

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, APS PUSHBUTTONS AND SIGNS AT THE INTERSECTION OF MD 337 (ALLENTOWN ROAD) AND MD 5 (BRANCH AVE) IN PRINCE GEORGES COUNTY. MD 337 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR-PHASE FULL-TRAFFIC-ACTUATED MODE WITH SPLIT PHASING FOR THE MOVEMENT FROM EAST-BOUND AND WEST-BOUND MD 337 ONTO RAMPS TO MD 5. TWO ALTERNATE PEDESTRIAN PHASES WILL BE ADDED AS PART OF THIS PROJECT.

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. AN APS CENTRAL CONTROL UNIT WILL BE INSTALLED BY THE CONTRACTOR.

SPECIAL NOTE

APS UNIT WILL FUNCTION AS FOLLOWS:

FOR ALL RAMPS

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS RAMP".

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACT PERSONS FOR DISTRICT # 3 ARE AS FOLLOWS:

MR. BRIAN YOUNG
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301) 513-7358

MR. AUGIE REBISH
UTILITY ENGINEER
PHONE: (301) 513-7350

MR. WAYNE A. MOWDY
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301) 513-7304

CONTACT PERSONS FOR DOTS ARE AS FOLLOWS:

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. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
410-787-7676

THE POWER COMPANY IS:

PEPCO
ROCKVILLE SERVICE CENTER
201 WEST GUDE DRIVE
ROCKVILLE, MD 20850
301-670-8700

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9570	SHEET ALUMINUM SIGNS - GROUND MOUNT CONSISTING OF:	SF	110

- 9 - W11-2 (36"x36")
- 2 - W13-4(1) (36"x24")
- 7 - M6-2 (21"x15")

WIRING KEY	
A,B,C,D, E,F,G,H	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
I,J,K,L, M,N,O,P	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
Z	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
⊗	GROUND ROD

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
5004	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	40
5005	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	500
8001	CONCRETE FOR SIGNAL FOUNDATION	CY	5.6
8002	AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON	EA	8
8003	BREAKAWAY PEDESTAL POLE - ANY SIZE	EA	8
8004	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL	EA	8
8005	PEDESTRIAN EDUCATION SIGN 8 - R10-3(1) MOD (9" X 15" - RAMP)	EA	8
8007	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	430
8008	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	295
8011	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	3
8012	CUT, CLEAN, GALVANIZE AND CAP SIGNAL STRUCTURE	EA	2
8013	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	2175
8014	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	2250
8015	INSTALL GROUND MOUNTED SIGN	SF	110
8016	APS CENTRAL CONTROL UNIT	EA	1
8020	WOOD SIGN SUPPORT 4 INCH X4 INCH	LF	196
8021	ADJUST EXISTING HANDHOLE	EA	2
8022	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED	LF	110

* MOT QUANTITY IS COVERED AS PART OF THE SIDEWALK PLANS.

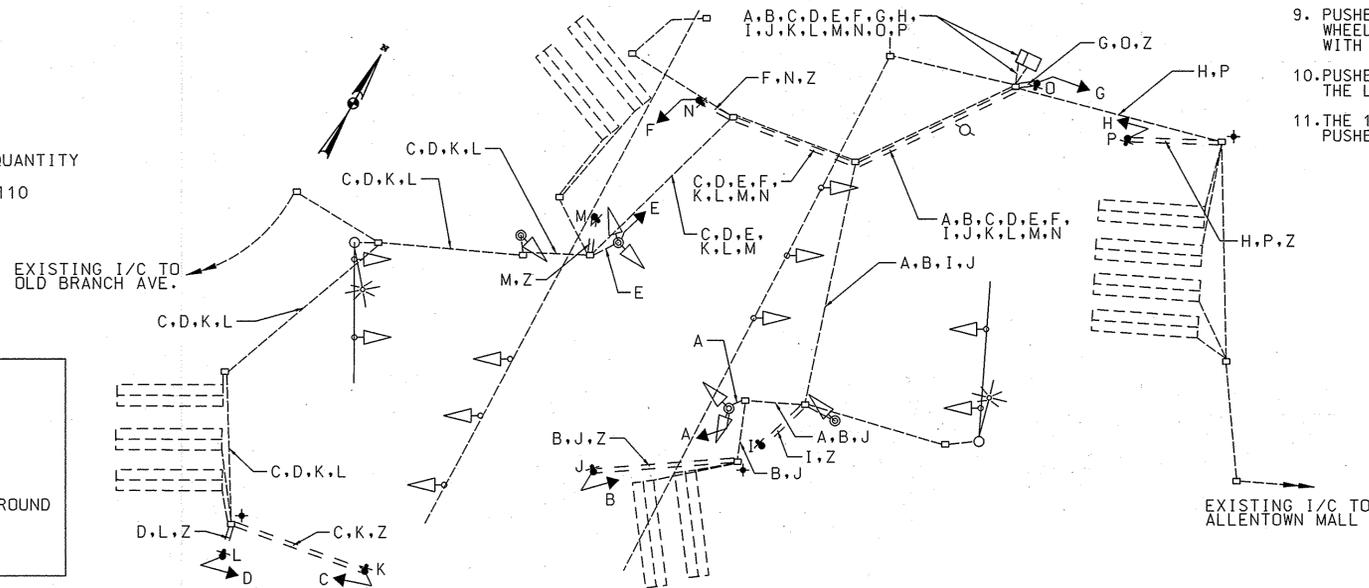
EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA. ALL MATERIALS AND EQUIPMENT REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONSTRUCTION DETAILS

