

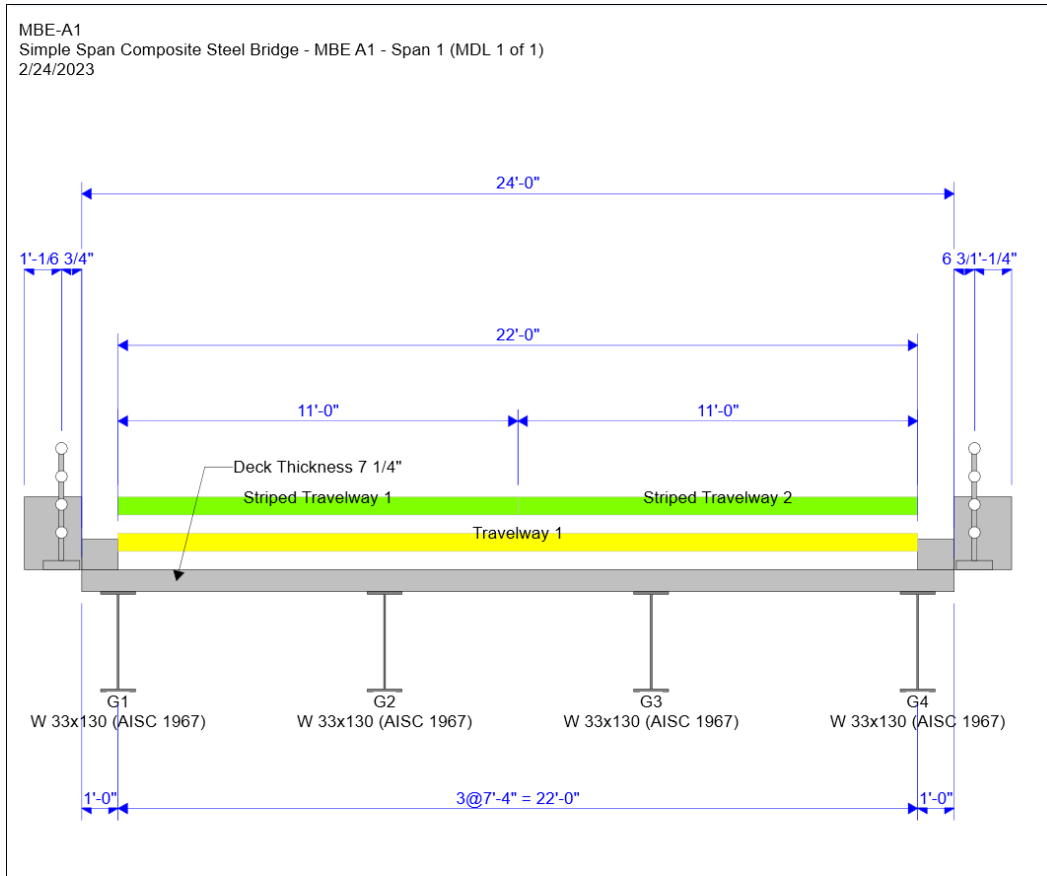
AASHTOWare BrDR 7.5.0

Steel Tutorial

STL-12 – Rating of the MBE Example A1 using BrDR 7.5.0

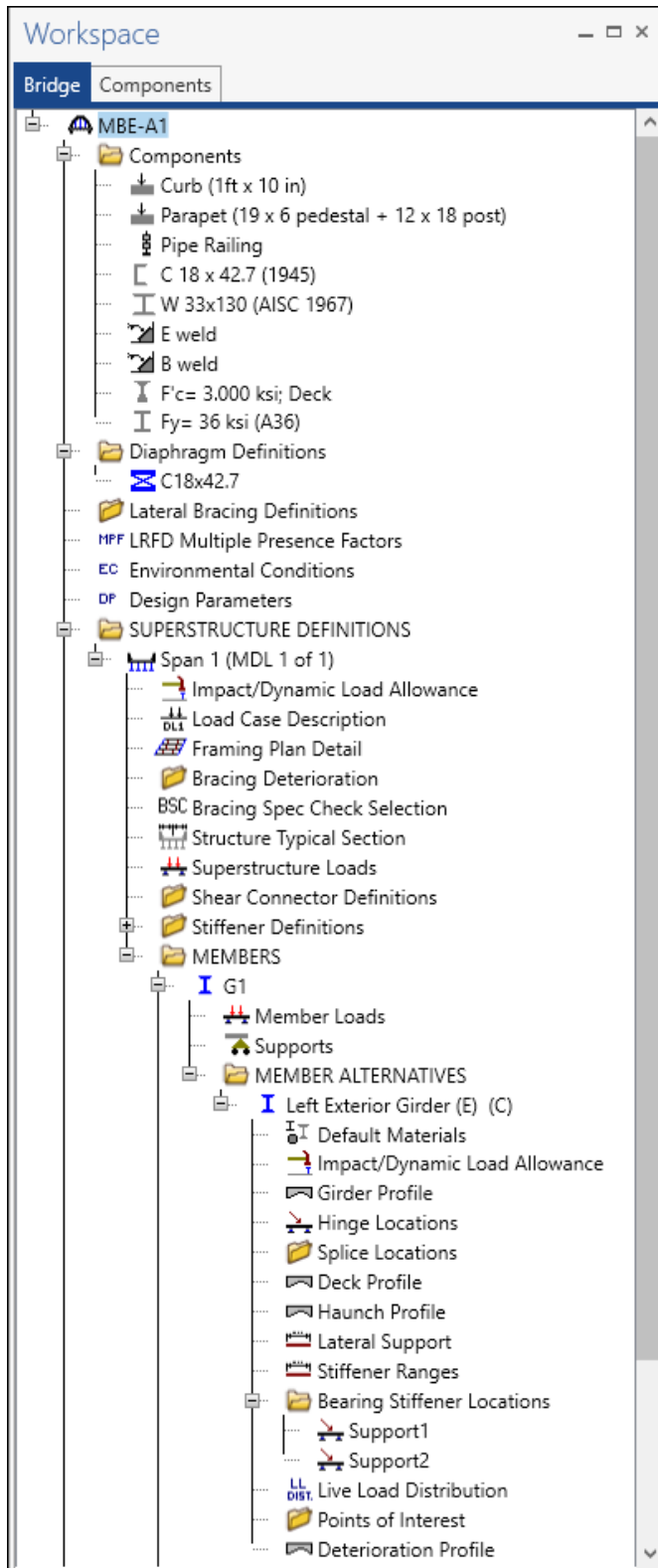
STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Rating of the MBE Example A1 using BrDR 7.5.0

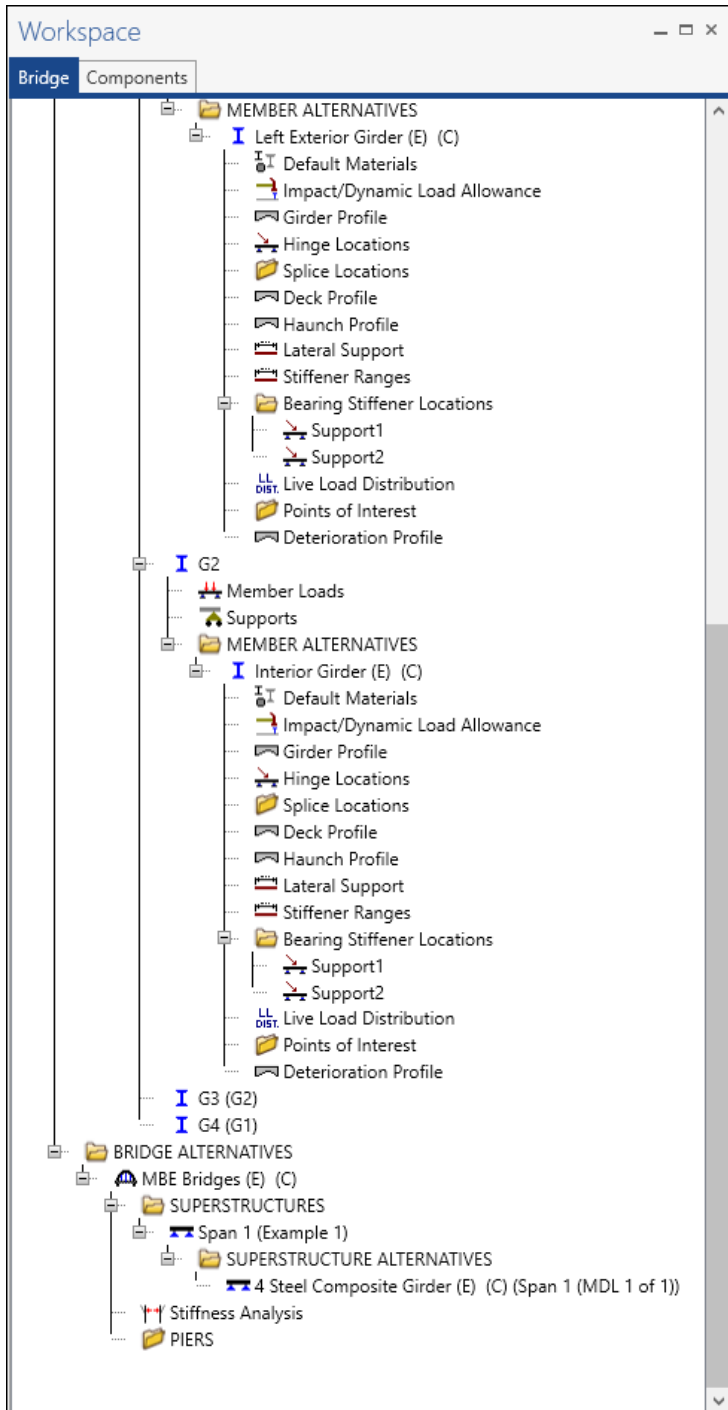


STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Bridge Workspace tree

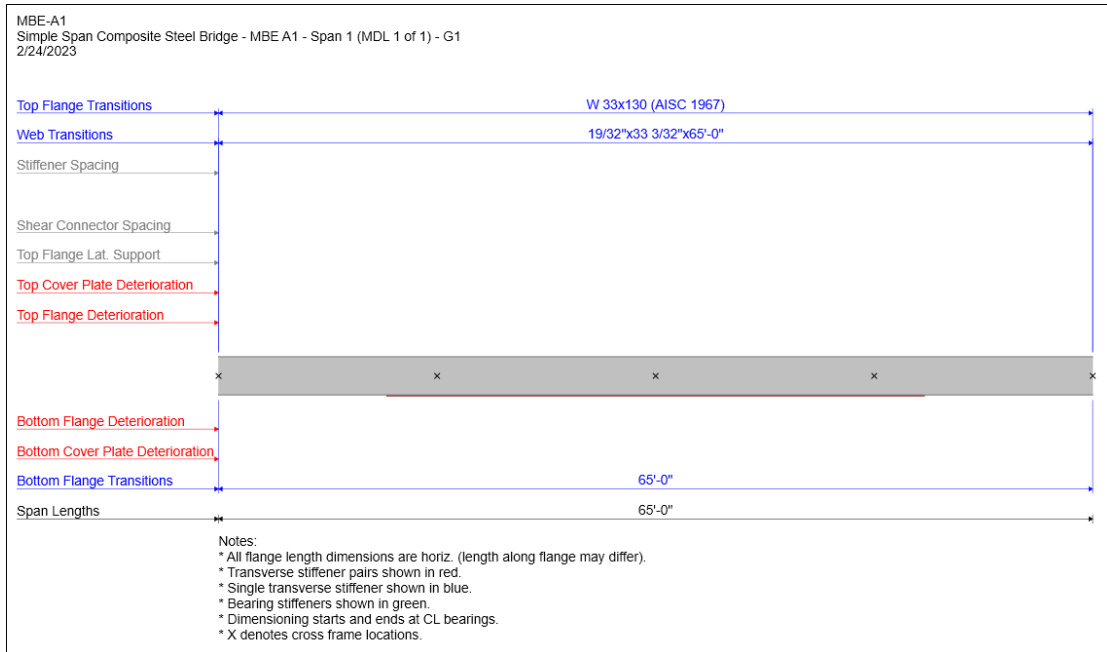


STL12 – Rating of the MBE Example A1 using BrDR 7.5.0



STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Exterior Girder Details



Member Alternative Description

Member alternative: Left Exterior Girder

Description Specs Factors Engine Import Control options

LRFD

Points of interest

- Generate at tenth points
- Generate at section change points
- Generate at user-defined points
- Generate at stiffeners

- Allow moment redistribution
- Use Appendix A6 for flexural resistance
- Allow plastic analysis
- Ignore long. reinf. in negative moment capacity
- Consider deck reinf. development length
- Must consider user input lateral bending stress
- Consider concurrent moments in Cb calculation

Distribution factor application method

By axle

By POI

LRFR

Points of interest

- Generate at tenth points
- Generate at section change points
- Generate at user-defined points
- Generate at stiffeners

- Allow moment redistribution
- Use Appendix A6 for flexural resistance
- Allow plastic analysis
- Evaluate remaining fatigue life
- Ignore long. reinf. in negative moment capacity
- Include field splices in rating
- Consider deck reinf. development length
- Consider tension-field action in stiffened web end panels
- Must consider user input lateral bending stress
- Consider concurrent moments in Cb calculation

Distribution factor application method

By axle

By POI

LFR

Points of interest

- Generate at tenth points
- Generate at section change points
- Generate at user-defined points

- Allow moment redistribution
- Allow plastic analysis of cover plates
- Include field splices in rating
- Include bearing stiffeners in rating
- Allow plastic analysis
- Ignore long. reinf. in negative moment capacity
- Ignore overload operating rating
- Ignore shear
- Consider deck reinf. development length
- Consider tension-field action in stiffened web end panels

Distribution factor application method

By axle

By POI

ASR

Points of interest

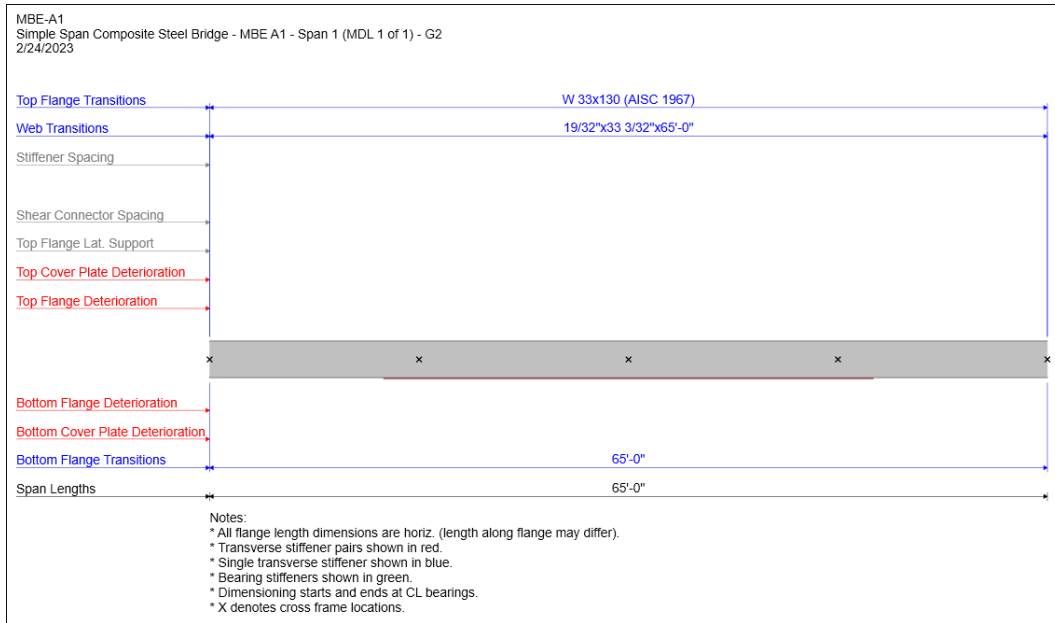
- Generate at tenth points
- Generate at section change points
- Generate at user-defined points

