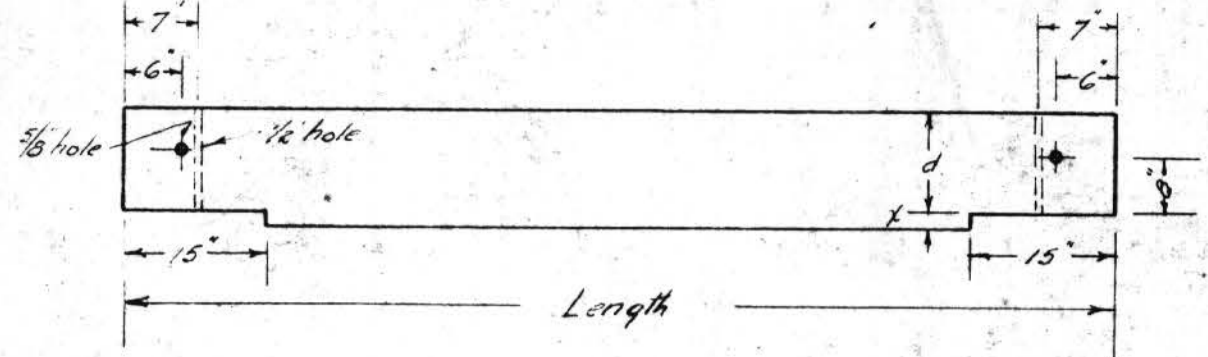
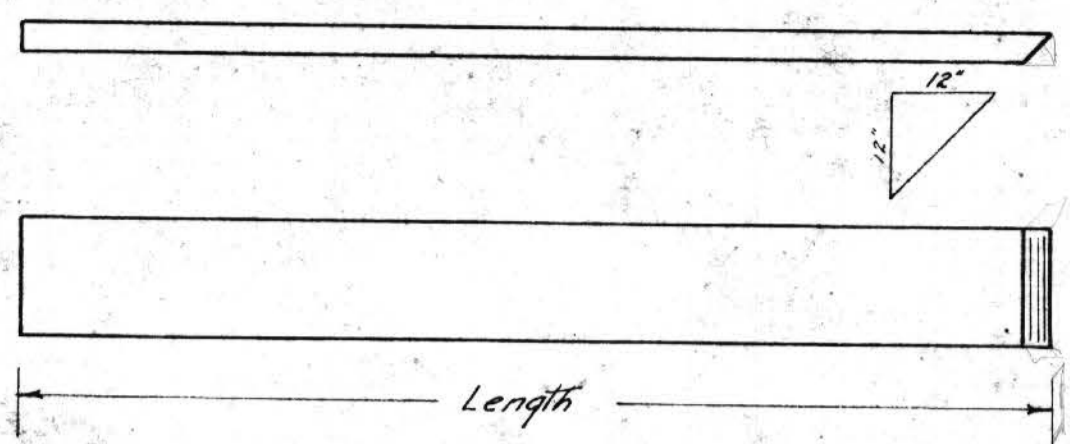


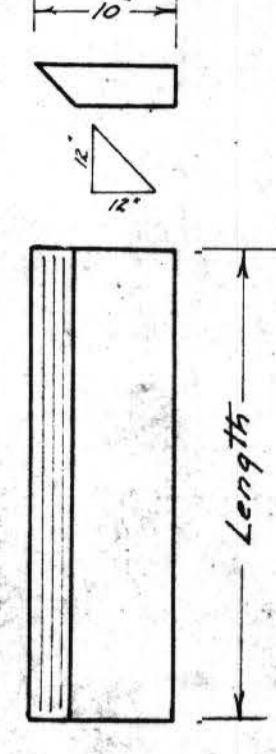
Inside stringers for end spans of multiple span bridges. **Mk. A.**



