#### A. TEMPORARY TRAFFIC CONTROL ITEMS

- 1. ALL TEMPORARY TRAFFIC CONTROL (TTC) DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD), (CURRENT EDITION). COPIES ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, OFFICE OF CONTRACTS, 1980 WEST BROAD STREET, COLUMBUS, OHIO, 43216. NOTE: ALL DEVICES SHALL COMPLY, FOR CONDITION AND LOCATION, WITH THE CURRENT EDITION OF THE NCHRP 350 CRASH TESTING GUIDELINES.
- 2. CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY THE DEPARTMENT OF PUBLIC SERVICE INSPECTOR. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, INCLUDING THE INSTALLATION OF TEMPORARY PAVEMENT MARKINGS AND THE REMOVAL OF CONFLICTING TRAFFIC CONTROLS, THEIR PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED. TEMPORARY PAVEMENT MARKINGS TO INCLUDE, BUT NOT LIMITED TO, CHANNELIZING LINES, EDGE LINES, AND CENTERLINES SHALL BE INSTALLED AND MAINTAINED ON ALL CONSTRUCTION OPERATIONS LASTING A MINIMUM OF 14 CALENDAR DAYS OR AS DIRECTED BY THE TEMPORARY TRAFFIC CONTROL COORDINATOR OR THE PROJECT ENGINEER.
- 3. THE CONTRACTOR SHALL GIVE ADVANCE NOTIFICATION (WRITTEN AND VERBALLY) TO THE TEMPORARY TRAFFIC CONTROL COORDINATOR AT 645-6269 OR 645 5845, THE COLUMBUS PAVING THE WAY PROGRAM COORDINATOR AT 645-7283 OR 645 6016, OR pavingtheway@columbus.gov, AND THE PROJECT ENGINEER, INFORMING THEM OF ALL UPCOMING MAINTENANCE OF TRAFFIC CHANGES ON A WEEKLY BASIS. NOTIFICATION SHALL INCLUDE, BUT NOT LIMITED TO, WHAT, WHERE, WHEN, AND HOW PEDESTRIAN AND VEHICULAR TRAFFIC WILL BE AFFECTED, AND THE TEMPORARY TRAFFIC CONTROL PROCEDURES THE CONTRACTOR IS PLANNING TO USE. THE TYPE OF TRAFFIC CHANGES SHALL DETERMINE THE LENGTH OF ADVANCE NOTIFICATION REQUIRED:

TYPE OF CHANGE	ADVANCE NOTIFICATION NEEDED
DETOURS / ROAD CLOSURES	30-DAY NOTIFICATION PRIOR TO CLOSU
LANE CLOSURE LASTING TWO WEEKS OR MORE	2-WEEKS
LANE CLOSURES LESS THAN TWO WEEKS	3-DAYS
LANE CLOSURE OF TWO DAYS OR LESS	1-DAY

THE COLUMBUS PAVING THE WAY PROGRAM COORDINATOR SHALL BE SUPPLIED COPIES OF ALL NOTIFICATION LETTERS SENT TO AREA BUSINESSES AND RESIDENTS.

THE COTA SENIOR SERVICE PLANNER SHALL BE CONTACTED 30 DAYS PRIOR TO ANY PLANNED CLOSURE ON ASSIGNED COTA ROUTES. ANY OTHER UNFORESEEN IMPACTS TO TRAFFIC SHALL BE IMMEDIATELY REPORTED AS THEY OCCUR.