- Ignore long. reinf. in negative moment capacity
- Consider deck reinf. development length
- Consider tension-field action in stiffened web end panels

OK Apply Cancel

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Interior Girder Details



Member Alternative Description

Member alternative: Interior Girder

Description | Specs | Factors | Engine | Import | Control options

LRFD

Points of interest

- Generate at tenth points
- Generate at section change points
- Generate at user-defined points
- Generate at stiffeners
- Allow moment redistribution
- Use Appendix A6 for flexural resistance
- Allow plastic analysis
- Ignore long. reinf. in negative moment capacity
- Consider deck reinf. development length
- Must consider user input lateral bending stress
- Consider concurrent moments in Cb calculation
- Distribution factor application method
 - By axle
 - By POI

LRFR

Points of interest

- Generate at tenth points
- Generate at section change points
- Generate at user-defined points
- Generate at stiffeners
- Allow moment redistribution
- Use Appendix A6 for flexural resistance
- Allow plastic analysis
- Evaluate remaining fatigue life
- Ignore long. reinf. in negative moment capacity
- Include field splices in rating
- Consider deck reinf. development length
- Consider tension-field action in stiffened web end panels
- Must consider user input lateral bending stress
- Consider concurrent moments in Cb calculation
- Distribution factor application method
 - By axle
 - By POI

LFR

Points of interest

- Generate at tenth points
- Generate at section change points
- Generate at user-defined points
- Allow moment redistribution
- Allow plastic analysis of cover plates
- Include field splices in rating
- Include bearing stiffeners in rating
- Allow plastic analysis
- Ignore long. reinf. in negative moment capacity
- Ignore overload operating rating
- Ignore shear
- Consider deck reinf. development length
- Consider tension-field action in stiffened web end panels
- Distribution factor application method
 - By axle
 - By POI

ASR

Points of interest

- Generate at tenth points
- Generate at section change points
- Generate at user-defined points
- Ignore long. reinf. in negative moment capacity
- Consider deck reinf. development length
- Consider tension-field action in stiffened web end panels

OK Apply Cancel

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Intermediate Results – Live Load Distribution Factors (LLDF)

Moment LRFR LLDF

(1) Exterior Girders

Action: Moment Sufficiently connected to act as a unit

Support number	Start distance (ft)	Length (ft)	End distance (ft)	Distribution factor (lanes)	
				1 lane	Multi-lane
1	0	65	65	0.5945454	0.5409091

(2) Interior Girders

Action: Moment Sufficiently connected to act as a unit

Support number	Start distance (ft)	Length (ft)	End distance (ft)	Distribution factor (lanes)	
				1 lane	Multi-lane
1	0	65	65	0.459856	0.6264958

Shear LRFR LLDF

(1) Exterior Girders

Action: Shear Sufficiently connected to act as a unit

Support number	Start distance (ft)	Length (ft)	End distance (ft)	Distribution factor (lanes)	
				1 lane	Multi-lane
1	0	65	65	0.5945454	0.5409091

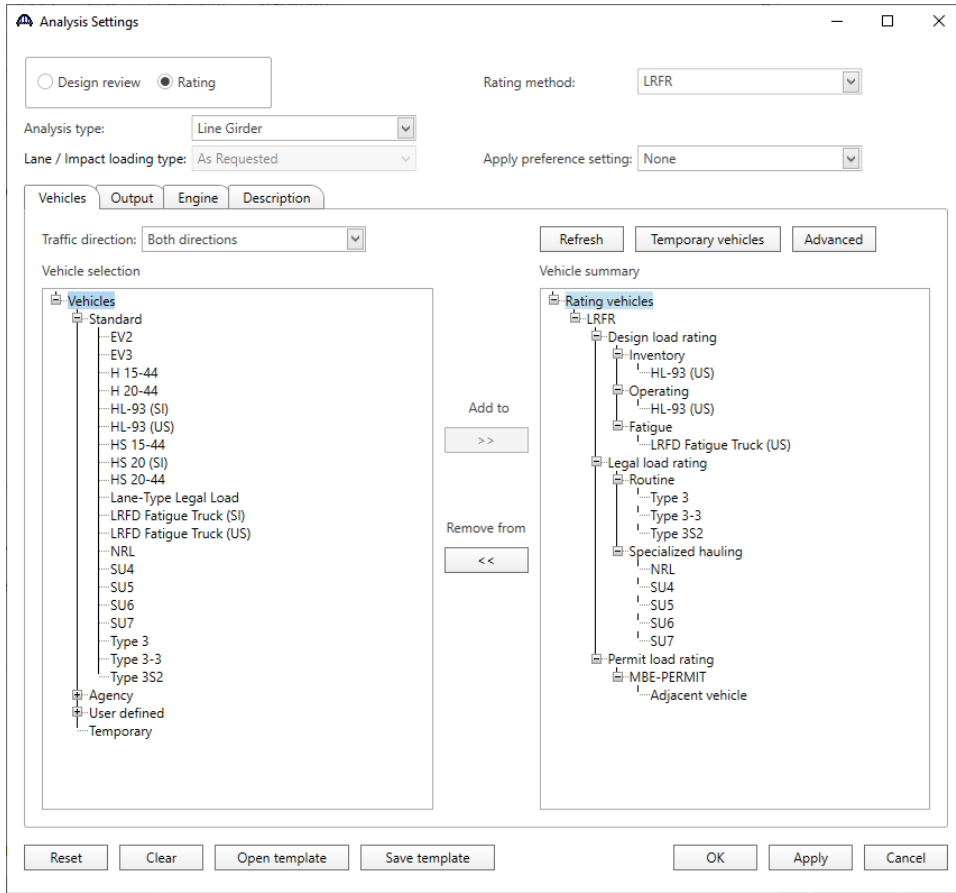
(2) Interior Girders

Action: Shear Sufficiently connected to act as a unit

Support number	Start distance (ft)	Length (ft)	End distance (ft)	Distribution factor (lanes)	
				1 lane	Multi-lane
1	0	65	65	0.6533333	0.7672109

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Analysis Settings



Vehicle Properties

Vehicle	Tandem train	Scale factor	Impact	Single lane loaded	Legal pair	Override	Legal live load factor	Frequency	Loading condition	Override	Permit live load factor
HL-93 (US)	<input type="checkbox"/>	1.000		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
LRFD Fatigue Truck (US)	<input type="checkbox"/>	1.000		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
Type 3	<input type="checkbox"/>	1.000	0.606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
Type 3-3	<input type="checkbox"/>	1.000	0.606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
Type 3S2	<input type="checkbox"/>	1.000	0.606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
NRL	<input type="checkbox"/>	1.000	0.606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
SU4	<input type="checkbox"/>	1.000	0.606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
SU5	<input type="checkbox"/>	1.000	0.606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
SU6	<input type="checkbox"/>	1.000	0.606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
SU7	<input type="checkbox"/>	1.000	0.606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	
MBE-PERMIT	<input type="checkbox"/>	1.000	0.6060606	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Single Trip	Mixed with traffic	<input type="checkbox"/>	

Permit lane load: kip/ft Adjacent vehicle live load factor:

Exclude permit lane load from permit vehicle location

OK Cancel

Note that Impact is adjusted to a factor of 0.6060606 to analyze the bridge using 20% dynamic load allowance.

[0.6060606 x 33% = 20%]

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Dead Load Demand – Exterior Girders

Load case 1 – Self Load (Stage 1: D, DC)

Analysis Results - Left Exterior Girder

Report type: Dead Load Actions | Stage: Non-composite (Stage 1) | Dead Load Case: Load Case 1 - Self Load(Stage 1)

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	4.77	0.00	4.77	0.0000	0.0000
1	6.50	10.0	Both	28.24	3.92	0.00		0.0000	-0.0808
1	8.13	12.5	Both	34.44	3.71	0.00		0.0000	-0.0998
1	12.50	19.2	Both	49.42	3.14	0.00		0.0000	-0.1464
1	13.00	20.0	Both	50.97	3.06	0.00		0.0000	-0.1512
1	16.25	25.0	Left	60.09	2.55	0.00		0.0000	-0.1805
1	16.25	25.0	Right	60.09	2.55	0.00		0.0000	-0.1805
1	19.50	30.0	Both	67.55	2.04	0.00		0.0000	-0.2053
1	24.38	37.5	Both	75.63	1.28	0.00		0.0000	-0.2331
1	26.00	40.0	Both	77.50	1.02	0.00		0.0000	-0.2397
1	32.50	50.0	Left	80.82	0.00	0.00		0.0000	-0.2515
1	32.50	50.0	Right	80.82	0.00	0.00		0.0000	-0.2515
1	39.00	60.0	Both	77.50	-1.02	0.00		0.0000	-0.2397
1	40.63	62.5	Both	75.63	-1.28	0.00		0.0000	-0.2331
1	45.50	70.0	Both	67.55	-2.04	0.00		0.0000	-0.2053
1	48.75	75.0	Left	60.09	-2.55	0.00		0.0000	-0.1805
1	48.75	75.0	Right	60.09	-2.55	0.00		0.0000	-0.1805
1	52.00	80.0	Both	50.97	-3.06	0.00		0.0000	-0.1512
1	52.50	80.8	Both	49.42	-3.14	0.00		0.0000	-0.1464
1	56.88	87.5	Both	34.44	-3.71	0.00		0.0000	-0.0998
1	58.50	90.0	Both	28.24	-3.92	0.00		0.0000	-0.0808
1	65.00	100.0	Left	0.00	-4.77	0.00	4.77	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Load Case 2: Additional Self Load (Stage 1: D, DC)

Analysis Results - Left Exterior Girder

Report type: Dead Load Actions | Stage: Non-composite (Stage 1) | Dead Load Case: Load Case 2 - Add'l Self Load (In)

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	0.29	0.00	0.29	0.0000	0.0000
1	6.50	10.0	Both	1.69	0.24	0.00		0.0000	-0.0048
1	8.13	12.5	Both	2.07	0.22	0.00		0.0000	-0.0060
1	12.50	19.2	Both	2.97	0.19	0.00		0.0000	-0.0088
1	13.00	20.0	Both	3.06	0.18	0.00		0.0000	-0.0091
1	16.25	25.0	Left	3.61	0.15	0.00		0.0000	-0.0108
1	16.25	25.0	Right	3.61	0.15	0.00		0.0000	-0.0108
1	19.50	30.0	Both	4.05	0.12	0.00		0.0000	-0.0123
1	24.38	37.5	Both	4.54	0.08	0.00		0.0000	-0.0140
1	26.00	40.0	Both	4.65	0.06	0.00		0.0000	-0.0144
1	32.50	50.0	Left	4.85	0.00	0.00		0.0000	-0.0151
1	32.50	50.0	Right	4.85	0.00	0.00		0.0000	-0.0151
1	39.00	60.0	Both	4.65	-0.06	0.00		0.0000	-0.0144
1	40.63	62.5	Both	4.54	-0.08	0.00		0.0000	-0.0140
1	45.50	70.0	Both	4.05	-0.12	0.00		0.0000	-0.0123
1	48.75	75.0	Left	3.61	-0.15	0.00		0.0000	-0.0108
1	48.75	75.0	Right	3.61	-0.15	0.00		0.0000	-0.0108
1	52.00	80.0	Both	3.06	-0.18	0.00		0.0000	-0.0091
1	52.50	80.8	Both	2.97	-0.19	0.00		0.0000	-0.0088
1	56.88	87.5	Both	2.07	-0.22	0.00		0.0000	-0.0060
1	58.50	90.0	Both	1.69	-0.24	0.00		0.0000	-0.0048
1	65.00	100.0	Left	0.00	-0.29	0.00	0.29	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Load case 4 – Exterior Diaphragm Loads (Stage 1: D, DC)

Analysis Results - Left Exterior Girder

Report type: Dead Load Actions Stage: Non-composite (Stage 1) Dead Load Case: Load Case 4 - Exterior Diaphragm

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	0.23	0.00	0.39	0.0000	0.0000
1	6.50	10.0	Both	1.53	0.23	0.00		0.0000	-0.0048
1	8.13	12.5	Both	1.91	0.23	0.00		0.0000	-0.0059
1	12.50	19.2	Both	2.94	0.23	0.00		0.0000	-0.0087
1	13.00	20.0	Both	3.05	0.23	0.00		0.0000	-0.0090
1	16.25	25.0	Left	3.82	0.23	0.00		0.0000	-0.0108
1	16.25	25.0	Right	3.82	0.08	0.00		0.0000	-0.0108
1	19.50	30.0	Both	4.07	0.08	0.00		0.0000	-0.0123
1	24.38	37.5	Both	4.45	0.08	0.00		0.0000	-0.0140
1	26.00	40.0	Both	4.58	0.08	0.00		0.0000	-0.0144
1	32.50	50.0	Left	5.09	0.08	0.00		0.0000	-0.0151
1	32.50	50.0	Right	5.09	-0.08	0.00		0.0000	-0.0151
1	39.00	60.0	Both	4.58	-0.08	0.00		0.0000	-0.0144
1	40.63	62.5	Both	4.45	-0.08	0.00		0.0000	-0.0140
1	45.50	70.0	Both	4.07	-0.08	0.00		0.0000	-0.0123
1	48.75	75.0	Left	3.82	-0.08	0.00		0.0000	-0.0108
1	48.75	75.0	Right	3.82	-0.23	0.00		0.0000	-0.0108
1	52.00	80.0	Both	3.05	-0.23	0.00		0.0000	-0.0090
1	52.50	80.8	Both	2.94	-0.23	0.00		0.0000	-0.0087
1	56.88	87.5	Both	1.91	-0.23	0.00		0.0000	-0.0059
1	58.50	90.0	Both	1.53	-0.23	0.00		0.0000	-0.0048
1	65.00	100.0	Left	0.00	-0.23	0.00	0.39	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Close

Load case 5 – Concrete Deck Load (Stage 1: D, DC)

Analysis Results - Left Exterior Girder

Report type: Dead Load Actions Stage: Non-composite (Stage 1) Dead Load Case: Load Case 5 - Concrete Deck Load

