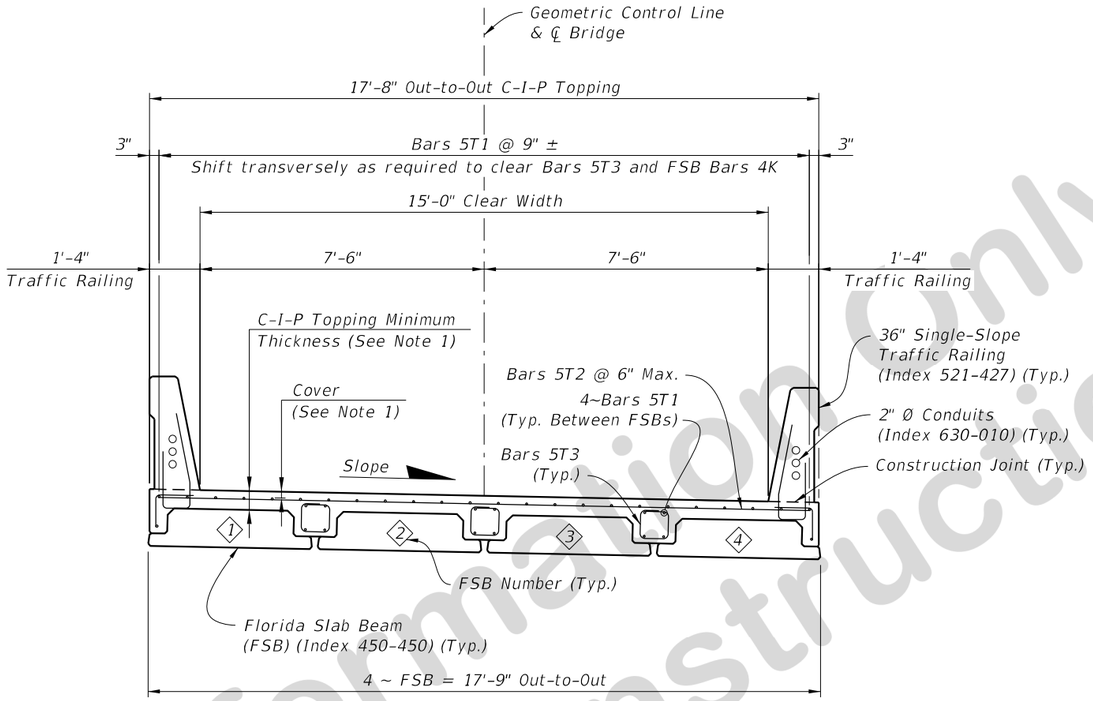


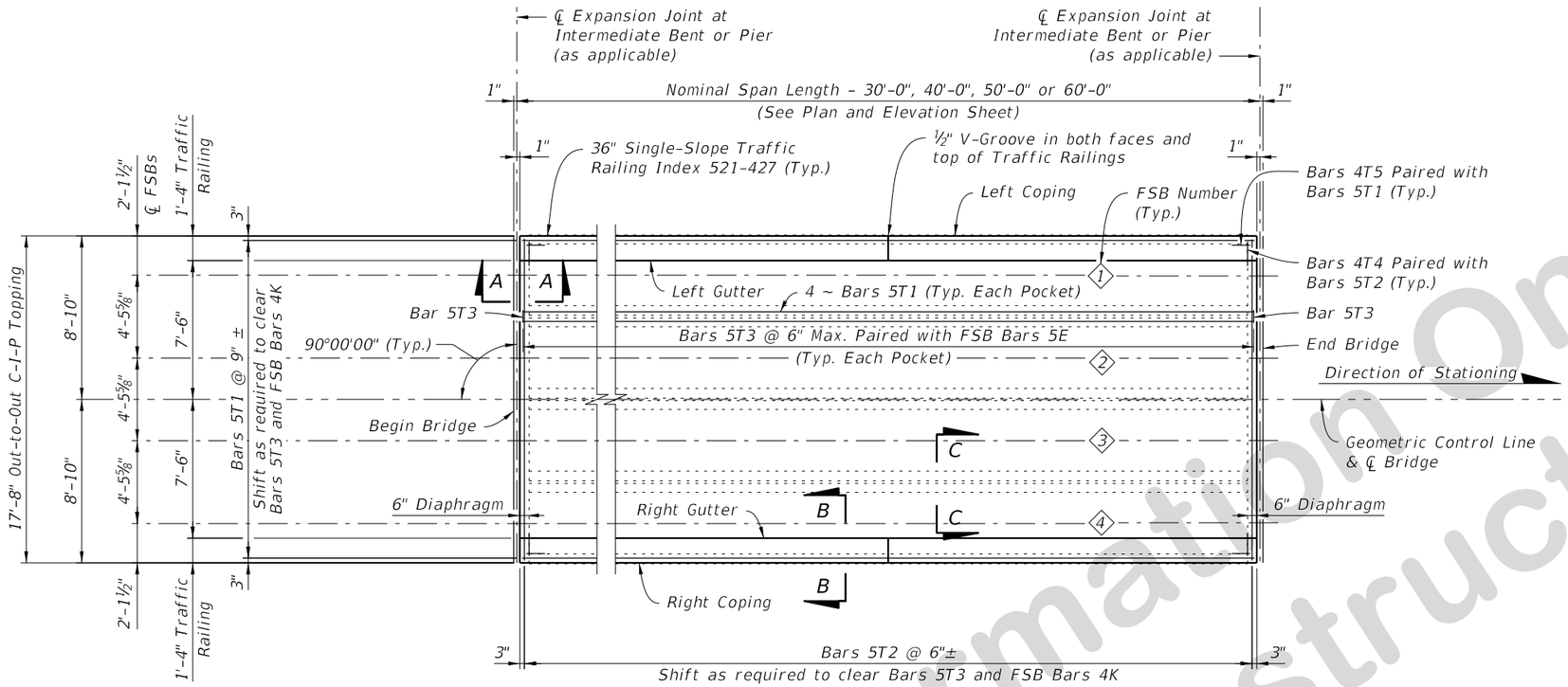
TYPICAL SECTION THRU SUPERSTRUCTURE

NOTES:
1. See Structure Plans General Notes for Topping minimum thickness and cover.
2. Work this Index with Index D400-300.

SUPERSTRUCTURE TYPICAL SECTION

9/16/2025 7:27:22 PM

LAST REVISION	REVISION	DESCRIPTION:				
01/01/26			DEVELOPMENTAL STANDARD PLANS	FSB SUPERSTRUCTURE PACKAGE 15 FT. CLEAR WIDTH	INDEX D400-315	SHEET 1 of 5



SUPERSTRUCTURE PLAN
(ONE SPAN SHOWN)

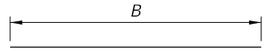
NOTE:
All bar dimensions are out-to-out.

CROSS REFERENCE:
See Index D400-300, Sheet 2 for Sections A-A, B-B and C-C.

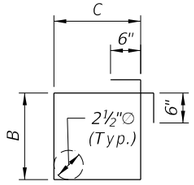
BILL OF REINFORCING STEEL FOR ONE SPAN ONLY

