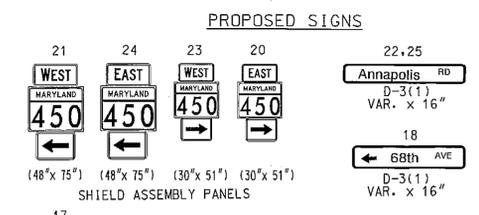




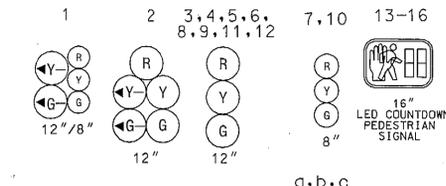
MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

CONSTRUCTION DETAILS

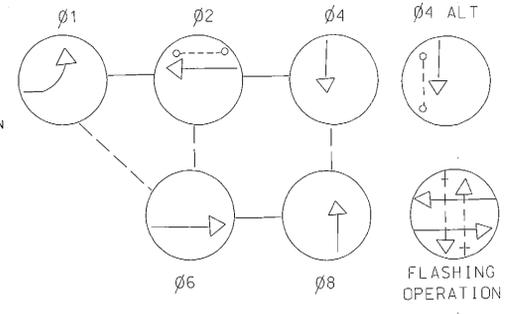
- A. INSTALL NEMA 6 BASE-MOUNTED CABINET AND CONTROLLER WITH NECESSARY EQUIPMENT.
- B. INSTALL 27' (CUT TO 21') STEEL POLE WITH TWIN 50' MAST ARMS (ANGLE POLE FOR SIDE ROAD ARM TO BE PARALLEL WITH THE OVERHEAD CABLES), TRAFFIC SIGNAL HEADS, LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, VIDEO DETECTION CAMERA, AND SIGNS (NOTE: 1-3" SCHEDULE 80, 90° PVC BEND).
- C. INSTALL 27' STEEL POLE WITH TWIN 50' AND 70' MAST ARMS (ANGLE POLE FOR SIDE ROAD ARM TO BE PARALLEL WITH THE OVERHEAD CABLES), TRAFFIC SIGNAL HEADS, 250 WATT LUMINAIRE ON 15' LIGHTING ARM, VIDEO DETECTION CAMERAS, AND SIGNS (NOTE: 1-3" SCHEDULE 80, 90° PVC BEND).
- D. INSTALL 10' PEDESTAL POLE WITH BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AND AUDIBLE PEDESTRIAN PUSHBUTTON STATION AND SIGNS (NOTE: 18"X36" FOUNDATION WITH 1-2" SCHEDULE 80, 90° BEND).
- E. INSTALL ELECTRICAL HANDHOLE.
- F. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- G. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- H. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
- J. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- K. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
- L. INSTALL 100 AMP METERED SERVICE PEDESTAL AND 3 WIRES OF 1-CONDUCTOR NO. 2/0 AWG ELECTRICAL CABLE TO UTILITY POLE NO. 82704-9533. COIL CABLES AT THE BASE OF THE POLE AROUND 1" STUB OF 4" CONDUIT.
- M. USE EXISTING HANDHOLE; PULL BACK DISCONNECTED INTERCONNECT CABLE FROM EXISTING CABINET/CONTROLLER AND PULL 7' OF SLACK FROM HANDHOLES TO THE EAST, RE-ROUTE CABLE TO THE NEW CONTROLLER/CABINET, THEN CAP AND ABANDON UNUSED CONDUIT.
- N. REMOVE EXISTING PAVEMENT MARKINGS IN THE AREA OF THE PROPOSED MARKINGS. INSTALL 12" WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKINGS.
- O. REMOVE EXISTING MARKINGS AND INSTALL 24" WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKINGS.
- P. INSTALL 10' PEDESTAL POLE (CUT TO 5') WITH BREAKAWAY COUPLINGS, AUDIBLE PEDESTRIAN PUSHBUTTON STATION AND SIGNS, (NOTE: 18"X36" FOUNDATION AND 1-2" SCHEDULE 80 90° PVC BEND).
- Q. USE EXISTING HANDHOLE; REMOVE UNUSED CABLES. INSTALL NEW FRAME AND COVER AND GROUND.
- R. USE EXISTING CONDUIT; REMOVE UNUSED CABLES.



