PROJECT DESCRIPTION

THE PROJECT INVOLVES THE INSTALLATION OF A PUSHBUTTON ACTUATED INTERSECTION CONTROL BEACON FOR THE CALVERT SUBSTATION FIREHOUSE LOCATED ALONG MD 272 JUST SOUTH OF THE INTERSECTION WITH MD 273 IN CECIL COUNTY.

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
9010	1 EA	(CONT/CAB/ADD) RELAY (110/120 VOLT) 11 PIN
9080	1 EA	CABINET INTERSECTION MONITOR, SIZE 5
9087	1 EA	CONTROLLER ASC II W/ TELEMETRY
9089	36 SF	FLAT SHEET ALUM SIGN - YELLOW, ORANGE, & SILVER (SF)
9096	1 EA	PUSHBUTTON

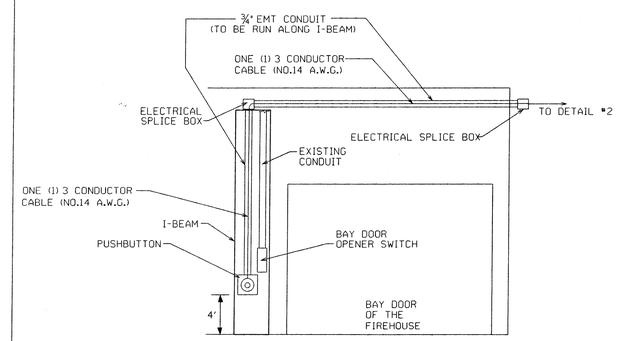
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EA	MAINTENANCE OF TRAFFIC
2002	1 CY	TEST PIT EXCAVATION
5008	240 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS- ANY WIDTH
6005	250 LF	TRAFFIC BARRIER W BEAM
6007	2 EA	SPECIAL TRAFFIC BARRIER W BEAM END TREATMENT
6009	3 EA	W BEAM BARRIER MOUNTED MARKERS
8000	12 SF	TO BE NEGOTIATED - REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS
8000	1 LS	TO BE NEGOTIATED - F&I MISC. EQUIPMENT FOR THE INSTALLATION INSIDE AND OUTSIDE THE FIREHOUSE FOR THE FIREHOUSE PRE-EMPTION PUSHBUTTON (FROM HANDBOX CLOSEST TO FIREHOUSE TO PUSHBUTTON)
8006	1 EA	CUT, CLEAN & CAP TRAFF SIG STRUCT
8011	12 EA	F&I 12 IN VEH SIG HEAD SECTION
8013	1 EA	F&I 15' BRAC ARM FOR SIG STRUCT
8014	1 EA	F&I 250W HPS LUMIN W/ PHOTOCELL
8019	6 EA	F&I 8 IN VEH SIG HEAD SECTION
8020	1 EA	F&I CONTROL AND DISTRIBUTION EQUIPMENT FOR SIGNAL
8033	1 EA	F&I TWIN MAST ARM POLE & 50 FT/50 FT MAST ARM
8051	20 LF	3" PVC SCH 80 CONDUIT-TRENCHED
8052	65 LF	4" PVC SCH 80 CONDUIT-BORED
8053	110 LF	4" PVC SCH 80 CONDUIT-TRENCHED
8060	40 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8063	240 LF	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT- BORED
8075	36 SF	INSTALL OVERHEAD SIGN
8080	1 EA	FURNISH AND INSTALL GROUND ROD-3/4INCH DIAMETER X 10 FOOT LENGTH
8083	355 LF	FURNISH AND INSTALL ELECTRICAL CABLE- 3 CONDUCTOR (NO 14 AWG)
8084	320 LF	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO 14 AWG)
8086	55 LF	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (NO 12 AWG) TC
8091	205 LF	FURNISH AND INSTALL TWO INCH DIAMETER POLYVINYL CHLORIDE ELECTRICAL CONDUIT, SCHEDULE 80, TRENCHED
8092	1 EA	INSTALL CONTROLLER AND CABINET- POLE MOUNT

