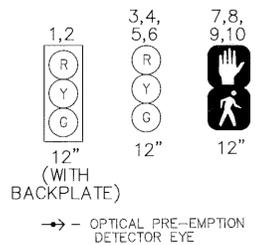


FHWA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
3	MD.	STPG-218-1(7)E	51	66

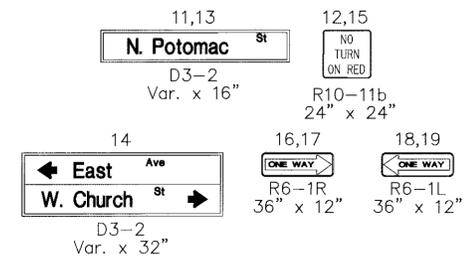
PHASING DIAGRAM

	1	2	3	4	5	6	7	8	9	10
PHASE 2+6	G	G	G	G	R	R	W	W	DW	DW
2+6 PED CLEAR	G	G	G	G	R	R	FL DW	FL DW	DW	DW
2+6 CHANGE	Y	Y	Y	Y	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	G	G	DW	DW	W	W
4 PED CLEAR	R	R	R	R	G	G	DW	DW	FL DW	FL DW
4 CHANGE	R	R	R	R	Y	Y	DW	DW	DW	DW
PRE-EMPTION A	G	G	R	R	R	R	DW	DW	DW	DW
A CHANGE	Y	Y	R	R	R	R	DW	DW	DW	DW
PRE-EMPTION B	R	R	R	R	G	G	DW	DW	DW	DW
B CHANGE	R	R	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL R	FL R	FL R	FL R	FL Y	FL Y	DARK	DARK	DARK	DARK

SIGNALS



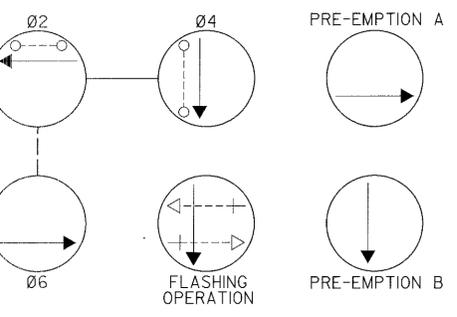
SIGNS



EQUIPMENT LISTS

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
1	EA	SP	BASE MOUNTED LOCAL CABINET (SIZE 5) LESS DETECTION EQUIPMENT WITH 8 PHASE ASC II CONTROLLER WITH TELEMETRY AND OPTICOM PRE-EMPTION MODULE
63	SF	813	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: - 2 EACH R6-1L (36" X 12")-POLE MOUNT - 2 EACH R6-1R (36" X 12")-POLE MOUNT - 2 EACH R10-11b (24" X 24")-MAST ARM MOUNT - 2 EACH D3-2 (N. Potomac St) (VAR. X 16")-MAST ARM MOUNT - 1 EACH D3-2 (ARROW-East Ave/W. Church St-ARROW)(VAR. X 32")-MAST ARM MOUNT
5	CY	205	TEST PIT EXCAVATION

NEMA PHASING



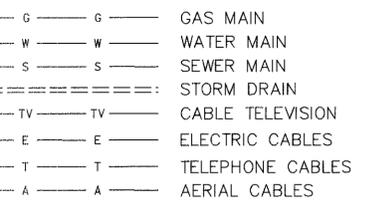
PHASING NOTES:

PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY

CONSTRUCTION DETAILS

- INSTALL 23' STEEL POLE (CITY STANDARD), 32' MAST ARM, SIGNAL HEADS, AND SIGNS (NOTE: 1-2", 90-DEGREE P.V.C. BEND).
- INSTALL 23' STEEL POLE (CITY STANDARD), 18' MAST ARM, SIGNAL HEADS, AND PEDESTRIAN SIGNALS (NOTE: 1-2", 90-DEGREE P.V.C. BEND).
- INSTALL 23' STEEL POLE (CITY STANDARD), 32' MAST ARM, SIGNAL HEADS, AND SIGN (NOTE: 1-2", 90-DEGREE P.V.C. BEND).
- INSTALL BASE-MOUNTED CABINET, SIZE #5, AND CONTROLLER WITH ALL NECESSARY EQUIPMENT AS SHOWN (NOTE: 2-4", 90-DEGREE P.V.C. BENDS; AND 2-2", 90-DEGREE P.V.C. BENDS).
- INSTALL HANDHOLE.
- INSTALL HANDHOLE (CITY STANDARD).
- INSTALL 3" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT - RISER AND 3" WEATHERHEAD.
- INSTALL 2" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT (SLOTTED).
- INSTALL 2" P.V.C. (SCHEDULE 40) ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4" P.V.C. (SCHEDULE 40) ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 24" SOLID WHITE LINE FOR STOP BAR.
- REMOVE EXISTING PEDESTAL POLE, SIGNAL HEAD(S), SIGN, AND FOUNDATION.
- REMOVE EXISTING PEDESTAL POLE, SIGNAL HEAD, AND FOUNDATION.
- REMOVE EXISTING SIGNAL HEAD.
- REMOVE EXISTING CABINET, CONTROLLER, AND FOUNDATION.
- REMOVE AND REPLACE EXISTING SIDEWALK.
- INSTALL 10' STEEL PEDESTAL POLE, PEDESTRIAN SIGNALS, AND SIGN (NOTE: 1-2", 90-DEGREE P.V.C. BEND).
- INSTALL 12" SOLID WHITE LINE FOR CROSSWALK.
- CONSTRUCT SIDEWALK RAMP.
- INSTALL 10' OF 2" P.V.C. (SCHEDULE 80) ELECTRICAL CONDUIT - RISER AND COIL 25' OF ADDITIONAL CABLE.
- INSTALL 3" P.V.C. (SCHEDULE 40) ELECTRICAL CONDUIT (TRENCHED).

