



Florida Slab Beams (FSB) Superstructure Package

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Structures Design Office

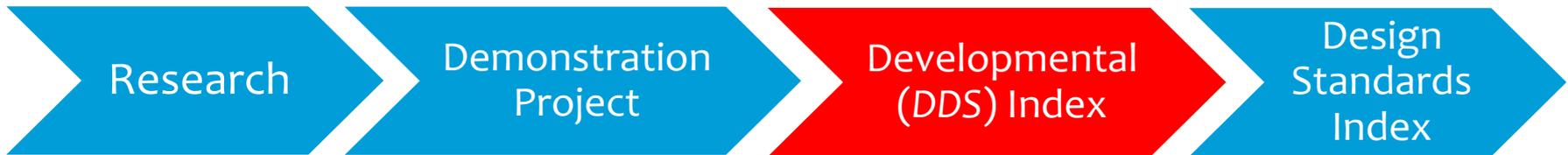
Agenda

- Part 1: Florida Slab Beam (FSB) Developmental Design Standard (DDS)
- Part 2: Florida Slab Beam (FSB) Superstructure Package (DDS)
- Part 3: 20 Ft. Approach Slab Developmental Design Standard (DDS)

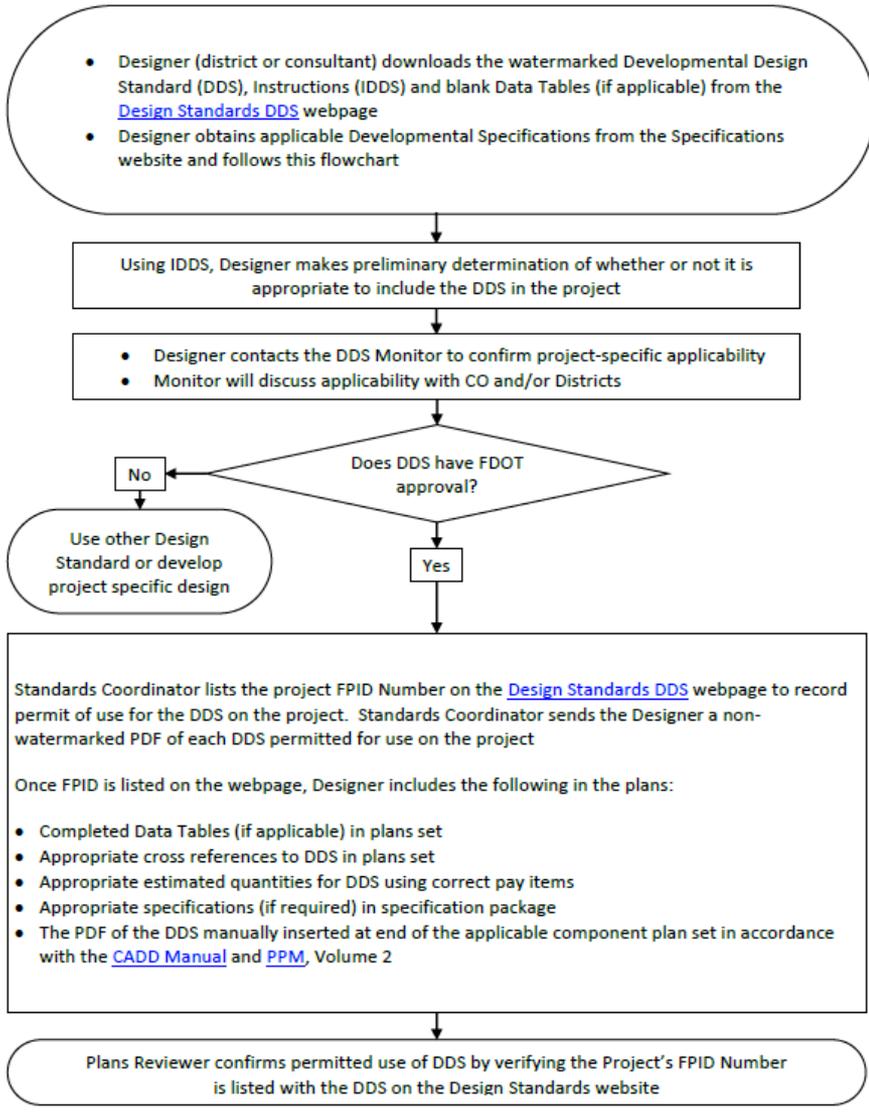


What is a Developmental Design Standard?

- Developmental Design Standards (DDS) are released by the Office of Design to implement new technologies in a limited trial fashion on an as-needed or an as-available basis requiring approval by the appropriate section within Design.



Florida Department of Transportation - Office of Design
 Developmental Design Standards Usage Process for Design-Bid-Build Projects
 2/2/2016



<http://www.dot.state.fl.us/rddesign/DS/Dev.shtm>



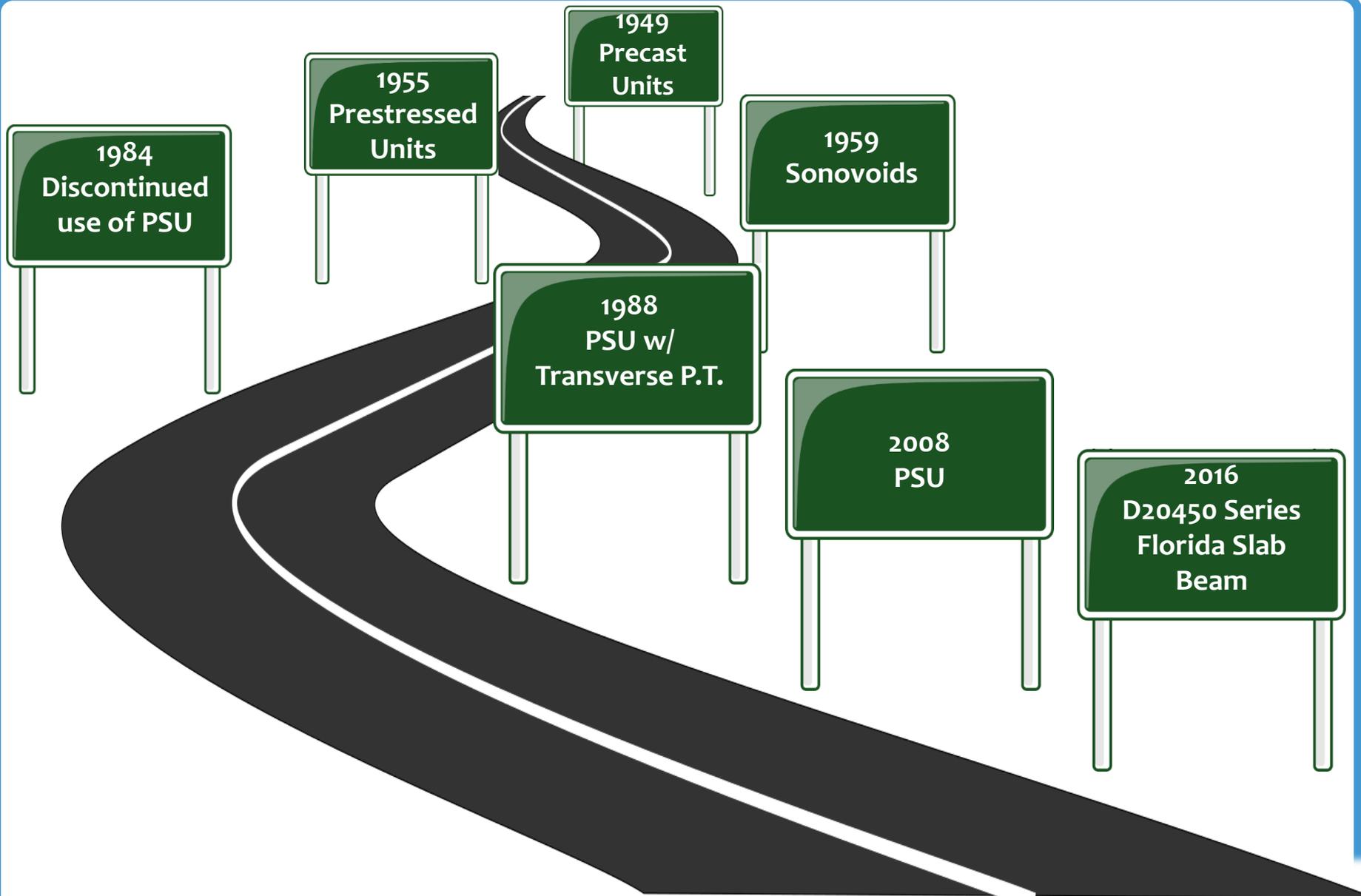
Basic Usage Process:

