DRILL HOLES

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BORDER REV. DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a battery backup system and meter pedestal for the existing Traffic Control signal at the intersection of Westbound MD 175 Ramp "A" and Snowden River Parkway in Howard County. Additionally, all traffic signal heads shall be upgraded to LED traffic signal heads and the pedestrian signals shall be upgraded to Countdown pedestrian signal heads. Snowden River Parkway is assumed to run in a north - south direction.

II. INTERSECTION OPERATION

1. The intersection shall continue to operate in a NEMA four-phase, semi-actuated mode, with the Snowden River Parkway approaches running concurrently. The Exclusive left turn phase for the northbound approach of Snowden River Parkway shall remain in operation. The pedestrian phase across the MD 175 On Ramp leg on recall shall now be a Countdown pedestrian phase. The MD 175 Off Ramp approach shall continue top operate in its own phase.

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.

3. A new NEMA size "6" base-mounted cabinet with battery back-up shall be installed at this intersection.

III. SPECIAL NOTES

1. 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.

The contact persons for District #7 are as follows:

Mr. John Concannon
Assistant District Engineer - Traffic
Phone: (310) 624-8141

Mr. Ray Johnson
Assistant District Engineer - Maintenance
Phone: (310) 624-8106

Ms Andrea Abend
District Engineer - Utility
Phone: (301) 624-8110

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

Mr. Ed Rodenhizer
Signal Shop
410-787-7652

The power company representative is:

Mr. Steve Schneider
Baltimore Gas and Electric
7317 Parkway Drive South
Hanover, MD 21076
410-859-9310

EQUIPMENT LIST

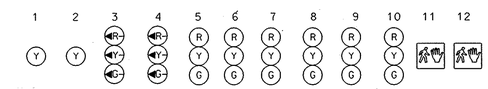
A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

ITEM NO.	DESCRIPTION	QUANTITY
9044	Controller cabinet, size "6" for battery back-up system.	1 EA

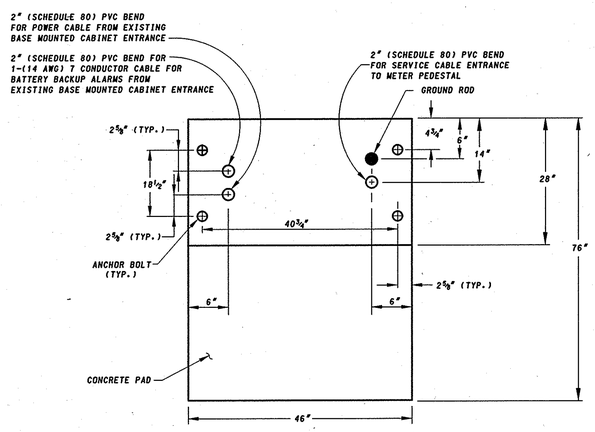
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment. 5271agi sheet	
2002	Test Pit Excavation	1 C.Y.
8014	LED 16" countdown pedestrian signal head.	2 EA
8015	LED signal head modules (any size).	29 EA
8022	Remove and dispose of existing material and equipment per assignment. 5271agi sheet	1 EA
8036	Schedule 80 rigid PVC conduit up tp 4" - trenched.	45 L.F.
8044	Metered service pedestal embedded.	1 EA
8046	Electrical cable 1-conductor No. 4 AWG THHN/THWN.	110 L.F.
8056	Electrical cable - 5 conductor (No. 14 AWG).	140 L.F.
8058	Electrical cable - 7 conductor (No. 14 AWG).	30 L.F.
Neg.	Cabinet size "6" and battery back-up system.	1 EA

