PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 201 (KENILWORTH AVENUE) AND BUCHANAN STREET IN PRINCE GEORGE'S COUNTY. MD 201 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA 5 PHASE, FULL TRAFFIC ACTUATED MODE. EXCLUSIVE/PERMISIVE LEFT-TURN PHASING IS PROPOSED FOR NORTHBOUND MD 201 VIDEO PRESENCE DETECTION IS PROPOSED FOR BUCHANAN STREET, MALL ENTRANCE AND NORTHBOUND LEFT TURNS ON MD 201. MICROLOOP SETBACK DETECTION IS PROPOSED ALONG NORTHBOUND AND SOUTHBOUND MD 201.

CONTROLLER REQUIREMENTS

INSTALL A NEW EIGHT PHASE FULLY ACTUATED TRAFFIC SIGNAL CONTROLLER, VIDEO DETECTION INTERFACE, TWO FOUR CHANNEL DETECTOR AMPLIFIERS, AND ASSOCIATED HARNESSES 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.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

BRIAN YOUNG
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: 301-513-7358

AUGIE REBISH
UTILITY ENGINEER
PHONE: 301-513-7350

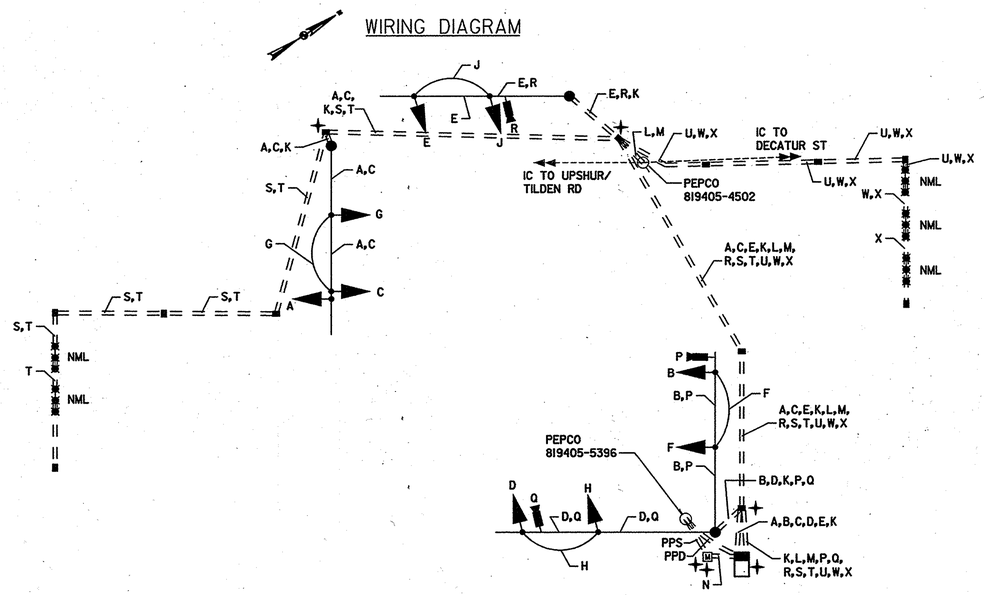
WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: 301-513-7304

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

EDWARD RODENHIZER
CHIEF, SHA TRAFFIC SIGNAL SHOP
PHONE: 410-787-7650

THE POWER COMPANY REPRESENTATIVE IS:
POTOMAC ELECTRIC POWER COMPANY
8300 OLD MARLBORO PIKE
UPPER MARLBORO, MARYLAND 20772
PHONE: 301-961-5325

WIRING DIAGRAM



A,B,C,D,E — ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

F,G,H,J — ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

K — NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

L — EXISTING REROUTED 12-PAIR COMMUNICATION CABLE (SEE INTERCONNECT PLAN)

M — PROPOSED SELF-SUPPORTING 12-PAIR COMMUNICATION CABLE (SEE INTERCONNECT PLAN)

N — ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG THHN/THWN

P,Q,R — VIDEO DETECTION CAMERA LEAD-IN CABLE

S,T,U,W,X — NON-INVASIVE MICROLOOP LEAD-IN CABLE

⏚ — GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH

M — METERED SERVICE PEDESTAL

PPS — PROPOSED POWER SERVICE
(ELECTRICAL CABLE - 1 CONDUCTOR, 250 KCMIL, CU, USE
3 RUNS WITH 3-30' COILS SLACK CABLE AT UTILITY POLE. FINAL
SERVICE CONNECTIONS SHALL BE MADE BY PEPCO FORCES)

