## **ORIGINATION FORM**

## **Proposed Revisions to the Specifications**

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

Date:	Of	Office:		
Originator:	Specification Section:			
Telephone:	Article/Subarticle:			
email:	As	sociated	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:		<u>I</u>	
Design Bulletin Construction (DCE Men	no)	Estima	ates Bulletin Materials Bulle	etin
Have all references to internal and external pul	blications i	in this Sec	tion been verified for accuracy?	
Synopsis: Summarize the changes:				
Justification: Why does the existing language no	eed to be o	changed?		
Do the changes affect either of the following ty	pes of spe	cifications	(Hover over type to go to site.):	
Special Provisions Developmental Specifi				
List Specifications Affected: (ex. SP3270301 De	v330TI D4	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?

## CONCRETE STRUCTURES. (REV 6-20-23)

SUBARTICLE 400-15.2.5.5 is deleted and the following substituted:

## 400-15.2.5.5 Smoothness Evaluation and Concrete Surface Planing,

**Long Bridges (including approach slabs):** Prior to planing, provide a smoothness evaluation of the completed bridge deck and exposed concrete surfaces of approach slabs by a computerized Cox California-type profilograph in accordance with the criteria herein and FM 5-558—E. Furnish this evaluation through an independent provider approved by the Engineer, using equipment calibrated by the Engineer. All bridge deck and concrete approach slab surfaces to-within 2 feet of gutter lines are subject to this smoothness evaluation.

Prior to initial profilograph testing, complete work on the bridge deck and approach slabs. Thoroughly clean and clear the bridge deck and approach slab areas to be evaluated for smoothness of all obstructions and provide the smoothness evaluation. Ensure that no radio transmissions or other activities that might disrupt the automated profilograph equipment are allowed during the evaluation.

Average the Profile Index Value for the bridge deck, including the exposed concrete surfaces of the approach slabs, for the left and right wheel path of each lane. The maximum allowable Profile Index Value for acceptable smoothness is 10 inches per mile utilizing the 0.2 inch blanking band. Apply these criteria to a minimum of 100 feet of each lane. Additionally, correct individual bumps or depressions exceeding a cutoff height of 0.3 inch from a chord of 25 feet (see ASTM E1274) on the profilograph trace. Ensure that the surface meets a 1/4 inch in 10 feet straightedge check made transversely across the deck and approach slabs if determined necessary by the Engineer. Provide additional profilograph testing as necessary following longitudinal planing and any other actions taken to improve smoothness, until a profile meeting the acceptance criteria is obtained.

Regardless of whether expansion joints are installed before or after deck planing is complete, plane off the concrete deck surface to a minimum depth of 1/4 inch and also meet or exceed the profilograph smoothness criteria. Longitudinally plane the entire bridge deck and exposed concrete surfaces of the approach slabs using a self-propelled planing machine with gang mounted diamond saw cutting blades specifically designed for such work. Use the profilograph generated smoothness data, to establish the optimum planing machine settings. Plane the deck surface to within 2 feet of the gutter line so that there is a smooth transition, without vertical faces or sudden surface discontinuities, from the fully planed surface to the unplaned surface. Use a machine with a minimum wheel base length of 15 feet, constructed and operated in such manner that it does not cause strain or damage to deck or approach slab surfaces, excessive ravels, aggregate fractures or spalling. The equipment shall be approved by the Engineer. Perform longitudinal planing parallel to the roadway centerline, and provide a consistent, textured surface. Clean the surface of all slurry/debris generated during this work concurrently with operation of the machine.

After the deck has been planed the minimum 1/4 inch, reevaluate the surface smoothness using the profilograph testing described above. Perform cycles of planing and profilograph retesting as necessary until the deck and exposed concrete surfaces of approach slabs are in compliance with the smoothness criteria but do not exceed the maximum concrete removal depth of 1/2 inch.