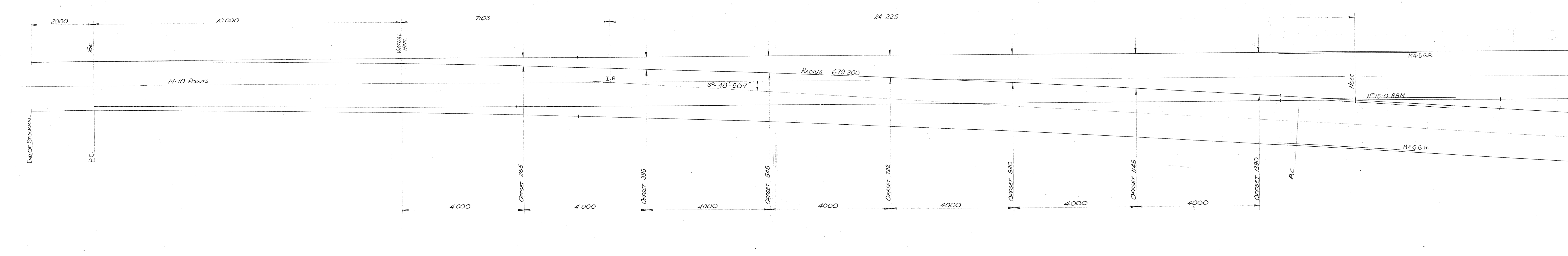
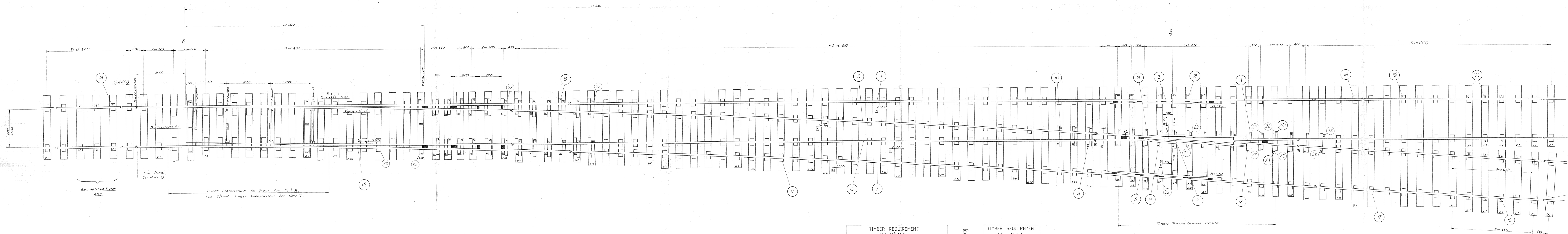


Note: For further detail see F397A.

V.R. 7-52 TURNOUT 80 LB., 15-9" x 7-52, ARRANGEMENT FOR REPLACING 13-6" x 7-52, 80 LB. <i>S. S. W. 5.10.72</i> Chief Civil Engineer.										Scale $\frac{1}{4}'' = 1'-0''$	
Rev'n	Date	Amendment	Amerid	App'd	Drawn	Traced	Checked	Corr's N	CT-23 PLAN No. - F - 223-72		
					<i>S. S. W.</i>	<i>S. S. W.</i>	<i>K. C.</i>		Engineer of M&WS		



OFFSET DIAGRAM
SCALE 1:100

TIMBER REQUIREMENT FOR V/LINE

SLEEPER 300mm x 150mm LENGTHS	NO. REQ.	SIZE & LENGTH FOR SLEEPERS REFER NOTE 7.	NO. REQ.
2.7 M	15		11
2.85 M	12		
3.0 M	5		
3.15 M	5		
3.3 M	6		
3.45 M	5		
3.6 M	5		
3.75 M	4		
3.9 M	5		
4.05 M	4		
4.2 M	4		
4.35 M	4		
4.5 M	4		
4.65 M	3		
4.8 M	3		
5.1 M	7		

TIMBER REQUIREMENT FOR M.T.A.

SIZE 300mm x 150mm LENGTHS	N ^o REQ.
2.7M	21
2.85M	12
3.0M	6
3.15M	5
3.3M	6
3.45M	5
3.6M	5
3.75M	4
3.9M	5
4.05M	4
4.2M	4
4.35M	4
4.5M	4
4.65M	3
4.8M	3
5.1M	7

- NOTES:**
1. WOODS CLOSED TO BE SUPPLIED WITH BOTH ENDS NAILS THE 1" BOLT NAIL OMITTED.
 2. TIMBER WOULD SHOWN THIS.
 3. 1021 NAILS TO BE DOWN IN CROSSING RAILS ON SIDE FOR HANDLING OF RAIL BOUNDS AS V/LINE.
 4. 1021 NAILS TO BE DOWN IN CROSSING RAILS ON SIDE FOR HANDLING OF M.T.A. BOUND RAILS.
 5. GUARD JOINTS MAY BE WROTE IN LAYOUT WHERE REQUIRED.
 6. ALL DIMENSIONS IN MILLIMETRES EXCEPT WHERE INDICATED.
 7. FOR V/LINE, DEPENDING ON POINTS OPERATION TIMBERS MAY VARY IN SIZE & LENGTH SEE RELEVANT S & C DRAWINGS FOR DETAILS.
- B. FOR DOUBLE WIRE POINTS OPERATION SEE RELEVANT S & C (V/LINE) DRAWINGS FOR TIMBER LENGTHS & SPACINGS.

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CONSENT OF THE CORPORATION
HEAD OFFICE, MELBOURNE DEPARTMENT 1

REV	DATE	DESCRIPTION	REV'D BY	APPROVED BY	DESIGNED BY	CHECKED BY
A	10-10-81	ISSUE FOR CONSTRUCTION	AV	AV	P.W.J.	P.W.J.
B	10-10-81	ISSUE FOR CONSTRUCTION	AV	AV	P.W.J.	P.W.J.
C	6-3-82	ISSUE FOR CONSTRUCTION	AV	AV	P.W.J.	P.W.J.
D	15-9-87	ISSUE FOR CONSTRUCTION	AV	AV	P.W.J.	P.W.J.
E	19-5-88	ISSUE FOR CONSTRUCTION	AV	AV	P.W.J.	P.W.J.

ITEM	DESCRIPTION	QTY	REMARKS
22	LOCKSMITH'S 'L' I	544	
21	BASEPLATE BB	104/82	1
20	BASEPLATE B7	104/82	1
19	BASEPLATE C10	500/81	500
18	CROSSING'S 'L' 6"	210	210
17	CURVATURE LEVEL BASE SLEEPER RAIL BOUND RAIL	186	186 AS 1085-1087-18
16	GRADUATED CUT PLATES ABC	500/81	500/81
15	GUARD RAIL PLATE G.P.	498/81	498/81
14	CROSSING PLATE C4	500/81	500/81
13	CROSSING PLATE C3	"	3
12	CROSSING PLATE C2	"	8
11	CROSSING PLATE C1	500/81	500/81
10	BASEPLATE B6	300/81	300/81
9	BASEPLATE B5	800/81	800/81
8	BASEPLATE B4	488/81	488/81
7	CLOSURE RAIL (CONVD) 31 000 LONG	487/81	487/81
6	CLOSURE RAIL (CONVD) 24 357 LONG	"	1
5	CLOSURE RAIL (CONVD) 24 355 LONG	"	1
4	CLOSURE RAIL (CONVD) 31 005 LONG	487/81	487/81
3	M.T.A. GUARD RAIL	487/81	487/81 COMPLETE WITH BUCKLES
2	N ^o 15 O RAIL BOUND MANGANESE Y-CROSSING	486/81	486/81 COMPLETE
1	POINT LAYOUT (M.T.A. FUND RAIL)	488/81	488/81 COMPLETE

VICTORIAN RAILWAYS
TURNOUT
M-10, N^o 15 O RAIL
BOUND MANGANESE
60 kg RAIL

DATE 30 JUNE 1981
SCALE 1:304.1750
WORKS CT 2886
DRAWING NO. 457/81
REV. E

SPREADER ASSEMBLY NUMBERS

INSULATED	TA 101	TA 102	TA 103	TA 105	TA 106
"	TA 201, TA 301, TA 401	TA 202 + TA 302	TA 203	TA 104 + TA 204	
NON-INSULATED		TA 402	TA 303	TA 107	
NON-INSULATED	TA 501	TA 502	TA 503	TA 504	

MATERIALS LIST

ASSEMBLY No	TA 101	TA 201	TA 301	TA 102	TA 202	TA 302	TA 103	TA 203	TA 303	TA 503	TA 204	TA 504	TA 105	TA 106	TA 107	TA 301	TA 302	TA 401	TA 104
JOINT ARRANGEMENT	L	L	M	M	N	M	M	M	N	M	M	M	L	L	N	L	M	L	M
DETAIL No																			
1074																			
1075																			
2075																			
1076																			
2076																			
3076																			
4076																			
2077																			
3077																			
1078																			
1079																			
1080																			
1081																			
1082																			
12 B 43																			
26 B 35																			
27 B 35																			
28 B 35																			
27 F 3184	2	2	2	2	2		2	2	2		2	2	2	2		2	2	2	2
28 F 3184	2	2	2										2	2		2	2		2
Boils 4" x 3/4" Sqnd *	2	2	2										2	2		2	2		2
3 1/2" x 3/4" *				2	2	2	2	2	2	2	2	2			2	2	2		2
Identification Label	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8076																			
9076																			
4077																			

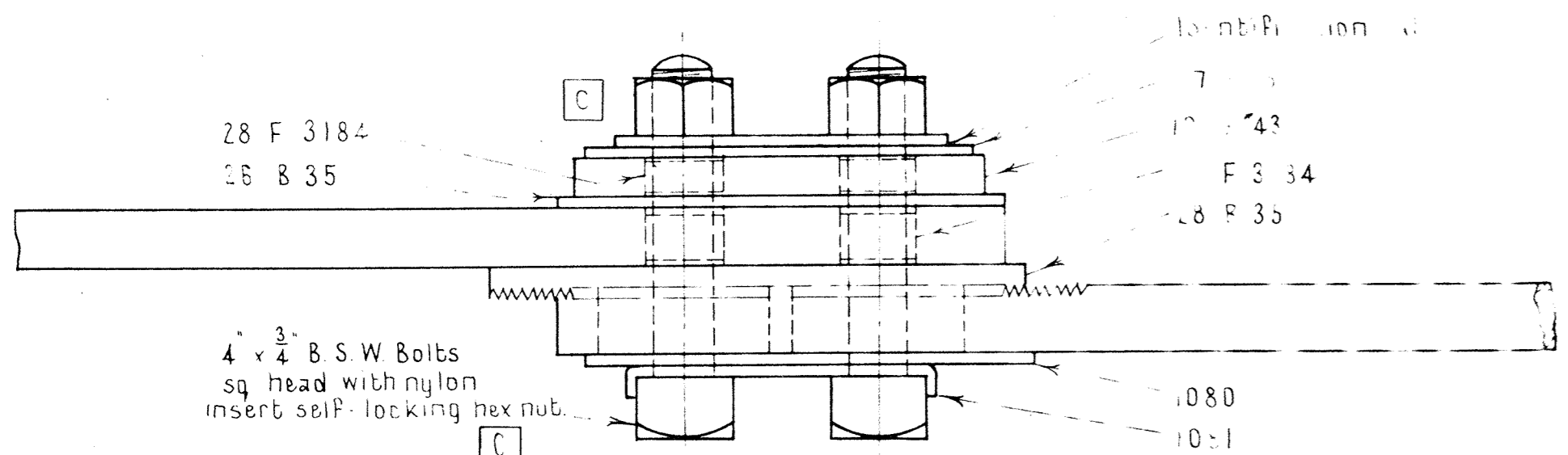
ASSEMBLY No	RANGE	
	MINIMUM	MAXIMUM
TA 101, 103, 302	4' - 3 3/8"	4' - 5"
TA 201, 102, 203, 303, 401	4' - 4 1/2"	4' - 5 3/8"
TA 202, 402	4' - 5 1/2"	4' - 6 5/8"
TA 104, 204	4' - 4 3/8"	4' - 5 1/2"
TA 301	4' - 2 3/4"	4' - 4 1/8"

Rev	Date	Amendment	Amended by	Approved by
G	23-2-71	TA 401, TA 104, and Details 9076, 4077 added.	K.W.D.	
F	22-7-64	TA 301, TA 302 and Det. 8076 added.	R.J.D.	A.A.P.

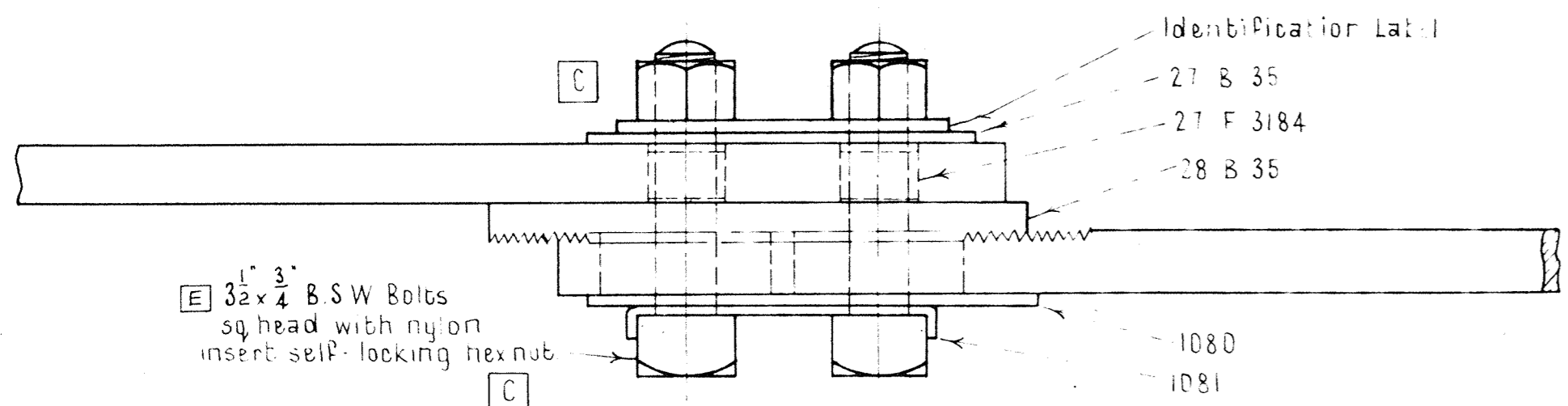
V.R.
SPREADERS
Scale - 6" = 1'-0"

SMM 21/1/60
Chief Civil Engineer

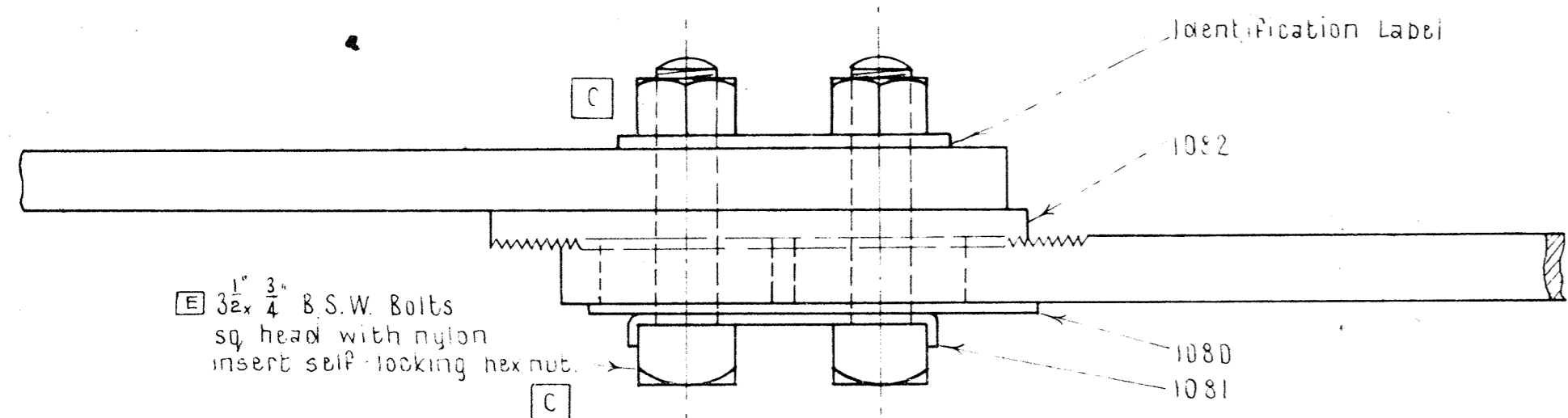
Revision	Date	Amendment	Amended by	Approved by	Drawn	Traced	Checked	Corres No	PLAN. No.
					L.U.W.	M.B.		A.A.P. Engr of M & W.S.	P-40 11-C 633-43



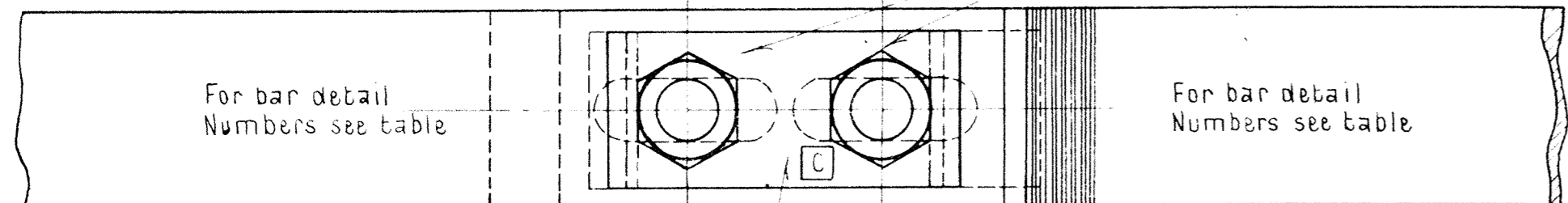
JOINT ARRANGEMENT - L



JOINT ARRANGEMENT - M



JOINT ARRANGEMENT - N

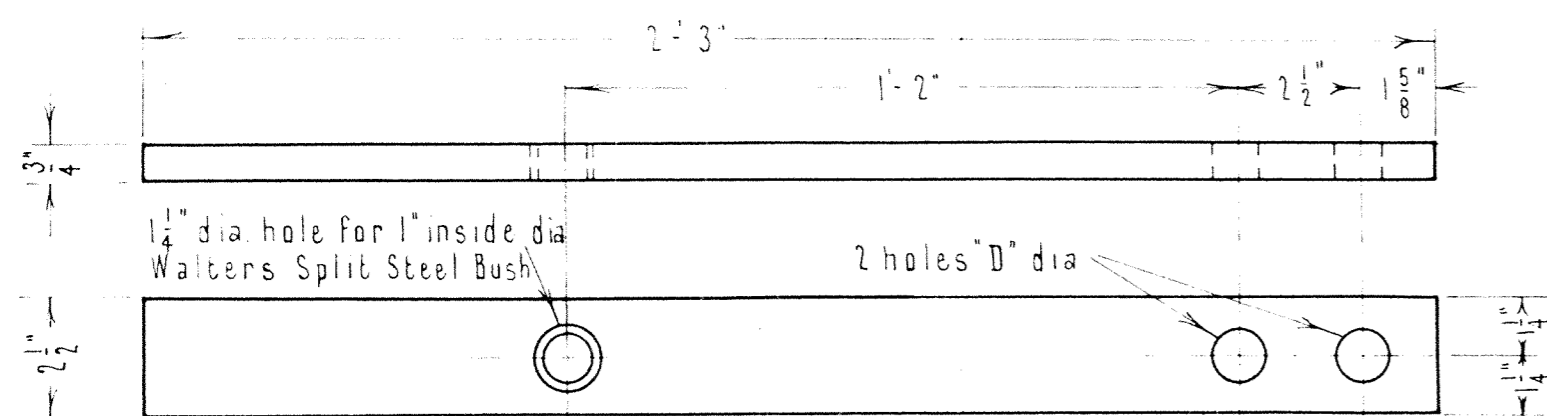


TYPICAL JOINT ARRANGEMENT

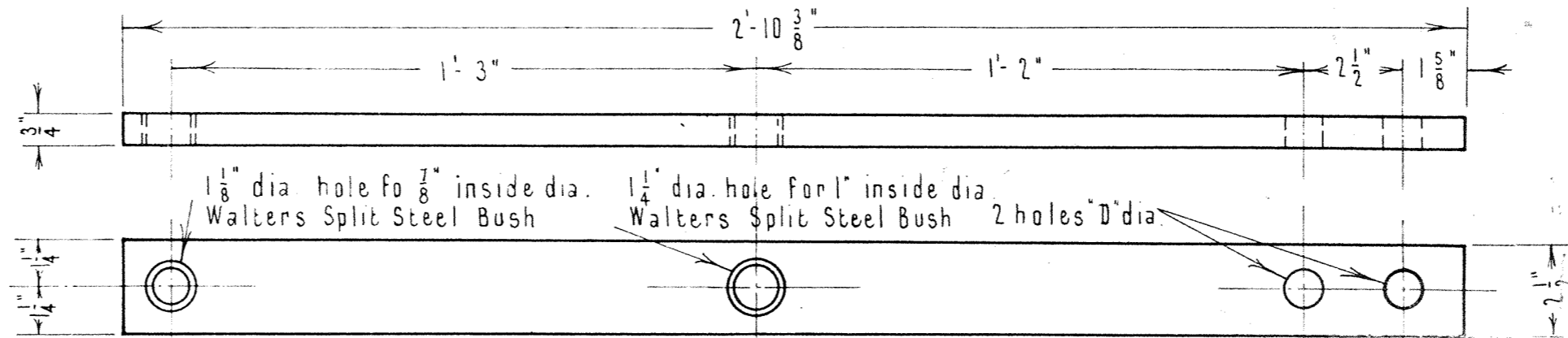
Stamp Spreader Assembly Number here on Identification Label.

For Spreader Details see D'9 No 634-48

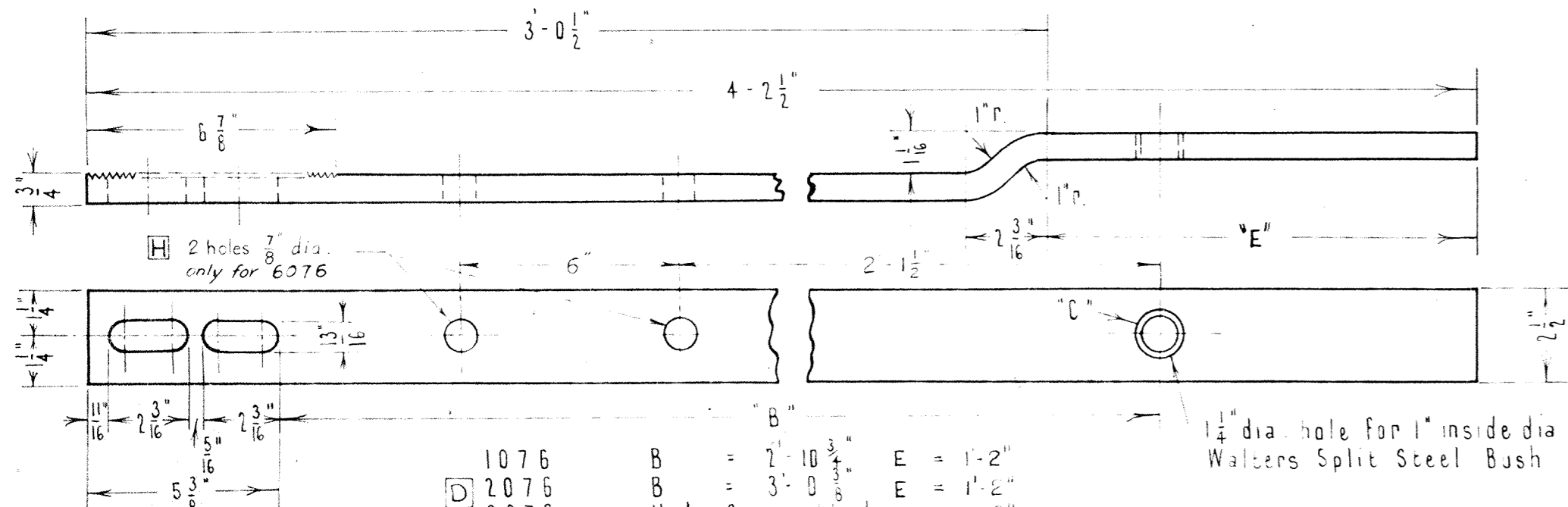
40862
L17-1.



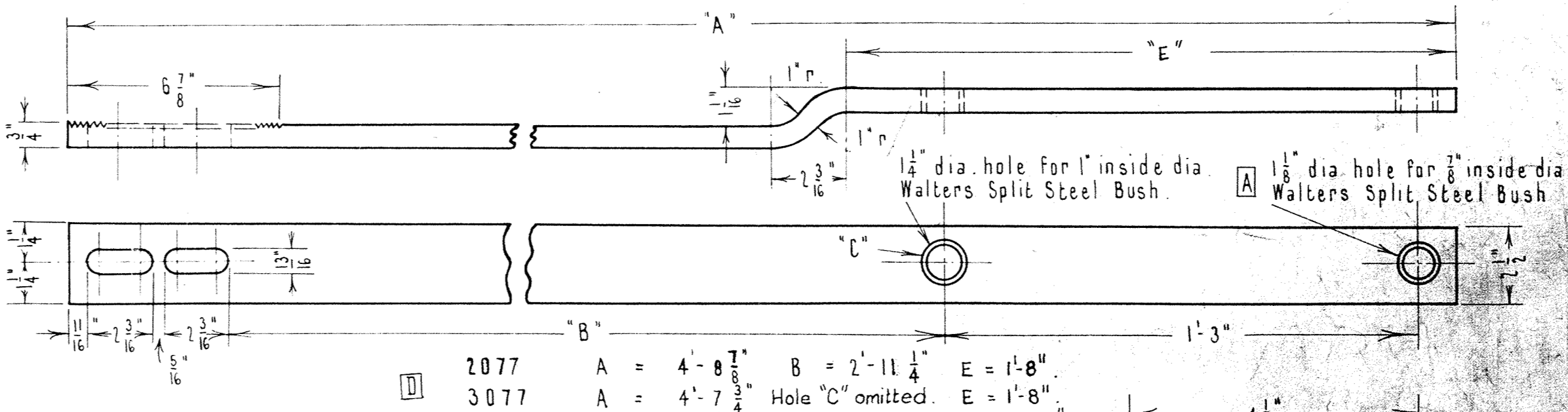
1074 "D" = 1 1/64"
2074 "D" = 1 5/32"



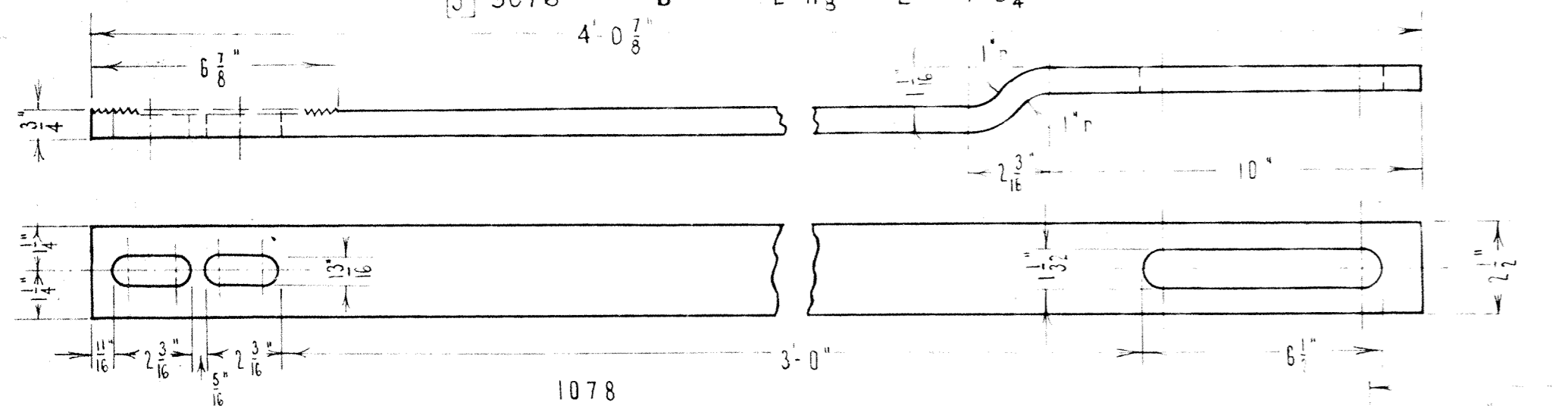
1075 "D" = 1 1/64"
2075 "D" = 1 5/32"



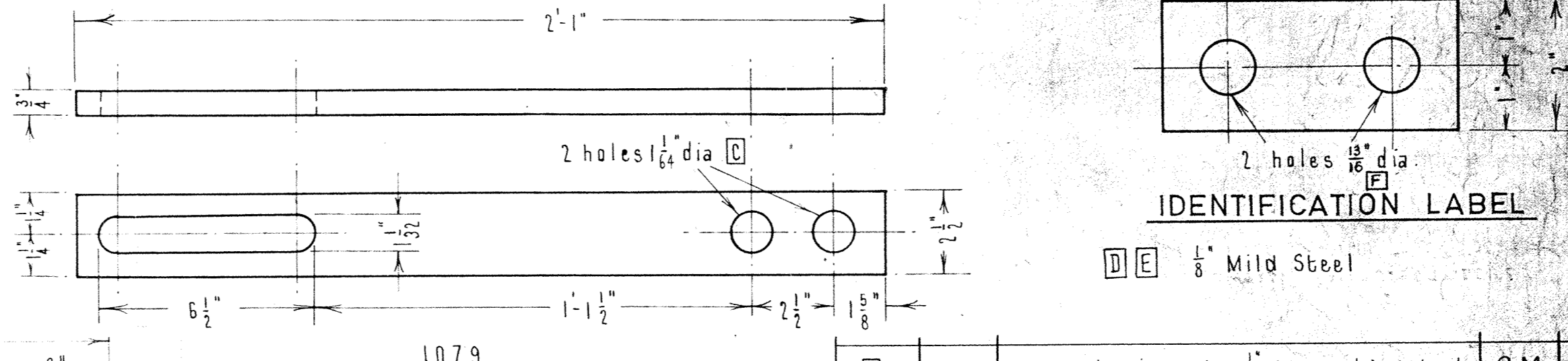
1076 B = 2'-10 3/4" E = 1'-2"
2076 B = 3'-0 3/4" E = 1'-2"
3076 Hole C omitted E = 1'-2"
6076 B = 2'-11 1/2" E = 1'-2"
8076 B = 2'-11 1/2" E = 1'-2"
9076 B = 2'-11 1/2" E = 1'-0 1/4"



2077 A = 4'-8 7/8" B = 2'-11 1/4" E = 1'-8"
3077 A = 4'-7 3/4" Hole 'C' omitted E = 1'-8"
4077 A = 4'-8 7/8" B = 2'-11 1/4" E = 1'-5 3/4"

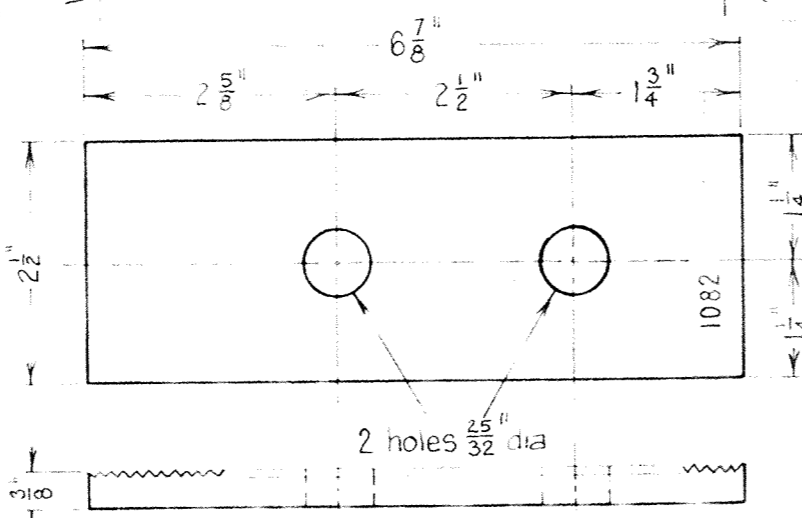


1078



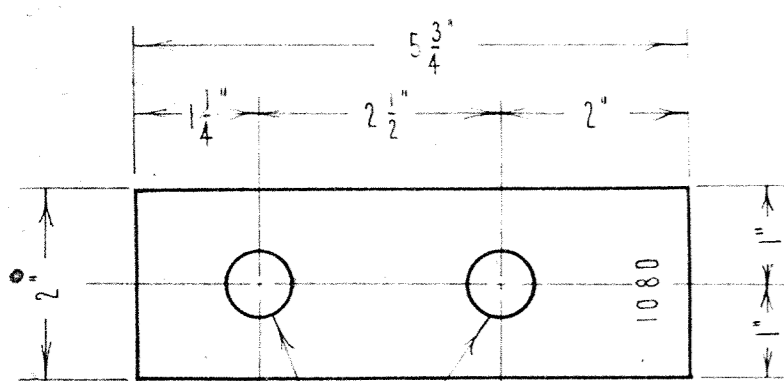
IDENTIFICATION LABEL

1/8" Mild Steel



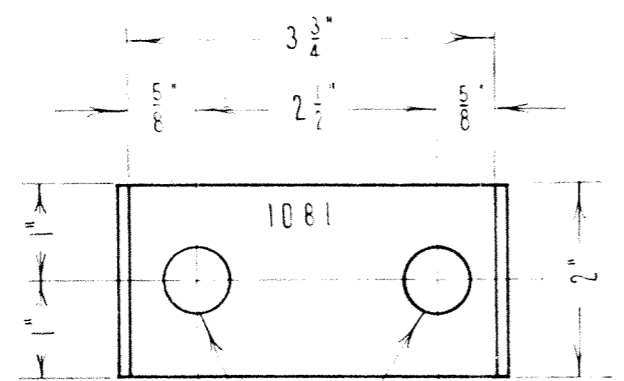
1082 Mild Steel forged

Note - Detail numbers to be stamped on one end of each bar. All bars from 2 1/2" x 3/4" Mild steel.



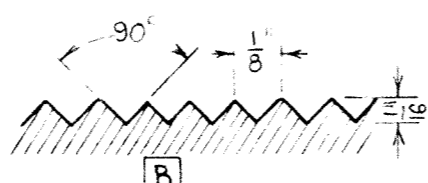
1080

1" Mild Steel



1081

16 gauge Mild Steel



DETAIL OF SERRATIONS

Revision	Date	Amendment	Amend. By	Approved
E	18-8-60	Identification Label 1/8" MS ex shim stock	G.M.	A.A.P.
D	4-1-60	Dimensions of 1076, 2077 amended. 6076 & Identification label added. 1077 Deleted.	G.M.	A.A.P.
C	18-9-59	Detail 1079, holes 1 1/4" dia ex 1" dia	K.W.D.	
B	7-3-51	Serrations amended	C.F.	
A	27-3-50	Dia. of end holes in 075 & 077 Bars reduced	C.F.	

V.R.
SPREADER DETAILS

Scales - 6" = 1'-0", 3" = 1'-0"

Revision	Date	Amendment	Amend. By	Approved
J	23-2-71	Details 9076 and 4077 added.	Z.C.	
H	18-9-69	Detail 6076 2 holes are added.	K.P.	
G	22-7-64	Detail 8076 added.	R.J.D.	A.A.P.
F	26-5-64	Identification label 13/16" dia ex 3/8" dia.	A.A.P.	

Chief Civil Engineer

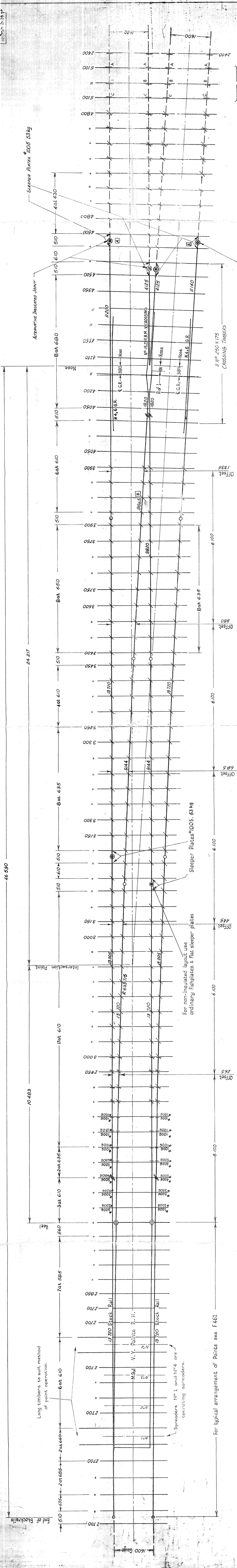
Drawn	Traced	Checked	Corres No	A.A.P.
L.J.W.	L.M.R.			Engineer M&W.S.

P-41 PLAN NO
11-CR 634-48

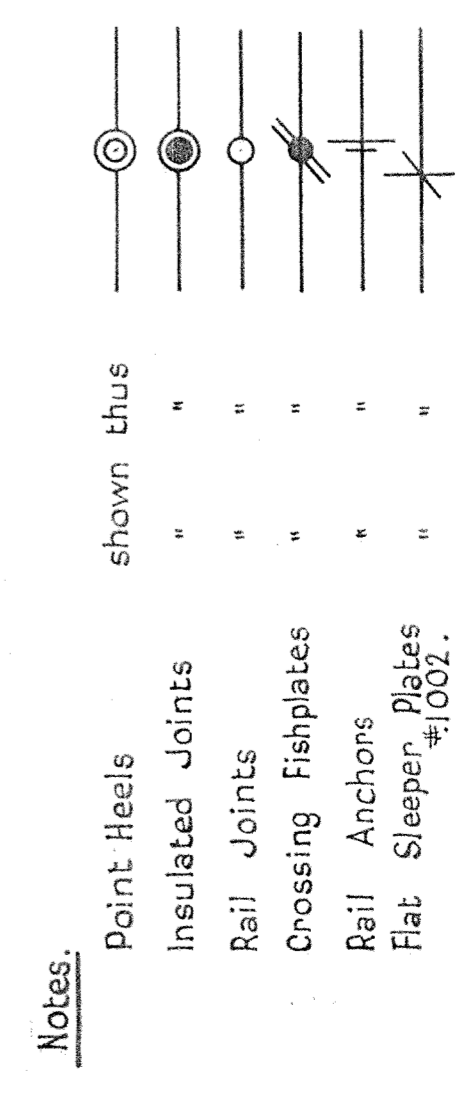
40863

L17-1

B 321
 28813
 HEDIN, S.M.



SPREADER ASSEMBLY N°		RAIL CLAMP POINT LOCK	
N°1 SPREADER	47 kg	TA. 301	TA. 319
N°2 SPREADER	53 kg	TA. 219	TA. 219
N°3 SPREADER	47 kg	TA. 202	TA. 219
N°4 SPREADER	53 kg	TA. 101	TA. 101



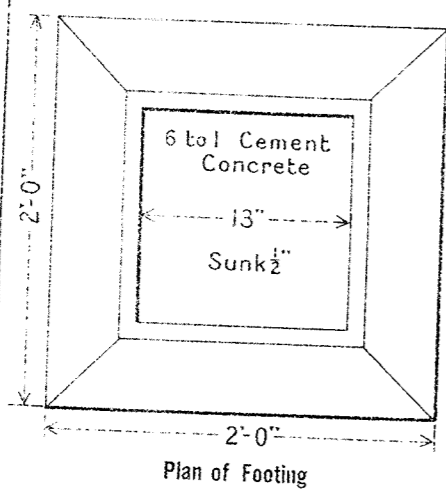
V.R.
TURNOUT N°15.0
 RAIL BOUND MANGANESE V CROSSING
 M 9,1 V.Y. POINTS.
 53 kg A.S.

Revision	Date	Amended by	Approved by
B	27-4-82	DIMENSION 9845 WAS 9820	SVB
A	28-7-75	ADDITIONAL 1" X 40000 & CLOSURE LENGTHS BELIEVED	K/S

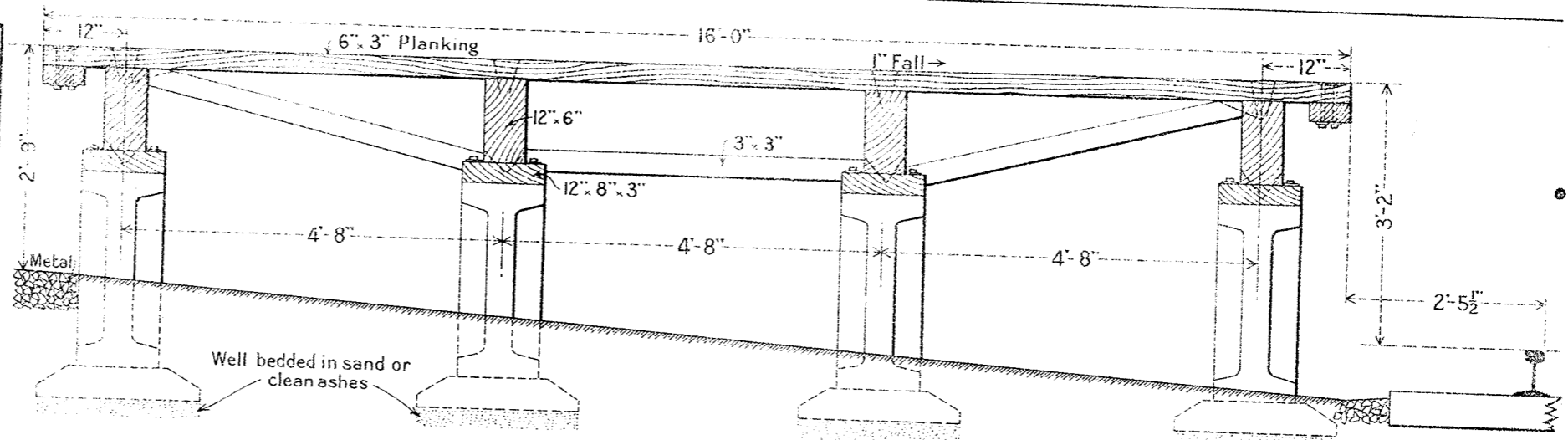
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Scale: 1:48
 Chief Civil Engineer
 Drawn: P.J.
 Checked: A.B.
 Eng' of M. & W. S.

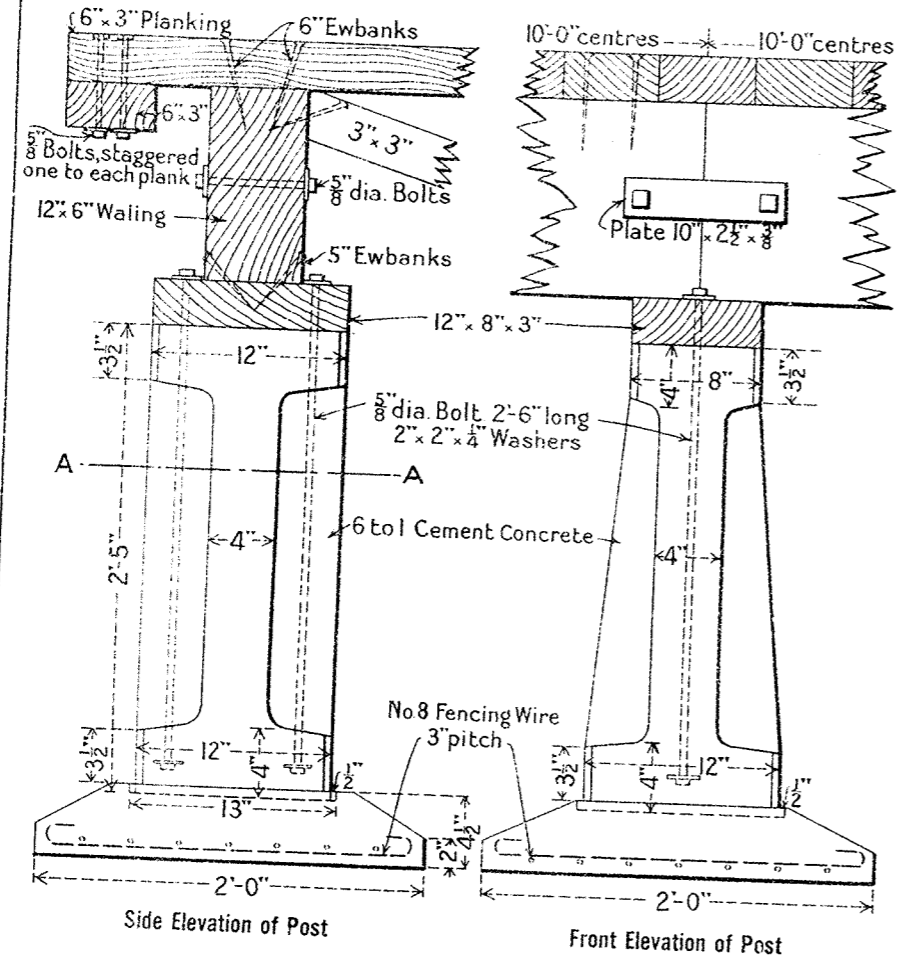
PLAN N°
 CT 39 F
 838-75



Plan of Footing

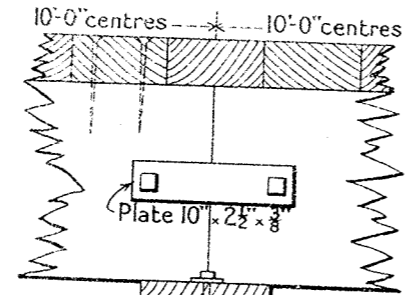


Cross Section

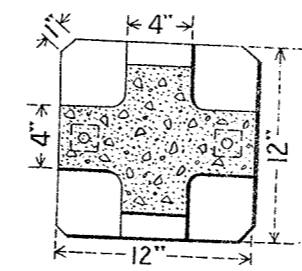


Side Elevation of Post

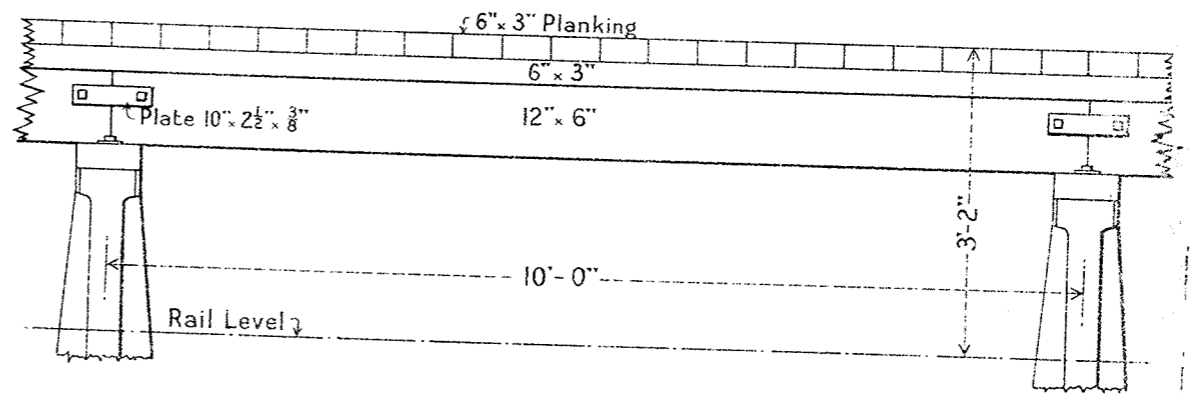
Front Elevation of Post



Detail of Plank Nailing



Cross Section of Post at AA

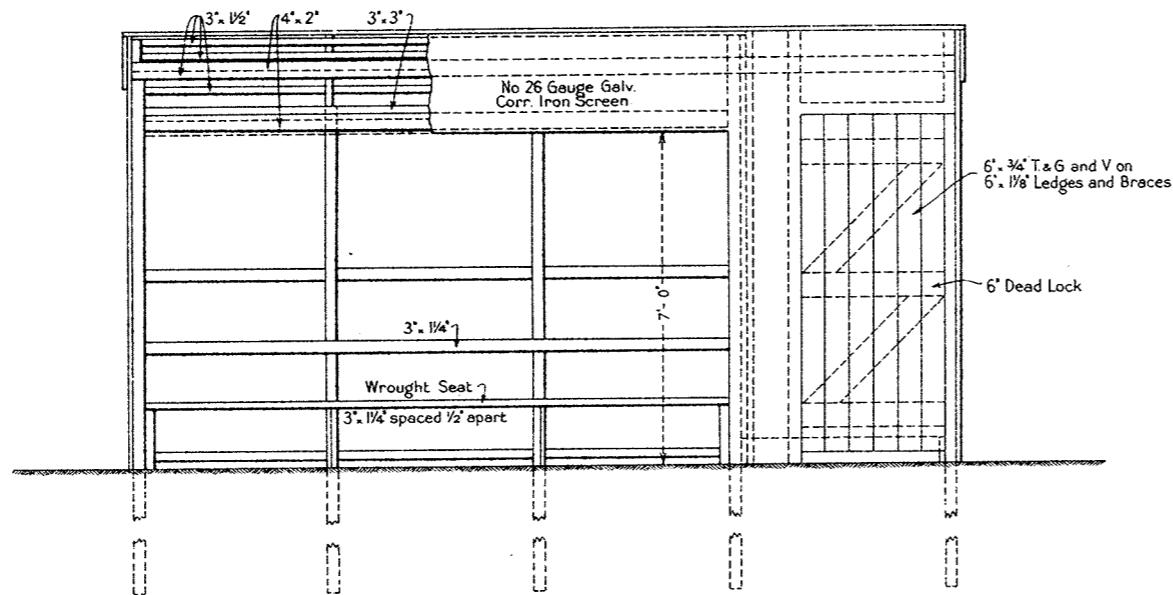


Part Front Elevation

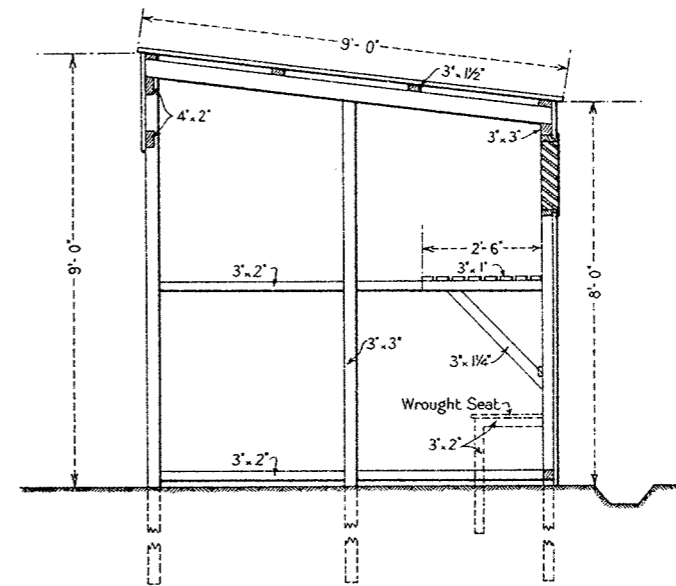
This plan supersedes plan N^o $\frac{W.W.}{S.A.}$

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING OF
GOODS PLATFORM
 PRE-CAST CONCRETE WITH TIMBER DECK
 SCALES { DETAILS 1 IN. TO ONE FOOT
 OTHER 1/2 IN. TO ONE FOOT

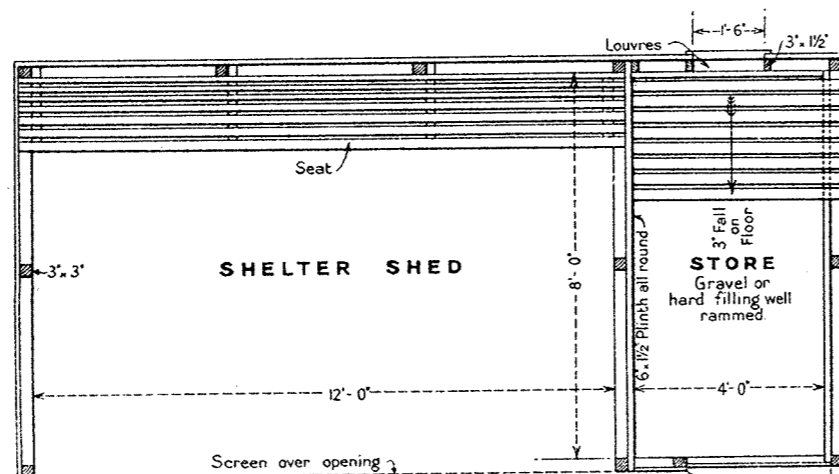
Approved <i>J. W. Schworth</i> Chief Eng. of Way & Works	Adopted 1. 7. 33
Checked by <i>S.M.</i>	Plan No. F 8 B



ELEVATION TO PLATFORM



CROSS SECTION



PLAN

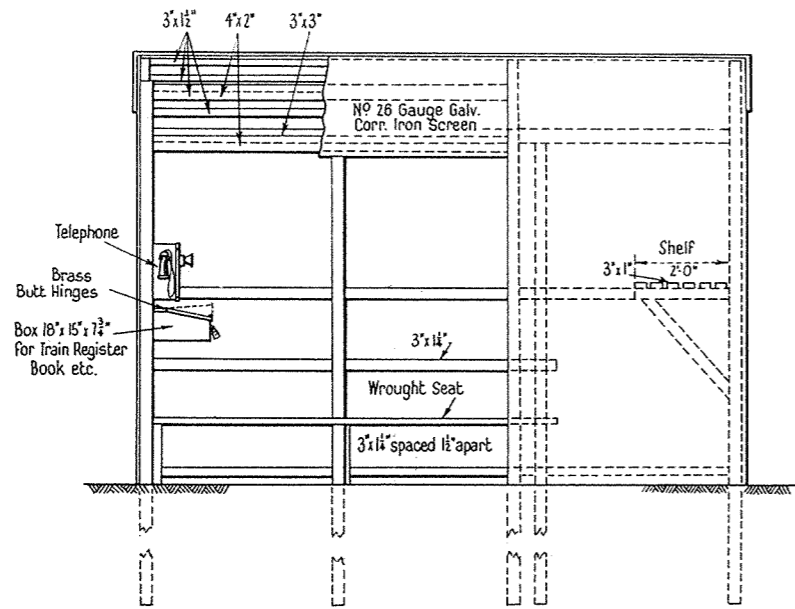
NOTES

Timbers touching ground sawn Red Gum,
other timbers sawn Hardwood.
No Angle Stops or Fascias.

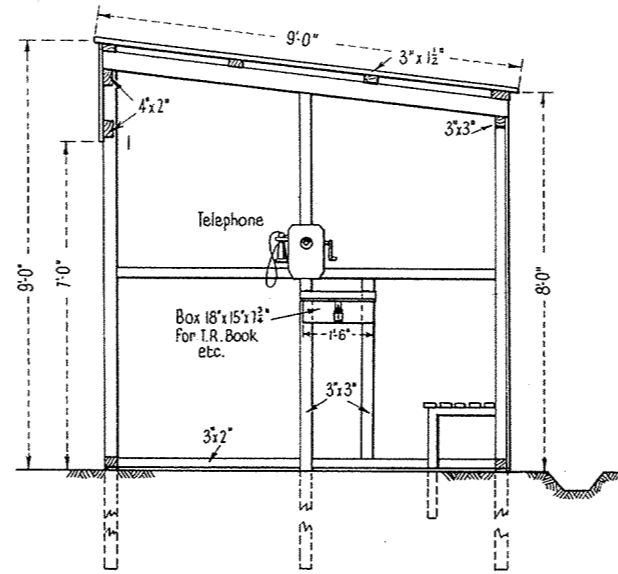
This drawing supersedes Plan No. L.120/21

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING CORRUGATED IRON SHELTER SHED AND STORE Scale 1/4" = 1'-0"		Approved Chief Civil Engineer Drawn by K. F. L. Checked by S. S. Chief Architect.	Adopted NOV. 1942 PLAN No. F 201
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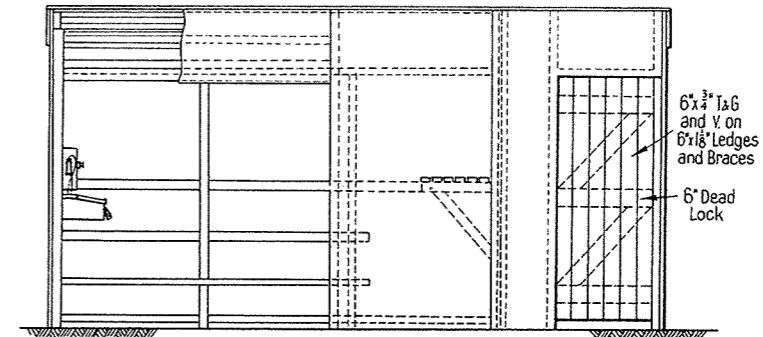
PROVISION OF STORE ROOM/OFFICE
FOR CARETAKER STATIONS



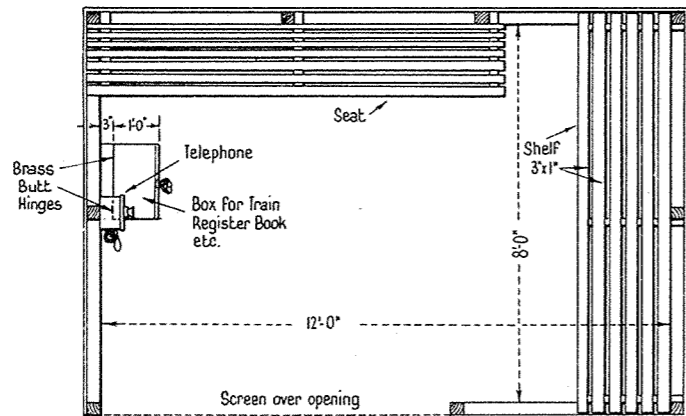
ELEVATION TO PLATFORM



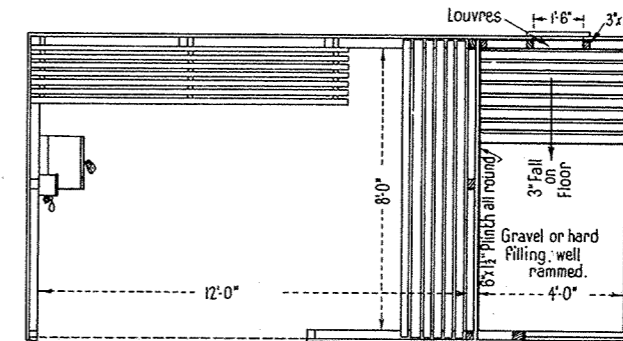
CROSS SECTION



ELEVATION TO PLATFORM



PLAN



PLAN

NOTES:
Timbers touching ground sawn Red Gum, other timbers sawn Hardwood.
No angle stops or fascias.

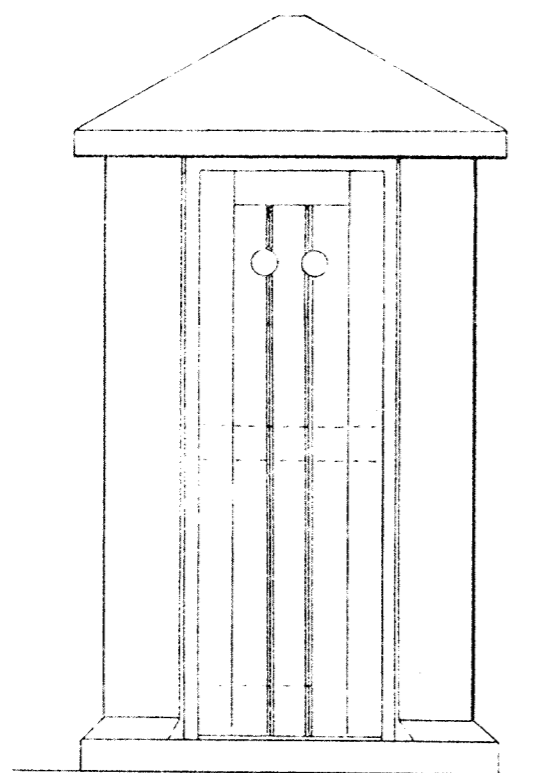
This Plan supersedes Plan No F201

Rev'n	Date	Amendment	Amended by
A	1-12-59	Elimination of Store Room/Office at M.C. stations. Rearrangement of Shed.	

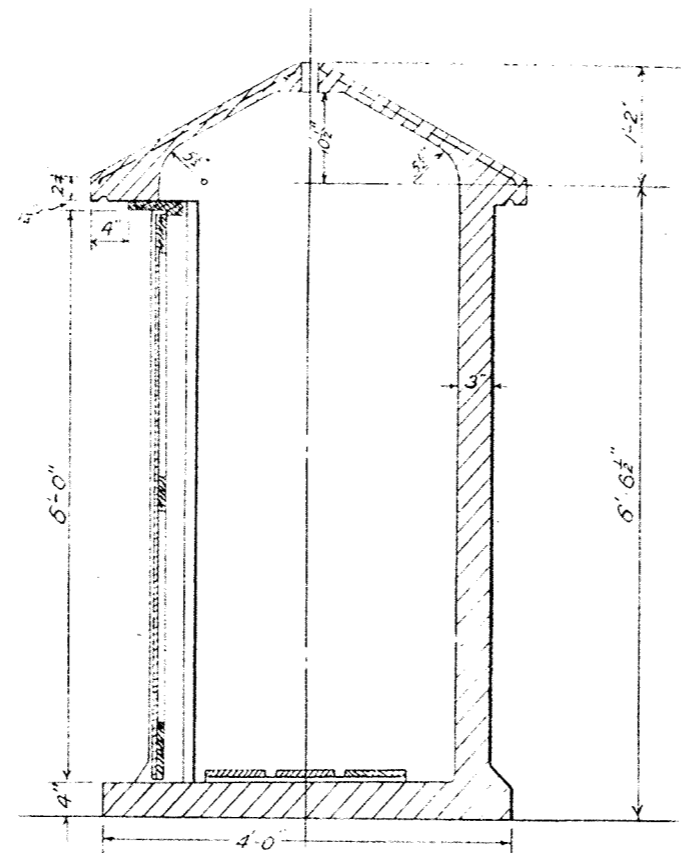
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
CORRUGATED IRON SHELTER
SHED AND STORE
(MALLEE SHED)

Approved
[Signature]
Chief Civil Engineer
Drawn by
E.W.B.
Checked by
[Signature]
Senior Architect

Adopted
JULY 1960
PLAN NO
F201A



ELEVATION

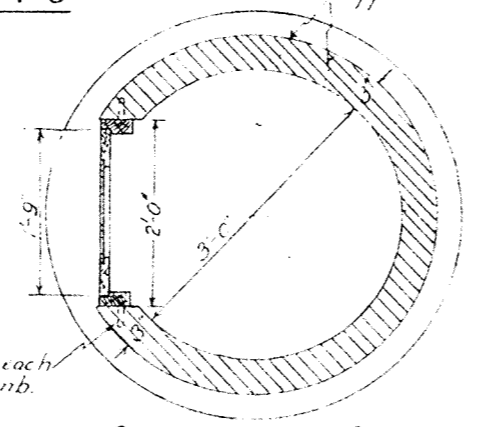


CROSS SECTION

Scale: $\frac{1}{2}'' = 1'-0''$

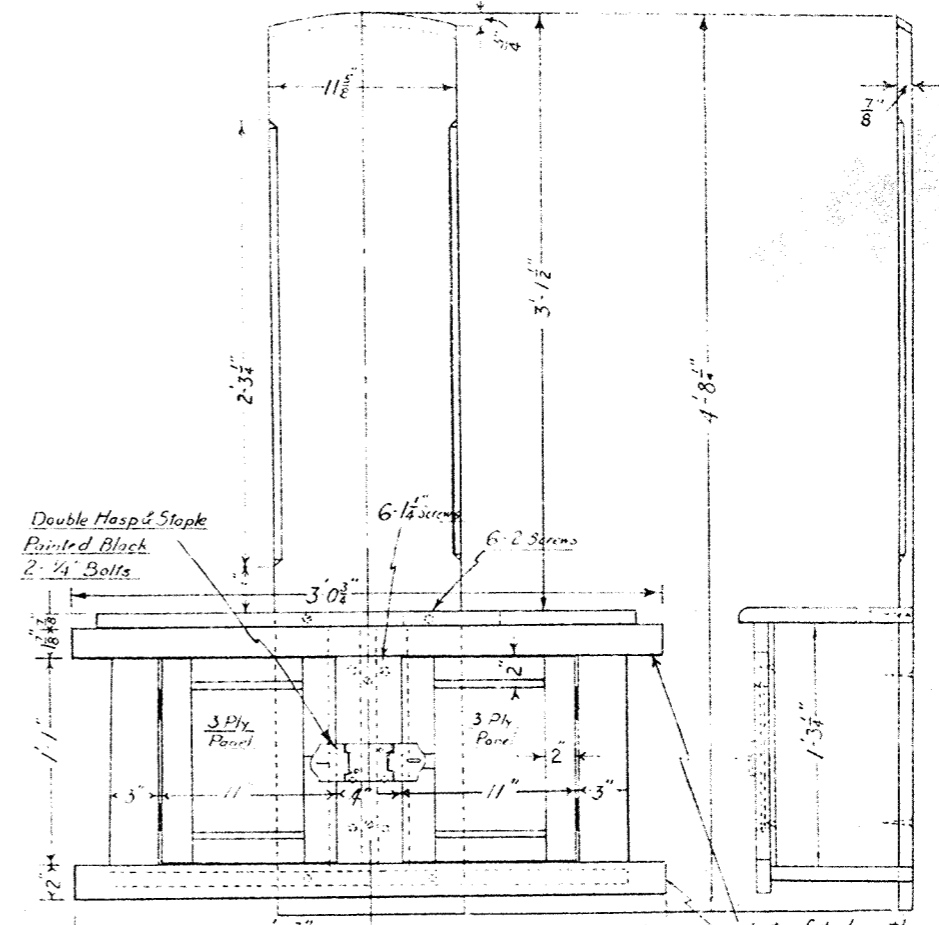
Core side for $1 \frac{3}{8}''$ bolts to support cabinet.

NOTE -
 Top & Bottom each reinforced with 6 concentric rings & 20 radial hooks
 Sides reinforced with 7ft roll of No. 4 Clinton Fabric
 Concrete 1 2 4
 4 inch rendered.



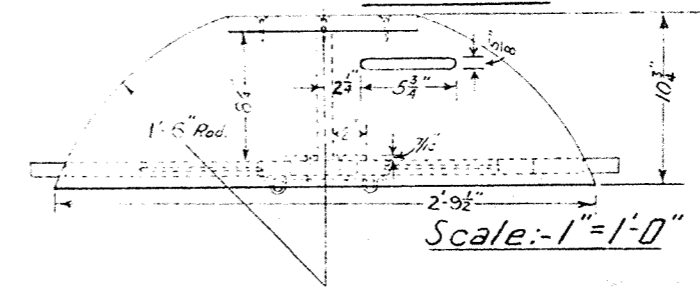
$3 \frac{3}{8}''$ Lewis Bolts in each side for door jamb.

SECTIONAL PLAN



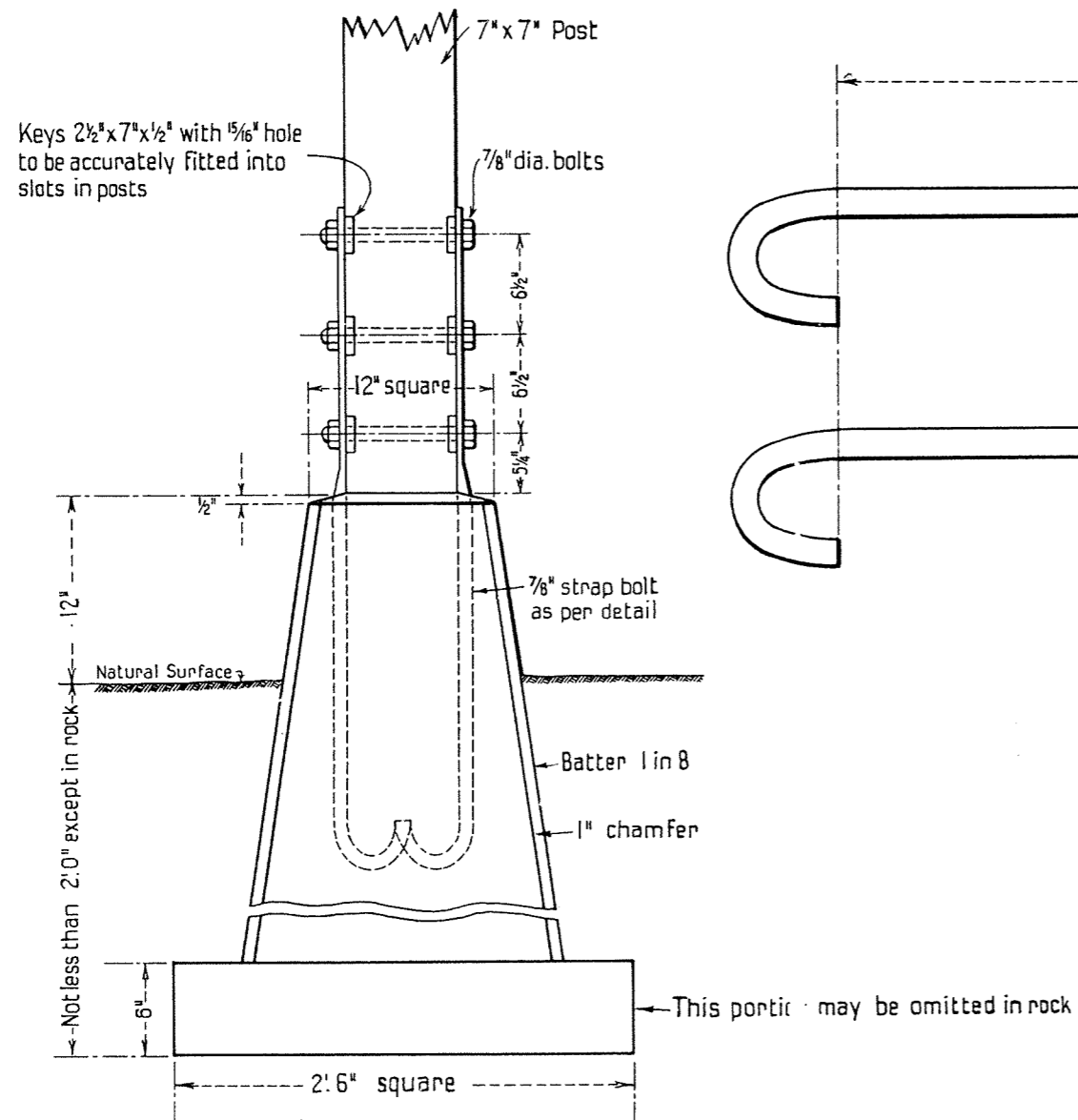
CABINET

Cut to fit booth.

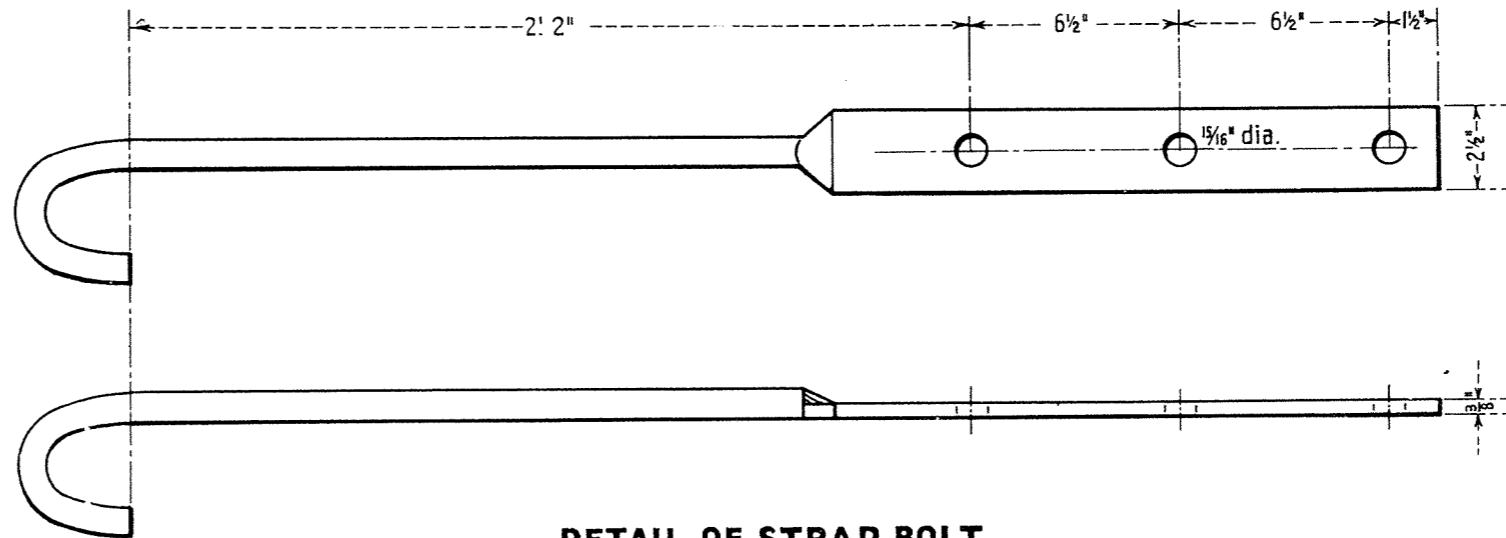


Scale: $1'' = 1'-0''$

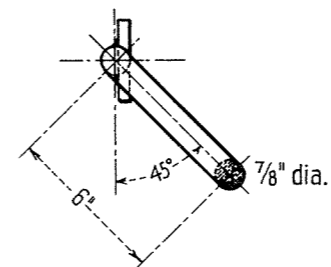
VICTORIAN RAILWAYS WAY AND WORKS BRANCH STANDARD DRAWING CONCRETE TELEPHONE BOX South Australian Railways Design	Approved <i>G. M. Baird</i> Chief Engineer of Way & Works	Adopted 1st May, 1928
	Checked by <i>G. M.</i> <i>Chas. Swallow</i> Chief Architect	Plan No. F 202A



SIDE ELEVATION



DETAIL OF STRAP BOLT

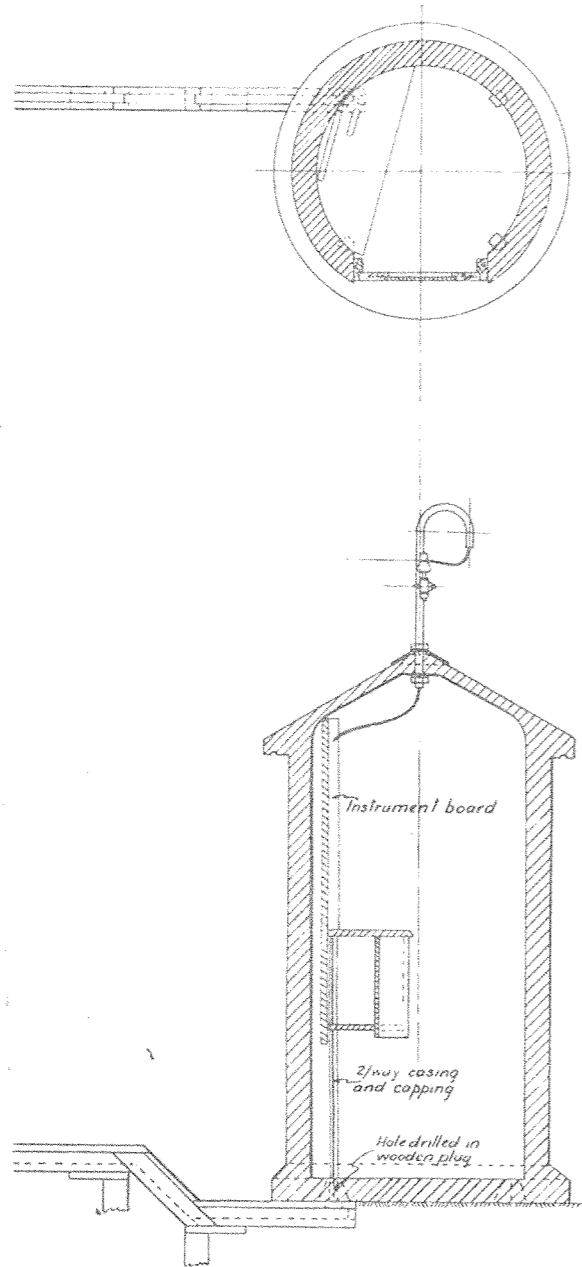


END VIEW

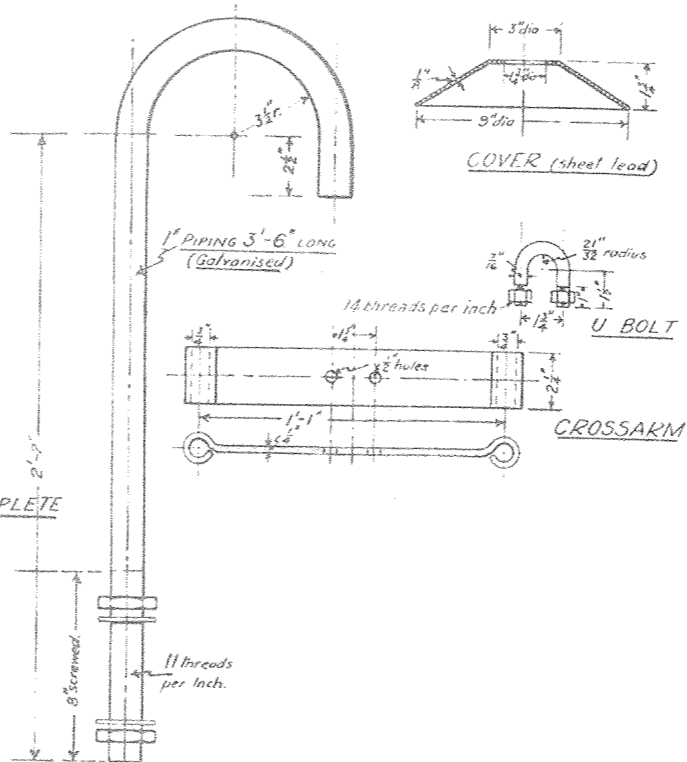
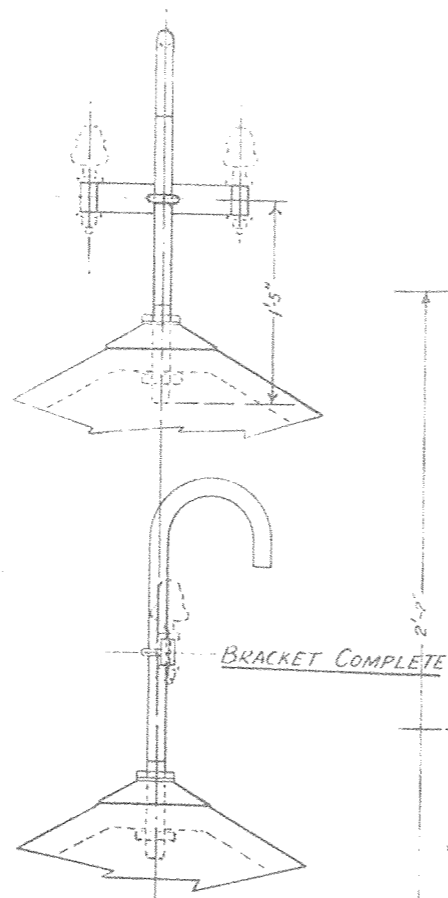
This Plan supersedes Plan No. 446/36

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
 CONCRETE BASE FOR FOOTBRIDGE POSTS

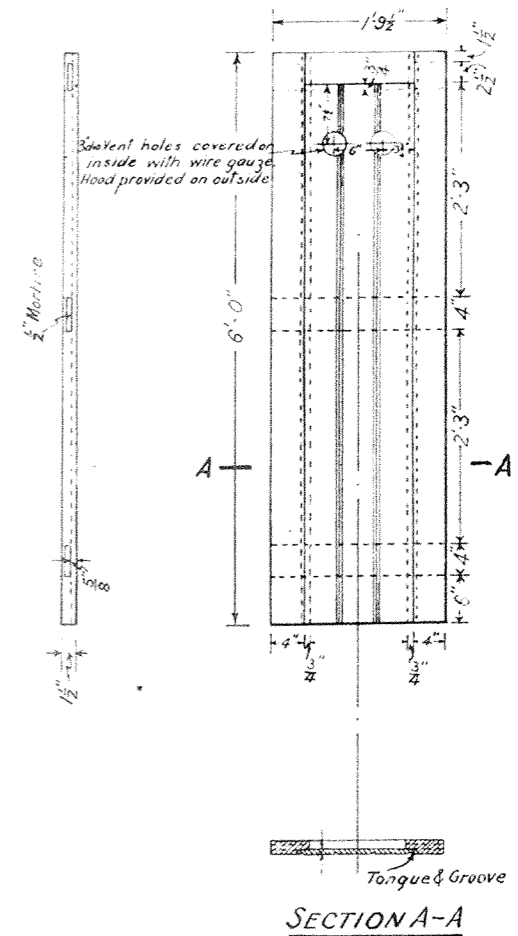
Approved <i>[Signature]</i> Chief Civil Engineer	Adopted
Drawn by V. R. M.	Checked by K. W. W.
<i>[Signature]</i> Engineer of Str. Design.	PLAN No. F 203



LEAD IN FOR WIRES
Scale $\frac{3}{8}$ " = 1'-0"

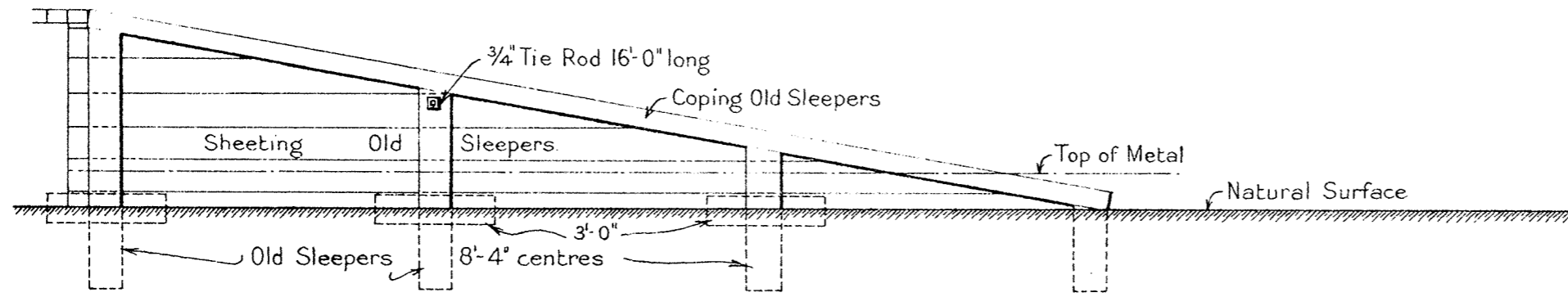


BRACKET FOR LEAD IN WIRES
Scale $\frac{1}{8}$ " = full size.



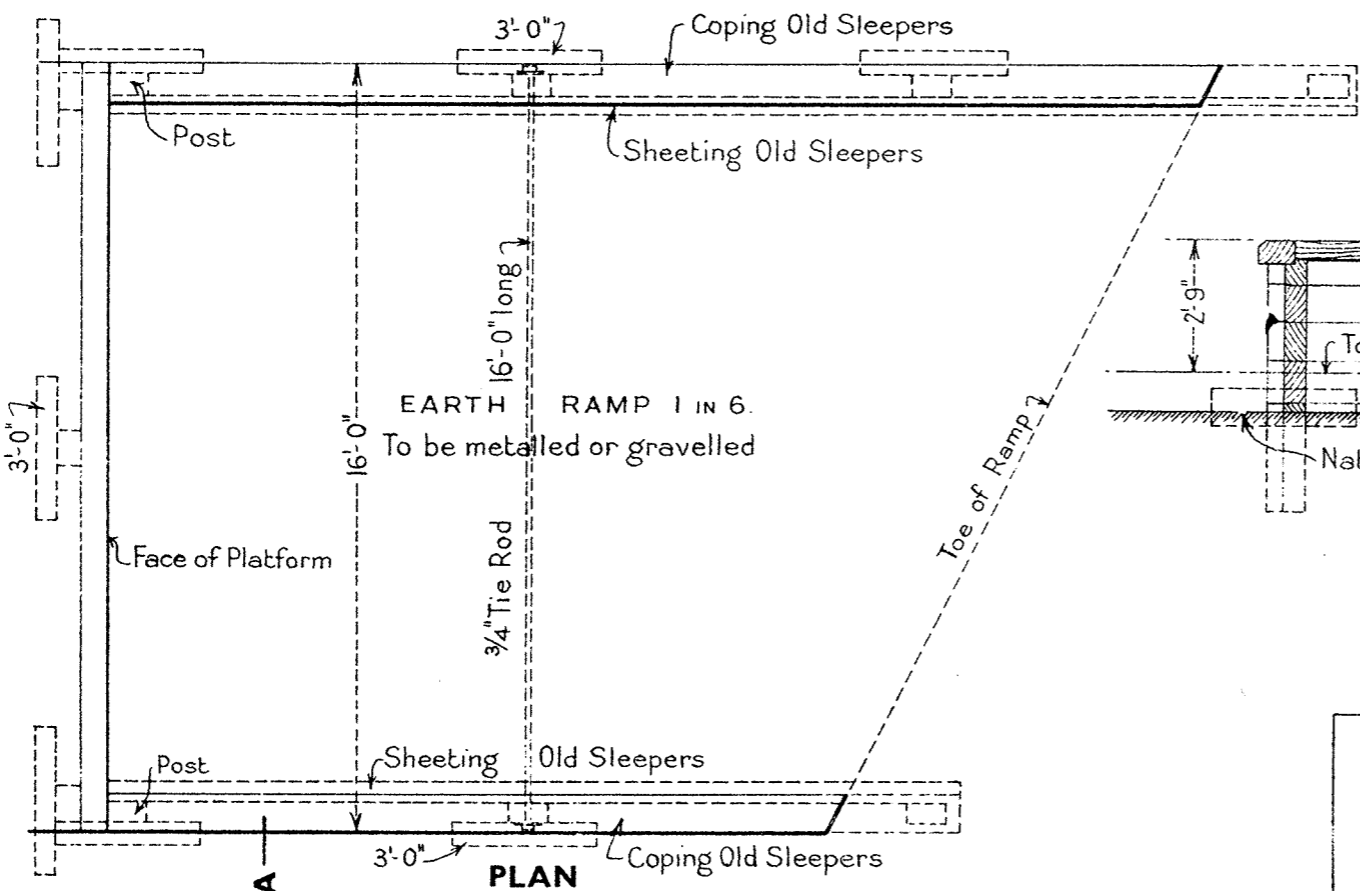
DOOR FOR TELEPHONE BOX
Scale. $\frac{1}{2}$ " = 1'-0"

VICTORIAN RAILWAYS WAY AND WORKS BRANCH STANDARD DRAWING CONCRETE TELEPHONE BOX South Australian Railways Design	Approved Chief Engineer of Way & Works	Adopted 1st May, 1928
	Checked by Chief Architect	Plan No. F 203A

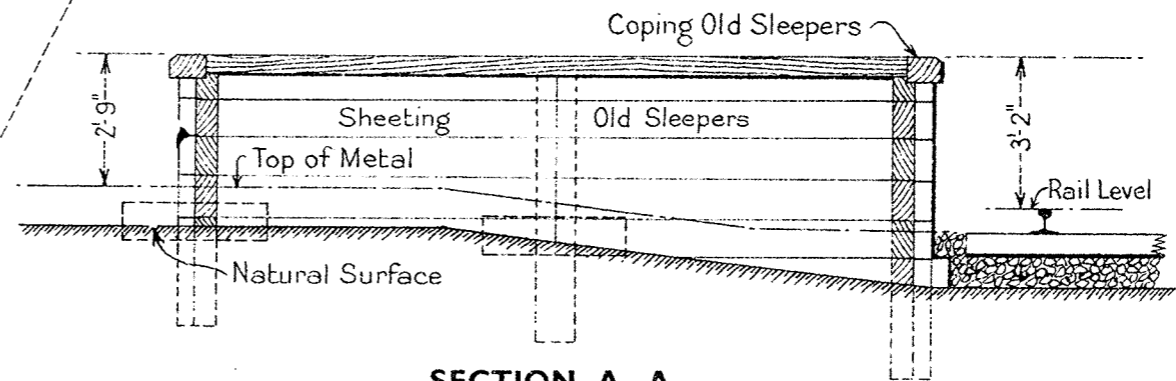


FRONT ELEVATION

⊥ of Track



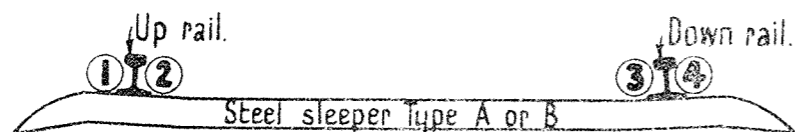
PLAN



SECTION A-A

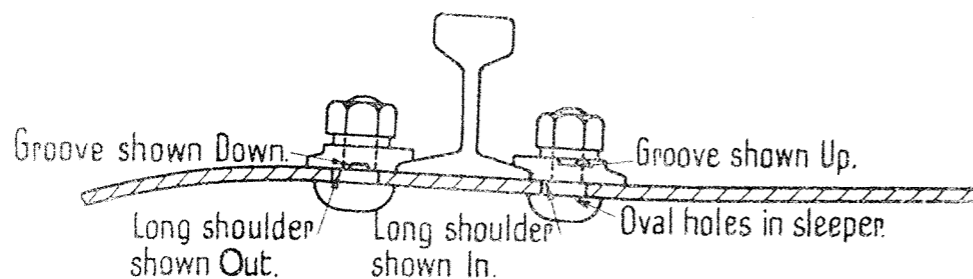
This drawing supersedes Plan No. L.236-20

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.M.</i>	DEC. 1942
		Chief Civil Engineer	
EARTH RAMP		Drawn by	Checked by
		K. F. L.	S. S.
SCALE 1/4"=1'-0"		<i>R. E. Munn</i>	F 204
		Chief Architect.	



POSITION OF FASTENING ASSEMBLIES

The type of sleeper, A or B, is shown with the rolling brand on each sleeper.



TYPICAL ASSEMBLY OF RAIL TO SLEEPER

In the Tables the symbols represent the position of bolts & clips as follows :-

- Long shoulder on bolt Out from rail.
- ◊ " " " " In towards rail.
- ⌒ Groove in clip Down.
- ⌒ " " " Up.

TABLE OF ASSEMBLIES

5'-3" GAUGE					
RAIL	TYPE OF SLEEPER	POSITION (SEE DIAGRAM)			
		1	2	3	4
60 D	A	OD	IU	IU	OD
60 AS	A	OD	ID	OU	OU
75 H	B	OD	IU	IU	OD
80, 90, 94	B	IU	IU	IU	ID

5'-3 1/2" GAUGE					
60 D	A	OU	ID	IU	OD
60 AS	A	OU	OU	OU	OU
75 H	B	OU	ID	IU	OD
80, 90, 94	B	IU	ID	IU	ID

5'-3 1/2" GAUGE					
60 D	A	ID	OU	IU	OD
60 AS	A	ID	OD	OU	OU
75 H	B	ID	OU	IU	OD
80, 90, 94	B	IU	ID	ID	IU

5'-3 3/8" GAUGE					
60 D	A	IU	OD	IU	OD
60 AS	A	ID	OD	OD	ID
75 H	B	IU	OD	IU	OD

The combination of oval holes in sleepers, reversible clips and off centre oval shoulder bolts permit of a wide range of adjustment to suit various rails and gauge requirements as tabulated.

A sleeper assembly consists of
 1 No steel sleeper type A or B
 4 No bolts & nuts for type A & B steel sleepers
 4 No clips for type A & B steel sleepers
 4 No 1" spring washers type 1944

VICTORIAN RAILWAYS WAY & WORKS BRANCH

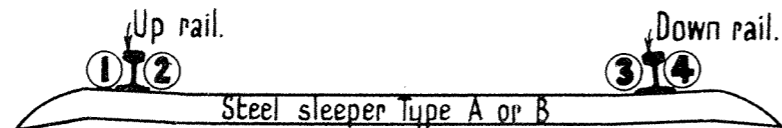
STEEL SLEEPERS
 TYPE A & B
 FASTENING ASSEMBLY

Approved
 CHIEF CIVIL ENGINEER
 Checked C.F.
 Passed
 ENGINEER OF M & W.S.

Adopted
 1953

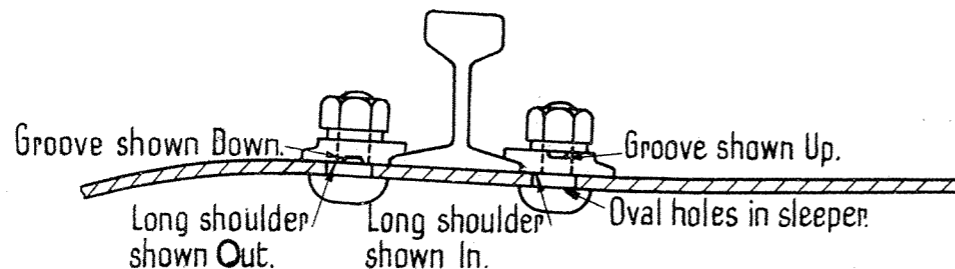
Plan No

F 205



POSITION OF FASTENING ASSEMBLIES

The type of sleeper, A or B, is shown with the rolling brand on each sleeper.



TYPICAL ASSEMBLY OF RAIL TO SLEEPER

In the Tables the symbols represent the position of bolts & clips as follows :-

- Long shoulder on bolt Out from rail.
- ◐ " " " " In towards rail.
- ⌒ Groove in clip Down.
- ⌒ " " " Up.

TABLE OF ASSEMBLIES

5'-3" GAUGE					
RAIL	TYPE OF SLEEPER	POSITION (SEE DIAGRAM)			
		1	2	3	4
60 D	A	OD	IU	IU	OD
60 AS	A	OD	ID	OU	OU
75 H	B	OD	IU	IU	OD

5'-3 1/8" GAUGE					
RAIL	TYPE OF SLEEPER	POSITION (SEE DIAGRAM)			
		1	2	3	4
60 D	A	OU	ID	IU	OD
60 AS	A	OU	OU	OU	OU
75 H	B	OU	ID	IU	OD

5'-3 1/4" GAUGE					
RAIL	TYPE OF SLEEPER	POSITION (SEE DIAGRAM)			
		1	2	3	4
60 D	A	ID	OU	IU	OD
60 AS	A	ID	OD	OU	OU
75 H	B	ID	OU	IU	OD

5'-3 3/8" GAUGE					
RAIL	TYPE OF SLEEPER	POSITION (SEE DIAGRAM)			
		1	2	3	4
60 D	A	IU	OD	IU	OD
60 AS	A	ID	OD	OD	ID
75 H	B	IU	OD	IU	OD

This plan supersedes Plan No F205

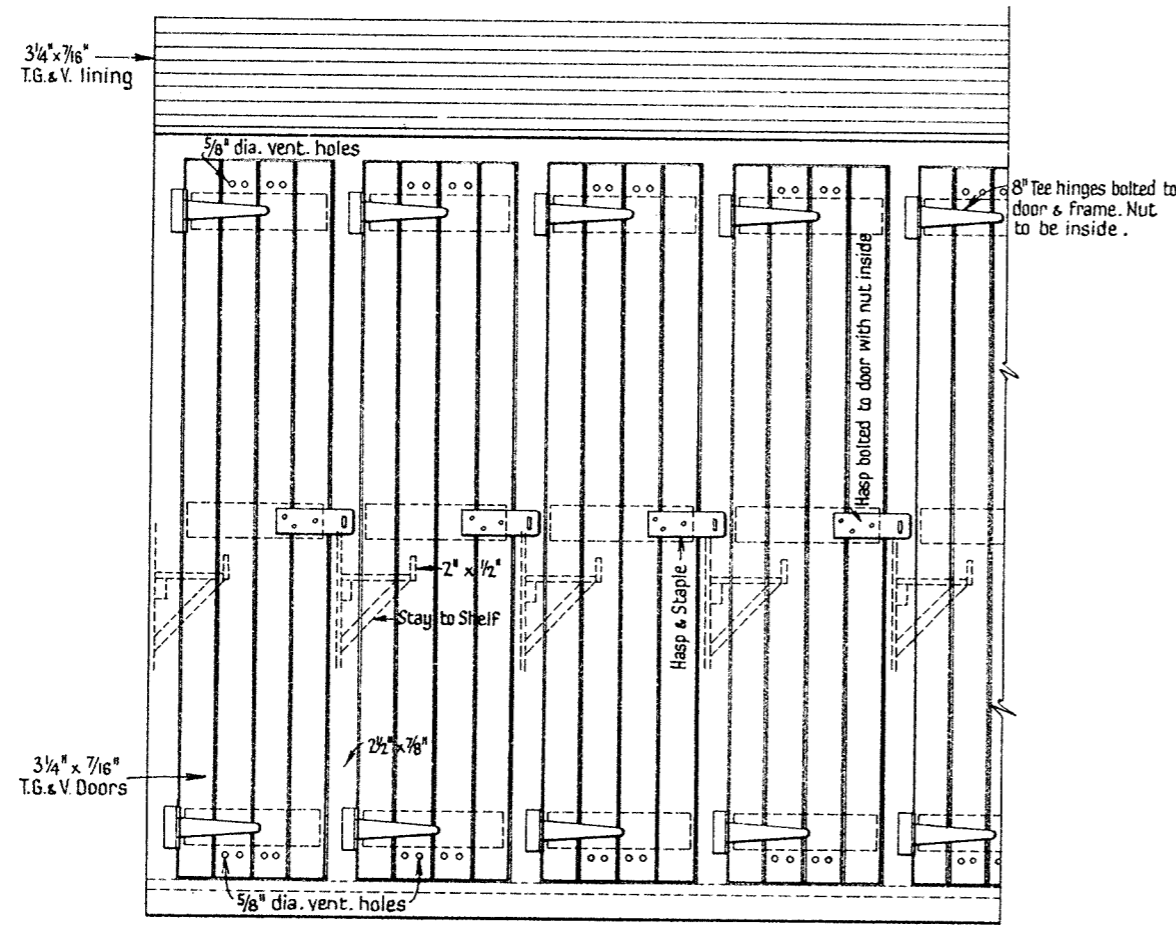
A	23-10-59	Reference to 80,90,94 lb. rail deleted	K.S
Revision	Date	Amendment	Amended by

The combination of oval holes in sleepers, reversible clips and off centre oval shoulder bolts permit of a wide range of adjustment to suit various rails and gauge requirements as tabulated.

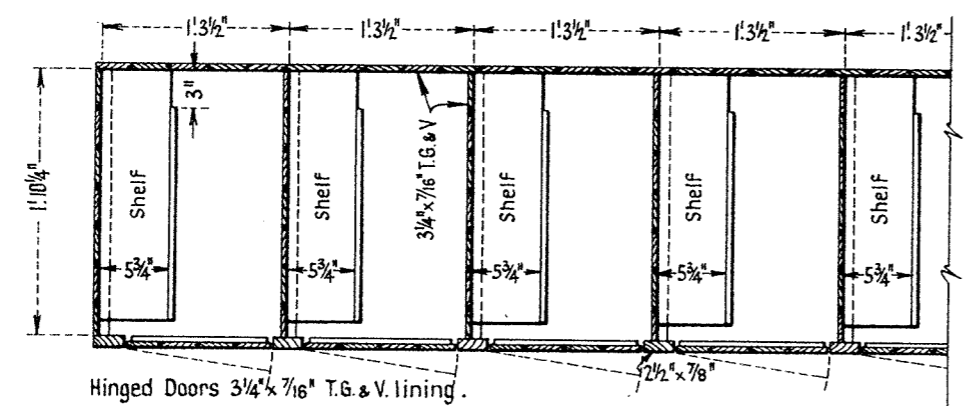
A sleeper assembly consists of
 1 No steel sleeper type A or B
 4 No bolts & nuts for type A & B steel sleepers
 4 No clips for type A & B steel sleepers
 4 No 1" spring washers type 1944

VICTORIAN RAILWAYS WAY & WORKS BRANCH
STEEL SLEEPERS
 TYPE A & B
FASTENING ASSEMBLY

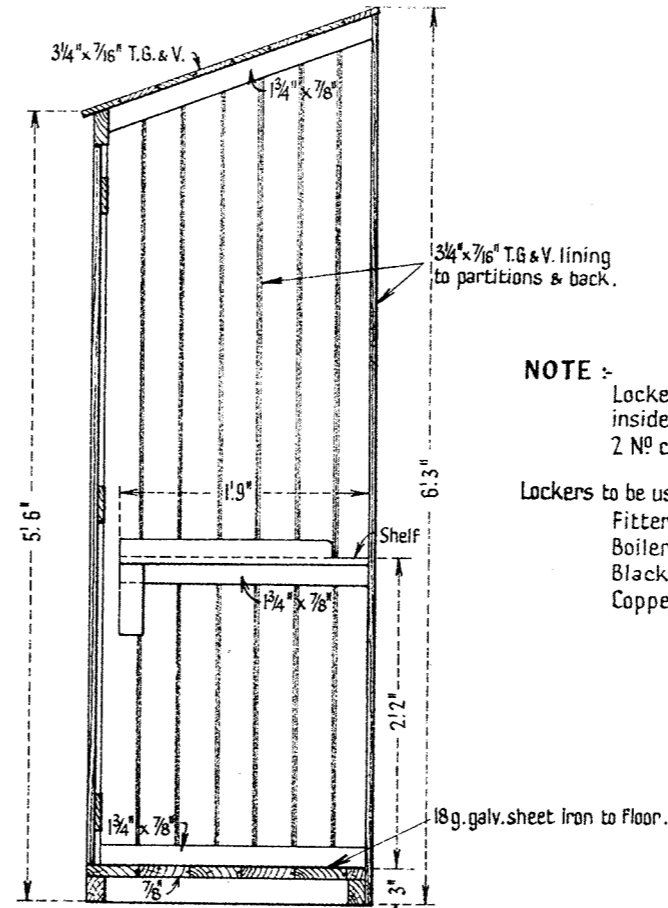
Approved
 CHIEF CIVIL ENGINEER
 Checked G.F.
 Passed
 ENGINEER OF M & W.S.
 Adopted
 1953
 Plan No
F205A



ELEVATION



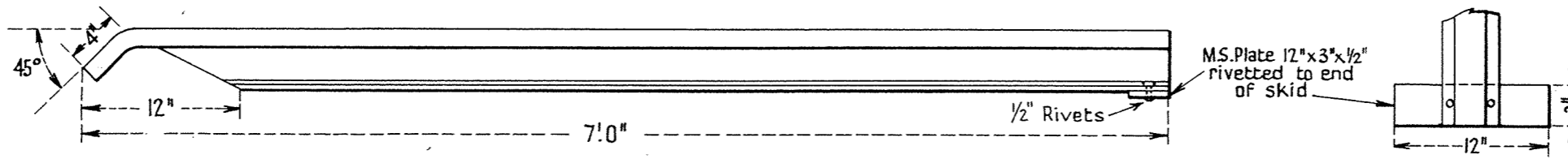
PLAN



CROSS SECTION

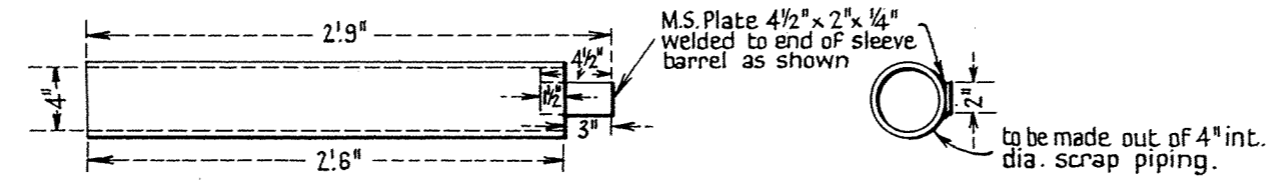
NOTE :-
 Lockers to be painted white inside . brown outside . Provide 2 No coat hangers to each locker.
 Lockers to be used by :-
 Fitters & Turners.
 Boilermakers.
 Blacksmiths.
 Coppersmiths .

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	SEPT. 1942
WORKSHOP LOCKERS		Drawn by <i>C.M.T.</i>	Checked by <i>E.A.E.</i>
FOR USE BY METAL TRADES		<i>[Signature]</i> Chief Architect	PLAN No
Scale = 3/4" = 1'0"			F 207



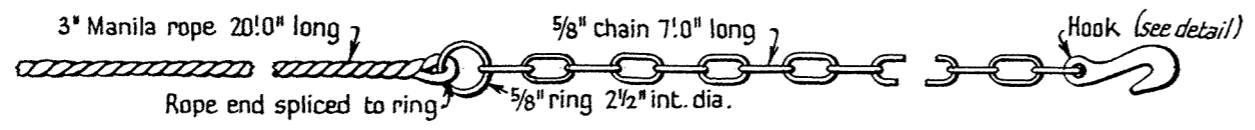
RAIL SKID
Scale 1" = 1'0"
2 N^o required per "Q" truck.

to be made out of 50 lb. or 60 lb. unserv. rails
7'0" long for unloading on outside of track
5'6" " " " " in 6'0" of double line tracks.

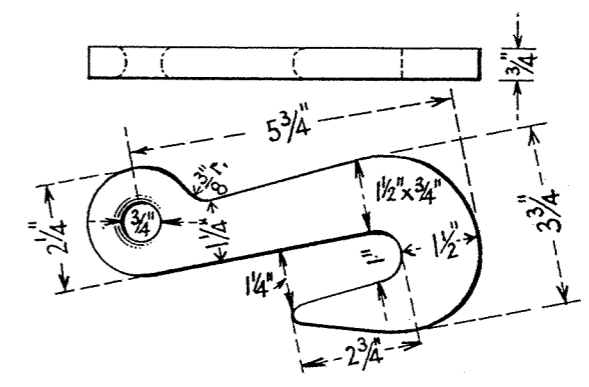


SLEEVE BARREL
for truck stanchions
Scale 1" = 1'0"
2 N^o required per "Q" truck

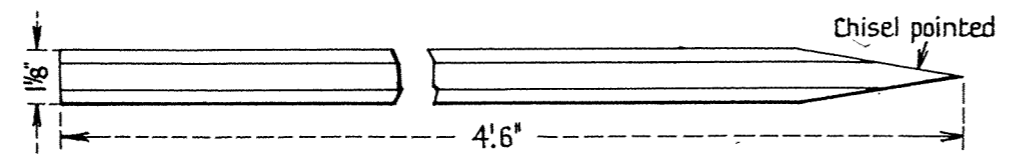
to be made out of 4" int. dia. scrap piping.



SLING
Scale 1" = 1'0"
2 N^o required per "Q" truck.



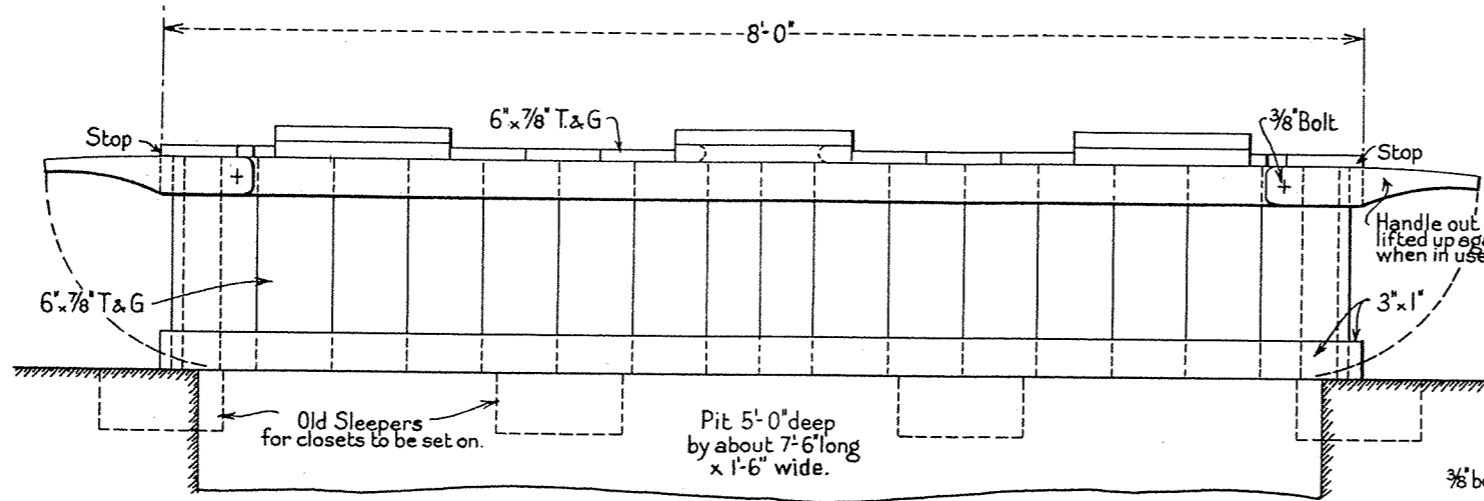
DETAIL OF HOOK
Scale 3" = 1'0"



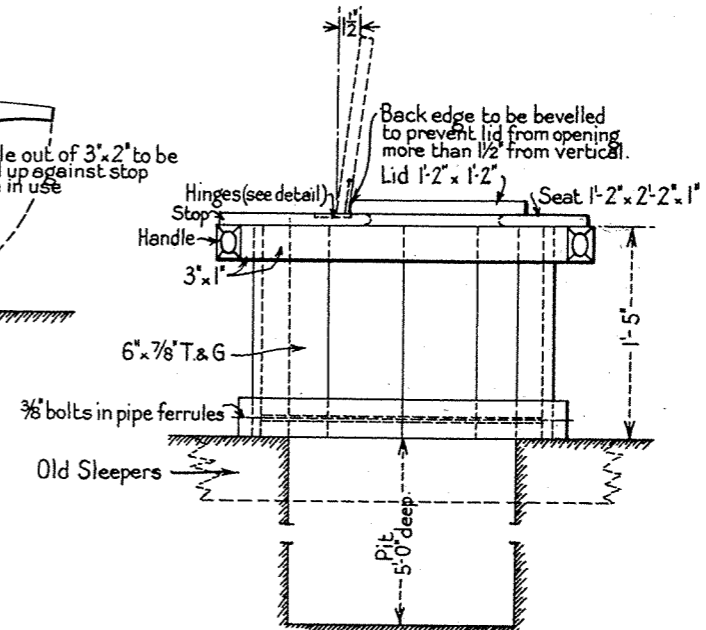
OCTAGON STEEL BAR
Scale 3" = 1'0"
2 N^o required per "Q" truck.

This plan supersedes plan N^o 305/39

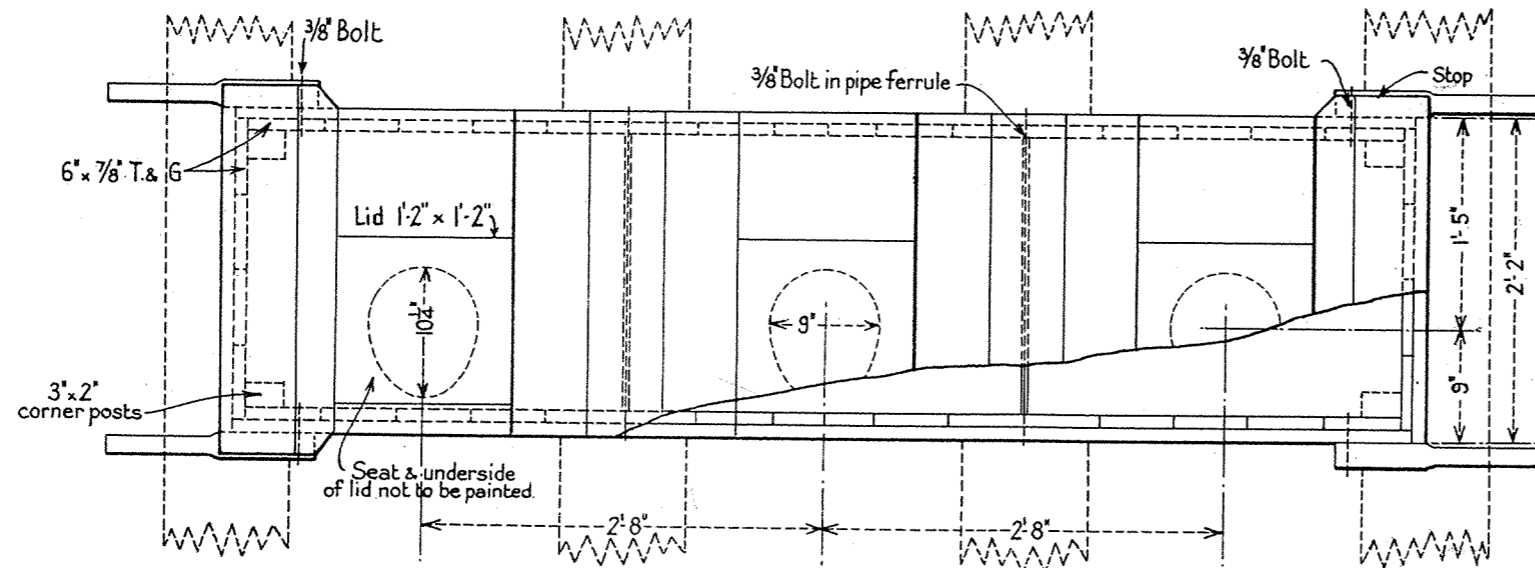
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adapted
STANDARD DRAWING		<i>W</i> Chief Civil Engineer	SEPT. 1942
DETAILS OF EQUIPMENT FOR UNLOADING LONG WELDED RAILS FROM "Q" TRUCKS.		Drawn by C.M.T.	Checked by C.B.
		<i>W.S.</i> Eng ^r Machinery & W.S.	PLAN N^o F209



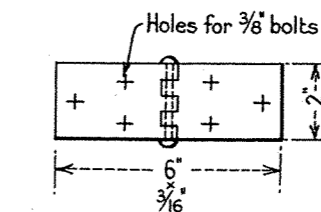
FRONT ELEVATION



SIDE ELEVATION



PLAN



DETAIL OF HINGE

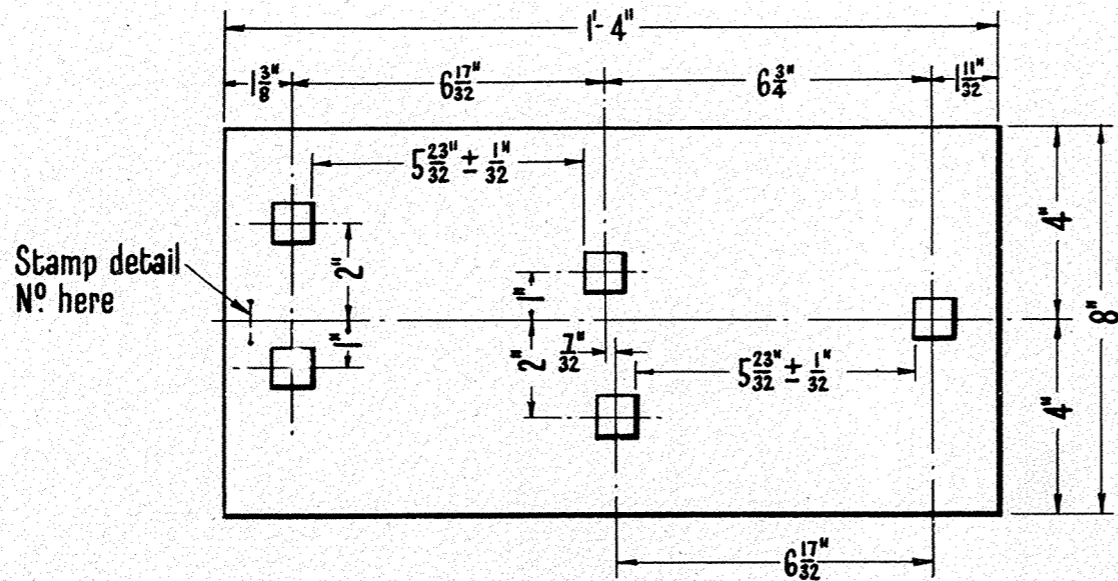
Not to Scale

Note:- The outside (excepting seat & underside of lid) to be painted battleship grey. The inside to be painted with bitumastic paint. Where pans are used 1/2 sleepers only required for bearers.

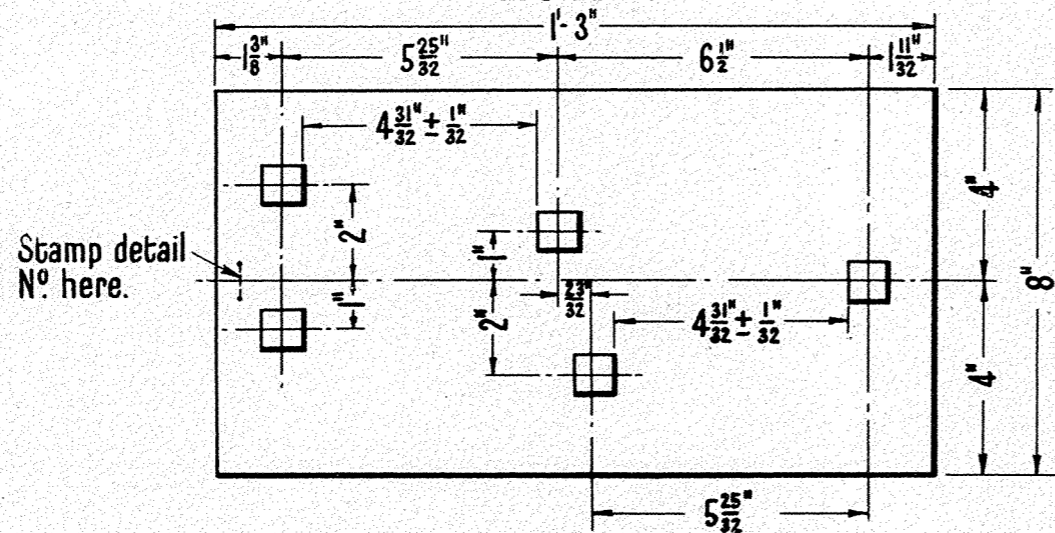
This drawing supersedes Plan No. 579-37.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
PORTABLE E.C.S
RAILWAY CAMPS
 Scale 3/4"=1'-0"

Approved <i>M.H.</i> Chief Civil Engineer	Adopted OCT. 1942
Drawn by K.F.L.	Checked by R.C.O.
Eng. of Mntce.	PLAN No. F 210

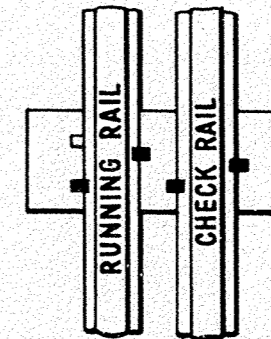


107 LB. A.S.



94 LB. A.S.

Holes punched $\frac{13}{16}$ " square.



TYPICAL ARRANGEMENT

Thickness of Plate	Detail N°	
	94 LB.	107 LB.
$\frac{5}{8}$ "	1086	1087

NOTE: Material - Mild steel plate.
Plates to be marked from Templates and punched to Tolerances shown.
Sides of square holes to be parallel to side of plate.

V. R.	Approved	Adopted
CHECK RAIL GAUGE PLATES	<i>[Signature]</i>	1954
94 LB. $\frac{3}{4}$ " FLANGWAY	CHIEF CIVIL ENGINEER	PLAN N°
107 LB. 4" FLANGWAY	CHECKED - C.F.	F 234
	PASSED	
	ENGINEER OF M.S.W.R.	

SCHEDULE OF QUANTITIES

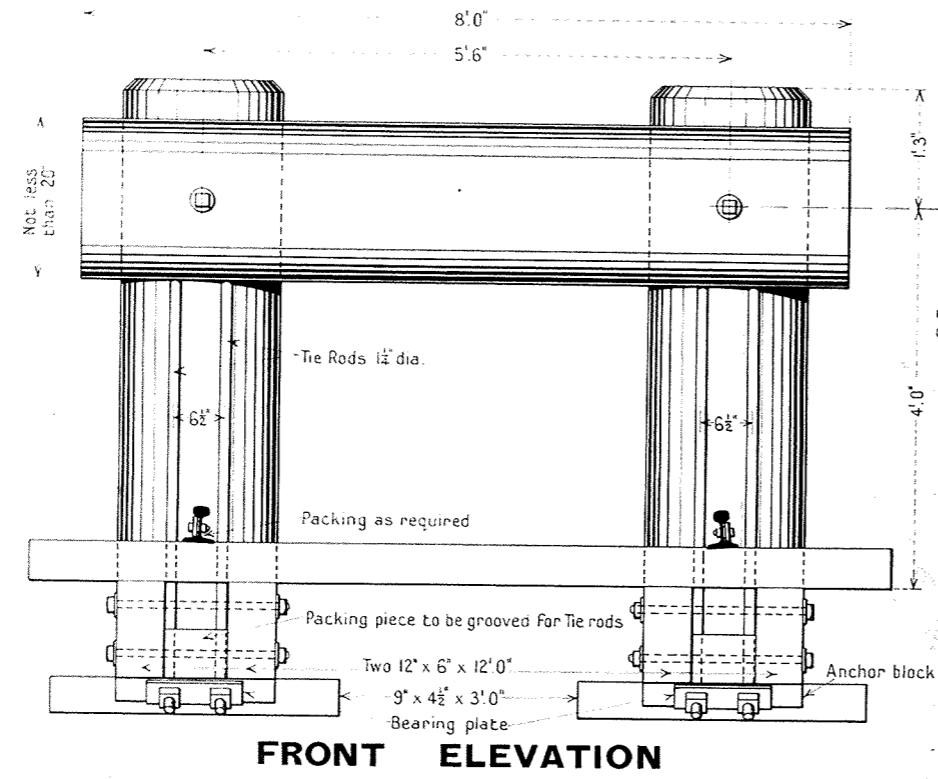
TIMBER:-

RED GUM, GREY BOX OR RED IRONBARK

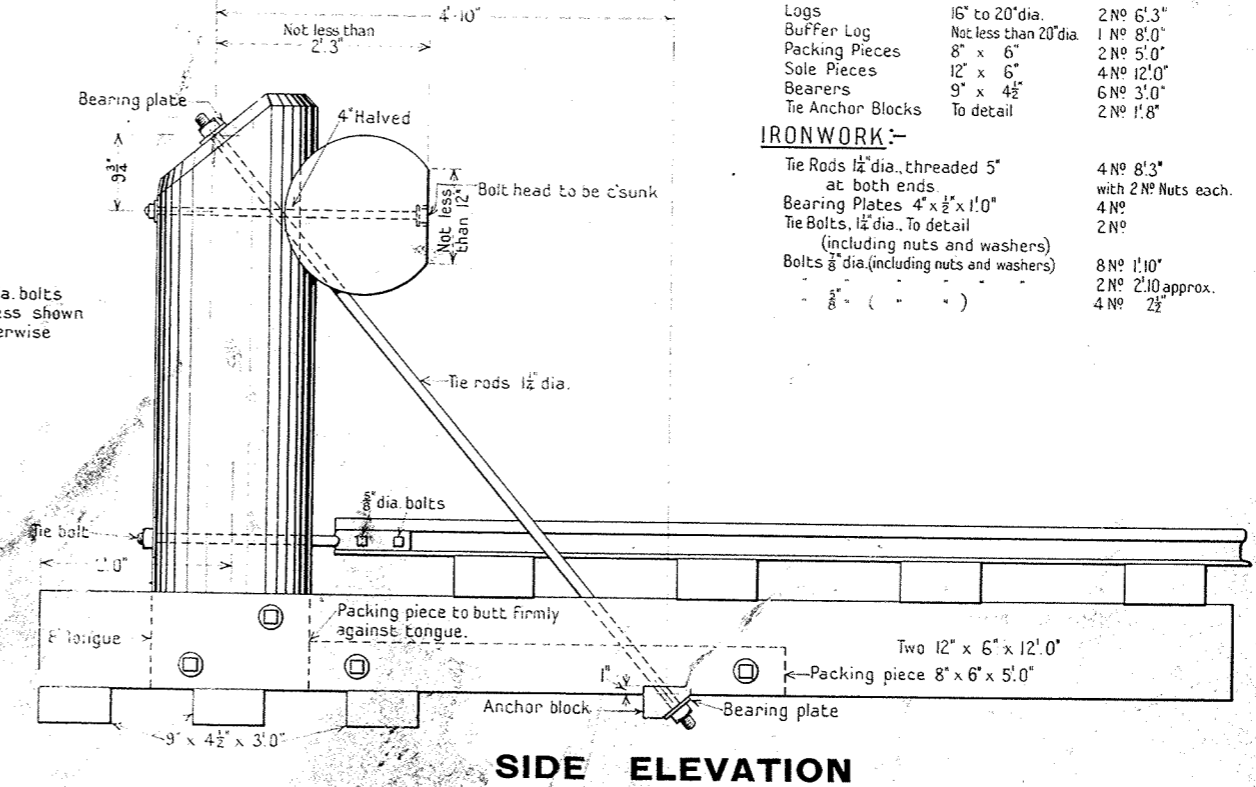
Logs	16" to 20" dia.	2 No 6'.3"
Buffer Log	Not less than 20" dia	1 No 8'.0"
Packing Pieces	8" x 6"	2 No 5'.0"
Sole Pieces	12" x 6"	4 No 12'.0"
Beamers	9" x 4½"	6 No 3'.0"
Tie Anchor Blocks	To detail	2 No 1'.8"

IRONWORK:-

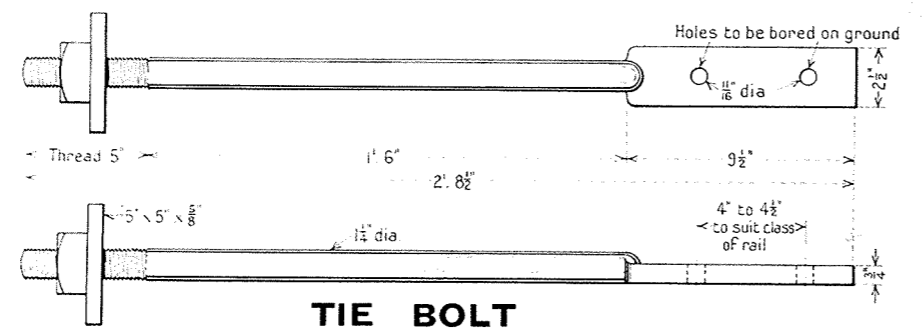
Tie Rods 1½" dia., threaded 5" at both ends.	4 No 8'.3" with 2 No Nuts each.
Bearing Plates 4" x ½" x 1'.0"	4 No
Tie Bolts, 1½" dia., To detail (including nuts and washers)	2 No
Bolts ¾" dia. (including nuts and washers)	8 No 1'.10"
	2 No 2'.10 approx.
	4 No 2½"



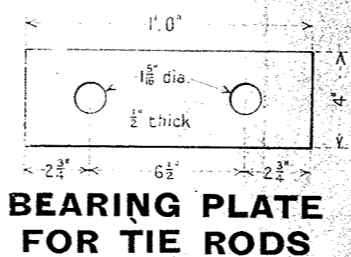
FRONT ELEVATION



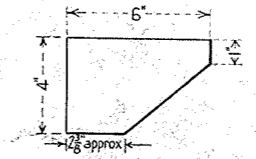
SIDE ELEVATION



TIE BOLT



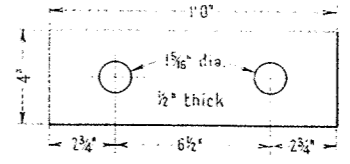
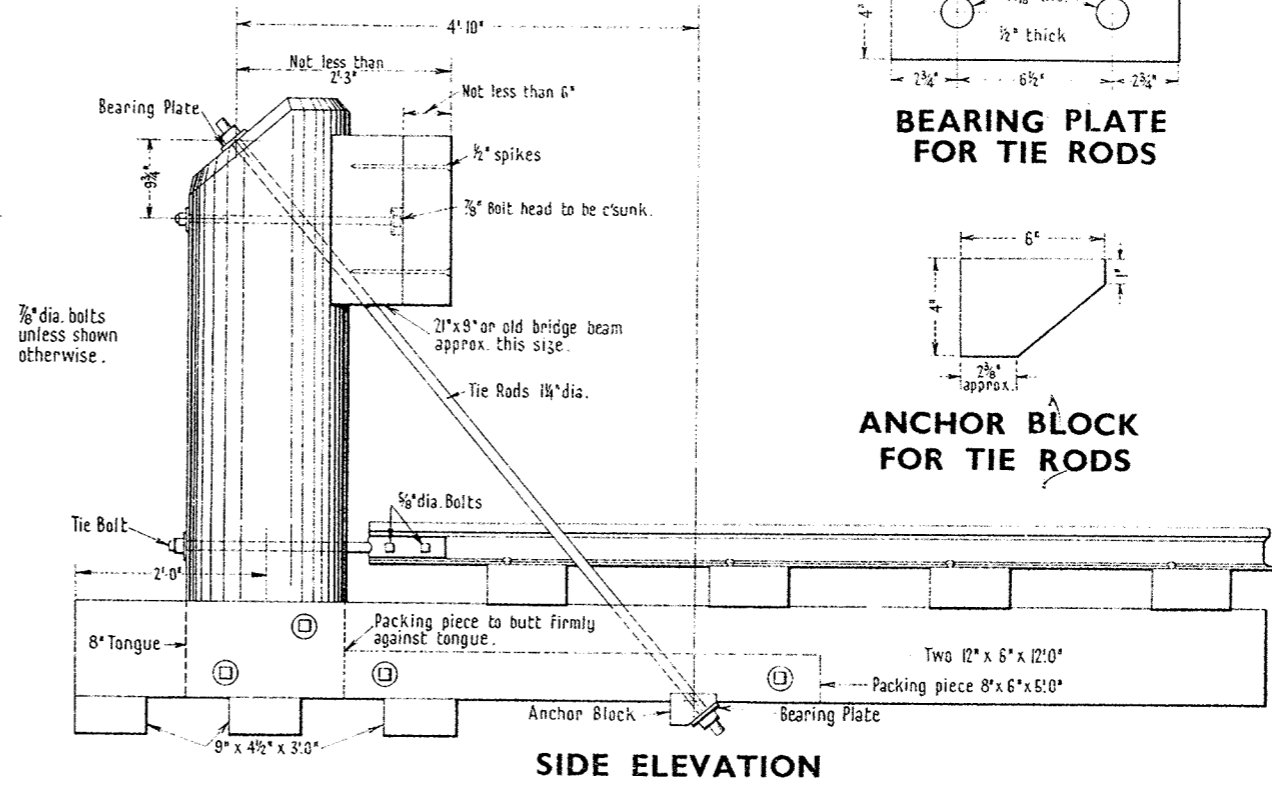
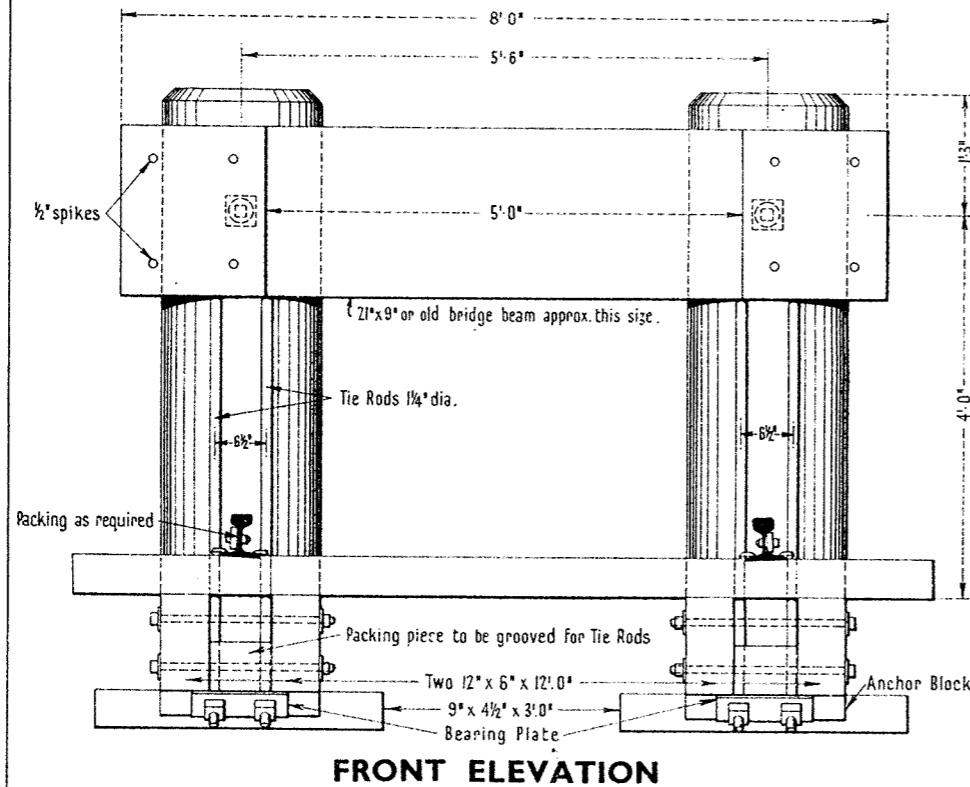
BEARING PLATE FOR TIE RODS



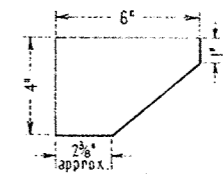
ANCHOR BLOCK FOR TIE RODS

NOTE:- This plan supersedes plan No F239

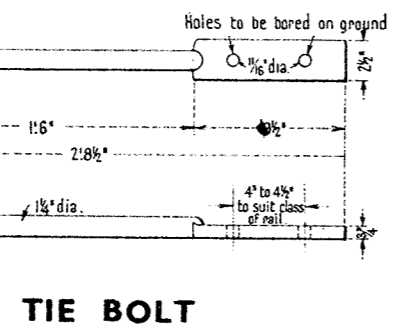
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>J. W. Schwarts</i>	Feb. 1938
OF		Chief Engineer of Way & Works	
BUFFER STOP		Drawn by	Checked by
(IN MADE GROUND)		<i>V. W. L.</i>	<i>W. Bromby</i>
Scales:- ½" & 1½" = 1'.0"		Structure Engineer	PLAN No. F239^A



BEARING PLATE FOR TIE RODS



ANCHOR BLOCK FOR TIE RODS



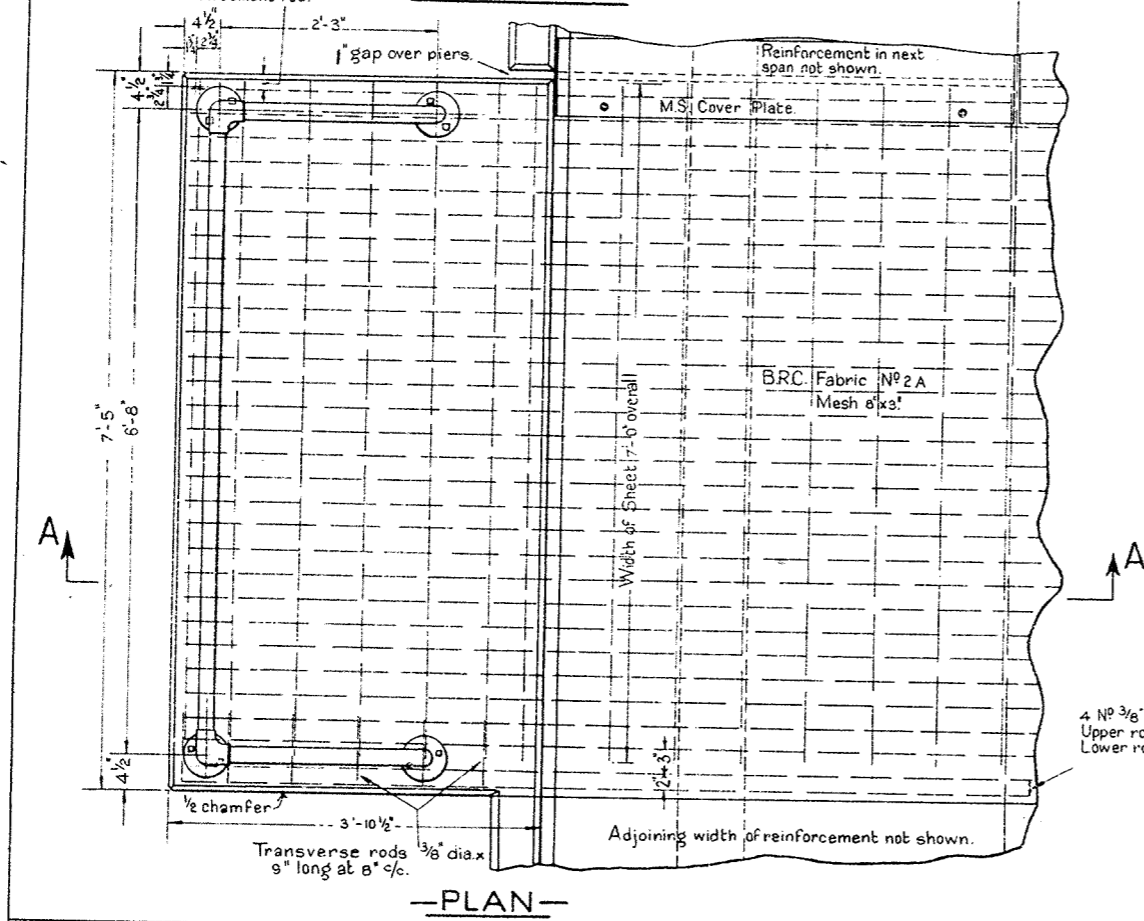
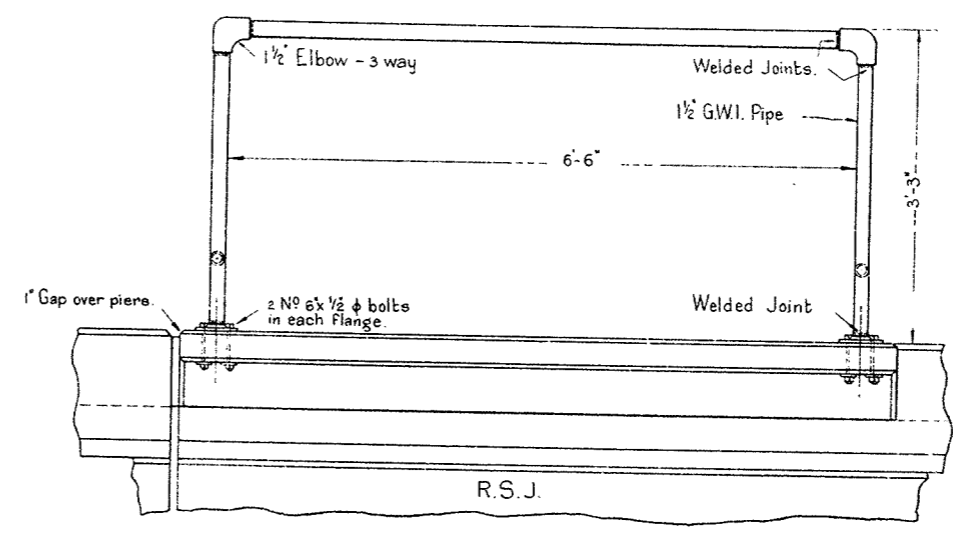
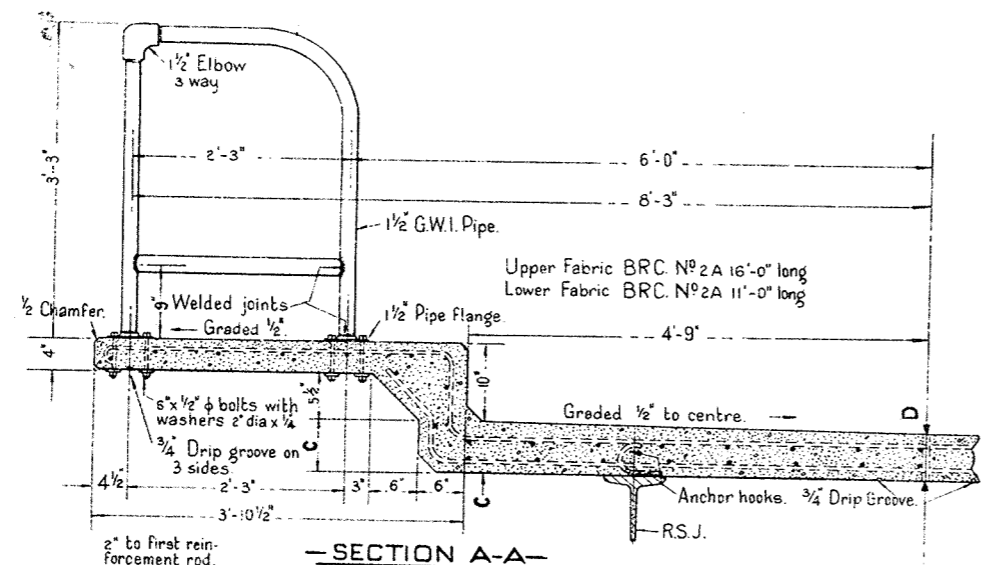
TIE BOLT

SCHEDULE OF QUANTITIES	
TIMBER	IRONWORK
Red Gum, Grey Box, Red Ironbark or Yellow Stringybark.	
Buffer Beam 21" x 9" or old Bridge Beam 8'0"	Tie Rods 1 1/4" dia. threaded 5' at both ends 4. 6:3 with 2 Nuts each.
Buffer Blocks 18" x 6" or more 2. 1:9"	Bearing Plates 4" x 1/2" x 1'0" 4.
Red Gum, Grey Box or Red Ironbark.	Tie Bolts, 1 1/4" dia. to detail (with nuts & washers) 2.
Posts 16" to 20" dia. 2. 6:3"	Bolts 7/8" dia. (with nuts & washers) 8. 1:10"
Packing Pieces 8" x 6" 2. 5:0"	" " " " " " 2. 2:3" approx.
Sole Pieces 12" x 6" 4. 12:0"	" 5/8" (" ") 4. 2 1/2"
Bearers 9" x 4 1/2" 6. 3:0"	Spikes 1/2" dia. 8. 12"
Tie Anchor Blocks To detail 2. 1:8"	

NOTES - Suitable condemned cattle pit logs and bridge piles are to be used for posts wherever possible.
 At the ends of sidings on which car stock is not stabled timber baulks in accordance with Plan No F449 may be bolted across the rails in lieu of buffer stops where directed by the District Engineer.
 Buffer stops, not baulks, must be used at the end of each siding on a falling grade and at the ends of frequently used sidings.

This plan supersedes plan No F239 A

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.S.</i> Chief Civil Engineer	NOV. 1943
BUFFER STOP		Drawn by C.M.T.	Checked by T.H.S.
In Made Ground or Natural Ground where ordered.		<i>H. Brown</i> Eng ^r of Structural Design	PLAN No. F239B
Scales : 1/2", 1" & 1 1/2" = 1'0"			



Note - This plan is to show detail of Safety Bracket only
For detail of R.S.J. & Deck System, see detail plan as below.

Dimension	12'-6" Ope.		22'-0", 23'-6"	30'-0" & 32'-0" Ope.		40'-0", 45'-0"
	8"x6" R.S.J. ^s	9"x4" R.S.J. ^s	Ope.	2 R.S.J. ^s per Ope.	4 R.S.J. ^s per Ope.	Ope.
C	5 1/2"	5 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"
D	5"	5"	6"	6"	6"	6"
Detail Plan	F202	F463	F 257 F 258	F 249	F 245	F497

Note:- Safety Brackets are to be provided alternately on up & down side of the bridge except in cases where the FL is high. In these cases the safety brackets are to be on the upstream side of the bridge.

4 N° 3/8" dia. rods inserted.
Upper rods 16'-0" long
Lower rods 11'-0" long

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH

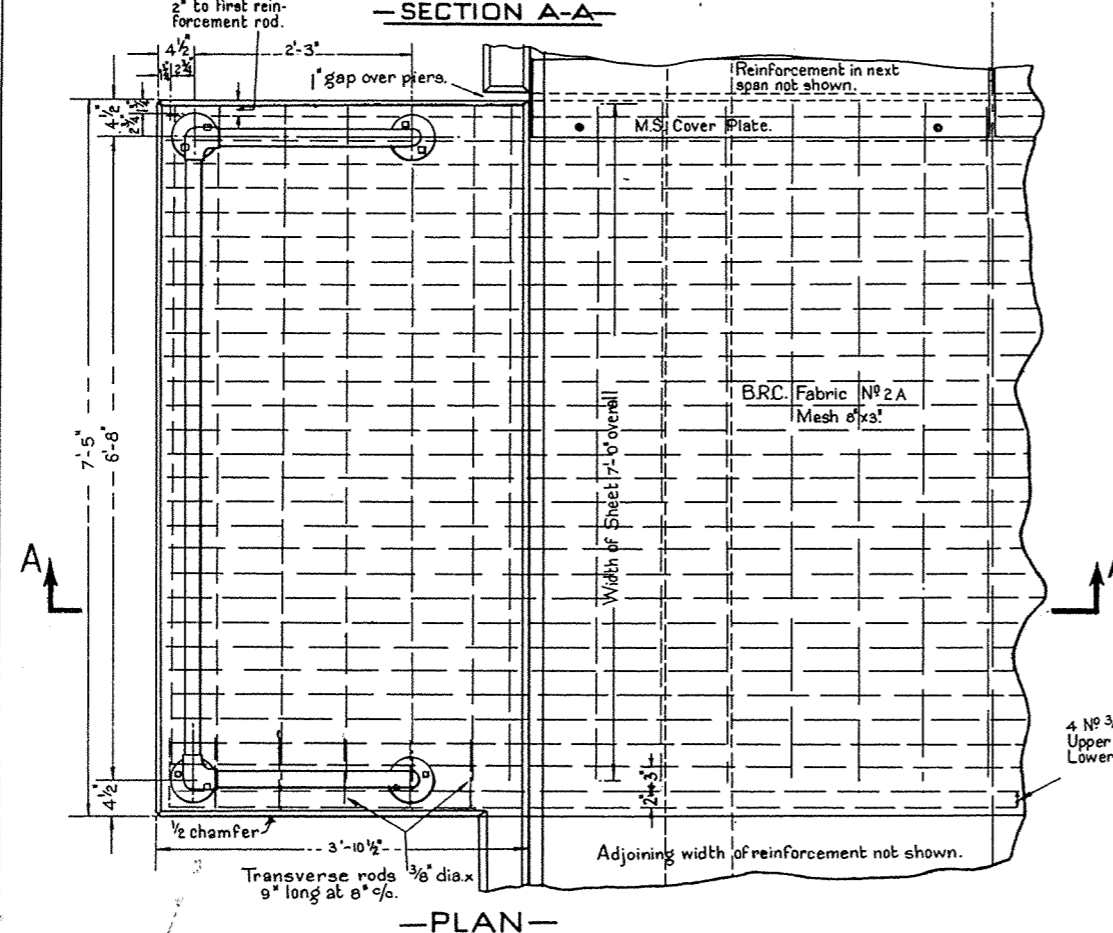
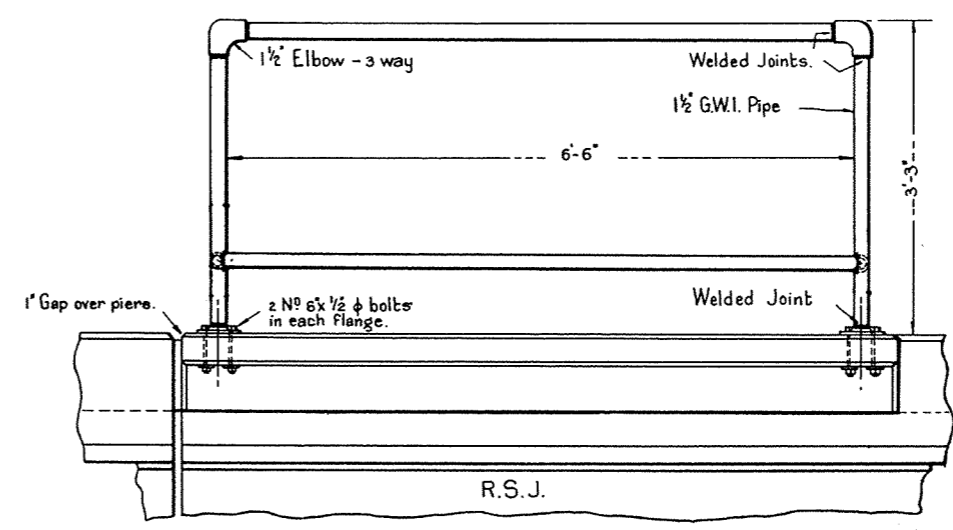
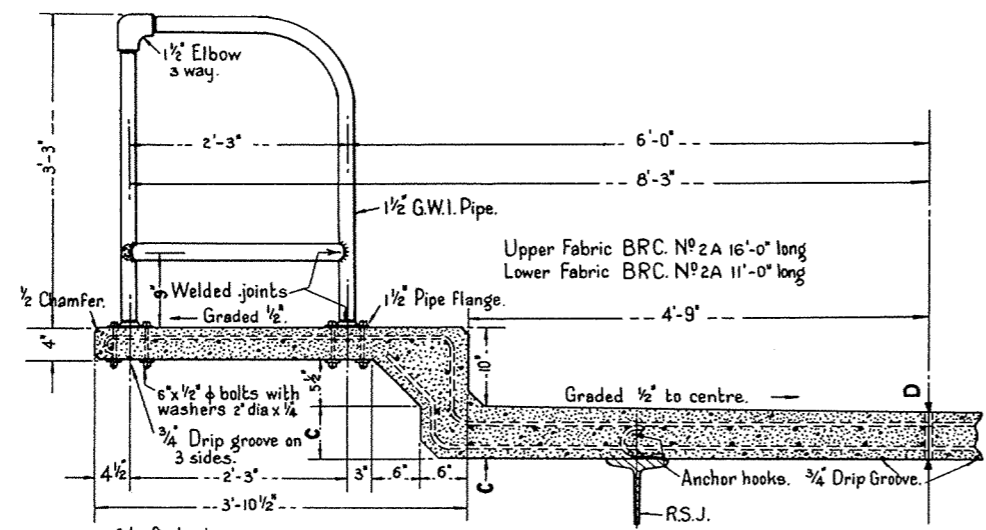
STANDARD DRAWING

SAFETY BRACKET

For R.S.J. Bridges with Concrete Deck

No Scale.

Approved	<i>[Signature]</i>	Adopted	1946
Chief Civil Engineer			
Drawn by	K. R. H.	Checked by	T. H. J.
Engineer of Struct. Design			
		PLAN N°	F 241



Note: This plan is to show detail of Safety Bracket only
For detail of R.S.J. & Deck System, see detail plan as below.

Dimension	12'-6" Ope.		22'-0", 23'-6"	30'-0" & 32'-0" Ope.		40'-0", 45'-0"
	6"x6" R.S.J. ^s	9"x4" R.S.J. ^s	Ope.	2 R.S.J. ^s per Ope.	4 R.S.J. ^s per Ope.	Ope.
C	5 1/2"	5 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"
D	5"	5"	6"	6"	6"	6"
Detail Plan	F202	F483	F 257 F 258	F 249	F 245	F497

Note: Safety Brackets are to be provided alternately on up & down side of the bridge except in cases where the F.L. is high. In these cases the safety brackets are to be on the upstream side of the bridge.

Revision	A	Date	30.9.63	Amendment	Lower pipe rail added at rear of bracket.	Checked	K.W.W.
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VICTORIAN RAILWAYS-WAY AND WORKS BRANCH

STANDARD DRAWING

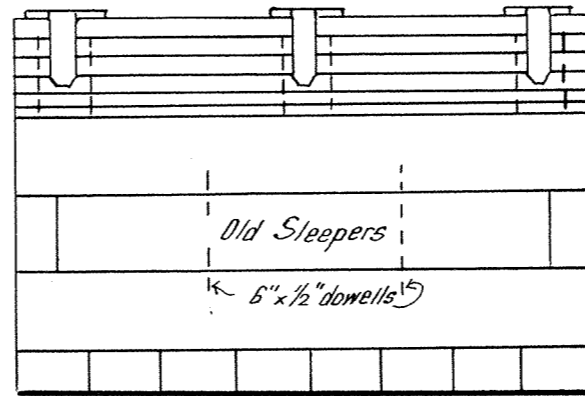
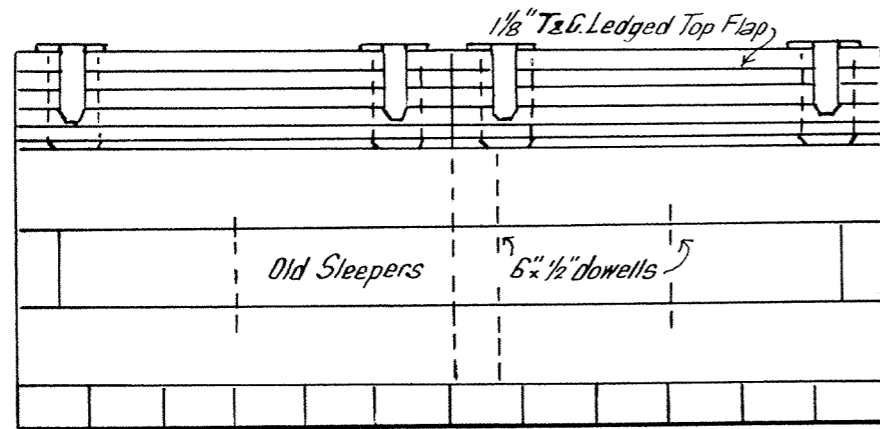
SAFETY BRACKET

For R.S.J. Bridges with Concrete Deck

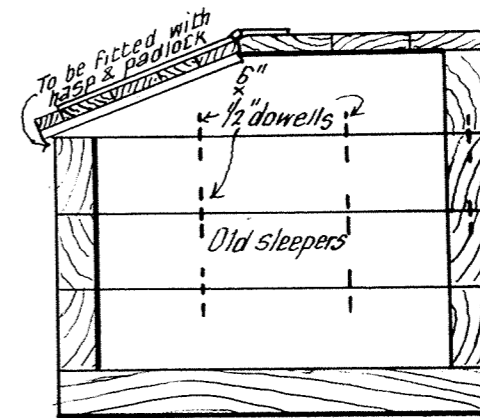
No Scale.

Approved	<i>M</i>	Adopted	1946
Chief Civil Engineer		PLAN No	F 241A
Drawn by	K. R. H.	Checked by	T. H. J.
Engineer of Struct. Design			

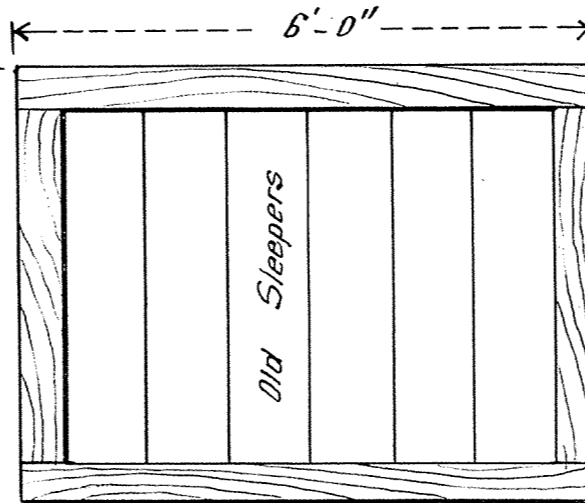
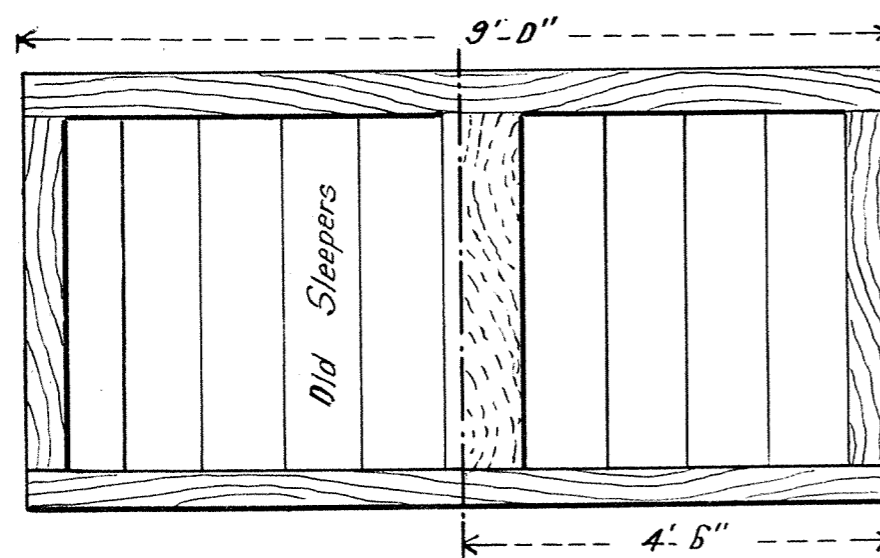
4 No 3/8" dia. rods inserted.
Upper rods 16'-0" long.
Lower rods 11'-0" long.



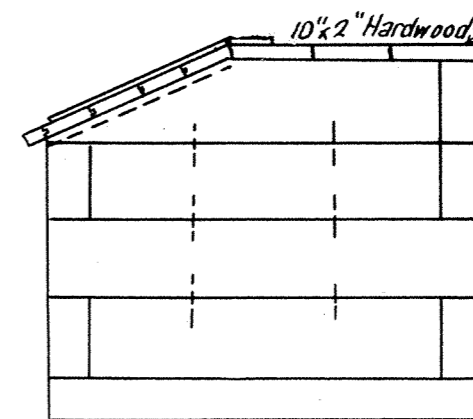
FRONT ELEVATION



SECTION



PLAN



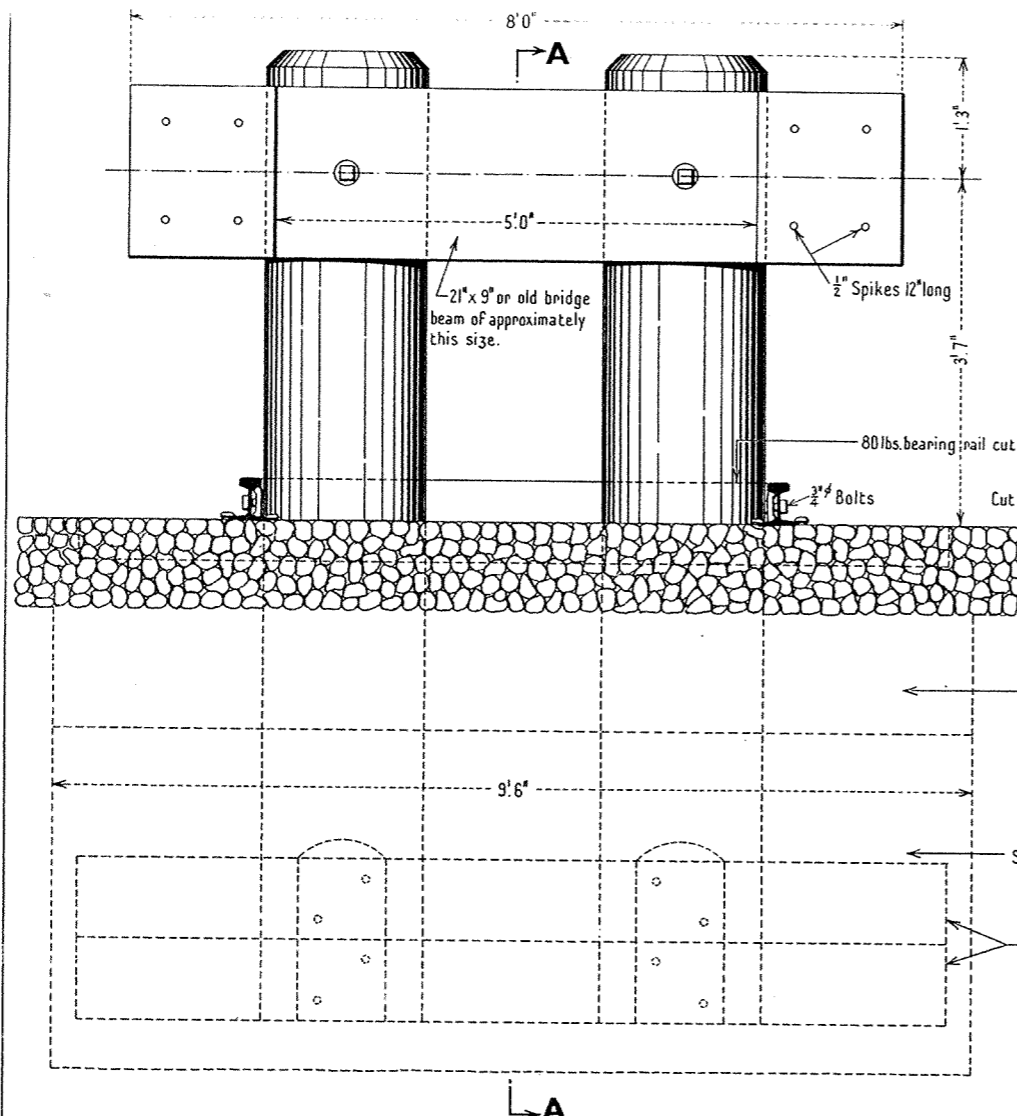
SIDE ELEVATION

Capacity of Bins

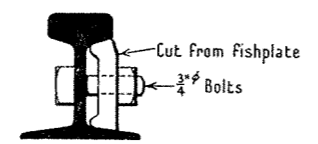
9'-0" x 4'-6"	holds	32 bags = 2 tons
6'-0" x 4'-6"	"	24 " = 1 1/2 "
4'-6" x 4'-6"	"	16 " = 1 "

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING
COAL BINS
 Scale 1/2 in to 1 ft.

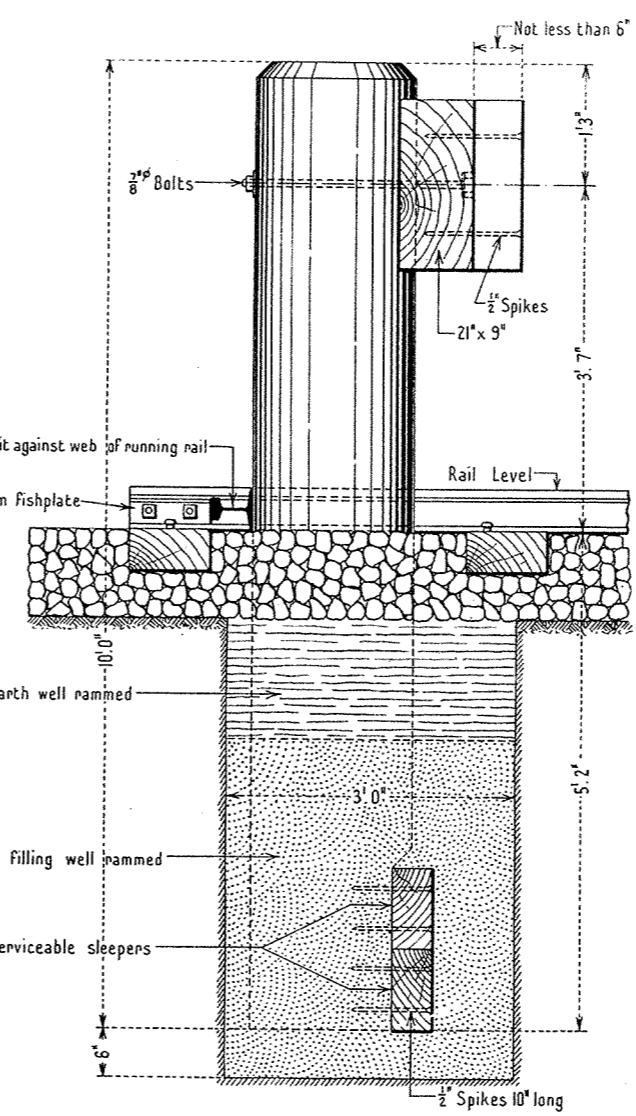
Approved <i>M. Schwartz</i> Actg. Chief Eng. of Way & Works	Adopted August 1928
Checked L.E.M.	PLAN No F242
<i>W. Sawcote</i> Chief Architect	



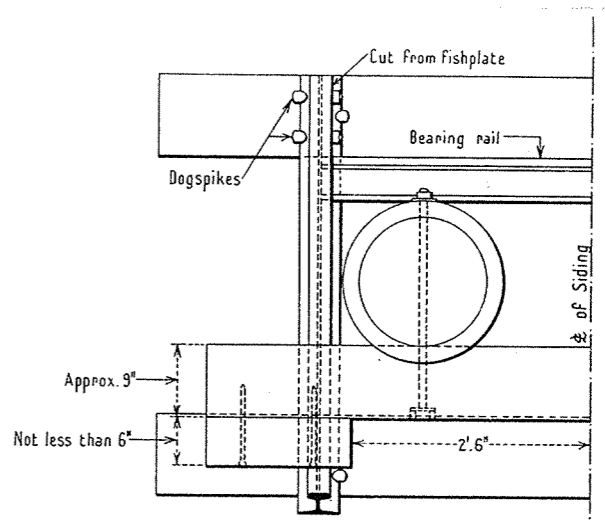
FRONT ELEVATION



SETTING FOR BEARING RAIL



SECTION A-A



PLAN

SCHEDULE OF QUANTITIES

TIMBER	IRONWORK
Red Gum, Grey Box or Red Ironbark	Bearing Rail 80lb..... 1/5'5 1/2"
Posts 16" to 20" dia..... 2/10'0"	Part Fishplate..... 2
Sleepers (Serviceable) 10" x 5"..... 2/9'0"	Bolts 3/4" (with nuts & washers) 2/2'3"
Red Gum, Grey Box, Red Ironbark	Bolts 3/4"..... 4/3"
or Yellow Stringybark	Spikes 1/2"..... 8/12'8/10"
Buffer Beam, 21' x 9" or old bridge beam... 1/8'0"	
Buffer Blocks, 18" x 6" or more..... 2/1'9"	

NOTES

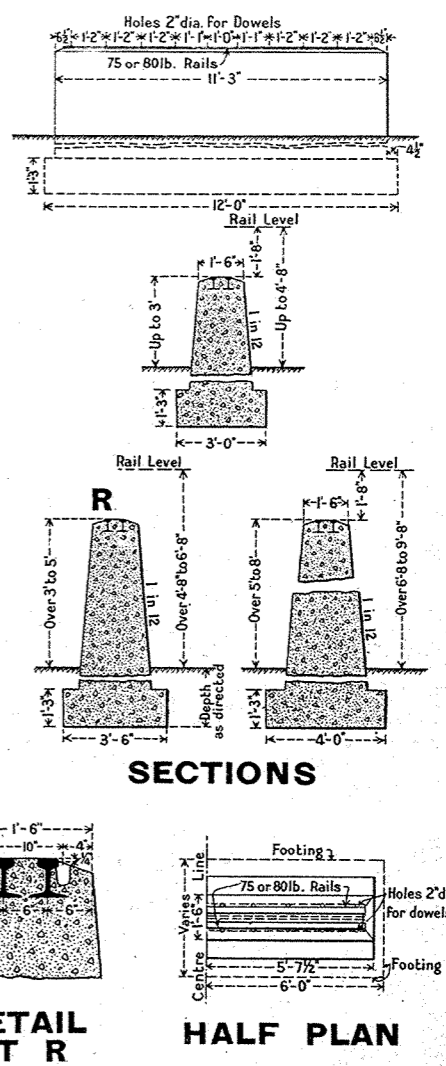
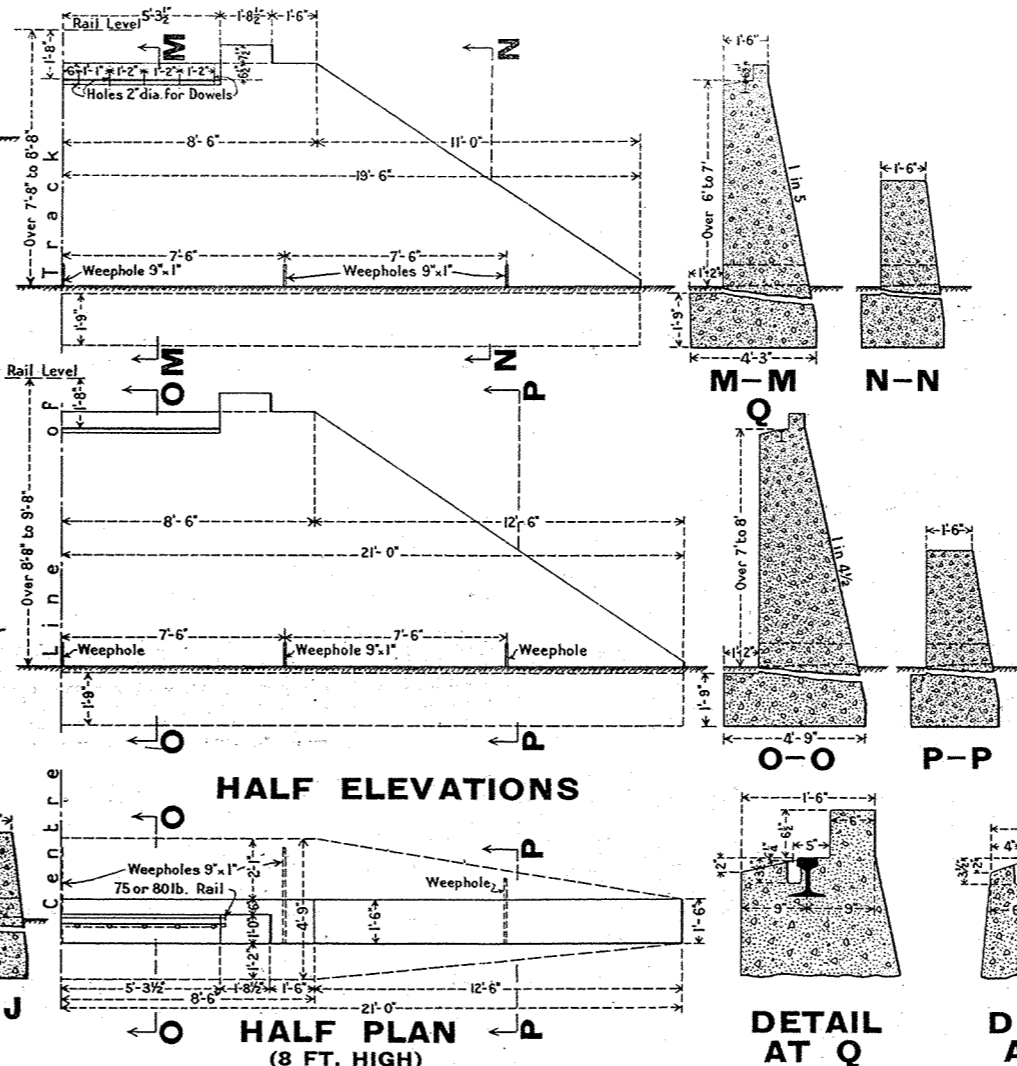
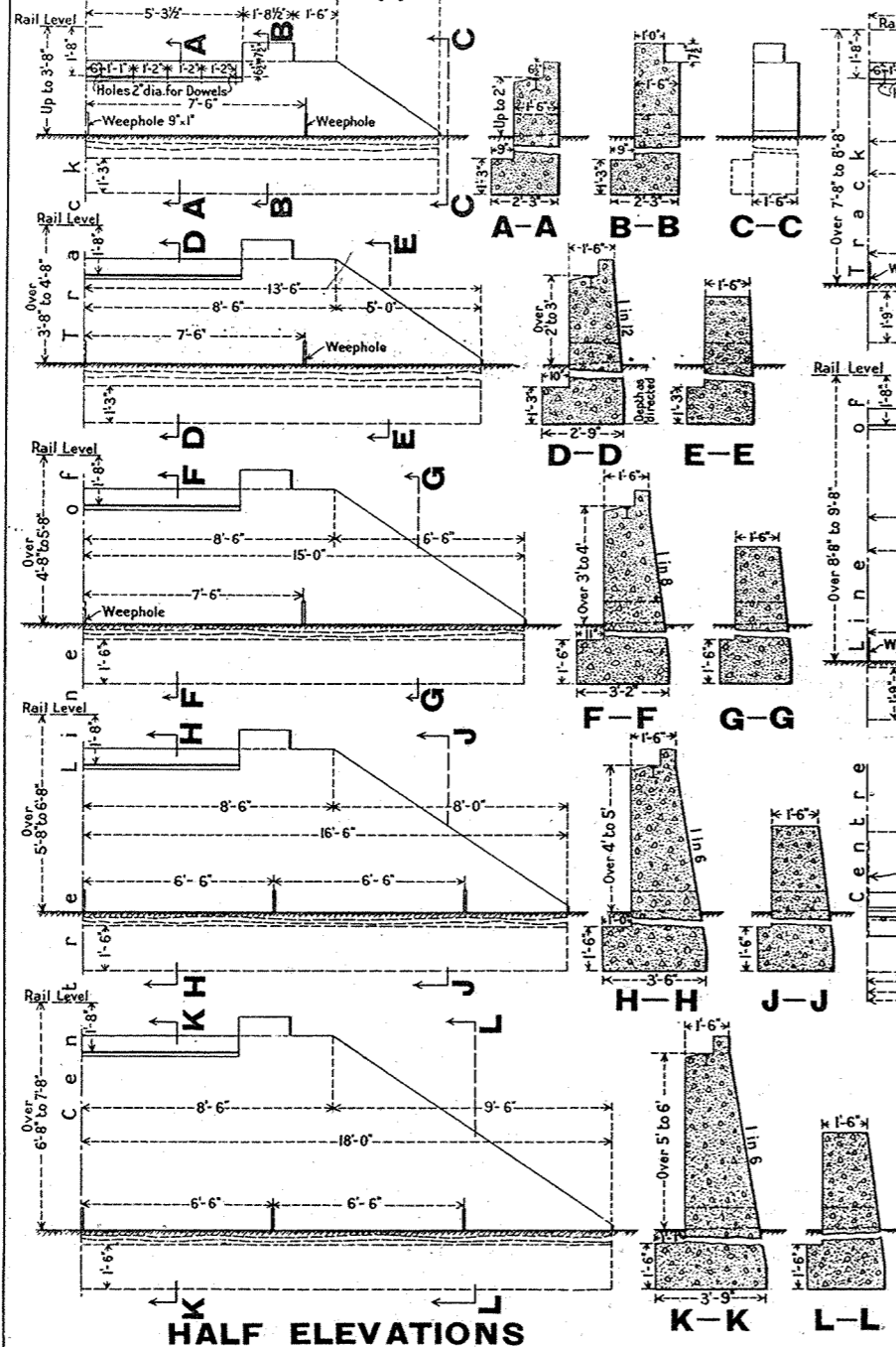
- Suitable condemned cattle pit logs & bridge piles are to be used for posts wherever possible.
- At the ends of sidings on which car stock is not stabled, timber baulks in accordance with Plan N° F449 may be bolted across rails in lieu of buffer stops where directed by the District Engineer.
- Buffer stops, not baulks, must be used at the end of each siding on a falling grade & at the ends of frequently used sidings.
- Running rails to be cramped tight against bearing rail before dogspikes are driven.
- If buffer stop be knocked out of plumb, jack it back to the vertical & insert packings between posts & rail at back. Before completion, shunt a truck against it a few times in order to consolidate the sand filling.
- In wet ground, use engine ashes instead of sand, well rammed in front of sleepers.

This plan supersedes plan N° F243A

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING BUFFER STOP IN NATURAL GROUND SCALES: 1/2" & 1 1/2" = 1'0"		Approved Chief Civil Engineer	Adopted NOV. 1943
Drawn by V. W. L.	Checked by T. H. J.	PLAN No. F243B	
 Engineer of Structural Design			

ABUTMENTS

PIERS



HALF ELEVATIONS

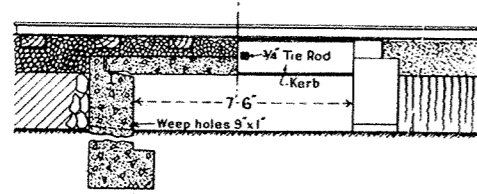
HALF PLAN (8 FT. HIGH)

Height in Feet	SCHEDULE OF QUANTITIES				Unserviceable 75 or 80 lb. rails, in lengths of 10'-8". In two abutments 2 No. In one pier - 2 No. Column "A" shows quantity of concrete in one pier or two abutments, including footings 2 feet deep. Column "B" shows quantity to be added to "A" for every foot in excess of two (2) feet in depth.
	TWO ABUTMENTS		ONE PIER		
	A	B	A	B	
2	12½	2½	3	3½	1
3	17½	3½	5	4½	1
4	24	4½	7	5½	1
5	31½	5½	9½	6½	1
6	39	6	12	8	1½
7	50	7½	15	9	1½
8	62½	9	18	10	1½

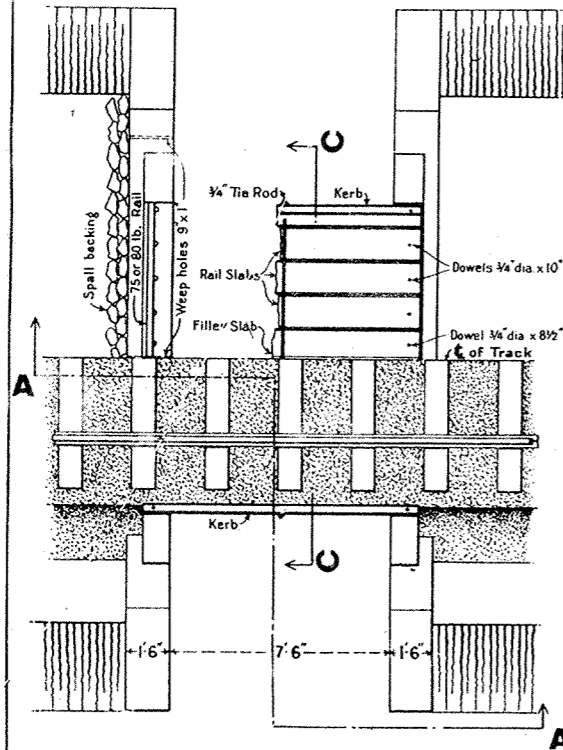
Note: Depths of foundations not to scale, actual depths to be determined on site.

Victorian Railways—Way and Works Branch Standard Rail Slab Deck Bridge 8 Ft. Opening - E. 50 Loading Substructure No Scale	Approved Chief Engineer of Way and Works	Adopted Nov. 1931
	Checked by Structure Engineer	Plan (2 SHEETS) No. F. 244 SHEET I.

ONE OPENING

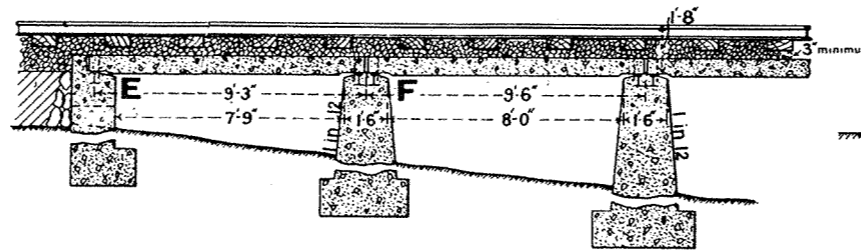


SECTION-ELEVATION A-A

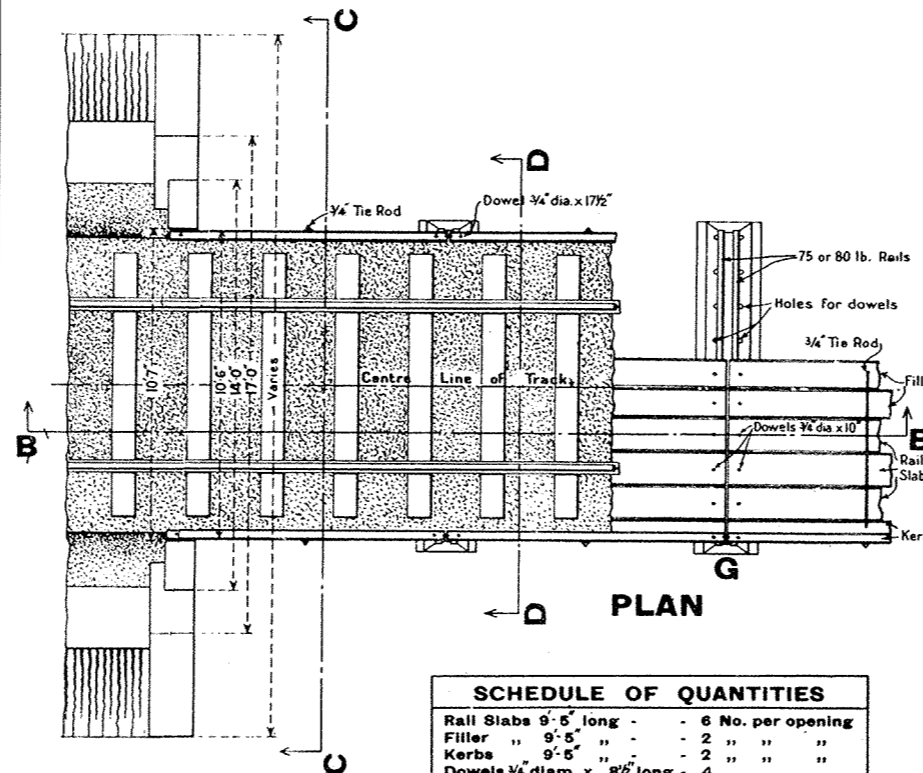


PLAN

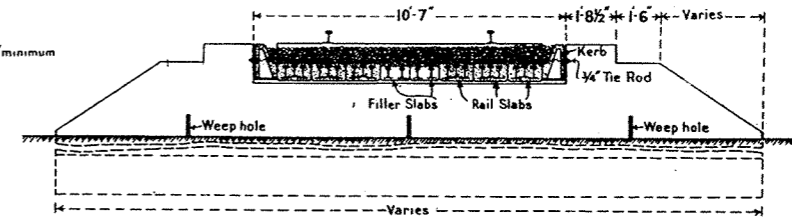
TWO OR MORE OPENINGS



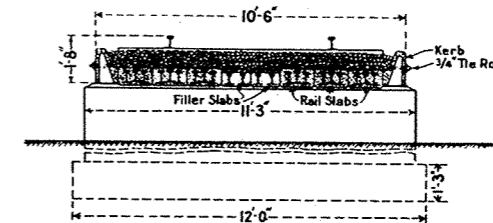
SECTION B-B



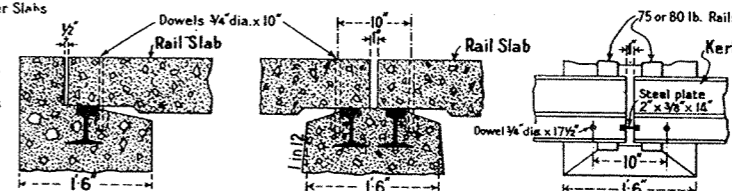
PLAN



SECTION C-C



SECTION D-D



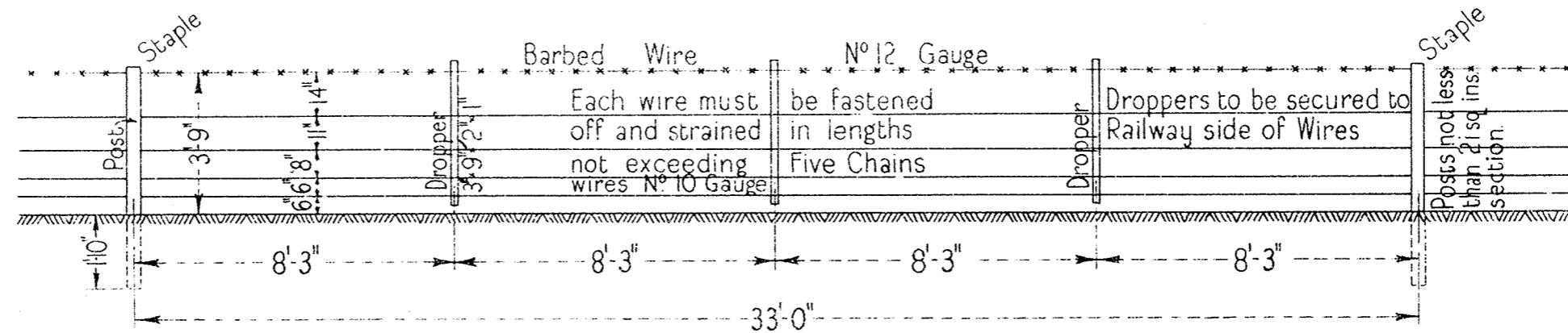
DETAIL AT E

DETAIL AT F

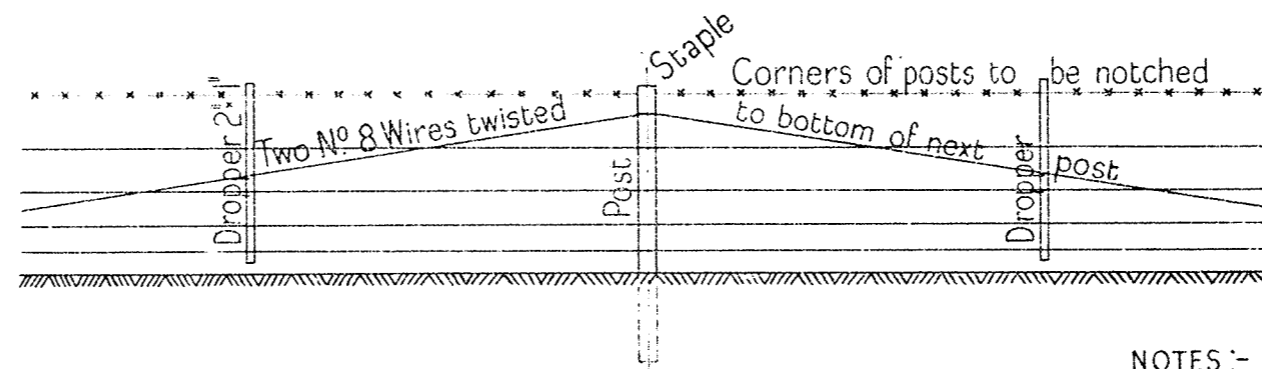
DETAIL AT G

SCHEDULE OF QUANTITIES		
Rail Slabs 9'-5" long	-	6 No. per opening
Filler " 9'-5" "	-	2 " " "
Kerbs 9'-5" "	-	2 " " "
Dowels 3/4 diam. x 8 1/2" long	-	4 " " "
" " " 10" "	-	12 " " "
" " " 17 1/2" "	-	4 " " "
Tie Rods 3/4 dia. x 10'-10" "	-	1 " " "
Steel Plates 2" x 3 1/2" x 14" - 2 " " pier		
Holes left for dowels in piers and abutments are to be filled with cement mortar as the slabs are placed.		

Victorian Railways—Way and Works Branch Standard Rail Slab Deck Bridge 8 Ft. Opening - E. 50 Loading Superstructure No Scale	Approved <i>[Signature]</i> Chief Engineer of Way and Works	Adopted Nov. 1931
	Checked by <i>[Signature]</i> Structure Engineer	Plan (2 SHEETS) No. F. 244 SHEET 2



ELEVATION OF ONE PANEL

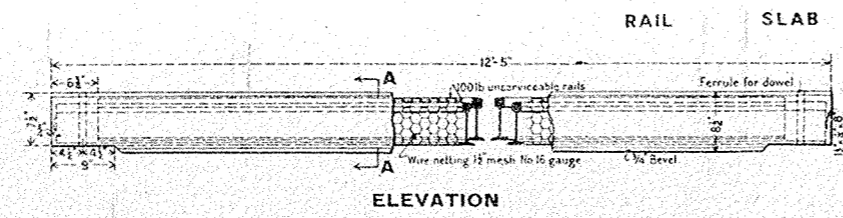


ELEVATION SHOWING STRAINING POST

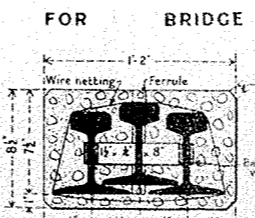
NOTES:-

- 1 Top barbed wire must be substituted by plain wire where it adjoins a road or pathway or where it turns under the span of a bridge
- 2 A suitable gate must be provided and kept in good order

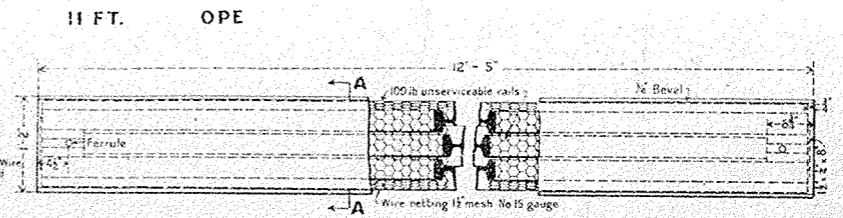
VICTORIAN RAILWAYS-WAY & WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	FEB. 1949
FENCING FOR LEASED LAND		Chief Civil Engineer	PLAN N ^o .
Scale :- 1/4" = 1'-0"		Drawn by K.F.L. Check by E.R.	
		<i>[Signature]</i>	Eng' of Track & Drainage



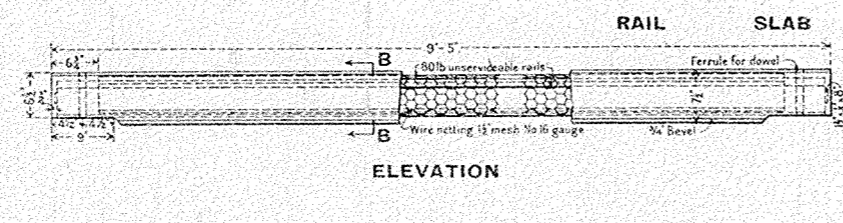
ELEVATION



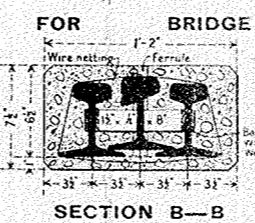
SECTION A—A



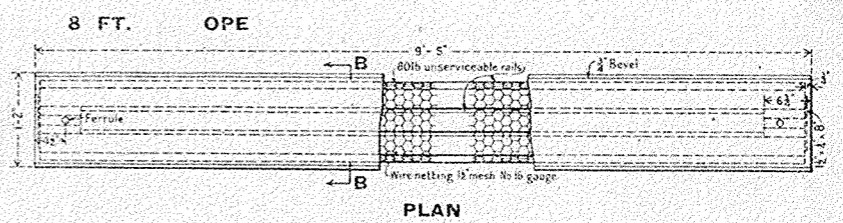
PLAN



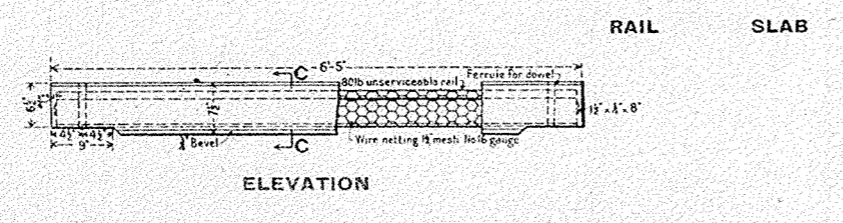
ELEVATION



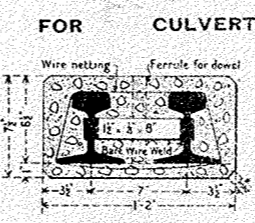
SECTION B—B



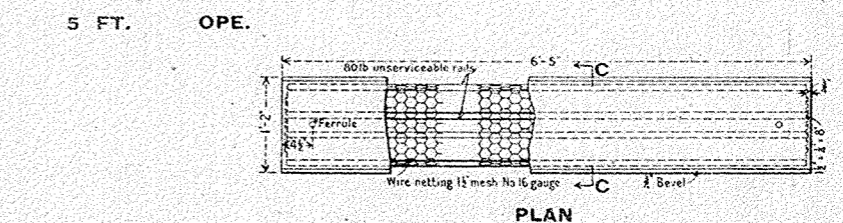
PLAN



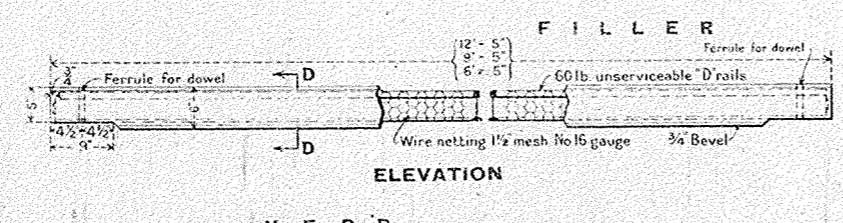
ELEVATION



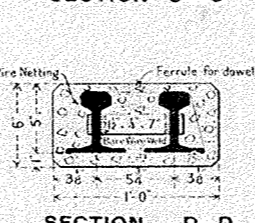
SECTION C—C



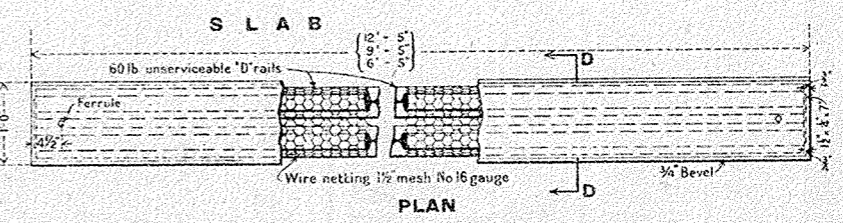
PLAN



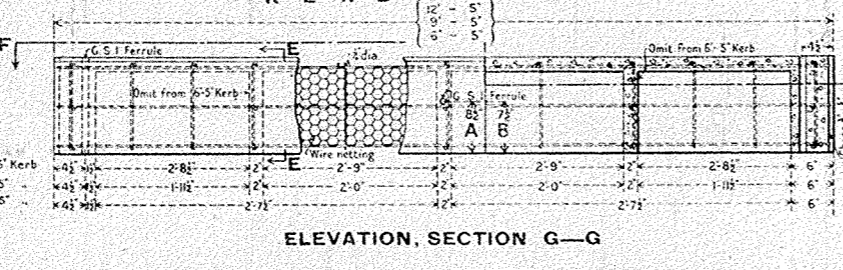
ELEVATION



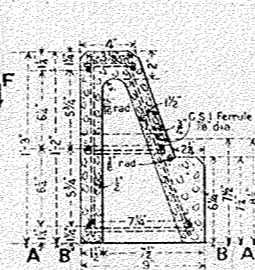
SECTION D—D



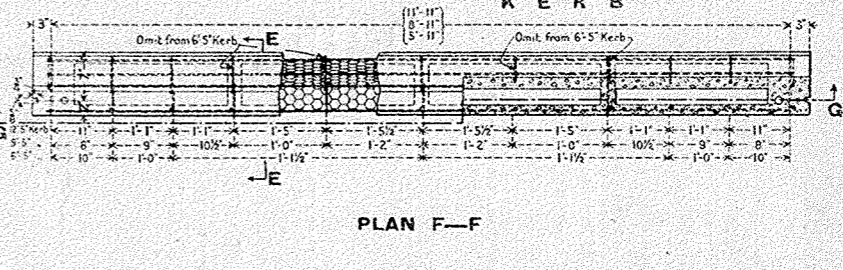
PLAN



ELEVATION, SECTION G—G



SECTION E—E



PLAN F—F

Length	12 ft. 5 in.			9 ft. 5 in.			6 ft. 5 in.			
	Gravel/Cement	Wire Netting 3 ft. wide	Rod 3/4 in. dia.	Gravel/Cement	Wire Netting 3 ft. wide	Rod 3/4 in. dia.	Gravel/Cement	Wire Netting 3 ft. wide	Rod 3/4 in. dia.	
Rail Slabs	7.8 c.f. 1.6 c.f. 11 lb. B in.	2 No. 12 ft. 3 1/2 in. 1 No. 11 ft. 3 1/2 in.	2 No. 12 ft. 3 1/2 in. 1 No. 11 ft. 3 1/2 in.	5.5 c.f. 1.0 c.f. 8 ft. 0 in.	2 No. 9 ft. 3 1/2 in. 1 No. 8 ft. 3 1/2 in.	2 No. 9 ft. 3 1/2 in. 1 No. 8 ft. 3 1/2 in.	4.0 c.f. 8 c.f. 5 ft. 6 in.	2 No. 6 ft. 3 1/2 in.	2 No. 6 ft. 3 1/2 in.	
Filler Slabs	4.0 c.f. 1.0 c.f. 9 ft. 0 in.	2 No. 12 ft. 3 1/2 in.	2 No. 12 ft. 3 1/2 in.	3.8 c.f. 7 c.f. 6 ft. 9 in.	2 No. 9 ft. 3 1/2 in.	2 No. 9 ft. 3 1/2 in.	2.5 c.f. 5 c.f. 4 ft. 6 in.	2 No. 0 ft. 0 in.	2 No. 0 ft. 0 in.	
Kerbs	1.0 c.f. 1.0 c.f. 10 ft. 0 in. 18 lbs.	3.9 c.f. 8 c.f. 7 ft. 10 in. 15 lbs.					2.7 c.f. 5.5 c.f. 5 ft. 4 in. 10 lbs.			

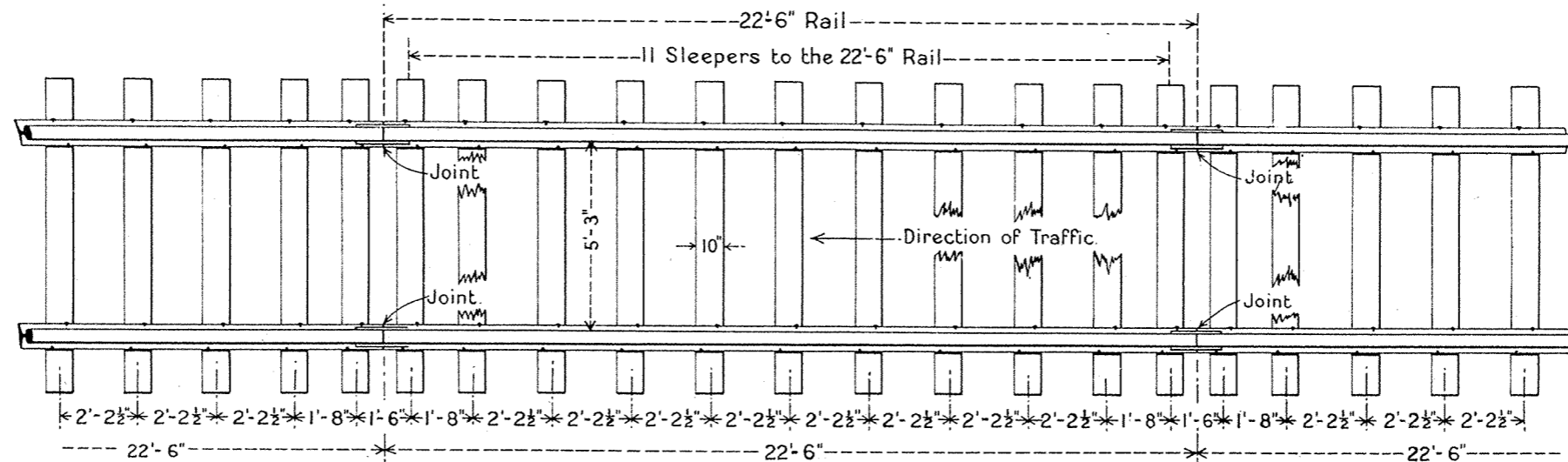
NOTE: Concrete is to be 3 parts of gravel to 1 of cement. No stone is to be larger than will pass through a 1 inch ring gauge. Lengths shown are for standard slabs, and may be varied for special cases. Ferrules are to be out of G. S. I. scrap. Unserviceable Rails are to be selected, free from defects and excessive wear.

Note: A dimensions are for 12'-5" Kerb.
B 9'-5" & 6'-5" Kerbs.

Victorian Railways - Way and Works Branch
Standard Rail Slab Deck Bridge
 E.50 Loading
 Details of Slabs and Kerbs
 No Scale

Checked by
 H. B. Smith
 Structure Engineer

Adopted
 JULY 1932.
 Plan No.
F.246



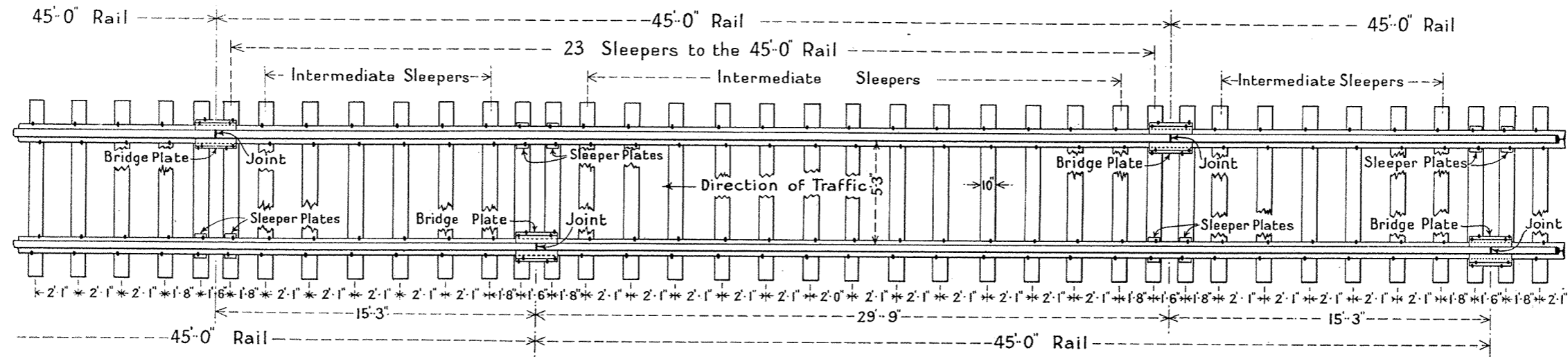
PLAN SHOWING SLEEPER SPACING

NOTE.—The two Outside Spikes must lead in direction of traffic on Double Track (as shown above) and down hill on Single Track.

Additional sleepers may be provided at soft places in accordance with Instruction 439 W. & W. Instruction Book (1924.) For rails other than 22'-6" in length joint sleepers must be spaced 1'-6" and shoulder sleeper 1'-8" as shown; intermediate sleepers to be spaced to suit the particular length of rail but not more than 2'-3".

SCHEDULE OF QUANTITIES						
Item	Size	Weight Each	Per 22 6 of Single Track		Per Mile of Single Track	
Rails, 60 lb. D	22'-6"	452·967 lbs.	2 No.	8·089 cwts	470 No.	95·042 tons
Fishplates (Heavy)	1'-5"	11·666 "	4 "	·417 "	940 "	4·896 "
" (Light)	1'-5"	10·467 "	4 "	·374 "	940 "	4·392 "
Fishbolts	7/8" x 4 1/8"	1·25 "	8 "	·089 "	1·880 "	1·049 "
Spring Washers	7/8" x 3/6" x 1/4"	·108 "	8 "	·008 "	1·880 "	·091 "
Dogspikes (round)	3/4" x 5"	·775 "	44 "	·304 "	10·340 "	3·577 "
Sleepers	9' x 10" x 5"	224·000 "	11 "	22·000 "	2·585 "	258·500 "

Victorian Railways-Way and Works Branch	Approved	Adopted
Standard Drawing 60 lb. TRACK 22'-6" Rails with Square Joints No Scale	<i>[Signature]</i> Chief Engineer of Way and Works	10·7·32.
	Checked by <i>[Signature]</i> Engineer	Plan No. F 247



UNEQUAL STAGGER JOINTS

SCHEDULE OF QUANTITIES

ITEM	Size	Weight Each	Per 45'-0" of Single Track		Per Mile of Single Track	
			Number	Cwts.	Number	Tons.
Rails, 90 lb. "A.S." Class	45'-0"	1366.830	2	24.408	235	143.395
" 110 lb. "A.S." Class	45'-0"	1653.080	2	29.520	235	173.425
Fishplates, 90 lb. "	25"	32.621	4	1.165	470	6.845
" 110 lb. "	25"	38.730	4	1.383	470	8.126
Fishbolts - - -	1" x 5 ³ / ₈ "	2.035	8	.145	940	.854
Spring Washers - -	1" x ³ / ₈ " x ³ / ₈ "	.177	8	.013	940	.074
Bridge Plates, 90 lb.	25" x 9"	31.200	2	.557	235	3.273
" " 110 lb.	25" x 9 ³ / ₄ "	38.100	2	.680	235	4.000
Sleeper Plates, 90 lb.	8" x 9"	9.800	4	.350	470	2.056
" " 110 lb.	8" x 9 ³ / ₄ "	12.100	4	.432	470	2.539
Dogspikes, (Round) -	³ / ₄ " x 6"	.900	16	.129	1880	.755
" (Round) -	³ / ₄ " x 5"	.775	84	.581	9870	3.415
Sleepers - - -	9" x 10" x 5"	224.000	23	46.000	2699	269.900

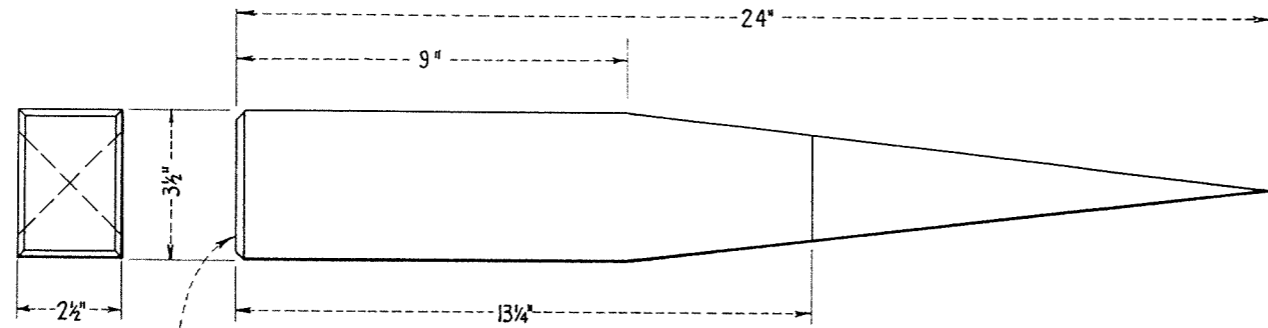
NOTE.—Rail anchors where required to be fixed as directed.

The two Outside Spikes must lead in the direction of traffic on Double Track (as shown above) and down hill on Single Track.

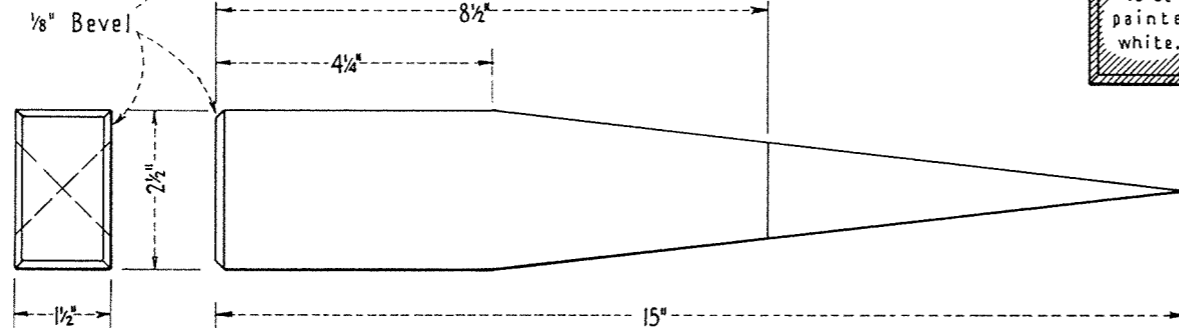
Joint Sleepers to be adzed Flat for Bridge and Sleeper Plates.

Sleeper Plates to be used on Intermediate Sleepers on curves of 20 chains radius and under, and Sleepers adzed Flat.

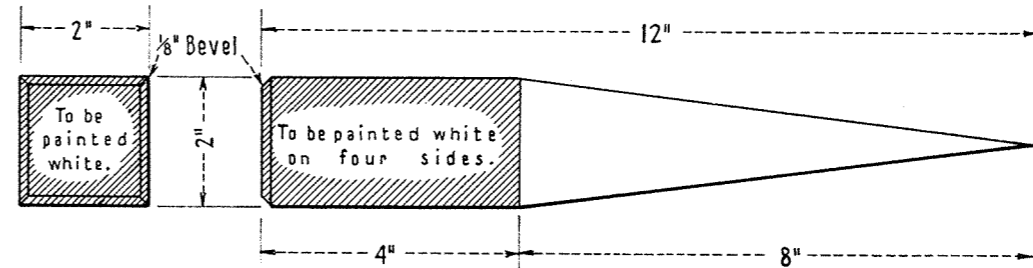
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING 90 and 110 lb. TRACK 45'-0" Rails with unequal stagger joints	Approved <i>J. W. Schwab</i> Chief Eng. of Way & Works	Adopted 1934
	Checked <i>J. M.</i>	PLAN NO F248
	<i>E. M.</i> Engineer	



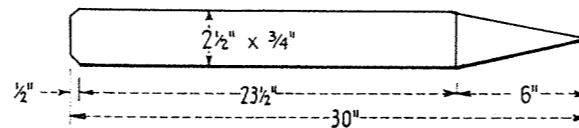
TYPE "A"



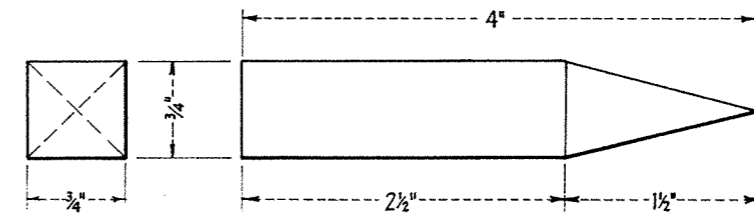
TYPE "B"



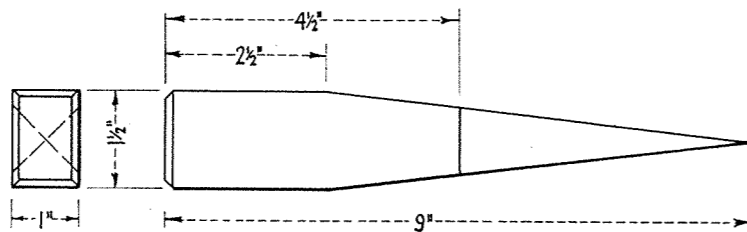
TYPE "D"



TYPE "F"



TYPE "E"



TYPE "C"

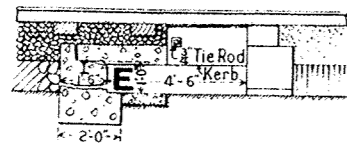
TYPE	PURPOSE	MATERIAL
A	Permanent Centre Line Pegs	Red Gum
B	General Setting Out Work	" "
C	Temporary Pegs (General Set Out)	" "
D	Title Survey	" "
E	Temporary Pegs (Title Survey)	" "
F	Indicators	Hardwood

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
STANDARD SURVEY PEGS
 IN ACCORDANCE WITH SURVEY
 CO-ORDINATION ACT 1940

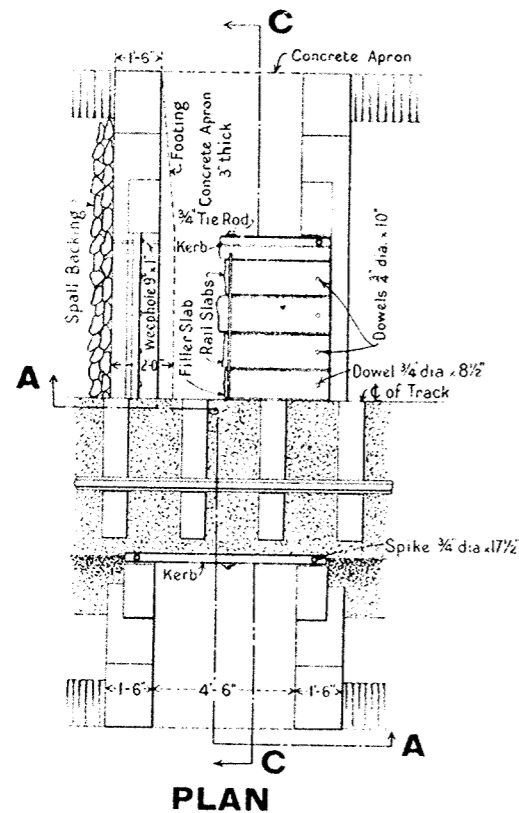
Approved
[Signature]
 Chief Civil Engineer
 Drawn by
R.J.B.
 Eng. of Track & Drainage

Adopted
PLAN No
F249

ONE OPENING

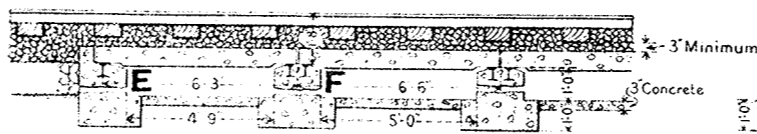


SECTION ELEVATION A-A

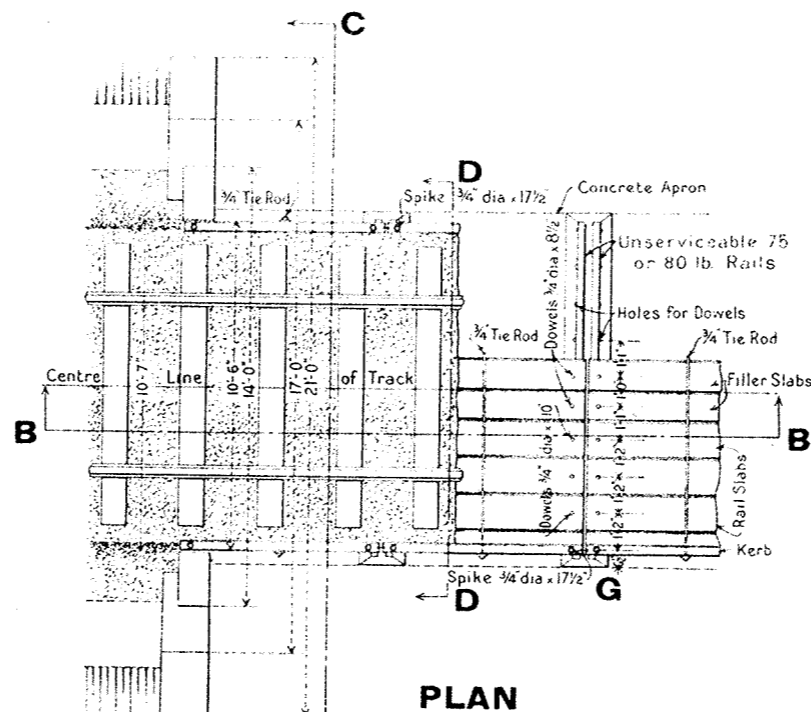


PLAN

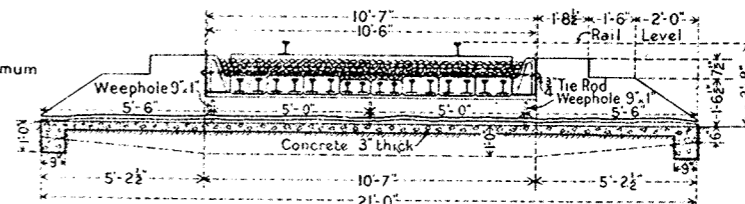
TWO OR MORE OPENINGS



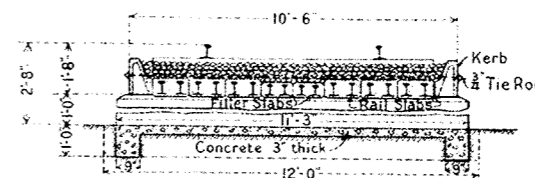
SECTION B-B



PLAN



SECTION C-C



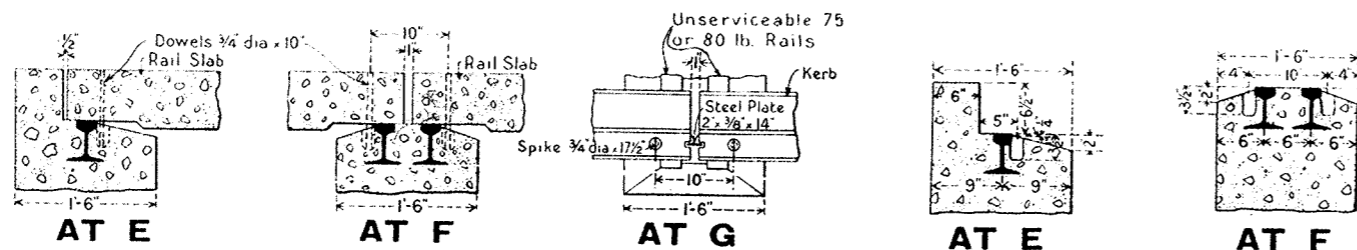
SECTION D-D

SCHEDULE OF QUANTITIES

Description	Two Abutments		One Pier		Description	One Opening
	Two Abutments	One Pier	Description	One Opening		
Concrete	6 c.y.	2 c.y.	Rail Slabs 6'-5" long	6 No.		
Spalls	1 c.y.		Filler	2 ..		
Unserviceable 75 or 80 lb. rails in lengths of 10'-8"	2 No.	2 No.	Kerbs	2 ..		
Steel Plates 2' x 3/8" x 14"		2 No.	Dowels 3/4" Dia. x 8 1/2" long	4 ..		
			" " x 10" "	12 ..		
			Round Spikes .. x 17 1/2" "	4 ..		
			Tie Rods .. x 10'-10" "	1 ..		
			with nuts & washers at both ends			

Holes left for dowels in piers and abutments are to be filled with cement mortar as the slabs are placed. Quantity of concrete is for one pier and two abutments one (1) foot high and footings one (1) foot deep, including concrete apron three (3) inches thick.

D E T A I L S



Victorian Railways—Way and Works Branch

STANDARD RAIL SLAB DECK CULVERT

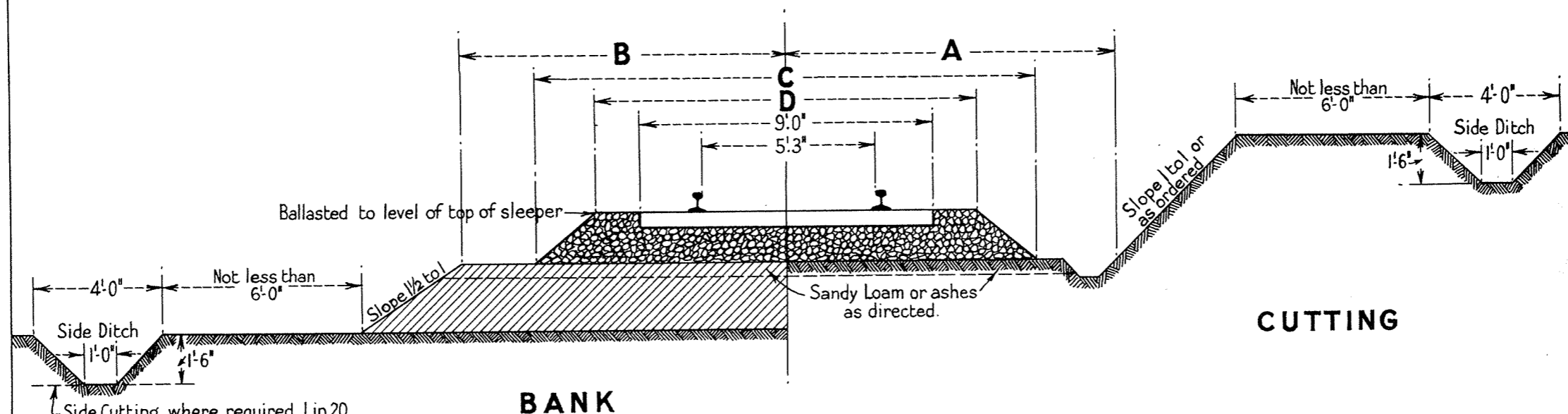
5'-0" Opening E.50 Loading
No Scale

Approved
J. H. Hurst
Chief Engineer of Way and Works

Adopted
1 · 12 · 32

Checked by
J. A. Brown
Structure Engineer

Plan No.
F 250



BANK

CUTTING

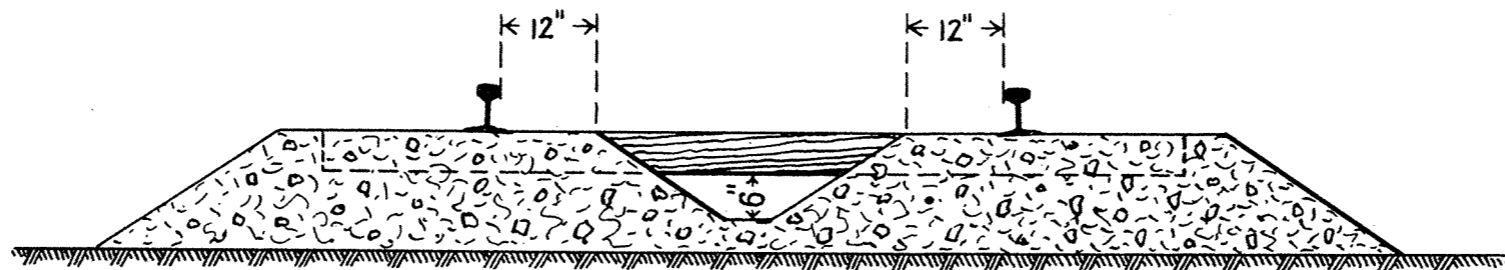
TYPE OF TRACK	A	B	C	D	MIN ^m DEPTH OF BALLAST UNDER SLEEPER
Welded Track having rails over 180 feet long.	12'-0"	11'-0"	16'-0"	11'-8"	12"
Welded Track having rails of lengths up to 180 feet.	12'-0"	11'-0"	15'-0"	11'-0"	10"
First Class Lines - Non-welded Track.	10'-6"	9'-6"	14'-0"	10'-0"	10"
Second Class Lines - Non-welded Track.	9'-0"	8'-0"	12'-0"	9'-6"	6"

Note:-
Where the weight of rail in track is 80lb. or over, sleeper plates are to be used in relaying and when spot renewals of sleepers are carried out.

This Plan supersedes Plan No F 251.

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH STANDARD DRAWING TRACK FORMATION & BALLAST	Approved <i>M</i> Chief Civil Engineer	Adopted MAY 1948
	Drawn by <i>K.F.L.</i> Checked by <i>A.P.T.</i>	PLAN No F 251A

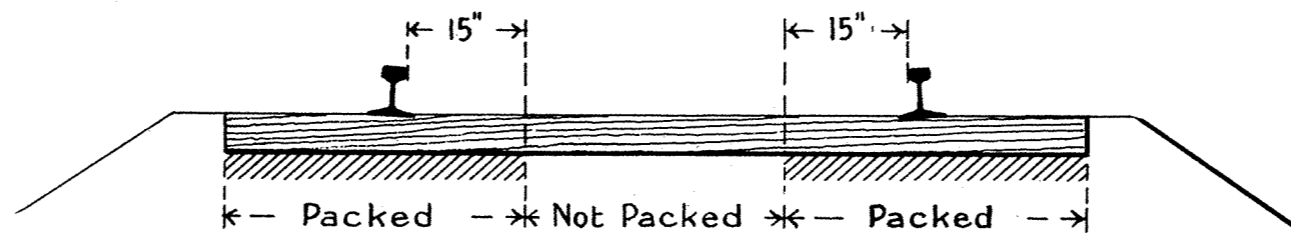
at Harrel
Eng. Tracks & Drainage



NOTE:- Ballast around centre pegs must not be removed.

DIAGRAM

TRIMMING OF BALLAST TO AVOID CENTREBOUND TRACK

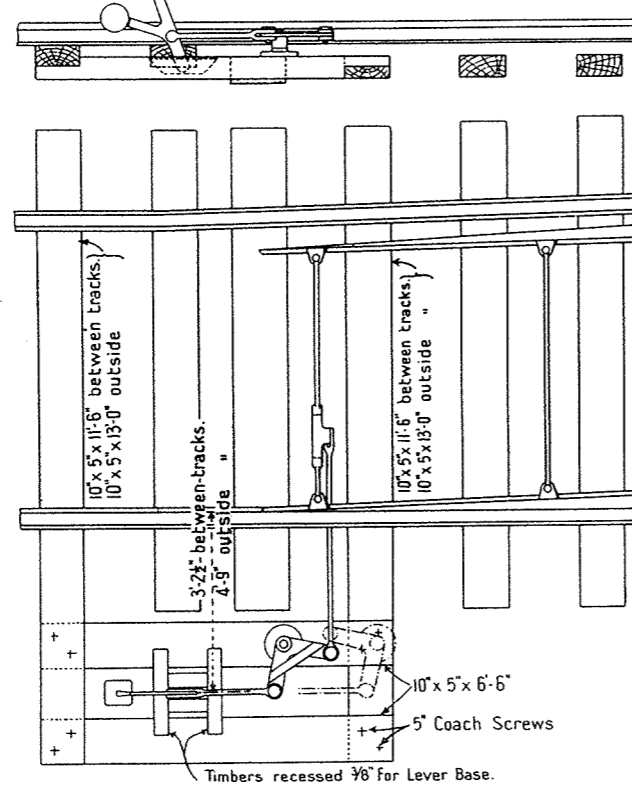
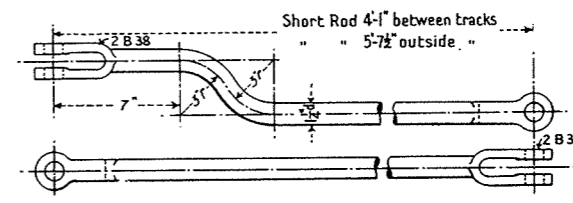
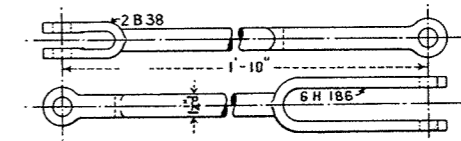


NOTE:- Sleepers at rail joints to be packed frequently & specially hard.

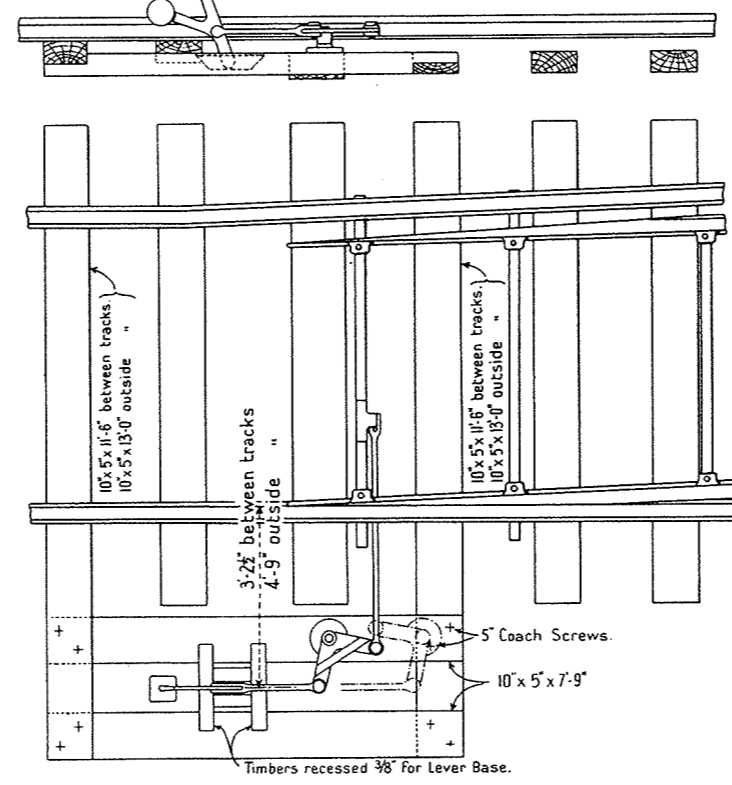
DIAGRAM

PACKING OF SLEEPERS UNDER EACH RAIL

Victorian Railways-Way and Works Branch	Approved <i>W. Schwab</i> Chief Engineer of Way and Works	Adopted 1 · 7 · 34
BALLAST & TRACK W. & W. Inst ⁿ Nos 436, 443 & 581. No Scale	Checked by <i>S.M.</i> Engineer	Plan No. F 252



— "X" LAYOUT —



— "Y" LAYOUT —

NOTE:—Crank positions for Opposite lay of Points shown dotted. — · — · —

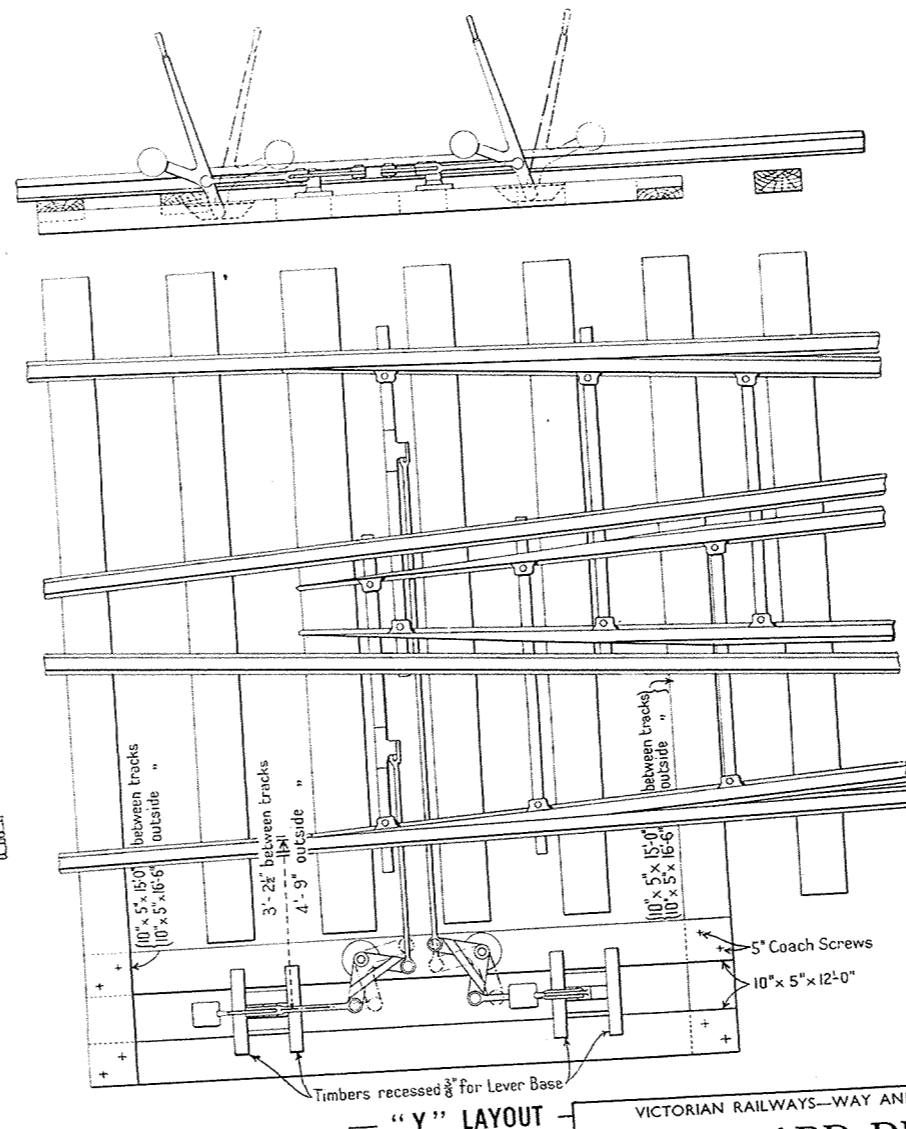
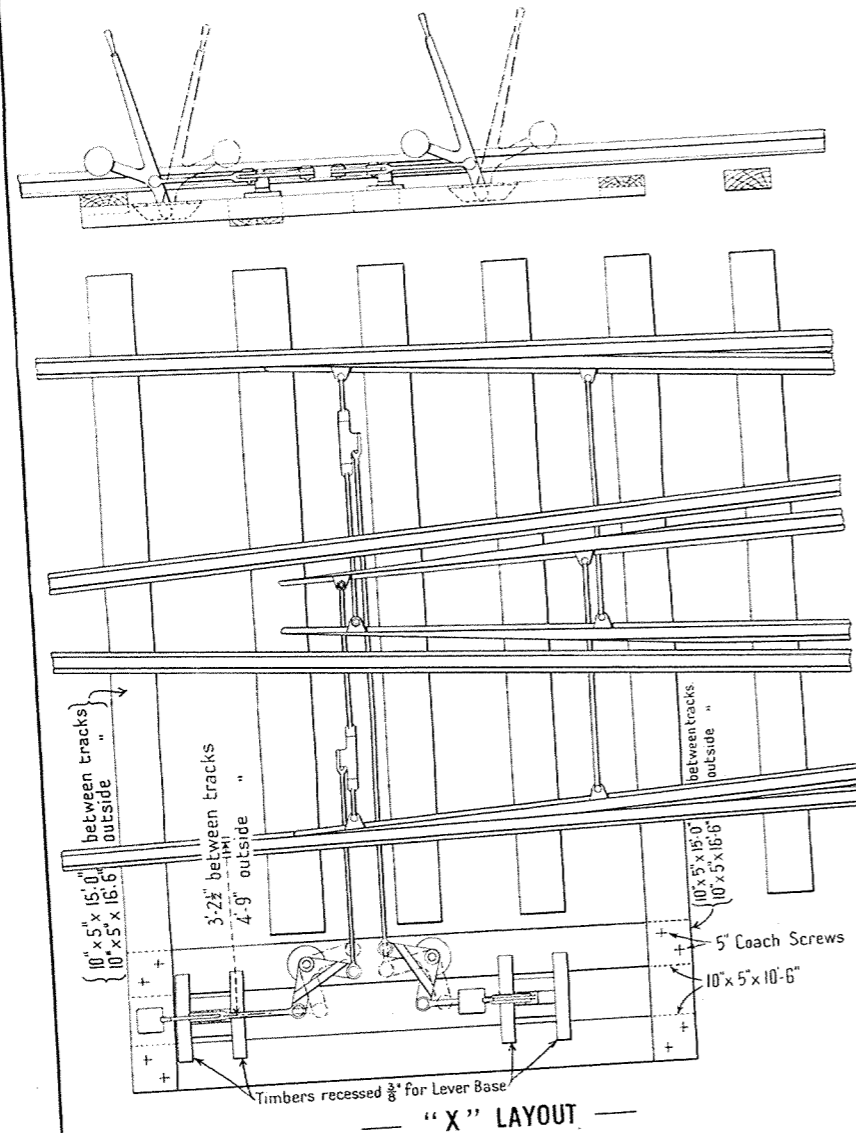
DIRECTIONS FOR INSTALLING

1. Connect up the rodding
2. Set the base of the lever so that the weight is suspended clear of lever rod, crank or other obstruction when the point blade is home against the stock rail.
3. Mark off, check timbers and bore for set screws.

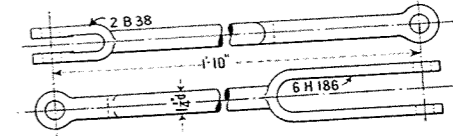
ORDERING SPREADERS

Refer to Blue Prints Nos. F. 1240 and F. 1268 quote the numbers and give the length "A" required.

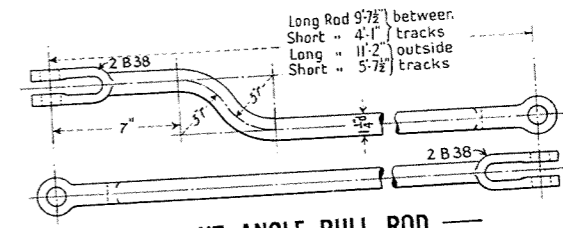
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING Arrangement of Spur Levers For Common Points		<i>M. Ashworth</i> Chief Eng. of Way & Works	1927
		Checked <i>W.S.E.</i>	PLAN No.
		<i>W.S.</i> Water Supply Eng.	F. 253



NOTE:—Crank positions for Opposite lay of Points shown dotted. —
 Levers are to be reversed when Points are set with Crank in dotted position.



— SPUR LEVER ROD —



— RIGHT ANGLE PULL ROD —

DIRECTIONS FOR INSTALLING

1. Connect up the rodding
2. Set the base of the lever so that the weight is suspended clear of lever rod, crank or other obstruction when the point blade is home against the stock rail.
3. Mark off, check timbers and bore for set screws.

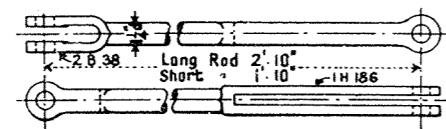
ORDERING SPREADERS

Refer to Blue Prints Nos. F. 1240 and F. 1268 quote the numbers and give the length "A" required.

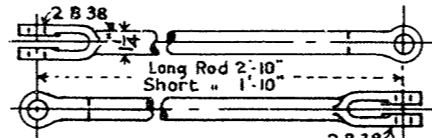
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
 Arrangement of Spur Levers
 For
 Compound Points

Approved
M. S. Swarth
 Chief Eng. of Way & Works
 Checked
A. S. G.
 Water Supply Eng.

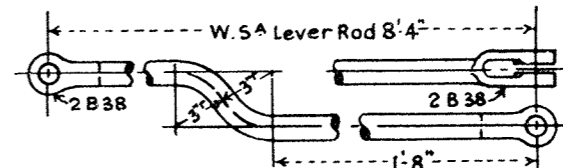
Adopted
 1927
 PLAN No.
F.254



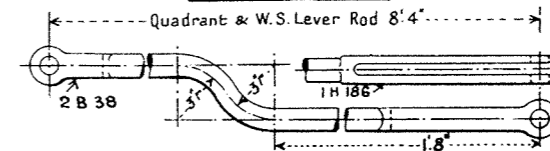
— QUADRANT AND W.S. LEVER ROD —



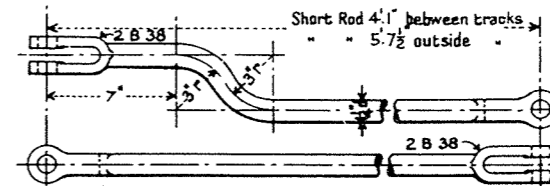
— W.S. LEVER ROD —



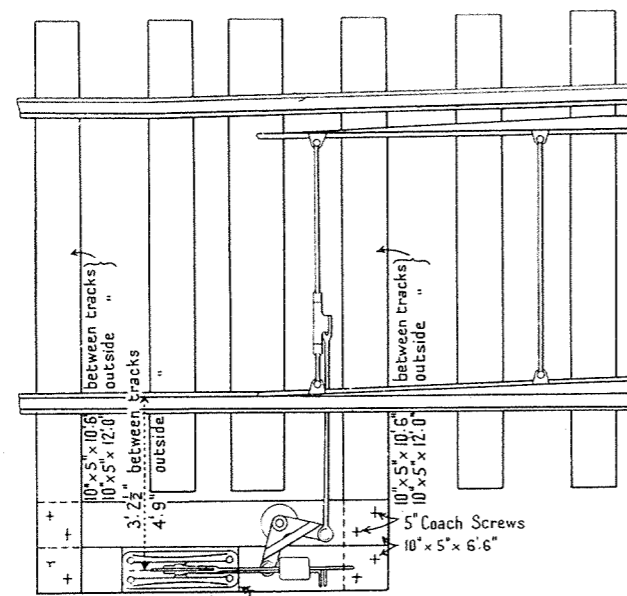
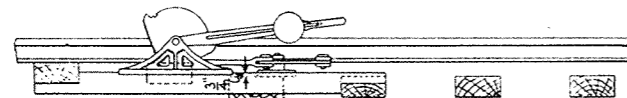
— DIRECT PULL ROD —



— DIRECT PULL ROD —

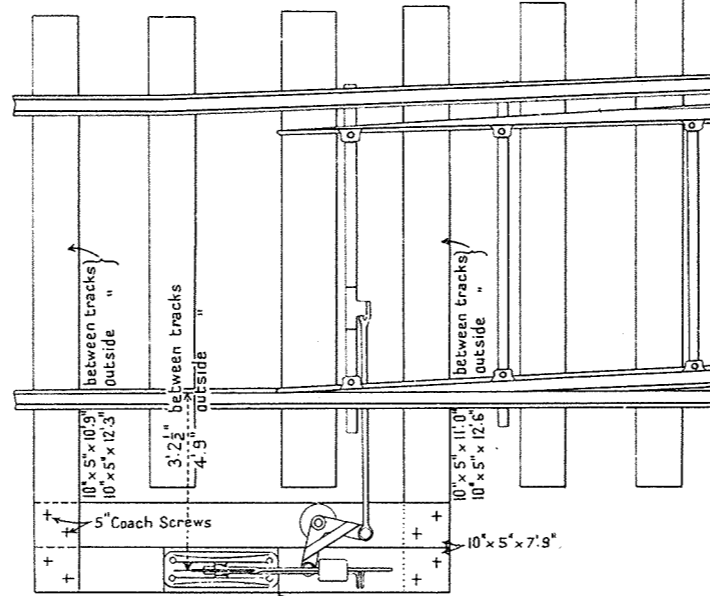


— RIGHT ANGLE PULL ROD —



Timber recessed
For Lever Base

— “X” LAYOUT —



Timber recessed $\frac{3}{8}$ " For
Lever Base

— “Y” LAYOUT —

Quadrant Levers here shown

DIRECTIONS FOR INSTALLING QUADRANT LEVERS

1. Connect up the rodding
2. Set the base of the lever so that the weight is suspended clear of lever rod, crank or other obstruction when the point blade is home against the stock rail.
3. Mark off, check timbers and bore for set screws.

W.S. LEVERS

1. Totally release the spring.
2. Connect up the rodding.
3. Place point blades half open.
4. Place lever in vertical position.
5. Set lever base in position, mark off, check timbers and bore for set screws and fix.
6. Adjust spring adjusting screw to exert sufficient pressure to hold point blades against the stock rails.
7. Tighten the lock nut on adjusting screw.

ORDERING SPREADERS

Refer to Blue Prints Nos. F. 1240 and F. 1268 quote the numbers and give the length "A" required.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH

STANDARD DRAWING
Arrangement of Quadrant, W.S. and
W.S. Levers For
Common Points

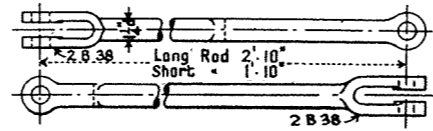
Approved
J. A. Shworth
Chief Eng. of Way & Works

Checked
W. S. B.
Water Supply Eng.

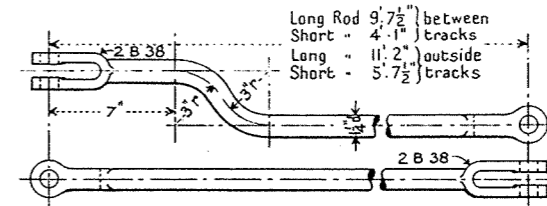
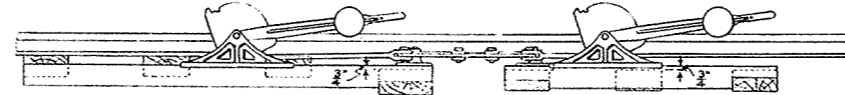
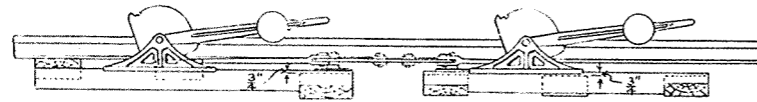
Adopted
1927
Previous F. 255

PLAN No.

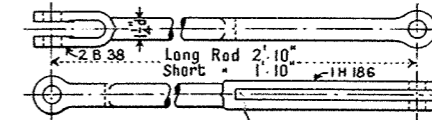
F. 255A



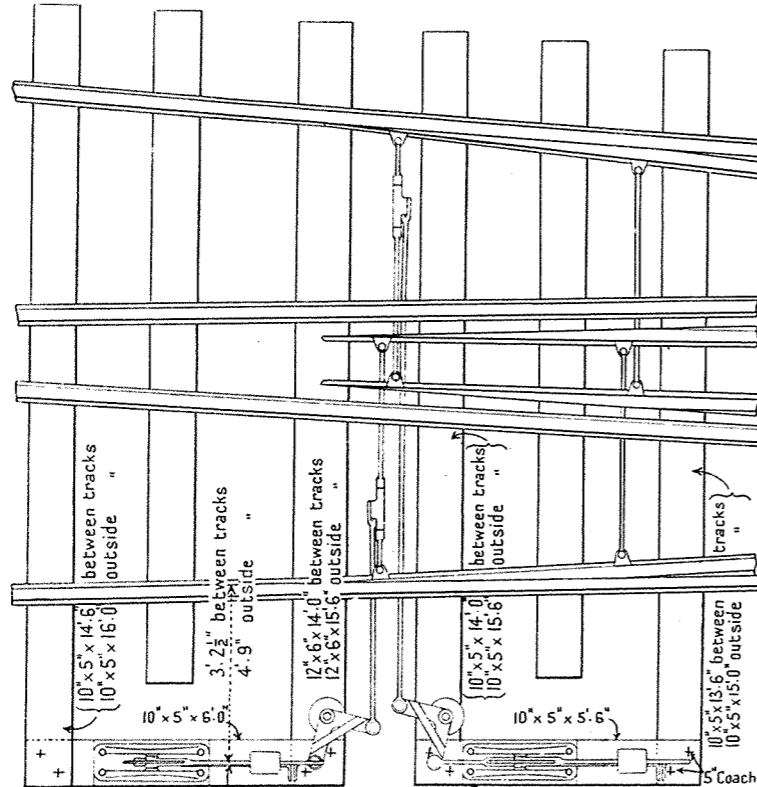
— W.S. LEVER ROD —



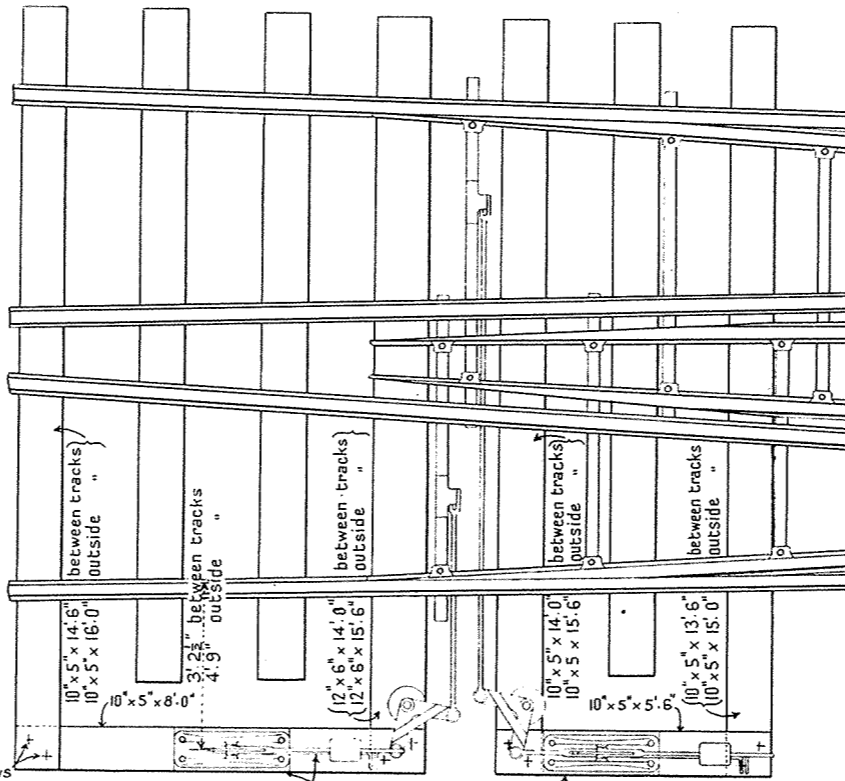
— RIGHT ANGLE PULL ROD —



— QUADRANT AND W.S. LEVER ROD —



— "X" LAYOUT —



— "Y" LAYOUT —

Quadrant Levers here shown

DIRECTIONS FOR INSTALLING QUADRANT LEVERS

1. Connect up the rodding
2. Set the base of the lever so that the weight is suspended clear of lever rod, crank or other obstruction when the point blade is home against the stock rail.
3. Mark off, check timbers and bore for set screws.

W.S. LEVERS

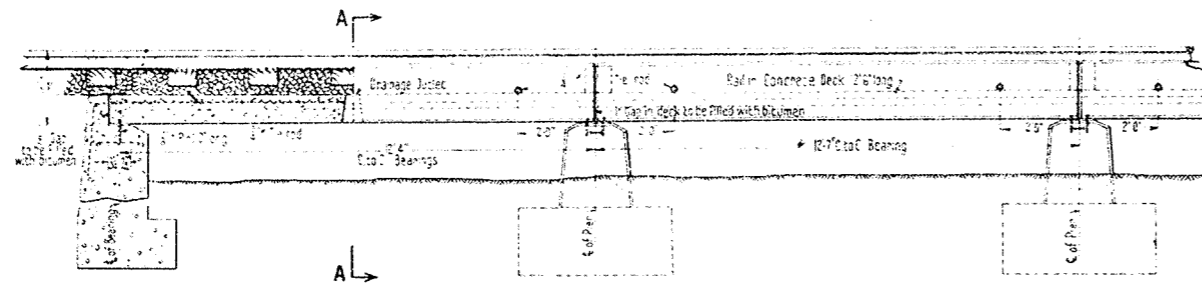
1. Totally release the spring.
2. Connect up the rodding.
3. Place point blades half open.
4. Place lever in vertical position.
5. Set lever base in position, mark off, check timbers and bore for set screws and fix.
6. Adjust spring adjusting screw to exert sufficient pressure to hold point blades against the stock rails.
7. Tighten the lock nut on adjusting screw.

ORDERING SPREADERS

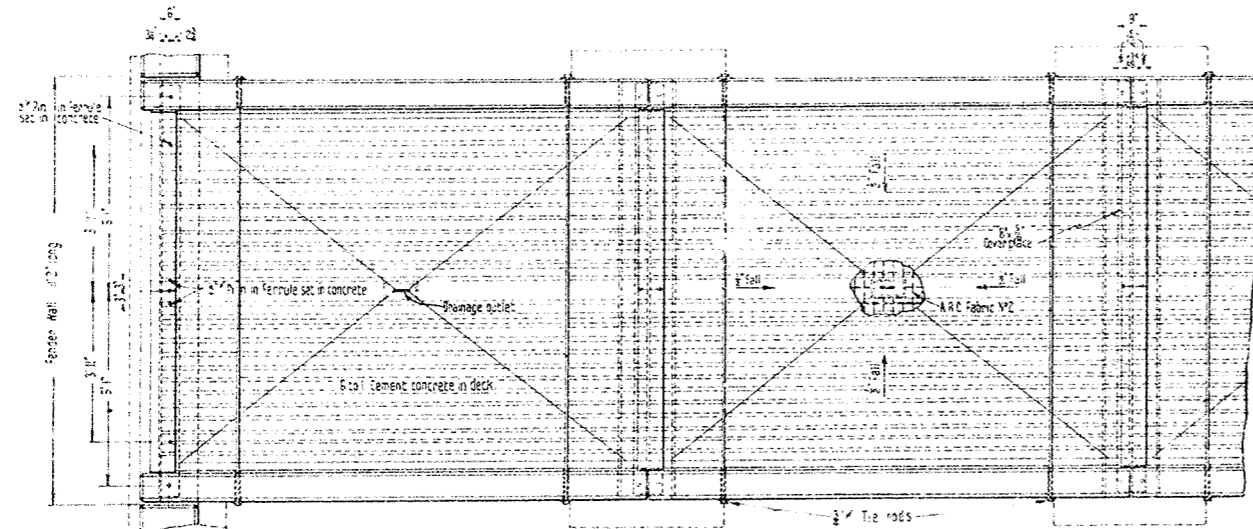
Refer to Blue Prints Nos. F. 1240 and F. 1268 quote the numbers and give the length "A" required.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
 Arrangement of Quadrant, W.S. and
 W.S.A. Levers For
 Compound Points

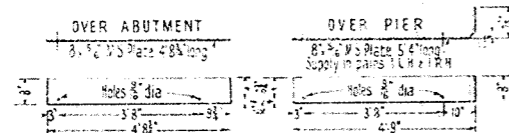
Approved <i>W.S. Wood</i> Chief Eng. of Way & Works	Adopted 1927 Previous F.256
Checked <i>A.S.B.</i> <i>H.S.</i> Water Supply Eng.	PLAN No. F.256A



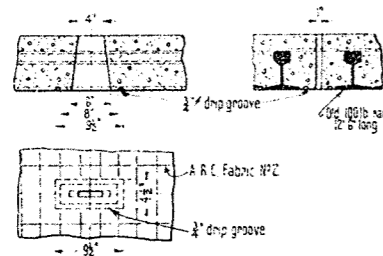
**PART SECTION — PART ELEVATION
TWO OR MORE OPENINGS**



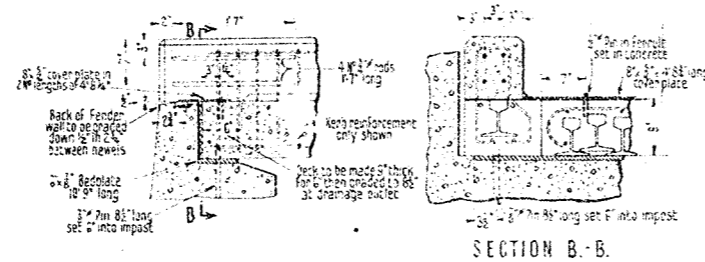
PLAN OVER DECK



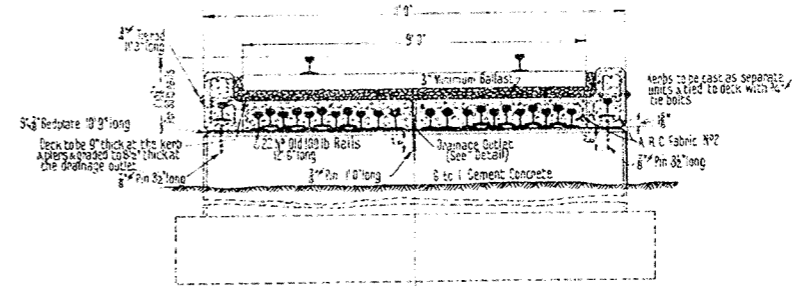
DETAIL OF COVERPLATES



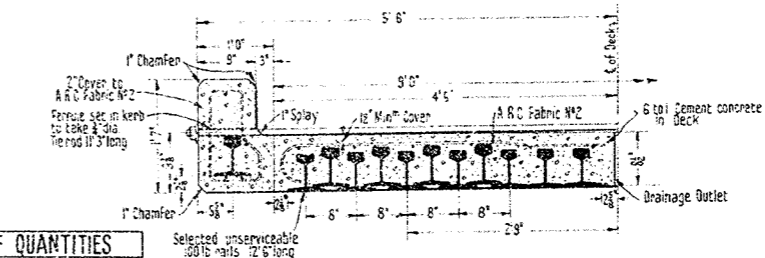
DETAIL OF DRAINAGE OUTLET



**DETAIL SHOWING KERB EXTENSION
& DECK COVERPLATES AT ABUTMENTS**



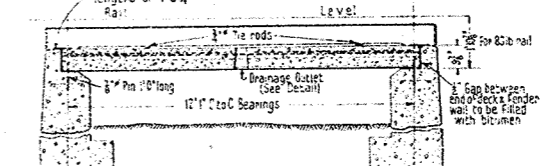
SECTION A-A.



**HALF CROSS SECTION OF DECK
SHOWING SPACING OF RAILS**

SCHEDULE OF QUANTITIES	
QUANTITIES PER OPENING	
Selected unserviceable 100 lb rails	100 L Yds
A.R.C. Fabric No 2	24 S Yds
6 to 1 Cement Concrete	355 CC Yds
3/4 dia Tie Rods 11'3" long	2 N°
1/2 dia Tie Rod Ferrules 3' long	4 N°
QUANTITIES PER PIER	
5/8 dia Bedplate 10'3" long	1 N°
5/8 dia Coverplates 5'4" long (bent)	2 N°
3/4 dia Bedplate pins 8 1/2" long	4 N°
3/4 dia Bedplate pins 1'0" long	2 N°
2 dia Coverplate pins 3 1/2" long with ferrules	4 N°
QUANTITIES PER ABUTMENT	
5/8 dia Bedplate 10'3" long	1 N°
5/8 dia Coverplates 4'8 1/2" long	2 N°
3/4 dia Bedplate pins 8 1/2" long	2 N°
3/4 dia Bedplate pins 1'0" long	1 N°
2 dia Coverplate pins 3 1/2" long with ferrules	4 N°
3/4 dia M.S. Kerb reinforcing rods 1'7" long	8 N°

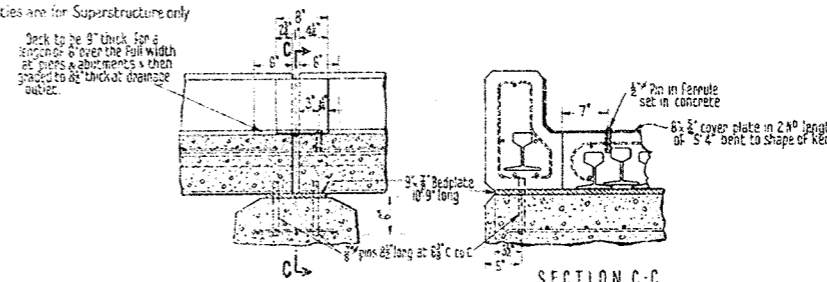
The above quantities are for Superstructures only



LONGITUDINAL SECTION - ONE OPENING

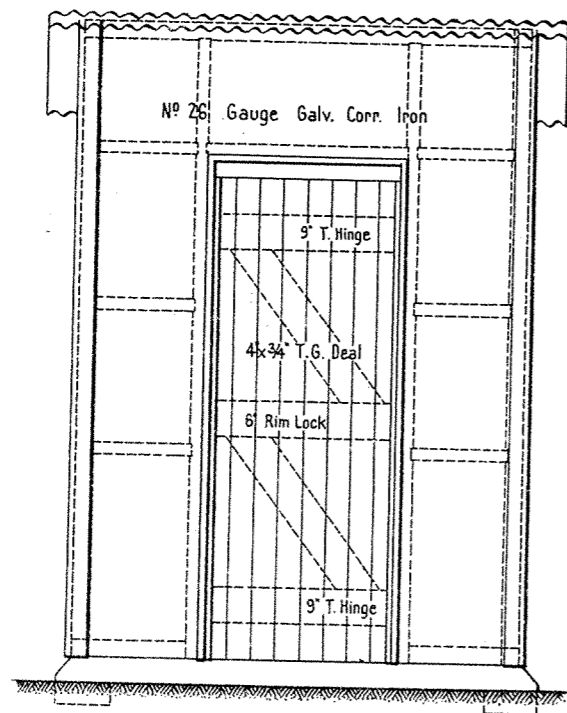
NOTES

- Substructure to be in accordance with Plan No F 428 with the following amendments.
 - a Impass level (100) to be at level (100) nail
 - b Fender wall 3 1/2' high
 - c Distance between newells 11'2"
- Where Shorters Gullways are required this plan is to be read in conjunction with Plan No F 258
This plan supersedes Plan No 662/17

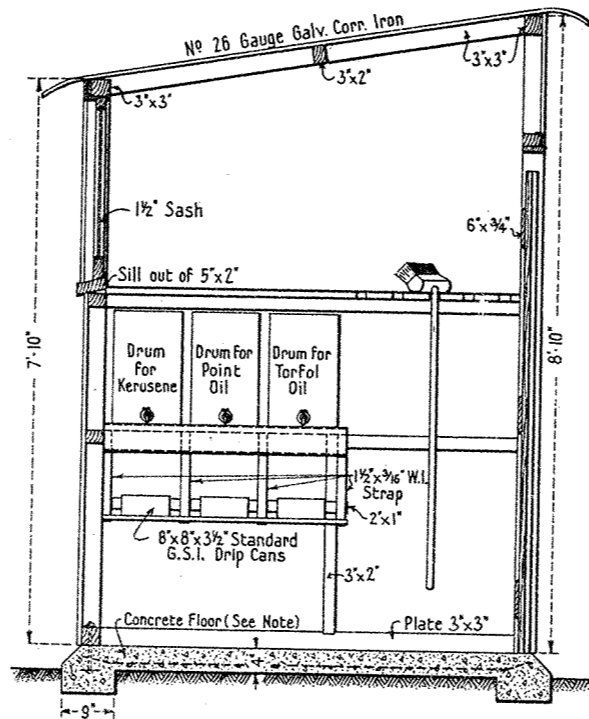
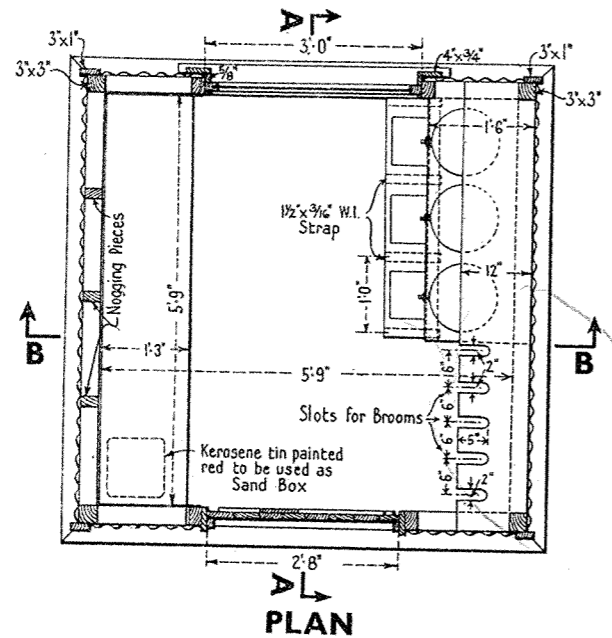


DETAIL OF DECK COVERPLATE AT PIERS

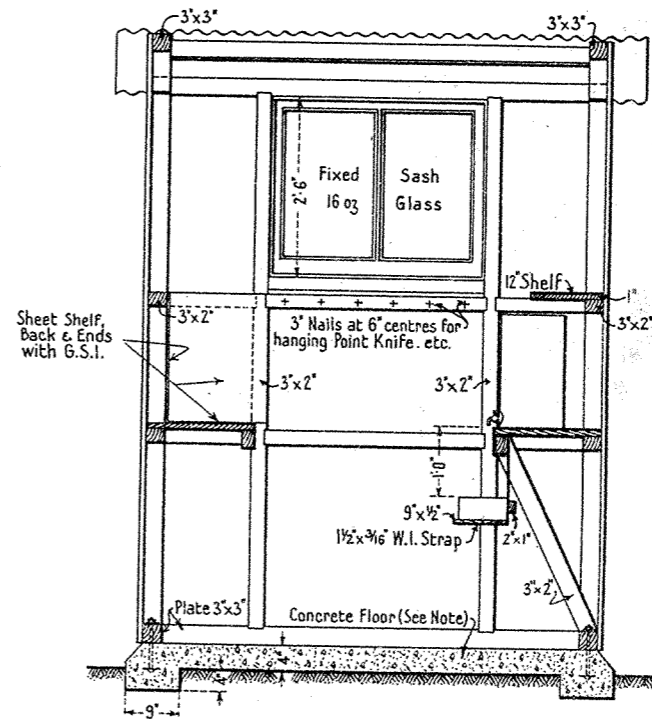
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	FEB. 1948
RAIL DECK BRIDGE 11'0" OPES. DETAILS OF SUPERSTRUCTURE		Drawn by R C R	Checked by L A S
CONCRETE PIERS		<i>[Signature]</i> Engineer of Structures	PLAN NO F 257
NO SCALE			



ELEVATION.



SECTION A-A.

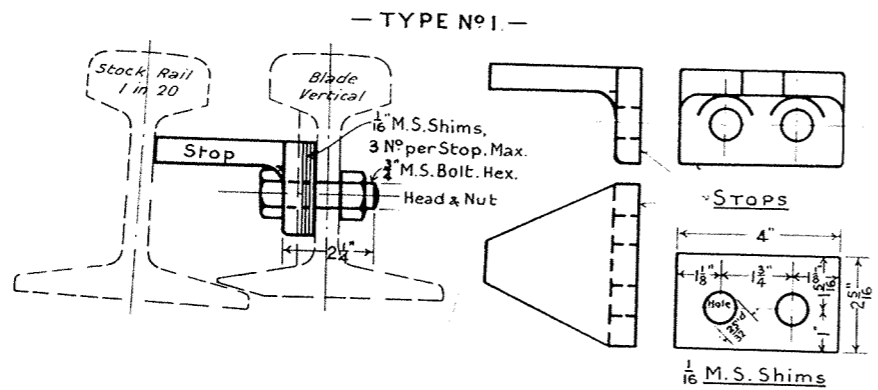


SECTION B-B.

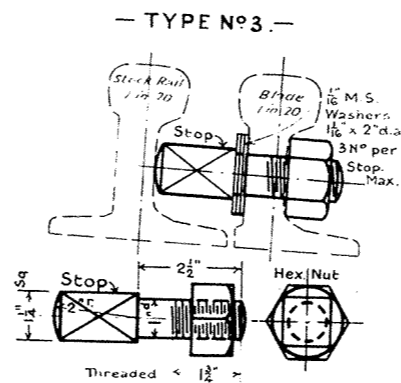
NOTES.

Concrete floor and footings to be composed of five parts 3/4" Bluestone screenings, two parts sand and one part Portland Cement, to be reinforced with 6x6x No 10 gauge fabric.
 All shelves to be covered with No 24 gauge G.S. Iron.
 1 No 2 Quart Tin Billy to be provided.
 Drum for Point Oil to be fitted with patent Treacle Stop.

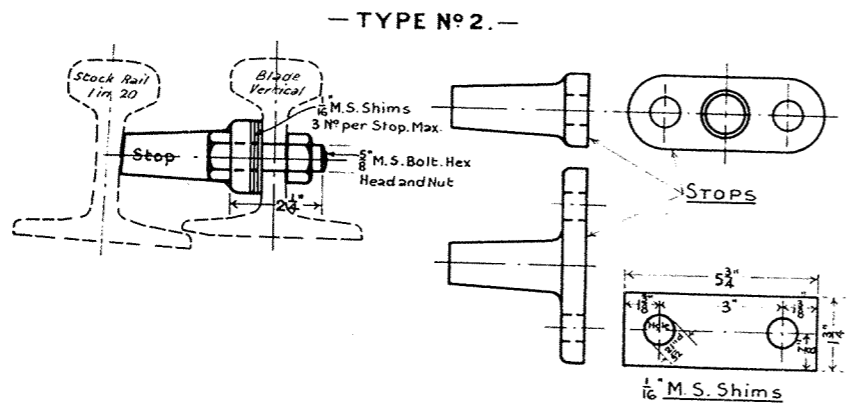
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.H.</i> Chief Civil Engineer	JAN. 1943
LAMP ROOM & FITTINGS		Drawn by E. J. C.	Checked by S. S.
SCALE: 3/8" = 1'-0"		<i>H. Schubert</i>	PLAN No. F 259



— ANGLE STOPS —
Cast Steel Annealed
 For 80 "D" and "A.S.", 90 "A.S.", 95 Stock, 100 "P" and "A.S.", 110 "A.S." and 115 lb. Stock Rails.



— PIN STOPS —
Mild Steel from Sq. Bar
 For 70, 78 and 86 L^b Stock Rails.



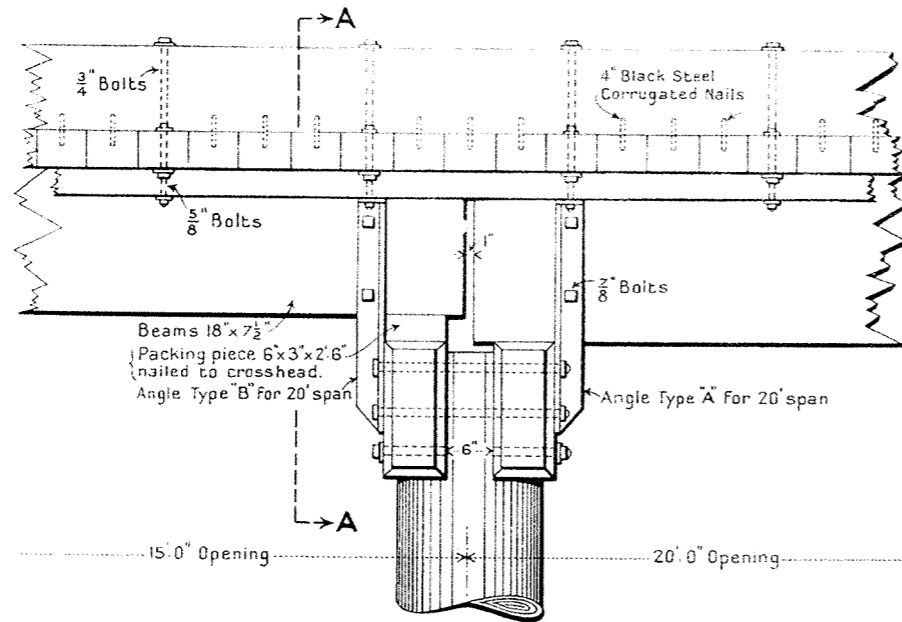
— TEE STOPS —
Mild Steel Drop Forging
 For 60 "D" and "A.S.", 66 "E" and 75 L^b "H" Rails.

NOTE:— Each Point Stop is to be supplied complete with bolts and nuts, shims or washers, according to the Type of Stop required.
 The number of shims or washers which may be used between any Stop and the blade shall not exceed 3 N^o.
 The existing rivet holes in the blades must be utilized when bolting on the replacement stops and no additional holes are to be drilled. Should any of the existing holes in the blades be smaller than the bolt diameters, they must be enlarged to suit.
 All nuts must be kept tightly screwed up to properly maintain the stops in position, and the ends of the bolts are to be slightly rivetted over.
 Before determining the N^o of Shims or Washers to be used with the Stops, it should be seen that the Stock Rails are properly lined up straight between the Heels and Toes of the Blades so that the Blades will lay snugly against the Stock Rails.

