PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of the existing traffic control signal at the intersection of MD 586 (Veirs Mill Road) and Wheaton Plaza South Entrance in Montgomery County, Maryland. MD 586 is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection is to be modified to operate in a NEMA six (6) phase, semi-traffic-actuated mode. There will be an exclusive lead/lag left turn phase for both the north and southbound movements of MD 586 (Veirs Mill Road). The MD 586 through movements will operate concurrently with actuated pedestrian movements across the east and west legs of the intersection. The Wheaton Plaza South Entrance/WMATA through movements will operate in a side street split phase mode with actuated pedestrian movements across the north and south legs of the intersection.

The existing cabinet/controller will be utilized. Install video camera detection , and APS Navigator Central Control Unit equipment.

EQUIPMENT LIST

A. S.H.A. furnished equipment material.

None.

B. Equipment to be furnished and/or installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
1	EA	818	27 ft. steel mast arm pole with a 38 ft. mast arm (painted NPS Brown).
1	EA	818	27 ft. steel mast arm pole with a 50 ft. mast arm (painted NPS Brown).
2	EA	818	27 ft. steel mast arm pole with a 60 ft. mast arm (painted NPS Brown).
4	EA	818	4 ft. pedestal pole on break away transformer base (painted NPS Brown).
5	EA	814	12 in., one-way, three section (RA,YA,GA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
6	EA	814	12 in., one-way, three section (R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, four section (R,Y, G,GA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
4	EA	814	16 in., two-way, one section (countdown indications) adjustable pedestrian signal head with pole mounting hardware and cut-away visors.
3	EA	813	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
1	EA	813	30 in. x 50 in. Shield Assembly sign with pole mounting hardware.
1	EA	813	48 in. x 75 in. Shield assembly sign with pole mounting hardware.
8	EA	813	9 in. x 12 in. R 10-4(I) sign with pole mounting hardware.
4	EA	---	Video camera detection (to include necessary cables). One (1) - 125 ft., One (1) - 200 ft., One (1) - 225 ft., One (1) - 300 ft.
8	EA	817	APS Pedestrian pushbutton assembly with pushbutton sign.
1	EA	---	Video detection cabinet retro-fit.
1	EA	---	APS Navvigation Central Control Unit.
2	EA	806	15 ft luminaire arm.
2	EA	806	250 W HPS lamp and luminaire.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
6	CY	205	Test pit excavation.
5	EA	811	Handhole.
280	LF	815	Sawcut for signal loop detector.
775	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
840	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
1125	LF	810	2-conductor electrical cable (No. 14 A.W.G.)
270	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.).
2200	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
450	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
400	LF	810	Bare copper stranded ground wire (No. 6 A.W.G.).
50	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
70	LF	805	2 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
50	LF	805	3 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
310	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - slotted in roadway.
25	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
20.0	CY	801	Concrete foundation for traffic signal equipment.
4	EA	---	Removal of existing concrete foundation 12" below grade.
4	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
2	EA	---	Elbows for existing foundation base.
Lump Sum	LS	---	Removal of existing traffic signal equipment.
Lump Sum	LS	---	Relocate existing traffic signal equipment.
Lump Sum	LS	---	Remove/Replace brick paver sidewalk.
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

CONTACT LIST

The contact persons for District #3 are as follows:

Mr. Lee Starkoff
Assistant District Engineer - Traffic
301-513-9318

Mr. Augie Reblish
Assistant District Engineer - Utility
301-513-7350

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Assistant District Engineer - Maintenance
301-513-7304

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

The Power Company Representative is:
PEPCO
Mr. Steven Custer
8300 Old Marlboro Pike
Upper Marlboro, Maryland 207772