- Download DDS (watermarked), IDDS & any applicable information
- Contact DDS Monitor
- DDS Monitor (w/ CO and/or Districts) **approves it**
- Standards Coordinator sends the Designer PDF of DDS
- Plans Reviewer uses DDS webpage “Permit Projects” listing to **confirm approval.**



Agenda

- **Part 1: Florida Slab Beam (FSB) Developmental Design Standard (DDS)**
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- Part 3: 20 Ft. Approach Slab Developmental Design Standard (DDS)



The Road to the FSBs



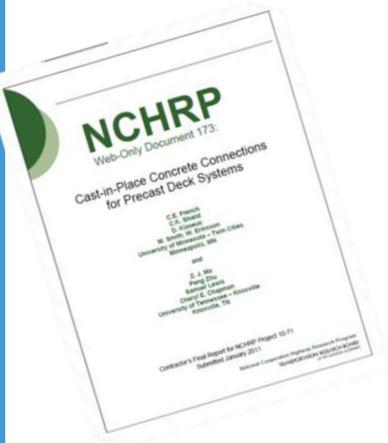
Poutre-Dalle System



Minnesota Shape



FDOT D7



FDOT CO - Pilot Project
(Orange Ave.)



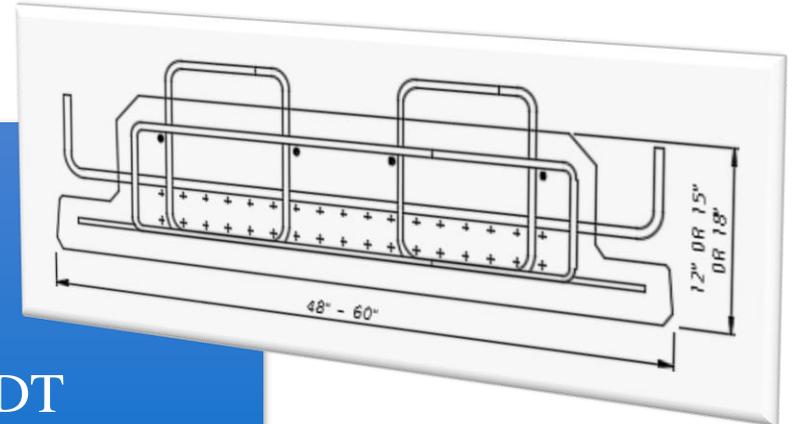
Florida Slab Beam

Development of the FSBs

D20450 Series – Florida Slab Beam (FSB)

New FDOT Standard Beam Shape

- Available January 2016
- Limited to Off-system Bridges w/ Low ADT
- 12", 15" & 18" Depth, Spanning between 30' to 60'
- Beam Widths range from 48" to 60" (1" increments)
- Minimum 6" Cast-In-Place Topping w/ SRA
- Requires 3 Developmental Specifications
 - 346 & 924 → SRA
 - 450 → FSB
- For more information → Instructions for Developmental Design Standards (IDDS)



D20450 Series – Florida Slab Beam (FSB)

FLORIDA DEPARTMENT OF TRANSPORTATION

Topic No. 625-010-003
March 2016

Design Guidelines (DDG)

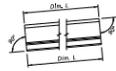


INSTRUCTIONS FOR DESIGN STANDARDS

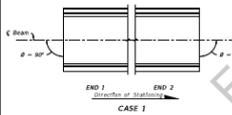
FY 2016-17

These Developmental Design Standards are for use on bridges with traffic (ADTT).
The Designer must request the Florida Department of Transportation Office of Design for any revisions for shrinkage.
Revisions for the FSBs are for shrinkage.
The Slab Beams (FSBs) are D20450, D20451, D20452, D20453, D20454, D20455, D20456, D20457, D20458, and Live Load.
The Slab Beam "width", e.g. FSB 12', may be different depths may be given bridge or multiple constant width possible of phase construction when possible for construction is recommended.
Revisions less than or equal to 30 degrees, a basis. The skew may

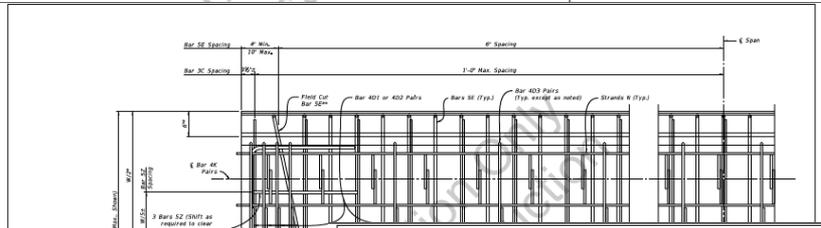
- FABRICATION NOTES**
- The abbreviated FSB designation for depth and width is FSB "Depth" x "Width" x "Span" x "Grade".
 - All bar reinforcement is uncoated.
 - Strands N shall be ASTM A416, Grade 250 or 270, 3/8" or larger strands, spaced to 18" O.C. each.
 - Unless otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".
 - For reference Dimensions, Angles and Case Numbers, see Florida Slab Beam - Table of Variables in Structures Plans & 402 correspond to END 2.
 - Bar 401 & 402 correspond to END 1, and Bar 403 correspond to END 2.
 - Bar SE1 correspond to Interior FSBs, and SE2 correspond to exterior FSBs.
 - Mark the top surface of the Slab Beams transversely to provide a roughened surface with 1/8" amplitude.



SCHEMATIC SIDE ELEVATION OF BEAM
(Beam on a Positive Grade shown; Beams 401 & 402 on Negative Grade or Horizontal Grade similar.)



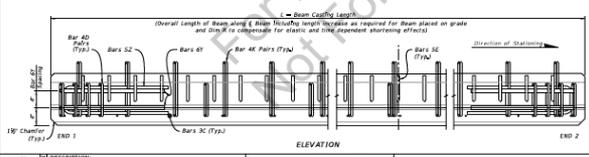
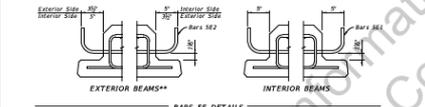
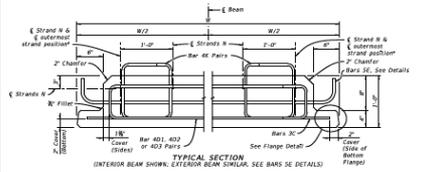
LAST REVISION DATE/TIME	DESCRIPTION



- * Required to Working Plans.
- ** If Beam ends, use number of field cut and related Bar SE as required to clear Bar 401 and Bar 402.
- *** Bar SE 401 & 402 longitudinally as required to clear Bar 401 and Bar 402.

