PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE CONSTRUCTION OF AN INTERSECTION CONTROL BEACON (ICB) ON MD 2 (GOVERNOR RITCHIE HIGHWAY) AT THE INTERSECTION OF NORMAN ROAD AND NORFOLK ROAD IN ANNE ARUNDEL COUNTY. MD 2 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION CONTROL BEACON OPERATION

THE ICB SHALL OPERATE IN FLASHING MODE WITH FLASHING YELLOW BEACONS ON MD 2 (GOVERNOR RITCHIE HIGHWAY) AND FLASHING RED BEACONS ON NORMAN ROAD AND NORFOLK ROAD.

CONTROLLER REQUIREMENTS

INSTALL A NEW EIGHT-PHASE FULLY ACTUATED TRAFFIC SIGNAL CONTROLLER AND ASSOCIATED HARNESSES IN A NEMA "6" BASE MOUNTED CABINET.

PHONE DROP

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

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

Ms. Kimberly Tran
Assistant District Engineer - Traffic
Phone: 410-841-1019

Mr. John Mays
Assistant District Engineer - Utility
Phone: 410-841-1039

Mr. Andre Futrell
Assistant District Engineer - Maintenance
Phone: 410-841-1013

Mr. Edward Rodenhizer
Chief, SHA Traffic Signal Shop
Phone: 410-787-7650

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

The Power Company Representative is:
Baltimore Gas & Electric Company
7317 Parkway Drive South
Hanover, MD 21076
Phone: 410-859-3062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

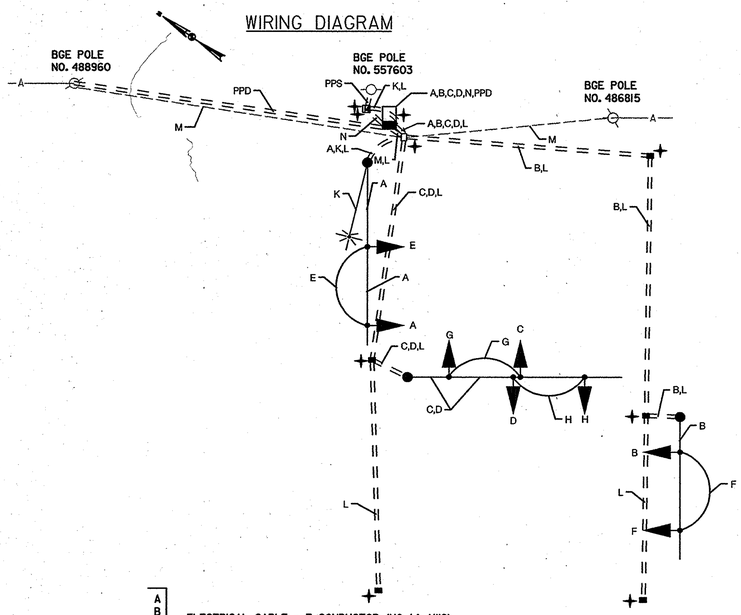
ITEM NO	QUANTITY	DESCRIPTION
9044	1 EA	[UPDATED] CONTROLLER CABINET, SIZE 6
9570	28 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN:
		1 EACH - SHIELD ASSEMBLY (24" x 51") "SOUTH, MD 2, RIGHT ARROW"
		1 EACH - SHIELD ASSEMBLY (36" x 75") "SOUTH, MD 2, LEFT ARROW"
9571	81 SF	[UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN:
		1 EACH - D-3(1) (96 IN. x 16 IN.) DUAL FACED "GOVERNOR RITCHIE HWY"
		1 EACH - D-3(1) (96 IN. x 32 IN.) "LEFT ARROW, NORFOLK RD/ NORMAN RD, RIGHT ARROW"
		1 EACH - D-3(1) (96 IN. x 32 IN.) "LEFT ARROW, NORMAN RD/ NORFOLK RD, RIGHT ARROW"
		1 EACH - SHIELD ASSEMBLY (24" x 51") "NORTH, MD 2, RIGHT ARROW"
		1 EACH - SHIELD ASSEMBLY (36" x 75") "NORTH, MD 2, LEFT ARROW"

