

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW POINT CONTROL PERSON SIGNAL (FLAG IN THE AIR) AT MD 165 (PYLESVILLE ROAD) AND NORTH HARFORD HIGH SCHOOL EXIT IN HARFORD COUNTY. MD 165 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

1. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A FLASHING MODE.

2. SPECIAL OPERATION

THE INTERSECTION WILL OPERATE AS INDICATED ABOVE, UNLESS A PUSHBUTTON IS ACTIVATED BY THE POINT CONTROL PERSON WHICH WILL STOP MD 165 APPROACHES.

CONTROLLER REQUIREMENTS

INSTALL FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER AND INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-12

STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)

STANDARD NO. MD-104.33-01 (SHOULDER WORK)

STANDARD NO. MD-104.35-01 (LANE SHIFT)

STANDARD NO. MD-104.32-02 (INTERSECTION FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. DAVE MALKOWSKI
DISTRICT ENGINEER
PHONE: 410-321-3461

MR. JOSEPH MCMAHON
DISTRICT UTILITIES ENGINEER
PHONE: 410-321-3456

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: 410-321-3514

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. DAVE RAMSEY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: 410-321-3468

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA

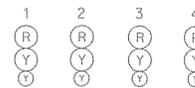
CATEGORY CODE NO.	QUANTITY	DESCRIPTION
971016	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER AND INTERSECTION MONITOR II WITH BATTERY BACK-UP HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.
973023	22 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH S1-1 MOD. SIGN (36 IN. X 42 IN.) - MAST ARM MOUNT
900000	1 EACH	PUSHBUTTON AND SIGNAL INDICATION FOR POINT CONTROL PERSON IN AUXILIARY CABINET

EQUIPMENT LIST "B"

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

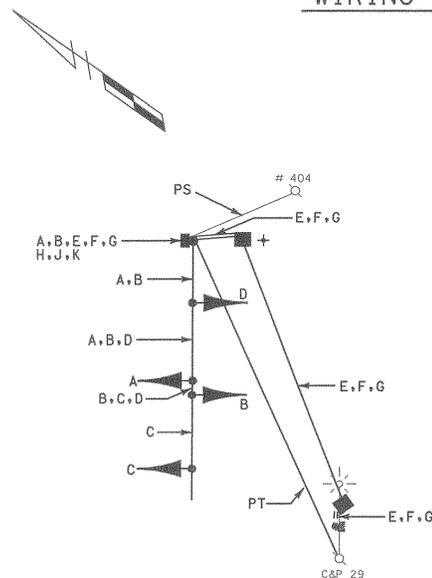
CATEGORY CODE NO.	QUANTITY	DESCRIPTION
120500	LUMP SUM	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
203030	2 C.Y.	TEST PIT EXCAVATION
500000	30 L.F.	24 INCH WHITE HEAT APPLIED PERMENENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
585450	240 L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIDTH
800000	1 EACH	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE (ANY SIZE)
800000	25 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	30 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	8 EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
800000	4 EACH	FURNISH AND INSTALL 8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
800000	1 EACH	FURNISH AND INSTALL AUXILIARY FLASHER CABINET (14.38 IN. (H) 10.38 IN. (W) X 7 IN. (D))
800000	1 EACH	FURNISH AND INSTALL TWIN MAST ARM POLE WITH 50 FT. MAST ARM
800000	1 EACH	CUT, CLEAN GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
801004	4 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	130 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
805105	75 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
805118	70 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
810010	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G. - THHN/THWN
811001	2 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	22 S.F.	INSTALL OVERHEAD SIGN
837001	2 EACH	FURNISH AND INSTALL GROUND - 3/4 IN. DIAMETER X 10 FT. LENGTH
838003	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240 V), 1 PHASE 3 WIRE SYSTEM
861105	130 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 2 CONDUCTOR (NO. 14 A.W.G.)
861107	190 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 5 CONDUCTOR (NO. 14 A.W.G.)
861108	140 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 7 CONDUCTOR (NO. 14 A.W.G.)
871201	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT

PHASE CHART



	1	2	3	4	
NORMAL OPERATION	8" FL/Y	8" FL/Y	8" FL/Y	8" FL/Y	← →
SPECIAL OPERATION	QUICK 8" FL/Y	QUICK 8" FL/Y	QUICK 8" FL/Y	QUICK 8" FL/Y	← →
	12" Y	12" Y	12" Y	12" Y	
	R	R	R	R	

WIRING DIAGRAM



WIRING KEY

- A } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- B }
- C } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D }
- E }
- F } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- G } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- H } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- J }
- K }
- PS - PROPOSED OVERHEAD ELECTRICAL SERVICE
- PT - PROPOSED UNDERGROUND TELEPHONE SERVICE
- + - 3/4 IN. X 10 FT. GROUND ROD

WR&A
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and Associates, LLP
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Baltimore, Maryland 21213
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 165 AND NORTH HARFORD HIGH SCHOOL

DRAWN BY: S. CHERNACK	F.A.P. NO. S.H.A. NO. HAI945176	TS NO. TS-3993	SHEET NO.
CHECKED BY: J. LEARY	COUNTY: HARFORD	T.M.S. NO. D-891	OF
SCALE: NONE	LOG MILE: 12016513-93		
DATE: 4/3/00			