CROSS REFERENCE:
For Dimensions V1, V2 & W and number of spans S1 & S2, see Florida Slab Beam - Table of Variables in Structures Plans.
See Index D20451, D20452 and D20453 for Bar SE Details.

LAST REVISION DATE/TIME	DESCRIPTION	DEV DESIGN



LAST REVISION DATE/TIME	DESCRIPTION	DEV DESIGN

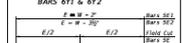
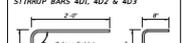
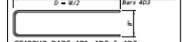
NOTES:
Work this Index with Index D20450 and Florida Slab Beams - Table of Variables in Structures Plans.
For Dimensions C, D, E, L, R, W, S, Y and Angle θ , see Florida Slab Beam - Table of Variables in Structures Plans.
For referenced notes, see Index D20450, Sheet 1.
* For 1/2" of interior strand position, see Reinforcing Strand Pattern in Florida Slab Beams - Table of Variables in Structures Plans.
** At the Contractor's option, the Detail as shown for Interior Beams may be used for Exterior Beams and the Bar SE Detail based on the exterior side of the Beam to provide the specified cover to the top layer.

BILL OF REINFORCING STEEL FOR ONE BEAM ONLY

BEAM SIZE	NO. OF NUMBERS	NUMBER REINFORCEMENT (NO. X I)	LENGTH (FEET)
C	3	3	VARIES
D	4	4	VARIES
E	5	5	VARIES
F	6	6	VARIES
G	7	7	VARIES
H	8	8	VARIES
I	9	9	VARIES
J	10	10	VARIES
K	11	11	VARIES
L	12	12	VARIES
M	13	13	VARIES
N	14	14	VARIES
O	15	15	VARIES
P	16	16	VARIES
Q	17	17	VARIES
R	18	18	VARIES
S	19	19	VARIES
T	20	20	VARIES
U	21	21	VARIES
V	22	22	VARIES
W	23	23	VARIES
X	24	24	VARIES
Y	25	25	VARIES
Z	26	26	VARIES

BENDING DIAGRAMS (See Note 1)

Beam Size	Span Length (ft)	Max. Moment (ft-k)
C	12	108
D	14	154
E	16	216
F	18	288
G	20	360
H	22	440
I	24	528
J	26	624
K	28	728
L	30	840
M	32	960
N	34	1080
O	36	1200
P	38	1320
Q	40	1440
R	42	1560
S	44	1680
T	46	1800
U	48	1920
V	50	2040
W	52	2160
X	54	2280
Y	56	2400
Z	58	2520



LAST REVISION DATE/TIME	DESCRIPTION	DEV DESIGN



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- **Part 2: Florida Slab Beam (FSB) Superstructure Package (DDS)**
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FSB Superstructure Standards Package

Objective:

- Standardize off-system bridge construction with either standard drawings or a bridge package which would decrease design costs and eventually construction costs.
- Local municipalities in Florida design and build bridges with varying construction methods and superstructure section types. The lack of consistency drives up the cost for these bridges, which are typically short span and carry two lanes of traffic. Many local officials wanted the Florida Department of Transportation to develop standard designs for typical off-system bridges in order to control and reduce cost.

Solution:

- Create an Off-System Superstructure Bridge Package Developmental Design Standard (DDS)

FSB Superstructure Standards Package

Off-System
Bridge
Superstructure
Packages

FSB

1. Cost
2. Span (≤ 60 ft)
3. Durability
4. Speed of Construction
5. Superstructure Depth
6. Constructability

FSB Superstructure Package



Off the shelf...
Superstructure Plan Set



Set Bridge Lengths and Widths



Preferred Material → Concrete



Traffic Railing → Concrete
(TL-4)

FSB Superstructure Standards Package

- Superstructure Details & Notes
- Typical Sections
- Superstructure Plan
- All applicable Table of Variables
- Bearing Pad Details
- Superstructure Reinforcing Bar List
- Design Load Rating
- Superstructure Quantities



FSB Superstructure Standards Package

5 Clear Widths
(15', 24', 28',
32', 40')



3 Bridge Lengths
(30', 40',
50')

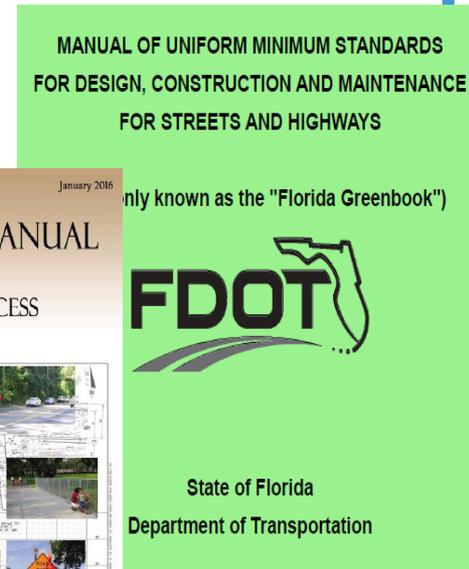
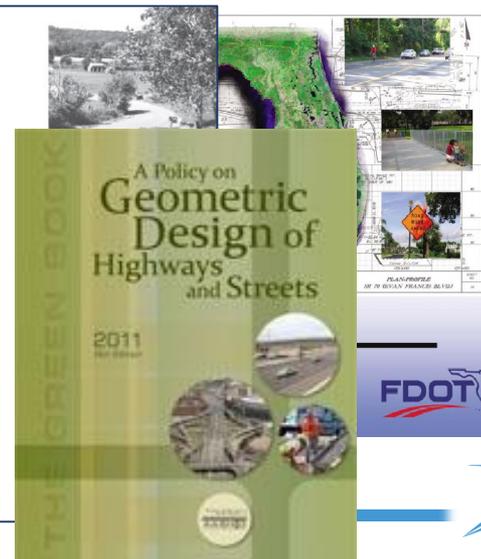
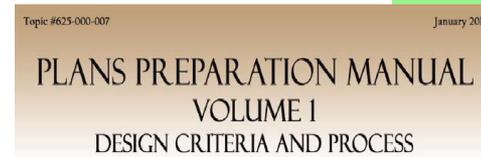
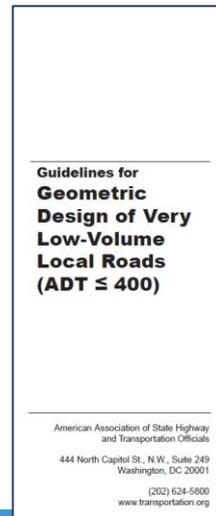


15 Total
Superstructure
Packages

FSB Superstructure Standards Package

How were the Lengths and Widths selected?

