

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE TEMPORARY RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 404 (SHORE HIGHWAY) AND MD 480 (RIDGELY ROAD) / RIDGELY ROAD IN CAROLINE COUNTY TO SUPPORT MOT PHASE 1. MD 404 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX PHASE, FULL ACTUATED MODE. EXCLUSIVE/FLASHING ON RED ARROW LEFT TURN PHASING IS PROPOSED FOR THE MAINLINE. THE EXISTING CONCURRENT SIDE STREET PHASING WILL REMAIN. THE EXISTING PRE-EMPTION PHASES WILL REMAIN. A PRE-EMPTION PHASE FOR EASTBOUND MD 404 IS PROPOSED.

CONTROLLER REQUIREMENTS

INSTALL A NEMA SIZE "6" BASE MOUNTED CABINET. THE SHA SIGNAL SHOP WILL INSTALL A NEW EIGHT PHASE FULLY-ACTUATED TRAFFIC SIGNAL CONTROLLER WITH ASSOCIATED HARNESSSES, TWO (2) 4 CHANNEL DETECTOR AMPLIFIERS, ONE (1) VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS AND ONE (1) DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764 WITHIN THE CABINET.

PHONE DROP

THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7635 TO ARRANGE FOR THE PHONE DROP LINE INSTALLATION. THE CONTRACTOR IS TO NOTIFY MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

THE CONTACT PERSONS FOR DISTRICT #2 / OOTS ARE AS FOLLOWS:

District #2

Mr. Robert L. Klei
Assistant District Engineer - Traffic
Phone: 410-810-3240

Mr. Barry Clothier
District Utility Engineer
Phone: 410-810-3275

Mr. Terry O. Wright
Assistant District Engineer - Maintenance
Phone: 410-810-3250

Mr. WM Norris Embert
Assistant District Engineer - Construction
Phone: 410-810-3270

Office Of Traffic & Safety

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
410-787-7630

Mr. Edward Rodenhizer
Team Leader, Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Team Leader, Sign Operations
410-787-7670

The Power Company Representative is:
Choptank Electric Cooperative, Inc.
Route 404 & Route 328
Denton, Maryland 21629
Phone: 1-877-892-0001

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

CATEGORY CODE	QUANTITY	DESCRIPTION
900000	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
963010	2 EA	4 CHANNEL DETECTOR AMPLIFIER
971017	1 EA	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNT
973023	85 SF	SHEET ALUMINUM SIGNS:
		1 EA - SHIELD ASSEMBLY (30 IN. x 51 IN.) *EAST, MD 404, RIGHT ARROW*
		1 EA - SHIELD ASSEMBLY (48 IN. x 75 IN.) *EAST, MD 404, LEFT ARROW*
		1 EA - SHIELD ASSEMBLY (48 IN. x 75 IN.) *WEST, MD 404, LEFT ARROW*
		2 EA - R10-12(2) (48 IN. x 36 IN.)

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

CATEGORY CODE	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
203030	5 CY	TEST PIT EXCAVATION
800000	2 EA	CLASS II WOOD POLE 40 FOOT
800000	2 EA	3 INCH SCHEDULE 80 RIGID PVC 90 DEGREE CONDUIT BEND
800000	1 LS	REMOVE AND DISPOSE OF TRAFFIC SIGNAL EQUIPMENT
801004	15 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	210 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805115	60 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805125	85 LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805135	595 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	240 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805160	30 LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
807202	1 EA	METERED SERVICE PEDESTAL
810010	115 LF	ELECTRICAL CABLE 1-CONDUCTOR, NO. 4 AWG-THHN/THWN
811001	13 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	85 SF	INSTALL OVERHEAD SIGN
816001	4 EA	VIDEO DETECTION CAMERA
816005	2 EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816010	2 EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816201	1 EA	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
816210	1 EA	OPTICOM EMITTER SYSTEM, 700 SERIES
816215	4 EA	OPTICOM NO. 721 DETECTOR EYE
818041	1 EA	STEEL POLE WITH A SINGLE 60 FOOT MAST ARM
818051	1 EA	STEEL POLE WITH A TWIN 50 FOOT AND 70 FOOT MAST ARMS
818052	1 EA	STEEL POLE WITH A SINGLE 70 FOOT MAST ARM
831010	3 EA	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
833060	35 LF	3 INCH DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80, RISER
837001	9 EA	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
860284	38 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860288	580 LF	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
861104	1150 LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861107	90 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	870 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	225 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC
862101	275 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
862102	90 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
866104	3 EA	20 FOOT LIGHTING ARM ON A SIGNAL STRUCTURE
869102	215 LF	STEEL SPAN WIRE - 3/8 INCH DIAMETER
871117	1 EA	INSTALL EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNT

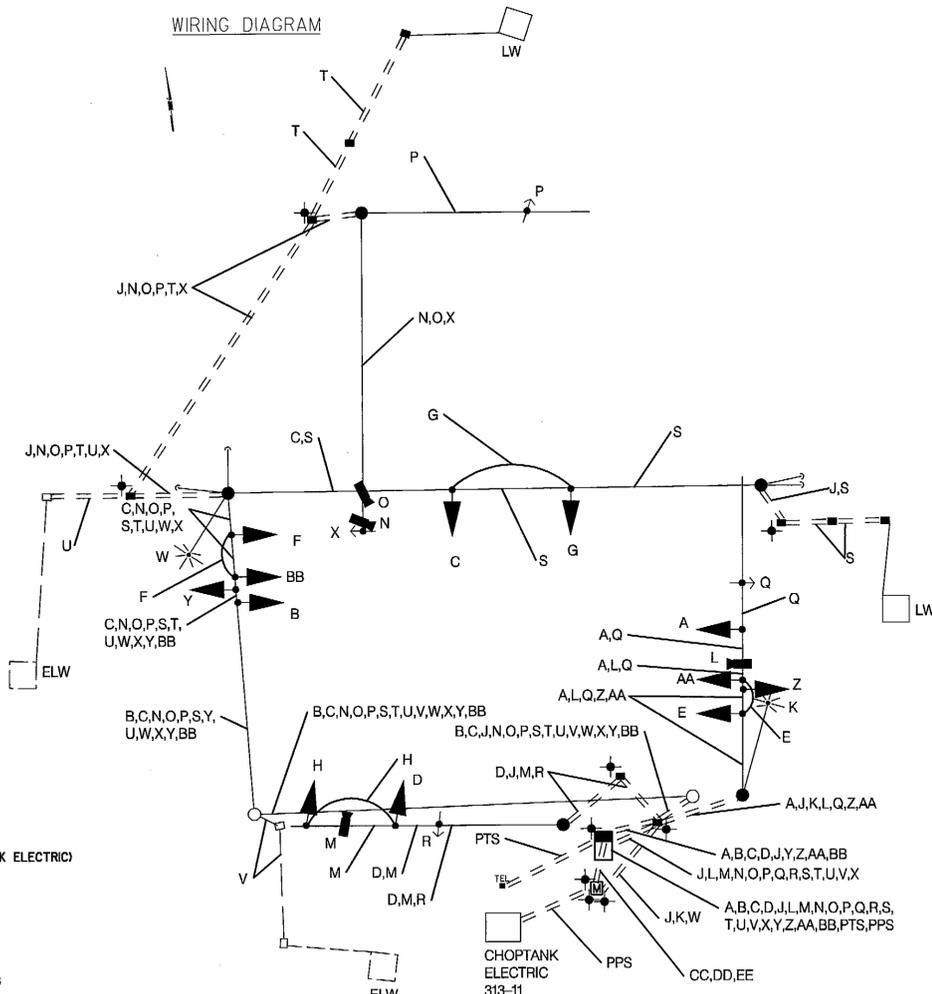
EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CATEGORY CODE	QUANTITY	DESCRIPTION
NONE	-	ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 AND 5	←G←	←G←	R	R	←G←	←G←	R	R	R	R	R	R
PHASE 1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6												
PHASE 1 AND 6	←G←	←G←	G	G	←R←	←R←	R	R	R	R	R	R
PHASE 1 CHANGE	←Y←	←Y←	G	G	←R←	←R←	R	R	R	R	R	R
PHASE 2 AND 5	←R←	←R←	R	R	←G←	←G←	G	G	R	R	R	R
PHASE 5 CHANGE	←R←	←R←	R	R	←Y←	←Y←	G	G	R	R	R	R
PHASE 2 AND 6	FL/RA	FL/RA	G	G	FL/RA	FL/RA	G	G	R	R	R	R
PHASE 2 AND 6 CHANGE	FL/RA	FL/RA	Y	Y	FL/RA	FL/RA	Y	Y	R	R	R	R
PHASE 4 & 8	←R←	←R←	R	R	←R←	←R←	R	R	G	G	G	G
PHASE 4 & 8 CHANGE	←R←	←R←	R	R	←R←	←R←	R	R	Y	Y	Y	Y
PRE-EMPTION 01	←R←	←R←	R	R	←R←	←R←	G	G	R	R	R	R
PRE-EMPTION 01 CHANGE	←R←	←R←	R	R	←R←	←R←	Y	Y	R	R	R	R
PRE-EMPTION 02	←R←	←R←	R	R	←R←	←R←	R	R	R	R	←GG	←GG
PRE-EMPTION 02 CHANGE	←R←	←R←	R	R	←R←	←R←	R	R	R	R	Y	Y
PRE-EMPTION 03	←R←	←R←	R	R	←R←	←R←	R	R	←GG	←GG	G	G
PRE-EMPTION 03 CHANGE	←R←	←R←	R	R	←R←	←R←	R	R	Y	Y	R	R
PRE-EMPTION 04	←R←	←R←	G	G	←R←	←R←	R	R	R	R	R	R
PRE-EMPTION 04 CHANGE	←R←	←R←	Y	Y	←R←	←R←	R	R	R	R	R	R
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R



