

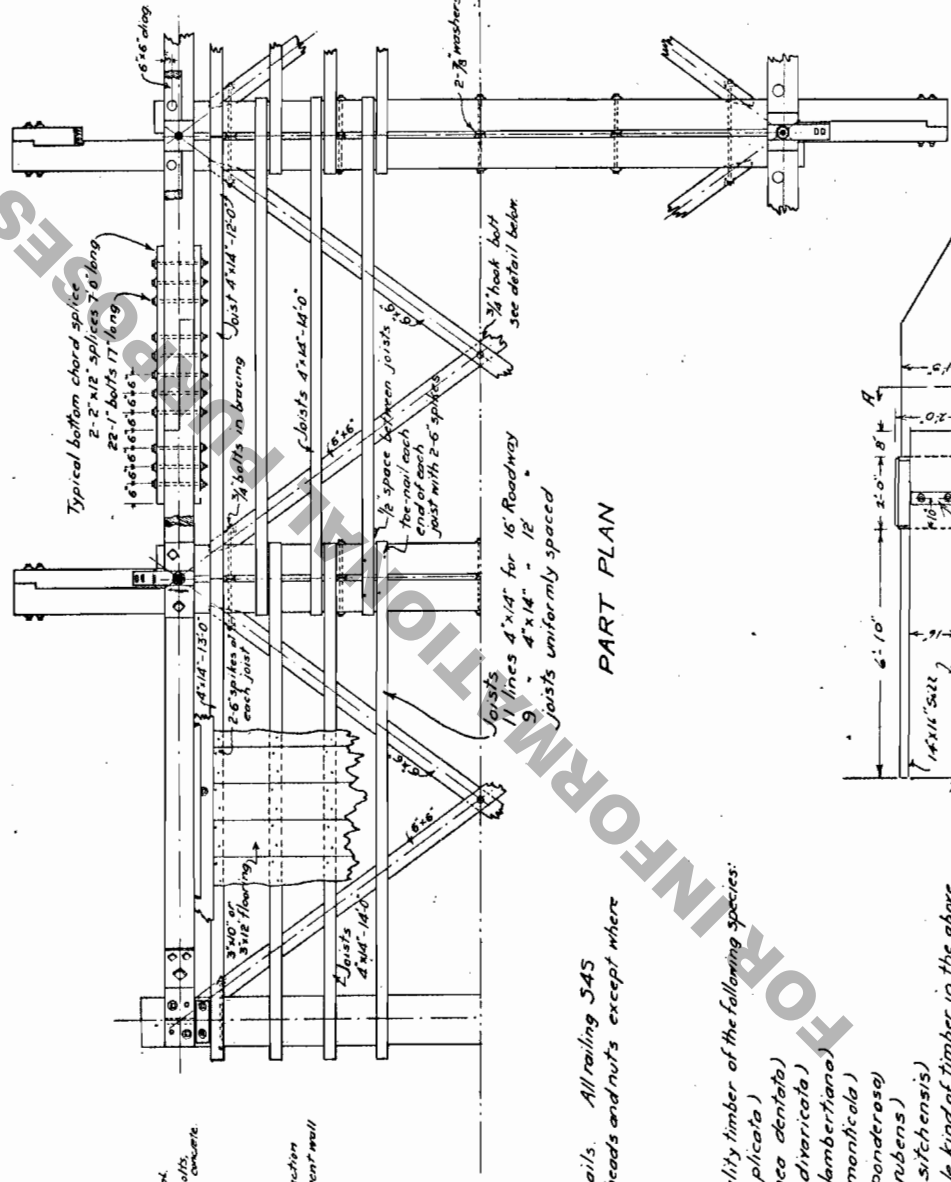
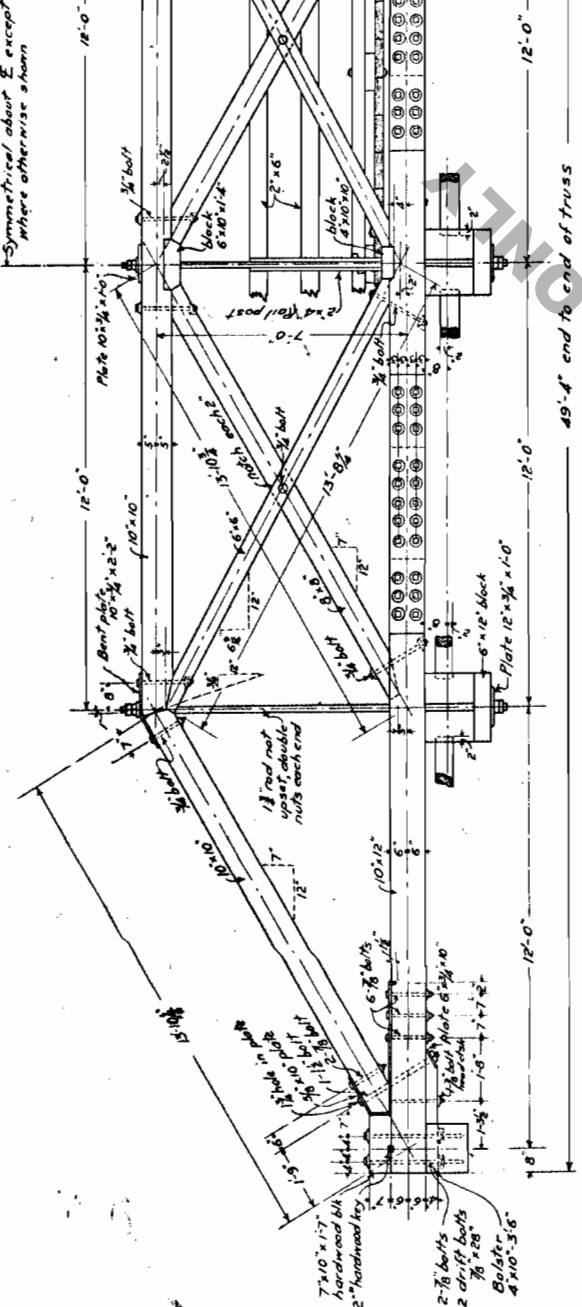
BILL OF MATERIAL

