

# CENTRAL FLORIDA EXPRESSWAY

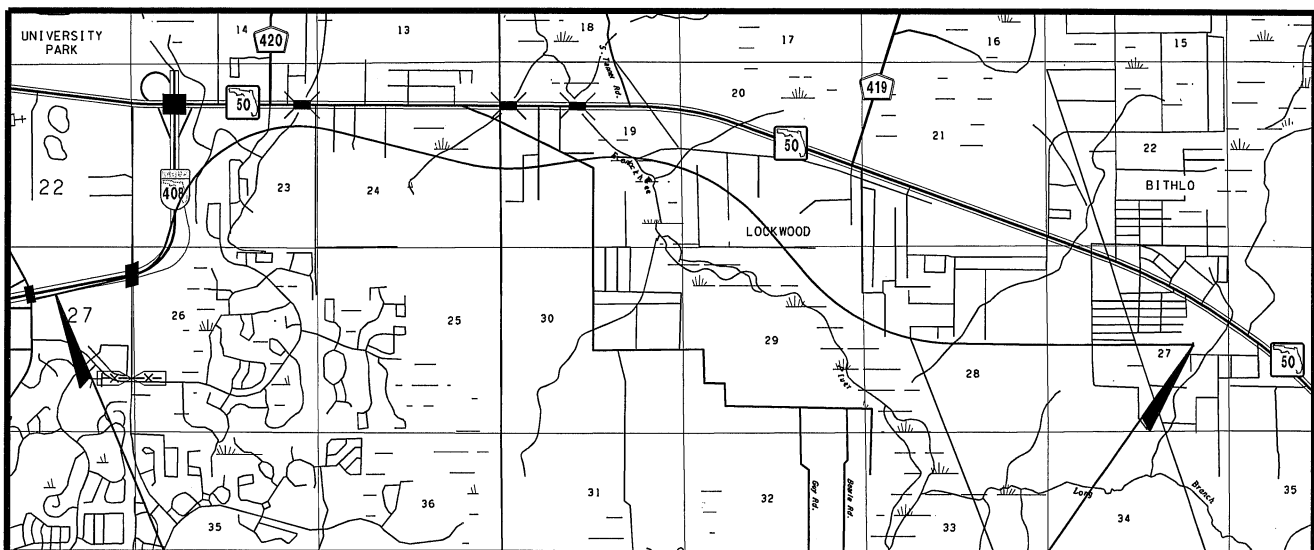
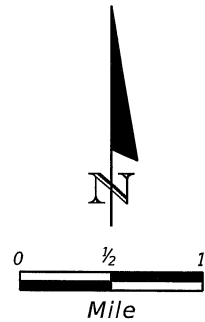
## TYPICAL SECTION PACKAGE

ORANGE COUNTY (75008160)

STATE ROAD NO. 408

SR 408 EASTERN EXTENSION PD&E STUDY  
(FROM CURRENT EASTERN TERMINUS NEAR  
WOODBURY ROAD TO SR 50, NEAR SR 520)

CFX PROJECT NO. 408-254



BEGIN PROJECT  
STA. 358+41.08

END PROJECT  
STA. 731+27.29

*PROJECT LOCATION MAP*

## PROJECT IDENTIFICATION

CFX PROJECT NO. 408-254 COUNTY (SECTION) 75008160  
 PROJECT DESCRIPTION SR 408 EASTERN EXTENSION PD&E STUDY (FROM CURRENT EASTERN TERMINUS NEAR WOODBURY ROAD TO SR 50, NEAR SR 520)

## PROJECT CONTROLS

### FUNCTIONAL CLASSIFICATION

- (X) RURAL  
 ( ) URBAN  
 (X) FREEWAY/EXPWY. ( ) MAJOR COLL.  
 ( ) PRINCIPAL ART. ( ) MINOR COLL.  
 ( ) MINOR ART. ( ) LOCAL

### HIGHWAY SYSTEM

- Yes No  
 ( ) (X) NATIONAL HIGHWAY SYSTEM  
 ( ) (X) STRATEGIC INTERMODAL SYSTEM  
 (X) ( ) STATE HIGHWAY SYSTEM  
 ( ) (X) OFF STATE HIGHWAY SYSTEM

### ACCESS CLASSIFICATION

- (X) 1 - FREEWAY  
 ( ) 2 - RESTRICTIVE w/Service Roads  
 ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing  
 ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing  
 ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing  
 ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing  
 ( ) 7 - BOTH MEDIAN TYPES

### TRAFFIC

	YEAR	AADT
CURRENT	<u>2017</u>	<u>N/A</u>
OPENING	<u>2025</u>	<u>8,600-20,500</u>
DESIGN	<u>2045</u>	<u>13,300-35,500</u>

### CRITERIA

- (X) NEW CONSTRUCTION / RECONSTRUCTION  
 ( ) RRR INTERSTATE / FREEWAY  
 ( ) RRR NON-INTERSTATE / FREEWAY  
 ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION  
 ( ) TDLC / RRR  
 ( ) MANUAL OF UNIFORM MINIMUM STANDARDS  
 (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