- A. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH LED PEDESTRIAN COUNTDOWN SIGNAL HEAD, APS PUSHBUTTON AND SIGN (ORIENT PARALLEL TO CROSSWALK). NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE
- B. INSTALL LED PEDESTRIAN COUNTDOWN SIGNAL HEAD ON EXISTING PEDESTAL POLE
- C. INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
- D. USE EXISTING CABINET
- E. USE EXISTING CONDUIT
- F. USE EXISTING HANDHOLE
- G. INSTALL SIGNS ON ONE 4"x4" WOOD SUPPORT AS SHOWN
- H. INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
- J. INSTALL 12" WHITE HEAT APPLIED LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
- K. REMOVE EXISTING CROSSWALK PAVEMENT MARKINGS
- L. REMOVE AND RESET EXISTING BRICK PAVERS; SEE SEPARATE PERTINENT SIDEWALK PLANS FOR DETAILS AND QUANTITIES
- M. INSTALL 5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS - 3' LINE, 9' GAP
- N. ADJUST EXISTING HANDHOLE TO BE FLUSH WITH FINAL SIDEWALK GRADE
- O. INSTALL 5 FT. BREAKAWAY PEDESTAL POLE WITH APS PUSHBUTTON AND SIGN (ORIENT PARALLEL TO CROSSWALK). NOTE: INSTALL 1-3 IN. CONDUIT BEND IN POLE BASE
- P. INSTALL SIGNS ON TWO 4"x4" WOOD SUPPORTS AS SHOWN

WIRING DIAGRAM



PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	21/22	23/24	25/26	27/28
PHASE 2 & 6	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW
2 & 6 CHANGE	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	G	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
ALT. 3	R	R	R	R	R	G	G	G	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED. CLEARANCE/COUNTDOWN	R	R	R	R	R	Y	Y	Y	Y	Y	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4	G	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
4 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
ALT. 4	G	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	WK	WK
PED. CLEARANCE/COUNTDOWN	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	R	R	R	R	DW	DW	FL/DW	FL/DW
4 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/R	DARK	DARK	DARK	DARK															

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
3. ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
4. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
5. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
6. ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7652 TO COORDINATE.
7. LOCATION OF ACCESSIBLE PEDESTRIAN PUSHBUTTONS MUST MEET THE LOCATION REQUIREMENTS OF THE MUTCD, SECTION 4E-09 AND FIGURE 4E-2 AND THE NCHRP PUBLICATION "ACCESSIBLE PEDESTRIAN SIGNAL: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
8. INSTALL PVC SLEEVE FOR SIGNS IN SIDEWALK AREAS.
9. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM 60"x60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN 2%.
10. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA, DOES NOT HAVE TO REACH MORE THAN 18"
11. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 337 (ALLENTOWN ROAD) AT
MD 5 (BRANCH AVE)
CAMP SPRINGS, MARYLAND

GENERAL INFORMATION SHEET			
SCALE	NA	DATE	SEPTEMBER 2007
CONTRACT NO.	AX1785133		
DESIGNED BY	T. CHOWDHRY	COUNTY	PRINCE GEORGE'S
DRAWN BY	T. CHOWDHRY	LOGMILE	16033700.00
CHECKED BY	D. EBY	TMS NO.	1509
FAP NO.		TOD NO.	
TS NO. I204D-GI	DRAWING	OF	SHEET NO. 2 OF 2

RK & K
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