Inside stringers for intermediate spans of multiple span bridges. **Mk. B.**



3x12 Wing planks **Mk. M.**

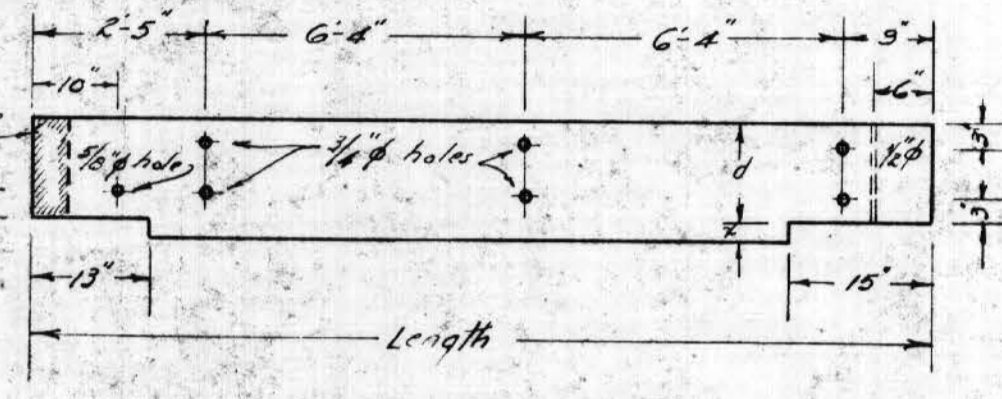


3x10 Batten **Mk. S.**

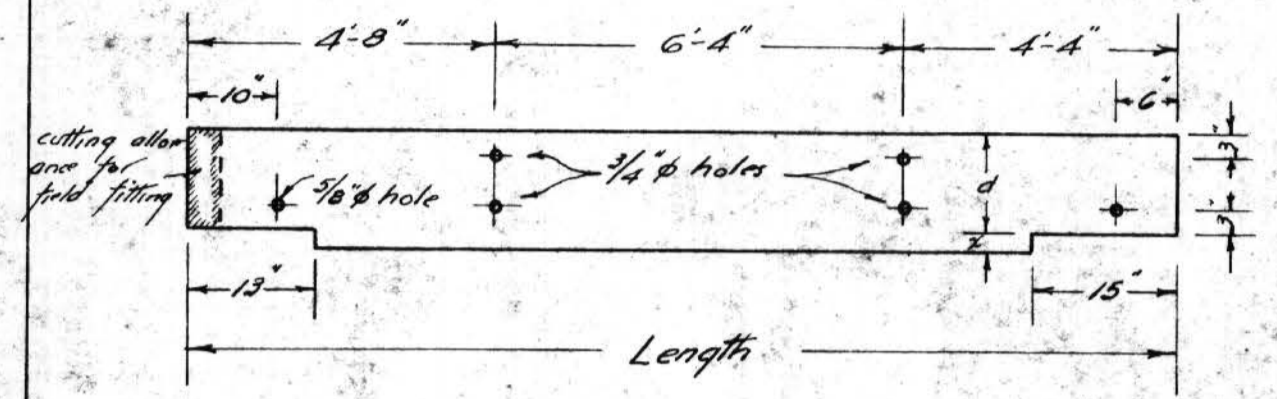
Note:- Ends of stringers must be cut square and true. Dimension 'd' must be exactly the same for all stringers of same nominal depth. The depth of the shoulder 'x' will vary according to the depth of the rough stringers but shall not be less than 2" and not more than 3". Shoulder 'x' shall be cut square.

BILL OF TREATED TIMBER.

