

BRIDGE / MEMBER DATA

Structure I. D. HAM500

Material of Construction SS
 Year of Construction 1959
 Roadway Width 32.000
 Center to Center Truss 38.833
 Number of Spans 1
 Live Load Distribution Factor 0.9370

Comments:

Truss I. D. 1 Truss Type: THROUGH

Span Length: Span 1
250.000

Number of Panels: 10 Symmetry:

Panel No.	Panel Code	Panel Length	Sub-Divided Panel Length	Vertical Height	Sub-Divided Vertical
1	7	25.000	0.000	28.000	0.000
2	2	25.000	0.000	34.670	0.000
3	2	25.000	0.000	38.670	0.000
4	2	25.000	0.000	40.000	0.000
5	4	25.000	0.000	40.000	0.000
6	3	25.000	0.000	40.000	0.000
7	1	25.000	0.000	38.670	0.000
8	1	25.000	0.000	34.670	0.000
9	1	25.000	0.000	28.000	0.000
10	5	25.000	0.000	0.000	0.000

Superimposed Dead Load:

Uniform Dead Load
 (kips/ft)
 Loaded Chord Unloaded Chord

0.441 0.000

Superimposed Dead Load:

Loaded Chord Dist.	Loaded Chord Load	Unloaded Chord Dist.	Unloaded Chord Load
0.000	27.810	0.000	0.000
25.000	58.720	0.000	0.000
50.000	51.410	0.000	0.000

75.000	53.130	0.000	0.000
100.000	52.680	0.000	0.000
125.000	52.830	0.000	0.000
150.000	52.680	0.000	0.000
175.000	53.130	0.000	0.000
200.000	51.410	0.000	0.000
225.000	58.720	0.000	0.000

Truss Members Selected:

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L 0L 1
L 0U 1
U 1L 1
U 1U 2
L 1L 2
U 1L 2
U 2L 2
U 2U 3
L 2L 3
U 2L 3
U 3L 3
U 3U 4
L 3L 4
U 3L 4
U 4L 4
L 4L 5
U 4U 5
U 4L 5
L 4U 5
U 5L 5
L 5L 6
U 5U 6
L 5U 6
U 5L 6
U 6L 6
L 6L 7
U 6U 7
L 6U 7
U 7L 7
L 7L 8
U 7U 8
L 7U 8
U 8L 8
L 8L 9
U 8U 9
L 8U 9
U 9L 9
L 9L10
U 9L10

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NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.**2, in.**3, and in.**4. Axial loads are shown in kips.

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Rating Type: INV.
 Rating Live Load: HS20

Member Properties:

Member	Effective X (ft)	Length Y (ft)	Allowable Ten.	Stress Comp.	Gross Area	Net Area
L 0L 1	25.000	25.000	18150.0	14421.0	29.24	28.75
L 0U 1	37.537	37.537	18150.0	14238.0	55.60	55.60
U 1L 1	28.000	28.000	18150.0	5837.0	11.80	11.51
U 1U 2	25.874	25.874	18150.0	14958.0	45.20	45.20
L 1L 2	25.000	25.000	18150.0	14421.0	29.24	28.75
U 1L 2	37.537	37.537	18150.0	7915.0	19.10	19.10
U 2L 2	34.670	34.670	18150.0	9039.0	19.10	19.10
U 2U 3	25.318	25.318	18150.0	14972.0	52.00	52.00
L 2L 3	25.000	25.000	18150.0	14421.0	40.50	39.83
U 2L 3	42.741	42.741	18150.0	4117.0	15.60	15.60
U 3L 3	38.670	19.335	18150.0	10618.0	11.80	11.51
U 3U 4	25.035	25.035	18150.0	14975.0	55.60	55.60
L 3L 4	25.000	25.000	18150.0	14421.0	49.50	48.67
U 3L 4	46.048	23.024	18150.0	8643.0	13.20	12.88
U 4L 4	40.000	20.000	18150.0	10272.0	11.80	11.51
L 4L 5	25.000	25.000	18150.0	14421.0	54.00	53.10
U 4U 5	25.000	25.000	18150.0	14977.0	55.60	55.60
U 4L 5	47.170	23.585	18150.0	5276.0	10.64	10.07
L 4U 5	47.170	23.585	18150.0	5276.0	10.64	10.07
U 5L 5	40.000	20.000	18150.0	10272.0	11.80	11.51
L 5L 6	25.000	25.000	18150.0	14421.0	54.00	53.10
U 5U 6	25.000	25.000	18150.0	14977.0	55.60	55.60
L 5U 6	47.170	23.585	18150.0	5276.0	10.64	10.07
U 5L 6	47.170	23.585	18150.0	5276.0	10.64	10.07
U 6L 6	40.000	20.000	18150.0	10232.0	10.93	10.50
L 6L 7	25.000	25.000	18150.0	14421.0	49.50	48.67
U 6U 7	25.035	25.035	18150.0	14975.0	55.60	55.60
L 6U 7	46.048	23.024	18150.0	8643.0	13.20	12.88
U 7L 7	38.670	19.335	18150.0	10731.0	11.49	11.15
L 7L 8	25.000	25.000	18150.0	14421.0	40.50	39.83
U 7U 8	25.318	25.318	18150.0	14972.0	52.00	52.00
L 7U 8	42.743	42.743	18150.0	4049.0	15.00	14.95
U 8L 8	34.670	34.670	18150.0	9039.0	19.10	19.10
L 8L 9	25.000	25.000	18150.0	14421.0	29.24	28.75
U 8U 9	25.874	25.874	18150.0	14958.0	45.20	45.20
L 8U 9	37.537	37.537	18150.0	8378.0	17.01	17.01
U 9L 9	28.000	28.000	18150.0	6004.0	11.30	10.93
L 9L10	25.000	25.000	18150.0	14421.0	29.24	28.75
U 9L10	37.537	37.537	18150.0	14238.0	55.60	55.60

