

# **Load Ratings for Standard Bridges**

Iowa Highway Research Board  
Project HR-239



Iowa Department  
of Transportation

Highway Division  
October 1982

The Iowa Department of Transportation assumes no responsibility for the improper use and/or application of these load ratings for Standard bridges.

ENGINEERING STUDY  
IOWA HIGHWAY RESEARCH BOARD  
PROJECT HR-239

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LOAD RATINGS FOR STANDARD BRIDGES

HIGHWAY DIVISION  
IOWA DEPARTMENT OF TRANSPORTATION  
AMES, IOWA 50010

OCTOBER 1982

## TABLE OF CONTENTS

Acknowledgement	1
Explanation of Load Ratings	2
Summary Ratings	
H Series	6
I Series	16
J Series	17
S Series	28
T Series	29
U Series	30
V Series	32
W Series	81
X Series	82
Y Series	83
Z Series	84

## ACKNOWLEDGEMENT

Project HR-239 was sponsored by the Iowa Highway Research Board and the Highway Division of the Iowa Department of Transportation. The Iowa Highway Research Board approved the expenditure of \$80,000 from the Secondary Road Research Fund to conduct the engineering study.

## Load Ratings for Standard Bridges - Rating Summaries

The load ratings for these Standard bridges were calculated in compliance with the 1978 AASHTO Manual for Maintenance Inspection of Bridges, using the appropriate allowable stresses for the materials specified by the Standard plans. (see page 4) Distribution of loads is in compliance with the Manual unless otherwise noted. Except for truss spans, all bridges with roadway widths of 18 ft. or less were rated for one lane of traffic. All 18 ft. roadway truss bridges were rated for both one and two lanes of traffic. All bridges with roadway widths exceeding 18 ft. were rated for two lanes of traffic. If the posting rating for two lane bridges was less than legal, then the bridges were rated for traffic restricted to one lane, or to one lane centered in the roadway, as noted on the summary sheet.

The ratings are applicable to bridges built in accordance with the standard plans and which exhibit no significant deterioration or damage to the structural members, and which have no added wearing surface material in excess of that noted on the summary sheets and used in the calculations.

The inventory and operating ratings were based upon the standard AASHTO HS20-44 loading. The legal load ratings were based upon the three typical Iowa legal vehicles shown on page 5. The legal load ratings were based upon the maximum allowable Operating Rating stresses specified in the Manual.

Refer to notations on the summary sheets for additional qualifications on the load ratings for specific standard bridge series. Load ratings for standard bridges with wood floors must be based upon existing conditions of attachment of the wood flooring to the top flanges of longitudinal steel stringers. The ratings must be re-evaluated if the existing lateral support conditions are not in accordance with conditions used for the rating and noted on the summary sheets.

Details of most of the standard bridges are included in the three books of "Iowa State Highway Commission, Bridge Standards," issued in June, 1972. Copies of plans for those standard bridges that were rated, and that are not included in the original books of standard plans, are being furnished under separate cover with these rating summaries.

The proper use and application of these bridge ratings requires the due consideration and evaluation, by a qualified Engineer, of all relevant factors affecting these ratings. Anyone utilizing these bridge ratings, or any portion thereof, assumes sole responsibility for the proper use and application of these bridge ratings.

TABLE OF ALLOWABLE STRESSES  
FOR  
RATING OF IOWA COUNTY BRIDGE STANDARDS

Material	Year of Standard Issue	F <sub>y</sub> or F' <sub>c</sub> (psi)	(4) Allowable Stress (psi)		
			Type of Rating		
			Inventory	Operating	Posting
Structrual Steel	Before - 1905	26,000	(1) 14,300	(1) 19,500	(1) 19,500
	1905 - 1936	30,000	16,500	22,500	22,500
	1937 - 1962	33,000	18,150	24,750	24,750
	1963 - Present	36,000	20,000	27,000	27,000
(5) Reinforcing Steel	Before - 1905	26,000	(2) 14,300	(2) 19,500	(2) 19,500
	1905 - 1944	33,000	18,150	24,750	24,750
	1945 - Present	40,000	20,000	28,000	28,000
(6) Concrete	Before - 1960	3,000	(3) 1,200	(3) 1,650	(3) 1,650
	1960 - Present	3,500	1,400	1,925	1,925

- (1) Axial tension, net section. Tension in extreme fiber of section subject to bending.
- (2) Axial tension.
- (3) Compression due to bending.
- (4) Refer to applicable AASHTO Specifications for allowable stresses not shown.
- (5) Pre-stressing strand for H-10, H-11, H-12, and H-13 standards:  $f'_s=250,000$  psi.
- (6) Concrete for prestressed beams for H-10, H-11, H-12 and H-13 standards:  $f'_c=5000$  psi. The allowable compressive stress in the prestressed beam concrete at the interface of the beam flange and the concrete deck shall be 2,250 psi, for Inventory Rating.



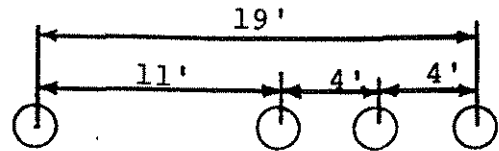
TYPICAL IOWA LEGAL TRUCK TYPES

WHEEL AND AXLE LOADS  
SHOWN ARE IN KIPS.

STRAIGHT TRUCK (Type 4)

Total Wt.=54.5 Kips (27.25 Tons)

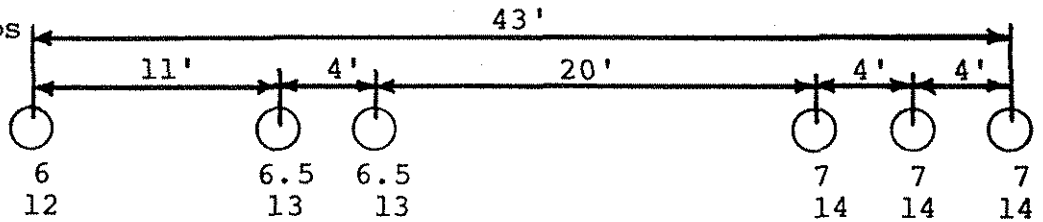
Wheel:	6.25	7	7	7
Axle:	12.5	14	14	14



TRUCK + SEMI-TRAILER (Type 3S3)

Total Wt.= 80 Kips  
(40 Tons)

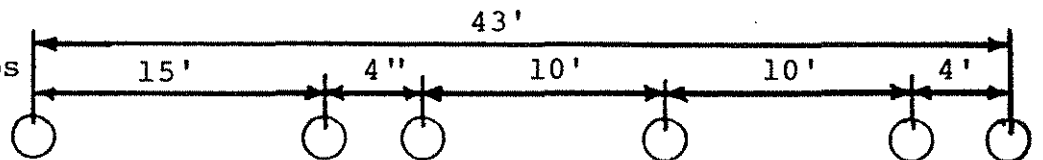
Wheel:	6	6.5	6.5	7	7	7
Axle:	12	13	13	14	14	14



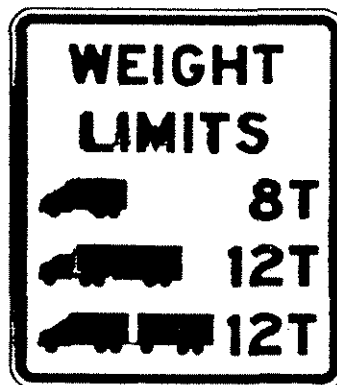
TRUCK + TRAILER (Type 3-3)

Total Wt.= 80 Kips  
(40 Tons)

Wheel:	7.25	6	6	6.75	7	7
Axle:	14.5	12	12	13.5	14	14



TYPICAL POSTING SIGN



H1 STANDARD ISSUED 1916

NOTE: Ratings are calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans.

16' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
24'	HS 17.0	HS 27.7	LEGAL	LEGAL	LEGAL	24'
26'	HS 14.8	HS 24.8	LEGAL	LEGAL	LEGAL	26'
28'	HS 15.3	HS 25.8	LEGAL	LEGAL	LEGAL	28'
30'	HS 14.4	HS 25.0	LEGAL	LEGAL	LEGAL	30'
32'	HS 14.7	HS 25.6	LEGAL	LEGAL	LEGAL	32'
34'	HS 16.1	HS 27.8	LEGAL	LEGAL	LEGAL	34'
36'	HS 15.0	HS 26.6	LEGAL	LEGAL	LEGAL	36'
38'	HS 14.2	HS 25.8	LEGAL	LEGAL	LEGAL	38'
40'	HS 15.0	HS 27.2	LEGAL	LEGAL	LEGAL	40'

H1 STANDARD ISSUED 1916

NOTE: Ratings are calculated using a 1/2" integral wearing surface deducted from the slab.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
24'	HS 15.0	HS 24.6	LEGAL	LEGAL	LEGAL	24'
26'	HS 13.0	HS 22.1	LEGAL	LEGAL	LEGAL	26'
28'	HS 13.4	HS 22.9	LEGAL	LEGAL	LEGAL	28'
30'	HS 12.7	HS 22.2	LEGAL	LEGAL	LEGAL	30'
32'	HS 12.9	HS 22.7	LEGAL	LEGAL	LEGAL	32'
34'	HS 14.1	HS 24.7	LEGAL	LEGAL	LEGAL	34'
36'	HS 13.1	HS 23.6	LEGAL	LEGAL	LEGAL	36'
38'	HS 12.4	HS 22.8	LEGAL	LEGAL	LEGAL	38'
40'	HS 13.1	HS 24.1	LEGAL	LEGAL	LEGAL	40'

H1 STANDARD ISSUED 1916

NOTE: Ratings are calculated using a 1/2" integral wearing surface deducted from the slab.

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
24'	HS 12.6	HS 21.6	LEGAL	LEGAL	LEGAL	24'
26'	HS 10.6	HS 19.2	LEGAL	LEGAL	LEGAL	26'
28'	HS 11.0	HS 20.0	LEGAL	LEGAL	LEGAL	28'
30'	HS 10.3	HS 19.2	LEGAL	LEGAL	LEGAL	30'
32'	HS 10.5	HS 19.7	LEGAL	LEGAL	LEGAL	32'
34'	HS 11.6	HS 21.4	LEGAL	LEGAL	LEGAL	34'
36'	HS 10.5	HS 20.3	LEGAL	LEGAL	LEGAL	36'
38'	HS 9.8	HS 19.4	LEGAL	LEGAL	LEGAL	38'
40'	HS 10.3	HS 20.5	LEGAL	LEGAL	LEGAL	40'

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H1 STANDARD ISSUED 1952

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NOTE: Ratings are calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam section.

