

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD-2 (GOV. RITCHIE HIGHWAY) AND MD-270 (FURNACE BRANCH ROAD) IN ANNE ARUNDEL COUNTY.

MD-2 (GOV. RITCHIE HIGHWAY) IS ASSUMED TO RUN IN A NORTH SOUTH DIRECTION.

INTERSECTION OPERATION

A SYSTEM READY BASE MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT WILL BE INSTALLED AT THE INTERSECTION. THE INTERSECTION OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES. MAINLINE MD-2 (GOV. RITCHIE HIGHWAY) OPERATES CONCURRENTLY. EXCLUSIVE LEFT TURN PHASING IS PROVIDED FOR THE NORTH AND SOUTHBOUND MD-2 APPROACHES. MD-270 (FURNACE BRANCH ROAD) OPERATES AS A SIDE STREET SPLIT. THIS INTERSECTION IS PART OF THE MD-2 INTERCONNECT SIGNAL SYSTEM.

VIDEO CAMERAS SHALL PROVIDE THE PRESENCE DETECTION, STREET LIGHTING AND STREET NAME SIGNS SHALL BE UPDATED TO CURRENT STANDARDS.

PROJECT CONTACTS:

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

- KIMBERLY TRAN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1003
- JAMES FOLDEN, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 841-1031
- JOHN MAYS, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013
- MIKE HUBER, UTILITY ENGINEER
PHONE: (410) 787-7652
- MR. RICHARD DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
- MR. EDWARD RODENHIZER, CHIEF SIGNAL OPERATIONS SECT.
PHONE: (410) 787-7652
- MR. SONNY BAILEY, CHIEF SIGN SHOP
PHONE: (410) 787-7676
- THE POWER COMPANY REPRESENTATIVE:
BALTIMORE GAS AND ELECTRIC
7317 PARKWAY DRIVE SOUTH
HANOVER, MARYLAND 21076
(410) 850-4620

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL FROM SECTION MD 104.00 OF THE STANDARDS FOR HIGHWAYS & INCIDENTAL STRUCTURES.

EQUIPMENT LIST 'C'

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	QUANTITY
900000	LOCAL CONTROLLER AND CABINET SIZE 6 W/ ALL NECESSARY EQUIPMENT HOUSED BASE MOUNTED CABINET	1 EA
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:	193 SF
3 EA	R3-5(L) "LEFT ONLY" (30"X36") MAST ARM MOUNT	
1 EA	R3-5(R) "RIGHT ONLY" (30"X36") MAST ARM MOUNT	
2 EA	R3-6(L) "LEFT AND THRU" (30"X36") MAST ARM MOUNT	
2 EA	D-3(2) (16" X VAR.) MAST ARM MOUNT (DUAL FACED) "Gov Ritchie Hwy."	
2 EA	"Furnace Branch Rd."	
1 EA	GUIDE SHIELD ASSEMBLY (24X51) POLE MOUNT "NORTH, MD 2, RIGHT ARROW"	
1 EA	"SOUTH, MD 2, RIGHT ARROW"	
1 EA	GUIDE SHIELD ASSEMBLY (36X75) POLE MOUNT "NORTH, MD 2, LEFT ARROW"	
1 EA	"SOUTH, MD 2, LEFT ARROW"	
1 EA	GUIDE SHIELD ASSEMBLY (48X75) POLE MOUNT "NORTH, MD 270, LEFT ARROW"	
1 EA	"SOUTH, MD 270 LEFT ARROW"	

