

**PROJECT DESCRIPTION**

**GENERAL**

THIS PORTION OF THE PROJECT INVOLVES MODIFICATIONS TO THE TRAFFIC SIGNAL FOR STAGE 3 OF MOT AT THE INTERSECTION OF MOTTER AVE/OPOSSUMTOWN PIKE AT THE SOUTHBOUND US 15 RAMP TO ACCOMMODATE THE WIDENING OF MOTTER AVENUE OVER US 15. MOTTER AVE/OPOSSUMTOWN PIKE IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA FOUR PHASE, FULL-TRAFFIC-ACTUATED MODE. THE EXISTING LAG WESTBOUND LEFT TURN EXCLUSIVE/PERMISSIVE PHASING WILL REMAIN.

**CONTROLLER REQUIREMENTS**

INSTALL A 2 WIRE CENTRAL CONTROL UNIT. THE EXISTING CONTROLLER AND ASSOCIATED EQUIPMENT SHALL REMAIN FROM STAGE 1 CONSTRUCTION.

**APS WILL FUNCTION AS FOLLOWS:**

FOR US 15 RAMP

- A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS US 15 RAMP AT MOTTER, WAIT."
- B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

**THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:**

Mr. John Concannon  
Assistant District Engineer - Traffic  
Phone: 301-624-8140/8141

Ms. Andrea Abend  
District Utility Engineer  
Phone: 301-624-8105/8116

Ms. Susan Palmer  
Assistant District Engineer - Maintenance  
Phone: 301-624-8105/8106

**OFFICE OF TRAFFIC AND SAFETY:**

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

Mr. Robert Snyder  
Assistant Division Chief, Traffic Operations  
410-787-7630

Mr. Edward Rodenhizer  
Team Leader Signal Operations  
Phone: 410-787-7650

Mr. Eugene Bailey  
Team Leader Sign Operations  
410-787-7670

The Power Company Is:  
Potomac Edison  
Mr. Chris Hixon  
421 East Patrick Street  
Frederick, MD 21705  
Phone: 301-694-4429  
Email: chixon@allegheny.com

**CITY OF FREDERICK:**

Mr. Zack Kershner  
City Engineer  
Phone: 301-600-1405

Mr. Marc Stachowski  
Deputy Director of Public Works for Operations  
Phone: 301-600-1438

Mr. Kenneth Ott  
Signal & Street Light Superintendent  
Phone: 301-600-1167

**EQUIPMENT LIST 'A'**

EQUIPMENT TO BE FURNISHED BY THE SHA.

CATEGORY CODE	QUANTITY	DESCRIPTION
973023	2 SF	SHEET ALUMINUM SIGNS 2 EA - R10-3(1) (9 IN. x 15 IN.) "PUSH BUTTON TO US 15 RAMP"

**EQUIPMENT LIST 'C'**

EQUIPMENT TO BE REMOVED AND RETURNED TO CITY OF FREDERICK.

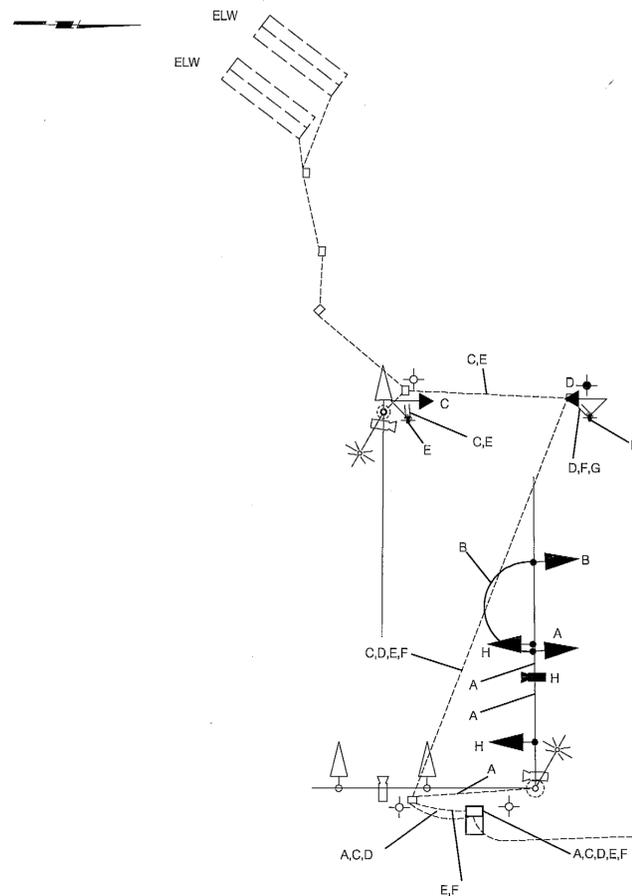
CATEGORY CODE	QUANTITY	DESCRIPTION
ALL REMOVED EQUIPMENT SHALL BE RETURNED TO THE CITY OF FREDERICK OR COORDINATED WITH SUPERINTENDANT KENNETH OTT AT (301)600-1167		

