

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE SYSTEMIZATION OF TRAFFIC SIGNALS ON MD 103 FROM US 29 RAMP 'F' TO LONG GATE PARKWAY IN HOWARD COUNTY. THIS MODIFICATION AT MD 103 AND LONG GATE CENTER ENTRANCE INVOLVES INSTALLATION OF VIDEO DETECTION FOR PRESENCE ON THE WEST AND NORTHBOUND APPROACHES. THE EXISTING LOOP DETECTORS WILL REMAIN FOR THE EAST AND WESTBOUND APPROACHES. ALL EXISTING TRAFFIC SIGNAL HEADS WILL BE UPGRADED TO BLACK FACED LED. MD 103 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR THE WESTBOUND APPROACH AND A FLASHING RED FOR THE SOUTHBOUND APPROACH.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CONTROLLER WILL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL THE VIDEO DETECTION INTERFACE EQUIPMENT WITHIN THE CABINET.

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

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

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

Mr. Ray Johnson
Assistant District Engineer - Maintenance
Phone: 301-624-8108

Mr. Edward Rodenhizer
Chief, SHA Traffic Signal Shop
Phone: 410-787-7650

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

The Power Company Representative is:
Baltimore Gas & 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
9086	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9570	36 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN: 1 EACH - ASSOCIATED SHIELD ASSEMBLY *WEST, MD 103, LEFT ARROW* (48 IN. X 75 IN.) POLE MOUNT 1 EACH - ASSOCIATED SHIELD ASSEMBLY *EAST, MD 103, RIGHT ARROW* (30 IN. X 51 IN.) POLE MOUNT

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

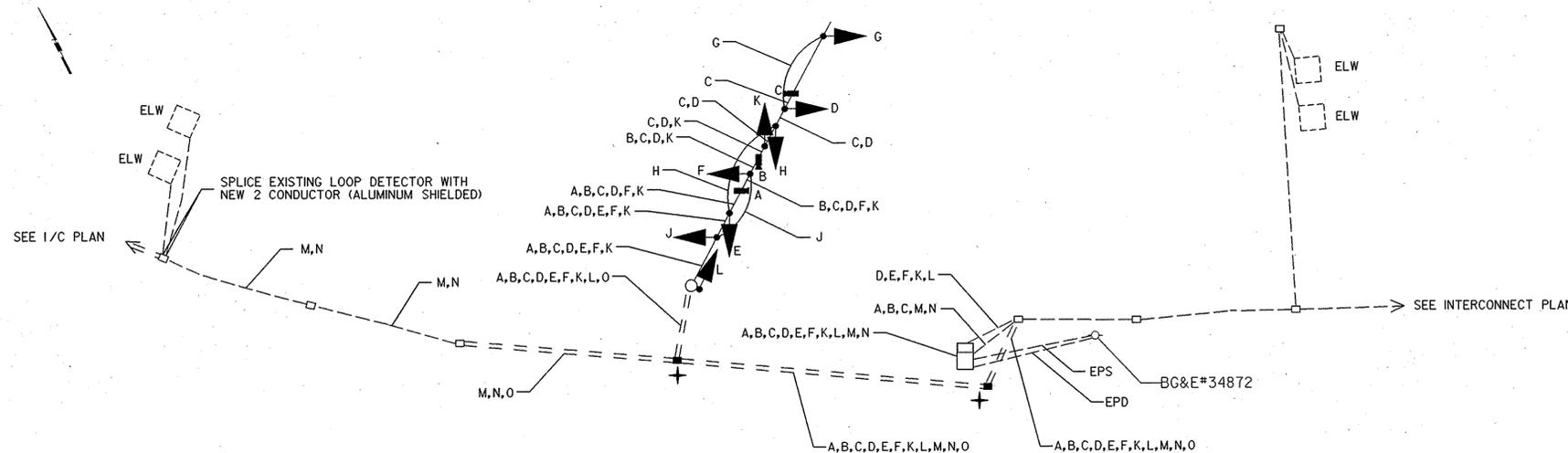
ITEM NO QUANTITY DESCRIPTION

ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

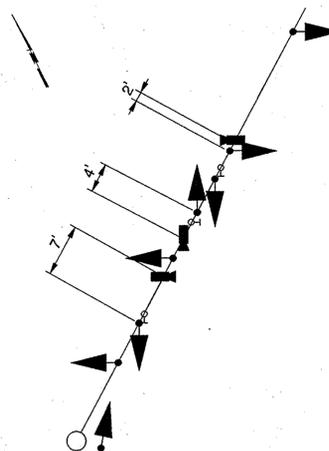
ITEM NO.	QUANTITY	DESCRIPTION
1002	2 EA	MAINTENANCE OF TRAFFIC
8003	17 EA	12 INCH RED OR GREEN LED SIGNAL HEAD SECTION
8004	7 EA	12 INCH YELLOW LED SIGNAL HEAD SECTION
8011	1 EA	CONDUIT BEND IN EXISTING FOUNDATION
8013	3 EA	CONTROL CABLE, 200 FOOT, VIDEO DETECTION
8040	55 LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
8041	185 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8051	60 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8055	120 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8065	2 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8067	36 SF	INSTALL GROUND MOUNTED SIGN
8069	3 EA	VIDEO DETECTION CAMERA
8087	2 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8094	1000 LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8096	360 LF	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
8097	50 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8098	650 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)



PHASE CHART

	1	2	3	4	5	6	7	8	
PHASE 2 + 5	R	R	G	G	R	R	FL/R	FL/R	
PHASE 5 CHANGE	R	R	G	G	R	R	FL/R	FL/R	
PHASE 2 + 6	G	G	G	G	R	R	FL/R	FL/R	
PHASE 2 + 6 CHANGE	Y	Y	Y	Y	R	R	FL/R	FL/R	
PHASE 4	R	R	R	R	G	G	FL/R	FL/R	
PHASE 4 CHANGE	R	R	R	R	Y	Y	FL/R	FL/R	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	

VIDEO DETECTION CAMERA LAYOUT



- A CONTROL CABLE, 200 FOOT, VIDEO DETECTION
- B
- C
- D 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- E
- F
- G
- H 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- I
- J
- K 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- L
- M 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
- N
- O BARE COPPER STRANDED GROUND WIRE (NO. 6 AWG)
- ELW EXISTING LOOP DETECTOR WIRE
- EPS EXISTING POWER SOURCE
- EPD EXISTING PHONE DROP
- GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

TOD NO.: AT720-11
SHA No.: HO365A52/B52

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 103 (MONTGOMERY ROAD)
AND LONG GATE CENTER ENTRANCE

GENERAL INFORMATION

SCALE	NONE	DATE	08/2006	CONTRACT NO.	AT7205185
DESIGNED BY	SBS	COUNTY	HOWARD		
DRAWN BY	SBS	LOGMILE	13010306.85		
CHECKED BY	BAB	T. I. M. S. NO.	G823		
F. A. P. NO.		TOD NO.			
DRAWING NO.	TS-3604A-GI	OF		SHEET NO.	6 OF 8

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