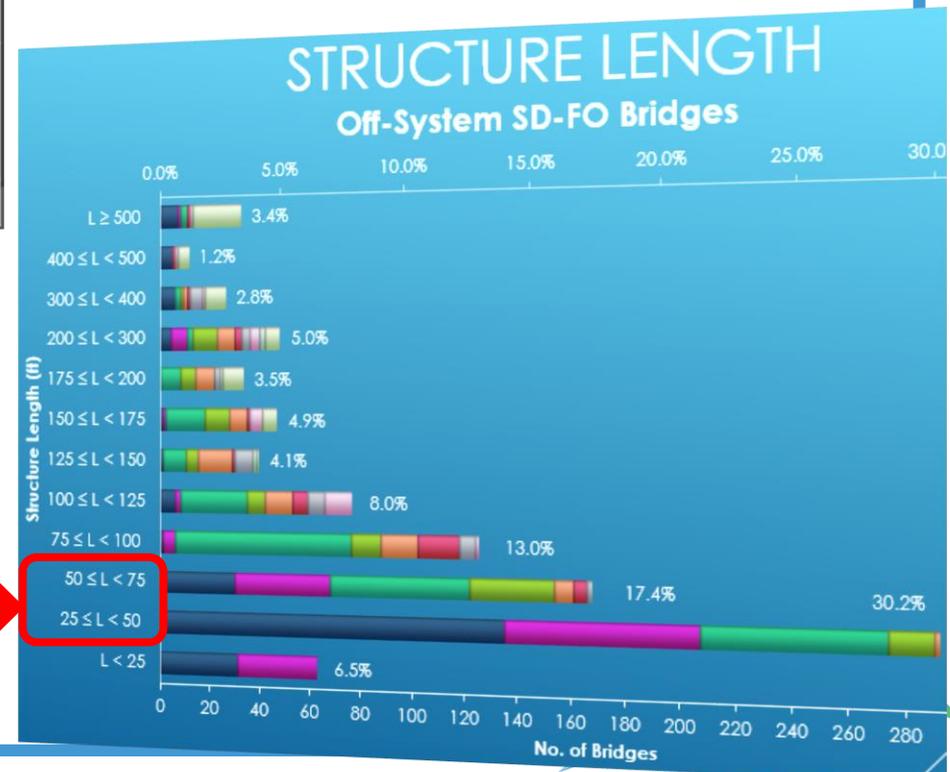
- AASHTO Guidelines for Geometric Design of Very Low-Volume Local Roads ($ADT \leq 400$)
- AASHTO Geometric Design of Highways & Streets
- Florida Green Book
- FDOT PPM
- FDOT Bridge Management System
- FSU Research Project
- Advisory Committee Survey
 - Local County Officials
 - FDOT Construction
 - Contractors
 - FDOT Districts



FSB Superstructure Standards Package

How were the Lengths and Widths selected?

Average Daily Traffic	Design Speed (MPH)	Total Width (ft)
< 100 and 1 Lane Roadway	Any	15
< 400	Any	22
< 400 with increases predicted beyond 20 years	Any	28
400 - 750	Any	
750 - 1,500	30 - 45 MPH	32
750 - 1,500	50 - 60 MPH	
1,500 - 1,600	Any	40
1,600 - 2,000	Any	
2,000 +	Any	40



Approximately 50%
25 ft – 75 ft Length

FSB Superstructure Standards Package

FSB Superstructure Package DDS Index List

Developmental Design Standard Index No.	Clear Roadway <u>Width</u> Between Traffic Railings	Nominal Span <u>Lengths</u>	FSB <u>Thickness</u>
	(feet)	(feet)	(inches)
D30000	Typical FSB Superstructure Package Details and Notes		
D30015	15	30	12
		40	12
		50	15
D30024	24	30	12
		40	12
		50	15
D30028	28	30	12
		40	12
		50	15
D30032	32	30	12
		40	12
		50	15
D30040	40	30	12
		40	12
		50	15



30 ft. & 40 ft. Span Lengths → 12 in. FSB Thickness
 50 ft. Span Lengths → 15 in. FSB Thickness

FSB Superstructure Standards Package

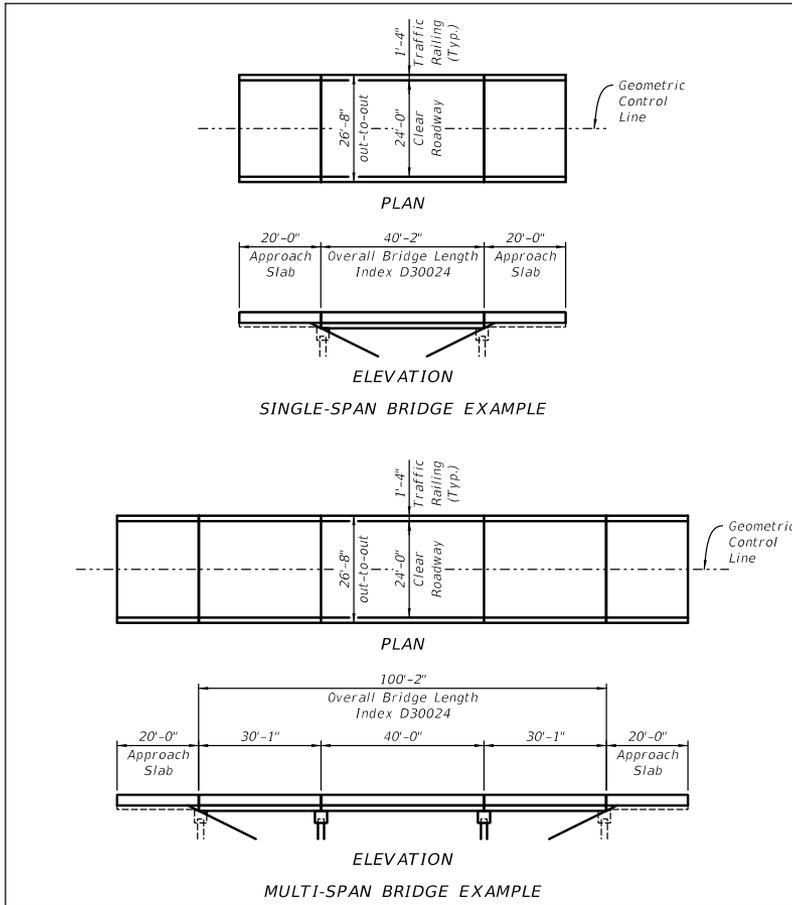
Assumptions & Limitations:

1. Zero Skew
2. Tangent horizontal alignment
(no horizontal curve within the bridge limits)
3. Tangent profile grade
(no vertical curve within the bridge limits)
4. No superelevation transition
(within the bridge limits)
5. Simple Spans
6. Single or Multiple Span Application
7. Crown or constant cross slope



<http://www.dot.state.fl.us/rddesign/DS/Dev.shtm>

FSB Superstructure Standards Package



- Short Bridge
 - < 100 ft.
 - No Planing → 6" Topping Thickness
-
- Long Bridge
 - > 100 ft.
 - Paved Roadways (Planing required) → 6½" Topping Thickness
 - Unpaved Roadways (No Planing) → 6" Topping Thickness

Include the following note in the Structure Plans General Notes to specify the Topping Thickness. Include either 6 or 6½ in the blank and reference the appropriate FSB Superstructure Package Index number:

C-I-P TOPPING THICKNESS:

