

PROPOSED LED SIGNALS

1,2,3,4,5,6,7,8,9



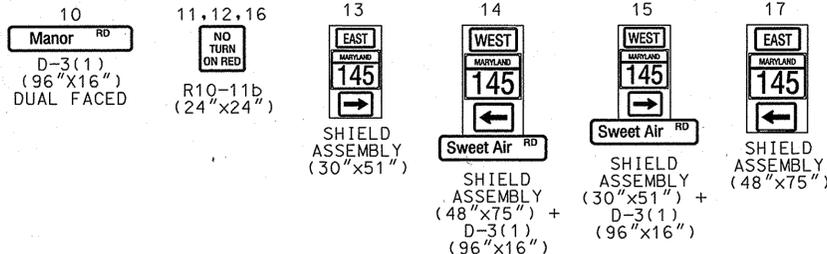
12"

PROPOSED VIDEO DETECTION

a, b, c



PROPOSED SIGNS



LINE HEIGHTS (LH) 1

SPAN WIRE	- 21'-7"
COMMUNICATION 1	- 24'-1"
COMMUNICATION 2	- 24'-8"
COMMUNICATION 3	- 25'-1"
COMMUNICATION 4	- 27'-0"
SECONDARY	- 35'+
PRIMARY	- 40'+

LINE HEIGHTS (LH) 2

COMMUNICATION 1	- 14'-8"
COMMUNICATION 2	- 20'-1"
COMMUNICATION 3	- 22'-6"
SECONDARY	- 30'+
PRIMARY	- 35'+

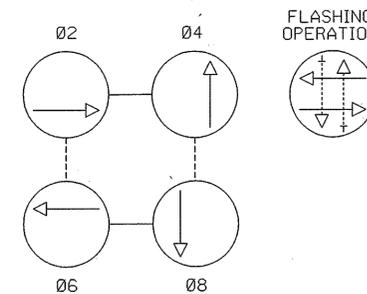
LINE HEIGHTS (LH) 3

SPAN WIRE	- 22'-8"
EX. PHONE	- 22'-8"
EX. POWER	- 28'-5"

LINE HEIGHTS (LH) 4

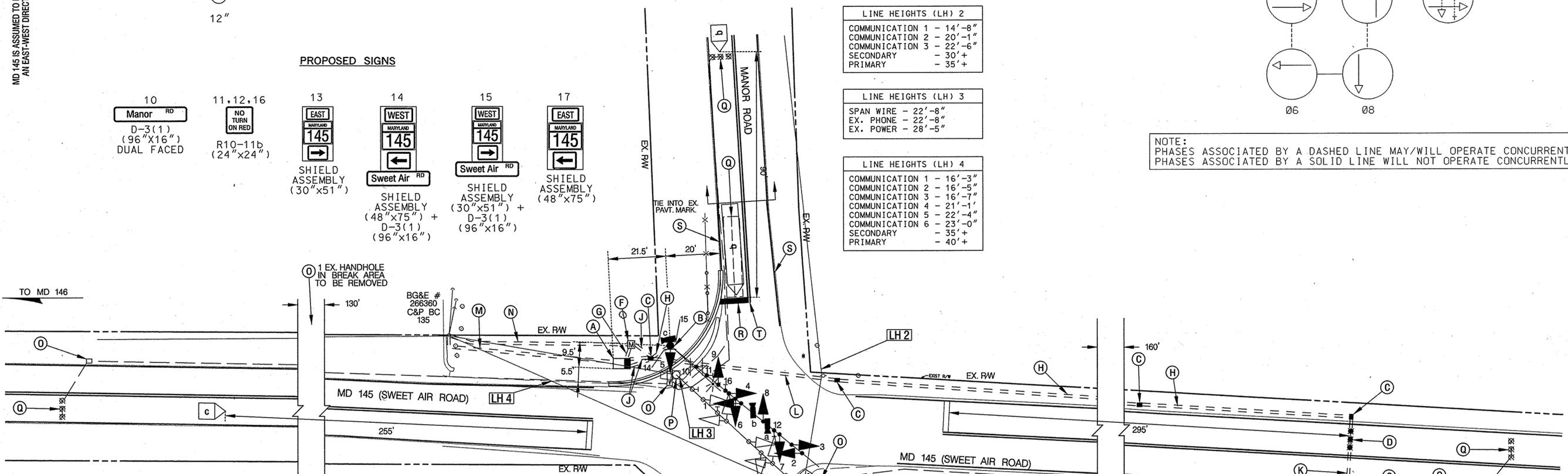
COMMUNICATION 1	- 16'-3"
COMMUNICATION 2	- 16'-5"
COMMUNICATION 3	- 16'-7"
COMMUNICATION 4	- 21'-1"
COMMUNICATION 5	- 22'-4"
COMMUNICATION 6	- 23'-0"
SECONDARY	- 35'+
PRIMARY	- 40'+

