

FHWA REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the modification of the existing traffic control signal at the intersection of US 13 and North Pointe Drive in Wicomico County, Maryland. US 13 is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA six (6) phase, full-traffic-actuated mode with fire house pre-emption. There will be an exclusive left turn phase for both the north and southbound movements of US 13. The US 13 through movements will operate concurrently. The North Pointe Drive movements will operate in a split phase.

The existing cabinet/controller will be utilized.

III. SPECIAL NOTES

The S.H.A. signal operations forces will be responsible for the wiring of the new rack mounted detector amplifier racks at the intersection of US 13 and North Pointe Drive. The contractor shall notify Mr. Ed Rodenizer at 410-787-7650 a minimum of seventy-two (72) hours in advance of the intended work.

EQUIPMENT LIST

A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

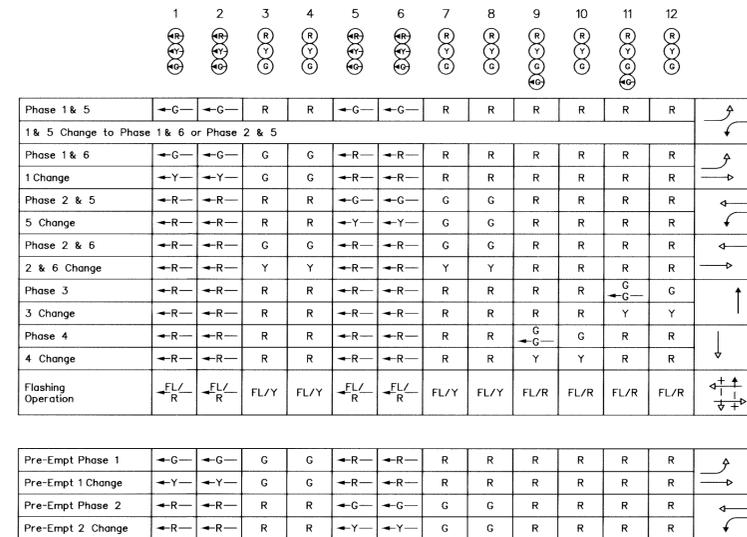
Quantity	Units	Specification Section	Description
1	EA	818	27 ft. steel twin mast arm pole with one 50 ft. mast arm and one 70 ft. mast arm [Note: four 2 in. x 90 in. anchor bolts].
1	EA	818	10 ft. mini-mast arm with appropriate mounting hardware.
4	EA	814	12 in., one-way, three section (R,Y,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
3	EA	814	12 in., one-way, three section (R,Y,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in., one-way, three section (R,Y,G) adjustable traffic signal head with pole mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, four section (R,Y,G,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
16	SF	813	16 in. x 72 in. D 3-2 (Dual Faced) sign with mast arm mounting hardware.
45	SF	813	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
15	SF	813	30 in. x 36 in. R 3-5(R) sign with mast arm mounting hardware.
15	SF	813	30 in. x 36 in. R 3-6(L) sign with mast arm mounting hardware.
3	SF	813	18 in. x 24 in. R 4-7 sign with pole mounting hardware.
1	EA	806	10 ft. luminaire arm.
1	EA	806	250 W H.P.S. lamp and luminaire.
3	EA	---	Microloop probe (set of three) with 750 ft. lead-in cable.
7	EA	---	Microloop probe (set of three) with 500 ft. lead-in cable.
1	EA	---	3-M Opticom Traffic Control System Optical Detector (Single Eye) - with mast arm mounting hardware.
2	EA	817	* Detector rack retrofit.
2	EA	---	Detector rack power supply.
8	EA	---	4-channel rack mounted loop detector amplifier.

* To be installed by S.H.A.

