

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES A TRAFFIC SIGNAL MODIFICATION IN CONJUNCTION WITH GEOMETRIC IMPROVEMENTS ON THE EAST LEG AT THE INTERSECTION OF MD 45 (YORK ROAD) AND MD 137 (MT. CARMEL ROAD) IN BALTIMORE COUNTY. THIS TRAFFIC SIGNAL MODIFICATION INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL POLE WITH TRAFFIC SIGNAL HEADS, VIDEO DETECTION CAMERA AND SIGNS FOR SITE ENTRANCE. MD 45 (YORK ROAD) IS ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION WILL OPERATE IN A NEMA FIVE-PHASE FULL-ACTUATED MODE. THE NORTHBOUND LEFT-TURN MOVEMENT ON YORK ROAD WILL OPERATE EXCLUSIVELY PERMISSIVELY. THE WESTBOUND AND EASTBOUND MOVEMENTS ON MT. CARMEL ROAD WILL OPERATE CONCURRENTLY. THIS SIGNAL IS INTERCONNECTED TO THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 45 (YORK ROAD) AND MD 138 (MONKTON ROAD).

CONTROLLER REQUIREMENTS

USE THE EXISTING NEMA SIZE "6" POLE-MOUNTED CABINET AND CONTROLLER ASSEMBLY WITH SYSTEM PACKAGE AND ALL EXISTING AUXILIARY EQUIPMENT. INSTALL VIDEO INTERFACE EQUIPMENT.

SPECIAL NOTES

- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR AND SHALL FOLLOW MDSHA STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PULLING ALL CABLE TO THE CABINET AND SHALL PROPERLY LABEL EACH CABLE.
- 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.
- THE CONTRACTOR SHALL NOTIFY MR. TONY YATES AT (443) 506-6443 OF THE SHA INSPECTION SECTION AND MR. ED RODENHIZER AT (410) 787-7652 OF THE SHA SIGNAL SHOP AT LEAST 48 HOURS IN ADVANCE BEFORE BEGINNING THE PROJECT.

PROJECT CONTACTS

THE CONTACT PERSONS FOR THIS PROJECT IN DISTRICT #4 ARE AS FOLLOWS:

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2781

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-2761

THE POWER COMPANY REPRESENTATIVE IS:
BG&E
7317 PARKWAY DRIVE, SOUTH
HANOVER, MD 21076
PHONE: (410) 850-4620

MR. MICHAEL PASQUARIELLO
DISTRICT UTILITIES ENGINEER
PHONE: (410) 321-2841

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

MR. ROBERT SNYDER
ASST. CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7631

MR. ED RODENHIZER
SIGNAL OPERATIONS SUPERVISOR
PHONE: (410) 787-7650

EQUIPMENT LIST "A"

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

NONE

EQUIPMENT LIST "B"

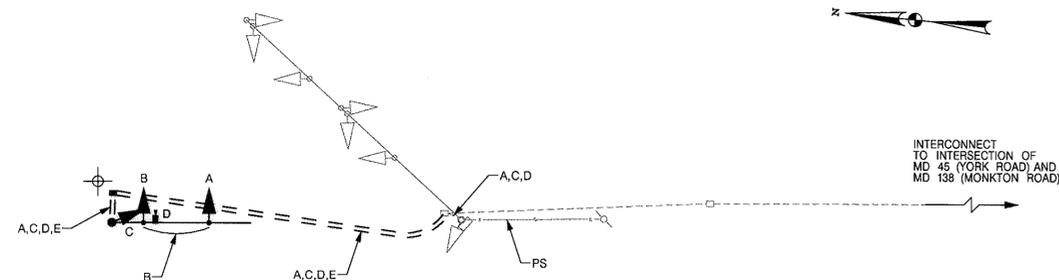
B. EQUIPMENT TO BE FURNISHED AND /OR INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOGUE CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY (OOTS) FOR APPROVAL.