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
42'-6"	HS 3.7	HS 17.6	LEGAL	LEGAL	LEGAL	42'-6"
55'-0"	HS 0.6	HS 17.6	LEGAL	LEGAL	LEGAL	55'-0"
67'-6"	HS 0.0	HS 17.6	LEGAL	LEGAL	LEGAL	67'-6"

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H1A STANDARD ISSUED 1928

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NOTE: Ratings are calculated using a 1" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam section.

24' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
24'	HS 27.5	HS 41.7	LEGAL	LEGAL	LEGAL	24'
28'	HS 24.9	HS 38.6	LEGAL	LEGAL	LEGAL	28'
32'	HS 22.5	HS 35.7	LEGAL	LEGAL	LEGAL	32'
36'	HS 20.8	HS 33.8	LEGAL	LEGAL	LEGAL	36'
40'	HS 21.1	HS 34.7	LEGAL	LEGAL	LEGAL	40'
44'	HS 20.8	HS 34.9	LEGAL	LEGAL	LEGAL	44'

H2 STANDARD ISSUED 1952

NOTE: Ratings are calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam section.

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
150'-0"	HS 7.0	HS 17.0	26.4*	LEGAL	LEGAL	150'-0"
175'-0"	HS 5.7	HS 17.9	LEGAL	LEGAL	LEGAL	175'-0"
200'-0"	HS 5.3	HS 19.5	LEGAL	LEGAL	LEGAL	200'-0"
250'-0"	HS 0.9	HS 20.4	LEGAL	LEGAL	LEGAL	250'-0"

\*Legal with one lane of traffic.

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H10 STANDARD ISSUED 1954

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NOTE: Ratings apply to 20' and 24' roadway widths.

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
30'-0"	HS 24.6	HS 35.2	LEGAL	LEGAL	LEGAL	30'-0"
42'-6"	HS 15.4	HS 30.3	LEGAL	LEGAL	LEGAL	42'-6"



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H11 STANDARD ISSUED 1958

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NOTE: Ratings apply to 20' and 24' roadway widths.

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
30'-0"	HS 19.8	HS 26.6	LEGAL	LEGAL	LEGAL	30'-0"
42'-6"	HS 14.9	HS 23.1	LEGAL	LEGAL	LEGAL	42'-6"
55'-0" (a)	HS 10.5	HS 23.2	LEGAL	LEGAL	LEGAL	55'-0" (a)
55'-0" (b)	HS 14.6	HS 24.2	LEGAL	LEGAL	LEGAL	55'-0" (b)
67'-6"	HS 11.1	HS 25.1	LEGAL	LEGAL	LEGAL	67'-6"

H12 STANDARD ISSUED 1960

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
30'-0"	HS 25.5	HS 34.3	LEGAL	LEGAL	LEGAL	30'-0"
42'-6"	HS 21.6	HS 32.5	LEGAL	LEGAL	LEGAL	42'-6"
55'-0" (a)	HS 16.6	HS 33.0	LEGAL	LEGAL	LEGAL	55'-0" (a)
55'-0" (b)	HS 20.7	HS 32.9	LEGAL	LEGAL	LEGAL	55'-0" (b)
67'-6" (a)	HS 16.3	HS 33.6	LEGAL	LEGAL	LEGAL	67'-6" (a)
67'-6" (b)	HS 19.0	HS 33.3	LEGAL	LEGAL	LEGAL	67'-6" (b)
80'-0"	HS 15.9	HS 35.8	LEGAL	LEGAL	LEGAL	80'-0"

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 H13 STANDARD ISSUED 1960  
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BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
30'-0"	HS 20.9	HS 27.4	LEGAL	LEGAL	LEGAL	30'-0"
42'-6"	HS 16.2	HS 25.8	LEGAL	LEGAL	LEGAL	42'-6"
55'-0" (a)	HS 11.5	HS 26.0	LEGAL	LEGAL	LEGAL	55'-0" (a)
55'-0" (b)	HS 15.0	HS 25.7	LEGAL	LEGAL	LEGAL	55'-0" (b)
67'-6" (a)	HS 11.0	HS 26.1	LEGAL	LEGAL	LEGAL	67'-6" (a)
67'-6" (b)	HS 13.3	HS 25.7	LEGAL	LEGAL	LEGAL	67'-6" (b)
80'-0"	HS 10.3	HS 27.5	LEGAL	LEGAL	LEGAL	80'-0"

I STANDARD ISSUED 1919

NOTE: Ratings are calculated with 3" of earth fill (30 psf).

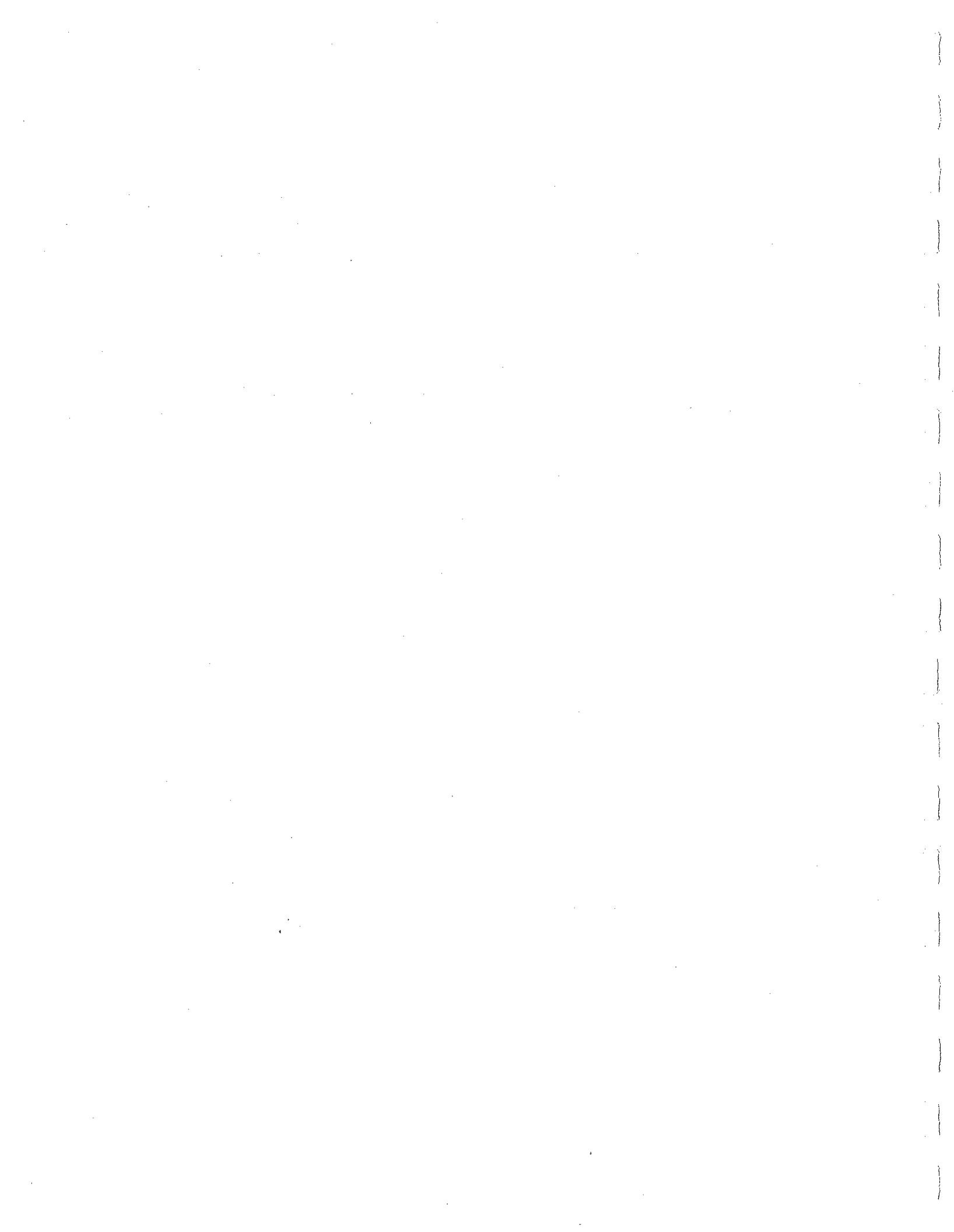
18' NOMINAL ROADWAY WIDTH

STANDARD	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
I-1	HS 13.4	HS 21.2	LEGAL	LEGAL	LEGAL	24'
I-3	HS 12.9	HS 20.3	LEGAL	LEGAL	LEGAL	26'
I-5	HS 12.8	HS 19.5	LEGAL	LEGAL	LEGAL	28'
I-7	HS 12.9	HS 20.2	LEGAL	LEGAL	LEGAL	30'
I-9	HS 12.5	HS 20.5	LEGAL	LEGAL	LEGAL	32'
I-11	HS 13.1	HS 20.1	LEGAL	LEGAL	LEGAL	34'
I-13	HS 12.6	HS 20.2	LEGAL	LEGAL	LEGAL	36'
I-15	HS 12.5	HS 20.2	LEGAL	LEGAL	LEGAL	38'
I-17	HS 12.7	HS 19.4	LEGAL	LEGAL	LEGAL	40'
I-19	HS 12.2	HS 20.2	LEGAL	LEGAL	LEGAL	42'

20' NOMINAL ROADWAY WIDTH

STANDARD	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
I-2	HS 8.4	HS 13.9	21.0*	30.8*	LEGAL	24'
I-4	HS 8.1	HS 12.9	21.6*	31.7*	LEGAL	26'
I-6	HS 8.1	HS 13.0	21.0*	30.8*	LEGAL	28'
I-8	HS 8.1	HS 13.2	20.6*	30.3*	LEGAL	30'
I-10	HS 7.8	HS 13.0	19.7*	29.0*	39.0*	32'
I-12	HS 8.0	HS 13.5	19.8*	29.1*	39.4*	34'
I-14	HS 7.8	HS 12.8	20.3*	29.9*	39.5*	36'
I-16	HS 7.8	HS 12.9	20.0*	29.4*	39.2*	38'
I-18	HS 7.9	HS 13.0	19.7*	28.9*	38.8*	40'
I-20	HS 7.8	HS 13.1	19.5*	28.6*	38.8*	42'

\*Legal with one lane of traffic.



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 J1 STANDARD ISSUED 1915  
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NOTE: Ratings are calculated with 3" of earth fill (30 psf).

