

# PROJECT DESCRIPTION

## GENERAL

THIS PROJECT INVOLVES TRAFFIC SIGNAL MODIFICATION AT THE INTERSECTION OF JENNIFER ROAD AT WESTBOUND US 50 / PAVILION PARKWAY IN ANNE ARUNDEL COUNTY, MARYLAND. THE NORTH LEG WILL BE WIDENED TO PROVIDE A DEDICATED LEFT-TURN LANE AND DUAL RIGHT-TURN LANES AND INCLUDE PEDESTRIAN SIGNALIZATION. JENNIFER ROAD IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

## INTERSECTION OPERATIONS

THE INTERSECTION OPERATES IN A FULLY ACTUATED MODE USING FOUR (4) NEMA PHASES. APS/CPS CROSSWALK IS TO BE ADDED TO THE NORTH LEG OF THE INTERSECTION, WHICH WILL RUN CONCURRENTLY WITH THE WESTBOUND PHASE. NORTHBOUND AND SOUTHBOUND MOVEMENTS OPERATE WITH SPLIT PHASE. THE INTERSECTION IS INTERCONNECTED WITH THE JENNIFER ROAD AT MEDICAL PARKWAY SIGNAL.

## CONTROLLER REQUIREMENT

EXISTING BASE MOUNTED CONTROLLER ASSEMBLY SHALL BE MODIFIED TO PROVIDE THE INTENDED OPERATION SHOWN IN THE PHASING DIAGRAM.

## SPECIAL NOTES

- ALL UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE SO THAT SHA FORCES CAN MAKE THE FINAL CONNECTIONS. CONTACT THE TRAFFIC SIGNAL OPERATIONS SUPERVISOR, AT LEAST 72 HOURS PRIOR TO INSTALLATION.
- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 104.00-30, 104.31-01 (FLAGGING OPERATION), 104.33-01 (SHOULDER WORK), 104.35 (LANE SHIFT), 104.32-01 (INTERSECTION FLAGGING OPERATION).

## PROJECT CONTACTS

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

### DISTRICT 5:

LEE STARKLOFF  
DISTRICT ENGINEER  
PHONE: (410) 841-1001

MS. KIMBERLY TRAM  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 841-1019

MR. JAMES FOLDEN  
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (410) 841-1031

MR. JOHN S. MAYS  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 841-1013

MIKE HUBER  
UTILITY ENGINEER  
PHONE: (410) 841-1039

### NOTES:

MR. ED RODENHIZER  
TRAFFIC SIGNAL OPERATIONS SUPERVISOR  
PHONE: (410) 787-7850

## EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE STATE HIGHWAY ADMINISTRATION.

NONE

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

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
114280	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH.	LF	150
114285	REMOVAL OF EXISTING PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS AND NUMBERS.	EA	2
120500	MAINTENANCE OF TRAFFIC	LS	1
130850	MOBILIZATION	LS	1
203030	TEST PIT EXCAVATION	CY	3
500000	4" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	476
500000	4" YELLOW PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	800
500000	6" YELLOW PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	35
585621	12" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	75
585625	24" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	70
585627	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS	SF	50
655120	DETECTABLE WARNING SURFACE FOR CURB RAMPS	SF	20
800000	2 WIRE CENTRAL CONTROL UNIT (APS)	EA	1
800000	AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON AND SIGN	EA	2
800000	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD	EA	2
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	2
801104	4" x 4" WOOD SIGN SUPPORTS	LF	15
801605	SHEET ALUMINUM SIGNS	SF	44
	1 EACH R3-5L (30" x 36") MAST ARM MOUNT (LEFT-TURN ONLY)		
	1 EACH R3-5R (30" x 36") MAST ARM MOUNT (RIGHT-TURN ONLY)		
	1 EACH R3-6T(MOD) (30" x 36") MAST ARM MOUNT (RIGHT-TURN LANE USAGE)		
	1 EACH R4-7(R) (24" x 30") GROUND MOUNT (KEEP RIGHT)		
802501	STRANDED BARE COPPER GROUND WIRE (No. 6 AWG)	LF	115
805118	4" SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	110
805125	2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	30
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	1
813006	RELOCATE SIGNS FROM EXISTING OVERHEAD STRUCTURES	SF	10
818004	10" BREAKAWAY PEDESTAL POLE	EA	2
837001	GROUND ROD - 3/4" x 10' LENGTH	EA	1
860284	12" LED BLACK FACED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	10
861105	ELECTRICAL CABLE - 2 CONDUCTOR (No. 14 AWG)	LF	380
861107	ELECTRICAL CABLE - 5 CONDUCTOR (No. 14 AWG)	LF	425
861108	ELECTRICAL CABLE - 7 CONDUCTOR (No. 14 AWG)	LF	250
873001	REMOVE AND SALVAGE EXISTING SIGNAL EQUIPMENT	EA	1

