PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with at the intersection of MD 175 and Reece Road in Anne Arundel County. Geometric improvements are being done to the south leg of Reece Road. Video detection shall be used for the northbound approach of Reece Rd. MD 175 is assumed to run an east-west direction.

II. INTERSECTION OPERATION

1. The intersection is to operate in a NEMA six-phase, fully-actuated mode, with the MD 175 approaches continuing to run concurrently. Exclusive/Permissive left turn phases shall continue to be provided for both approaches of MD 175. The pedestrian phase with pushbutton actuation shall remain in operation across the west leg of MD 175. The pedestrian phases across Reece Road shall also remain in operation. The Reece Road approaches shall continue to run concurrently. Exclusive / Permissive left turn phases shall remain on both approaches of Reece Road.

2. The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection. Video interface equipment shall be installed into the cabinet.

III. SPECIAL NOTES

1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.

2. All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.

3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

The contact persons for District #5 are as follows:

Ms. Kim Tran
Assistant District Engineer - Traffic
Phone: (410) 841-1003

Mr. Charles George
Assistant District Engineer - Maintenance
Phone: (410) 841-1002

Mr. John Mays
Assistant District Engineer - Utility
Phone: (410) 841-1005

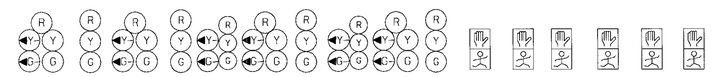
Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

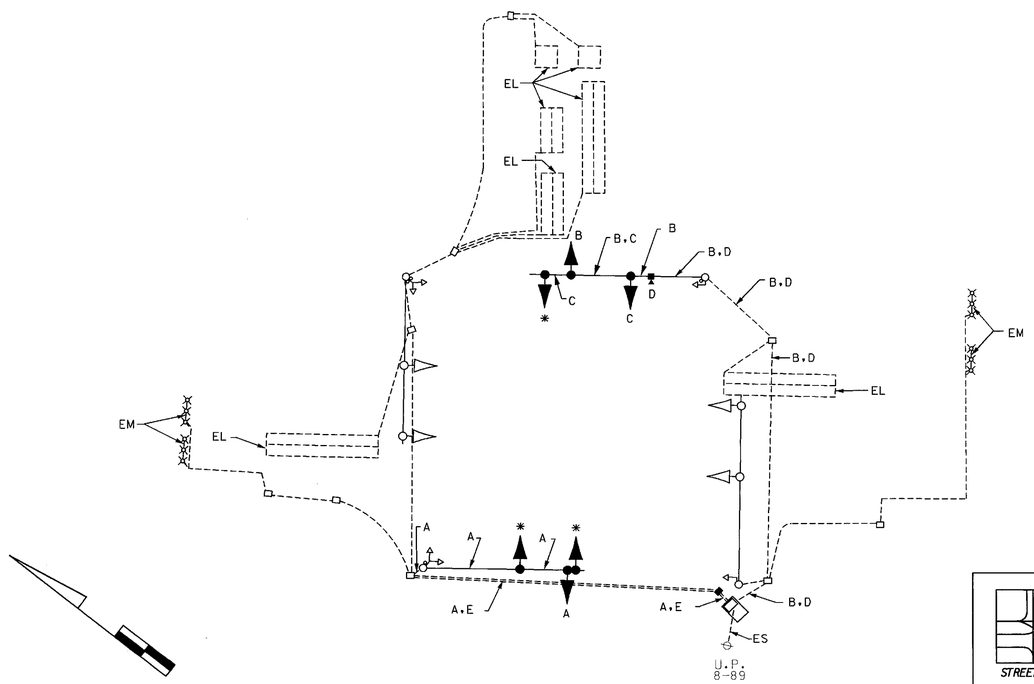
SPEC. NUMBER	DESCRIPTION	QUANTITY
814	12", one-way, three-section (R,Y,G) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 EA
814	12", one-way, five-section (R,Y,G,YA,GA) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 EA
814	8"/12", one-way, five-section (8"R,Y,G) (12"YA,GA) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 EA
813	Overhead mounted sheet aluminum sign consisting of:	7.5 S.F.
	R3-5R "RIGHT TURN ONLY" sign, (30" x 36") mast arm mounted.	1 EA
556	12" white heat applied permanent preformed thermoplastic pavement marking	355 L.F.
556	24" white heat applied permanent preformed thermoplastic pavement marking	75 L.F.
	Remove existing pavement markings	400 L.F.
805	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	10 L.F.
805	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	110 L.F.
811	Furnish and install electrical handhole.	1 EA
810	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).	50 L.F.
810	Furnish and install 7-conductor electrical cable (No. 14 A.W.G.).	400 L.F.
	Remove existing handhole	2 EA
822	Remove existing traffic signal head. (Note: Remove wiring where necessary).	4 EA
	Reroute signal cable. (Signal head, pedestrian head, pushbutton ground wire, loop and microprobes).	1200 L.F.
	Furnish and install Traficon Video detector camera w/ coaxial cable	1 EA
	Video interface equipment.	1 EA
	Adjust existing handhole	1 EA
	Cut conduit and attach proposed conduit to existing 3"LB	1 EA
	Pre-manufactured camera to controller (200' length) cable	1 EA
	Remove overhead sign.	1 EA