### DISTRIBUTION

DESIGN SPEED	<u>65-70</u>	K	9%
POSTED SPEED	<u>65</u>	D	60%
		T 24	2%

LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

#### LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

WOODBURY ROAD OVER SR 408	SR 408 EB/WB OVER PEL ST	SR 408 EB/WB OVER HAMILTON DR
WOODBURY RD ENTRANCE RAMP TO SR 408	SR 408 EB/WB OVER AVALON PARK BLVD	SR 408 EB/WB OVER ECONLOCKHATCHEE
SR 408 EB/WB OVER CHALLENGER PKWY RAMPS	SR 408 EB/WB OVER ECONLOCKHATCHEE RIVER AND	RIVER TRIBUTARY
SR 408 WB RAMP OVER CHALLENGER PKWY RAMPS	OLD CHENEY HIGHWAY	SR 408 EB/WB OVER SEMINOLE TRAIL
SR 408 EB/WB OVER BRIDGEWAY BLVD	SR 408 EB/WB RAMPS OVER LOCKWOOD DR	SR 408 EB/WB OVER N 5TH ST
SR 408 EB/WB OVER HANCOCK LONE PALM RD	SR 408 EB/WB OVER LOCKWOOD DR	SR 408 EB/WB OVER NORTH COUNTY RD 13
SR 408 EB/WB OVER FRICKE AVE	SR 408 EB/WB OVER CHULUOTA RD EXTENSION	

#### LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

ADVANCED CABLING SOLUTIONS INC	CHARTER COMMUNICATIONS	ORANGE COUNTY UTILITIES
AMERICAN TRAFFIC SOLUTIONS	DUKE ENERGY	ORANGE COUNTY UTILITIES-WASTEWATER
AT&T FLORIDA - DISTRIBUTION	FIBERNET DIRECT	TECO - PEOPLES GAS
CENTRAL FLORIDA EXPRESSWAY AUTHORITY	LOVELACE GAS SERVICE	
CENTURYLINK	MCI	
CITY OF ORLANDO - WASTEWATER	ORANGE COUNTY PUBLIC WORKS	
COMCAST CABLE COMMUNICATIONS	ORLANDO TELEPHONE COMPANY INC	

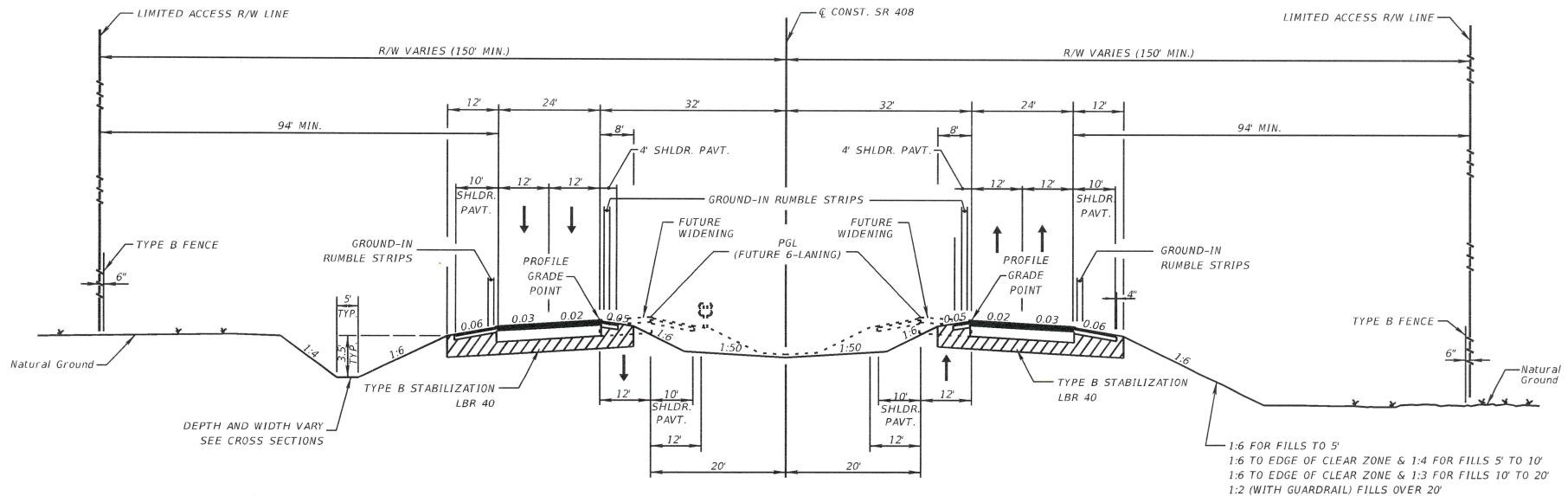
#### LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

INTERCHANGES - CHALLENGER PARKWAY, AVALON PARK, CR 419, SR 50

## PROJECT IDENTIFICATION

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 PROJECT DESCRIPTION SR 408 EASTERN EXTENSION PD&E STUDY (FROM CURRENT EASTERN TERMINUS NEAR WOODBURY ROAD TO SR 50, NEAR SR 520)

## PROPOSED ROADWAY TYPICAL SECTION



BEGIN PROJECT TO EAST OF AVALON PARK  
 DESIGN SPEED = 65 MPH  
EAST OF AVALON PARK TO END OF PROJECT  
 DESIGN SPEED = 70 MPH

