PROJECT DESCRIPTION

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THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL WITH VIDEO DETECTION FOR THE INTERSECTION OF MD 108 AND GATEWAY OVERLOOK SOUTHERN ENTRANCE IN HOWARD COUNTY. THE NEW TRAFFIC CONTROLLER WILL BE CONNECTED TO AN UNDERGROUND INTERCONNECT SYSTEM COMING FROM ADJACENT INTERSECTIONS TO THE EAST AND WEST. MD 108 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA THREE-PHASE, SEMI-TRAFFIC ACTUATED MODE.

THE SIGNAL SHALL BE INTERCONNECTED TO THE MD 175/MD 108 INTERSECTION TO THE WEST AND THE MD 108/LARK BROWN ROAD INTERSECTION TO THE EAST.

CONTROLLER REQUIREMENTS

INSTALL A SEMI-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1) FOUR CHANNEL, TELEMETRY EQUIPMENT, VIDEO DETECTOR SYSTEM, MONITOR WITH BATTERY BACK-UP, AND ASSOCIATED HARNESSES HOUSED IN A NEMA '6' BASE MOUNTED CABINET.

THE PRESENCE AND SAMPLING DETECTION REGIONS SHALL BE MONITORED/ACTUATED WITH VIDEO-DETECTION CAMERAS.

PROJECT CONTACTS

CONTACTS FOR DISTRICT 7:

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER, TRAFFIC
301-624-8140/8141

MR. DAVE COYNE
ASSISTANT DISTRICT ENGINEER, MAINTENANCE
301-624-8105/8106

MS. ANDREA ABEND
UTILITIES ENGINEER
301-624-8115/8116

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
410-787-7676

MR. MIKE STOCKER
SIGNAL SHOP WAREHOUSE
410-787-7696

EQUIPMENT LIST 'A'

B. EQUIPMENT TO BE SUPPLIED BY THE STATE HIGHWAY ADMINISTRATION.

ITEM NO.	CATEGORY CODE	QUANTITY	DESCRIPTION
9001	900000	1 EA	VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS)
9002	971017	1 EA	EIGHT-PHASE, SEMI-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH INTERSECTION MONITOR WITH BATTERY BACK-UP AND TELEMENTRY EQUIPMENT. HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET.

EQUIPMENT LIST 'C'

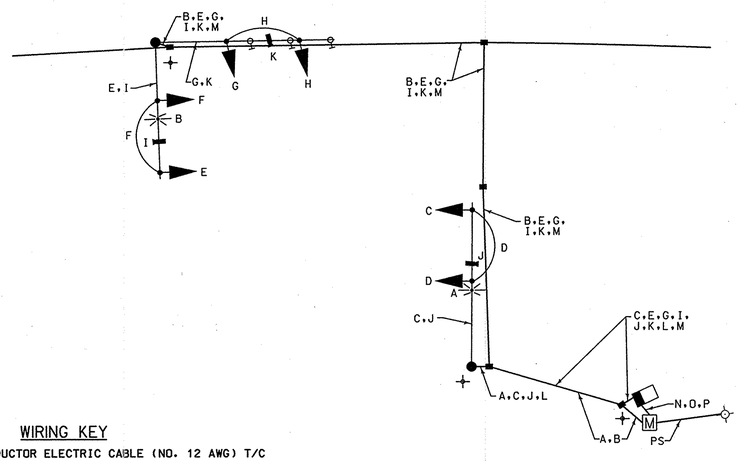
NONE

EQUIPMENT LIST 'B'

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

ITEM NO.	CATEGORY CODE	QUANTITY	DESCRIPTION
1007	120500	1 LS	MAINTENANCE OF TRAFFIC
2005	203030	5 CY	TEST PIT EXCAVATION
5010	585424	100 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8005	800000	15 LF	ELECTRICAL CABLE- 1 CONDUCTOR (NO. 8 AWG)
8007	801004	8 CY	CONCRETE FOR SIGNAL FOUNDATION
8010	801605	50 SF	SHEET ALUMINUM SIGNS
8013	802501	305 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8014	805125	35 LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT- TRENCED
8015	805135	105 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
8016	805140	65 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
8017	805155	100 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT- SLOTTED
8018	807202	1 EA	METERED SERVICE PEDESTAL
8019	811001	5 EA	FURNISH AND INSTALL ELECTRIC HANDHOLE
8024	816001	3 EA	VIDEO DETECTION CAMERA
8025	816005	1 EA	CONTROL CABLE, 250 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
8026	816010	2 EA	CONTROL CABLE, 500 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
8027	818021	1 EA	27 FOOT STEEL POLE WITH TWIN 50 FOOT MAST ARMS
8029	818036	1 EA	27 FOOT STEEL POLE WITH A SINGLE 50 FOOT MAST ARM
8034	831010	2 EA	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
8035	837001	3 EA	GROUND ROD- 3/4 INCH DIAMETER X 10 FOOT LENGTH
8038	860284	18 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8039	860292	2 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8041	861107	360 LF	ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 AWG)
8042	861108	435 LF	ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 AWG)
8043	861116	405 LF	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 12 AWG) T/C
8045	866104	2 EA	20 FOOT LIGHT ARM ON SIGNAL STRUCTURE
8046	871202	1 EA	INSTALL CONTROLLER AND CABINET- BASE MOUNTED

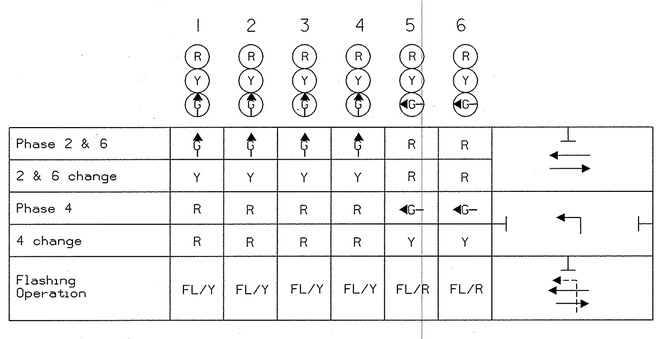
WIRING DIAGRAM



WIRING KEY

A,B	2-CONDUCTOR ELECTRIC CABLE (NO. 12 AWG) T/C
D,F,G,H	5-CONDUCTOR ELECTRIC CABLE (NO. 14 AWG)
C,E	7-CONDUCTOR ELECTRIC CABLE (NO. 14 AWG)
I,J,K	VIDEO DETECTION LEAD IN CABLE
L,M	NO. 6 STRANDED BARE COPPER GROUND WIRE
N,O,P	1-CONDUCTOR ELECTRICAL CABLE (NO. 8 AWG)
PS	PROPOSED ELECTRICAL SERVICE
⏚	3/4" X 10' GROUND ROD

PHASE CHART



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

MD 108 AND GATEWAY OVERLOOK SHOPPING CENTER (ROAD 'A')

GENERAL INFORMATION SHEET

SG-04

DESIGN CONSULTANT

WALLACE, MONTGOMERY & ASSOCIATES, LLP
CIVIL AND STRUCTURAL ENGINEERS
110 West Road
Suite 300
Towson, Maryland 21204

SCALE N.T.S. DATE 06-30-05 CONTRACT NO.

DESIGNED BY J.L.R. TS NO. 4446
DRAWN BY J.L.R. T.I.M.S. NO. G875
CHECKED BY M.J.A. F.A.P. NO.
COUNTY HOWARD LOGMILE 13010815.05

DRAWING NO. 4 OF 6 SHEET NO. 42 OF 49

SURVEY BOOK NO.

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