PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 129 AND SLADE AVE. IN BALTIMORE COUNTY. THE SIGNAL IMPROVEMENTS INCLUDES NEW MAST ARMS AND POLES,SIGNAL HEADS, AUTO-SCOPE, LIGHTING,SIGNS,NEW CONDUIT,TELEPHONE DROP AND NEW CABINET/CONTROLLER WILL BE PROVIDED FOR MD 129 AT SLADE AVE..

MD 129 RUNS IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

1. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SEVEN PHASE, FULL TRAFFIC ACTUATED MODE. THE MD 129 APPROACHES WILL OPERATE CONCURRENTLY AND THE SLADE AVE. APPROACHES WILL OPERATE CONCURRENTLY.

EXCLUSIVE/ PREMISSIVE LEFT TURN PHASE WILL BE PROVIDED FOR BOTH NORTH AND SOUTHBOUND MD129.

EXCLUSIVE/ PREMISSIVE LEFT TURN PHASE WILL BE PROVIDED OR EASTBOUND SLADE AVE.

A CONCURRENT PEDESTRIAN MOVEMENT WILL OPERATE ACROSS THE WEST LEG OF THE INTERSECTION. AN ALTERNATE PEDESTRAIN MOVEMENT WILL OPERATE ACROSS NORTH LEG OF THE INTERSECTION.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT 4 ARE AS FOLLOWS:

MR. SCOTT RANDALL
ASSISTANCE DISTRICT ENGINEER-TRAFFIC
PHONE: 410-321-2781/2885

MR.DAVE RAMSEY
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: 410-321-2761

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATION SECTION
PHONE: 410-787-7652

MR. JOSEPH McMAHON
DISTRICT UTILITY ENGINEER
PHONE: 410-321-2841

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

MR. ROBERT SNYDER
ASST. CHIEF, TRAFFIC OPERATION DIVISION
PHONE: 410-787-7631

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM	QUANTITY		DESCRIPTION
9081	1	EA	CABINET, INTERSECTION MONITOR, SIZE 6
9571	42	SF	D-3(1) (SLADE AVE) (VAR.X16") MAST ARM MOUNTED
9571	32	SF	R10-12 (LEFT TURN YIELD ON GREEN) (36"X42") MAST ARM MOUNTED
9571	50	SF	SHIELD ASSEMBLY (NORTH,SOUTH MD 129,LEFT,RIGHT ARROWS) (48"X75") POLE MOUNTED
9571	21	SF	SHIELD ASSEMBLY (NORTH,SOUTH MD 129,LEFT,RIGHT ARROWS) (30"X51") POLE MOUNTED
9002	2	EA	(CONT/CAB/ADD) DETECTOR AMPLIFIER 4-CH RACK MT
9003	2	EA	(CONT/CAB/ADD) DETECTOR PANEL
9004	1	EA	(CONT/CAB/ADD) DETECTOR RACK POWER SUPPLY
9087	1	EA	CONTROLLER, ASC II W/ TELEMETRY
9571	8	SF	R3-5 (L) (LEFT TURN) (30"X36") MAST ARM MOUNTED
9021	1	EA	UPDATED 50' MAST ARM SINGLE X 21' POLE
9029	1	EA	UPDATED 60' MAST ARM SINGLE X 21' POLE
9028	1	EA	UPDATED 50'/70' MAST ARM TWIN X 27' POLE
9000	1	EA	15' BRAC ARM FOR SIG STRUCT (27' POLE)

