PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 124 (IMIDCOUNTY HIGHWAY) AND GOSHEN ROAD IN MONTGOMERY COUNTY, MARYLAND. MD 124 (MIDCOUNTY HIGHWAY) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 124 APPROACHES OPERATING CONCURRENTLY AND GOSHEN ROAD APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE LEFT-TURN PHASING EXISTS FOR GOSHEN ROAD APPROACHES AND DOUBLE EXCLUSIVE LEFT-TURN PHASING IS PROVIDED FOR THE MD 124 NORTHBOUND APPROACH. EXCLUSIVE LEFT-TURN PHASING IS PROVIDED FOR THE SOUTHBOUND MD 124 APPROACH.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER SHALL BE USED.

MAINTENANCE OF TRAFFIC

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

STANDARD NO. MD-104.04-01 (SHOULDER WORK)
STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)
STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)
STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)
STANDARD NO. MD-104.04-15 (INTERSECTION LEFT LANE, TURN BAY)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. JEFF WENTZ
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358

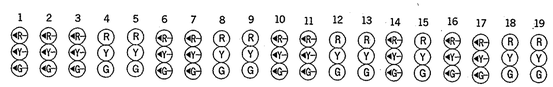
MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

MR. KAMAL HAMUD AND MR. KEITH LORD
MONTGOMERY COUNTY
TRAFFIC ENGINEERING AND OPERATIONS SECTION
PHONE: (240) 777-8763

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

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

PHASE DIAGRAM



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
PHASE 1 AND 5	←G—	←G—	←G—	R	R	←G—	←G—	R	R	←R—	←R—	R	R	←R—	R	←R—	←R—	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																			
PHASE 1 AND 6	←G—	←G—	←G—	G	G	←R—	←R—	R	R	←R—	←R—	R	R	←R—	R	←R—	←R—	R	R
1 AND 6 CHANGE	←Y—	←Y—	←Y—	G	G	←R—	←R—	R	R	←R—	←R—	R	R	←R—	R	←R—	←R—	R	R
PHASE 2 AND 5	←R—	←R—	←R—	R	R	←G—	←G—	G	G	←R—	←R—	R	R	←R—	R	←R—	←R—	R	R
2 AND 5 CHANGE	←R—	←R—	←R—	R	R	←Y—	←Y—	G	G	←R—	←R—	R	R	←R—	R	←R—	←R—	R	R
PHASE 2 AND 6	←R—	←R—	←R—	G	G	←R—	←R—	G	G	←R—	←R—	R	R	←R—	R	←R—	←R—	R	R
2 AND 6 CHANGE	←R—	←R—	←R—	Y	Y	←R—	←R—	Y	Y	←R—	←R—	R	R	←R—	R	←R—	←R—	R	R
PHASE 3 AND 7	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←G—	←G—	R	R	←G—	R	←G—	←G—	R	R
3 AND 7 CHANGE	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←Y—	←Y—	R	R	←Y—	R	←Y—	←Y—	R	R
PHASE 3 AND 8	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←G—	←G—	G	G	←R—	R	←R—	←R—	R	R
3 AND 8 CHANGE	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←Y—	←Y—	G	G	←R—	R	←R—	←R—	R	R
PHASE 4 AND 7	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	R	R	←G—	G	←G—	←G—	G	G
4 AND 7 CHANGE	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	R	R	←Y—	G	←Y—	←Y—	G	G
PHASE 4 AND 8	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	G	G	←R—	G	←R—	←R—	G	G
4 AND 8 CHANGE	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	Y	Y	←R—	Y	←R—	←R—	Y	Y
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	←FL/R	←FL/R	FL/R	FL/R