NOMINAL SPAN LENGTH	MARK SIZE	MARK DES	LENGTH	NO. OF BARS	B	C
30'-0"	5	T1	29'-6"	38	29'-6"	
	5	T2	17'-4"	62	17'-4"	
	5	T3	4'-2"	180	9½"	9½"
	4	T4	2'-2"	120	1'-6"	8"
	4	T5	2'-6"	48	1'-6"	1'-0"
40'-0"	5	T1	39'-6"	38	39'-6"	
	5	T2	17'-4"	82	17'-4"	
	5	T3	4'-2"	240	9½"	9½"
	4	T4	2'-2"	160	1'-6"	8"
	4	T5	2'-6"	48	1'-6"	1'-0"
50'-0"	5	T1	49'-6"	38	49'-6"	
	5	T2	17'-4"	102	17'-4"	
	5	T3	4'-7"	300	1'-0"	9½"
	4	T4	2'-5"	200	1'-6"	11"
	4	T5	2'-9"	48	1'-6"	1'-3"
60'-0"	5	T1	59'-6"	38	59'-6"	
	5	T2	17'-4"	122	17'-4"	
	5	T3	5'-1"	360	1'-3"	9½"
	4	T4	2'-8"	240	1'-6"	1'-2"
	4	T5	3'-0"	48	1'-6"	1'-6"

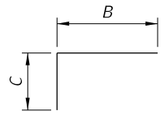
BENDING DIAGRAMS



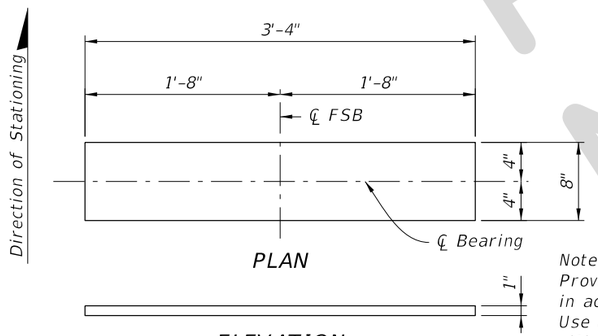
BARS 5T1 & 5T2



STIRRUP BAR 5T3



BARS 4T4 & 4T5



PLAN

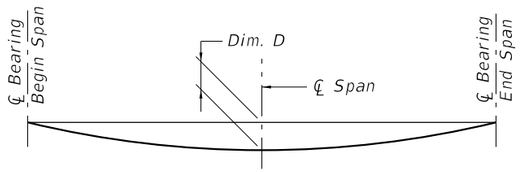
ELEVATION

BEARING PAD DETAIL

Note:
Provide Plain Neoprene Bearing Pads in accordance with Specification 932. Use a Shear Modulus of:
(1) G = 150 psi for 18" FSBs
(2) G = 110 psi for both 12" FSBs and 15" FSBs.

FLORIDA SLAB BEAM - CAMBER AND DEFLECTION DATA TABLE

SPAN LENGTH (ft.)	BEAM NO.	NET BEAM CAMBER (PRESTRESS - DEAD LOAD OF BEAM) @ 120 DAYS (in.)	DIM D DEAD LOAD DEFLECTION DUE TO TOPPING POUR @ 120 DAYS (in.)
30	1-4	7/16"	3/16"
40	1-4	1 1/16"	5/8"
50	1-4	1½"	15/16"
60	1-4	2"	1⅛"



DEAD LOAD DEFLECTION DIAGRAM

CAMBER NOTE:

The values given in the table are based on theoretical beam cambers. The Contractor shall monitor beam cambers for the purpose of predicting camber values at the time of the topping casting. If the predicted cambers based on field measurements differ more than ± ½" from the theoretical "Net Beam Camber @ 120 Days" shown in the table, propose modified dimensions as required and submit to the Engineer for approval a minimum of 21 days prior to casting topping concrete.

SUPERSTRUCTURE PLAN

1/22/2026 4:38:53 PM

LAST REVISION	REVISION	DESCRIPTION:				
01/01/26			FDOT DEVELOPMENTAL STANDARD PLANS	FSB SUPERSTRUCTURE PACKAGE 15 FT. CLEAR WIDTH	INDEX D400-315	SHEET 2 of 5