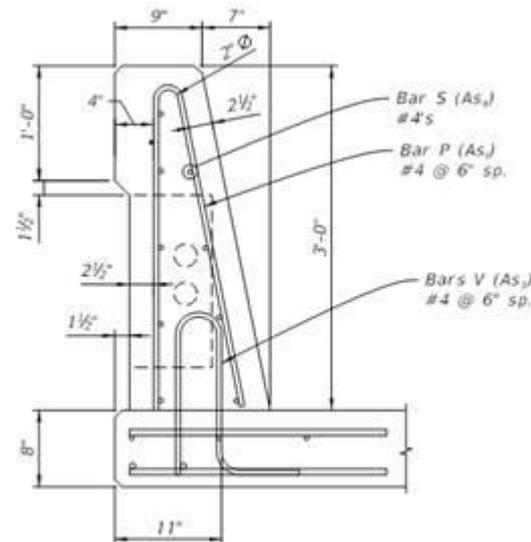
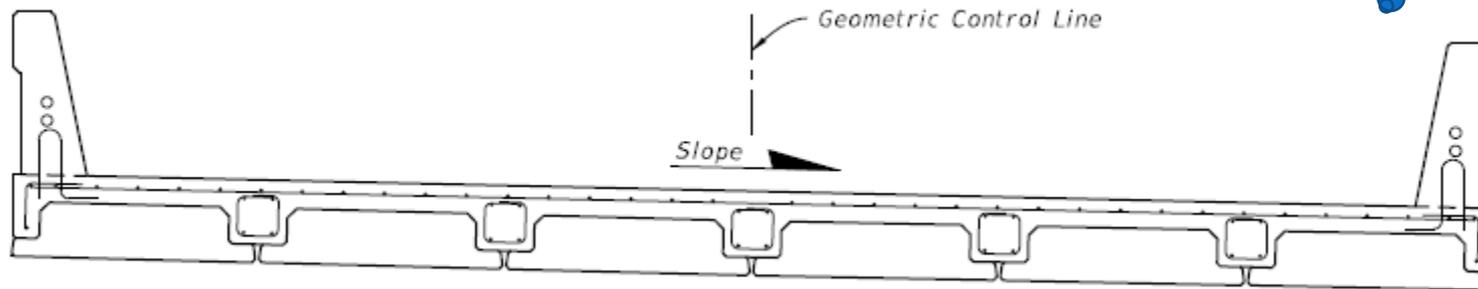
C-I-P Topping Thickness = ___ inches. See Index D300__



FSB Superstructure Standards Package

- Incorporates the New TL-4 Traffic Railing:
- 36" Single-Slope Traffic Railing → DDS Index D427

DDS until
July 2018



FSB Superstructure Standards Package

- How the Design Standards are Organized
 - General Sheets: Index D30000
 1. Notes
 2. General Details
 3. Finish Grade Elevation Plan View, T-Lines, & Typical Elevation Points
 - Clear Width Specific Packages: Indexes D30015, D30024, D30028, D30032, D30040
 1. Typical Section
 2. Framing Plan, Reinforcing Layout & Superstructure Bar List
 3. Table of Variables
 - Beam Table & Strand Layouts
 - Camber & Deflection Table
 - Bearing Pad
 4. Load Rating Summary Sheet
- IDDS
 - Dead Load & Live Load Reactions
 - Superstructure Depths
 - Superstructure Quantities
 - Load Rating
 - Additional Design Assumptions, Plan Content & More

Clear Width
(e.g. 40')

D30040

D30000 Series

FSB Superstructure Standards Package

General Sheets: Index D30000

Instructions for Developmental Design Standards Index D30000 Series FSB Superstructure Package
 Index D30000 Series FSB Superstructure Package
 Design Criteria

Topic No. 625-010-003
 2016

DESIGN METHODOLOGY
 Load and Resistance Factor Design (LRFD) method using strength and service limit states.

DESIGN LOADING
 1. Live Loads: HC-93 with Dynamic Load Allowance
 2. Dead Loads: 30" Single-Slope Traffic Railing 430 pcf
 Reinforced Concrete 150 pcf
 Future Wearing Surface 15 pcf

Future Wearing Surface Load is only included for bridges with a 6-inch topping thickness.
 For bridges with a 6 1/2-inch topping thickness, a one-half inch sacrificial thickness is included in the dead load of the topping but omitted from the section properties used for design.

3. Utilities: No allowance for utility loads has been included in the design.

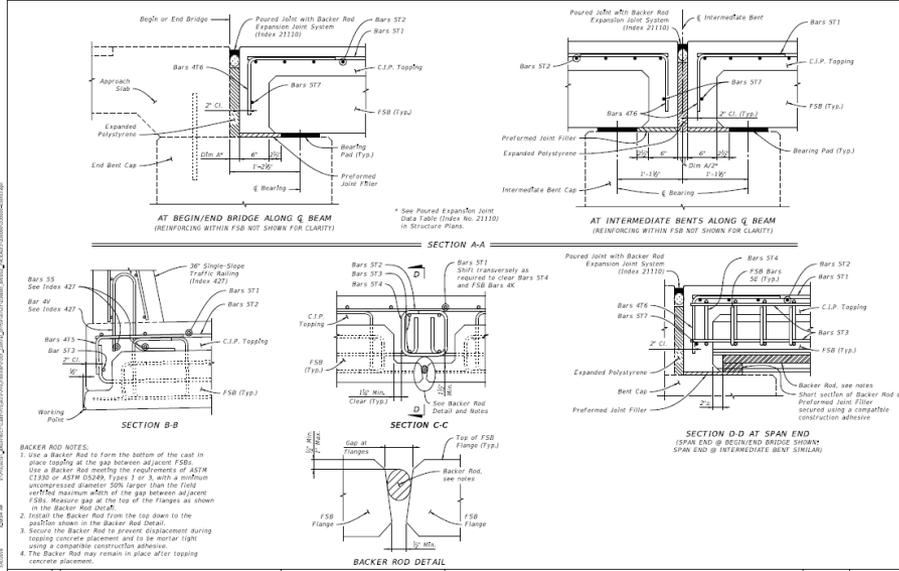
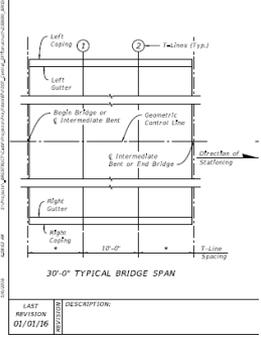
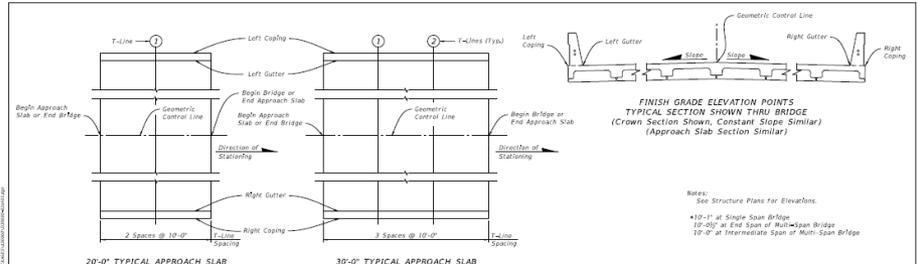
Location of Concrete in Structure	Concrete Class	Min. 28-day Compressive Strength (psi)
FSB	ST	6,500
C.I.P. Topping	See Structures Plans General Notes	
CRACK FINISHING	See Structures Plans General Notes	

Location of Concrete in Structure	Cover
C.I.P. Concrete Topping (top surface) For bridges with 6" topping thickness For bridges with 6 1/2" topping thickness	2" before placing
T.P. Reinforcement external surfaces	2"
FSB All other surfaces of FSB	1"
C.I.P. Traffic Railings (Front & Back)	2"
All other locations not listed above	See Structure Plans

PAV ITEM NOTES

- Placement of incidental items not specifically covered in the Individual Bid Items shall be included in the contract prices for the related Bid Items.
- Pay Item 400 for the C.I.P. Topping includes the cost and installation of the backer rod.
- Pay Item 450-A includes the cost to furnish and install the plain rebar pads.
- Pay Item 415-1-4 includes all labor, equipment, materials, etc. required to field bore and/or field cast reinforcing steel.
- Pay Item 321-5-1X includes the cost to furnish and install controls according to Index 2110.

