#### **ORIGINATION FORM**

# **Proposed Revisions to the Specifications**

(Please provide all information - incomplete forms will be returned)

Date:	Of	Office:			
Originator:	Sp	Specification Section:			
Telephone:	Ar	Article/Subarticle:			
email:	As	Associated Section(s) Revisions:			
Will the proposed revision require changes to the following Publications:					
Publication	Yes	No	Office Staff Contacted	Date	
Standard Plans Index					
Traffic Engineering Manual					
FDOT Design Manual					
Construction Project Administration Manual					
Basis of Estimate/Pay Items					
Structures Design Guidelines					
Approved Product List					
Materials Manual					
Maintenance Specs					
Will this revision necessitate any of the followi	ng:		J		
Design Bulletin Construction (DCE Men	no)	Estima	ates Bulletin Materials Bulle	etin	
Have all references to internal and external pul	olications i	n this Sec	ction been verified for accuracy?		
Synopsis: Summarize the changes:					
Justification: Why does the existing language ne	eed to be o	hanged?			
Do the changes affect either of the following ty	pes of spec	cifications	(Hover over type to go to site.):		
Special Provisions Developmental Specifi	-				
List Specifications Affected: (ex. SP3270301, De	v330TI De	v334TI =	tc )		

1. Are changes in line with promoting and making meaningful progress on improving safety, enhancing mobility, inspiring innovation, and fostering talent; explain how?
2. What financial impact does the change have; project costs, pay item structure, or consultant fees?
3. What impacts does the change have on production or construction schedules?
4. How does this change improve efficiency or quality?
5. Which FDOT offices does the change impact?
6. What is the impact to districts with this change?
7. Does the change shift risk and to who?
8. Provide summary and resolution of any outstanding comments from the districts or industry.
9. What is the communication plan?
10. What is the schedule for implementation?

# TIMBER TREATMENT (INCLUDING TREATING MATERIALS) (REV 5-5-23)

SECTION 955 is deleted and the following substituted:

### 955-1 General.

The work specified in this Section is the treating of structural timber, timber piling and timber posts, bracing and railing. The method of treatment and determination of assay results for all such timber materials shall be in accordance with American Wood Protection Association (AWPA) Use Category System (UCS) - U1, with the exceptions and additions as specified herein. Use approved producers listed on the Department's Production Facility Listing for timber components located in <a href="https://mac.fdot.gov/smoreports">https://mac.fdot.gov/smoreports</a>. Producers seeking inclusion shall meet the requirements of Section 105. All timber products manufactured for incorporation into the work shall be produced by a producer/treater approved through one of the following third-party audit programs:

- 1. Southern Pine Inspection Bureau (SPIB)
- 2. Timber Products (TPI)

#### 955-2 Preservative.

955-2.1 Guardrail Post, Fence Post, Bracing and Railing on Pedestrian Bridges, Buildings, and Rest Areas in Above Ground, Ground Contact, Fresh Water Immersion Applications (Pedestrian Use): Provide guardrail post, fence post, bracing and railing in accordance with Table 955-1. Approved producers should provide a certification showing the timber species, treatment, and assay results with every shipment.

		Table 95	5-1	
Product	Type / Species	Category	Treatment	Assay Results
			Micronized Copper Azole (MCA) Copper Azole Type C (CA-C)	$\geq 2.4 \text{ kg/m}^3 \text{ or } \geq 0.15 \text{ pcf}$
			Copper Azole Type B (CA-B)	$\geq$ 3.3 kg/m <sup>3</sup> or $\geq$ 0.21 pcf
Guardrail Posts, Fence Post, Bracing, & Railing	Southern Yellow Pine	UC4A	Alkaline Copper Quat Type A, (ACQ-A) Alkaline Copper Quat Type B, (ACQ-B)  Alkaline Copper Quat Type C, (ACQ-C)  Alkaline Copper Quat Type C, (ACQ-C)	$\geq 6.4 \text{ kg/m}^3 \text{ or } \geq 0.40 \text{ pcf}$

955-2.2 Guardrail Posts, Fence Posts, Bracing and Sheet Piling in Above Ground, Ground Contact or Fresh Water Immersion Applications (Non-Pedestrian Use): Provide guardrail post, fence post, bracing and sheet piling in accordance with Table 955-2. Approved producers should provide a certification showing the timber species, treatment, and assay results with every shipment.

