

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 173 AND ELIZABETH LANDING WAY IN ANNE ARUNDEL COUNTY. THE WORK IS NECESSITATED BY THE CONSTRUCTION OF A FOURTH LEG TO THE INTERSECTION. MD 173 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR-PHASE, FULLY-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR N.B. MD 173. THE INTERSECTION WILL NOW OPERATE IN A NEMA SIX-PHASE, FULLY-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR BOTH NORTHBOUND AND SOUTHBOUND MD 173. THE SIDE ROAD MOVEMENTS OPERATE CONCURRENTLY.

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MRS. KIM TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 841-1019

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1013

MR. JOE HORTY
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 841-1041

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

EQUIPMENT LIST "A"

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

ITEM NO.	QUANTITY	DESCRIPTION
		NONE

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.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
2 CY	TEST PIT EXCAVATION
325 LF	5 INCH HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKING
642 LF	5 INCH HEAT APPLIED YELLOW THERMOPLASTIC PAVEMENT MARKING
85 LF	24 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
2 EA	HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKING ARROWS
30 EA	12 INCH LED SIGNAL HEAD SECTION
3 EA	8 INCH LED SIGNAL HEAD SECTION
1 EA	27 FT. MAST ARM POLE & 50 FT. MAST ARM
1 EA	16.5 FT. POLE & TWIN 50 FT/70 FT MAST ARMS
2 EA	VIDEO DETECTION CAMERA WITH 300 FT. LEAD-IN CABLE
1 EA	VIDEO DETECTION CAMERA WITH 100 FT. LEAD-IN CABLE
35 LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
80 LF	4 IN. SCHEDULE 80 RIGID PVC CONDUIT- BORED
275 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
1 EA	ELECTRICAL HANDHOLE
65 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO 14 AWG)
1460 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO 14 AWG)
8 CY	CONCRETE FOUNDATION FOR SIGNAL
1 EA	VIDEO INTERFACE EQUIPMENT
2 EA	3/4 IN. X 10 FT. GROUND ROD
2 EA	D3-2 (VAR X 32") SIGN - MAST ARM MOUNT
1 EA	R3-5L (30" X 36") SIGN - MAST ARM MOUNT
1 EA	RELOCATE EXISTING GROUND MOUNTED SIGN
745 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
2 EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING ARROWS
LS	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT

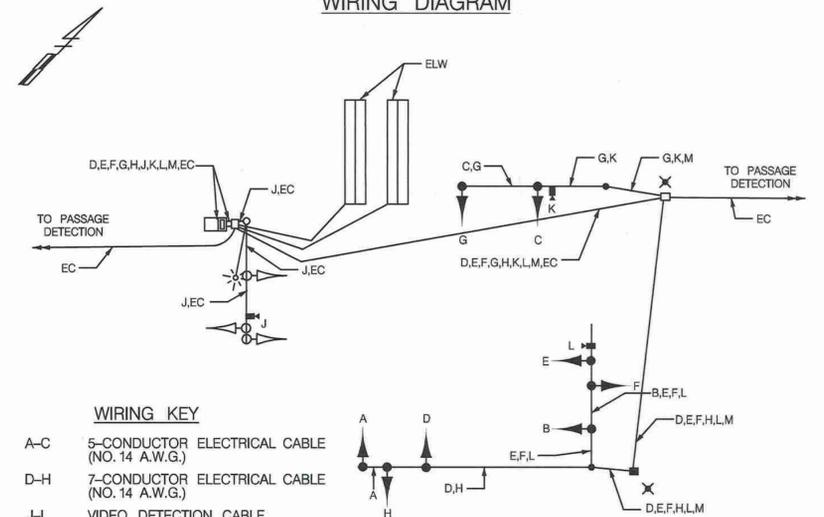
EQUIPMENT LIST "C"

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.

WIRING DIAGRAM



WIRING KEY

- A-C 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D-H 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- J-L VIDEO DETECTION CABLE
- M STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- EC EXISTING CABLE
- ELW EXISTING LOOP WIRE (NO. 14 A.W.G.)
- X GROUND ROD

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11
PHASE 1 & 5	R	R	R	R	R	R	R	R	R	R	R
1 & 5 CHANGE	←G→	←G→	R	←G→	R	R	R	R	R	R	R
PHASE 1 & 6	G	G	G	R	R	R	R	R	R	R	R
1 & 6 CHANGE	←G→	←G→	G	R	R	R	R	R	R	R	R
PHASE 2 & 5	R	R	R	←G→	←G→	G	R	R	R	R	R
2 & 5 CHANGE	R	R	R	←Y→	←Y→	G	R	R	R	R	R
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	R	R
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR

1 RED LINE REVISION
November 22, 2010
REPLACE SIGNAL INDICATION #5 WITH A FIVE SECTION SIGNAL
TEDD Approval: *[Signature]* 12/6/2010

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN
MD 173 (FORT SMALLWOOD RD.)
AND ELIZABETH LANDING WAY/
PASADENA YACHT YARD RD

TRAFFIC CONCEPTS, INC.

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

SCALE NONE DATE 5-9-08 CONTRACT NO. BW996M82

DESIGNED BY T. ZAYDEL COUNTY ANNE ARUNDEL
DRAWN BY T. ZAYDEL LOGMILE
CHECKED BY K. SCHMID T.I.M.S. NO. 1-019
F.A.P. NO. NA TOD NO.

DRAWING NO. TS-4049A GI SHEET NO. 2 OF 2