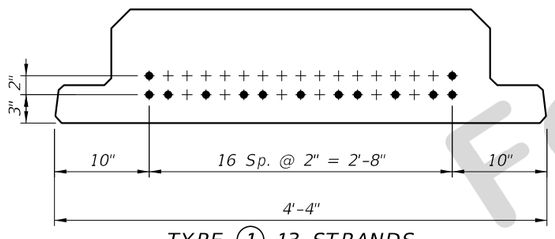
FLORIDA SLAB BEAM - TABLE OF VARIABLES

NOMINAL SPAN LENGTH	LOCATION BEAM NO.	BEAM TYPE	CONCRETE PROPERTIES CLASS	STRENGTHS (psi) 28 Day	STRENGTHS (psi) Release	STND. PTRN. TYPE	PLAN VIEW CASE END 1	PLAN VIEW CASE END 2	ANGLE Ø END 1	ANGLE Ø END 2	BEAM DIMENSIONS* DIM W	DIM L	DIM R	REINFORCING STEEL 3C NO.	3C DIM C	4D1 DIM D	4D2 DIM D	4D3 NO.	4D3 DIM D	5E1 NO.	5E1 DIM E	5E2 NO.	5E2 DIM E	6Y1 DIM Y	6Y2 DIM Y	4K NO.	NO. OF BAR SPACES S1	NO. OF BAR SPACES S2	BAR SPACING* V1	BAR SPACING* V2
30'	1,4	FSB 12x52	VI	8500	6800	1	1	1	90°	90°	4'-4"	28'-10¼"	¼"	31	3'-11½"	2'-2"	2'-2"	24	2'-2"	–	–	57	4'-0½"	2'-11½"	2'-11½"	84	1	8	1'-6"	1'-6"
	2,3	FSB 12x52	VI	8500	6800	1	1	1	90°	90°	4'-4"	28'-10¼"	¼"	31	3'-11½"	2'-2"	2'-2"	24	2'-2"	57	4'-2"	–	–	2'-11½"	2'-11½"	84	1	8	1'-6"	1'-6"
40'	1,4	FSB 12x52	VI	8500	6800	2	1	1	90°	90°	4'-4"	38'-10⅜"	⅜"	41	3'-11½"	2'-2"	2'-2"	32	2'-2"	–	–	77	4'-0½"	2'-11½"	2'-11½"	156	8	10	6"	1'-6"
	2,3	FSB 12x52	VI	8500	6800	2	1	1	90°	90°	4'-4"	38'-10⅜"	⅜"	41	3'-11½"	2'-2"	2'-2"	32	2'-2"	77	4'-2"	–	–	2'-11½"	2'-11½"	156	8	10	6"	1'-6"
50'	1,4	FSB 15x52	VI	8500	6800	3	1	1	90°	90°	4'-4"	48'-10½"	½"	51	3'-11½"	2'-2"	2'-2"	44	2'-2"	–	–	97	4'-0½"	2'-11½"	2'-11½"	148	4	13	1'-0"	1'-6"
	2,3	FSB 15x52	VI	8500	6800	3	1	1	90°	90°	4'-4"	48'-10½"	½"	51	3'-11½"	2'-2"	2'-2"	44	2'-2"	97	4'-2"	–	–	2'-11½"	2'-11½"	148	4	13	1'-0"	1'-6"
60'	1,4	FSB 18x52	VI	8500	6800	4	1	1	90°	90°	4'-4"	58'-10⅝"	⅝"	61	3'-11½"	2'-2"	2'-2"	52	2'-2"	–	–	117	4'-0½"	2'-11½"	2'-11½"	224	12	15	6"	1'-6"
	2,3	FSB 18x52	VI	8500	6800	4	1	1	90°	90°	4'-4"	58'-10⅝"	⅝"	61	3'-11½"	2'-2"	2'-2"	52	2'-2"	117	4'-2"	–	–	2'-11½"	2'-11½"	224	12	15	6"	1'-6"

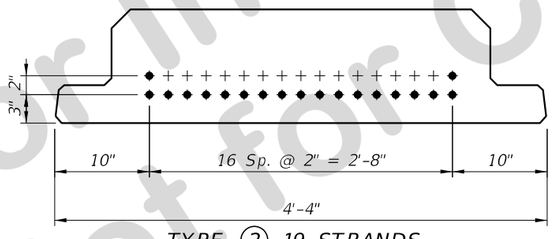
NOTE: Work this sheet with Standard Plans Index 450-450.