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	3 CY	TEST PIT EXCAVATION
5005	28 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
8000	100 LF	ELECTRICAL CABLE - 1 CONDUCTOR, 250 KCMIL, CU, USE
8001	8 EA	12 INCH LED SIGNAL HEAD SECTION
8007	1 EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP & LUMINAIRE
8016	1 EA	MAST ARM POLE & 38 FT MAST ARM ANY 'T' DIMENSION
8019	2 EA	MAST ARM POLE & 50 FT MAST ARM ANY 'T' DIMENSION
8022	1 EA	REM & DISPOSE MAT & EQUIP PER ASSIGNMENT
8032	20 LF	DISCONNECT, PULL-BACK & REROUTE CABLES
8035	180 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8036	335 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8037	38 LF	WOOD SIGN SUPPORTS UP TO 4 X 6
8039	109 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8041	380 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8043	1 EA	METERED SERVICE PEDESTAL EMBEDDED
8045	20 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8047	5 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8056	120 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	590 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8058	80 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC
8065	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

WIRING DIAGRAM



A B C D — ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

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

K — ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC

L — NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

M — EXISTING REROUTED 12-PAIR COMMUNICATION CABLE

N — ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG THHN/THWN

GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH

M — METERED SERVICE PEDESTAL

PPS — PROPOSED POWER SERVICE (ELECTRICAL CABLE - 1 CONDUCTOR, 250 KCMIL, CU, USE 3 RUNS WITH 3-30' COILS SLACK CABLE AT UTILITY POLE. FINAL SERVICE CONNECTIONS SHALL BE MADE BY BGE FORCES)

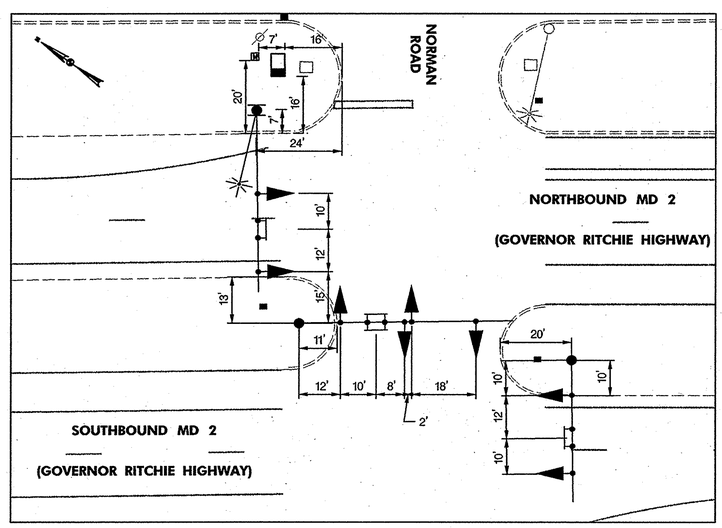
PPD — PROPOSED PHONE DROP TO BE INSTALLED BY OTHERS

PHASE CHART

	1	2	3	4	5	6	7	8	
	Ⓨ	Ⓨ	Ⓨ	Ⓨ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	

SIGNAL LAYOUT DETAIL

SCALE: 1"=20'



EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE	NONE	NONE

ALL REMOVED MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

RJM ENGINEERING, INC.
CONSULTING ENGINEERS
COLUMBIA, MARYLAND
410-730-1001

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

MD 2 AT NORFOLK RD /NORMAN ROAD
INTERSECTION CONTROL BEACON INSTALLATION

GENERAL INFORMATION

SCALE NONE DATE 04/15/2007 CONTRACT NO. AT9155185

DESIGNED BY P.WESTCOTT
DRAWN BY P.WESTCOTT
CHECKED BY B.BIDDLE
FAP NO.
COUNTY ANNE ARUNDEL
LOGMILE 02000235.00
TIMS NO.
TOD NO.

TS NO. 4589 | DRAWING - OF | SHEET NO. 2 OF 2

FLOTTED: Friday, June 15, 2007 AT 08:13 AM
FILE: P:\SHA\MD 2\MD2_at_Norman\Rd\2007-06\pGN-N001_MD2.dgn

BY: phil