TYPICAL SECTION  
 SR 408  
 STA 358+41.08 TO STA 731+27.29

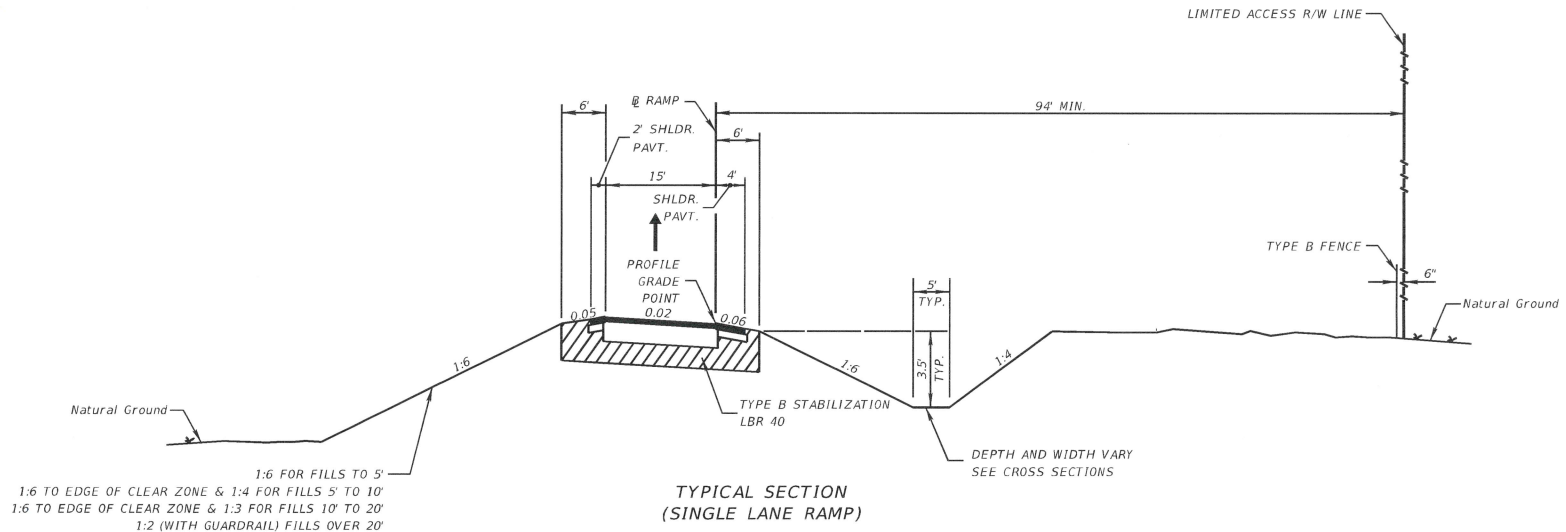
\*SUPERELEVATION TRANSITION WILL NEED TO BE BASED ON THE FUTURE 6-LANING PGL

<p>APPROVED BY: <i>Jonathan Williamson</i>, P.E.                  License No.: 49524                  Date: <i>7/19/18</i></p> <p>Engineer's Record Signature</p>	<p style="text-align: center;">CFX CONCURRENCE</p> <p style="text-align: center;"><i>Jonathan Williamson</i>                  Jonathan Williamson, AICP                  CFX Project Manager</p> <p style="text-align: right;">Date: <i>9/7/18</i></p>	<p style="text-align: center;">CFX APPROVAL</p> <p style="text-align: center;"><i>Glenn M. Pressimone</i>                  Glenn M. Pressimone, PE                  CFX Director of Engineering</p> <p style="text-align: right;">Date: <i>8/7/2018</i></p>
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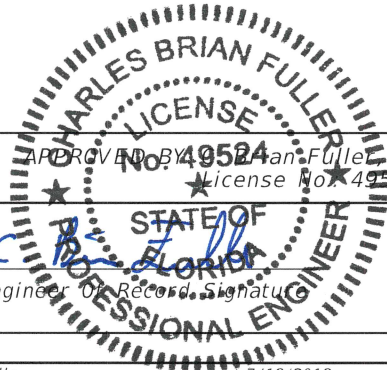
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## PROPOSED ROADWAY TYPICAL SECTION



