# PROJECT DESCRIPTION

## GENERAL

THIS PROJECT INVOLVES MODIFYING THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 2 (GOVERNOR RITCHIE HWY) AT GEORGIA AVENUE IN ANNE ARUNDEL COUNTY. ACCESSIBLE PEDESTRIAN SIGNALS WILL BE INSTALLED ACROSS THE SOUTH LEG OF MD 2.

MD 2 RUNS IN A NORTH-SOUTH DIRECTION.

## INTERSECTION OPERATION

NORMAL OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX PHASE, FULL-TRAFFIC ACTUATED MODE, WITH THE MD 2 APPROACHES RUNNING CONCURRENTLY AND THE GEORGIA AVENUE APPROACHES RUNNING CONCURRENTLY.

NORTHBOUND AND SOUTHBOUND MD 2 HAVE EXCLUSIVE LEFT TURN PHASES. EASTBOUND AND WESTBOUND LEFT TURN MOVEMENTS ON GEORGIA AVENUE ARE PERMISSIVE.

NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTON MOVEMENTS TO CROSS THE SOUTH LEGS OF THE INTERSECTION IS TO BE PROVIDED.

A LEADING PEDESTRIAN PHASE WILL BE PROVIDED FOR CROSSING THE SOUTH LEG OF MD 2 (GOVERNOR RITCHIE HWY).

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER AT THE INTERSECTION WILL BE USED.

SPECIAL NOTES

APS will function as follows:

FOR GOVERNOR RITCHIE HIGHWAY

a. When pedestrian locates and presses the pushbutton for an extended time the pushbutton unit will be " wait to cross Governor Ritchie Highway".

b. When walk phase begins, the message will be a rapid tick, which will last for the duration of the walk phase.

# PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MRS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER
TRAFFIC - 410 841 1019

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER
MAINTENANCE - 410 841 1013

MR. JOHN S. MAYS
UTILITY ENGINEER
UTILITIES - 410 841 1039

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

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

MR. ED RODENHIZER
CHIEF, SHA SIGNAL SHOP
410-787-7652

MR. ROBERT SNYDER
CONSTRUCTION INSPECTION
410-545-0390

# EQUIPMENT LIST "A"

| ITEM NO. | QUANTITY | DESCRIPTION |
|---|---|---|
| 9571 | 91 SF | SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGNS |
| | | 1 EA - SHIELD ASSEMBLY (31" X 51") SOUTH, MD. 2, RIGHT ARROW |
| | | 1 EA - SHIELD ASSEMBLY (48" X 75") NORTH, MD. 2, LEFT ARROW |
| | | 1 EA - SHIELD ASSEMBLY (31" X 51") NORTH, MD. 2, RIGHT ARROW |
| | | 1 EA - SHIELD ASSEMBLY (48" X 75") SOUTH, MD. 2, LEFT ARROW |
| | | 2 EA - R3-5L "LANE USE CONTROL - LEFT ONLY" (30" X 36") |
| | | 4 EA - R10-4(I) MOD (9" X 15") - PUSHBUTTON SIGN |

# EQUIPMENT LIST "B"

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR:

| ITEM NO. | QUANTITY | DESCRIPTION |
|---|---|---|
| 1001 | 1 EA | MAINTENANCE OF TRAFFIC |
| 2001 | 8 CY | CLASS 2 EXCAVATION |
| 2002 | 2 CY | TEST PIT EXCAVATION |
| 5003 | 210 LF | 12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS |
| 5004 | 55 LF | 24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS |
| 5005 | 60 LF | REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS |
| 6002 | 495 SF | 4 INCH SIDEWALK |
| 8003 | 1 EA | CENTRAL CONTROL UNIT |
| 8010 | 4 EA | AUDIBLE /TACTILE PEDSTRIAN PUSHBUTTON STATION & SIGN |
| 8011 | 4 EA | BREAKAWAY PEDESTAL POLE (ANY SIZE) |
| 8014 | 4 EA | 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD |
| 8026 | 80 LF | UP TO 4 INCH SCHEDULE 80 PVC CONDUIT - TRENCHED |
| 8027 | 50 SF | DETECTABLE WARNING SURFACES |
| 8033 | 95 LF | NO. 6 AWG STRANDED BARE COPPER GROUND WIRE |
| 8034 | 15 LF | 1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE |
| 8044 | 2 EA | INSTALL ELECTRICAL HANDHOLE |
| 8052 | 3 EA | GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH |
| 8058 | 900 LF | ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG) |
| 8060 | 900 LF | ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) |
| 8062 | 560 LF | LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG) |
| 8063 | 135 LF | SAW CUT FOR SIGNAL (LOOP DETECTOR) |

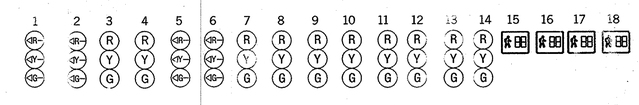
# EQUIPMENT LIST "C"

