F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD	SEE TITLE SHEET	353	465

CONSTRUCTION DETAILS

ULTIMATE

A. EXISTING CABINET/CONTROLLER ARE TO BE UTILIZED.
B. USE EXISTING STRAIN POLE.
C. USE EXISTING CONDUIT.
D. USE EXISTING HANDHOLE.
~~E. INSTALL 1 IN. LIQUID TIGHT, NON METALLIC CONDUIT FOR LOOP DETECTOR SLEEVE.~~
F. INSTALL HANDHOLE.
G. INSTALL 24 IN. PREFORMED WHITE PAVEMENT MARKING FOR STOP LINE.
H. USE EXISTING HANDHOLE AND SPLICE NEW LOOP WIRE, TO EXISTING 2-CONDUCTOR ALUMINUM SHIELDED CABLE.
J. INSTALL 6 FT. X 30 FT. QUADRUPOLE TYPE VEHICLE LOOP DETECTOR (3-6-3 TURNS) ENCASED IN FLEXIBLE TUBING.
K. INSTALL MICRO LOOP PROBE TYPE VEHICLE DETECTOR
L. INSTALL 2 IN. POLYVINYL CHLORIDE (SCH.40) ELECTRICAL CONDUIT-TRENCHED. (SEE NOTE 1)
M. INSTALL 2 IN. POLYVINYL CHLORIDE (SCH.80) ELECTRICAL CONDUIT-TRENCHED.
N. REMOVE EXISTING SPAN WIRE AND ALL ATTACHMENTS.

SIGNS

16,18,20 — LEFT TURN YIELD ON GREEN — R 10-12, 36" X 42"

15A,17A: Forbes Blvd. | 15B,17B: Forbes Blvd.
D3-2 - DUAL FACED VAR. X 16"

19A, 21A: Annapolis Rd. | 19B, 21B: Annapolis Rd.
D3-2 - DUAL FACED VAR. X 16"

22,23 — RUN CROSSING FORBES BLVD. — R 10-3, 9" X 12"

24 EAST, 25 WEST, 26 WEST, 27 EAST — MARYLAND 450 — 30" X 51", 48" X 75", 30" X 51", 48" X 75"
ASSOCIATED SHIELD ASSEMBLY

SIGNALS

1,4,7 — 12'/8'; 2,5,8 — 12'; 3,6,9, 10,11,12 — 12'; 13,14 — 12'

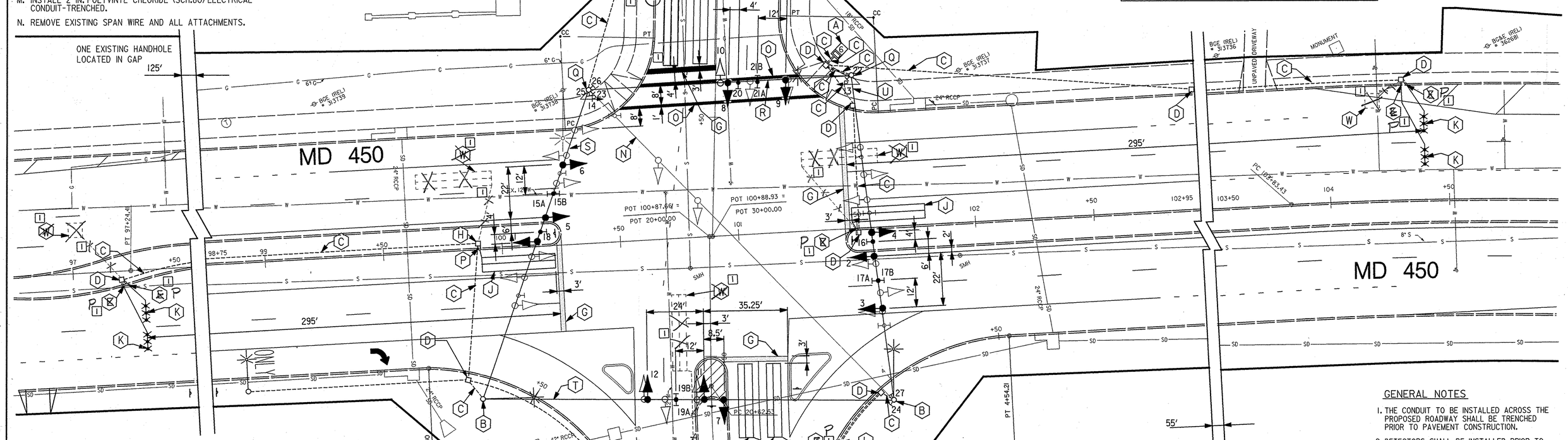
NOTE: SIGNALS 1,2,3,4,5,6,7,8,9,11,12 AND SIGNS 15,16,17, 18,20 ARE EXISTING AND ARE TO BE RELOCATED.
SIGNALS 13,14 AND SIGNS 19,21,22,23 ARE PROPOSED.
SIGNAL 10 IS EXISTING AND IS TO REMAIN.
SIGNALS 1,2,3,7,8,9 AND SIGNS 16,18 ARE TO BE UNBAGGED.