DESIGN SPEED:  
 DIRECTIONAL RAMP = 50 MPH  
 LOOP RAMP = 30 MPH



APPROVED BY: Charles Brian Fuller, P.E.  
 License No. 49524

Engineer of Record Signature

7/19/18  
 Date

CFX CONCURRENCE

Jonathan Williamson  
 Jonathan Williamson, AICP  
 CFX Project Manager

8/7/18  
 Date

CFX APPROVAL

Glenn M. Pressimone  
 Glenn M. Pressimone, PE  
 CFX Director of Engineering

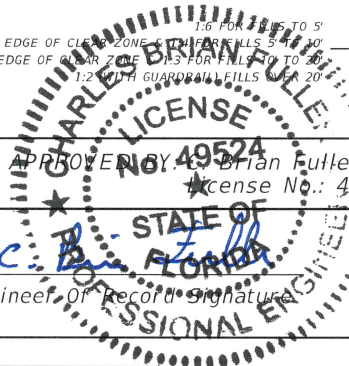
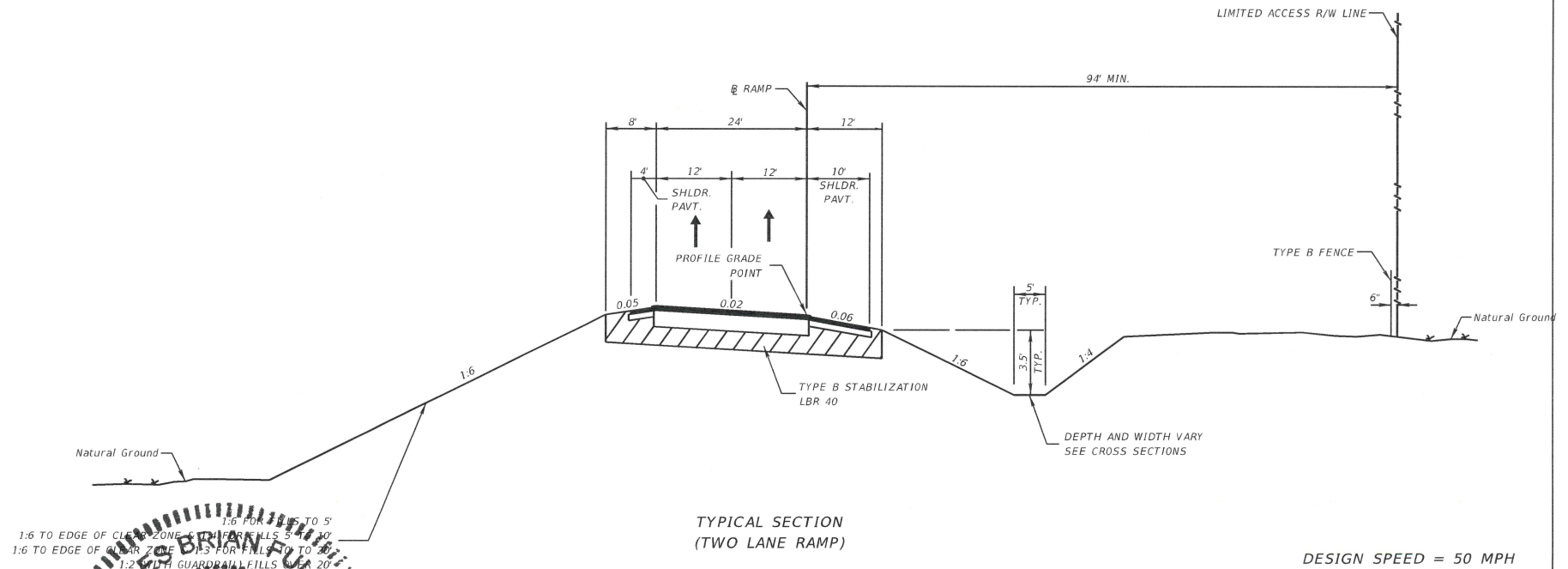
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## PROPOSED ROADWAY TYPICAL SECTION



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 License No.: 49524

Engineer Of Record Signature

Date

7/19/18

CFX CONCURRENCE

Jonathan Williamson, AICP  
 CFX Project Manager

Date

8/17/18

CFX APPROVAL

Glenn M. Pressimone, PE  
 CFX Director of Engineering

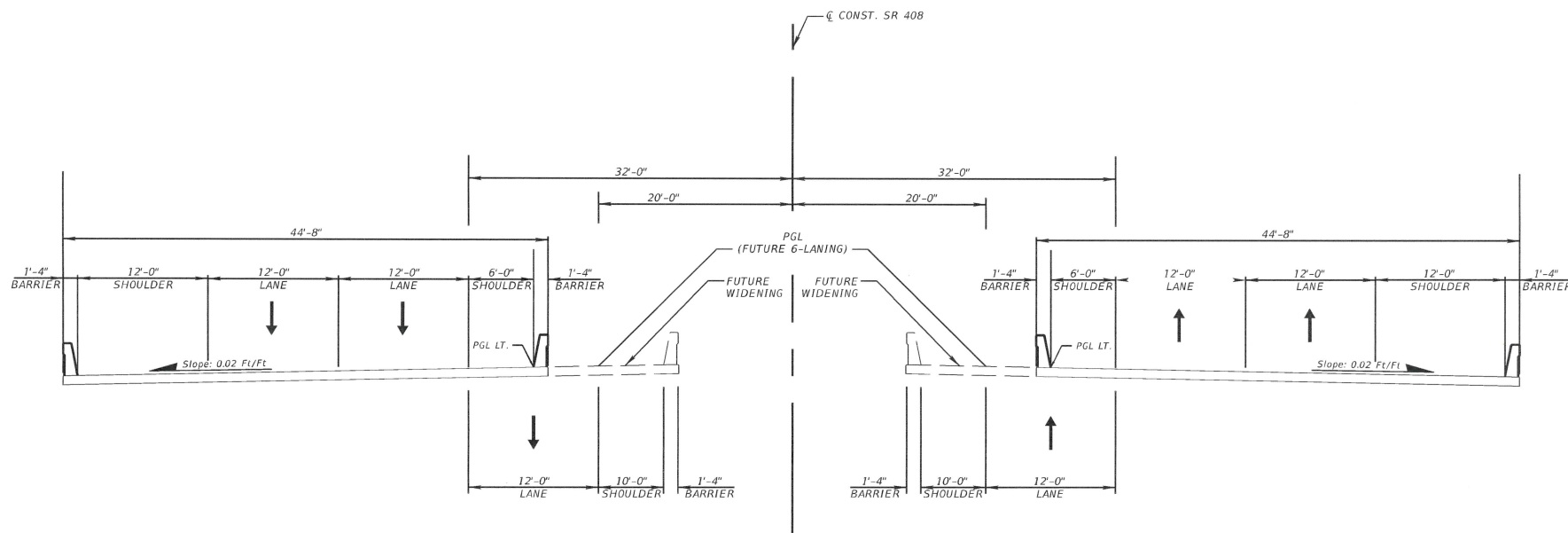
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## PROPOSED ROADWAY TYPICAL SECTION



PROPOSED STRUCTURE TYPICAL SECTION  
SR 408 BRIDGE TYPICAL

BEGIN PROJECT TO EAST OF AVALON PARK  
 DESIGN SPEED = 65 MPH  
EAST OF AVALON PARK TO END PROJECT  
 DESIGN SPEED = 70 MPH