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
14'	HS 14.2	HS 21.9	LEGAL	LEGAL	LEGAL	14'
16'	HS 16.2	HS 25.5	LEGAL	LEGAL	LEGAL	16'
18'	HS 17.1	HS 27.4	LEGAL	LEGAL	LEGAL	18'
20'	HS 18.8	HS 30.8	LEGAL	LEGAL	LEGAL	20'
22'	HS 22.0	HS 36.3	LEGAL	LEGAL	LEGAL	22'
24'	HS 21.5	HS 36.5	LEGAL	LEGAL	LEGAL	24'

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J1A STANDARD ISSUED 1927

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NOTE: Ratings were calculated using 1" integral wearing surface deducted from the slab as shown on the standard plans.

24' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 21.5	HS 32.9	LEGAL	LEGAL	LEGAL	16'
20'	HS 22.6	HS 36.1	LEGAL	LEGAL	LEGAL	20'
24'	HS 23.9	HS 39.9	LEGAL	LEGAL	LEGAL	24'

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 J1B STANDARD ISSUED 1927  
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NOTE: Ratings were calculated using 1" integral wearing surface deducted from the slab as shown on the standard plans.

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 17.1	HS 26.7	LEGAL	LEGAL	LEGAL	16'
20'	HS 18.2	HS 29.9	LEGAL	LEGAL	LEGAL	20'
24'	HS 18.7	HS 32.3	LEGAL	LEGAL	LEGAL	24'



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J2 STANDARD ISSUED 1950

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NOTE: Ratings are calculated with 3" of earth fill (30 psf).

24' NOMINAL ROADWAY WIDTH

BRIDGE			LEGAL LOADS IN TONS			BRIDGE
SPAN	INVENTORY	OPERATING	TYPE 4	TYPE 3S3	TYPE 3-3	SPAN
<u>18'</u>	<u>HS 13.4</u>	<u>HS 22.1</u>	<u>LEGAL</u>	<u>LEGAL</u>	<u>LEGAL</u>	<u>18'</u>

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J3 STANDARD ISSUED 1952

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NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans.

20' NOMINAL ROADWAY WIDTH

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
23'-9"	HS 10.3	HS 18.1	24.3	35.7	LEGAL	23'-9"
30'-0"	HS 9.4	HS 18.4	26.8	LEGAL	LEGAL	30'-0"

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J3A STANDARD ISSUED 1960

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NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans.

20' NOMINAL ROADWAY WIDTH

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
24'-0"	HS 10.6	HS 19.2	25.7	37.7	LEGAL	24'-0"
30'-0"	HS 10.1	HS 20.1	LEGAL	LEGAL	LEGAL	30'-0"

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J4 STANDARD ISSUED 1952

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NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans.

20' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
75'	HS 12.0	HS 19.2	LEGAL	LEGAL	LEGAL	75'
100'	HS 8.7	HS 17.0	25.4	LEGAL	LEGAL	100'
125'	HS 6.1	HS 18.4	LEGAL	LEGAL	LEGAL	125'

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J4A STANDARD ISSUED 1960

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NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans.

20' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
75'	HS 12.2	HS 19.5	LEGAL	LEGAL	LEGAL	75'
100'	HS 9.8	HS 17.2	25.7	LEGAL	LEGAL	100'
125'	HS 9.6	HS 18.6	LEGAL	LEGAL	LEGAL	125'

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J5 STANDARD ISSUED 1957

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NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans.

24' NOMINAL ROADWAY WIDTH

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
24'-0"	HS 11.1	HS 19.2	25.7	37.7	LEGAL	24'-0"
30'-0"	HS 10.5	HS 20.0	LEGAL	LEGAL	LEGAL	30'-0"

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J6 STANDARD ISSUED 1957

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NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans.

24' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
75'	HS 13.7	HS 20.9	LEGAL	LEGAL	LEGAL	75'
100'	HS 10.3	HS 19.6	LEGAL	LEGAL	LEGAL	100'
125'	HS 6.4	HS 19.5	LEGAL	LEGAL	LEGAL	125'

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 J10 STANDARD ISSUED 1954  
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NOTE: Ratings were calculated using a 1/4" integral wearing surface deducted from the slab as shown on the standard plans.

20'-9" NOMINAL ROADWAY WIDTH

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
18'	HS 10.9	HS 16.5	24.3*	35.7*	LEGAL	18'
24'	HS 12.2	HS 18.8	25.2*	37.0*	LEGAL	24'
30'	HS 8.2	HS 13.4	19.5*	29.2*	34.9*	30'

\*Legal with one lane of traffic.

24' NOMINAL ROADWAY WIDTH

BRIDGE SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
18'	HS 12.4	HS 18.8	LEGAL	LEGAL	LEGAL	18'
24'	HS 13.6	HS 21.0	LEGAL	LEGAL	LEGAL	24'
30'	HS 9.1	HS 14.9	21.7*	32.5*	38.7*	30'

\*Legal with one lane of traffic.



RATING SUMMARY

Bridge Standard: S Series

Date Issued: June 1925 (S1 thru S6 - These plans not available.)  
 March 1930 (S8 - Plans available.)

Dates Revised: 1928 and 1931 (Plans available.)

St'd No.	Span Length ft.	Roadway Width ft.	Rating (2) (HS)		Legal Capacity, Tons <sup>(1)</sup>		
					Truck Types		
					4	3S3	3-3
S1	100	20	15.7	24.1	L	L	L
S2	110	20	15.0	22.4	L	L	L
S3	120	20	15.7	23.4	L	L	L
S4	130	20	15.4	22.9	L	L	L
S5	140	20	15.7	23.3	L	L	L
S6	150	20	16.3	24.4	L	L	L
S8	160	20	15.6	23.2	L	L	L

(1) L = Legal

(2) Does not include any allowance for a "future wearing surface" as noted in the standard plan.  
 The minimum calculated rating for 1928 or 1931 revisions is shown. Plans for the 1928 revisions are included with these ratings.

### RATING SUMMARY

Bridge Standard: T Series (T1 thru T14)

Date of Issue: 1915 - 1917

St'd No.	Span Length	Roadway Width	Rating (1) (HS)		Legal Capacity, Tons <sup>(1)</sup>					
					Truck Types			One Lane <sup>(2)</sup>		
					Truck Type			Truck Type		
					4	3S3	3-3	4	3S3	3-3
T1	90	16	9.9	16.0	24	35	L			
T2	90	18	5.7	9.2	14	20	27	24	36	L
T3	100	16	11.3	18.2	L	L	L			
T4	100	18	6.8	10.6	16	24	32	L	L	L
T5	110	16	9.5	15.5	23	33	36			
T6	110	18	5.5	8.9	13	19	26	23	34	L
T7	120	16	11.1	17.5	26	39	L			
T8	120	18	6.4	10.0	15	22	30	L	L	L
T9	130	16	11.1	18.7	L	L	L			
T10	130	18	8.2	12.7	18	27	37	L	L	L
T11	140	16	10.6	16.8	25	37	L			
T12	140	18	6.1	9.7	14	21	29	26	38	L
T13	150	16	11.0	18.1	L	38	38			
T14	150	18	8.1	12.5	18	27	30	L	L	L

(1) Includes allowance of 30 psf for the 3 in. earth fill as detailed on the standard plans. (L = LEGAL) Live Loads were assumed to be supported by the interior stringers only.

(2) Legal load capacity if traffic is restricted to one lane. (16 ft. roadway bridges are considered one lane bridges.)

### RATING SUMMARY

Bridge Standard: U Series (U1 thru U9)

Date of Issue: 1928 (Including 1929 and 1931 revisions.)

St'd No.	Span Length ft.	Floor Type	Rating (1) (HS)		Legal Capacity, Tons <sup>(1)</sup>					
					Truck Types			One Lane <sup>(2)</sup>		
					4	3S3	3-3	4	3S3	3-3
U1	50	Concrete	10.7	17.9	L	L	L			
		Wood	10.5	14.6	L	L	L			
U2	60	Concrete	7.4	13.4	23	33	34	L	L	L
		Wood	10.5	14.6	L	L	L			
U3	70	Concrete	11.2	17.9	L	39	L	L	L	L
		Wood	10.5	14.6	L	L	L			
U4	80	Concrete	9.2	17.1	L	37	38	L	L	L
		Wood	10.5	14.6	L	L	L			
U5	90	Concrete	10.0	18.9	L	L	L			
		Wood	10.5	14.6	L	L	L			
U6	108	Concrete	8.4	14.1	21	32	38	L	L	L
		Wood	13.7	19.4	L	L	L			
U7	126	Concrete	8.4	14.1	21	32	38	L	L	L
		Wood	13.7	19.4	L	L	L			
U8	144	Concrete	8.4	14.1	21	32	38	L	L	L
		Wood	13.7	19.4	L	L	L			
U9	162	Concrete	8.4	14.1	21	32	38	L	L	L
		Wood	13.7	19.4	L	L	L			

(1) Does not include an allowance for added wearing surface. L = LEGAL.

(2) Legal load capacity if traffic is restricted to one lane.

### RATING SUMMARY

Bridge Standard: U Series (U1 thru U9)

Date of Issue: 1928 (1937 revision)

St'd No.	Span Length ft.	Floor Type	Rating (1) (HS)		Legal Capacity, Tons <sup>(1)</sup>						
					Truck Types			One Lane <sup>(2)</sup>			
					4	3S3	3-3	4	3S3	3-3	
U1	50	Concrete	12.8	18.8	L	L	L				
		Wood	11.8	16.4	L	L	L				
U2	60	Concrete	9.0	15.6	26	39	39		L	L	L
		Wood	11.8	16.4	L	L	L				
U3	70	Concrete	13.3	18.8	L	L	L				
		Wood	11.8	16.4	L	L	L				
U4	80	Concrete	11.4	18.8	L	L	L				
		Wood	11.8	16.4	L	L	L				
U5	90	Concrete	12.5	18.8	L	L	L				
		Wood	11.8	16.4	L	L	L				
U6	108	Concrete	10.0	16.3	24	37	L		L	L	L
		Wood	15.2	21.5	L	L	L				
U7	126	Concrete	10.0	16.3	24	37	L		L	L	L
		Wood	15.2	21.5	L	L	L				
U8	144	Concrete	11.4	17.4	L	L	L				
		Wood	15.1	21.1	L	L	L				
U9	162	Concrete	11.4	17.4	L	L	L				
		Wood	15.1	21.1	L	L	L				

(1) Does not include an allowance for added wearing surface. L = LEGAL.