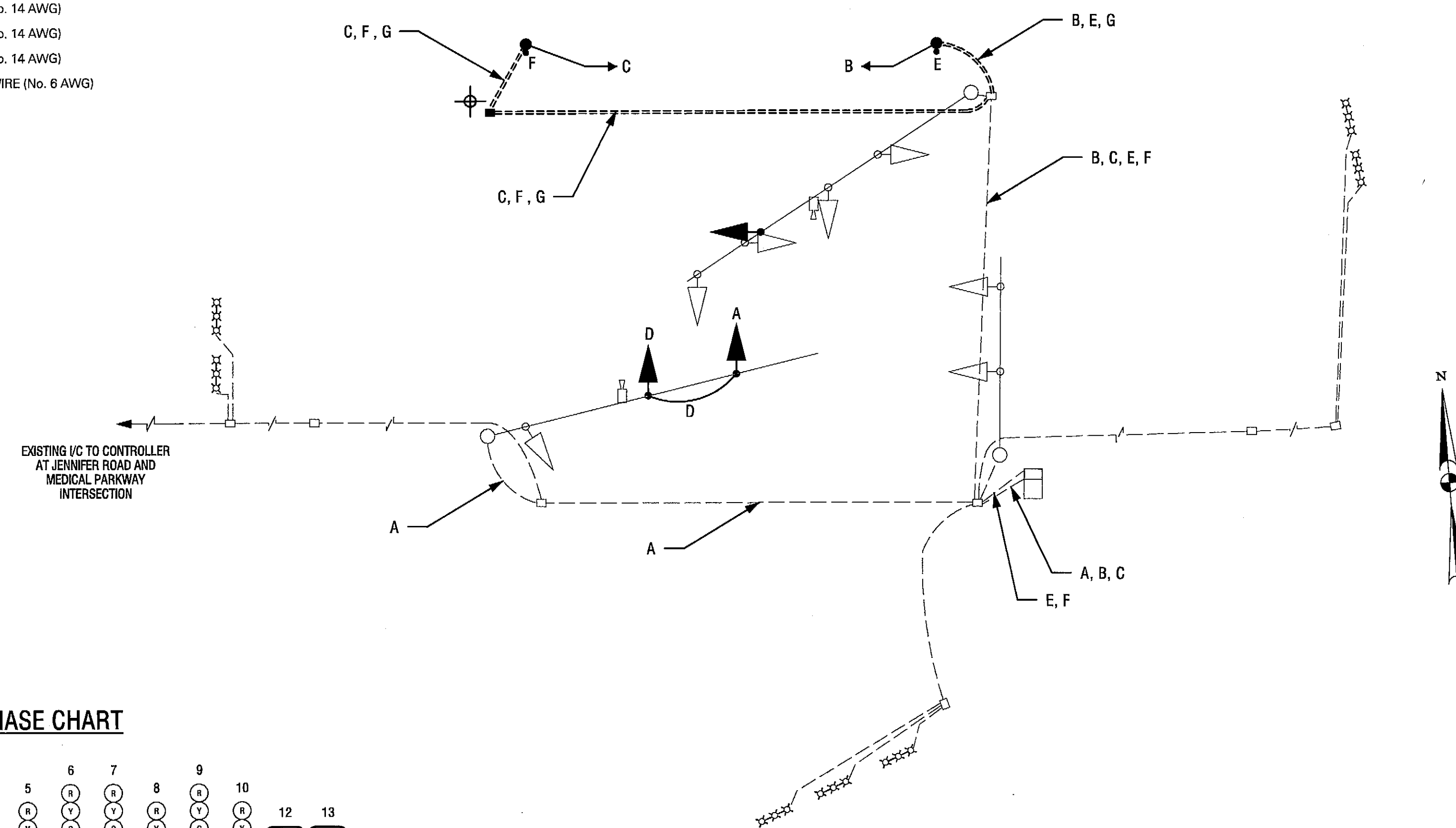
C. EQUIPMENT TO BE REMOVED AND RETURNED TO STATE HIGHWAY ADMINISTRATION.