PPD — PROPOSED PHONE DROP TO BE INSTALLED BY OTHERS

NML — NON-INVASIVE MICROLOOP PROBE

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

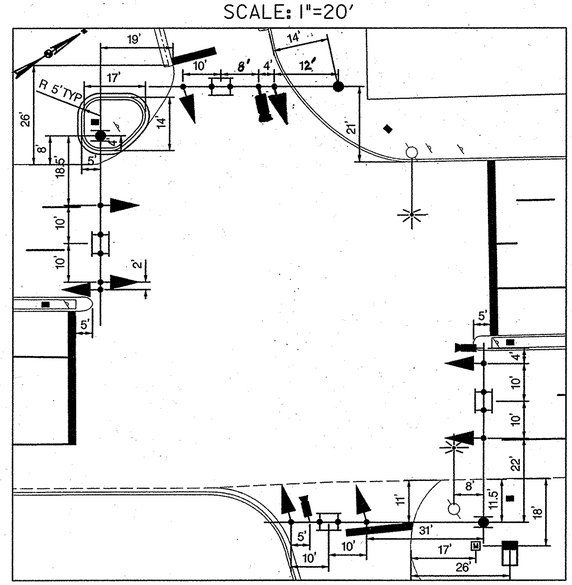
ITEM NO	QUANTITY	DESCRIPTION
9016	2 EA	[UPDATED] 4 CHANNEL DETECTOR AMPLIFIER
9044	1 EA	[UPDATED] CONTROLLER CABINET, SIZE 6
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT:1-4 CAMERAS
9570	26 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
		2 EACH - D95-25 (24 IN. X 24 IN.), W3-3 (36 IN. X 36 IN.)
9571	114 SF	[UPDATED] SHEET ALUMINIUM MAST ARM/POLE MOUNTED SIGN
		1 EACH - SHIELD ASSEMBLY (30" x 51") "NORTH, MD 201, RIGHT ARROW"
		1 EACH - SHIELD ASSEMBLY (30" x 51") "SOUTH, MD 201, RIGHT ARROW"
		1 EACH - SHIELD ASSEMBLY (48" x 75") "SOUTH, MD 201, LEFT ARROW"
		1 EACH - SHIELD ASSEMBLY (48" x 75") "NORTH, MD 201, LEFT ARROW"
		1 EACH - D-3(1) (96 IN. x 16 IN.) DUAL FACED "KENILWORTH AVE"
		1 EACH - D-3(1) (96 IN. x 16 IN.) DUAL FACED "LEFT ARROW, BUCHANAN ST"
		"RIGHT ARROW, BUCHANAN ST"

PHASE CHART

	1	2	3	4	5	6	7	8	9
	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G
PHASE 1 & 6	G	G	G	R	R	R	R	R	R
PHASE 1 CHANGE	G	G	G	R	R	R	R	R	R
PHASE 2 & 6	G	G	G	G	G	R	R	R	R
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R
PHASE 4 & 8	R	R	R	R	R	G	G	G	G
PHASE 4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

SIGNAL LAYOUT DETAIL

SCALE: 1"=20'



EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1001	3 EA	MAINTENANCE OF TRAFFIC
2001	4 CY	CLASS 2 EXCAVATION
2002	3 CY	TEST PIT EXCAVATION
5002	130 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIDTH
5005	115 LF	24 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6001	60 LF	STANDARD TYPE A COMBINATION CURB & GUTTER 12 INCH GUTTER PAN AND 8 INCH DEPTH
6002	465 SF	4 INCH CONCRETE SIDEWALK
8001	28 EA	12 INCH LED SIGNAL HEAD SECTION
8019	1 EA	MAST ARM POLE & 50 FT MAST ARM ANY 'T' DIMENSION
8021	5 EA	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000 FT
8022	1 EA	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8023	1 EA	TWIN MAST ARM POLE & 50 FT/ 60 FT MAST ARMS ANY 'T' DIMENSION
8026	3 EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT
8031	130 LF	CABLE - 1 CONDUCTOR, 250 KCMIL, CU, USE
8034	130 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8035	470 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8036	320 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8037	20 LF	WOOD SIGN SUPPORTS UP TO 4 X 6
8039	140 SF	INSTALL OVERHEAD AND GROUND MOUNTED SIGNS
8041	250 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8043	1 EA	METERED SERVICE PEDESTAL EMBEDDED
8045	15 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8047	12 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8056	100 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	950 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8065	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
8016	1 EA	MAST ARM & POLE 38 FT MAST ARM ANY 'T' DIMENSION
8004	3 EA	8 INCH LED SIGNAL HEAD SECTION

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE	NONE	NONE

ALL REMOVED MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

TOD NO:PG573A59/B59
SHA NO:AT10-28
MD 201@ BUCHANAN ST.

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

MD 201 (KENILWORTH AVENUE) AT BUCHANAN STREET

RJM ENGINEERING, INC.
CONSULTING ENGINEERS
COLUMBIA, MARYLAND

GENERAL INFORMATION

SCALE NONE DATE 02/2008 CONTRACT NO. AT9105185

DESIGNED BY P. WESTCOTT COUNTY PRINCE GEORGES
DRAWN BY P. WESTCOTT LOGMILE 16020102.67
CHECKED BY B. BIDDLE CJW TIMS NO. 1009
FAP NO. N/A TOD NO. N/A

TS NO. 4603-GI | DRAWING SG - 02 OF 04 | SHEET NO. 2 OF 4

PLOTTED: $DATETIME$
FILE: $FILE$

BY: $USERNAME$