Ø 1, Ø 2, Ø 3, Ø 4, Ø 5, Ø 6, FLASHING OPERATION, Ø 8

PHASING NOTES

1. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY
2. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY

MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION



O. INSTALL 12 IN. PREFORMED WHITE PAVEMENT MARKING FOR CROSSWALK. (REFER TO CROSSWALK DETAIL ON DWG. SN-2.1)
P. INSTALL 1 IN. GALVANIZED STEEL CONDUIT FOR LOOP DETECTOR SLEEVE.
Q. USE EXISTING STRAIN POLE. INSTALL PEDESTRIAN SIGNAL HEAD, AND SIGN.
R. USE EXISTING SPAN WIRE. INSTALL SIGN AND UNBAG AND RELOCATE EXISTING VEHICLE SIGNAL HEADS AND SIGN.
S. USE EXISTING SPAN WIRE. RELOCATE EXISTING VEHICLE SIGNAL HEADS AND SIGNS AND REMOVE AN EXISTING VEHICLE SIGNAL HEAD.
T. USE EXISTING SPAN WIRE. INSTALL VEHICLE SIGNAL HEADS AND SIGN AND RELOCATE AND UNBAG EXISTING VEHICLE SIGNAL HEAD.
U. USE EXISTING SPAN WIRE. UNBAG EXISTING VEHICLE SIGNAL HEADS AND SIGN, RELOCATE EXISTING VEHICLE SIGNAL HEADS AND SIGNS AND REMOVE EXISTING VEHICLE SIGNAL HEADS AND SIGN.
~~V. MAINTAIN EXISTING VEHICLE DETECTOR.~~
~~W. ABANDON EXISTING VEHICLE DETECTOR.~~

GENERAL NOTES

1. THE CONDUIT TO BE INSTALLED ACROSS THE PROPOSED ROADWAY SHALL BE TRENCHED PRIOR TO PAVEMENT CONSTRUCTION.
2. DETECTORS SHALL BE INSTALLED PRIOR TO FINAL PAVEMENT SURFACE COURSE.
3. THE CONTRACTOR SHALL CONFIRM THE LOCATIONS OF THE PROPOSED GEOMETRICS PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT.
4. FOR THE LOCATION OF THE 'ARROW' AND 'ONLY' PAVEMENT MARKINGS AND SIGNS, SEE THE SIGNING AND MARKING PLAN SN-2.2.
5. ALL POLE AND CABINET FOUNDATIONS AND HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES
AERIAL CABLES — A
ELECTRICAL — E
TELEPHONE — T
GAS — G
SEWER — S
WATER — W
CABLE TV — TV

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

ULTIMATE SIGNAL	DWG. NO. TS-7

REVISIONS
A AUGUST 1996 - WTB MODIFY EXISTING SIGNAL SHA NO. PG9005171
JDM MR

APPROVALS
ASST. DIVISION CHIEF, TEDD
ASST. DISTRICT ENGINEER, TRAFFIC
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, OFFICE OF TRAFFIC & SAFETY
ORIGINAL ON FILE

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

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

MD 450 (ANNAPOLIS ROAD) AT FORBES BLVD.

LOG MILE NO. 16045006.59 DATE 8/ -/96

DRAWN BY:	S. BLOSS	F.A.P. NO.	N/A	PLAN SHEET NO.:	SHEET NO.
CHECK BY:	T. HANNAN	S.H.A. NO.	N/A		
SCALE:	1"=20'	COUNTY	PRINCE GEORGES	TS-3600A-P	353 OF 465

FILE NO. SS5SS450.DGN
09-10-96
LJS