F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

PROPOSED SIGNS

13,17 — W3-3 (48" X 48") W/"NEW" PANEL (30" X 30") AND FLAGS; D3-2 (BLACK ON YELLOW) (VARIABLE X 16")

14,16,18,20 — D3-2 (DUAL FACED) (VARIABLE X 16")

15,19 — R10-12 (36" X 42")

21,25 — W3-3 (36"x36") W/"NEW" PANEL (30"x30") AND FLAGS

24 — R3-5R (30" X 36")

22 — ASSOCIATED SHIELD ASSEMBLY (24" X 51")

23 — ASSOCIATED SHIELD ASSEMBLY (36" X 75")

26 — ASSOCIATED SHIELD ASSEMBLY (24" X 51")

27 — ASSOCIATED SHIELD ASSEMBLY (36" X 75")

U.S. 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

PROPOSED SIGNALS

1,4 — 12"/8"; 2,5 — 12"; 7,10 — 8"; 3,6,8,9 11,12 — 12"

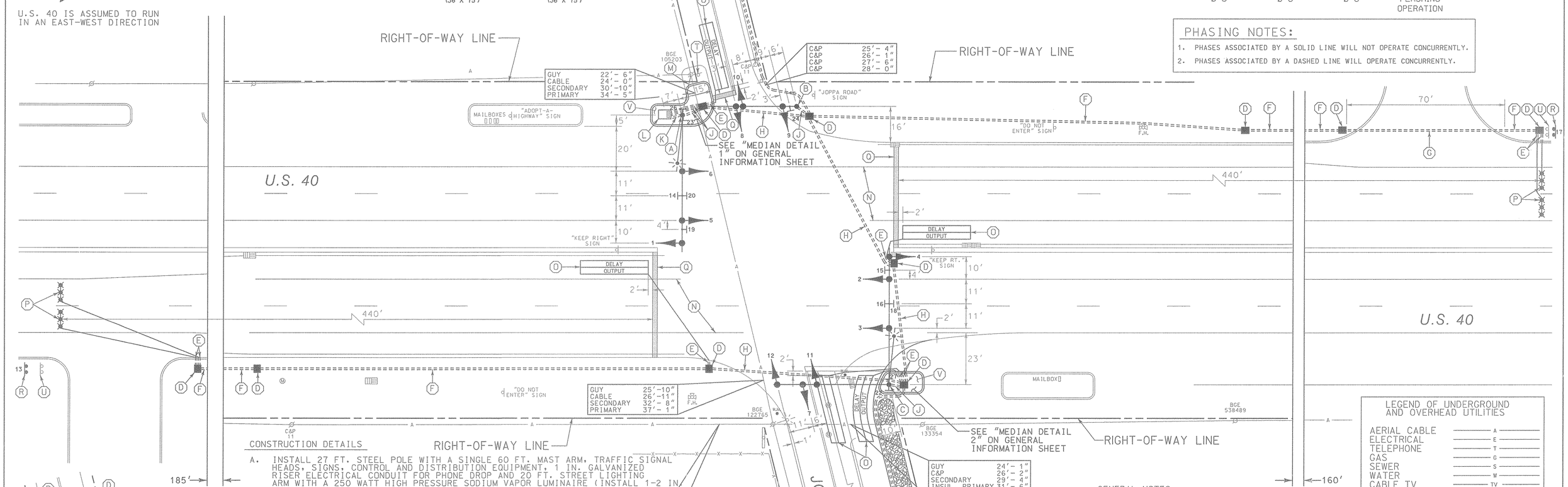
NEMA PHASING

Ø 1, Ø 2, Ø 4, Ø 5, Ø 6, Ø 8

FLASHING OPERATION

PHASING NOTES:

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



LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

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

CONSTRUCTION DETAILS

A. INSTALL 27 FT. STEEL POLE WITH A SINGLE 60 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, CONTROL AND DISTRIBUTION EQUIPMENT, 1 IN. GALVANIZED RISER ELECTRICAL CONDUIT FOR PHONE DROP AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE CONDUIT BENDS IN POLE BASE).
B. INSTALL 27 FT. STEEL POLE WITH SINGLE 38 FT. MAST ARM AND TRAFFIC SIGNAL HEADS (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE CONDUIT BENDS IN POLE BASE).
C. INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT./60 FT. MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNS AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE CONDUIT BENDS IN POLE BASE).
D. INSTALL HANDHOLE.
E. INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
F. INSTALL 2 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
G. INSTALL 2 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (BORED).
H. INSTALL 4 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
J. INSTALL 4 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
K. INSTALL 2 IN. SCHEDULE 80, RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED ELECTRICAL SERVICE.
L. INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE CONDUIT BENDS IN CABINET BASE).
M. PROPOSED OVERHEAD ELECTRICAL SERVICE BY BG&E.
N. REMOVE EXISTING PAVEMENT MARKINGS.
O. INSTALL 6 FT. X 30 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
P. INSTALL MICROLOOP PROBE SET.
Q. INSTALL 24 IN. WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE (STOP LINE).
R. INSTALL W3-3 "SIGNAL AHEAD" SIGN WITH "NEW" PANEL AND FLAGS AND D3-2 "JOPPA RD" BLACK ON YELLOW SIGN ON TWO 4 IN. X 4 IN. TREATED WOOD POSTS APPROXIMATELY 400 FT. IN ADVANCE OF THE INTERSECTION ON U.S. ROUTE 40.
S. INSTALL W3-3 "SIGNAL AHEAD" SIGN WITH "NEW" PANEL AND FLAGS ON TWO 4 IN. X 4 IN. TREATED WOOD POSTS APPROXIMATELY 400 FT. IN ADVANCE OF THE INTERSECTION ON JOPPA ROAD.
T. REMOVE EXISTING R1-1 AND R6-1 SIGNS AND SUPPORT. RELOCATE R6-1 SIGNS ONTO SIGNAL POLE.
U. REMOVE EXISTING W2-1 AND D3-2 SIGNS AND SUPPORTS.
V. CONSTRUCT CONCRETE MEDIAN.

GENERAL NOTES

1. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
2. INSTALL LOOP DETECTOR AND CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
3. PAVEMENT MARKINGS ON NORTHBOUND JOPPA ROAD TO BE INSTALLED BY HARFORD COUNTY FORCES. DETECTOR LOCATIONS SHALL BE CONFIRMED WITH PAVEMENT MARKING PLAN PRIOR TO INSTALLATION.
4. 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 THE 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.
5. REMOVE STOP SIGN ON SOUTHEAST CORNER (NOT SHOWN ON PLAN BECAUSE LOCATION WILL BE DETERMINED DURING ROADWAY WIDENING STAGE)

LOG MILE 12004001.13

REVISIONS	APPROVALS	REVISIONS
	8/26/97 ASSISTANT DIVISION CHIEF	
	ASST. DISTRICT ENGINEER, TRAFFIC	
	8/26/97 CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	
	8/27/97 DIRECTOR, OFFICE OF TRAFFIC & SAFETY	

WR&A
Whitman, Requardt and Associates
Engineers and Planners
2315 Saint Paul Street
Baltimore, Maryland 21218
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNALIZATION PLAN

U.S. ROUTE 40 AND JOPPA ROAD

DATE: 8-22-97	DRAWN BY: S.BLOSS	F.A.P. NO. AC-STPG-000S(589)E	PLAN SHEET NO.: TS-3727	SHEET NO. 1 OF 2
SCALE: 1" = 20'	DESIGNED BY: N.LEARY	S.H.A. NOS.: AW.978A55.9, AW.978B55.9, AW.978H55.9		
APPROVED BY:	CHECKED BY: T.HANNAN	COUNTY HARFORD		