DIMENSION NOTES

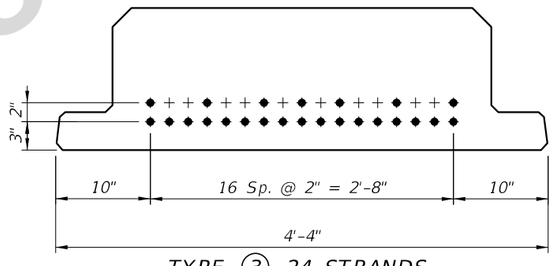
* All longitudinal slab beam dimensions shown on this sheet with a single asterisk (*) are measured along the top of beam at the centerline. Dimension "R" is calculated at mid-height of the slab beam.



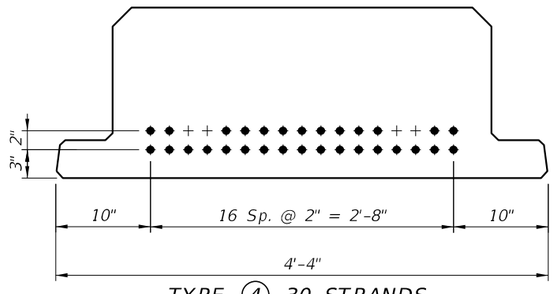
TYPE (1) 13 STRANDS



TYPE (2) 19 STRANDS



TYPE (3) 24 STRANDS



TYPE (4) 30 STRANDS

STRAND DESCRIPTION: Use 0.60" Diameter, Grade 270, Low Relaxation Carbon Steel Strands stressed at 44.0 kips each. Area per strand equals 0.217 sq. in.

STRAND DEBONDING LEGEND

● – fully bonded strands.

STRAND PATTERNS

Table 2 - LRFR - Load Rating Summary Details for Prestressed Concrete Bridges (Flat Slab and Deck/Girder)