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	13.74	0.00	13.74	0.0000	0.0000
1	6.50	10.0	Both	80.41	11.00	0.00		0.0000	-0.2252
1	8.13	12.5	Both	97.72	10.31	0.00		0.0000	-0.2779
1	12.50	19.2	Both	138.77	8.46	0.00		0.0000	-0.4074
1	13.00	20.0	Both	142.95	8.25	0.00		0.0000	-0.4208
1	16.25	25.0	Left	167.51	6.87	0.00		0.0000	-0.5019
1	16.25	25.0	Right	167.51	6.87	0.00		0.0000	-0.5019
1	19.50	30.0	Both	187.62	5.50	0.00		0.0000	-0.5707
1	24.38	37.5	Both	209.39	3.44	0.00		0.0000	-0.6477
1	26.00	40.0	Both	214.42	2.75	0.00		0.0000	-0.6658
1	32.50	50.0	Left	223.35	0.00	0.00		0.0000	-0.6984
1	32.50	50.0	Right	223.35	0.00	0.00		0.0000	-0.6984
1	39.00	60.0	Both	214.42	-2.75	0.00		0.0000	-0.6658
1	40.63	62.5	Both	209.39	-3.44	0.00		0.0000	-0.6477
1	45.50	70.0	Both	187.62	-5.50	0.00		0.0000	-0.5707
1	48.75	75.0	Left	167.51	-6.87	0.00		0.0000	-0.5019
1	48.75	75.0	Right	167.51	-6.87	0.00		0.0000	-0.5019
1	52.00	80.0	Both	142.95	-8.25	0.00		0.0000	-0.4208
1	52.50	80.8	Both	138.77	-8.46	0.00		0.0000	-0.4074
1	56.88	87.5	Both	97.72	-10.31	0.00		0.0000	-0.2779
1	58.50	90.0	Both	80.41	-11.00	0.00		0.0000	-0.2252
1	65.00	100.0	Left	0.00	-13.74	0.00	13.74	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Close

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Load case 1 – Generic Loads (Stage 2: D, DC)

Analysis Results - Left Exterior Girder

Report type: Stage Dead Load Case
 Dead Load Actions Composite (long term) (Stage 2) Load Case 1 - Generic Loads(DC)

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	7.64	0.00	7.64	0.0000	0.0000
1	6.50	10.0	Both	44.68	6.11	0.00		0.0000	-0.0736
1	8.13	12.5	Both	54.30	5.73	0.00		0.0000	-0.0908
1	12.50	19.2	Both	77.11	4.70	0.00		0.0000	-0.1329
1	13.00	20.0	Both	79.43	4.58	0.00		0.0000	-0.1373
1	16.25	25.0	Left	93.08	3.82	0.00		0.0000	-0.1636
1	16.25	25.0	Right	93.08	3.82	0.00		0.0000	-0.1636
1	19.50	30.0	Both	104.25	3.06	0.00		0.0000	-0.1859
1	24.38	37.5	Both	116.35	1.91	0.00		0.0000	-0.2109
1	26.00	40.0	Both	119.15	1.53	0.00		0.0000	-0.2168
1	32.50	50.0	Left	124.11	0.00	0.00		0.0000	-0.2274
1	32.50	50.0	Right	124.11	0.00	0.00		0.0000	-0.2274
1	39.00	60.0	Both	119.15	-1.53	0.00		0.0000	-0.2168
1	40.63	62.5	Both	116.35	-1.91	0.00		0.0000	-0.2109
1	45.50	70.0	Both	104.25	-3.06	0.00		0.0000	-0.1859
1	48.75	75.0	Left	93.08	-3.82	0.00		0.0000	-0.1636
1	48.75	75.0	Right	93.08	-3.82	0.00		0.0000	-0.1636
1	52.00	80.0	Both	79.43	-4.58	0.00		0.0000	-0.1373
1	52.50	80.8	Both	77.11	-4.70	0.00		0.0000	-0.1329
1	56.88	87.5	Both	54.30	-5.73	0.00		0.0000	-0.0908
1	58.50	90.0	Both	44.68	-6.11	0.00		0.0000	-0.0736
1	65.00	100.0	Left	0.00	-7.64	0.00	7.64	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
 Analysis preference setting: None

Close

Load case 2 – Railing Loads (Stage 2: D, DC)

Analysis Results - Left Exterior Girder

Report type: Stage Dead Load Case
 Dead Load Actions Composite (long term) (Stage 2) Load Case 2 - Railing Loads(DC2)

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	0.33	0.00	0.33	0.0000	0.0000
1	6.50	10.0	Both	1.90	0.26	0.00		0.0000	-0.0031
1	8.13	12.5	Both	2.31	0.24	0.00		0.0000	-0.0039
1	12.50	19.2	Both	3.28	0.20	0.00		0.0000	-0.0057
1	13.00	20.0	Both	3.38	0.20	0.00		0.0000	-0.0058
1	16.25	25.0	Left	3.96	0.16	0.00		0.0000	-0.0070
1	16.25	25.0	Right	3.96	0.16	0.00		0.0000	-0.0070
1	19.50	30.0	Both	4.44	0.13	0.00		0.0000	-0.0079
1	24.38	37.5	Both	4.95	0.08	0.00		0.0000	-0.0090
1	26.00	40.0	Both	5.07	0.07	0.00		0.0000	-0.0092
1	32.50	50.0	Left	5.28	0.00	0.00		0.0000	-0.0097
1	32.50	50.0	Right	5.28	0.00	0.00		0.0000	-0.0097
1	39.00	60.0	Both	5.07	-0.06	0.00		0.0000	-0.0092
1	40.63	62.5	Both	4.95	-0.08	0.00		0.0000	-0.0090
1	45.50	70.0	Both	4.44	-0.13	0.00		0.0000	-0.0079
1	48.75	75.0	Left	3.96	-0.16	0.00		0.0000	-0.0070
1	48.75	75.0	Right	3.96	-0.16	0.00		0.0000	-0.0070
1	52.00	80.0	Both	3.38	-0.20	0.00		0.0000	-0.0058
1	52.50	80.8	Both	3.28	-0.20	0.00		0.0000	-0.0057
1	56.88	87.5	Both	2.31	-0.24	0.00		0.0000	-0.0039
1	58.50	90.0	Both	1.90	-0.26	0.00		0.0000	-0.0031
1	65.00	100.0	Left	0.00	-0.33	0.00	0.33	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
 Analysis preference setting: None

Close

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Dead Load Demand – Interior Girders

Load case 1 – Self Load (Stage 1: D, DC)

Analysis Results - Interior Girder

Report type: Dead Load Actions | Stage: Non-composite (Stage 1) | Dead Load Case: Load Case 1 - Self Load(Stage 1)

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	4.66	0.00	4.66	0.0000	0.0000
1	6.50	10.0	Both	27.51	3.81	0.00		0.0000	-0.0812
1	8.13	12.5	Both	33.53	3.60	0.00		0.0000	-0.1002
1	13.00	20.0	Both	49.52	2.96	0.00		0.0000	-0.1522
1	13.50	20.8	Both	50.99	2.90	0.00		0.0000	-0.1570
1	16.25	25.0	Left	58.38	2.48	0.00		0.0000	-0.1816
1	16.25	25.0	Right	58.38	2.48	0.00		0.0000	-0.1816
1	19.50	30.0	Both	65.63	1.98	0.00		0.0000	-0.2065
1	24.38	37.5	Both	73.48	1.24	0.00		0.0000	-0.2344
1	26.00	40.0	Both	75.29	0.99	0.00		0.0000	-0.2410
1	32.50	50.0	Left	78.52	0.00	0.00		0.0000	-0.2529
1	32.50	50.0	Right	78.52	0.00	0.00		0.0000	-0.2529
1	39.00	60.0	Both	75.29	-0.99	0.00		0.0000	-0.2410
1	40.63	62.5	Both	73.48	-1.24	0.00		0.0000	-0.2344
1	45.50	70.0	Both	65.63	-1.98	0.00		0.0000	-0.2065
1	48.75	75.0	Left	58.38	-2.48	0.00		0.0000	-0.1816
1	48.75	75.0	Right	58.38	-2.48	0.00		0.0000	-0.1816
1	51.50	79.2	Both	50.99	-2.90	0.00		0.0000	-0.1570
1	52.00	80.0	Both	49.52	-2.96	0.00		0.0000	-0.1522
1	56.88	87.5	Both	33.53	-3.60	0.00		0.0000	-0.1002
1	58.50	90.0	Both	27.51	-3.81	0.00		0.0000	-0.0812
1	65.00	100.0	Left	0.00	-4.66	0.00	4.66	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Load Case 2: Additional Self Load (Stage 1: D, DC)

Analysis Results - Interior Girder

Report type: Dead Load Actions | Stage: Non-composite (Stage 1) | Dead Load Case: Load Case 2 - Add'l Self Load (In)

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	0.28	0.00	0.28	0.0000	0.0000
1	6.50	10.0	Both	1.65	0.23	0.00		0.0000	-0.0049
1	8.13	12.5	Both	2.01	0.22	0.00		0.0000	-0.0060
1	13.00	20.0	Both	2.97	0.18	0.00		0.0000	-0.0091
1	13.50	20.8	Both	3.06	0.17	0.00		0.0000	-0.0094
1	16.25	25.0	Left	3.50	0.15	0.00		0.0000	-0.0109
1	16.25	25.0	Right	3.50	0.15	0.00		0.0000	-0.0109
1	19.50	30.0	Both	3.94	0.12	0.00		0.0000	-0.0124
1	24.38	37.5	Both	4.41	0.07	0.00		0.0000	-0.0141
1	26.00	40.0	Both	4.52	0.06	0.00		0.0000	-0.0145
1	32.50	50.0	Left	4.71	0.00	0.00		0.0000	-0.0152
1	32.50	50.0	Right	4.71	0.00	0.00		0.0000	-0.0152
1	39.00	60.0	Both	4.52	-0.06	0.00		0.0000	-0.0145
1	40.63	62.5	Both	4.41	-0.07	0.00		0.0000	-0.0141
1	45.50	70.0	Both	3.94	-0.12	0.00		0.0000	-0.0124
1	48.75	75.0	Left	3.50	-0.15	0.00		0.0000	-0.0109
1	48.75	75.0	Right	3.50	-0.15	0.00		0.0000	-0.0109
1	51.50	79.2	Both	3.06	-0.17	0.00		0.0000	-0.0094
1	52.00	80.0	Both	2.97	-0.18	0.00		0.0000	-0.0091
1	56.88	87.5	Both	2.01	-0.22	0.00		0.0000	-0.0060
1	58.50	90.0	Both	1.65	-0.23	0.00		0.0000	-0.0049
1	65.00	100.0	Left	0.00	-0.28	0.00	0.28	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Load case 4 – Exterior Diaphragm Loads (Stage 1: D, DC)

Analysis Results - Interior Girder

Report type: Dead Load Actions | Stage: Non-composite (Stage 1) | Dead Load Case: Load Case 4 - Exterior Diaphragm

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	0.47	0.00	0.78	0.0000	0.0000
1	6.50	10.0	Both	3.05	0.47	0.00		0.0000	-0.0099
1	8.13	12.5	Both	3.82	0.47	0.00		0.0000	-0.0123
1	13.00	20.0	Both	6.11	0.47	0.00		0.0000	-0.0187
1	13.50	20.8	Both	6.34	0.47	0.00		0.0000	-0.0193
1	16.25	25.0	Left	7.63	0.47	0.00		0.0000	-0.0224
1	16.25	25.0	Right	7.63	0.16	0.00		0.0000	-0.0224
1	19.50	30.0	Both	8.14	0.16	0.00		0.0000	-0.0255
1	24.38	37.5	Both	8.90	0.16	0.00		0.0000	-0.0289
1	26.00	40.0	Both	9.16	0.16	0.00		0.0000	-0.0297
1	32.50	50.0	Left	10.18	0.16	0.00		0.0000	-0.0312
1	32.50	50.0	Right	10.18	-0.16	0.00		0.0000	-0.0312
1	39.00	60.0	Both	9.16	-0.16	0.00		0.0000	-0.0297
1	40.63	62.5	Both	8.90	-0.16	0.00		0.0000	-0.0289
1	45.50	70.0	Both	8.14	-0.16	0.00		0.0000	-0.0255
1	48.75	75.0	Left	7.63	-0.16	0.00		0.0000	-0.0224
1	48.75	75.0	Right	7.63	-0.47	0.00		0.0000	-0.0224
1	51.50	79.2	Both	6.34	-0.47	0.00		0.0000	-0.0193
1	52.00	80.0	Both	6.11	-0.47	0.00		0.0000	-0.0187
1	56.88	87.5	Both	3.82	-0.47	0.00		0.0000	-0.0123
1	58.50	90.0	Both	3.05	-0.47	0.00		0.0000	-0.0099
1	65.00	100.0	Left	0.00	-0.47	0.00	0.78	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Close

Load case 5 – Concrete Deck Load (Stage 1: D, DC)

Analysis Results - Interior Girder

Report type: Dead Load Actions | Stage: Non-composite (Stage 1) | Dead Load Case: Load Case 5 - Concrete Deck Load

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	21.60	0.00	21.60	0.0000	0.0000
1	6.50	10.0	Both	126.35	17.28	0.00		0.0000	-0.3657
1	8.13	12.5	Both	153.56	16.20	0.00		0.0000	-0.4515
1	13.00	20.0	Both	224.63	12.96	0.00		0.0000	-0.6848
1	13.50	20.8	Both	231.03	12.63	0.00		0.0000	-0.7063
1	16.25	25.0	Left	263.24	10.80	0.00		0.0000	-0.8165
1	16.25	25.0	Right	263.24	10.80	0.00		0.0000	-0.8165
1	19.50	30.0	Both	294.83	8.64	0.00		0.0000	-0.9282
1	24.38	37.5	Both	329.05	5.40	0.00		0.0000	-1.0533
1	26.00	40.0	Both	336.94	4.32	0.00		0.0000	-1.0827
1	32.50	50.0	Left	350.98	0.00	0.00		0.0000	-1.1357
1	32.50	50.0	Right	350.98	0.00	0.00		0.0000	-1.1357
1	39.00	60.0	Both	336.94	-4.32	0.00		0.0000	-1.0827
1	40.63	62.5	Both	329.05	-5.40	0.00		0.0000	-1.0533
1	45.50	70.0	Both	294.83	-8.64	0.00		0.0000	-0.9282
1	48.75	75.0	Left	263.24	-10.80	0.00		0.0000	-0.8165
1	48.75	75.0	Right	263.24	-10.80	0.00		0.0000	-0.8165
1	51.50	79.2	Both	231.03	-12.63	0.00		0.0000	-0.7063
1	52.00	80.0	Both	224.63	-12.96	0.00		0.0000	-0.6848
1	56.88	87.5	Both	153.56	-16.20	0.00		0.0000	-0.4515
1	58.50	90.0	Both	126.35	-17.28	0.00		0.0000	-0.3657
1	65.00	100.0	Left	0.00	-21.60	0.00	21.60	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Close

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Load case 1 – Generic Loads (Stage 2: D, DC)

Analysis Results - Interior Girder

Report type: Dead Load Actions | Stage: Composite (long term) (Stage 2) | Dead Load Case: Load Case 1 - Generic Loads(DC)

