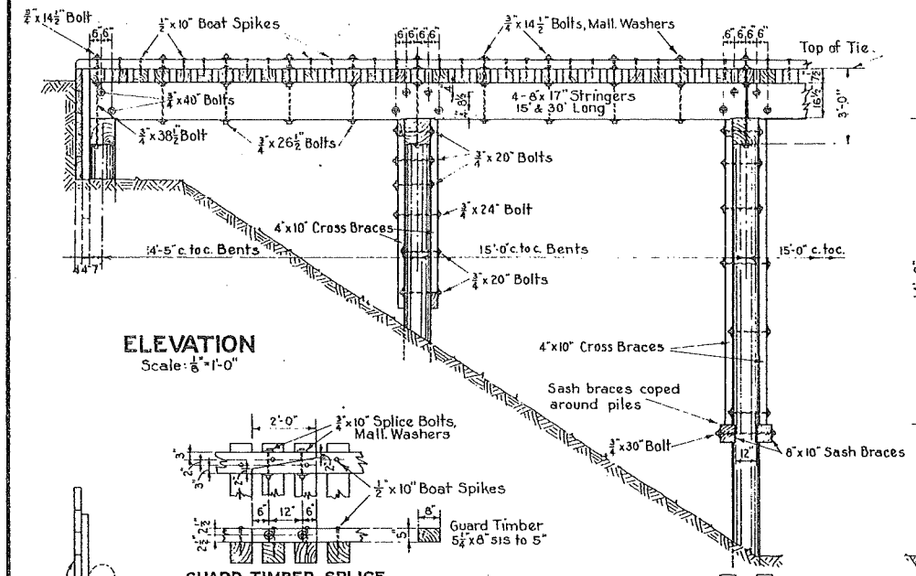
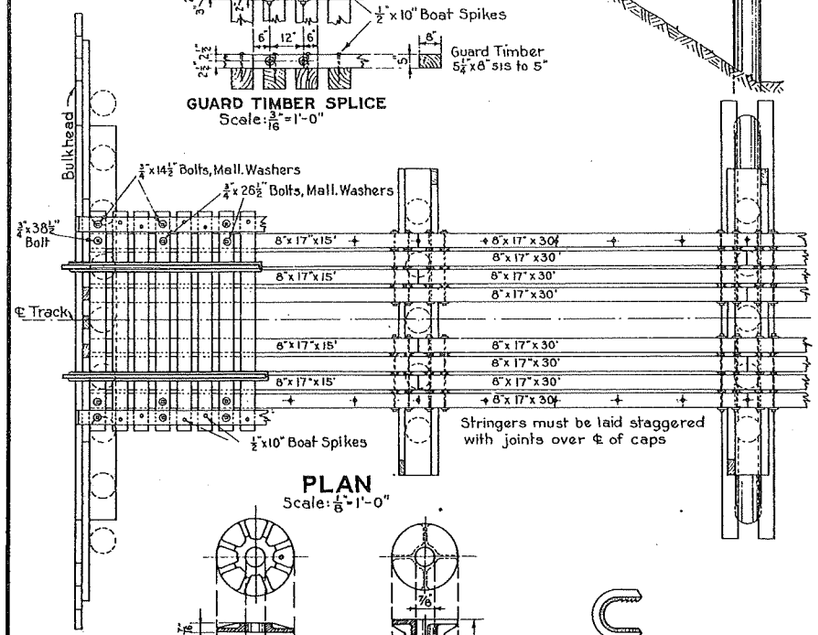
C.E.
S-100

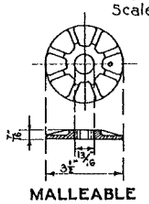


ELEVATION
Scale: 1/8" = 1'-0"

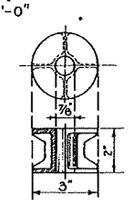
GUARD TIMBER SPLICE
Scale: 3/16" = 1'-0"



PLAN
Scale: 1/8" = 1'-0"

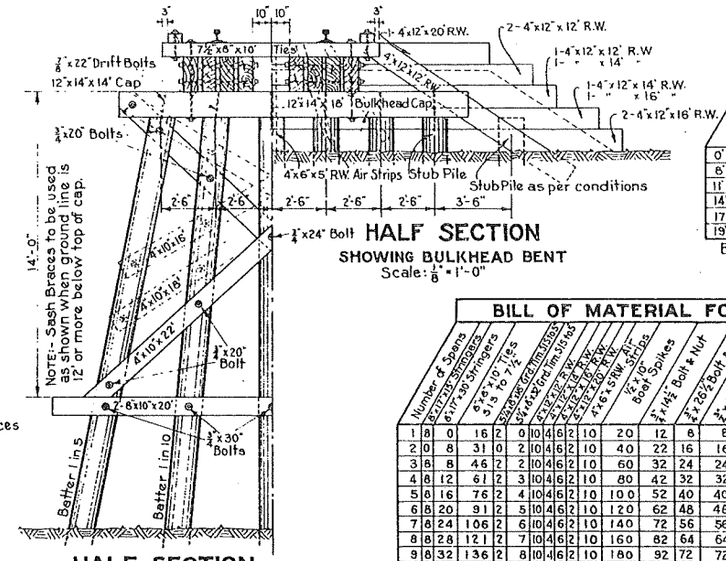


MALLEABLE WASHER
Wt. 0.47# ea.



MALLEABLE SEPARATOR SPOOL
Wt. 1.0# ea.

ALLIGATOR NUT LOCK
Wt. 0.021# ea.