ITEM NUMBER	QUANTITY	UNITS	SPECIFICATION SECTION	DESCRIPTION
1001	1	LS	104	MAINTENANCE OF TRAFFIC
1002	1	LS	108	MOBILIZATION
2001	1	CY	205	TEST PIT EXCAVATION
5001	200	LF	549	REMOVAL OF EXISTING PAVEMENT LINE MARKING
5002	60	LF	549	5 INCH WHITE HEAT-APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING TAPE
5003	200	LF	549	5 INCH DOUBLE YELLOW HEAT-APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING TAPE
5004	50	LF	549	24 INCH WHITE HEAT-APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING TAPE
8001	3	CY	801	CONCRETE FOR SIGNAL FOUNDATION
8002	1	EA	804	GROUND ROD - 3/4 IN. DIAMETER x 10 FT
8003	90	LF	804	No. 6 BARE COPPER STRANDED GROUND WIRE
8004	10	LF	805	3 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED)
8005	85	LF	805	4 IN. SCHEDULE 80 RIGID PVC CONDUIT (BORED)
8006	180	LF	810	ELECTRICAL CABLE - 5 CONDUCTOR (No. 14 AWG)
8007	155	LF	810	ELECTRICAL CABLE - 7 CONDUCTOR (No. 14 AWG)
8008	1	EA	811	INSTALL ELECTRICAL HANDHOLE
8009	14	SF	813	INSTALL SHEET ALUMINUM SIGNS CONSISTING OF: 1 EA (42" x 16") DUAL-FACED "YORK ROAD" MAST ARM MOUNT 1 EA (78" x 16") DUAL-FACED "MT CARMEL RD" MAST ARM MOUNT
8010				
8011	11	EA	814	INSTALL 12 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD
8012	1	EA	816	VIDEO DETECTION CAMERA (SOLO TERRA)
8013	1	EA	816	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
8014	1	EA	816	VIDEO INTERFACE EQUIPMENT
8015	1	EA	818	INSTALL 27 FOOT STEEL POLE WITH SINGLE 30 FOOT MAST ARM
			825	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE (MAST ARM)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO MARYLAND STATE HIGHWAY ADMINISTRATION. ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



WIRING LEGEND

- B 5 CONDUCTOR ELECTRICAL CABLE (No. 14 AWG)
- A,C 7 CONDUCTOR ELECTRICAL CABLE (No. 14 AWG)
- D CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
- E STRANDED BARE COPPER GROUND WIRE (No. 6 AWG)
- ⊕ GROUND ROD
- PS POWER SOURCE

PHASE CHART

	1	2	3	4	5	6	7	8	9	10
PHASE 1	←G	←G	R	R	R	R	R	R	R	R
PHASE 1 CHANGE	←G	←G	R	R	R	R	R	R	R	R
PHASE 1+6	←G	←G	G	R	R	R	R	R	R	R
PHASE 1+6 CHANGE	←G	←G	Y	R	R	R	R	R	R	R
PHASE 2+6	G	G	G	G	G	R	R	R	R	R
PHASE 2+6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R
PHASE 4+8	R	R	R	R	R	G	G	G	G	G
PHASE 4+8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 45 (YORK ROAD) AT
MD 137 (MT CARMEL ROAD)
HEREFORD, MARYLAND

GENERAL INFORMATION SHEET

SCALE 1" = 20' DATE NOV 2008 CONTRACT NO.

DESIGNED BY NDG COUNTY BALTIMORE
DRAWN BY APV LOGMILE 03004516.16
CHECKED BY CT TIMS NO. J088
F.A.P. NO. TOD NO.

W WELLS + ASSOCIATES, INC
TRANSPORTATION, TRAFFIC AND PARKING CONSULTANTS

6 W1 Street SW, Suite 300, Leesburg, Virginia 20176
Phone: 703/443-1442 Facsimile: 703/443-1225
1420 Spring Hill Road, Suite 600, McLean, Virginia 22102
Phone: 703/917-8620 Facsimile: 703/917-0738

DRAWING NO. TS-2585-G1 SHEET NO. 2 OF 2

PLOTTED:
FILE: L:\Projects\3501 - 4000\3866 - MD 45 @ MD 137 TSD\Design\MD45_MD137 Gl.dgn