(2) Legal load capacity if traffic is restricted to one lane.

V1 STANDARD ISSUED 1915

NOTE: Ratings are calculated with no earth fill and adequate lateral support for the stringers.

16' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 5.5	HS 8.3	12.5*	18.3*	24.3*	16'
18'	HS 6.3	HS 9.5	13.7*	20.1*	27.1*	18'
20'	HS 5.2	HS 8.1	11.2	16.5	21.8*	20'
22'	HS 8.5	HS 12.7	17.1*	25.2*	32.2*	22'
24'	HS 7.0	HS 10.7	14.7*	21.6*	27.0*	24'
26'	HS 5.6	HS 8.9	12.7	18.7	22.8*	26'
28'	HS 11.8	HS 17.4	25.3*	37.7*	LEGAL	28'
30'	HS 10.1	HS 15.2	22.2*	33.7*	39.9*	30'
32'	HS 8.7	HS 13.3	19.6*	30.2*	35.4*	32'

\*Legal with one lane of traffic centered on bridge.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 5.6	HS 8.5	12.7*	18.7*	24.8*	16'
18'	HS 6.4	HS 9.7	14.0*	20.5*	27.7*	18'
20'	HS 5.3	HS 8.3	11.5	16.9	22.4*	20'
22'	HS 8.7	HS 13.0	17.5*	25.8*	32.9*	22'
24'	HS 7.2	HS 11.0	15.1*	22.2*	27.6*	24'
26'	HS 5.8	HS 9.1	13.0*	19.2*	23.4*	26'
28'	HS 12.1	HS 17.9	26.0*	38.6*	LEGAL	28'
30'	HS 10.4	HS 15.6	22.8*	34.6*	LEGAL	30'
32'	HS 9.0	HS 13.7	20.1*	31.0*	36.3*	32'

\*Legal with one lane of traffic centered on bridge.

V1 STANDARD ISSUED 1915

NOTE: Ratings are calculated with no earth fill and adequate lateral support for the stringers.

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 5.7	HS 8.6	12.9*	19.0*	25.2*	16'
18'	HS 6.6	HS 9.9	14.2*	20.9*	28.2*	18'
20'	HS 5.4	HS 8.4	11.7*	17.2*	22.7*	20'
22'	HS 8.8	HS 13.2	17.8*	26.2*	33.4*	22'
24'	HS 7.3	HS 11.1	15.3*	22.5*	28.1*	24'
26'	HS 5.9	HS 9.3	13.3*	19.5*	23.8*	26'
28'	HS 12.3	HS 18.1	26.4*	39.2*	LEGAL	28'
30'	HS 10.6	HS 15.8	23.1*	35.1*	LEGAL	30'
32'	HS 9.1	HS 13.9	20.4*	31.5*	36.9*	32'

\*Legal with one lane of traffic centered on bridge.

V1A STANDARD ISSUED 1928

NOTE: Ratings are calculated with no addition for future wearing surface and adequate lateral support for the stringers.

20' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.9	HS 20.4	LEGAL	LEGAL	LEGAL	16'
20'	HS 14.0	HS 21.3	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.5	HS 21.1	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.5	HS 20.3	LEGAL	LEGAL	LEGAL	28'
32'	HS 11.9	HS 19.8	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.3	HS 19.0	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.7	HS 18.5	LEGAL	LEGAL	LEGAL	40'

VIA STANDARD REVISED 1931

NOTE: Ratings are calculated with no addition for future wearing surface and adequate lateral support for the stringers.

20' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.9	HS 20.4	LEGAL	LEGAL	LEGAL	16'
20'	HS 14.1	HS 21.3	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.5	HS 21.1	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.5	HS 20.3	LEGAL	LEGAL	LEGAL	28'
32'	HS 12.2	HS 20.1	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.5	HS 19.2	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.6	HS 18.4	LEGAL	LEGAL	LEGAL	40'



V1B STANDARD ISSUED 1928

NOTE: Ratings are calculated with no addition for future wearing surface and adequate lateral support for the stringers.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.3	HS 19.5	LEGAL	LEGAL	LEGAL	16'
20'	HS 13.6	HS 20.4	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.5	HS 20.4	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.8	HS 19.6	LEGAL	LEGAL	LEGAL	28'
32'	HS 12.1	HS 19.2	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.4	HS 18.8	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.8	HS 18.6	LEGAL	LEGAL	LEGAL	40'

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 11.3	HS 17.6	26.3*	38.7*	LEGAL	16'
20'	HS 11.5	HS 18.2	25.2*	37.0*	LEGAL	20'
24'	HS 10.9	HS 17.8	24.6*	36.2*	LEGAL	24'
28'	HS 10.1	HS 16.9	24.5*	36.5*	LEGAL	28'
32'	HS 9.6	HS 16.4	24.1*	37.3*	LEGAL	32'
36'	HS 8.9	HS 15.9	24.0*	38.1*	LEGAL	36'
40'	HS 8.4	HS 15.3	23.7*	38.5*	39.8*	40'

\*Legal with one lane of traffic.

V1B STANDARD REVISED 1931

NOTE: Ratings are calculated with no addition for future wearing surface and adequate lateral support for the stringers.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.3	HS 19.5	LEGAL	LEGAL	LEGAL	16'
20'	HS 13.6	HS 20.4	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.5	HS 20.4	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.8	HS 19.6	LEGAL	LEGAL	LEGAL	28'
32'	HS 12.1	HS 19.2	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.6	HS 19.0	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.8	HS 18.6	LEGAL	LEGAL	LEGAL	40'

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 11.3	HS 17.6	26.3*	38.7*	LEGAL	16'
20'	HS 11.5	HS 18.2	25.2*	37.0*	LEGAL	20'
24'	HS 11.1	HS 18.0	24.9*	36.6*	LEGAL	24'
28'	HS 10.1	HS 16.9	24.5*	36.5*	LEGAL	28'
32'	HS 9.6	HS 16.4	24.1*	37.3*	LEGAL	32'
36'	HS 9.2	HS 16.1	24.3*	38.7*	LEGAL	36'
40'	HS 8.4	HS 15.3	23.7*	38.5*	39.8*	40'

\*Legal with one lane of traffic.

V1B STANDARD REVISED 1934

NOTE: Ratings are calculated with no addition for future wearing surface and adequate lateral support for the stringers.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.1	HS 19.3	LEGAL	LEGAL	LEGAL	16'
20'	HS 13.6	HS 20.2	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.3	HS 20.1	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.6	HS 19.3	LEGAL	LEGAL	LEGAL	28'
32'	HS 12.1	HS 18.9	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.4	HS 18.5	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.7	HS 18.2	LEGAL	LEGAL	LEGAL	40'

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 11.3	HS 17.5	26.2*	38.4*	LEGAL	16'
20'	HS 11.4	HS 18.1	25.0*	36.7*	LEGAL	20'
24'	HS 11.1	HS 17.9	24.7*	36.3*	LEGAL	24'
28'	HS 10.1	HS 16.7	24.3*	36.2*	LEGAL	28'
32'	HS 9.6	HS 16.3	23.9*	36.0*	LEGAL	32'
36'	HS 9.2	HS 15.9	24.0*	38.2*	LEGAL	36'
40'	HS 8.4	HS 15.1	23.4*	38.0*	39.3*	40'

\*Legal with one lane of traffic.

VIC STANDARD ISSUED 1928

NOTE: Ratings are calculated with adequate lateral support for the stringers, a 4 x 12 plank floor, and a 3/4" bituminous mat.

16' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 8.6	HS 12.3	18.8	27.7	36.5	16'
20'	HS 8.5	HS 12.3	17.2	25.2	33.6	20'
24'	HS 8.2	HS 12.0	16.3	24.0	30.1	24'
28'	HS 7.6	HS 11.3	16.4	24.2	29.2	28'
32'	HS 7.1	HS 10.7	15.7	24.2	28.4	32'
36'	HS 6.7	HS 10.2	15.3	24.2	27.6	36'
40'	HS 6.4	HS 9.9	15.3	24.7	25.9	40'

VIC STANDARD REVISED 1931

NOTE: Ratings are calculated with adequate lateral support for the stringers, a 4 x 12 plank floor, and a 3/4" bituminous mat.

16' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 8.6	HS 12.3	18.8	27.7	36.5	16'
20'	HS 8.5	HS 12.3	17.2	25.2	33.6	20'
24'	HS 8.2	HS 12.0	16.3	24.0	30.0	24'
28'	HS 7.6	HS 11.3	16.4	24.2	29.2	28'
32'	HS 7.2	HS 10.8	15.8	24.3	28.5	32'
36'	HS 6.7	HS 10.2	15.3	24.2	27.6	36'
40'	HS 6.4	HS 9.9	15.3	24.7	25.9	40'

VIC STANDARD REVISED 1934

NOTE: Ratings are calculated with adequate lateral support for the stringers, a 4 x 12 plank floor, and a 3/4" bituminous mat.

16' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 8.6	HS 12.3	18.8	27.7	36.5	16'
20'	HS 8.5	HS 12.3	17.2	25.2	33.6	20'
24'	HS 8.2	HS 12.0	16.3	24.0	30.0	24'
28'	HS 7.6	HS 11.3	16.4	24.2	29.2	28'
32'	HS 7.2	HS 10.8	15.8	24.3	28.5	32'
36'	HS 6.7	HS 10.2	15.3	24.2	27.6	36'
40'	HS 6.4	HS 9.9	15.3	24.7	25.9	40'

V2 STANDARD ISSUED 1915

NOTE: Ratings are calculated with adequate lateral support for the stringers.

16' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 9.5	HS 13.2	20.0	29.4	38.8	16'
18'	HS 10.9	HS 15.2	22.0	32.3	LEGAL	18'
20'	HS 9.7	HS 13.6	18.9	27.8	36.8	20'
22'	HS 13.2	HS 18.4	24.9	36.6	LEGAL	22'
24'	HS 11.5	HS 16.2	22.1	32.5	LEGAL	24'
26'	HS 9.8	HS 13.9	19.8	29.1	35.6	26'
28'	HS 14.7	HS 20.6	LEGAL	LEGAL	LEGAL	28'
30'	HS 13.0	HS 18.3	26.7	LEGAL	LEGAL	30'
32'	HS 11.6	HS 16.4	24.1	37.1	LEGAL	32'

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V2B STANDARD ISSUED 1928

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NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.3	HS 19.5	LEGAL	LEGAL	LEGAL	16'
20'	HS 13.7	HS 20.4	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.5	HS 20.5	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.8	HS 19.7	LEGAL	LEGAL	LEGAL	28'
32'	HS 12.1	HS 19.3	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.4	HS 18.8	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.8	HS 18.6	LEGAL	LEGAL	LEGAL	40'



V2B STANDARD REVISED 1931

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.3	HS 19.5	LEGAL	LEGAL	LEGAL	16'
20'	HS 13.7	HS 20.4	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.5	HS 20.5	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.8	HS 19.7	LEGAL	LEGAL	LEGAL	28'
32'	HS 12.1	HS 19.3	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.4	HS 18.8	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.8	HS 18.6	LEGAL	LEGAL	LEGAL	40'

V2B STANDARD REVISED 1934

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.2	HS 19.3	LEGAL	LEGAL	LEGAL	16'
20'	HS 13.6	HS 20.2	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.4	HS 20.2	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.7	HS 19.3	LEGAL	LEGAL	LEGAL	28'
32'	HS 12.2	HS 19.0	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.4	HS 18.5	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.8	HS 18.2	LEGAL	LEGAL	LEGAL	40'

V3 STANDARD ISSUED 1915

NOTE: Ratings are calculated with no earth fill and adequate lateral support for the stringers.

16' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 6.2	HS 11.0	16.5	24.3	32.2*	16'
18'	HS 7.1	HS 12.6	18.1	26.6	36.0*	18'
20'	HS 4.8	HS 9.8	13.6	20.0	26.4	20'
22'	HS 7.9	HS 14.6	19.7*	28.9*	36.9*	22'
24'	HS 5.2	HS 11.2	15.4	22.6	28.2*	24'
26'	HS 3.0	HS 8.2	11.7	17.2	21.0	26'
28'	HS 7.7	HS 15.3	22.2*	33.0*	39.7*	28'
30'	HS 5.3	HS 12.1	17.7*	26.8*	31.7*	30'
32'	HS 3.2	HS 9.4	13.8	21.2	24.9*	32'

\*Legal with one lane of traffic centered on bridge.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 6.6	HS 11.4	17.2	25.3	33.6*	16'
18'	HS 7.5	HS 13.1	18.9	27.7	37.4*	18'
20'	HS 5.2	HS 10.3	14.3	21.0	27.7*	20'
22'	HS 8.3	HS 15.2	20.5*	30.1*	38.5*	22'
24'	HS 5.7	HS 11.7	16.2	23.7	29.6*	24'
26'	HS 3.4	HS 8.7	12.4	18.2	22.3	26'
28'	HS 8.2	HS 16.0	23.2*	34.5*	LEGAL	28'
30'	HS 5.7	HS 12.7	18.5*	28.1*	33.3*	30'
32'	HS 3.6	HS 9.9	14.5	22.5*	26.3*	32'

\*Legal with one lane of traffic centered on bridge.

V3 STANDARD ISSUED 1915

NOTE: Ratings are calculated with no earth fill and adequate lateral support for the stringers.

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY		OPERATING		LEGAL LOADS IN TONS			CLEAR SPAN
					TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS	6.9	HS	11.8	17.8	26.2	34.7*	16'
18'	HS	7.8	HS	13.6	19.5*	28.6*	38.7*	18'
20'	HS	5.5	HS	10.7	14.9	21.8	28.8*	20'
22'	HS	8.7	HS	15.7	21.2*	31.2*	39.8*	22'
24'	HS	6.0	HS	12.2	16.8	24.7	30.7*	24'
26'	HS	3.7	HS	9.1	13.0	19.1	23.3	26'
28'	HS	8.6	HS	16.5	23.9*	35.6*	LEGAL	28'
30'	HS	6.1	HS	13.2	19.2*	29.2*	34.6*	30'
32'	HS	3.9	HS	10.4	15.2*	23.5*	27.5*	32'

\*Legal with one lane of traffic centered on bridge.

V3A STANDARD ISSUED 1928

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

24' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 15.4	HS 23.5	LEGAL	LEGAL	LEGAL	16'
20'	HS 15.4	HS 24.2	LEGAL	LEGAL	LEGAL	20'
24'	HS 14.8	HS 23.8	LEGAL	LEGAL	LEGAL	24'
28'	HS 13.7	HS 22.6	LEGAL	LEGAL	LEGAL	28'
32'	HS 13.0	HS 21.9	LEGAL	LEGAL	LEGAL	32'
36'	HS 12.2	HS 21.0	LEGAL	LEGAL	LEGAL	36'
40'	HS 11.6	HS 20.5	LEGAL	LEGAL	LEGAL	40'

V3A STANDARD REVISED 1931

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

24' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 15.4	HS 23.5	LEGAL	LEGAL	LEGAL	16'
20'	HS 15.4	HS 24.2	LEGAL	LEGAL	LEGAL	20'
24'	HS 14.8	HS 23.8	LEGAL	LEGAL	LEGAL	24'
28'	HS 14.0	HS 23.0	LEGAL	LEGAL	LEGAL	28'
32'	HS 13.2	HS 22.1	LEGAL	LEGAL	LEGAL	32'
36'	HS 12.1	HS 20.9	LEGAL	LEGAL	LEGAL	36'
40'	HS 11.6	HS 20.5	LEGAL	LEGAL	LEGAL	40'

V3A STANDARD ISSUED 1934

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

24' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 15.3	HS 23.2	LEGAL	LEGAL	LEGAL	16'
20'	HS 15.2	HS 23.7	LEGAL	LEGAL	LEGAL	20'
24'	HS 14.6	HS 23.4	LEGAL	LEGAL	LEGAL	24'
28'	HS 13.4	HS 22.0	LEGAL	LEGAL	LEGAL	28'
32'	HS 12.7	HS 21.3	LEGAL	LEGAL	LEGAL	32'
36'	HS 12.0	HS 20.6	LEGAL	LEGAL	LEGAL	36'
40'	HS 11.6	HS 20.3	LEGAL	LEGAL	LEGAL	40'

V3B STANDARD ISSUED 1928

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 10.8	HS 17.0	25.5*	37.4*	LEGAL	16'
20'	HS 10.4	HS 17.1	23.7*	34.8*	LEGAL	20'
24'	HS 9.7	HS 16.6	23.0*	33.7*	LEGAL	24'
28'	HS 8.6	HS 15.4	22.4	33.4*	LEGAL	28'
32'	HS 7.7	HS 14.6	21.4	33.1*	38.7*	32'
36'	HS 7.0	HS 13.9	21.0	33.3*	37.3*	36'
40'	HS 6.4	HS 13.3	20.6	33.5*	34.6*	40'

\*Legal with one lane of traffic centered on bridge.

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 10.0	HS 16.2	24.3*	35.7*	LEGAL	16'
20'	HS 9.7	HS 16.5	22.8*	33.4*	LEGAL	20'
24'	HS 8.9	HS 15.9	21.9*	32.2*	LEGAL	24'
28'	HS 7.9	HS 14.7	21.4*	31.9*	38.3*	28'
32'	HS 7.3	HS 14.2	20.8	32.2*	37.6*	32'
36'	HS 6.6	HS 13.5	20.4	32.5*	36.4*	36'
40'	HS 5.9	HS 12.8	19.9	32.2*	33.3*	40'

\*Legal with one lane of traffic centered on bridge.



V3B STANDARD REVISED 1931

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 10.8	HS 17.0	25.5*	37.4*	LEGAL	16'
20'	HS 10.7	HS 17.4	24.1*	35.4*	LEGAL	20'
24'	HS 9.8	HS 16.7	23.1*	33.9*	LEGAL	24'
28'	HS 8.7	HS 15.5	22.6*	33.7*	LEGAL	28'
32'	HS 8.1	HS 15.0	22.0	34.1*	39.8*	32'
36'	HS 7.2	HS 14.0	21.2	33.7*	37.7*	36'
40'	HS 6.6	HS 13.5	21.0	34.0*	35.2*	40'

\*Legal with one lane of traffic centered on bridge.

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 10.0	HS 16.2	24.3*	35.7*	LEGAL	16'
20'	HS 9.7	HS 16.5	22.8*	33.4*	LEGAL	20'
24'	HS 9.0	HS 16.0	22.0*	32.4*	LEGAL	24'
28'	HS 8.1	HS 14.9	21.6*	32.3*	38.7*	28'
32'	HS 7.4	HS 14.3	21.0	32.4*	37.9*	32'
36'	HS 6.8	HS 13.7	20.7	32.9*	36.8*	36'
40'	HS 6.0	HS 12.9	20.0	32.5*	33.6*	40'

\*Legal with one lane of traffic centered on bridge.

V3B STANDARD REVISED 1934

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 11.9	HS 18.1	LEGAL	39.9*	LEGAL	16'
20'	HS 12.0	HS 18.7	25.9*	38.0*	LEGAL	20'
24'	HS 11.4	HS 18.3	25.1*	36.9*	LEGAL	24'
28'	HS 10.3	HS 17.3	25.1*	37.3*	LEGAL	28'
32'	HS 9.6	HS 17.0	24.9	38.5*	LEGAL	32'
36'	HS 8.5	HS 16.2	24.5	38.8*	LEGAL	36'
40'	HS 7.7	HS 15.8	24.5	39.7*	LEGAL	40'

\*Legal with one lane of traffic centered on bridge.

20' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 10.5	HS 16.8	25.2*	37.1*	LEGAL	16'
20'	HS 10.2	HS 17.0	23.5*	34.6*	LEGAL	20'
24'	HS 9.5	HS 16.5	22.7*	33.3*	LEGAL	24'
28'	HS 8.5	HS 15.4	22.3*	33.2*	39.8*	28'
32'	HS 7.8	HS 14.6	21.5*	33.2*	38.8*	32'
36'	HS 7.2	HS 14.0	21.2	33.7*	37.9*	36'
40'	HS 6.4	HS 13.3	20.5	33.2*	34.5*	40'

\*Legal with one lane of traffic centered on bridge.

V4 STANDARD ISSUED 1915

NOTE: Ratings are calculated with no earth fill and adequate lateral support for the stringers.

16' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 5.2	HS 7.8	11.8	17.4	23.0*	16'
18'	HS 5.9	HS 9.0	12.9*	19.0*	25.7*	18'
20'	HS 4.9	HS 7.7	10.6	15.6	20.6*	20'
22'	HS 8.0	HS 12.1	16.3*	23.9*	30.5*	22'
24'	HS 6.5	HS 10.1	13.9*	20.5*	25.5*	24'
26'	HS 5.3	HS 8.4	12.0	17.6	21.5*	26'
28'	HS 11.1	HS 16.6	24.1*	35.8*	LEGAL	28'
30'	HS 9.5	HS 14.4	21.1*	32.0*	37.8*	30'
32'	HS 8.2	HS 12.6	18.5*	28.6*	33.5*	32'

\*Legal with one lane centered on bridge.