HALF SECTION
SHOWING BULKHEAD BENT
Scale: 1/8" = 1'-0"

HALF SECTION
SHOWING INTERMEDIATE BENT
Scale: 1/8" = 1'-0"

BILL OF MATERIAL BENTS 0 TO 20 FT.

Height of Bent	Stub Pile Blk. Bent No. Piles	2"x14"x16' Blk. Bent	4"x10"x16' Inter. Bent	4"x10"x22' Braces	6"x10"x20' Sash, Etc.	3/4"x24" Bolt & Nut	3/4"x30" Bolt & Nut	3/4"x38" Bolt & Nut	3/4"x22" Drift Bolt & Nut	Malleable Washer	Alligator Nut Lock
0' to 7'	2	5	1	1			0	0	2	7	5	4	2
8' to 10'	2	5	1	1	2			10	1	2	7	5	26	13
11' to 13'	2	5	1	1		2		2	10	1	5	2	7	5	36	18
14' to 16'	2	5	1	1			2	2	10	1	5	2	7	5	36	18
17' to 18'	2	5	1	1			2	2	10	1	5	2	7	5	36	18
19' to 20'	2	5	1	1			2	2	10	1	5	2	7	5	36	18

Bolts in this list to be threaded 3" minimun

BILL OF MATERIAL FOR DECKS (Caps not incl.)

Number of Spans	8"x17" Stringers	6"x6"x10' Ties 3'-1" to 7'-2"	5"x16" Grd. Rm. Ties	5"x14"x6' Grd. Rm. Sis. Ties	4"x10"x6' R.W.	4"x12"x6' R.W.	4"x12"x10' R.W.	4"x12"x20' R.W.	4"x6"x5' R.W. Air Strips	1/2"x10" Boat Spikes	3/4"x14 1/2" Bolt & Nut	3/4"x26 1/2" Bolt & Nut	3/4"x40" Bolt & Nut	Malleable Washers	3/4" Alligator Nut Lock	Separator Spools	3/4"x10" Grd. Rm. Splice Bolts	3/4"x10" Splice Bolts	Mall. Washers	Wood Preserving	Fire Resisting Paint - Gal.	30d. Nails	20d. Nails	3/4"x6" Boat Spikes
1	8	0	16	2	0	10	4	6	2	10	20	12	8	8	56	28	24	0	0	4	11	9	3	60
2	0	8	31	0	2	10	4	6	2	10	40	22	16	16	108	54	48	0	0	7	22	9	6	60
3	8	8	46	2	2	10	4	6	2	10	60	32	24	24	160	80	72	4	8	10	33	9	9	60
4	8	12	61	2	3	10	4	6	2	10	80	42	32	32	212	106	96	6	12	13	44	9	12	60
5	8	16	76	2	4	10	4	6	2	10	100	52	40	40	264	132	120	8	16	15	55	9	15	60
6	8	20	91	2	5	10	4	6	2	10	120	62	48	48	316	156	144	10	20	18	66	9	18	60
7	8	24	106	2	6	10	4	6	2	10	140	72	56	56	368	184	168	12	24	21	77	9	21	60
8	8	28	121	2	7	10	4	6	2	10	160	82	64	64	420	210	192	14	28	24	88	9	24	60
9	8	32	136	2	8	10	4	6	2	10	180	92	72	72	472	236	216	16	32	26	99	9	27	60
10	8	36	151	2	9	10	4	6	2	10	200	102	80	80	524	262	240	18	36	29	110	9	30	60
11	8	40	166	2	10	10	4	6	2	10	220	112	88	88	576	288	264	20	40	32	121	9	33	60
12	8	44	181	2	11	10	4	6	2	10	240	122	96	96	628	314	288	22	44	35	132	9	36	60
13	8	48	196	2	12	10	4	6	2	10	260	132	104	104	680	340	312	24	48	37	143	9	39	60
14	8	52	211	2	13	10	4	6	2	10	280	142	112	112	732	366	336	26	52	40	154	9	42	60
15	8	56	226	2	14	10	4	6	2	10	300	152	120	120	784	392	360	28	56	43	165	9	45	60

NOTES:-

The center line of piles produced should intersect at a point 25 feet above cut off.
All bents over 7 feet in height must be cross braced.
All bolts to be set tight and held with Alligator Nut Locks.
Bents to have sash braces as shown when ground line is 12 feet or more below top of cap.
When caps and stringers are dapped daps shall be true and level.
All piling shall be creosoted as per W.P. Spec. #103.
Wood bearing on wood shall have bearing surfaces painted with Standard Wood Preserving Paint.
Ties, guard timbers, tops of caps and stringers shall be given one coat of Standard Fire Resisting Paint before placing, and tops of ties, guard timbers, caps and stringers shall have a second coat after placing ~~and sprinkled with fine sand while paint is still wet.~~
Super-elevation on curves to be provided for in cutoffs, with top of lower rail maintained at established grade.
All timber to be Douglas Fir except as noted.
When ordering timber be governed by West Coast Lumbermen's Association Standard Grading and Dressing Rules No.10, effective July 1, 1934:-

Stringers to be Select Structural Grade,	see paragraph	218
Cross Braces to be " " " , "	"	214
Ties, Caps, Sashes to be " " " , "	"	210
Guard Rail to be No.1 Dimension, "	"	195

APPROVED: J. M. Williams
CHIEF ENGINEER.

APPROVED: E. E. Mason
VICE PRESIDENT AND GENERAL MANAGER.

THE WESTERN PACIFIC RAILROAD CO.
STANDARD
PILE TRESTLE FOR BRANCH LINES
15' SPAN - 8"x17" STRINGERS - 5 PILE BENTS

Scales as noted

Adopted July 1931
Revised May 15, 1937