UTILITY LEGEND



INTERSECTION DESCRIPTION

I. GENERAL
THIS INTERSECTION IS NORTH POTOMAC STREET AND EAST AVENUE/WEST CHURCH STREET. CONSTRUCTION AT THIS INTERSECTION INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AND INTERCONNECTION WITH THE OTHER SIGNALIZED INTERSECTIONS IN THE NEW CITY-WIDE SYSTEM. IT IS ASSUMED THAT EAST AVENUE/WEST CHURCH STREET RUNS IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION
THE INTERSECTION WILL OPERATE IN A NEMA THREE (3) PHASE PRE-TIMED MODE EASTBOUND AND WESTBOUND WEST AVENUE/WEST CHURCH STREET WILL OPERATE CONCURRENTLY. SOUTHBOUND NORTH POTOMAC STREET WILL OPERATE SEPARATELY.

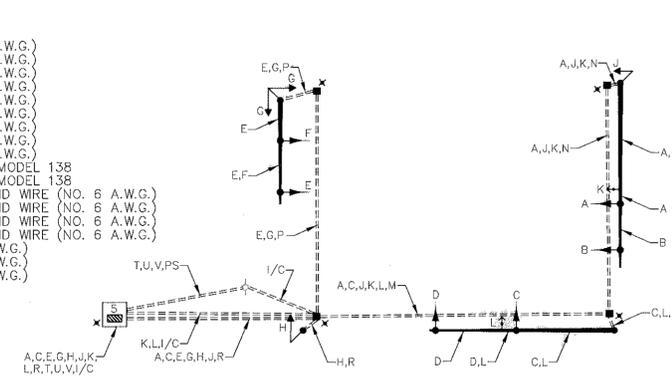
PRE-EMPTION ON WESTBOUND EAST AVENUE/WEST CHURCH STREET WILL CALL PRE-EMPTION A. PRE-EMPTION ON SOUTHBOUND NORTH POTOMAC STREET WILL CALL PRE-EMPTION B.

A NEW EIGHT PHASE FULLY ACTUATED CONTROLLER WITH TELEMETRY MODULE, AND PRE-EMPTION HOUSED IN A GROUND MOUNTED CABINET WILL BE INSTALLED.

WIRING LEGEND

- A - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- B - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- C - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- D - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- E - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- F - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- G - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- H - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- J - 5 CONDUCTOR CABLE (NO. 14 A.W.G.)
- K - 3M OPTICOM DETECTOR CABLE, MODEL 138
- L - 3M OPTICOM DETECTOR CABLE, MODEL 138
- M - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- N - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- P - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- R - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- T - 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
- U - 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
- V - 1 CONDUCTOR CABLE (NO. 4 A.W.G.)
- X - 3/4"x10" GROUND ROD
- PS - PROPOSED ELECTRICAL SERVICE
- I/C - INTERCONNECT CABLE

WIRING DIAGRAM



REVISIONS	APPROVALS
	CHIEF, SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION LOG MI. 21MPOT01.56

DRAWN BY: M. GESELL
DES. BY: J. LAWRENCE
CHK. BY: _____

North Potomac St. at East Ave./West Church St.
COUNTY: WASHINGTON

DATE: 05/30/97 F.A.P. NO. STPG-218-1(7)E TS NO. 3705
SCALE: 1" = 10' S.H.A. NO. WA9535185 SHEET NO. 51 OF 66
CITY NO. 07-243-332

A/E GROUP, INC.
ENGINEERS • PLANNERS
181 E. Main Street
Westminster, Maryland 21158
A/E Job No. 96-317

CITY OF HAGERSTOWN, MARYLAND
ENGINEERING DEPARTMENT

LOCATION: North Potomac Street at East Ave./West Church Street

TITLE: TRAFFIC SIGNAL UPGRADE

DRAWN BY: A.W. (BASE PLAN) DATE: 8-96
SURVEY BY: A.J.B. DATE: 7-96

SCALES: HORIZONTAL: 1" = 10' VERTICAL: -

APPROVED: _____ FILE NUMBER: _____

DATE: _____ BY: _____ CITY ENGINEER **67-054-16**