

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS AND VIDEO DETECTION AT THE INTERSECTION OF MD 424 (DAVIDSONVILLE ROAD) AND RIEDEL ROAD IN ANNE ARUNDEL COUNTY. LED SIGNAL HEADS AND 16 INCH PEDESTRIAN COUNTDOWN SIGNAL HEADS WILL REPLACE THE EXISTING TRAFFIC SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS. PRESENCE LOOP DETECTORS WILL BE REPLACED WITH VIDEO DETECTION. MD 424 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE / PERMISSIVE PHASING ALONG SOUTHBOUND MD 424. THE CONCURRENT MAINLINE PEDESTRIAN PHASE WILL REMAIN.

CONTROLLER REQUIREMENTS

THE EXISTING POLE MOUNTED CONTROLLER SHALL REMAIN. THE SHA SIGNAL SHOP SHALL INSTALL THE VIDEO DETECTION INTERFACE EQUIPMENT AND 2-WIRE CENTRAL CONTROL UNIT WITHIN THE CABINET.

PHONE DROP

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

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

Ms. Kimberly Tran
Assistant District Engineer - Traffic
Phone: 410-841-1019

Mr. John Mays
Assistant District Engineer - Utility
Phone: 410-841-1039

Mr. Andre Furtell
Assistant District Engineer - Maintenance
Phone: 410-841-1013

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

Mr. Edward Rodenhizer
Chief, Signal Operations Division
Phone: 410-787-7650

The Power Company Representative is:
Baltimore Gas and Electric Company
7317 Parkway Drive South
Hanover, Maryland 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	11 SF	UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN:
		1 EA - ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 424, RIGHT ARROW" (30 IN. X 51 IN.)
9571	27 SF	UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN:
		2 EA - R10-411] MOD., (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS RIEDEL ROAD"
		1 EA - ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 424, LEFT ARROW" (48 IN. X 75 IN.)

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

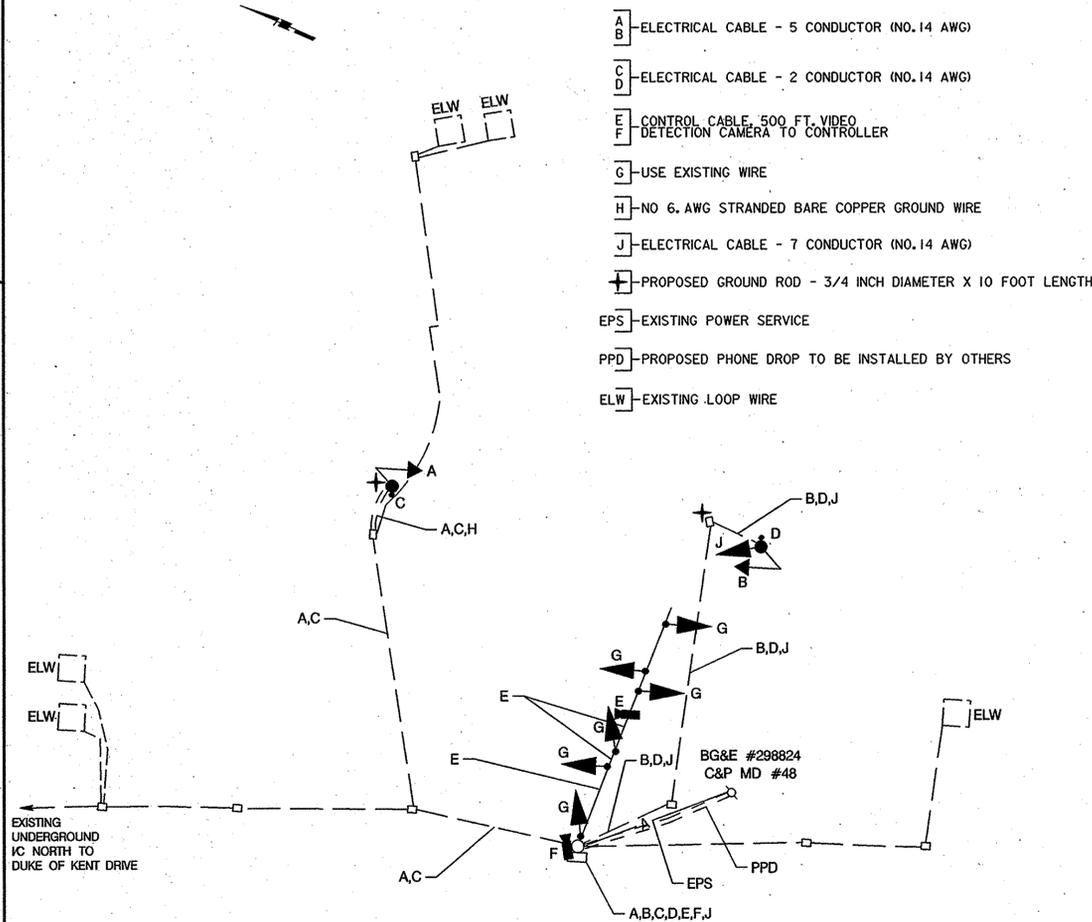
ITEM NO	QUANTITY	DESCRIPTION
NONE		ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST 'B'