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	7.64	0.00	7.64	0.0000	0.0000
1	6.50	10.0	Both	44.68	6.11	0.00		0.0000	-0.0662
1	8.13	12.5	Both	54.30	5.73	0.00		0.0000	-0.0818
1	13.00	20.0	Both	79.43	4.58	0.00		0.0000	-0.1238
1	13.50	20.8	Both	81.69	4.46	0.00		0.0000	-0.1277
1	16.25	25.0	Left	93.08	3.82	0.00		0.0000	-0.1475
1	16.25	25.0	Right	93.08	3.82	0.00		0.0000	-0.1475
1	19.50	30.0	Both	104.25	3.06	0.00		0.0000	-0.1675
1	24.38	37.5	Both	116.35	1.91	0.00		0.0000	-0.1900
1	26.00	40.0	Both	119.15	1.53	0.00		0.0000	-0.1953
1	32.50	50.0	Left	124.11	0.00	0.00		0.0000	-0.2048
1	32.50	50.0	Right	124.11	0.00	0.00		0.0000	-0.2048
1	39.00	60.0	Both	119.15	-1.53	0.00		0.0000	-0.1953
1	40.63	62.5	Both	116.35	-1.91	0.00		0.0000	-0.1900
1	45.50	70.0	Both	104.25	-3.05	0.00		0.0000	-0.1675
1	48.75	75.0	Left	93.08	-3.82	0.00		0.0000	-0.1475
1	48.75	75.0	Right	93.08	-3.82	0.00		0.0000	-0.1475
1	51.50	79.2	Both	81.69	-4.46	0.00		0.0000	-0.1277
1	52.00	80.0	Both	79.43	-4.58	0.00		0.0000	-0.1238
1	56.88	87.5	Both	54.30	-5.73	0.00		0.0000	-0.0818
1	58.50	90.0	Both	44.68	-6.11	0.00		0.0000	-0.0662
1	65.00	100.0	Left	0.00	-7.64	0.00	7.64	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Close

Load case 2 – Railing Loads (Stage 2: D, DC)

Analysis Results - Interior Girder

Report type: Dead Load Actions | Stage: Composite (long term) (Stage 2) | Dead Load Case: Load Case 2 - Railing Loads(DC2)

Span	Location (ft)	% Span	Side	Moment (kip-ft)	Shear (kip)	Axial (kip)	Reaction (kip)	X Deflection (in)	Y Deflection (in)
1	0.00	0.0	Right	0.00	0.33	0.00	0.33	0.0000	0.0000
1	6.50	10.0	Both	1.90	0.26	0.00		0.0000	-0.0028
1	8.13	12.5	Both	2.31	0.24	0.00		0.0000	-0.0035
1	13.00	20.0	Both	3.38	0.20	0.00		0.0000	-0.0053
1	13.50	20.8	Both	3.48	0.19	0.00		0.0000	-0.0054
1	16.25	25.0	Left	3.96	0.16	0.00		0.0000	-0.0063
1	16.25	25.0	Right	3.96	0.16	0.00		0.0000	-0.0063
1	19.50	30.0	Both	4.44	0.13	0.00		0.0000	-0.0071
1	24.38	37.5	Both	4.95	0.08	0.00		0.0000	-0.0081
1	26.00	40.0	Both	5.07	0.07	0.00		0.0000	-0.0083
1	32.50	50.0	Left	5.28	0.00	0.00		0.0000	-0.0087
1	32.50	50.0	Right	5.28	0.00	0.00		0.0000	-0.0087
1	39.00	60.0	Both	5.07	-0.06	0.00		0.0000	-0.0083
1	40.63	62.5	Both	4.95	-0.08	0.00		0.0000	-0.0081
1	45.50	70.0	Both	4.44	-0.13	0.00		0.0000	-0.0071
1	48.75	75.0	Left	3.96	-0.16	0.00		0.0000	-0.0063
1	48.75	75.0	Right	3.96	-0.16	0.00		0.0000	-0.0063
1	51.50	79.2	Both	3.48	-0.19	0.00		0.0000	-0.0054
1	52.00	80.0	Both	3.38	-0.19	0.00		0.0000	-0.0053
1	56.88	87.5	Both	2.31	-0.24	0.00		0.0000	-0.0035
1	58.50	90.0	Both	1.90	-0.26	0.00		0.0000	-0.0028
1	65.00	100.0	Left	0.00	-0.33	0.00	0.33	0.0000	0.0000

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Close

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

LRFR Controlling Rating Factor – Exterior Girder

Analysis Results - Left Exterior Girder

Print

Report type: Rating Results Summary

Lane/Impact loading type: As requested Detailed

Display Format: Single rating level per row

Live Load	Live Load Type	Rating Method	Rating Level	Load Rating (Ton)	Rating Factor	Location (ft)	Location Span-(%)	Limit State	Impact	Lane
HL-93 (US)	Truck + Lane	LRFR	Inventory	50.35	1.399	32.50	1 - (50.0)	STRENGTH-I Steel Flexure	As Requested	As Requested
HL-93 (US)	Truck + Lane	LRFR	Operating	65.27	1.813	32.50	1 - (50.0)	STRENGTH-I Steel Flexure	As Requested	As Requested
HL-93 (US)	Tandem + Lane	LRFR	Inventory	56.67	1.574	32.50	1 - (50.0)	STRENGTH-I Steel Flexure	As Requested	As Requested
HL-93 (US)	Tandem + Lane	LRFR	Operating	73.46	2.041	32.50	1 - (50.0)	STRENGTH-I Steel Flexure	As Requested	As Requested
LRFD Fatigue Truck (US)	Axle Load	LRFR	Inventory	7.62	0.254	12.50	1 - (19.2)	FATIGUE-I Steel Fatigue Stress	As Requested	As Requested
MBE-PERMIT	Axle Load	LRFR	Permit	151.90	1.381	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
NRL	Axle Load	LRFR	Legal	72.29	1.807	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
SU4	Axle Load	LRFR	Legal	67.99	2.518	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
SU5	Axle Load	LRFR	Legal	71.00	2.290	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
SU6	Axle Load	LRFR	Legal	71.35	2.053	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
SU7	Axle Load	LRFR	Legal	73.00	1.884	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
Type 3	Axle Load	LRFR	Legal	71.08	2.843	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
Type 3-3	Axle Load	LRFR	Legal	115.39	2.885	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
Type 3S2	Axle Load	LRFR	Legal	97.40	2.706	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Close

LRFR Controlling Rating Factor – Interior Girder

Analysis Results - Interior Girder

Print

Report type: Rating Results Summary

Lane/Impact loading type: As requested Detailed

Display Format: Single rating level per row

Live Load	Live Load Type	Rating Method	Rating Level	Load Rating (Ton)	Rating Factor	Location (ft)	Location Span-(%)	Limit State	Impact	Lane
HL-93 (US)	Truck + Lane	LRFR	Inventory	43.42	1.206	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
HL-93 (US)	Truck + Lane	LRFR	Operating	56.45	1.568	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
HL-93 (US)	Tandem + Lane	LRFR	Inventory	48.87	1.357	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
HL-93 (US)	Tandem + Lane	LRFR	Operating	63.53	1.765	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
LRFD Fatigue Truck (US)	Axle Load	LRFR	Inventory	9.72	0.324	13.50	1 - (20.8)	FATIGUE-I Steel Fatigue Stress	As Requested	As Requested
MBE-PERMIT	Axle Load	LRFR	Permit	169.06	1.537	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
NRL	Axle Load	LRFR	Legal	59.05	1.476	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
SU4	Axle Load	LRFR	Legal	55.54	2.057	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
SU5	Axle Load	LRFR	Legal	58.00	1.871	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
SU6	Axle Load	LRFR	Legal	58.29	1.677	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
SU7	Axle Load	LRFR	Legal	59.63	1.539	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
Type 3	Axle Load	LRFR	Legal	58.07	2.323	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
Type 3-3	Axle Load	LRFR	Legal	94.27	2.357	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested
Type 3S2	Axle Load	LRFR	Legal	79.57	2.210	32.50	1 - (50.0)	SERVICE-II Steel Flexure Stress	As Requested	As Requested

AASHTO LRFR Engine Version 7.5.0.3001
Analysis preference setting: None

Close

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Rating Results at all analysis Points for Exterior Girder for each analysis Truck

Bridge Name: Simple Span Composite Steel Bridge - MBE A1
NBI Structure ID: MBE-A1
Bridge ID: MBE-A1

Analyzed By: Bridge
Analyze Date: Friday, February 24, 2023 12:09:08
Analysis Engine: AASHTO LRFR Engine Version 7.5.0.1
Analysis Preference Setting: None

Report By: Bridge
Report Date: Friday, February 24, 2023 15:06:03

Structure Definition Name: Span 1 (MDL 1 of 1)
Member Name: G1
Member Alternative Name: Left Exterior Girder

Report by Action: Flexure Shear Overload Interaction Critical

Detailed Rating Results
Left Exterior Girder
HL-93 (US)
Truck + Lane
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Inventory Rating	Inventory Load Rating (Ton)	Operating Rating	Operating Load Rating (Ton)
(ft)	Percent									
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	3564.00	99.000	3564.00
0.00	0.0		kip	380.02	27.00	61.13	3.237	116.54	4.196	151.07
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3564.00	99.000	3564.00
6.50	10.0		kip-ft	2050.49	198.06	616.47	3.005	108.18	3.895	140.23
6.50	10.0		kip	380.02	21.76	53.08	3.798	136.74	4.924	177.25
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
6.50	10.0		ksi	34.20	4.43	7.58	3.022	108.80	3.929	141.44
12.50	19.2		kip-ft	2050.49	343.10	1045.58	1.633	58.79	2.117	76.20
12.50	19.2		kip	380.02	16.92	45.88	4.470	160.92	5.794	208.60
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
12.50	19.2		ksi	34.20	7.67	12.85	1.588	57.16	2.064	74.30
13.00	20.0		kip-ft	2768.88	353.54	1075.28	2.246	80.86	2.912	104.82
13.00	20.0		kip	380.02	16.50	45.29	4.535	163.26	5.879	211.63
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
13.00	20.0		ksi	34.20	5.40	9.11	2.433	87.59	3.163	113.86
19.50	30.0		kip-ft	2768.88	464.97	1376.43	1.674	60.26	2.170	78.11

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

19.50	30.0	kip	380.02	10.92	37.74	5.548	199.71	7.191	258.89
19.50	30.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
19.50	30.0	ksi	34.20	7.10	11.66	1.788	64.38	2.325	83.69
26.00	40.0	kip-ft	2768.88	531.70	1550.93	1.442	51.93	1.870	67.32
26.00	40.0	kip	380.02	5.50	30.44	7.006	252.20	9.081	326.92
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
26.00	40.0	ksi	34.20	8.12	13.14	1.527	54.99	1.986	71.49
32.50	50.0	kip-ft	2768.88	554.37	1583.26	1.399	50.35	1.813	65.27
32.50	50.0	kip	380.02	0.08	23.38	9.284	334.24	12.035	433.27
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
32.50	50.0	ksi	34.20	8.46	13.41	1.476	53.15	1.919	69.10
39.00	60.0	kip-ft	2768.88	531.70	1550.93	1.442	51.93	1.870	67.32
39.00	60.0	kip	380.02	-5.50	-30.44	7.006	252.20	9.081	326.92
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
39.00	60.0	ksi	34.20	8.12	13.14	1.527	54.99	1.986	71.49
45.50	70.0	kip-ft	2768.88	464.97	1376.43	1.674	60.26	2.170	78.11
45.50	70.0	kip	380.02	-10.92	-37.74	5.548	199.71	7.191	258.89
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
45.50	70.0	ksi	34.20	7.10	11.66	1.788	64.38	2.325	83.69
52.00	80.0	kip-ft	2768.88	353.54	1075.28	2.246	80.86	2.912	104.82
52.00	80.0	kip	380.02	-16.50	-45.29	4.535	163.26	5.879	211.63
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
52.00	80.0	ksi	34.20	5.40	9.11	2.433	87.59	3.163	113.86
52.50	80.8	kip-ft	2050.49	343.10	1045.58	1.633	58.79	2.117	76.20
52.50	80.8	kip	380.02	-16.92	-45.88	4.470	160.92	5.794	208.60
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
52.50	80.8	ksi	34.20	7.67	12.85	1.588	57.16	2.064	74.30
58.50	90.0	kip-ft	2050.49	198.06	616.47	3.005	108.18	3.895	140.23
58.50	90.0	kip	380.02	-21.76	-53.08	3.798	136.74	4.924	177.25
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
58.50	90.0	ksi	34.20	4.43	7.58	3.022	108.80	3.929	141.44
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	3564.00	99.000	3564.00
65.00	100.0	kip	380.02	-27.00	-61.13	3.237	116.54	4.196	151.07
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3564.00	99.000	3564.00

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
 Left Exterior Girder
 HL-93 (US)
 Tandem + Lane
 Impact: As Requested
 Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Inventory	Inventory	Operating	Operating
(ft)	Percent						Rating	Load Rating	Rating	Load Rating
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	3564.00	99.000	3564.00
0.00	0.0		kip	380.02	27.00	50.69	3.904	140.54	5.061	182.18
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3564.00	99.000	3564.00
6.50	10.0		kip-ft	2050.49	198.06	517.53	3.579	128.86	4.640	167.04
6.50	10.0		kip	380.02	21.76	44.38	4.543	163.53	5.888	211.99
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
6.50	10.0		ksi	34.20	4.43	6.36	3.600	129.60	4.680	168.48
12.50	19.2		kip-ft	2050.49	343.10	890.44	1.917	69.03	2.486	89.48
12.50	19.2		kip	380.02	16.92	38.78	5.287	190.35	6.854	246.74
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
12.50	19.2		ksi	34.20	7.67	10.94	1.864	67.11	2.424	87.25
13.00	20.0		kip-ft	2768.88	353.54	916.97	2.634	94.83	3.414	122.92
13.00	20.0		kip	380.02	16.50	38.33	5.358	192.89	6.946	250.05
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
13.00	20.0		ksi	34.20	5.40	7.77	2.853	102.71	3.709	133.52
19.50	30.0		kip-ft	2768.88	464.97	1198.34	1.923	69.21	2.492	89.72
19.50	30.0		kip	380.02	10.92	32.52	6.438	231.76	8.345	300.43
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
19.50	30.0		ksi	34.20	7.10	10.15	2.054	73.95	2.670	96.13
26.00	40.0		kip-ft	2768.88	531.70	1361.62	1.643	59.15	2.130	76.67
26.00	40.0		kip	380.02	5.50	26.96	7.910	284.75	10.253	369.12
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
26.00	40.0		ksi	34.20	8.12	11.53	1.740	62.63	2.262	81.42
32.50	50.0		kip-ft	2768.88	554.37	1406.82	1.574	56.67	2.041	73.46
32.50	50.0		kip	380.02	0.08	21.64	10.031	361.10	13.003	468.10
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
32.50	50.0		ksi	34.20	8.46	11.92	1.662	59.82	2.160	77.76
39.00	60.0		kip-ft	2768.88	531.70	1361.62	1.643	59.15	2.130	76.67
39.00	60.0		kip	380.02	-5.50	-26.96	7.910	284.75	10.253	369.12
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
39.00	60.0		ksi	34.20	8.12	11.53	1.740	62.63	2.262	81.42
45.50	70.0		kip-ft	2768.88	464.97	1198.34	1.923	69.21	2.492	89.72
45.50	70.0		kip	380.02	-10.92	-32.52	6.438	231.76	8.345	300.43
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
45.50	70.0		ksi	34.20	7.10	10.15	2.054	73.95	2.670	96.13