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 1 & 5	◄G-/R	R	◄G-/R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6																
PHASE 1 & 6	◄G-/G	G	R	R	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW
1 & 6 CHANGE	◄Y-/G	G	R	R	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW
PHASE 2 & 5	R	R	◄G-/G	G	R	R	R	R	R	R	WK	DW	DW	WK	DW	DW
2 & 5 CHANGE	R	R	◄Y-/G	G	R	R	R	R	R	R	WK	DW	DW	WK	DW	DW
PHASE 2 & 6	G	G	G	G	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW
PED CLEAR	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3 & 7	R	R	R	R	◄G-/R	◄G-/R	R	◄G-/R	◄G-/R	R	DW	DW	DW	DW	DW	DW
3 & 7 CHANGE	R	R	R	R	◄Y-/R	◄Y-/R	R	◄Y-/R	◄Y-/R	R	DW	DW	DW	DW	DW	DW
PHASE 3 & 8	R	R	R	R	◄G-/G	◄G-/G	G	R	R	R	DW	DW	DW	DW	DW	DW
3 & 8 CHANGE	R	R	R	R	◄Y-/G	◄Y-/G	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 & 7	R	R	R	R	R	R	R	◄G-/G	◄G-/G	G	DW	DW	DW	DW	DW	DW
4 & 7 CHANGE	R	R	R	R	R	R	R	◄Y-/G	◄Y-/G	Y	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 & 7 ALT	R	R	R	R	R	R	R	◄G-/G	◄G-/G	G	DW	DW	DW	DW	WK	WK
4 & 7 CHANGEALT	R	R	R	R	R	R	R	◄Y-/G	◄Y-/G	Y	DW	DW	DW	DW	WK	WK
PHASE 4 & 8 ALT	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	WK	WK
PED CLEAR	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW
4 & 8 CHANGE ALT	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A } 7-CONDUCTOR ELECTRICAL
B } CABLE (NO. 14 A.W.G)

C - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

D - PRE-MANUFACTURED CAMERA TO CONTROLLER CABLE (200')

E - REROUTED SIGNAL CABLE (SIGNAL HEAD, PEDESTRIAN HEAD, PUSHBUTTON, GROUND WIRE, LOOP and MICROPROBES).

* - USE EXISTING WIRING

EM - EXISTING MICROLOOP

EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING

ES - EXISTING UNDERGROUND SERVICE TO BE MAINTAINED BY BGE

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy. NW.
Glen Burnie, MD 21061
Ph (410) 590-5500
Fax (410) 590-9537

4648AGI.dgn

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

MD 175 AND REECE ROAD

DRAWN BY: ROB CICCHINI	F.A.P. NO.		TS NO. TS-164B-GI	SHEET NO. 2 OF 2
CHECKED BY: R ZACHERL	S.H.A. NO.	AA-238-501-585		
SCALE: NONE	COUNTY:	ANNE ARUNDEL	T.I.M.S. NO. G659	
DATE: 7/29/04	LOG MILE:	02017505.93		

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