



# BOARD OF COUNTY COMMISSIONERS ESCAMBIA COUNTY, FLORIDA ENGINEERING DEPARTMENT

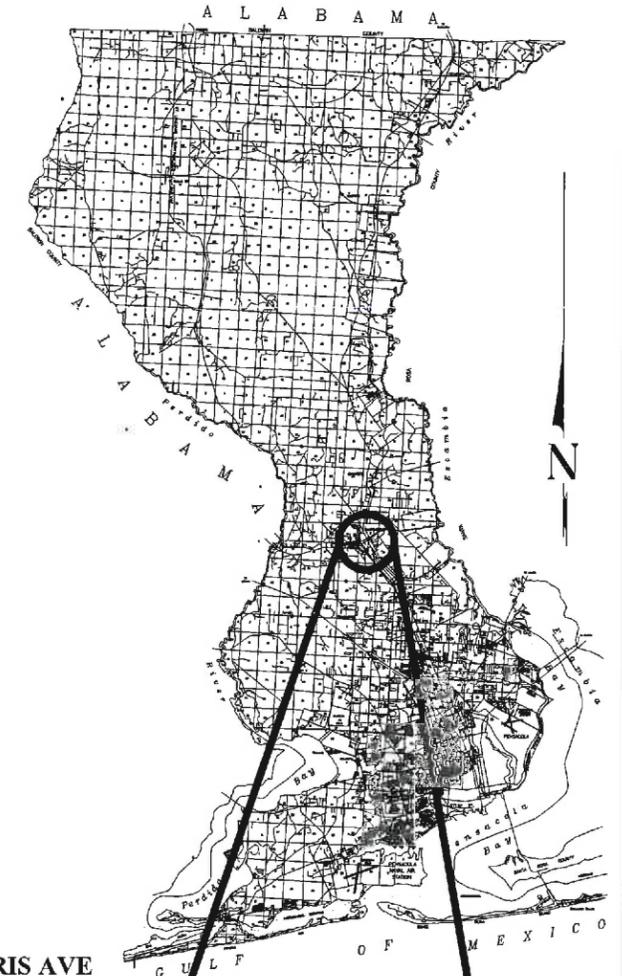
## SIGNAL PLANS PROPOSED FOR

# SR 95 (US 29)

PD 14-15.098

LAP FPID 437039-1-54-01

## SIGNAL IMPROVEMENTS (TREE STREET, MUSCOGEE ROAD & MORRIS AVENUE)



### INDEX OF SIGNAL PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	TABULATION OF QUANTITIES
3	GENERAL NOTES
4 THRU 6	SIGNALIZATION PLAN SHEETS

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE FLORIDA GREEN BOOK (DATED MAY 2011), THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (DATED 2016), THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS (DATED 2016), AND THE LATEST ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

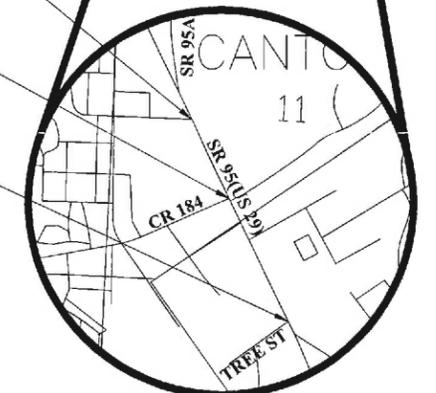
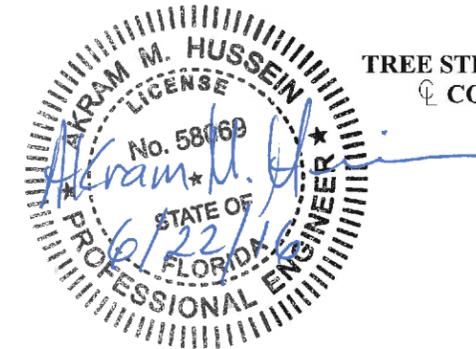
ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATION REFERED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

KEY SHEET REVISIONS	
DATE	DESCRIPTION

MORRIS AVE  
 ☉ CONST.

MUSCOGEE RD  
 ☉ CONST.

