

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING LANE CONTROL SYSTEM ALONG US 29 (COLESVILLE ROAD) FROM SLIGO CREEK PARKWAY TO MD 97 (GEORGIA AVENUE) IN MONTGOMERY COUNTY. THE MODIFICATION WILL REPLACE THE EXISTING STRAIN POLES, SPAN MOUNTED SIGNALS AND SIGNS WITH MAST ARM MOUNTED LED LANE CONTROL SIGNALS AND SIGNS. THE SYSTEM WILL CONTINUE TO USE THE EXISTING CABINET AT THE INTERSECTION OF US 29 (COLESVILLE ROAD) AND MD 97 (GEORGIA AVENUE) AS THE MASTER CONTROLLER. US 29 (COLESVILLE ROAD) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. SYSTEM OPERATION

THE SYSTEM IS IN OPERATION MONDAY THRU FRIDAY PROVIDING 4-LANES OF THRU TRAFFIC FOR SOUTH BOUND US 29 (COLESVILLE RD.) IN THE AM PEAK FROM 7:00AM TO 9:30 AM. AT 9:30AM, THE OFF-PEAK OPERATION SHALL BEGIN CONSISTING OF 3 THRU LANES IN EACH DIRECTION. AT 4:00 PM THE PM PEAK BEGINS PROVIDING 4-LANES OF TRAFFIC FOR NORTHBOUND US 29 (COLESVILLE RD.) UNTIL 7:00 PM AT WHICH TIME THE OFF-PEAK OPERATION WILL AGAIN COMMENCE.

III. SPECIAL NOTE

ALL FIELD WIRING TO THE CONTROLLER CABINET SHALL BE TERMINATED TO THE APPROPRIATE CONTROLLER CABINET CONNECTORS BY THE CONTRACTOR AND LABELED. ALL OTHER CONTROLLER CABINET WIRING WILL BE PERFORMED BY THE MCDOT FORCES.

CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

DISTRICT

MR. BRIAN YOUNG
DISTRICT ENGINEER
301-513-7311

MR. CEDRIC WARD
ASSISTANT DISTRICT ENGINEER - TRAFFIC
301-513-7318

MR. KEVIN NOWAK & DUANE BERNARD
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
301-513-7336

MR. VERNON STINNETT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
301-513-7304

MR. VICTOR GRAFTON
ASSISTANT DISTRICT ENGINEER - UTILITIES
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OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DUFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
410-787-7631

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
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TEAM LEADER SIGN OPERATIONS
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MR. MICHAEL STOCKER
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MONTGOMERY COUNTY DWP&T

MR. KAMAL HAMUD
TRAFFIC ENGINEER
240 777-8761

PEPCO

PEPCO CUSTOMER DESIGN
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201 W GUIDE DR.
ROCKVILLE, MD 20850
PHONE : 301 548-4329

LED SIGNAL DISPLAY CHART

STATIONS 1 & 2

	1	2	3	4	5	6	7	8
OFF PEAK 7:00 PM TO 7:00 AM	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
A.M. OFF PEAK CHANGE	(X) (RED)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
AM OFF PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
AM PEAK 7:00 AM TO 9:30 AM	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
AM PEAK CHANGE	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(V) (GREEN)
AM PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
OFF PEAK 9:30 AM TO 4:00 PM	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
P.M. OFF PEAK CHANGE	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)
PM OFF PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
PM PEAK 4:00 PM TO 7:00 PM	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
PM PEAK CHANGE	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
PM PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)

FIBER OPTIC SIGNS

STATION 1 STATION 2

	9	11
OFF PEAK 7:00 PM TO 7:00 AM	(V)	(V)
A.M. OFF PEAK CHANGE	(V)	(V)
AM PEAK 7:00 AM TO 9:30 AM	(V)	(V)
AM PEAK CHANGE	(V)	(V)
OFF PEAK 9:30 AM TO 4:00 PM	(V)	(V)
P.M. OFF PEAK CHANGE	(V)	(V)
PM PEAK 4:00 PM TO 7:00 PM	(V) ONLY	(V) ONLY
PM PEAK CHANGE	(V)	(V)

