

DRILL HOLES

BORDER REV. DATE: June 1, 2004

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PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 235 (Three Notch Rd) and Shangri-La Drive (North) in St. Mary's County. The existing pedestrian signal heads shall be replaced by Countdown pedestrian signal heads with audible pushbuttons. The existing signal heads shall be removed and replaced with proposed LED signal heads. MD 235 (Three Notch Rd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- 1. The intersection shall continue to operate in a NEMA three-phase, fully-actuated mode, with the southbound MD 235 (Three Notch Rd) approach running in its own phase. The Exclusive left turn phase for the northbound approach of MD 235 (Three Notch Rd) shall remain in operation. The pedestrian phase across Shangri-La Drive (North) on recall shall now be a Countdown pedestrian phase with audible pushbuttons. The pre-emption phase for the southbound approach of MD 235 (Three Notch Rd) shall continue to operate. The Shangri-La Drive (North) approach shall continue to 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 maintained at this intersection.
3. SHA signal shop shall install APS control unit into controller cabinet. The Contractor shall deliver the Control Unit and audible pushbuttons to the SHA Signal Shop for testing and programming. Contact Mr. Ed Rodenhizer (410) 787-7652.

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) 787-7652 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.
4. APS will function as follows:
FOR SHANGRI-LA DRIVE (NORTH)
a. When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be "wait to cross Shangri-La Drive (North) at Three Notch Rd."
b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

The contact persons for District #5 are as follows:

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

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

Mr. John Mays
Assistant District Engineer - Maintenance
Phone: (410) 841-1002

Mr. Ed Rodenhizer
Chief, Signal Operations Section
410-787-7652

Mr. Joe Harty
Assistant District Engineer - Utility
Phone: (410) 841-1005

Mr. Sonny Bailey
Chief, Sign Operations Section
410-787-7670

EQUIPMENT LIST

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

Table with 3 columns: ITEM NO., DESCRIPTION, QUANTITY. Includes sheet aluminum signs, pedestrian education R10-3(1) mod sign, and pushbutton to cross Shangri-La Dr North.

EQUIPMENT LIST (cont.)

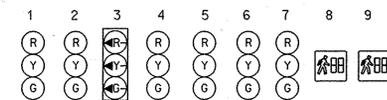
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

Table with 3 columns: ITEM NO., DESCRIPTION, QUANTITY. Lists items like maintenance of traffic lights, test pit excavation, standard type A combination curb and gutter, concrete sidewalk, detectable warning surfaces, LED signal head section, 2 wire Central Control unit, audible/tactile pedestrian pushbutton station & signs, breakaway pedestal pole, LED 16" countdown pedestrian signal heads, remove and dispose of existing material, schedule 80 rigid PVC conduit, No. 6 AWG stranded bare copper ground wire, install overhead sign, electrical cable (2 conductor), and electrical cable (5 conductor).

C. EQUIPMENT TO BE REMOVED

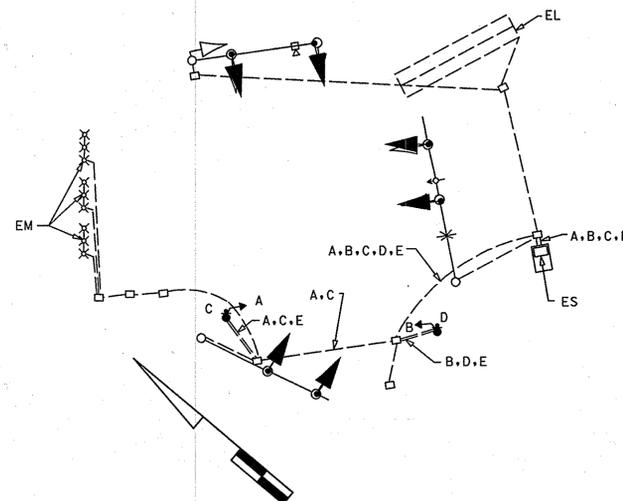
All removed signal materials are to become property of the contractor.

PHASE CHART



Phase chart table with columns for PHASE 5, 5 CHANGE, PHASE 6, PED CLEAR / COUNTDOWN, 6 CHANGE, PHASE 4, 4 CHANGE, PRE EMT 1, PRE EMT 1 CHANGE, FLASHING OPERATION and rows for signal phases R, Y, G and arrow directions.

WIRING DIAGRAM



WIRING KEY

- A } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
C } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
D } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
EM - EXISTING MICROLOOP LEAD-IN CABLE
EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
ES - EXISTING SERVICE TO BE MAINTAINED BY SMECO

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
MD 235 (THREE NOTCH ROAD)
AND SHANGRI-LA DRIVE (NORTH)
LEXINGTON PARK, MARYLAND

GENERAL INFORMATION SHEET

Table with project details: SCALE NONE, DATE 2/08/2008, CONTRACT NO. AT9135105, DESIGNED BY J ALLEN, COUNTY ST. MARY'S, DRAWN BY ROB CICCHINI, LOGMILE 18023512.16, CHECKED BY, TMS NO. 1971, F.A.P. NO., TOD NO., TS NO. 787-H, DRAWING NO. 2 OF 2, SHEET NO. OF