PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of MD 97 and MD 144 in Howard County, Maryland.
MD 97 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, full-traffic-actuated mode. There will be an exclusive/permissive left turn phase for both the north and southbound movements of MD 97. The MD 97 through movements will operate concurrently. The MD 144 (Frederick Road) through movements will operate concurrently.

The existing cabinet/controller to be utilized. Video detection equipment is to be installed at this location.

CONTACT LIST

The contact persons for District #7 are as follows:

Mr. John Concannon
Assistant District Engineer - Traffic
301-624-8140

Ms. Andrea Abend
Assistant District Engineer - Utility
301-624-8115

Mr. Dave Coyne
Assistant District Engineer - Maintenance
301-624-8105

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

EQUIPMENT LIST

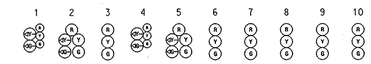
A. S.H.A. furnished equipment material.

None.

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.

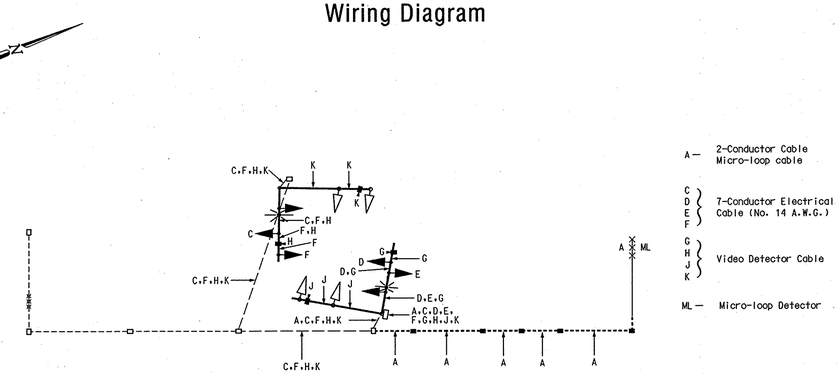
Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
2	EA	814	12 in., one-way, three section L.E.D. (R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, five section L.E.D. (R,Y,YA,G,GA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in./8 in., one-way, five section L.E.D. (12 in. YA, GA/ 8 in. R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	---	Video Detection Retro-Fit Kit.
4	EA	---	Video Detection Camera and Cable (2 - 100 LF, 2 - 300 LF)
1	EA	---	Micro-loop probe (set of 3) with 500 ft. lead-in cable.
35	LF	815	Sawcut for signal loop detector.
5	EA	811	Handhole.
620	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
5	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
225	LF	805	3 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
150	LF	805	3 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
2	EA	---	NEMA load switch.
1	EA	---	Raise handhole frame and cover to grade
Lump Sum	LS	---	Remove and dispose of existing signal equipment.
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

Phase Chart



Phase 1 & 5	R G	R G	R	R G	R G	R	R	R	R	R
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6										
Phase 1 & 6	G G	G G	G	R	R	R	R	R	R	R
1 Change	G Y	G Y	G	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	G G	G G	G	R	R	R	R
5 Change	R	R	R	G Y	G Y	G	R	R	R	R
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G
4 & 8 Change	R	R	R	R	R	R	Y	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



Revision 'B'

The Traffic Group
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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
MD 97 at MD144

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CHECKED BY:	S.H.A. NO. BW996M82		
SCALE: N/A	COUNTY: Howard	T.I.M.S. NO. H-155	2 OF 2
DATE: November 22, 2005	LOG MILE: 13009706.36		

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