STATIONS 3 - 7

	1	2	3	4	5	6	7	8
OFF PEAK 7:00 PM TO 7:00 AM	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
A.M. OFF PEAK CHANGE	(X) (RED)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
AM OFF PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
AM PEAK 7:00 AM TO 9:30 AM	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
AM PEAK CHANGE	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(V) (GREEN)
AM PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
OFF PEAK 9:30 AM TO 4:00 PM	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
P.M. OFF PEAK CHANGE	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)
PM OFF PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
PM PEAK 4:00 PM TO 7:00 PM	(X) (RED)	(V) (YELLOW)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
PM PEAK CHANGE	(X) (RED)	(V) (YELLOW)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)
PM PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)

STATION 8

	11
OFF PEAK 7:00 PM TO 7:00 AM	(V)
A.M. OFF PEAK CHANGE	(V) LANE ENDS MERGE RIGHT
AM PEAK 7:00 AM TO 9:30 AM	(V) LANE ENDS MERGE RIGHT
AM PEAK CHANGE	(V)
OFF PEAK 9:30 AM TO 4:00 PM	(V)
P.M. OFF PEAK CHANGE	(V)
PM PEAK 4:00 PM TO 7:00 PM	(V)
PM PEAK CHANGE	(V)

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

CAT CODE	QUANTITY	DESCRIPTION
900000	8 EA	[UPDATED] CONTROLLER ASC III WITH TELEMETRY
900000	8 EA	[UPDATED] CONTROLLER MASTER ASC 10,000 WITH TELEMETRY
900000	8 EA	[UPDATED] CONTROLLER CABINET, SIZE 7 1/2'
900000	1 EA	[UPDATED] CONTROLLER CABINET, SIZE 7 1/2'
900000	110 SF	[UPDATED] SHEET ALUMINUM, GROUND MOUNTED SIGN
		8 EA "OBEY SIGNALS" (30"x24")
		1 EA "NOTICE LANE CONTROL SIGNAL AHEAD (48"x72")"
		1 EA "NOTICE LANE CONTROL SIGNAL AHEAD (42"x68")"
		2 EA R1-1 "STOP" (30"x30")
900000	180 SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
		14 EA "OBEY LANE CONTROL SIGNALS" (48"x36")
		1 EA "BEGIN LANE CONTROL SYSTEM" (48"x36")

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

CAT. CODE	QUANTITY	DESCRIPTION
120500	1	EA MAINTENANCE OF TRAFFIC
130850	1	EA MOBILIZATIONS
201032	10	CY CLASS 2 EXCAVATION
203030	12	CY TEST PIT EXCAVATION
634300	90	LF STANDARD TYPE A COMBINATION CURB & GUTTER
655105	995	SF 5 INCH CONCRETE SIDEWALK
655120	20	SF DETECTABLE WARNING SURFACES FOR CURB RAMPS
800000	8	EA PAINTED MAST ARM POLE & 60' MAST ARM ANY 'T' DIMENSION
800000	1	EA REMOVE & DISPOSE OF EQUIPMENT
800000	290	SF INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
800000	625-450	SF REMOVE & RESET DECORATIVE BRICK
800000	1945-1300	LF ELECTRICAL CABLE - 1 CONDUCTOR NO. 2/0 AWG THHN
800000	340	EA WOOD SIGN SUPPORTS FOR RETAINING WALLS
800000	3	EA FIBER OPTIC SIGN WITH ONE MESSAGE "LEFT ONLY"
800000	1	EA FIBER OPTIC SIGN WITH ONE MESSAGE "LANE ENDS MERGE RIGHT"
800000	16	EA LED LANE USE CONTROL SIGNAL - SINGLE DISPLAY "GREEN ARROW"
800000	16	EA LED LANE USE CONTROL SIGNAL - SINGLE DISPLAY "RED X"
800000	36	EA LED LANE USE CONTROL SIGNAL - MULTIPLE DISPLAY "RED X, FLASHING YELLOW X, GREEN ARROW"
801004	37	CY CONCRETE FOR SIGNAL FOUNDATION
801106	101	LF WOOD SIGN SUPPORTS UP TO 4"x6"
802501	290	LF NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805140	340-340	LF SCHEDULE 80 RIGID PVC CONDUIT UP TO 4" - TRENCHED
805155	1700-1920	LF SCHEDULE 80 RIGID PVC CONDUIT UP TO 4" - SLOTTED
807400	8	EA ELECTRICAL UTILITIES SERVICE EQUIPMENT - 120/240-VOLT 60-AMPS
807500	8	EA EMBEDDED METERED SERVICE PEDESTAL WITH BYPASS LEVER
810010	360-660	LF ELECTRICAL CABLE - 1 CONDUCTOR NO. 8 AWG - THHN/THWN
811001	13	EA FURNISH AND INSTALL ELECTRICAL HANDHOLE
822001	5100	LF 12-PAIR COMMUNICATIONS SELF-SUPPORTING
822002	1585-6685	LF 12-PAIR COMMUNICATIONS, JELLY-FILLED
833060	6	EA 3" DIAMETER PVC, SCHEDULE 80, RISER
833062	5	EA 4" DIAMETER PVC, SCHEDULE 80, RISER
837001	8	EA GROUND ROD - 1/2" INCH DIAMETER X 10 FOOT LENGTH
860265	1	EA RELOCATE EXISTING SIGNAL HEAD
861107	3450	LF ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	1545	LF ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
871201	8	EA INSTALL CONTROLLER CABINET - POLE MOUNT
871202	1	EA INSTALL CONTROLLER & CABINET - BASE MOUNTED

