

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF NEW TRAFFIC CONTROL SIGNALS AT THE INTERSECTIONS OF MAUGANS AVE. AND THE I-81 NB OFF-RAMP, MAUGANS AVE. AND THE I-81 SB OFF-RAMP, AND U.S. 11 (PENNSYLVANIA AVE.) AND LONGMEADOW RD./MAUGANS AVE. IN WASHINGTON COUNTY, MARYLAND. MAUGANS AVE IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION AND U.S. 11 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

1. MAUGANS AVENUE AND I-81 NB OFF-RAMP

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MAUGANS AVE. APPROACHES OPERATING CONCURRENTLY AND THE I-81 APPROACH OPERATING ALONE.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR THE WESTBOUND MAUGANS AVE. APPROACH.

2. MAUGANS AVENUE AND I-81 SB OFF-RAMP

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MAUGANS AVE. APPROACHES OPERATING CONCURRENTLY AND THE I-81 APPROACH OPERATING ALONE.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR EASTBOUND MAUGANS AVE. APPROACH.

3. U.S. 11 (PENNSYLVANIA AVE.) AND LONGMEADOW RD./MAUGANS AVE.

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE U.S. 11 APPROACHES OPERATING CONCURRENTLY AND THE MAUGANS AVE./LONGMEADOW RD. APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND AND SOUTHBOUND U.S. 11 APPROACHES.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS BOTH LEGS OF U.S. 11 AND PEDESTRIAN INDICATIONS ARE PROVIDED ACROSS THE EAST LEG OF MAUGANS AVE./LONGMEADOW DRIVE.

CONTROLLER REQUIREMENTS

1. MAUGANS AVENUE AND I-81 NB OFF-RAMP

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS), ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER WITH SYSTEM PACKAGE AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

2. MAUGANS AVENUE AND I-81 SB OFF-RAMP

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS), ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER WITH SYSTEM PACKAGE AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET. INSTALL TRAFFIC RESPONSIVE MASTER CONTROLLER.

3. U.S. 11 (PENNSYLVANIA AVE.) AND LONGMEADOW RD./MAUGANS AVE.

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS), TWO (2) FOUR-CHANNEL, TIME DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

PROJECT CONTACTS FOR WASHINGTON COUNTY

THE CONTACT PERSONS FOR THE WASHINGTON COUNTY ENGINEERING DEPARTMENT ARE AS FOLLOWS:

MS. JESSICA SPRING
PROJECT MANAGER
PHONE: (313) 240-2414

MR. DAVE SHRADER
SIGNAL OPERATIONS
PHONE: (240) 313-2720

MR. DAVID A. MASON
DESIGN ENGINEER
PHONE: (240) 313-2408

MR. ROBERT SLOCUM
DEPUTY CHIEF ENGINEER
PHONE: (240) 313-2418

PROJECT CONTACTS FOR SHA

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. GEORGE H. SMALL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 729-8444

MR. DAVID LARRICK
DISTRICT UTILITY ENGINEER
PHONE: (301) 729-8420

MR. GEORGE FRANKENBERRY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 729-8457

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

EQUIPMENT LIST "A" FOR SHA SIGNALS ONLY

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

QUANTITY	DESCRIPTION
5 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
3 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
3 EACH	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
1 EACH	TRAFFIC RESPONSIVE MASTER CONTROLLER
305 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
- 6 EACH	D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT
- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "NORTH, MD, RIGHT ARROW" (24 IN. x 51 IN.) - POLE MOUNT
- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "NORTH, MD, LEFT ARROW" (36 IN. x 75 IN.) - POLE MOUNT
- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD, RIGHT ARROW" (24 IN. x 51 IN.) - POLE MOUNT
- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD, LEFT ARROW" (36 IN. x 75 IN.) - POLE MOUNT
- 2 EACH	R3-1 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT
- 2 EACH	R3-4 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT
- 3 EACH	R3-5(L) SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT
- 2 EACH	R3-18 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT
- 2 EACH	R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS LONGMEADOW RD."
- 2 EACH	R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS PENNSYLVANIA AVE."
- 1 EACH	W9-2(4) SIGN (30 IN. x 42 IN.) - MAST ARM MOUNT
- 8 EACH	W3-3 SIGN (36 IN. x 36 IN.) WITH "NEW" PANEL (24 IN. x 24 IN.) AND FLAG - GROUND MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO COUNTY/SHA

COUNTY AT MACK TRUCK RD./SHA AT ROUTE 11 FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST "B" FOR SHA SIGNALS ONLY

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

QUANTITY	DESCRIPTION
LUMP SUM	MAINTENANCE OF TRAFFIC
14 C.Y.	TEST PIT EXCAVATION
42 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
74 L.F.	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
930 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
336 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
390 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
815 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
2259 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
325 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
213 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
65 L.F.	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
6 EACH	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
3 EACH	METERED SERVICE PEDESTAL
185 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
5 EACH	MICROLOOP PROBE, 500 FOOT LEAD IN CABLE
3 EACH	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
35 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
132 S.F.	INSTALL GROUND MOUNTED SIGN
173 S.F.	INSTALL OVERHEAD SIGN
9 EACH	VIDEO DETECTION CAMERA
6 EACH	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
3 EACH	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
3 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
8 EACH	OPTICOM NO. 721 DETECTOR EYE
2 EACH	STEEL POLE WITH TWIN 50 FOOT MAST ARM
1 EACH	STEEL POLE WITH SINGLE 38 FOOT MAST ARM
2 EACH	STEEL POLE WITH SINGLE 50 FOOT MAST ARM
1 EACH	STEEL POLE WITH SINGLE 60 FOOT MAST ARM
1 EACH	STEEL POLE WITH TWIN 50 FOOT AND 70 FOOT MAST ARMS
1960 L.F.	12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)
22 EACH	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
100 EACH	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
1675 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
4 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
930 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
2674 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
3575 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
1135 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
695 L.F.	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
542 L.F.	SAW CUT FOR SIGNAL (LOOP DETECTOR)
6 EACH	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
3 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
12 EACH	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
LUMP SUM	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
6 EACH	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
6 EACH	AUDIBLE/ TACTILE PEDESTRIAN PUSHBUTTON STATION
1 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT

TSP-8

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
Maugans Ave @ I-81 and U.S. 11 @ Maugans Ave /Longmeadow Rd
Maugansville, MD

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	1/22/2007	CONTRACT NO.	RD-MA-140-10
DESIGNED BY	B. DONOWAY	COUNTY	Washington		
DRAWN BY	B. DONOWAY	LOGMILE			
CHECKED BY	N. Leary	TIMS NO.			
FAP NO.	SEE TITLE SHEET	TOD NO.			
TS NO.	DRAWING TSP-8 - 8	OF	8	SHEET NO.	OF



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