- 4. ACCESS FOR PEDESTRIAN AND VEHICULAR TRAFFIC TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND SAFE MOVEMENT OF PEDESTRIANS THROUGH, AROUND, OR DETOURED AWAY FROM THE CONSTRUCTION SITE. TRAFFIC CONTROL FOR PEDESTRIAN MOVEMENT SHALL BE AS PER FIGURES 6H-28 (TA-28) AND 6H-29 (TA-29) OF PART VI OF THE OMUTCD. ALL SIDEWALK DIVERSIONS AND TEMPORARY MID-BLOCK CROSSINGS SHALL BE PRE-APPROVED BY THE PROJECT ENGINEER OR THE TEMPORARY TRAFFIC CONTROL COORDINATOR.
- 6. THE CONTRACTOR SHALL MAINTAIN ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROLS THROUGHOUT THIS PROJECT. PERMANENT TRAFFIC CONTROLS MAY BE TEMPORARILY RELOCATED OR COVERED, AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED, OR IMPROPERLY PLACED SIGNS.
- 7. ANY WORK DONE BY THE DEPARTMENT OF PUBLIC SERVICE, INCLUDING INSTALLATION, RELOCATION, REMOVAL AND/OR REPLACEMENT OF TEMPORARY TRAFFIC CONTROL DEVICES AS RESULT OF WORK DONE BY THE CONTRACTOR OR AS A RESULT OF NEGLIGENCE OF THE CONTRACTOR, SHALL BE AT THE CONTRACTORS' EXPENSE.
- 8. THE ROADWAY SHALL **NOT** BE OPENED TO NON-CONSTRUCTION TRAFFIC UNTIL THE CRITICAL PERMANENT TRAFFIC CONTROL ARE IN PLACE, OR UNTIL TEMPORARY TRAFFIC CONTROLS APPROVED BY THE ENGINEER, ARE INSTALLED. THE CRITICAL PERMANENT TRAFFIC CONTROL ARE **STOP, YIELD, ONE-WAY, DO NOT ENTER, AND RESTRICTED TURN SIGNS.** OTHER CRITICAL SIGNS MAY BE NOTED ON THE PLANS AS WELL. THE CONTRACTOR ASSUMES ALL LIABILITY FOR THE PREMATURE REMOVAL OF TEMPORARY TRAFFIC CONTROLS.
- 9. ITEM 614 MAINTAINING TRAFFIC, LUMP SUM

ALL COSTS THAT CONSIST OF MAINTAINING AND PROTECTING VEHICULAR AND PEDESTRIAN TRAFFIC ACCORDING TO THE LATEST EDITION OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD), AND PER THE REQUIREMENTS DESIGNATED IN THE PLAN INCLUDING ALL LAW ENFORCEMENT OFFICER (LEO) AND FLAGGER HOURS SHALL BE INCLUDED IN THE LUMP SUM ITEM 614.

IN ADDITION TO THE REQUIREMENTS HEREIN, AND THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, A UNIFORMED LAW ENFORCEMENT OFFICER (LEO) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC UNDER THE FOLLOWING CONDITIONS:

- WORK WITHIN A SIGNALIZED INTERSECTION, DEFINED AS THE AREA BOUNDED BY THE REAR X-WALK LINES
- WHEN FLAGGING WITHIN THE INTERSECTION OF TWO ARTERIAL ROADWAYS
- WHEN SPECIFIED IN THE MAINTENANCE OF TRAFFIC PLAN OR AS DIRECTED BY THE PROJECT ENGINEER

  WHEN SHIPTING TRAFFIC LEFT OF CENTER THROUGH A SIGNALIZED INTERSECTION. WITHOUT SHIPTING.
- WHEN SHIFTING TRAFFIC LEFT OF CENTER, THROUGH A SIGNALIZED INTERSECTION, WITHOUT SHIFTING SIGNAL HEADS

A FLAGGER SHALL BE UTILIZED TO ASSIST IN CONTROLLING TRAFFIC WHILE EQUIPMENT IS ENTERING OR EXITING AN INTERSECTION OR WORK ZONE. THE CONTRACTOR MAY UTILIZE HIS OWN OR LEO UNDER PAY ITEM 614 MAINTAINING TRAFFIC, LUMP SUM.

FLAGGERS AND LEO'S SHALL BE EQUIPPED ACCORDING TO THE STANDARDS FOR FLAGGING TRAFFIC CONTAINED IN THE OMUTCD. FLAGGING OPERATIONS PERFORMED BY LEO'S OR DESIGNATED FLAGGERS SHALL ONLY BE PERMITTED AS LONG AS ALL TRAFFIC CONTROL IS IN PLACE ACCORDING TO FIGURE 6H-10 (TA-10) IN THE OHIO MANUAL. PATROL CARS SHALL **NOT** BE USED IN FLAGGING OPERATIONS.

IF THE CONTRACTOR WISHES TO UTILIZE LEOS' FOR TRAFFIC CONTROL OTHER THAN FOR THE REQUIRED IN THE PLANS, THEY DO SO AT THEIR OWN EXPENSE. THE CONTRACTOR SHALL MAKE ARRANGEMENT THROUGH THE COLUMBUS POLICE DIVISION AT (614) 645-4795.

