PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 193 (UNIVERISTY BLVD) AND MD 212 (RIGGS RD) IN PRINCE GEORGES COUNTY. MD 193 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION IS OPERATING IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 193 APPROACHES OPERATING CONCURRENTLY AND THE MD 212 APPROACHES OPERATING SPLIT.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING EXISTS FOR EASTBOUND AND WESTBOUND MD 193 APPROACHES.

AN ALTERNATE PEDESTRIAN PHASE EXISTS ACROSS THE EAST LEG OF MD 193.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-30
STANDARD NO. MD-104.37-01 (LEFT LANE CLOSURE)
STANDARD NO. MD-104.38-01 (RIGHT LANE CLOSURE)
STANDARD NO. MD-104.41-01 (INTERSECTION FAR-RIGHT LANE CLOSURE)
STANDARD NO. MD-104.43-01 (SHOULDER WORK)
STANDARD NO. MD-104.44-01 (LEFT LANE CLOSURE)
STANDARD NO. MD-104.45-01 (RIGHT LANE CLOSURE)
STANDARD NO. MD-104.46-01 (CENTER LANE CLOSURE)
STANDARD NO. MD-104.49-01 (SHOULDER WORK)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. MAHIB SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358

MR. RALEIGH MEDLEY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

MR. AUGIE REBISH
DISTRICT UTILITIES ENGINEER
PHONE: (301) 513-7350

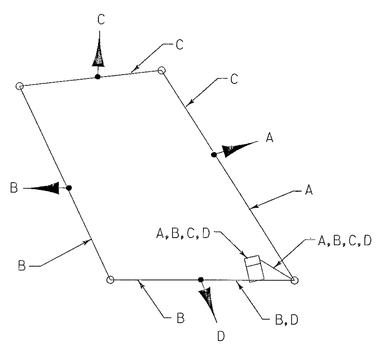
MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

WIRING DIAGRAM

WIRING KEY

A, B, C — 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

D — 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9547	88 S.F.	EXTRUDED ALUMINUM SIGNS TO CONSIST OF :
		- 1 EACH GM-1 SIGN (90 IN. x 60 IN.) - GROUND MOUNT
		- 2 EACH GM-2, GM-3 SIGNS (60 IN. x 60 IN.) - GROUND MOUNT
9570	43 S.F.	SHEET ALUMINUM GROUND MOUNTED SIGNS TO CONSIST OF:
		- 1 EACH D3-3 SIGN (72 IN. x 24 IN.) - GROUND MOUNT
		- 1 EACH M3-2 (30" x 15"), M1-5 (48" x 36"), AND M6-1 (30" x 24") - GROUND MOUNT
		- 1 EACH M3-2 (24" x 12"), M1-5 (30" x 24"), AND M6-1 (21" x 15") - GROUND MOUNT
9571	108 S.F.	SHEET ALUMINUM POLE MOUNTED SIGNS TO CONSIST OF:
		- 1 EACH ASSOCIATED SHIELD ASSEMBLY "SOUTH MD 212, RIGHT ARROW (30" x 51") - POLE MOUNT
		- 1 EACH ASSOCIATED SHIELD ASSEMBLY "NORTH MD 212, RIGHT ARROW (30" x 51") - POLE MOUNT
		- 1 EACH ASSOCIATED SHEILD ASSEMBLY "SOUTH MD 212, LEFT ARROW (48" x 75") - POLE MOUNT
		- 1 EACH ASSOCIATED SHIELD ASSEMBLY "NORTH MD 212, LEFT ARROW (48" x 75") - POLE MOUNT
		- 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST MD 193, RIGHT ARROW (30" x 51") - POLE MOUNT
		- 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST MD 193, LEFT ARROW (48" x 75") - POLE MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

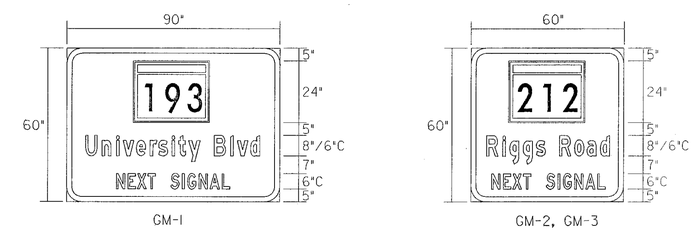
ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA.	MAINTENANCE OF TRAFFIC
2002	2 C.Y.	TEST PIT EXCAVATION
8011	39 EA.	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8019	12 EA.	FURNISH AND INSTALL 8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8048	1 EA.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT AS PER ASSIGNMENT
8061	72 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 IN. x 6 IN.
8075	36 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 6 IN. x 6 IN.
8076	131 S.F.	INSTALL GROUND MOUNTED SIGN
8077	108 S.F.	INSTALL OVERHEAD SIGN
8086	140 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G)
8087	550 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G)
8060	60 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 IN. x 4 IN.

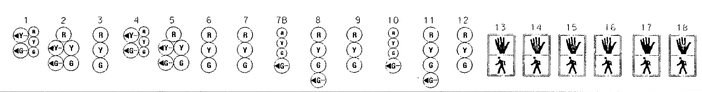
PROPOSED SIGN DETAIL



PANEL NO.	QUANTITY	AREA (SQ.FT.)	WIDTH	HEIGHT	COLOR		BORDER		ARROW	SHIELD
					LEG.	BKGD	WIDTH	RADIUS		
GM-1	1	37.5	7'-6"	5'-0"	W	G	2"	6"	---	M1-5(1) (30" x 24")
GM-2,3	2	25	5'-0"	5'-0"	W	G	2"	6"	---	M1-5(1) (30" x 24")
REMARKS: EXTRUDED ALUMINUM										

BLK=BLACK; BLU=BLUE; BRO=BROWN; G=GREEN; OR=ORANGE; R=RED; W=WHITE; Y=YELLOW

PHASE CHART



	1	2	3	4	5	6	7	7B	8	9	10	11	12	13	14	15	16	17	18	
PHASE 1 + 5	R G	R C	R	R C	R C	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	
1 + 5 CHANGE	R Y	R Y	R	R Y	R Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 1 + 6	C G	C C	G	R	R	R	R	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW	
1 + 6 CHANGE	C Y	C Y	G	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 2 + 5	R	R	R	C G	C G	G	R	R	R	R	R	R	R	WK	DW	DW	WK	DW	DW	
2 + 5 CHANGE	R	R	R	C Y	C Y	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 3	R	R	R	R	R	R	G	C G	C G	G	R	R	R	DW	DW	DW	DW	DW	DW	
3 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 4	R	R	R	R	R	R	R	R	R	R	C C	C C	G	DW	DW	DW	DW	WK	WK	
4 CHANGE	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	C C	C C	G	DW	DW	DW	DW	WK	WK	
PED CLEARANCE	R	R	R	R	R	R	R	R	R	R	C C	C C	G	DW	DW	DW	DW	FL/DW	FL/DW	
4 ALT CHANGE	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	

REVISION "A"

WMR&A
Whitman, Requardt and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 193 (UNIVERSITY BLVD.) AT MD 212 (RIGGS RD)

DRAWN BY: B. DONOWAY	F.A.P. NO.		TS NO. TS-714A	SHEET NO.
CHECKED BY: B. MARTINE	S.H.A. NO.	PG 193 A 5M		
SCALE: NONE	COUNTY:	PRINCE GEORGES	T.I.M.S. NO. F260	2 OF 2
DATE: $DATE$	LOG MILE:			

$DGNNAME$