

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING FIREHOUSE SIGNAL AT THE INTERSECTION OF US 1 (SOUTHWEST BLVD) AND ARBUTUS VOLUNTEER FIRE DEPARTMENT IN BALTIMORE COUNTY. THE STREET LIGHTING AND REQUIRED SIGNS ARE TO BE REPLACED. THERE ARE SIGNS THAT WILL BE RELOCATED. THESE ADJUSTMENTS ARE NECESSARY DUE TO WIDENING OF THE FIREHOUSE ENTRANCE AND THE ADDITION OF THREE BAY DOORS.

US 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

NORMAL OPERATION: US 1 IS FLASHING 8" YELLOW AND THE FIREHOUSE IS FLASHING 8" RED. WHEN PRE-EMPTION HAS BEEN ACTIVATED BY ONE OF THE THREE METHODS: PUSHBUTTONS AT THE BAY DOORS OR CONTROL PANEL AND/OR BY REMOTE FROM INSIDE THE VEHICLES, THERE SHALL BE WARNING PHASE. A QUICK FLASH AND THEN PRE-EMPTION PHASE. DURING PRE-EMPTION PHASE US 1 SHALL BE A SOLID RED AND THE FIREHOUSE WILL RECEIVE THE GREEN.

SPECIAL NOTES

1. THERE WILL BE TEMPORARY OVERHEAD PUSHBUTTON CONNECTIONS TO THE FIREHOUSE, THE TRAFFIC SIGNAL SHALL BE REBUILT PRIOR TO THE DRIVEWAY CONSTRUCTION.
2. THE FIREHOUSE ELECTRICIAN SHALL INSTALL THE INTERNAL WIRING FOR THE HOUSE. THIS INCLUDES THE PUSHBUTTON AT BAY DOORS TWO AND FOUR AND AT THE PROPOSED CONTROL PANEL. THE REMOTE SYSTEM ORIGINAL INSTALLED BY THE FIREHOUSE WILL BE RELOCATED. THE FIREHOUSE CONTRACTOR WILL BRING AN UNDERGROUND PVC CONDUIT TO THE CABINET.
3. THE INTERNAL EQUIPMENT FROM THE EXISTING CABINET SHALL BE REMOVED AND INSTALLED INTO THE PROPOSED CABINET BY SHA FORCES. THE SHA WILL ALSO CONNECT THE PUSHBUTTON CABLES. (SEE PLAN FOR ALL NECESSARY CONTACTS AND THEIR NUMBERS.)

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE SHA, AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9013	2 EA	20' LIGHTING ARM (CLAMP ON)
9038	1 EA	CABINET BOTTOM PLATE, SIZE 5
9043	1 EA	CONTROLLER CABINET, SIZE 5
9063	4 EA	12" x 30' STRAIN POLE (1 3/4" x 90" ANCHORS INCLUDED)
9089	41 SF	FLAT SHEET ALUM. SIGN-YELLOW, ORANGE, & SILVER SIGN INVENTORY AS FOLLOWS:
	1 EA	I95-10 "SAFETY BELTS BUCKLED ?" (18" X 14") GROUND MOUNTED
	2 EA	W11-8(2) "FIRETRUCK SYMBOL, SIGNAL" (45.5" X 29.5") SIGN SPAN WIRE MOUNTED AND TETHER
	2 EA	R7-1 "NO PARKING, SYMBOL, TWO WAY ARROWS" (12" X 18") GROUND MOUNTED
9000	15 SF	FLAT SHEET ALUM. SIGN- BLUE & GREEN SIGN INVENTORY AS FOLLOWS:
	1 EA	M4-5 "TO" (24"X12"), M3-1 "NORTH" (30" X 24"), M1-4 "INTERSTATE 695" (30" X 24"), M5-1 "NEXT RIGHT ARROW" (21" X 15")

The contact persons for District #4 are as follows:

Mr. Randall Scott
Assistant District Engineer - Traffic
Phone: (410) 321-2781

Mr. Dave Ramsey
Assistant District Engineer - Maintenance
Phone: (410) 321-2761

Mr. Joe McMahon
Assistant District Engineer - Utility
Phone: (410) 321-2841

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

The power company representative is:

Baltimore Gas Electric
Mr. John Frøeburger
7317 Parkway Drive
Hanover, Maryland 21076
(410) 859-9017

EQUIPMENT LIST (cont.)

