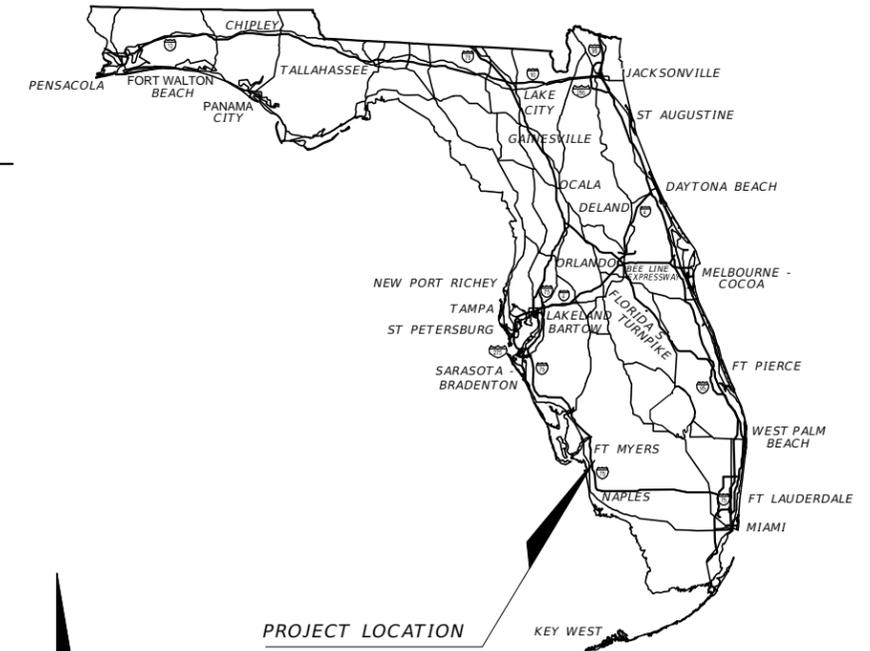


# LEE COUNTY DEPARTMENT OF TRANSPORTATION



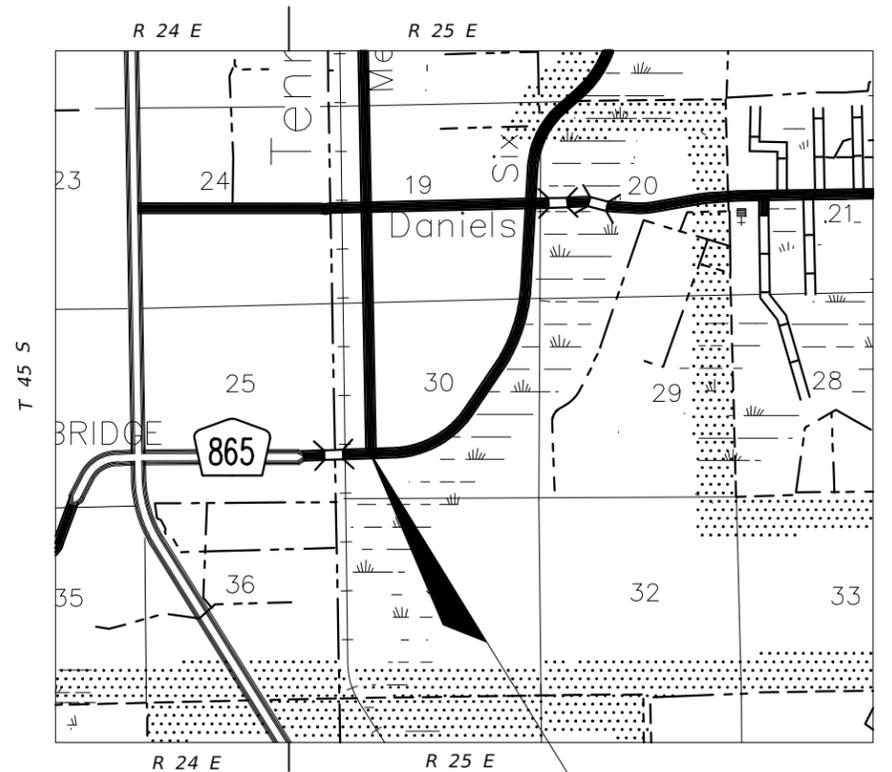
## INDEX OF SIGNAL PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	TABULATION OF QUANTITIES GENERAL NOTES & DETAILS
T-3	SIGNALIZATION PLAN
T-4	MAST ARM TABULATION