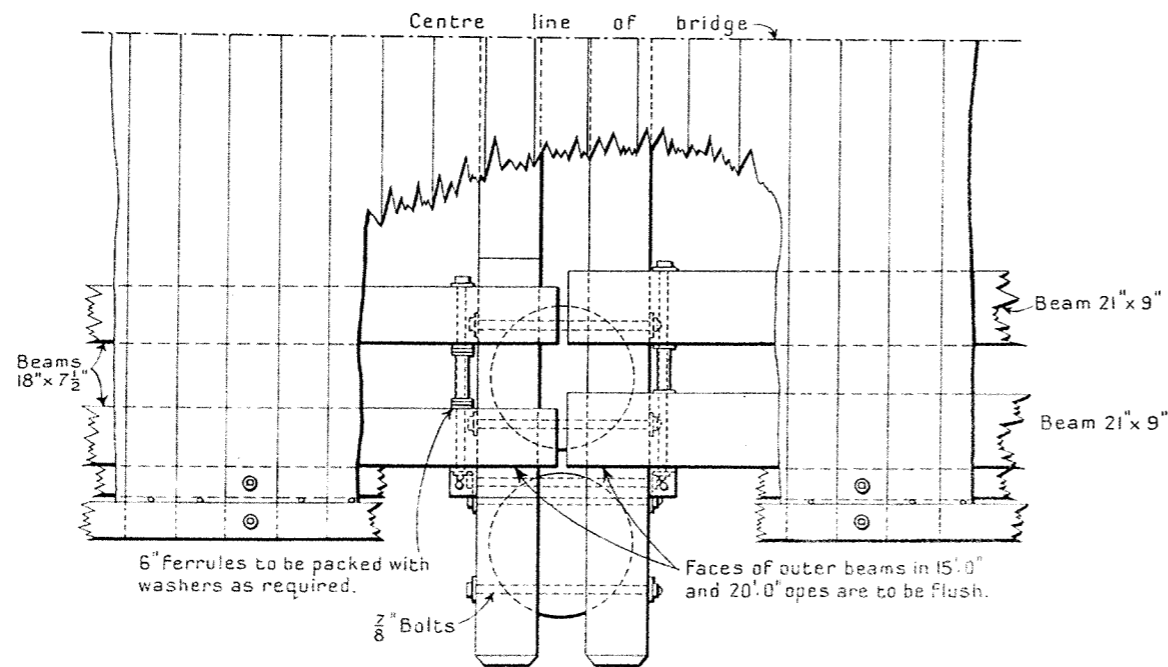
Weight of Rail per Yd and Class	Length of Blade	Canted or Vertical Stock Rails	Spread at Heel	Lengths of Stops measured from web to web			Distance of Stops from Heels of Blades			Type of Stop	Bolts required per Stop			
				1st Heel	2nd Inter ^m	3rd Front	1st Heel	2nd Inter ^m	3rd Front		No	Dia	Length	N ^o
				Heel	Inter ^m	Front	Heel	Inter ^m	Front					
60 lb "D"	12'	Canted	5 1/2"	4 1/8"	3 1/8"	2 1/2"	2'-6"	2'-0"	2'-0"	2	3/8"	2 1/4"	2	
"	15'	"	"	4 1/8"	3 1/8"	2 1/2"	2'-8"	2'-2"	2'-2"	"	"	"	"	
"	8'	"	"	3 3/8"	"	"	2'-6"	"	"	"	"	"	"	
"	12'	"	"	4 1/8"	3 1/8"	2 1/2"	2'-6"	2'-0"	2'-0"	"	"	"	"	
"	15'	"	"	4 1/8"	3 1/8"	2 1/2"	2'-8"	2'-2"	2'-2"	"	"	"	"	
"	8'	"	"	3 3/8"	"	"	2'-6"	"	"	"	"	"	"	
"	15'	Vertical	"	4 1/8"	3 1/8"	2 1/2"	2'-8"	2'-2"	2'-2"	"	"	"	"	
66 "E"	12'	Canted	"	4 1/8"	3 1/8"	2 1/2"	2'-8"	2'-6"	2'-7"	"	"	"	"	
"	15'	"	"	4 1/8"	3 1/8"	2 1/2"	2'-8"	2'-0"	2'-0"	"	"	"	"	
70 "Stock"	14'-8"	"	4 1/2"	2 1/8"	2 1/8"	1 3/8"	2'-8"	2'-0"	2'-0"	3	"	"	"	
75 "H"	15'	Canted	"	3 3/8"	2 1/8"	2 1/8"	2'-8"	2'-2"	2'-2"	2	3/8"	2 1/4"	2	
"	15'	"	5 1/2"	4 1/8"	3 1/8"	2 1/2"	2'-8"	2'-2"	2'-2"	"	"	"	"	
78 "Stock"	12'	Canted	4 1/2"	"	"	"	"	"	"	"	"	"	"	
"	15'	"	"	2 3/8"	2 3/8"	1 1/8"	1'-10 1/2"	1'-10 1/2"	1'-10 1/2"	3	"	"	"	
"	12'	"	5 1/2"	"	"	"	"	"	"	"	"	"	"	
"	15'	"	"	"	"	"	"	"	"	"	"	"	"	
80 "D & A.S."	13'-6"	Canted	"	4 1/8"	"	3 3/8"	2'-0"	"	2'-3"	1	3/8"	2 1/4"	2	
"	15'-9"	"	"	4 1/8"	3 3/8"	2 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
"	18'	"	"	4 1/8"	3 3/8"	3 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
86 "Stock"	15'	"	4 1/2"	2 1/8"	2 1/8"	1 3/8"	2'-0"	2'-1 1/2"	1'-7 1/2"	3	"	"	"	
90 "A.S."	13'-6"	Vertical	5 1/2"	4 1/8"	"	3 3/8"	2'-0"	"	2'-3"	1	3/8"	2 1/4"	2	
"	15'-9"	"	"	4 1/8"	3 3/8"	3 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
"	18'	"	"	4 1/8"	3 3/8"	3 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
95 "Stock"	13'-6"	Canted	"	3 3/8"	2 1/8"	1 3/8"	2'-0"	2'-3"	2'-3"	"	"	2 1/4"	"	
"	15'-9"	"	"	4 1/8"	3 3/8"	2 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
"	18'	"	"	4 1/8"	3 3/8"	2 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
100 "P & A.S."	13'-6"	Canted	"	4 1/8"	"	3 3/8"	2'-0"	"	2'-3"	"	"	2 1/4"	"	
"	15'-9"	"	"	4 1/8"	3 3/8"	2 3/8"	2'-0"	"	2'-3"	"	"	"	"	
"	18'	"	"	4 1/8"	3 3/8"	3 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
110 "A.S."	13'-6"	Vertical	"	4 1/8"	3 3/8"	3 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
"	15'-9"	"	"	4 1/8"	3 3/8"	3 3/8"	2'-0"	2'-3"	2'-0"	"	"	"	"	
"	18'	"	"	4 1/8"	3 3/8"	3 3/8"	2'-0"	2'-3"	2'-0"	"	"	"	"	
115 "Stock"	13'-6"	Canted	"	3 3/8"	2 1/8"	2 1/8"	2'-0"	2'-3"	2'-3"	"	"	2 1/4"	"	
"	15'-9"	"	"	4 1/8"	3 3/8"	2 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	
"	18'	"	"	4 1/8"	3 3/8"	2 3/8"	2'-0"	2'-3"	2'-3"	"	"	"	"	

* 60 L^b A.S. Substituting 15' Blades for 12' Blades.

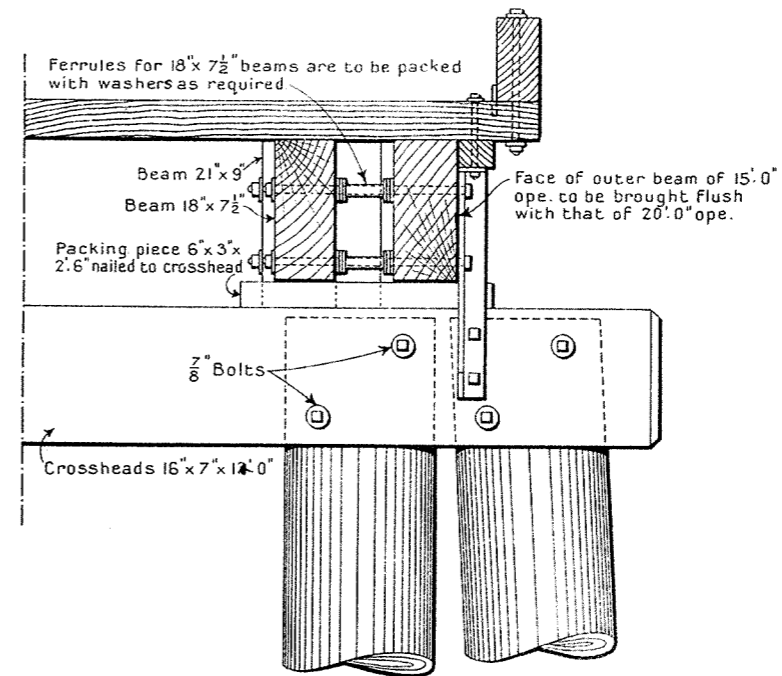
Victorian Railways-Way and Works Branch	Approved <i>M.S. Howard</i> Chief Engineer of Way and Works.	Adopted 30-7-35.
POINT STOPS. FOR MAINTENANCE ONLY. DETAILS NO SCALE	Checked by <i>H.B.</i>	Plan No. F 260
	<i>W.S.</i> W.S. Engineer.	



ELEVATION



HALF PLAN OVER PIER

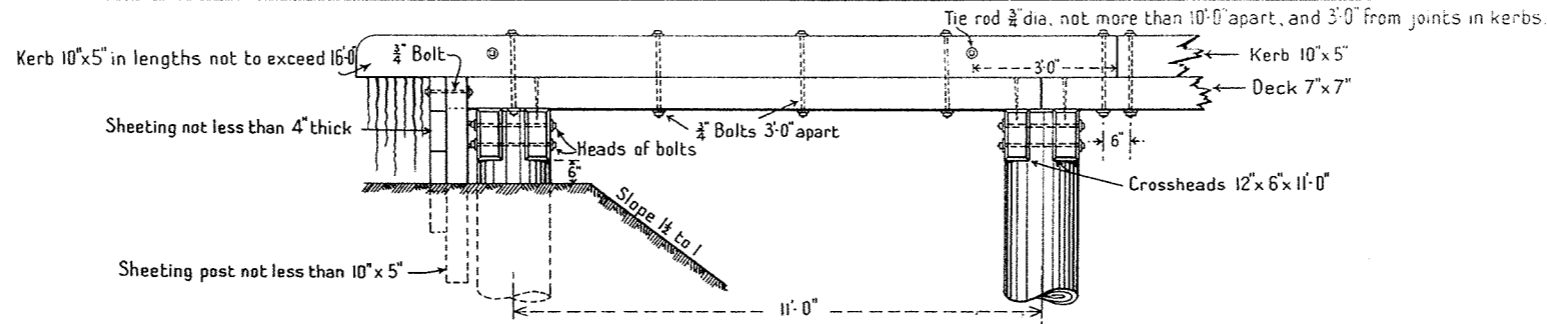


SECTION A-A.

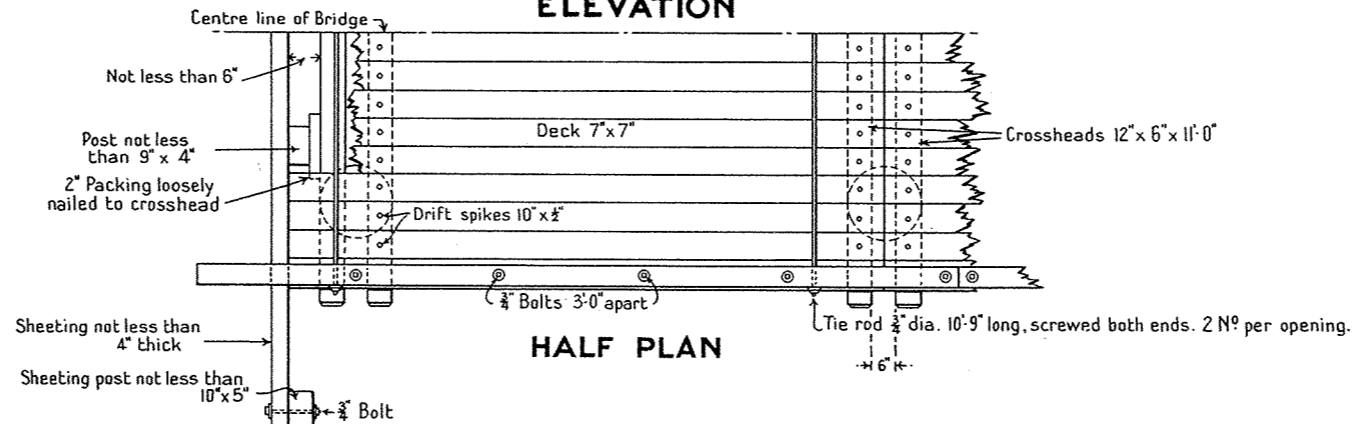
NOTE

This plan supersedes plan 142/30.

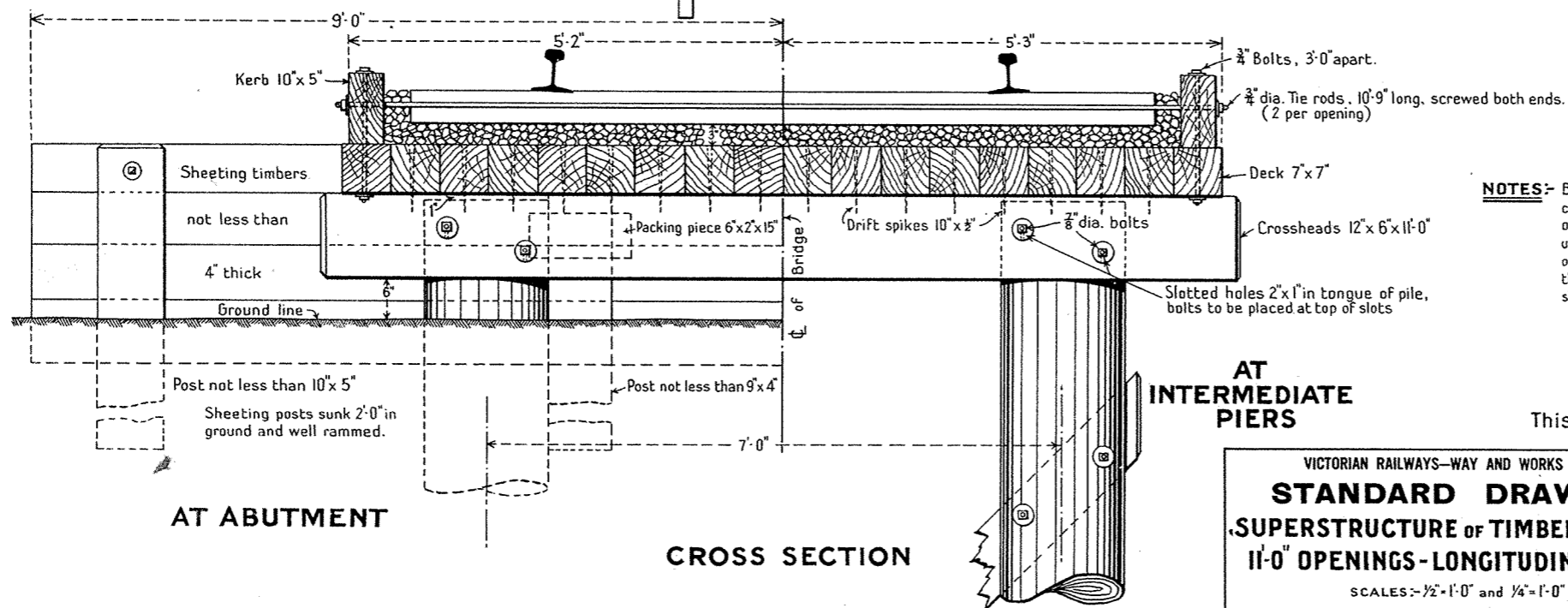
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING JUNCTION OF 15' 0" AND 20' 0" SPANS TIMBER BRIDGE		<i>W. Schwartz</i> Chief Eng. of Way & Works	Oct. 1935
		Drawn by <i>E.G.D.</i> Checked by <i>A.P.T.</i>	PLAN No.
SCALE: — $\frac{1}{2}$ " = 1' 0"		<i>W. Brown</i> Structure Engineer	F. 261



ELEVATION



HALF PLAN



CROSS SECTION

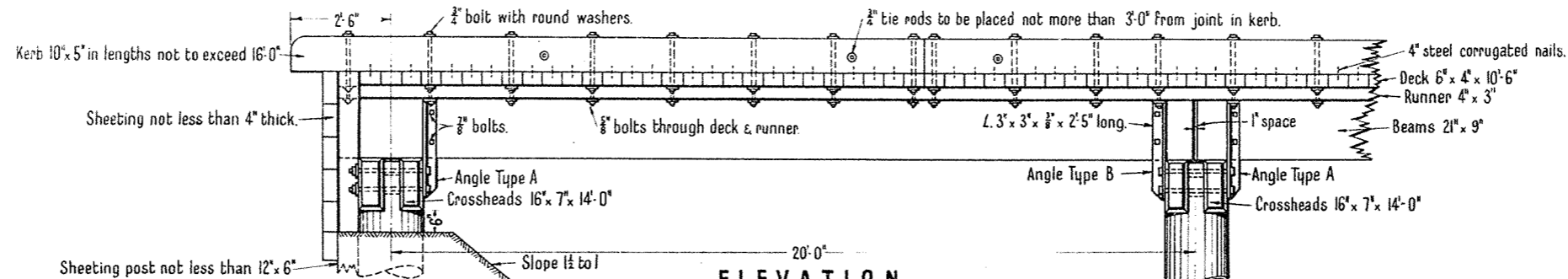
NOTES:- Banks at end piers to be made up to 6" below crossheads as shown. Pile cut off to be 1' below tops of crossheads. On curves of 50 chains radius and under, crossheads are to be sloped, the pile cut off on the outside of curve being 1/2 above that of the inside pile. Serviceable material to be used in end sheeting when available.

This plan supersedes plan 317/27

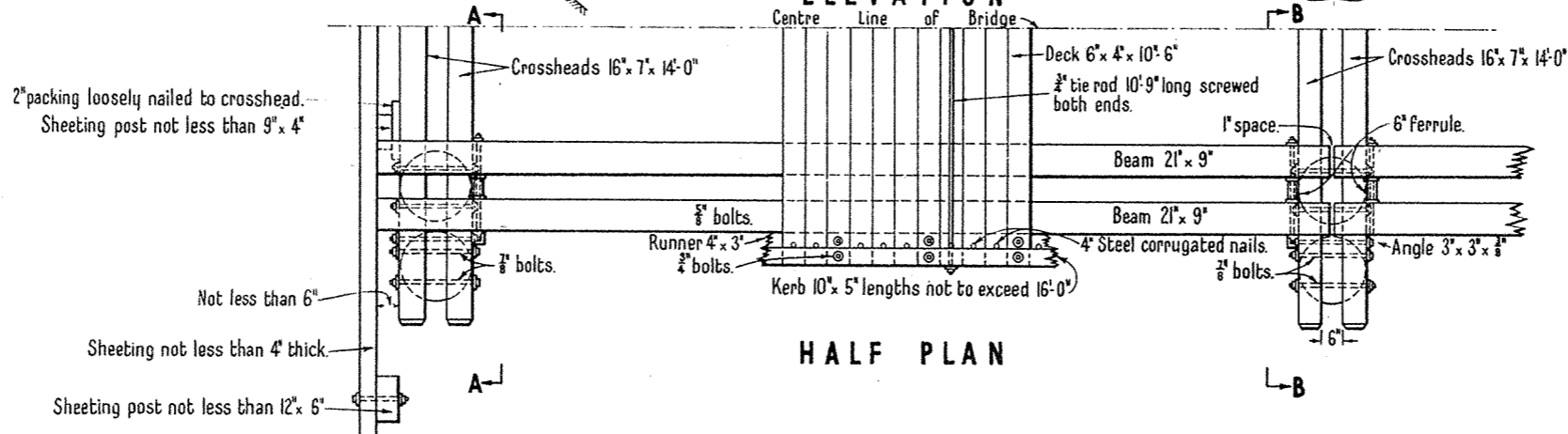
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH.
STANDARD DRAWING
SUPERSTRUCTURE OF TIMBER BRIDGES
11'-0" OPENINGS—LONGITUDINAL DECK

SCALE:- 1/2" = 1'-0" and 1/4" = 1'-0"

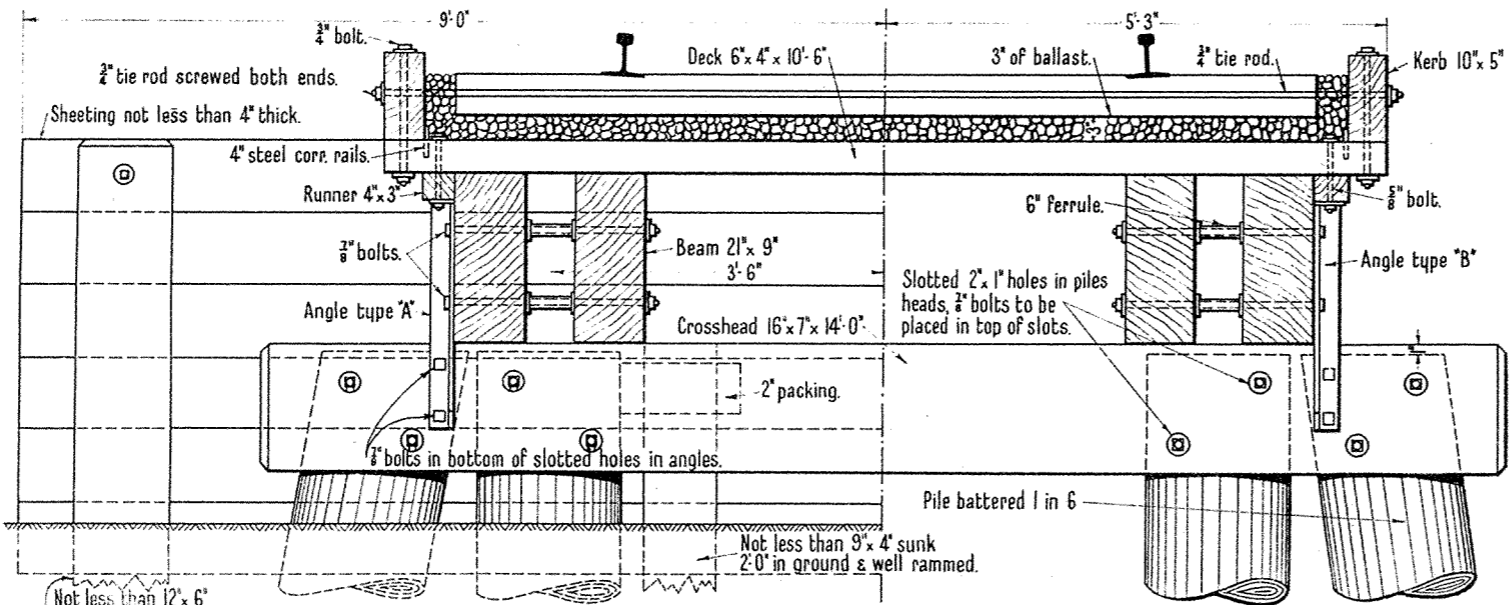
Approved <i>J.M. Schwartz</i> Chief Eng. of Way & Works	Adopted Oct. 1935
Drawn by V.M.	Checked by A.P.T.
<i>W. Bromby</i> Structure Engineer	PLAN No. F. 262



ELEVATION



HALF PLAN



HALF SECTION A-A

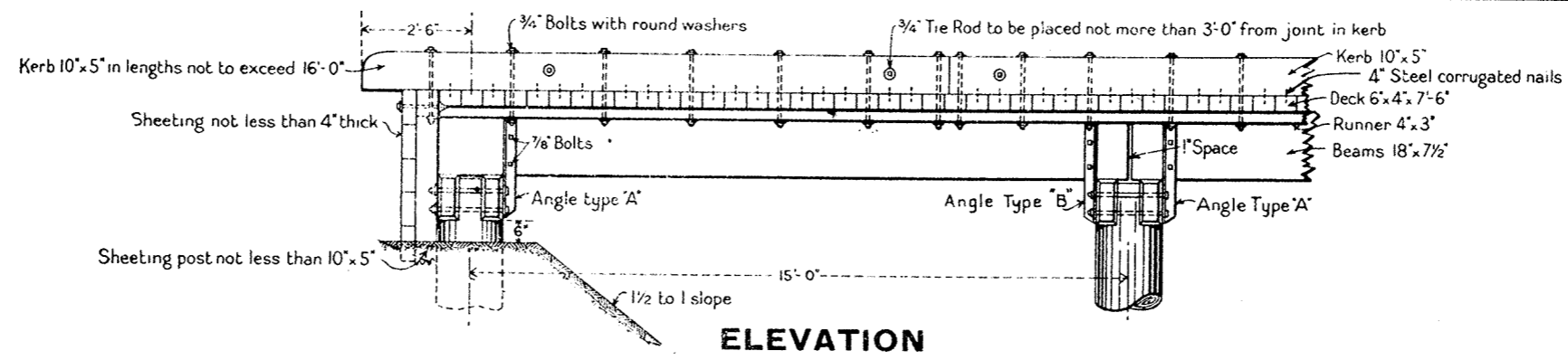
CROSS SECTION

HALF SECTION B-B

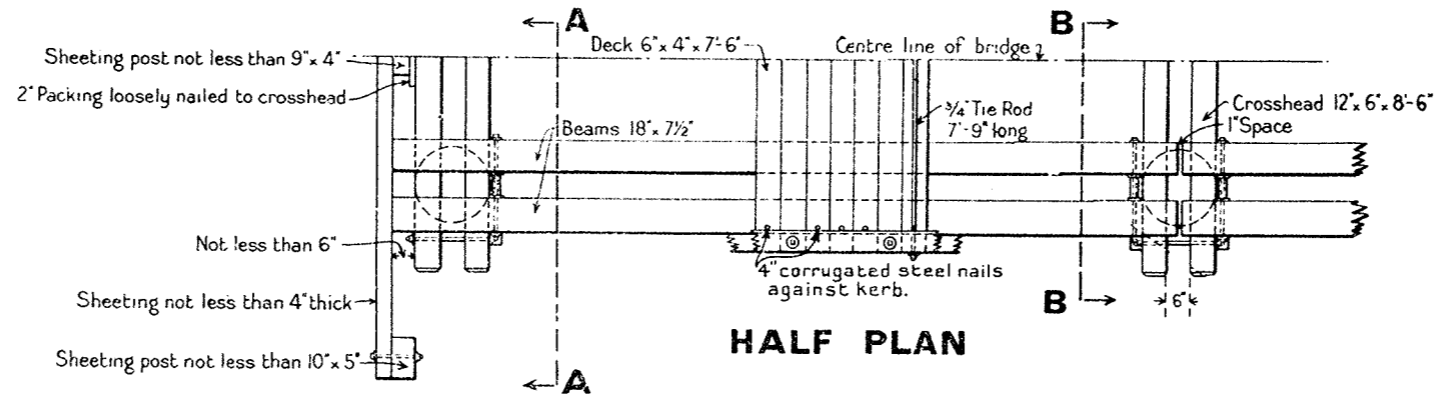
NOTES
 Bank at end piers to be trimmed to 6" below crossheads.
 Pile cut offs are to be 1" below tops of crossheads.
 On curves of 50 chains radius and under crossheads are to be sloped, the cut off of the pile on the outside of the curved being $\frac{1}{2}$ " above that of the inside pile.
 Serviceable material to be used in end sheeting when available.
 For details of angles and ferrules see Plan No 254/35

This plan supersedes plans No 4943/25 & 316/27

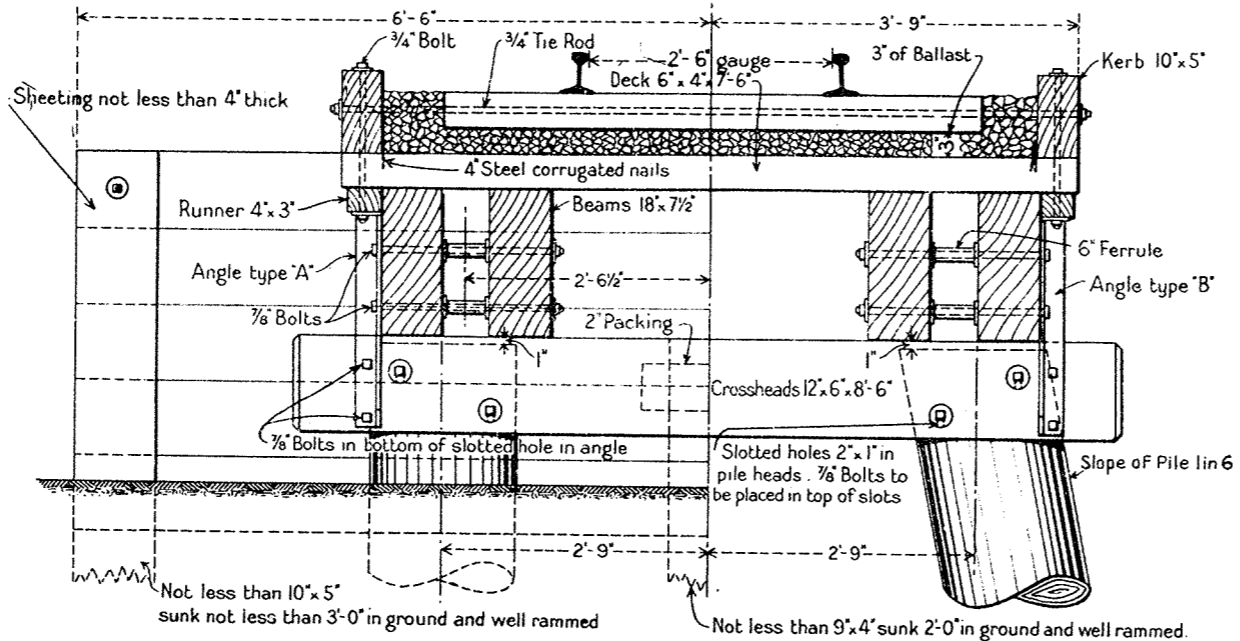
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH	Approved <i>J. M. Schuricht</i> Chief Eng of Way & Works	Adopted OCT. 1935
STANDARD DRAWING	Drawn by EGD	Checked by A.P.T.
SUPERSTRUCTURE OF TIMBER	<i>J. Brown</i> Structure Engineer	PLAN No F263
Scales :- $\frac{1}{2}$ " = 1'-0" and $\frac{1}{4}$ " = 1'-0"		



ELEVATION



HALF PLAN



HALF SECTION A-A

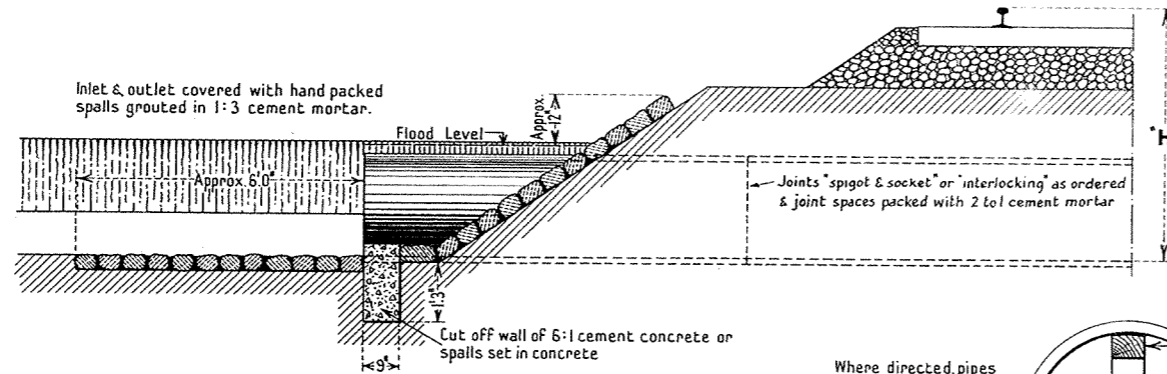
HALF SECTION B-B

Note:- Bank at end piers to be trimmed to 6" below crossheads.
 For details of angles and ferrules see plan 254/35.
 Pile cut offs are to be 1" below tops of crossheads.
 On curves crossheads are to be sloped. The level of the cut off of the pile on the outside of the curve above the level of that of the inside pile to be

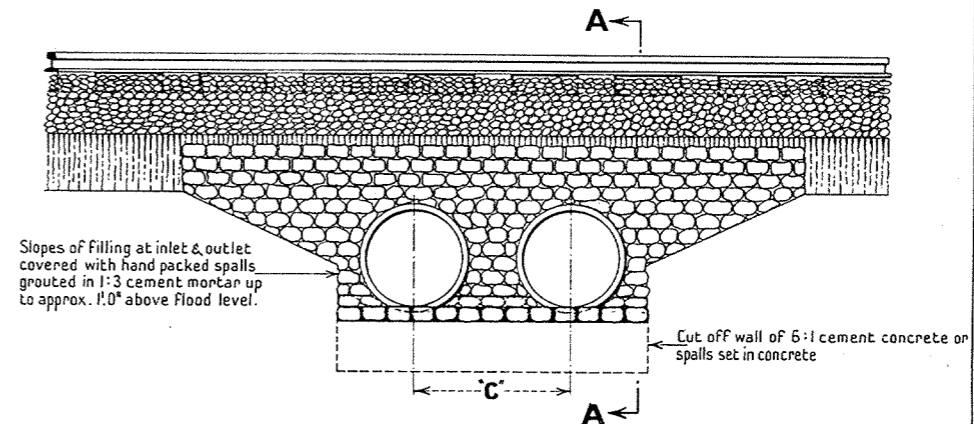
For curves of 2-3 chains radius, 3"
 " " over 3-5 " " 2"
 " " " 5 " " 1"

Serviceable material to be used in end sheeting when available.
 This plan supersedes Plans Nos. 2951/26 & 314/27.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M. Schwob</i>	Nov. 1935
SUPERSTRUCTURE OF TIMBER BRIDGES		Chief Eng. of Way & Works	
15.0" OPENINGS		Drawn by <i>K. L.</i>	Checked by <i>A. P. T.</i>
NARROW GAUGE			PLAN No.
SCALES:- 1/4" = 1'-0" & 1/2" = 1'-0"		<i>W. Blomby</i>	F.264
		Structure Engineer	

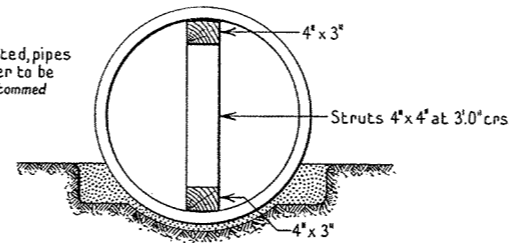


SECTION A-A

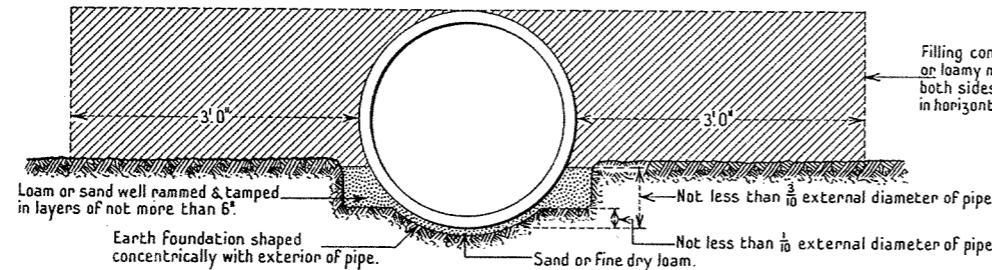


GENERAL ELEVATION

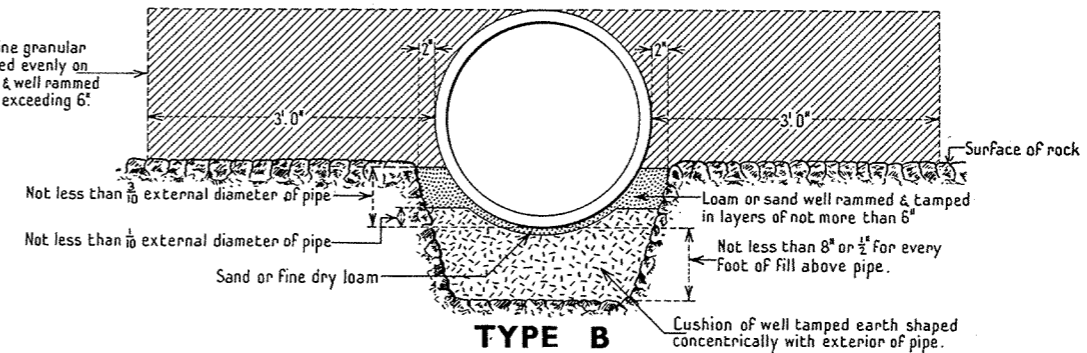
Where directed, pipes 2.6' dia. & over to be temporarily tommed



METHOD OF TOMMING PIPES



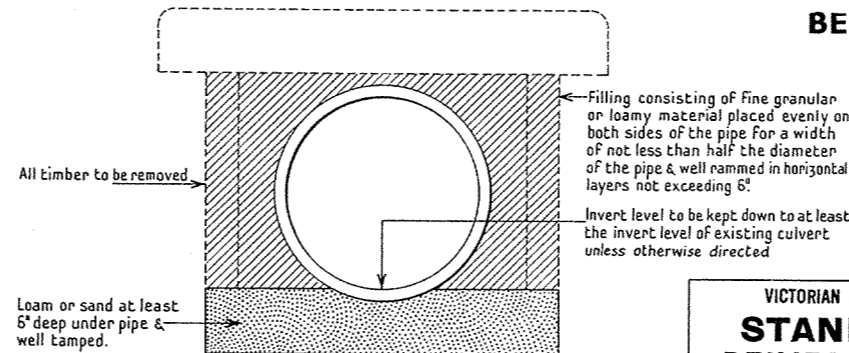
**TYPE A
BEDDING ON EARTH**



**TYPE B
BEDDING ON ROCK**

Diameter of pipe in inches	Height "H" from invert level of pipe to rail level		Minimum distance "C" centre to centre of adjacent pipe lines
	MAXIMUM	MINIMUM	
9	11'0"	3'0"	1'6"
12	11'0"	3'3"	2'0"
15	11'0"	3'6"	2'3"
18	11'0"	3'9"	2'6"
21	11'0"	4'0"	3'0"
24	11'0"	4'3"	3'3"
27	11'0"	4'6"	3'6"
30	11'0"	5'3"	4'0"
36	11'0"	6'0"	5'0"
42	11'0"	6'9"	5'6"
48	11'0"	7'6"	6'6"

NOTE:- Heights in column "a" not to be exceeded except as authorised by Head Office

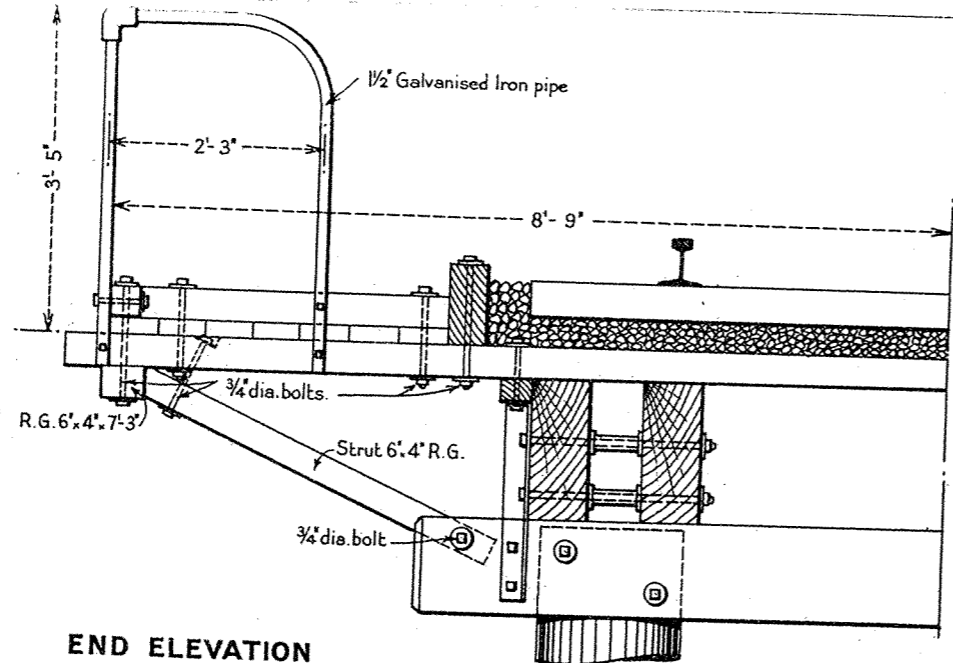


**TYPE C
PIPE REPLACING BOX CULVERT**

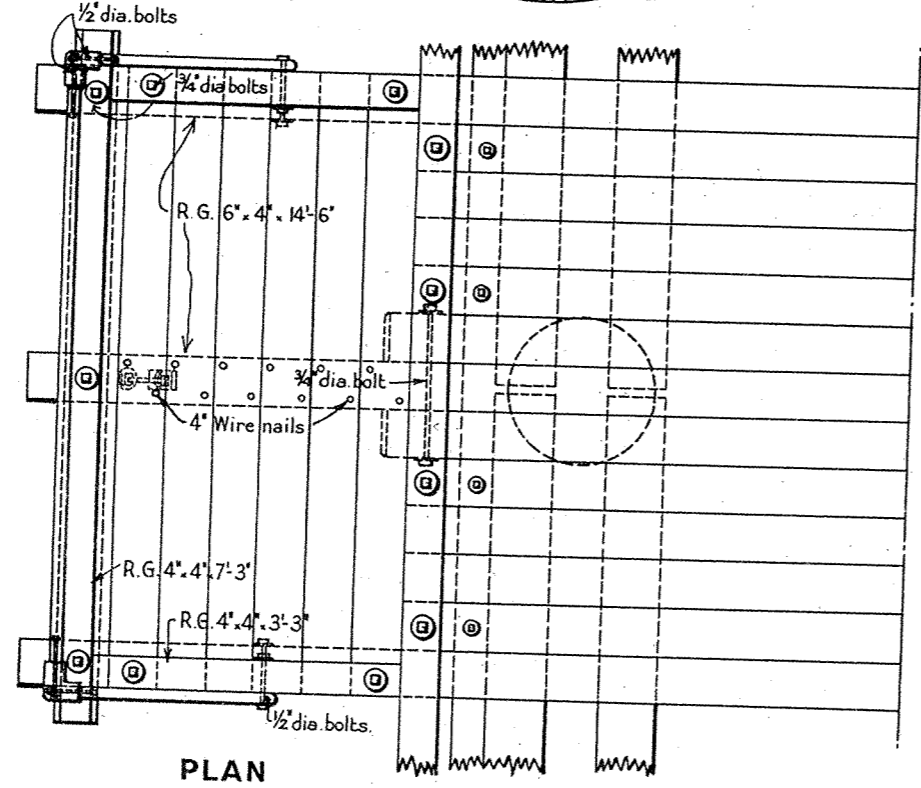
NOTE:- Spalls & cut off walls at ends of pipes to be provided where directed. In special cases concrete end walls to details supplied from Head Office are to be provided. Pipes labelled "TOP" must be laid with this part uppermost

This plan supersedes Instruction N°1010 of the Way & Works Book of Instructions, and plan on page 292 of that book, also plans N° 506-30, N° 389-16, N° 1696-15 & L 37-27

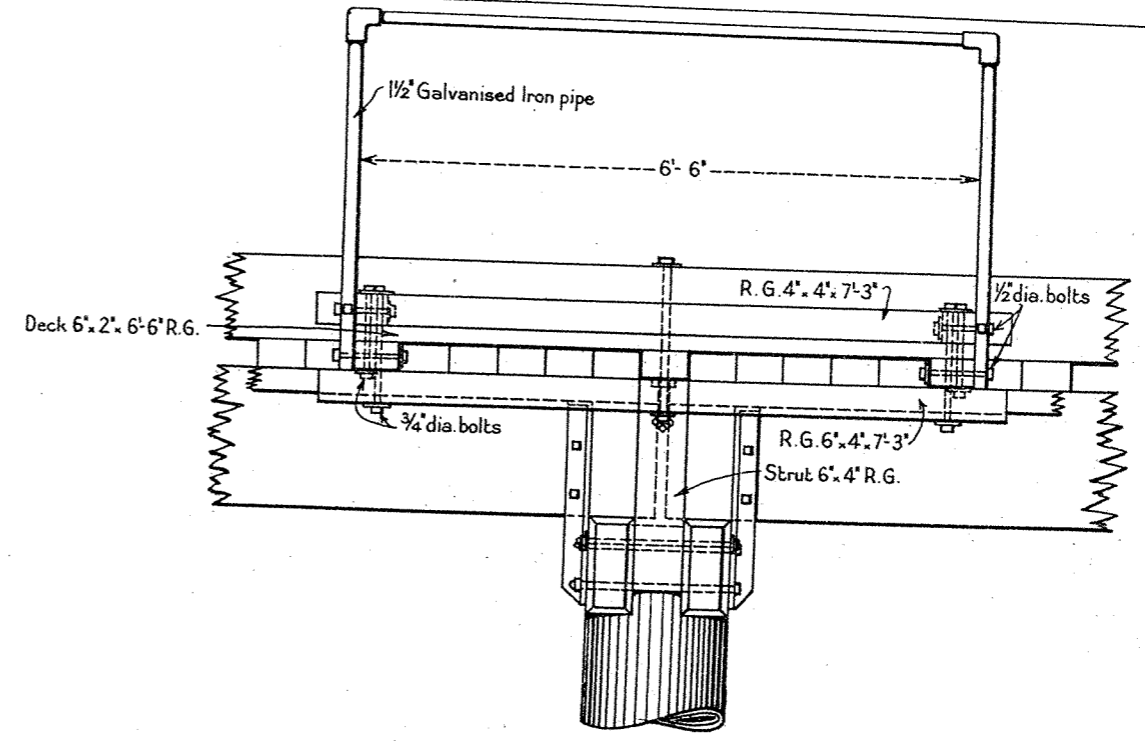
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.W.L.</i>	JUNE 1942
REINFORCED CONCRETE		Chief Civil Engineer	
PIPE CULVERT		Drawn by <i>V.W.L.</i>	Checked by <i>T.H.J.</i>
SHOWING APPROVED METHODS OF LAYING PIPES		<i>W. Brown</i>	PLAN No.
SCALES: 1/2" & 1/4" = 1'0"		Eng. of Struct'l Design	F 265



END ELEVATION



PLAN



SIDE ELEVATION

SCHEDULE OF QUANTITIES ONE BRACKET	
DESCRIPTION	QUANTITIES
Red Gum 6x4	3/14-6, 1/7-3, 1/6-0
" " 4x4	1/7-3, 2/3-3
" " 6x2	7/6-6
Bolts 3/4 dia.	5/12, 3/16, 1/varies.
Washers for 3/4 bolts.	18 No.
Bolts 1/2 dia.	4/9, 4/7
Washers for 1/2 bolts.	8 No.
Wire Nails 4"	1 lb.
1/2 dia. G.W.I. Pipes.	1/6-5" screwed both ends.
" " " "	2/5-4" curved & screwed one end with 2 holes for 1/2 bolts.
" " " "	2/3-7" screwed one end with 2 holes for 1/2 bolts.
1/2 Elbows - 3 way.	2 No.

NOTES

Safety brackets to be erected in general on up stream side of bridge. Length of 6x4 strut & angle at which it is placed must be adjusted to suit piers.

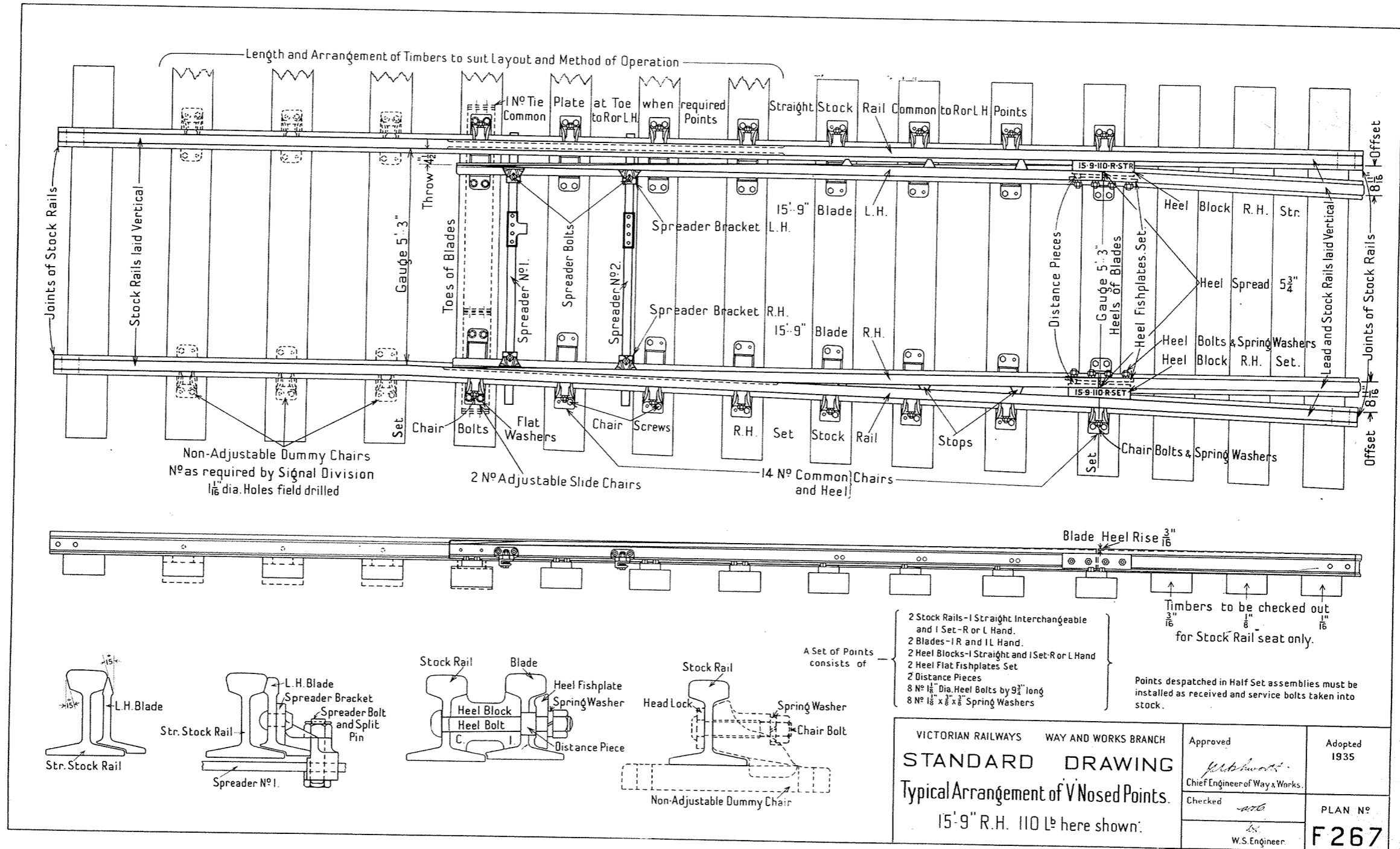
This plan supersedes plan No. F.266.

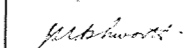
VICTORIAN RAILWAYS-WAY & WORKS BRANCH

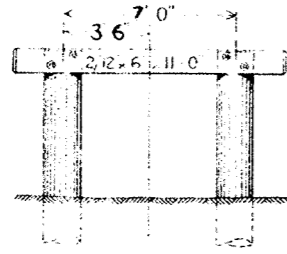
STANDARD DRAWING
SAFETY BRACKET

Scale 1/2"=1'-0"

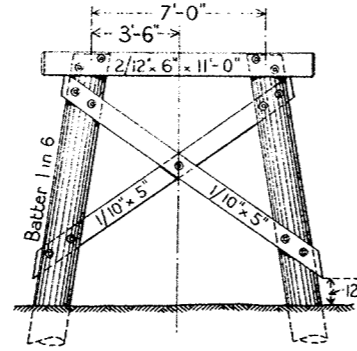
Approved <i>[Signature]</i> Chief Civil Engineer.	Adopted June 1942.
Drawn by K.F.L.	Checked by T.H.J.
<i>[Signature]</i>	PLAN NO F.266A.



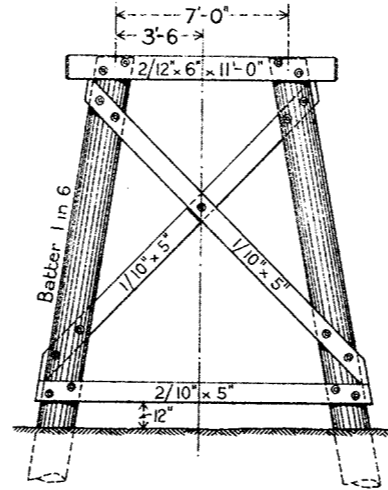
VICTORIAN RAILWAYS WAY AND WORKS BRANCH		Approved	Adopted 1935
STANDARD DRAWING Typical Arrangement of V Nosed Points. 15'-9" R.H. 110 L ^b here shown:		 Chief Engineer of Way & Works.	
		Checked <i>W.S.</i>	PLAN No F 267
		W.S. Engineer	



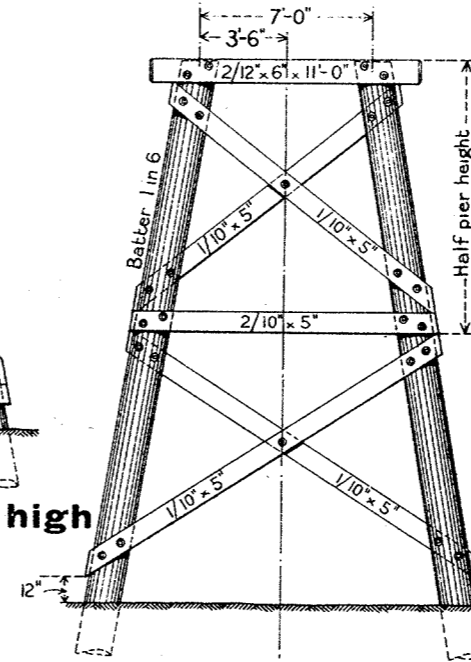
Piers up to 6'-0" high
TYPE A or B



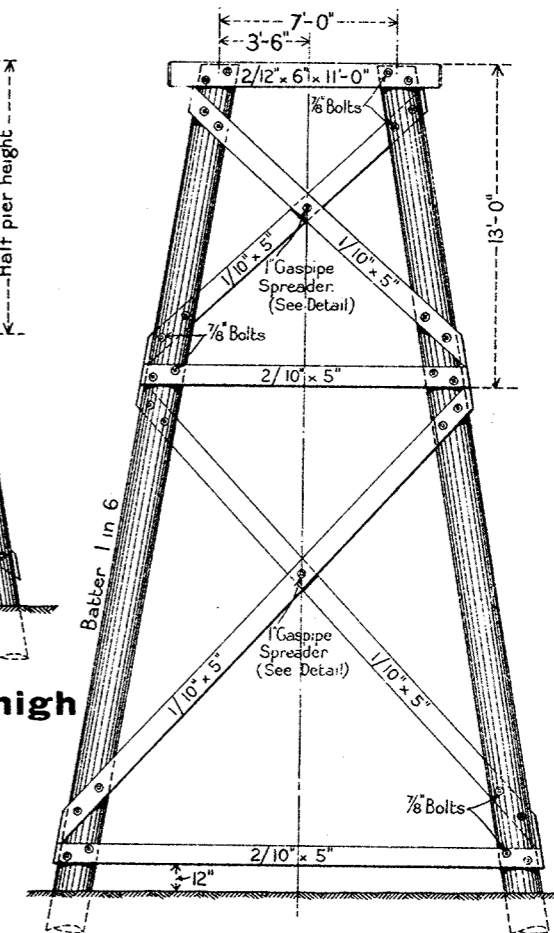
Piers over 6'-0" to 10'-0" high
TYPE B



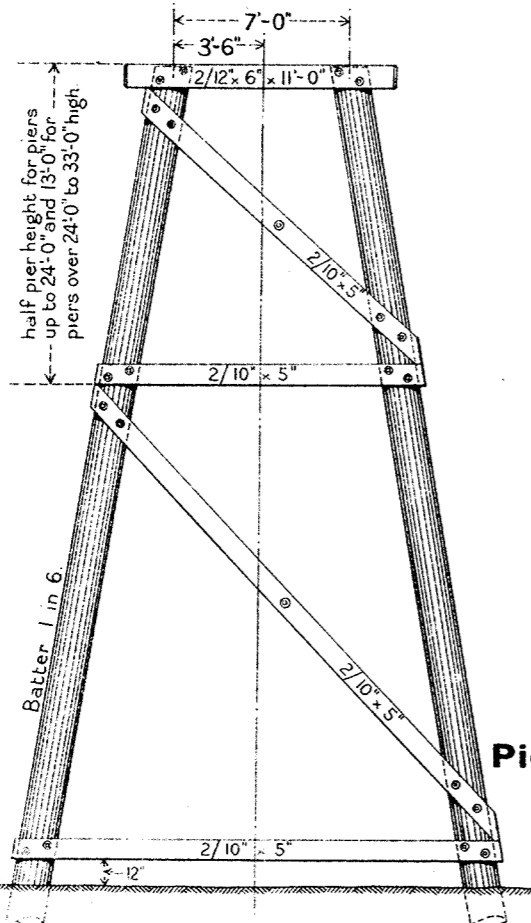
Piers over 10'-0" to 16'-0" high
TYPE B



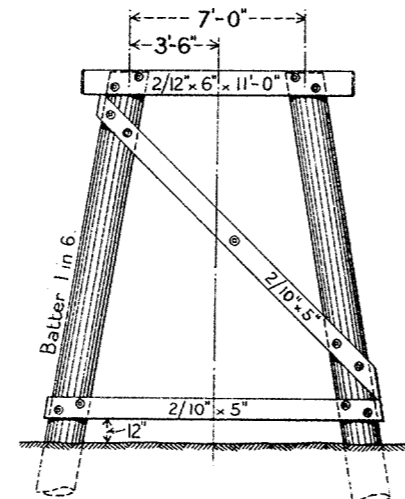
Piers over 16'-0" to 24'-0" high
TYPE B



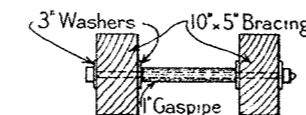
Piers over 24'-0" to 33'-0" high
TYPE B



Piers over 16'-0" to 33'-0" high
TYPE A



Piers over 6'-0" to 16'-0" high
TYPE A



Detail of Spreader for Braces

NOTES

Height of pier is to be measured from ground level to top of crossheads on down hill side of pier.
Bracing in accordance with drawings Type 'A', is to be used when existing bracing is of this type or when entire pier is to be renewed or remodelled. In other cases bracing in accordance with drawings Type 'B' is to be used.
On bridges where existing pile heads are at less than 7ft. centres, the existing dimension may be retained.
All bolts to be 7/8" diameter.
Gaspipe spreader to detail to be provided at the middle of length of diagonal braces. Pile cut offs to be 1" below top of crossheads.
Crossheads to bear evenly on pile shoulders and to be 6" apart.
Holes for bolts in pile heads to be slotted vertically 2 x 1", bolts to be placed in top of slots.
On curves of 50 chains radius and under, crossheads to be sloped, the cut off of the pile on the outside of the curve being 1/2" above that of the pile on the inside of the curve.
In sidling country the bottom of the diagonal bracing type 'A' to be on the downhill side of the pier.
Bank at end piers to be trimmed to 6" below underside of crossheads.
For details see - F.272. Treatment of sinking piles.
F.273. Splices for butted piles.
F.274. Planted bridge pile.
F.300. Piledriving instructions.

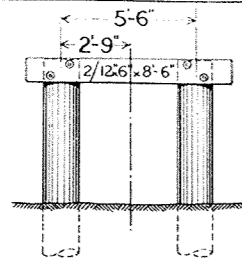
This plan supersedes Plan No. W.W. 16131A-10.

DRIVEN PILES		
Length of Piles	Minimum Diameter at	
	Head	Toe
20'-0", 25'-0"	18"	16"
30'-0" and upwards.	21"	15"

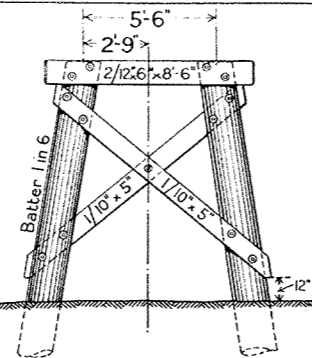
PLANTED PILES	
Minimum diameter 18". To be planted with butt end down.	

Table of Pile Sizes

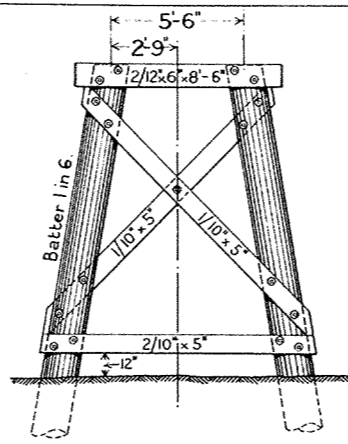
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING SUBSTRUCTURE OF TIMBER BRIDGES Two Pile Piers Scales 1/8"=1'-0" & 1/2"=1'-0"		Approved <i>J.M. Schwartz</i> Chief Eng. of Way & Works Drawn by K.F.L. A.P.T. Checked by <i>W. Bandy</i> Structure Engineer	Adopted MAR. 1936 PLAN No. F. 268
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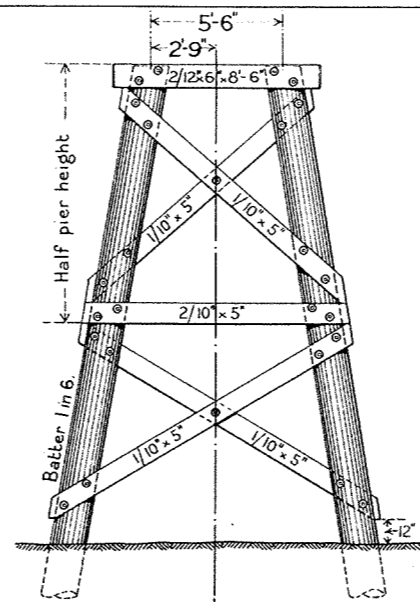
Piers up to 6'-0" high
TYPE A or B



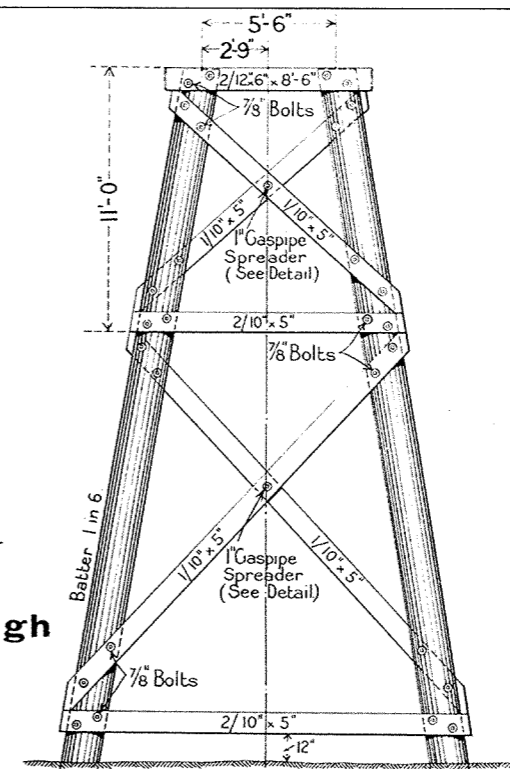
Piers over 6'-0" to 9'-0" high
TYPE B



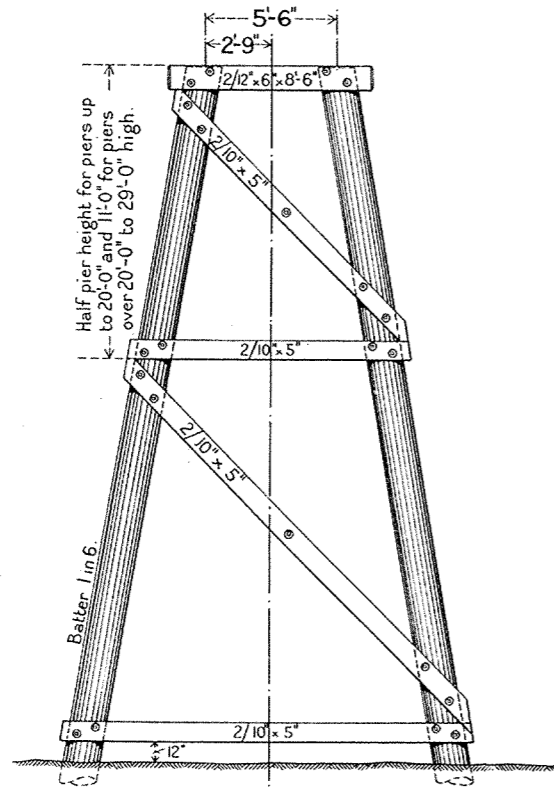
Piers over 9'-0" to 13'-0" high
TYPE B



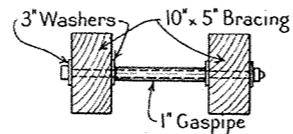
Piers over 13'-0" to 20'-0" high
TYPE B



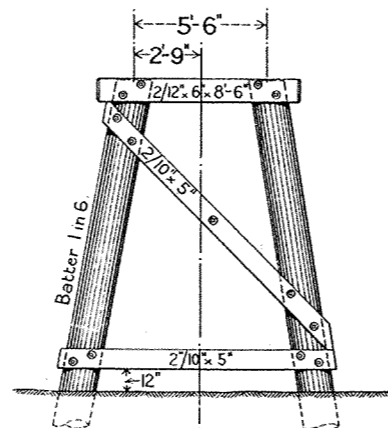
Piers over 20'-0" to 29'-0" high
TYPE B



Piers over 13'-0" to 29'-0" high
TYPE A



Detail of Spreader
for Braces



Piers over 6'-0" to 13'-0" high
TYPE A

Length of Piles	DRIVEN PILES	
	Minimum Diameter at Head	Minimum Diameter at Toe
20'-0", 25'-0"	18"	16"
30'-0" and upwards.	21"	15"

PLANTED PILES	
Minimum diameter 18". To be planted with butt end down.	

Table of Pile Sizes

NOTES

Height of pier is to be measured from ground level to top of crossheads on downhill side of pier. Bracing in accordance with drawings Type 'A' is to be used when existing bracing is of this type, or when entire pier is to be renewed or remodelled. In other cases bracing in accordance with drawings Type 'B' is to be used.

On bridges where existing pile heads are at less than 5'-6" centres, the existing dimension may be retained.

All bolts to be 7/8" diameter.

Gaspipe spreader to detail, to be provided at the middle of length of diagonal braces.

Pile cut offs to be 1" below top of crossheads.

Crossheads to bear evenly on pile shoulders and to be 6" apart.

Holes for bolts in pile heads to be slotted vertically 2"x1", bolts to be placed in top of slots.

On curves crossheads are to be sloped. The level of the cut off of the pile on the outside of the curve above the level of that on the inside to be:

For curves of 2 to 3 chains radius	3"
" " " " " " " " " " " " " " " "	2"
" " " " " " " " " " " " " " " "	1"

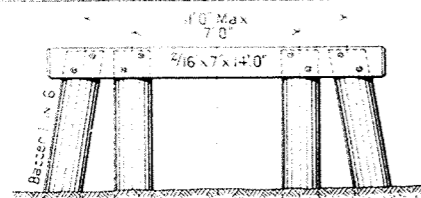
In siding country, the bottom of the diagonal bracing Type 'A' to be on the down hill side of the pier.

Bank at end piers to be trimmed to 6" below underside of crossheads.

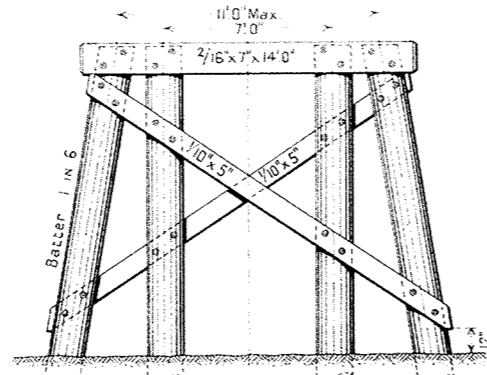
For details see :- F. 272. Treatment of sinking piles.
F. 273. Splices for butted piles.
F. 274. Planted bridge pile.
F. 300. Piledriving instructions.

This plan supercedes Plan No. W.W. 16131A-10.

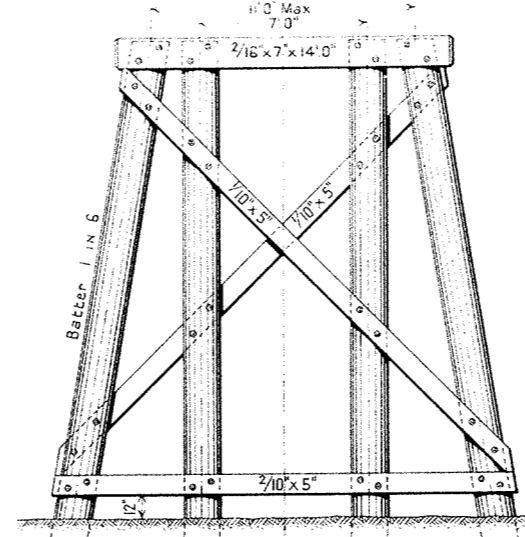
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M. A. H. W. O. R. T.</i>	MAR. 1936
SUBSTRUCTURE OF		Chief Eng of Way & Works	
TIMBER BRIDGES		Drawn by	Checked by
Two Pile Piers-Narrow Gauge Lines		K. F. L.	A. P. T.
Scales 1/8" = 1'-0" & 1/2" = 1'-0"		W. Bromby	PLAN No.
		Structure Engineer	F. 269



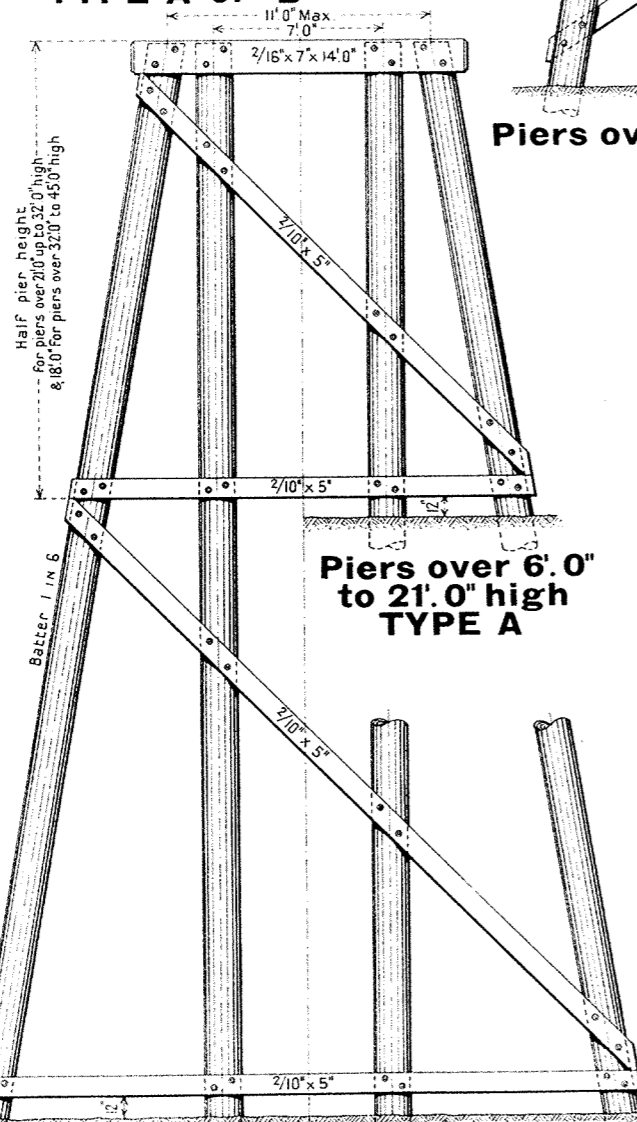
Piers up to 6'.0" high
TYPE A or B



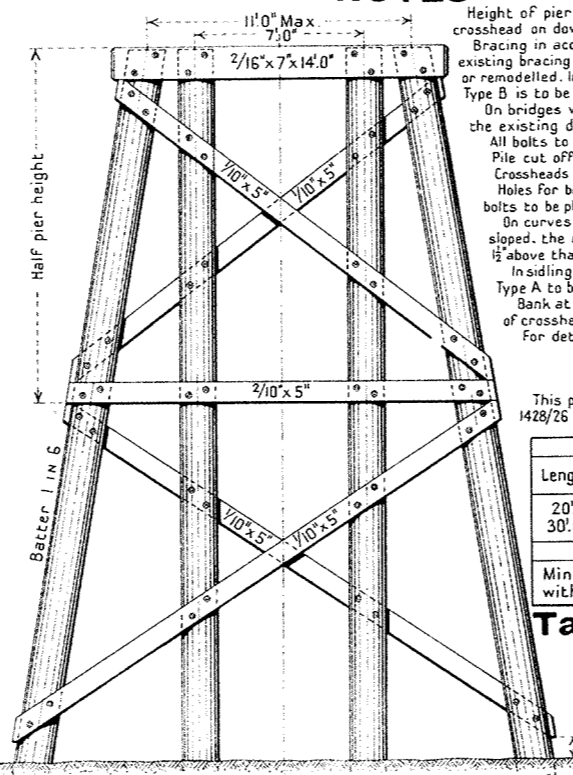
Piers over 6'.0" to 13'.0" high
TYPE B



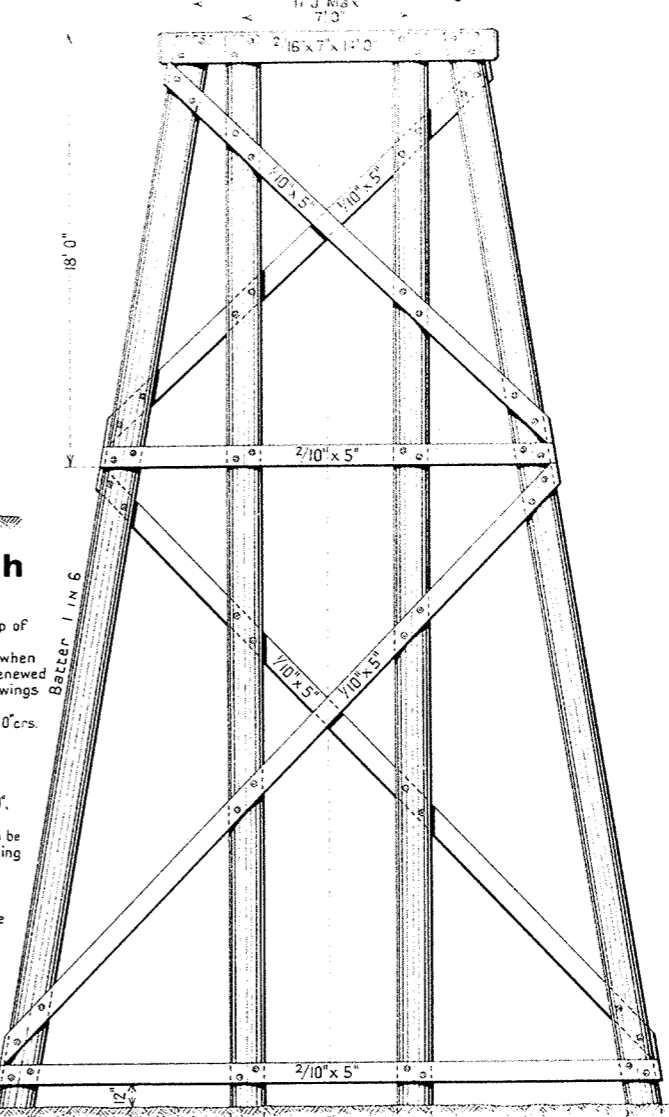
Piers over 13'.0" to 21'.0" high
TYPE B



Piers over 6'.0" to 21'.0" high
TYPE A



Piers over 21'.0" to 32'.0" high
TYPE B



Piers over 32'.0" to 45'.0" high
TYPE B

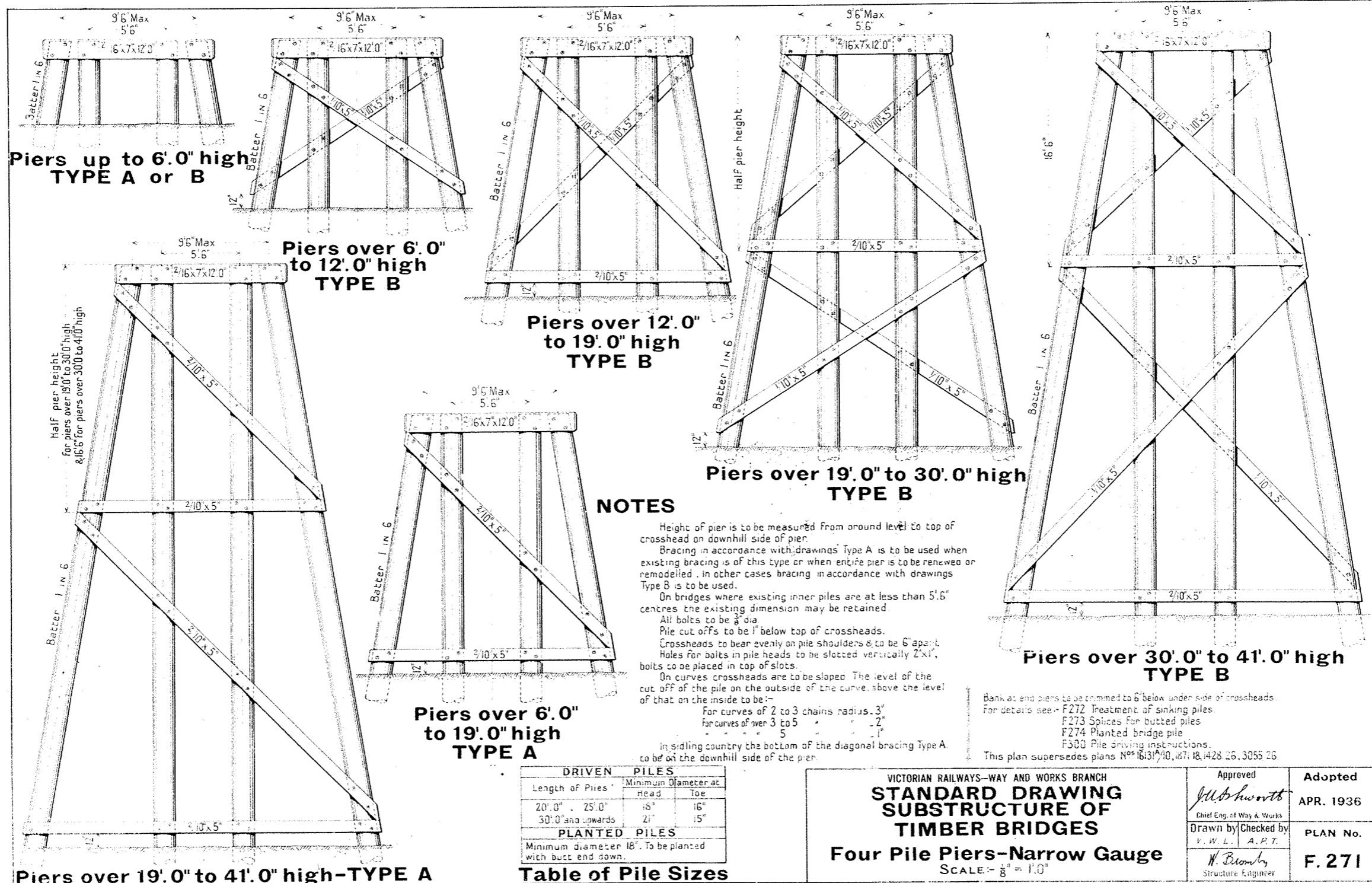
NOTES

Height of pier is to be measured from ground level to top of crosshead on downhill side of pier.
Bracing in accordance with drawings Type A is to be used when existing bracing is of this type or when entire pier is to be renewed or remodelled. In other cases bracing in accordance with drawings Type B is to be used.
On bridges where existing inner piles are at less than 7' 0" c/s, the existing dimensions may be retained.
All bolts to be 3/8" dia.
Pile cut offs to be 1" below top of crossheads
Crossheads to bear evenly on pile shoulders & to be 6" apart.
Holes for bolts in pile heads to be slotted vertically 2" x 1", bolts to be placed in top of slots.
On curves of 50 chains radius & under, crossheads to be sloped, the cut off of pile on the outside of the curve being 1/2" above that of the pile on the inside of the curve.
In siding country the bottom of the diagonal bracing Type A to be on the downhill side of the pier.
Bank at end piers to be trimmed to 6" below underside of crossheads.
For details see - F272 Treatment of sinking piles.
F273 Splices for butted piles.
F274 Planted bridge pile.
F300 Piledriving instructions
This plan supersedes Plans Nos 16131/10, 1871/18, 1428/26 & 3055/26.

DRIVEN PILES		
Length of Piles	Minimum Diameter at	
	Head	Toe
20'.0" , 25'.0"	18"	16"
30'.0" and upwards	21"	15"
PLANTED PILES		
Minimum diameter 18". To be planted with butt end down.		

Table of Pile Sizes

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING SUBSTRUCTURE OF TIMBER BRIDGES Four Pile Piers SCALE - 1/8" = 1' 0"		Approved <i>J. M. Howarth</i> Chief Eng. of Way & Works	Adopted APR. 1936
		Drawn by V. W. L.	Checked by A. P. T.
		<i>W. Bromber</i> Structure Engineer	



Piers up to 6'.0" high
TYPE A or B

Piers over 6'.0" to 12'.0" high
TYPE B

Piers over 12'.0" to 19'.0" high
TYPE B

Piers over 19'.0" to 30'.0" high
TYPE B

Piers over 30'.0" to 41'.0" high
TYPE B

Half pier height for piers over 19'.0" to 30'.0" high & 16'.6" for piers over 30'.0" to 41'.0" high

NOTES

Height of pier is to be measured from ground level to top of crosshead on downhill side of pier.
 Bracing in accordance with drawings Type A is to be used when existing bracing is of this type or when entire pier is to be renewed or remodelled. In other cases bracing in accordance with drawings Type B is to be used.
 On bridges where existing inner piles are at less than 5'.6" centres the existing dimension may be retained.
 All bolts to be 3" dia.
 Pile cut offs to be 1' below top of crossheads.
 Crossheads to bear evenly on pile shoulders & to be 6" apart.
 Holes for bolts in pile heads to be slotted vertically 2"x1", bolts to be placed in top of slots.
 On curves crossheads are to be sloped. The level of the cut off of the pile on the outside of the curve above the level of that on the inside to be:-
 For curves of 2 to 3 chains radius .3"
 for curves of over 3 to 5 " .2"
 " " " " " " .1"
 In siding country the bottom of the diagonal bracing Type A to be on the downhill side of the pier.

Bank at end piers to be trimmed to 6" below under side of crossheads.
 For details see:- F272 Treatment of sinking piles.
 F273 Splices for butted piles
 F274 Planted bridge pile
 F300 Pile driving instructions.
 This plan supersedes plans N^o 1631/10, 187, 18, 1428, 26, 3055, 26

Piers over 6'.0" to 19'.0" high
TYPE A

Piers over 19'.0" to 41'.0" high-TYPE A

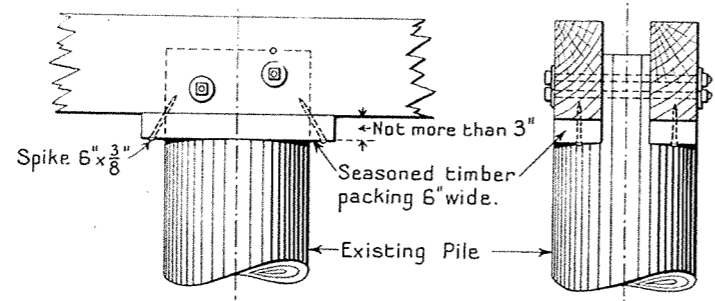
DRIVEN PILES	
Length of Piles	Minimum Diameter at head
20'.0" - 25'.0"	18"
30'.0" and upwards	21"

PLANTED PILES	
Minimum diameter 18". To be planted with butt end down.	Toe
	16"
	15"

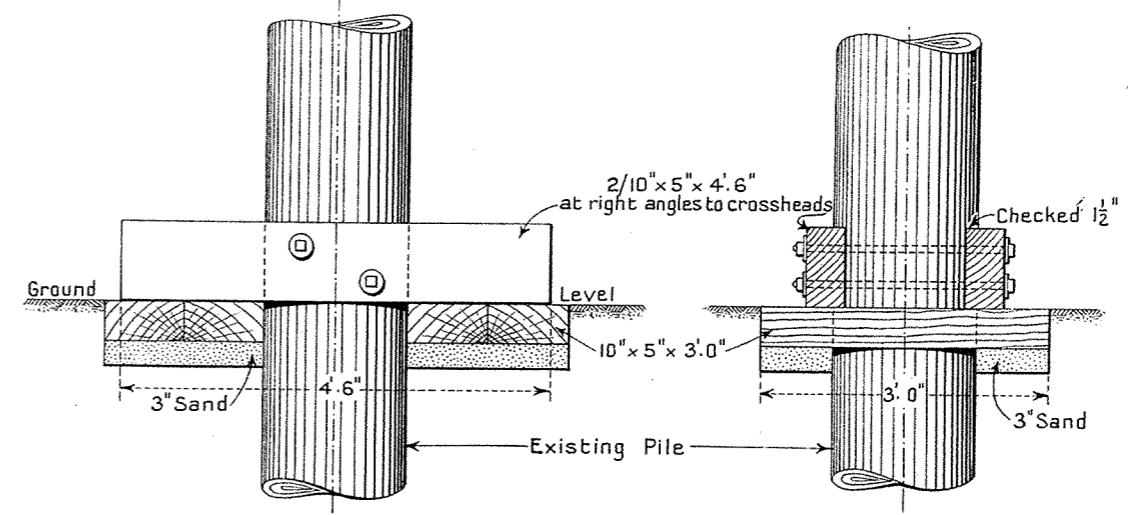
Table of Pile Sizes

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING
SUBSTRUCTURE OF
TIMBER BRIDGES
Four Pile Piers-Narrow Gauge
 SCALE:- 1/8" = 1'.0"

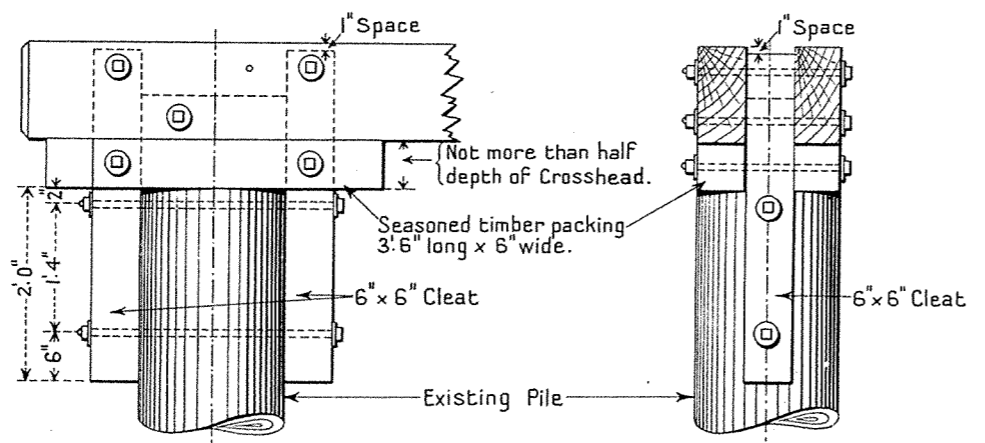
Approved <i>M. B. Schwartz</i> Chief Eng. of Way & Works	Adopted APR. 1936
Drawn by V. W. L.	Checked by A. P. T.
W. Bromby Structure Engineer	PLAN No. F. 271



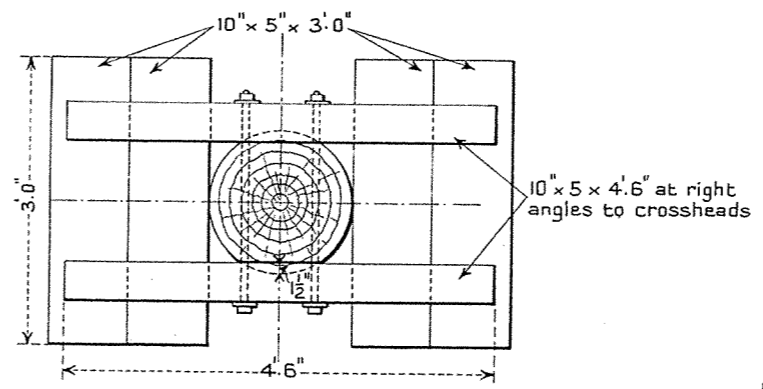
ELEVATION **SECTION**
LIFTING CROSSHEADS
TYPE "A"
 Up to 3 Inches



ELEVATION **SECTION**



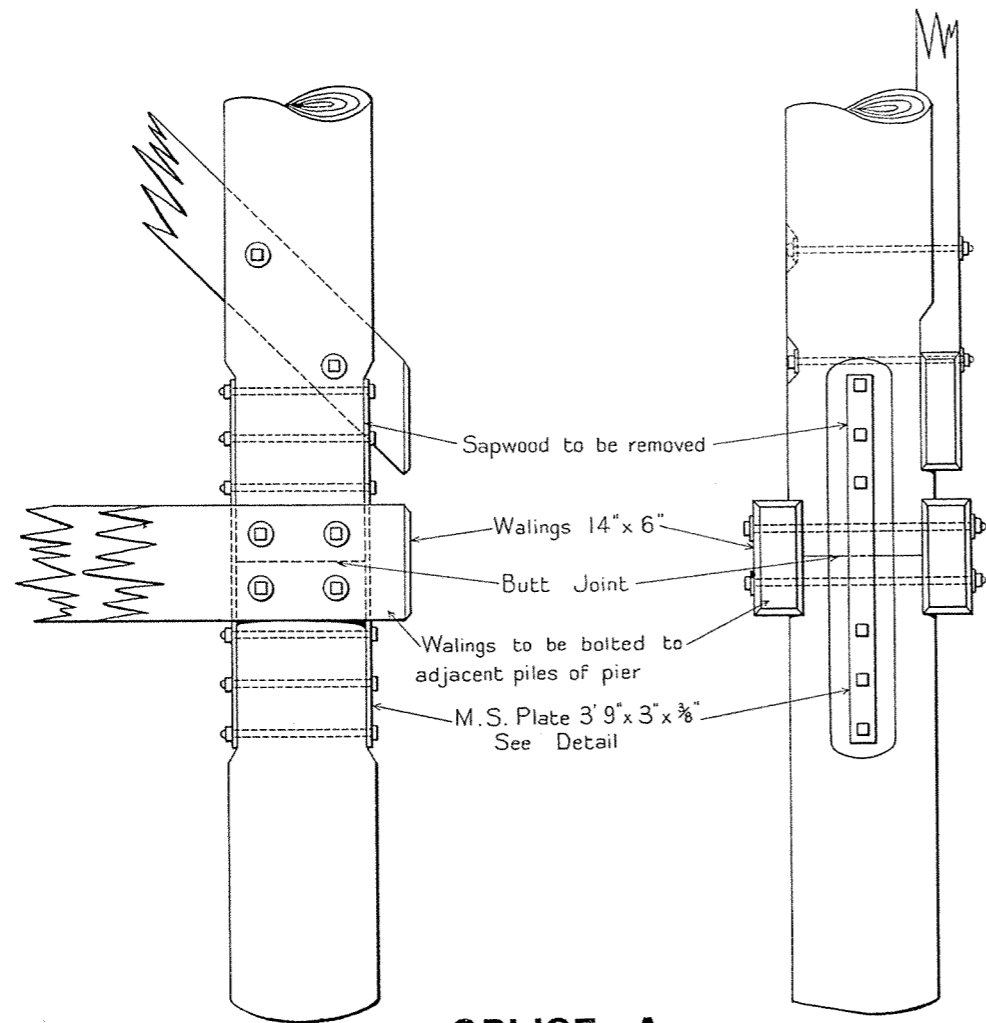
ELEVATION **SECTION**
LIFTING CROSSHEADS
TYPE "B"
 Over 3 Inches but not more than half depth of Crosshead



PLAN
PILE CRADLE

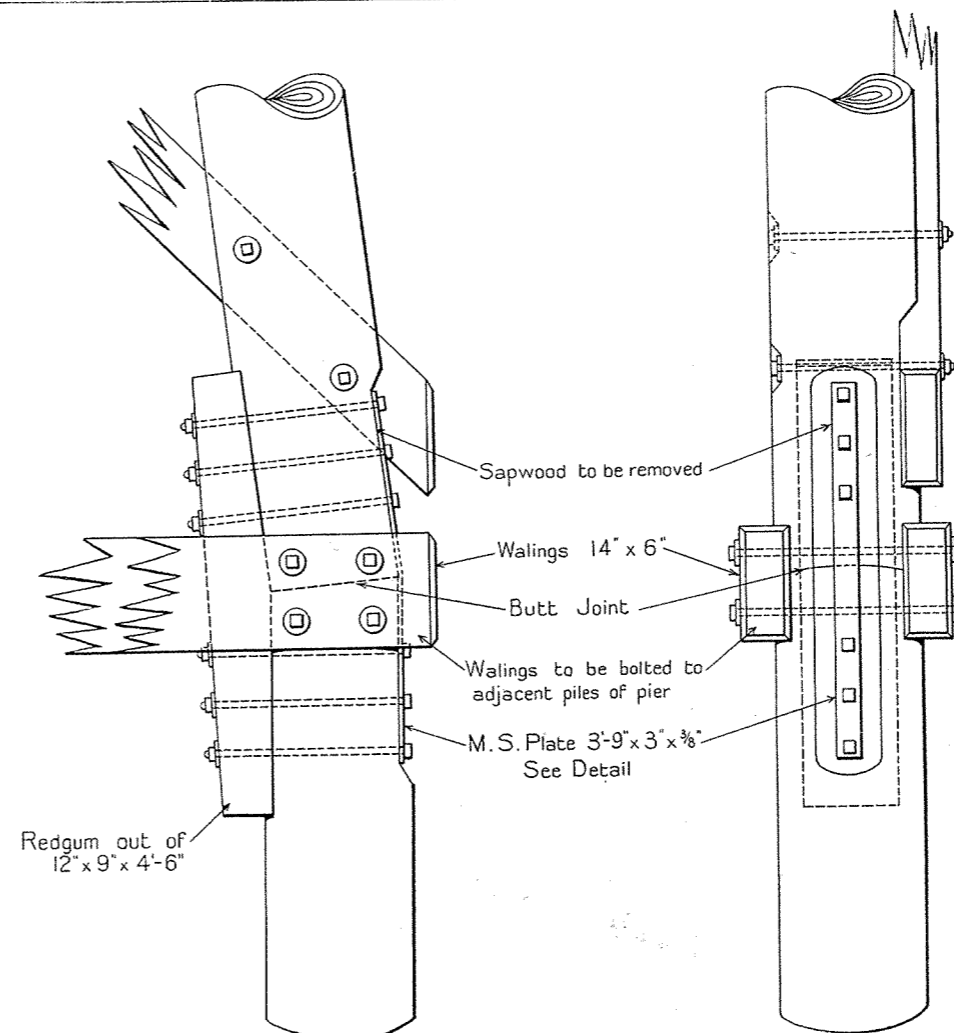
NOTES
 All bolts to be 7/8" dia.
 Red Gum, Ironbark or Box Timber only to be used.
 This plan supersedes plans Nos. 1520/08 & 1359/22

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING TIMBER BRIDGES TREATMENT FOR SINKING PILES		<i>J. Ashworth</i>	MAR. 1936
		Chief Eng. of Way & Works	
SCALE 1/2" = 1.0"		Drawn by	Checked by
		E.G.D.	A.P.T.
		<i>W. Blomby</i>	PLAN No.
		Structure Engineer	F.272



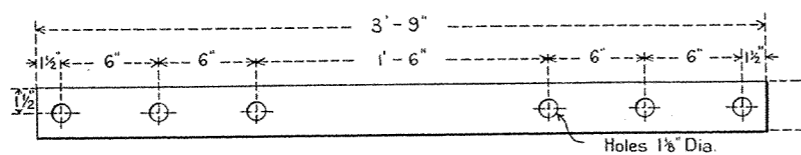
SPLICE A

Where piles are to be in the same alignment



SPLICE B

Where piles are not in the same alignment



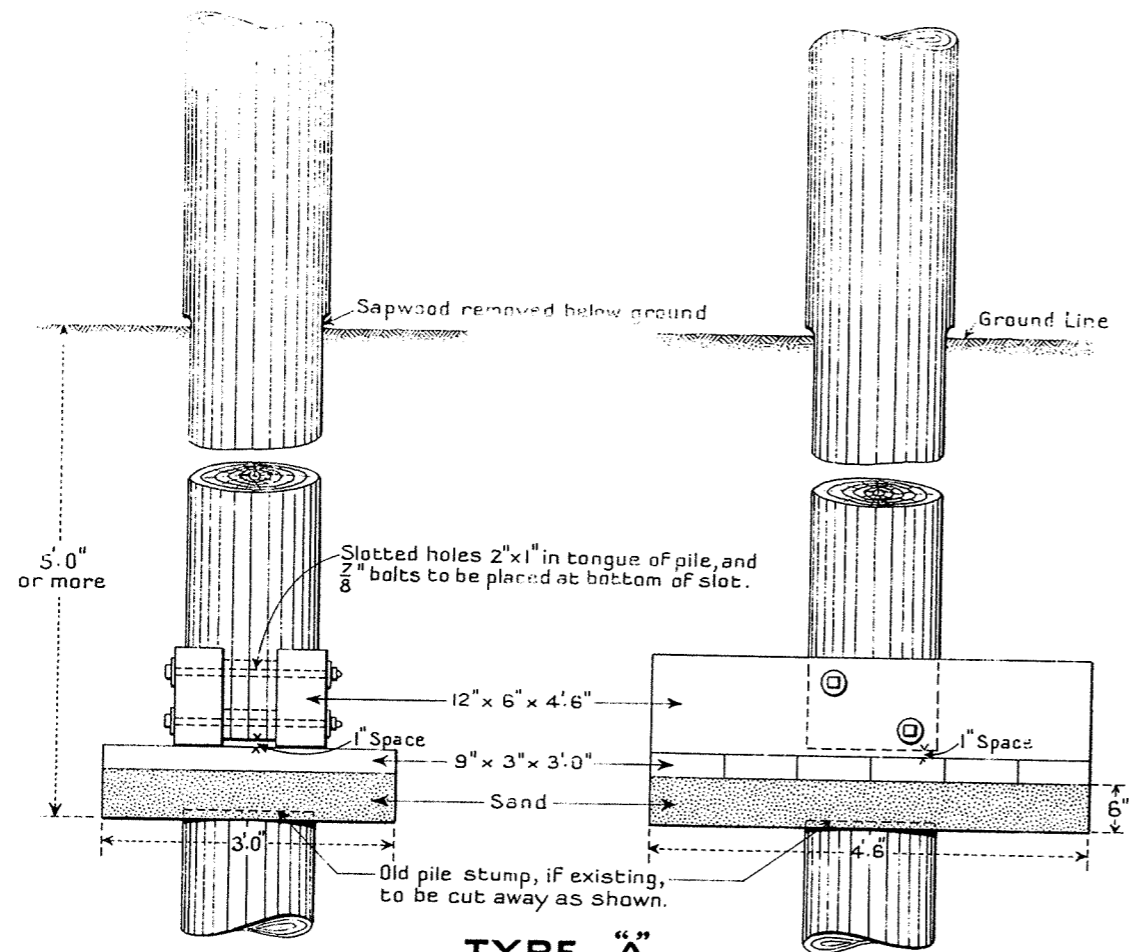
M.S. PLATE 3'-9" x 3" x 3/8"

(When used for SPLICE "B", plates to be bent at central point to suit angle between upper and lower piles)

NOTE :- All butt joints in piles are to be made in a plane at right angles to the centre line of the Upper pile, and are to be coated with red lead and oil paste. All bolts to be 7/8" diameter

This plan supersedes plans Nos 14-35, 74-27 and 283-35

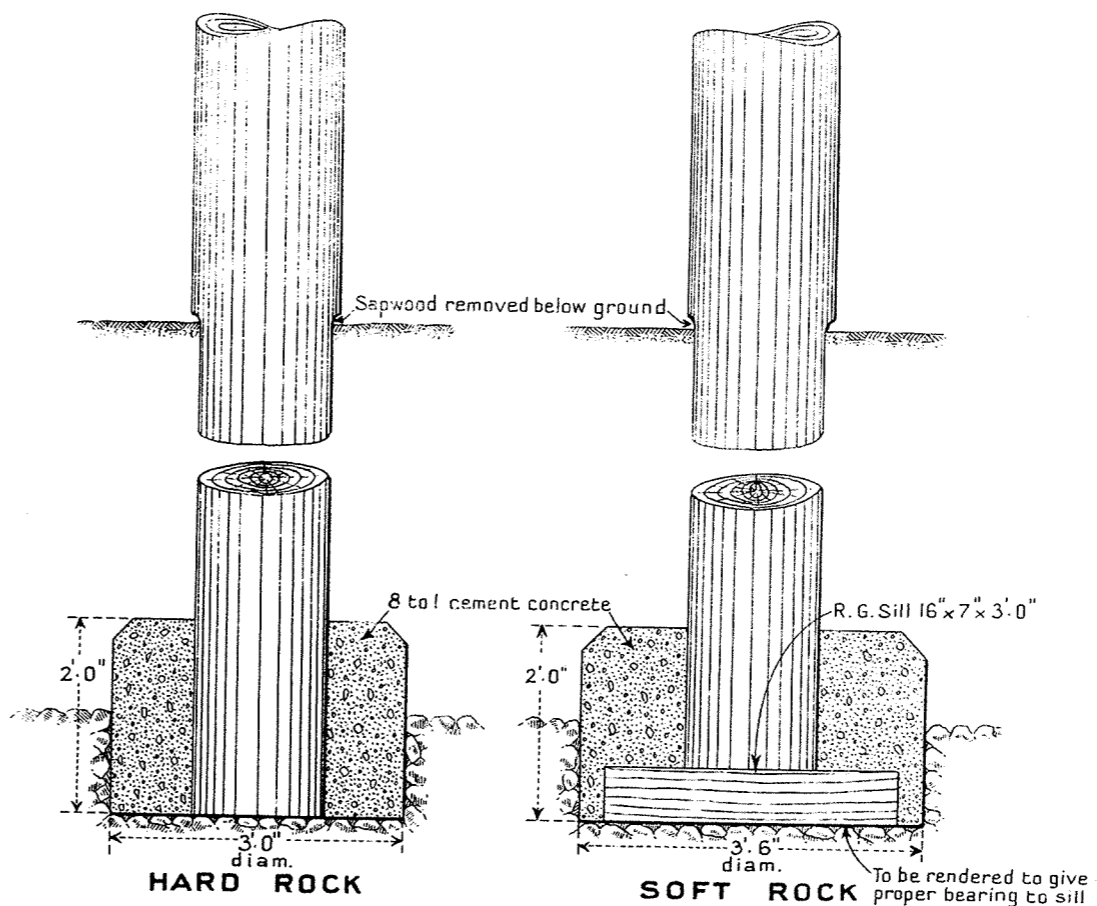
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING SPLICES FOR BUTTED PILES Scales 1/2 and 1 inch to 1 foot		Approved <i>M. Ashworth</i> Chief Eng. of Way & Works	Adopted Nov. 1935
Drawn by E. C.	Checked by A. P. T.	PLAN No. F.273	
W. Bromby Structure Engineer			



TYPE "A"
PILE PLANTED ON SILLS

SCHEDULE OF QUANTITIES PER PILE	
TYPE "A" PILE PLANTED ON SILLS	
Pile (length to be fixed)	1 N ^o
Red Gum 12" x 6"	2 N ^o 4.6"
" " 9" x 3"	6 N ^o 3.0"
Bolts $\frac{7}{8}$ " diam.	2 N ^o
Washers	4 N ^o
Sand	$\frac{1}{4}$ cubic yard

TYPE "B" PILE PLANTED ON ROCK	
Pile (length to be fixed)	1 N ^o
Cement concrete 8 to 1	$\frac{1}{2}$ cubic yard
Sill 16" x 7" (in soft rock)	1 N ^o 3.0"

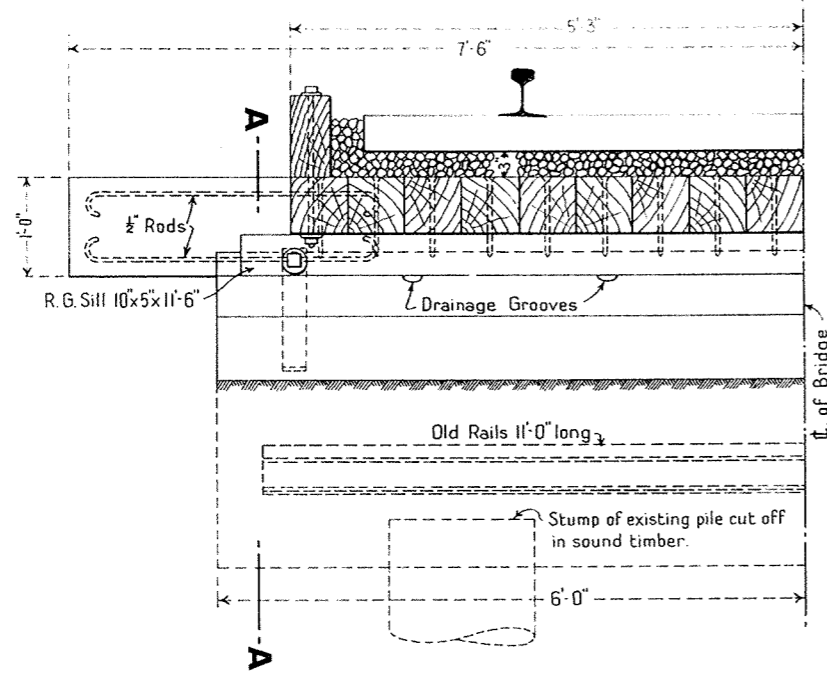


TYPE "B"
PILE PLANTED ON ROCK

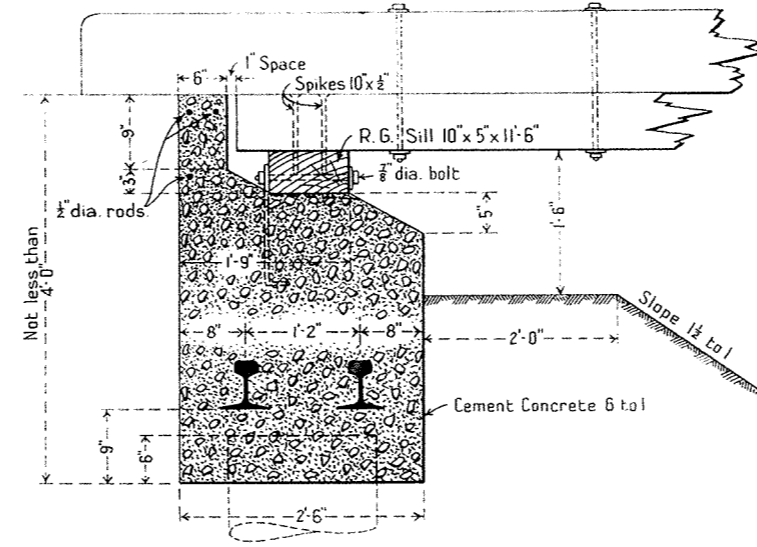
NOTES

In type "A", 12" x 6" timbers } are to be placed at right angles
 In type "B" 16" x 7" sill } to centre line of railway.
 Bottom of excavation and timber sills to be at right
 angles to centre line of pile for vertical or batter piles.
 Filling around piles to be thoroughly rammed.
 This Plan supersedes Plans N^{os} 1067/18, 162/22 and 434-35.

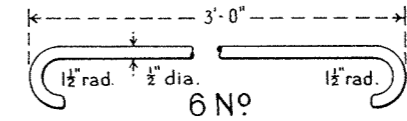
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M. Schwartz</i>	Nov. 1935
		Chief Eng. of Way & Works	
PLANTED BRIDGE PILE		Drawn by <i>E.G.D.</i>	Checked by <i>A.P.T.</i>
		SCALE: $\frac{1}{2}$ " = 1'-0"	
		<i>H. Brown</i> Structure Engineer	PLAN No. F. 274



HALF ELEVATION

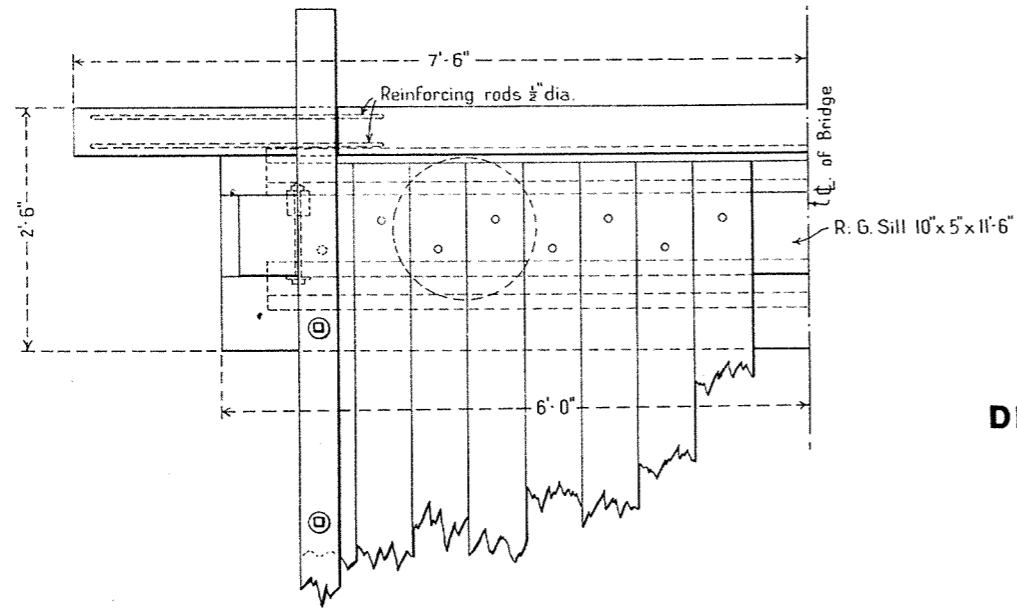


SECTION - A-A

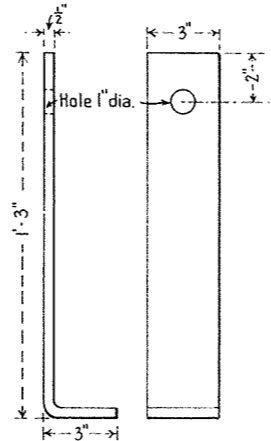


DETAILS OF REINFORCING RODS

Scale 1/2" = 1'-0"



HALF PLAN



DETAILS OF M.S. FLATS

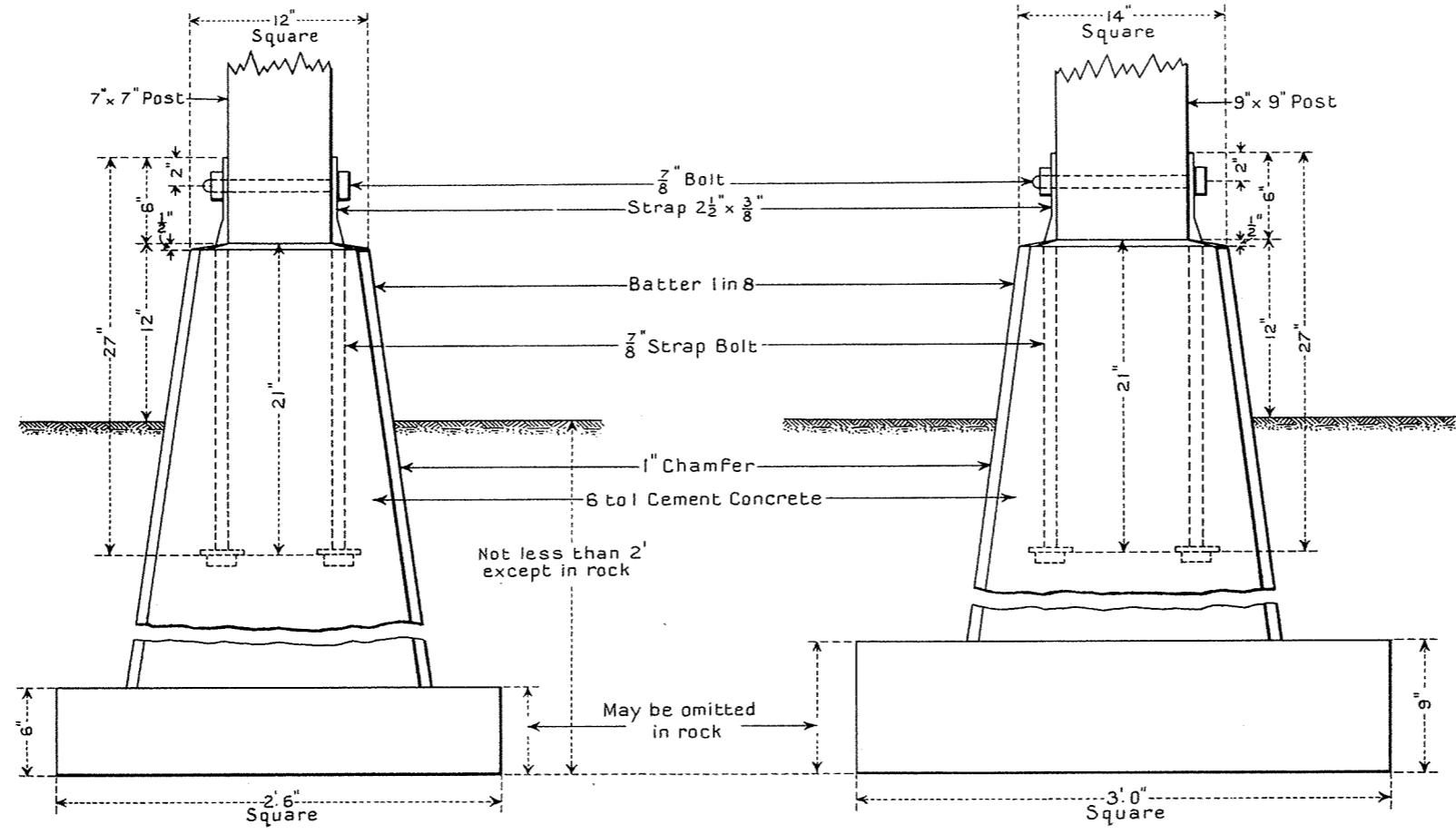
Scale 1/2" = 1'-0"

SCHEDULE OF QUANTITIES — ONE ABUTMENT —	
DESCRIPTION	QUANTITIES
Cement Concrete 6 to 1	3.6 C.Yards (min.)
Red Gum 10" x 5"	1/11'-6"
Old Rails 11'-0" long	2 N°
M.S. Rods 1/2" dia.	20 Lin. feet.
M.S. Flats 3" x 1/2"	2/1'-6"
Bolts 7/8" dia.	2/1'-0"
Washers for 7/8" bolts	2 N°

NOTES:-
 If even bearing on pile stumps cannot be obtained, piles are to be cut off 1 ft. below base of concrete.
 Earth foundation under abutment is to be well rammed.
 Corners of concrete to have 1/2 bevel.

This plan supersedes Plans. N° 174/28 & 361/35.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>J. M. Ashworth</i> Chief Eng. of Way & Works	Nov. 1935
CONCRETE ABUTMENT FOR LONGITUDINAL DECK BRIDGES		Drawn by V. M.	Checked by A. P. T.
SCALE 1/2" = 1'-0"		<i>H. Brown</i> Structure Engineer	PLAN No. F.275



FOR 6,000 GALLON TANK

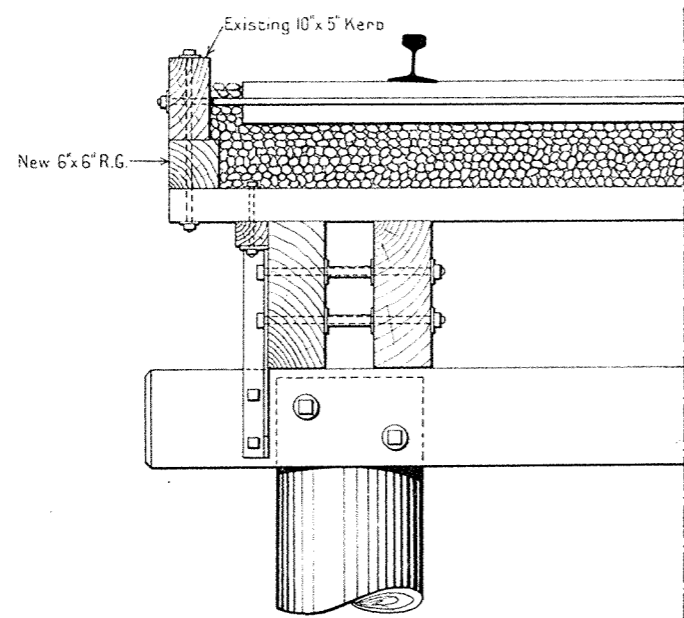
FOR 10,000 GALLON TANK

SCHEDULE OF QUANTITIES - PER BASE

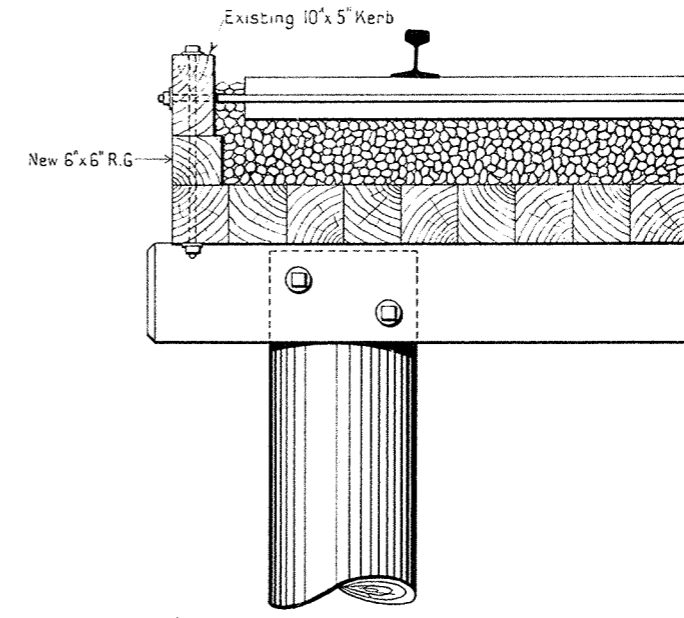
DESCRIPTION	6,000 GALLON TANK	10,000 GALLON TANK
Cement Concrete 6 to 1 (Minimum, except in Rock)	1/3 cubic yard	1/2 cubic yard
Strap Bolts, 7/8" x 27"	2 N ^o	2 N ^o
Bolt, 7/8"	1 N ^o x 9" long	1 N ^o x 11" long
Washers, 3"	2 N ^o	2 N ^o

This Plan supersedes Plans Nos. 3044/21 & 232-35

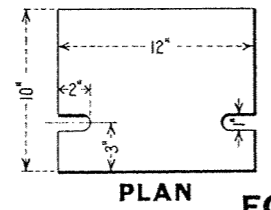
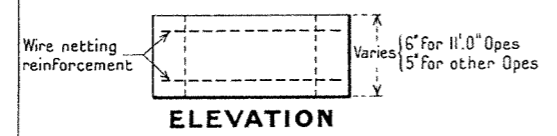
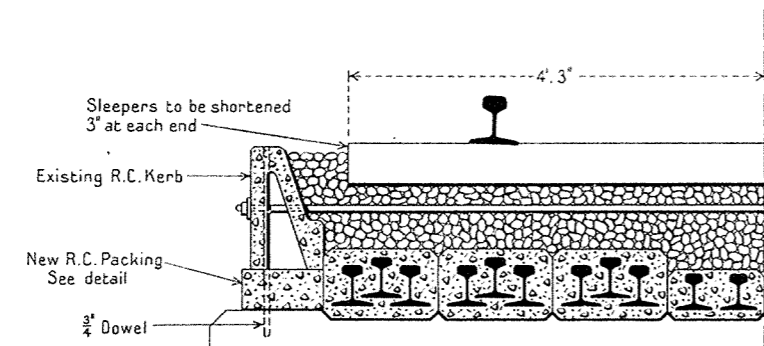
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING CONCRETE BASE FOR TIMBER TANK STAND SCALE:- 1 Inch = 1 Foot		Approved <i>J. M. Schwartz</i> Chief Eng. of Way & Works	Adopted Nov. 1935
Drawn by <i>E. G. D.</i>	Checked by <i>A. P. T.</i>	PLAN No. F. 276	
<i>V. Brown</i> Structure Engineer			



FOR CROSS DECK BRIDGES

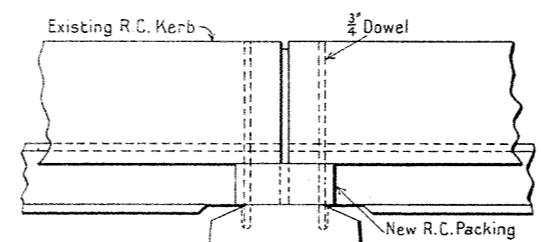


FOR LONG DECK BRIDGES



DETAIL OF R.C. PACKING

FOR RAIL SLAB DECK BRIDGES

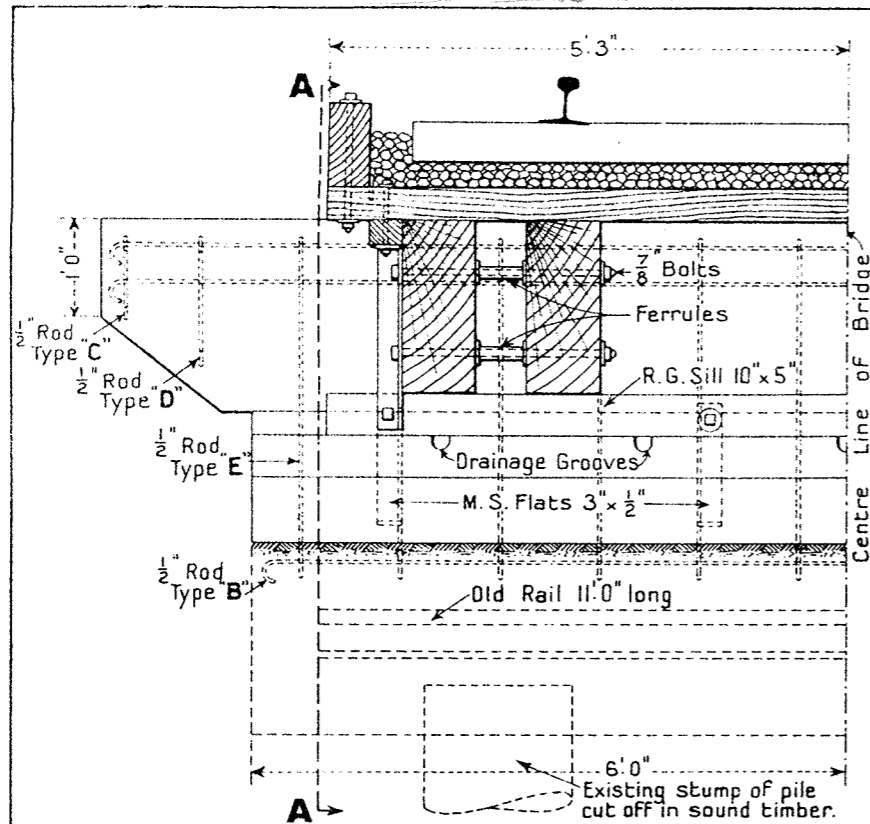


SIDE ELEVATION

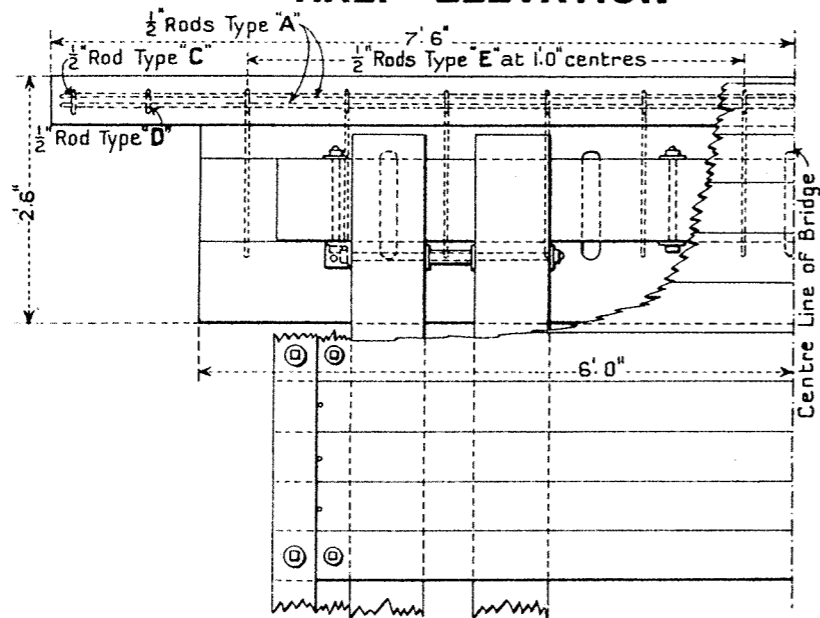
This plan supersedes plans 491-34 & 435-35

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING METHOD OF RAISING KERB WHERE BALLAST IS EXCESSIVE		<i>J. M. Schwartz</i>	Nov. 1935
		Chief Eng. of Way & Works	
Drawn by	Checked by		PLAN No.
V. W. L.	A. P. T.		F. 277
		<i>W. Blomby</i>	
		Structure Engineer	

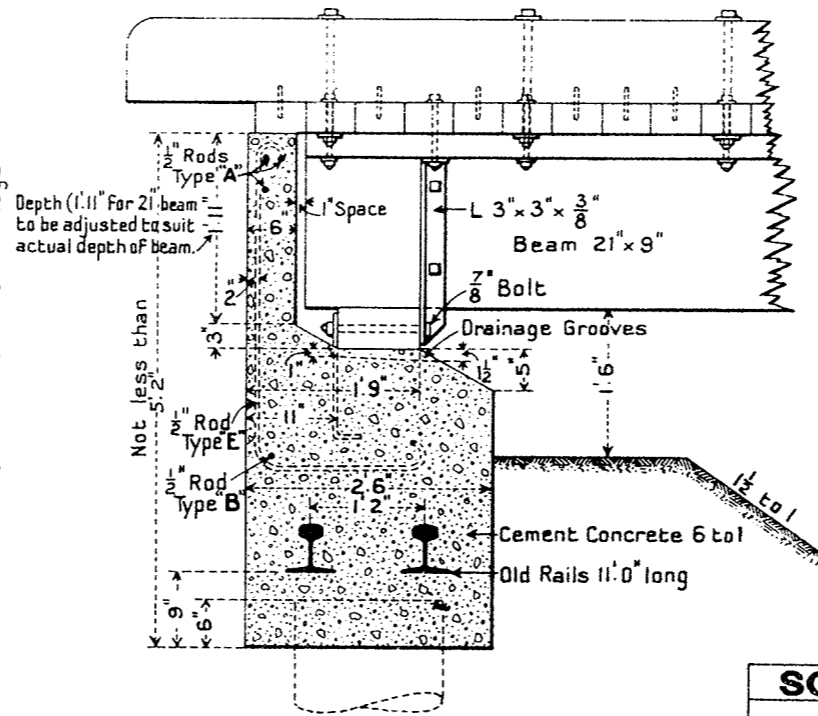
SCALES: - 1/2" & 1" = 1'-0"



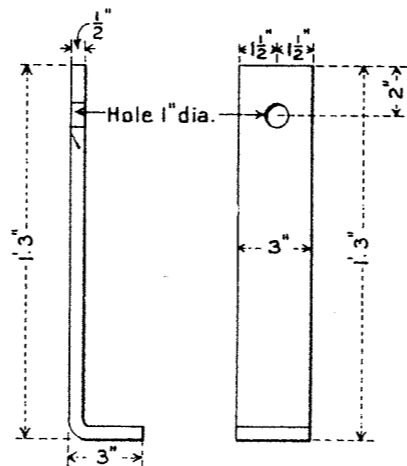
HALF ELEVATION



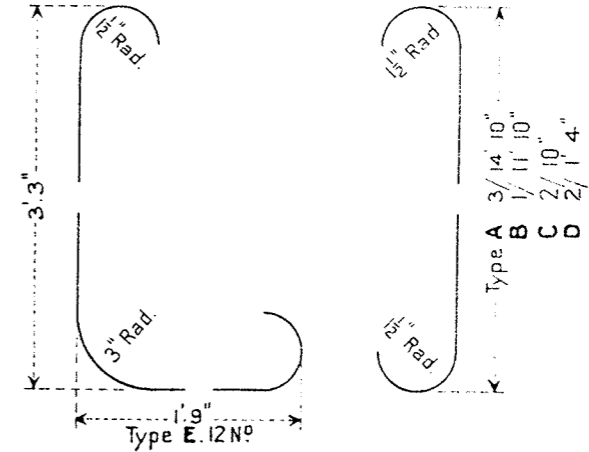
HALF PLAN



SECTION A-A



DETAILS OF M.S. FLATS

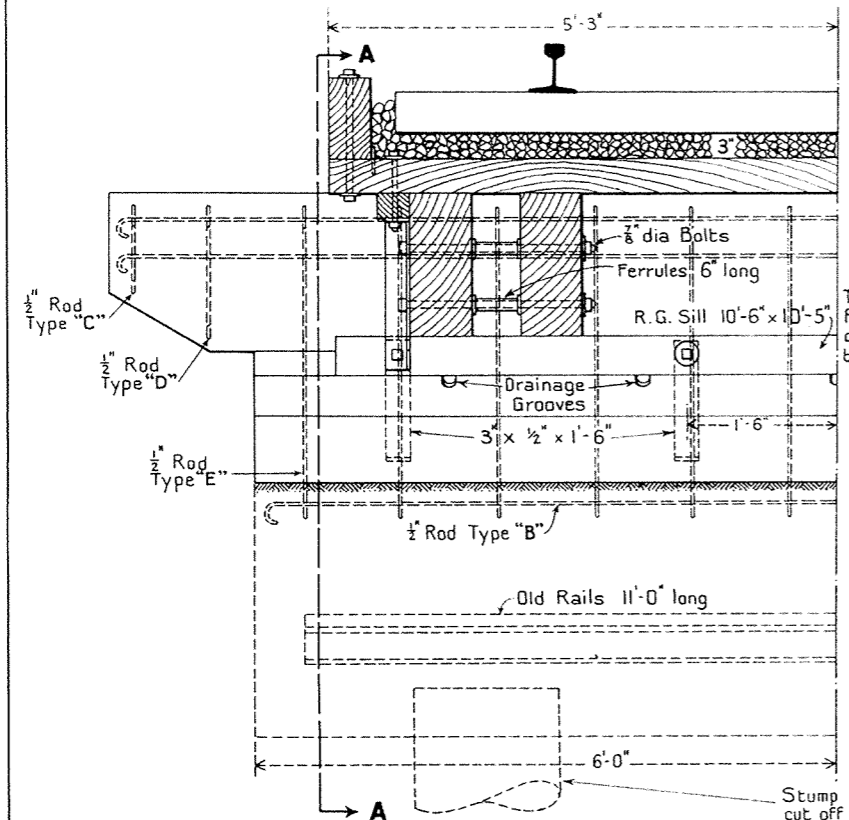


DETAILS OF REINFORCING RODS

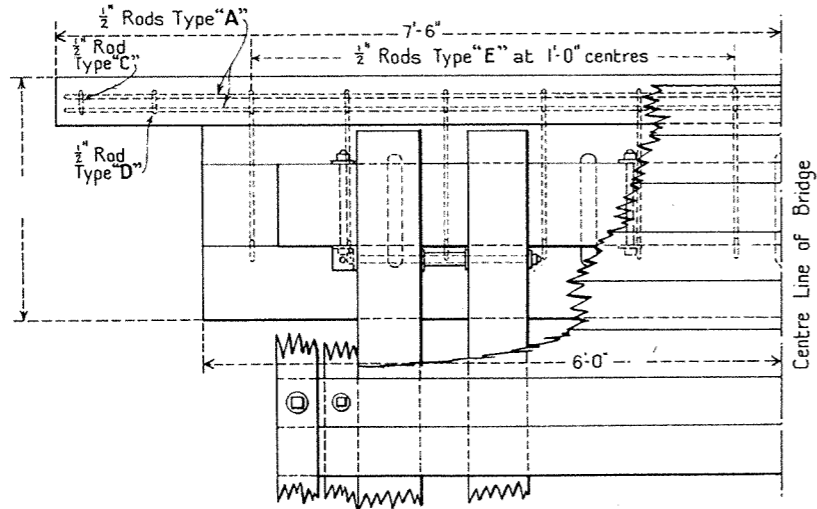
SCHEDULE OF QUANTITIES	
ONE ABUTMENT	
DESCRIPTION	QUANTITY
Cement Concrete 6 to 1	4 C. Yds. Min.
Red Gum 10" x 5"	1/10' 6"
Old Rails 11'0" long	2 No
M.S. Rods 1/2" dia. to details	130 Lin. Ft.
M.S. Flats 3" x 1/2" to detail	4/1' 6"
Bolts 7/8" dia.	4/1' 0"
Washers for 7/8" bolts	2 No
M.S. Angles 3" x 3" x 3/8" x 1'10 1/2"	1 No Type A, 1 No Type B

NOTES
 Corners of concrete above ground to have 1/2" bevel.
 If even bearing on pile stumps cannot be obtained, piles are to be cut off 1 foot below base of concrete.
 Earth foundation under abutment is to be well rammed.
 For details of Angles See Plan No 254/35.
 This plan supersedes Plans Nos. 78/28, 359/35.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING CONCRETE ABUTMENT FOR 20'0" OPES TIMBER BRIDGES		<i>J. M. Schwartz</i>	Feb. 1936
		Chief Eng. of Way & Works	
SCALES:—1/2" and 1/2" = 1'0"		Drawn by <i>E.G.D.</i>	Checked by <i>A.P.T.</i>
		PLAN No. F.278	
		<i>W. Blomby</i>	Structure Engineer



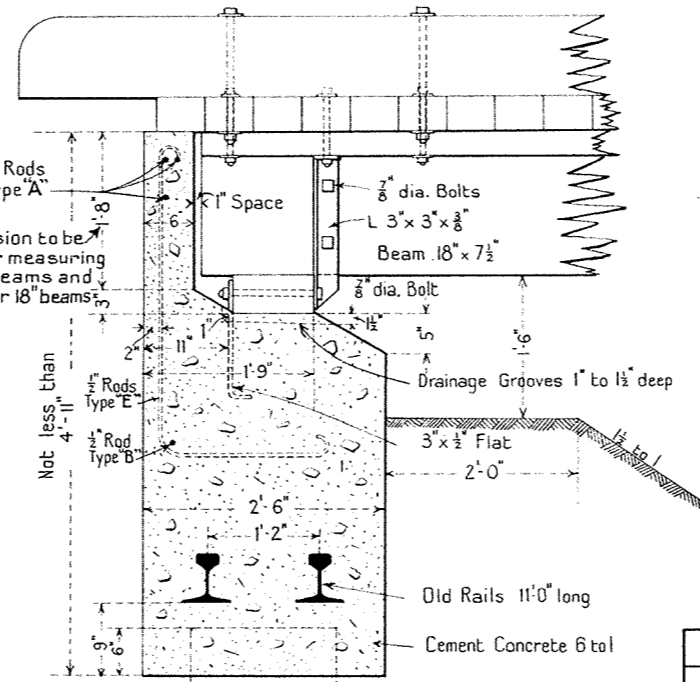
HALF ELEVATION



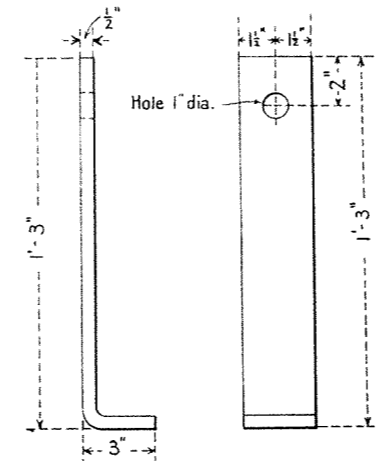
HALF PLAN

Centre Line of Bridge

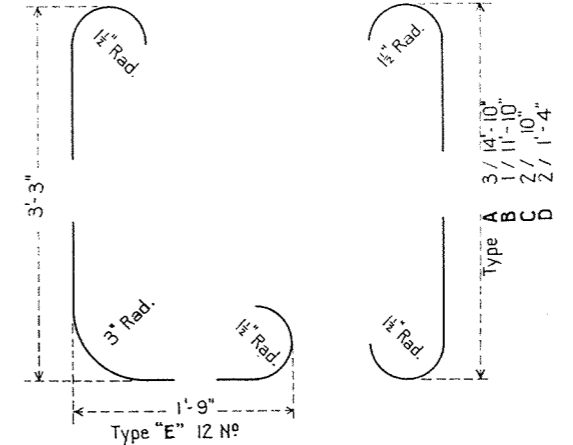
Stump of existing Pile cut off in sound timber



SECTION A A



DETAILS OF M. S. FLATS



DETAILS OF REINFORCING RODS

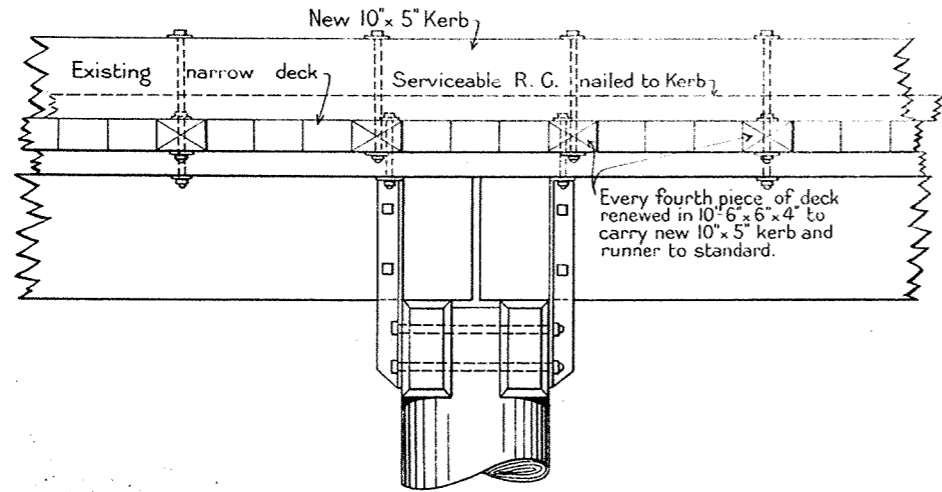
SCHEDULE OF QUANTITIES	
ONE ABUTMENT	
DESCRIPTION	QUANTITY
Cement Concrete 6 to 1	3.9 cubic yards (Minimum)
Red Gum 10" x 5"	1 / 10'-6"
Old Rails 11'-0" long	2 No
M.S. Rods 1/2" dia. to details	130 lineal feet
M.S. Flats 3" x 1/2" to detail	4 / 1'-6"
Bolts 3/8" dia.	4 / 1'-0"
Washers for 3/8" bolts	2 No
M.S. Angles 3" x 3" x 3/8" 1'-7 1/2" long	1 No Type A. 1 No Type B

NOTES

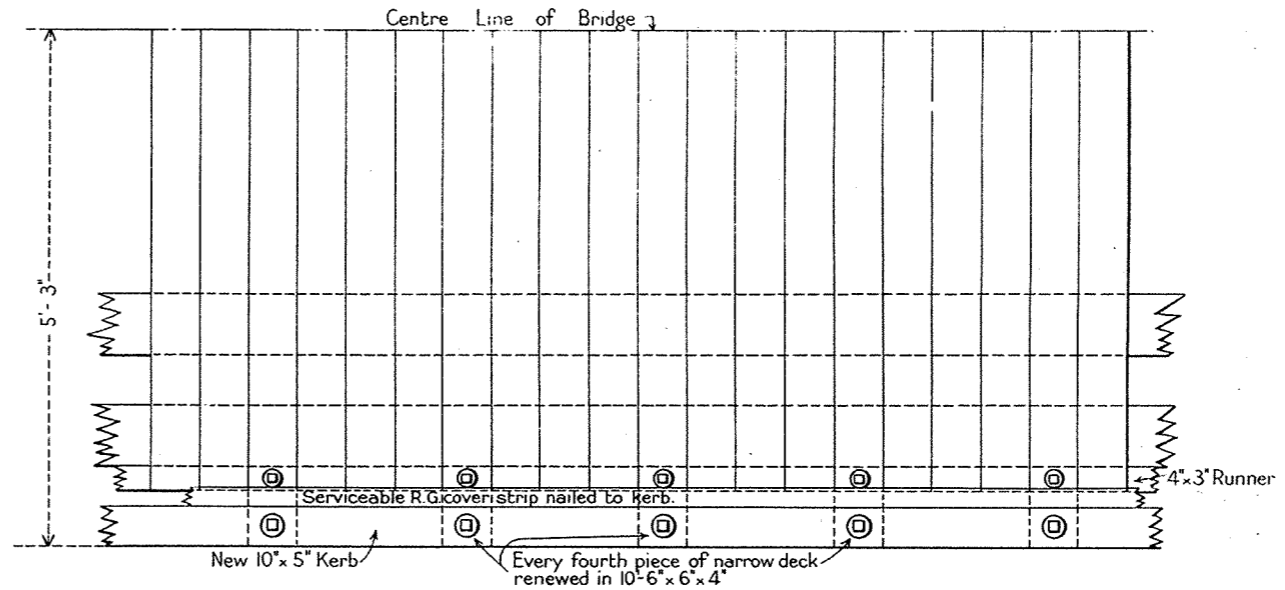
Corners of Concrete above ground to have 1/4" bevel.
 If even bearing on pile stumps cannot be obtained, piles are to be cut off 1 foot below base of concrete.
 Earth foundation under abutment is to be well rammed.
 For details of Angles see Plan No 254/35

This plan supersedes Plan Nos 22/28 & 360/35

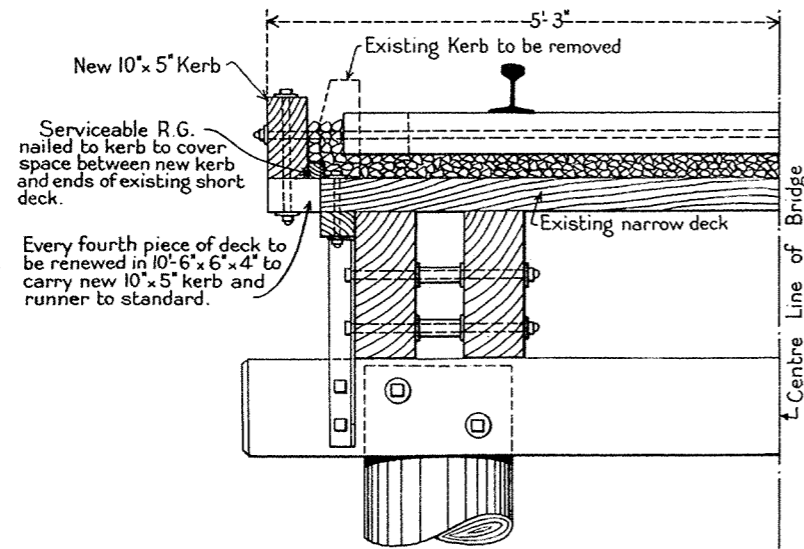
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING CONCRETE ABUTMENT FOR 15.0" OPES TIMBER BRIDGES		<i>W. Brown</i>	1936
		Chief Eng. of Way & Works	
Scales 1/2" and 1/4" = 1'-0"		Drawn by E.J.C.	Checked by A.P.T.
		<i>W. Brown</i>	PLAN No F. 279
		Structure Engineer	



ELEVATION



HALF PLAN

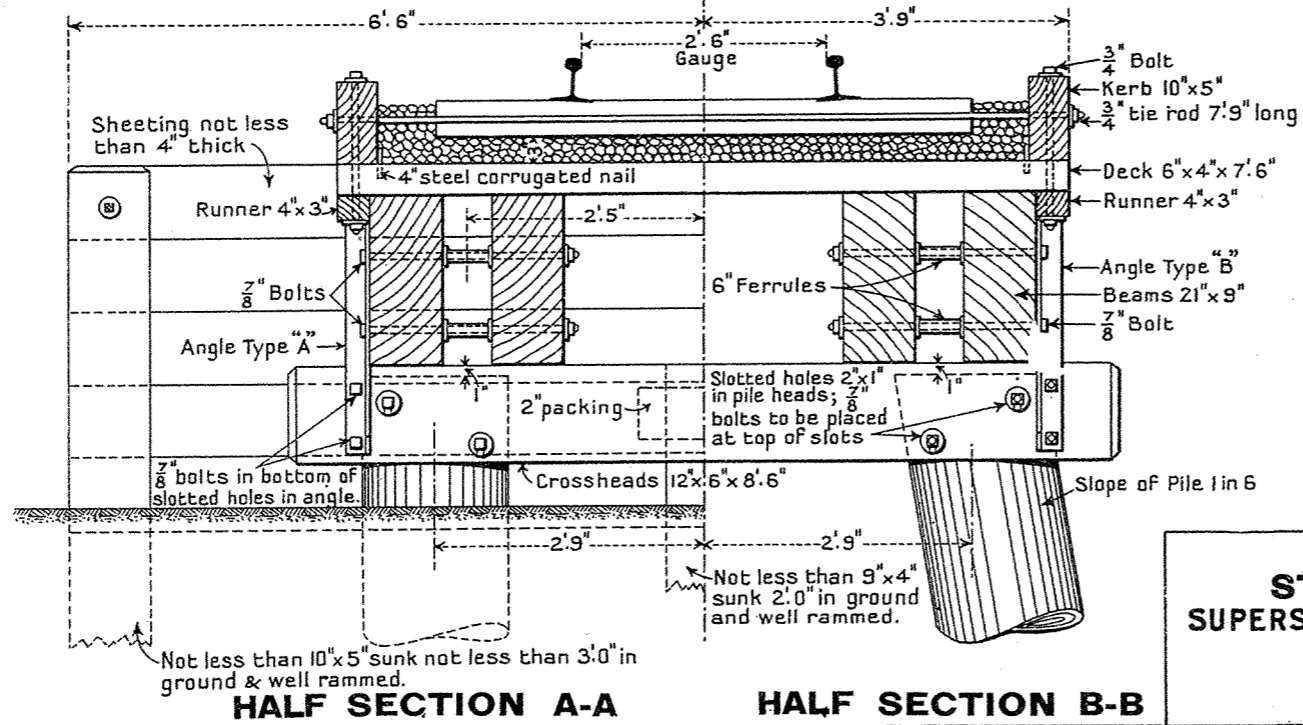
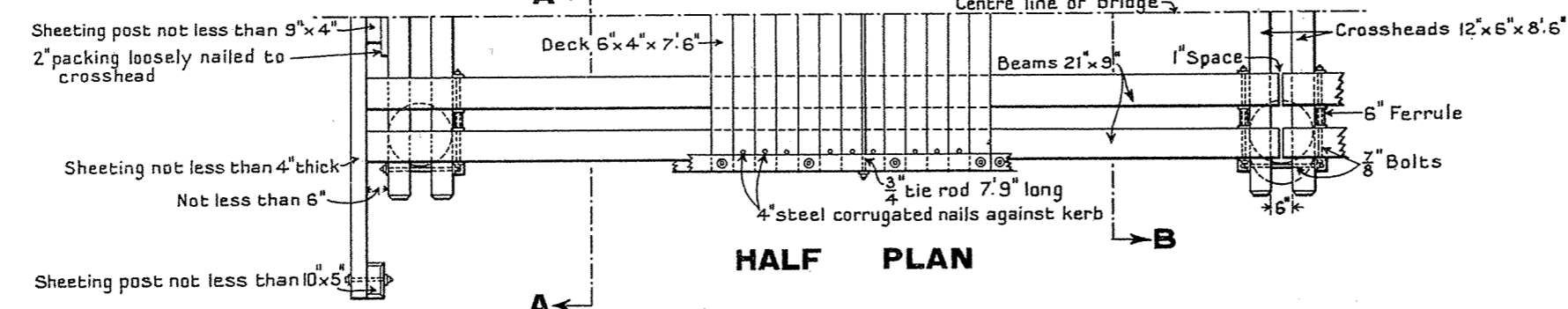
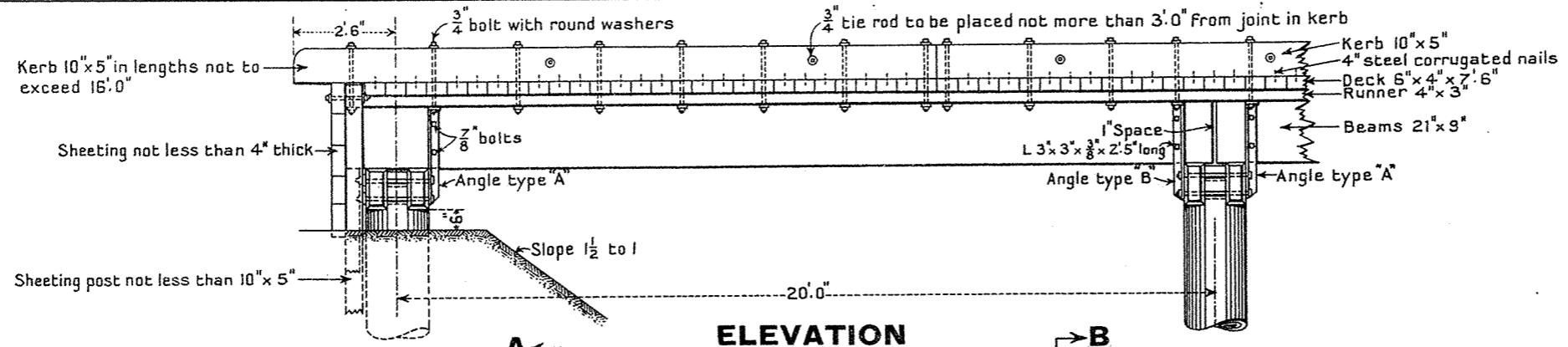


HALF CROSS SECTION

HALF PLAN

This plan supersedes Plan No. 596/35.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING TIMBER BEAM BRIDGES Method of renewing kerb to standard to provide for widening of Deck to 10' 6" SCALE:— $\frac{1}{2}$ " = 1' 0"		Approved <i>J. L. Smith</i> Chief Eng. of Way & Works Nov. 1935 Adopted
Drawn by K. L.	Checked by A. P. T.	PLAN No. F.280
W. Bromby Structure Engineer		



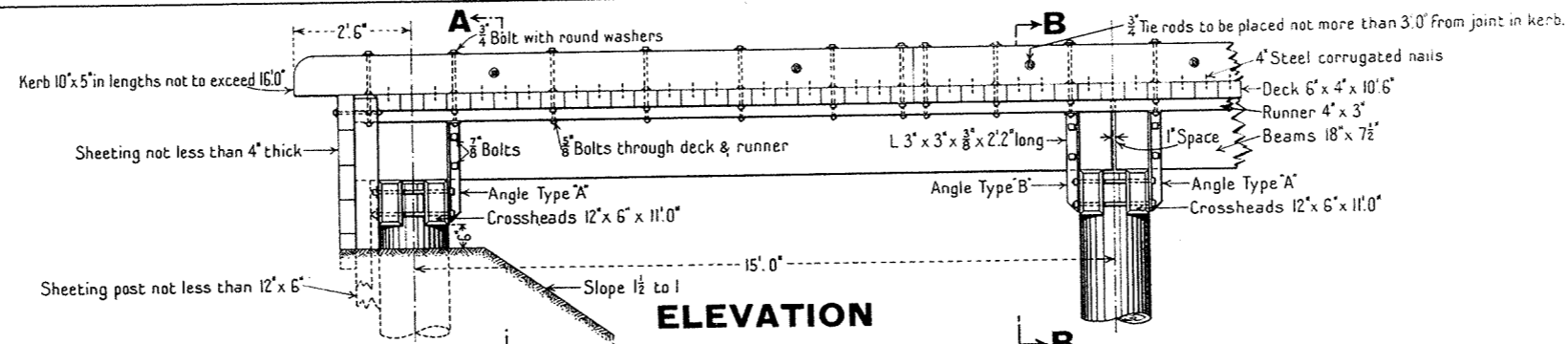
NOTES

Bank at end piers to be made up to 6" below crossheads. For details of angles and Ferrules see plan No. 254/35. Pile cut offs are to be 1" below tops of crossheads. On curves crossheads are to be sloped. The level of the cut off of the pile on the outside of the curve above the level of that of the inside pile to be :-
 For curves of 2-3 chains radius, 3"
 " " over 3-5 " " 2"
 " " " 5 " " 1".

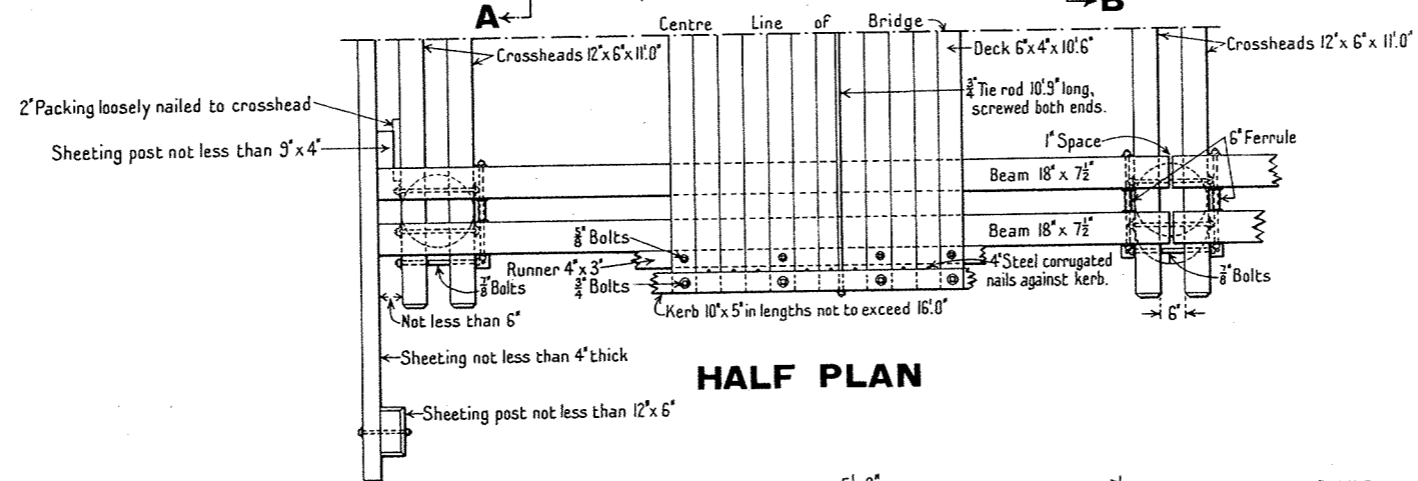
Serviceable material to be used in end sheeting when available. With 4 - pile piers, crossheads are to be 12'0" x 16" x 7".

This plan supersedes Plans 314/27 and 436/35.

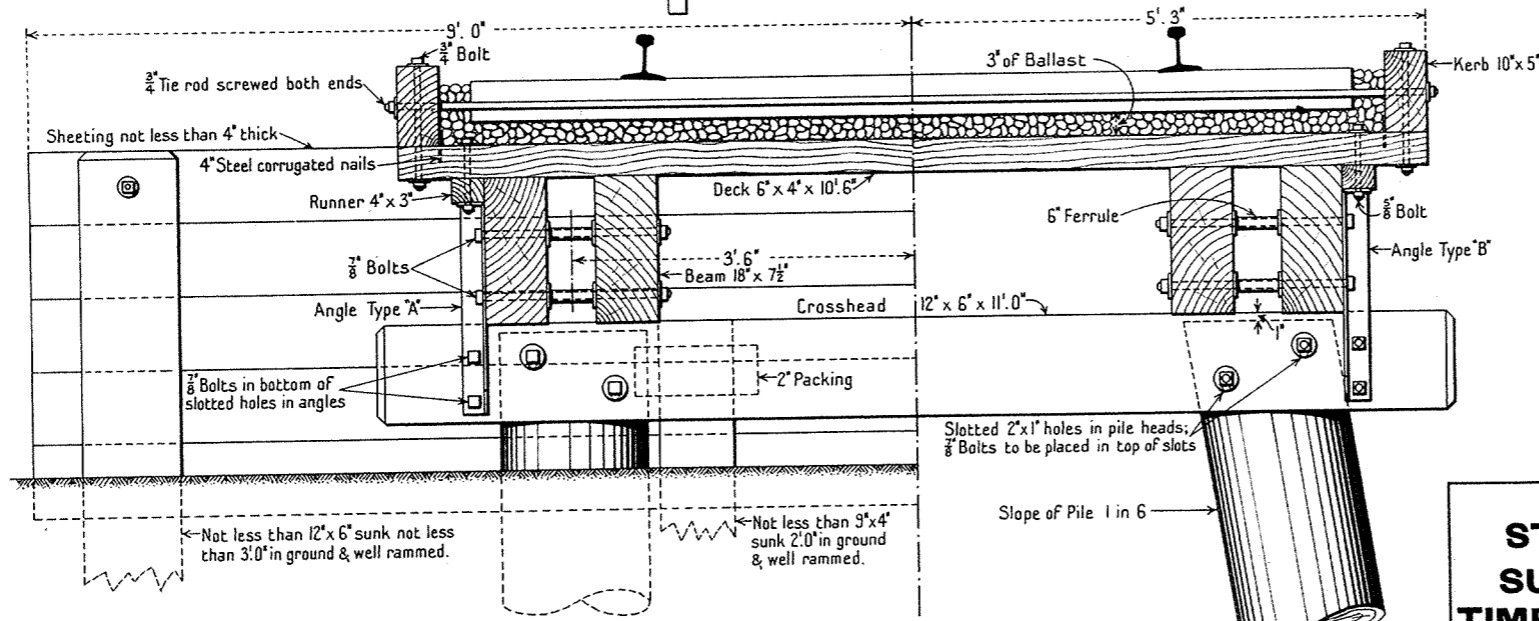
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING SUPERSTRUCTURE OF TIMBER BRIDGES 20'0" OPENINGS NARROW GAUGE SCALES: - 1/4" = 1'0" and 1/2" = 1'0"		<i>W. Schwab</i>	JAN. 1936
		Chief Eng. of Way & Works	PLAN No.
		Drawn by	Checked by
		E.G.D.	A.P.T.
		<i>W. Blomby</i>	F.281
		Structure Engineer	



ELEVATION



HALF PLAN



HALF SECTION A-A

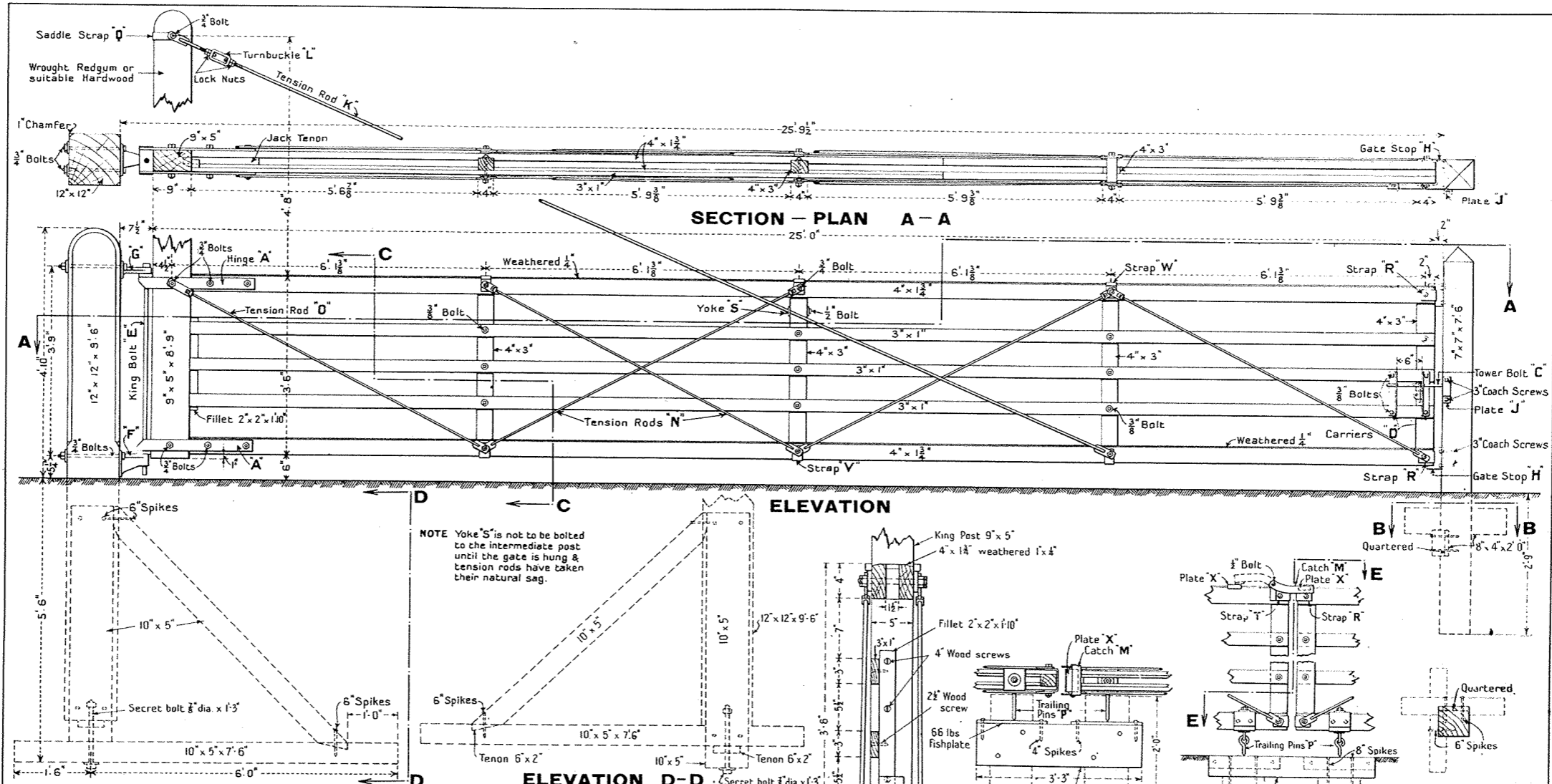
HALF SECTION B-B

NOTES

Bank at end piers to be trimmed to 6" below crossheads.
 Pile cut offs are to be 1' below tops of crossheads.
 On curves of 50 chains radius and under, crossheads are to be sloped, the cut off of the pile on the outside of the curve being 1 1/2" above that of the inside pile.
 Serviceable material to be used in end sheeting when available.
 For details of angles and ferrules see plan 254/35.
 With 4-pile piers, crossheads are to be 16' x 7' x 14'0".

This plan supersedes plans Nos 2646/26 & 316/27

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved <i>V. M. Schwartz</i> Chief Eng. of Way & Works	Adopted JAN. 1936
STANDARD DRAWING		Drawn by V. W. L.	Checked by A. P. T.
SUPERSTRUCTURE OF		PLAN No.	
TIMBER BRIDGES 15'0" OPES		F. 282	
SCALES:— 1/4" = 1'0" & 1/2" = 1'0"		W. Brown Structure Engineer	

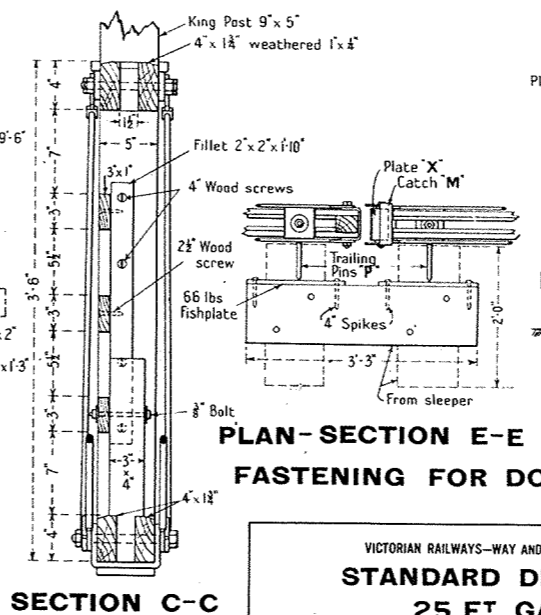
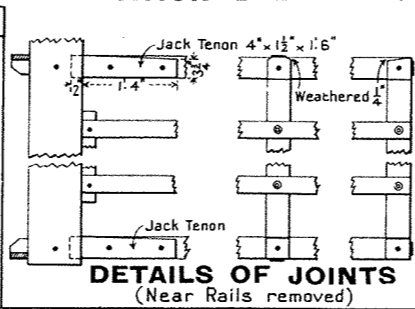


NOTE Yoke 'S' is not to be bolted to the intermediate post until the gate is hung & tension rods have taken their natural sag.

SCHEDULE OF QUANTITIES
 FOR IRONWORK SEE PLANS F284 & F285

Wrought Oregon, 4x12x24' 3, 4 No.; 3x12x24' 3, 3 No.; 4x3x3' 6, 4 No.; 2'x2'x1' 10, 1 No.
 Wrought Redgum or suitable Hardwood, 9'x5'x8' 9, 1 No.; 4'x12'x16' (Jack Tenons), 2 No.
 Sawn Redgum, 12'x12'x9' 6, 1 No.; 7'x7'x7' 6, 1 No.; 10'x5'x7' 6, 2 No.; 10'x5'x6' 8, 1 No.
 10'x5'x6' 3, 1 No.; 8'x4'x2' 0, 2 No.

Trailing Pin Stop, 1 No. 3' 3, 2 No. 2' 0, from Sleepers; Fish Plates 2 No.; Spikes, 4, 4 No.; 8, 4 No.
 Cast Steel Gudgeons, 'F' & 'G', 1 Pair; King Bolt 'E', 1 No.; Hinges 'A', 2 No.;
 Tension Rods, 'O', 2 No. (L=6' 10 8); 'N', 8 No. (L=6' 10 8); 'K', 2 No.; Yoke, 'S', 1 No.;
 Turnbuckles, 'L', 2 No.; Straps, 'Q', 1 No.; 'W', 3 No.; 'V', 3 No.; 'R', 2 No.;
 Tower Bolt, Carriers & Plate, 'C', 'D' & 'J', 1 Set; Gate Stops, 'H', 2 No.;
 Trailing Pins, 'P', 2 Sets; Catch, 'M', 1 No.; Plates, 'X', 2 No.; Strap, 'T', 1 No. (vice 'R').
 Bolts, 1/2 dia. 1 No. 15'; 3/4 dia. 4 No. 15'; 3 No. 9'; 6 No. 8'; 6 No. 7'.
 " 1/2 dia. 1 No. 8'; 1 No. 6'; 3/8 dia. 12 No. 5'; 2 No. 2'; Spikes, 6, 12 No.

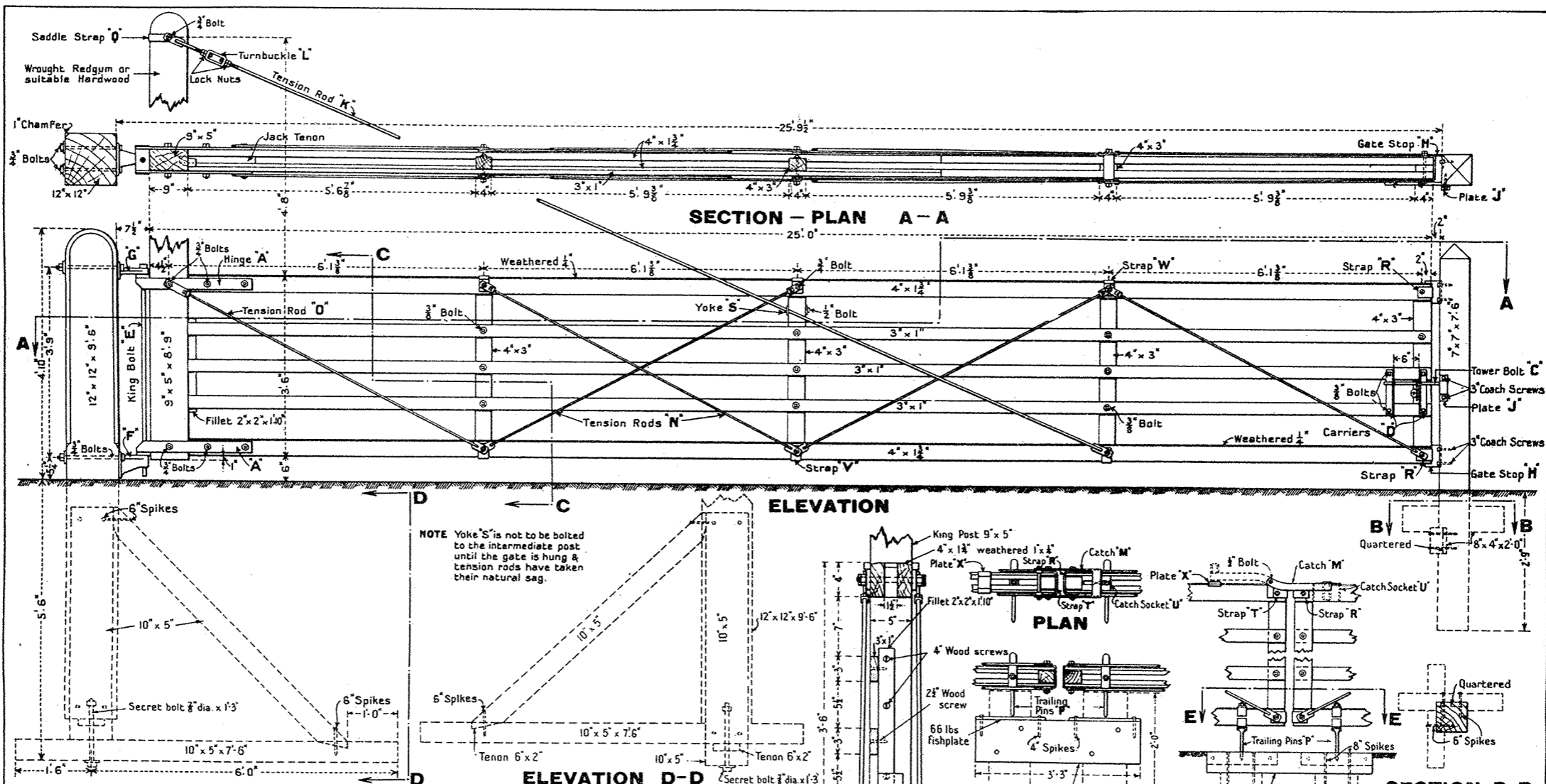


VICTORIAN RAILWAYS-WAY AND WORKS BRANCH

STANDARD DRAWING
25 FT GATE

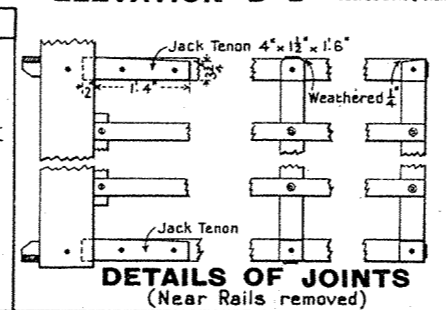
SCALES { 1/4" of an Inch to One Foot

Approved <i>J. M. Schmitt</i> Chief Engineer of Way & Works	Adopted JAN. 1936
Designed by A. A. B.	Checked by R. G. H.
Drawn by H. E. L. G. G.	PLAN No. F283
Structure Engineer	



SCHEDULE OF QUANTITIES
FOR IRONWORK SEE PLANS F284 & F285

Wrought Oregon, 4" x 12" x 24' 3", 4 N^o - 3" x 1" x 24' 3", 3 N^o - 4" x 3" x 3' 6", 4 N^o - 2" x 2" x 1' 10", 1 N^o.
Wrought Redgum or suitable Hardwood, 9" x 5" x 8' 9", 1 N^o - 4" x 12" x 1' 6" (Jack Tenons), 2 N^o.
Sawn Redgum 12" x 12" x 9' 6", 1 N^o - 7' x 7' 6", 1 N^o - 10' x 5' x 7' 6", 2 N^o - 10' x 5' x 6' 8", 1 N^o - 10' x 5' x 6' 3", 1 N^o - 8' x 4' x 2' 0", 2 N^o.
Cast Steel Gudgeons, F & G, 1 Pair - King Bolt 'E', 1 N^o - Hinges 'A', 2 N^o - Tension Rods 'O', 2 N^o (L-6-10) -
'M', 8 N^o (L-6-10) - 'K', 2 N^o - Yoke 'S', 1 N^o - Turnbuckles 'L', 2 N^o - Straps 'Q', 1 N^o - 'W', 3 N^o - 'V', 3 N^o -
'R', 2 N^o - Tower Bolt, Carriers & Plate, 'C', 'D', 'J', 1 Set - Gate Stops 'H', 2 N^o - Bolts 3/8" dia, 1 N^o 15' -
3/8" dia, 4 N^o 15' - 3 N^o 9' - 6 N^o 8' - 6 N^o 7' - 3/8" dia, 1 N^o 6' - 3/8" dia, 12 N^o 5' - 2 N^o 2' - Spikes, 6', 12 N^o.
For Double Gates omit Strap 'R', 1 N^o - Carriers, Tower Bolt & Plate 'C', 'D', 'J' - Gate Stops 'H'
2 N^o - and include Strap 'T', 1 N^o - Catch 'M', 1 N^o - Catch Socket 'U', 1 N^o - Plate 'X', 1 N^o -
Trailing Pins 'P', 2 Sets - Trailing Pin Stop, 1 N^o 3' 3" - 2 N^o 2' 0", From Sleepers - Fish Plates, 2 N^o -
Spikes, 4', 4 N^o - 8', 4 N^o - Bolt, 3/8" dia, 1 N^o 8'.



SECTION E-E ELEVATION

FASTENING FOR DOUBLE GATES

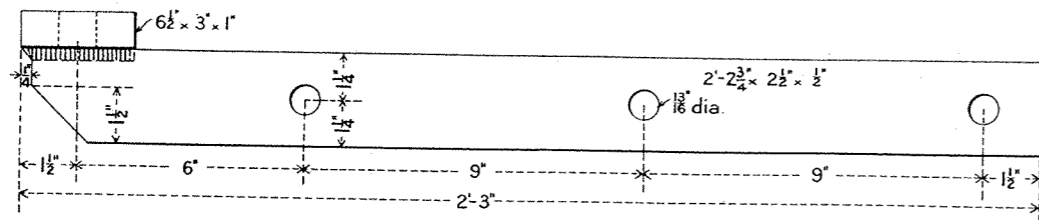
This plan supersedes plan N^o F283

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH

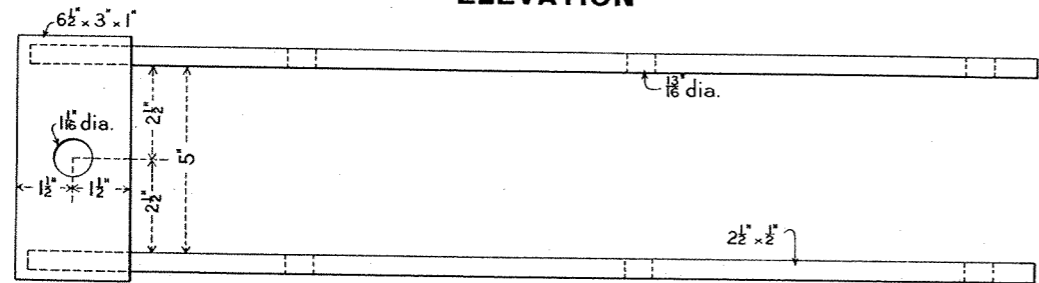
STANDARD DRAWING
25 FT GATE

SCALES { 3/4 of an Inch to One Foot

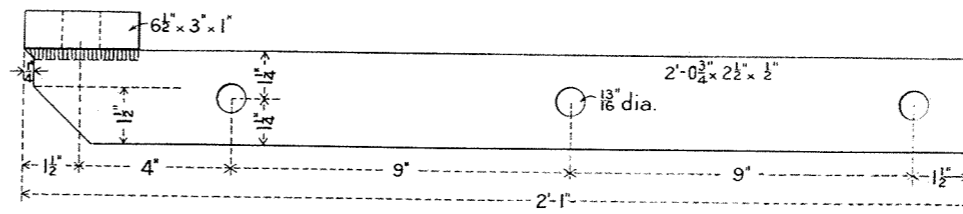
Designed by A. A. B.	Drawn by Y. M.	Checked by R. G. H.	Approved <i>M. J. ...</i> Chief Engineer of Way & Works	Adopted JAN. 1938
Structure Engineer			PLAN No. F 283A	



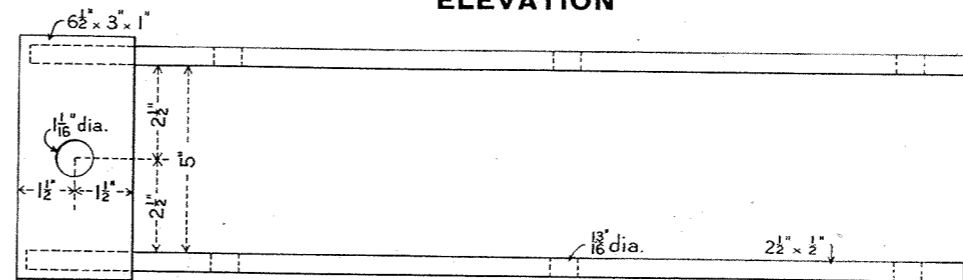
ELEVATION



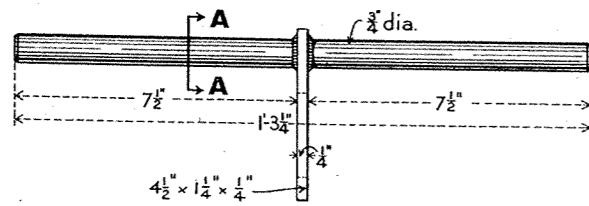
PLAN
HINGE 'A'



ELEVATION

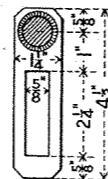


PLAN
HINGE 'B'

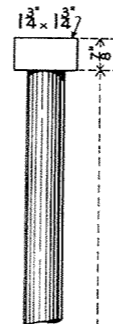


ELEVATION

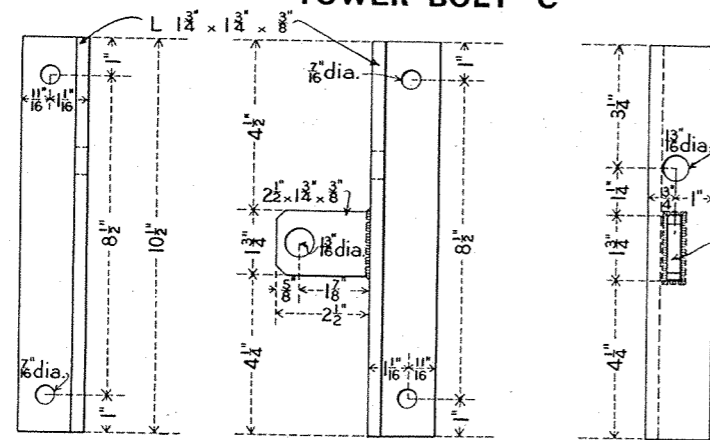
TOWER BOLT 'C'



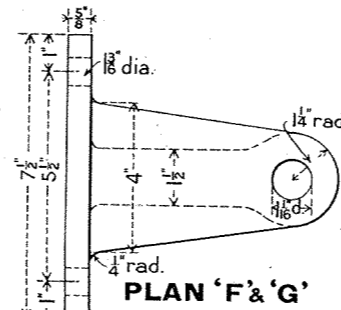
SECTION A-A



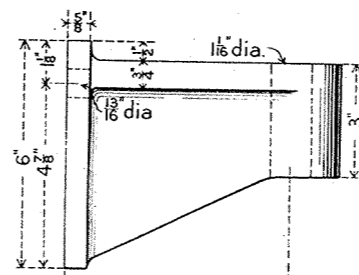
KING BOLT 'E'



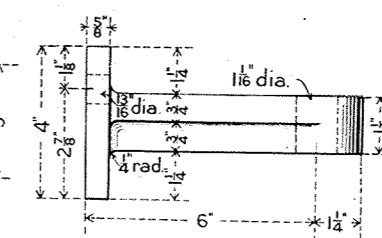
CARRIERS 'D'



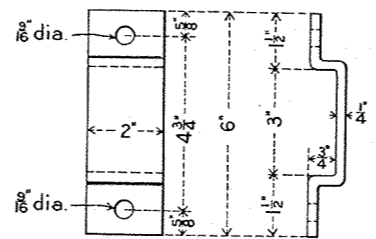
PLAN 'F & G'



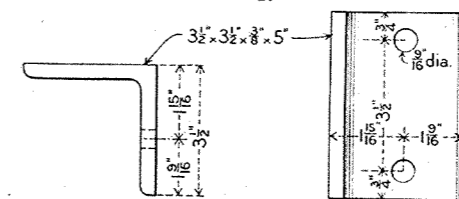
ELEVATION 'F'
CAST STEEL GUDGEONS 'F & G'



ELEVATION 'G'



ELEVATION
SECTION
PLATE 'J'

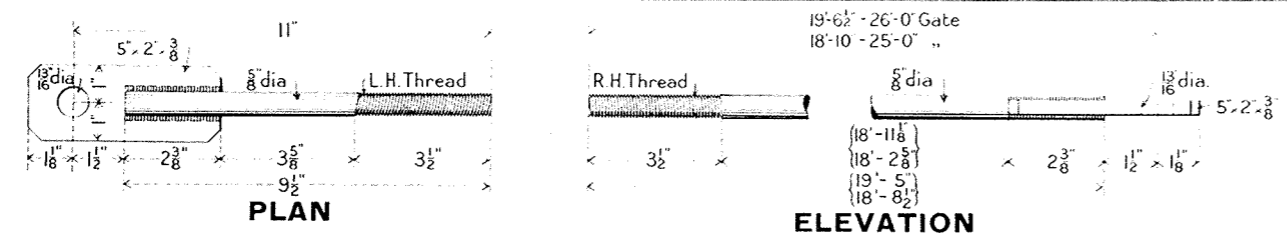


PLAN

ELEVATION

GATE STOP 'H'

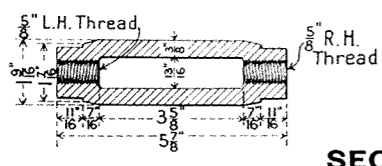
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>J.M. Schwartz</i>	JAN. 1936
IRONWORK FOR		Chief Engineer of Way & Works.	
15 FT, 18 FT 6 IN, 22 FT 6 IN, 25 FT & 26 FT GATES.		Designed by	Checked by
NO SCALE		A.A.B.	K.F.L. R.G.H.
SHEET NO 1.			
		<i>MB</i>	PLAN No.
		Structure Engineer	F284



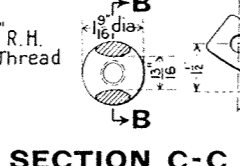
PLAN

ELEVATION

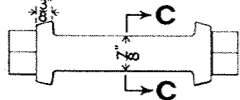
TENSION ROD 'K'



SECTION B-B



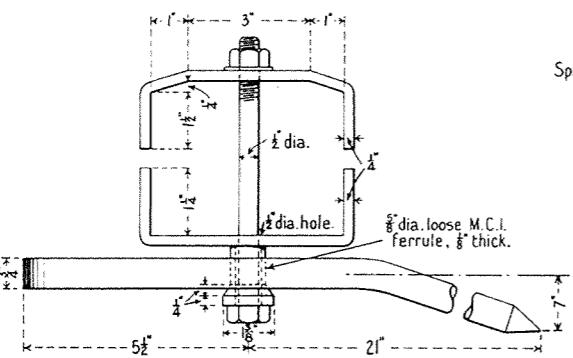
SECTION C-C



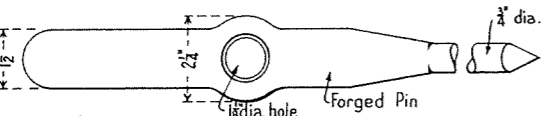
PLAN

ELEVATION

TURNBUCKLE 'L'

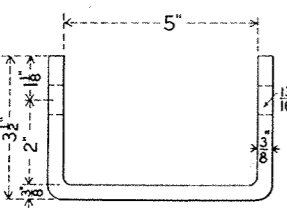


ELEVATION

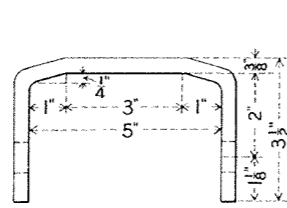


PLAN (From underside)

TRAILING PIN 'P'

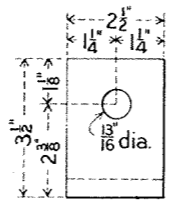


SECTION 'V'

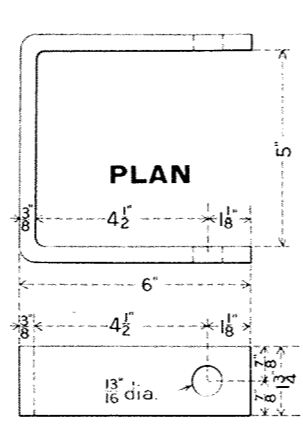


SECTION 'W'

SADDLE STRAPS 'V' & 'W'



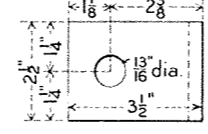
ELEVATION



PLAN

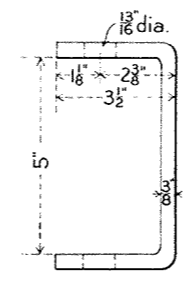
ELEVATION

SADDLE STRAP 'Q'



ELEVATION

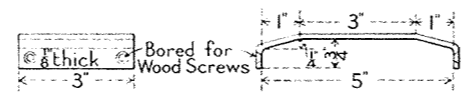
STYLE STRAP 'R'



PLAN

ELEVATION

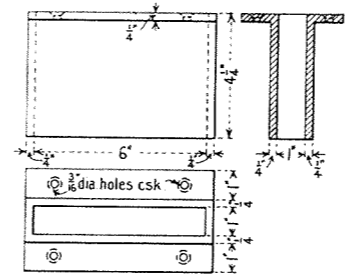
STYLE STRAP 'R'



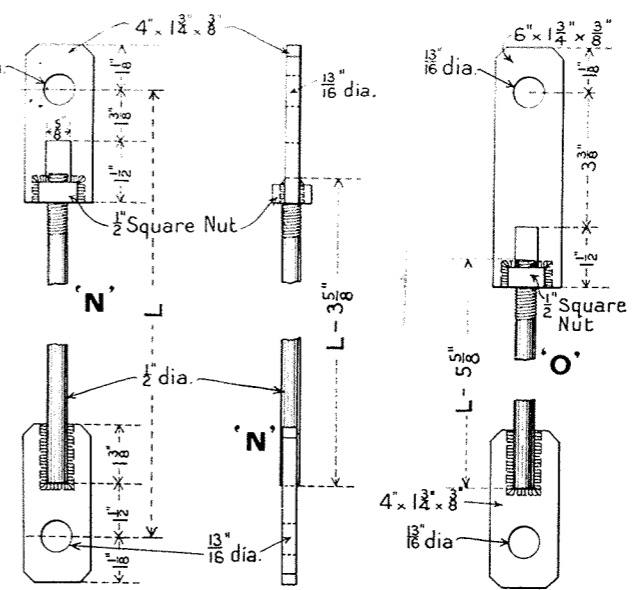
ELEVATION

SECTION

SHIELD PLATE 'X'

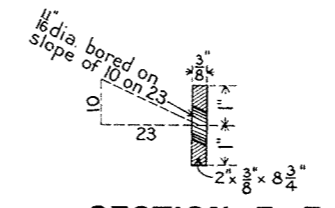


CATCH SOCKET 'U'



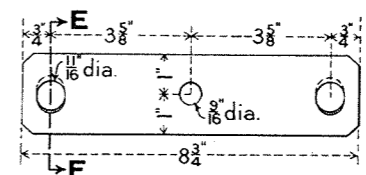
PLAN ELEVATION

TENSION RODS 'N' & 'O'



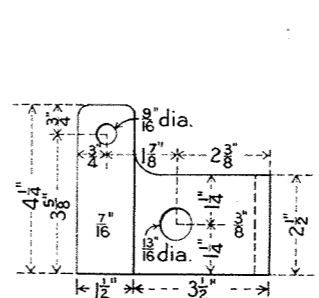
SECTION E-E

YOKE 'S'



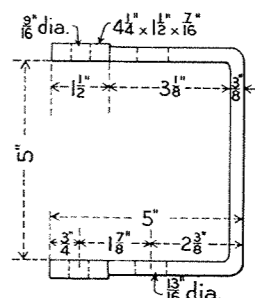
ELEVATION

YOKE 'S'



ELEVATION

STYLE STRAP 'T'

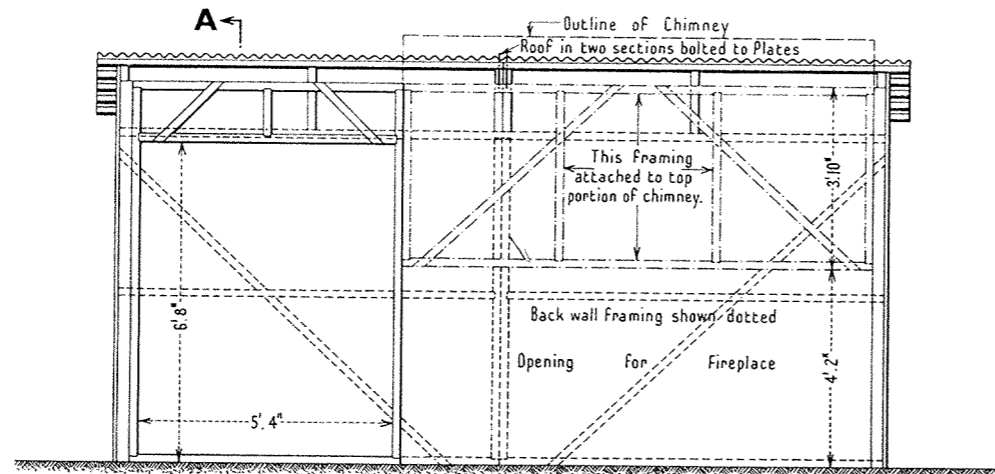


PLAN

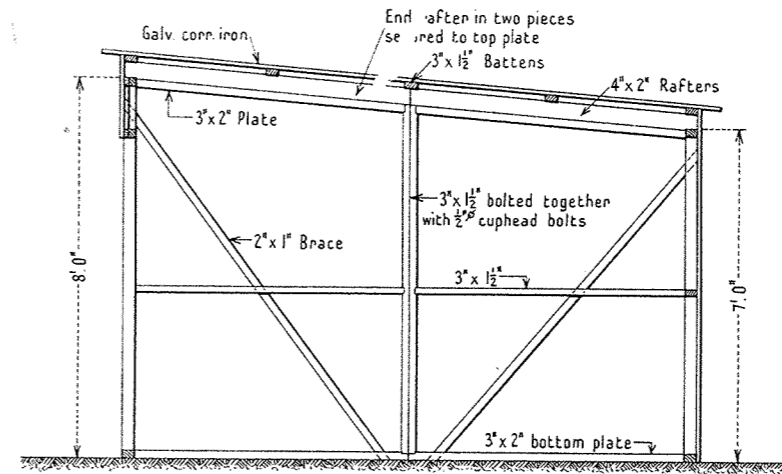
STYLE STRAP 'T'

This plan supersedes plan N° F285.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M. Schwartz</i>	JAN. 1936
IRONWORK FOR		Chief Engineer of Way & Works	
15 FT., 18 FT. 6 IN., 22 FT. 6 IN., 25 FT. & 26 FT. GATES		Designed by	Checked by
NO SCALE		A. A. B.	K. F. L.
SHEET N° 2.			R. G. H.
		113	PLAN No.
		Structure Engineer	F285A



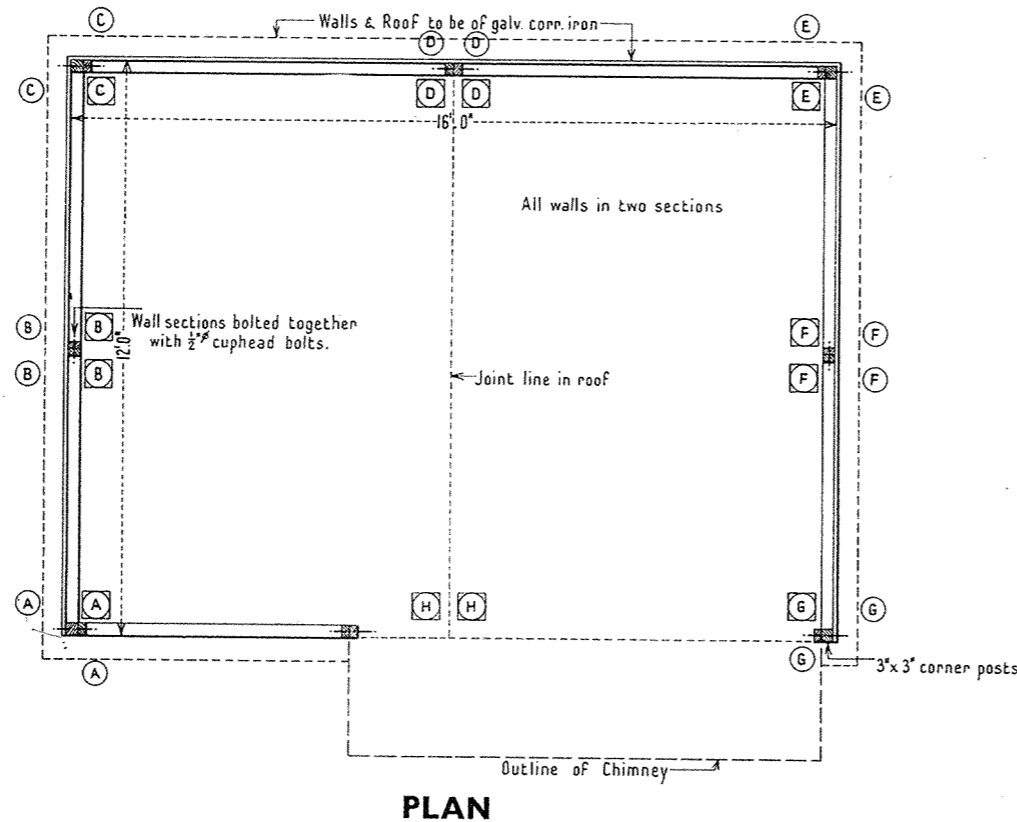
FRONT ELEVATION



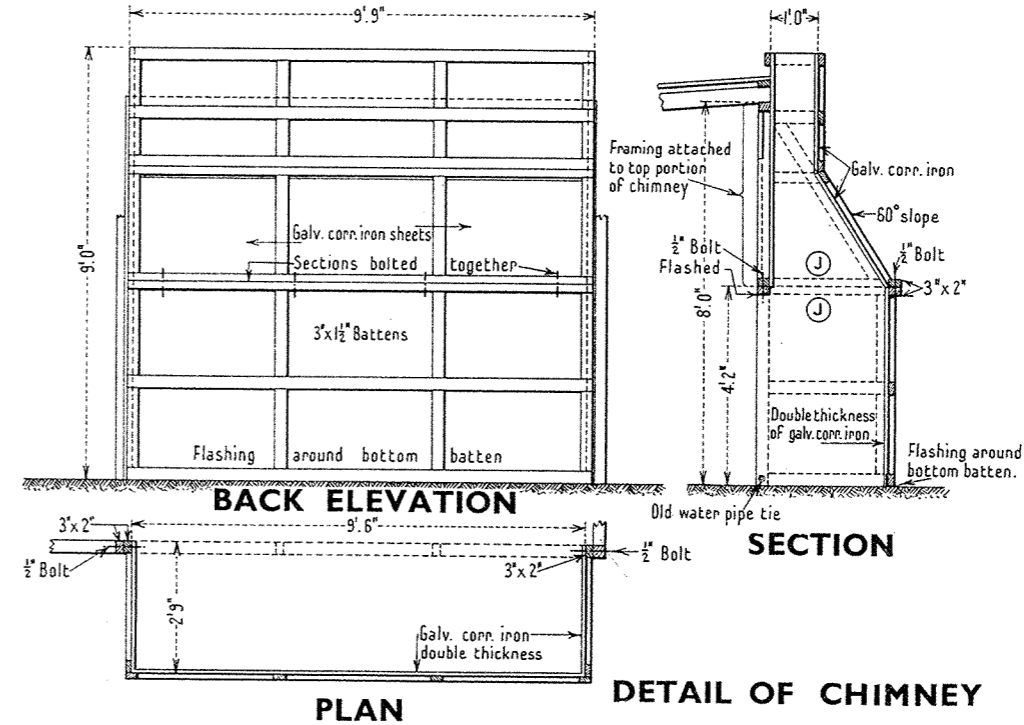
SECTION A-A

NOTE:-

Opening to face East or North East
Letters shown thus (A) are to be painted in positions shown on walls.
Letters shown thus (A) are to be painted on underside of roof to facilitate assembly on site.



PLAN



BACK ELEVATION

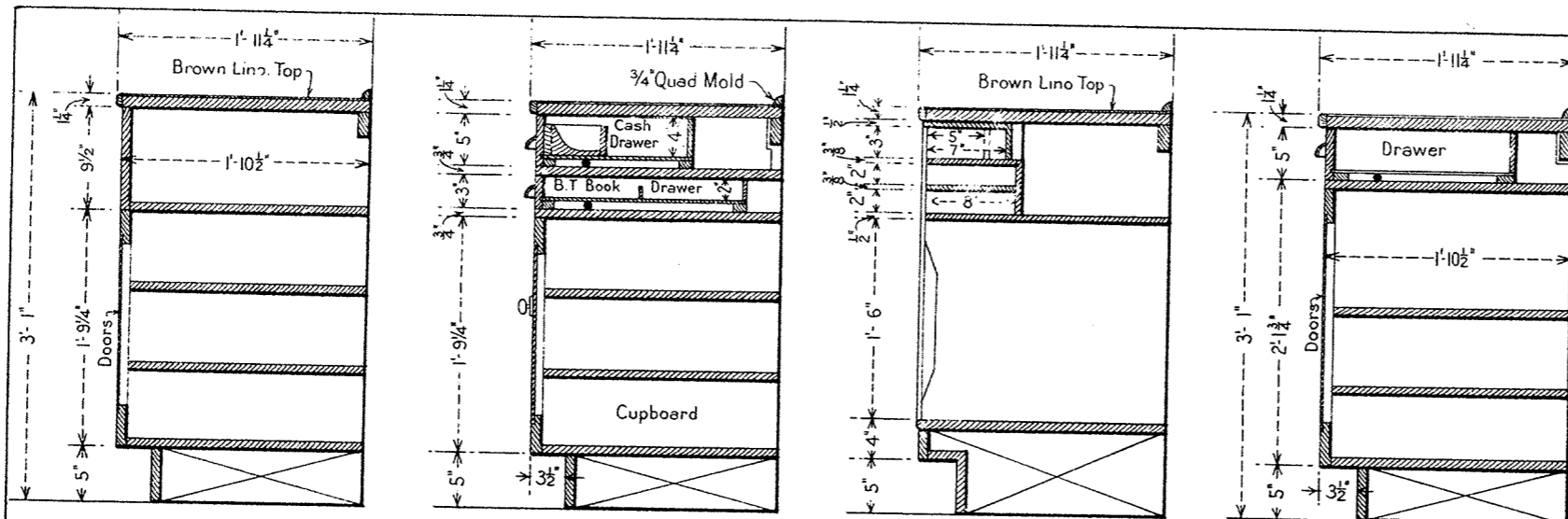
SECTION

PLAN

DETAIL OF CHIMNEY

This plan supersedes plan No 196-36

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	OCT. 1942
PORTABLE SHELTER		Chief Civil Engineer	
FOR PERMIT WAY GANGS ETC.		Drawn by V.W.L.	Checked by E.A.E.
SCALE:- 1/4" = 1'0"		<i>[Signature]</i>	PLAN No. F286
		Chief Architect.	

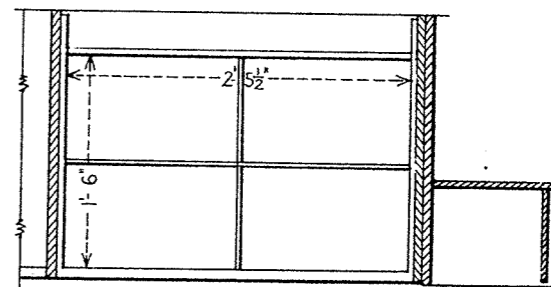


SECTION A-A

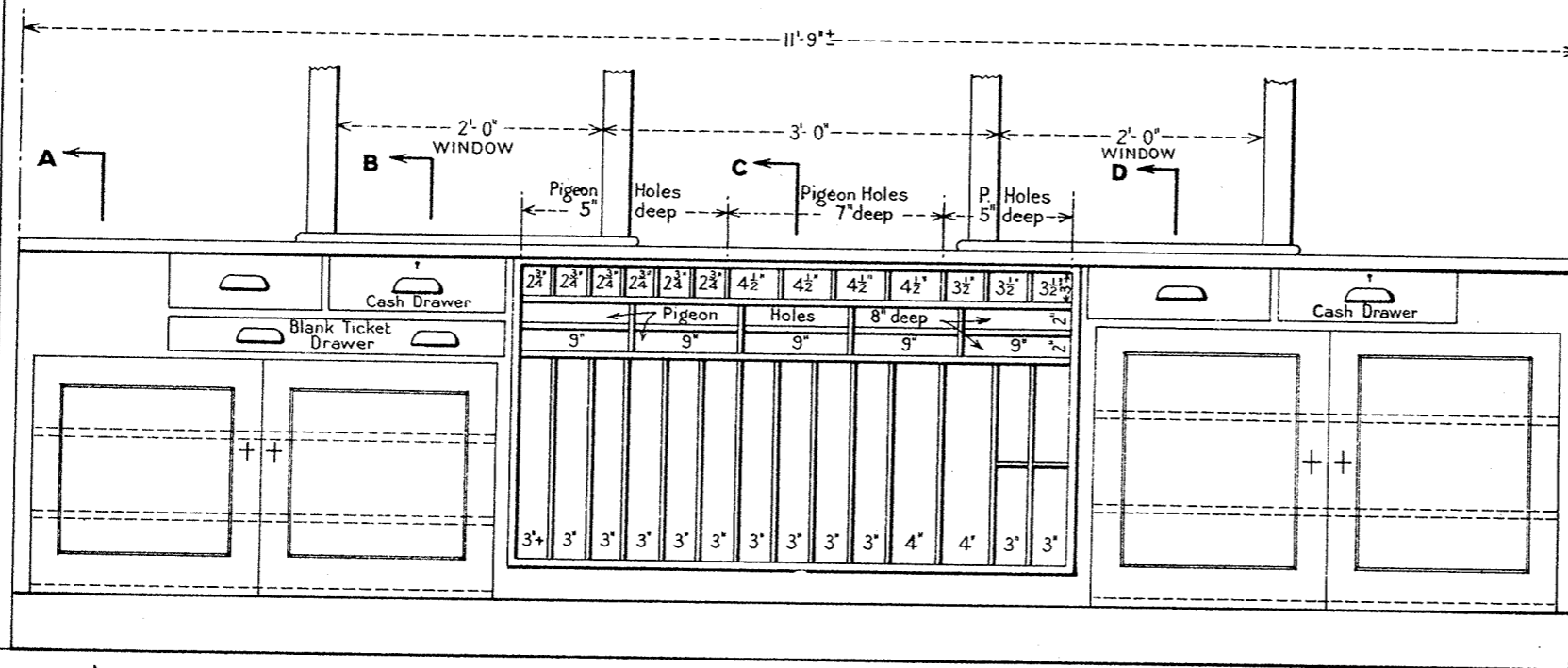
SECTION B-B

SECTION C-C

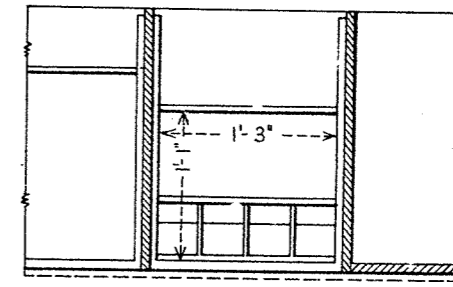
SECTION D-D



PLAN
DRAWER FOR BLANK TICKET BOOKS



ELEVATION



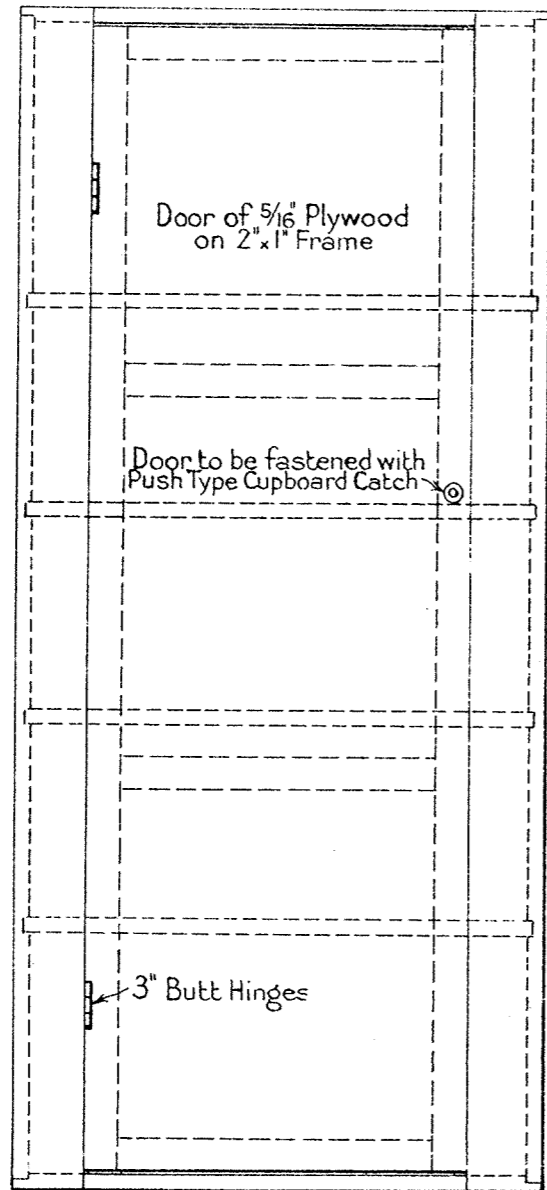
PLAN
CASH DRAWER

This drawing supersedes Plan No. 455-42.

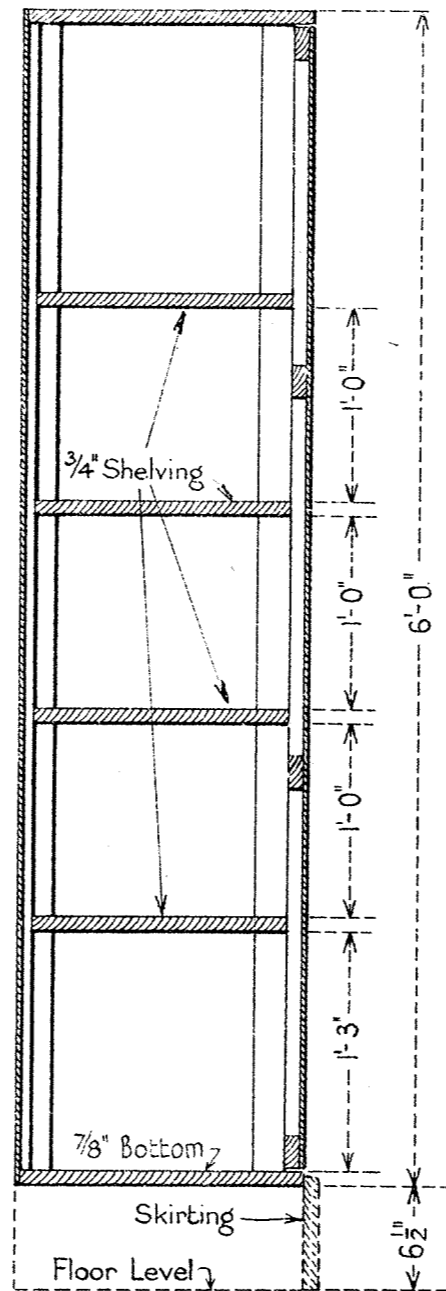
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
SUBURBAN STATION OFFICE
BOOKING COUNTER FITTINGS

Approved
[Signature]
 Chief Civil Engineer
 Drawn by K.F.L. | Checked by *[Signature]*
R.S. May
 Chief Architect

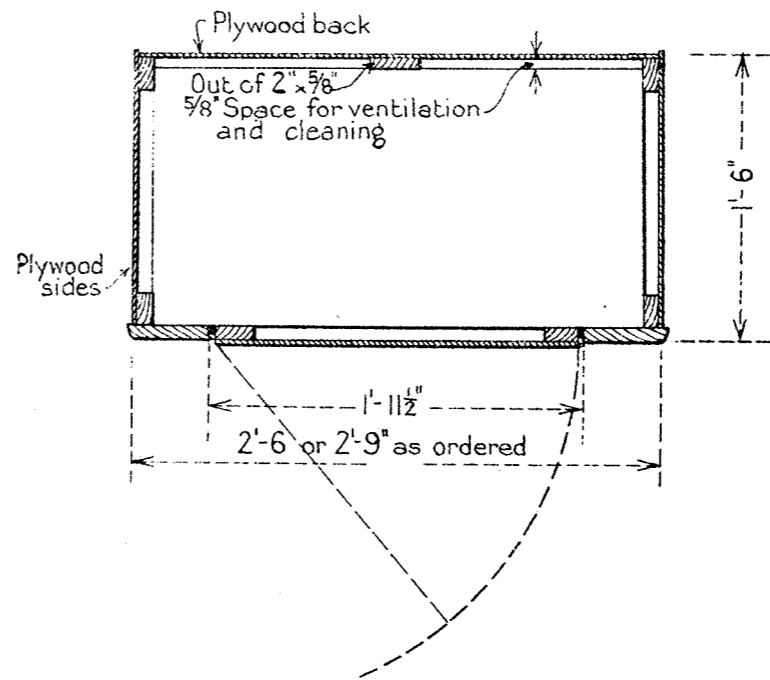
Adopted
 SEPT. 1942
 PLAN NO
F 287



ELEVATION



SECTION



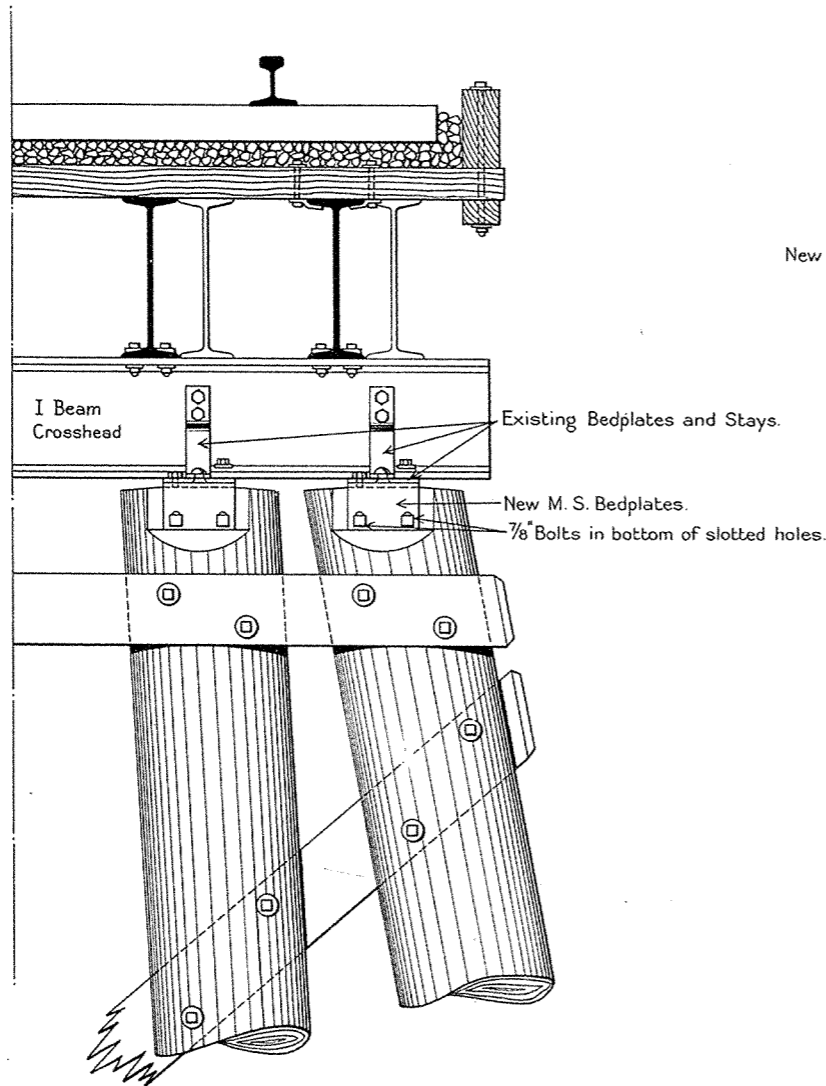
PLAN

NOTES

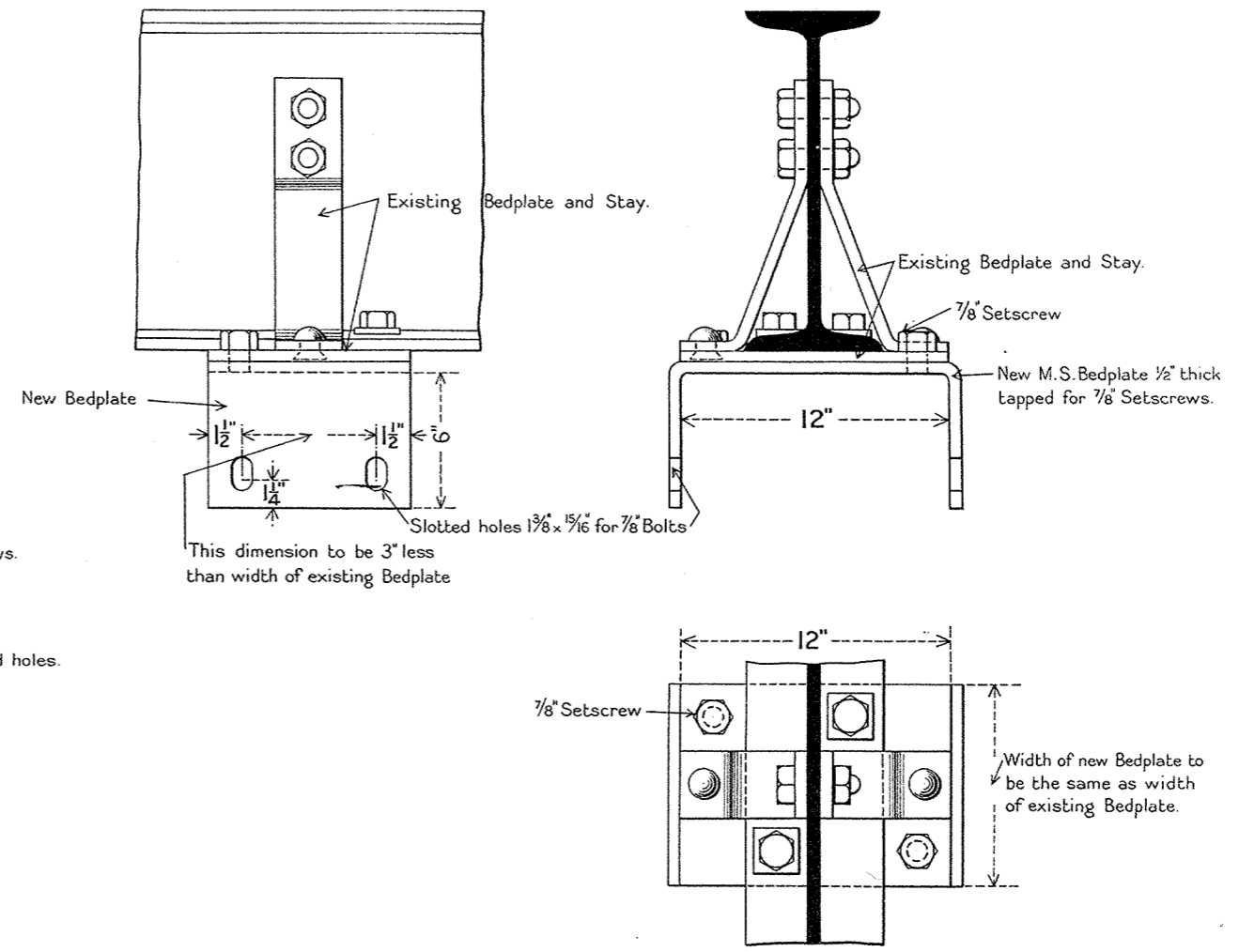
Cupboard to be prepared for paint finish.
Cupboards to be fitted as shown in Plans Nos. 466-40, 471-40, 513-40 & 528-40.

This drawing supersedes Plan No. 548-40.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING CUPBOARDS FOR DEPARTMENTAL RESIDENCES		<i>M</i> Chief Civil Engineer	Oct. 1942
		Drawn by K.F.L.	Checked by L.E.M.
Scale 1" = 1'-0"		<i>H. Sutcliffe</i> Chief Architect.	PLAN No. F 288



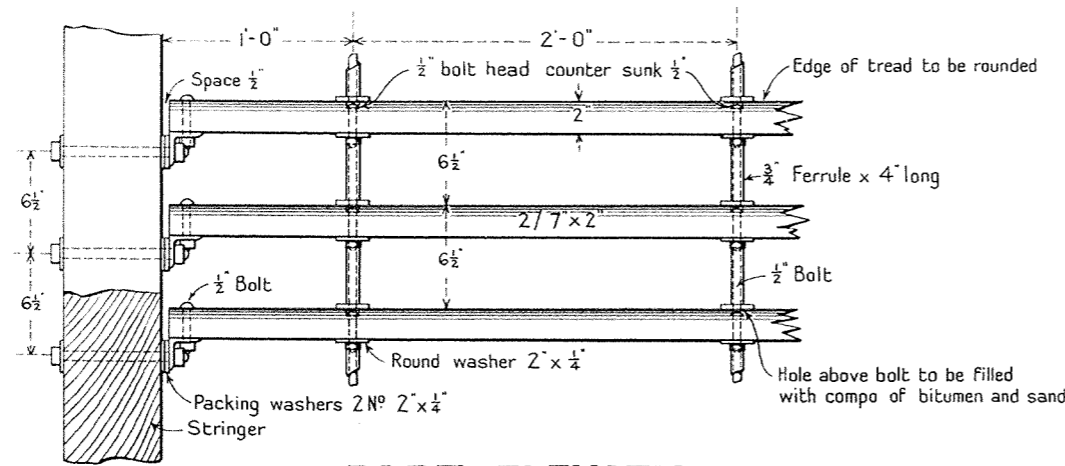
HALF CROSS SECTION



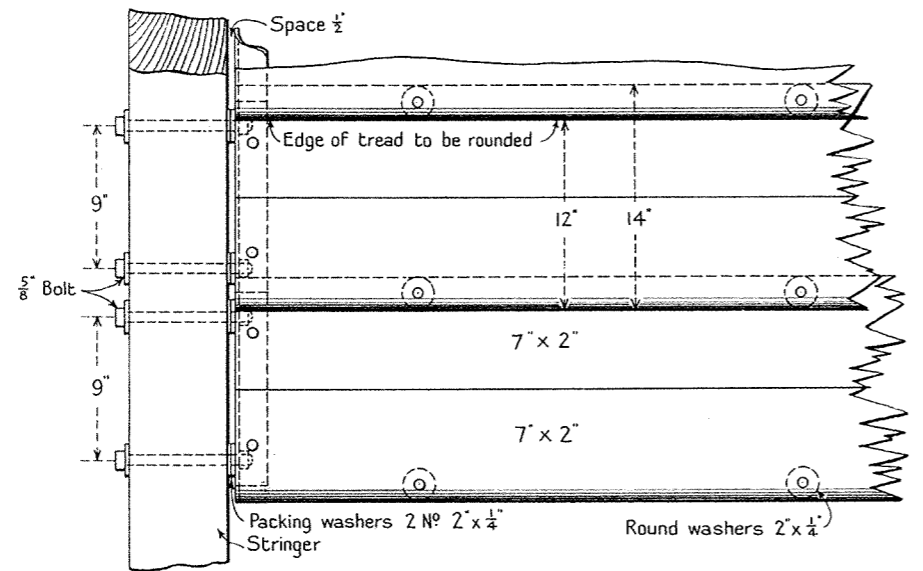
DETAILS OF BEDPLATES, STAYS, ETC.

Note:- This plan supersedes plan No.80/28.

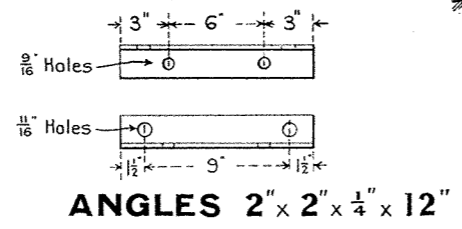
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING ALTERATION TO EXISTING BEDPLATES FOR 'I' BEAM BRIDGES		<i>J. L. S. Swarth</i> Chief Eng of Way & Works	MAR. 1936
		Drawn by K. L.	Checked by A. P. T.
SCALES 1/2" and 1 1/2" = 1.0"		<i>W. Bromby</i> Structure Engineer	PLAN No. F. 289



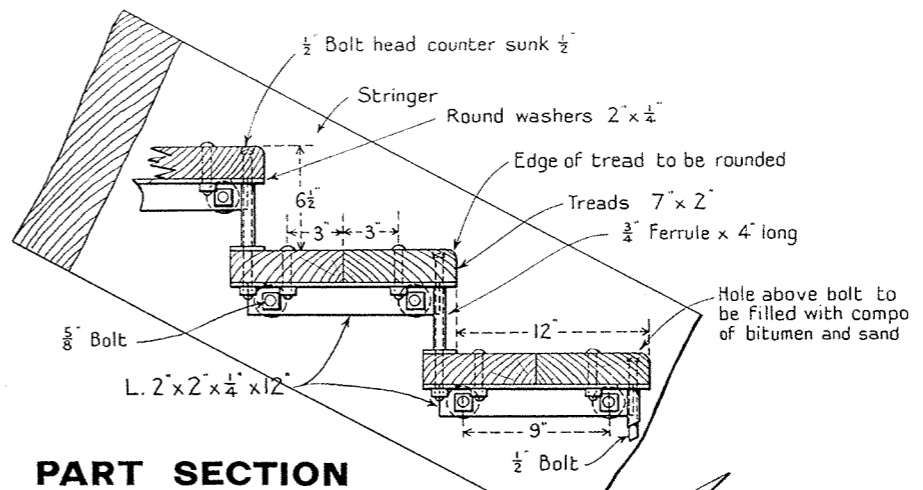
PART ELEVATION



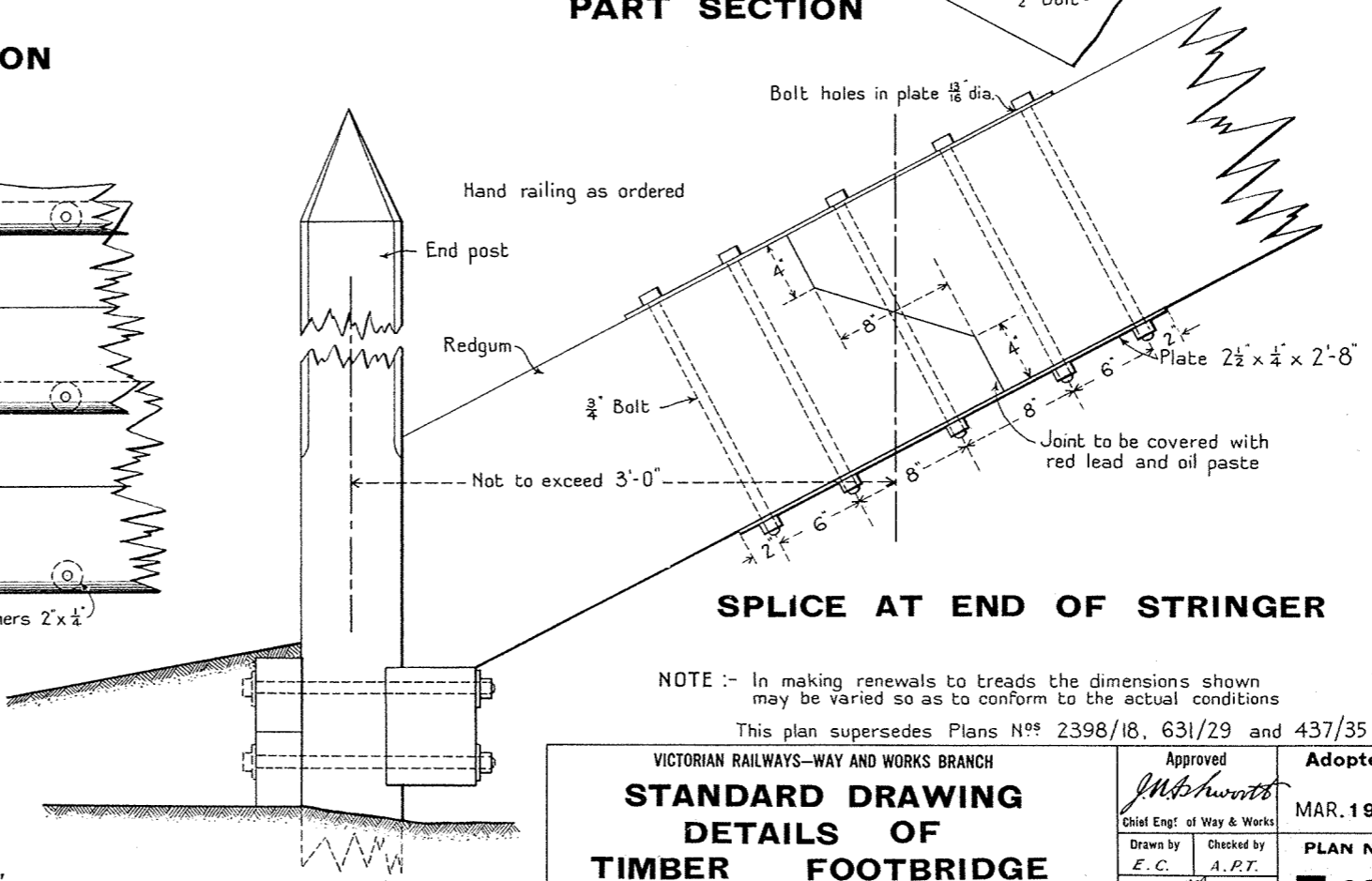
PART PLAN



ANGLES 2" x 2" x 1/4" x 12"



PART SECTION

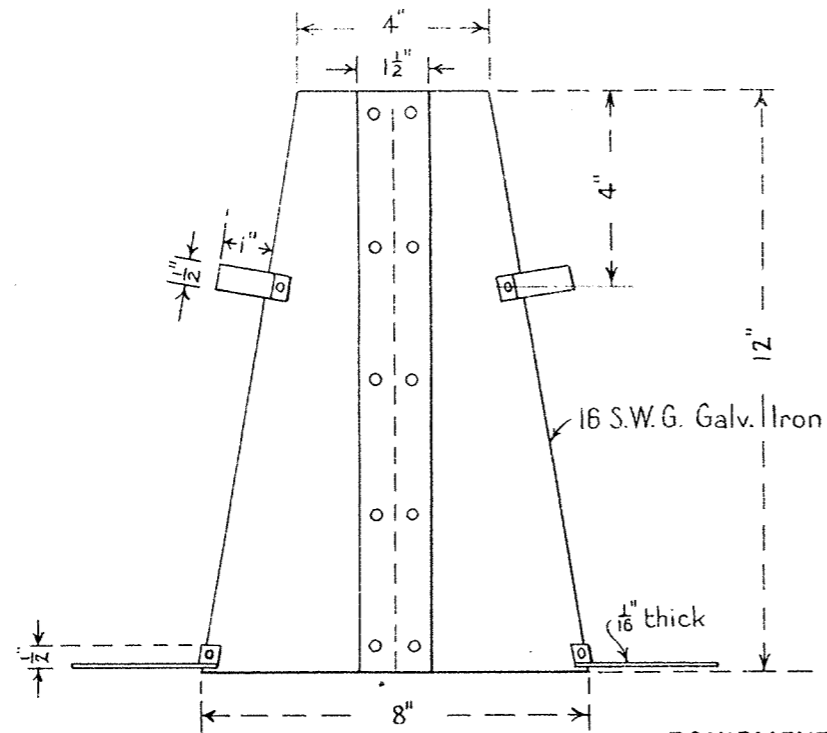


SPLICE AT END OF STRINGER

NOTE :- In making renewals to treads the dimensions shown may be varied so as to conform to the actual conditions

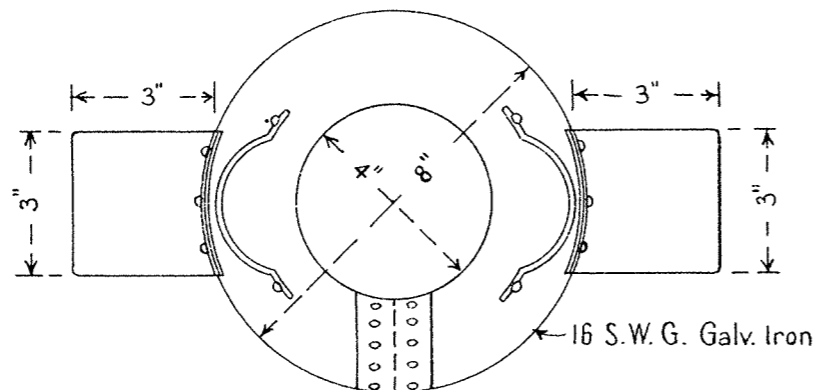
This plan supersedes Plans Nos 2398/18, 631/29 and 437/35

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING DETAILS OF TIMBER FOOTBRIDGE		<i>J.M. Schwartz</i>	MAR. 1936
		Chief Eng ^r of Way & Works	PLAN No.
SCALE 1" = 1'-0"		Drawn by E.C.	Checked by A.P.T.
		118 Structure Engineer	F 290



ELEVATION

NOTE: All rivets to be countersunk on inside of cone.

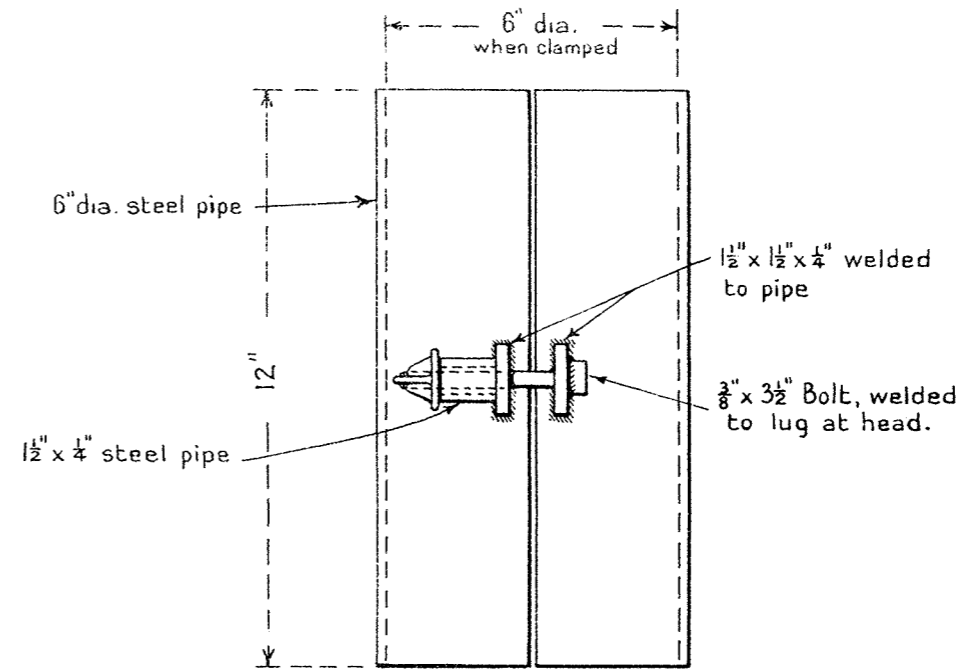


PLAN

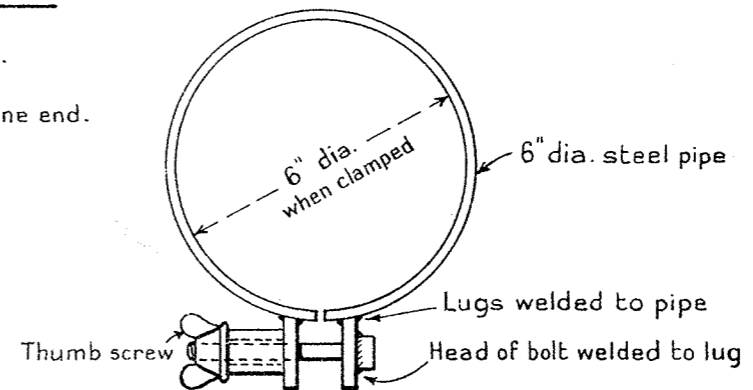
MOULD FOR SLUMP TESTS

EQUIPMENT REQUIRED FOR CONCRETE TESTS

- 1 N° 16 S.W.G. Galv. Iron Mould for Slump Tests.
- 2 " 6" dia. Steel Pipe Moulds for Compression Tests.
- 4 " 10"x10" Planed Mild Steel Plates " " "
- 1 " 5/8" dia. Metal Rod 24" long, bullet pointed at one end.



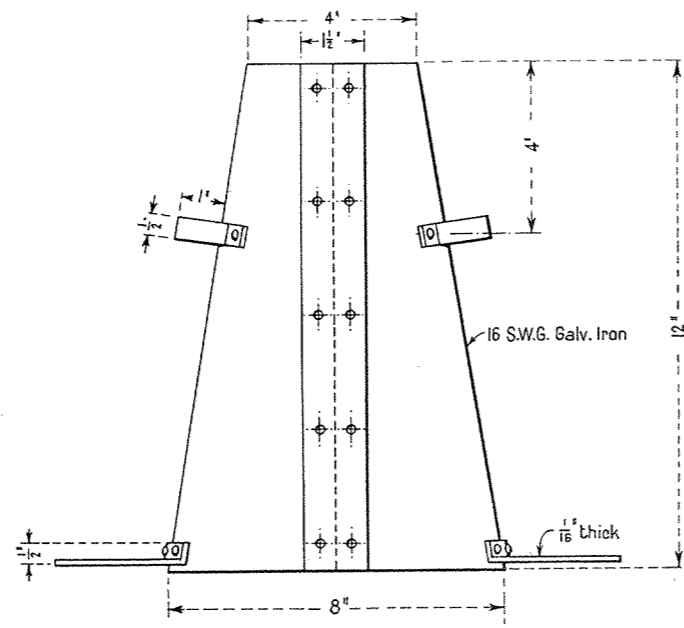
ELEVATION



PLAN

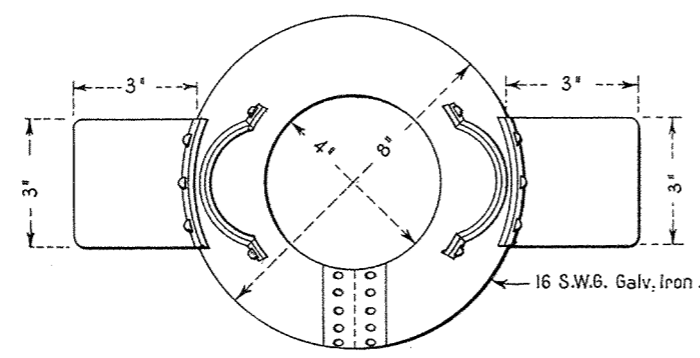
MOULDS FOR COMPRESSION TESTS

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M. Schwartz</i>	APR. 1937
MOULDS FOR		Chief Eng. of Way & Works	
CONCRETE TESTS		Drawn by V. M.	Checked by A. P. T.
SCALE - 3/16" = 1 FT		<i>W. Bromby</i>	PLAN No
		Structure Engineer	F. 291

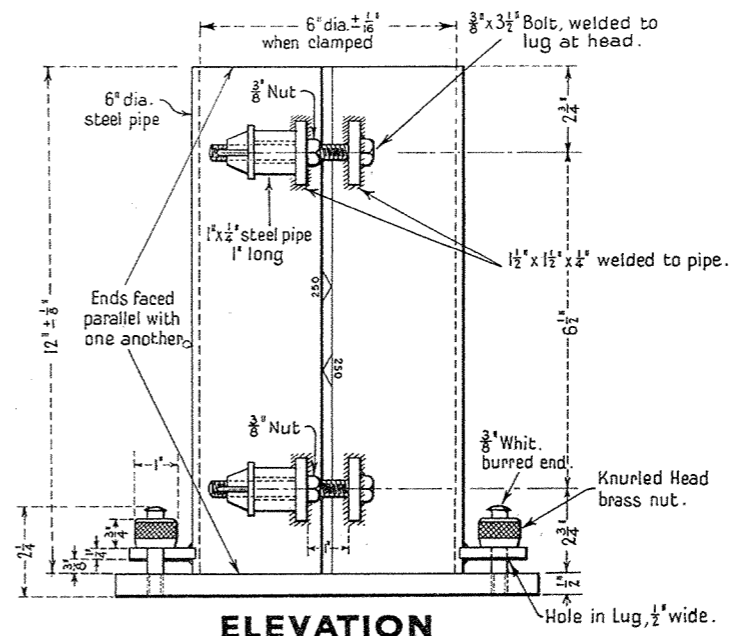


ELEVATION

NOTE :- All rivets to be countersunk on inside of cone.



**PLAN
MOULD FOR SLUMP TESTS**



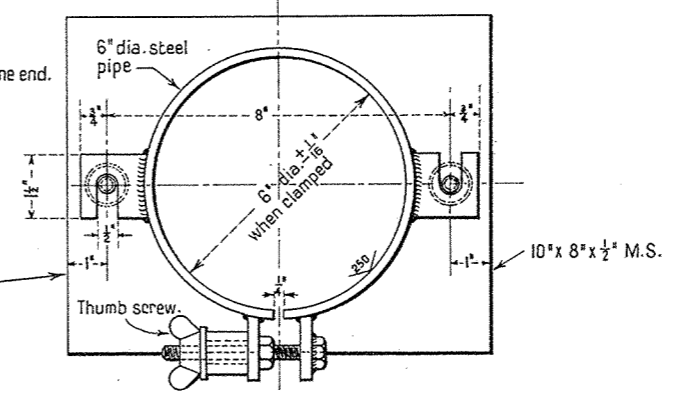
ELEVATION

EQUIPMENT REQUIRED FOR CONCRETE TESTS

- 1 No 16 S.W.G. Galv. Iron Mould for Slump Tests.
 - 2 # 6" dia. Steel Pipe Moulds for Compression Tests.
 - 1 # 3/8" dia. Metal Rod 24" long, bullet-pointed at one end.
- See also Plan No F 309.

Surfaces of plates must not depart from plane by more than .002"

This plan supersedes Plan No F 291 A



**PLAN
MOULDS FOR COMPRESSION TESTS**

Rev'n	Date	Amendment	Amended by
B	10-10-61	Amendments to comp. test mould.	K.W.W.
A	1-3-61	Moulds for Compression Tests Amended	M.R.S.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING
MOULDS FOR CONCRETE TESTS

Approved <i>[Signature]</i> Chief Civil Engineer	Adopted APR. 1937
Drawn by V.M. & M.O.	Checked by A.P.T.
<i>[Signature]</i> Eng ^r of Structural Design	
PLAN No F291B	

TABLE OF ARABIC & ROMAN NUMERALS

ARABIC	ROMAN	ARABIC	ROMAN
1	I	26	XXVI
2	II	27	XXVII
3	III	28	XXVIII
4	IV	29	XXIX
5	V	30	XXX
6	VI	31	XXXI
7	VII	32	XXXII
8	VIII	33	XXXIII
9	IX	34	XXXIV
10	X	35	XXXV
11	XI	36	XXXVI
12	XII	37	XXXVII
13	XIII	38	XXXVIII
14	XIV	39	XXXIX
15	XV	40	XL
16	XVI	41	XLI
17	XVII	42	XLII
18	XVIII	43	XLIII
19	XIX	44	XLIV
20	XX	45	XLV
21	XXI	46	XLVI
22	XXII	47	XLVII
23	XXIII	48	XLVIII
24	XXIV	49	XLIX
25	XXV	50	L

NOTES

Every plate with mileage marks must be refixed in its exact original position should it be necessary to remove the timber to which the plate is attached.

If it be necessary to permanently change the position of the mileage plate owing to bridge alterations, Head Office must be advised so that correct mileage for altered position may be given.

Each pier, except the last one, of every bridge must be numbered. Eight-inch figures must be painted in white in the centre of the down crossheads of a timber bridge, and in a corresponding position in any other bridge, so that the number as seen from the ground will give the number both of the pier and of the span of the bridge. The pier or abutment at the Melbourne end must be called No 1, and so on.

Where a bridge is reduced by filling some of the openings, the original numbering on the remaining piers must be retained.

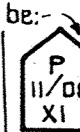
Every beam, crosshead, and pile when renewed must be branded in Arabic Figures 3" in height with the month and year of its renewal, on beams and crossheads the branding is to be as near the centre of the member as possible.

Piles must be marked by cutting a bench in the solid wood (not sap wood) in such a position as to be about five (5) feet above ground surface or summer water level, on the side of the pile away from the centre line, and on it must be cut the date, depth from bottom of bench to foot of pile in Roman Figures, with the descriptive lettering "B" for butted, "C" for cradled, "D" for driven, or "P" for planted.

The complete brand, for example, of a pile renewed by planting in November, 1908, at a depth of 11 ft. from bottom of bench to foot of pile would be:-

Roman Figures are only to be used in marking the depth to foot of pile from the bottom of bench.

Arabic Figures 1-50 with the equivalent Roman Figures are tabulated herewith.



VICTORIAN RAILWAYS WAY & WORKS BRANCH TIMBER BRIDGES METHOD OF MARKING RENEWALS	<i>[Signature]</i> CHIEF ENGINEER OF WAY & WORKS	Adopted MAR 1936
	CHECKED BY <i>A.P.T.</i> STRUCTURE ENGR	PLAN NO F 293

NOTES

TABLE OF ARABIC & ROMAN NUMERALS

ARABIC	ROMAN	ARABIC	ROMAN
1	I	26	XXVI
2	II	27	XXVII
3	III	28	XXVIII
4	IV	29	XXIX
5	V	30	XXX
6	VI	31	XXXI
7	VII	32	XXXII
8	VIII	33	XXXIII
9	IX	34	XXXIV
10	X	35	XXXV
11	XI	36	XXXVI
12	XII	37	XXXVII
13	XIII	38	XXXVIII
14	XIV	39	XXXIX
15	XV	40	XL
16	XVI	41	XLI
17	XVII	42	XLII
18	XVIII	43	XLIII
19	XIX	44	XLIV
20	XX	45	XLV
21	XXI	46	XLVI
22	XXII	47	XLVII
23	XXIII	48	XLVIII
24	XXIV	49	XLIX
25	XXV	50	L

Every plate with mileage marks must be refixed in its exact original position should it be necessary to remove the timber to which the plate is attached.

If it be necessary to permanently change the position of the mileage plate owing to bridge alterations, Head Office must be advised so that correct mileage for altered position may be given.

Each pier, except the last one, of every bridge must be numbered. Eight-inch figures must be painted in white in the centre of the down crossheads of a timber bridge, and in a corresponding position in any other bridge, so that the number as seen from the ground will give the number both of the pier and of the span of the bridge. The pier or abutment at the Melbourne end must be called No.1, and so on.

Where a bridge is reduced by filling some of the openings, the original numbering on the remaining piers must be retained. In permanent structures, at the time of construction, each abutment and pier must be marked to show the depth of foundations. The depths are to be shown in Roman figures 3" in height on the down side of the line, and, if possible, about five (5) feet above ground level or summer water level. In the case of concrete work the figures are to be scribed in the concrete immediately after the removal of the form-work. For brickwork, the figures are to be stencilled in white paint.

Every beam, crosshead, and pile when renewed must be branded in Arabic figures 3" in height with the month and year of its renewal; on beams and crossheads the branding is to be as near the centre of the member as possible.

Piles must be marked by cutting a bench in the solid wood (not sap wood) in such a position as to be about five (5) feet above ground surface or summer water level, on the side of the pile away from the centre line, and on it must be cut the date in Arabic figures and the depth from bottom of bench to foot of pile in Roman figures, with the descriptive lettering "B" for butted, "C" for cradled, "D" for driven, or "P" for planted.

The complete brand, for example of a pile renewed by planting in November, 1908, at a depth of 11 ft. from bottom of bench to foot of pile would be

Where a driven pile with a register mark has the upper portion renewed by butt splicing, the old bench being thereby removed, the new bench, besides showing the particulars for the butted renewal, must show above them the total depth to the toe of the original pile.

For example ~

← Indicating that toe of original pile is 35 ft. below bottom of bench.

← Indicating that pile was butt spliced 9 ft. below bottom of bench in December 1936.

Roman figures are only to be used in marking the depths of piles below bottom of bench.

Arabic figures 1-50 with the equivalent Roman figures are tabulated herewith.

This plan supersedes plan No.F293.

VICTORIAN RAILWAYS - WAY & WORKS BRANCH

BRIDGES

**MARKING OF MILEAGES, PIER NUMBERS,
DEPTH OF FOUNDATIONS & RENEWALS.**

CHIEF CIVIL ENGINEER

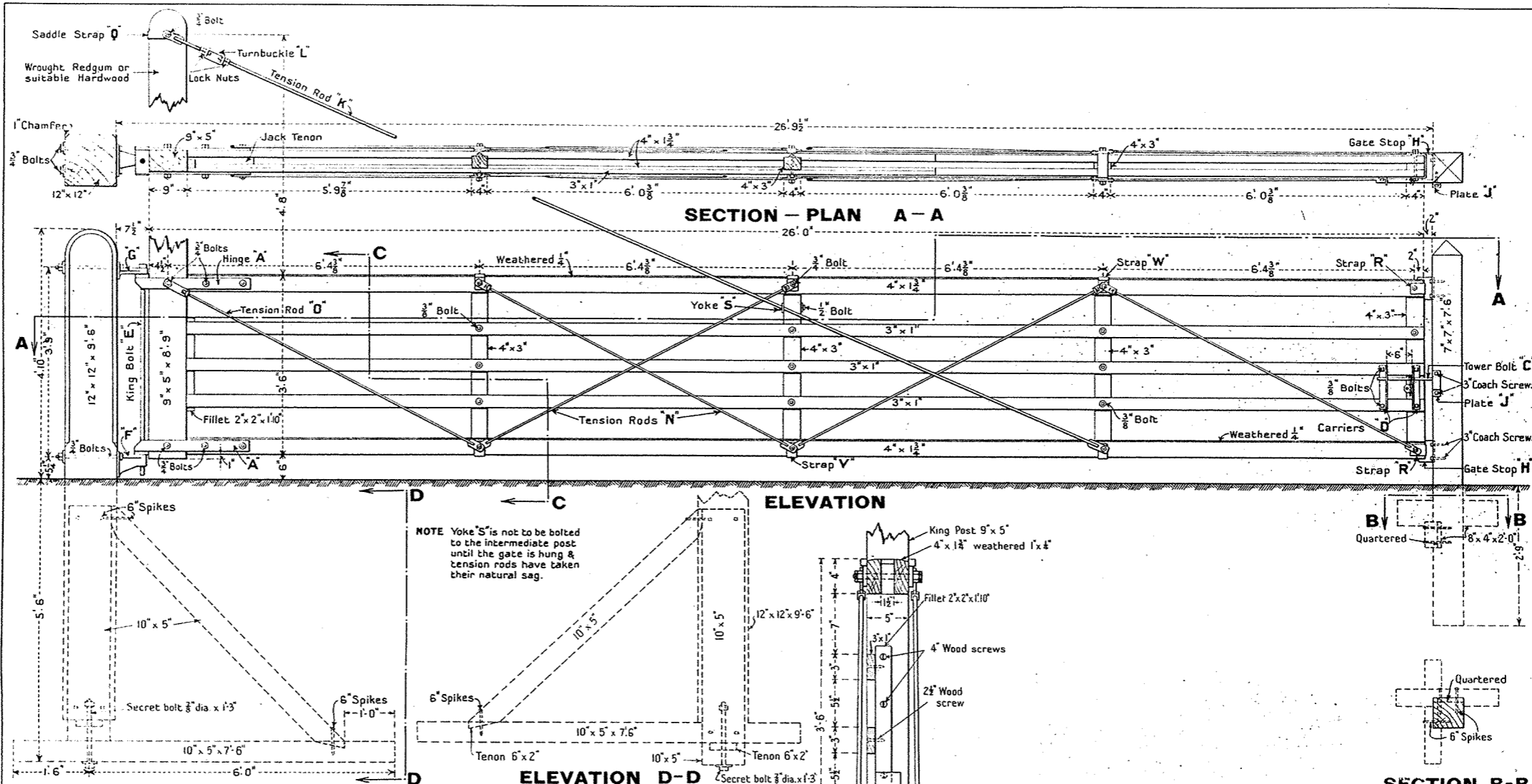
CHECKED BY

T. H. J.

ENGINEER OF STRUCTURAL DESIGN

ADOPTED
AUG. 1941.

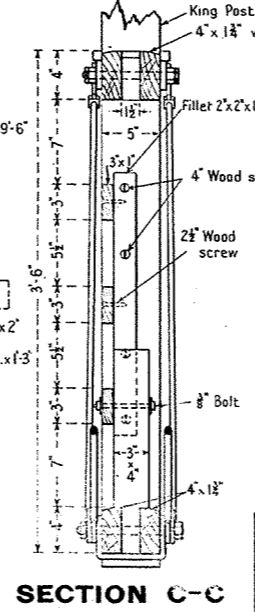
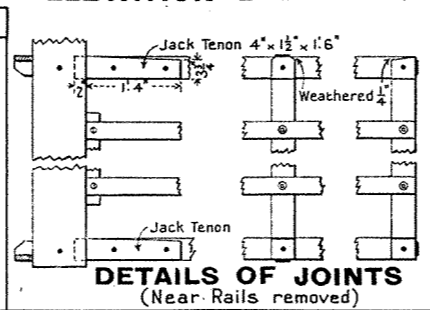
**PLAN No
F293A**



NOTE Yoke S is not to be bolted to the intermediate post until the gate is hung & tension rods have taken their natural sag.

SCHEDULE OF QUANTITIES
 FOR IRONWORK SEE PLANS F294 & F285

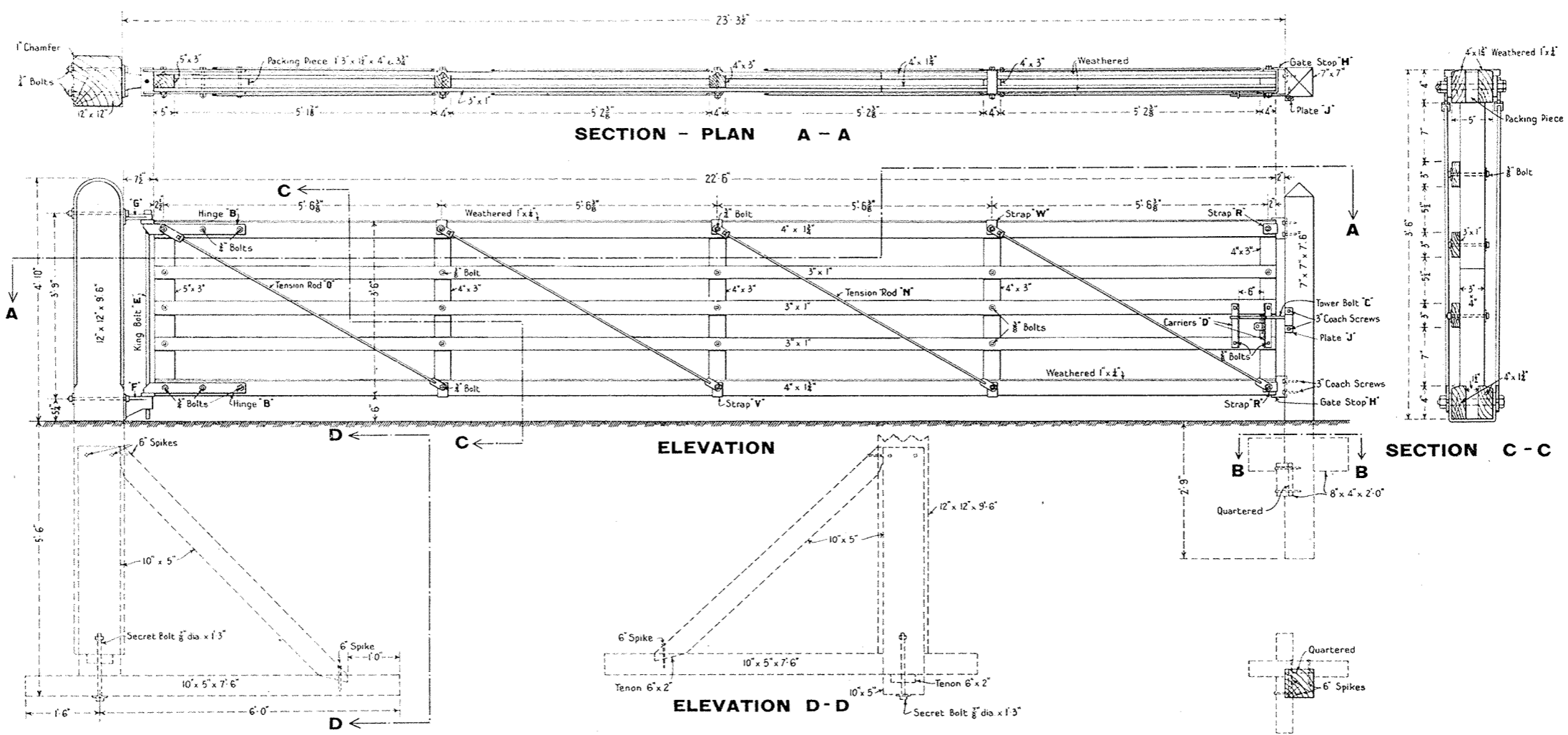
Wrought Oregon, 4 1/2" x 5 1/2" 4 N^o - 4 1/2" x 25 1/2" 3 N^o - 4 1/2" x 3'6" 4 N^o - 2" x 2" x 1'10" 1 N^o.
 Wrought Redgum or suitable Hardwood, 2 1/2" x 5'8" 1 N^o - 4 1/2" x 1'6" (Jack Tenons), 2 N^o.
 Sawn Redgum, 12" x 9'6" 1 N^o - 7' x 7'6" 1 N^o - 10' x 5'7'6" 2 N^o - 10' x 5'6" 1 N^o - 10' x 5'6" 1 N^o - 8' x 4' x 2'0" 2 N^o.
 Cast Steel Gudgeons, F & G, 1 Pair - King Bolt E, 1 N^o - Hinges A, 2 N^o - Tension Rods O, 2 N^o (L & 7'1 1/2") -
 N, 8 N^o (L & 7'1 1/2") - K, 2 N^o - Yoke S, 1 N^o - Turnbuckles L, 2 N^o - Straps Q, 1 N^o - W, 3 N^o - V, 3 N^o -
 R, 2 N^o - Tower Bolt C, Carriers & Plate C, D & J, 1 Set - Gate Stops H, 2 N^o - Bolts 3/8" dia, 1 N^o 1 1/2" -
 1/2" dia, 4 N^o 1 1/2" - 3 N^o 1" - 6 N^o 7/8" - 5 N^o 7/8" - 1/2" dia, 1 N^o 6" - 3/8" dia, 12 N^o 5" - 2 N^o 2" - Spikes, 6, 12 N^o.
 For Double Gates unit, Strap R, 1 N^o - Carriers, Tower Bolt & Plate C, D & J - Gate Stops H
 2 N^o - and include Strap T, 1 N^o - Catch M, 1 N^o - Catch Socket U, 1 N^o - Plate X, 1 N^o -
 Trailing Pins P, 2 Sets - Trailing Pin Stop, 1 N^o 3/3" - 2 N^o 2'0". From Sleepers - Fish Plates, 2 N^o -
 Spikes, 4, 4 N^o - 8' - Bolt, 1/2" dia, 1 N^o 8'.



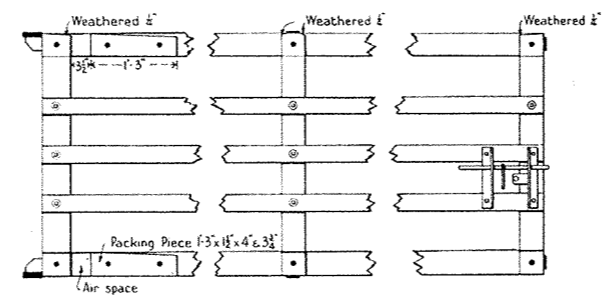
This plan supersedes plan N^o F294

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING
26 FT GATE

Approved		Adopted
chief	Designed by	Checked by
Drawn by	PLAN No.	
		F294^A



SCHEDULE OF QUANTITIES	
FOR IRONWORK SEE PLANS F.284 & F.285	
WROUGHT DREGON:-	4" x 12" x 22'-6", 4 No. 3" x 1" x 22'-6", 3 No. 4" x 3" x 3'-6", 4 No. 5" x 3" x 3'-6", 1 No.
WROUGHT REDGUM on SUITABLE HARDWOOD:-	1'-3" x 1'-1/2" x 4" to 3/8", 2 No.
SAWN REDGUM:-	12" x 12" x 9'-6", 1 No. 7" x 7'-6", 1 No. 10" x 5" x 7'-6", 2 No. 10" x 5" x 6'-8", 1 No. 10" x 5" x 6'-3", 1 No. 8" x 4" x 2'-0", 2 No.
CAST STEEL GUDGEONS:-	F & G, 1 Pair. KING BOLT E, 1 No. HINGES B, 2 No.
TENSION RODS:-	D, 2 No. (L = 6'-4 1/8", N, 6 No. (6'-4 1/8")
STRAPS:-	W, 3 No. V, 3 No. R, 2 No.
TOWER BOLT, CARRIERS & PLATE:-	C, D, J, 1 Set. GATE STOPS H, 2 No.
BOLTS:-	1/2" dia., 1 No. 15", 1/2" dia., 4 No. 15", 8 No. 8", 6 No. 7", 3/8" dia., 15 No. 5", 2 No. 2".
SPIKES:-	6", 12 No.

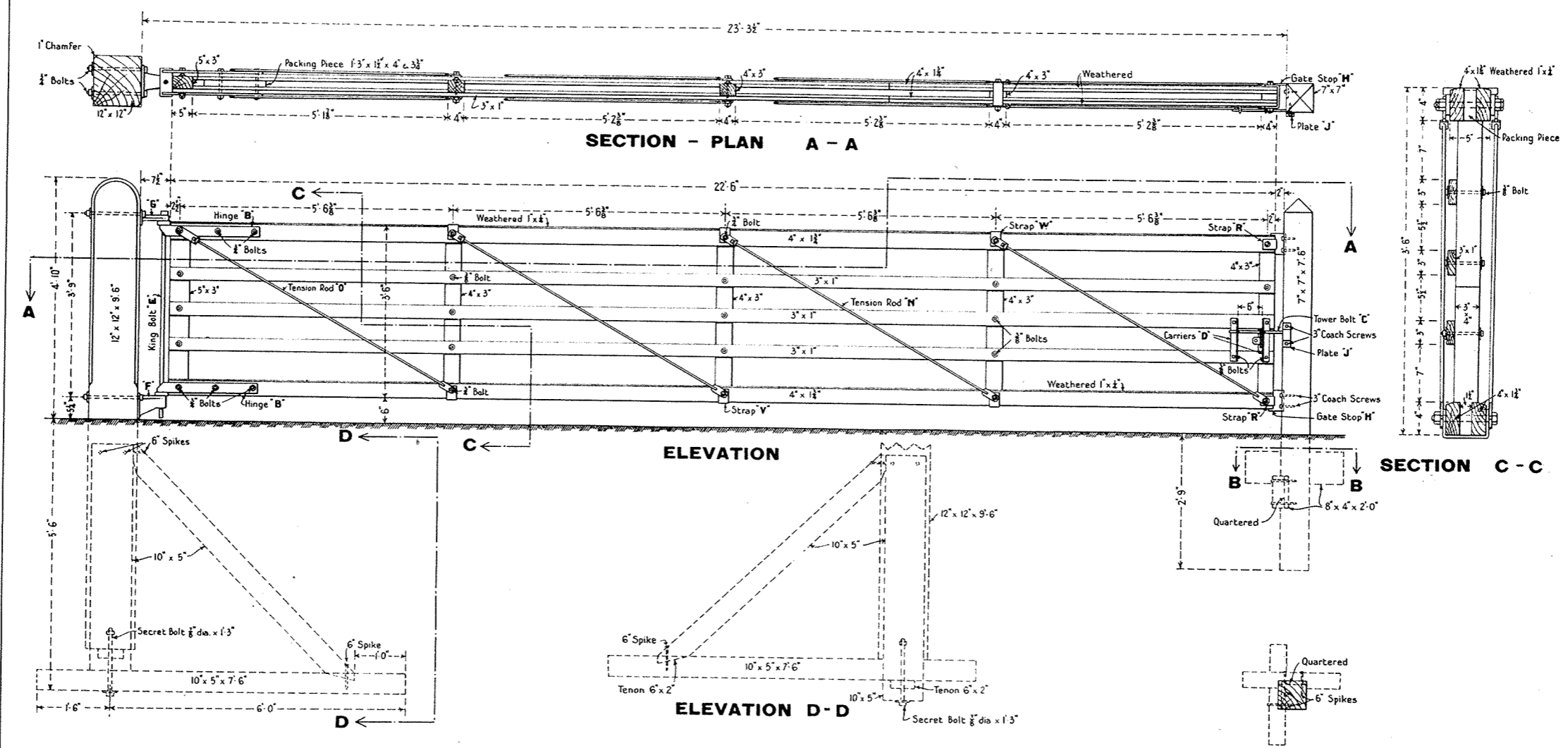


DETAILS OF JOINTS
(Near Rails removed)

SECTION B - B

NOTE
For Double Gates omit Strap R, 1 No.; Carriers, Tower Bolt and Plate C, D & J; Stops H, 2 No.; and substitute Strap T, 1 No.; Catch M; Plates X, 2 No.; Trailing Pins P, 2 Sets and Trailing Pin Stop. For Details see F283 or F294.