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

52.00	80.0	kip-ft	2768.88	353.54	916.97	2.634	94.83	3.414	122.92
52.00	80.0	kip	380.02	-16.50	-38.33	5.358	192.89	6.946	250.05
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
52.00	80.0	ksi	34.20	5.40	7.77	2.853	102.71	3.709	133.52
52.50	80.8	kip-ft	2050.49	343.10	890.44	1.917	69.03	2.486	89.48
52.50	80.8	kip	380.02	-16.92	-38.78	5.287	190.35	6.854	246.74
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
52.50	80.8	ksi	34.20	7.67	10.94	1.864	67.11	2.424	87.25
58.50	90.0	kip-ft	2050.49	198.06	517.53	3.579	128.86	4.640	167.04
58.50	90.0	kip	380.02	-21.76	-44.38	4.543	163.53	5.888	211.99
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
58.50	90.0	ksi	34.20	4.43	6.36	3.600	129.60	4.680	168.48
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	3564.00	99.000	3564.00
65.00	100.0	kip	380.02	-27.00	-50.69	3.904	140.54	5.061	182.18
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3564.00	99.000	3564.00

Detailed Rating Results
Left Exterior Girder
LRFD Fatigue Truck (US)
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location							Inventory	Inventory
(ft)	Percent	Limit State	Units	Capacity	DL + Adj-LL*	LL	Rating Factor	Load Rating (Ton)
12.50	19.2		ksi	2.60	0.00	10.24	0.254	7.62
13.00	20.0		ksi	4.50	0.00	7.02	0.641	19.23
19.50	30.0		ksi	4.50	0.00	8.90	0.506	15.17
26.00	40.0		ksi	4.50	0.00	9.70	0.464	13.92
32.50	50.0		ksi	4.50	0.00	9.15	0.492	14.75
39.00	60.0		ksi	4.50	0.00	9.70	0.464	13.92
45.50	70.0		ksi	4.50	0.00	8.90	0.506	15.17
52.00	80.0		ksi	4.50	0.00	7.02	0.641	19.23
52.50	80.8		ksi	2.60	0.00	10.24	0.254	7.62

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Left Exterior Girder
MBE-PERMIT
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Permit Rating	Permit Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	10890.00
0.00	0.0		kip	380.02	27.00	86.35	3.342	367.62
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	10890.00
6.50	10.0		kip-ft	2050.49	198.06	574.33	3.225	354.79
6.50	10.0		kip	380.02	21.76	73.27	4.013	441.44
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	4.43	10.29	2.892	318.10
12.50	19.2		kip-ft	2050.49	343.10	979.57	1.743	191.73
12.50	19.2		kip	380.02	16.92	61.19	4.887	537.59
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN
12.50	19.2		ksi	34.20	7.67	17.56	1.511	166.17
13.00	20.0		kip-ft	2768.88	353.54	1010.25	2.391	262.99
13.00	20.0		kip	380.02	16.50	60.19	4.976	547.37
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	5.40	12.48	2.308	253.92
19.50	30.0		kip-ft	2768.88	464.97	1307.76	1.762	193.79
19.50	30.0		kip	380.02	10.92	47.61	6.413	705.40
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	7.10	16.15	1.678	184.57
26.00	40.0		kip-ft	2768.88	531.70	1479.70	1.512	166.31
26.00	40.0		kip	380.02	5.50	35.62	8.730	960.34
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	8.12	18.28	1.427	156.99
32.50	50.0		kip-ft	2768.88	554.37	1508.96	1.468	161.43
32.50	50.0		kip	380.02	0.08	25.42	12.453	1369.85
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	8.46	18.64	1.381	151.90
39.00	60.0		kip-ft	2768.88	531.70	1479.70	1.512	166.31
39.00	60.0		kip	380.02	-5.50	-35.62	8.730	960.34
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	8.12	18.28	1.427	156.99
45.50	70.0		kip-ft	2768.88	464.97	1307.76	1.762	193.79
45.50	70.0		kip	380.02	-10.92	-47.61	6.413	705.40
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	7.10	16.15	1.678	184.57
52.00	80.0		kip-ft	2768.88	353.54	1010.25	2.391	262.99

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

52.00	80.0	kip	380.02	-16.50	-60.19	4.976	547.37
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	12.48	2.308	253.92
52.50	80.8	kip-ft	2050.49	343.10	979.57	1.743	191.73
52.50	80.8	kip	380.02	-16.92	-61.19	4.887	537.59
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	17.56	1.511	166.17
58.50	90.0	kip-ft	2050.49	198.06	574.33	3.225	354.79
58.50	90.0	kip	380.02	-21.76	-73.27	4.013	441.44
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	10.29	2.892	318.10
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	10890.00
65.00	100.0	kip	380.02	-27.00	-86.35	3.342	367.62
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	10890.00

Detailed Rating Results
Left Exterior Girder
NRL
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location							Legal Rating	Legal Load Rating
(ft)	Percent	Limit State	Units	Capacity	DL + Adj-LL*	LL	Factor	(Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	3960.00
0.00	0.0		kip	380.02	27.00	44.96	5.925	236.99
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3960.00
6.50	10.0		kip-ft	2050.49	198.06	331.67	5.585	223.41
6.50	10.0		kip	380.02	21.76	39.25	6.915	276.59
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	4.43	5.49	4.173	166.92
12.50	19.2		kip-ft	2050.49	343.10	579.61	2.946	117.83
12.50	19.2		kip	380.02	16.92	33.98	8.124	324.94
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN
12.50	19.2		ksi	34.20	7.67	9.59	2.128	85.10
13.00	20.0		kip-ft	2768.88	353.54	596.56	4.049	161.95
13.00	20.0		kip	380.02	16.50	33.54	8.242	329.67
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	5.40	6.80	3.258	130.30
19.50	30.0		kip-ft	2768.88	464.97	796.90	2.891	115.64
19.50	30.0		kip	380.02	10.92	27.84	10.124	404.98
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	7.10	9.09	2.295	91.78
26.00	40.0		kip-ft	2768.88	531.70	926.01	2.416	96.64

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

26.00	40.0	kip	380.02	5.50	22.33	12.857	514.27
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0	ksi	34.20	8.12	10.56	1.900	76.02
32.50	50.0	kip-ft	2768.88	554.37	960.88	2.305	92.19
32.50	50.0	kip	380.02	0.08	17.09	17.101	684.03
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0	ksi	34.20	8.46	10.96	1.807	72.29
39.00	60.0	kip-ft	2768.88	531.70	926.01	2.416	96.64
39.00	60.0	kip	380.02	-5.50	-22.33	12.857	514.27
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0	ksi	34.20	8.12	10.56	1.900	76.02
45.50	70.0	kip-ft	2768.88	464.97	796.90	2.891	115.64
45.50	70.0	kip	380.02	-10.92	-27.84	10.124	404.98
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0	ksi	34.20	7.10	9.09	2.295	91.78
52.00	80.0	kip-ft	2768.88	353.54	596.56	4.049	161.95
52.00	80.0	kip	380.02	-16.50	-33.54	8.242	329.67
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	6.80	3.258	130.30
52.50	80.8	kip-ft	2050.49	343.10	579.61	2.946	117.83
52.50	80.8	kip	380.02	-16.92	-33.98	8.124	324.94
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	9.59	2.128	85.10
58.50	90.0	kip-ft	2050.49	198.06	331.67	5.585	223.41
58.50	90.0	kip	380.02	-21.76	-39.25	6.915	276.59
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	5.49	4.173	166.92
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	3960.00
65.00	100.0	kip	380.02	-27.00	-44.96	5.925	236.99
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3960.00

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Left Exterior Girder
SU4
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	2673.00
0.00	0.0		kip	380.02	27.00	34.71	7.675	207.22
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	2673.00
6.50	10.0		kip-ft	2050.49	198.06	260.72	7.105	191.84
6.50	10.0		kip	380.02	21.76	30.85	8.796	237.50
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	4.43	4.31	5.309	143.33
12.50	19.2		kip-ft	2050.49	343.10	443.59	3.849	103.92
12.50	19.2		kip	380.02	16.92	27.30	10.113	273.04
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN
12.50	19.2		ksi	34.20	7.67	7.34	2.780	75.06
13.00	20.0		kip-ft	2768.88	353.54	456.33	5.293	142.91
13.00	20.0		kip	380.02	16.50	27.00	10.239	276.44
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	5.40	5.20	4.259	114.99
19.50	30.0		kip-ft	2768.88	464.97	586.82	3.926	106.00
19.50	30.0		kip	380.02	10.92	23.15	12.174	328.71
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	7.10	6.69	3.116	84.13
26.00	40.0		kip-ft	2768.88	531.70	669.28	3.343	90.25
26.00	40.0		kip	380.02	5.50	19.30	14.875	401.63
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	8.12	7.63	2.629	71.00
32.50	50.0		kip-ft	2768.88	554.37	689.59	3.211	86.71
32.50	50.0		kip	380.02	0.08	15.44	18.924	510.94
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	8.46	7.86	2.518	67.99
39.00	60.0		kip-ft	2768.88	531.70	669.28	3.343	90.25
39.00	60.0		kip	380.02	-5.50	-19.30	14.875	401.63
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	8.12	7.63	2.629	71.00
45.50	70.0		kip-ft	2768.88	464.97	586.82	3.926	106.00
45.50	70.0		kip	380.02	-10.92	-23.15	12.174	328.71
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	7.10	6.69	3.116	84.13
52.00	80.0		kip-ft	2768.88	353.54	456.33	5.293	142.91

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

52.00	80.0	kip	380.02	-16.50	-27.00	10.239	276.44
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	5.20	4.259	114.99
52.50	80.8	kip-ft	2050.49	343.10	443.59	3.849	103.92
52.50	80.8	kip	380.02	-16.92	-27.30	10.113	273.04
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	7.34	2.780	75.06
58.50	90.0	kip-ft	2050.49	198.06	260.72	7.105	191.84
58.50	90.0	kip	380.02	-21.76	-30.85	8.796	237.50
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	4.31	5.309	143.33
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	2673.00
65.00	100.0	kip	380.02	-27.00	-34.71	7.675	207.22
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	2673.00

Detailed Rating Results
Left Exterior Girder
SU5
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location							Legal Rating	Legal Load Rating
(ft)	Percent	Limit State	Units	Capacity	DL + Adj-LL*	LL	Factor	(Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	3069.00
0.00	0.0		kip	380.02	27.00	38.83	6.859	212.64
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3069.00
6.50	10.0		kip-ft	2050.49	198.06	290.77	6.371	197.50
6.50	10.0		kip	380.02	21.76	34.41	7.887	244.51
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	4.43	4.81	4.760	147.56
12.50	19.2		kip-ft	2050.49	343.10	492.82	3.465	107.40
12.50	19.2		kip	380.02	16.92	30.33	9.103	282.18
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN
12.50	19.2		ksi	34.20	7.67	8.15	2.502	77.57
13.00	20.0		kip-ft	2768.88	353.54	506.78	4.766	147.75
13.00	20.0		kip	380.02	16.50	29.99	9.219	285.80
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	5.40	5.78	3.835	118.88
19.50	30.0		kip-ft	2768.88	464.97	653.97	3.523	109.21
19.50	30.0		kip	380.02	10.92	25.56	11.024	341.75
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	7.10	7.46	2.796	86.68
26.00	40.0		kip-ft	2768.88	531.70	743.48	3.009	93.28

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

26.00	40.0	kip	380.02	5.50	21.14	13.578	420.91
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0	ksi	34.20	8.12	8.48	2.367	73.38
32.50	50.0	kip-ft	2768.88	554.37	758.22	2.921	90.54
32.50	50.0	kip	380.02	0.08	16.72	17.482	541.96
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0	ksi	34.20	8.46	8.64	2.290	71.00
39.00	60.0	kip-ft	2768.88	531.70	743.48	3.009	93.28
39.00	60.0	kip	380.02	-5.50	-21.14	13.578	420.91
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0	ksi	34.20	8.12	8.48	2.367	73.38
45.50	70.0	kip-ft	2768.88	464.97	653.97	3.523	109.21
45.50	70.0	kip	380.02	-10.92	-25.56	11.024	341.75
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0	ksi	34.20	7.10	7.46	2.796	86.68
52.00	80.0	kip-ft	2768.88	353.54	506.78	4.766	147.75
52.00	80.0	kip	380.02	-16.50	-29.99	9.219	285.80
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	5.78	3.835	118.88
52.50	80.8	kip-ft	2050.49	343.10	492.82	3.465	107.40
52.50	80.8	kip	380.02	-16.92	-30.33	9.103	282.18
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	8.15	2.502	77.57
58.50	90.0	kip-ft	2050.49	198.06	290.77	6.371	197.50
58.50	90.0	kip	380.02	-21.76	-34.41	7.887	244.51
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	4.81	4.760	147.56
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	3069.00
65.00	100.0	kip	380.02	-27.00	-38.83	6.859	212.64
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3069.00

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Left Exterior Girder
SU6
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	3440.25
0.00	0.0		kip	380.02	27.00	41.61	6.402	222.48
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3440.25
6.50	10.0		kip-ft	2050.49	198.06	309.67	5.982	207.88
6.50	10.0		kip	380.02	21.76	36.65	7.406	257.36
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	4.43	5.12	4.469	155.31
12.50	19.2		kip-ft	2050.49	343.10	541.04	3.156	109.66
12.50	19.2		kip	380.02	16.92	32.07	8.608	299.13
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN
12.50	19.2		ksi	34.20	7.67	8.95	2.279	79.20
13.00	20.0		kip-ft	2768.88	353.54	557.42	4.333	150.57
13.00	20.0		kip	380.02	16.50	31.69	8.724	303.17
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	5.40	6.36	3.486	121.15
19.50	30.0		kip-ft	2768.88	464.97	725.27	3.177	110.39
19.50	30.0		kip	380.02	10.92	26.73	10.543	366.38
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	7.10	8.27	2.521	87.61
26.00	40.0		kip-ft	2768.88	531.70	819.72	2.729	94.84
26.00	40.0		kip	380.02	5.50	21.77	13.184	458.15
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	8.12	9.35	2.147	74.60
32.50	50.0		kip-ft	2768.88	554.37	845.76	2.618	90.99
32.50	50.0		kip	380.02	0.08	16.81	17.383	604.05
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	8.46	9.64	2.053	71.35
39.00	60.0		kip-ft	2768.88	531.70	819.72	2.729	94.84
39.00	60.0		kip	380.02	-5.50	-21.77	13.184	458.15
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	8.12	9.35	2.147	74.60
45.50	70.0		kip-ft	2768.88	464.97	725.27	3.177	110.39
45.50	70.0		kip	380.02	-10.92	-26.73	10.543	366.38
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	7.10	8.27	2.521	87.61
52.00	80.0		kip-ft	2768.88	353.54	557.42	4.333	150.57

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

52.00	80.0	kip	380.02	-16.50	-31.69	8.724	303.17
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	6.36	3.486	121.15
52.50	80.8	kip-ft	2050.49	343.10	541.04	3.156	109.66
52.50	80.8	kip	380.02	-16.92	-32.07	8.608	299.13
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	8.95	2.279	79.20
58.50	90.0	kip-ft	2050.49	198.06	309.67	5.982	207.88
58.50	90.0	kip	380.02	-21.76	-36.65	7.406	257.36
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	5.12	4.469	155.31
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	3440.25
65.00	100.0	kip	380.02	-27.00	-41.61	6.402	222.48
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3440.25