## S R 739 @ SIX MILE CYPRESS PKWY SIGNAL RENOVATION PLANS

### PLANS PREPARED FOR:

AGNOLI, BARBER & BRUNDAGE, INC.  
7400 TAMiami TRAIL N, SUITE 200  
NAPLES, FL 34108



PROJECT LOCATION

### GOVERNING STANDARDS AND SPECIFICATIONS:

Florida Department of Transportation, 2016/2017 Design Standards and revised Index Drawings as appended herein, and 2017 Standard Specifications for Road and Bridge Construction, as amended by Contract Documents.

For Design Standards click on the "Design Standards" link at the following web site:

<http://www.dot.state.fl.us/programmanagement/>

For the Standard Specifications for Road and Bridge Construction click on the "Specifications" link at the following web site:

<http://www.fdot.gov/programmanagement/Specs.shtm>

KEY SHEET REVISIONS	
DATE	DESCRIPTION

SHOP DRAWINGS  
TO BE SUBMITTED TO  
AND PLANS PREPARED BY:



1205 PIPER BLVD SUITE 202 NAPLES FL 34110  
TREBILCOCK CONSULTING SOLUTIONS PA  
CERTIFICATE OF AUTHORIZATION No. 27796  
PHONE: 239 566 9551  
FAX: 239 566 9553

NOTE: THE SCALE OF THESE PLANS MAY  
HAVE CHANGED DUE TO REPRODUCTION.



ISSUE FOR SUBMITTAL: 3-31-2017

SIGNAL PLANS  
ENGINEER OF RECORD: NORMAN J. TREBILCOCK PE AICP

PE NO. 47116

This item has been electronically signed and sealed by Norman J. Trebilcock, PE using a SHA-1 authentication code.  
Printed copies of this document are not considered signed and sealed, and the SHA-1 authentication code must be verified on any electronic copies.

FISCAL YEAR	SHEET NO.
17	T-1

GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT LEE COUNTY DEPARTMENT OF TRANSPORTATION PRIOR TO NOTICE TO PROCEED TO GET THE LATEST LEE COUNTY TRAFFIC TECHNICAL SPECIAL PROVISIONS.
2. AS REQUIRED BY FLORIDA STATUTES, THE CONTRACTOR SHALL NOTIFY THE SUNSHINE STATE ONE CALL CENTER AT 1-800-432-4770 SO THAT APPLICABLE UTILITIES MAY BE MARKED. THE INVOLVED UTILITIES, TELEPHONE NUMBERS, AND REQUIRED NOTIFICATION PERIODS ARE PROVIDED.
3. THE PLANS MAY NOT DEPICT ALL UTILITIES IN THE AREA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR HAVING ALL UNDERGROUND UTILITIES LOCATED AND IDENTIFIED BY PROPER AUTHORITIES AT ALL CONSTRUCTION SITES PRIOR TO CONSTRUCTION.
4. SIGNAL INSTALLATION SHALL CONFORM TO THE LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS DATED APRIL 15, 2014 AND THE LATEST FDOT SPECIFICATIONS FOR TRAFFIC SIGNALS. WHERE CONFLICTS ARISE, THE COUNTY'S SPECIFICATIONS SHALL PREVAIL.
5. SIGNAL TO BE MAINTAINED BY LEE COUNTY DEPARTMENT OF TRANSPORTATION AFTER FINAL ACCEPTANCE.
6. SHOP DRAWING SUBMITTALS SHALL BE IN ACCORDANCE WITH SECTION A601 OF THE FDOT MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNAL DEVICES, 2010, INCLUDING AMENDMENTS THERETO.
7. SECT.611-4 FIELD TESTS OF SIGNAL INSTALLATIONS;
 