LEO'S SHALL BE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH EMPLOYED BY THE CONTRACTOR, THE CITY REPRESENTATIVE SHALL HAVE CONTROL OVER THEIR PLACEMENT.LEO'S SHALL NOT HAVE THE AUTHORITY TO CHANGE, EDIT, OR MODIFY ANT MAINTENANCE OF TRAFFIC SCHEME WITHOUT THE PERMISSION OF THE TEMPORARY TRAFFIC CONTROL COORDINATOR OR PROJECT ENGINEER UNLESS AN EMERGENCY DEVELOPS.

IF A SAFETY HAZARD DEVELOPS, A LEO MAY BE ASSIGNED BY THE COLUMBUS SAFETY AND SERVICES DIRECTOR AT THE CONTRACTOR'S EXPENSE.

## TEMPORARY TRAFFIC CONTROL NOTES IF APPLICABLE FOR PRIVATE DEVELOPMENT PROJECTS

## B. TEMPORARY TRAFFIC CONTROL ITEMS

 PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) SHALL BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO CLOSURE OF ROADWAY. THE MESSAGE SHALL ADVISE THE MOTORISTS OF THE DATES, TIMES, AND DURATION OF THE CLOSURE. THE PCMS SHALL REMAIN IN PLACE FOR 7 DAYS AFTER THE START OF THE CLOSURE, OR AS DIRECTED BY THE TEMPORARY TRAFFIC CONTROL COORDINATOR OR PROJECT ENGINEER.

