

**PROJECT DESCRIPTION**

**GENERAL**

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 140 (MAIN STREET) AND GLYNDON DRIVE / GLYNDON TRACE DRIVE IN BALTIMORE COUNTY, MARYLAND. MD 140 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH THE MD 140 APPROACHES OPERATING CONCURRENTLY AND THE GLYNDON DRIVE / GLYNDON TERRACE APPROACHES OPERATING SPLIT.

AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE NORTH LEG OF MD 140.

**CONTROLLER REQUIREMENTS**

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS) AND SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

**PHONE DROP**

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

**MAINTENANCE OF TRAFFIC**

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAYBE USED AS DIRECTED BY THE ENGINEER.

- STANDARD NO. MD-104.03-01 (SHOULDER WORK)
- STANDARD NO. MD-104.03-03 (LEFT LANE CLOSURE)
- STANDARD NO. MD-104.03-05 (RIGHT LANE CLOSURE)

**PROJECT CONTACTS**

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

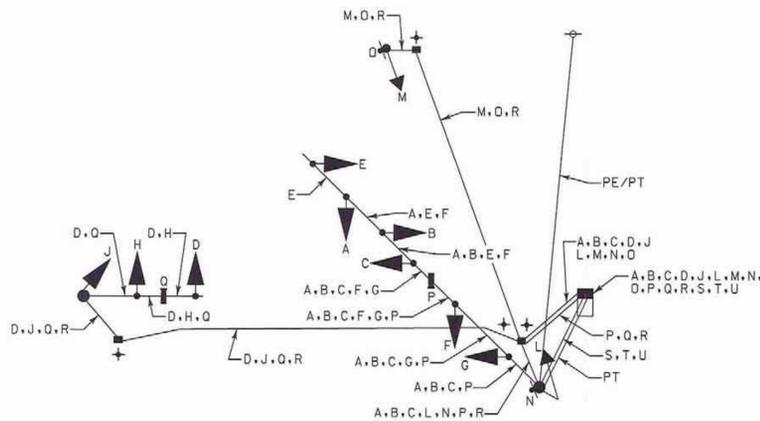
MR. RANDALL SCOTT  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 321-2785

MR. MIKE PASQUARIELLO  
ASST. DISTRICT UTILITY ENGINEER  
PHONE: (410) 321-2841

MR. STEVE MARCISZEWSKI  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 321-2761

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

**WIRING DIAGRAM**



**WIRING KEY**

- A, B, C, D, E, F, G, H, J, L, M } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- N } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- P, O } VIDEO CAMERA DETECTION LEAD-IN CABLE
- R } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- S, T, U } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- PE/PT } PROPOSED OVERHEAD ELECTRICAL AND TELEPHONE SERVICE
- PT } PROPOSED UNDERGROUND TELEPHONE SERVICE
- + } 3/4 IN. X 10 FT. GROUND ROD

**EQUIPMENT LIST "A"**

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	61 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 3 EACH D-3(1) SIGN (VARIABLE X 16 IN.) DUAL FACED - MAST ARM MOUNT - 2 EACH R10-3(1) SIGN (9 IN. X 15 IN.) TO READ "PUSHBUTTON TO CROSS MAIN STREET" - 2 EACH W3-3 SIGN (36 IN. X 36 IN.) WITH "NEW" PANEL (24 IN. X 24 IN.) AND FLAG - GROUND MOUNT

**EQUIPMENT LIST "C"**

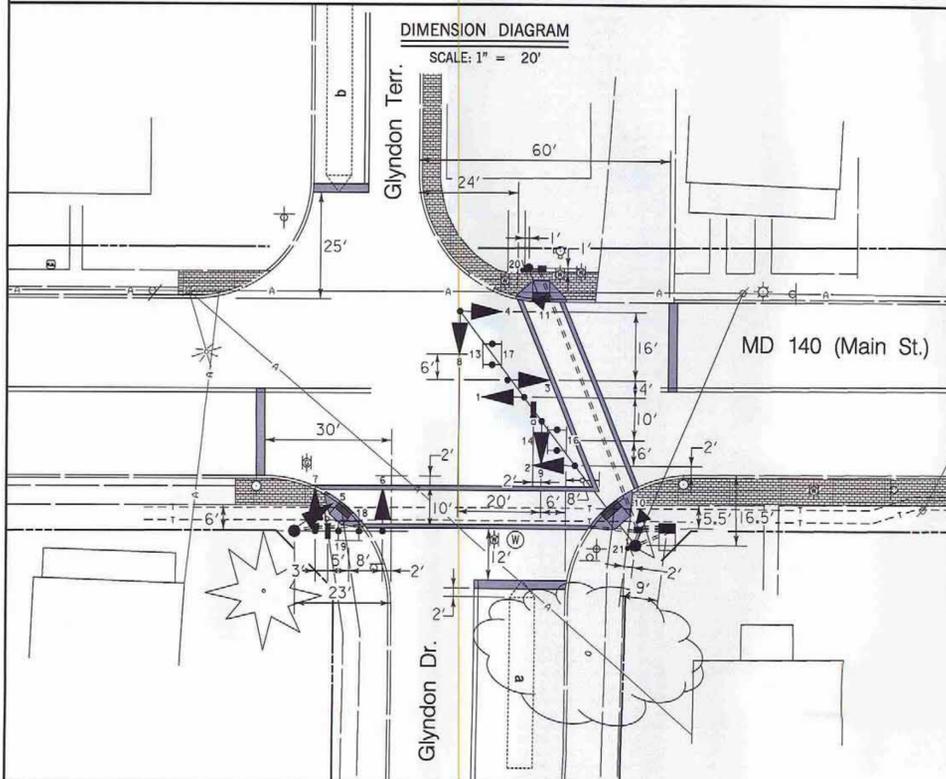
NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

