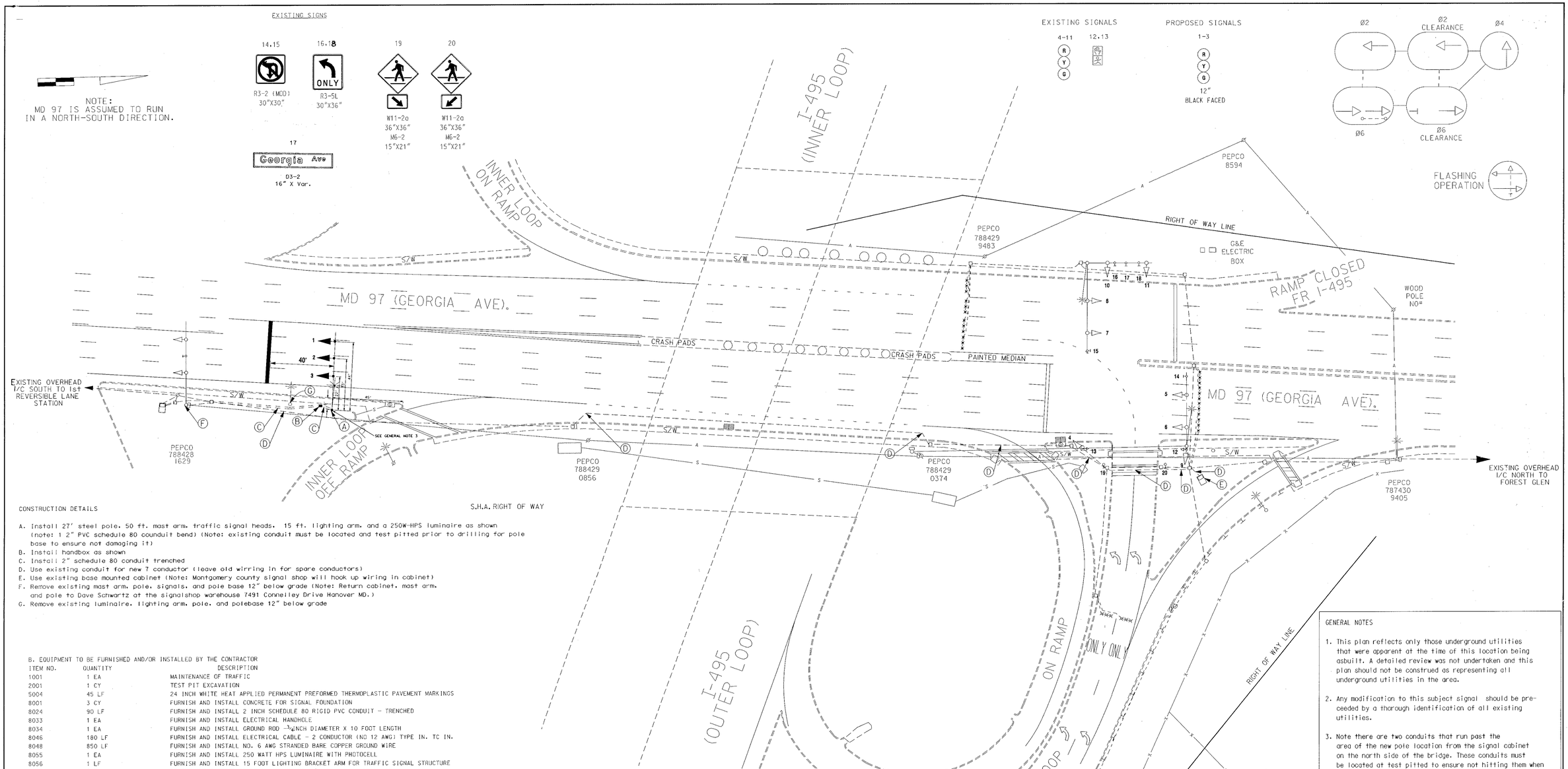


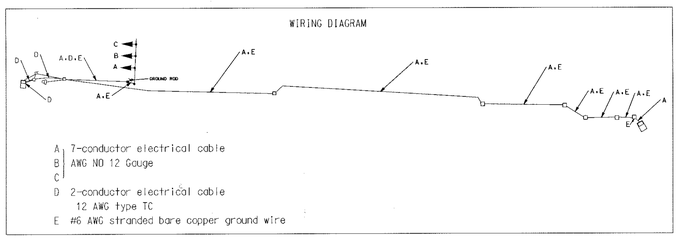
CONSTRUCTION DETAILS

A. Install 27' steel pole. 50 ft. mast arm. traffic signal heads. 15 ft. lighting arm. and a 250W-HPS luminaire as shown (note: 1 2" PVC schedule 80 counduit bend) (Note: existing conduit must be located and test pitted prior to drilling for pole base to ensure not damaging it)
B. Install handbox as shown
C. Install 2" schedule 80 conduit trenched
D. Use existing conduit for new 7 conductor (leave old wirring in for spare conductors)
E. Use existing base mounted cabinet (Note: Montgomery county signal shop will hook up wiring in cabinet)
F. Remove existing mast arm. pole. signals. and pole base 12" below grade (Note: Return cabinet. mast arm. and pole to Dave Schwartz at the signalshop warehouse 7491 Connelley Drive Hanover MD.)
G. Remove existing luminaire. lighting arm. pole. and polebase 12" below grade

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	1 CY	TEST PIT EXCAVATION
5004	45 LF	24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	3 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8024	90 LF	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8033	1 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	1 EA	FURNISH AND INSTALL GROUND ROD ¾ INCH DIAMETER X 10 FOOT LENGTH
8046	180 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 12 AWG) TYPE IN. TC IN.
8048	850 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8055	1 EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8056	1 LF	FURNISH AND INSTALL 15 FOOT LIGHTING BRACKET ARM FOR TRAFFIC SIGNAL STRUCTURE
8057	2 EA	REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 INCH BELOW GRADE
8058	1 EA	REMOVAL OF EXISTING CONTROLLER. CABINET AND GALVANIZED SIGNAL STRUCTURE
8059	1 EA	DELIVERY OF REMOVED CONTROLLER. CABINET AND GALVANIZED SIGNAL STRUCTURE
8060	1 EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
8077	1 EA	FURNISH AND INSTALL MAST ARM POLE AND 50 FOOT MAST ARM