PRIOR TO THE 48 HOUR TEST (CONDITIONAL ACCEPTANCE TEST) ALL EQUIPMENT SHALL BE INSTALLED AND OPERABLE. RESULTS OF FIELD TEST, I.E. SECT. 611-4 SHALL BE MADE AVAILABLE TO THE ENGINEER IN WRITTEN FORM. A QUALIFIED REPRESENTATIVE SHALL BE PRESENT AT THE CONDITIONAL ACCEPTANCE INSPECTION OF THE CONTROLLER ASSEMBLY. THE QUALIFICATIONS FOR THE REPRESENTATIVE SHALL INCLUDE COMPLETE FAMILIARITY WITH ALL SYSTEM ELEMENTS INCLUDING CONTROLLERS, COORDINATION UNITS, SYSTEM CLOCKS AND SYSTEM COMMUNICATIONS ELEMENTS. THE REPRESENTATIVE SHALL BE QUALIFIED TO INPUT AND RECALL ALL CONTROLLER AND SYSTEM TIMING FUNCTIONS.
8. THE CONTRACTOR SHALL NOTIFY, IN WRITING, LEE COUNTY'S, TRAFFIC SIGNAL SECTION, AFTER CONSTRUCTION WITH DATE AND TIMES OF START OF SIGNAL, AND COMPLETION OF CONSTRUCTION PROJECT.
9. FOR TRAFFIC SIGNAL COMPONENTS OR DETAILS NOT SHOWN, THE REQUIREMENTS OF THE LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS DATED APRIL 15, 2014, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, FDOT EVALUATION CRITERIA FOR TRAFFIC CONTROL DEVICES, AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS SHALL APPLY.
10. AT THE TIME OF THE FINAL INSPECTION OF THE PROJECT, THE CONTRACTOR SHALL FURNISH THE COUNTY'S PROJECT MANAGER WITH TWO COMPLETE SETS OF AS-BUILT PLANS.

SIGNAL HEADS:

11. ALL ELECTRICAL CONNECTIONS FOR VEHICULAR TRAFFIC ASSEMBLIES SHALL USE INSULATED SPADE TERMINALS.
12. SIGNAL HEADS SHALL INCLUDE ALL SUPPORTING HARDWARE NECESSARY TO RIGIDLY MOUNT SIGNAL HEADS TO MAST ARM. NUTS, BOLTS, WASHERS, SHALL BE STAINLESS STEEL.
13. ALL SIGNAL HEAD HOUSINGS SHALL BE CAST ALUMINUM (BLACK)
14. ALL RED, YELLOW AND GREEN SIGNAL INDICATORS SHALL HAVE FDOT CERTIFIED LED LENS INSTALLED IN THE SIGNAL ASSEMBLY. NO METAL INSERTS FOR ARROWS WILL BE ALLOWED.
15. TRAFFIC SIGNAL HEADS SHALL BE EQUIPPED WITH TUNNEL VISORS AND LOVERED ALUMINUM BACKPLATES. BACKPLATES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS CONSISTENT WITH SAFE CONSTRUCTION PRACTICES AND MUST MEET LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS. ALL ALUMINUM BACKPLATES SHALL BE PROVIDED WITH RETRO-REFLECTIVE BORDER MATERIAL.

PAY ITEM NOTES

SIGNAL HEAD:

650-1-14 AND 650-1-16: THE COST FOR THE TUNNEL VISORS AND BACKPLATES SHALL BE INCLUDED UNDER THE SIGNAL HEAD PAY ITEM. USE LOVERED ALUMINUM SIGNAL HEAD BACK PLATES WITH A 2" YELLOW REFLECTORIZED (TYPE III REFLECTIVITY) OUTER EDGE BORDER. BACK PLATES TO BE ONE-PIECE ALUMINUM.