		16' Roadway				12' Roadway			
		LUMBER							
No. Pcs.	Size	Length	No. Pcs.	Size	Length	No. Pcs.	Size	Length	FT. BM.
2	10"x10"	12'-0"	4	10"x10"	12'-0"	4	10"x10"	12'-0"	428
4	10"x10"	24'-6"	4	10"x10"	24'-6"	4	10"x10"	19'-8"	408
4	10"x12"	19'-8"	787	4	10"x12"	19'-8"	4	10"x12"	787
2	10"x12"	16'-0"	320	2	10"x12"	16'-0"	320	2	320
2	2"x12"	7'-0"	112	2	2"x12"	7'-0"	112	2	112
2	4"x10"	0'-10"	6	2	4"x10"	0'-10"	6	2	6
6	6"x12"	1'-0"	66	6	6"x12"	1'-6"	54	6	54
4	7"x10"	1'-7"	38	4	7"x10"	1'-7"	38	4	38
4	2"x2"	0'-10"	1	4	2"x2"	0'-10"	1	4	1
4	4"x10"	3'-6"	47	4	4"x10"	3'-8"	47	4	47
4	8"x8"	12'-10"	274	4	8"x8"	12'-0"	274	4	274
4	6"x6"	13'-3"	159	4	6"x6"	13'-3"	159	4	159
6	10"x16"	22'-0"	1760	6	8"x16"	18'-0"	1152	6	1152
6	6"x6"	10'-2"	183	6	6"x6"	10'-2"	183	6	183
2	14"x6"	19'-0"	710	2	12"x16"	15'-0"	480	2	480
4	6"x6"	16'-0"	228	4	6"x6"	16'-8"	200	4	200
4	6"x6"	18'-8"	224	4	6"x6"	16'-4"	197	4	197
4	4"x12"	1'-0"	16	4	4"x12"	1'-0"	16	4	16
50	3"x12"	16'-0"	2400	50	3"x12"	12'-0"	1800	50	1800
4	4"x14"	12'-0"	224	4	4"x14"	13'-0"	224	4	224
4	4"x14"	13'-0"	243	4	4"x14"	13'-0"	243	4	243
36	4"x14"	14'-0"	2350	28	4"x14"	14'-0"	1830	28	1830
4	4"x6"	16'-0"	128	4	4"x6"	16'-0"	128	4	128
2	4"x6"	19'-0"	76	2	4"x6"	19'-0"	76	2	76
22	3"x6"	1'-0"	33	22	3"x6"	1'-0"	33	22	33
2	2"x6"	16'-0"	32	2	2"x6"	16'-0"	32	2	32
8	2"x6"	13'-0"	104	8	2"x6"	15'-0"	104	8	104
2	2"x6"	10'-0"	20	2	2"x6"	10'-0"	20	2	20
4	2"x6"	8'-0"	32	4	2"x6"	8'-0"	32	4	32
4	2"x6"	6'-0"	24	4	2"x6"	6'-0"	24	4	24
4	3"x8"	5'-0"	40	4	3"x8"	5'-0"	40	4	40
6	2"x4"	4'-0"	16	6	2"x4"	4'-0"	16	6	16
4	2"x4"	2'-0"	5	4	2"x4"	2'-0"	5	4	5
Total Lumber - Ft. BM. 11507									
HARDWARE									
6	1 1/2"	10'-8"	643	6	1 1/2"	10'-8"	643	6	643
6	1 1/2"	1'-0"	184	6	1 1/2"	1'-0"	184	6	184
2	10"x3/4"	1'-0"	51	2	10"x3/4"	1'-0"	51	2	51
4	6"x3/4"	0'-10"	51	4	6"x3/4"	0'-10"	51	4	51
4	10"x3/4"	2'-2"	221	4	10"x3/4"	2'-2"	221	4	221
4	10"x3/4"	5'-6"	468	4	10"x3/4"	5'-6"	468	4	468
6	5"x1/2"	2'-7"	132	6	5"x1/2"	2'-7"	132	6	132
4	1 1/2"	30"	73	4	1 1/2"	30"	73	4	73
88	1"	17'	414	88	1"	17'	414	88	414
8	7/8"	26"	40	8	7/8"	26"	40	8	40
4	7/8"	18"	15	4	7/8"	18"	15	4	15
24	7/8"	16"	80	24	7/8"	16"	80	24	80
8	7/8"	13"	22	8	7/8"	13"	22	8	22
6	3/4"	33"	26	6	3/4"	31"	25	6	25
25	3/4"	24"	83	4	3/4"	24"	13	4	13
12	3/4"	20"	54	2	3/4"	22"	64	2	64
4	3/4"	18"	10	12	3/4"	20"	34	12	34
8	3/4"	16"	28	4	3/4"	18"	10	4	10
8	3/4"	13"	16	12	3/4"	14"	25	12	25
12	3/4"	8"	17	8	3/4"	13"	16	8	16
22	3/8"	12"	27	22	3/8"	12"	27	22	27
8	7/8"	28"	38	8	7/8"	28"	38	8	38
4	3/4"	36"	19	4	3/4"	36"	19	4	19
176	1/8"	284	176	176	1/8"	284	176	176	284
52	1"	65	52	1"	65	52	1"	65	65
190	7/8"	146	190	7/8"	146	190	7/8"	146	146
44	3/4"	28	44	3/4"	28	44	3/4"	28	28
1400	6"	156	1400	6"	156	1400	6"	128	128
150	16d	3	150	16d	3	150	16d	3	3
4	4x1/2"	1-4"	36	4	4x1/2"	1-4"	36	4	36
8	1"	2-4"	46	8	1"	2-4"	46	8	46
Total Hardware - Burnds 3456									

