

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF US 1 (BALTIMORE AVENUE) AT JEFFERSON STREET IN PRINCE GEORGE'S COUNTY. US 1 (BALTIMORE AVENUE) IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

MODIFY INTERSECTION TO ADD FOURTH LEG, CHANGE EXISTING PEDESTRIAN EQUIPMENT TO APS/COUNTDOWN.

INTERSECTION OPERATION

EXISTING CONTROLLER/CABINET TO BE UTILIZED. THE INTERSECTION WILL BE MODIFIED TO OPERATE IN A SEMI-ACTUATED MODE USING 5 NEMA PHASES. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR THE NORTHBOUND MOVEMENT OF US 1 (BALTIMORE AVENUE). THE US 1 (BALTIMORE AVENUE) THROUGH MOVEMENT WILL OPERATE CONCURRENTLY WITH CONCURRENT PEDESTRIAN MOVEMENTS ACROSS THE EAST AND WEST LEGS OF THE INTERSECTION. THE JEFFERSON STREET MOVEMENTS WILL OPERATE CONCURRENTLY WITH AN ACTUATED PEDESTRIAN MOVEMENT ACROSS THE SOUTH LEG OF THE INTERSECTION.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MS. FELECIA MURPHY, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7404
MR. DUANE BERNARD, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 513-7336
MR. VERNON STINNETT, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 515-7304
MR. VICTOR GRAFTON, UTILITY ENGINEER
PHONE: (301) 513-7350
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. EDWARD RODENHIZER, SUPERVISOR, SIGNAL OPERATIONS
PHONE: (410) 787-7652

2. APS WILL FUNCTION AS FOLLOWS:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
"WAIT TO CROSS BALTIMORE AT JEFFERSON, WAIT"
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

FOR JEFFERSON STREET

- A. WHEN PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
"WAIT TO CROSS JEFFERSON AT BALTIMORE, WAIT"
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

3. THE CONTRACTOR SHALL DELIVER THE NEMA LOAD SWITCHES AND APS EQUIPMENT TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT SHA SIGNAL SHOP AT 410-787-7650 TO COORDINATE THIS WORK.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE STATE HIGHWAY ADMINISTRATION.
NONE.

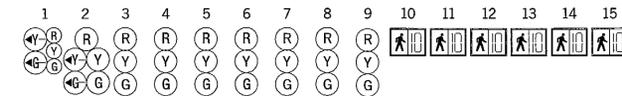
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

QUANTITY	UNITS	DESCRIPTION	QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MAINTENANCE OF TRAFFIC	4	CY	TEST PIT EXCAVATION
LUMP SUM	LS	MOBILIZATION	3	EA	HANDHOLE
4	EA	10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY COUPLINGS AND MODIFIED BASE	150	LF	2-CONDUCTOR TRAY CABLE (NO.12 AWG)
1	EA	16 FT. SPECIAL "T" STEEL MONOCURVE STEEL MAST ARM POLE WITH TWIN 50 FT. MAST ARMS	575	LF	2-CONDUCTOR CABLE (NO.14 AWG)
1	EA	27 FT. SPECIAL "T" STEEL MONOCURVE STEEL MAST ARM POLE WITH TWIN 50 FT. MAST ARMS	800	LF	5-CONDUCTOR CABLE (NO.14 AWG)
1	EA	15 FT. LUMINARIE ARM	715	LF	7-CONDUCTOR CABLE (NO.14 AWG)
1	EA	250W HPS LAMP AND LUMINARIE WITH PHOTO CELL	280	LF	BARE COPPER GROUND WIRE (NO.6 AWG)
1	EA	VIDEO DETECTOR CAMERA (ECONOLITE TERRA TYPE)	2	EA	NEMA LOAD SWITCH (ECONOLITE TYPE TSII MODEL)
600	LF	VIDEO DETECTOR CAMERA CABLE	50	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
1	EA	TERRA VIDEO DETECTOR CAMERA INTERFACE PANEL	150	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - SLOTTED IN ROADWAY
4	EA	AUDIBLE PEDESTRIAN PUSHBUTTON ASSEMBLY WITH PUSHBUTTON SIGN	9	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT
1	EA	APS 2-WIRE CENTRAL CONTROL UNIT	3	EA	GROUND ROD - 3/4 IN. X 10 FT. LENGTH
7	EA	12 IN. 3-SECTION LED SIGNAL HEAD - MAST	230	LF	12 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - CROSSWALK
1	EA	12 IN. 5-SECTION LED SIGNAL HEAD - MAST	85	LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE
1	EA	8 IN. / 12 IN. 5-SECTION LED SIGNAL HEAD - MAST	1	EA	CUT, CLEAN, AND CAP MAST ARM
5	EA	16 IN. 1-SECTION, 1-WAY LED (COUNTDOWN) PEDESTRIAN SIGNAL HEAD - POST TOP	1	EA	ADJUST EXISTING HANDHOLE FRAME AND COVER TO MATCH NEW SIDEWALK
1	EA	16 IN. 1-SECTION, 1-WAY LED (COUNTDOWN) PEDESTRIAN SIGNAL HEAD - SIDE POLE	LUMP SUM	LS	RELOCATE EXISTING INTERCONNECT CABLE (APPROX. 150 LF)
1	EA	36 IN. X 24 IN. R10-6 SIGN - GROUND	LUMP SUM	LS	REMOVE EXISTING SIGNAL EQUIPMENT
1	EA	24 IN. X 24 IN. R10-11(b) SIGN - MAST ARM	LUMP SUM	LS	REMOVE AND DISPOSE OF EXISTING CONCRETE FOUNDATION 12 INCHES BELOW GRADE
2	EA	16 IN. X VAR. DUAL FACED D-3(2) SIGN - MAST ARM			
2	EA	16 IN. X VAR. D-3(2) SIGN - MAST ARM			
2	EA	78 IN. X 24 IN. M-95-1 SIGN - MAST ARM			
15	LF	4 IN. X 4 IN. WOOD SIGN SUPPORTS			