- 2. TYPE C STEADY-BURN OR TYPE D 360-DEGREE STEADY BURN WARNING LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS, AND SIMILAR TRAFFIC CONTROL DEVICES IN USE AT NIGHT. ONLY 42" REFLECTORIZED CHANNELIZING DEVICES (CONES) SHALL BE PERMITTED FOR NIGHTTIME WORK WITH THE APPROVAL OF THE TTC COORDINATOR AT 645-6269 OR 645-5845 PER ODOT STANDARDS.
- 3. A FLASHING ARROW PANEL (48" x 96"-TYPE C) SHALL BE USED IN LANE CLOSURES AS PER THE OHIO MANUAL (OMUTCD).
- 4. ALL TRENCHES WITHIN THE ROAD RIGHT OF WAY SHALL BE BACKFILLED OR SECURELY PLATED PER (CITY OF COLUMBUS GENERAL POLICY ON STEEL PLATE USAGE DATES 11/15/2006 AND 2013 STD. DWG. 1441) DURING NON-WORKING HOURS.
- 5. ALL EXISTING TRAFFIC LANES SHALL BE OPEN TO TRAFFIC AT ALL TIMES ON:
- 7. ONE-WAY LANE (S) OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON
- 8. TWO-WAY TWO-LANE (ONE-LANE EACH DIRECTION) SHALL BE MAINTAINED AT ALL TIMES BY USE OF EXISTING, PROPOSED, OR TEMPORARY PAVEMENT PER FIGURE 6H-32 TYPICAL APPLICATION 32 (TA-32) OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 9. TWO-WAY ONE-LANE TRAFFIC MAY BE MAINTAIN DURING CONSTRUCTION OPERATIONS ON \_\_\_\_ PER FIGURE 6H-10 (TA-10) OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 10. \_\_\_\_\_ MAY BE CLOSED BETWEEN \_\_\_\_ AND \_\_\_\_ FOR A MAXIMUM OF \_\_\_\_ HOUR (S)/ DAY (S) BETWEEN THE HOURS OF \_\_\_\_ AND \_\_\_ PER FIGURE 6H-20 (TA-20) OF THE OMUTCD AND/OR APPROVED BY THE DEPARTMENT OF PUBLIC SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN PROVIDING A DETOUR INCLUDING THE REMOVAL AND REINSTALLATION OF ANY CONFLICTING TRAFFIC CONTROL AND/OR ANY NECESSARY TRAFFIC SIGNAL WORK.
- 11. A TEMPORARY DIVERSION SHALL BE PROVIDED AND MAINTAINED IN GOOD CONDITION ON \_\_\_\_\_\_\_ DURING THE PERIOD OF WORK. ALL SUCH DIVERSIONS SHALL BE IN ACCORDANCE WITH THE OHIO MANUAL of UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).
- 12. THE DEPARTMENT OF PUBLIC SERVICE WILL REMOVE OR COVER ALL PARKING METER HEADS PUT OUT OF SERVICE BY THIS CONTRACT. THERE IS A \$60.00 CHARGE FOR THE REMOVAL AND RE-INSTALLATION OF EACH METER. IN ADDITION, A DAILY METER FEE WILL BE CHARGED FOR ALL ENFORCEMENT HOURS FOR EACH METER TAKEN OUT OF SERVICE. THESE CHARGES WILL BE COLLECTED FROM THE CONTRACTOR IN ADVANCE WITH THE ISSUANCE OF THE STREET OCCUPANCY / EXCAVATION PERMIT FROM THE DEPARTMENT OF PUBLIC SERVICE'S PERMIT OFFICE. (645-7497) THE MANAGER OF PARKING SERVICES SUPPORT (645-7890) SHALL BE NOTIFIED A MINIMUM OF FORTY-EIGHT (48) HOURS (EXCLUDING SAT. SUN.,& HOLIDAYS) PRIOR TO THE BEGINNING OF WORK. CALL 645-8376 IF UNABLE TO MAKE CONTACT THROUGH THE PRIOR PHONE NUMBER.
- 13. TEMPORARY "EMERGENCY NO PARKING" SIGNS SHALL BE INSTALLED AT 50' INTERVALS C/C MINIMUM BY USE OF ANY OF THE FOLLOWING ITEMS: EXISTING SIGN POSTS, EXISTING UTILITY POLES, DRUMS AND/OR 42"CONES AND REMOVED BY THE CONTRACTOR IN AREAS WITH NO PARKING METERS. THE SIGNS SHALL HAVE THE INSTALLATION DATE, WORKING DATES, AND HOURS OF RESTRICTION SHOWN ON EACH SIGN. THESE SIGNS CAN BE OBTAINED FROM THE DEPARTMENT OF PUBLIC SERVICE'S PERMIT OFFICE. THE POLICE DIVISION REQUIRES THE "EMERGENCY NO PARKING" SIGNS TO BE POSTED A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO ANY VEHICLES BEING TOWED. WITHIN TWENTY-FOUR (24) HOURS OF POSTING, THE CONTRACTOR SHALL SUPPLY THE DEPARTMENT OF PUBLIC SERVICE WITH A WRITTEN RECORD OF POSTED LOCATIONS (FAX 645-3298).