DESIGN NOTES

Loading:
 Dead Load = 45 lbs. per sq. ft.
 Live Load = 80 lbs. per sq. ft. or Typical 10 Ton Truck
 Impact = 30% of Live Load
 Unit Stresses:
 Tension: 1000 lbs. per sq. in.
 Compression:
 Parallel to grain (1/2 not exceeding 10) = 700 lbs. per sq. in.
 Parallel to grain (1/2 greater than 10 and less than 30) = 500 - 200
 Where L = length of member in inches
 Perpendicular to grain = 150 lbs. per sq. in.
 End Bearing = 800 lbs. per sq. in.
 Bending:
 Extreme fiber stress = 1000 lbs. per sq. in.
 Horizontal Shear = 90 " "
 Shear:
 Parallel to grain when not subject to bending = 140 lbs. per sq. in.

49'-4" end to end of truss



GENERAL NOTES

Railing to be nailed to posts with 16d nails. All railing 3x4s. All bolts to have cast-iron washers under heads and nuts except where bearing on steel plate.

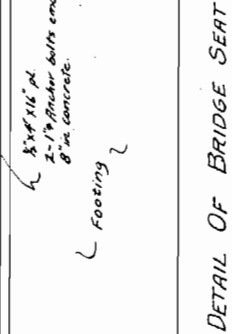
Timber:
 This design permits the use of first quality timber of the following species:

- Cedar, western red (Thuja plicata)
- Chestnut (Castanea dentata)
- Pine, Jack (Pinus divaricata)
- Pine, sugar (Pinus lambertiana)
- Pine, western white (Pinus monticola)
- Pine, western yellow (Pinus ponderosa)
- Spruce, red (Picea rubens)
- Spruce, sitka (Picea sitchensis)

Select for the bridge the most durable kind of timber in the above list obtainable locally, or a timber having as great or greater strength and durability. The timber should have at least 85% heartwood on any growth. Be free from worm holes, loose knots, wind shakes, decayed or unsound portions, or any other defects which might impair its strength or durability.

Painting:

Railing, including posts, shall be given 2 coats of pure white lead or other approved paint. Steel plates and rods, one shop coat and 2 field coats of red lead and linseed oil. Truss joints, tops of joists, and all other contact surfaces shall be heavily coated with hot coal tar before assembling.



DETAIL OF BRIDGE SEAT

Use Plan B-2-22 for abutment with bridge seat support as shown.

PLAN OF TYPICAL WOOD TRUSS BRIDGE
 48' Span
 12' & 16' Clear Roadway
 Scale: 3/8" = 1'

HIGHWAY DEPARTMENT
 BOARD OF STATE ENGINEERS
 NEW ORLEANS, LA.
 Nov. 1927

HALF SECTION
HALF END ELEVATION