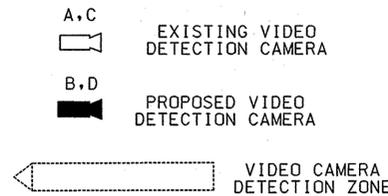


MD 147 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

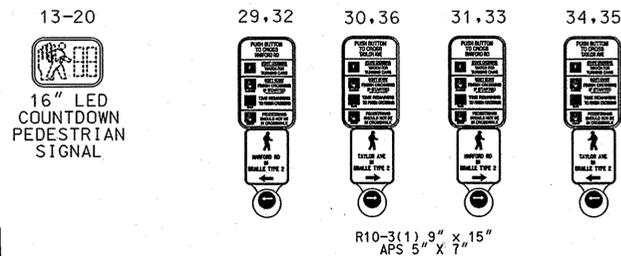


CONSTRUCTION DETAILS

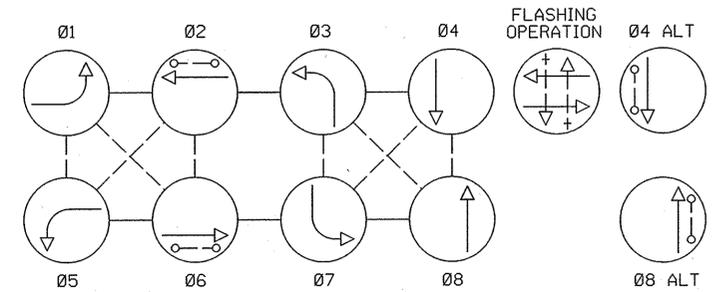
- A. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, APS STATION, AND PEDESTRIAN EDUCATION SIGN FOR HARFORD ROAD CROSSING.
- B. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, APS STATION, AND PEDESTRIAN EDUCATION SIGN FOR TAYLOR ROAD CROSSING.
- C. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, LED COUNTDOWN PEDESTRIAN SIGNAL, APS, AND PEDESTRIAN EDUCATION (MOD) SIGN. (NOTE: 1-3 IN. PVC SCHEDULE 80 CONDUIT BENDS).
- D. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE (CUT TO 5 FT.) WITH APS STATION, AND PEDESTRIAN EDUCATION SIGN. (INSTALL 1-3 IN. PVC SCHEDULE 80 CONDUIT BENDS).
- E. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN EDUCATION SIGN AND REPLACE WITH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN EDUCATION (MOD) SIGN.
- F. REMOVE EXISTING R10-12 FROM EXISTING MAST ARM.
- G. REMOVE EXISTING PEDESTRIAN SIGNAL HEADS AND REPLACE WITH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD. REMOVE EXISTING APS AND PEDESTRIAN EDUCATION SIGN.
- H. USE EXISTING HANDHOLE.



PROPOSED EQUIPMENT



NEMA PHASING

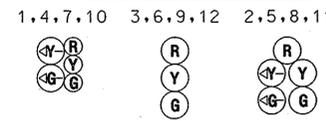


NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

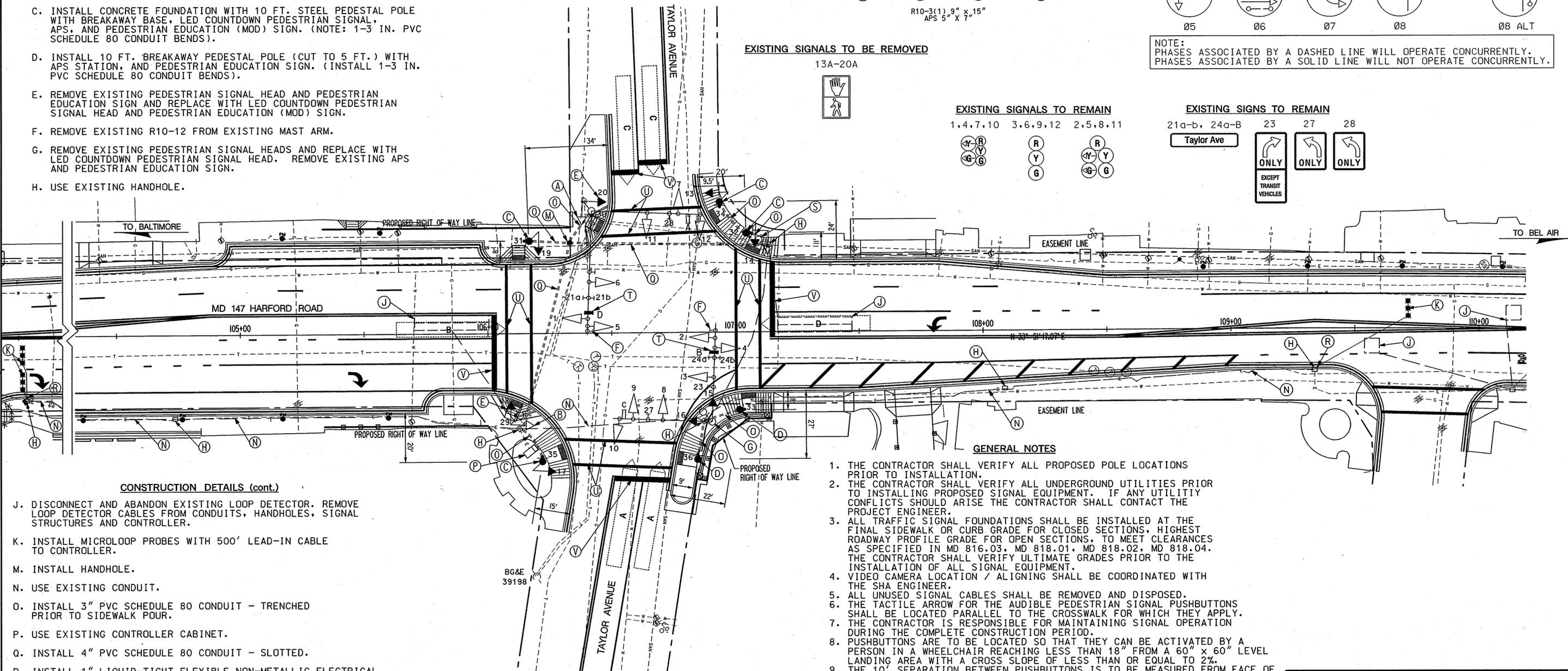
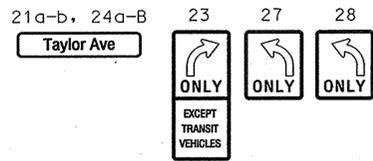
EXISTING SIGNALS TO BE REMOVED