- 14. TRAFFIC OPERATIONS' PERSONNEL SHALL LOCATE AND MARK ALL UNDERGROUND TRAFFIC CONTROL CABLES. THE TRAFFIC OPERATIONS SHOP SHALL BE NOTIFIED 645-7393 (FAX 645-5967) AT LEAST FORTY-EIGHT (48) HOURS (EXCLUDING SATURDAY & SUNDAY) PRIOR TO THE BEGINNING OF ANY WORK WITH 450 FEET OF ANY SIGNALIZED INTERSECTION (S) OR WITHIN ANY POSTED AREA WHERE THE DEPARTMENT HAS UNDERGROUND CABLE. THE SIGNAL OPERATION ENGINEER (645-6418) SHALL BE NOTIFIED SIX (6) WEEKS IN ADVANCE FOR SIGNAL REVISION OR POLE RELOCATIONS.
- 15. NO EXCAVATION SHALL BE MADE WITHIN FIVE (5) FEET OF ANY FOUNDATION THAT SUPPORTS SIGNAL POLES, TRAFFIC SIGNAL DISPLAYS OR SIGNS BY MAST ARMS OR SIGNAL SPAN. EXCAVATION WITHIN EIGHT (8) FEET, BUT MORE THAN FIVE (5) FEET SHALL REQUIRE ADDITIONAL SUPPORT (DOWN GUY, HEAD GUY, BASE GUY, ETC.). THE CONTRACTOR SHALL CONTACT SIGNAL OPERATION PERSONNEL AT 645-0423 (CELL 419-4501) AT LEAST FORTY-EIGHT 48 HOURS (EXCLUDING SATURDAY & SUNDAY) PRIOR TO BEGINNING OF SUCH EXCAVATION SO THAT THE CITY CAN APPROVE THE STABILIZATION SETUP BY THE CONTRACTOR. IF UNABLE TO MAKE CONTACT THROUGH ABOVE NUMBERS, CALL 645-7393. STABILIZATION WILL BE DONE BY THE CONTRACTOR AT THE OWNERS' / CONTRACTING AGENCY'S EXPENSE.
- 16. WHEN ANY TRAFFIC CONTROL DEVICE, CONDUIT, OR CABLE IS DAMAGED, THE CONTRACTOR SHALL NOTIFY SIGNAL OPERATION PERSONNEL AT 645-0423 (CELL 451-4501) BETWEEN 7:00 A.M. AND 4:00 P.M., MONDAY THROUGH FRIDAY. IF UNABLE TO MAKE CONTACT THROUGH THE OTHER NUMBERS, CALL 645-7393.
- 17. SIGNAL CONDUIT CLEARANCE FROM ADJACENT UTILITIES SHALL BE MAINTAINED AT ALL TIMES, THE SIGNAL CONDUIT CLEARANCE TABLE CAN BE FOUND IN THE CITY OF COLUMBUS TRAFFIC SIGNAL DESIGN MANUAL TABLE 13.2, MINIMUM CONDUIT CLEARANCE.
- 18. THE ROADWAY OR ANY SECTION OF ROADWAY SHALL NOT BE OPENED TO NON-CONSTRUCTION TRAFFIC UNTIL ALL TEMPORARY, NON-REFLECTIVE, BLACKOUT TAPE HAS BEEN COMPLETELY REMOVED FROM NON-CONFLICTING PERMANENT PAVEMENT MARKINGS FOR THAT AREA OF THE ROADWAY, OR UNLESS OTHERWISE DIRECTED IN WRITING BY THE ENGINEER. THIS IS SUPPLEMENTAL TO THE CMS-614.11F, AND SHALL BE PAID FOR THROUGH THE 614-LUMP SUM.
- 19. WHENEVER YELLOW CENTERLINES OR TURN-LANE LINE ARE PAVED OVER, REMOVED, OR OTHERWISE UNSERVICEABLE, THE CONTRACTOR SHALL INSTALL CLASS II TEMPORARY STRIPING (MINIMUM 4' LONG SEGMENTS). TEMPORARY PAINT SHALL BE USED ON ALL MILLED SURFACES. TEMPORARY TAPE SHALL BE USED ON ALL FINAL COURSES OF ASPHALT. PAINT OR TAPE MAY BE USED ON ALL INTERMEDIATE COURSES OF ASPHALT. IF APPROVED BY THE ENGINEER, DRUMS WITH STEADY BURNING TYPE C OR TYPE D 360 DEGREE WARNING LIGHTS AND "KEEP RIGHT" SIGNS MAY BE SUBSTITUTED FOR CENTERLINE MARKINGS.
- 20. CLASS II TEMPORARY STRIPING (MINIMUM 4' LONG SEGMENTS) SHALL BE AS PER ITEM 614-WORK ZONE PAVEMENT MARKINGS AND SHALL BE PLACED WITH ONE (1) FOOT LONGITUDINAL TOLERANCE OF THE PERMANENT STRIPE (S). ALL STRIPING NOT TO WITHIN ONE (1) FOOT TOLERANCE SHALL BE REMOVED AND REPLACED IN THE PROPER LOCATION BY THE CONTRACTOR. CLASS II TEMPORARY STRIPING SHALL BE OF THE APPROPRIATE COLOR AND SPACED AT A MAXIMUM OF FORTY (40) FEET CENTER TO CENTER.