**PHASE CHART**

	1	2	3	4	5	6	7	8	9	10	11
PHASE 2 + 6	G	G	G	G	G	R	R	R	R	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW
PHASE 3	R	R	R	R	R	G	G	G	G	DW	DW
3 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	R	DW	DW
4 CHANGE	R	R	R	R	R	R	R	R	R	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	R	R	R	WK	WK
PED CLEARANCE	R	R	R	R	R	R	R	R	R	FLDW	FLDW
4 ALT CHANGE	R	R	R	R	R	R	R	R	R	DW	DW
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	DARK	DARK

**DIMENSION DIAGRAM**

SCALE: 1" = 20'



**EQUIPMENT LIST "B"**

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	5 C.Y.	CLASS 2 EXCAVATION
2002	4 C.Y.	TEST PIT EXCAVATION
5001	80 L.F.	5 INCH HEAT APPLIED YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5002	90 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5004	230 L.F.	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	80 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6001	60 L.F.	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN AND 8 INCH DEPTH
6002	200 S.F.	4 INCH CONCRETE SIDEWALK
8001	29 EACH	12 INCH RED OR GREEN LED SIGNAL HEAD SECTION
8002	1 EACH	2-WIRE CENTRAL CONTROL UNIT
8008	2 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
8009	1 EACH	FURNISH AND INSTALL PEDESTAL POLE-ANY SIZE
8012	1 EACH	INSTALL BREAKAWAY PEDESTAL POLE ANY SIZE
8013	2 EACH	INSTALL STEEL STRAIN OR MAST ARM POLE WITH SINGLE OR TWIN MAST ARM (AST)
8014	2 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN
8016	1 EACH	FURNISH AND INSTALL MAST ARM POLE AND 38 FOOT MAST ARM ANY T-DIMENSION
8018	1 EACH	FURNISH AND INSTALL MAST ARM POLE AND 70 FOOT MAST ARM ANY DIMENSION
8022	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
8026	2 EACH	VIDEO DETECTION CAMERA AND CABLE
8028	30 L.F.	1 INCH GALVANIZED RISER
8029	2120 L.F.	12-PAIR COMMUNICATION CABLE, SELF-SUPPORTING OR JELLY-FILLED
8030	30 L.F.	3 INCH DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80, RISER
8033	155 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8034	55 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8035	1665 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8036	38 L.F.	WOOD SIGN SUPPORTS UP TO 4 X 6
8037	30 S.F.	DETECTABLE WARNING SURFACE
8038	61 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8039	40 S.F.	REMOVE-REINSTALL DECORATIVE BRICK SIDEWALK
8040	215 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8041	1 EACH	WEATHERHEAD, 3 INCH
8043	1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS
8044	80 L.F.	ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G - THHN/THWN
8046	4 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8051	1 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8053	150 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G)
8055	265 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G)
8056	600 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G)
8064	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
NEG.	5 EACH	FURNISH AND INSTALL ELECTRICAL MANHOLE

REVISED ITEM NUMBERS  
REDLINE REVISION NO. 1  
03/13/2007

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 140 (Main Street) and Glyndon Drive /Glyndon Trace Drive  
Reisterstown, MD

**WR&A**  
Whitman, Reardon and Associates, LLP  
Engineers, Architects and Planners  
801 South Carolina Street  
Baltimore, Maryland 21231  
410-235-3450

**GENERAL INFORMATION SHEET**

SCALE	NONE	DATE	12/9/2006	CONTRACT NO.	AT3125185
DESIGNED BY	S. BLOSS	COUNTY	BALTIMORE		
DRAWN BY	S. BLOSS	LOGMILE			
CHECKED BY	N. LEARY	TIMS NO.	H435		
FAP NO.		TOD NO.			
TS NO.	DRAWING	OF		SHEET NO.	3 OF 3

PLOTTED: Tuesday, March 13, 2007 AT 01:50 PM  
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BY: sbloss