F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD	SEE TITLE SHEET		

GENERAL NOTES

1. Geometrics shall be confirmed prior to the installation of signal equipment.
2. Loop detectors and conduits shall be installed prior to the installation of pavement markings.
3. All utilities are shown in their approximate locations and are not to be considered as complete. The Contractor shall be responsible for contacting Miss Utility to verify the location of all utilities. The Contractor shall contact The Project Engineer prior to construction if there may be potential conflicts.
4. Pavement markings detailed are proposed and are to be installed by the Contractor in accordance with S.H.A. standards. All other pavement markings will be installed as part of the highway contract.
5. All luminaires must to be full cut off.
6. "D.O." indicates delay output loop detector.
7. See Utility Plans for utility location.
8. All loops must be installed in the base course paving, after the milling is completed.
9. To start signal operation loop detectors on spur must be in place and operational.
10. Upon completion of this project, the Contractor shall notify Mr Robert Snyder at (410) 787-7631 to arrange for the telephone line installation. The contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and telephone.
11. All patching shall be done with type "B" pavement, as per roadway details.

INTERSECTION OPERATION

The intersection of Eastbound MD 193 and Spur of Westbound MD 193 will operate in a NEMA two-phase semi-traffic-actuated mode with eastbound MD 193 operating alone with a pedestrian phase and spur of westbound MD 193 operating alone, with an alternate pedestrian phase.

CONSTRUCTION DETAILS

A. Install 27' steel pole with 3" weatherhead, 52' mast arms, 20' lighting arm and luminaire, traffic signal heads and signs as shown (NOTE: 2-3" PVC 90 degree angle conduit bend).

B. Install 8' breakaway pedestal pole with pedestrian signal head, and, push button as shown (NOTE: 1-2" PVC 90 degree angle conduit bend).

C. Install 10' breakaway pedestal pole with traffic signal head, pedestrian signal heads, push button and signs as shown (NOTE: 1-2" PVC 90 degree angle conduit bend).

D. Install 8' breakaway pedestal pole with pedestrian signal head, and signs as shown (NOTE: 1-2" PVC 90 degree angle conduit bend).

E. Install traffic signal controller with control and distribution equipment (see drawind B-16) in base-mounted, system-ready cabinet (NOTE: 1-2" PVC 90 degree angle (schedule 80) conduit bend and 2-4" PVC 90degree angle conduit bends).

F. Install handhole.

G. Install 1" electrical conduit detector wire sleeve.

H. Install 2" schedule 40 electrical conduit-trenched/buried.

I. Install 3" schedule 40 electrical conduit-trenched/buried.

J. Install 4" schedule 40 electrical conduit-trenched/buried.

K. Install 4" schedule 80 electrical conduit-slotted.

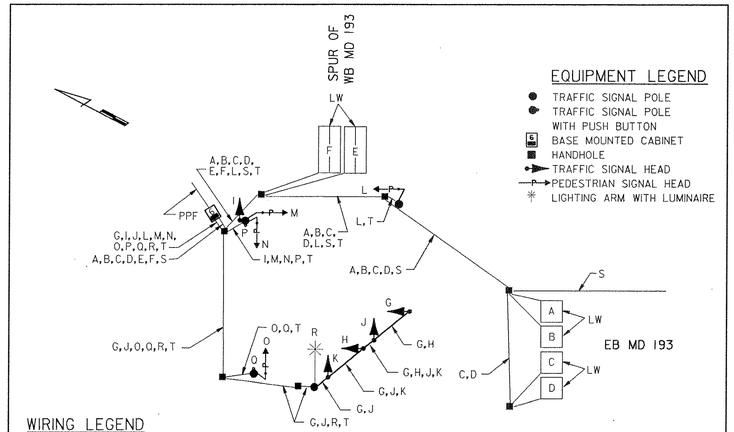
L. Install 4" schedule 40 electrical conduit-trenched/buried with 1" flexible corrugated inner conduit (color-orange) with an inner pull string.

M. Install 4" schedule 80 electrical conduit-slotted with 1" flexible corrugated inner conduit (color-orange) with an inner pull string.

N. Install 6'x 30' loop detector, quadrupole type (2-4-2 turns).

O. Install 6'x 6' loop detector (3 turns).

P. Install ground mounted sign.

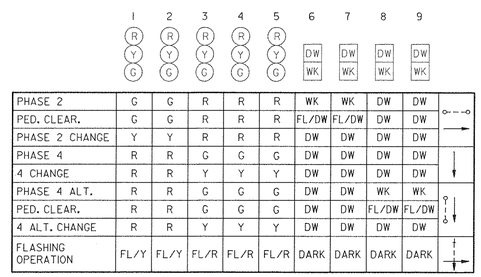


WIRING LEGEND

LW	LOOP WIRE
A-F	2-CONDUCTOR CABLE (ALUMINUM SHIELDED)
P,O	2-CONDUCTOR CABLE (NO. 14 A.W.G.)
L-O	3-CONDUCTOR CABLE (NO. 14 A.W.G.)
H,K	5-CONDUCTOR CABLE (NO. 14 A.W.G.)
G,I,J	7-CONDUCTOR CABLE (NO. 14 A.W.G.)
R	2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
S	50 PAIR TELECOMMUNICATION CABLE
T	GROUND WIRE (NO. 6 A.W.G.)
PPF	PROPOSED POWER FEED BY PEPCO

NOTE:
SEE SHEET SS-17 FOR INTER-CONNECT WIRING DIAGRAM

WIRING DIAGRAM



PHASE 2	G	G	R	R	R	WK	WK	DW	DW	
PED. CLEAR.	G	G	R	R	R	FL/DW	FL/DW	DW	DW	
PHASE 2 CHANGE	Y	Y	R	R	R	DW	DW	DW	DW	
PHASE 4	R	R	G	G	G	DW	DW	DW	DW	
4 CHANGE	R	R	Y	Y	Y	DW	DW	DW	DW	
PHASE 4 ALT.	R	R	G	G	G	DW	DW	WK	WK	
PED. CLEAR.	R	R	G	G	G	DW	DW	FL/DW	FL/DW	
4 ALT. CHANGE	R	R	Y	Y	Y	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	

PHASING CHART

SS-08

RK&K RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

REVISIONS:	APPROVALS:
	CHIEF SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER TRAFFIC
	CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR OFFICE OF TRAFFIC & SAFETY

MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
LOG MILE # 15019304.22

DRAWN BY: ZAJ
DES. BY: ZAJ
CHK. BY: Steve Ryan 10/27/95

EB MD 193 @ SPUR OF WB MD 193
GENERAL INFORMATION
COUNTY: MONTGOMERY

DATE: SEPTEMBER, 1995 F.A.P. NO.
SCALE: None S.H.A. NO. M 425-502-370

TS/STD. NO.: TS-3533-GI-1
SHEET NO. ____ OF ____