8084	9 EA	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
NEG.	900 LF	TO BE NEGOTIATED - FURNISH AND INSTALL 7 CONDUCTOR NO. 12 AWG ELECTRICAL CABLE

WIRING DIAGRAM



A, B, C — 7-conductor electrical cable AWG NO 12 Gauge
D — 2-conductor electrical cable 12 AWG type TC
E — #6 AWG stranded bare copper ground wire

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13
Phase 2 & 6	G	G	G	G	G	G	G	G	R	R	R	WK	WK
Phase 2 & 6 Ped Clr.	G	G	G	G	G	G	G	G	R	R	R	FL/DW	FL/DW
Phase 2 & 6 Change	Y	Y	Y	G	G	G	G	G	R	R	R	DW	DW
Phase 2 & 6 Clearance	R	R	R	G	G	G	G	G	R	R	R	DW	DW
Phase 2 & 6 Clearance Change	R	R	R	Y	Y	Y	Y	Y	R	R	R	DW	DW
Phase 4	R	R	R	R	R	R	R	R	G	G	G	DW	DW
Phase 4 Change	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW
Flashing operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK

GENERAL NOTES

1. This plan reflects only those underground utilities that were apparent at the time of this location being asbuilt. A detailed review was not undertaken and this plan should not be construed as representing all underground utilities in the area.
2. Any modification to this subject signal should be preceeded by a thorough identification of all existing utilities.
3. Note there are two conduits that run past the area of the new pole location from the signal cabinet on the north side of the bridge. These conduits must be located at test pitted to ensure not hitting them when installing the new pole base.
4. Contractor shall notify John Lohmeyer or James Folden at 301-946-7187 prior to starting construction to co-ordinate with the existing bridge widening contract.

REVISIONS

(A) REMOVE H18 AND INSTALL FULL SIGNAL N/B MD 97 PRIOR TO BRIDGE 4/2000 TIMS # D 910 SHA XX1005385

JAH

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

ORIGINAL ON FILE

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

MD 97 AT I-495 INTERCHANGE

DRAWN BY: SB	F.A.P. NO.	M0857A50/1330	TS NO. 3636 A	SHEET NO.
CHECKED BY: RRZ	S.H.A. NO.	MONTGOMERY	T.I.M.S. NO. D 910	01 OF 01
SCALE: 1"=30'	COUNTY:			
DATE: 9-24-99	LOG MILE:	15009701.50		