Concrete cover dimensions shown in the plans do not include placement and fabrication tolerances unless shown as "minimum cover". See Specification Section 413 for allowable tolerances.



BACKER ROD NOTES:

- Use a Backer Rod to form the bottom of the cast in place topping at the gap between adjacent FSBs. Use a Backer Rod with the properties of ASTM C1330 or ASTM D5240, Type 1 or 3, with a minimum uncompressed diameter 50% larger than the top vertical maximum width of the gap between adjacent FSBs. Measure gap at the top of the flange as shown in the Backer Rod Detail.
- Install the Backer Rod from the top down to the position shown in the Backer Rod Detail.
- Secure the Backer Rod to prevent displacement during topping concrete placement and to be mortar tight using a compatible construction adhesive. The Backer Rod may remain in place after topping concrete placement.

FLORIDA DEPARTMENT OF TRANSPORTATION (SDG)

Office of Design

INSTRUCTIONS FOR DESIGN STANDARDS

FY 2016-17

LAST REVISION	DESCRIPTION
01/01/16	

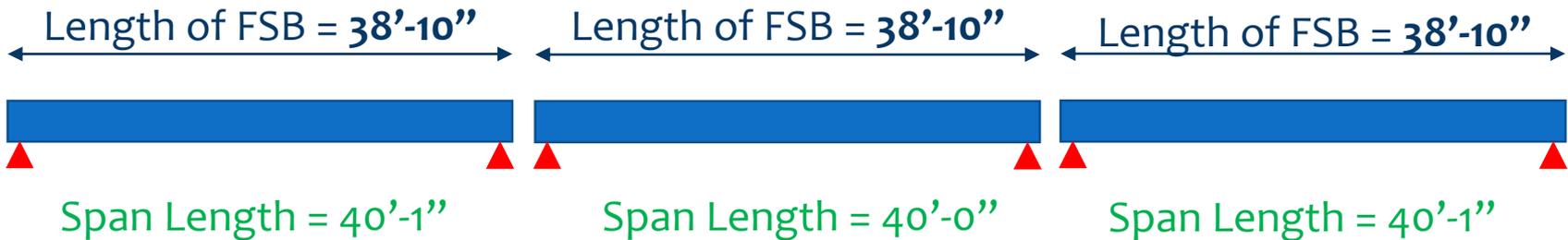
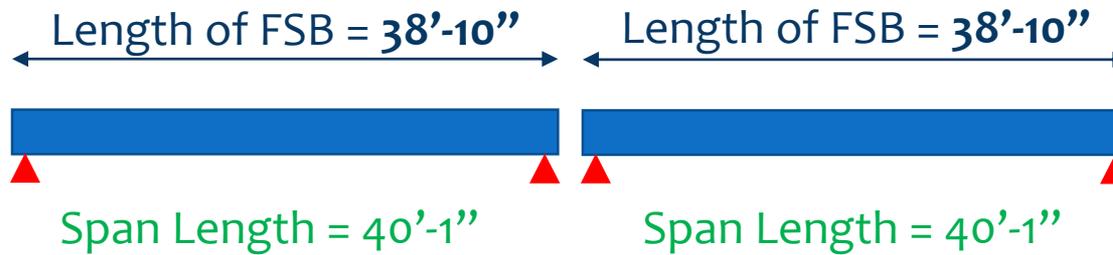
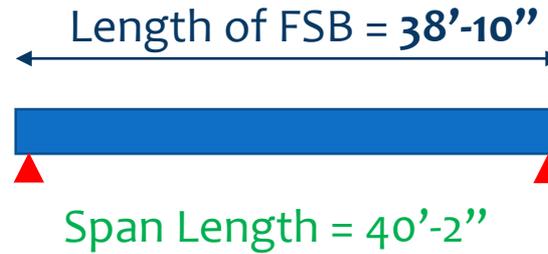
LAST REVISION	DESCRIPTION
01/01/16	



Nominal Span Length

- FSB Length is the same no matter what the span configuration!

BRIDGE SPAN TABLE				
Nominal Span Length (ft)	Length of C.I.P. Topping	Bridge Span		
		Single Span Bridge	Multiple Span Bridge	
			End Span	Intermediate Span
30	29'-10"	30'-2"	30'-1"	30'-0"
40	39'-10"	40'-2"	40'-1"	40'-0"
50	49'-10"	50'-2"	50'-1"	50'-0"



FSB Superstructure Standards Package

PSA



The Developmental Design Standards (DDS) Index D30000 Series, herein referred to as the DDS, provides a standard set of superstructure plans utilizing the Florida Slab Beam (FSB) Developmental Design Standards D20450 Series. Approval to use the FSB Superstructure Package DDS D30000 Series also serves as approval to use the FSB Developmental Design Standards D20450 Series (i.e. the designer is not required to obtain separate approvals to use the FSB Superstructure Package and the FSB Developmental Design Standards).

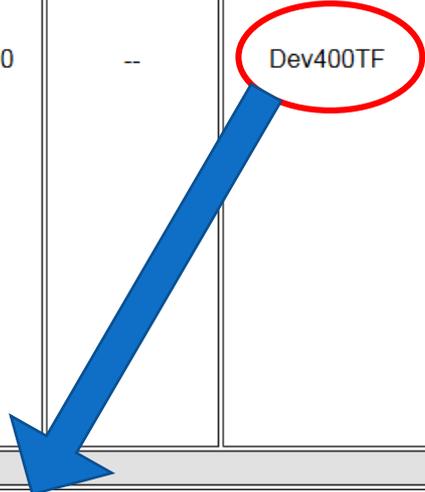
The DDS does not provide a complete set of stand-alone Structure Plans for the Contract Documents. It is a standard set of superstructure plans that supplements other necessary components of the Structure Plans such as, but not limited to, the following: Summary of Structure Quantities, General Notes, Plan and Elevation, Bridge Hydraulic Recommendations, Construction Sequence, Report of Core Borings, Foundation Layout, Pile Data Table, Substructure Plans and Details, Riprap and/or Slope Protection Details, and Reinforcing Bar Lists for Approach Slabs and Substructures. Prepare the Structure Plans in accordance with the Plans Preparation Manual (PPM). The Contractor will refer to the DDS for the information that would normally be located in the superstructure portion of the Structure Plans.

FSB Superstructure Standards Package

UNDER CONSTRUCTION
 CONTENT WILL BE AVAILABLE SOON

On the FDOT Developmental Design Standards Website, Click on the bridge width you need.