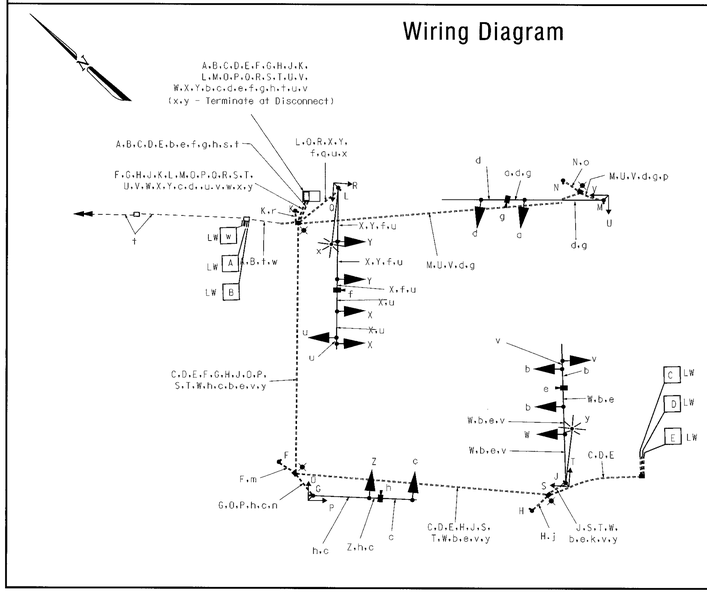
C. SHA forces shall remove from controller all auxiliary equipment being replaced from the controller cabinet. The cabinet and all other materials to be removed by the contractor shall become the property of the contractor.

Quantity	Units	Description
7	EA	12 in. 3-section traffic signal head.
1	EA	12 in. 4 section traffic signal head.
1	EA	12 in 5 section traffic signal head.
1	EA	12/in./8 in. 5 section traffic signal head.
2	EA	R 3-5 sign.
1	EA	R 3-7
4	EA	Steel mast arm pole.

Phase Chart

	1-3	4	5-7	8	9	10	11	12	13	14-17	18.19	20.21	
	DR DY DG	R Y G	DR DY DG	R Y R	R Y G	R Y R DG	R Y R	R Y R DG	R Y G				
Phase 1 & 5	R	R	C	G	G	R	R	R	R	DW	DW	DW	
1 & 5 Change	R	R	Y	G	G	R	R	R	R	DW	DW	DW	
Phase 1 & 6	R	G	R	G	G	R	R	R	R	DW	DW	DW	
1 & 6 Change	R	Y	R	Y	Y	R	R	R	R	DW	DW	DW	
Phase Alt 1 & Alt 6	R	G	R	G	G	G	G	R	R	WK	DW	DW	
Ped Clearance	R	Y	R	Y	Y	G	G	R	R	FL/DW	DW	DW	
Alt 1 & Alt 6 Change	R	R	R	R	R	Y	Y	R	R	DW	DW	DW	
Phase 2 & 6	G	G	R	R	R	R	R	R	R	DW	DW	DW	
2 & 6 Change	Y	Y	R	R	R	R	R	R	R	DW	DW	DW	
Phase 3	R	R	R	R	R	R	R	G G	G	DW	DW	DW	
3 Change	R	R	R	R	R	R	R	Y	Y	DW	DW	DW	
Phase 4	R	R	R	R	R	G G	G	R	R	DW	DW	DW	
4 Change	R	R	R	R	R	Y	Y	R	R	DW	DW	DW	
Phase Alt 3	R	R	R	R	R	R	R	G	G	DW	WK	DW	
Ped Clearance	R	R	R	R	R	R	R	G	G	DW	FL/DW	DW	
Alt 3 Change	R	R	R	R	R	R	R	Y	Y	DW	DW	DW	
Phase Alt 4	R	R	R	R	R	G	G	R	R	DW	DW	WK	
Ped Clearance	R	R	R	R	R	G	G	R	R	DW	DW	FL/DW	
Alt 4 Change	R	R	R	R	R	Y	Y	R	R	DW	DW	DW	
Flashing Operation	FL/R	FL/Y	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	

Wiring Diagram



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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
MD 586 (Veirs Mill Road at Wheaton Plaza South Entrance/WMATA

DRAWN BY: Frank Hoeckel	F.A.P. NO. N/A	TS NO. 2440-C	SHEET NO. 8 OF 8
CHECKED BY:	S.H.A. NO. BW996M82		
SCALE: N/A	COUNTY: Montgomery	T.I.M.S. NO. G-383	
DATE: June 14, 2004	LOG MILE: 15058605.67		

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