TREE STREET  
 ☉ CONST.



SECTION 11, 14  
 TOWNSHIP 1 N, RANGE 31 W  
 DISTRICT 5  
**VICINITY MAP**  
 NOT TO SCALE

### COMMISSIONERS

- DISTRICT ONE      WILSON ROBERTSON, VICE CHAIRMAN
- DISTRICT TWO      DOUG UNDERHILL
- DISTRICT THREE     LUMON MAY
- DISTRICT FOUR     GROVER ROBINSON, IV (CHAIRMAN)
- DISTRICT FIVE     STEVEN BARRY

ESCAMBIA COUNTY PROJECT MANAGER: ELIZABETH BUSH

SIGNAL PLANS  
 ENGINEER OF RECORD: AKRAM M. HUSSEIN, PE

P.E. NO.: 58069



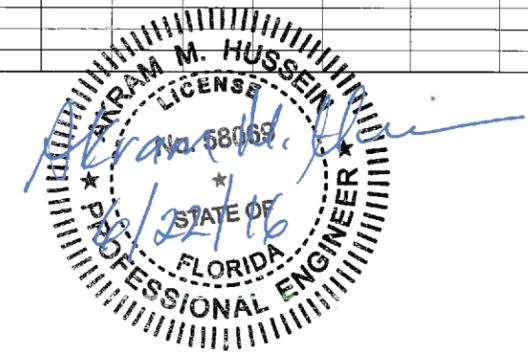
4489 Woodbine Road • Pace, Florida 32571  
 Tel 850.289.1000 • Fax 850.289.1001  
 Certificate of Authorization No. 9302

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS												TOTAL THIS SHEET		GRAND TOTAL			
			4		5		6		7		8		9		10		PLAN	FINAL	PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL						
101-1	MOBILIZATION	LS	1																	
102-1	MAINTENANCE OF TRAFFIC	LS	1																	
630-2-11	CONDUIT (F&I) (OPEN TRENCH)	LF	26		13			6												
635-2-11	PULL & SPLICE BOX (F&I) (13" x 24" - COVER SIZE)	EA	2		2			1												
639-1-113	ELECTRICAL POWER SERVICE (F&I) (OVERHEAD) (NO METER)	AS	1		1															
639-1-610	ELECTRICAL POWER SERVICE (REMOVE) (OVERHEAD)	AS	1		1															
639-2-1	ELECTRICAL SERVICE WIRE (F&I)	LF	133		97															
639-2-6	ELECTRICAL SERVICE WIRE (REMOVE)	LF	143		114															
639-3-11	ELECTRICAL SERVICE DISCONNECT (F&I) (POLE MOUNT)	EA	1		1															
639-3-60	ELECTRICAL SERVICE DISCONNECT (REMOVE) (POLE TO REMAIN)	EA	1		1															
641-2-12	PRESTRESSED CONCRETE POLE (F&I) (TYPE P-11 SERVICE POLE)	EA	1		1															
660-4-11	VEHICLE DETECTION SYSTEM - VIDEO (F&I) (CABINET EQUIPMENT)	EA	1		1			1												
660-4-12	VEHICLE DETECTION SYSTEM - VIDEO (F&I) (ABOVE GROUND EQUIPMENT)	EA	1		1			1												
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (F&I) (ATC) (NONE)	AS	1																	
670-5-151	TRAFFIC CONTROLLER ASSEMBLY (F&I) (ATC) (ONE PREEMPTION)	AS			1															
670-5-400	TRAFFIC CONTROLLER ASSEMBLY (MODIFY)	AS						1												
670-5-600	TRAFFIC CONTROLLER ASSEMBLY (REMOVE CONTROLLER & CABINET)	AS	1		1															
671-2-14	TRAFFIC CONTROLLER WITHOUT CABINET (F&I) (2070)	EA						1												
684-1-1	MANAGED FIELD ETHERNET SWITCH (F&I)	EA	1		1			1												
684-6-12	WIRELESS COMMUNICATION DEVICE (F&I) (ETHERNET SUBSCRIBER UNIT)	EA	2		2			2												

