PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new traffic control signal at the intersection of MD 193 at Reedie Drive in Montgomery County, Maryland. MD 193 is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection is to operate as a pedestrian actuated crossing signal. The normal operation for the MD 193 through movements will be flashing yellow. The Reedie Drive normal operation will be flashing red.

Upon actuation of the pedestrian phase all intersection vehicle movements are to stop with the pedestrian indication being provided across the east leg of the intersection.

An eight phase, full-traffic-actuated, solid state digital controller with LAU and harness, and battery back-up, housed in a base mounted cabinet are to be installed at this location.

EQUIPMENT LIST

A. Equipment to be furnished by S.H.A.

	Item No.	Quantity	Units	Description
	9013	2	EA	(Mast arm mt.) 12 in., one-way, two section signal head [aluminum].
	9024	5	EA	(Mast arm mt.) 8 in./ 12 in., one-way, three section signal head [aluminum].
	9027	2	EA	(Pedestal pole mt.) 12 in., one-way, two section pedestrian signal head [aluminum].
	9086	1	EA	Cabinet for Montgomery County with LAU, size 6.
	9087	1	EA	Controller ASC II with telemetry.
	9090	9.3	SF	16 in. x 72 in. aluminum sign - D-3(1).
	9090	32	SF	16 in. x 84 in. (Dual Faced) aluminum sign - D-3(1).
	9096	2	EA	Pushbutton and sign.
	9104	3	EA	Sign hardware - under mast arm astro bracket 84 in. cable.
1	9034	2	EA	(Side of pole mount) 12 in., 1-way, 1-section signal head.[aluminum].
1	9090	2	EA	36 in. x 36 in. aluminum sign - W2-2.
1	9090	1	EA	36 in. x 36 in aluminum sign - W11-2.

B. Equipment to be furnished and/or installed by the Contractor.

	Item No.	Quantity	Units	Description
	1001	1	EA	Maintenance of traffic per assignment.
	1003	1	EA	Mobilization out of contract area.
	2001	4	CY	Test pit excavation.
	5001	30	LF	6 in. yellow permanent preformed pavement marking tape.
	5009	100	LF	12 in. white thermoplastic pavement marking tape.
	5010	105	LF	24 in. white thermoplastic pavement marking tape.
	6001	25	SF	4 in. concrete sidewalk.
1	8001	10.95	CY	Concrete for signal foundation.
	8003	1	EA	Breakaway pedestal pole (10 ft.).
1	8003	1	EA	Breakaway pedestal pole (14 ft.).
	8006	2	EA	Cut, clean, galvanize, and cap traffic signal structure.
	8008	3	EA	3 in. weatherhead.
	8010	600	LF	Steel span wire 1/4 in. diameter.
1	8011	11	EA	Install signal head (any type).
	8018	2	EA	Install pushbutton with sign.
	8020	1	EA	Install controller and cabinet - base mount.
1	8024	285	LF	2 in. electrical conduit - PVC [Schedule 80] - trenched.
	8027	15	LF	3 in. electrical conduit - PVC [Schedule 80] - trenched.
	8030	85	LF	4 in. electrical conduit - PVC [Schedule 80] - trenched.
	8031	120	LF	4 in. electrical conduit - PVC [Schedule 80] - slotted in roadway.
	8032	45	LF	4 in. electrical conduit - PVC [Schedule 80] - bored.
1	8033	9	EA	Electrical handhole.
1	8034	6	EA	Ground rod (3/4 in. diameter x 10 ft. length).
	8042	400	LF	Electrical cable - 2-conductor (No. 14 A.W.G.).
	8043	420	LF	Electrical cable - 3-conductor (No. 14 A.W.G.).
	8044	90	LF	Electrical cable - 5-conductor (No. 14 A.W.G.).
	8045	900	LF	Electrical cable - 7-conductor (No. 14 A.W.G.).
	8047	1	EA	Mast arm pole and twin (50 ft./ 50 ft.) mast arms
1	8049	320	LF	Stranded bare copper ground wire (No. 6 A.W.G.).
	8050	135	LF	Electrical cable - 1-conductor (No. 4 A.W.G.) THHN/THWN.
	8054	41.3	SF	Install overhead sign.
	8068	20	LF	2 in. electrical conduit PVC [Schedule 80] riser.
	8070	1	EA	Control and distribution equipment (120/240, 1 phase, 3 wire).
	8083	1	EA	Mast arm pole and 60 ft. mast arm.
	Neg.	.5	CY	Removal of existing sidewalk.
1	Neg.	1690	LF	Electrical cable - 5-conductor (No. 12 A.W.G.).
	Neg.	1800	LF	50-Pair communication cable, self-supporting.
1	8025	200	LF	2 in. electrical conduit - PVC [Schedule 80] - slotted in roadway.
1	8053	27	SF	Install ground mounted sign.

