PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of an existing signal to provide for an additional eastbound left turn lane and new median at the intersection of MD 193 and Cherrywood Lane/60th Avenue. The existing strain poles and span wires will be removed and new signal poles and mast arms will be installed. The existing loop detectors will be replaced with detection cameras.

II. INTERSECTION OPERATION

1. The intersection is to operate in a NEMA 8-phase, semi-actuated mode, with the North-South approaches running separately.

III. CONTROLLER REQUIREMENT

1. Re-use a semi-traffic-actuated, eight-phase controller in an existing NEMA size "6" base mounted cabinet. Video interface equipment will be installed.

IV. SPECIAL NOTES

1. The Maryland State Highway Administration Signal Shop shall be responsible for installing all new equipment in the cabinets.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

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

MR. RICHARD DAFF
DIVISION CHIEF, TOD
(410) 787-7630

MR. DENNIS McMAHON
ADE CONSTRUCTION
(301) 513-7345

MR. MAJID SHAKIB
ADE TRAFFIC
(301) 513-7358

MR. EDWARD RODENHIZER
CHIEF OF SIGNAL OPERATIONS
(410) 787-7652

EQUIPMENT LIST A

A. EQUIPMENT TO BE FURNISHED BY SHA AND INSTALLED BY CONTRACTOR.

QUANTITY	DESCRIPTION
125 SF	SHEET ALUMINUM SIGNS
- 1 EACH	R3-5R SIGN (30" X 36") - MAST ARM MOUNT
- 4 EACH	R3-5L SIGN (30" X 36") - MAST ARM MOUNT
- 1 EACH	R3-6 SIGN (30" X 36") - MAST ARM MOUNT
- 6 EACH	D3-2 (VAR. X 16") DUAL- FACED - MAST ARM MOUNT
1 EACH	INTERFACE EQUIPMENT FOR CAMERAS

EQUIPMENT LIST B

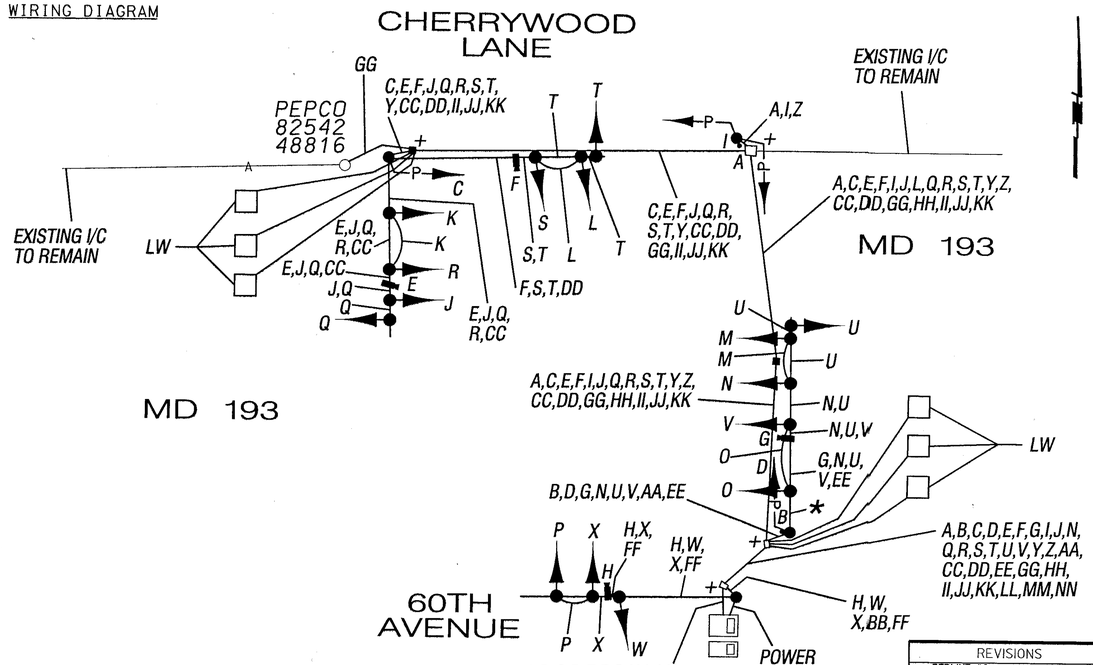
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR.

