PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the completion of the reconstruction of the traffic control signal at the intersection of MD 589 and Manklin Creek Road in Worcester County, Maryland. MD 589 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 left turn phase for the both the north and southbound movements of MD 589. The MD 589 through movements will operate concurrently. The Manklin Creek Road movements will operate in a side street split phase mode.

The new controller will be adjusted by MD-SHA forces.

CONTACT LIST

The contact persons for District #1 are as follows:

Mr. Gene Cofield
Assistant District Engineer - Traffic
410-543-6715

Mr. Bruce Poole
Assistant District Engineer - Utility
410-677-4082

Mr. James Wright
Assistant District Engineer - Maintenance
410-543-6715

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

EQUIPMENT LIST

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

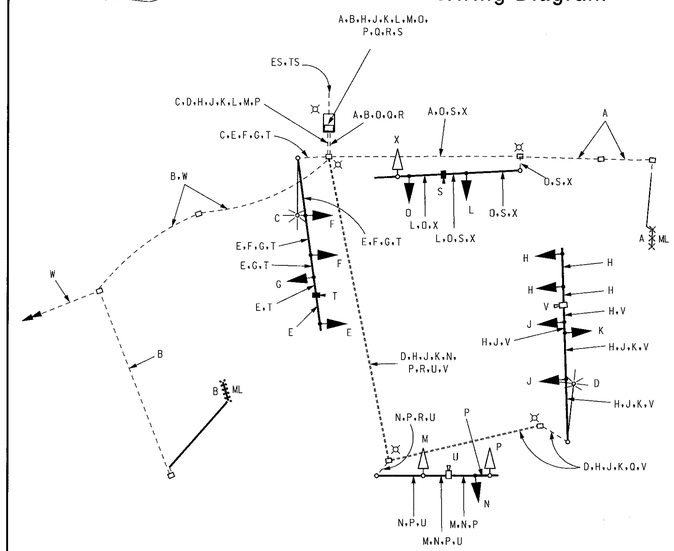
Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
2	EA	---	Video Detector with Manufacture Recomended Cables 1- 150 LF 1- 250 LF
5	EA	814	12 in., one-way, three section (RA,YA,GA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
5	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	813	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
1	EA	813	30 in. x 36 in. R 3-5(R) sign with mast arm mounting hardware.
1	EA	813	16 in. x Var. (Dual Faced) D-3(1) with mast arm mounting hardware.
1	EA	813	30 in. x 51 in. Shield Assembly with pole mounting hardware.
1	EA	813	48 in. x 75 in. Shield Assembly with pole mounting hardware.

Quantity	Units	Specification Section	Description
2	EA	---	Micro-loop probe (set of 3) with 750 ft. lead-in cable.
80	LF	815	Sawcut for signal loop detector.
5	LF	805	1 in. liquid tight flexible non-metalic conduit for loop detector sleeve.
1300	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
400	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
225	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
225	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
Lump Sum	LS	---	Relocate existing signal equipment and cables.
Lump Sum	LS	---	Remove and dispose of existing signal equipment.
Lump Sum	LS	---	As-Built for MD-SHA (on CADD)

Phase Chart

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Phase 1 & 5	G	G	R	R	G	G	G	R	R	R	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	R	R	R	R	R	R	R	R	R	R	R
1 Change	Y	Y	G	G	R	R	R	R	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	R	G	G	G	G	G	R	R	R	R	R	R
5 Change	R	R	R	R	Y	Y	Y	G	G	R	R	R	R	R	R
Phase 2 & 6	R	R	G	G	R	R	R	G	G	R	R	R	R	R	R
2 & 6 Change	R	R	Y	Y	R	R	R	Y	Y	R	R	R	R	R	R
Phase 3	R	R	R	R	R	R	R	R	R	R	R	R	G G	G G	G
3 Change	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y
Phase 4	R	R	R	R	R	R	R	R	R	G G	G G	G	R	R	R
4 Change	R	R	R	R	R	R	R	R	R	Y	Y	Y	R	R	R
Flashing Operation	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



A } Micro-loop Detector
B } Lead-in Cable

C — 2-Conductor Tray Cable (No. 12 A.W.G.) - Existing

D — 2-Conductor Tray Cable (No. 12 A.W.G.) Existing To Be Relocated

E J, F K, G L, H M } 5-Conductor Electrical Cable (No. 14 A.W.G.)

N O P X } 7-Conductor Electrical Cable (No. 14 A.W.G.) [X=Existing]

Q R } Bare Copper Ground Wire (No. 6 A.W.G.)

S T } Video Detector Cable

U V } Video Detector Cable [Existing Relocated]

W — Existing Interconnect Cable (Cathell Rd - Manklin Creek Rd Run)

⊗ — Grounding Rod

ES — Electrical Service

TS — Telephone Service

MOT- Phase 3 & Ultimate Traffic Signal

The Traffic Group
The Traffic Group, Inc.
410-931-6600
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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)

MD 589 (Race Track Road) at Manklin Creek Road

DRAWN BY:	J. Dirndorfer	F.A.P. NO.	N/A	TS NO. 2406A-GI	SHEET NO.
CHECKED BY:		S.H.A. NO.	BW996M82		
SCALE:	N/A	COUNTY:	Worcester	T.I.M.S. NO. G220	4 OF 4
DATE:	February 3, 2004	LOG MILE:	23058902.12		

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