

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of MD 193 (Glenn Dale Boulevard) and Prospect Hill Road in Prince George's County, Maryland. MD 193 is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA six (6) phase, full-traffic-actuated mode. There will be an exclusive left turn phase for both the east and westbound movements of MD 193 with a concurrent right turn indication for the southbound movement of Prospect Hill Road. The MD 193 through movements will operate concurrently. The Prospect Hill Road through movements will operate concurrently.

The existing pole mounted cabinet, controller and electrical service will be removed.

A new eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, telemetry interconnect equipment, and four (4) four-channel rack mounted time delay output loop detector amplifiers housed in a new base mounted cabinet are to be installed at this location.

III. SPECIAL NOTE:

The Contractor shall notify Mr. Robert Snyder of SHA at 410-787-7635 to arrange for the phone drop installation.

The Contractor is to provide Mr. Snyder with the nearest street number, zip code, and telephone number.

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	816	Standard S.H.A. traffic signal controller, base mounted cabinet, telemetry interconnect equipment, and four (4) four-channel loop detector amplifiers (Note: Controller and cabinet shall be purchased from Econolite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650).
5	EA	814	12 in., one-way, three section (R,Y,G) adjustable L.E.D. black faced traffic signalhead with span wire mounting hardware and tunnel visors.
7	EA	814	12 in., one-way, three section (R,Y,G) adjustable L.E.D. black faced traffic signalhead with span wire mounting hardware and tunnel visors.
1	EA	814	12 in., one-way, five section (R,Y,YA,G,G) adjustable L.E.D. black faced traffic signalhead with span wire mounting hardware and tunnel visors.
2	EA	813	30 in. x 36 in. R 3-5(L) sign with span wire mounting hardware.
2	EA	---	Non-invasive probe (set of 3) with 1000 ft. lead-in cable.
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
2	CY	205	Test pit excavation.
5	EA	811	Handhole.
400	LF	815	Sawcut for signal loop detector.
1700	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
3275	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
450	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
1400	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
45	LF	810	1-conductor electrical cable (No. 4 A.W.G.).
50	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
5	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
1.5	CY	801	Concrete foundation for traffic signal equipment.
45	LF	805	1 in. galvanized steel conduit for loop detector sleeve.
20	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
10	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trench.
650	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trench.
75	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
55	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trench.
190	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
115	LF	549	24 in. wide HAPPTM - white for stop line.
4	EA	---	Loop detector splice.
Lump Sum	LS	---	Electrical utility service equipment (120/240 V, one phase, three wire system) for an underground electrical power service as per MD-SHA Typical No. 807.05-01 (200 amp. electrical pedestal).
1	EA	---	4 in. elbow into existing base.
Lump Sum	LS	---	Remove and salvage existing equipment.
Lump Sum	LS	---	Relocate existing interconnect Cable (Approx. 825 LF) & Aluminum Shielded Cable (Approx. 60 LF).
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

CONTACT LIST

The contact persons for District #3 are as follows:

Mr. Jeff Wentz
Assistant District Engineer - Traffic
MO - 301-513-7318
PG - 301-513-7358

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

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
301-513-7304

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

The Power Company Representative is:
Baltimore Gas and Electric Company
410-850-4620