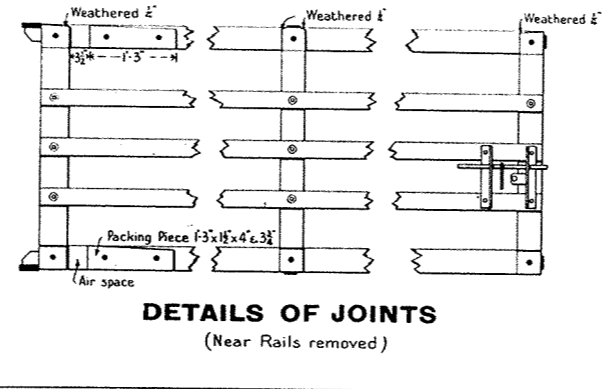
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved <i>J. M. Schwartz</i> Chief Engineer of Way & Works	Adopted Mch. 1936
STANDARD DRAWING		Designed by A. A. B.	Drawn by V. M.
22'-6" GATE		Checked by A. P. T.	PLAN No. F295
Scales - 1/4" = 1'-0"		113 Structure Engineer	



SCHEDULE OF QUANTITIES

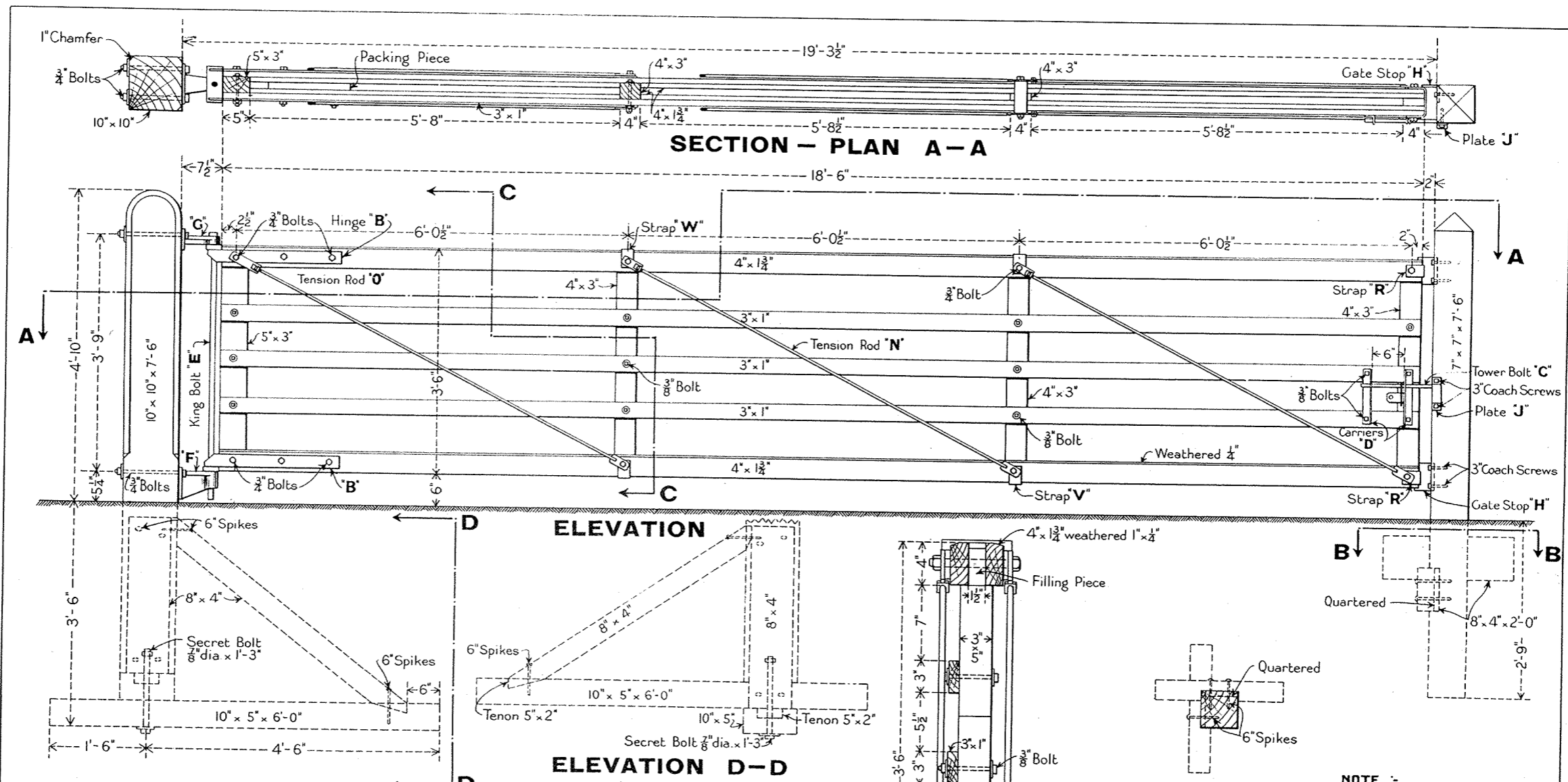
FOR IRONWORK SEE PLANS F.284 & F.285^A

Wrought Oregon, 4"x 12"x 22'6", 4 N^o-3"x 1"x 22'6", 3 N^o-4"x 3"x 3'6", 4 N^o-5"x 3"x 3'6", 1 N^o
 Wrought Redgum or suitable Hardwood, 1 1/2"x 1 1/2"x 4" to 3 3/8", 2 N^o
 Sawn Redgum, 12"x 12"x 9'6", 1 N^o-7"x 7"x 7'6", 1 N^o-10"x 5"x 7'6", 2 N^o-10"x 5"x 6'8", 1 N^o-
 10"x 5"x 6'3", 1 N^o-8"x 4"x 2'0", 2 N^o.
 Cast Steel Gudgeons, F & G, 1 Pair - King Bolt E, 1 N^o-Hinges B, 2 N^o-Tension Rods,
 D, 2 N^o(L=6'4 3/8")-N, 6 N^o(L=6'4 3/8")-Straps W, 3 N^o-V, 3 N^o-R, 2 N^o-Tower Bolt,
 Carriers & Plate, C, D & J, 1 Set - Gate Stops H, 2 N^o-Bolts 7/8" dia., 1 N^o 1 1/2" -
 3/4" dia., 4 N^o 1 1/2" - 8 N^o 8" - 6 N^o 7" - 3/8" dia., 15 N^o 5" - 2 N^o 2" - Spikes, 6", 12 N^o.
 For Double Gates omit Strap R, 1 N^o-Carriers, Tower Bolt & Plate C, D & J -
 Gate Stops H, 2 N^o-and include Strap T, 1 N^o-Catch M, 1 N^o-Catch Socket U,
 1 N^o-Plate X, 1 N^o-Trailing Pins P, 2 Sets -Trailing Pin Stop, 1 N^o 3'3" - 2 N^o 2'0",
 From Sleepers - Fish Plates, 2 N^o-Spikes 4", 4 N^o-8", 4 N^o-Bolt, 1/2" dia. 1 N^o 8".
 For details see F.283A or F.294A

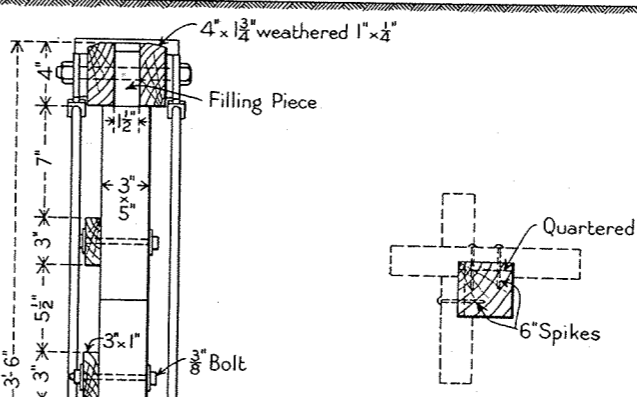
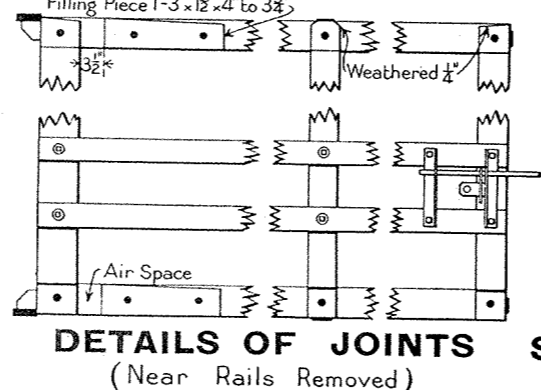
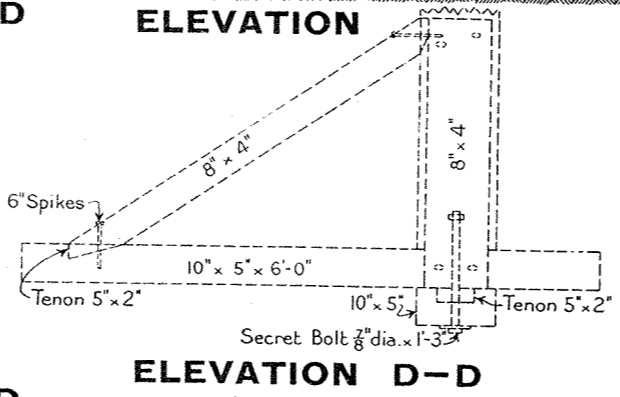


This plan supersedes plan N^o F.295

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved <i>J. W. Hurst</i>	Adopted Mch. 1936	
STANDARD DRAWING		Chief Engineer of Way & Works	PLAN No. F.295^A	
22'-6" GATE		Designed by A. A. B.		Drawn by V. M.
Scales - 3/8" & 1/4" = 1'-0"		Checked by A. P. T.		Structure Engineer

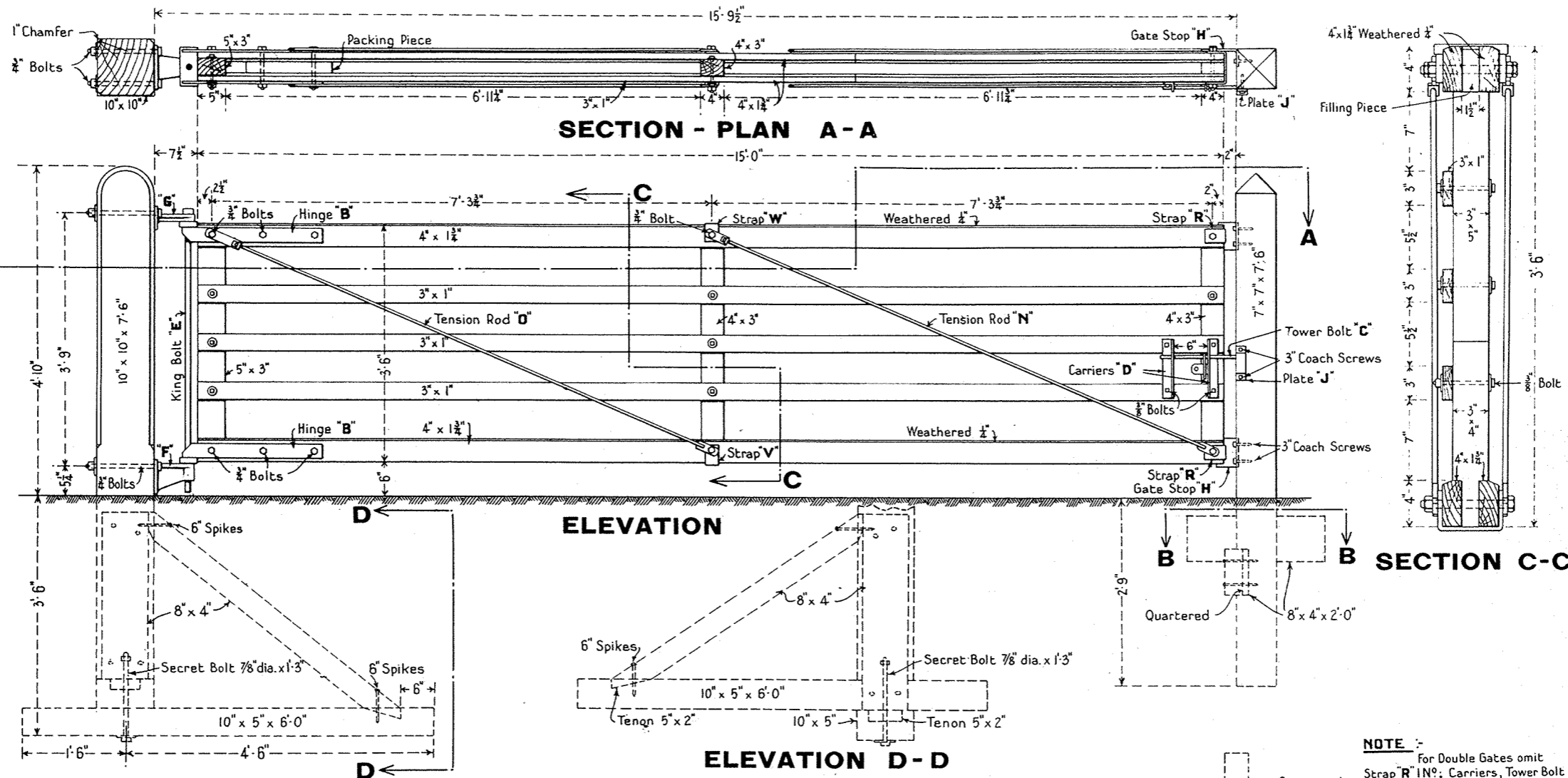


SCHEDULE OF QUANTITIES	
FOR IRONWORK SEE PLANS F284 & F285.	
Wrought Oregon	4x1 1/2x18'-6", 4 No, 3x1x18'-6", 3 No, 4x3x3'-6", 3 No, 5x3x3'-6", 1 No.
Wrought Redgum or suitable Hardwood	1'-3x1 1/2x4" to 3 3/4", 2 No.
Sawn Redgum	10x10x7'-6", 1 No, 7x7x7'-6", 1 No, 10x5x6'-0", 2 No.
"	8x4x4'-10", 1 No, 8x4x4'-6", 1 No, 8x4x2'-0", 2 No.
Cast Steel Gudgeons	F&C', 1 Pair, King Bolt E', 1 No, Hinges B', 2 No.
Tension Rods	O', 2 No, (L=6'-9 3/8"), N', 4 No, (L=6'-9 3/8"), Straps W', 2 No.
Straps	V', 2 No, R', 2 No, Tower Bolt, Carriers & Plate C', D' & J', 1 Set.
Gate Stops	H' 2 No, Bolts 3/8" dia 1 No 15", 3/4" dia 4 No 13".
Bolts	3/4" dia 6 No 8", 6 No 7", 3/8" dia 12 No 5", 2 No 2".
Spikes	12 No 6".

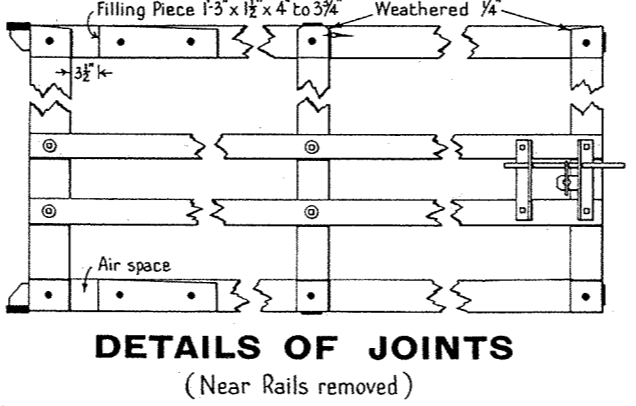


VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>J. M. Ashworth</i>	APL.1936
		Chief Engineer of Way & Works	
18'-6" GATE		Drawn by	Checked by
		K.F.L.	A.A.B. R.G.H.
SCALES { 1/2 Inch to 1-Foot " " " "		<i>W.B.</i> Structure Engineer	PLAN No. F296

NOTE :-
 For Double Gates omit
 Strap R' 1 No.; Carriers, Tower Bolt
 and Plate C' D' & J'; Stops H' 2 No.;
 and substitute Strap T' 1 No.;
 Catch M'; Plates X' 2 No.; Trailing
 Pins P' 2 Sets and Trailing Pin Stop.
 For Details see F283 or F294.



SCHEDULE OF QUANTITIES	
FOR IRONWORK SEE PLANS F.284 & F.285	
WROUGHT OREGON:-	4"x1 1/2"x15'-0", 4 N ^o , 3"x1"x15'-0", 3 N ^o , 4"x3"x3'-6", 2 N ^o , 5"x3"x3'-6", 1 N ^o .
WROUGHT REDGUM OR SUITABLE HARDWOOD:-	1'-3"x1 1/2"x4" to 3 3/4", 2 N ^o .
SAWN REDGUM:-	10"x10"x7'-6", 1 N ^o , 7"x7"x7'-6", 1 N ^o , 10"x5"x6'-0", 2 N ^o , 8"x4"x4'-10", 1 N ^o , 8"x4"x4'-6", 1 N ^o , 8"x4"x2'-0", 2 N ^o .
CAST STEEL GUDGEONS:-	F & G, 1 Pair. KING BOLT "E", 1 N ^o . HINGES "B", 2 N ^o .
TENSION RODS:-	"D", 2 N ^o (L=7'-11 3/8"). "N", 2 N ^o (7'-11 3/8").
STRAPS:-	"W", 1 N ^o . "V", 1 N ^o . "R", 2 N ^o .
TOWER BOLT, CARRIERS & PLATE:-	"C", "D" & "J", 1 Set. GATE STOPS:- "H", 2 N ^o .
BOLTS:-	3/8" dia., 1 N ^o 15", 3/4" dia., 4 N ^o 13", 4 N ^o 8", 6 N ^o 7", 3/8" dia., 9 N ^o 5", 2 N ^o 2".
SPIKES:-	6", 12 N ^o .



VICTORIAN RAILWAYS—WAY AND WORKS BRANCH

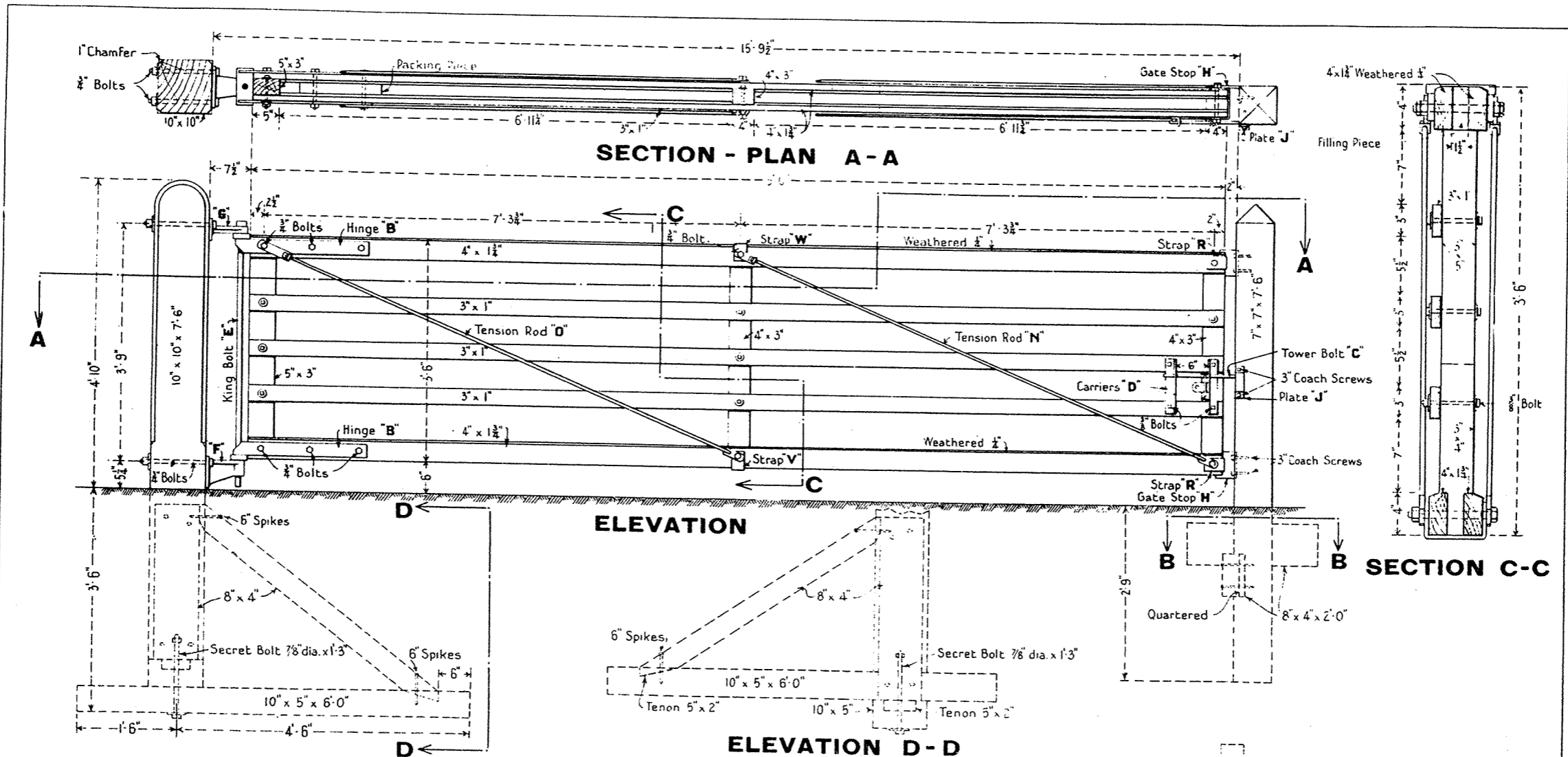
STANDARD DRAWING

15'-0" GATE

Scales:- 1/2" & 1" = 1'-0"

Approved <i>W.A. Schwab</i> Chief Engineer of Way & Works	Adopted Apr. 1936
Designed by A. A. B.	Checked by A. P. T.
Drawn by V. M.	PLAN No. F297
Structure Engineer	

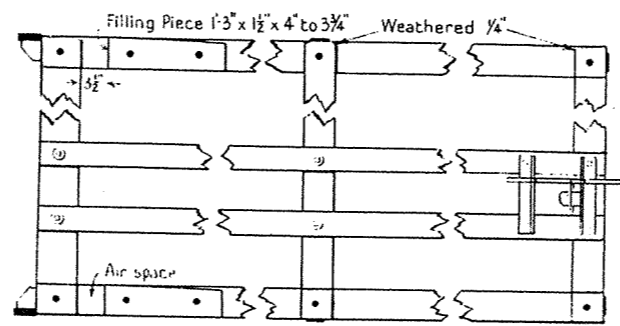
NOTE :-
For Double Gates omit Strap "R" 1 N^o; Carriers, Tower Bolt and Plate "C", "D" & "J"; Stops "H" 2 N^o; and substitute Strap "T" 1 N^o; Catch "M"; Plates "X" 2 N^o; Trailing Pins "P" 2 Sets and Trailing Pin Stop. For Details see F283 or F294.



SCHEDULE OF QUANTITIES

FOR IRONWORK SEE PLANS F284 & F285^A

Wrought Oregon, 4' x 1 1/2" x 15' 0", 4 N^o - 3' x 1 1/2" x 15' 0", 3 N^o - 4' x 3' x 3' 6", 2 N^o - 5' x 3' x 3' 6", 1 N^o -
Wrought Redgum or suitable Hardwood, 1 1/2" x 1 1/2" x 4' to 3 1/2", 2 N^o -
Sawn Redgum, 10' x 10' x 7' 6", 1 N^o - 7' x 7' x 7' 6", 1 N^o - 10' x 5' x 6' 0", 2 N^o -
8' x 4' x 4' 10", 1 N^o - 8' x 4' x 4' 6", 1 N^o - 8' x 4' x 2' 0", 2 N^o -
Cast Steel Gudgeons, F & G, 1 Pair - King Bolt E, 1 N^o - Hinges B, 2 N^o -
Tension Rods, D, 2 N^o (L=7' 11 3/8") - N, 2 N^o (L=7' 11 3/8") - Straps, W, 1 N^o - V, 1 N^o - R, 2 N^o -
Tower Bolt, Carriers & Plate, C, D & J, 1 Set - Gate Stops, H, 2 N^o - Bolts, 7/8" dia.,
1 N^o 15' - 3/4" dia., 4 N^o 13' - 4 N^o 8' - 6 N^o 7' - 3/8" dia., 9 N^o 5' - 2 N^o 2' - Spikes, 6", 12 N^o -
For Double Gates omit Strap R, 1 N^o - Carriers, Tower Bolt & Plate, C, D & J -
Gate Stops H, 2 N^o - and include Strap T, 1 N^o - Catch M, 1 N^o - Catch Socket
U, 1 N^o - Plate X, 1 N^o - Trailing Pins P, 2 sets - Trailing Pin Stop, 1 N^o 3' 3" -
2 N^o 2' 0", from sleepers - Fish Plates, 2 N^o - Spikes, 4, 4 N^o - 8, 4 N^o - Bolt, 3/4" dia., 1 N^o 8'
For details see F283^A or F294^A



DETAILS OF JOINTS
(Near Rails removed)

SECTION B-B

This plan supersedes plan N^o F297

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING

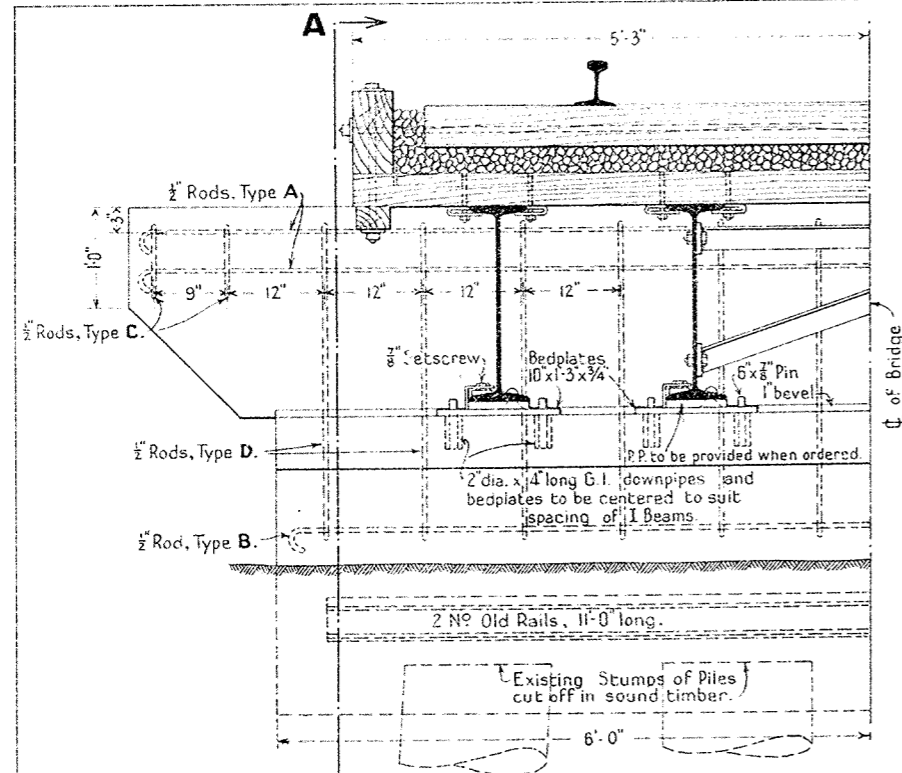
15'-0" GATE

Scales - 1/2" & 1" = 1'-0"

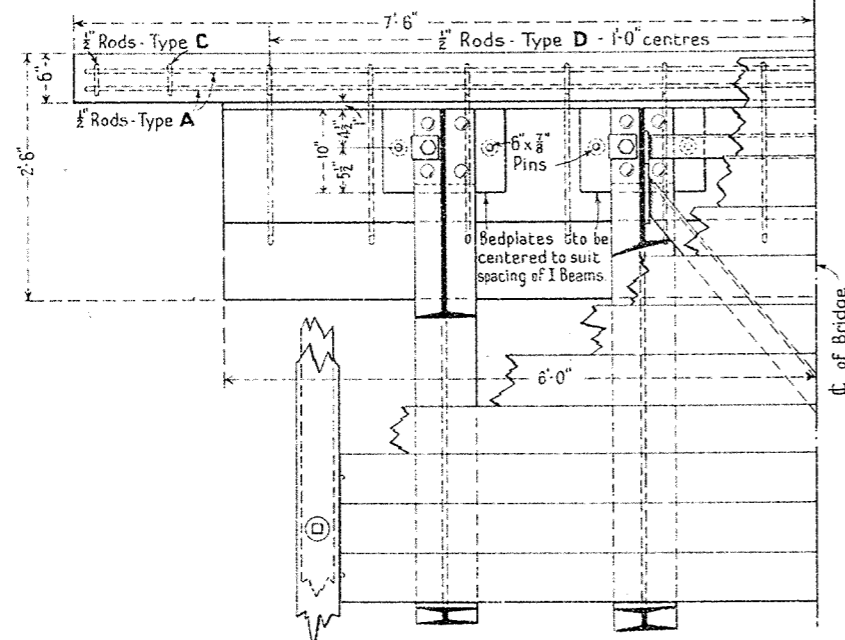
Approved
W. A. Shworth
Chief Engineer of Way & Works
Designed by A. A. B. Drawn by K. M. Checked by A. P. T.
Structure Engineer

Adopted
Apr. 1936

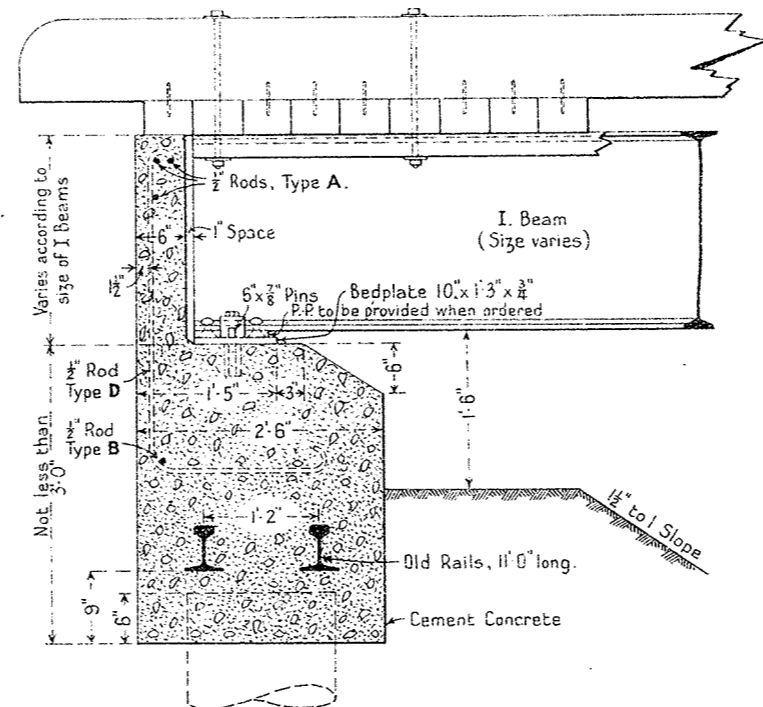
PLAN No.
F297^A



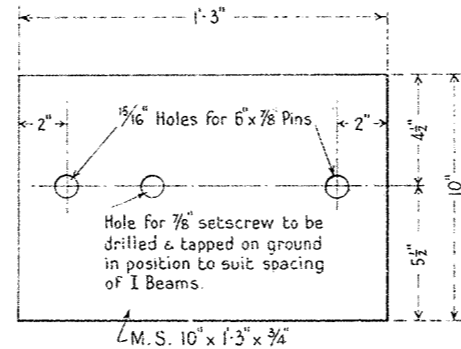
HALF ELEVATION



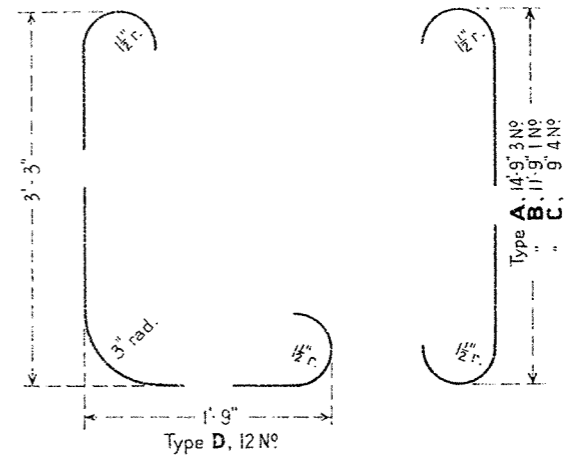
HALF PLAN



SECTION A - A



BEDPLATE



DETAILS OF REINFORCING RODS

SCHEDULE OF QUANTITIES	
ONE ABUTMENT	
DESCRIPTION	QUANTITY
Cement Concrete	4 C.Yds (min)
Old Rails - 11'-0" long	2 No
M.S. Rods - 1/2" dia. to details	130 Lin. Ft.
Pins - 5/8" dia.	8 No 6" long
G.I. Downpipes - 2" dia.	8 No 4" long
M.S. Bedplates - to details	4 No

NOTES:-
 Corners of concrete above ground to have 1" bevel.
 If even bearings on piles cannot be obtained, piles are to be cut off 1ft. below base of concrete.
 Earth foundation under abutment is to be well rammed.
 Bedplates, 7/8" Pins & 2" dia. Downpipe Ferrules are to be fixed to suit spacing & position of I Beams.
 Holes formed by 2" dia. G.I. Downpipes for 7/8" dia. Pins are to be filled with cement mortar as Pins & I Beams are placed.
 THIS PLAN SUPERSEDES PLAN No 183/28

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved <i>J.M. Schwartz</i> Chief Engineer of Way & Works	Adopted Apr. 1936
STANDARD DRAWING		Drawn by V.M.	Checked by A.P.T.
CONCRETE ABUTMENT		<i>J.B.</i> Structure Engineer	PLAN No.
FOR "I" BEAM BRIDGES			F298
Scales:- 1/2" & 1/4" = 1'-0"			

APPROVED TIMBERS FOR PILES

In northern districts - Ironbark, Red Gum and Grey Box.
 In southern districts - Ironbark, Red Gum, Grey Box and Yellow Stringybark.

LENGTHS FOR ORDERING are to be fixed by consideration of depth in ground of existing piles, height of pier and length of cut off required. Where depth of existing piles in ground is not obtainable local circumstances are to be taken into account - usually 15' to 20' in ground is sufficient allowance.

PREPARATION FOR DRIVING. Toes of piles are to be carefully pointed, the size of the point being made to suit local conditions. As a general rule the size and shape of the point should be as follows -

Material	Size of point of pile	Taper of point of pile
Sand or clay	4" square	4 to 1
Silt or swampy ground	8" to 12" square	8 to 1

Pile shoes are only to be fitted when the ground contains hard cemented layers or when the piles are to be driven to soft rock.

Before driving, each pile is to be clearly scribed showing at about five feet intervals the length in feet from the toe of the pile, and the head of the pile is to be fitted with a ring forged from 3" x 1 1/2" steel.

SETTING OUT. Unless otherwise ordered, positions of piles are to be as nearly as possible in accordance with standard drawings.

The height of the cut off of piles is to be carefully fixed in relation to other piles of the pier and the grade line of the bridge. In special cases positions of piles and levels for cut off will be marked out on application to the Structure Engineer.

MINIMUM PILE TESTS. Piles are to be driven to the test shown in table below.

7' drop of 30 cwt. or 10' drop of 20 cwt. monkey released by tripper		10' drop of 30 cwt. or 12' drop of 25 cwt. monkey released by friction drum	
Ordinary soils		Soft ground	
File at least 10' in ground	File at least 17' in ground and driving uniformly hard for last 7'	File at least 25' in ground	File at least 25' in ground
Test same day	Test same day	Test same day	Test after 48 hours
Average set per blow of last 3 blows	Average set per blow of last 3 blows	Average set per blow of last 6 blows when pile is driven continuously without any interval exceeding 2 hours	Average set per blow of last 3 blows
1/2 inch	3/4 inch	1 inch	1/3 inch

PILE TESTS (Continued)

If friction drum is in use and pile tests are irregular then a test should be made with the monkey released by the tripper.

Where tests are not obtained on driving to the required depth and it is considered that the 48 hour test could not possibly be obtained, the pile is to be spliced and driving continued. Where it is considered that the 48 hour test will possibly be satisfactory it is to be carried out and if a close approximation to that test is obtained, driving need not be continued. A note however should be made of piles on which required tests on day of driving have not been obtained so that observations may be made from time to time of the effect of traffic.

SIZE OF MONKEY. A heavy monkey with a short fall is to be used in preference to a light monkey with a long fall. Monkeys of less than 25 cwt. are not to be used with friction drum.

OVERDRIVING. Care must be taken to prevent damage to piles by an excessive number of blows or by overdriving. The symptoms of overdriving are sudden alteration of penetration to less than 1/4 inch or splitting of piles. If the required depth in ground has not been attained, the pile should be withdrawn and a pile fitted with a shoe driven. The pile that has been withdrawn may be re-driven if still sound. If the proper depth in the ground cannot be obtained in that way, a pile should be planted on a concrete base resting on the hard stratum that has been before encountered.

Where the driving is uniformly hard, damage to the pile may be avoided by sinking a pilot hole in the ground at the point of driving. This hole should be smaller than the diameter of the pile and taken only to such a depth as will ensure that the pile will reach the depth required and the minimum pile test will be obtained for the last 3 feet of driving.

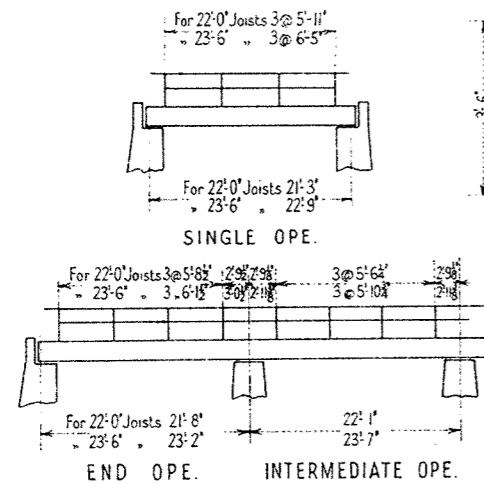
REGISTER MARKS are to be cut on each pile after driving on a bench cut in the solid wood about 5 feet above ground surface or summer water level on the side of the pile away from the centre line indicating in 3 inch letters and figures the date of driving and the distance to the toe of pile from the bottom of the bench. The date of driving is to be in ordinary numerals and the distance to toe of pile in Roman figures as indicated hereunder.

D
11/35
XXI

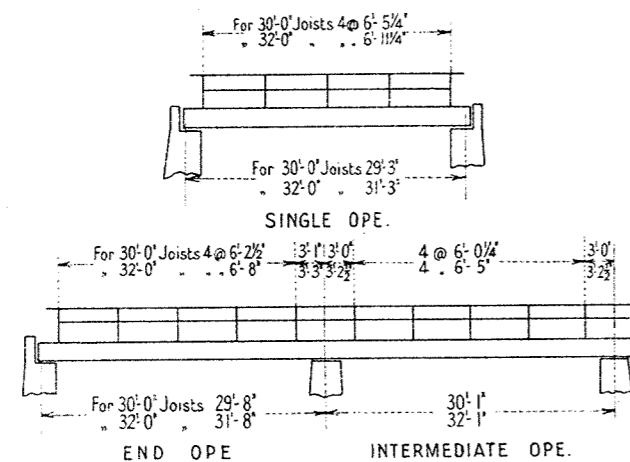
PILE DRIVING RECORD. At the conclusion of authorised pile driving, a statement is to be forwarded to the Structure Engineer giving particulars of pile driving. Forms for recording this information may be obtained from the Structure Engineer.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH	Approved <i>M. H. W. O. R. T.</i> Chief Engineer of Way & Works	Adopted May 1936
	Drawn by W. U.	Checked by A. P. T.
	Structure Engineer <i>W. Brown</i>	PLAN No. F 300

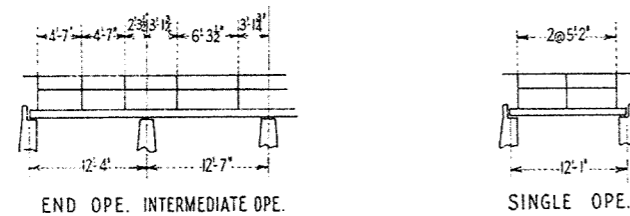
TIMBER BRIDGES
Instructions for Pile Driving



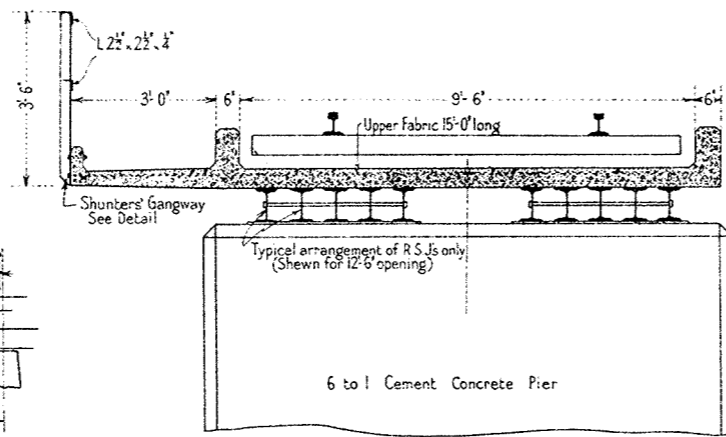
SPACING OF HANDRAILING FOR 22'-0" & 23'-6" OPENINGS.
Scale 1" = 20'



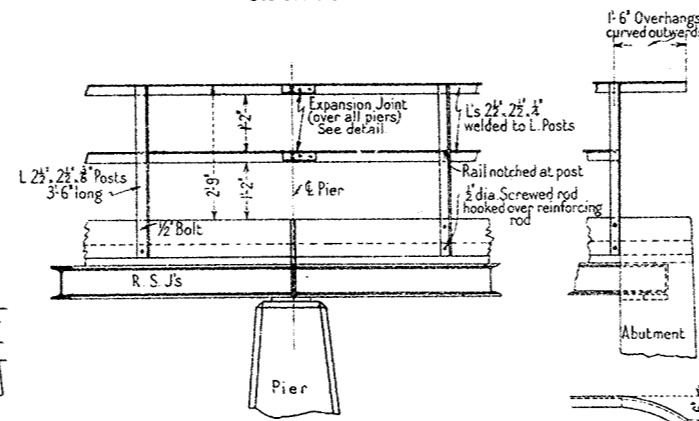
SPACING OF HANDRAILING FOR 30'-0" & 32'-0" OPENINGS.
Scale 1" = 20'



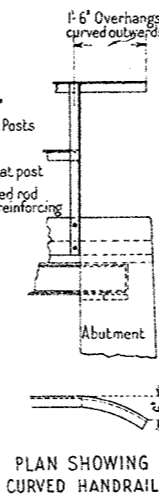
SPACING OF HANDRAILING FOR 12'-6" OPENINGS.
Scale 1" = 20'



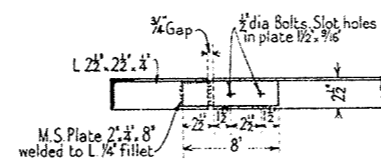
CROSS SECTION OF DECK AT PIER
SHOWING SHUNTERS' GANGWAY ONE SIDE ONLY.
Scale 1/4" = 1'-0"



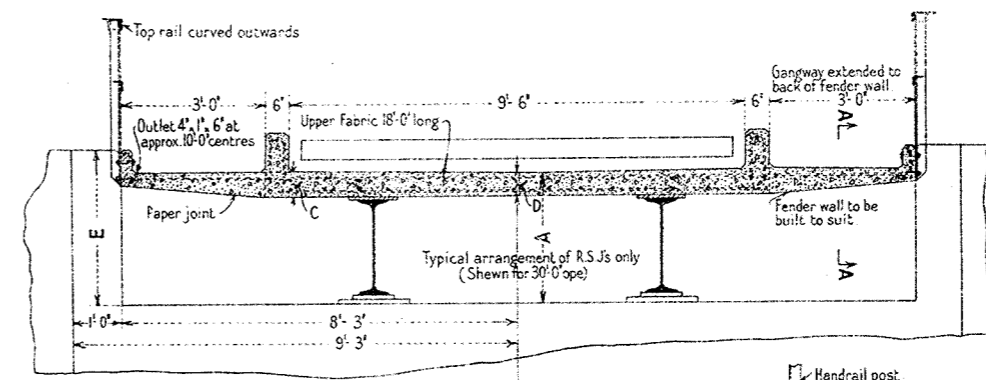
SIDE ELEVATION OF SHUNTERS' GANGWAY
Scale 1/4" = 1'-0"



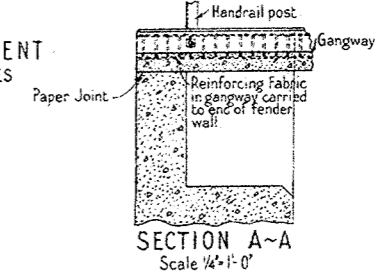
PLAN SHOWING CURVED HANDRAIL



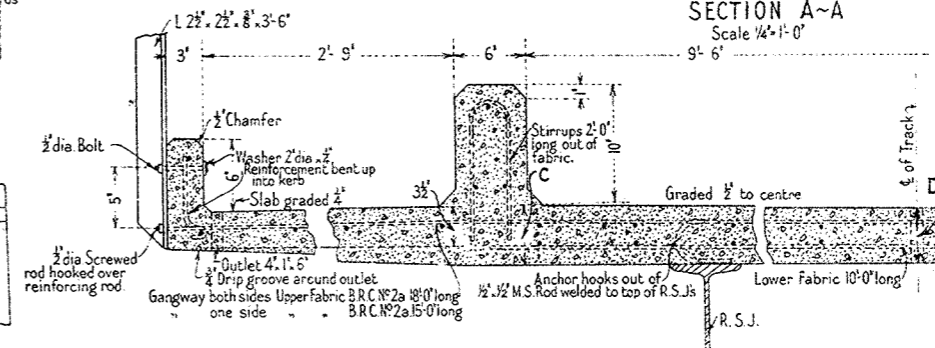
EXPANSION JOINT IN ANGLE RAILS.
Scale 3/4" = 1'-0"



CROSS SECTION OF DECK AT ABUTMENT
SHOWING SHUNTERS' GANGWAY AT BOTH SIDES
Scale 1/4" = 1'-0"



SECTION A-A
Scale 1/4" = 1'-0"

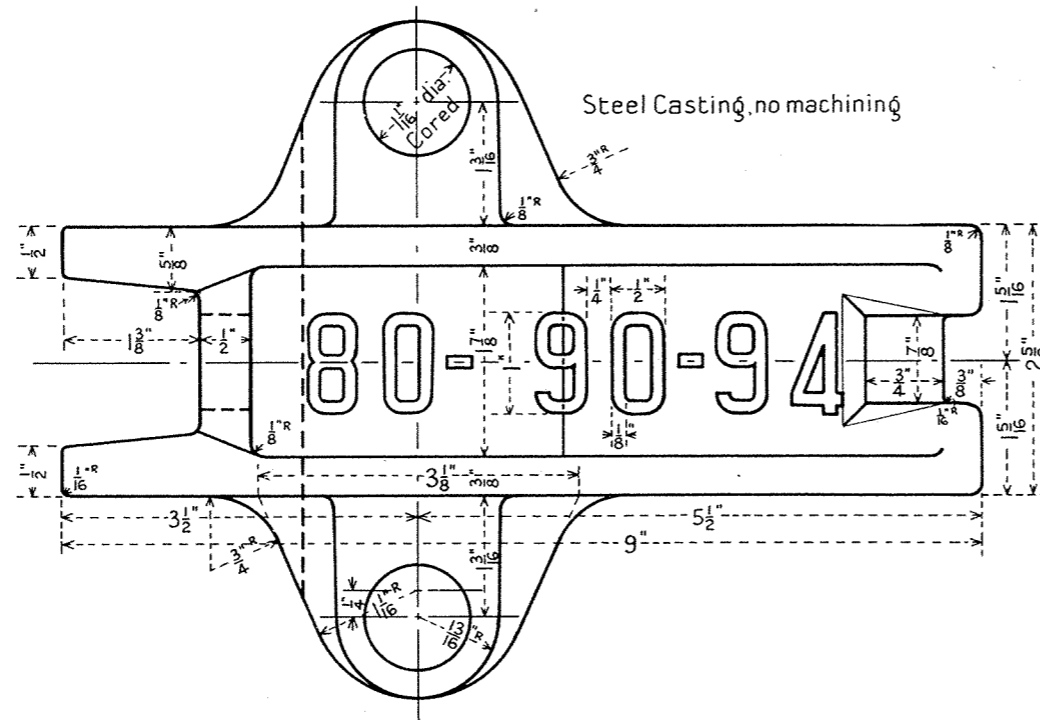
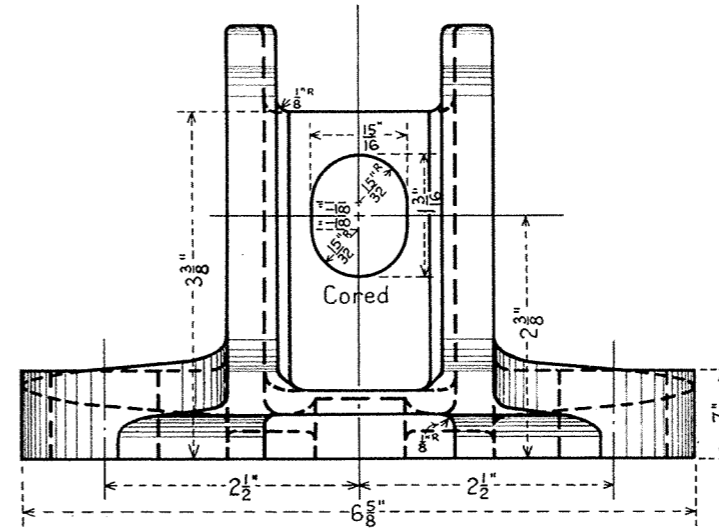
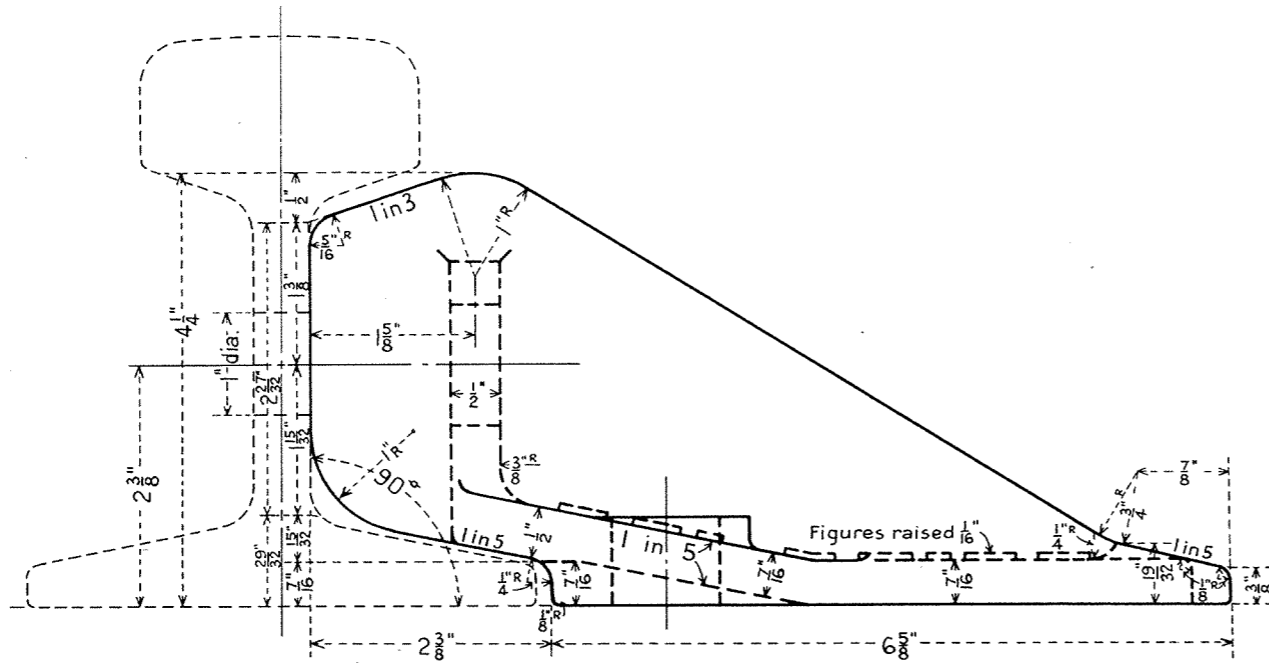


DETAIL OF GANGWAY
Scale 3/4" = 1'-0"

Dimension	12'-6" Ope		22' Ope		30' & 32' Ope	
	8.6 R.S.J's	3.4 R.S.J's	23'6"	2 R.S.J's	4 R.S.J's	per ope
A	1'-2"	1'-3"	2'-8"	2'-8 1/2"	2'-8 1/2"	2'-8 1/2"
E	1'-8 1/2"	1'-9 1/2"	3'-2 1/4"	3'-3"	3'-3 1/4"	3'-3 1/4"
C	5 1/2"	5 1/4"	6 1/2"	6 1/2"	6 1/2"	6 1/2"
D	5'	5'	6'	6'	6'	6'
Detail Plan	F.202	F.483	F.373 F.418	F.380A	F.307A	

NOTES.
This plan is to show details of Shunters' Gangway only.
For details of R.S.J's & Deck System, see appropriate detail plan.

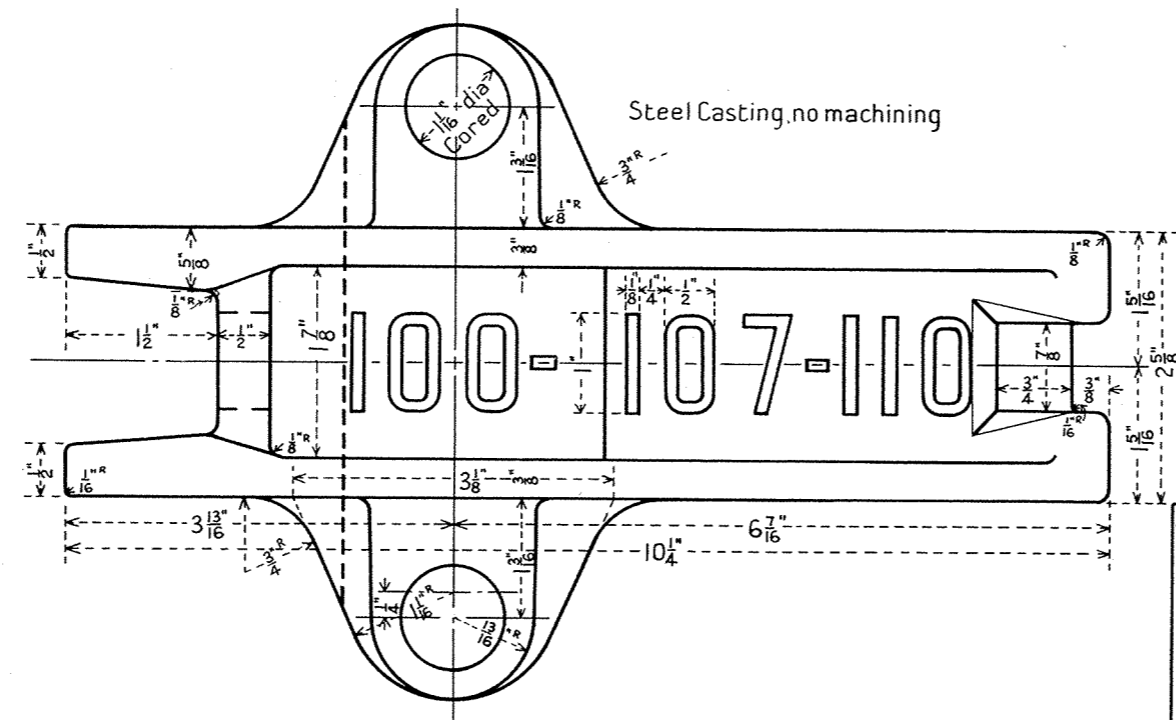
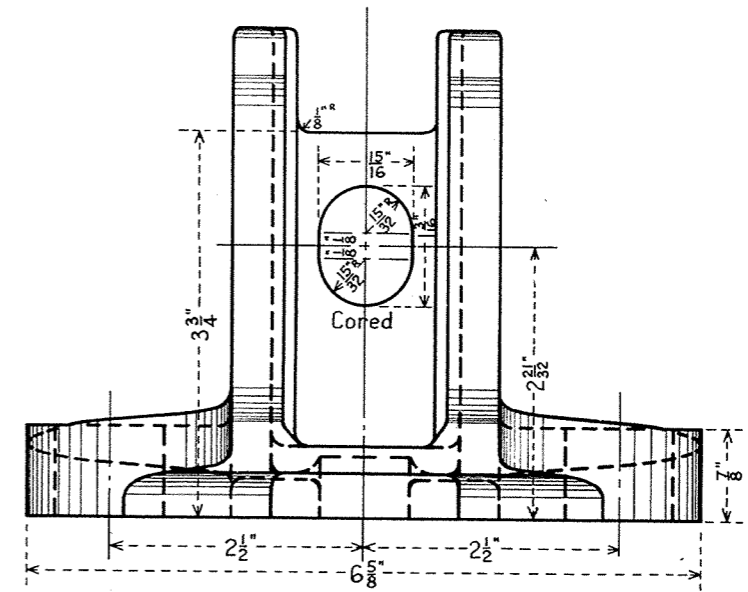
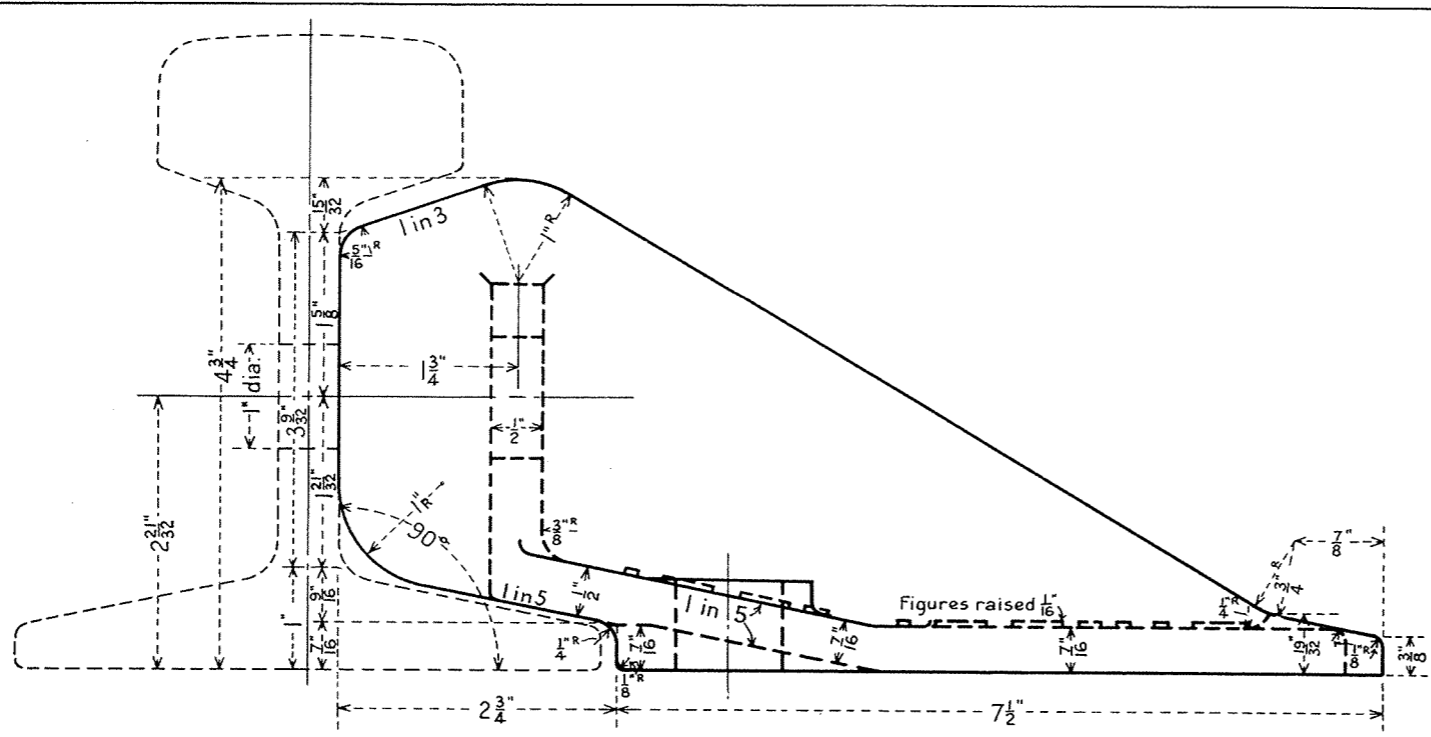
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		Chief Civil Engineer	SEP. 1946
SHUNTERS' GANGWAY FOR R.S.J. BRIDGES (12'-6", 22'-0", 23'-6", 30'-0" & 32'-0" OPES) WITH CONCRETE DECK		Checked by	PLAN NO
		Engineer of Structural Design	F 301



— Fastenings per Brace —

- Fishbolt 7/8" dia. x 4 1/4" 1 N^o
- Spring Washer 3/8" x 1/4" for 7/8" 1 N^o
- M^s B or R Screws 2 N^o
- Dogspike 3/4" Sq. x 6" 1 N^o

VICTORIAN-RAILWAYS WAY AND WORKS BRANCH	Approved	Adopted
	<i>C. H. Deane</i> Chief Engineer of Way & Works	1936 Previous 262-34
STANDARD DRAWING	Checked	PLAN N ^o
	<i>W.S.</i> W.S. Engineer	F 302B
80-90-94 Rail Brace		

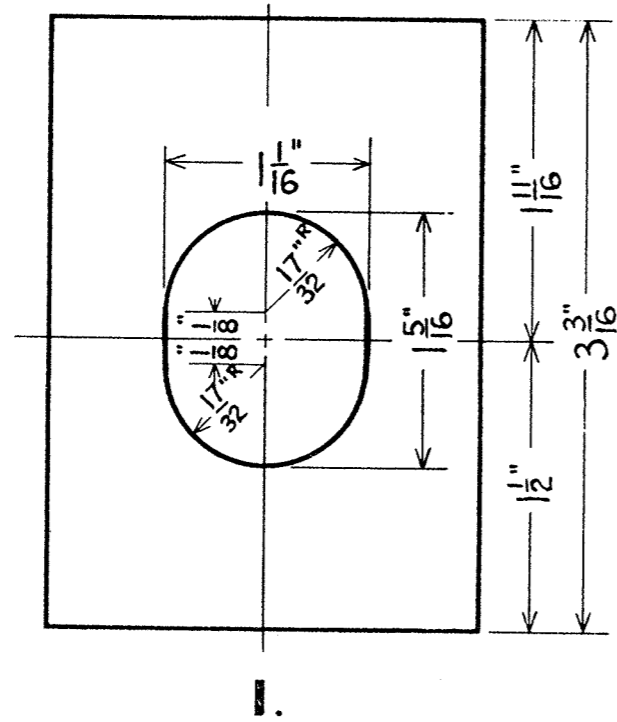


— Fastenings per Brace —

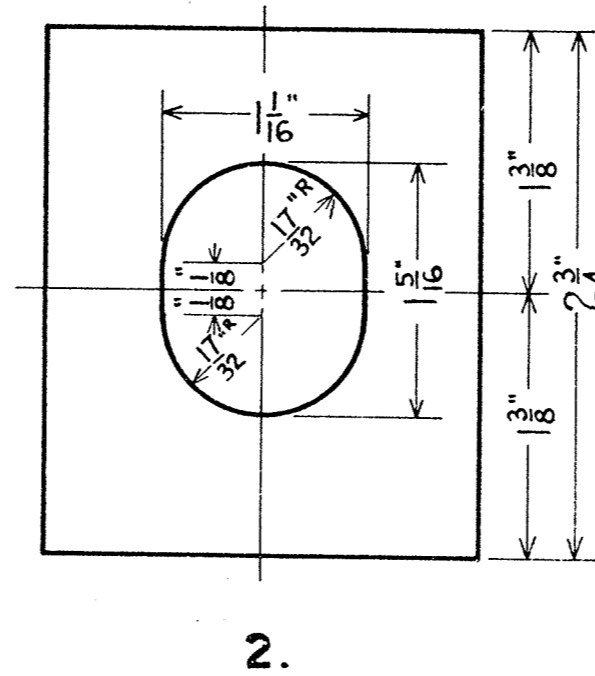
- Fishbolt $\frac{7}{8}$ " dia. x $4\frac{1}{4}$ ".....1 N^o
- Spring Washer $\frac{3}{8}$ " x $\frac{1}{4}$ " for $\frac{7}{8}$ ".....1 N^o
- M^s B or R Screws.....2 N^o
- Dogspike $\frac{3}{4}$ " Sq. x 6".....1 N^o

VICTORIAN RAILWAYS WAY AND WORKS BRANCH STANDARD DRAWING 100-107-110 Rail Brace	Approved	Adopted
	<i>[Signature]</i> Chief Engineer of Ways & Works	1936 Previous 1704-22
	Checked <i>[Signature]</i>	PLAN N ^o F 303 B
	<i>[Signature]</i> W.S. Engineer	

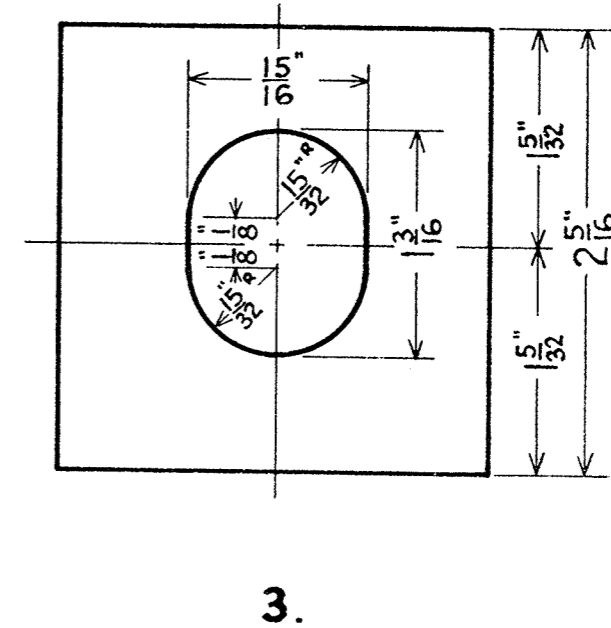
107 & 110 LB



90 & 94 LB

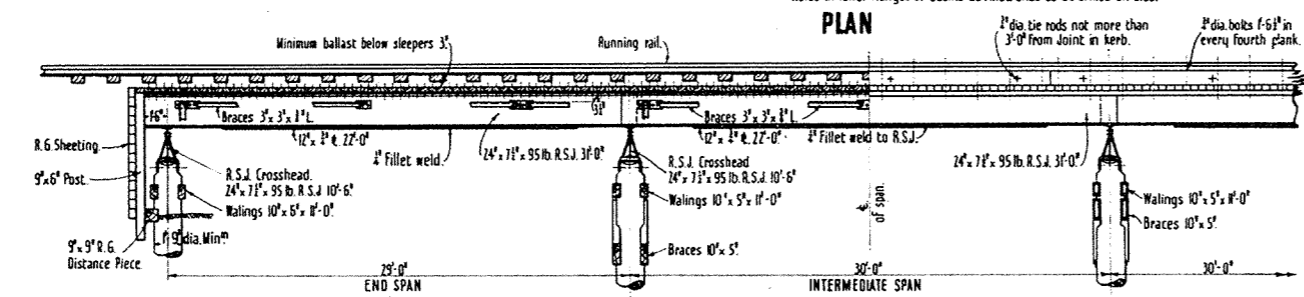
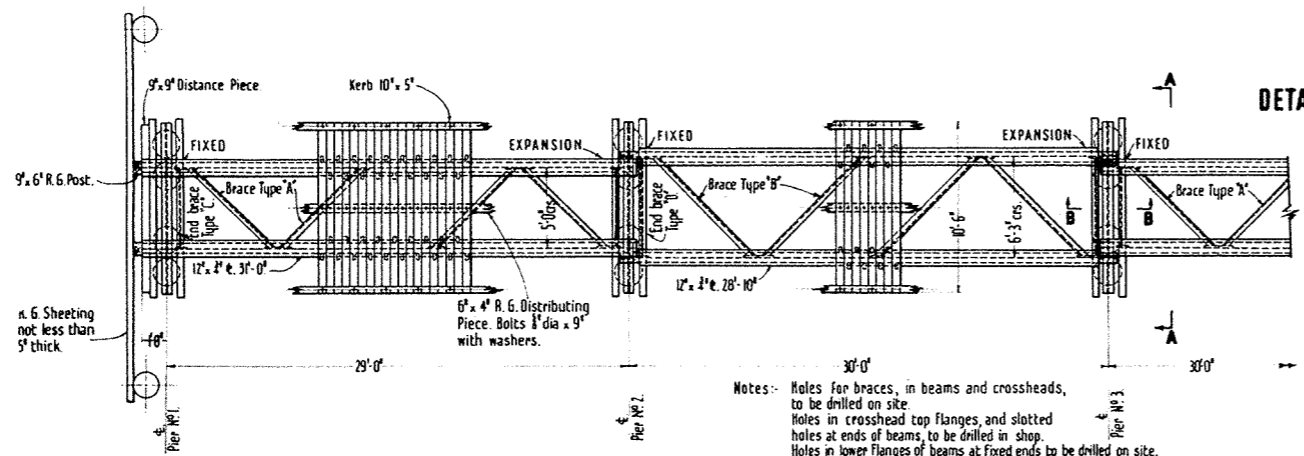


60 LB



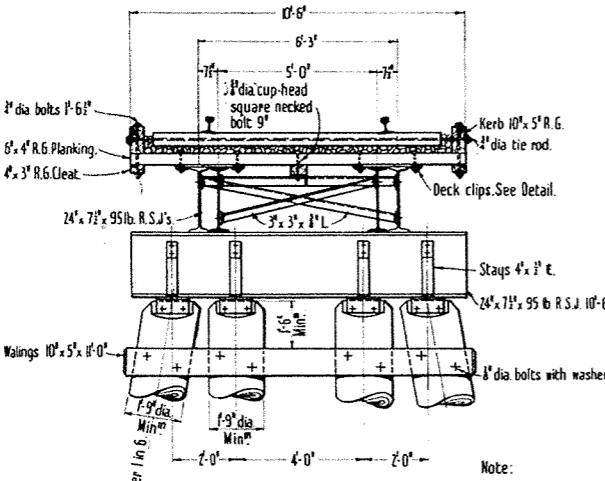
Sheared from $2\frac{1}{4} \times \frac{1}{2}$ Mild Steel Bar.
Holes punched.

VICTORIAN RAILWAYS WAY & WORKS BRANCH	Approved <i>P. J. Schwartz</i> Chief Eng ^r of Way & Works	Adopted 1936
STANDARD DRAWING	Checked <i>W.S.</i> W.S. Engineer	PLAN No F 305A
Headlocks for Special Dummy Chair Bolts.		

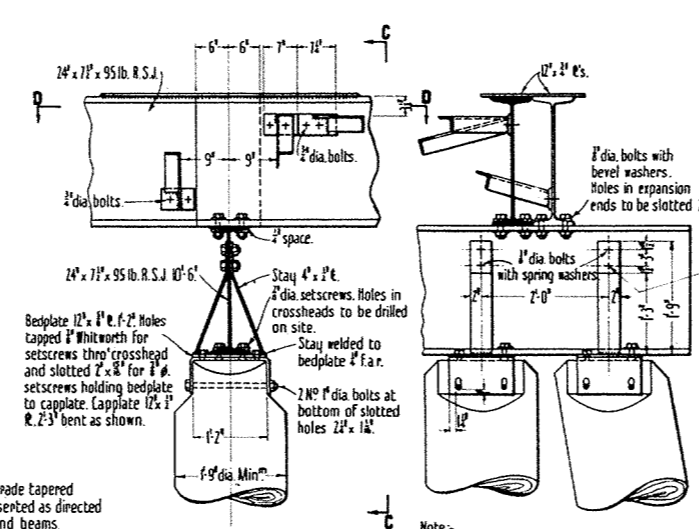


PART LONGITUDINAL SECTION

PART ELEVATION

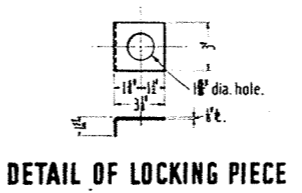
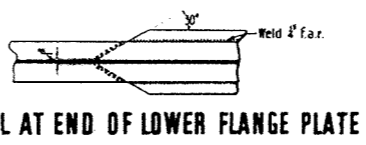


SECTION A-A INTERMEDIATE PIERS

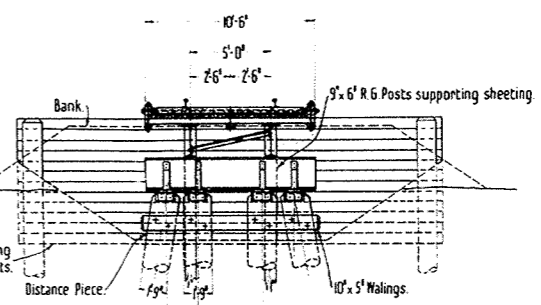


SECTION B-B

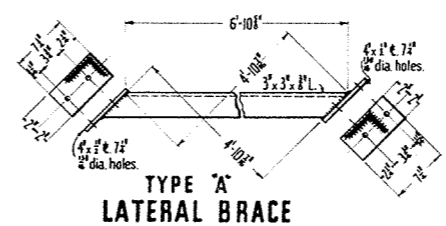
SECTION C-C



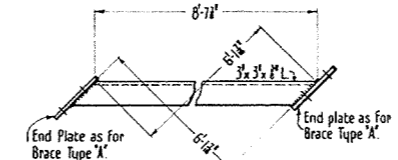
DETAIL OF LOCKING PIECE



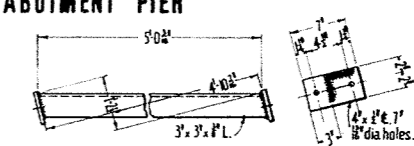
CROSS SECTION ABUTMENT PIER



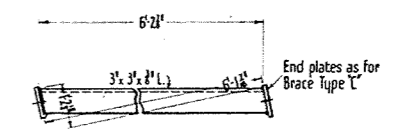
TYPE 'A' LATERAL BRACE



TYPE 'B' LATERAL BRACE

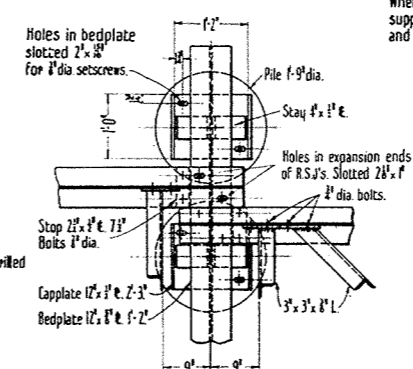


TYPE 'C' END BRACE

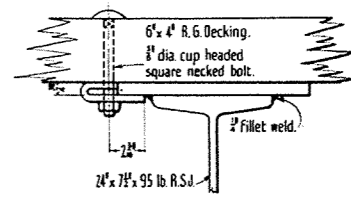


TYPE 'D' END BRACE

Notes re braces: All holes to be drilled in shop. When directed, bracing angles 3" x 3" x 1/2" will be supplied in running lengths, cut to fit on site and welded in position with 2" f.a.r.



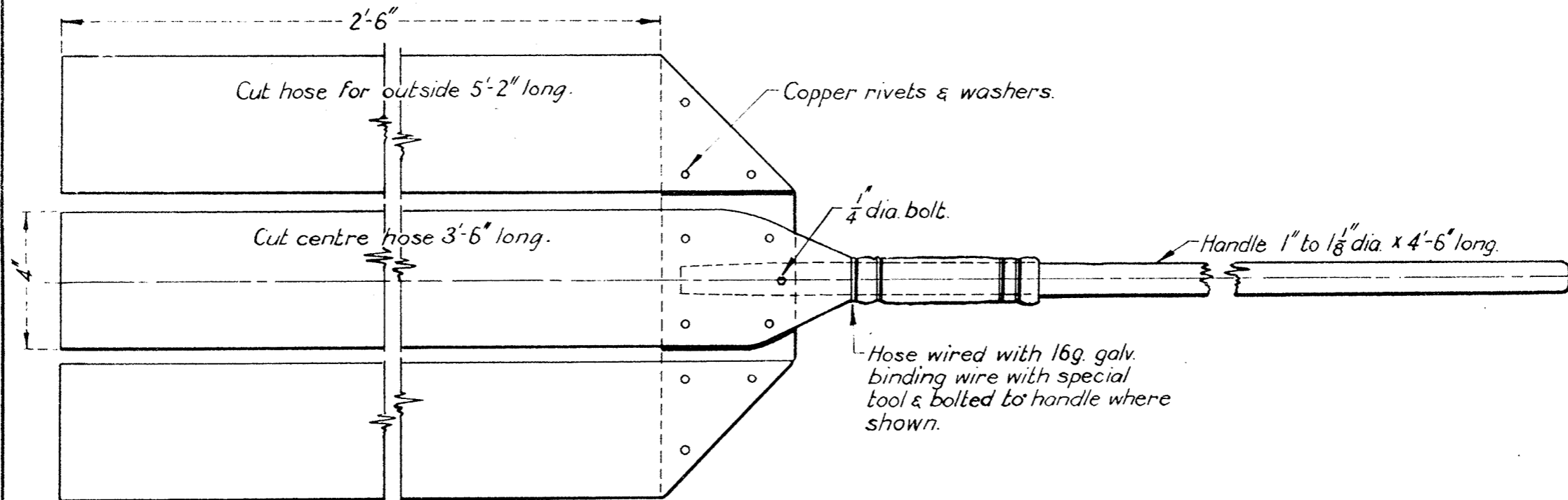
SECTION D-D



DETAIL OF CLIPS

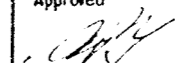
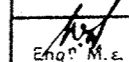
Victorian Railways—Way and Works Branch
STANDARD DRAWING
 30 FT. SPAN BRIDGE WITH STEEL SUPERSTRUCTURE AND PILE PIERS
 2N° PLATED 24" x 7 1/2" x 95 LB. R.S.J.'s. PER. OPE.
DETAILS OF SUPERSTRUCTURE
 NO SCALE

Approved	Adopted
Chief Civil Engineer	
Drawn by J. E. K.	Checked by L. A. S.
Eng' of Structural Design	Plan No. F306



10 No Canvas tails, sewn into two ply,
made from old canvas fire hose.

This plan supersedes Plan No 308

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING — FIRE BEATER —	Approved  Chief Civil Engineer.	Adopted November 1948.
	Checked C.M.	PLAN No F 308A
	 Eng. M. & W. S.	

Scale: - 3" = 1'-0"

PART I - GENERAL.
 1. Structural concrete work shall be carried out subject to the following instructions. These instructions apply only to concrete made from normal Portland cement. Quick setting or rapid hardening cement if specified must be used as specially directed.
 One set of field equipment for making slump tests and forms for making compression test specimens should be available in each district and will be forwarded to the various Works Foremen's sections as required.

PART II - MATERIALS.
 2. Cement required by the Department is subjected to tests by the engineer of Tests and field tests of cement are not to be undertaken. If any cement has been damaged or is considered to be of doubtful quality, samples should be forwarded to the Engineer of Tests, and the cement must not be used until advice has been received as to how it may be utilised.
 Cement shall be protected from the effects of weather, damp air or dampness in the ground and shall be stored in such a way as to permit of its use in lots in the order in which it is received so as to avoid an excessive time of storage.

3. Fine aggregate (or sand) shall consist of approved clean, hard, strong, durable, uncoated grains of inert material, free from injurious amounts of dust, lumps, soft or flaky particles, shale, alkali, organic matter, loam or other deleterious substances.
 4. Coarse aggregate shall consist of approved gravel or crushed stone having clean, hard, strong, durable and uncoated particles, free from soft, thin, elongated or laminated pieces and vegetable matter. The maximum size of the aggregate shall not be larger than one-fifth of the narrowest dimension between the forms, nor larger than three-fourths of the minimum clear distance between reinforcing bars nor of the minimum clear distance between the inside of bars and nearest reinforcing bar.
 Aggregate shall be stored in such a manner as to prevent the intrusion of foreign matter.

5. Water for concrete shall be clean and free from oil and injurious amounts of acid, alkali, organic matter or other deleterious substance.
 6. Metal reinforcement shall be clean and free from loose scale, oil paint or other coatings and shall also be free from kinks and bends not shown on plans.

PART III - PROPORTIONING.
 7. Mixing proportions. Concrete shall be mixed in the proportions by volume of cement to aggregate as shown on the drawings, except as indicated below.
 For jobs on which over 20 cubic yards of concrete are to be used or where directed or thought desirable by supervising officers, the proportions to be used shall be determined by the Structure Engineer. For this purpose samples of about 15 lbs. weight of fine aggregate and 30 lbs. weight of coarse aggregate are to be forwarded to the Structure Engineer for inspection and testing. Care must be taken that the samples forwarded are truly representative of the aggregates to be used. The proportions of cement, fine aggregate and coarse aggregate and the quantity of water to be used, as fixed by the Structure Engineer, are to be adhered to as closely as possible and any variations found necessary are to be reported.

8. Measuring. All materials shall be measured by volume. One bag of cement (94 lbs.) can be regarded as occupying 1 cubic foot space. The aggregates shall be measured loose in suitable gauge boxes, barrows or skips.
 The quantity of water used with each batch shall be measured and shall be the minimum necessary to produce concrete of the required consistency which shall be determined by the slump test to be carried out as follows:-
 A standard sheet metal form and 5/8" diameter metal rod will be supplied with field equipment. The form shall be filled with concrete placed in layers about 4 inches deep and each layer worked 30 times with the bullet pointed end of rod. The form shall then be lifted off immediately and the settlement or slump of the concrete measured. This must not exceed the value given in Table No.1.

Table No.1 - Consistency of Concrete.

Type of Concrete	Maximum Slump from 12 inches
Mass concrete	2 inches
Reinforced concrete -	
Thin vertical sections	6 inches
Heavy sections	2 inches
Thin confined horizontal sections	8 inches
Roads and pavements hard finished	4 inches
Mortar for finishing	2 inches

The exact amount of materials required to produce concrete of the proper consistency can only be specified after trial mixes have been made but the approximate quantities required are shown in Table No.2, which allows for the use of fine sand and clean crushed bluestone of uniform gauge. For coarse sand, the quantities shown in column headed "damp or wet" may be reduced.

Table No.2 - Approximate quantities of materials required per cubic yard of concrete.

Type of Mix.	Gallons of Water			Paper bags of Cement	Cubic feet of Sand				Coarse Aggregate	Maximum size of aggregate allowable	
	Condition of Sand				"Bone Dry"		Damp or wet				
	Dry	Damp	Wet		c.ft.	c.yds.	c.ft.	c.yds.			
1:3 :.5	28	22	20	4 1/2	14	.52	18	.67	23	.85	2"
1:2 1/2 :.4	30	24	22	5 1/2	14	.52	18	.67	22	.81	1 1/2"
1:2 :.3	31	24	22	6 1/2	14	.52	18	.67	21	.78	1"
1:1 1/2 :.3	28	24	22	7 1/2	11 1/2	.43	15 1/2	.58	22	.81	3/4"

* Where the use of a larger size of aggregate would give economy, the quantity of water shown as required should be reduced.

PART IV - TESTING OF CONCRETE.
 9. Quantity of water to be used shall be checked by slump tests made from time to time during the progress of the work by the Works Foreman.
 10. Test specimens. Where directed test cylinders are to be prepared in accordance with instructions in Appendix A. The specimens are to be clearly marked with waterproof ink or lead pencil with date and identification marks and after curing are to be forwarded to the Engineer of Tests accompanied by standard form to be supplied on application with as much information filled in as possible. A copy of this form is to be sent in direct to the Structure Engineer at the same time.
 11. Tallying. The employe in charge of the concrete gang is to arrange to keep a daily tally of the bags of cement used and the batches mixed. These particulars are to be forwarded at the end of each fortnightly pay period to the Works Foreman who is to check the results with the quantity of concrete poured.

PART V - MIXING CONCRETE.
 12. Mixing. No concrete shall be mixed while the air temperature is at or below 35 degrees Fahrenheit or during excessively hot weather.
 13. Machine mixing. The concrete shall be mixed until there is a uniform distribution of the materials and the mass is uniform in color and composition. Only batch mixers shall be used. Each batch shall be mixed for at least one minute after all materials are in the mixer and before commencing to discharge concrete. The concrete shall be completely discharged from the mixer before commencing recharging.
 The machine, including the engine must be kept clean and the mixer drums must be regularly washed out and have set concrete removed. Arrangements must be made for the repair of holes in the mixer drum and wear on the blades. Speed of rotation of the mixer drum should be made to approximate that fixed by the maker of the machine - usually 14 to 20 revolutions per minute. The time of mixing, not the number of times the batch is turned over during mixing, affects the strength.
 14. Hand mixing. Concrete shall be mixed by hand only when the quantity to be mixed is small or when approved. It shall be done on a watertight platform and the amount of cement used shall be 10 per cent more than that used for machine mixed concrete. The cement and aggregate shall first be mixed together dry by turning over at least three times until the whole is of uniform color. The determined quantity of water shall then be added by means of a watering can fitted with a rose while the entire mass is again turned over three times until it is uniform in color and composition.
 15. Retempering prohibited. If more than 30 minutes has elapsed since mixing any batch of concrete or if the concrete has partially hardened, such batch shall not be placed in any structure.

PART VI - PREPARATION OF FORMS AND EQUIPMENT, ETC.
 16. Cleaning forms and equipment, etc. Before placing concrete all forms and all equipment for mixing and transporting the concrete shall be cleaned, all debris removed from the places to be occupied by the concrete and the interior of the forms shall be thoroughly wetted or coated with a non-staining mineral oil or soft soap.
 Water shall be removed from the excavation unless otherwise directed.
 17. Concrete shall be handled from the mixer to the place of final deposit as rapidly as possible by methods which shall prevent the separation and loss of the ingredients. It shall be deposited as nearly as practicable in its final position to avoid rehandling or flowing. The concrete shall be thoroughly compacted by tamping, spading or slicing with suitable tools and care must be taken not to disturb reinforcement.
 Placing under water shall be done only when approved. Concreting started under water shall proceed continuously and shall not be disturbed after being placed. In general concrete placed under water should have 25 per cent more cement than similar concrete placed in the open and in no case should the quantity be less than 7 bags per cubic yard.

PART VII - TRANSPORTING AND PLACING.
 18. Construction joints. Location of joints shall be planned in advance as far as possible and are to be so placed as to least impair the strength of the structure. In bridge piers the joints shall be horizontal and keyed. Before leaving the work, the surface of construction joints shall be roughened. On resuming work, the surface of the set concrete shall be thoroughly chipped and cleaned of foreign matter and laitance, washed with clean water and painted with neat cement mortar after which concreting may proceed. When painting with neat cement mortar, the cement must not be applied within two inches of the forms.
 19. Curing. Exposed surfaces of concrete shall be kept moist for a period of seven days after being deposited, particular care being taken during hot weather.

PART VIII - CURING.
 20. Construction of forms. Forms shall be substantial and sufficiently tight to prevent leakage of mortar. They shall be so supported and braced that they will not deflect, distort, nor move out of position when filled with concrete.
 21. Removal of forms. The minimum time for stripping forms shall be as shown in Table No.3.

Table No.3 - Minimum Times for stripping Forms

Atmospheric Temperature	Vertical Surfaces	Bottom Forms of Beams and Surfaces	
		Less than 6 ft span	More than 6 ft span
Not under 70° F.	2 days	7 days	12 days
From 70° to 50° F.	3 days	10 days	14 days
From 50° to 40° F.	5 days	14 days	21 days
Under 40°	10 days	21 days	28 days

PART X - FINISHING.
 22. Finishing surface of concrete. As soon as the forms are removed all wires, etc., shall be cut off or set back one inch below the surface and concreted with cement mortar. The surface shall not be plastered with mortar finish unless specially directed but lean places in surface of concrete may have the holes filled with mortar applied with a trowel immediately after stripping forms.

PART XI - LOADING.
 23. Removal of temporary supports. Unless otherwise instructed, temporary supports are not to be removed nor live loads imposed on concrete structures within the periods shown in Table No.4.

Table No.4 - Minimum Times for loading Concrete.

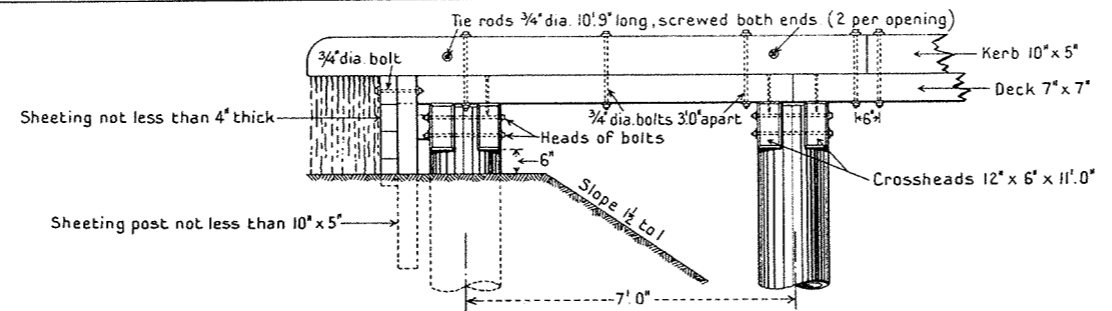
Type of concrete structure	Minimum time for loading with live loads
Bridge piers and abutments, walls and members under vertical loads only	14 days
Beams, flat slabs and members subject to bending	28 days

APPENDIX A. Method of Making and Storing Specimens of Cement Concrete for Compression Test.

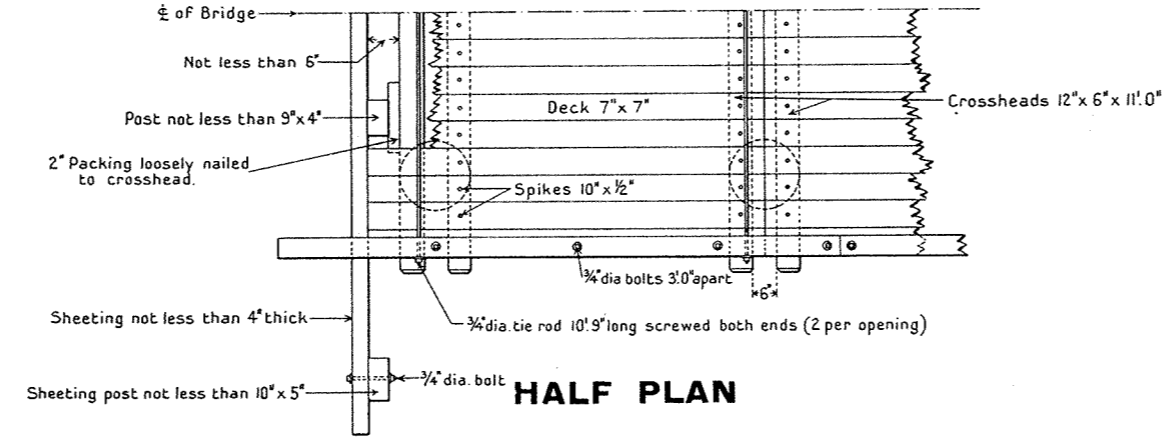
1. Test specimens shall be cast in standard cylindrical moulds. Each mould shall be provided with a base plate and top plate having plane surfaces and a standard 5/8 inch diameter bullet pointed metal rod.
 2. Before use the moulds and base and top plates shall be slightly smeared with mineral oil to prevent adhesion of the concrete.
 3. Concrete for test specimens shall if possible be taken immediately after it has been placed in the work but when this is not possible it may be taken from the barrows or chutes as it is being deposited in the forms. All the concrete for each specimen shall be taken from one place. A sufficient number of specimens shall be taken at different points so that the test specimens made from them will give a fair average of the concrete placed in that portion of the structure selected.
 In securing specimens the concrete shall be taken from the mass by a shovel or similar implement and placed in a bucket or other suitable non-absorbent receptacle, for transporting to the place of moulding. Care shall be taken that each test specimen represents the total mixture of the concrete at that place. Different specimens shall not be mixed together, but each specimen shall make one test.
 4. The receptacles containing the samples of concrete shall be taken as quickly as possible to the place selected for moulding test specimens, and the concrete, after a minimum of mixing such as is necessary to offset any segregation that has occurred during transportation, shall be immediately placed in the mould.
 5. The test specimens shall be moulded by placing the concrete in the mould in three layers, each approximately one-third the volume of the mould. In placing each scoopful of concrete, the scoop shall be moved around the top edge of the mould as the concrete slides from it in order to ensure a symmetrical distribution of concrete within the mould. Each layer shall be puddled throughout its depth with 25 strokes of the bullet pointed end of the standard metal rod. The strokes shall be distributed in a uniform manner over the cross-section of the mould and shall penetrate in the case of the upper layers, into the underlying layer. After the top layer has been puddled, the surface of the concrete shall be struck off with a trowel and covered with the top cover plate. The specimens shall be retained without movement at the place of moulding for 24 hours, during which time they shall be protected from the elements by the same method of protection as is used for the portion of the work which they represent.
 6. At the end of 24 hours the moulds shall be removed from the test specimens.
 7. Specimens for testing shall be kept on the work as near the point of sampling as practicable and receive similar protection from the elements as is given to the work they represent. They shall be protected from injury.
 For 28 day tests, specimens shall be sent to the engineer of Tests 7 days prior to the time of the test. For 7 day tests, specimens shall be sent to the engineer of Tests 3 days prior to the time of test. Specimens are to be carefully marked and packed to prevent damage in transit and advice of consignment promptly sent so that there may be no delay in receipt of specimens.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH INSTRUCTIONS FOR CONCRETE WORK	Approved <i>M. S. H. Smith</i> Chief Engineer of Way & Works	Adopted Jan. 1937
	Drawn by W. U.	Checked by A. P. T.
	<i>W. D. Brown</i> Structure Engineer	

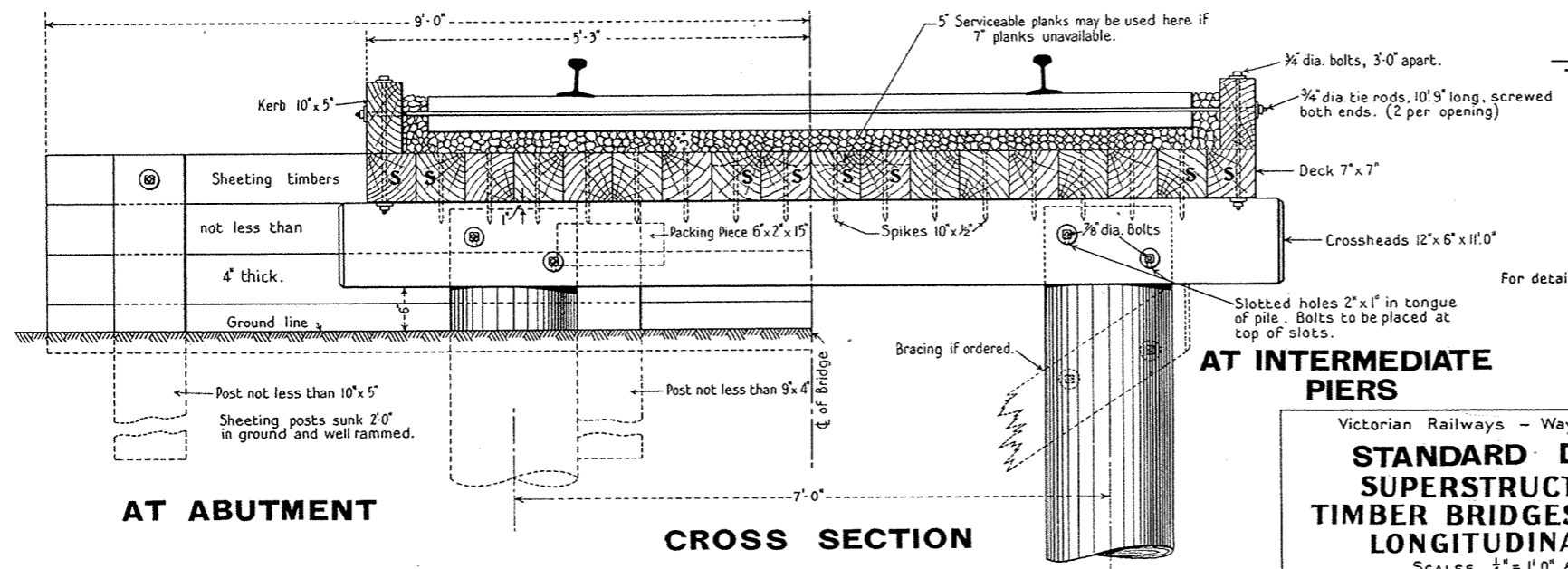
PLAN No. F309



ELEVATION



HALF PLAN



AT INTERMEDIATE PIERS

AT ABUTMENT

CROSS SECTION

NOTES— Banks at end piers to be made up to 6\"/>

For details of substructure see drawings Nos F268 & F270

Victorian Railways - Way and Works Branch
STANDARD DRAWING
SUPERSTRUCTURE OF
TIMBER BRIDGES - 7.0\"/>

Approved <i>J. W. Schwartz</i> Chief Eng of Way & Works	Adopted MAY 1937
Drawn by <i>W. G. H. T. & K. W. L.</i>	Checked by <i>W. Bromby</i> Structure Engineer
PLAN No F 311	

SCALES 1/4\"/>

LIST OF FASTENINGS REQUIRED FOR 90LB & 110LB LAYOUTS "V" NOSED POINTS WITH TIEPLATES.

DETAIL OF FASTENINGS.	TURNOUTS						COM. O'IDS.						MODIFIED THREE THROWS.						DELTA'S.						REMARKS.			
	CROSSING		SPRING CRSG.		SINGLE		DOUBLE		100 FOLL. BY		800 FOLL. BY		1000 FOLL. BY		STANDARD		UNEQUAL											
	600	800	1000	600	800	1000	600	800	1000	600	800	1000	600	800	1000	600	800	1000	600	800	1000							
CHAIRS, ADJUSTABLE SLIDE.	2	2	2	2	2	2	4	4	4	4	4	4	3	3	3	4	3	3	4	4	4	8	8	8	8	8	8	
" " " TOE.										4	4	4	1	1	1		1	1										
" " " COMMON TOE.										4	4	4			1			1										
" " " COMMON & HEEL SLIDE.	12	14	16	12	14	16	24	28	32	44	52	60	24	26	27	26	28	29	28	30	32	48	56	64	48	56	64	
" " " SPECIAL DUMMY.	SEE LIST OF EXTRA MATERIAL FOR SIGNAL REQUIREMENTS																											
" " " DEEP							2	2	2				1	1	1	1	1	1	1	1	1							
" " " COMMON							24	28	32				13	15	17	13	15	17	13	15	17							
" " " INSULATED							2	2	2																			
RAIL BRACES.				3	3	3																						
BOLTS CHAIR.	14	16	18	14	16	18	28	32	36	56	64	72	28	30	32	30	32	34	32	34	36	56	64	72	56	64	72	
" " " GUARD RAIL LONG.	4	4	4	4	4	4	8	8	8	8	8	8	10	10	10	10	10	10	10	10	10	12	12	12	10	10	10	
" " " " SHORT.	6	6	6	12	12	12	12	12	12	12	12	12	18	18	18	18	18	18	18	18	18	24	24	24	18	18	18	
WASHERS, SPRING.	24	26	28	30	32	34	48	52	56	76	84	92	56	58	60	58	60	62	60	62	64	92	100	108	84	92	100	
" " " FLAT.	32	32	32	56	56	56	64	64	64	72	72	72	88	88	88	88	88	88	88	88	88	128	128	128	104	104	104	
PINS, CHAIR.	6	6	6	6	6	6																24	24	24	24	24	24	
SCREWS, CHAIR.	42	46	50	42	46	50	88	96	104	160	176	192	83	87	90	89	91	94	92	96	100	168	184	200	168	184	200	
" " " RAIL BRACE				6	6	6																						
FERRULES, GUARD RAIL, LONG.	4	4	4	4	4	4	8	8	8	8	8	8	10	10	10	10	10	10	10	10	10	12	12	12	10	10	10	
" " " " SHORT.	6	6	6	12	12	12	12	12	12	12	12	12	18	18	18	18	18	18	18	18	18	24	24	24	18	18	18	
PLATES " " " GAUGE.				14	16	16																						
DOG SPIKES 7" FOR DUMMY CHAIRS							48	56	64				26	30	34	26	30	34	26	30	34							
" " " 9" FOR DEEP " "							8	8	8				4	4	4	4	4	4	4	4	4							
SPREADERS NO 1.	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	} FOR TYPE OF SPREADER CONSULT S.&T. PLANS.
" " " 2.	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	
" " " 3.															1			1	1	1	2			4		4		
TIE PLATES.	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	
TIMBER COVERS, FOR TIE PLATES.	1	1	1	1	1	1																4	4	4	4	4	4	
FISH PLATES, CROSSING, PAIR.	2		2	3	1	3	4	8	12	4	8	12	4	4	6	2		2	4	2	4							
INSULATED JOINTS.	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8	8	8	8	8	8	TRACK LOCKED AREAS.
WHERE DEPRESSED TIMBERS ARE REQUIRED BY THE SIGNALS DIVISION THE FOLLOWING QUANTITIES ARE EXTRA, AND ARE GIVEN FOR ONE DEPRESSED TIMBER AHEAD OF EACH SET OF POINTS.																												
CHAIRS, SPECIAL DUMMY.	2	2	2	2	2	2	4	4	4	8	8	8	4	4	3	4	4	3	4	4	4	8	8	8	8	8	8	FASTENINGS FOR LAYOUTS.
" " " DEEP							4	4	4				2	2	3	2	2	3	2	2	2							
BOLTS, CHAIR.	2	2	2	2	2	2	4	4	4	8	8	8	4	4	3	4	4	3	4	4	4	8	8	8	8	8	8	
WASHERS, SPRING.	2	2	2	2	2	2	4	4	4	8	8	8	4	4	3	4	4	3	4	4	4	8	8	8	8	8	8	
HEADLOCKS, FOR CHAIR BOLTS.	2	2	2	2	2	2	4	4	4	8	8	8	4	4	3	4	4	3	4	4	4	8	8	8	8	8	8	
DOG SPIKES 9" FOR DEEP DUMMYS.							8	8	8				4	4	6	4	4	6	4	4	4							

CHIEF ENGR. OFF. N. & W.
 V.S. ENGR. *[Signature]*
 CHKD. *[Signature]* F313.

LIST OF FASTENINGS REQUIRED FOR 90LB & 110LB LAYOUTS "V" NOSED POINTS WITH TIEPLATES.

DETAIL OF FASTENINGS.	TURNOUTS						COMPOUNDS.						MODIFIED THREE THROWS.						DELTA.						REMARKS.			
	V CROSSING			SPRING GRSG.			SINGLE			DOUBLE			600 FOLL. BY		800 FOLL. BY		1000 FOLL. BY		STANDARD			UNEQUAL						
	600	800	1000	600	800	1000	600	800	1000	600	800	1000	600	800	600	800	600	800	600	800	1000	600	800	1000		600	800	1000
CHAIRS, ADJUSTABLE SLIDE.	2	2	2	2	2	2	4	4	4	4	4	4	3	3	3	4	3	3	4	4	4	8	8	8	8	8	8	
" " TOE.													4	4	4	1	1	1	1	1								
" COMMON TOE.													4	4	4													
" COMMON & HEEL SLIDE.	12	14	16	12	14	16	24	28	32	44	52	60	24	26	27	26	28	29	28	30	32	48	56	64	48	56	64	
" SPECIAL DUMMY.	SEE LIST OF EXTRA MATERIAL FOR SIGNAL REQUIREMENTS.																											
" DEEP "							2	2	2				1	1	1	1	1	1	1	1	1							
" COMMON "							24	28	32				13	15	17	13	15	17	13	15	17							
" INSULATED "							2	2	2																			
RAIL BRACES.				3	3	3																						
BOLTS CHAIR.	14	16	18	14	16	18	28	32	36	56	64	72	28	30	32	30	32	34	32	34	36	56	64	72	56	64	72	
" GUARD RAIL LONG.	4	4	4	4	4	4	8	8	8	8	8	8	10	10	10	10	10	10	10	10	10	12	12	12	10	10	10	
" " " SHORT.	6	6	6	12	12	12	12	12	12	12	12	12	18	18	18	18	18	18	18	18	18	24	24	24	18	18	18	
WASHERS, SPRING.	24	26	28	30	32	34	48	52	56	76	84	92	56	58	60	58	60	62	60	62	64	92	100	108	84	92	100	
" FLAT.	32	32	32	56	56	56	64	64	64	72	72	72	88	88	88	88	88	88	88	88	88	128	128	128	104	104	104	
PINS, CHAIR.	6	6	6	6	6	6																24	24	24	24	24	24	
SCREWS, CHAIR.	42	46	50	42	46	50	88	96	104	160	176	192	83	87	90	88	91	94	92	96	100	168	184	200	168	184	200	
" RAIL BRACE.				6	6	6																						
FERRULES, GUARD RAIL, LONG.	4	4	4	4	4	4	8	8	8	8	8	8	10	10	10	10	10	10	10	10	10	12	12	12	10	10	10	TYPE 1930 FERRULES IN HANDS TYPE 1935 BLOCKS IN HANDS
" " " SHORT.	6	6	6	12	12	12	12	12	12	12	12	12	18	18	18	18	18	18	18	18	18	24	24	24	18	18	18	
PLATES " " " GAUGE.				14	16	16																						
DOG SPIKES 7" FOR DUMMY CHAIRS							48	56	64				26	30	34	26	30	34	26	30	34							
" 9" FOR DEEP "							8	8	8				4	4	4	4	4	4	4	4	4							
SPREADERS NO 1.	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	FOR TYPE OF SPREADER CONSULT S.&T. PLANS.
" " " 2.	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	
" " " 3.			1			1			2			4			1			1	1	1	2			4			4	
TIE PLATES.	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	
TIMBER COVERS, FOR TIE PLATES.	1	1	1	1	1	1																4	4	4	4	4	4	
FISH PLATES, CROSSING, PAIR.	2		2	3	1	3	4	8	12	4	8	12	4	4	6	2		2	4	2	4	4	4	4	4	4	4	
INSULATED JOINTS.	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8	8	8	8	8	8	TRACKLOCKED AREAS.

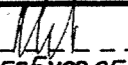


WHERE DEPRESSED TIMBERS ARE REQUIRED BY THE SIGNALS DIVISION THE FOLLOWING QUANTITIES ARE EXTRA, AND ARE GIVEN FOR ONE DEPRESSED TIMBER AHEAD OF EACH SET OF POINTS.

CHAIRS, SPECIAL DUMMY.	2	2	2	2	2	2	4	4	4	8	8	8	4	4	3	4	4	3	4	4	4	8	8	8	8	8	8	FASTENINGS FOR LAYOUTS. CHIEF ENGR. OF W. & W. W.S. ENGR. <i>[Signature]</i> GHKD. <i>[Signature]</i> F313A
" DEEP "							4	4	4				2	2	3	2	2	3	2	2	2							
BOLTS, CHAIR.	2	2	2	2	2	2	4	4	4	8	8	8	4	4	3	4	4	3	4	4	4	8	8	8	8	8	8	
WASHERS, SPRING.	2	2	2	2	2	2	4	4	4	8	8	8	4	4	3	4	4	3	4	4	4	8	8	8	8	8	8	
HEADLOGS, FOR CHAIR BOLTS.	2	2	2	2	2	2	4	4	4	8	8	8	4	4	3	4	4	3	4	4	4	8	8	8	8	8	8	
DOG SPIKES 9" FOR DEEP DUMMYS.							8	8	8				4	4	6	4	4	6	4	4	4							

LIST OF FASTENINGS REQUIRED FOR 90LB & 110LB LAYOUTS "V" NOSED POINTS WITHOUT TIEPLATES.

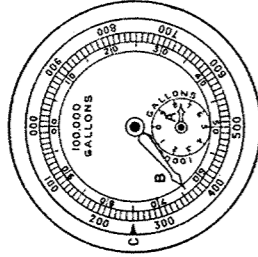
DETAIL OF FASTENINGS.	TURNOUTS						COMPOUNDS						MODIFIED THREE THROWS						DELTAS						REMARKS.				
	V GROSSINGS			SPRING CRSNG			SINGLE			DOUBLE			600 FOLL. BY.		800 FOLL. BY.		1000 FOLL. BY.		STANDARD			UNEQUAL							
	600	800	1000	600	800	1000	600	800	1000	600	800	1000	600	800	600	800	600	800	600	800	1000	600	800	1000		600	800	1000	
CHAIRS ADJUSTABLE SLIDE.																													
" " TOE.																													
" COMMON TOE.										8	8	8	1	1	2		1	2											
" COMMON & HEEL SLIDE.	14	16	18	14	16	18	28	32	36	48	56	64	27	29	30	30	31	32	32	34	36	56	64	72	56	64	72		
" SPECIAL DUMMY.																													
" DEEP																													
" COMMON							28	32	36				14	16	18	14	16	18	14	16	18								
" INSULATED																													
RAIL BRACES.				3	3	3																							
BOLTS CHAIR,	14	16	18	14	16	18	28	32	36	56	64	72	28	30	32	30	32	34	32	34	36	56	64	72	56	64	72		
" GUARD RAIL LONG.	4	4	4	4	4	4	8	8	8	8	8	8	10	10	10	10	10	10	10	10	10	12	12	12	10	10	10		
" " " SHORT.	6	6	6	12	12	12	12	12	12	12	12	12	18	18	18	18	18	18	18	18	18	24	24	24	18	18	18		
WASHERS, SPRING.	24	26	28	30	32	34	48	52	56	76	84	92	56	58	60	58	60	62	60	62	64	92	100	108	84	92	100		
" FLAT.	24	24	24	48	48	48	48	48	48	48	48	48	72	72	72	72	72	72	72	72	72	96	96	96	72	72	72		
PINS, CHAIRS.																													
SCREWS, CHAIRS.	42	46	50	42	46	50	88	96	104	160	176	192	83	87	90	88	91	94	92	96	100	168	184	200	168	184	200		
" RAIL BRACE.				6	6	6																							
FERRULES, GUARD RAIL LONG.	4	4	4	4	4	4	8	8	8	8	8	8	10	10	10	10	10	10	10	10	10	12	12	12	10	10	10	} TYPE 1930 FERRULES IN HANDS TYPE 1935 BLOCKS IN HANDS	
" " " SHORT.	6	6	6	12	12	12	12	12	12	12	12	12	18	18	18	18	18	18	18	18	18	24	24	24	18	18	18		
PLATES " " " GAUGE.				14	16	16																							
DOG SPIKES 7" FOR DUMMY CHAIRS							56	64	72				28	32	36	28	32	36	28	32	36								
" 9" FOR DEEP " "																													
SPREADERS NO 1.	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	} FOR TYPE OF SPREADER CONSULT S.&T. PLANS.
" " 2.	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	
" " 3.			1			1			2			4			1		1	1	1	2		4			4		4		
TIE PLATES.																													
TIMBER COVERS, FOR TIE PLATES.																													
FISH PLATES, CROSSING, PAIR.	2		2	3	1	3	4	8	12	4	8	12	4	4	6	2		2	4	2	4								
INSULATED JOINTS	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8	8	8	8	8	8	8	TRACK LOCKED AREAS.

FASTENINGS FOR LAYOUTS.


 CHIEF ENGR. OF W. & W.
 W.S. ENGR. 
 CHKD.  F.314B

INFERENCEAL WATER METERS

Sizes 1½, 1¼ & 1½"

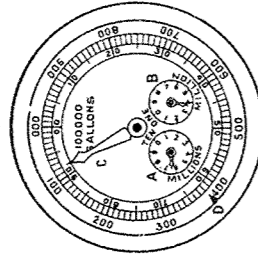


Capacity 100,000,000 Gallons.

The pointers of the above indicate a consumption of 764,250 gallons which is read as follows:—

Pointer A	700,000
" B	64,000
" C	250
Total Registration	<u>764,250</u>

Sizes 2, 2½ & 4"

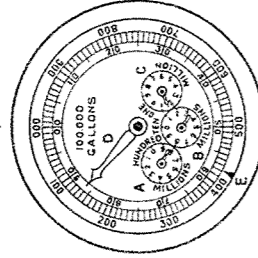


Capacity 10,000,000 Gallons.

The pointers of the above indicate a consumption of 6,392,380 gallons which is read as follows:—

Pointer A	6,000,000
" B	300,000
" C	92,000
" D	380
Total Registration	<u>6,392,380</u>

Sizes 4 & 5"

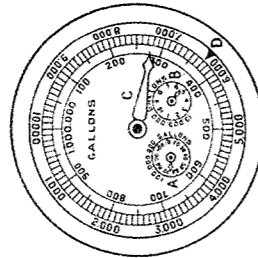


Capacity 100,000,000 Gallons.

The pointers of the above indicate a consumption of 83,186,420 gallons which is read as follows:—

Pointer A	80,000,000
" B	3,000,000
" C	100,000
" D	86,000
" E	420
Total Registration	<u>83,186,420</u>

Sizes 5, 6 & upwards.



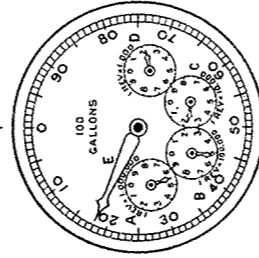
Capacity 100,000,000 Gallons.

The pointers of the above indicate a consumption of 65,276,300 gallons which is read as follows:—

Pointer A	60,000,000
" B	5,000,000
" C	270,000
" D	6,300
Total Registration	<u>65,276,300</u>

POSITIVE WATER METERS DIAL TYPE

Sizes 1 & 1½"

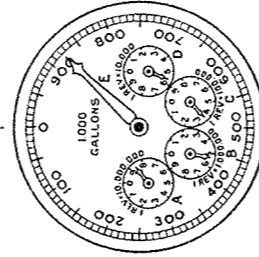


Capacity 1,000,000 Gallons.

The pointers of the above indicate a consumption of 552,218 gallons which is read as follows:—

Pointer A	500,000
" B	50,000
" C	2,000
" D	200
" E	18
Total Registration	<u>552,218</u>

Sizes 1½, 1¼, 1½, 2 & 3"

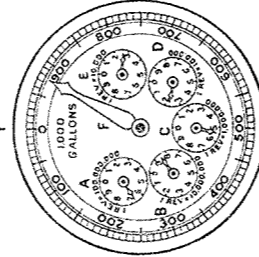


Capacity 10,000,000 Gallons.

The pointers of the above indicate a consumption of 8,535,880 gallons which is read as follows:—

Pointer A	8,000,000
" B	500,000
" C	30,000
" D	5,000
" E	880
Total Registration	<u>8,535,880</u>

Sizes 3 & 4"



Capacity 100,000,000 Gallons.

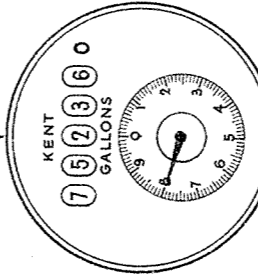
The pointers of the above indicate a consumption of 68,522,920 gallons which is read as follows:—

Pointer A	60,000,000
" B	8,000,000
" C	500,000
" D	20,000
" E	2,000
" F	920
Total Registration	<u>68,522,920</u>

NOTE :- It will be seen from above examples that the lesser figure is always taken i.e. if the pointer is between 5 & 6 the figure 5 is read & so on.

POSITIVE WATER METERS STRAIGHT READING TYPE

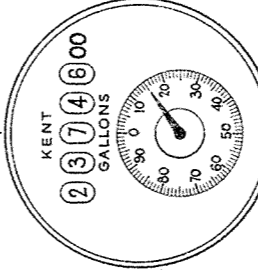
Sizes 1 & 1½"



Capacity 1,000,000 Gallons.

The above registration indicates a consumption of 752,368 Gallons.

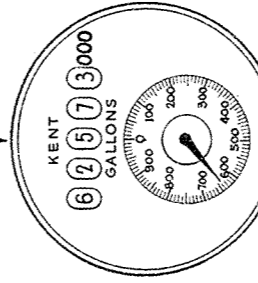
Sizes 1½, 1¼, 1½, 2 & 3"



Capacity 10,000,000 Gallons.

The above registration indicates a consumption of 2,374,615 Gallons.

Sizes 3 & 4"



Capacity 100,000,000 Gallons.

The above registration indicates a consumption of 62,573,640 Gallons.

NOTE :- A meter after recording the measurement of water up to its full capacity, will again start registering from zero. - Quantities less than 1000 gallons should only be given when an account is closed. Meter readings should be taken on the first day of each month, if possible, in conjunction with the representative of the Trust or other body concerned.

This plan supersedes Plan No F315

VICTORIAN RAILWAYS —WAY AND WORKS BRANCH

STANDARD DRAWING

EXAMPLES OF METHODS FOR READING ALL TYPES OF WATER METERS

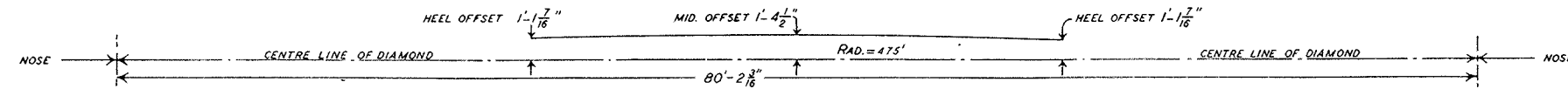
Approved
JAN. 62

Chief Civil Engineer
Drawn by (Checked by)
V.M.&M.O. C.F.

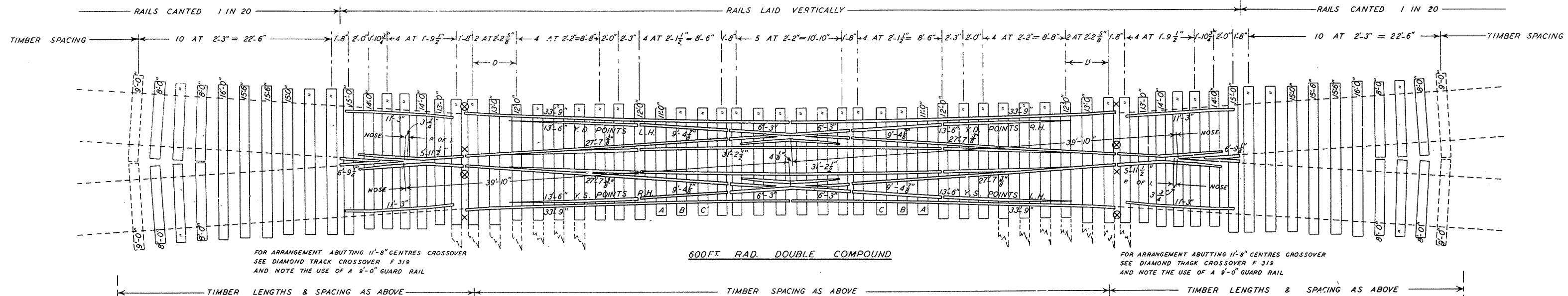
PLAN No.
F315A

A.A.P.
Engt. of M. & W.S.

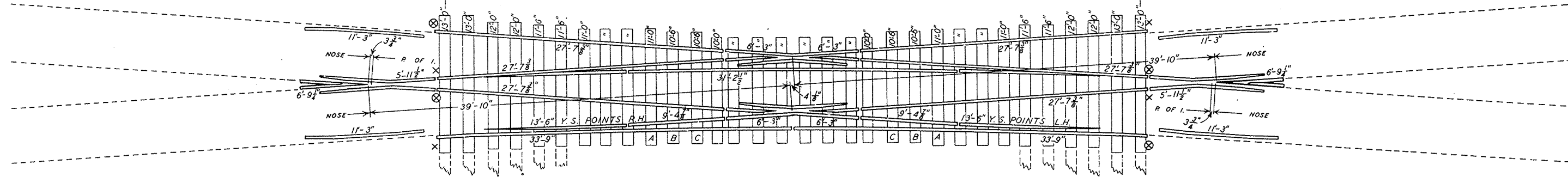
Revision	Date	Amendment	Chkd.
A	Jan. 62	Positive straight reading type added.	



OFFSET DIAGRAM



600 FT. RAD. DOUBLE COMPOUND



600 FT. RAD. SINGLE COMPOUND

DATA	POINTS AND CROSSINGS FOR DOUBLE COMPOUND	POINTS AND CROSSINGS FOR SINGLE COMPOUND	TIMBERS FOR DOUBLE COMPOUND:- 12"x6" SAWN	TIMBERS FOR SINGLE COMPOUND:- 12"x6" SAWN	NOTES:	IN THE DOUBLE COMPOUND WHEN POINTS ARE HAND OPERATED THE LEADING LEVER FACING THE POINTS MUST BE RODDED TO OPERATE THE POINTS NEAREST THE LEVERS. WHEN FUTURE CONVERSION OF SINGLE COMPOUND TO DOUBLE COMPOUND IS CONTEMPLATED THE DOUBLE COMPOUND TIMBERS MUST BE PROVIDED. SPACING AT "D" TO BE ARRANGED, WHEN NECESSARY, TO SUIT METHOD OF OPERATION. 1 IN 20 RAIL CANT TO BE RUN OUT OVER THREE TIMBERS BEFORE JUNCTIONING TO VERTICAL RAILS.
POINT ANGLE 1° 54' - 1° 0'	2 SETS 13'-6" Y.S. POINTS 1 - R.H. 1 - L.H.	2 SETS 13'-6" Y.S. POINTS 1 - R.H. 1 - L.H.	2 NO. 16'-0" 8 NO. 13'-0" } SUP. FT.	2 NO. 16'-0" 4 NO. 12'-0" } SUP. FT.	ALTERNATE POSITIONS FOR INSULATED JOINTS WHEN REQUIRED ARE SHOWN THUS X & THUS ⊗	LOCATE ENDS OF GUARD RAILS 2" CLEAR OF JOINT FISHPLATES LEAD IS ADJUSTED TO 79'-2 1/2" FOR RAIL CUTTING ADZE TIMBERS A B & C UNDER ALL STOCKRAILS A 1/8", B 1/4", C 1/8" POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. EXPANSION AT JOINTS:- INSULATED JOINTS NIL. OTHER JOINTS 1/8" EQUALIZE EXPANSIONS IN NON INSULATED LAYOUTS.
CROSSING NUMBERS 1 IN 7-52	2 SETS 13'-6" Y.D. POINTS 1 - R.H. 1 - L.H.	2 "V" CROSSINGS. NUMBER 1 IN 7-52	4 " 15'-6" 14 " 12'-0" } 4512	4 " 15'-6" 8 " 11'-0" } 4404	NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10"x5" HEWN TIMBERS 12 NO. 8'-0" = 400 SUP. FT.	
CROSSING ANGLES 7° 34' - 6° 6'	2 "V" CROSSINGS. NUMBER 1 IN 7-52	2 "K" CROSSINGS. NUMBER 1 IN 7-52	8 " 15'-0" 18 " 11'-0" }	8 " 15'-0" 8 " 11'-0" }		NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10"x5" HEWN TIMBERS 12 NO. 8'-0" = 400 SUP. FT.
R.E. OPENINGS "K" CROSSINGS. 9 1/2" EACH	2 "K" CROSSINGS. NUMBER 1 IN 7-52	2 PAIR 11'-3" GUARD RAILS WITH FERRULES	8 " 14'-0"	8 " 13'-0" 8 " 12'-0" }	NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10"x5" HEWN TIMBERS 12 NO. 8'-0" = 400 SUP. FT.	
"V" 9/16" WING. 10 3/4" VEE	2 PAIR 11'-3" GUARD RAILS WITH FERRULES	CLOSURE RAILS: 1 - 31'-2 1/2" 2 - 9'-4 3/8"				NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10"x5" HEWN TIMBERS 12 NO. 8'-0" = 400 SUP. FT.
GAUGE BETWEEN STOCK RAILS AT TOE OF POINTS 5'-3 3/8"	CLOSURE RAILS: 2 - 31'-2 1/2" 4 - 9'-4 3/8"				NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10"x5" HEWN TIMBERS 12 NO. 8'-0" = 400 SUP. FT.	
GAUGE AT "K" CROSSINGS 5'-2 1/2"						NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10"x5" HEWN TIMBERS 12 NO. 8'-0" = 400 SUP. FT.
LEAD BETWEEN P ₂ OF I. 79-38 1/2"					NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10"x5" HEWN TIMBERS 12 NO. 8'-0" = 400 SUP. FT.	

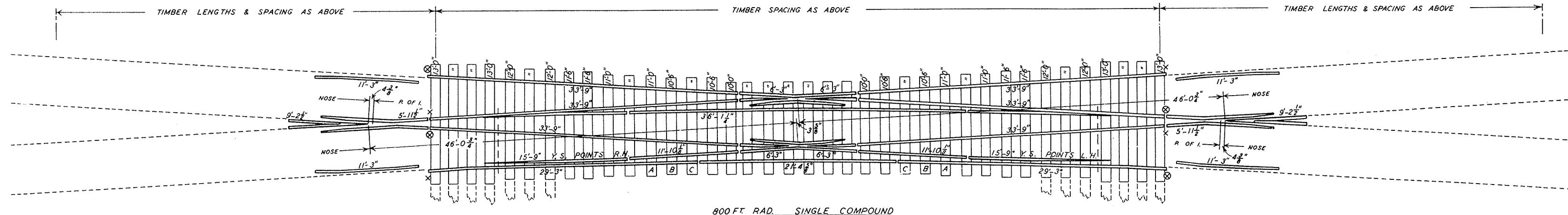
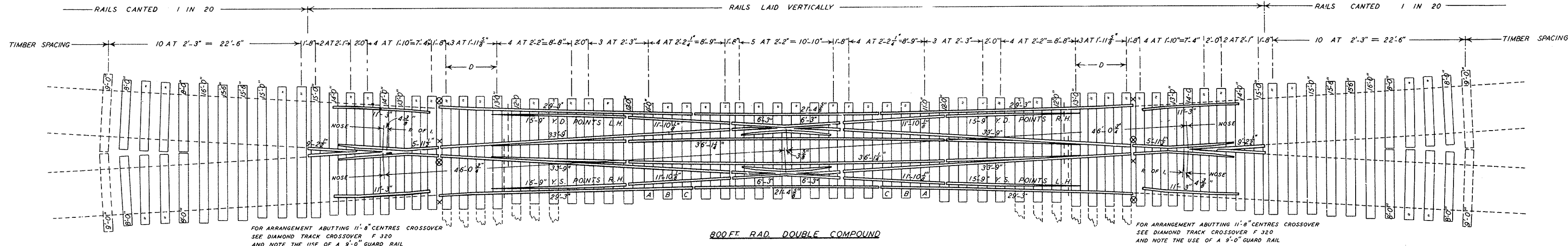
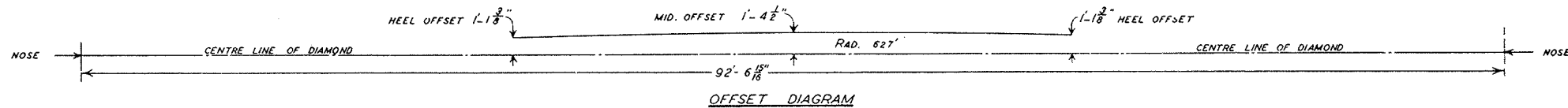
VICTORIAN RAILWAYS WAY AND WORKS BRANCH

COMPOUNDS DOUBLE & SINGLE

600 FT. RADIUS 90LB. & 110LB. A.S.

NOT TO SCALE

APPROVED CHIEF CIVIL ENGINEER	ADOPTED 1938
CHECKED PASSED	F 316
 ENGINEER OF M & W.S.	



DATA	
POINT ANGLE	1°-37' - 44.5"
CROSSING NUMBERS	1 IN 8.7
CROSSING ANGLES	6°-33' - 24.8"
R.E. OPENINGS "K" CROSSINGS	8 3/8" EACH
"V" "	8 1/8" WING, 12 3/8" VEE
GAUGE BETWEEN STOCK RAILS AT TOE OF POINTS	5'-3 3/8"
GAUGE AT "K" CROSSINGS	5'-2 3/8"
LEAD BETWEEN R.S. OF I.	91'-6.98'

POINTS AND CROSSINGS FOR DOUBLE COMPOUND	
2 SETS 15'-9" Y.S. POINTS	1 - R.H. 1 - L.H.
2 SETS 15'-9" Y.D. POINTS	1 - R.H. 1 - L.H.
2 "V" CROSSINGS	NUMBER 1 IN 8.7
2 "K" CROSSINGS	NUMBER 1 IN 8.7
2 PAIR 11'-3" GUARD RAILS WITH FERRULES	
CLOSURE RAILS:	
1 No. 36'-1 1/4"	4 No. 33'-9"
2 No. 21'-4 3/8"	4 No. 11'-10 1/2"

POINTS AND CROSSINGS FOR SINGLE COMPOUND	
2 SETS 15'-9" Y.S. POINTS	1 - R.H. 1 - L.H.
2 "V" CROSSINGS	NUMBER 1 IN 8.7
2 "K" CROSSINGS	NUMBER 1 IN 8.7
2 PAIR 11'-3" GUARD RAILS WITH FERRULES	
CLOSURE RAILS:	
1 No. 36'-1 1/4"	4 No. 33'-9"
2 No. 21'-4 3/8"	4 No. 11'-10 1/2"

TIMBERS FOR DOUBLE COMPOUND:- 12" x 6" SAWN	
2 No. 16'-0"	14 No. 13'-0"
4 " 15'-6"	14 " 12'-0"
8 " 15'-0"	16 " 11'-0"
8 " 14'-0"	
NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	
10" x 5" HEWN TIMBERS	
16 No. 8'-0" = 53.4 SUP. FT.	

TIMBERS FOR SINGLE COMPOUND:- 12" x 6" SAWN	
2 No. 16'-0"	6 No. 12'-0"
4 " 15'-6"	4 " 11'-8"
8 " 15'-0"	6 " 11'-0"
8 " 14'-0"	6 " 10'-6"
14 " 13'-0"	8 " 10'-0"
NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	
10" x 5" HEWN TIMBERS	
16 No. 8'-0" = 53.4 SUP. FT.	

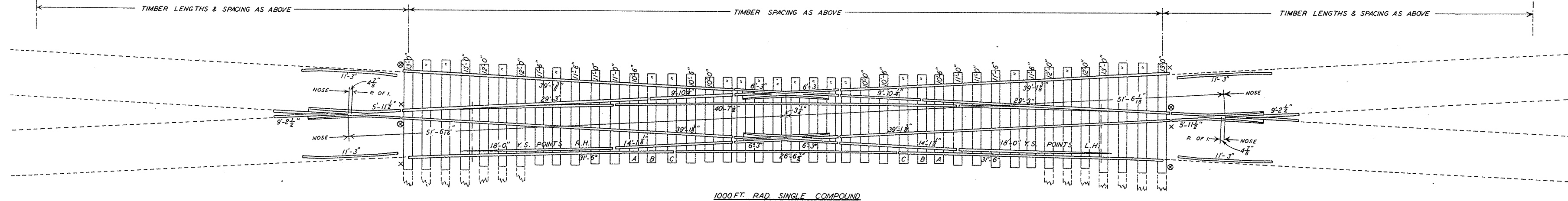
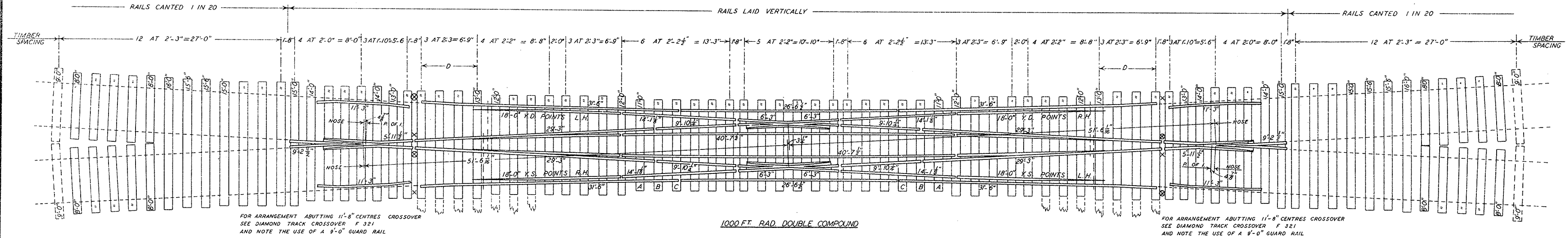
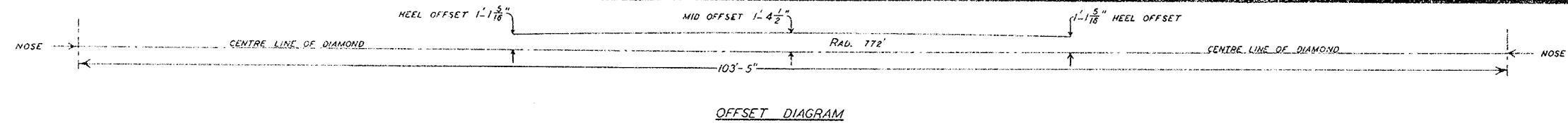
NOTES: ALTERNATE POSITIONS FOR INSULATED JOINTS WHEN REQUIRED ARE SHOWN THUS X & THUS ⊗. LOCATE ENDS OF GUARD RAILS 2" CLEAR OF JOINT FISHPLATES. LEAD IS ADJUSTED TO 91'-8 3/8" FOR RAIL CUTTING. ADZE TIMBERS, A, B, & C, UNDER ALL STOCKRAILS A 3/16", B 1/8", C 1/16". POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. EXPANSION AT JOINTS:- INSULATED JOINTS NIL, OTHER JOINTS 5/8". EQUALIZE EXPANSIONS IN NON INSULATED LAYOUTS.

IN THE DOUBLE COMPOUND WHEN POINTS ARE HAND OPERATED THE LEADING LEVER FACING THE POINTS MUST BE RODDED TO OPERATE THE POINTS NEAREST THE LEVERS. WHEN FUTURE CONVERSION OF SINGLE COMPOUND TO DOUBLE COMPOUND IS CONTEMPLATED THE DOUBLE COMPOUND TIMBERS MUST BE PROVIDED. SPACING AT "D" TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF OPERATION. 1 IN 20 RAIL CANT TO BE RUN OUT OVER THREE TIMBERS BEFORE JUNCTIONING TO VERTICAL RAILS.

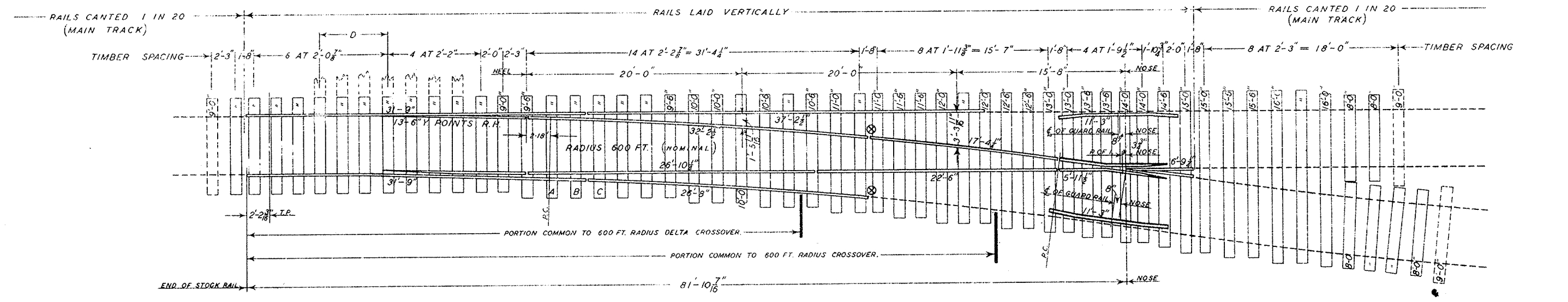
VICTORIAN RAILWAYS WAY AND WORKS BRANCH
COMPOUNDS DOUBLE & SINGLE
 800 FT. RADIUS 90° & 110° A.S.
 NOT TO SCALE

APPROVED
 CHIEF CIVIL ENGINEER
 CHECKED W.C.M.
 PASSED
 ENGINEER OF M & W.S.

ADOPTED
 1938
 PLAN No.
F317

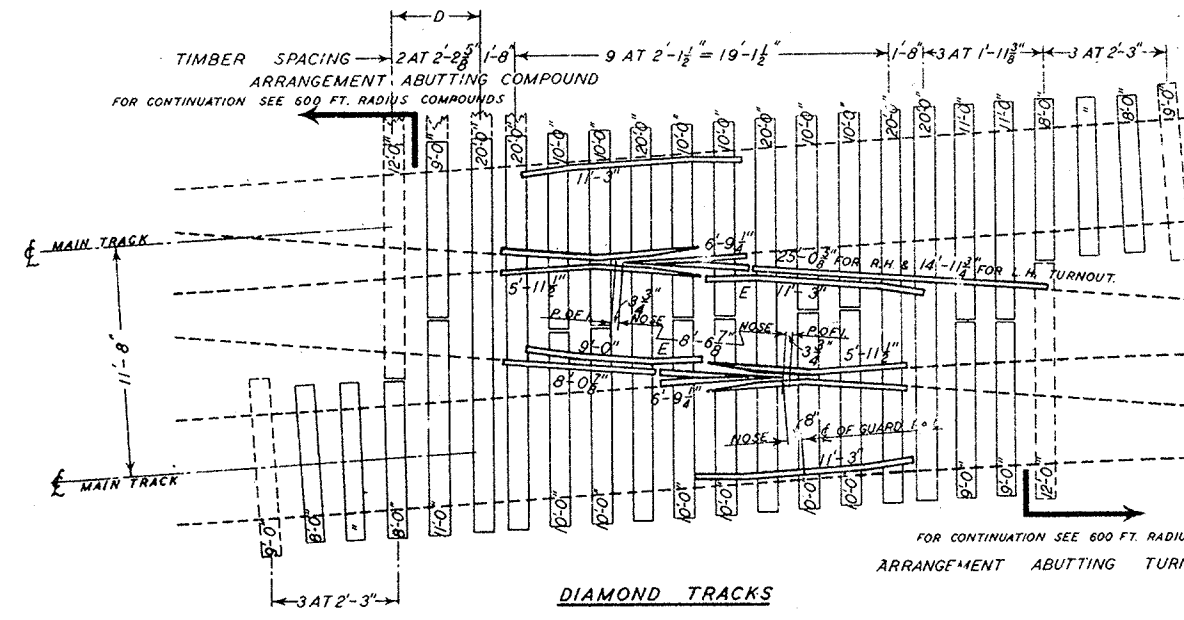


DATA	POINTS AND CROSSINGS FOR DOUBLE COMPOUND	POINTS AND CROSSINGS FOR SINGLE COMPOUND	TIMBERS FOR DOUBLE COMPOUND:- 12" x 6" SAWN	TIMBERS FOR SINGLE COMPOUND:- 12" x 6" SAWN	NOTES:	APPROVED	ADOPTED
POINT ANGLE 1° 25' 31.9"	2 SETS 18'-0" X.S. POINTS I-R.H. I-L.H.	2 SETS 18'-0" X.S. POINTS I-R.H. I-L.H.	2 No. 16'-0" 12 No. 15'-0" SUP. FT.	2 No. 16'-0" 6 No. 12'-0" SUP. FT.	NOTES: ALTERNATE POSITIONS FOR INSULATED JOINTS WHEN REQUIRED ARE SHOWN THIS X & THIS ⊕ LOCATE ENDS OF GUARD RAILS 2" CLEAR OF JOINT FISHPLATES ADZE TIMBERS A, B, & C, UNDER ALL STOCKRAILS A 2 1/16" B 5/8" C 7/8" POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. EXPANSION AT JOINTS:- INSULATED JOINTS NIL, OTHER JOINTS 1/8" EQUALIZE EXPANSIONS IN NON INSULATED LAYOUTS.	VICTORIAN RAILWAYS WAY AND WORKS BRANCH COMPOUNDS DOUBLE & SINGLE 1000 FT. RADIUS 90° & 110° A.S. NOT TO SCALE	1938 PLAN No. F. 318
CROSSING NUMBERS 1 IN 9.73 CROSSING ANGLES 5° 51' 57.5" R.E. OPENINGS K CROSSINGS 7 1/16" EACH V 7 1/16" WING, 1 1/2" VEE GAUGE BETWEEN STOCK RAILS AT TOE OF POINTS 5'-3 3/4" GAUGE AT "K" CROSSINGS 5'-2 1/4" LEAD BETWEEN R. OF I. 102.469	2 "V" CROSSINGS NUMBER 1 IN 9.73 2 "K" CROSSINGS NUMBER 1 IN 9.73 2 PAIR 11'-3" GUARD RAILS WITH FERRULES CLOSURE RAILS: 1- 40'-7 1/2" 2- 26'-6 1/2" 4- 14'-1 1/8" 4- 9'-10 1/4"	2 "V" CROSSINGS NUMBER 1 IN 9.73 2 "K" CROSSINGS NUMBER 1 IN 9.73 2 PAIR 11'-3" GUARD RAILS WITH FERRULES CLOSURE RAILS: 1- 40'-7 1/2" 1- 26'-6 1/2" 4- 39'-1 1/8" 2- 14'-1 1/8" 2- 9'-10 1/4"	NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10" x 5" HEWN TIMBERS 20 No. 8'-0" 667 SUP. FT.	NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10" x 5" HEWN TIMBERS 20 No. 8'-0" 667 SUP. FT.			
						CHECKED [Signature] PASSED [Signature]	ENGINEER OF M. & W.S.

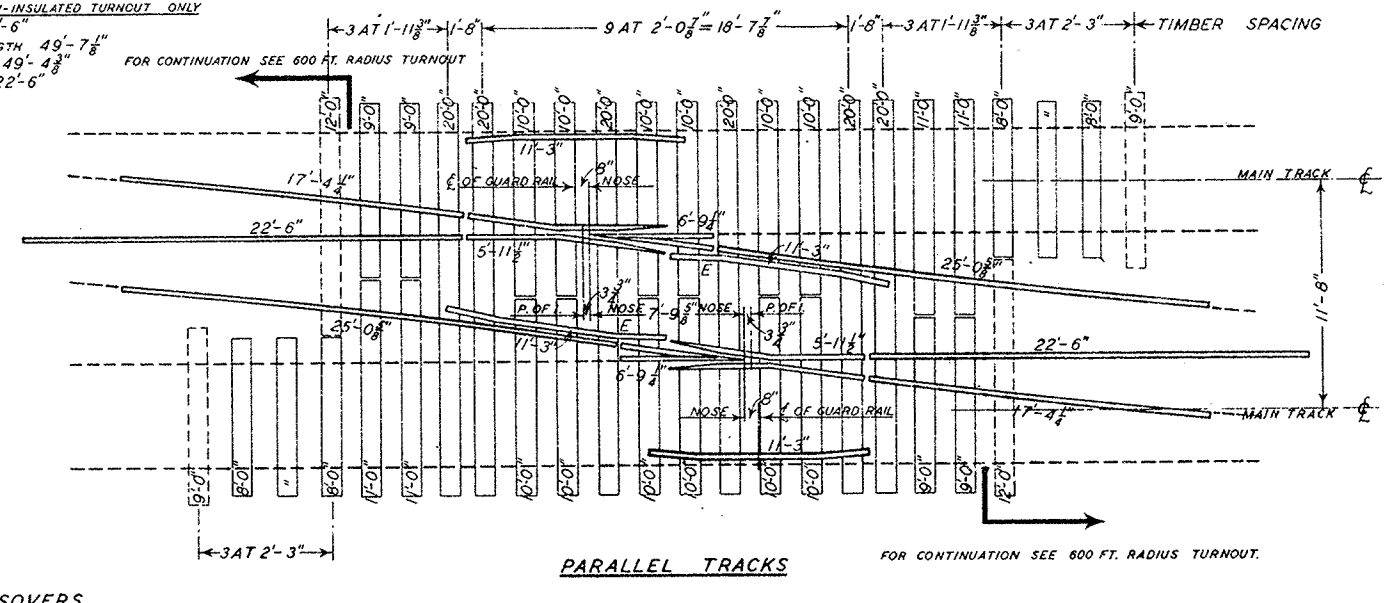


600 FT. RADIUS TURNOUT

ALTERNATIVE CLOSURES FOR NON-INSULATED TURNOUT ONLY
 CURVED INNER CLOSURE LENGTH 22'-6"
 CURVED OUTER CLOSURE WELDED LENGTH 49'-7 7/8"
 STRAIGHT CLOSURE WELDED LENGTH 49'-4 3/8"
 STRAIGHT OUTER CLOSURE LENGTH 22'-6"



DIAMOND TRACKS



PARALLEL TRACKS

600 FT. RADIUS CROSSOVERS

DATA	POINTS AND CROSSING FOR TURNOUT	POINTS & CROSSINGS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR TURNOUT	TIMBERS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR DIAMOND TRACK CROSSOVER	NOTES - EXPANSION AT JOINTS - INSULATED JOINTS SHOWN THIS WAY. OTHER JOINTS EQUALIZE EXPANSIONS IN NON-INSULATED LAYOUTS.
POINT ANGLE 1° 54' 10"	1 SET 13-6" Y. POINTS R.H. OR L.H.	2 SETS 13-6" Y. POINTS R.H. OR L.H.	12" x 6" SAWN	12" x 6" SAWN	12" x 6" SAWN	LOCATE GUARD RAILS MARKED 'E' AS FOLLOWS: - DRILL 1 1/2" HOLE IN V. CROSSING 1-10" FROM VEE END, FOR GUARD RAIL END BOLT. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED & SERVICE BOLTS TAKEN INTO STOCK. ADZE TIMBERS A, B & C, UNDER STOCK RAILS - A 1 1/2", B 1 1/2", C 1 1/2". SPACING AT 'D' TO BE ARRANGED, IF NECESSARY, TO SUIT METHOD OF OPERATION. 1 IN 20 RAIL CANT TO BE RUN OUT OVER 3 TIMBERS BEFORE JUNCTIONING TO VERTICAL RAILS.
CROSSING NUMBER 1 IN 7-52	2 V. CROSSINGS NUMBER 1 IN 7-52	2 V. CROSSINGS NUMBER 1 IN 7-52	3 NO 16'-0" 3 NO 12'-0"	6 NO 20'-0" 6 NO 10'-6"	6 NO 20'-0" 12 NO 10'-0"	
CROSSING ANGLE 7° 34' 6"	1 PAIR 11-3" GUARD RAILS WITH FERRULES	2 PAIR 11-3" GUARD RAILS WITH FERRULES	2 " 15'-6" 2 " 11'-6"	6 " 12'-0" 18 " 10'-0"	3 " 11'-0" 3 " 8'-0"	
R.E. OPENINGS V. CROSSINGS WING 6 7/8"	ALTERNATIVELY -	CLOSURE RAILS - 2-37'-2 1/2" 2-32'-2 1/2" 2-26'-10 1/2"	2 " 15'-0" 3 " 11'-0"	4 " 11'-0" 14 " 9'-6"	10 " 5" HEWN - 6 NO 8'-0" = 200	
" " " VEE 10 1/2"	1 SPRING V. CROSSING 1 IN 7-52	2-26'-8" 2-25'-0 3/8" 2-22'-6" 2-17'-4 1/2"	2 " 14'-6" 3 " 10'-6"	10 " 11'-0" 30 " 9'-0"	10 " 5" HEWN - 6 NO 8'-0" = 200	
GAUGE BETWEEN STOCK RAILS 5'-3 3/8"	1 PAIR 22'-6" GUARD RAILS WITH FERRULES	CLOSURE RAILS FOR DIAMOND TRACK CROSSOVER	2 " 13'-6" 7 " 9'-6"			
AT TOE OF POINTS 5'-3 3/8"	CLOSURE RAILS - 1-37'-2 1/2" 1-32'-2 1/2"	ABUTTING R.H. TURNOUT 1-25'-0 3/8"	2 " 12'-6" 13 " 9'-0"			
RADIUS OF OUTER RAIL 479'-4 1/2"	1-26'-10 1/2" 1-26'-8"	L.H. TURNOUT 1-14'-11 1/2"	10 " 5" HEWN - 6 NO 8'-0" = 200			
RADIUS OF INNER RAIL 474'-2 1/2"	1-22'-6" 1-17'-4 1/2"	COMPOUND 1-6'-0 3/8"	NOTE - EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT POINT OPERATION.			
LEAD BETWEEN T.P. & P.O.F. 79'-37 1/2"						

VICTORIAN RAILWAYS WAY AND WORKS BRANCH

TURNOUT & CROSSOVERS

600 FT. RADIUS 90 LB. & 110 LB.A.S.

11 FT. 8 IN. CENTRES

NOT TO SCALE

APPROVED *[Signature]* CHIEF CIVIL ENGINEER

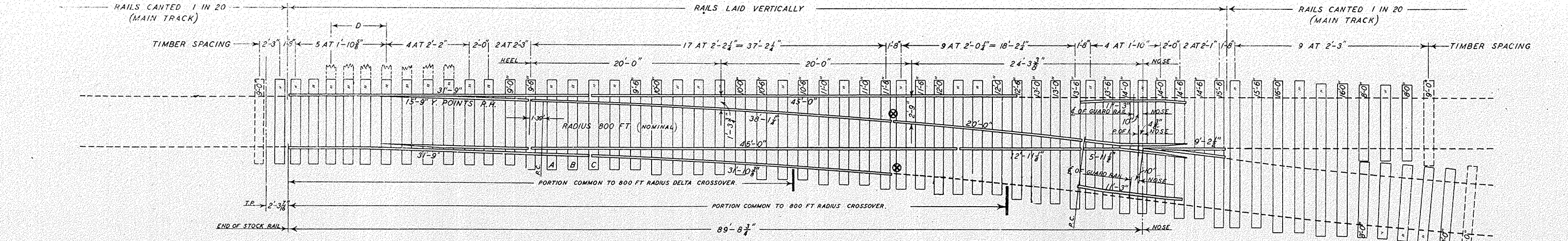
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PASSED *[Signature]*

ADOPTED 1938

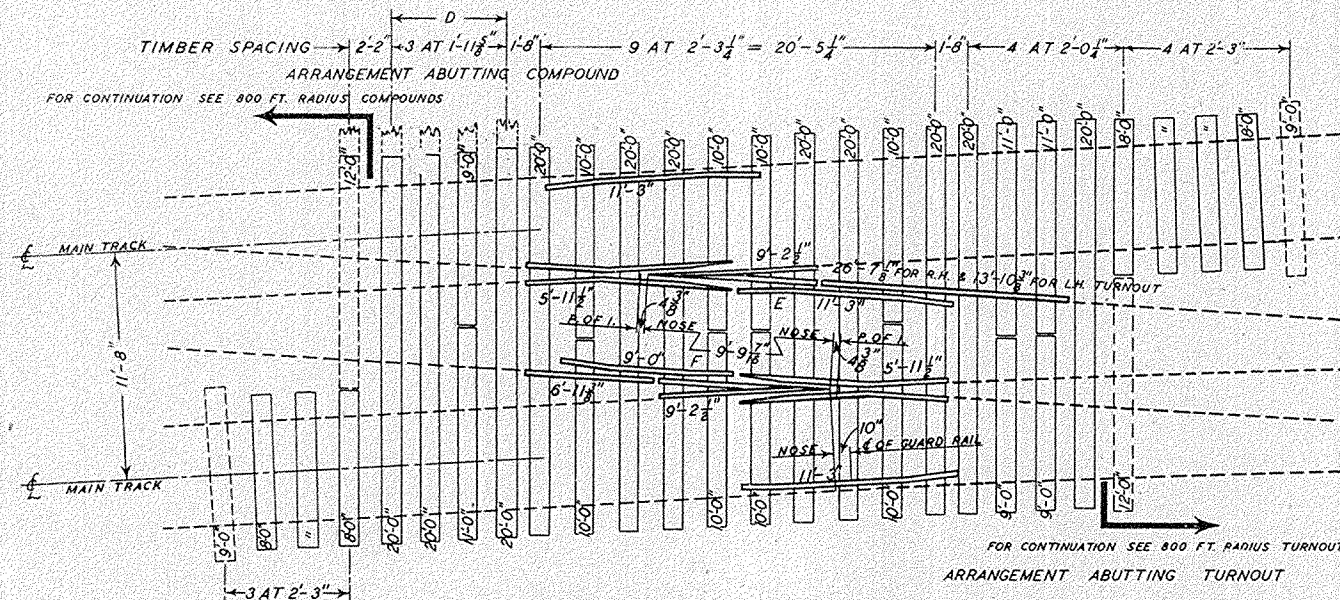
PLAN NO F319

ENGINEER OF M. & W.S.

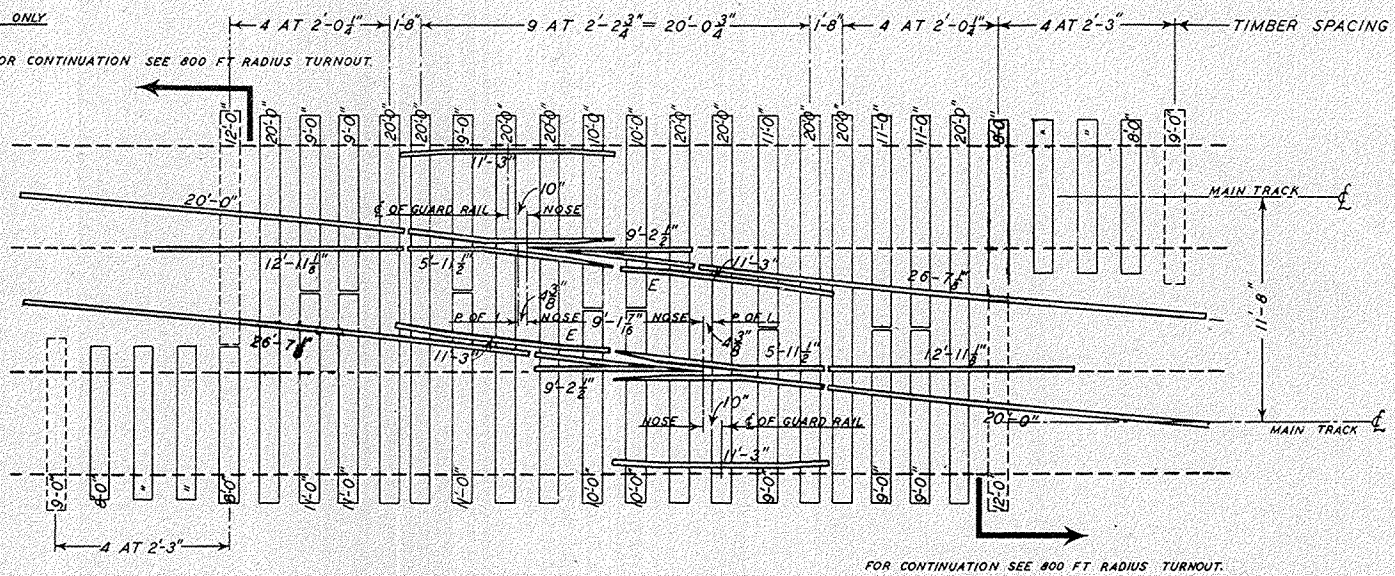


800 FT RADIUS TURNOUT

ALTERNATIVE CLOSURES FOR NON-INSULATED TURNOUT ONLY
 CURVED INNER CLOSURE LENGTH 45'-0"
 CURVED OUTER CLOSURE WELDED LENGTH 58'-1 1/8"
 STRAIGHT CLOSURE WELDED LENGTH 57'-11 1/2"



DIAMOND TRACKS



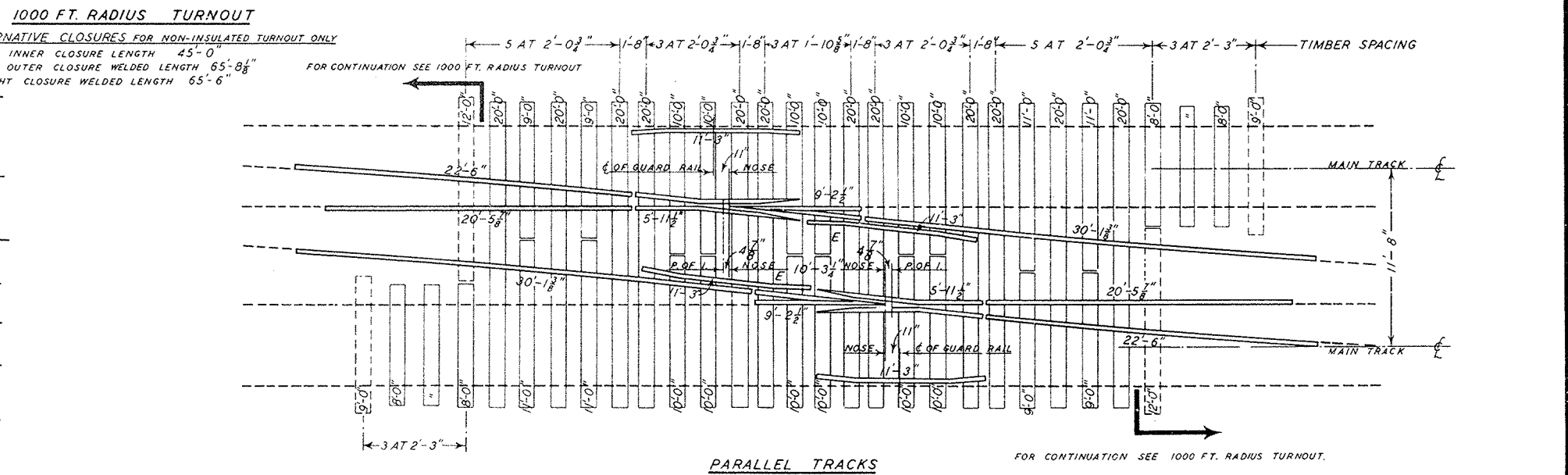
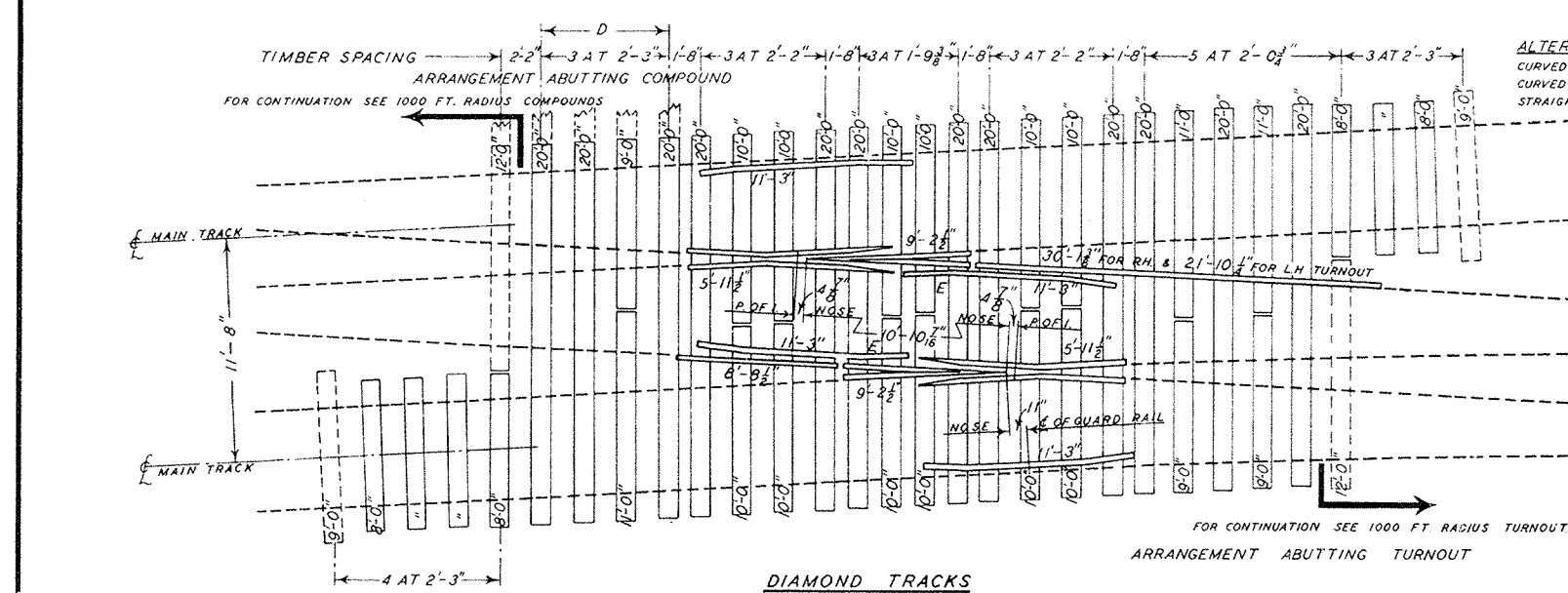
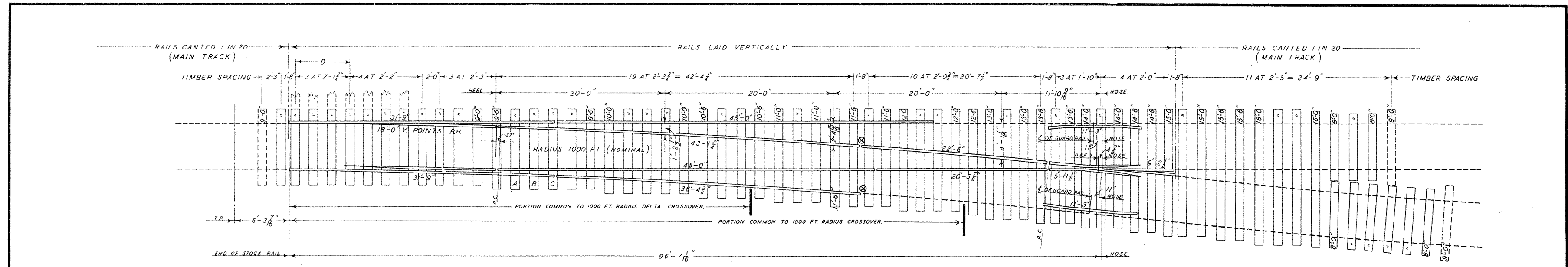
PARALLEL TRACKS

800 FT RADIUS CROSSOVERS

DATA	POINTS AND CROSSING FOR TURNOUT	POINTS & CROSSINGS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR TURNOUT	TIMBERS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR DIAMOND TRACK CROSSOVER	NOTES:- EXPANSION AT JOINTS:- INSULATED JOINTS SHOWN THUS ⊕ NIL, OTHER JOINTS ⊕ EQUALIZE EXPANSIONS IN NON-INSULATED LAYOUTS. LOCATE GUARD RAILS MARKED 'E' & 'F' AS FOLLOWS:- DRILL 1/2" HOLE IN V CROSSING 3'-6" FOR 'E', & 3'-3" FOR 'F', FROM VEE END, FOR GUARD RAIL END BOLT. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED & SERVICE BOLTS TAKEN INTO STOCK. ADZE TIMBERS A, B & C, UNDER STOCK RAILS:- A 18" B 8" C 1" SPACING AT 'D' TO BE ARRANGED, IF NECESSARY, TO SUIT METHOD OF OPERATION. 1 IN 20 RAIL CANT TO BE RUN OUT OVER 3 TIMBERS BEFORE JUNCTIONING TO VERTICAL RAILS.
POINT ANGLE 1° 37' 44.5"	1 SET 15'-9" V. POINTS R.H. OR L.H.	2 SETS 15'-9" V. POINTS R.H. OR L.H.	12" x 6" SAWN TIMBERS	12" x 6" SAWN TIMBERS	12" x 6" SAWN TIMBERS	VICTORIAN RAILWAYS WAY AND WORKS BRANCH TURNOUT & CROSSOVERS 800 FT. RADIUS 90 LB. & 110 LB. A.S. 11 FT. 8 IN. CENTRES NOT TO SCALE
CROSSING NUMBER 1 IN 8.7	1 V. CROSSING NUMBER 1 IN 8.7	2 V. CROSSINGS NUMBER 1 IN 8.7	4 NO 16'-0" 2 NO 13'-0" 3 NO 10'-6"	10 NO 20'-0" 6 NO 10'-6"	11 NO 20'-0" 8 NO 10'-0"	
CROSSING ANGLE 6° 33' 24.8"	1 PAIR 11'-3" GUARD RAILS WITH FERRULES	1 PAIR 11'-3" GUARD RAILS WITH FERRULES	3 " 15'-6" 1 " 12'-6" 5 " 10'-0"	3 " 12'-0" 14 " 10'-0"	3 " 11'-0" 3 " 9'-0"	
R.E. OPENINGS "V" CROSSINGS WING 8 3/8"	ALTERNATIVELY:-	CLOSURE RAILS:- 4 - 45'-0" 2 - 38'-1 1/2" 2 - 31'-10 3/8"	2 " 14'-6" 4 " 12'-6" 6 " 9'-6"	6 " 11'-6" 12 " 9'-6"	NOTE:- EXTRA LENGTH TIMBERS SHOWN BROKEN TO SUIT METHOD OF POINT OPERATION ARE TO BE PROVIDED IN LIEU OF COMPOUND TIMBERS	
" " VEE 1'-0 3/8"	1 SPRING V. CROSSING 1 IN 8.7	2 - 26'-7 1/8" 2 - 20'-0" 2 - 12'-11 3/8"	3 " 14'-0" 3 " 11'-6" 13 " 9'-0"	12 " 11'-0" 32 " 9'-0"	10" x 5" HEWN TIMBERS 8 NO 8'-0" = 267	
GAUGE BETWEEN STOCK RAILS 54'-3 3/8"	1 PAIR 22'-6" GUARD RAILS WITH FERRULES	CLOSURE RAILS FOR DIAMOND TRACK CROSSOVER	3 " 15'-6" 3 " 11'-0"	NOTE:- EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION	10" x 5" HEWN TIMBERS 8 NO 8'-0" = 267	
AT TOE OF POINTS 54'-3 3/8"	CLOSURE RAILS:- 2 - 45'-0" 1 - 36'-1 1/2"	ABUTTING R.H. TURNOUT 1 - 26'-7 1/8"	" L.H. " 1 - 13'-10 3/8"			
RADIUS OF OUTER RAIL 660'-10"	1 - 31'-10 3/8" 1 - 20'-0" 1 - 12'-11 3/8"	" COMPOUND 1 - 6'-11 3/8"				
RADIUS OF INNER RAIL 654'-8 1/2"						
LEAD BETWEEN T.P. & P.O.F.I. 91'-6 5/16"						

APPROVED *[Signature]* CHIEF CIVIL ENGINEER
 CHECKED *[Signature]* W.C.M.
 PASSED *[Signature]*
 ENGINEER OF M.E.W.S.

ADOPTED 1938
 PLAN NO
F 320



DATA	
POINT ANGLE	1° 25' 31.8"
CROSSING NUMBER	1 IN 9.73
CROSSING ANGLE	5° 51' 57.5"
R.E. OPENINGS V. CROSSINGS	7 3/8"
" " " VEE	11 5/16"
GAUGE BETWEEN STOCK RAILS AT TOE OF POINTS	5'-3 3/8"
RADIUS OF OUTER RAIL	842'-67"
RADIUS OF INNER RAIL	837'-62"
LEAD BETWEEN T.P. & P.O.F.I.	102'-46.95'

POINTS AND CROSSING FOR TURNOUT	
1 SET 18'-0" Y. POINTS R.H. OR L.H.	
1 V. CROSSING NUMBER 1 IN 9.73	
1 PAIR 11'-3" GUARD RAILS WITH FERRULES	
ALTERNATIVELY:-	
1 SPRING V. CROSSING 1 IN 9.73	
1 PAIR 22'-6" GUARD RAILS WITH FERRULES	
CLOSURE RAILS:-	2 - 45'-0" 1 - 43'-1 1/2" 1 - 22'-6"
	1 - 36'-4 1/2" 1 - 22'-6" 1 - 20'-5 1/2"

POINTS & CROSSINGS FOR PARALLEL TRACK CROSSOVER	
2 SETS 18'-0" Y. POINTS R.H. OR L.H.	
2 V. CROSSINGS NUMBER 1 IN 9.73	
2 PAIR 11'-3" GUARD RAILS WITH FERRULES	
CLOSURE RAILS:-	4 - 45'-0" 2 - 43'-1 1/2" 2 - 36'-4 1/2" 2 - 30'-1 1/2" 2 - 20'-5 1/2" 2 - 22'-6"
CLOSURE RAILS FOR DIAMOND TRACK CROSSOVER	
ABUTTING R.H. TURNOUT	1 - 30'-1 1/2" 1 - 21'-1 1/2" 1 - 21'-1 1/2"
" " " L.H. TURNOUT	1 - 21'-1 1/2" 1 - 21'-1 1/2" 1 - 21'-1 1/2"
" " " COMPOUND	1 - 8'-8 1/2"

TIMBERS FOR TURNOUT	
12x6 SAWN TIMBERS	4 N2 16'-0" 3 N2 13'-6" 3 N2 11'-0" SUP.FI
	2 " 15'-6" 3 " 13'-0" 4 " 10'-6" = 4122
	3 " 15'-0" 1 " 12'-6" 5 " 10'-0" = 4122
	2 " 14'-6" 4 " 12'-0" 6 " 9'-6" = 4122
	3 " 14'-0" 4 " 11'-6" 12 " 9'-0" = 4122
NOTE:-	EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION
10"x5" HEWN TIMBERS	9 N2 8'-0" = 300

TIMBERS FOR PARALLEL TRACK CROSSOVER	
12x6 SAWN TIMBERS	12 N2 20'-0" 8 N2 10'-6" SUP.FI
	8 " 12'-0" 22 " 10'-0" = 7248
	8 " 11'-6" 12 " 9'-6" = 7248
	10 " 11'-0" 28 " 9'-0" = 7248
NOTE:-	EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION
10"x5" HEWN TIMBERS	6 N2 8'-0" = 200

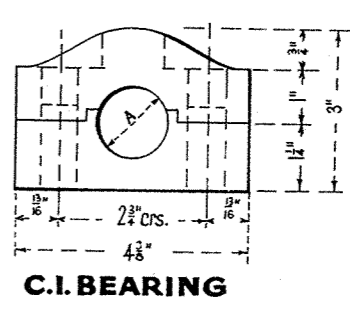
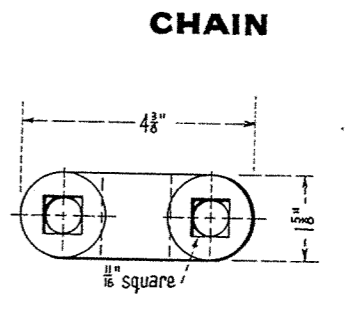
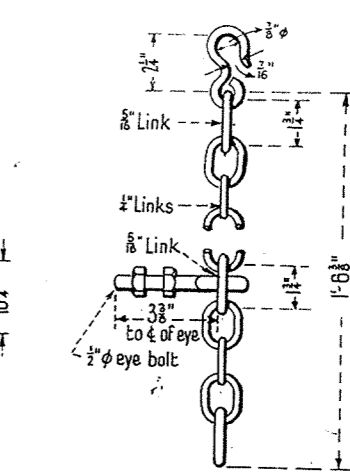
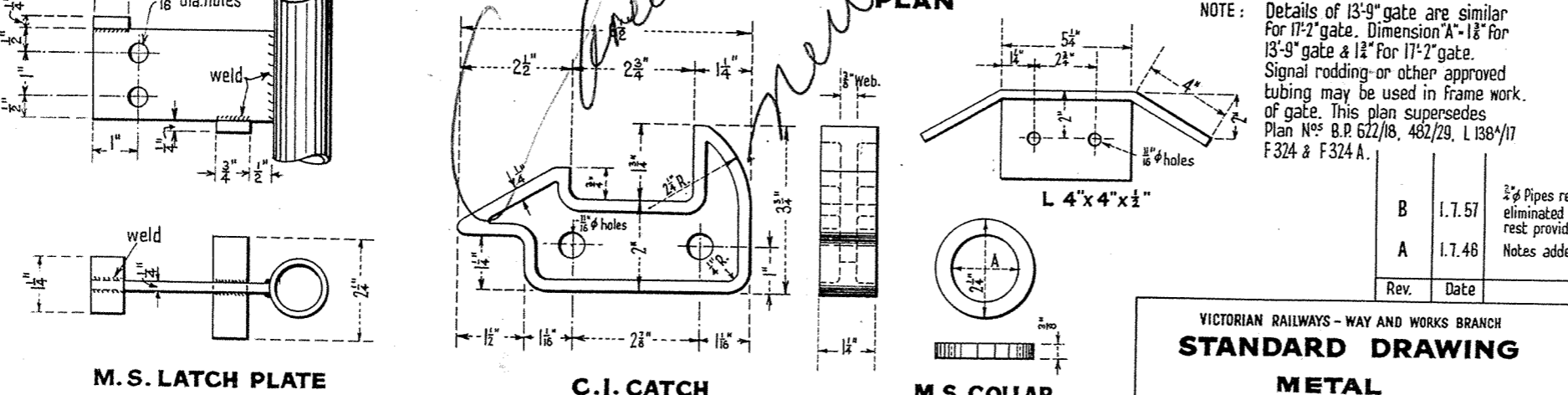
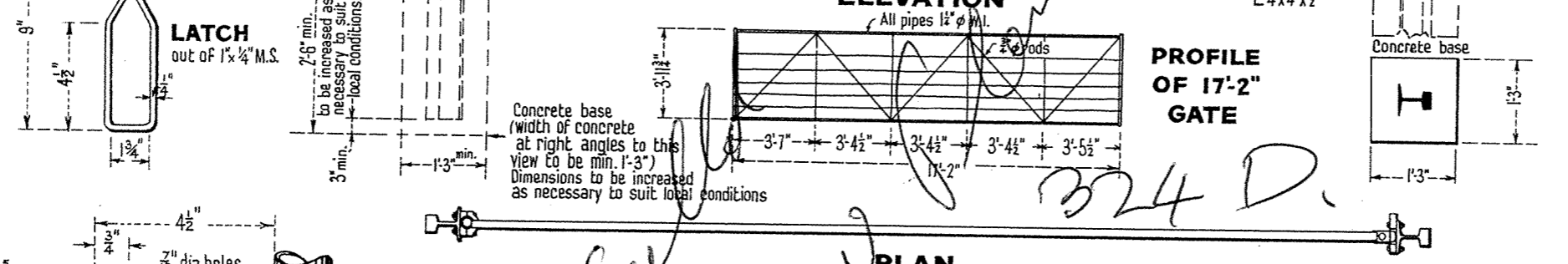
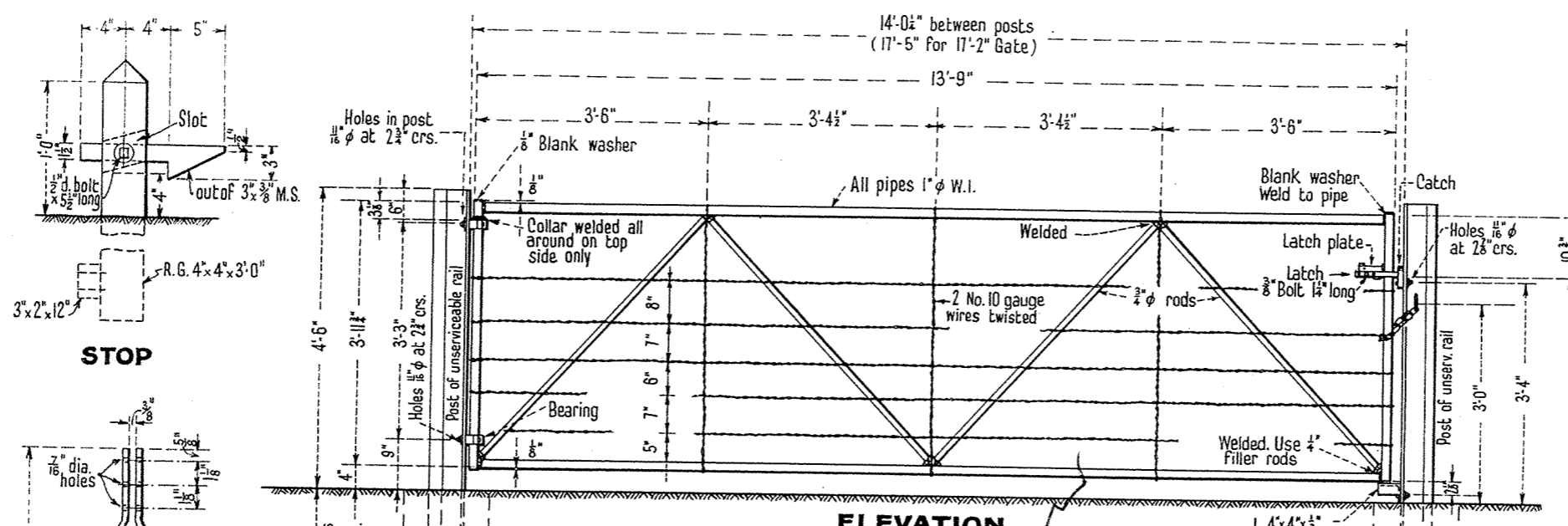
TIMBERS FOR DIAMOND TRACK CROSSOVER	
12x6 SAWN TIMBERS	12 N2 20'-0" 12 N2 10'-0" SUP.FI
	3 " 11'-0" 3 " 9'-0" = 2520
NOTE:-	EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION, ARE TO BE PROVIDED IN LIEU OF COMPOUND TIMBERS
10"x5" HEWN TIMBERS	7 N2 8'-0" = 233
	ABOVE TIMBERS REPLACE STANDARD TIMBERS TO SUIT METHOD OF OPERATION. 1 IN 20 RAIL CANT TO BE RUN OUT OVER 3 TIMBERS BEFORE JUNCTIONING TO VERTICAL RAILS.

NOTES:- EXPANSION AT JOINTS:- INSULATED JOINTS SHOWN THUS ⊗, OTHER JOINTS ⊕. EQUALIZE EXPANSIONS IN NON-INSULATED LAYOUTS.
 LOCATE GUARD RAILS MARKED "E" AS FOLLOWS:- DRILL 1 1/2" HOLE IN V. CROSSING 3'-3" FROM VEE END, FOR GUARD RAIL END BOLT. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED & SERVICE BOLTS TAKEN INTO STOCK.
 ADZE TIMBERS, A, B & C, UNDER STOCK RAILS:- A, B & C, SPACING AT "D" TO BE ARRANGED, IF NECESSARY, TO SUIT METHOD OF OPERATION. 1 IN 20 RAIL CANT TO BE RUN OUT OVER 3 TIMBERS BEFORE JUNCTIONING TO VERTICAL RAILS.

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
TURNOUT & CROSSOVERS
 1000 FT. RADIUS 90 LB. & 110 LB. A.S.
 11 FT. 8 IN. CENTRES
 NOT TO SCALE

APPROVED *[Signature]* CHIEF CIVIL ENGINEER
 CHECKED *[Signature]*
 PASSED *[Signature]*
 ENGINEER-IN-CHARGE

ADOPTED 1938
 PLAN NO
F 321



NOTE: Details of 13'-9" gate are similar for 17'-2" gate. Dimension "A" - 1 1/8" for 13'-9" gate & 1 1/2" for 17'-2" gate. Signal rodding or other approved tubing may be used in frame work of gate. This plan supersedes Plan Nos B.P. 672/18, 482/29, L 138A/17 F 324 & F 324 A.

Rev.	Date	Amendment	Amended by
B	1.7.57	3/4" Pipes replaced by 3/8" rods both gates. Pipe bends eliminated and welded joints modified. Angle iron rest provided on closing post.	
A	1.7.46	Notes added re size of footing to hanging post.	

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH

STANDARD DRAWING

METAL

OCCUPATION GATES

No scale

Approved
R. K. 4.10.57
Chief Civil Engineer

Adopted
OCT. 1957

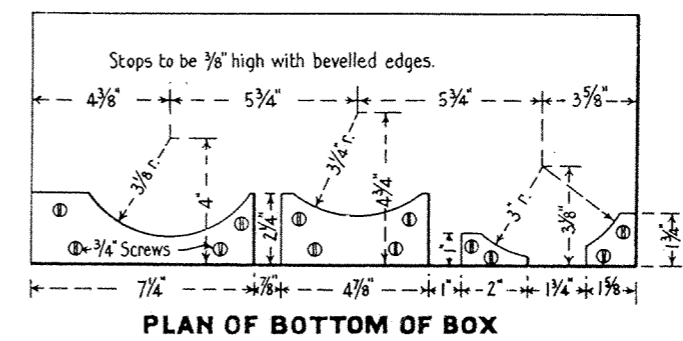
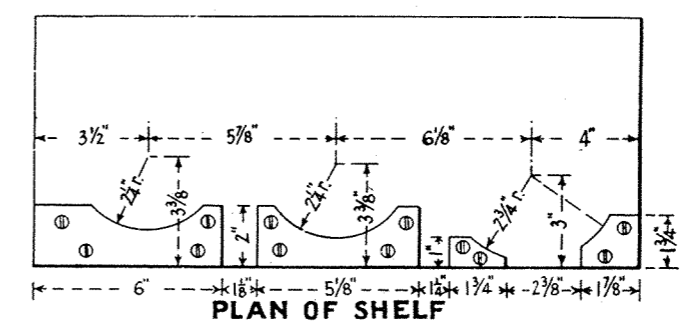
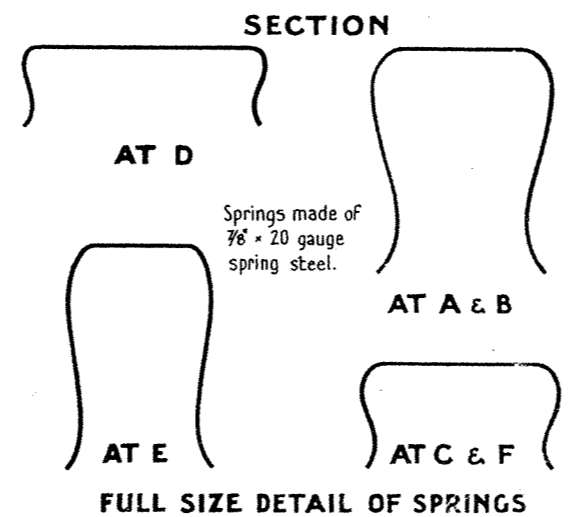
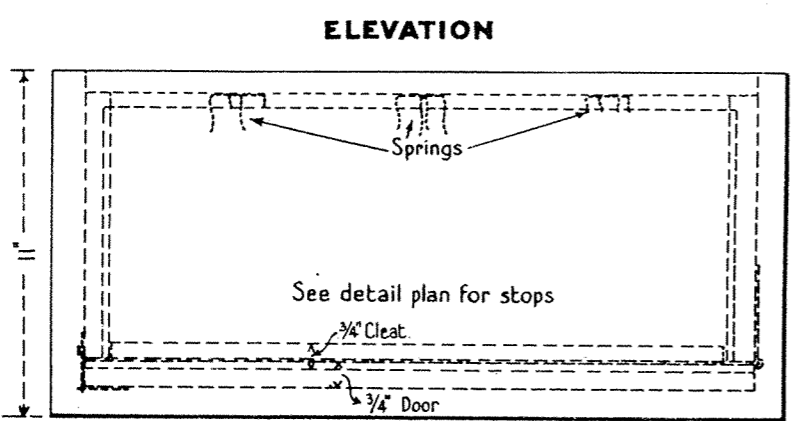
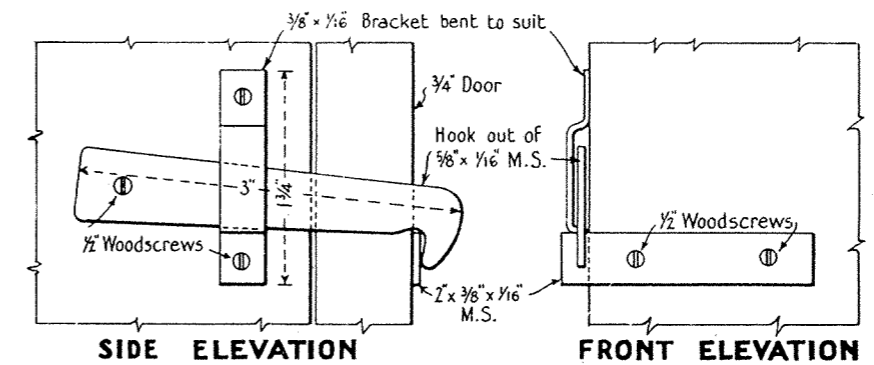
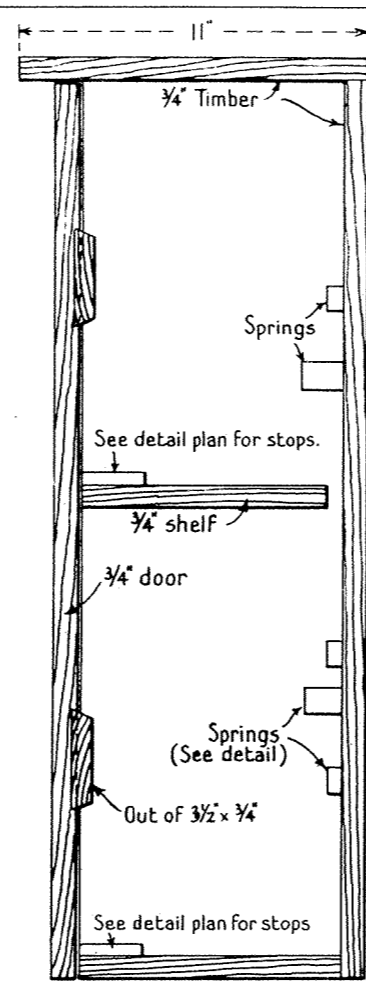
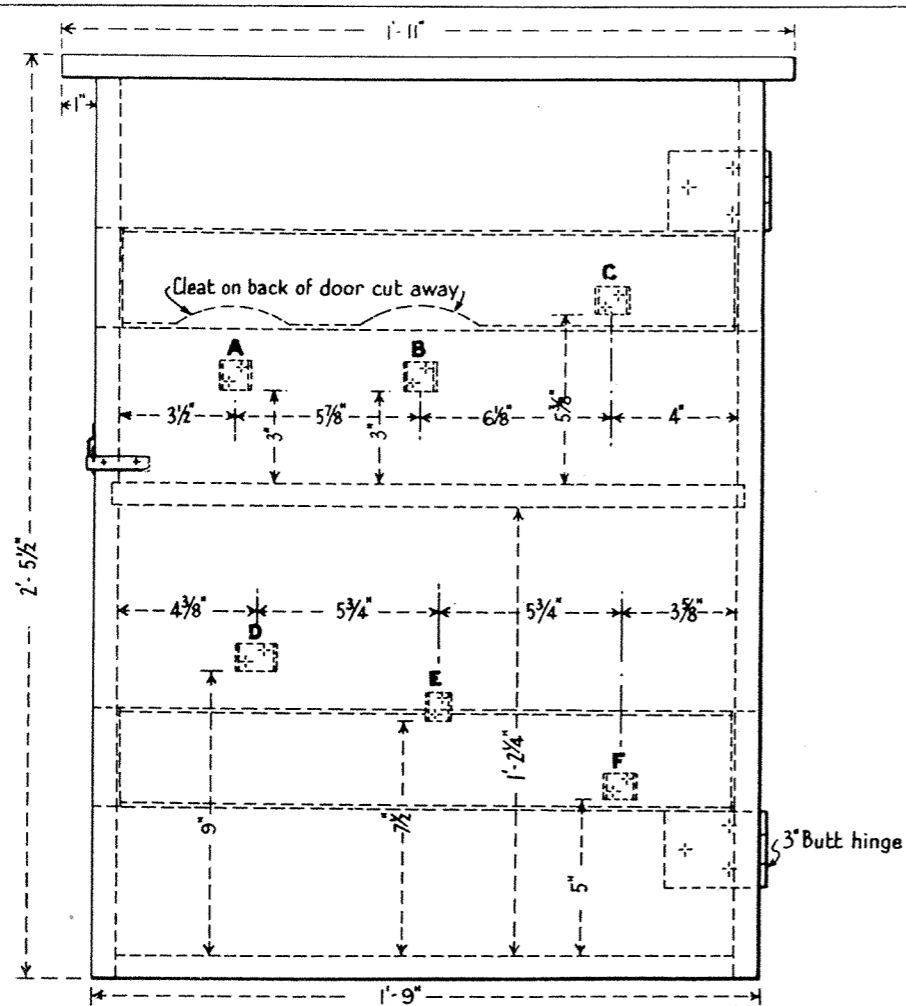
Drawn by
E. B.

Checked by
K. W. W.

Engr. of Struct. Design

PLAN No

F 324 B

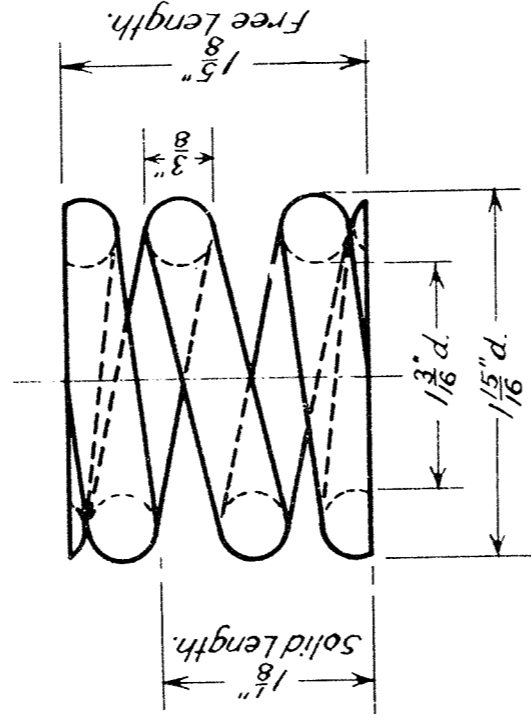


VICTORIAN RAILWAYS - WAY AND WORKS BRANCH

STANDARD DRAWING OF LAMP BOX

Scales:- 1/6, 1/3 & Full Size

Checked by G.W.D.	Adopted 3.6.38
H. Sutcliffe Chief Architect	PLAN NO. F.326



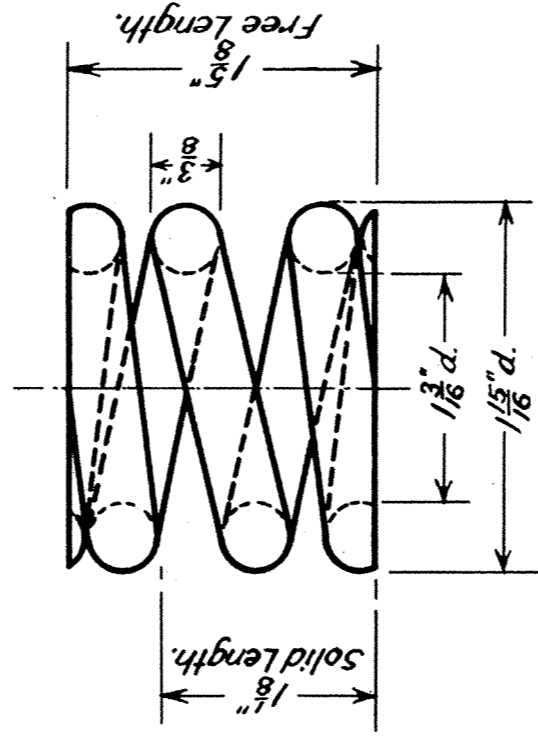
Spring: $1\frac{1}{2}$ Active, full section, coils plus $\frac{1}{4}$ coils at each end set and ground to form a flat seating.

Material: Spring steel to Aust. Std. Spec. No. E5-1930.

Tests: Scrag test to Aust. Std. Spec. No. E4-1930.

: Closed spring test 1190 lbs when compressed $\frac{1}{2}$ ".

F 327.	VICT. RLYS WAY & WORKS BRANCH.	SPRING FOR RESILIENT POINTS.	Approved. <i>W.S.</i> Chief Engr. of Way & Works Checked. <i>W.S.</i> Adopted. 1938. PLAN No. F 327. W.S. Engr.
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Spring: $1\frac{1}{2}$ Active, full section, coils plus $1\frac{1}{2}$ coils at each end set and ground to form a flat seating.

Material: Spring steel $\frac{3}{8}$ " dia.

Tests: Closed spring test. The spring shall return to its original length of $1\frac{5}{8}$ " after being completely closed

Working load 1500 lbs. at $\frac{3}{8}$ " deflection

F 327.B

VICT. RLYS. WAY & WORKS BRANCH.

SPRING

FOR

RESILIENT POINT SUSPENSION

Approved. *W.A.*

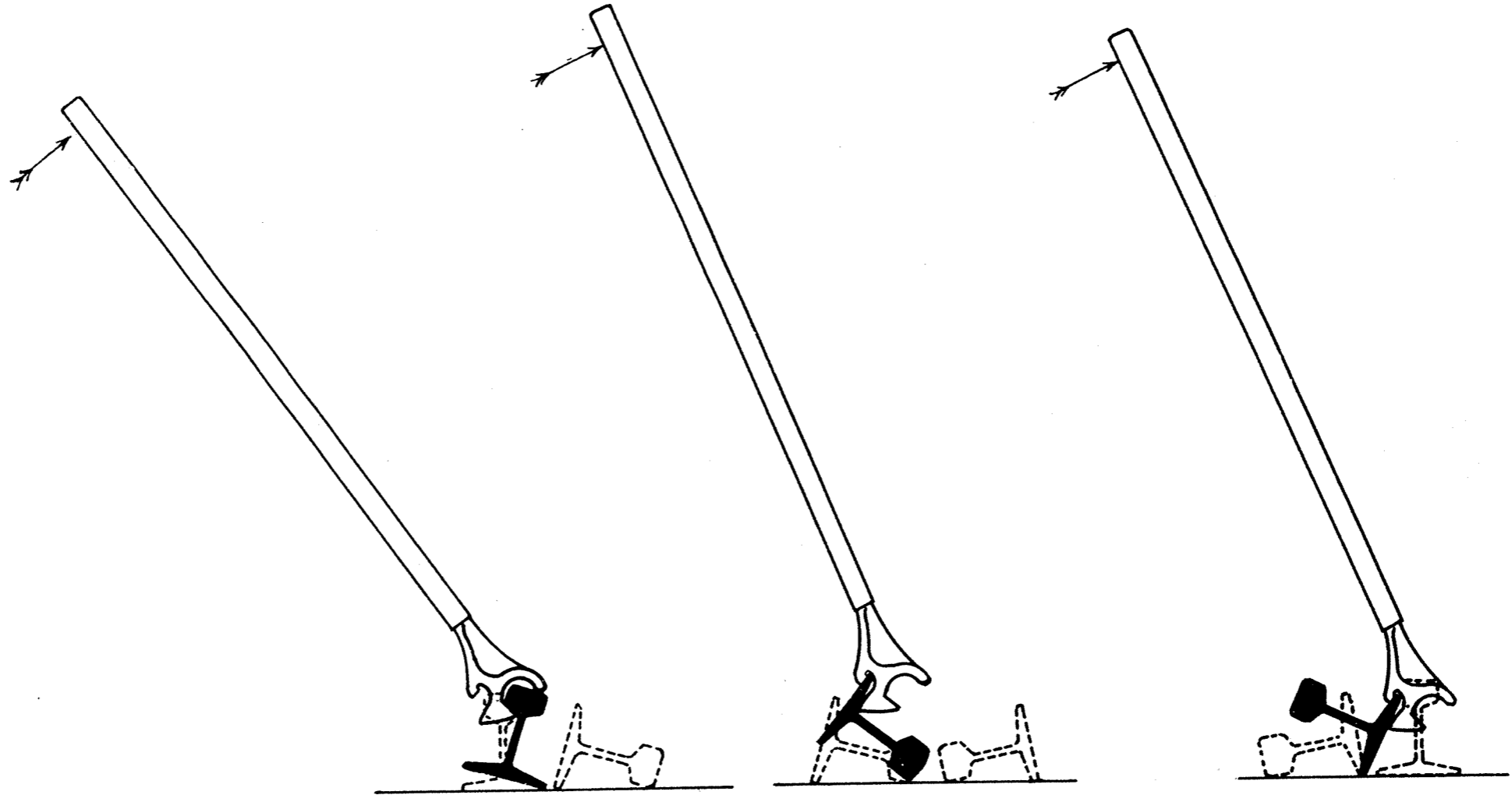
Chief Eng. of Works

Checked. *W.S.*

W.S. ENG.

Adopted.
1938.

PLAN N^o
F 327.B

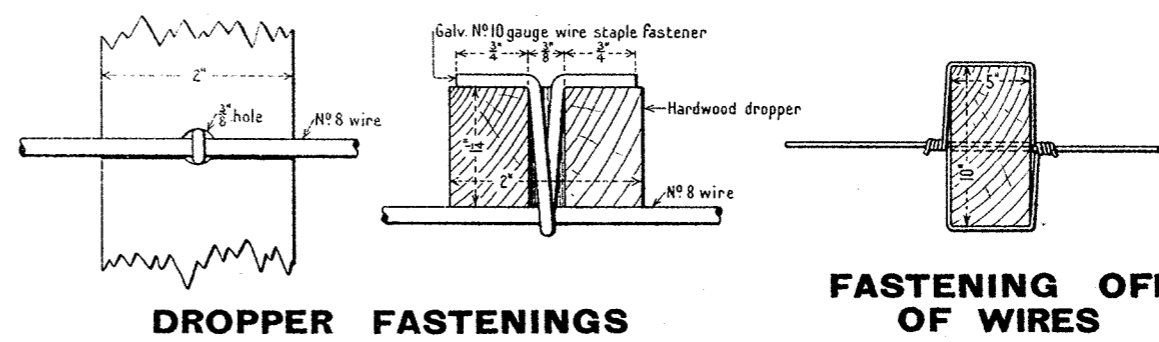
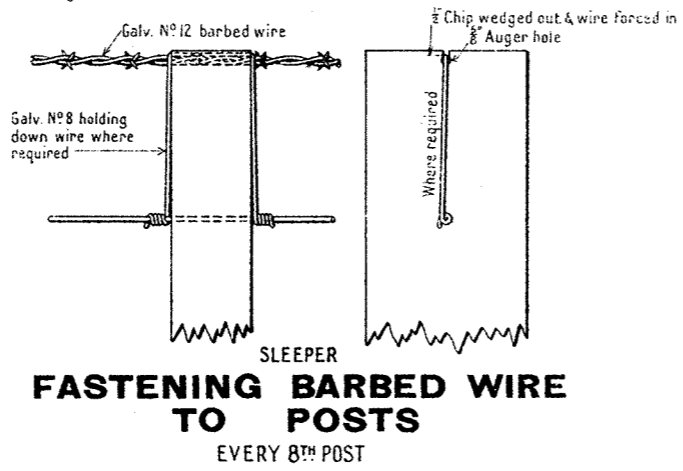
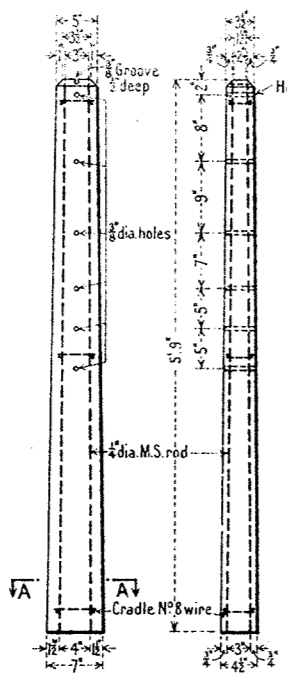
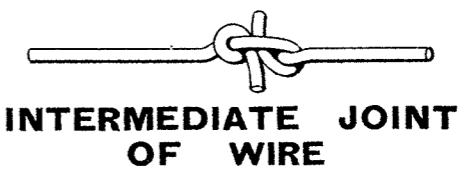
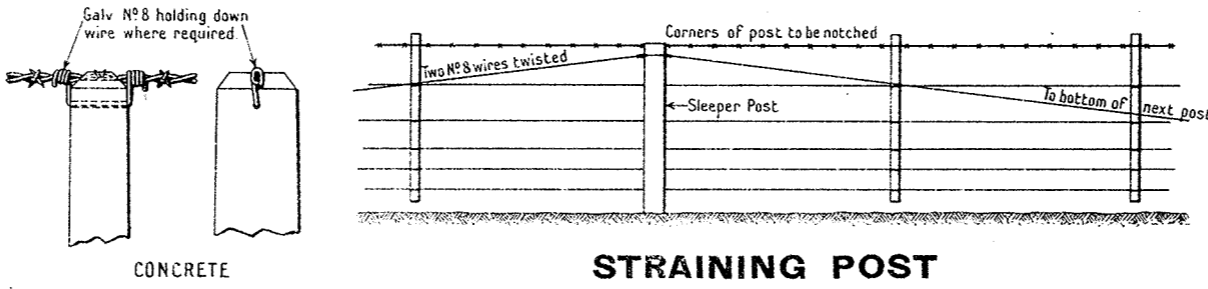
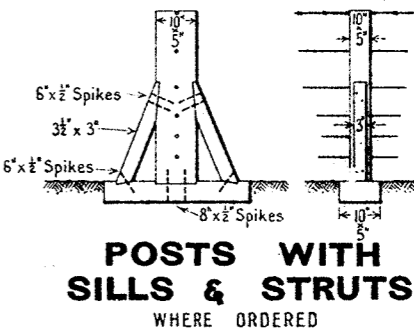
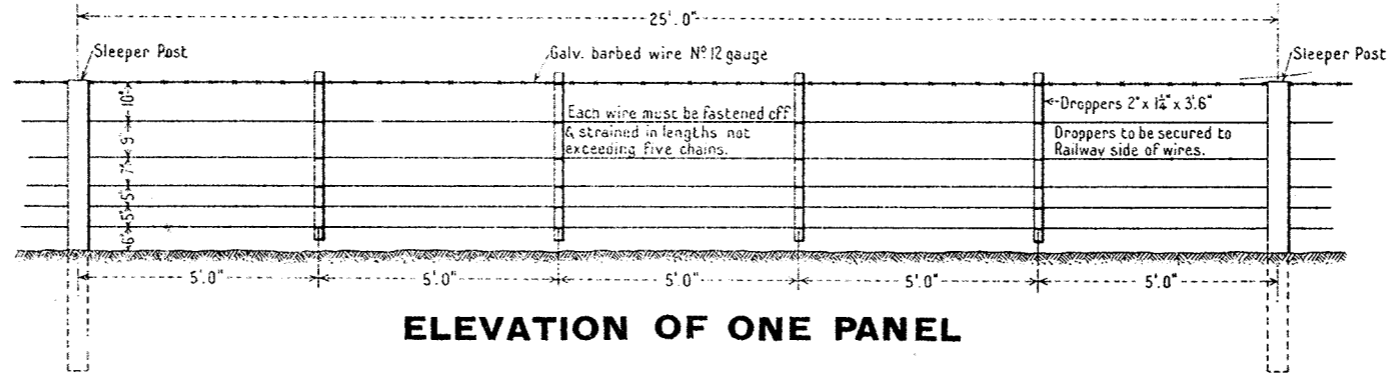
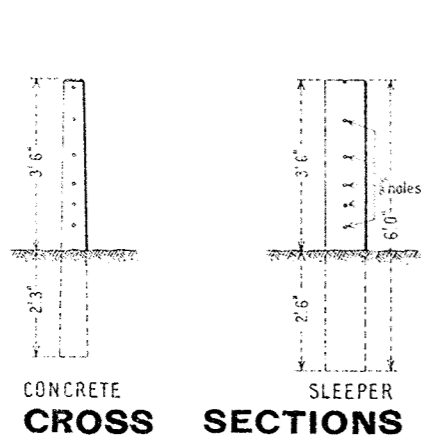


VICT. RLYS. WAY & WORKS BRANCH.

RAIL TURNING BAR.
METHOD OF APPLICATION.

Approved *[Signature]*
Chief Engr. of Way & Works
Checked *W.C.M.*
Examined *[Signature]*
W.S.
Water Supply Engr.

ADOPTED
1938
PLAN NO.
F 328



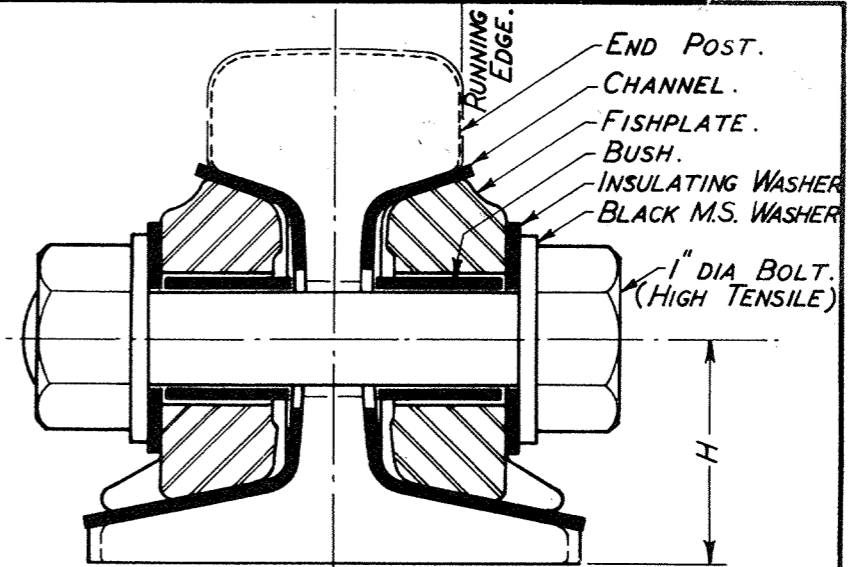
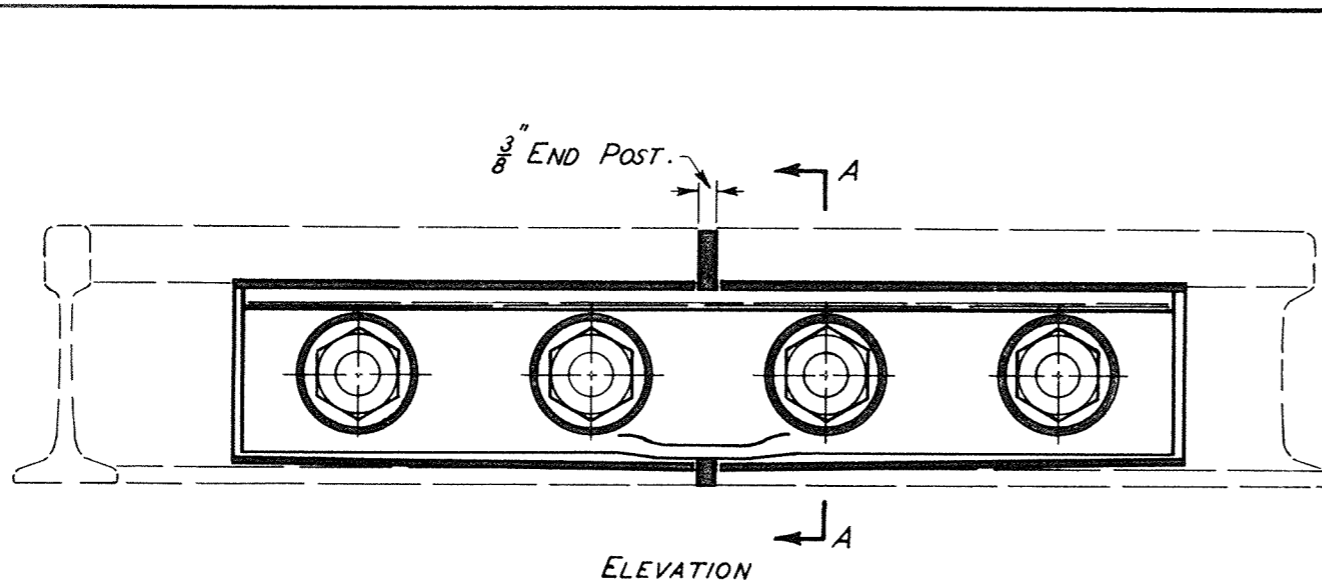
FASTENING OFF OF WIRES

SCHEDULE OF QUANTITIES		
Per length of 1 Mile		
Item	N°	Weight
Posts (sleeper or concrete)	211	-
Droppers 2' x 1 1/4' x 3' 6" (hardwood)	844	-
Wire, galvanized, N° 8 gauge (including allowance for straining)	-	16 1/2 cwt.
Wire, barbed, N° 12 gauge	-	4
Fasteners, N° 10 gauge wire	-	88 lbs
Sills & struts not included in above		

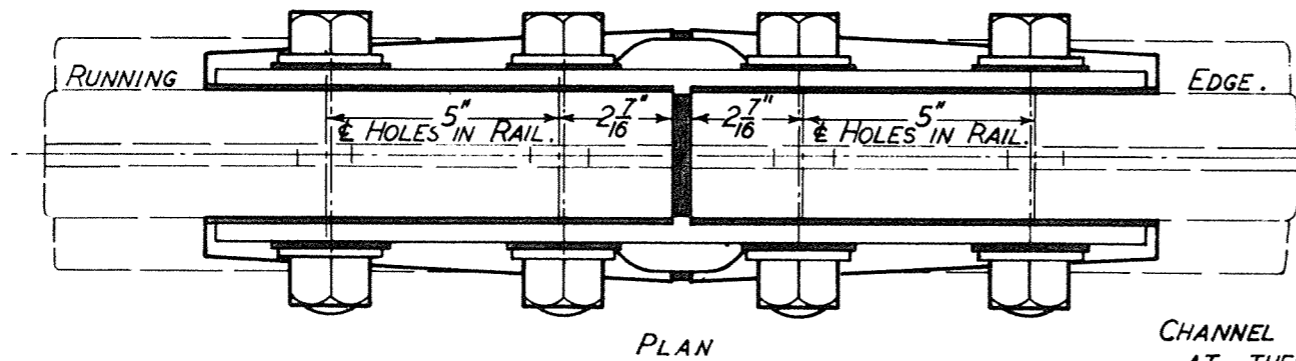
This plan supersedes Plan N° $\frac{W}{7A}$

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING DROPPER FENCING FOR RAILWAYS BOUNDARIES SCALES—6", 1", 1/2" & 1/4" = 1'. 0"		Approved Chief Civil Engineer Drawn by V. W. L. Checked by T. J. U. Engineer of Track & Drainage	Adopted 1939 PLAN No. F 330
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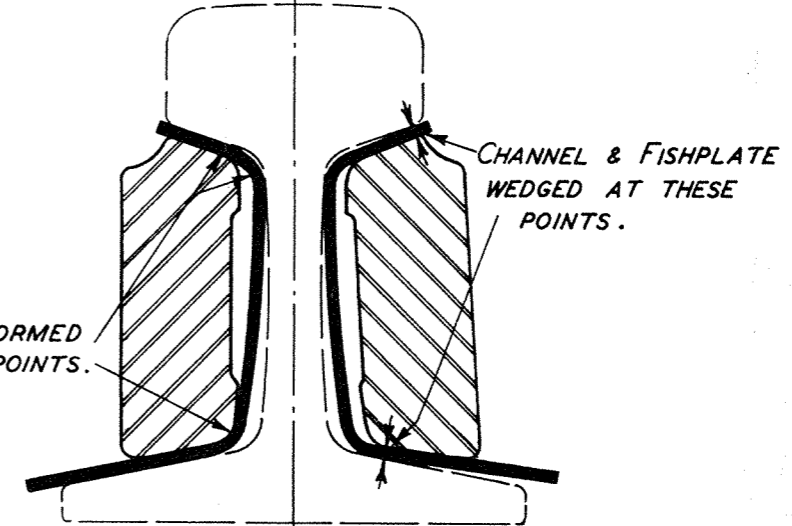
REINFORCED CONCRETE FENCE POST



SECTION AA
CORRECT ASSEMBLY.



CHANNEL DEFORMED
AT THESE POINTS.



CHANNEL INCORRECT. CHANNEL & FISHPLATE INCORRECT.
EXAMPLES OF INCORRECT ASSEMBLY.

TYPICAL INSULATED JOINT HERE SHOWN.
PARTICULARS ALSO APPLY TO INSULATED JUNCTION.

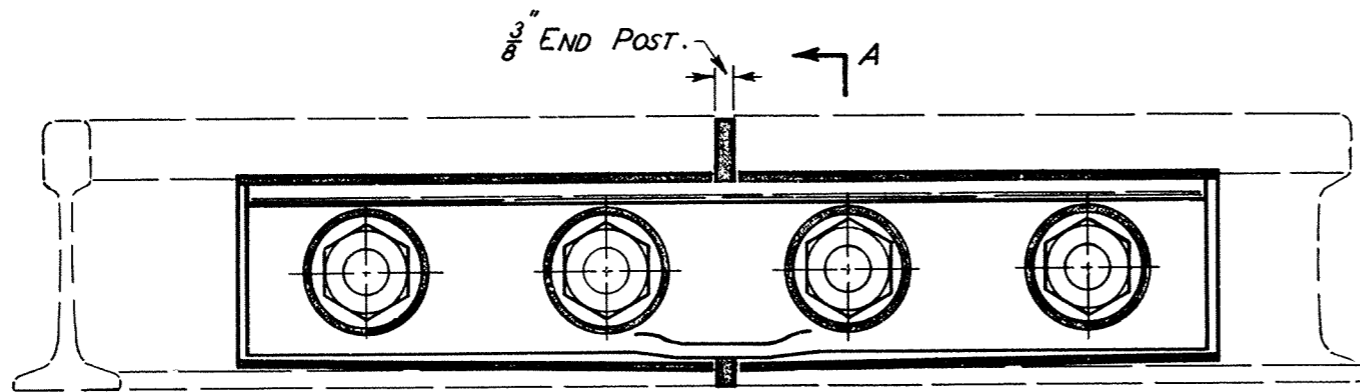
WEIGHT OF RAIL.	DIMENSION "H"
80 LB A.S.	2 3/8"
90 & 94 " "	2 7/8"
100 " "	2 5/8"
107 " "	2 43/64"
110 " "	2 45/64"

NOTES. WHEN ORDERING INSULATIONS, REFER
TO S.&T. DRG. A581 FOR PART NOS.
HOLES IN ALL RAILS 1/4" DIA.

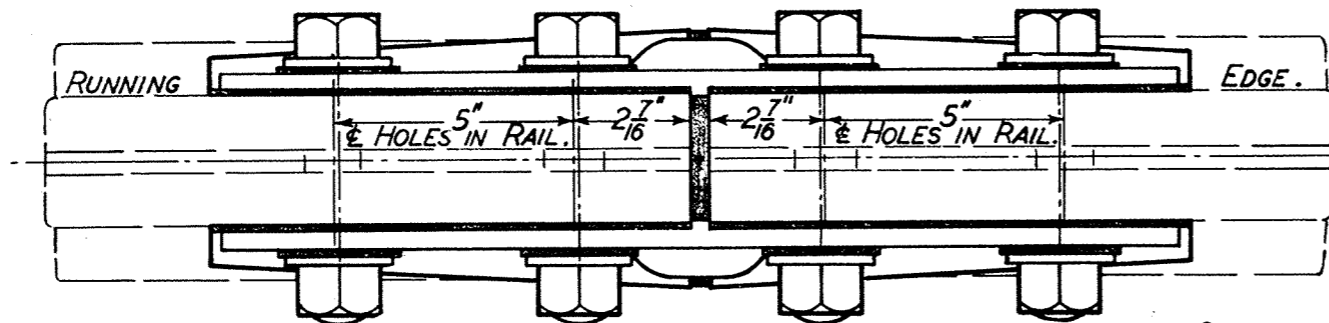
V-R

INSULATED JOINT
TYPICAL ASSEMBLY
TYPE 1939

Approved. <i>M.H.</i> Chief Civil Eng.	Adopted. 1939
Checked. G.M.	PLAN NO F 331
Examined. <i>G.M.</i> Eng. of Mach & Water Supply.	



ELEVATION

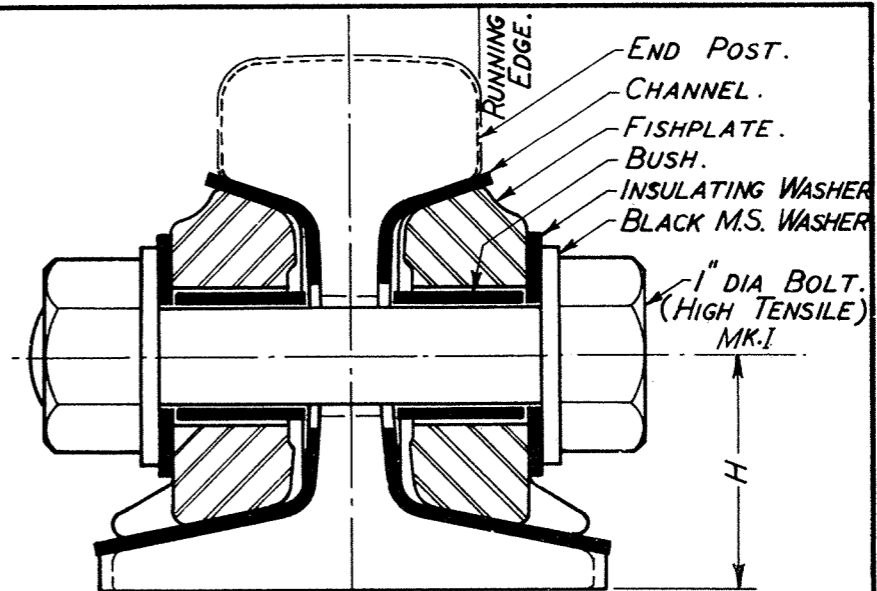


PLAN

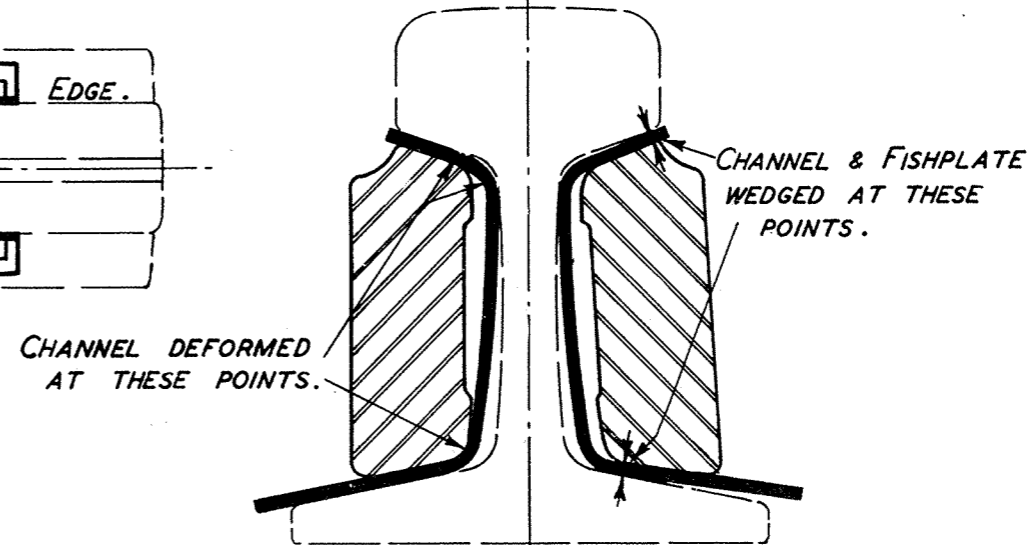
TYPICAL INSULATED JOINT HERE SHOWN.
PARTICULARS ALSO APPLY TO INSULATED JUNCTION.

WEIGHT OF RAIL.	DIMENSION "H"
80 LB A.S.	2 3/8"
90 & 94 " "	2 7/16"
100 " "	2 5/8"
107 " "	2 43/64"
110 " "	2 45/64"

NOTES. WHEN ORDERING INSULATIONS, REFER TO S.&T. DRG. A581 FOR PART NOS.
HOLES IN ALL RAILS 1 1/4" DIA.

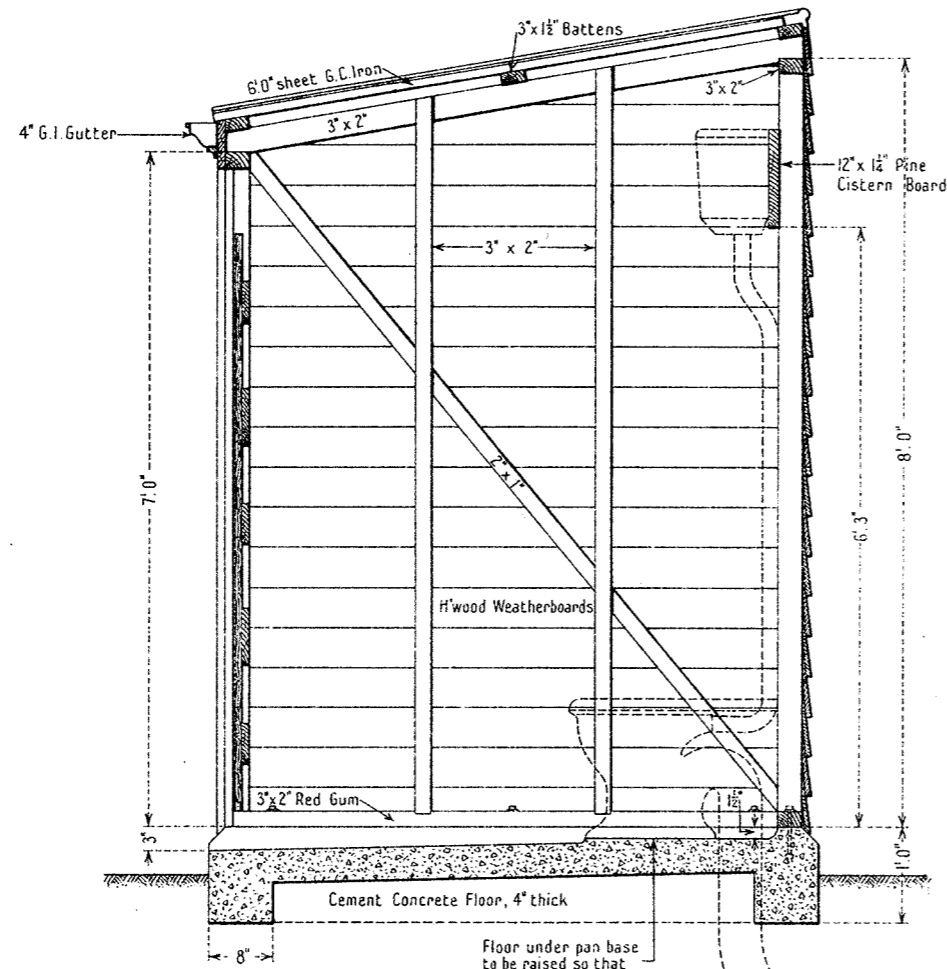


SECTION AA
CORRECT ASSEMBLY.

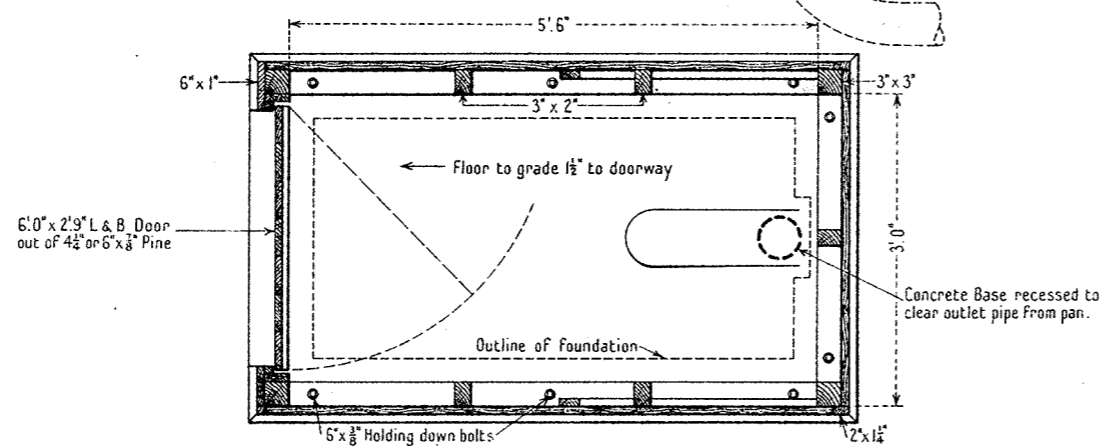


CHANNEL INCORRECT. CHANNEL & FISHPLATE INCORRECT.
EXAMPLES OF INCORRECT ASSEMBLY.

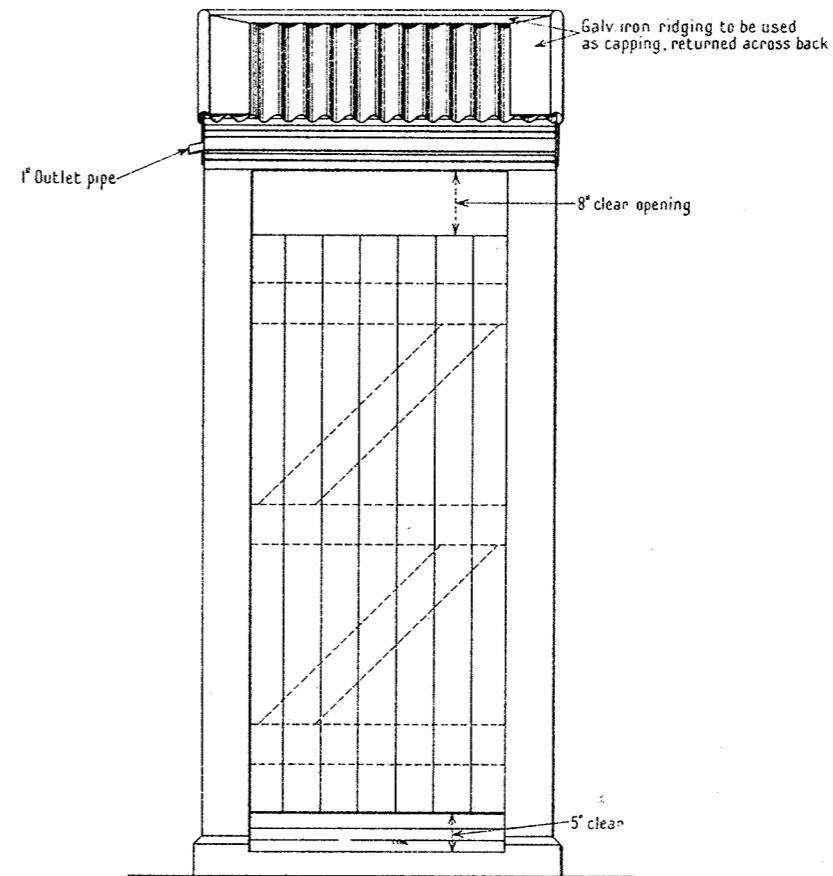
V-R INSULATED JOINT TYPICAL ASSEMBLY TYPE 1939	Approved. <i>[Signature]</i>	Adopted. 1939
	Chief Civil Eng.	
	Checked. G.M.	PLAN No F 331A.
	Examined. <i>[Signature]</i>	
	Eng. of Mach & Water Supply.	



SECTION



PLAN

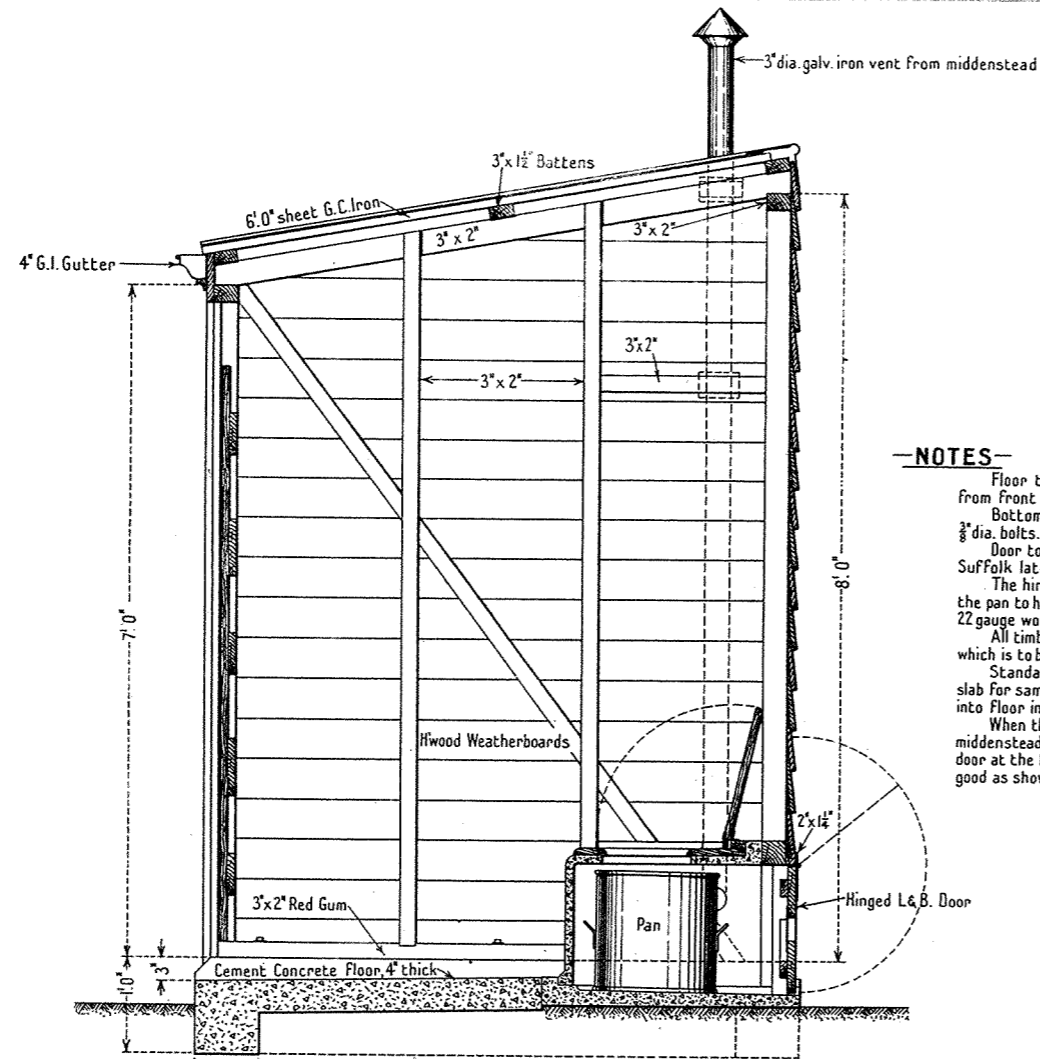


ELEVATION

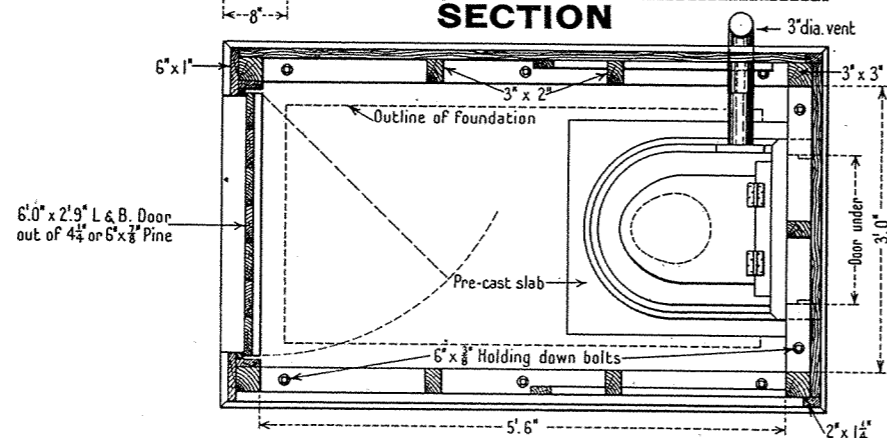
— NOTE — Door to be fitted with 4" brass barrel bolt & Suffolk latch.
All timbers to be hardwood except bottom plate which is to be red gum.

This plan supersedes plan No. B.P. 79-40

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING SEWERED CLOSET BUILDING SCALE:— 1/2 Inch = 1 Foot		Approved Chief Civil Engineer	Adopted MAY 1940
Drawn by V. W. L.	Checked by R. C. O.	PLAN No. F 333	
 Chief Architect			



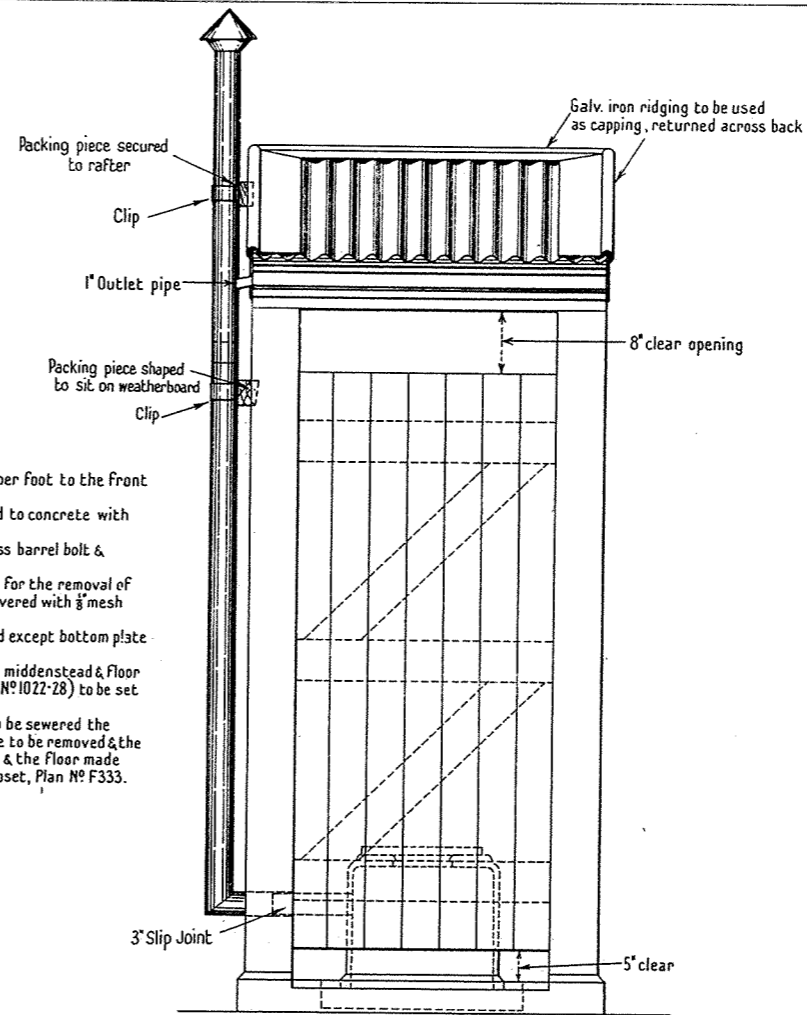
SECTION



PLAN

NOTES

- Floor to be given a fall of $\frac{1}{4}$ " per foot to the front from front of middenstead slab.
- Bottom plate is to be secured to concrete with $\frac{3}{8}$ " dia. bolts.
- Door to be fitted with 4" brass barrel bolt & Suffolk latch.
- The hinged door at the back for the removal of the pan to have a 9" x 3" opening covered with $\frac{3}{8}$ " mesh 22 gauge woven wire.
- All timbers to be of hardwood except bottom plate which is to be red gum.
- Standard pre-cast concrete middenstead & floor slab for same (units 6 & 7 on plan N^o 1022-28) to be set into floor in the manner shown.
- When this type of closet is to be sewerd the middenstead, vent & floor slab are to be removed & the door at the back to be boarded up & the floor made good as shown for the sewerd closet, Plan N^o F333.

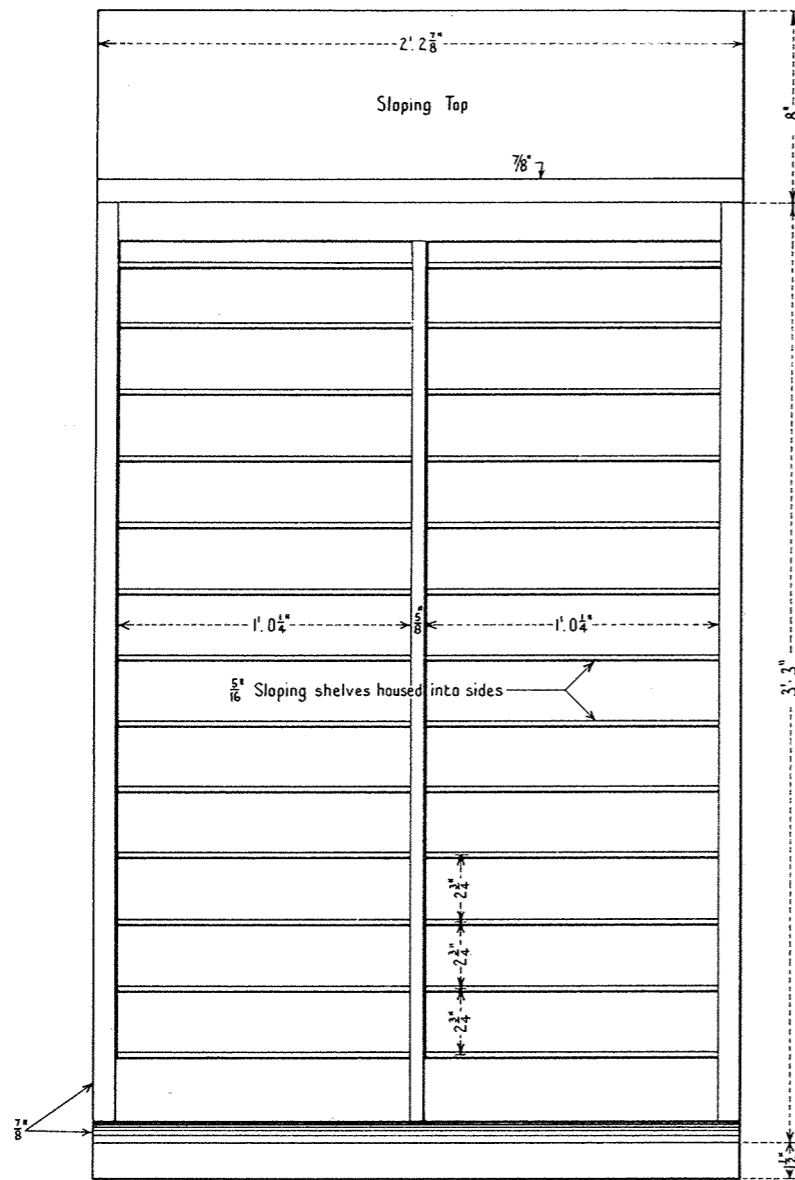


ELEVATION

This plan supersedes Plan N^o F334

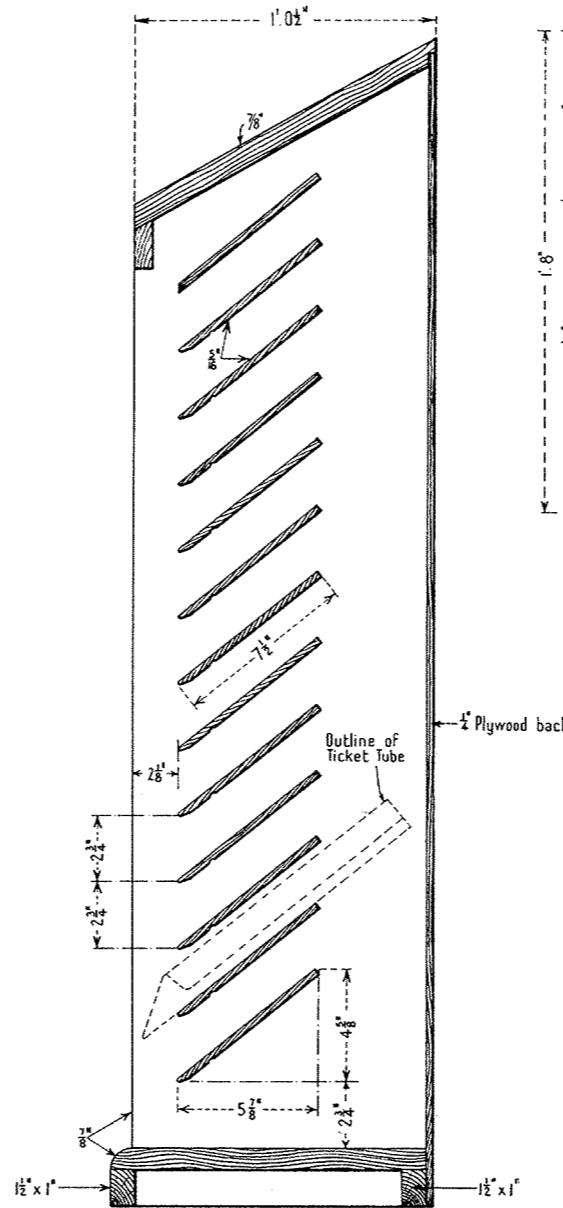
Rev'n	Date	Amendment	Amended by
A	16/1/59	Vent Pipe to be fixed externally	C.C.E.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING UNSEWERED CLOSET BUILDING SCALE = $\frac{1}{2}$ Inch = 1 Foot		Approved <i>R. V. L. 1959</i> Chief Civil Engineer	Adopted MAY 1940
Drawn by <i>V. W. L.</i>	Checked by A. B.	PLAN No. F334^A	
<i>Book</i> Senior Architect			

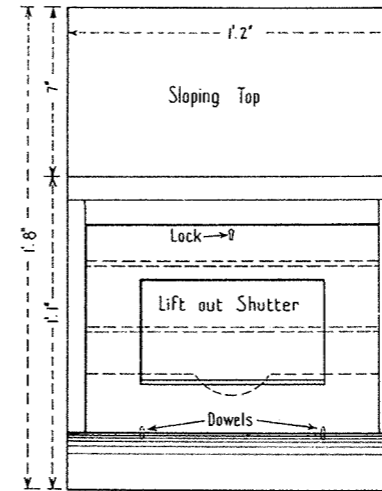


ELEVATION

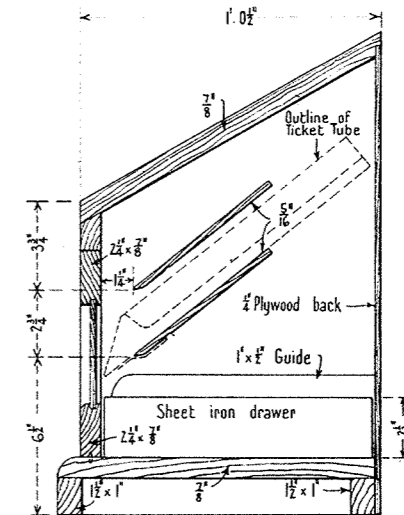
216 TUBE CABINET
 NOTE :- 108 Tube cabinet is similar in section & 1'-2" wide in elevation.



SECTION



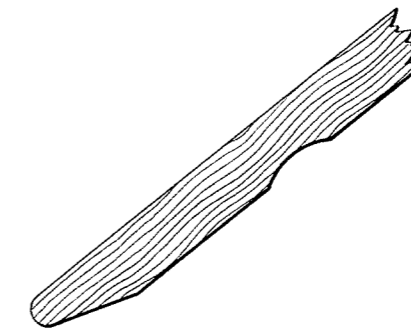
ELEVATION



SECTION

18 TUBE CABINET

NOTE :- 27, 45, 54, & 81 Tube cabinets to be similar in section & elevation only that the height shall be adjusted by 2 3/4" for each row of 9 tubes according to requirements.



FULL SIZE DETAIL OF SLOPING SHELVES

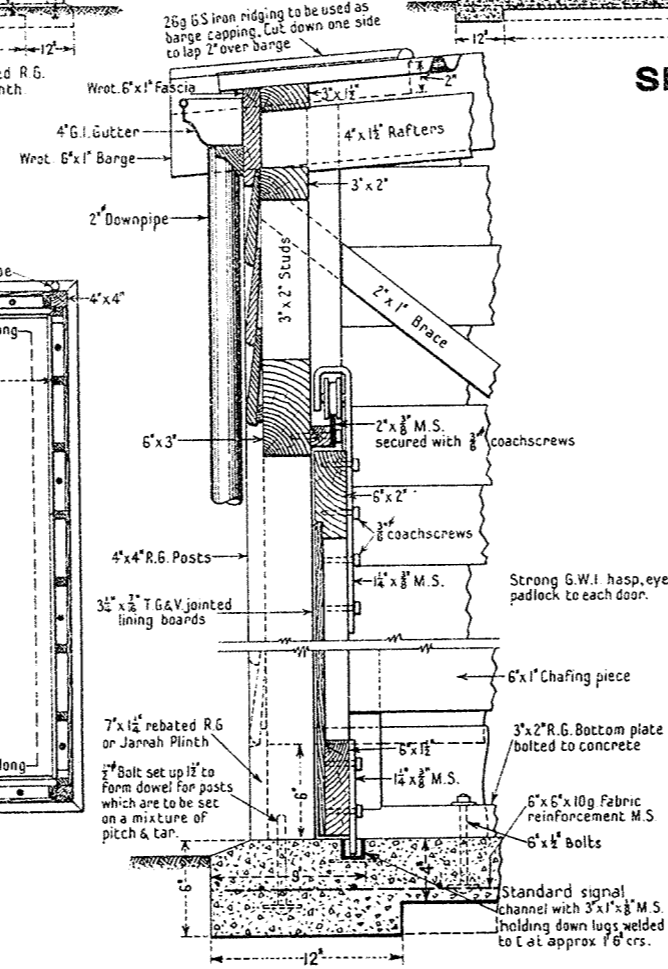
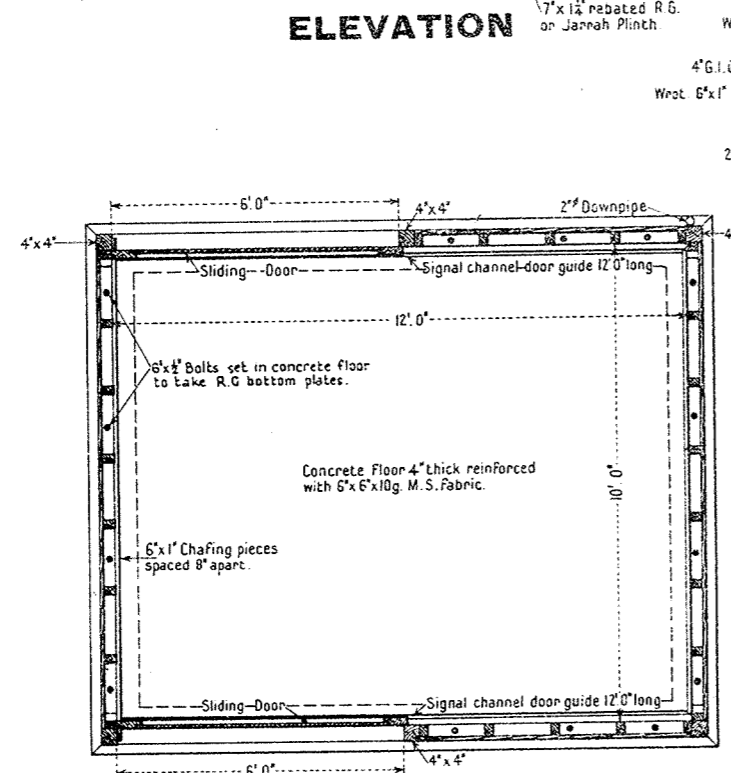
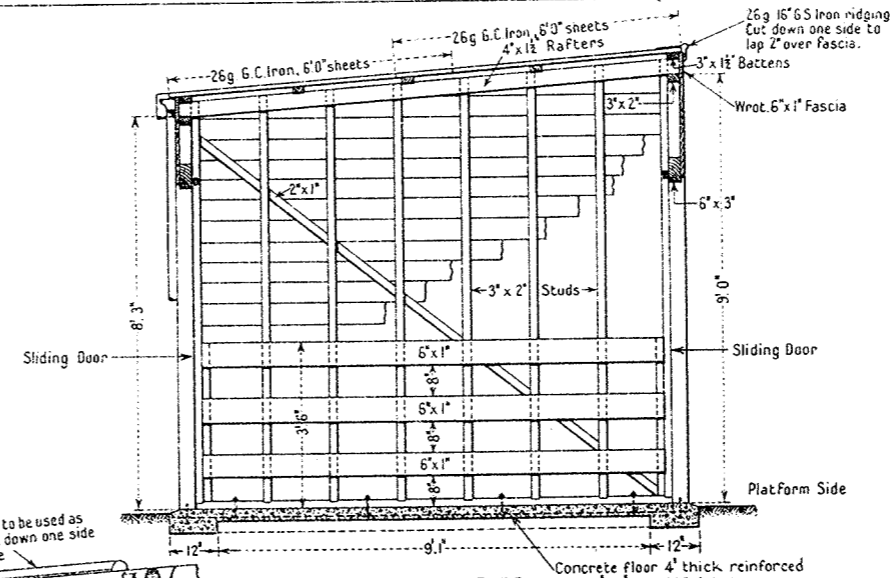
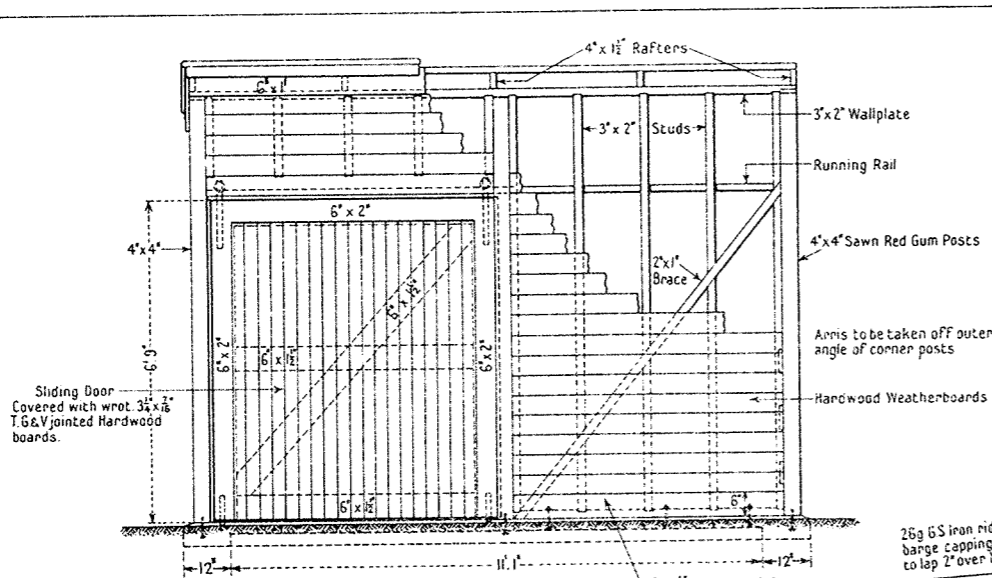
Cabinets to be constructed of Mountain Ash timber, light stained & varnished.

This plan supersedes plan N^o F 335^A

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
DAGGER TYPE
TICKET CABINETS

Scale - 1 1/2" = 1'-0"

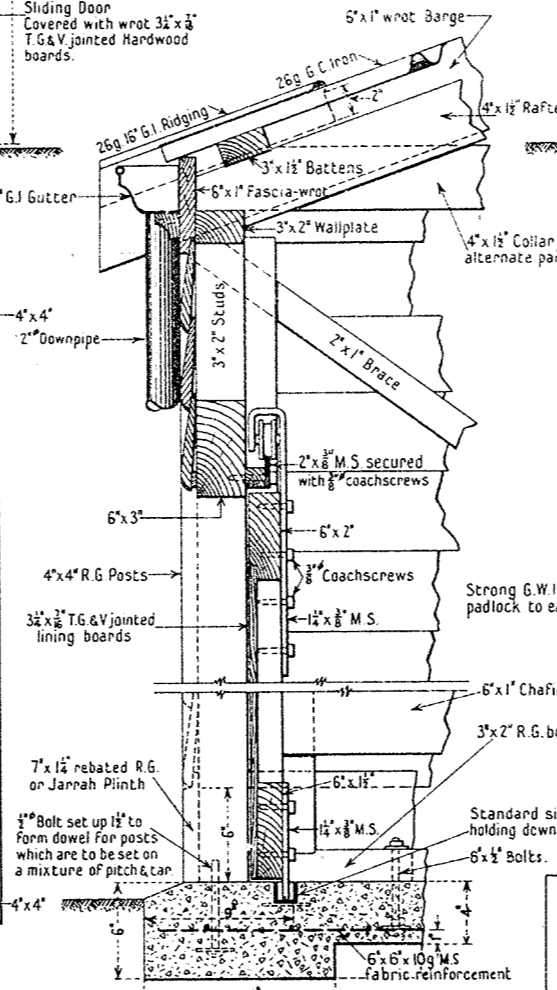
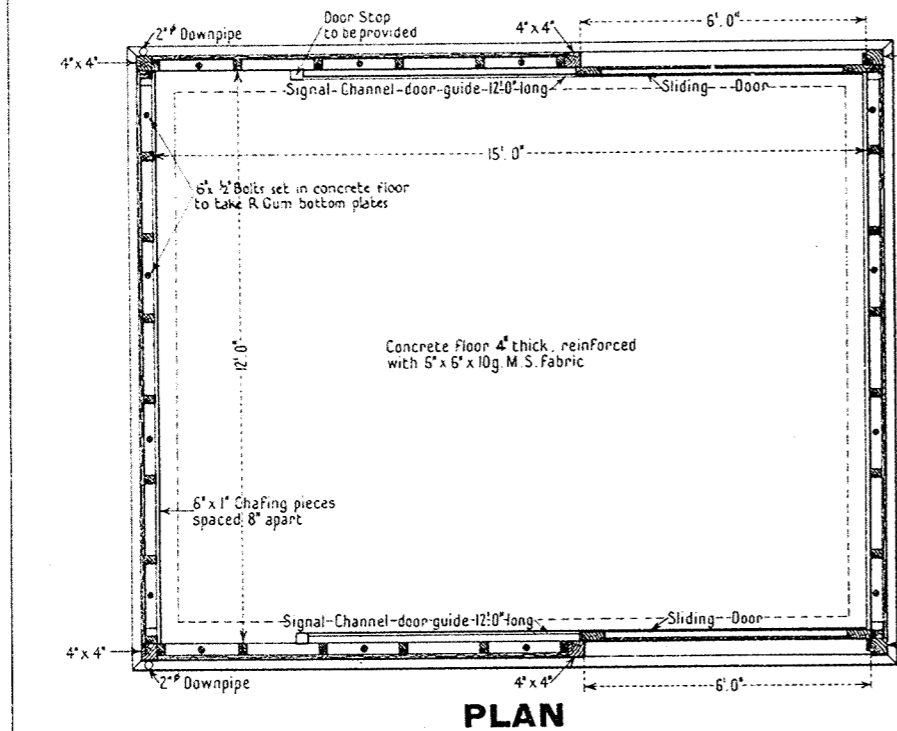
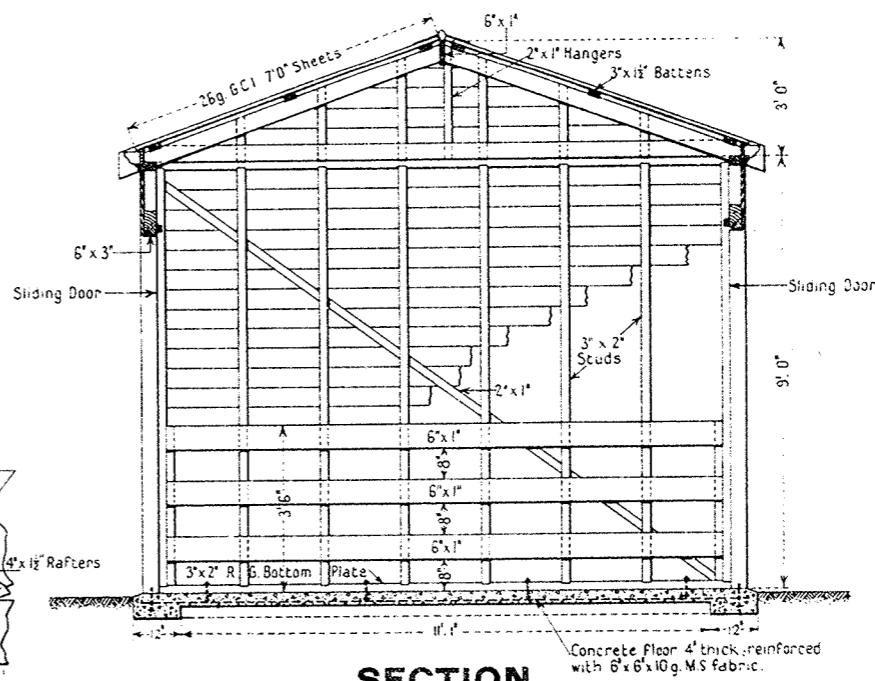
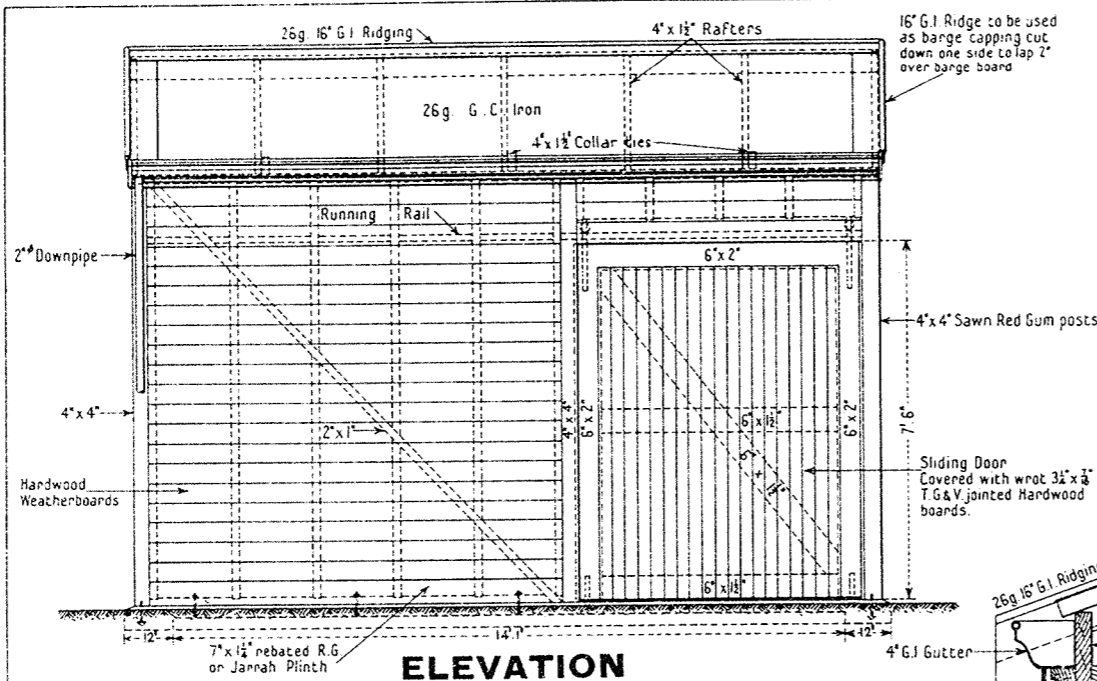
Approved <i>[Signature]</i> Chief Civil Engineer		Adopted AUG. 1949
Drawn by V. M.	Checked by F. G. B.	PLAN No. F335^B
S. S. May Chief Architect.		



NOTE
 Timbers in contact with the concrete floor to be sawn Red Gum or Jannah. Other timbers to be sawn Hardwood unless otherwise shown.
 To prevent door from coming off the runner, the clearance between the top and the bottom of the W iron runner is to be less than the depth of the groove on the roller.
 This direction also applies to the doors on Goods Sheds.

This plan supersedes plan No L275-20, F337 & F337A

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	SEP. 1940
12' x 10' WEATHERBOARD VAN GOODS SHED		Drawn by V. W. L.	Checked by S. S.
—SCALE— 1/4 Inch = 1 Foot		<i>[Signature]</i> Chief Architect	PLAN No. F 337B



NOTE

Timbers in contact with the concrete floor to be sawn Red Gum or Jarrah. Other timbers to be sawn Hardwood unless otherwise shown.

To prevent door from coming off the runner, the clearance between the top and the bottom of the W. Iron runner is to be less than the depth of the groove on the roller.

This direction also applies to the doors on Goods Sheds.

This plan supersedes plan Nos. LI76-27, F338 & F338A

DETAIL OF DOOR ETC.
SCALE - 1 Inch = 1 Foot

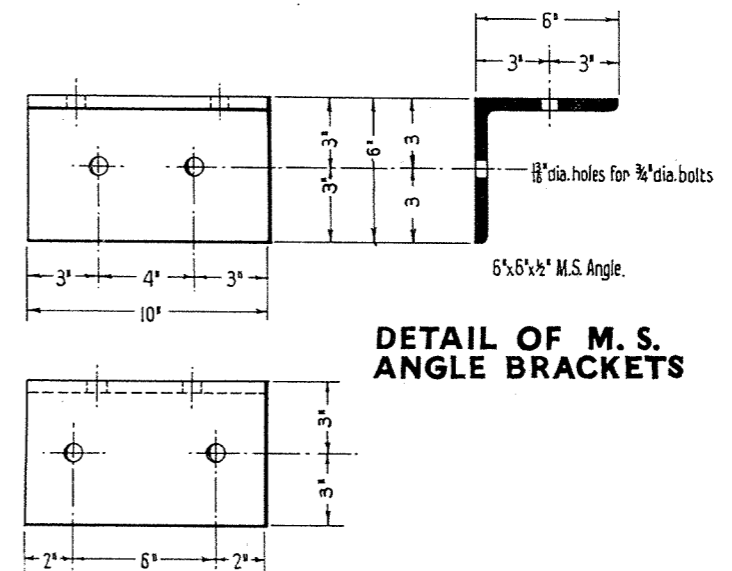
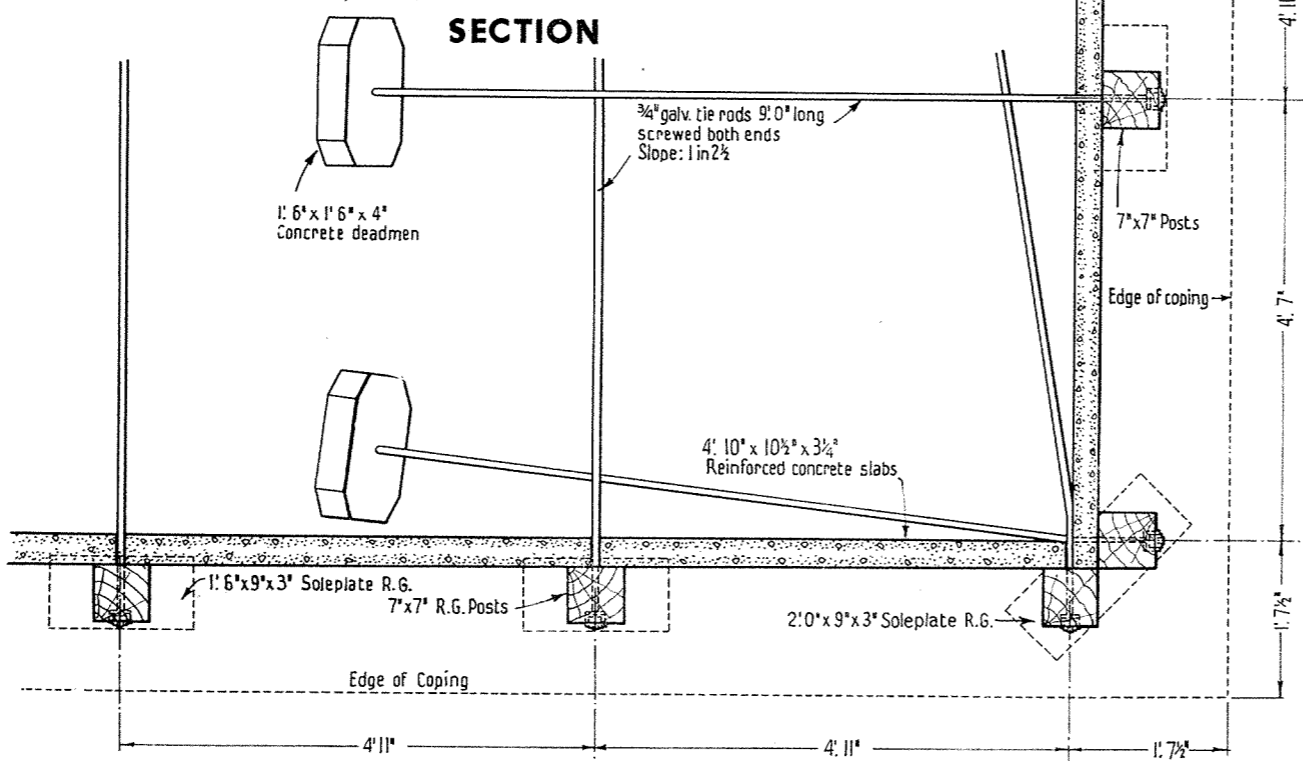
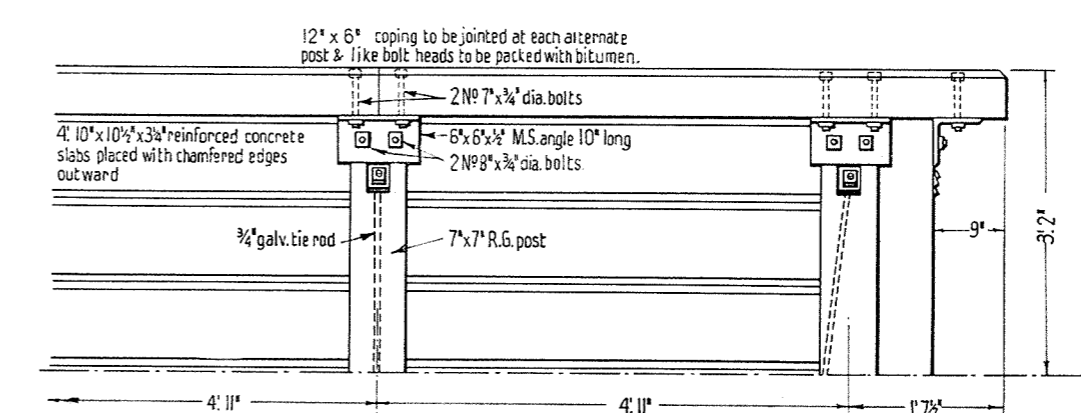
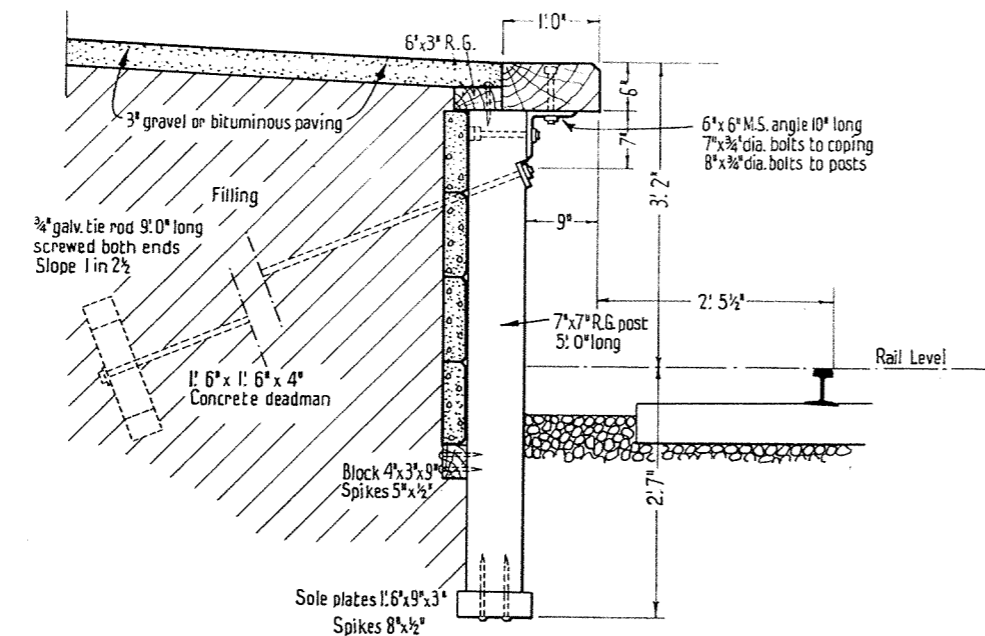
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH

STANDARD DRAWING

15' X 12' WEATHERBOARD VAN GOODS SHED

SCALE - 1/4 Inch = 1 Foot

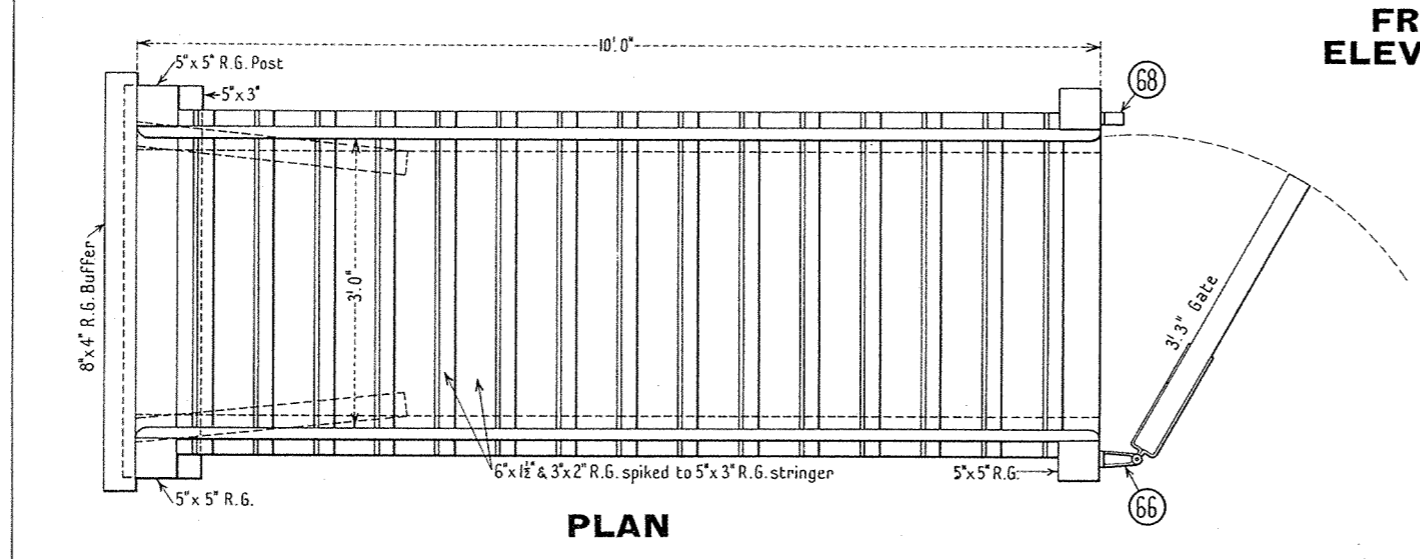
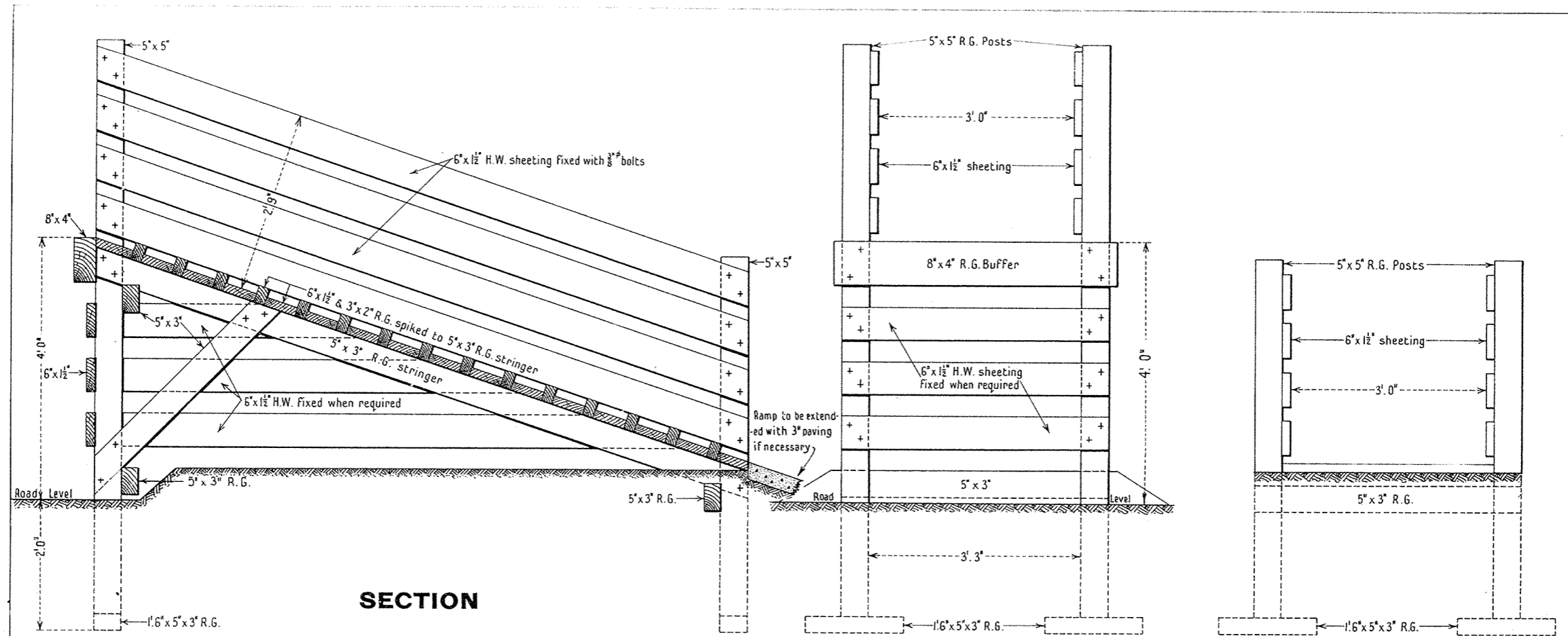
Approved <i>M.H.</i> Chief Civil Engineer	Adopted SEP. 1940
Drawn by V. W. L.	Checked by S. S.
<i>H. Schuff</i> Chief Architect	PLAN No. F 338B



NOTES:
Posts, soleplates and blocks shall be Red Gum.
Plan F353^b to be used for goods platforms only.

