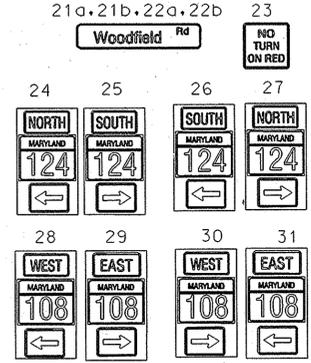


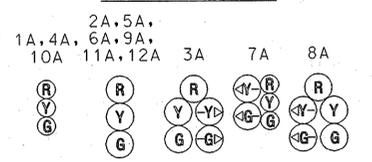
**EXISTING SIGNS TO REMAIN**



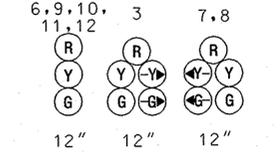
**EXISTING SIGNS TO BE REMOVED**



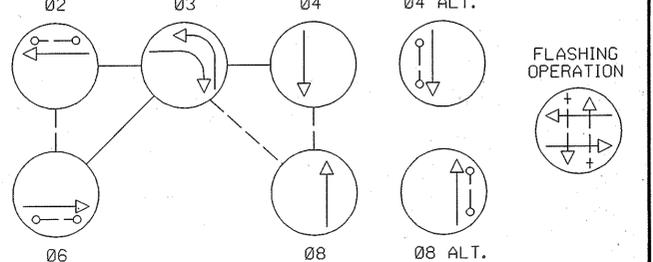
**EXISTING SIGNALS TO BE REMOVED**



**PROPOSED LED SIGNALS**



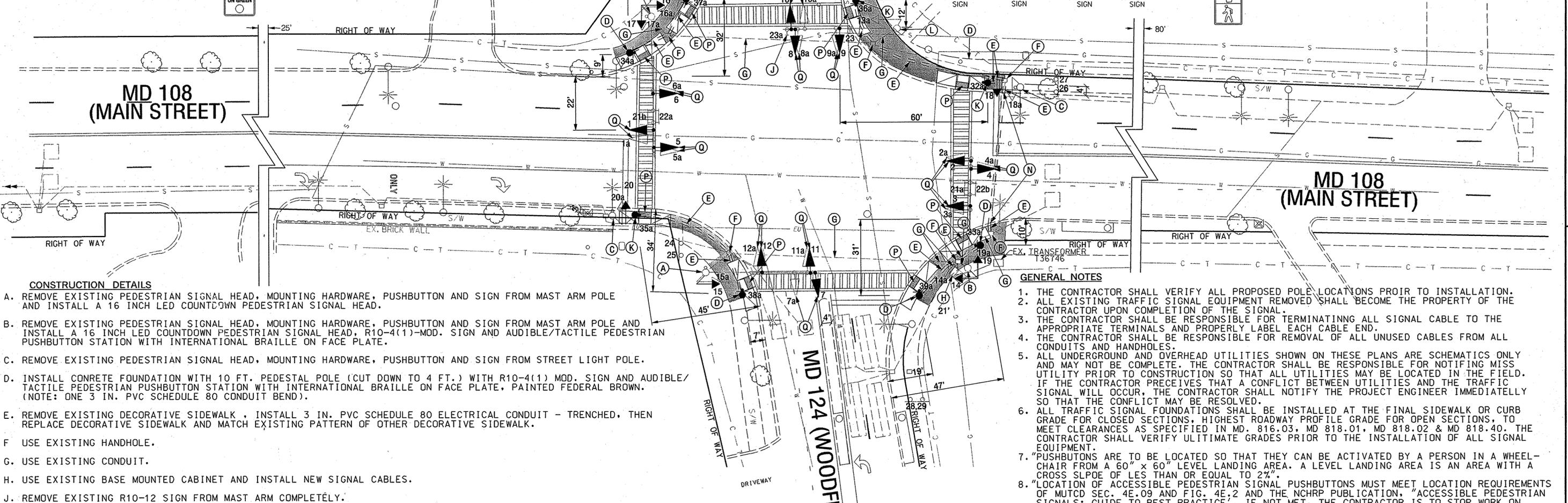
**NEMA PHASING**



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**

13a, 14a, 15a, 16a, 17a, 18a, 19a, 20a



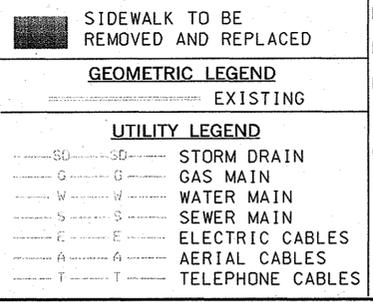
**CONSTRUCTION DETAILS**

- A. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, MOUNTING HARDWARE, PUSHBUTTON AND SIGN FROM MAST ARM POLE AND INSTALL A 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD.
- B. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, MOUNTING HARDWARE, PUSHBUTTON AND SIGN FROM MAST ARM POLE AND INSTALL A 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, R10-4(1)-MOD. SIGN AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION WITH INTERNATIONAL BRAILLE ON FACE PLATE.
- C. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, MOUNTING HARDWARE, PUSHBUTTON AND SIGN FROM STREET LIGHT POLE.
- D. INSTALL CONCRETE FOUNDATION WITH 10 FT. PEDESTAL POLE (CUT DOWN TO 4 FT.) WITH R10-4(1) MOD. SIGN AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION WITH INTERNATIONAL BRAILLE ON FACE PLATE, PAINTED FEDERAL BROWN. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
- E. REMOVE EXISTING DECORATIVE SIDEWALK, INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED, THEN REPLACE DECORATIVE SIDEWALK AND MATCH EXISTING PATTERN OF OTHER DECORATIVE SIDEWALK.
- F. USE EXISTING HANDHOLE.
- G. USE EXISTING CONDUIT.
- H. USE EXISTING BASE MOUNTED CABINET AND INSTALL NEW SIGNAL CABLES.
- J. REMOVE EXISTING R10-12 SIGN FROM MAST ARM COMPLETELY.
- K. INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTRIAN POLE WITH BREAKAWAY BASE, 16 INCH LED COUNTDOWN PEDESTRIAN SIGNALS, R10-4(1) MOD. SIGN AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION WITH INTERNATIONAL BRAILLE ON FACE PLATE, PAINTED FEDERAL BROWN. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND).
- L. REMOVE EXISTING PEDESTRIAN SIGNAL, MOUNTING HARDWARE, PUSHBUTTON AND SIGN FROM MAST ARM POLE.
- M. CAP AND ABANDON EXISTING CONDUIT.
- N. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT-SLOTTED.
