PROJECT DESCRIPTION

GENERAL

THIS PHASE OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 45 (YORK ROAD) AND SEMINARY AVENUE DUE TO THE WIDENING OF MD 45. MD 45 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 45 APPROACHES OPERATING CONCURRENTLY AND THE SEMINARY AVENUE APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR ALL APPROACHES.

PEDESTRIAN INDICATIONS WILL BE PROVIDED ACROSS THE NORTH, SOUTH AND EAST LEGS. UPON THE COMPLETION OF THE MD 45 WIDENING PROJECT, A PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE WEST LEG. ALL PEDESTRIAN SIGNAL HEADS WILL BE COUNTDOWN TYPE.

CONTROLLER REQUIREMENTS

FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH FIVE (5) TWO-CHANNEL AND ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

SPECIAL NOTE

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.

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2781

MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-2761

MR. MIKE PASQUARIELLO
DISTRICT UTILITY ENGINEER
PHONE: (410) 321-2841

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

WIRING DIAGRAM

A,B,C,D, E,F,G,H — 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

J,K, L,M — 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

N,P,Q,R,S, T,U,V,W,X, Y,Z,AA,BB, CC,DD — 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

EE,FF,GG, HH,JJ,KK, LL,MM — 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

NN,PP — 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)

QQ,RR, SS,TT — VIDEO DETECTION LEAD-IN CABLE

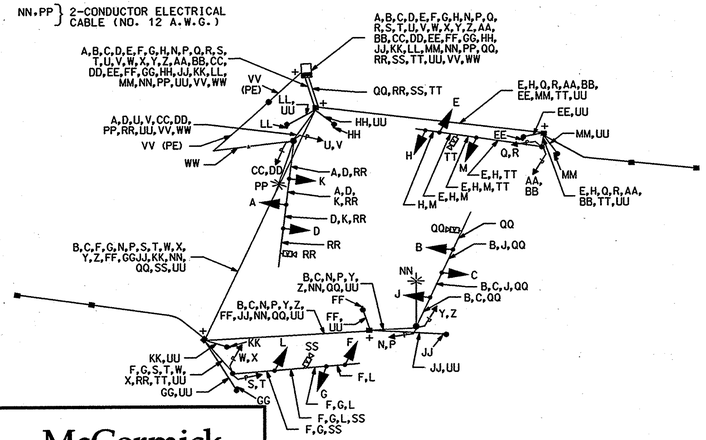
UU — STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

VV — 3-WIRE FOR ELECTRICAL SERVICE (NO. 4 A.W.G.)

WW — 12-PAIR COMMUNICATION CABLE (SEE INTERCONNECT PLANS)

PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE

+ - 3/4 IN. X 10 FT. GROUND ROD



McCormick Taylor
Engineers & Planners Since 1946
509 South Exeter Street
4th Floor
Baltimore, Maryland 21202
(410) 662-7400

BY: WJWARNER

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA:

