

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 175 (JESSUP ROAD) AT NATIONAL BUSINESS PARKWAY (FORMERLY BROCK BRIDGE ROAD) IN ANNE ARUNDEL COUNTY. MD 175 IS CONSIDERED TO RUN IN AN EAST/WEST DIRECTION.

THE EXISTING BROCK BRIDGE ROAD IS TO BE REALIGNED AND RENAMED.

INTERSECTION OPERATION

A NEMA 8 PHASE CONTROLLER HOUSED IN A BASE MOUNTED S CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES. THERE WILL BE AN EXCLUSIVE LEFT TURN PHASE FOR THE EAST AND WESTBOUND MOVEMENT OF MD 175 (JESSUP ROAD) WITH A CONCURRENT RIGHT TURN FOR THE NORTHBOUND NATIONAL BUSINESS PARKWAY RIGHT TURN MOVEMENT. THE MD 175 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE NATIONAL BUSINESS PARKWAY AND CHURCH DRIVEWAY THROUGH MOVEMENTS WILL OPERATE IN A SPLIT PHASE MODE.

PROJECT CONTACTS:

MS. KIMBERLY TRAN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019
MR. JAMES FOLDEN, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 841-1031
MR. JOHN MAYS, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013
MR. MIKE HUBER, UTILITY ENGINEER
PHONE: (410) 841-1039
MR. EDWARD RODENHIZER, SIGNAL OPERATIONS
PHONE: (410)-787-7652

THE POWER COMPANY REPRESENTATIVE IS:

BALTIMORE GAS & ELECTRIC
1068 NORTH FRONT STREET
BALTIMORE, MD 21202
410-637-8713
WMS# 2058702

- ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY THE SHA SIGNAL SHOP. CONTRACTOR SHALL CONTACT ED RODENHIZER 72 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7631 TO ARRANGE FOR THE PHONE DROP INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET NUMBER, ZIP CODE, AND TELEPHONE NUMBER.

EQUIPMENT LIST

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| A. EQUIPMENT TO BE SUPPLIED BY THE STATE HIGHWAY ADMINISTRATION. | C. EQUIPMENT TO BE RETURNED TO THE STATE HIGHWAY ADMINISTRATION. |
| NONE. | QUANTITY UNITS DESCRIPTION |
| B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR. | 1 EA TRAFFIC SIGNAL CONTROLLER AND ASSOCIATED EQUIPMENT TO BE REMOVED BY SHA SIGNAL SHOP. (CABINET SHALL BECOME PROPERTY OF THE CONTRACTOR.) |

QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MAINTENANCE OF TRAFFIC
LUMP SUM	LS	MOBILIZATION
1	EA	27 FT. STEEL MAST ARM POLE WITH 38 FT. MAST ARM
1	EA	27 FT. STEEL TWIN MAST ARM POLE WITH 50 FT. AND 70 FT. MAST ARMS
1	EA	15 FT. LUMINAIRE ARM
1	EA	250W HPS LAMP AND LUMINAIRE
1	EA	STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, BASE MOUNTED NEMA S CABINET, VIDEO DETECTION INTERFACE, UNIVERSAL POWER SUPPLY, BATTERY BACK-UP AND ONE (1) FOUR-CHANNEL LOOP DETECTOR AMPLIFIER [NOTE: CONTROLLER AND CABINET SHALL BE PURCHASED FROM ECONOLITE AND DELIVERED TO THE S.H.A. SIGNAL SHOP FOR WIRING AND TESTING. CONTACT MR. ED RODENHIZER (410) 787-7650]
5	EA	TERRA VIDEO DETECTOR CAMERA
640	LF	TERRA VIDEO DETECTOR CAMERA CABLE
3	EA	NON-INVASIVE PROBE (SET OF 3) WITH 500 FT. LEAD-IN CABLE
6	EA	12 IN. 3-SECTION LED SIGNAL HEAD - MAST
6	EA	12 IN. 3-SECTION LED SIGNAL HEAD (RA, YA, GA) - MAST
3	EA	12 IN. 4-SECTION LED SIGNAL HEAD - MAST
4	EA	30 IN. X 36 IN. R3-5 REGULATORY SIGN - MAST ARM
1	EA	30 IN. X 30 IN. R10-11(b) REGULATORY SIGN - MAST ARM
1	EA	20 IN. X VAR. D-3(1) DUAL FACED SIGN - MAST ARM
1	EA	30 IN. X 51 IN. SHIELD ASSEMBLY SIGN - POLE MOUNT
1	EA	48 IN. X 75 IN. SHIELD ASSEMBLY SIGN - POLE MOUNT
3	CY	TEST PIT EXCAVATION
9	EA	HANDHOLE
30	LF	1-CONDUCTOR CABLE (NO. 4 AWG)
125	LF	2-CONDUCTOR TRAY CABLE (NO. 12 AWG)
540	LF	5-CONDUCTOR CABLE (NO. 14 AWG)
960	LF	7-CONDUCTOR CABLE (NO. 14 AWG)
285	LF	BARE COPPER GROUND WIRE (NO. 6 AWG)
35	LF	2 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
350	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
170	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - BORED
140	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - SLOTTED
30	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
240	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - SLOTTED
9.5	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT
5	EA	GROUND ROD 3/4" X 10 FT. LENGTH
1	EA	EMBEDDED ELECTRICAL SERVICE PEDESTAL (100 AMPS)
1	EA	CUT, CLEAN, AND CAP MAST ARM
125	LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE
LUMP SUM	LS	REMOVE EXISTING SIGNAL EQUIPMENT

