

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE ADDITION OF EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR MD 381 AT THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 301 AND MD 381 IN PRINCE GEORGE'S COUNTY. US 301 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND US 301. WORK WILL CONSIST OF THE ADDITION OF EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR EASTBOUND AND WESTBOUND MD 381.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
9002	2 EA	NEMA LOAD SWITCH
9571	18 SF	ALUMINUM SHEET
2 EACH - R10-12 SIGN (30" X 42") - MAST ARM MOUNT		

EQUIPMENT LIST "B"

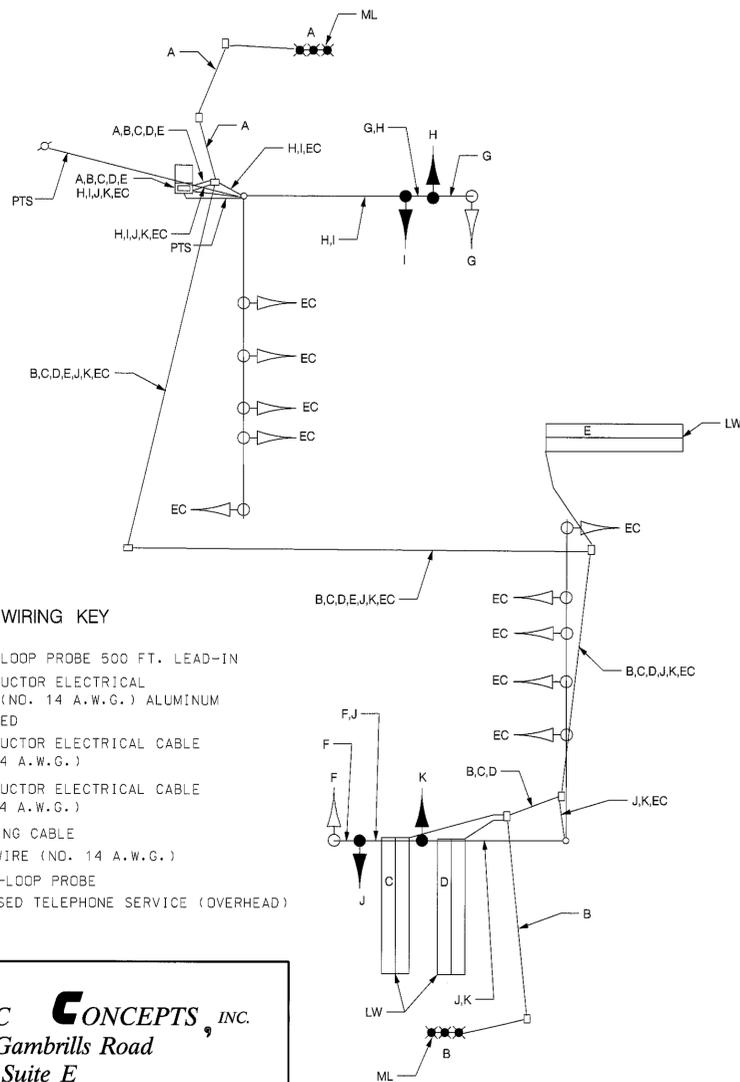
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
5006	90 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED
8006	1 EA	FURNISH AND INSTALL 3 IN. CONDUIT BEND IN EXISTING FOUNDATION
THERMOPLASTIC PAVEMENT MARKING		
8019	1 EA	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8032	30 LF	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8033	30 LF	FURNISH AND INSTALL 3 IN. ELECTRICAL CONDUIT - GALVANIZED RISER
8034	1 EA	FURNISH AND INSTALL 3 IN. WEATHER HEAD
8039	15 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8044	20 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT
FOR DETECTOR WIRE SLEEVE		
8049	2 EA	FURNISH AND INSTALL MICRO-LOOP PROBE WITH 500 FT. LEAD-IN
8056	18 SF	INSTALL OVERHEAD SIGN
8075	6 EA	FURNISH AND INSTALL 8 IN. VEHICULAR SIGNAL HEAD SECTION
8076	14 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
8081	800 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (ALUMINUM SHIELDED)
8084	50 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)
8085	870 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
8087	1340 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8088	285 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)