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
963007	5	EA	TWO-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
963010	1	EA	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
971017	1	EA	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
973023	74	SF	SHEET ALUMINUM SIGNS TO CONSIST OF :
			- 2 EACH R3-5L SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT
			- 1 EACH R3-5R SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT
			- 2 EACH D-3(1) SIGN (VARIABLE x 16 IN.) - MAST ARM MOUNT
			- 1 EACH M95-1-NL (MOD) SIGN (72 IN. x 40 IN.) - MAST ARM MOUNT
			- 1 EACH M95-1-NR (MOD) SIGN (72 IN. x 40 IN.) - MAST ARM MOUNT
			- 8 EACH R10-4(1) SIGN (9 IN. x 12 IN.) - POLE MOUNT
974024	4	EA	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 + 5	R	R	R	R	R	R	R	R	R	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5, OR PHASE 2 + 6												DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 1 + 6	R	R	G	R	R	R	R	R	R	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
1 + 6 CHANGE	R	R	G	R	R	R	R	R	R	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 2 + 5	R	R	R	R	R	G	R	R	R	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
2 + 5 CHANGE	R	R	R	R	R	G	R	R	R	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 3 + 7	R	R	R	R	R	R	R	R	G	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
3 + 7 CHANGE	PHASE 3 + 7 MAY CHANGE TO PHASE 3 + 8, PHASE 4 + 7, OR PHASE 4 + 8												DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 3 + 8	R	R	R	R	R	R	R	R	G	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
3 + 8 CHANGE	R	R	R	R	R	R	R	R	G	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 4 + 7	R	R	R	R	R	R	R	R	R	R	R	G	DARK	DW	DW	DARK	DW	DW	DW	DW
4 + 7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	G	DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	G	G	DARK	DW	DW	DARK	DW	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 6 ALT.	G	G	G	G	G	G	R	R	R	R	R	R	DARK	W	W	DARK	DW	DW	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	DARK	FL/DW	FL/DW	DARK	DW	DW	DW	DW
6 ALT. CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DARK	DW	DW	DARK	DW	DW	DW	DW
PHASE 4 + 8 ALT.	R	R	R	R	R	R	G	G	G	G	G	G	DARK	DW	DW	DARK	W	W	W	W
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	G	G	DARK	DW	DW	DARK	FL/DW	FL/DW	FL/DW	FL/DW
4 + 8 ALT. CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DARK	DW	DW	DARK	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

NOTE: PEDESTRIAN SIGNAL HEADS 13 AND 16 TO BE COVERED UNTIL THE COMPLETION OF THE MD 45 WIDENING PROJECT.

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
800000	4	EA	RELOCATE VIDEO DETECTION CAMERA
800000	8	EA	16 INCH PEDESTRIAN LED SIGNAL HEAD SECTION - POLE MOUNT (COUNTDOWN)
800000	8	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION
801004	27	CY	CONCRETE FOR SIGNAL FOUNDATION
802501	500	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805050	1	EA	WEATHER HEAD, 3 INCH
805140	400	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805155	650	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
807202	1	EA	METERED SERVICE PEDESTAL
811001	7	EA	INSTALL ELECTRICAL HANDHOLE
813014	6	SF	INSTALL GROUND MOUNTED SIGN
813015	68	SF	INSTALL OVERHEAD SIGN
816005	3	EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA CONTROLLER
816010	1	EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA CONTROLLER
818004	8	EA	10 FOOT BREAKAWAY PEDESTAL POLE
821003	9	EA	BREAKAWAY BASE SUPPORT SYSTEM FOR SIGNAL STRUCTURE
831010	2	EA	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
837001	5	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860270	12	EA	8 INCH VEHICULAR TRAFFIC LED SIGNAL HEAD SECTION
860284	40	EA	12 INCH VEHICULAR TRAFFIC LED SIGNAL HEAD SECTION
860292	4	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	1500	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861106	2300	LF	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
861107	100	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	1300	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	350	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
861117	50	LF	ELECTRICAL CABLE - 3 WIRE (NO. 4 AWG)
866103	1	EA	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
866104	1	EA	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
866204	4	EA	INSTALL STEEL POLE AND SINGLE MAST ARM
871117	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
873001	1	LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT

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 AND RELOCATE EXISTING VIDEO INTERFACE EQUIPMENT TO NEW CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE 1

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

MARYLAND 45 (YORK ROAD) WIDENING
CAVAN DRIVE TO RIDGELY ROAD

GENERAL INFORMATION - MD 45 at Seminary Avenue

SCALE NONE DATE 5/78 CONTRACT NO. BA7065171

DESIGNED BY G. HARRIS
DRAWN BY G. HARRIS
CHECKED BY
F.A.P. NO. SEE TITLE SHEET

COUNTY BALTIMORE
LOGMILE 03004503.67
T.I.M.S. NO.
TOD NO.

DRAWING NO. SS-04 OF SS-25 SHEET NO. 72 OF 137

PLOTTED: 03/02/2006
FILE: G:\4674\10\DESIGN\ENGINEERING\PLANSET\SS04MD45.DGN