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PHASE: REVIEW  
 SIGNATURE: \_\_\_\_\_  
 ORIGINATOR (OP) \_\_\_\_\_ DATE \_\_\_\_\_  
 PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP)  
 CHECKER (CP) \_\_\_\_\_ DATE \_\_\_\_\_  
 CHANGER (CR) \_\_\_\_\_ DATE \_\_\_\_\_  
 CORRECT (Green Highlight) Change (Red Pin)  
 CORRECT (Red Pin X-out to Reorganize or Remove)  
 CORRECT (Blue Highlight)  
 CORRECT (Pink Highlight)  
 VERIFICATION CHECKER (VR) \_\_\_\_\_ DATE \_\_\_\_\_  
 REMARK INCORPORATION (Blue Highlight)  
 PROPOSER VERIFICATION (Green Highlight)



SR 95 (US 29) SIGNAL IMPROVEMENT  
 TABULATION OF QUANTITIES



AKRAM M. HUSSEIN, P.E. No. 58069  
 DATE: \_\_\_\_\_  
 PROJECT LOCATION: \_\_\_\_\_  
 PROJECT NUMBER: \_\_\_\_\_  
 PROJECT TITLE: SR 95 @ DEEP ST. INTERSECTION & MORRIS AVE  
 COUNTY PROJECT MANAGER: Elizabeth Bush

**American** Consulting Engineers of Florida, LLC  
 4489 WOODBINE RD.  
 PACE, FLORIDA 32571  
 Phone: (850) 289-1000 Fax: (850) 289-1001  
 Certificate of Authorization No. S-502  
 Akram M. Hussein, P.E. No. 58069  
 PROJECT ID: 5768029

NO.	DATE	DESCRIPTION



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**NOTES:**

1. POWER SERVICE DISCONNECT SHALL BE INSTALLED ON CONCRETE SERVICE POLE AS SHOWN ON THE PLANS AND INDEX 17504 AND 17736.
2. SIGNAL CABINET EQUIPMENT SHALL MEET THE LATEST ESCAMBIA COUNTY SPECIFICATIONS.
3. ROADWAY CROSSINGS CONSIST OF TWO (2) CONDUIT RUNS; 1 VIDEO & 1 SPARE.
4. SPECIAL CARE SHALL BE TAKEN WHEN PLACING CONDUIT AROUND THE GAS LINES. THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE UTILITY OWNER PRIOR TO DIGGING OR DIRECTIONAL DRILLING.
5. EXISTING SIGNAL HEADS TO REMAIN.

**CONTROLLER OPERATIONS:**

1. MAJOR STREET IS SR 95 (US 29), PHASES 1, 2 & 3 (MOVEMENTS 1, 2, 5 & 6).
2. MINOR STREET IS MORRIS AVENUE/N. HIGHWAY 95A, PHASE 4 (MOVEMENTS 4 & 8).
3. FLASHING OPERATION IS YELLOW FOR MOVEMENTS 2 & 6 AND RED FOR ALL OTHER MOVEMENTS.
4. CONTROLLER SHALL OPERATE AS A SOP 7.
5. PRIOR TO BIDDING THIS CONTRACT, THE CONTRACTOR SHALL COORDINATE WITH THE ESCAMBIA COUNTY ENGINEERING OFFICE FOR SPECIFIC COUNTY SPECIFICATIONS AND DETAILS FOR THE PLACEMENT OR MODIFICATIONS OF THE SIGNAL CABINET AND PULL BOXES.