Detailed Rating Results
Left Exterior Girder
SU7
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location							Legal Rating	Legal Load Rating
(ft)	Percent	Limit State	Units	Capacity	DL + Adj-LL*	LL	Factor	(Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	3836.25
0.00	0.0		kip	380.02	27.00	44.26	6.018	233.20
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3836.25
6.50	10.0		kip-ft	2050.49	198.06	327.29	5.660	219.32
6.50	10.0		kip	380.02	21.76	38.73	7.007	271.53
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	4.43	5.42	4.229	163.87
12.50	19.2		kip-ft	2050.49	343.10	572.07	2.985	115.65
12.50	19.2		kip	380.02	16.92	33.63	8.209	318.10
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN
12.50	19.2		ksi	34.20	7.67	9.47	2.156	83.53
13.00	20.0		kip-ft	2768.88	353.54	588.96	4.101	158.92
13.00	20.0		kip	380.02	16.50	33.20	8.326	322.64
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	5.40	6.71	3.300	127.86
19.50	30.0		kip-ft	2768.88	464.97	785.01	2.935	113.73
19.50	30.0		kip	380.02	10.92	27.67	10.184	394.62
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	7.10	8.95	2.329	90.26
26.00	40.0		kip-ft	2768.88	531.70	889.46	2.515	97.46

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

26.00	40.0	kip	380.02	5.50	22.14	12.962	502.28
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0	ksi	34.20	8.12	10.14	1.979	76.67
32.50	50.0	kip-ft	2768.88	554.37	921.81	2.402	93.09
32.50	50.0	kip	380.02	0.08	16.62	17.589	681.59
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0	ksi	34.20	8.46	10.51	1.884	73.00
39.00	60.0	kip-ft	2768.88	531.70	889.46	2.515	97.46
39.00	60.0	kip	380.02	-5.50	-22.14	12.962	502.28
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0	ksi	34.20	8.12	10.14	1.979	76.67
45.50	70.0	kip-ft	2768.88	464.97	785.01	2.935	113.73
45.50	70.0	kip	380.02	-10.92	-27.67	10.184	394.62
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0	ksi	34.20	7.10	8.95	2.329	90.26
52.00	80.0	kip-ft	2768.88	353.54	588.96	4.101	158.92
52.00	80.0	kip	380.02	-16.50	-33.20	8.326	322.64
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	6.71	3.300	127.86
52.50	80.8	kip-ft	2050.49	343.10	572.07	2.985	115.65
52.50	80.8	kip	380.02	-16.92	-33.63	8.209	318.10
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	9.47	2.156	83.53
58.50	90.0	kip-ft	2050.49	198.06	327.29	5.660	219.32
58.50	90.0	kip	380.02	-21.76	-38.73	7.007	271.53
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	5.42	4.229	163.87
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	3836.25
65.00	100.0	kip	380.02	-27.00	-44.26	6.018	233.20
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3836.25

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Left Exterior Girder
Type 3
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	2475.00
0.00	0.0		kip	380.02	27.00	31.59	8.432	210.80
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	2475.00
6.50	10.0		kip-ft	2050.49	198.06	236.79	7.823	195.58
6.50	10.0		kip	380.02	21.76	28.02	9.685	242.13
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	4.43	3.92	5.845	146.13
12.50	19.2		kip-ft	2050.49	343.10	401.85	4.249	106.22
12.50	19.2		kip	380.02	16.92	24.73	11.163	279.08
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN
12.50	19.2		ksi	34.20	7.67	6.65	3.069	76.72
13.00	20.0		kip-ft	2768.88	353.54	413.29	5.844	146.10
13.00	20.0		kip	380.02	16.50	24.46	11.305	282.62
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	5.40	4.71	4.702	117.55
19.50	30.0		kip-ft	2768.88	464.97	529.50	4.351	108.78
19.50	30.0		kip	380.02	10.92	20.89	13.492	337.31
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	7.10	6.04	3.453	86.33
26.00	40.0		kip-ft	2768.88	531.70	596.56	3.750	93.75
26.00	40.0		kip	380.02	5.50	17.32	16.572	414.30
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	8.12	6.80	2.950	73.75
32.50	50.0		kip-ft	2768.88	554.37	610.75	3.626	90.65
32.50	50.0		kip	380.02	-0.08	-13.75	21.250	531.24
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	8.46	6.96	2.843	71.08
39.00	60.0		kip-ft	2768.88	531.70	596.56	3.750	93.75
39.00	60.0		kip	380.02	-5.50	-17.32	16.572	414.30
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	8.12	6.80	2.950	73.75
45.50	70.0		kip-ft	2768.88	464.97	529.50	4.351	108.78
45.50	70.0		kip	380.02	-10.92	-20.89	13.492	337.31
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	7.10	6.04	3.453	86.33
52.00	80.0		kip-ft	2768.88	353.54	413.29	5.844	146.10

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

52.00	80.0	kip	380.02	-16.50	-24.46	11.305	282.62
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	4.71	4.702	117.55
52.50	80.8	kip-ft	2050.49	343.10	401.85	4.249	106.22
52.50	80.8	kip	380.02	-16.92	-24.73	11.163	279.08
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	6.65	3.069	76.72
58.50	90.0	kip-ft	2050.49	198.06	236.79	7.823	195.58
58.50	90.0	kip	380.02	-21.76	-28.02	9.685	242.13
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	3.92	5.845	146.13
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	2475.00
65.00	100.0	kip	380.02	-27.00	-31.59	8.432	210.80
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	2475.00

Detailed Rating Results
Left Exterior Girder
Type 3-3
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location						Legal Rating	Legal Load Rating
(ft)	Percent	Limit State	Units	Capacity	DL + Adj-LL*	LL	Factor (Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000
0.00	0.0		kip	380.02	27.00	36.09	7.381
0.00	0.0		ksi	0.00	0.00	0.00	99.000
0.00	0.0		ksi	-34.20	0.00	0.00	99.000
6.50	10.0		kip-ft	2050.49	198.06	256.73	7.216
6.50	10.0		kip	380.02	21.76	30.38	8.933
6.50	10.0		ksi	0.00	0.00	0.00	99.000
6.50	10.0		ksi	34.20	4.43	4.25	5.391
12.50	19.2		kip-ft	2050.49	343.10	413.23	4.132
12.50	19.2		kip	380.02	16.92	25.31	10.906
12.50	19.2		ksi	0.00	0.00	0.00	99.000
12.50	19.2		ksi	34.20	7.67	6.84	2.984
13.00	20.0		kip-ft	2768.88	353.54	424.42	5.691
13.00	20.0		kip	380.02	16.50	24.94	11.086
13.00	20.0		ksi	0.00	0.00	0.00	99.000
13.00	20.0		ksi	34.20	5.40	4.84	4.579
19.50	30.0		kip-ft	2768.88	464.97	532.94	4.323
19.50	30.0		kip	380.02	10.92	20.09	14.030
19.50	30.0		ksi	0.00	0.00	0.00	99.000
19.50	30.0		ksi	34.20	7.10	6.08	3.431
26.00	40.0		kip-ft	2768.88	531.70	574.30	3.895

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

26.00	40.0	kip	380.02	5.50	15.23	18.841	753.62
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0	ksi	34.20	8.12	6.55	3.064	122.57
32.50	50.0	kip-ft	2768.88	554.37	601.94	3.679	147.16
32.50	50.0	kip	380.02	0.08	11.57	25.262	1010.47
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0	ksi	34.20	8.46	6.86	2.885	115.39
39.00	60.0	kip-ft	2768.88	531.70	574.30	3.895	155.82
39.00	60.0	kip	380.02	-5.50	-15.23	18.841	753.62
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0	ksi	34.20	8.12	6.55	3.064	122.57
45.50	70.0	kip-ft	2768.88	464.97	532.94	4.323	172.92
45.50	70.0	kip	380.02	-10.92	-20.09	14.030	561.22
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0	ksi	34.20	7.10	6.08	3.431	137.24
52.00	80.0	kip-ft	2768.88	353.54	424.42	5.691	227.64
52.00	80.0	kip	380.02	-16.50	-24.94	11.086	443.43
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	4.84	4.579	183.16
52.50	80.8	kip-ft	2050.49	343.10	413.23	4.132	165.27
52.50	80.8	kip	380.02	-16.92	-25.31	10.906	436.26
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	6.84	2.984	119.37
58.50	90.0	kip-ft	2050.49	198.06	256.73	7.216	288.62
58.50	90.0	kip	380.02	-21.76	-30.38	8.933	357.32
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	4.25	5.391	215.64
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	3960.00
65.00	100.0	kip	380.02	-27.00	-36.09	7.381	295.23
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3960.00

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Left Exterior Girder
Type 3S2
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2050.49	0.00	0.00	99.000	3564.00
0.00	0.0		kip	380.02	27.00	36.66	7.266	261.57
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3564.00
6.50	10.0		kip-ft	2050.49	198.06	266.38	6.954	250.35
6.50	10.0		kip	380.02	21.76	31.52	8.610	309.95
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	4.43	4.41	5.196	187.05
12.50	19.2		kip-ft	2050.49	343.10	435.21	3.923	141.23
12.50	19.2		kip	380.02	16.92	26.78	10.308	371.07
12.50	19.2		ksi	0.00	0.00	0.00	99.000	NaN
12.50	19.2		ksi	34.20	7.67	7.20	2.833	102.01
13.00	20.0		kip-ft	2768.88	353.54	445.94	5.416	194.99
13.00	20.0		kip	380.02	16.50	26.39	10.477	377.17
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	5.40	5.08	4.358	156.89
19.50	30.0		kip-ft	2768.88	464.97	581.35	3.963	142.67
19.50	30.0		kip	380.02	10.92	21.25	13.262	477.44
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	7.10	6.63	3.145	113.23
26.00	40.0		kip-ft	2768.88	531.70	647.76	3.454	124.33
26.00	40.0		kip	380.02	5.50	16.33	17.574	632.68
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	8.12	7.39	2.717	97.80
32.50	50.0		kip-ft	2768.88	554.37	641.82	3.450	124.21
32.50	50.0		kip	380.02	0.08	11.91	24.540	883.44
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	8.46	7.32	2.706	97.40
39.00	60.0		kip-ft	2768.88	531.70	647.76	3.454	124.33
39.00	60.0		kip	380.02	-5.50	-16.33	17.574	632.68
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	8.12	7.39	2.717	97.80
45.50	70.0		kip-ft	2768.88	464.97	581.35	3.963	142.67
45.50	70.0		kip	380.02	-10.92	-21.25	13.262	477.44
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	7.10	6.63	3.145	113.23
52.00	80.0		kip-ft	2768.88	353.54	445.94	5.416	194.99

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

52.00	80.0	kip	380.02	-16.50	-26.39	10.477	377.17
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	5.40	5.08	4.358	156.89
52.50	80.8	kip-ft	2050.49	343.10	435.21	3.923	141.23
52.50	80.8	kip	380.02	-16.92	-26.78	10.308	371.07
52.50	80.8	ksi	0.00	0.00	0.00	99.000	NaN
52.50	80.8	ksi	34.20	7.67	7.20	2.833	102.01
58.50	90.0	kip-ft	2050.49	198.06	266.38	6.954	250.35
58.50	90.0	kip	380.02	-21.76	-31.52	8.610	309.95
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	4.43	4.41	5.196	187.05
65.00	100.0	kip-ft	2050.49	0.00	0.00	99.000	3564.00
65.00	100.0	kip	380.02	-27.00	-36.66	7.266	261.57
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3564.00

Note:

*Adj-LL is only applicable for Permit load rating.

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Rating Results at ALL analysis Points for Interior Girder for each analysis Truck

Bridge Name: Simple Span Composite Steel Bridge - MBE A1
NBI Structure ID: MBE-A1
Bridge ID: MBE-A1

Analyzed By: Bridge
Analyze Date: Friday, February 24, 2023 12:09:08
Analysis Engine: AASHTO LRFR Engine Version 7.5.0.1
Analysis Preference Setting: None

Report By: Bridge
Report Date: Friday, February 24, 2023 15:13:36

Structure Definition Name: Span 1 (MDL 1 of 1)
Member Name: G2
Member Alternative Name: Interior Girder

Report by Action: Flexure Shear Overload Interaction Critical

Detailed Rating Results
Interior Girder
HL-93 (US)
Truck + Lane
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Inventory	Inventory	Operating	Operating
(ft)	Percent						Rating	Load Rating	Rating	Load Rating
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	3564.00	99.000	3564.00
0.00	0.0		kip	380.02	34.97	78.88	2.436	87.71	3.158	113.70
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3564.00	99.000	3564.00
6.50	10.0		kip-ft	2275.26	256.44	649.60	3.108	111.88	4.029	145.03
6.50	10.0		kip	380.02	28.16	68.50	2.877	103.56	3.729	134.24
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
6.50	10.0		ksi	34.20	5.76	7.71	2.836	102.09	3.687	132.72
13.00	20.0		kip-ft	2275.26	457.54	1133.07	1.604	57.75	2.080	74.86
13.00	20.0		kip	380.02	21.35	58.44	3.455	124.38	4.479	161.24
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
13.00	20.0		ksi	34.20	10.28	13.45	1.367	49.22	1.777	63.99
13.50	20.8		kip-ft	2275.26	470.72	1163.37	1.551	55.84	2.011	72.39
13.50	20.8		kip	380.02	20.82	57.68	3.507	126.26	4.546	163.67
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
13.50	20.8		ksi	34.20	10.58	13.81	1.315	47.35	1.710	61.55
19.50	30.0		kip-ft	2872.20	601.52	1450.40	1.566	56.36	2.029	73.06

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

19.50	30.0	kip	380.02	14.08	48.70	4.253	153.10	5.513	198.46
19.50	30.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
19.50	30.0	ksi	34.20	9.73	12.53	1.502	54.08	1.953	70.31
26.00	40.0	kip-ft	2872.20	687.66	1634.27	1.337	48.12	1.733	62.38
26.00	40.0	kip	380.02	7.12	39.28	5.399	194.38	6.999	251.97
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
26.00	40.0	ksi	34.20	11.12	14.12	1.257	45.26	1.635	58.84
32.50	50.0	kip-ft	2872.20	717.22	1668.34	1.292	46.50	1.674	60.28
32.50	50.0	kip	380.02	-0.16	-30.17	7.193	258.95	9.324	335.68
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
32.50	50.0	ksi	34.20	11.60	14.42	1.206	43.42	1.568	56.45
39.00	60.0	kip-ft	2872.20	687.66	1634.27	1.337	48.12	1.733	62.38
39.00	60.0	kip	380.02	-7.12	-39.28	5.399	194.38	6.999	251.97
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
39.00	60.0	ksi	34.20	11.12	14.12	1.257	45.26	1.635	58.84
45.50	70.0	kip-ft	2872.20	601.52	1450.40	1.566	56.36	2.029	73.06
45.50	70.0	kip	380.02	-14.08	-48.70	4.253	153.10	5.513	198.46
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
45.50	70.0	ksi	34.20	9.73	12.53	1.502	54.08	1.953	70.31
51.50	79.2	kip-ft	2275.26	470.72	1163.37	1.551	55.84	2.011	72.39
51.50	79.2	kip	380.02	-20.82	-57.68	3.507	126.26	4.546	163.67
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
51.50	79.2	ksi	34.20	10.58	13.81	1.315	47.35	1.710	61.55
52.00	80.0	kip-ft	2275.26	457.54	1133.07	1.604	57.75	2.080	74.86
52.00	80.0	kip	380.02	-21.35	-58.44	3.455	124.38	4.479	161.24
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
52.00	80.0	ksi	34.20	10.28	13.45	1.367	49.22	1.777	63.99
58.50	90.0	kip-ft	2275.26	256.44	649.60	3.108	111.88	4.029	145.03
58.50	90.0	kip	380.02	-28.16	-68.50	2.877	103.56	3.729	134.24
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
58.50	90.0	ksi	34.20	5.76	7.71	2.836	102.09	3.687	132.72
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	3564.00	99.000	3564.00
65.00	100.0	kip	380.02	-34.97	-78.88	2.436	87.71	3.158	113.70
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3564.00	99.000	3564.00