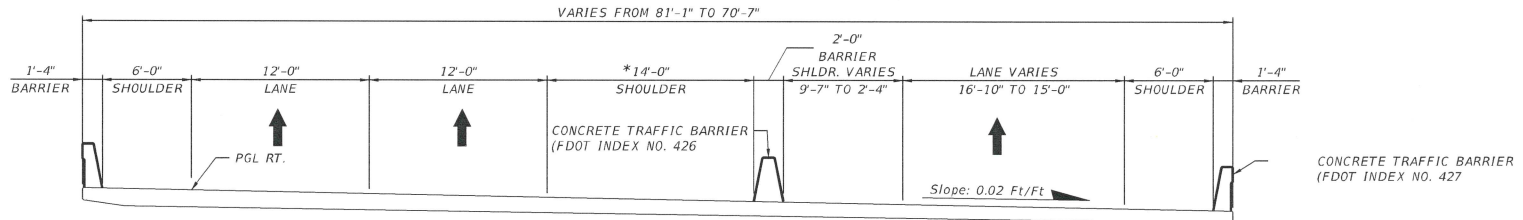
\*SUPERELEVATION TRANSITION WILL NEED  
TO BE BASED ON THE FUTURE 6-LANING PGL.

<div>APPROVED BY: <u>Brian Fuller</u>, P.E. License No. <u>49524</u></div>	CFX CONCURRENCE		CFX APPROVAL	
<div><div>STATE OF FLORIDA Professional Engineer <u>7/19/18</u> Date</div><div><u>C. Brian Fuller</u> Engineer of Record Signature</div></div>	<div><u>Jonathan Williamson</u> Jonathan Williamson, AICP CFX Project Manager <u>8/7/18</u> Date</div>	<div><u>Glenn M. Pressimone</u> Glenn M. Pressimone, PE CFX Director of Engineering <u>8/7/2018</u> Date</div>		

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## PROPOSED ROADWAY TYPICAL SECTION

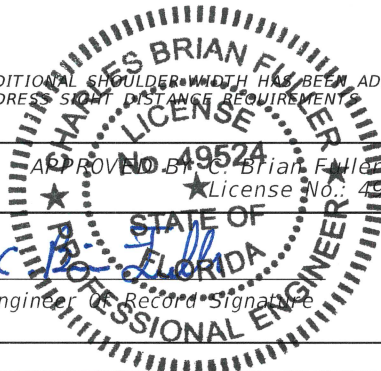


### TYPICAL SECTION

SR 408 EB OVER CHALLENGER PARKWAY RAMP

DESIGN SPEED = 65 MPH

\* ADDITIONAL SHOULDER WIDTH HAS BEEN ADDED TO ADDRESS SHORT DISTANCE REQUIREMENT



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Engineer of Record Signature

Date

7/19/18

CFX CONCURRENCE

Jonathan Williamson, AICP  
 CFX Project Manager

Date

8/7/18

CFX APPROVAL

Glenn M. Pressimone, PE  
 CFX Director of Engineering

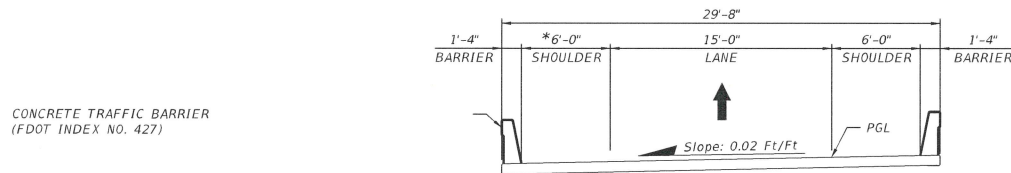
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## PROPOSED ROADWAY TYPICAL SECTION



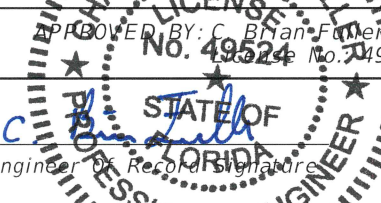
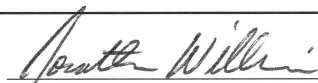
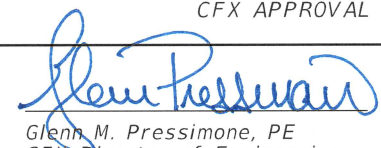
### TYPICAL SECTION

SINGLE LANE RAMP BRIDGE STRUCTURE

DESIGN SPEED = 50 MPH

\* ADDITIONAL SHOULDER WIDTH HAS BEEN ADDED TO ADDRESS SIGHT DISTANCE REQUIREMENTS AT THE FOLLOWING BRIDGES:

1. WOODBURY ON-RAMP TO EB SR 408 OVER CHALLENGER PARKWAY RAMP - 11 FT INSIDE SHOULDER
2. WB SR 408 OFF-RAMP TO WOODBURY OVER CHALLENGER PARKWAY RAMP - 12 FT INSIDE SHOULDER