**WARNING GAS MAIN IN AREA OF CONSTRUCTION**

**REMOVAL ITEMS**

1 AS	639-1-610
143 LF	639-2-6
1 EA	639-3-60

**R/W LINE**

7 LF (2 RUNS)	630-2-11
1 EA	635-2-11
1 AS	639-1-713
133 LF	639-2-1
1 EA	639-3-11
1 EA	641-2-12

1 EA	660-4-11
1 AS	670-5-150
1 AS	670-5-600
1 EA	684-1-1

MAKE CONNECTION FROM WIRELESS ANTENNA TO PROPOSED CONTROLLER CABINET

EXISTING SIGNAL CONTROLLER CABINET LOCATION

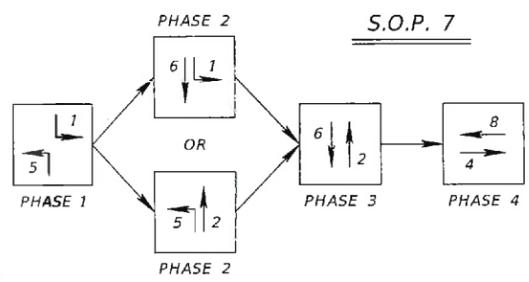
19 LF (2 RUNS)	630-2-11
1 EA	635-2-11

1 EA	660-4-12
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VIDEO DETECTOR VD-1 MOUNT ON EXISTING DAVIT ARM

684-6-12 2 EA POSITION WIRELESS ANTENNA BETWEEN SIGNAL HEAD AND STREET NAME SIGN

6' x 50' DETECTION ZONE PLACED 5' BEYOND STOP BAR (TYP)



**CONTROLLER TIMINGS**

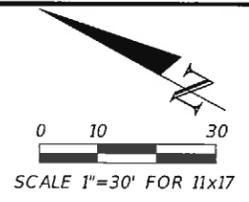
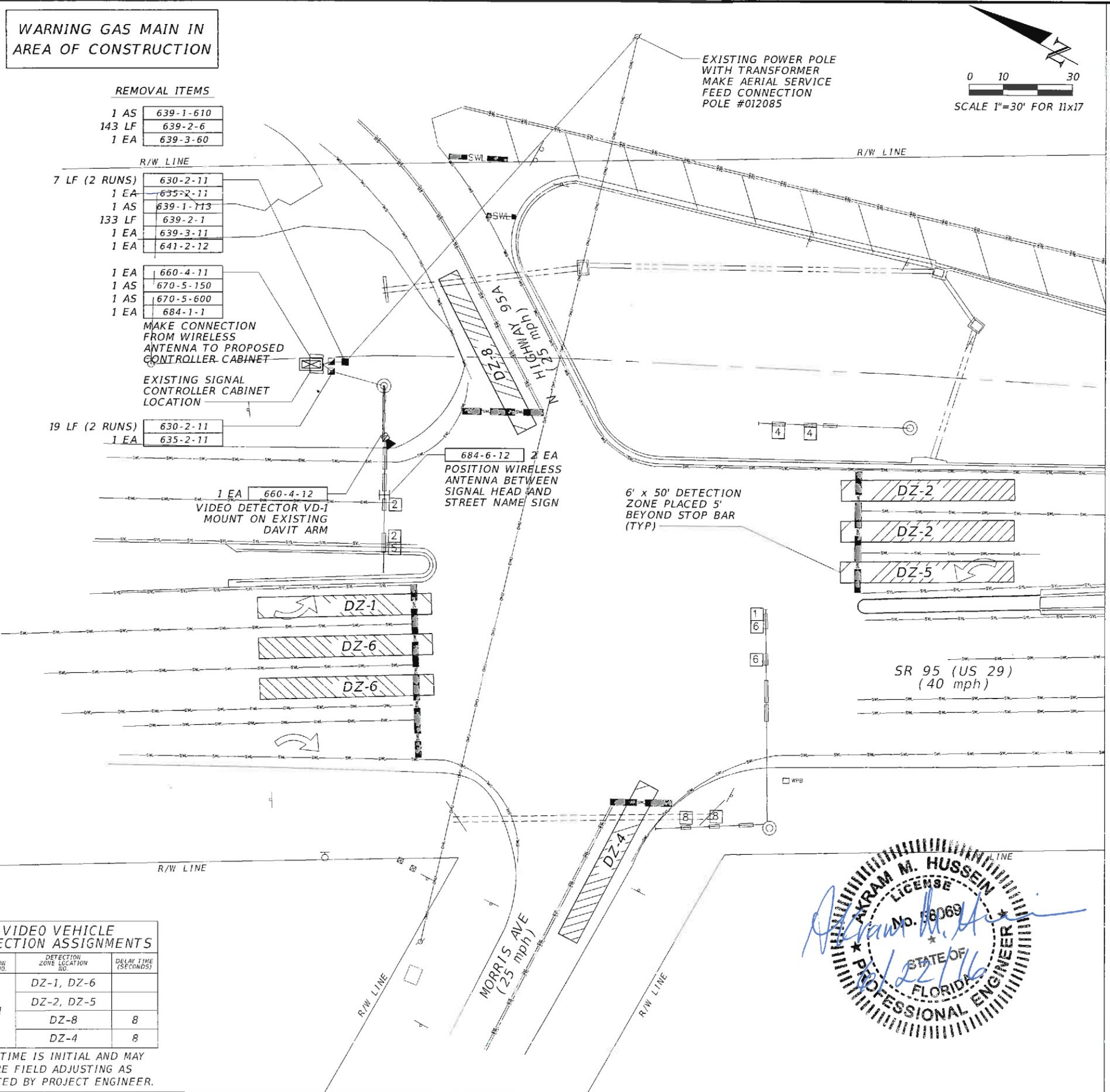
MOVEMENT NUMBER	1	2	3	4	5	6	7	8
DIRECTION	SBL NB		EB	NBL SB	WB			
TURN TYPE	P/P			P/P				
MINIMUM GREEN	5	25	8	5	25	8		
EXTENSION	2.5	6.0	5.0	2.5	6.0	5.0		
MAXIMUM GREEN 1	15	77	68	15	77	68		
MAXIMUM GREEN 2								
YELLOW CLEARANCE	4.4	4.4	3.4	4.4	4.4	3.7		
ALL RED	2.4	2.4	3.5	2.4	2.4	3.5		
PEDESTRIAN WALK								
PED. CLEARANCE								
DUAL ENTRY								
RECALL								