**EQUIPMENT LIST 'B'**

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

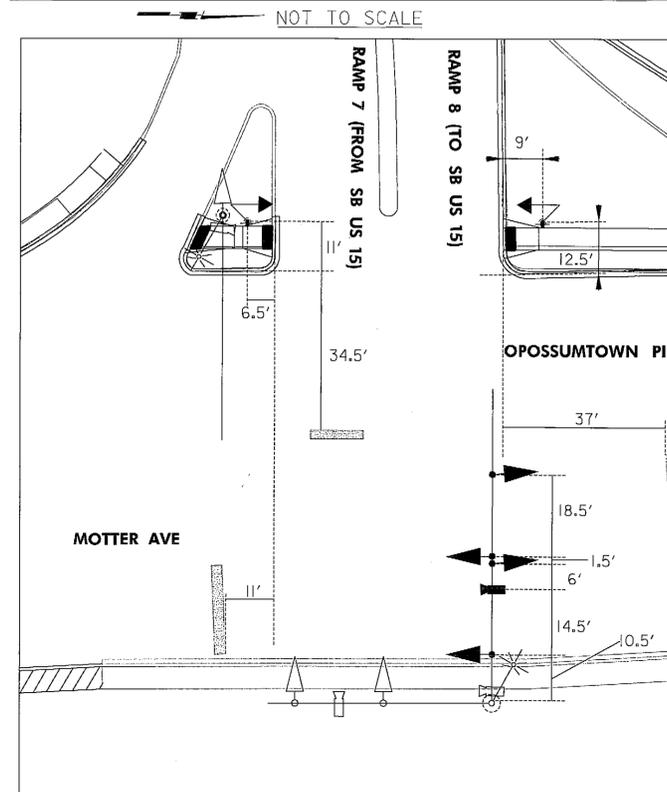
CATEGORY CODE	QUANTITY	DESCRIPTION
114045	60 LF	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT
114280	80 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
203030	1 CY	TEST PIT EXCAVATION
800000	2 EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL
800000	2 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON
800000	1 EA	RELOCATE EXISTING VIDEO DETECTION CAMERA
800000	1 EA	2 WIRE CENTRAL CONTROL UNIT
801004	1 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	20 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805125	20 LF	2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
813015	2 SF	INSTALL OVERHEAD SIGN
818004	2 EA	10 FOOT BREAKAWAY PEDESTAL POLE
837001	1 EA	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
860265	4 EA	RELOCATE EXISTING SIGNAL HEAD
861105	410 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	410 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	95 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
873001	1 LS	REMOVE AND SALVAGE EXISTING EQUIPMENT

**WIRING DIAGRAM**



- A** ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
- B** ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- C** ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
- D** NO. 6 STRANDED BARE COPPER GROUND WIRE
- E** USE EXISTING WIRE
- ELW** EXISTING LOOP WIRE
- F** PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
- G** EXISTING GROUND ROD

**PROPOSED SIGNAL POLE, EQUIPMENT AND PAVEMENT MARKING DETAIL**



**PHASE CHART**

PHASE CHART	2	3	4	5	6	7	8	9	10
PHASE 2 and 6	G	G	G	G	R	R	R	BAG	BAG
PHASE 2 and 6 CHANGE	G	G	Y	Y	R	R	R	BAG	BAG
PHASE 1 and 6	+GG	G	R	R	R	R	R	BAG	BAG
PHASE 1 AND 6 CHANGE	+WY	Y	R	R	R	R	R	BAG	BAG
PHASE 4	R	R	R	R	G	G	G	BAG	BAG
PHASE 4 CHANGE	R	R	R	R	Y	Y	Y	BAG	BAG
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	FLR	BAG	BAG

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
SOUTHBOUND US 15 AT MOTTER AVE/OPOSSUMTOWN PIKE  
MOT STAGE 3

**GENERAL INFORMATION**

SCALE	NONE	ADVERTISED DATE	OCTOBER 2010	CONTRACT NO.	FR4185180
DESIGNED BY	KXT	COUNTY	FREDERICK		
DRAWN BY	KXT	LOGMILE	10001514.60		
CHECKED BY	MTS	TIMS NO.	1976		
F.A.P. NO.	SEE TITLE SHEET	TOD NO.			
TS NO.	4254A2	DRAWING	SG-08	OF 21	SHEET NO. OF

**STV**  
STV Incorporated  
7125 Ambassador Road, Suite 200  
Baltimore, MD 21244  
www.stvinc.com

BY: youngsd