DRILL HOLES

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PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AND SYSTEMIZATION AT THE INTERSECTION OF ALT US 1 AND THE RAMP TO THE OUTER LOOP OF I-695 IN BALTIMORE COUNTY. ALT US 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

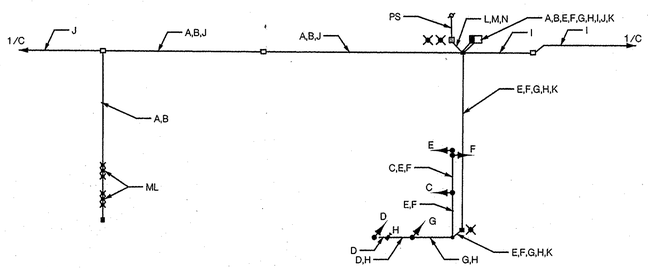
INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA TWO-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH AN EXCLUSIVE LEFT TURN PHASE FOR THE SOUTHBOUND ALT. US 1 LEFT TURN MOVEMENT.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE AND ONE (1), FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER AND VIDEO DETECTION INTERFACE EQUIPMENT HOUSED IN A NEMA "6" BASE MOUNTED CABINET.

WIRING DIAGRAM



WIRING KEY

A-B	MICRO-LOOP PROBE LEAD-IN
C-D	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E-G	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
H	VIDEO DETECTION CABLE
I	12-PAIR VOICE GRADE INTERCONNECT CABLE
J	EXISTING 12 PAIR VOICE GRADE INTERCONNECT CABLE
K	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
L-N	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
ML	MICRO-LOOP PROBE
PS	PROPOSED ELECTRIC SERVICE
X	GROUND ROD

EQUIPMENT LIST "A"

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

QUANTITY	DESCRIPTION
1 EA	NEMA TYPE "6" BASE MOUNTED CABINET AND CONTROLLER
45 SF	SHEET ALUMINUM SIGNS TO CONSIST OF THE FOLLOWING:
1 EA	R10-12(4) SIGN (36" X 42") - MAST ARM MOUNT
1 EA	W3-3 SIGN (48" X 48") WITH "NEW" PANEL (30" X 30")-GROUND MOUNT
1 EA	R10-12(4) MOD. SIGN (36" X 42") - MAST ARM MOUNT
1 EA	VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS)
1 EA	FOUR-CHANNEL, TIME- DELAY-OUTPUT LOOP DETECTOR AMPLIFIER

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NOS.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	1 CY	CLASS 2 EXCAVATION
2002	2 CY	TEST PIT EXCAVATION
5006	60 LF	24 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
6002	10 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER
8001	15 EA	12 INCH LED SIGNAL HEAD SECTION
8011	1 EA	METERED SERVICE PEDESTAL EMBEDDED
8019	2 EA	NON-INVASIVE MICRO-LOOP PROBE
8023	1 EA	MAST ARM POLE & TWIN 50 FT./50 FT. MAST ARMS
8027	1 EA	VIDEO DETECTION CAMERA AND CABLE
8032	190 LF	SCHEDULE 80 RIGID PVC CONDUIT- BORED
8033	60 LF	SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
8035	34 LF	WOOD SIGN SUPPORTS UP TO 4 IN. X 6 IN.
8038	150 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8043	50 LF	ELECTRICAL CABLE 1 - CONDUCTOR NO. 4 AWG - THHN /THWN
8044	3 EA	ELECTRICAL HANDHOLE
8045	23 SF	INSTALL GROUND MOUNTED SIGN
8046	22 SF	INSTALL OVERHEAD SIGN
8058	50 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO 14 AWG)
8059	610 F	ELECTRICAL CABLE 7 - CONDUCTOR (NO 14 AWG)
8067	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

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 4 ARE AS FOLLOWS:

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 321-2781 /2785

STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 321-2761

MR. MICHAEL PASQUARIELLO
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 321-2843

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

PHASE CHART

PHASE 5	R	R	GA	G	G	
5 CHANGE	R	R	YA	Y	Y	
PHASE 6	G	G	FL/R	FL/R	FL/R	
6 CHANGE	Y	Y	RA	R	R	
FLASHING OPERATION	FLY	FLY	FLR	FLR	FLR	

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
FAX (410) 923-6473
EMAIL TRAFFIC.CONCEPTS@COMCAST.NET

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION PLAN
ALT US 1 AND I-695 ON RAMP (OUTER LOOP)

SCALE NONE | DATE 10-3-07 | CONTRACT NO. AT9135185

DESIGNED BY T. ZAYDEL | COUNTY BALTIMORE
DRAWN BY T. ZAYDEL | LOGMILE 03A00101.63
CHECKED BY | T.I.M.S. NO. G 882
F.A.P. NO. N/A | TOD NO.

DRAWING NO. TS-4627GI | SHEET NO. 4 OF 6