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

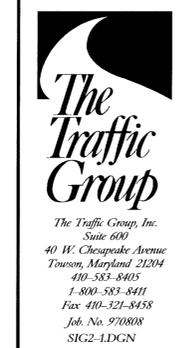
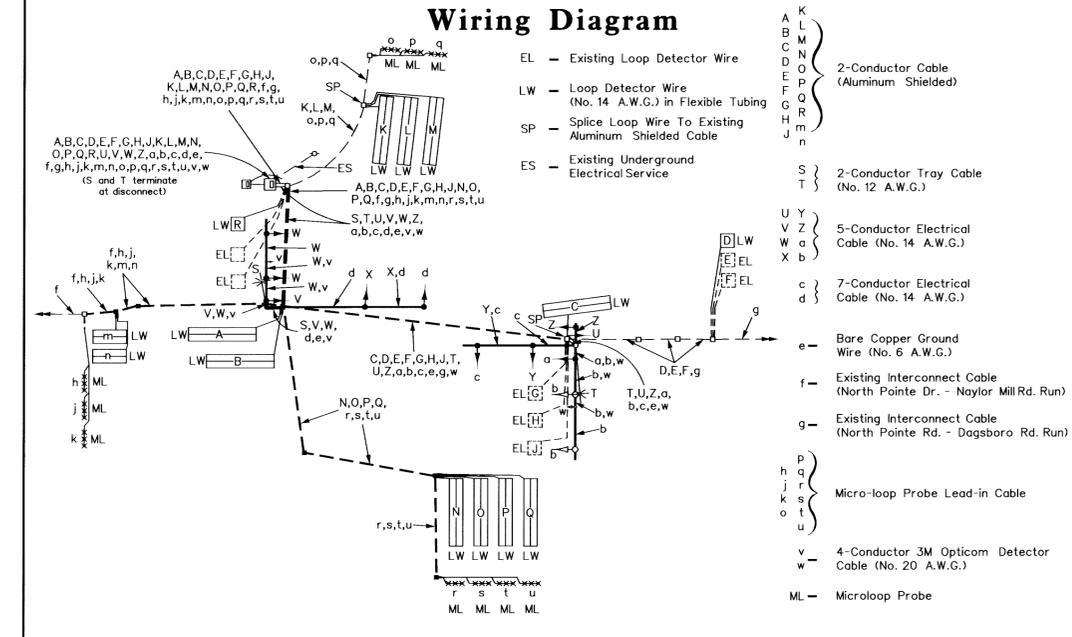
Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
1	CY	205	Test pit excavation.
6	EA	811	Handhole.
1850	LF	815	Sawcut for signal loop detector.
5345	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
2700	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
120	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.).
1000	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
500	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
250	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
70	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
15	LF	805	1 in. galvanized steel conduit for loop detector sleeve.
100	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
510	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
150	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
15	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
235	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
4.65	CY	801	Concrete foundation for traffic signal equipment.
1	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
1	EA	---	24 in. wide HAPPTM - white for stop line.
125	LF	---	3-M Opticom detector cable.
1	EA	---	Cut, clean, and cap mast arm.
Lump Sum	LS	---	Remove existing signal equipment.
Lump Sum	LS	---	Remove and rerun existing electrical cables.
Lump Sum	LS	---	Relocate existing underground interconnect cable.
Lump Sum	LS	---	As-built for S.H.A [on CADD].

Phase Chart



PRE-EMPTION NOTE: Controller equipped with emergency pre-emption equipment which shall provide a selective yellow interval of 4 seconds minimum. Following this interval, a green indication is given to the direction on which an emergency vehicle is approaching and a red indication on all other directions.

Wiring Diagram



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

(General Information)
US 13 at North Pointe Drive / Depot Centre Entrance

DRAWN BY: Jamie Storck
 DES. BY: Jamie Storck
 CHK. BY:

COUNTY: WICOMICO LOG MILE: 22001312.53

DATE: February 6, 1998 F.A.P. NO. N/A TS/STD. NO. SHEET NO.
 SCALE: N/A S.H.A. NO. BW996M82 3297B-GI 3 of 4