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Interior Girder
HL-93 (US)
Tandem + Lane
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Inventory	Inventory	Operating	Operating
(ft)	Percent						Rating	Load Rating	Rating	Load Rating
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	3564.00	99.000	3564.00
0.00	0.0		kip	380.02	34.97	65.41	2.938	105.78	3.809	137.12
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3564.00	99.000	3564.00
6.50	10.0		kip-ft	2275.26	256.44	545.34	3.702	133.27	4.799	172.76
6.50	10.0		kip	380.02	28.16	57.27	3.440	123.85	4.460	160.55
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
6.50	10.0		ksi	34.20	5.76	6.48	3.378	121.61	4.391	158.09
13.00	20.0		kip-ft	2275.26	457.54	966.25	1.881	67.72	2.439	87.79
13.00	20.0		kip	380.02	21.35	49.46	4.082	146.96	5.292	190.51
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
13.00	20.0		ksi	34.20	10.28	11.47	1.603	57.72	2.084	75.04
13.50	20.8		kip-ft	2275.26	470.72	993.47	1.816	65.39	2.355	84.76
13.50	20.8		kip	380.02	20.82	48.87	4.139	149.01	5.366	193.16
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
13.50	20.8		ksi	34.20	10.58	11.80	1.540	55.44	2.002	72.08
19.50	30.0		kip-ft	2872.20	601.52	1262.74	1.798	64.74	2.331	83.92
19.50	30.0		kip	380.02	14.08	41.96	4.935	177.67	6.397	230.31
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
19.50	30.0		ksi	34.20	9.73	10.91	1.726	62.12	2.243	80.75
26.00	40.0		kip-ft	2872.20	687.66	1434.79	1.523	54.81	1.974	71.05
26.00	40.0		kip	380.02	7.12	34.79	6.096	219.47	7.903	284.50
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
26.00	40.0		ksi	34.20	11.12	12.40	1.432	51.56	1.862	67.03
32.50	50.0		kip-ft	2872.20	717.22	1482.43	1.454	52.33	1.884	67.84
32.50	50.0		kip	380.02	-0.16	-27.93	7.771	279.76	10.074	362.66
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
32.50	50.0		ksi	34.20	11.60	12.81	1.357	48.87	1.765	63.53
39.00	60.0		kip-ft	2872.20	687.66	1434.79	1.523	54.81	1.974	71.05
39.00	60.0		kip	380.02	-7.12	-34.79	6.096	219.47	7.903	284.50
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
39.00	60.0		ksi	34.20	11.12	12.40	1.432	51.56	1.862	67.03
45.50	70.0		kip-ft	2872.20	601.52	1262.74	1.798	64.74	2.331	83.92
45.50	70.0		kip	380.02	-14.08	-41.96	4.935	177.67	6.397	230.31
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
45.50	70.0		ksi	34.20	9.73	10.91	1.726	62.12	2.243	80.75

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

51.50	79.2	kip-ft	2275.26	470.72	993.47	1.816	65.39	2.355	84.76
51.50	79.2	kip	380.02	-20.82	-48.87	4.139	149.01	5.366	193.16
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
51.50	79.2	ksi	34.20	10.58	11.80	1.540	55.44	2.002	72.08
52.00	80.0	kip-ft	2275.26	457.54	966.25	1.881	67.72	2.439	87.79
52.00	80.0	kip	380.02	-21.35	-49.46	4.082	146.96	5.292	190.51
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
52.00	80.0	ksi	34.20	10.28	11.47	1.603	57.72	2.084	75.04
58.50	90.0	kip-ft	2275.26	256.44	545.34	3.702	133.27	4.799	172.76
58.50	90.0	kip	380.02	-28.16	-57.27	3.440	123.85	4.460	160.55
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
58.50	90.0	ksi	34.20	5.76	6.48	3.378	121.61	4.391	158.09
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	3564.00	99.000	3564.00
65.00	100.0	kip	380.02	-34.97	-65.41	2.938	105.78	3.809	137.12
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3564.00	99.000	3564.00

Detailed Rating Results
Interior Girder
LRFD Fatigue Truck (US)
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Inventory Rating	Inventory Load Rating
(ft)	Percent						Factor	(Ton)
13.50	20.8		ksi	2.60	0.00	8.02	0.324	9.72
19.50	30.0		ksi	4.50	0.00	7.07	0.636	19.09
26.00	40.0		ksi	4.50	0.00	7.71	0.584	17.51
32.50	50.0		ksi	4.50	0.00	7.27	0.619	18.56
39.00	60.0		ksi	4.50	0.00	7.71	0.584	17.51
45.50	70.0		ksi	4.50	0.00	7.07	0.636	19.09
51.50	79.2		ksi	2.60	0.00	8.02	0.324	9.72

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Interior Girder
MBE-PERMIT
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Permit Rating	Permit Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	10890.00
0.00	0.0		kip	380.02	34.97	94.88	2.954	324.91
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	10890.00
6.50	10.0		kip-ft	2275.26	256.44	444.22	4.545	499.91
6.50	10.0		kip	380.02	28.16	80.51	3.569	392.61
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	7.69	3.697	406.63
13.00	20.0		kip-ft	2275.26	457.54	781.39	2.326	255.89
13.00	20.0		kip	380.02	21.35	66.14	4.452	489.73
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	13.53	1.767	194.41
13.50	20.8		kip-ft	2275.26	470.72	804.18	2.244	246.83
13.50	20.8		kip	380.02	20.82	65.03	4.536	498.98
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	13.93	1.696	186.56
19.50	30.0		kip-ft	2872.20	601.52	1011.50	2.245	246.93
19.50	30.0		kip	380.02	14.08	52.32	5.773	635.01
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	12.75	1.920	211.22
26.00	40.0		kip-ft	2872.20	687.66	1144.49	1.909	209.96
26.00	40.0		kip	380.02	7.12	39.14	7.902	869.19
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	11.12	14.42	1.601	176.06
32.50	50.0		kip-ft	2872.20	717.22	1167.11	1.846	203.11
32.50	50.0		kip	380.02	-0.16	-27.94	11.330	1246.27
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	11.60	14.71	1.537	169.06
39.00	60.0		kip-ft	2872.20	687.66	1144.49	1.909	209.96
39.00	60.0		kip	380.02	-7.12	-39.14	7.902	869.19
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	11.12	14.42	1.601	176.06
45.50	70.0		kip-ft	2872.20	601.52	1011.50	2.245	246.93
45.50	70.0		kip	380.02	-14.08	-52.32	5.773	635.01
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	9.73	12.75	1.920	211.22
51.50	79.2		kip-ft	2275.26	470.72	804.18	2.244	246.83

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

51.50	79.2	kip	380.02	-20.82	-65.03	4.536	498.98
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	13.93	1.696	186.56
52.00	80.0	kip-ft	2275.26	457.54	781.39	2.326	255.89
52.00	80.0	kip	380.02	-21.35	-66.14	4.452	489.73
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	13.53	1.767	194.41
58.50	90.0	kip-ft	2275.26	256.44	444.22	4.545	499.91
58.50	90.0	kip	380.02	-28.16	-80.51	3.569	392.61
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	7.69	3.697	406.63
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	10890.00
65.00	100.0	kip	380.02	-34.97	-94.88	2.954	324.91
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	10890.00

Detailed Rating Results
Interior Girder
NRL
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	3960.00
0.00	0.0		kip	380.02	34.97	58.02	4.459	178.37
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3960.00
6.50	10.0		kip-ft	2275.26	256.44	349.49	5.776	231.06
6.50	10.0		kip	380.02	28.16	50.65	5.237	209.48
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	5.59	3.915	156.62
13.00	20.0		kip-ft	2275.26	457.54	628.62	2.892	115.66
13.00	20.0		kip	380.02	21.35	43.28	6.279	251.17
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	10.05	1.831	73.23
13.50	20.8		kip-ft	2275.26	470.72	648.29	2.784	111.34
13.50	20.8		kip	380.02	20.82	42.72	6.374	254.98
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	10.36	1.753	70.13
19.50	30.0		kip-ft	2872.20	601.52	839.72	2.704	108.16
19.50	30.0		kip	380.02	14.08	35.92	7.761	310.45
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	9.77	1.928	77.10
26.00	40.0		kip-ft	2872.20	687.66	975.77	2.239	89.55

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

26.00	40.0	kip	380.02	7.12	28.81	9.909	396.37
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0	ksi	34.20	11.12	11.35	1.564	62.58
32.50	50.0	kip-ft	2872.20	717.22	1012.52	2.128	85.13
32.50	50.0	kip	380.02	-0.16	-22.05	13.249	529.95
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0	ksi	34.20	11.60	11.78	1.476	59.05
39.00	60.0	kip-ft	2872.20	687.66	975.77	2.239	89.55
39.00	60.0	kip	380.02	-7.12	-28.81	9.909	396.37
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0	ksi	34.20	11.12	11.35	1.564	62.58
45.50	70.0	kip-ft	2872.20	601.52	839.72	2.704	108.16
45.50	70.0	kip	380.02	-14.08	-35.92	7.761	310.45
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0	ksi	34.20	9.73	9.77	1.928	77.10
51.50	79.2	kip-ft	2275.26	470.72	648.29	2.784	111.34
51.50	79.2	kip	380.02	-20.82	-42.72	6.374	254.98
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	10.36	1.753	70.13
52.00	80.0	kip-ft	2275.26	457.54	628.62	2.892	115.66
52.00	80.0	kip	380.02	-21.35	-43.28	6.279	251.17
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	10.05	1.831	73.23
58.50	90.0	kip-ft	2275.26	256.44	349.49	5.776	231.06
58.50	90.0	kip	380.02	-28.16	-50.65	5.237	209.48
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	5.59	3.915	156.62
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	3960.00
65.00	100.0	kip	380.02	-34.97	-58.02	4.459	178.37
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3960.00

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
 Interior Girder
 SU4
 Axle Load
 Impact: As Requested
 Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	2673.00
0.00	0.0		kip	380.02	34.97	44.79	5.776	155.96
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	2673.00
6.50	10.0		kip-ft	2275.26	256.44	274.73	7.348	198.41
6.50	10.0		kip	380.02	28.16	39.81	6.662	179.88
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	4.39	4.981	134.49
13.00	20.0		kip-ft	2275.26	457.54	480.85	3.780	102.07
13.00	20.0		kip	380.02	21.35	34.84	7.801	210.62
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	7.69	2.393	64.62
13.50	20.8		kip-ft	2275.26	470.72	493.86	3.654	98.66
13.50	20.8		kip	380.02	20.82	34.46	7.902	213.35
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	7.89	2.301	62.14
19.50	30.0		kip-ft	2872.20	601.52	618.36	3.672	99.15
19.50	30.0		kip	380.02	14.08	29.87	9.333	251.98
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	7.19	2.618	70.67
26.00	40.0		kip-ft	2872.20	687.66	705.24	3.098	83.63
26.00	40.0		kip	380.02	7.12	24.90	11.465	309.56
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	11.12	8.20	2.164	58.44
32.50	50.0		kip-ft	2872.20	717.22	726.65	2.966	80.07
32.50	50.0		kip	380.02	-0.16	-19.93	14.661	395.85
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	11.60	8.45	2.057	55.54
39.00	60.0		kip-ft	2872.20	687.66	705.24	3.098	83.63
39.00	60.0		kip	380.02	-7.12	-24.90	11.465	309.56
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	11.12	8.20	2.164	58.44
45.50	70.0		kip-ft	2872.20	601.52	618.36	3.672	99.15
45.50	70.0		kip	380.02	-14.08	-29.87	9.333	251.98
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	9.73	7.19	2.618	70.67
51.50	79.2		kip-ft	2275.26	470.72	493.86	3.654	98.66

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

51.50	79.2	kip	380.02	-20.82	-34.46	7.902	213.35
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	7.89	2.301	62.14
52.00	80.0	kip-ft	2275.26	457.54	480.85	3.780	102.07
52.00	80.0	kip	380.02	-21.35	-34.84	7.801	210.62
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	7.69	2.393	64.62
58.50	90.0	kip-ft	2275.26	256.44	274.73	7.348	198.41
58.50	90.0	kip	380.02	-28.16	-39.81	6.662	179.88
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	4.39	4.981	134.49
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	2673.00
65.00	100.0	kip	380.02	-34.97	-44.79	5.776	155.96
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	2673.00

Detailed Rating Results
Interior Girder
SU5
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location							Legal Rating	Legal Load Rating
(ft)	Percent	Limit State	Units	Capacity	DL + Adj-LL*	LL	Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	3069.00
0.00	0.0		kip	380.02	34.97	50.11	5.163	160.04
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3069.00
6.50	10.0		kip-ft	2275.26	256.44	306.39	6.589	204.26
6.50	10.0		kip	380.02	28.16	44.40	5.974	185.18
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	4.90	4.466	138.45
13.00	20.0		kip-ft	2275.26	457.54	534.01	3.404	105.52
13.00	20.0		kip	380.02	21.35	38.70	7.024	217.74
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	8.54	2.155	66.81
13.50	20.8		kip-ft	2275.26	470.72	548.26	3.291	102.03
13.50	20.8		kip	380.02	20.82	38.26	7.118	220.65
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	8.76	2.073	64.27
19.50	30.0		kip-ft	2872.20	601.52	689.12	3.295	102.15
19.50	30.0		kip	380.02	14.08	32.99	8.451	261.99
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	8.02	2.349	72.81
26.00	40.0		kip-ft	2872.20	687.66	783.43	2.788	86.44

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

26.00	40.0	kip	380.02	7.12	27.28	10.465	324.41
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0	ksi	34.20	11.12	9.11	1.948	60.40
32.50	50.0	kip-ft	2872.20	717.22	798.97	2.697	83.61
32.50	50.0	kip	380.02	-0.16	-21.57	13.544	419.88
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0	ksi	34.20	11.60	9.29	1.871	58.00
39.00	60.0	kip-ft	2872.20	687.66	783.43	2.788	86.44
39.00	60.0	kip	380.02	-7.12	-27.28	10.465	324.41
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0	ksi	34.20	11.12	9.11	1.948	60.40
45.50	70.0	kip-ft	2872.20	601.52	689.12	3.295	102.15
45.50	70.0	kip	380.02	-14.08	-32.99	8.451	261.99
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0	ksi	34.20	9.73	8.02	2.349	72.81
51.50	79.2	kip-ft	2275.26	470.72	548.26	3.291	102.03
51.50	79.2	kip	380.02	-20.82	-38.26	7.118	220.65
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	8.76	2.073	64.27
52.00	80.0	kip-ft	2275.26	457.54	534.01	3.404	105.52
52.00	80.0	kip	380.02	-21.35	-38.70	7.024	217.74
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	8.54	2.155	66.81
58.50	90.0	kip-ft	2275.26	256.44	306.39	6.589	204.26
58.50	90.0	kip	380.02	-28.16	-44.40	5.974	185.18
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	4.90	4.466	138.45
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	3069.00
65.00	100.0	kip	380.02	-34.97	-50.11	5.163	160.04
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3069.00