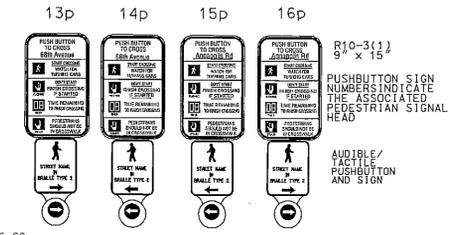
PROPOSED SIGNALS



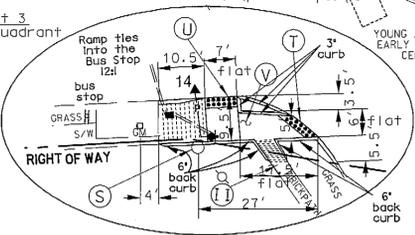
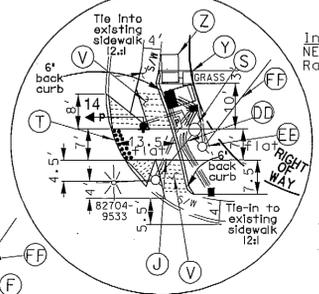
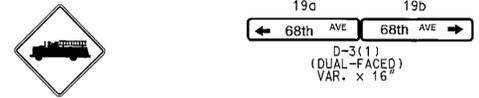
NEMA PHASING



PHASING NOTES:
 1.) PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
 2.) PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.



TOD NO: XX351-14
 SHA NO: PG769ASC/KSC
 MD 450 @ 68th Avenue



MD 450 (ANNAPOLIS RD.)

MD 450 (ANNAPOLIS RD.)

CONSTRUCTION DETAILS (CONT'D.)

- S. REMOVE EXISTING SIGNAL STRUCTURE AND ALL ATTACHED EQUIPMENT; REMOVE THE FOUNDATION 12" BELOW GROUND GRADE. CAP AND ABANDON CONDUIT.
- T. REMOVE EXISTING RAMP, WARNING SURFACE, ADJOINING CURB AND GUTTER. INSTALL STA. MD 655.11 TYPE RAMP AND CURB AND GUTTER WITH 2" WIDE STA. MD 655.40 DETECTABLE WARNING SURFACE THE LENGTH OF THE RAMP OPENING WITHIN THE CROSSWALK (SEE INSETS 2 & 3).
- U. REMOVE EXISTING RAMP, WARNING SURFACE, ADJOINING CURB AND GUTTER. INSTALL STA. MD 655.13 TYPE RAMP AND CURB AND GUTTER WITH 2" WIDE STA. MD 655.40 DETECTABLE WARNING SURFACE THE LENGTH OF THE RAMP OPENING WITHIN THE CROSSWALK (SEE INSETS 1 & 3).
- V. REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK (FOR THE INSTALLATION OF EQUIPMENT AND/OR RAMP).
- W. INSTALL NON-INVASIVE DETECTORS WITHIN 3" PVC CONDUIT.
- Y. REMOVE EXISTING HANDHOLE; CAP AND ABANDON EXISTING CONDUIT.
- Z. REMOVE EXISTING CONTROLLER CABINET; REMOVE THE FOUNDATION 12" BELOW GROUND GRADE. CAP AND ABANDON CONDUIT.
- AA. REMOVE AND REPLACE W11-8 SIGN AND SUPPORTS.
- BB. REMOVE EXISTING GROUND MOUNTED SHIELD SIGN AND SUPPORT.
- CC. INSTALL HANDHOLE ONTO EXISTING CONDUIT; PROTECT EXISTING INTERCONNECT CABLE.
- DD. REMOVE EXISTING ELECTRICAL SERVICE FEED.
- EE. INSTALL 40' WOOD POLE, 3" WEATHER HEAD, 3" RISER, AND 3" BEND AT THE BASE (GUYS & ANCHOR INCIDENTAL) FOR THE RELOCATION OF THE FIREHOUSE PUSHBUTTON CABLE.
- FF. DISCONNECT FIREHOUSE PUSHBUTTON PRE-EMPTION CABLE, PULL BACK AND STORE AT THE TOP OF STRAIN POLE. MOVE CABLE TO WOOD POLE "EE"; AT/OR SLIGHTLY LOWER THEN THE ATTACHMENT HEIGHT ON THE STRAIN POLE AND RE-ROUTE TO THE PROPOSED CONTROLLER/CABINET.
- GG. USE EXISTING HANDHOLE. INSTALL NEW FRAME, COVER AND GROUND ROD. PULL BACK DISCONNECTED INTERCONNECT CABLE FROM EXISTING CONTROLLER/CABINET AND RE-ROUTE CABLE TO NEW CONTROLLER/CABINET.
- HH. INSTALL STA MD 655.11 TYPE CUT THROUGH ISLAND OPENING WITH CURB AND GUTTER WITH 2" WIDE OF STA. MD 655.40 DETECTABLE WARNING SURFACE THE LENGTH OF THE PRESSED DOWN CURB AREA.
- II. INSTALL RAMP AND TIE INTO EXISTING BRICK SIDEWALK.