THE RED, YELLOW AND GREEN LIGHT SOURCE FOR THE TRAFFIC SIGNAL SHALL BE LIGHT EMITTING DIODE (LED)

MAST ARM MOUNTING SIGNAL HEAD BRACKETS SHALL BE MANUFACTURED BY PELCO OR APPROVED EQUIVALENT.

RIGID MOUNT TRAFFIC SIGNAL HEADS TO MAST ARMS UTILIZING STAINLESS STEEL WIRE ROPE CABLE.

USE RED, YELLOW, GREEN, AND WHITE THHN #14 COPPER WIRES FROM DISCONNECT TO SIGNAL HEAD. PLACE A PERMANENT MARKING ON THE WIRE DESIGNATING THE PHASE USED.

AT THE COMPLETION OF THE PROJECT, PROVIDE AS-BUILT PLANS IN ELECTRONIC FORM (PDF) TO: LEE COUNTY DEPARTMENT OF TRANSPORTATION

**TABULATION OF QUANTITIES**

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS						TOTAL THIS SHEET		
			T-5		T-6		T-7		PLAN	FINAL	
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL			
101-1	MOBILIZATION	LS						1			
102-1	MAINTENANCE OF TRAFFIC	LS						1			
650-1-14	TRAFFIC SIGNAL (INSTALL) (3 SECTION) (1-WAY)	AS						1			

CONTACT INFORMATION

1. AT LEAST 48 HOURS PRIOR TO BEGINNING THE TRAFFIC SIGNAL INSTALLATION, CONTRACTOR SHALL CONTACT THE TRAFFIC SIGNAL INSPECTOR/LIAISON. SUBMITTAL DATA FOR ALL PERMIT JOBS MUST BE IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 603.5, AND SHALL BE SUBMITTED TO LEE COUNTY TRAFFIC OPERATIONS FOR REVIEW AND APPROVAL OR REJECTION PRIOR TO ORDERING.

JAMES FENCIL  
LEE COUNTY DOT  
5650 ENTERPRISE PKWY.  
FORT MYERS, FL 33905  
PH: (239) 707-4870



NORMAN TREBILCOCK, AICP, PE #47116  
TCS CERTIFICATE OF AUTHORIZATION No. 27796  
ISSUE FOR SUBMITTAL: 3-31-2017

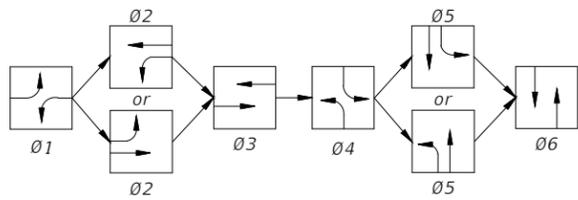
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



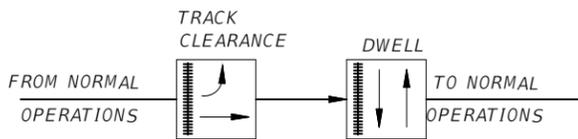
S R 739 + SIX MILE CYPRESS PKWY SIGNAL RENOVATION PLANS		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 739	LEE	NA

*TABULATION OF QUANTITIES  
GENERAL NOTES & DETAILS*

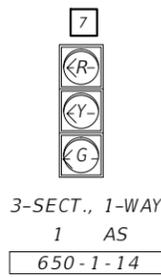
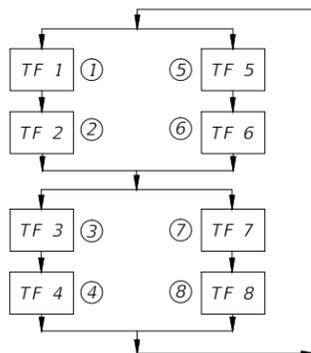
SHEET NO.  
T-2