NONE

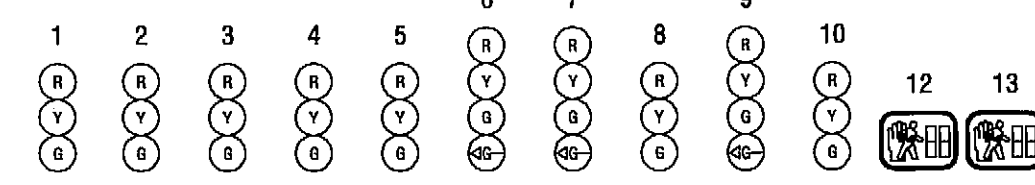
## WIRING DIAGRAM LEGEND

- A 7 CONDUCTOR ELECTRICAL CABLE (No. 14 AWG)
- B, C, D 5 CONDUCTOR ELECTRICAL CABLE (No. 14 AWG)
- E, F 2 CONDUCTOR ELECTRICAL CABLE (No. 14 AWG)
- G STRANDED BARE COPPER GROUND WIRE (No. 6 AWG)
- GROUND ROD

## WIRING DIAGRAM



## PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 2 + 6	G	G	G	G	G	R	R	R	R	R	W	W	
PHASE 2 + 6 PED CLEAR	G	G	G	G	G	R	R	R	R	R	FLDW	FLDW	
PHASE 2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW	T
PHASE 3	R	R	R	R	R	R	R	R	R	G	DW	DW	
PHASE 3 CHANGE	R	R	R	R	R	R	R	R	R	Y	DW	DW	T
PHASE 4	R	R	R	R	R	G	G	G	R	R	DW	DW	
PHASE 4 CHANGE	R	R	R	R	R	Y	Y	Y	R	R	DW	DW	T
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	

## MESSAGES FOR ACCESSIBLE PEDESTRIAN SIGNALS

LEG	WAIT MESSAGE	WALK MESSAGE
	When the pedestrian locates and presses the push button for an extended time, the push button unit will announce the following message:	When the WALK phase begins, the push button unit will provide either (1) a rapid tick which will last for the duration of the WALK phase or (2) the following message:
NORTH	"WAIT to cross PAVILION at JENNIFER."	Rapid Tick

BY: WELLS+ASSOCIATES, INC

**WA** WELLS + ASSOCIATES, INC  
TRANSPORTATION, TRAFFIC AND PARKING CONSULTANTS

5 Wirt Street SW, Suite 300, Leesburg, Virginia 20175  
Phone: 703-443-1442 Facsimile: 703-443-1225  
1420 Spring Hill Road, Suite 600, McLean, Virginia 22102  
Phone: 703-917-8820 Facsimile: 703-917-0739

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
**JENNIFER ROAD AT  
WESTBOUND US 50 RAMP 'F'**  
ANNAPOLIS, MARYLAND

### GENERAL INFORMATION SHEET

SCALE \_\_\_\_\_ DATE 30 SEPT 09 CONTRACT NO. BW996M82

DESIGNED BY NDG COUNTY ANNE ARUNDEL

DRAWN BY NDG LOGMILE 02CJEN00.41

CHECKED BY CT TMS NO. J720

F.A.P. NO. \_\_\_\_\_ TOD NO. \_\_\_\_\_

DRAWING NO. TS-4073A-GI SHEET NO. 2 OF 2

PLOTTED:  
FILE: L:\Projects\4000 - 4500\4272 - Jennifer Rd & WB 50 Ramp Signal\Design\JENNIFER RD\_WB 50 RAMP TSM.dgn