F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD	SEE TITLE SHEET	370	465

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC CONTROL SIGNAL AT THE MD 450 (ANNAPOLIS ROAD) AND MD953 (GLENN DALE ROAD) INTERSECTION IN PRINCE GEORGES COUNTY. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION IS TO BE MODIFIED TO OPERATE IN A NEMA SIX PHASE, FULLY-TRAFFIC-ACTUATED MODE. THE MODIFICATION WILL BE THAT THE MD 953 MOVEMENTS WILL OPERATE AS A SIDE STREET SPLIT AND A NORTHBOUND TO EASTBOUND RIGHT TURN OVERLAY WILL BE INCLUDED.

CONTROLLER REQUIREMENTS

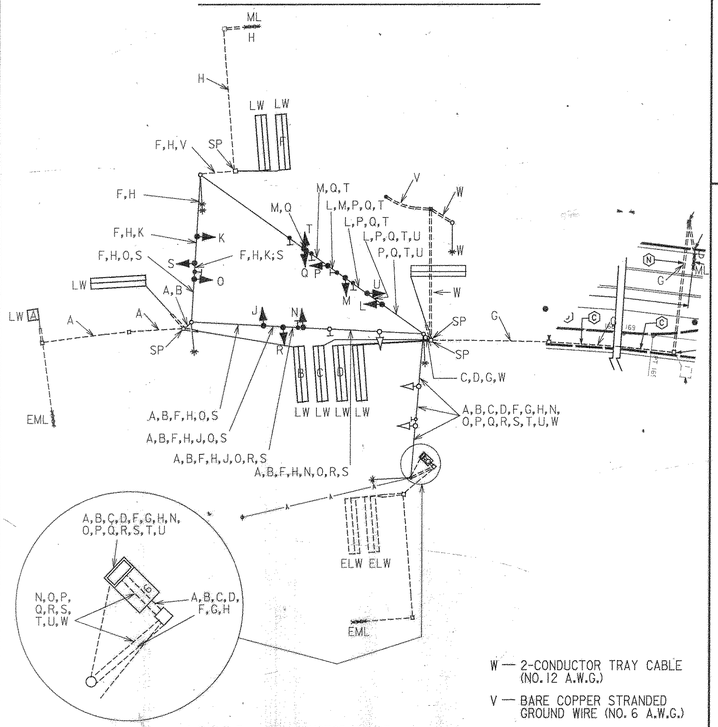
THE EXISTING CONTROLLER AND CABINET ARE TO BE UTILIZED.

SPECIAL NOTE

ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UNDERGROUND 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 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).

WIRING DIAGRAM



W — 2-CONDUCTOR TRAY CABLE (NO.12 A.W.G.)

V — BARE COPPER STRANDED GROUND WIRE (NO. 6 A.W.G.)

LW — LOOP WIRE (NO.14 A.W.G) IN FLEXIBLE TUBING

ELW — EXISTING LOOP WIRE

ML — MICRO LOOP PROBE

EML — EXISTING MICRO LOOP PROBE

SP — SPLICE EXISTING ALUMINUM SHIELDED CABLE TO NEW LOOP WIRE

A,B,C,D,F — 2-CONDUCTOR CABLE (ALUMINUM SHIELDED)

G,H — MICRO-LOOP DETECTOR LEAD-IN

J,K,L — 5-CONDUCTOR CABLE (NO.14 A.W.G.)

M,N,O,P,Q,R,S,T,U — 7-CONDUCTOR CABLE (NO.14 A.W.G.)

FILE NO. S3285450.DGN
09-26-96 FOB/JLS/TES

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	SPEC. SECTION	QUANTITY		DESCRIPTION
960015	814	2	EA.	12 IN. 1 WAY 3 SECTION (R,Y,G) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
960019	814	5	EA.	12 IN. 1 WAY 4 SECTION (R,Y,G,GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
960020	814	3	EA.	12 IN. 1 WAY 5 SECTION (R,Y,G,YA,GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
973023	813	22.5	S.F.	SHEET ALUMINUM SIGNS - 3 EACH R3-5(L) (30" X 36")
900000	814	2	EA.	8 IN./12 IN. 1 WAY 5 SECTION (8" R,Y,G, - 12" YA,GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE
900000	XXX	2	EA.	MICRO-LOOP PROBE SET WITH 1000-FOOT LEAD-IN