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Interior Girder
SU6
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	3440.25
0.00	0.0		kip	380.02	34.97	53.69	4.819	167.45
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3440.25
6.50	10.0		kip-ft	2275.26	256.44	326.31	6.187	214.99
6.50	10.0		kip	380.02	28.16	47.29	5.609	194.92
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	5.22	4.194	145.73
13.00	20.0		kip-ft	2275.26	457.54	587.38	3.095	107.54
13.00	20.0		kip	380.02	21.35	40.89	6.647	230.98
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	9.39	1.959	68.09
13.50	20.8		kip-ft	2275.26	470.72	604.12	2.987	103.80
13.50	20.8		kip	380.02	20.82	40.40	6.740	234.23
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	9.66	1.881	65.38
19.50	30.0		kip-ft	2872.20	601.52	764.25	2.971	103.25
19.50	30.0		kip	380.02	14.08	34.49	8.082	280.87
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	8.89	2.118	73.60
26.00	40.0		kip-ft	2872.20	687.66	863.77	2.529	87.89
26.00	40.0		kip	380.02	7.12	28.09	10.162	353.12
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	11.12	10.05	1.767	61.41
32.50	50.0		kip-ft	2872.20	717.22	891.21	2.418	84.03
32.50	50.0		kip	380.02	-0.16	-21.70	13.467	467.98
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	11.60	10.37	1.677	58.29
39.00	60.0		kip-ft	2872.20	687.66	863.77	2.529	87.89
39.00	60.0		kip	380.02	-7.12	-28.09	10.162	353.12
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	11.12	10.05	1.767	61.41
45.50	70.0		kip-ft	2872.20	601.52	764.25	2.971	103.25
45.50	70.0		kip	380.02	-14.08	-34.49	8.082	280.87
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	9.73	8.89	2.118	73.60
51.50	79.2		kip-ft	2275.26	470.72	604.12	2.987	103.80

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

51.50	79.2	kip	380.02	-20.82	-40.40	6.740	234.23
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	9.66	1.881	65.38
52.00	80.0	kip-ft	2275.26	457.54	587.38	3.095	107.54
52.00	80.0	kip	380.02	-21.35	-40.89	6.647	230.98
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	9.39	1.959	68.09
58.50	90.0	kip-ft	2275.26	256.44	326.31	6.187	214.99
58.50	90.0	kip	380.02	-28.16	-47.29	5.609	194.92
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	5.22	4.194	145.73
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	3440.25
65.00	100.0	kip	380.02	-34.97	-53.69	4.819	167.45
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3440.25

Detailed Rating Results
Interior Girder
SU7
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location							Legal Rating	Legal Load Rating
(ft)	Percent	Limit State	Units	Capacity	DL + Adj-LL*	LL	Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	3836.25
0.00	0.0		kip	380.02	34.97	57.12	4.529	175.52
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3836.25
6.50	10.0		kip-ft	2275.26	256.44	344.88	5.854	226.83
6.50	10.0		kip	380.02	28.16	49.98	5.307	205.65
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	5.51	3.968	153.76
13.00	20.0		kip-ft	2275.26	457.54	620.61	2.929	113.50
13.00	20.0		kip	380.02	21.35	42.85	6.344	245.82
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	9.92	1.854	71.86
13.50	20.8		kip-ft	2275.26	470.72	638.19	2.828	109.57
13.50	20.8		kip	380.02	20.82	42.30	6.438	249.47
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	10.20	1.781	69.01
19.50	30.0		kip-ft	2872.20	601.52	827.19	2.745	106.37
19.50	30.0		kip	380.02	14.08	35.71	7.807	302.51
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	9.62	1.957	75.82
26.00	40.0		kip-ft	2872.20	687.66	937.26	2.331	90.32

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

26.00	40.0	kip	380.02	7.12	28.58	9.990	387.13
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0	ksi	34.20	11.12	10.90	1.629	63.11
32.50	50.0	kip-ft	2872.20	717.22	971.35	2.219	85.97
32.50	50.0	kip	380.02	-0.16	-21.44	13.627	528.06
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0	ksi	34.20	11.60	11.30	1.539	59.63
39.00	60.0	kip-ft	2872.20	687.66	937.26	2.331	90.32
39.00	60.0	kip	380.02	-7.12	-28.58	9.990	387.13
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0	ksi	34.20	11.12	10.90	1.629	63.11
45.50	70.0	kip-ft	2872.20	601.52	827.19	2.745	106.37
45.50	70.0	kip	380.02	-14.08	-35.71	7.807	302.51
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0	ksi	34.20	9.73	9.62	1.957	75.82
51.50	79.2	kip-ft	2275.26	470.72	638.19	2.828	109.57
51.50	79.2	kip	380.02	-20.82	-42.30	6.438	249.47
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	10.20	1.781	69.01
52.00	80.0	kip-ft	2275.26	457.54	620.61	2.929	113.50
52.00	80.0	kip	380.02	-21.35	-42.85	6.344	245.82
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	9.92	1.854	71.86
58.50	90.0	kip-ft	2275.26	256.44	344.88	5.854	226.83
58.50	90.0	kip	380.02	-28.16	-49.98	5.307	205.65
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	5.51	3.968	153.76
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	3836.25
65.00	100.0	kip	380.02	-34.97	-57.12	4.529	175.52
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3836.25

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Interior Girder
Type 3
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	2475.00
0.00	0.0		kip	380.02	34.97	40.76	6.346	158.66
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	2475.00
6.50	10.0		kip-ft	2275.26	256.44	249.51	8.091	202.28
6.50	10.0		kip	380.02	28.16	36.16	7.335	183.39
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	3.99	5.484	137.11
13.00	20.0		kip-ft	2275.26	457.54	435.50	4.174	104.35
13.00	20.0		kip	380.02	21.35	31.56	8.613	215.32
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	6.96	2.643	66.07
13.50	20.8		kip-ft	2275.26	470.72	447.18	4.035	100.89
13.50	20.8		kip	380.02	20.82	31.20	8.727	218.17
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	7.15	2.542	63.54
19.50	30.0		kip-ft	2872.20	601.52	557.96	4.070	101.74
19.50	30.0		kip	380.02	14.08	26.95	10.343	258.58
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	6.49	2.901	72.52
26.00	40.0		kip-ft	2872.20	687.66	628.62	3.475	86.88
26.00	40.0		kip	380.02	7.12	22.35	12.773	319.32
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	11.12	7.31	2.428	60.71
32.50	50.0		kip-ft	2872.20	717.22	643.57	3.348	83.71
32.50	50.0		kip	380.02	-0.16	-17.75	16.463	411.58
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	11.60	7.49	2.323	58.07
39.00	60.0		kip-ft	2872.20	687.66	628.62	3.475	86.88
39.00	60.0		kip	380.02	-7.12	-22.35	12.773	319.32
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	11.12	7.31	2.428	60.71
45.50	70.0		kip-ft	2872.20	601.52	557.96	4.070	101.74
45.50	70.0		kip	380.02	-14.08	-26.95	10.343	258.58
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	9.73	6.49	2.901	72.52
51.50	79.2		kip-ft	2275.26	470.72	447.18	4.035	100.89

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

51.50	79.2	kip	380.02	-20.82	-31.20	8.727	218.17
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	7.15	2.542	63.54
52.00	80.0	kip-ft	2275.26	457.54	435.50	4.174	104.35
52.00	80.0	kip	380.02	-21.35	-31.56	8.613	215.32
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	6.96	2.643	66.07
58.50	90.0	kip-ft	2275.26	256.44	249.51	8.091	202.28
58.50	90.0	kip	380.02	-28.16	-36.16	7.335	183.39
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	3.99	5.484	137.11
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	2475.00
65.00	100.0	kip	380.02	-34.97	-40.76	6.346	158.66
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	2475.00

Detailed Rating Results
Interior Girder
Type 3-3
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location							Legal Rating	Legal Load Rating
(ft)	Percent	Limit State	Units	Capacity	DL + Adj-LL*	LL	Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	3960.00
0.00	0.0		kip	380.02	34.97	46.57	5.555	222.20
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3960.00
6.50	10.0		kip-ft	2275.26	256.44	270.53	7.463	298.50
6.50	10.0		kip	380.02	28.16	39.21	6.766	270.63
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	4.32	5.058	202.34
13.00	20.0		kip-ft	2275.26	457.54	447.23	4.064	162.58
13.00	20.0		kip	380.02	21.35	32.18	8.446	337.85
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	7.15	2.573	102.93
13.50	20.8		kip-ft	2275.26	470.72	458.41	3.936	157.46
13.50	20.8		kip	380.02	20.82	31.70	8.590	343.61
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	7.33	2.479	99.18
19.50	30.0		kip-ft	2872.20	601.52	561.58	4.043	161.74
19.50	30.0		kip	380.02	14.08	25.92	10.756	430.23
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	6.53	2.882	115.29
26.00	40.0		kip-ft	2872.20	687.66	605.16	3.610	144.39

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

26.00	40.0	kip	380.02	7.12	19.66	14.521	580.85
26.00	40.0	ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0	ksi	34.20	11.12	7.04	2.522	100.90
32.50	50.0	kip-ft	2872.20	717.22	634.29	3.397	135.90
32.50	50.0	kip	380.02	-0.16	-14.93	19.571	782.85
32.50	50.0	ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0	ksi	34.20	11.60	7.38	2.357	94.27
39.00	60.0	kip-ft	2872.20	687.66	605.16	3.610	144.39
39.00	60.0	kip	380.02	-7.12	-19.66	14.521	580.85
39.00	60.0	ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0	ksi	34.20	11.12	7.04	2.522	100.90
45.50	70.0	kip-ft	2872.20	601.52	561.58	4.043	161.74
45.50	70.0	kip	380.02	-14.08	-25.92	10.756	430.23
45.50	70.0	ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0	ksi	34.20	9.73	6.53	2.882	115.29
51.50	79.2	kip-ft	2275.26	470.72	458.41	3.936	157.46
51.50	79.2	kip	380.02	-20.82	-31.70	8.590	343.61
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	7.33	2.479	99.18
52.00	80.0	kip-ft	2275.26	457.54	447.23	4.064	162.58
52.00	80.0	kip	380.02	-21.35	-32.18	8.446	337.85
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	7.15	2.573	102.93
58.50	90.0	kip-ft	2275.26	256.44	270.53	7.463	298.50
58.50	90.0	kip	380.02	-28.16	-39.21	6.766	270.63
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	4.32	5.058	202.34
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	3960.00
65.00	100.0	kip	380.02	-34.97	-46.57	5.555	222.20
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3960.00

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

Detailed Rating Results
Interior Girder
Type 3S2
Axle Load
Impact: As Requested
Lane: As Requested

Span 1

Location		Limit State	Units	Capacity	DL + Adj-LL*	LL	Legal Rating	Legal Load Rating
(ft)	Percent						Factor	(Ton)
0.00	0.0		kip-ft	2275.26	0.00	0.00	99.000	3564.00
0.00	0.0		kip	380.02	34.97	47.31	5.469	196.87
0.00	0.0		ksi	0.00	0.00	0.00	99.000	NaN
0.00	0.0		ksi	-34.20	0.00	0.00	99.000	3564.00
6.50	10.0		kip-ft	2275.26	256.44	280.69	7.192	258.92
6.50	10.0		kip	380.02	28.16	40.68	6.521	234.74
6.50	10.0		ksi	0.00	0.00	0.00	99.000	NaN
6.50	10.0		ksi	34.20	5.76	4.49	4.875	175.51
13.00	20.0		kip-ft	2275.26	457.54	469.90	3.868	139.26
13.00	20.0		kip	380.02	21.35	34.05	7.982	287.37
13.00	20.0		ksi	0.00	0.00	0.00	99.000	NaN
13.00	20.0		ksi	34.20	10.28	7.51	2.449	88.17
13.50	20.8		kip-ft	2275.26	470.72	480.67	3.754	135.15
13.50	20.8		kip	380.02	20.82	33.54	8.119	292.28
13.50	20.8		ksi	0.00	0.00	0.00	99.000	NaN
13.50	20.8		ksi	34.20	10.58	7.68	2.365	85.13
19.50	30.0		kip-ft	2872.20	601.52	612.59	3.707	133.44
19.50	30.0		kip	380.02	14.08	27.42	10.167	366.00
19.50	30.0		ksi	0.00	0.00	0.00	99.000	NaN
19.50	30.0		ksi	34.20	9.73	7.13	2.642	95.12
26.00	40.0		kip-ft	2872.20	687.66	682.57	3.200	115.22
26.00	40.0		kip	380.02	7.12	21.08	13.545	487.63
26.00	40.0		ksi	0.00	0.00	0.00	99.000	NaN
26.00	40.0		ksi	34.20	11.12	7.94	2.236	80.51
32.50	50.0		kip-ft	2872.20	717.22	676.31	3.186	114.71
32.50	50.0		kip	380.02	-0.16	-15.37	19.012	684.44
32.50	50.0		ksi	0.00	0.00	0.00	99.000	NaN
32.50	50.0		ksi	34.20	11.60	7.87	2.210	79.57
39.00	60.0		kip-ft	2872.20	687.66	682.57	3.200	115.22
39.00	60.0		kip	380.02	-7.12	-21.08	13.545	487.63
39.00	60.0		ksi	0.00	0.00	0.00	99.000	NaN
39.00	60.0		ksi	34.20	11.12	7.94	2.236	80.51
45.50	70.0		kip-ft	2872.20	601.52	612.59	3.707	133.44
45.50	70.0		kip	380.02	-14.08	-27.42	10.167	366.00
45.50	70.0		ksi	0.00	0.00	0.00	99.000	NaN
45.50	70.0		ksi	34.20	9.73	7.13	2.642	95.12
51.50	79.2		kip-ft	2275.26	470.72	480.67	3.754	135.15

STL12 – Rating of the MBE Example A1 using BrDR 7.5.0

51.50	79.2	kip	380.02	-20.82	-33.54	8.119	292.28
51.50	79.2	ksi	0.00	0.00	0.00	99.000	NaN
51.50	79.2	ksi	34.20	10.58	7.68	2.365	85.13
52.00	80.0	kip-ft	2275.26	457.54	469.90	3.868	139.26
52.00	80.0	kip	380.02	-21.35	-34.05	7.982	287.37
52.00	80.0	ksi	0.00	0.00	0.00	99.000	NaN
52.00	80.0	ksi	34.20	10.28	7.51	2.449	88.17
58.50	90.0	kip-ft	2275.26	256.44	280.69	7.192	258.92
58.50	90.0	kip	380.02	-28.16	-40.68	6.521	234.74
58.50	90.0	ksi	0.00	0.00	0.00	99.000	NaN
58.50	90.0	ksi	34.20	5.76	4.49	4.875	175.51
65.00	100.0	kip-ft	2275.26	0.00	0.00	99.000	3564.00
65.00	100.0	kip	380.02	-34.97	-47.31	5.469	196.87
65.00	100.0	ksi	0.00	0.00	0.00	99.000	NaN
65.00	100.0	ksi	-34.20	0.00	0.00	99.000	3564.00

Note:

*Adj-LL is only applicable for Permit load rating.