PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 26 (LIBERTY ROAD) AND McDONOGH ROAD/GREENS LANE IN BALTIMORE COUNTY, MARYLAND. MD 26 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 26 APPROACHES OPERATING CONCURRENTLY AND THE McDONOGH ROAD/GREENS LANE APPROACHES OPERATING SPLIT.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS THE WEST LEG OF MD 26 AND PEDESTRIAN INDICATIONS ARE PROVIDED ACROSS McDONOGH ROAD AND GREENS LANE.

APS NOTES

APS WILL FUNCTION AS FOLLOWS:

1. MD 26 (LIBERTY ROAD)
   - A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE MESSAGE WILL BE "WAIT TO CROSS LIBERTY ROAD".
   - B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.
2. McDONOGH ROAD
   - A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE MESSAGE WILL BE "WAIT TO CROSS McDONOGH ROAD".
   - B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.
3. GREENS LANE
   - A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE MESSAGE WILL BE "WAIT TO CROSS GREENS LANE".
   - B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS), ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER, SYSTEM PACKAGE AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAYBE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-01 (SHOULDER WORK)

STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)

CONTACT PERSONS FOR DISTRICT 4 ARE AS FOLLOWS:

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

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 321-2761

MR. MICHAEL PASQUARIELLO
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 321-2841

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

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

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

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

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

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

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
900000	1	EA	TYPE "G" CABINET WITH PUSHBUTTON FOR POINT CONTROL PERSON
963010	1	EA	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
971017	1	EA	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
900000	1	EA	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
973023	100	SF	SHEET ALUMINUM SIGNS TO CONSIST OF :
			- 4 EACH R10-11b SIGN (24 IN. x 24 IN.) - MAST ARM MOUNT
			- 2 EACH R3-5(L) SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT
			- 2 EACH D-3(2) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT
			- 2 EACH M95-1 MOD. (72 IN. x 40 IN.) - MAST ARM MOUNT
			- 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS McDONOGH ROAD"
			- 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS GREENS LANE"
			- 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS LIBERTY ROAD"

EQUIPMENT LIST 'C'

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST 'B'

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
114285	16	EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS AND NUMBERS
585621	930	L.F.	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	145	L.F.	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585428	4	EA.	LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING ARROW
585426	8	EA.	LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING LETTER

EQUIPMENT LIST 'B'

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

	ITEM NO.		QUANTITY	UNIT	DESCRIPTION
	860284		36	EA	12 INCH VEHICULAR LED TRAFFIC SIGNAL HEAD SECTION
	800000		1	EA	2 WIRE CENTRAL CONTROL UNIT
	800000		6	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
2	818004	5	~~4~~	EA	10 FOOT BREAKAWAY PEDESTAL POLE (CUT 4 OF THE POLES TO 5')
2	800000	5	~~4~~	EA	16 INCH PEDESTRIAN LED SIGNAL HEAD SECTION - POLE MOUNTED (COUNTDOWN)
2	800000	1	~~2~~	EA	16 INCH PEDESTRIAN LED SIGNAL HEAD SECTION - PEDESTAL POLE MOUNTED (COUNTDOWN)
2	818030	0	~~1~~	EA	STEEL POLE WITH A SIGNLE 38 FOOT MAST ARM
	810601		2	EA	NON-INVASIVE DETECTOR, 500 FOOT LEAD IN CABLE
	810605		2	EA	NON-INVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
	800000		1	EA	REMOVE & DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
	800000		1	EA	16.5 FOOT STEEL POLE WITH A TWIN 50/70 MAST ARMS
	816001		2	EA	VIDEO DETECTION CAMERA
	822001		3820	L.F.	12 - PAIR COMMUNICATION CABLE, SELF-SUPPORTING (OVERHEAD)
	800000		70	L.F.	DISCONNECT, PULL-BACK & REROUTE CABLES
2	802501	500	450	L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
	805050		1	EA	WEATHER HEAD, 3 INCH
	807202		1	EA	METERED SERVICE PEDESTAL EMBEDDED
	810010		60	L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
	811001		14	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
	860292		4	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
2	861105	1035	925	L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
	861106		10	L.F.	ELECTRICAL CABLE- 3 CONDUCTOR (NO. 14 AWG)
2	861107	1535	1500	L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
2	861108	1580	1380	L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
	871201		1	EA	INSTALL CONTROLLER AND CABINET - POLE MOUNT
	871202		1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
2	801004	13.4	18	C.Y.	CONCRETE FOR SIGNAL FOUNDATION
	805125		90	L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
	805135		525	L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
	805140		130	L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
2	805150	200	195	L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
2	805155	260	245	L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
	821003		4	EA	BREAKAWAY BASE SUPPORT SYSTEM FOR SIGNAL STRUCTURE
2	837001	9	11	EA	GROUND ROD 3/4 INCH DIAMETER X 10 FOOT LENGTH
	801607		100	S.F.	INSTALL SHEET ALUMINUM SIGN
	816005		1	EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
	816010		1	EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
	800000		1	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT
2	800000	0	~~1~~	EA	16.5 FT. STEEL "T" POLE WITH SINGLE 38 FT. MAST ARM
	860270		6	EA	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
2	800000	1	~~0~~	EA	27 FOOT STEEL POLE WITH A TWIN 50/70 MAST ARMS

2 GREENLINE REVISION 2
SHA CONTRACT NO. BA4335177
7/3/2008

9-8-08

PHOENIX ENGINEERING, INC.
CONSULTING ENGINEERS
1420-A Joh Avenue
BALTIMORE, MARYLAND 21227
(410) 247-8833 FAX 247-9397

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 26 (LIBERTY ROAD) AND
MCDONOGH ROAD/GREENS LANE

GENERAL INFORMATION SHEET

SCALE NONE DATE FEB 28, 2008 CONTRACT NO. BA4335177

DESIGNED BY D.A. COUNTY **BALTIMORE**
DRAWN BY C.F. LOGMILE 03002605.30
CHECKED BY J.H. TIMS NO. H610
FAP NO. SEE TITLE SHEET TOD NO.

TS NØS-447G | DRAWING GI-3 OF GI-4 | SHEET NO. 21 OF 27

PLOTTED:DATETIME:
FILE:FILE:

BY:$USERNAME$

BORDER REV: DATE: June 1, 2004

DRILL HOLES

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