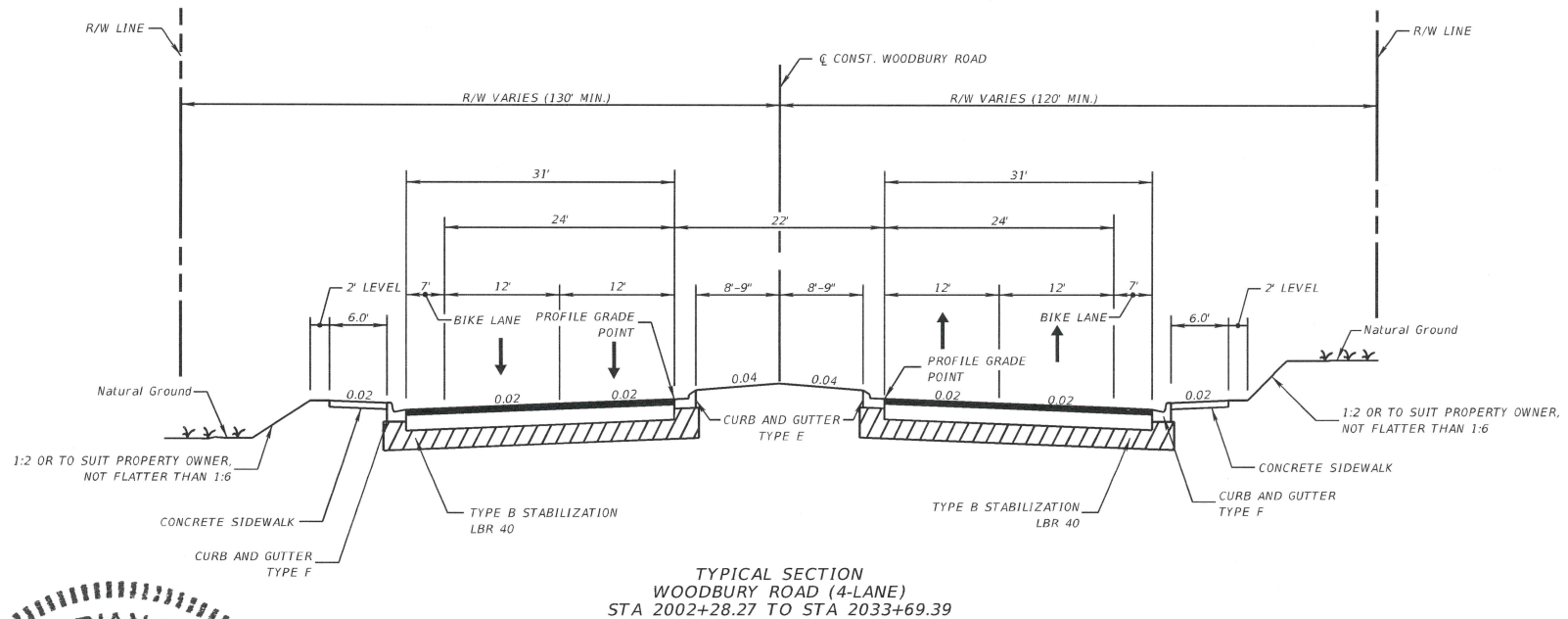
APPROVED BY: C. Brian Fowler, P.E. License No. 49524	CFX CONCURRENCE		CFX APPROVAL	
<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">   <b>CHARLES BRIAN FOWLER</b>                  STATE OF FLORIDA                  PROFESSIONAL ENGINEER             </div> <div>                 Date <u>7/19/18</u> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">                   Jonathan Williamson, AICP                  CFX Project Manager             </div> <div>                 Date <u>8/7/18</u> </div> </div>		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">                   Glenn M. Pressimone, PE                  CFX Director of Engineering             </div> <div>                 Date <u>8/7/2018</u> </div> </div>	



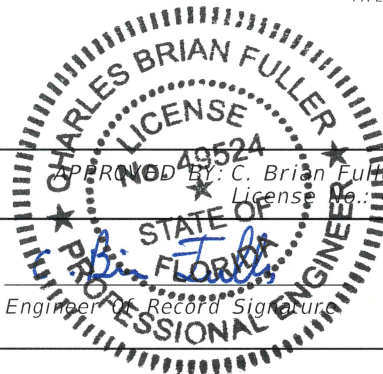
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## PROPOSED ROADWAY TYPICAL SECTION



DESIGN SPEED = 45 MPH



APPROVED BY: C. Brian Fuller, P.E.  
 License No.: 49524  
 Date: 7/19/18

CFX CONCURRENCE

Jonathan Williamson  
 Jonathan Williamson, AICP  
 CFX Project Manager

8/7/18  
 Date

CFX APPROVAL

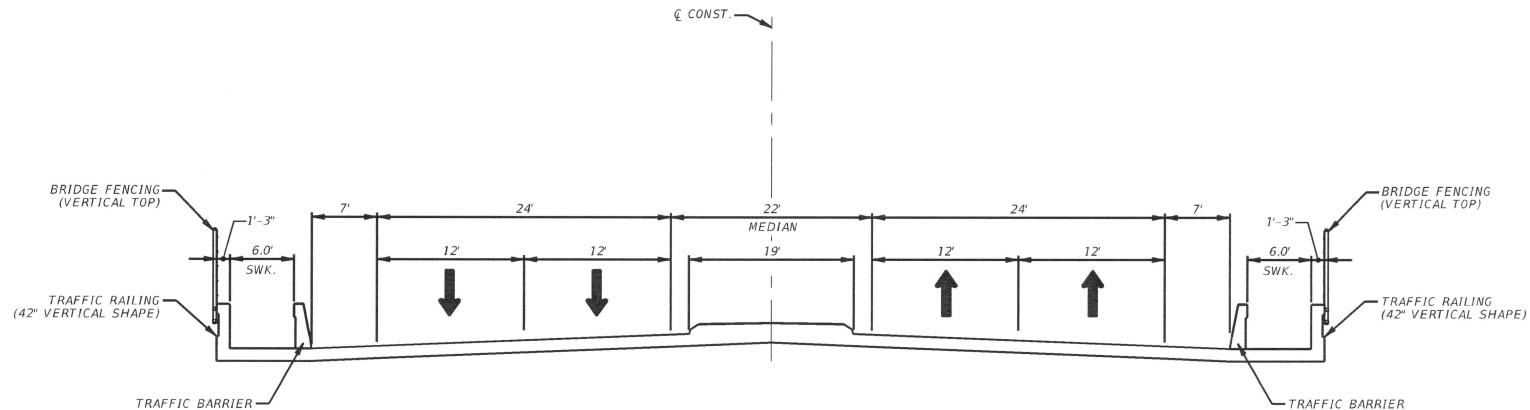
Glenn M. Pressimone  
 Glenn M. Pressimone, PE  
 CFX Director of Engineering