GENERAL NOTES

1. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
2. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS AND ALL UTILITY LOCATIONS PRIOR TO INSTALLING THE PROPOSED SIGNAL EQUIPMENT. IF CONFLICTS ARISE, THE CONTRACTOR SHALL STOP WORK AND CONTACT THE PROJECT ENGINEER.
3. FOR FINAL PAVEMENT MARKINGS, REFER TO THE PAVEMENT MARKINGS DETAILED ON THIS PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
4. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF SIGNAL CONTRACTOR UPON COMPLETION OF NEW SIGNAL.

GENERAL NOTES (CONT'D.)

5. ALL NEW LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING UNUSED CABLES FROM EXISTING HANDHOLES AND CONDUITS; FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS; AND FOR PROPERLY LABELING EACH CABLE INSIDE THE CABINET.
7. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, AND THE HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 818.03, MD 818.01, MD 818.02, AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL PROPOSED EQUIPMENT.
8. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSINGS FOR WHICH THEY ARE INTENDED. THEIR 10' SEPARATION IS TO BE MEASURED FROM CENTER TO CENTER OF THE PUSHBUTTONS, NOT CENTER TO CENTER OF THE POLES.

GENERAL NOTES (CONT'D.)

9. PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF SIDEWALKS AND PEDESTRIAN RAMPS, AND THE INSTALLATION OF DETECTABLE WARNING SURFACES.
10. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18 INCHES FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
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 AND APPROVED BY THE DIRECTOR OF THE OFFICE OF TRAFFIC AND SAFETY.

MM CENTURY ENGINEERING
 CONSULTING ENGINEERS - PLANNERS
 10710 GILROY ROAD
 HUNT VALLEY, MD 21031

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	— A —
ELECTRICAL	— E —
TELEPHONE	— T —
GAS	— G —
SEWER	— S —
WATER	— W —
CABLE TV	— TV —

REVISION 'B' CEI # 26265-21-005

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 MD 450 (ANNAPOLIS ROAD)
 AT 68TH AVENUE
 HYATTSVILLE, MARYLAND

TRAFFIC SIGNALIZATION PLAN

SCALE: 1" = 20' ADVERTISED DATE: 7-9-73 CONTRACT NO. P-420-000-385

DESIGNED BY	COUNTY	PRINCE GEORGES
DRAWN BY	LOGMILE	16045001.91
CHECKED BY	TIMS NO.	NA
F.A.P. NO.	U-931-1 (2)	TOD NO.
TS NO.	778B	DRAWING SGT-01
OF	2	SHEET NO. 1 OF 2

APPROVALS	REVISIONS
TEAM LEADER	
ASST. DIV. CHIEF	
DIVISION CHIEF	
OFFICE DIRECTOR	

RECONSTR. W/ MAST FEB. 2011
 ARMS-VIDEO-APS/GPS, ADA RAMPS
 SHA # XX3515168 TMS # K-044
 EMM MAR 22 2011