F. H. WA. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS

PROJECT DESCRIPTION

GENERAL

This project involves the installation of a new traffic control signal at US Route 1 and Ammendale South Business Campus Entrance in Prince George's County. US Route 1 is assumed to run in a north-south orientation.

INTERSECTION OPERATIONS

The intersection will operate in a NEMA three phase, semi-actuated mode with the US Route 1 approaches running concurrently and the Ammendale South Business Campus Entrance running on a separate phase.

Exclusive/permissive left turn phasing will be provided on the northbound US Route 1 approach.

CONTROLLER REQUIREMENTS

Install a full-traffic-actuated, eight phase controller with one (1), four channel, time-delay-output loop detector amplifier, intersection monitor with battery back-up for phone drop, telemetry module in a NEMA size '6' base mounted cabinet. The contractor shall deliver the cabinet to Mr. Ed Rodenhizer at 7491 Connelley Drive, Hanover, MD 21076 for wiring and testing at least 14 days prior to installing it in the field.

MAINTENANCE OF TRAFFIC

THE FOLLOWING WORK ZONE TRAFFIC CONTROL STANDARDS SHALL BE USED FOR THE PROJECT:

STANDARD NO. MD-104.44-01 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.45-01 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.48-01 (INTERSECTION LEFT LANE/TURN BAY CLOSURE)

STANDARD NO. MD-104.02-01 (FLAGGING OPERATION)

STANDARD NO. MD-104.03-01 (INTERSECTION FLAGGING)

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

MR. CHARLIE K. WATKINS
DISTRICT ENGINEER
(301) 513-7311

MR. MAJID SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(301) 513-7358

MR. RANDY BROWN
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 531-7304

MR. AUGUSTINE REBISH
ASSISTANT DISTRICT ENGINEER - UTILITY
(301) 513-7350

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
(301) 787-7630

MR. BARRY KING
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
(410) 787-4011

THE POWER COMPANY REPRESENTATIVE IS:

MR. RAYMOND DURANT
POTOMAC ELECTRIC POWER COMPANY
8300 OLD MARLBORO PIKE
UPPER MARLBORO, MARYLAND 20772

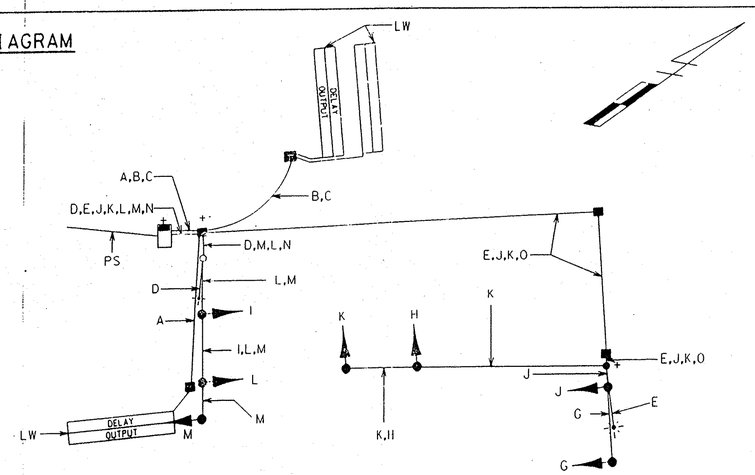
EQUIPMENT LIST

QUANTITY	DESCRIPTION
4 EACH	FURNISH AND INSTALL 12", ONE-WAY, THREE-SECTION (R, Y, G) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS
2 EACH	FURNISH AND INSTALL 12", ONE-WAY, FIVE-SECTION (R, Y, YA, G, GA) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS
1 EACH	FURNISH AND INSTALL 8" / 12" ONE-WAY, FIVE-SECTION (R,Y,YA,G,GA) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS
2540 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
141 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2-CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)
284 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (NO. 12 A.W.G.)
66 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5-CONDUCTOR (NO. 14 A.W.G.)
622 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7-CONDUCTOR (NO. 14 A.W.G.)
328 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
2 EACH	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
2 EACH	FURNISH AND INSTALL 20 FT. LIGHTING BRACKET FOR TRAFFIC SIGNAL STRUCTURE
1 EACH	FURNISH AND INSTALL CONTROLLER AND CABINET-BASE MOUNT
1 EACH	CONTROL AND DISTRIBUTION EQUIPMENT
1 EACH	FURNISH AND INSTALL A FOUR CHANNEL, TIME DELAY OUTPUT, LOOP DETECTOR AMPLIFIER

EQUIPMENT LIST, CONT.