# EXISTING PERMANENT TRAFFIC CONTROL NOTES REQUIRED FOR PRIVATE DEVELOPMENT PROJECTS

# C. EXISTING PERMANENT TRAFFIC CONTROL ITEMS

- 1. ANY WORK DONE BY THE DEPARTMENT OF PUBLIC SERVICE, INCLUDING INSTALLATION, RELOCATION, REMOVAL AND/OR REPLACEMENT OF PERMANENT TRAFFIC CONTROL DEVICES AS A RESULT OF WORK DONE BY THE CONTRACTOR OR AS A RESULT OF NEGLIGENCE OF THE CONTRACTOR, SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTALLATION AND/OR REPLACEMENT OF ALL PERMANENT TRAFFIC CONTROL DEVICES DAMAGED OR REMOVED DURING CONSTRUCTION. PERMANENT TRAFFIC CONTROL NO LONGER IN CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE REPLACED IMMEDIATELY.

#### EXISTING PERMANENT TRAFFIC CONTROL NOTES IF APPLICABLE FOR PRIVATE IMPROVEMENT PROJECTS

- D. EXISTING PERMANENT TRAFFIC CONTROL ITEMS
- ALL OVERHEAD CABLE, DOWN GUYS OR BACK GUYS SHALL NOT BLOCK ANY PORTION OF A TRAFFIC SIGNAL, TRAFFIC CONTROL SIGN, OR OTHER TRAFFIC CONTROL DEVICE SUCH THAT VISIBILITY OR OPERATION OF THE TRAFFIC CONTROL DEVICE IS IMPAIRED.
- 2. ALL PERMANENT PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS AS SHOWN ON THIS PLAN SHALL BE INSTALLED BY THE CONTRACTOR AT THE PROJECTS EXPENSE. THE PROJECT ENGINEER SHALL BE NOTIFIED TO DIRECT APPROPRIATE PERSONNEL A MINIMUM OF FORTY-EIGHT (48) HOURS (EXCLUDING SAT. & SUN. ) PRIOR TO THE INSTALLATION OF PERMANENT MARKING TO INSPECT AND APPROVE THE PAVEMENT MARKING LAYOUT PRIOR TO PLACING THE PERMANENT MARKINGS.
- 3. PERMANENT STRIPING OR CLASS I TEMPORARY STRIPING SHALL BE INSTALLED NO LATER THAN FOURTEEN (14) CALENDAR DAYS AFTER THE FINAL PAVING COURSE IS COMPLETED. THE PAVING CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE STRIPING CONTRACTOR TO INSURE THE PERMANENT STRIPING IS INSTALLED WITHIN THE FOURTEEN (14) CALENDAR DAY LIMIT.
- 4. IF THE DEPARTMENT OF PUBLIC SERVICE IS TO INSTALL PERMANENT STRIPING, THE PROJECT ENGINEER SHALL BE NOTIFIED TO DIRECT APPROPRIATE PERSONNEL A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO THE APPLICATION OF THE FINAL COURSE OF PAVEMENT

### NOTE #5 INSTRUCTIONS: DO NOT PLACE IN PLAN

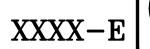
INSERT NOTE #5 WHEN; WORKING NEAR A LOCATION WHERE TRAFFIC LOOP DETECTION AND/OR ITS LEAD IN CABLES COULD BE INADVERTENTLY DAMAGED. CONTINGENCY ITEMS AND ESTIMATED QUANTITIES SHALL ONLY BE INCLUDED AS DIRECTED BY THE PLAN REVIEWER. LOOP DETECTION AND/OR ITS LEAD IN CABLES BEING DESTROYED OR ELSE RENDERED INOPERATIVE DUE TO TYPICAL CONSTRUCTION ACTIVITIES SHALL BE QUANTIFIED IN THE GENERAL SUMMARY AND SIGNAL SUMMARY AND SHOWN AS REMOVED AND REPLACED. NOTE # 5 IS NOT REQUIRED FOR THIS OPERATION UNLESS THE AFOREMENTIONED REQUIREMENT IS MET.

5. AT ANY LOCATION WHERE THE CONTRACTOR DAMAGES DETECTORS AND/OR THEIR LEAD IN CABLES THE CONTRACTOR SHALL REPLACE THEM. AT ANY LOCATION WHERE DETECTION IS CHANGED FROM MAG PROBE UNITS TO LOOP, THE CONTRACTOR SHALL REPLACE THE PROBE LEAD-IN WITH LOOP LEAD-IN CABLE. ALL REPAIRS TO DETECTION SHALL BE COMPLETED WITHIN 21 DAYS FROM DAMAGE TO DETECTION ON A PER INTERSECTION BASIS. IF THE 21 DAY REPAIR PERIOD CANNOT BE SATISFIED AT ANY LOCATION WHERE THE CONTRACTOR DAMAGES DETECTORS AND/OR THEIR LEAD-IN CABLES, THE CONTRACTOR, AT THE DIRECTION OF SIGNAL OPERATION PERSONNEL, MAY BE REQUIRED TO INSTALL A VERSICAM FLEX CAMERA SYSTEM OR TEMPORARY LOOP DETECTION. ANY CONTRACTOR FAILING TO COMPLY WITH THESE GUIDELINES SHALL BE SUBJECT TO PENALTY TO THE SUM OF \$100.00 PER DAY FOR EACH DAY BEYOND THE 21 DAY PERIOD ON A PER INTERSECTION BASIS, UNTIL CONDITIONS ARE MET TO THE SATISFACTION OF SIGNAL OPERATIONS PERSONNEL. THIS PENALTY DEDUCTION SHALL BE SPECIFIC TO EACH SIGNALIZED INTERSECTION EFFECTED BY THIS PROJECT AND SEPARATE FROM ANY LIQUIDATED DAMAGES FOR THE PROJECT AS A WHOLE. THE WORK TO INSTALL THE DETECTION SHALL CONFORM TO ODOT STANDARD DRAWING TC-82.10 ( DATED 4/29/02 OR LATER) AND TO THE CURRENT STATE OF OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS WITH THE FOLLOWING PROVISIONS.