- AA BB ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
- HH GG ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- J NO. 6 STRANDED BARE COPPER GROUND WIRE
- KL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC
- LM CONTROL CABLE, VIDEO DETECTION CAMERA TO CONTROLLER, 250 FT.
- NO CONTROL CABLE, VIDEO DETECTION CAMERA TO CONTROLLER, 500 FT.
- PP OPTICOM CABLE, NO. 4 CONDUCTOR
- RR ELECTRICAL CABLE, 2-CONDUCTOR ALUMINUM SHIELDED
- CC DD EE ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG-THHN/THWN
- ELW EXISTING LOOP WIRE
- LW LOOP WIRE
- PTS PROPOSED UNDERGROUND TELEPHONE SERVICE TO BE INSTALLED BY OTHERS
- PPS PROPOSED UNDERGROUND ELECTRICAL SERVICE (TO BE INSTALLED BY CHOPTANK ELECTRIC)
- PROPOSED GROUND ROD - 3/4 IN. DIAMETER X 10 FOOT LENGTH

NOTES:
1. DETAILS U AND V, SPLICE TO EXISTING LOOP WIRE INSIDE HANDHOLE.

STV Incorporated
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SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 404 (SHORE HIGHWAY) AT
MD 480 (RIDGELY ROAD)/RIDGELY ROAD
TEMPORARY SIGNAL - PHASE 1

GENERAL INFORMATION

SCALE NONE ADVERTISED DATE CONTRACT NO. CQ3235170

DESIGNED BY MCG COUNTY CAROLINE
DRAWN BY MCG LOGMILE 05040400.73
CHECKED BY BAB TMS NO. 1833
F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 1946E DRAWING SG-02 OF 06 SHEET NO. 115 OF 138