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

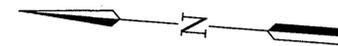
ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	4 CY	CLASS 2 EXCAVATION
2002	2 CY	TEST PIT EXCAVATION
5005	25 LF	24" WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKINGS
5008	25 LF	REMOVAL OF EXISTING PAVEMENT MARKINGS
6004	100 SF	FURNISH AND INSTALL 4" CONCRETE SIDEWALK
8011	12 EA	FURNISH AND INSTALL 12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8014	2 EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8015	1 EA	FURNISH AND INSTALL 3" WEATHERHEAD
8019	15 EA	FURNISH AND INSTALL 8" VEHICULAR TRAFFIC SIGNAL HEAD
8020	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240V, 1PHASE, 3 WIRE SYSTEM)
8041	4 EA	INSTALL STRAIN POLE
8047	4 EA	REMOVE AND DISPOSE OF EXISTING FOUNDATION 12" BELOW GRADE
8048	1 EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
8051	40 LF	FURNISH AND INSTALL 3" SCH 80 RIGID PVC CONDUIT-TRENCHED
8053	270 LF	FURNISH AND INSTALL 4" SCH 80 RIGID PVC CONDUIT-TRENCHED WITH A PULL STRING FOR THE INSTALLATION OF SERVICE BY BGE.
8055	25 LF	FURNISH AND INSTALL 2" SCH 80 PVC RISER
8057	12 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8058	32 LF	FURNISH AND INSTALL 4" X 4" WOOD SIGN SUPPORTS
8059	50 LF	FURNISH AND INSTALL 4" X 6" WOOD SIGN SUPPORTS
8060	80 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8070	30 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO 4 AWG THHN/THWN (TRAFFIC SIGNAL)
8072	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8074	38 SF	INSTALL GROUND MOUNTED SIGN
8075	18 SF	INSTALL OVERHEAD SIGN
8080	4 EA	FURNISH AND INSTALL GROUND ROD 3/4" DIA. X 10' LONG
8082	150 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 14 AWG)
8084	1330 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO 14 AWG)
8086	330 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 12 AWG) TYPE "TC"
8089	320 LF	FURNISH AND INSTALL STEEL SPAN WIRE - 1/4" DIAMETER
8090	320 LF	FURNISH AND INSTALL STEEL SPAN WIRE - 3/8" DIAMETER
8092	1 EA	INSTALL CABINET - POLE MOUNT
NEG	2 EA	RELOCATE EXISTING SIGN ON NEW 4" X 6" WOOD SIGN SUPPORT (QUANTITY FOR WOOD SUPPORT INCLUDED IN ITEM 8059)
NEG	2 EA	INSTALL LIGHTING ARM TO SIGNAL STRAIN POLE.

EQUIPMENT LIST (cont.)

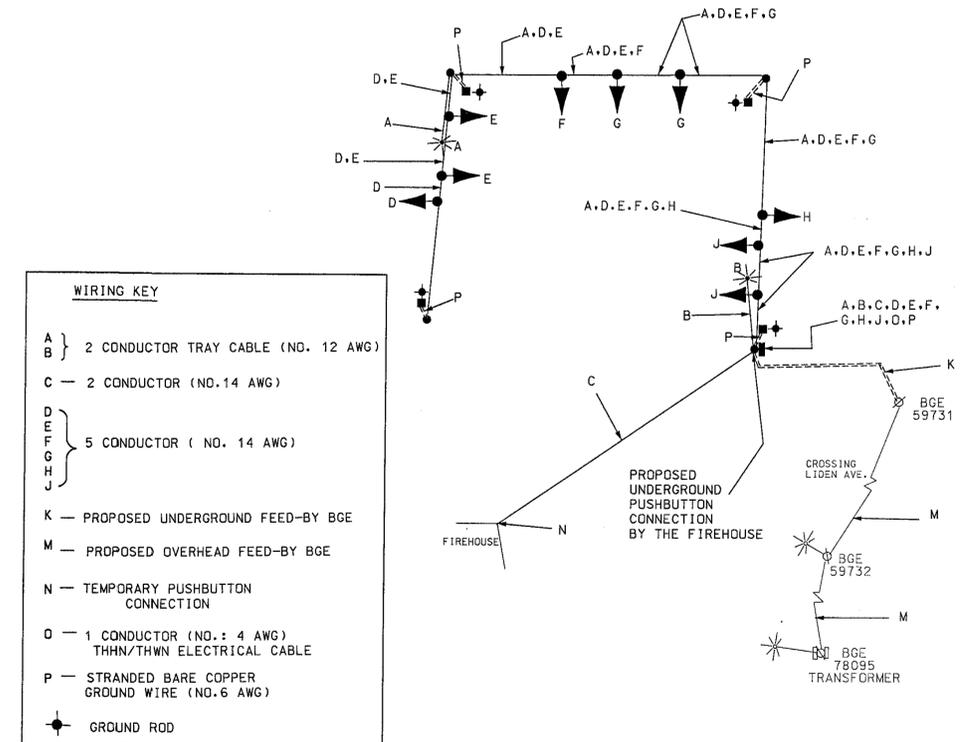
- C. THE SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

	1	2	3	4	5	6	7	8	9	
	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	
NORMAL OPERATION	8" FL/Y	FL/R	FL/R	FL/R	←					
PRE-EMPTION WARNING	12" FL/Y	R	R	R	←					
QUICK FLASH	12" FL/R	Y	Y	Y	↑					
PRE-EMPTION	12" R	G	G	G	↑					
PRE-EMPTION CLEAR	12" R	Y	Y	Y	↑					
FLASHING OPERATION	12" FL/Y	FL/R	FL/R	FL/R	←					



WIRING DIAGRAM



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CONSULTING ENGINEERS
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(410) 884-3607

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
US1 (SOUTHWEST BLVD) AND ARBUTUS
VOLUNTEER FIRE DEPARTMENT

DRAWN BY: E. MILESKY	F.A.P. NO. AC-STPG-000S(787)E	TS NO. 1897D	SHEET NO. 2 OF 2
CHECKED BY: R. MILSTEAD	S.H.A. NO. XX1065385		
SCALE: 1" = 20'	COUNTY: BALTIMORE	T.I.M.S. NO. F328	
DATE: 06-27-02	LOG MILE: 03000102.50		