



Florida Department of  
**TRANSPORTATION**

# **DESIGN BUILD PLANS REVIEW PROCESS IN D-4**



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**2014 Design-Build Workshop  
January 2014**



# D-B Plan Submittals

**REQUIRED PLANS CONTENT FOR EACH SUBMITTAL IS NOW GIVEN IN THE PPM – VOL II – SECTION 2.4.2**

ITEM	TECHNICAL PROPOSAL	90% PLANS	FINAL PLANS
Key Sheet		P	F
Signature Sheet		P	F
Drainage Map	P	C	F
Interchange Drainage Map	P	C	F
Typical Section	P	C	F
Summary of Drainage Structures		C	F
Project Layout		C	F
Roadway Plan-Profile	P	C	F
Special Profile		C	F
Back-of-Sidewalk Profile		C	F
Interchange Layout	P	C	F
Intersection Layout/Detail	P	C	F
Drainage Structures		C	F
Three-Sided/Box Culvert Details		C	F
Lateral Ditch Plan-Profile		C	F
Lateral Ditch Cross Section		C	F
Retention/Detention Pond Details		C	F
Roadway Soil Survey		C	F
Cross Sections		C	F
Temporary Traffic Control Plans	P	C	F

**P – PRELIMINARY**  
**C – COMPLETE BUT SUBJECT TO CHANGE**  
**F - FINAL**



# D-B Plan Submittals

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WHAT DOES “PRELIMINARY”  
MEAN?



WHAT DO YOU MEAN  
“COMPLETE BUT  
SUBJECT TO  
CHANGE?”



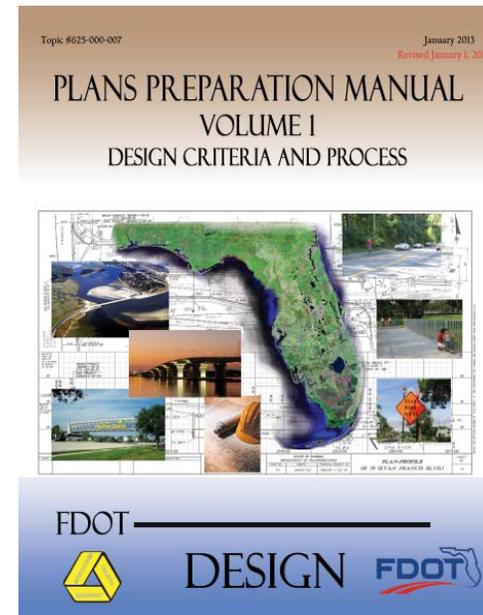
# D-B Plan Submittals

## MORE DIRECTION ON WHAT THE DEPARTMENT IS LOOKING FOR IN PPM VOL II SECTION 2.4.2.1

### TECHNICAL PROPOSAL PHASE

#### **PLAN AND PROFILE - PLAN VIEW**

- North arrow and scale
- Baseline of survey, equations
- Curve data (including superelevation)
- Existing topography including utilities
- Preliminary horizontal geometrics/dimensions
- Existing & proposed RW lines (if available)
- Centerline of construction (if different from the baseline of survey)
- Begin and end stations for the project and stations of equations and exceptions
- Existing utilities
- Guide sign locations
- Limits of wetlands





# D-B Plan Submittals

## 90% PLANS SUBMITTAL

### **ROADWAY PLAN PROFILE - PLAN VIEW**

North arrow and scale  
Baseline of survey, equations  
Curve data (including superelevation)  
Existing topography including utilities  
Preliminary horizontal geometrics/dimensions  
Existing & proposed R/W lines (if available)  
Centerline of construction (if different from the baseline of survey)  
Begin and end stations for the project, bridges, bridge culverts and exceptions  
Reference points (if project survey control sheet not included in plans set)

### **ROADWAY PLAN PROFILE – PLAN VIEW (con't)**

Curb return numbers, station ties and elevations  
Proposed drainage structures with structure nos.  
Proposed R/W lines  
Existing utilities  
Limits of wetlands  
Flood data if not shown elsewhere  
Proposed side drain pipe requirements (including size) for access and intersections  
Final geometrics and dimensions including radii, station pluses, offsets, widths, taper/transition lengths, curve data



# D-B Plan Submittals

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## FINAL PLANS SUBMITTAL

**PPM VOL II – SECTION 2.4.2.3**

**“ORDINARILY, THE ONLY OTHER REMAINING WORK TO BE DONE WILL BE TO COMPLY WITH COMMENTS RECEIVED AS A RESULT OF THE 90% REVIEW “**

**ANY REMAINING COMMENTS WILL BE SUBMITTED TO THE D-B TEAM FOR INCORPORATION INTO THE PLAN FOR RESUBMITTAL AND RFC**







# D-B Plan Submittals

## ADDITIONAL CHANGES TO THE PPM

### VOL I – CHAPTER 2 – STANDARD TABLE

Table 2.1.1 Lane Widths

LANE WIDTHS (FEET)						
FACILITY		THROUGH OR TRAVEL	AUXILIARY			
TYPE	AREA		SPEED CHANGE	TURNING (LT/RT/MED)	PASSING	CLIMBING
FREEWAY	Rural	12	12	----	----	12
	Urban	12	12	----	----	12
ARTERIAL	Rural	12	12	12	12	12
	Urban	12 <sub>1</sub>	12 <sub>1</sub>	12 <sub>1,4</sub>	12 <sub>1</sub>	12
COLLECTOR	Rural	12 <sub>6</sub>	11 <sub>2</sub>	11 <sub>2,4</sub>	11 <sub>2,5</sub>	12
	Urban	11 <sub>3</sub>	11 <sub>3</sub>	11 <sub>3,4</sub>	11 <sub>3</sub>	12



