

DRILL HOLES

BORDER REV: DATE: June 1, 2004

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PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a Pedestrian activated Hazard Identification Beacon (H.I.B.) along MD 117 (W.Diamond Ave) at the Southbound I-270 On Ramp in Montgomery County, MD 117 (W.Diamond Ave) is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

- 1. The Hazard Identification Beacon is to be activated by pedestrians pushing the pushbuttons to cross the southbound I-270 on Ramp. Upon pushing the pushbutton, the Red LED indication on the pedestrian education sign will flash in unison with the H.I.B. The flashing RED indication will assure the pedestrian that the H.I.B. is operating. At all other times the Hazard Identification Beacon shall be dark.
2. A pole mounted "G" size cabinet with relay package shall be installed at this intersection.
3. SHA Signal Shop shall install Polara Control Unit into 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 Montgomery County Forces. Contact Kamal Hamud at (240) 777-8761 seventy-two hours in advance of intended work.
3. The contractor must notify Mr. Ed Rodenhizer at least 3 weeks in advance of the installation of the R10-4(1)Mod. "Pedestrian sign with Red LED indications", to assure enough time to fabricate the sign. The contractor is to bring the wiring to the sign, the SHA signal shop will make the connections to the Red LED indications.
4. 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.

APS NOTES:

- 1. Pushbuttons are to be located so that they can be activated by a person in a wheelchair reaching less than 18" from a 60"x 60" level landing area with a cross slope of less than or equal to 2%.
2. Pushbutton arrows are to be parallel to the crossing for which they are intended.
3. APS will function as follows:
TO CROSS I-270 RAMP
a. When pedestrian locates and presses the pushbutton for an extended time, the pushbutton unit will announce the following message "Yellow Flashing lights activated for I-270 Ramp. Watch for traffic. Use Caution"
b. When the WALK phase begins, the pushbutton unit will provide a rapid tick which will last for the duration of the WALK phase.

The contacts for Montgomery County and SHA are as follows:

Ms. Anyesha Mackherjee, Assistant District Engineer - Traffic, Phone: (301) 513-7318
Mr. Richard L. Daff, Sr., Chief, Traffic Operations Division, Phone: (410) 787-7630
Mr. Vernon Stinnett, Assistant District Engineer - Maintenance, Phone: (301) 513-7304
Mr. Bob Ricketts, Signal Shop (Mont Co.), 240-777-8760
Mr. Victor Grafton, Assistant District Engineer - Utility, Phone: (301) 513-7350
Mr. Sonny Bailey, Manager, Sign Shop Operations, 410-787-7670
Mr. Kamal Hamud, Mont. County TMC Center, 240-777-8761
The power company representative is:

Mr. Steve Custer, PEPCO Customer Design, 201 W Guide Dr., Rockville, MD 20850, Phone: 301 548-4333

EQUIPMENT LIST

Table with columns: ITEM NO., DESCRIPTION, QUANTITY. Includes items like Relay package, Cabinet "G" type, Sheet aluminum signs, Pedestrian education sign, HIKER BIKER TRAIL CROSSING sign, ACROSS RAMP sign.

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

Table with columns: ITEM NO., DESCRIPTION, QUANTITY. Includes items like Maintenance of traffic per assignment, Test Pit Excavation, Standard type A combination curb and gutter, 5" concrete sidewalk, Detectable warning surfaces, LED signal head section, Breakaway pedestal pole, Remove and dispose of existing material, Schedule 80 rigid PVC conduit, Install overhead or ground mounted sign, No. 6 AWG stranded bare copper ground wire, Furnish and install electrical handhole, Cut, clean, galvanize and cap traffic signal structure, Electrical cable, Install controller and cabinet pole mount, Electrical cable 1-conductor No. 2 AWG THHN, Non-audible pedestrian pushbutton, Polara Model-X Control Unit, Polara Push Button Station with 350' of cable.

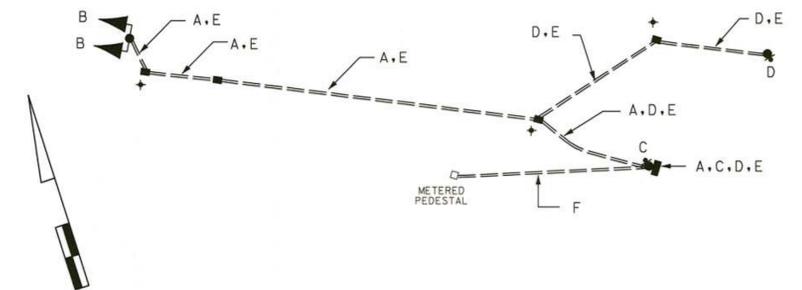
C. EQUIPMENT TO BE REMOVED

There is no signal equipment to be removed for this project.

PHASE CHART

Phase chart table with columns for Normal Operation, Pedestrian Crossing Operation, and various signal states (DARK, FL/Y).

WIRING DIAGRAM



WIRING KEY

- A - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
B - 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
C - 8-CONDUCTOR POLARA ELECTRICAL CABLE
E - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
F - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 2 A.W.G.) FOR UNDERGROUND SERVICE BY PEPCO
+ - GROUND ROD

Redline Revision Dated February, 2011

Redline Revision Dated July 19, 2011

SHA MDOT-SHA O.O.T.S. S.H.A. Approval Date 7/19/2011 T.S. # 4774 T.I.W.S. # J803

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION MD 117 (W.DIAMOND AVE) AND I-270 SOUTHBOUND RAMP GAITHERSBURG, MARYLAND

GENERAL INFORMATION SHEET

Table with project details: SCALE NONE, DATE 10/29/2010, CONTRACT NO. XX3545168R, DESIGNED BY R.R.Z., COUNTY MONTGOMERY, DRAWN BY R.C., LOGMILE 15011711.58, CHECKED BY, TMS NO. J803, F.A.P. NO., TOD NO.



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