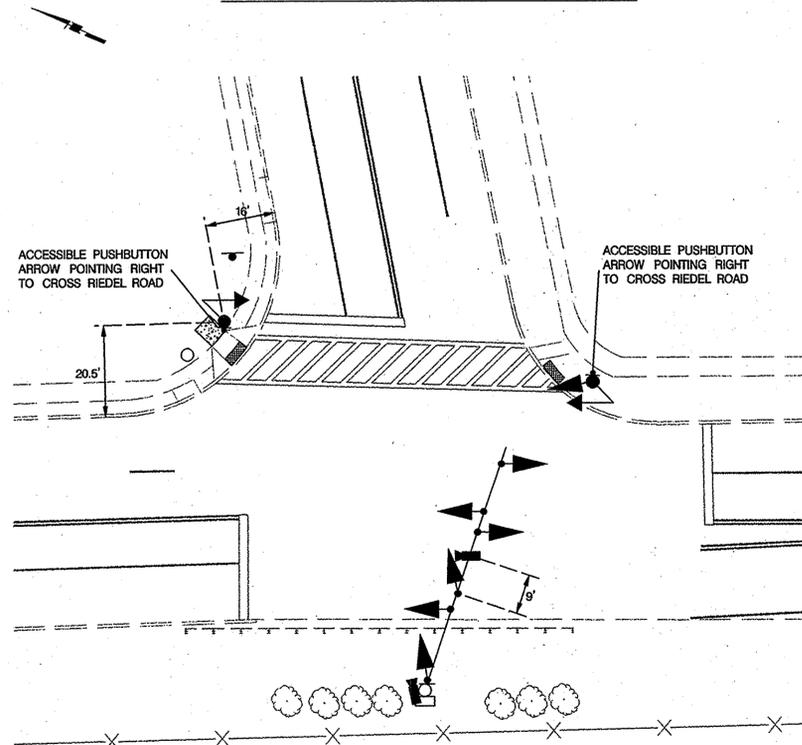
EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	2 CY	TEST PIT EXCAVATION
6002	35 SF	4 INCH CONCRETE SIDEWALK
8001	22 EA	12 INCH LED SIGNAL HEAD SECTION
8002	1 EA	2 WIRE CENTRAL CONTROL UNIT
8004	3 EA	8 INCH LED SIGNAL HEAD SECTION
8008	2 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
8009	2 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8014	2 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8022	1 EA	REMOVE & DISPOSE MATERIAL & EQUIPMENT PER ASSIGNMENT
8026	2 EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT
8035	50 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8037	17 LF	WOOD SIGN SUPPORTS UP TO 4 X 6
8038	20 SF	DETECTABLE WARNING SURFACES
8039	38 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8041	15 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8054	300 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8056	300 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	140 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

WIRING DIAGRAM



PROPOSED APS PUSHBUTTON AND VIDEO DETECTION CAMERA LAYOUT



PHASE CHART

	1	2	3	4	5	6	7	8	9	
PHASE 1 & 6	R	R	G	G	G	R	R	DW	DW	
PHASE 1 CHANGE	R	R	G	G	G	R	R	DW	DW	
PHASE 2 & 6	G	G	G	G	G	R	R	W	W	
PED. CLEARANCE	G	G	G	G	G	R	R	FL/DW	FL/DW	
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	
PHASE 4	R	R	R	R	R	G	G	DW	DW	
PHASE 4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 424 (DAVIDSONVILLE ROAD) AND RIEDEL ROAD

GENERAL INFORMATION

SCALE	NONE	DATE	12/20/06	CONTRACT NO.	ATS155185
DESIGNED BY	VGN	COUNTY	ANNE ARUNDEL		
DRAWN BY	VGN	LOGMILE	020042407.35		
CHECKED BY	RAB CSW	T.I.M.S. NO.	H884		
F.A.P. NO.		TOD NO.			
DRAWING NO.	TS-1864C	SHEET NO.	2 OF 2		

BY: weavercc