CONTACT LIST

The contact persons for District #3 are as follows:

Mr. Charlie Watkins
District Engineer
301-513-7300

Mr. Majid Shakib
Assistant District Engineer - Traffic
301-513-7300

Mr. Augie Rebish
Assistant District Engineer - Utility
301-513-7300

Mr. Randy Brown
Assistant District Engineer - Maintenance
301-513-7300

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

The Power Company Representative is:
Potomac Electric Power Company
Ms. Robyn Law
1610 Gaither Road
Rockville, Maryland 20850
301-931-2876

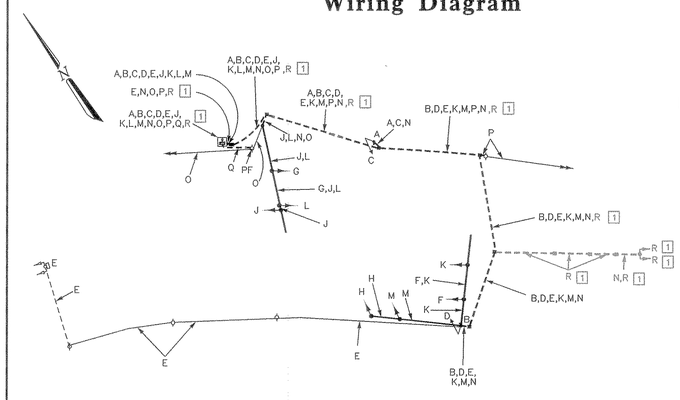
Phase Chart

	1	2	3	4	5	6	7	8-9	13,14	26,27
	R Y Y	R Y Y	R Y Y	R Y Y	R Y Y	R R	R R	R R	Y	Y
1 Normal Operation	8" FL/Y	8" FL/Y	8" FL/Y	8" FL/Y	8" FL/Y	FL/R DARK	FL/R DARK	DW	DARK	DARK
1 Flashing Operation	8" FL/Y	8" FL/Y	8" FL/Y	8" FL/Y	8" FL/Y	FL/R DARK	FL/R DARK	DARK	DARK	DARK

Pedestrian Crossing Phase

	1	2	3	4	5	6	7	8-9	13,14	26,27
First Change Interval	8" Y Quick Flash	8" Y Quick Flash	8" Y Quick Flash	8" Y Quick Flash	8" Y Quick Flash	R R	R R	DW	FL/Y	FL/Y
Second Change Interval	12" Y	12" Y	12" Y	12" Y	12" Y	R R	R R	DW	FL/Y	FL/Y
Ped Phase	R	R	R	R	R	R R	R R	WK	FL/Y	FL/Y
Ped Clearance	R	R	R	R	R	R R	R R	FL/DW	FL/Y	FL/Y
Ped Change	8" FL/Y	8" FL/Y	8" FL/Y	8" FL/Y	8" FL/Y	FL/R DARK	FL/R DARK	DW	DARK	DARK

Wiring Diagram



A, B — 2-Conductor Electrical Cable (No. 14 A.W.G.)

C, D — 3-Conductor Electrical Cable (No. 14 A.W.G.)

1 E, R — 5-Conductor Electrical Cable (No. 12 A.W.G.)

F, G, H — 5-Conductor Electrical Cable (No. 14 A.W.G.)

J, K, L, M — 7-Conductor Electrical Cable (No. 14 A.W.G.)

N — Bare Copper Ground Wire (No. 6 A.W.G.)

O — 12-Pair Voice Grade Telemetry Interconnect Cable (No. 19 A.W.G.) (Amherst Ave - Reedie Dr Run)

P — Existing Interconnect Cable (Reedie Dr - Inwood Ave Run)

Q — 3 - 1-Conductor Electrical Cables (No. 4 A.W.G.)

PF — Proposed Underground Electrical Service By PEPCO

1 REDLINE REVISION
January 11, 1999

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MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information)

MD 193 at Reedie Drive

DATE: October 23, 1998 — LOG MILE # 15019301.96

DRAWN BY: J. Dirndorfer	F.A.P. NO. N/A	PLAN SHEET NO.: 3646-GI	SHEET NO. 2 of 2
CHK. BY:	S.H.A. NO.		
SCALE: N/A	COUNTY: MONTGOMERY		

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