C. EQUIPMENT TO BE REMOVED AND RETURNED TO STATE HIGHWAY ADMINISTRATION

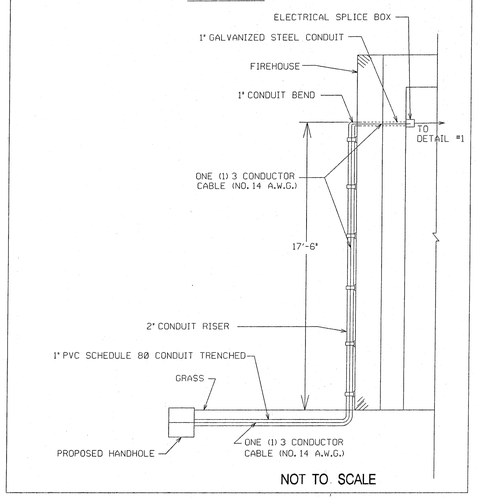
NO EQUIPMENT IS TO BE REMOVED IN THIS PROJECT.

INSIDE VIEW OF FIREHOUSE
DETAIL NO. 1



NOT TO SCALE

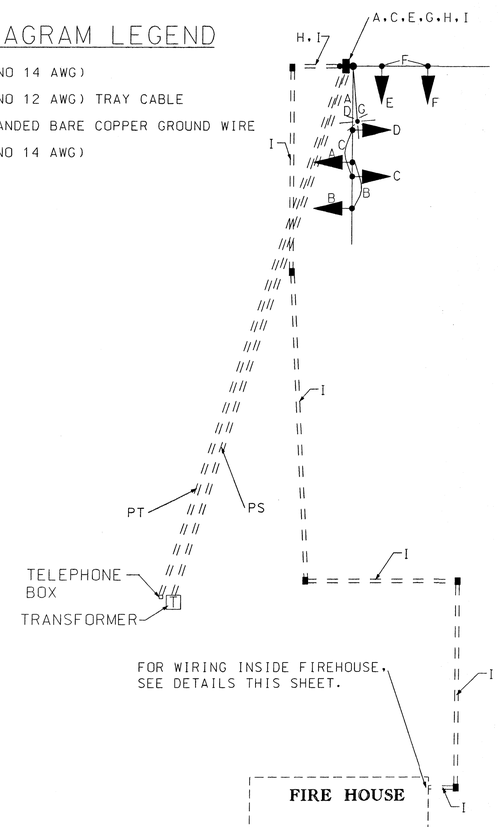
SIDE VIEW -
OUTSIDE OF FIREHOUSE
DETAIL NO. 2



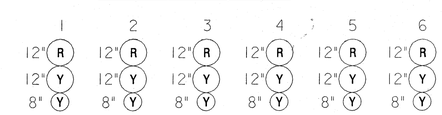
NOT TO SCALE

WIRING DIAGRAM LEGEND

A-F - 5 CONDUCTOR (NO 14 AWG)
G - 2 CONDUCTOR (NO 12 AWG) TRAY CABLE
H - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
I - 3 CONDUCTOR (NO 14 AWG)



PHASE CHART



	1	2	3	4	5	6	
NORMAL OPERATION	FL/ 8"Y	FL/ 8"Y	FL/ 8"Y	FL/ 8"Y	FL/R	FL/R	←
PRE-EMPT WARNING	QFL/ 8"Y	QFL/ 8"Y	QFL/ 8"Y	QFL/ 8"Y	R	R	→
WARNING CHANGE	Y	Y	Y	Y	R	R	
PRE-EMPT PHASE	R	R	R	R	FL/ 8"Y	FL/ 8"Y	↑
PRE-EMPT CHANGE	R	R	R	R	Y	Y	
FLASHING OPERATION	FL/ 12"Y	FL/ 12"Y	FL/ 12"Y	FL/ 12"Y	FL/ R	FL/ R	←↑→

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

MD 272 @ CALVERT SUBSTATION
FIRE DEPARTMENT

DRAWN BY:	J. GALES	F.A.P. NO.		TS NO.	SHEET NO.
CHECKED BY:	M. RUCKER	S.H.A. NO.		4154	
SCALE:	1" = 20'	COUNTY:	CECIL	T.I.M.S. NO.	
DATE:	1/7/02	LOG MILE:	07027219.10	E888	2 OF 2