

PROJECT DESCRIPTION

GENERAL
 THIS PROJECT INVOLVES THE INSTALLATION OF A NEW PART TIME (TIME OF DAY) TRAFFIC SIGNAL AT THE INTERSECTION OF MD 139 AT GREENWOOD ROAD, TOWSON WEST ELEMENTARY SCHOOL IN BALTIMORE COUNTY, MD. MD 139 IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

A CONTROLLER HOUSED IN A BASE MOUNTED 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/PERMISSIVE LEFT TURN PHASE FOR THE NORTH AND SOUTHBOUND MOVEMENTS OF MD 139. THE MD 139 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE GREENWOOD ROAD/TOWSON WEST ELEMENTARY SCHOOL MOVEMENTS WILL OPERATE CONCURRENTLY.

SPECIAL NOTES

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

- MS. ERIN KUHN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
 PHONE: 410-229-2381
- MR. DONALD SCHAEFFER, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
 PHONE: (410) 229-2421
- MR. ANDRE FITRELL, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
 PHONE: 410-229-2361
- MR. MICHAEL PASOARTELLO, UTILITY ENGINEER
 PHONE: 410-229-2341
- MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
 PHONE: (410) 787-7630
- MR. EDWARD RODENHIZER, SUPERVISOR, SIGNAL OPERATIONS
 PHONE: (410) 787-7652

THE POWER COMPANY REPRESENTATIVE IS:

BALTIMORE GAS & ELECTRIC
 7317 PARKWAY DRIVE SOUTH
 HANOVER, MD 21076
 410-859-9070
 MW# 0001886903

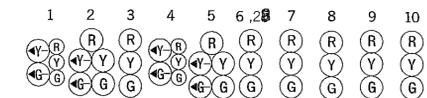
- 2. ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY THE SHA SIGNAL SHOP. CONTRACTOR SHALL CONTACT ED RODENHIZER 72 HOURS PRIOR TO CONSTRUCTION.
- 3. THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7635 TO ARRANGE FOR THE PHONE DROP INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET NUMBER, ZIP CODE, AND TELEPHONE NUMBER. THE PHONE NUMBER WILL BE USED TO ACTIVATE/DEACTIVATE THE SIGNAL FOR SPECIAL EVENTS.

EQUIPMENT LIST

QUANTITY	UNITS	DESCRIPTION
		A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION. NONE.
		B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.
LUMP SUM	LS	MAINTENANCE OF TRAFFIC
LUMP SUM	LS	MOBILIZATION
2	EA	27 FT. STEEL TWIN MAST ARM POLE WITH 50 FT. AND 70 FT. MAST ARMS
2	EA	20 FT. LUMINARIE ARM
2	EA	250W HPS LAMP AND LUMINARIE
1	EA	STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, BASE MOUNTED NEMA 6 CABINET, VIDEO DETECTION INTERFACE, TELEMETRY INTERFACE EQUIPMENT, AND ONE 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]
4	EA	TERRA VIDEO DETECTOR CAMERA
600	EA	TERRA VIDEO DETECTOR CAMERA CABLE
4	EA	NON-INVASIVE PROBE (SET OF 3) WITH 500 FT. LEAD-IN CABLE
7	EA	12 IN. 3-SECTION LED SIGNAL HEAD - MAST
4	EA	12 IN. 5-SECTION LED SIGNAL HEAD - MAST
5	EA	36 IN. X 36 IN. W3-3 "NEW" SIGN - GROUND
2	EA	16 IN. X VAR. D-3-2 SIGN WITH MAST ARM MOUNTING HARDWARE.
1	EA	30 IN. X 48 IN. SHIELD ASSEMBLY SIGN - POLE MOUNT
2	EA	48 IN. X 72 IN. SHIELD ASSEMBLY SIGN - POLE MOUNT
205	EA	4 IN. X 6 IN. WOOD SIGN SUPPORTS
4	CY	TEST PIT EXCAVATION
9	EA	HANDHOLE
75	LF	1-CONDUCTOR CABLE (NO. 8 AWG)
325	LF	2-CONDUCTOR TRAY CABLE (NO.12 AWG)
335	LF	5-CONDUCTOR CABLE (NO. 14 AWG)
865	LF	7-CONDUCTOR CABLE (NO. 14 AWG)
240	LF	BARE COPPER GROUND WIRE (NO. 6 AWG)
210	LF	2 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
650	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
150	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - BORED
65	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
200	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - BORED
15.0	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT
6	EA	GROUND ROD - 3/4 IN. X 10 FT. LENGTH
1	EA	CONTROL & DISTRIBUTION EQUIPMENT FOR ELECTRICAL SERVICE
100	LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE
4	EA	REMOVE EXISTING GROUND MOUNTED SIGN
1	EA	30 IN. X 48 IN. SHIELD ASSEMBLY SIGN - GROUND MOUNT
2	EA	RELOCATE EXISTING GROUND MOUNTED SIGNS