AXIAL CAPACITY REPORT

Structure I. D.

HAM500

Truss I. D. 1
 Rating Type: INV.
 Rating Live Load: HS20

Member	Axial Capacity	TENSION	Available Capacity	COMPRESSION	Axial Dead Load	Available Capacity
		Axial Dead Load		Axial Capacity		
L 0L 1	437.9	290.2	263.8	-350.7	0.0	-524.9
L 0U 1	846.8	0.0	1108.3	-658.4	-435.8	-396.9
U 1L 1	175.3	69.7	133.5	-57.3	0.0	-99.1
U 1U 2	688.4	0.0	945.0	-562.3	-427.7	-305.7
L 1L 2	437.9	290.2	263.8	-350.7	0.0	-524.9
U 1L 2	290.9	184.6	180.1	-125.7	0.0	-236.5
U 2L 2	290.9	0.0	336.1	-143.6	-75.3	-98.4
U 2U 3	792.0	0.0	1087.1	-647.5	-491.8	-352.4
L 2L 3	606.6	413.2	358.6	-485.7	0.0	-733.7
U 2L 3	237.6	123.9	163.3	-53.4	0.0	-127.7
U 3L 3	175.3	0.0	197.1	-104.2	-36.3	-82.4
U 3U 4	846.8	0.0	1169.0	-692.5	-536.9	-370.3
L 3L 4	741.4	485.7	450.0	-593.7	0.0	-885.1
U 3L 4	196.2	93.1	140.3	-94.9	0.0	-150.7
U 4L 4	175.3	0.0	184.0	-100.8	-14.4	-92.1
L 4L 5	808.8	536.2	487.0	-647.7	0.0	-969.4
U 4U 5	846.8	0.0	1181.9	-692.6	-558.4	-357.5
U 4L 5	153.4	42.0	128.2	0.0	0.0	0.0
L 4U 5	153.4	0.0	153.4	0.0	0.0	0.0
U 5L 5	175.3	-7.4	179.7	-100.8	-7.4	-96.4
L 5L 6	808.8	536.2	487.0	-647.7	0.0	-969.4
U 5U 6	846.8	0.0	1181.9	-692.6	-558.4	-357.5
L 5U 6	153.4	42.0	128.2	0.0	0.0	0.0
U 5L 6	153.4	0.0	153.4	0.0	0.0	0.0
U 6L 6	160.0	0.0	168.6	-93.0	-14.4	-84.3
L 6L 7	741.4	485.7	450.0	-593.7	0.0	-885.1
U 6U 7	846.8	0.0	1169.0	-692.5	-536.9	-370.3
L 6U 7	196.2	93.1	140.3	-94.9	0.0	-150.7
U 7L 7	169.8	0.0	191.6	-102.5	-36.3	-80.7
L 7L 8	606.6	413.2	358.6	-485.7	0.0	-733.7
U 7U 8	792.0	0.0	1087.1	-647.5	-491.8	-352.4
L 7U 8	227.6	123.9	153.3	-50.5	0.0	-124.8
U 8L 8	290.9	0.0	336.1	-143.6	-75.3	-98.4
L 8L 9	437.9	290.2	263.8	-350.7	0.0	-524.9
U 8U 9	688.4	0.0	945.0	-562.3	-427.7	-305.7
L 8U 9	259.1	184.6	148.4	-118.6	0.0	-229.3
U 9L 9	166.5	69.7	124.7	-56.4	0.0	-98.3
L 9L10	437.9	290.2	263.8	-350.7	0.0	-524.9
U 9L10	846.8	0.0	1108.3	-658.4	-435.8	-396.9