8/7/2018  
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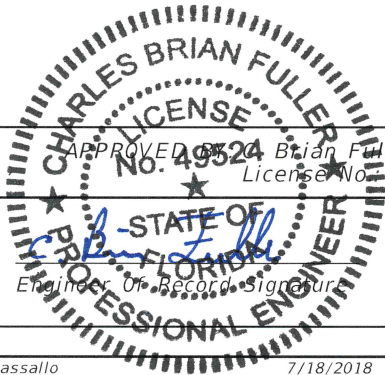
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## PROPOSED ROADWAY TYPICAL SECTION



PROPOSED STRUCTURE TYPICAL SECTION  
 WOODBURY ROAD BRIDGE TYPICAL

DESIGN SPEED = 45 MPH



APPROVED BY: Charles Brian Fuller, P.E.  
 License No. 49524

Engineer of Record Signature

7/19/18  
 Date

CFX CONCURRENCE

Jonathan Williamson  
 Jonathan Williamson, AICP  
 CFX Project Manager

8/17/18  
 Date

CFX APPROVAL

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 CFX Director of Engineering

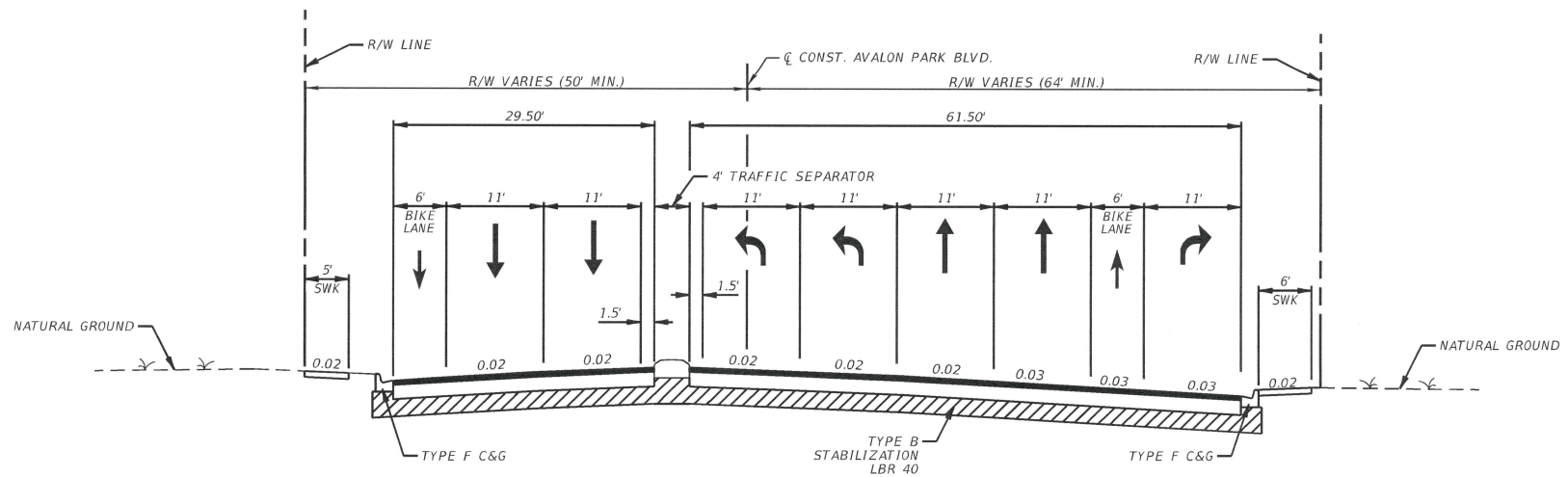
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## PROPOSED ROADWAY TYPICAL SECTION