BY: fbrownley

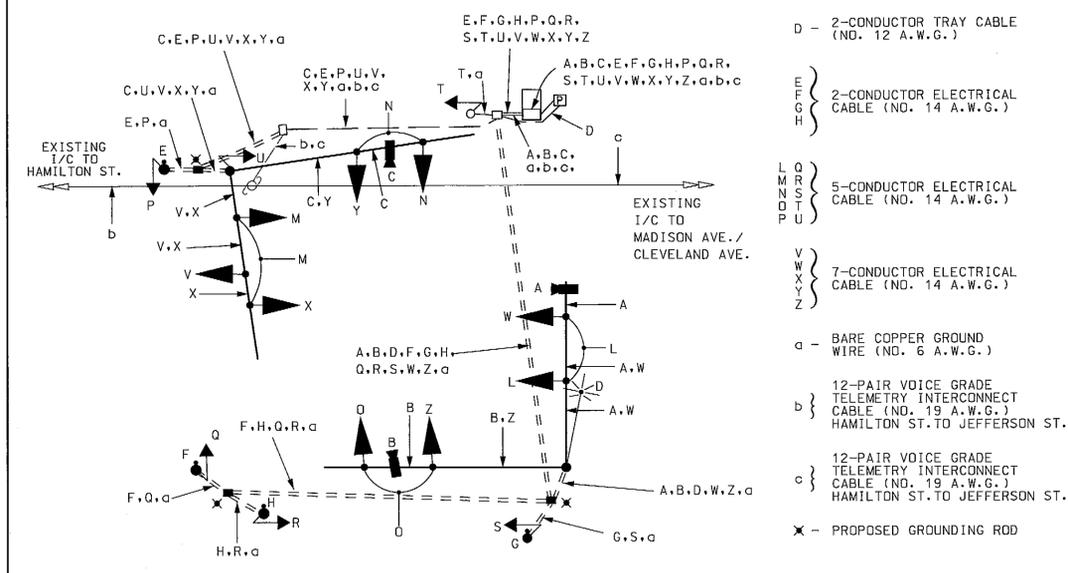
The Traffic Group, Inc.
Suite H
9900 Franklin Square Drive
Baltimore, Maryland 21236
410-931-6600
1-800-583-8411
Fax 410-931-6601

Phase Chart



PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 AND 6	+GG	+GG	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 CHANGE	+YG	+YG	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW
4 AND 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 ALT AND 8	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW
4 ALT AND 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

Wiring Diagram



SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 1 (BALTIMORE AVENUE) AND JEFFERSON STREET
ARTS DISTRICT HYATTSVILLE
HYATTSVILLE, MARYLAND

GENERAL INFORMATION PLAN

SCALE	NA	DATE	OCTOBER 6, 2010	CONTRACT NO.	BW996M82
DESIGNED BY	F. BROWNLEY	COUNTY	PRINCE GEORGE'S		
DRAWN BY	F. BROWNLEY	LOGMILE	16000101.97		
CHECKED BY	Jad 10/13/10	TIMS NO.	J-607		
F.A.P. NO.	NA	TOD NO.			
TS NO. 4378B-GI	DRAWING	SG-1.0	OF	SHEET NO.	2 OF 2