QUANTITY	DESCRIPTION
2 EACH	PEDESTRIAN PUSHBUTTON AND R10-4(2) SIGN - "PUSHBUTTON TO CROSS GREENBELT RD."
390 LF	SAWCUT FOR SIGNAL (LOOP DETECTOR)
LS	MAINTENANCE OF TRAFFIC
2 CY	TEST PIT EXCAVATION
15 CY	CONCRETE FOR SIGNAL FOUNDATION
350 LF	12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
180 LF	24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
4 EACH	¾ IN. X 10 FT. GROUND ROD
2 EACH	MAST ARM POLE AND 60 FT. MAST ARM
1 EACH	MAST ARM POLE AND TWIN 50 FT./60 FT. MAST ARMS
470 LF	RECONNECT I/C WIRE
1300 LF	LOOP WIRE (NO. 14 AWG)
51 EACH	12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
4 EACH	12 IN. PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT
4 EACH	12 IN. PEDESTRAIN SIGNAL HEAD SECTION PEDESTAL POLE MOUNT

PHASING SEQUENCE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
PHASE 01 & 05	◀G—	◀G—	◀G—	R	R	◀G—	◀G—	R	R	R	R	R	R	R	R —G▶	DW	DW	DW	DW
PHASE 01 & 05 CHANGE	◀Y—	◀Y—	◀Y—	R	R	◀Y—	◀Y—	R	R	R	R	R	R	R	R —Y▶	DW	DW	DW	DW
PHASE 02 & 06	R	R	R	G	G	R	R	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR	R	R	R	G	G	R	R	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
PHASE 02 & 06 CHANGE	R	R	R	Y	Y	R	R	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 03	R	R	R	R	R	R	R	R	R	R	R	R	G ◀G—	G ◀G—	G —G▶	DW	DW	DW	DW
PHASE 03 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y —Y▶	DW	DW	DW	DW
PHASE 04	R	R	R	R	R	R	R	R	R	G ◀G—	G ◀G—	G	R	R	R	DW	DW	DW	DW
PHASE 04 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 04 ALT	R	R	R	R	R	R	R	R	R	G ◀G—	G ◀G—	G	R	R	R	DW	DW	WK	WK
PED CLEAR	R	R	R	R	R	R	R	R	R	G ◀G—	G ◀G—	G	R	R	R	DW	DW	FL/DW	FL/DW
PHASE 04 ALT CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/◀R—	FL/◀R—	FL/◀R—	FL/Y	FL/Y	FL/◀R—	FL/◀R—	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM



A.B	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
C.D.E.F.G.H	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
I.J.K.L.M.N.O.P	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
Q.R.S.T.U.V.W.X	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
Y.Z.AA.BB	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
CC.DD.EE.FF	POWER SERVICE FOR CAMERA
+	¾ IN. X 10 FT. GROUND ROD
GG.HH	INTERCONNECT WIRE
II.JJ.KK.LL.MM.NN	2-CONDUCTOR ELECTRICAL CABLE - ALUM. SH. (NO. 14 A.W.G.)

EQUIPMENT LIST B CONTINUED

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR.

QUANTITY	DESCRIPTION
30 LF	4 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED)
320 LF	4 IN. SCHEDULE 80 RIGID PVC CONDUIT (SLOTTED)
30 LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED)
40 LF	2 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED)
1 EACH	10 FT. BREAKAWAY PEDESTAL POLE
2 EACH	ELECTRICAL HANDHOLE
LS	REMOVE AND DISPOSE OF EXISTING MATERIALS
680 LF	ELECTRICAL CABLE-5 CONDUCTOR (NO.14 AWG)
1700 LF	ELECTRICAL CABLE-7 CONDUCTOR (NO. 14 AWG)
480 LF	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
1130 LF	ELECTRICAL CABLE-3 CONDUCTOR (NO. 14 AWG)
210 LF	ELECTRICAL CABLE-2 CONDUCTOR (NO. 14 AWG)
4 EA	VIDEO DETECTION CAMERA
4 EA	500 FT. OF VIDEO CABLE TO CAMERA
130 LF	1 IN. LIQUID TIGHT FLEX. CONDUIT (NO. 14 AWG)
810 LF	ELECTRICAL CABLE-2 CONDUCTOR - ALUM. SH. (NO. 14 AWG)

EQUIPMENT LIST C

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

TS-2

REVISIONS
2 REDLINE #2 REPLACE SHEET 20 3/7/03 (NEW SHEET)
F SIGNAL RECONSTRUCTION PG3255130

ENGINEERING-PLANNING-EARTH SCIENCES-SURVEYING
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(410) 583-6700
ANNAPOLIS,MD-BALTIMORE,MD-ATLANTA,GA-TAMPA,FL-FAIRFAX,VA-WEST PALM BEACH,FL
ROCKVILLE,MD-BALEIGH,NC-FREDERICKSBURG,VA-WILMINGTON,DE-ST. PETERSBURG,FL

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
Traffic Signal Plan
MD 193 AT CHERRYWOOD LANE AND 60TH AVENUE

DRAWN BY:	STEVE RENZI	F.A.P. NO.		TS NO. 273-F	SHEET NO. 20A OF 20
CHECKED BY:	STEVE RENZI	S.H.A. NO.	P-385-001-385		
SCALE:	1" = 20'	COUNTY:	PRINCE GEORGE'S	T.I.M.S. NO.	
DATE:	JANUARY, 1971	LOG MILE:			

J:/TRANS/0066.008/700cadd/711trans/Signal/TS02(A)RED
March 7, 2003 10:30