Superstructure - Environmental Classification: Slightly/Moderately Aggressive

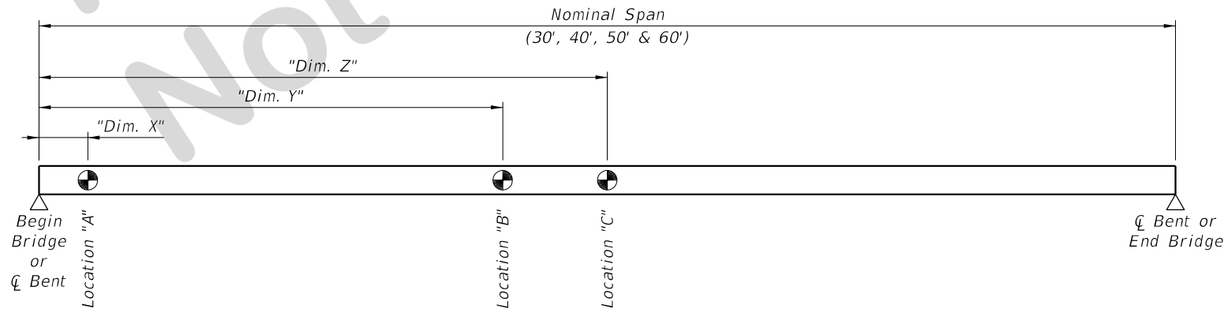
Span Length (Ft)	Level	Limit State	Vehicle	Weight (tons)	Load Factors			Moment (Strength) or Stress (Service)					Shear (Strength)					Comments: Interior/exterior beam DF method if other than LRFD. Other appropriate comments
					LL	DC	DW	Distribution Factor (DF)	Rating Factor	Tons	Location	Dimension (Ft)	Distribution Factor (DF)	Rating Factor	Tons	Location	Dimension (Ft)	
30	Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.38	2.03	N/A	C	15.00	0.64	4.20	N/A	A	1.30	Exterior Beam
		Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.38	2.63	N/A	C	15.00	0.64	5.44	N/A	A	1.30	Exterior Beam
		Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.38	2.37	N/A	C	15.00	N/A	N/A	N/A	N/A	N/A	Exterior Beam
	Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.38	2.67	160.04	B	12.24	0.64	4.45	267.15	A	1.30	Exterior Beam
40	Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.33	1.44	N/A	C	20.00	0.61	4.56	N/A	A	4.00	Exterior Beam
		Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.33	1.86	N/A	C	20.00	0.61	5.91	N/A	A	4.00	Exterior Beam
		Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.33	1.93	N/A	C	20.00	N/A	N/A	N/A	N/A	N/A	Exterior Beam
	Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.33	1.71	102.32	C	20.00	0.61	4.92	295.08	A	4.00	Exterior Beam
50	Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.30	1.43	N/A	C	25.00	0.60	4.11	N/A	A	1.50	Exterior Beam
		Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.30	1.85	N/A	C	25.00	0.60	5.33	N/A	A	1.50	Exterior Beam
		Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.30	1.92	N/A	C	25.00	N/A	N/A	N/A	N/A	N/A	Exterior Beam
	Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.30	1.65	98.93	C	25.00	0.60	4.58	274.69	A	1.50	Exterior Beam
60	Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.28	1.78	N/A	C	30.00	0.58	5.16	N/A	A	6.00	Exterior Beam
		Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.28	2.31	N/A	C	30.00	0.58	6.69	N/A	A	6.00	Exterior Beam
		Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.28	1.99	N/A	C	30.00	N/A	N/A	N/A	N/A	N/A	Exterior Beam
	Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.28	2.10	126.14	C	30.00	0.58	5.83	350.02	A	6.00	Exterior Beam

NOTES:
1. Permit capacity is determined by using the permit vehicle in all lanes.
2. Service III Design Inventory tensile stress limits:
   $3\sqrt{f'c}$ (Extremely/Moderately Aggressive)
   $6\sqrt{f'c}$ (Slightly Aggressive)
3. Meets AASHTO LRFD Specifications Article 5.8.3.5 longitudinal reinforcement criteria.

Abbreviations:

Inv – Inventory

Op – Operating



RATING LOCATIONS

LOAD RATING SUMMARY SHEET

LAST REVISION	REVISION	DESCRIPTION:				
01/01/26			FDOT DEVELOPMENTAL STANDARD PLANS	FSB SUPERSTRUCTURE PACKAGE 15 FT. CLEAR WIDTH	INDEX D400-315	SHEET 4 of 5

11/4/2025 9:00:53 AM

Table 2 - LRFR - Load Rating Summary Details for Prestressed Concrete Bridges (Flat Slab and Deck/Girder)