FSB BRIDGE SUPERSTRUCTURE PACKAGES				
D30000 <i>(pending)</i> Certification Statement	FSB Superstructure Package Permitted Projects FPID No(s): 433884-1, 433903-1	Steve Nolan	IDDS-30000 	--
D30015 <i>(pending)</i> Certification Statement	FSB Superstructure - 15 ft. Clear Width Permitted Projects FPID No(s):			
D30024 <i>(pending)</i> Certification Statement	FSB Superstructure - 24 ft. Clear Width Permitted Projects FPID No(s): 433884-1, 433903-1			
D30028 <i>(pending)</i> Certification Statement	FSB Superstructure - 28 ft. Clear Width Permitted Projects FPID No(s):			
D30032 <i>(pending)</i> Certification Statement	FSB Superstructure - 32 ft. Clear Width Permitted Projects FPID No(s):			
D30040 <i>(pending)</i> Certification Statement	FSB Superstructure - 40 ft. Clear Width Permitted Projects FPID No(s):			



Developmental Specification Dev400TF which includes provisions that allow a tined finish in lieu of grooving for off-system bridges and approach slabs on unpaved roadways

<http://www.dot.state.fl.us/rddesign/DS/Dev.shtm>



Conventional Using FSB Superstructure Package

GENERAL DRAWINGS

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
B-1	KEY SHEET & INDEX
B-2	SIGNATURE SHEET
B0-1	SUMMARY OF STRUCTURE QUANTITIES
B-3	GENERAL NOTES
B-4	RIPRAP DETAILS

BRIDGE 1

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
B1-1	PLAN AND ELEVATION
B1-2	TYPICAL SECTION
B1-3	BRIDGE HYDRAULICS RECOMMENDATIONS
B1-4	CONSTRUCTION SEQUENCE (SHEET 1 OF 3)
B1-5	CONSTRUCTION SEQUENCE (SHEET 2 OF 3)
B1-6	CONSTRUCTION SEQUENCE (SHEET 3 OF 3)
B1-7	REPORT OF CORE BORINGS (SHEET 1 OF 3)
B1-8	REPORT OF CORE BORINGS (SHEET 2 OF 3)
B1-9	REPORT OF CORE BORINGS (SHEET 3 OF 3)
B1-10	FOUNDATION LAYOUT
B1-11	PILE DATA TABLE
B1-12	END BENT 1 LT.
B1-13	END BENT 4 LT.
B1-14	END BENT 1 RT.
B1-15	END BENT 4 RT.
B1-16	END BENT DETAILS (SHEET 1 OF 2)
B1-17	END BENT DETAILS (SHEET 2 OF 2)
B1-18	INTERMEDIATE BENTS 2 AND 3 LT.
B1-19	INTERMEDIATE BENTS 2 AND 3 RT.
B1-20	INTERMEDIATE BENT DETAILS
B1-21	FINISH GRADE ELEVATIONS (SHEET 1 OF 3)
B1-22	FINISH GRADE ELEVATIONS (SHEET 2 OF 3)
B1-23	FINISH GRADE ELEVATIONS (SHEET 3 OF 3)
B1-24	FRAMING PLAN
B1-25	BUILD UP AND DEFLECTION DATA TABLES
B1-26	SUPERSTRUCTURE SECTION LT.
B1-27	SUPERSTRUCTURE SECTION RT.
B1-28	SUPERSTRUCTURE PLAN LT.
B1-29	SUPERSTRUCTURE PLAN RT.
B1-30	SUPERSTRUCTURE DETAILS
B1-31	PRESTRESSED BEAM TABLE OF VARIABLES
B1-32	BEARING PAD AND EXPANSION JOINT DATA TABLES
B1-33	APPROACH SLAB DATA TABLES
B1-34	REINFORCING BAR LIST (SHEET 1 OF 2)
B1-35	REINFORCING BAR LIST (SHEET 2 OF 2)
B1-36	RIPRAP PLAN
B1-37	LOAD RATING SHEET (SHEET 1 OF 2)
B1-38	LOAD RATING SHEET (SHEET 2 OF 2)

GENERAL DRAWINGS

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
B-1	KEY SHEET & INDEX
B-2	SIGNATURE SHEET
B0-1	SUMMARY OF STRUCTURE QUANTITIES
B-3	GENERAL NOTES
B-4	RIPRAP DETAILS

BRIDGE 1

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
B1-1	PLAN AND ELEVATION
B1-2	BRIDGE HYDRAULICS RECOMMENDATIONS
B1-3	CONSTRUCTION SEQUENCE (SHEET 1 OF 3)
B1-4	CONSTRUCTION SEQUENCE (SHEET 2 OF 3)
B1-5	CONSTRUCTION SEQUENCE (SHEET 3 OF 3)
B1-6	REPORT OF CORE BORINGS (SHEET 1 OF 3)
B1-7	REPORT OF CORE BORINGS (SHEET 2 OF 3)
B1-8	REPORT OF CORE BORINGS (SHEET 3 OF 3)
B1-9	FOUNDATION LAYOUT
B1-10	PILE DATA TABLE
B1-11	END BENT 1 LT.
B1-12	END BENT 4 LT.
B1-13	END BENT 1 RT.
B1-14	END BENT 4 RT.
B1-15	END BENT DETAILS (SHEET 1 OF 2)
B1-16	END BENT DETAILS (SHEET 2 OF 2)
B1-17	INTERMEDIATE BENTS 2 AND 3 LT.
B1-18	INTERMEDIATE BENTS 2 AND 3 RT.
B1-19	INTERMEDIATE BENT DETAILS
B1-20	FINISH GRADE ELEVATIONS (SHEET 1 OF 2)
B1-21	FINISH GRADE ELEVATIONS (SHEET 2 OF 2)
B1-22	APPROACH SLAB DATA TABLES
B1-23	REINFORCING BAR LIST
B1-24	RIPRAP PLAN

Eliminating 14 Sheets

43 Plan Sheets



29 Plan Sheets

Agenda

- Part 1: Florida Slab Beam (FSB) Developmental Design Standard (DDS)
- Part 2: Florida Slab Beam (FSB) Superstructure Package (DDS)
- **Part 3: 20 Ft. Approach Slab Developmental Design Standard (DDS)**

20 Ft. Approach Slab Developmental Design Standard

Design Assumptions and Limitations

Index D20920 is intended to be used with asphalt (flexible) roadway approach pavement.