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

ITEM	QUANTITY		DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2002	4	CY	TEST PIT EXCAVATION
5004	460	LF	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	4	EA	VIDEO CABLE TO CONTROLLER (250FT.)
8010	8	EA	FURNISH AND INSTALL 12 INCH PED SIGNAL HEAD SECTION
8011	36	EA	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8014	1	EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8019	9	EA	FURNISH AND INSTALL 8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8020	1	EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240V 1PHASE 3 WIRE SYSTEM)
8029	4	EA	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 500 FT LEAD-IN
8030	1	EA	FURNISH AND INSTALL PEDESTAL POLE (ANY SIZE)
8032	2	EA	FURNISH AND INSTALL PUSHBUTTON AND SIGN
8039	2	EA	INSTALL STEEL POLE AND SINGLE MAST ARM (ANY SIZE)
8040	1	EA	INSTALL STEEL POLE AND TWIN MAST ARM (ANY SIZE)
8047	6	EA	REMOVE AND DISPOSE FOUND 12" BELOW GRADE
8048	1	EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
8049	4	EA	VIDEO DETECTION CAMERA
8050	1	EA	VIDEO INTERFACE EQUIPMENT
8051	75	LF	FURNISH AND INSTALL 3 INCH SCH 80 RIGID PVC CONDUIT - TRENCHED
8053	45	LF	FURNISH AND INSTALL 4 INCH SCH 80 RIGID PVC CONDUIT - TRENCHED
8057	16	CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8060	110	LF	FURNISH AND INSTALL NO 6 AWG STRANDED BARE COPPER GROUND WIRE
8061	35	LF	FURNISH AND INSTALL 1" RIGID METAL ELECTRICAL CONDUIT - GALVANIZED RISER
8067	185	LF	FURNISH AND INSTALL 4 INCH SCH 80 RIGID PVC CONDUIT - SLOTTED
8068	25	LF	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON METALLIC CONDUIT FOR DETECTOR SLEEVE
8070	25	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG- THHN/THWN
8071	45	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 8 AWG- THHN/THWN
8075	145	SF	INSTALL OVERHEAD SIGN
8080	2	EA	FURNISH AND INSTALL GROUND ROD -3/4INCH DIAMETER X 10 FOOT LENGTH
8081	900	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8082	500	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 14 AWG)
8083	660	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO 14 AWG)
8084	140	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO 14 AWG)
8085	2025	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO 14 AWG)
8086	150	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 12 AWG) TYPE "TC"
8088	240	LF	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
8093	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
NEG	1	EA	INSTALL 15' BRAC ARM FOR SIGNAL STRUCTURE (27' POLE)

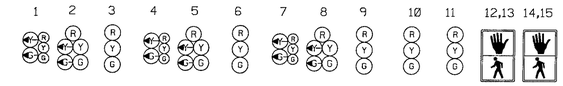
NOTE: EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND NOT LISTED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST CONT.

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

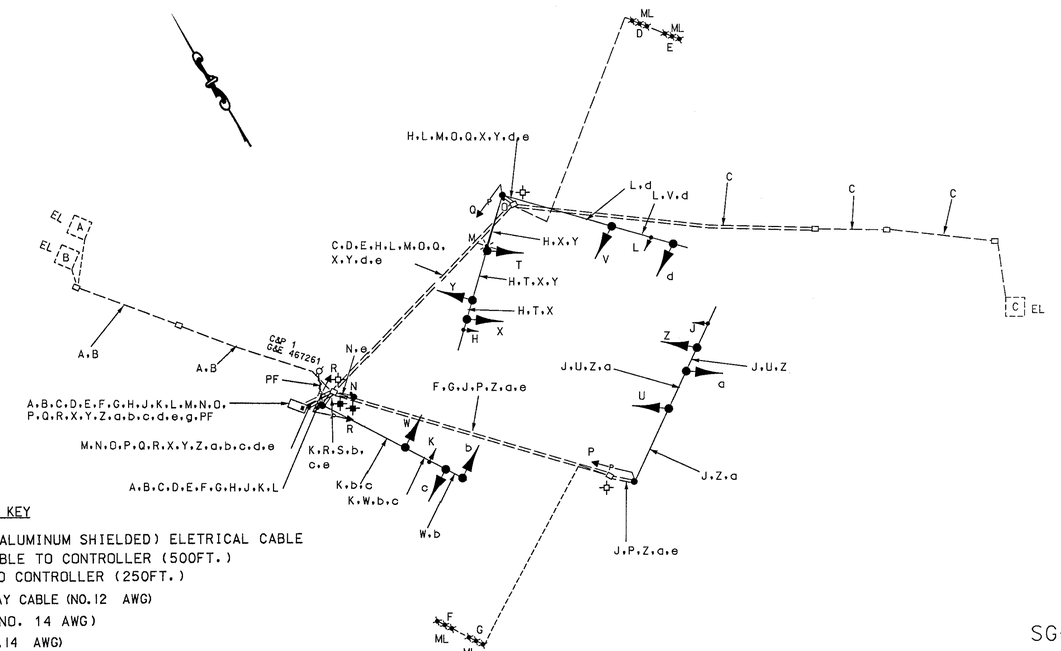
1 EA CONTROLLER AND CABINET - POLE MOUNT