C. IF THE CABINET IS TO BE REMOVED SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

STATION 8

	1	2	3	4	5	6	7	8	9	10
OFF PEAK 7:00 PM TO 6:30 AM	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
A.M. OFF PEAK CHANGE	(X) (RED)	(X) (RED)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
AM OFF PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
AM PEAK 6:30 AM TO 9:30 AM	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
AM PEAK CHANGE	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
AM PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
OFF PEAK 9:30 AM TO 4:00 PM	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
P.M. OFF PEAK CHANGE	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
PM OFF PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(V) (GREEN)
PM PEAK 4:00 PM TO 7:00 PM	(X) (RED)	(X) (RED)	(V) (YELLOW)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
PM CHANGE	(X) (RED)	(X) (RED)	(Y) (YELLOW)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)
PM PEAK CHANGE RED CLEAR	(X) (RED)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(X) (RED)	(X) (RED)	(V) (GREEN)	(V) (GREEN)	(V) (GREEN)

STATIONS 8A & SIGNAL 32B

	1,32B
OFF PEAK 7:00 PM TO 6:30 AM	(X) (RED)
A.M. OFF PEAK CHANGE	(X) (RED)
AM OFF PEAK CHANGE RED CLEAR	(X) (RED)
AM PEAK 6:30 AM TO 9:30 AM	(X) (RED)
AM PEAK CHANGE	(X) (RED)
AM PEAK CHANGE RED CLEAR	(X) (RED)
OFF PEAK 9:30 AM TO 4:00 PM	(X) (RED)
P.M. OFF PEAK CHANGE	(X) (RED)
PM OFF PEAK CHANGE RED CLEAR	(X) (RED)
PM PEAK 4:00 PM TO 7:00 PM	(V) (YELLOW)
PM CHANGE	(X) (RED)
PM PEAK CHANGE RED CLEAR	(X) (RED)

1 REDLINE REVISION NO.1 3-18-2013

TEDD APPROVAL 3/26/13

ADDENDUM 4-30-12

PARSONS BRINCKERHOFF

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SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 29 (COLESVILLE RD)
FROM SLIGO CREEK PKW TO MD 97 (GEORGIA AVE)
(REVERSIBLE LANE USE CONTROL SYSTEM)

GENERAL INFORMATION PLAN

SCALE N.T.S. DATE FEBRUARY 14, 2012 CONTRACT NO. MO5475185

DESIGNED BY MAW COUNTY MONTGOMERY
DRAWN BY MAW LOGMILE 15002900.82 TO 15002901.74
CHECKED BY KMP TMS NO. K792
FAP NO. TOD NO.

TS NO. 1727XB GI DRAWING SG-05 OF 06 SHEET NO. 08 OF 11