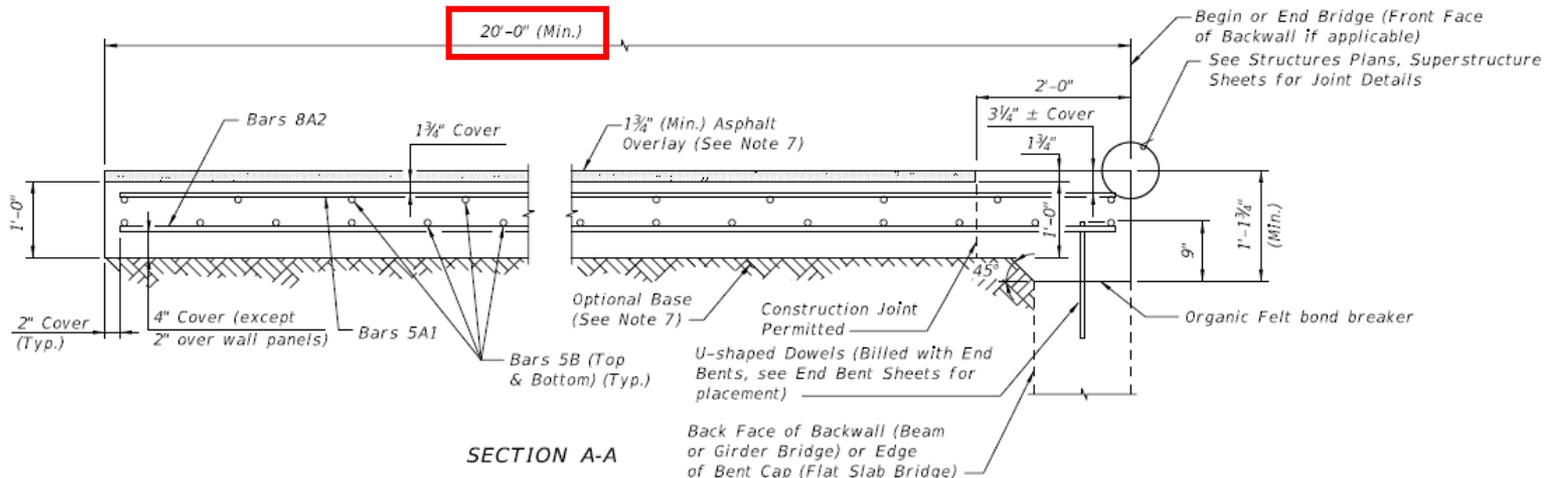
The use of the 20 ft. Approach Slabs Design Standards will be restricted to off-system bridges with a low Average Daily Traffic (ADT) and Average Daily Truck Traffic (ADTT).



Design Assumptions and Limitations

Index D20930 is intended to be used with concrete (rigid) roadway approach pavement and with unpaved roadway approaches.

The use of the 20 ft. Approach Slabs Design Standards will be restricted to off-system bridges with a low Average Daily Traffic (ADT) and Average Daily Truck Traffic (ADTT).



Using all Three Developmental Design Standards

FSB DDS

Single Slope
Traffic
Railing
Index D427

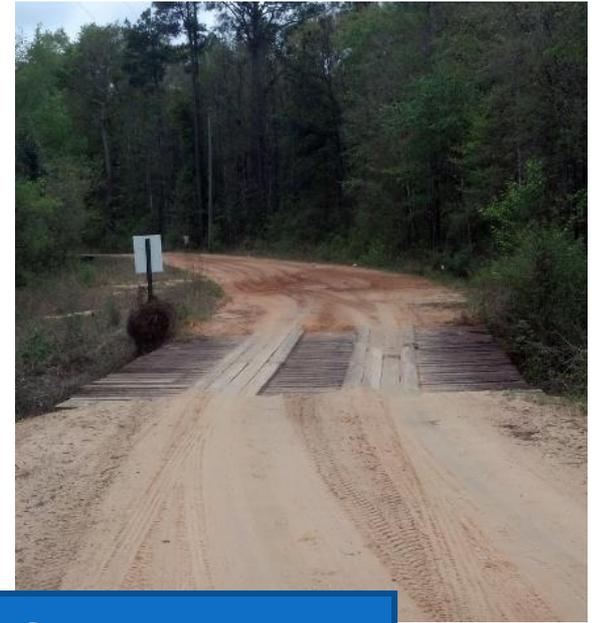
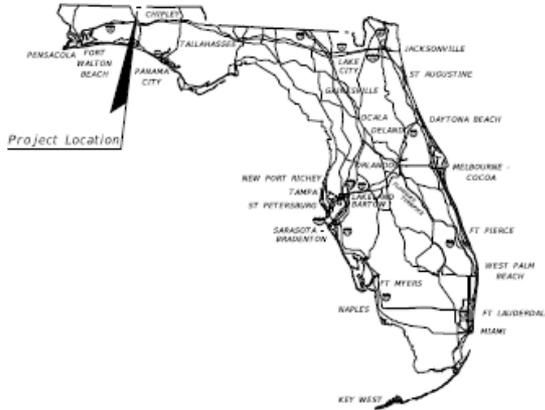
Demonstration
Project

Hicks Rd.
Holmes Co., FL

FSB
Superstructure
Package

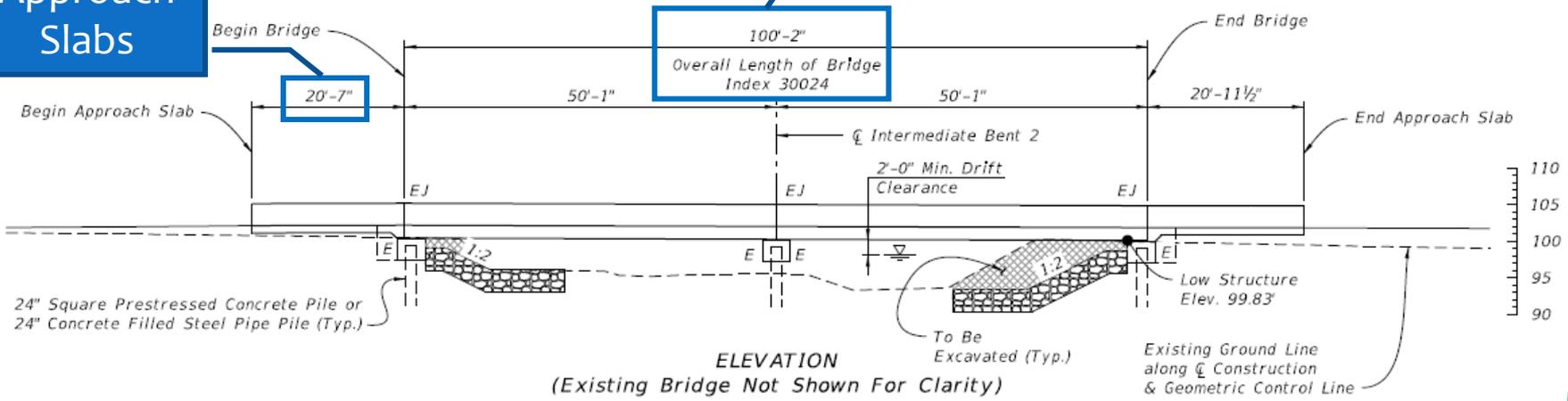
20 Ft.
Approach
Slab DDS

Hicks Rd. Over West Pittman Creek in Holmes County, FL



20 Ft. Approach Slabs

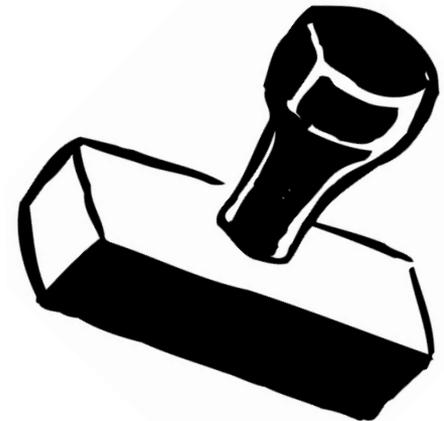
FSB Superstructure Package



- Currently At ~ 60% Structure Plans

Agenda

- Part 1: Florida Slab Beam (FSB) Developmental Design Standard (DDS)
Currently Available: <http://www.dot.state.fl.us/rddesign/DS/Dev.shtm>
- Part 2: Florida Slab Beam (FSB) Superstructure Package (DDS) 
Available in Fall 2016
- Part 3: 20 Ft. Approach Slab Developmental Design Standard (DDS)
Available in Fall 2016



Thanks!



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	State of Florida Department of Transportation
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<http://www.dot.state.fl.us/rddesign/DS/Dev.shtm>