PHASING CHART

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 1 & 5	<G-	<G-	R	R	R	<G-	<G-	R	R	R	R	R	R	R	R	R
1 & 5 CHANGE	PHASE 1 & 5 CHANGE MAY CHANGE TO PHASE 1 & 6, 2 & 5 OR 2 & 6															
PHASE 1 & 6	<G-	<G-	G	G	G	<R-	<R-	R	R	R	R	R	R	R	R	R
1 & 6 CHANGE	<Y-	<Y-	G	G	G	<R-	<R-	R	R	R	R	R	R	R	R	R
PHASE 2 & 5	<R-	<R-	R	R	R	<G-	<G-	G	G	G	R	R	R	R	R	R
2 & 5 CHANGE	<R-	<R-	R	R	R	<Y-	<Y-	G	G	G	R	R	R	R	R	R
PHASE 2 & 6	<R-	<R-	G	G	G	<R-	<R-	G	G	G	R	R	R	R	R	R
2 & 6 CHANGE	<R-	<R-	Y	Y	Y	<R-	<R-	Y	Y	Y	R	R	R	R	R	R
PHASE 3 & 7	<R-	<R-	R	R	R	<R-	<R-	R	R	R	R	R	R	R	R	R
3 & 7 CHANGE	PHASE 3 & 7 CHANGE MAY CHANGE TO PHASE 3 & 8, 4 & 7 OR 4 & 8															
PHASE 3 & 8	<R-	<R-	R	R	R	<R-	<R-	R	R	R	R	R	R	R	R	R
PRE-EMPTION	<R-	<R-	R	R	R	<R-	<R-	R	R	R	R	R	R	R	R	R
3 & 8 CHANGE	<R-	<R-	R	R	R	<R-	<R-	R	R	R	R	R	R	R	R	R
PHASE 4 & 7	<R-	<R-	R	R	R	<R-	<R-	R	R	R	R	R	R	R	R	R
PRE-EMPTION	<R-	<R-	R	R	R	<R-	<R-	R	R	R	R	R	R	R	R	R
4 & 7 CHANGE	<R-	<R-	R	R	R	<R-	<R-	R	R	R	R	R	R	R	R	R
PHASE 4 & 8	<R-	<R-	R	R	R	<R-	<R-	R	R	R	G	G	G	G	G	G
4 & 8 CHANGE	<R-	<R-	R	R	R	<R-	<R-	R	R	R	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



WIRING KEY

- A-D MICRO-LOOP PROBE 500 FT. LEAD-IN
- E-I 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
- L-O 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- P-W 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- EC EXISTING CABLE
- LW LOOP WIRE (NO. 14 A.W.G.)
- ML MICRO-LOOP PROBE
- PTS PROPOSED TELEPHONE SERVICE (OVERHEAD)

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. MAJID SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(301) 513-7358

MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 513-7304

MR. AUGIE REBISH
ASSISTANT DISTRICT ENGINEER - UTILITIES
(301) 513-7350

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101

FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM

SHA #: PG107A53/B00 TGD #: ATB00-06

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
US 301 (ROBERT CRAIN HWY.) AND MD 381

DRAWN BY: T.ZAYDEL	F.A.P. NO. M.HOWELL	TS NO. 596H GI	SHEET NO.
CHECKED BY: M.HOWELL	S.H.A. NO. PRINCE GEORGE'S	T.I.M.S. NO. 16030103.12	2 OF 2
SCALE: NONE	COUNTY: PRINCE GEORGE'S	LOG MILE: 16030103.12	
DATE: JULY, 2004			