**VIDEO VEHICLE DETECTION ASSIGNMENTS**

VIDEO DETECTION CAMERA NO.	DETECTION ZONE LOCATION NO.	DELAY TIME (SECONDS)
VD-1	DZ-1, DZ-6	
	DZ-2, DZ-5	
	DZ-8	8
	DZ-4	8

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTMENT AS DIRECTED BY PROJECT ENGINEER.



**ESCAMBIA COUNTY, FLORIDA**

**SR 95 (US 29) SIGNAL IMPROVEMENT**

MORRIS AVENUE/N. HIGHWAY 95A

AKRAM M. HUSSEIN, P.E. No. 58069

**American Engineers of Florida, LLC**  
 4389 WOODBINE RD.  
 PACE, FLORIDA 32571  
 Phone: (850) 289-1000 Fax: (850) 289-1001  
 Certificate of Authorization No. 8302  
 Akram M. Hussein, P.E. No. 58069  
 PROJECT ID: 5769029

DATE: 6/21/2016

PROJECT NUMBER: 163029

PROJECT NAME: SR 95 (US 29) SIGNAL IMPROVEMENT

4

Drawing: F:\PROJECTS\168029\CADD\Plans\Signals\RD\_PLANSHEET100.dwg LAYOUT:5\_10.dwg Date: 6/21/2016 11:42 AM By: brown, david h. XREF: SR, DORPER, XREF, TOAD, XREF, DOD, XREF, TOP2

**NOTES:**

1. POWER SERVICE DISCONNECT SHALL BE INSTALLED ON CONCRETE SERVICE POLE AS SHOWN ON THE PLANS AND INDEX 17504 AND 17736.
2. SIGNAL CABINET EQUIPMENT SHALL MEET THE LATEST ESCAMBIA COUNTY SPECIFICATIONS.
3. SPECIAL CARE SHALL BE TAKEN WHEN PLACING CONDUIT AROUND THE GAS LINES. THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE UTILITY OWNER PRIOR TO DIGGING OR DIRECTIONAL DRILLING.
4. EXISTING SIGNAL HEADS TO REMAIN.