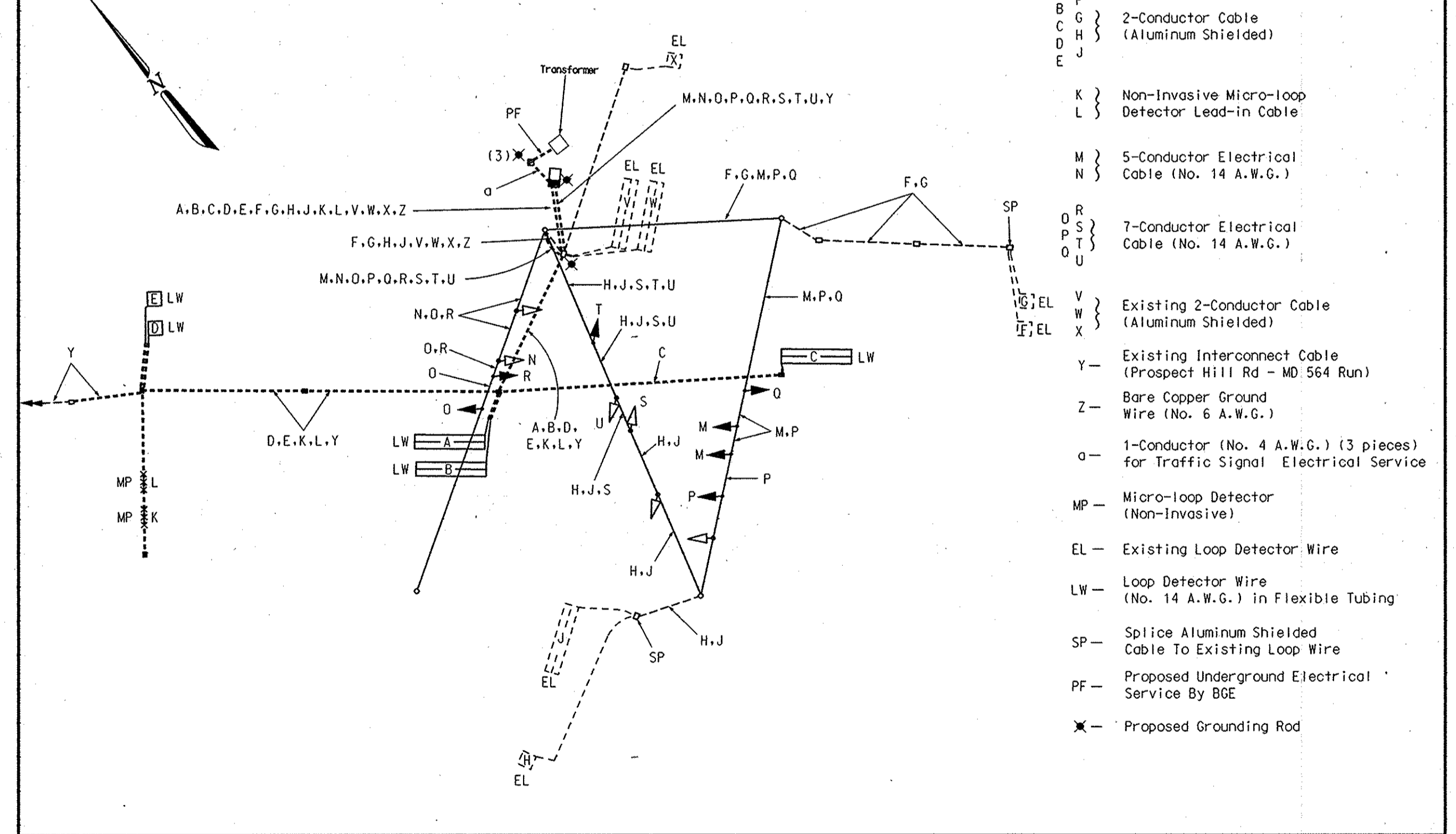
WMS * 0001471008

Service Address
11400 Glen Dale Boulevard
Bowie, Maryland 20720

Phase Chart

	1	2	3	4	5	17	18	6	7	8	9	10	11
Phase 1 & 5	←G→	←G→	←G→	R	R	←G→	←G→	R	R	R	R	R	R
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6	←G→	←G→	←G→	R	R	←G→	←G→	R	R	R	R	R	R
Phase 1 & 6	←G→	←G→	←G→	G	G	←R→	←R→	R	R	R	R	R	R
1 Change	←Y→	←Y→	←Y→	G	G	←R→	←R→	R	R	R	R	R	R
Phase 2 & 5	←R→	←R→	←R→	R	R	←G→	←G→	G	G	R	R	R	R
5 Change	←R→	←R→	←R→	R	R	←Y→	←Y→	G	G	R	R	R	R
Phase 2 & 6	←R→	←R→	←R→	G	G	←R→	←R→	G	G	R	R	R	R
2 & 6 Change	←R→	←R→	←R→	Y	Y	←R→	←R→	Y	Y	R	R	R	R
Phase 4 & 8	←R→	←R→	←R→	R	R	←R→	←R→	R	R	G	G	G	G
4 & 8 Change	←R→	←R→	←R→	R	R	←R→	←R→	R	R	Y	Y	Y	Y
Flashing Operation	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



Revision "A"

The Traffic Group
410-931-6600
Fax 410-931-6601

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
MD 193 (Glenn Dale Blvd.) at Prospect Hill Road

TS NO. 2311A-61
SHEET NO. 4 OF 4

DRAWN BY: F. Brownley	F.A.P. NO. N/A	TS NO. 2311A-61
CHECKED BY: N/A	S.H.A. NO. BW996M82	SHEET NO. 4 OF 4
SCALE: N/A	COUNTY: Prince George's	T.I.M.S. NO. G-315
DATE: May 30, 2006	LOG MILE: 16019.311.08	

c:\shah\2002\2002-0409\MD193 & Prospect Hill.Rdw 6/6/2006