

**PROJECT DESCRIPTION**

**GENERAL**  
 THIS PROJECT INVOLVES THE REPLACEMENT OF EXISTING TRAFFIC SIGNAL HEADS WITH NEW BLACK FACED LED TRAFFIC SIGNAL HEADS AT THE INTERSECTION OF MD 97 (NEW WASHINGTON ROAD) AT HOOK ROAD IN CARROLL COUNTY. AN ADDITIONAL NEAR SIDE SIGNAL HEAD WILL BE ADDED FOR NB MD 97. MD 97 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**  
 THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE. THE MAINLINE EXCLUSIVE/PERMISSIVE PHASE WILL REMAIN.

**CONTROLLER REQUIREMENTS**  
 THE EXISTING POLE MOUNTED CONTROLLER, LOOP DETECTOR AMPLIFIERS, AND ASSOCIATED HARNESSES SHALL REMAIN.

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

Mr. John Concannon  
 Assistant District Engineer - Traffic  
 Phone: 301-624-8140

Ms. Andrea Abend  
 Assistant District Engineer - Utility  
 Phone: 301-624-8115

Mr. Ray Johnson  
 Assistant District Engineer - Maintenance  
 Phone: 301-624-8105

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

Mr. Edward Rodenhizer  
 Chief, SHA Signal Shop  
 Phone: 410-787-7652

The Power Company Representative Is:  
 Baltimore Gas and Electric Company  
 7317 Parkway Drive South  
 Hanover, MD 21076  
 Phone: 410-859-9062

**EQUIPMENT LIST 'A'**

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9571	55 SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGNS:
		1 EA - ASSOCIATED SHIELD ASSEMBLY POLE MOUNT, (24 IN. X 51 IN.), *NORTH, MD 97, RIGHT ARROW*
		1 EA - ASSOCIATED SHIELD ASSEMBLY POLE MOUNT, (24 IN. X 51 IN.), *SOUTH, MD 97, RIGHT ARROW*
		1 EA - ASSOCIATED SHIELD ASSEMBLY POLE MOUNT, (36 IN. X 75 IN.), *NORTH, MD 97, LEFT ARROW*
		1 EA - ASSOCIATED SHIELD ASSEMBLY POLE MOUNT, (36 IN. X 75 IN.), *SOUTH, MD 97, LEFT ARROW*

**EQUIPMENT LIST 'B'**

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
8001	29 EA	12 INCH LED SIGNAL HEAD SECTION
8004	6 EA	8 INCH LED SIGNAL HEAD SECTION
8015	3 EA	LED SIGNAL HEAD MODULES (ANY SIZE)
8022	1 EA	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8028	10 LF	1 INCH DETECTOR SLEEVE GALVANIZED OR FLEXIBLE LIQUID TIGHT
8040	55 SF	INSTALL OVERHEAD SIGN
8054	15 LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8057	100 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
8058	875 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
8060	450 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO.14 AWG)
8061	140 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)

