

**PROJECT DESCRIPTION**

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW STRAIN POLE AND ASSOCIATED EQUIPMENT AT THE INTERSECTION OF U.S. 29 AND STEWART LANE IN MONTGOMERY COUNTY, MARYLAND. U.S. 29 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE U.S. 29 APPROACHES OPERATING CONCURRENTLY AND THE STEWART LANE APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND AND SOUTHBOUND U.S. 29 APPROACHES.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED.

**EQUIPMENT LIST "A"**

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

NONE

**EQUIPMENT LIST "B"**

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

QUANTITY	DESCRIPTION
LUMP SUM	MAINTENANCE OF TRAFFIC
1 EACH	TEST PIT EXCAVATION
1 EACH	STEEL STRAIN POLE (12 IN. x 32 FT.)
1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
15 L.F.	4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
70 L.F.	4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
3 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
80 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
30 L.F.	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
1 EACH	ELECTRICAL HANDHOLE
3 EACH	RELOCATE EXISTING OVERHEAD SIGN
1 EACH	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
950 L.F.	LOOP WIRE ENCASED IN 1/4 INCH FLEXIBLE TUBING (NO. 14 A.W.G.)
2550 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
340 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.) TYPE TC
150 L.F.	SAW CUT FOR SIGNAL (LOOP DETECTOR)
1050 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
60 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
3 EACH	8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
16 EACH	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
1 EACH	RELOCATE EXISTING LIGHTING ARM AND LUMINAIRE
280 L.F.	STEEL SPAN WIRE - 3/8 INCH DIAMETER
150 L.F.	STEEL SPAN WIRE - 1/4 INCH DIAMETER
LUMP SUM	RELOCATE INTERCONNECT CABLE

**EQUIPMENT LIST "C"**

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

**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-104.38-01 (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-104.49-01 (SHOULDER WORK)
- STANDARD NO. MD-104.45-01 (RIGHT LANE CLOSURE)
- STANDARD NO. MD-104.44-01 (LEFT LANE CLOSURE)
- STANDARD NO. MD-104.46-01 (CENTER LANE CLOSURE)

**PROJECT CONTACTS**

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. LEE STARKLOFF  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 513-7358

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

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

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

**WIRING DIAGRAM**

**WIRING KEY**

A } 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)

B E } 2-CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED (NO. 14 A.W.G.)  
C F }  
D G }

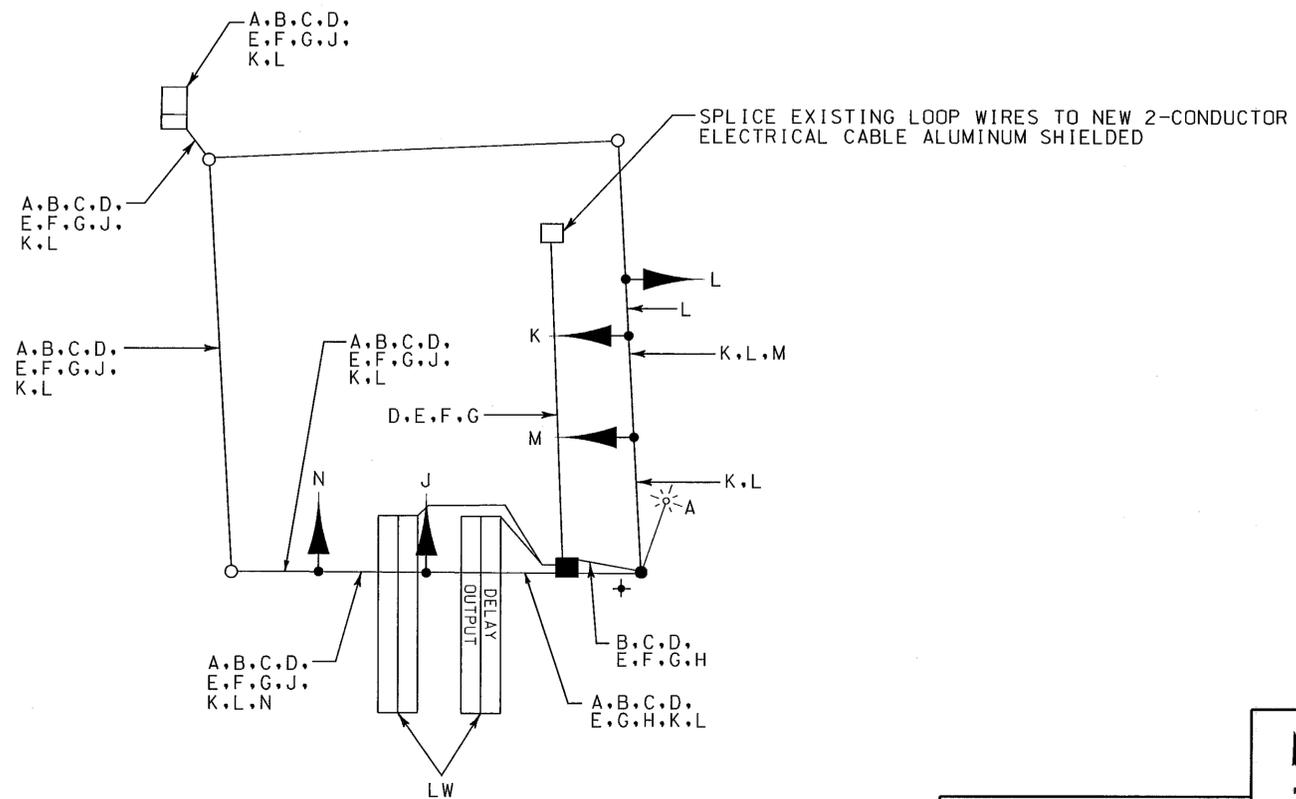
H } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

J } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
K L }

M } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
N }

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

† - 3/4 IN. X 10 FT. GROUND ROD



**WR&A**  
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and Associates, LLP  
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**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
GENERAL INFORMATION SHEET  
US 29 (COLUMBIA PIKE) @ STEWART LANE

DRAWN BY: B. DONOWAY	F.A.P. NO.	TS NO.	SHEET NO.
CHECKED BY: N. LEARY	S.H.A. NO. 27863TI5008	TS-2647B	
SCALE: NONE	COUNTY: MONTGOMERY	T.I.M.S. NO.	2 OF 2
DATE: 2/10/2004	LOG MILE: 15002905.11	G156	