- P. REMOVE EXISTING DECORATIVE SIDEWALK AND INSTALL NEW DEPRESSED CURB AND GUTTER AND DETECTABLE WARNING SURFACES, SEE MD. STANDARD NO. 655-12. FOR RAMPS AND SEE MD. STANDARD NO. 655-40 FOR DETECTABLE WARNING SURFACES.
- Q. REMOVE EXISTING YELLOW FACED TRAFFIC SIGNAL HEAD FROM THE MAST ARM, THEN IN THE SAME LOCATION INSTALL 12 IN. BLACK FACED LED TRAFFIC SIGNAL HEAD TO THE MAST ARM AS SHOWN ON THE PLAN.

**GENERAL NOTES**

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
2. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UPON COMPLETION OF THE SIGNAL.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE END.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL UNUSED CABLES FROM ALL CONDUITS AND HANDHOLES.
5. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATICS ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
6. 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 818.40. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
7. "PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEEL-CHAIR FROM A 60" x 60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LES THAN OR EQUAL TO 2%".
8. "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."
9. THE CONTRACTOR SHALL DELIVER APS EQUIPMENT TO MONTGOMERY COUNTY SIGNAL SHOP THREE (3) WEEKS PRIOR TO THE ACTIVATION DATE.

**CONSTRUCTION LEGEND**



**APPROVALS**

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION	ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	DIRECTOR, OFFICE OF TRAFFIC & SAFETY
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**REVISIONS**

1	SIGNAL MODIFICATION, INSTALL APS AND CPS FOR CROSSWALKS	09/2007
2	INSTALL E/P LEFT TURN FOR NB MD 124 AND RIGHT TURN OVERLAP FOR MD 108.	2/1997
3	TOTAL RECONSTRUCTION DUE TO NEW GEOMETRICS	9/1990

TOD NO : AT925-23  
SHA NO: M0281ASB/C5B  
MD 108@ MD 124

**SABRA, WANG & ASSOCIATES, INC.**  
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**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

**MD 108 (MAIN ST.) & MD 124 (WOODFIELD RD.)**  
DAMASCUS, MARYLAND

TRAFFIC SIGNAL PLAN

SCALE 1"=20' DATE 09/1990 CONTRACT NO. M-652-501-377

DESIGNED BY D. DISTANCE COUNTY MONTGOMERY  
DRAWN BY D. DISTANCE 02/1979 LOGMILE 15010800.15  
CHECKED BY S. RENZI 02/1979 T.J.M.S. NO. H960  
F.A.P. NO. TOD NO.

TS NO. 1682 C DRAWING 1 OF 2 SHEET NO. 1 OF 2