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12,13	14,15
Phase 1 & 5	R, G	R, G	R	R, G	R, G	R	R	R	R	R	R	DW	DW
1 & 5 change to phase 1 & 6,2 & 5,or 2 & 6													
Phase 1 & 6	R	R	R	G, G	G, G	G	R	R	R	R	R	DW	DW
1 & 6 change	R	R	R	G, Y	G, Y	G	R	R	R	R	R	DW	DW
Phase 2 & 5	G, G	G, G	G	R	R	R	R	R	R	R	R	DW	DW
2 & 5 change	G, Y	G, Y	G	R	R	R	R	R	R	R	R	DW	DW
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	WK	DW
PED Clearance	G	G	G	G	G	G	R	R	R	R	R	FL/DW	DW
2 & 6 change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW
Phase 3 & 8	R	R	R	R	R	R	G, G	G, G	G	R	R	DW	DW
3 & 8 change	R	R	R	R	R	R	G, Y	G, Y	G	R	R	DW	DW
Phase 4ALT & 8	R	R	R	R	R	R	G	G	G	G	G	DW	WK
PED Clearance	R	R	R	R	R	R	G	G	G	G	G	DW	FL/DW
4ALT & 8change	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G	G	DW	DW
4 & 8 change	R	R	R	R	R	R	Y	Y	Y	Y	Y	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	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A - C	2 CONDUCTOR (ALUMINUM SHIELDED) ELETRICAL CABLE
D - G	MIRCO LOOP CABLE TO CONTROLLER (50OFT.)
H,J,K,L	VIDEO CABLE TO CONTROLLER (250FT.)
M	2 CONDUCTOR TRAY CABLE (NO.12 AWG)
N,O	2 CONDUCTOR (NO. 14 AWG)
P,Q	3 CONDUCTOR (NO.14 AWG)
R,T-W	5 CONDUCTOR (NO.14 AWG)
X-d	7 CONDUCTOR (NO. 14 AWG)
e	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
ML	MIRCO LOOP PROBE SET(3)
PF	PROPOSED OVERHEAD FEED-BY BGE
EL	EXISTING LOOP WIRE
f	3 WIRE (NO.: 4 AWG) FOR TRAFFIC SIGNAL ELECTRICAL SERVICE
g	3 WIRE (NO.: 8 AWG) FOR LIGHTING ELECTRICAL SERVICE
⏚	GROUND ROD

SG-2

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN
MD 129 (PARK HEIGHTS AVE.)
AND SLADE AVE.
BALTIMORE, MARYLAND

DRAWN BY: M.A.M.	F.A.P. NO.		TS NO. 3081C	SHEET NO.
CHECKED BY:	S.H.A. NO.	XX1065385		
SCALE: 1" = 20'	COUNTY:	BALTIMORE	T.I.M.S. NO. F084	2 OF 2
DATE: JUNE, 2002	LOG MILE:	03012900.00		