- A) THE CONTRACTOR SHALL PROVIDE THE DEPARTMENT OF PUBLIC SERVICE'S INSPECTOR, PRIOR TO THE COMMENCEMENT OF WORK, THE IMSA (INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION) CERTIFICATION PAPERS FOR ALL SIGNAL TECHNICIANS WORKING ON THIS PROJECT.
- B) LOCATIONS OF THE REPLACEMENT DETECTION SHALL BE FIELD MARKED OR DIMENSIONED DRAWINGS SHALL BE SUBMITTED TO THE CONSTRUCTION SECTION BY DEPARTMENT OF PUBLIC SERVICE PERSONNEL. LOCATION OF FINAL PAVEMENT MARKINGS OR THE MARKINGS THEMSELVES SHALL BE CLEARLY INDICATED ON THE ASPHALT PRIOR TO DETECTOR LOCATIONS BEING MARKED. THE CONTRACTOR SHALL LAYOUT THE LOOPS ON THE PAVEMENT IF DRAWINGS ARE SUBMITTED. IF DRAWINGS HAVE NOT BEEN PROVIDED, CONTACT SIGNAL OPERATIONS PERSONNEL AT 645-0423 ( CELL 419-4501 ) AT LEAST TWO WORKING DAYS PRIOR TO NEEDING THE LOCATION MARKED. IF UNABLE TO MAKE CONTACT THROUGH THE ABOVE NUMBERS, CALL 645-7393.
- C) THE SAW SLOT DEPTH FOR LOOP WIRE INSTALLATION SHALL BE FOUR (4) INCHES WITH SIX (6) INCHES AT THE CONDUIT ENTRANCE. IF ADVERSE PAVEMENT CONDITIONS WARRANT, DEPTH MAY BE INCREASED TO SIX (6) INCHES THROUGHOUT AND SHALL BE DETERMINED BY THE DEPARTMENT OF PUBLIC SERVICE INSPECTOR.
- D) EACH LOOP SHALL HAVE ITS OWN CONDUIT FROM EDGE OF PAVEMENT TO PULL BOX UNLESS SPECIFIED OTHERWISE BY THE DEPARTMENT OF PUBLIC SERVICE INSPECTOR.
- E) THE PULLBOX ASSEMBLY SHALL BE RATED AS MEDIUM TO HEAVY DUTY, TO BE INSTALLED IN CONCRETE WALKWAYS, AND HAVE ALL STAINLESS STEEL HARDWARE. THE PULLBOX COVER SHALL HAVE THE WORD "TRAFFIC" ON IT. THE COVER SHALL BE BOLTED TO THE BOX AND SHALL BE EITHER POLYMER CONCRETE OR STEEL PLATE. THE COVER PLUS HOUSING AS A UNIT SHALL BE RATED TO WITHSTAND A MINIMUM OF 20,000LB. STATIC LOAD OVER A 10"x 10" AREA AS PER ASTM-C857. THE BOX DEPTH SHALL BE 18 INCHES MINIMUM TO 30 INCHES MAXIMUM. IF THE PROJECT DOES NOT SPECIFY 713.08 CONCRETE PULL BOXES, THE SUPPLIED ASSEMBLIES SHALL BE AS FOLLOWS: CDR SYSTEMS MODEL SA32-1015-18, OR SYNERTECH MODEL 11"x 18". SIX (6) INCHES OF #4 AGGREGATE SHALL BE PLACED AT THE BOTTOM OF THE PULLBOX. NO CONDUIT SHALL PROTRUDE MORE THAN THREE (3) INCHES INSIDE THE PULLBOX. CONDUIT ELLS OR EXTENSIONS MAY BE USED TO ALIGN THE CONDUIT WITH THE HOUSING. THE COST FOR THE EXTENSIONS OR ELLS IF NEEDED SHALL BE INCIDENTAL TO THE PER UNIT PRICE.