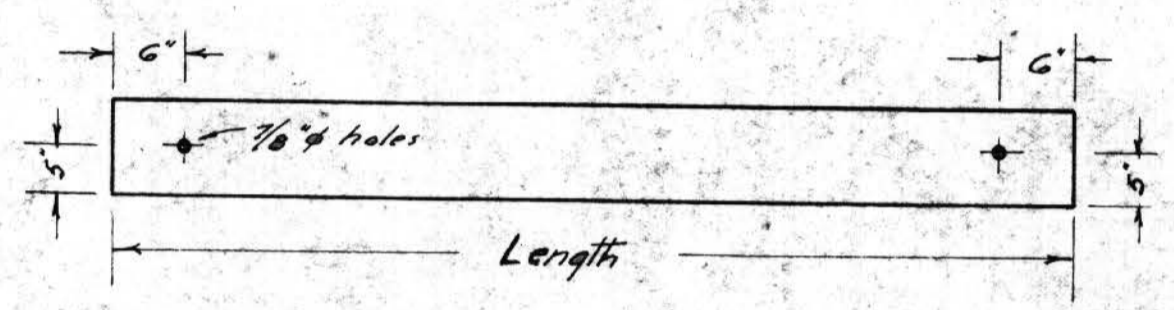
Mark	No	Description	Size	Length	Treatment	Remarks	F.B.M.
A	22	Stringers	6x16	16'-0"		Rough	2816
B	11	"	"	16'-0"			1408
C1C2	4	"	"	15'-10"		Joint Common	512
D1D2	2	"	"	15'-4"			256
E1E2	3	"	3x12	16'-0"			144
F1F2	3	"	2x12	16'-0"			96
G	2	Caps	12x12	31'-6"			
H	2	"	"	29'-6"			
J	12	Clamps	4x6	2'-0"			
K	12	"	"	3'-0"			
L	4	Blocks	12x12	4'-6"			
M	2	Wing Planks	3x12	6'-0"			
N	2	"	"	7'-0"			
M	12	"	"	9'-0"			
N	4	Sway Braces	3x10	16'-0"			180
N	2	"	"	17'-6"			90
N	2	"	"	20'-0"			100
O	2	Floor Planks	5x10	14'-0"			115
O	2	"	"	12'-0"		3" non incised	100
P	2	Guard Rails	4x6	24'-0"			No. Common 96
R	2	"	6x6	23'-0"			144
S	2	Battens	3x10	8'-0"			40
T	4	Straps	4x6	2'-0"			16
U	18	Risers	2x6	0'-8"		515	12
	16	Ballast Planks	3x12	24'-0"		Rough	1152
	16	"	"	13'-0"			672
	2	"	"	5'-6"			36
	36	Separators	"	1'-6"			180
	6	"	"	2'-1"			30
	2	Edge Pieces	2x6	4'-6"		515	10
	3	"	"	5'-0"			15
	2	"	"	9'-0"			20
	340	Flooring	2x4	14'-0"		545	3280
	320	"	"	10'-0"			2160
	60	"	2x10	5'-0"			500
	78	Fillers	2x4	0'-8"			34
Total =							16,508



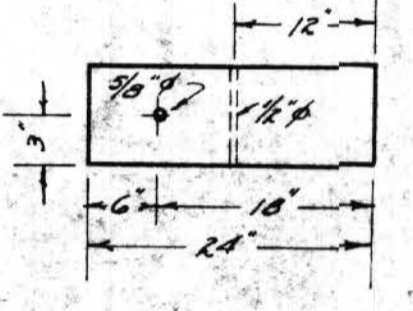
Outside stringers for end spans of multiple span bridges. **Mk. C.**
Stringers with 3/4" holes for rail posts **Mk. C.**
" " " " " " **Mk. C2.**



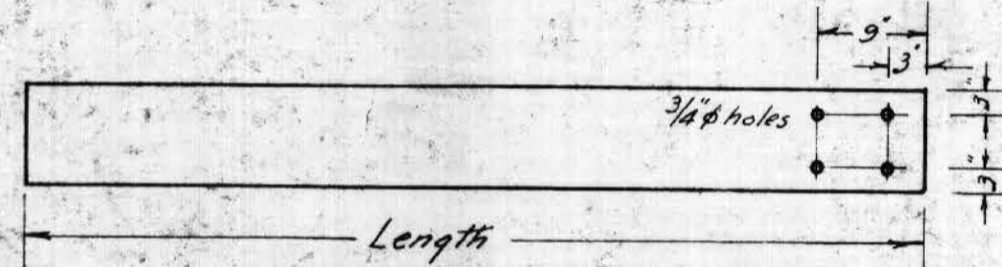
Outside stringers for intermediate spans of multiple span bridges. **Mk. D.**
Stringers with 3/4" holes for rail posts **Mk. D.**
" " " " " " **Mk. D2.**



