PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL LOCATED AT THE INTERSECTION OF MD 147 (HARFORD ROAD) AND TAYLOR AVENUE IN BALTIMORE COUNTY.

THE MODIFICATIONS INCLUDE THE FOLLOWING:

- REMOVE TWO EXISTING PEDESTAL POLES AND REPLACE THEM WITH NEW ONES;
- INSTALL 6 PAIR 20 AWG ELECTRICAL CABLES FOR LED PEDESTRIAN SIGNAL HEADS. AUDIBLE PUSHBUTTONS AND SPEAKERS;
- INSTALL NEW SHIELDED MICROPHONE CABLES;
- INSTALL NEW R10-4(1) SIGNS FOR CROSSING HARFORD ROAD AND TAYLOR AVENUE.
- REPLACE THE CROSSWALK AND STOP LINES FOR MD 147.

MD 147 (HARFORD ROAD) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA 8 PHASE, FULLY-TRAFFIC ACTUATED MODE.
THERE ARE EXCLUSIVE/PERMISSIVE LEFT-TURNS FOR BOTH APPROACHES OF MD 147 AND TAYLOR AVENUE.
THE THROUGH MOVEMENTS FOR MD 147 OPERATE CONCURRENTLY.
BOTH DIRECTIONS OF TAYLOR AVENUE ALSO OPERATE CONCURRENTLY.

SPECIAL NOTE

THE CONTRACTOR SHALL CONTACT THE FOLLOWING PERSON PRIOR TO STARTING THE WORK:

MR. EDWARD RODENHISER
SIGNAL OPERATIONS SECTION, CHIEF
OFFICE OF TRAFFIC & SAFETY
MARYLAND STATE HIGHWAY ADMINISTRATION
HANOVER, MD 21076
(401) 787-7652

EQUIPMENT LIST A

(EQUIPMENT TO BE SUPPLIED BY THE S.H.A.)

ITEM NOS.	QUANTITY	SPEC. SECTION	DESCRIPTION
9089	6 S.F.	900000	4 Each of R10-4(1) - 'PUSH BUTTON TO CROSS HARFORD ROAD.' 4 Each of R10-4(1) - 'PUSH BUTTON TO CROSS TAYLOR AVENUE.'
9094	2 EACH	900000	Pedestal pole 10 foot
9000	8 EACH	900000	4 Audible pushbutton/Sign for crossing Harford Road 4 Audible pushbutton/Sign for crossing Taylor Avenue
9000	2,000 L.F.	900000	6-pair 20 AWG electrical cable (Belden No. 8691) for new LED pedestrian signal indications, pushbuttons and speakers.
9000	2,000 L.F.	900000	Shielded microphone cable (Belden No. 8760).
9000	8 EACH	900000	16" LED pedestrian signal head.
9000	8 EACH	900000	Navigator Pole Mount Unit.
9000	8 EACH	900000	MD special pedestrian head control unit.

EQUIPMENT LIST B

(EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR)

ITEM NOS.	QUANTITY	SPEC. SECTION	DESCRIPTION
1001	1 EACH	104	Maintenance of traffic.
5003	260 L.F.	500000	Furnish and install 12 inch white heat applied permanent preformed thermoplastic pavement marking.
5004	90 L.F.	500000	Furnish and install 24 inch white heat applied permanent preformed thermoplastic pavement marking.
5007	320 L.F.	585450	Remove existing pavement marking - any width.
8011	8 EACH	800000	Install signal head (any type).
8018	8 EACH	865201	Install pushbutton and sign.
8060	1 EACH	800000	Remove and dispose of existing material and equipment per assignment.
8072	2 EACH	800000	Install pedestal pole (any size).
NEG.	2,000 L.F.	-	Install 6-pair 20 AWG electrical cable (Belden No. 8691) for new 16" LED pedestrian signal indications, pushbuttons and speakers.
NEG.	2,000 L.F.	-	Install shielded microphone cable (Belden No. 8760).