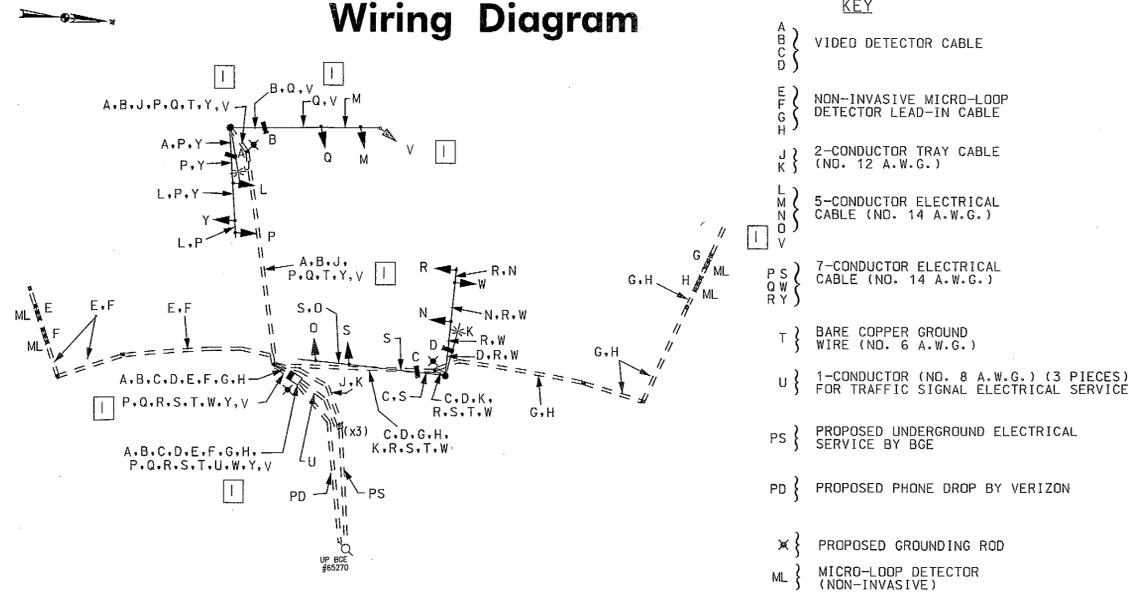
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 9900 Franklin Square Drive
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 "Merging Innovation and Excellence"®

Phase Chart



PHASE 1 AND 5	+GR	+GR	R	+GR	+GR	R	R	R	R	R	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6												
PHASE 1 AND 6	+GG	+GG	G	R	R	R	R	R	R	R	R	R
1 CHANGE	+YG	+YG	G	R	R	R	R	R	R	R	R	R
PHASE 2 AND 5	R	R	R	+GG	+GG	G	R	R	R	R	R	R
5 CHANGE	R	R	R	+YG	+YG	G	R	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	R	R	G	G	G	G	G	G
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



Redline Revision
 Dated August 9, 2010

 S.H.A. Approval Date
 T.S. # 4741 T.I.M.S. # K-156

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 MD 139 (CHARLES STREET) AT GREENWOOD ROAD/
 TOWSON WEST ELEMENTARY SCHOOL
 Ruxton Pkgs, MD

GENERAL INFORMATION PLAN

SCALE: NA DATE: MARCH 2, 2010 CONTRACT NO.: BW990M82

DESIGNED BY: FRANK HOECKEL COUNTY: BALTIMORE
 DRAWN BY: FRANK HOECKEL LOGMILE: 03013902.61
 CHECKED BY: TIMS NO.: K-156
 F.A.P. NO.: NA TOD NO.:

TS NO. GI-4741 DRAWING GI-01 OF 01 SHEET NO. 2 OF 2