**CONTROLLER OPERATIONS:**

1. MAJOR STREET IS SR 95 (US 29), PHASES 1, 2 & 3 (MOVEMENTS 1, 2, 5 & 6).
2. MINOR STREET IS MUSCOGEE ROAD (CR 184)/ BECKS LAKE ROAD, PHASES 4, 5 & 6 (MOVEMENTS 3, 4, 7 & 8).
3. FLASHING OPERATION IS YELLOW FOR MOVEMENTS 2 & 6 AND RED FOR ALL OTHER MOVEMENTS.
4. CONCURRENT/ACTUATED PEDESTRIANS FOR MOVEMENTS 2 (P2) AND 4 (P4).
5. CONTROLLER SHALL OPERATE AS A SOP 10.
6. PRIOR TO BIDDING THIS CONTRACT, THE CONTRACTOR SHALL COORDINATE WITH THE ESCAMBIA COUNTY ENGINEERING OFFICE FOR SPECIFIC COUNTY SPECIFICATIONS AND DETAILS FOR THE PLACEMENT OR MODIFICATIONS OF THE SIGNAL CABINET AND PULL BOXES.

**WARNING GAS MAIN IN AREA OF CONSTRUCTION**

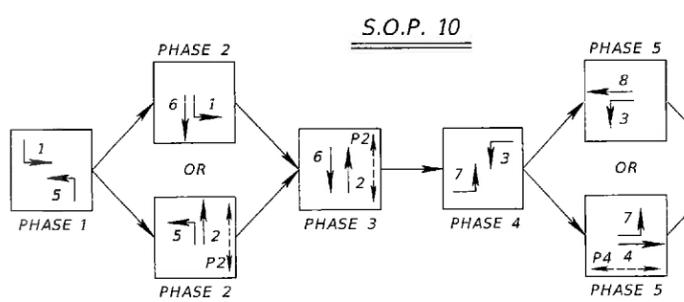
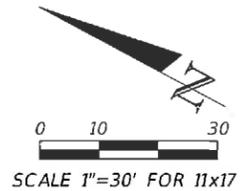
**REMOVAL ITEMS**