18' NOMINAL ROADWAY WIDTH

CLEAR SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			CLEAR SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 5.3	HS 8.1	12.1*	17.8*	23.6*	16'
18'	HS 6.1	HS 9.2	13.3*	19.5*	26.4*	18'
20'	HS 5.0	HS 7.9	10.9	16.1	21.2*	20'
22'	HS 8.2	HS 12.4	16.7*	24.5*	31.3*	22'
24'	HS 6.8	HS 10.4	14.3*	21.1*	26.2*	24'
26'	HS 5.5	HS 8.7	12.4	18.2	22.2*	26'
28'	HS 11.5	HS 17.0	24.7*	36.7*	LEGAL	28'
30'	HS 9.8	HS 14.8	21.6*	32.8*	38.9*	30'
32'	HS 8.5	HS 13.0	19.1*	29.5*	34.5*	32'

\*Legal with one lane centered on bridge.

V4B STANDARD ISSUED 1928

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH  
WOOD DECK

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 10.8	HS 15.3	22.9	33.6	LEGAL	16'
20'	HS 11.7	HS 16.6	23.0	33.7	LEGAL	20'
24'	HS 11.7	HS 16.8	23.1	34.0	LEGAL	24'
28'	HS 11.4	HS 16.5	23.9	35.6	LEGAL	28'
32'	HS 11.3	HS 16.4	24.1	37.2	LEGAL	32'
36'	HS 11.1	HS 16.2	24.5	38.9	LEGAL	36'
40'	HS 11.1	HS 16.2	25.2	LEGAL	LEGAL	40'

CONCRETE DECK

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 12.1	HS 18.2	LEGAL	LEGAL	LEGAL	16'
20'	HS 12.6	HS 19.4	26.8*	39.4*	LEGAL	20'
24'	HS 12.2	HS 19.1	26.4*	38.8*	LEGAL	24'
28'	HS 11.6	HS 18.5	26.9*	LEGAL	LEGAL	28'
32'	HS 11.3	HS 18.2	26.8*	LEGAL	LEGAL	32'
36'	HS 10.8	HS 17.8	26.9*	LEGAL	LEGAL	36'
40'	HS 10.6	HS 17.7	LEGAL	LEGAL	LEGAL	40'

\*Legal with one lane of traffic centered on bridge.

V4B STANDARD REVISED 1931

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH  
WOOD DECK

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 10.9	HS 15.4	23.1	33.9	LEGAL	16'
20'	HS 11.8	HS 16.7	23.1	34.0	LEGAL	20'
24'	HS 11.7	HS 16.8	23.1	34.0	LEGAL	24'
28'	HS 11.6	HS 16.7	24.2	36.1	LEGAL	28'
32'	HS 11.3	HS 16.4	24.1	37.2	LEGAL	32'
36'	HS 11.1	HS 16.2	24.5	38.9	LEGAL	36'
40'	HS 11.1	HS 16.2	25.2	LEGAL	LEGAL	40'

CONCRETE DECK

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 12.2	HS 18.4	LEGAL	LEGAL	LEGAL	16'
20'	HS 12.8	HS 19.6	27.1*	39.8*	LEGAL	20'
24'	HS 12.2	HS 19.1	26.4*	38.8*	LEGAL	24'
28'	HS 11.9	HS 18.8	LEGAL	LEGAL	LEGAL	28'
32'	HS 11.3	HS 18.2	26.8*	LEGAL	LEGAL	32'
36'	HS 10.8	HS 17.8	26.9*	LEGAL	LEGAL	36'
40'	HS 10.6	HS 17.7	LEGAL	LEGAL	LEGAL	40'

\*Legal with one lane of traffic centered on bridge.

V4B STANDARD REVISED 1934

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH  
WOOD DECK

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 10.8	HS 15.3	22.9	33.7	LEGAL	16'
20'	HS 11.7	HS 16.6	23.0	33.8	LEGAL	20'
24'	HS 11.7	HS 16.8	23.1	34.0	LEGAL	24'
28'	HS 11.6	HS 16.7	24.2	36.1	LEGAL	28'
32'	HS 11.3	HS 16.4	24.1	37.2	LEGAL	32'
36'	HS 11.1	HS 16.2	24.5	38.9	LEGAL	36'
40'	HS 11.1	HS 16.2	25.2	LEGAL	LEGAL	40'

CONCRETE DECK

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 12.1	HS 18.3	LEGAL	LEGAL	LEGAL	16'
20'	HS 12.7	HS 19.4	26.9*	39.5*	LEGAL	20'
24'	HS 12.2	HS 19.1	26.4*	38.8*	LEGAL	24'
28'	HS 11.9	HS 18.8	LEGAL	LEGAL	LEGAL	28'
32'	HS 11.3	HS 18.2	26.8*	LEGAL	LEGAL	32'
36'	HS 10.8	HS 17.8	26.9*	LEGAL	LEGAL	36'
40'	HS 10.6	HS 17.7	LEGAL	LEGAL	LEGAL	40'

\*Legal with one lane of traffic centered on bridge.

V5B STANDARD ISSUED 1936

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.0	HS 19.3	LEGAL	LEGAL	LEGAL	16'
20'	HS 13.3	HS 20.0	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.0	HS 20.0	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.4	HS 19.4	LEGAL	LEGAL	LEGAL	28'
32'	HS 11.8	HS 18.7	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.3	HS 18.2	LEGAL	LEGAL	LEGAL	36'
40'	HS 11.1	HS 18.2	LEGAL	LEGAL	LEGAL	40'

20' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 11.7	HS 18.0	27.1*	39.8*	LEGAL	16'
20'	HS 11.7	HS 18.4	25.5*	37.5*	LEGAL	20'
24'	HS 11.2	HS 18.2	25.1*	36.8*	LEGAL	24'
28'	HS 10.3	HS 17.1	24.9*	37.0*	LEGAL	28'
32'	HS 9.8	HS 16.8	24.6*	38.0*	LEGAL	32'
36'	HS 9.1	HS 16.1	24.3**	38.5*	LEGAL	36'
40'	HS 8.9	HS 16.0	24.7*	LEGAL	LEGAL	40'

\*Legal with one lane of traffic.

\*\*Legal with one lane of traffic centered on bridge.

V5B STANDARD REVISED 1947

NOTE: Ratings are calculated with adequate lateral support for the stringers and no addition for future wearing surface.

18' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 14.7	HS 21.7	LEGAL	LEGAL	LEGAL	16'
20'	HS 15.1	HS 22.5	LEGAL	LEGAL	LEGAL	20'
24'	HS 14.9	HS 22.6	LEGAL	LEGAL	LEGAL	24'
28'	HS 14.0	HS 21.5	LEGAL	LEGAL	LEGAL	28'
32'	HS 13.7	HS 21.3	LEGAL	LEGAL	LEGAL	32'
36'	HS 13.2	HS 20.8	LEGAL	LEGAL	LEGAL	36'
40'	HS 13.1	HS 20.8	LEGAL	LEGAL	LEGAL	40'

20' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
16'	HS 13.4	HS 20.3	LEGAL	LEGAL	LEGAL	16'
20'	HS 13.5	HS 20.9	LEGAL	LEGAL	LEGAL	20'
24'	HS 13.1	HS 20.8	LEGAL	LEGAL	LEGAL	24'
28'	HS 12.2	HS 19.7	LEGAL	LEGAL	LEGAL	28'
32'	HS 11.8	HS 19.5	LEGAL	LEGAL	LEGAL	32'
36'	HS 11.0	HS 18.7	LEGAL	LEGAL	LEGAL	36'
40'	HS 10.9	HS 18.6	LEGAL	LEGAL	LEGAL	40'



V6 STANDARD ISSUED 1939

NOTE: Ratings are calculated with no addition for future wearing surface.

20' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
120'	HS 10.2	HS 15.3	23.5*	LEGAL	LEGAL	120'
150'	HS 10.1	HS 15.5	24.5*	LEGAL	38.9*	150'
180'	HS 10.7	HS 16.5	26.6*	LEGAL	38.9*	180'
210'	HS 10.7	HS 16.9	LEGAL	39.5*	38.2*	210'
240'	HS 11.7	HS 18.5	LEGAL	LEGAL	LEGAL	240'

\*Legal with one lane of traffic centered on bridge.

V6 STANDARD REVISED 1946

NOTE: Ratings are calculated with no addition for future wearing surface.

20' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
120'	HS 11.0	HS 16.4	25.2*	LEGAL	LEGAL	120'
150'	HS 10.5	HS 16.1	25.4*	LEGAL	LEGAL	150'
180'	HS 11.2	HS 17.3	LEGAL	LEGAL	LEGAL	180'
210'	HS 10.7	HS 16.9	LEGAL	39.5*	38.1*	210'
240'	HS 12.5	HS 19.7	LEGAL	LEGAL	LEGAL	240'

\*Legal with one lane of traffic centered on bridge.

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V7 STANDARD ISSUED 1939

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NOTE: Ratings are calculated with no addition for future wearing surface.

22' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
120'	HS 9.3	HS 14.1	21.7*	38.1*	39.5*	120'
150'	HS 9.3	HS 14.4	22.7*	36.9*	36.1*	150'
180'	HS 9.7	HS 15.2	24.6*	37.1*	36.0*	180'
210'	HS 9.8	HS 15.7	25.7*	36.6*	35.3*	210'
240'	HS 10.6	HS 17.0	LEGAL	38.7*	37.5*	240'

\*Legal with one lane of traffic centered on bridge.

V7 STANDARD REVISED 1946

NOTE: Ratings are calculated with no addition for future wearing surface.

22' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
120'	HS 10.0	HS 15.1	23.2*	LEGAL	LEGAL	120'
150'	HS 9.6	HS 14.8	23.4*	38.1*	37.2*	150'
180'	HS 10.3	HS 16.0	25.8*	38.9*	37.7*	180'
210'	HS 9.8	HS 15.6	25.6*	36.4*	35.2*	210'
240'	HS 11.4	HS 18.1	LEGAL	LEGAL	39.8*	240'

\*Legal with one lane of traffic centered on bridge.

