PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS (APS), COUNTDOWN PEDESTRIAN SIGNALS (CPS), ADA RAMP MODIFICATIONS FOR ALL LEGS, BASE MOUNTED SIZE "S" CABINET, LED VEHICULAR SIGNAL HEADS AND VIDEO DETECTION AT THE INTERSECTION OF MD 355 (FREDERICK ROAD) AND MIDDLEBROOK ROAD IN GERMANTOWN, MD.
MD 355 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULLY-TRAFFIC-ACTIVATED MODE. MD 355 EXCLUSIVE LEFT TURNS, SIDE STREET SPLIT PHASING, PEDESTRIAN CONCURRENT MAINLINE PHASING AND ALTERNATE SIDE STREET PEDESTRIAN PHASING SHALL REMAIN.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET WILL BE REMOVED AND A SIZE "S" CABINET WILL BE INSTALLED. THE MONTGOMERY COUNTY SIGNAL SHOP WILL INSTALL ONE (1) 2 WIRE CENTRAL CONTROL UNIT, ASC III CONTROLLER, BATTERY BACK-UP, LAU PANEL AND ALL OTHER ASSOCIATED EQUIPMENT AND HARNESSES WITHIN THE CABINET.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS FREDERICK ROAD

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS FREDERICK AT MIDDLEBROOK, CROSSWALK ANGLES RIGHT, WAIT".

B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

TO CROSS MIDDLEBROOK ROAD

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS MIDDLEBROOK AT FREDERICK, CROSSWALK ANGLES LEFT, WAIT".

B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

SPECIAL NOTES

1. THE MONTGOMERY COUNTY SIGNAL SHOP SHALL INSTALL APS CONTROL UNIT INTO CONTROLLER CABINET. THE APS PUSH BUTTONS SHALL BE PROGRAMMED BY THE MANUFACTURER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND SHALL PROPERLY LABEL EACH CABLE.
3. ALL INTERNAL CABINET WIRING WILL BE PERFORMED BY MONTGOMERY COUNTY FORCES. CONTACT KAMAL HAMUD AT (240) 777-8761 72 HOURS IN ADVANCE OF INTENDED WORK.
4. THE CONTRACTOR SHALL DELIVER APS PUSHBUTTONS AND CENTRAL CONTROL UNIT TO MR. BOB RICKETTS AT MONTGOMERY COUNTY TECHNICAL CENTER AT 1283 SEVEN LOCKS ROAD, ROCKVILLE, MD 20854 AT LEAST THREE WEEKS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL HAVE THE APS MESSAGES PROGRAMMED FROM THE FACTORY AND DELIVER THE APS WAVE FILES TO MR. BOB RICKETTS.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Cedric Ward
Assistant District Engineer - Traffic
Phone: 301-513-7358

Mr. Victor Grafton
District Utility Engineer
Phone: 301-513-7350

Mr. Vernon Stinnett
Assistant District Engineer - Maintenance
Phone: 301-513-7304

OFFICE OF TRAFFIC AND SAFETY:

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

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
410-787-7630

Mr. Edward Rodenhizer
Chief Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Chief Sign Operations
410-787-7670

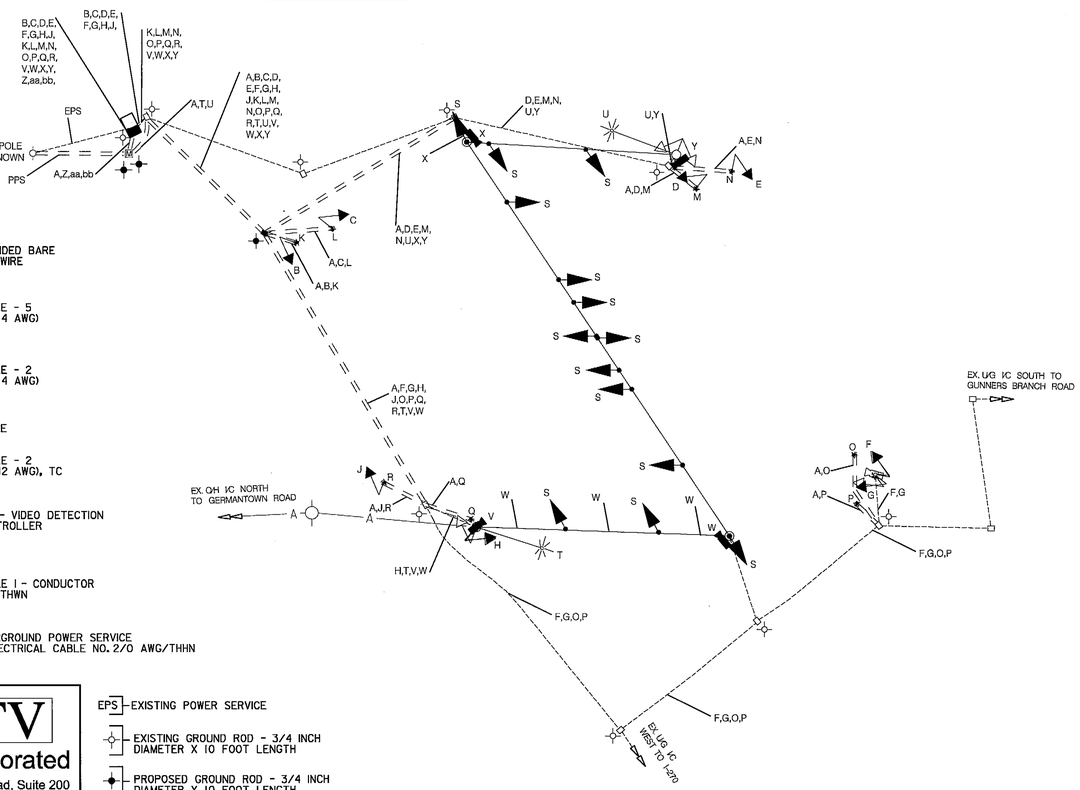
MONTGOMERY COUNTY:

Mr. Kamal Hamud
Traffic Engineering
240-777-8761

Mr. Bob Ricketts
Signal Shop
301-279-1975

The Power Company is:
Pepco
Mr. Paul Wilson
201 W. Gude Drive
Rockville, MD 20850
Phone: 301-548-4322

WIRING DIAGRAM



A — NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

B C D E F G H J — ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

K L M N O P Q R — ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

S — USE EXISTING WIRE

T U — ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC

V W X Y — CONTROL CABLE - VIDEO DETECTION CAMERA TO CONTROLLER

Z aa bb — ELECTRICAL CABLE 1 - CONDUCTOR NO. 8 AWG-THHN/THWN

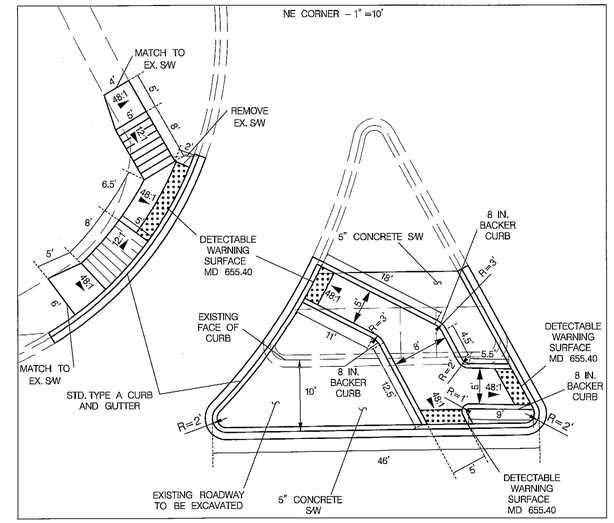
PPS — PROPOSED UNDERGROUND POWER SERVICE 1-CONDUCTOR ELECTRICAL CABLE NO. 2/0 AWG/THHN

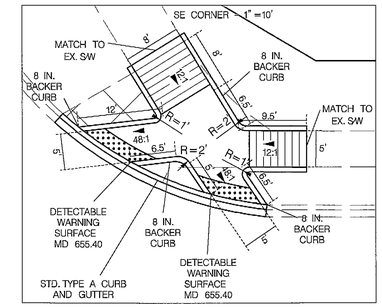
EPS — EXISTING POWER SERVICE

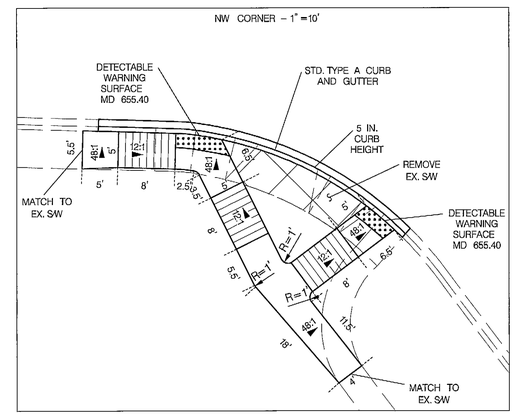
EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

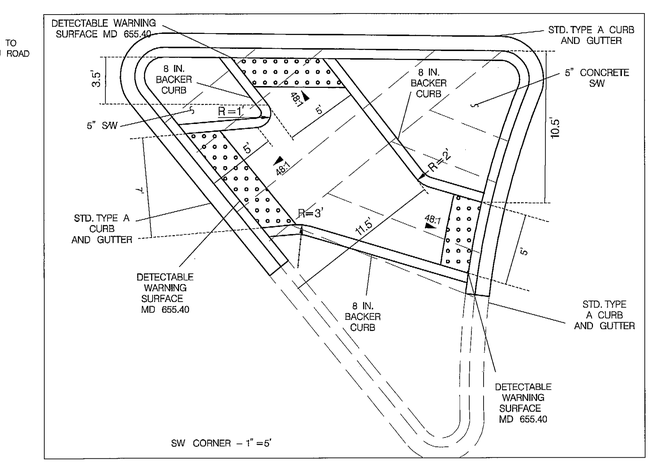
PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

ADA SIDEWALK RAMP DETAILS

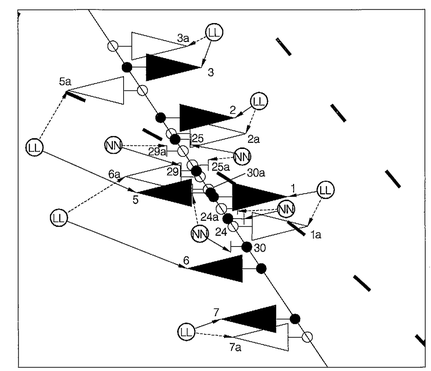








PROPOSED LED VEH. SIGNAL HEADS



TOD NO: XX439-12
SHA NO: MO242857
MD 355 @ Middle Brook Road

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 355 (FREDERICK ROAD)

AT MIDDLEBROOK ROAD

GERMANTOWN, MD

GENERAL INFORMATION SHEET (1 OF 3)

SCALE NONE ADVERTISED DATE 01/2012 CONTRACT NO. XX4395185

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CHECKED BY MTS MF — TIMS NO. K911
F.A.P. NO. — TOD NO.

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STV
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BY: tarnovk -

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