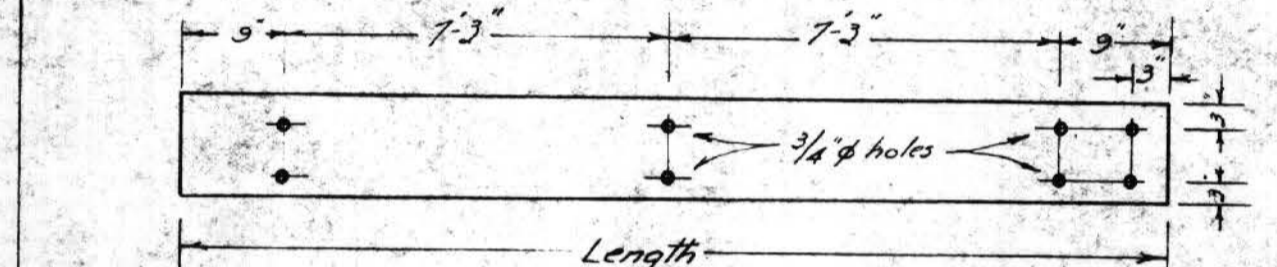
3x10 Sway Brace **Mk. N.**



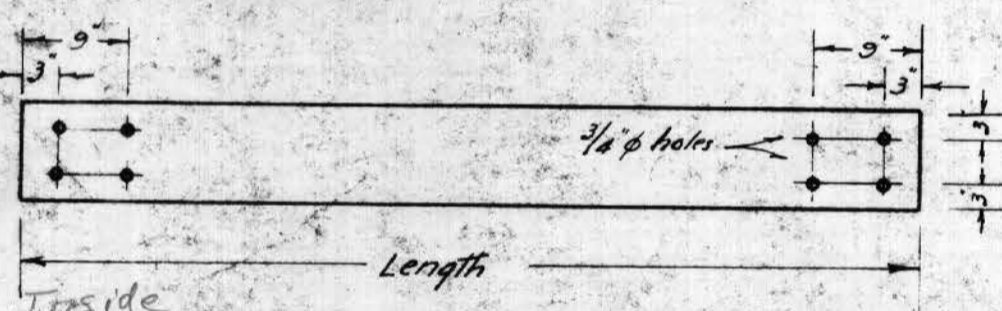
4x6 Strap **Mk. T.**



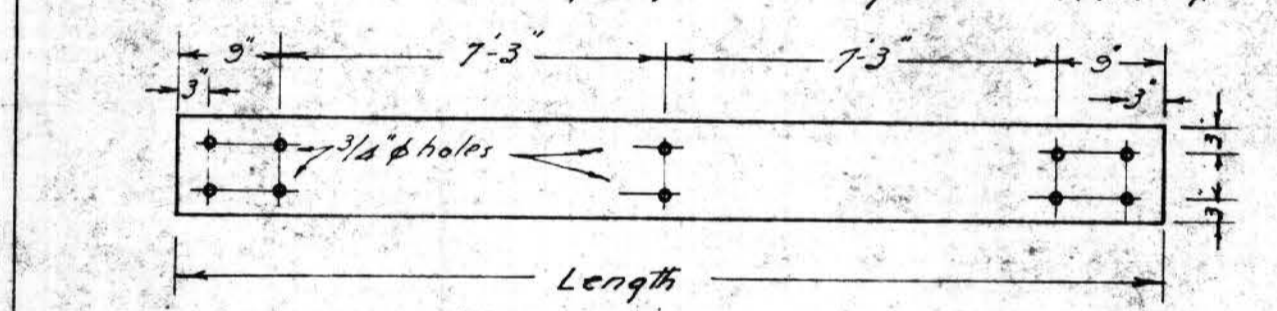
Inside Walk stringers for end spans **Mk. E.**



