PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 235 (THREE NOTCH ROAD) AT WILDEWOOD BOULEVARD/OAK CREST DRIVE IN ST. MARY'S COUNTY.

INTERSECTION OPERATION

A NEMA "S" CONTROLLER HOUSED IN A BASE MOUNTED CABINET WITH UPS SHALL BE INSTALLED AT THIS LOCATION.THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES. THERE WILL BE EXCLUSIVE LEFT TURN PHASES FOR BOTH THE NORTH AND SOUTHBOUND MOVEMENTS OF MD 235 WITH AN ASSOCIATED RIGHT TURN OVERLAP FOR THE WESTBOUND OAK CREST DRIVE NORTHBOUND RIGHT TURN MOVEMENT. THE MD 235 THROUGH MOVEMENT WILL OPERATE CONCURRENTLY. THE WILDEWOOD BOULEVARD/OAK CREST DRIVE MOVEMENTS SHALL OPERATE IN A SIDE STREET SPLIT MODE.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

QUANTITY	DESCRIPTION
NONE	

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY		DESCRIPTION
	LS	MAINTENANCE OF TRAFFIC
1	EA	27 FT. STEEL MAST ARM POLE WITH 60 FT. MAST ARM
2	EA	27 FT. STEEL MAST ARM POLE WITH 70 FT. MAST ARM
2	EA	15 FT. LUMINAIRE ARM
2	EA	LED LUMINAIRE
1	EA	STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, BASE MOUNTED NEMA "S" CABINET WITH UNINTERRUPTIBLE POWER SUPPLY, VIDEO DETECTION INTERFACE, TELEMETRY INTERFACE, AND FOUR-CHANNEL LOOP DETECTOR AMPLIFIERS [Note: CONTROLLER AND CABINET SHALL BE PURCHASED FROM ECONOLITE AND DELIVERED TO THE S.H.A. SIGNAL SHOP FOR WIRING AND TESTING. CONTACT MR. ED RODENHIZER (410) 787-7650]
8	EA	TERRA VIDEO DETECTOR CAMERA AND CABLE (NO 18 A.W.G.)
4	EA	NON-INVASIVE PROBE
5	EA	12 IN. 3-SECTION LED SIGNAL HEAD - MAST ARM MOUNT
6	EA	12 IN. 3-SECTION LED SIGNAL HEAD (RA,YA,GA) - MAST ARM MOUNT
2	EA	12 IN. 4-SECTION LED SIGNAL HEAD - MAST ARM MOUNT
1	EA	12 IN. 5-SECTION LED SIGNAL HEAD - MAST ARM MOUNT
2	EA	12 IN./8 IN. 4-SECTION LED SIGNAL HEAD - MAST ARM MOUNT
7	EA	30 IN.X 36 IN. R3-5(L) REGULATORY SIGN - MAST ARM MOUNT
1	EA	30 IN.X 36 IN. R3-5(R) REGULATORY SIGN - MAST ARM MOUNT
1	EA	30 IN.X 36 IN. R3-6(L) REGULATORY SIGN - MAST ARM MOUNT
2	EA	16 IN.X VAR. D-3(t) DUAL FACE SIGN - MAST ARM MOUNT
2	EA	30 IN. X 48 IN. SHIELD ASSEMBLY SIGN - GROUND MOUNT/POLE MOUNT
2	EA	48 IN. X 72 IN. SHIELD ASSEMBLY SIGN - GROUND MOUNT/POLE MOUNT
5	CY	TEST PIT EXCAVATION
15	EA	HANDHOLE
500	LF	2-CONDUCTOR TRAY CABLE (NO.12 AWG)
750	LF	5-CONDUCTOR CABLE (NO. 14 AWG)
2800	LF	7-CONDUCTOR CABLE (NO. 14 AWG)
525	LF	BARE COPPER GROUND WIRE (NO. 6 AWG)
60	LF	2 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
1085	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
165	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - BORED
120	LF	3 IN. PVC CONDUIT [SCHEDULE 80] RISER
4	EA	3 IN. WEATHERHEAD
20	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
500	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - BORED
15	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT
6	EA	GROUND ROD - 3/4 IN. X 10 FT. LENGTH
1	EA	EMBEDDED ELETRICAL SERVICE PEDESTAL (100 AMPS)
70	LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE
3	EA	REMOVE AND DISPOSE OF EXISTING CONCRETE FOUNDATION 12 INCHES BELOW GRADE
	LS	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT
5	EA	RELOCATE EXISTING GROUND MOUNTED SIGN AND SUPPORT
1	EA	R4-7 (24" X 30") SIGN - GROUND MOUNT
1	EA	R1-2 (36" X 36") SIGN - GROUND MOUNT
1	EA	W11-2 (30" X 30") AND W16-7P(L) (24" X 12") SIGNS - GROUND MOUNT
1	EA	OM-1 (18" X 18") SIGN - GROUND MOUNT
65	LF	WOOD SIGN SUPPORTS 4 IN. X 4 IN.
1210	LF	5 IN. YELLOW HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
1935	LF	5 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
485	LF	10 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
320	LF	TEMPORARY 10 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
110	LF	12 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
680	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
7	EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW
1300	LF	RELOCATE EXISTING INTERCONNECT CABLE
1	EA	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
1	EA	OPTICOM NO. 721 DETECTOR EYE
290	LF	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE

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CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