NEMA PHASING

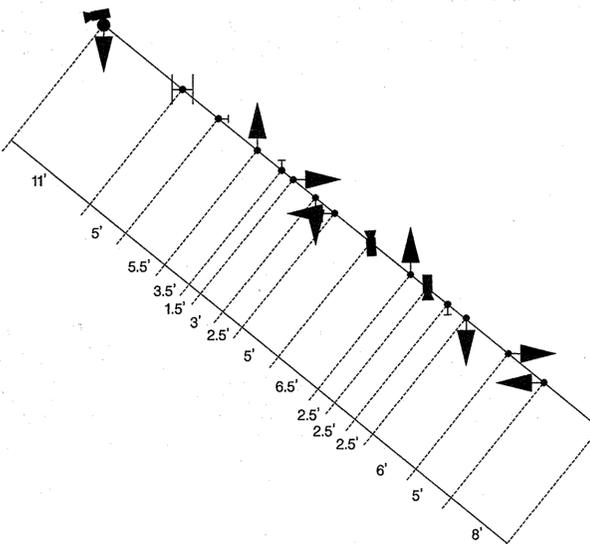


FLASHING OPERATION

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



SIGNAL HEAD LAYOUT (NOT TO SCALE)



- CONSTRUCTION DETAILS**
- INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT. (NOTE: 2-2 IN. AND 2-4 IN. 90 DEGREE BENDS).
 - INSTALL 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, FOUNDATION, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERAS, AND A 20 FT. LIGHTING ARM WITH 250 WATT HPS LUMINAIRE (NOTE: 1-3 IN. PVC 90 DEGREE BEND).
 - INSTALL ELECTRICAL HANDHOLE.
 - INSTALL NON-INVASIVE MICROLOOP PROBE SET.
 - INSTALL GROUND MOUNTED SIGN ON TWO 4 IN. X 6 IN. WOOD SUPPORTS.
 - INSTALL METERED SERVICE PEDESTAL (NOTE: 2-2 IN. AND 1-4 IN. 90 DEGREE PVC BENDS).
 - INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED.
 - INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED.
 - INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED.
 - INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED.
 - INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED.
 - INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
 - INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED) - FOR PROPOSED UNDERGROUND POWER SERVICE. CAP AND MARK CONDUIT, AND LEAVE A 1 FT. STUB WITH PULL STRING AT UTILITY POLE FOR USE BY OTHERS.
 - REMOVE EXISTING HANDHOLE. CAP AND ABANDON EXISTING CONDUIT.
 - REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT. CAP AND ABANDON EXISTING CONDUIT. REMOVE FOUNDATION 12 IN. BELOW GRADE. POLE MOUNTED CABINET AND CONTROLLER TO BE SALVAGED BY THE SHA SIGNAL SHOP.
 - ABANDON EXISTING LOOP DETECTOR / MICROLOOP PROBE.
 - INSTALL 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOPLINE.
 - INSTALL 5 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES.
 - INSTALL 5 INCH DOUBLE YELLOW PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES.

- GENERAL NOTES**
- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSA STANDARD TYPICALS FOR TRAFFIC CONTROL.
 - THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
 - WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
 - ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSURE 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.
 - THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.
 - THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
 - THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE AND CABINET LOCATION PRIOR TO INSTALLATION.
 - THE CONTRACTOR SHALL ENSURE THE TRAFFIC SIGNAL REMAINS OPERATIONAL UNTIL RECONSTRUCTED TRAFFIC SIGNAL IS CONSTRUCTED.
 - ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSA STANDARDS.
 - ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
 - THE SHA SIGNAL SHOP SHALL PROGRAM VIDEO DETECTION CAMERAS (a) AND (b) FOR BOTH PRESENCE AND SETBACK DETECTION.

UTILITY LEGEND

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

TOD No. AT915-39
SHA No. BA617A54/B54

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 145 (SWEET AIR ROAD) AT MANOR ROAD
INTERSECTION IMPROVEMENTS

SIGNALIZATION PLAN SHEET

SCALE 1" = 20'. ADVERTISED DATE 11-13-72. CONTRACT NO. B-241X-475.

DESIGNED BY _____ COUNTY BALTIMORE
DRAWN BY B. RICHARDSON LOGMILE 03014506.83
CHECKED BY WILLIAM F. FITCH TMS NO. I-967
F.A.P. NO. SEE TITLE SHEET TOD NO. _____

TS NO. 784 D DRAWING **SG-01** OF 2 SHEET NO. 5 OF 6

APPROVALS	REVISIONS
TEAM LEADER	RECONSTRUCT SIGNAL DUE TO GEOMETRIC CHANGES SHA NO. AT915178 7/2008
ASST. DIV. CHIEF	REPLACE FAILED DETECTION OT 2003
DIVISION CHIEF	CONVERT FLASHER TO NORMAL SIGNAL OPERATION AW-679-501-085
OFFICE DIRECTOR	