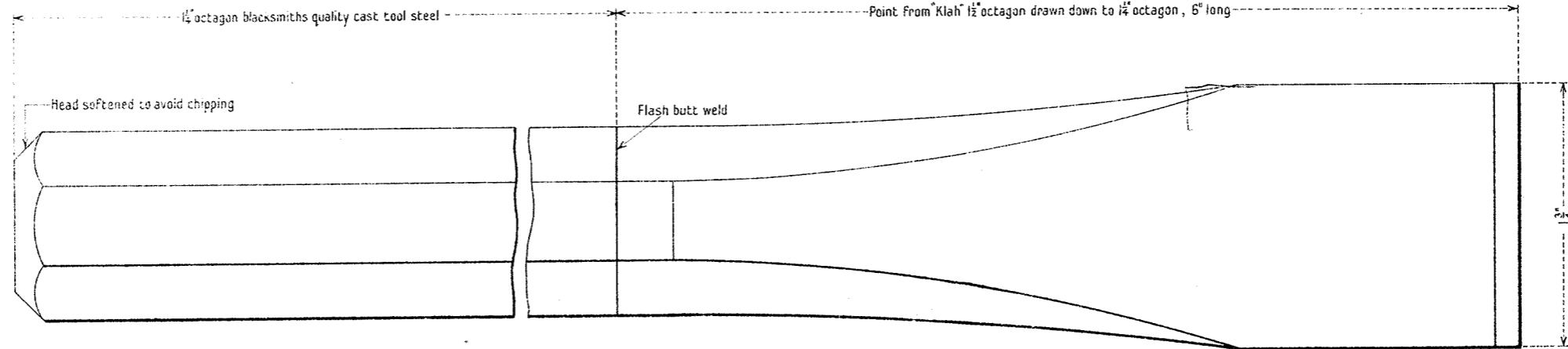
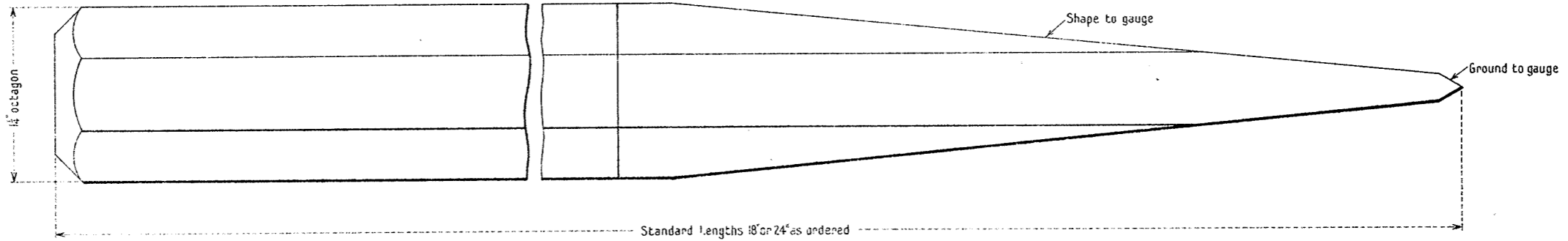
Rev.	Date	Amendment

VICTORIAN RAILWAYS WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	JUNE 1951
DETAILS OF PLATFORM FACING FOR PASSENGER PLATFORM		Chief Civil Engineer	PLAN No.
Drawn by	Checked by	H. C. J.	D. B. C.
Chief Architect			F 339
SCALES 1/2" = 1'0", 1/4" = 1'0"			

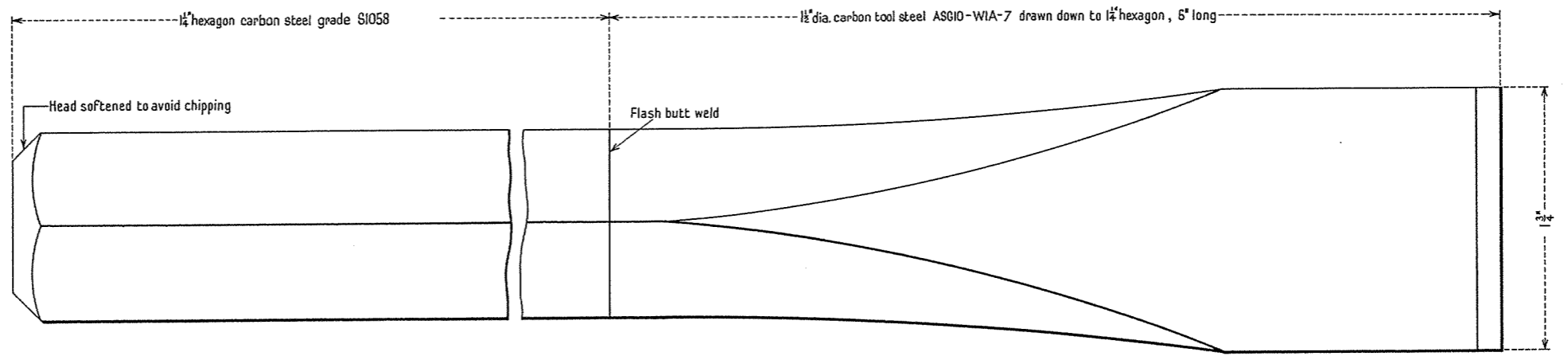
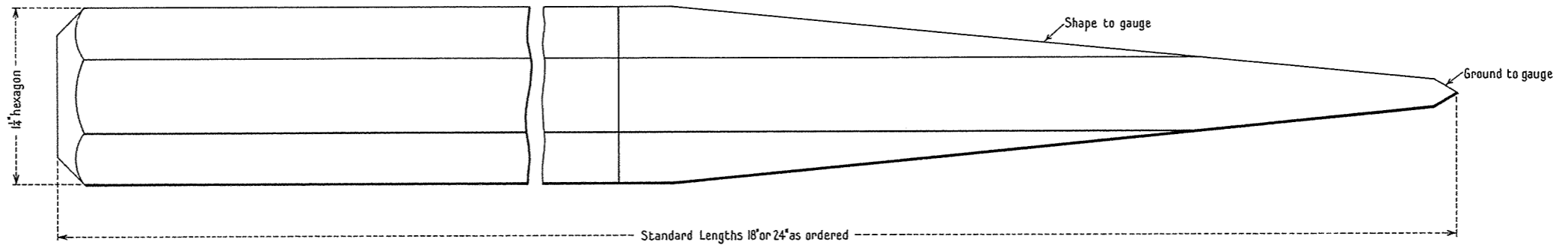


This plan supersedes plan N° 680-39 & F.342 & F. 342^A

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING STOCK TRANSPORT RAMP LIGHT TYPE SCALE— 1/2 Inch = 1 Foot		Approved Chief Engineer	Adopted JAN. 1950
Drawn by V. W. L.	Checked by F. G. B.	Chief Architect 	PLAN No. F 342^B



VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	JUNE 1940
BRIDGE CUTTER		Drawn by V. W. L.	Checked by K. M.
Full Size			PLAN No. F343

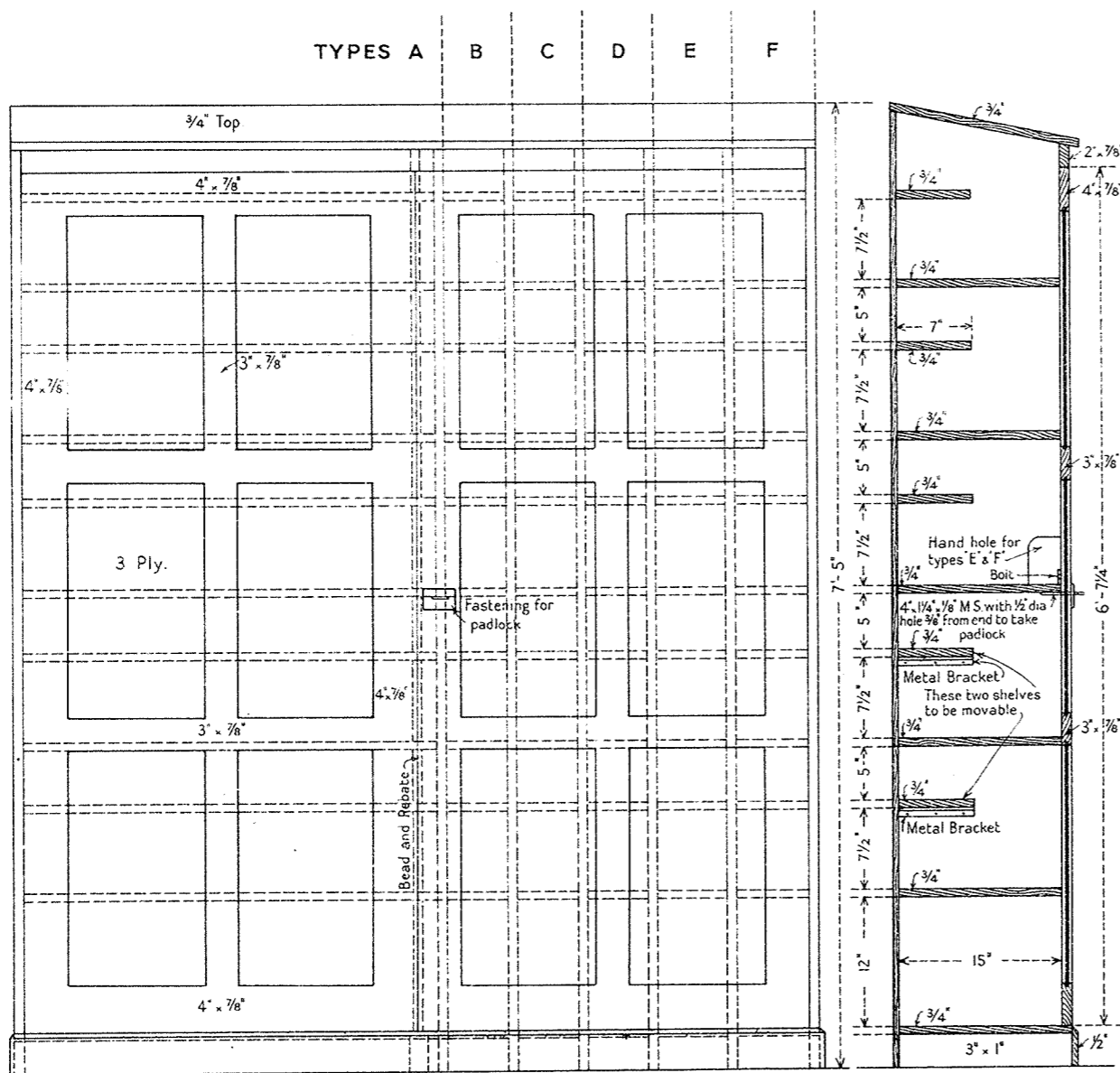


Rev.	Date	Amendment
A	27-11-67	Material amended from 1 1/4" Octagon to 1 1/4" Hexagon.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
BRIDGE CUTTER
 Full Size

Approved
[Signature]
 Chief Civil Engineer
 Drawn by
 V. W. L.
 Checked by
 K.M.

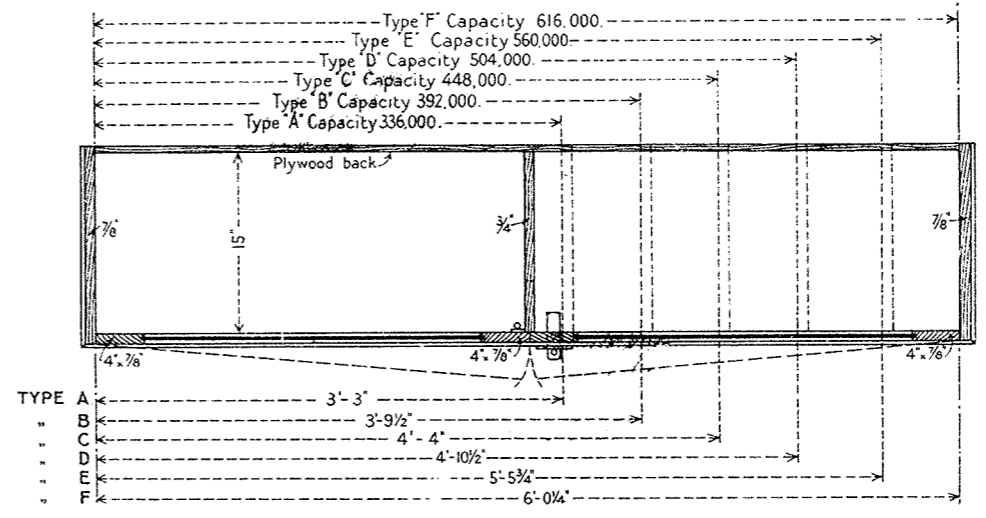
Adopted
 JUNE 1940
 PLAN No.
F 343^A



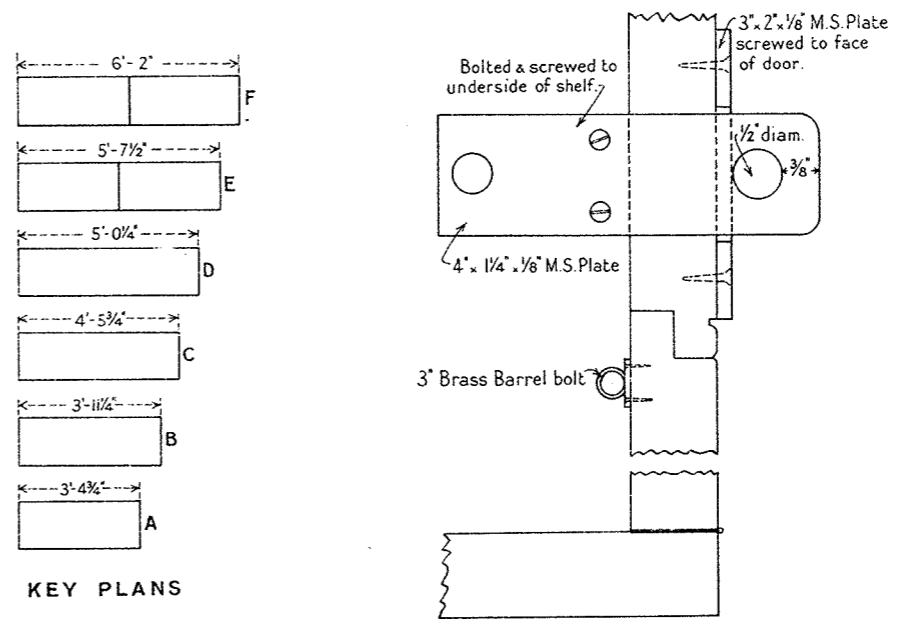
ELEVATION

SECTION

Note:- Cupboards to be made of Mountain Ash, stained and varnished.



PLAN

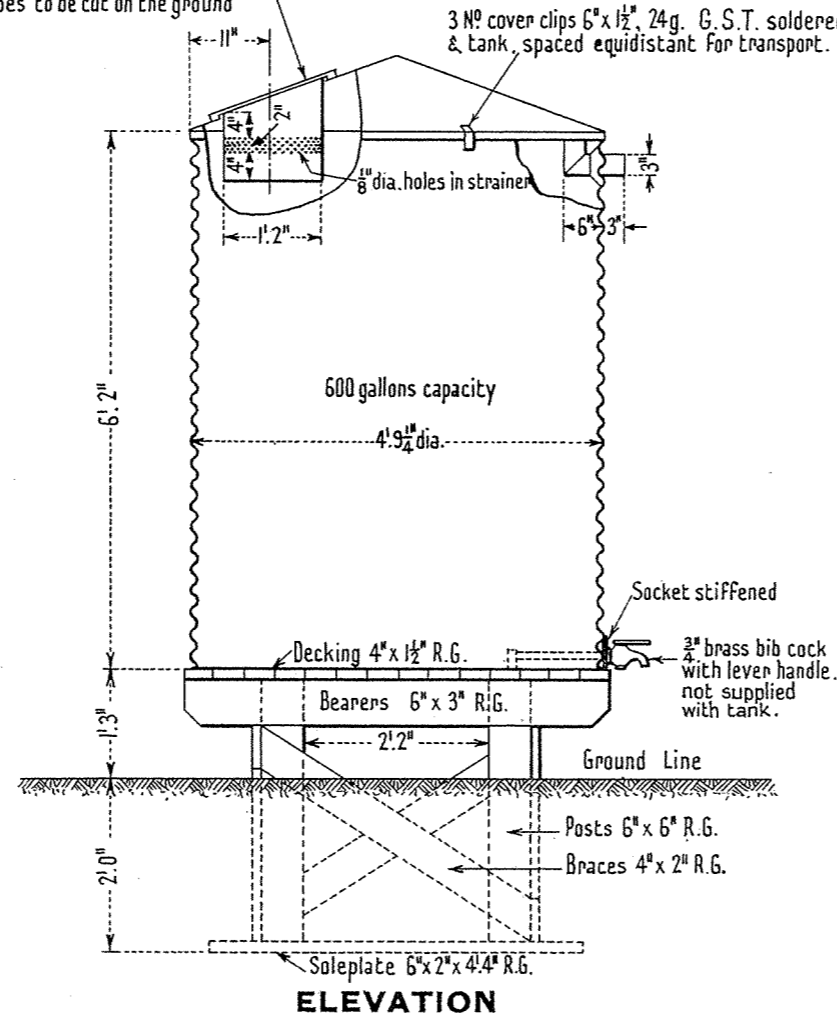


KEY PLANS

DETAILS OF DOOR FASTENINGS

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.W.</i> Chief Civil Engineer.	JULY 1940
RAILWAY TICKET STORAGE CUPBOARDS		Drawn by K. F. L.	Checked by F. G. B.
Scales 3/4" = 1'-0" & Half full size.		<i>H. Schubert</i> Chief Architect.	PLAN No. F 344

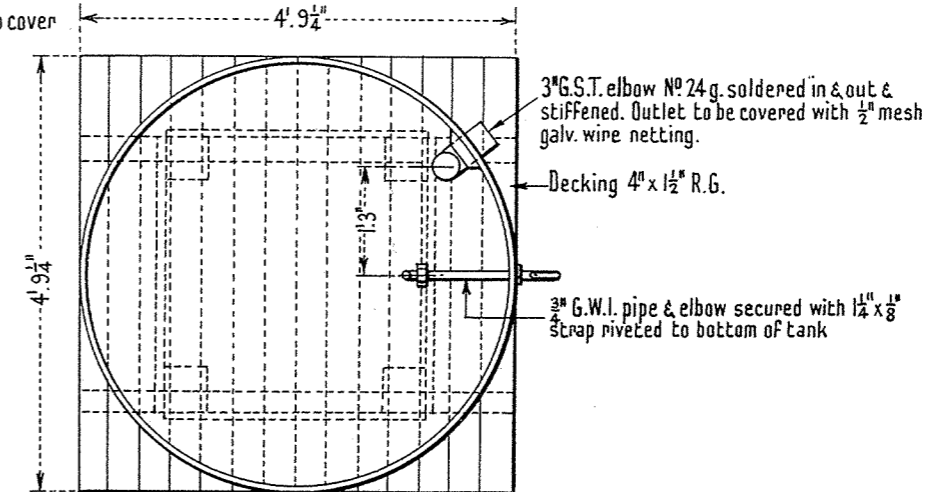
Flanged cover plate of 24 g. galv. iron
Holes for down pipes to be cut on the ground



ELEVATION

Painting:- Allow new galv. tanks to weather for one month.
Apply primary coat of dilute "Flintkote" Type I
(5% cold water added) to interior surfaces
and underside of bottom.
When completely dry apply one heavy undiluted
coat of "Flintkote" Type I. (C.C.E. 22.5.57)

This plan supersedes Plan Nos 384/30, & F345^A



PLAN

NOTES:-

Cover 24 g. sheet iron. Joints to be single riveted $3\frac{1}{2}$ " pitch
This cover is to have a 14" dia. opening as shown.
Cylindrical portion to be made with 8'-0" sheets of 24 g. galv.
corrugated iron. The vertical joints to be double riveted at
each corrugation & the horizontal joint to be single riveted at 6" pitch.
Bottom 24 g. flat galv. iron. Joints to be single riveted at $3\frac{1}{2}$ " pitch.
Rim to be folded & soldered outside.
All rivets throughout the tank to be soldered inside & outside.
Bottom soldered inside & outside. Sides outside only.
All materials to be of approved brands.
A minimum distance of 18" clear is to be maintained between tanks,
any adjoining building, fence or other structure.
Orders for tanks to be placed on the Storekeeper,
Spotswood workshops. Lids to be ordered separately.
Flexible joints are to be provided for coupled tanks.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH

STANDARD DRAWING
600 GALLON TANK
(DEEP TYPE) AND STAND

SCALE:- $\frac{1}{2}$ " = 1' 0"

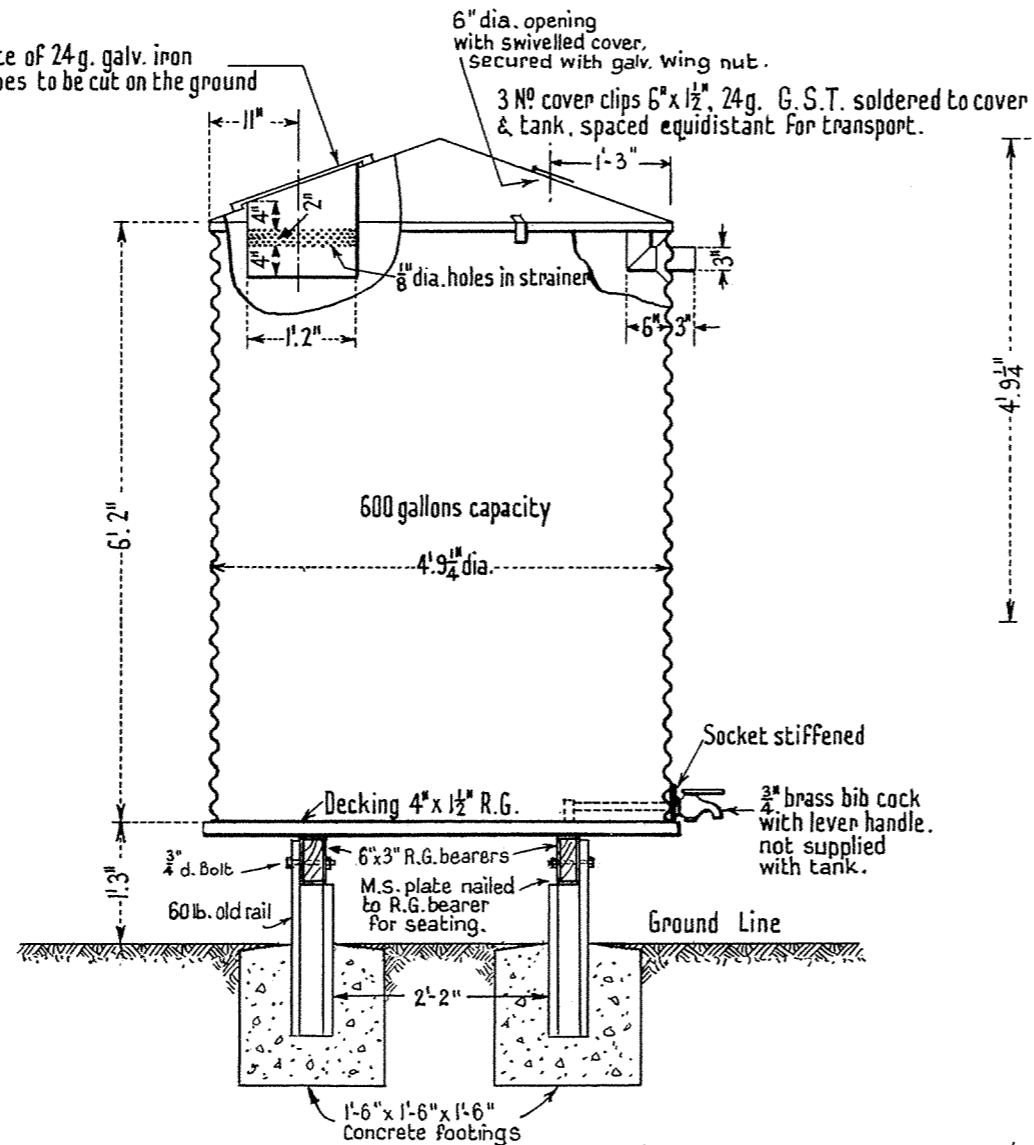
Approved
M
Chief Civil Engineer
Traced by
v.w.l.
Checked by
S.S.
M. J. H. H.
Chief Architect

Adopted
FEB. 1946

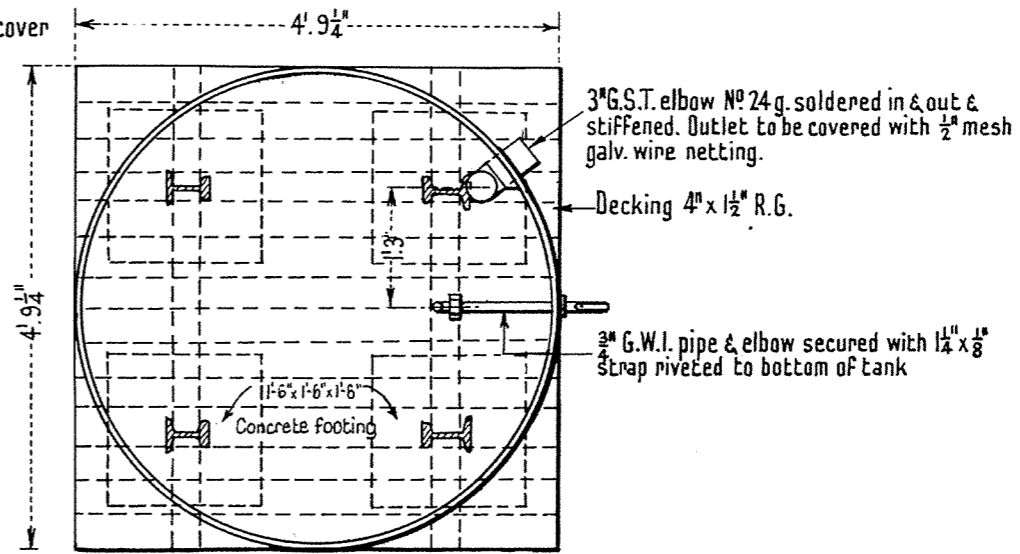
PLAN No.

F345^B

Flanged cover plate of 24 g. galv. iron
Holes for down pipes to be cut on the ground



ELEVATION



PLAN

NOTES:—

Cover 24 g. sheet iron. Joints to be single riveted $3\frac{1}{2}$ " pitch
This cover is to have a 14" dia. opening as shown.
Cylindrical portion to be made with 8'-0" sheets of 24 g. galv. corrugated iron. The vertical joints to be double riveted at each corrugation & the horizontal joint to be single riveted at 6" pitch.
Bottom 24 g. flat galv. iron. Joints to be single riveted at $3\frac{1}{2}$ " pitch.
Rim to be folded & soldered outside.
All rivets throughout the tank to be soldered inside & outside.
Bottom soldered inside & outside. Sides outside only.
All materials to be of approved brands.
A minimum distance of 18" clear is to be maintained between tanks, any adjoining building, fence or other structure.
Orders for tanks to be placed on the Storekeeper, Spotswood workshops. Lids to be ordered separately.
Flexible joints are to be provided for coupled tanks.

This plan supersedes Plan Nos 384/30, F 345A, F 345 B

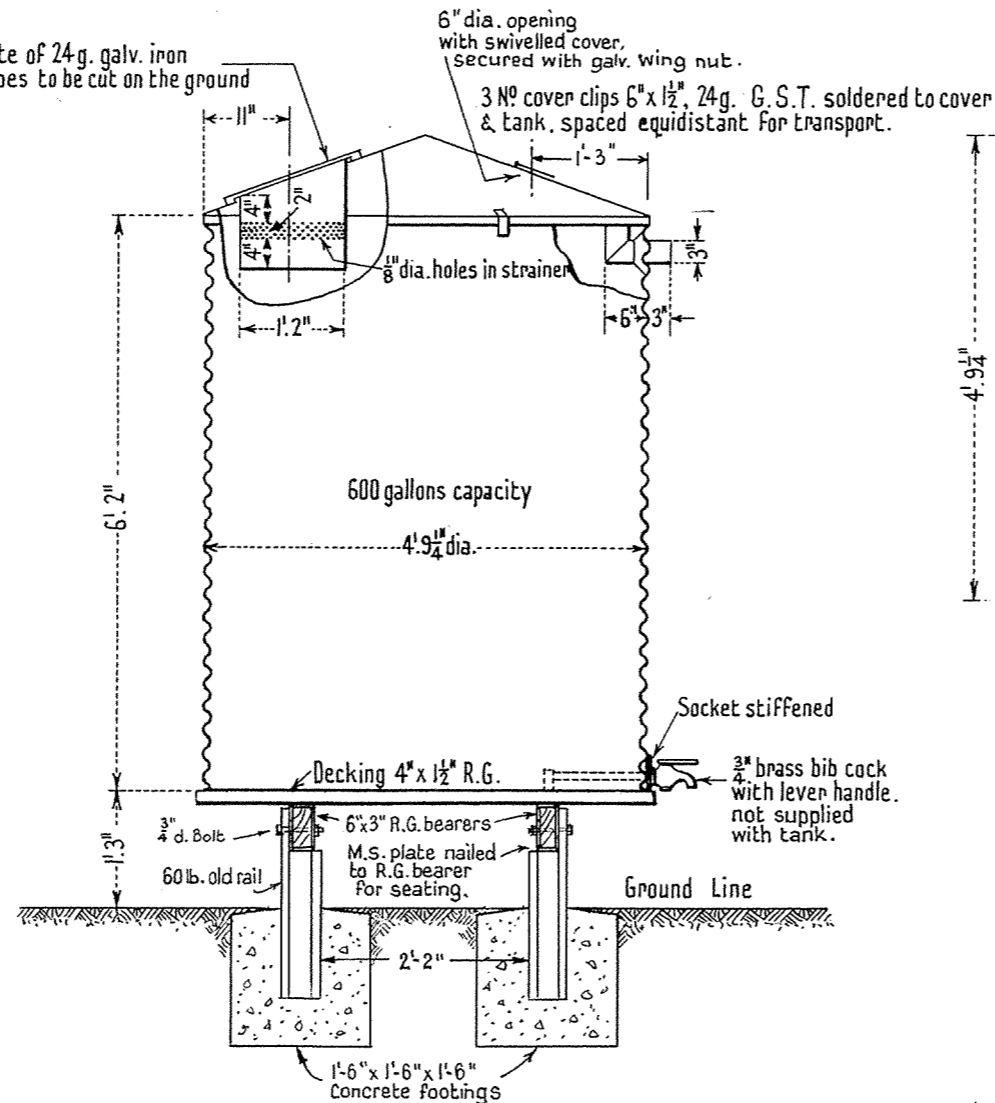
Painting:- Allow new galv. tanks to weather for one month.
Apply primary coat of dilute "Flintkote" Type I (5% cold water added) to interior surfaces and underside of bottom.
When completely dry apply one heavy undiluted coat of "Flintkote" Type I.
(C.C.E. 22-5-57)

7/1/65	C	Opening for filling tank with hose.	
		Timber posts replaced by old rails set in concrete.	
Date	Revision	Amendment	Amendd. By

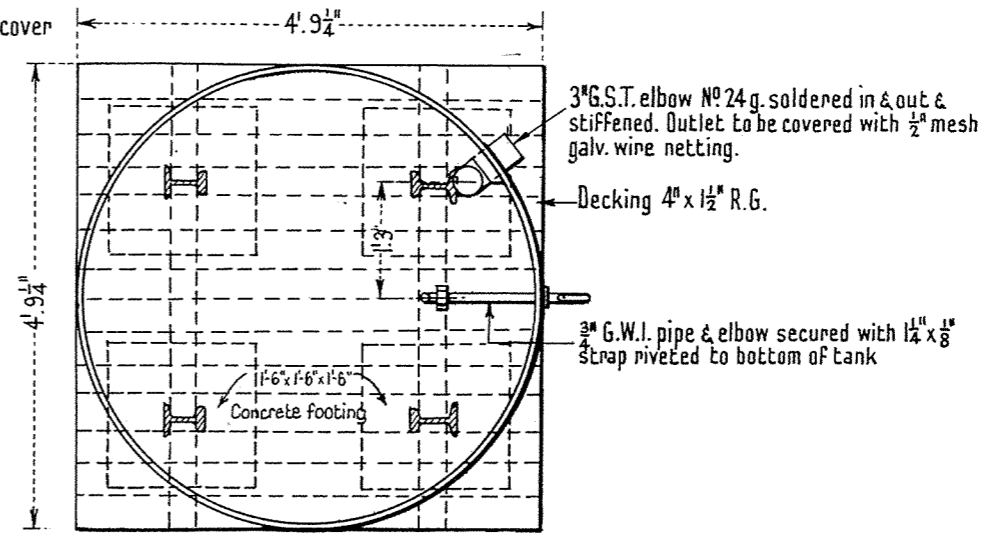
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING
600 GALLON TANK
(DEEP TYPE) AND STAND

Approved <i>M</i> Chief Civil Engineer	Adopted FEB. 1946
Traced by V.W.L.	Checked by S.S.
<i>W. Sturt</i> Chief Architect	PLAN No. F345C

Flanged cover plate of 24-g. galv. iron
Holes for down pipes to be cut on the ground



ELEVATION



PLAN

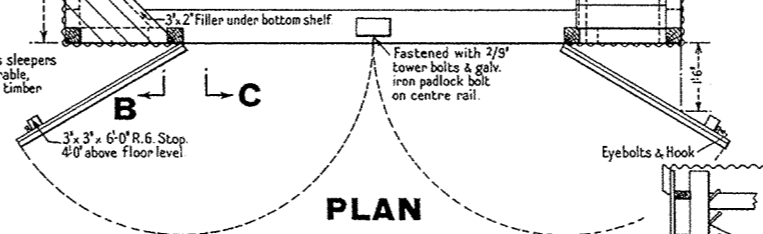
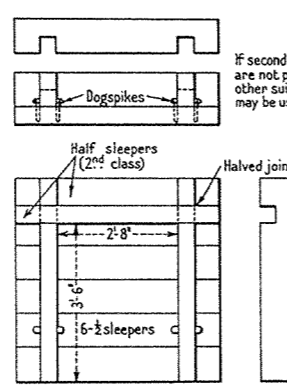
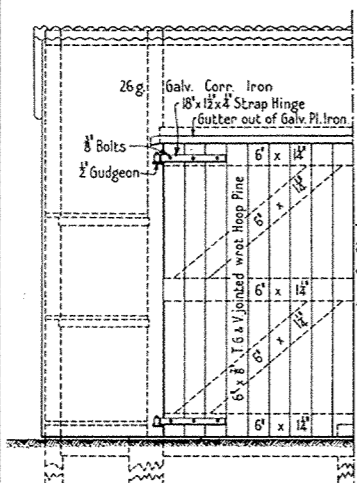
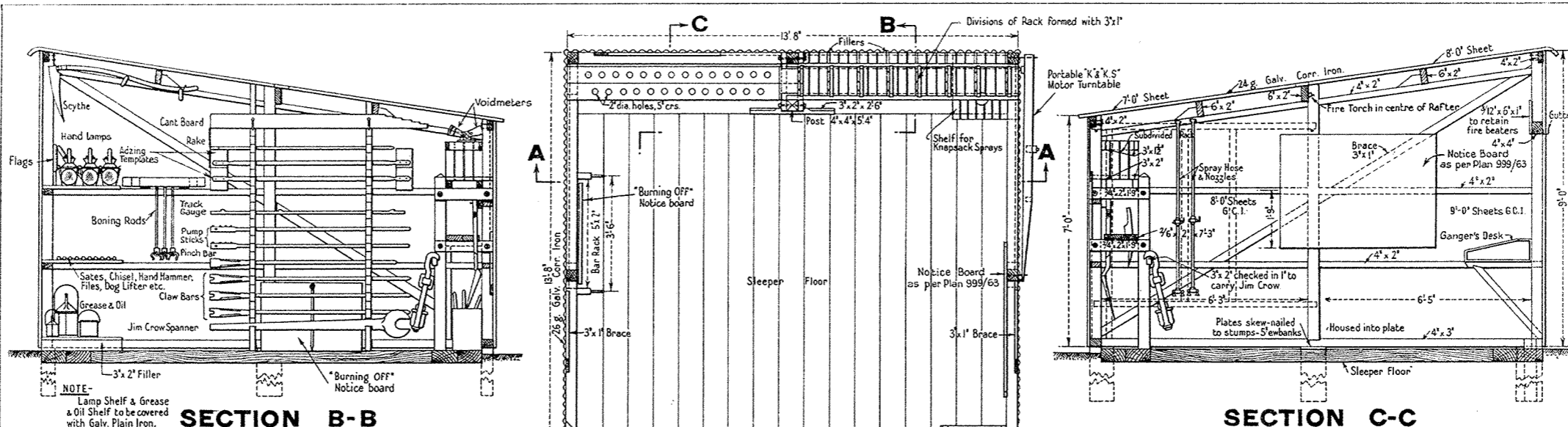
NOTES:—

Cover 24 g. sheet iron. Joints to be single riveted $3\frac{1}{2}$ " pitch
This cover is to have a 14" dia. opening as shown.
Cylindrical portion to be made with 8'-0" sheets of 24 g. galv.
corrugated iron. The vertical joints to be double riveted at
each corrugation & the horizontal joint to be single riveted at 6" pitch.
Bottom 24 g. flat galv. iron. Joints to be single riveted at $3\frac{1}{2}$ " pitch.
Rim to be folded & soldered outside.
All rivets throughout the tank to be soldered inside & outside.
Bottom soldered inside & outside. Sides outside only.
All materials to be of approved brands.
A minimum distance of 18" clear is to be maintained between tanks,
any adjoining building, fence or other structure.
Orders for tanks to be placed on the Storekeeper,
Spotswood workshops. Lids to be ordered separately.
Flexible joints are to be provided for coupled tanks.

This plan supersedes Plan Nos 384/30, F 345A, B, C.

Date	Revision	Amendment	Amendd. by
8/6/70	D	Painting interiors of new tanks discontinued.	
7/7/65	C	Opening for filling tank with hose. Timber posts replaced by old rails set in concrete.	

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted:
STANDARD DRAWING		<i>M</i>	FEB. 1946
600 GALLON TANK		Chief Civil Engineer	
(DEEP TYPE) AND STAND		Traced by v.w.l.	Checked by s.s.
		<i>W. J. Mc</i>	PLAN No.
		Chief Architect	F345^P



SCHEDULE OF QUANTITIES

FOR BUILDING

SAWN HARDWOOD	Strapings 18" x 12" x 2"	4
Purlins	6" x 2" x 3/4"	2
Studs & Door Head	4" x 4" x 3/4" x 3/7"	4
Bottom Plates	4" x 2" x 3/4" x 2/2"	12
Battens for G.C.I.	4" x 2" x 1/2" x 1/2"	2
Bracing	3" x 1" x 1/2" x 1/2"	1
Red Gum Stops	3" x 3" x 3/8"	6 Pkts
WROG HOOP PINE	Springhead Nails 24"	3 lbs.
Door - 2 leaves each 6'6" high x 4'3" wide, ledged & braced with 6" x 14" sheeted with 6" x 8" T.G. & V. jointed. Old Sleepers for Stumps - 5.	Wire Nails 2" x N°11	3 lbs.
IRONWORK	Wire Nails 3/2" x N°10	3 lbs.
Galv. Corr. Iron N°24, 9/4"	Wire Nails 4" x N°8	5 lbs.
Bullnosed one end 5" rad. 9/8"	Ewbanks 5"	50
Galv. Corr. Iron N°26, 9/8" x 9/8"	5" Town Bolts with screws	2
Gutter - Galv. Plain Iron, 9"0" x 6"	Galv. Iron Padlock bolt with coach bolts 2' long to suit	1
Shelves, 2 N° - Galv. Pl. Iron, 5'0" x 2'6"	Galv. Iron Padlock with 2" dia. x 1/2" long	1
	Mixed Paint (light stone color)	10 lbs.
	Bolts x Washers 1/2" dia. x 1/2"	14

FOR FITTINGS

SAWN HARDWOOD	Planks	6" x 2" x 3/4"	2
Bar Rack	5" x 2" x 1/2" x 1/2"	1	
Posts	4" x 4" x 1/2" x 1/2"	1	
Beams	4" x 2" x 1/2" x 1/2"	1	
Battens	3" x 2" x 1/2" x 1/2"	1	
Desk Brackets	2" x 2" x 3/2" x 3/2"	1	
WROG MATERIAL	Shelves, 4 1/2" x 1/2" T.G. - 30 lin. Ft.	1	
Ganger's Desk to detail	Board for Tool List 19" x 19" x 1"	1	
Half Unit Board	5" Town Bolts with screws	1	
IRONWORK	Bolts, 9" x 2"	4	
Washers for do. 1 1/2" dia. x 1/2"	Nails 4" x N°8	2 lbs.	
Spikes 9" x 1/2"	Spikes 6" x 2"	33	

This Plan supersedes Plans N°s W.W. 704, F.307.

Revision	Date	Amendment
D	2. 2. 64	Notice Board, Voidmeters, Canisters, Boning Rods.
C	1. 5. 58	Motor turntable to be hung on left hand outside wall of Tool Shed
B	1. 11. 56	Burning OFF notice stowed at rear of Bar rack
		Knapsack spray turned upside down

VICTORIAN RAILWAYS WAY AND WORKS BRANCH

STANDARD DRAWING

PERMANENT WAY

TOOL SHED

SHOWING LAYOUT OF TOOLS

SCALE - 1/2" = 1'.

Approved: *[Signature]* Chief Civil Engineer

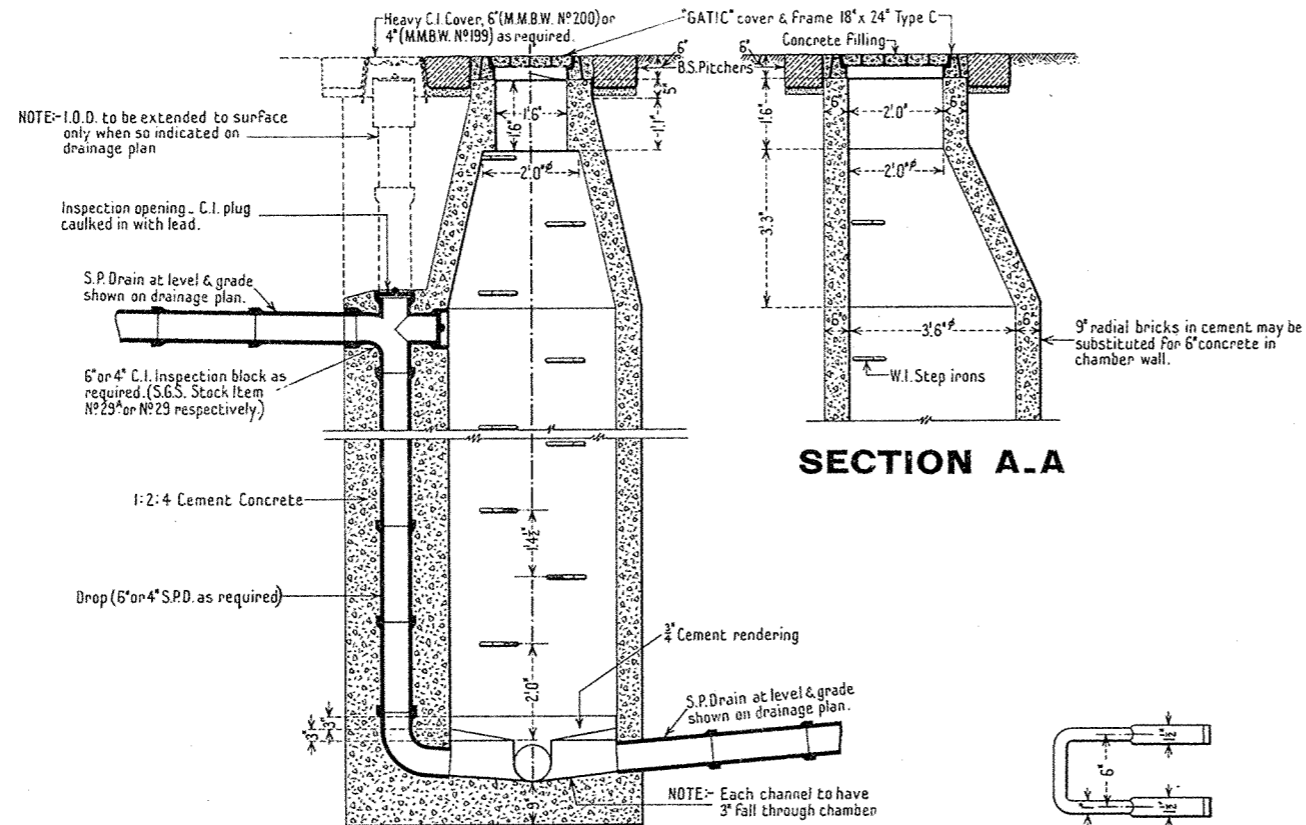
Adopted: APL. 1947.

Drawn by: K. F. L.

Checked by: S. S.

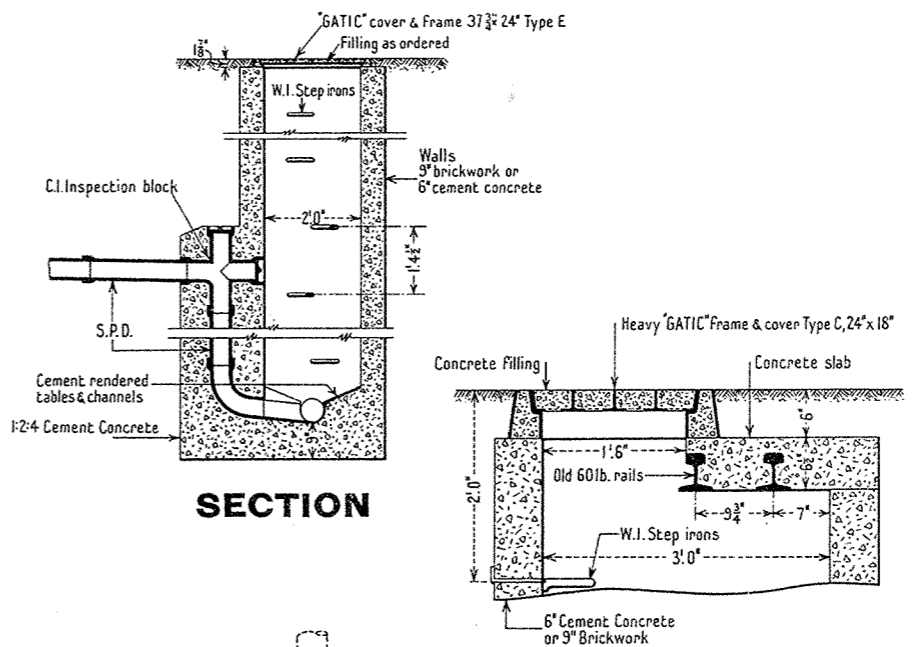
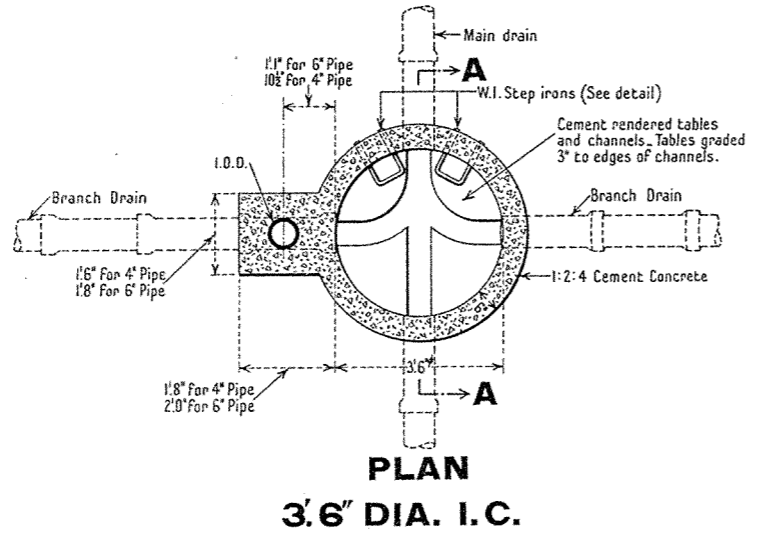
Chief Architect: *[Signature]*

PLAN N° F346 P

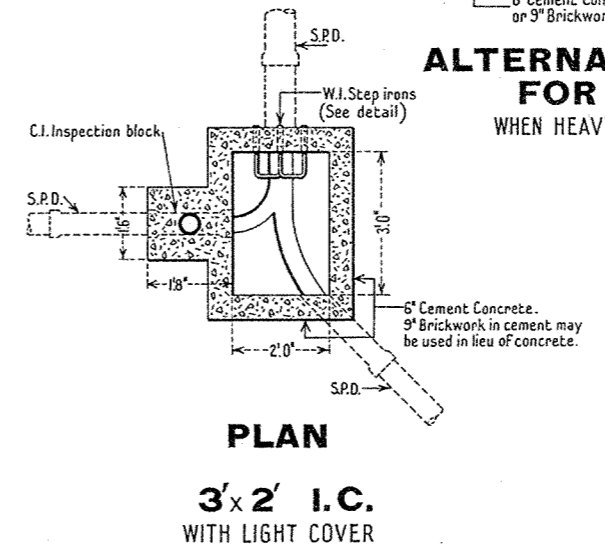
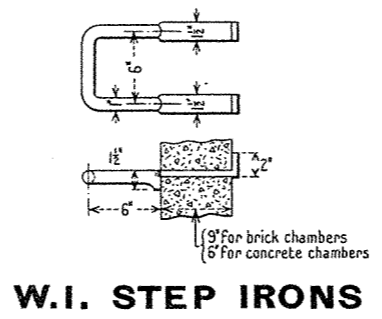


HALF SECTION WITH INSPECTION OPENING & DROP (I.O.D., Jump-up or Vertical Shaft)

HALF SECTION WITHOUT INSPECTION OPENING & DROP (I.O.D., Jump-up or Vertical Shaft)

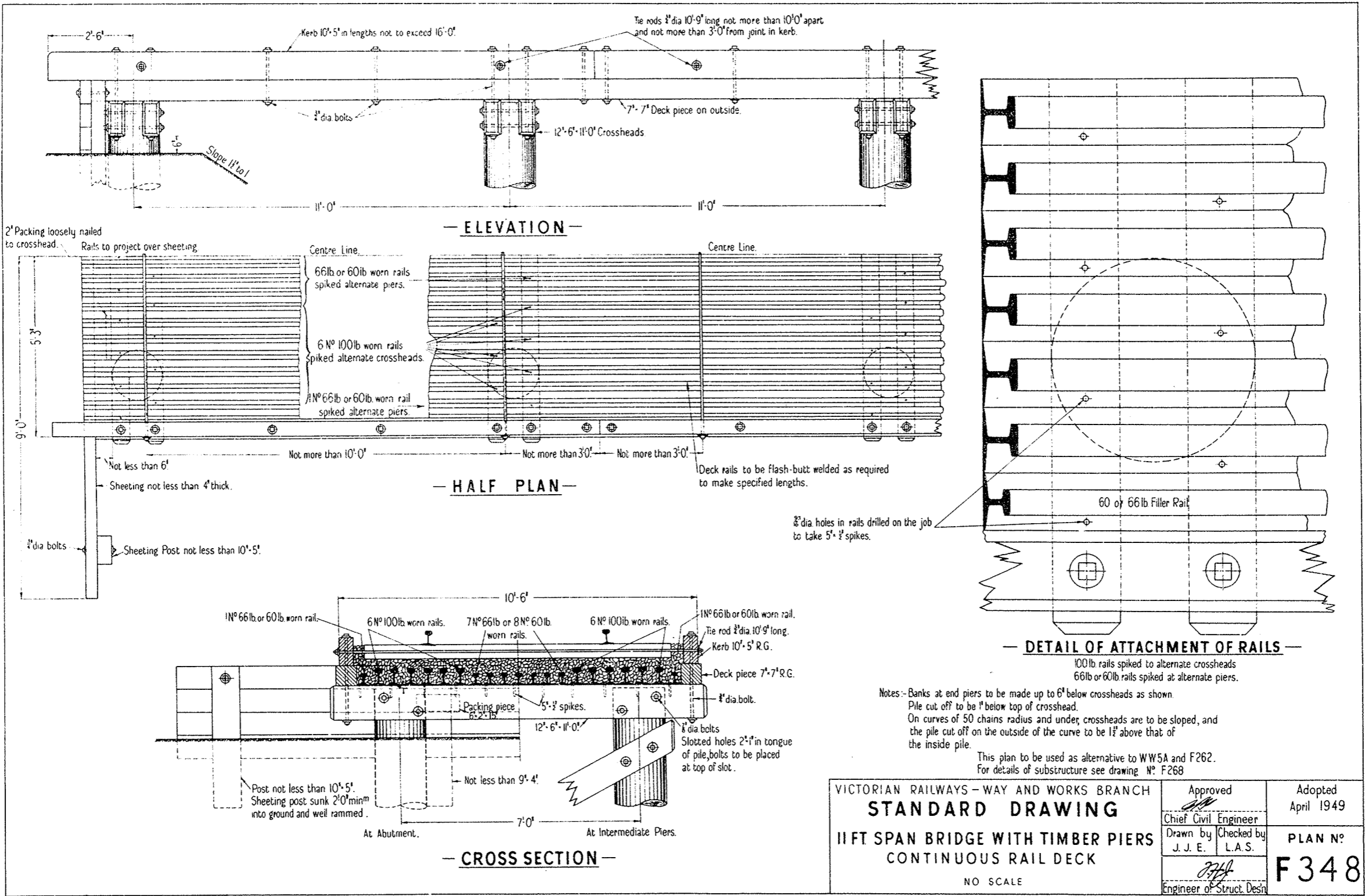


ALTERNATIVE DETAIL FOR 3' x 2' I.C. WHEN HEAVY COVER IS ORDERED



This plan supersedes plan N° 357-39

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.W.</i>	SEP. 1940
INSPECTION CHAMBERS		Chief Civil Engineer	
TYPE DETAILS		Drawn by V. W. L.	Checked by R. C. O.
SCALES - $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{4}$ = 1" 0"		<i>H. S. Sublette</i>	PLAN No. F347
		Chief Architect	



ELEVATION

HALF PLAN

CROSS SECTION

DETAIL OF ATTACHMENT OF RAILS

2'-6"

Kerb 10'-5" in lengths not to exceed 16'-0"

Tie rods ½" dia 10'-9" long not more than 10'-0" apart and not more than 3'-0" from joint in kerb.

¾" dia bolts

12'-6" x 11'-0" Crossheads

7'-7" Deck piece on outside.

Slope 1" to 1

11'-0"

11'-0"

2" Packing loosely nailed to crosshead.

Rails to project over sheeting

Centre Line

66lb or 60lb worn rails spiked alternate piers.

6 N° 100lb worn rails spiked alternate crossheads.

1 N° 66lb or 60lb worn rail spiked alternate piers.

Centre Line

9'-0"

5'-3"

Not less than 6"

Not more than 10'-0"

Not more than 3'-0"

Not more than 3'-0"

Deck rails to be flash-butt welded as required to make specified lengths.

Sheeting not less than 4" thick.

¾" dia bolts

Sheeting Post not less than 10'-5"

1 N° 66lb or 60lb worn rail.

6 N° 100lb worn rails.

7 N° 66lb or 8 N° 60lb worn rails.

6 N° 100lb worn rails.

1 N° 66lb or 60lb worn rail.

Tie rod ½" dia 10'-9" long.

Kerb 10'-5" R.G.

Deck piece 7'-7" R.G.

¾" dia bolt.

Packing piece 6'-2" x 15"

5'-½" spikes.

12'-6" x 11'-0"

¾" dia bolts

Slotted holes 2'-1" in tongue of pile, bolts to be placed at top of slot.

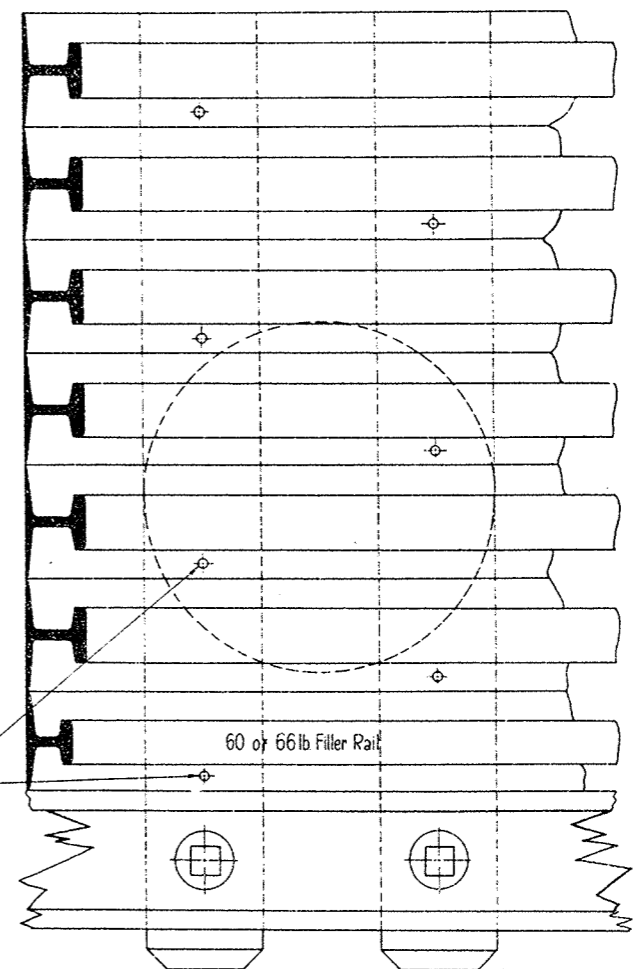
Not less than 9'-4"

7'-0"

Post not less than 10'-5". Sheeting post sunk 2'-0" min into ground and well rammed.

At Abutment.

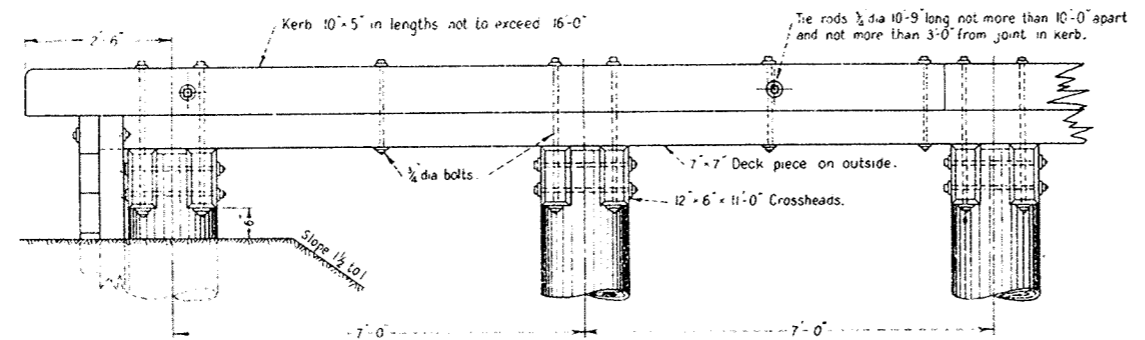
At Intermediate Piers.



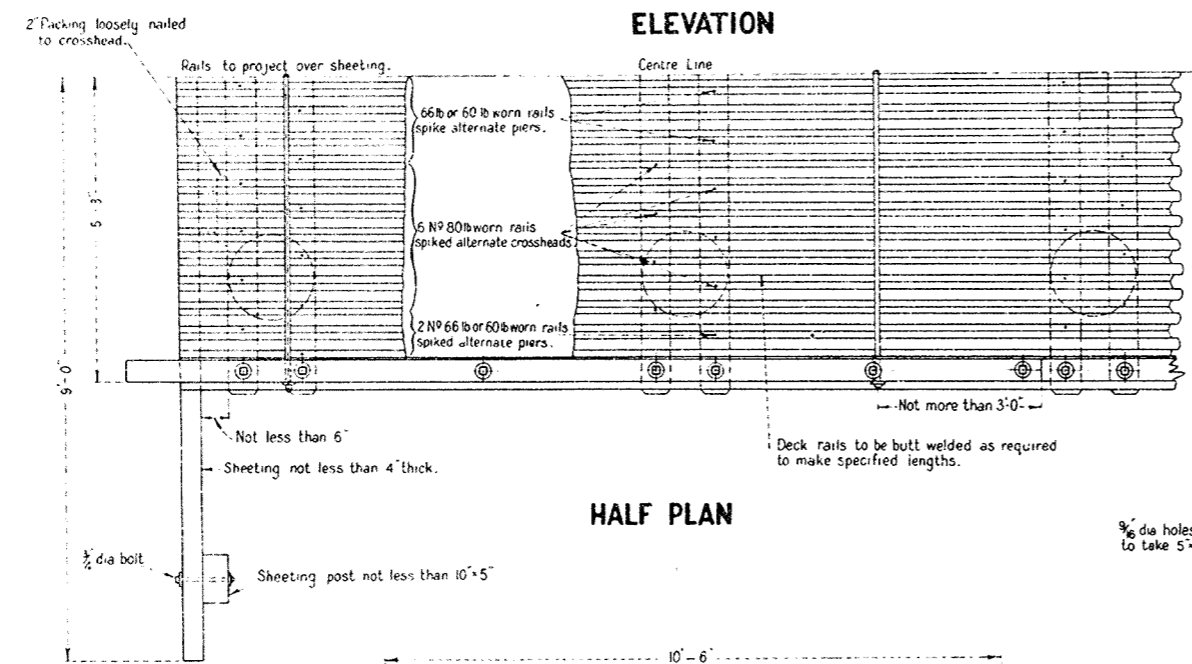
100lb rails spiked to alternate crossheads
66lb or 60lb rails spiked at alternate piers.

Notes:- Banks at end piers to be made up to 6" below crossheads as shown.
Pile cut off to be 1" below top of crosshead.
On curves of 50 chains radius and under, crossheads are to be sloped, and the pile cut off on the outside of the curve to be 1½" above that of the inside pile.
This plan to be used as alternative to WW5A and F262.
For details of substructure see drawing N° F268

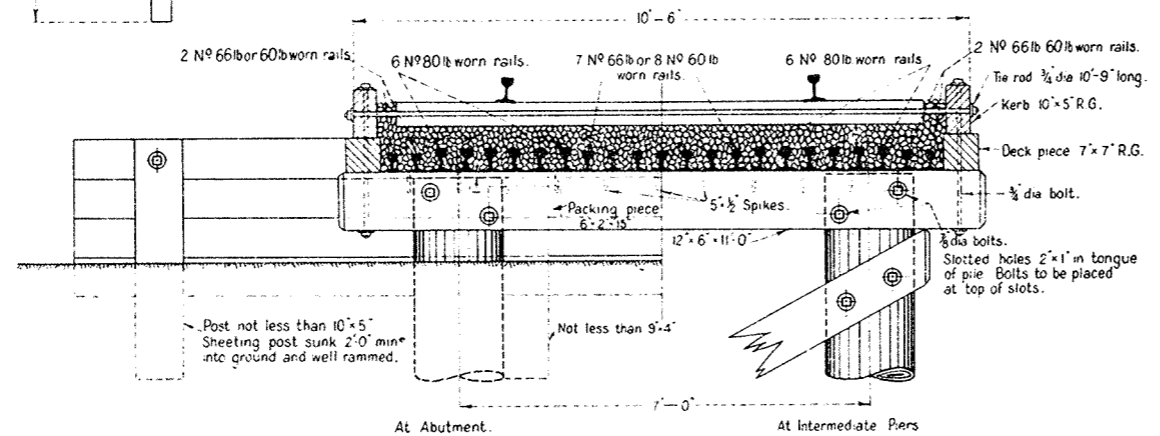
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	April 1949
		Chief Civil Engineer	
11FT SPAN BRIDGE WITH TIMBER PIERS CONTINUOUS RAIL DECK		Drawn by	Checked by
		J. J. E.	L. A. S.
NO SCALE		<i>[Signature]</i>	PLAN N°
		Engineer of Struct. Desn	F 348



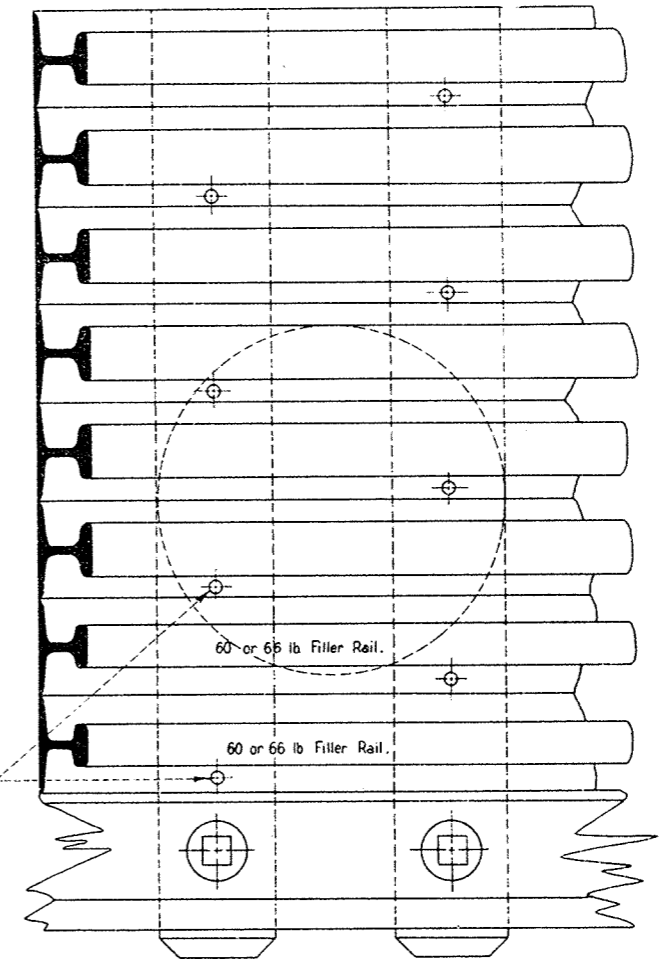
ELEVATION



HALF PLAN



CROSS SECTION



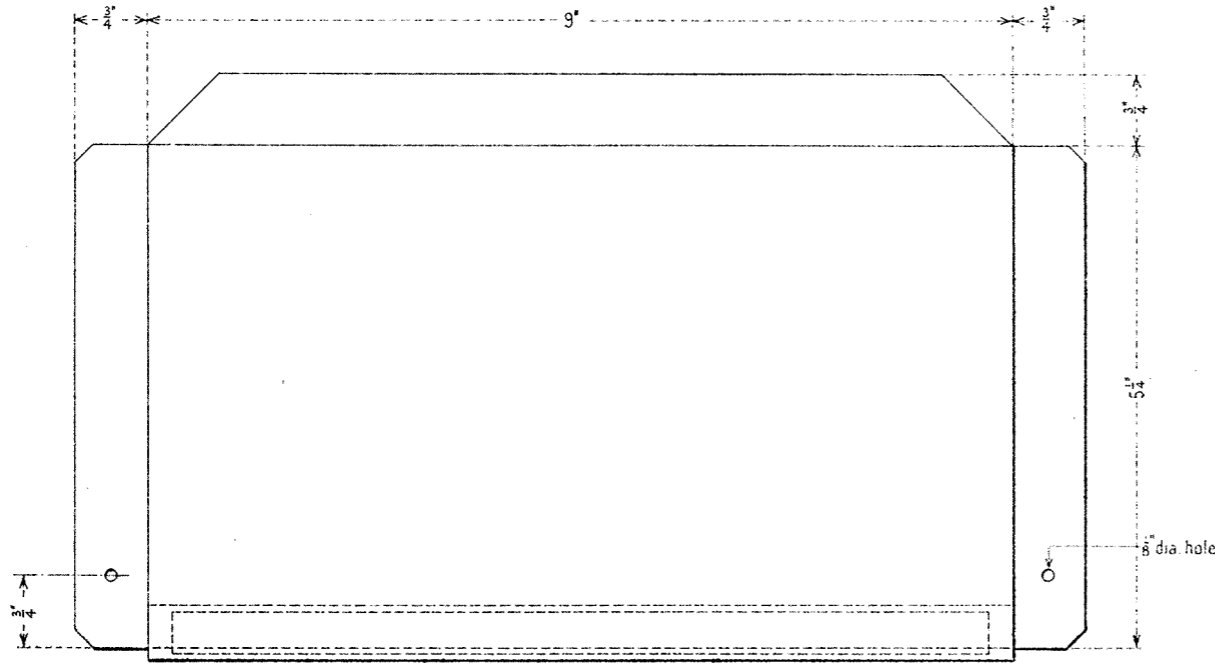
DETAIL OF ATTACHMENT OF RAILS

80 lb rails spiked to alternate crossheads
66 lb or 60 lb rails spiked at alternate piers.

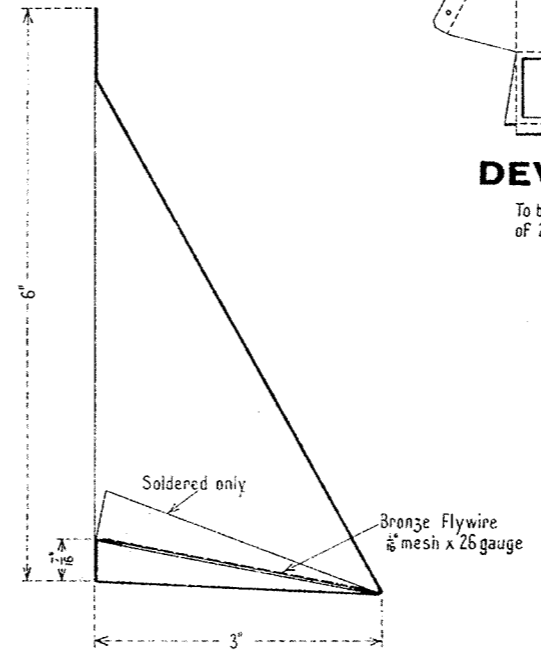
Notes: Banks at end piers to be made up to 6" below crossheads as shown.
Pile cut off to be 1" below top of crosshead.
On curves of 50 chains radius and under crossheads are to be sloped and the pile cut off on the outside of the curve to be 1 1/2" above that of the inside pile.

This plan to be used as alternative to plans WW 5A and F 311 for details of substructure see drawing N° F 268

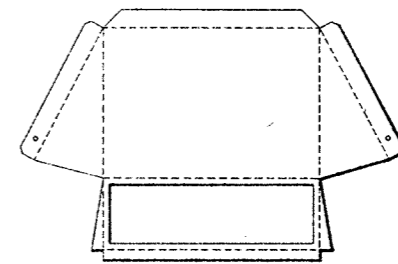
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH STANDARD DRAWING		Approved Chief Civil Engineer.	Adopted APRIL 1949
		Drawn by J.J.E.	Checked by L.A.S.
7 FT SPAN BRIDGE WITH TIMBER PIERS CONTINUOUS RAIL DECK NO SCALE		 Engineer of Structural Design.	



ELEVATION

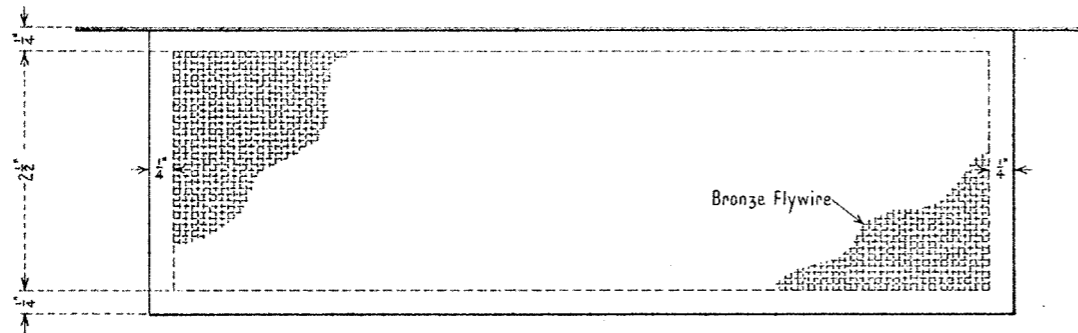


CROSS SECTION

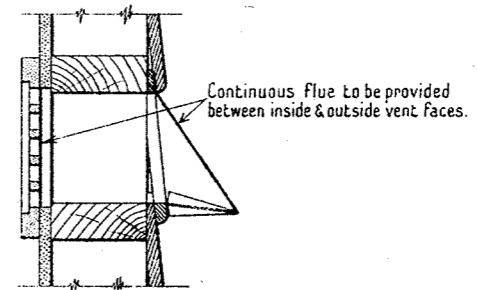


DEVELOPMENT

To be made out of one piece of 26 gauge galv sheet iron.



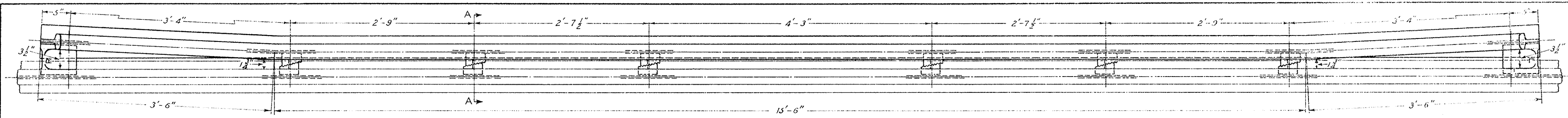
PLAN



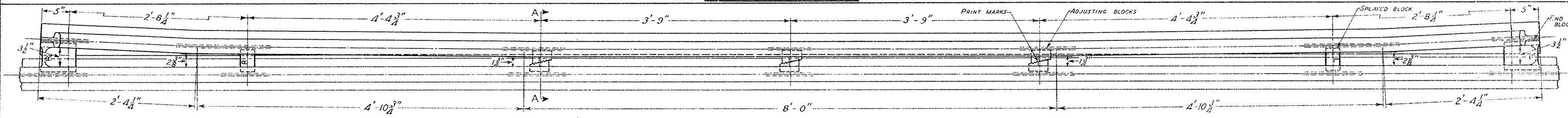
SECTION

SHOWING METHOD OF FIXING

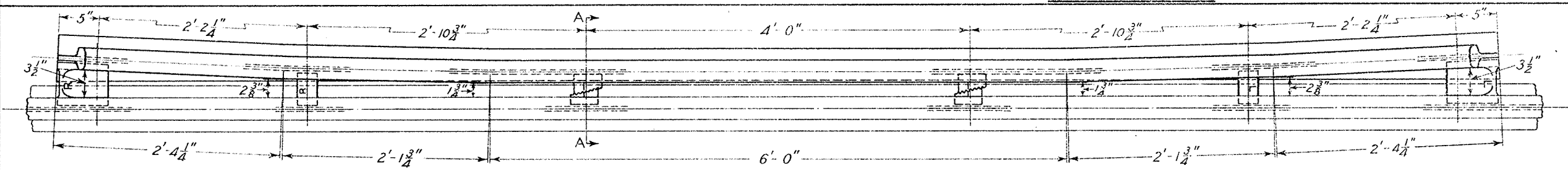
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.A.</i> Chief Civil Engineer	NOV. 1940
WALL VENTILATOR		Drawn by V. W. L.	Checked by L. E. M.
SCALE:— Half Full size		<i>H. S. L.</i> Chief Architect	PLAN No. F 350



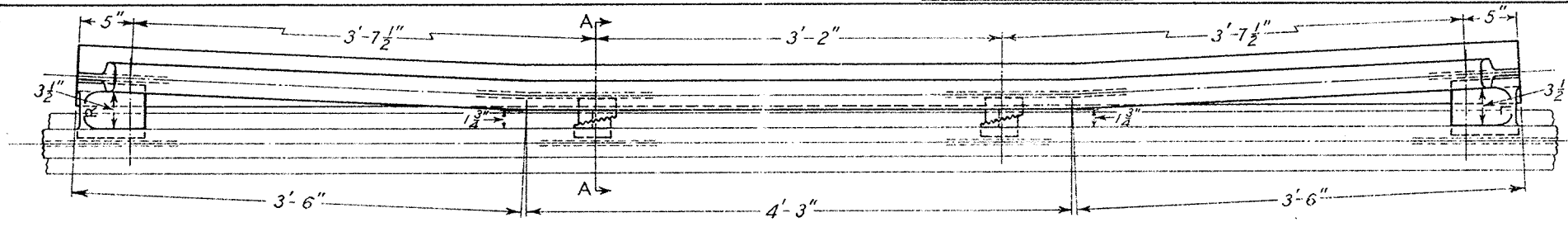
22'-6" DELTA GUARD RAIL



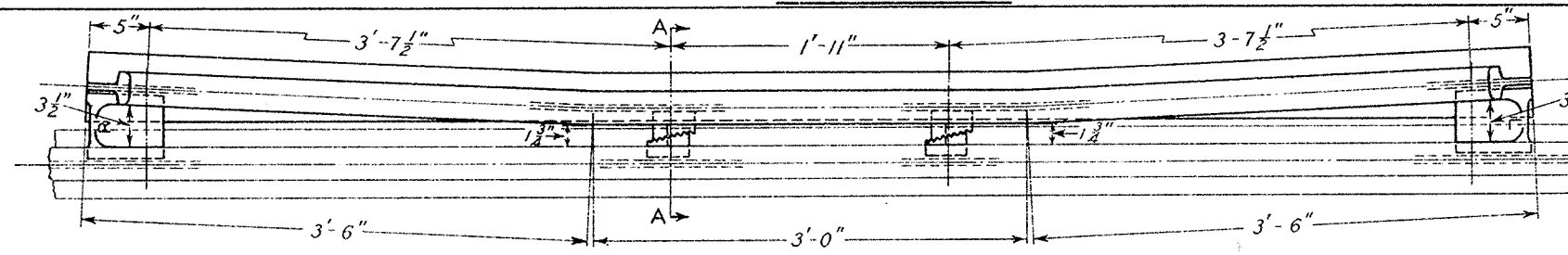
22'-6" GUARD RAIL



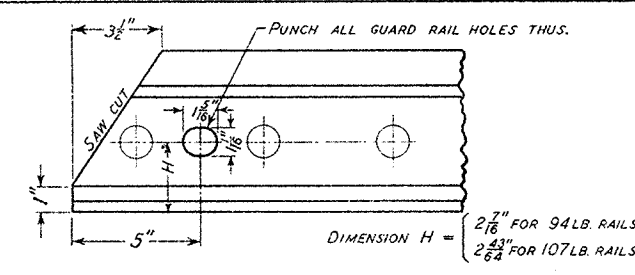
15'-0" GUARD RAIL



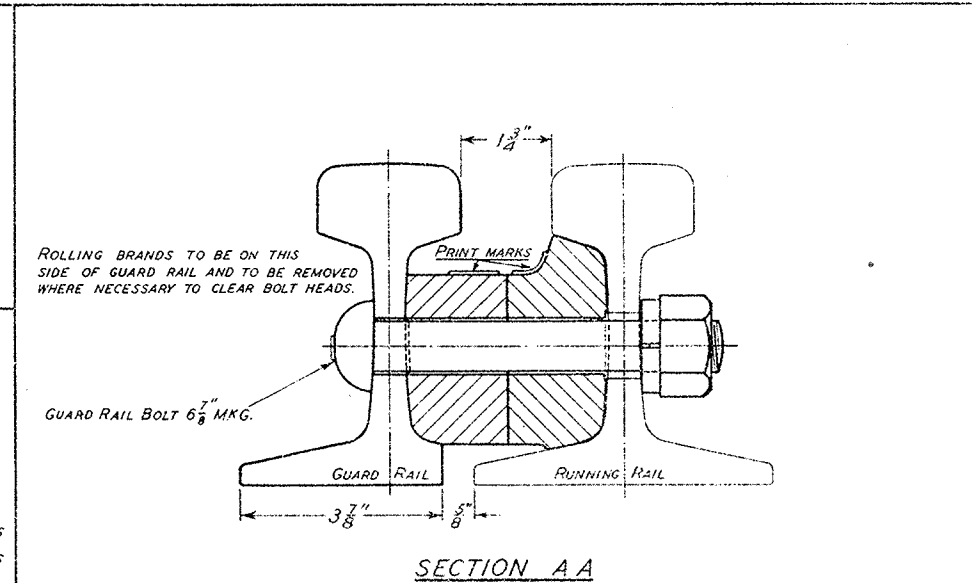
11'-3" GUARD RAIL



10'-0" GUARD RAIL



BEVELLED END



SECTION A A

ROLLING BRANDS TO BE ON THIS SIDE OF GUARD RAIL AND TO BE REMOVED WHERE NECESSARY TO CLEAR BOLT HEADS.

NOTES:- STANDARD 1 1/2" FLANGWAY IS ESTABLISHED WITH UNWORN RAILS WHEN PRINT MARKS COINCIDE. AN ADJUSTMENT OF 1/8" IN FLANGWAY IS OBTAINED BY MOVING THE ADJUSTING BLOCKS ONE NOTCH.

FASTENINGS	FASTENINGS FOR GUARD RAILS			
	10'-0" 11'-3"	15'-0"	22'-6"	22'-6" DELTA
BLOCKS - GUARD RAIL END	1 IN°R.H., 1 IN°L.H.	1 IN°R.H., 1 IN°L.H.	1 IN°R.H., 1 IN°L.H.	1 IN°R.H., 1 IN°L.H.
" " " SPLAYED		1 IN°R.H., 1 IN°L.H.	1 IN°R.H., 1 IN°L.H.	
" " " ADJUSTING	2 PAIR	2 PAIR	3 PAIR	6 PAIR
BOLTS - GUARD RAIL 8 1/4" MKG.	2	2	2	2
" " " 6 7/8" MKG.	2	4	5	6
WASHERS - SPRING 1" TYPE. 1944	4	6	7	8

VICTORIAN RAILWAYS WAY AND WORKS BRANCH

APPROVED *[Signature]* CHIEF CIVIL ENGINEER

CHECKED *[Signature]* W.C.M.

PASSED *[Signature]*

ENGINEER OF M & W.S.

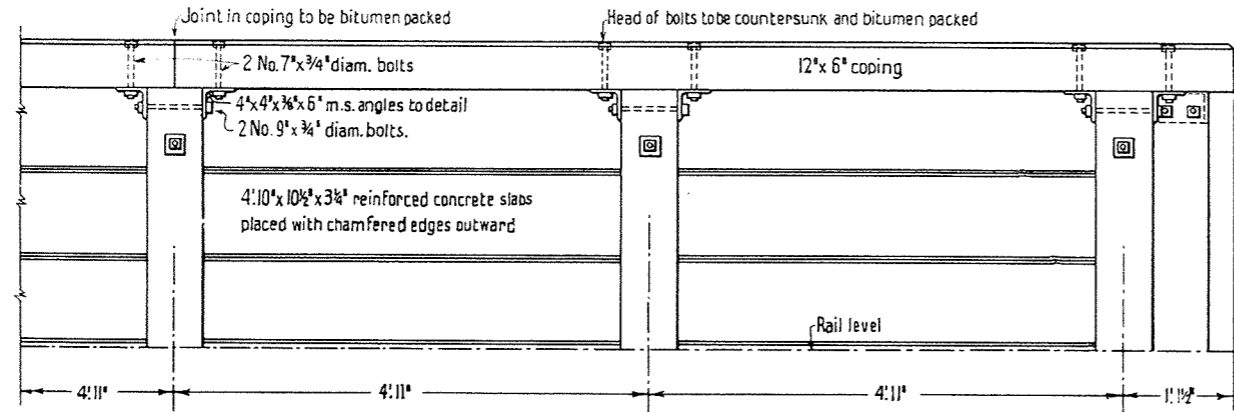
ADOPTED 1940

PLAN NO F 352^A

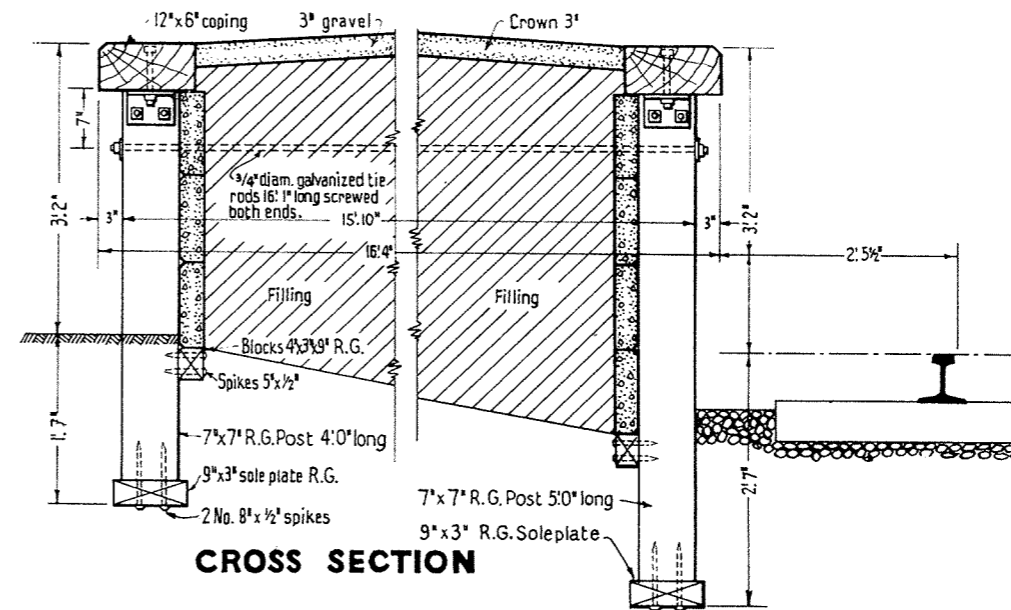
GUARD RAILS

94 LB. & 107 LB. A.S.

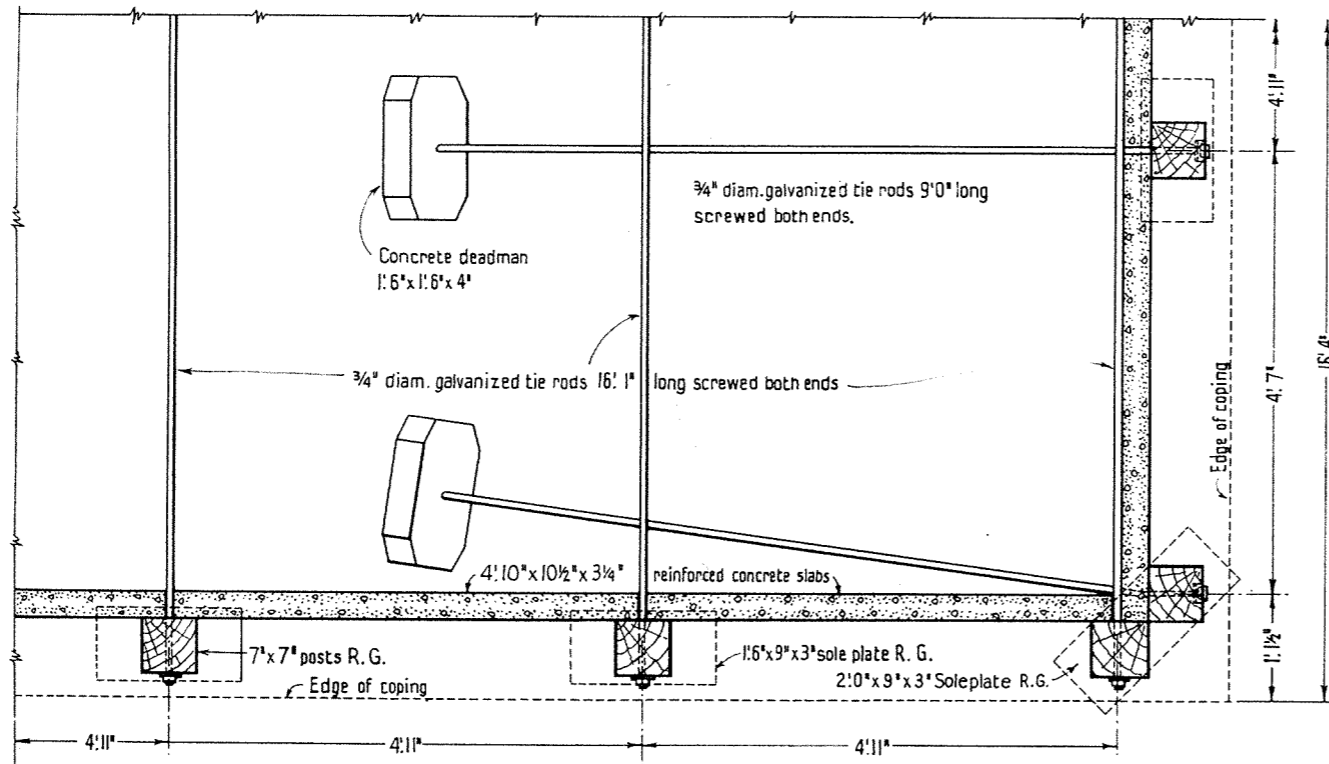
SCALES:- 1 1/2", 3" & 6" = 1 FT.



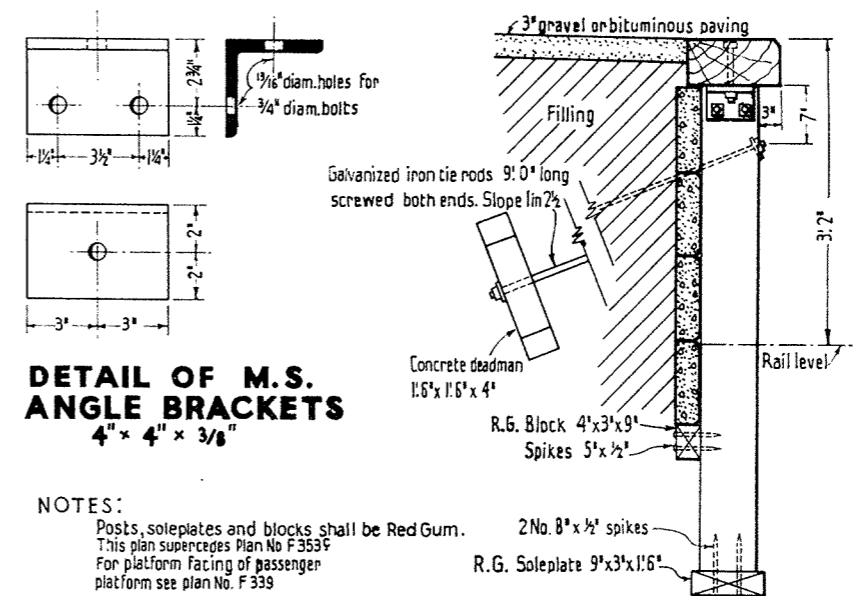
ELEVATION TO RAIL



CROSS SECTION



HALF PLAN



DETAIL OF M.S. ANGLE BRACKETS
4" x 4" x 3/8"

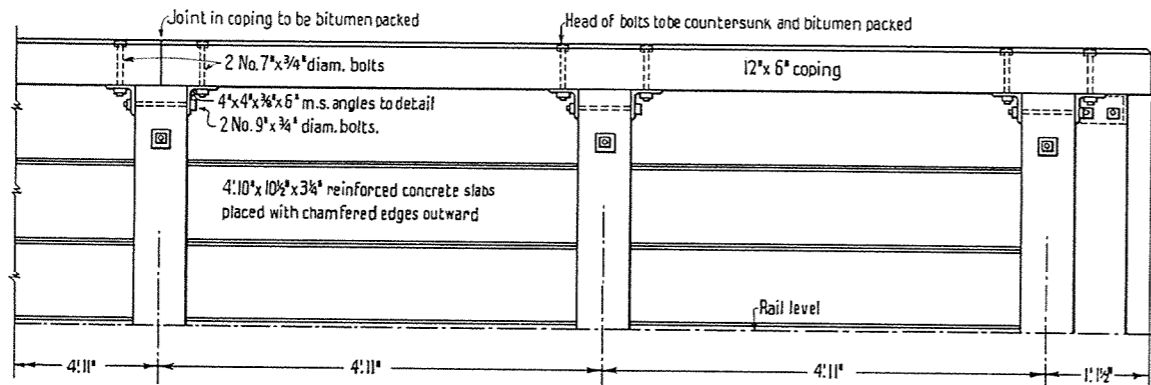
SECTION AT END

NOTES:
 Posts, soleplates and blocks shall be Red Gum.
 This plan supercedes Plan No F 353⁹
 For platform facing of passenger platform see plan No. F 339

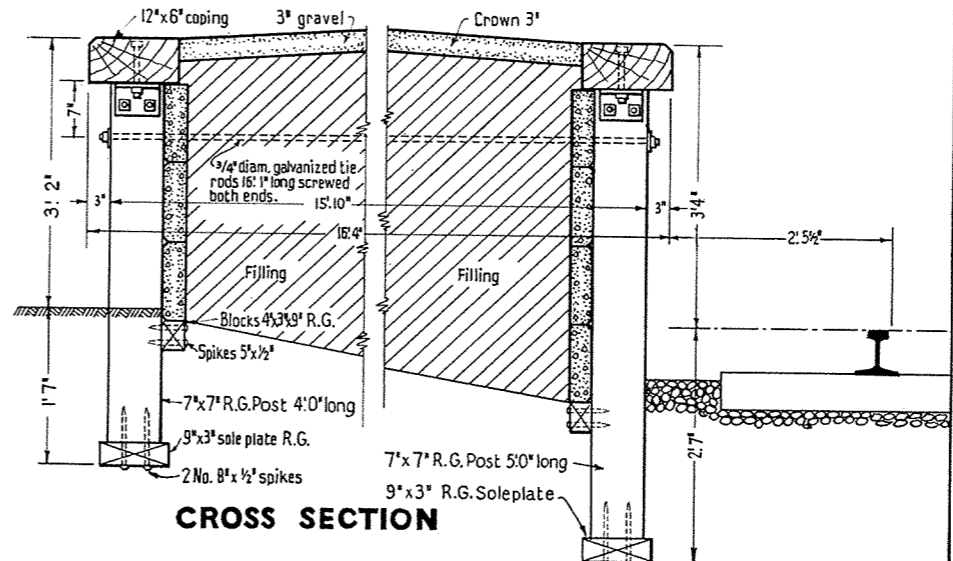
This Plan supercedes Plan No. F 353⁹

VICTORIAN RAILWAYS WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	JUNE 1951
DETAILS OF PLATFORM FACING FOR GOODS PLATFORM		Chief Civil Engineer	
SCALES: 1/2" = 1' 0", 1 1/2" = 1' 0"		Drawn by J.S.S.	Checked by D.B.C.
		Chief Architect	PLAN No. F 353⁹

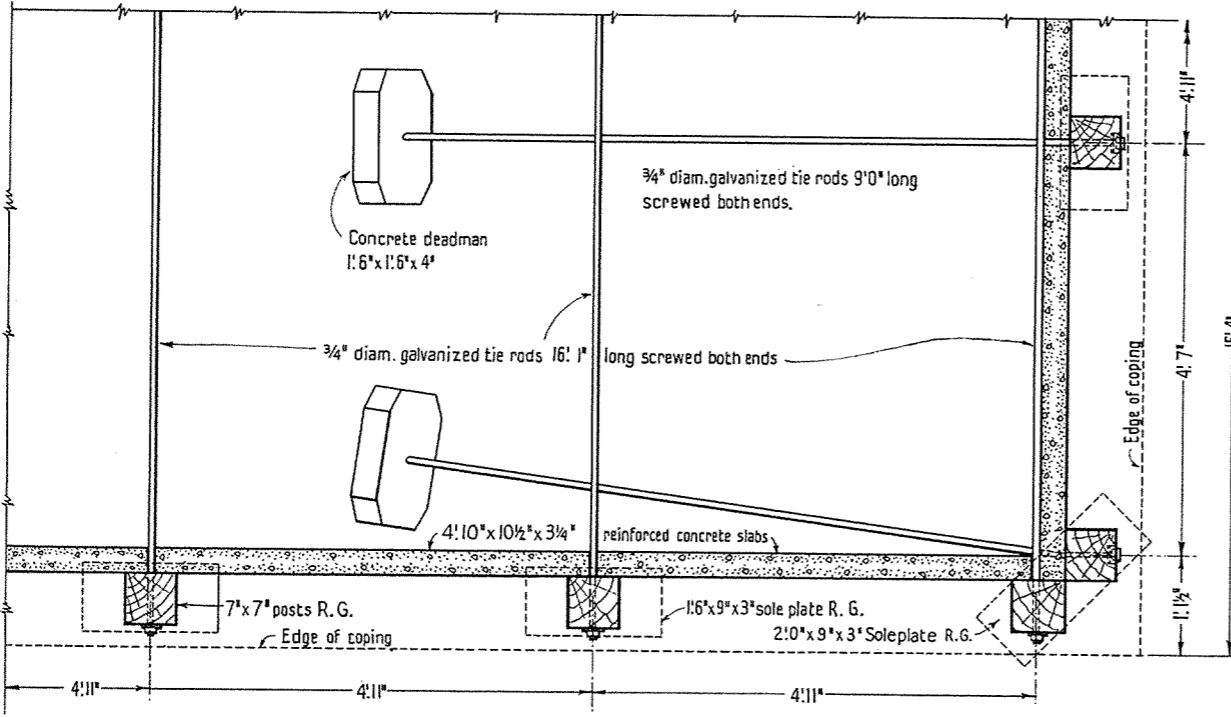
Rev.	Date	Amendment



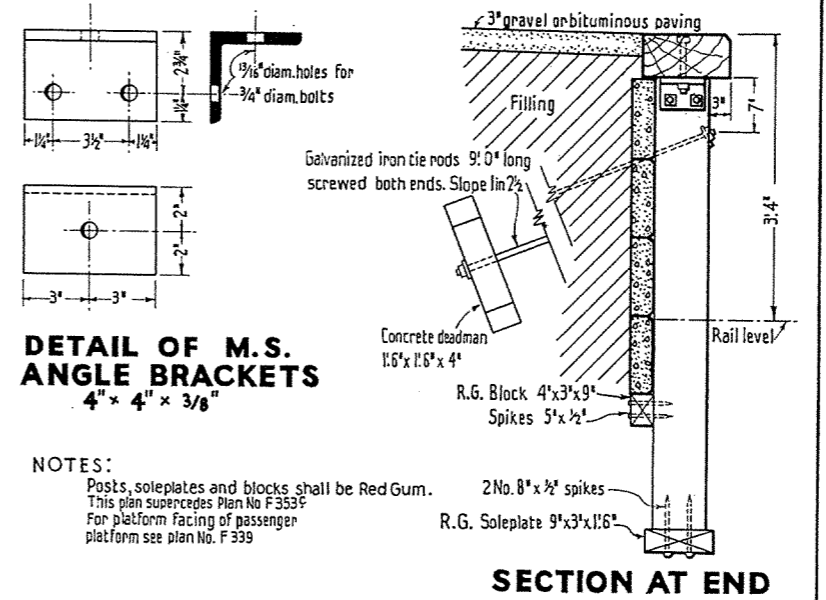
ELEVATION TO RAIL



CROSS SECTION



HALF PLAN



DETAIL OF M.S. ANGLE BRACKETS
4" x 4" x 3/8"

SECTION AT END

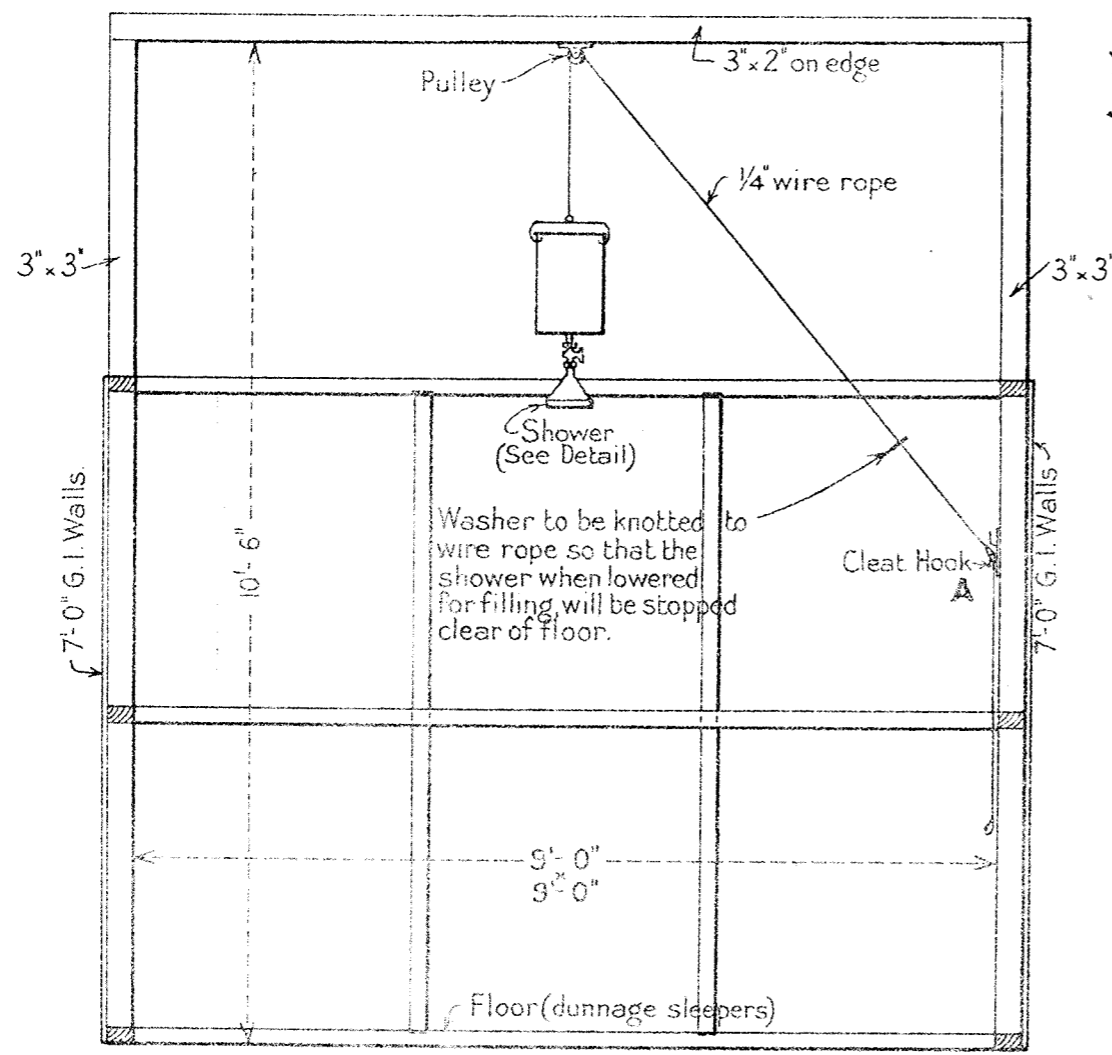
NOTES:
 Posts, soleplates and blocks shall be Red Gum.
 This plan supercedes Plan No F 353^D
 For platform facing of passenger platform see plan No. F 339

Rev.	Date	Amendment
E	2-1-64	Rail to Coping height increased to 3'-4"

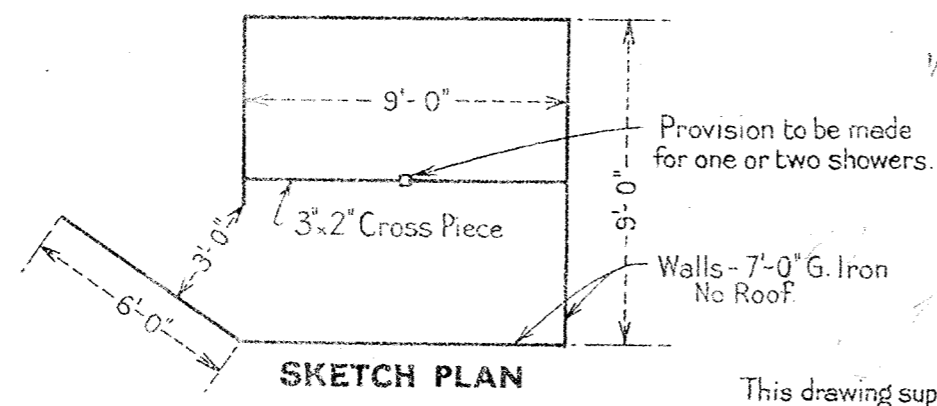
This Plan supercedes Plan No. F 353^D

VICTORIAN RAILWAYS WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	JUNE 1951
DETAILS OF PLATFORM FACING FOR GOODS PLATFORM		Chief Civil Engineer	
Drawn by	Checked by		PLAN No.
J.S.S.	D.B.C.		F 353^E
	Chief Architect		

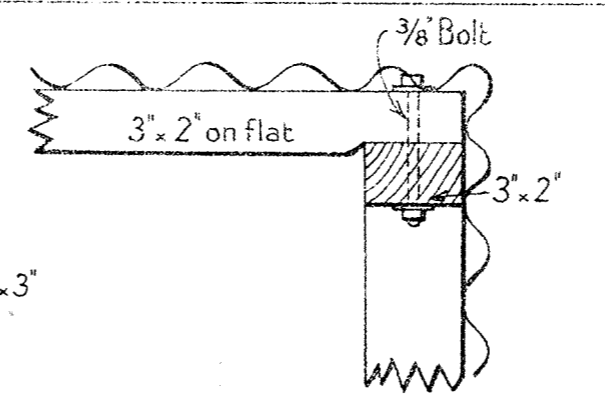
SCALES: 1/2" = 1' 0", 1 1/2" = 1' 0"



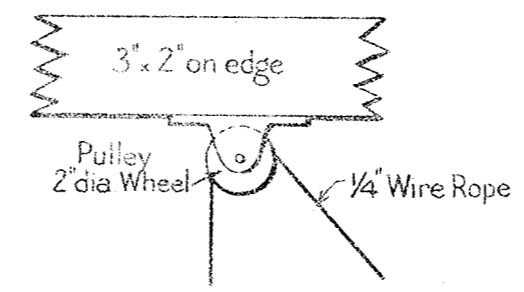
SECTION



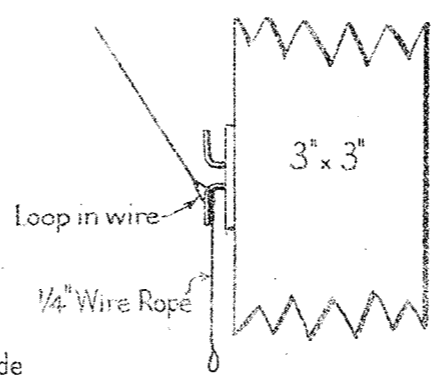
SKETCH PLAN



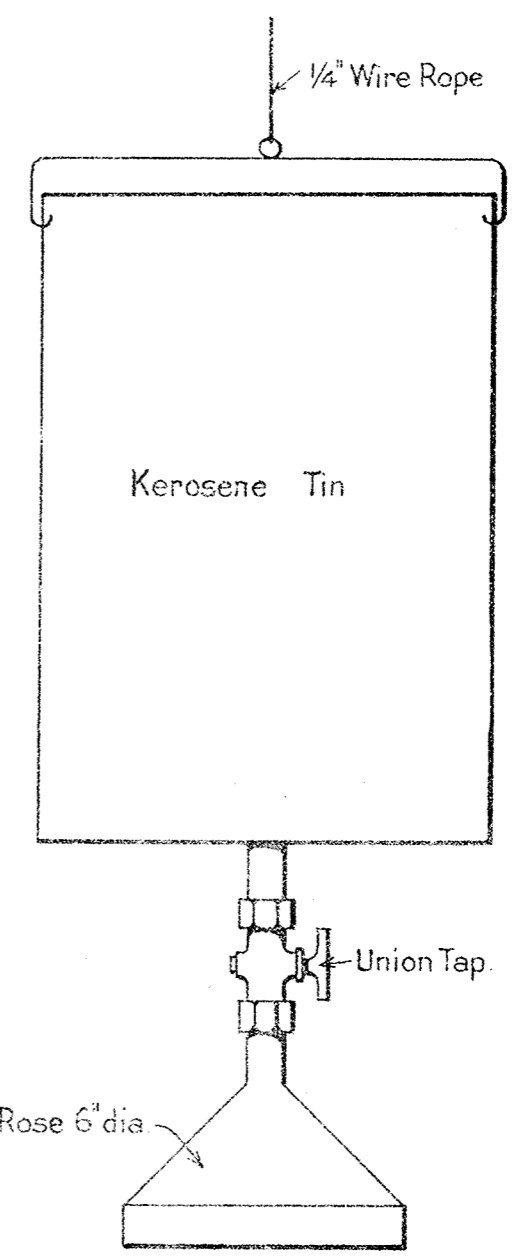
DETAIL OF CORNER



DETAIL OF PULLEY



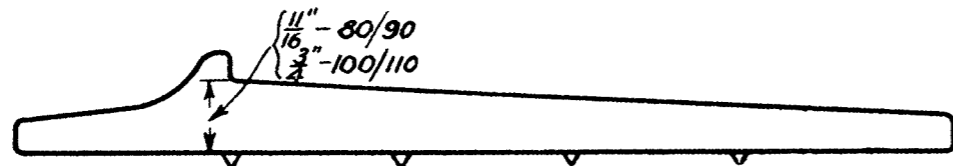
DETAIL AT A



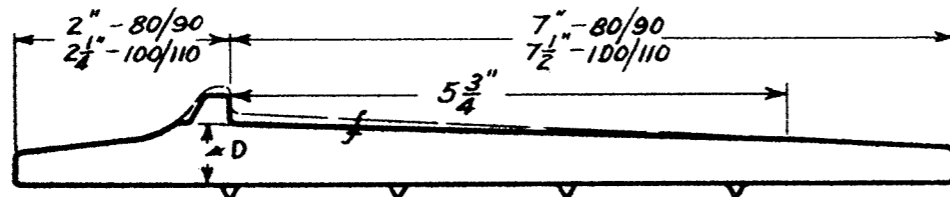
DETAIL OF SHOWER

This drawing supersedes Plan No. 474-39.

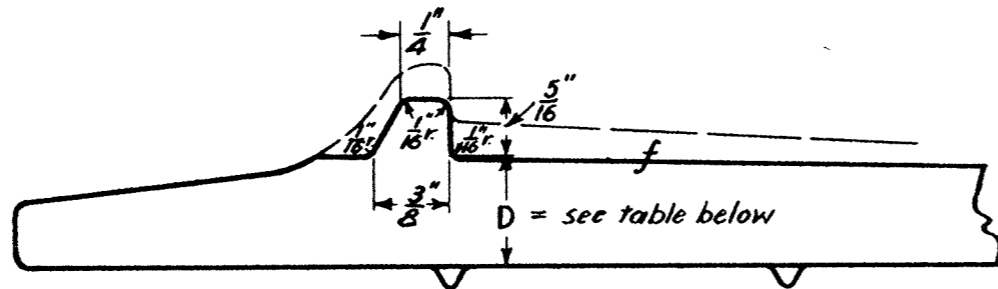
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	SEP. 1942
SHOWER		Drawn by	Checked by
FOR USE IN CAMPS		K.F.L.	E.A.E.
		<i>[Signature]</i> Chief Architect.	PLAN No.
			F354



STANDARD SLEEPER PLATE
1928 - A.S.

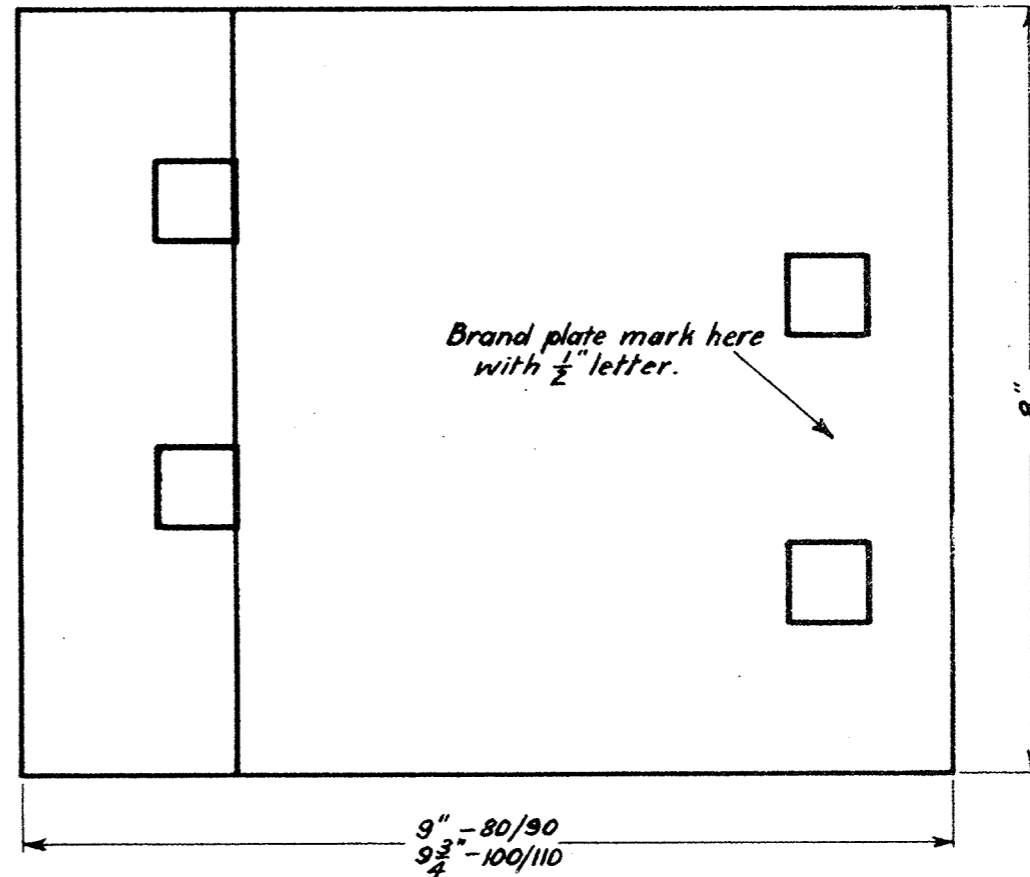


SLEEPER PLATES
FOR GRADUATED RAIL CANT



DETAIL OF MACHINING OF SHOULDER

PLATE MARK	DIMENSION "D"	
	94 LB.	107 LB.
A	5/8	11/16
B	9/16	5/8
C	1/2	9/16

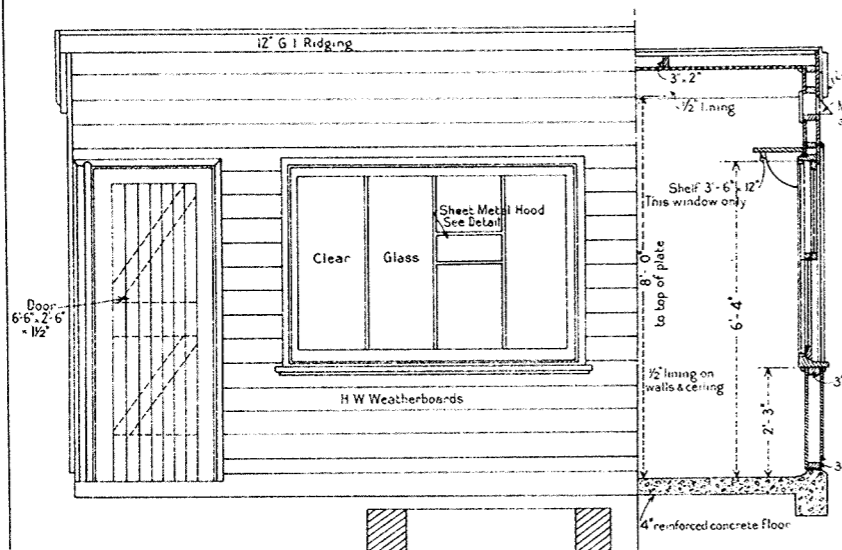


PLAN

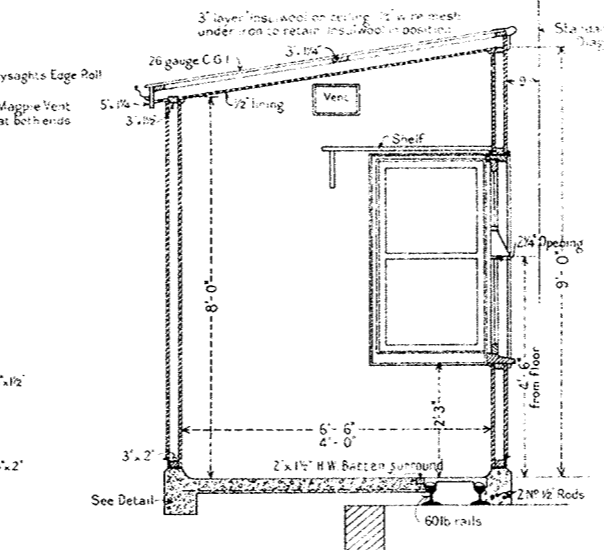
V - R
SLEEPER PLATES
1928 A.S.

Approved. *M.H.*
Chief Civil Engr.
Checked. *W.C.M.*
Passed. *[Signature]*
Eng' of M. & W.S.

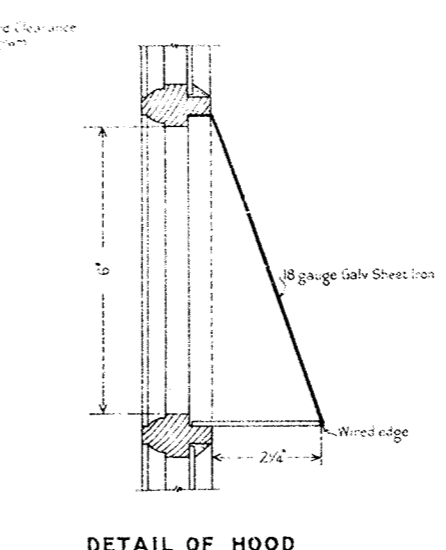
Adopted.
1941
PLAN N^o
F-355



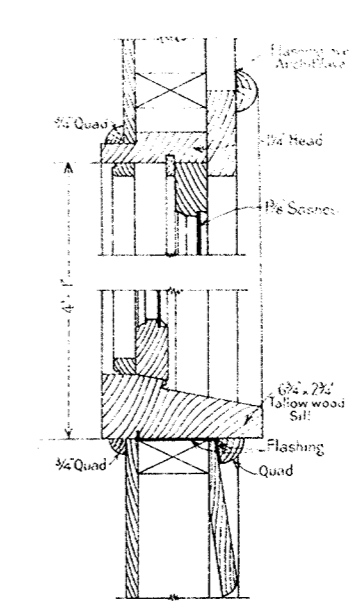
PART ELEVATION
1/4" = 1'-0"



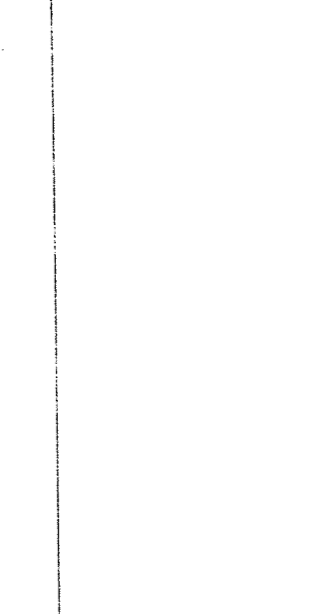
PART SECTION A-A
1/4" = 1'-0"



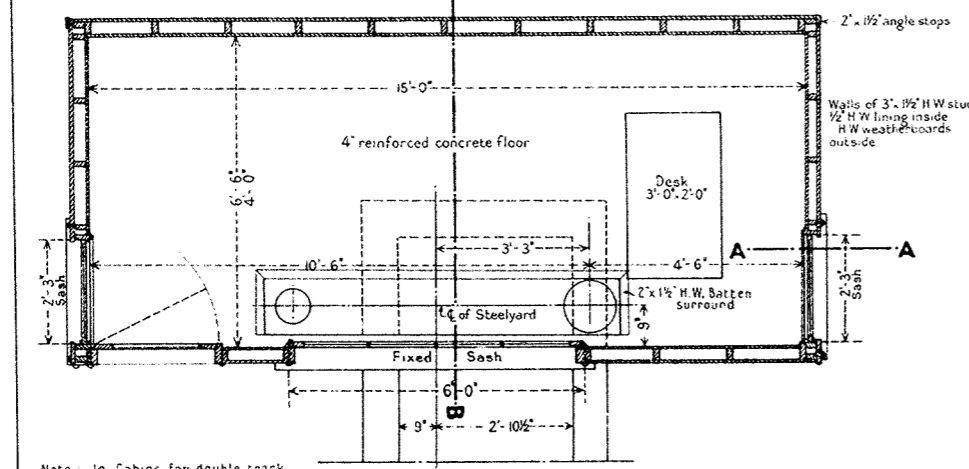
SECTION B-B
1/4" = 1'-0"



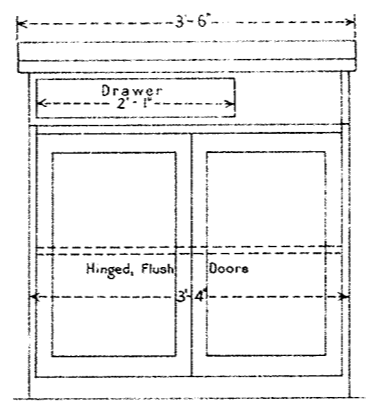
DETAIL OF HOOD
3' = 1'-0"



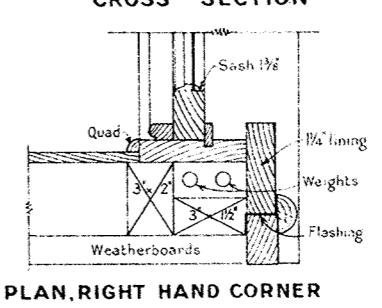
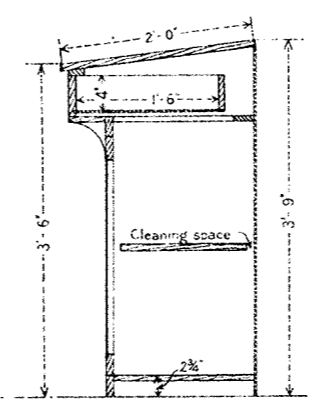
CROSS SECTION



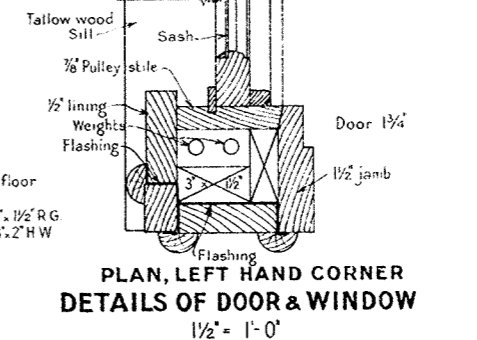
PLAN
1/4" = 1'-0"



DETAIL OF DESK
1/2" = 1'-0"

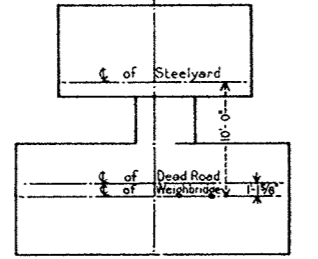


PLAN, RIGHT HAND CORNER

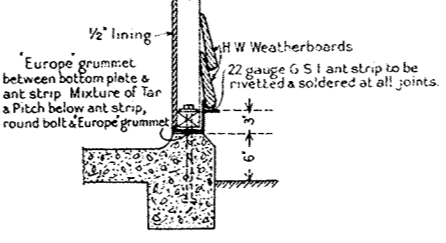


**PLAN, LEFT HAND CORNER
DETAILS OF DOOR & WINDOW**
1 1/2" = 1'-0"

Note - In Cabins for double track truck weighbridges provision for installing of point operating lever & rodding must be made when laying the concrete floor.



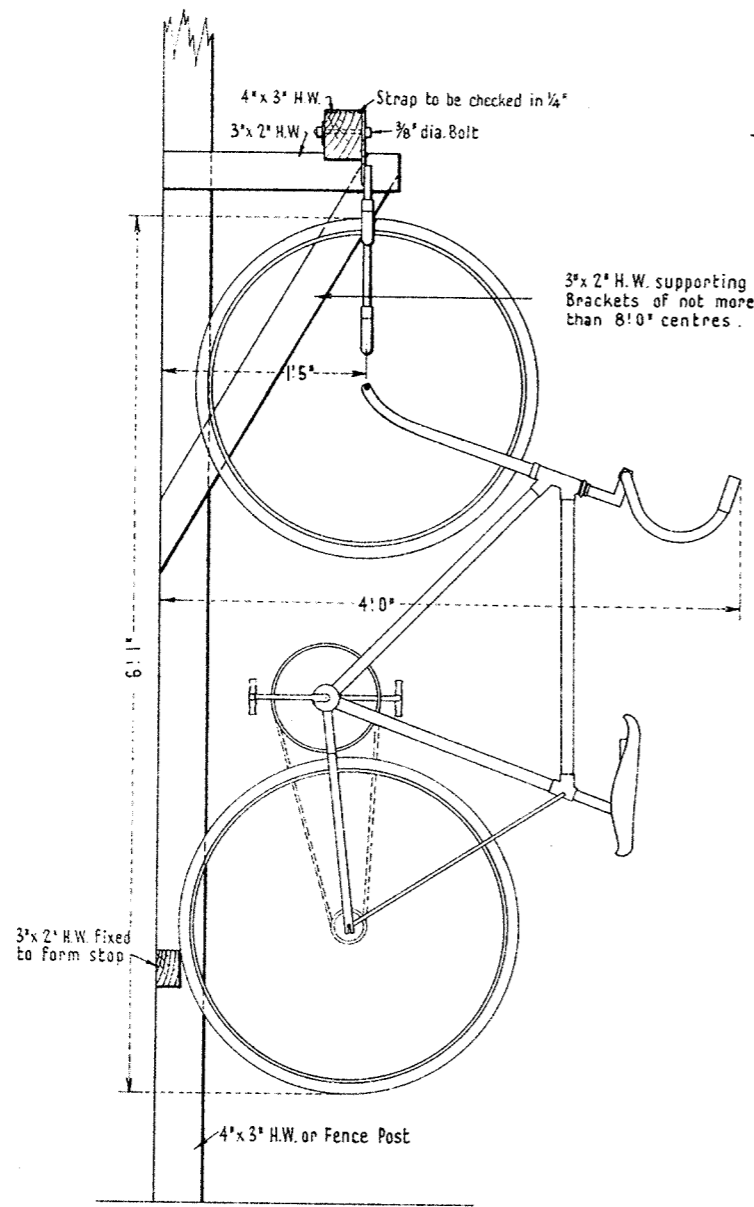
KEY PLAN
1/16" = 1'-0"



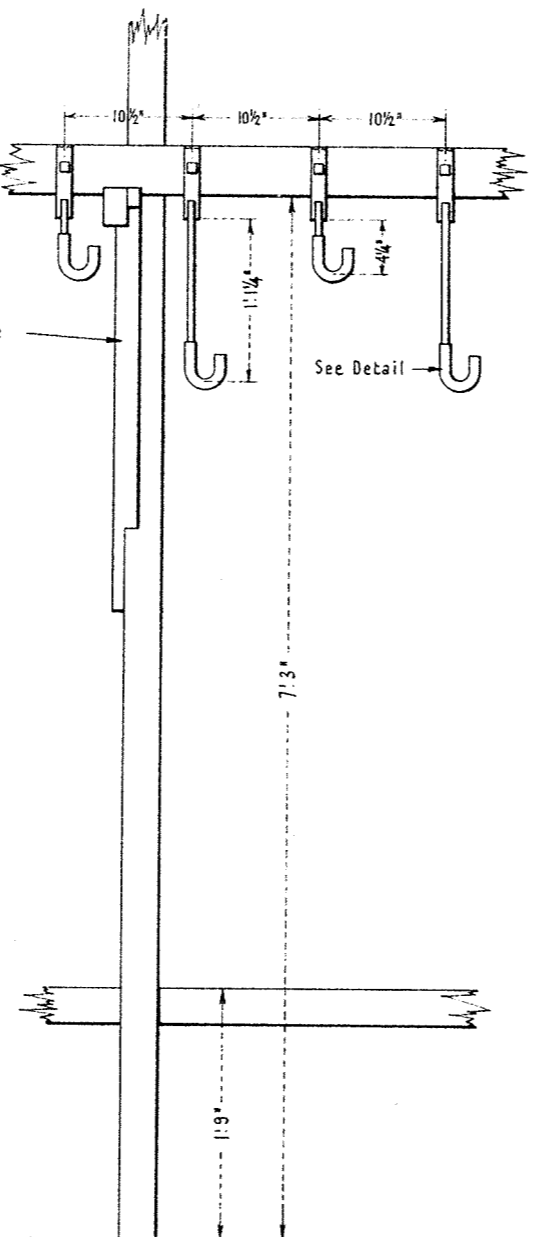
DETAILS OF FOUNDATION
1/2" = 1'-0"

Note - If site is not suitable for Concrete floor Timber floor as follows to be used
Stumps 4" x 4" R G. Sole plates 9" x 6" x 1/2" R G
Flooring T & G 4 1/4" x 1/2" H W. Joists 3" x 2" H W
Bearers 3" x 2" H W

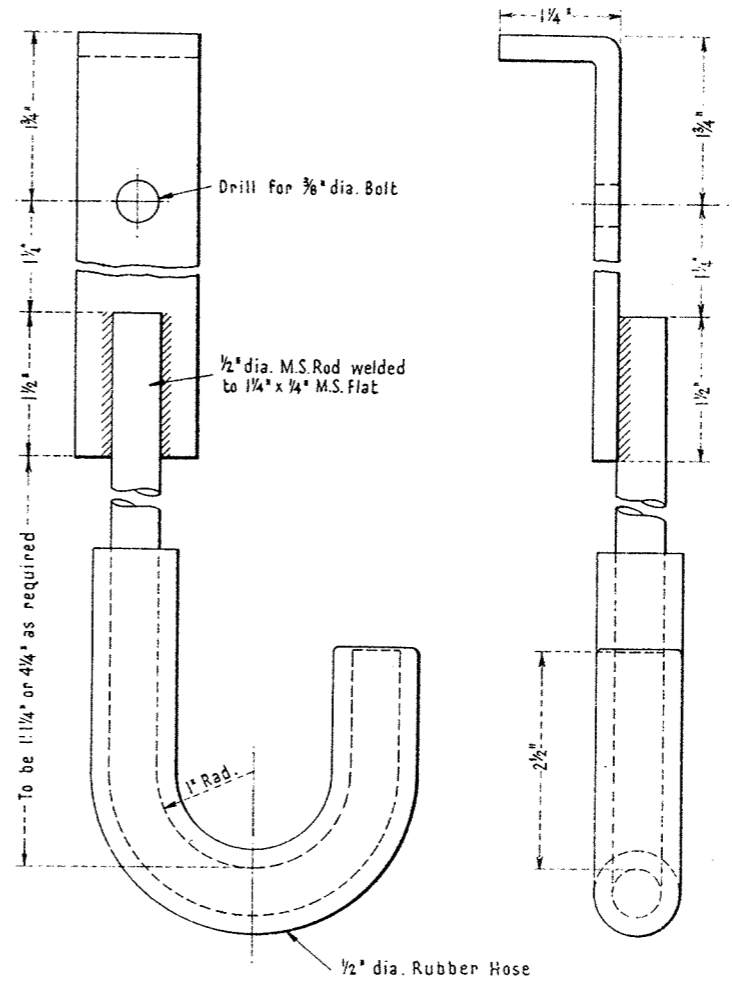
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	FEB. 1941
WEIGHBRIDGE CABIN		Drawn by K F L	Checked by E A E
		<i>[Signature]</i> Chief Architect	PLAN No. F 356



SECTION
Scale $\frac{3}{4}'' = 1'-0''$



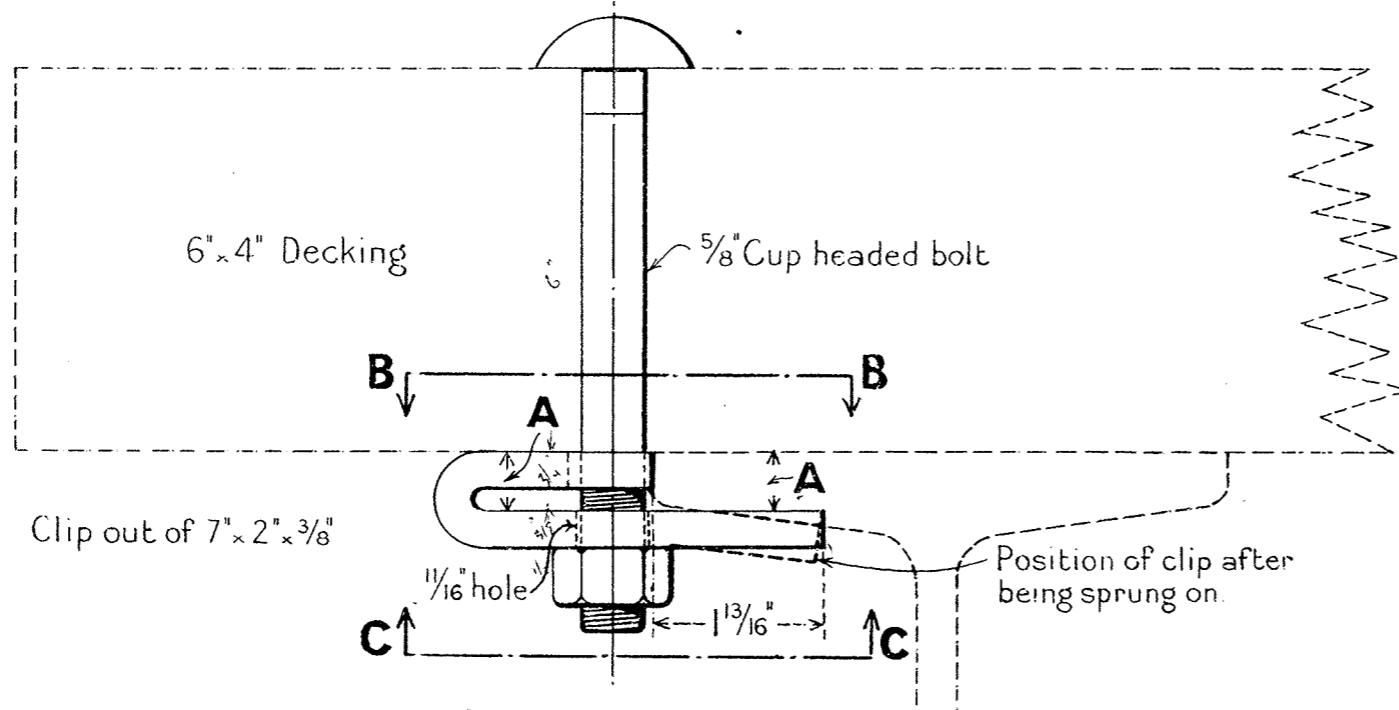
ELEVATION
Scale $\frac{3}{4}'' = 1'-0''$



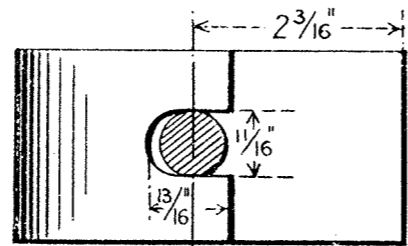
DETAIL OF HOOK
Scale HALF Full Size

This drawing supersedes Plans 475/38 & F 357

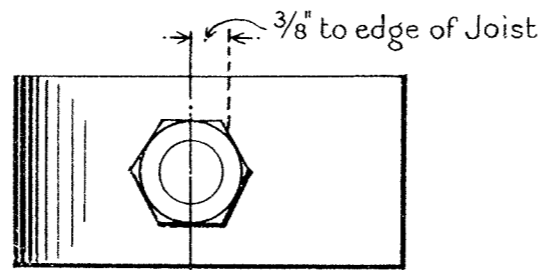
VICTORIAN RAILWAYS WAY AND WORKS BRANCH STANDARD DRAWING BICYCLE RACK		Approved <i>M.W.</i> Chief Civil Engineer	Adopted OCT. 1944
		Drawn by <i>C.M.T.</i> Chief Architect	Checked by <i>D.B.C.</i> PLAN NO F 357 A



ELEVATION



PLAN B-B

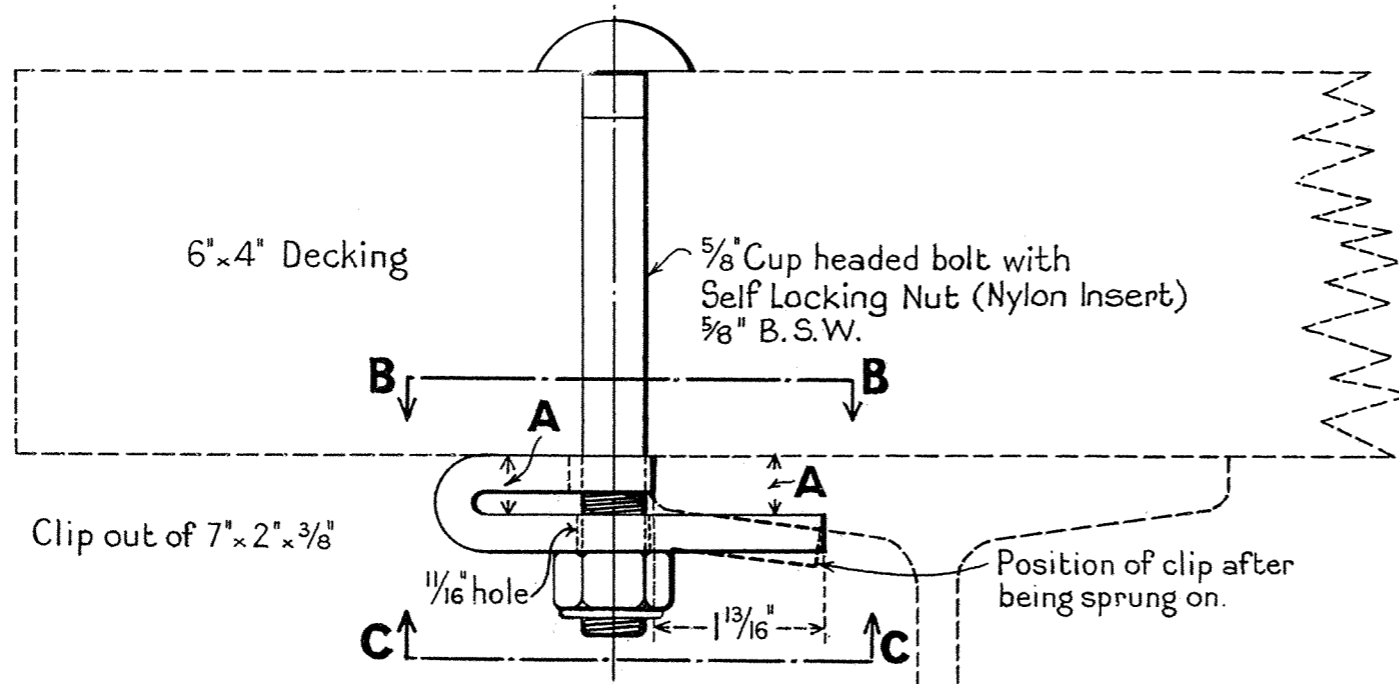


INVERTED PLAN C-C

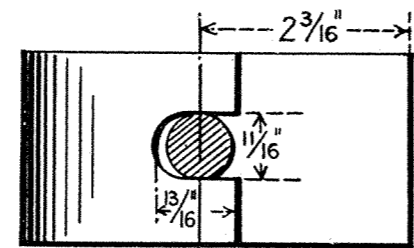
Size of Joist			Dimension
No.	Size Inches	Wgt in lbs/ft.	"A"
B.S.B. 30	24 x 7 1/2	100	3/4"
A.S.B. 24	24 x 7 1/2	95	3/4"
N.B.S.B. 18	24 x 7 1/2	90	3/4"
A.S.B. 22	22 x 7	75	5/8"
B.S.B. 29	20 x 7 1/2	89	3/4"
A.S.B. 21	20 x 6 1/2	65	5/8"
B.S.B. 28	18 x 7	75	3/4"
A.S.B. 20	18 x 6	55	5/8"
B.S.B. 27	16 x 6	62	5/8"
A.S.B. 18	16 x 6	50	1/2"
B.S.B. 26	15 x 6	59	3/4"
A.S.B. 17	15 x 6	45	1/2"
B.S.B. 25	15 x 5	42	1/2"
B.S.B. 24	14 x 6	57	3/4"
B.S.B. 23	14 x 6	46	1/2"
A.S.B. 16	14 x 5 1/2	40	1/2"

Weight per clip = 1.40 lbs.
 " " bolt = 0.75 " = 2.15 lbs.

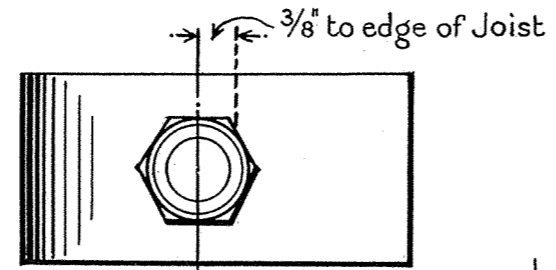
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING DECK CLIP FOR R.S.J. BRIDGES Scale 1/2 Full Size		Approved Chief Civil Engineer Drawn by K. F. L. Checked by R. P. Eng of Structural Design	Adopted OCT. 1941 PLAN NO F 358
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ELEVATION



PLAN B-B



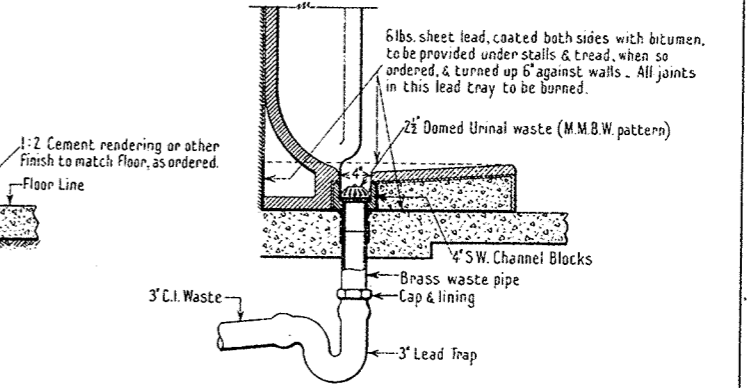
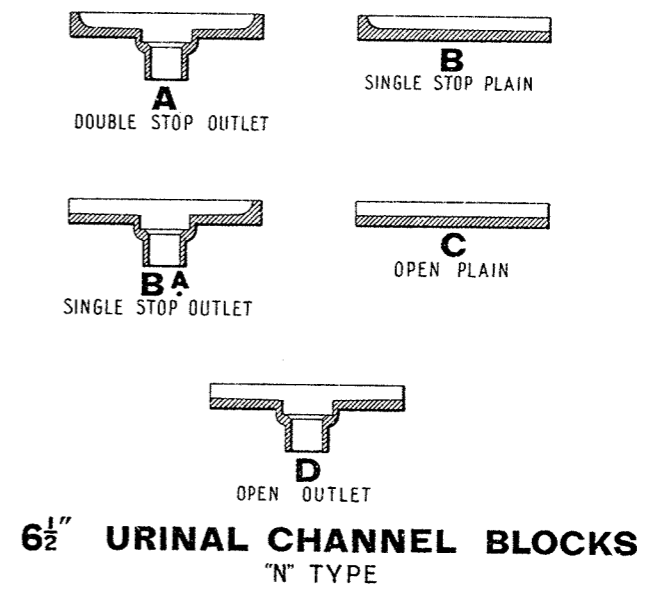
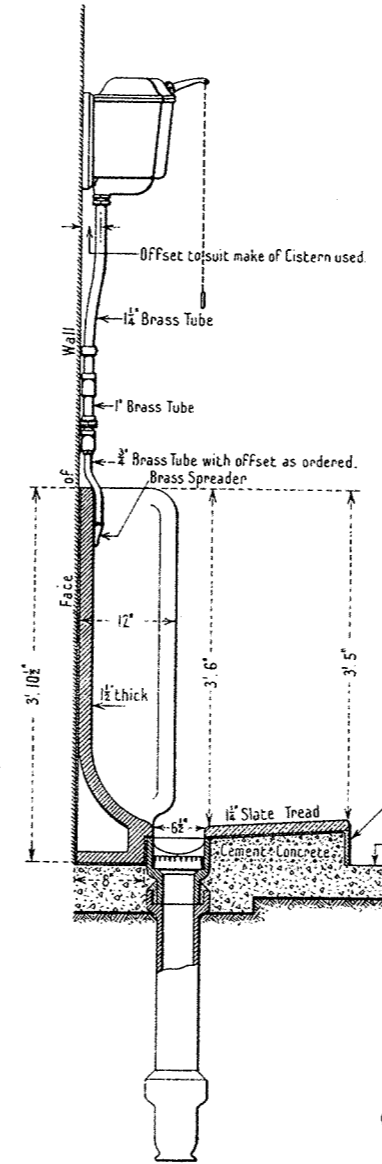
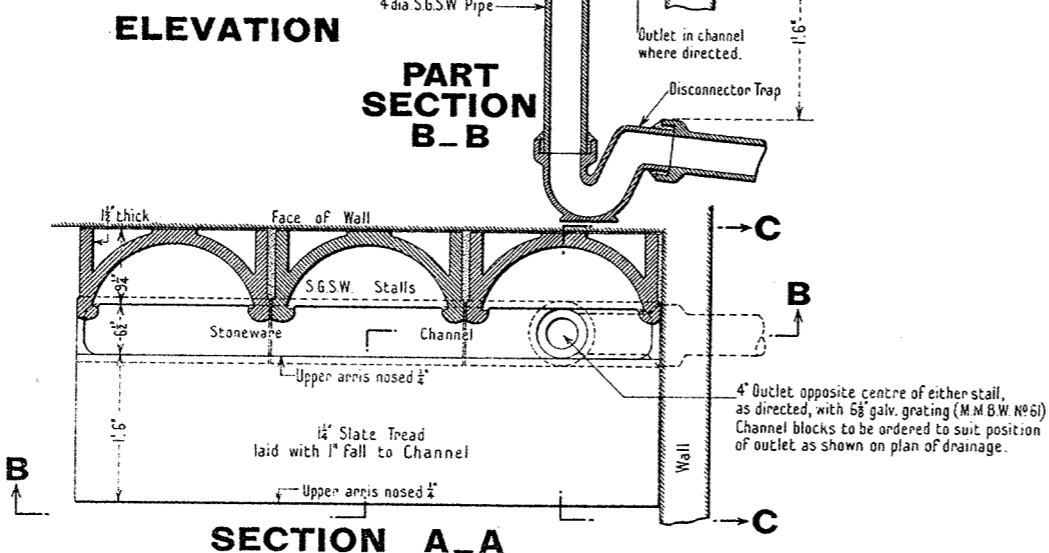
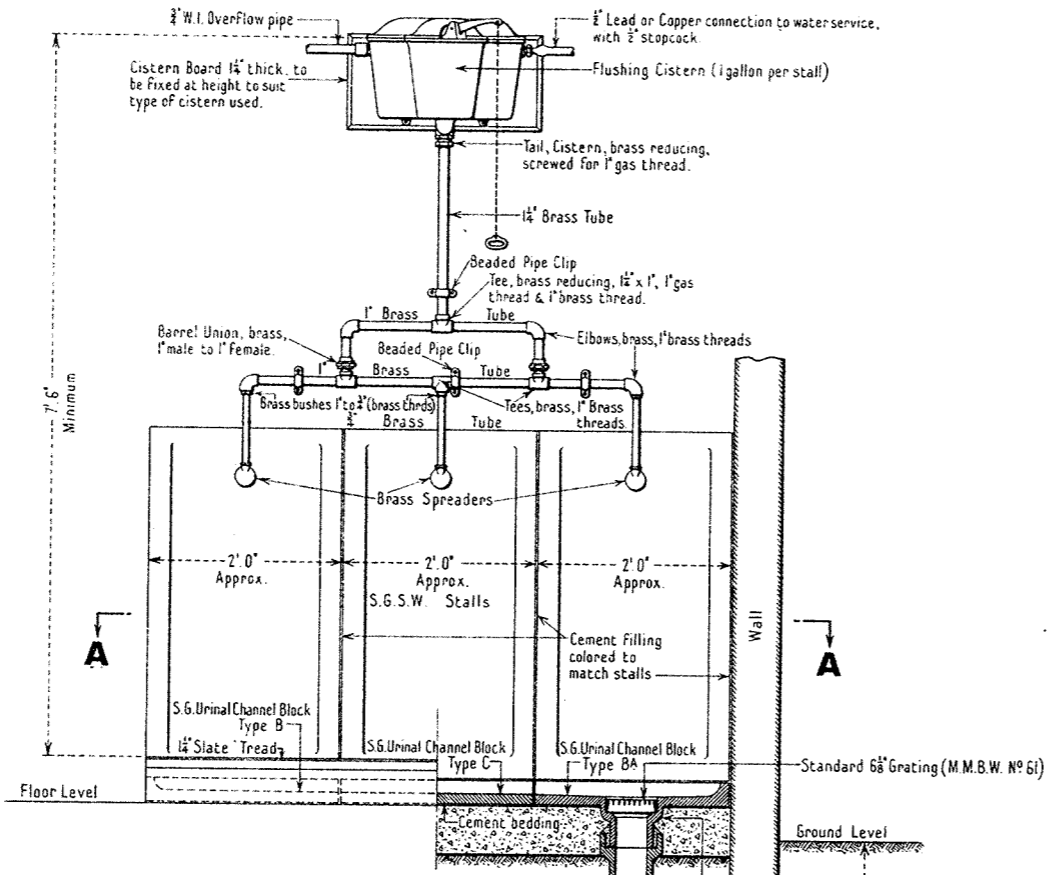
INVERTED PLAN C-C

Size of Joist			Dimension
No.	Size Inches	Wgt in lbs/ft.	'A'
B.S.B. 30	24 x 7 1/2	100	3/4"
A.S.B. 24	24 x 7 1/2	95	3/4"
N.B.S.B. 18	24 x 7 1/2	90	3/4"
A.S.B. 22	22 x 7	75	5/8"
B.S.B. 29	20 x 7 1/2	89	3/4"
A.S.B. 21	20 x 6 1/2	65	5/8"
B.S.B. 28	18 x 7	75	3/4"
A.S.B. 20	18 x 6	55	5/8"
B.S.B. 27	16 x 6	62	5/8"
A.S.B. 18	16 x 6	50	1/2"
B.S.B. 26	15 x 6	59	3/4"
A.S.B. 17	15 x 6	45	1/2"
B.S.B. 25	15 x 5	42	1/2"
B.S.B. 24	14 x 6	57	3/4"
B.S.B. 23	14 x 6	46	1/2"
A.S.B. 16	14 x 5 1/2	40	1/2"

Weight per clip = 1.40 lbs
 " " bolt = 0.75 " = 2.15 lbs.

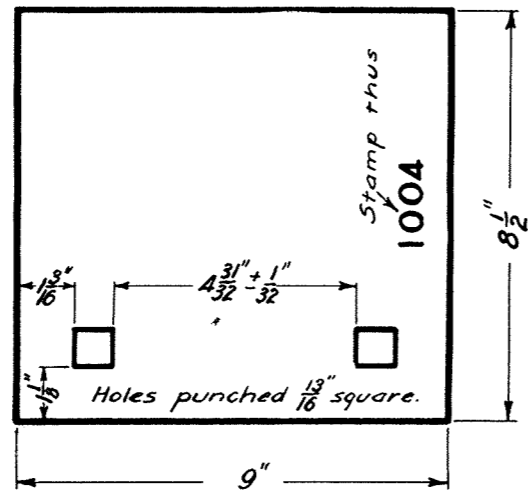
A	21-12-67	Self Locking Nuts substituted.
Rev.	Date	Amendment

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING		Approved <i>[Signature]</i> Chief Civil Engineer	Adopted OCT. 1941
DECK CLIP FOR		Drawn by K. F. L.	Checked by R. P.
R.S.J. BRIDGES		<i>[Signature]</i> Eng. of Structural Design	PLAN NO F 358A
Scale 1/2 Full Size			

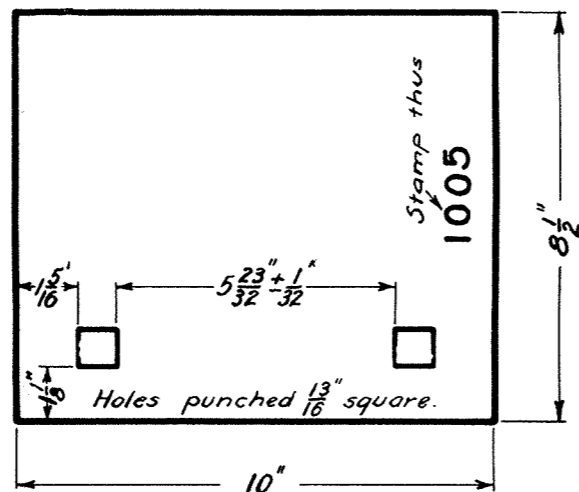


VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	APR. 1941
SALT - GLAZED		Drawn by V. W. L.	PLAN No. F359
STONEWARE URINALS		Checked by R. C. O.	
TYPE DETAILS		<i>[Signature]</i> Chief Architect	
SCALE - 1/2 Inch = 1 Foot			

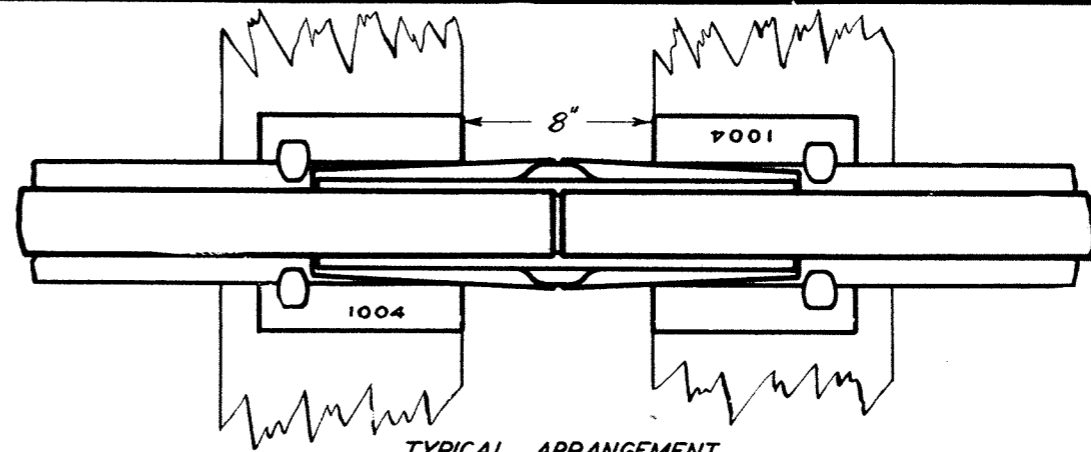
This plan supersedes plan No 3577-23



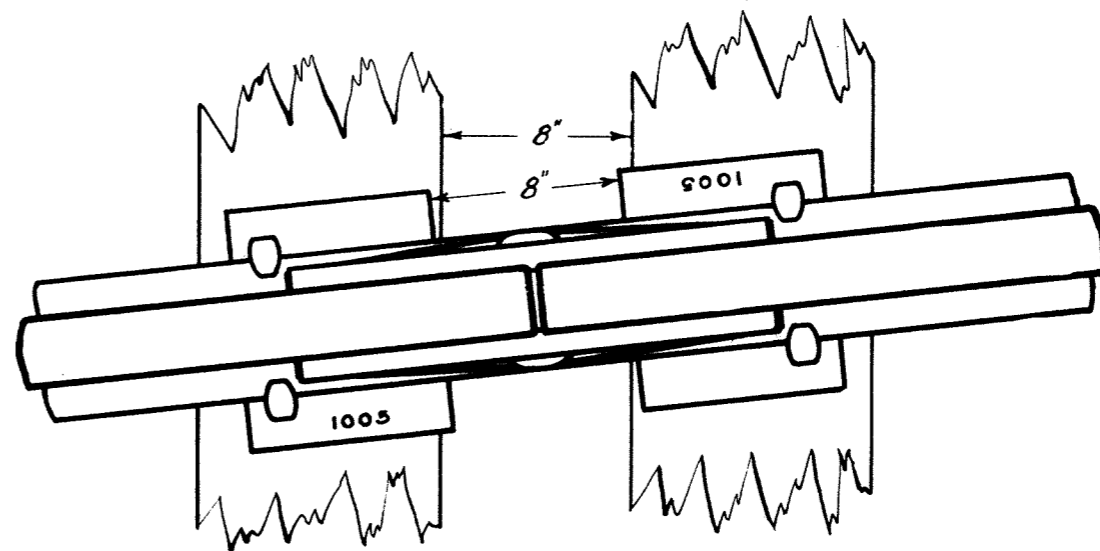
80, 90 & 94 LB.



100, 107 & 110 LB.



TYPICAL ARRANGEMENT
80, 90 & 94 LB. INSULATED JOINT
(Shown square with sleepers)



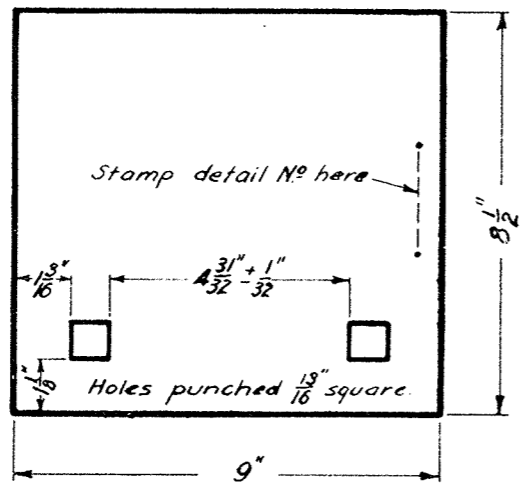
TYPICAL ARRANGEMENT
100, 107 & 110 LB INSULATED JOINT
(Shown at inclination to sleepers.)

Notes:- Material, $\frac{5}{8}$ " Mild Steel plate.
Plates to be marked off from templates
and punched to tolerances shown.
Sides of square holes to be parallel to side of plate.

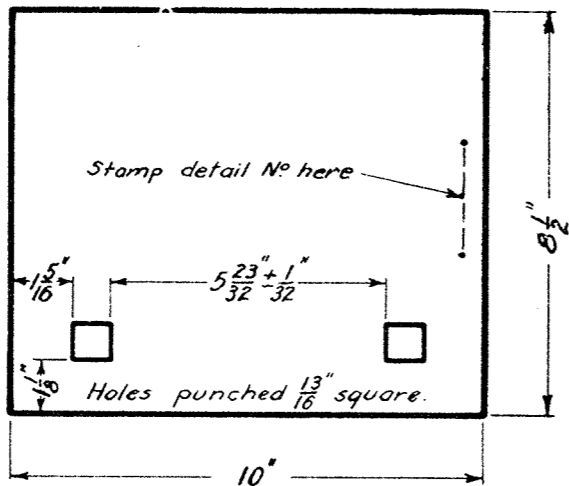
V - R
SLEEPER PLATES-FLAT
FOR TYPE 1939
INSULATED JOINTS

Approved *M.H.*
19-8-41
Chief Civil Engr.
Checked *W.C.M.*
Passed *[Signature]*
Eng'r. of M.&W.S.

Adopted
1941
PLAN NO
F-360

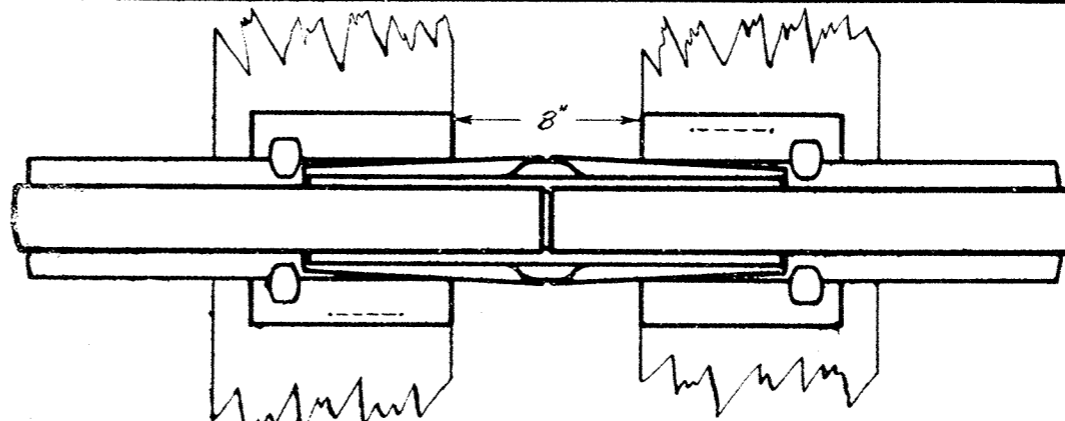


80, 90 & 94 LB.

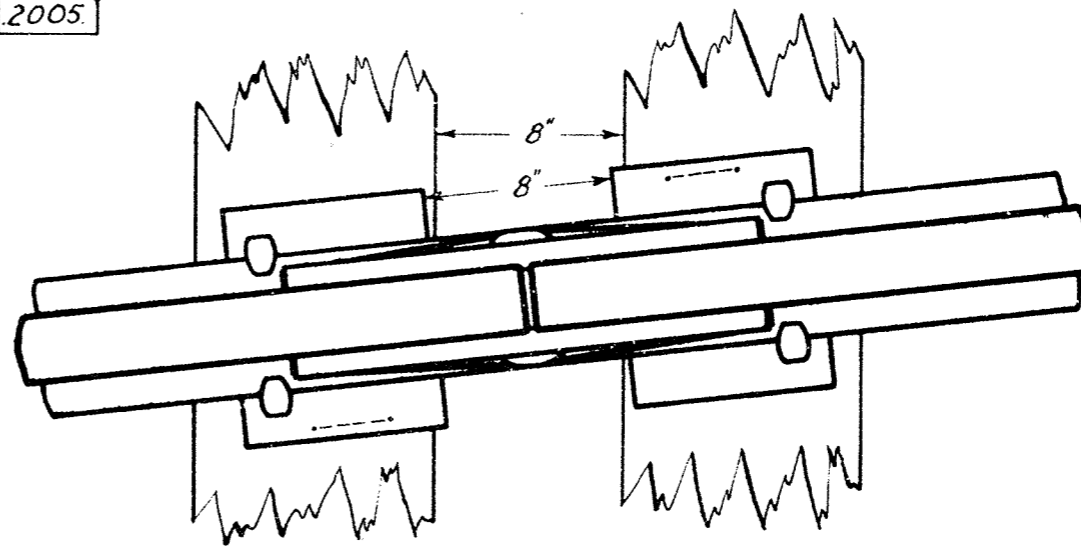


100, 107 & 110 LB.

Thickness of Plate	Detail No	
	94L ^B	107L ^B
5/8"	1004.	1005.
1"	2004.	2005.



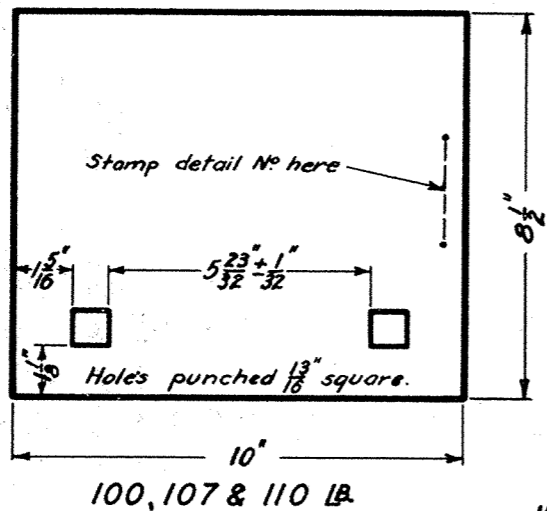
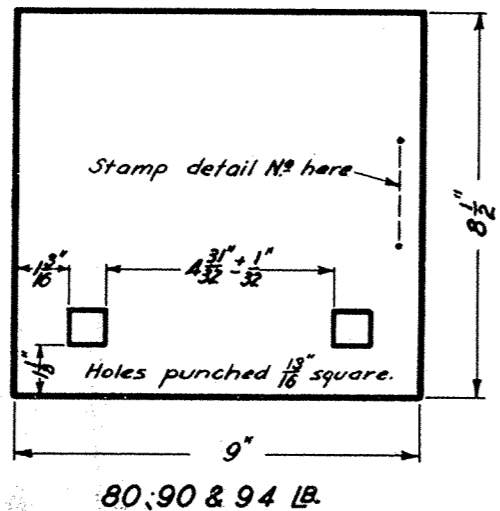
TYPICAL ARRANGEMENT
80, 90 & 94 LB. INSULATED JOINT
(Shown square with sleepers)



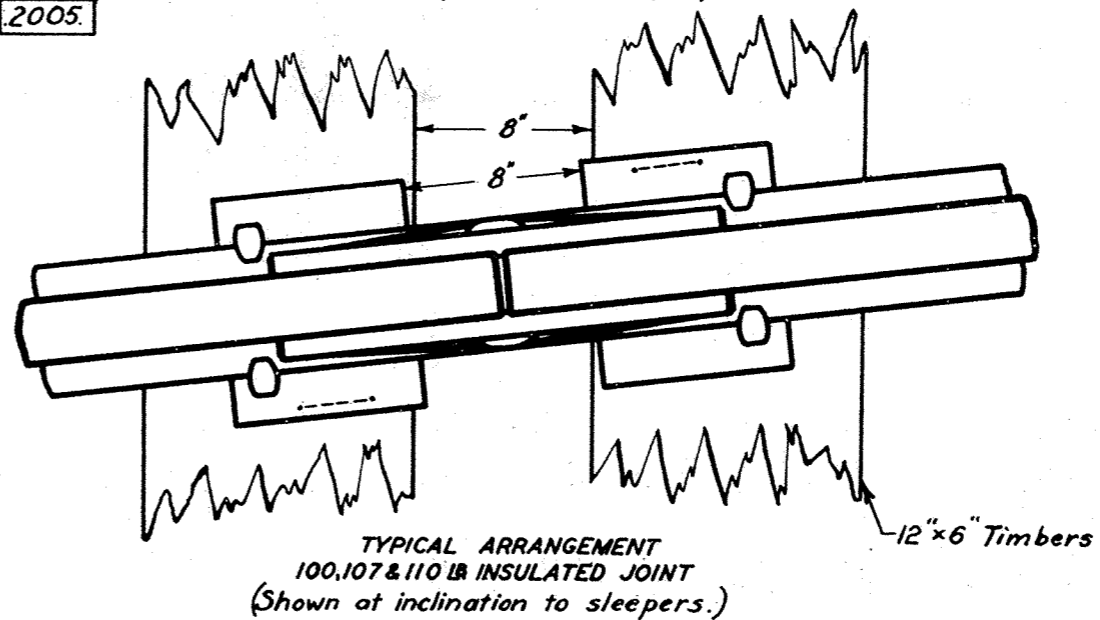
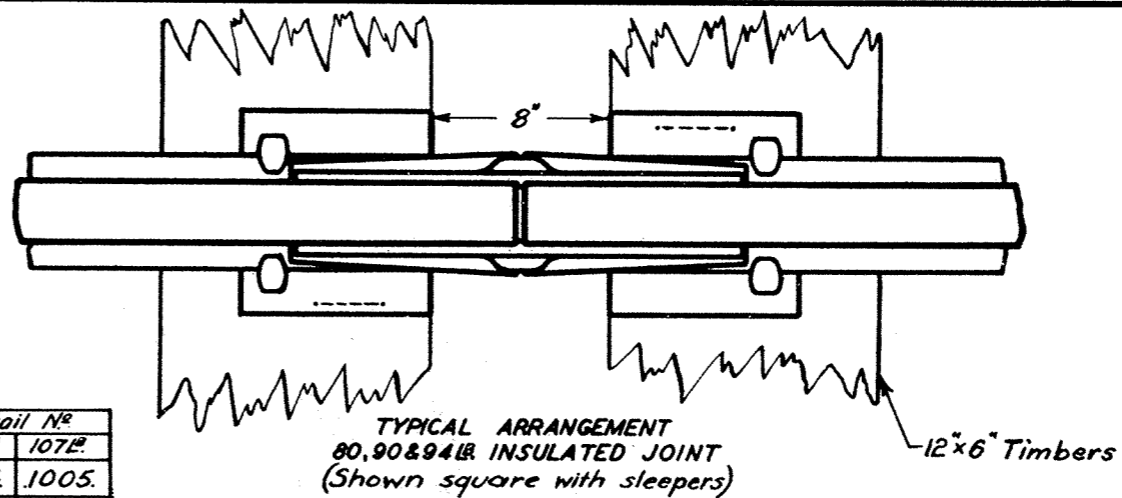
TYPICAL ARRANGEMENT
100, 107 & 110 LB INSULATED JOINT
(Shown at inclination to sleepers.)

Notes: Material: 5/8" Mild Steel plate.
Plates to be marked off from templates
and punched to tolerances shown.
Sides of square holes to be parallel to side of plate.

V - R SLEEPER PLATES-FLAT FOR TYPE 1939 INSULATED JOINTS	Approved: <i>[Signature]</i>	Adopted
	19-8-41 Chief Civil Engr.	1941
	Checked: W. C. M. Passed: <i>[Signature]</i>	PLAN No
	Engr. of M & W.S.	F-360 ^A



Thickness of Plate	Detail N ^o	
	94 L ^o	107 L ^o
$\frac{5}{8}$ "	1004.	1005.
1"	2004.	2005.



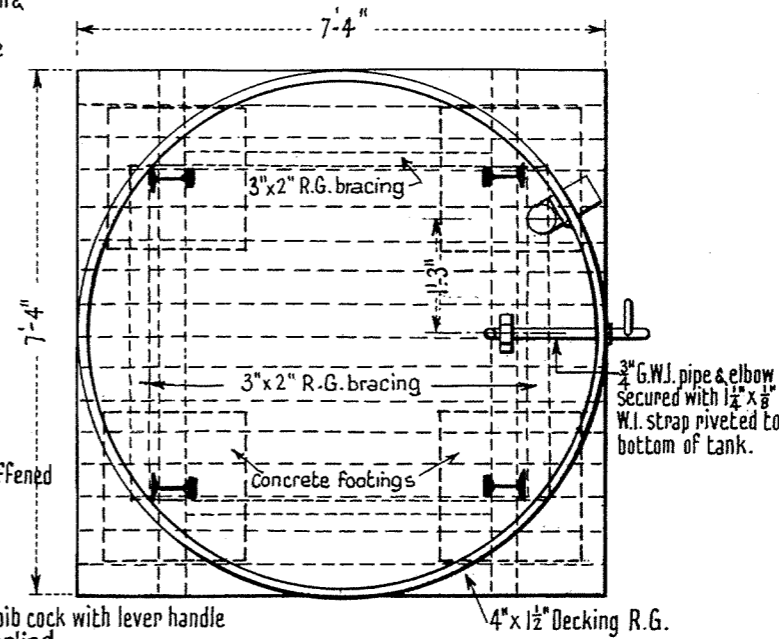
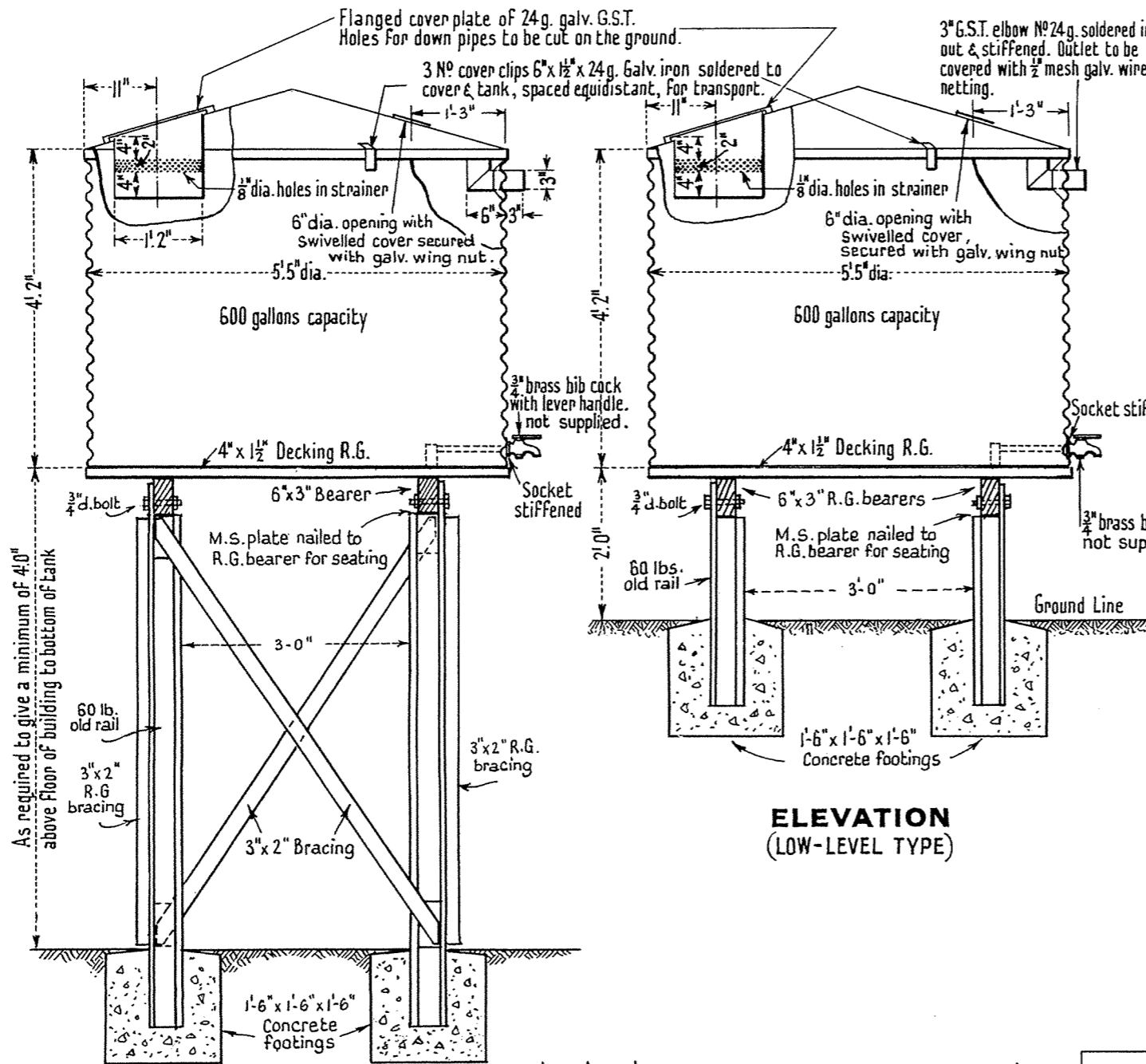
Notes: Material: Mild Steel plate.
Plates to be marked off from templates
and punched to tolerances shown.
Sides of square holes to be parallel to side of plate.

SIGNAL & TELEGRAPH
OFFICE ENGINEER

Revision	Date	Amendment	Amend by.
B	19-2-63	12"x6" Timbers added.	L.G.E.
A	27-3-45	Detail N ^o s 2004 & 2005 added.	L.G.E.

V - R
SLEEPER PLATES-FLAT
FOR TYPE 1939
INSULATED JOINTS

Approved: <i>[Signature]</i>	Adopted 1941
19-8-41 Chief Civil Engr.	PLAN N ^o
Checked: W.C.M.	F-360 ^B
Passed: <i>[Signature]</i>	
Engr. of M&W.S.	



PLAN
(HIGH LEVEL TYPE)

NOTES:—

Cover 24 g. sheet iron. Joints to be single riveted $3\frac{1}{2}$ " pitch. This cover is to have a 14" dia. opening as shown. Cylindrical portion to be made with 9'-0" sheets of 24 g. galv. corrugated iron. The vertical joints to be double riveted at each corrugation & the horizontal joints to be single riveted 6" pitch. Bottom 24 g. flat galv. iron. Joints to be single riveted $3\frac{1}{2}$ " pitch. Rim to be folded & soldered outside. All rivets throughout tank to be soldered inside & outside. Bottom soldered both sides. Sides on outside only. All materials to be of approved brands. A minimum distance of 18" clear is to be maintained between tanks, any adjoining building, fence or other structure. Orders for tanks to be placed on the Storekeeper, Spotswood Workshops. Lids to be ordered separately. Painting :- as for F345 P Flexible joints are to be provided for coupled tanks. Plan of Low level type would be same except that it has no fillers or bracing.

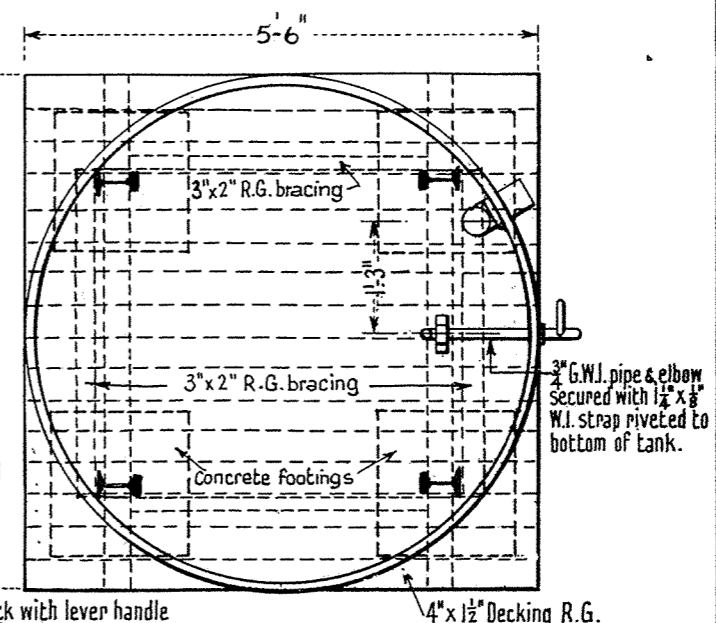
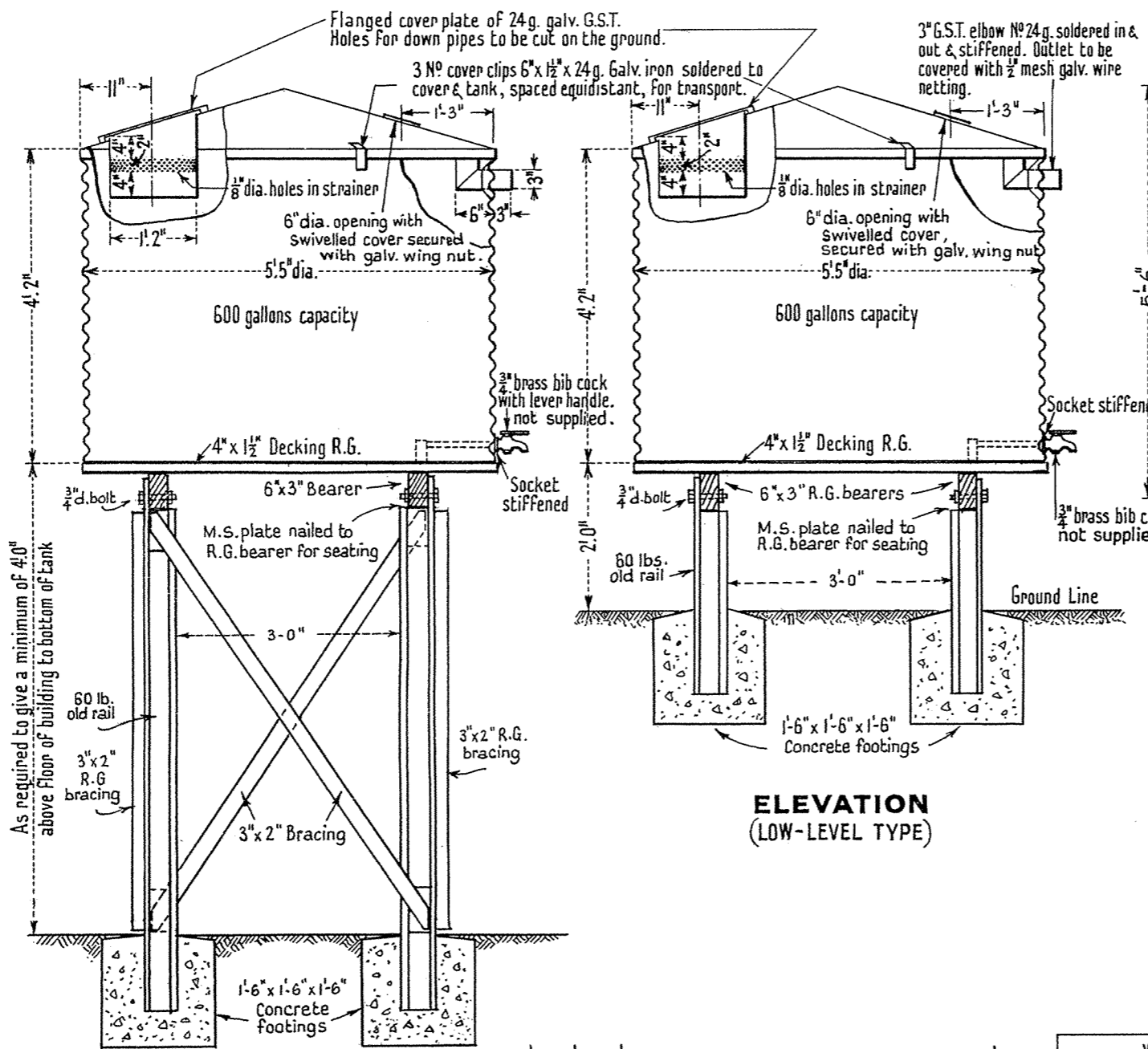
This plan supersedes plans No 385-30 & No F370^A 370^B

ELEVATION
(HIGH-LEVEL TYPE)

ELEVATION
(LOW-LEVEL TYPE)

C	7/7/65	Opening for filling tank with hose. Timber posts replaced by old rails set in concrete.	
Rev:	Date	Amendment	Amended by

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	FEB. 1946
600 GALLON TANK		Chief Civil Engineer	
(SQUAT TYPE) AND STAND		Traced by V.W.L.	Checked by L.E.M.
		Chief Architect	PLAN No
			F 370^C



PLAN
(HIGH LEVEL TYPE)

NOTES:—
 Cover 24 g. sheet iron. Joints to be single riveted $3\frac{1}{2}$ " pitch. This cover is to have a 14" dia. opening as shown. Cylindrical portion to be made with 9'-0" sheets of 24 g. galv. corrugated iron. The vertical joints to be double riveted at each corrugation & the horizontal joints to be single riveted 6" pitch. Bottom 24 g. flat galv. iron. Joints to be single riveted $3\frac{1}{2}$ " pitch. Rim to be folded & soldered outside. All rivets throughout tank to be soldered inside & outside. Bottom soldered both sides. Sides on outside only. All materials to be of approved brands. A minimum distance of 18" clear is to be maintained between tanks, any adjoining building, fence or other structure. Orders for tanks to be placed on the Storekeeper, Spotswood Workshops. Lids to be ordered separately. Painting :- as for F345^B. Flexible joints are to be provided for coupled tanks. Plan of Low level type would be same except that it has no fillers or bracing.

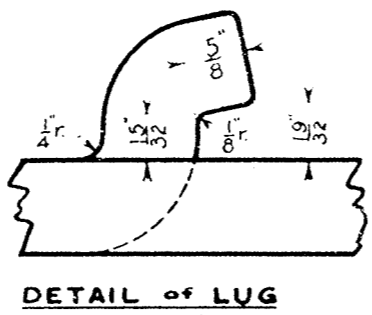
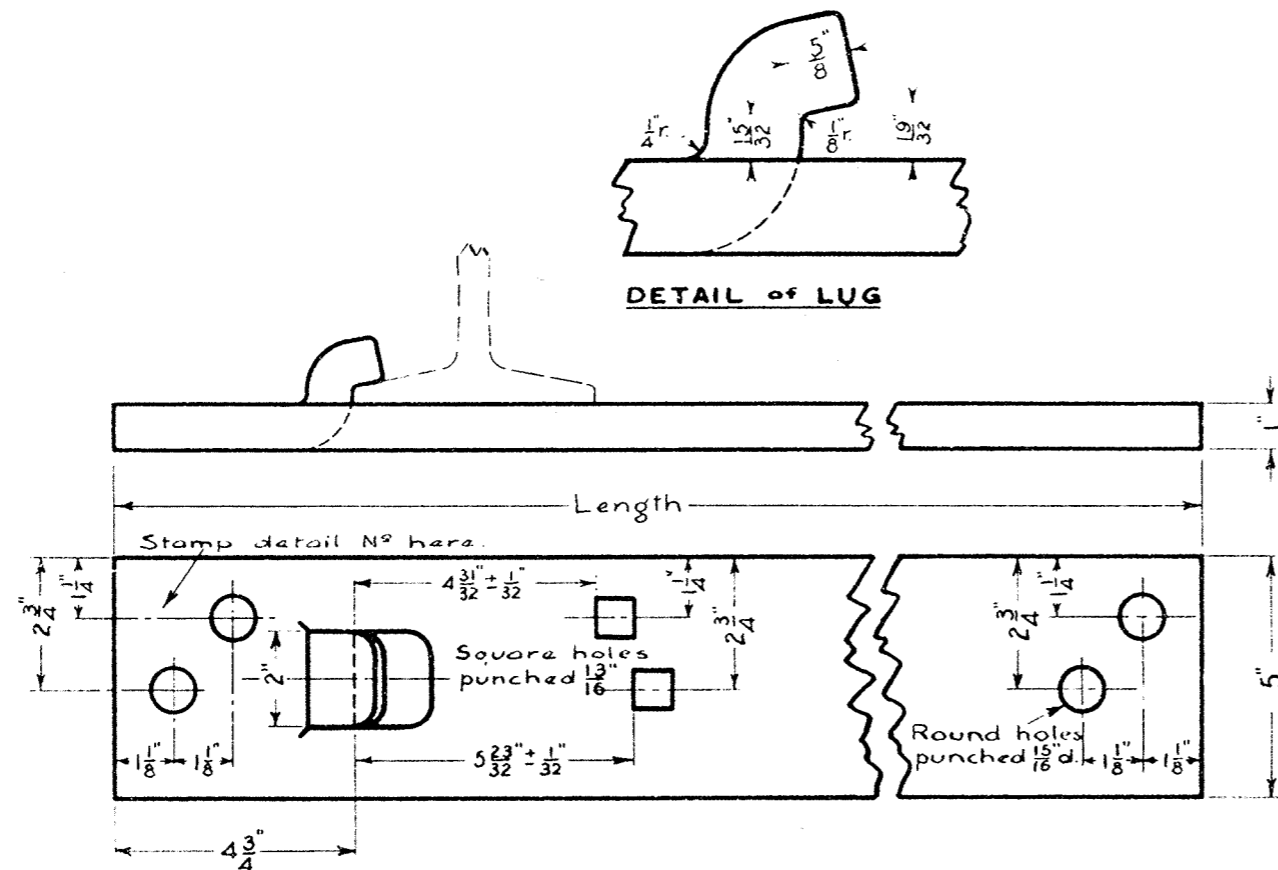
This plan supersedes plans N^o 385-30 & N^o F370^A, 370^B

ELEVATION
(HIGH-LEVEL TYPE)

ELEVATION
(LOW-LEVEL TYPE)

D	4/9/68	Size of deck reduced to 5'-6" square.	
C	7/7/65	Opening for filling tank with hose. Timber posts replaced by old rails set in concrete.	
Rev:	Date	Amendment	Amended by

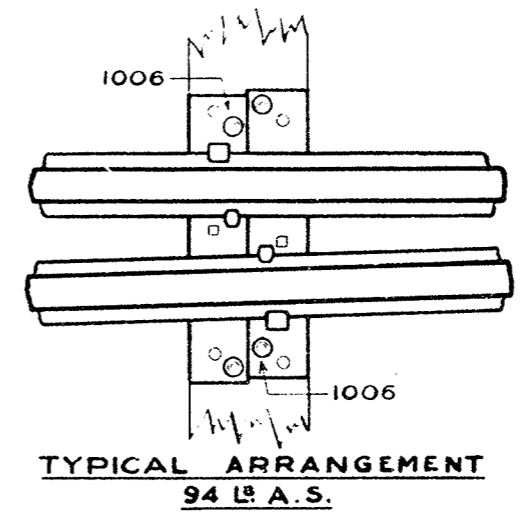
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopter
STANDARD DRAWING		<i>M. J.</i>	FEB. 1946
600 GALLON TANK		Chief Civil Engineer	
(SQUAT TYPE) AND STAND		Traced by <i>V.W.L.</i>	Checked by <i>L.E.M.</i>
		Chief Architect	PLAN N ^o
			F 370^D



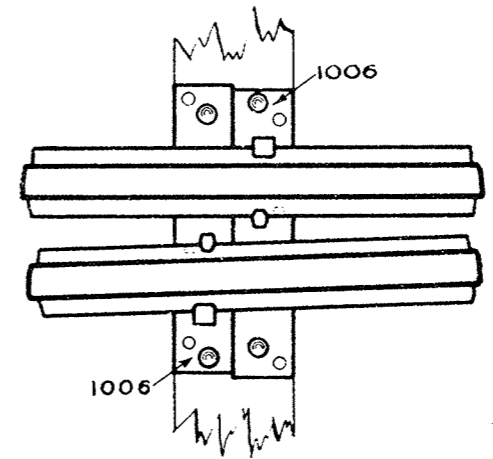
Length	Detail N°
1'-11 1/2"	1006

Notes:-Material 5"x1" M.S. Plate.
 Sides of square holes to be punched parallel to side of plate.

Fastenings per Plate
 2 N° 7/8" d x 6 1/4" Pins. M.K.P.
 1 N° 3/4" x 6" Dogspike.



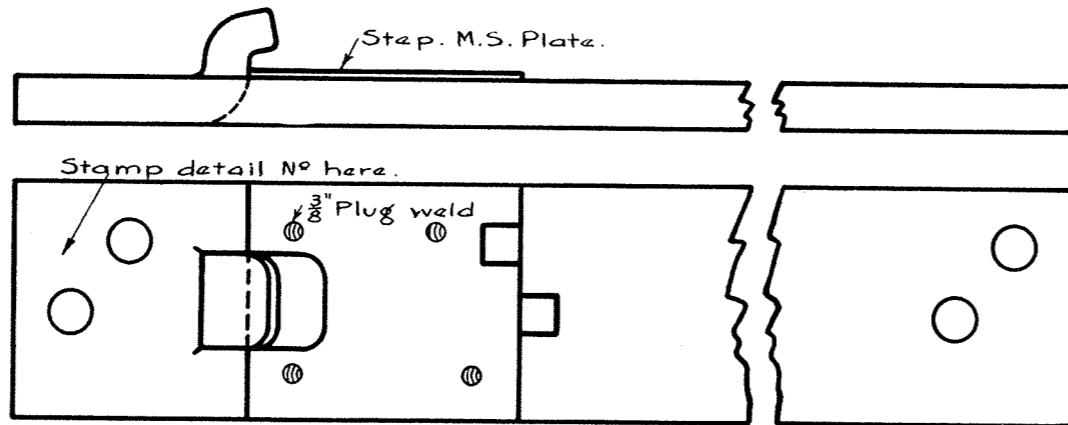
TYPICAL ARRANGEMENT
94 LB. A.S.



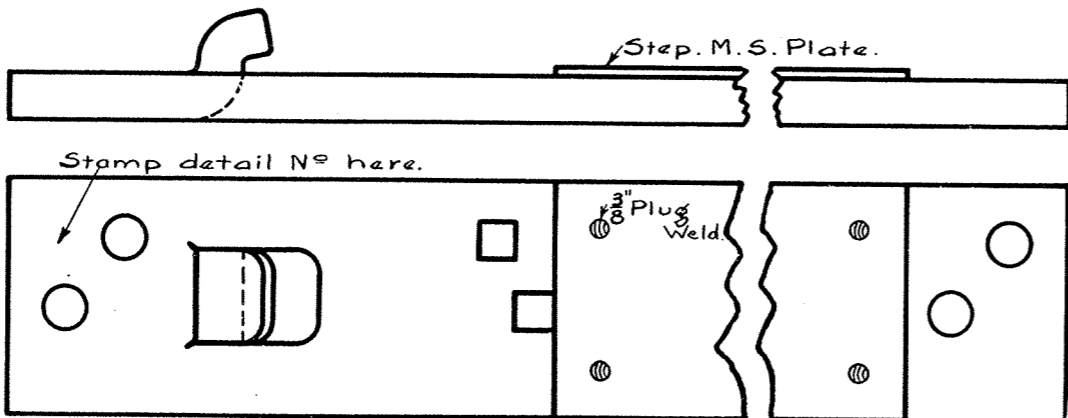
TYPICAL ARRANGEMENT
107 LB. A.S.

Note: Plates arranged for minimum distance of 2 3/4 from dogspike or pin to edge of timber.

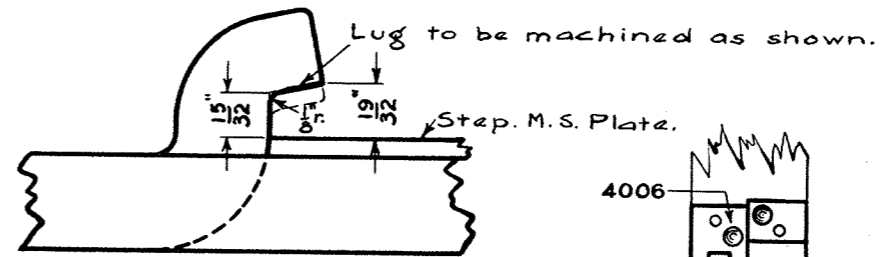
V·R LUG PLATES FLAT FOR LEADS	Approved <i>[Signature]</i>	Adopted
	Chief Civil Engr.	1941
	Checked <i>M.C.M.</i>	PLAN N° F 361 A
	Passed <i>[Signature]</i>	
	Engr. of Mach. & W.S.	



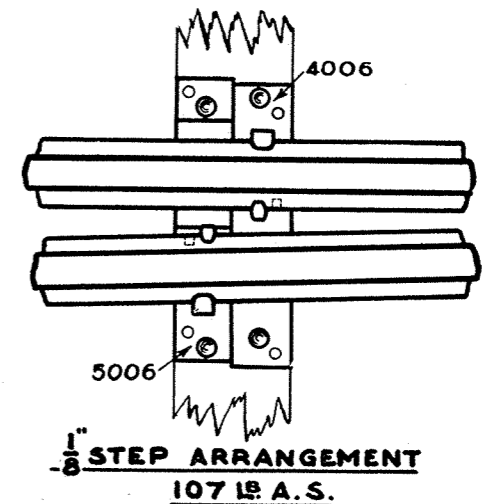
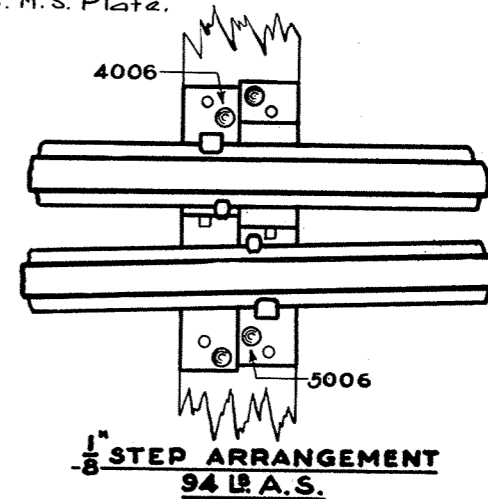
Size of Step Plate	Base Plate Detail N°	Detail N° of Welded Assembly
5 3/4" x 5" x 3/16"	1006	2006
5 3/4" x 5" x 1/8"	1006	4006



Size of Step Plate	Base Plate Detail N°	Detail N° of Welded Assembly
8 7/8" x 5" x 3/16"	1006	3006
8 7/8" x 5" x 1/8"	1006	5006



MACHINING of LUG



For 3/16" Step use details 2006*3006.

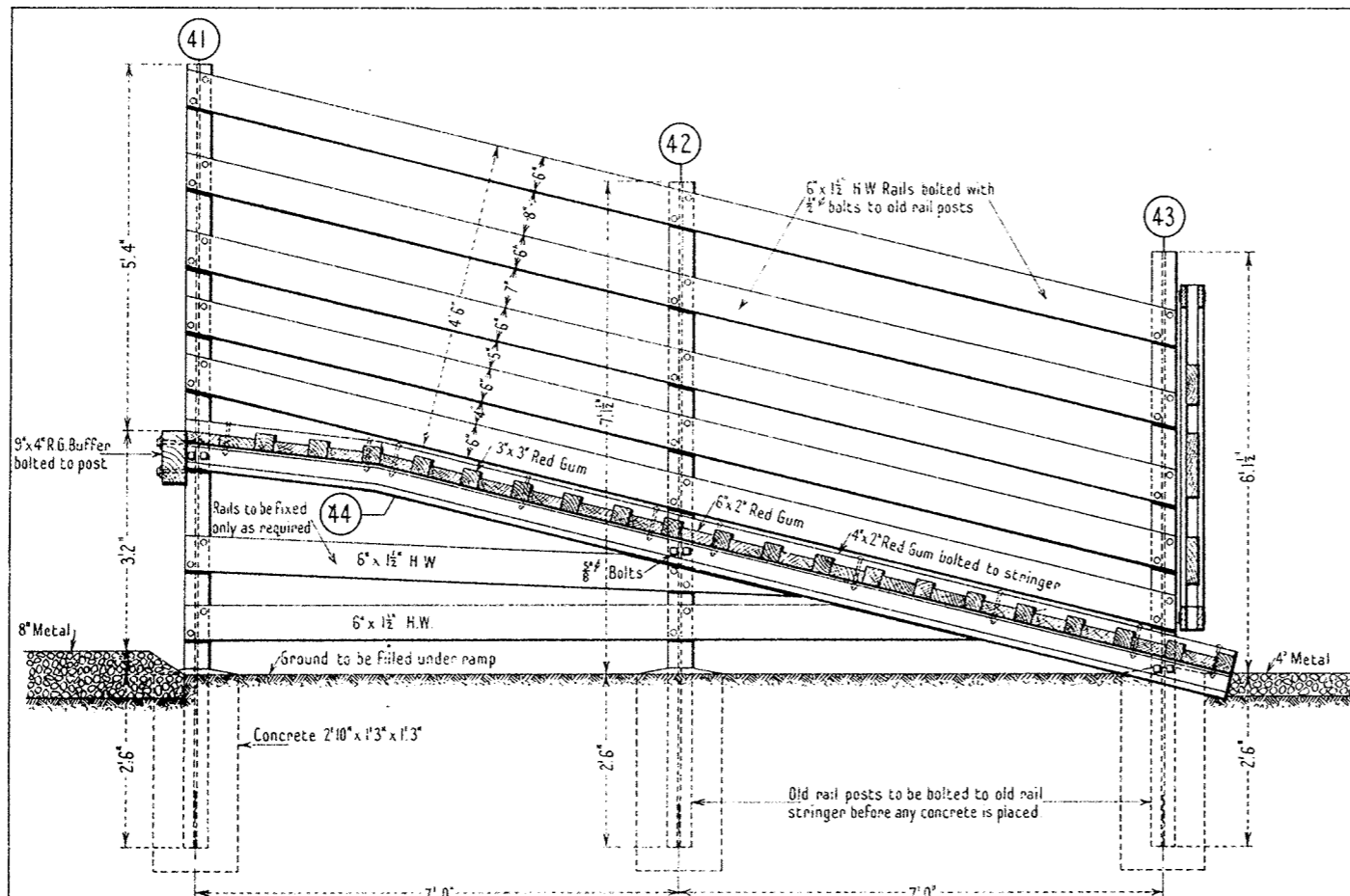
For details of base plate see Plan No F.361A.

Fastenings per Plate
 2 N° 7/8" d. x 6 1/4" Pins. M^h.P.
 1 N° 3/4" x 6" Dogspike.

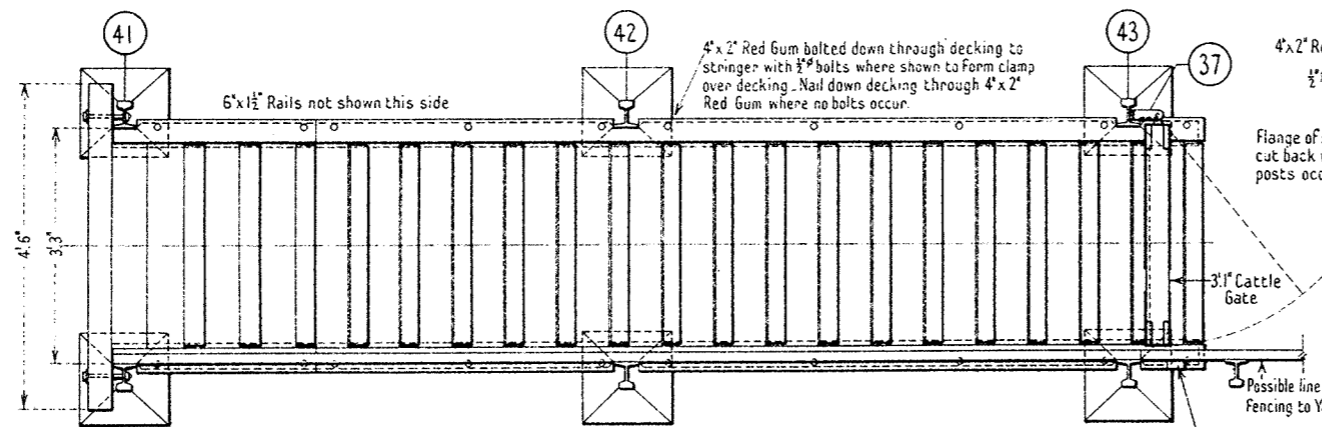
**V·R
LUG PLATES
STEP
FOR LEADS**

Approved
 Chief Engr.
 Checked *N.C.M.*
 Passed
 Eng^r of Mach. & W. S.

Adopted
 1941
 PLAN N°
 F 362 A

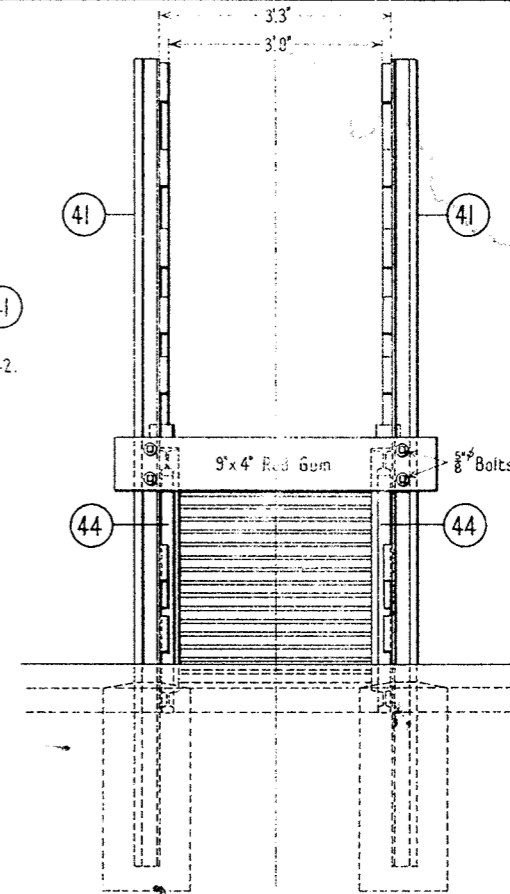


LONG SECTION

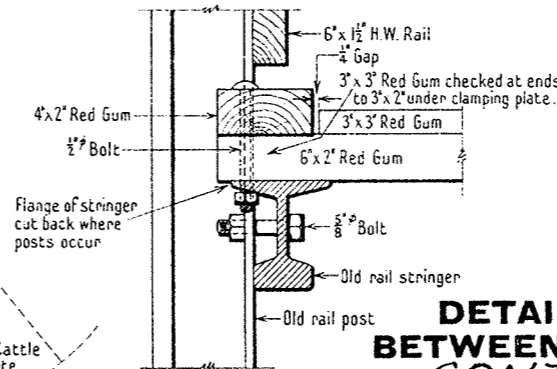


PLAN

NOTE
 For details of Items shown thus (41) see plan N^o 48-40.
 For lighter type of ramp suitable for handling pigs & sheep, see plan N^o F.342.

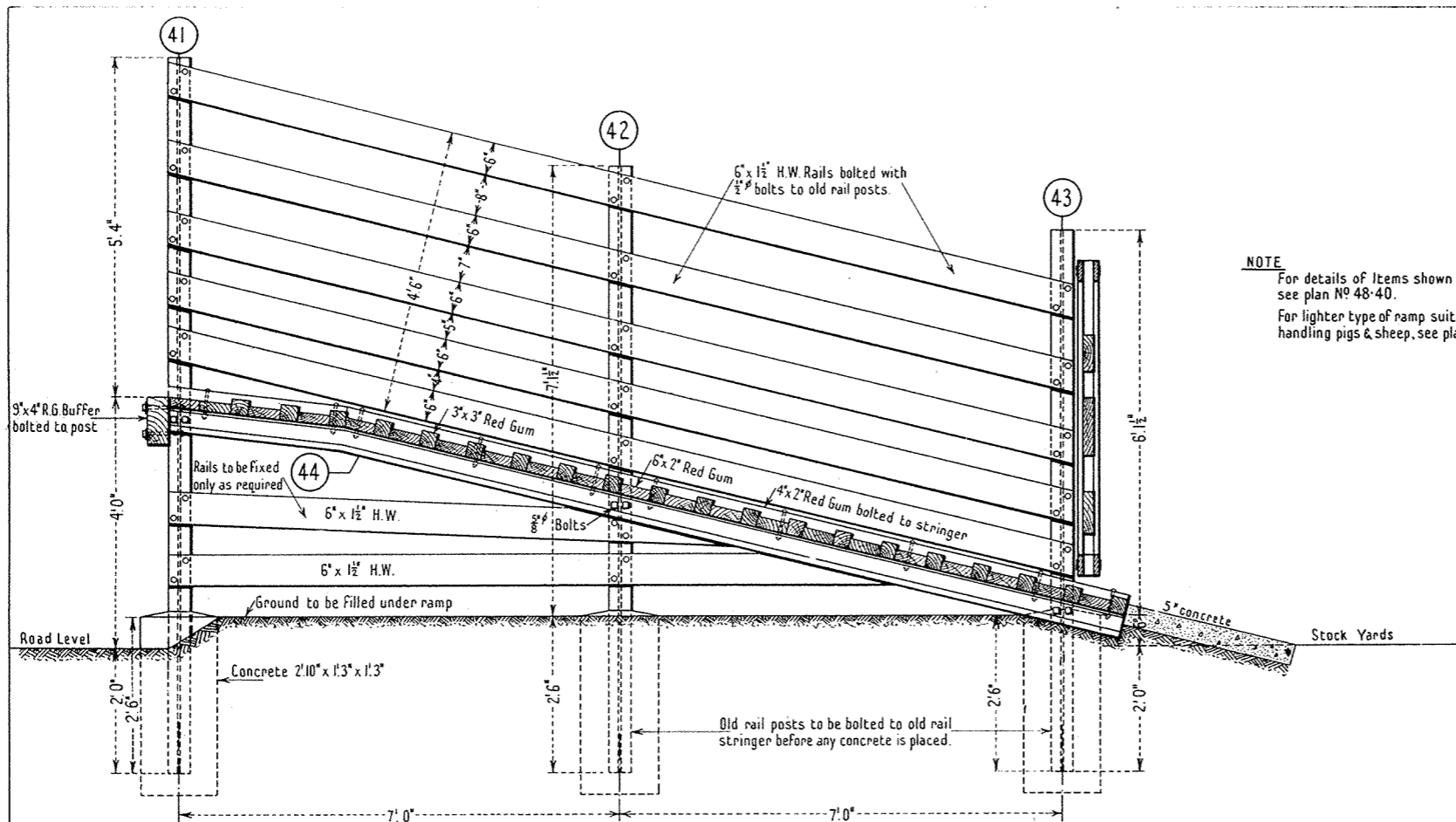


FRONT ELEVATION

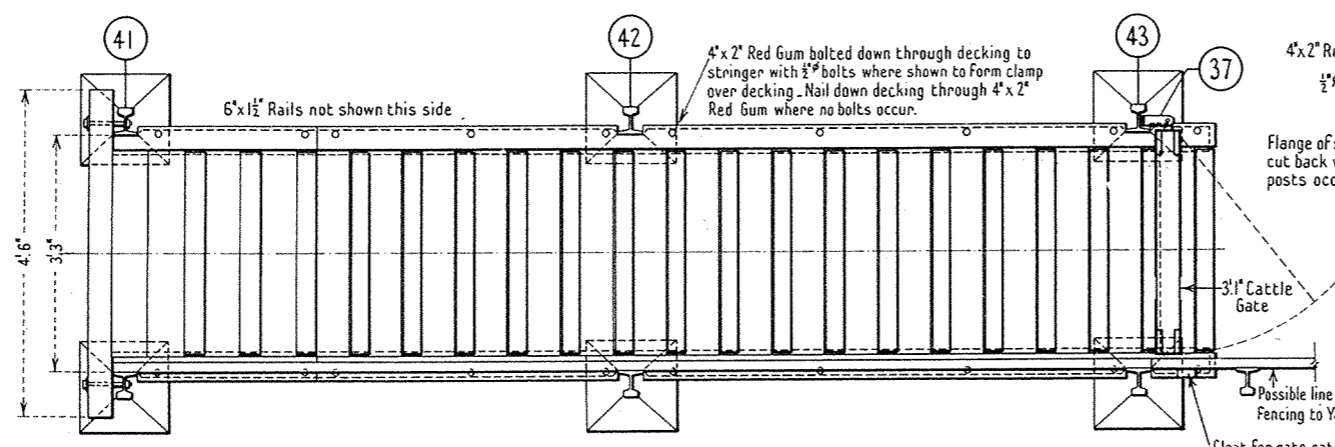


DETAIL OF JUNCTION BETWEEN STRINGER & POST
CONTRACT N^o 57274
 This plan supersedes plan N^o F.363 & F.363A

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	OCT. 1941
STOCK TRANSPORT RAMP		Drawn by V.W.L.	Checked by S.S.
HEAVY TYPE		<i>[Signature]</i> Chief Architect	PLAN No. F363^B
SCALES - $\frac{3}{8}$ " & $\frac{1}{2}$ " = 1'0"			

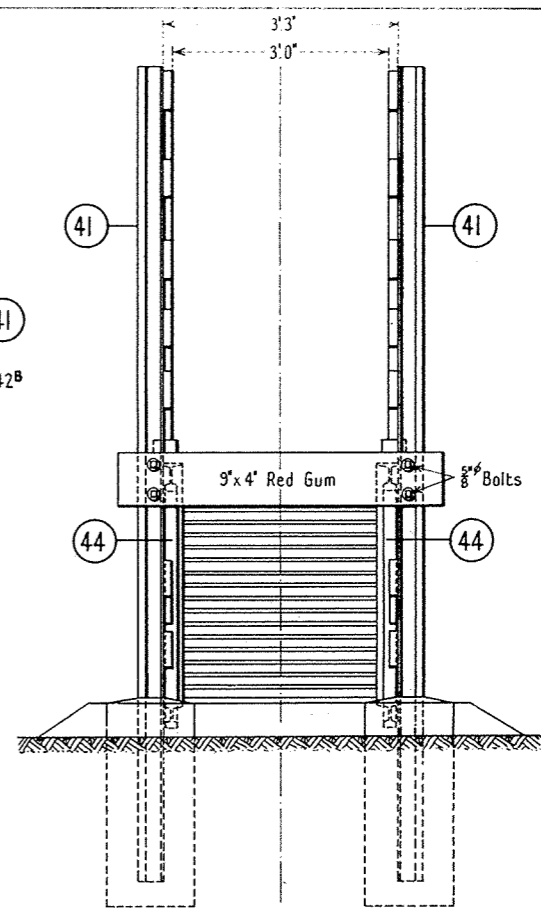


LONG SECTION

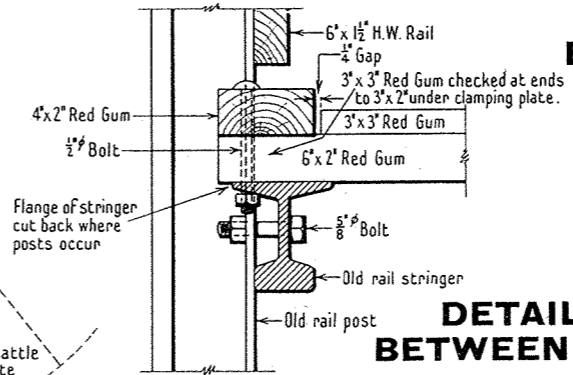


PLAN

NOTE
 For details of Items shown thus **41**
 see plan N^o 48-40.
 For lighter type of ramp suitable for
 handling pigs & sheep, see plan N^o F 342^B



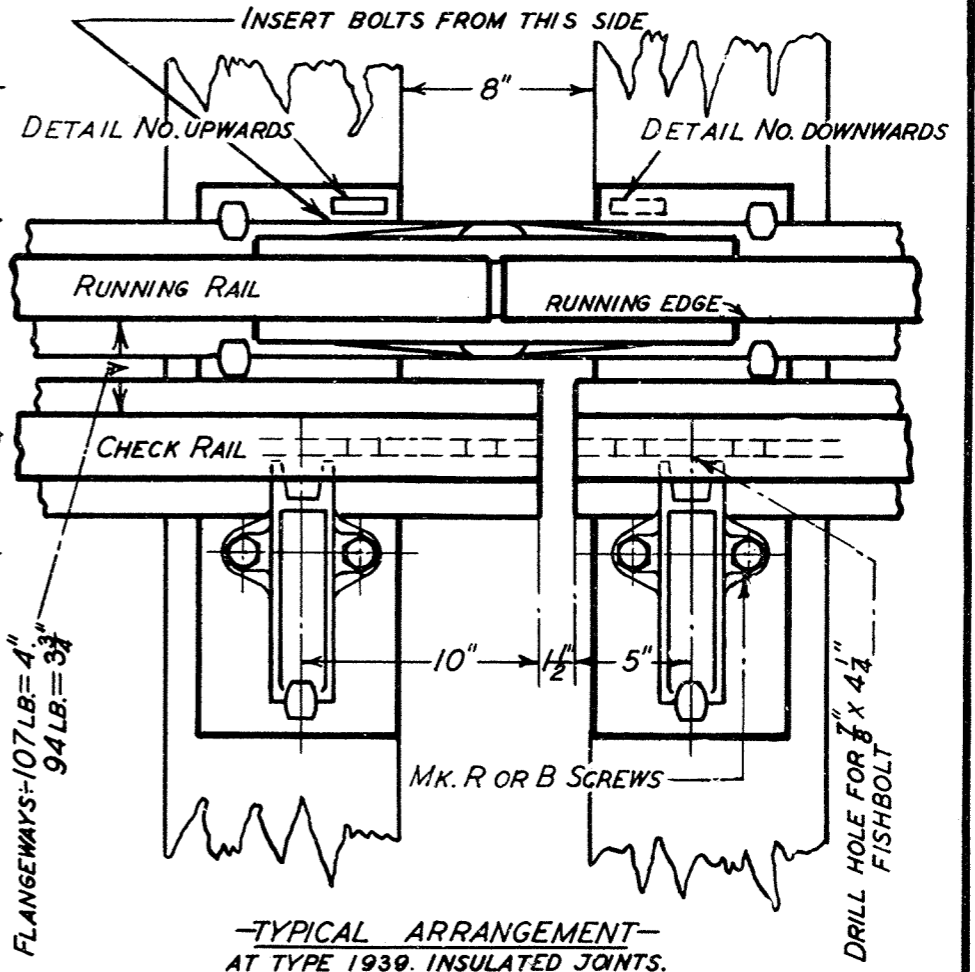
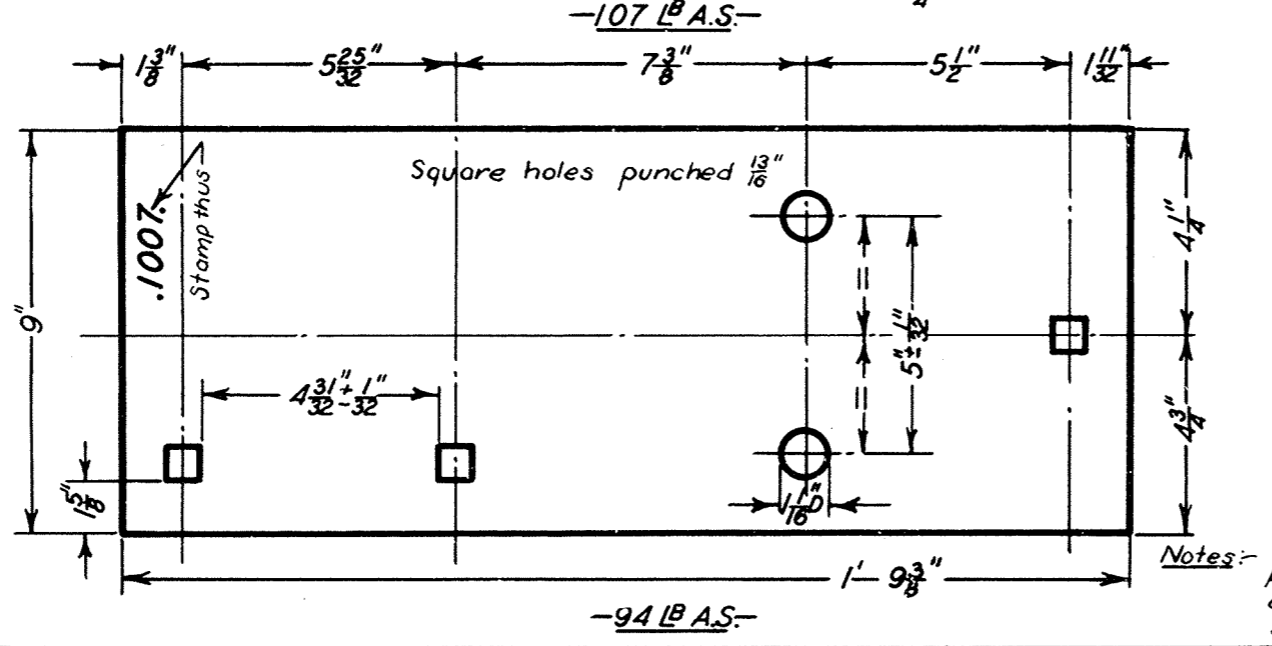
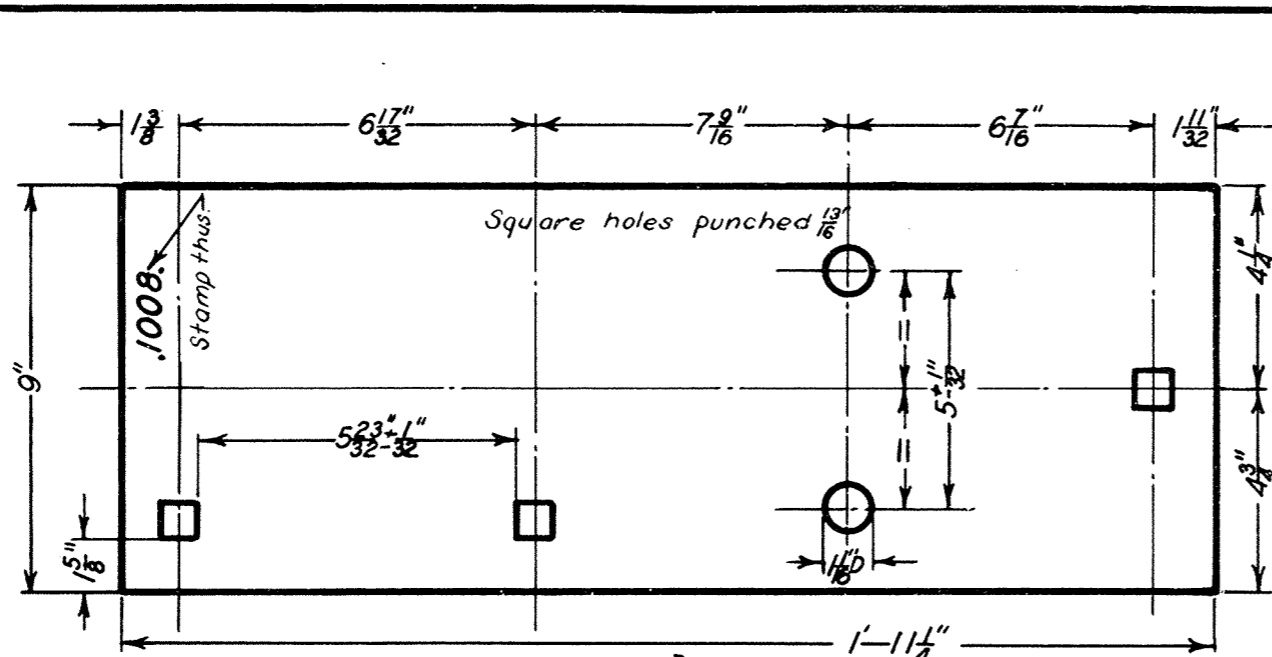
FRONT ELEVATION



DETAIL OF JUNCTION BETWEEN STRINGER & POST

This plan supersedes plan N^o F 363 & F 363^A & F 363^B

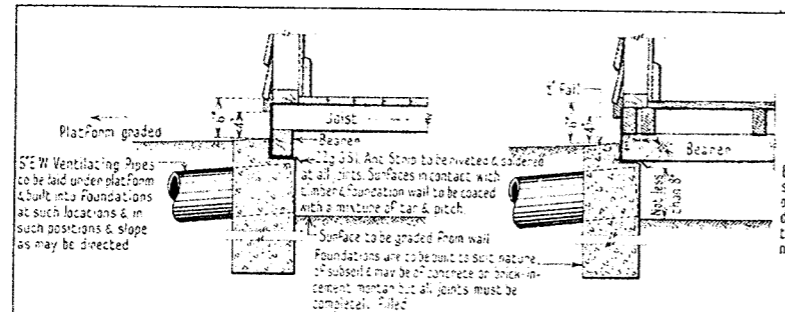
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING STOCK TRANSPORT RAMP HEAVY TYPE		<i>[Signature]</i> Chief Civil Engineer	JAN. 1950
		Drawn by V. W. L.	Checked by S. S.
SCALES: $\frac{3}{8}$ & $\frac{1}{2}$ = 1:0"		<i>[Signature]</i> Chief Architect	PLAN No. F 363^C



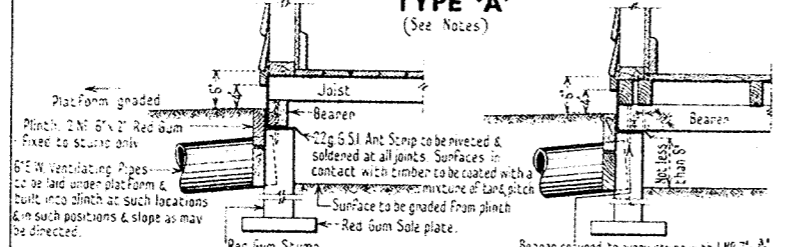
-TYPICAL ARRANGEMENT-
AT TYPE 1939. INSULATED JOINTS.

Notes:- Material 5/8" Mild Steel plate.
Plates to be marked off from templates
and punched to tolerances shown.
Sides of square holes to be parallel to side of plate.

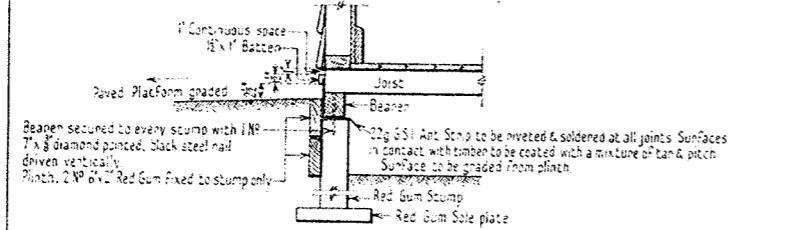
V. R. CHECK RAIL GAUGE PLATES FOR TYPE 1939 INSULATED JOINTS	Approved	Adopted
	<i>[Signature]</i>	1941
	Chief Civil Eng.	PLAN NO
	Checked Passed A.T.G.	F-364A
	Eng. of M&W.S.	



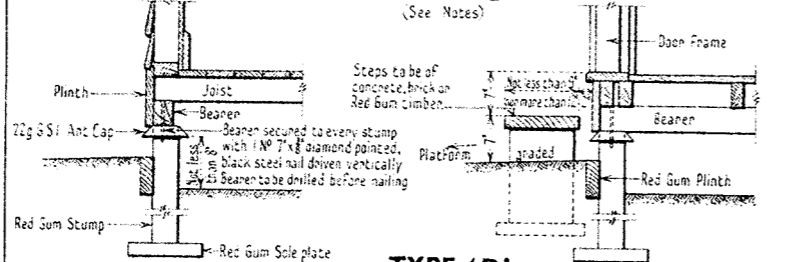
TYPE 'A'
(See Notes)



TYPE 'B'
(See Notes)

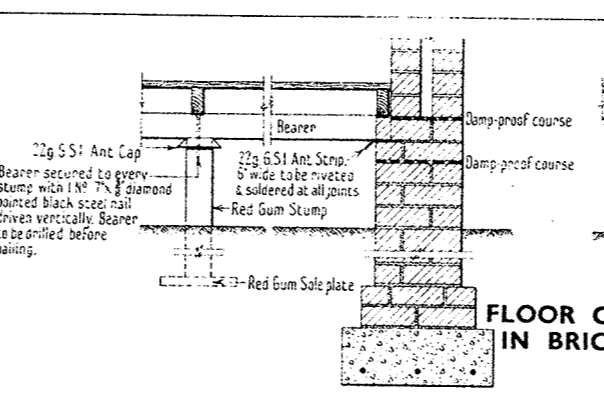
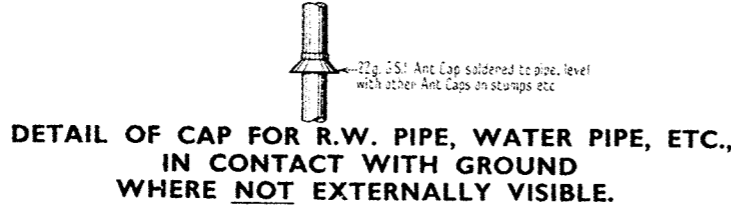


TYPE 'C'
(See Notes)



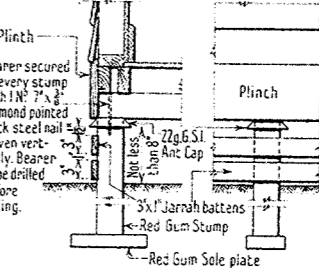
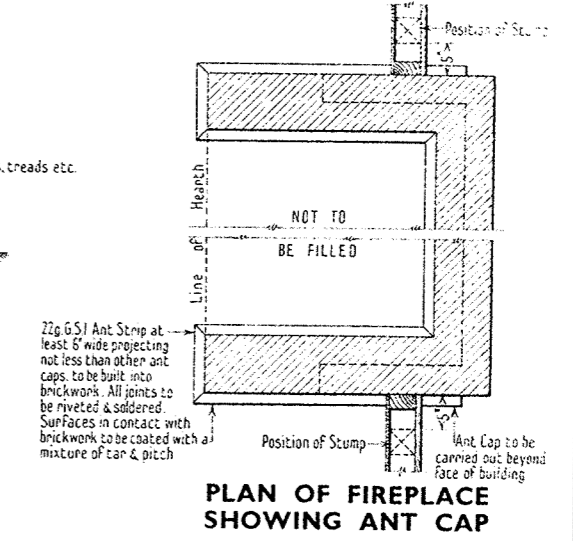
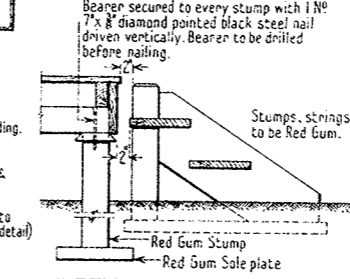
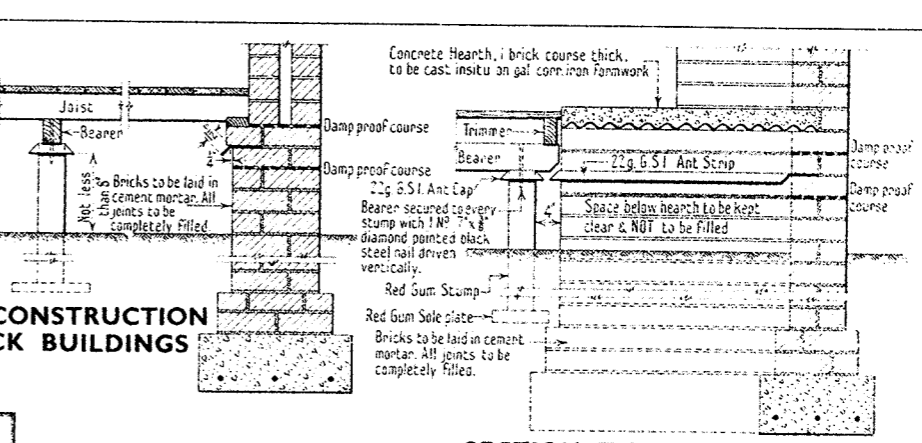
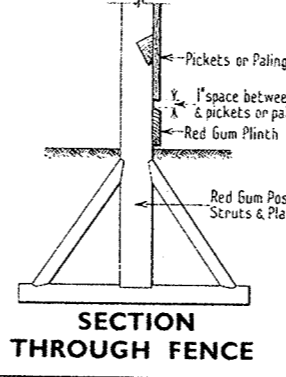
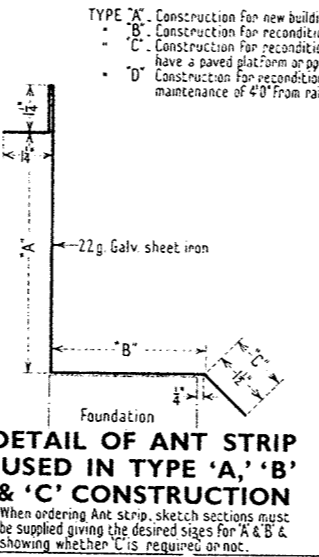
TYPE 'D'
(See Notes)

VARIOUS TYPES OF TIMBER BUILDING CONSTRUCTION ADJACENT TO PLATFORMS, FILLED PORCHES, ETC.



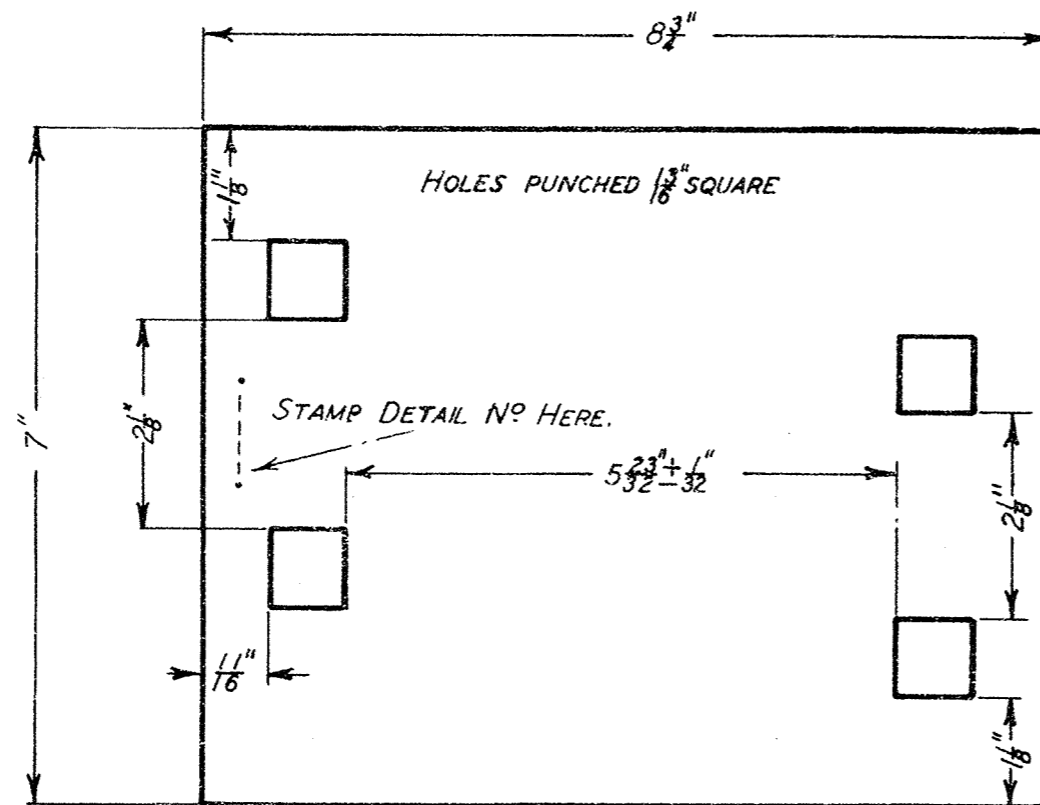
SPECIAL NOTE
Top & bottom surfaces of galv sheet iron ant-protection caps & stripping, where in contact with other surfaces are to be treated with the special tar & pitch mixture described under Item 2 in general notes. The quantity of the mixture to be used must be such as to afford maximum protection to the galv. sheet iron against corrosion.

- NOTES**
- All creosote to conform to Aust. Standard Specification No. K 55 1936.
 - Tar & pitch mixture to consist of approx. 1 gallon horizontal retort tar to 19lb coke oven pitch, brought to the consistency of thick paint by the addition of crude naphtha. This will be held in stock by the Comptroller of Stores.
 - All stumps & soleplates to be treated with creosote after timber has been cut & before assembling.
 - All loose or waste timber & concrete formwork if any, to be removed from under structure. Burial of timber waste in site is to be avoided.
 - All tree stumps, roots & material containing cellulose to be removed to a depth of at least 1'6" in areas known to be affected the site should be ploughed & all doubtfull material removed.
 - Surface below buildings to be graded to facilitate drainage.
 - Conduits, service & waste pipes where not externally visible are to be fitted with ant caps & to be so arranged to prevent termites building runways over them & so gaining access to bldg. (See detail)
 - The planting of shrubberies which will restrict air circulation below floors of buildings is prohibited. No garden to be within 3'0" of building.
 - All surface drains where possible to be kept back from any buildings, fences, etc.
 - Fence or gate posts adjoining buildings to be kept a minimum distance of 1" clear from the wall of bldg.
 - Tanks. All timber in construction of tank stands to be Red Gum. A minimum distance of 9" clear is to be maintained between tanks & any adjoining building, fence or other structure.
 - SYSTEMATIC INSPECTION TO AVOID:-**
 - Interruption of adequate ventilation below floors.
 - Raising of exterior grade levels.
 - Leaks in pipes.
 - The improper storage under buildings of materials susceptible to termite attack.
 - Faulty disposal of water from roofs & tanks.
 - Faulty drainage, both surface & subsoil.
 - Wood stacks being built within 1'6" of buildings or fences.

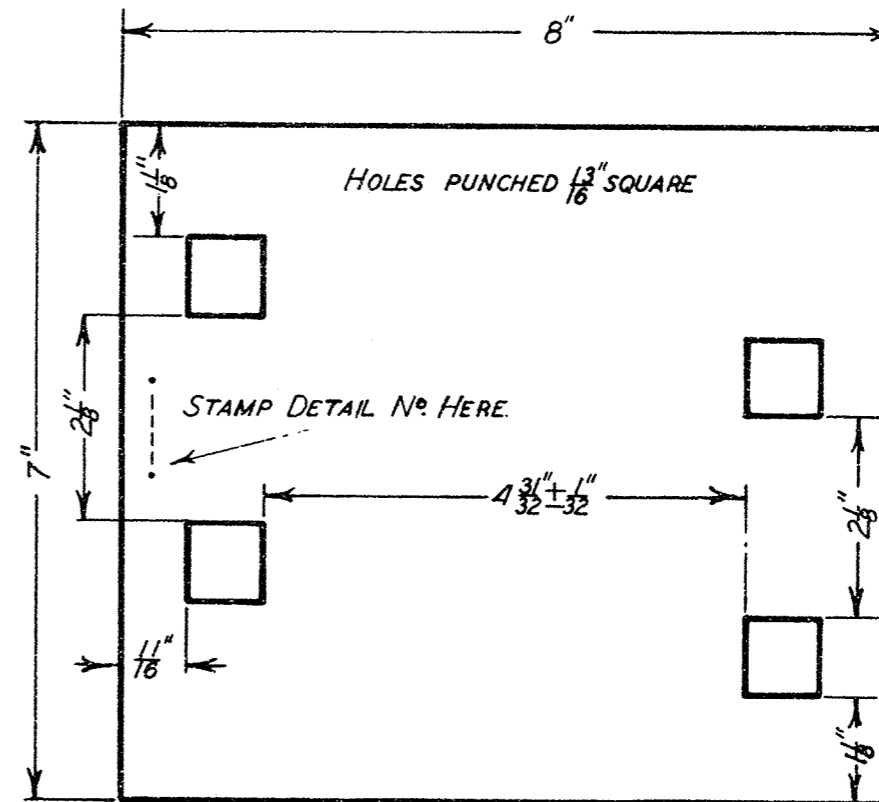


VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved <i>[Signature]</i> Chief Civil Engineer	Adopted OCT. 1941 AMENDED TO JUNE 1944.
STANDARD DRAWING		Drawn by V. W. L.	Checked by L. E. M.
TERMITE CONTROL		PLAN No. F365A	
METHODS OF CONSTRUCTION		SCALE— $\frac{3}{8}$ " = 1'0"	
		<i>[Signature]</i> Chief Architect.	

This Plan Supersedes Plan No 179-39



5 3/4" FLANGE RAIL.



5" FLANGE RAIL.

THICKNESS OF PLATE	DETAIL N ^o	
	5" FLANGE	5 3/4" FLANGE
1/4"	1010.	1009.
3/16"	2010.	2009.
1/2"	3010.	3009.

NOTES:— MATERIAL : MILD STEEL PLATE

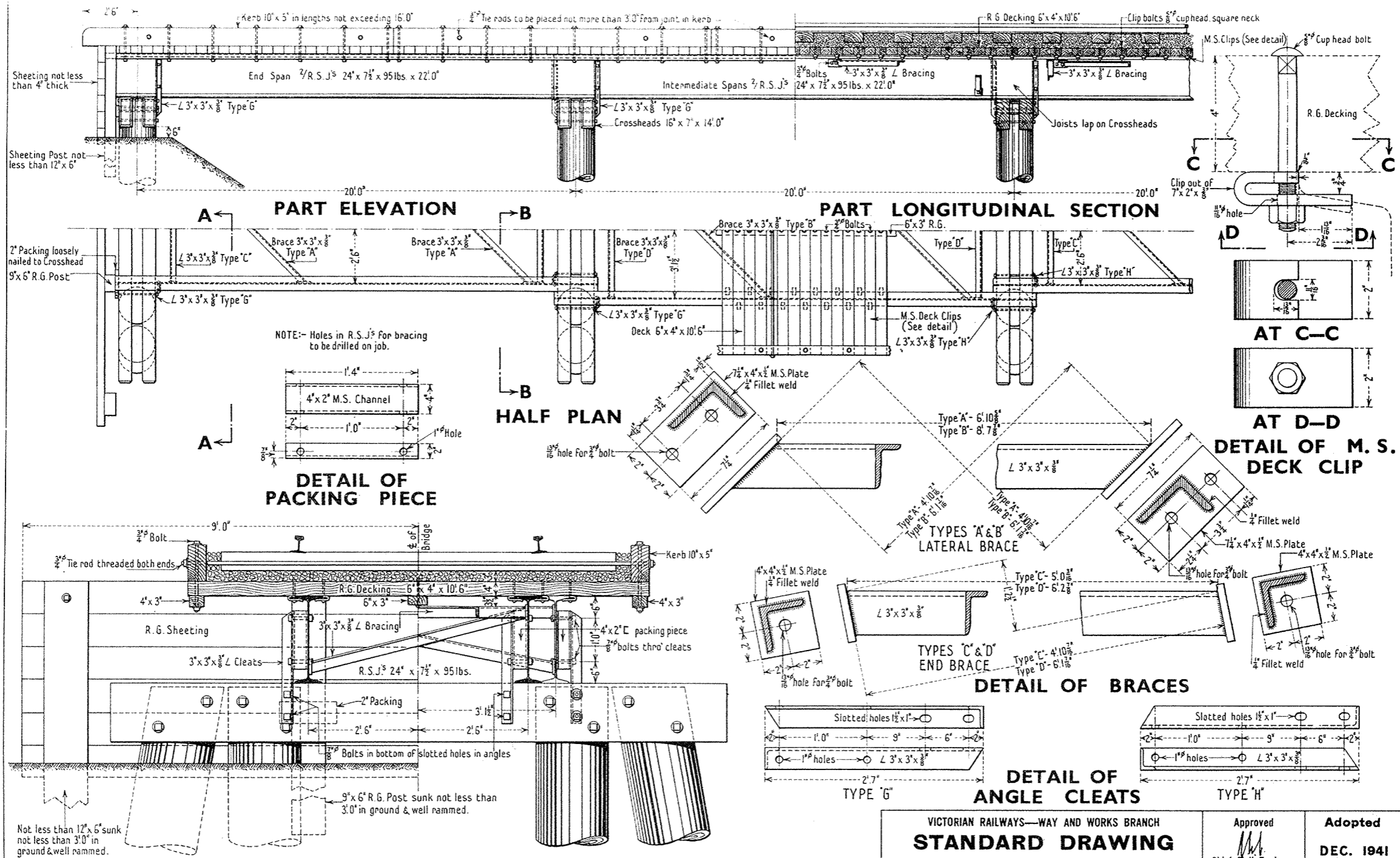
PLATES TO BE MARKED OFF FROM TEMPLATES
AND PUNCHED TO TOLERANCES SHOWN

SIDES OF SQUARE HOLES TO BE PARALLEL TO SIDE OF PLATE

V. R.
SLEEPER PLATES
(PACKING)

APPROVED
[Signature]
CHIEF CIVIL ENGR.
Checked _____
Passed *[Signature]*
Eng^r of Mech & W.S.

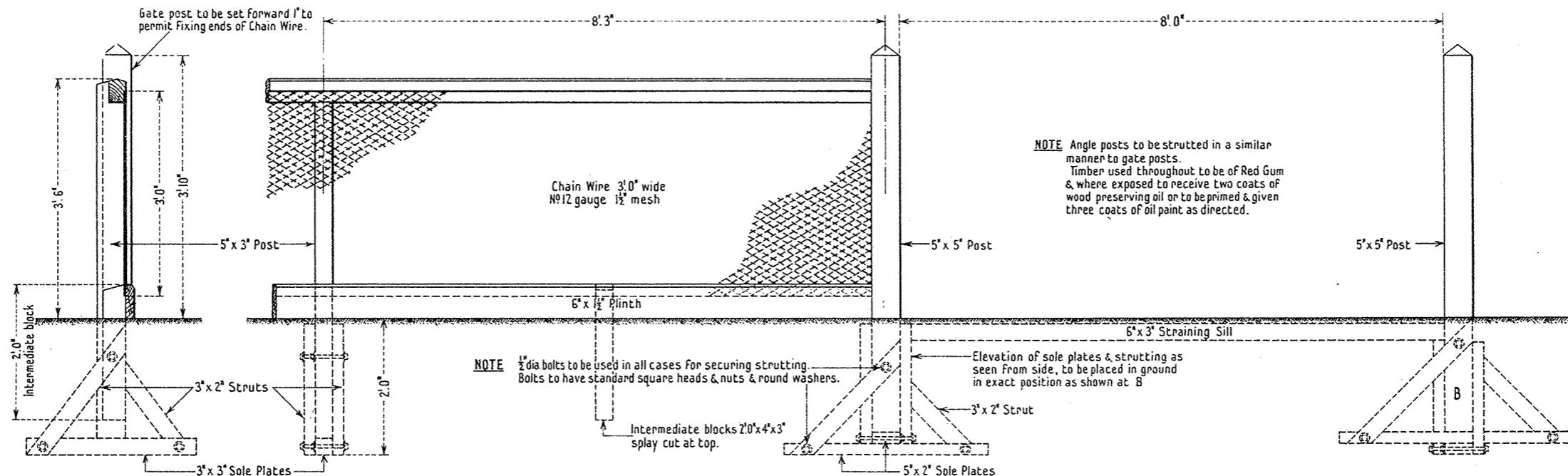
ADOPTED
1941
PLAN N^o
F 366A



A	14-1-47	Type 'A' Brace adjusted.
Rev.	Date	Amendment

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
 SUPERSTRUCTURE OF BRIDGES OF 20' SPANS
 WITH ROLLED STEEL JOISTS ON TIMBER PIERS
 2 No 24' x 7 1/2' R.S.J's PER OPE
 SCALES:- 3", 1 1/2", 3/4", 1/2", 3/8" = 1' 0"

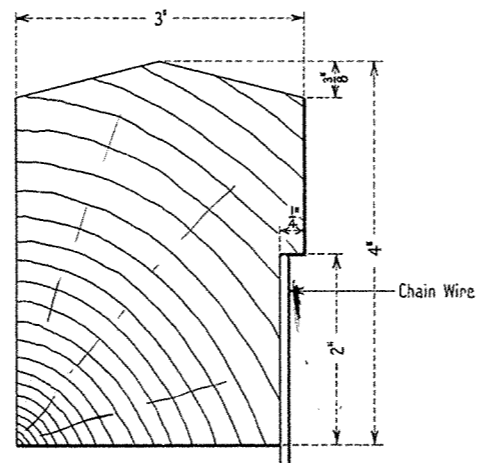
Approved	Adopted
Chief Civil Engineer	DEC. 1941
Drawn by V. W. L.	Checked by T. H. J.
Engr. of Struct'l Design	PLAN No. F367A



SECTION

ELEVATION OF ONE BAY

GATEWAY OPENING



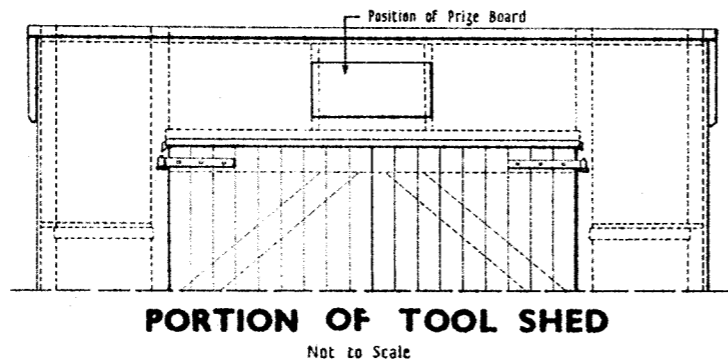
SECTION OF TOP RAIL

This plan supersedes plan No 861-37

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.W.</i> Chief Civil Engineer	DEC. 1941
CHAIN WIRE FRONT FENCE		Drawn by	Checked by
FOR DEPARTMENTAL RESIDENCES		V. W. L.	W. J. V.
SCALES:— 6" & 1/2" = 1' 0"		<i>H. Sutcliffe</i> Chief Architect	PLAN No. F368

1" Board bolted to Studs at corners
 White letters on black ground.


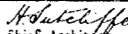
Note: The word "Northern" is typical only and should read as required for the District concerned.
 The word "First" is typical only and should read as required First, Second, Third or Most Improved.



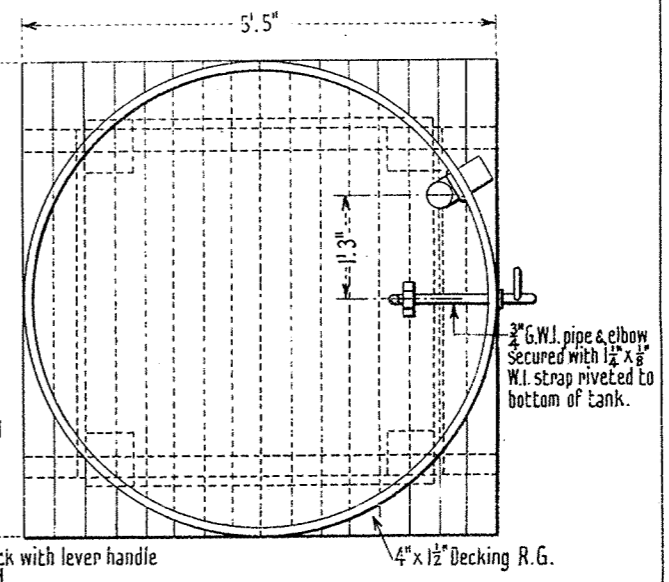
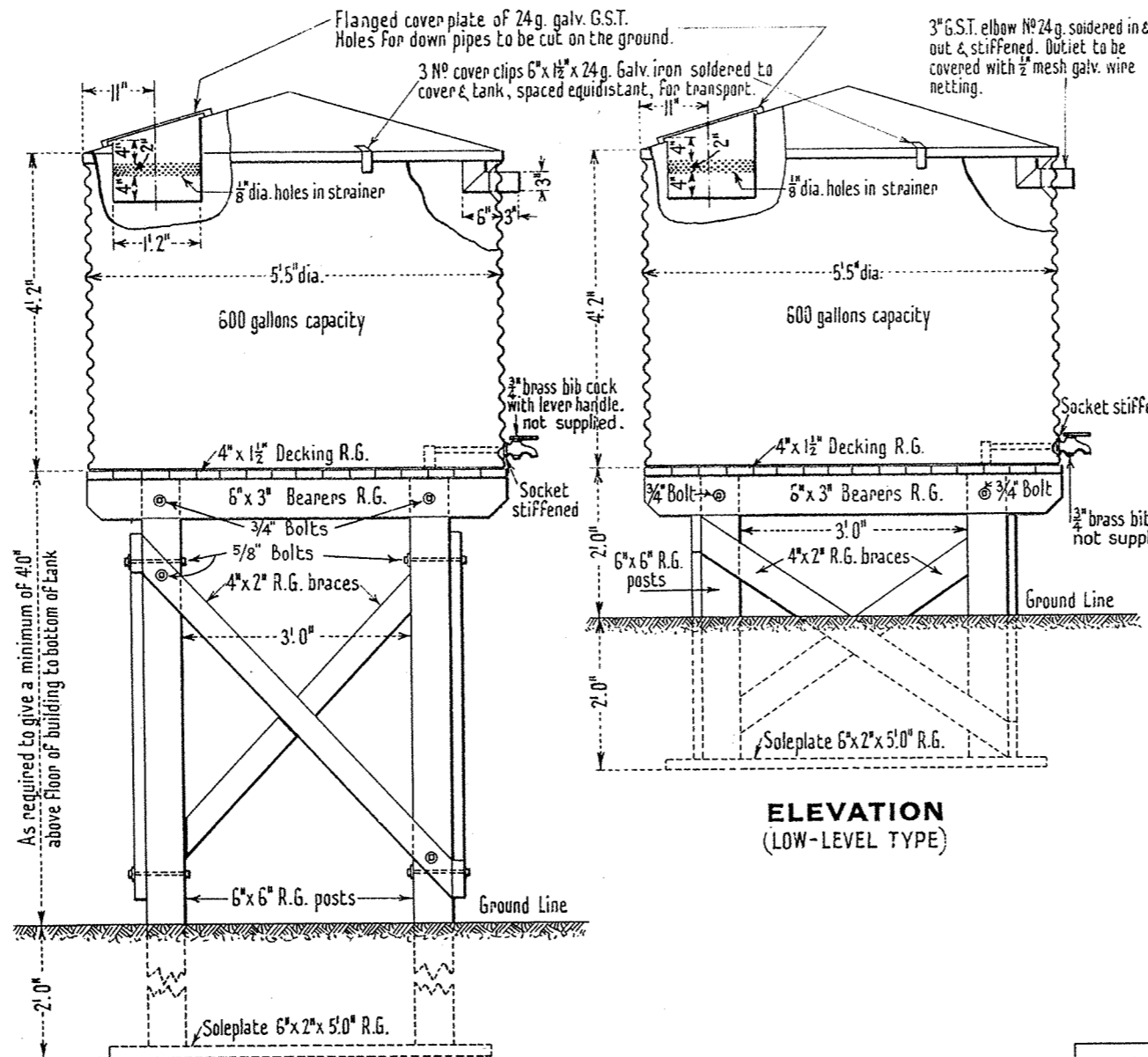
This Plan supersedes Plan No 55-33

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
GANGERS TOOL SHED
PRIZE BOARD

SCALE: 3 Inches = 1 Foot

Approved

 Chief Civil Engineer
 Drawn by
 C.M.F.
 Checked by
 S.S.

 Chief Architect

Adopted
 JAN 1942
 PLAN No.
F369

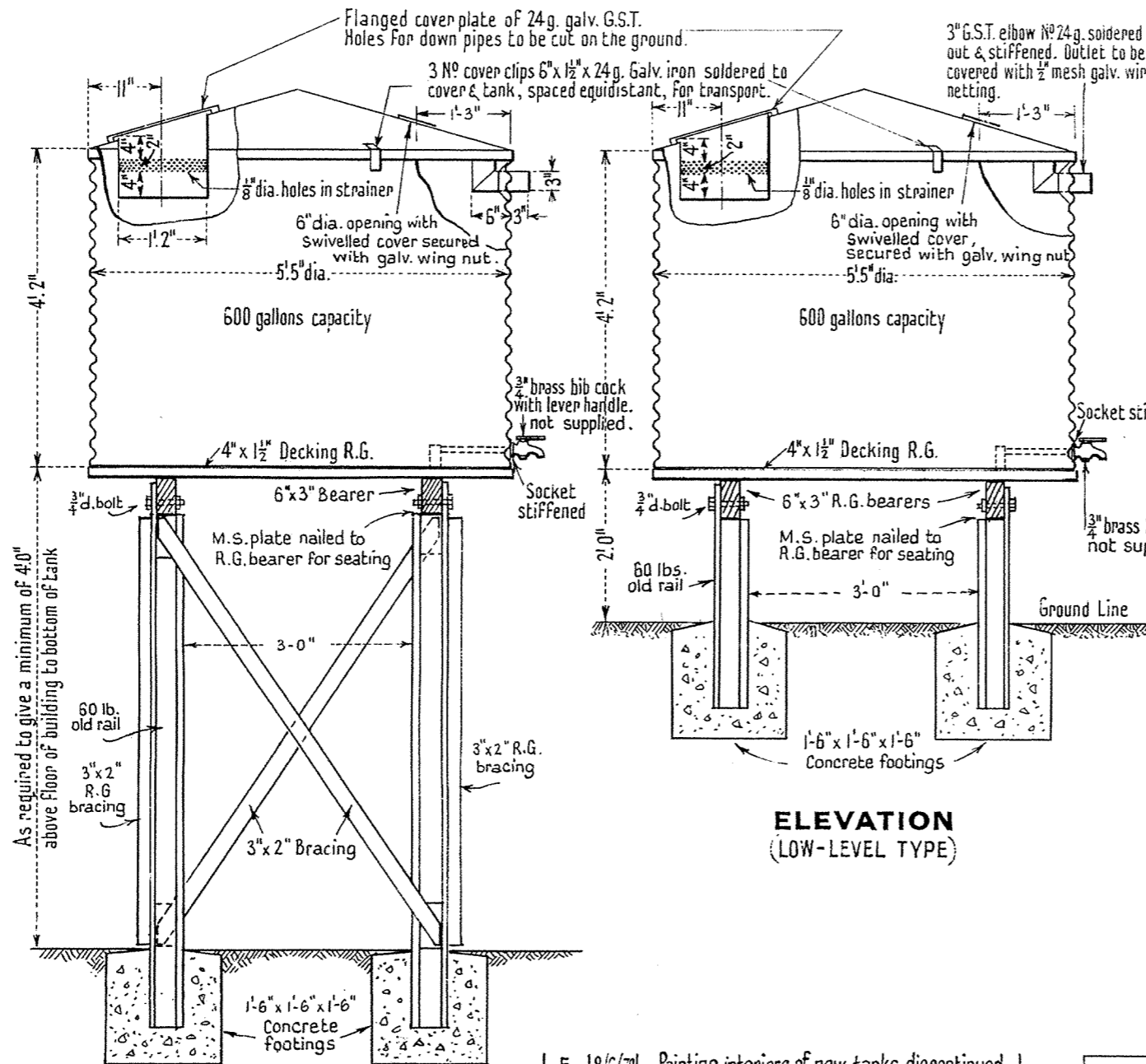


PLAN

NOTES:—
 Cover 24 g. sheet iron. Joints to be single riveted $3\frac{1}{2}$ " pitch.
 This cover is to have a 14" dia. opening as shown.
 Cylindrical portion to be made with 9'-0" sheets of 24 g. galv. corrugated iron. The vertical joints to be double riveted at each corrugation & the horizontal joints to be single riveted 6" pitch.
 Bottom 24 g. flat galv. iron. Joints to be single riveted $3\frac{1}{2}$ " pitch.
 Rim to be folded & soldered outside.
 All rivets throughout tank to be soldered inside & outside.
 Bottom soldered both sides. Sides on outside only.
 All materials to be of approved brands.
 A minimum distance of 18" clear is to be maintained between tanks, any adjoining building, fence or other structure.
 Orders for tanks to be placed on the Storekeeper, Spotswood Workshops.
 Lids to be ordered separately.
 Painting :- as for F345^B
 Flexible joints are to be provided for coupled tanks.

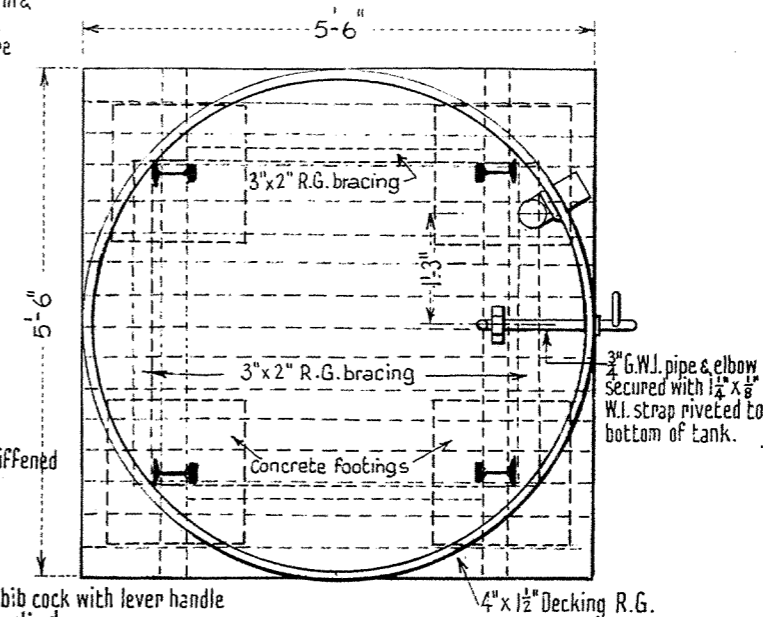
This plan supersedes plans No 385-30 & No F370^A

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.A.</i>	FEB. 1946
600 GALLON TANK		Chief Civil Engineer	
(SQUAT TYPE) AND STAND		Traced by <i>V.W.L.</i>	Checked by <i>E.M.</i>
SCALE: $\frac{1}{2}$ " = 1'-0"		<i>W. Sutcliffe</i>	PLAN No F 370^B
		Chief Architect	



**ELEVATION
(HIGH-LEVEL TYPE)**

**ELEVATION
(LOW-LEVEL TYPE)**



**PLAN
(HIGH LEVEL TYPE)**

NOTES:—

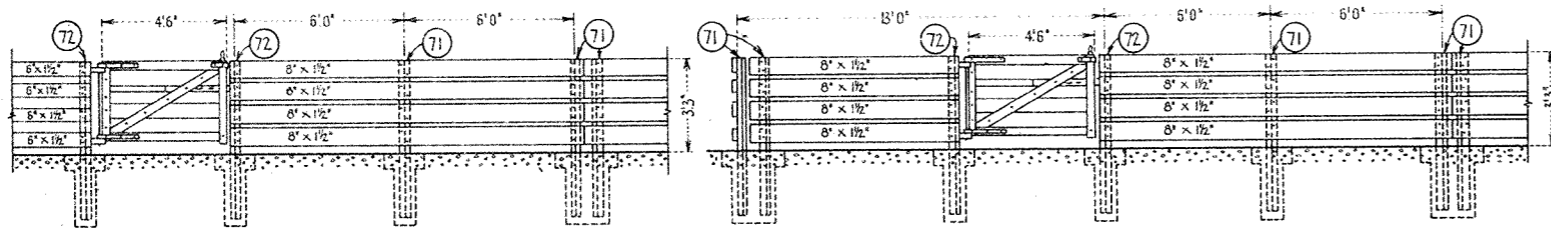
Cover 24 g. sheet iron. Joints to be single riveted $3\frac{1}{2}$ " pitch. This cover is to have a 14" dia. opening as shown. Cylindrical portion to be made with 9'-0" sheets of 24 g. galv. corrugated iron. The vertical joints to be double riveted at each corrugation & the horizontal joints to be single riveted 6" pitch. Bottom 24 g. flat galv. iron. Joints to be single riveted $3\frac{1}{2}$ " pitch. Rim to be folded & soldered outside. All rivets throughout tank to be soldered inside & outside. Bottom soldered both sides. Sides on outside only. All materials to be of approved brands. A minimum distance of 18" clear is to be maintained between tanks, any adjoining building, fence or other structure. Orders for tanks to be placed on the Storekeeper, Spotswood Workshops. Lids to be ordered separately.

Flexible joints are to be provided for coupled tanks. Plan of Low level type would be same except that it has no fillers or bracing.

This plan supersedes plans No 385-30 & No F 370 A, B, C, D.

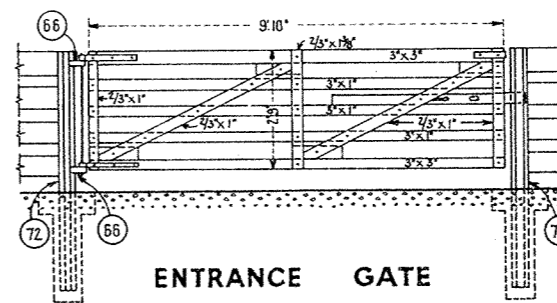
E	8/6/70	Painting interiors of new tanks discontinued.
D	4/9/68	Size of deck reduced to 5'-6" square.
C	7/7/65	Opening for filling tank with hose. Timber posts replaced by old rails set in concrete.
Rev:	Date	Amendment
		Amended by

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	FEB. 1946
600 GALLON TANK		Chief Civil Engineer	
(SQUAT TYPE) AND STAND		Traced by	Checked by
		V.W.L.	L.E.M.
		<i>[Signature]</i>	PLAN No
		Chief Architect	F 370E

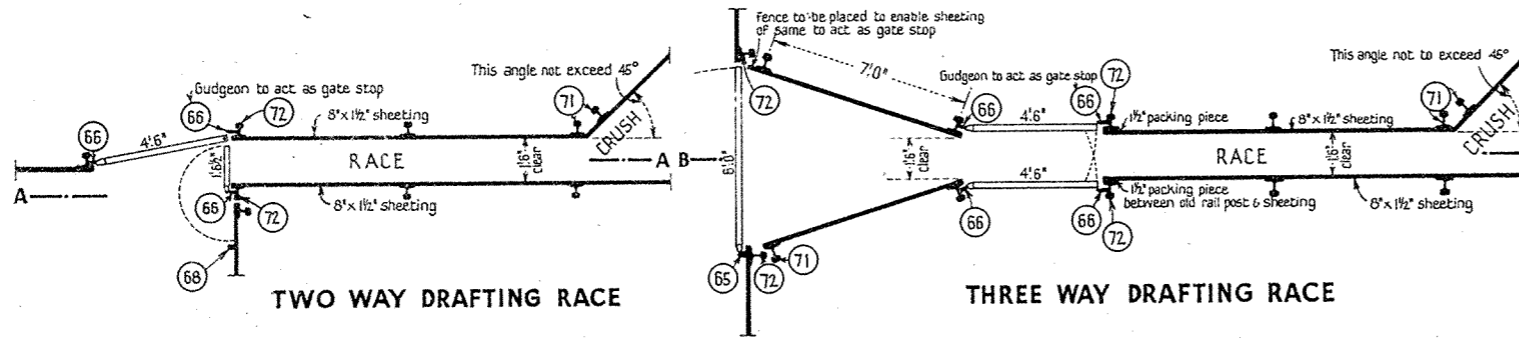


SECTION A-A

SECTION B-B

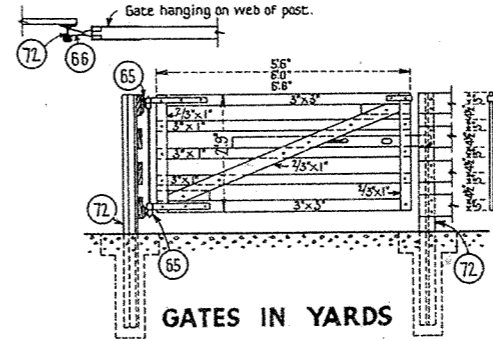


ENTRANCE GATE

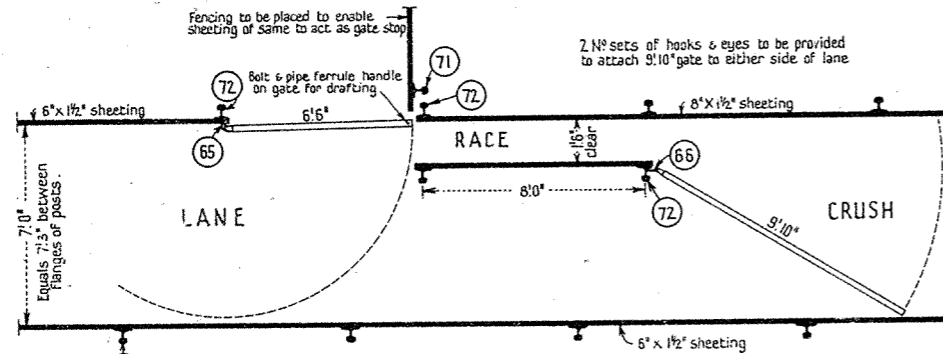


TWO WAY DRAFTING RACE

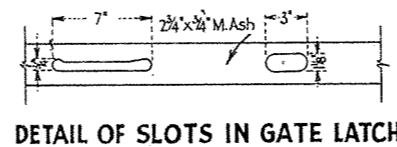
THREE WAY DRAFTING RACE



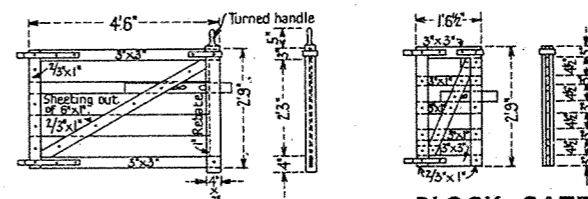
GATES IN YARDS



DRAFTING FACILITIES IN SHEEP LANE

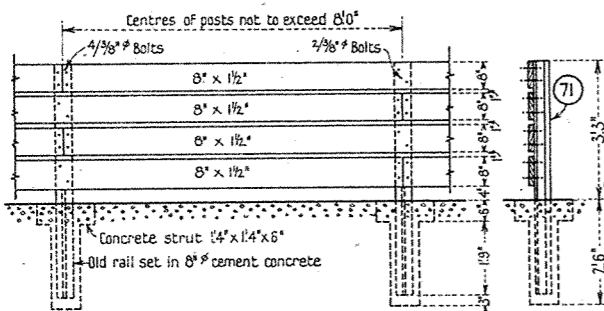


DETAIL OF SLOTS IN GATE LATCH

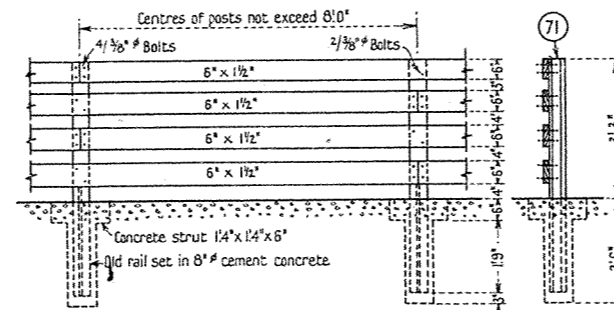


DRAFTING GATE

BLOCK GATE TO DRAFTING RACE



FENCING FOR DRAFTING RACE & CRUSH



FENCING IN YARDS ETC.

— NOTES —
 Post holes to be formed with 8" boring auger to minimum depth of 2'6".
 Cement concrete to be well rammed around posts & concrete strut.
 1'4" x 1'4" x 6" formed below finished surface.
 For details of old rail posts, gudgeons, keepers etc. see plan No 167-40.
 Bolts in Gates. Projection of bolts past the nuts to be cut off, riveted over and filed to a smooth finish.
 All bolts to be the Cup Head Square Neck type.
 Exposed ends of fence rails to be well rounded off.

This plan supersedes Plan No 387/40

Victorian Railways - Way and Works Branch
STANDARD DRAWING
SHEEP FENCING, GATES & DRAFTING FACILITIES

Approved

Adopted

Chief Civil Engineer

MAY 1942

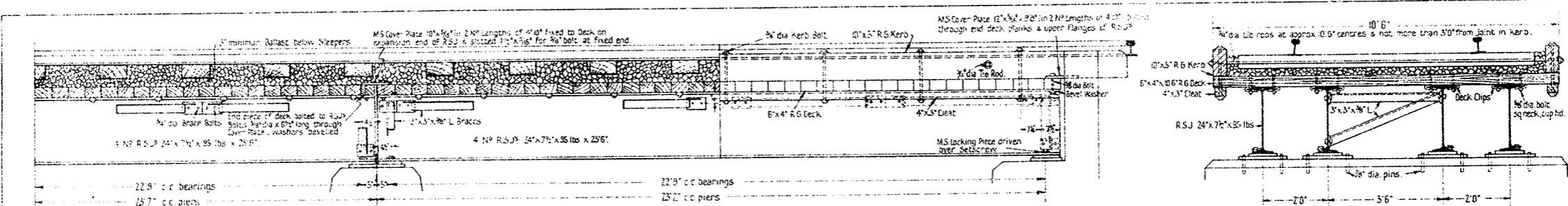
Drawn by C.M.T.

Checked by S.S.

PLAN No

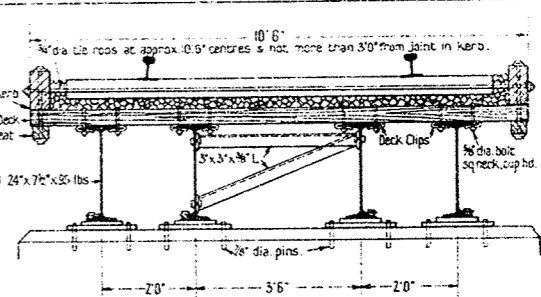
Chief Architect

F 372

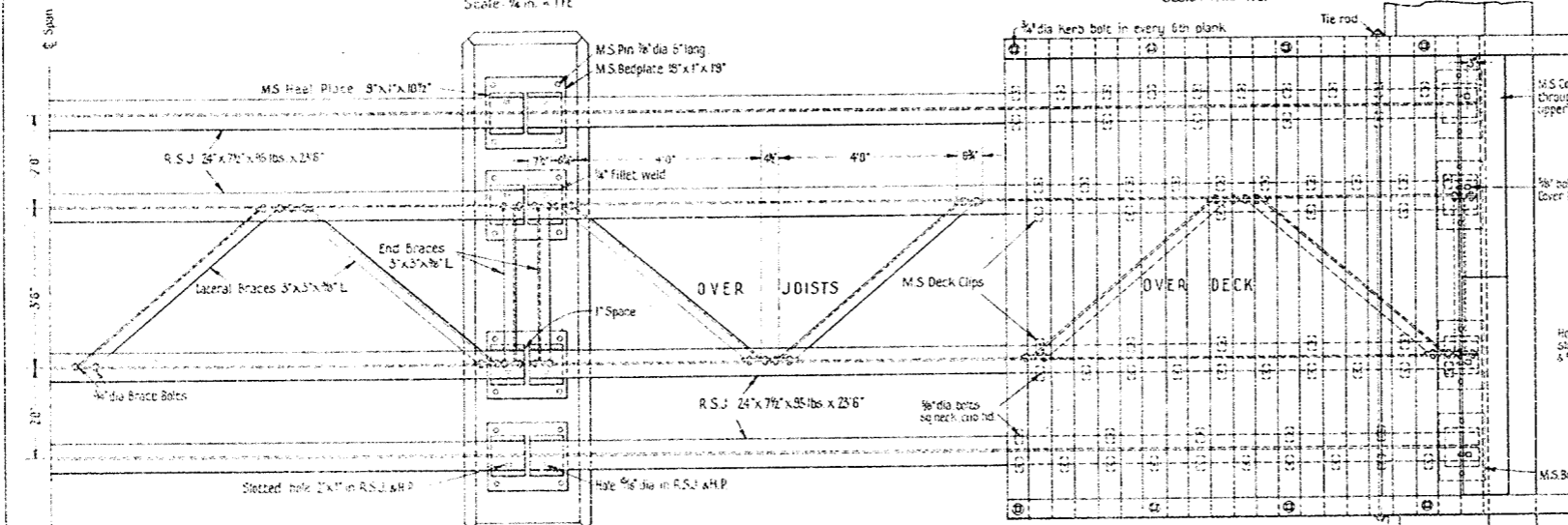


LONGITUDINAL SECTION
Scale - 1/4 in. = 1 ft.