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MR. ED RODENHIZER
SIGNAL OPERATIONS
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ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
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SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

SMECO

MIKE BARRINGER
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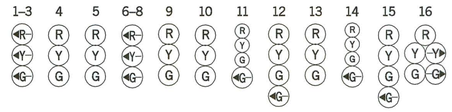
HUGHESVILLE, MD 20637

PHASE CHART



	1-3	4	5	6-8	9	10	11	12	13	14	15	16
PHASE 1 AND 5	←G—	R	R	←G—	R	R	R	R	R	R	R	R —G→
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6												
PHASE 1 AND 6	←G—	G	G	←R—	R	R	R	R	R	R	R	R
1 CHANGE	←Y—	G	G	←R—	R	R	R	R	R	R	R	R
PHASE 2 AND 5	←R—	R	R	←G—	G	G	R	R	R	R	R	R —G→
5 CHANGE	←R—	R	R	←Y—	G	G	R	R	R	R	R	R —Y→
PHASE 2 AND 6	←R—	G	G	←R—	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	←R—	Y	Y	←R—	Y	Y	R	R	R	R	R	R
PHASE 3	←R—	R	R	←R—	R	R	G ←G—	G ←G—	G	R	R	R
3 CHANGE	←R—	R	R	←R—	R	R	Y	Y	Y	R	R	R
PHASE 4	←R—	R	R	←R—	R	R	R	R	R	G ←G—	G ←G—	G
4 CHANGE	←R—	R	R	←R—	R	R	R	R	R	Y	Y	Y
PRE-EMPTION	←R—	R	R	←R—	G	G	R	R	R	R	R	R
CHANGE	←R—	R	R	←R—	Y	Y	R	R	R	R	R	R
FLASHING OPERATION	FL/ ←R—	FL/Y	FL/Y	FL/ ←R—	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

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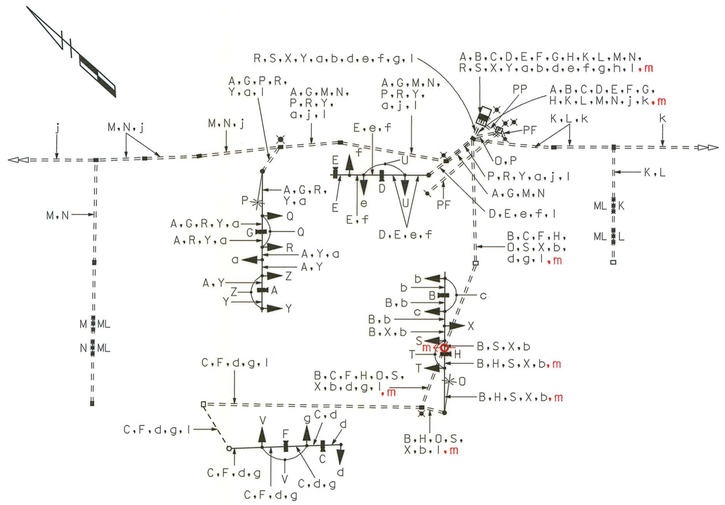
WIRING DIAGRAM



A B C D E } F G H } VIDEO DETECTOR CABLE

K L M N } NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE

O P } 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)

Q R S T } U V W } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

X Y Z a b c } d e f g h } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

j } 12-PAIR VOICE GRADE TELEMETRY INTERCONNECT CABLE (NO. 19 A.W.G.) (Wildewood/Oak Crest - MD 4 RUN)

k } 12-PAIR VOICE GRADE TELEMETRY INTERCONNECT CABLE (NO. 19 A.W.G.) (Wildewood/Oak Crest - Airport Rd/Clarks Mill Rd RUN)

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

PP } PROPOSED PHONE SERVICE BY VERIZON

PF } PROPOSED UNDERGROUND ELECTRICAL SERVICE BY SMECO

ML } MICRO-LOOP DETECTOR (NON-INVASIVE)

PROPOSED GROUNDING ROD

1 m } 4-CONDUCTOR OPTICOM CABLE

RED LINE REVISION NO. 1
August 22, 2013
Install Opticom Detector
Eye for SB MD 235
TEDD Approval: 8.28.13

MD-AMD Tracking No.: 05APSM003XX

*PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 52613 , EXPIRATION DATE: 6/6/2014 *

TRAFFIC CONCEPTS, INC.
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FAX: (410) 923-6473
EMAIL: TRAFFIC@TRAFFIC-CONCEPTS.COM

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Thursday, August 22, 2013 AT 02:40 PM

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 235 AT WILDEWOOD BLVD./ OAK CREST DR.

CALIFORNIA, MARYLAND

GENERAL INFORMATION PLAN

SCALE	N / A	DATE	1-2-2013
CONTRACT NO.	BW996M82		
DESIGNED BY	T.Z.	COUNTY	ST. MARY'S
DRAWN BY	J.K.S.	LOGMILE	18023517.48
CHECKED BY	K.S.	T.I.M.S. NO.	I596
F.A.P. NO.	N/A	TOD NO.	N/A
DRAWING NO.	2535E-GI	SHEET NO.	4 OF 4

PLOTTED: Thursday, August 22, 2013 AT 02:40 PM
FILE: Z:\1300\1319\TRAF-CON-PLANS (Traffic Concepts Signal)\Oak Crest Nov-16-12 slg.pm.lc.dgn

DRILL HOLES
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