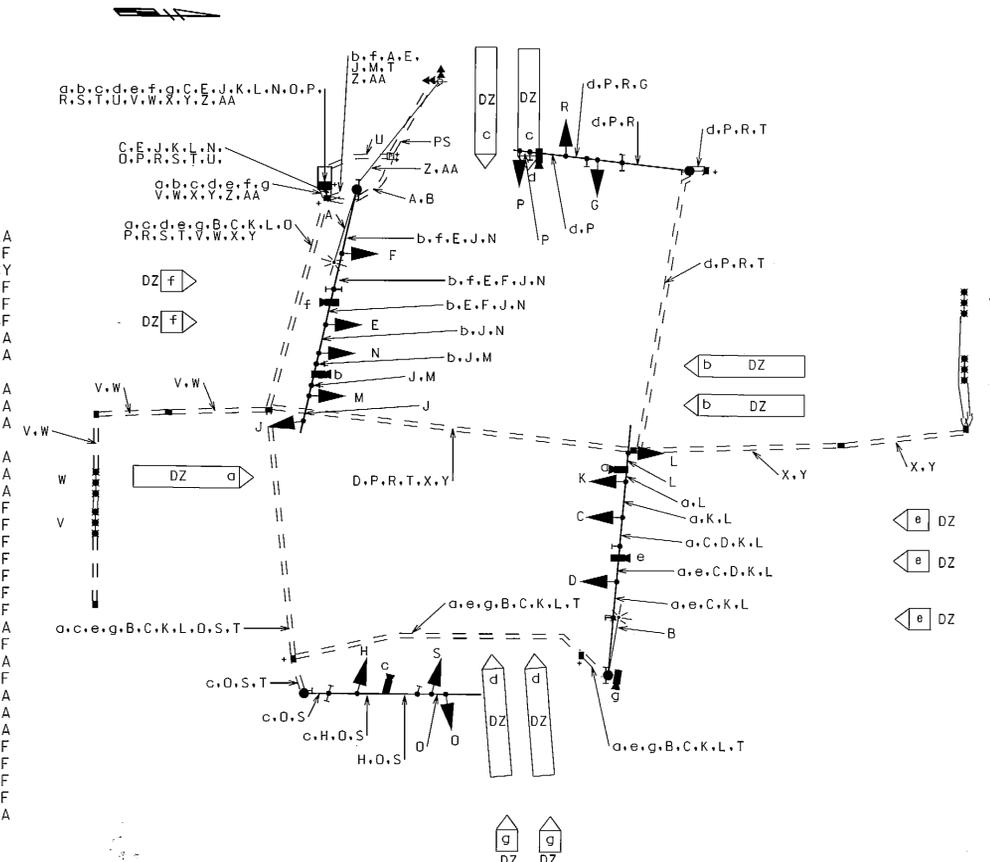
EQUIPMENT LIST 'B'

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

CATEGORY CODE NO.	DESCRIPTION	QUANTITY
100000	MAINTENANCE OF TRAFFIC	1 EA
120784	TEMP ORANGE FENCE	250 LF
203030	TEST PIT EXCAVATION	5 CY
500000	REMOVE PAVEMENT MARKING LINES	60 LF
585625	24" WHITE HEAT APPL. PERMANENT THERMO. PAVEMENT MARKING	150 LF
655105	5 INCH CONCRETE SIDEWALK	200 SF
800000	8" LED SIGNAL HEAD SECTION	6 EA
800000	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT LUMINAIRE AND LAMP	2 EA
800000	MAST ARM POLE & 50 FT MAST ARM ANY "T" DIMENSION	2 EA
800000	MAST ARM POLE & 70 FT MAST ARM ANY "T" DIMENSION	2 EA
800000	NON-INVASIVE MICRO LOOP TRIPLE PROBE SET ANY LENGTH LEAD IN.	2 EA
800000	MICRO-LOOP PROBE SET ANY LENGTH LEAD IN	2 EA
800000	REMOVE & DISPOSE OF EXISTING EQUIPMENT	1 EA
800000	VIDEO CAMERA & CABLE ANY LENGTH TO CONTROLLER	7 EA
800000	1 INCH DETECTOR SLEEVE GALVANIZED OR FLEXIBLE	15 LF
800000	DISCONNECT, PULL BACK & RE-ROUTE EXISTING CABLES	120 LF
800000	SCHEDULE 80 PVC CONDUIT UP TO 4" - BORED	160 LF
800000	SCHEDULE 80 PVC CONDUIT UP TO 4" - SLOTTED	270 LF
800000	SCHEDULE 80 PVC CONDUIT UP TO 4" - TRENCHED	760 LF
800000	WOOD SIGN POST UP TO 4X6	52 LF
800000	INSTALL OVERHEAD OR GROUND MOUNTED SIGN	193 SF
800000	RELOCATE EXISTING SIGN	1 EA
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	540 LF
807202	METERED SERVICE PEDESTAL	1 EA
810022	CABLE 1-CONDUCTOR, NO. 8 AWG-THHN/THWN	60 LF
811001	INSTALL ELECTRICAL HAND-HOLE	11 EA
860284	12" LED SIGNAL SECTION	43 EA
860292	CUT/CLEAN/GALV/CAP	2 EA
861107	ELECTRICAL CABLE -5 CONDUCTOR (NO.14 AWG)	550 LF
861108	ELECTRICAL CABLE -7 CONDUCTOR (NO.14 AWG)	2100 LF
861116	ELECTRICAL CABLE -2 CONDUCTOR (NO.12 AWG TRAY CABLE)	390 LF
862102	SAWCUT FOR DETECTOR	40 LF
871202	INSTALL CONTROLLER & CABINET. BASE MOUNT	1 EA