V8 STANDARD ISSUED 1941

NOTE: Ratings are calculated with no addition for future wearing surface.

22' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			NOMINAL SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
24'	HS 8.3	HS 13.4	18.5*	27.1*	33.7*	24'
28'	HS 7.6	HS 12.7	18.4*	27.5*	32.9*	28'
32'	HS 7.4	HS 12.5	18.4*	28.4*	33.2*	32'
36'	HS 7.2	HS 12.3	18.6*	29.6*	33.1*	36'
40'	HS 6.6	HS 11.6	18.0*	29.2*	30.2*	40'

\*Legal with one lane of traffic centered on bridge.

V8 STANDARD REVISED 1947

NOTE: Ratings are calculated with no addition for future wearing surface.

22' NOMINAL ROADWAY WIDTH

NOMINAL SPAN	INVENTORY		OPERATING		LEGAL LOADS IN TONS			NOMINAL SPAN
	HS		HS		TYPE 4	TYPE 3S3	TYPE 3-3	
24'	HS	8.1	HS	13.2	18.2*	26.8*	33.2*	24'
28'	HS	7.4	HS	12.5	18.1*	27.0*	32.4*	28'
32'	HS	7.3	HS	12.3	18.1*	28.0*	32.8*	32'
36'	HS	6.9	HS	12.1	18.3*	29.1*	32.5*	36'
40'	HS	6.3	HS	11.4	17.6*	28.6*	29.6*	40'

\*Legal with one lane of traffic centered on bridge.

LEGAL LOADS IN TONS						
SPAN	INVENTORY	OPERATING	TYPE 4	TYPE 3S3	TYPE 3-3	SPAN
23'-9"	HS 11.2	HS 16.4	LEGAL	LEGAL	LEGAL	23'-9"
30'-0"	HS 9.1	HS 16.1	LEGAL	25.1*	LEGAL	30'-0"
42'-6"	HS 9.2	HS 16.6	LEGAL	LEGAL	LEGAL	42'-6"
55'-0"	HS 9.1	HS 16.7	LEGAL	LEGAL	LEGAL	55'-0"
67'-6"	HS 9.5	HS 16.8	LEGAL	LEGAL	LEGAL	67'-6"
80'-0"	HS 10.3	HS 16.8	LEGAL	LEGAL	LEGAL	80'-0"

\*Legal with one lane of traffic.

20' NOMINAL ROADWAY WIDTH

NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

V9 STANDARD ISSUED 1950

V9 STANDARD ISSUED 1964

NOTE: Ratings were calculated using a 1/4" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

20' NOMINAL ROADWAY WIDTH

SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
23'-9	HS 13.8	HS 22.5	LEGAL	LEGAL	LEGAL	23'-9
30'-0	HS 11.8	HS 20.0	LEGAL	LEGAL	LEGAL	30'-0
42'-6	HS 10.7	HS 18.9	LEGAL	LEGAL	LEGAL	42'-6
55'-0	HS 9.4	HS 17.9	LEGAL	LEGAL	LEGAL	55'-0
67'-6	HS 10.5	HS 20.1	LEGAL	LEGAL	LEGAL	67'-6
80'-0	HS 10.3	HS 20.9	LEGAL	LEGAL	LEGAL	80'-0



V9A STANDARD ISSUED 1957

NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

20' NOMINAL ROADWAY WIDTH

SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
23'-9	HS 11.7	HS 17.8	LEGAL	LEGAL	LEGAL	23'-9
30'-0	HS 9.0	HS 16.0	24.8*	39.7*	LEGAL	30'-0
42'-6	HS 9.0	HS 17.7	LEGAL	LEGAL	LEGAL	42'-6
55'-0	HS 9.0	HS 17.7	LEGAL	LEGAL	LEGAL	55'-0
67'-6	HS 9.3	HS 18.2	LEGAL	LEGAL	LEGAL	67'-6
80'-0	HS 10.3	HS 18.2	LEGAL	LEGAL	LEGAL	80'-0

\*Legal with one lane of traffic.

V10 STANDARD ISSUED 1951

NOTE: Ratings were calculated using a 1/4" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

20' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
125'	HS 9.5	HS 15.5	23.8*	LEGAL	LEGAL	125'
150'	HS 9.6	HS 15.8	25.0*	LEGAL	39.3*	150'
175'	HS 10.3	HS 16.9	LEGAL	LEGAL	39.9*	175'
200'	HS 10.0	HS 16.8	LEGAL	39.9*	38.2*	200'
250'	HS 10.6	HS 18.0	LEGAL	LEGAL	39.5*	250'
300'	HS 12.4	HS 18.2	LEGAL	LEGAL	LEGAL	300'

\*Legal with one lane of traffic.

V10 STANDARD ISSUED 1964

NOTE: Ratings were calculated using a 1/4" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

20' NOMINAL ROADWAY WIDTH  
3 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
125'	HS 11.1	HS 17.1	26.4*	LEGAL	LEGAL	125'
150'	HS 10.3	HS 16.1	25.2*	LEGAL	LEGAL	150'
175'	HS 10.5	HS 17.2	LEGAL	LEGAL	LEGAL	175'
200'	HS 10.5	HS 17.3	LEGAL	LEGAL	39.3*	200'
225'	HS 10.2	HS 17.2	LEGAL	39.4*	38.0*	225'
250'	HS 10.4	HS 17.9	LEGAL	LEGAL	39.7*	250'
300'	HS 10.8	HS 19.2	LEGAL	LEGAL	LEGAL	300'

\*Legal with one lane of traffic.

4 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
174'	HS 11.0	HS 17.0	26.2*	LEGAL	LEGAL	174'
208.5'	HS 10.2	HS 15.9	25.1*	LEGAL	39.6*	208.5'
243'	HS 10.5	HS 17.2	LEGAL	LEGAL	LEGAL	243'
278'	HS 10.6	HS 17.2	LEGAL	LEGAL	39.2*	278'
313'	HS 10.2	HS 17.1	LEGAL	39.3*	37.9*	313'
347.5'	HS 10.4	HS 17.9	LEGAL	LEGAL	39.5*	347.5'
417'	HS 10.9	HS 19.2	LEGAL	LEGAL	LEGAL	417'

\*Legal with one lane of traffic.

V10 STANDARD ISSUED 1964

NOTE: Ratings were calculated using a 1/4" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

20' NOMINAL ROADWAY WIDTH  
5 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
223'	HS 11.0	HS 16.9	26.0*	LEGAL	LEGAL	223'
267'	HS 10.0	HS 15.7	24.8*	LEGAL	39.0*	267'
311'	HS 10.5	HS 17.0	LEGAL	LEGAL	LEGAL	311'
356'	HS 10.6	HS 17.2	LEGAL	LEGAL	39.0*	356'
401'	HS 10.2	HS 17.1	LEGAL	39.2*	37.7*	401'
445'	HS 10.4	HS 17.9	LEGAL	LEGAL	39.2*	445'
534'	HS 10.8	HS 19.2	LEGAL	LEGAL	LEGAL	534'

\*Legal with one lane of traffic.

V10A STANDARD ISSUED 1957

NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

20' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
125'	HS 9.5	HS 15.2	23.3*	39.7*	LEGAL	125'
150'	HS 9.6	HS 15.5	24.5*	39.8*	38.6*	150'
175'	HS 9.9	HS 16.5	26.7*	LEGAL	39.7*	175'
200'	HS 9.7	HS 16.2	26.6*	38.5*	36.9*	200'
250'	HS 10.2	HS 16.7	LEGAL	LEGAL	39.6*	250'
300'	HS 11.5	HS 16.9	LEGAL	LEGAL	LEGAL	300'

\*Legal with one lane of traffic.

V11 STANDARD ISSUED 1957

NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

24' NOMINAL ROADWAY WIDTH

SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
23'-9	HS 12.4	HS 17.5	LEGAL	LEGAL	LEGAL	23'-9
30'-0	HS 12.1	HS 17.6	LEGAL	LEGAL	LEGAL	30'-0
42'-6	HS 9.3	HS 16.4	26.2*	LEGAL	LEGAL	42'-6
55'-0	HS 6.9	HS 13.9	22.5*	34.6*	33.8*	55'-0
67'-6	HS 8.7	HS 16.7	LEGAL	37.1*	37.5*	67'-6
80'-0	HS 8.2	HS 16.7	LEGAL	35.5*	35.8*	80'-0

\*Legal with one lane of traffic centered on roadway.

V11 STANDARD ISSUED 1964

NOTE: Ratings were calculated using a 1/4" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

24' NOMINAL ROADWAY WIDTH

SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
23'-9	HS 16.3	HS 23.4	LEGAL	LEGAL	LEGAL	23'-9
30'-0	HS 15.6	HS 23.4	LEGAL	LEGAL	LEGAL	30'-0
42'-6	HS 11.2	HS 19.1	LEGAL	LEGAL	LEGAL	42'-6
55'-0	HS 10.9	HS 19.4	LEGAL	LEGAL	LEGAL	55'-0
67'-6	HS 10.8	HS 20.1	LEGAL	LEGAL	LEGAL	67'-6
80'-0	HS 11.2	HS 21.5	LEGAL	LEGAL	LEGAL	80'-0

V12 STANDARD ISSUED 1957

NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

24' NOMINAL ROADWAY WIDTH

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
125'	HS 10.7	HS 16.7	26.0*	LEGAL	LEGAL	125'
150'	HS 10.7	HS 16.8	26.6*	LEGAL	LEGAL	150'
175'	HS 11.4	HS 17.5	LEGAL	LEGAL	LEGAL	175'
200'	HS 9.6	HS 15.6	25.5*	36.9*	35.2*	200'
250'	HS 10.0	HS 16.7	LEGAL	37.4*	36.1*	250'
300'	HS 9.3	HS 16.6	LEGAL	36.2*	35.2*	300'

\*Legal with one lane of traffic centered on bridge.