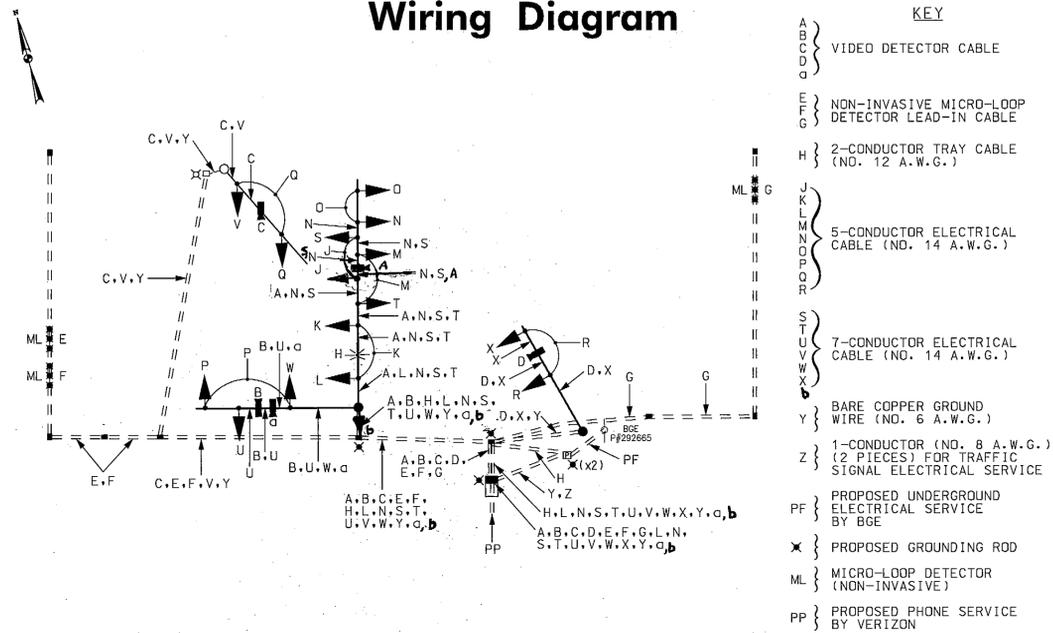
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410-931-6600
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"Merging Innovation and Excellence"®

BY: F. Brownley

Phase Chart

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15, 15A	
PHASE 1 AND 5	←G-	←G-	R	R	←G-	←G-	R	R	R	R	R	R	R	R	-G-	-G-
1 AND 5 MAY CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																
PHASE 1 AND 6	←G-	←G-	G	G	←R-	←R-	R	R	R	R	R	R	R	R	-R-	-R-
1 CHANGE	←Y-	←Y-	Y	Y	←R-	←R-	R	R	R	R	R	R	R	R	-R-	-R-
PHASE 2 AND 5	←R-	←R-	R	R	←G-	←G-	G	G	R	R	R	R	R	R	-G-	-G-
5 CHANGE	←R-	←R-	R	R	←Y-	←Y-	Y	Y	R	R	R	R	R	R	-Y-	-Y-
PHASE 2 AND 6	←R-	←R-	G	G	←R-	←R-	G	G	R	R	R	R	R	R	-R-	-R-
2 AND 6 CHANGE	←R-	←R-	Y	Y	←R-	←R-	Y	Y	R	R	R	R	R	R	-R-	-R-
PHASE 3	←R-	←R-	R	R	←R-	←R-	R	R	R	R	R	←G-	G	-R-	-R-	
3 CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	R	R	R	Y	Y	-R-	-R-	
PHASE 4	←R-	←R-	R	R	←R-	←R-	R	R	←G-	←G-	G	R	R	-G-	-G-	
4 CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	Y	Y	R	R	R	-G-	-G-	
FLASHING OPERATION	←FL	←FL	FLY	FLY	←FL	←FL	FLY	FLY	FL/R	FL/R	FLY	FL/R	FL/R	FL/R	FL/R	

Wiring Diagram



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

MD 175 AT NATIONAL BUSINESS PARKWAY
(FORMERLY BROCK BRIDGE ROAD)
JESSUP, MARYLAND

GENERAL INFORMATION PLAN

SCALE	N/A	DATE	SEPTEMBER 19, 2011	CONTRACT NO.	BW696M62
DESIGNED BY	F. BROWNLEY	COUNTY	ANNE ARUNDEL		
DRAWN BY	F. BROWNLEY	LOGMILE	02017508.91		
CHECKED BY		TIMS NO.	K740		
F.A.P. NO.	N/A	TOD NO.	N/A		
TS NO.	1897	DRAWING	SG - 01 OF 01	SHEET NO.	2 OF 2

PLOTTED: Monday, September 19, 2011 AT 11:58 AM
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