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Phase 1 & 5	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
1 & 5 Change	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
Phase 1 & 6	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
1 & 6 Change	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
Phase 2 & 5	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
2 & 5 Change	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
Phase 2 & 6	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
2 & 6 Change	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
Phase 3	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
3 Change	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
Phase 4	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
4 Change	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R
Fleshing Operation	G	G	R	R	G	G	R	R	G	G	R	R	G	G	R	R



WIRING KEY

- a. b. c. d. e. f. g. - VIDEO DETECTION CAMERA LEAD-IN CABLE 3 CONDUCTOR NO.18 AWG
- A. B - 2" CONDUCTOR NO. 12 AWG TRAY CABLE
- C. D. E. F. G. H. M - 5 CONDUCTOR NO. 14 AWG ELECTRIC CABLE
- J. K. L. . N. O. P. R. S - 7 CONDUCTOR NO. 14 AWG ELECTRIC CABLE
- T - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- U - 1 CONDUCTOR NO. 8 AWG-THHN/THWN ELECTRIC CABLE
- V. W. X. Y - NON INVASIVE MICRO-LOOP PROBE LEADS
- Z. AA - EXISTING INTERCONNECT CABLE TO BE PULLED BACK, RE-ROUTE TO NEW CONTROLLER (SEE NOTE)
- PS - PROPOSED SERVICE FEED
- DZ - DETECTION ZONE
- ‡ - GROUND ROD (3/4"DIA X 10 FT. LENGTH)

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

**MD 2 (GOVERNOR RITCHIE HWY.)
AT MD 270 (FURNACE BRANCH RD.)**

GENERAL INFORMATION PLAN

SCALE: NONE ADVERTISED DATE: 2-20-2009 CONTRACT NO. AA2615168

DESIGNED BY: WAE COUNTY: ANNE ARUNDEL
DRAWN BY: WAE LOGMILE: 02000237.75
CHECKED BY: JPH 2/10/09 TMS NO.: J661
F.A.P. NO.: TOD NO.:

TS NO. 761F-G1 DRAWING: 2 OF 2 SHEET NO. 13 OF 31

WAE Williams Associates-Engineers, P.A.
251 Najoles Road, Suite E
Millersville, Maryland 21108
Phone: 410-728-1004
Facsimile: 410-728-1009

CENTURY ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031

DRILL HOLES
BORDER REV. DATE: June 1, 2004
DRILL HOLES
DRILL HOLES
BY: \$USERNAMES\$