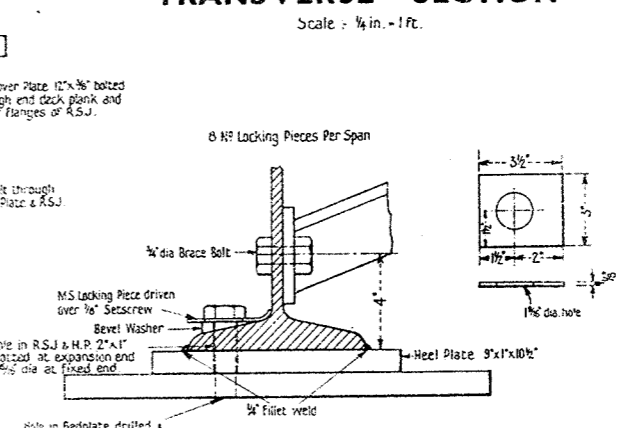
SIDE ELEVATION
Scale - 1/4 in. = 1 ft.



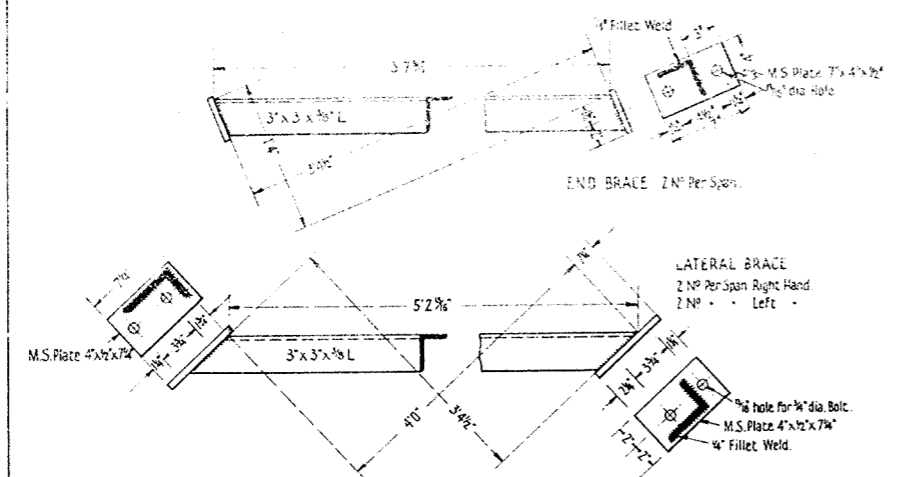
TRANSVERSE SECTION
Scale - 1/4 in. = 1 ft.



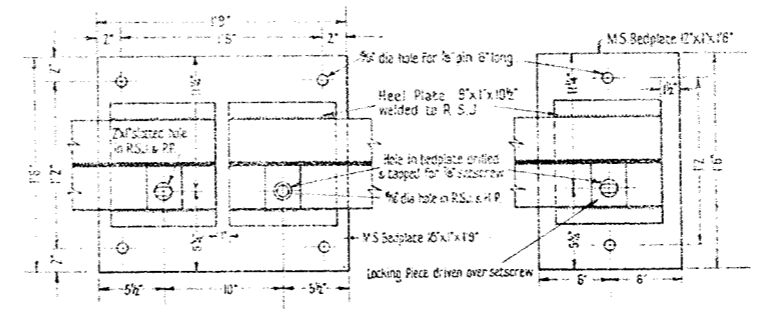
PLAN
Scale - 1/2 in. = 1 ft.



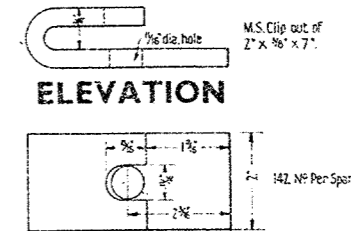
DETAIL OF LOCKING PIECE
Scale - 1 1/2 in. = 1 ft.



DETAIL OF BRACES
Scale - 3/4 in. = 1 ft.



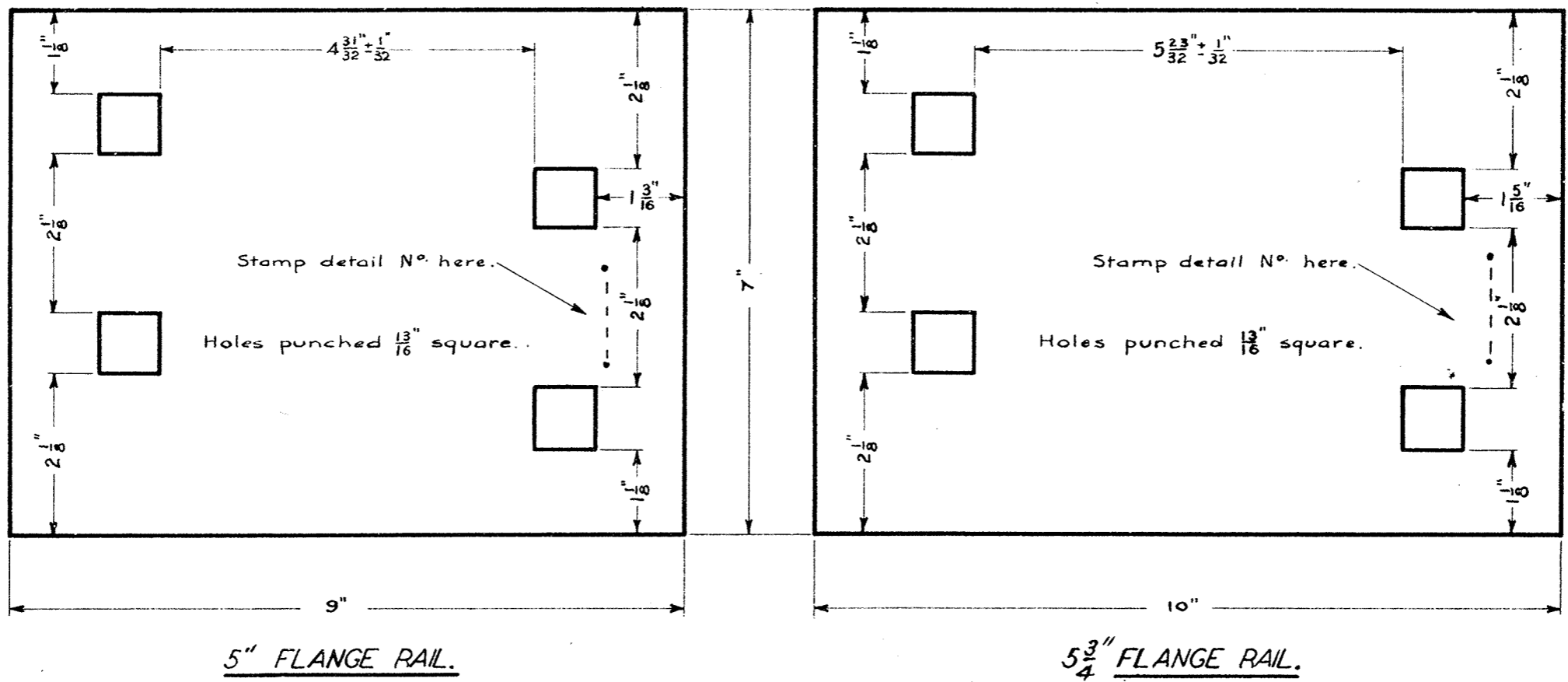
DETAIL OF BEDPLATES
Scale - 3/4 in. = 1 ft.



DETAIL OF DECK CLIP
Scale - 3 in. = 1 ft.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>W.J.</i> Chief Civil Engineer	APRIL 1942.
SUPERSTRUCTURE FOR STANDARD R.S.J. BRIDGES		Drawn by C.M.T.	Checked by T.H.J.
4 No. 24" x 7 1/2" x 23'6" JOISTS PER DPE.		<i>Blom</i> Engineer of Structure Design	PLAN No. F 373

Note: Where directed, bracing is to be welded to R.S.J. & 3" x 3" x 3/8" L, supplied in running lengths & cut to fit on the job.



5" FLANGE RAIL.

5 3/4" FLANGE RAIL.

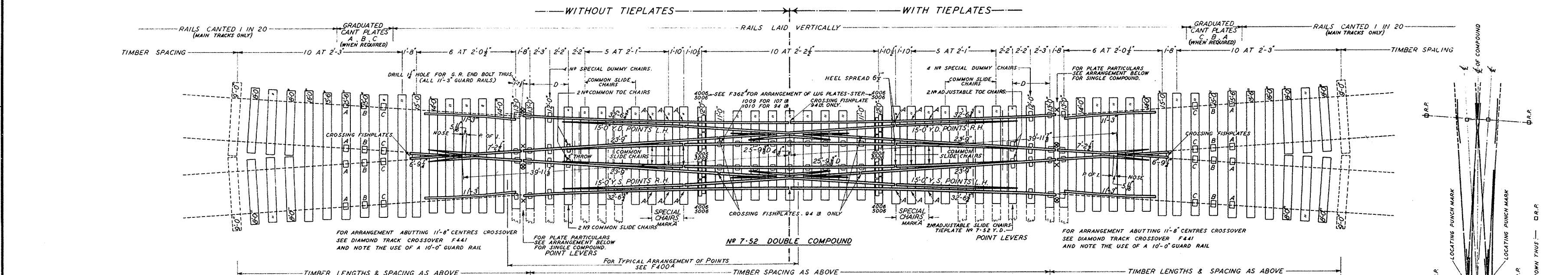
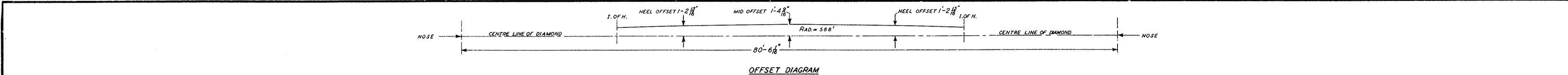
THICKNESS OF PLATE.	DETAIL N°.	
	5" FLANGE	5 3/4" FLANGE
5/8"	1001.	1002.
1"	2001.	2002.
3/4"	3001.	3002.

Notes:- Material. M.S. Plate.
 Plates to be marked off from templates
 and punched to tolerances shown.
 Sides of square holes to be parallel to side of plate.

V·R
 SLEEPER PLATES
 FLAT

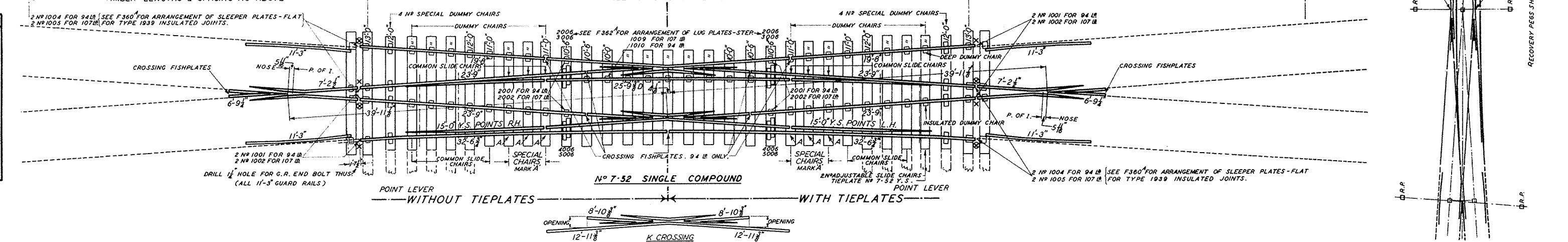
Approved *[Signature]*
 Chief Civil Engr.
 Checked *G.V.E.*
 Passed *[Signature]*
 Engr. of Mach & W.S.

Adopted
 1941
 Previous 228-41
 PLAN N°
 F 374A



REFERENCE	DETAIL NO.	DRG NO.
LUG PLATES - STEP	2006, 3006, 4006, 5006	F362 ^A
SLEEPER PLATES - FLAT	1001, 1008	F374 ^A
SLEEPER PLATES - PACKING	2001, 2002	F366 ^A
SLEEPER PLATES - FLAT FOR INSUL. JTS.	1009, 1010	F360 ^A
TYPICAL ARRANGEMENT OF POINTS	1004, 1005	F400 ^A
QUANTITY OF IRONWORK & FASTENINGS		F382 ^A
GRADUATED CANT PLATES		F355
POINT LEVERS - INSTALLATION ARRANGEMENTS		F471
CLOSURES - LENGTHS & CURVING DETAILS		F456
TYPICAL ASSEMBLY OF INSULATED JOINTS - TYPE 1939		F441
GUARD RAILS		F331 ^A
DIAMOND TRACK CROSSOVER		F352 ^A
		F441

DATA	POINTS AND CROSSINGS FOR DOUBLE COMPOUND	POINTS AND CROSSINGS FOR SINGLE COMPOUND
POINT ANGLE	1° 42' 37.5"	2 SETS 15°-0' Y.S. POINTS. 1-R.H. 1-L.H.
CROSSING NUMBERS	7-52-A	2 SETS 15°-0' Y.D. POINTS. 1-R.H. 1-L.H.
CROSSING ANGLES	7° 34' 6.6"	2 V CROSSINGS No 7-52-A
R.E. OPENINGS	1'-2 1/8" (SWING), 10 1/2" VEE	2 K CROSSINGS No 7-52-A
GAUGE BETWEEN STOCK RAILS AT TOE OF POINTS	5'-3 3/8"	2 PAIR 11'-3" GUARD RAILS WITH BLOCKS.
GAUGE AT CENTRES OF K CROSSINGS	5'-2 1/2"	CLOSURE RAILS 2 - 25'-0 3/8" D. CVD.
GAUGE AT HEELS, STRAIGHT TRACKS	5'-2 1/2"	CLOSURE RAILS 1 - 25'-0 3/8" D. CVD. 2 - 19'-8" STR.
GAUGE THROUGH CURVED TRACKS	5'-3"	2 - 25'-0" STR.
LEAD BETWEEN P.O.F. I.	79-372	



TIMBERS FOR DOUBLE COMPOUND - 12" x 8" SAWN	TIMBERS FOR SINGLE COMPOUND - 12" x 6" SAWN	NOTES
2 NR 16'-0" 4 NR 13'-0" SUP. FT. 4470	2 NR 16'-0" 10 NR 12'-0" SUP. FT. 4356	NOTE: INSULATED JOINTS SHOWN ⊗.
4 - 15'-6" 20 - 12'-0" 8 - 15'-0" 9 - 11'-0" 10 - 14'-0" 4 - 13'-0"	4 - 15'-6" 8 - 11'-0" 8 - 15'-0" 4 - 10'-6" 10 - 14'-0" 7 - 10'-0" 4 - 13'-0"	ALTERNATE POSITIONS FOR INSULATED JOINTS SHOWN X.
NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN. TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN. TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK.
10' x 5" HEWN TIMBERS 12 NR 8'-0" = 400 SUPER. FEET	10' x 5" HEWN TIMBERS 12 NR 8'-0" = 400 SUPER. FEET	POINT LEVERS SHOULD, WHEREVER PRACTICABLE, BE LOCATED ADJACENT TO THE Y.S. POINTS TO PERMIT OF THE LEADING LEVER FACING THE POINTS OPERATING THE POINTS NEAREST THE LEVERS.

VICTORIAN RAILWAYS WAY & WORKS BRANCH

COMPOUNDS DOUBLE & SINGLE

No 7-52 94 & 107 LB A.S.

CAST IRON CHAIRS

NOT TO SCALE

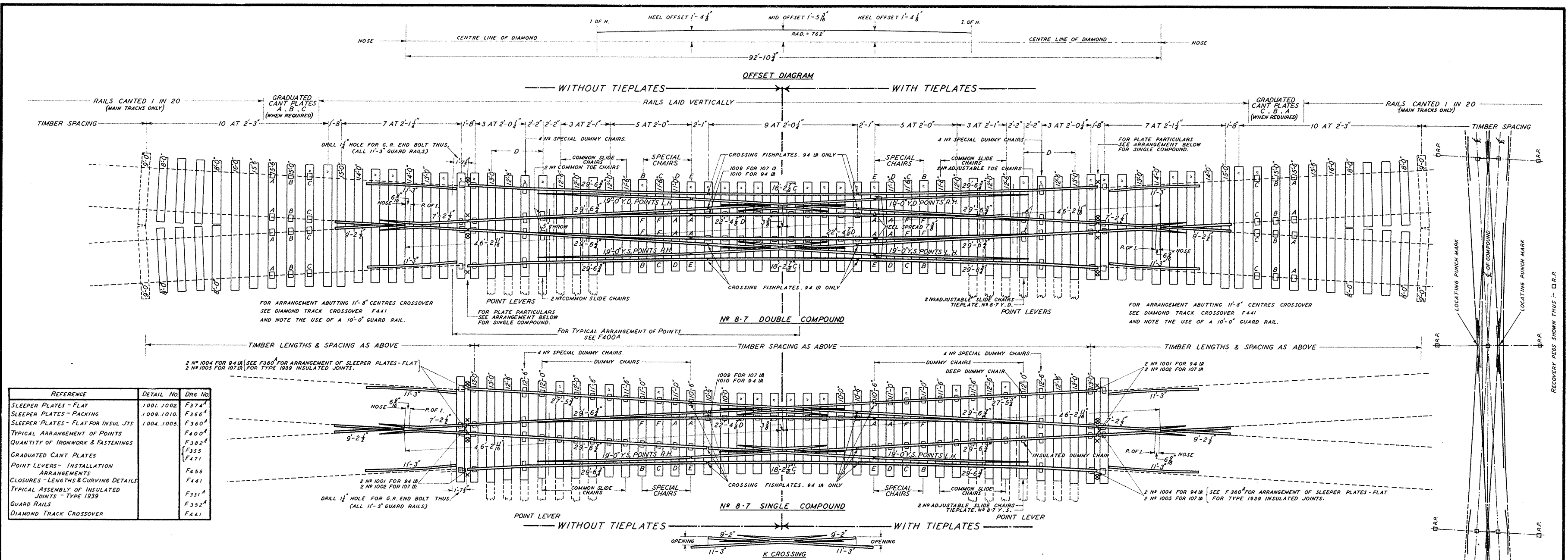
APPROVED: [Signature] CHIEF CIVIL ENGINEER

CHECKED: [Signature]

PASSED: [Signature] ENGINEER OF M.&W.S.

ADOPTED 1942

PLAN No F 376 A



REFERENCE	DETAIL NO.	DRG NO.
SLEEPER PLATES - FLAT	1001, 1002	F374 ^A
SLEEPER PLATES - PACKING	1009, 1010	F366 ^A
SLEEPER PLATES - FLAT FOR INSUL. JTS	1004, 1005	F360 ^A
TYPICAL ARRANGEMENT OF POINTS		F400 ^A
QUANTITY OF IRONWORK & FASTENINGS		F382 ^A
GRADUATED CANT PLATES		F471
POINT LEVERS - INSTALLATION ARRANGEMENTS		F456
CLOSURES - LENGTHS & CURVING DETAILS		F441
TYPICAL ASSEMBLY OF INSULATED JOINTS - TYPE 1939		F331 ^A
GUARD RAILS		F352 ^A
DIAMOND TRACK CROSSOVER		F441

DATA	POINTS AND CROSSINGS FOR DOUBLE COMPOUND	POINTS AND CROSSINGS FOR SINGLE COMPOUND
POINT ANGLE	1° 33' 18"	2 SETS 19'-0" Y.S. POINTS 1-R.H. 1-L.H.
CROSSING NUMBERS	8-7-A	2 SETS 19'-0" Y.D. POINTS 1-R.H. 1-L.H.
CROSSING ANGLES	8° 33' 24.6"	2 V CROSSINGS NR 8-7-A
R.E. OPENINGS	1'-0.8"	2 K CROSSINGS NR 8-7-A
VEE	1'-0.8" VEE	2 PAIR 11'-3" GUARD RAILS WITH BLOCKS.
GAUGE BETWEEN STOCK RAILS AT TOE OF POINTS	5'-3"	
GAUGE AT CENTRES OF K CROSSINGS	5'-2.2"	
GAUGE AT HEELS STRAIGHT TRACKS	5'-2.2"	
GAUGE THROUGH CURVED TRACKS	5'-2.2"	
LEAD BETWEEN P.O.F.I.	91.652'	

TIMBERS FOR DOUBLE COMPOUND - 12" x 6" SAWN	TIMBERS FOR SINGLE COMPOUND - 12" x 6" SAWN
2 NR 16'-0"	2 NR 16'-0"
4 - 15'-6"	4 - 15'-6"
8 - 15'-0"	8 - 15'-0"
8 - 14'-0"	8 - 14'-0"
10 - 13'-0"	10 - 13'-0"
10 - 12'-0"	10 - 12'-0"
16 NR 8'-0" = 533 SUPER. FEET	16 NR 8'-0" = 533 SUPER. FEET

NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	NOTE: EXTRA LENGTH TIMBERS, SHOWN BROKEN, TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.
10 x 5" HEWN TIMBERS	10 x 5" HEWN TIMBERS
16 NR 8'-0" = 533 SUPER. FEET	16 NR 8'-0" = 533 SUPER. FEET

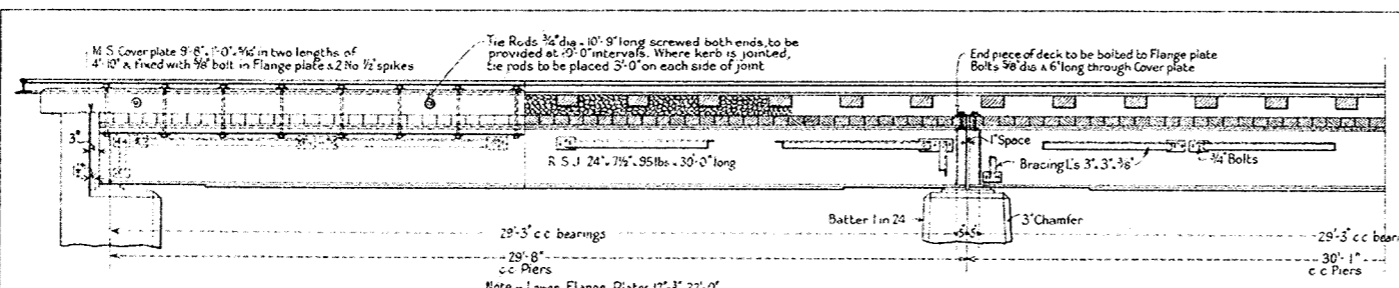
NOTES: INSULATED JOINTS SHOWN ⊗. ALTERNATE POSITIONS FOR INSULATED JOINTS SHOWN X. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. POINT LEVERS SHOULD, WHEREVER PRACTICABLE, BE LOCATED ADJACENT TO THE Y.S. POINTS TO PERMIT OF THE LEADING LEVER FACING THE POINTS OPERATING THE POINTS NEAREST THE LEVERS.

WHEN FUTURE CONVERSION OF SINGLE COMPOUND TO DOUBLE COMPOUND IS CONTEMPLATED, THE DOUBLE COMPOUND TIMBERS MUST BE PROVIDED. SPACING AT D TO BE ARRANGED, WHEN NECESSARY, TO SUIT METHOD OF OPERATION. FOR EXTRA LENGTH TIMBERS SHOWN BROKEN REFER TO STANDARD DRAWING F456 FOR HAND WORKED POINTS OTHER THAN PLUNGER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUNGER LOCKED, INTERLOCKED AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS.

VICTORIAN RAILWAYS WAY & WORKS BRANCH
COMPOUNDS DOUBLE & SINGLE
 NR 8-7 94 & 107 LB A.S.
 CAST IRON CHAIRS
 NOT TO SCALE

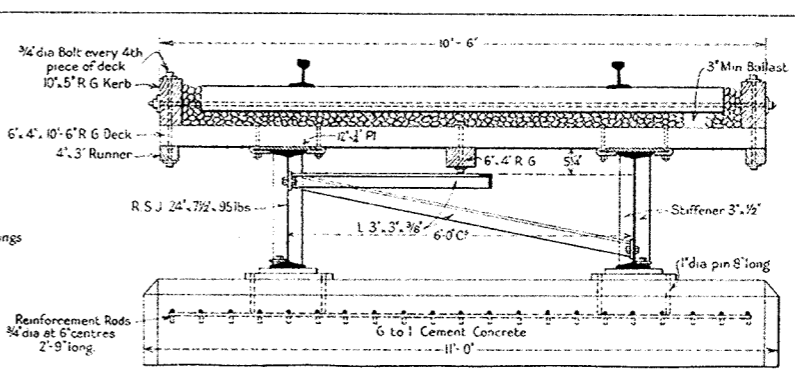
APPROVED	ADOPTED
CHIEF CIVIL ENGINEER	1942
CHECKED	PLAN NR
PASSED	F 377 ^A
ENGINEER OF M.E.W.S.	

RECOVERY PEGS SHOWN THUS □ R.P.P.

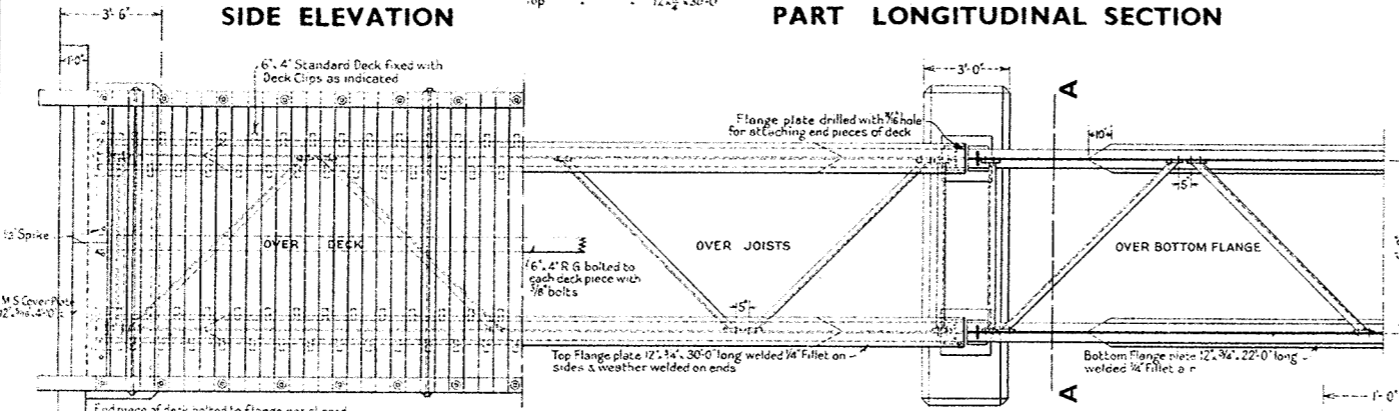


SIDE ELEVATION

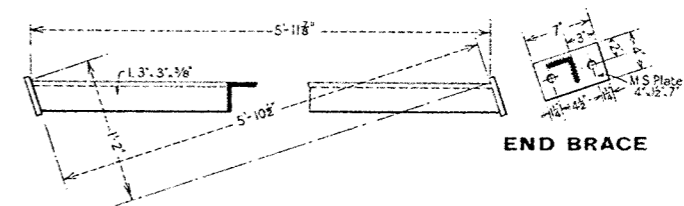
PART LONGITUDINAL SECTION



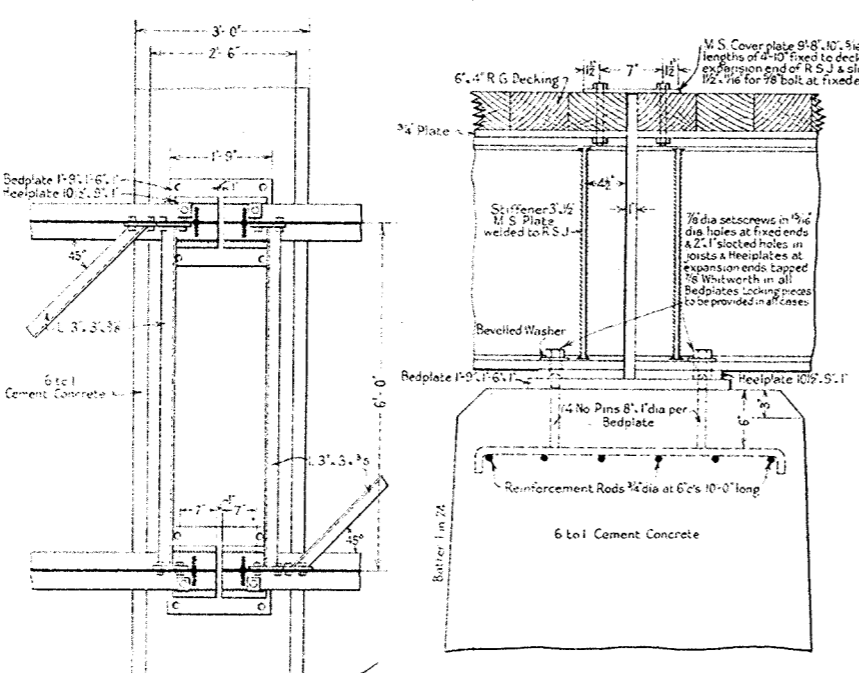
CROSS SECTION A-A



PART PLAN

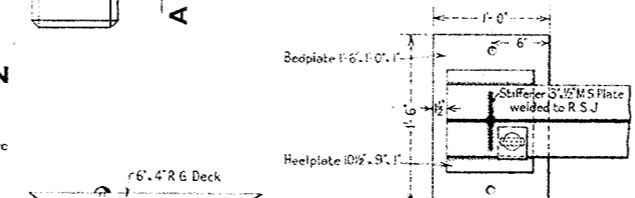


END BRACE



DETAIL OF BRACING OVER PIERS

BEDPLATE DETAIL FOR PIERS

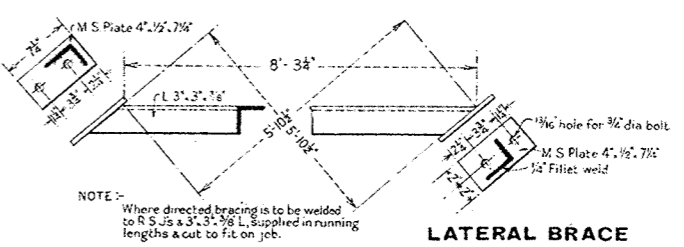


ON ABUTMENTS

DETAIL OF JOISTS

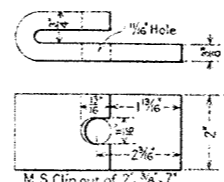
ON PIERS

DETAIL OF BEDPLATES

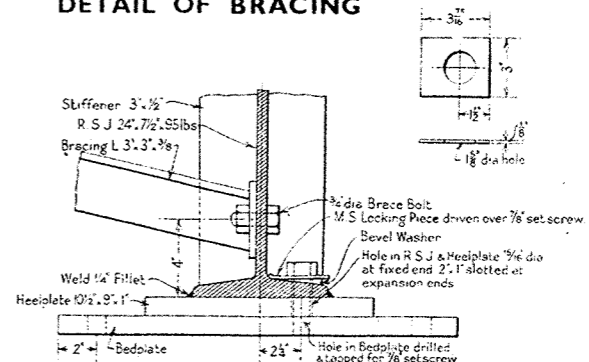


LATERAL BRACE

DETAIL OF BRACING



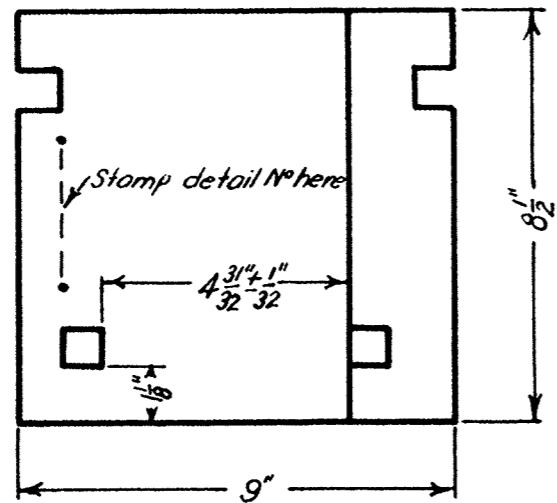
DETAIL OF DECK CLIP



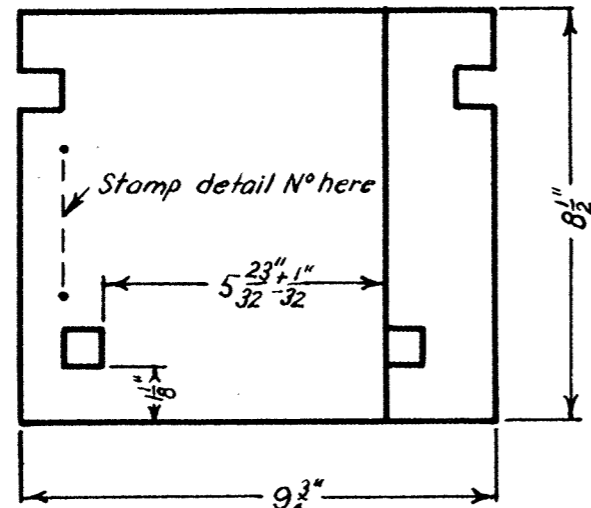
DETAIL OF LOCKING PIECE

This drawing supersedes Plan No F 360

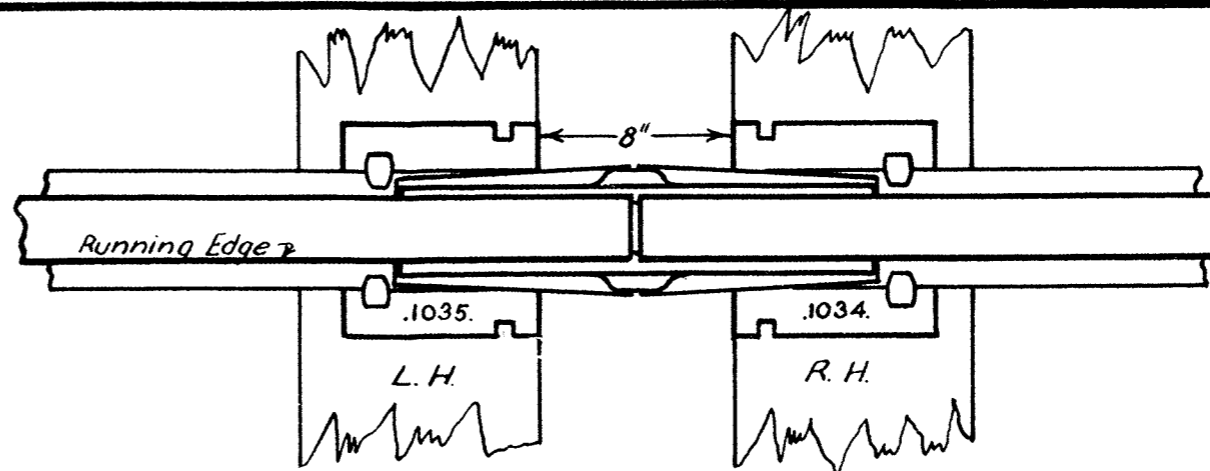
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.H.</i>	JUNE 1943
30 FT. OPE BRIDGE WITH CONCRETE PIERS		Chief Civil Engineer	
2 NO. PLATED 24" x 7 1/2" R.S.J.'s PER OPE		Drawn by K.F.L.	Checked by T.H.J.
DETAILS OF SUPERSTRUCTURE		<i>H. Brown</i>	PLAN No. F 380A
		Engineer of Structural Design	



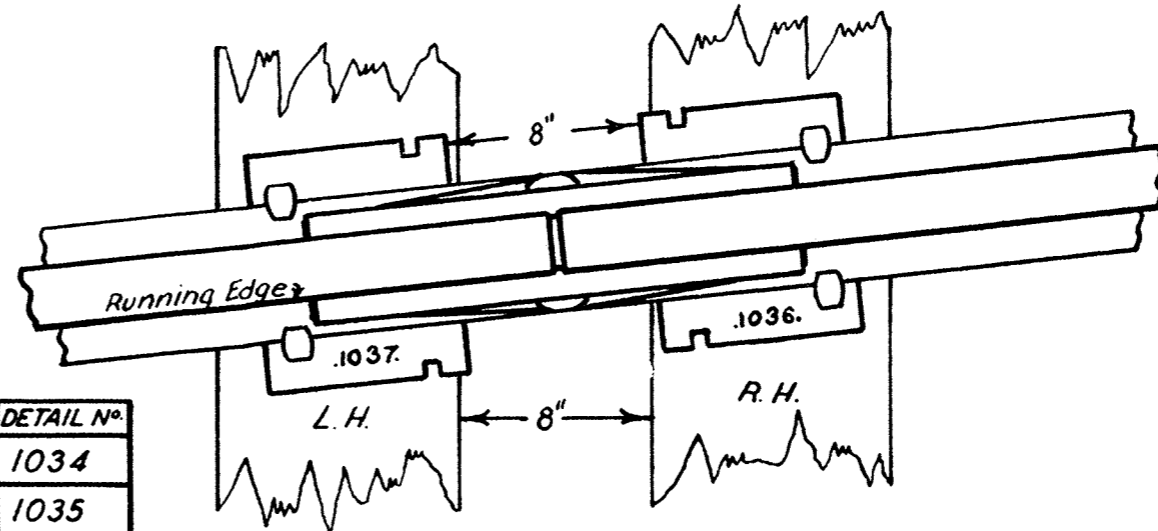
80, 90 & 94 LB. L.H.



100, 107 & 110 LB. L.H.



TYPICAL ARRANGEMENT
80, 90 & 94 LB. INSULATED JOINT
(Shown square with sleepers)



TYPICAL ARRANGEMENT
100, 107 & 110 LB. INSULATED JOINT
(Shown at inclination to sleepers)

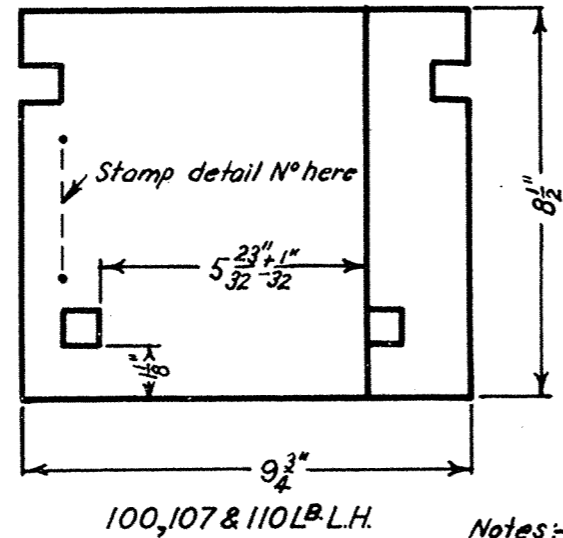
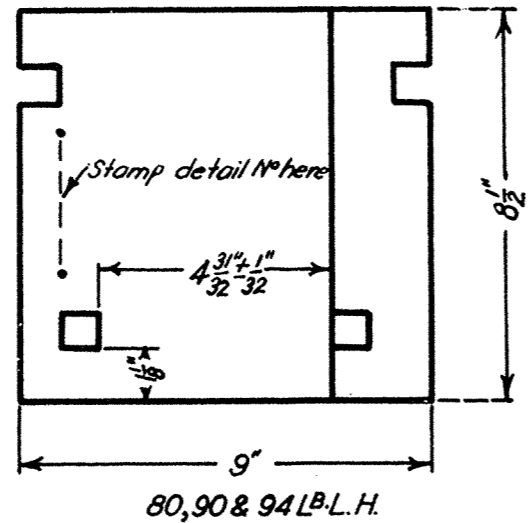
WEIGHT	HAND	DETAIL N ^o .
80, 90 & 94 LB.	R.H.	1034
	L.H.	1035
100, 107 & 110 LB.	R.H.	1036
	L.H.	1037

Notes:- Material Serviceable Bridge Plates
Details of manufacture shown on Plan N^o 403-42

V R
SLEEPER PLATES-1 IN 20
FOR TYPE 1939
INSULATED JOINTS
(INSTALLATION)

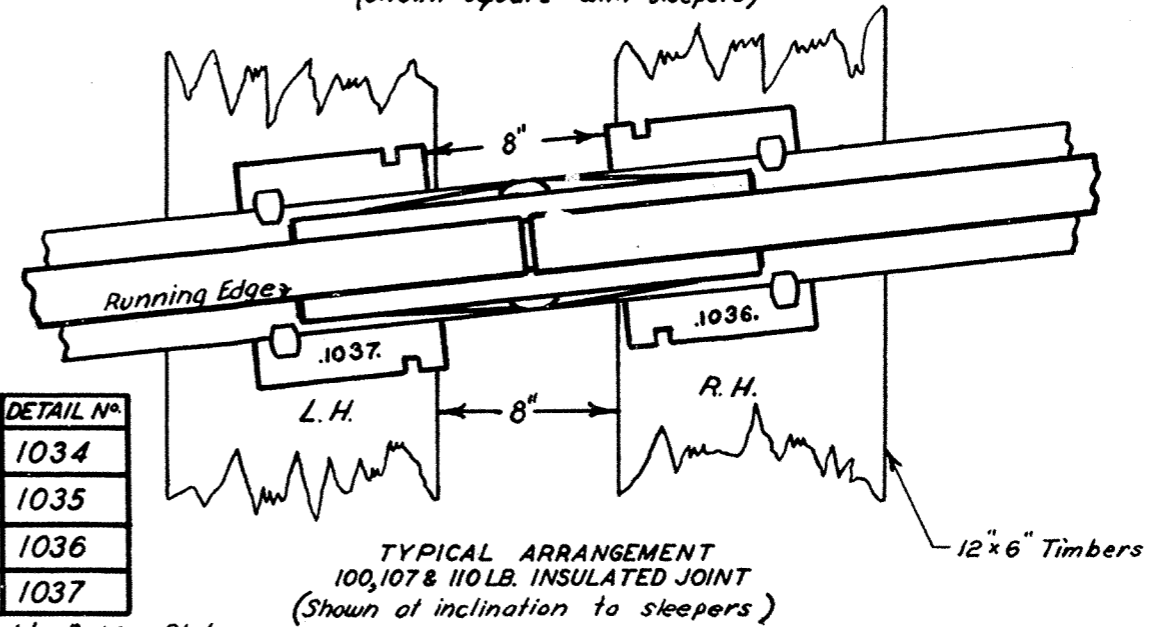
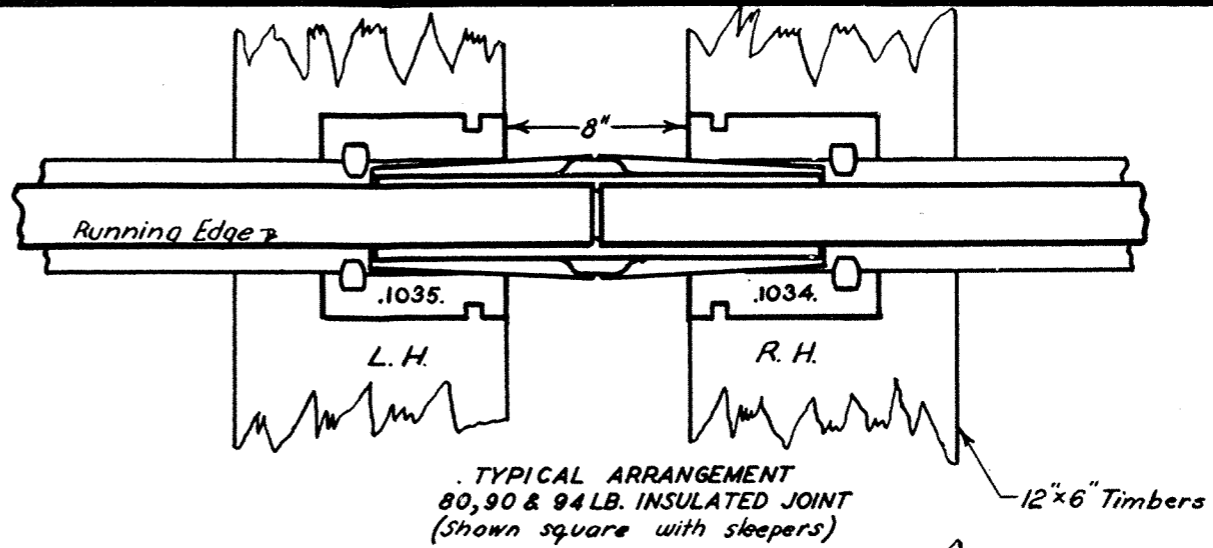
Approved *[Signature]*
Chief Civil Engr.
Checked *K.S.*
Passed *[Signature]*
Eng^r of M & W.S.

Adopted
1942
PLAN N^o
F381



WEIGHT	HAND	DETAIL N°
80, 90 & 94 LB.	R.H.	1034
	L.H.	1035
100, 107 & 110 LB.	R.H.	1036
	L.H.	1037

Notes:- Material Serviceable Bridge Plates
 Details of manufacture shown on Plan N° 403-42



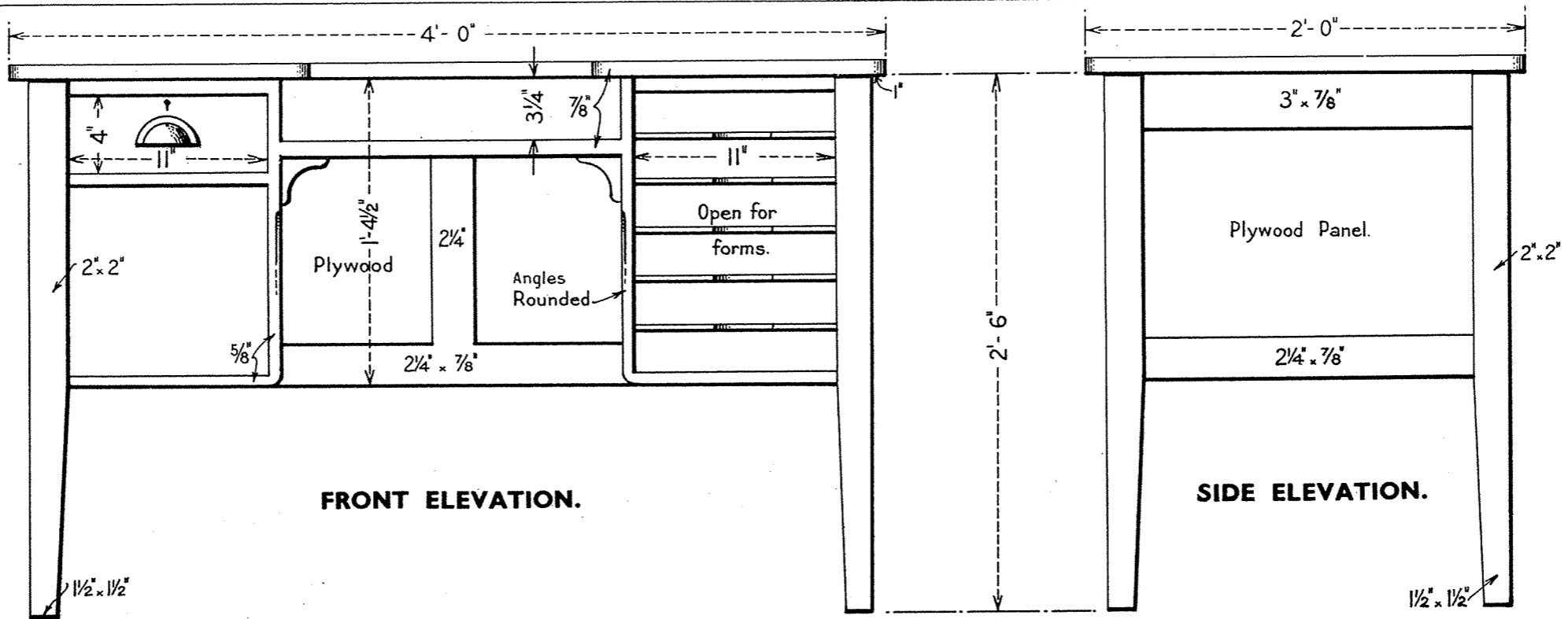
SIGNAL & TELEGRAPH
 OFFICE ENGINEER

Revision	Date	Amendment	Amend by
A	19-2-63	12"x6" Timbers added.	L.G.E.

V R
 SLEEPER PLATES-1 IN 20
 FOR TYPE 1939
 INSULATED JOINTS
 (INSTALLATION)

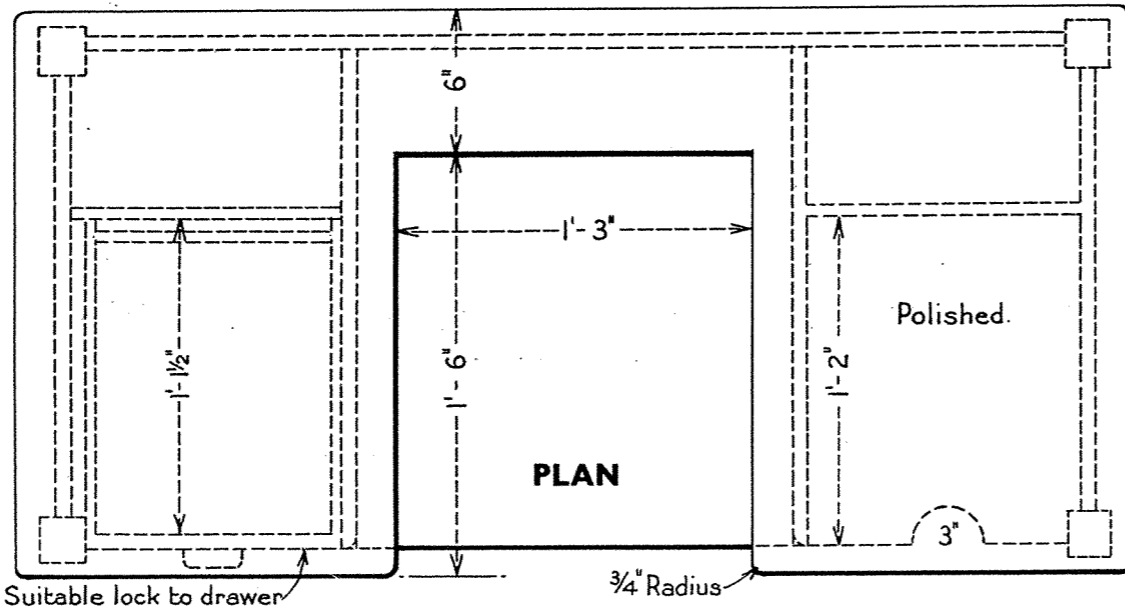
Approved *[Signature]*
 Chief Civil Engr.
 Checked *[Signature]*
 Passed *[Signature]*
 Engr of M.A.W.S.

Adopted
 1942
 PLAN N°
 F 381^A



FRONT ELEVATION.

SIDE ELEVATION.



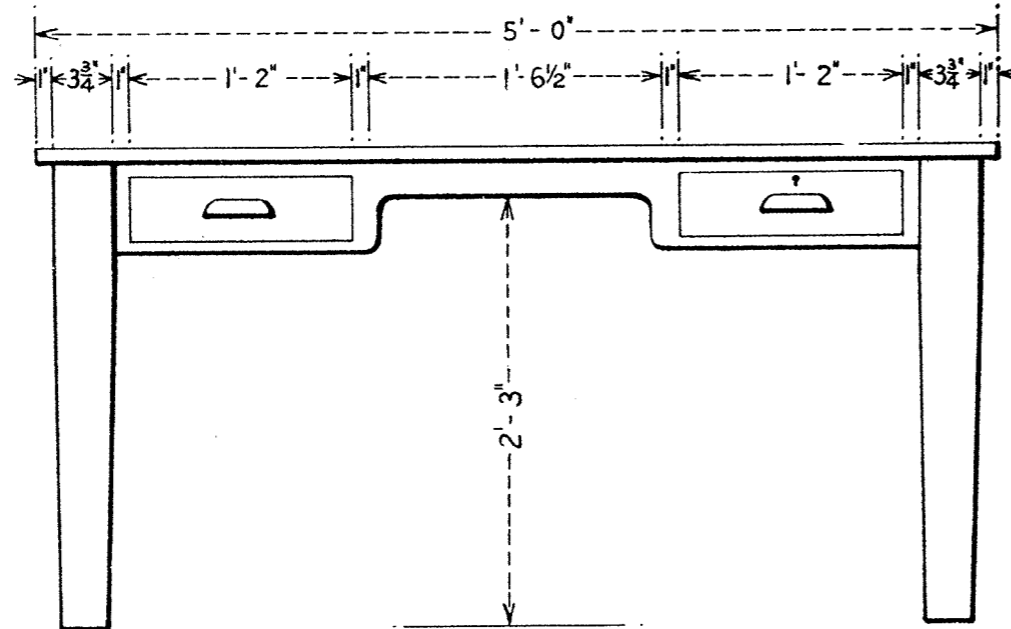
PLAN

NOTE

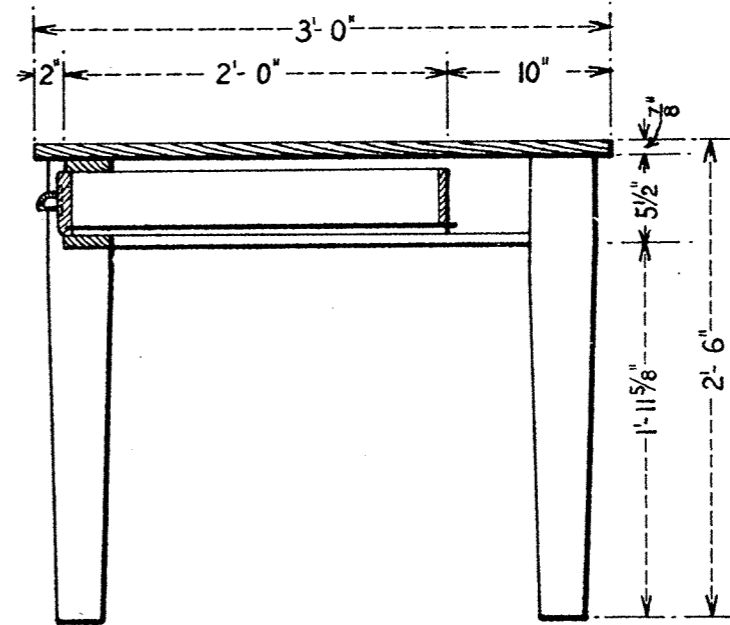
To be made of Mountain Ash. Top only to be french polished (including edges) all other visible parts to be finished with approved oil varnish.

This Plan supersedes Plan No. 350-38.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING		Approved Chief Civil Engineer	Adopted June 1942.
Drawn by K.F.L.	Checked by F.B.	PLAN No. F 383	
Scale 1/2" = 1'-0"		 Chief Architect	



ELEVATION.


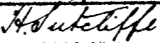


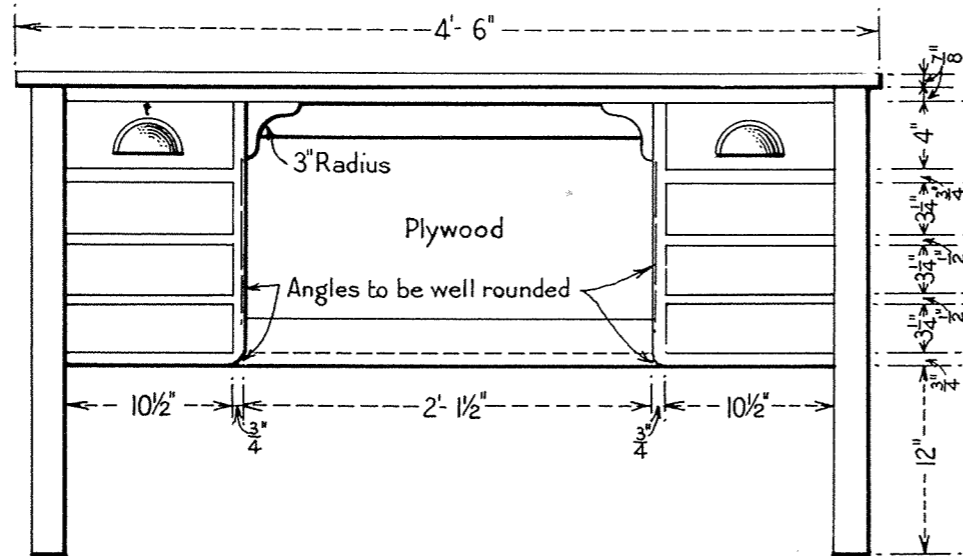
SECTION

NOTES

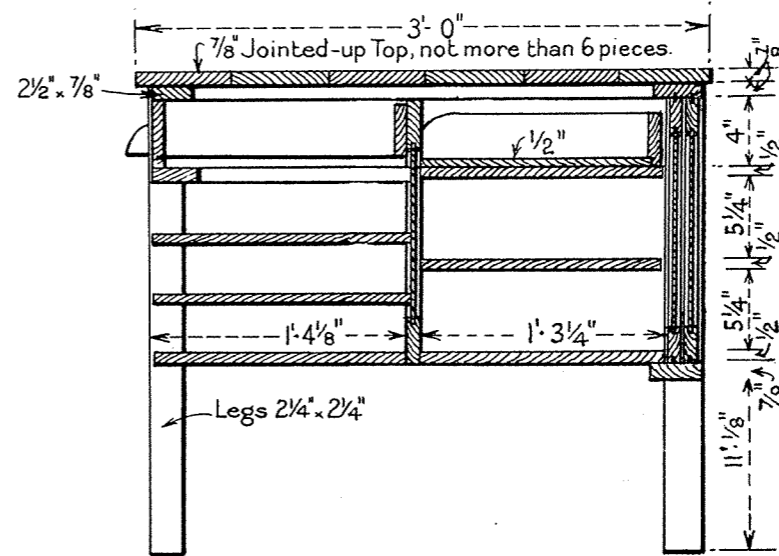
Material: Mountain Ash. Finish: Dulux.
 Drawer fronts project $\frac{1}{4}$ " with bullnosed edges.
 Right hand drawer to lock.

This drawing supersedes Plan No. 388-38.

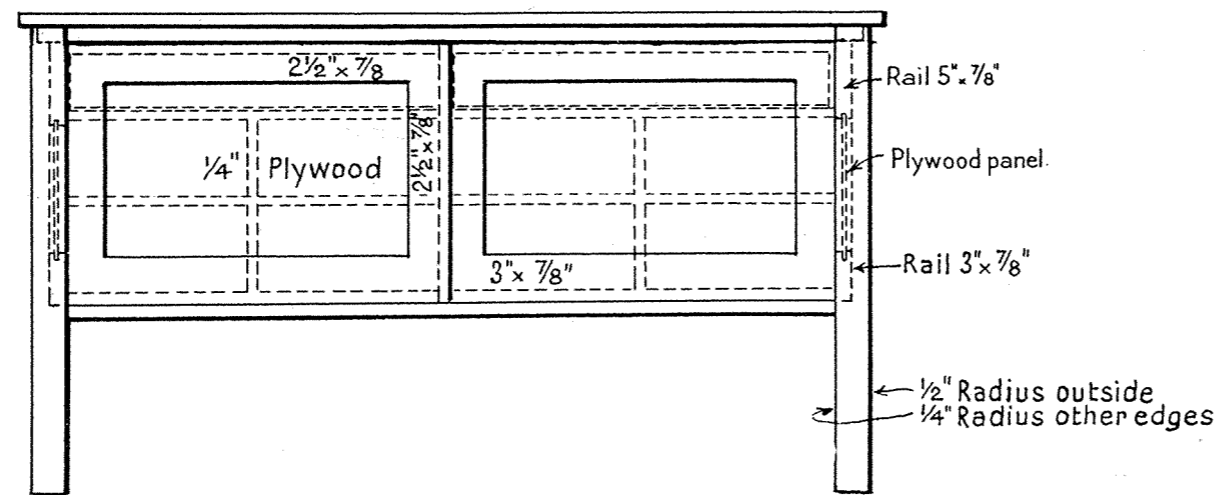
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING TYPE 3. OFFICE TABLE Scale 1"=1'-0"		Approved  Chief Civil Engineer	Adopted July 1942
		Drawn by K.F.L.	Checked by  Chief Architect.



FRONT ELEVATION.



SECTION



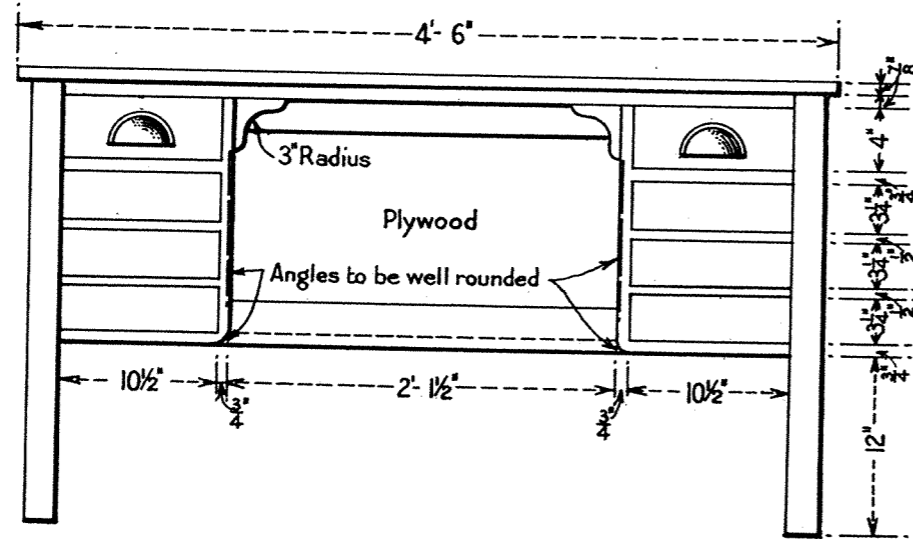
BACK ELEVATION.

NOTES.

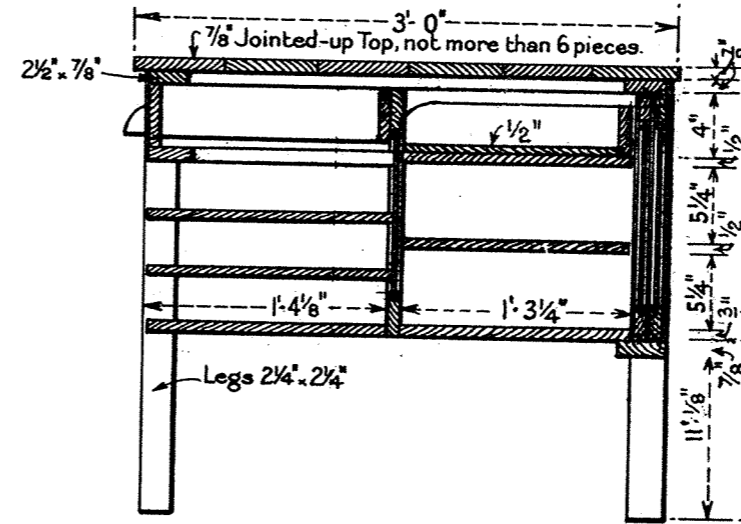
- Top to be screwed on using slots.
- Insides of front & back pigeon holes to be packed out flush.
- Plywood to be 5/16" slice-cut silver ash.
- Bottoms of trays to be covered with green baize.
- Left hand drawer only to be provided with lock.
- Double sliding Door to be provided at back.
- Finish: Dulux.
- Material: Mountain Ash.

This drawing supersedes Plan No.412-38 & F 385

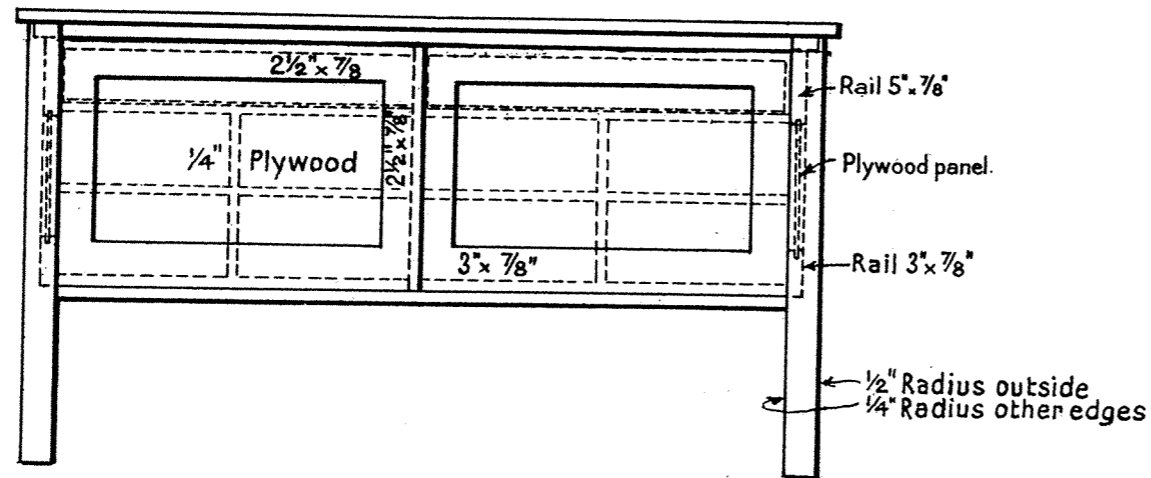
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	MAR. 1955
TYPE 4.		Drawn by	Checked by
OFFICE TABLE		K.F.L.	J.S.
Scale 1"=1'-0"		<i>[Signature]</i> Senior Architect	PLAN No. F 385^A



FRONT ELEVATION.



SECTION



BACK ELEVATION.

NOTES.

Top to be screwed on using slots.
 Insides of front & back pigeon holes to be packed out flush.
 Plywood to be 5/16" slice-cut silver ash.
 Bottoms of trays to be covered with green baize.
 Left hand drawer only to be provided with lock.
 Double sliding Door to be provided at back.
 Finish: Dulux.
 Material: Mountain Ash.

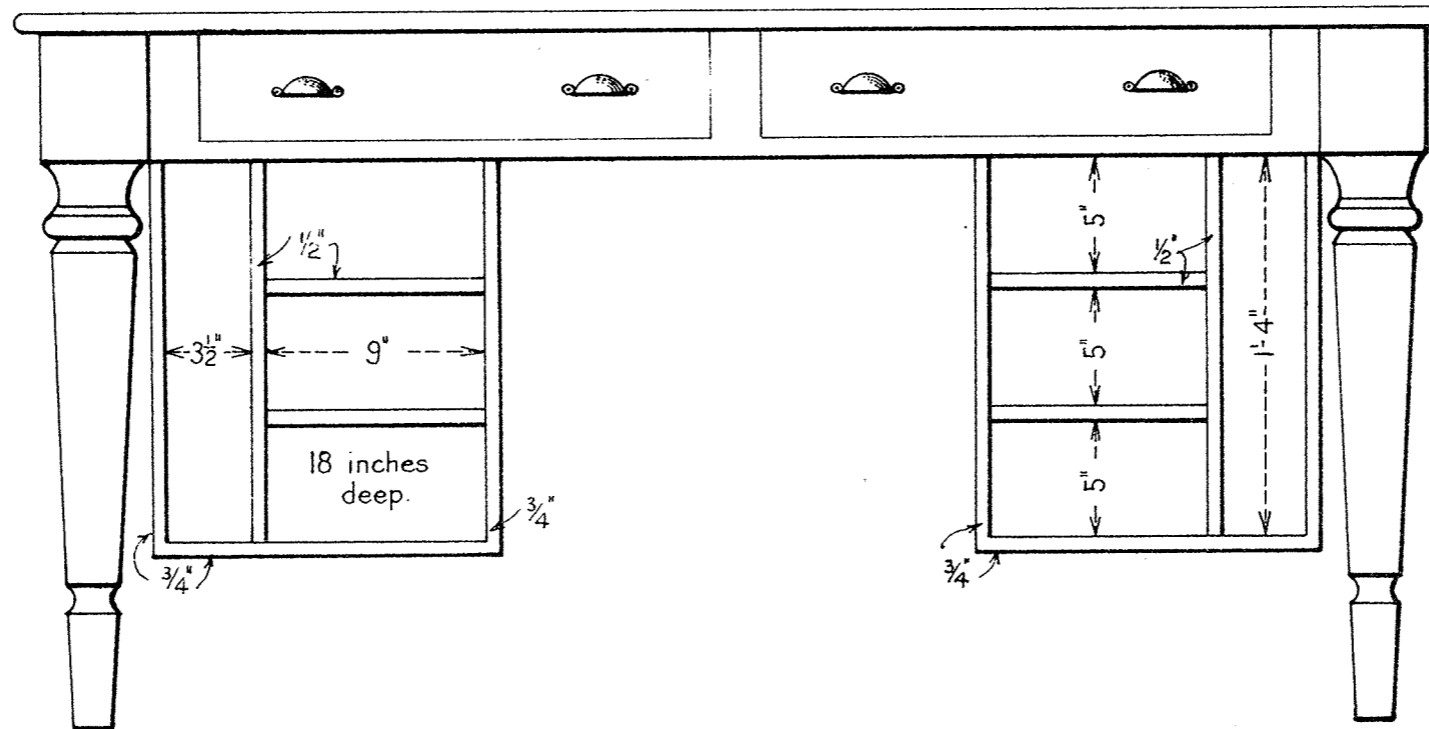
This drawing supersedes Plan No 412-38 & F 385 A

B	10-9-63	Dimension at back of table revised	E.W.B.
Rev ⁿ	Date	Amendment	Amended by

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
TYPE 4.
OFFICE TABLE
 Scale 1"=1'-0"

Approved
[Signature]
 Chief Civil Engineer
 Drawn by
 K.F.L.
 Checked by
 J.S.
[Signature]
 Senior Architect

Adopted
 MAR. 1955
 PLAN No.
F 385^B

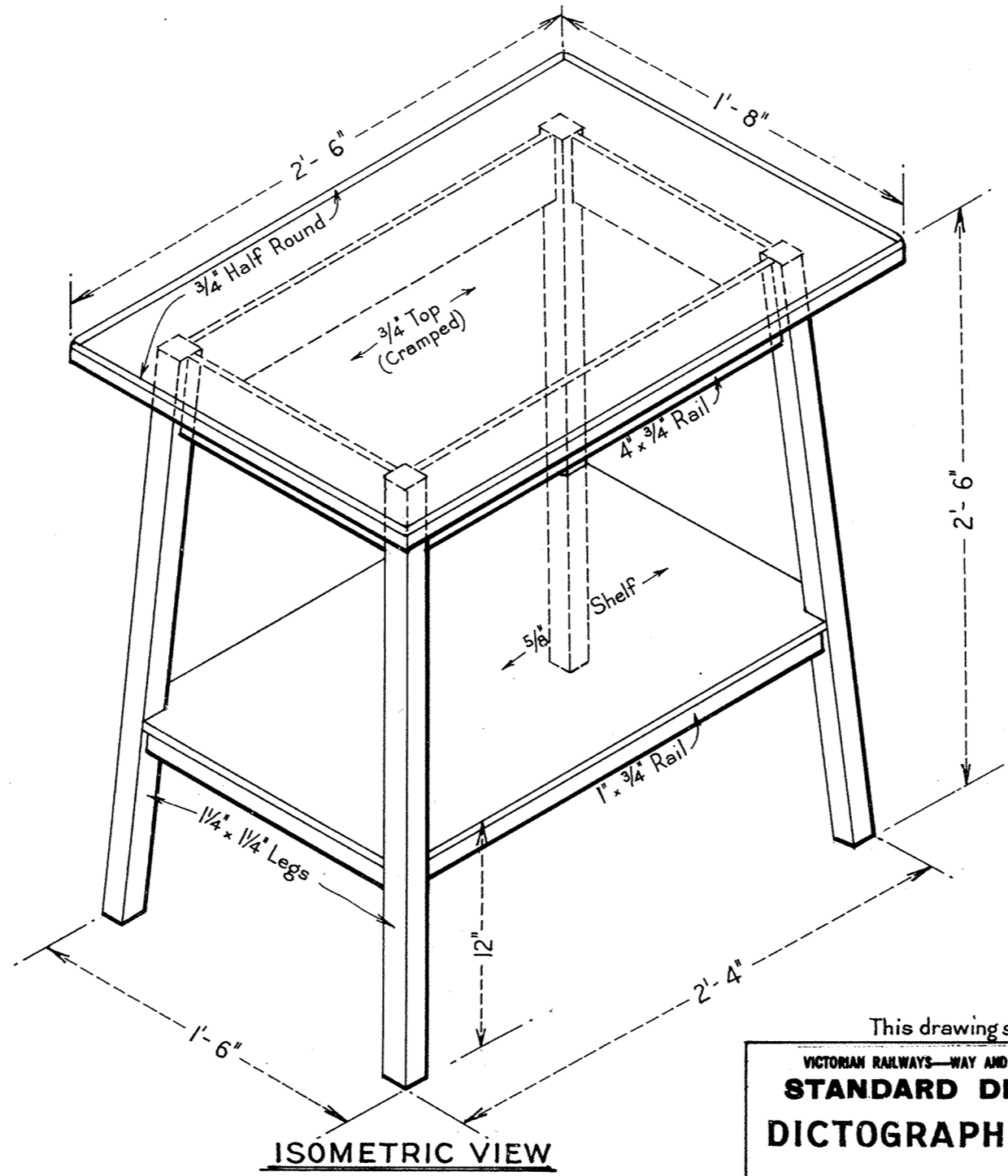


NOTE.
5' x 3' Table to be re-conditioned & provided with fittings.

This drawing supersedes Plan No. 441-34.



VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	July 1942.
TABLE - TYPE FOR DISTRICT ACCOUNTING OFFICES		Drawn by K.F.L.	Checked by <i>[Signature]</i> Dt. of Architect.
Scale 1/2" = 1'-0"			PLAN No. F386

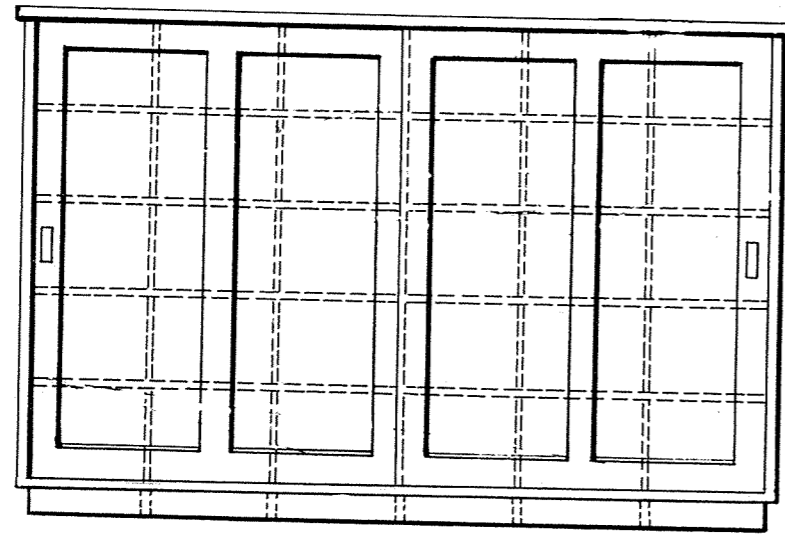
Material: Mountain Ash.
 Finish: Clear Dulux.



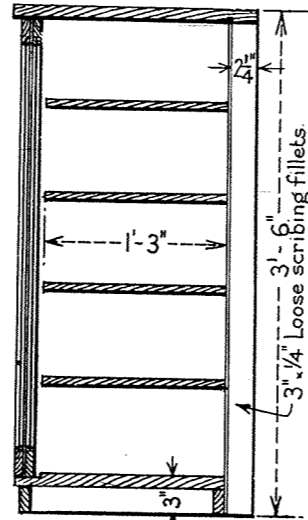
ISOMETRIC VIEW

This drawing supersedes Plan No. 2747-22.

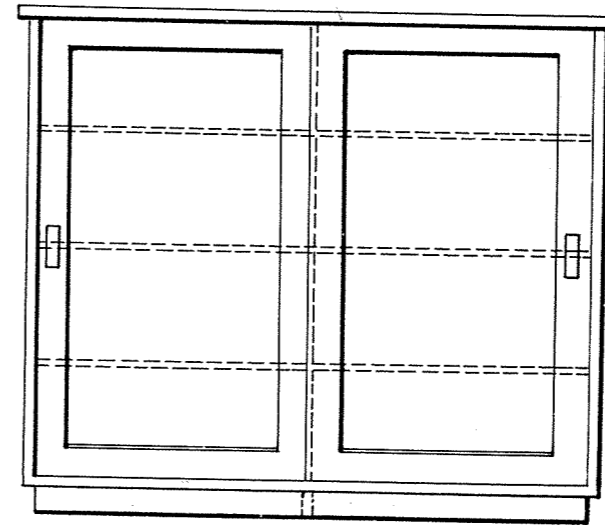
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING DICTOGRAPH TABLE		Approved  Chief Civil Engineer	Adopted July 1942.
Drawn by K.F.L.	Checked by  Chief Architect.	PLAN No. F387	



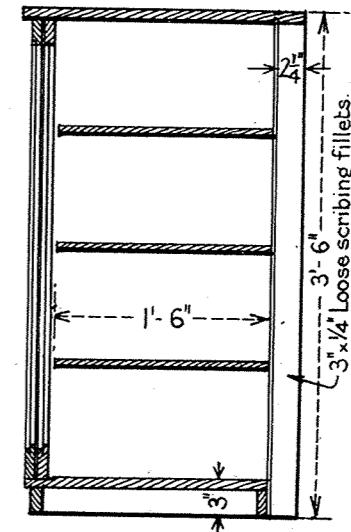
ELEVATION.



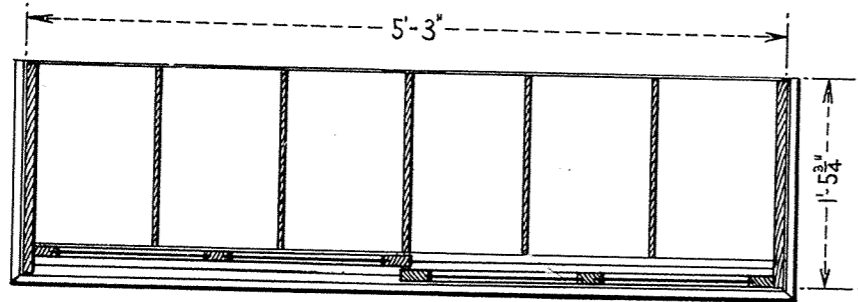
SECTION



ELEVATION.

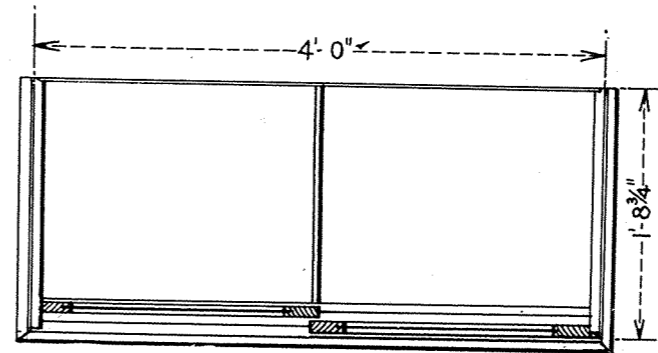


SECTION



PLAN

TYPE 1.



PLAN

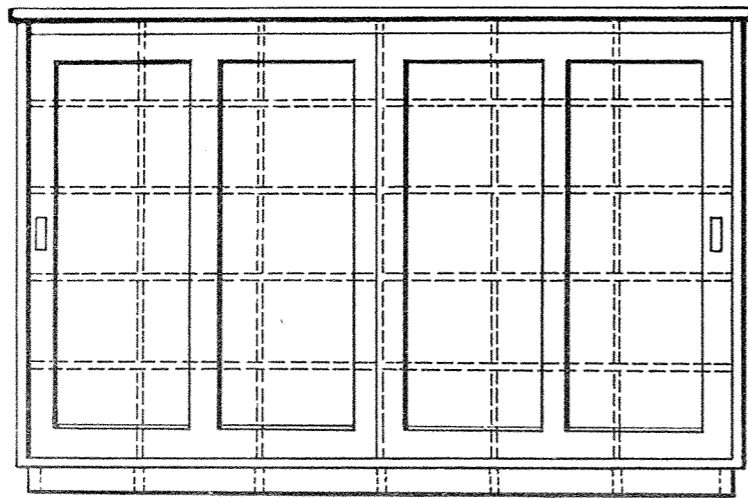
TYPE 2.

Materials: $\frac{7}{8}$ " Finish mountain ash throughout, shelves & partitions $\frac{9}{16}$ " mountain ash. Back $\frac{1}{4}$ " H. pine plywood.
 Door panels $\frac{1}{4}$ " slice cut silver ash.
 Door sizes: Styles & T. Rail $2\frac{1}{2}$ " x $\frac{7}{8}$ " B. Rail 3 " x $\frac{7}{8}$ ". Muntins 2 " x $\frac{7}{8}$ ".
 Construction: $\frac{1}{4}$ " Rebate below doors to sink track flush. $2\frac{1}{8}$ " x $\frac{7}{8}$ " cleat at back to enable rollers to be placed under cupboard.

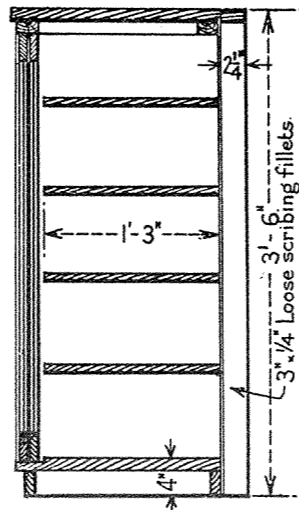
Fittings: "Zhiel" No 9. rollers & track throughout.
 Flush grips, brass finish, 3 " x $\frac{1}{4}$ " o'all size.
 Finish: Top filled & polished, sides brush polished.
 Generally: Partitions & shelves may be altered or omitted to suit particular requirements.

This drawing supersedes Plan No. F. 388.

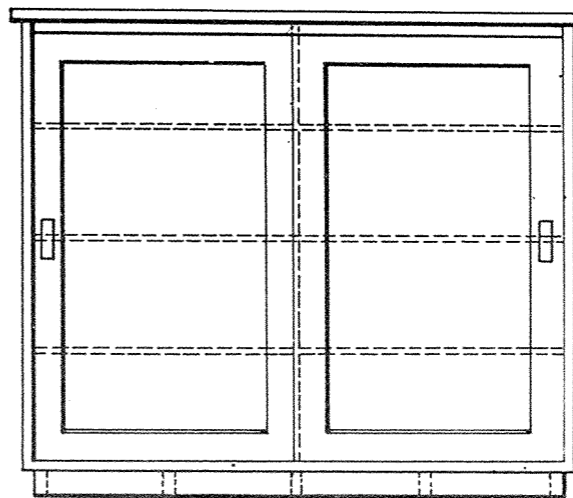
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved <i>M.H.</i> Chief Civil Engineer	Adopted Sept 1943.
STANDARD DRAWING		Drawn by K.F.L.	Checked by PLAN No.
CUPBOARDS TYPES 1 & 2		<i>H. Subteloff</i> Chief Architect.	F 388A
Scale $\frac{3}{4}$ " = 1'-0"			



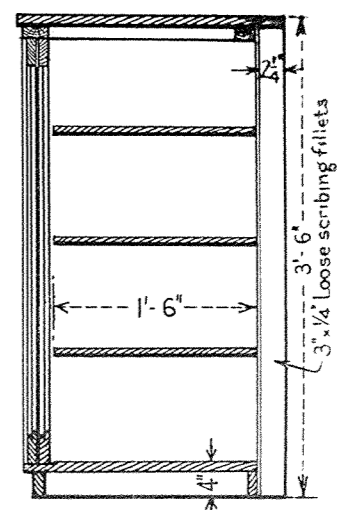
ELEVATION.



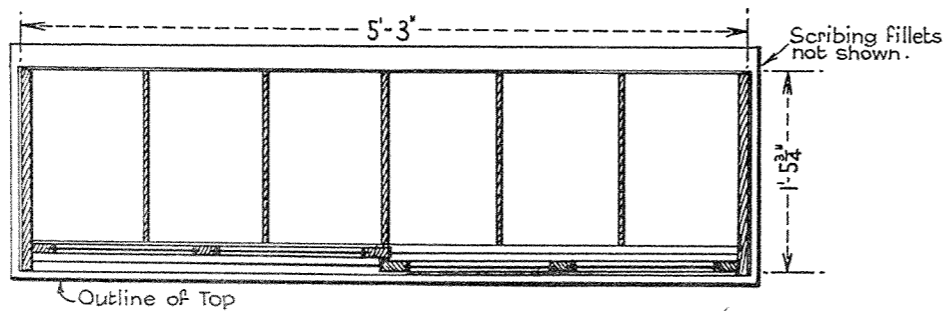
SECTION



ELEVATION.

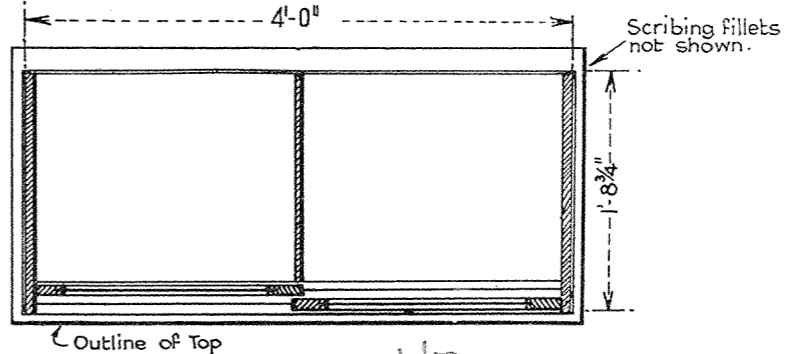


SECTION



PLAN
TYPE 1.

*3/11/67
cost 103.70*



PLAN
TYPE 2.

*3/11/67
73.00*

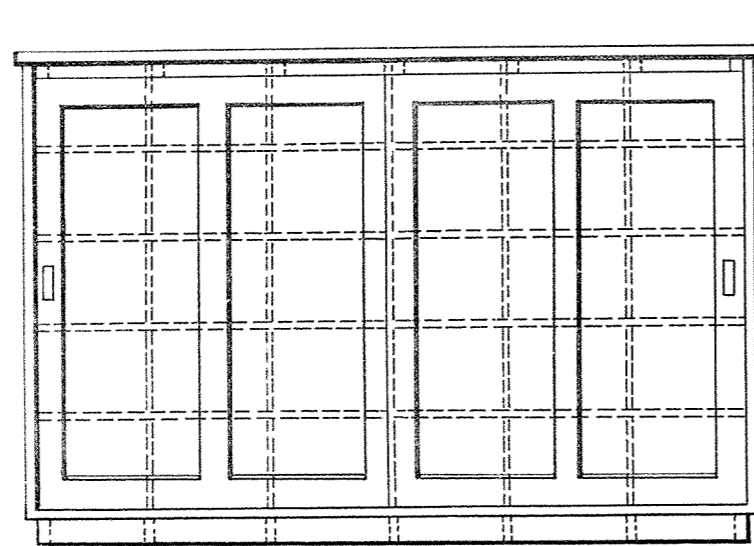
Materials: 7/8" Finish mountain ash throughout, shelves & partitions 9/16" selected pine. Back 1/4" H. pine plywood or 1/4" thick hardboard.
 Door panels 1/4" slice cut silver ash.
 Door sizes: Styles & T. Rail 2 1/2" x 7/8" B. Rail 3" x 7/8". Muntins 2" x 7/8".
 Construction: 1/4" Rebate below doors to sink track flush. 3/8" x 7/8" cleat at back to enable rollers to be placed under cupboard.

Fittings: "Zhiel" No 9. rollers & track throughout. Flush grips, chrome finish, 3" x 1/4" o'all size.
 Finish: Top filled & polished, sides brush polished.
 Generally: Partitions & shelves may be altered or omitted to suit particular requirements.

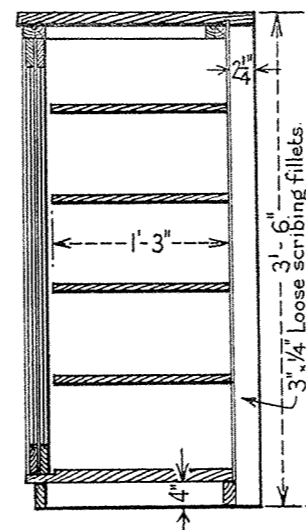
Rev'n	Date	Amendment	Amended by
"B"	16.12.68	Additional Frame under Top inserted.	M. O.
"A"		This drawing supersedes PLAN No F 388	

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
CUPBOARDS TYPES 1&2
 Scale 3/4" = 1'-0"

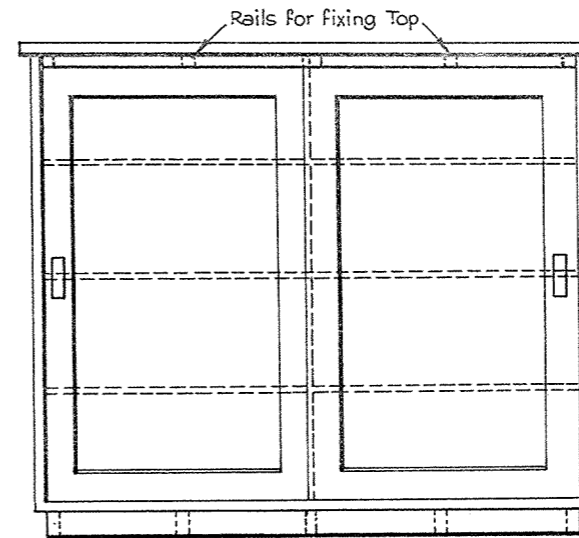
Approved <i>M.H.</i> Chief Civil Engineer		Adopted Sep: 1943.
Drawn by K.F.L.	Checked by	PLAN No.
<i>H. Sutcliffe</i> Chief Architect.		F388B



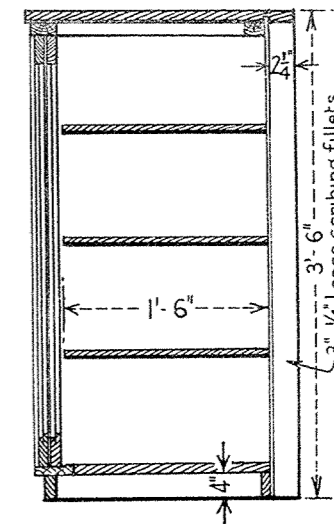
ELEVATION.



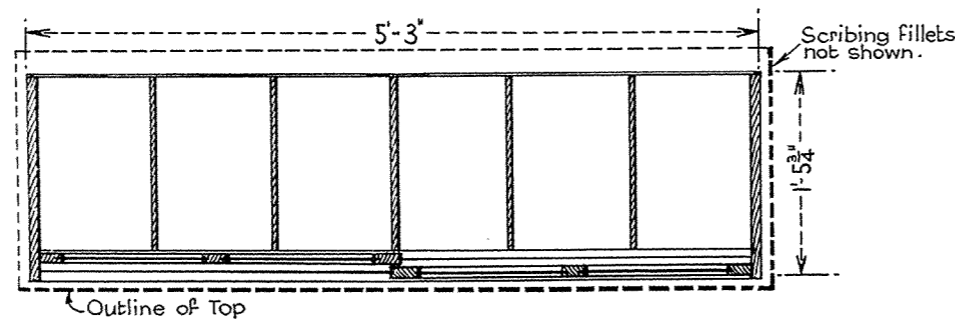
SECTION



ELEVATION.



SECTION



PLAN

TYPE 1.

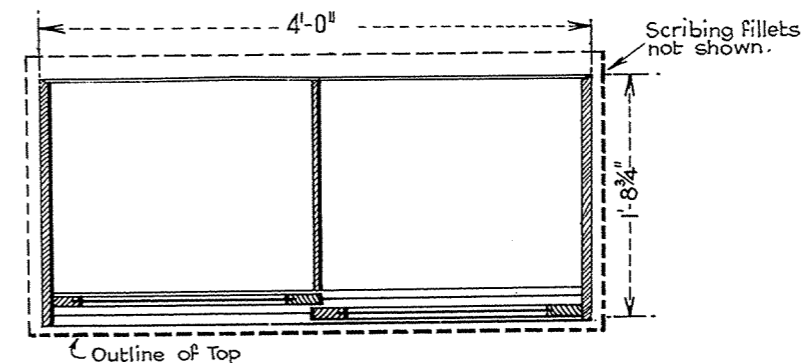
Materials: $\frac{13}{16}$ " Finish mountain ash throughout, shelves & partitions $\frac{9}{16}$ " selected pine. Back $\frac{1}{4}$ " H. pine plywood or $\frac{1}{4}$ " thick hardboard.
 Door panels $\frac{1}{4}$ " slice cut silver ash.
 Door sizes: Styles & T. Rail $2\frac{1}{2}$ " x $\frac{7}{8}$ " B. Rail $3\frac{1}{2}$ " x $\frac{13}{16}$ " Muntins 3 " x $\frac{19}{16}$ ".

Construction: $\frac{1}{4}$ " Rebate below doors to sink track flush.
 3 " x $\frac{19}{16}$ " cleat at back to enable rollers to be placed under cupboard.

Fittings: *Kingfisher* Nylon Sheaves $\frac{3}{8}$ " dia. (Metal track item 39920/40 throughout.)
 Flush grips, oxidised finish.
 Item 23340/40 $3\frac{1}{4}$ " x $1\frac{1}{8}$ ". o'all Size.

Finish: Top filled & polished, sides brush polished.
 Generally: Partitions & shelves may be altered or omitted to suit particular requirements.

Rev'n	Date	Amendment	Amended by
C	20.5.70	Notes amended for Materials, Constr ⁿ & Fittings.	M. O.
B	16.12.68	Additional Frame under Top inserted.	M. O.
A		This drawing supersedes PLAN No F 388B	

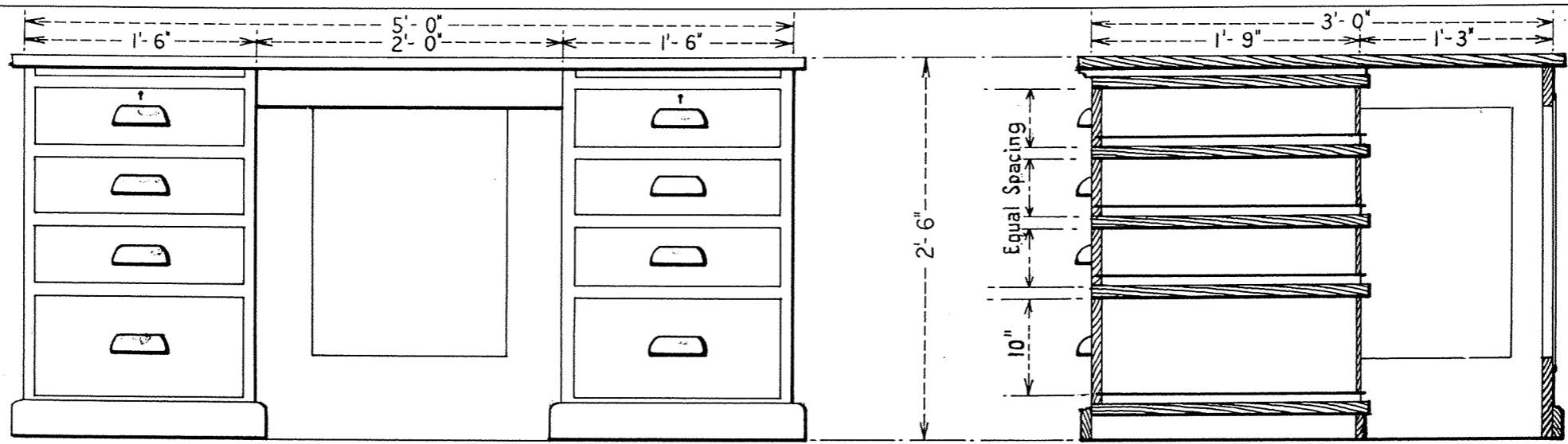


PLAN

TYPE 2.

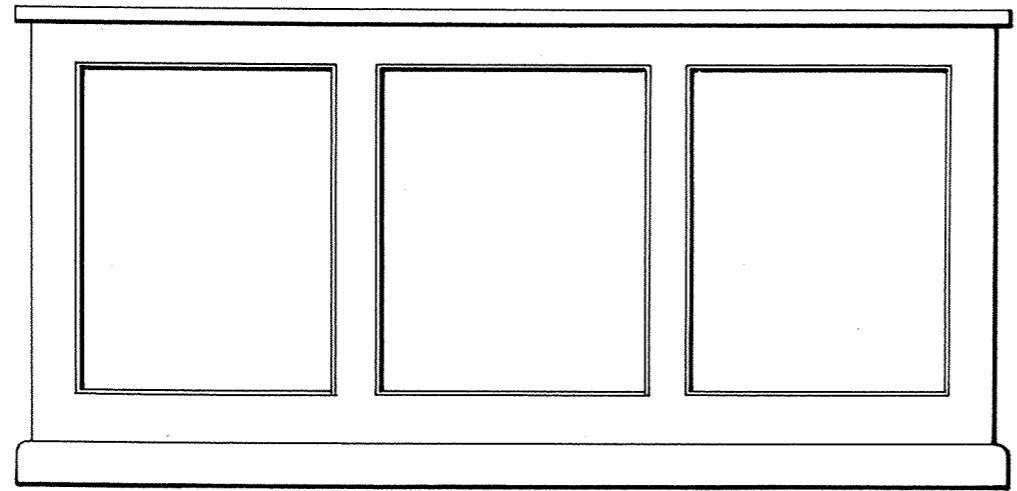
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
CUPBOARDS TYPES 1 & 2
 Scale $\frac{3}{4}$ " = 1'-0"

Approved <i>M. O.</i> Chief Civil Engineer	Adopted Sept 1943
Drawn by K.F.L.	Checked by PLAN No. F388C
Chief Architect.	

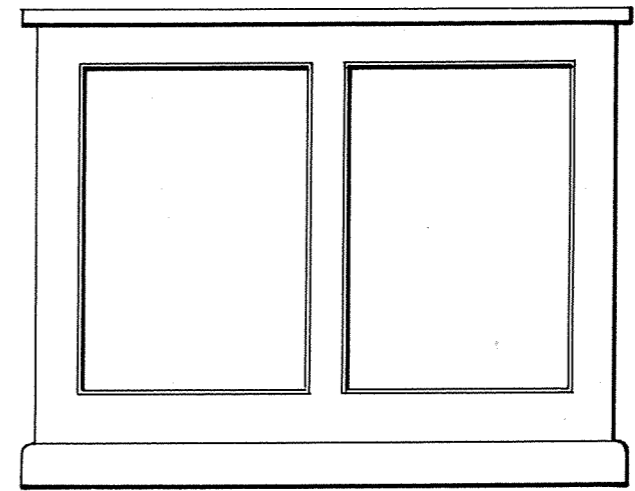


FRONT ELEVATION.

SECTION



BACK ELEVATION.

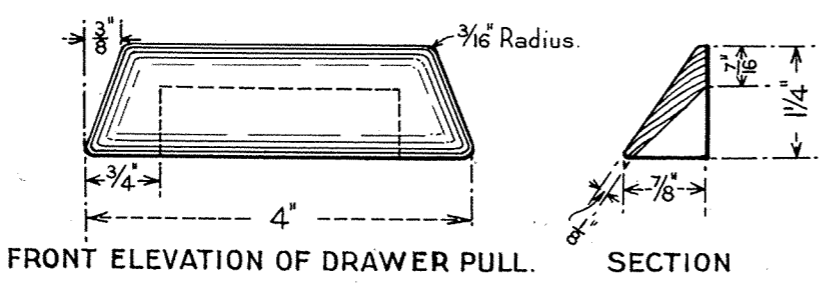


END ELEVATION.

NOTES

Material: Selected Mountain Ash. Construction: All material $\frac{7}{8}$ " thick. Jointed-up table tops out of not more than 6 pieces. Flush panelling to be $\frac{1}{4}$ " Slice cut Silver Ash. Rail above knee hole to be $3 \times \frac{7}{8}$ " with double bull-nose. Plinth out of $3 \times \frac{7}{8}$ " bull-nosed. Styles, Muntins & Top Rails out of $2\frac{1}{2} \times \frac{7}{8}$ ". Bottom Rails $6 \times \frac{7}{8}$ ". Overhang of table tops $\frac{3}{4}$ " with corners well rounded & all sharp edges throughout to be rounded off. Slides $\frac{3}{4}$ " thick, cramped. Fittings: Standard locks to be provided where shown. All drawers to be operated by locking bars. Finish: Tops to be french polished, rest of table Dulux.

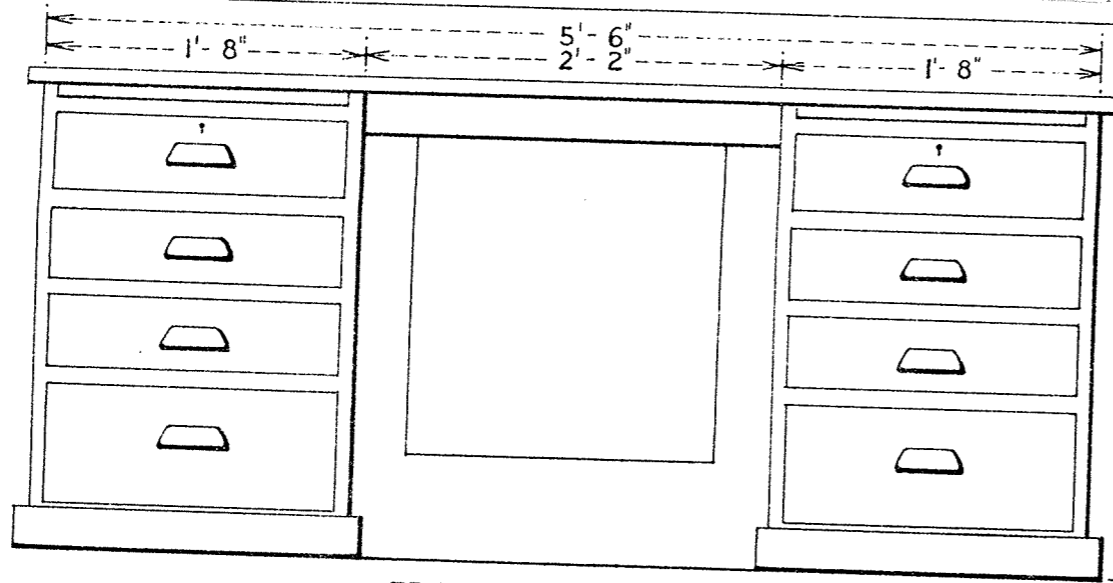
This drawing supersedes Plan No. 212-41.



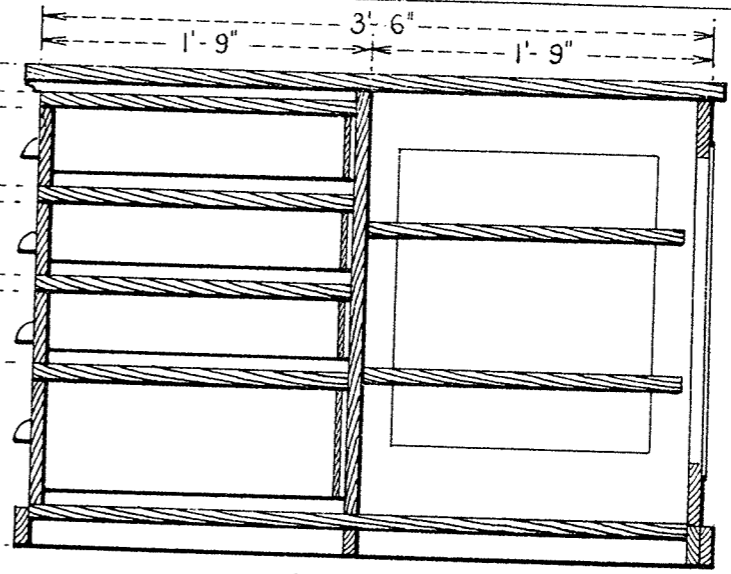
FRONT ELEVATION OF DRAWER PULL.

SECTION

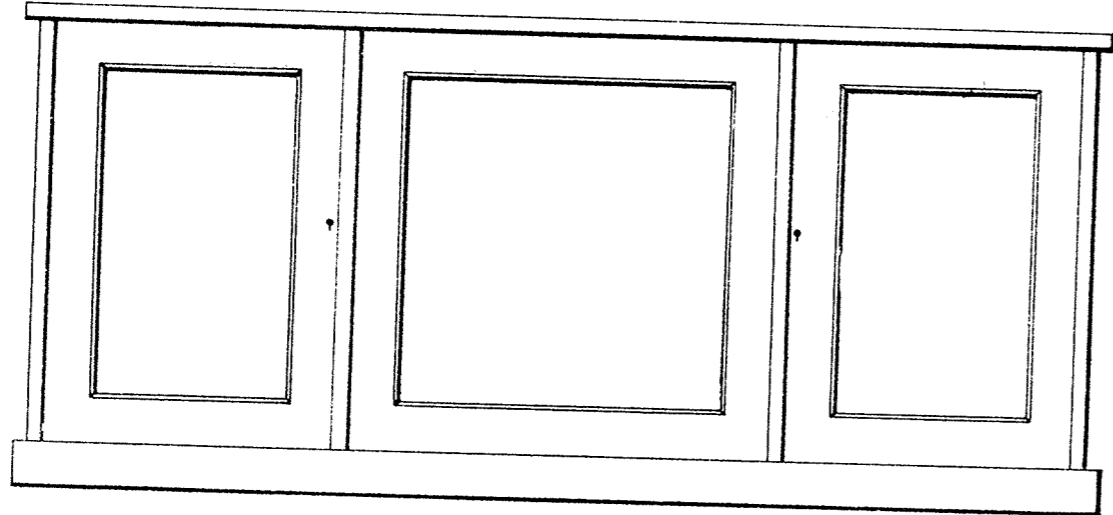
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	July 1942.
PEDESTAL TABLE FOR HEAD OF ROOM		Drawn by K.F.L.	Checked by PLAN No.
Scale 1"=1'-0"		<i>[Signature]</i> Chief Architect.	F 389



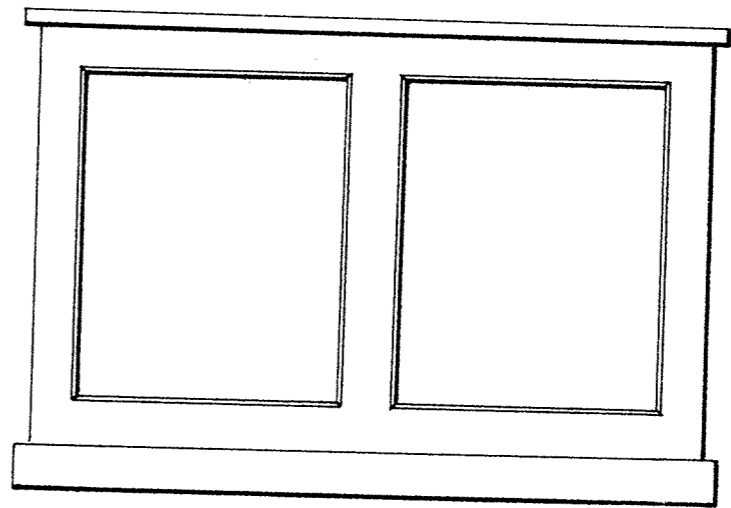
FRONT ELEVATION.



SECTION



BACK ELEVATION.

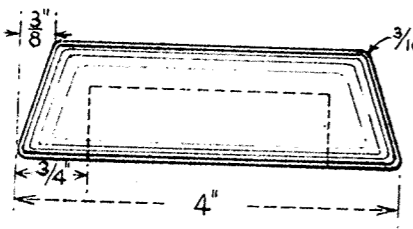


END ELEVATION.

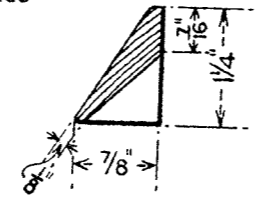
NOTES

Material: Selected Mountain Ash. Construction: All material $\frac{7}{8}$ " thick. Jointed-up table tops out of not more than 6 pieces. Flush panelling to be $\frac{1}{4}$ " Slice cut Silver Ash. Rail above knee hole to be $3\frac{7}{8}$ " with double bull-nose. Plinth out of $3\frac{7}{8}$ " bull-nosed. Styles, Muntins & Top Rails out of $2\frac{1}{2}$ " \times $\frac{7}{8}$ ". Bottom Rails $6\frac{1}{8}$ ". Overhang of table tops $\frac{3}{4}$ " with corners well rounded & all sharp edges throughout to be rounded off. Slides $\frac{3}{4}$ " thick, cramped. Fittings: Standard locks to be provided where shown. All drawers to be operated by locking bars. Finish: Tops to be french polished, rest of table Dulux.

This drawing supersedes Plan No. 212-41.

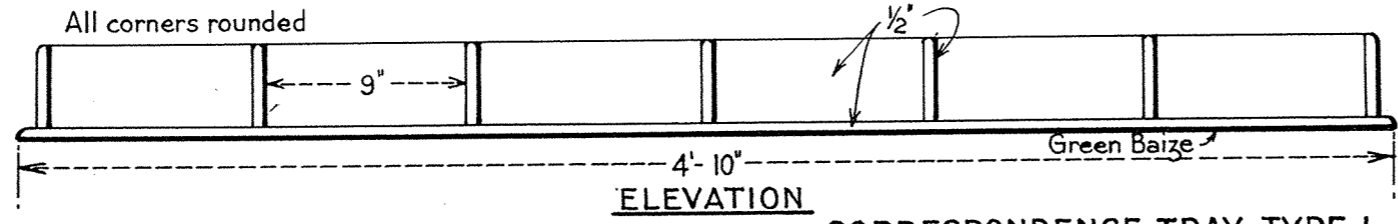


FRONT ELEVATION OF DRAWER PULL



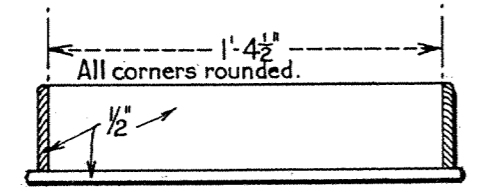
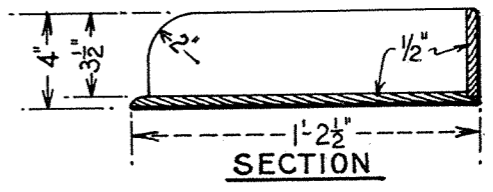
SECTION

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved <i>[Signature]</i> Chief Civil Engineer	Adopted July 1942.
STANDARD DRAWING		Drawn by K.F.L.	Checked by <i>[Signature]</i> Chief Architect.
PEDESTAL TABLE FOR HEAD OF BRANCH		PLAN No. F390	
Scale 1" = 1'-0"			



Material: Mountain Ash; Finish: French Polished.

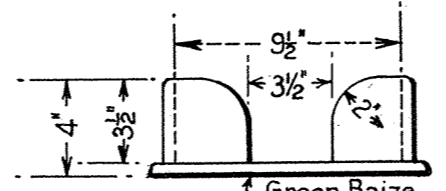
CORRESPONDENCE TRAY TYPE 1.



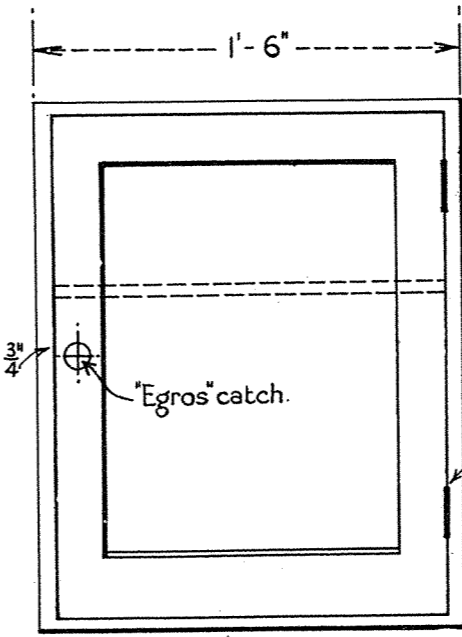
SECTION

Material: Mountain Ash; Finish: French Polished.

CORRESPONDENCE TRAY TYPE 2.

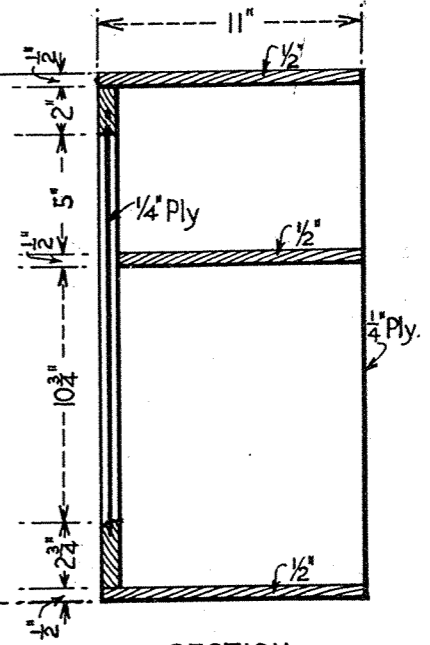


ELEVATION

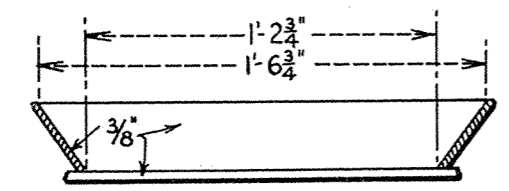


DRAFTSMAN'S CUPBOARD.

Material: Hardwood; Finish: Painted, tint as instructed.



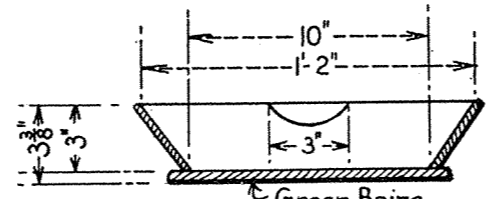
SECTION



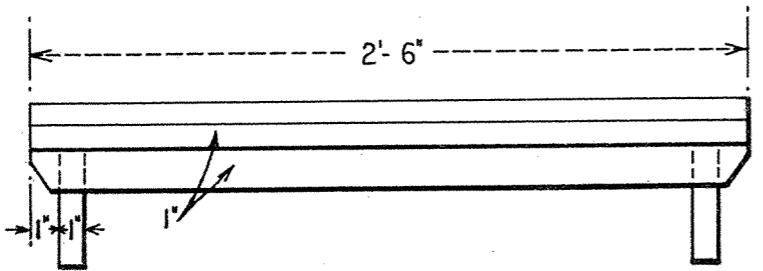
SECTION

Material: Mountain Ash; Finish: French Polished.

CORRESPONDENCE TRAY TYPE 3.



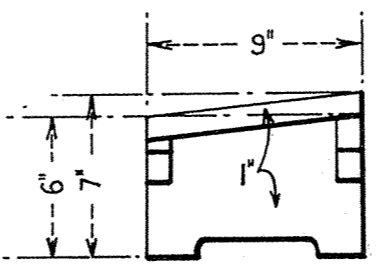
SECTION



ELEVATION

Material: Hardwood; Finish: Dressed, left natural.

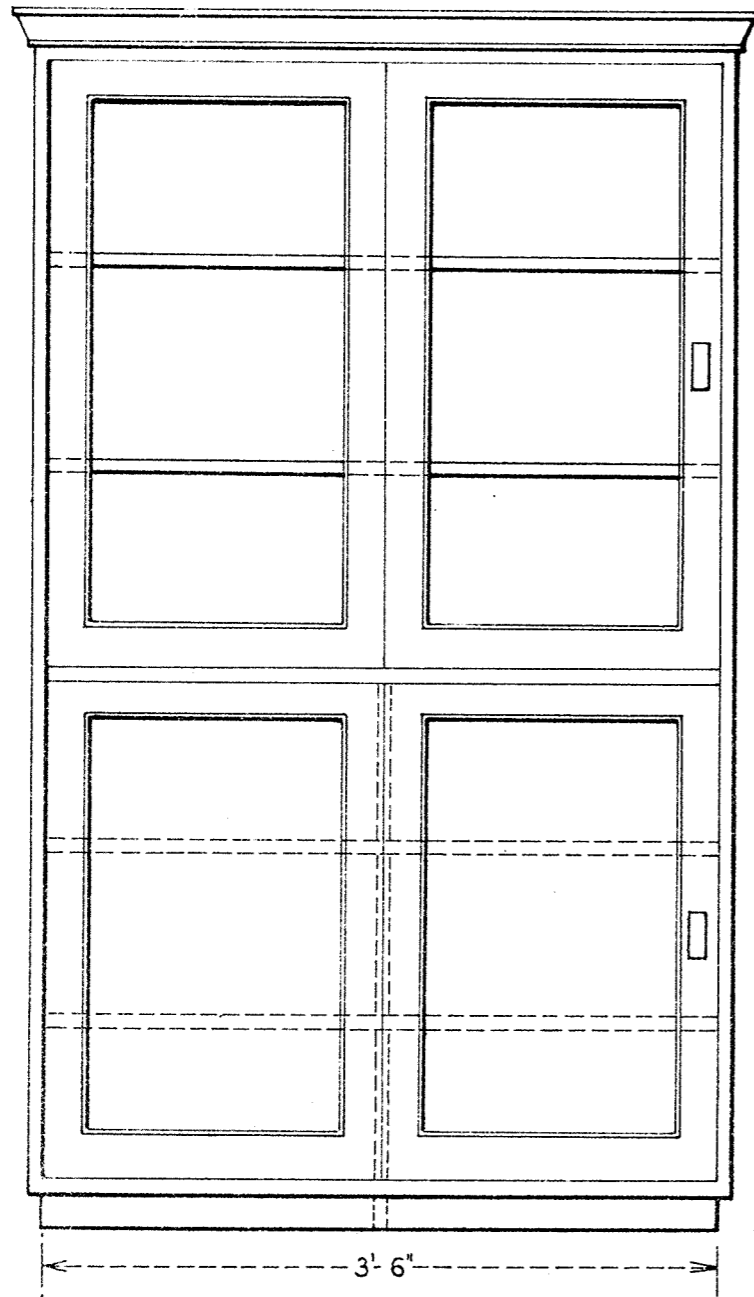
DRAFTSMAN'S FOOTSTOOL.



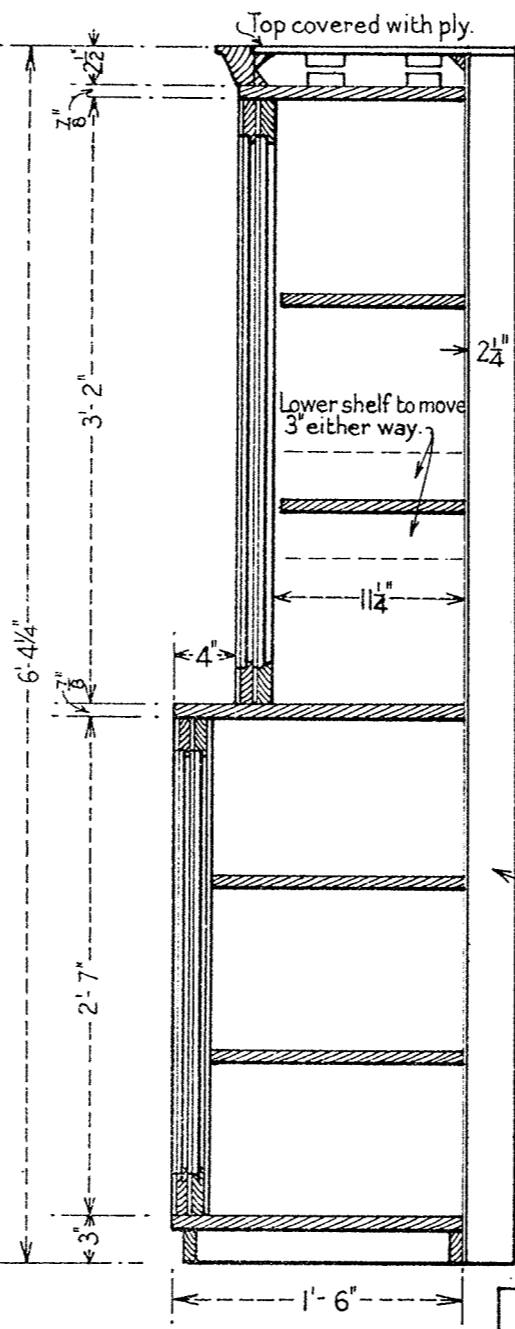
ELEVATION

This drawing supersedes Plan No. 16-40.

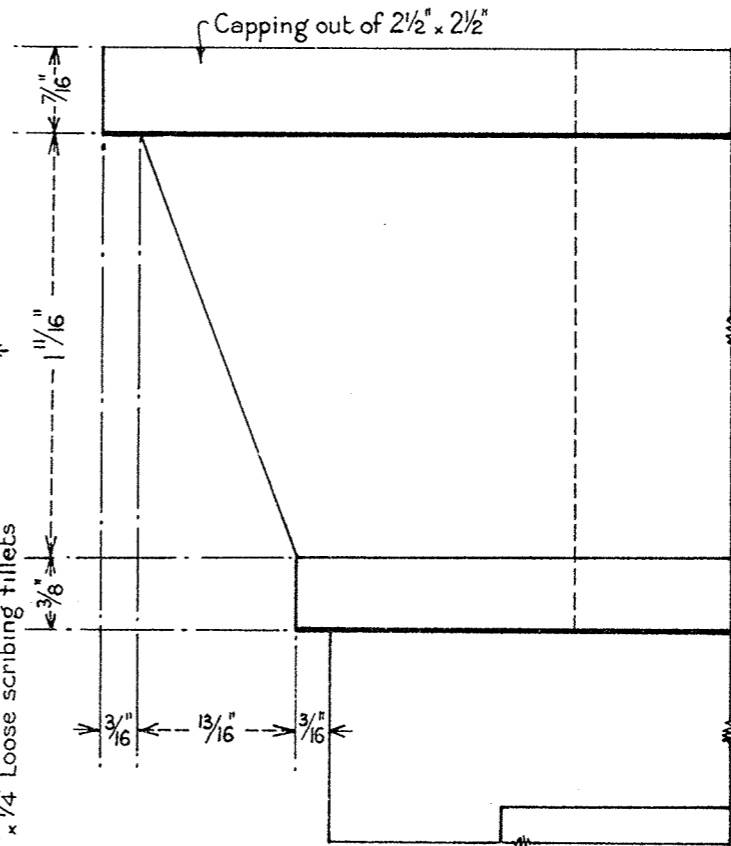
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	July 1942.
CORRESPONDENCE TRAYS TYPES 1, 2 & 3.		Chief Civil Engineer	
DRAFTSMAN'S FOOTSTOOL.		Drawn by	PLAN No.
DRAFTSMAN'S CUPBOARD.		K.F.L.	
Scale 1/2"=1'-0"		Checked by	F391
		<i>[Signature]</i>	Chief Architect



ELEVATION.



SECTION.



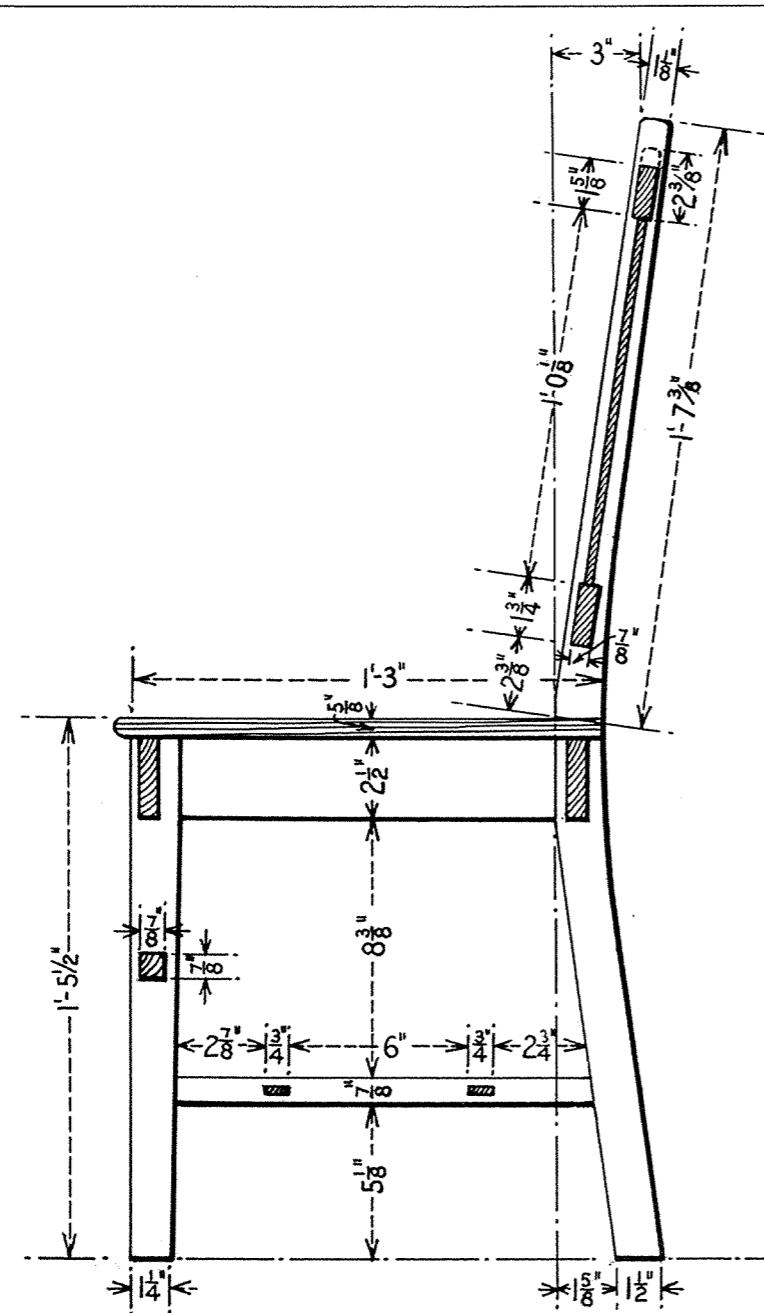
FULL SIZE DETAIL OF CAPPING.

NOTES

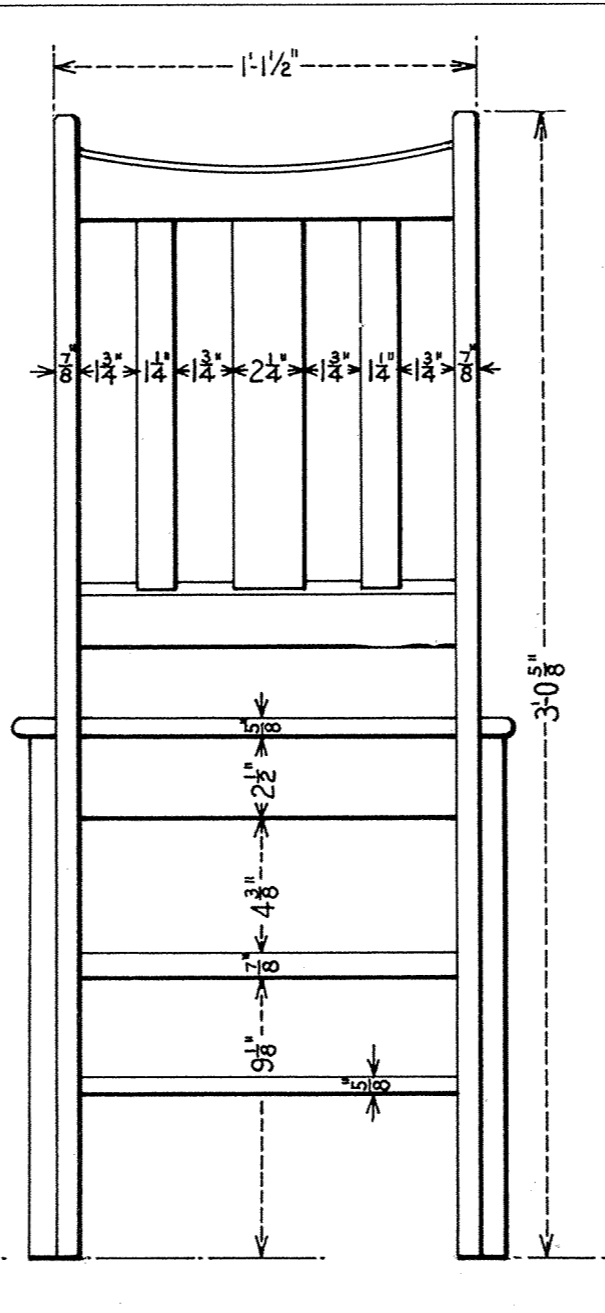
All material except capping out of 7/8" Mountain Ash.
 Finish: French polished. Top doors glazed with selected
 Signal Box glass. Lower doors fitted with 1/4" slice cut
 Silver Ash. "Zhiel" tracks to doors & 3" x 1/4" brass
 finish door pulls. Back of 1/4" Hoop pine ply.

This drawing supercedes Plan No. F 392.

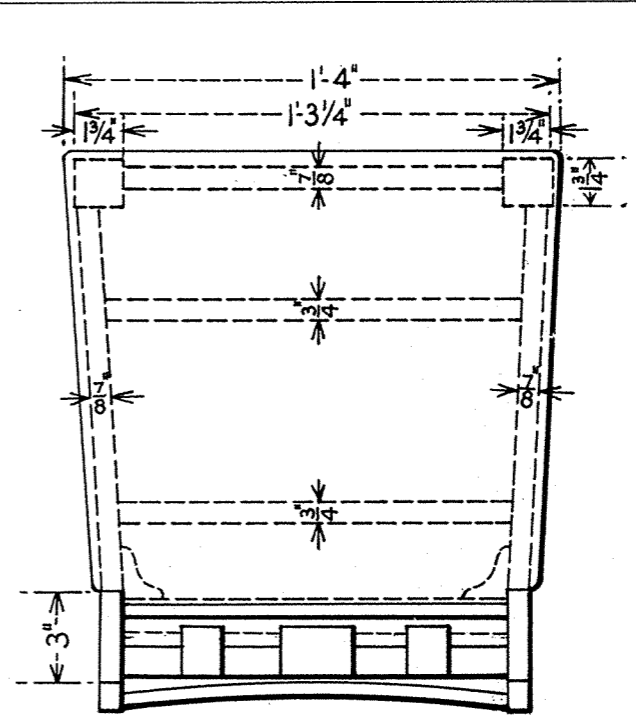
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>W.</i> Chief Civil Engineer	Sep ^r 1943
BOOKCASE		Drawn by	Checked by
Scale 1" = 1'-0"		K.F.L.	PLAN No.
		<i>H. S. Skeliff</i> Chief Architect.	F 392^A



SECTION



BACK ELEVATION.



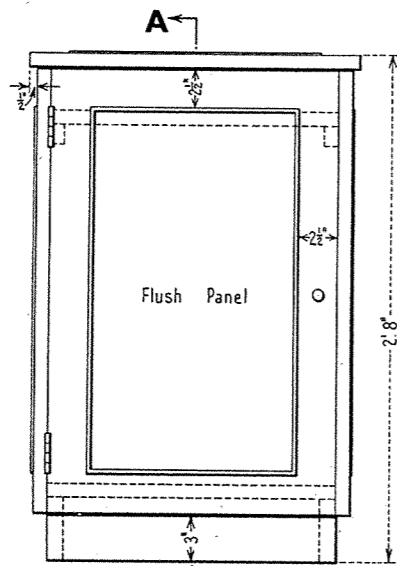
PLAN

NOTES
 Material: Mountain Ash.
 Finish: Dulux.
 Arris to be taken off outside edges of legs and outside members of back.

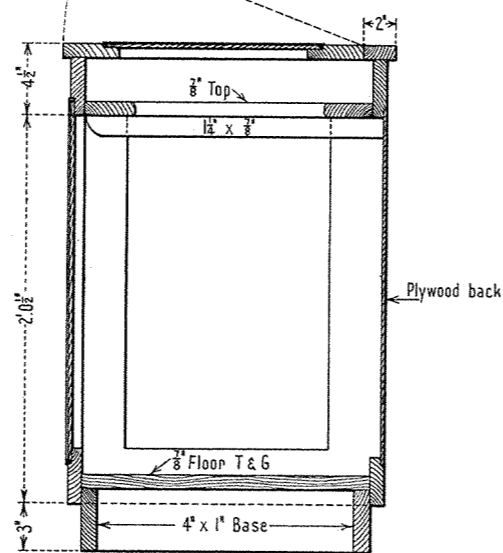
This drawing supersedes Plan No. 30-37.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING		Approved Chief Civil Engineer	Adopted July 1942.
WOODEN CHAIR Scale 2' = 1"		Drawn by K.F.L.	Checked by Chief Architect.
		PLAN No.	F393

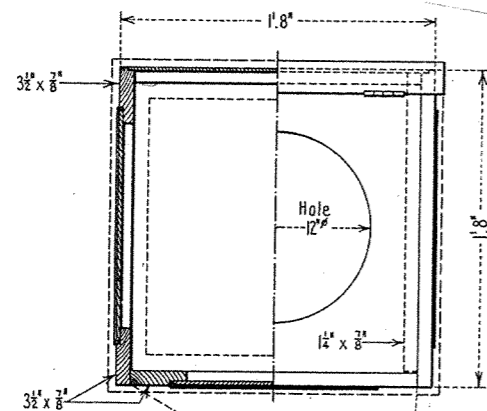
TYPE 'A'



FRONT ELEVATION



SECTION A-A



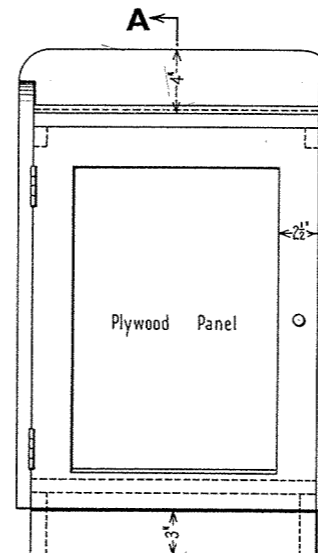
PLAN

MATERIALS
Mountain Ash 3/8" thick. Flush Panels to be of 1/4" slice cut Silver Ash.

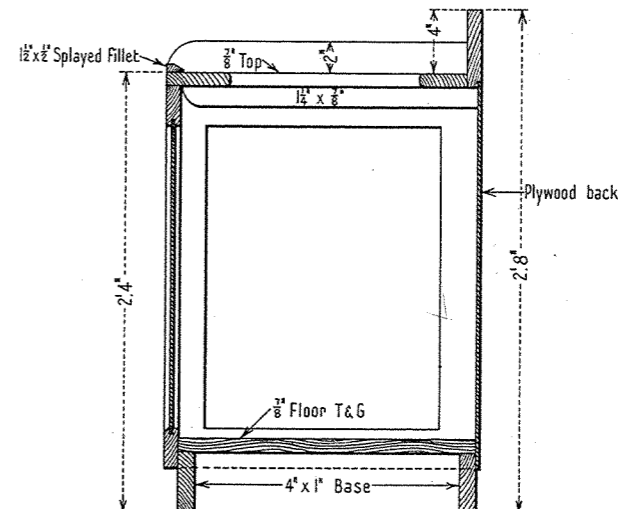
FITTINGS
2 No. 2 1/2" brass butt hinges to door & lid.
"Ideal" catch to door.

FINISH
"Dulux" clear externally, white enamel inside of top.

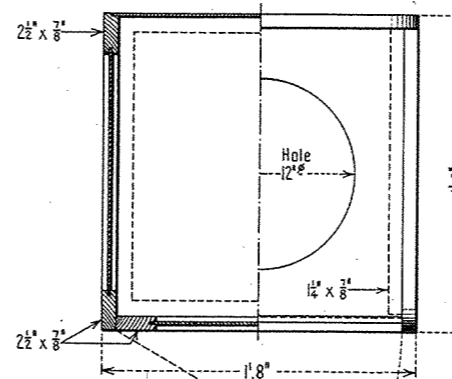
TYPE 'B'



FRONT ELEVATION



SECTION A-A



PLAN

MATERIALS
Any suitable Pine 3/8" thick, Hoop Pine panels.

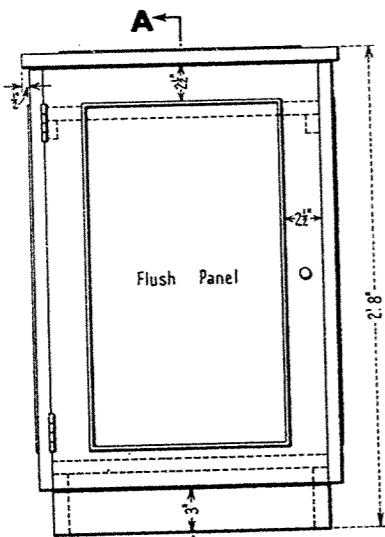
FITTINGS
2 No. 2 1/2" brass butt hinges to door
"Ideal" catch to door.

FINISH
Painted Light & Dark stone outside, Light stone inside, White enamel around basin & Black recessed base.

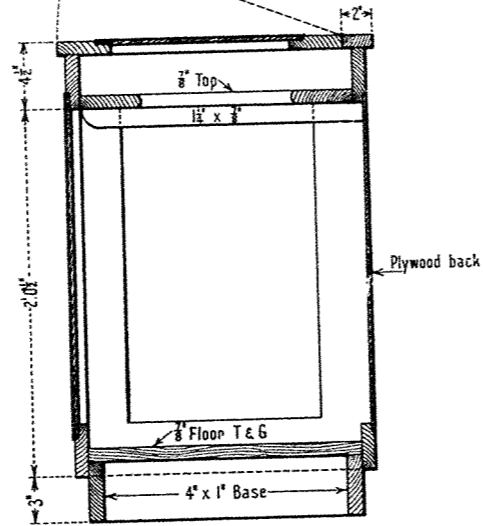
This plan supersedes plan N° F394

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING WASH STANDS SCALE— 1" = 1' 0"		Approved Chief Civil Engineer	Adopted FEB. 1944
Drawn by V. W. L.	Checked by F. G. B.	PLAN No. F394A	
 Chief Architect			

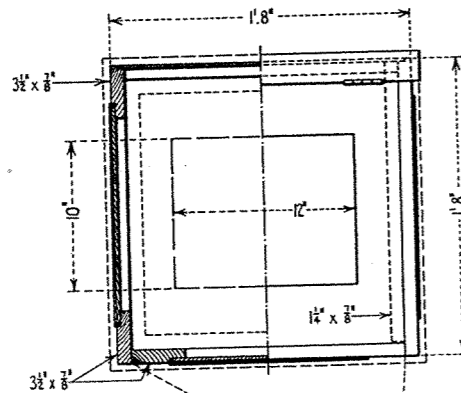
TYPE 'A'



FRONT ELEVATION



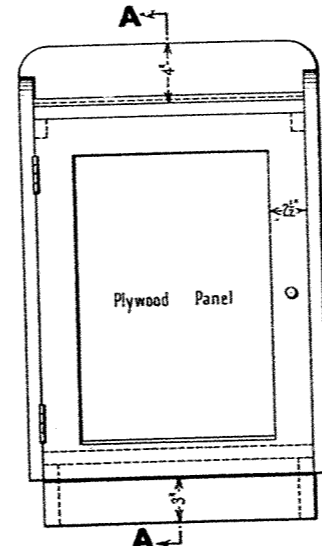
SECTION A-A



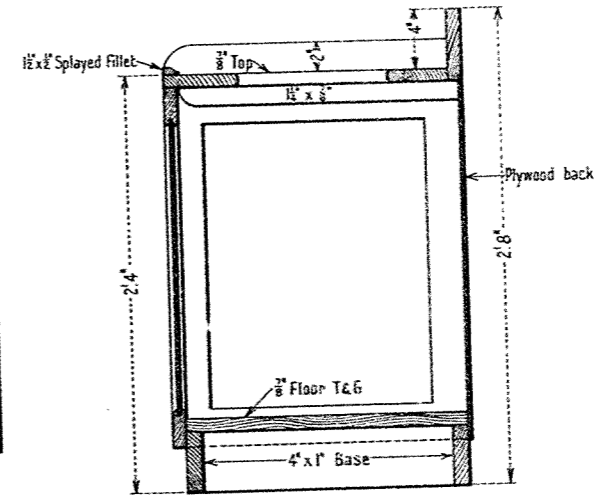
PLAN

- MATERIALS**
Mountain Ash 3/8" thick. Flush Panels to be of 1/2" slice cut Silver Ash.
- FITTINGS**
2 No 2 1/2" brass butt hinges to door & lid, "Ideal" catch to door.
- FINISH**
"Dulux" clear externally, white enamel inside of top.
- BASIN**
Stainless Steel 10" x 12" x 6".

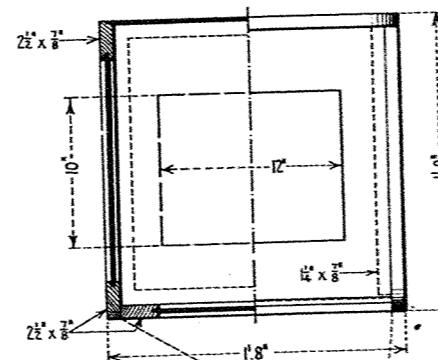
TYPE 'B'



FRONT ELEVATION



SECTION A-A



PLAN

- MATERIALS**
Any suitable Pine 3/8" thick, Hoop Pine panels.
- FITTINGS**
2 No 2 1/2" brass butt hinges to door, "Ideal" catch to door.
- FINISH**
Painted Light & Dark stone outside, Light stone inside, White enamel around basin & Black recessed base.
- BASIN**
Stainless Steel 10" x 12" x 6".

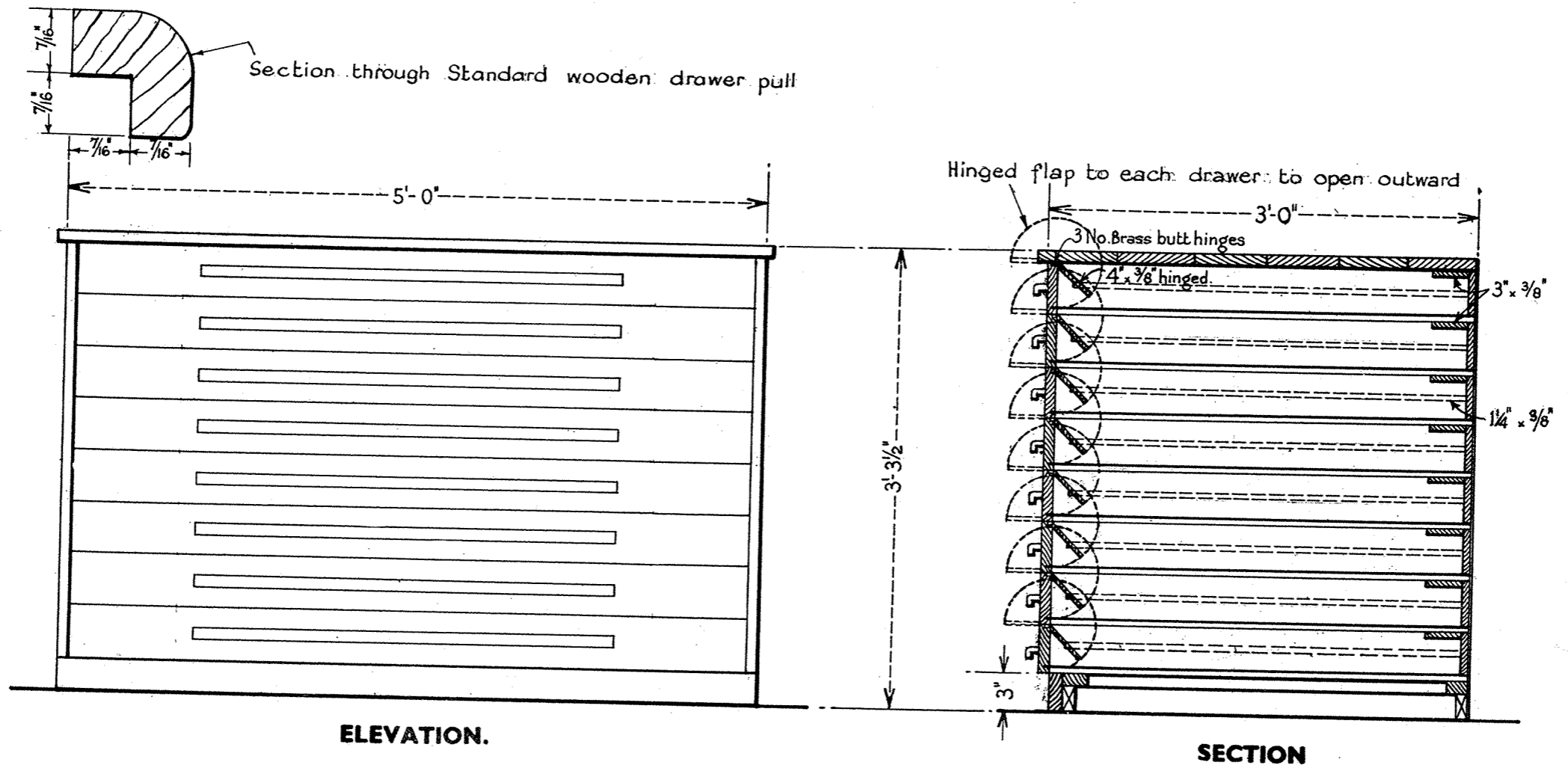
This plan supersedes plan No F394 and No F394A.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
WASH STANDS

SCALE: 1" = 1' 0"

Approved <i>M.W.</i> Chief Civil Engineer	Adopted FEB. 1944
Drawn by <i>V.W.L.</i>	Checked by <i>F.G.B.</i>
<i>H. Subcliffe.</i> Chief Architect	PLAN No. F394B

B	15-10-63	Stainless Steel Basin Provided	Sen. Archt.
Revision	Date	Amendment	Amended by

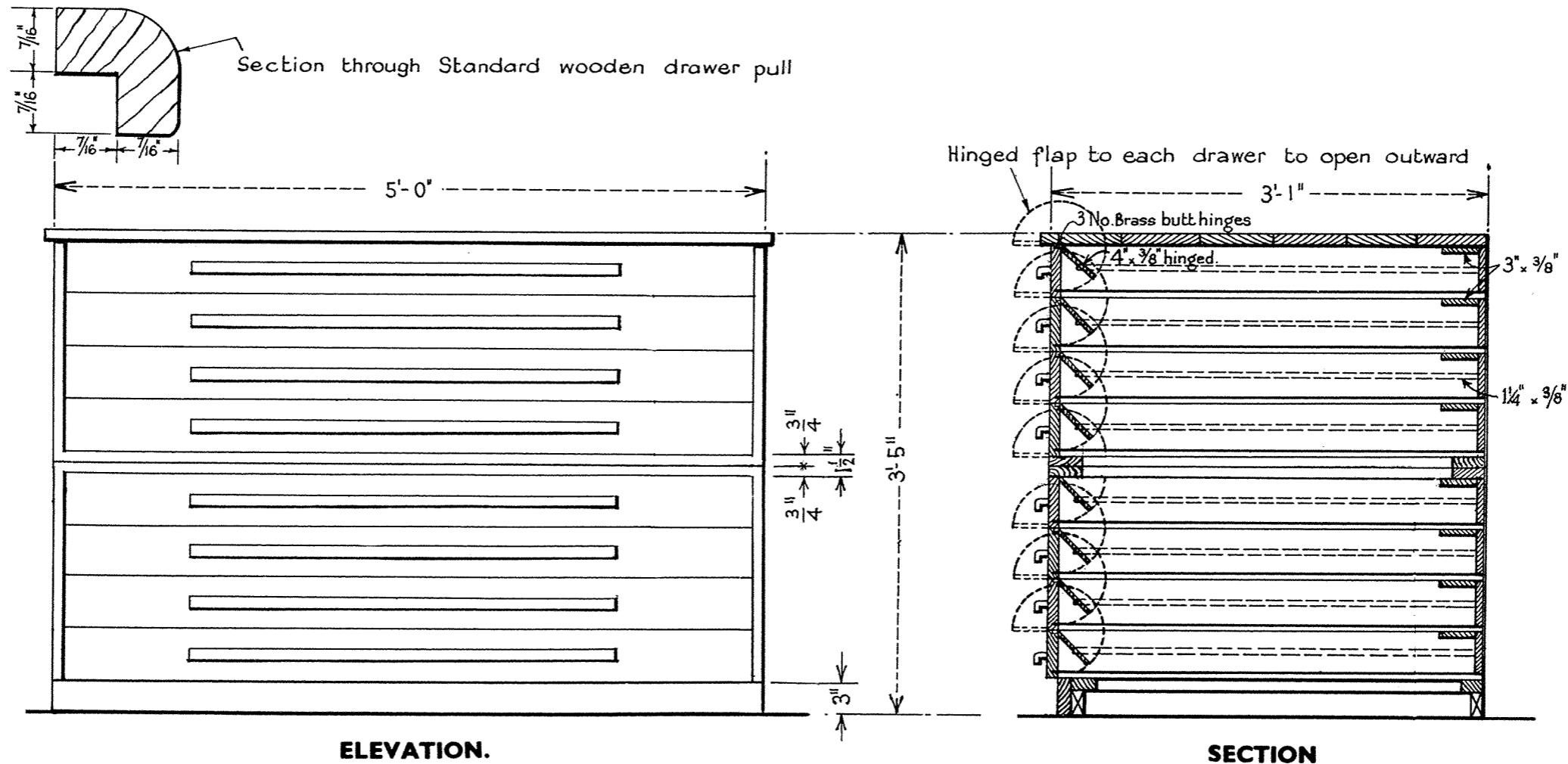


NOTES

All material 7/8" Mountain Ash. Drawer bottoms to be 1/4" Mountain Ash ply, with 2 No. bars 3" x 3/4" for intermediate support of same.
 Back of 1/4" Hoop pine ply. Finish: Standard Dulux treatment.
 Standard wooden drawer pulls: 3'0" long.
 Sides of drawers 7/8" Mountain Ash grooved to take 1/4" x 3/8" runners screwed to sides.

This drawing supersedes Plan No. 584-41.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	Oct. 1952.
PLAN PRESS		Drawn by K.F.L.	Checked by
Scale 1'-1'-0"		<i>[Signature]</i> Chief Architect	PLAN No. F395



ELEVATION.

SECTION

NOTES

All material $\frac{7}{8}$ " Mountain Ash. Drawer bottoms to be $\frac{1}{4}$ " Mountain Ash ply, with 2 No. bars $3" \times \frac{3}{4}"$ for intermediate support of same. Back of $\frac{1}{4}$ " Hoop pine ply. Finish: Standard Dulux treatment. Standard wooden drawer pulls $3'0"$ long. Sides of drawers $\frac{7}{8}$ " Mountain Ash grooved to take $\frac{1}{4}" \times \frac{3}{8}"$ runners screwed to sides.

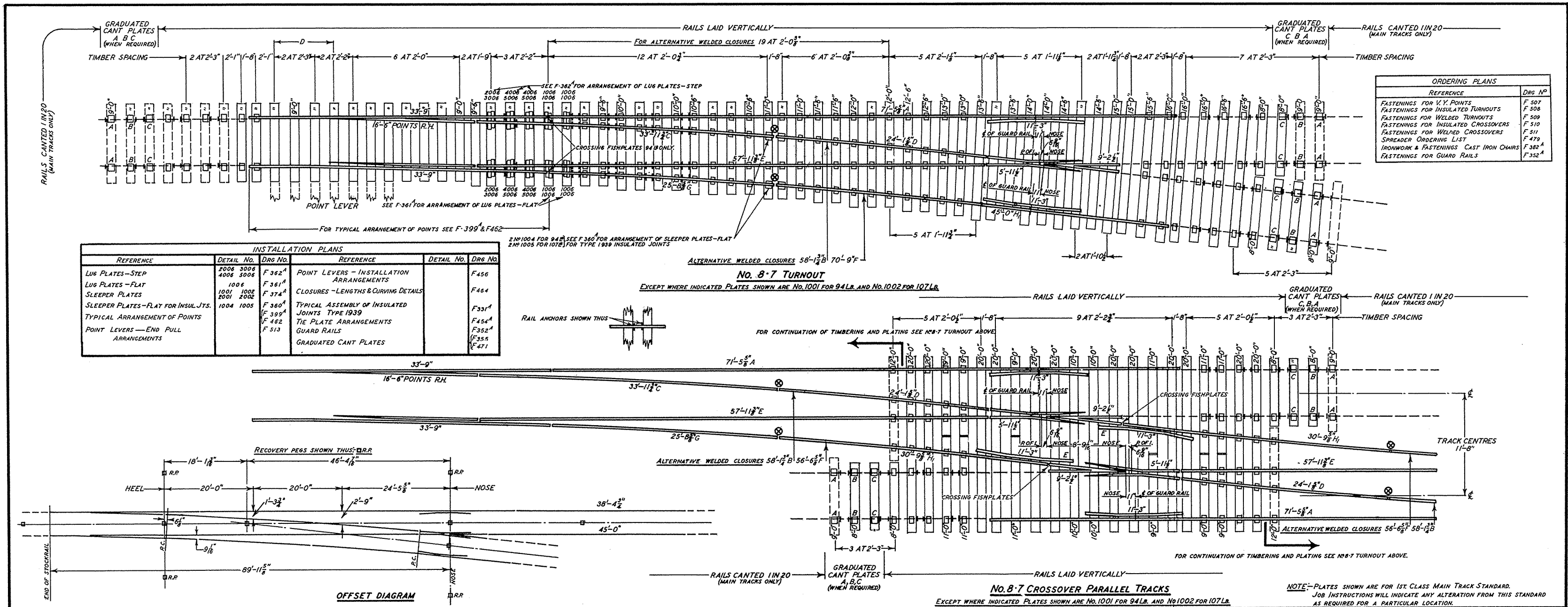
This drawing supersedes Plan No F 395

"A"	12.5.1966	Plan press to be manufactured in two separate sections with 4 drawers each, screwed together to form one unit.	J.S.
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Rev.	Date	Amendment	Amended by
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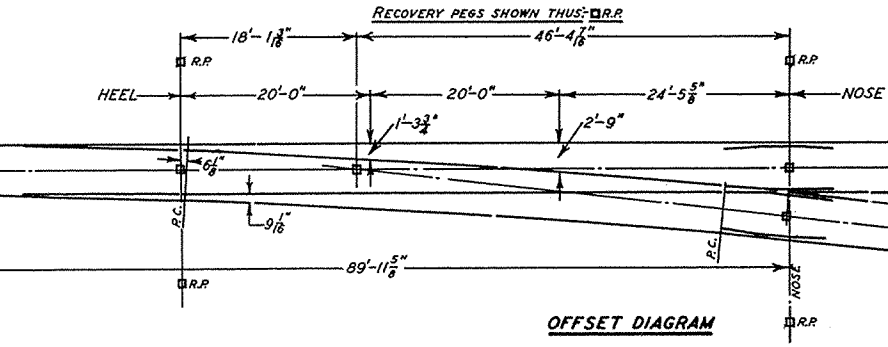
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
PLAN PRESS
 Scale $1\frac{1}{2}=1'-0"$

Approved <i>[Signature]</i> Chief Civil Engineer	Adopted Oct. 1952.
Drawn by K.F.L.	Checked by <i>[Signature]</i> Chief Architect
PLAN No. F395^A	

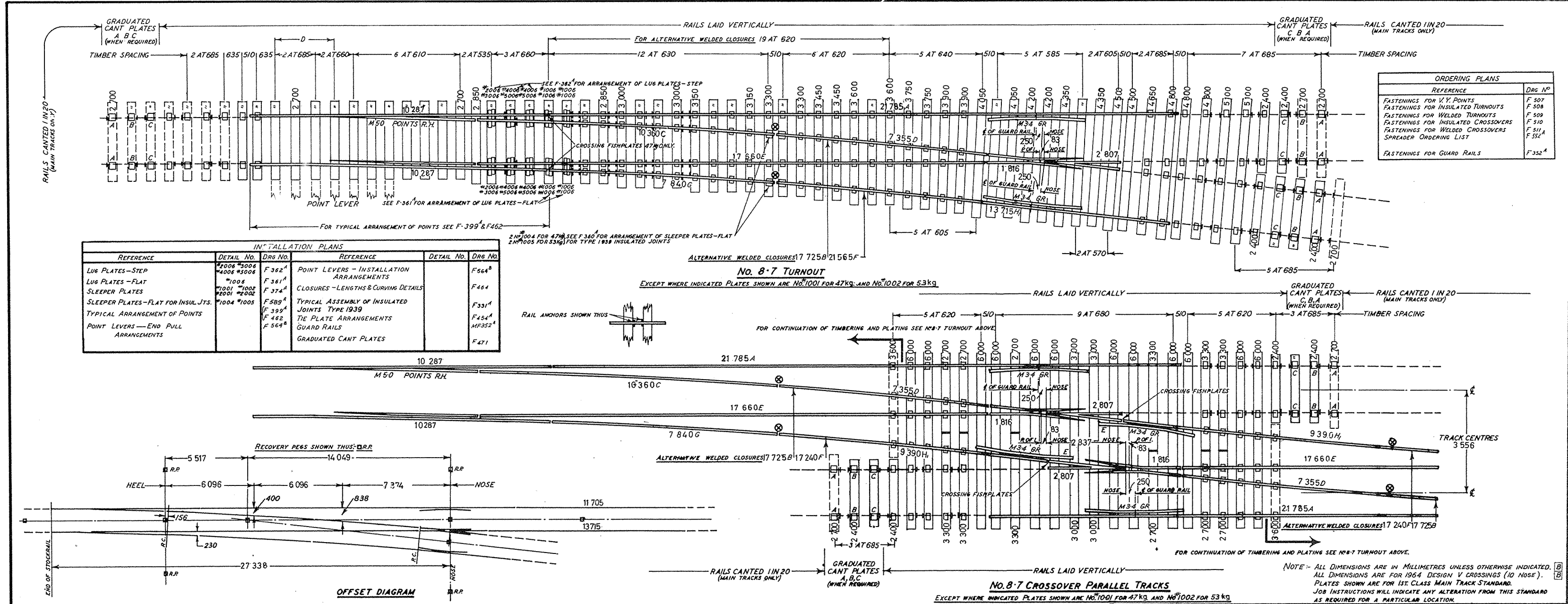


ORDERING PLANS	
REFERENCE	DRG NO.
FASTENINGS FOR V.V. POINTS	F 507
FASTENINGS FOR INSULATED TURNOUTS	F 508
FASTENINGS FOR WELDED TURNOUTS	F 509
FASTENINGS FOR INSULATED CROSSOVERS	F 510
FASTENINGS FOR WELDED CROSSOVERS	F 511
SPREADER ORDERING LIST	F 479
IRONWORK & FASTENINGS CAST IRON CHAIRS	F 382 ^A
FASTENINGS FOR GUARD RAILS	F 352 ^A

INSTALLATION PLANS					
REFERENCE	DETAIL No.	DRG No.	REFERENCE	DETAIL No.	DRG No.
LUG PLATES—STEP	2008	3006	POINT LEVERS—INSTALLATION ARRANGEMENTS		F 456
LUG PLATES—FLAT	1006		CLOSURES—LENGTHS & CURVING DETAILS		F 464
SLEEPER PLATES	1001	1002	TYPICAL ASSEMBLY OF INSULATED JOINTS TYPE 1939		F 331 ^A
SLEEPER PLATES—FLAT FOR INSUL. JTS.	2001	2002	TIE PLATE ARRANGEMENTS		F 454 ^A
TYPICAL ARRANGEMENT OF POINTS	1004	1005	GUARD RAILS		F 352 ^A
POINT LEVERS—END PULL ARRANGEMENTS			GRADUATED CANT PLATES		F 355 ^A F 471



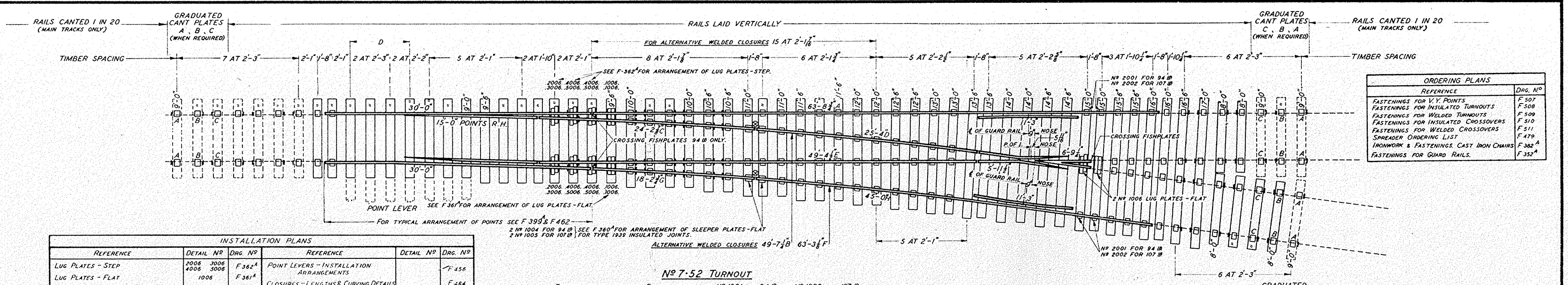
DATA	POINTS AND CROSSING FOR TURNOUT	POINTS AND CROSSINGS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR TURNOUT	TIMBERS FOR PARALLEL TRACK CROSSOVER	NOTES	VICTORIAN RAILWAYS WAY & WORKS BRANCH	APPROVED	ADOPTED
POINT ANGLE CROSSING NUMBER CROSSING ANGLE R.E. OPENINGS V. CROSSINGS VEE GAUGE BETWEEN STOCKRAILS AT TOE OF POINTS RADIUS OF OUTER RAIL RADIUS OF INNER RAIL	1° 33' 18" 9-7 6° 33' 24'-8" 8 1/2 1'-0 3/8" 5'-3 3/8" 660-41' 635-16'	1 SET 16'-6" POINTS R.H. OR L.H. 1 V. CROSSING NUMBER 8-7 2 PAIR 11'-3" GUARD RAILS WITH BLOCKS CLOSURE RAILS INSULATED LAYOUTS WELDED LAYOUTS	2 SETS 16'-6" POINTS R.H. OR L.H. 2 V. CROSSINGS NUMBER 8-7 2 PAIR 11'-3" GUARD RAILS WITH BLOCKS CLOSURE RAILS INSULATED LAYOUTS WELDED LAYOUTS	12 X 6" SAWN TIMBERS SUR. FT. = 3939 NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10 X 5 HEWN TIMBERS 6 No. 8'-0" = 200 SUPER FEET	12 X 6" SAWN TIMBERS SUPER FEET = 8804 NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10 X 5 HEWN TIMBERS 6 No. 8'-0" = 200 SUPER FEET	TURNOUT & CROSSOVER NO. 8-7 11 FT. 8 IN. CENTRES MAIN TRACK STANDARD NOT TO SCALE	CHIEF CIVIL ENGINEER CHECKED PASSED ENGINEER OF M.A.W.S.	1942 PLAN NO. F 397 ^A



INSTALLATION PLANS			
REFERENCE	DETAIL NO.	DRG NO.	REFERENCE
LUG PLATES—STEP	#2006 #3006 #4006 #5006	F 362 ^A	POINT LEVERS—INSTALLATION ARRANGEMENTS
LUG PLATES—FLAT	#1006	F 361 ^A	CLOSURES—LENGTHS & CURVING DETAILS
SLEEPER PLATES—FLAT FOR INSUL. JTS.	#1001 #1002 #2001 #2002	F 374 ^A	TYPICAL ASSEMBLY OF INSULATED JOINTS TYPE 1939
TYPICAL ARRANGEMENT OF POINTS	#1004 #1005	F 399 ^A	TIE PLATE ARRANGEMENTS
POINT LEVERS—END PULL ARRANGEMENTS		F 462	GUARD RAILS
		F 564 ^B	GRADUATED CANT PLATES
		F 564 ^B	
		F 331 ^A	
		F 454 ^A	
		MF352 ^A	
		F 471	

ORDERING PLANS	
REFERENCE	DRG NO.
FASTENINGS FOR V.Y. POINTS	F 507
FASTENINGS FOR INSULATED TURNOUTS	F 508
FASTENINGS FOR WELDED TURNOUTS	F 509
FASTENINGS FOR INSULATED CROSSOVERS	F 510
FASTENINGS FOR WELDED CROSSOVERS	F 511 ^A
SPREADER ORDERING LIST	F 552 ^A
FASTENINGS FOR GUARD RAILS	F 352 ^A

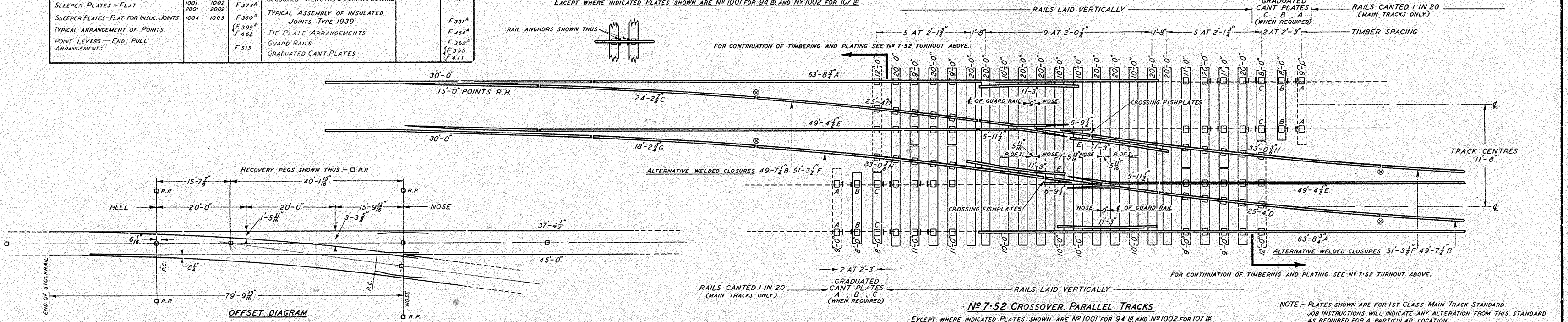
DATA	POINTS AND CROSSING FOR TURNOUT	POINTS AND CROSSINGS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR TURNOUT	TIMBERS FOR PARALLEL TRACK CROSSOVER	NOTES	APPROVED	ADOPTED	
POINT ANGLE CROSSING NUMBER CROSSING ANGLE R.E. OPENINGS V CROSSINGS " " " " VEE GAUGE BETWEEN STOCKRAILS AT TOE OF POINTS RADIUS OF OUTER RAIL RADIUS OF INNER RAIL	1° 33' 18" # 7 6° 33' 24" 8" 208 321 1 610 201 295 199 695	1 SET M50 POINTS R.H. OR L.H. 1 V CROSSING NUMBER # 7 1 PAIR M3-4 GUARD RAILS WITH BLOCKS CLOSURE RAILS INSULATED LAYOUTS WELDED LAYOUTS	2 SETS M50 POINTS R.H. OR L.H. 2 V CROSSINGS NUMBER # 7 2 PAIRS M3-4 GUARD RAILS WITH BLOCKS CLOSURE RAILS INSULATED LAYOUTS WELDED LAYOUTS	300x150 SAWN TIMBERS 2 No. 5100 1 No. 4050 3 No. 3300 3 " 4800 2 " 3900 4 " 3150 1 " 4850 2 " 3750 4 " 3000 2 " 4500 3 " 3400 8 " 2850 3 " 4350 2 " 3450 13 " 2700 2 " 4200 NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	300x150 SAWN TIMBERS 12 No. 6000 8 No. 3150 6 " 3600 12 " 3000 4 " 3450 8 " 2850 12 " 3300 32 " 2700 NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	EXPANSION AT JOINTS—INSULATED JOINTS SHOWN THUS, OTHER JOINTS 3 LOCATE GUARD RAILS MARKED 'E' AS FOLLOWS—DRILL 32 HOLE IN V CROSSING 781 FROM VEE END FOR GUARD RAIL END BOLTS POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. SPACING AT 'D' TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF OPERATION FOR EXTRA LENGTH TIMBERS SHOWN BROKEN REFER TO STANDARD DRAWING F54 FOR HAND WORKED POINTS OTHER THAN PLUMBER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUMBER LOCKED, INTERLOCKED AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS. JUNCTION FISHPATES WHEN REQUIRED MUST BE PLACED AT LEAST ONE RAIL LENGTH CLEAR OF POINTS AND CROSSINGS.	VICTORIAN RAILWAYS WAY & WORKS BRANCH TURNOUT & CROSSOVER No. 8-7 3 556 CENTRES MAIN TRACK STANDARD NOT TO SCALE	1975 PLAN NO. MF397



REFERENCE	DETAIL NO	DRG NO	REFERENCE	DETAIL NO	DRG NO
LUG PLATES - STEP	2006	3006	POINT LEVERS - INSTALLATION ARRANGEMENTS		F 456
LUG PLATES - FLAT	4006	5006	CLOSURES - LENGTHS & CURVING DETAILS		F 464
SLEEPER PLATES - FLAT	1001	1002	TYPICAL ASSEMBLY OF INSULATED JOINTS TYPE 1939		F 331A
SLEEPER PLATES - FLAT FOR INSUL. JOINTS	1004	1005	TIE PLATE ARRANGEMENTS		F 454A
TYPICAL ARRANGEMENT OF POINTS			GUARD RAILS		F 352A
POINT LEVERS - END PULL ARRANGEMENTS			GRADUATED CANT PLATES		F 471

ORDERING PLANS	
REFERENCE	DRG. NO
FASTENINGS FOR V.Y. POINTS	F 507
FASTENINGS FOR INSULATED TURNOUTS	F 508
FASTENINGS FOR WELDED TURNOUTS	F 509
FASTENINGS FOR INSULATED CROSSOVERS	F 510
FASTENINGS FOR WELDED CROSSOVERS	F 511
SPREADER ORDERING LIST	F 479
IRONWORK & FASTENINGS, CAST IRON CHAIRS	F 382A
FASTENINGS FOR GUARD RAILS	F 352A

No 7-52 TURNOUT
EXCEPT WHERE INDICATED PLATES SHOWN ARE NO 1001 FOR 94 LB AND NO 1002 FOR 107 LB



DATA	POINTS AND CROSSINGS FOR TURNOUT	POINTS AND CROSSINGS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR TURNOUT	TIMBERS FOR PARALLEL TRACK CROSSOVER	NOTES
POINT ANGLE CROSSING NUMBER CROSSING ANGLE R.E. OPENINGS V CROSSING WING VEE GAUGE BETWEEN STOCK RAILS AT TOE OF POINTS RADIUS OF OUTER RAIL RADIUS OF INNER RAIL	1 42' 37.5" 7-52 7° 34' 06.6" 9 1/8" 10 3/8" 5-3 3/8" 480.37' 475.12'	2 SETS 15'-0" POINTS R.H. OR L.H. 2 V CROSSINGS NUMBER 7-52 2 PAIR 11'-3" GUARD RAILS WITH BLOCKS	12x6 SAWN TIMBERS 1 17'-0" 2 14'-0" 3 11'-0" 1 16'-6" 2 13'-6" 2 10'-6" 2 15'-0" 2 13'-0" 4 10'-0" 3 426 2 15'-0" 2 12'-6" 0 9'-6" 2 15'-0" 2 12'-0" 9 9'-0" 2 14'-6" 3 11'-6"	12x6 SAWN TIMBERS 12 20'-0" 4 10'-6" 4 12'-0" 16 10'-0" 5 11'-6" 16 9'-6" 10 11'-0" 22 9'-0"	NOTE: EXPANSION AT JOINTS - INSULATED JOINTS SHOWN THUS ⊗. OTHER JOINTS ⊕. LOCATE GUARD RAILS MARKED E AS FOLLOWS: DRILL 1/4" HOLE IN V CROSSING 1-10" FROM VEE END FOR GUARD RAIL END BOLT. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. SPACING AT D TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF OPERATION. FOR EXTRA LENGTH TIMBERS SHOWN BROKEN REFER TO STANDARD DRAWING F 456 & F 513 FOR HAND WORKED POINTS OTHER THAN PLUNGER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUNGER LOCKED, INTERLOCKED AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS. JUNCTION FISHPATES, WHEN REQUIRED, MUST BE PLACED AT LEAST ONE RAIL LENGTH CLEAR OF POINTS AND CROSSINGS. POINTS AND CROSSINGS MUST BE DATE STAMPED WHEN LAID IN VIDE W.M. INSTR. 383-24.
	CLOSURE RAILS INSULATED LAYOUTS 1-49'-4 1/2" 1-18'-2 3/8" 1-25'-4 1/2" WELDED LAYOUTS 1-63'-8 1/2" 1-49'-7 1/8" 1-49'-4 1/2" 1-52'-3 1/8"	CLOSURE RAILS INSULATED LAYOUTS 2-63'-8 1/2" 2-24'-2 3/8" 2-25'-4 1/2" WELDED LAYOUTS 2-49'-4 1/2" 2-18'-2 3/8" 2-33'-2 3/8" 2-63'-8 1/2" 2-49'-7 1/8" 2-49'-4 1/2" 2-31'-3 1/8"	NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10x5 HEWN TIMBERS 6 NO 8'-0" = 200 SUPER FT.	NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION. 10x5 HEWN TIMBERS 4 NO 8'-0" = 133.3 SUPER FT.	

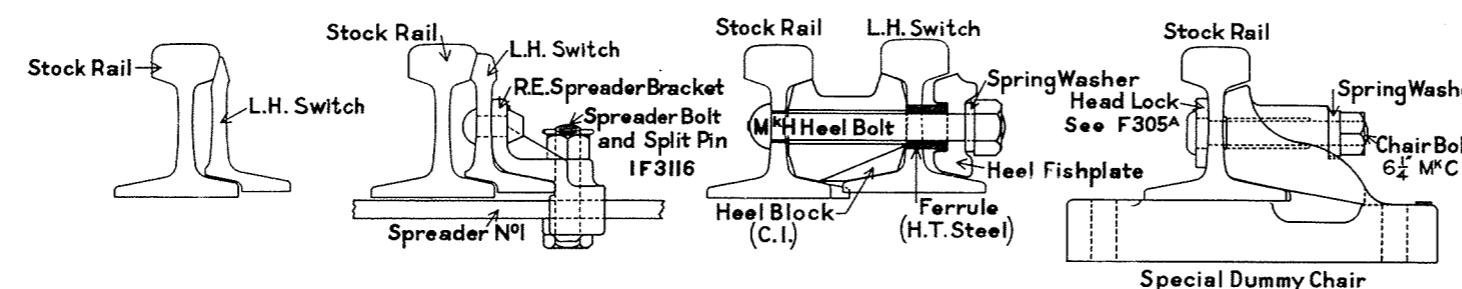
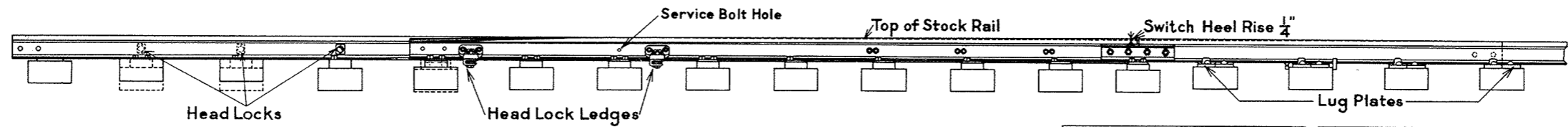
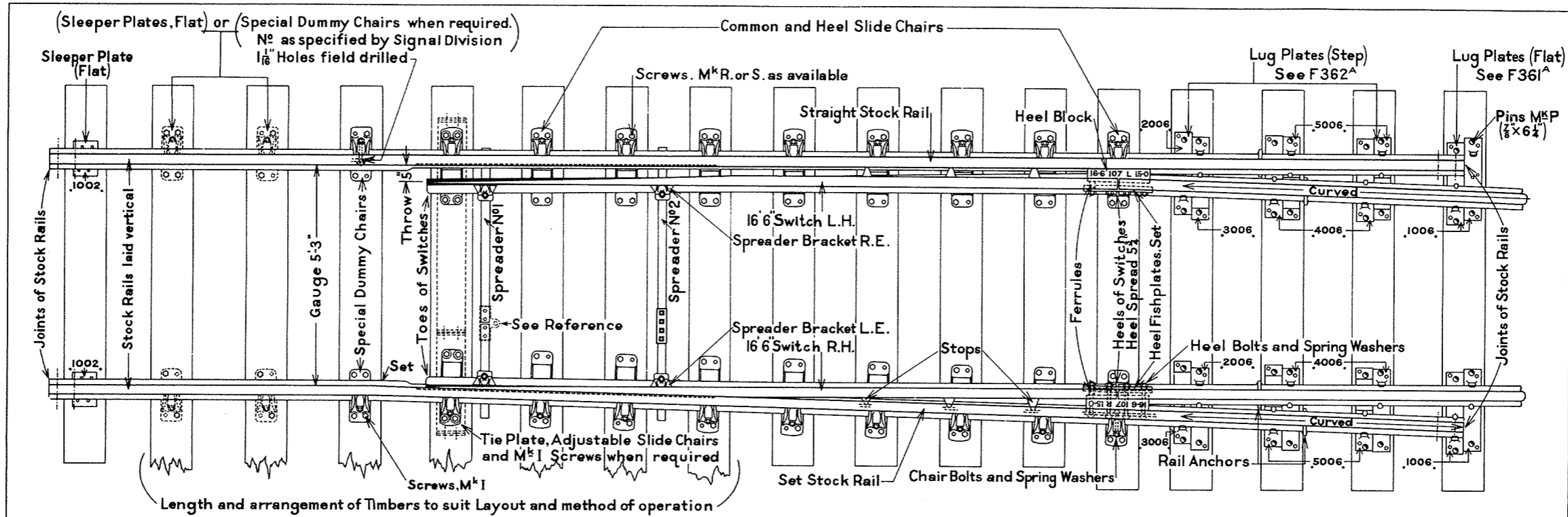
VICTORIAN RAILWAYS WAY & WORKS BRANCH

TURNOUT & CROSSOVER
No 7-52 94 & 107 LB A.S.
11 FT. 8 IN. CENTRES
MAIN TRACK STANDARD
NOT TO SCALE

APPROVED [Signature]
CHIEF CIVIL ENGINEER

CHECKED [Signature]
PASSED [Signature]
ENGINEER OF M & S.

ADOPTED 1942
PLAN NO F398A

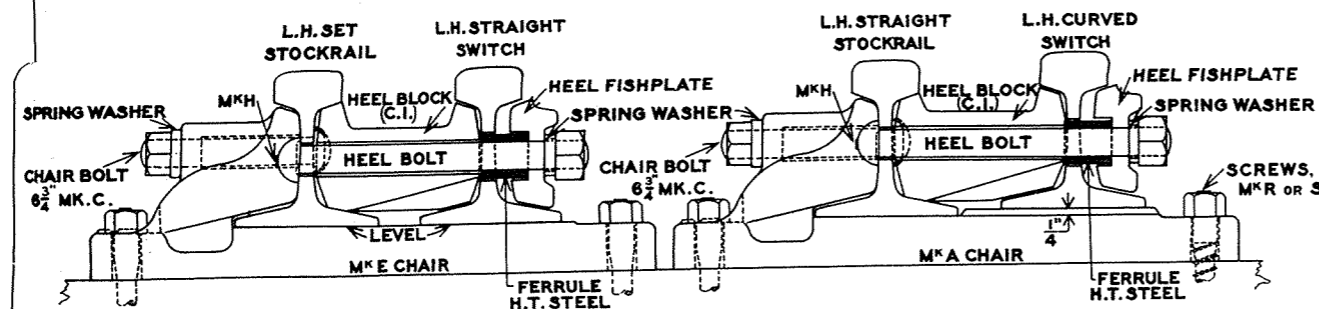
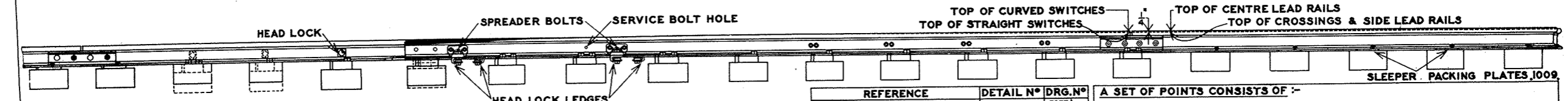
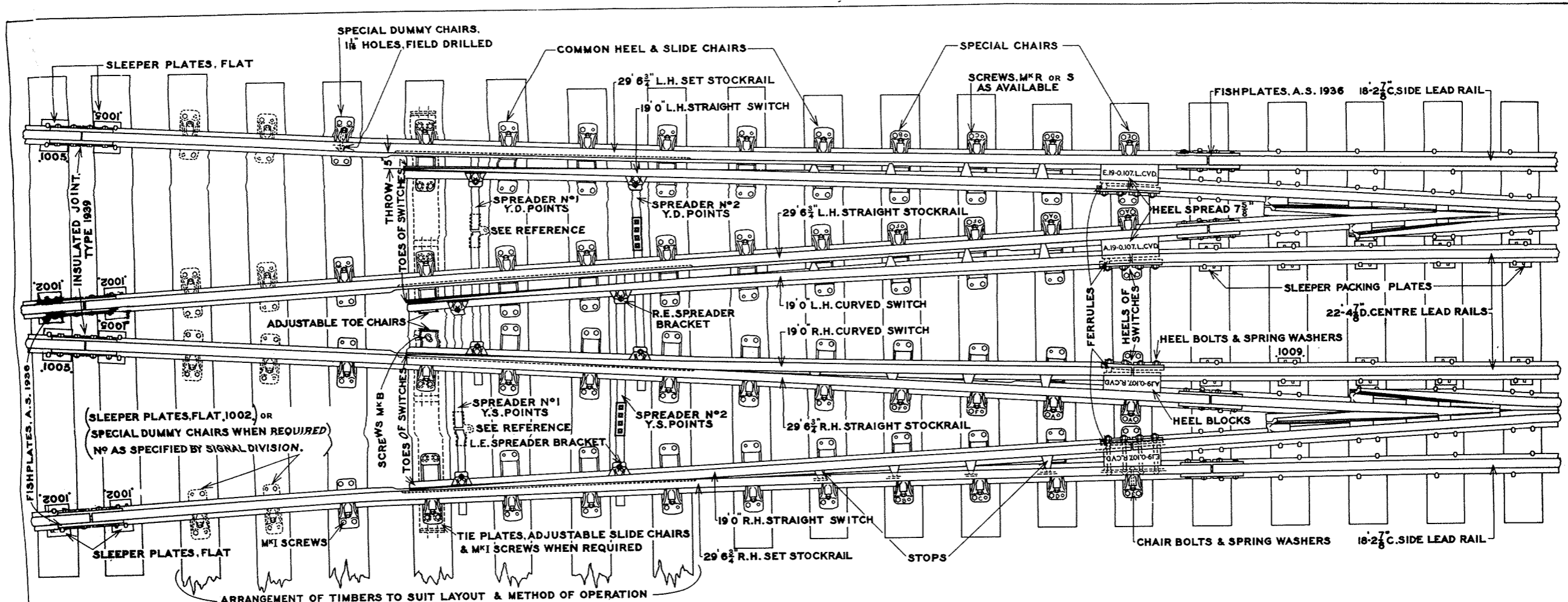


A Set of Points consists of :-
 2 Stock Rails - 1 Str. & 1 Set, R. or L. Hand
 2 Switches - 1 R. & 1 L. Hand
 2 Heel Blocks - 1 R. & 1 L. Hand
 2 Heel Fishplates, Set
 2 Ferrules
 8N° 1 1/8" Dia. Heel Bolts X 9 3/8" long
 8N° Spring Washers
 Points despatched in half-set assemblies to be installed as received and service bolts taken into stock.

Reference	Detail N°	Drg N°
Lug Plates (Flat)	1006	F 361^A
" " (Step)	2006, 3006, 4006, 5006	F 362^A
Sleeper Plates (Flat)	1002	F 374^A
Spreader Bolts	1F3116	F1240 F1268
Point Levers Installation Arrangements		F456
Quantity of Ironwork and Fastenings		F382^A

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING
 Typical Arrangement of V Nosed Points
 16-6" R.H. 107 L^b A.S. here shown
 CAST IRON CHAIRS

Approved <i>[Signature]</i> Chief Civil Engineer	Adopted 1942
Checked <i>[Signature]</i> Passed <i>[Signature]</i> Engineer of M & W.S.	PLAN N° F399^A



REFERENCE	DETAIL NO	DRG. NO
STANDARD DIAGRAM OF DOUBLE AND SINGLE COMPOUNDS, N° 87, 94 & 107 LBS.		F377A
SLEEPER PLATES, FLAT, FOR INSULATED JOINTS.	1005.	F380B
SLEEPER PLATES, FLAT.	1002.	F374A
SLEEPER PACKING PLATES	1009.	F366A
SPREADERS		F1240 F1268
POINT LEVERS		F 456
INSTALLATION ARRANGEMENTS		F382B
QUANTITY OF IRONWORK AND FASTENINGS.		F331A
INSULATED JOINT, TYPICAL ASSEMBLY.		F305A
HEAD LOCKS FOR SPECIAL DUMMY CHAIR BOLTS.		
SPREADER BOLTS	IF3116	F3116

POINTS ARE MADE IN HALF-SET ASSEMBLIES COMPLETE WITH HEEL FASTENINGS, AND ARE TO BE LAID AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK.

A SET OF POINTS CONSISTS OF :-

2 STOCKRAILS, 1 STR. & 1 SET, R. OR L. HAND.	2 FERRULES.
2 SWITCHES, 1 STR. & 1 CURVED, R. OR L. HAND.	8 N° 1 1/2 DIA HEEL BOLTS X 11 1/2 LONG, M&K.
2 SLEEPER PACKING PLATES	8 N° SPRING WASHERS.
2 HEEL FISHPLATES, SET.	

VICTORIAN RAILWAYS WAY & WORKS BRANCH

COMPOUND POINTS

TYPICAL ARRANGEMENT
N° 8-7. 107 LB. A.S.

APPROVED *[Signature]*

CHIEF CIVIL ENGINEER

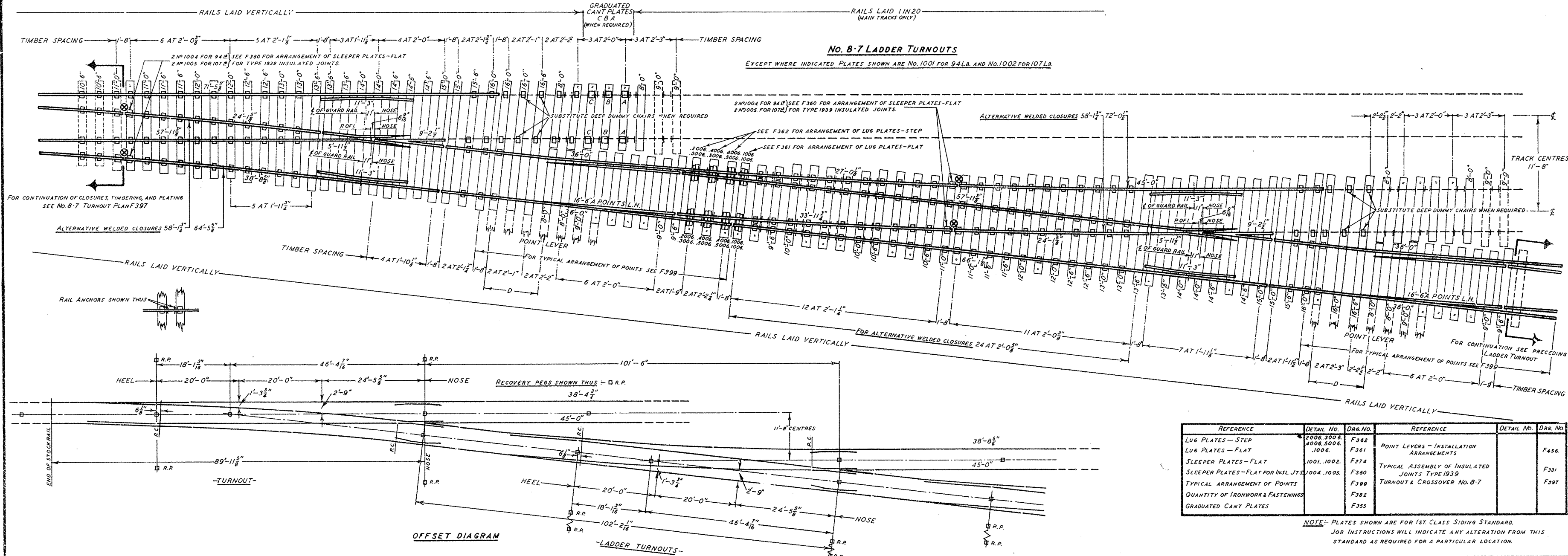
CHECKED *K.S.*

PASSED *[Signature]*

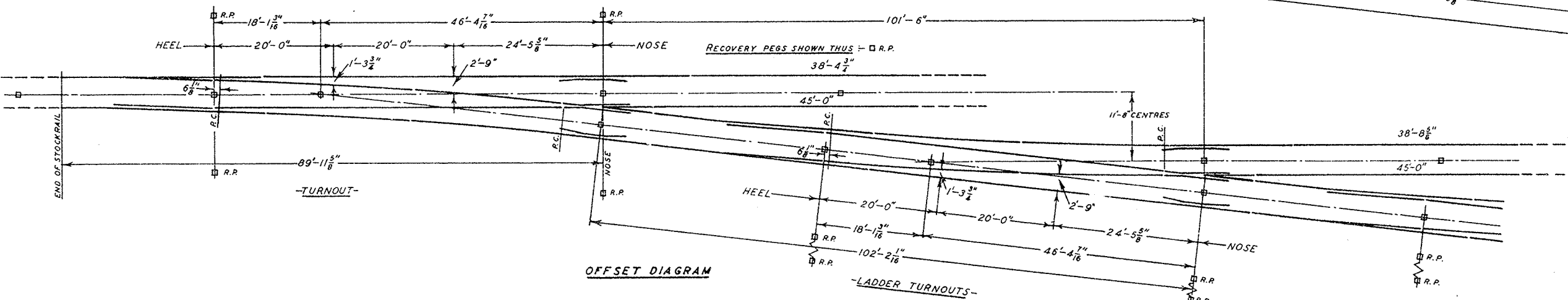
ENGINEER OF M.&W.S.

ADOPTED 1942

PLAN N° **F400A**



No. 8-7 LADDER TURNOUTS
EXCEPT WHERE INDICATED PLATES SHOWN ARE NO. 1001 FOR 94 LB. AND NO. 1002 FOR 107 LB.



REFERENCE	DETAIL NO.	DRG. NO.	REFERENCE	DETAIL NO.	DRS. NO.
LUG PLATES - STEP	2006, 3006, 4006, 5006, 1006	F362	POINT LEVERS - INSTALLATION ARRANGEMENTS		F456
LUG PLATES - FLAT	1001, 1002	F374			
SLEEPER PLATES - FLAT	1001, 1002	F374	TYPICAL ASSEMBLY OF INSULATED JOINTS TYPE 1939		F331
SLEEPER PLATES - FLAT FOR INSL. JTS.	1004, 1005	F360			
TYPICAL ARRANGEMENT OF POINTS		F399	TURNOUT & CROSSOVER NO. 8-7		F397
QUANTITY OF IRONWORK & FASTENINGS		F382			
GRADUATED CANT PLATES		F355			

NOTE: PLATES SHOWN ARE FOR 1ST. CLASS SIDING STANDARD. JOB INSTRUCTIONS WILL INDICATE ANY ALTERATION FROM THIS STANDARD AS REQUIRED FOR A PARTICULAR LOCATION.

DATA		POINTS AND CROSSING FOR TURNOUT	POINTS AND CROSSING FOR LADDER TURNOUTS	TIMBERS FOR TURNOUT	TIMBERS FOR LADDER TURNOUTS	NOTES
POINT ANGLE	1° 33' 18"	1 SET 16'-6" POINTS R.H. OR L.H.	1 SET 16'-6" POINTS R.H. OR L.H.	12" X 6" SAWN TIMBERS	12" X 6" SAWN TIMBERS	NOTES: EXPANSION AT JOINTS - INSULATED JOINTS SHOWN THUS ⊗ NIL, OTHER JOINTS ⊕ POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. SPACING AT "D" TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF OPERATION. FOR EXTRA LENGTH TIMBERS SHOWN BROKEN REFER TO STANDARD DRAWING - F456 FOR HAND WORKED POINTS OTHER THAN PLUNGER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUNGER LOCKED, INTERLOCKED AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS. JUNCTION FISHPLATES WHEN REQUIRED MUST BE PLACED AT LEAST ONE RAIL LENGTH CLEAR OF POINTS & CROSSINGS. POINTS AND CROSSINGS MUST BE DATE STAMPED WHEN LAID IN VIDE WAY AND WORKS INSTRUCTION 383-24.
CROSSING NUMBER	8-7	1 V CROSSING NUMBER 8-7	1 V CROSSING NUMBER 8-7	3 No. 16'-6" 3 No. 13'-6" 3 No. 11'-0" } = 3840	3 No. 16'-6" 3 No. 13'-6" 3 No. 11'-0" } = 3561	
CROSSING ANGLE	6° 33' 24.8"	1 PAIR 11'-3" GUARD RAILS WITH BLOCKS	1 PAIR 11'-3" GUARD RAILS WITH BLOCKS	2 " 15'-0" 2 " 12'-0" 2 " 9'-0" } = 14'-0"	2 " 15'-0" 2 " 12'-0" 2 " 9'-0" } = 14'-0"	
R.E. OPENING V CROSSINGS	WING 8 3/8"	CLOSURE RAILS INSULATED LAYOUTS	CLOSURE RAILS INSULATED LAYOUTS	2 " 14'-0" 2 " 11'-6" 13 " 9'-0"	2 " 14'-0" 2 " 11'-6" 13 " 9'-0"	
" " " "	VEE 1'-0 5/8"	WELDED LAYOUTS	WELDED LAYOUTS	NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION	NOTE: EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION	
GAUGE BETWEEN STOCKRAILS AT TOE OF POINTS	5'-3 3/8"			10" X 5" HEWN TIMBERS 6 No. 8'-0" 200 SUPER FT	10" X 5" HEWN TIMBERS 6 No. 8'-0" 200 SUPER FT	
RADIUS OF OUTER RAIL	660.41'					
RADIUS OF INNER RAIL	655.16'					

VICTORIAN RAILWAYS WAY & WORKS BRANCH

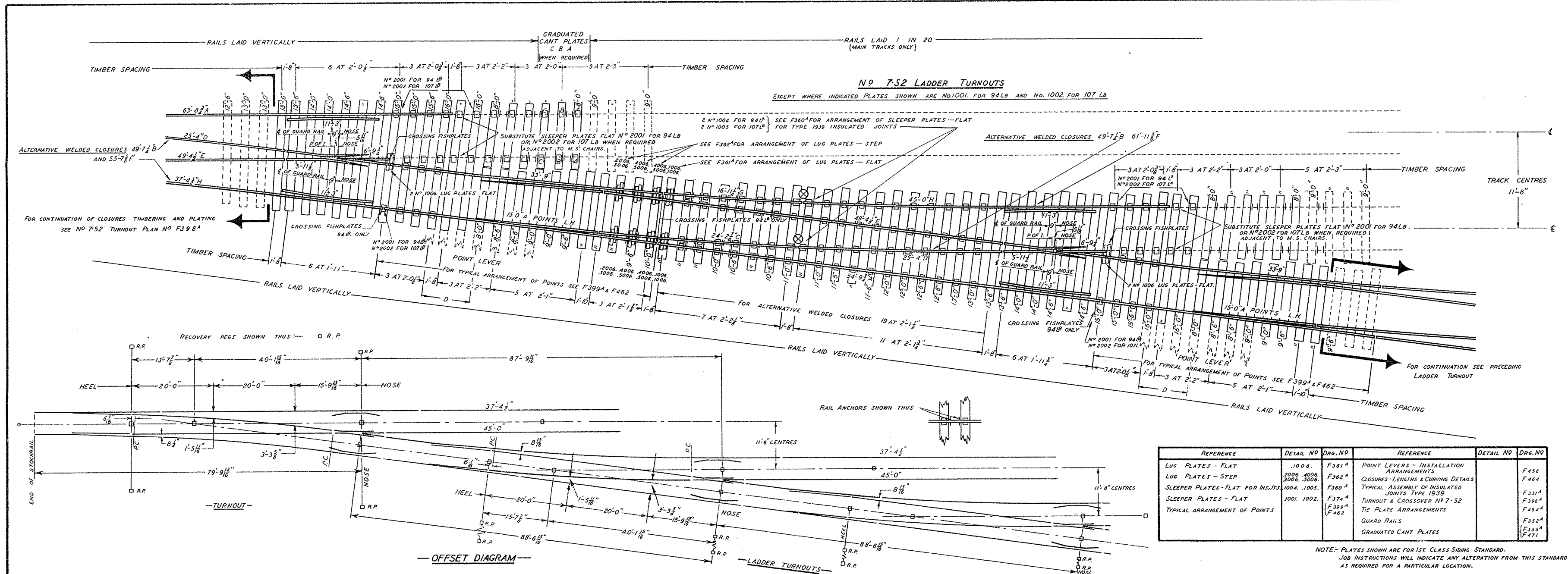
LADDER TURNOUTS
NO. 8-7 94 & 107 L.B.A.S.
11 FT. 8 IN. CENTRES
1ST. CLASS SIDING STANDARD
NOT TO SCALE

APPROVED: [Signature]
CHIEF CIVIL ENGINEER

CHECKED: [Signature]
PASSED: [Signature]

ENGINEER OF M.S.W.S.

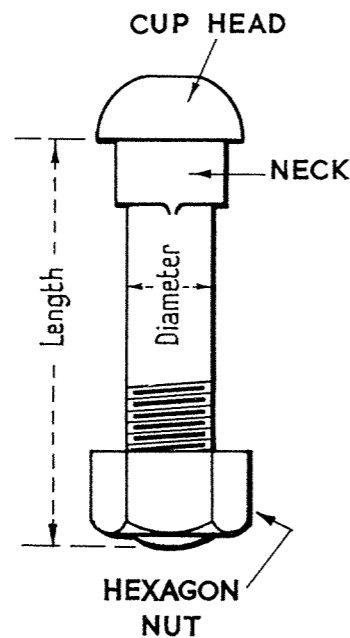
ADOPTED 1943
PLAN NO. F402A



REFERENCE	DETAIL NO	DRG. NO	REFERENCE	DETAIL NO	DRG. NO
LUG PLATES - FLAT	1006	F361A	POINT LEVERS - INSTALLATION ARRANGEMENTS		F456
LUG PLATES - STEP	2006, 4006, 3006, 3006	F362A	CLOSURES - LENGTHS & CURVING DETAILS		F464
SLEEPER PLATES - FLAT FOR INS. JTS.	1004, 1005	F380A	TYPICAL ASSEMBLY OF INSULATED JOINTS TYPE 1939		F331A
SLEEPER PLATES - FLAT	1001, 1002	F374A	TURNOUT & CROSSOVER NO 7-52		F398A
TYPICAL ARRANGEMENT OF POINTS		F399A, F462	TIE PLATE ARRANGEMENTS		F454A
			GUARD RAILS		F352A
			GRADUATED CANT PLATES		F355A, F471

DATA	POINTS AND CROSSINGS FOR TURNOUT	POINTS AND CROSSINGS FOR LADDER TURNOUT	TIMBERS FOR TURNOUT	TIMBERS FOR LADDER TURNOUTS	NOTES
POINT ANGLE	1° 42' 37"		12" 6" SAWN TIMBERS	12" 6" SAWN TIMBERS	EXPANSION AT JOINTS - INSULATED JOINTS SHOWN THUS ⊗ NIL, OTHER JOINTS ⊕ POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. SPACING AT 'D' TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF OPERATION. FOR EXTRA LENGTH TIMBERS SHOWN BROKEN REFER TO STANDARD DRAWING F456 FOR HAND WORKED POINTS OTHER THAN PLUNGER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUNGER LOCKED, INTERLOCKED AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS. JUNCTION FISHPATES WHEN REQUIRED MUST BE PLACED AT LEAST ONE RAIL LENGTH CLEAR OF POINTS & CROSSINGS. POINTS AND CROSSINGS MUST BE DATE STAMPED WHEN LAID IN WIDE WAY AND WORKS INSTRUCTION 383-24.
CROSSING NUMBER	7-52		9 No 9'-0" 2 No 12'-0" 2 No 15'-0"	1 No 8'-0" 3 No 11'-0" 2 No 14'-0"	
CROSSING ANGLE	7° 34' 06.6"		8 " 9'-6" 2 " 12'-6" 1 " 15'-6"	2 " 8'-6" 3 " 11'-6" 3 " 14'-6"	
RE. OPENINGS V CROSSING WING	9 3/8"		4 " 10'-0" 2 " 13'-0" 3 " 16'-0"	2 " 9'-0" 2 " 12'-0" 2 " 15'-0"	
" " " VEE	10 3/8"		2 " 10'-6" 2 " 13'-6"	5 " 9'-6" 2 " 12'-6" 1 " 15'-6"	
GAUGE BETWEEN STOCKRAILS AT TOE OF POINTS	5'-3 3/8"		3 " 11'-0" 2 " 14'-0"	5 " 10'-0" 2 " 13'-0" 3 " 16'-0"	
RADIUS OF OUTER RAIL	480-37'		3 " 11'-6" 3 " 14'-6"	3 " 10'-6" 2 " 13'-6"	
RADIUS OF INNER RAIL	475-12'				
			NOTE - EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	NOTE - EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION.	
			10 1/2" 5" HEWN TIMBERS 6 No 8'-0" 200 SUPER FT	10 1/2" 5" HEWN TIMBERS 6 No 8'-0" 200 SUPER FT	

VICTORIAN RAILWAYS	WAY & WORKS BRANCH	APPROVED	ADOPTED
LADDER TURNOUTS		 CHIEF CIVIL ENGINEER	1948
NO 7-52 94 & 107 LB. S.			PLAN NO
11 FT 8 IN CENTRES		 ENGINEER OF M.S. WORKS	F 403
1ST CLASS SIDING STANDARD NOT TO SCALE			



OVAL NECK



NIB NECK

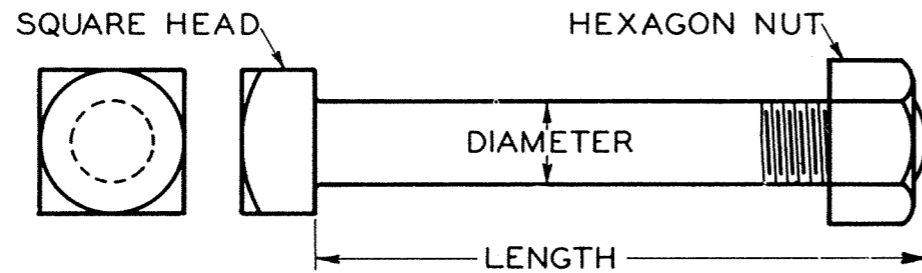
LENGTH	DIAMETER	SHAPE			SPRING WASHER	USE (TYPE OF FISHPLATE)
		HEAD	NECK	NUT		
5 $\frac{3}{4}$ "	1"	CUP	OVAL	HEXAGON	TYPE 1944	80 LB. A.S./80 LB. O 1958
5 $\frac{3}{8}$ "	1"	"	"	"	"	80/90 LB. A.S. 1925, 1928, 1935. 94 LB. A.S. 1937.
5"	1"	"	"	"	"	100 LB. A.S. 1923. 100/110 LB. A.S. 1925, 1928. 107 LB. A.S. 1937. 94 LB. A.S. 1939.
4 $\frac{1}{2}$ "	1"	"	"	"	"	80 LB. O. 1897. 80 LB. A.S. 1915. 100 LB. P. 1897. 100 LB. A.S. 1915, 1921. 75 LB. H.&I. 1929. 80 LB. O. FLAT. 80 LB. A.S. FLAT. 90 LB. A.S. FLAT. 110 LB. A.S. FLAT. 100 LB. P. FLAT. 100 LB. A.S. FLAT. 95 LB. (THICK WEB 80 LB. O) 115 LB. (THICK WEB 100 LB. P)
4 $\frac{1}{2}$ "	1"	"	NIB	"	"	75 LB. I. 1881. 75 LB. H. 1885, 1888. 86 LB. (THICK WEB 75 LB. H.) 100 LB. M. 1889.
4 $\frac{1}{4}$ "	$\frac{7}{8}$ "	"	OVAL	"	$\frac{15}{16} \times \frac{3}{8} \times \frac{1}{4}$ "	60 LB. A.S. 1919, 1925. 60 LB. N. 1901. 66 LB. E.& F. 1929. 80 LB. A.S. 1921. 60 LB. A.S. X LAYOUT HEEL. 60 LB. A.S. FLAT.
4 $\frac{1}{8}$ "	$\frac{7}{8}$ "	"	NIB	"	"	60 LB. C. 1879. 60 LB. D. 1881, 1889, 1893. 66 LB. F. 1886. 66 LB. B. E. 1879 (HEAVY). 70 LB. (THICK WEB 60 LB. C) 78 LB. (THICK WEB 66 LB. E)
4"	$\frac{3}{4}$ "	"	OVAL	"	$\frac{13}{16} \times \frac{3}{8} \times \frac{1}{4}$ "	60 LB. A.S. 1921.

Revision	Date	Amendment	Amended by
B	1.7.58	5 $\frac{3}{4}$ " Fishbolt added	G.E.M.
A	18.5.53	4 $\frac{1}{2}$ " x 1" dia. Nib ex 4 $\frac{1}{8}$ " x 1" dia.	G.J.E.

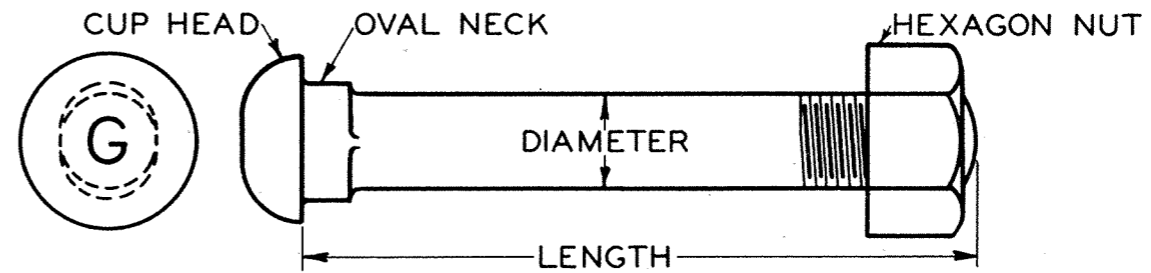
VICTORIAN RAILWAYS - WAY & WORKS BRANCH
STANDARD DRAWING
FISH BOLTS
STOCK SIZES
 GENERAL USE

Approved <i>[Signature]</i> Chief Civil Engineer		Adopted 1.9.58
Drawn by E. W. B.	Checked by G. E. M.	PLAN NO F404B
A. A. R. Eng' of Machs & Water Supply		

LENGTH	DIAMETER	SHAPE			SPRING WASHER	PURPOSE
		HEAD	NECK	NUT		
8 $\frac{5}{8}$ " 'G'	1"	CUP	OVAL	HEXAGON	TYPE 1944	LONG BOLT FOR 94 & 107 LB. DERAIL TURNOUT GUARD RAILS WITH D.T. 3 END BLOCKS.
8 $\frac{1}{4}$ " 'G'	"	"	"	"	"	LONG BOLT FOR ALL WEIGHTS & CLASSES OF GUARD RAILS 80 - 110 LBS. BOLT FOR STEEL SLEEPERS FOR ASH DUMPS.
6 $\frac{7}{8}$ " 'G'	"	"	"	"	"	SHORT BOLT FOR ALL WEIGHTS & CLASSES OF GUARD RAILS 80 - 110 LBS.
7 $\frac{1}{8}$ "	$\frac{7}{8}$ "	SQUARE	ROUND	"	$\frac{15}{16}$ " x $\frac{3}{8}$ " x $\frac{1}{4}$ "	LONG BOLT FOR 60 LB. A.S. GUARD RAILS WITH END FERRULES.
6 $\frac{3}{8}$ "	"	"	"	"	"	COMMON BOLT FOR 50 LB. A & B, 60 LB. C & D, 66 LB. E & F, 75 LB. H & I GUARD RAILS. SHORT BOLT FOR 60 LB. A.S. GUARD RAILS.



SQUARE HEAD GUARD RAIL BOLT

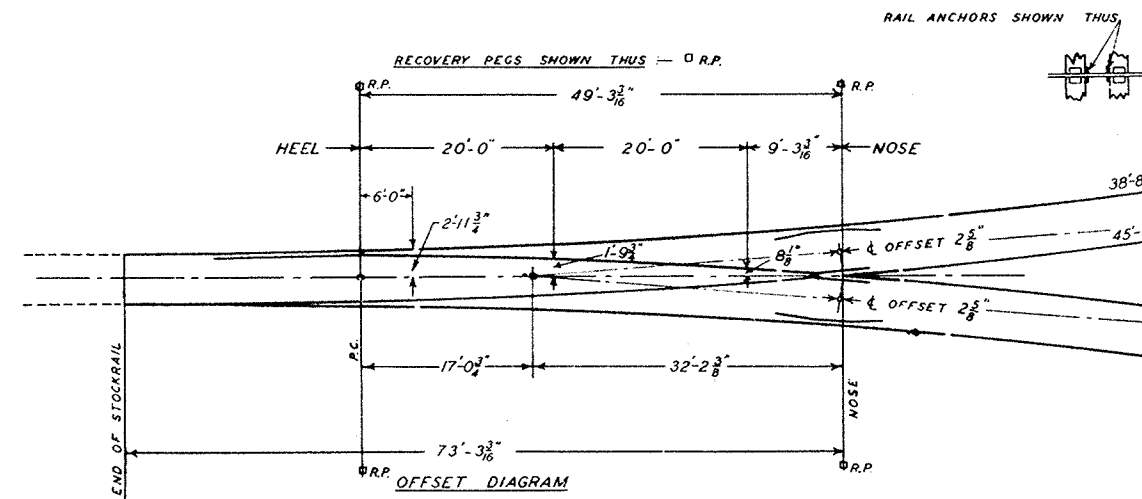
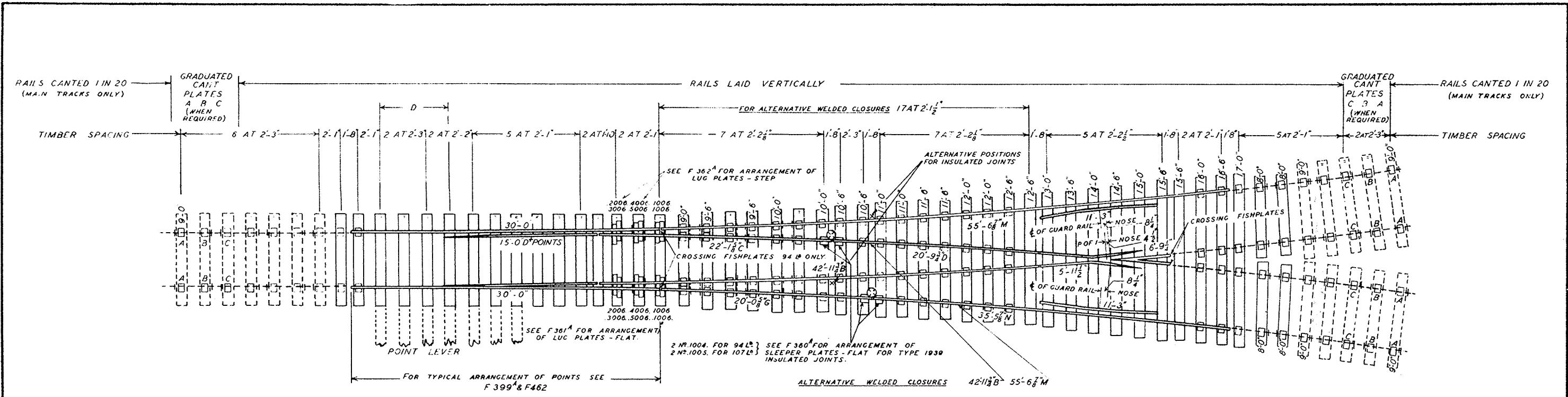


CUP HEAD GUARD RAIL BOLT

V · R
**BOLTS, GUARD RAIL
 STOCK SIZES**
 GENERAL USE

APPROVED *[Signature]*
 CHIEF CIVIL ENGR
 CHECKED *L.G.F.*
 PASSED *[Signature]*
 ENGR. OF M & W. S.

ADOPTED
1948
 PLAN No
F.405-A



EXCEPT WHERE INDICATED PLATES SHOWN ARE NO.1001 FOR 94 LB AND NO.1002 FOR 107 LB.

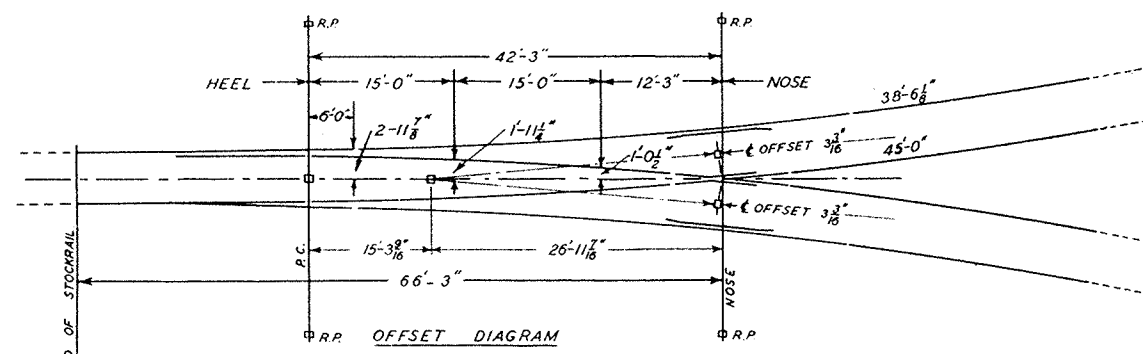
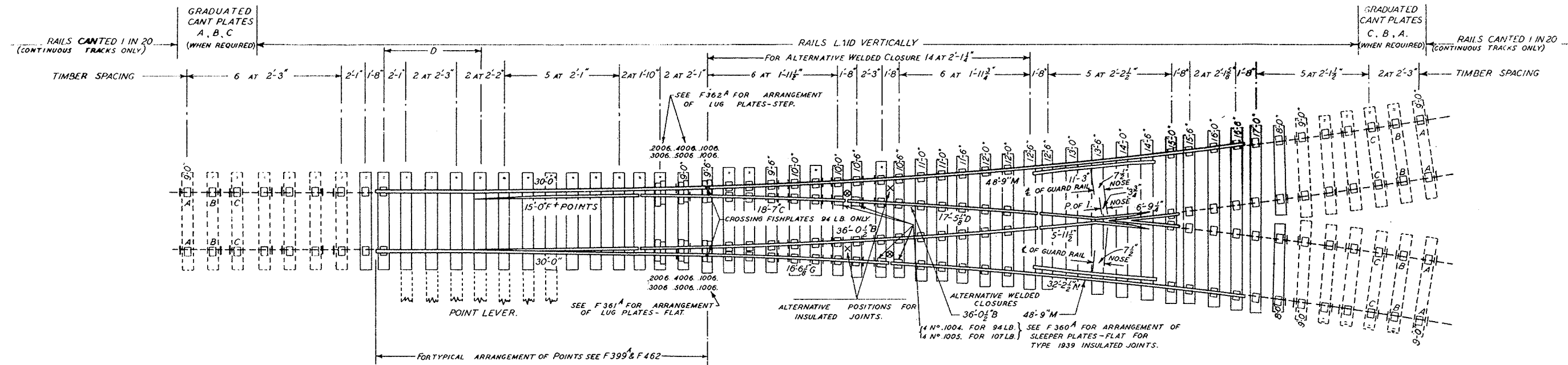
ORDERING PLANS	
REFERENCE	DRG. NO.
FASTENINGS FOR V.Y. POINTS	F 507
FASTENINGS FOR JUNCTIONS	F 512
FASTENINGS FOR GUARD RAILS	F 352 ^A
SPREADER ORDERING LIST	F 479

INSTALLATION PLANS		
REFERENCE	DETAIL NO.	DRG. NO.
LUG PLATES - STEP	2006, 3006, 4006, 5006	F 362 ^A
LUG PLATES - FLAT	1006	F 361 ^A
SLEEPER PLATES	1001, 1002, 2001, 2002	F 374 ^A
SLEEPER PLATES - FLAT FOR INSUL. JTS.	1004, 1005	F 360 ^A
TYPICAL ARRANGEMENT OF POINTS		F 399 ^A F 462
GRADUATED CANT PLATES		F 355 F 471
POINT LEVERS - INSTALLATION ARRANGEMENTS		F 456
TIE PLATE ARRANGEMENTS		F 454 ^A
TYPICAL ASSEMBLY OF INSULATED JOINTS TYPE 1939		F 331 ^A
CLOSURES - LENGTHS & CURVING DETAILS		F 464
GUARD RAILS		F 352 ^A
POINT LEVERS - END PULL ARRANGEMENTS		F 513

NOTE - PLATES SHOWN ARE FOR MAIN TRACK & P'CLASS SIDING STANDARDS. JOB INSTRUCTIONS WILL INDICATE ANY ALTERATIONS FROM THIS STANDARD AS REQUIRED FOR A PARTICULAR LOCATION. NR 60A CROSSING TO BE USED FOR MAIN TRACK & P'CLASS SIDING STANDARDS. NR 60B CROSSING TO BE USED FOR SECONDARY SIDINGS.

DATA	POINTS AND CROSSINGS	TIMBERS	NOTES - EXPANSION AT JOINTS - INSULATED JOINTS SHOWN THUS ⊗ NIL, OTHER JOINTS 1/8"
ANGLE OF DIVERGENCE AT SWITCH CROSSING NUMBER CROSSING ANGLE RE OPENINGS V CROSSING WING VEE GAUGE OF STOCKRAILS AT TOE OF POINTS RADIUS OF OUTER RAIL RADIUS OF INNER RAIL	0° 51' 18.7" 8-0" A OR B 9° 27' 44.4" 113° 1-10-2 1-2-10 5'-3 1/8" 723-75' 710-50'	1 SET 15'-0" POINTS 1 V CROSSING N° 6-0" A OR B 1 PAIR 11'-3" GUARD RAILS WITH BLOCKS CLOSURE RAILS INSULATED LAYOUTS WELDED LAYOUTS	ALTERNATIVE POSITION OF INSULATED JOINTS SHOWN THUS X. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. SPACING AT 'D' TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF OPERATION. FOR EXTRA LENGTH TIMBERS SHOWN BROKEN; REFER TO STANDARD DRAWINGS F 456 & F 513, FOR HAND WORKED POINTS OTHER THAN PLUNGER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUNGER LOCKED INTERLOCKED AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS. JUNCTION FISHPATES WHEN REQUIRED MUST BE PLACED AT LEAST ONE RAIL LENGTH CLEAR OF POINTS & CROSSINGS. POINTS & CROSSINGS MUST BE DATE STAMPED WHEN LAID IN VIDE WAY & WORKS INSTRUCTIONS 383-24.
	1-55'-6 7/8" M 1-22'-1 1/2" C 1-20'-0 3/8" G 1-42'-11 1/2" B 1-20'-9 1/2" D 1-35'-5 1/8" N 2-55'-6 7/8" M 2-42'-11 1/2" B	12 X 6" SAWN TIMBERS 17 N° 9'-0" 2 N° 12'-0" 1 N° 15'-0" 3 - 9'-6" 2 - 12'-6" 2 - 15'-6" 3 - 10'-0" 1 - 13'-0" 1 - 16'-0" 2 - 10'-6" 1 - 13'-6" 1 - 16'-6" 2 - 11'-0" 1 - 14'-0" 1 - 17'-0" 2 - 11'-6" 1 - 14'-6" 10 X 5 HEWN TIMBERS 4 N° 8'-0" = 133-3 SUP. FT.	Sup. Ft. 2862

VICTORIAN RAILWAYS	WAY & WORKS BRANCH	APPROVED	ADOPTED
JUNCTION		<i>M. W. S.</i>	1943
SYMMETRICAL CONTRAFLEXURE		CHIEF CIVIL ENGINEER	
NR 6-0 94 & 107 LB. A.S.		CHECKED <i>K.S.</i>	PLAN NO
MAIN TRACK & SIDING STANDARDS NOT TO SCALE		PASSED <i>K.S.</i>	F406^A
		ENGINEER OF M.E.W.S.	



RECOVERY PEGS SHOWN THUS - R.P.

RAIL ANCHORS SHOWN THUS

EXCEPT WHERE INDICATED PLATES SHOWN ARE NO. 1001. FOR 94 LB. & NO. 1002. FOR 107 LB.

INSTALLATION PLANS					
REFERENCE	DETAIL NO	DRG. NO	REFERENCE	DETAIL NO	DRG. NO
LUG PLATES - STEP	.2006, .3006, .4006, .5006, .1006	F362 ^A	POINT LEVERS - INSTALLATION ARRANGEMENTS		F456 ^A
LUG PLATES - FLAT	.1006	F361 ^A	TIE PLATE ARRANGEMENTS		F454 ^A
SLEEPER PLATES - FLAT	.1001, .1002	F374 ^A	TYPICAL ASSEMBLY OF INSULATED JOINTS TYPE 1939		F331 ^A
SLEEPER PLATES - FLAT FOR INSUL. JOINTS	.1004, .1005	F360 ^A	POINT LEVERS - END PULL ARRANGEMENTS		F513
TYPICAL ARRANGEMENT OF POINTS	F399 ^A , F462		CLOSURES - LENGTHS & CURVING DETAILS		F464
GRADUATED CANT PLATES	F355, F471		GUARD RAILS		F352 ^A

NOTE: PLATES SHOWN ARE FOR 1ST CLASS SIDING STANDARD. JOB INSTRUCTIONS WILL INDICATE ANY ALTERATIONS FROM THIS STANDARD AS REQUIRED FOR A PARTICULAR LOCATION. NO. 507A CROSSING TO BE USED FOR 1ST CLASS SIDINGS. NO. 507B CROSSING TO BE USED FOR SECONDARY SIDINGS. THIS JUNCTION IS NOT RECOMMENDED FOR THE REGULAR MOVEMENTS OF "C", "X" AND "H" CLASS LOCOMOTIVES.

ORDERING PLANS	
REFERENCE	DRG. NO
FASTENINGS FOR VY POINTS	F 507
FASTENINGS FOR JUNCTIONS	F 512
FASTENINGS FOR GUARD RAILS	F 352 ^A
SPREADER ORDERING LIST	F 479

DATA	
ANGLE OF DIVERGENCE AT SWITCH	0° 51' 18.7"
CROSSING NUMBER	5-0'A OR B
CROSSING ANGLE	17° 18' 35.8"
RE OPENINGS V-CROSSING, WING	1'-1 1/2"
VEE	1'-5 1/8"
GAUGE OF STOCKRAIL AT TOE OF POINTS	5'-3 3/8"
RADIUS OF OUTER RAIL	501.58'
RADIUS OF INNER RAIL	496.33'

POINTS AND CROSSINGS	
1 SET 15' 0" POINTS.	
1 V-CROSSING NO. 5-0'A OR B	
1 PAIR 11'-3" GUARD RAILS WITH BLOCKS	
CLOSURE RAILS - INSULATED LAYOUTS	
1 - 18'-9 1/4"	1 - 32'-2 1/2" N
1 - 17'-5 1/2" D	1 - 16'-6 1/8" G
1 - 36'-0 1/2" B	1 - 18'-7" C
2 - 48'-9" M	2 - 36'-0 1/2" B
WELDED LAYOUTS	
2 - 48'-9" M	2 - 36'-0 1/2" B

TIMBERS	
12" x 6" SAWN TIMBERS	
15 NO 9'-0"	2 NO 12'-0"
4 - 9'-6"	2 - 12'-6"
3 - 10'-0"	1 - 13'-0"
3 - 10'-6"	1 - 13'-6"
2 - 11'-0"	1 - 14'-0"
1 - 11'-6"	1 - 14'-6"
10" x 5" HEWN TIMBERS	
2 NO 8'-0"	86.6 SUP. FT.

NOTES: EXPANSION AT JOINTS - INSULATED JOINTS SHOWN THUS \otimes NIL, OTHER JOINTS, $\frac{1}{8}$ ". ALTERNATIVE POSITION OF INSULATED JOINTS SHOWN THUS X. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. SPACING AT "D" TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF OPERATION. FOR EXTRA LENGTH TIMBERS SHOWN BROKEN REFER TO STANDARD DRAWINGS F456 & F513 FOR HAND WORKED POINTS OTHER THAN PLUNGER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUNGER LOCKED, INTERLOCKED, AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS. JUNCTION FISHPATES WHEN REQUIRED MUST BE PLACED AT LEAST ONE RAIL LENGTH CLEAR OF POINTS & CROSSINGS. POINTS & CROSSINGS MUST BE DATE STAMPED WHEN LAID IN. VIDE WAY & WORKS INSTRUCTION 383-24.

VICTORIAN RAILWAYS WAY & WORKS BRANCH

APPROVED: *[Signature]* CHIEF CIVIL ENGINEER

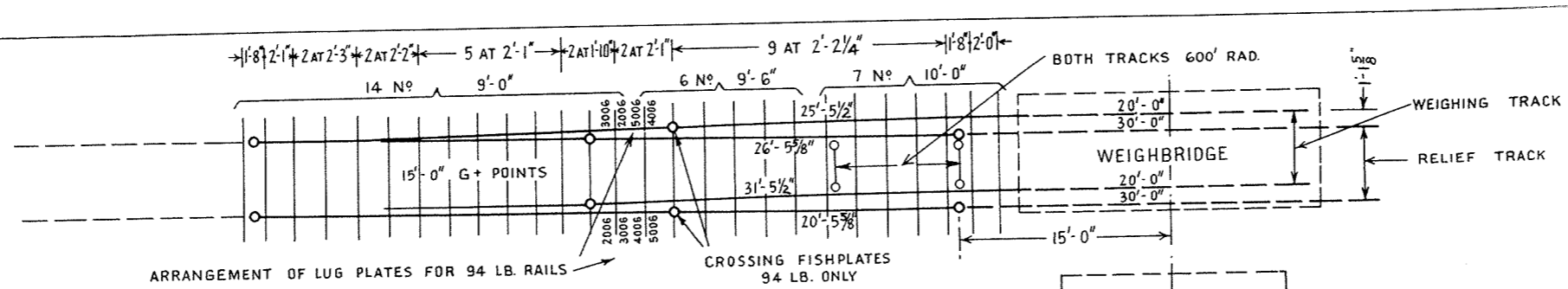
CHECKED: *[Signature]*

PASSED: *[Signature]* ENGINEER OF M & W.S.

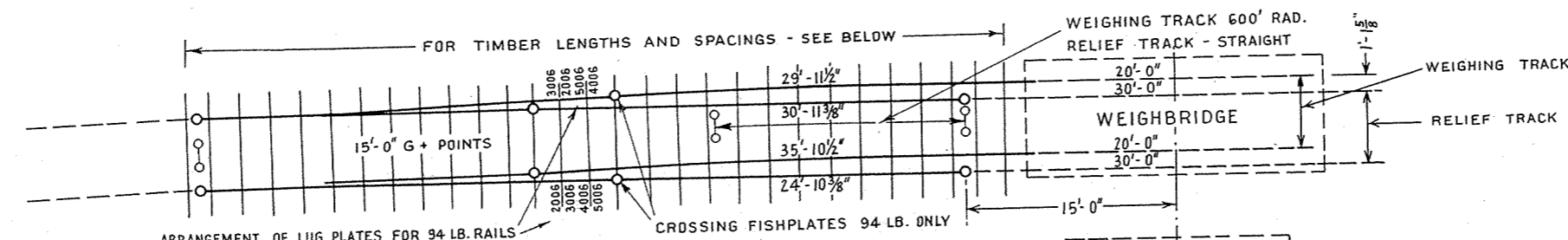
ADOPTED 1943

PLAN NO F407^A

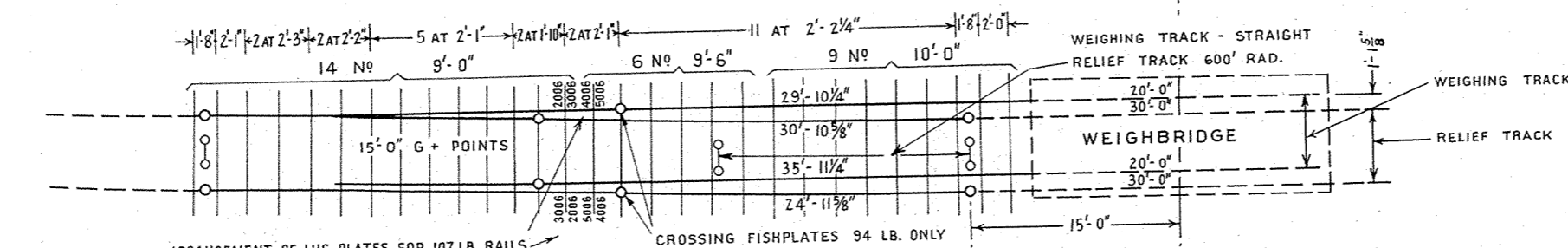
JUNCTION SYMMETRICAL CONTRAFLEXURE NO. 5-0 94 & 107 L. A.S. SIDING STANDARDS NOT TO SCALE



ARRANGEMENT FOR STRAIGHT TRACK



**ARRANGEMENT FOR CURVED TRACK
CABIN ON INSIDE OF CURVE**



**ARRANGEMENT FOR CURVED TRACK
CABIN ON OUTSIDE OF CURVE**

NOTE :- RAILS ON WEIGHBRIDGE TO BE SUPPLIED AND FASTENED TO WEIGHBRIDGE BY WORKSHOPS MANAGER SPOTSWOOD.

— V. R. —
**TURNOUTS
FOR DOUBLE TRACK
WEIGHBRIDGES**

APPROVED
[Signature]
CHIEF CIVIL ENGINEER
CHECKED G. J. E.
PASSED *[Signature]*
ENGR OF MACH. & W.S.

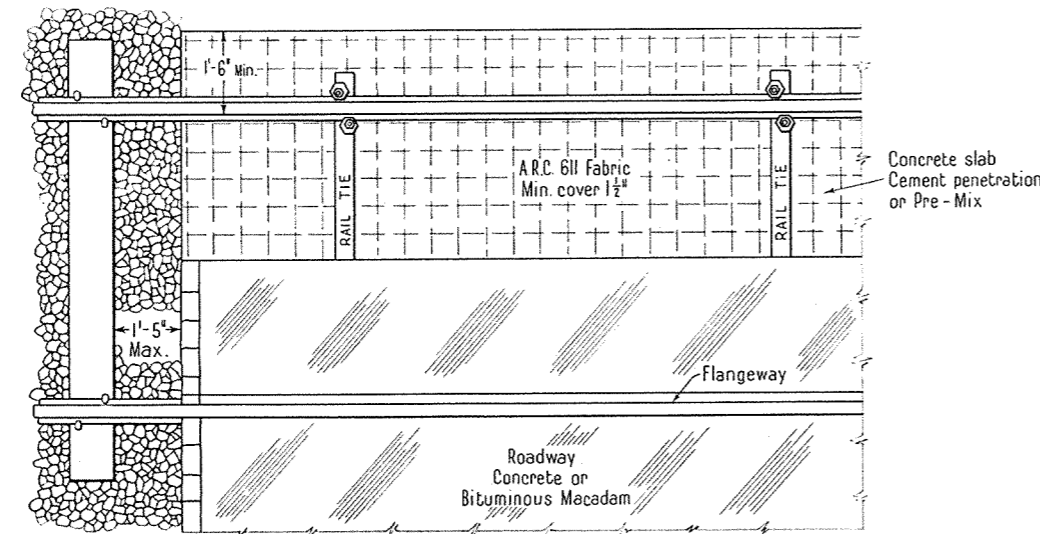
ADOPTED
1950
PLAN N°
F.408

MATERIAL LIST		
ITEMS COMMON TO EACH ARRANGEMENT		
POINTS - 15'-0" G+	94 LB.	107 LB.
CHAIRS - SLIDE 1039	2 SETS	2 SETS
RAIL 1040	4 "	4 "
BOLTS - CHAIR 2 7/8 MARK C	36 "	36 "
SCREWS - MARK R	60 "	60 "
SPREADERS - T.A.101	2 "	2 "
" T.A.102	-	-
" T.A.202	2 N°	-
LUG PLATES - STEP 2006	4 "	4 N°
" " 3006	4 "	4 "
" " 4006	4 "	4 "
" " 5006	4 "	4 "
PINS - MARK P	32 "	32 "
FISHPLATES - TRACK	8 PAIR	12 PAIR
" CROSSING	4 "	-
FISHBOLTS - 1" x 5 7/8"	32 N°	-
" 1" x 5"	16 "	48 N°
SPRING WASHERS - 1" TYPE 1944	84 "	84 "
DOG SPIKES - 6"	16 "	16 "
TIMBERS - SAWN 12" x 6" x 9'-0"	28 "	28 "
" " " " 9'-6"	12 "	12 "

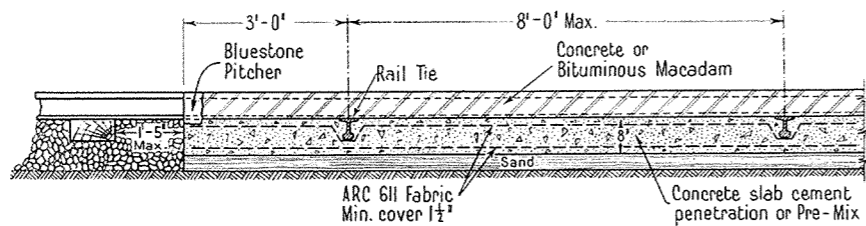
ADDITIONAL ITEMS - 94 & 107 LB.		
STRAIGHT TRACKS		
CLOSURES - 20'-5 7/8" PART CURVED 1 N° R.H. 1 N° L.H.		
" 25'-5 1/2" " " 1 " " 1 " "		
" 26'-5 3/8" " " 1 " " 1 " "		
" 31'-5 1/2" " " 1 " " 1 " "		
DOG SPIKES - 5"	224 N°	
TIMBERS - SAWN 12" x 6" x 10'-0"	14 N°	

CURVED TRACKS - CABIN ON INSIDE OF CURVE		
CLOSURES - 24'-10 3/8" STRAIGHT	2 N°	
" 30'-11 3/8" " " 2 N°		
" 29'-11 1/2" PART CURVED 1 N° R.H. 1 N° L.H.		
" 35'-10 1/2" " " 1 " " 1 " "		
DOG SPIKES - 5"	256 N°	
TIMBERS - SAWN 12" x 6" x 10'-0"	18 N°	

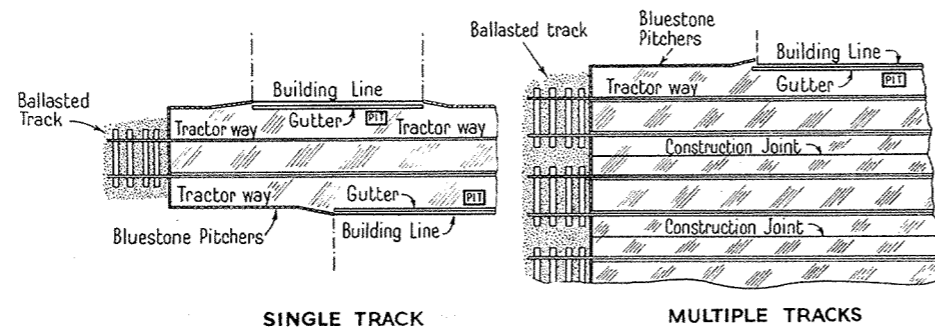
CURVED TRACKS - CABIN ON OUTSIDE OF CURVE		
CLOSURES - 29'-10 1/4" STRAIGHT	2 N°	
" 35'-11 1/4" " " 2 N°		
" 24'-11 3/8" PART CURVED 1 N° R.H. 1 N° L.H.		
" 30'-10 3/8" " " 1 " " 1 " "		
DOG SPIKES - 5"	256 N°	
TIMBERS - SAWN 12" x 6" x 10'-0"	18 N°	



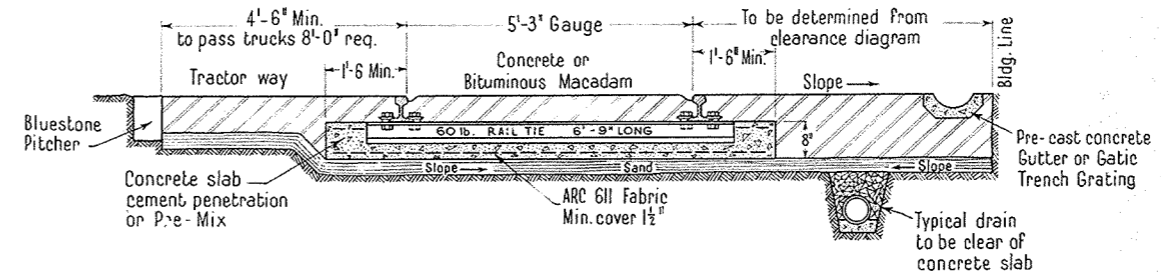
TYPICAL PLAN



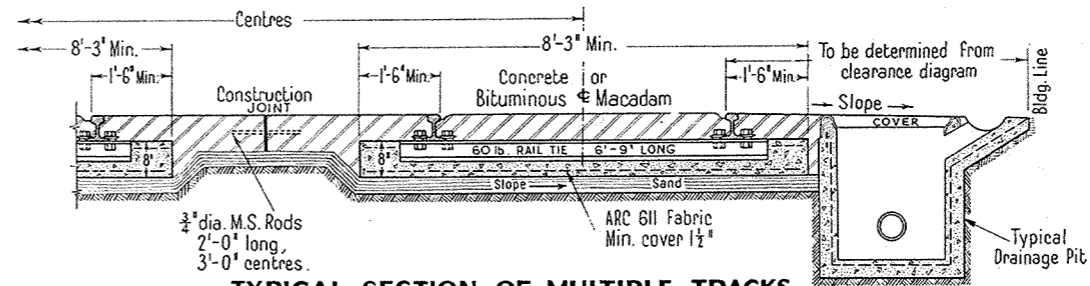
TYPICAL LONGITUDINAL SECTION



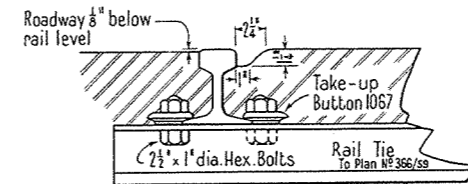
TYPICAL GENERAL ARRANGEMENTS



TYPICAL SECTION OF SINGLE TRACK WITH TRACTOR WAY AND SIDE DRAINS



TYPICAL SECTION OF MULTIPLE TRACKS AND DRAINAGE PIT



RAIL FASTENING DETAILS

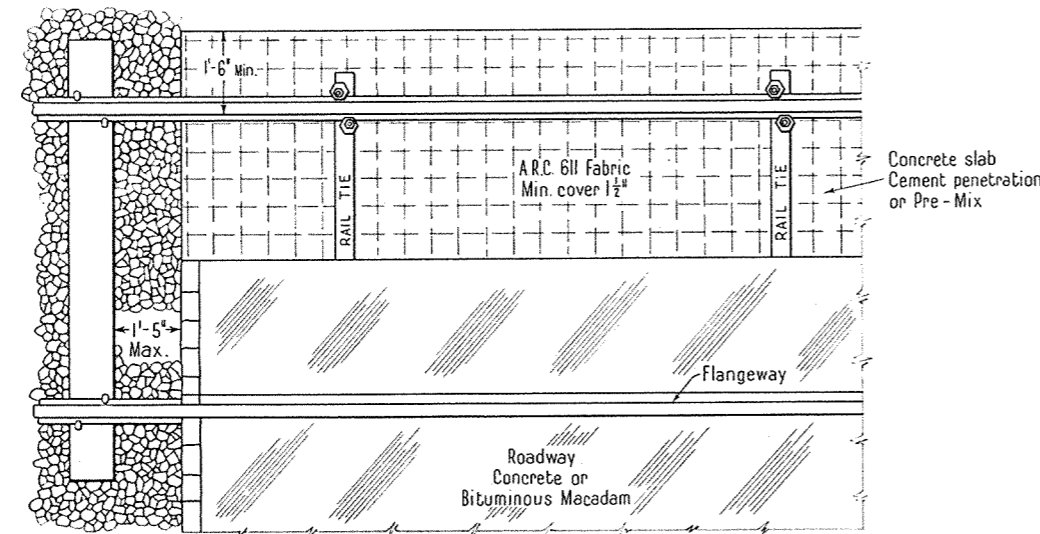
NOTE: - The drainage details shown are typical only and may be amended to suit the particular area.

At locations approved by C.C.E. where a concrete roadway is proposed, 2 1/2 x 3 x 6 1/2 M.S. flats welded to the rail flanges may be used in lieu of rail ties, take-up buttons and bolts.

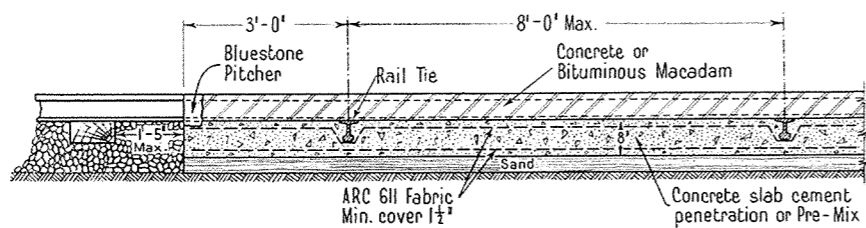
NOTE: - This plan supersedes Plan No. 409

Rev'n	Date	Amendment	Amended by
A	1-4-59	Checkrail construction and concrete apron eliminated.	S.F.

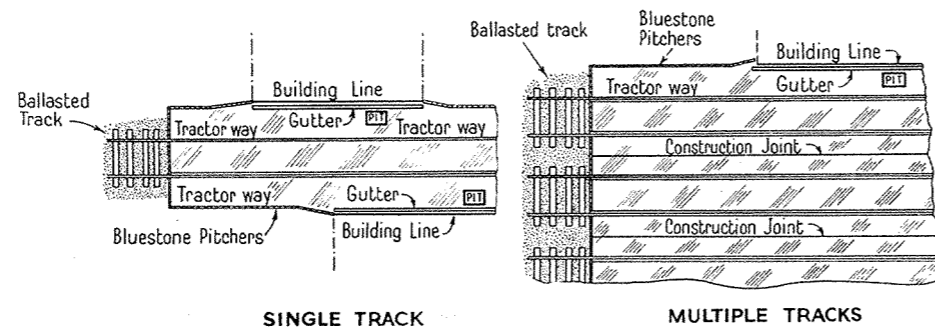
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	1952
TRACK CONSTRUCTION		Chief Civil Engineer	
FOR		Drawn by	Checked by
1ST CLASS PAVED AREAS		S.F.	G.E.M.
Not to scale		A.A.P.	
		Eng. of Machinery & Water Supply	
		F409A	



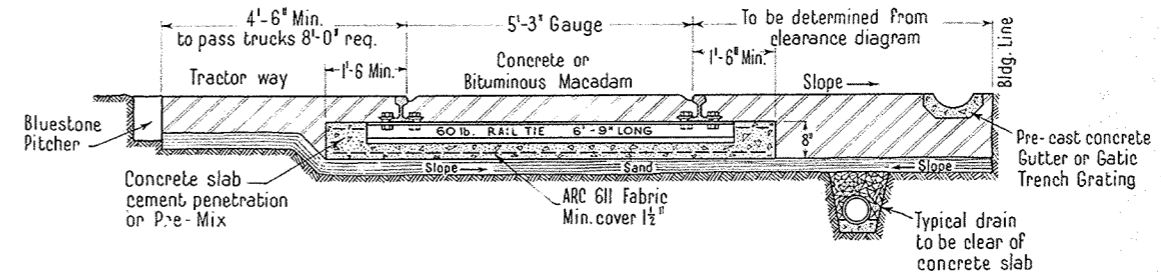
TYPICAL PLAN



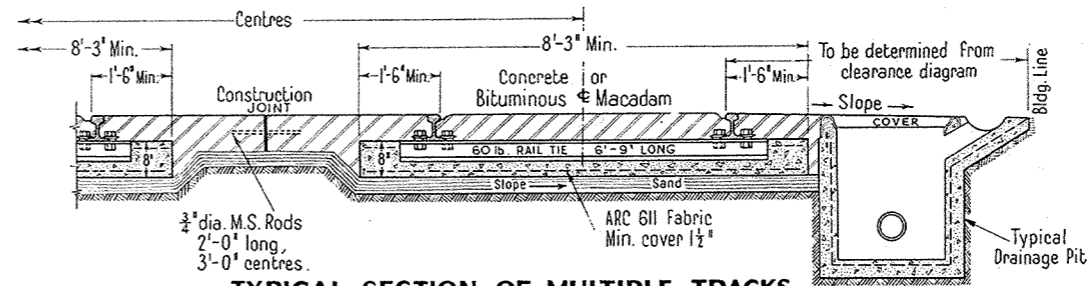
TYPICAL LONGITUDINAL SECTION



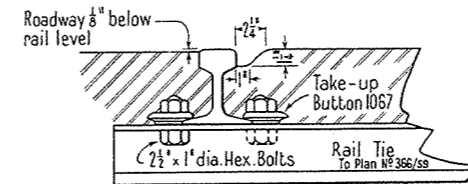
TYPICAL GENERAL ARRANGEMENTS



TYPICAL SECTION OF SINGLE TRACK WITH TRACTOR WAY AND SIDE DRAINS



TYPICAL SECTION OF MULTIPLE TRACKS AND DRAINAGE PIT



RAIL FASTENING DETAILS

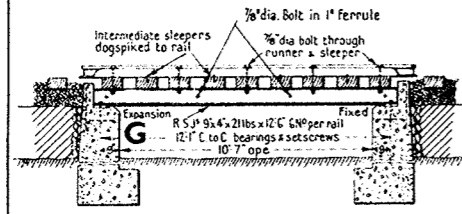
NOTE: - The drainage details shown are typical only and may be amended to suit the particular area.

At locations approved by C.C.E. where a concrete roadway is proposed, 2 1/2 x 3 x 6 1/2 M.S. Flats welded to the rail flanges may be used in lieu of rail ties, take-up buttons and bolts.

NOTE: - This plan supersedes Plan No 409

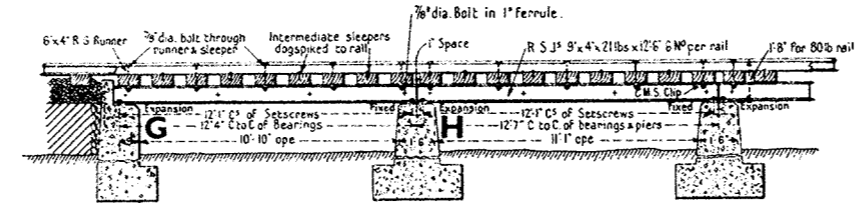
Rev'n	Date	Amendment	Amended by
A	1-4-59	Checkrail construction and concrete apron eliminated.	S.F.

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	1952
TRACK CONSTRUCTION		Chief Civil Engineer	
FOR		Drawn by	Checked by
1 ST CLASS PAVED AREAS		S.F.	G.E.M.
Not to scale		A.A.P.	
		Eng. of Machinery & Water Supply	
		F409A	



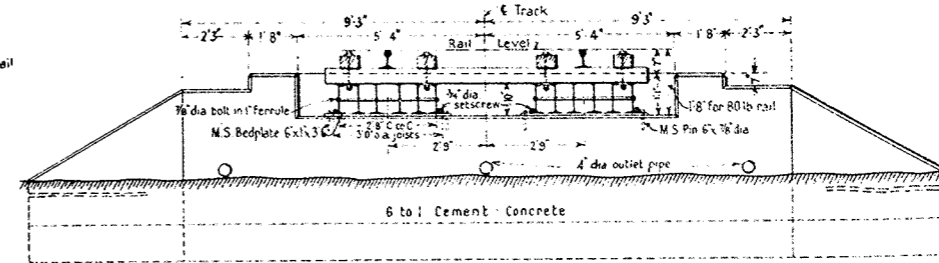
SECTION A-A

ONE OPENING

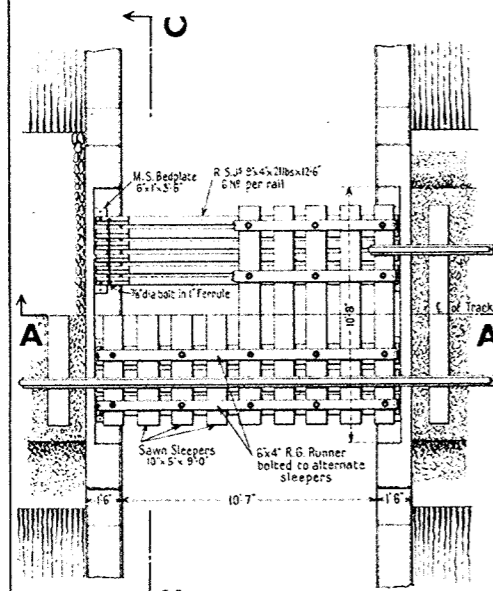


SECTION B-B

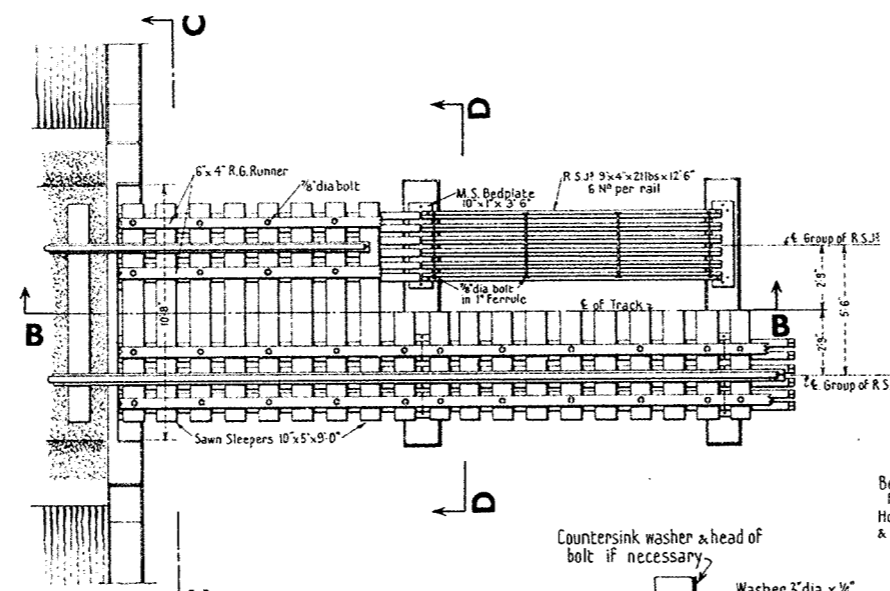
TWO OR MORE OPENINGS



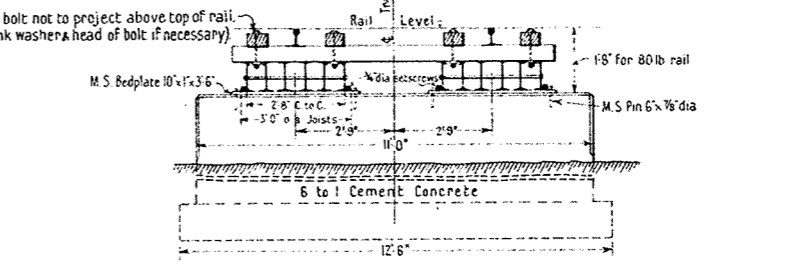
SECTION C-C



PLAN

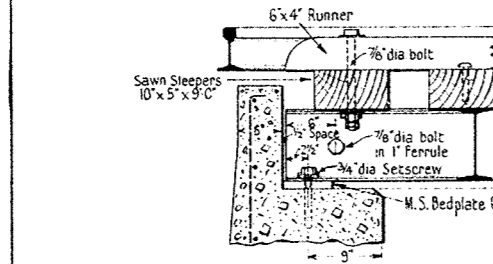


PLAN

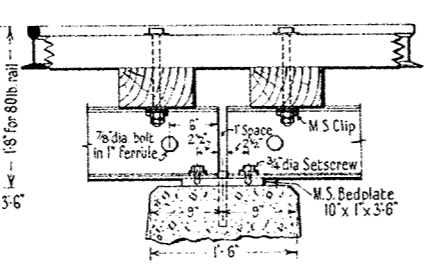


SECTION D-D.

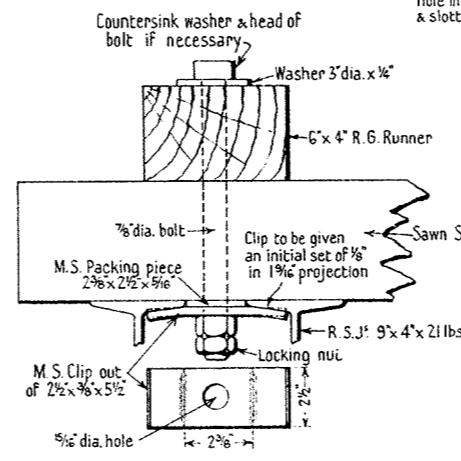
NOTE: Head of bolt not to project above top of rail.
(Countersink washer & head of bolt if necessary)



DETAIL AT G

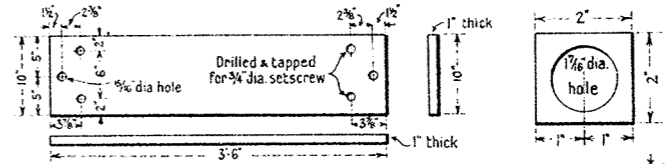


DETAIL AT H

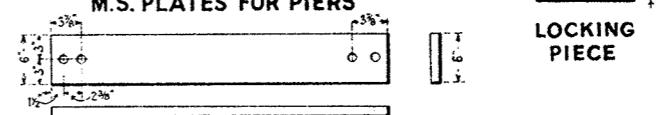


DETAIL OF CLIP

Bedplate drilled & tapped for 3/4 dia. setscrew. Hole in R.S.J. 1/4 dia at fixed end & slotted 1 3/8 x 7/8 at expansion end.



M.S. PLATES FOR PIERS



M.S. PLATES FOR ABUTMENTS

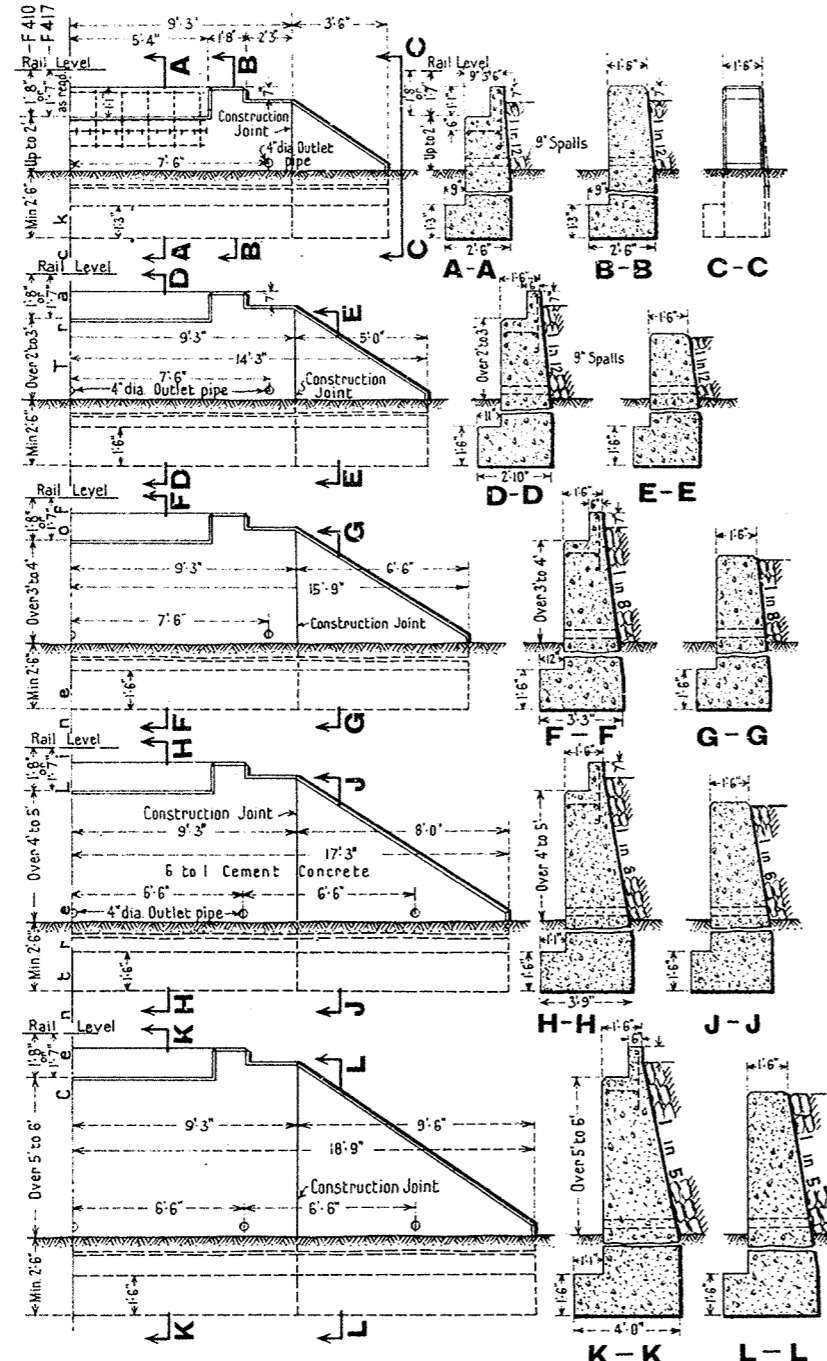
LOCKING PIECE

DETAIL AT BEDPLATES

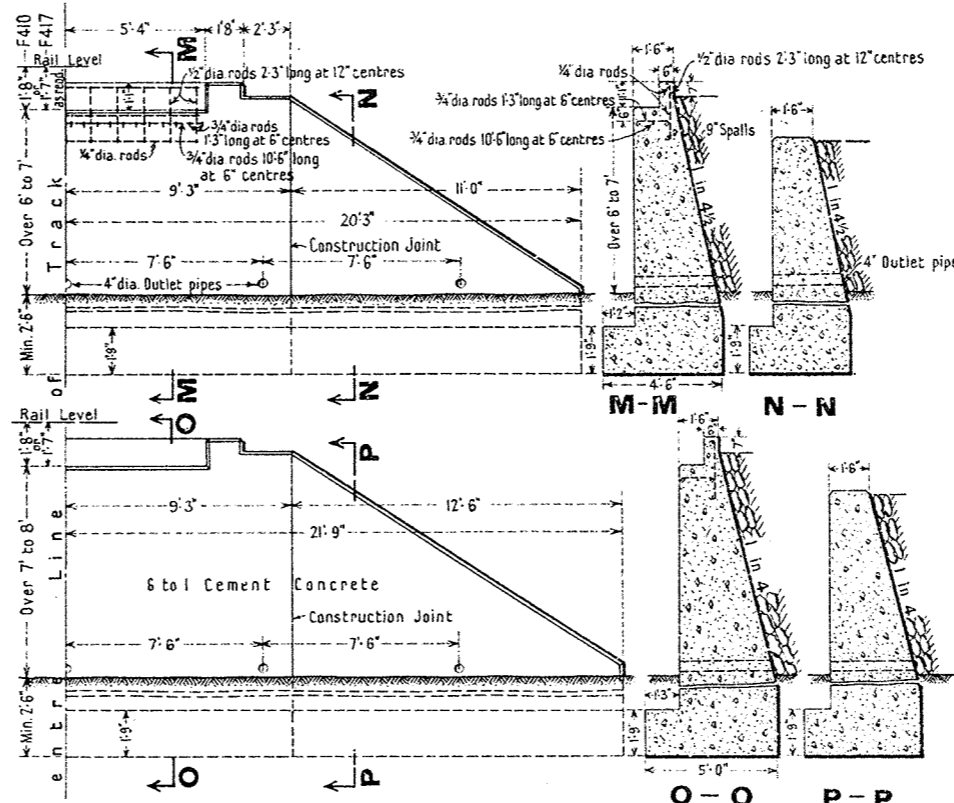
NOTE: This plan to be used in conjunction with Plan No. F411.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.H.</i>	SEP. 1943
SKELETON TYPE BRIDGE WITH R.S.J'S		Chief Civil Engineer	
11'-0" OPENING		Drawn by	Checked by
DETAILS OF SUPERSTRUCTURE		E.J.C.	T.H.J.
Coopers E 40 Standard		<i>W. Bromby</i>	PLAN No.
No Scale		Engr. of Struct'l Design	F 410

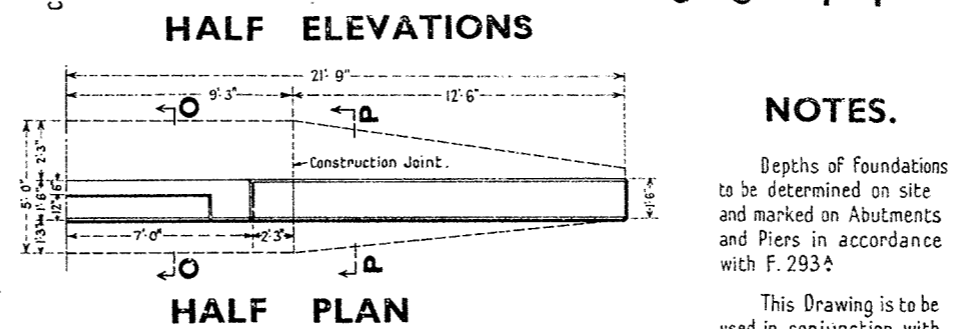
ABUTMENTS



HALF ELEVATIONS



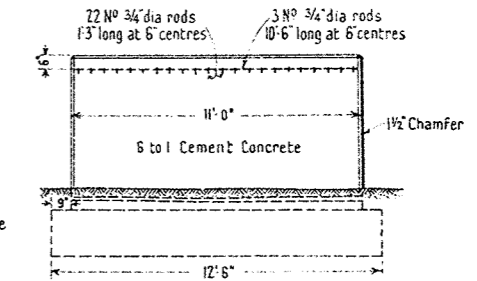
HALF ELEVATIONS



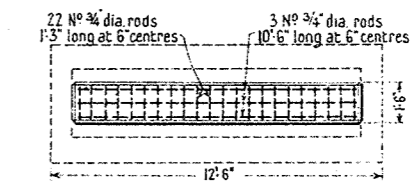
HALF PLAN

HT. IN FEET Nat Surface to Impost	SCHEDULE OF QUANTITIES						REINFORCING RODS		
	TWO ABUTMENTS CONCRETE		SPALLS	ONE PIER CONCRETE					
	A	B	Cub. Yds.	A	B	DIAM	TWO ABUTS Lengths	ONE PIER Lengths	
2	16	4 1/2	3	5	2	1/4"	6/10'		
3	23 1/2	5 1/2	5	6 1/4	2	1/2"	22/2' 3"		
4	31	7 1/2	7	7 1/2	2	3/4"	6/10' 6", 44/1' 3"	3/10' 6", 22/1' 3"	
5	38	8 3/4	9 1/2	8 1/2	2	NOTE			
6	47 1/2	9 1/2	12	9 3/4	2 1/4	Column 'A' shows quantity of concrete in one pier or two abutments including footings 2' 6" deep.			
7	58 1/2	11 1/4	15	10 3/4	2 1/2	Column 'B' shows quantity to be added to 'A' for every foot of depth of foundation in excess of 2 ft. 6 in.			
8	73	13 1/4	18	12 1/2	2 1/2				

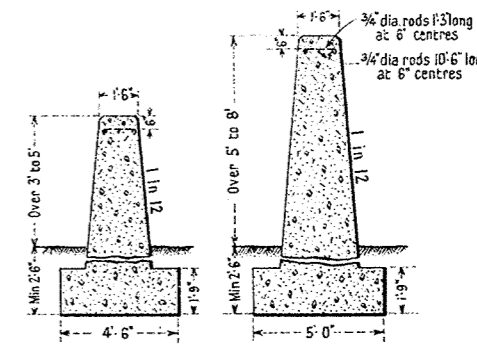
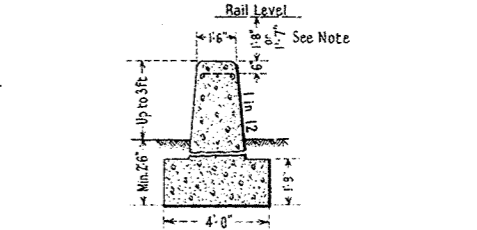
PIERS



ELEVATION



PLAN



SECTIONS

NOTES.

Depths of foundations to be determined on site and marked on Abutments and Piers in accordance with F. 293 A.

This Drawing is to be used in conjunction with Standard Drawings F. 410 and F. 417.

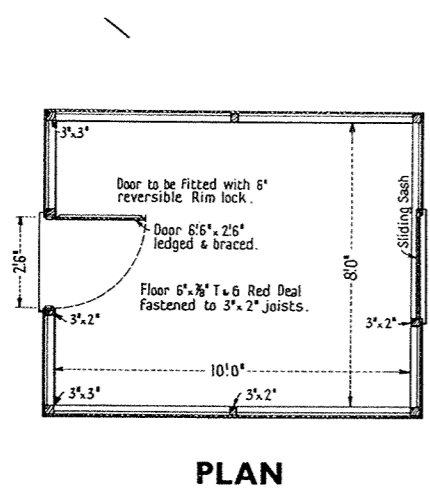
For 80 lb rails, rail level to impost = 1' 8" with F. 410.

Spliced wings to abutments to be provided where necessary.

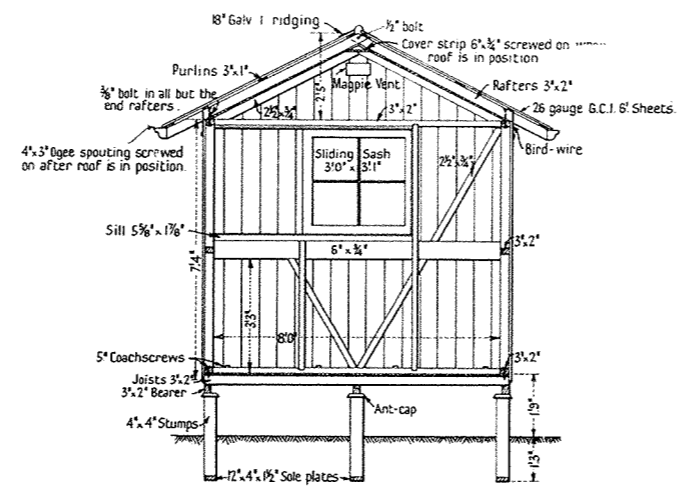
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
SKELETON TYPE BRIDGE
WITH R.S.J.'S 11' 0" OPENINGS
DETAILS OF SUBSTRUCTURE
 Coopers E40 & E55 Standards No Scale

Approved

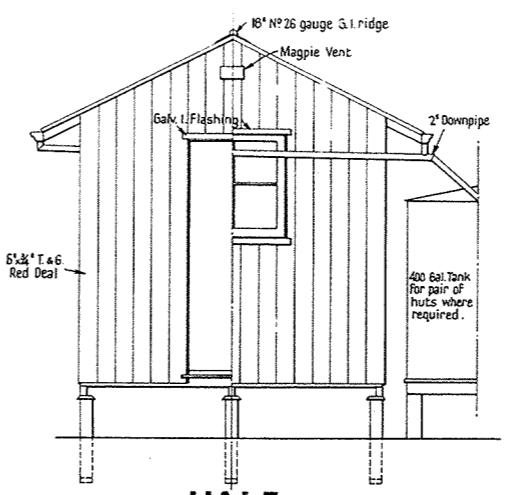
 Chief Civil Engineer
 Adopted
JULY 1943
 PLAN No.
F 411



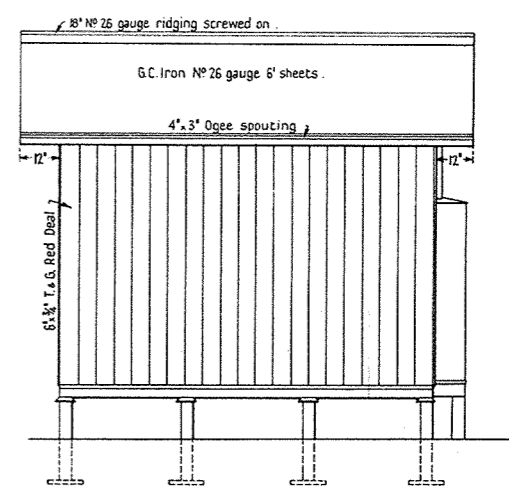
PLAN



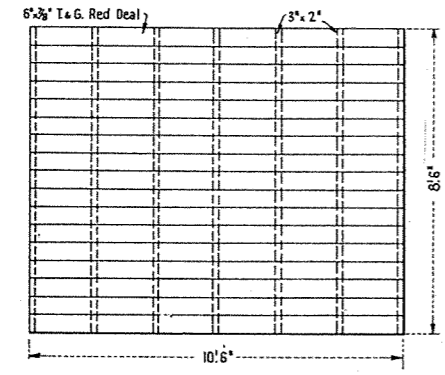
SECTION



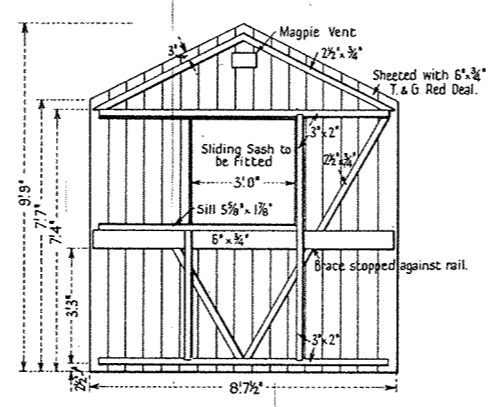
HALF FRONT & BACK ELEVATIONS



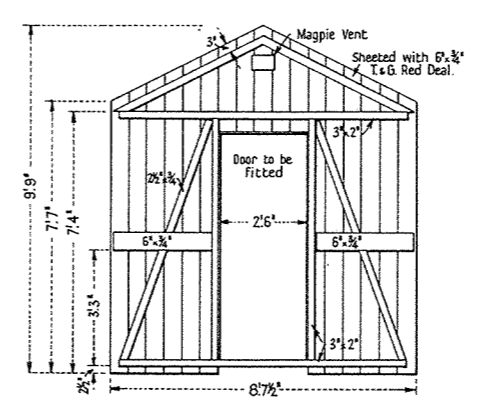
SIDE ELEVATION



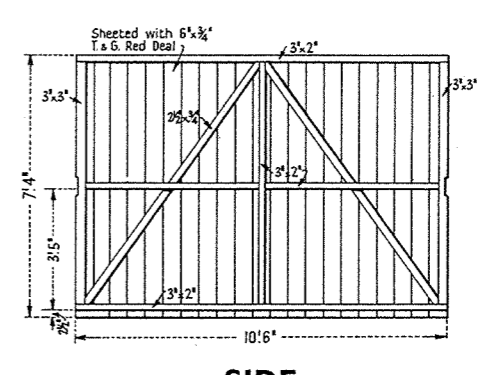
FLOOR



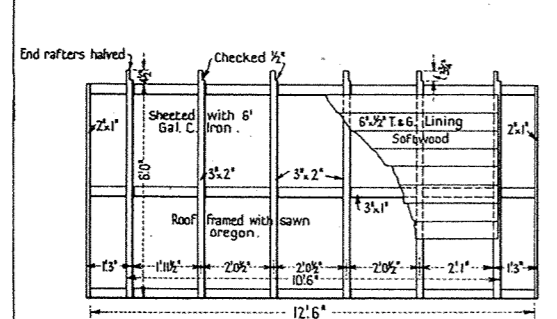
BACK



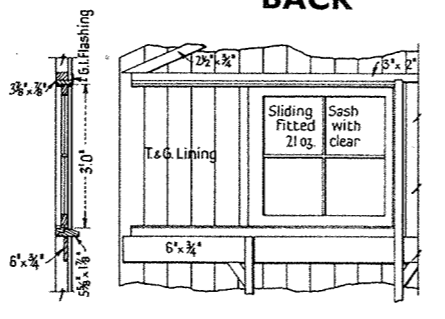
FRONT



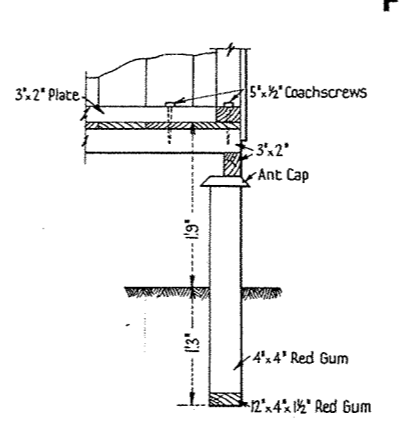
SIDE (2 No Required)



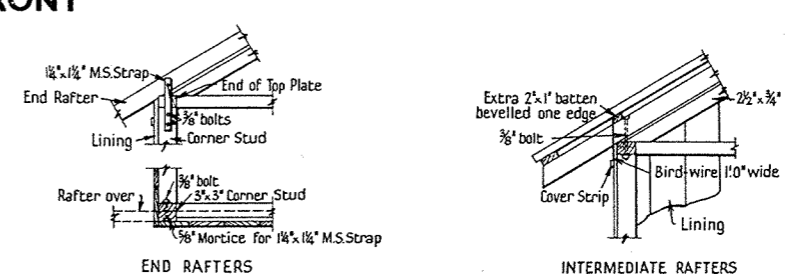
ROOF (2 No Required.)