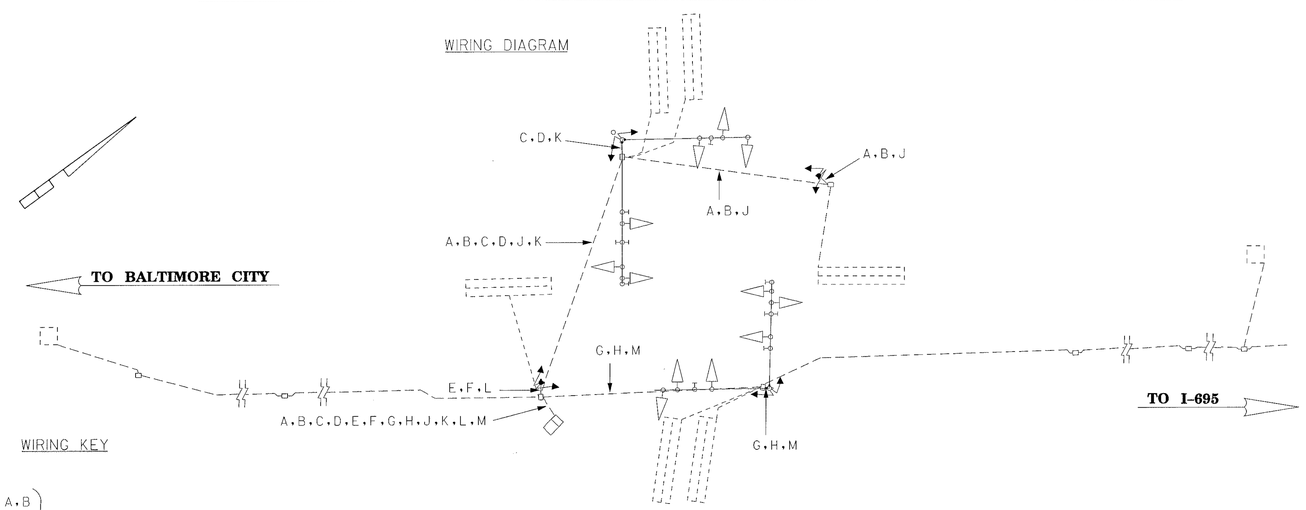
EQUIPMENT LIST C

ALL REMOVED SIGNAL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13-16	17-20
Phase 1 & 5	◀G-R	◀G-R	R	◀G-R	◀G-R	R	R	R	R	R	R	R	DW	DW
1 & 5 Change	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6													
Phase 1 & 6	◀G-G	◀G-G	G	R	R	R	R	R	R	R	R	R	DW	DW
1 & 6 Change	◀Y-G	◀Y-G	G	R	R	R	R	R	R	R	R	R	DW	DW
Phase 2 & 5	R	R	R	◀G-G	◀G-G	G	R	R	R	R	R	R	DW	DW
2 & 5 Change	R	R	R	◀Y-G	◀Y-G	G	R	R	R	R	R	R	DW	DW
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW
2 & 6 Alt.	G	G	G	G	G	G	R	R	R	R	R	R	WK	DW
Ped. Clearance	G	G	G	G	G	G	R	R	R	R	R	R	FL/DW	DW
2 & 6 Alt. Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW
Phase 3 & 7	R	R	R	R	R	R	◀G-R	◀G-R	R	◀G-R	◀G-R	R	DW	DW
3 & 7 Change	THE CONTROLLER MAY SKIP TO PHASES 3 & 8 OR 4 & 7 OR 4 & 8													
Phase 3 & 8	R	R	R	R	R	R	R	R	R	◀G-G	◀G-G	G	DW	DW
3 & 8 Change	R	R	R	R	R	R	R	R	R	◀Y-G	◀Y-G	G	DW	DW
Phase 4 & 7	R	R	R	R	R	R	◀G-G	◀G-G	G	R	R	R	DW	DW
4 & 7 Change	R	R	R	R	R	R	◀Y-G	◀Y-G	G	R	R	R	DW	DW
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW
4 & 8 Change	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW
4 & 8 Alt.	R	R	R	R	R	R	G	G	G	G	G	G	DW	WK
Ped. Clearance	R	R	R	R	R	R	G	G	G	G	G	G	DW	FL/DW
4 & 8 Alt. Change	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A,B
C,D
E,F
G,H
} 6-PAIR 20 AWG STRANDED ELECTRICAL CABLE (BELDEN No. 8691) FOR LED PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND SPEAKER.

J
K
L
M
} SHIELDED MICROPHONE CABLE (BELDEN No. 8760).

REVISIONS				
(B) INSTALL NEW PEDESTAL POLES, AUDIBLE PEDESTRIAN INDICATIONS/SIGNS FOR THE BLIND AND RELATED CABLES. REPLACE CROSSWALK AND STOP LINES FOR MD 147. APRIL 18, 2001 S.H.A. NO. 01 2000				
修改 ADDENDUM TO B-909-501-477 APRIL 22, 1992				
JJD	EMM	DAZ	ETP	TH
(A) RECONSTRUCT DUE TO MD 147 WIDENING MAY 26, 1991 S.H.A. NO. B-909-501-477				
JJD	EMM			

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 147 (Harford Road) and Taylor Avenue

GENERAL INFORMATION SHEET

DRAWN BY:	M. KABENGELE	F.A.P. NO.		TS NO.	SHEET NO.
CHECKED BY:	D. DODA	S.H.A. NO.	23854T25C28	2167 (B)	
SCALE:	NONE	COUNTY:	BALTIMORE	T.I.M.S. NO.	
DATE:	3/15/2001	LOG MILE:	03014700.16	E-457	2 OF 2