R3-1 30"X30" | R3-2 30"X30" | R3-5L 30"X36" | R3-4 30"X30"

MAUGANS AVE

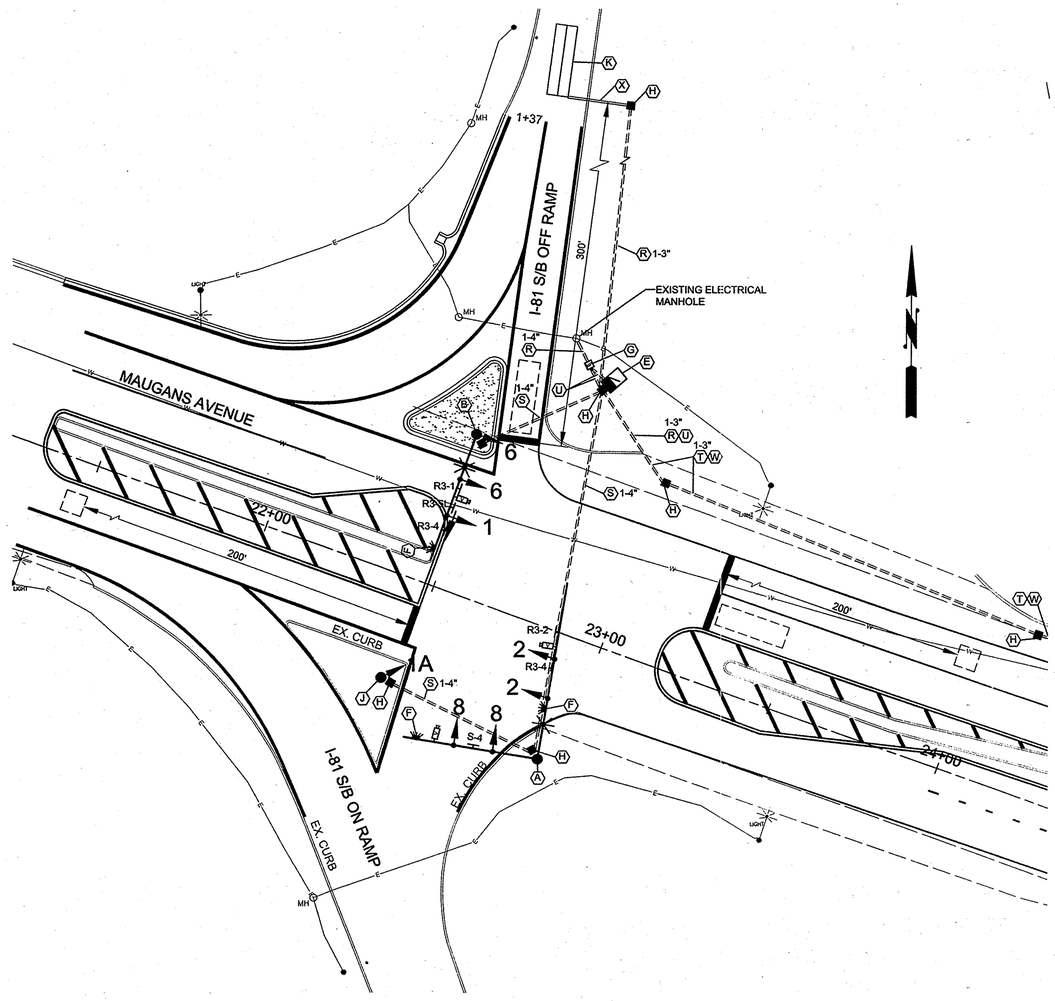
S-4
16" X VARIES

GENERAL NOTES:

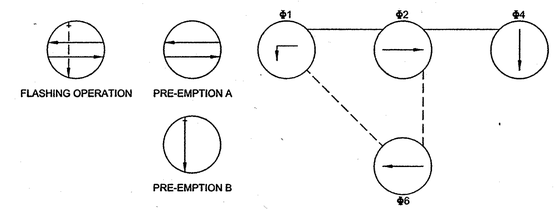
1. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT FINAL SIDEWALK OR CURB GRADE TO MEET CLEARANCE AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02 AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONTRUCTION SO THAT THE UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
3. THE CONTRACTOR SHALL NOT CUT THE MAST ARM AS INDICATED ON THE PLANS UNTIL THE MAST ARM POLE LOCATION IS FINALIZED.
4. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
5. HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
6. THE SIGNAL CONTRACTOR SHALL DETERMINE IF ANY WORK BY OTHER CONTRACTORS CAN NOT BE COMPLETED UNTIL THE INSTALLATIONS OF SIGNAL EQUIPMENT IS COMPLETE. THE SIGNAL CONTRACTOR SHALL NOTIFY OTHER CONTRACTORS OF THIS WORK.
7. VIDEO CAMERA LOCATION/ALIGNMENT SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL VIDEO DETECTION CAMERA CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
9. SEE SIGNAL PLAN DETAILS SHEETS, SP-13 TO SP-16, FOR SHA STANDARD DETAILS.
10. SEE SHEET PM-01 TO PM-06 FOR PAVEMENT MARKINGS AND SIGNAGE.
11. CAP ALL UNUSED CONDUIT.