1 AS	639-1-610
114 LF	639-2-6
1 EA	639-3-60

630-2-11	7 LF (2 RUNS)
635-2-11	1 EA
639-1-113	1 AS
639-2-1	97 LF
639-3-11	1 EA
641-2-12	1 EA

660-4-11	1 EA
670-5-151	1 AS
670-5-600	1 AS
684-1-1	1 EA

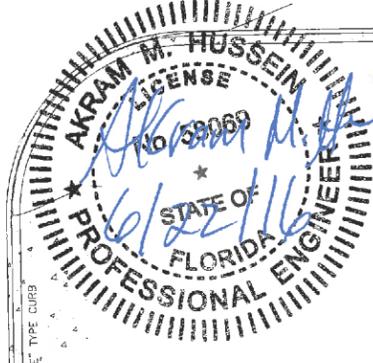
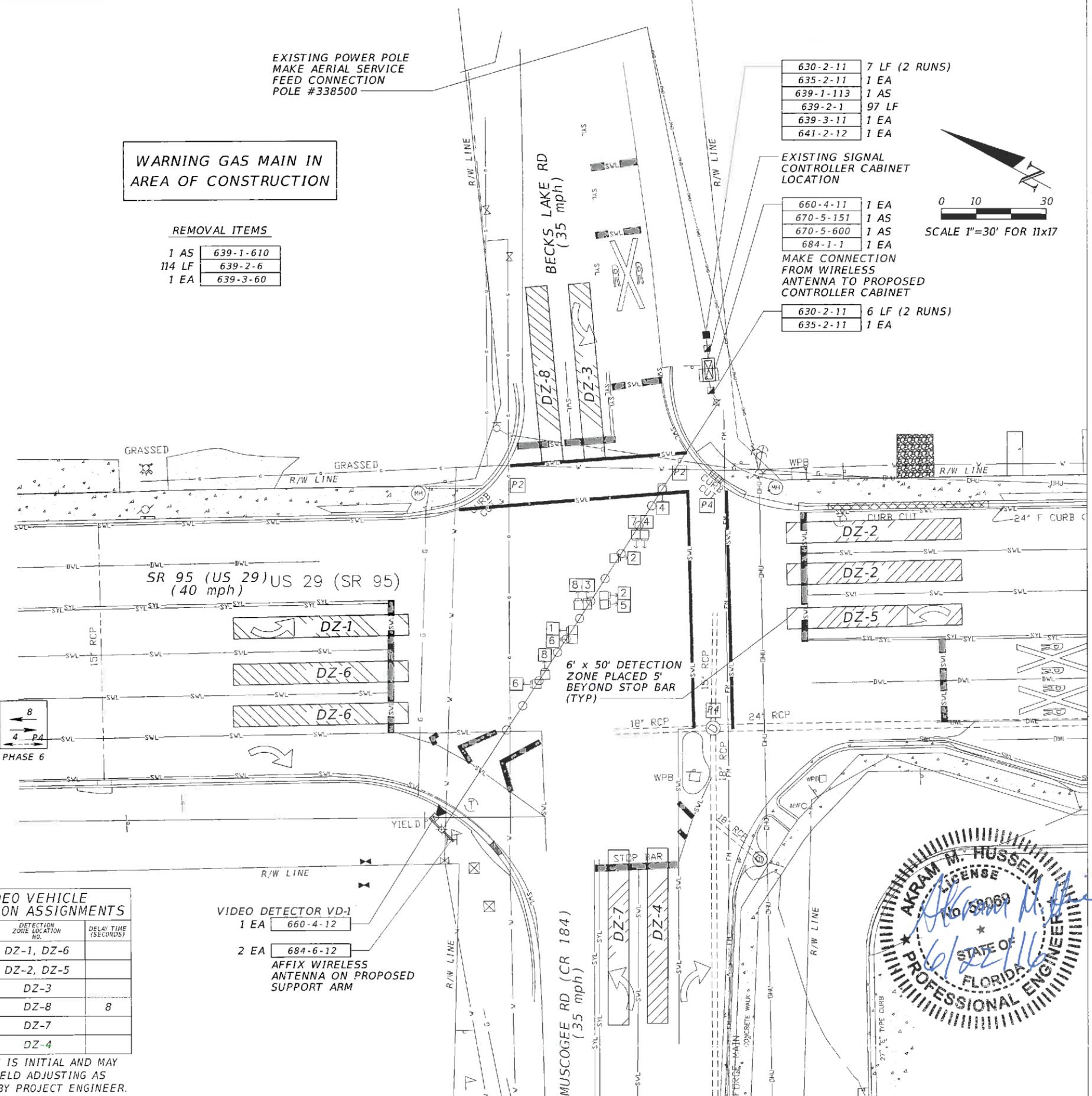
630-2-11	6 LF (2 RUNS)
635-2-11	1 EA



MOVEMENT NUMBER	1	2	3	4	5	6	7	8
DIRECTION	SBL	NB	WBL	EB	NBL	SB	EBL	WB
TURN TYPE	P/P		P/P		P/P		P/P	
MINIMUM GREEN	5	20	6	6	5	20	6	6
EXTENSION	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
MAXIMUM GREEN 1	11	102	13	34	17	96	24	23
MAXIMUM GREEN 2								
YELLOW CLEARANCE	4.4	4.4	4.0	3.7	4.4	4.4	3.7	4.0
ALL RED	2.1	2.1	3.1	3.1	2.1	2.1	3.1	3.1
PEDESTRIAN WALK		7		7				
PED. CLEARANCE		17		17				
DUAL ENTRY								
RECALL								

VIDEO DETECTION CAMERA NO.	DETECTION ZONE LOCATION NO.	DELAY TIME (SECONDS)
VD-1	DZ-1, DZ-6	
	DZ-2, DZ-5	
	DZ-3	
	DZ-8	8
	DZ-7	
	DZ-4	

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.



**SR 95 (US 29) SIGNAL IMPROVEMENT**  
MUSCOGEE ROAD/BECKS LAKE ROAD



AKRAM M. HUSSEIN, P.E. No. 58069  
PROJECT LOCATION: SR 95 @ BECKS LAKE RD & MUSCOGEE AVE  
PROJECT NUMBER: 168029  
ESCAMBIA COUNTY PROJECT ENGINEER

**American** Consulting Engineers of Florida, LLC  
4189 WOODBINE RD.  
PACE, FLORIDA 32571  
Phone: (850) 289-1000 Fax: (850) 289-1001  
Certificate of Authorization No. 9302  
Akram M. Hussein, P.E. No. 58069  
PROJECT ID: 5760029

DATE	DESCRIPTION

