BORNER REV: DATE: June 1, 2004

PROJECT DESCRIPTION

GENERAL
This project involves the modification of the existing traffic control signal at MD 193 and Good Luck Road in Prince George's County. For this project, an additional through lane will be added in both the eastbound and westbound directions. MD 193 is assumed to run in an east-west direction. A new crosswalk will be added across the south leg of the intersection.

INTERSECTION OPERATIONS
The advance detectors on eastbound and westbound MD 193 will be replaced due to milling and overlay associated with pavement marking changes. Audible pedestrian pushbuttons and countdown LED pedestrian signals will be installed for the two existing marked crosswalks as well as the new crosswalk.

CONTROLLER REQUIREMENTS
Use existing controller and cabinet.

* New APS/CPS controller unit shall shall be delivered for testing and programming to MDSHA Traffic Signal Shop. ContactMr. Ed Rodenheizer at 410-787-7650 prior to delivery and scheduling.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

MS. FELECIA MURPHY
ADE TRAFFIC, D3
(301) 513-7409

MR. KEVIN NOWAK
MR. DUANE BERNARD
ADE CONSTRUCTION, D3
(301) 513-7336

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

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

MAINTENANCE OF TRAFFIC

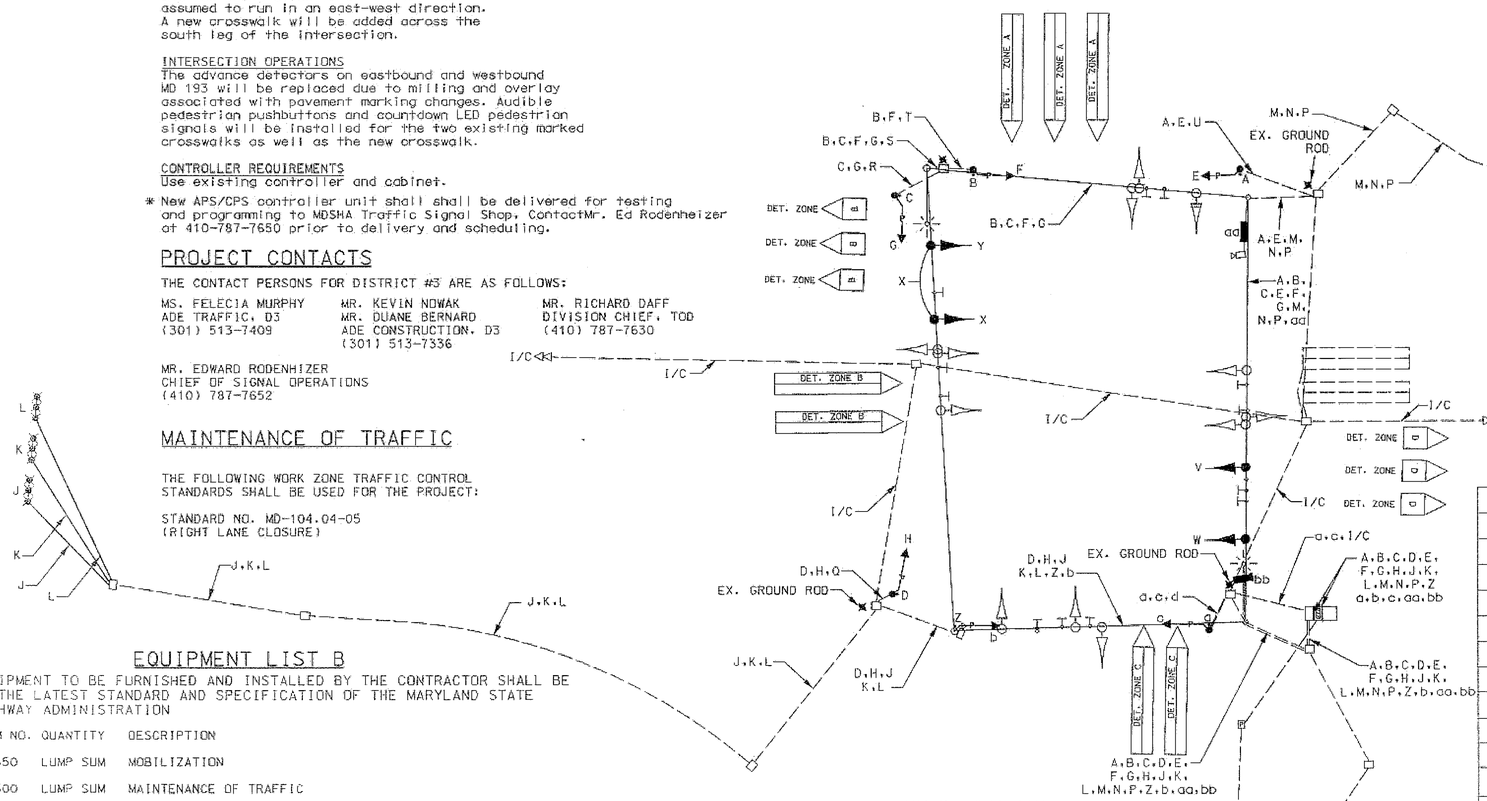
THE FOLLOWING WORK ZONE TRAFFIC CONTROL STANDARDS SHALL BE USED FOR THE PROJECT:

STANDARD NO. MD-104.04-05
(RIGHT LANE CLOSURE)

EQUIPMENT LIST B

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE TO THE LATEST STANDARD AND SPECIFICATION OF THE MARYLAND STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
130850	LUMP SUM	MOBILIZATION
120500	LUMP SUM	MAINTENANCE OF TRAFFIC
500000	11 EA	WHITE PREFORMED PERMANENT SHARK'S TOOTH YIELD LINE PAVEMENT MARKINGS
585448	1325 LF	12 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585452	125 LF	24 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585462	1050 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKING - ANY WIDTH
800000	LUMP SUM	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
800000	6 EA	16 INCH ONE WAY LED COUNTDOWN PEDESTRIAN SIGNAL POST TOP MOUNT
800000	1 EA	* APS CENTRAL CONTROL UNIT (TO BE DELIVERED TO MDSHA TRAFFIC SIGNAL SHOP FOR PROGRAMMING AND TESTING)
801004	4 CY	CONCRETE FOR SIGNAL FOUNDATION
801605	14 SF	SHEET ALUMINUM SIGNS 6 EA R10-3(1)MOD (9"x15") PEDESTAL POLE MOUNT 1 EA W9-2(4) (30"x42") SPAN WIRE MOUNT
802501	75 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805135	100 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805160	200 LF	1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
810555	6 EA	MICROLOOP PROBE, 1000-FT LEAD-IN CABLE
811001	2 EA	FURNISH & INSTALL ELECTRICAL HANDHOLE
818004	6 EA	10 FOOT BREAKAWAY PEDESTAL POLE
837001	2 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
816001	2 EA	VIDEO DETECTION CAMERA, TERRA TYPE WITH EXTENSION ARM
816010	1 EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER



WIRING DIAGRAM

A,B,C,D,Z,a	- 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E,F,G,H,X,b,c	- 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
J,K,L,M,N,P	- 4-CONDUCTOR MICROLOOP LEAD-IN (NO. 22 A.W.G.)
Q,R,S,T,U,d	- STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
V,W,Y	- USE EXISTING CABLE
aa,bb	- VIDEO DETECTION CABLE
⚹	- GROUND ROD
I/C	- EXISTING INTERCONNECT CABLE

EQUIPMENT LIST B (CONT.)

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
860265	4 EA	RELOCATE EXISTING SIGNAL HEAD
861105	1502 LF	ELECTRICAL CABLE - 2-CONDUCTOR (NO. 14 AWG)
861107	1502 LF	ELECTRICAL CABLE - 5-CONDUCTOR (NO. 14 AWG)
865001	6 EA	*AUDIBLE PEDESTRIAN PUSHBUTTON (TO BE DELIVERED TO MDSHA TRAFFIC SIGNAL SHOP FOR PROGRAMMING AND TESTING)

APS WILL FUNCTION AS FOLLOWS:

TO CROSS GREENBELT ROAD

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS GREENBELT AT GOOD LUCK, WAIT."
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

TO CROSS GOOD LUCK ROAD

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS GOOD LUCK AT GREENBELT, WAIT."
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	61	62
PHASE 1 + 5	G	G	G	R	R	G	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 + 5 CHANGE TO 1 + 6, 2 + 5, OR 2 + 6																						
PHASE 1 + 6	G	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	W	W
PED CLEAR	G	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	FL/DW	FL/DW
1 + 6 CHANGE	Y	Y	Y	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 + 5	R	R	R	R	R	G	G	G	G	G	R	R	R	R	R	R	W	W	DW	DW	DW	DW
PED CLEAR	R	R	R	R	R	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
2 + 5 CHANGE	R	R	R	R	R	Y	Y	Y	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 + 6	R	R	R	G	G	R	R	R	G	G	R	R	R	R	R	R	W	W	DW	DW	W	W
PED. CLEAR	R	R	R	G	G	R	R	R	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	FL/DW	FL/DW
2 + 6 CHANGE	R	R	R	Y	Y	R	R	R	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	R	R	R	R	R	G/G	G/G	G	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 3 ALT	R	R	R	R	R	R	R	R	R	R	R	R	R	G/G	G/G	G	DW	DW	W	W	DW	DW
PED. CLEAR	R	R	R	R	R	R	R	R	R	R	R	R	R	G/G	G/G	G	DW	DW	FL/DW	FL/DW	DW	DW
3 ALT CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	R	R	G/G	G/G	G	R	R	R	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

These plans are approved for construction for a period of one (1) year from date of approvals. Should construction not begin within this time limit these documents shall become null and void without a review from the SHA's Traffic Engineering Design Division.

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

MD 193 (Greenbelt Road) at Good Luck Road
GLEN DALE, MD

GENERAL INFORMATION PLAN

SCALE N.T.S. DATE 6/21/01 CONTRACT NO. BW 996M82

DESIGNED BY EAP
DRAWN BY EAP
CHECKED BY JMC
F.A.P. NO.
COUNTY PRINCE GEORGE'S
LOGMILE 16019309.40
T.I.M.S. NO. 1105
TOD NO.

T.S. NO. 93E-01 SHEET NO. 3 OF 14

PLOTTED: Thursday, May 26, 2011 AT 02:52 PM
FILE: J:\TRANS\6344 - Electrical\Final CADD for OOTS 12-12-06\sh\TP-03-ND193dGL.dgn