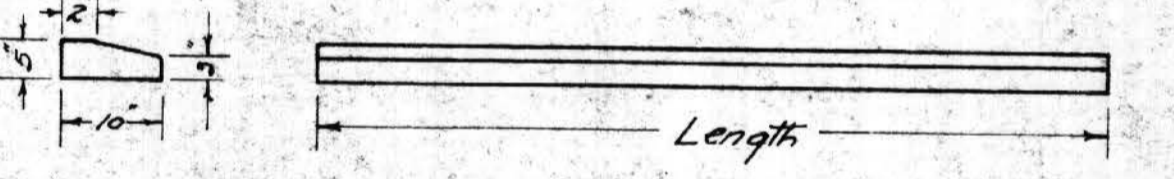
Outside walk stringer for end spans **Mk. F1.**



Inside Walk stringers for intermediate spans **Mk. E2.**



Outside walk stringer for intermediate spans **Mk. F2.**



5x10 Floor Plank **Mk. O.**



2x6x8 Risers **Mk. U.**

- 2 required of length 14'-0"
- 2 " " " 12'-0"
- " " " "

- 4 required

- 18 required

BILL OF TREATED PILING.

No	Butt Dia	Tip Dia	Length	Lin. Ft
26	13-15 inches	7-10 inches	30'-0"	780

BILL OF IRON.

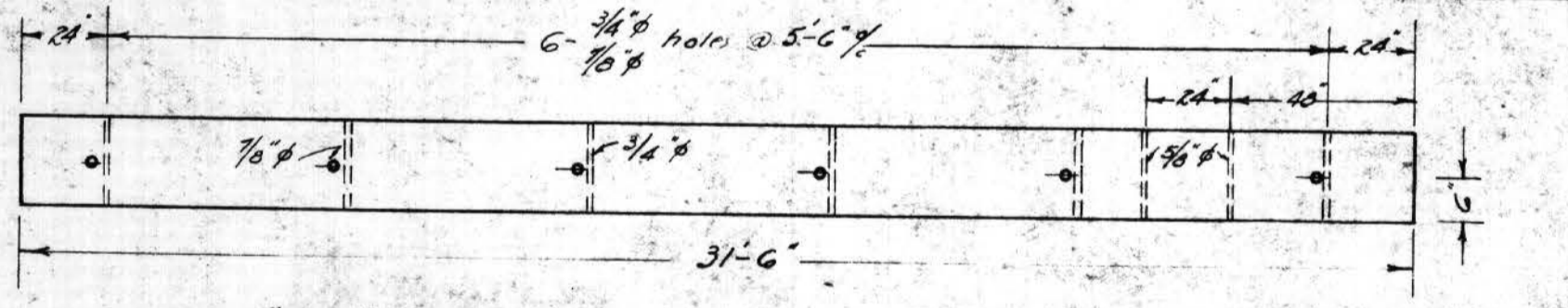
Mk	No	Description	Size	Length	Location	Lbs.
A	22	Drift Bolts	3/4"	20'	Cap to Piles	55
B	32	"	1/2"	20'	Strap to Caps	36
C	4	"	1/2"	12'	Strap Straps to Caps	3
D	12	"	1/2"	16'	Guard Rail to Floor	17
E	6	Machine Bolts	3/4"	22'	Sway Bracing to Piles	13
F	14	"	3/4"	19'	"	39
G	24	"	3/4"	26 1/2'	Clamps	90
H	8	"	1/2"	25 1/2'	Blocks to Caps	12
J	22	"	1/2"	13 1/2'	Through Stringers	20
K	8	"	1/2"	11 1/2'	Through Straps & Straps	7
L	14	"	3/8"	5 1/2'	Through SW Straps	3
M	18	"	3/8"	7 1/2'	"	18
N	4	"	3/8"	9'	Through Rail Posts & Straps	4
O	16	"	3/8"	12 1/2'	"	22
P	16	Eye Bolts	1/2"	21'	Straps to Caps	22
R	18	Log Screws	3/8"	14'	Guard Rail to Floor	22
S	108	C.I. Washers	2 3/8"	3/8"	Fat Bolt H.L.M.N.O.P.	70
T	88	"	3/8"	3/8"	E.F. & G.	77
U	70	Cut Washers	1 1/8"	1/8"	H.J. & R.	3
V	22	"	2"	1/2"	K.J.	3
Total =						542

BILL OF UNTREATED TIMBER.

