PROJECT DESCRIPTION

I. GENERAL:

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 7 AND CHESACO AVENUE IN BALTIMORE COUNTY.

MD 7 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION:

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-ACTUATED MODE.

MD 7 THROUGH MOVEMENTS OPERATE CONCURRENTLY. CHESACO AVENUE AND THE SCHOOL BUS DRIVEWAY OPERATE IN SPLIT PHASE. VIDEO CAMERAS AND PROBES PROVIDE DETECTION. NAVIGATOR AUDIBLE PUSHBUTTON PEDESTRIAN ARE PROVIDED TO CROSS THE SOUTH AND EAST LEGS OF THE INTERSECTION.

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: 410-321-2781-2885

MR. DAVID CREIGHTON
ASSISTANT DISTRICT ENGINEER-CONSTRUCTION
410-321-2821

MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
410-321-2761

MR. MIKE PAQUARILLO
DISTRICT UTILITY ENGINEER
410-321-2841

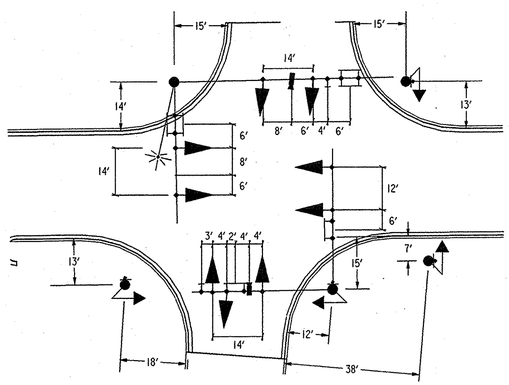
THE CONTACT PERSONS FOR
OFFICE OF TRAFFIC AND SAFETY:

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATION SECTION
PHONE: 410-787-7652

MR. ROBERT SNYDER
ASST. CHIEF, TRAFFIC OPERATION DIVISION
410-787-7631

MR. JAY THAKER
PROJECT MANAGER, TRAFFIC
ENGINEERING DESIGN DIVISION
410-582-5682

DIMENSION DETAIL



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

QUANTITY	DESCRIPTION
1 EA	NEMA EIGHT PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH VIDEO DETECTION UNIT. 1- FOUR CHANNEL RACK MOUNTED AMPLIFIER AND ALL NECESSARY EQUIPMENT.
30 SF	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:
	3 EA D-3(1) (16" X VAR.) MAST ARM MOUNT
	2 EA R10-11b (24"X24")
	4 EA R10-4(1) MOD (9"X12")

EQUIPMENT LIST "B"

CAT. CODE	QUANTITY	DESCRIPTION
203030	3 CY	TEST PIT EXCAVATION
800000	4 EA	FURNISH AND INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
800000	1 EA	2 WIRE NAVIGATOR CENTRAL CONTROL UNIT
800000	8 EA	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION
801004	14 CY	CONCRETE FOR SIGNAL FOUNDATION
805125	40 LF	2" SCHEDULE 80 PVC CONDUIT-TRENCHED
805135	350 LF	3" SCHEDULE 80 PVC CONDUIT-TRENCHED
805140	75 LF	4" SCHEDULE 80 PVC CONDUIT-TRENCHED
805150	80 LF	3" SCHEDULE 80 PVC CONDUIT-SLOTTED
805155	120 LF	4" SCHEDULE 80 PVC CONDUIT-SLOTTED
807202	1 EA	METERED SERVICE PEDESTAL
810010	50 LF	ELEC CABLE - 1 CONDUCTOR NO. 4 AWG-THHN/THWN
810601	2 EA	NON-INVASIVE PROBE WITH 500' LEAD-IN CABLE
811001	10 EA	FURNISH & INSTALL ELECTRICAL HANDHOLE
813015	30 SF	INSTALL SHEET ALUMINUM SIGN
816001	2 EA	VIDEO DETECTOR CAMERA
816005	2 EA	CONTROL CABLE, 250', VIDEO DETECTOR CAMERA TO CONT.
818004	2 EA	10' BREAKAWAY PEDESTAL POLE
818021	1 EA	STEEL POLE WITH TWIN 50' MAST ARMS
818050	1 EA	STEEL POLE WITH TWIN 50' AND 60' MAST ARMS
821003	2 EA	BREAKAWAY BASE SUPPORT SYSTEM FOR SIGNAL STRUCTURE
831010	1 EA	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
832020	400 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
837001	6 EA	GROUND ROD (3/4 " DIA X 10' LENGTH)
860270	3 EA	8" LED SIGNAL HEAD SECTION
860272	27 EA	12" LED SIGNAL HEAD SECTION
860292	4 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	440 LF	ELECTRICAL CABLE 2 - CONDUCTOR NO. 14 AWG
861107	520 LF	ELECTRICAL CABLE 5 - CONDUCTOR NO. 14 AWG
861108	1020 LF	ELECTRICAL CABLE 7 - CONDUCTOR NO. 14 AWG
861116	80 LF	ELECTRICAL CABLE 2 - CONDUCTOR NO. 12 AWG TRAY CABLE
866104	1 EA	20' LIGHTING ARM ON SIGNAL STRUCTURE
871202	1 EA	INSTALL CONTROLLER AND CABINET-BASE MOUNT