PHASE CHART



PHASE 1 & 6	DARK	DARK	◄G-	◄G-	G	G	R	R	R	R	DW	DW
1 & 6 CHANGE	DARK	DARK	◄Y-	◄Y-	G	G	R	R	R	R	DW	DW
PHASE 2 & 6	DARK	DARK	◄R-	◄R-	G	G	G	G	R	R	WK	WK
PED CLEAR / COUNTDOWN	DARK	DARK	◄R-	◄R-	G	G	G	G	R	R	FL/DW	FL/DW
2 & 6 CHANGE	FL/Y	FL/Y	◄R-	◄R-	Y	Y	Y	Y	R	R	DW	DW
PHASE 4	FL/Y	FL/Y	◄R-	◄R-	R	R	R	R	G	G	DW	DW
4 CHANGE	FL/Y	FL/Y	◄R-	◄R-	R	R	R	R	Y	Y	DW	DW
FLASHING OPERATION	DARK	DARK	FL/◄R-	FL/◄R-	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK

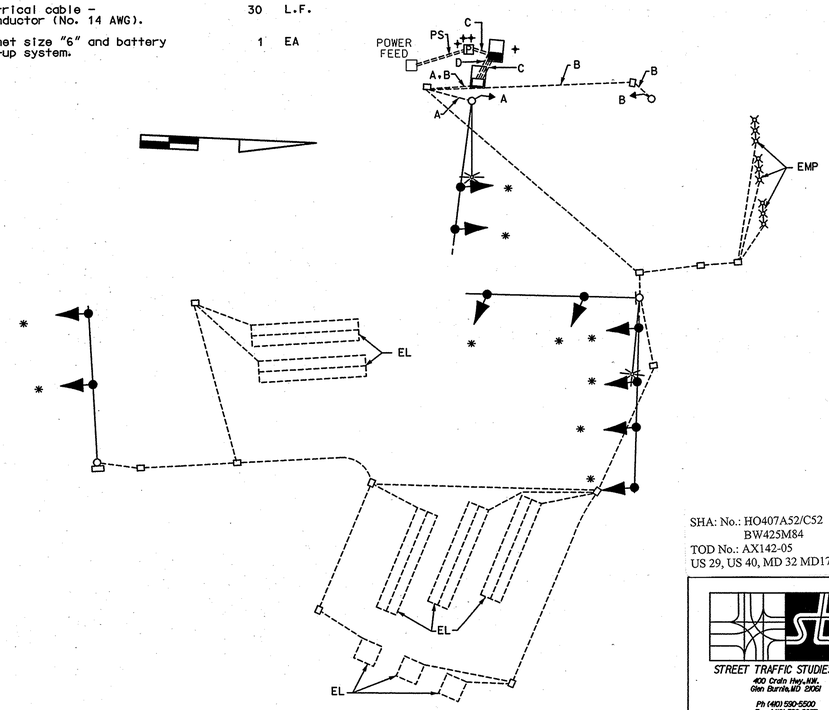


TYPICAL PLAN VIEW FOR BATTERY BACKUP CABINET

NOTE:

1. ALL CONDUIT BENDS ARE SUBJECT TO CHANGE AS PER CABINET LOCATION.
2. REFER TO WIRING DIAGRAM ON THIS SHEET FOR SPECIFIC DETAILS.

WIRING DIAGRAM



WIRING KEY

A, B } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
C - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
D - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G) FOR ALARM
EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
EMP - EXISTING MICROLOOP PROBE
* - USE EXISTING CABLE
PS - PROPOSED UNDERGROUND SERVICE TO BE INSTALLED BY BGE
+ - GROUND ROD

SHA: No.: HO407A52/C52
BW425M84
TOD No.: AX142-05
US 29, US 40, MD 32 MD175

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy.NW.
Glen Burnie,MD 21061
Ph (410) 590-5500
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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

WB MD 175 RAMP "A" AND SNOWDEN RIVER PARKWAY

COLUMBIA, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE	DATE 4/18/07	CONTRACT NO. AX1425185	
DESIGNED BY JWA		COUNTY HOWARD	
DRAWN BY RC		LOGMILE 13017503.55	
CHECKED BY		TIMS NO. 1288	
F.A.P. NO.		TOD NO.	
TS NO. 3819C-&1	DRAWING NO. 2 OF 2	SHEET NO. OF	

PLOTTED: $DATETIME$
FILE: $FILE$

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