CONSTRUCTION DETAILS

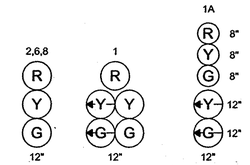
A. INSTALL CONCRETE FOUNDATION WITH STEEL POLE AND TWIN 50 FT MAST ARMS (CUT TO 38') WITH TRAFFIC SIGNAL HEADS, LUMINAIRE, OVERHEAD VIDEO DETECTION CAMERA AND SIGNS MOUNTED ON MAST ARMS AS SHOWN. (INSTALL 2-4 IN SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN FOUNDATION.)
B. INSTALL CONCRETE FOUNDATION WITH STEEL POLE 38 FT MAST ARM WITH TRAFFIC SIGNAL HEADS, LUMINAIRE, OVERHEAD VIDEO DETECTION CAMERA AND SIGNS MOUNTED ON MAST ARMS AS SHOWN. (INSTALL 2-4 IN SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN FOUNDATION.)
E. INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER WITH CONCRETE PAD. (INSTALL 2-4" AND 2-2" IN SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN FOUNDATION.)
F. INSTALL OPTICOM EMERGENCY VEHICLE PRE-EMPTION DETECTOR EYE.
G. INSTALL 200 AMP METER PEDESTAL FOR ELECTRIC SERVICE.
H. INSTALL HANDHOLE.
J. INSTALL 10 FT BREAKAWAY PEDESTAL POLE WITH SIGNAL HEADS. (INSTALL 1-4 IN SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN FOUNDATION.)
K. INSTALL RAMP QUEUE DETECTION, 6'x22' LOOP WIRE.
R. INSTALL SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED).
S. INSTALL SCHEDULE 80 PVC ELECTRICAL CONDUIT (BORED).
T. INSTALL SCHEDULE 80 PVC ELECTRICAL CONDUIT (SLOTTED).
U. INSTALL 2" SCHEDULE 80 PVC ELECTRICAL CONDUIT (TRENCHED).
V. INSTALL 2" SCHEDULE 80 PVC ELECTRICAL CONDUIT (BORED).
W. INSTALL 2" SCHEDULE 80 PVC ELECTRICAL CONDUIT (SLOTTED).
X. INSTALL 1" FLEXIBLE TUBING (BORED).



NEMA PHASING



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



NOTE: ALL SIGNALS SHALL BE "LED" WITH BLACK FACE.

LEGEND

METAL POLE/PEDESTAL WITH LUMINAIRE	THREE HEAD SIGNAL
SINGLE MAST ARM AND POLE	THREE HEAD SIGNAL TURN
TWIN MAST ARM AND POLE	FIVE HEAD SIGNAL
PEDESTRIAN SIGNAL, PUSH BUTTON AND SIGN ON METAL POLE	PROPOSED SIGN ON MAST ARM
BASE MOUNTED NEMA SIZE "6" CABINET AND CONCRETE PAD	OPTICOM EMERGENCY VEHICLE PRE-EMPTION DETECTOR EYE
HANDHOLE	TRAFFIC VIDEO CAMERA
VIDEO DETECTION ZONE	PROPOSED CONDUIT
RAMP QUEUE DETECTION 6'x22' QUADRAPOLE	3/4" x 10' GROUND ROD
METER PEDESTAL	

SPECIAL NOTES

THE CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITES PRIOR TO INSTALLING SIGNAL EQUIPMENT.

SHA No.: BW707M83
Maughan's Avenue: I-81 to US 11

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MAUAGNS AVENUE AND
I-81 SOUTHBOUND RAMPS

TRAFFIC SIGNAL PLANS

NO.	REVISION DESCRIPTION	BY	DATE

DESIGNED BY: D.A.M.
DRAWN BY: D.A.M.
CHECKED BY: R.J.S.
DATE: 10-25-06

DIVISION OF PUBLIC WORKS
WASHINGTON COUNTY, MARYLAND
ENGINEERING DEPARTMENT

Washington County Administration Building
80 W. Baltimore St., Hagerstown, MD 21740
Phone: 240-313-2400 Fax: 240-313-2401

MAUGANS AVE. & PENNSYLVANIA AVE.
RECONSTRUCTION

SIGNAL PLANS
I-81 SOUTHBOUND RAMPS

SCALE
1" = 20'

SHEET NO.
SP-02

PROJECT NO. 10-140

DWG. No. 59 OF 146