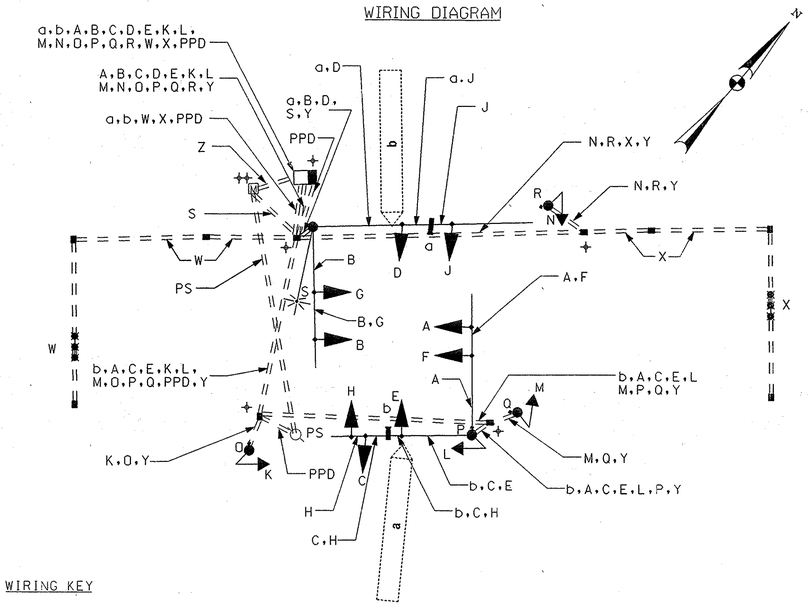
EQUIPMENT LIST "C"

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

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 2 AND 6	G	G	G	G	R	R	R	R	R	W/K	W/K	DW	DW
PED CLEARANCE	G	G	G	G	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	R	R	R	R	G ←G	G ←G	R	R	R	DW	DW	DW	DW
PHASE 3 CHANGE	R	R	R	R	G ←G	G ←G	R	R	R	DW	DW	DW	DW
PHASE 3 ALT	R	R	R	R	G ←G	G ←G	R	R	R	DW	DW	W/K	W/K
PED CLEARANCE	R	R	R	R	G ←G	G ←G	R	R	R	DW	DW	FL/DW	FL/DW
PHASE 3 ALT CHANGE	R	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	G ←G	G	DW	DW	DW	DW
PHASE 4 CHANGE	R	R	R	R	R	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A B C D E	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
F G H J K L M N	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
O P Q R	2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
a b	VIDEO DETECTION CABLE WITH 250' LEAD IN
S	2 CONDUCTOR #12 TRAY CABLE
W X	NON-INVASIVE PROBE
Y	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
Z	(3-WIRES) 1 CONDUCTOR ELECTRICAL CABLE NO. 4 AWG
PS	PROPOSED UNDERGROUND SERVICE FEED
PPD	PROPOSED PHONE DROP
+	GROUND ROD
M	METERED SERVICE PEDESTAL

SHA

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

MD 7 (PHILADELPHIA RD)
AND CHESACO AVE

GENERAL INFORMATION SHEET

SCALE 1" = 20' DATE 10-11-06 CONTRACT NO. BA6885185

DESIGNED BY AJM
DRAWN BY SJW
CHECKED BY PAT
F.A.P. NO.

COUNTY BALTIMORE
LOGMILE 030007000.95
T.I.M.S. NO. F169
TOD NO.

DRAWING NO. TS-1157C SG-4 OF 9 SHEET NO. 165 OF

CENTURY ENGINEERING
CONSULTING ENGINEERS - PLANNERS
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HUNT VALLEY, MD 21031

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BY: amym

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