PHASE DIAGRAM

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 + 5	R G	R G	R	R G	R G	R	R	R	R G	R	R	R
1 + 5 CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6												
PHASE 1 + 6	G G	G G	G	R	R	R	R	R	R	R	R	R
1 CHANGE	G Y	G Y	G	R	R	R	R	R	R	R	R	R
PHASE 2 + 5	R	R	R	G G	G G	G	R	R	R G	R	R	R
5 CHANGE	R	R	R	G Y	G Y	G	R	R	R Y	R	R	R
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	R
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3	R	R	R	R	R	R	G G	G G	G	R	R	R
3 CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R
PHASE 4	R	R	R	R	R	R	R	R	R	G G	G G	G
4 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y
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

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	SPEC. SECTION	QUANTITY		DESCRIPTION
114245	104	141	L.F.	24 IN. WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE
203030	205	1	C.Y.	TEST PIT EXCAVATION
801004	801	0.7	C.Y.	FURNISH AND ISNTALL CONCRETE FOR SIGNAL FOUNDATION
802501	810	30	L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
805011	805	90	L.F.	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE
805125	805	162	L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 40 RIGID PVC CONDUIT - TRENCHED
805160	805	10	L.F.	FURNISH AND INSTALL 1 IN. LIQUID-TIGHT NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
811001	811	5	EA.	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	813	22.5	S.F.	INSTALL OVERHEAD SIGN
837001	804	1	EA.	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
860015	814	2	EA.	INSTALL 12 IN. 1 WAY 3 SECTION (R,Y,G) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT
860019	814	5	EA.	INSTALL 12 IN. 1 WAY 4 SECTION (R,Y,G,GA) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT
860020	814	3	EA.	INSTALL 12 IN. 1 WAY 5 SECTION (R,Y,G,YA,GA) POLYCARBONATE SIGANL HEAD - SPAN MOUNT
860265	814	1	EA.	RELOCATE EXISTING SIGNAL HEAD
861104	810	2371	L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861107	810	103	L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
861108	810	2027	L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
861116	810	375	L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
862101	810	3610	L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
862102	815	1091	L.F.	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
868201	818	1	L.F.	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE
869101	819	236	L.F.	FURNISH AND INSTALL STEEL SPAN WIRE - 1/4 IN. DIAMETER
869102	819	154	L.F.	FURNISH AND INSTALL STEEL SPAN WIRE - 3/8 IN. DIAMETER
800000	805	210	L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	813	6	EA.	RELOCATE EXISTING OVERHEAD SIGN
800000	814	2	EA.	INSTALL 8 IN./12 IN. 1 WAY 5 SECTION (8" R,Y,G - 12" YA,GA) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT
800000	810	2	EA.	INSTALL MICRO-LOOP PROBE SET
800000	XXX	LUMP	SUM	REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

TEMPORARY SIGNAL PHASE IV

DWG. NO. TS - 24

THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS
OWINGS MILLS, MARYLAND

REVISIONS

© AUGUST 1996 - WTB MODIFY EXISTING SIGNAL SHA NO. PG9005171
JDM

Ⓑ 2/91 CHANGE SIGNALS TO POLYCARBONATE, ADJUST SPAN SHA NO. 855-2503.039
JT SR ETP TH

Ⓐ INSTALL E/P LEFT TURN FOR NB MD 953
DBD SR DZ ETP TH

APPROVALS

ASST. DIVISION CHIEF, TEDD

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, OFFICE OF TRAFFIC & SAFETY

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

MD 450 (ANNAPOLIS ROAD) AT MD 953 (GLENN DALE ROAD)

LOG MILE NO. 1604507.9 DATE 9 / - / 90

DRAWN BY:	N/A	F.A.P. NO.	N/A	PLAN SHEET NO.:	SHEET NO.
CHECK BY:	N/A	S.H.A. NO.	N/A	TS-3083C-X3-GI	370 OF 465
SCALE:	NONE	COUNTY	PRINCE GEORGES		