

PROJECT DESCRIPTION

- I. GENERAL
THIS PROJECT INVOLVES INSTALLING APS/CPS PEDESTRIAN EQUIPMENT ON THE SOUTH AND EAST LEG OF THE INTERSECTION. MD 450 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.
- II. INTERSECTION OPERATION
THIS INTERSECTION OPERATES IN A NEMA FOUR-PHASE SEMI-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE PHASE FOR THE NORTHBOUND MOVEMENT OF RUSSELL STREET.
- III. PEDESTRIAN OPERATION
NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTONS TO CROSS THE EAST AND SOUTH LEG OF THE INTERSECTION ARE TO BE PROVIDED. WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
EAST: "WAIT TO CROSS WEST AT RUSSELL. WAIT."
SOUTH: "WAIT TO CROSS RUSSELL AT WEST. WAIT."
WHEN THE WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10
	(R) (Y) (G)									
PHASE 2 & 6	G	G	G	G	R	R	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	G	G	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK

1. CONTACT PERSONS

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

DISTRICT	OFFICE OF TRAFFIC AND SAFETY
MS. KIM TRAN ASSISTANT DISTRICT ENGINEER - TRAFFIC 410-841-1003	CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. MIKE HUBER UTILITY ENGINEER 410-841-1039	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. JOHN MAYS ASSISTANT DISTRICT ENGINEER - MAINTENANCE 410-841-1002	MR. ED RODENHIZER MANAGER SIGNAL OPERATIONS 410-787-7650
MR. JAMES FOLDEN ASSISTANT DISTRICT ENGINEER - CONSTRUCTION 410-841-1031	MR. EUGENE BAILEY MANAGER SIGN OPERATIONS 410-787-7670
	MR. MIKE STOCKER SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: MD 104.04-13 THROUGH MD 104.04-16.

EQUIPMENT LIST

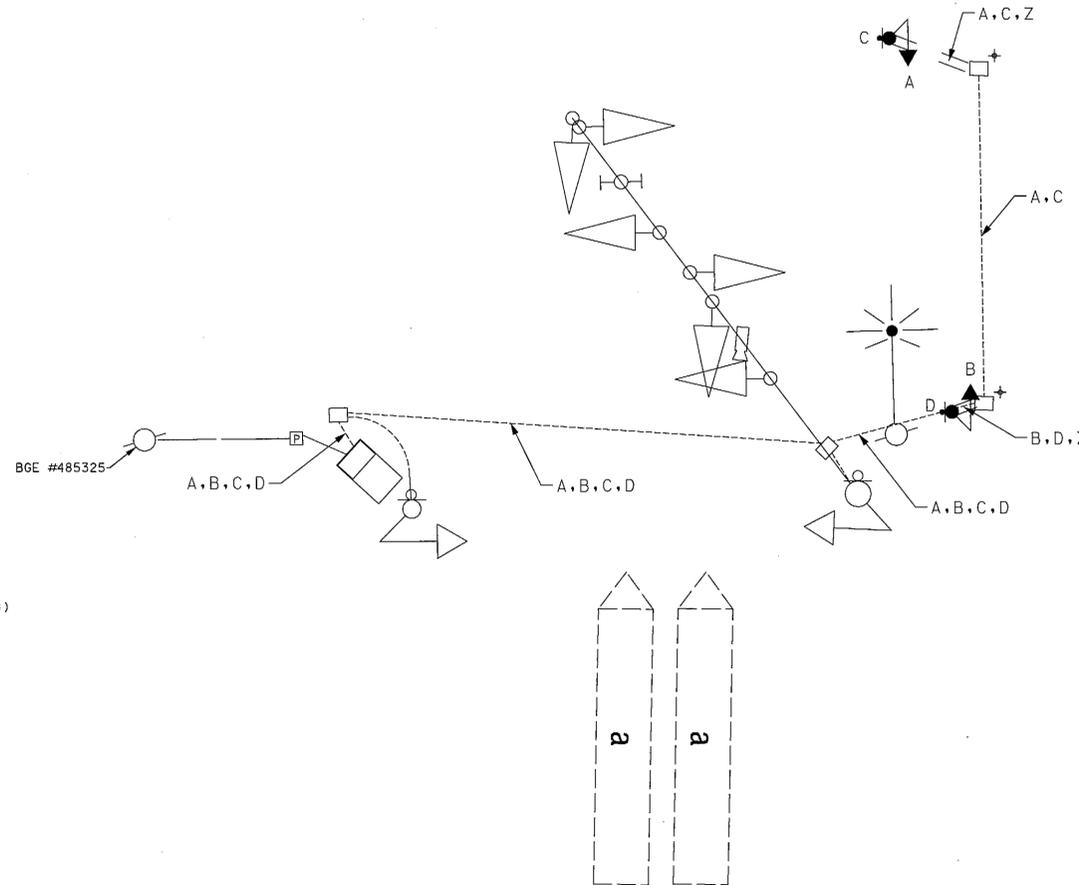
A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION
ITEM NO. QUANTITY UNIT DESCRIPTION
NONE

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR
ITEM NO. QUANTITY UNIT DESCRIPTION

1001	1	EA	MAINTENANCE OF TRAFFIC
2001	10	CY	CLASS 2 EXCAVATION
2002	1	CY	TEST PIT EXCAVATION
6001	45	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	144	SF	5 INCH CONCRETE SIDEWALK
6003	14	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8005	2	EA	ADJUST HANDHOLE TO GRADE WITH NEW FRAME AND COVER
8008	2	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS (FOR RELOCATION OF EXISTING)
8009	2	EA	BREAKAWAY PEDESTAL POLE - ANY SIZE
8015	2	EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD (FOR RELOCATION OF EXISTING)
8023	1	EA	REMOVE AND DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8033	20	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8040	17	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE) (FOR RELOCATION OF EXISTING)
8042	55	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8053	230	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8055	215	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



WIRING KEY

- A,B-ELECTRICAL CABLE-2 CONDUCTOR (NO. 14 AWG)
- C,D-ELECTRICAL CABLE-5 CONDUCTOR (NO. 14 AWG)
- Z-NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- + -GROUND ROD

TOD NO: XX647-24
SHA NO: AA127B5F
MD 450 @ Russell Street

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 450 (WATER STREET) AT
RUSSELL STREET
ANNAPOLIS, MARYLAND

GENERAL INFORMATION SHEET

SCALE	NTS	ADVERTISED DATE	OCTOBER 2012	CONTRACT NO.	XX6475185
DESIGNED BY	JVBAMH	COUNTY	ANNE ARUNDEL		
DRAWN BY	JVB	LOGMILE	02045011.36		
CHECKED BY	JFL	TIMS NO.	L745		
F.A.P. NO.	N/A	TOD NO.			

TS NO. 592-C	DRAWING SG-2 OF 2	SHEET NO. 2 OF 2
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ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

BORNER REV. DATE: March 27, 2007
 DRILL HOLES
 DRILL HOLES
 DRILL HOLES
 BY: Aaron Hottenstein Division: P068 Highway Traffic/GMA Emp