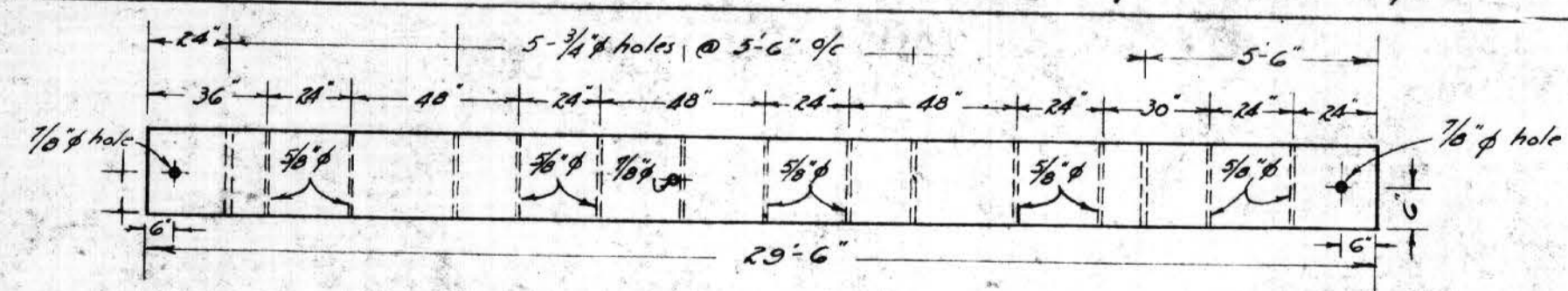
No	Description	Size	Length	Remarks	F.B.M.
B	Rail Posts	3x6	7'-0"		84
T	"	4x4	5'-6"		93
7	"	4x4	4'-4"		
2	Hick Boards	2x6	24'-0"		48
2	Hub Boards	2x8	24'-0"		128
2	"	"	6'-0"	2 D.I.S.F. No. 1 Common	16
2	"	"	3'-0"		8
A	Rail Boards	2x8	24'-0"		63
2	"	"	6'-0"		8
2	"	"	3'-0"		4
A	Hand Rails	3x6	24'-0"		144
3	"	"	6'-0"		27
Total =					624

No	Size	Length	Mark
22	6x16	16'-0"	A
11	"	16'-0"	B
2	"	15'-10"	C
2	"	15'-4"	D
1	"	15'-4"	D2
2	3x12	16'-0"	E
1	"	16'-0"	E2
2	2x12	16'-0"	F
1	"	16'-0"	F2

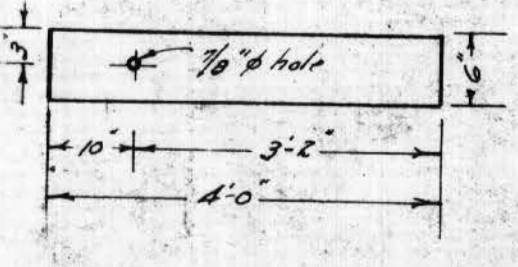
No of stringers required



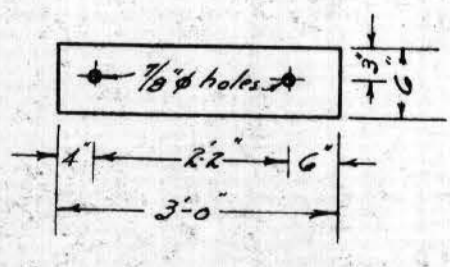
12x12 Caps for end bents. **Mk. G.** 2 reqd.