Table 955-2					
Product	Type / Species	Category	Treatment	Assay Results	
			MCA	$\geq 2.4 \text{ kg/m}^3 \text{ or } \geq 0.15 \text{ pcf}$	
			CA-C		
			CA-B	$\geq$ 3.3 kg/m <sup>3</sup> or $\geq$ 0.21 pcf	
		UC4A	Ammoniacal		
			Copper Zinc		
			Arsenate		
Guardrail	Southern Yellow Pine		(ACZA)		
Posts, Fence			Chromated		
Post, Bracing			Copper		
1 ost, Dracing			Arsenate	$\geq 6.4 \text{ kg/m}^3 \text{ or } \geq 0.40 \text{ pcf}$	
			Type C	≥ 0.4 kg/III oi ≥ 0.40 pci	
ļ			(CCA)		
			ACQ-A		
			ACQ-B		
			ACQ-C		
			ACQ-D		
	Cypress		None	N/A	
Piling	Southern Yellow Pine	UC4B UC4C	ACZA	$\geq$ 9.6 kg/m <sup>3</sup> or $\geq$ 0.60 pcf	
			CCA	$\geq$ 9.6 kg/m <sup>3</sup> or $\geq$ 0.60 pcf	
	Pacific Coast Douglas Fir		ACZA	$\geq$ 9.6 kg/m <sup>3</sup> or $\geq$ 0.60 pcf	

**955-2.3** Guardrail Post, Fence Post, Bracing and Sheet Piling for Salt and Brackish Water Applications (Non-Pedestrian): Provide guardrail post, fence post, bracing and sheet piling in accordance with this section and Table 955-3. Approved producers should provide a certification showing the <u>timber species</u>, treatment, and assay results with every shipment.

Table 955-3				
Product	Type / Species	Category	Treatment	Assay Results
Guardrail Posts, Fence Post, Bracing	Southern Yellow Pine	UC4C	CCA	$\geq$ 9.6 kg/m <sup>3</sup> or $\geq$ 0.60 pcf
	Cypress		None	N/A
Piling	Southern Yellow Pine	UC5C	CCA	Zone 1 (Outer): $\geq 40 \text{ kg/m}^3 \text{ or } \geq 2.50 \text{ pcf}$ Zone 2 (Inner): $\geq 24 \text{ kg/m}^3 \text{ or } \geq 1.50 \text{ pcf}$
	Pacific Coast Douglas Fir		ACZA	$40 \text{ kg/m}^3 \text{ or } \ge 2.50 \text{ pcf}$

**955-2.4 Structural Timber:** Provide structural timber in accordance with this section and Table 955-4. Approved producers should provide a certification showing the treatment and assay results with every shipment.

Table 955-4				
Product	Type / Species	Category	Treatment	Assay Results
Boards, Dimensional, Timber	Southern Yellow Pine	UC4B	CCA	$\geq 9.6 \text{ kg/m}^3 \text{ or } \geq 0.60 \text{ pcf}$

## 955-3 Handling Waterborne Preservative Treated Piling.

In handling of piles that have been treated with chromated copper arsenate (CCA) or ammoniacal copper zinc arsenate (ACZA), cable slings shall be used. Mechanical grabbers or pointed tools shall not be permitted. Rough or careless handing shall be avoided at all times.

### 955-4 Identification of Treating Plants for Round Piling.

The treating plant shall brand, or place a distinctive permanent mark, on each round pile, approximately 6 feet from the butt end, such that the plant responsible for the treatment can be readily determined at any time during the service life of the piling.