V12 STANDARD ISSUED 1964

NOTE: Ratings were calculated using a 1/4" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

24' NOMINAL ROADWAY WIDTH  
3 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
125'	HS 13.0	HS 19.5	LEGAL	LEGAL	LEGAL	125'
150'	HS 13.5	HS 20.3	LEGAL	LEGAL	LEGAL	150'
175'	HS 12.4	HS 19.4	LEGAL	LEGAL	LEGAL	175'
200'	HS 12.9	HS 19.9	LEGAL	LEGAL	LEGAL	200'
225'	HS 12.8	HS 20.1	LEGAL	LEGAL	LEGAL	225'
250'	HS 13.4	HS 21.4	LEGAL	LEGAL	LEGAL	250'

4 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
174'	HS 13.0	HS 19.4	LEGAL	LEGAL	LEGAL	174'
208.5'	HS 13.3	HS 20.1	LEGAL	LEGAL	LEGAL	208.5'
243'	HS 12.4	HS 19.2	LEGAL	LEGAL	LEGAL	243'
278'	HS 12.9	HS 19.9	LEGAL	LEGAL	LEGAL	278'
313'	HS 12.8	HS 20.1	LEGAL	LEGAL	LEGAL	313'
347.5'	HS 13.4	HS 21.4	LEGAL	LEGAL	LEGAL	347.5'

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V12 STANDARD ISSUED 1964

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NOTE: Ratings were calculated using a 1/4" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

24' NOMINAL ROADWAY WIDTH  
5 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
223'	HS 12.9	HS 19.2	LEGAL	LEGAL	LEGAL	223'
267'	HS 13.2	HS 19.9	LEGAL	LEGAL	LEGAL	267'
311'	HS 12.4	HS 19.0	LEGAL	LEGAL	LEGAL	311'
356'	HS 12.9	HS 19.9	LEGAL	LEGAL	LEGAL	356'
401'	HS 12.8	HS 20.0	LEGAL	LEGAL	LEGAL	401'
445'	HS 13.4	HS 21.3	LEGAL	LEGAL	LEGAL	445'

V13 STANDARD ISSUED 1960

NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

28' NOMINAL ROADWAY WIDTH

SPAN	INVENTORY	OPERATING	LEGAL LOADS IN TONS			SPAN
			TYPE 4	TYPE 3S3	TYPE 3-3	
23'-9	HS 16.3	HS 23.7	LEGAL	LEGAL	LEGAL	23'-9
30'-0	HS 16.4	HS 23.7	LEGAL	LEGAL	LEGAL	30'-0
42'-6	HS 16.5	HS 23.8	LEGAL	LEGAL	LEGAL	42'-6
55'-0	HS 16.1	HS 23.9	LEGAL	LEGAL	LEGAL	55'-0
67'-6	HS 16.6	HS 24.1	LEGAL	LEGAL	LEGAL	67'-6

V14 STANDARD ISSUED 1960

NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

28' NOMINAL ROADWAY WIDTH  
3 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
125'	HS 16.4	HS 23.8	LEGAL	LEGAL	LEGAL	125'
150'	HS 16.1	HS 23.9	LEGAL	LEGAL	LEGAL	150'
175'	HS 16.5	HS 23.9	LEGAL	LEGAL	LEGAL	175'
200'	HS 16.6	HS 24.0	LEGAL	LEGAL	LEGAL	200'
225'	HS 16.7	HS 24.1	LEGAL	LEGAL	LEGAL	225'
250'	HS 16.7	HS 24.1	LEGAL	LEGAL	LEGAL	250'

4 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
174'	HS 16.2	HS 23.8	LEGAL	LEGAL	LEGAL	174'
208.5'	HS 16.2	HS 23.9	LEGAL	LEGAL	LEGAL	208.5'
243'	HS 16.5	HS 23.9	LEGAL	LEGAL	LEGAL	243'
278'	HS 16.6	HS 24.0	LEGAL	LEGAL	LEGAL	278'
313'	HS 16.7	HS 24.1	LEGAL	LEGAL	LEGAL	313'
347.5'	HS 16.7	HS 24.1	LEGAL	LEGAL	LEGAL	347.5'

V14 STANDARD ISSUED 1960

NOTE: Ratings were calculated using a 1/2" integral wearing surface deducted from the slab as shown on the standard plans. The curb was used as part of the exterior beam composite section.

28' NOMINAL ROADWAY WIDTH  
5 SPAN BRIDGE

BRIDGE LENGTH	INVENTORY	OPERATING	LEGAL LOADS IN TONS			BRIDGE LENGTH
			TYPE 4	TYPE 3S3	TYPE 3-3	
223'	HS 16.1	HS 23.8	LEGAL	LEGAL	LEGAL	223'
267'	HS 16.2	HS 23.9	LEGAL	LEGAL	LEGAL	267'
311'	HS 16.5	HS 23.9	LEGAL	LEGAL	LEGAL	311'
356'	HS 16.6	HS 24.0	LEGAL	LEGAL	LEGAL	356'
401'	HS 16.7	HS 24.1	LEGAL	LEGAL	LEGAL	401'
445'	HS 16.7	HS 24.1	LEGAL	LEGAL	LEGAL	445'

RATING SUMMARY

Standard Series: W (W1 thru W5)

Date Issued: 1924 (Including 1925, 1928, and 1931 revisions.)

Standard No.	Span Length	Rating (1) (HS)		Legal Load Capacity, Tons (1)		
		ft.	Inv.	Oper.	Truck Type	
	4				3S3	3-3
W1	50	15.6	22.8	L	L	L
W2	60	16.3	24.9	L	L	L
W3	70	16.9	25.2	L	L	L
W4	80	17.0	25.4	L	L	L
W5	90	16.3	24.4	L	L	L

(1) Does not include any allowance for added wearing surface. (L= LEGAL)

RATING SUMMARY

Bridge Standard: X Series (X1 thru X28)

Date of Issue: 1914

St'd No.	Span Length ft.	Roadway Width ft.	Rating <sup>(1)</sup> (HS)		Legal Load Capacity, Tons <sup>(1)</sup>					
					Truck Type			One Lane <sup>(2)</sup>		
					Truck Type			Truck Type		
					4	3S3	3-3	4	3S3	3-3
X1	35	16	10.5	17.9	L	L	L			
X2	35	18	6.6	11.8	18	26	33	26	38	L
X3	40	16	11.7	18.8	L	L	L			
X4	40	18	7.7	12.4	19	28	37	L	L	L
X5	45	16	8.9	15.3	25	L	L			
X6	45	18	7.1	11.6	17	25	34	25	37	L
X7	50	16	9.7	16.7	L	L	L			
X8	50	18	6.1	11.0	18	27	29	25	39	39
X9	55	16	8.4	15.7	26	39	39			
X10	55	18	6.6	11.4	17	24	31	24	36	L
X11	60	16	9.0	16.4	L	L	39			
X12	60	18	7.2	11.7	18	26	28	26	38	39
X13	65	16	10.2	17.1	L	L	39			
X14	65	18	6.7	12.2	19	28	30	L	L	L
X15	70	16	9.9	18.9	L	L	L			
X16	70	18	6.5	11.7	18	26	30	26	38	L
X17	75	16	10.4	18.6	L	L	L			
X18	75	18	7.6	12.2	19	27	31	L	L	L
X19	80	16	8.4	15.0	26	35	36			
X20	80	18	7.9	12.4	19	28	33	L	L	L
X21	85	16	12.6	20.8	L	L	L			
X22	85	18	7.4	11.9	18	26	32	26	39	L
X23	90	16	12.5	19.8	L	L	L			
X24	90	18	7.1	11.6	17	25	34	25	37	L
X25	95	16	11.4	18.6	L	L	L			
X26	95	18	9.3	16.1	24	35	36	L	L	L
X27	100	16	13.0	19.1	L	L	L			
X28	100	18	10.0	15.8	22	33	38	L	L	L

(1) Includes allowance of 30 psf for the 3 in. earth fill as detailed on the standard plans. (L = LEGAL)

(2) Legal load capacity if traffic is restricted to one lane. (16 ft. roadway bridges are considered one lane bridges.)

RATING SUMMARY

Bridge Standard: Y Series (Y1 thru Y20)

Date Issued: 1914

St'd No.	Span Length ft.	Roadway Width ft.	Rating <sup>(1)</sup> (HS)		Legal Load Capacity, Tons <sup>(1)</sup>					
			Inv.	Oper	Truck Type			One Lane <sup>(2)</sup>		
					4	3S3	3-3	4	3S3	3-3
Y1	40	16	8.5	15.5	26	38	L			
Y2	40	18	6.5	10.6	18	27	33	L	L	L
Y3	45	16	8.6	15.2	25	36	L			
Y4	45	18	5.6	8.8	14	21	27	25	37	L
Y5	50	16	9.1	17.0	L	L	L			
Y6	50	18	6.8	10.6	16	24	32	L	L	L
Y7	55	16	7.6	15.2	25	37	37			
Y8	55	18	6.3	10.1	17	25	29	26	L	L
Y9	60	16	8.6	15.2	25	36	L			
Y10	60	18	5.6	8.8	14	21	27	25	37	39
Y11	65	16	8.0	16.2	L	36	37			
Y12	65	18	7.1	11.0	17	25	32	L	L	L
Y13	70	16	7.9	14.7	25	36	36			
Y14	70	18	6.4	9.8	16	24	31	L	L	L
Y15	75	16	9.6	15.2	25	36	39			
Y16	75	18	5.6	8.8	14	21	27	25	37	L
Y17	80	16	10.4	18.7	L	L	L			
Y18	80	18	7.4	11.3	18	26	33	L	L	L
Y19	85	16	9.3	17.5	L	39	L			
Y20	85	18	6.5	10.2	15	23	31	L	L	L

(1) Includes allowance of 30 psf for the 3 in. earth fill as detailed on the standard plans. (L=LEGAL). Live loads were assumed to be supported by the interior stringers only.

(2) Legal load capacity if traffic is restricted to one lane. (16 ft. roadway bridges are considered one lane bridges.)



## RATING SUMMARY

Bridge Standard: Z Series (Z1 thru Z7, and Z9)

Date Issued: 1927 (except Z9, issued in 1930)

Date Revised: 1945

St'd No.	Span Length	Roadway Width	Rating (HS)		Legal Load Capacity, Tons <sup>(1)</sup>		
					Truck Types		
	ft.	ft.	Inv.	Oper.	4	3S3	3-3
Z1	45	16	5.0	7.2	12	17	22
Z2	60	16	5.0	7.2	12	17	22
Z3	75	16	5.0	7.2	12	17	22
Z4	90	16	5.0	7.2	12	17	22
Z5	105	16	4.8	7.0	10	15	21
Z6	122.5	16	4.8	7.0	10	15	21
Z7	140	16	4.8	7.0	10	15	21
Z9	157.5	16	4.8	7.0	10	15	21

(1) 16 ft. roadway bridges are considered one lane bridges.

NOTE: Rating and load capacity for all spans was controlled by the laterally unsupported compression flange of interior stringers. If the original wood plank floor has been replaced with planks adequately attached to the top flange of all stringers, the rating and load capacity should be re-evaluated.