QUANTITY	DESCRIPTION
LUMP SUM	MAINTENANCE OF TRAFFIC
2 CY	TEST PIT EXCAVATION
10 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
172 LF	FURNISH AND INSTALL STRANDED BARE COPPER GROUND (NO. 6 A.W.G.)
194 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
37 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
6 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
5 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
85 LF	FURNISH AND INSTALL 4 IN. BY 4 IN. WOOD SIGN SUPPORTS
66 SF	FURNISH AND INSTALL GROUND MOUNTED SIGNS
11 SF	FURNISH AND INSTALL MAST ARM MOUNTED SIGNS
1 EACH	FURNISH AND INSTALL MAST ARM POLE AND 50 FT. MAST ARM
1 EACH	FURNISH AND INSTALL MAST ARM POLE AND TWIN 50 FT. / 70 FT. MAST ARMS
1 EACH	USE EXISTING DISK AND AS-BUILT TRAFFIC CONTROL DEVICES
3 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
97 LF	FURNISH AND INSTALL 24 IN. WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING TAPE
147 LF	FURNISH AND INSTALL 8 IN. WHITE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING TAPE
1 EACH	FURNISH AND INSTALL PAVEMENT MARKING ARROW
4 EACH	FURNISH AND INSTALL PREFORMED PAVEMENT MARKING LETTER

WIRING DIAGRAM



A, B, C — 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED: NO. 14 A.W.G.)

D, E — 2-CONDUCTOR ELECTRICAL CABLE NO. 12 A.W.G.

G, H, I — 5-CONDUCTOR ELECTRICAL CABLE NO. 14 A.W.G.

J, K, L, M — 7-CONDUCTOR ELECTRICAL CABLE NO. 14 A.W.G.)

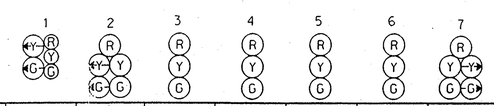
N, O — STRANDED BARE COPPER WIRE (NO. 6 A.W.G.)

LW - LOOP WIRE (NO. 14 A.W.G.)

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

PS PROPOSED ELECTRICAL SERVICE

PHASE CHART



	1	2	3	4	5	6	7
PHASE 1+ 6	G —G—	G —G—	G	R	R	R	R —G—
1+ 6 CHANGE	G —Y—	G —Y—	G	R	R	R	R —Y—
PHASE 2 + 6	G	G	G	G	G	R	R
2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R
PHASE 4	R	R	R	R	R	G	G —G—
4 CHANGE	R	R	R	R	R	Y	Y —Y—
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R

ENGINEERS-ARCHITECTS-PLANNERS-SCIENTISTS-SURVEYORS-PHOTOGRAMMETRISTS
GREENHORNE & O'MARA, INC.
9001 EDMONSTON ROAD, GREENBELT, MARYLAND 20770
(301) 982-2800
ANNAPOLIS,MD-ATLANTA,GA-FAIRFAX,VA-ORLANDO,FLA
TAMPA,FLA-WEST PALM BEACH,FLA-RALEIGH,NC-ROCKVILLE,MD

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	—A——A—
ELECTRIC	—E——E—
TELEPHONE	—T——T—
GAS	—G——G—
SEWER	—S——S—
WATER	—W——W—
CABLE TV	—TV——TV—

REVISIONS

APPROVALS

CHIEF, SIGN DESIGN SECTION

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DIVISION

DEPUTY CHIEF ENGINEER, OFFICE OF TRAFFIC

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

LOG MILE 8.98

DRAWN BY: KEITH RINIKER
DES. BY: KEITH RINIKER
CHK. BY: JOHN CHRISTMAN
DATE: MAY 11, 1998
SCALE: 1" = 20'

GENERAL INFORMATION SHEET
US ROUTE 1 AT
AMMENDALE SOUTH ENTRANCE

F.A.P. NO.
S.H.A. NO.
TS/FILE NO. TS-3793
SHEET NO. 2 OF 2