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

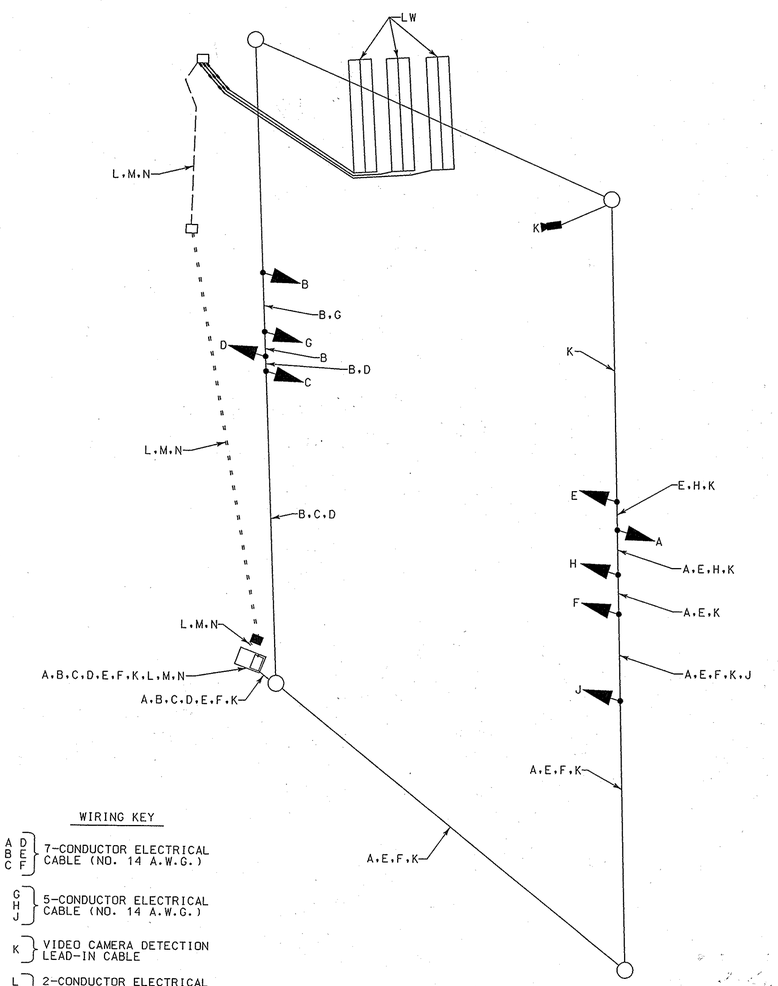
CATEGORY CODE	QUANTITY	DESCRIPTION
900000	1 EACH	VIDEO INTERFACE EQUIPMENT
973023	33 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
		- 2 EACH R3-5(L) SIGN (30 IN. x 36 IN.) - SPAN MOUNT
		- 1 EACH R4-7(R) SIGN (24 IN. x 30 IN.) - GROUND MOUNT
		- 2 EACH R5-1 SIGN (30 IN. x 30 IN.) - GROUND MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

WIRING DIAGRAM



WIRING KEY

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

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

K — VIDEO CAMERA DETECTION LEAD-IN CABLE

L M N — 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED

LW - LOOP WIRE (NO. 14 A.W.G.)

EQUIPMENT LIST "B"

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

CATEGORY CODE	QUANTITY	DESCRIPTION
585405	5890 L.F.	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585407	3415 L.F.	5 INCH YELLOW LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585408	465 L.F.	10 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585624	195 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585630	6 EACH	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
801104	65 L.F.	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
801711	19 S.F.	REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS
805011	100 L.F.	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
805118	120 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805140	20 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805160	30 L.F.	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
810550	2 EACH	MICROLOOP PROBE, 500 FOOT LEAD IN CABLE
811001	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	18 S.F.	INSTALL GROUND MOUNTED SIGN
813015	15 S.F.	INSTALL OVERHEAD SIGN
813023	7 S.F.	RELOCATE EXISTING GROUND MOUNTED SIGNS
816001	1 EACH	VIDEO DETECTION CAMERA
860284	27 EACH	12 INCH L.E.D. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861104	520 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861107	60 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	1285 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
862101	4225 L.F.	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
862102	1200 L.F.	SAW CUT FOR SIGNAL (LOOP DETECTOR)
866103	1 EACH	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
800000	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
800000	1 EACH	CONTROL CABLE, 400 FOOT, VIDEO DETECTION CAMERA

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

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

MD 124 (MIDCOUNTY HIGHWAY) @ GOSHEN ROAD
INTERSECTION IMPROVEMENT

GENERAL INFORMATION SHEET

SCALE NONE DATE 03/12/2006 CONTRACT NO. MO3705176

DESIGNED BY NLM
DRAWN BY JHR
CHECKED BY NLM
F.A.P. NO. SEE TITLE SHEET
COUNTY MONTGOMERY
LOGMILE
T.I.M.S. NO. H530
TOD NO. TS-2413C

DRAWING NO. TSP-2 OF 2 SHEET NO. OF

BY: JRASMUSSEN

PLOTTED: PLOT TIME: 08:55 AM ON FRIDAY, MARCH 31, 2006
FILE: N:\3155611\CADD\PSG-N002_MD124.DGN