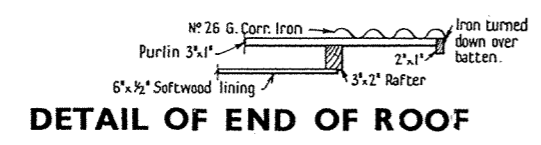
DETAIL OF WINDOW



DETAIL OF STUMPS



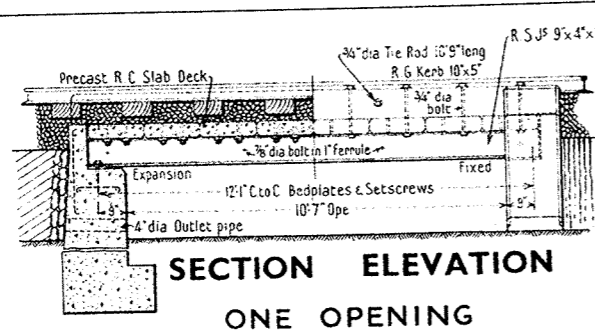
DETAILS OF FIXINGS FOR RAFTERS



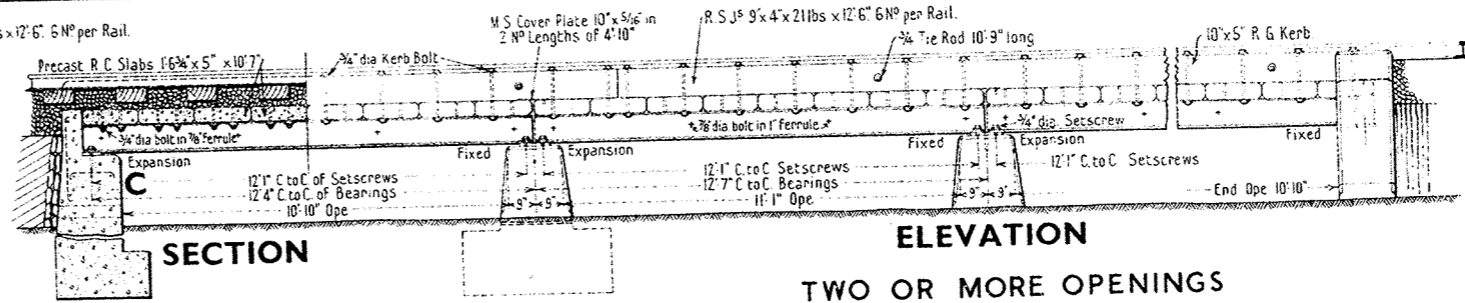
DETAIL OF END OF ROOF

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.W.</i> Chief Civil Engineer	JAN. 1943
10' x 8' PORTABLE HUT		Drawn by C.M.T.	Checked by S.S.
		<i>H. Sutcliffe</i> Chief Architect	PLAN No. F412^A

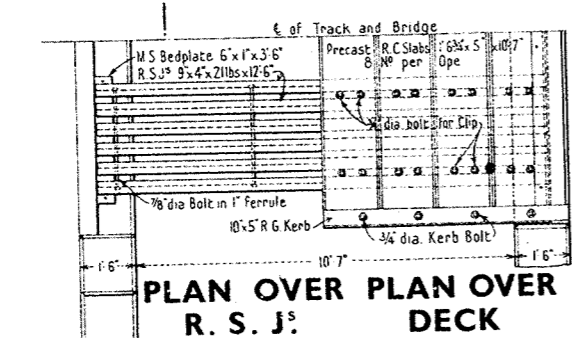
This Plan supersedes Plan No F 412



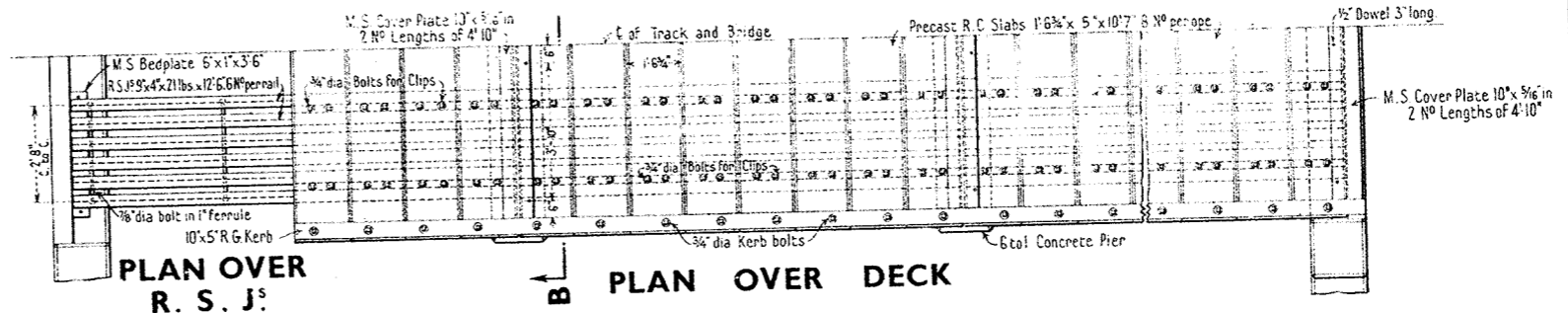
**SECTION ELEVATION
ONE OPENING**



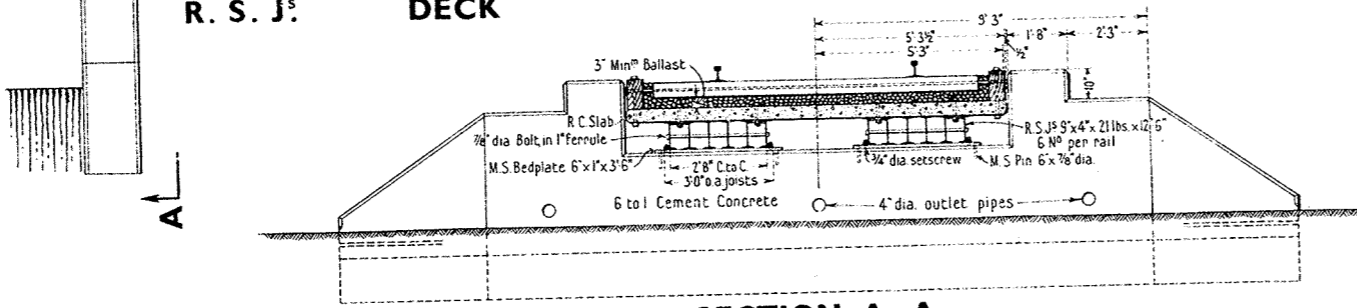
**SECTION ELEVATION
TWO OR MORE OPENINGS**



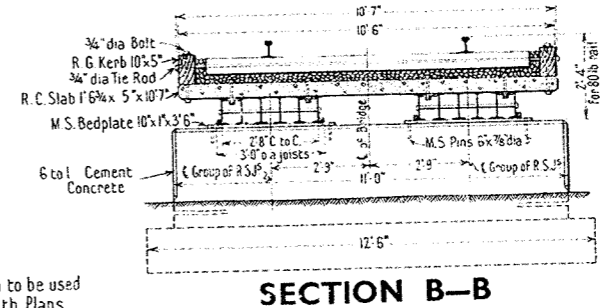
**PLAN OVER
R. S. J'S**



PLAN OVER DECK

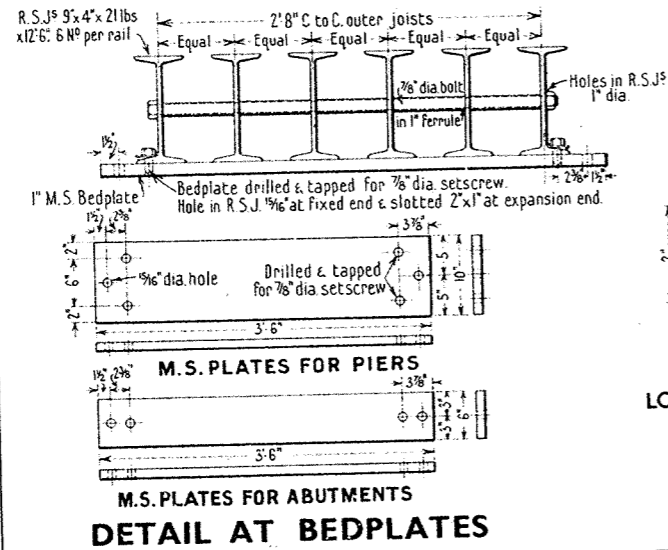


SECTION A-A

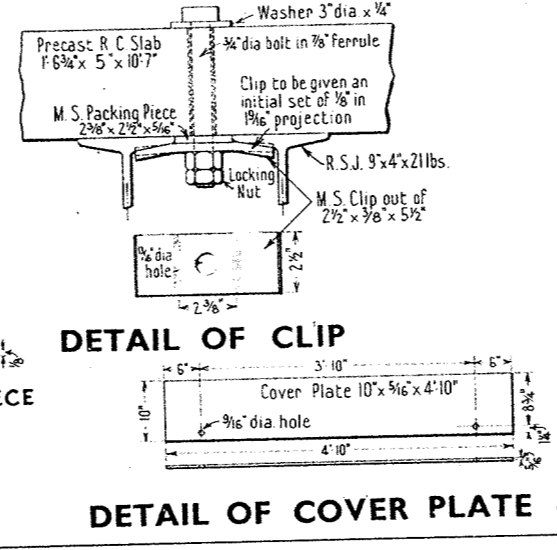


SECTION B-B

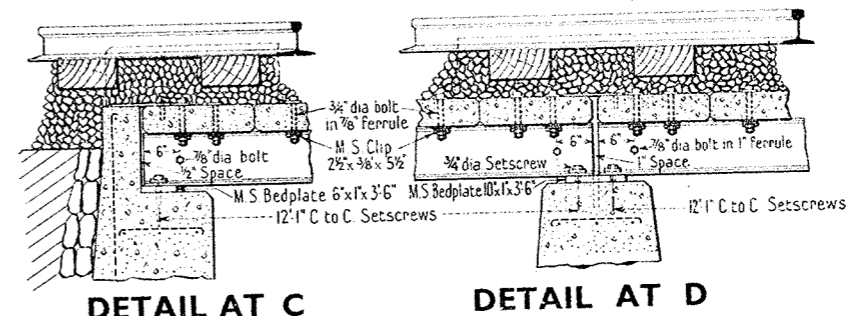
NOTE:- This Plan to be used in conjunction with Plans Nos F427 & F428.



DETAIL AT BEDPLATES

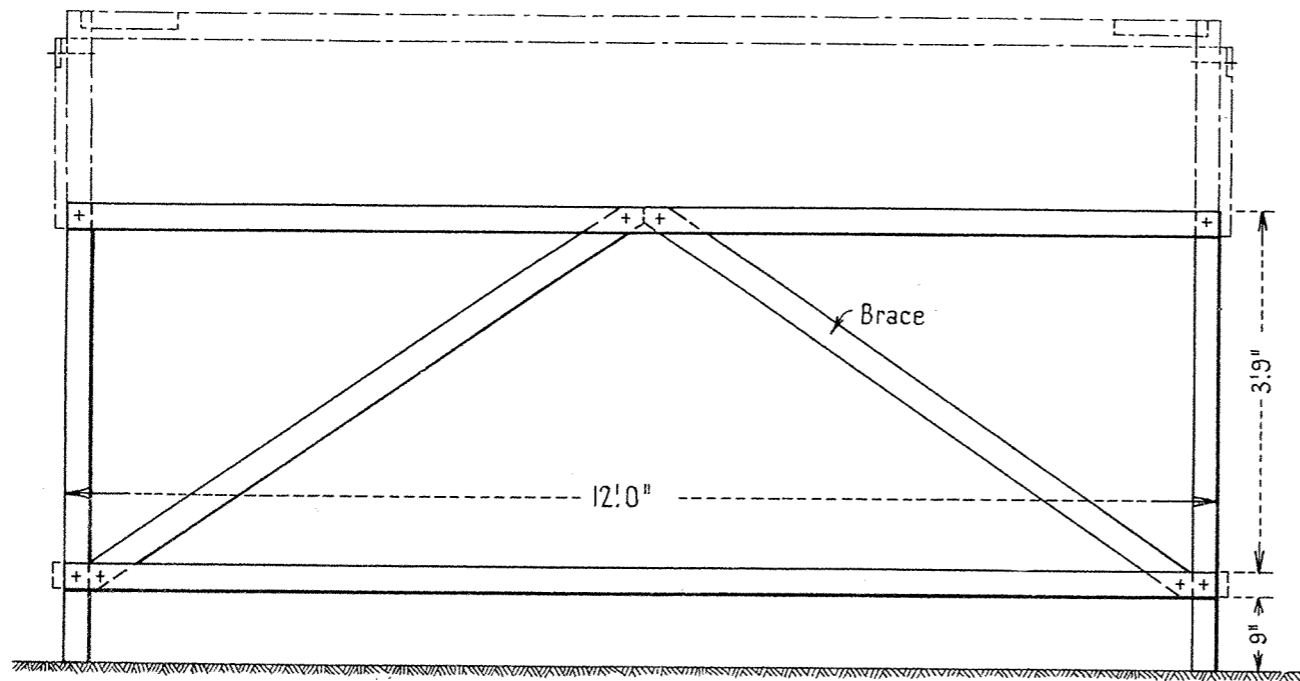


**DETAIL OF CLIP
DETAIL OF COVER PLATE**



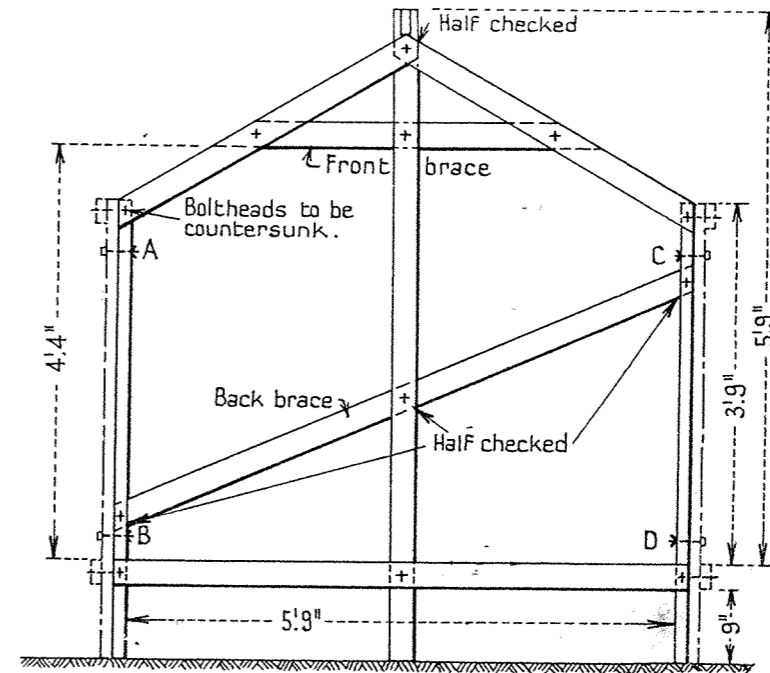
**DETAIL AT C
DETAIL AT D**

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.H.</i>	NOV. 1943
SHALLOW DECK BRIDGE WITH REINFORCED CONCRETE SLABS ON 9" x 4" x 21 LB. R. S. J'S 11'0" OPENINGS		Chief Civil Engineer	
DETAILS OF SUPERSTRUCTURE		Drawn by E. J. C.	Checked by T. H. J.
Coopers E 40 Standard		<i>H. Brown</i>	PLAN No.
No Scale		Engr. of Struct'l Design	F 414



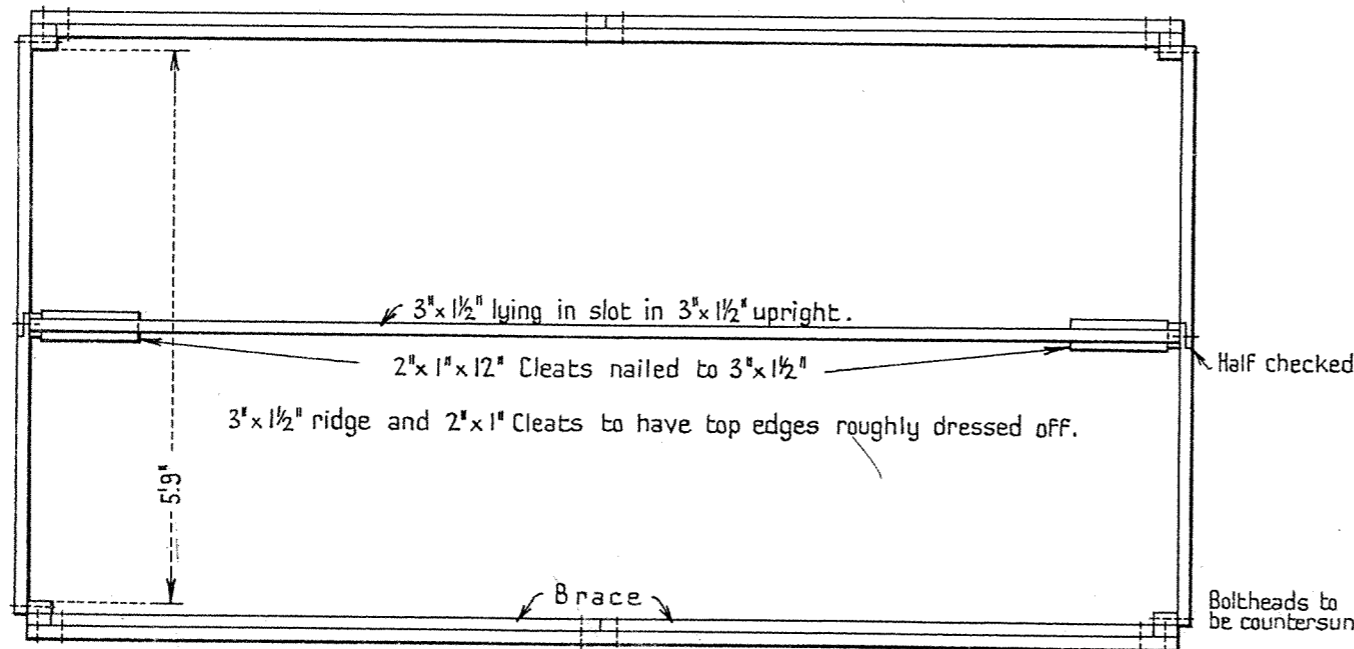
SIDE ELEVATION

2 N^o Thus (to the full lines) per Frame.



END ELEVATION

2 N^o Thus (to the full lines) per Frame.



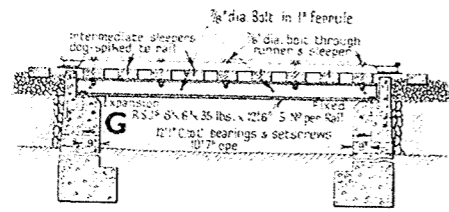
PLAN

NOTES : All timber, except where otherwise noted, to be 3" x 1/2" H.W.
 All bolts to be 4" x 1/2" dia.
 Butterfly nuts to be used at A, B, C & D.
 All timber is to be roughly dressed.

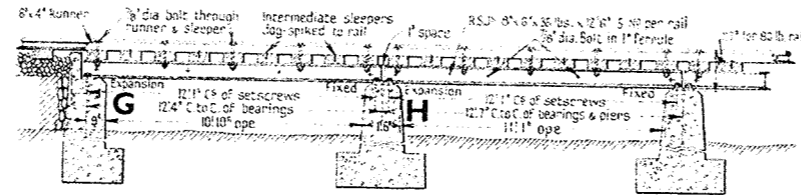
QUANTITIES : 3" x 1/2" H.W., 4/3'9", 8/4'9", 1/4'3", 2/6'0", 3/6'9",
 4/7'0", 5/12'0".
 2" x 1" H.W. - 1/4'0"
 4" x 1/2" dia bolts, 42 N^o, 36 N^o with square nuts
 and 8 N^o with butterfly nuts
 Round Washers, 84 N^o.

This Plan supersedes Plan N^o 578/37

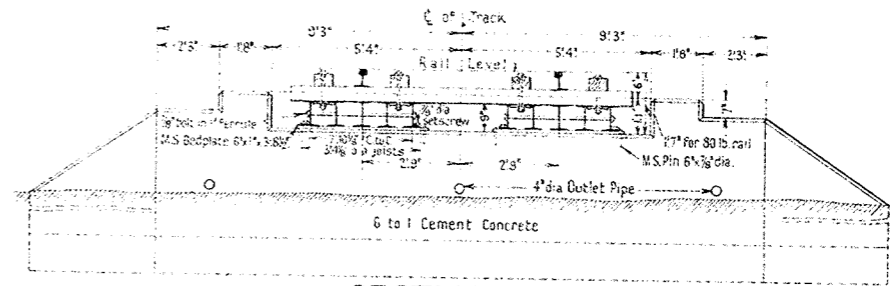
VICTORIAN RAILWAYS - WAY & WORKS BRANCH STANDARD DRAWING PORTABLE FRAME To be covered with tarpaulin to provide shelter for men at work points. Scale 1/2" = 1'0"	Approved <i>M.H.</i> Chief Civil Engineer	Adopted APRIL 1943
	Drawn by Checked by <i>C.M.T.</i> Eng. of Maintenance	PLAN N^o F 416



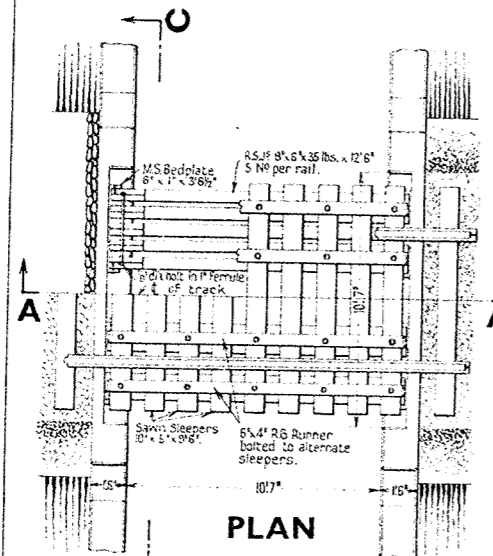
SECTION A-A
ONE OPENING



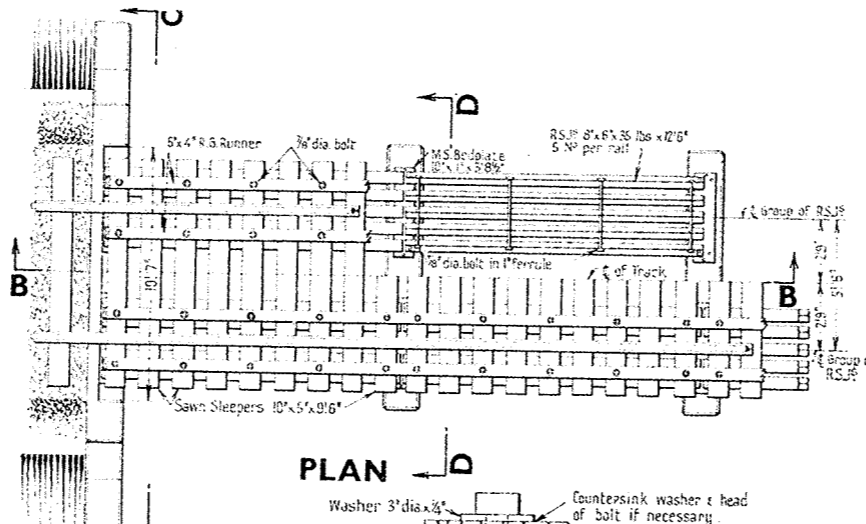
SECTION B-B
TWO OR MORE OPENINGS



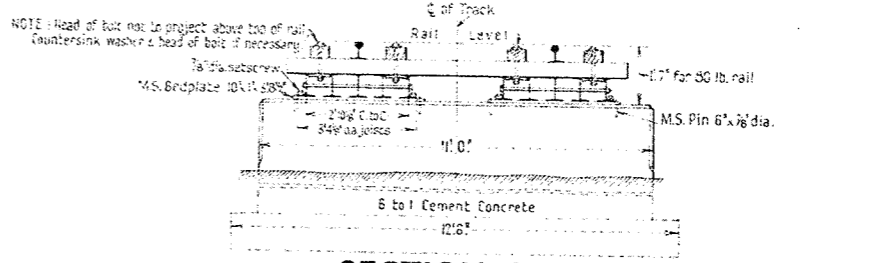
SECTION C-C



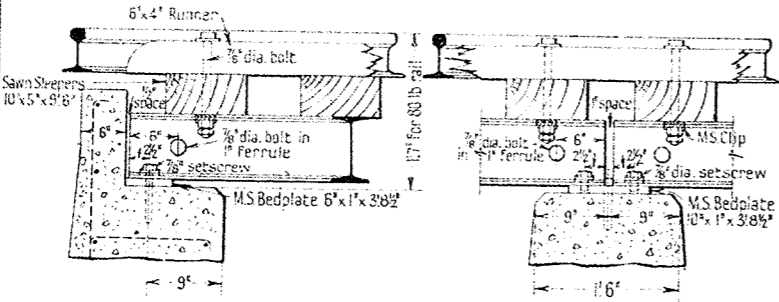
PLAN



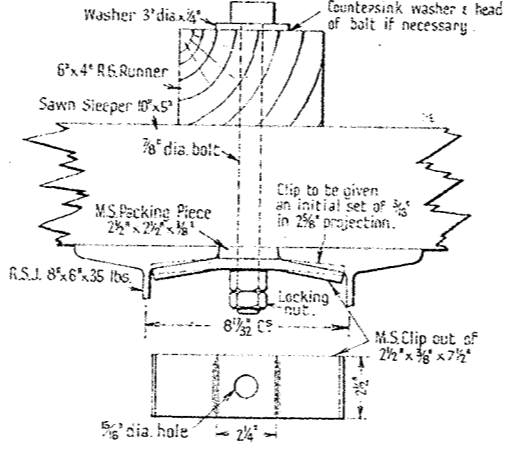
PLAN



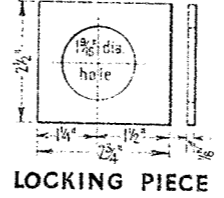
SECTION D-D



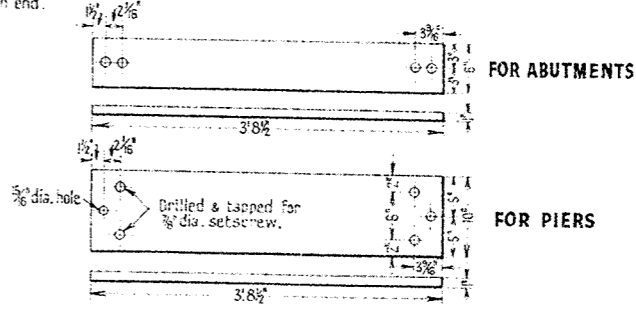
DETAIL AT G



DETAIL OF CLIP



LOCKING PIECE



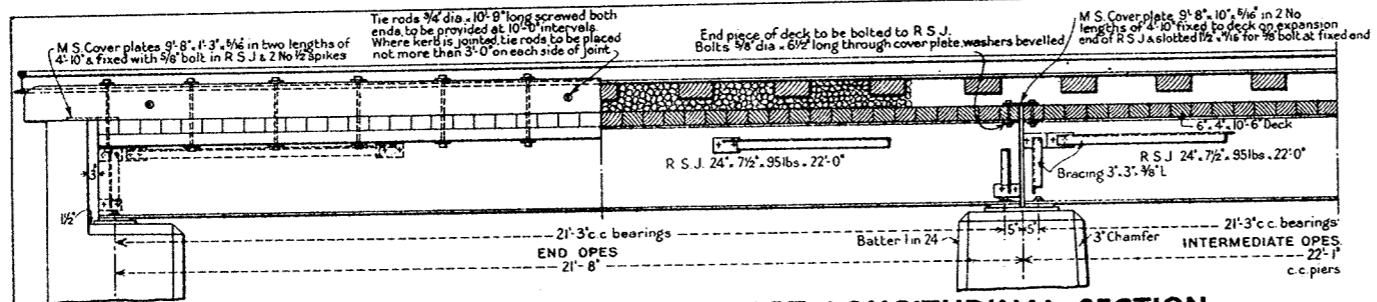
DETAIL AT BEDPLATES

NOTE: Head of bolt not to project above top of rail. Countersink washer & head of bolt if necessary.

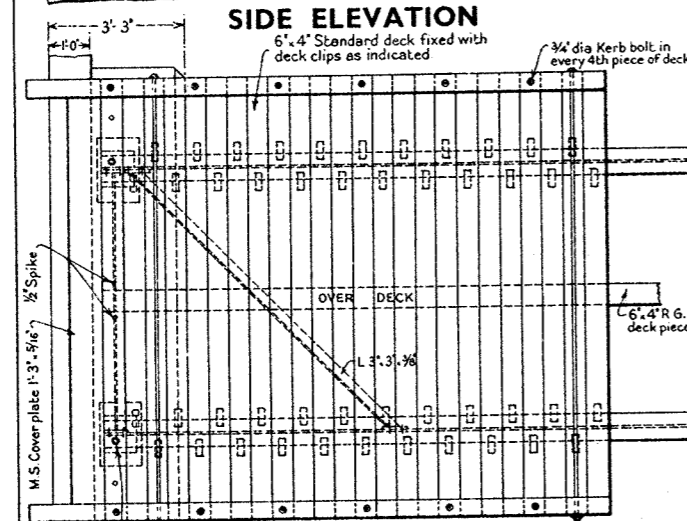
Bedplate drilled & tapped for 7/8 dia. setscrew. Hole in R.S.J. 5/8 at fixed end & slotted 2 x 1/2 at expansion end.

NOTE: This Plan to be used in conjunction with Plan No. F411.

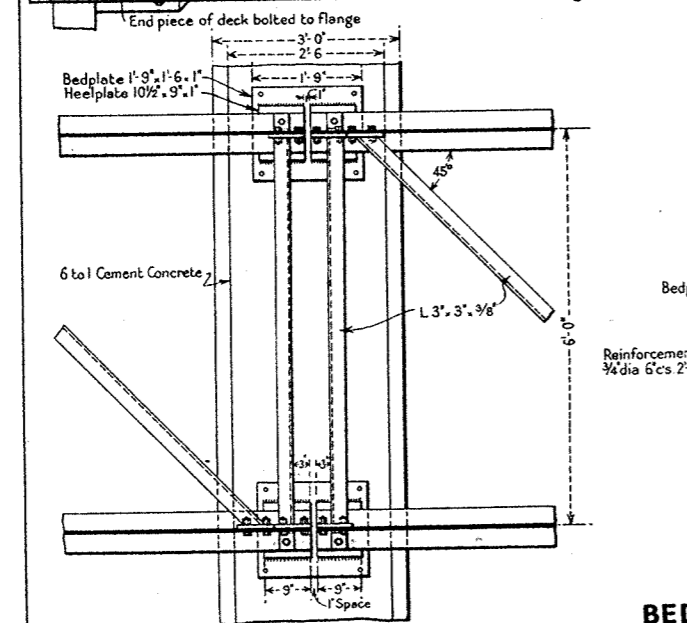
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING SKELETON TYPE BRIDGE WITH 8"x6"x35 LB. R.S.J.S. 11:0" OPENING. DETAILS OF SUPERSTRUCTURE Coopers E 55 Standard		Approved Chief Civil Engineer Drawn by C.M.T. Checked by T.H.J. Engr. of Structural Design	Adopted JULY 1943 PLAN No. F417
No Scale			



PART LONGITUDINAL SECTION



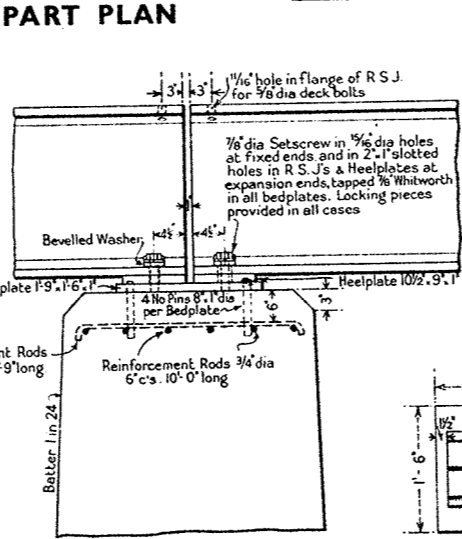
SIDE ELEVATION



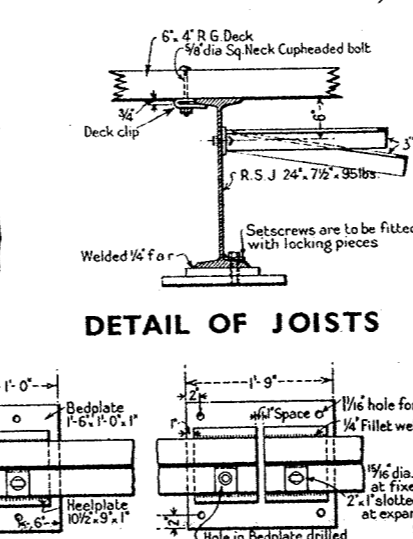
PART PLAN



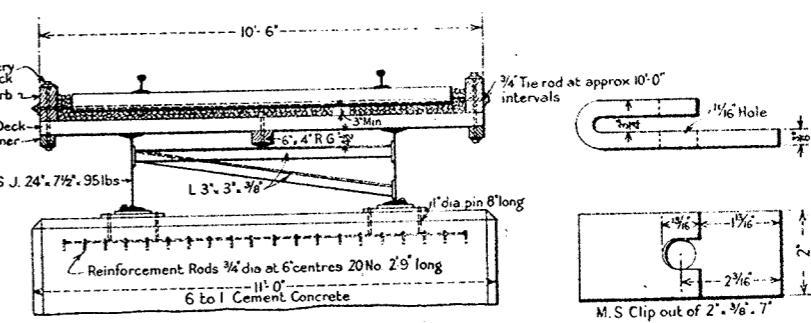
DETAIL OF BRACING OVER PIERS



BEDPLATE DETAIL FOR PIERS

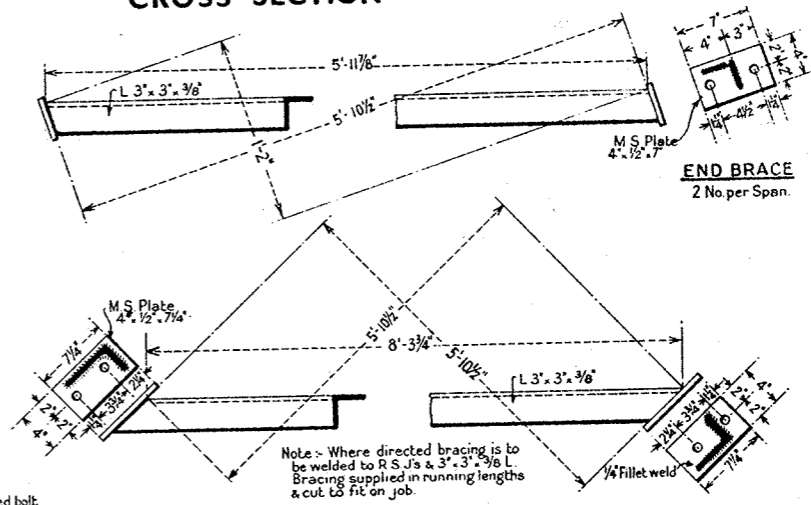


DETAIL OF JOISTS



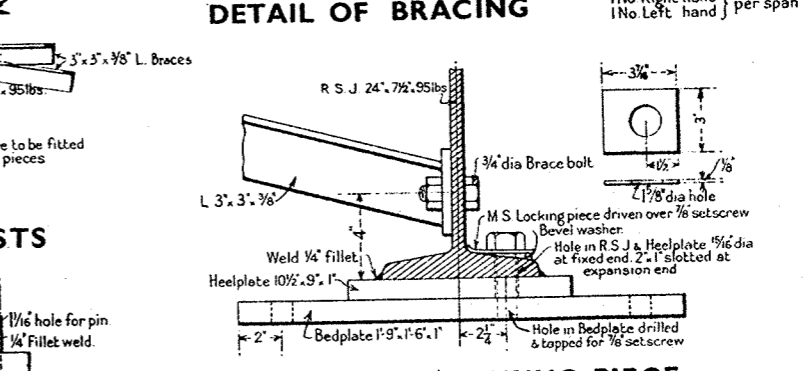
CROSS SECTION

DECK CLIP



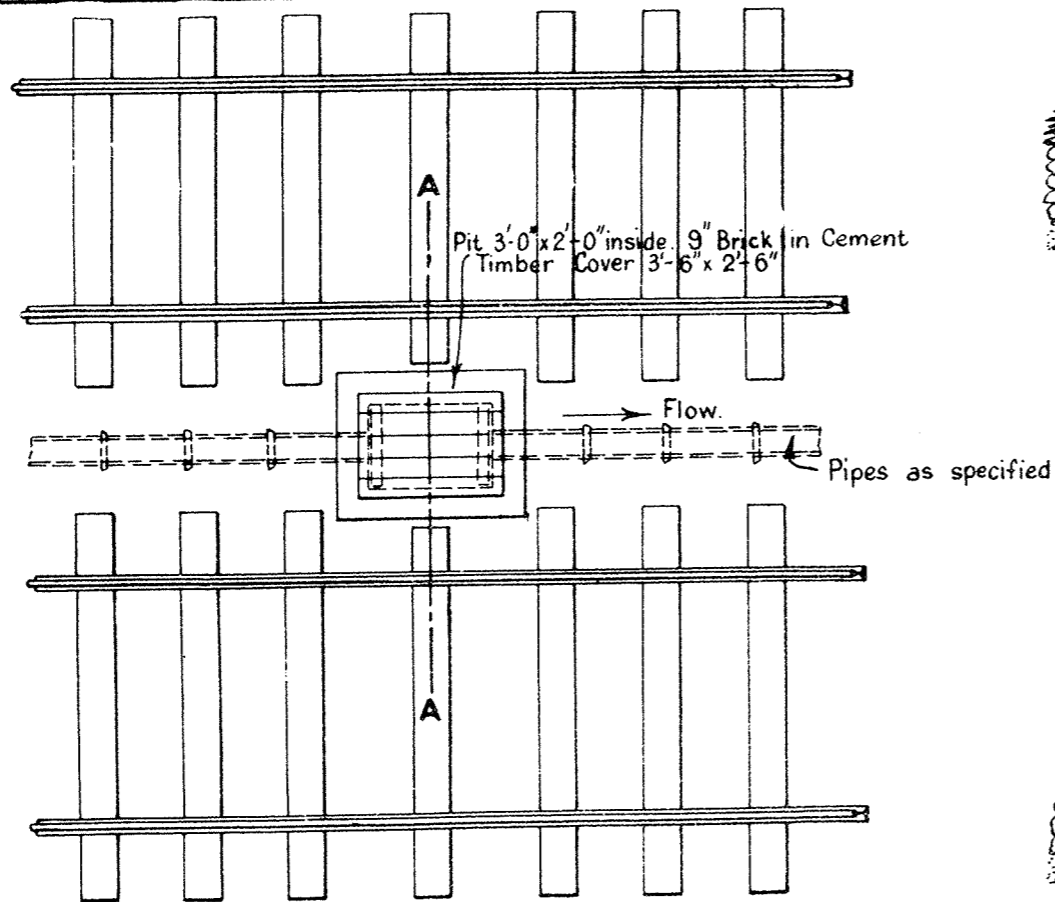
DETAIL OF BRACING

LATERAL BRACE

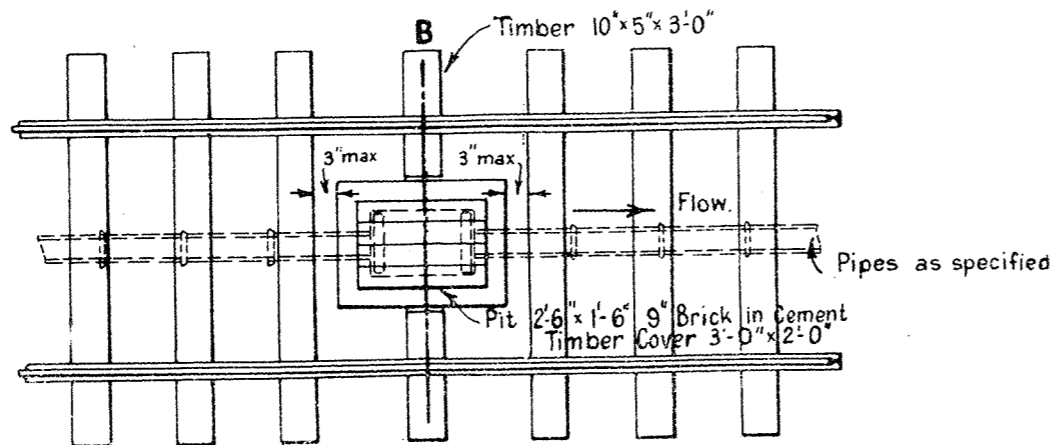


DETAIL OF LOCKING PIECE

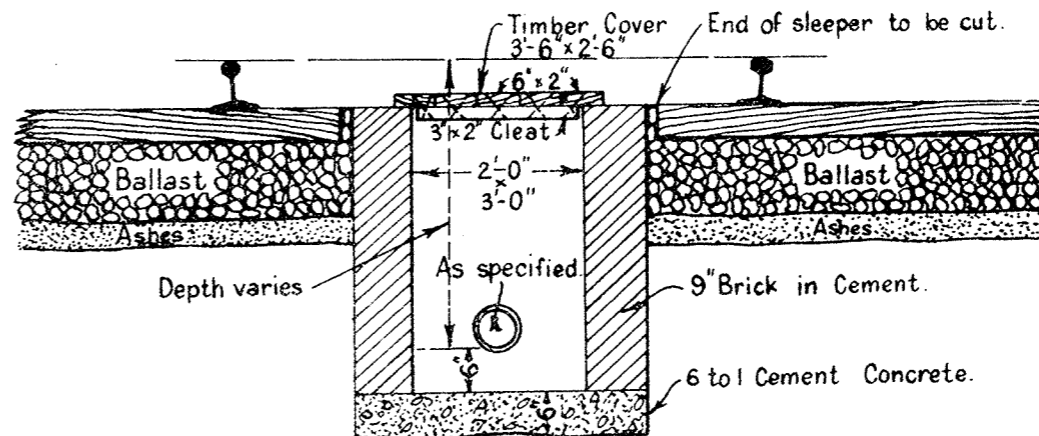
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		Chief Civil Engineer	MAY 1943
22 FT OPE BRIDGE WITH CONCRETE PIERS		Drawn by K.F.L.	Checked by T.H.J.
2 No 24" x 7 1/2" R.S.J.'s PER OPE.		PLAN No.	
DETAILS OF SUPERSTRUCTURE		F 418	



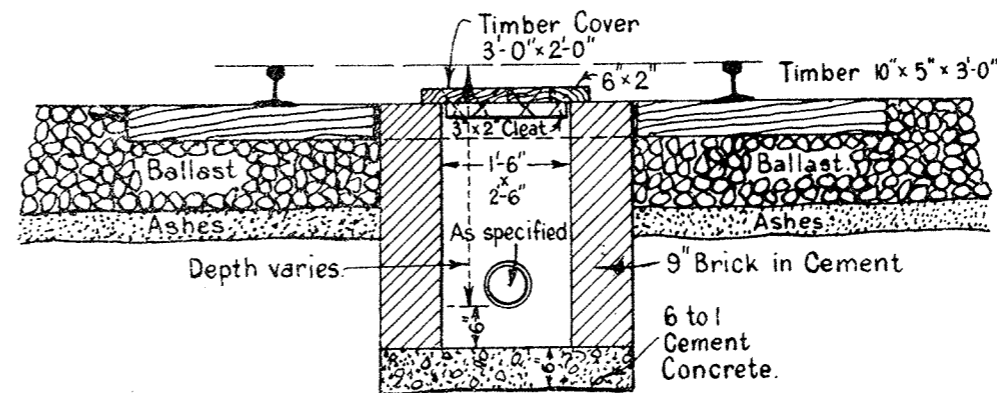
PLAN - PIT IN 6 FT



PLAN - PIT IN 5 FT.



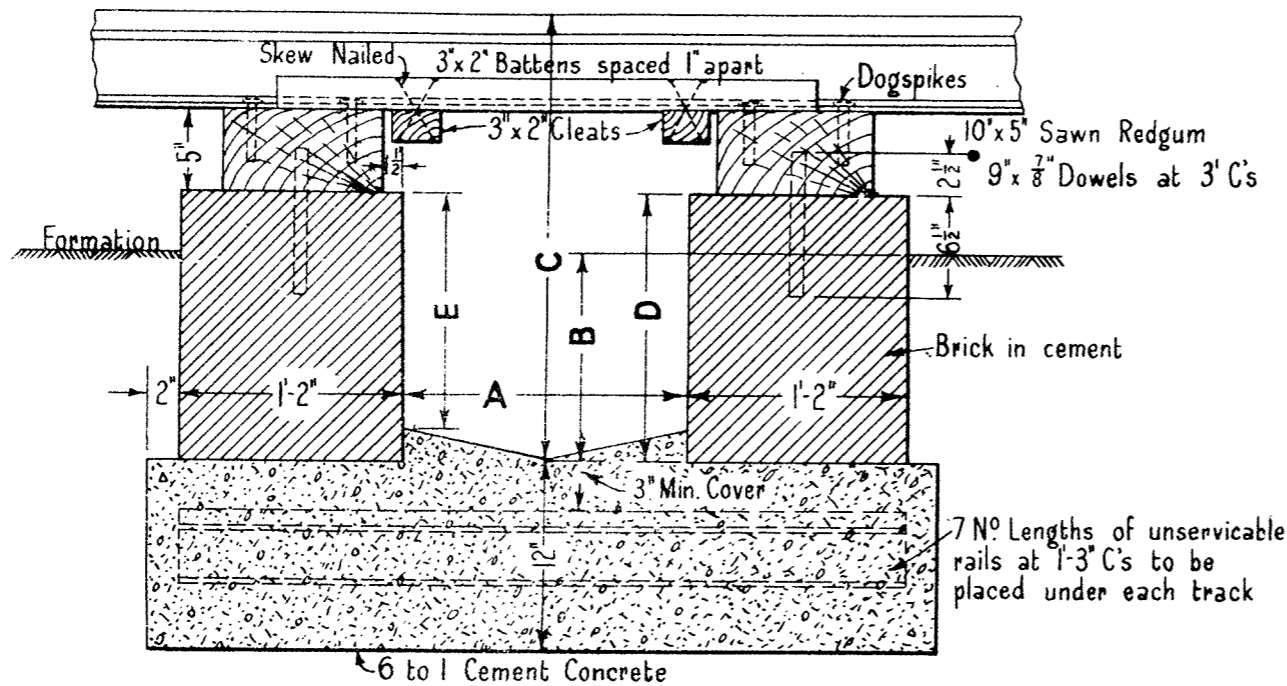
DETAIL OF PIT IN 6 FT.
SECTION A-A



DETAIL OF PIT IN 5 FT.
SECTION B-B

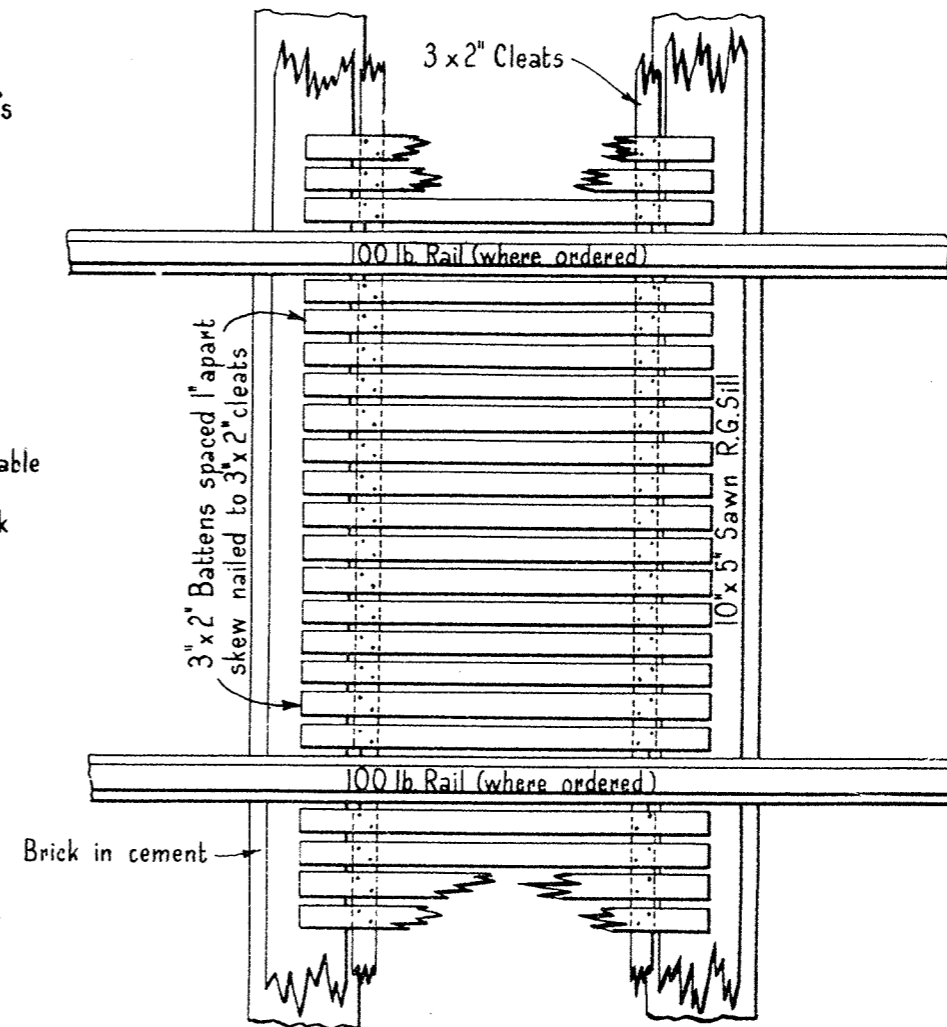
NOTE: This drawing supersedes Plan No. 162-38

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		Chief Civil Engineer.	JULY 1948
DETAILS OF PITS		Drawn by M. D.	Checked by <i>ack.</i>
FOR TRACK DRAINAGE		Eng. of Track & Drainage.	PLAN No.
NO SCALE			F 419



— **DETAIL OF INVERT** —

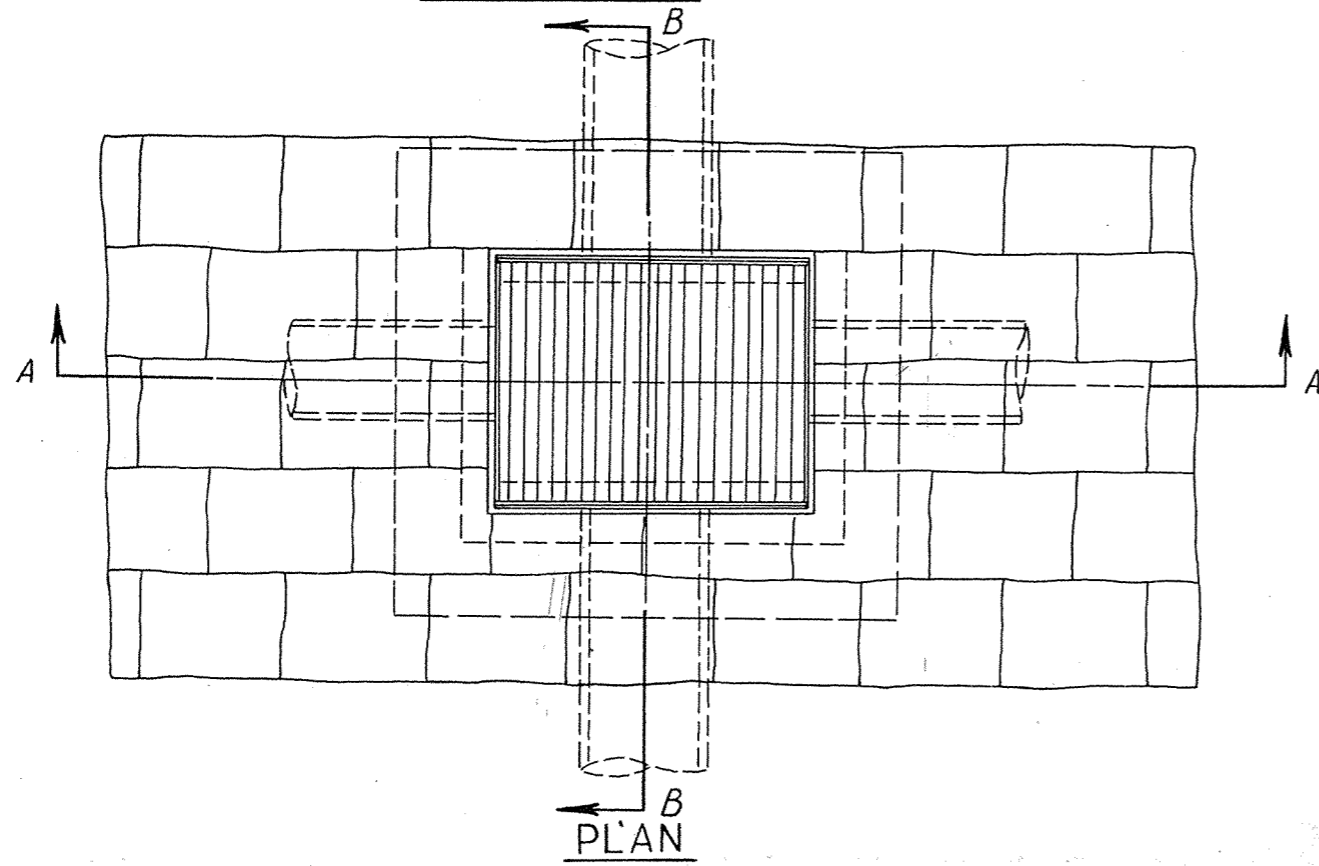
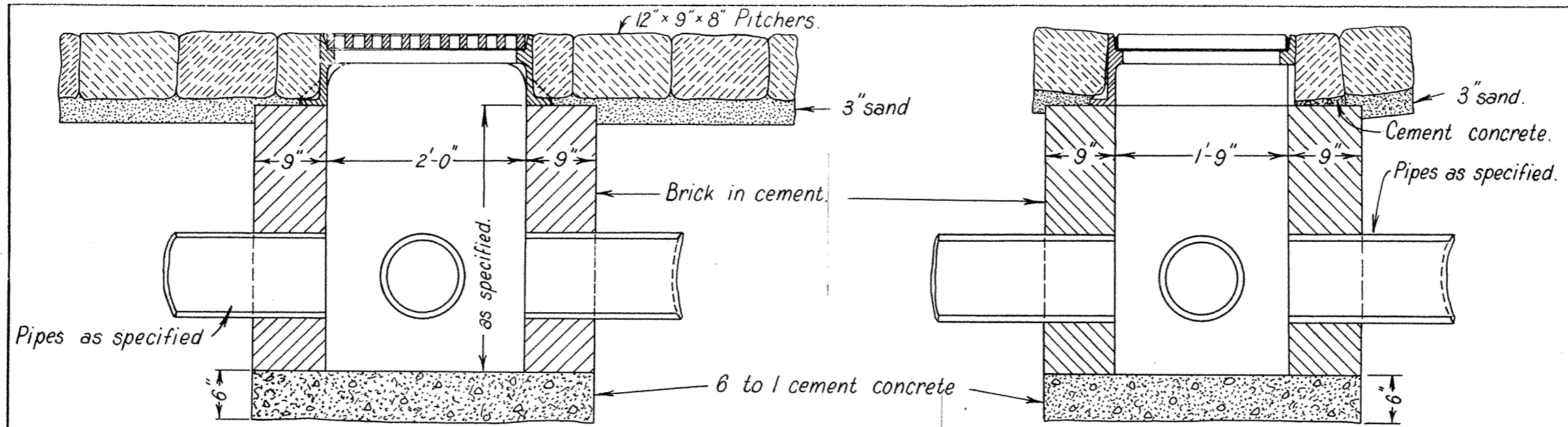
Size of invert	DIMENSION				
	A	B	C	D	E



— **DETAIL OF GRIDS** —

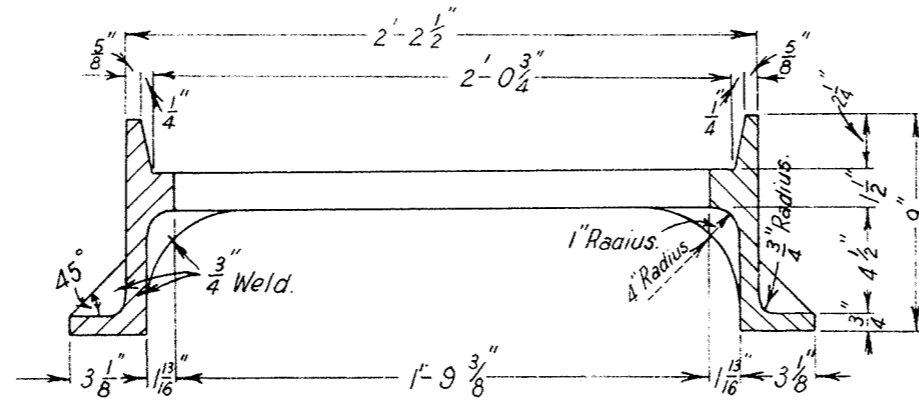
This drawing supersedes Plan No. 670-42

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	DEC. 1948
BRICK & CONCRETE INVERT		Drawn G.S.C.	Checked <i>[Signature]</i>
Scales $\frac{1}{2}$ " & 1" = 1'-0"		Edge of Track & Drainage	F 420

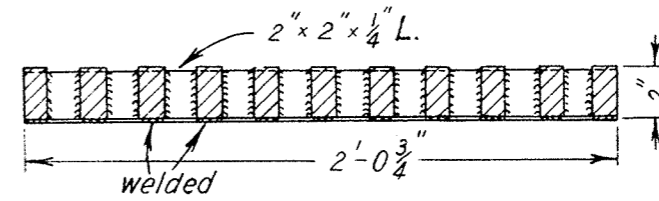


For details of grating & frame see Plan No F423
 This plan supersedes Plan No 1182-21

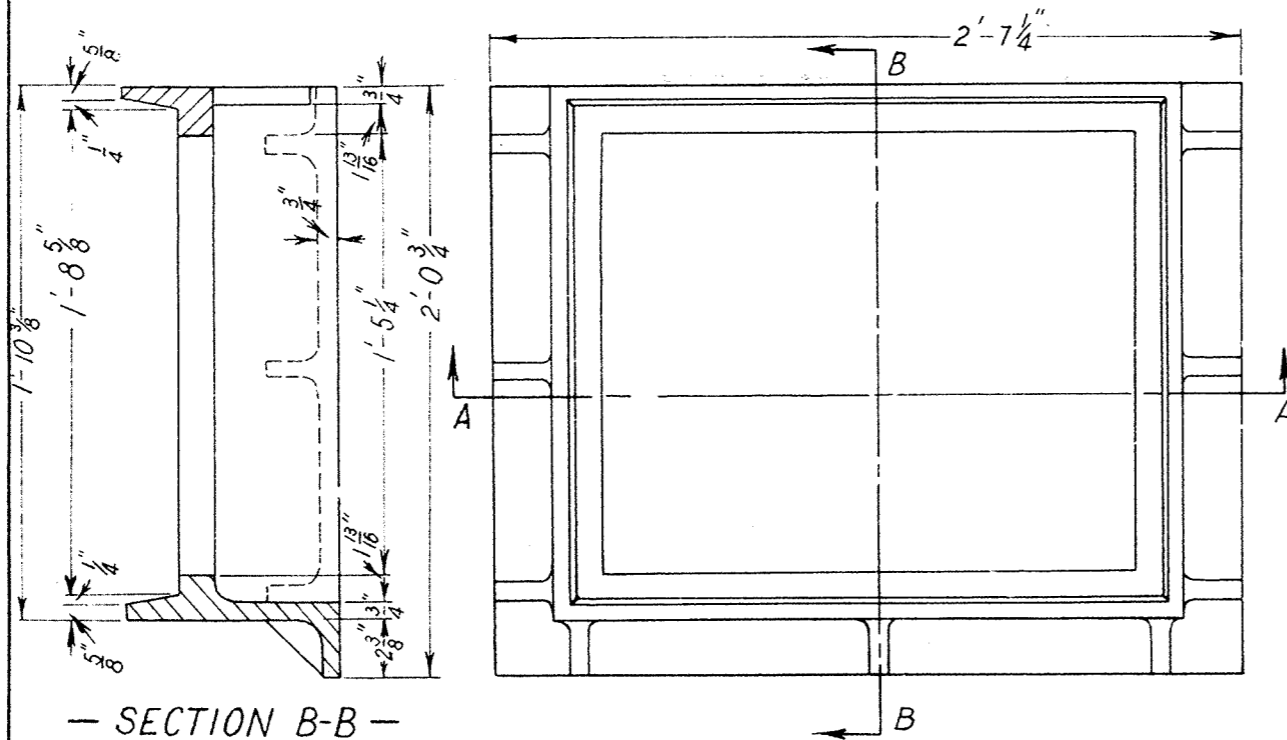
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	Oct 1948
DETAILS OF BRICK PITS		Drawn by G.S.C.	Checked by <i>[Signature]</i>
2'-0" x 1'-9"		PLAN No	
Scale $\frac{3}{4}'' = 1'-0''$		F 422	
		Eng. of Track & Drainage	



— SECTION A-A —



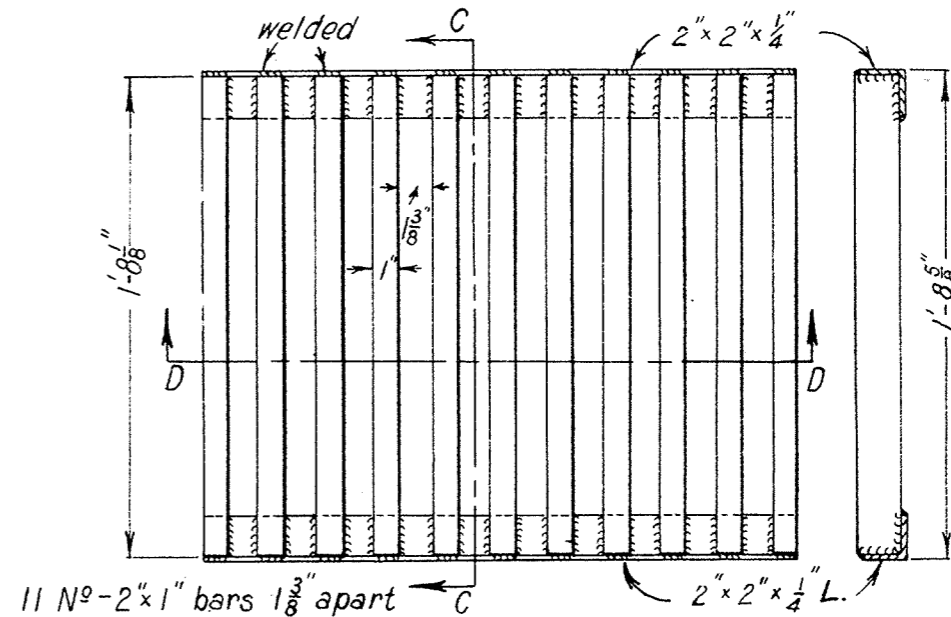
— SECTION D-D —



— SECTION B-B —

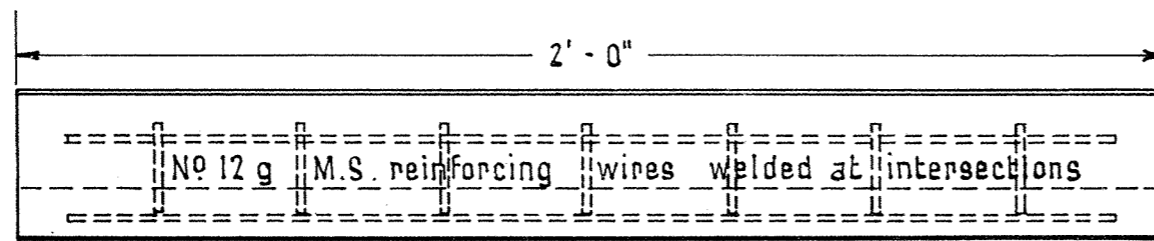
— PLAN OF C.I. FRAME —

This plan supersedes Plan No 4744/25

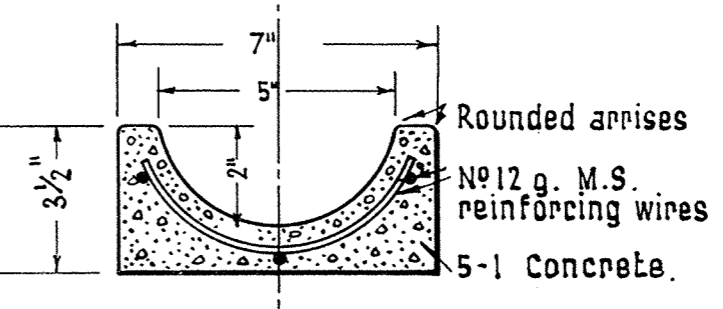


— PLAN OF M.S. GRATING —

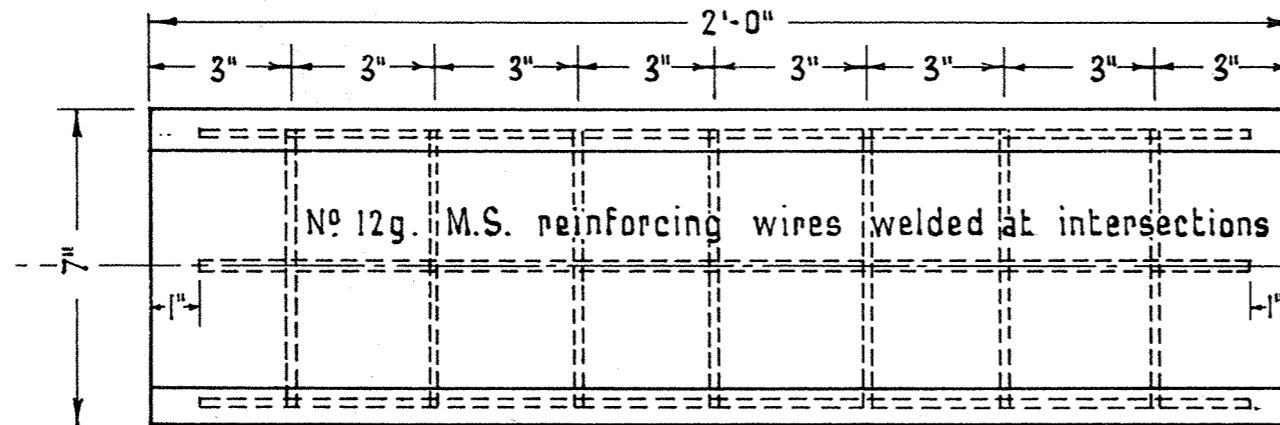
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M</i>	OCT. 1948
M.S. GRATING AND C.I. FRAMES		Chief Civil Engineer	PLAN No
Scale: 1 1/2" = 1'-0"		Drawn by <i>G.S.C.</i>	F 423
		Checked by <i>ab</i>	
		Eng ^r of Track & Dng ^r	



ELEVATION



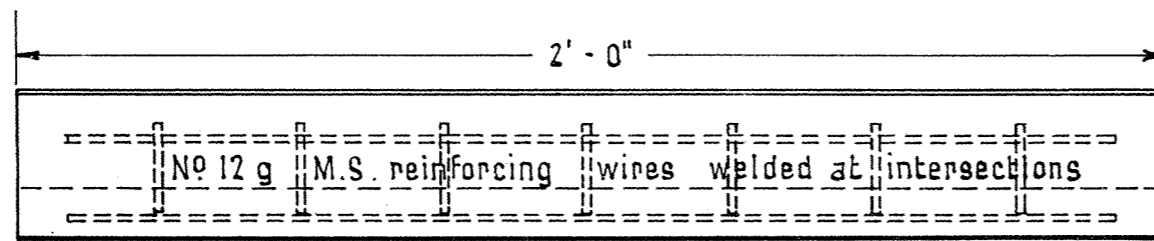
SECTION



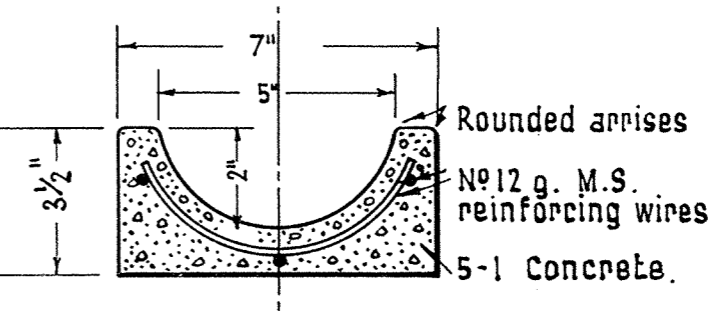
PLAN.

This plan supersedes plan No 357-49

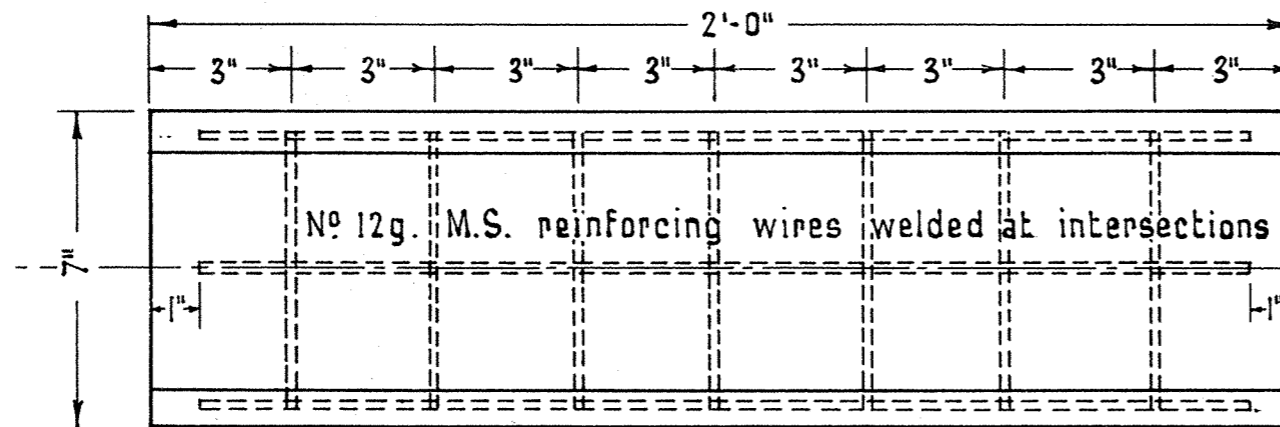
VICTORIAN RAILWAYS. WAY & WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Eng ^r	
5" PRECAST CONCRETE INVERT		Drawn. Check. J. C. <i>[Signature]</i>	PLAN No
Scale: - 3" = 1'0"		<i>[Signature]</i> Eng ^r I. & O.	F 424



ELEVATION



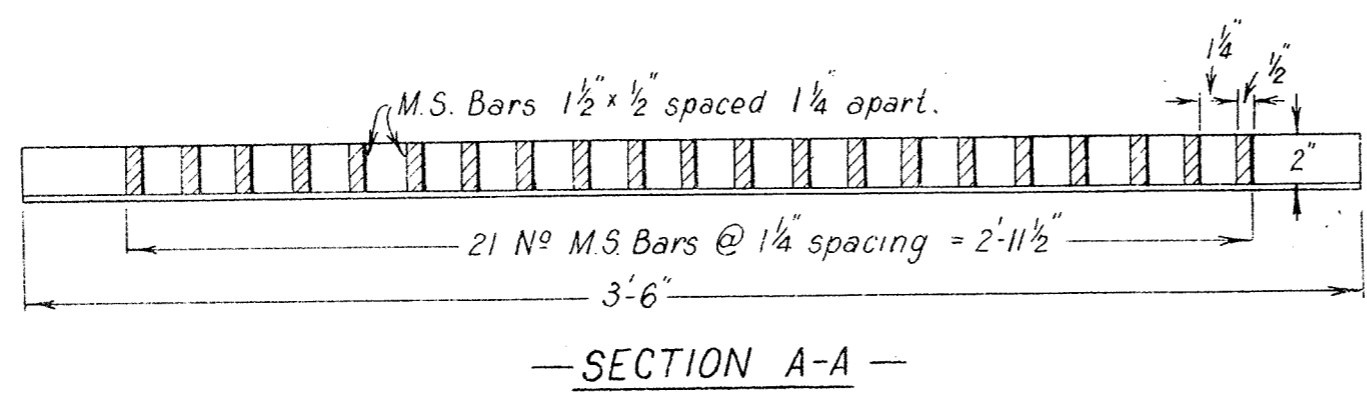
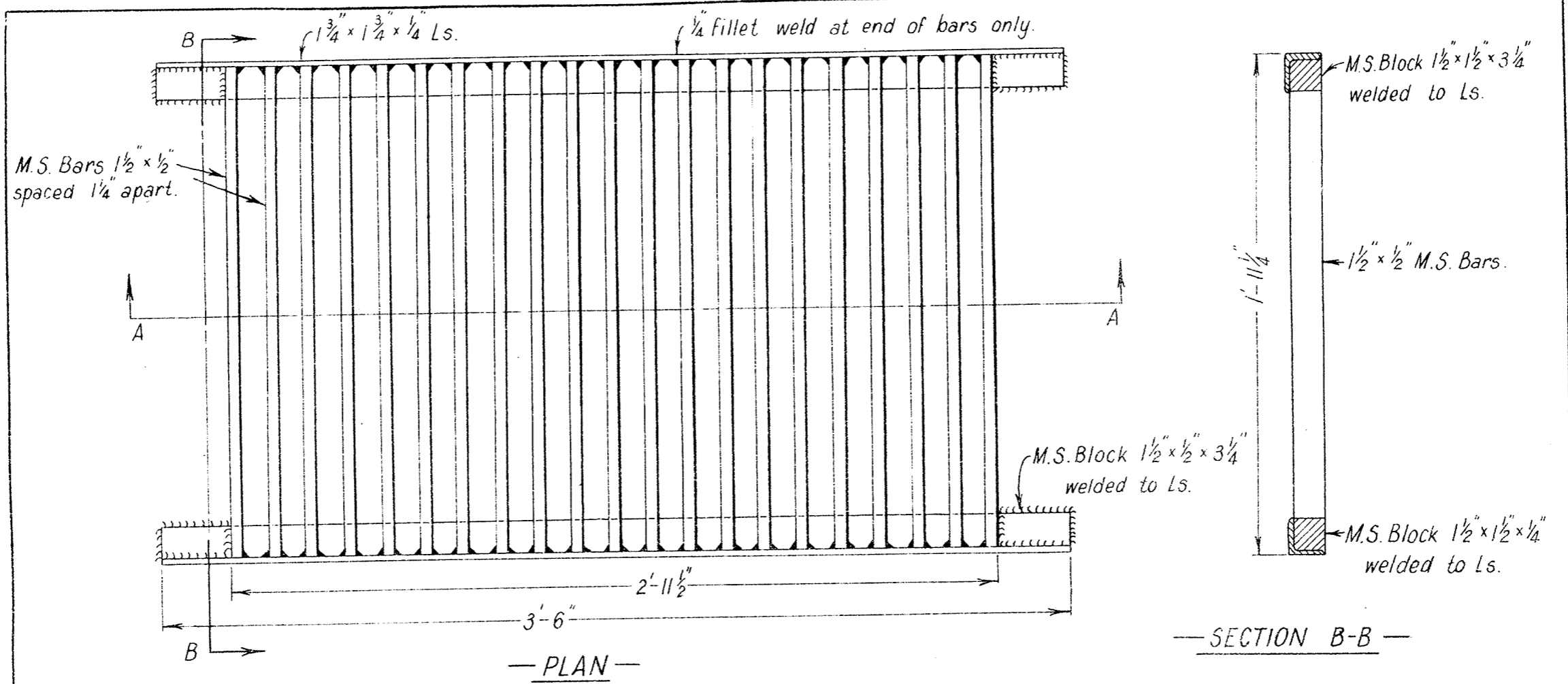
SECTION



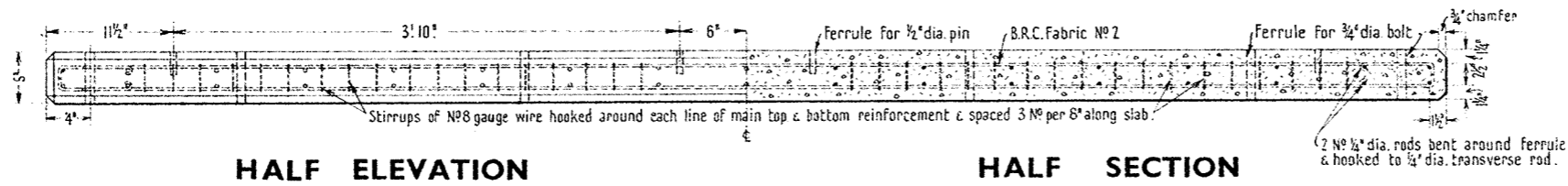
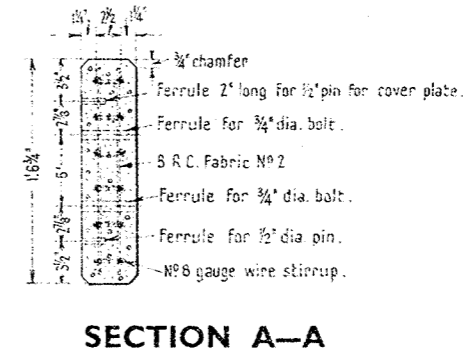
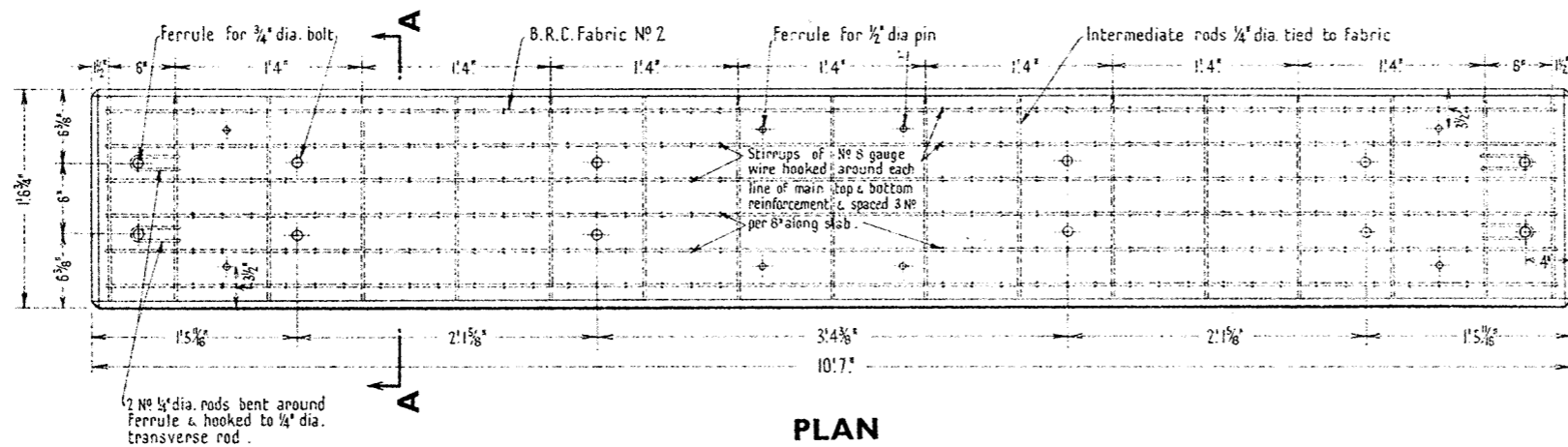
PLAN.

This plan supersedes plan No 357-49

VICTORIAN RAILWAYS. WAY & WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	
5" PRECAST		Chief Civil Eng ^r	
CONCRETE INVERT		Drawn. J. G.	PLAN No
Scale: - 3" = 1'0"		Check. <i>[Signature]</i>	F 424
		Eng ^r T. E. O.	



VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer.	OCT. 1948
M.S. GRATING FOR 30" x 20" PIT		Drawn by <i>[Signature]</i>	Checked by <i>[Signature]</i>
Scale = 2" = 1'		<i>[Signature]</i> Eng ^r of Track & Drainage	PLAN No F 425



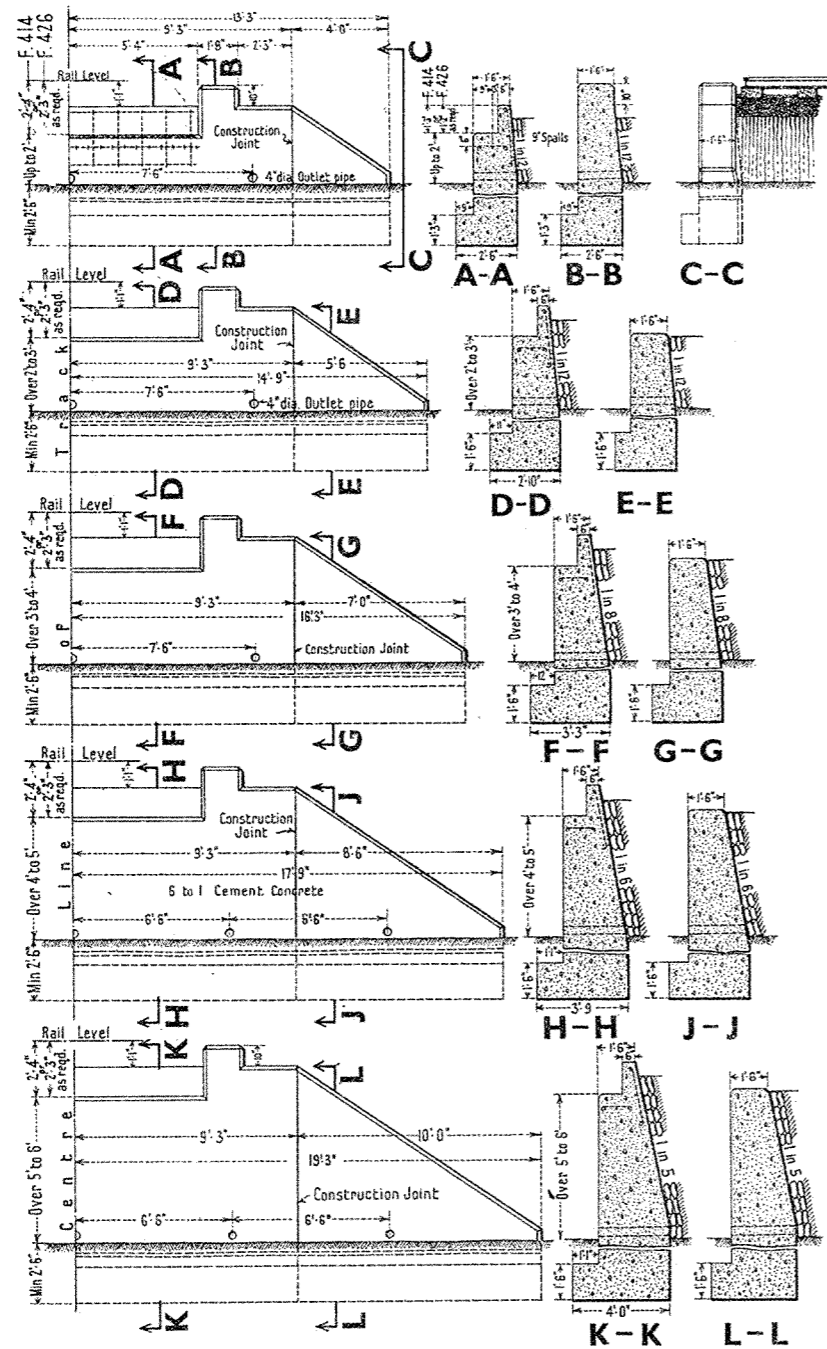
NOTES: The slabs are to be 5 to 1 cement concrete.
 Concrete to be composed of Portland Cement and approved bluestone metal and sand, the size of the coarse aggregate not to be greater than will pass a 1" screen.

This Plan to be used in conjunction with Plan No F 426. & F 414.

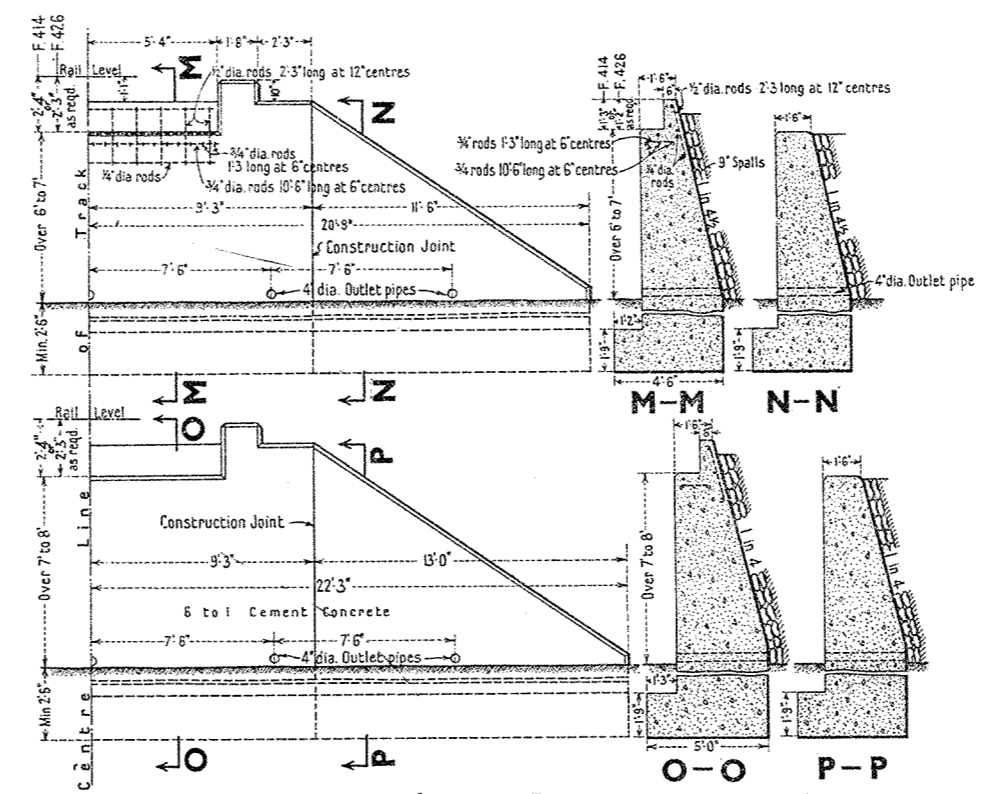
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING 11'0" OPES R.S.J. BRIDGE WITH REINFORCED CONCRETE DECK DETAILS OF PRECAST R.C. SLABS. Scale: 3/8" = 1'0"		Approved Chief Civil Engineer	Adopted JUNE 1943
Drawn by C.M.T.	Checked by T.H.J.	PLAN No. F 427	
 W. Branch of Struct'l Design			

A B U T M E N T S

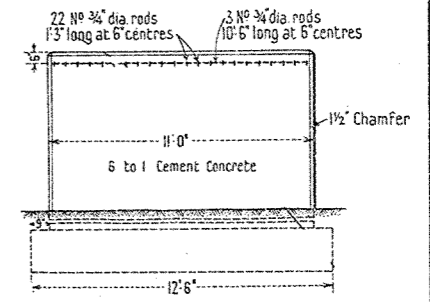
P I E R S



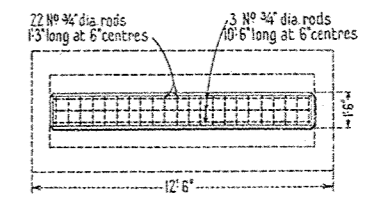
HALF ELEVATIONS SECTIONS



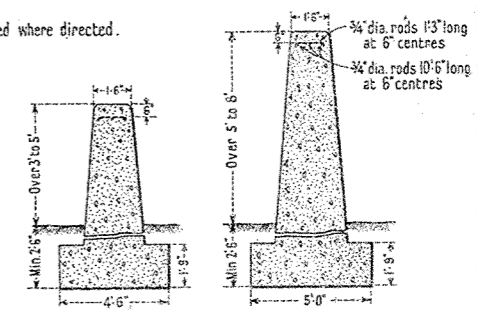
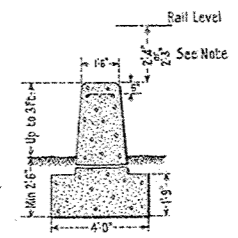
HALF ELEVATIONS SECTIONS



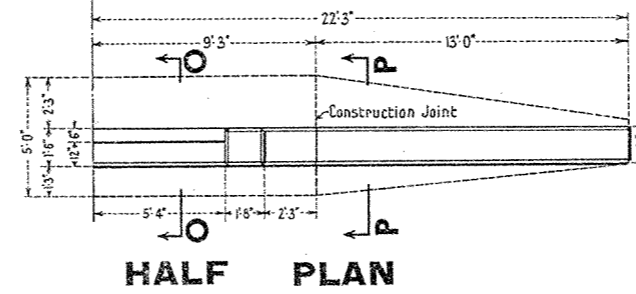
ELEVATION



PLAN



SECTIONS



HALF PLAN

SCHEDULE OF QUANTITIES

HT. in FEET Nat. Surface to Impost	TWO ABUTMENTS			ONE PIER		REINFORCING RODS		
	CONCRETE		SPALLS	CONCRETE		TWO ABUTS ONE PIER		
	A Cub. Yds.	B Cub. Yds.	Cub. Yds.	A Cub. Yds.	B Cub. Yds.	DIAM	Lengths	Lengths
2	16½	4¾	3	5	2	¼"	6/10'	
3	24	5½	5	6¼	2	½"	22/2'3"	
4	31½	7	7	7½	2	¾"	6/10'6", 44/1'3"	3/10'6", 22/1'3"
5	38½	8¼	9½	8½	2			
6	48	9½	12	9¾	2¼			
7	59	11¼	15	10¾	2½			
8	73½	13¼	18	12½	2½			

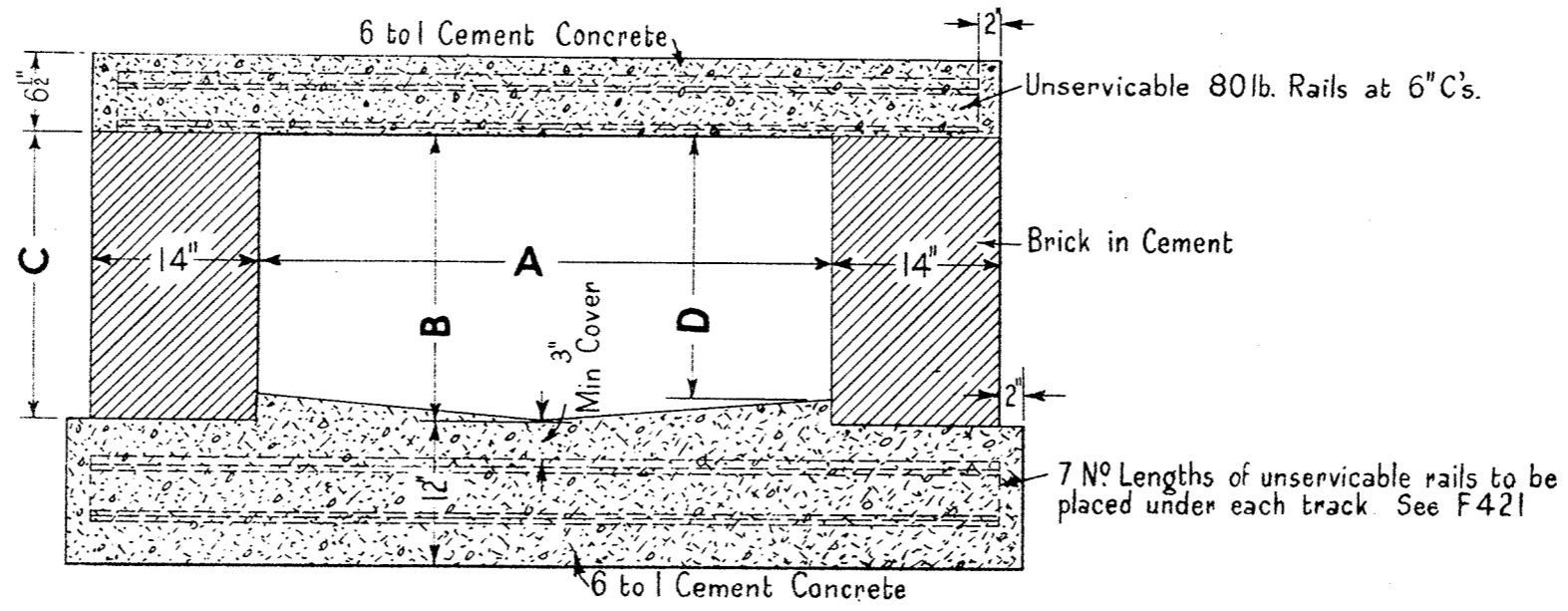
NOTE: Column 'A' shows quantity of concrete in one pier or two abutments including Footings 2'-6" deep. Column 'B' shows quantity to be added to 'A' for every foot of depth of foundation in excess of 2 Ft. 6 in.

NOTES
 Splayed wings to abutments to be provided where directed.
 Depths of foundations to be determined on site and marked on Abutments and Piers in accordance with F. 293A.

This Drawing is to be used in conjunction with Standard Drawings F. 414 and F. 426.

For 80 lb. rails, rail level to impost = 2'-4" for F. 414.
 = 2'-3" for F. 426.

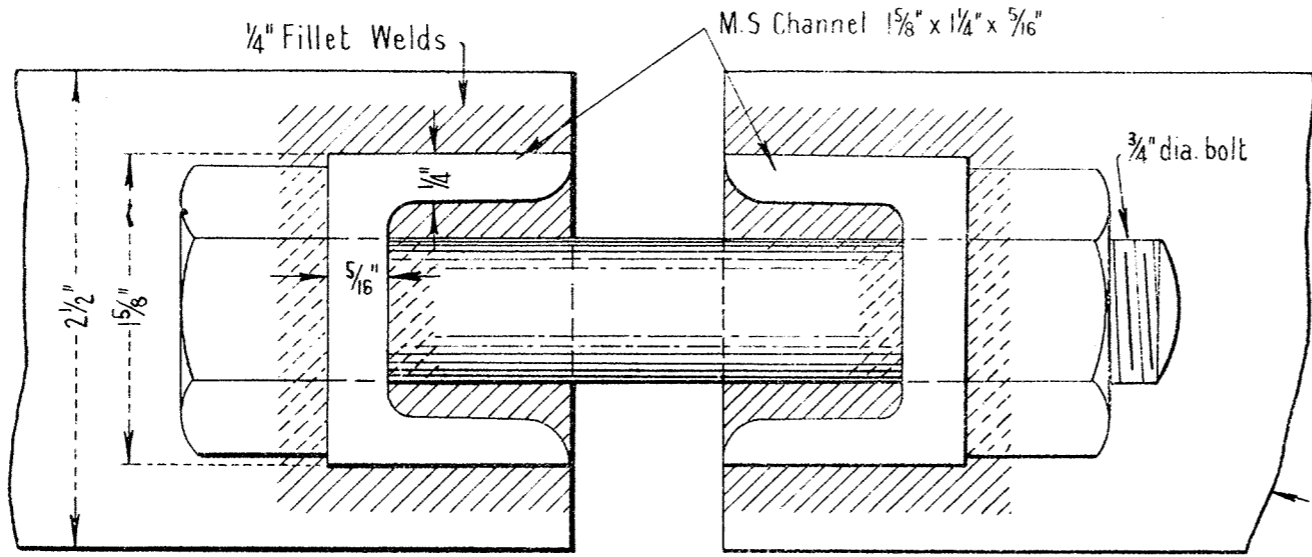
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING SHALLOW DECK BRIDGES WITH REINFORCED CONCRETE SLABS ON 8'x 6'x 35 lbs. & 9'x 4'x 21 lbs. R. S. J's DETAILS OF SUBSTRUCTURE Coopers E 40 & E 55 Standards No Scale		Approved Chief Civil Engineer Drawn by E. C. Checked by T. N. J. Eng. of Struct. Design	Adopted JULY 1943 PLAN No. F 428
---	--	---	--



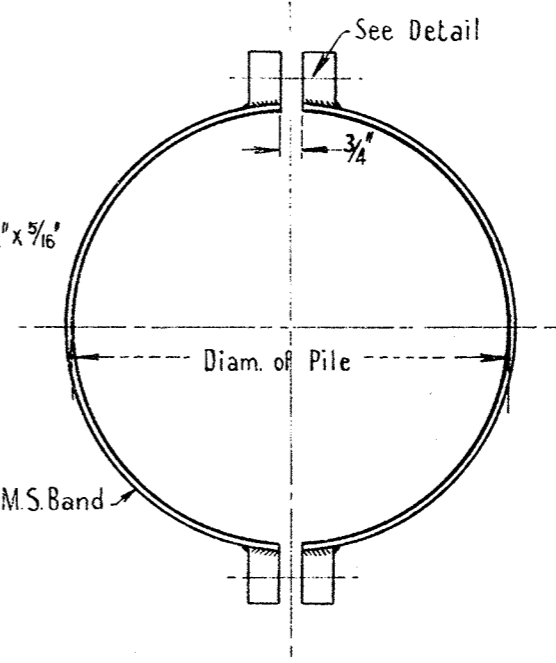
N.B. When specified, End walls to be provided in accordance with F493

Size of Culvert	Dimension			
	A	B	C	D

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH	Approved <i>M</i> Chief Civil Engineer	Adopted DEC.1948
STANDARD DRAWING	Drawn by G.S.C. <i>G.S.C.</i>	Checked by <i>ab</i>
DETAILS OF RAIL DECK CULVERTS	Scale $\frac{3}{4}" = 1'-0"$	PLAN No F 429
	Engt of Tracks Dept	



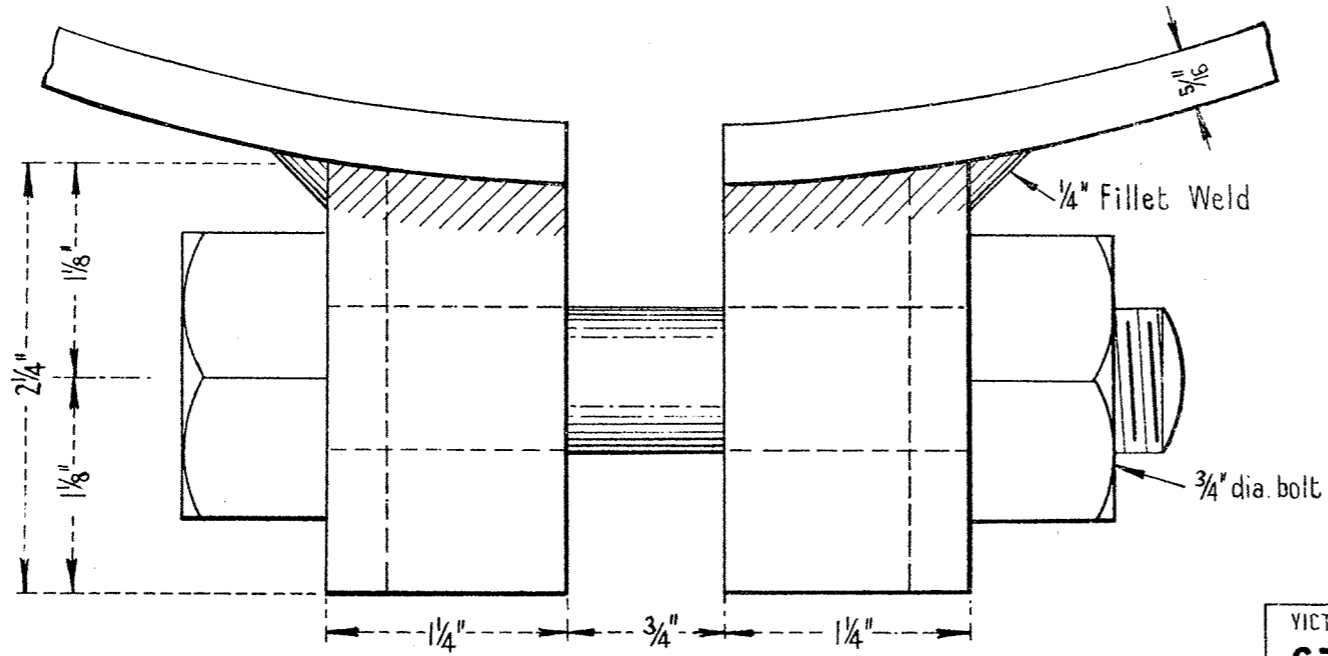
ELEVATION



PLAN

Scale:- 1/2" = 1'-0"

NOTE :- Straps to be ordered to suit dia. of piles.

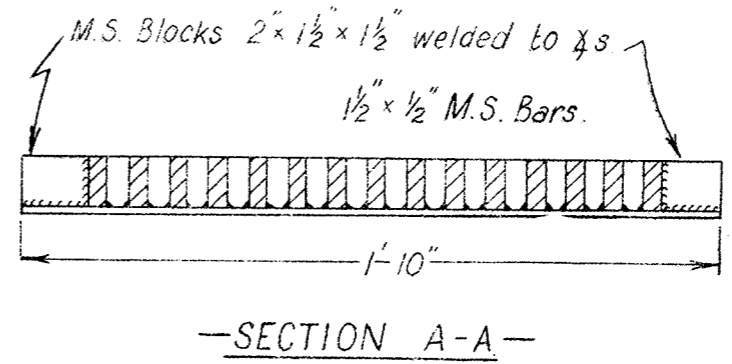
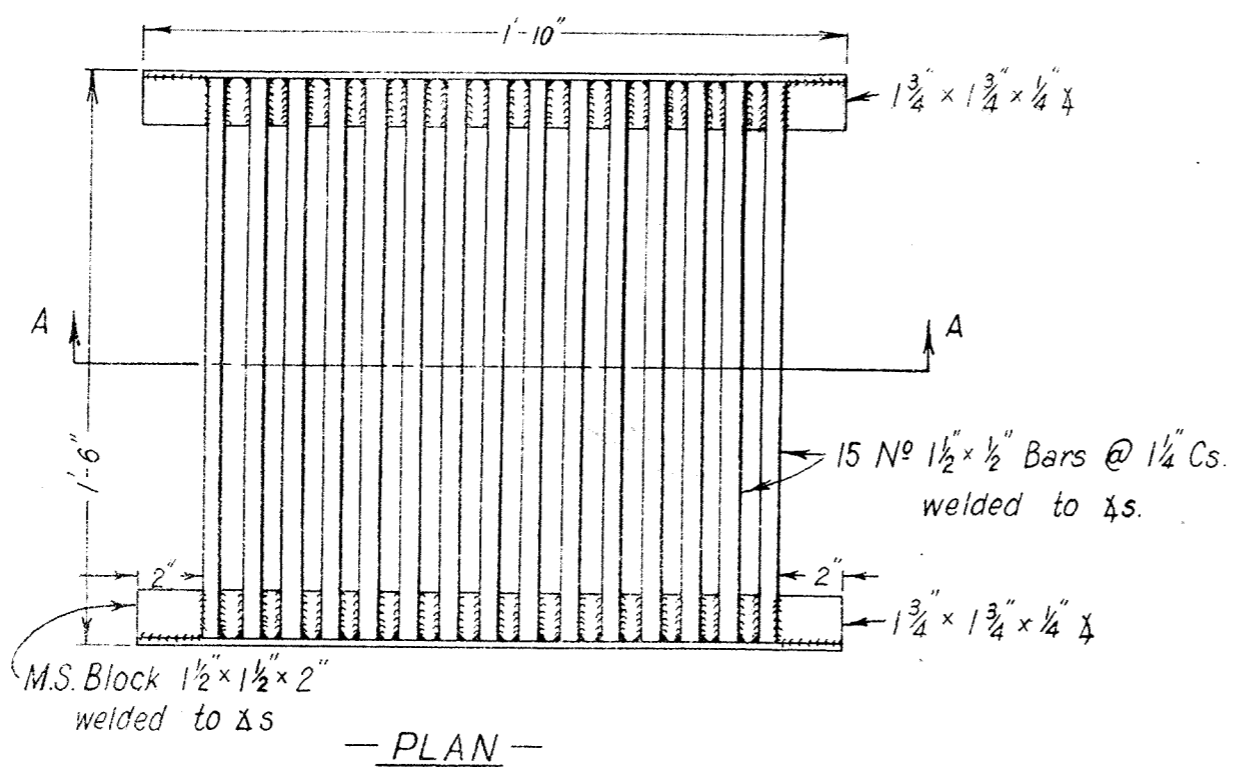


PLAN

DETAIL OF CLIP

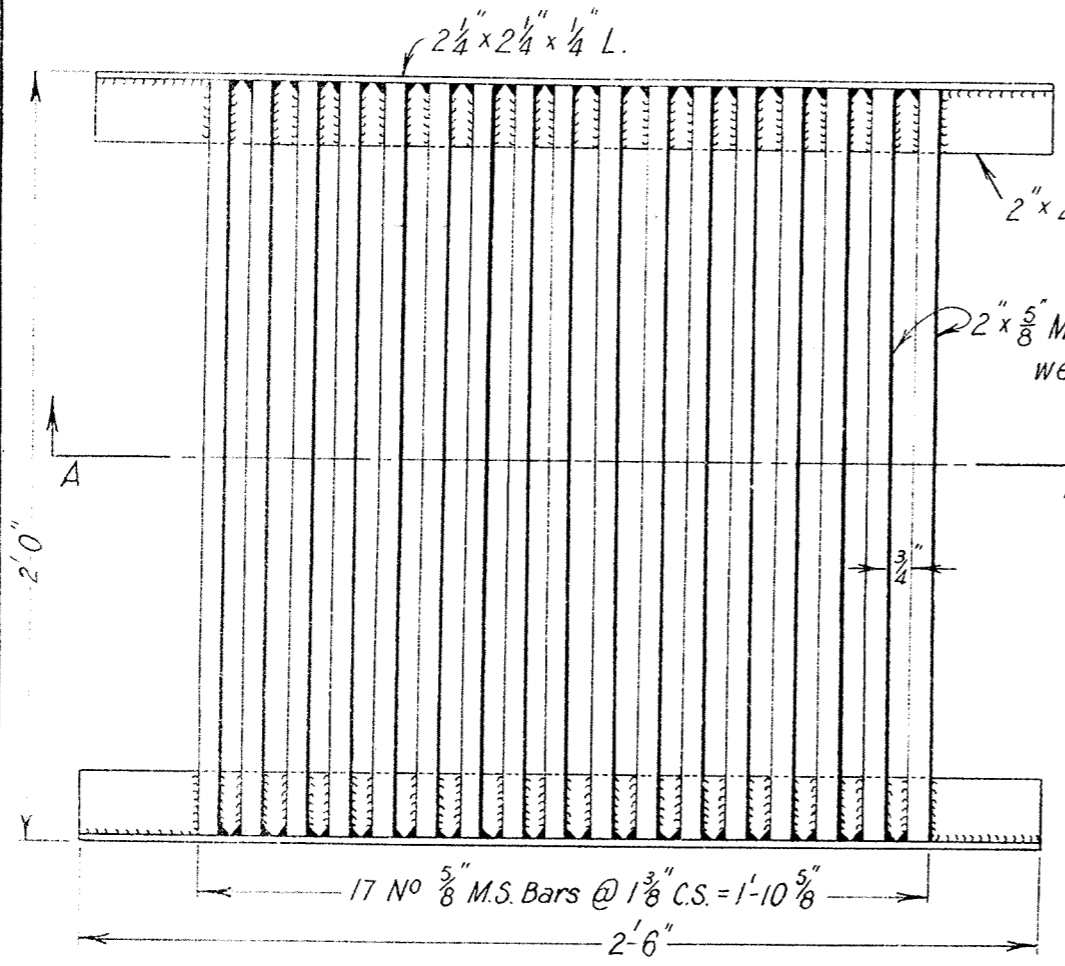
Scale:- Full Size

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.A.</i>	JAN. 1948
DETAIL OF M.S. BAND CLIPS FOR SPLIT PILES		Chief Civil Engineer	
Drawn by	Checked by	M.E.C.	T.H.J.
		Eng. of Struct. Design	PLAN NO F.431

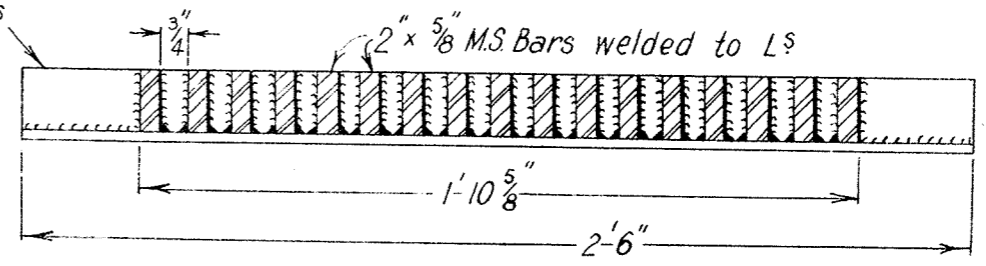


This plan supersedes Plan No 3386-19

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved <i>Mt</i> Chief Civil Engineer.	Adopted DEC. 1948
STANDARD DRAWING		Drawn by G.S.C. <i>2015</i>	Checked by <i>2015</i>
M.S. GRATING FOR 1'-6" x 1'-6" PIT		Eng. of Track & D'ng'e.	PLAN No F 432
Scale: 2" = 1'-0"			



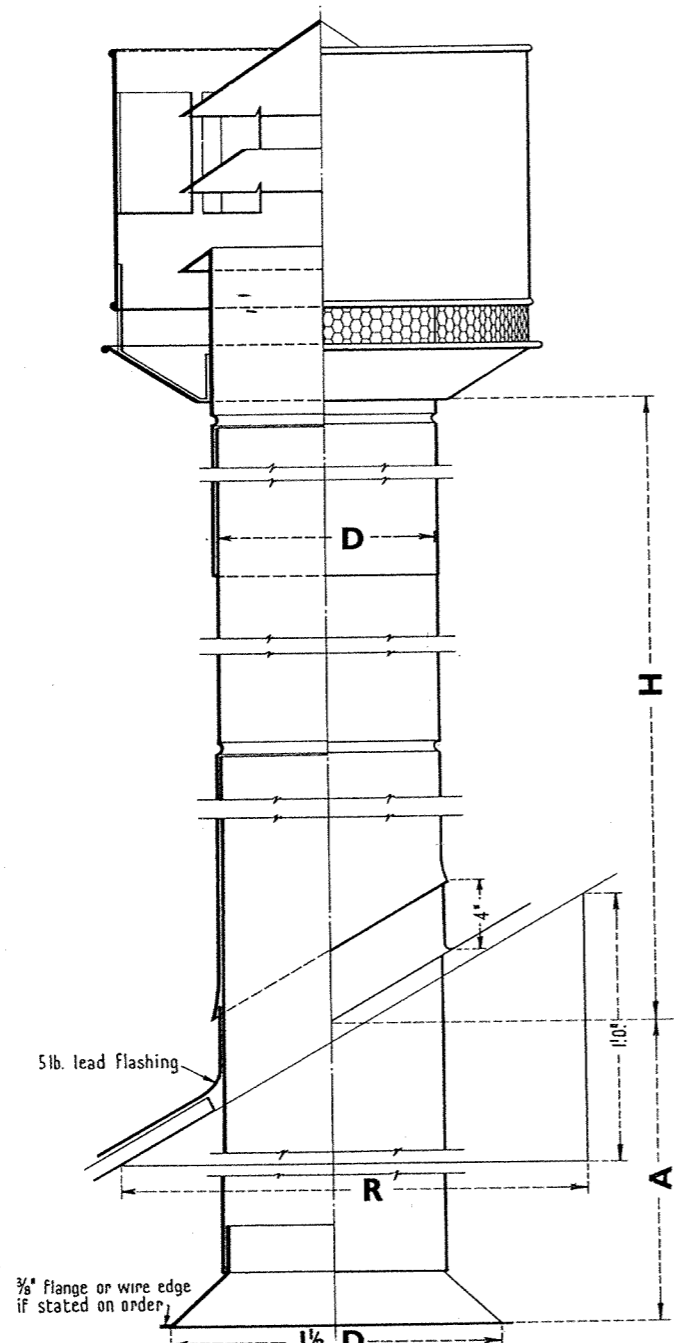
— PLAN —



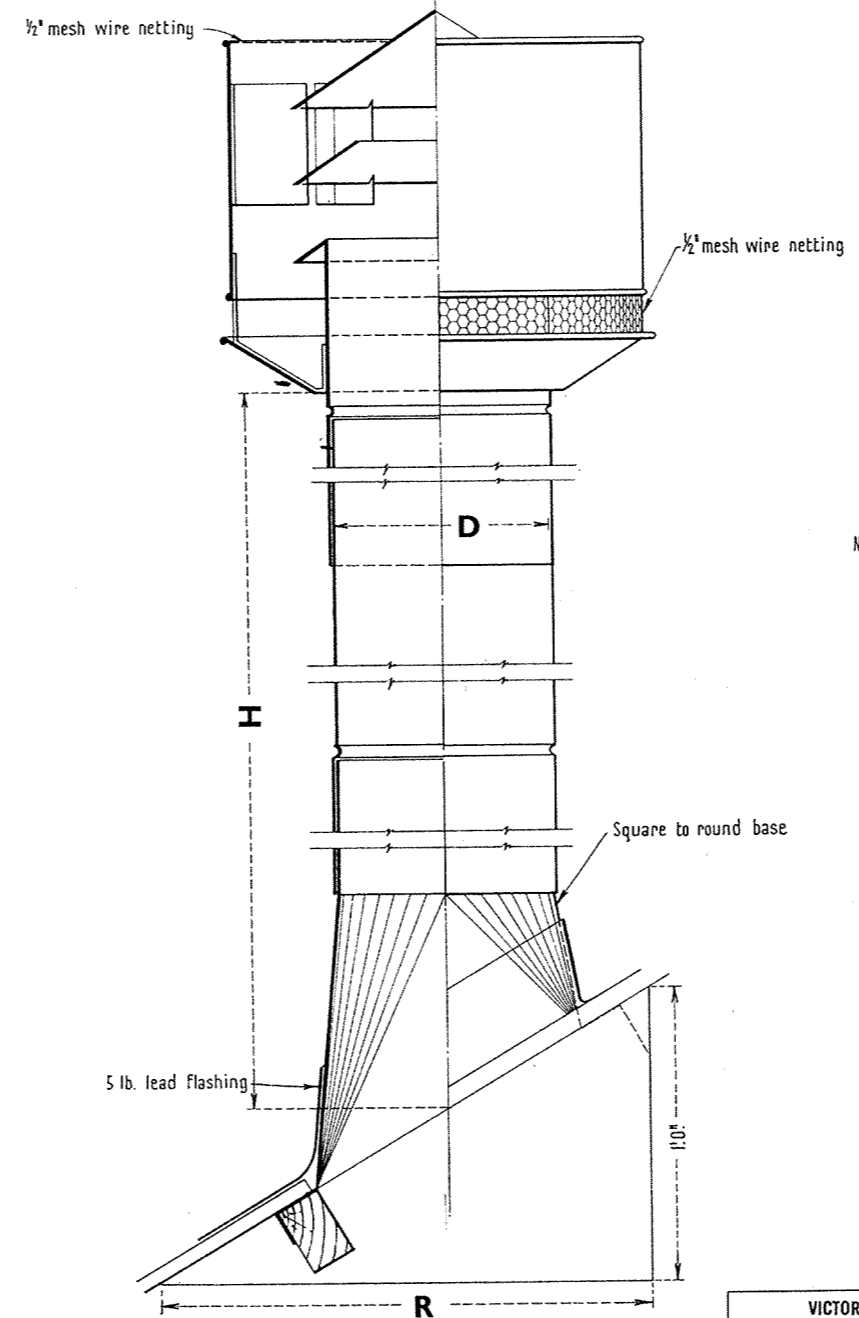
— SECTION A-A —

This Plan supersedes Plan No 3322/19

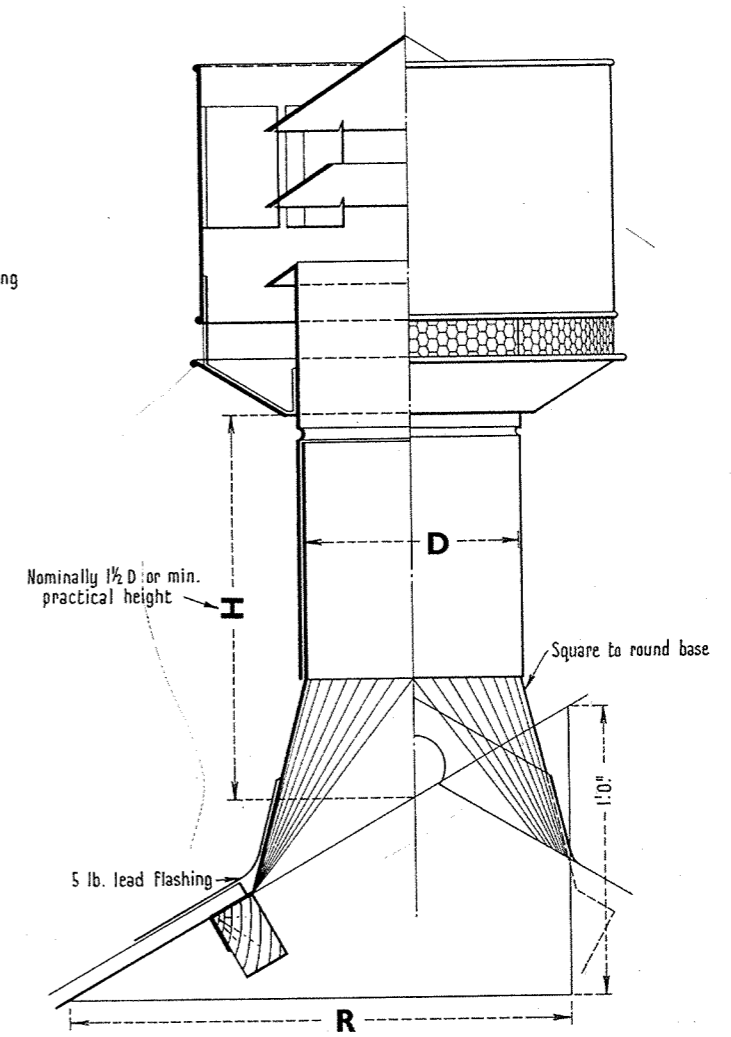
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH	Approved	Adopted
	<i>[Signature]</i> Chief Civil Engineer	OCT. 1948
STANDARD DRAWING	Drawn by <i>[Signature]</i>	PLAN No
	Checked by <i>[Signature]</i>	
M.S. GRATING FOR 2' x 2' Pit.	<i>[Signature]</i> Eng. of Track & Dngce	F 433
Scale: 2" = 1'-0"		



ROOF VENT TYPE 1
 DETAIL BASE AND FLASHING OF
 VENT THROUGH CLOSED ROOF
 Sizes A.H.R.& D. to be stated when ordering.

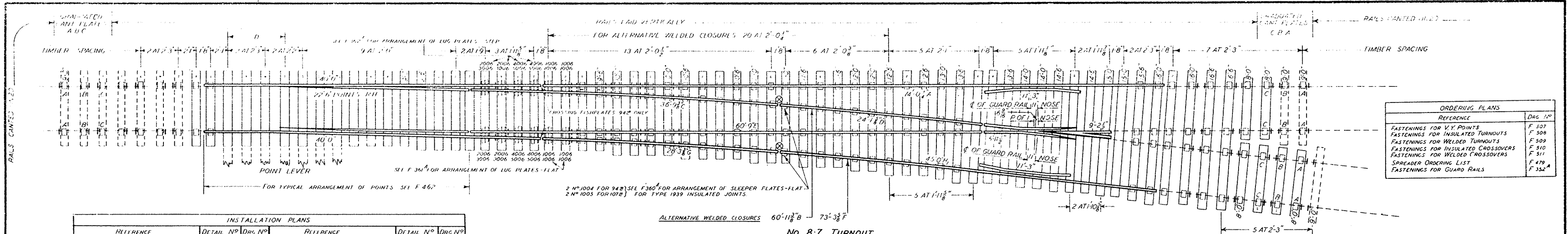


ROOF VENT TYPE 2
 DETAIL BASE OF VENT FIXED
 ON SLOPE OF OPEN ROOF
 Sizes H.R.&D. to be stated when ordering.



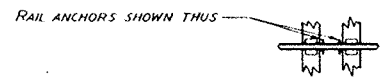
ROOF VENT TYPE 3
 DETAIL BASE OF VENT
 FIXED ON RIDGE
 Sizes H.R.&D to be stated when ordering.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.W.</i> Chief Civil Engineer	SEPT. 1943
COWL VENTILATORS		Drawn by C.M.T.	Checked by D.B. COOK.
Not to Scale.		<i>H. Subcliffe</i> Chief Architect	PLAN NO F434



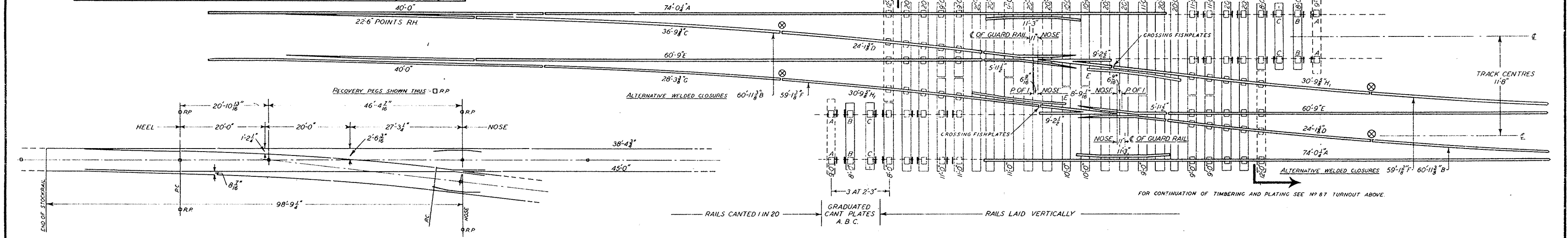
ORDERING PLANS	
REFERENCE	DRG. NO.
FASTENINGS FOR V.Y. POINTS	F 507
FASTENINGS FOR INSULATED TURNOUTS	F 508
FASTENINGS FOR WELDED TURNOUTS	F 510
FASTENINGS FOR INSULATED CROSSOVERS	F 511
FASTENINGS FOR WELDED CROSSOVERS	F 479
SPREADER ORDERING LIST	F 352 ^A
FASTENINGS FOR GUARD RAILS	F 352 ^A

INSTALLATION PLANS					
REFERENCE	DETAIL NO.	DRG. NO.	REFERENCE	DETAIL NO.	DRG. NO.
LUG PLATES - STEP	2006 3006	F 362 ^A	POINT LEVERS - INSTALLATION ARRANGEMENTS		F 456
LUG PLATES - FLAT	4006 5006	F 361 ^A	TIE PLATE ARRANGEMENTS GUARD RAILS		F 454 ^A
SLEEPER PLATES - FLAT	1001 1002	F 314 ^A	TYPICAL ARRANGEMENT OF INSULATED JOINTS TYPE 1939		F 331 ^A
SLEEPER PLATES - FLAT FOR INSUL. JTS	2001 2002	F 360 ^A	CLOSURES - LENGTHS & CURVING DETAILS		F 464
TYPICAL ARRANGEMENT OF POINTS	1004 1005	F 462	GRADUATED CANT PLATES		F 355
POINT LEVERS - END PULL ARRANGEMENTS		F 513			F 471



No. 8-7 TURNOUT

EXCEPT WHERE INDICATED PLATES SHOWN ARE NO. 1001 FOR 94LB AND NO. 1002 FOR 107LB



OFFSET DIAGRAM

No. 8-7 CROSSOVER PARALLEL TRACKS

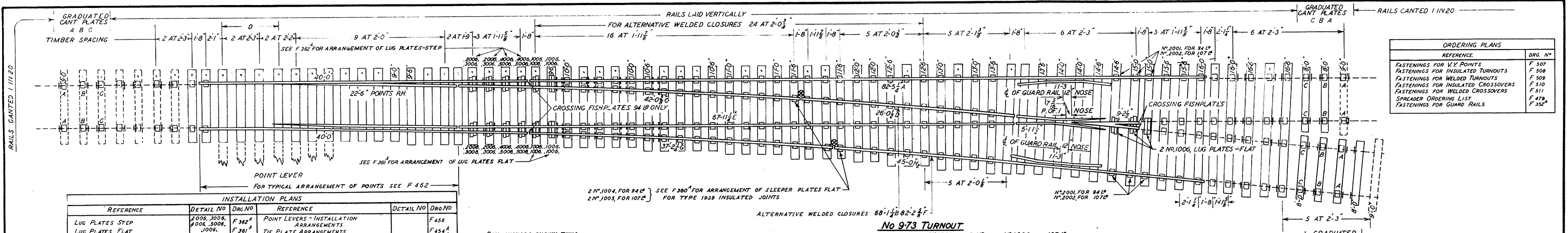
EXCEPT WHERE INDICATED PLATES SHOWN ARE NO. 1001 FOR 94LB AND NO. 1002 FOR 107LB

DATA	POINTS AND CROSSING FOR TURNOUT	POINTS AND CROSSINGS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR TURNOUT	TIMBERS FOR PARALLEL TRACK CROSSOVER	NOTES	
POINT ANGLE CROSSING NUMBER CROSSING ANGLE RE OPENINGS V CROSSINGS WING VEE GAUGE BETWEEN STOCKRAILS AT TOE OF POINTS RADIUS OF OUTER RAIL RADIUS OF INNER RAIL	1° 8' 25.9" 8-7 6° 33' 24.8" 8 1/2" 1'-0 3/8" 5'-3 3/8" 644.88' 639.63'	1 SET 22'-6" POINTS R.H. OR L.H. 1 V CROSSINGS NUMBER 8-7 1 PAIR 11'-3" GUARD RAILS WITH BLOCKS	2 SETS 22'-6" POINTS R.H. OR L.H. 2 V CROSSINGS NUMBER 8-7 2 PAIR 11'-3" GUARD RAILS WITH BLOCKS	12x6 SAWN TIMBERS 2 No. 16'-6" 4 No. 13'-6" 3 No. 11'-0" 3 - 10'-0" 1 - 13'-0" 4 - 10'-6" 1 - 15'-0" 3 - 12'-6" 4 - 10'-0" 2 - 15'-0" 2 - 12'-0" 12 - 9'-6" 3 - 14'-6" 3 - 11'-6" 13 - 9'-0" 2 - 14'-0"	12x6 SAWN TIMBERS 12 No. 20'-0" 8 No. 10'-6" 6 - 12'-0" 12 - 10'-0" 6 - 11'-6" 24 - 9'-6" 12 - 11'-0" 32 - 9'-0" 6 No. 8'-0" = 200 SUPER FEET	EXPANSION AT JOINTS - INSULATED JOINTS SHOWN THUS \otimes OTHER JOINTS \otimes LOCATE GUARD RAILS MARKED 'E' AS FOLLOWS - DRILL 1/4" HOLE IN V CROSSING 2'-7" FROM VEE END FOR GUARD RAIL END BOLT. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. SPACING AT 'D' TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF OPERATION FOR EXTRA LENGTH TIMBERS SHOWN REFER TO STANDARD DRAWING F456 & F 513 FOR HAND WORKED POINTS OTHER THAN PLUNGER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUNGER LOCKED, INTERLOCKED, AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS. JUNCTION FISHPATES WHEN REQUIRED MUST BE PLACED AT LEAST ONE RAIL LENGTH CLEAR OF POINTS AND CROSSINGS. POINTS AND CROSSINGS MUST BE DATE STAMPED WHEN LAID IN WIDE W. INSTR. 383-24.

VICTORIAN RAILWAYS WAY & WORKS BRANCH

No. 8-7 TURNOUT & CROSSOVER
WITH 22'-6" POINTS
94 & 107 LB A.S.
11ft. 8in. CENTRES
MAIN TRACK STANDARD
NOT TO SCALE

APPROVED	ADOPTED
<i>[Signature]</i>	1943
CHIEF CIVIL ENGINEER	PLAN NO.
CHECKED <i>[Signature]</i>	F 436 ^A
PASSED <i>[Signature]</i>	
ENGINEER OF M.W.S.	



ORDERING PLANS	
REFERENCE	DRG. NO.
FASTENINGS FOR V.V. POINTS	F 507
FASTENINGS FOR INSULATED TURNOUTS	F 508
FASTENINGS FOR WELDED TURNOUTS	F 509
FASTENINGS FOR INSULATED CROSSOVERS	F 510
FASTENINGS FOR WELDED CROSSOVERS	F 511
SPREADER ORDERING LIST	F 479
FASTENINGS FOR GUARD RAILS	F 352

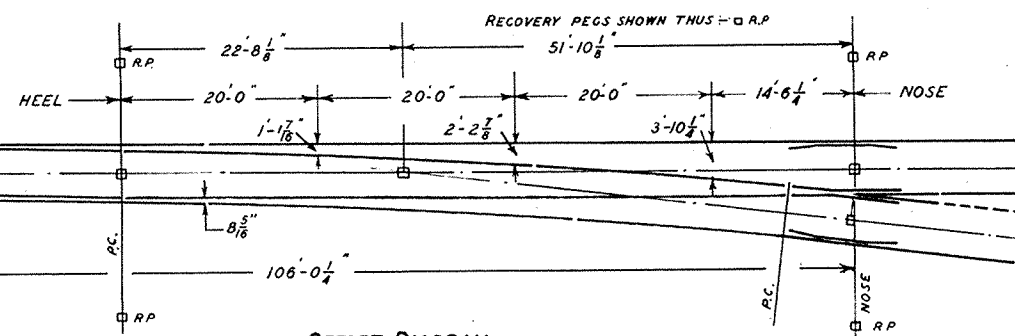
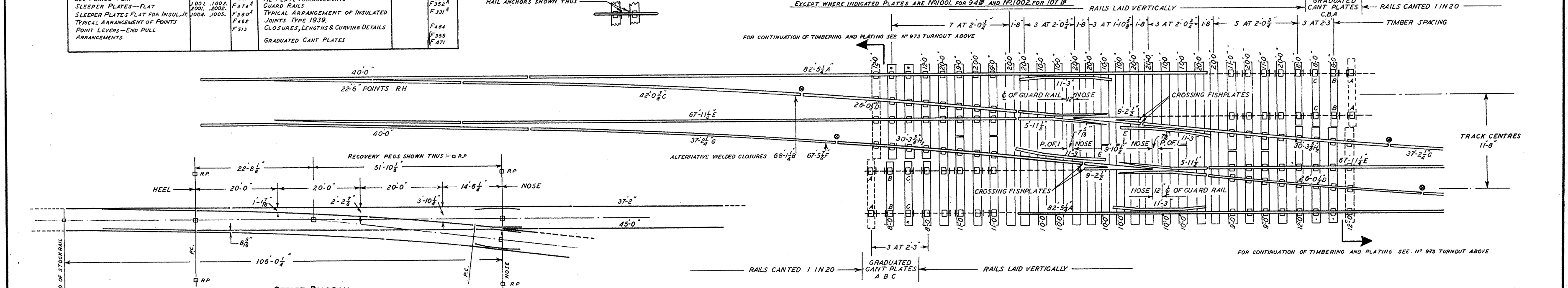
INSTALLATION PLANS					
REFERENCE	DETAIL NO	DRG NO	REFERENCE	DETAIL NO	DRG NO
LUG PLATES STEP	2006, 3006, 4006, 5006, 6006, 7006, 8006, 9006, 1006	F 362 ^A	POINT LEVERS - INSTALLATION ARRANGEMENTS		F 456
LUG PLATES FLAT	1001, 1002, 2001, 2002, 3001, 3002, 4001, 4002, 5001, 5002, 6001, 6002, 7001, 7002, 8001, 8002, 9001, 9002, 1001, 1002	F 361 ^A	TIE PLATE ARRANGEMENTS		F 454 ^A
SLEEPER PLATES - FLAT	1001, 1002, 2001, 2002, 3001, 3002, 4001, 4002, 5001, 5002, 6001, 6002, 7001, 7002, 8001, 8002, 9001, 9002, 1001, 1002	F 374 ^A	GUARD RAILS		F 352 ^A
SLEEPER PLATES FLAT FOR INSULATED JOINTS	1004, 1005	F 360 ^A	TYPICAL ARRANGEMENT OF INSULATED JOINTS TYPE 1939		F 331 ^A
TYPICAL ARRANGEMENT OF POINTS		F 462	CLOSURES, LENGTHS & CURVING DETAILS		F 464
POINT LEVERS - END PULL ARRANGEMENTS		F 513	GRADUATED GANT PLATES		F 471

2 N° 1004 FOR 94 LB } SEE F 360 FOR ARRANGEMENT OF SLEEPER PLATES FLAT
 2 N° 1005 FOR 107 LB } FOR TYPE 1939 INSULATED JOINTS



RAIL ANCHORS SHOWN THUS

ALTERNATIVE WELDED CLOSURES 68'-1 1/2" B 82'-2 3/8" F
 No 9-73 TURNOUT
 EXCEPT WHERE INDICATED PLATES ARE N° 1001 FOR 94 LB AND N° 1002 FOR 107 LB



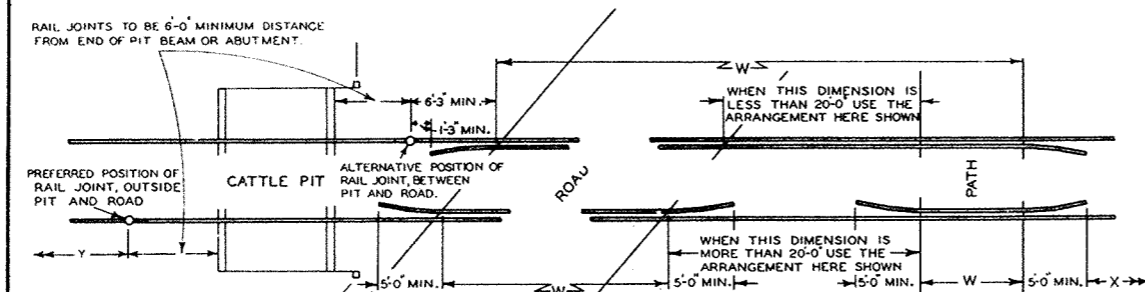
OFFSET DIAGRAM

No 9-73 CROSSOVER PARALLEL TRACKS
 EXCEPT WHERE INDICATED PLATES ARE N° 1001 FOR 94 LB AND N° 1002 FOR 107 LB

DATA	POINTS AND CROSSING FOR TURNOUT	POINTS AND CROSSINGS FOR PARALLEL TRACK CROSSOVER	TIMBERS FOR TURNOUT	TIMBERS FOR PARALLEL TRACK CROSSOVER	NOTES - EXPANSION AT JOINTS - INSULATED JOINTS SHOWN THUS @ NIL OTHER JOINTS. LOCATE GUARD RAILS MARKED E AS FOLLOWS - DRILL 1/2" HOLE IN V CROSSING 2'-0" FROM VEE END FOR GUARD RAIL END BOLT. POINTS DESPATCHED IN HALF SET ASSEMBLIES MUST BE INSTALLED AS RECEIVED AND SERVICE BOLTS TAKEN INTO STOCK. SPACING AT D TO BE ARRANGED WHEN NECESSARY TO SUIT METHOD OF POINT OPERATION FOR EXTRA LENGTH TIMBERS SHOWN BROKEN REFER TO STANDARD DRAWING F 456 & F 513 FOR HAND-WORKED POINTS OTHER THAN PLUNGER LOCKED POINTS. TIMBER DIAGRAMS FOR PLUNGER LOCKED INTERLOCKED AND MOTOR OPERATED POINTS FOR COMPLICATED LAYOUTS WILL BE ISSUED WITH JOB INSTRUCTIONS. JUNCTION FISHPATES WHEN REQUIRED MUST BE PLACED AT LEAST ONE RAIL LENGTH CLEAR OF POINTS AND CROSSINGS. POINTS AND CROSSINGS MUST BE DATE STAMPED WHEN LAID IN VIDE W.W.INS. 38324.
POINT ANGLE CROSSING NUMBER CROSSING ANGLE R.E. OPENINGS V CROSSINGS WING T VEE GAUGE BETWEEN STOCKRAILS AT TOE OF POINTS RADIUS OF OUTER RAIL RADIUS OF INNER RAIL	1 SET 22'-6" POINTS RH OR LH 1 V CROSSING NUMBER 973 1 PAIR 11'-3" GUARD RAILS WITH BLOCKS CLOSURE RAILS INSULATED LAYOUTS 1-82'-5 1/2" A 1-67'-11 1/2" E 1-45'-0 1/2" H 1-42'-0 3/8" C 1-37'-2 1/2" G 1-26'-0 1/2" D WELDED LAYOUTS 1-82'-5 1/2" A 1-67'-11 1/2" E 1-68'-1 1/2" B 1-67'-11 1/2" E	2 SETS 22'-6" POINTS RH OR LH 2 V CROSSINGS NUMBER 973 2 PAIR 11'-3" GUARD RAILS WITH BLOCKS CLOSURE RAILS INSULATED LAYOUTS 2-82'-5 1/2" A 2-67'-11 1/2" E 2-42'-0 3/8" C 2-37'-2 1/2" G 2-30'-3 3/8" H 2-26'-0 1/2" D WELDED LAYOUTS 2-82'-5 1/2" A 2-68'-1 1/2" B 2-67'-11 1/2" E 2-67'-5 3/8" F	12x6 SAWN TIMBERS 3 No 16'-6" 4 No 13'-6" 4 No 11'-0" } SUB.FT. 3 - 16'-0" 3 - 12'-0" 5 - 10'-6" } = 4647 2 - 15'-6" 3 - 12'-8" 5 - 10'-0" } 2 - 15'-0" 2 - 12'-0" 10 - 9'-6" } 2 - 14'-6" 4 - 11'-6" 13 - 9'-0" } 2 - 14'-0" } NOTE - EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION 10x5 HEWN TIMBERS 6 No 8'-0" = 200 SUPER FEET	12x6 SAWN TIMBERS 12 No 20'-0" 10 No 10'-6" } SUB.FT. 10 - 12'-0" 22 - 10'-0" } = 8214 8 - 11'-6" 20 - 9'-6" } 12 - 11'-0" 30 - 9'-0" } NOTE - EXTRA LENGTH TIMBERS SHOWN BROKEN TO BE PROVIDED TO SUIT METHOD OF POINT OPERATION 10x5 HEWN TIMBERS 6 No 8'-0" = 200 SUPER FEET	

VICTORIAN RAILWAYS WAY & WORKS BRANCH
 No 9-73 TURNOUT & CROSSOVER
 WITH 22'-6" POINTS
 94 & 107 LB AS
 11 FT 8 IN CENTRES
 MAIN TRACK STANDARD
 NOT TO SCALE

APPROVED	ADOPTED
<i>[Signature]</i>	1943
CHIEF CIVIL ENGINEER	
CHECKED	
PASSED	
<i>[Signature]</i>	F 437 ^A
ENGINEER OF M & W S	



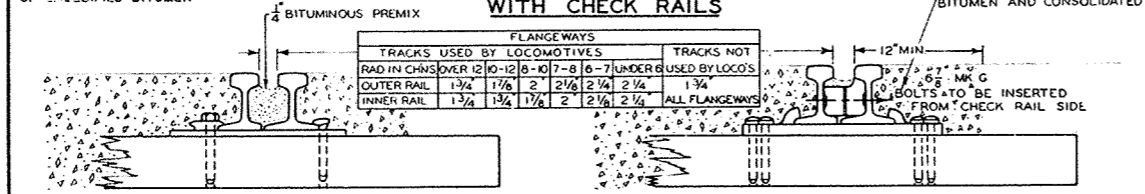
RAIL JOINTS TO BE 6'-0" MINIMUM DISTANCE FROM END OF PIT BEAM OR ABUTMENT.

WHEN THIS DIMENSION IS LESS THAN 20'-0" USE THE ARRANGEMENT HERE SHOWN

WHEN THIS DIMENSION IS MORE THAN 20'-0" USE THE ARRANGEMENT HERE SHOWN

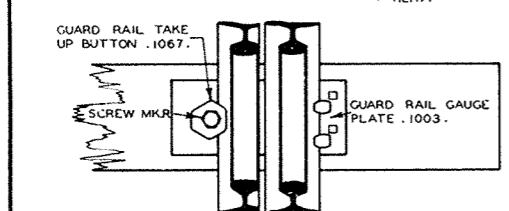
NOTE - MINIMUM DISTANCE TO TOE OF COMMON POINTS
 X = 13'-0"
 Y = 9'-0"

TYPICAL LEVEL CROSSING WITH CHECK RAILS

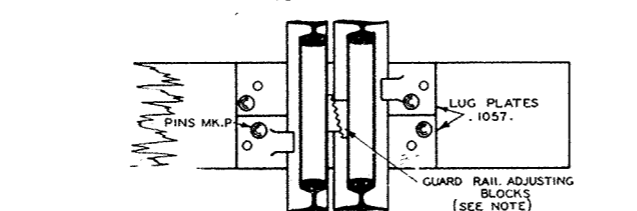


NOTE - FOR LIGHT TRAFFIC ACROSS CROSSING USE LUG PLATES AT EVERY THIRD SLEEPER

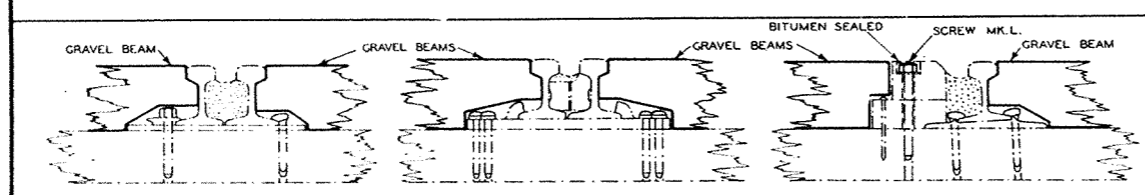
HEAVY ALTERNATE



ARRANGEMENT AT SLEEPERS WITH GUARD RAIL GAUGE PLATES

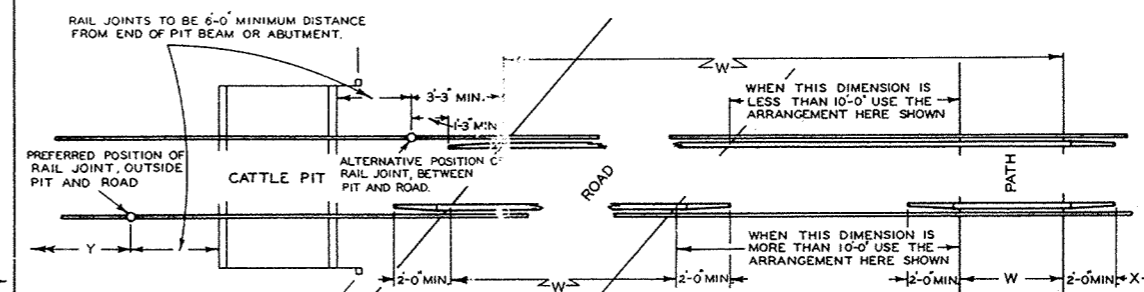


ARRANGEMENT AT SLEEPERS WITH LUG PLATES



TYPICAL NOTCHING OF GRAVEL BEAM TIMBERS

NOTE - GRAVEL BEAM TO BE HELD DOWN WITH CHAIR SCREWS MK.L. WITH 1" WASHERS UNDER HEAD. TIMBER RECESSED 2 3/8" x 1 1/2" DEEP.



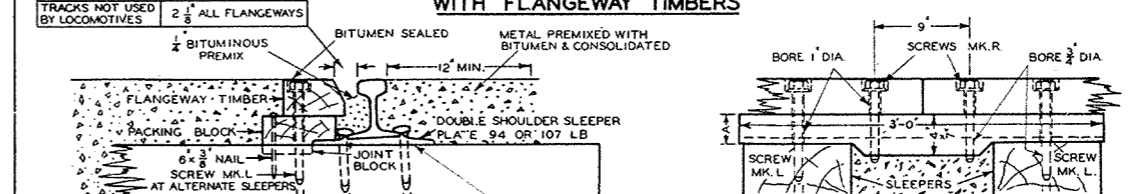
RAIL JOINTS TO BE 6'-0" MINIMUM DISTANCE FROM END OF PIT BEAM OR ABUTMENT.

WHEN THIS DIMENSION IS LESS THAN 10'-0" USE THE ARRANGEMENT HERE SHOWN

WHEN THIS DIMENSION IS MORE THAN 10'-0" USE THE ARRANGEMENT HERE SHOWN

NOTE - MINIMUM DISTANCE TO TOE OF COMMON POINTS
 X = 16'-0"
 Y = 9'-0"

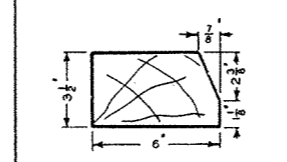
TYPICAL LEVEL CROSSING WITH FLANGEWAY TIMBERS



NOTE - FOR 94 LB. VERTICAL RAIL USE SLEEPER PLATE, FLAT, 1001.

FOR 107 LB. VERTICAL RAIL USE SLEEPER PLATE, FLAT, 1002.

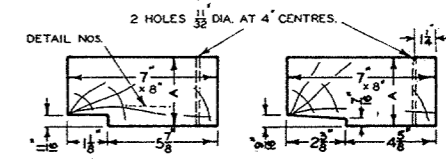
TYPICAL SECTION OF RAIL WITH FLANGEWAY TIMBERS



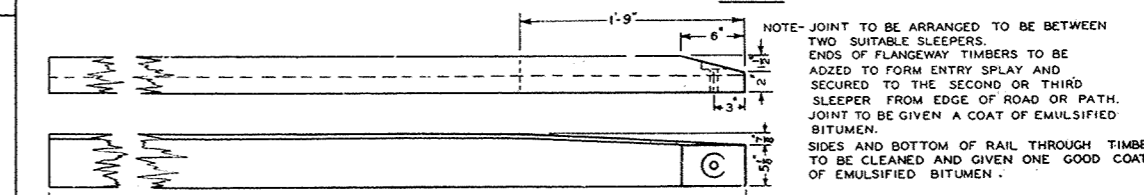
FLANGEWAY TIMBER 6x3 1/2 RED GUM

RAIL	HOW LAID	A	BLOCKS	
			PACKING	JOINT
94 LB.	VERTICAL	2 3/4	1083	1084
	1 IN 20	2 5/8	2083	2084
107 LB.	VERTICAL	3 3/8	3083	3084
	1 IN 20	3 1/4	4083	4084

PACKING BLOCKS RED GUM



DETAIL AT JOINT IN FLANGEWAY TIMBERS



DETAIL OF FLANGEWAY TIMBER END

CHECK RAILS

LENGTH OF CHECK RAIL = WIDTH W + 10'-0" MIN.

WHEN ORDERING STATE :-
 NO. AND LENGTH OF CHECK RAILS.
 NO. OF GUARD RAIL GAUGE PLATES 1003
 - PLATES 1057
 - TAKE UP BUTTONS 1067
 - SCREWS MK.R.
 - PINS MK.P.
 - DOG SPIKES 6"
 - GUARD RAIL ADJUSTING BLOCKS (STANDARD OR MK.W.)
 - SPLAYED BLOCKS

FLANGEWAY TIMBERS

LENGTH OF FLANGEWAY TIMBERS = WIDTH W + 4'-0" MIN.

WHEN ORDERING STATE :-
 NO. AND LENGTH OF FLANGEWAY TIMBERS (END & PLAIN)
 NO. OF PACKING BLOCKS
 - JOINT
 - SLEEPER PLATE
 - SCREWS MK.R.
 - MK.L. (PREFERRED) (PINS 9x2 1/2 ALTERNATIVE)
 - DOG SPIKES 6"
 - NAILS 6 x 3/8

FLANGEWAY TIMBERS

LENGTH OF FLANGEWAY TIMBERS = WIDTH W + 4'-0" MIN.

WHEN ORDERING STATE :-
 NO. AND LENGTH OF FLANGEWAY TIMBERS (END & PLAIN)
 NO. OF PACKING BLOCKS
 - JOINT
 - SLEEPER PLATE
 - SCREWS MK.R.
 - MK.L. (PREFERRED) (PINS 9x2 1/2 ALTERNATIVE)
 - DOG SPIKES 6"
 - NAILS 6 x 3/8

VICTORIAN RAILWAYS WAY & WORKS BRANCH

LEVEL CROSSINGS

CHECK RAILS & FLANGEWAY TIMBERS FOR 94 & 107 LB RAILS.

SEE F 439^A FOR DETAILS FOR OTHER RAIL SECTIONS.

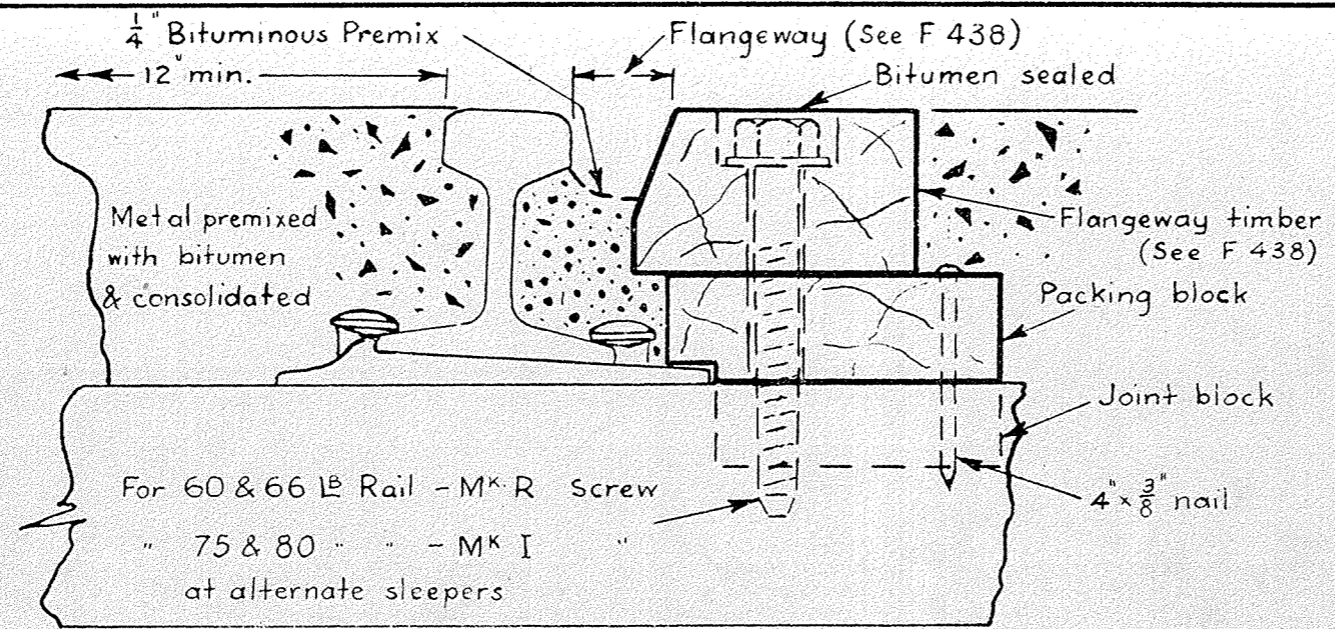
APPROVED: *[Signature]* CHIEF CIVIL ENGINEER

CHECKED: *[Signature]*

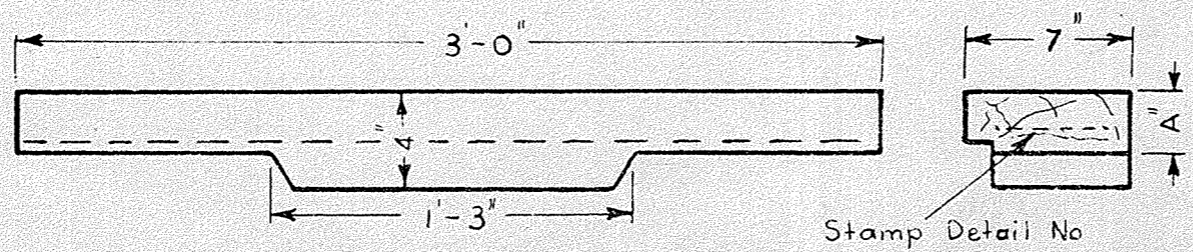
PASSED: *[Signature]* ENGINEER OF MACH & W. S.

ADOPTED: 1949

PLAN NO F 438^A



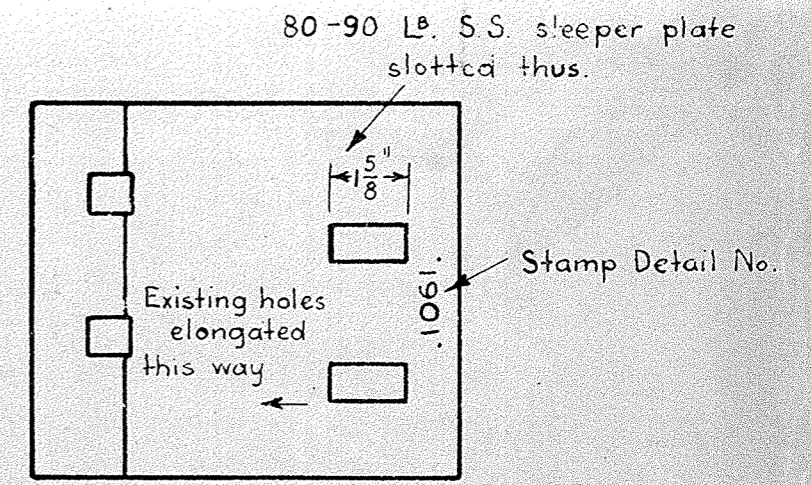
TYPICAL SECTION



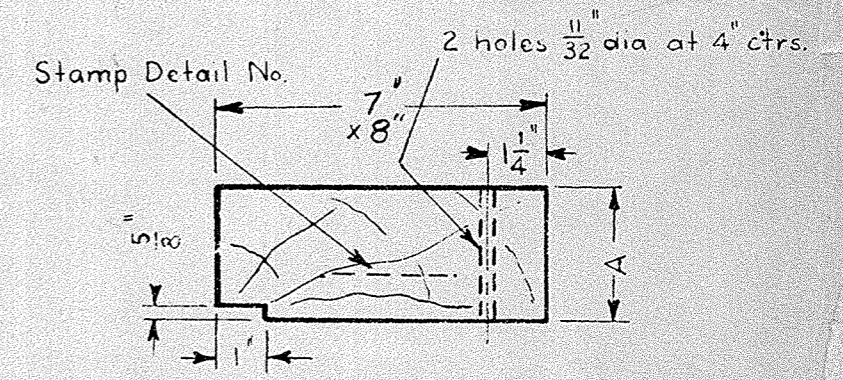
JOINT BLOCK
RED GUM

RAIL	A	BLOCKS	
		PACKING	JOINT
60 lb	1 3/8"	5083	5084
66 "	1 1/2"	6083	6084
75 "	1 3/4"	7083	7084
80 "	2 1/4"	8083	8084

BLOCK DETAIL Nos.



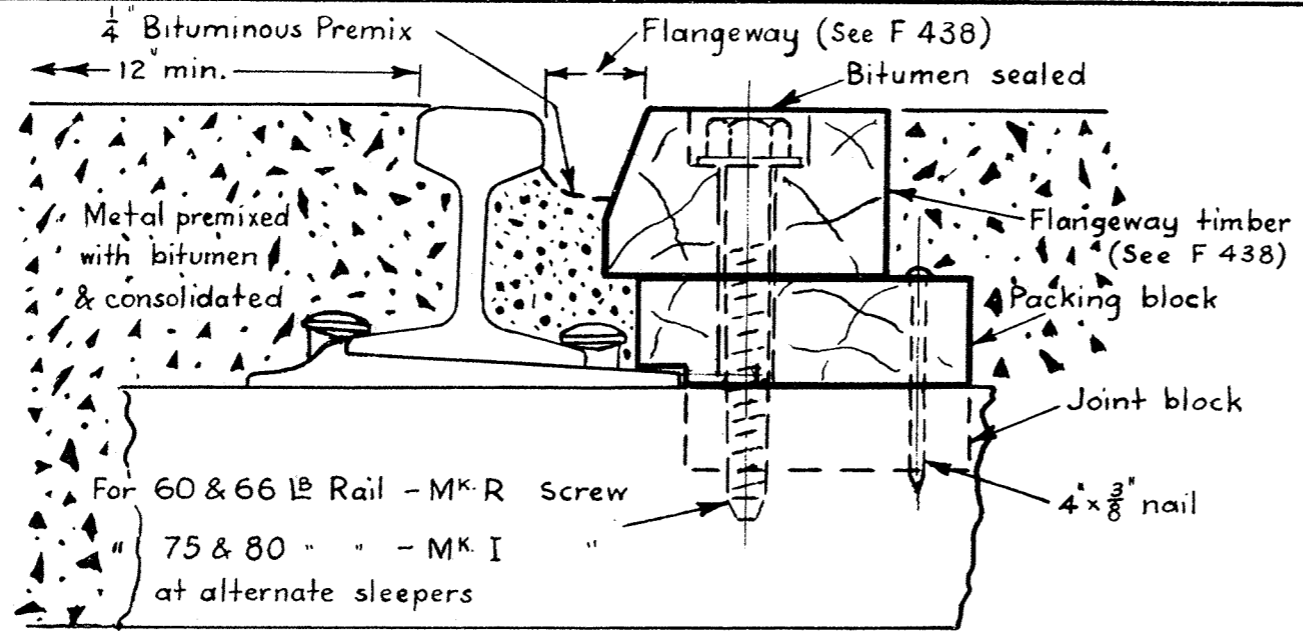
SLEEPER PLATE



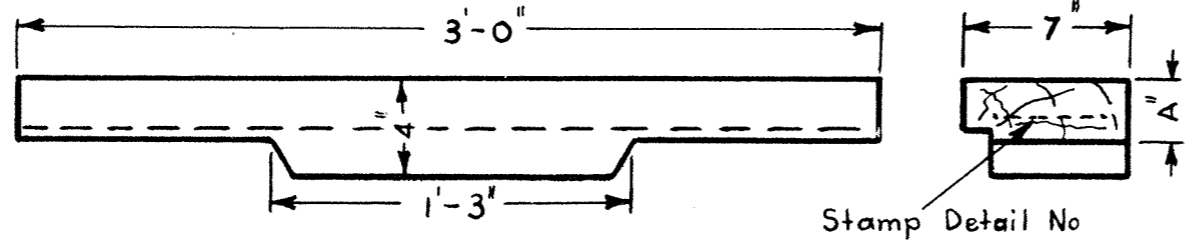
PACKING BLOCKS
RED GUM

SEE F438 FOR GENERAL ARRANGEMENT

V·R LEVEL CROSSINGS FLANGWAY TIMBERS FOR 60,66,75 & 80 lb RAILS	APPROVED <i>[Signature]</i> CHIEF CIVIL ENGR.	ADOPTED 1949
	CHECKED <i>G.F.</i> PASSED <i>[Signature]</i>	PLAN No.
	ENGR OF M&W.S. <i>[Signature]</i>	F439



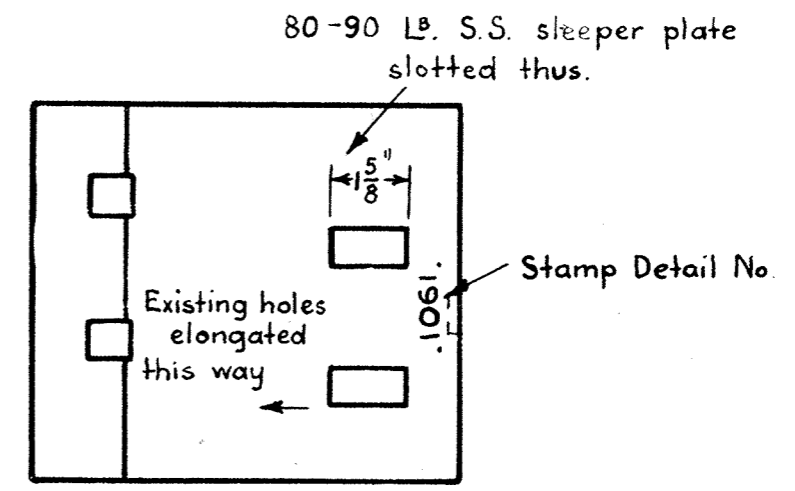
TYPICAL SECTION



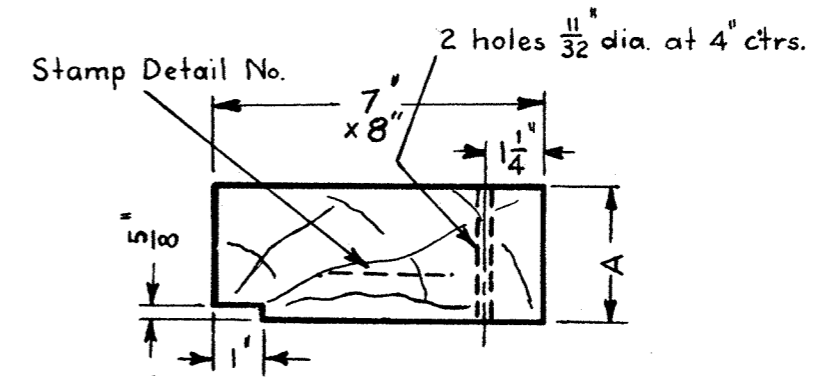
JOINT BLOCK
RED GUM

RAIL	A	BLOCKS	
		PACKING	JOINT
60 lb	1 3/8"	5083	5084
66 "	1 1/2"	6083	6084
75 "	1 3/4"	7083	7084
80 "	2 1/4"	8083	8084

BLOCK DETAIL Nos.



SLEEPER PLATE

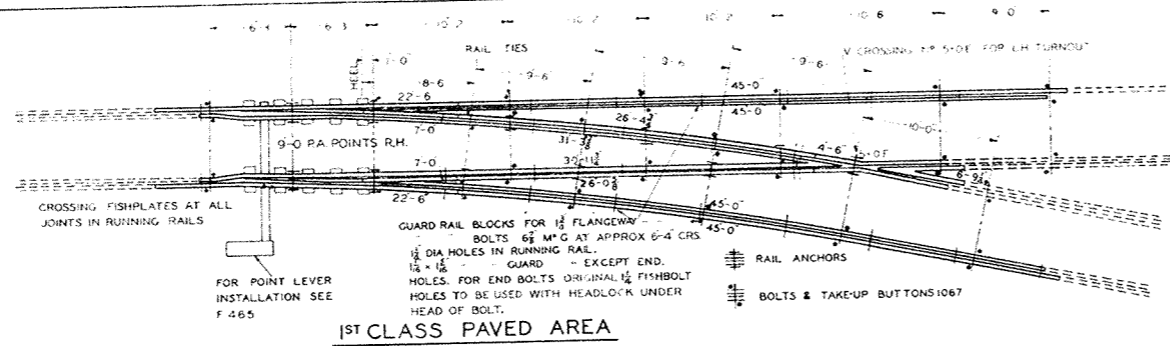


PACKING BLOCKS

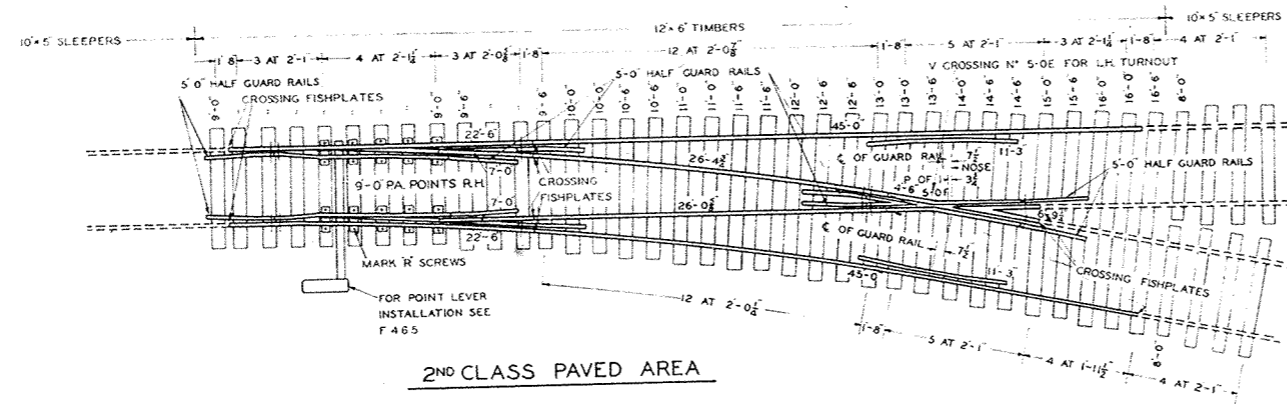
NOTE:- Sides & Bottom of Rail through timbers to be cleaned and given one good coat of Emulsified Bitumen.

SEE F438 FOR GENERAL ARRANGEMENT

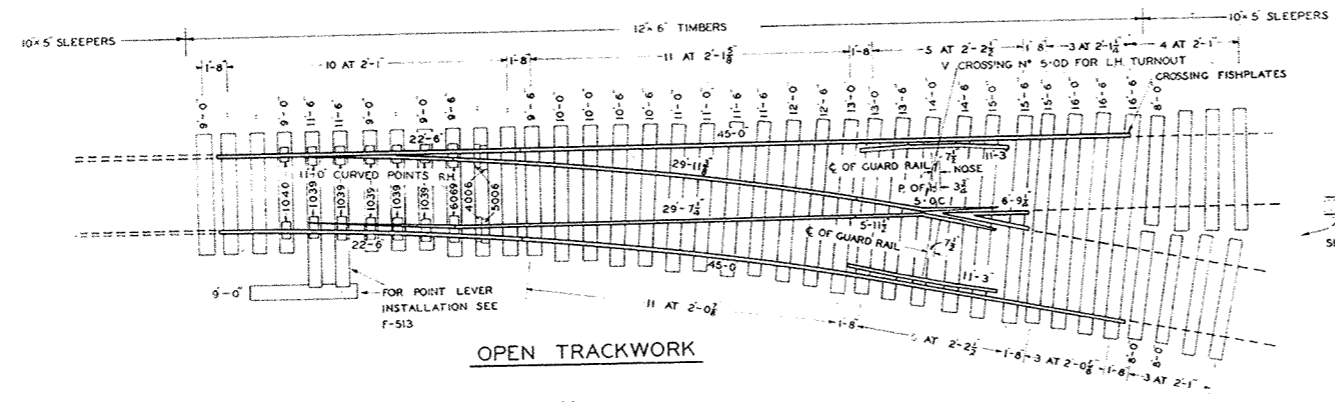
V.R	APPROVED	ADOPTED
LEVEL CROSSINGS	CHIEF CIVIL ENGR.	1949
FLANGWAY TIMBERS	CHECKED - C.F.	PLAN No.
FOR 60, 66, 75 & 80 lb RAILS	PASSED - [Signature]	F439^A
	ENGR OF M.W.S.	



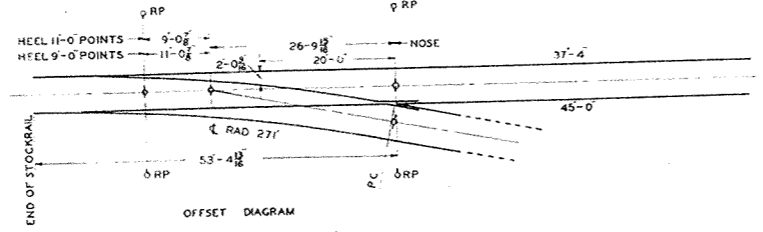
1ST CLASS PAVED AREA



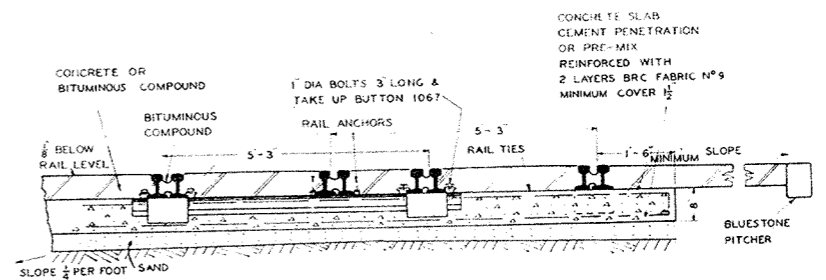
2ND CLASS PAVED AREA



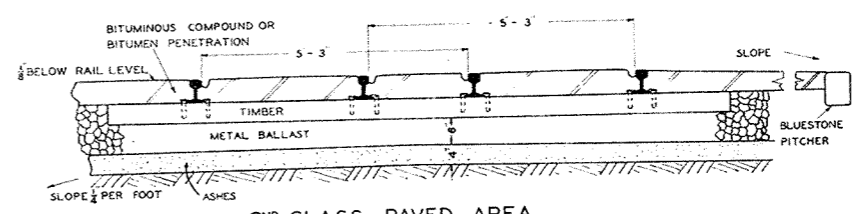
OPEN TRACKWORK



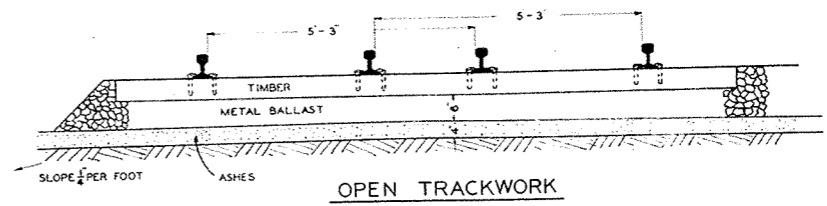
TYPICAL SECTIONS



1ST CLASS PAVED AREA



2ND CLASS PAVED AREA



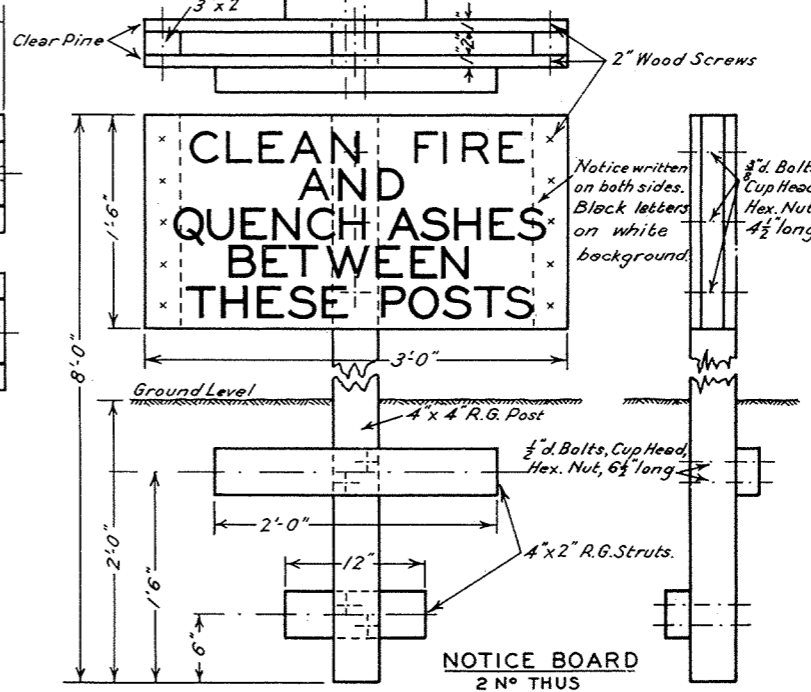
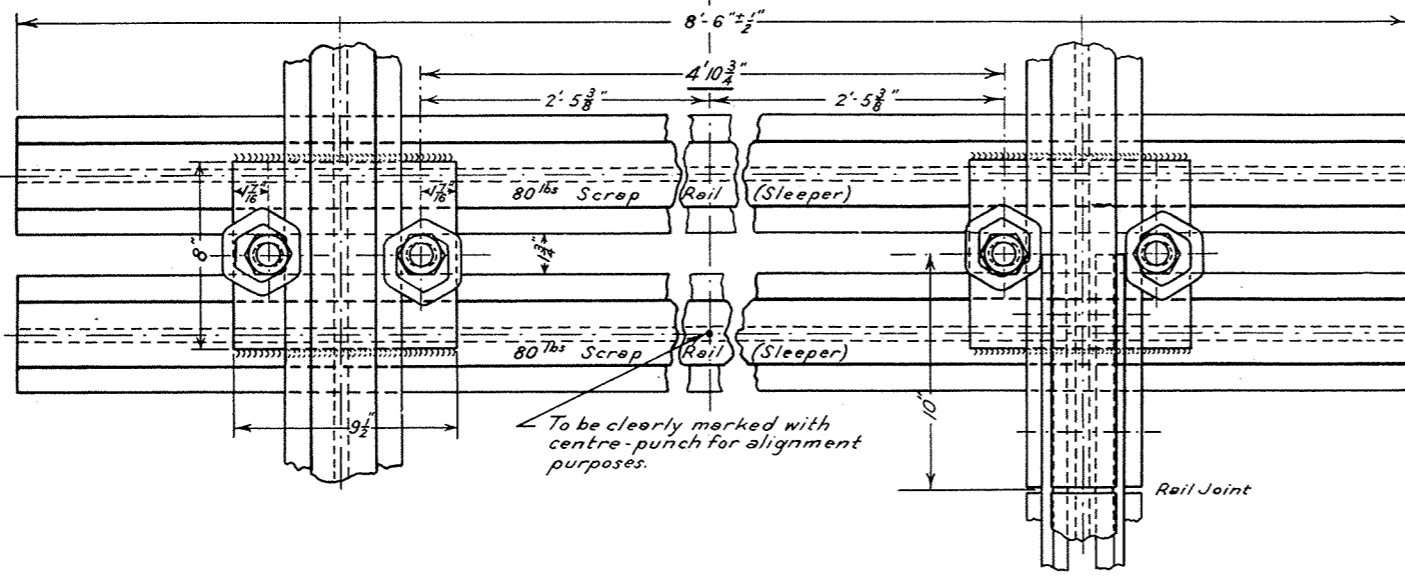
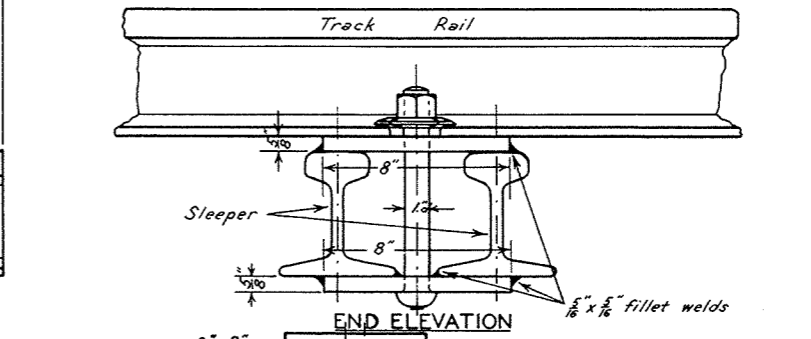
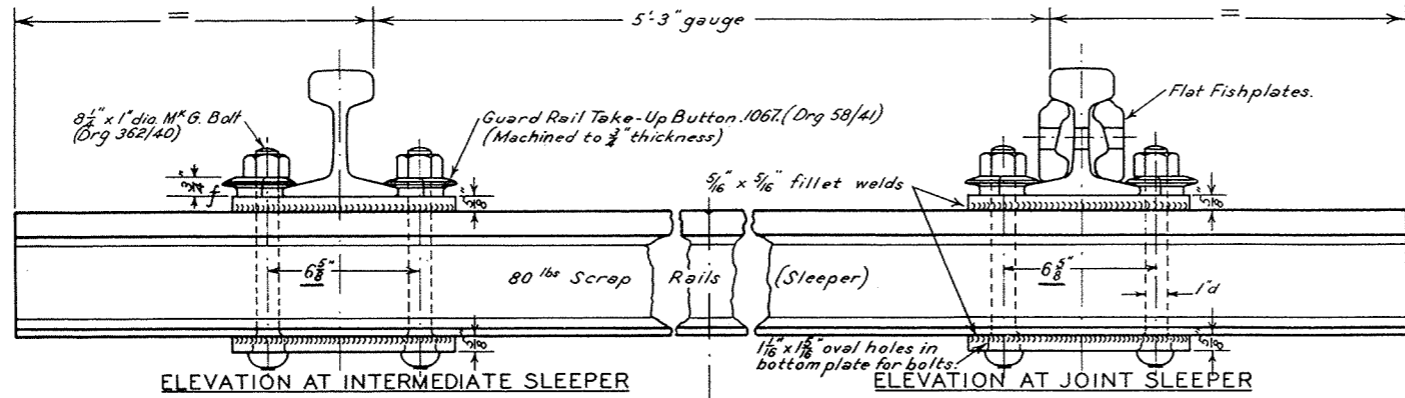
OPEN TRACKWORK

NOTE - THESE TURNOUTS TO BE ORDERED, MANUFACTURED, AND DELIVERED AS A LAYOUT.
 POINT LEVER PIT MUST BE DRAINED.
 THIS LAYOUT IS SUITABLE ONLY FOR VEHICLES WITH TWO PAIRS OF FLANGED WHEELS ON A RIGID WHEELBASE.

REFERENCES	SCHEDULE OF QUANTITIES
	F 451
PA POINT LEVER INSTALLATION ARRGT.	F 465
POINT LEVERS END PULL ARRGT.	F 513
TYPICAL ARRANGEMENT OF POINTS	F 462
LUG PLATES STEP	F 362 ^A
GUARD RAILS	F 352 ^A

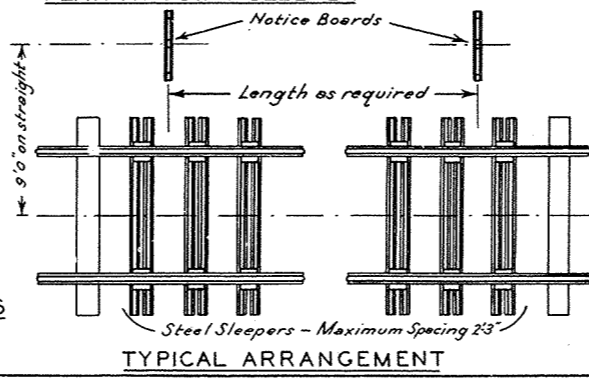
V-R		
TURNOUTS		
N° 5	VARIOUS	94 LB

APPROVED	ADOPTED
<i>[Signature]</i> CHIEF CIVIL ENGINEER	1950
CHECKED <i>C.F.</i>	PLAN N°
PASSED <i>[Signature]</i>	F 440
ENGR. OF MACH & W. S.	



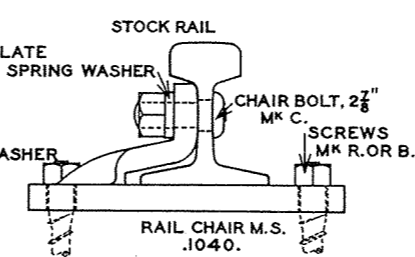
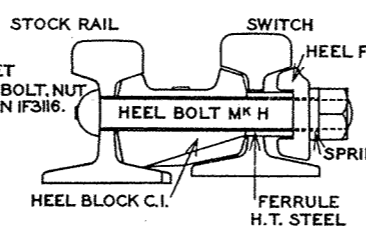
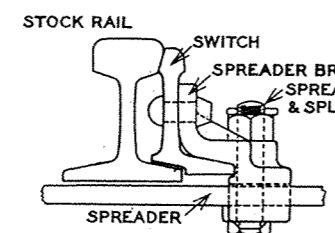
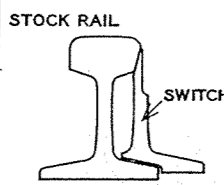
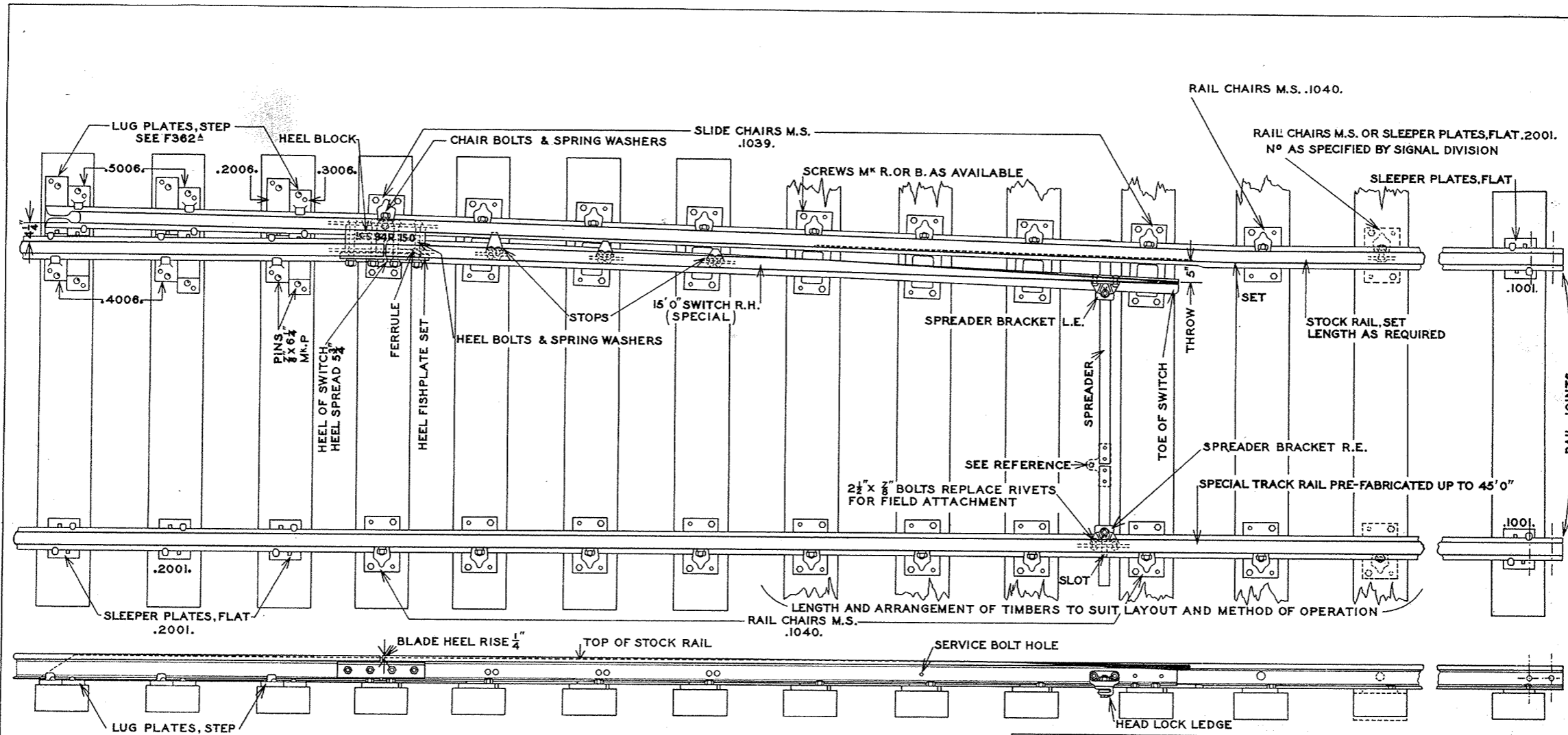
WEIGHT OF RAIL	TAKE-UP BUTTON FACE TO FLANGE ON R.F. SIDE	TO FLANGE ON OUTSIDE	WEIGHT OF RAIL	TAKE-UP BUTTON FACE TO FLANGE ON R.F. SIDE	ON OUTSIDE
94 lbs A.S.	4	1	75 lbs I	5	2
90 lbs A.S.	4	1	66 lbs E	2	3
80 lbs A.S.	4	1	66 lbs F	5	4
80 lbs A.	4	1	60 lbs A.S.	6	5
80 lbs O	4	1	60 lbs C	4	6
75 lbs G	2	1	60 lbs D	5	5
75 lbs H	4	3	60 lbs N	6	5

TABLE SHOWING APPLICATION OF GUARD RAIL TAKE-UP BUTTONS .1067.



Note :- Important dimensions underlined.

VICTORIAN RAILWAYS, WAY & WORKS BRANCH	APPROVED	ADOPTED
ASH DUMP FACILITIES	<i>M.W.S.</i>	1944
ARRANGEMENT OF STEEL SLEEPERS AND NOTICE BOARD	CHIEF CIVIL ENGINEER	PREVIOUS 427/33 354/30
VARIOUS WEIGHTS OF RAIL 94 LBS. A.S. HERE SHOWN	CHECKED <i>K.S.L.</i>	PLAN N°
	PASSED <i>M.W.S.</i>	F442 A
	ENGINEER OF M. & W. S.	



- A CATCH POINT DERAIL CONSISTS OF :-**
- 1 STOCK RAIL SET, R. OR L. HAND.
 - 1 TRACK RAIL, SPECIAL.
 - 1 SWITCH, SPECIAL, R. OR L. HAND.
 - 1 HEEL BLOCK, R. OR L. HAND.
 - 1 HEEL FISHPLATE, SET.
 - 1 FERRULE.
 - 4 N° HEEL BOLTS, MK H. 1 1/2" DIA. x 9 1/2" LONG.
 - 4 N° SPRING WASHERS.

REFERENCE	DETAIL N°	DRG. N°
SLEEPER PLATES, FLAT.	.1001, .2001	F374A
POINT LEVERS INSTALLATION ARRANGEMENTS		F456
POINT LEVERS END PULL ARRANGEMENTS		F513
SPREADER ORDERING LIST		F479
SPREADER BOLT.	IF3116	F3116
LUG PLATES STEP.	.2006, .3006, .4006, .5006	F362A

DESPATCHED IN HALF-SET ASSEMBLY TO CATALOGUE N° DR. WITH SPECIAL TRACK RAIL TO CATALOGUE N° SR. UP TO 45'-0" LENGTHS. LONGER SPECIAL TRACK RAILS PREPARED IN THE FIELD.

VICTORIAN RAILWAYS WAY & WORKS BRANCH
CATCH POINT DERAIL
 15' 0" SINGLE SWITCH
 94 & 107 LB. A.S.
 TYPICAL ARRANGEMENT FOR 94 LB A.S. HERE SHOWN

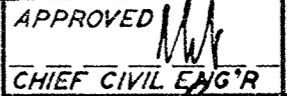
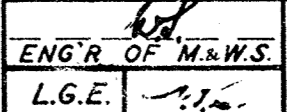
APPROVED	ADOPTED
	1944
CHIEF CIVIL ENGINEER	
CHECKED K.S.	PLAN N°
PASSED	F443 A
ENGINEER OF M. & W.S.	

	DEGREES	RADIANS	SINE	COSINE	TANGENT	COTANGENT	SECANT	COSECANT	VERSINE	CHORD	1/CHORD
CROSSING NUMBER	CROSSING ANGLE θ										
3	18° 26' 05.8"	.321 750 55	.316 227 76	.948 683 29	333 333 33	3.000 000 0	1.054 092 6	3.162 277 7	.051 316 7	.320 364 48	3.121 444 7
5	11° 18' 35.8"	.197 395 56	.196 116 14	.980 580 68	200 000 00	5.000 000 0	1.019 803 9	5.099 019 5	.019 419 3	.197 075 23	5.074 204 4
6	9° 27' 44.4"	.165 148 68	.164 398 99	.986 393 93	.166 666 67	6.000 000 0	1.013 793 7	6.082 762 5	.013 606 1	.164 961 06	6.062 036 7
7.52	7° 34' 06.6"	.132 095 15	.131 711 33	.991 288 11	.132 868 87	7.526 217 6	1.008 788 4	7.592 361 4	.008 712 0	.131 999 13	7.575 807 5
8.7	6° 33' 24.8"	.114 439 33	.114 189 71	.993 458 96	.114 941 54	8.700 074 5	1.006 584 1	8.757 356 7	.006 541 0	.114 376 89	8.743 024 9
9.73	5° 51' 57.5"	.102 379 99	.102 201 23	.994 763 75	.102 739 20	9.733 38 31	1.005 263 8	9.784 61 79	.005 236 3	.102 335 28	9.771 801 0
12	4° 45' 49.3"	.083 141 23	.083 045 48	.996 545 72	.083 333 33	12.000 000	1.003 466 3	12.041 595	.003 454 3	.083 117 29	12.031 191
15	3° 48' 50.7"	.066 568 16	.066 519 01	.997 785 18	.066 666 67	15.000 000	1.002 219 7	15.033 296	.002 214 8	.066 555 87	15.024 970
20	2° 51' 44.7"	.049 958 39	.049 937 62	.998 752 36	.050 000 00	20.000 000	1.001 249 2	20.024 984	.001 247 6	.049 953 20	20.018 738

CROSSING NUMBER	ANGLE $\theta/2$										
3	9° 13' 02.9"		.160 182 24	.987 087 46	.162 277 68	6.162 277 7	1.013 081 5	6.242 889 3			
5	5° 39' 17.9"		.098 537 62	.995 133 33	.099 019 51	10.099 020	1.004 890 5	10.148 409			
6	4° 43' 52.2"		.082 480 53	.996 592 68	.082 762 53	12.082 762	1.003 419 0	12.124 073			
7.52	3° 47' 03.3"		.065 999 57	.997 819 65	.066 143 78	15.118 579	1.002 185 1	15.151 615			
8.7	3° 16' 42.4"		.057 188 45	.998 363 40	.057 282 19	17.457 432	1.001 639 3	17.486 049			
9.73	2° 55' 58.8"		.051 167 64	.998 690 08	.051 234 75	19.518 008	1.001 311 6	19.543 602			
12	2° 22' 54.6"		.041 558 64	.999 136 07	.041 594 58	24.041 594	1.000 864 9	24.062 383			
15	1° 54' 25.3"		.033 277 94	.999 446 14	.033 296 38	30.033 296	1.000 554 2	30.049 940			
20	1° 25' 52.3"		.024 976 60	.999 688 04	.024 984 39	40.024 986	1.000 312 1	40.037 476			

BLADE LENGTH	BLADE ANGLE α										APEX DISTANCE ALONG STRAIGHT
15'-0"	1° 42' 37.5"	.029 852 24	.029 847 81	.999 554 47	.029 861 11	33.488 372	1.000 445 7	33.503 299	.000 445 5	1.046 511 6	
16'-6"	1° 33' 18.0"	.027 139 80	.027 136 47	.999 631 71	.027 146 46	36.837 209	1.000 368 4	36.850 781	.000 368 3	1.151 162 8	
22'-6"	1° 08' 25.7"	.019 904 78	.019 903 46	.999 801 91	.019 907 41	50.232 558	1.000 198 1	50.242 513	.000 198 1	1.569 767 4	

BLADE LENGTH	ANGLE $\alpha/2$										
15'-0"	0° 51' 18.7"	.014 926 12	.014 925 57	.999 888 61	.014 927 23	66.991 672	1.000 111 4	66.999 135			
16'-6"	0° 46' 39.0"	.013 569 90	.013 569 48	.999 907 94	.013 570 73	73.687 987	1.000 092 1	73.694 772			
22'-6"	0° 34' 12.8"	.009 952 34	.009 952 22	.999 950 47	.009 952 72	100.475 07	1.000 049 5	100.480 05			

CROSSING BLADE	ANGLE $(\theta - \alpha)/2$					V-R	APPROVED	ADOPTED
7.52 15'-0"		.051 121 45	.051 099 19	.998 693 58		19.544 215	 CHIEF CIVIL ENG'R  ENG'R OF M.&W.S. L.G.E.	1944
8.7 16'-6"		.043 649 76	.043 635 90	.999 047 50		22.895 082		
9.73 16'-6"		.037 620 09	.037 611 22	.999 292 45		26.568 997		
9.73 22'-6"		.041 237 60	.041 225 92	.999 149 85		24.235 963		
						TRIGONOMETRICAL FUNCTIONS OF CROSSING & BLADE ANGLES	F 444	


CROSSING NUMBER	$5'-11\frac{1}{2}" \times \sin \theta$	$5'-11\frac{1}{2}" \times \cos \theta$	G. TAN θ	G. TAN $\theta/2$	G. COT θ	G. SEC θ	G. COSEC θ	P.O.F.I. TO NOSE
3	1.884 190 4	5.652 571 2	1.750 000 0	.851 957 82	15.750 000	5.533 986 1	16.601 958	.195 090 29
5	1.168 525 3	5.842 626 5	1.050 000 0	.519 852 43	26.250 000	5.353 970 5	26.769 852	.317 137 77
6	.979 543 98	5.877 263 8	.875 000 00	.434 503 28	31.500 000	5.322 416 9	31.934 503	.378 877 29
7.52	.784 780 00	5.906 425 0	.697 561 57	.347 254 84	39.512 642	5.296 139 1	39.859 897	.473 487 97
8.7	.680 380 35	5.919 359 6	.603 443 09	.300 731 50	45.675 391	5.284 566 5	45.976 123	.546 439 06
9.73	.608 948 99	5.927 134 0	.539 380 80	.268 982 4 4	51.100 261	5.277 635 0	51.369 244	.610 737 56
12	.494 812 65	5.937 751 5	.437 500 00	.218 371 5 4	63.000 000	5.268 198 1	63.218 374	.751 949 4 4
15	.396 342 43	5.945 136 7	.350 000 00	.174 805 99	78.750 000	5.261 653 4	78.924 804	.939 060 25
20	.297 544 98	5.950 899 4	.262 500 00	.131 168 05	105.000 00	5.256 558 3	105.131 17	1.251 171 1

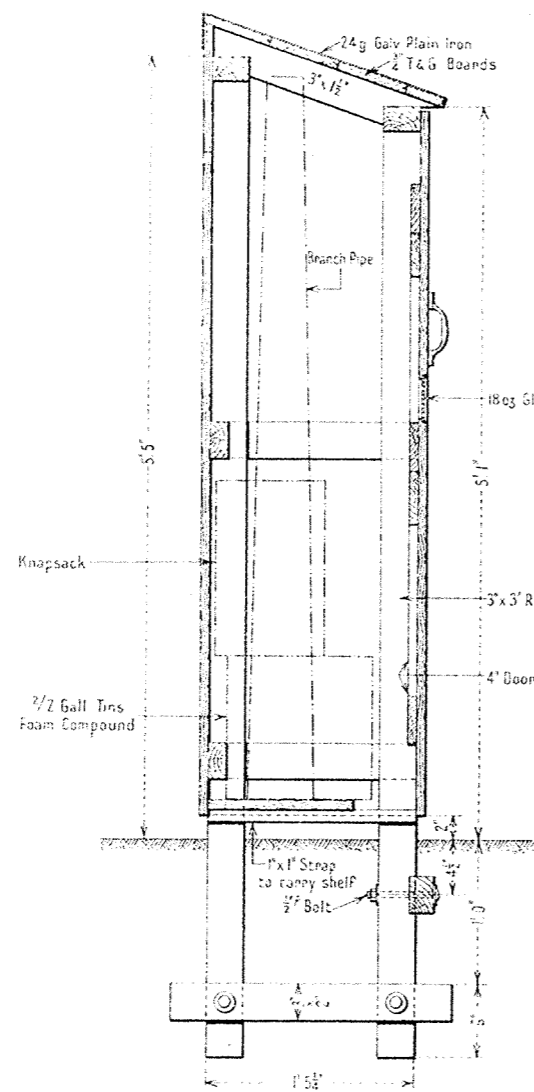
BLADE LENGTH	G. TAN α	$2\frac{3}{4}" \cdot \text{COSEC } \alpha$
15'-0"	.156 770 83	7.677 839 5
16'-6"	.142 518 91	8.444 970 8
22'-6"	.104 513 90	11.513 909

CROSSING	BLADE	SIN $\theta - \sin \alpha$	COS $\alpha - \cos \theta$	TAN $\theta - \tan \alpha$
7.52	15'-0"	.101 863 52	.008 266 36	.103 007 76
8.7	16'-6"	.087 053 24	.006 172 75	.087 795 08
9.73	16'-6"	.075 064 76	.004 867 96	.075 592 76
9.73	22'-6"	.082 297 77	.005 038 16	.082 831 79
8.7	22'-6"	.094 286 25	.006 342 95	.095 034 13

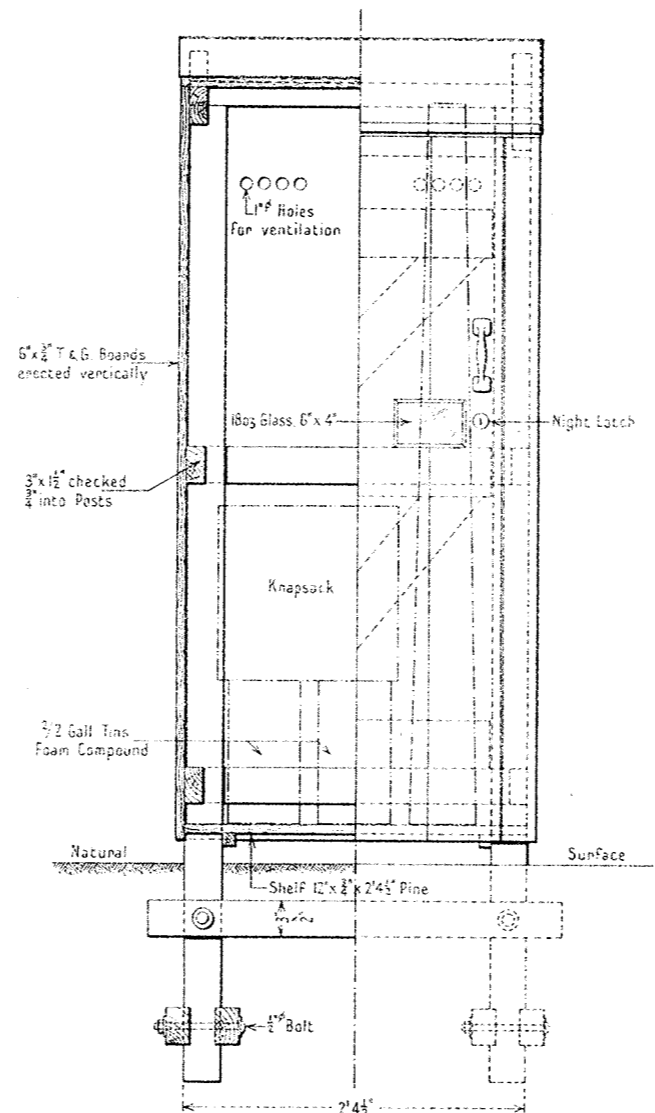
NOMINAL RADIUS	HEEL TO P.O.F.I.
600	55.345 762
800	63.921 518
1000	71.475 648

DECIMAL EQUIVALENTS OF A FOOT		
	LENGTH	DECIMAL EQUIVALENT
HEEL	$5\frac{3}{4}"$.479 166 67
HEEL - TOE	$5\frac{3}{4}" - \frac{3}{8}"$.447 916 67
WING LENGTH	$5'-11\frac{1}{2}"$	5.958 3333
WING LENGTH - SPECIAL	$7'-2\frac{1}{2}"$	7.208 3333
"V" LENGTH UP TO 7.52	$6'-9\frac{1}{4}"$	6.770 8333
"V" LENGTH 7.53 TO 10.54	$9'-2\frac{1}{2}"$	9.208 3333
"V" LENGTH 10.55 TO 15	$13'-6\frac{1}{2}"$	13.541 667
GAUGE - HEEL	$4'-9\frac{1}{4}"$	4.770 8333

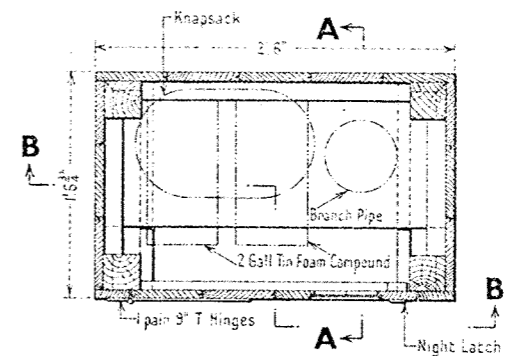
V-R CONSTANTS FOR TRACKWORK CALCULATIONS		APPROVED  CHIEF CIVIL ENGR.	ADOPTED 1944
		ENG'R. OF M. & W.S. L.G.E.	F 445



SECTION A-A



SECTION B-B



SECTIONAL PLAN

NOTE

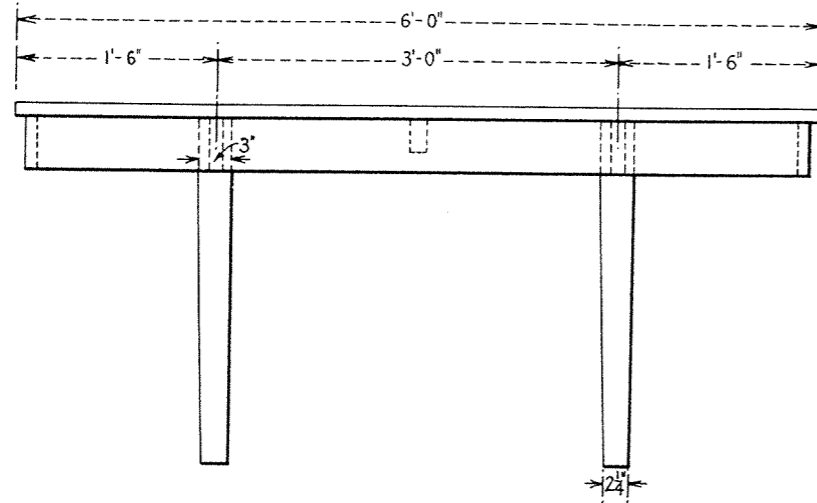
When erecting box it is to be fixed so that the bottom of door is 2" above ground line
 Outside of box to be painted 3 coats & finished in vermilion & "FOAM MAKING BRANCH PIPE FOR OIL FIRES" stenciled on door.
 All timbers below surface to be well coated with hot Coal Tar.
 Well seasoned timber to be used throughout.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
FOAM MAKING
BRANCH PIPE BOX

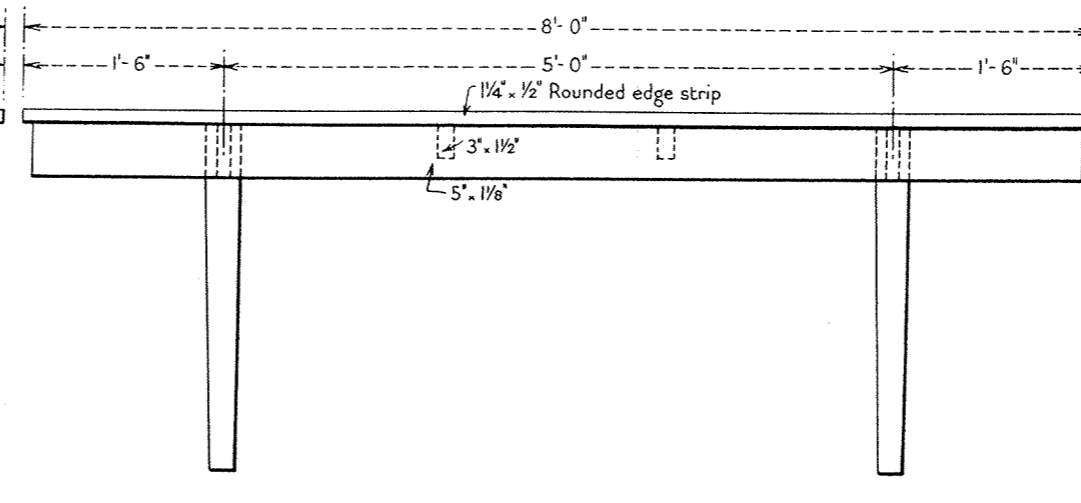
SCALE— $\frac{3}{4}$ " = 1'0"

Approved
[Signature]
 Chief Civil Engineer
 Drawn by
 F. H. L.
 Checked by
[Signature]
 Eng^r of Mach^y & Water Supply

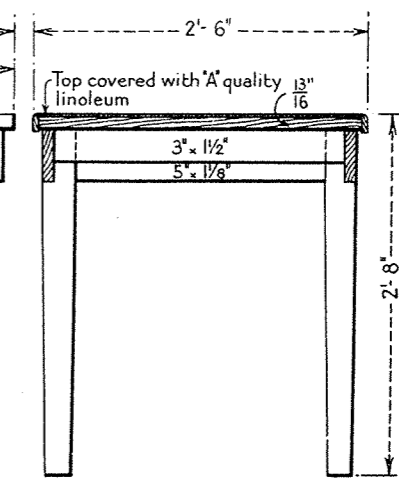
Adopted
 OCT. 1943
 PLAN No.
F446



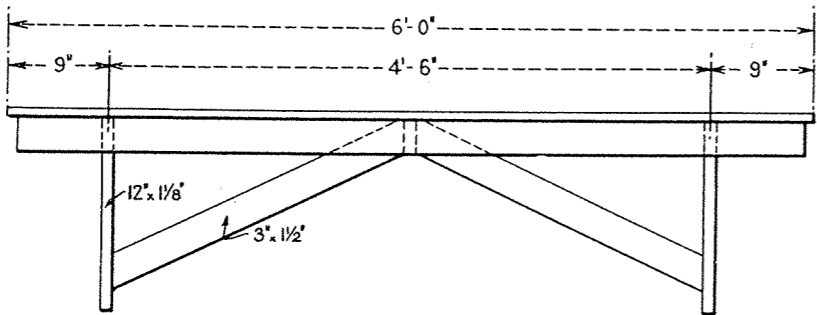
ELEVATION
(6'-0" Table)



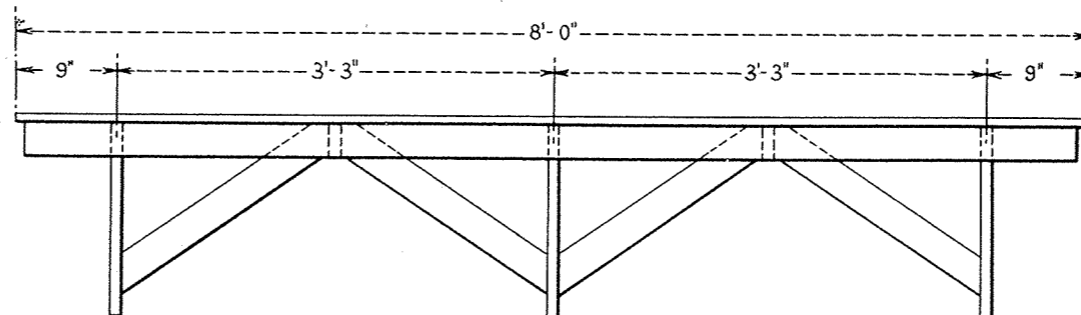
ELEVATION
(8'-0" Table)



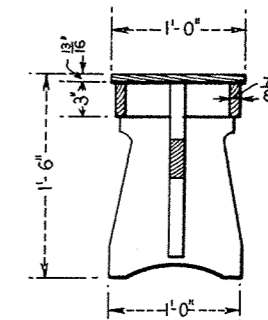
SECTION



ELEVATION
(6'-0" Form)




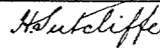
ELEVATION
(8'-0" Form)

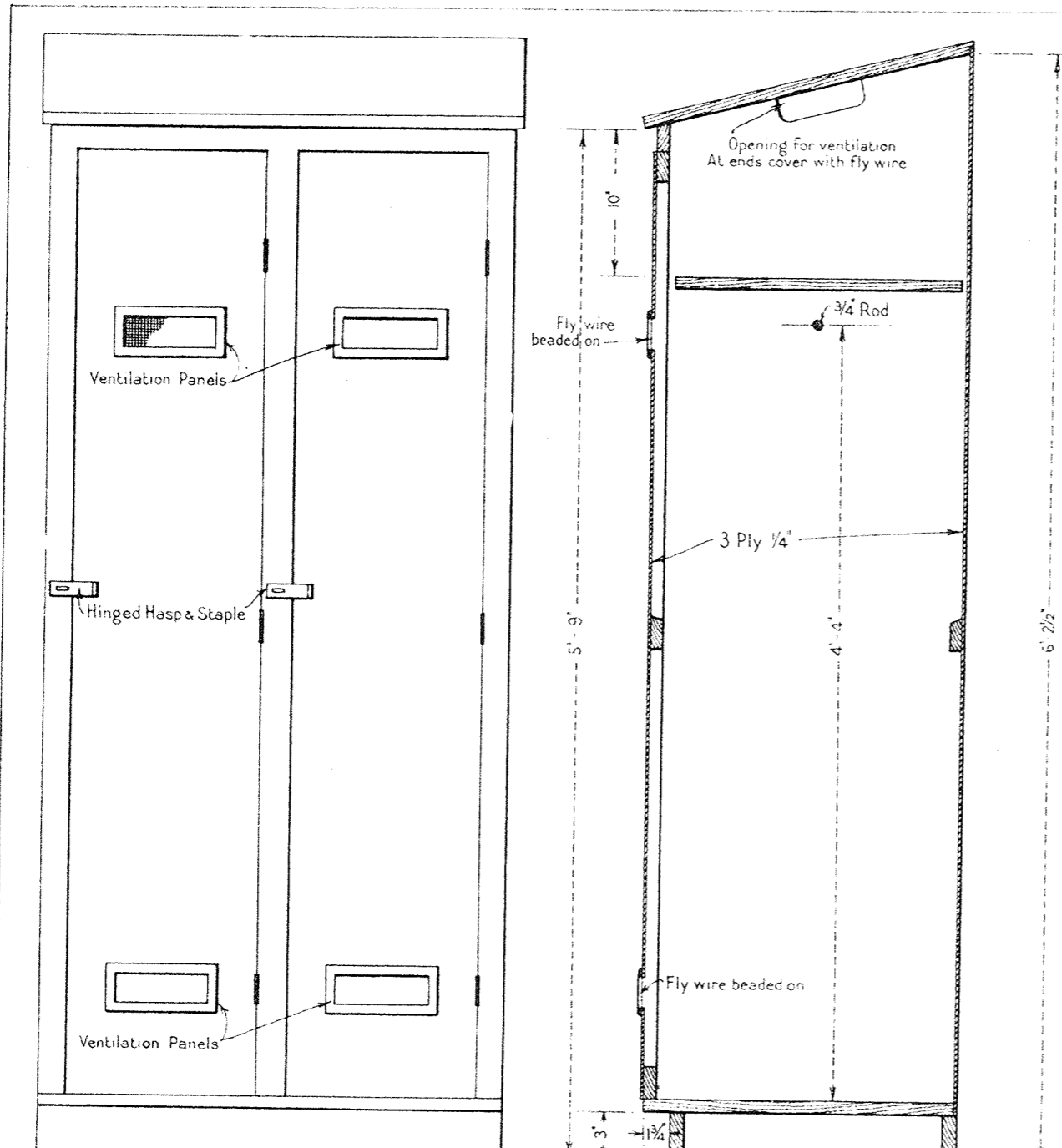


SECTION

Material :- Mountain Ash.
Finish :- Brush Polish.

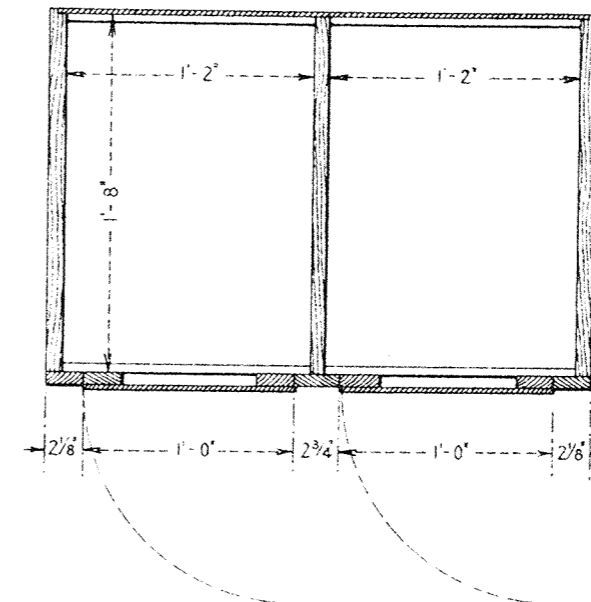
This drawing supersedes Plan No. 365-41.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING		Approved  Chief Civil Engineer	Adopted OCT. 1943
		Drawn by K. F. L.	Checked by D. B. C.
TABLES & FORMS FOR MESS ROOMS		 Chief Architect.	
No SCALE.			



ELEVATION

SECTION



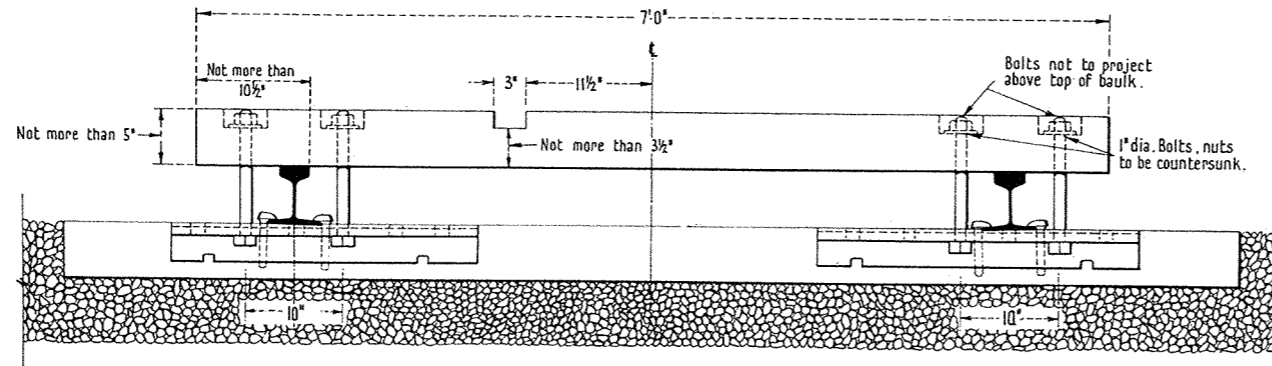
PLAN

NOTE:-

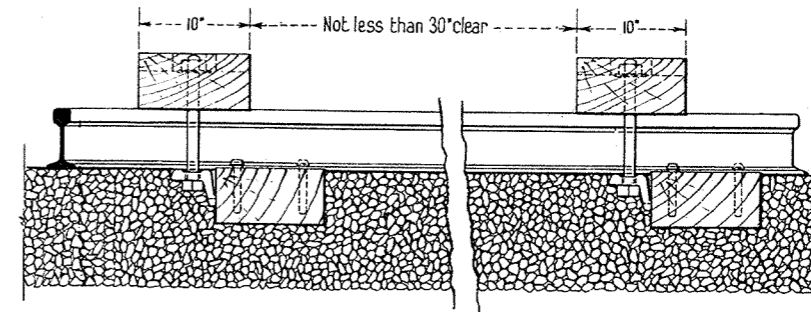
Shelves, Sides, Top & Framing out of 1" material
Finish - Brush Polish.

This drawing supersedes Plan No 643-42

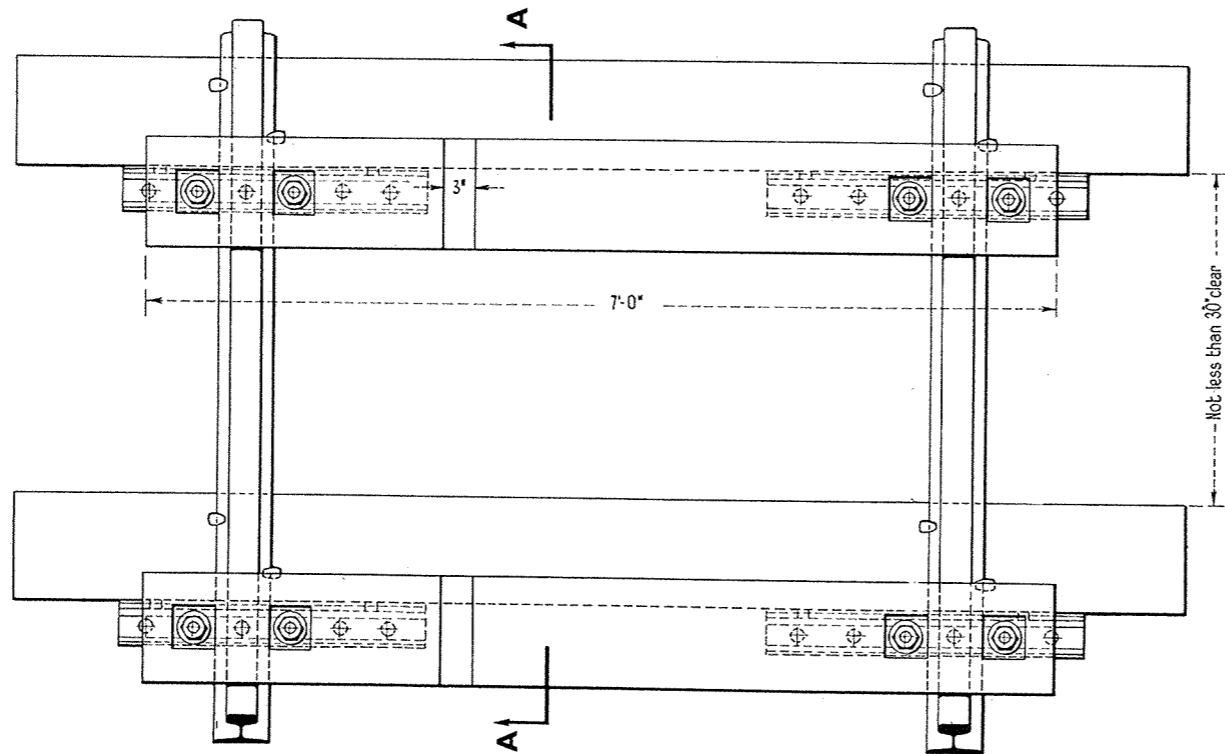
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING		Approved Chief Civil Engineer	Adopted OCT. 1943
Drawn by K.F.L.	Checked by D.B.C.	PLAN No.	
CLOTHES LOCKER 20" x 14" No SCALE.		 Chief Architect	F448



FRONT ELEVATION
As seen from approaching vehicles.



SECTION A-A



PLAN

SCHEDULE OF QUANTITIES	
TIMBER	IRONWORK
Baulks 10" x 5" 2 N ^o . 7'-0"	Bolts 1" dia. (with washers) 8 N ^o 10 1/2" for 60 lb. nails 8 N ^o 11 1/2" for 80 lb. nails 8 N ^o 12" for 94 lb. nails Fishplates 4 N ^o 80 lb. Unserviceable

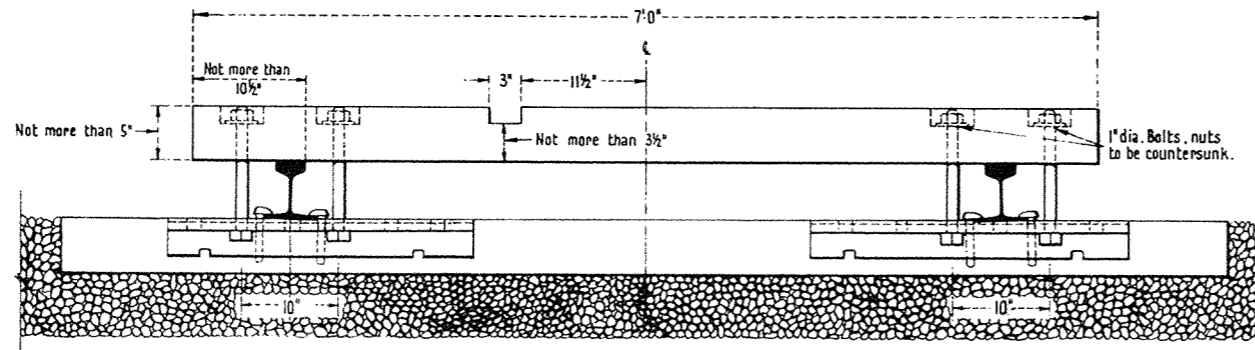
NOTES: Standard timber baulks may be used (where directed by the District Engineer) at the ends of sidings on which car stock is not stabled. Baulks must be fixed in sets of not less than two with a minimum clear distance of 30" between baulks. Buffer stops, not baulks, must be used at the end of each siding on a falling grade and at the ends of frequently used sidings.

This plan supersedes Plan N^o 449

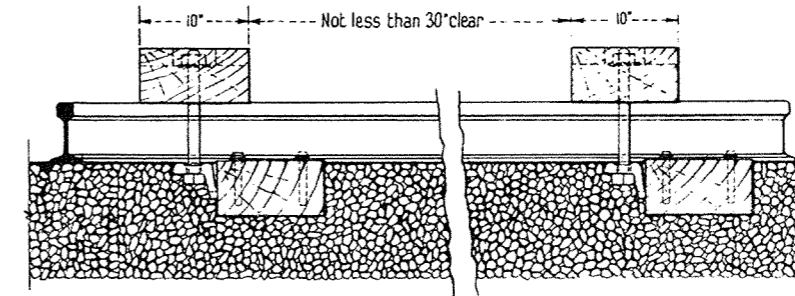
Revision	Date	Amendment	Amended by
A	7-7-59	Baulks attached to rail with unserviceable 80 lb. fishplates	

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING TIMBER BAULKS in lieu of Buffer Stop.	Approved <i>R.M. 11/16/50</i> Chief Civil Engineer	Adopted NOV. 1945
	Drawn by E.W.B. Checked by <i>L.S.</i> Eng ^o of Structural Design	PLAN No. F 449^A

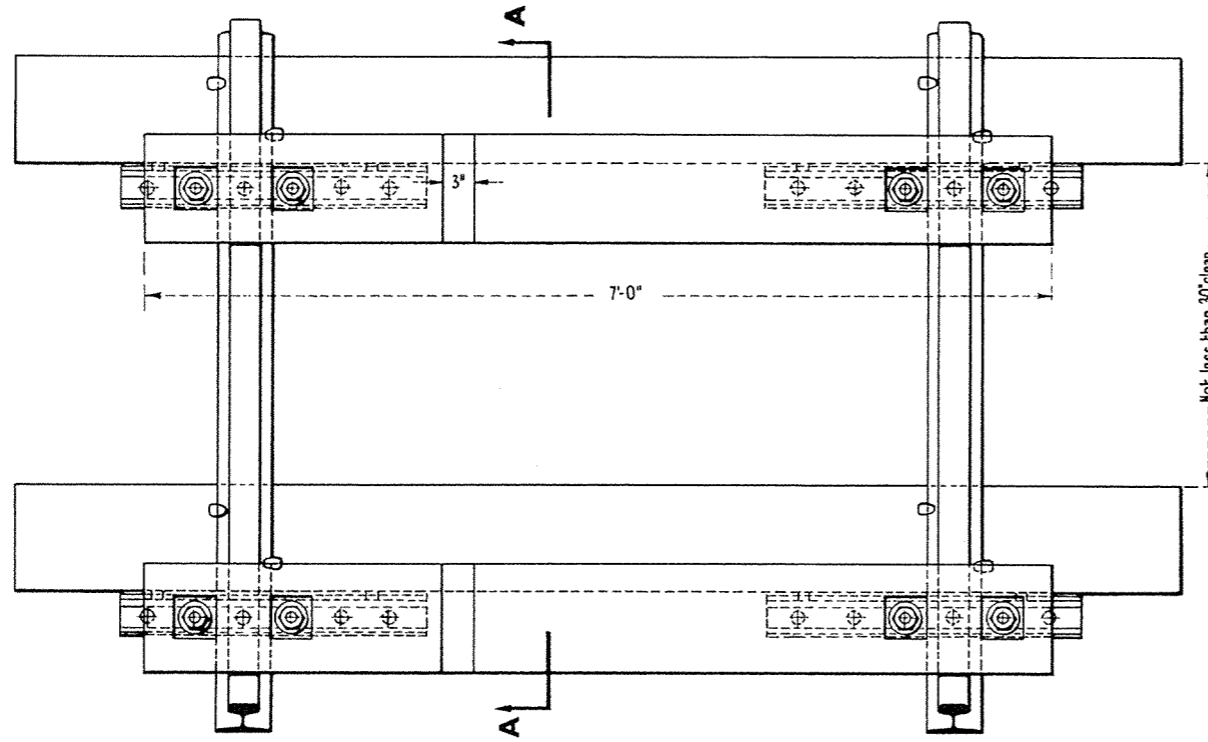
No scale



FRONT ELEVATION
As seen from approaching vehicles.



SECTION A-A



PLAN

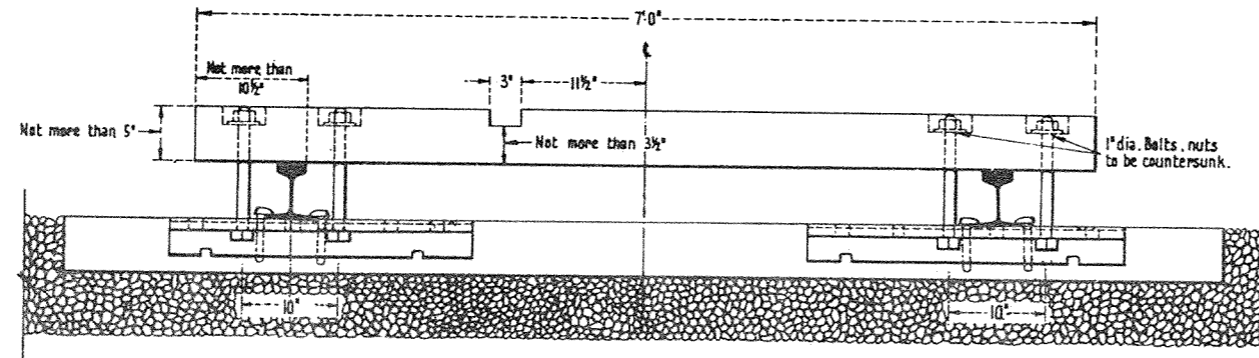
SCHEDULE OF QUANTITIES	
TIMBER	IRONWORK
Baulks 10"x5" 2 No. 7'-0"	Bolts 1" dia (with washers)
	8 No 11" for 60 lb rails
	8 No 12" for 80 lb rails
	8 No 12" for 94 lb rails
	Fishplates 4 No 80 lb Unserviceable

NOTES: Standard timber baulks may be used (where directed by the District Engineer) at the ends of sidings on which car stock is not stabled. Baulks must be fixed in sets of not less than two with a minimum clear distance of 30" between baulks. Buffer stops, not baulks, must be used at the end of each siding on a falling grade and at the ends of frequently used sidings.

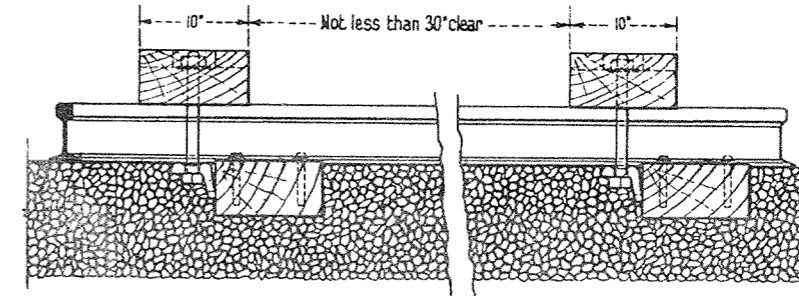
This plan supersedes Plan No 449^A

Revision	Date	Amendment	Amended by
B	21-9-67	Length of Bolts altered	
A	7-7-59	Baulks attached to rail with unserviceable 80 lb fishplates	

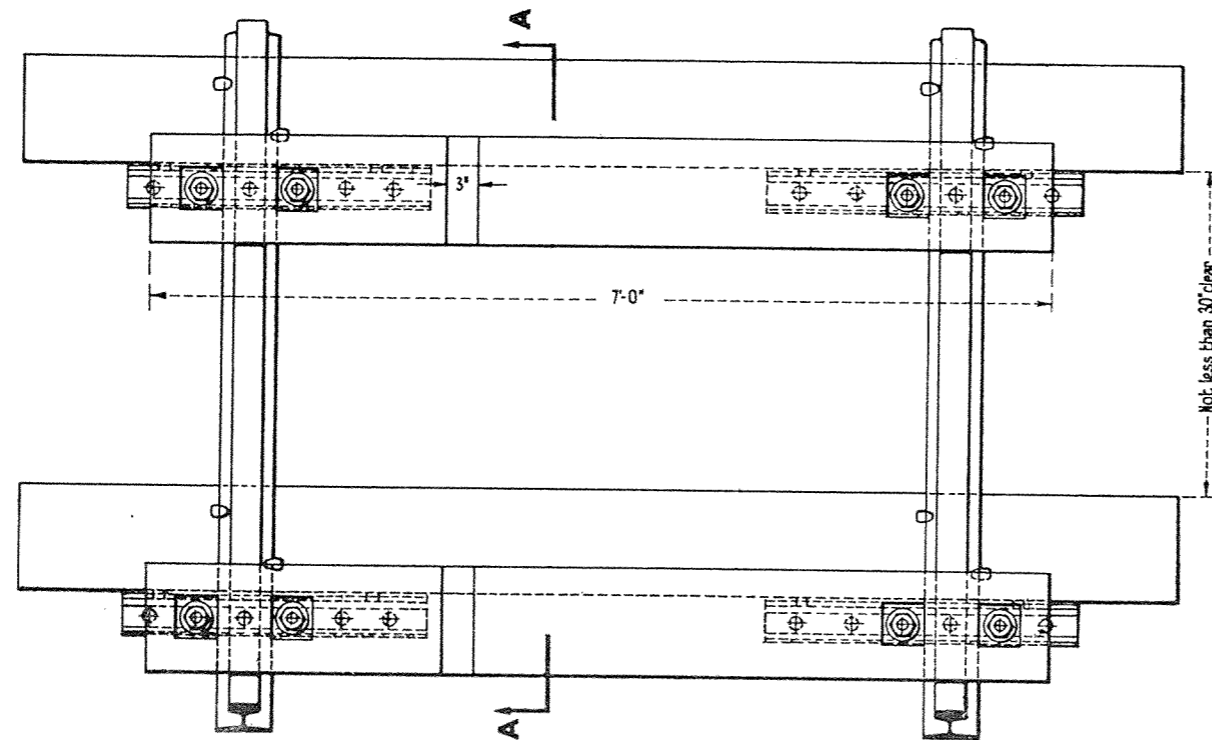
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING TIMBER BAULKS in lieu of Buffer Stop.	Approved <i>R.M.</i> Chief Civil Engineer	Adopted NOV. 1945
	Drawn by E.W.B.	Checked by <i>L.S.</i> Eng' of Structural Design
No scale		PLAN No. F 449^B



FRONT ELEVATION
As seen from approaching vehicles.



SECTION A-A



PLAN

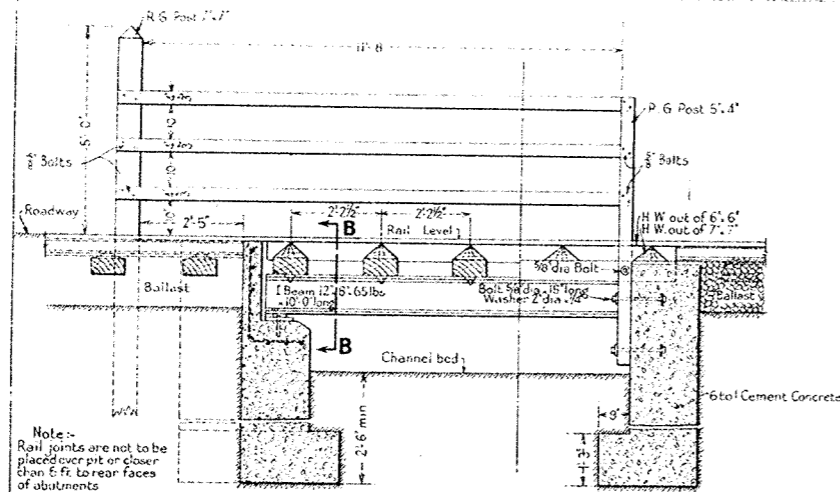
SCHEDULE OF QUANTITIES	
TIMBER	IRONWORK
Baulks 10" x 5" 2 Nos. 7'-0"	Bolts 1" dia. (with washers) 8 No 11" for 60 lb. nails 8 No 12" for 80 lb. nails 8 No 12" for 94 lb. nails 8 No 12" for 107 lb. nails Fishplates 4 No 60 lb. Unserviceable

NOTES: Standard timber baulks may be used (where directed by the District Engineer) at the ends of sidings on which car stock is not stabled. Baulks must be fixed in sets of not less than two with a minimum clear distance of 30" between baulks. Buffer stops, not baulks, must be used at the end of each siding on a falling grade and at the ends of frequently used sidings.

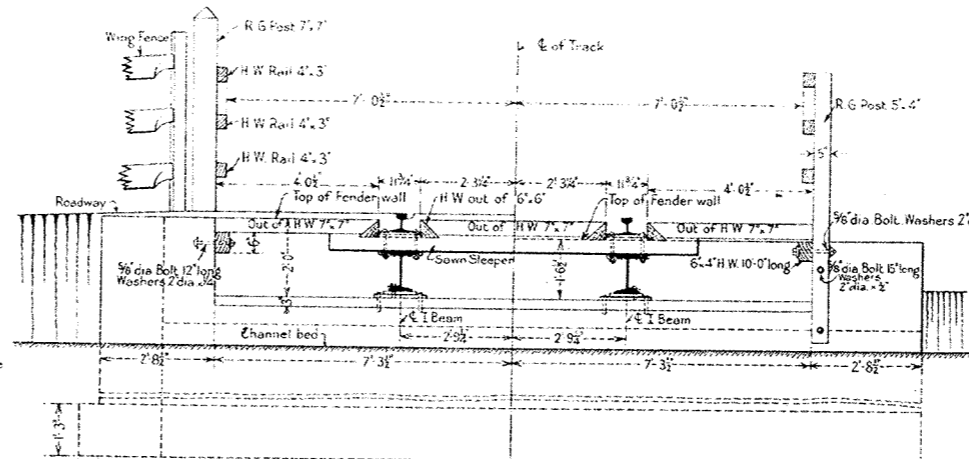
This plan supersedes Plan No 449^B

Revision	Date	Amendment	Amended by
C	17-9-71	Bolts for 107 lb. added.	
B	21-9-67	Length of Bolts altered.	
A	7-7-58	Baulks attached to rail with unserviceable 80 lb. fishplates	

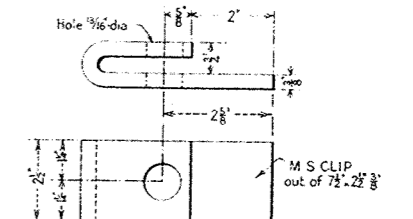
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING TIMBER BAULK in lieu of Buffer Stop.	Approved <i>R.M.H.</i> Chief Civil Engineer	Adopted NOV. 1945
	Drawn by E.W.B.	Checked by <i>L.A.S.</i> Eng. of Structural Design
No scale	PLAN No. F 449^C	



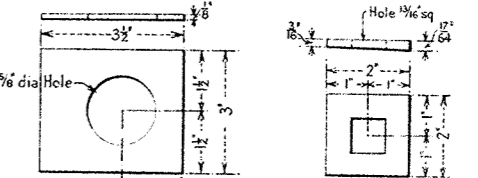
SECTIONAL ELEVATION A-A



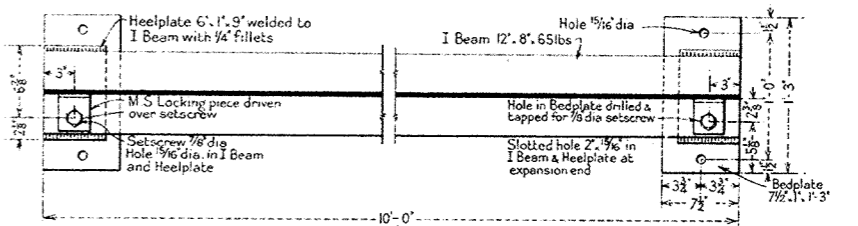
HALF FRONTAL ELEVATION OF ABUTMENT NO 1 ABUTMENT NO 2



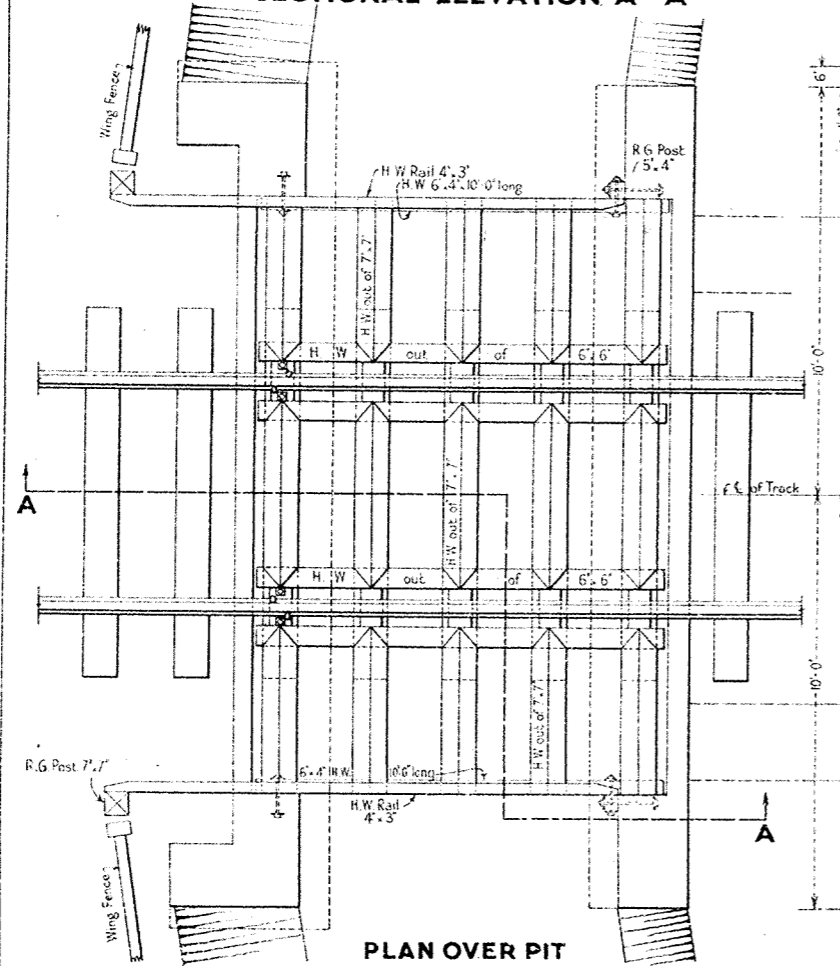
DETAIL OF DECK CLIP



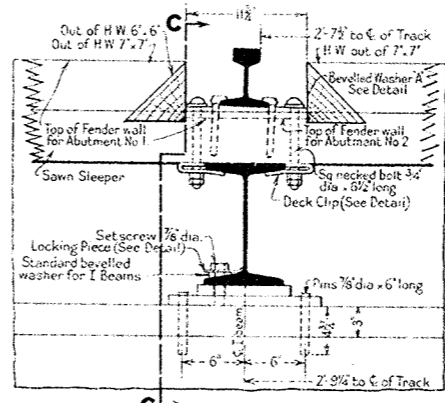
DETAIL OF LOCKING PIECE BEVELLED WASHER 'A'



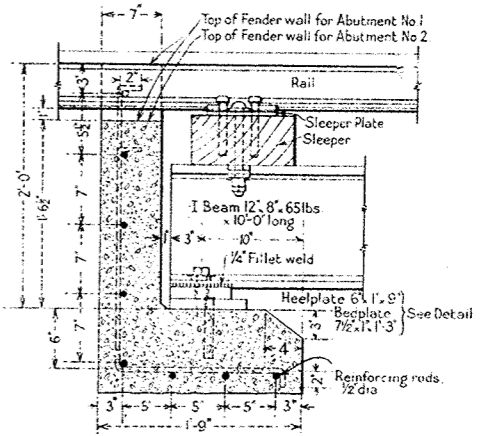
DETAIL OF BEDPLATES



PLAN OVER PIT ABUTMENT NO 1 ABUTMENT NO 2 PLAN OVER ABUTMENTS & I BEAMS



SECTION B-B



SECTION C-C

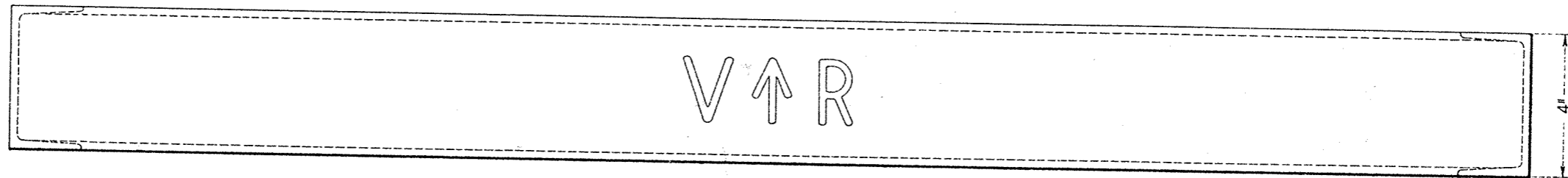
NOTE: For Schedule of Quantities see Plan No F.490A

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
CATTLE PIT
FOR MAIN SPEED LINES
 I Beam Superstructure No Scale

Approved <i>M.M.</i> Chief Civil Engineer	Adopted NOV. 1944
Drawn by W.H.T.	Checked by T.H.J.
Engineer of Structural Design	PLAN No. F 450A

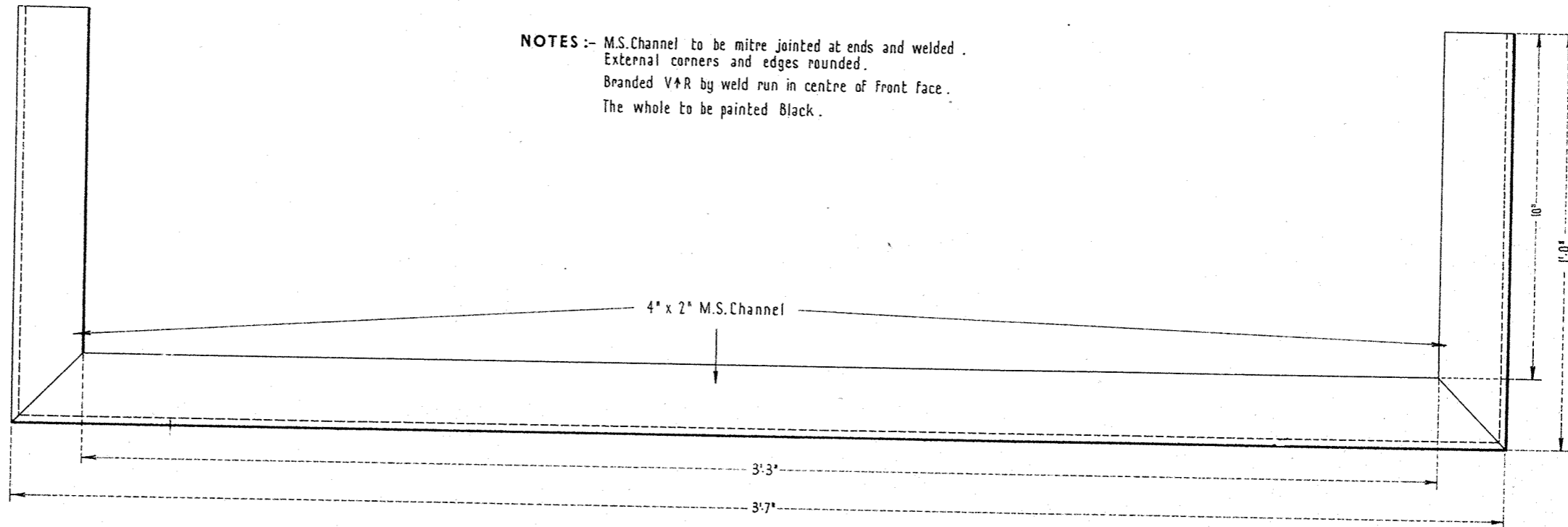
REV.	DATE	AMENDMENT
A	23/7/46	Rails bolted on sides of posts. Dimension to front post adjusted.

1 ST CLASS PAVED AREAS		2 ND CLASS PAVED AREAS		OPEN TRACKWORK	
Nº 5-0 TURNOUT FOR 1 ST CLASS PAVED AREAS L.H. OR R.H.	1 SET	Nº 5-0 TURNOUT FOR 2 ND CLASS PAVED AREAS L.H. OR R.H.	1 SET	Nº 5-0 TURNOUT WITH 11'-0" CURVED POINTS L.H. OR R.H.	1 SET
FISHPLATES CROSSING	12 PAIR	FISHPLATES TRACK	1 PAIR	SPREADER TA 303	1 Nº
FISH BOLTS 1" DIA. x 5"	48 Nº	" CROSSING	11 "	" TA 402	1 "
SPRING WASHERS 1" TYPE 1944	48 "	FISH BOLTS 1" DIA. x 5 ³ / ₈ "	4 Nº	SPREADER BOLTS 1F3116	4 "
RAIL TIES	13 "	" 1" DIA. x 5"	44 "	CHAIRS MS SLIDE 1039	10 "
BOLTS 1" DIA. 3" LONG HEX. HEAD	42 "	SPRING WASHERS 1" TYPE 1944	48 "	" " " 6069	2 "
TAKE UP BUTTONS 1067	42 "	SCREWS MARK R	20 "	" " RAIL 1040	2 "
RAIL ANCHORS 60 LB.	20 "	DOG SPIKES 5"	190 "	BOLTS CHAIR 2 ³ / ₈ " MARK C	14 "
PA POINT LEVER INSTALLATION SEE F 465		TIMBERS 12"x6" SAWN		FISHPLATES TRACK	9 PAIR
Nº 5-0 TURNOUT FOR 1 ST CLASS PAVED AREAS		16'-6" 1 Nº	14'-0" 1 Nº	" CROSSING	1 "
COMPRISES THE FOLLOWING MATERIAL		16'-0" 2 "	13'-6" 1 "	FISH BOLTS 1" DIA. x 5 ³ / ₈ "	36 Nº
POINTS 9'-0" PA R.H. OR L.H.		15'-6" 1 "	13'-0" 2 "	" 1" DIA. x 5"	4 "
V CROSSING Nº 5-0E FOR L.H. TURNOUT OR	1 SET	15'-0" 1 "	12'-6" 2 "	SPRING WASHERS 1" TYPE 1944	54 "
" " " 5-0F " R.H. "	1 Nº	14'-6" 2 "	12'-0" 1 "	LUG PLATES STEP 4006	2 "
				" " " 5006	2 "
RUNNING RAILS		PA POINT LEVER INSTALLATION SEE F 465		SCREWS MARK R	44 "
45'-0" STRAIGHT	1 Nº	Nº 5-0 TURNOUT FOR 2 ND CLASS PAVED AREAS		PINS " P	8 "
45'-0" PART CURVED 269' RAD.	1 "	COMPRISES THE FOLLOWING MATERIAL		DOG SPIKES 5"	190 "
26'-4 ³ / ₈ " CURVED 274' RAD.	1 "	POINTS 9'-0" PA L.H. OR R.H.	1 SET	" 6"	4 "
26'-0 ⁵ / ₈ " STRAIGHT	1 "	V CROSSING Nº 5-0E FOR L.H. TURNOUT OR	1 Nº	TIMBERS 12"x6" SAWN	
FLANGWAY RAILS		" " " 5-0F " R.H. "	1 Nº	16'-6" 2 Nº	14'-0" 1 Nº
45'-0" STRAIGHT	1 Nº	RAILS	1 Nº	16'-0" 1 "	11'-0" 2 "
45'-0" PART CURVED 269' RAD.	1 "	45'-0" STRAIGHT	1 Nº	15'-6" 2 "	10'-6" 2 "
31'-3 ³ / ₈ " CURVED 274' RAD.	1 "	45'-0" PART CURVED 269' RAD.	1 "	15'-0" 1 "	10'-0" 2 "
30'-11 ³ / ₈ " STRAIGHT	1 "	26'-4 ³ / ₈ " CURVED 274' RAD.	1 "	14'-6" 1 "	9'-6" 4 "
GUARD RAIL BLOCKS FOR 1 ³ / ₄ " FLANGWAY	28 "	26'-0 ⁵ / ₈ " STRAIGHT	1 "		10"x5" HEWN
" " BOLTS 6 ⁷ / ₈ " MARK G	26 "	GUARD RAILS 11'-3"	2 "		8'-0" 2 Nº
SPRING WASHERS 1" TYPE 1944	26 "	HALF GUARD RAILS 5'-0"	L.H. 5 Nº R.H. 5 "	POINT LEVER ARRANGEMENT SEE PLAN Nº F 513	
HEADLOCKS FOR GUARD RAIL BOLTS	6 "	GUARD RAIL END BLOCKS	L.H. 7 " R.H. 7 "	Nº 5-0 TURNOUT WITH 11'-0" CURVED POINTS	
		" " ADJUSTING BLOCKS	4 PAIR	COMPRISES THE FOLLOWING MATERIAL	
		" " BLOCKS FOR 1 ³ / ₄ " FLANGWAY	10 Nº	POINTS 11'-0" CURVED L.H. OR R.H.	1 SET
		" " BOLTS 8 ¹ / ₂ " MARK G	12 "	V CROSSING Nº 5-0D FOR L.H. TURNOUT OR	1 Nº
		" " " 6 ⁷ / ₈ " " "	14 "	" " Nº 5-0C " R.H. "	
		SPRING WASHERS 1" TYPE 1944	26 "	RAILS	
				45'-0" STRAIGHT	1 Nº
				45'-0" PART CURVED 269' RAD.	1 "
				29'-11 ³ / ₈ " CURVED 274' RAD.	1 "
				29'-7 ¹ / ₄ " STRAIGHT	1 "
				GUARD RAILS 11'-3"	2 "
				" " BLOCKS END	L.H. 2 Nº R.H. 2 "
				" " " ADJUSTING	4 PAIR
				" " BOLTS 8 ¹ / ₂ " MARK G	4 Nº
				" " " 6 ⁷ / ₈ " " "	4 "
				SPRING WASHERS 1" TYPE 1944	8 "
NOTE: SCHEDULED QUANTITIES ARE EXACT FOR THE LAYOUTS AS SHOWN ON PLAN Nº F 440		V. R.		ADOPTED	
REFERENCE: PA POINT LEVER INSTALLATION ARRANGEMENT F 465		SCHEDULE OF QUANTITIES		1950	
POINT LEVERS END PULL ARRANGEMENTS F 513		TURNOUTS		F 451	
		Nº 5-0 VARIOUS 94 LB.		CHIEF CIVIL ENGINEER	
				CHECKED C.F.	
				PASSED	
				ENGINEER OF M. & W.S.	



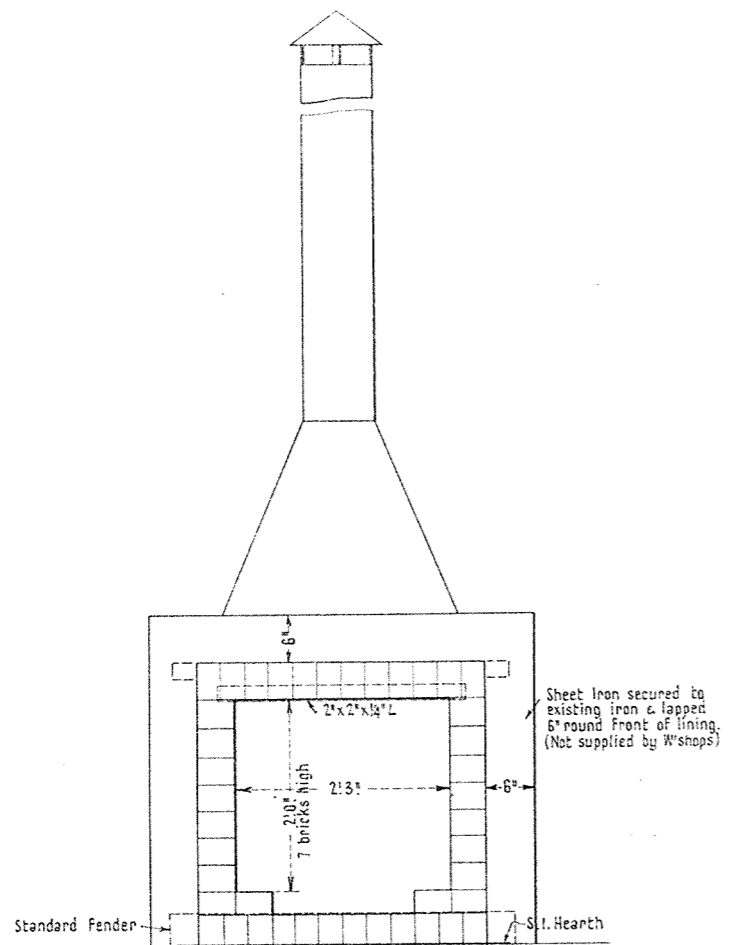
ELEVATION

NOTES :- M.S.Channel to be mitre jointed at ends and welded .
 External corners and edges rounded .
 Branded V↑R by weld run in centre of front face .
 The whole to be painted Black .

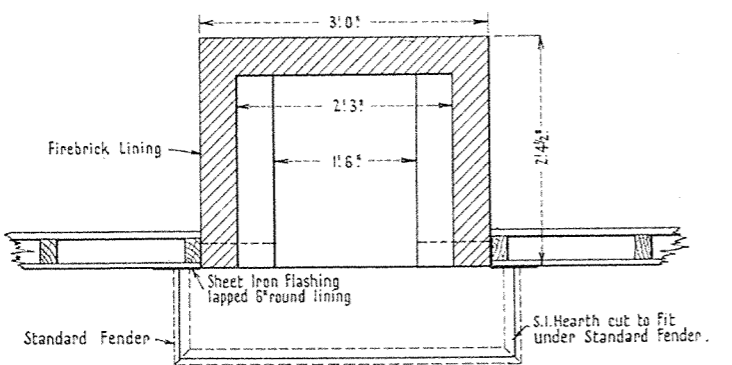


PLAN

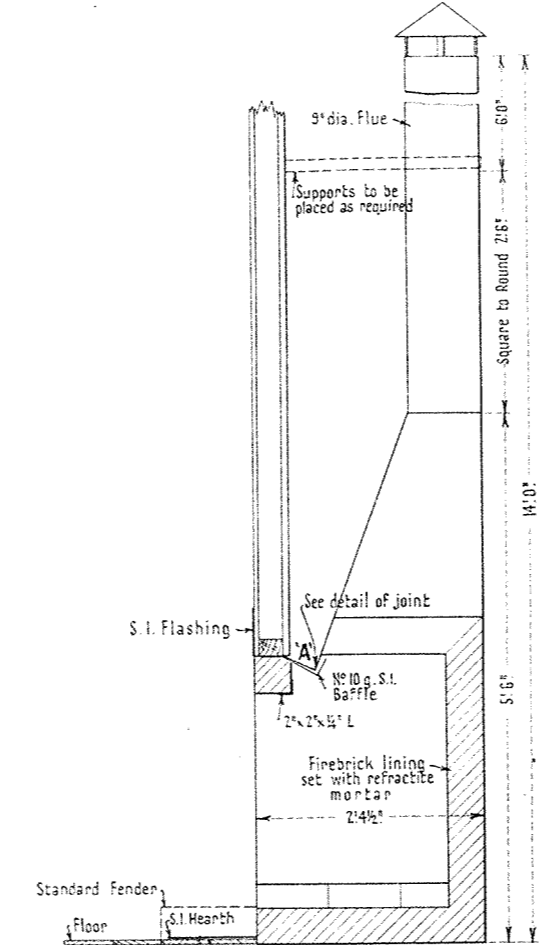
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.W.</i>	JAN. 1944
FENDER FOR		Chief Civil Engineer	PLAN No.
STANDARD FIREPLACE		Drawn by C.M.F.	Checked by L.E.M.
Scale :- 3" = 1'0"		<i>H. Sutcliffe</i>	F 452
		Chief Architect	



ELEVATION



PLAN



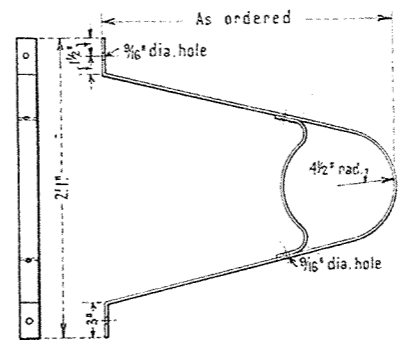
SECTION

Where concrete or brick base is used the iron hearth should be omitted.

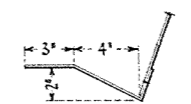
NOTES - Gauges of Sheet Iron
 Chimney and sides No 16
 Back and hearth No 14
 All joints at angles to be lapped
 3/4\"/>

In accordance with Circular 12.43 Sheet Iron Fireplaces lined with brick must be used in temporary and/or unimportant buildings only.

For details of fender see Plan No F452.

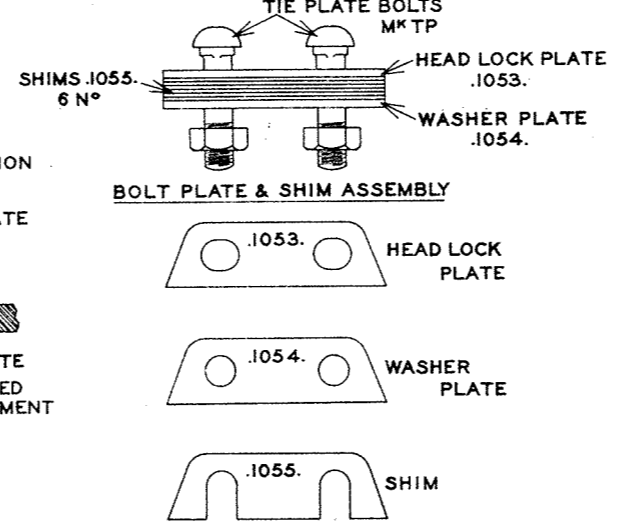
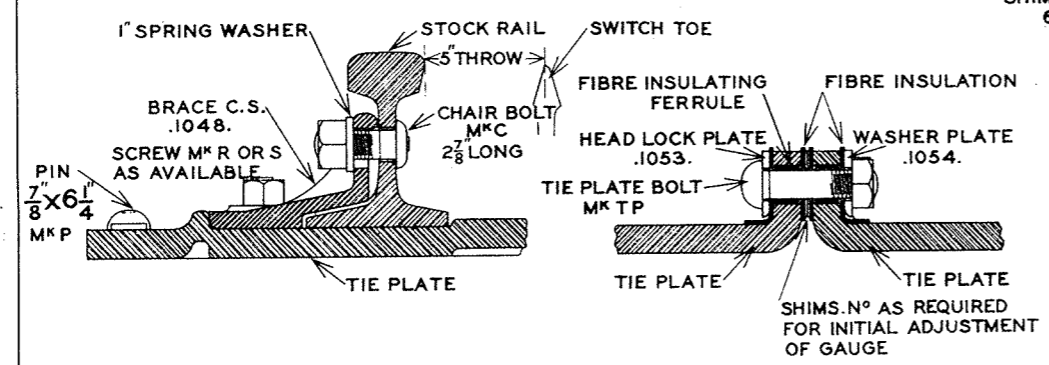
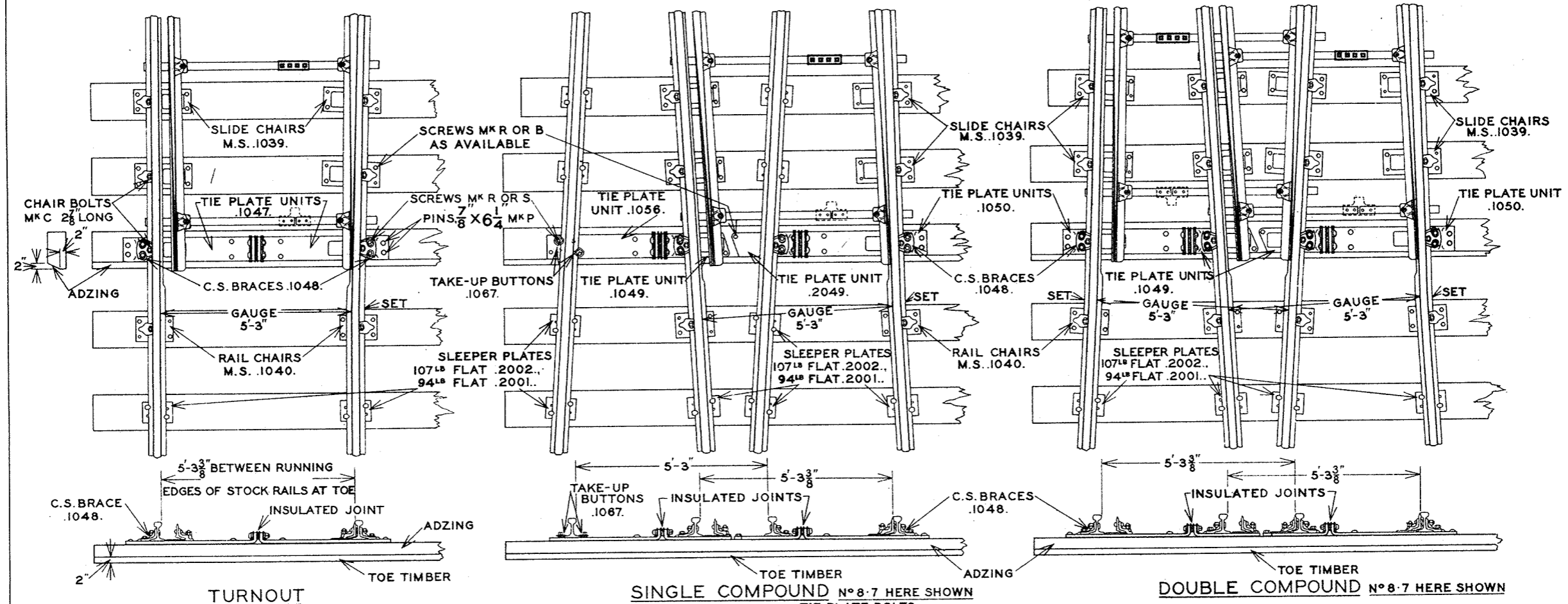


DETAIL OF CHIMNEY SUPPORT



DETAIL OF JOINT 'A'

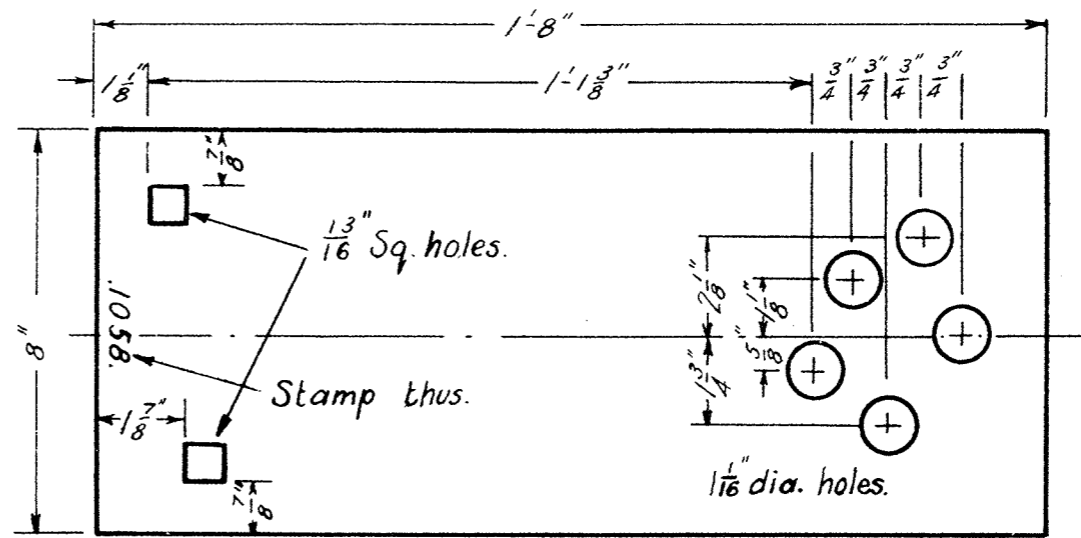
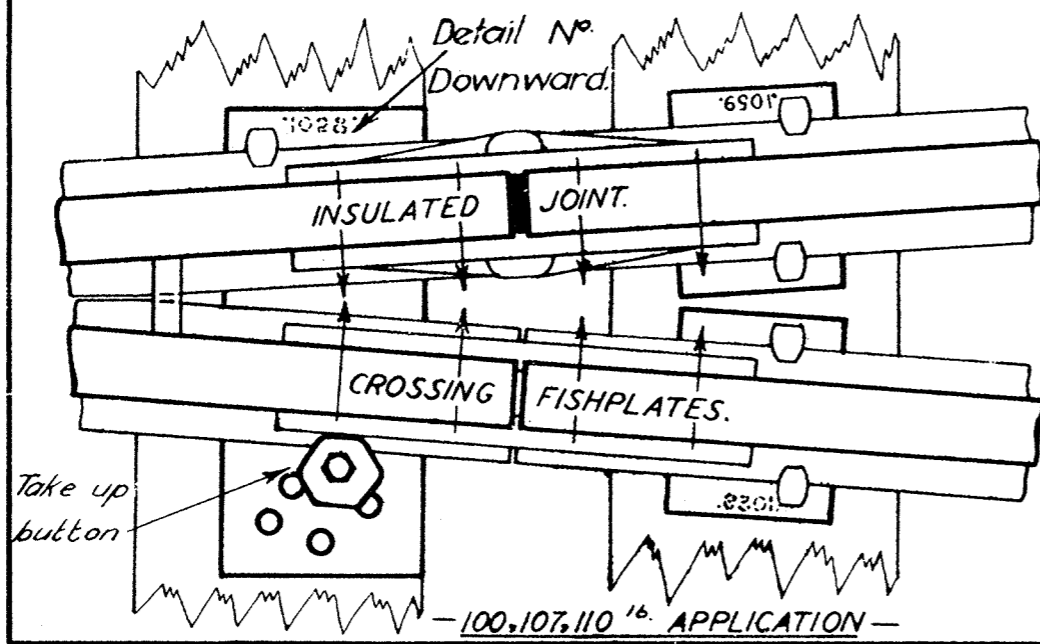
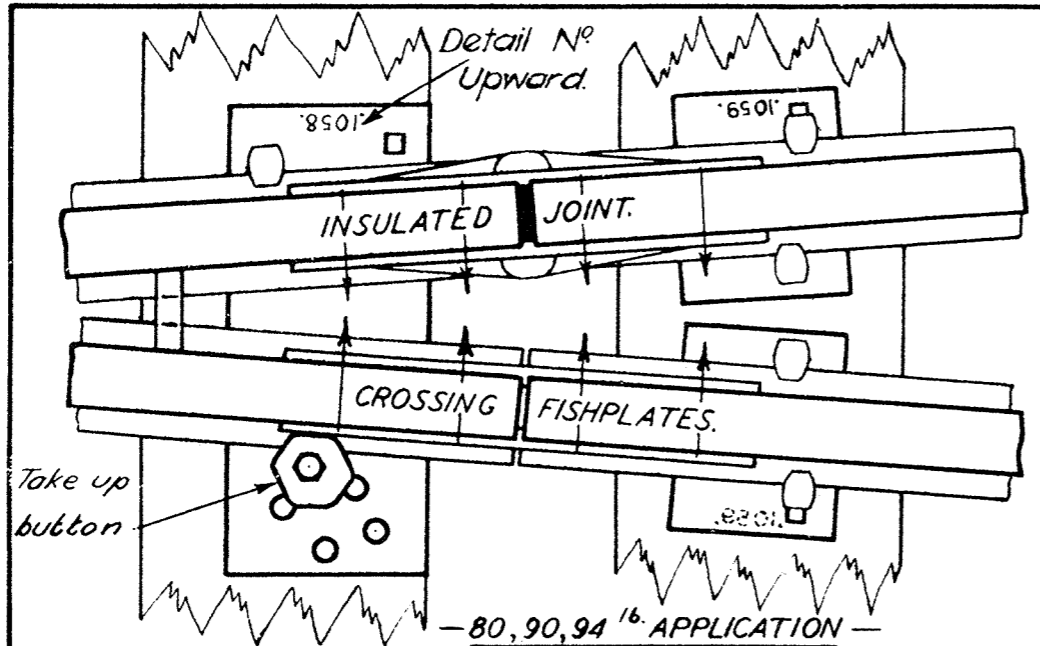
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING PORTABLE W.I. FIREPLACE AND CHIMNEY Scales - 1", 3/4" & 1/2" = 1!0"		Approved Chief Civil Engineer Drawn by L.E.M. Checked by Chief Architect	Adopted MAY 1943 PLAN No. F 453
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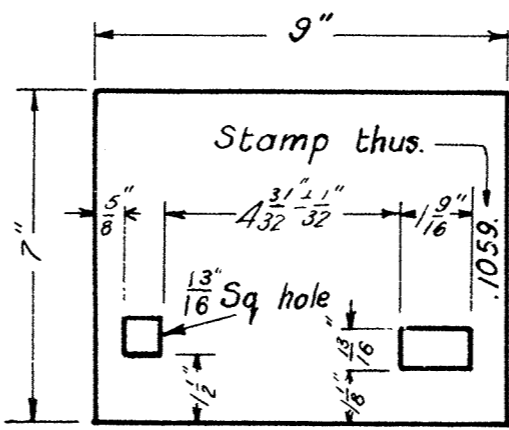
UNITS REQUIRED FOR EACH TIE PLATE ASSEMBLY		
TURNOUT	SINGLE COMPOUND	DOUBLE COMPOUND
.1047. 2N°	N°7-52.1047.1049..1056..2049.	N°7-52. .1047. 2N°..1049.2N°
FOR ALL LENGTHS OF SWITCHES.	N°8-7 .1050..1049..1056..2049.	N°8-7 .1050. 2N°..1049.2N°

UNITS LISTED UNDER SINGLE AND DOUBLE COMPOUNDS REFER ONLY TO ONE END OF THE COMPOUND.
BOLT, PLATE AND SHIM ASSEMBLIES SUPPLIED SEPARATELY.
INSULATIONS SUPPLIED BY SIGNAL DIVISION. ONE SET (5F130) PER JOINT.