RATING REPORT

Structure I. D. HAM500

Truss I. D. 1
 Rating Type: INV.
 Rating Live Load: HS20

	Available Capacity	Live Load + Impact	Rating Factor	Load Capacity (tons)
L 0L 1	263.8	41.81	6.31	227.1
L 0U 1	-396.9	-67.91	5.84	210.4
U 1L 1	133.5	29.88	4.47	160.8
U 1U 2	-305.7	-62.13	4.92	177.1
L 1L 2	263.8	41.81	6.31	227.1
U 1L 2	180.1	33.76	5.34	192.0
U 2L 2	-98.4	-20.06	4.91	176.6
U 2U 3	-352.4	-71.54	4.93	177.3
L 2L 3	358.6	60.03	5.97	215.1
U 2L 3	163.3	28.01	5.83	209.9
U 3L 3	-82.4	-17.66	4.67	168.0
U 3U 4	-370.3	-78.16	4.74	170.6
L 3L 4	450.0	70.64	6.37	229.3
U 3L 4	140.3	26.79	5.24	188.6
U 4L 4	-92.1	-16.88	5.46	196.5
L 4L 5	487.0	78.05	6.24	224.6
U 4U 5	-357.5	-81.30	4.40	158.3
U 4L 5	128.2	23.15	5.54	199.4
L 4U 5	153.4	17.48	8.77	315.9
U 5L 5	-96.4	0.00	999.00	999.0
L 5L 6	487.0	78.05	6.24	224.6
U 5U 6	-357.5	-81.30	4.40	158.3
L 5U 6	128.2	23.15	5.54	199.4
U 5L 6	153.4	17.48	8.77	315.9
U 6L 6	-84.3	-16.88	4.99	179.8
L 6L 7	450.0	70.64	6.37	229.3
U 6U 7	-370.3	-78.16	4.74	170.6
L 6U 7	140.3	26.79	5.24	188.6
U 7L 7	-80.7	-15.84	5.10	183.5
L 7L 8	358.6	60.03	5.97	215.1
U 7U 8	-352.4	-71.54	4.93	177.3
L 7U 8	153.3	28.01	5.47	197.1
U 8L 8	-98.4	-18.19	5.41	194.8
L 8L 9	263.8	41.81	6.31	227.1
U 8U 9	-305.7	-62.13	4.92	177.1
L 8U 9	148.4	33.76	4.39	158.2
U 9L 9	124.7	29.88	4.17	150.3
L 9L10	263.8	41.81	6.31	227.1
U 9L10	-396.9	-67.91	5.84	210.4

SECTION DATA (ASD/LFD)

Structure I. D. HAM500

Truss I. D. 1
 Rating Type: OPER.
 Rating Live Load: 5C1

Member Properties:

Member	Effective X (ft)	Length Y (ft)	Allowable Ten.	Stress Comp.	Gross Area	Net Area
L 0L 1	25.000	25.000	24750.0	17984.0	29.24	28.75
L 0U 1	37.537	37.537	24750.0	17756.0	55.60	55.60
U 1L 1	28.000	28.000	24750.0	7280.0	11.80	11.51
U 1U 2	25.874	25.874	24750.0	18653.0	45.20	45.20
L 1L 2	25.000	25.000	24750.0	17984.0	29.24	28.75
U 1L 2	37.537	37.537	24750.0	9870.0	19.10	19.10
U 2L 2	34.670	34.670	24750.0	11272.0	19.10	19.10
U 2U 3	25.318	25.318	24750.0	18671.0	52.00	52.00
L 2L 3	25.000	25.000	24750.0	17984.0	40.50	39.83
U 2L 3	42.741	42.741	24750.0	5134.0	15.60	15.60
U 3L 3	38.670	19.335	24750.0	13241.0	11.80	11.51
U 3U 4	25.035	25.035	24750.0	18675.0	55.60	55.60
L 3L 4	25.000	25.000	24750.0	17984.0	49.50	48.67
U 3L 4	46.048	23.024	24750.0	10779.0	13.20	12.88
U 4L 4	40.000	20.000	24750.0	12809.0	11.80	11.51
L 4L 5	25.000	25.000	24750.0	17984.0	54.00	53.10
U 4U 5	25.000	25.000	24750.0	18677.0	55.60	55.60
U 4L 5	47.170	23.585	24750.0	6579.0	10.64	10.07
L 4U 5	47.170	23.585	24750.0	6579.0	10.64	10.07
U 5L 5	40.000	20.000	24750.0	12809.0	11.80	11.51
L 5L 6	25.000	25.000	24750.0	17984.0	54.00	53.10
U 5U 6	25.000	25.000	24750.0	18677.0	55.60	55.60
L 5U 6	47.170	23.585	24750.0	6579.0	10.64	10.07
U 5L 6	47.170	23.585	24750.0	6579.0	10.64	10.07
U 6L 6	40.000	20.000	24750.0	12760.0	10.93	10.50
L 6L 7	25.000	25.000	24750.0	17984.0	49.50	48.67
U 6U 7	25.035	25.035	24750.0	18675.0	55.60	55.60
L 6U 7	46.048	23.024	24750.0	10779.0	13.20	12.88
U 7L 7	38.670	19.335	24750.0	13382.0	11.49	11.15
L 7L 8	25.000	25.000	24750.0	17984.0	40.50	39.83
U 7U 8	25.318	25.318	24750.0	18671.0	52.00	52.00
L 7U 8	42.743	42.743	24750.0	5049.0	15.00	14.95
U 8L 8	34.670	34.670	24750.0	11272.0	19.10	19.10
L 8L 9	25.000	25.000	24750.0	17984.0	29.24	28.75
U 8U 9	25.874	25.874	24750.0	18653.0	45.20	45.20
L 8U 9	37.537	37.537	24750.0	10448.0	17.01	17.01
U 9L 9	28.000	28.000	24750.0	7487.0	11.30	10.93
L 9L10	25.000	25.000	24750.0	17984.0	29.24	28.75
U 9L10	37.537	37.537	24750.0	17756.0	55.60	55.60

AXIAL CAPACITY REPORT

Structure I. D.

HAM500

Truss I. D.

1

Rating Type:

OPER.

Rating Live Load:

5C1

Member	Axial Capacity	TENSION	Available Capacity	COMPRESSION	Axial Dead Load	Available Capacity
		Axial Dead Load		Axial Capacity		
L 0L 1	729.9	290.2	439.7	-584.5	0.0	-874.8
L 0U 1	1411.4	0.0	1847.2	-1097.3	-435.8	-661.5
U 1L 1	292.2	69.7	222.4	-95.5	0.0	-165.2
U 1U 2	1147.4	0.0	1575.1	-937.2	-427.7	-509.5
L 1L 2	729.9	290.2	439.7	-584.5	0.0	-874.8
U 1L 2	484.8	184.6	300.2	-209.6	0.0	-394.2
U 2L 2	484.8	0.0	560.1	-239.3	-75.3	-164.0
U 2U 3	1320.0	0.0	1811.8	-1079.2	-491.8	-587.4
L 2L 3	1010.9	413.2	597.7	-809.6	0.0	-1222.8
U 2L 3	396.0	123.9	272.1	-89.0	0.0	-212.9
U 3L 3	292.2	0.0	328.5	-173.7	-36.3	-137.4
U 3U 4	1411.4	0.0	1948.3	-1154.2	-536.9	-617.2
L 3L 4	1235.6	485.7	749.9	-989.5	0.0	-1475.2
U 3L 4	327.0	93.1	233.9	-158.1	0.0	-251.2
U 4L 4	292.2	0.0	306.6	-168.0	-14.4	-153.6
L 4L 5	1347.9	536.2	811.7	-1079.4	0.0	-1615.6
U 4U 5	1411.4	0.0	1969.8	-1154.3	-558.4	-595.8
U 4L 5	255.7	42.0	213.7	0.0	0.0	0.0
L 4U 5	255.7	0.0	255.7	0.0	0.0	0.0
U 5L 5	292.2	-7.4	299.5	-168.0	-7.4	-160.7
L 5L 6	1347.9	536.2	811.7	-1079.4	0.0	-1615.6
U 5U 6	1411.4	0.0	1969.8	-1154.3	-558.4	-595.8
L 5U 6	255.7	42.0	213.7	0.0	0.0	0.0
U 5L 6	255.7	0.0	255.7	0.0	0.0	0.0
U 6L 6	266.6	0.0	281.1	-155.0	-14.4	-140.5
L 6L 7	1235.6	485.7	749.9	-989.5	0.0	-1475.2
U 6U 7	1411.4	0.0	1948.3	-1154.2	-536.9	-617.2
L 6U 7	327.0	93.1	233.9	-158.1	0.0	-251.2
U 7L 7	283.1	0.0	319.4	-170.9	-36.3	-134.6
L 7L 8	1010.9	413.2	597.7	-809.6	0.0	-1222.8
U 7U 8	1320.0	0.0	1811.8	-1079.2	-491.8	-587.4
L 7U 8	379.4	123.9	255.5	-84.2	0.0	-208.0
U 8L 8	484.8	0.0	560.1	-239.3	-75.3	-164.0
L 8L 9	729.9	290.2	439.7	-584.5	0.0	-874.8
U 8U 9	1147.4	0.0	1575.1	-937.2	-427.7	-509.5
L 8U 9	431.9	184.6	247.3	-197.6	0.0	-382.2
U 9L 9	277.6	69.7	207.8	-94.0	0.0	-163.8
L 9L10	729.9	290.2	439.7	-584.5	0.0	-874.8
U 9L10	1411.4	0.0	1847.2	-1097.3	-435.8	-661.5

RATING REPORT

Structure I. D. HAM500

Truss I. D. 1
 Rating Type: OPER.
 Rating Live Load: 5C1

	Available Capacity	Live Load + Impact	Rating Factor	Load Capacity (tons)
L 0L 1	439.7	30.46	14.44	577.4
L 0U 1	-661.5	-45.73	14.47	578.6
U 1L 1	222.4	22.60	9.84	393.7
U 1U 2	-509.5	-44.69	11.40	456.0
L 1L 2	439.7	30.46	14.44	577.4
U 1L 2	300.2	24.92	12.05	481.9
U 2L 2	-164.0	-16.14	10.16	406.5
U 2U 3	-587.4	-51.47	11.41	456.5
L 2L 3	597.7	43.18	13.84	553.7
U 2L 3	272.1	22.27	12.22	488.7
U 3L 3	-137.4	-15.28	8.99	359.6
U 3U 4	-617.2	-55.77	11.07	442.7
L 3L 4	749.9	50.82	14.76	590.2
U 3L 4	233.9	22.83	10.25	409.9
U 4L 4	-153.6	-15.60	9.85	393.8
L 4L 5	811.7	55.69	14.58	583.1
U 4U 5	-595.8	-57.20	10.42	416.7
U 4L 5	213.7	21.19	10.08	403.3
L 4U 5	255.7	16.23	15.75	630.0
U 5L 5	-160.7	0.00	999.00	999.0
L 5L 6	811.7	55.69	14.58	583.1
U 5U 6	-595.8	-57.20	10.42	416.7
L 5U 6	213.7	21.19	10.08	403.3
U 5L 6	255.7	16.23	15.75	630.0
U 6L 6	-140.5	-15.60	9.01	360.3
L 6L 7	749.9	50.82	14.76	590.2
U 6U 7	-617.2	-55.77	11.07	442.7
L 6U 7	233.9	22.83	10.25	409.9
U 7L 7	-134.6	-15.28	8.81	352.3
L 7L 8	597.7	43.18	13.84	553.7
U 7U 8	-587.4	-51.47	11.41	456.5
L 7U 8	255.5	22.27	11.47	458.9
U 8L 8	-164.0	-16.14	10.16	406.5
L 8L 9	439.7	30.46	14.44	577.4
U 8U 9	-509.5	-44.69	11.40	456.0
L 8U 9	247.3	24.92	9.92	396.9
U 9L 9	207.8	22.60	9.20	367.8
L 9L10	439.7	30.46	14.44	577.4
U 9L10	-661.5	-45.73	14.47	578.6