EXISTING SIGNALS TO REMAIN



EXISTING SIGNS TO REMAIN



CONSTRUCTION DETAILS (cont.)

- J. DISCONNECT AND ABANDON EXISTING LOOP DETECTOR. REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
- K. INSTALL MICROLOOP PROBES WITH 500' LEAD-IN CABLE TO CONTROLLER.
- M. INSTALL HANDHOLE.
- N. USE EXISTING CONDUIT.
- O. INSTALL 3" PVC SCHEDULE 80 CONDUIT - TRENCHED PRIOR TO SIDEWALK POUR.
- P. USE EXISTING CONTROLLER CABINET.
- Q. INSTALL 4" PVC SCHEDULE 80 CONDUIT - SLOTTED.
- R. INSTALL 1" LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT. (FOR DETECTOR WIRE SLEEVE).
- T. INSTALL VIDEO DETECTION CAMERA ON EXISTING MAST ARM.
- U. INSTALL 12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.
- V. INSTALL 24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.

SPECIAL NOTES:

- 1. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON # 29 AND 32 TO BE INSTALLED WITH VIBRATING ARROW POINTING LEFT WITH R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS HARFORD ROAD")
- 2. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON # 31 AND 33 TO BE INSTALLED WITH VIBRATING ARROW POINTING RIGHT WITH R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS HARFORD ROAD")
- 3. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON # 30 AND 36 TO BE INSTALLED WITH VIBRATING ARROW POINTING RIGHT WITH R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS TAYLOR AVENUE")
- 4. AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON # 34 AND 35 TO BE INSTALLED WITH VIBRATING ARROW POINTING LEFT WITH R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS TAYLOR AVENUE")

GENERAL NOTES

- 1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- 2. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- 3. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- 4. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- 5. ALL UNUSED SIGNAL CABLES SHALL BE REMOVED AND DISPOSED.
- 6. THE TACTILE ARROW FOR THE AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTONS SHALL BE LOCATED PARALLEL TO THE CROSSWALK FOR WHICH THEY APPLY.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SIGNAL OPERATION DURING THE COMPLETE CONSTRUCTION PERIOD.
- 8. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- 9. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- 10. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- 11. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 147 HARFORD ROAD AND
TAYLOR AVENUE

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FAIRFAX, VA 22030
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UTILITY LEGEND

- SD - STORM DRAIN
- G - GAS MAIN
- W - WATER MAIN
- S - SEWER MAIN
- E - ELECTRIC CABLES
- A - AERIAL CABLES
- T - TELEPHONE CABLES
- F - FIBER-OPTIC

APPROVALS		REVISIONS	
ORIGINAL ON FILE		SHA NO. B46835184 ADDENDUM NUMBER 5 12/12/08 JRL / AJM / PAT B INDICATES CHANGES FOR THE BUND & RELATED CHANGES REPLACE CROSSWALK & STOP LINES FOR MD 147 APRIL 18, 2001 SHA NO. 07 2000 MG DD DGZ BRK HK 1 ADDENDUM TO B-909-501-477 APRIL 22, 1992 JJD EMM PAT ETP TH	
TRAFFIC SIGNAL PLAN		SCALE 1" = 20' DATE 2-12-92 CONTRACT NO. 23854T25028	
DESIGNED BY _____ COUNTY BALTIMORE		DRAWN BY W.R. SMITH LOGMILE 03014700.16	
CHECKED BY S.E.W. T.I.M.S. NO. E-457		F.A.P. NO. _____ TOD NO. _____	
DRAWING NO. SG-2.1 OF 2.12		SHEET NO. 235 OF 291	