VICTORIAN RAILWAYS. WAY & WORKS BCH. TIE PLATE ARRANGEMENTS. FOR USE WITH MILD STEEL CHAIRS. 94 & 107 LB A.S. POINTS.	APPROVED	ADOPTED
	<i>[Signature]</i> CHIEF CIVIL ENGINEER	1945
	CHECKED <i>[Signature]</i>	PLAN N°
	PASSED <i>[Signature]</i> ENGINEER OF M.&W.S.	F454



LONG PLATE .1058.

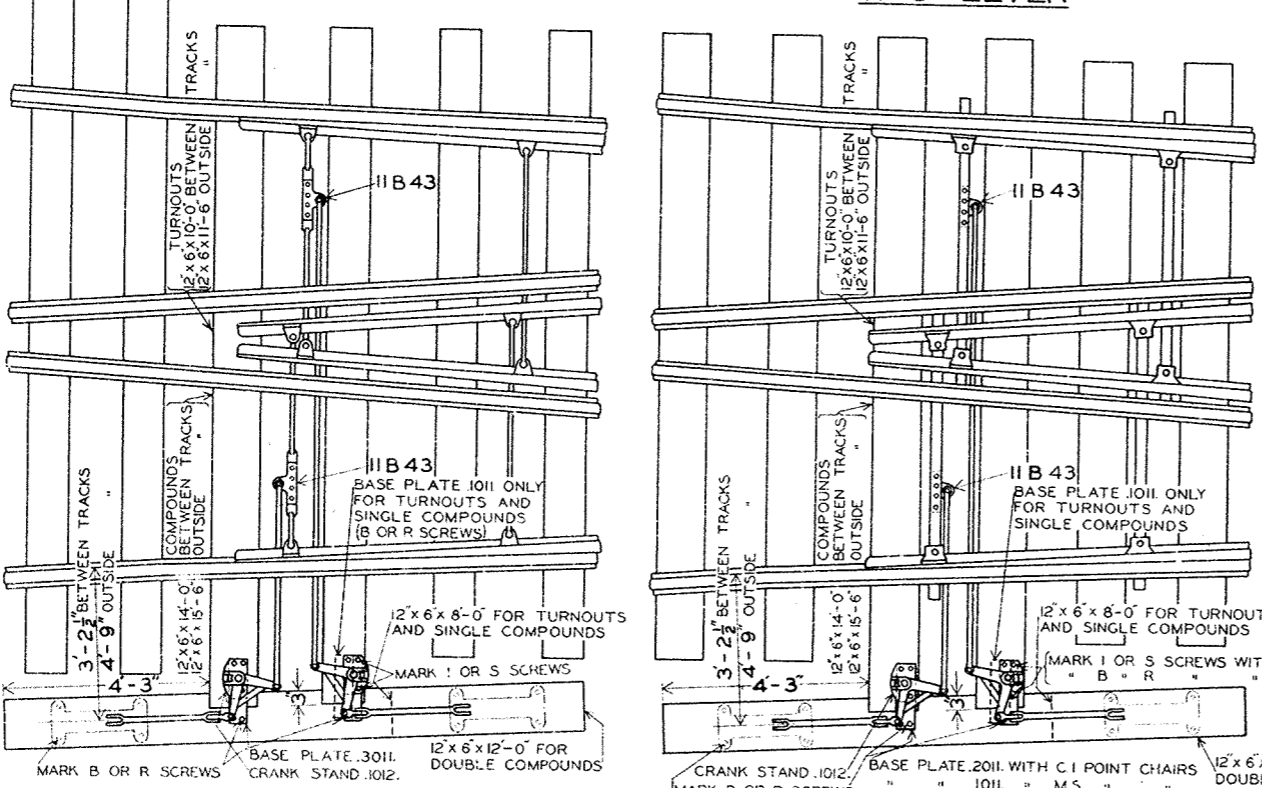
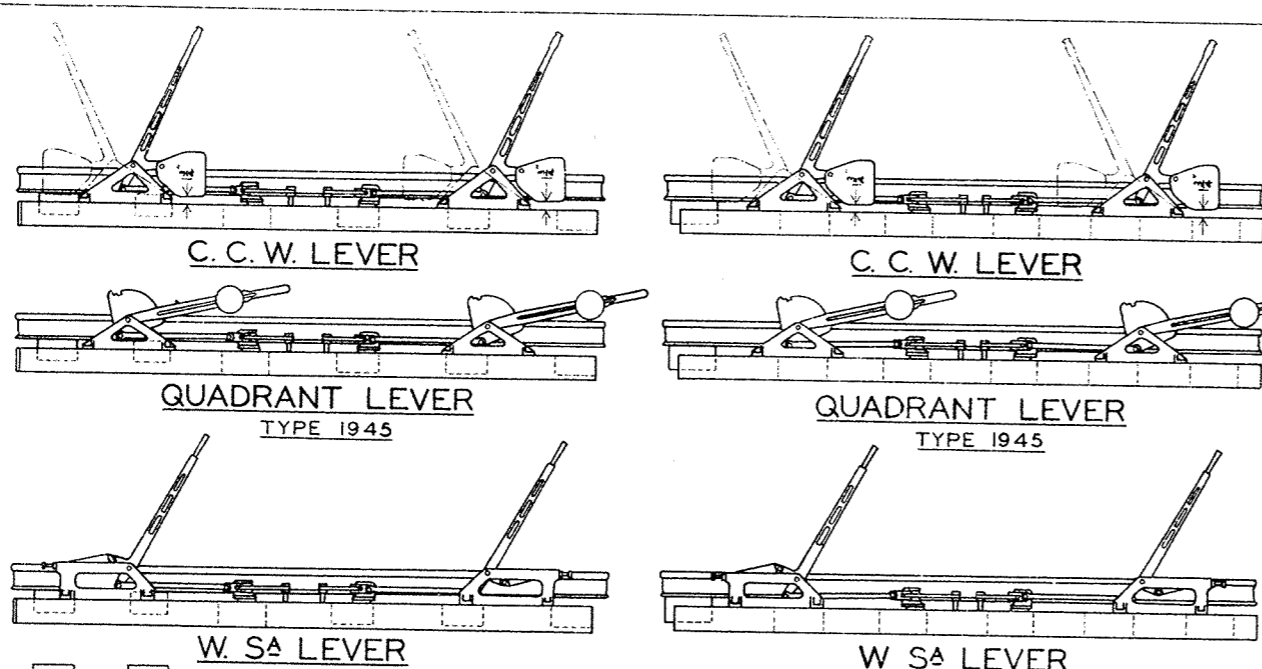


SHORT PLATE .1059.

THICKNESS OF PLATE	DETAIL NO	
	LONG	SHORT
5/8"	.1058.	.1059.
1"	.2058.	.2059.

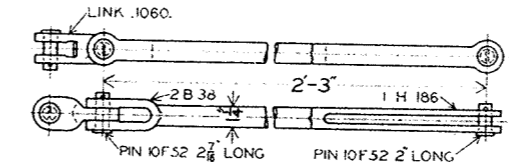
NOTE. MATERIAL, MILD STEEL PLATE. PLATES TO BE MARKED OFF FROM TEMPLATES AND PUNCHED TO TOLERANCES SHOWN. SIDES OF SQUARE HOLES TO BE PARALLEL TO SIDE OF PLATE. INSERT BOLTS AS INDICATED THUS

V.R. SLEEPER PLATES FLAT FOR TYPE 1939 INS. JOINTS CROSSING APPLICATION	APPROVED	ADOPTED
	14/1/44 CHIEF CIVIL ENG	1944
	Checked - R.S. Passed - R.S.	PLAN NO
	Eng. MR WS.	F.455A

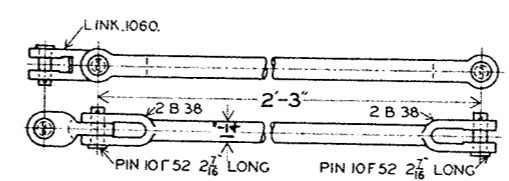


X LAYOUT

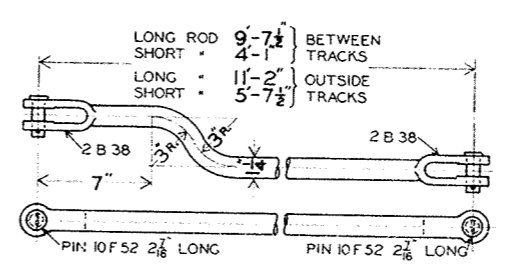
Y LAYOUT



QUADRANT & CONVERTED QUADRANT LEVER ROD



C.C.W. & W. SA LEVER ROD



RIGHT ANGLE PULL ROD

MATERIAL SUPPLIED IN ASSEMBLIES

LEVER RODS SUPPLIED COMPLETE WITH LINK .1060, PINS 10F 52, AND 1/4" SPLIT PINS.

RIGHT ANGLE PULL RODS SUPPLIED COMPLETE WITH PINS 10F 52, AND 1/4" SPLIT PINS.

SHORT RODS ONLY REQUIRED FOR TURNOUTS AND SINGLE COMPOUNDS.

CRANK STAND .1012, SUPPLIED COMPLETE WITH CRANK IF 3229, PIN IF 1437, WASHER 4F 3069, AND 1/8" SPLIT PIN.

SPREADERS. REFER TO PLAN Nos. F1240 AND F1268. QUOTE THE NUMBERS AND GIVE THE LENGTH 'A' REQUIRED FOR X LAYOUT POINTS.

QUADRANT LEVER WEIGHTS

TYPE L WEIGHT ROD FOR POINTS UNDER 80 LB MATERIAL.

" H " " " " 80 LB & OVER.

DIRECTIONS FOR INSTALLING

C. C. W. LEVER

- 1 CONNECT UP THE RODDING.
- 2 SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED 1/2" CLEAR OF THE TIMBER WHEN THE SWITCH IS HOME AGAINST THE STOCK RAIL.
- 3 MARK OFF, BORE FOR SET SCREWS AND TURN IN THE SCREWS.
- 4 TEST OPERATION.

QUADRANT LEVER TYPE 1945

- 1 CONNECT UP THE RODDING.
- 2 SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED CLEAR OF LEVER ROD, CRANK OR OTHER OBSTRUCTION WHEN THE SWITCH IS HOME AGAINST THE STOCK RAIL.
- 3 MARK OFF, BORE FOR SET SCREWS AND TURN IN THE SCREWS.
- 4 TEST OPERATION.

W. SA LEVER

- 1 TOTALLY RELEASE THE SPRING COMPRESSION SCREW.
- 2 CONNECT UP THE RODDING.
- 3 PLACE THE SWITCHES HALF OPEN.
- 4 PLACE THE LEVER IN VERTICAL POSITION.
- 5 SET LEVER BASE IN POSITION, MARK OFF, BORE FOR SET SCREWS AND TURN IN THE SCREWS.
- 6 ADJUST THE SPRING COMPRESSION SCREW TO HOLD THE SWITCHES TO THE STOCK RAILS.
- 7 TIGHTEN THE LOCK NUT ON THE SPRING COMPRESSION SCREW.
- 8 TEST OPERATION.

MATERIAL	X LAYOUTS		Y LAYOUTS	
	XD	X XM & XS	C.I. CHAIRS YD & YS	M.S. CHAIRS YD & YS
POINT LEVER	2	1	2	1
CRANK & STAND	2	1	2	1
LEVER ROD	2	1	2	1
RIGHT ANGLE PULL ROD } LONG	1	-	1	-
} SHORT	1	-	1	-
BASE PLATE .1011	-	-	2	2
" " .2011	-	-	2	2
" " .3011	2	1	-	-
SCREWS MARK B OR R	12	12	12	20
" " " " S	8	4	8	4
TIMBER 12' x 6' x 12'-0"	1	-	1	-
" " 12' x 6' x 8'-0"	-	-	-	1

VICTORIAN RAILWAYS WAY & WORKS BRANCH

APPROVED *[Signature]* CHIEF CIVIL ENGINEER

ADOPTED **1945**

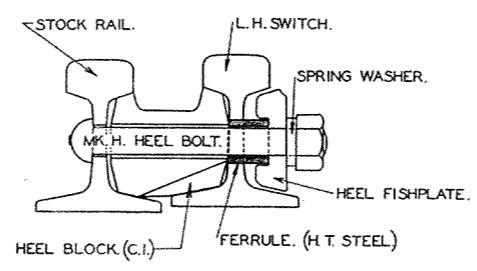
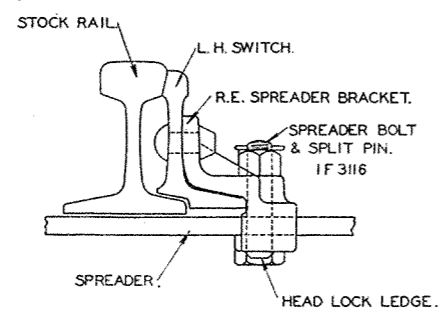
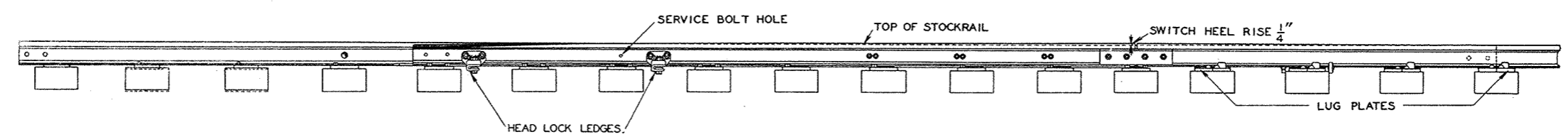
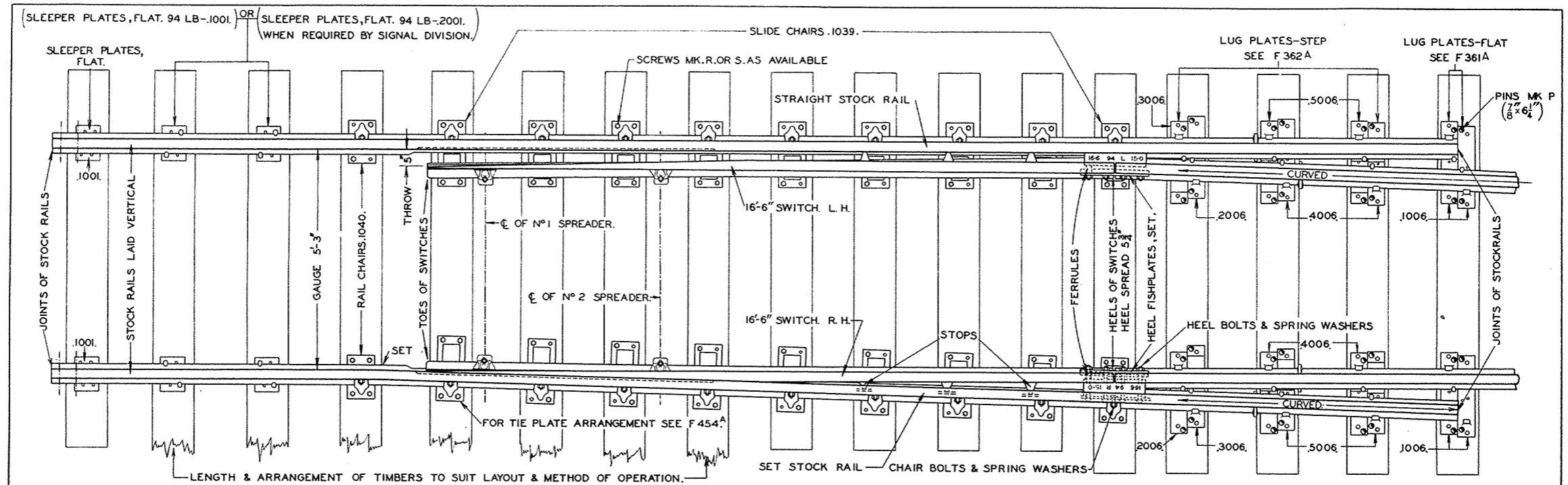
CHECKED *[Signature]*

PASSED *[Signature]* ENGINEER OF M. & W. S.

POINT LEVERS

INSTALLATION ARRANGEMENTS

PLAN No **F 456**



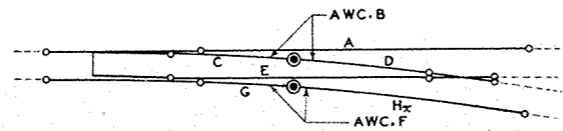
REFERENCE.	DETAIL N°	DRG. N°
LUG PLATES—FLAT.	.1006.	F 361A
LUG PLATES—STEP.	2006, 3006, 4006, 5006.	F 362A
SLEEPER PLATES—FLAT.	1001, 2001.	F 374A
SPREADER—ORDERING LIST.		F 479
SPREADER—BOLTS.	1F 3116	F 3116
TIE PLATE ARRANGEMENTS.		F 454A
FASTENINGS FOR V.Y. POINTS.		F 507
POINT LEVERS—END PULL ARRANGEMENTS.		F 513

NOTES.
 RIGHT HAND POINTS COMPRISE :—
 1/2 SET POINTS (STRAIGHT RIGHT HAND)
 1/2 SET POINTS (SET RIGHT HAND)
 POINTS DESPATCHED IN HALF-SET ASSEMBLIES TO BE INSTALLED AS RECEIVED, AND SERVICE BOLTS TAKEN INTO STOCK.

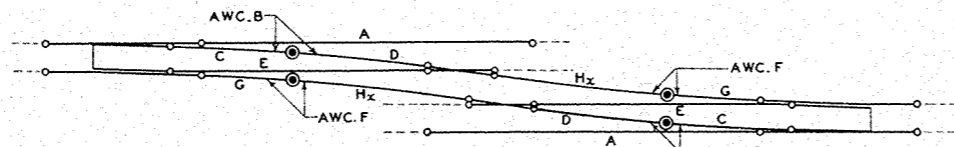
VICTORIAN RAILWAYS. WAY & WORKS BRANCH.

V.Y. POINTS
 WITH MILD STEEL CHAIRS.
 TYPICAL ARRANGEMENT.
 16'-6" R.H. 94 LB. A.S.

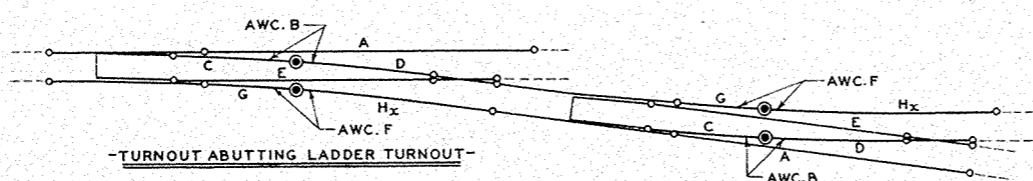
APPROVED	ADOPTED
<i>[Signature]</i>	1948
CHIEF CIVIL ENGINEER.	
CHECKED: G. J. E.	
PASSED: <i>[Signature]</i>	
ENGINEER OF M. & W. S.	F 462



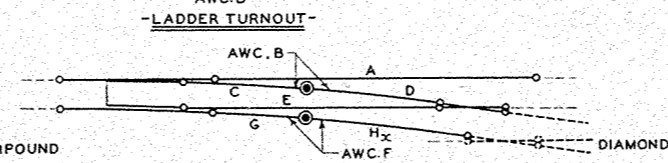
- BASIC TURNOUT -



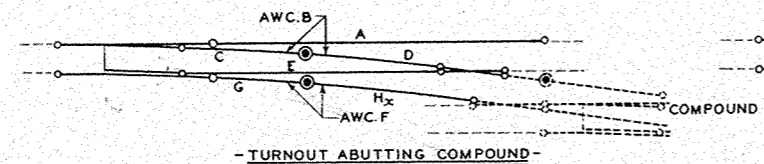
- PARALLEL TRACK CROSSOVER -



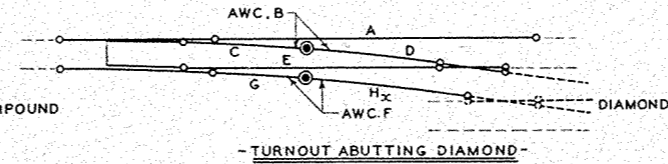
- TURNOUT ABUTTING LADDER TURNOUT -



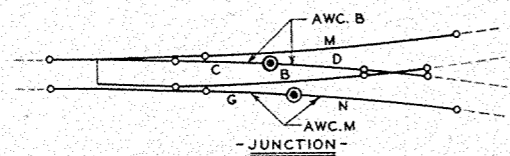
- LADDER TURNOUT -



- TURNOUT ABUTTING COMPOUND -



- TURNOUT ABUTTING DIAMOND -

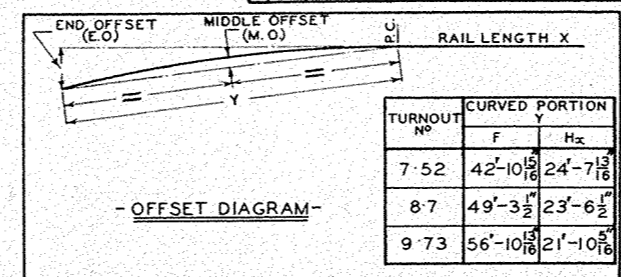


- JUNCTION -

JUNCTIONS			
LAYOUT	15'-0" N° 5-0	15'-0" N° 6-0	
	INSULATED	WELDED	INSULATED WELDED
B	36'-0 ¹¹ / ₁₆	36'-0 ¹¹ / ₁₆	42'-11 ³ / ₄ 42'-11 ³ / ₄
M.O.	3 ⁷ / ₈	3 ⁷ / ₈	3 ¹³ / ₁₆ 3 ¹³ / ₁₆
C	18'-7 ¹¹ / ₁₆		22'-1 ⁵ / ₈
M.O.	1 ¹ / ₁₆		1 ¹ / ₁₆
D	17'-5 ¹¹ / ₁₆		20'-9 ³ / ₄
M.O.	7 ¹¹ / ₁₆		7 ¹¹ / ₁₆
G	16'-6 ¹¹ / ₁₆		20'-0 ² / ₈
M.O.	13 ¹¹ / ₁₆		13 ¹¹ / ₁₆
M	48'-9 ¹¹ / ₁₆	48'-9 ¹¹ / ₁₆	55'-6 ⁷ / ₈ 55'-6 ⁷ / ₈
M.O.	7 ³ / ₁₆	7 ³ / ₁₆	6 ¹ / ₁₆ 6 ¹ / ₁₆
N	32'-2 ¹¹ / ₁₆		35'-5 ⁷ / ₈
M.O.	3 ¹ / ₈		2 ⁵ / ₈

CLOSURE H _x	
ANGLE	CLOSURE
7-52	H
8-7	H ₁
9-73	H ₂

LADDER TURNOUTS						
CLOSURES B,C,D,E & H _x AS FOR BASIC TURNOUTS ABOVE						
LAYOUT	15'-0" N° 7-52	16'-6" N° 8-7	16'-6" N° 8-7	16'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73
	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED
A	54'-9 ³ / ₄	54'-9 ³ / ₄	66'-1 ⁷ / ₈	66'-1 ⁷ / ₈	80'-4 ⁵ / ₈	80'-4 ⁵ / ₈
F		61'-11 ⁵ / ₈		72'-0 ¹¹ / ₁₆		80'-0 ¹¹ / ₁₆
M.O.		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆
E.O.		1'-11 ¹ / ₄		1'-10"		1'-11 ³ / ₁₆
G	16'-11 ¹ / ₄		27'-0 ¹¹ / ₁₆		35'-0 ¹¹ / ₁₆	
M.O.	7 ¹¹ / ₁₆		1 ¹¹ / ₁₆		2 ³ / ₁₆	



- OFFSET DIAGRAM -

BASIC TURNOUTS										
LAYOUT	15'-0" N° 7-52	16'-6" N° 8-7	16'-6" N° 8-7	16'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73
	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED
A	63'-8 ³ / ₄	63'-8 ³ / ₄	71'-5 ⁵ / ₈	71'-5 ⁵ / ₈	80'-3 ¹¹ / ₈	80'-3 ¹¹ / ₈	74'-0 ¹¹ / ₄	74'-0 ¹¹ / ₄	82'-5 ¹ / ₄	82'-5 ¹ / ₄
B		49'-7 ¹¹ / ₁₆		58'-1 ³ / ₄		65'-8 ¹¹ / ₁₆		60'-11 ³ / ₈		68'-1 ¹ / ₄
M.O.		7 ¹¹ / ₁₆		7 ¹¹ / ₁₆		7 ¹¹ / ₁₆		6 ⁵ / ₈		8 ¹ / ₁₆
C	24'-2 ⁷ / ₈		33'-11 ³ / ₄		43'-3 ¹ / ₄		36'-9 ³ / ₈		42'-0 ³ / ₈	
M.O.	1 ¹³ / ₁₆		2 ⁵ / ₈		3 ⁵ / ₁₆		3 ¹ / ₈		3 ³ / ₁₆	
D	25'-4"		24'-1 ⁵ / ₈		22'-4 ⁵ / ₈		24'-1 ⁵ / ₈		26'-0 ² / ₂	
M.O.	2"		1 ⁵ / ₁₆		7 ¹ / ₈		1 ⁵ / ₁₆		1 ¹ / ₄	
E	49'-4 ¹ / ₂	49'-4 ¹ / ₂	57'-11 ³ / ₈	57'-11 ³ / ₈	65'-6"	65'-6"	60'-9"	60'-9"	67'-11 ¹ / ₄	67'-11 ¹ / ₄
F		63'-3 ¹¹ / ₈		70'-9"		80'-0 ¹¹ / ₂		73'-3 ¹¹ / ₈		82'-2 ⁵ / ₈
M.O.		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆
E.O.		1'-11 ¹ / ₄		1'-10"		1'-11 ³ / ₁₆		1'-10"		1'-11 ³ / ₁₆
G	18'-2 ³ / ₄		25'-8 ⁵ / ₈		35'-0 ¹¹ / ₈		28'-3 ³ / ₈		37'-2 ¹ / ₄	
M.O.	1 ¹ / ₁₆		1 ¹ / ₂		2 ³ / ₁₆		1 ⁷ / ₈		2 ¹ / ₂	
H _x	45'-0 ^H		45'-0 ^H		45'-0 ^H		45'-0 ^H		45'-0 ^H	
E.O.	7 ¹¹ / ₁₆		5 ¹ / ₁₆		3 ¹ / ₁₆		5 ¹ / ₁₆		3 ¹ / ₁₆	

PARALLEL TRACK CROSSOVERS										
CLOSURES A, B, C, D, E & G AS FOR BASIC TURNOUTS ABOVE										
LAYOUT	15'-0" N° 7-52	16'-6" N° 8-7	16'-6" N° 8-7	16'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73
	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED
F		51'-3 ¹ / ₂		56'-6 ⁵ / ₈		65'-3 ⁷ / ₈		59'-1 ³ / ₈		67'-5 ⁷ / ₈
M.O.		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆
E.O.		1'-11 ¹ / ₄		1'-10"		1'-11 ³ / ₁₆		1'-10"		1'-11 ³ / ₁₆
H _x	33'-0 ³ / ₈ H		30'-9 ⁵ / ₈ H		30'-3 ³ / ₈ H		30'-9 ⁵ / ₈ H		30'-3 ³ / ₈ H	
E.O.	7 ¹¹ / ₁₆		5 ¹ / ₁₆		3 ¹ / ₁₆		5 ¹ / ₁₆		3 ¹ / ₁₆	

TURNOUT ABUTTING LADDER TURNOUT										
CLOSURES A, B, C, D, E & G AS FOR BASIC TURNOUTS ABOVE										
LAYOUT	15'-0" N° 7-52	16'-6" N° 8-7	16'-6" N° 8-7	16'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73
	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED
F		55'-7 ⁷ / ₈		64'-5 ⁵ / ₈		80'-0 ¹¹ / ₂		67'-0 ³ / ₈		82'-2 ⁵ / ₈
M.O.		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆
E.O.		1'-11 ¹ / ₄		1'-10"		1'-11 ³ / ₁₆		1'-10"		1'-11 ³ / ₁₆
H _x	37'-4 ¹ / ₂ H		38'-8 ⁵ / ₈ H		45'-0 ^H		38'-8 ⁵ / ₈ H		45'-0 ^H	
E.O.	7 ¹¹ / ₁₆		5 ¹ / ₁₆		3 ¹ / ₁₆		5 ¹ / ₁₆		3 ¹ / ₁₆	

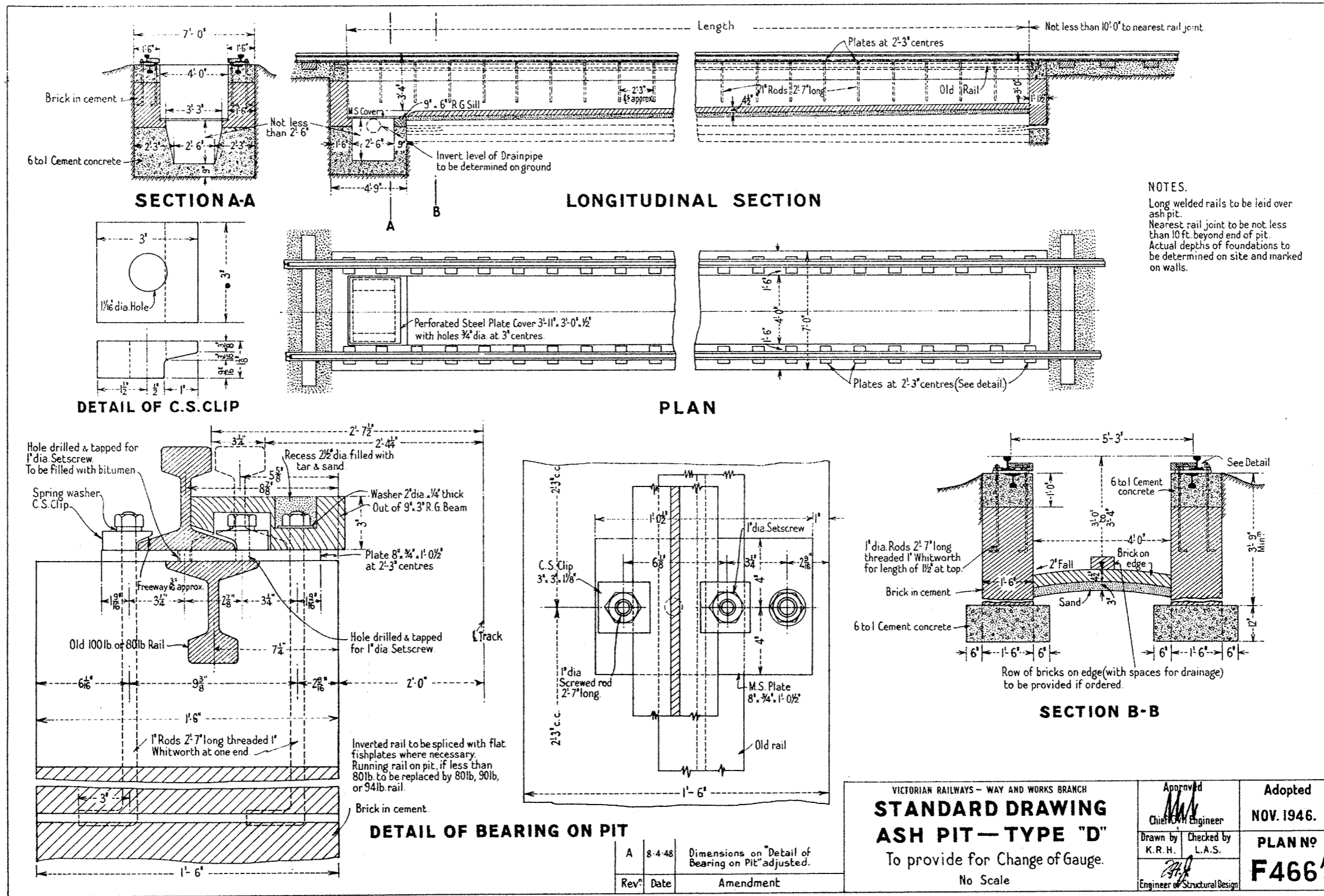
TURNOUT ABUTTING COMPOUND & DIAMOND										
CLOSURES B, C, D, E & G AS FOR BASIC TURNOUTS ABOVE										
LAYOUT	15'-0" N° 7-52	16'-6" N° 8-7	16'-6" N° 8-7	16'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73	22'-6" N° 8-7	22'-6" N° 9-73
	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED	INSULATED	WELDED
A	65'-9"	65'-9"	73'-4 ⁵ / ₈	73'-4 ⁵ / ₈		75'-11 ¹ / ₄		75'-11 ¹ / ₄		
F		51'-3 ¹ / ₂		56'-6 ⁵ / ₈		65'-3 ⁷ / ₈		59'-1 ³ / ₈		67'-5 ⁷ / ₈
M.O.		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆		5 ¹ / ₂		5 ¹³ / ₁₆
E.O.		1'-11 ¹ / ₄		1'-10"		1'-11 ³ / ₁₆		1'-10"		1'-11 ³ / ₁₆
H _x	33'-0 ³ / ₈ H		30'-9 ⁵ / ₈ H		30'-3 ³ / ₈ H		30'-9 ⁵ / ₈ H		30'-3 ³ / ₈ H	
E.O.	7 ¹¹ / ₁₆		5 ¹ / ₁₆		3 ¹ / ₁₆		5 ¹ / ₁₆		3 ¹ / ₁₆	

CLOSURES LONGER THAN 45'-0" ARE SUPPLIED INITIALLY CURVED AT THE ENDS ONLY, AND MUST BE LAID IN TO THE OFFSETS SHOWN HEREON.

NOTES - OFFSETS ARE MEASURED FROM THE CHORD OR THE TANGENT AS SHOWN BY THE OFFSET DIAGRAM.
 CLOSURES F & H_x ARE PARTLY CURVED X = TOTAL LENGTH SHOWN IN MAIN TABLE.
 Y = LENGTH OF CURVED PORTION.
 QUARTER POINT OFFSET = 3/4 MIDDLE OFFSET
 ENDS OF CLOSURES BORED WITH 2 HOLES TO A.S.S. E22-1939.
 ALTERNATIVE WELDED CLOSURES SHOWN THUS - AWC.

ORDERING PARTICULARS REQUIRED - WEIGHT, LENGTH, LETTER AND FOR F & H_x CLOSURES, THE HAND.
 FOR EXAMPLE - 107 LB. 30'-9⁵/₈ H₁ R.H.
 IDENTIFICATION MARKS - PARTICULARS ARE STAMPED ON THE ENDS OF THE CLOSURES WHEN MANUFACTURED.
 DETERMINATION OF HAND OF F & H_x CLOSURES - THE HAND OF F & H_x CLOSURES IS IDENTICAL TO THE LAYOUT HAND.

VICTORIAN RAILWAYS	WAY & WORKS BRANCH	APPROVED	ADOPTED
CLOSURES		CHIEF CIVIL ENGINEER	1948
TRACKWORK LAYOUTS		CHECKED: G.E.	PLAN N°
11'-8" CENTRES		PASSED: [Signature]	F464
94 & 107 LB. A.S.		ENGINEER M & W.S.	



NOTES.
 Long welded rails to be laid over ash pit.
 Nearest rail joint to be not less than 10 ft. beyond end of pit.
 Actual depths of foundations to be determined on site and marked on walls.

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH

STANDARD DRAWING
ASH PIT - TYPE "D"
 To provide for Change of Gauge.
 No Scale

Approved <i>M.A.</i> Chief Engineer	Adopted NOV. 1946.
Drawn by K.R.H.	Checked by L.A.S.
<i>J.P.</i> Engineer of Structural Design	PLAN No F466A

A	8-4-48	Dimensions on "Detail of Bearing on Pit" adjusted.
Rev ^s	Date	Amendment

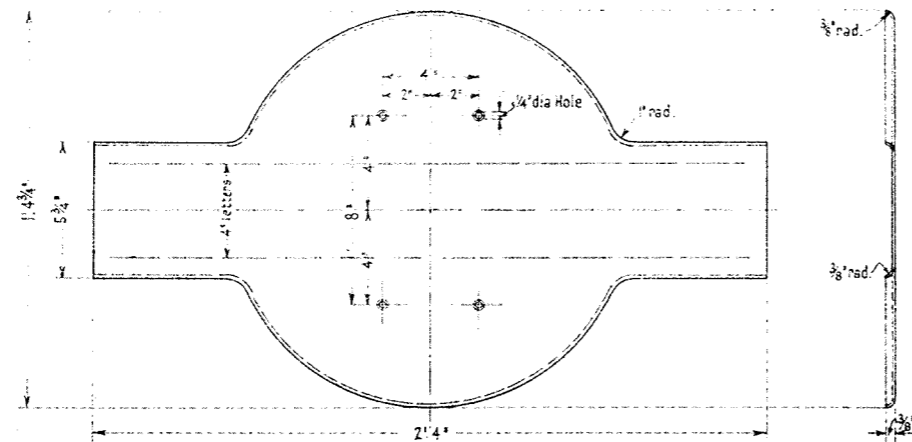


Plate to be 20 S.W.G. M.S.

TYPE 'A'

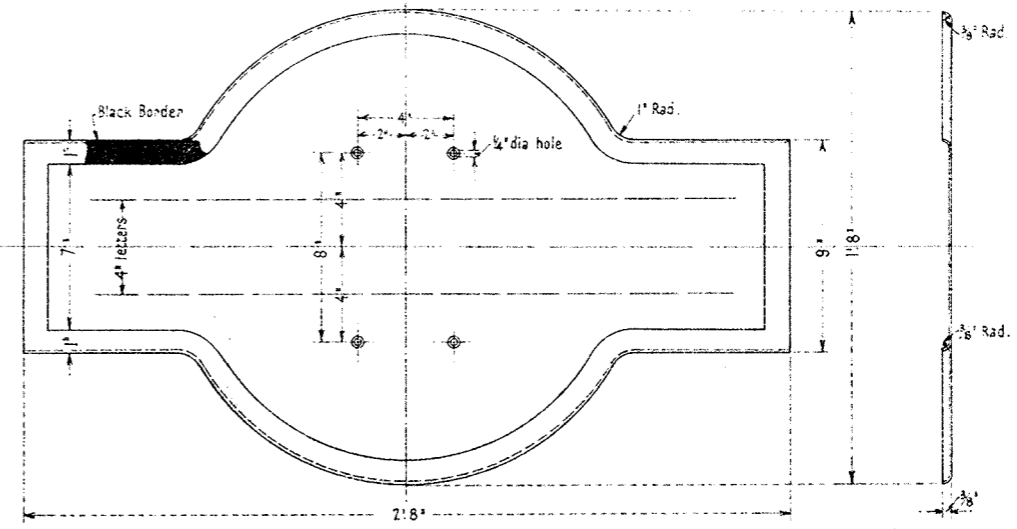


Plate to be 20 S.W.G. M.S.

TYPE 'B'

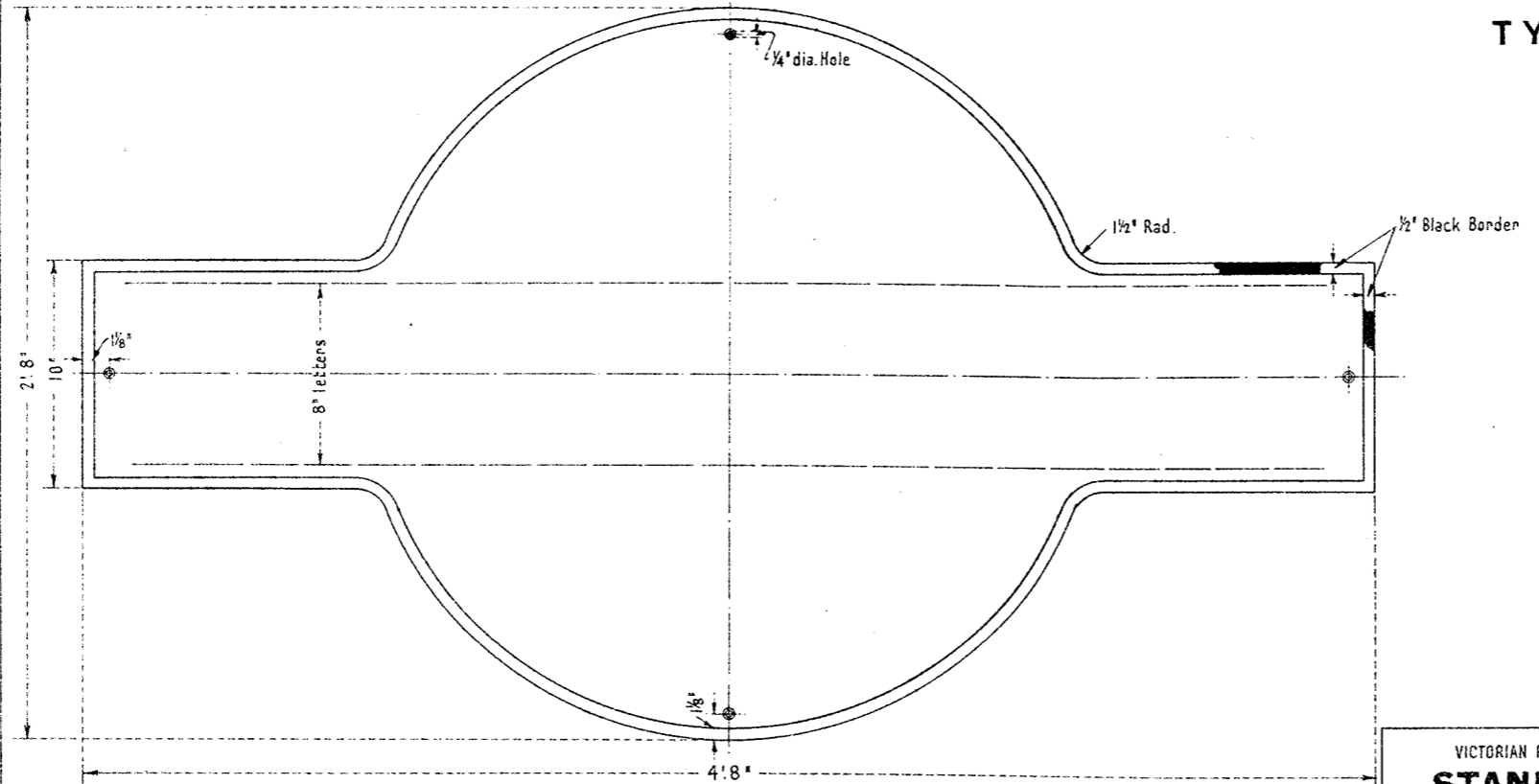
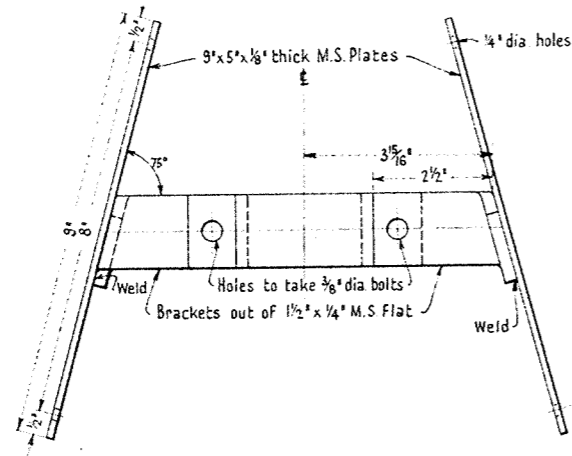


Plate to be 18 S.W.G. M.S.

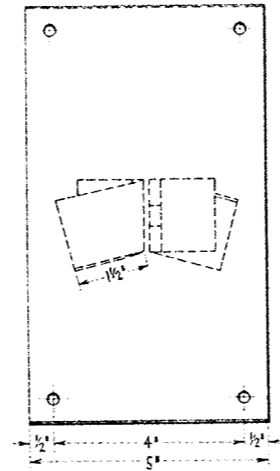
TYPE 'C'

NOTES - Plates to be Vitreous Enamelled
 Black Letters on White Background.
 All holes to be 1/4" dia. loose Non-ferrous
 Eyeletted.

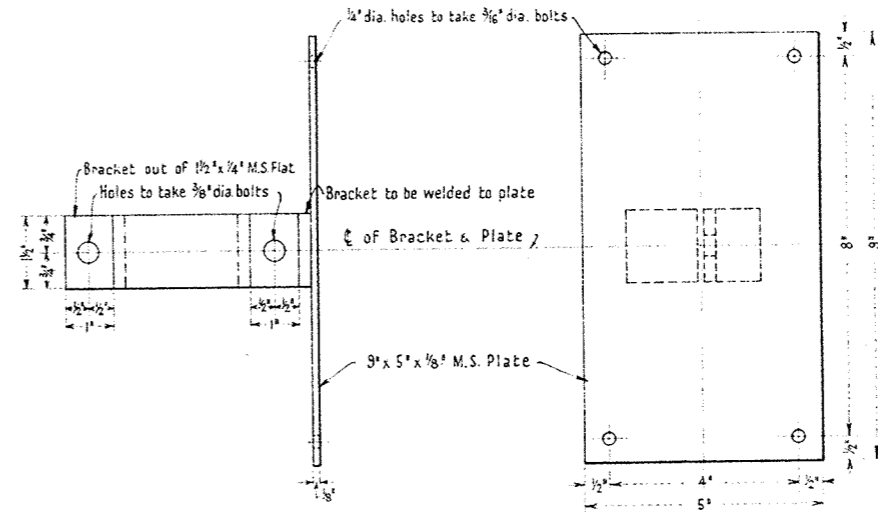
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	OCT. 1944
STATION NAME PLATES FOR		Chief Civil Engineer	PLAN NO
SUBURBAN AREA		Drawn by <i>C.M.F.</i> / Checked by <i>L.E.M.</i>	
Scale = 1 1/2" = 1'-0"		<i>[Signature]</i> Chief Architect	F467



ELEVATION

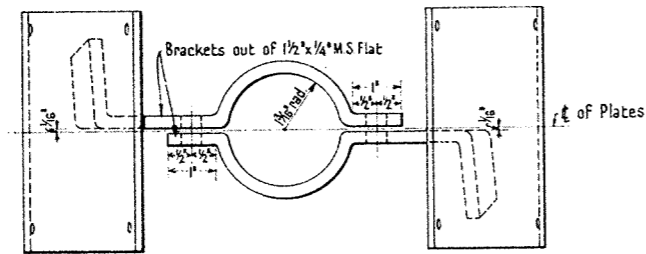


END ELEVATION

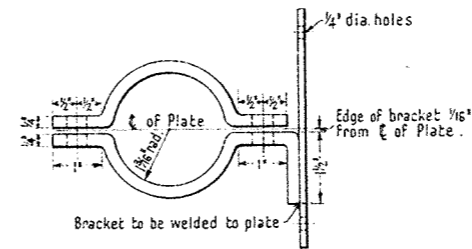


ELEVATION

END ELEVATION

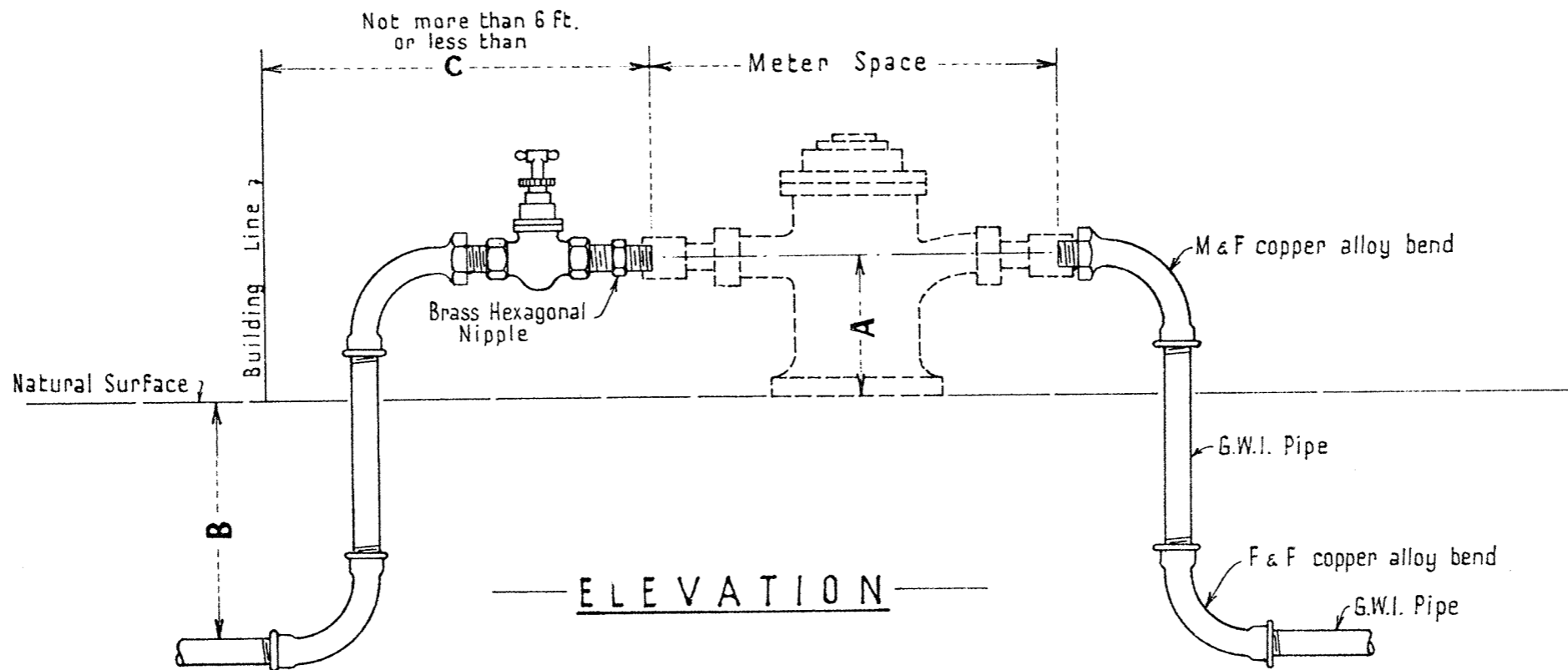


PLAN



PLAN

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.S.</i>	MAY 1945
MOUNTINGS FOR TYPES 'A' & 'B'		Chief Civil Engineer	PLAN No.
SUBURBAN STATION NAME PLATES		Drawn by C.M.P. / Checked by R.C.	
Scale = 3" = 1'-0"		<i>H. Sutcliffe</i>	F 468
		Chief Architect	



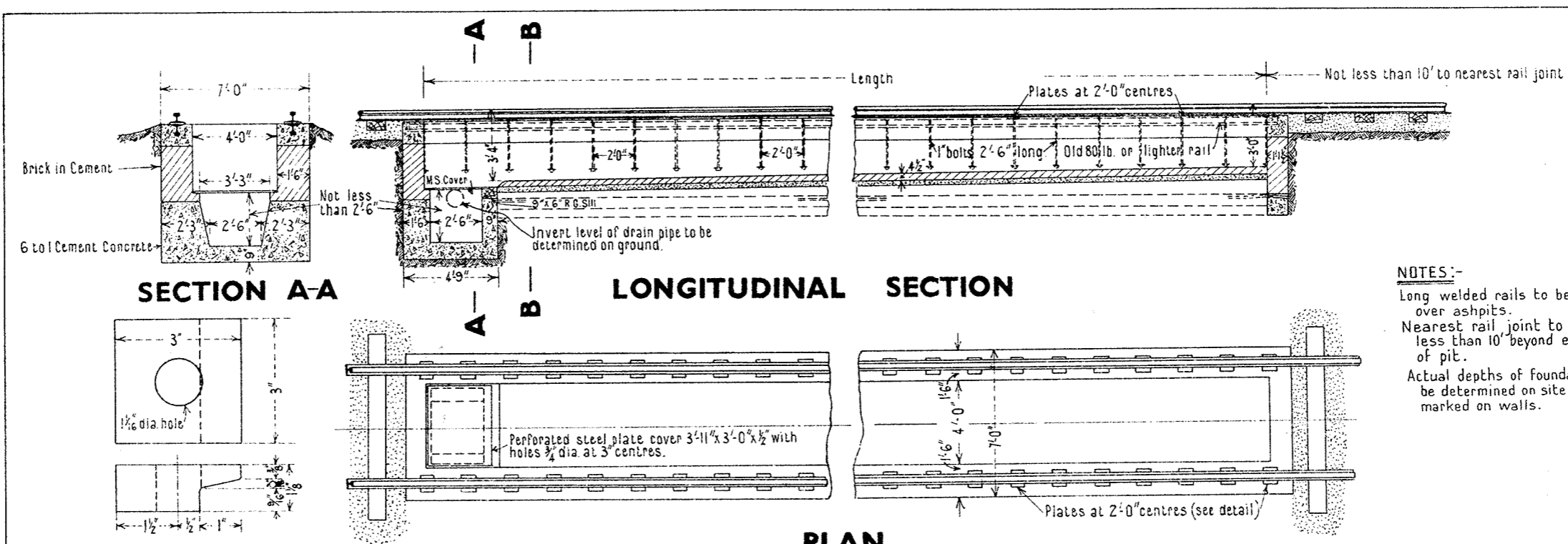
ELEVATION

Water Meter connections shown in full lines.

NOTE :- When specially directed meter is to be placed close to the Department's Main.

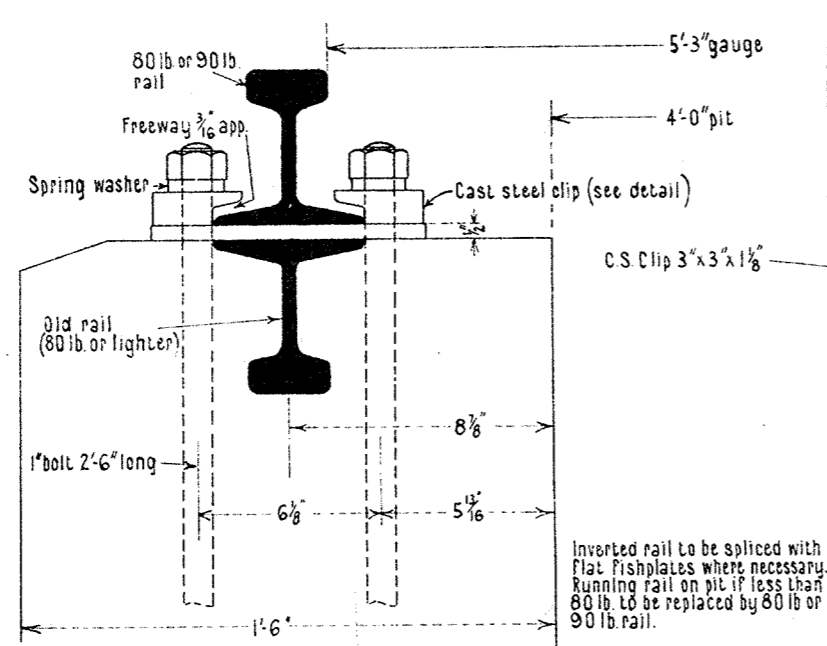
TABLE				
Meters	Meter Space	A	B	C
¾"	10¼"	6"	12"	13"
1"	11¾"	7"	12"	14"
1¼"	13¼"	7"	12"	15"
1½"	14½"	8"	12"	16"

VICTORIAN RAILWAYS - WAY & WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.S.</i>	FEB. 1945
APPROVED METHOD OF FIXING METER CONNECTIONS FOR METERS IN TABLE		Chief Eng. & Inspector	PLAN No F469
Drawn by	Checked by	C.T. C.A.M.	
Eng. of Mach. & W.S.			

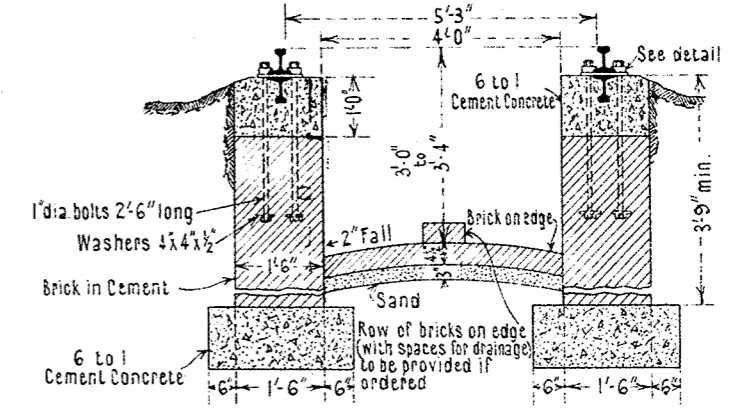
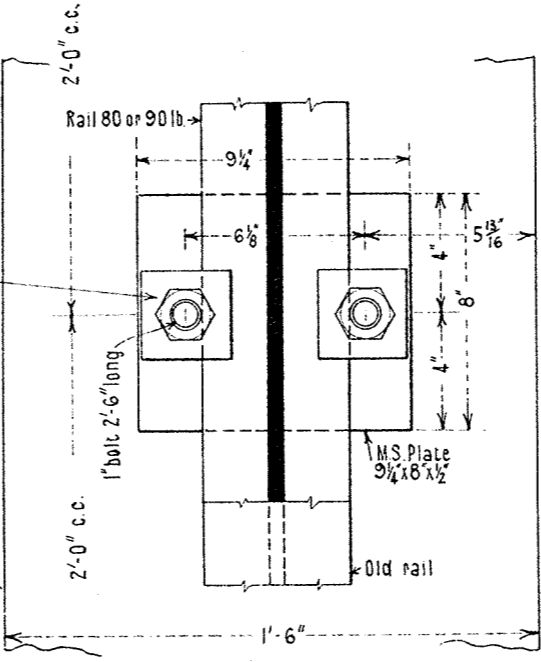


NOTES:-
 Long welded rails to be laid over ashpits.
 Nearest rail joint to be not less than 10' beyond end of pit.
 Actual depths of foundations to be determined on site and marked on walls.

DETAIL OF C.S. CLIP



DETAIL OF BEARING ON PIT

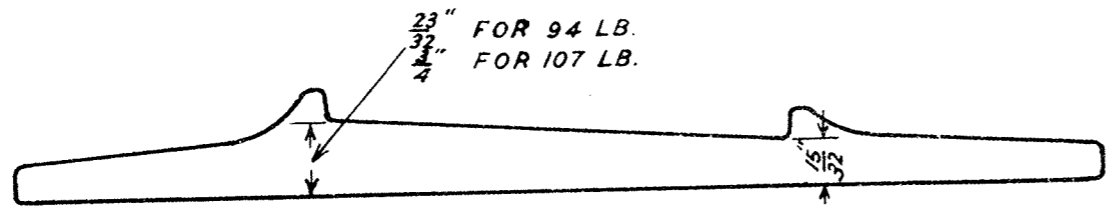


SECTION B-B

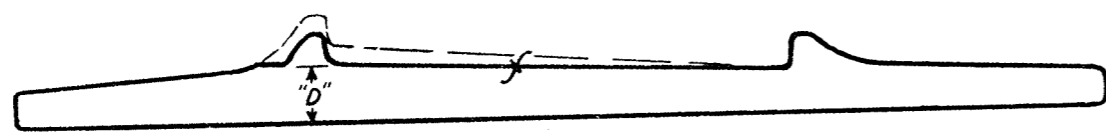
NOTE:- This plan supersedes Plan N° 328/36.

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH STANDARD ASHPIT TYPE "C"	Approved Chief Civil Engineer	Adopted MAY 1945
	Drawn by F. E. I.	Checked by R. S. M.

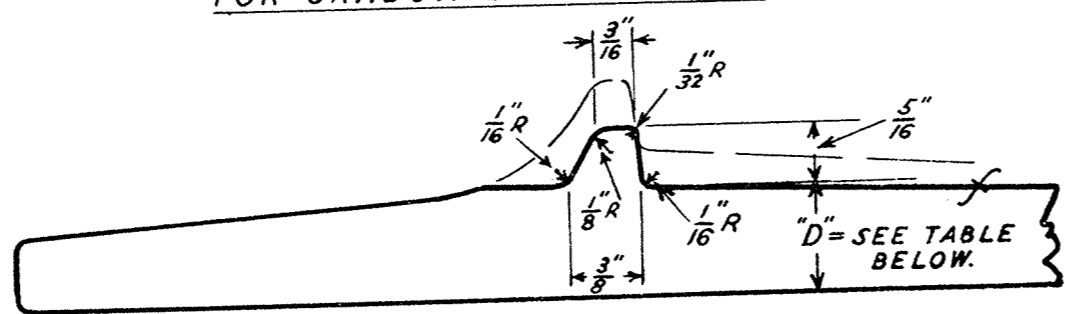
Eng' of Struct' Design.



STANDARD DOUBLE SHOULDER SLEEPER PLATE
1939-A.S.

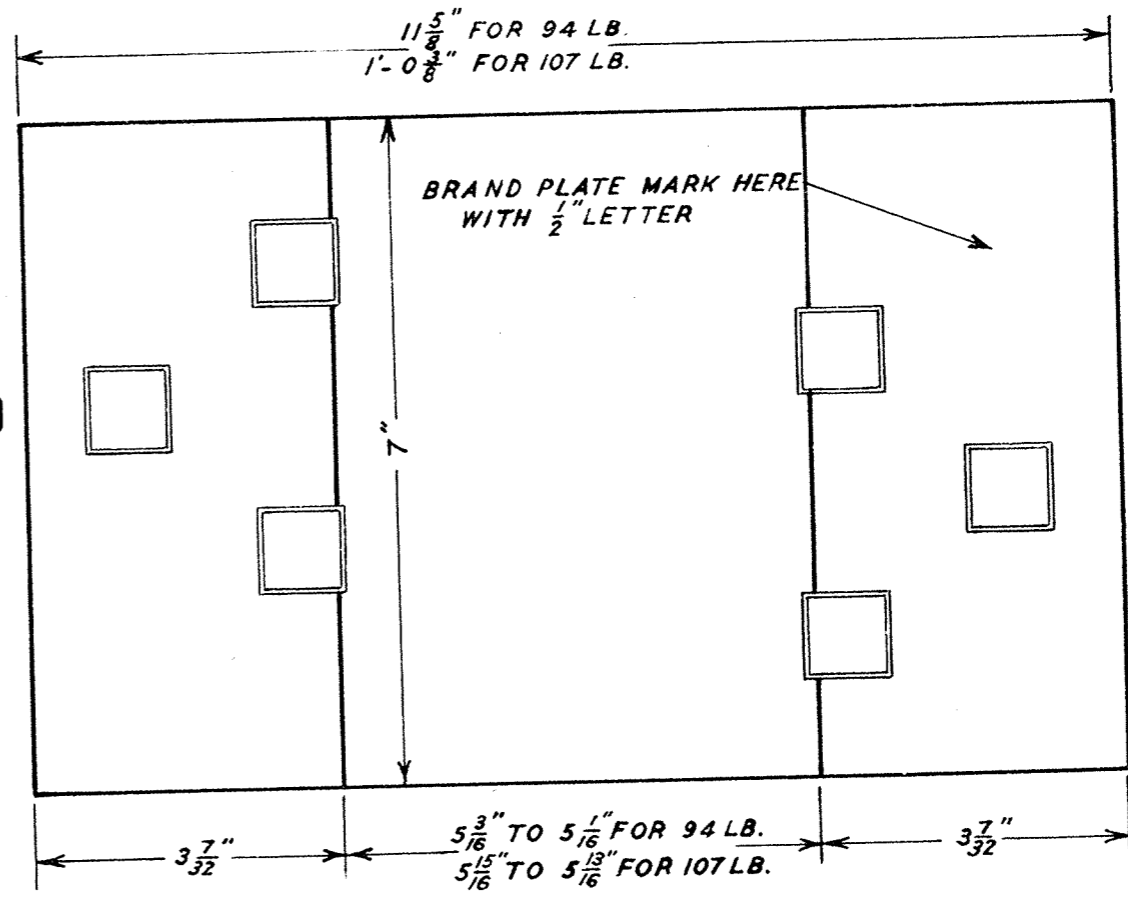


DOUBLE SHOULDER SLEEPER PLATES
FOR GRADUATED RAIL CANT



DETAIL OF MACHINING OF SHOULDER

PLATE MARK	DIMENSION "D"	
	94 LB.	107 LB.
A	$\frac{21}{32}$ "	$\frac{11}{16}$ "
B	$\frac{19}{32}$ "	$\frac{5}{8}$ "
C	$\frac{17}{32}$ "	$\frac{9}{16}$ "



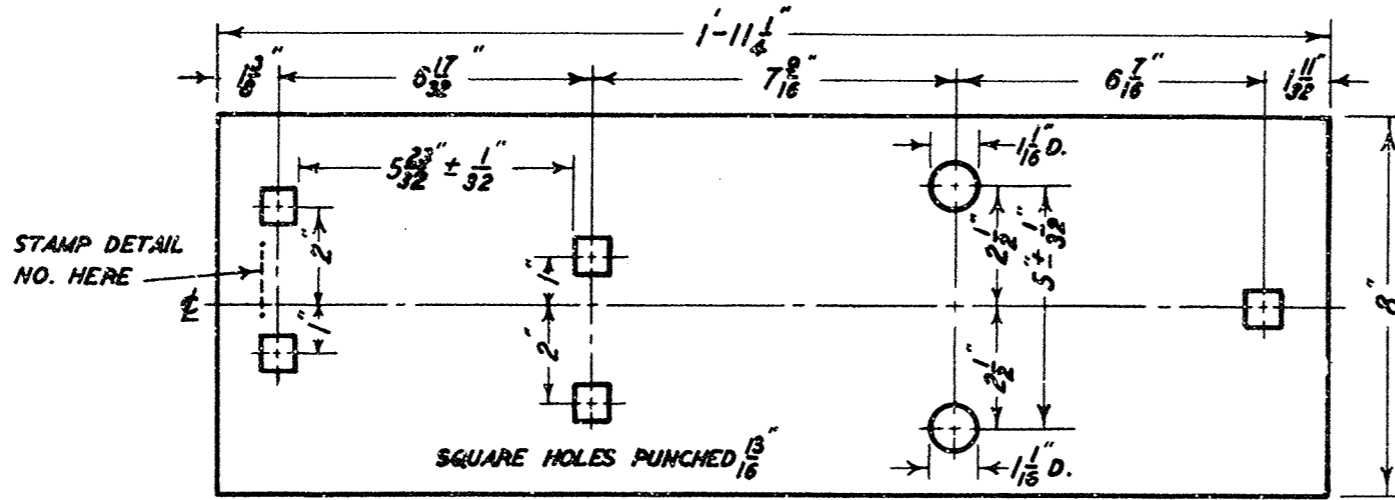
PLAN

V. R.
DOUBLE SHOULDER
SLEEPER PLATES
1939 A.S.

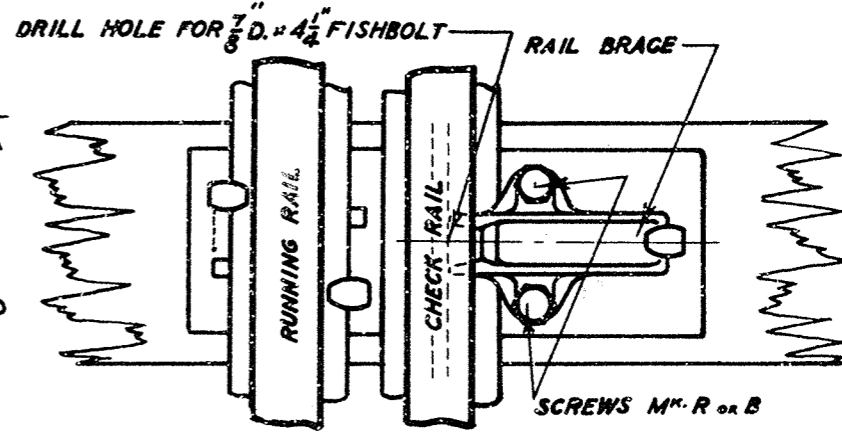
Approved

 Chief Civil Eng'r
 Checked L.G.E.
 Passed
 Eng'r of M.&W.S.

ADOPTED
 1945
 PLAN No
 F471

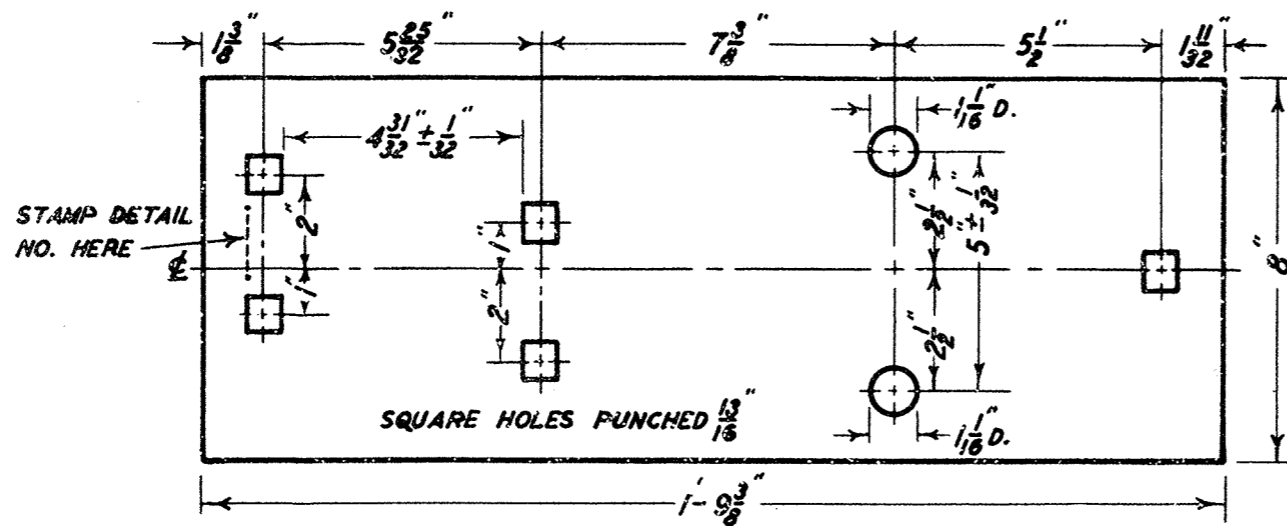


107 LB. AS.



TYPICAL ARRANGEMENT

94 LB. AS.



94 LB. AS.

THICKNESS OF PLATE	DETAIL NO.	
	94 LB.	107 LB.
5/8"	.1062.	.1063.
1"	.2062.	.2063.

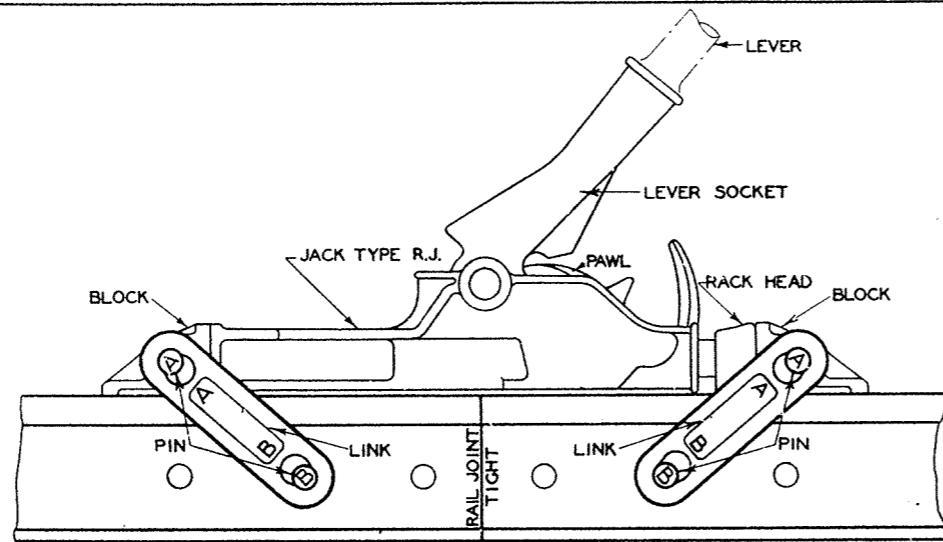
NOTES:- MATERIAL - MILD STEEL PLATE.

PLATES TO BE MARKED OFF FROM TEMPLATES

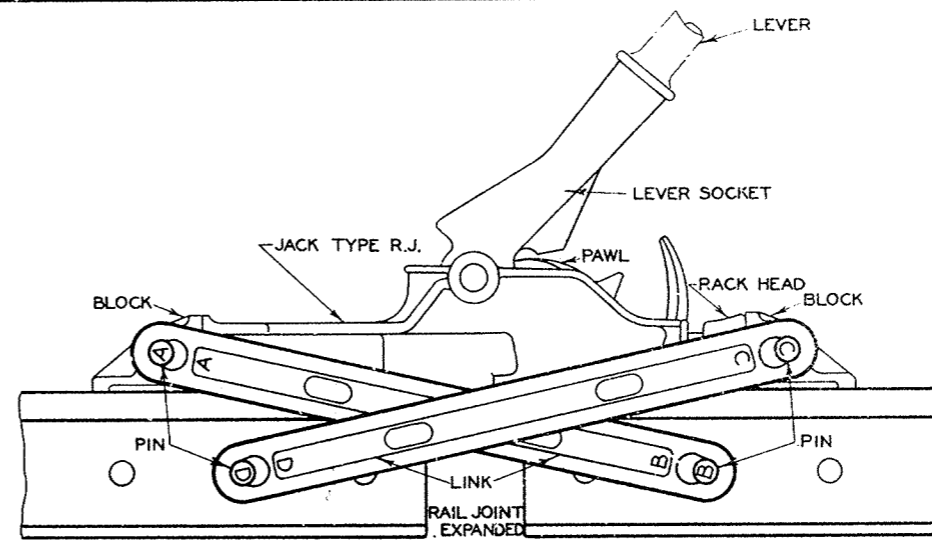
AND PUNCHED TO TOLERANCES SHOWN.

SIDES OF SQUARE HOLES TO BE PARALLEL TO SIDE OF PLATE.

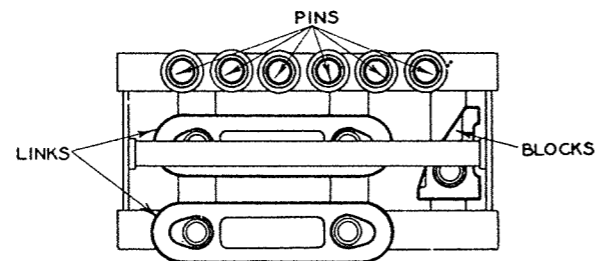
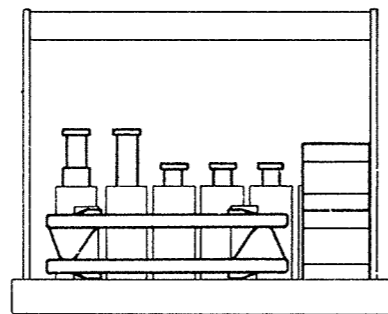
V · R CHECK RAIL GAUGE PLATES 94 LB. - 3 3/4" FLANGWAY 107 LB. - 4" FLANGWAY	Approved <i>[Signature]</i>	ADOPTED 1946
	Chief Civil Eng'r	
	Checked <i>L. G. E.</i>	PLAN NO.
	Passed <i>[Signature]</i> Eng'r of M&W.S.	F-472



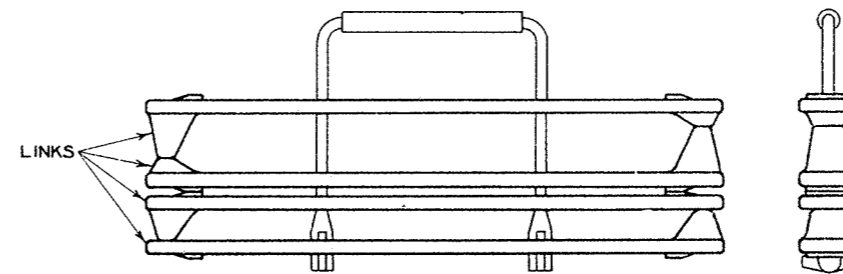
GENERAL ARRANGEMENT
 ASSEMBLY WITH SHORT LINKS FOR EXPANDING JOINTS
 FISHPLATES REMOVED



GENERAL ARRANGEMENT
 ASSEMBLY WITH LONG LINKS FOR CLOSING JOINTS
 FISHPLATES REMOVED



CARRIER
 SHORT LINKS, PINS & BLOCKS

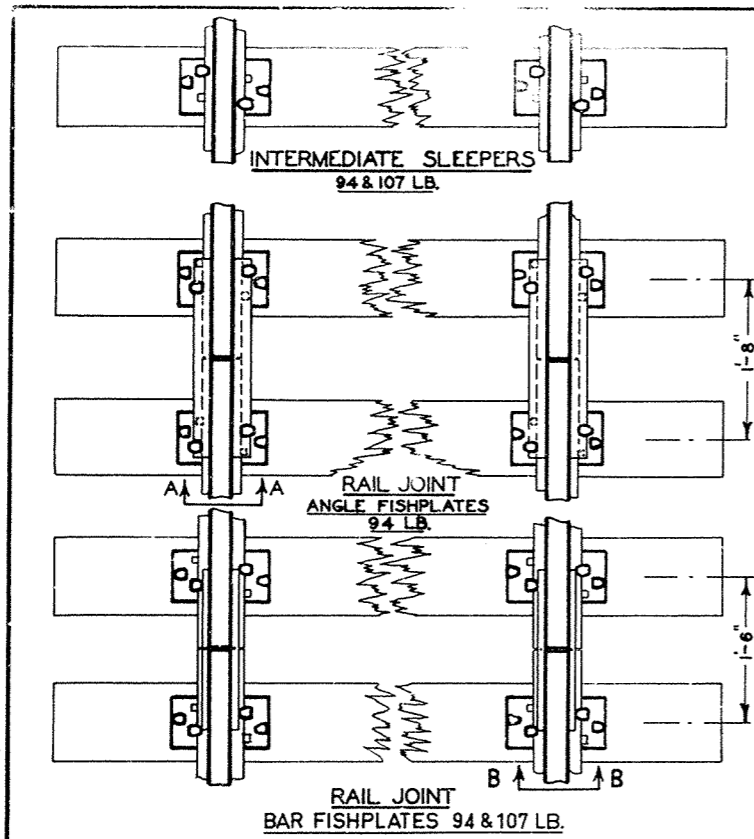


CARRIER
 LONG LINKS

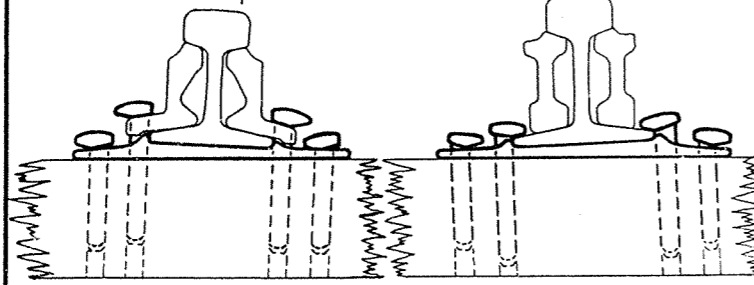
VICTORIAN RAILWAYS WAY & WORKS BRANCH
RAIL JOINT ADJUSTER
 TYPE 1946
 APPLICATION & ARRANGEMENT

APPROVED *M*
 CHIEF CIVIL ENGINEER
 CHECKED *C.F.*
 PASSED *asa*
KE
 ENGINEER OF M. & W.S.

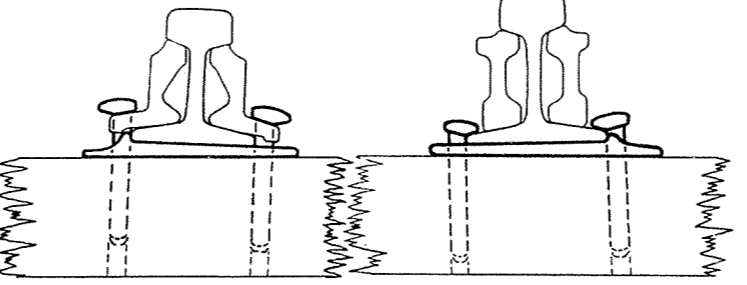
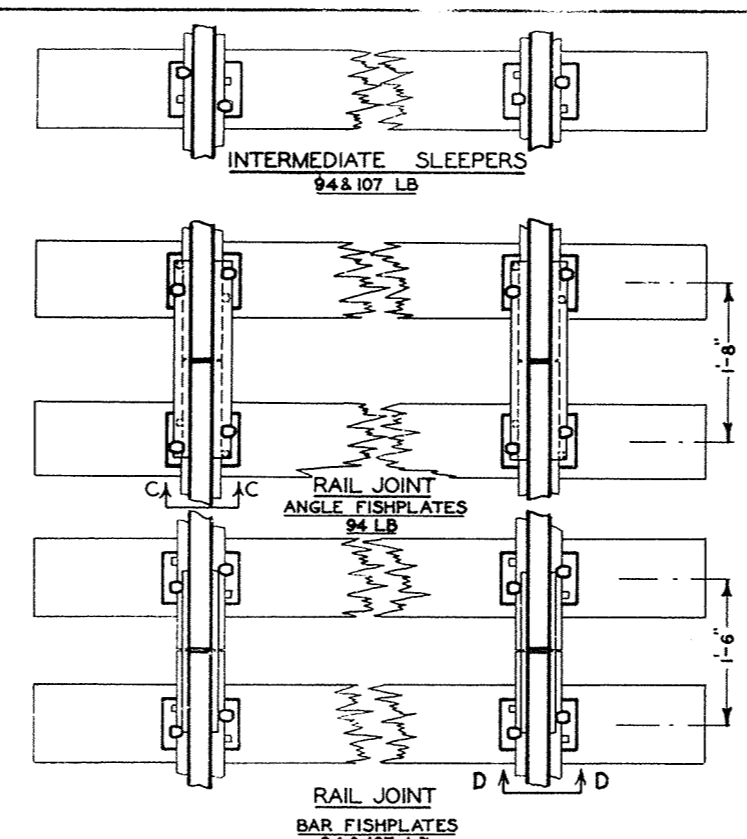
ADOPTED
 1946
 PLAN N^o.
 F 473



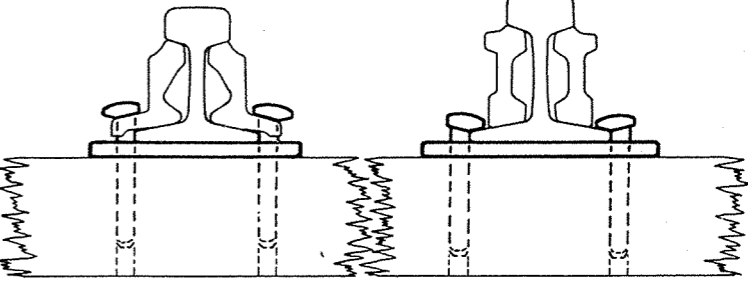
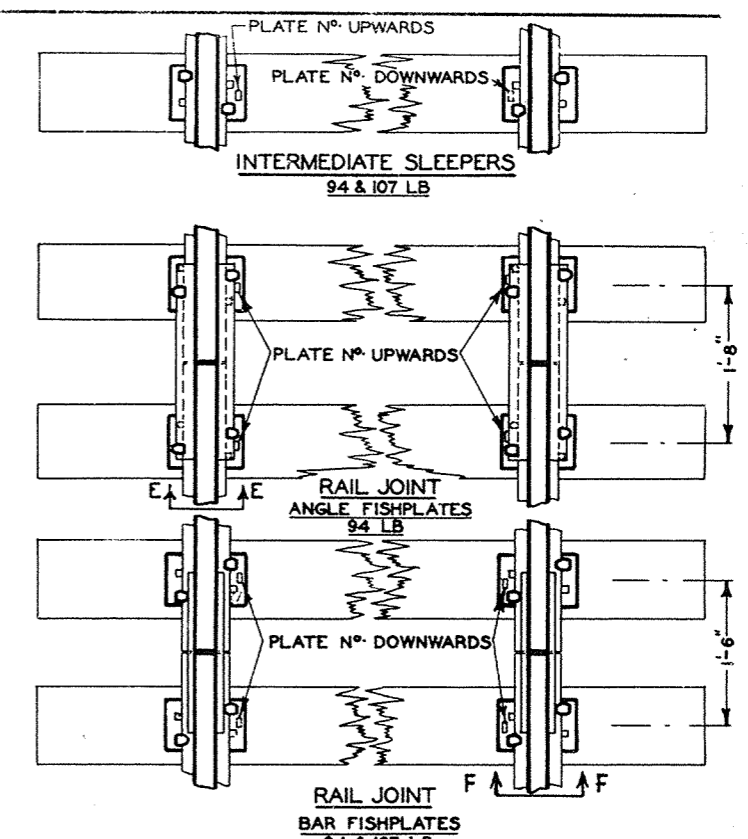
NOTE In the outer holes of double shoulder sleeper plates only, throat cut dogspikes are to be used and they are to be driven with the head pointing to the end of sleeper.



APPLICATION OF DOUBLE SHOULDER SLEEPER PLATES



APPLICATION OF SINGLE SHOULDER SLEEPER PLATES



APPLICATION OF FLAT SLEEPER PLATES

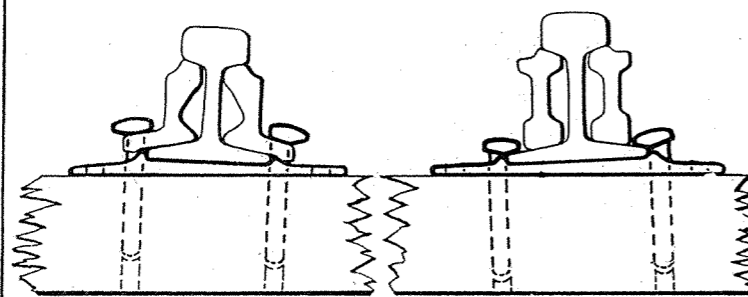
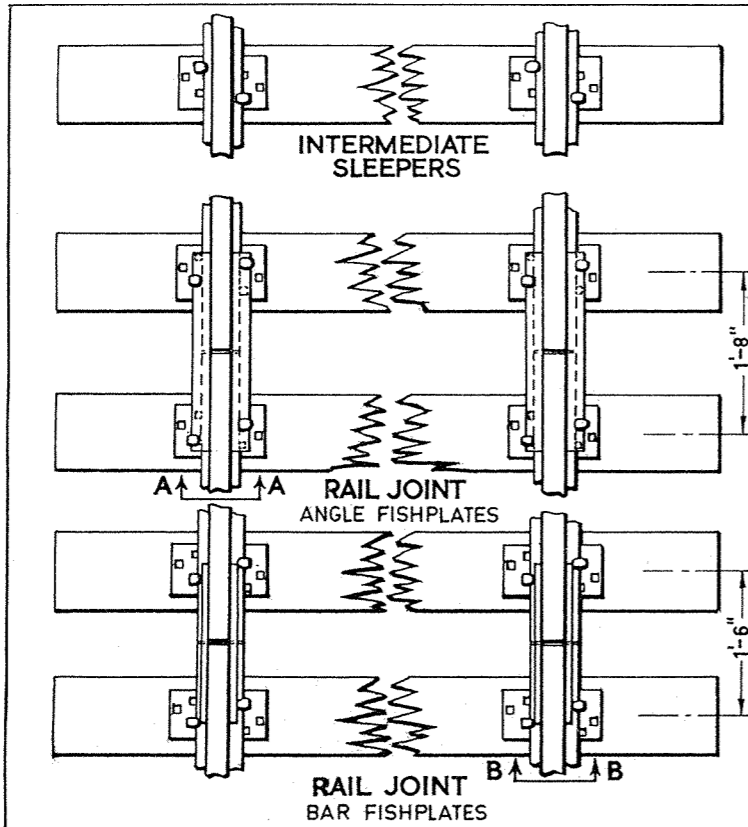
This Plan supersedes Plan N° F474 A

Revision	Date	Amendment
B.	13-3-56	Dogspikes in outside holes of sleeper plates amended in accordance with C.E. 10/56.
A.	19-10-48	Spacing of joint sleepers added.

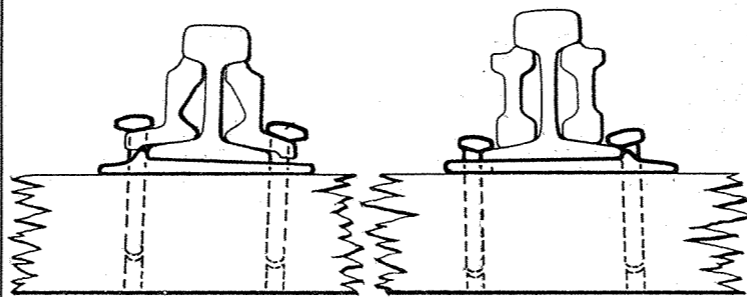
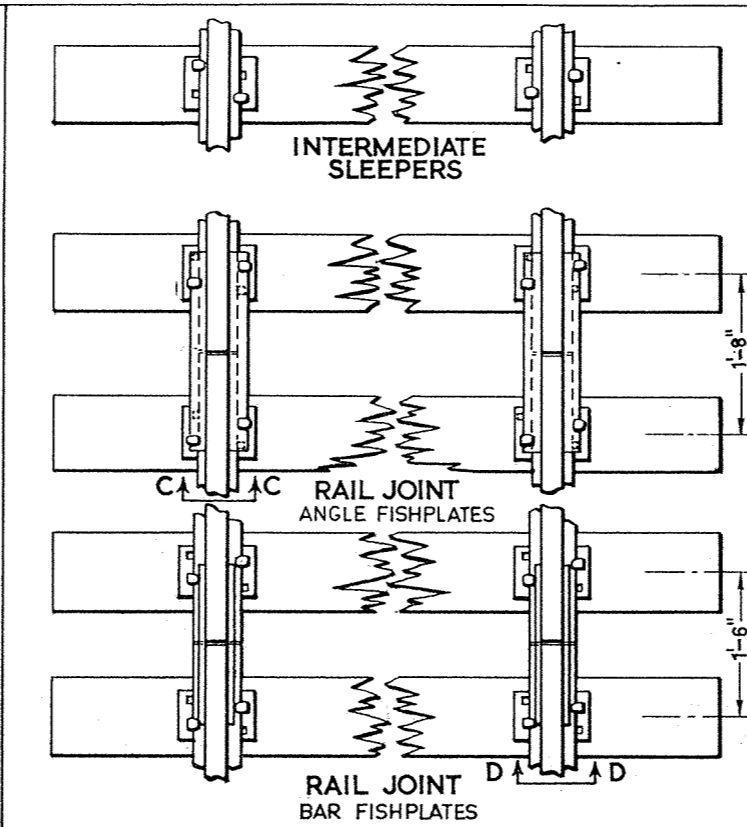
VICTORIAN RAILWAYS
WAY & WORKS BRANCH
ARRANGEMENT OF DOG SPIKES WITH SLEEPER PLATES
94 & 107 LB.A.S.

APPROVED
R. H. B. S.
CHIEF CIVIL ENGINEER
CHECKED
PASSED
A. A. P.
ENGINEER OF M.&W.S.

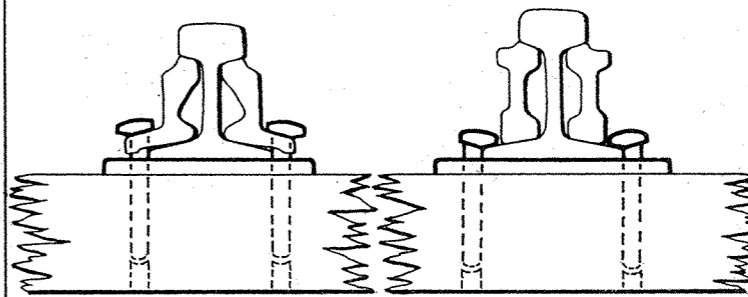
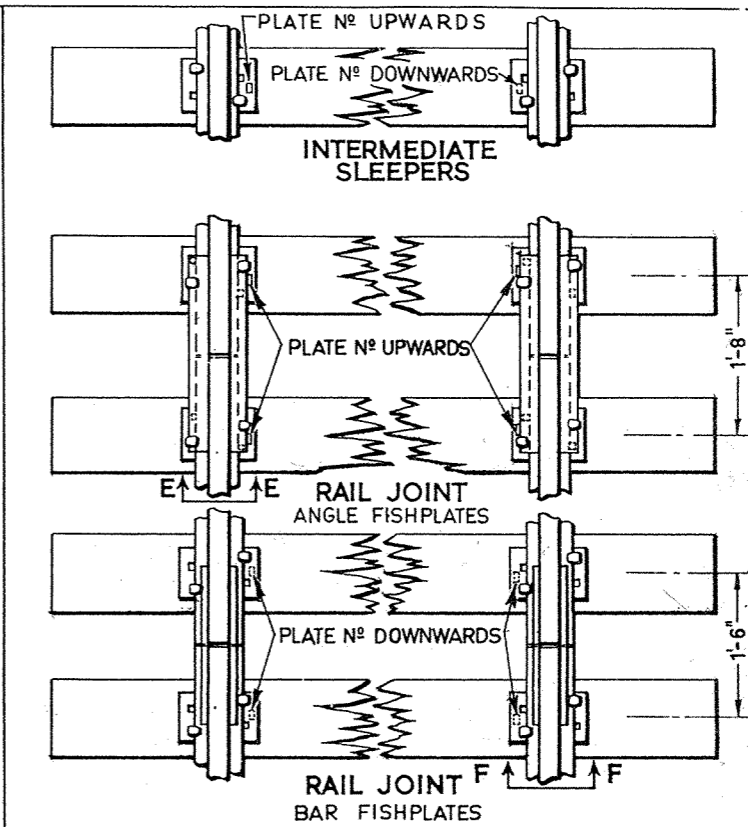
ADOPTED
1956
PLAN N° F-474B



SECTION A-A SECTION B-B
**APPLICATION OF
 DOUBLE SHOULDER SLEEPER PLATES**



SECTION C-C SECTION D-D
**APPLICATION OF
 SINGLE SHOULDER SLEEPER PLATES**



SECTION E-E SECTION F-F
**APPLICATION OF
 FLAT SLEEPER PLATES**

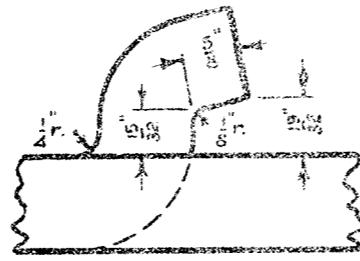
This Plan supersedes Plan N° F474^B

Revision	Date	Amendment
C.	19-5-59	Dogspikes in outside holes of sleeper plates eliminated and reference to weight deleted.
B.	13-3-56	Dogspikes in outside holes of sleeper plates amended in accordance with C. E. 10/56.
A.	19-10-48	Spacing of joint sleepers added.

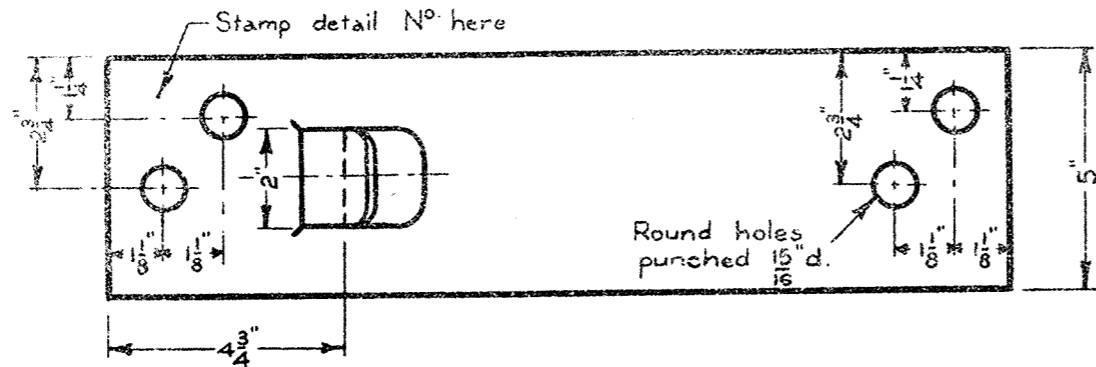
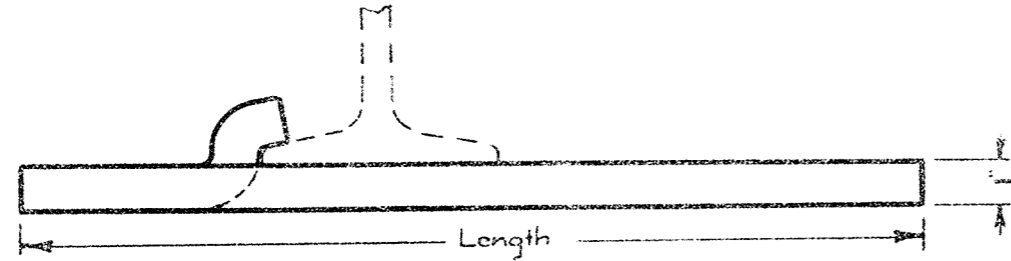
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
**ARRANGEMENT OF DOG SPIKES
 WITH SLEEPER PLATES**
latest

Approved
R. S. S. S. S.
 Chief Civil Engineer
 Drawn by A.W.A. Checked G.E.M.
 K. S.
 R/ Eng. of Mach. & Water Supply

Adopted
1956
**PLAN N°
 F474^C**

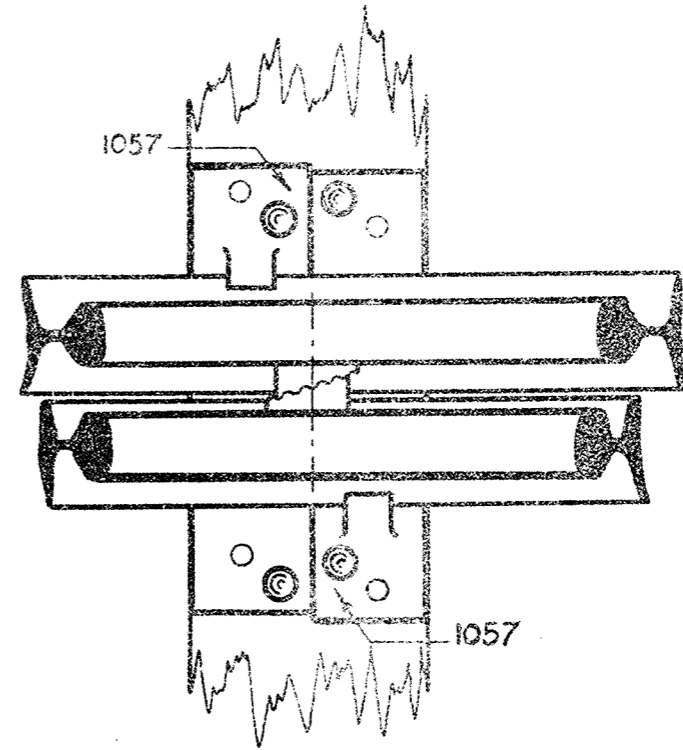


DETAIL OF LUG



Length	Detail N°
1'-6 3/4"	1057

Note - Material 5"x1" M.S. Plate



TYPICAL ARRANGEMENT

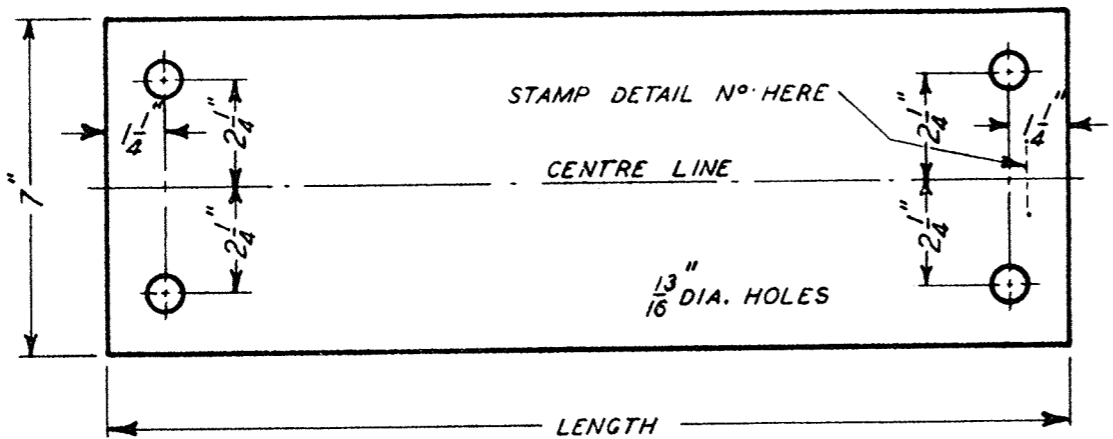
94 & 107 LB. A.S.

Fastenings per plate
2 N° 7/8" d x 6 1/4" Mark "P" Pins

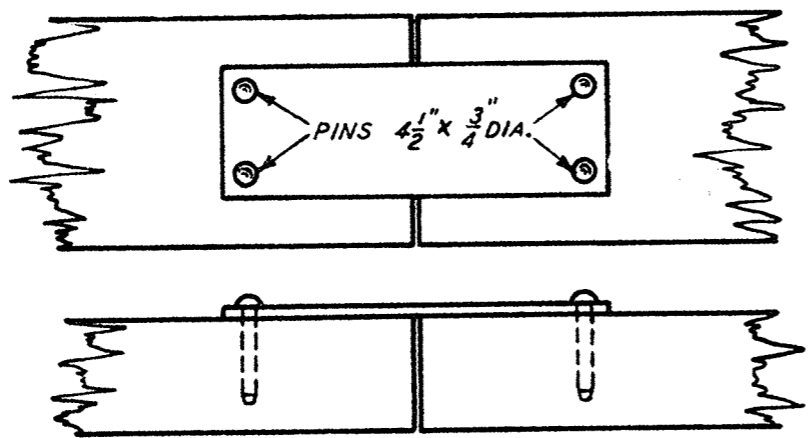
V-R
LUG PLATE
FLAT
FOR CHECK RAILS

APPROVED *[Signature]*
CHIEF CIVIL ENGINEER
CHECKED *L. G. E.*
PASSED *[Signature]*
ENGINEER OF M&W.S.

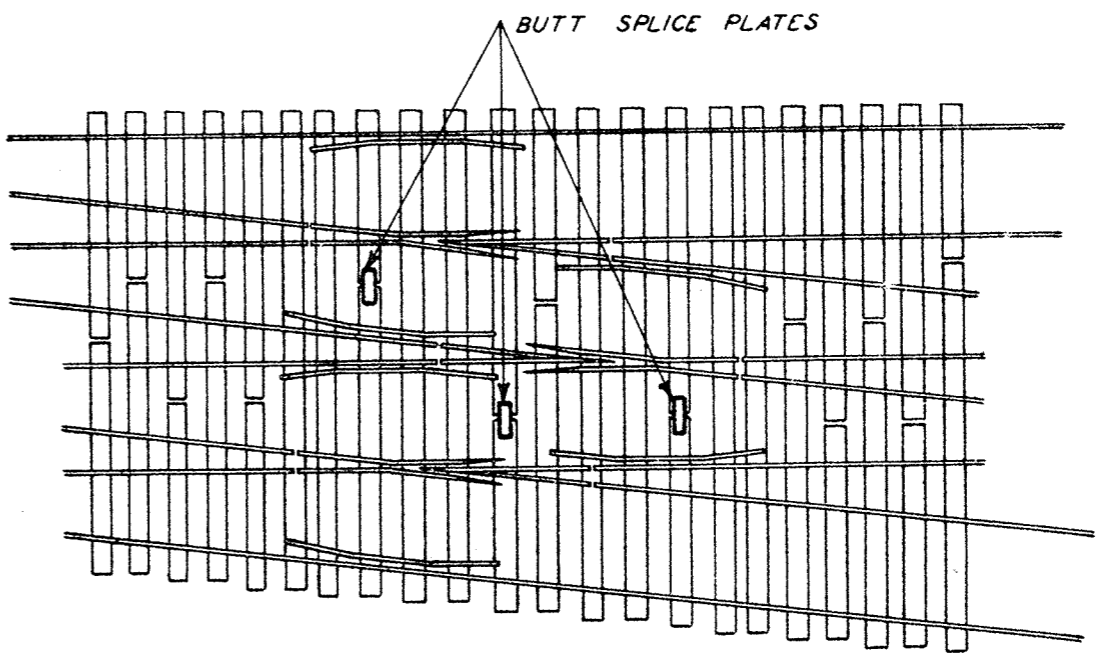
ADOPTED
1946
PLAN N°.
F-475



NOTES - MATERIAL $\frac{1}{2}$ " MILD STEEL PLATE.
 PLATES TO BE MARKED OFF FROM TEMPLATE.



BUTT SPLICE JOINT



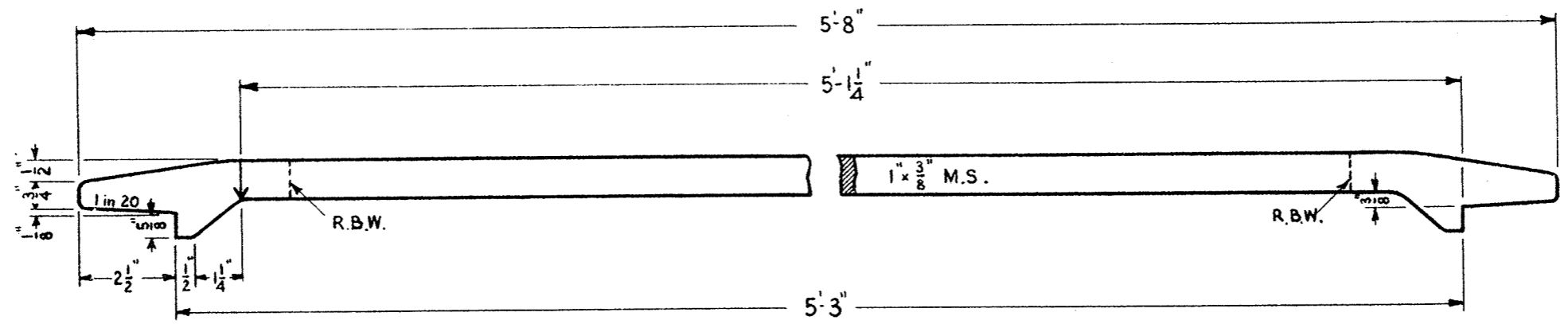
APPLICATION OF BUTT SPLICE PLATES.

FOR USE WHEN SOME TIMBERS ARE BUTT JOINTED
 BETWEEN THE CROSSING AND ITS GUARD RAIL.

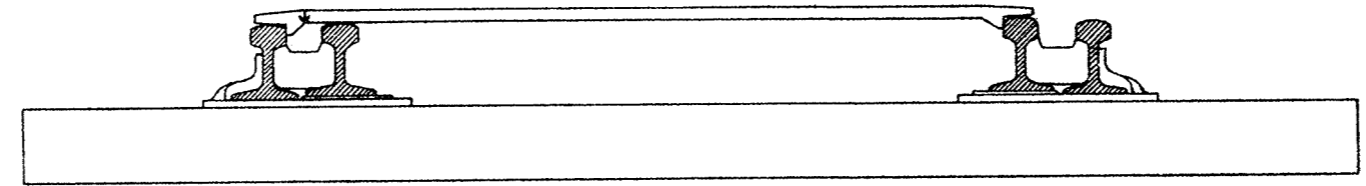
LENGTH	DETAIL N°.
1'-8"	1064

V. R. BUTT SPLICE PLATES ^A FOR CROSSING TIMBERS	APPROVED <i>[Signature]</i>	ADOPTED
	CHIEF CIVIL ENGR	1947
	CHECKED <i>K.S.</i>	
	PASSED <i>[Signature]</i>	F-476
	ENGR. M. & W. S.	

R.B.W. denotes resistance butt weld.

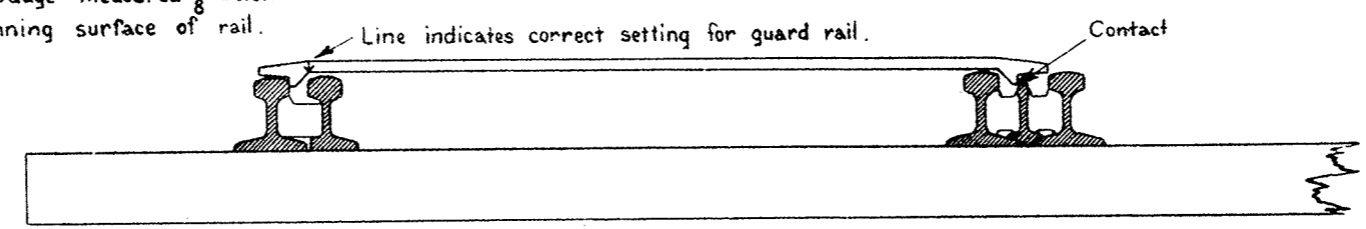


Heel of switch $\frac{1}{4}$ " above stock rail when new.



Gauge measured $\frac{5}{8}$ " below running surface of rail.

GAUGE APPLIED AT HEEL OF V NOSE POINTS

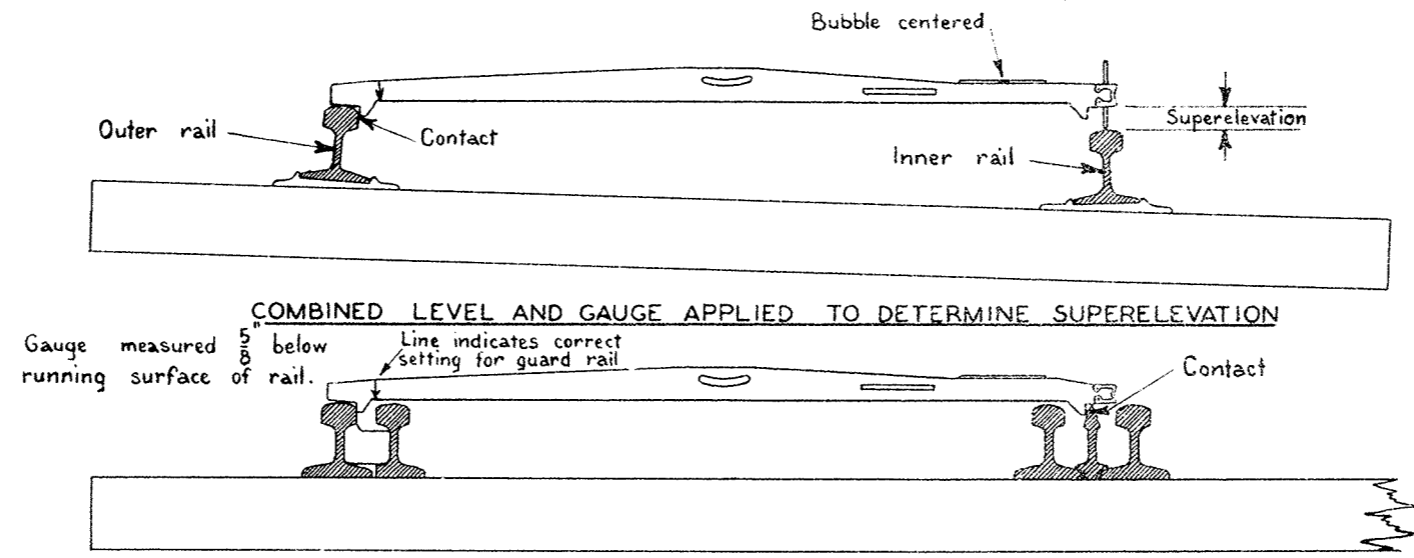
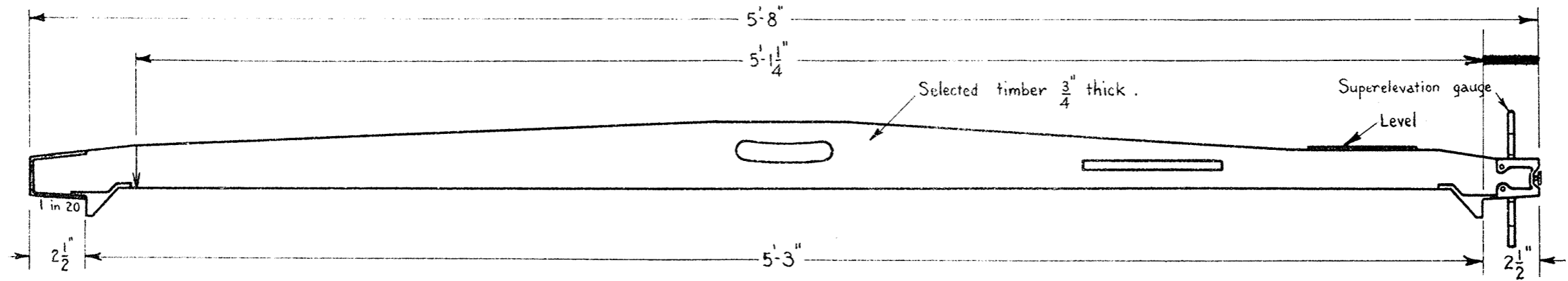


GAUGE APPLIED AT NOSE OF 94 & 107 LB. V CROSSINGS

V-R
GAUGE
TYPE 1947

Approved *MW*
Chief Civil Engineer
Checked *C.F.*
Passed *[Signature]*
Eng'r of M. & W.S.

Adopted
1947
PLAN N°
F-477



COMBINED LEVEL AND GAUGE APPLIED AT NOSE OF 94 & 107 LB. V CROSSINGS

V-R COMBINED LEVEL AND GAUGE TYPE 1948	Approved <i>MW</i> Chief Civil Engineer	Adopted. 1948
	Checked <i>C.F.</i>	PLAN N ^o .
	Passed <i>agb</i>	F-478
	Eng ^r of M. & W.S.	

V Y POINTS

SECTION OF RAIL	THROW OF POINTS	LENGTH OF SWITCH	INTERLOCKED			HAND WORKED					
			No.1 SPREADER	No.2 SPREADER	No.3 SPREADER	No.1 SPREADER		No.2 SPREADER		No.3 SPREADER	
						INSULATED	NON INSULATED	INSULATED	NON INSULATED	INSULATED	NON INSULATED
107 LB.	5"	15'-0"	TA 101	TA 102		TA 103	TA 303	TA 102	TA 302		
" "	"	16'-6"	TA 101	TA 102		TA 103	TA 303	TA 102	TA 302		
" "	"	22'-6"	TA 101	TA 102	TA 202	TA 103	TA 303	TA 102	TA 302	TA 202	TA 402
94 LB.	"	15'-0"	TA 101	TA 202		TA 103	TA 303	TA 202	TA 402		
" "	"	16'-6"	TA 101	TA 202		TA 103	TA 303	TA 202	TA 402		
" "	"	22'-6"	TA 101	TA 202	TA 202	TA 103	TA 303	TA 202	TA 402	TA 202	TA 402
110 LB.	4 1/2"	13'-6"	TA 101	TA 202		TA 103	TA 303	TA 202	TA 402		
" "	"	15'-9"	TA 101	TA 102		TA 103	TA 303	TA 102	TA 302		
" "	"	18'-0"	TA 101	TA 102		TA 103	TA 303	TA 102	TA 302		
90 LB.	"	13'-6"	TA 101	TA 202		TA 103	TA 303	TA 202	TA 402		
" "	"	15'-9"	TA 101	TA 202		TA 103	TA 303	TA 202	TA 402		
" "	"	18'-0"	TA 101	TA 202		TA 103	TA 303	TA 202	TA 402		

Y & YM POINTS.

80 LB. 90 LB. 100 LB.	4 1/2"	13'-6" 15'-9" 18'-0"	TA 501	TA 502	TA 502	TA 503	TA 603	TA 502	TA 602	TA 502	TA 602
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DR CATCH POINTS

107 LB.	5"	15' 0"	TA 105	WHEN OPERATION IS FROM SIDE ADJACENT TO SWITCH. INTERLOCKED							
94 LB.	"	"	TA 105	" " " " " " " " " "							
107 LB.	"	"	TA 106	WHEN OPERATION IS FROM SIDE OPPOSITE TO SWITCH. "							
94 LB.	"	"	TA 106	" " " " " " " " " "							
94 & 107 LB.	"	"	TA 107	OPERATION FROM SIDE ADJACENT TO SWITCH. HAND WORKED							

NOTE :- SPREADERS FOR Y POINTS ARE ISSUED DRILLED & BUSHED AT ONE END ONLY, OPPOSITE END MUST BE DRILLED ON SITE TO SUIT REQUIREMENTS.

TO BE ORDERED SEPARATELY:- SPREADER BOLTS 1F3116 FOR VY POINTS
" PINS 11F52 FOR Y "

V. R.
SPREADERS
ORDERING LIST
FOR VY, Y, YM & DR POINTS

APPROVED <i>M. V.</i> CHIEF CIVIL ENGR
CHECKED <i>C. E.</i> PASSED <i>A. E.</i> ENGR. OF M. & W. S.

ADOPTED 1948
PLAN NO F479

VYS & VYD POINTS

SECTION OF RAIL	THROW OF POINTS	LENGTH OF SWITCH	INTERLOCKED			HAND WORKED							
			N ^o 1 SPREADER	N ^o 2 SPREADER		N ^o 1 SPREADER				N ^o 2 SPREADER			
				VYS & VYD	VYS	VYD	VYS		VYD		VYS		VYD
			INSULATED		NON-INSULATED	INSULATED	NON-INSULATED	INSULATED	NON-INSULATED	INSULATED	NON-INSULATED	INSULATED	NON-INSULATED
107 LB	5"	15'-0"	TA101	TA202	TA202	TA103	TA303	TA104	TA304	TA202	TA402	TA202	TA402
" "	"	19'-0"	TA101	TA102	TA102	TA103	TA303	TA104	TA304	TA102	TA302	TA102	TA302
94 "	"	15'-0"	TA101	TA202	TA202	TA103	TA303	TA204	TA404	TA202	TA402	TA202	TA402
" "	"	19'-0"	TA101	TA202	TA202	TA103	TA303	TA204	TA404	TA202	TA402	TA202	TA402
110 "	4½"	13'-6"	TA101	TA202	TA202	TA103	TA303	TA204	TA404	TA202	TA402	TA202	TA402
" "	"	15'-9"	TA101	TA102	TA202	TA103	TA303	TA204	TA404	TA102	TA302	TA202	TA402
" "	"	18'-0"	TA101	TA102	TA202	TA103	TA303	TA204	TA404	TA102	TA302	TA202	TA402
90 "	"	13'-6"	TA201	TA202	TA202	TA203	TA403	TA204	TA404	TA202	TA402	TA202	TA402
" "	"	15'-9"	TA201	TA202	TA202	TA203	TA403	TA204	TA404	TA202	TA402	TA202	TA402
" "	"	18'-0"	TA201	TA202	TA202	TA203	TA403	TA204	TA404	TA202	TA402	TA202	TA402

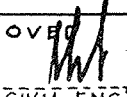
YS & YD POINTS

SECTION OF RAIL	THROW OF POINTS	LENGTH OF SWITCH	INTERLOCKED			HAND WORKED							
			N ^o 1 SPREADER	N ^o 2 SPREADER		N ^o 1 SPREADER				N ^o 2 SPREADER			
				YS & YD	YS	YD	YS		YD		YS		YD
			INSULATED		NON-INSULATED	INSULATED	NON-INSULATED	INSULATED	NON-INSULATED	INSULATED	NON-INSULATED	INSULATED	NON-INSULATED
80,90,100 LB	4½"	13'-6", 15'-9", 18'-0"	TA501	TA502	TA502	TA503	TA603	TA504	TA604	TA502	TA602	TA502	TA602

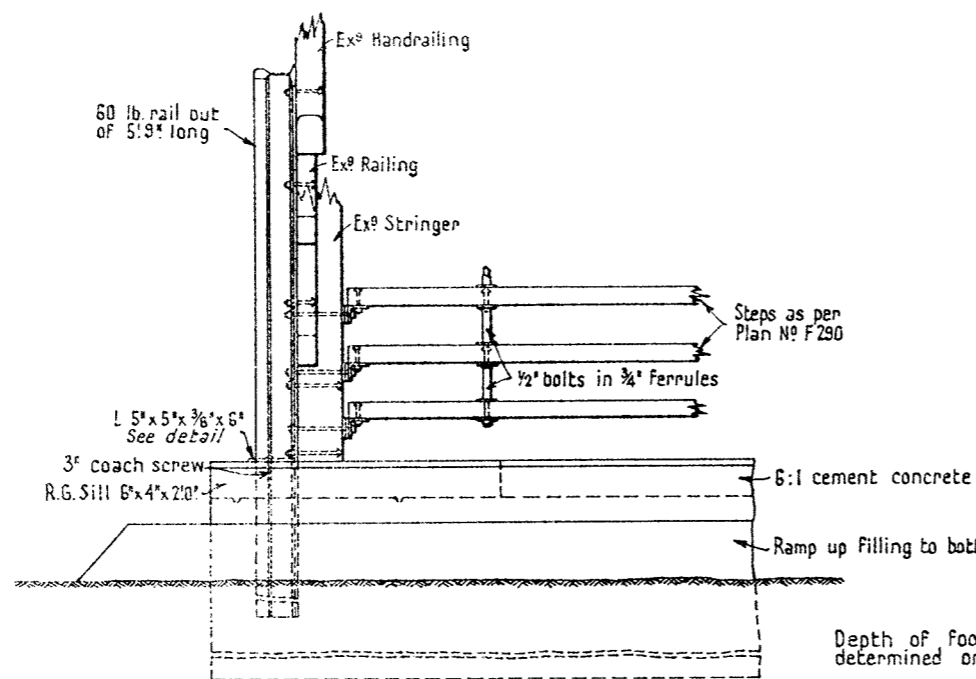
NOTE :- SPREADERS FOR YS & YD POINTS ARE ISSUED, DRILLED & BUSHED AT ONE END ONLY, OPPOSITE END MUST BE DRILLED ON SITE TO SUIT REQUIREMENTS.

TO BE ORDERED SEPARATELY :- SPREADER BOLTS IF3116 FOR VYS & VYD POINTS
SPREADER PINS IIF52 FOR YS & YD POINTS

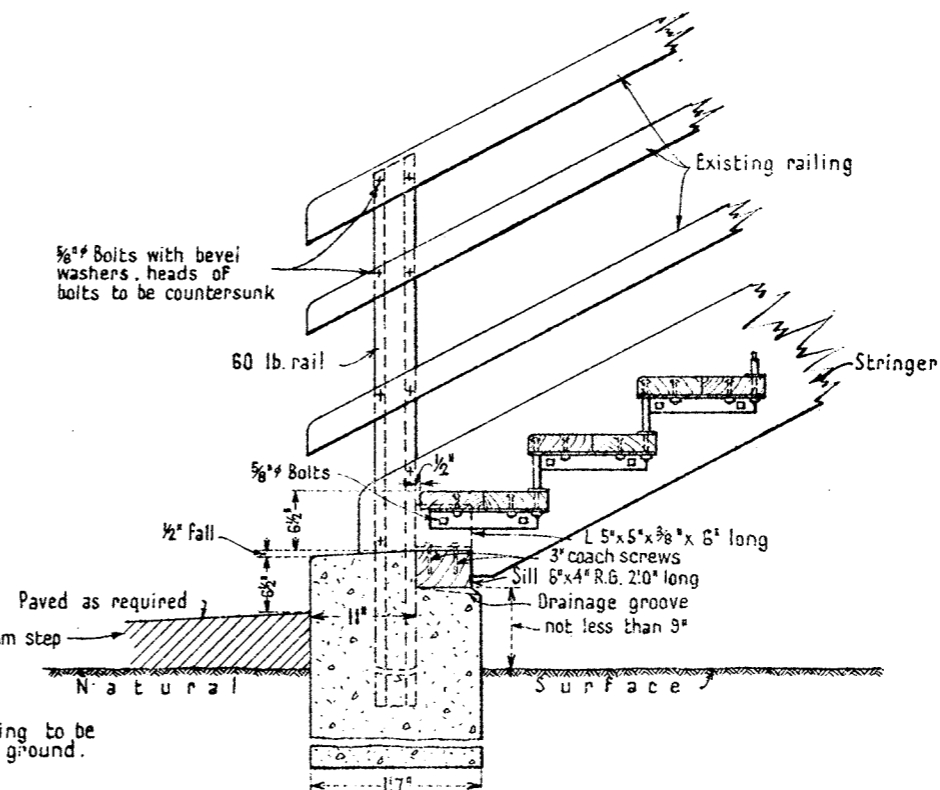
V. R.
SPREADERS
ORDERING LIST
FOR VYS,VYD,YS & YD POINTS

APPROVED 
CHIEF CIVIL ENGR
CHECKED C.F.
PASSED [Signature]
ENGR OF M.&W.S.

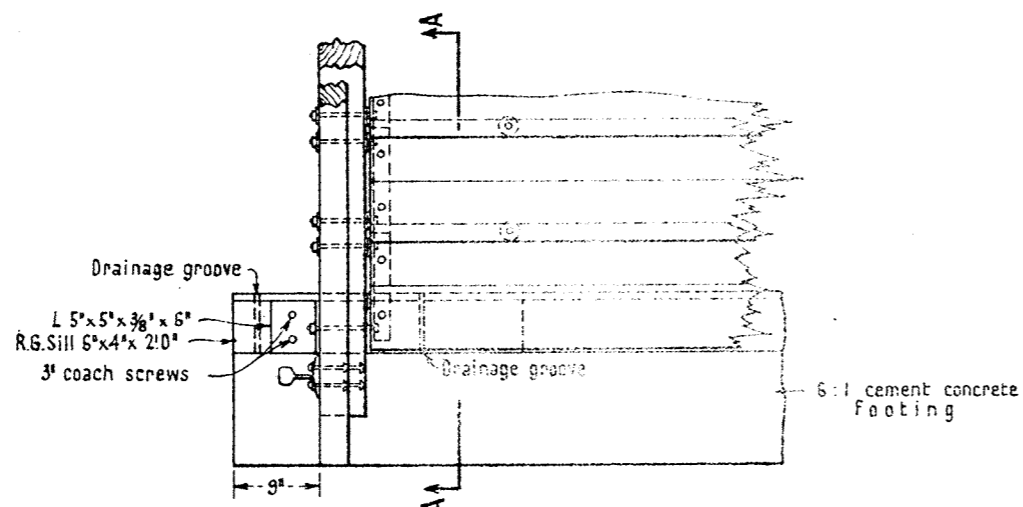
ADOPTED
1948
PLAN N^o
F480



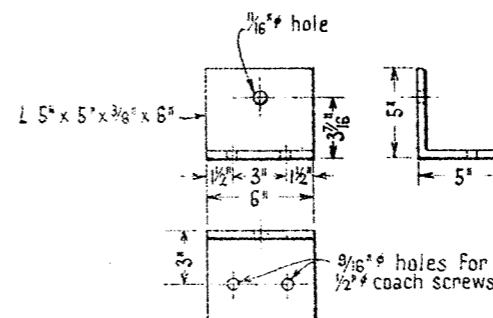
ELEVATION



SECTION A-A



PART PLAN

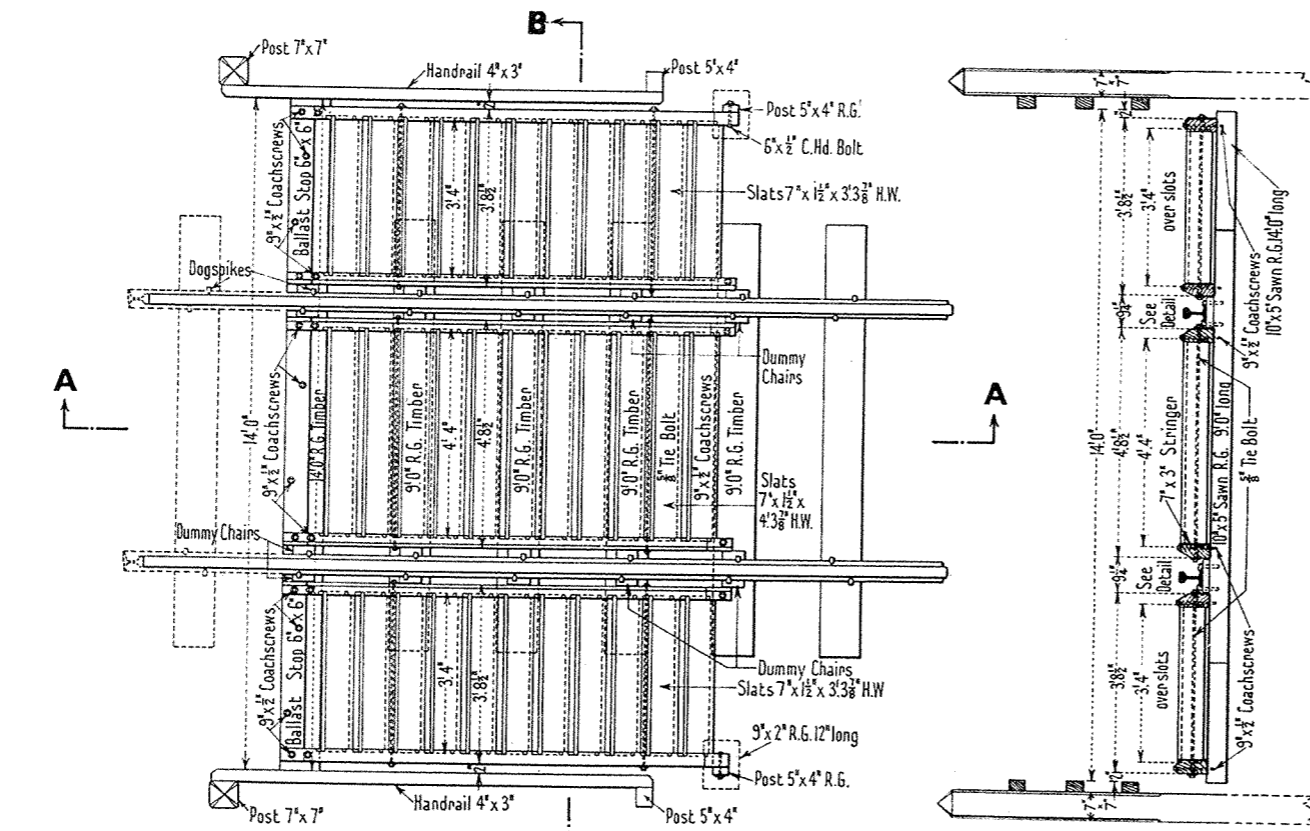


DETAIL OF ANGLES

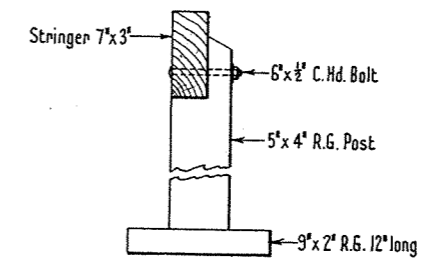
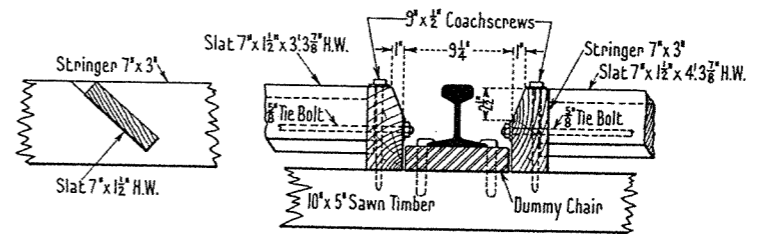
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
 DETAILS OF FOOTBRIDGE
 CONCRETE STEP AND FOOTING
 AT BOTTOM OF STEPS.

Approved
M.W.
 Chief Civil Engineer
 Drawn by *C.M.T.* Checked by *R.L.R.*
 Eng. of Struct. Design

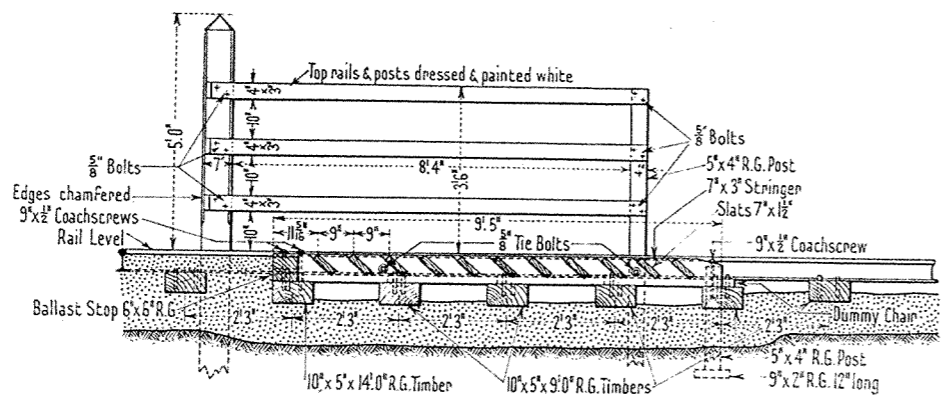
Adopted
 SEPT. 1945
 PLAN No
F481



SECTION B-B.



DETAILS
Scale: 3/4" = 1'-0"



SECTION A-A.

QUANTITIES FOR ONE PIT

TIMBER		
Ballast Stops	6' x 6'	2/3' 8 1/2", 1/4' 8 1/2"
Timbers, Sawn R.G.	10' x 5'	1/14' 0", 4/9' 0"
Posts	5' x 4'	2/8' 0", 2/3' 0"
Posts	7' x 7'	2/8' 6"
Rails	4' x 3'	6/9' 0"
Stringers	7' x 3'	6/9' 5"
Slats	7' x 1 1/2'	22/3' 3 3/8", 1/4' 3 3/8"
Plates R.G.	9' x 2'	2/1' 0"

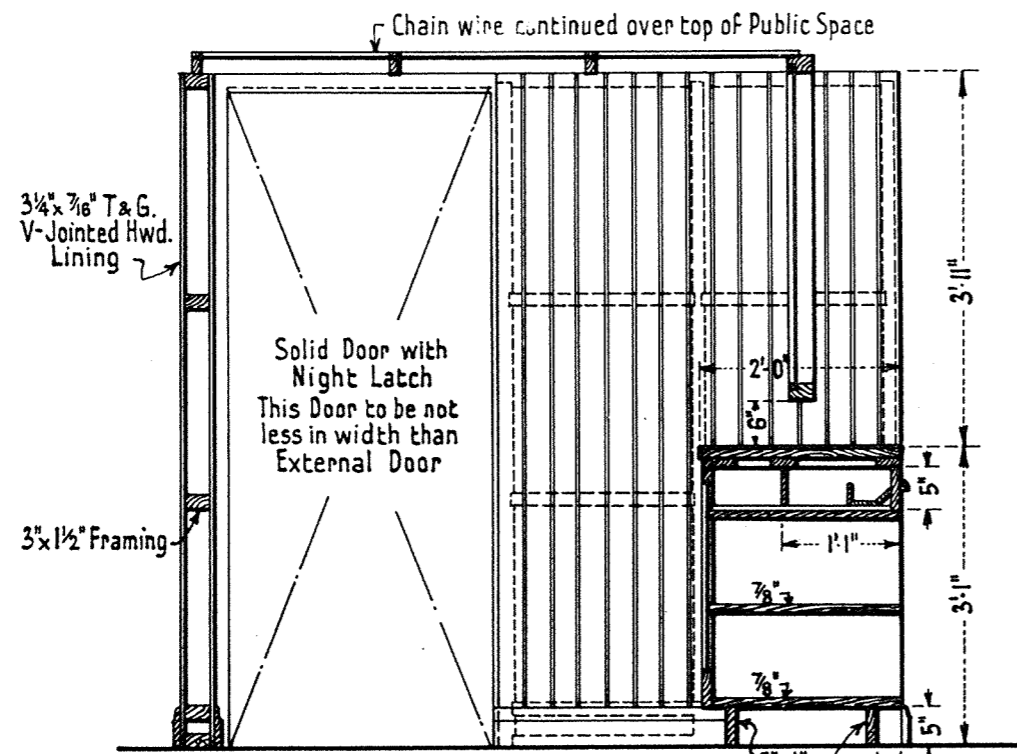
IRONWORK		
Bolts 5/8" x 11'	12 No	
Bolts 5/8" x 9'	12 No	
3/8" Tie Bolts	4/3' 10 1/2", 2/4' 10 1/2"	
9' x 1/2' Coachscrews	22 No	
6' x 1/2" C. Head Bolts	2 No	
Dummy Chairs	10 No	
Dogspikes	20 No	
4' Wire Nails	2 1/2 lb.	
Washers 2" x 1/4" with 1/8" holes	24	

NOTE:-
This plan supersedes
Plan No F.484A

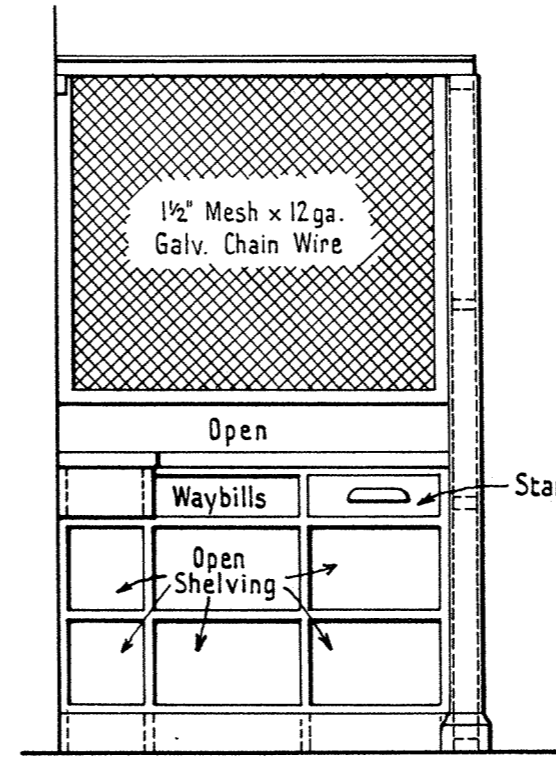
REV.	DATE	AMENDMENT
B	25-3-55	Slats now 7' x 1 1/2" instead of 9' x 1 1/2"
A	25-7-46	Rails bolted on sides of posts & quantities amended to suit.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
SURFACE GRID
Scale: 1/4" = 1'-0"

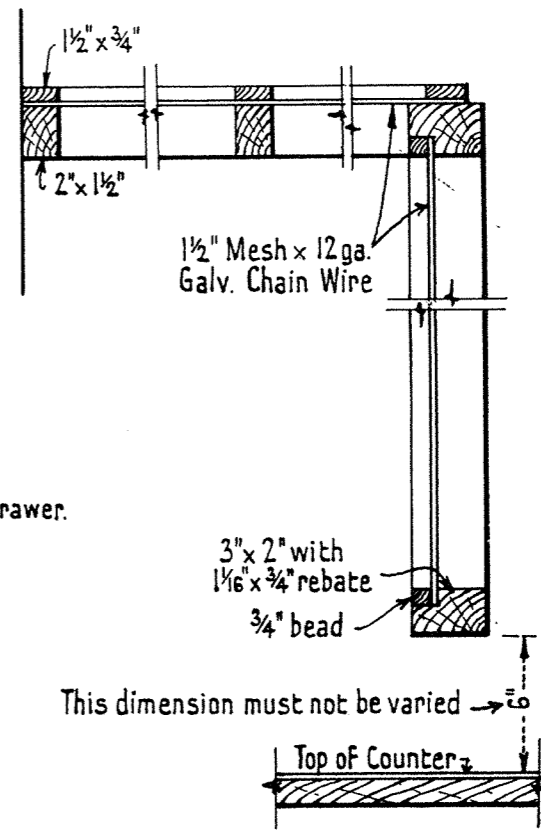
Approved
M.H.
Chief Civil Engineer
Traced by *V.W.L.*
Checked by *S.M.*
A.K. Bantel
Engineer of Tracks & Drainage
Adopted
NOV. 1945
PLAN No.
F484 B



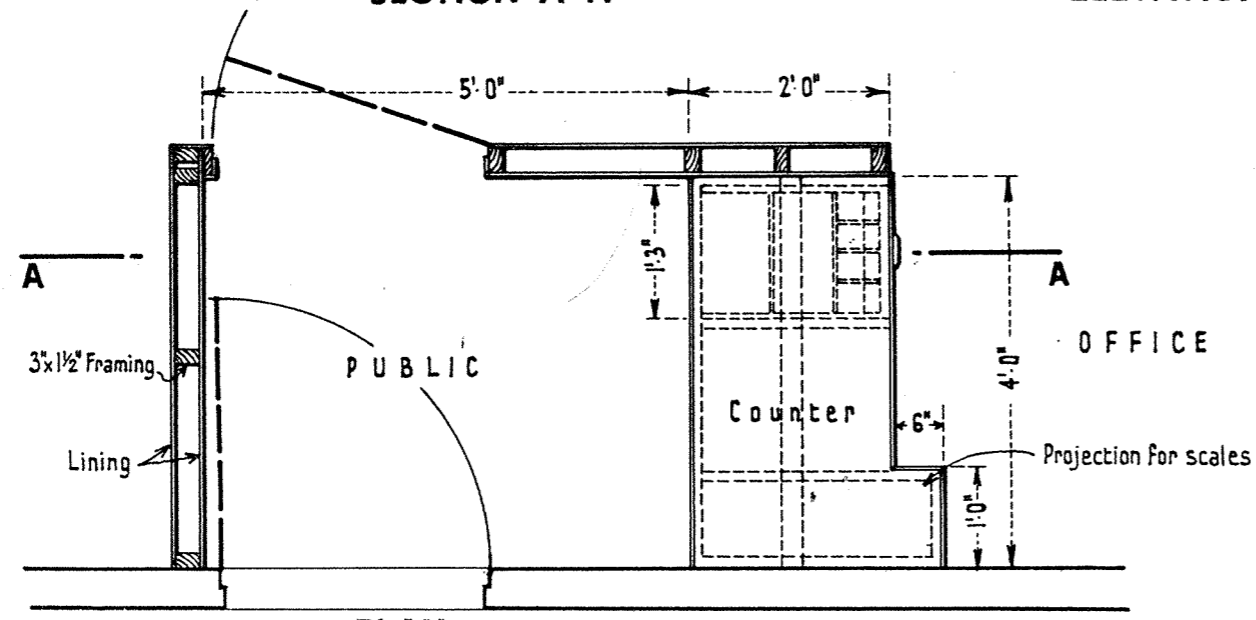
SECTION A-A



ELEVATION FROM OFFICE



DETAIL OF CHAIN WIRE ETC.



PLAN

This plan supersedes Plan No 643/45.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.H.</i>	FEB. 1946
PARCELS COUNTER AND SCREEN		Chief Civil Engineer	
TYPE DETAIL		Drawn by G.A.N. & F.C.	Checked by L.E.M.
Scales 1/2" & 1 1/2" = 1'-0"		<i>H. Sutcliffe</i>	PLAN No.
		Chief Architect	F 485

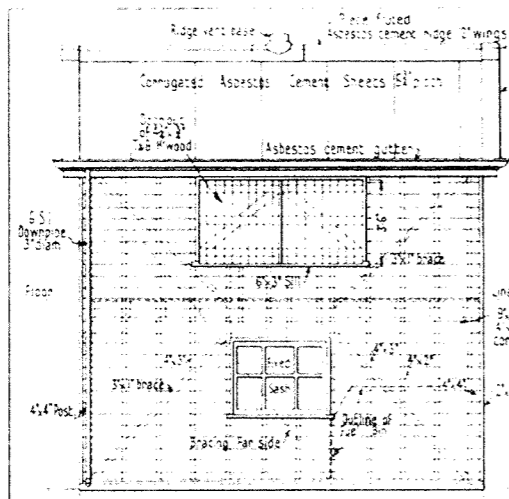


PEDESTRIANS ONLY.
CYCLING PROHIBITED

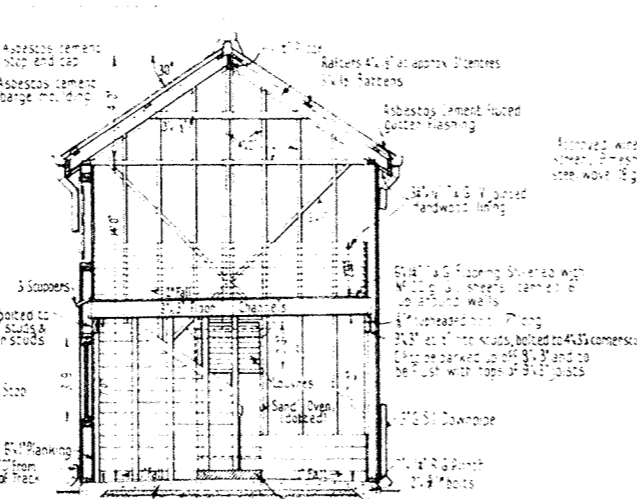
3" Black letters on White background

Mountain Ash Timber

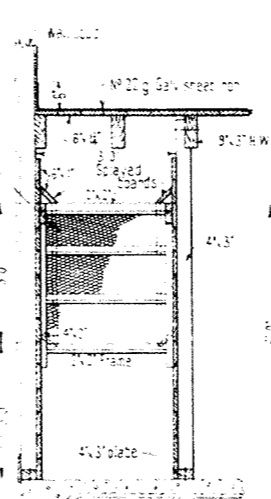
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING NOTICE BOARD SCALE— 3" = 1'0"		Approved Chief Civil Engineer	Adopted NOV. 1945
		Drawn by V. W. L.	Checked by L. E. M.
		 Chief Architect.	



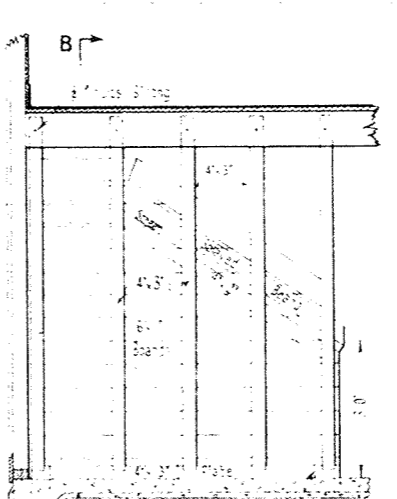
ELEVATION



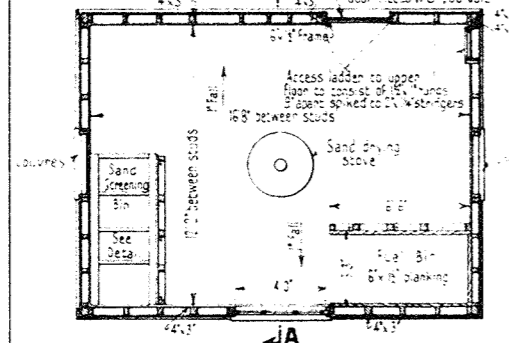
SECTION A. A.



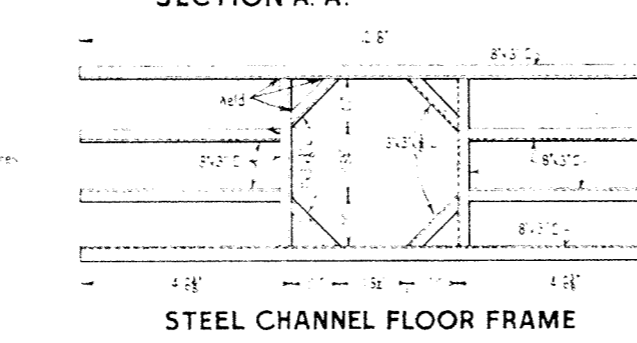
SECTION B. B.



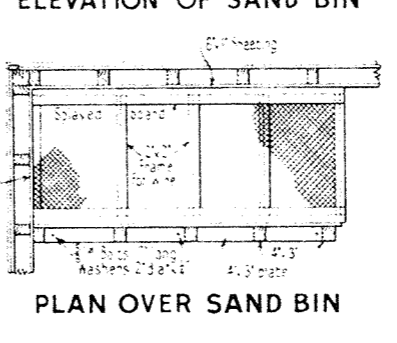
ELEVATION OF SAND BIN



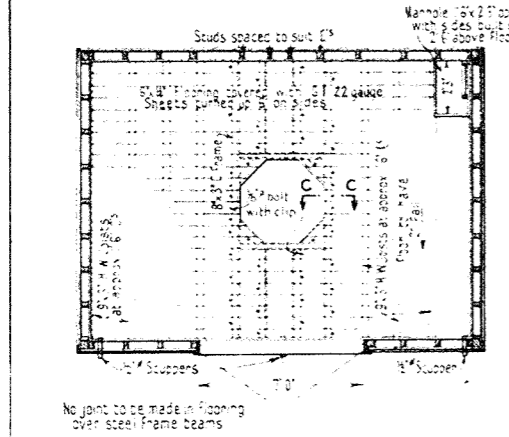
PLAN OF LOWER FLOOR



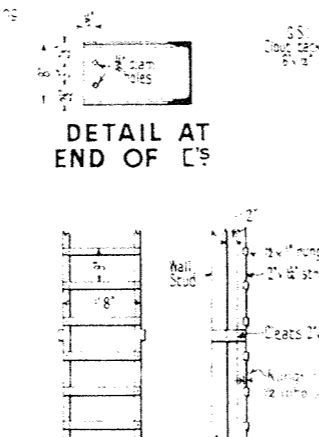
STEEL CHANNEL FLOOR FRAME



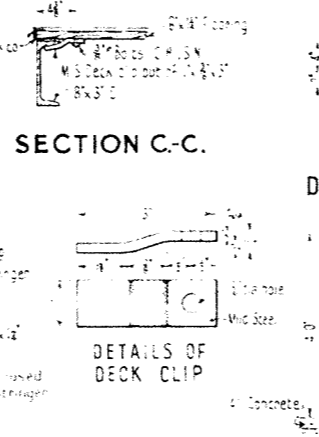
PLAN OVER SAND BIN



PLAN OF UPPER FLOOR



TYPICAL DETAIL OF WALL LADDER



SECTION C. C.



DETAIL AT FOOTING



DETAILS OF DECK CLIP



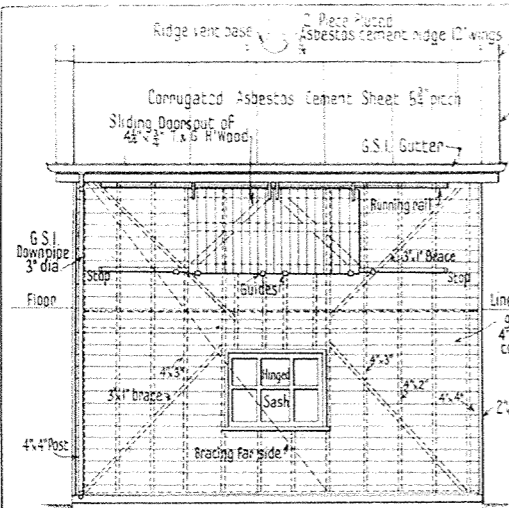
SECTION THROUGH FUEL BIN

SCHEDULE OF QUANTITIES				
NO	DESCRIPTION	MATERIAL	QTY	LENGTH
1	Asbestos cement sheets	Asbestos	100	100
2	Asbestos cement gutter	Asbestos	100	100
3	Asbestos cement barge molding	Asbestos	100	100
4	Asbestos cement fluted gutter flashing	Asbestos	100	100
5	Asbestos cement ridge capping	Asbestos	100	100
6	Asbestos cement ridge vent base	Asbestos	100	100
7	Asbestos cement barge molding socketed	Asbestos	100	100
8	Asbestos cement gutter brackets & screws	Galv M Steel	100	100
9	Asbestos cement gutter complete with washers	Galv M Steel	100	100
10	Asbestos cement gutter bolts	Galv M Steel	100	100
11	Asbestos cement gutter nuts	Galv M Steel	100	100
12	Asbestos cement gutter washers	Galv M Steel	100	100
13	Asbestos cement gutter nuts	Galv M Steel	100	100
14	Asbestos cement gutter washers	Galv M Steel	100	100
15	Asbestos cement gutter nuts	Galv M Steel	100	100
16	Asbestos cement gutter washers	Galv M Steel	100	100
17	Asbestos cement gutter nuts	Galv M Steel	100	100
18	Asbestos cement gutter washers	Galv M Steel	100	100
19	Asbestos cement gutter nuts	Galv M Steel	100	100
20	Asbestos cement gutter washers	Galv M Steel	100	100
21	Asbestos cement gutter nuts	Galv M Steel	100	100
22	Asbestos cement gutter washers	Galv M Steel	100	100
23	Asbestos cement gutter nuts	Galv M Steel	100	100
24	Asbestos cement gutter washers	Galv M Steel	100	100
25	Asbestos cement gutter nuts	Galv M Steel	100	100
26	Asbestos cement gutter washers	Galv M Steel	100	100
27	Asbestos cement gutter nuts	Galv M Steel	100	100
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43	Asbestos cement gutter nuts	Galv M Steel	100	100
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51	Asbestos cement gutter nuts	Galv M Steel	100	100
52	Asbestos cement gutter washers	Galv M Steel	100	100
53	Asbestos cement gutter nuts	Galv M Steel	100	100
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100	Asbestos cement gutter washers	Galv M Steel	100	100

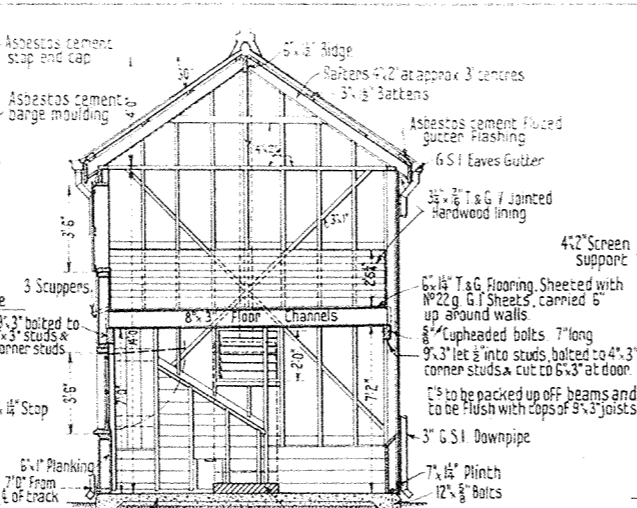
VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING
SAND HOUSE
 TYPE B
 No Scale

Approved
 Chief Engineer
 Adopted
 OCT. 1946
 PLAN No.
F488

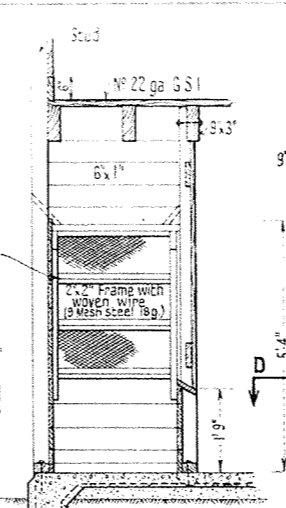
BD19-1



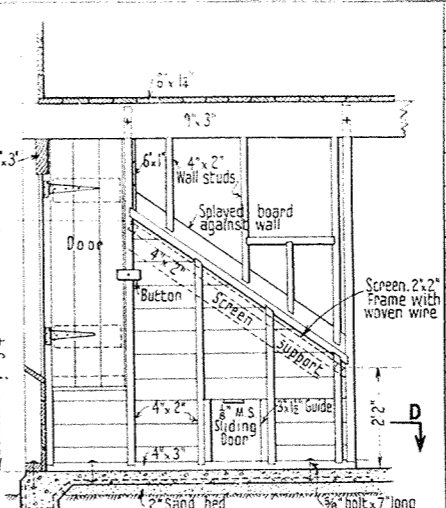
ELEVATION



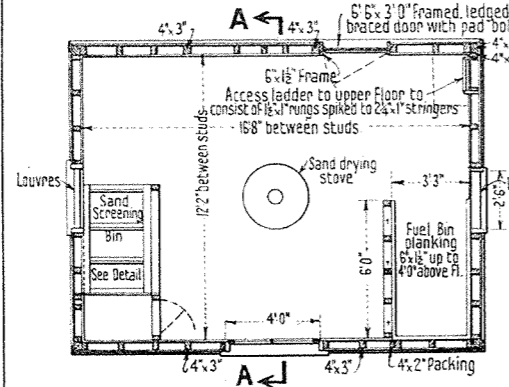
SECTION A-A.



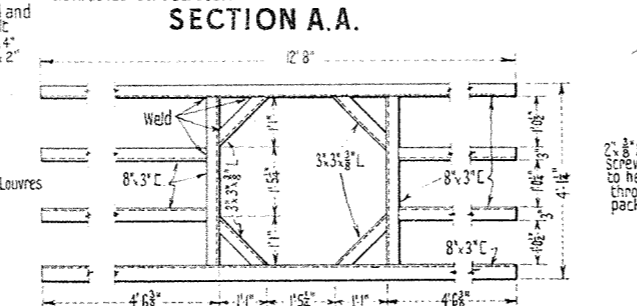
SECTION B-B.



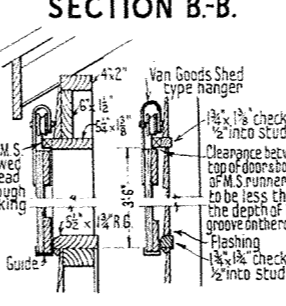
ELEVATION OF SAND BIN



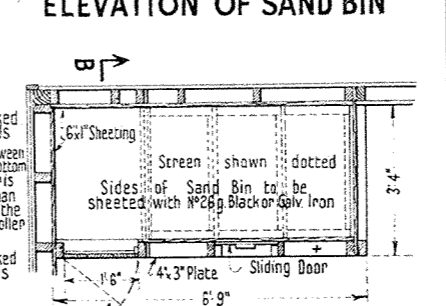
PLAN OF LOWER FLOOR



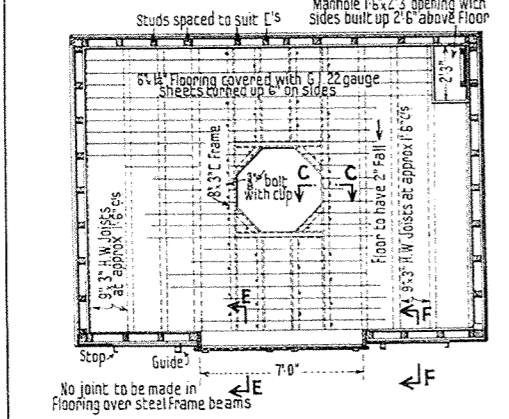
STEEL CHANNEL FLOOR FRAME



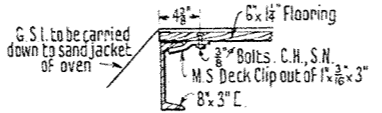
SECTION E-E SECTION F-F



PLAN AT D-D.



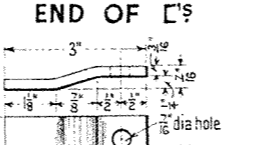
PLAN OF UPPER FLOOR



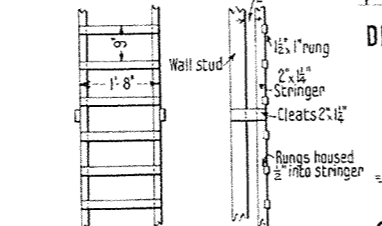
SECTION C-C.



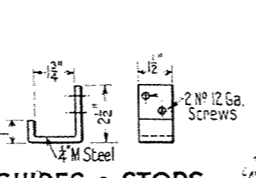
DETAIL AT END OF C'S



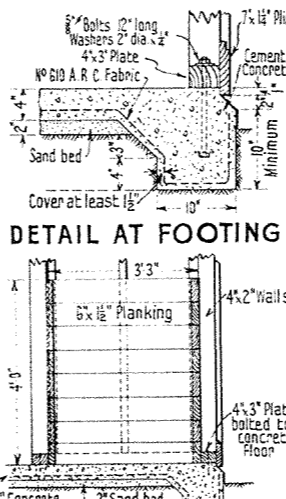
DETAILS OF DECK CLIP



WALL LADDER



GUIDES & STOPS FOR SLIDING DOORS



SECTION THROUGH FUEL BIN

SCHEDULE OF QUANTITIES (CONTD.)

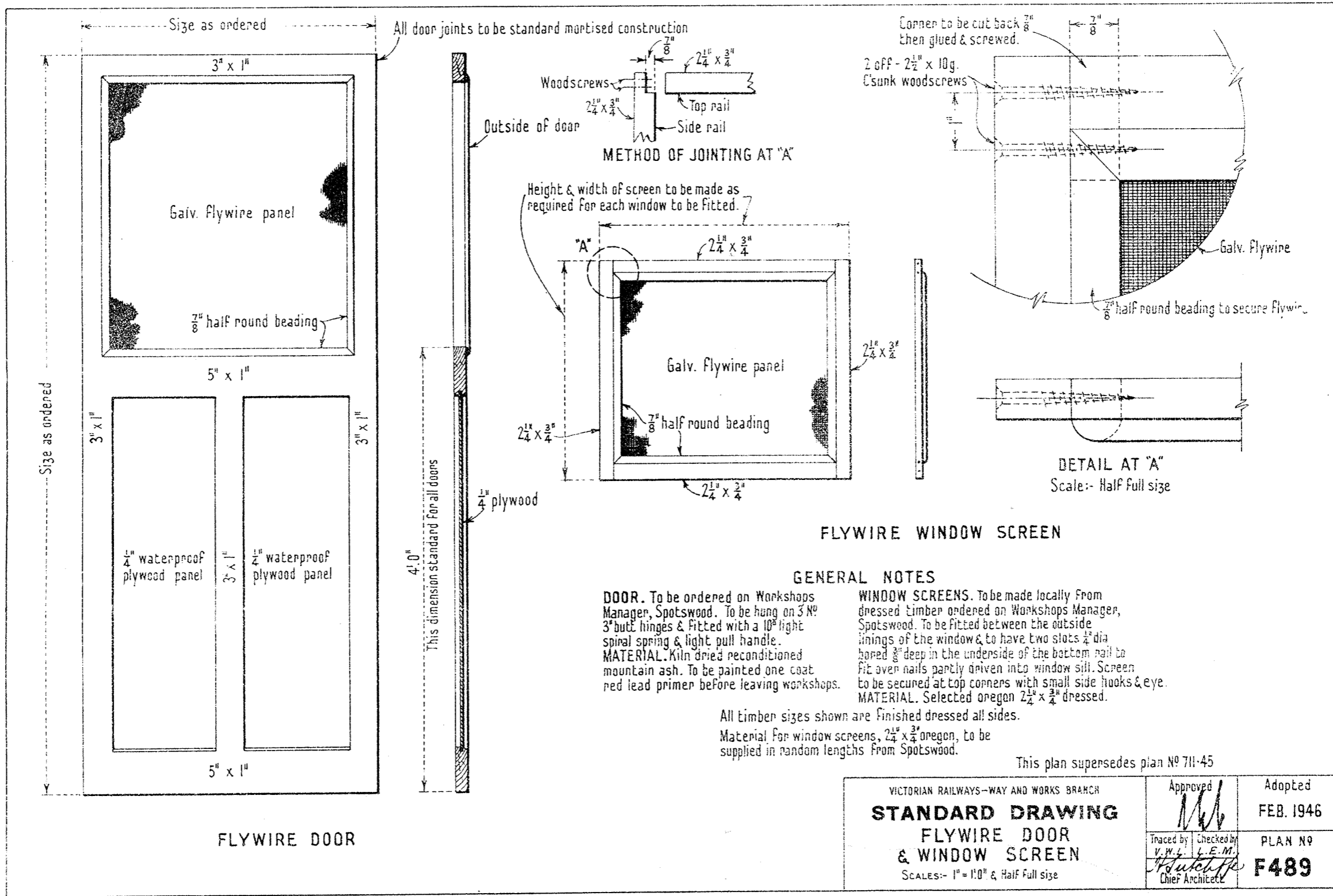
Nº	DESCRIPTION	MATERIAL	QTY	SIZE	LENGTH
74	Bolts & Washers Bin plates	M. S	7	5/8"	7"
75	Channels to studs	"	16	5/8"	3 3/4"
76	Cupheaded bolts floor plates	"	16	5/8"	7"
77	Deck clips	"	48	3/8"	2"
78	Stop ends for ridge & barge	"	48	1 1/2"	3"
79	Bricks for oven base	"	50	8 1/2 x 4 1/2 x 3 1/2	
80	Nails	"	10 lb	1 1/2 x 1 1/2	
81	"	"	10 lb	2 x 1 1/2	
82	"	"	6 lb	2 1/2 x 1 1/2	
83	"	"	16 lb	3 x 9	
84	"	"	5 lb	4 x 8	
85	Padbolt with screws	Galv. Steel	2	1 1/2"	8"
86	Hinges, Tee	"	1	Pair	8"
87	butt	"	1	Pair	3"
88	Barrel bolts	"	2	Pair	3"
89	Painting including putty and sandpaper	"	105	Yds	
90	Bin studs to floor beams	"	7	3"	7"

SCHEDULE OF QUANTITIES

Nº	DESCRIPTION	MATERIAL	QTY	SIZE	LENGTH
1	Plinth molded to detail	Dressed Jamah	2	7 1/4"	8' 0"
2	"	"	1	7 1/4"	4' 0"
3	"	"	1	7 1/4"	12' 0"
4	Bottom plate	Sawn Red Gum	2	4 x 3"	18' 0"
5	"	"	1	4 x 3"	4' 0"
6	"	"	1	4 x 3"	12' 0"
7	"	"	1	4 x 3"	7' 0"
8	"	"	1	4 x 3"	3' 6"
9	Sand Bin	"	1	4 x 3"	6' 0"
10	Fuel Bin	"	1	4 x 3"	6' 0"
11	Studs to Sand Bin	Sawn H.W	3	4 x 2"	8' 0"
12	" & sloping plate to Sand Bin	"	3	4 x 2"	6' 0"
13	to Fuel Bin	"	5	4 x 3"	8' 0"
14	corner intermediate	"	4	4 x 3"	14' 0"
15	"	"	32	4 x 2"	14' 0"
16	gable end & trimming	"	4	4 x 2"	12' 0"
17	"	"	8	4 x 2"	8' 0"
18	Top plates	"	2	4 x 2"	20' 0"
19	"	"	2	4 x 2"	14' 0"
20	Trimmings to Doors & Windows	"	2	4 x 2"	9' 0"
21	Sliding Door opening	"	1	6 x 1 1/2"	9' 0"
22	Braces	"	3	3 x 1"	10' 0"
23	"	"	4	3 x 1"	10' 0"
24	Floor Joists	"	8	9 x 3"	13' 0"
25	support	"	2	9 x 3"	18' 0"
26	Rafters	"	16	4 x 2"	9' 0"
27	Collar ties	"	6	3 x 1 1/2"	8' 0"
28	Roof battens	"	8	3 x 1 1/2"	20' 0"
29	Ridge	"	2	6 x 1 1/2"	9' 0"
30	Lining to Sand Bin	Lin. Fc	6 x 11'	240'	
31	ground floor walls	"	6 x 11'	240'	
32	Frame for Sand Screen	Dressed H.W	4	2 x 2"	8' 0"
33	Splay boards to Sand Screen	"	3	6 x 1"	8' 0"
34	Support for	Sawn H.W	2	4 x 2"	8' 0"
35	Lining to Fuel Bin	Dressed H.W	20	6 x 1 1/2"	6' 6"
36	Ladder stringers	"	2	2 x 1 1/4"	10' 0"
37	rungs	"	10	1 1/2 x 1"	2' 0"
38	T & G Flooring	Milled H.W	Lin. Fc	6 x 11'	420'
39	T & G V. Jointed lining (Upper Floor & lining to eaves soffit)	"	"	3 1/2 x 7 1/2"	830'
40	Weatherboards	"	"	5 1/2 cover	200'
41	Barge boards	Dressed Oregon	4	8 x 1 1/2"	8' 0"
42	Fascia	"	2	8 x 1 1/2"	20' 0"
43	Weatherboard Stops	"	4	2 x 1 1/2"	14' 0"
44	Scotia mold under eaves gutter	M. Ash	Lin. Fc	1 1/2"	40' 0"
45	Quadrant molding	"	2	3/4"	20' 0"
46	Louvre Frames (timber blades)	"	2	2' 0" x 2' 6"	
47	Hinged sash & frame complete	"	1	3' 6" x 4' 0"	
48	Door & frame without sill	"	1	6' 6" x 2' 6"	
49	Sliding doors & frame	"	1	6' 6" x 2' 6"	
50	Campan for sliding door track	Dressed H.W	2	1 1/2 x 1 1/2"	5' 0"
51	Guides	"	2	1 1/2 x 1 1/2"	5' 0"
52	6" Conc. Floor mortar for oven base	Cement	28	Bags	
53	fine aggregate for conc. Floor 2" cushion	Sand	3 1/2	Cu Yds	
54	coarse aggregate for floor	3/4" Screenings	4 1/2	Yds	
55	Reinforcing Fabric	6 x 6" No 10 ga.	3 1/2	Yds	16' 0" x 13' 0" to detail
56	Steel Channel Floor Frame	"	1	to detail	
57	5 1/2" pitch corr. roof sheeting 7' laps	Asb. Cement	14	14	8' 0"
58	2 piece fluted ridge capping 9' wings	"	7	Sets	3' 1/2"
59	Ridge vent base (30")	"	1	9" dia.	
60	Barge molding socketed	"	3	L.H.	8' 1/2" x 7' 1/2" x 1 1/2" x 1 1/2"
61	"	"	3	R.H.	8' 1/2" x 7' 1/2" x 1 1/2" x 1 1/2"
62	Stop ends for ridge & barge	"	2	"	
63	Fluted gutter flashing	"	14	"	2' 10 1/2"
64	galv. screws for fixing Asbestos cement complete with washers	"	100	3 x 1 3/4"	
65	Eaves gutter	Galv. S. Iron	8	4 1/2" x 6"	6' 0"
66	4 1/2" G. Gutter brackets & screws	"	14	1 x 1 1/2"	
67	Downpipes	"	6	3" diam.	6' 0"
68	Floor sheathing upper floor & flashings	"	15	22 ga.	6' 6" x 3' 0"
69	Sheeting interior of sand bin	G.S.I. or black	6	25 ga.	6' 6" x 3' 0"
70	Galv. clout tacks	"	3	lb	
71	3 mesh steel wave for sand screen	Steel Wire	18 1/2	ft.	10' 0" x 6' 6" x 3' 0"
72	Bolts & Washers bottom plate	M. S.	24	5/8"	12"
73	"	"	7	3/8"	7"

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING
SAND HOUSE
 TYPE B
 No Scale

Approved
 Chief Civil Engineer
 Adopted
JULY 1949
 Drawn by I. D. R.
 Checked by L. A. S.
 PLAN No.
F488A
 Engineer of Structural Design



METHOD OF JOINTING AT "A"

DETAIL AT "A"
Scale:- Half Full size

FLYWIRE WINDOW SCREEN

GENERAL NOTES

DOOR. To be ordered on Workshops Manager, Spotswood. To be hung on 3 No 3" butt hinges & fitted with a 10" light spiral spring & light pull handle.
MATERIAL. Kiln dried reconditioned mountain ash. To be painted one coat red lead primer before leaving workshops.

WINDOW SCREENS. To be made locally from dressed timber ordered on Workshops Manager, Spotswood. To be fitted between the outside linings of the window & to have two slots $\frac{1}{4}$ " dia bored $\frac{3}{8}$ " deep in the underside of the bottom rail to fit over nails partly driven into window sill. Screen to be secured at top corners with small side hooks & eye.
MATERIAL. Selected oregon $2\frac{1}{4} \times \frac{3}{4}$ " dressed.

All timber sizes shown are finished dressed all sides.
 Material for window screens, $2\frac{1}{4} \times \frac{3}{4}$ " oregon, to be supplied in random lengths from Spotswood.

This plan supersedes plan No 711-45

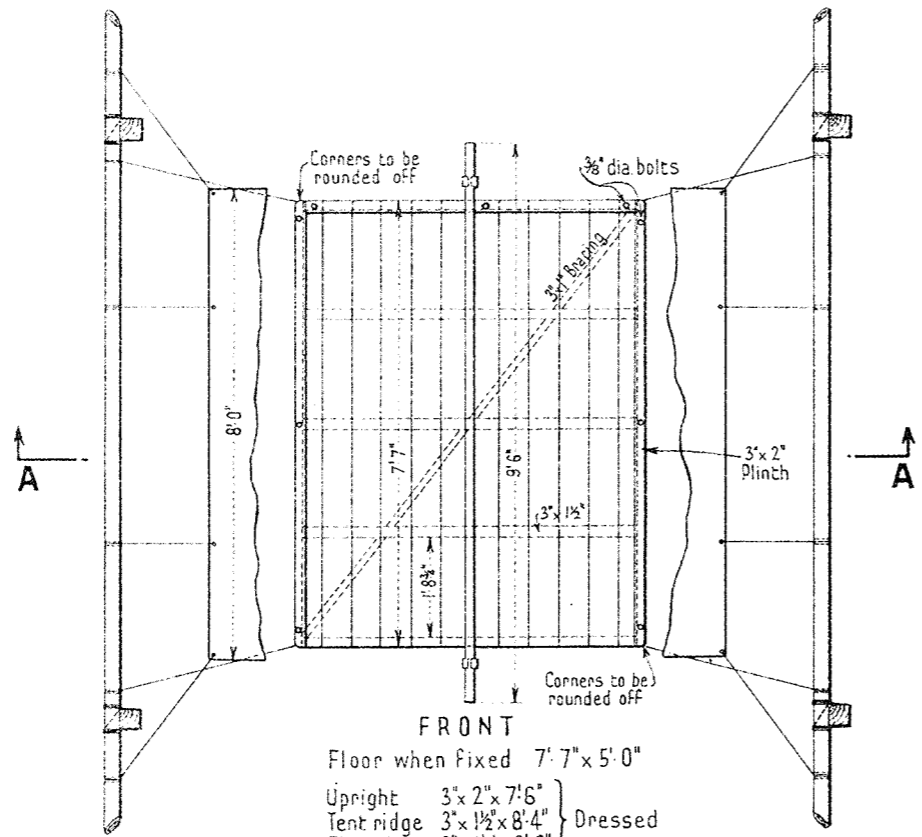
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.H.</i>	FEB. 1946
FLYWIRE DOOR & WINDOW SCREEN		Traced by <i>V.W.L.</i>	PLAN No
SCALES:- 1" = 1'-0" & Half Full size		Checked by <i>L.E.M.</i>	F489
		<i>Hutchings</i> Chief Architect	

SCHEDULE OF QUANTITIES FOR ONE TRACK			
I T E M	QUANTITY	I T E M	QUANTITY
6-1 Cement Concrete.	16 Cub. Yards (Minimum)	Bolt $\frac{5}{8}$ " dia. x 15" long.	4 N ^o
R.S.J. 12" x 8" x 65 lbs. x 10'-0" long.	2 N ^o	Bolt $\frac{5}{8}$ " dia. x 12" long.	2 N ^o
M.S. Heel plate 6" x 1" x 9"	4 N ^o	Bolt $\frac{5}{8}$ " dia. x 11" long. sq. necked cup headed	12 N ^o
M.S. Bed plate 7 $\frac{1}{2}$ " x 1" x 1'-3"	4 N ^o	Bolt $\frac{5}{8}$ " dia. x 10 $\frac{1}{2}$ " long.	2 N ^o
M.S. Bed plate pins $\frac{7}{8}$ " dia. x 6" long.	2 N ^o	Bolt $\frac{5}{8}$ " dia. x 9" long. sq. necked cup headed	12 N ^o
Set screws $\frac{7}{8}$ " dia. x 3" long.	4 N ^o	Washer 2" dia. x $\frac{1}{4}$ " with $\frac{11}{16}$ " dia. hole.	40 N ^o
Bevel washers (Standard for $\frac{7}{8}$ " dia. set screws).	4 N ^o	H. W. Arris 7" x 7"	5 N ^o 4'-6 $\frac{1}{2}$ " long - 10 N ^o 4'-0 $\frac{1}{2}$ " long
Locking pieces 3 $\frac{1}{2}$ " x 3" x $\frac{1}{8}$ " with $\frac{15}{16}$ " dia. hole.	4 N ^o	H. W. Arris 6" x 6" x 10" long.	4 N ^o
Standard sleeper plate.	10 N ^o	H. W. Bearer 6" x 4" x 10" long.	2 N ^o
Dog spikes $\frac{3}{4}$ " sq. x 6" long.	20 N ^o	H. W. Rails 4" x 3" x 12'-7" long.	6 N ^o
M.S. Deck clip out of 2 $\frac{1}{2}$ " x $\frac{3}{8}$ " x 7 $\frac{1}{2}$ " (Dimension A = $\frac{3}{4}$ ").	20 N ^o	R. G. Post 5" x 4" x 6'-6" long.	2 N ^o
Bevel washers (2" x 2" with $\frac{13}{16}$ " sq. hole. Type A).	20 N ^o	R. G. Post 7" x 7" x 8'-6" long.	2 N ^o
Bolt $\frac{3}{4}$ " dia. x 8 $\frac{1}{2}$ " long sq. necked & cup headed with lock nut.	20 N ^o	Sleepers (sawn) 10" x 5" x 9'-0" long.	5 N ^o

NOTE:- This SCHEDULE to be used in conjunction with PLAN N^o F. 450^A

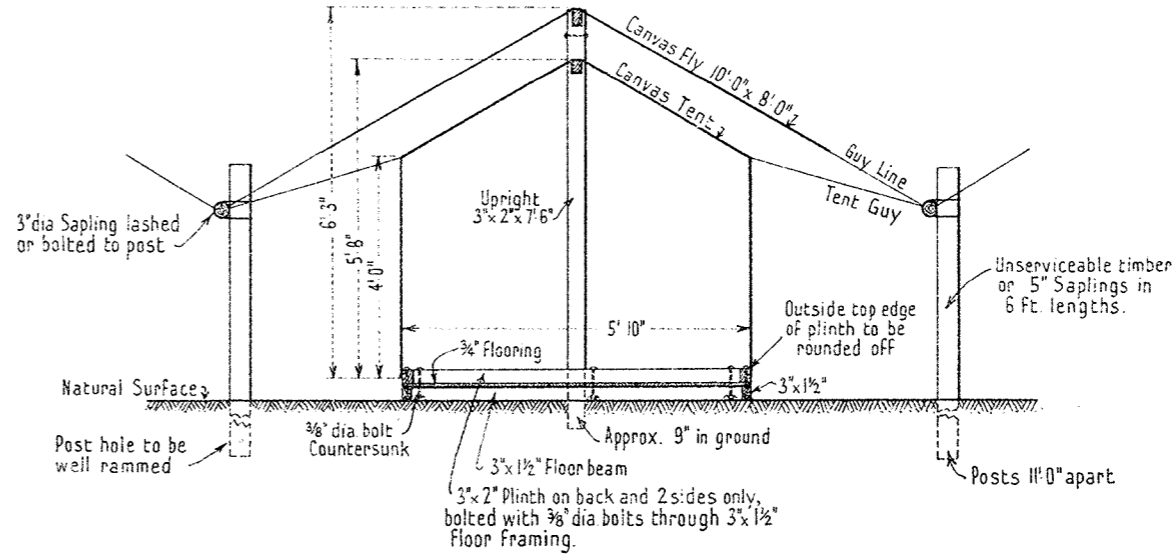
A	23-746	Quantities adjusted to suit amended F.450.
REV.	DATE	AMENDMENT

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>M.M.</i> Chief Civil Engineer	NOV. 1944
SCHEDULE OF QUANTITIES		Drawn by Checked by	PLAN N ^o
CATTLE PIT FOR MAIN SPEED LINES		E. C. T. H. J.	F 490 ^A
I Beam Superstructure		<i>W. Brandy</i> Eng' of Struct'l Design	

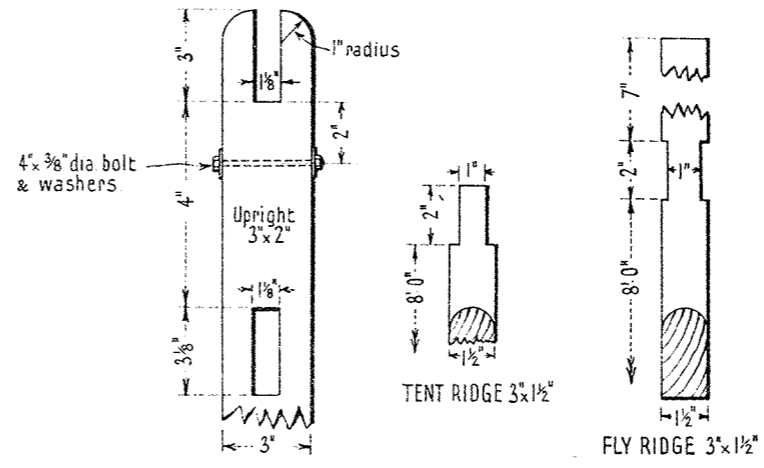


FRONT
 Floor when Fixed 7' 7" x 5' 0"
 Upright 3' x 2" x 7' 6"
 Tent ridge 3' x 1 1/2" x 8' 4"
 Fly ridge 3' x 1 1/2" x 9' 6"
 } Dressed

PLAN



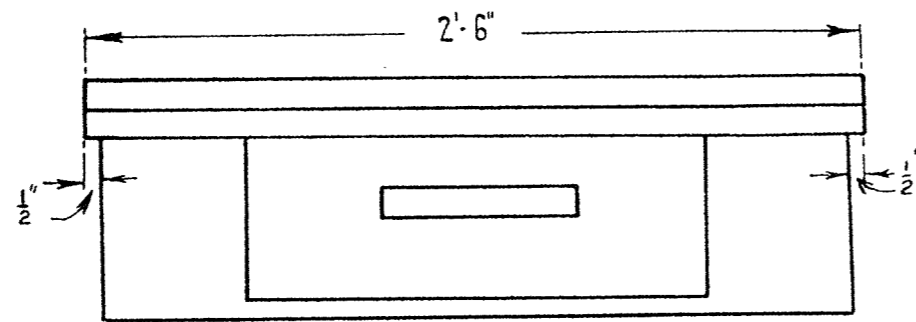
SECTION A-A



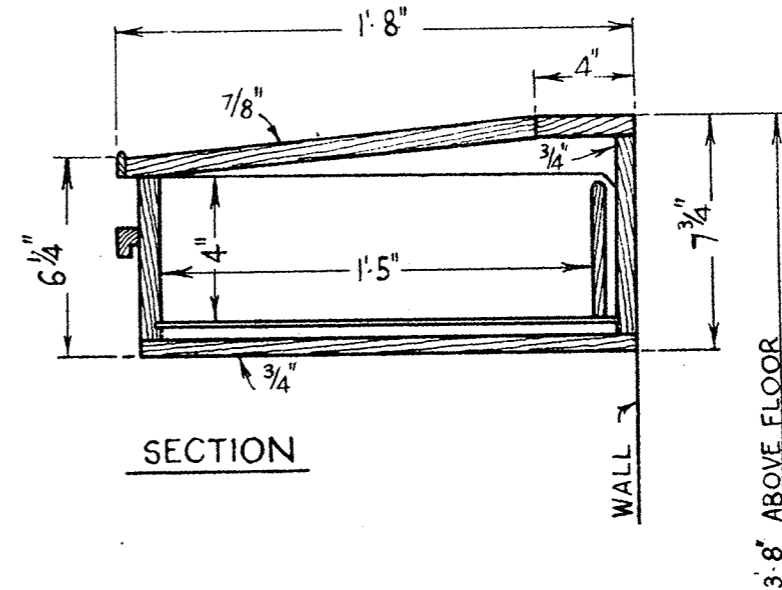
DETAIL OF RIDGE CONNECTIONS

Minimum Size of Tent	
Width between Walls	5' 10"
Length between Ends	7' 7"
Height	5' 8"
Height of Walls	4' 0"
Weight of Floor (Approx.)	1 1/2 Cwt.

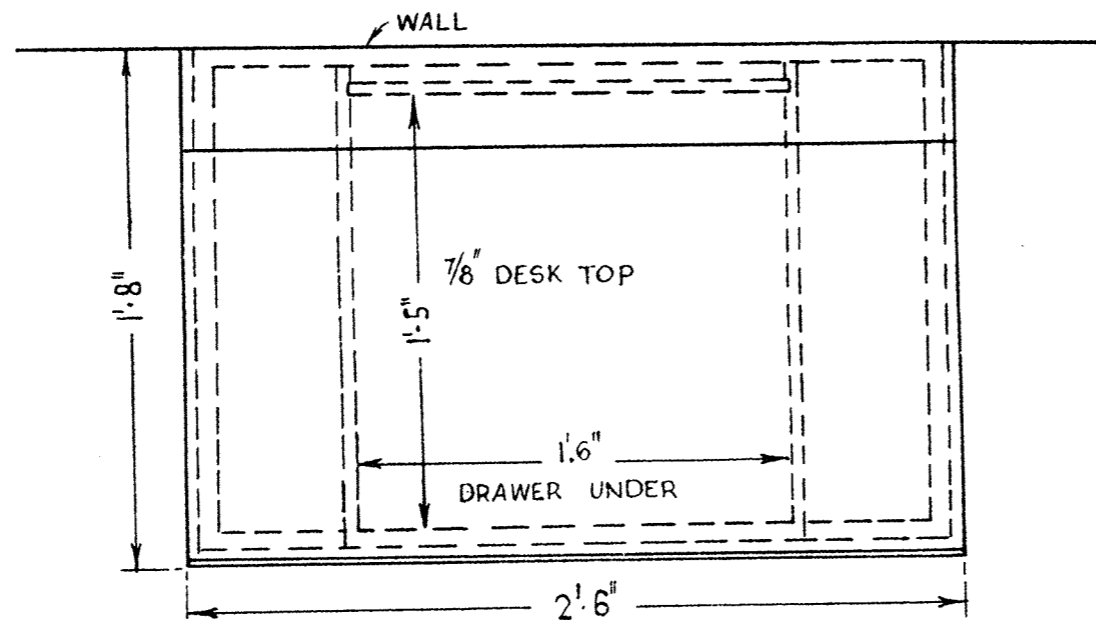
VICTORIAN RAILWAYS - WAY & WORKS BRANCH		Approved	Adopted.
STANDARD DRAWING		<i>MW</i>	FEB. 1946
METHOD OF ERECTING 8' x 6' TENT AND FLY WITH FLOOR		Chief Civil Engineer	
Drawn by	Checked by	PLAN NO	
M. F. & E. C.	H. C. T.	F 491	
<i>NE</i>		Engineer of Special Works	



ELEVATION



SECTION



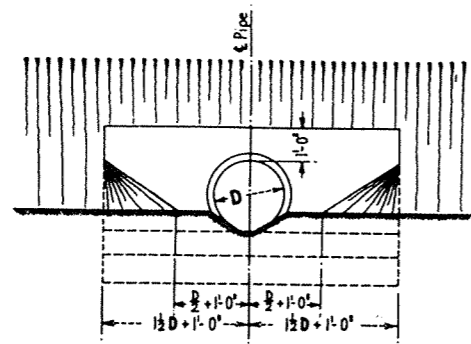
PLAN

NOTE :

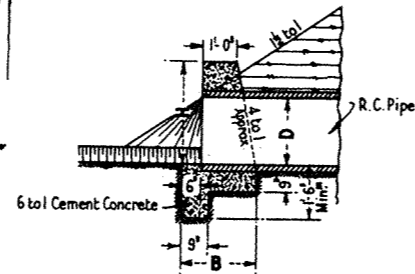
DESK SHALL BE FIXED TO WALL
AND SECURED ON SUITABLE BRACKETS
TO SUIT EACH PARTICULAR LOCATION.

FINISH IN NATURAL MOUNTAIN ASH
COLOR UNLESS OTHERWISE DIRECTED.

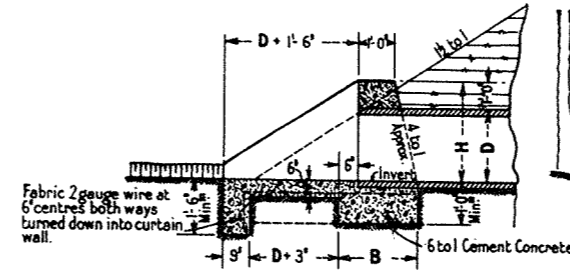
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved <i>[Signature]</i>	Adopted
STANDARD DRAWING		A/Chief Civil Engineer	1946
TRAIN REGISTER BOOK DESK		Checked <i>S.S.</i>	PLAN No.
FOR SIGNAL CABINS, ETC.		<i>L. E. May</i> Chief Architect	F.492
Scale : 1/2" to 1'0"			



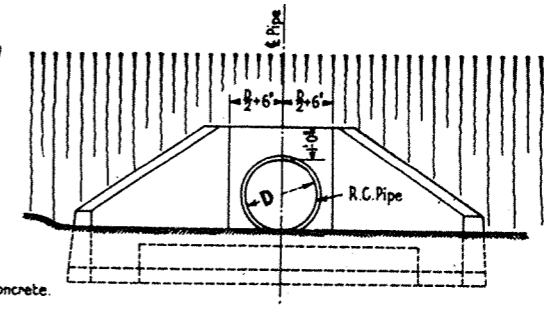
ELEVATION



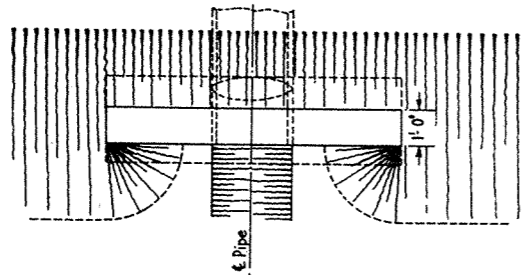
PART SECTION ON $\text{\textcircled{C}}$



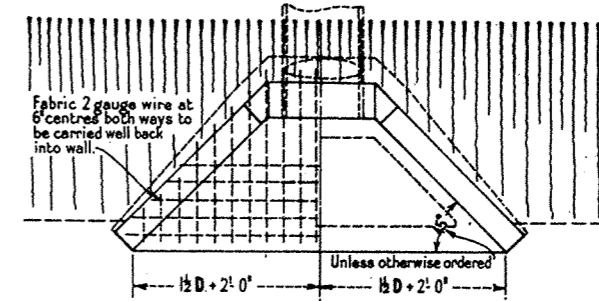
PART SECTION ON $\text{\textcircled{C}}$



ELEVATION



PART PLAN



PLAN

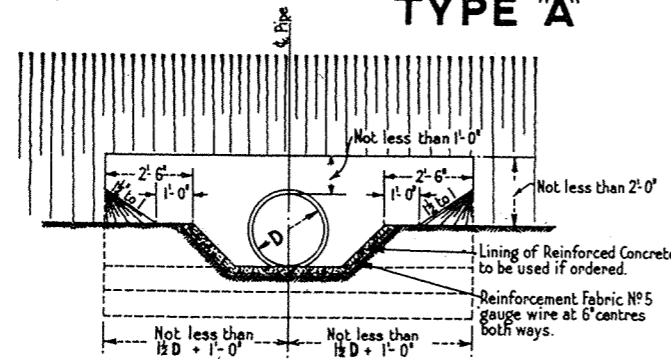
Table of Heights and Base Widths of Wall.

Height H	Breadth B	Height H	Breadth B
1'-9"	2'-0"	4'-0"	2'-6"
2'-0"	.	4'-6"	2'-9"
2'-3"	.	5'-0"	.
2'-6"	2'-3"	5'-6"	3'-0"
2'-9"	.	6'-0"	.
3'-0"	.	6'-6"	3'-3"
3'-3"	.	7'-0"	.
3'-6"	2'-6"	7'-6"	3'-6"

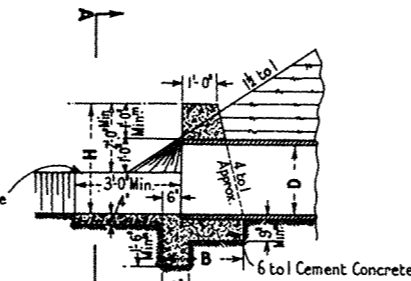
NOTE:- This Table does not apply to Type D.

TYPE "A"

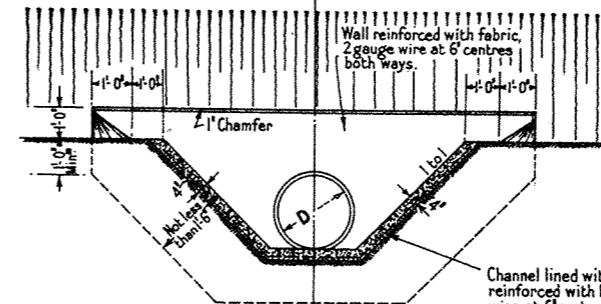
TYPE "B"



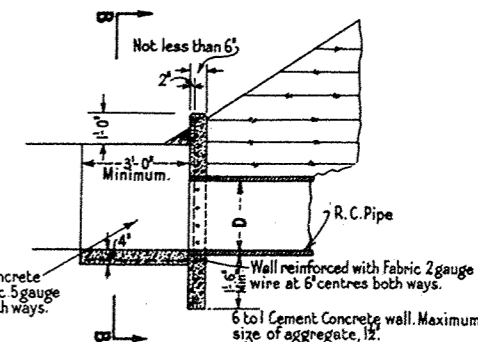
SECTION A-A



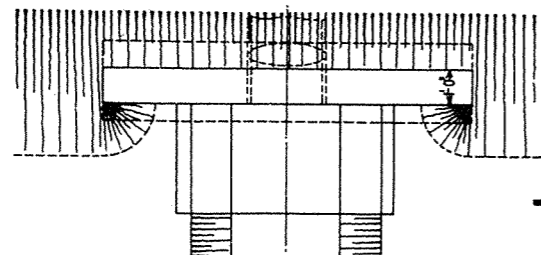
PART SECTION ON $\text{\textcircled{C}}$



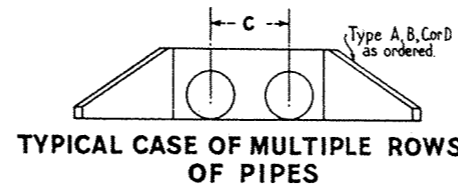
SECTION B-B



PART SECTION ON $\text{\textcircled{C}}$



PLAN



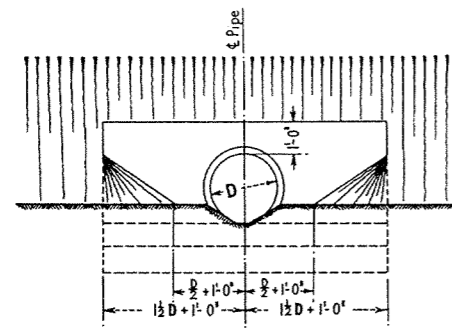
TYPICAL CASE OF MULTIPLE ROWS OF PIPES

For minimum values of C, see F. 265.

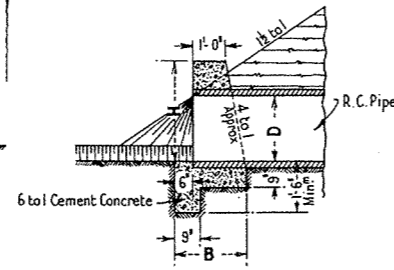
TYPE "D"

NOTE:- This drawing is to be used in conjunction with plan No F. 265.

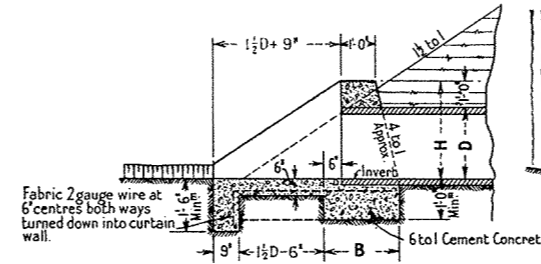
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	JUNE 1946
REINFORCED CONCRETE		Chief Civil Engineer	
PIPE CULVERTS.		Drawn by I. D. R.	Checked by <i>[Signature]</i>
DETAILS OF END WALLS		<i>[Signature]</i>	PLAN No. F 493
		Engineer of Structural Design.	



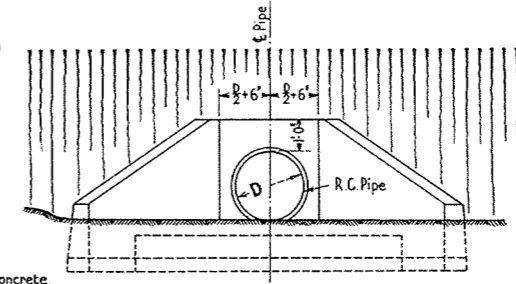
ELEVATION



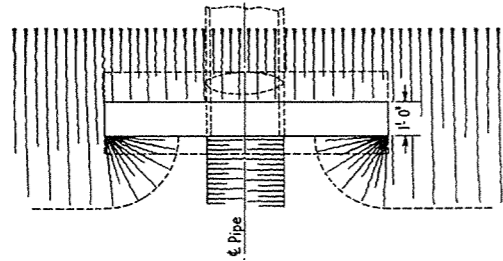
PART SECTION ON CL



PART SECTION ON CL



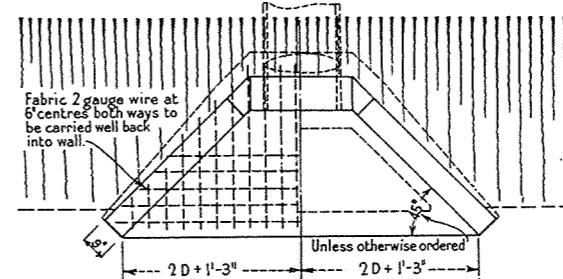
ELEVATION



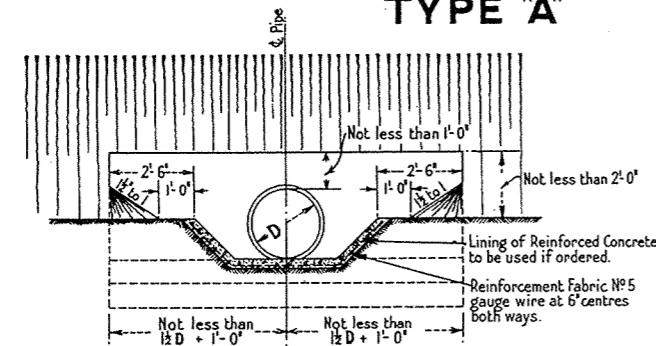
PART PLAN

Table of Heights and Base Widths of Wall.			
Height H	Breadth B	Height H	Breadth B
1'-9"	2'-0"	4'-0"	2'-6"
2'-0"	.	4'-6"	2'-9"
2'-3"	.	5'-0"	.
2'-6"	2'-3"	5'-6"	3'-0"
2'-9"	.	6'-0"	.
3'-0"	.	6'-6"	3'-3"
3'-3"	.	7'-0"	.
3'-6"	2'-6"	7'-6"	3'-6"

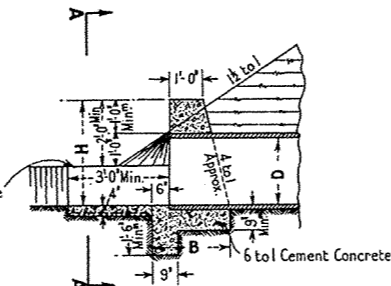
NOTE:- This Table does not apply to type D.



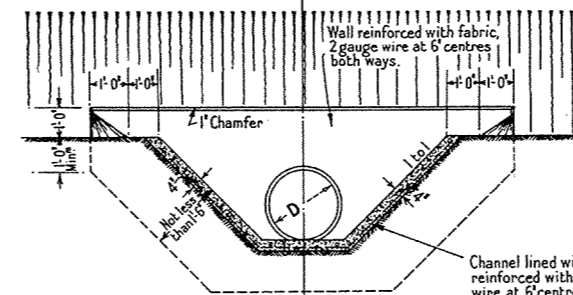
PLAN



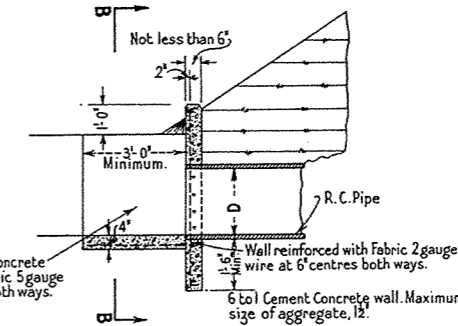
SECTION A-A



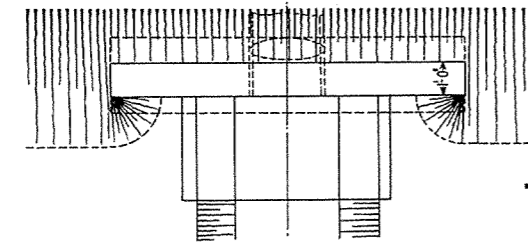
PART SECTION ON CL



SECTION B-B

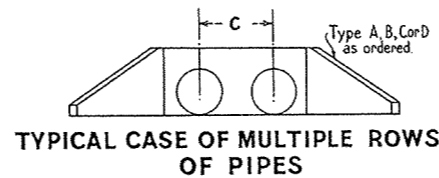


PART SECTION ON CL



PLAN

TYPE "C"



TYPICAL CASE OF MULTIPLE ROWS OF PIPES

For minimum values of C, see F 265

Rev'n	Date	Amendment	Engineer
"A"	25-10-65	Dimension for Type 'B' corrected.	R.E.M.

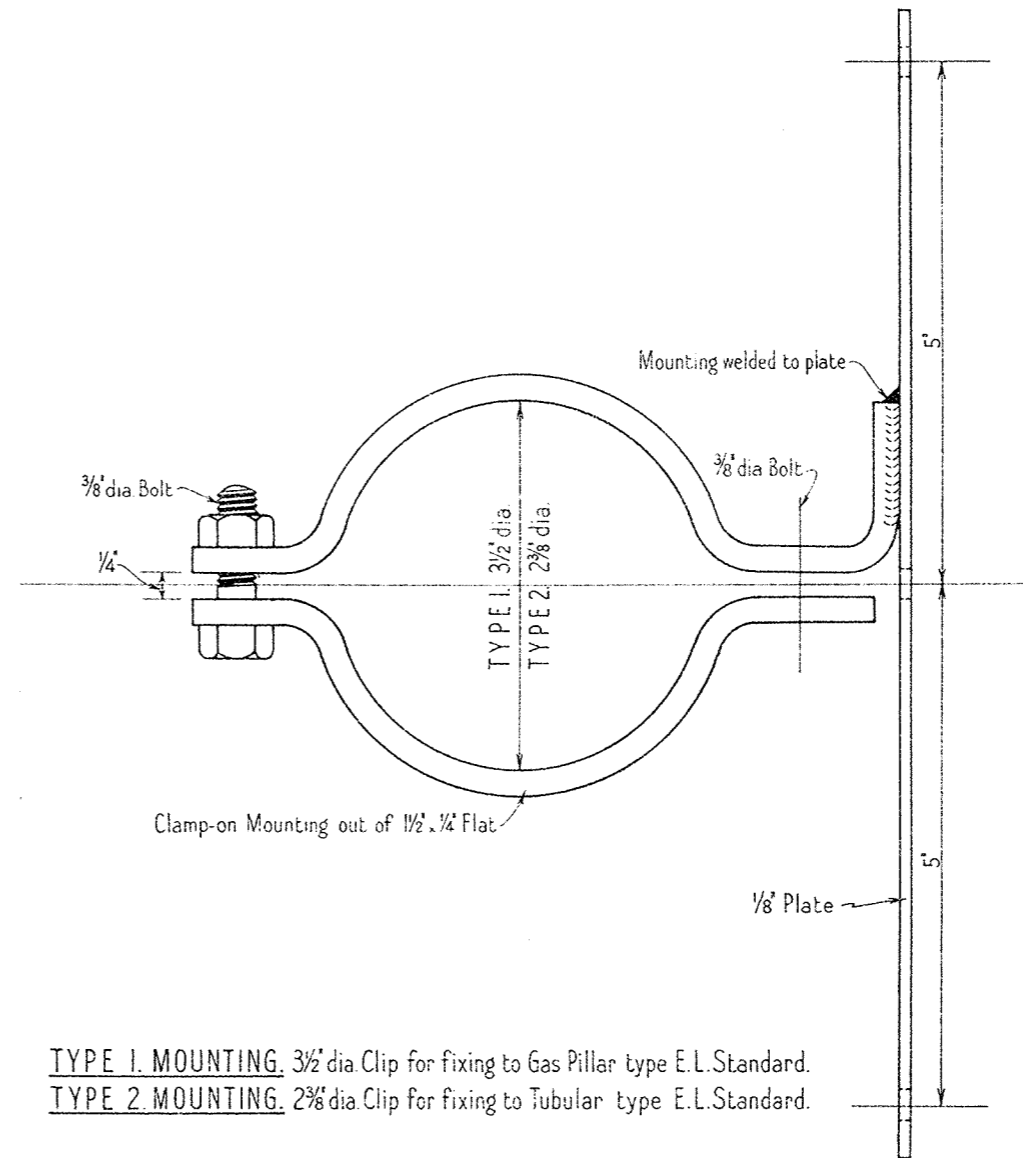
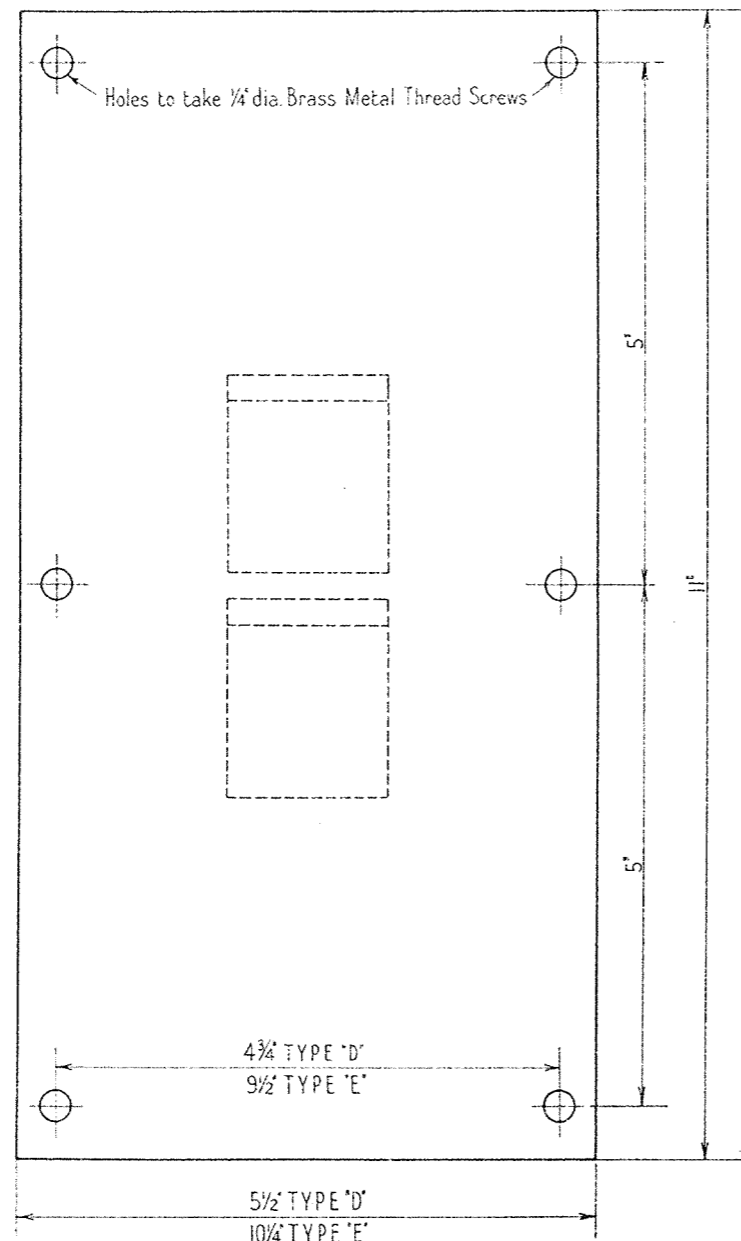
TYPE "B"

TYPE "D"

NOTE:- This drawing is to be used in conjunction with plan No F. 265.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING
REINFORCED CONCRETE
PIPE CULVERTS.
DETAILS OF END WALLS

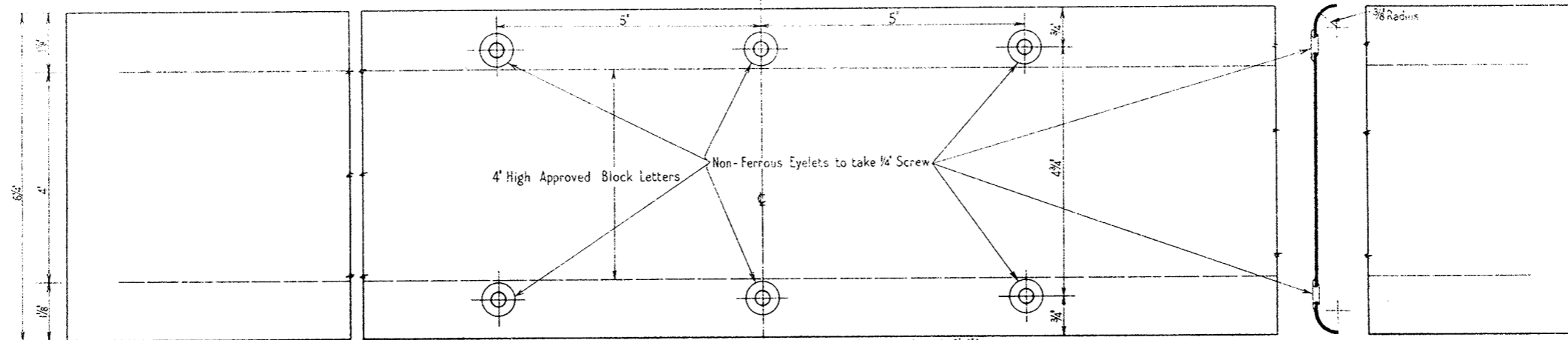
Approved		Adopted
Chief Civil Engineer		JUNE 1946
Drawn by	Checked by	PLAN No.
I. D. R.	R.K.	
Engineer of Structural Design.		F 493^A



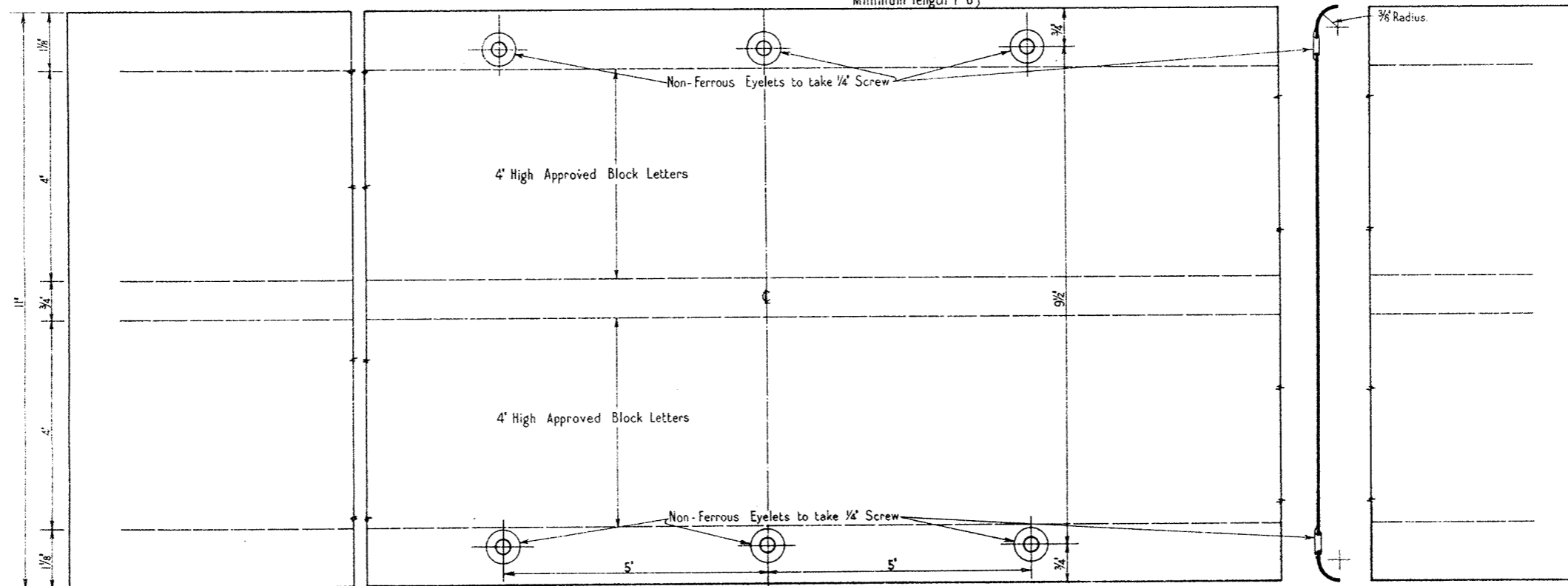
TYPE 1. MOUNTING. 3 1/2" dia. Clip for fixing to Gas Pillar type E.L. Standard.
 TYPE 2. MOUNTING. 2 3/8" dia. Clip for fixing to Tubular type E.L. Standard.

This drawing supersedes plans Nos 706-42 & 700-43.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING MOUNTINGS FOR TYPES 'D' & 'E' COUNTRY STATION NAME PLATES.		 Chief Civil Engineer. Drawn by K.F.L. Checked by S.S.	SEP. 1946
			PLAN No F494
NO SCALE.		 Chief Architect	



TYPE "D" PLATE Maximum length 2'-6" Minimum length 1'-6" Width 6 1/4"



TYPE "E" PLATE Maximum length 2'-6" Minimum length 1'-6" Width 11"

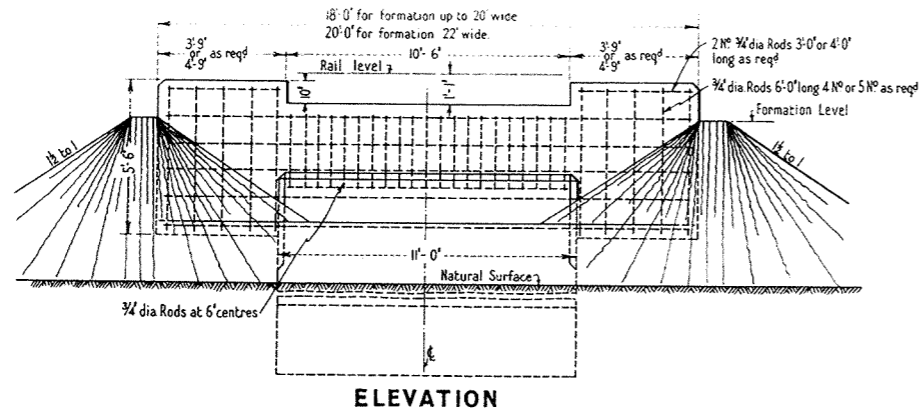
NOTE-
Plates to be 20 B.G. Mild steel vitreous enamelled.
Black letters on White background.

This drawing supersedes plan No 699-42.

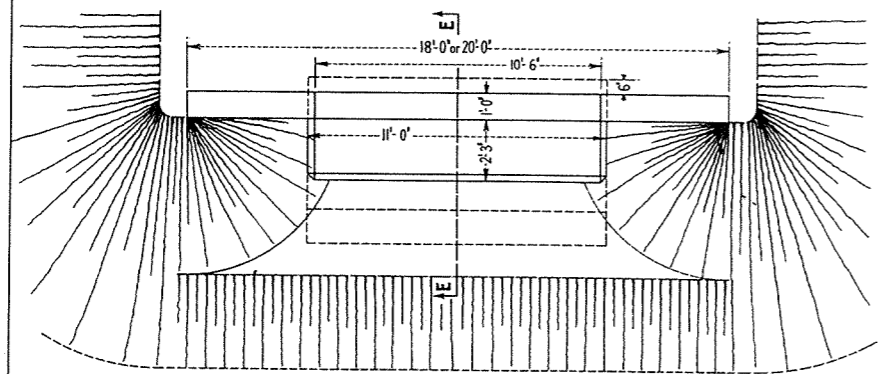
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING
ENAMELLED STATION
NAMEPLATES FOR USE ON
COUNTRY LINES.
NO SCALE

Approved
M.H.
Chief Civil Engineer
Drawn by
R.C.
Checked by
L.E.M.
H. Whitecliffe.
Chief Architect

Adopted
SEP. 1946
PLAN No
F495

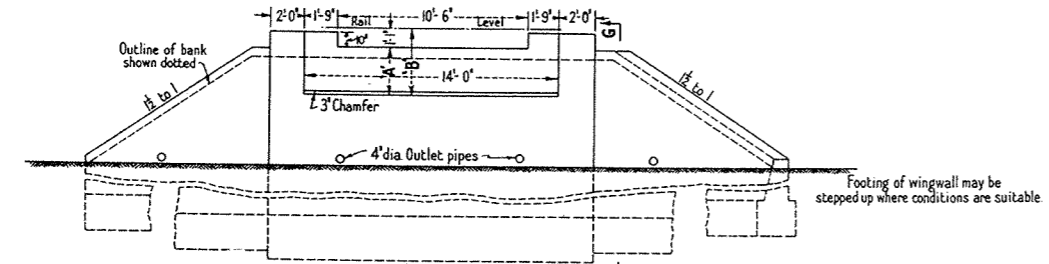


ELEVATION

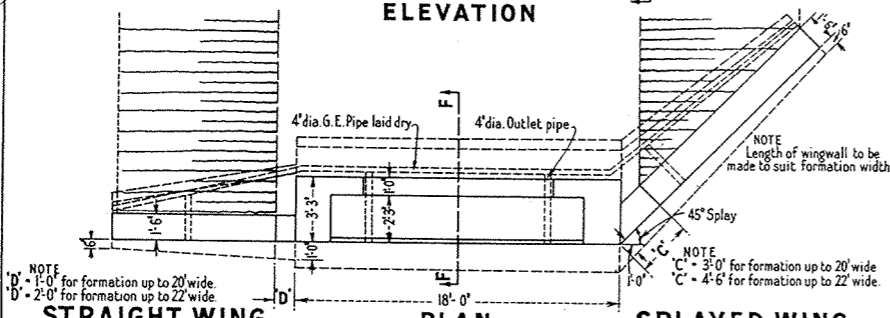


PLAN

DETAILS OF ABUTMENT WITHOUT WINGWALLS



ELEVATION

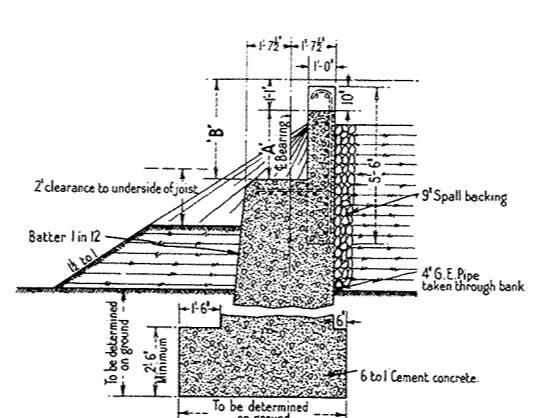


STRAIGHT WING

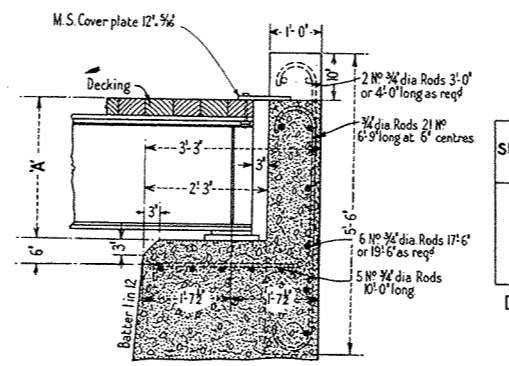
PLAN

SPLAYED WING

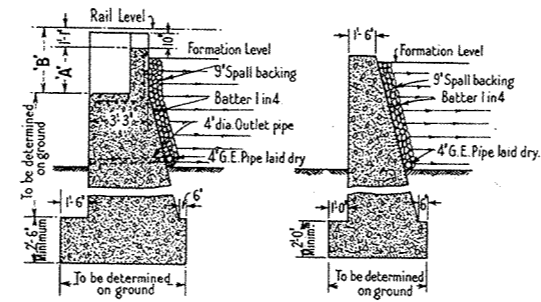
DETAILS OF ABUTMENT WITH WINGWALLS



SECTION E-E

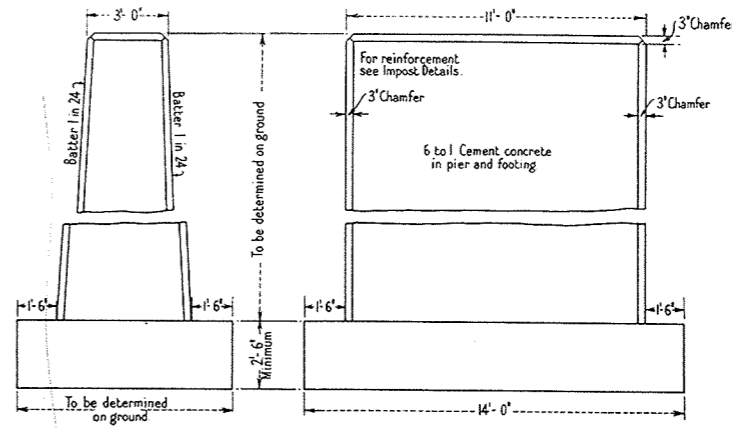


IMPOST DETAILS



SECTION F-F

SECTION G-G



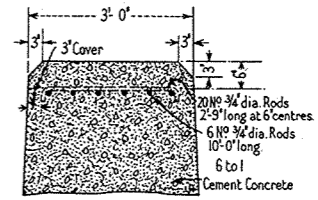
END ELEVATION

SIDE ELEVATION

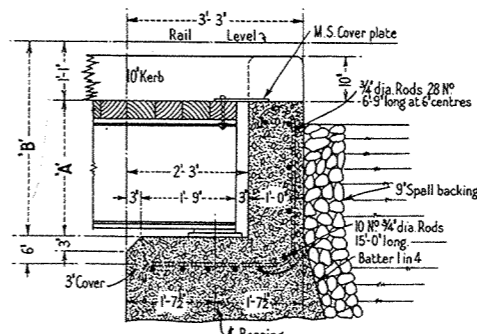
TYPICAL DETAILS OF PIER

SUPERSTRUCTURE PLAN NO	JOIST SECTION	TIMBER DECK		CONCRETE DECK	
		A	B	A	B
F 307A	24x7 1/2 Pltd	2'-7"	3'-8"	2'-9 1/2"	3'-10 1/2"
F 373	24x7 1/2 Unpltd	2'-6"	3'-7"	2'-8 1/2"	3'-9 1/2"
F 380A	24x7 1/2 Pltd	2'-7"	3'-8"	2'-9 1/2"	3'-10 1/2"
F 418	24x7 1/2 Unpltd	2'-6"	3'-7"	2'-8 1/2"	3'-9 1/2"

Dimension 'B' allows for 80 lb. Rail.



PIER IMPOST DETAILS



IMPOST DETAILS

NOTES
 Depths of foundations to be determined on the ground and marked on piers abutments where adjacent to planted piles, foundations to be taken down to at least level of pile sills.
 1/2 Chamfer on all exposed edges of concrete except where shown as 3'.
 This plan to be used in conjunction with plans F 307A, F 373, F 380A & F 418 as directed.
 Type of abutment to be adopted will be shown on instruction.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH

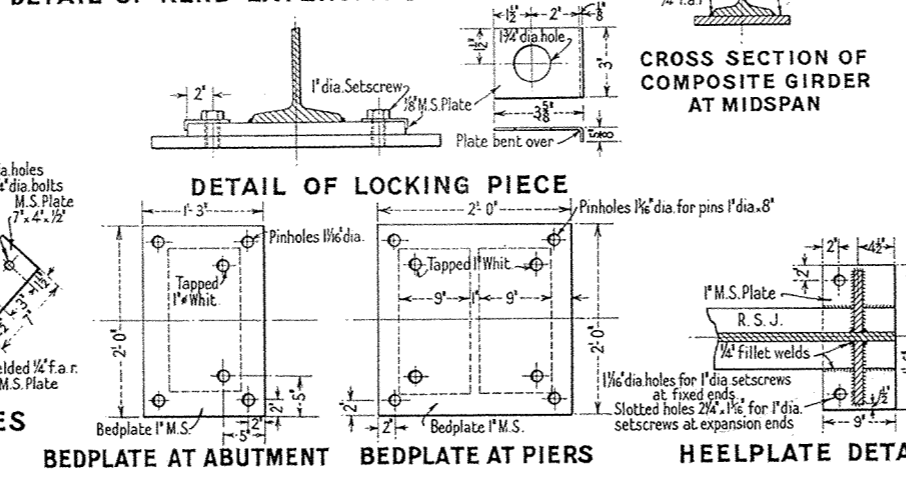
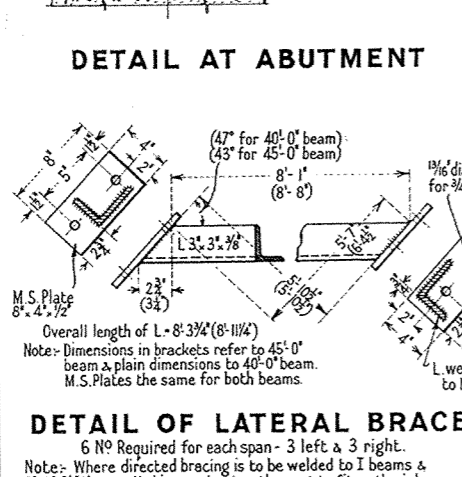
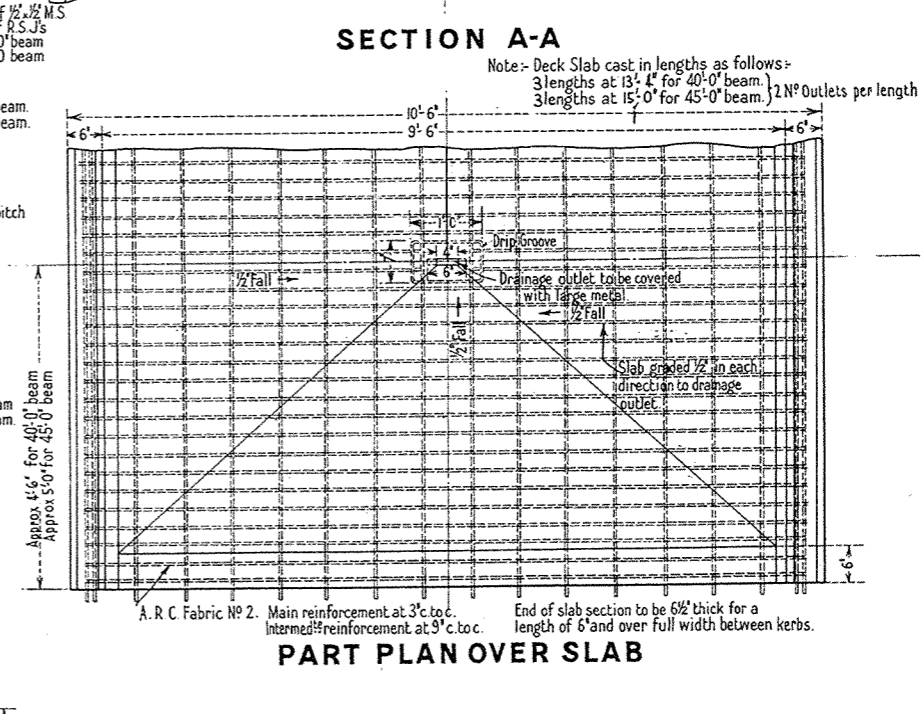
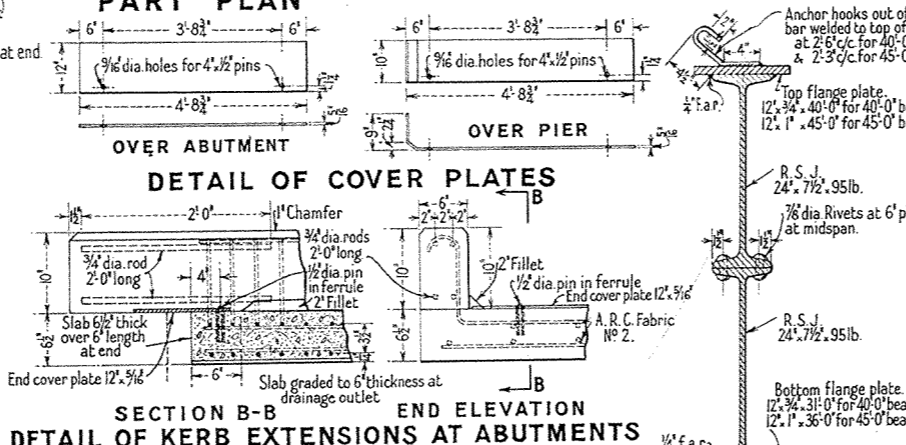
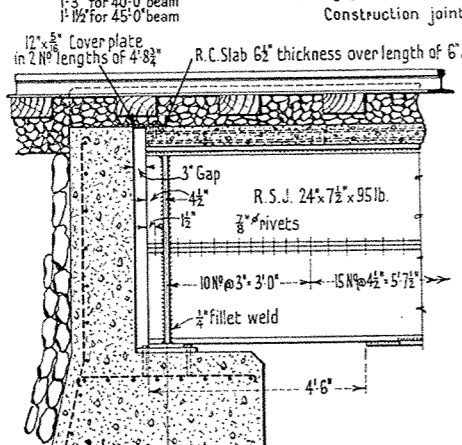
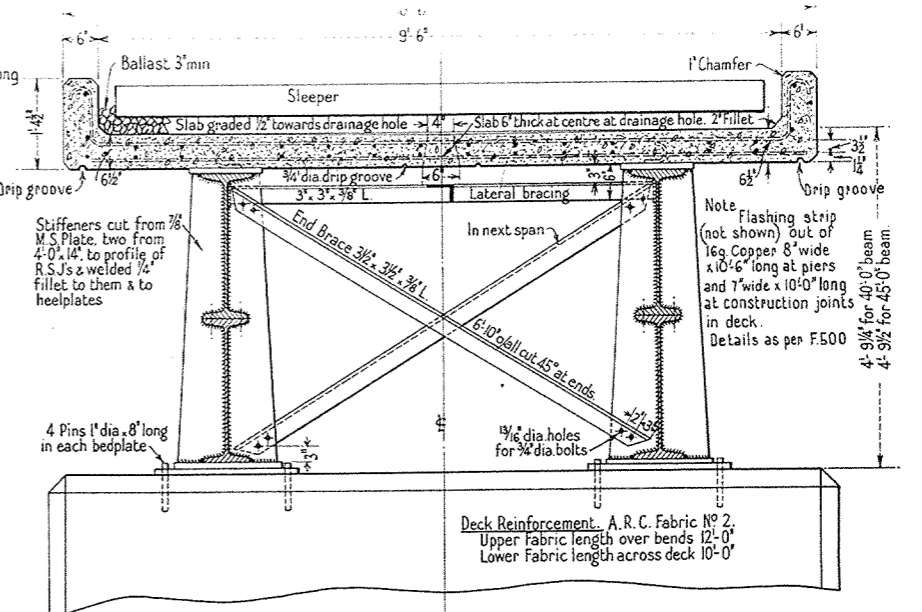
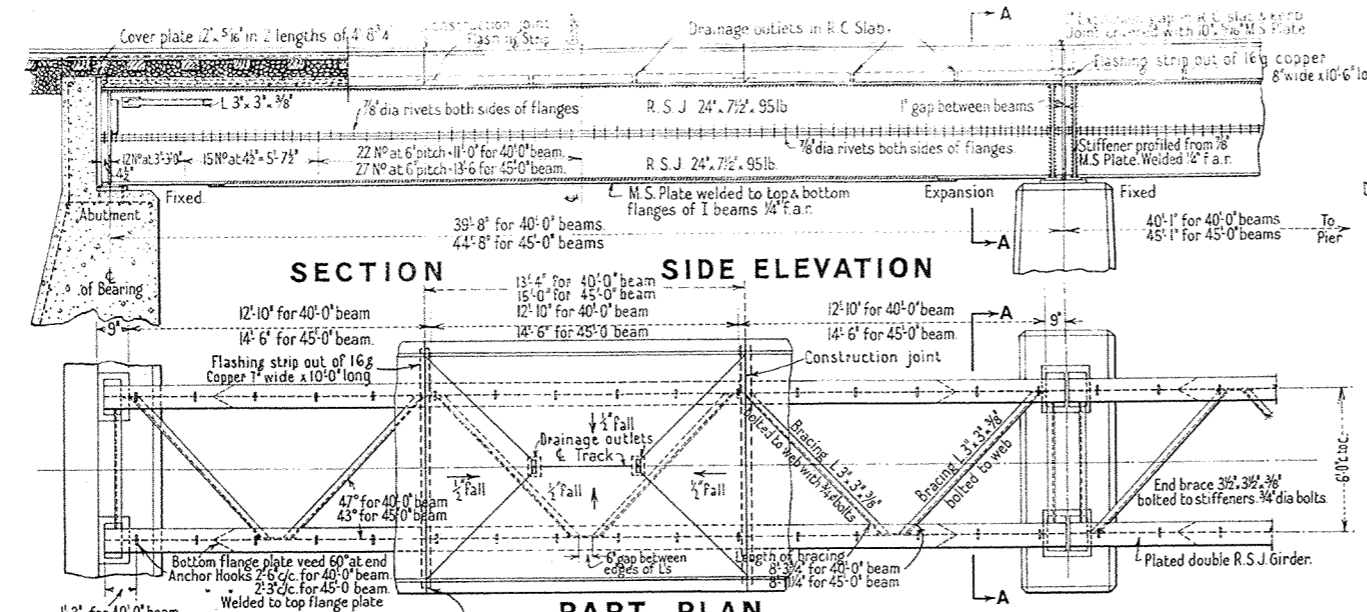
STANDARD DRAWING

R.S.J. BRIDGES, 20"-32" SPANS

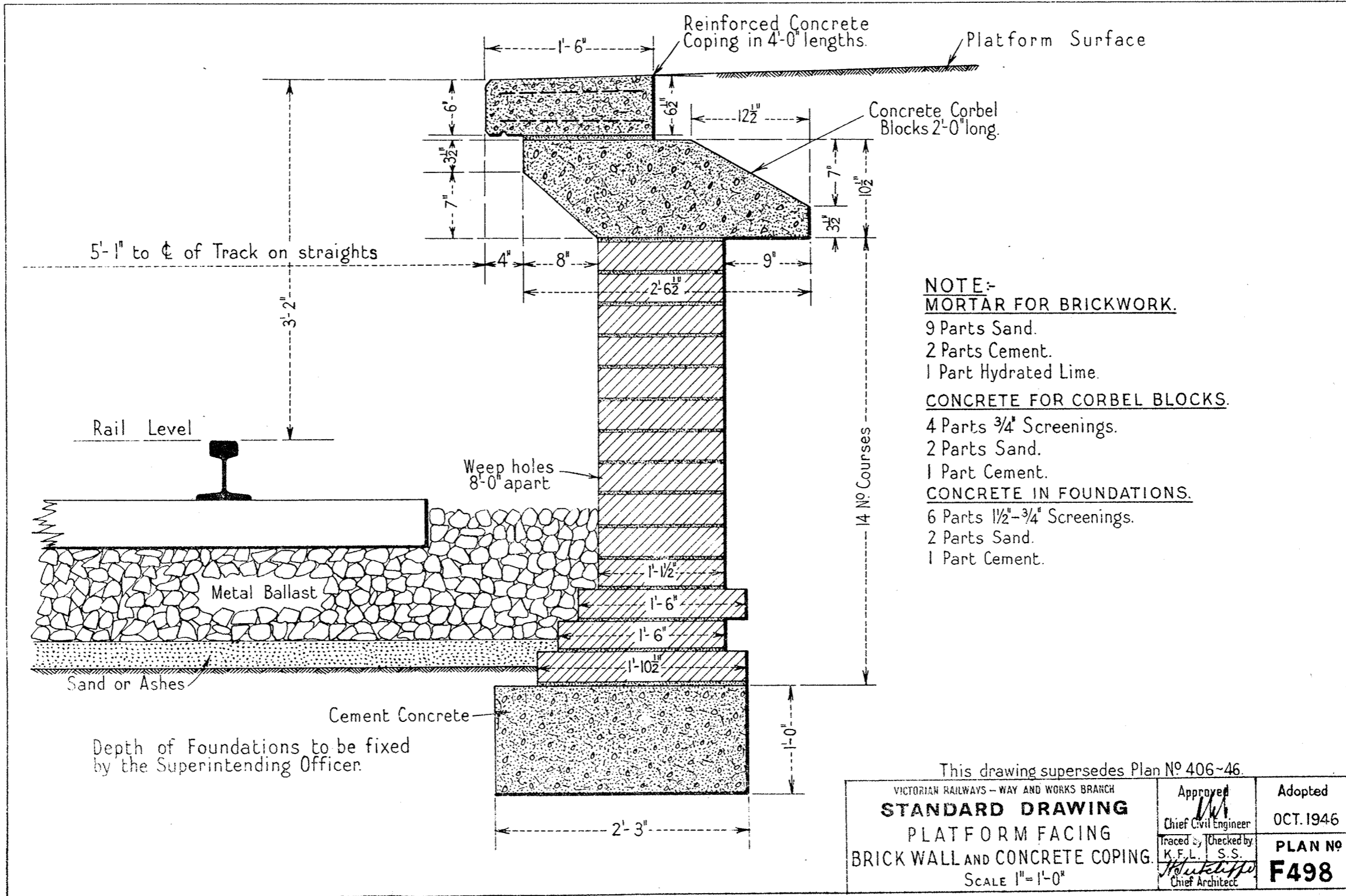
DETAILS OF SUBSTRUCTURE

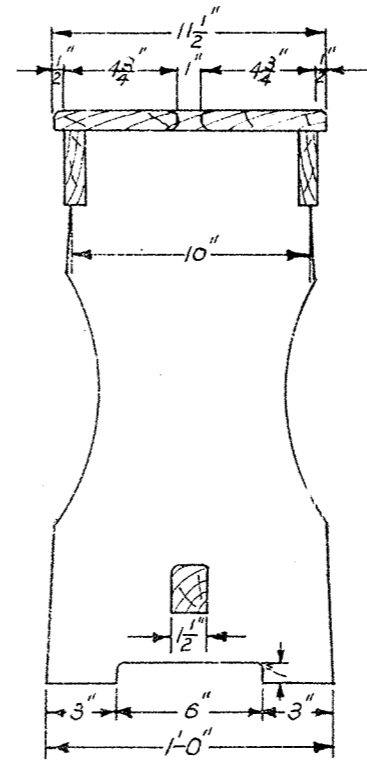
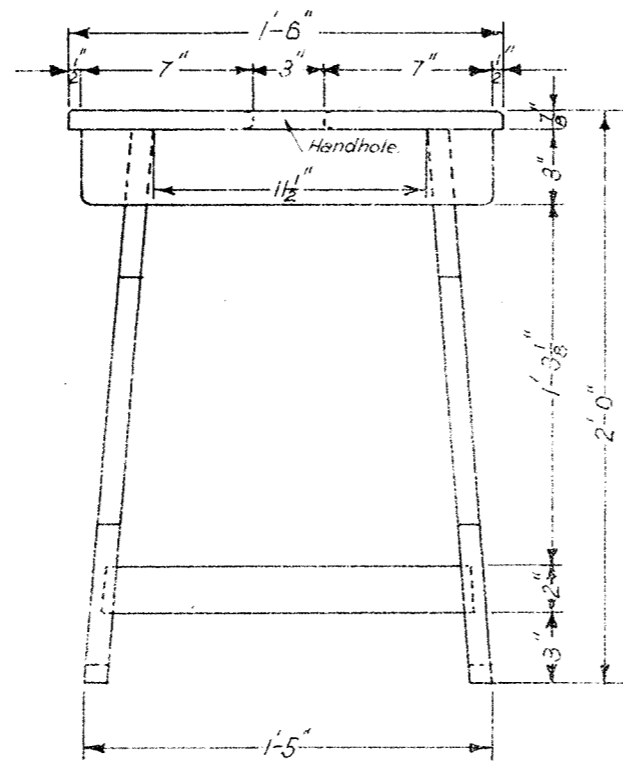
NO SCALE

Approved Chief Civil Engineer	Adopted SEPT 1946
Drawn by I. D. R.	Checked by [Signature]
Engineer of Structural Design.	PLAN NO F 496



VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING SUPERSTRUCTURE FOR PLATED I BEAM BRIDGE WITH R.C. DECK. 40 FT. & 45 FT. SPANS. NO SCALE		Approved A/Chief Civil Engineer Drawn by K. R. H. Checked by L. A. S. Engineer of Structural Design	Adopted MAY, 1947. PLAN No F497
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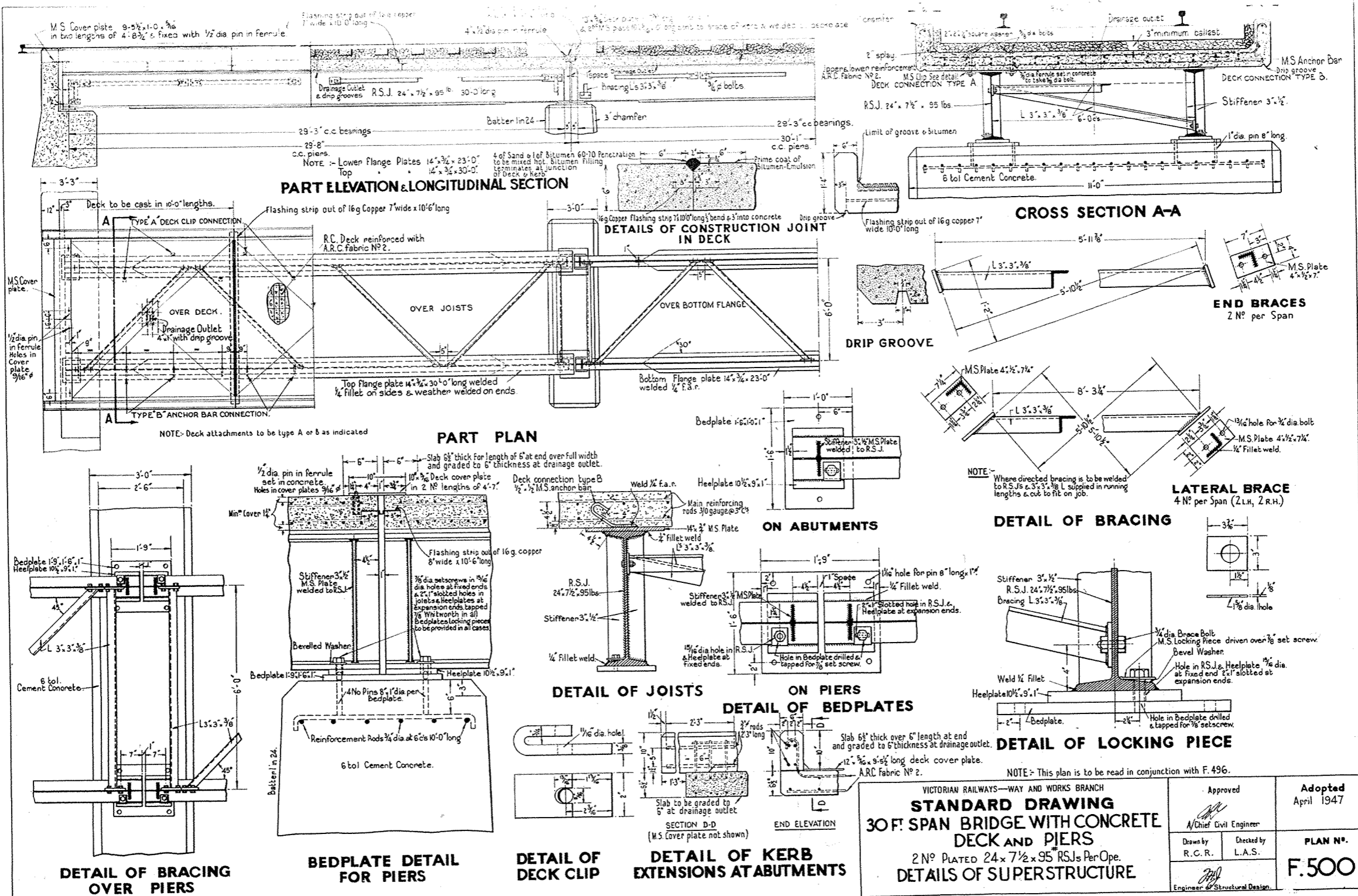




Note:-

Of Mountain Ash
with $\frac{1}{8}$ " Finish. Painted Oxide.

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	25 · 3 · 47
STOOL		Chief Civil Engineer	
FOR GANGER'S TOOL SHEDS		Drawn by	Checked by
SCALE $\frac{1}{2}$ " = 1'-0"		A.G.V.	S.S.
		<i>[Signature]</i>	PLAN NO
		Chief Architect	F499



PART ELEVATION & LONGITUDINAL SECTION

DETAILS OF CONSTRUCTION JOINT IN DECK

CROSS SECTION A-A

END BRACES
2 N° per Span

LATERAL BRACE
4 N° per Span (2 L.H., 2 R.H.)

DETAIL OF BRACING

DETAIL OF LOCKING PIECE

DETAIL OF JOISTS

ON PIERS

DETAIL OF BEDPLATES

DETAIL OF DECK CLIP

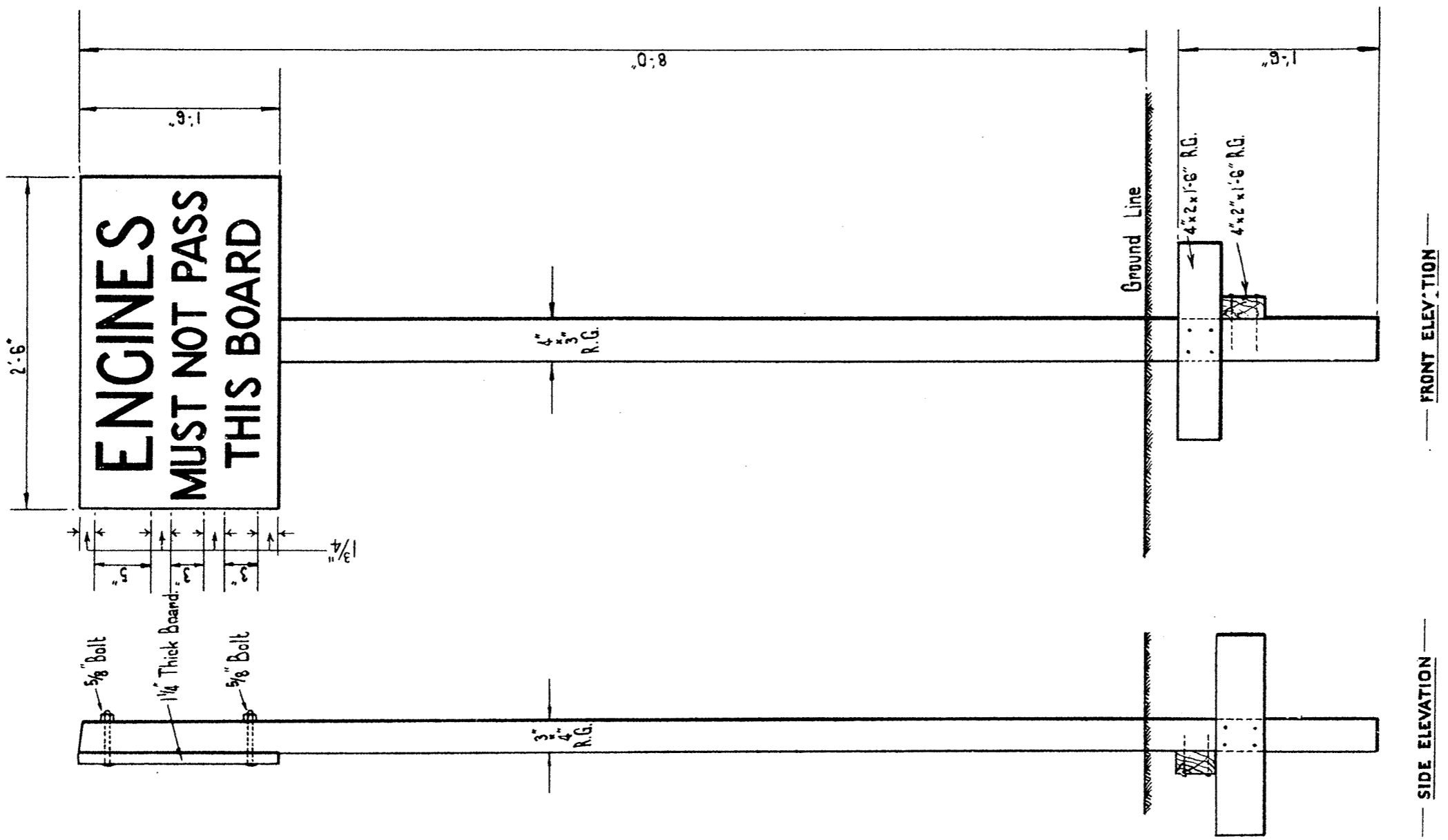
DETAIL OF KERB EXTENSIONS AT ABUTMENTS

NOTE: Deck attachments to be type A or B as indicated

NOTE: Where directed bracing is to be welded to R.S.J.s 2 x 3 x 3/8 L supplied in running lengths & cut to fit on job.

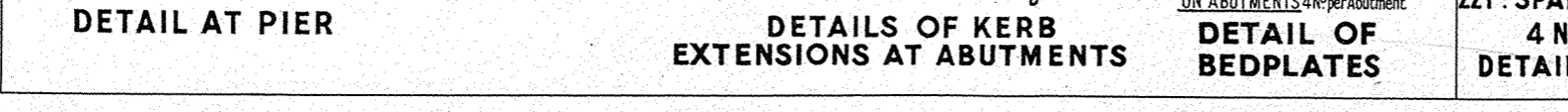
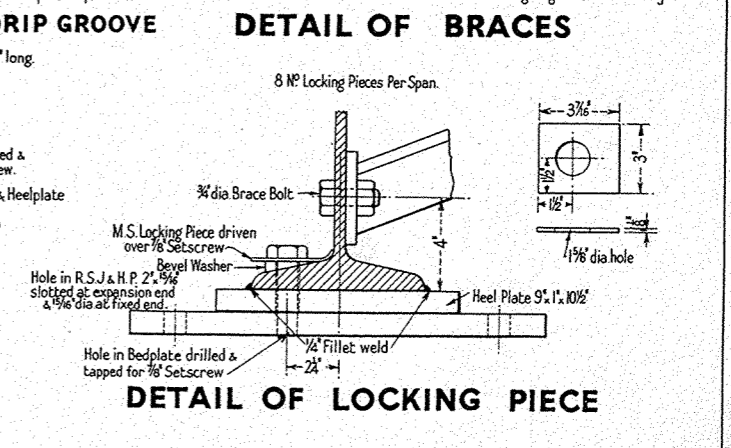
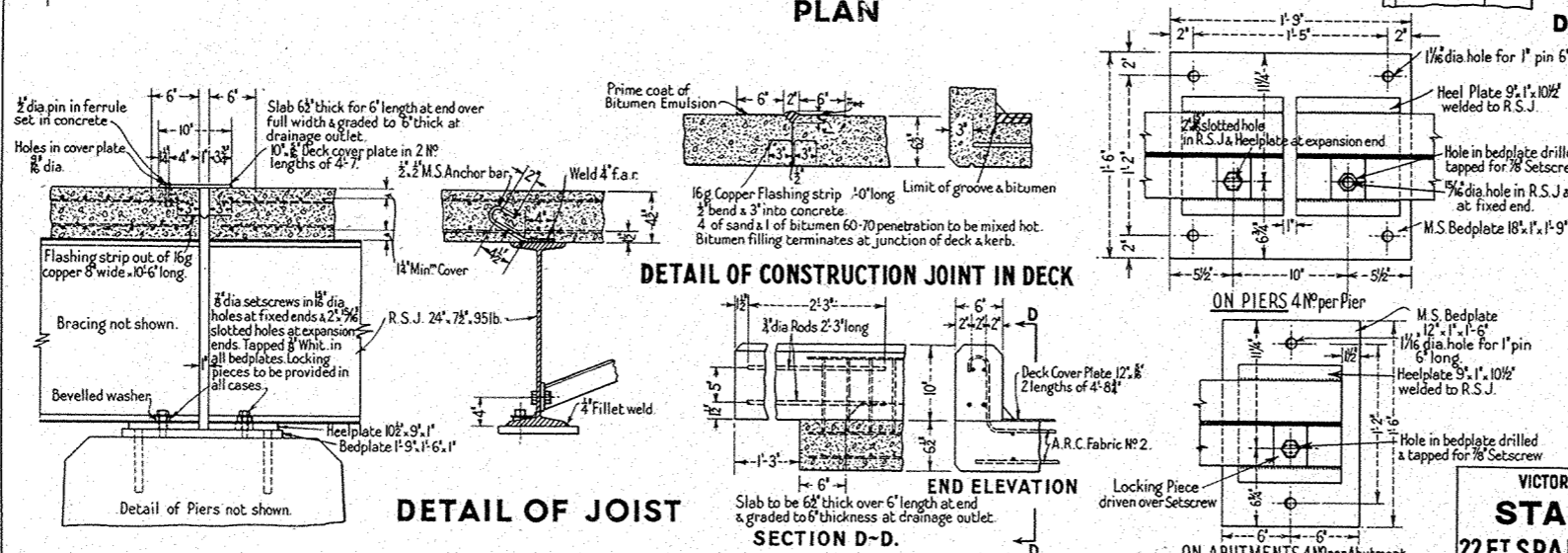
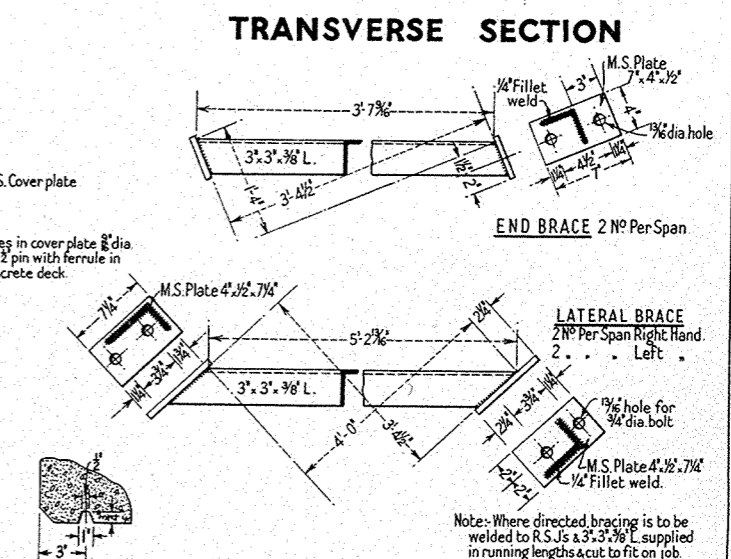
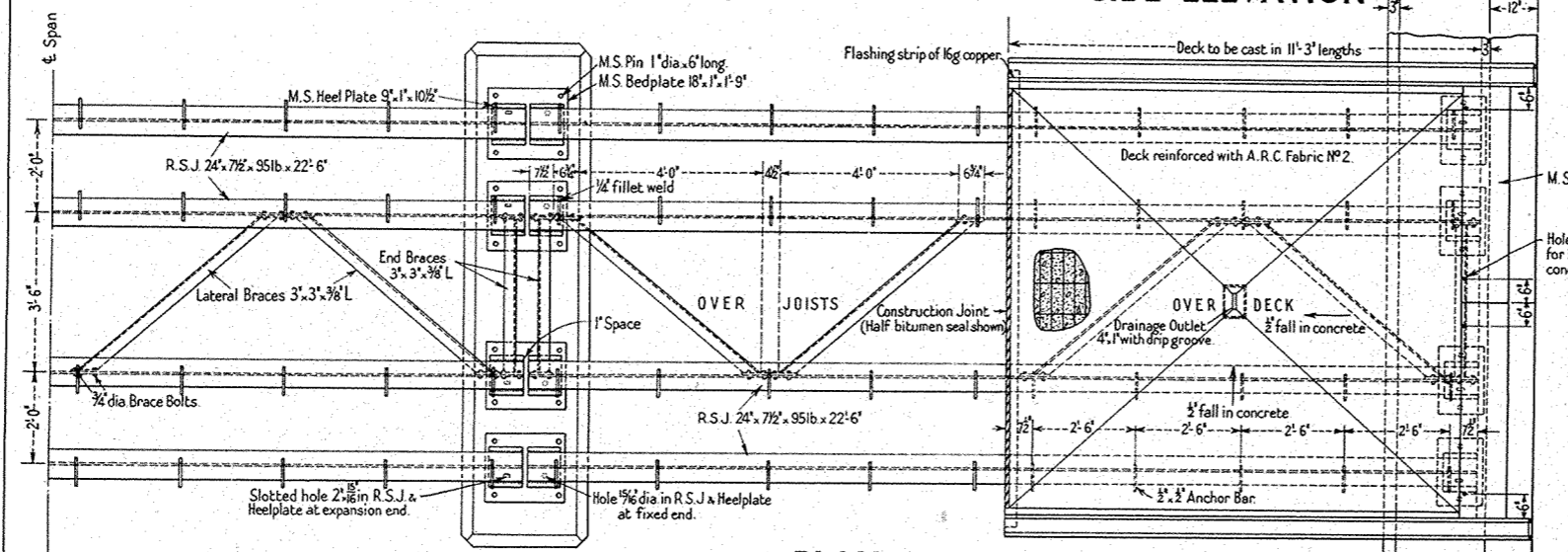
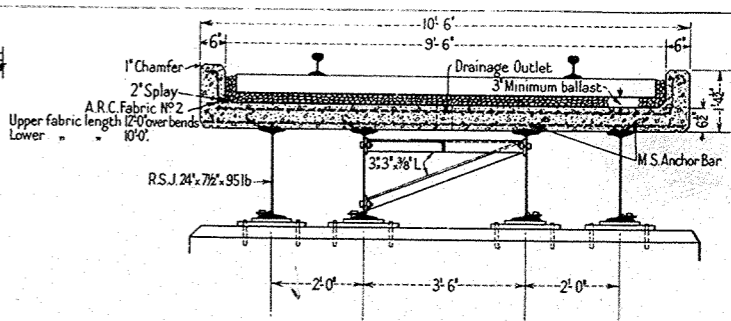
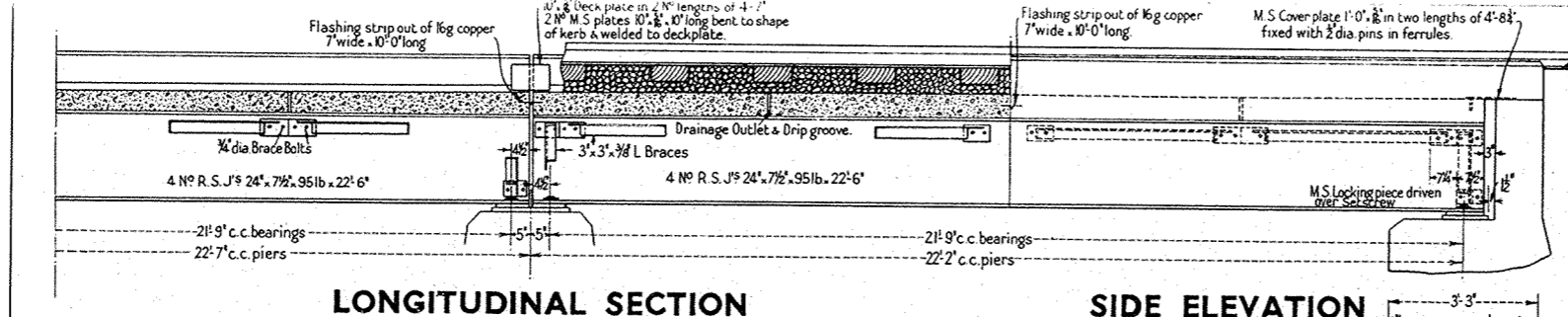
NOTE: This plan is to be read in conjunction with F. 496.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	April 1947
30 FT. SPAN BRIDGE WITH CONCRETE DECK AND PIERS		N/Chief Civil Engineer	
2 N° PLATED 24 x 7 1/2 x 95 RSJs Per Ope.		Drawn by R.C.R.	Checked by L.A.S.
DETAILS OF SUPERSTRUCTURE		<i>[Signature]</i>	PLAN N°.
		Engineer & Structural Design	F. 500



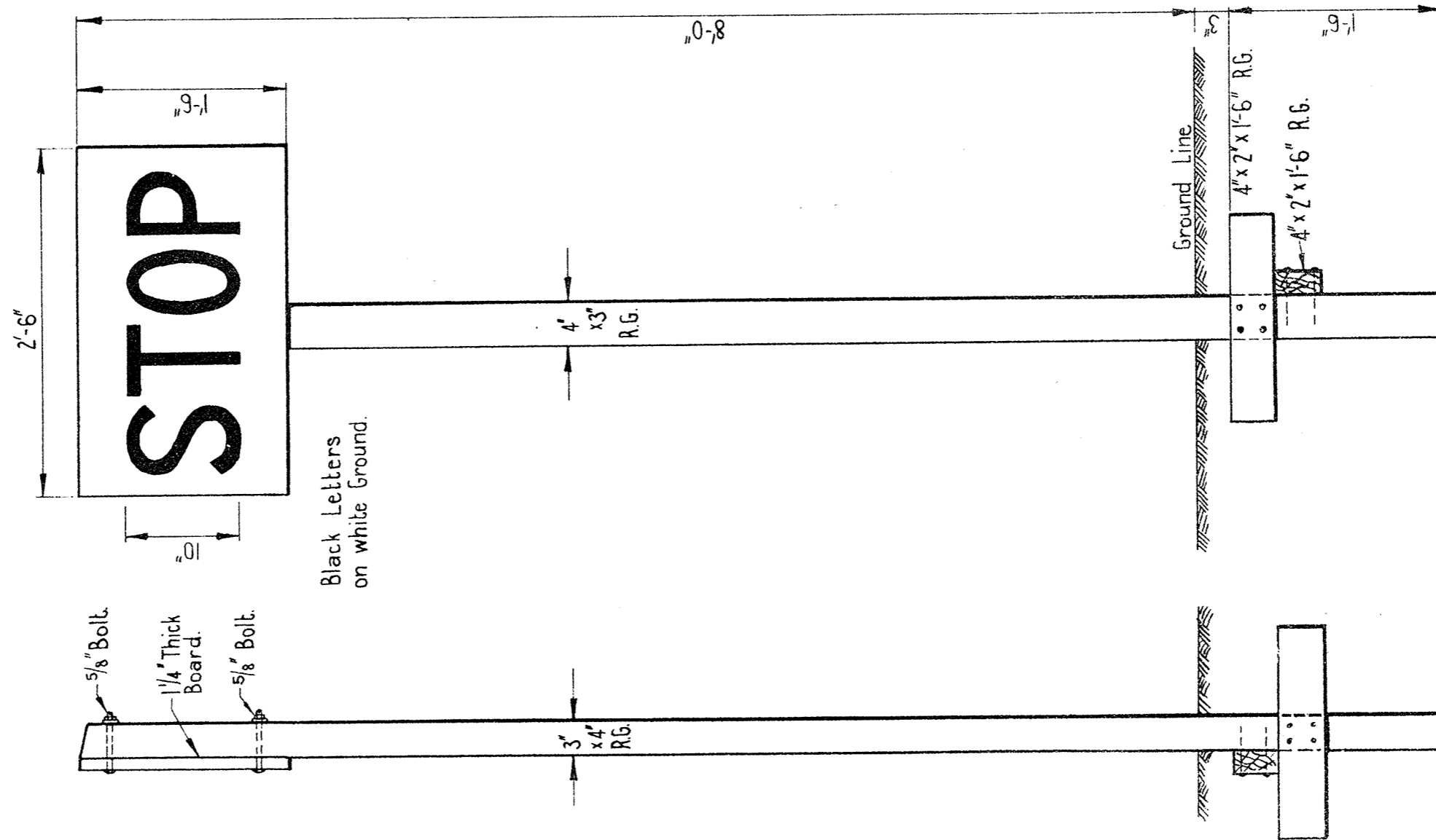
Scale: 1" = 1'-0"

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING — STOP BOARD —		<i>[Signature]</i>	June 1947
		Chief Civil Engineer	
FOR — SIDINGS —		Drawn by	Checked by
		M. T.	S. S.
		<i>[Signature]</i>	PLAN NO F.501
		Chief Architect	



VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	JUNE 1948
22FT SPAN BRIDGE WITH CONCRETE DECK		Chief Civil Engineer	
4 NO 24" x 7 1/2" x 95lb. R.S.J's PER OPE.		Drawn by J. K. B.	Checked by L. A. S.
DETAILS OF SUPERSTRUCTURE		<i>[Signature]</i>	Engineer of Structures Design
			PLAN No. F 502

Note: This Plan to be read in conjunction with F.496.



Black Letters
on white Ground.