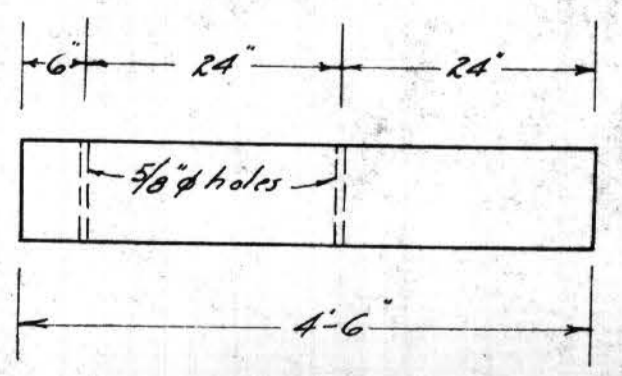
12x12 Caps for intermediate bents **Mk. H.** 2 reqd.



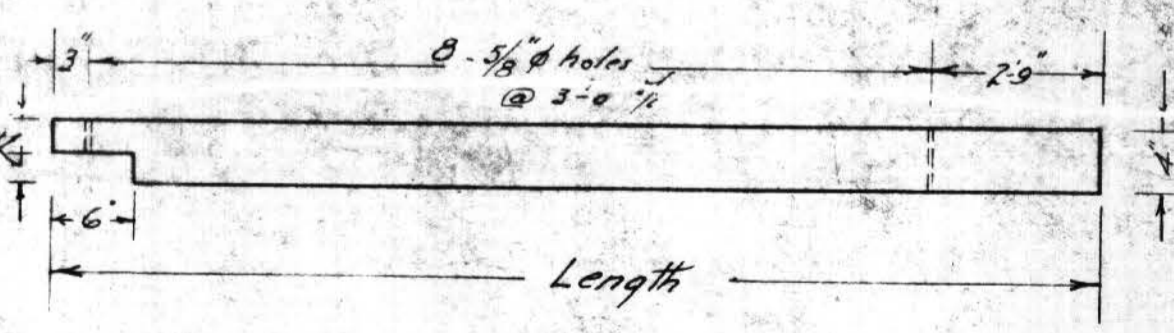
4x6 Clamp **Mk. J.**



4x6 Clamp **Mk. K.**

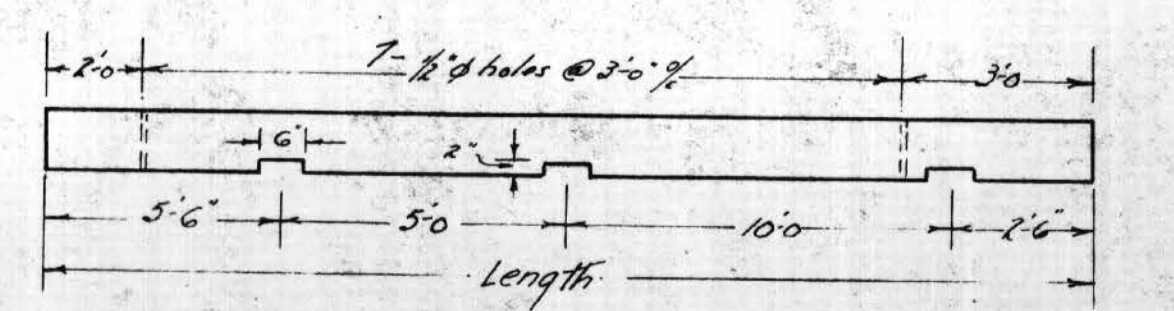


12x12 Block **Mk. L.**



4x6 Guard Rail **Mk. P.**

- 2 required of length 24'-0"



6x6 Guard Rail **Mk. R.**

- 2 required of length 23'-0"

NOTE:- All timber to be Coast Douglas Fir of the grades shown on the Bills of Material. Timber designated by Mark shall be framed before treatment according to the details shown on the plan.

CITY OF WINNIPEG
 TITLE: DETAIL OF FRAMING AND BILL OF MATERIALS FOR BRIDGE AT JASKATCHEWAN AVE. & OMAHA ST.
 301 ... DATE: Aug 7 1936
 W. ALDRIDGE DESIGNING ENGINEER
 W. P. BRADSTON CITY ENGINEER
 DRAWN BY: N.S. Bubbitt
 CHECKED BY: ...
 APPROVED BY: ...
 TUBE NO. ...