# D-B Plan Submittals

## VOL I – CHAPTER 2 – NON-CONVENTIONAL PROJECTS TABLE

Modification for Non-Conventional Projects:  
Delete *PPM* Table 2.1.1 and replace with the following:

FACILITY		LANE WIDTHS (FEET)				
TYPE	AREA	THROUGH OR TRAVEL	AUXILIARY			
			SPEED CHANGE	TURNING (LT/RT/MED)	PASSING	CLIMBING
FREEWAY	Rural	12	12	---	---	12
	Urban	12	12	---	---	12
ARTERIAL	Rural	12	12	12	12	12
	Urban	12	12	12	12	12
COLLECTOR	Rural	12	11	11	11	12
	Urban	12	11	11	11	12

## ADDITIONAL CHANGES TO THE PPM

### 2.1.4.2 Bicycle Facilities

Bicycle facilities shall be provided as required by **Chapter 8** of this volume. Bicycle lanes on the approaches to bridges should be continued across the structure. The District Pedestrian/Bicycle Coordinator shall be consulted during planning and design to establish appropriate bicycle facility elements on a project-by-project basis. **Chapter 8** of this volume contains additional criteria for the accommodation of bicyclists.

Modification for Non-Conventional Projects:

Delete third sentence in above paragraph and see RFP for requirements





# D-B Plan Submittals

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**SO NOW WE KNOW WHAT TO SUBMIT, WHAT'S NEXT?**

**WHO DOES IT GO TO?**

- **GENERALLY SPEAKING, THE DESIGN SUBMITTALS GO DIRECTLY TO THE FDOT DESIGN PM**
- **COPY THE CEI ON THE SUBMITTAL – THEY NEED TO HAVE THE SAME PLANS THAT EVERYONE ELSE HAS**
- **AS RFC PLANS ARE APPROVED FOR EACH COMPONENT, THE CEI USUALLY BECOMES THE KEEPER OF THE PLANS**



# D-B Plan Submittals

## A QUICK WORD ABOUT COMPONENT PLANS SUBMITTALS

The number one complaint from reviewers of D-B plans submittals is that the components are submitted without enough information on how that component fits with the rest of the project

### FROM THE RFP BOILERPLATE:

Plans must meet the minimum contents of a particular phase submittal prior to submission for review. The particular phase of each submittal shall be clearly indicated on the cover sheet. Component submittals must be accompanied by sufficient information for adjoining components or areas of work to allow for proper evaluation of the component under review.

Submittals for Category I and II bridges are limited to the following component submittals: foundation, substructure, and superstructure. Bridge component submittals must be accompanied by all supplemental information required for a complete review. Submittals for individual component elements (i.e. Pier 2, Abutment 1, Span 4, etc.) and incomplete submittals will not be accepted.



# D-B Plan Submittals

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**THE NUMBER OF COMPONENT SUBMITTALS ON A PROJECT  
CAN RANGE FROM 20 TO 50 SUBMITTALS**

**TO HELP YOUR SUBMITTAL GO MORE SMOOTHLY:**

- Stick closely to your approved (per D-B specs) submittal schedule
- Include roadway approaches in bridge submittals
- Include description of all work to be done during MOT phase I in the MOT phase I submittal
- Include MOT phase II, etc., in MOT phase I submittal even if in preliminary stages
- If possible, don't split the project design submittals geographically



# D-B Plan Submittals

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## NEXT STEPS

- PM gets the submittal and enters it into the Electronic Review Comments (ERC) system
- Reviewers get an email that the plans have been submitted and they should post their comments
- Reviewers review the submittal against the RFP requirements as well as the D-B team's technical proposal
- D-B team can review and respond to comments as they come in



# D-B Plan Submittals

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The following slides give real examples of comments made on D-B plan review submittals. As you will see, it's sometimes difficult to say clearly that a comment should or shouldn't require a response. In other words, is it a violation of the RFP or a suggestion that will ensure a properly designed and constructed project?

Let's start with an easy one:

Note 1: The word 'conversion' is misspelled.





# D-B Plan Submittals

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Sheet BM-2 - Is the 7 degree offset of the interior tail stops (see also BM-25) going to create problems with driving the tail stops? Are there going to be uneven lateral forces between the two tail stops?

Please review and document that all PD&E commitments are being addressed

There is a 540' taper shown for closing right lane. Based on index 613 or 614 this is for 45 mph. The MOT typical call for 40 mph. It seems the taper could be reduced if needed.

Metal stairs are called out. RFP required cast in place concrete stairs. Clarify why metal stairs are specified.

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# D-B Plan Submittals

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Check spelling under glazing notes. Please clarify the insulated glazing as impact resistant in accordance with applicable Building Code for the geographical area. The glass/frames should be labeled accordingly by an approved manufacturer.

General note 13- consider replacing and upgrading the top / street name sign assemblies to meet current FDOT sign / MUTCD standards.

Following 3 comments require written response. As per M Chapter 26, Exhibit 26-D, please provide MSE wall drawings.



## D-B Plan Submittals

Please remove note with asterisk regarding using alternate shoulder treatment and warning devices instead of the barrier wall. Given the design speed and the available space, reviewer does not foresee feasibility of using shoulder treatment or warning devices. If designer intends to use such devices, please show in the plans for approval.

What is the duration of phase I? Please show the documentation that the temporary pavement design provided in the general sheet number 4 will be able to handle the traffic for the total duration of Phase I.

Windows around the toilet room, how is privacy going



# Questions?

For more information contact:

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**END  
ROAD WORK**