- F) WHEN A PULLBOX IS NOT USED, THE SOLDERED SPLICE SHALL BE MADE IN AN ANCHOR BASE STRAIN POLE OR CONDUIT RISER SPECIFIED BY THE DEPARTMENT OF PUBLIC SERVICE'S REPRESENTATIVE, EXCEPT WHERE A CONTROLLER CABINET IS MOUNTED ON THAT POLE IN WHICH CASE THE LOOP WIRE SHALL BE ROUTED DIRECTLY INTO THE CABINET.
- G) THE CONTRACTOR SHALL NOT MAKE ANY WIRING CONNECTIONS OR ADJUSTMENTS INSIDE THE CONTROL CABINET. WHEN SUCH CONNECTIONS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE TRAFFIC OPERATIONS SHOP 645-7393, MON.-FRI., 8AM-4PM, TO SCHEDULE CITY FORCES FOR MAKING THE ACTUAL CONNECTIONS. THE CONTRACTOR SHALL BE AVAILABLE AT THE AGREED TIME. THE CONTRACTOR WILL BE BILLED FOR ANY TIME CITY FORCES ARE REQUIRED TO WAIT FOR THE CONTRACTORS' WORK TO BE COMPLETED.
- H) CONDUIT PLACED IN "RIGHT OF WAY" AREAS BEARING NO TRAFFIC FOR DETECTOR LEAD IN SHALL BE ODOT ITEM 725.051, ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, LATEST EDITION. CONDUIT PLACED UNDER A ROADWAY OR IN AREAS THAT MAY BEAR TRAFFIC SHALL BE ODOT ITEM 725.04 (SIZES AND TYPE TO BE DETERMINED BY THE DEPARTMENT OF PUBLIC SERVICE'S REPRESENTATIVE. ALL CONDUITS SHALL BE PLACED AT A MINIMUM DEPTH OF 24 INCHES.
- I) LOOP WIRE SHALL BE IDENTIFIED WITH A PLASTIC TAG (WBLT, EBRT, ECT.) AT THE SPLICE POINT OR AT THE ENTRANCE TO THE CABINET IF LEAD-IN CABLE IS NOT USED.
- J) THE ITEMS AND ESTIMATED QUANTITIES FOR THE REPLACEMENT OF THE DEPARTMENT OF PUBLIC SERVICE'S DETECTION ITEMS SHALL BE INCLUDED IN THESE PLANS WHEN DIRECTED BY THE PLAN REVIEWER. THESE ESTIMATES ARE FOR THE PURPOSE OF BIDDING THE PROJECT. THE FOLLOWING LIST OF THE ITEMS AND QUANTITIES PROJECTED FOR USE IN DETECTOR REPLACEMENT FOR THIS PROJECT:

ITEM	QUAINT	UNIT	ITEM DESCRIPTION
202		SF	WALK REMOVED
608		SF	4" CONCRETE WALK
632		LF	CONDUIT RISER, 1 OR 2 INCH DIA.
625		LF	CONDUIT 1, 1 $\frac{1}{2}$ , OR 2 INCH DIA.
625		LF	TRENCH
625		EACH	PULL BOX, AS PER PLAN
632		EACH	DETECTOR LOOP
632		LF	LOOP DETECTOR LEAD-IN CABLE
632		LF	LASH / UNLASH CABLE
			<u> </u>

THE CONTRACTOR SHALL NOTIFY SIGNAL OPERATIONS' PERSONNEL AT 645-0423 (CELL 419-4501) AFTER ALL LOOPS HAVE BEEN INSTALLED AT EACH INTERSECTION. IF UNABLE TO MAKE CONTACT THROUGH THE ABOVE NUMBER CALL, 645-7393. THE DEPARTMENT OF PUBLIC SERVICE SHALL INSPECT ALL SENSORS AND TEST AS NECESSARY. THE CONTRACTOR SHALL REPLACE ALL LOOPS NOT MEETING SPECIFICATIONS.





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