Superstructure - Environmental Classification: Extremely Aggressive

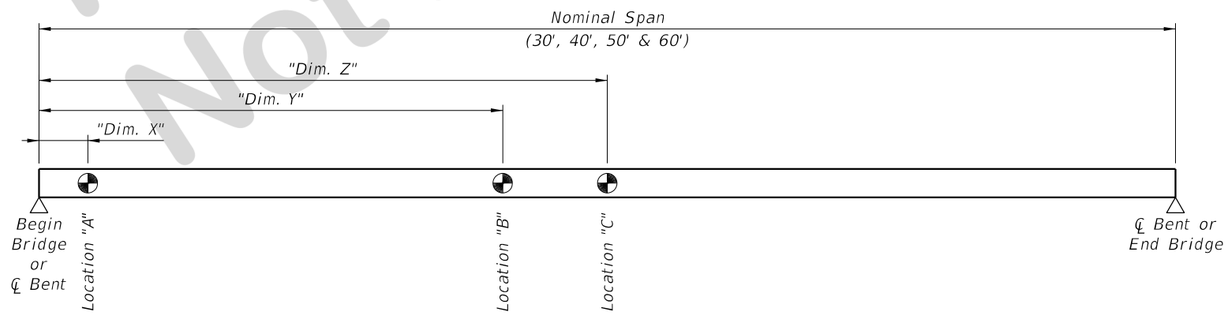
Span Length (Ft)	Level	Limit State	Vehicle	Weight (tons)	Load Factors			Moment (Strength) or Stress (Service)					Shear (Strength)					Comments: Interior/exterior beam DF method if other than LRFD. Other appropriate comments
					LL	DC	DW	Distribution Factor (DF)	Rating Factor	Tons	Location	Dimension (Ft)	Distribution Factor (DF)	Rating Factor	Tons	Location	Dimension (Ft)	
30	Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.38	2.03	N/A	C	15.00	0.64	4.20	N/A	A	1.30	Exterior Beam
		Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.38	2.63	N/A	C	15.00	0.64	5.44	N/A	A	1.30	Exterior Beam
		Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.38	1.92	N/A	C	15.00	N/A	N/A	N/A	N/A	N/A	Exterior Beam
	Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.38	2.67	160.04	B	12.24	0.64	4.45	267.15	A	1.30	Exterior Beam
40	Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.33	1.44	N/A	C	20.00	0.61	4.56	N/A	A	4.00	Exterior Beam
		Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.33	1.86	N/A	C	20.00	0.61	5.91	N/A	A	4.00	Exterior Beam
		Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.33	1.58	N/A	C	20.00	N/A	N/A	N/A	N/A	N/A	Exterior Beam
	Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.33	1.71	102.32	C	20.00	0.61	4.92	295.08	A	4.00	Exterior Beam
50	Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.30	1.43	N/A	C	25.00	0.60	4.11	N/A	A	1.50	Exterior Beam
		Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.30	1.85	N/A	C	25.00	0.60	5.33	N/A	A	1.50	Exterior Beam
		Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.30	1.55	N/A	C	25.00	N/A	N/A	N/A	N/A	N/A	Exterior Beam
	Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.30	1.65	98.93	C	25.00	0.60	4.58	274.69	A	1.50	Exterior Beam
60	Design Load Rating	Strength I (Inv)	HL-93	N/A	1.75	1.25	1.50	0.28	1.78	N/A	C	30.00	0.58	5.16	N/A	A	6.00	Exterior Beam
		Strength I (Op)	HL-93	N/A	1.35	1.25	1.50	0.28	2.31	N/A	C	30.00	0.58	6.69	N/A	A	6.00	Exterior Beam
		Service III (Inv)	HL-93	N/A	0.80	1.00	1.00	0.28	1.60	N/A	C	30.00	N/A	N/A	N/A	N/A	N/A	Exterior Beam
	Permit Load Rating	Strength II	FL120	60.0	1.35	1.25	1.50	0.28	2.10	126.14	C	30.00	0.58	5.83	350.02	A	6.00	Exterior Beam

NOTES:
1. Permit capacity is determined by using the permit vehicle in all lanes.
2. Service III Design Inventory tensile stress limits:
   $3\sqrt{f'c}$ (Extremely/Moderately Aggressive)
   $6\sqrt{f'c}$ (Slightly Aggressive)
3. Meets AASHTO LRFD Specifications Article 5.8.3.5 longitudinal reinforcement criteria.

Abbreviations:

Inv – Inventory

Op – Operating



RATING LOCATIONS

LOAD RATING SUMMARY SHEET

LAST REVISION	REVISION	DESCRIPTION:				
01/01/26			FDOT DEVELOPMENTAL STANDARD PLANS	FSB SUPERSTRUCTURE PACKAGE 15 FT. CLEAR WIDTH	INDEX D400-315	SHEET 5 of 5

11/4/2025 9:00:54 AM