SOP 10



EMERGENCY PREEMPTION



Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8
Min Green	6.0	20.0	6.0	20.0	6.0	20.0	6.0	20.0
Ext	2.0	2.0	3.0	2.0	3.0	3.0	3.0	2.0
Yellow	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
All Red	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max I	25.0	50.0	30.0	45.0	25.0	50.0	30.0	45.0
Max II								
Ped Walk		7.0		7.0		7.0		7.0
Ped Clr.		32.0		32.0		32.0		32.0
Recall		MIN				MIN		

GENERAL NOTES:

1. MAJOR STREET IS METRO PARKWAY (S.R 735) PHASE 3 MOVEMENTS 2 AND 6, MINOR STREET IS SIX MILE CYPRESS PARKWAY PHASE 6 MOVEMENTS 4 AND 8.
2. SIGNAL OPERATING PLAN AS SHOWN IN PLANS.
3. PREEMPTION OPERATING PLANS ACTUATED AS SHOWN, GREEN PHASE HELD UNTIL ACTIVATION CEASES.

CONTROLLER TIMING NOTES:

1. TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTING AS REQUIRED BY THE PROJECT ENGINEER. INSTALL SEQUENTIAL TIMINGS OF INITIAL AND EXTENSION INTERVALS.
1. PROGRAM PHASE RESTRICTION TO OMIT PHASE 5 WHEN PHASE 6 IS GREEN, IN ADDITION TO DETECTOR CROSS SWITCHING.

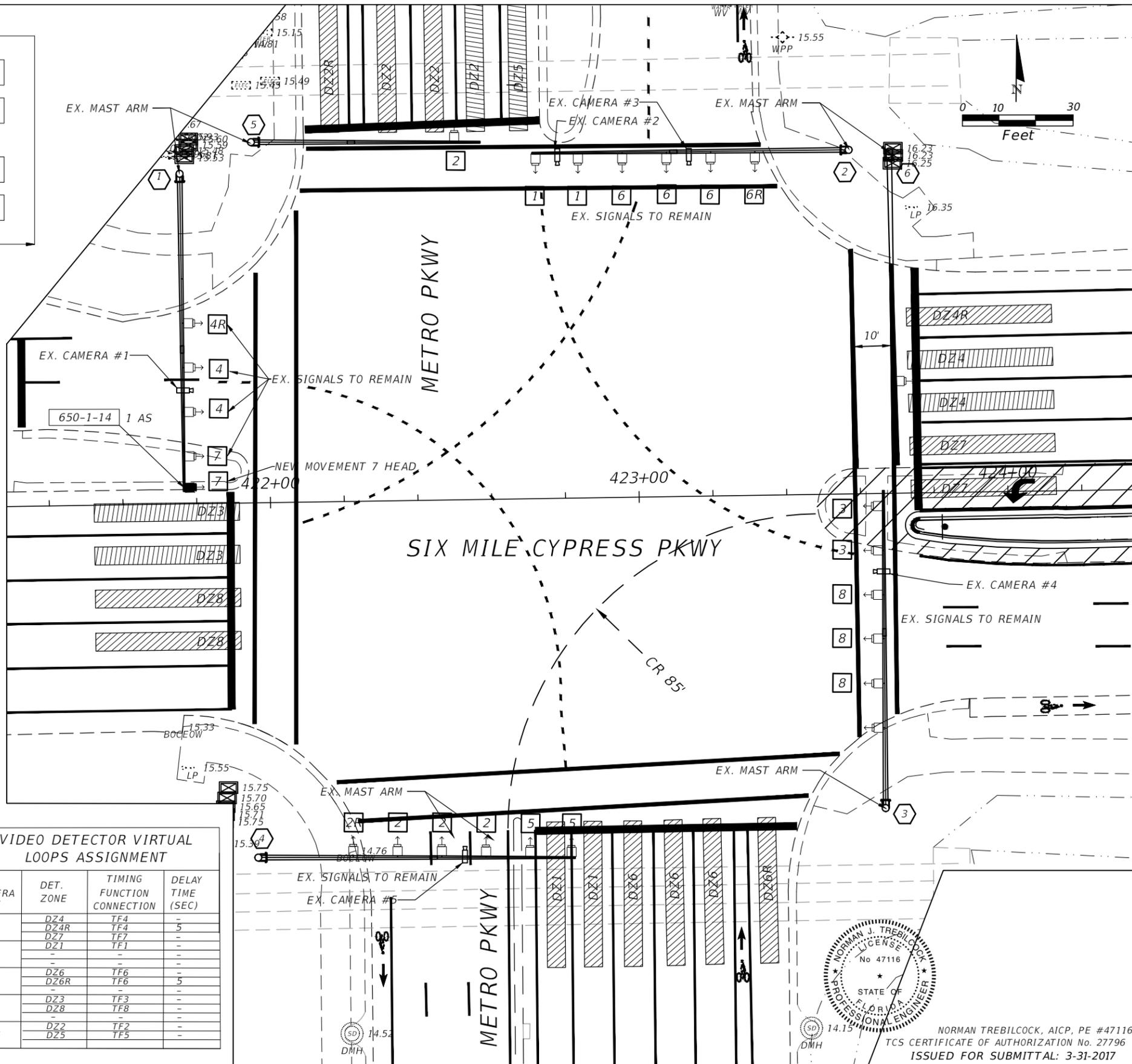
MAINTENANCE OF TRAFFIC:

1. THE IMPLEMENTATION OF THE PROJECT MAINTENANCE OF TRAFFIC (MOT) PLAN SHALL BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) ROADWAY AND TRAFFIC DESIGN STANDARDS DATED JANUARY 2016. IN ADDITION, FDOT 600 SERIES INDEXES AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS SHALL BE THE GOVERNING DESIGN AND IMPLEMENTATION DOCUMENTS.
2. REFER TO FDOT INDEX NO. 600 FOR ADDITIONAL GENERAL INFORMATION. INDEX NO. 602 PROVIDES ADDITIONAL RELEVANT CRITERIA.
3. THE SIGN SPACING SHOWN IN THE FDOT INDEXES IS TYPICAL (RECOMMENDED) DISTANCES. THESE DISTANCES MAY BE INCREASED OR DECREASED BASED ON FIELD CONDITIONS, IN ORDER TO AVOID CONFLICTS OR TO IMPROVE SITE-SPECIFIC TRAFFIC CONTROLS.
4. THE MINIMUM LANE WIDTH SHALL BE 10 FEET.

VIDEO DETECTOR NOTES:

1. ADVANCED DETECTION CAMERAS FOR ADVANCE SYSTEM DETECTION MAY BE REQUIRED BY MAINTAINING AGENCY (LEE COUNTY DOT TRAFFIC).
2. CONTRACTOR SHALL COORDINATE WITH LEE COUNTY DOT TRAFFIC OPERATIONS ON VIDEO DETECTOR AND VIDEO ZONE LOCATIONS.
3. SEE MOST CURRENT LEE COUNTY DOT SPECIFICATION TECHNICAL SPECIFICATION TO CONFIRM MULTI-POINT DETECTION PLACEMENT

CAMERA DET	DET. ZONE	TIMING FUNCTION CONNECTION	DELAY TIME (SEC)
CD1	DZ4	TF4	-
	DZ4R	TF4	5
	DZ7	TF7	-
CD2	DZ1	TF1	-
	-	-	-
CD3	DZ6	TF6	-
	DZ6R	TF6	5
CD4	DZ3	TF3	-
	DZ8	TF8	-
CD5	DZ2	TF2	-
	DZ5	TF5	-



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DATE	DESCRIPTION	DATE



ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 739	LEE	NA

SIGNALIZATION PLAN

SHEET NO.  
T-3

