## PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF NEW ADVANCE VEHICLE DETECTORS AND VEHICLE SIGNAL HEADS ON THE MD 450 EASTBOUND APPROACH. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION IS TO OPERATE AS IN PRECEEDING PHASE.

CONTROLLER REQUIREMENTS

THE EXISTING CABINET AND CONTROLLER ARE TO BE UTILIZED.

SPECIAL NOTE

THIS INTERSECTION IS APPROXIMATELY 1100 FT. EAST OF THE EXISTING INTERSECTION OF MD 450 AT MD 704.

ALL UNDERGROUND AND OVERHEAD UTILITIERS SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UNDERGOUND AND OVERHEAD UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES 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 EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PROJECT ENGINEER IMMEDIATELY.

72 HOURS PRIOR TO ANY WORK ON THE TRAFFIC SIGNALS, THE CONTRACTOR SHALL NOTIFY THE DISTRICT 3 TRAFFIC SECTION REPRESENTATIVE, MR. RICHARD BUETTNER (301-513-7316) AND THE SIGNAL OPERATIONS SUPERVISOR, MR. EDWARD RODENHIZER (410-787-7652).

## EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

CATEGORY CODE NO.	SPEC. SECTION	QUANTITY	DESCRIPTION
960017	814	2 EA.	12 IN. I WAY 3 SECTION (RA, YA, GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
973023	813	15 S.F.	SHEET ALUMINUM SIGNS - 2 EACH R3-5(L) (30" X 36")
<u> </u>	810		MICRO LOOP PROBE SET DETECTOR WITH 500 FT. LEAD IN

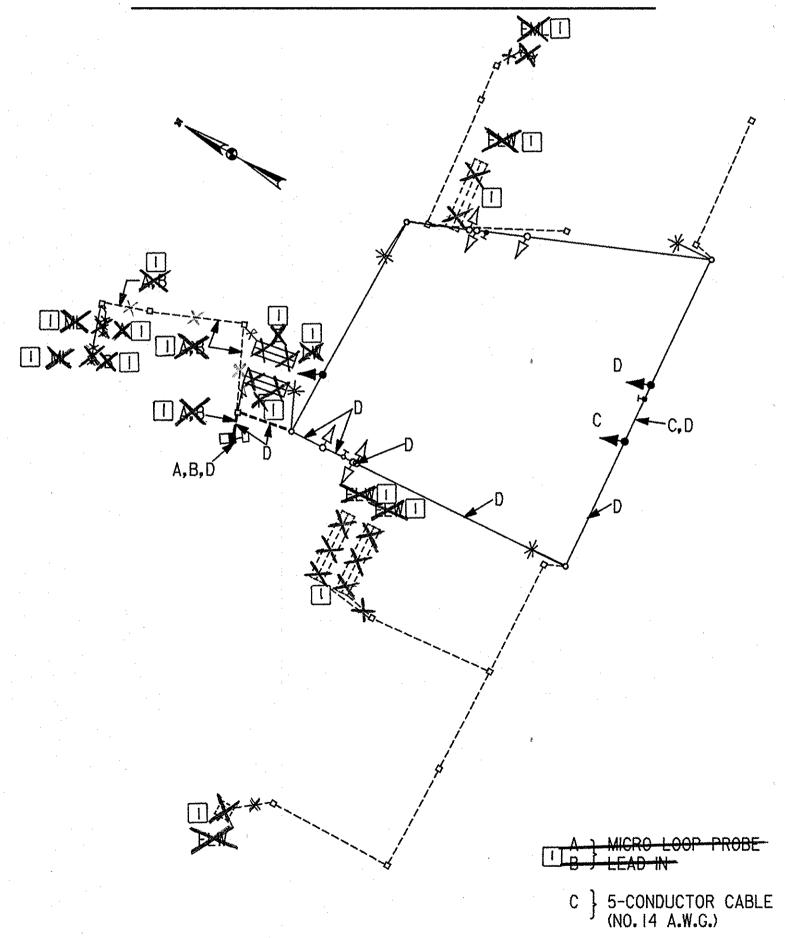
## EQUIPMENT L

REGION NO. SEE TITLE 362 465 SHEET

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

	CATEGORY CODE NO.	SPEC. SECTION	QUANTI	TY	DESCRIPTION
	114245 104 30		F.	24 IN. WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE	
	-805160	805		<b>-</b>	FURNISH AND INSTALL IIN. LIQUID TIGHT NON METALLIC CONDUIT FOR DETECTOR SLEEVE
	813015	813	15 S	S.F.	INSTALL OVERHEAD SIGN
	860017	814	2 E	EA.	INSTALL 12 IN., I WAY, 3 SECTION (RA, YA, GA) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT
	860265	814	ΙE	EA.	RELOCATE EXISTING SIGNAL HEAD
<u> </u>	<del>-86H04</del>		863 L	F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
	861107	810	32 L	F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
	861108	810	290 L	F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
	-862102		275 L		FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
	869101	819	101 L	.F.	FURNISH AND INSTALL STEEL SPAN WIRE - 1/4 IN. DIAMETER
	-800000	810		- <b>A</b>	INSTALL MICRO LOOP PROBE SET
	800000	XXX	LUMP S	SUM	REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

## WIRING DIAGRAM



D } 7-CONDUCTOR CABLE (NO.14 A.W.G.)

PHASE DIAGRAM

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PHASE 2	<b>◆</b> G−	<b>◆</b> G-	<b>◆</b> G-	R	R	R	R	R	R	
2 CHANGE	<b>◆</b> Y−	<b>◆</b> Y-	<b>◆</b> Y-	R	R	R	R	R	R	-
PHASE 3+8	<b>◆</b> R-	<b>4</b> R−	<b>4</b> R−	<b>4</b> -G	<b></b> -G	G	R	R	R	<b>←</b> 1↑
3 CHANGE	<b>◆</b> R-	<b>4</b> R−	<b>◆</b> R−	<b>4</b> -Y	<b>4</b> -Ÿ	G	R	R	R	
PHASE 4 + 8	<b>◆</b> R-	<b>◆</b> R-	<b>4</b> R−	G	G	G	G	G	G	1 1
4 + 8 CHANGE	<b>◆</b> R-	<b>◆</b> R-	<b>◆</b> R-	Y	Υ	Υ	Y	Y	Υ	+
FLASHING OPERATION	FL Y-	FL_Y_	FL_Y-	FL R	FL/R	FL/R	FL/R	FL/R	FL R	† <b>A</b>

TEMPORARY SIGNAL PHASE

DWG. NO.

SHEET NO.

<u>TS-3167A-X4-P</u> <u>362</u> OF <u>465</u>

SHEET NO .:

RED LINE REV. NO. 1 7-14-97

APPROVALS

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, OFFICE OF TRAFFIC & SAFETY

ASST. DIVISION CHIEF, TEDD

REVISIONS

AUGUST 1996 - WTB MODIFY EXISTING SIGNAL SHA NO. PG9005171

TS-16 MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

MD 450 (ANNAPOLIS ROAD) AT MD 704 (MARTIN LUTHER KING JR. HWY) LOG MILE NO. 16045007.35 DATE 2 / 6 / 91 SEE TITLE SHEET

P-981-451-385

PRINCE GEORGES

THE WILSON T. BALLARD CO. CONSULTING ENGINEERS

OWINGS MILLS, MARYLAND