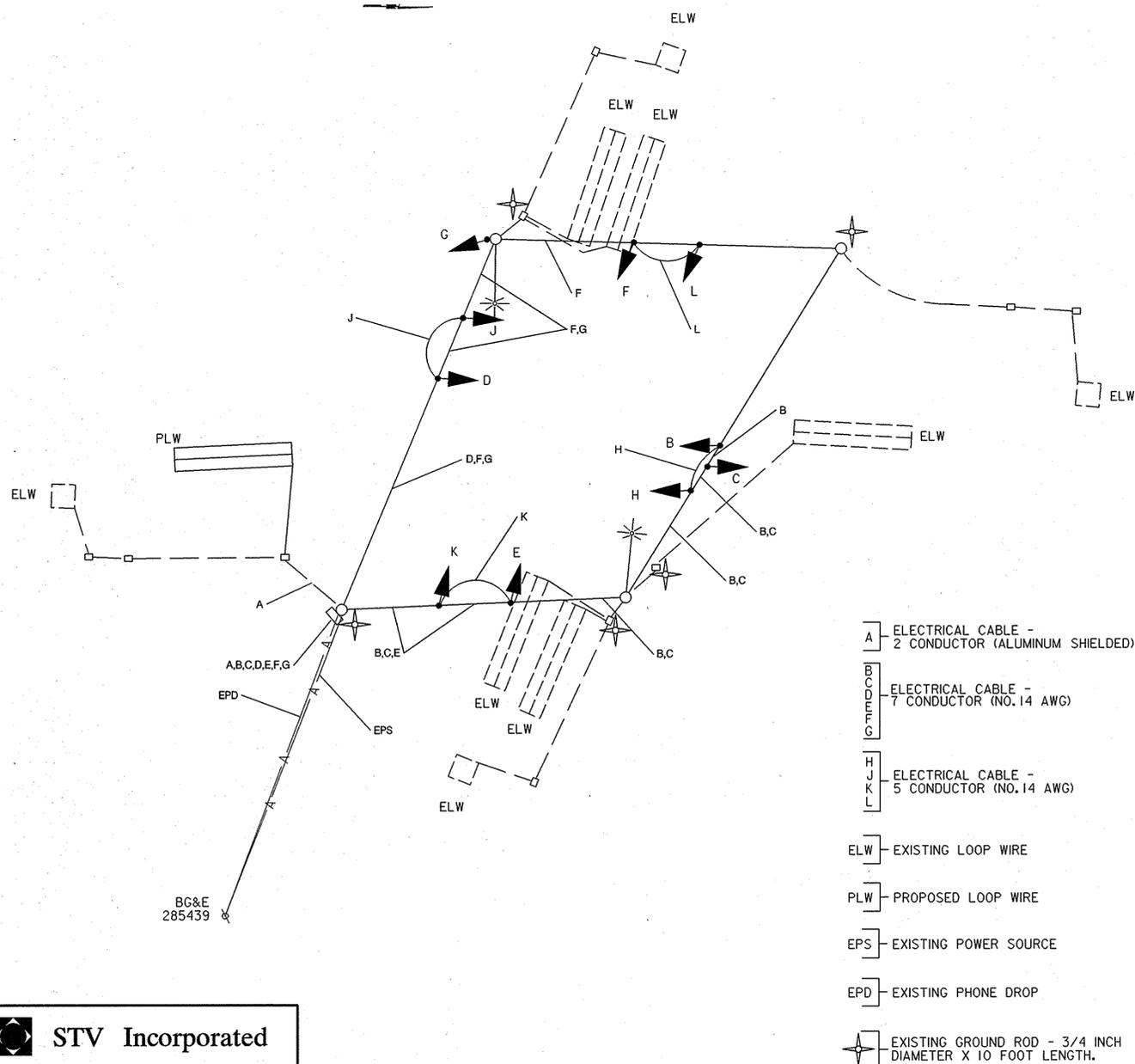
**EQUIPMENT LIST 'C'**

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO QUANTITY DESCRIPTION

NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

**WIRING DIAGRAM**



**PHASE CHART**

	1	2	3	4	5	6	7	8	9	10	
PHASE 1 & 5	R	R	R	R	R	R	R	R	R	R	
PHASE 1 & 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASE: 1 & 6, 2 & 5, OR 2 & 6										
PHASE 1 & 6	R	R	R	R	R	R	R	R	R	R	
PHASE 1 CHANGE	R	R	R	R	R	R	R	R	R	R	
PHASE 2 & 5	R	R	R	R	R	R	R	R	R	R	
PHASE 5 CHANGE	R	R	R	R	R	R	R	R	R	R	
PHASE 2 & 6	R	R	R	R	R	R	R	R	R	R	
PHASE 2 & 6 CHANGE	R	R	R	R	R	R	R	R	R	R	
PHASE 4 & 8	R	R	R	R	R	R	R	R	R	R	
PHASE 4 & 8 CHANGE	R	R	R	R	R	R	R	R	R	R	
PHASE 4 & 8	R	R	R	R	R	R	R	R	R	R	
PED. CLEARANCE	R	R	R	R	R	R	R	R	R	R	
PHASE 4 & 8 CHANGE	R	R	R	R	R	R	R	R	R	R	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	

TOD NO: AX142-02  
 SHA No.: CL359A51/C51  
 MD 97 @ Hook Road

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION -  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 MD 97 (NEW WASHINGTON ROAD)  
 AT HOOK ROAD

**GENERAL INFORMATION**

SCALE	NONE	DATE	4/2007	CONTRACT NO.	AX1425185
DESIGNED BY	MCJ	COUNTY	CARROLL		
DRAWN BY	AMT	LOGMILE	06009713.90		
CHECKED BY	BAB	T.I.M.S. NO.	H937		
F.A.P. NO.		TOD NO.			
DRAWING NO.	TS-1689D-GI	OF		SHEET NO.	2 OF 2

BY: thompson  
**STV Incorporated**  
 engineers / architects / planners / construction managers  
 7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112