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

| ITEM NO. | QUANTITY | DESCRIPTION |
|---|---|---|

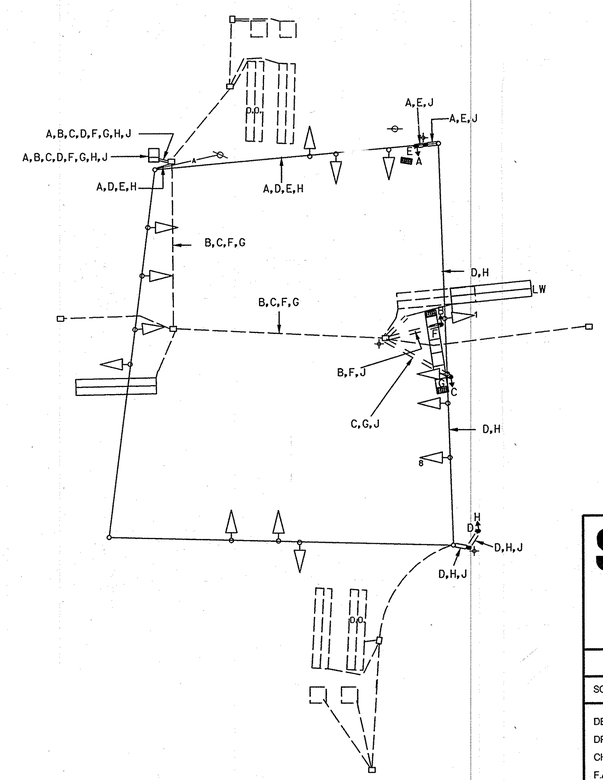
ALL REMOVED MATERIAL ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

# PHASING SEQUENCE CHART




| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHASE 2 AND 5 | R | R | R | R | ←G- | ←G- | G | G | R | R | R | R | R | R | DW | DW | DW | DW |
| 5 CHANGE | R | R | R | R | ←Y- | ←Y- | G | G | R | R | R | R | R | R | DW | DW | DW | DW |
| PHASE 2 AND 6 | R | R | G | G | R | R | G | G | R | R | R | R | R | R | DW | DW | DW | DW |
| 2 CHANGE | R | R | G | G | R | R | Y | Y | R | R | R | R | R | R | DW | DW | DW | DW |
| PHASE 1 AND 6 | ←G- | ←G- | G | G | R | R | R | R | R | R | R | R | R | R | DW | DW | DW | DW |
| 1 AND 6 CHANGE | ←Y- | ←Y- | G | G | R | R | R | R | R | R | R | R | R | R | DW | DW | DW | DW |
| PHASE 4 AND 8 | R | R | R | R | R | R | R | R | G | G | G | G | G | G | DW | DW | DW | DW |
| 4 AND 8 CHANGE | R | R | R | R | R | R | R | R | Y | Y | Y | Y | Y | Y | DW | DW | DW | DW |
| PHASE 4 ALT AND 8 | R | R | R | R | R | R | R | R | G | G | G | G | G | G | WALK | WALK | WALK | WALK |
| PED CLEARANCE | R | R | R | R | R | R | R | R | G | G | G | G | G | G | FL/DW | FL/DW | FL/DW | FL/DW |
| 4 ALT AND 8 CHANGE | R | R | R | R | R | R | R | R | Y | Y | Y | Y | Y | Y | DW | DW | DW | DW |
| FLASHING OPERATION | FL/R | FL/R | FL/Y | FL/Y | FL/R | FL/R | FL/Y | FL/Y | FL/ | FL/R | FL/R | FL/R | FL/R | FL/R | DARK | DARK | DARK | DARK |

# WIRING DIAGRAM




# WIRING KEY

A,B,C,D } 5 CONDUCTOR ELECTRICAL CABLE ( NO. 14 AWG )

E,F,G,H } 2 CONDUCTOR ELECTRICAL CABLE ( NO. 14 AWG)

J } STRANDED BARE COPPER GROUND WIRE (#6 AWG)

LW } LOOP WIRE (NO. 14 AWG) WIRE (#6 AWG)

+ } 3/4" X 10 FEET GROUND ROD

TOD NO:AT936-27
SHA NO:AA522A5A/B5A
MD 2 @ GEORGIA AVE

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 2 (GOVERNOR RITCHIE HWY)
AND GOERGIA AVENUE

## GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE September, 2007 CONTRACT NO. AT93651B5

DESIGNED BY H.O. COUNTY ANNE ARUNDEL
DRAWN BY H.O. LOGMILE 02000236.66
CHECKED BY D.D. TIMS NO. 1192
F.A.P. NO. TOD NO.

TS NO. 663F | DRAWING - OF - | SHEET NO. 1 OF 2

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BY: hogallo