TYPICAL SECTION  
 AVALON PARK (4-LANE)  
 STA 3000+00.00 TO STA 3019+03.14

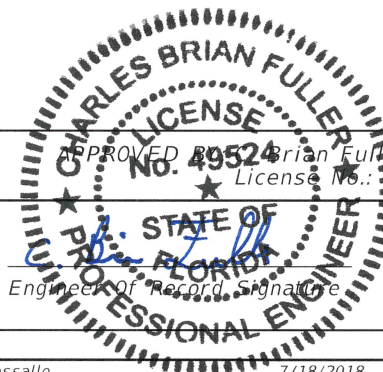
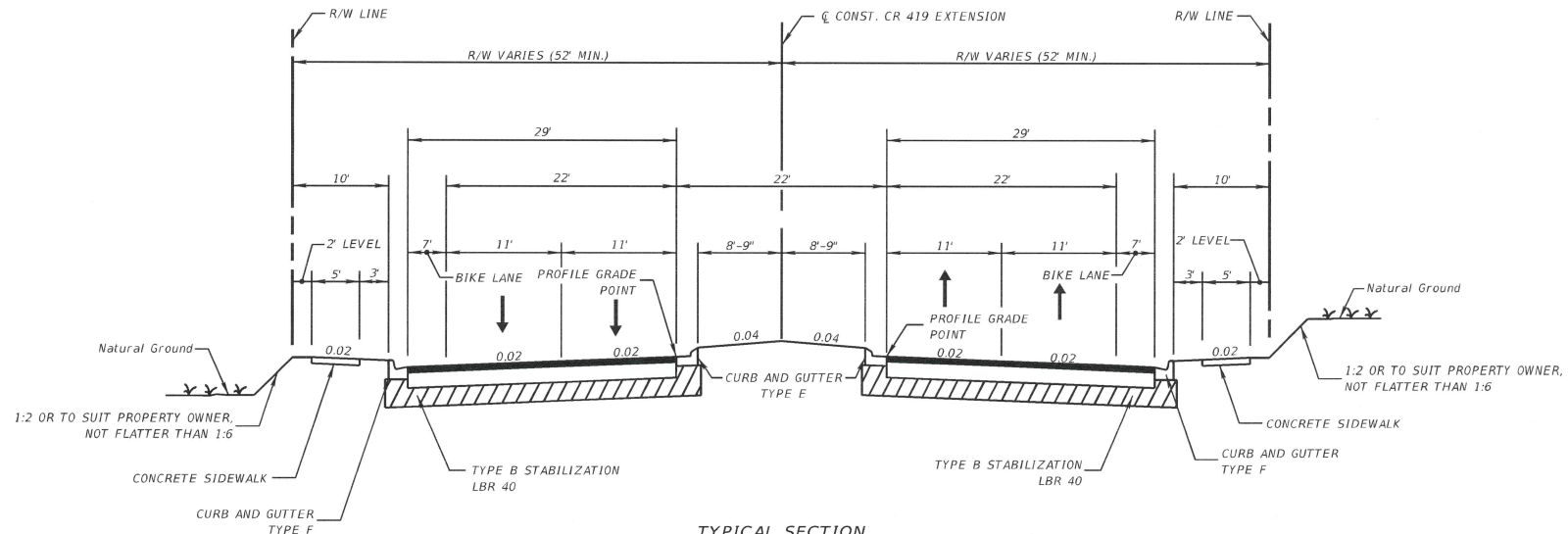
DESIGN SPEED = 45 MPH

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<p><i>Jonathan Williamson</i>                  Jonathan Williamson, AICP                  CFX Project Manager</p>	<p><i>7/19/18</i>                  Date</p>		<p><i>Glenn M. Pressimone</i>                  Glenn M. Pressimone, PE                  CFX Director of Engineering</p>	

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## PROPOSED ROADWAY TYPICAL SECTION



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Engineer of Record Signature

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8/7/18  
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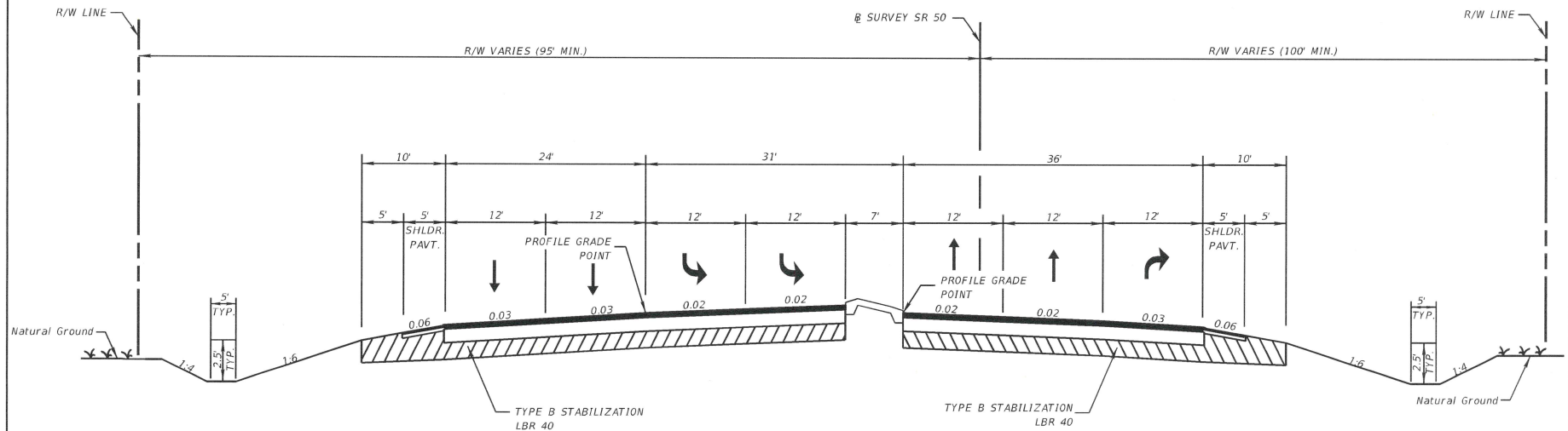
Glenn M. Pressimone  
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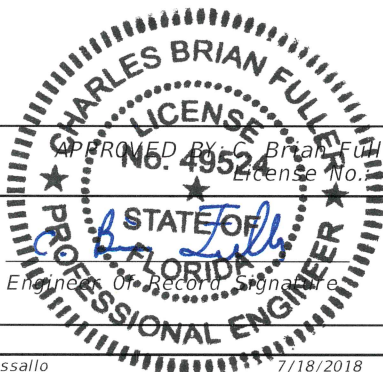
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## PROPOSED ROADWAY TYPICAL SECTION



TYPICAL SECTION  
 SR 50 (4-LANE)  
 STA 5001+14.28 TO STA 5031+00.00

DESIGN SPEED = 60 MPH



Engineer of Record Signature

Date

7/19/18

CFX CONCURRENCE

Jonathan Williamson, AICP  
 CFX Project Manager

Date

8/7/18

CFX APPROVAL

Glenn M. Pressimone, PE  
 CFX Director of Engineering

Date

8/7/2018