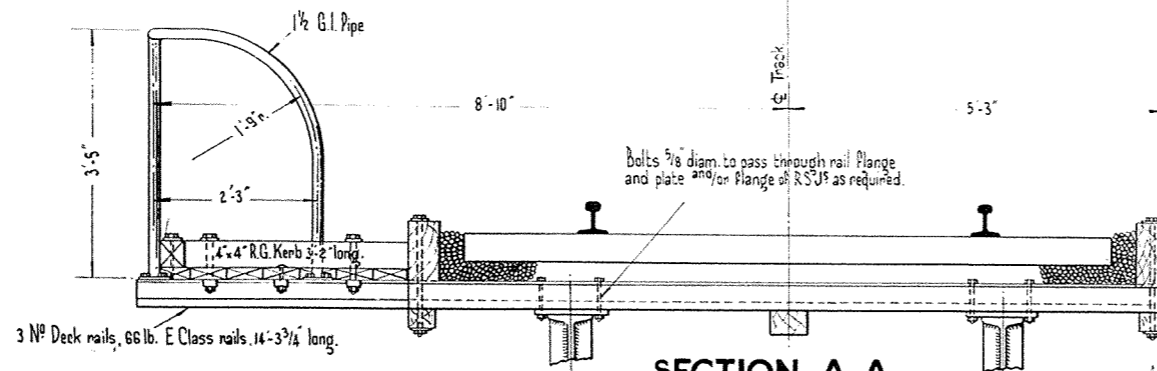
FRONT ELEVATION

SIDE ELEVATION

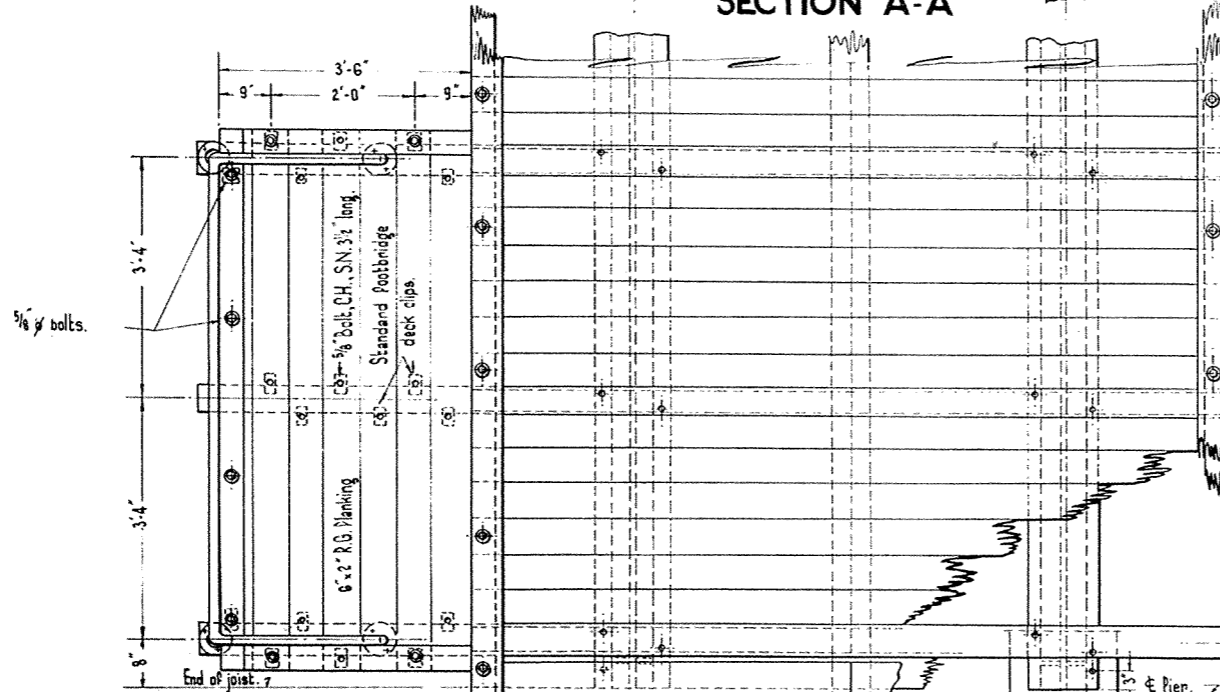
Scale: - 1" = 1'-0"

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH.		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	
STOP BOARD		Traced by B.J.W.	Checked by S.S.
for Banking Engines		<i>R. E. May</i> Chief Architect	PLAN NO F.502

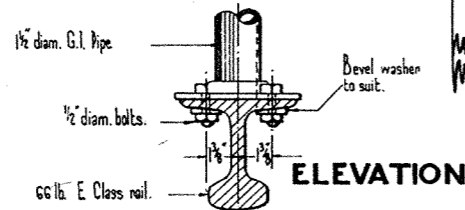
F.503



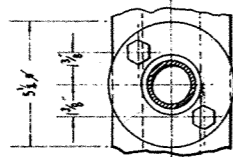
SECTION A-A



PLAN

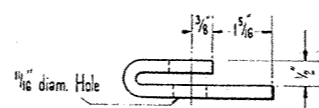


ELEVATION



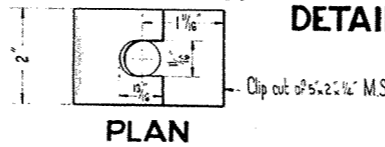
DETAIL AT PIPE FLANGE

PLAN

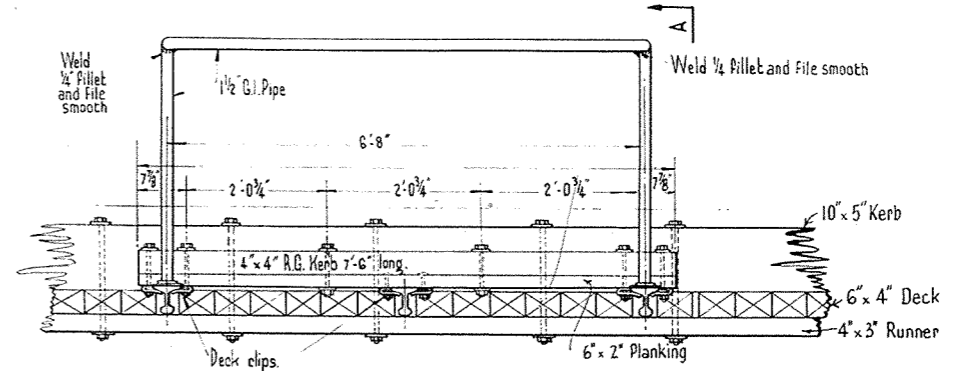


ELEVATION

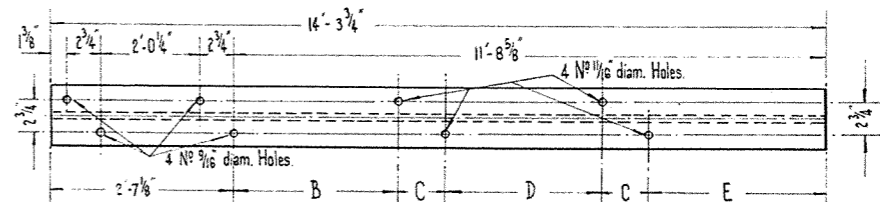
CLIP DETAIL



PLAN



ELEVATION



NOTE: In case of centre deck rail 4 No 9/16 diam holes only are required.

RAIL DRILLING DIAGRAM
FLANGE OF 66 LB RAIL

R.S.J's to be drilled to suit.

TABLE OF DIMENSIONS RELATING TO RAIL DRILLING DIAGRAM					
DETAIL PLAN	SECTION	B	C	D	E
F. 307 ^A	4/24" x 7 1/2" Pltd.	2'-6 3/8"	4 1/2"	7'-1 1/2"	1'-3 3/4"
F. 373	4/24" x 7 1/2"	2'-6 3/8"	4 1/2"	7'-1 1/2"	1'-3 3/4"
F. 380 ^A	2/24" x 7 1/2" Pltd.	3'-0 3/8"	10"	5'-2"	1'-10"
F. 418	2/24" x 7 1/2"	3'-3 3/8"	4 1/2"	5'-7 1/2"	2'-0 3/4"

In case of detail plan F380^A bolts are to pass through plate only of plated R.S.J's
F307^A plate & Flange

QUANTITIES PER SAFETY BRACKET			
DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
1/2" dia. G.I. pipe	23'-6"	4" x 4" R.G. Kerbing	14 lin. Ft.
Flanges for 1/2" dia G.I. pipe	4 No	6" x 2" R.G. Planking	53 lin. Ft.
Deck rails, 66 lb. E Class rails 14'-3 3/4" long.	3 No	Bevel washers to suit 66 lb. E. Rail.	8 No
1/2" dia Bolts 1 1/2" long.	8 No	Bevel washers to suit 24" x 7 1/2" R.S.J.	
5/8" dia Bolts 8" long	12 No	(for F307 ^A , F373, F418 only)	12 No
5/8" dia Bolts C.H.S.N. 3 1/2" long	12 No	Deck clip as detailed	18 No
5/8" dia Bolts 7 1/2" long.	8 No		

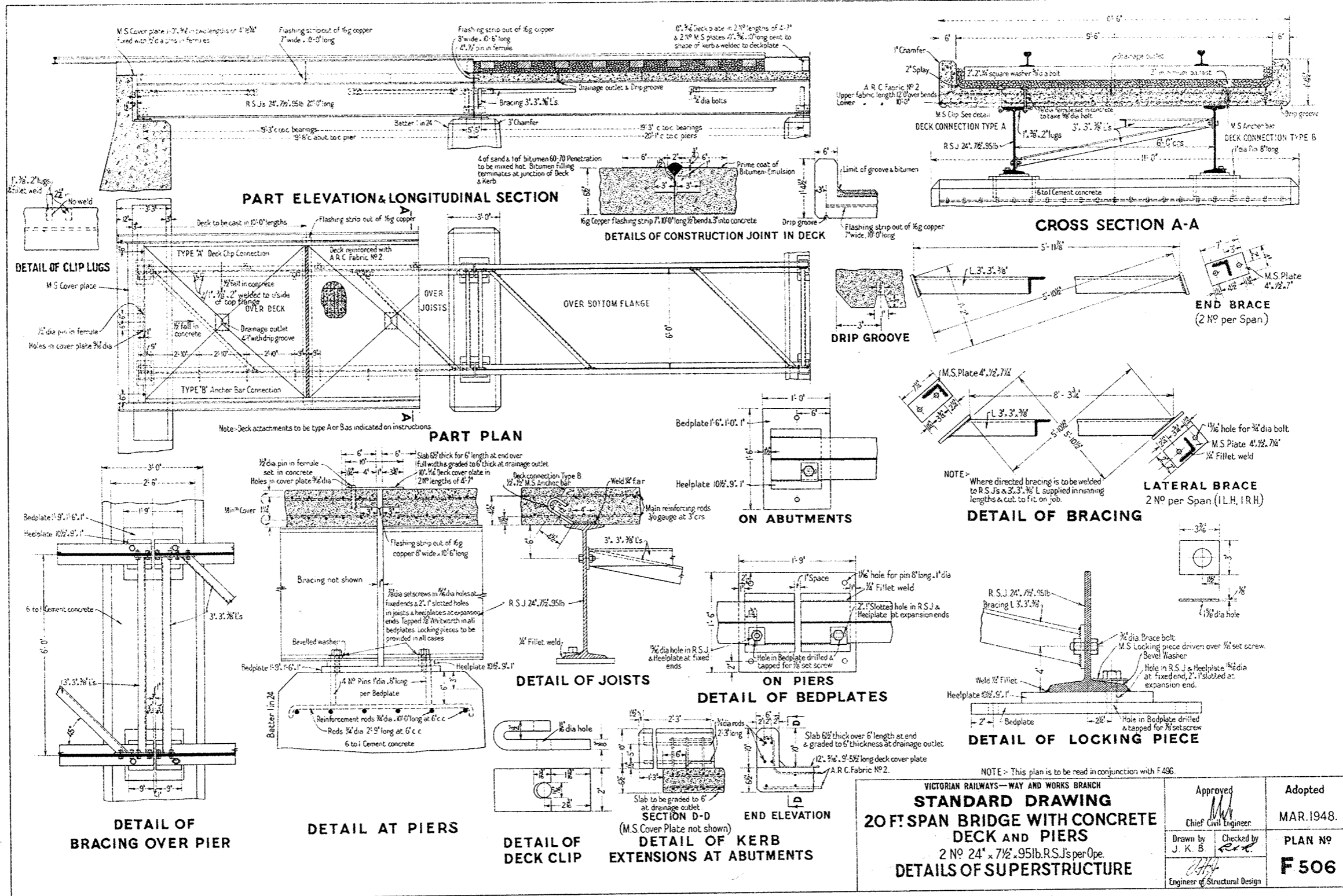
This Drawing to be used in conjunction with F307, F373, F380^A and F418.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING
SAFETY BRACKET FOR R.S.J. BRIDGES
WITH TIMBER DECK

Approved
M.A.
Chief Civil Engineer
Drawn by
I. D. R.
Checked by
L. A. S.
J.P.H.
Eng. of Struct. Design

Adopted
25-6-1947

PLAN No
F. 504



VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
20 FT. SPAN BRIDGE WITH CONCRETE
DECK AND PIERS
 2 No 24" x 7 1/2" x 95 lb. R.S.J.s per Op.
DETAILS OF SUPERSTRUCTURE

Approved Chief Civil Engineer.	Adopted MAR. 1948.
Drawn by J. K. B.	Checked by [Signature]
Engineer of Structural Design	PLAN No F 506

NOTE: This plan is to be read in conjunction with F 496.

FASTENINGS FOR VY POINTS

FASTENINGS REQUIRED	15'-0" STANDARD		15'-0"D+ SPECIAL		16'-6" STANDARD		22'-6" STANDARD		REMARKS
	15'-0"A SPECIAL		15'-0"F+ SPECIAL		16'-6" A SPECIAL				
	WITH TIEPLATES	WITHOUT TIEPLATES	WITH TIEPLATES	WITHOUT TIEPLATES	WITH TIEPLATES	WITHOUT TIEPLATES	WITH TIEPLATES	WITHOUT TIEPLATES	
CHAIRS - SLIDE .1039.	14	16	14	16	16	18	22	24	{ SEE SPREADER DRAWING F 479
CHAIRS - RAIL .1040.	2	2	2	2	2	2	2	2	
* BOLTS - CHAIR 2 7/8" M ^c C.	18	18	18	18	20	20	26	26	
SPREADERS	2	2	2	2	2	2	3	3	
* SCREWS M ^c R.	48	52	56	60	52	56	66	70	
* WASHERS - SPRING 1" TYPE 1944	18	18	18	18	20	20	26	26	
LUG PLATES - FLAT .1006.	4	4	4	4	8	8	8	8	
" " - STEP .2006.	2	2	2	2	2	2	4	4	
" " " .3006.	2	2	2	2	2	2	4	4	
" " " .4006.	4	4	2	2	4	4	4	4	
" " " .5006.	4	4	2	2	4	4	4	4	
* PINS M ^c P.	40	32	32	24	48	40	56	48	
* DOG - SPIKES 6"	16	16	12	12	20	20	24	24	
TIE PLATE UNITS .1047.	2		2		2		2		
BRACES C.S. .1048.	2		2		2		2		
BOLT, PLATE & SHIM ASSEMBLY	1		1		1		1		
* WASHERS - FLAT 1"	4		4		4		4		
BOLTS - SPREADER IF3116	4	4	4	4	4	4	6	6	
ANCHORS - RAIL	4	4	4	4	4	4	4	4	

{ 1/1053, 1/1054.
 6/1055.
 { 2/M^c T.P. BOLTS

NOTES:- SCHEDULED QUANTITIES ARE EXACT FOR THE POINT LAYOUTS SPECIFIED. ADDITIONAL QUANTITIES OF THE ITEMS INDICATED THUS * SHOULD BE INCLUDED WHEN ORDERING TO PROVIDE FOR LOSS OR DAMAGE BEFORE INSTALLATION.

V. R.
FASTENINGS
VY POINTS
 94 & 107LB A.S.
 MILD STEEL CHAIRS

APPROVED *[Signature]*
 CHIEF CIVIL ENGR.
 CHECKED *[Signature]*
 PASSED *[Signature]*
 ENGR. OF M & W.S.

ADOPTED
1948
 PLAN NO
F507

POINTS, CROSSINGS & FASTENINGS FOR 94 & 107LB INSULATED TURNOUTS											
MATERIAL REQUIRED	15'-0" SWITCHES		16'-6" SWITCHES				22'-6" SWITCHES				REMARKS
	N ^o 7-52		N ^o 8-7		N ^o 9-73		N ^o 8-7		N ^o 9-73		
	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	
POINTS WITH FASTENINGS	1 SET 15'-0" L.H. OR R.H.		1 SET 16'-6" L.H. OR R.H.		1 SET 16'-6" L.H. OR R.H.		1 SET 22'-6" L.H. OR R.H.		1 SET 22'-6" L.H. OR R.H.		SEE PLAN F507
V CROSSINGS	1 N ^o 7-52		1 N ^o 8-7		1 N ^o 9-73		1 N ^o 8-7		1 N ^o 9-73		
GUARD RAILS WITH FASTENINGS	2 N ^o 11'-3"		2 N ^o 11'-3"		2 N ^o 11'-3"		2 N ^o 11'-3"		2 N ^o 11'-3"		SEE PLAN F 352 ^A
SLEEPER PLATES - FLAT 5/8"	116	4	128	4	144	4	132	4	152	12	94LB.1001. 107LB.1002.
" " " 1"	4				6				6		94LB.2001. 107LB.2002.
" " " INSLD.JTS.	4	4	4	4	4	4	4	4	4	4	94LB.1004. 107LB.1005.
LUG PLATES - FLAT .1006.	4				6				6		
GRADUATED CANT PLATES A	6	6	6	6	6	6	6	6	6	6	REQUIRED ONLY WHEN LAYOUT ABUTTS 1 IN 20 TRACK
" " " B	6	6	6	6	6	6	6	6	6	6	
" " " C	6	6	6	6	6	6	6	6	6	6	
* ANCHORS - RAIL	66	66	76	76	78	78	76	76	78	78	
FISHPLATES - TRACK, PAIRS	8 FOR 107, 6 FOR 94		10 FOR 107, 8 FOR 94		8 FOR 107, 6 FOR 94		10 FOR 107, 8 FOR 94		8 FOR 107, 6 FOR 94		
* FISHBOLTS 1" DIA. FOR TRACK PLATES	32 FOR 107, 24 FOR 94		40 FOR 107, 32 FOR 94		32 FOR 107, 24 FOR 94		40 FOR 107, 32 FOR 94		32 FOR 107, 24 FOR 94		5/8" FOR 94LB 5" FOR 107LB
FISHPLATES - CROSSING, PAIRS	2 FOR 107, 4 FOR 94		2 FOR 94		2 FOR 107, 4 FOR 94		2 FOR 94		2 FOR 107, 4 FOR 94		
* FISHBOLTS 1" X 5" FOR CROSSING PLATES	8 FOR 107, 16 FOR 94		8 FOR 94		8 FOR 107, 16 FOR 94		8 FOR 94		8 FOR 107, 16 FOR 94		
* PINS - M&P	8				12				12		
* WASHERS - SPRING 1" TYPE 1944	40	40	40	40	40	40	40	40	40	40	
* DOGSPIKES 5"	90	340	120	380	90	410	120	390	90	420	
* DOGSPIKES 6"	310	60	320	60	380	60	330	60	400	70	
INSULATED JOINTS	2	2	2	2	2	2	2	2	2	2	
<p><u>DEPRESSED TIMBERS</u> :- WHERE DEPRESSED TIMBERS ARE REQUIRED BY THE SIGNALS DIVISION, ADD 2 N^o SLEEPER PLATES - FLAT .2001. OR .2002. AND DELETE 2 N^o SLEEPER PLATES - FLAT .1001. OR .1002, IF PROVIDED, FROM THE SCHEDULED QUANTITIES FOR EACH EXTRA DEPRESSED TIMBER AHEAD OF SET OF POINTS.</p>											
<p>NOTES :- SCHEDULED QUANTITIES ARE EXACT FOR THE LAYOUTS AS SHOWN ON STANDARD PLANS. ADDITIONAL QUANTITIES OF THE ITEMS INDICATED THUS * SHOULD BE INCLUDED WHEN ORDERING TO PROVIDE FOR LOSS OR DAMAGE BEFORE INSTALLATION.</p>						<p>V. R.</p> <p>SCHEDULE OF QUANTITIES</p> <p>INSULATED TURNOUTS 94 & 107 LB</p> <p>MILD STEEL CHAIRS</p>		<p>APPROVED <i>MW</i></p> <p>CHIEF CIVIL ENGR</p> <p>CHECKED <i>L.G.E.</i></p> <p>PASSED <i>arg</i></p> <p><i>cy.</i></p> <p>ENGR OF M & WS.</p>		<p>ADOPTED</p> <p>1948</p> <p>PLAN N^o</p> <p>F 508</p>	
REFERENCES	POINT FASTENINGS F507		GUARD RAIL FASTENINGS F 352 ^A								

POINTS, CROSSINGS & FASTENINGS FOR 94 & 107 LB WELDED TURNOUTS												REMARKS
MATERIAL REQUIRED	15'-0" SWITCHES		16'-6" SWITCHES				22'-6" SWITCHES					
	N ^o 7-52		N ^o 8-7		N ^o 9-73		N ^o 8-7		N ^o 9-73			
	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED		
POINTS WITH FASTENINGS	1 SET 15'-0" L.H. OR R.H.		1 SET 16'-6" L.H. OR R.H.		1 SET 16'-6" L.H. OR R.H.		1 SET 22'-6" L.H. OR R.H.		1 SET 22'-6" L.H. OR R.H.		SEE PLAN F507	
V CROSSINGS	1 N ^o 7-52		1 N ^o 8-7		1 N ^o 9-73		1 N ^o 8-7		1 N ^o 9-73		SEE PLAN F 352 A	
GUARD RAILS WITH FASTENINGS	2 N ^o 11'-3"		2 N ^o 11'-3"		2 N ^o 11'-3"		2 N ^o 11'-3"		2 N ^o 11'-3"			94 LB.1001. 107 LB.1002.
SLEEPER PLATES - FLAT 5/8"	120		132		148		136		156		94 LB.2001. 107 LB.2002.	
" " " 1"	4				6				6			
LUG PLATES - FLAT .1006.	4				6				6			
GRADUATED CANT PLATES A	6	6	6	6	6	6	6	6	6	6	REQUIRED ONLY WHEN LAYOUT ABUTTS 1 IN 20 TRACK	
" " " B	6	6	6	6	6	6	6	6	6	6		
" " " C	6	6	6	6	6	6	6	6	6	6		
* ANCHORS - RAIL	66	66	76	76	78	78	76	76	78	78		
FISHPLATES - TRACK, PAIRS	8 FOR 107, 6 FOR 94		10 FOR 107, 8 FOR 94		8 FOR 107, 6 FOR 94		10 FOR 107, 8 FOR 94		8 FOR 94, 6 FOR 94			
* FISHBOLTS 1" DIA. FOR TRACK PLATES	32 FOR 107, 24 FOR 94		40 FOR 107, 32 FOR 94		32 FOR 107, 24 FOR 94		40 FOR 107, 32 FOR 94		32 FOR 94, 24 FOR 94		5 3/8" FOR 94 LB 5" FOR 107 LB	
FISHPLATES - CROSSING, PAIRS	2 FOR 107, 4 FOR 94		2 FOR 94		2 FOR 107, 4 FOR 94		2 FOR 94		2 FOR 107, 4 FOR 94			
* FISHBOLTS 1"x5" FOR CROSSING PLATES	8 FOR 107, 16 FOR 94		8 FOR 94		8 FOR 107, 16 FOR 94		8 FOR 94		8 FOR 107, 16 FOR 94			
* PINS - M & P	8				12				12			
* WASHERS - SPRING 1" TYPE 1944	40	40	40	40	40	40	40	40	40	40		
* DOG SPIKES 5"	90	360	120	400	90	430	120	410	90	450		
* DOG SPIKES 6"	310	40	320	40	380	40	330	40	400	40		
<p><u>DEPRESSED TIMBERS</u> :- WHERE DEPRESSED TIMBERS ARE REQUIRED BY THE SIGNALS DIVISION, ADD 2 N^o SLEEPER PLATES - FLAT .2001. OR .2002. AND DELETE 2 N^o SLEEPER PLATES - FLAT .1001. OR .1002., IF PROVIDED, FROM THE SCHEDULED QUANTITIES FOR EACH EXTRA DEPRESSED TIMBER AHEAD OF SET OF POINTS.</p>												
<p><u>NOTES</u> :- SCHEDULED QUANTITIES ARE EXACT FOR THE LAYOUTS AS SHOWN ON STANDARD PLANS. ADDITIONAL QUANTITIES OF THE ITEMS INDICATED THUS * SHOULD BE INCLUDED WHEN ORDERING TO PROVIDE FOR LOSS OR DAMAGE BEFORE INSTALLATION.</p>						<p>V. R. SCHEDULE OF QUANTITIES WELDED TURNOUTS 94 & 107 LB MILD STEEL CHAIRS</p>			<p>APPROVED <i>W.V.</i> CHIEF CIVIL ENGR</p>		<p>ADOPTED 1948</p>	
<p>REFERENCES POINT FASTENINGS F507 GUARD RAIL FASTENINGS F 352^A</p>									<p>CHECKED <i>L.G.F.</i> PASSED <i>A.C.</i></p>		<p>PLAN N^o :- F 509</p>	
									<p>ENG^o OF M & W.S.</p>			

POINTS, CROSSINGS & FASTENINGS FOR 94 & 107 LB INSULATED CROSSOVERS 11'-8" CENTRES

FASTENINGS REQUIRED	15'-0" SWITCHES		16'-6" SWITCHES				22'-6" SWITCHES				REMARKS
	N ^o 7-52		N ^o 8-7		N ^o 9-73		N ^o 8-7		N ^o 9-73		
	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	
POINTS WITH FASTENINGS	2 SETS 15'-0" L.H. OR R.H.		2 SETS 16'-6" L.H. OR R.H.		2 SETS 16'-6" L.H. OR R.H.		2 SETS 22'-6" L.H. OR R.H.		2 SETS 22'-6" L.H. OR R.H.		SEE PLAN F507 SEE PLAN F 352 ^A 94 LB.1001. 107 LB.1002. 94 LB.1004. 107 LB.1005. REQUIRED ONLY WHEN LAYOUT ABUTTS 1 IN 20 TRACK
V CROSSINGS	2 N ^o 7-52		2 N ^o 8-7		2 N ^o 9-73		2 N ^o 8-7		2 N ^o 9-73		
GUARD RAILS WITH FASTENINGS	4 N ^o 11'-3"		4 N ^o 11'-3"		4 N ^o 11'-3"		4 N ^o 11'-3"		4 N ^o 11'-3"		
SLEEPER PLATES - FLAT ⁵ / ₈ "	184	8	220	8	244	8	228	8	260	24	
" " " INSLD. JTS.	8	8	8	8	8	8	8	8	8	8	
GRADUATED CANT PLATES A	8	8	8	8	8	8	8	8	8	8	
" " " B	8	8	8	8	8	8	8	8	8	8	
" " " C	8	8	8	8	8	8	8	8	8	8	
* ANCHORS - RAIL	96	96	116	116	116	116	116	116	116	116	
FISHPLATES - TRACK, PAIRS	14 FOR 107, 10 FOR 94		16 FOR 107, 12 FOR 94		14 FOR 107, 10 FOR 94		16 FOR 107, 12 FOR 94		14 FOR 107, 10 FOR 94		
* FISHBOLTS 1" DIA. FOR TRACK PLATES	56 FOR 107, 40 FOR 94		64 FOR 107, 48 FOR 94		56 FOR 107, 40 FOR 94		64 FOR 107, 48 FOR 94		56 FOR 107, 40 FOR 94		
FISHPLATES - CROSSING, PAIRS	4 FOR 107, 8 FOR 94		2 FOR 107, 6 FOR 94		4 FOR 107, 8 FOR 94		2 FOR 107, 6 FOR 94		4 FOR 107, 8 FOR 94		
* FISHBOLTS 1"x5" FOR CROSSING PLATES	16 FOR 107, 32 FOR 94		8 FOR 107, 24 FOR 94		16 FOR 107, 32 FOR 94		8 FOR 107, 24 FOR 94		16 FOR 107, 32 FOR 94		
* WASHERS - SPRING 1" TYPE 1944	72	72	72	72	72	72	72	72	72	72	
* DOGSPIKES 5"	200	590	200	670	220	740	200	690	220	740	
* DOGSPIKES 6"	470	80	550	80	600	80	570	80	640	120	
INSULATED JOINTS	4	4	4	4	4	4	4	4	4	4	

5 3/8" FOR 94 LB 5" FOR 107 LB

DEPRESSED TIMBERS :- WHERE DEPRESSED TIMBERS ARE REQUIRED BY THE SIGNALS DIVISION, ADD 2N^o SLEEPER PLATES - FLAT .2001. OR .2002. AND DELETE 2N^o SLEEPER PLATES - FLAT .1001. OR .1002, IF PROVIDED, FROM THE SCHEDULED QUANTITIES FOR EACH EXTRA DEPRESSED TIMBER AHEAD OF EACH SET OF POINTS.

NOTES :- SCHEDULED QUANTITIES ARE EXACT FOR THE LAYOUTS AS SHOWN ON STANDARD PLANS. ADDITIONAL QUANTITIES OF THE ITEMS INDICATED THUS * SHOULD BE INCLUDED WHEN ORDERING TO PROVIDE FOR LOSS OR DAMAGE BEFORE INSTALLATION.

REFERENCES POINT FASTENINGS F507 GUARD RAIL FASTENINGS F352^A

V. R.
SCHEDULE OF QUANTITIES
INSULATED CROSSOVERS
11'-8" CENTRES
94 & 107 LB
MILD STEEL CHAIRS

APPROVED *MW*
CHIEF CIVIL ENG^r
CHECKED *L.G.E.*
PASSED *g.p.*
ENG^r OF M & WS.

ADOPTED
1948
PLAN N^o
F 510

POINTS, CROSSINGS & FASTENINGS FOR 94 & 107L^B WELDED CROSSOVERS, 11-8' CENTRES

FASTENINGS REQUIRED	15'-0" SWITCHES				16'-6" SWITCHES				22'-6" SWITCHES				REMARKS
	N ^o 7-52		N ^o 8-7		N ^o 9-73		N ^o 8-7		N ^o 9-73				
	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED			
POINTS WITH FASTENINGS	2 SETS 15'-0" L.H. OR R.H.		2 SETS 16'-6" L.H. OR R.H.		2 SETS 16'-6" L.H. OR R.H.		2 SETS 22'-6" L.H. OR R.H.		2 SETS 22'-6" L.H. OR R.H.		SEE PLAN F507 SEE PLAN F352 ^A 94 L ^B .1001. 107L ^B .1002. REQUIRED ONLY WHEN LAYOUT ABUTTS 1 IN 20 TRACK 5 ³ " FOR 94 L ^B . 5" FOR 107 L ^B		
V CROSSINGS	2 N ^o 7-52		2 N ^o 8-7		2 N ^o 9-73		2 N ^o 8-7		2 N ^o 9-73				
GUARD RAILS WITH FASTENINGS	4 N ^o 11'-3"		4 N ^o 11'-3"		4 N ^o 11'-3"		4 N ^o 11'-3"		4 N ^o 11'-3"				
SLEEPER PLATES - FLAT 5" 8"	192		228		252		236		268				
GRADUATED CANT PLATES A	8	8	8	8	8	8	8	8	8	8			
" " " B	8	8	8	8	8	8	8	8	8	8			
" " " C	8	8	8	8	8	8	8	8	8	8			
* ANCHORS - RAIL	96	96	116	116	116	116	116	116	116	116			
FISHPLATES - TRACK, PAIRS	14 FOR 107, 10 FOR 94		16 FOR 107, 12 FOR 94		14 FOR 107, 10 FOR 94		16 FOR 107, 12 FOR 94		14 FOR 107, 10 FOR 94				
* FISHBOLTS 1" DIA. FOR TRACK PLATES	56 FOR 107, 40 FOR 94		64 FOR 107, 48 FOR 94		56 FOR 107, 40 FOR 94		64 FOR 107, 48 FOR 94		56 FOR 107, 40 FOR 94				
FISHPLATES-CROSSING, PAIRS	4 FOR 107, 8 FOR 94		2 FOR 107, 6 FOR 94		4 FOR 107, 8 FOR 94		2 FOR 107, 6 FOR 94		4 FOR 107, 8 FOR 94				
* FISHBOLTS 1"x5" FOR CROSSING PLATES	16 FOR 107, 32 FOR 94		8 FOR 107, 24 FOR 94		16 FOR 107, 32 FOR 94		8 FOR 107, 24 FOR 94		16 FOR 107, 32 FOR 94				
* WASHERS - SPRING, 1" TYPE 1944	72	72	72	72	72	72	72	72	72	72			
* DOGSPIKES 5"	200	620	200	700	220	770	200	720	220	810			
* DOGSPIKES 6"	470	50	550	50	600	50	570	50	640	50			

DEPRESSED TIMBERS :- WHERE DEPRESSED TIMBERS ARE REQUIRED BY THE SIGNALS DIVISION, ADD 2 N^o SLEEPER PLATES - FLAT .2001. OR .2002. AND DELETE 2 N^o SLEEPER PLATES - FLAT .1001. OR .1002, IF PROVIDED, FROM THE SCHEDULED QUANTITIES FOR EACH EXTRA DEPRESSED TIMBER AHEAD OF EACH SET OF POINTS.

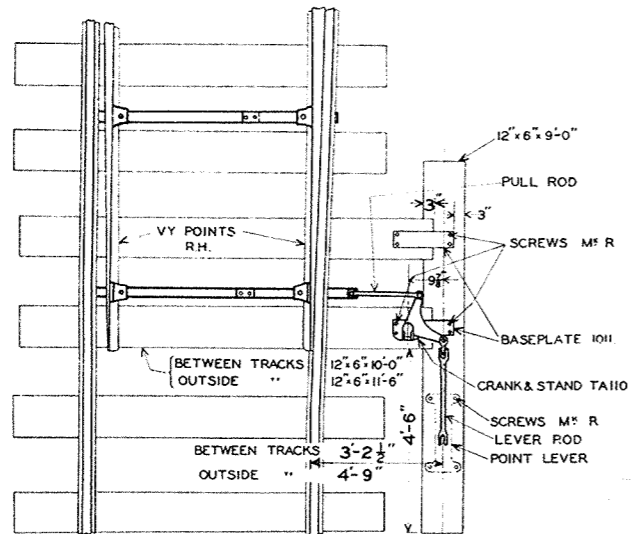
NOTES:- SCHEDULED QUANTITIES ARE EXACT FOR THE LAYOUTS AS SHOWN ON STANDARD PLANS. ADDITIONAL QUANTITIES OF THE ITEMS INDICATED THUS * SHOULD BE INCLUDED WHEN ORDERING TO PROVIDE FOR LOSS OR DAMAGE BEFORE INSTALLATION.

REFERENCES POINT FASTENINGS F507 GUARD RAIL FASTENINGS F 352^A

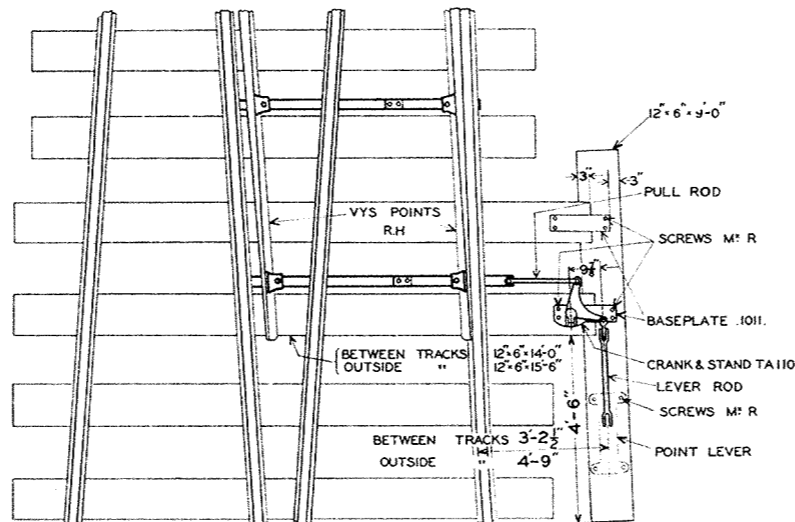
V. R.
SCHEDULE OF QUANTITIES
WELDED CROSSOVERS
11'-8" CENTRES
94 & 107L^B
MILD STEEL CHAIRS

APPROVED <i>[Signature]</i>	ADOPTED 1948
CHIEF CIVIL ENGR ^R	PLAN N ^o
CHECKED <i>[Signature]</i>	F 511
PASSED <i>[Signature]</i>	
ENGR ^R OF M&W.S.	

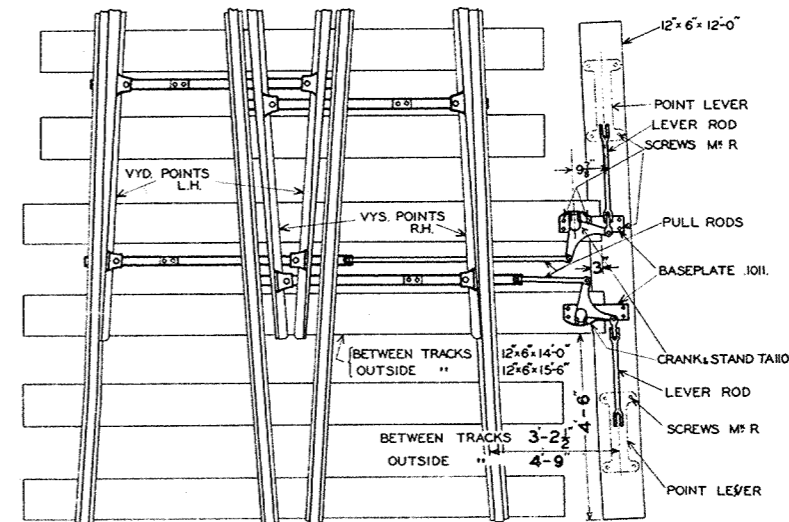
POINTS, CROSSINGS & FASTENINGS FOR 94 & 107 LB JUNCTIONS										
MATERIAL	REQUIRED	Nº 5 · 0				Nº 6 · 0				REMARKS
		INSULATED		WELDED		INSULATED		WELDED		
		PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	PLATED	NON PLATED	
POINTS WITH FASTENINGS		1 SET 15'-0" F ⁺		1 SET 15'-0" F ⁺		1 SET 15'-0" D ⁺		1 SET 15'-0" D ⁺		SEE PLAN F507
V CROSSINGS		1 Nº 5·0A	1 Nº 5·0B	1 Nº 5·0A	1 Nº 5·0B	1 Nº 6·0A	1 Nº 6·0B	1 Nº 6·0A	1 Nº 6·0B	SEE PLAN F 352 ^A 94 LB.1001, 107 LB.1002, 94 LB.1004, 107 LB.1005. REQUIRED ONLY WHEN LAYOUT ABUTTS 1 IN 20 TRACK.
GUARD RAILS WITH FASTENINGS		2 Nº 11'-3"		2 Nº 11'-3"		2 Nº 11'-3"		2 Nº 11'-3"		
SLEEPER PLATES - FLAT 5/8"		104	12	108		104	12	108		
" " FLAT INSLD. JTS.		4	4			4	4			
GRADUATED CANT PLATES A		6	6	6	6	6	6	6	6	
" " " B		6	6	6	6	6	6	6	6	
" " " C		6	6	6	6	6	6	6	6	
* ANCHORS - RAIL		66	66	66	66	66	66	66	66	
FISHPLATES - TRACK, PAIRS		10 FOR 107, 8 FOR 94				8 FOR 107, 6 FOR 94				
* FISHBOLTS 1" DIA FOR TRACK PLATES		40 FOR 107, 32 FOR 94				32 FOR 107, 24 FOR 94				
FISHPLATES - CROSSING, PAIRS		2 FOR 94				2 FOR 107, 4 FOR 94				
* FISHBOLTS 1" x 5" FOR CROSSING PLATES		8 FOR 94				8 FOR 107, 16 FOR 94				
* WASHERS - SPRING, 1" TYPE 1944		40	40	40	40	40	40	40	40	
* DOGSPIKES 5"		90	310	90	350	110	330	110	370	
* DOGSPIKES 6"		300	80	300	40	300	80	300	40	
INSULATED JOINTS		2	2			2	2			
<p><u>DEPRESSED TIMBERS</u> :- WHERE DEPRESSED TIMBERS ARE REQUIRED BY THE SIGNALS DIVISION, ADD 2 Nº SLEEPER PLATES - FLAT .2001, OR .2002. AND DELETE 2 Nº SLEEPER PLATES - FLAT .1001. OR .1002, IF PROVIDED, FROM THE SCHEDULED QUANTITIES FOR EACH EXTRA DEPRESSED TIMBER AHEAD OF SET OF POINTS</p>										
<p><u>NOTES</u> :- SCHEDULED QUANTITIES ARE EXACT FOR THE LAYOUTS AS SHOWN ON STANDARD PLANS. ADDITIONAL QUANTITIES OF THE ITEMS INDICATED THUS * SHOULD BE INCLUDED WHEN ORDERING TO PROVIDE FOR LOSS OR DAMAGE BEFORE INSTALLATION.</p>						<p>V. R SCHEDULE OF QUANTITIES JUNCTIONS 94 & 107 LB MILD STEEL CHAIRS</p>		<p>APPROVED <i>[Signature]</i> CHIEF CIVIL ENGR^R</p> <p>CHECKED <i>L.G.E.</i> PASSED <i>[Signature]</i> ENGR OF M. & W'S.</p>		<p>ADOPTED 1948</p> <p>PLAN Nº F 512</p>
REFERENCES	POINT FASTENINGS F507	GUARD RAIL FASTENINGS F352 ^A								



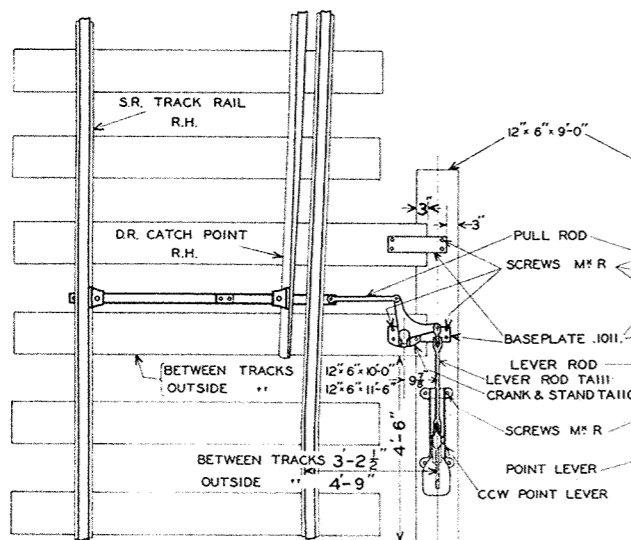
TURNOUTS
VY LAYOUT



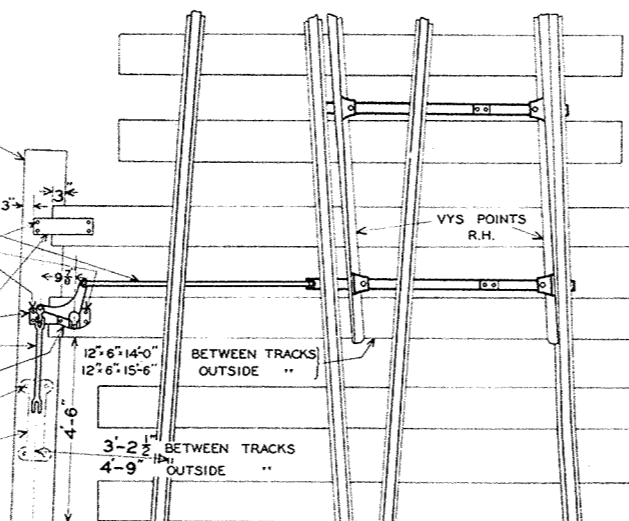
SINGLE COMPOUNDS
STANDARD ARRANGEMENT
VYS LAYOUT *



DOUBLE COMPOUNDS
VYD LAYOUT *

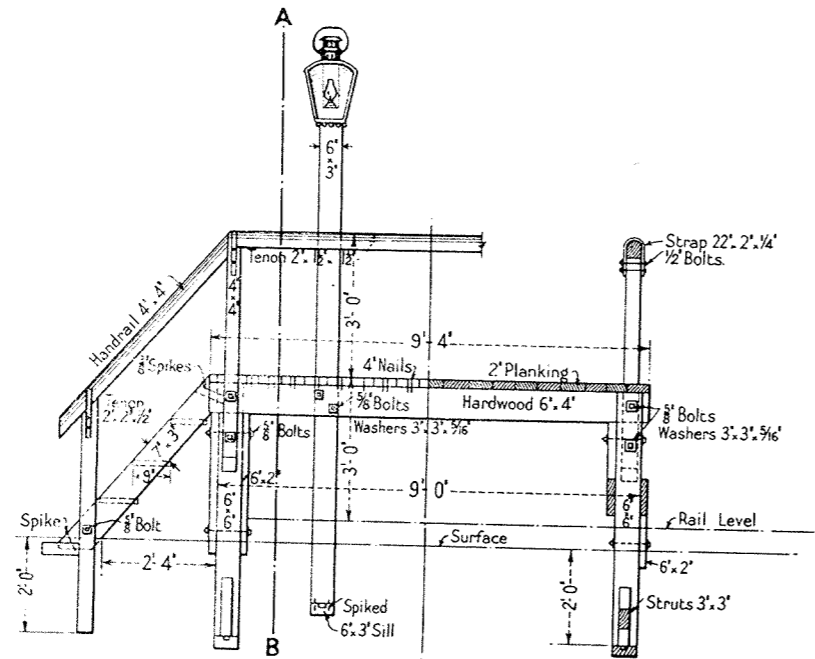


CATCH POINT DERAILS
DR LAYOUT



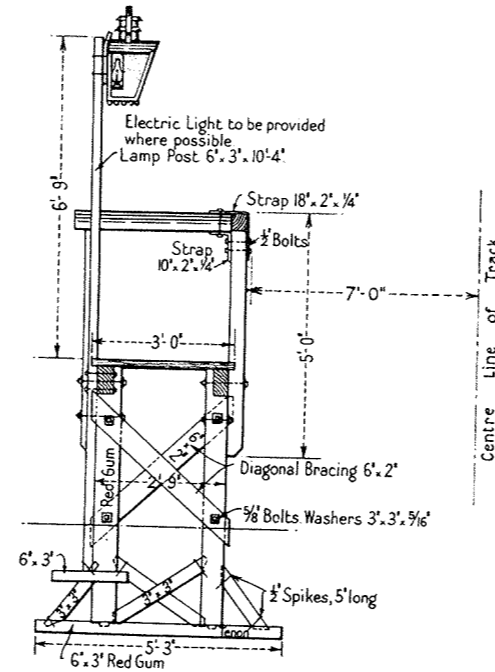
SINGLE COMPOUNDS
ALTERNATIVE ARRANGEMENT
VYS LAYOUT *

DIRECTIONS FOR INSTALLING		MATERIAL		94 & 107 LB LAYOUTS	
		VY, VYS & DR.	VYD.	VY, VYS & DR.	VYD.
ADJUSTABLE SPREADERS					
1. INSTALL M1 SPREADER AS RECEIVED USING TWO SPREADER BOLTS IF 3116.		POINT LEVER, TYPE AS AUTHORIZED		1	2
2. SLACKEN OFF NUTS AT SPREADER JOINT, ADJUST FOR REQUIRED THROW OF POINTS AND RE-TIGHTEN NUTS AT SPREADER JOINT.		CRANK & STAND ASSEMBLY TA110		1	2
3. INSTALL M2 SPREADER USING ONE SPREADER BOLT IF 3116.		LEVER ROD TA111 FOR CCW & WS LEVERS OR		1	2
4. SLACKEN OFF NUTS AT SPREADER JOINT AND ADJUST TO ENABLE FREE INSERTION OF THE SECOND SPREADER BOLT IF 3116.		" TA211 " 0 45			
5. TIGHTEN ALL NUTS AND INSERT SPLIT PINS IN SPREADER BOLTS.		PULL ROD TA112 BETWEEN TRACK OR		1	1
6. TRY THE SWITCHES AT NORMAL AND REVERSE TO ENSURE FULL BEARING AGAINST THE STOCKRAIL IN EACH POSITION.		" TA212 OUTSIDE " "		1	1
		" TA312 BETWEEN " OR		1	1
		" TA412 OUTSIDE " "		2	2
		BASEPLATE 1011		14	20
		SCREWS MARK R		1	1
		TIMBER 12'6" x 12'-0"		1	1
		12'6" x 9'-0"		1	1
		SPREADERS SEE PLANS N ^o F479 & F480			
		PULL RODS TA312 OR TA412 TO BE FITTED AT SINGLE COMPOUNDS WHEN ALTERNATIVE ARRANGEMENT IS REQUIRED.			
		MATERIAL LIST IS FOR 94 & 107 LB POINTS WITH MS CHAIRS.			
		POINTS WITH CLCHAIRS WILL REQUIRE BASEPLATE 2011 IN LIEU OF 1011 UNDER CRANK STAND.			
		80, 90, 100, & 110 LB LAYOUTS			
		MATERIAL LIST FOR 94 & 107 LB LAYOUTS IS APPLICABLE WITH AMENDMENTS AS FOLLOWS.			
		BASEPLATE 2011 IN LIEU OF 1011 UNDER CRANK STAND.			
		PULL ROD TA012 IN LIEU OF TA312 & TA412			
		PULL ROD TA012 MUST BE ORDERED TO THE LENGTH REQUIRED.			
		* QUANTITIES LISTED ABOVE ARE FOR PORTION OF LAYOUTS SHOWN.			
		REFERENCE PREVIOUS STANDARD ARRANGEMENT F 456 WITH PULL TO SPREADER BRACKET.			
CCW LEVER 1. CONNECT UP THE RODDING. 2. SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED CLEAR OF THE TIMBER WHEN THE SWITCH IS HOME AGAINST THE STOCKRAIL. 3. MARK OFF, BORE FOR SETSCREWS AND TURN IN THE SCREWS. 4. TEST OPERATION.					
WS LEVER 1. TOTALLY RELEASE THE SPRING COMPRESSION SCREW. 2. CONNECT UP THE RODDING. 3. PLACE THE SWITCHES HALF OPEN. 4. PLACE THE LEVER IN VERTICAL POSITION. 5. SET LEVER BASE IN POSITION, MARK OFF, BORE FOR SETSCREWS AND TURN IN THE SCREWS. 6. ADJUST THE SPRING COMPRESSION SCREW TO HOLD THE SWITCHES TO THE STOCKRAILS. 7. TIGHTEN THE LOCKWUT ON THE SPRING COMPRESSION SCREW. 8. TEST OPERATION.					
O 4 S LEVER 1. CONNECT UP THE RODDING. 2. SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED CLEAR OF LEVER ROD, CRANK, OR OTHER OBSTRUCTION WHEN THE SWITCH IS HOME AGAINST THE STOCKRAIL. 3. MARK OFF, BORE FOR SETSCREWS AND TURN IN THE SCREWS. 4. TEST OPERATION.					
PACKING OUTER END OF LONG TIMBERS AND LEVER BASE TIMBERS TO HAVE BALLAST LIGHTLY FILLED THEREUNDER. SOLID PACKING MUST NOT EXTEND BEYOND 1'-6" OUTSIDE THE GAUGE.					
VICTORIAN RAILWAYS WAY & WORKS BRANCH POINT LEVERS END PULL ARRANGEMENT		APPROVED CHIEF CIVIL ENGINEER		ADOPTED 1950	
		CHECKED <i>C.F.</i> PASSED <i>[Signature]</i> ENGINEER OF M & W S.		PLAN N ^o F 513	

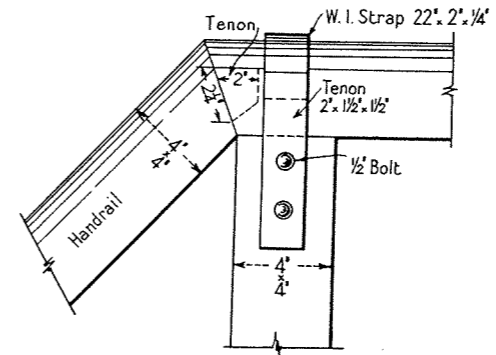
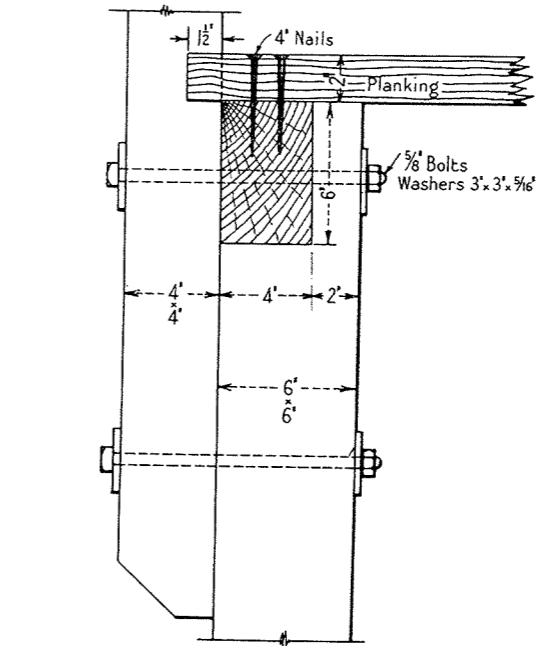


PART ELEVATION

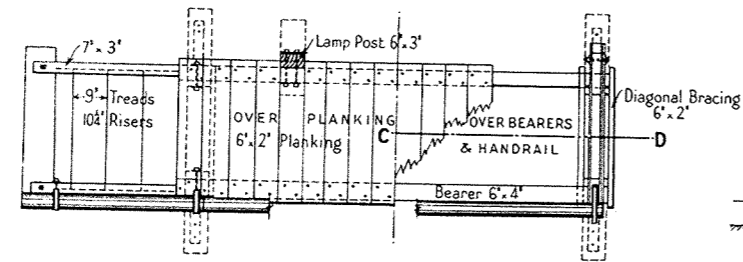
PART LONG SECTION C-D



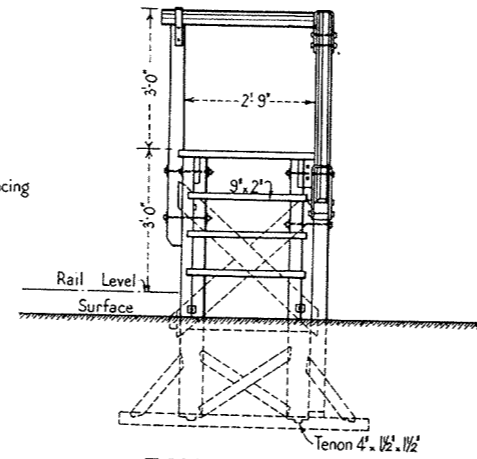
SECTION A-B



DETAILS



PLAN

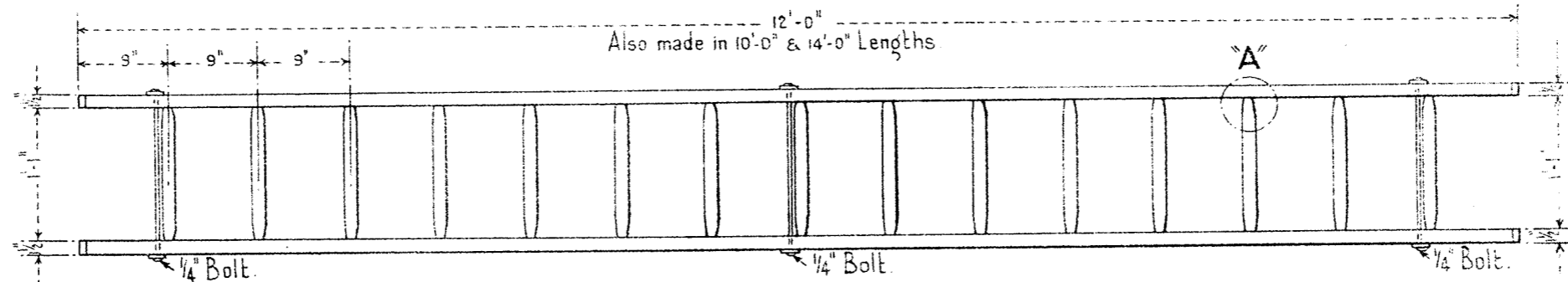


END VIEW
(Showing Steps)
(Lamp Post Removed)

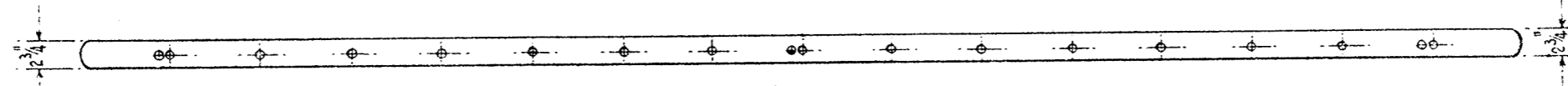
NOTE-Platform may be reversed if required to bring steps to opposite end, but railed side of platform must face track.

This Plan supersedes Plan No F514

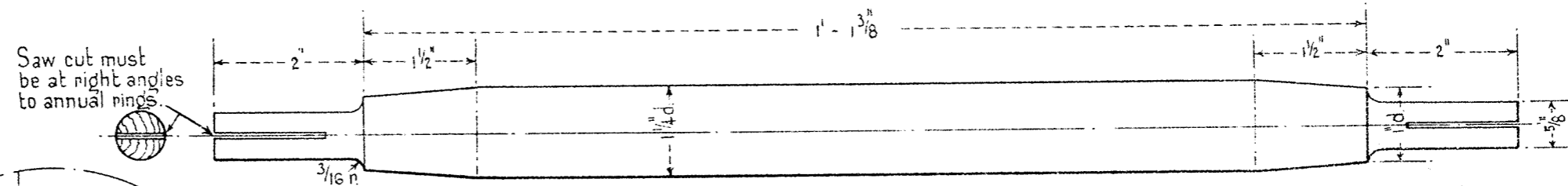
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	OCT. 1953.
STAFF PLATFORM		Drawn by K.F.L.	Checked by S.S.
		<i>[Signature]</i> Senior Architect.	PLAN No F 514^A



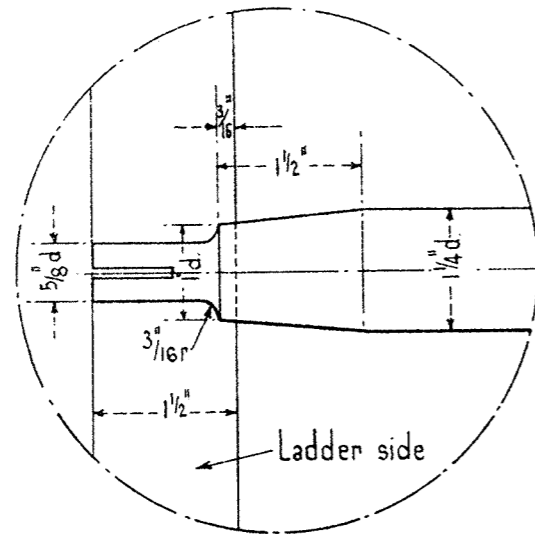
ELEVATION



SIDE ELEVATION
Scale - 3/4" to 1 Foot.



DETAIL OF RUNG
Scale - 1/2 Full Size



DETAIL AT 'A' - 1/2 Full Size

NOTES:-

SIDES Specially selected straight grained Oregon, dressed to dimensions, parallel.

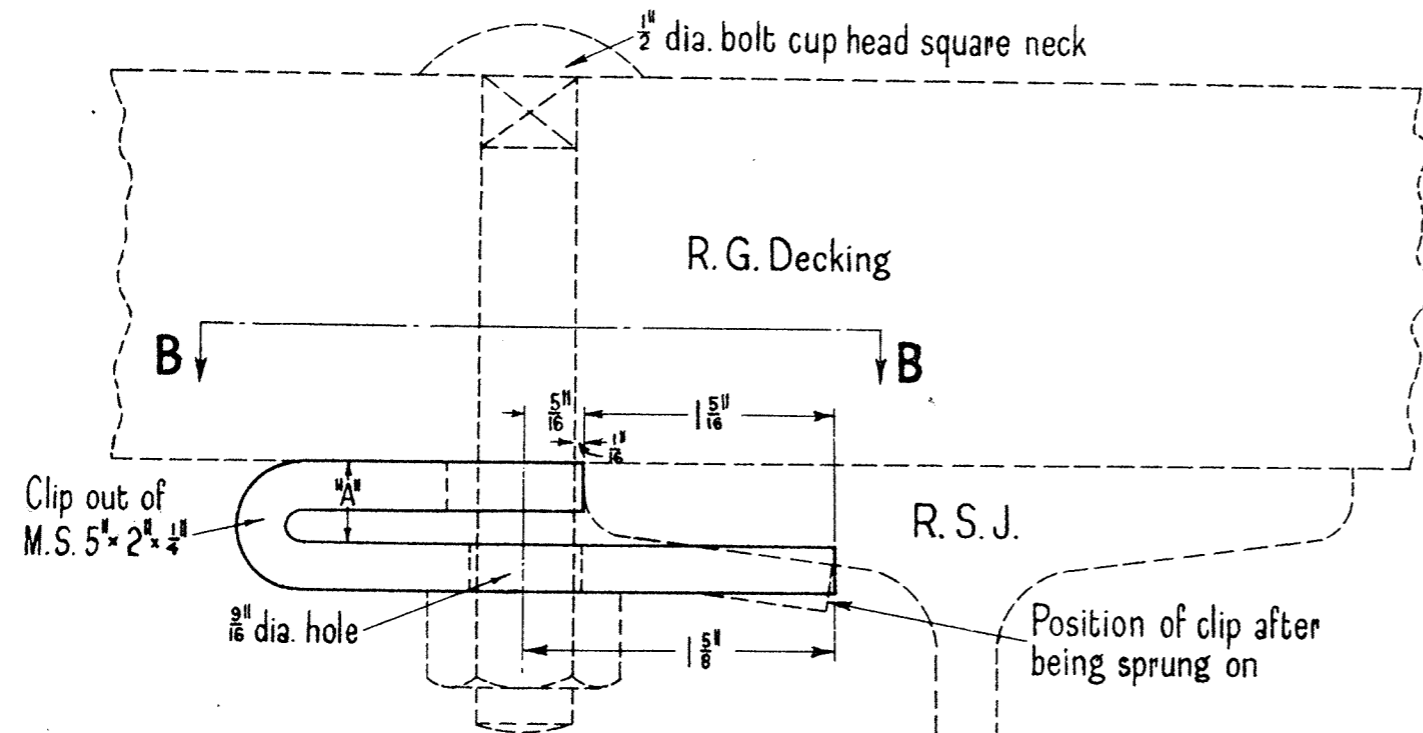
RUNGS Hardwood selected for strength and good wearing properties. Turned parallel except for 1 1/2" at ends as shown.

Every ladder to be inspected and passed before priming and red oxide painting.

LENGTHS Stocked in 10', 12' & 14' lengths only in this type. Extension type ladders may also be obtained in 3 sizes
 (a) 20' open, 11' closed.
 (b) 25' open, 14' closed.
 (c) 30' open, 16' closed.

Should a ladder of other than the sizes set out above be ordered, the reason why a standard ladder will not suffice must be given.

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved <i>[Signature]</i> Chief Civil Engineer	Adopted NOV 1948
STANDARD DRAWING		Drawn J. G.	Checked S. S.
SINGLE LADDERS		<i>[Signature]</i> Chief Architect	PLAN N ^o F 516



Clip out of
M.S. 5" x 2" x 1/4"

9/16" dia. hole

R.G. Decking

R.S.J.

Position of clip after
being sprung on

— ELEVATION —

M.S. Clip out of
5" x 2" x 1/4"

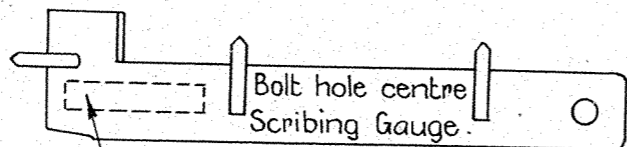
9/16" dia. hole

— PLAN B-B —

SIZE OF JOIST			Dimension A
N ^o	Size	lbs./ft.	
A.S.B. 21	20" x 6 1/2"	65	5 1/8"
A.S.B. 20	18" x 6"	55	5 1/8"
A.S.B. 18	16" x 6"	50	1 1/2"
A.S.B. 17	15" x 6"	45	1 1/2"
A.S.B. 16	14" x 5 1/2"	40	1 1/2"
A.S.B. 15	13" x 5"	35	1 1/2"
A.S.B. 13	12" x 5"	30	7 1/16"
A.S.B. 10	10" x 4 1/2"	25	7 1/16"
A.S.B. 9	9" x 4"	21	7 1/16"
A.S.B. 7	8" x 4"	18	3 1/8"

VICTORIAN RAILWAYS WAY & WORKS BRANCH
 STANDARD DRAWING
 DECK CLIP FOR
 FOOTBRIDGES
 Scale Full Size

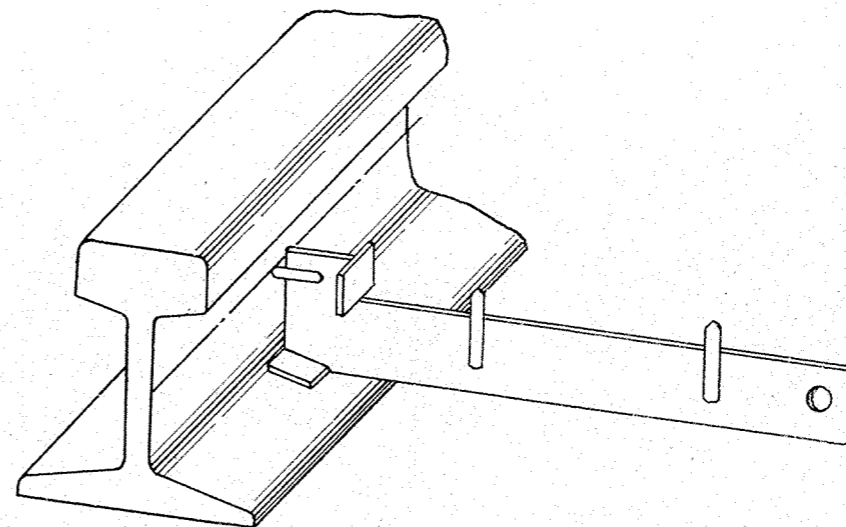
Approved <i>[Signature]</i>	Adopted APRIL 1949
Chief Civil Engineer	PLAN N ^o F 517
Drawn E.J.G.	Checked L.A.S.
Eng'g of Struct. Design	



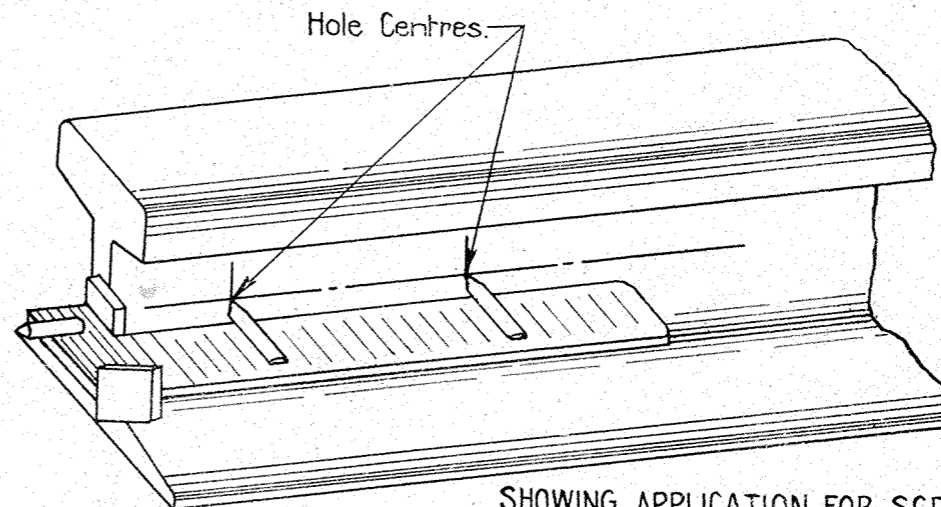
Stamped here for applicable rail groups shown below.

RAIL GROUPS	
100 - 110 lb.	60 lb. A.S. A & B.
80 - 94 lb.	60 lb. A.S. (1919)
75 lb.	60 lb. N.
	60 lb. D & 66 lb.

Drill sizes for rails 75 - 110 lb. $\frac{1}{4}$ " dia.
 " " " " 60 - 66 lb. $\frac{1}{8}$ " dia.

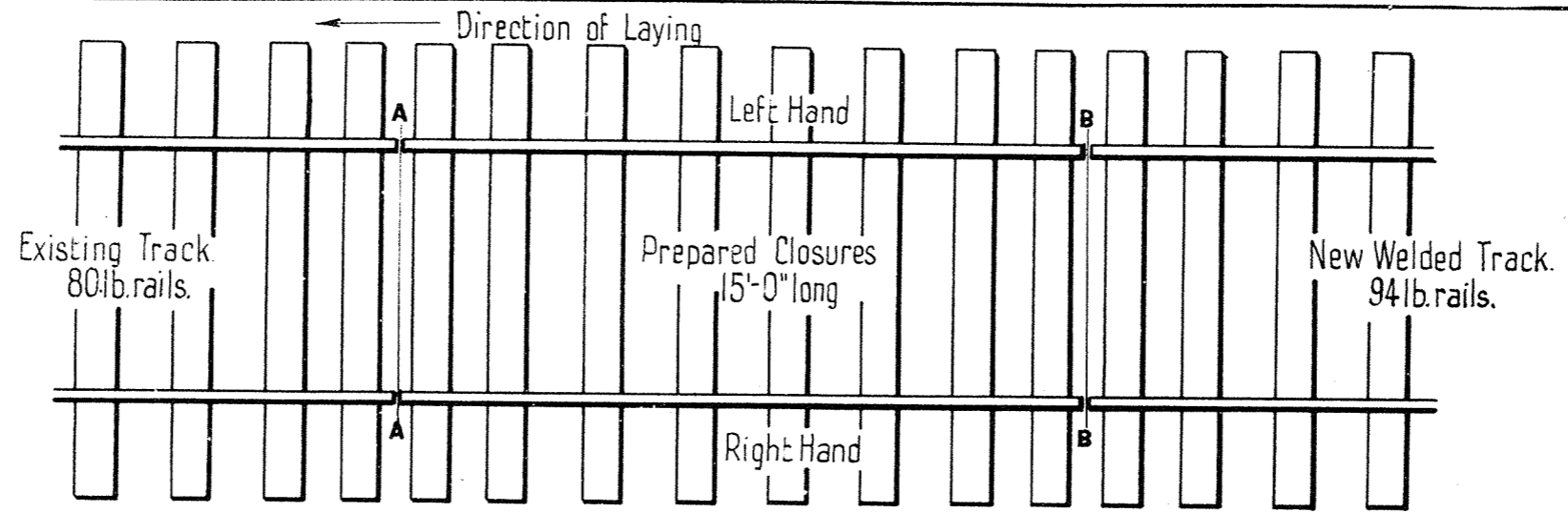


SHOWING APPLICATION FOR SCRIBING HEIGHT OF HOLES



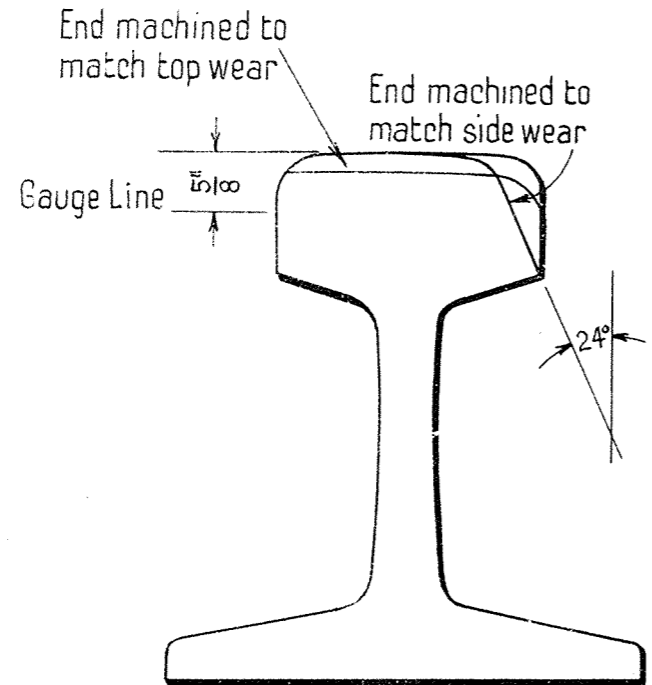
SHOWING APPLICATION FOR SCRIBING POSITION OF HOLES.

- V. R. - WELDED TRACK BOLT HOLE CENTRE SCRIBING GAUGES	Approved Chief Civil Engineer	Adopted 1951
	Checked C.F. Passed <i>[Signature]</i>	PLAN No.
	 Engineer M. & W.S.	F520

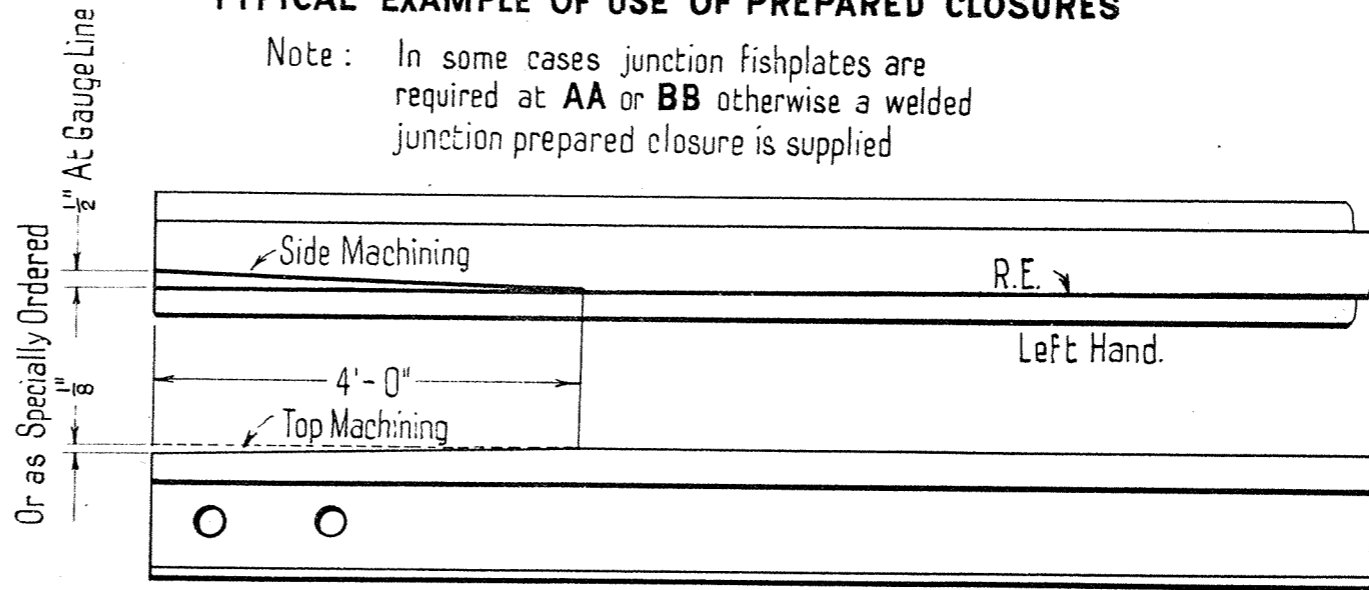


TYPICAL EXAMPLE OF USE OF PREPARED CLOSURES

Note: In some cases junction fishplates are required at **AA** or **BB** otherwise a welded junction prepared closure is supplied



TYPICAL MACHINED END



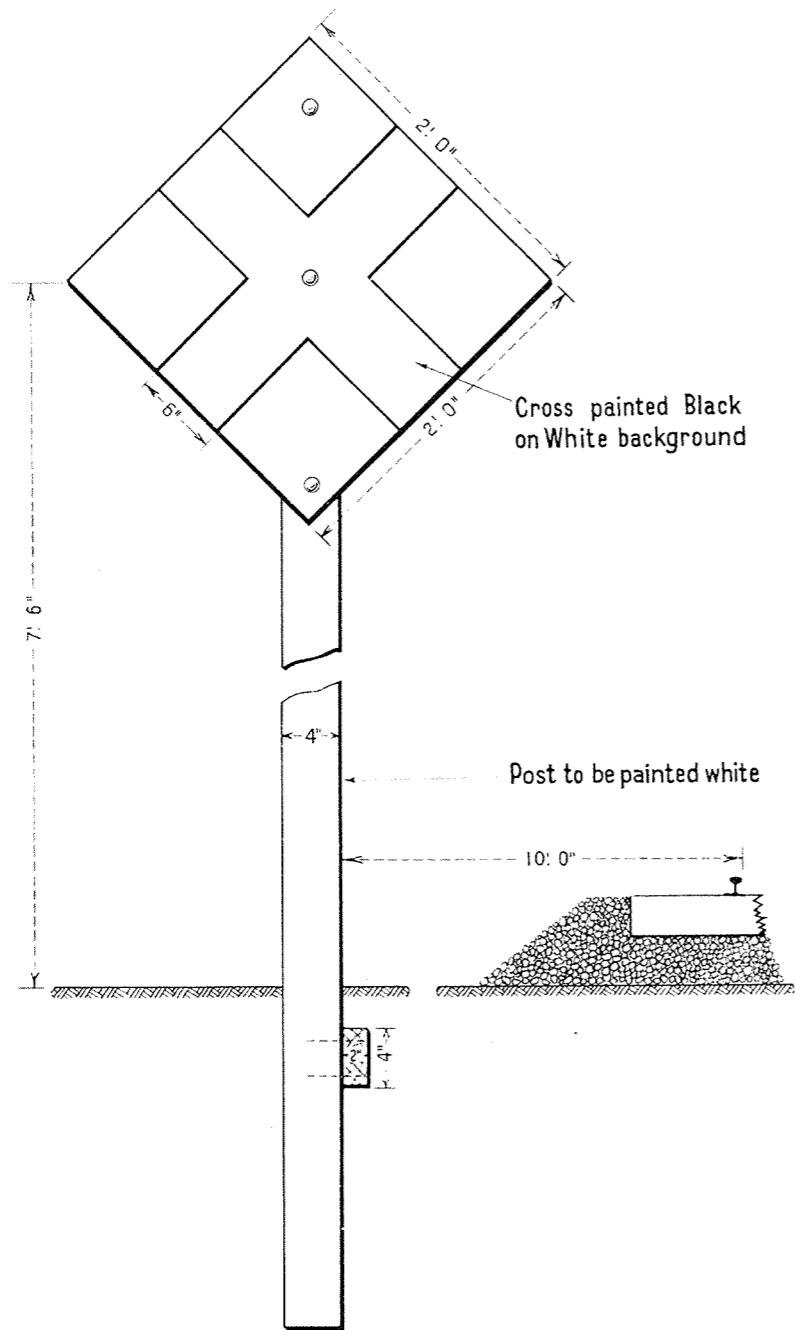
TYPICAL END MACHINING

80lb.end

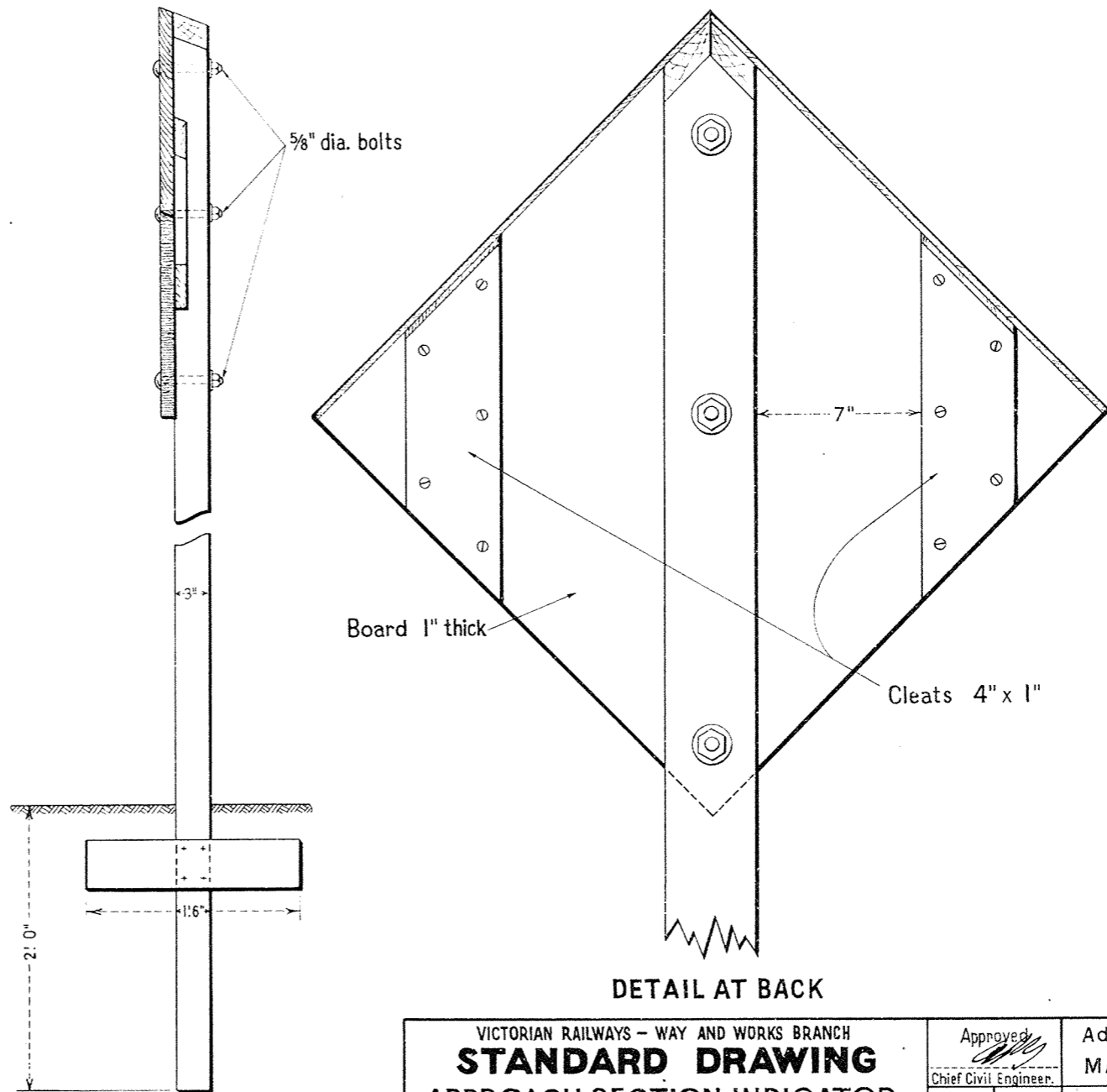
V. R.
WELDED TRACK
PREPARED CLOSURES
TEMPORARY USE ONLY

Approved *[Signature]*
Chief Civil Engineer
Checked C. F.
Passed *[Signature]*
Engineer of M. & W. S.

Adopted
1951
PLAN N^o
F 521



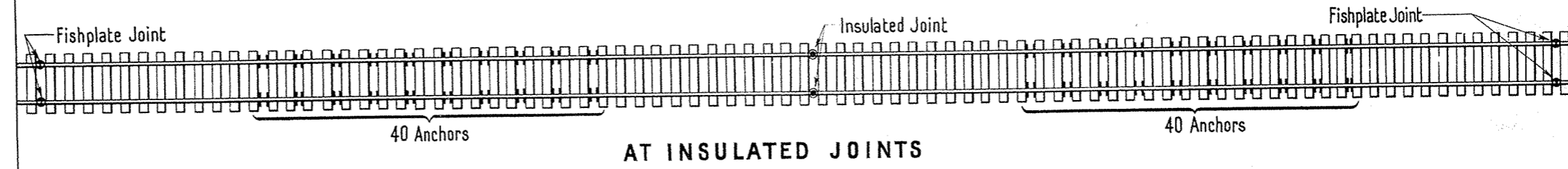
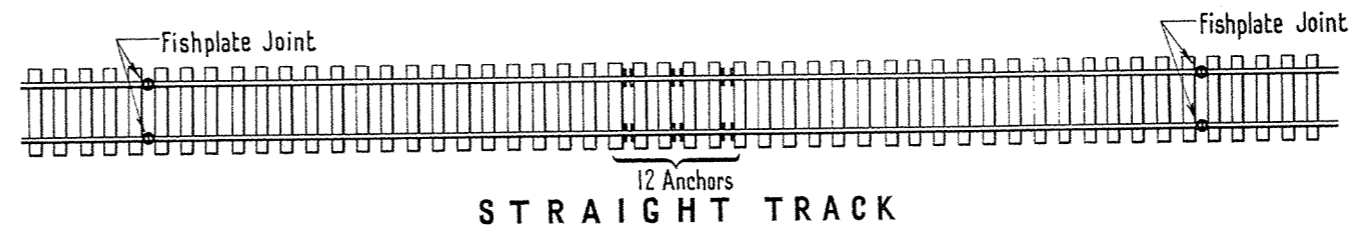
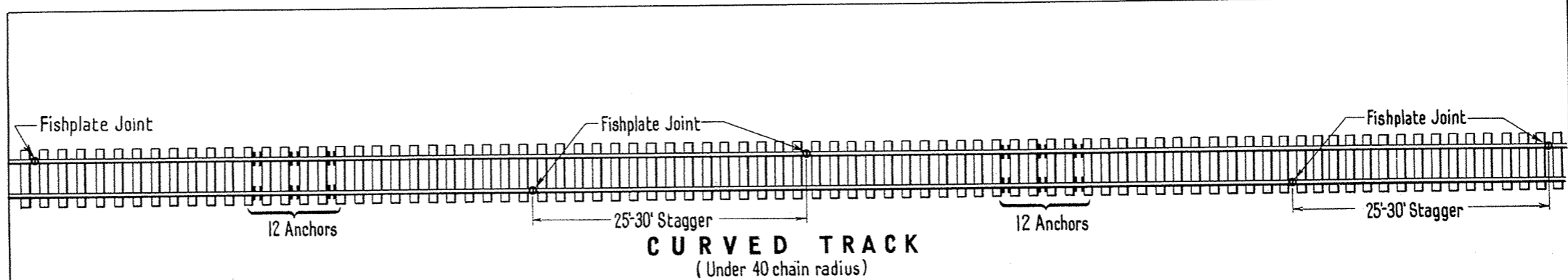
FRONT ELEVATION



DETAIL AT BACK

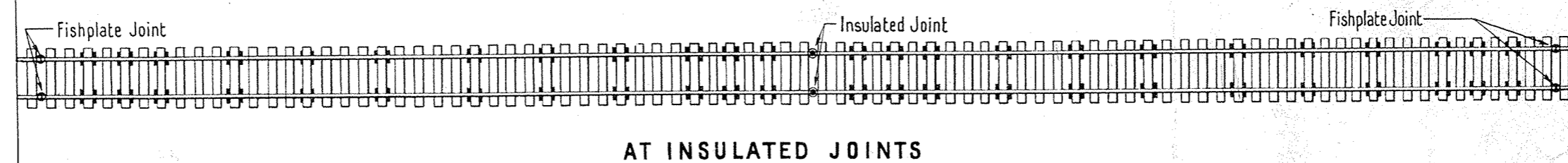
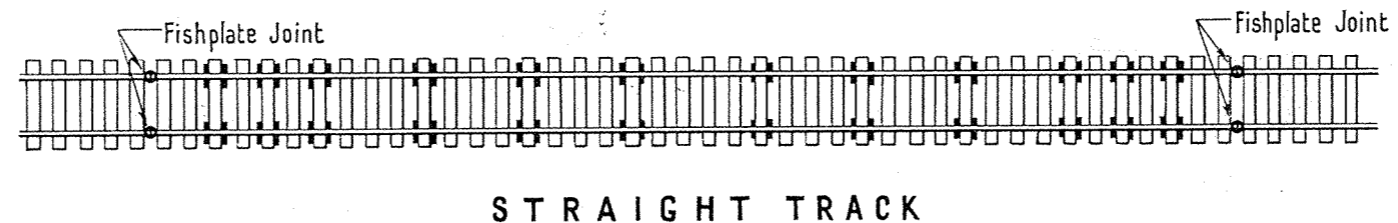
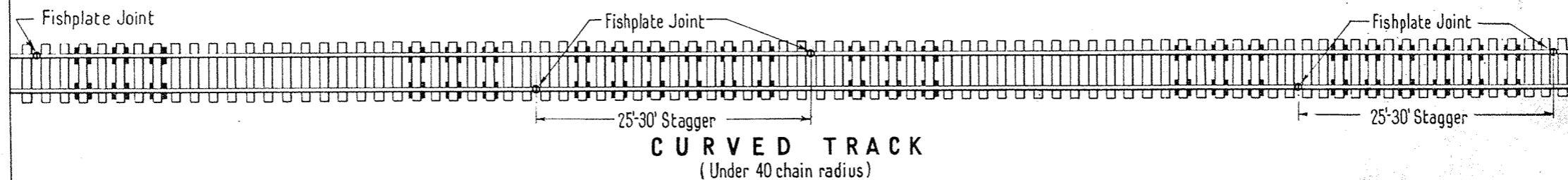
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
 APPROACH SECTION INDICATOR
 FOR LEVEL CROSSING SIGNALS
 Scales - 1 1/2" = 1' 0" & 3" = 1' 0"

Approved <i>[Signature]</i> Chief Civil Engineer.	Adopted MAR. 1955
Drawn by <i>[Signature]</i>	Checked by
<i>[Signature]</i> Sig. & Tele. Engineer.	F 522



NOTES:-
 This Plan applies to Single Track.
 On Double Track, in addition to the anchorage shown, each fourth sleeper is to be anchored against creep in the direction of traffic.
 When any tendency to creep is detected, additional anchors are to be provided as required.

VICTORIAN RAILWAYS WAY & WORKS BRANCH		R.H.H. 10.8.56		Adopted	
STANDARD DRAWING		Chief Civil Engineer		1956	
WELDED TRACK		Drawn by	Checked by		
RAIL ANCHORING ARRANGEMENT		H.C.J.	4/6		
FOR 90 FT RAILS		Engineer of Mach ^y & W.S.		F523	
NOT TO SCALE					

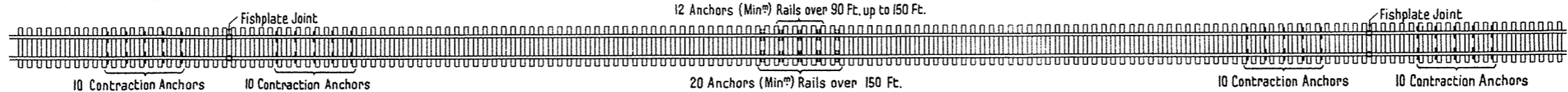


NOTES:
 This Plan applies to Single & Double Track.
 When any tendency to creep is detected, additional anchors are to be provided as required.
 48 No Anchors per 90' of Track.

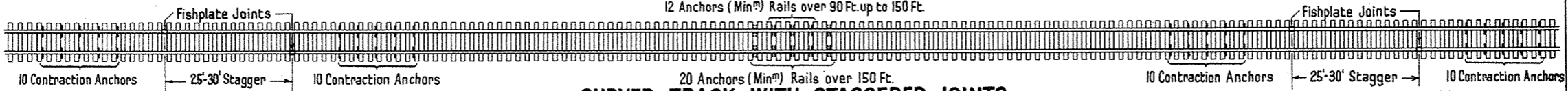
Rev'n	Date	Amendment	Amend'd by
A	13-3-69	No. of anchors increased and arrangement altered.	<i>H.C.J.</i>

VICTORIAN RAILWAYS WAY & WORKS BRANCH STANDARD DRAWING WELDED TRACK RAIL ANCHORING ARRANGEMENT FOR 90 FT RAILS NOT TO SCALE		<i>R.H.</i> Chief Civil Engineer Drawn by H.C.J.	Adopted 1956 A F523 Engineer of Mach' & W.S.
		Checked by <i>4/8</i>	

SINGLE TRACK

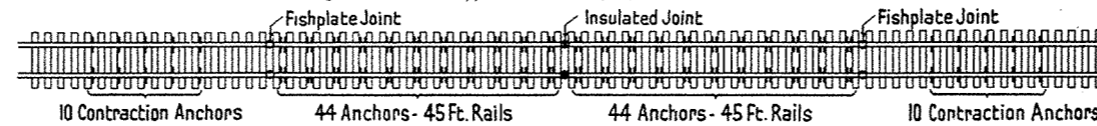


STRAIGHT TRACK



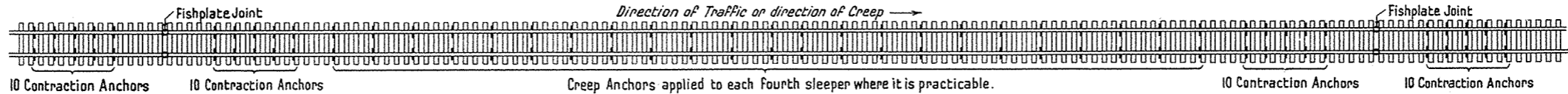
CURVED TRACK WITH STAGGERED JOINTS

Stagger Joints are not to be used except on curves under 40 Chains radius. This anchorage arrangement applies where stagger joints have been used on Flatter curves.

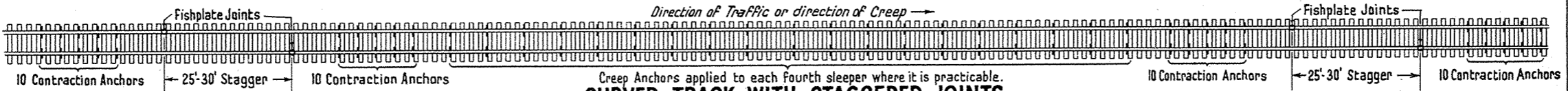


AT INSULATED JOINTS

DOUBLE TRACK

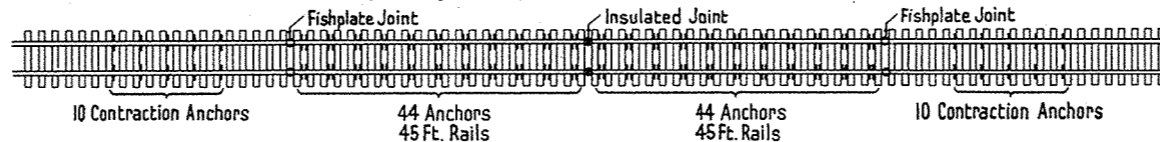


STRAIGHT TRACK



CURVED TRACK WITH STAGGERED JOINTS

Stagger Joints are not to be used except on curves under 40 Chains radius. This anchorage arrangement applies where stagger joints have been used on Flatter curves.



AT INSULATED JOINTS

NOTES:-

The minimum anchorage against creep on Double Track is to be obtained by anchoring at every fourth sleeper between the two sets of contraction anchors. In the suburban electrified area and at other locations where heavy creep is likely to occur additional anchors are to be provided as follows:-

DOWN GRADES (Grades steeper than 1 in 60)

SINGLE TRACK:- Additional Anchors on every second sleeper against creep are to be provided on each side of the central group of anchors, up to the contraction anchors. **DOUBLE TRACK**:- Additional Anchors on every second sleeper against creep are to be provided between the two sets of contraction anchors.

STATION PITS

DOUBLE TRACK: Rails to be anchored against brake action on every second sleeper between the two sets of contraction anchors. Rails on approach side are to be similarly anchored for a distance of 200 feet. **SINGLE TRACK**: The central anchor group as shown to be increased to within two sleepers of the two sets of contraction anchors, up to a maximum of 80 anchors.

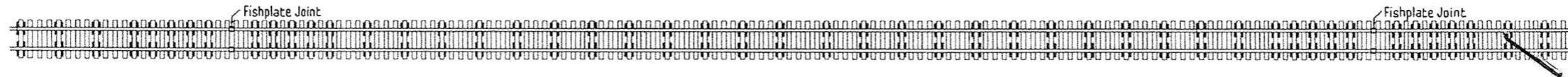
Revision	Date	Amendment

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING
WELDED TRACK
RAIL ANCHORAGE ARRANGEMENTS
FOR RAIL LENGTHS OVER 90 FT.

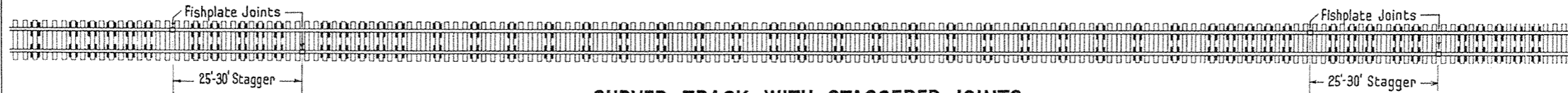
Approved
R. C. S. S.
 Chief Civil Engineer
 Drawn by
 E. J. C.
 Checked by
[Signature]
 A. A. P.
 Engineer of Machinery & W.S.

Adopted
1957
F 524

SINGLE TRACK

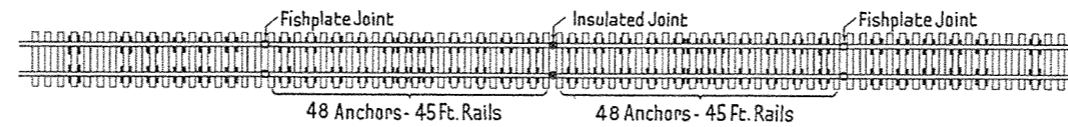


STRAIGHT TRACK



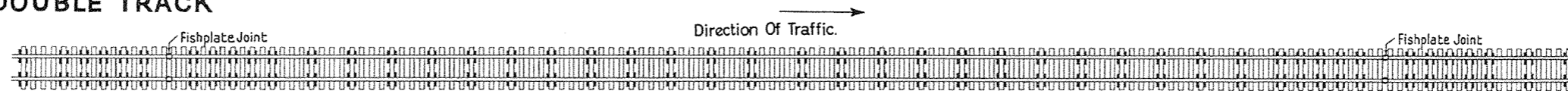
CURVED TRACK WITH STAGGERED JOINTS

Stagger Joints are not to be used except on curves under 40 Chains radius.

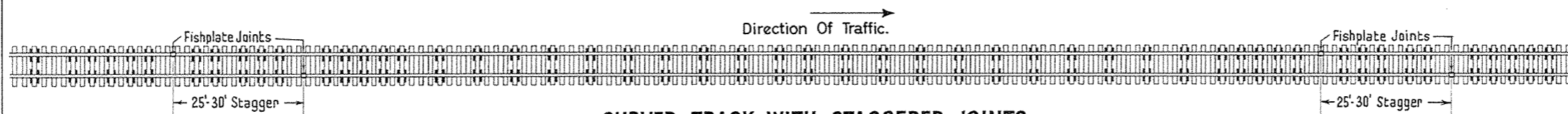


AT INSULATED JOINTS

DOUBLE TRACK

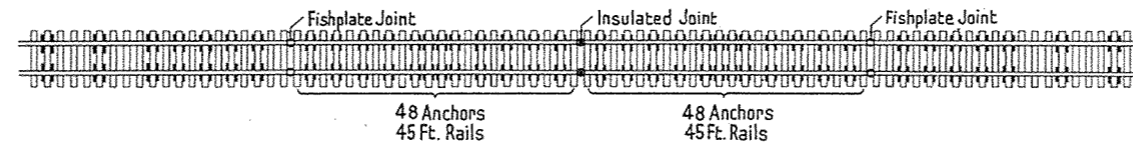


STRAIGHT TRACK



CURVED TRACK WITH STAGGERED JOINTS

Stagger Joints are not to be used except on curves under 40 Chains radius.



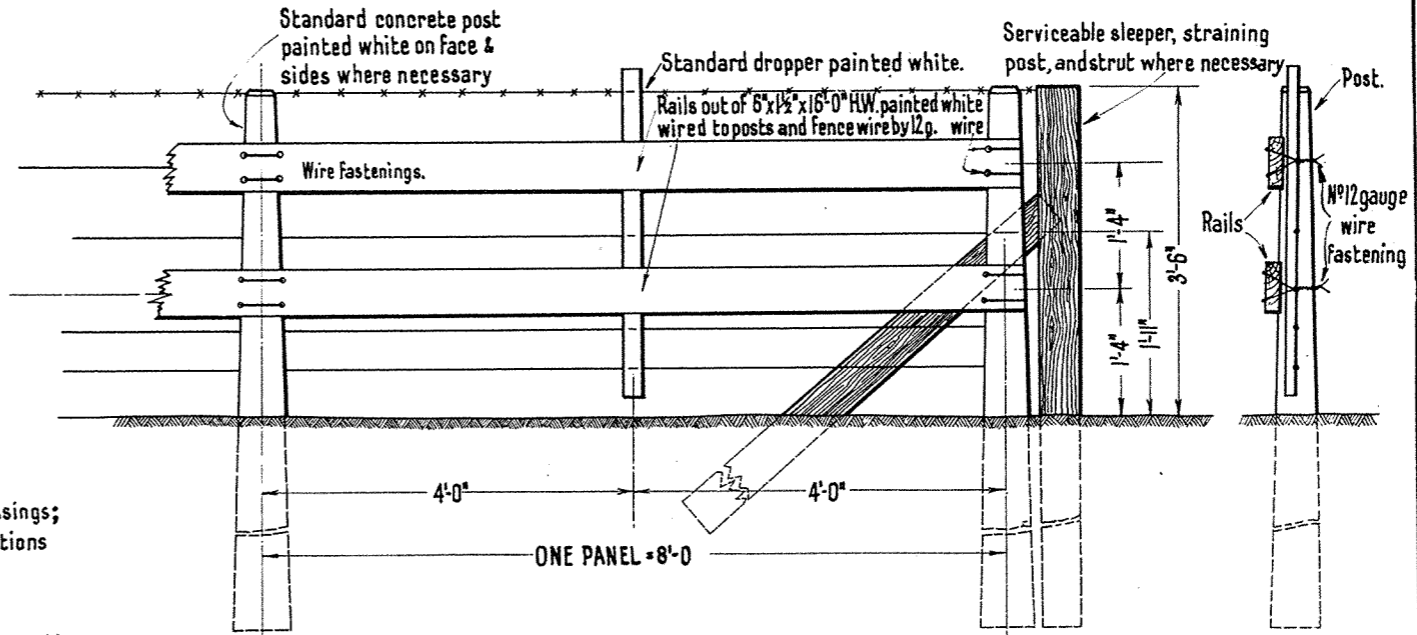
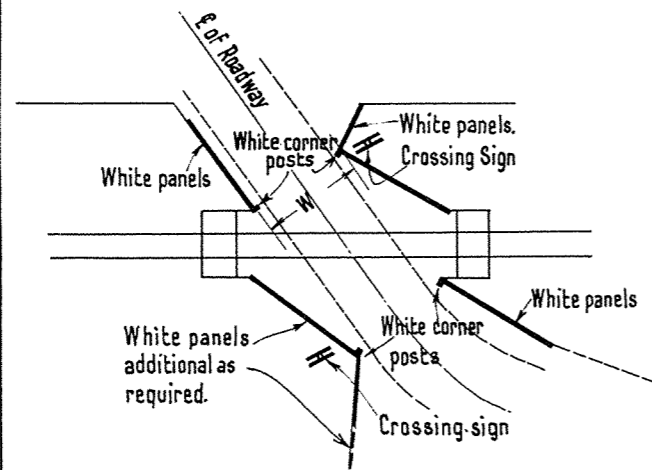
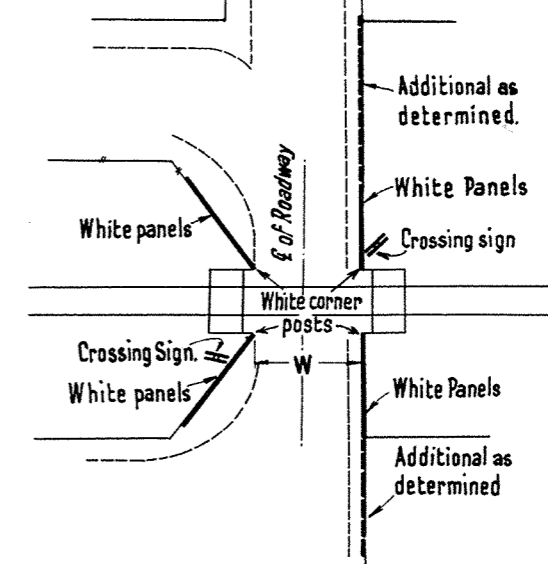
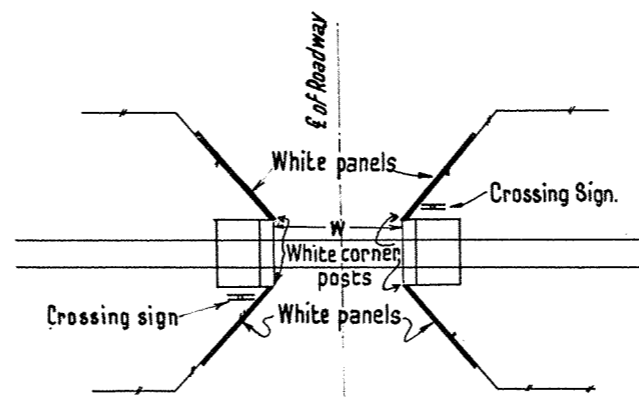
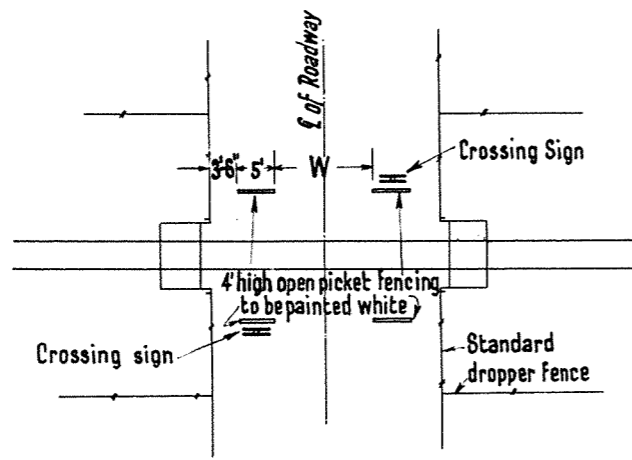
AT INSULATED JOINTS

NOTE.

When any tendency to creep is detected, additional anchors are to be provided as required.

Revision	Date	Amendment
A	19-12-69	Anchor pattern amended. Single & Double track brought to agreement.

VICTORIAN RAILWAYS WAY AND WORKS BRANCH STANDARD DRAWING WELDED TRACK RAIL ANCHORAGE ARRANGEMENTS FOR RAIL LENGTHS OVER 90 FT.		Approved <i>[Signature]</i> Chief Civil Engineer	Adopted 1957
Drawn by E. J. C.	Checked by <i>[Signature]</i>	F 524 ^A	
		A. A. P. Engineer of Machinery & W.S.	



NOTES

STANDARD WIDTH "W" = 33 ft., to apply to single or double line crossings; increased width of openings for Highways and special locations as may be approved.

PANELLING OF WINGS. (Indicated by heavy lines)

- A. Highways and other roads carrying fair amount of traffic:- provide generally 4 No 8ft Panels at each wing fence (see detail sketch)
- B. Country and other roads carrying light traffic 2 No Panels at each wing
- C. In special cases additional panelling as determined on the site may be provided in order to better define the crossing

WHITE PAINTING. All corner posts, Picket panels, Posts and hand rails on cattle pits or grids, and Panels as per notes A, B & C (above) to be painted white.

CROSSING SIGNS. Each crossing to be equipped with 2 No Crossing signs (S.A. Type B, D, or F as approved) and erected generally at 10ft. from nearest rail at LEFT SIDE of approach road, special cases as circumstances dictate.

DETAIL OF DROPPER FENCE WITH TIMBER RAIL PANELLING

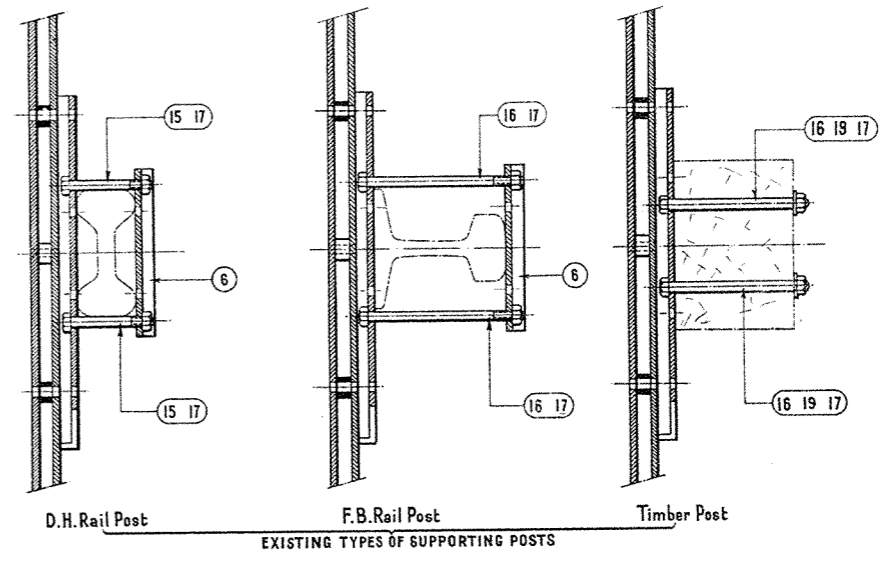
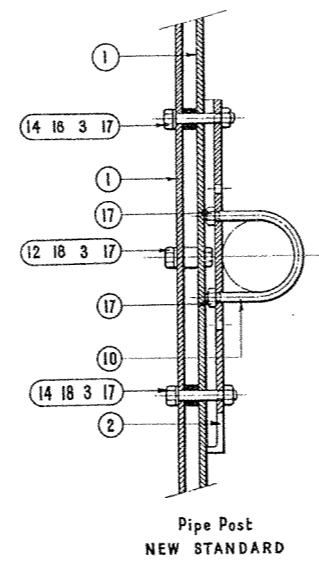
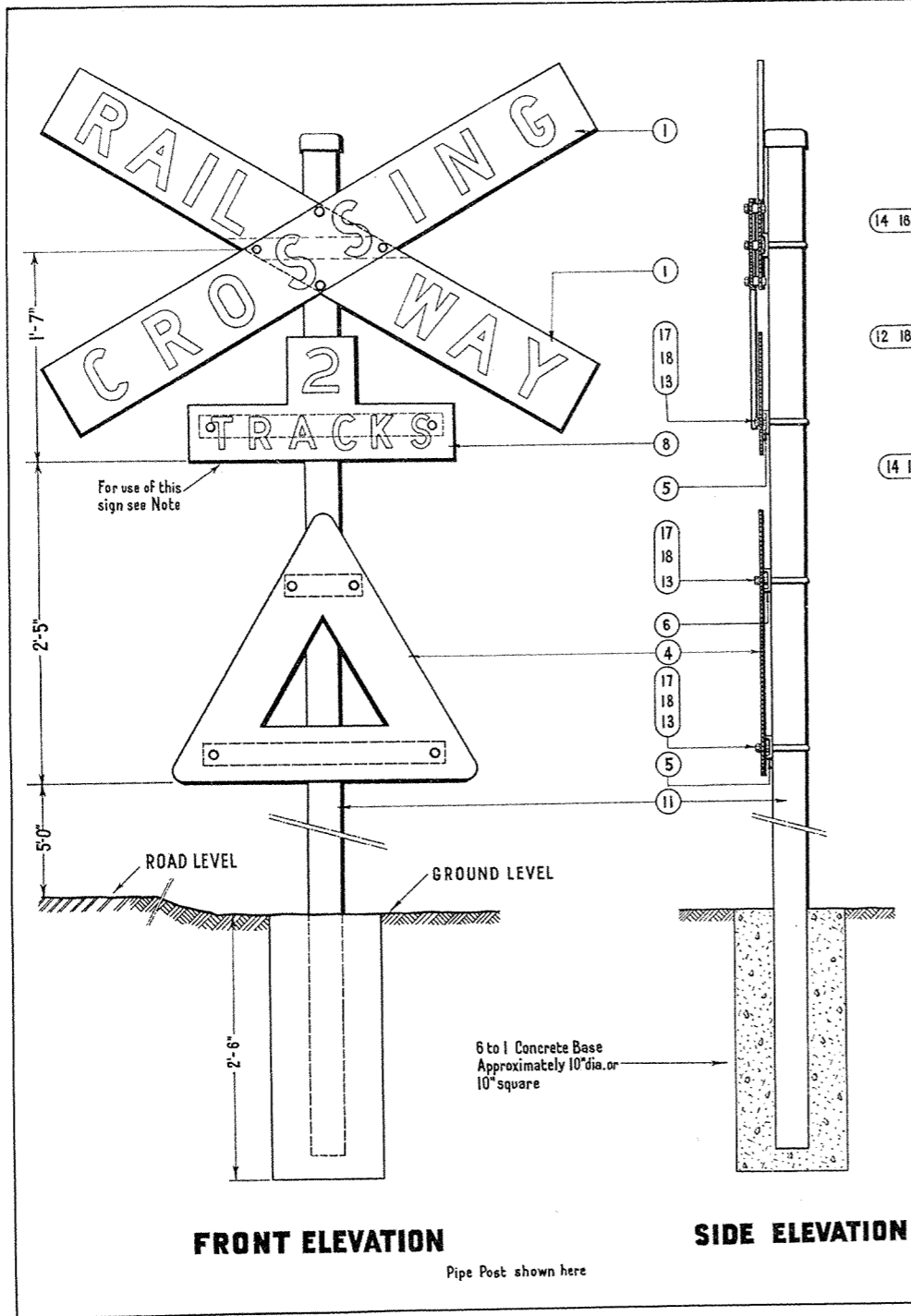
This Plan supersedes Plan No F 336.
See Plan No F 330 for details of Dropper Fence.

Revision	Date	Amendment

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING
P.C.R. (OPEN) CROSSING
DIAGRAMS INDICATING TYPICAL
PANELLING WING FENCING & WHITE PAINT WORK

Approved
R. L. H. 19.11.56
Chief Civil Engineer
Drawn
Checked

Adopted
Nov. 1956
PLAN No.
F 525



DETAILS OF CROSSARM ASSEMBLIES
Other signs have a similar assembly without spacers

Notes:-
Channel strips are to be levelled first and securely fixed to posts before attaching signs.
Track signs only to be used where 2 or more tracks pass through the crossing.
Where existing painted signs are being replaced by reflectorised signs the existing D.H., F.B or timber supporting post, if in good order & correctly positioned, is to be used. In other cases the new Standard Pipe Post is to be requisitioned.

18	Washer	3/8" dia.	Galv.	-	-	-	-	-	-	8	6
18	Washer	3/8" dia.	Fibre.	-	8	10	8	10	-	10	8
17	Nut	NP/V126/10/2	Simmonds	18	14	18	14	18	14	18	14
16	Bolt	3/8" x 6"	Cad.Pl.	-	-	-	-	-	-	-	-
15	Bolt	3/8" x 3 1/2"	Cad.Pl.	-	-	8	6	-	-	2	2
14	Bolt	3/8" x 2"	Cad.Pl.	2	2	2	2	2	2	2	2
13	Bolt	3/8" x 1 1/2"	Cad.Pl.	6	4	6	4	6	4	6	4
12	Bolt	3/8" x 1 1/4"	Cad.Pl.	2	2	2	2	2	2	2	2
11	Post Pipe		Galv.	1	1	-	-	-	-	-	-
10	U-Bolt		Cad.Pl.	4	3	-	-	-	-	-	-
8	Track sign.	(2,3 or 4 Tracks as required)		1	1	1	1	1	1	1	1
6	Channel strip	7"		1	1	5	4	5	4	1	1
5	Channel strip	1'-10"		2	1	2	1	2	1	2	1
4	Red triangle			1	1	1	1	1	1	1	1
3	Spacer			4	4	4	4	4	4	4	4
2	Channel strip	1'-1"		1	1	1	1	1	1	1	1
1	Cross arms			1	1	1	1	1	1	1	1
				1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.

VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING
LEVEL CROSSING
- CROSSING SIGN
TYPE "B"

Approved
R.H. G.H.
Chief Civil Engineer

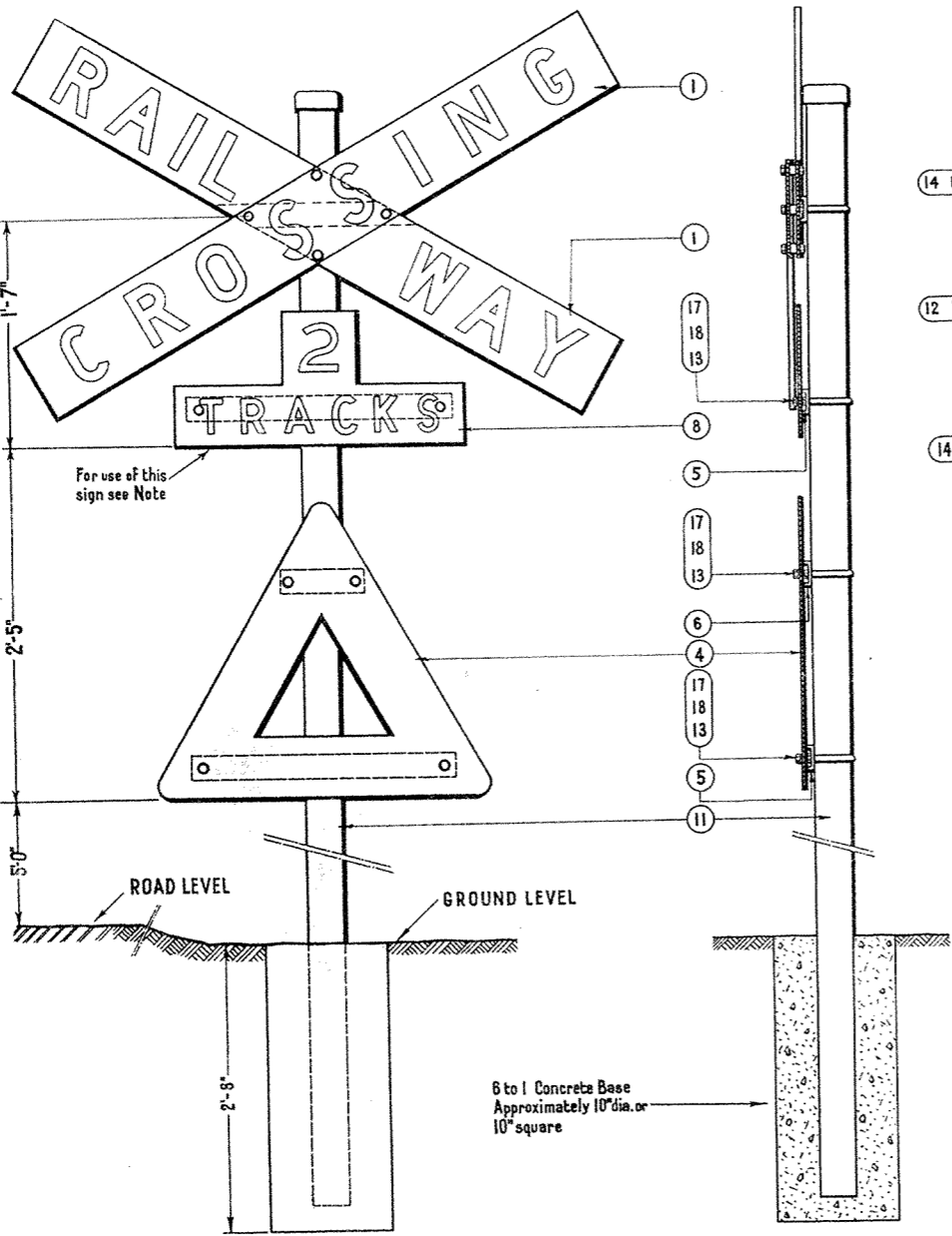
Checked
Y.H.

Passed

Engineer of Machinery & Water Supply

Adopted
1956
PLAN N^o F526

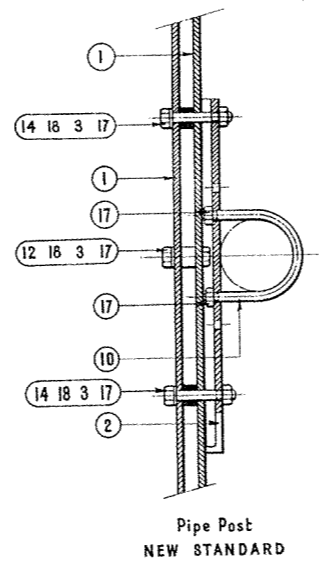
Revision	Date	Amendment



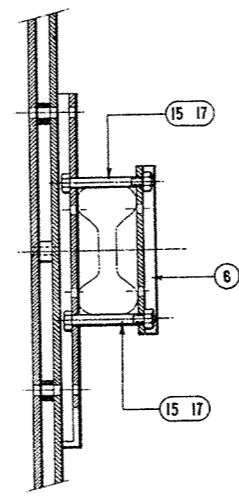
FRONT ELEVATION

SIDE ELEVATION

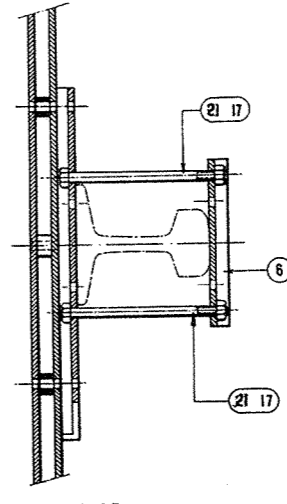
Pipe Post shown here



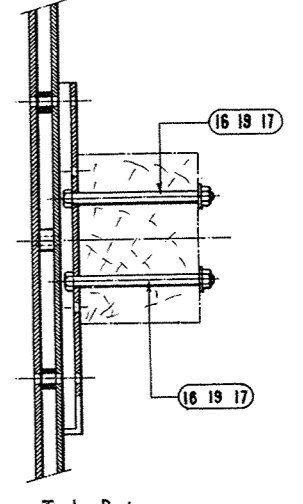
Pipe Post
NEW STANDARD



D.H. Rail Post



F.B. Rail Post



Timber Post

EXISTING TYPES OF SUPPORTING POSTS

DETAILS OF CROSSARM ASSEMBLIES
Other signs have a similar assembly without spacers
Except top attachment of Red Triangle on Rail Posts where bolts 16 or 20 pass through both sign & channel strip

Detail No	Description	Quantities per Post							
		WITH TRACK SIGN	WITHOUT TRACK SIGN	WITH TRACK SIGN	WITHOUT TRACK SIGN	WITH TRACK SIGN	WITHOUT TRACK SIGN	WITH TRACK SIGN	WITHOUT TRACK SIGN
21	Bolt 3/8" x 5"	-	-	2	2	6	4	-	-
20	Bolt 3/8" x 4"	-	-	-	-	-	-	8	6
19	Washer 3/8" dia.	10	8	10	8	10	8	10	8
18	Washer 3/8" dia.	18	14	16	12	16	12	18	14
17	Nut NP/V126/10/2 Simmonds	-	-	-	-	2	2	8	6
16	Bolt 1/2" x 6"	-	-	6	4	-	-	-	-
15	Bolt 1/2" x 3 1/2"	-	-	-	-	-	-	-	-
14	Bolt 1/2" x 2"	2	2	2	2	2	2	2	2
13	Bolt 1/2" x 1 1/2"	6	4	4	2	4	2	2	2
12	Bolt 3/8" x 1 1/2"	2	2	2	2	2	2	2	2
11	Post Pipe Galv.	1	1	-	-	-	-	-	-
10	U-Bolt Cad.Pl.	4	3	-	-	-	-	-	-
8	Track sign. (2,3 or 4 Tracks as required)	-	-	1	-	1	1	1	1
6	Channel strip 7"	1	1	5	4	5	4	1	1
5	Channel strip 1'-10"	2	1	2	1	2	1	2	1
4	Red triangle	1	1	1	1	1	1	1	1
3	Spacer	4	4	4	4	4	4	4	4
2	Channel strip 1'-1"	1	1	1	1	1	1	1	1
1	Cross arms	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.

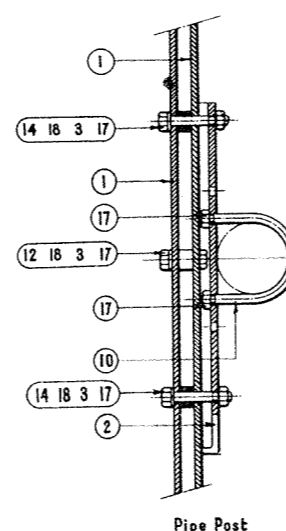
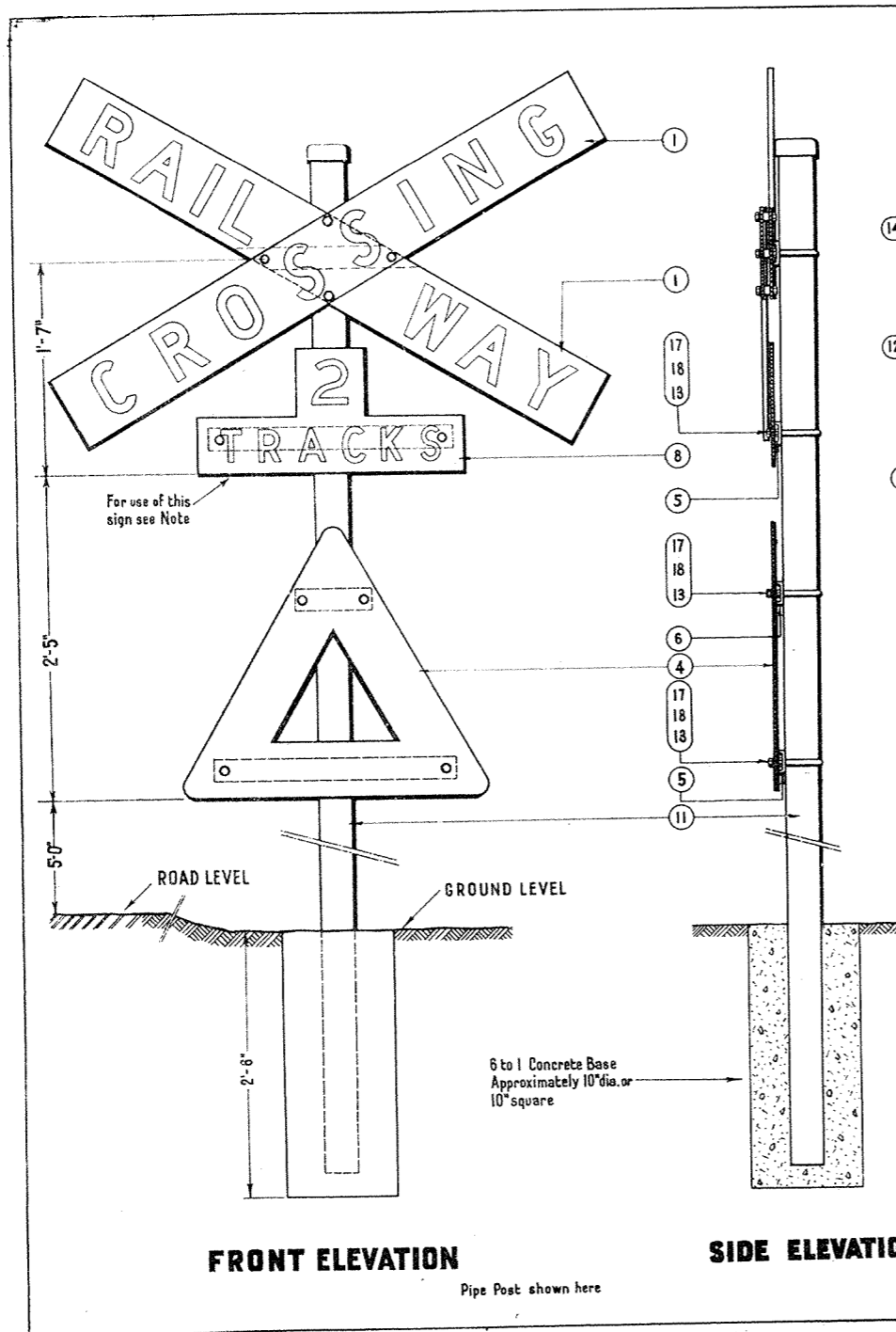
Notes:-
Channel strips are to be levelled first and securely fixed to posts before attaching signs.
Track signs only to be used where 2 or more tracks pass through the crossing.
Where existing painted signs are being replaced by reflectorised signs the existing D.H., F.B. or timber supporting post, if in good order & correctly positioned, is to be used. In other cases the new Standard Pipe Post is to be requisitioned

Revision	Date	Amendment
A	8-7-57	3/8" x 5" Bolt added
	8-7-57	3/8" x 4" Bolt added

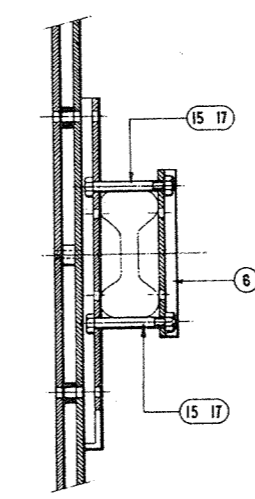
VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING
LEVEL CROSSING CROSSING SIGN
TYPE "B"

Approved
L.H.C. 6.11.56
Chief Civil Engineer
Checked
J.P.
Passed
J.P.
Engineer of Machinery & Water Supply

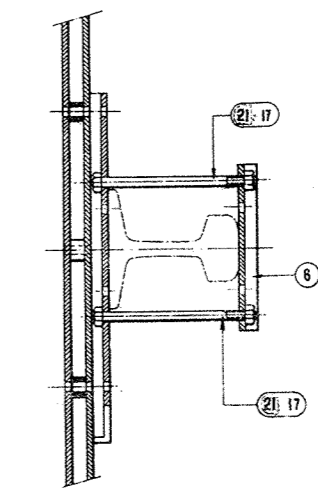
Adopted
1956
PLAN N^o F 526A



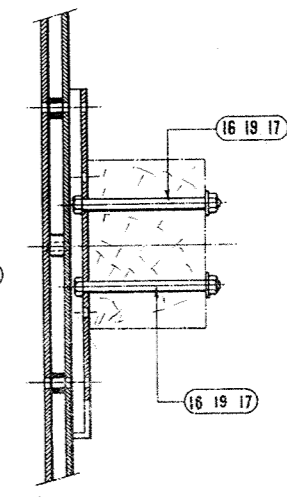
Pipe Post



D.H. Rail Post



60 lb. F.B. Rail Post



Timber Post

Notes:-
 Channel strips are to be levelled first and securely fixed to posts before attaching signs.
 Track signs only to be used where 2 or more tracks pass through the crossing.
 Where existing painted signs are being replaced by reflectorised signs the existing D.H., F.B. or timber supporting post, if in good order & correctly positioned, is to be used. In other cases unserviceable 60 lb. F.B. rail is to be requisitioned.

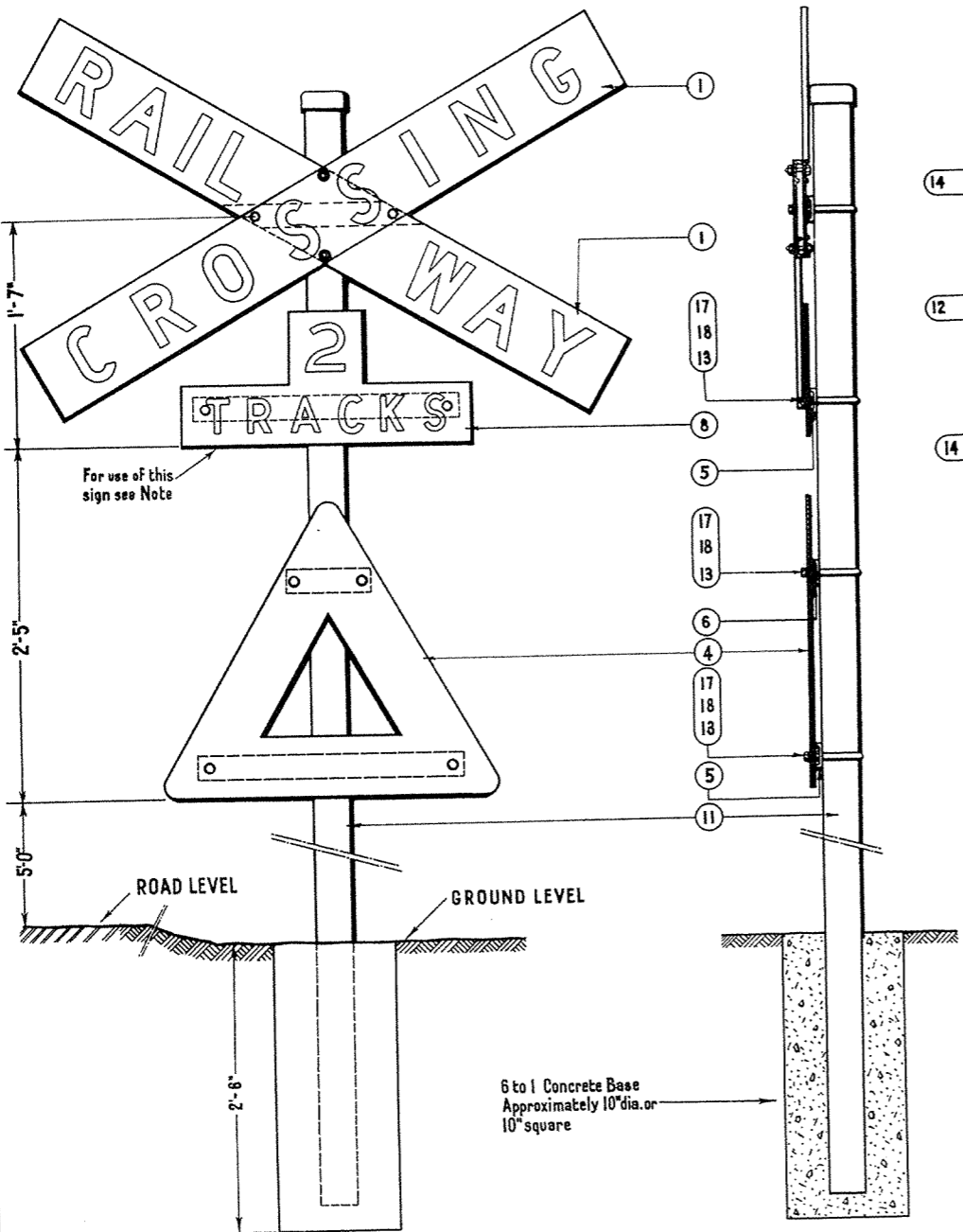
DETAILS OF CROSSARM ASSEMBLIES
 Other signs have a similar assembly without spacers
 Except top attachment of Red Triangle on Rail Posts where bolts 16 or 20 pass through both sign and channel strip.

21	Bolt	1/2" x 5"	Cad. Pl.	-	-	-	-	6	4	-	-
20	Bolt	1/2" x 4"	Cad. Pl.	-	-	2	2	-	-	-	6
18	Washer	1/2" dia.	Galv.	10	8	10	8	10	8	10	8
18	Washer	1/2" dia.	Fibre.	18	8	10	8	10	8	10	8
17	Nut	NP/V126/10/2	Simmonds	10	14	16	12	16	12	16	14
16	Bolt	1/2" x 6"	Cad. Pl.	-	-	-	-	2	2	2	2
15	Bolt	1/2" x 3 1/2"	Cad. Pl.	-	-	6	4	-	-	-	-
14	Bolt	1/2" x 2"	Cad. Pl.	2	2	2	2	2	2	2	2
13	Bolt	1/2" x 1 1/2"	Cad. Pl.	6	4	4	2	4	2	2	2
12	Bolt	1/2" x 1 1/4"	Cad. Pl.	2	2	2	2	2	2	2	2
11	Post	Pipe	Galv.	1	1	-	-	-	-	-	-
10	U-Bolt		Cad. Pl.	4	3	-	-	-	-	-	-
8	Track sign	(2, 3 or 4 Tracks as required)		1	-	1	-	1	-	1	-
6	Channel strip	7"		1	1	5	4	5	4	1	1
5	Channel strip	1'-10"		2	1	2	1	2	1	2	1
4	Red triangle			1	1	1	1	1	1	1	1
3	Spacer			4	4	4	4	4	4	4	4
2	Channel strip	1'-1"		1	1	1	1	1	1	1	1
1	Cross arms			1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.

B	20-8-59	Pipe post deleted as NEW STANDARD
A	8-7-57	Weight of F.B. Rail post added. 3/8" x 5" Bolt added. 1/2" x 4" Bolt added.
Revision	Date	Amendment

VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING
LEVEL CROSSING
CROSSING SIGN
TYPE "B"

Approved <i>R.H. Cox</i> Chief Civil Engineer	Adopted 1956
Checked <i>W.H.</i>	Passed
Engineer of Machinery & Water Supply	PLAN NO. F 526^B

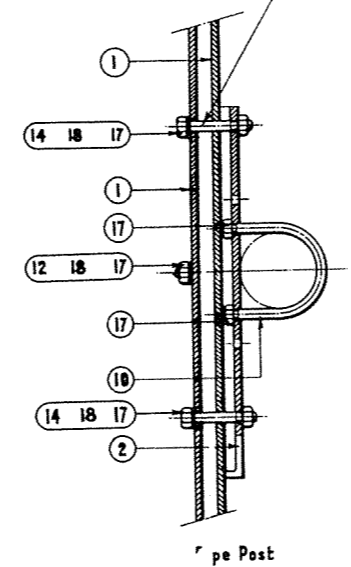


FRONT ELEVATION

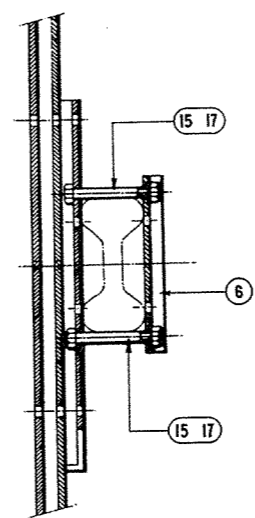
SIDE ELEVATION

Pipe Post shown here

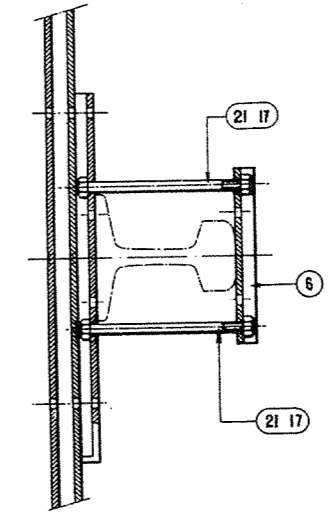
Spacers required only where original non-ribbed section crossarms are in use.



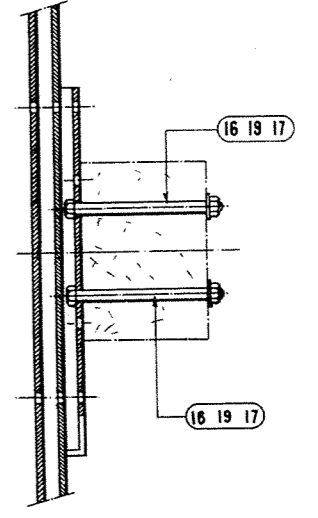
Pipe Post



D.H. Rail Post



60 lb. F.B. Rail Post



Timber Post

DETAILS OF CROSSARM ASSEMBLIES
Other signs have a similar assembly without spacers
Except top attachment of Red Triangle on Rail Posts where bolts 16 or 20 pass through both sign and channel strip.

Notes:-
Channel strips are to be levelled first and securely fixed to posts before attaching signs.
Track signs only to be used where 2 or more tracks pass through the crossing.
Where existing painted signs are being replaced by reflectorised signs the existing D.H., F.B. or timber supporting post, if in good order & correctly positioned, is to be used. In other cases unserviceable 60 lb. F.B. rail is to be requisitioned.

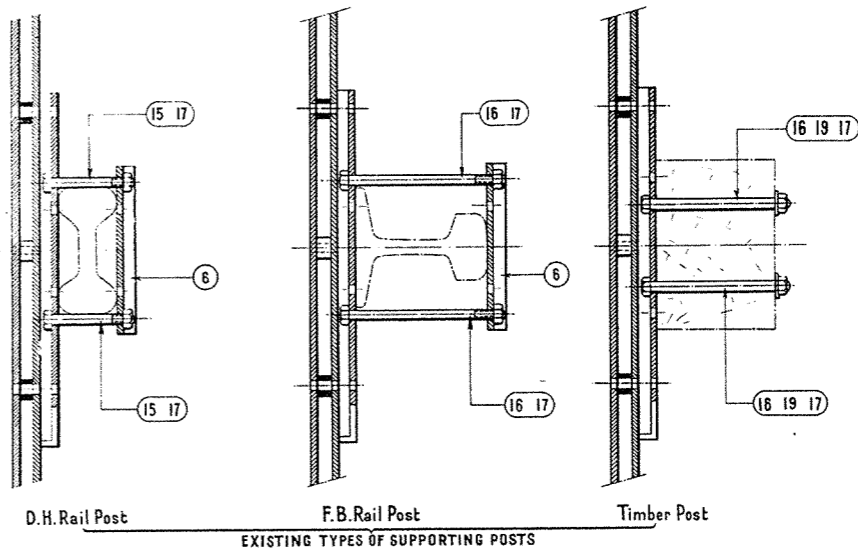
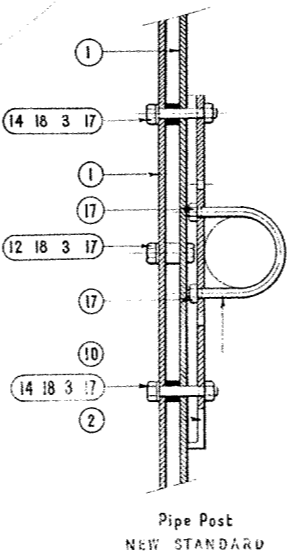
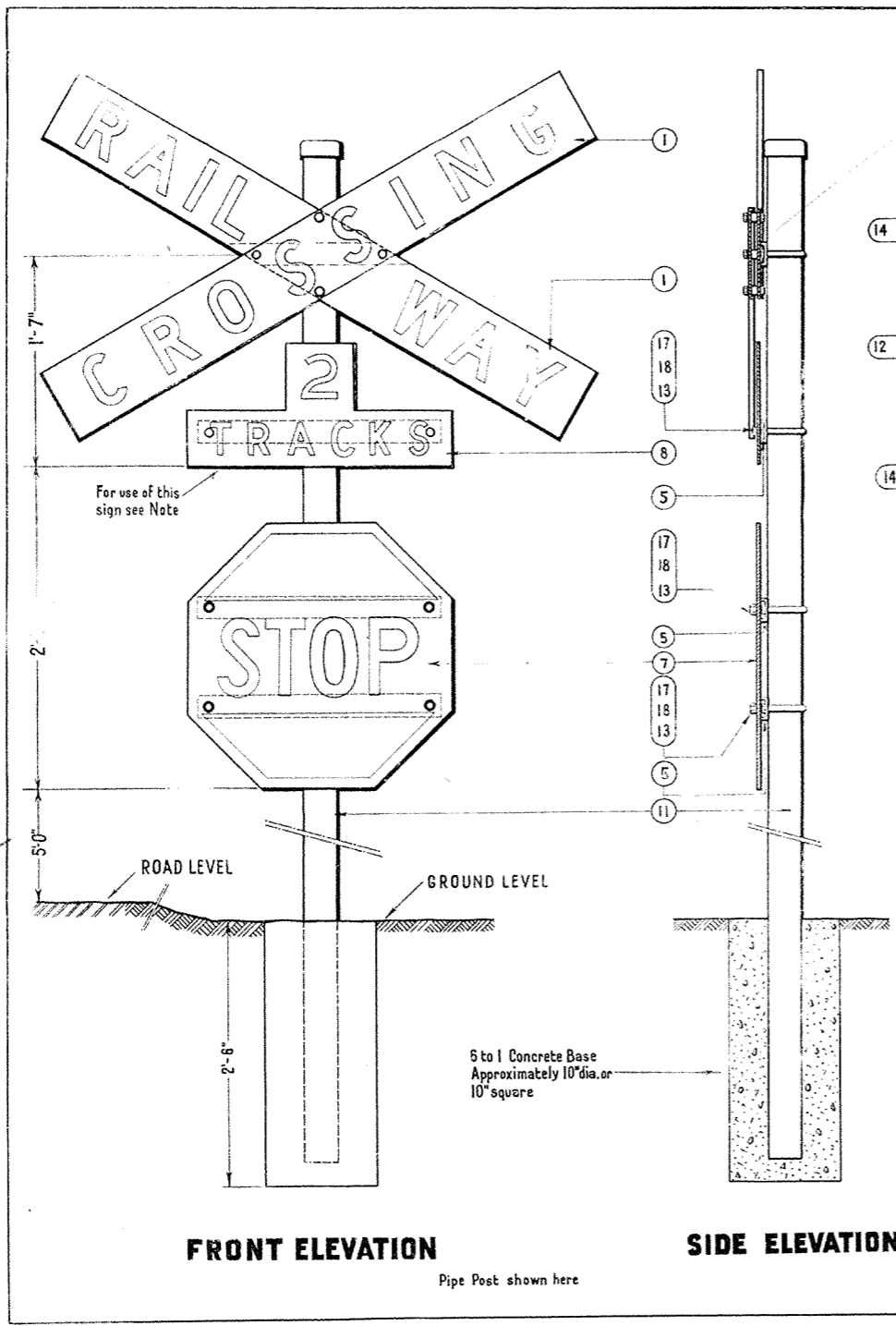
Detail No	Description	Quantities per Post							
		WITH TRACK SIGN		WITHOUT TRACK SIGN		WITH TRACK SIGN		WITHOUT TRACK SIGN	
		Pipe Post	D.H. Rail	F.B. Rail	Timber	Pipe Post	D.H. Rail	F.B. Rail	Timber
21	Bolt 3/8" x 5"	-	-	2	2	6	4	-	-
20	Bolt 1/2" x 4"	-	-	-	-	-	-	8	8
18	Washer 1/2" dia.	10	8	10	8	10	8	10	8
18	Washer 1/2" dia.	18	14	16	12	16	12	18	14
17	Nut 3/8" dia. Conelok.	-	-	-	-	2	2	8	6
16	Bolt 1/2" x 5"	-	-	6	4	-	-	-	-
15	Bolt 1/2" x 3 1/2"	-	-	2	2	2	2	2	2
14	Bolt 1/2" x 2"	2	2	2	2	2	2	2	2
13	Bolt 1/2" x 1 1/2"	6	4	4	2	4	2	2	2
12	Tee Head Bolt 3/8" x 1 1/2"	2	2	2	2	2	2	2	2
11	Post Pipe	1	1	-	-	-	-	-	-
10	U-Bolt	4	3	-	-	-	-	1	1
8	Track sign. (2,3 or 4 Tracks as required)	-	-	1	-	1	-	1	1
6	Channel strip 7"	1	-	5	2	5	2	1	1
5	Channel strip 1'-10"	2	1	2	1	2	1	1	1
4	Red triangle	1	1	1	1	1	1	1	1
3	Spacer (SEE NOTE *)	1	1	1	1	1	1	1	1
2	Channel strip 1'-1"	1	1	1	1	1	1	1	1
1	Cross arms	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.

Revision	Date	Amendment
C	12-3-57	Alterations to suit extruded section crossarms.
B	20-8-59	Pipe post deleted as NEW STANDARD Weight of F.B. Rail post added. 3/8" x 5" Bolt added. 3/8" x 4" Bolt added.
A	8-7-57	

VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING
LEVEL CROSSING CROSSING SIGN
TYPE "B"

Approved
L.H. C.W.A.
Chief Civil Engineer
Checked
S.H.
Passed
S.H.
Engineer of Machinery & Water Supply

Adopted
1956
PLAN NO F 526^C



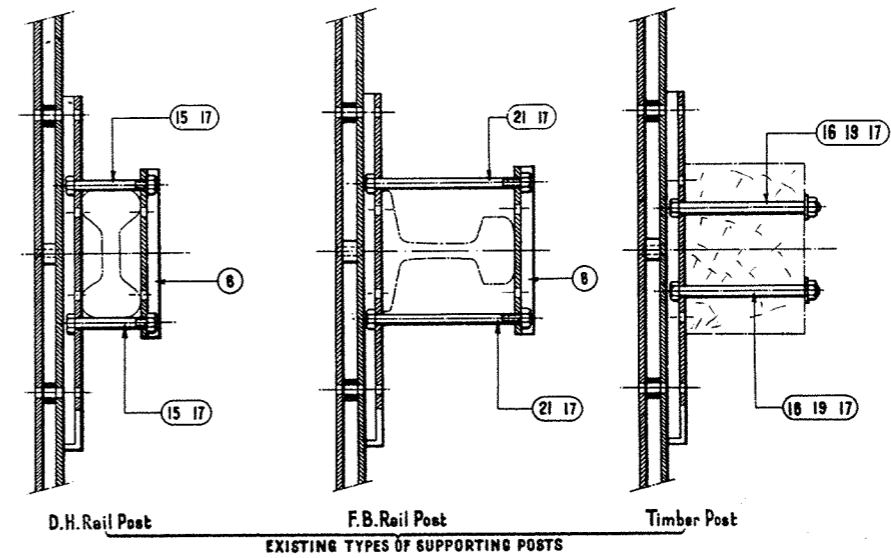
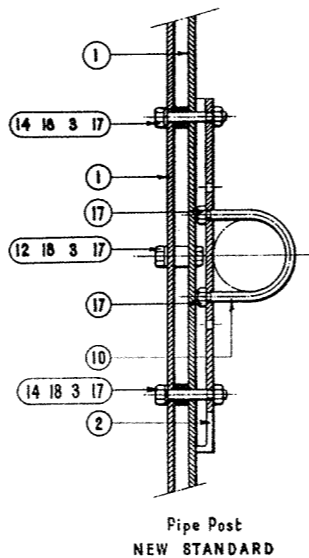
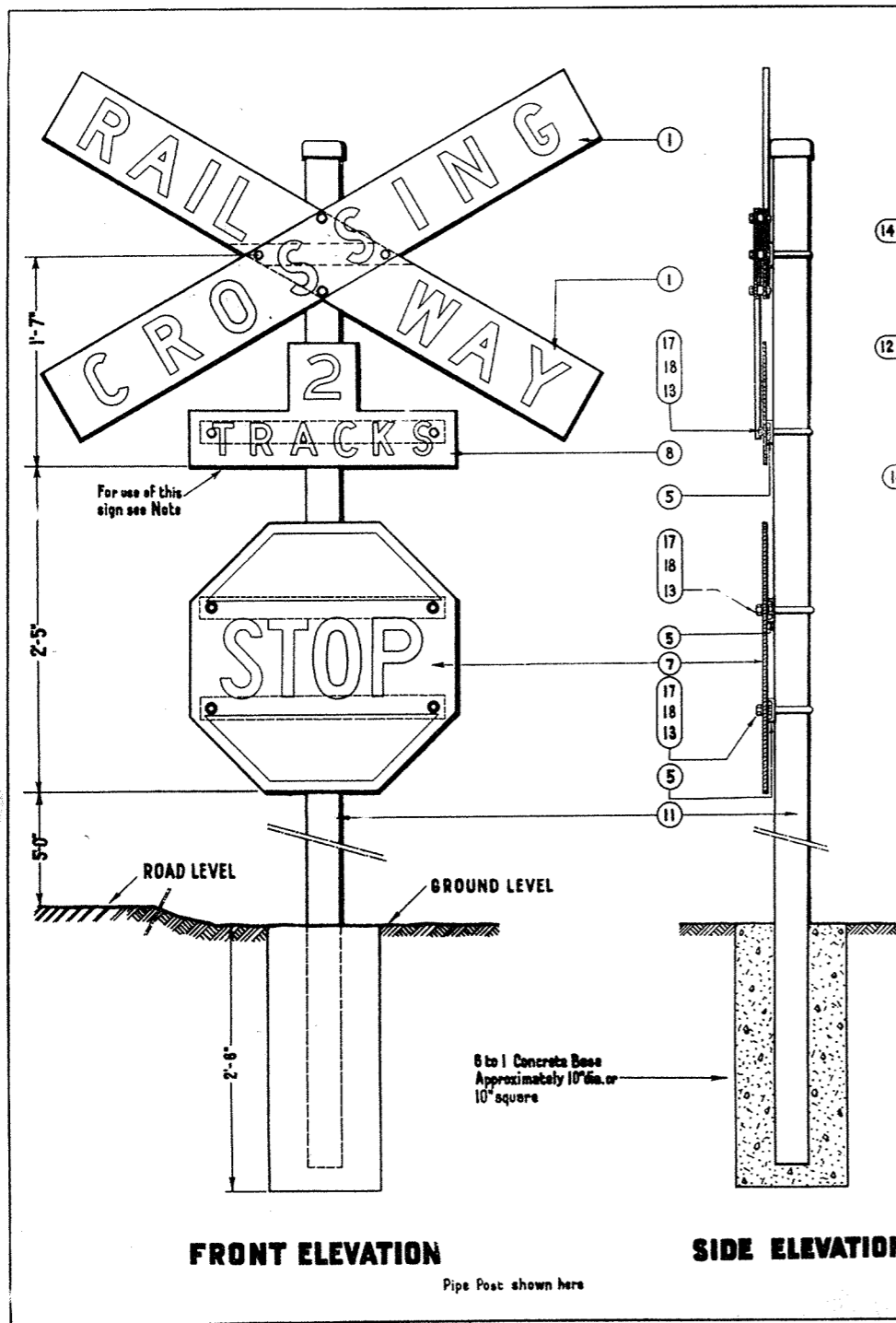
DETAILS OF CROSSARM ASSEMBLIES
Other signs have a similar assembly without spacers

Notes:-
Channel strips are to be levelled first and securely fixed to posts before attaching signs.
Track signs only to be used where 2 or more tracks pass through the crossing.
Where existing painted signs are being replaced by reflectorised signs the existing D.H. F.B. or timber supporting post, if in good order & correctly positioned, is to be used. In other cases the new Standard Pipe Post is to be requisitioned.

19	Washer	1/2" dia.	Galv.	-	-	-	-	-	-	8	6
18	Washer	1/2" dia.	Fibre.	10	8	10	8	10	8	10	8
17	Nut	NP/V126/10/2	Simmonds	18	14	18	14	18	14	18	14
16	Bolt	3/8" x 6"	Cad.Pl.	-	-	-	-	8	6	8	6
15	Bolt	3/8" x 3 1/2"	Cad.Pl.	-	-	8	6	-	-	2	2
14	Bolt	3/8" x 2"	Cad.Pl.	2	2	2	2	2	2	2	2
13	Bolt	3/8" x 1 1/2"	Cad.Pl.	6	4	6	4	6	4	6	4
12	Bolt	3/8" x 1 1/4"	Cad.Pl.	2	2	2	2	2	2	2	2
11	Post Pipe		Galv.	1	1	-	-	-	-	-	-
10	U-Bolt		Cad.Pl.	4	3	-	-	-	-	-	-
8	Track sign.	(2,3 or 4 Tracks as required)		1	1	1	1	1	1	1	1
7	Stop sign			1	1	1	1	1	1	1	1
6	Channel strip 7"			-	-	4	3	4	3	-	-
5	Channel strip 1'-10"			3	2	3	2	3	2	3	2
3	Spacer			4	4	4	4	4	4	4	4
2	Channel strip 1'-1"			1	1	1	1	1	1	1	1
1	Cross arms			1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.

Detail No	Description	Quantities per Post											
		WITH TRACK SIGN Pipe Post	WITHOUT TRACK SIGN Pipe Post	WITH TRACK SIGN D.H. Rail	WITHOUT TRACK SIGN D.H. Rail	WITH TRACK SIGN F.B. Rail	WITHOUT TRACK SIGN F.B. Rail	WITH TRACK SIGN Timber	WITHOUT TRACK SIGN Timber	WITH TRACK SIGN	WITHOUT TRACK SIGN	WITH TRACK SIGN	WITHOUT TRACK SIGN
VICTORIAN RAILWAYS WAY & WORKS BRANCH STANDARD DRAWING LEVEL CROSSING STOP SIGN TYPE "D"		Approved <i>R.H.K. 6.12.56</i> Chief Civil Engineer						Adopted 1956					
		Checked <i>W.H.</i>						Passed					
		Engineer of Machinery & Water Supply						PLAN No F527					

Revision	Date	Amendment



DETAILS OF CROSSARM ASSEMBLIES
Other signs have a similar assembly without spacers

Notes:-
Channel strips are to be levelled first and securely fixed to posts before attaching signs.
Track signs only to be used where 2 or more tracks pass through the crossing.
Where existing painted signs are being replaced by reflectorised signs the existing D.H., F.B. or timber supporting post, if in good order & correctly positioned, is to be used. In other cases the new Standard Pipe Post is to be requisitioned

21	Bolt	1/2" x 5"	Cad. Pl.	-	-	-	-	8	6	-	-
18	Washer	1/2" dia.	Galv.	10	8	10	8	10	8	10	8
17	Nut	NP/VI26/10/2	Simmonds	18	14	18	14	18	14	18	14
16	Bolt	1/2" x 6"	Cad. Pl.	-	-	8	6	-	-	-	-
15	Bolt	1/2" x 3 1/2"	Cad. Pl.	-	-	-	-	-	-	2	2
14	Bolt	1/2" x 2"	Cad. Pl.	2	2	2	2	2	2	2	2
13	Bolt	1/2" x 1 1/2"	Cad. Pl.	6	4	6	4	6	4	6	4
12	Bolt	1/2" x 1 1/4"	Cad. Pl.	2	2	2	2	2	2	2	2
11	Post Pipe		Galv.	1	1	-	-	-	-	-	-
10	U-Bolt		Cad. Pl.	4	3	-	-	-	-	-	-
8	Track sign	(2, 3 or 4 Tracks as required)		1	1	1	1	1	1	1	1
7	Stop sign			1	1	1	1	1	1	1	1
6	Channel strip	7"		-	-	4	3	4	3	-	-
5	Channel strip	1'-10"		3	2	3	2	3	2	3	2
3	Spacer			4	4	4	4	4	4	4	4
2	Channel strip	1'-1"		1	1	1	1	1	1	1	1
1	Cross arms			1	1	1	1	1	1	1	1
				1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.

VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING
LEVEL CROSSING
STOP SIGN
TYPE "D"

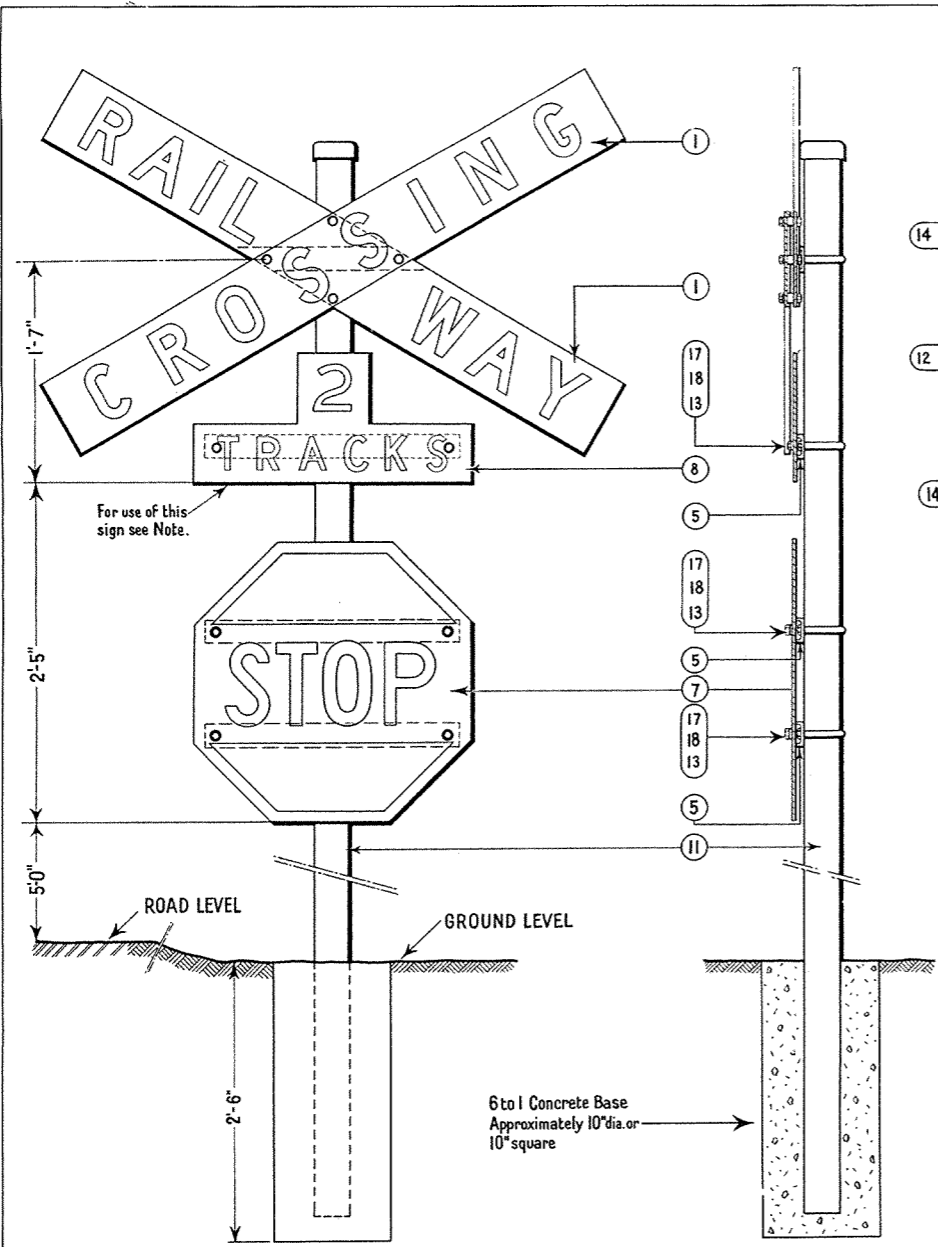
Approved
L.R. L. 11/11
Chief Civil Engineer

Checked
4/11

Passed
A.S.P.
Engineer of Machinery & Water Supply

Adopted
1956
PLAN N^o F 527A

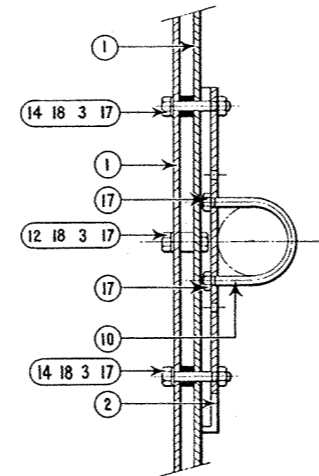
A	8-7-57	3/8" x 5" Bolt added
Revision	Date	Amendment



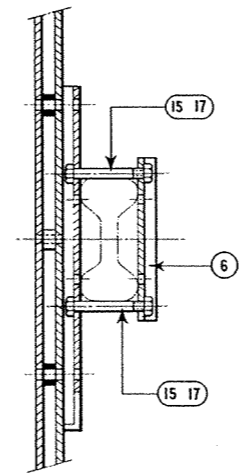
FRONT ELEVATION

SIDE ELEVATION

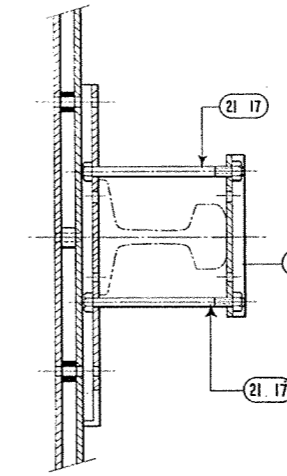
Pipe Post shown here



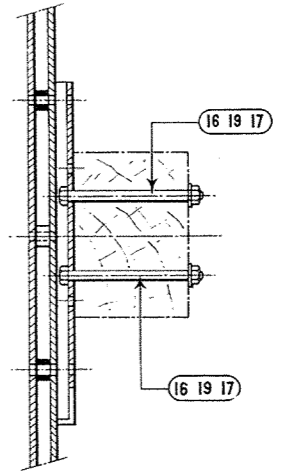
Pipe Post



D.H. Rail Post



60 lb. F.B. Rail Post



Timber Post

DETAILS OF CROSSARM ASSEMBLIES
Other signs have a similar assembly without spacers

Notes:-
Channel strips are to be levelled first and securely fixed to posts before attaching signs.
Track signs only to be used where 2 or more tracks pass through the crossing.
Where existing painted signs are being replaced by reflectorised signs, the existing D.H., F.B. or timber supporting post, if in good order & correctly positioned, is to be used. In other cases unserviceable 60 lb. F.B. rail is to be requisitioned.

Detail No	Description	Quantities per Post							
		WITH TRACK SIGN Pipe Post	WITHOUT TRACK SIGN Pipe Post	WITH TRACK SIGN D.H. Rail	WITHOUT TRACK SIGN D.H. Rail	WITH TRACK SIGN F.B. Rail	WITHOUT TRACK SIGN F.B. Rail	WITH TRACK SIGN Timber	WITHOUT TRACK SIGN Timber
21	Bolt 3/8" x 5" Cad. Pl.	-	-	-	-	8	6	-	-
19	Washer 3/8" dia. Galv.	-	-	-	-	8	6	8	6
18	Washer 3/8" dia. Fibre.	10	8	10	8	10	8	10	8
17	Nut NP/VI26/10/2 Simmonds	18	14	18	14	18	14	18	14
16	Bolt 3/8" x 6" Cad. Pl.	-	-	-	-	-	-	-	-
15	Bolt 3/8" x 3 1/2" Cad. Pl.	-	-	8	6	-	-	-	-
14	Bolt 3/8" x 2" Cad. Pl.	2	2	2	2	2	2	2	2
13	Bolt 3/8" x 1 1/2" Cad. Pl.	6	4	6	4	6	4	6	4
12	Bolt 3/8" x 1 1/4" Cad. Pl.	2	2	2	2	2	2	2	2
11	Post Pipe Galv.	1	1	1	1	1	1	1	1
10	U-Bolt Cad. Pl.	4	3	-	-	-	-	-	-
8	Track sign. (2,3 or 4 Tracks as required)	1	1	1	1	1	1	1	1
7	Stop sign	1	1	1	1	1	1	1	1
6	Channel strip 7"	-	-	4	3	4	3	-	-
5	Channel strip 1'-10"	3	2	3	2	3	2	3	2
3	Spacer	4	4	4	4	4	4	4	4
2	Channel strip 1'-1"	1	1	1	1	1	1	1	1
1	Cross arms	1	1	1	1	1	1	1	1

Revision	Date	Amendment
B	20-8-59	Pipe post deleted as NEW STANDARD
A	8-7-57	Weight of F.B. Rail post added. 3/8" x 5" Bolt added

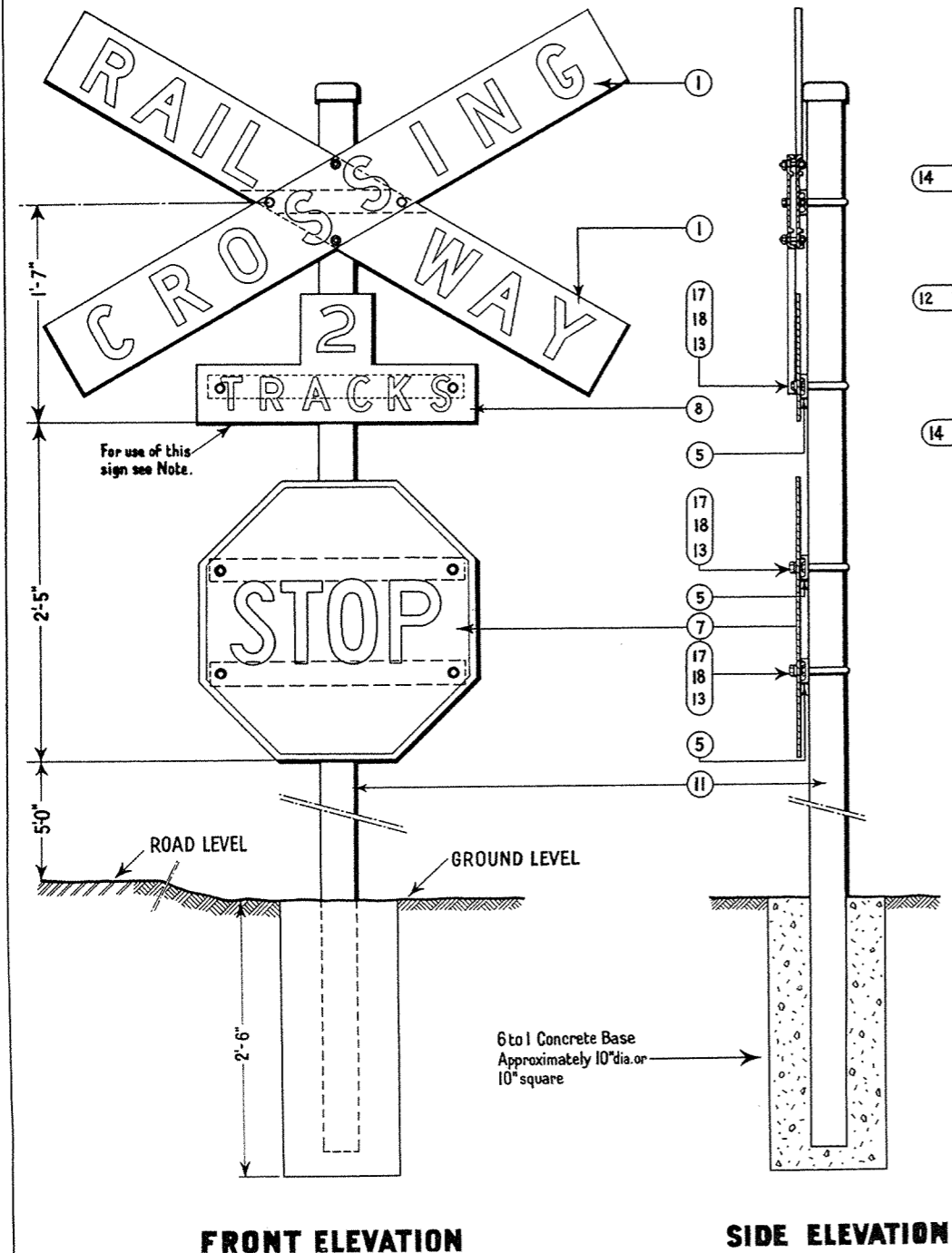
VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING
LEVEL CROSSING STOP SIGN
TYPE "D"

Approved: *[Signature]*
Chief Civil Engineer

Checked: *[Signature]* Passed

Engineer of Machinery & Water Supply

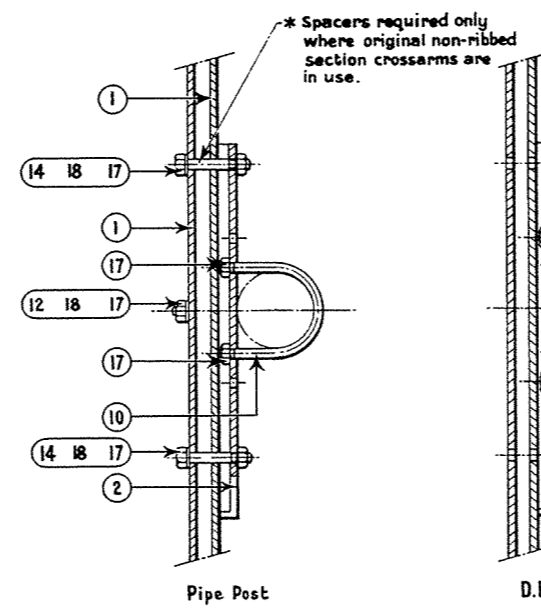
Adopted
1956
PLAN NO F 527B



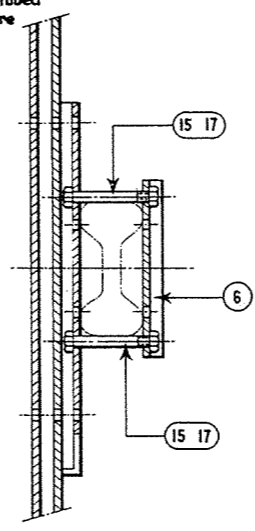
FRONT ELEVATION

SIDE ELEVATION

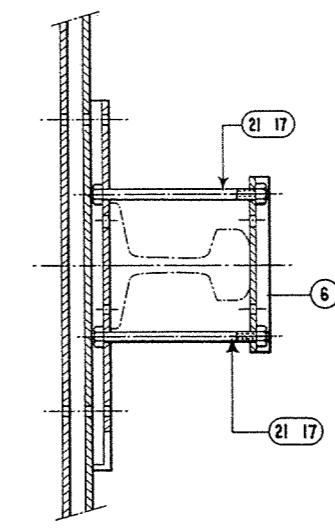
Pipe Post shown here



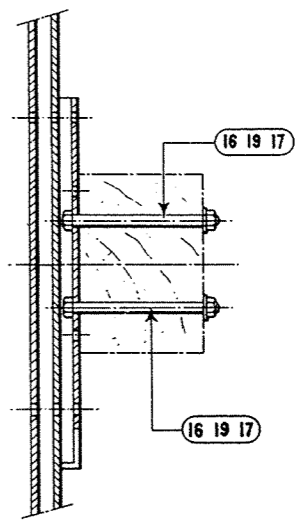
Pipe Post



D.H. Rail Post



60 lb. F.B. Rail Post



Timber Post

DETAILS OF CROSSARM ASSEMBLIES
Other signs have a similar assembly to those shown above

Notes:-
Channel strips are to be levelled first and securely fixed to posts before attaching signs.
Track signs only to be used where 2 or more tracks pass through the crossing.
Where existing painted signs are being replaced by reflectorised signs, the existing D.H., F.B or timber supporting post, if in good order & correctly positioned, is to be used. In other cases unserviceable 60 lb. F.B. rail is to be requisitioned.

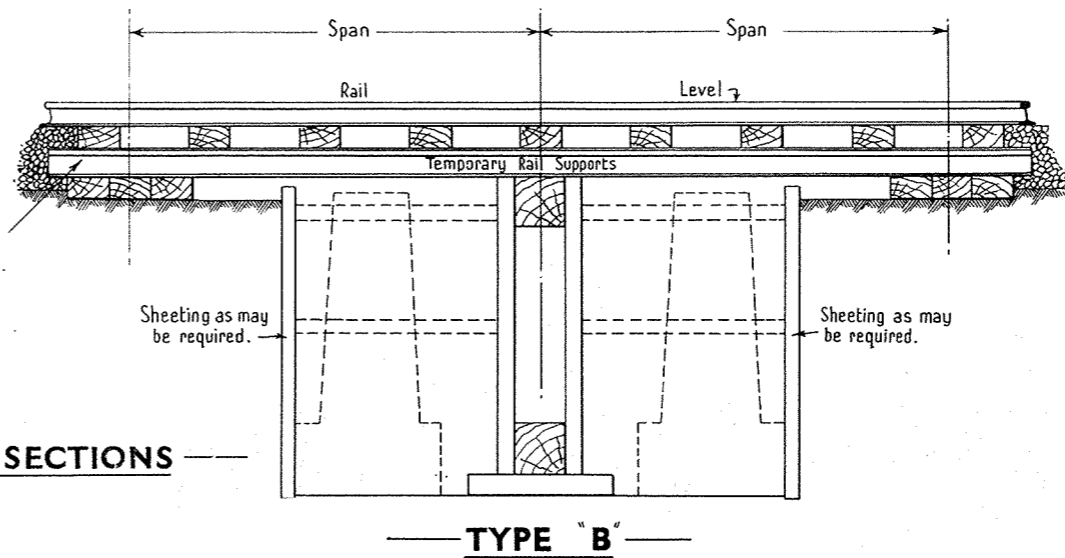
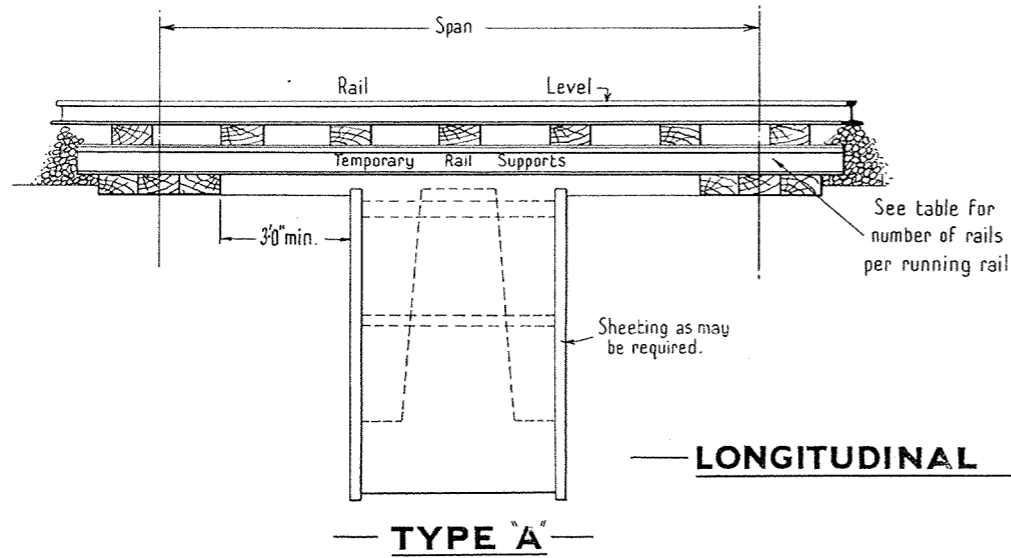
Detail No	Description	Quantities per Post							
		Pipe Post		D.H. Rail		F.B. Rail		Timber	
		WITH TRACK SIGN	WITHOUT TRACK SIGN	WITH TRACK SIGN	WITHOUT TRACK SIGN	WITH TRACK SIGN	WITHOUT TRACK SIGN	WITH TRACK SIGN	WITHOUT TRACK SIGN
21	Bolt 3/8" x 5"	-	-	-	-	8	6	-	-
19	Washer 3/8" dia.	-	-	-	-	-	-	8	8
18	Washer 3/8" dia.	10	8	10	8	10	8	10	8
17	Nut 3/8" dia. Conelok.	18	14	18	14	18	14	18	14
16	Bolt 3/8" x 6"	-	-	-	-	-	-	8	6
15	Bolt 3/8" x 3 1/2"	-	-	8	6	-	-	-	-
14	Bolt 3/8" x 2"	2	2	2	2	2	2	2	2
13	Bolt 3/8" x 1 1/2"	6	4	6	4	6	4	6	4
12	Tee Head Bolt 3/8" x 1 1/2"	2	2	2	2	2	2	2	2
11	Post Pipe	1	1	-	-	-	-	-	-
10	U-Bolt	4	3	-	-	-	-	-	-
8	Track sign. (2,3 or 4 Tracks as required)	1	1	1	1	1	1	1	1
7	Stop sign	1	1	1	1	1	1	1	1
6	Channel strip 7"	-	-	4	2	4	2	-	-
5	Channel strip 1'-10"	3	2	3	2	3	2	3	2
3	Spacer (See Note *)	-	-	-	-	-	-	-	-
2	Channel strip 1'-1"	1	1	1	1	1	1	1	1
1	Cross arms	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	1 Pr.

Revision	Date	Amendment
C	12-3-67	Alterations to suit extruded section crossarms.
B	20-8-59	Pipe post deleted as NEW STANDARD Weight of F.B. Rail post added.
A	8-7-57	3/8" x 5" Bolt added

VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING
LEVEL CROSSING STOP SIGN
TYPE "D"

Approved
L.H. ...
Chief Civil Engineer
Checked
...
Passed
...
Engineer of Machinery & Water Supply

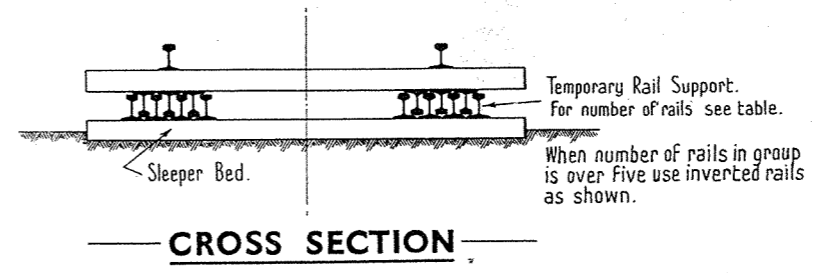
Adopted
1956
PLAN NO F527C



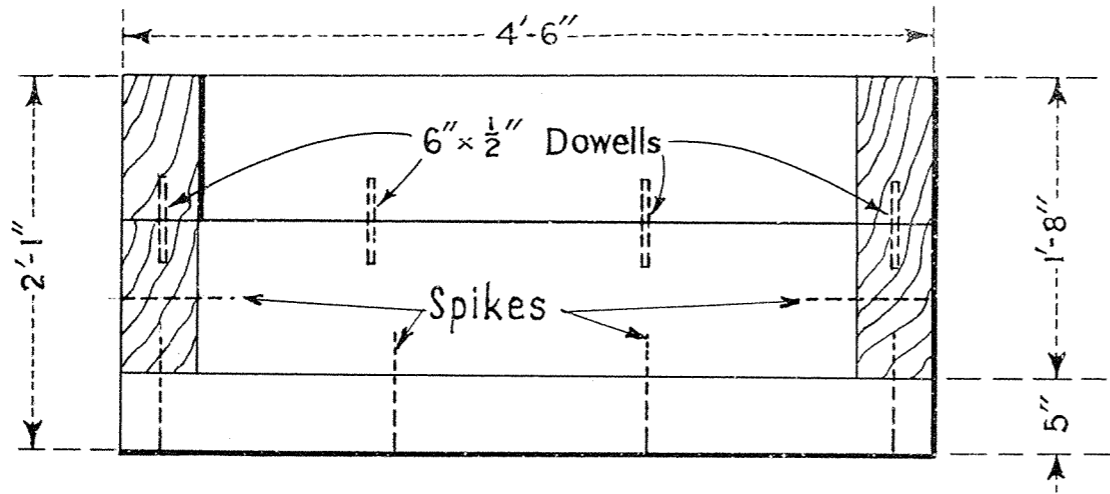
— LONGITUDINAL SECTIONS —

Description of Unserviceable Steel Rail			Heaviest Engine	Spans in feet, from Centre to Centre of Areas of Support																
Weight of Rail used in Temporary Supports lbs. per yard	Class	General Length		No. of Supporting Rails under each Rail																
			6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'			
110 or 107 or 100 or 100	A.S.	45'	H	3	3	3	4	4	5	7	7	9	9	11	13					
	A.S.	45'	R.X. or C.	2	3	3	3	4	4	5	5	7	9	9	11	13				
	A.S.	40'	B.S. or A.	2	2	3	3	3	4	4	4	5	7	7	9	11	13			
	?	31'-9"	L	2	2	2	3	3	3	3	4	4	5	7	7	9	11	11		
			T	2	2	3	3	3	3	4	4	4	5	7	7	9	9	11		
94 or 90 or 80	A.S.	45'	D.K.N. or J.	2	2	2	3	3	3	4	4	5	7	7	9	9	11	13		
	A.S.	45'	H	3	3	4	4	5	7	7	9	11	13							
	A.S.	45'	R.X. or C.	3	3	4	4	4	5	7	7	9	11	13						
	A.S.	45'	B.S. or A.	2	3	3	3	4	4	5	7	7	9	11	13					
			L	2	2	3	3	3	4	4	4	5	7	7	9	11	13			
80		31'-9"	T	2	3	3	3	4	4	4	5	7	7	9	11	13				
			D.K.N. or J.	2	2	3	3	3	4	5	5	7	9	9	11	13				
			H	3	4	4	4	5	7	7	9	13								
			R.X. or C.	3	3	4	4	5	5	7	9	11	13	13						
			B.S. or A.	2	3	3	3	4	4	5	7	9	11	13	13					
60			L	2	3	3	3	3	4	4	4	5	7	7	9	11	13			
			T	2	3	3	3	4	4	4	5	7	7	9	11	13				
			D.K.N. or J.	2	3	3	3	4	4	5	7	7	9	9	11	13				
			H	5	7	7	7	9	11	13										
			R.X. or C.	4	5	7	7	7	9	11	13									
Min number of supporting sleepers under each end of temporary support rail system.			B.S. or A.	4	4	5	7	7	7	9	11	13								
			L	3	4	4	5	7	7	9	11	11								
			T	4	4	5	5	7	7	9	11	11	13							
			D.K.N. or J.	3	4	4	5	7	7	9	11	13								
			H	3	3	4	4	4	4	5	5	5	5	6						
		R.X. or C.	3	3	3	3	4	4	4	4	4	4	5	5						
		L or T	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4			
		D.K.N.J.A.S.B.	3	3	3	3	3	3	4	4	4	4	4	4	5	5	5			

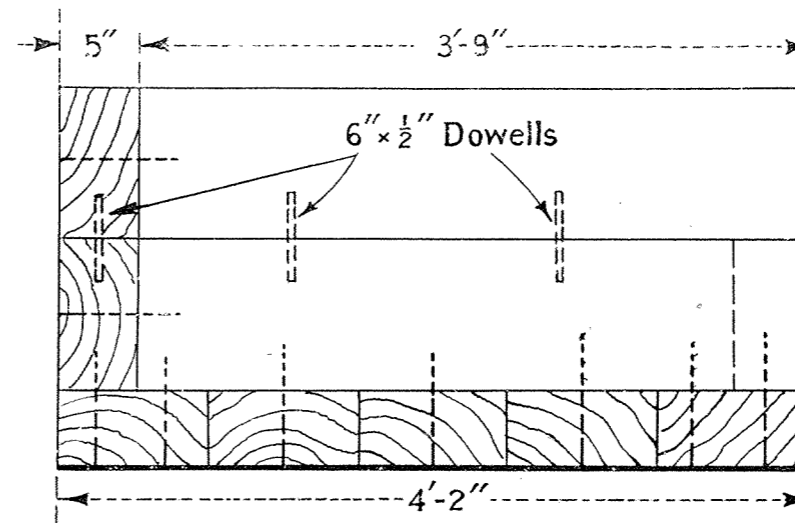
— MINIMUM NUMBER OF RAILS UNDER EACH RUNNING RAIL —



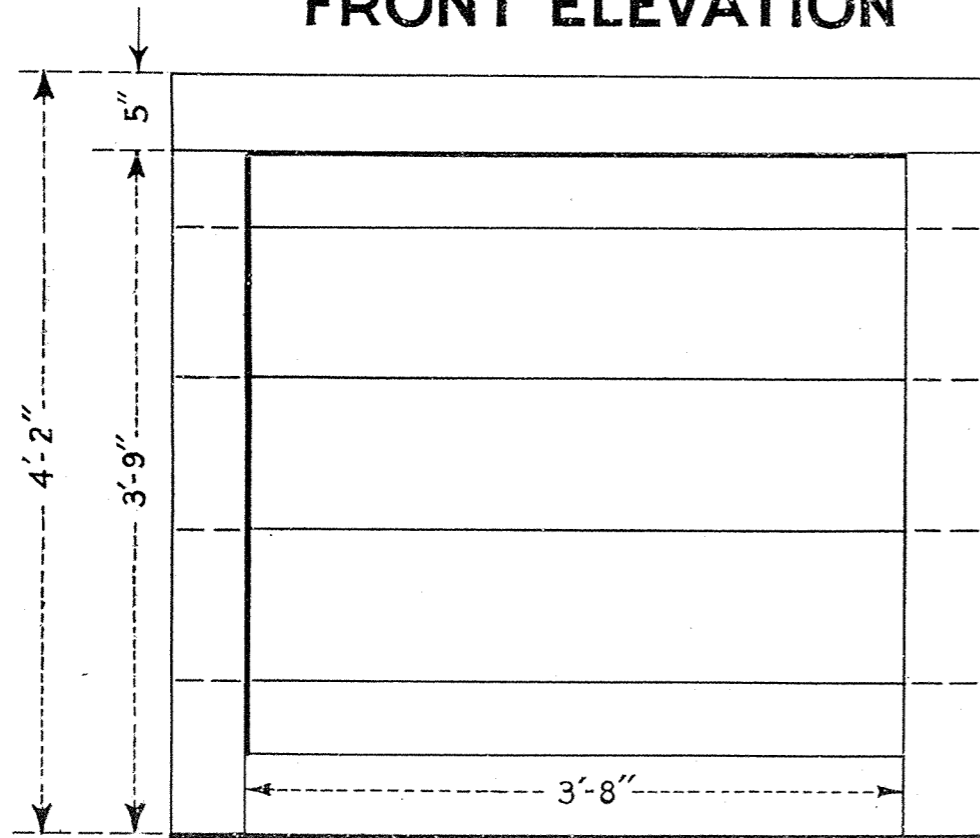
Revision	Date	Amendment
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH STANDARD DRAWING TEMPORARY SUPPORTS FOR TRACK		
Approved <i>R. H. 20.8.57</i> Chief Civil Engineer		Adopted AUG. 1957.
Drawn by K.J.Y.	Checked by K.W.W.	PLAN No. F 529
Eng' of Structl Design <i>A.H.</i>		



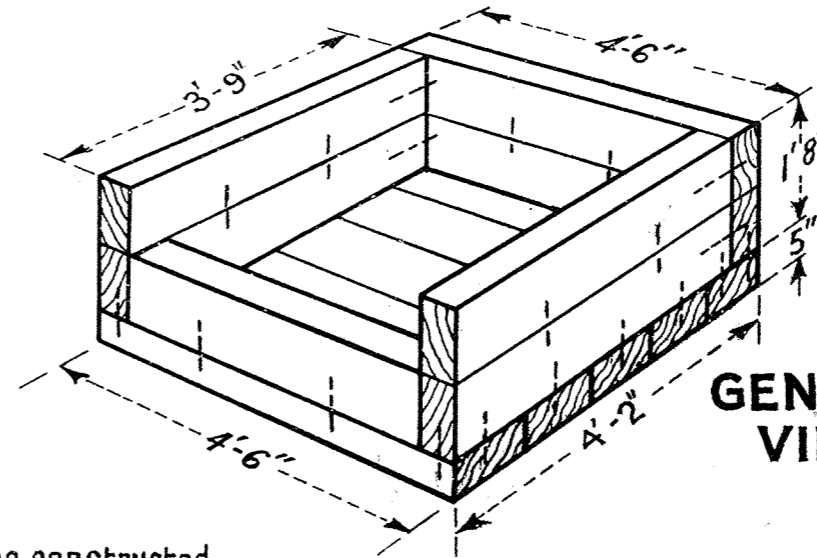
FRONT ELEVATION



SIDE ELEVATION



PLAN

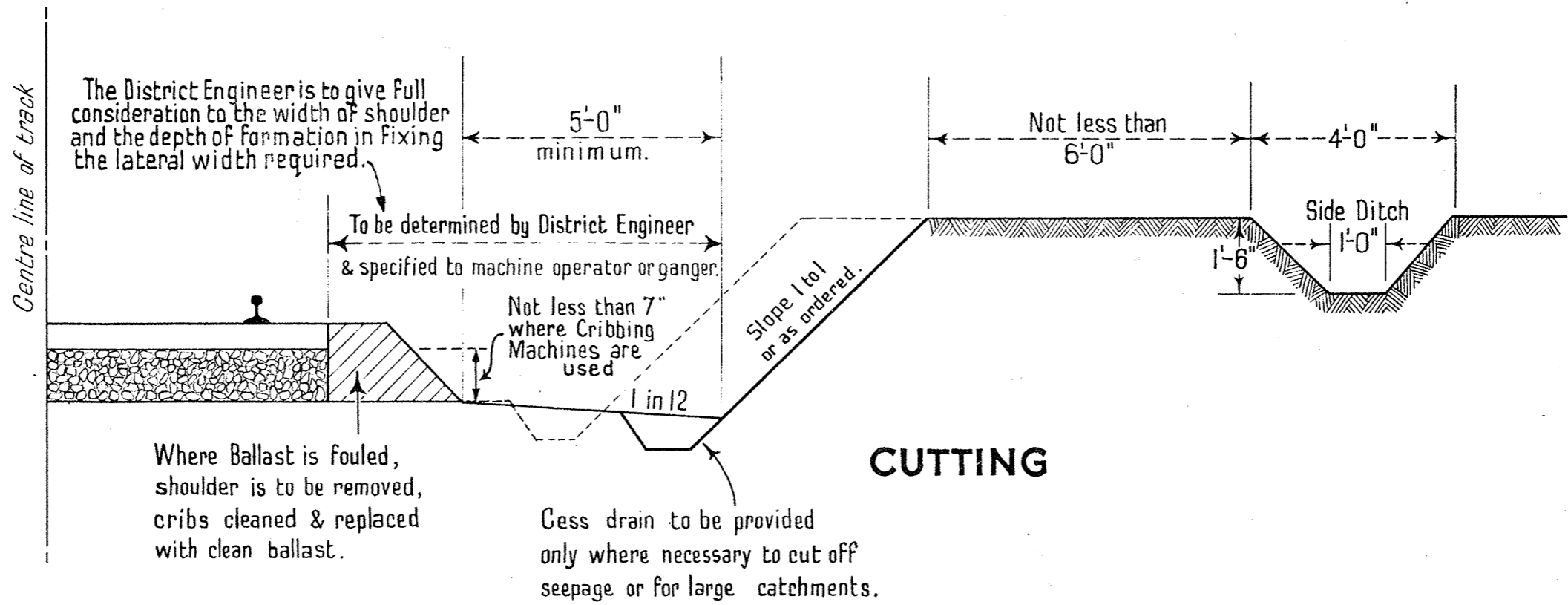


GENERAL VIEW

NOTE:-
Bins to be constructed of old sleepers and placed as far as possible from the track at suitable intervals along each Gangers length.

Revision	Date	Amendment

VICTORIAN RAILWAYS WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	1957
GRANITE SCREENINGS BIN		Chief Civil Engineer	PLAN No
FOR MEASURED PACKING		Drawn by (Checked by)	F 530
No Scale		<i>E.J.C.</i> <i>R.S.M.</i>	
		Engr. Maintce.	



CUTTING

Revision	Date	Amendment

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH

STANDARD DRAWING

WIDENING OF CUTTINGS

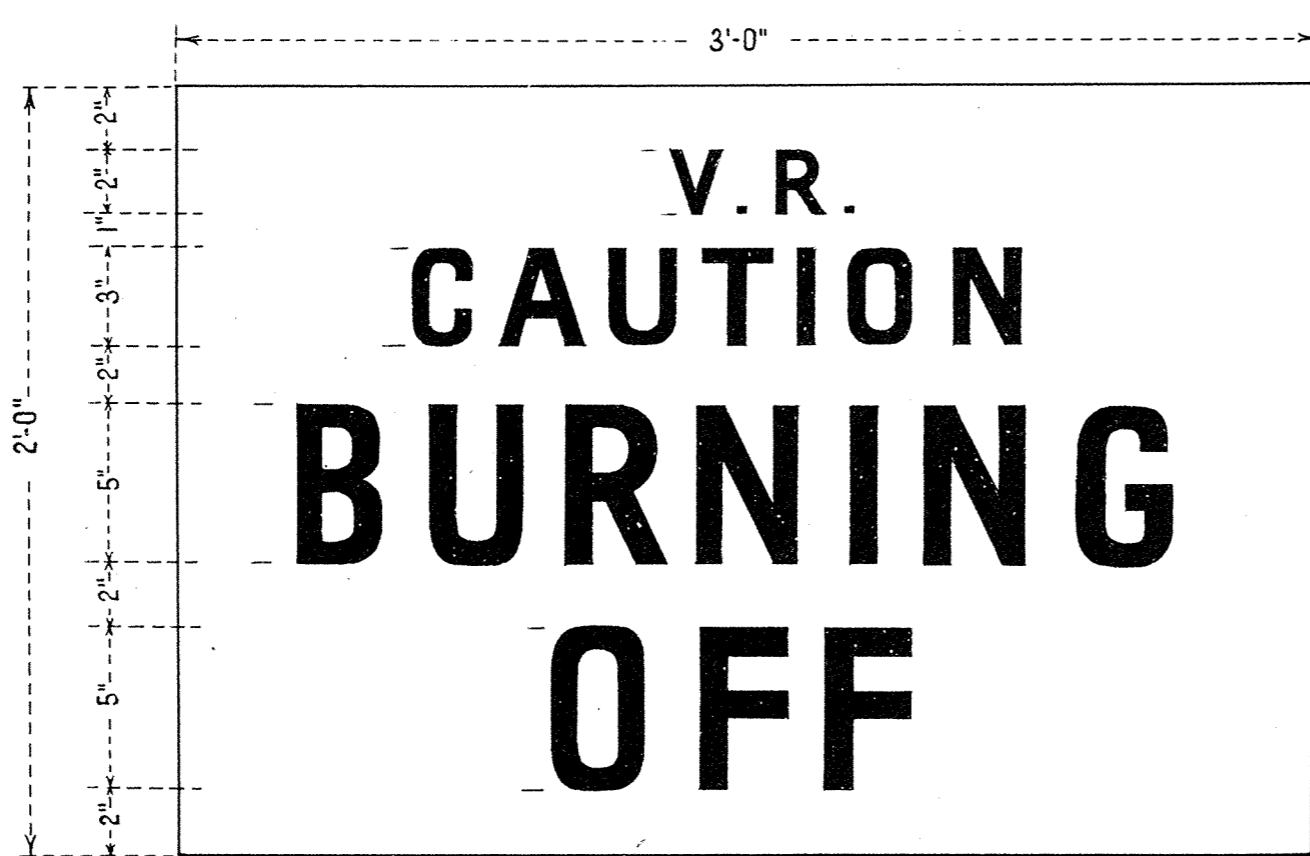
Approved *E. B.* 2/857
Chief Civil Engineer

Adopted **1957**

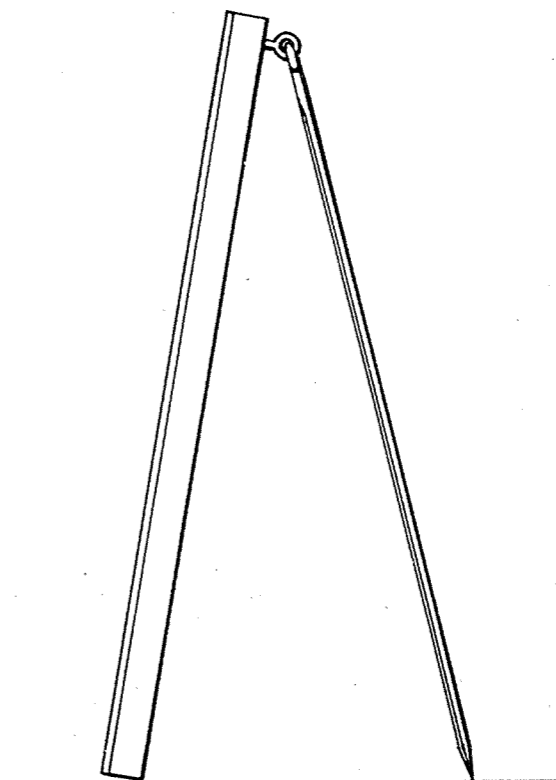
Drawn by *E. B.* Checked by

Eng. Track & Drainage

PLAN N^o F 531



FRONT VIEW

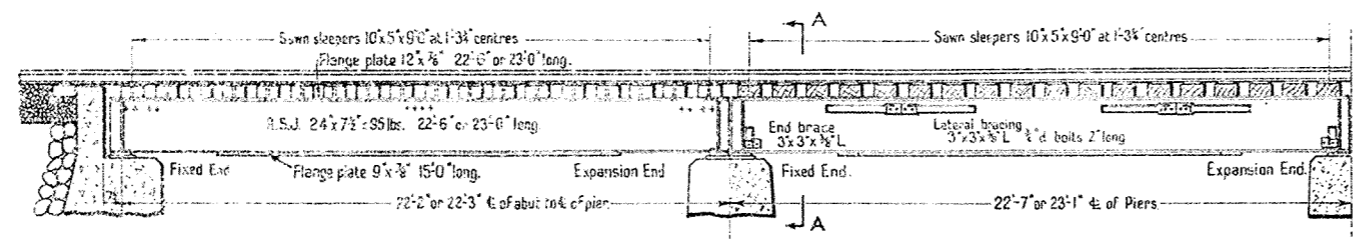


SIDE VIEW

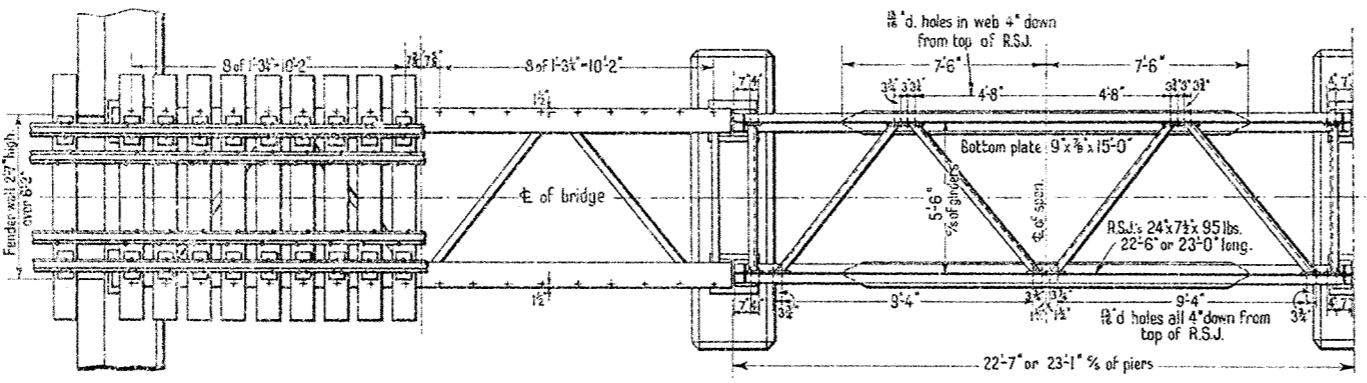
NOTE: All lettering to be BLACK on YELLOW background.
 When smoke from burning off operations on Railway land is likely to blow across roads parallel or adjacent to the Railway reserve, notices are to be placed at each end of the section of road referred to.

Revisn	Date	Amendment

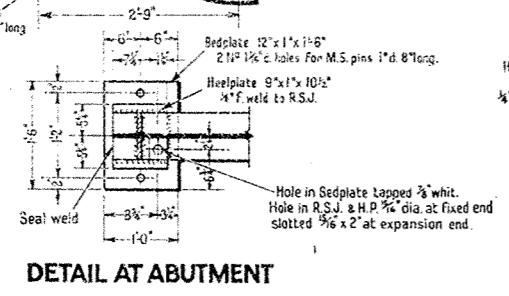
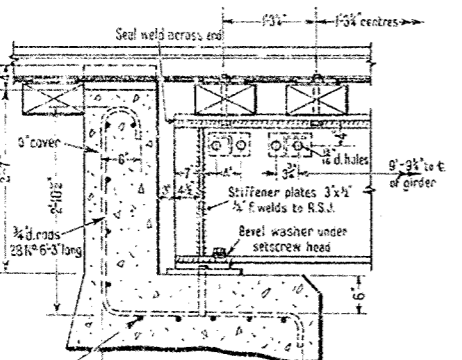
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>E.W.B.</i> 24.7.57 Chief Civil Engineer	1957
PORTABLE ROAD SIGN FOR BURNING OFF OPERATIONS		Drawn by E.W.B.	Checked by Engr. of Maintenance
			PLAN No. F 532



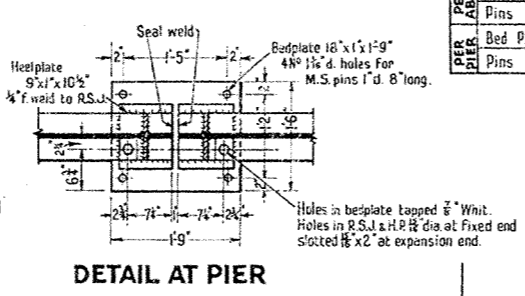
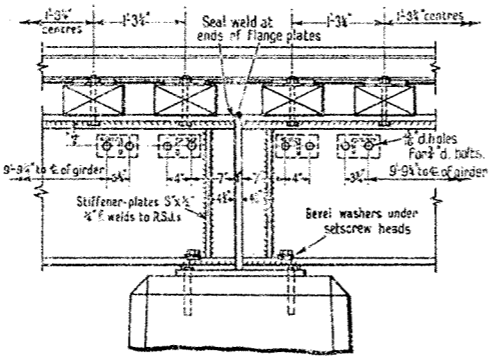
PART ELEVATION & LONGITUDINAL SECTION



OVER DECK OVER JOISTS PART PLAN OVER BOTTOM FLANGE

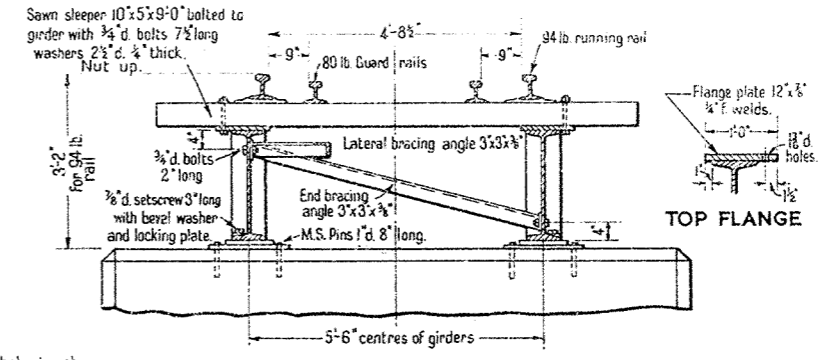


DETAIL AT ABUTMENT

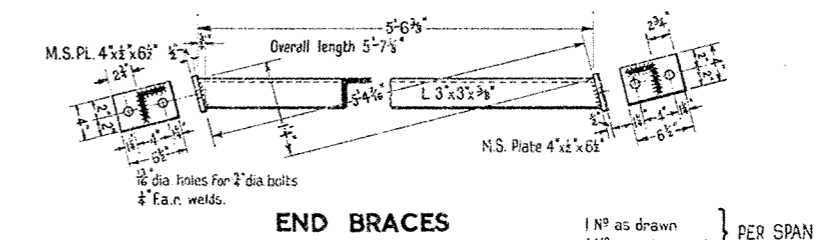


DETAIL AT PIER

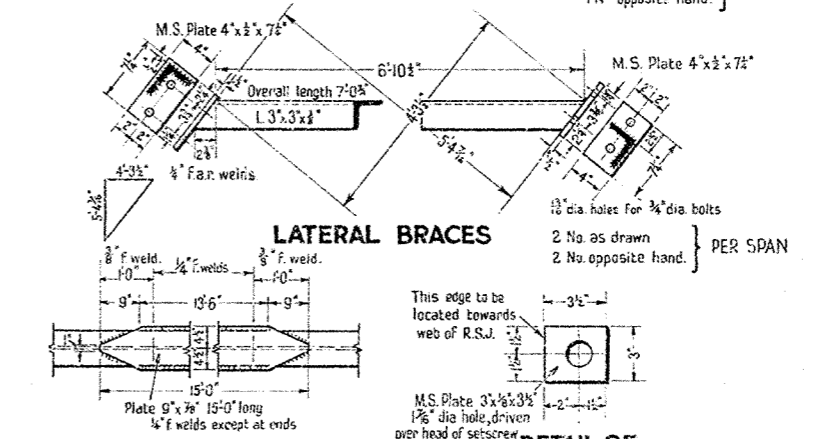
QUANTITIES		
ITEM	N°	WEIGHT
R.S.J. 24x7 1/2 x 95 lb 23'-0" or 22'-6"	2	
Top Plates 12x 7/8" 23'-0" or 22'-6" long	2	
Bottom Plates 9x 7/8" 15'-0" long	2	
Heel Plates 9x 10 1/2" x 1'	4	
End Stiffeners 3x 1/2"	8	
End Braces L 3x3x 3/8" 5'-7 1/2" L	2	
Lateral Braces L 3x3x 3/8" 7'-0 1/2" L	4	
Brace Bolts 3/4" dia. 2" long	24	23'-0" span
Bolts 1/2" dia. 7 1/2" long with washers 2 1/2" x 1/4"	36	7450 lbs.
Set screws 1/2" dia with bevelled washer	4	22'-6" span
Locking pieces	4	7316 lbs.
Bed Plates 1'-6 1/2" x 1'-0"	2	
Pins 1" dia. 8" long	4	128 lbs.
Bed Plates 1'-6 1/2" x 1'-9"	2	
Pins 1" dia. 8" long	8	226 lbs.



CROSS SECTION A-A



END BRACES



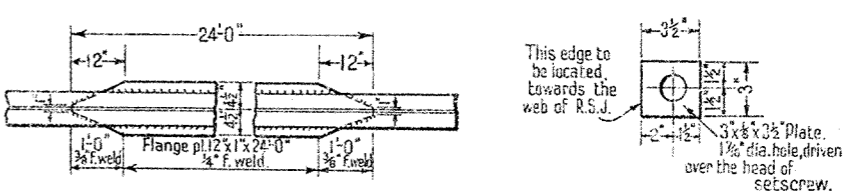
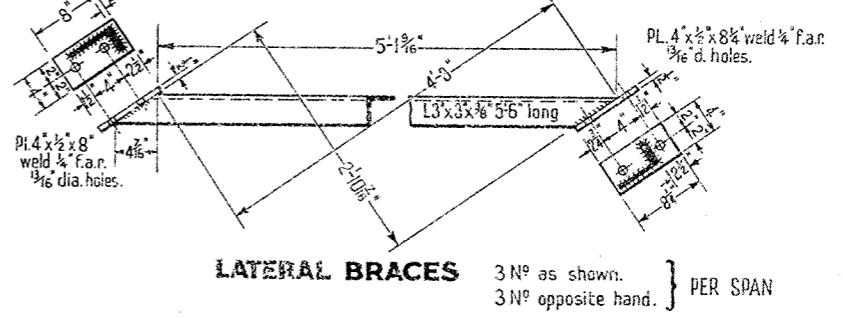
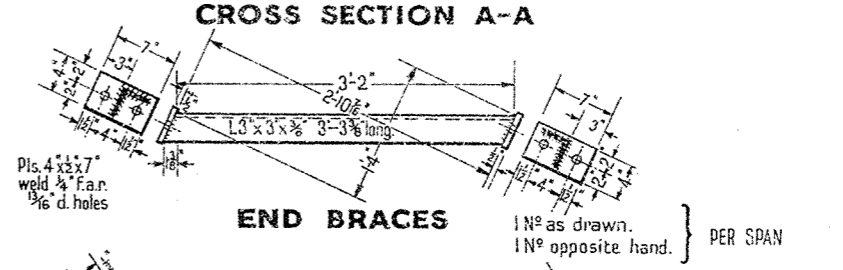
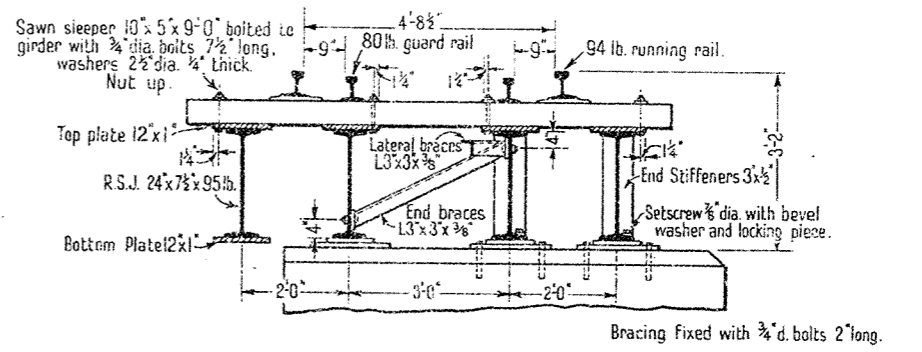
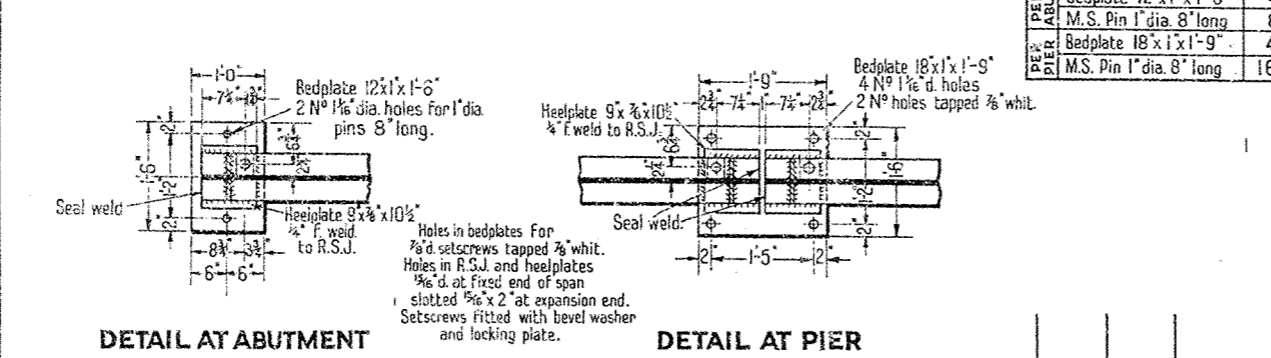
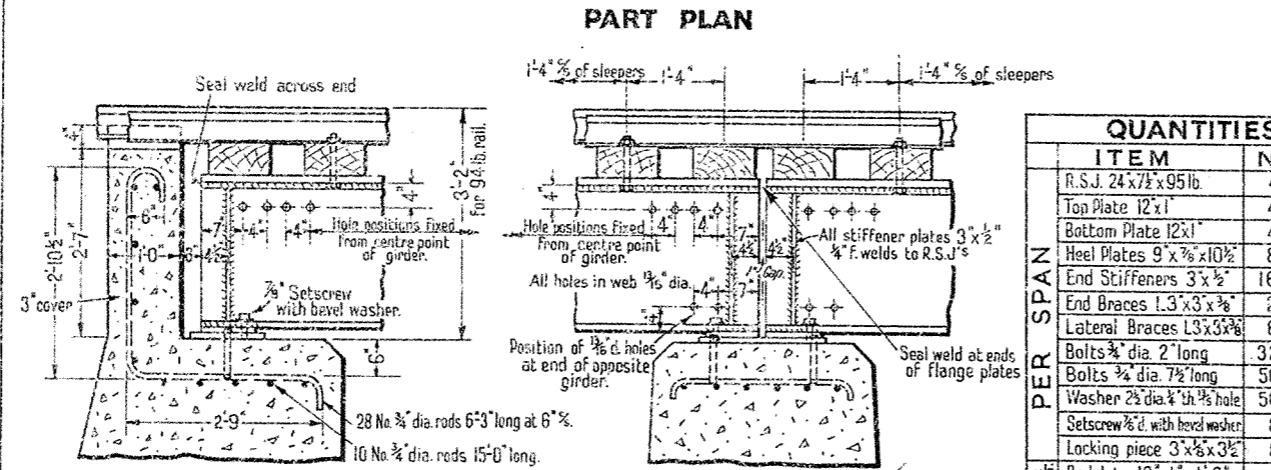
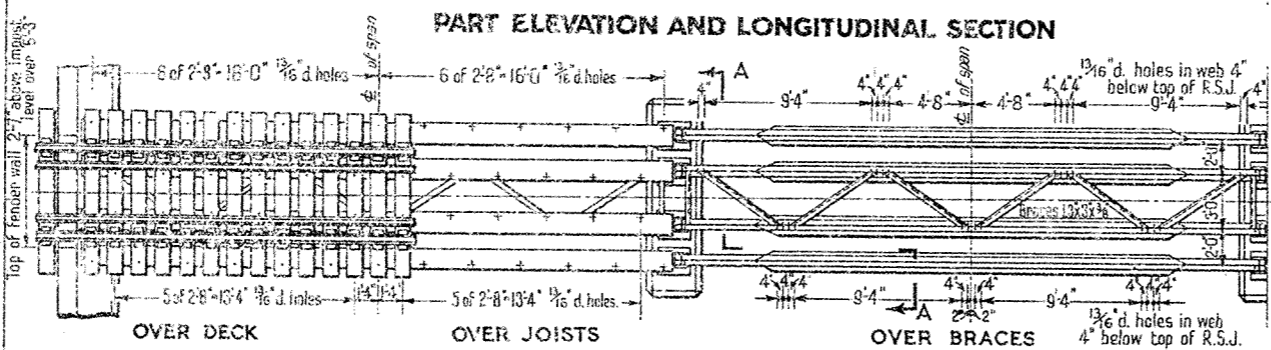
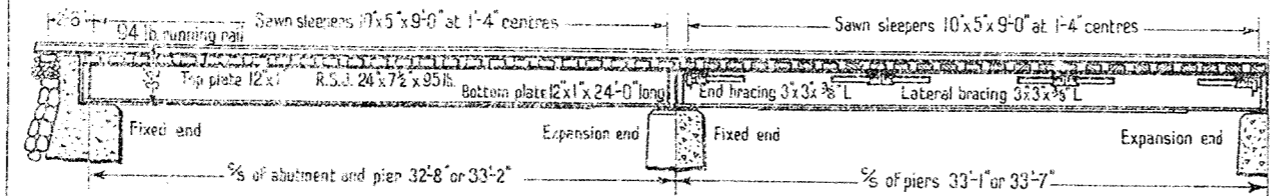
LATERAL BRACES

DETAIL OF LOWER FLANGE PLATE DETAIL OF LOCKING PIECE

NOTES: Substructure as per Plan F 498 with fender wall amended as shown on this drawing.
 All lateral brace holes, sleeper holes and bottom flange to be located from c/c of span.
 End braces, Stiffeners and heel plates to be located from ends of span.

VICTORIAN RAILWAYS - WAY & WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		20.10.57	SEPT. 1957
23 FT. & 22' 6" SPAN OPEN DECK BRIDGE FOR NORTH-EASTERN LINE - 4'-8 1/2" GAUGE.		Chief Civil Engineer	
2 N° 24x7 1/2 x 95 lb. Plated PER OPE		Drawn by	Checked by
DETAILS OF SUPERSTRUCTURE		F. A. G.	K. W. W.
Cooper E 50 Standard.		Engineer of Structural Design	PLAN N°
No Scale.			F533

Rev'n	Date	Amendment	Chkd.



QUANTITIES		
ITEM	N ^o	WEIGHT
R.S.J. 24x7 1/2 x 95 lb.	4	
Top Plate 12x1	4	
Bottom Plate 12x1	4	
Heel Plates 9 x 7/8 x 10 1/2	8	
End Stiffeners 3 x 3/2	16	
End Braces 1.3 x 3 x 3/8	2	
Lateral Braces 1.3 x 3 x 3/8	6	
Bolts 3/4 dia. 2" long	32	
Bolts 3/4 dia. 7 1/2" long	50	33'-6" SPAN
Washer 2 1/2 dia. 4" th. 1/2 hole	50	22860 lbs.
Setscrew 3/8 dia. with bevel washer	8	33'-0" SPAN
Locking piece 3 x 5 x 3 1/2	8	22589 lbs.
Bedplate 12 x 1 x 1'-6"	4	
M.S. Pin 1" dia. 8" long	8	257 lbs.
Bedplate 18 x 1 x 1'-9"	4	
M.S. Pin 1" dia. 8" long	16	453 lbs.

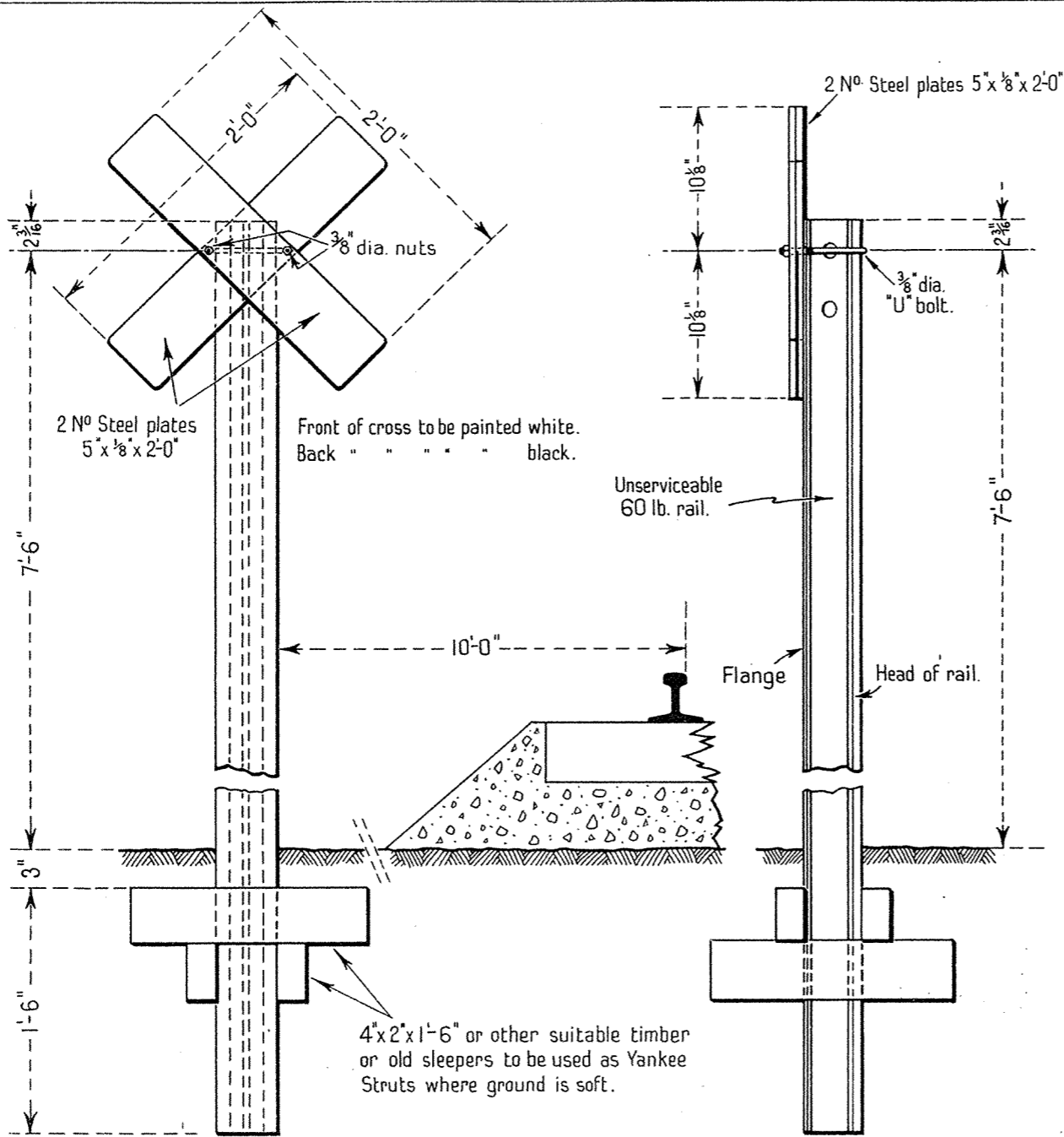
NOTES: Substructure to be as per plan F496 with fender wall amended as shown on this drawing.
 All lateral brace bolt holes and sleeper bolt holes to be located from center of span.
 End braces, stiffeners and heel plates to be located from ends of span.

VICTORIAN RAILWAYS-WAY & WORKS BRANCH
STANDARD DRAWING
 33' & 33'-6" SPAN OPEN DECK BRIDGE
 FOR NORTH-EASTERN LINE 4-8 1/2 GAUGE.
 4 N^o 24x7 1/2 x 95 lb. Plated per O.P.E.
 DETAILS OF SUPERSTRUCTURE

Approved	Adopted
Chief Civil Engineer	SEPT 1957
Drawn by	Checked by
T.A.G.	K.W.W.
Engineer of Structure Design	PLAN N ^o
	F534

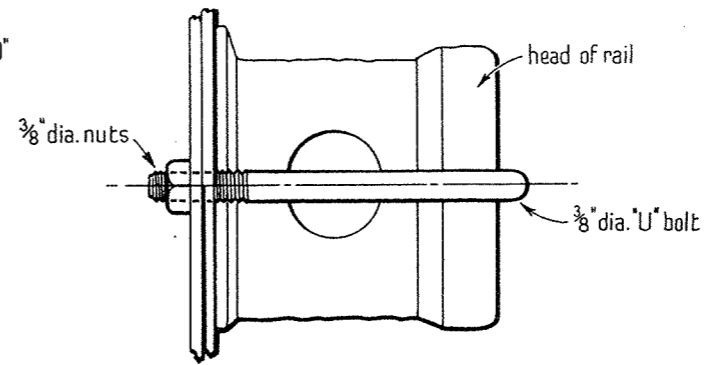
Cooper E 50 Standard Loading No Scale.

Rev'n	Date	Amendment	Ch'd

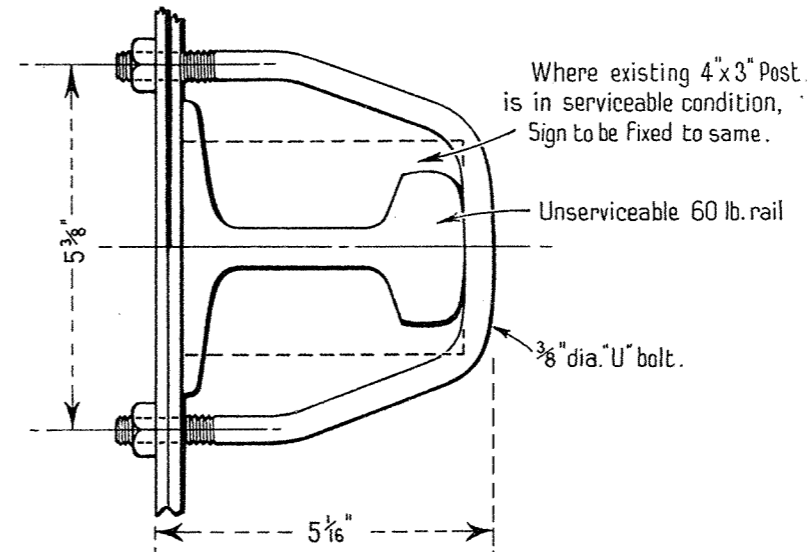


FRONT ELEVATION

SIDE ELEVATION

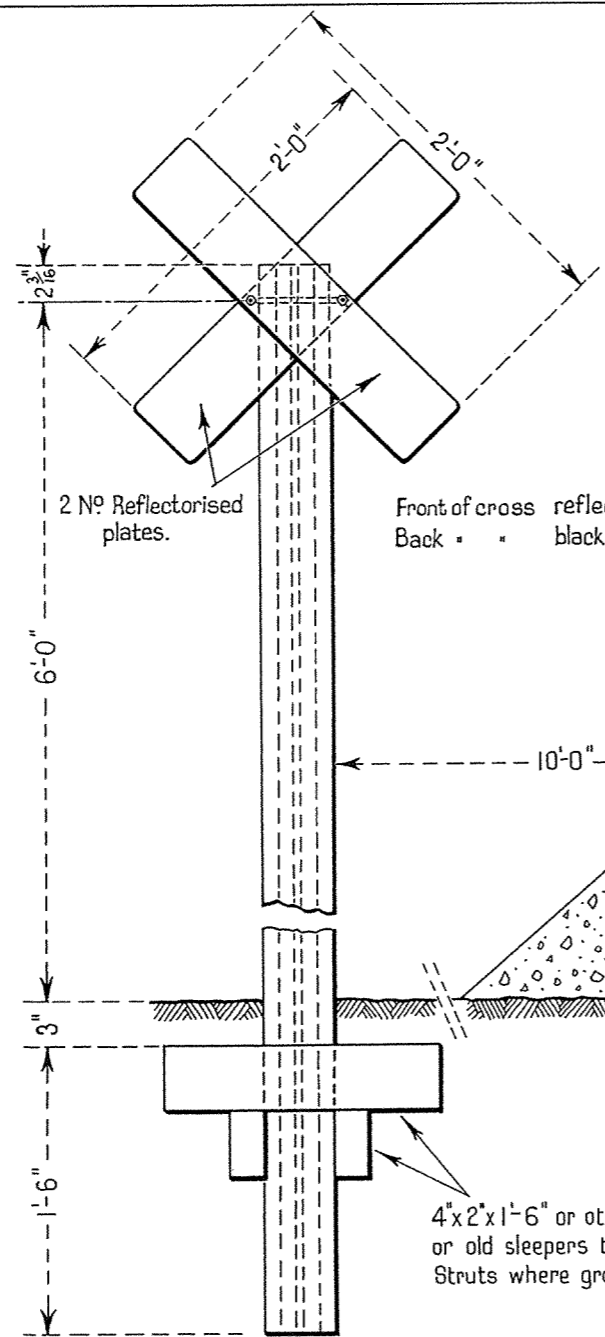


FIXING TO RAIL-POST

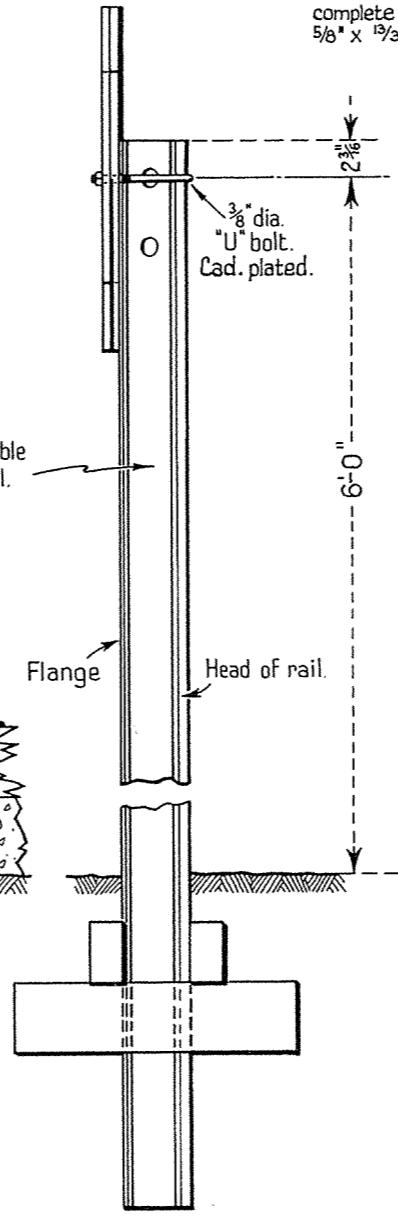


DETAIL OF "U" BOLT

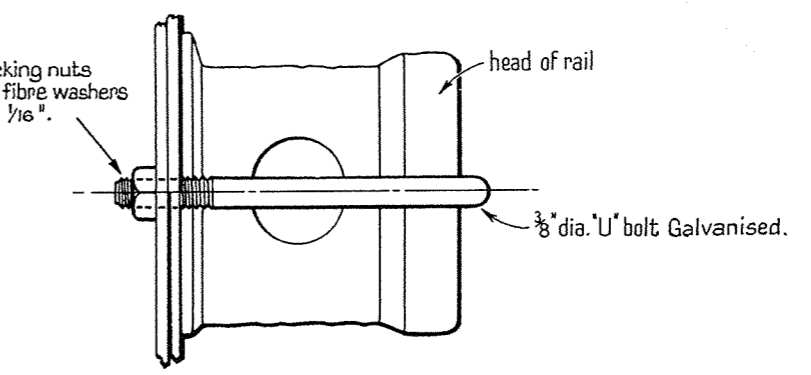
Revision	Date	Amendment
VICTORIAN RAILWAYS - WAY & WORKS BRANCH STANDARD DRAWING WHISTLE POST No Scale.		
Approved <i>R.S.M.</i> 29.10.57 Chief Civil Eng. Drawn by <i>W.A.</i> / Checked by <i>R.S.M.</i> Eng ^o of Maintenance		Adopted OCT. 1957 PLAN No F535



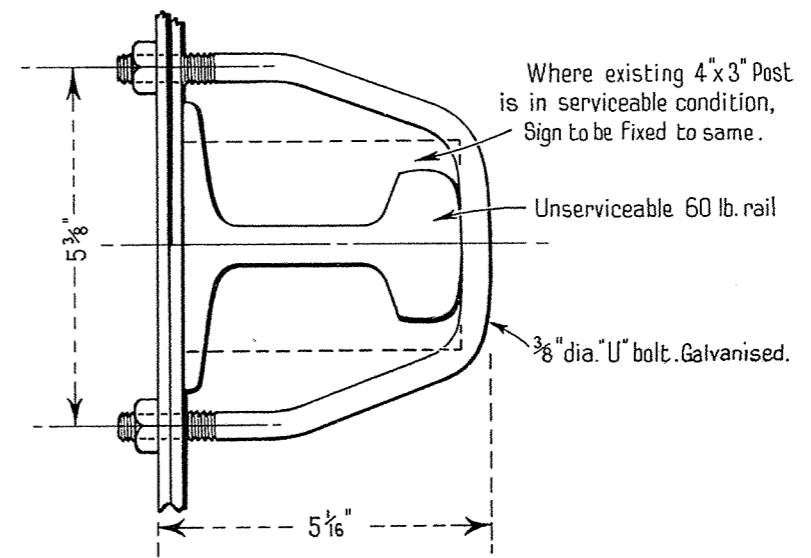
FRONT ELEVATION



SIDE ELEVATION



FIXING TO RAIL-POST



DETAIL OF "U" BOLT

4"x2"x1'-6" or other suitable timber or old sleepers to be used as Yankee Struts where ground is soft.

3/8" dia. self locking nuts complete with fibre washers 5/8" x 13/32" x 1/16".

3/8" dia. "U" bolt. Cad. plated.

Where existing 4"x3" Post is in serviceable condition, Sign to be fixed to same.

Unserviceable 60 lb. rail

3/8" dia. "U" bolt Galvanised.

"B"	26.4.72	Reflectorised plates, Fibre washers & Galvanised 'U' bolts.
"A"	24.3.70	Height of Post above ground reduced from 7'-6" to 6'-0".

Revision	Date	Amendment
----------	------	-----------

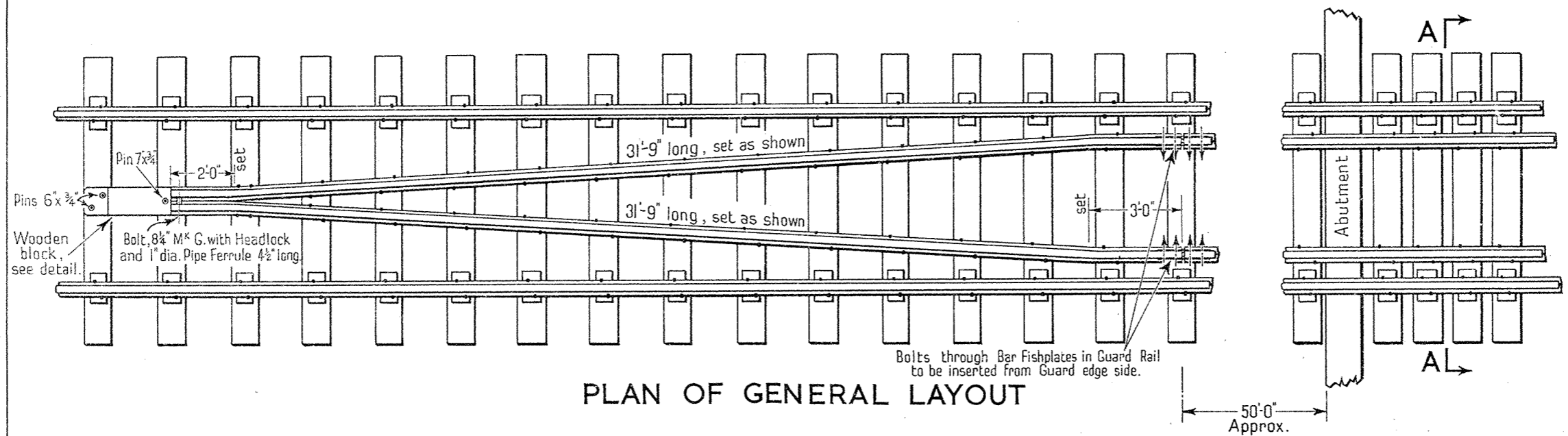
VICTORIAN RAILWAYS - WAY & WORKS BRANCH

STANDARD DRAWING

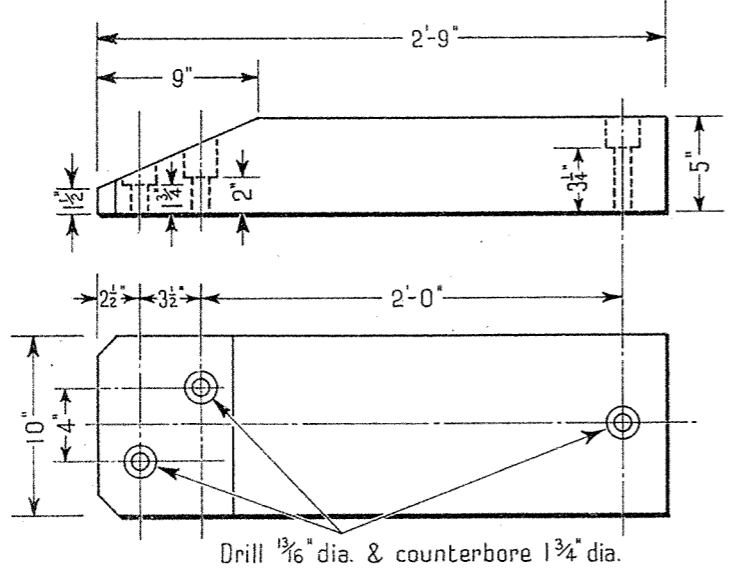
WHISTLE POST

No Scale.

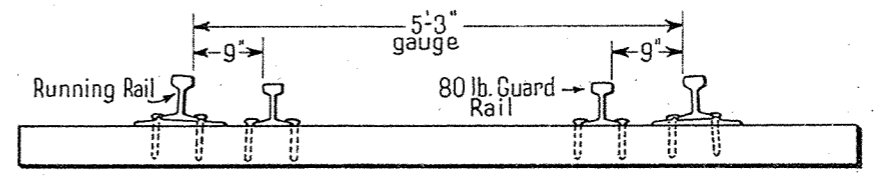
Approved <i>R. A. S. M.</i> Chief Civil Eng.	Adopted OCT. 1957
Drawn by W. A.	Checked. R. S. M.
Eng. of Maintenance	PLAN NO. B F535



PLAN OF GENERAL LAYOUT



WOODEN BLOCK
Cut from 10" x 5" serviceable sleeper.

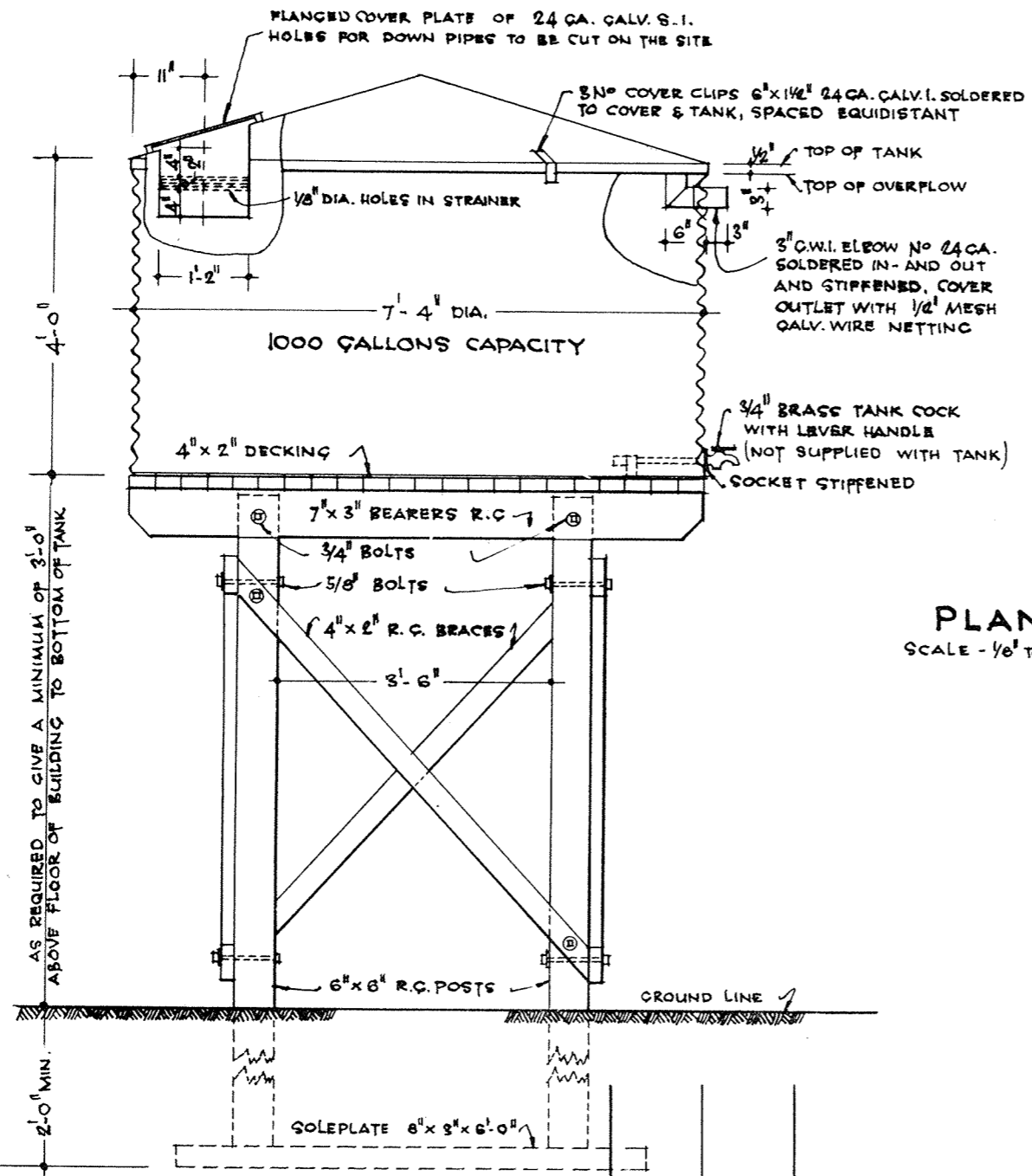


SECTION A-A

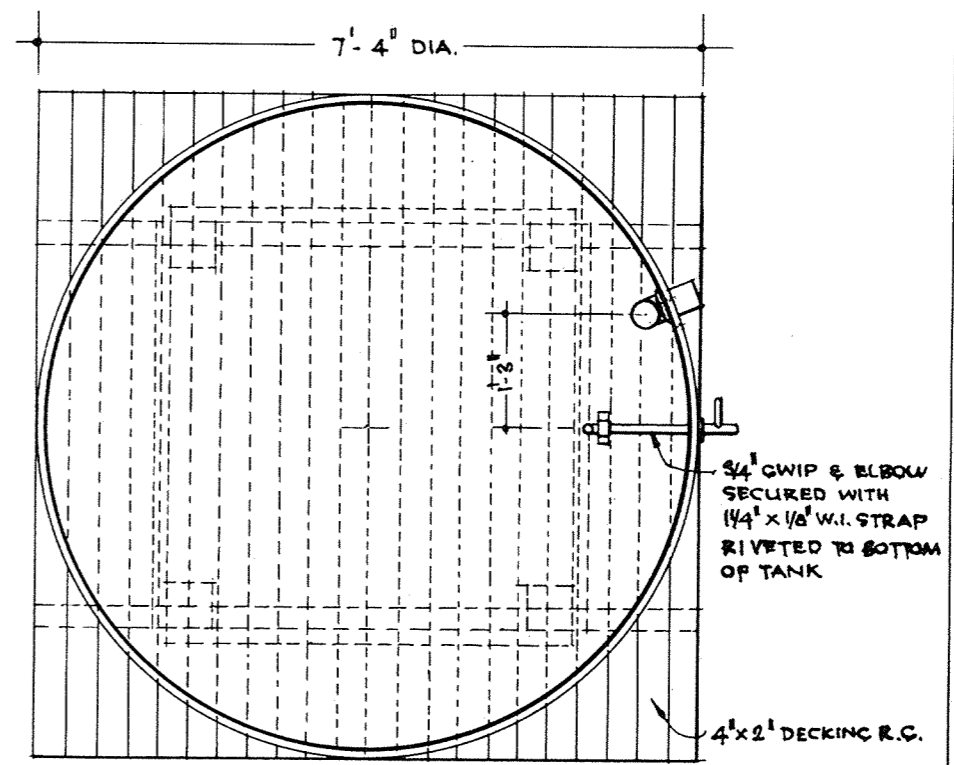
NOTES: 5" x 3/4" Dogspikes to be used in sleepers on bridge.
94 lb. Bar Fishplates to be used on 80 lb. Guard rail.
Suitable for bridges with running rails of 80 lbs. and heavier.

This drawing supersedes Plan No. 557-57

Revision	Date	Amendment	Amended by.
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING BRIDGE GUARD RAILS FOR SKELETON DECK			Approved <i>retd 11.57</i> Chief Civil Engineer Drawn J.C.L. Checked K.S. A.A.P. Eng. of Mach. & Water Supply
			Adopted Nov. 1957 PLAN NO. F537



PLAN
SCALE - 1/8" TO 1'-0"



NOTES:- COVER 24GA. C.S.IRON. JOINTS TO BE SINGLE RIVETED 3 1/2" PITCH CYLINDRICAL PORTION 24 GA. C.C.IRON VERTICAL JOINTS TO BE DOUBLE RIVETED AT EACH CORRUGATION & THE HORIZONTAL JOINTS TO BE SINGLE RIVETED 6" PITCH BOTTOM 24GA. C.S.IRON. JOINTS TO BE SINGLE RIVETED 3 1/2" PITCH RIM TO BE FOLDED & SOLDERED OUTSIDE ALL RIVETS THROUGHOUT TANK TO BE SOLDERED IN AND OUTSIDE SOLDERING OF JOINTS. C.C.I. SIDES SOLDERED OUTSIDE ONLY FLAT CAL. BOTTOM SWEATED BY SOLDERING INSIDE & OUTSIDE.

ALL MATERIALS TO BE APPROVED BRANDS A MINIMUM DISTANCE OF 9" CLEAR IS TO BE MAINTAINED BETWEEN TANKS, ANY ADJOINING BUILDING, FENCE OR OTHER STRUCTURE

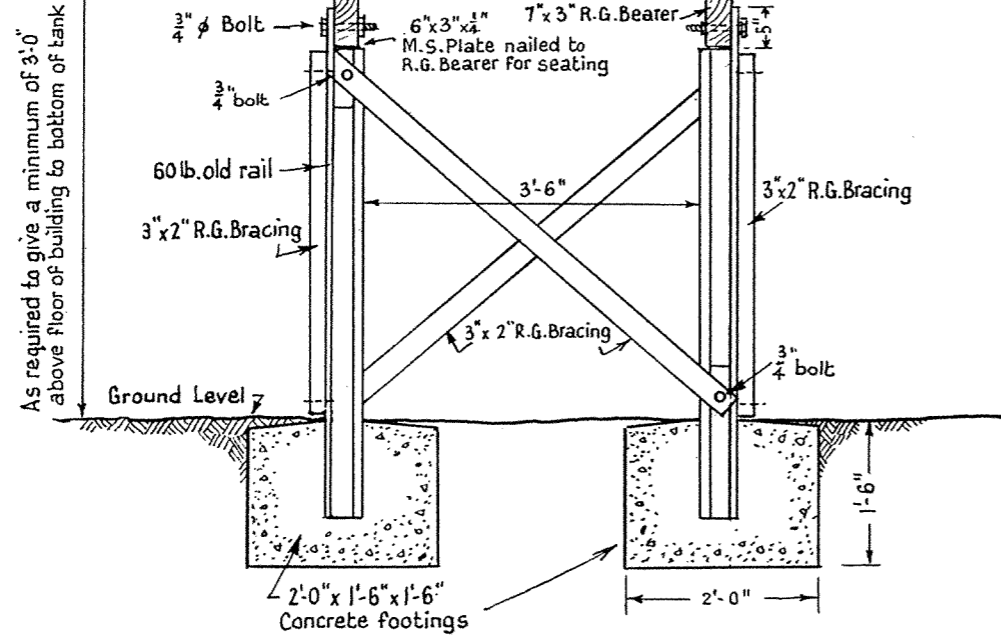
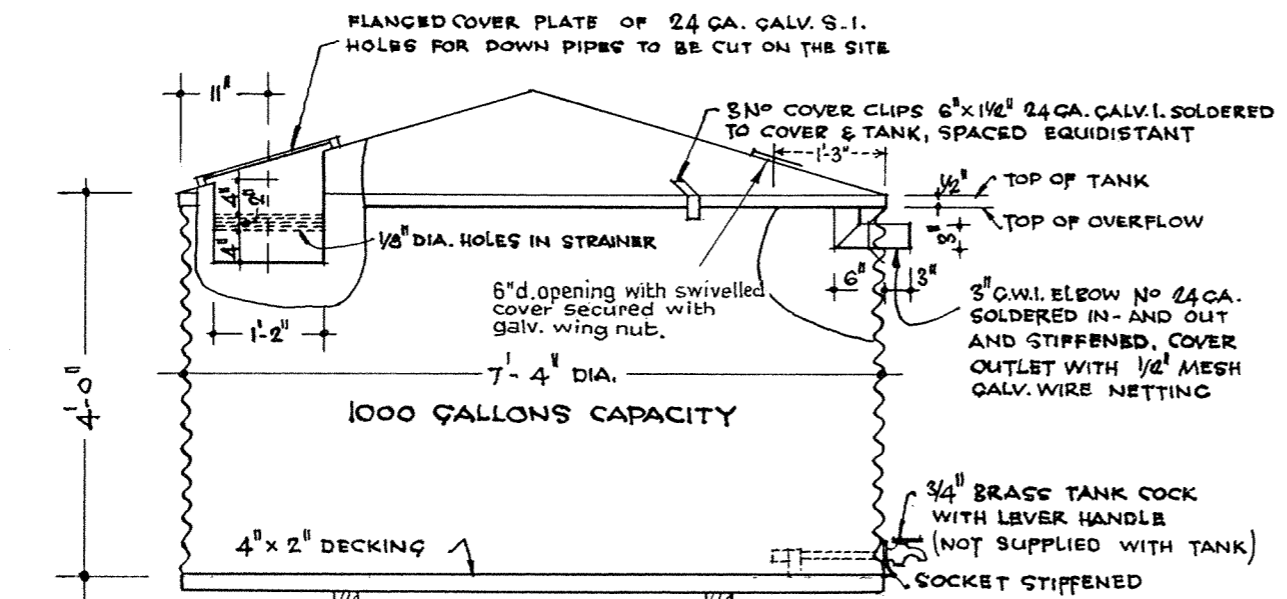
ALL TANKS ARE TO BE FITTED WITH FLEXIBLE JOINT AT COUPLING AND AT VERTICAL DROP TO PROVIDE FOR DIFFERENTIAL SETTLEMENT

ORDERS FOR TANKS TO BE PLACED ON THE WORKSHOPS MANAGER, SPOTSWOOD

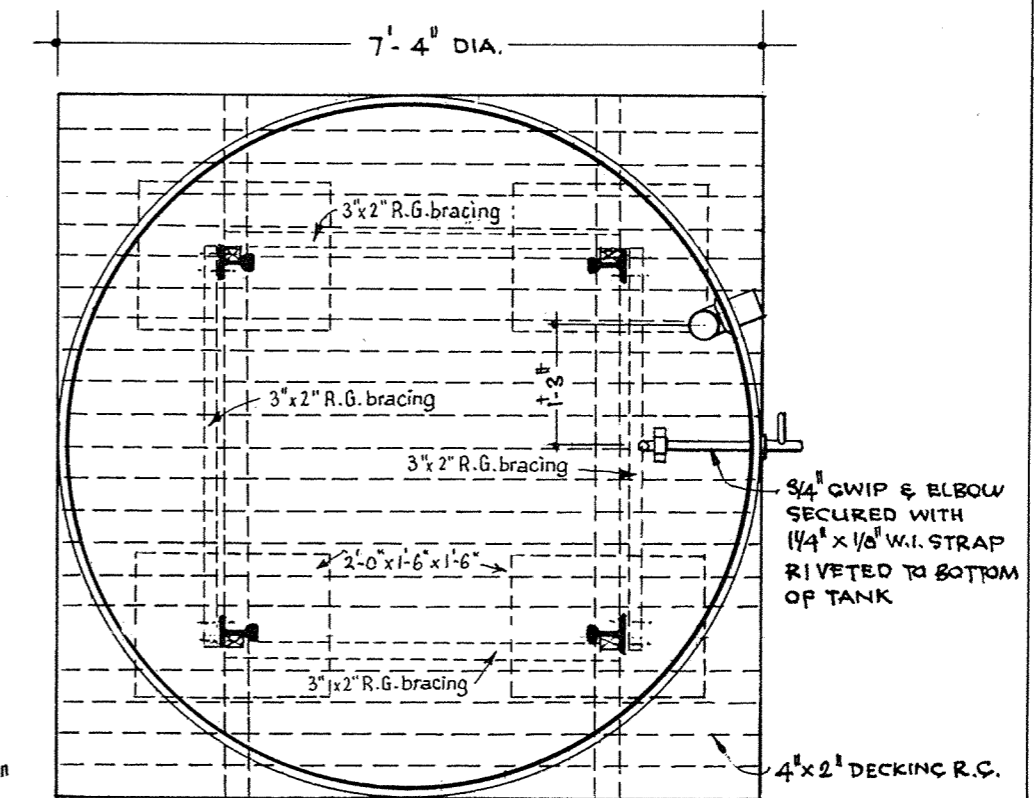
ELEVATION

REVISION	DATE	DESCRIPTION

VICTORIAN RAILWAY AND WORKS BRANCH		APPROVED	ADOPTED
STANDARD DRAWING		<i>R.V.R.</i>	28/4/58
1000 GALLON TANK		CHIEF CIVIL ENGINEER	
(SQUAT TYPE) AND STAND		DRAWN	CHECK.
SCALE - 1/2" = 1'-0"		K.T.	E.A.E.
		556	PLAN N°
		SENIOR ARCHITECT	F 539



ELEVATION



PLAN
SCALE - 1/6" TO 1'-0"

NOTES:- COVER 24 GA. C.S. IRON. JOINTS TO BE SINGLE RIVETED 3 1/2" PITCH
CYLINDRICAL PORTION 24 GA. C.C. IRON VERTICAL JOINTS TO BE
DOUBLE RIVETED AT EACH CORRUGATION & THE
HORIZONTAL JOINTS TO BE SINGLE RIVETED 6" PITCH
BOTTOM 24 GA. C.S. IRON. JOINTS TO BE SINGLE RIVETED 3 1/2" PITCH
RIM TO BE FOLDED & SOLDERED OUTSIDE
ALL RIVETS THROUGHOUT TANK TO BE SOLDERED IN AND OUTSIDE
SOLDERING OF JOINTS. C.C.I. SIDES SOLDERED OUTSIDE ONLY
FLAT GAL. BOTTOM SWEATED BY SOLDERING INSIDE &
OUTSIDE.

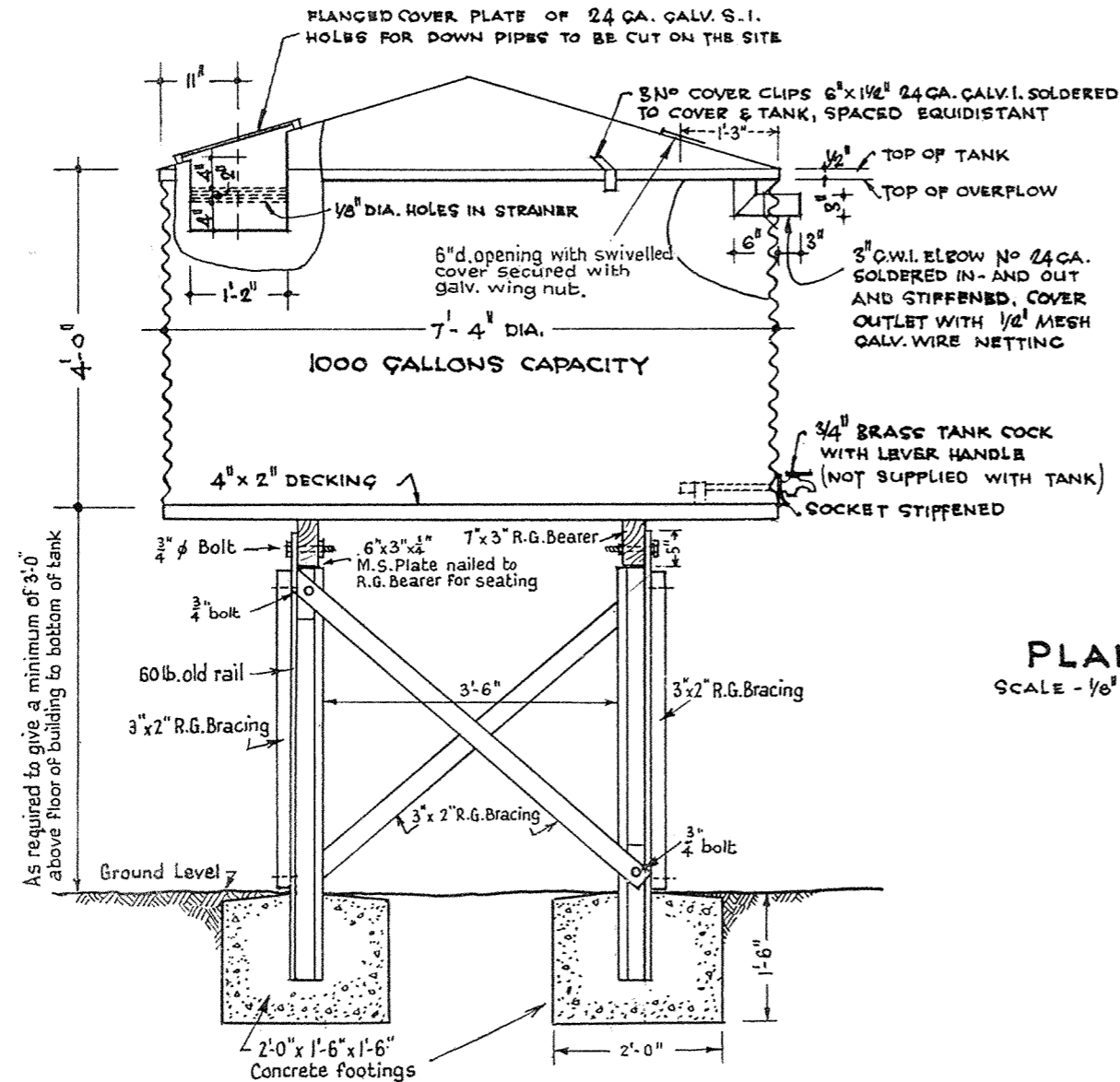
ALL MATERIALS TO BE APPROVED BRANDS
A MINIMUM DISTANCE OF 9" CLEAR IS TO BE MAINTAINED
BETWEEN TANKS, ANY ADJOINING BUILDING, FENCE OR
OTHER STRUCTURE

ALL TANKS ARE TO BE FITTED WITH FLEXIBLE JOINT AT COUPLING
AND AT VERTICAL DROP TO PROVIDE FOR
DIFFERENTIAL SETTLEMENT

ORDERS FOR TANKS TO BE PLACED ON THE WORKSHOPS MANAGER, SPOTSWOOD

REVISION	DATE	DESCRIPTION
B	1/7/65	Opening for filling tank with hose.
A	23/2/65	Timber posts replaced by old rails set in concrete.

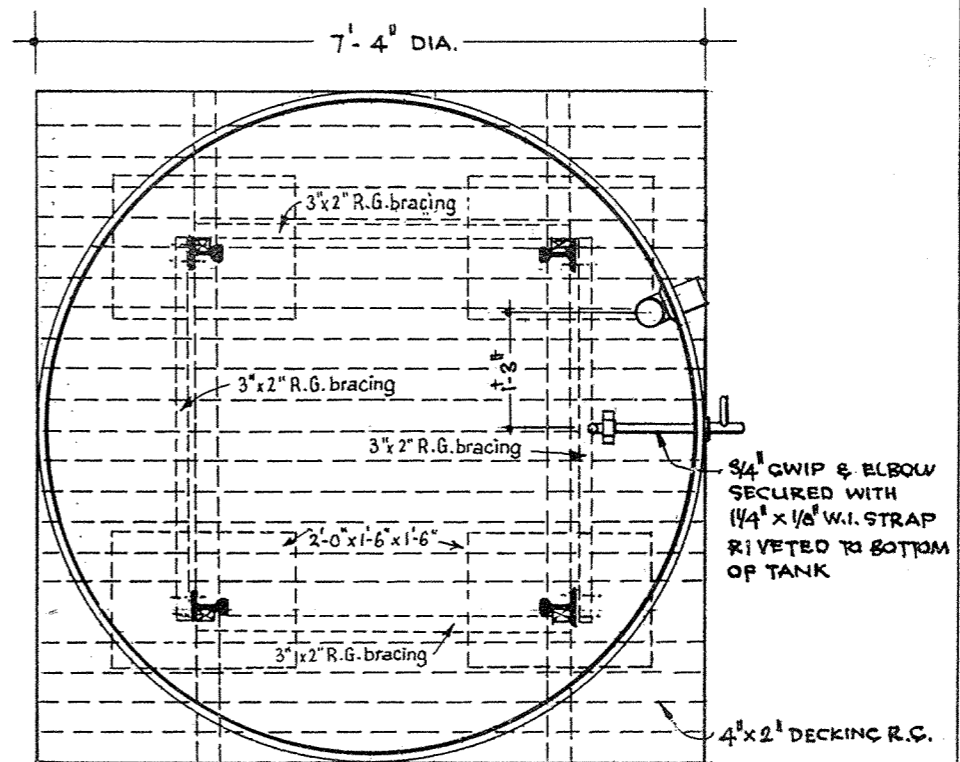
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		APPROVED	ADOPTED
STANDARD DRAWING 1000 GALLON TANK (SQUAT TYPE) AND STAND		<i>R.V.R.</i>	28/4/58
		CHIEF CIVIL ENGINEER	
SCALE - 1/2" = 1'-0"		DRAWN	CHECK.
		K.J.	E.A.E.
		SENIOR ARCHITECT	PLAN NO F539B



ELEVATION

This plan supersedes Plans Nos F539 A & B.

REVISION	DATE	DESCRIPTION
C	8/6/70	Minimum clearance increased to 18". Painting interiors of new tanks discontinued.
B	1/7/65	Opening for filling tank with hose.
A	23/2/65	Timber posts replaced by old rails set in concrete.



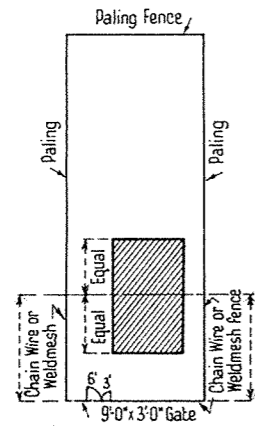
PLAN
SCALE - 1/8" TO 1'-0"

NOTES:- COVER 24GA. C.S.IRON. JOINTS TO BE SINGLE RIVETED 3 1/2" PITCH CYLINDRICAL PORTION 24 GA. C.C.IRON VERTICAL JOINTS TO BE DOUBLE RIVETED AT EACH CORRUGATION & THE HORIZONTAL JOINTS TO BE SINGLE RIVETED 6" PITCH BOTTOM 24GA. C.S.IRON. JOINTS TO BE SINGLE RIVETED 3 1/2" PITCH RIM TO BE FOLDED & SOLDERED OUTSIDE ALL RIVETS THROUGHOUT TANK TO BE SOLDERED IN AND OUTSIDE SOLDERING OF JOINTS. C.C.I. SIDES SOLDERED OUTSIDE ONLY FLAT GAL. BOTTOM SWEATED BY SOLDERING INSIDE & OUTSIDE.

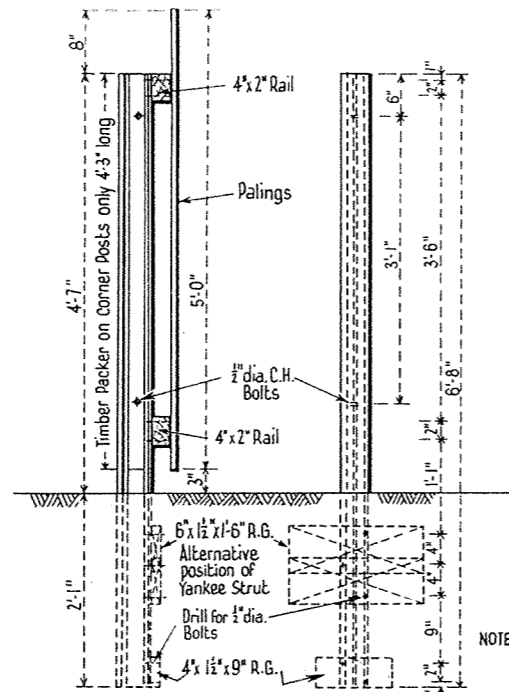
ALL MATERIALS TO BE APPROVED BRANDS
A MINIMUM DISTANCE OF 18" CLEAR IS TO BE MAINTAINED BETWEEN TANKS, ANY ADJOINING BUILDING, FENCE OR OTHER STRUCTURE

ALL TANKS ARE TO BE FITTED WITH FLEXIBLE JOINT AT COUPLING AND AT VERTICAL DROP TO PROVIDE FOR DIFFERENTIAL SETTLEMENT. ORDERS FOR TANKS TO BE PLACED ON THE WORKSHOPS MANAGER, SPOTSWOOD

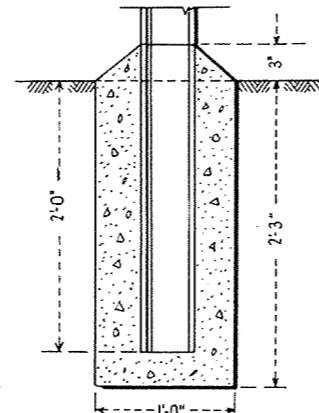
VICTORIAN RAILWAYS -WAY AND WORKS BRANCH		APPROVED	ADOPTED
STANDARD DRAWING 1000 GALLON TANK (SQUAT TYPE) AND STAND		<i>R.P.R.</i>	28/4/58
		CHIEF CIVIL ENGINEER	
DRAWN	CHECK.	PLAN No	
K.T.	E.A.E.	F539 ^C	
SCALE - 1/2" = 1'-0"		SENIOR ARCHT.	



SITE PLAN

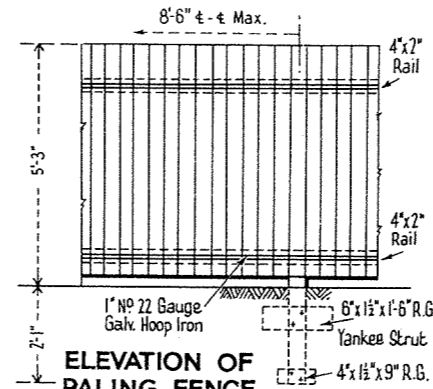


SECTION THROUGH PALING FENCE

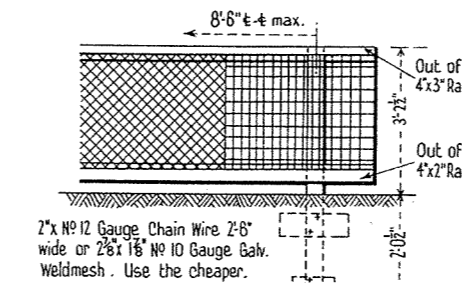


DETAIL OF ALTERNATIVE CONCRETE BASE

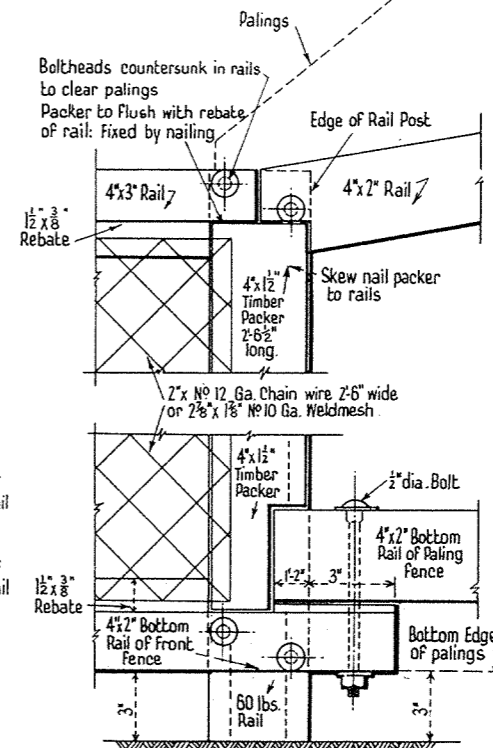
NOTE: Where Concrete materials are on hand for associated works this type of base should be used. Concrete is not to be ordered specifically for fencing.



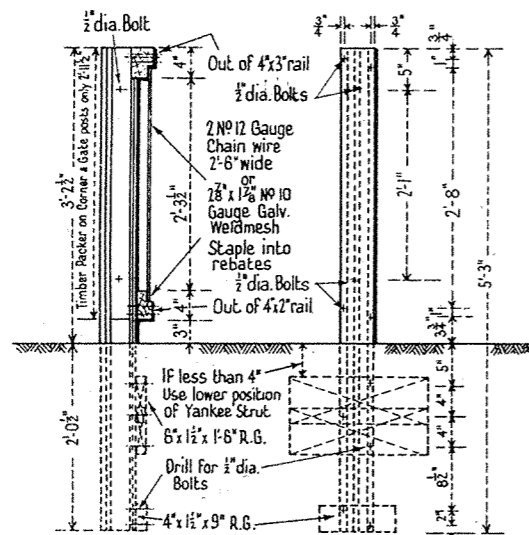
ELEVATION OF PALING FENCE



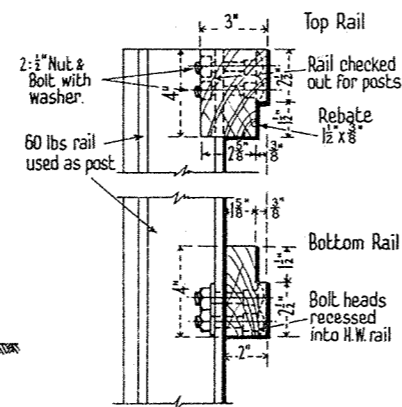
ELEVATION OF CHAIN WIRE OR WELDMESH FENCES



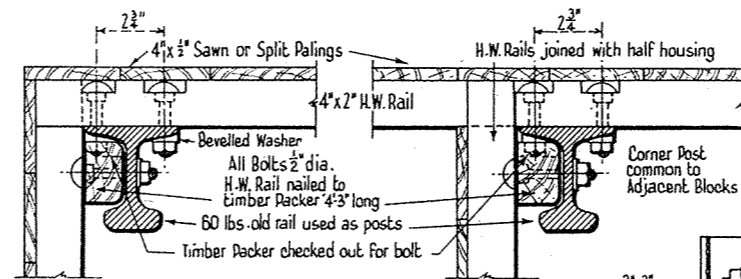
JUNCTION DETAILS OF PALING AND CHAIN WIRE OR WELDMESH FENCES AT TOP AND BOTTOM RAILS



SECTION THROUGH CHAIN WIRE OR WELDMESH FENCES

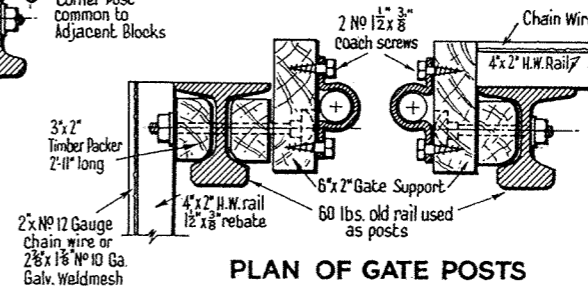


DETAILS OF H.W. RAIL FOR CHAIN WIRE OR WELDMESH FENCE



PLAN OF CORNER POSTS

NOTE: Top and bottom rails of chain wire and weld mesh fences to be dressed and painted in built up areas only. Elsewhere all timbers to be sawn and unpainted.



PLAN OF GATE POSTS

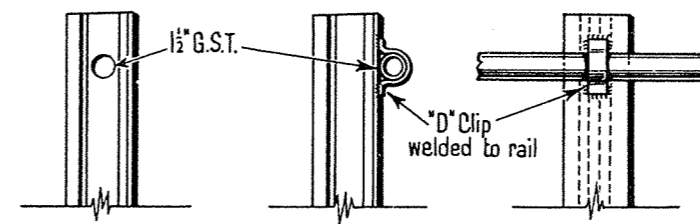
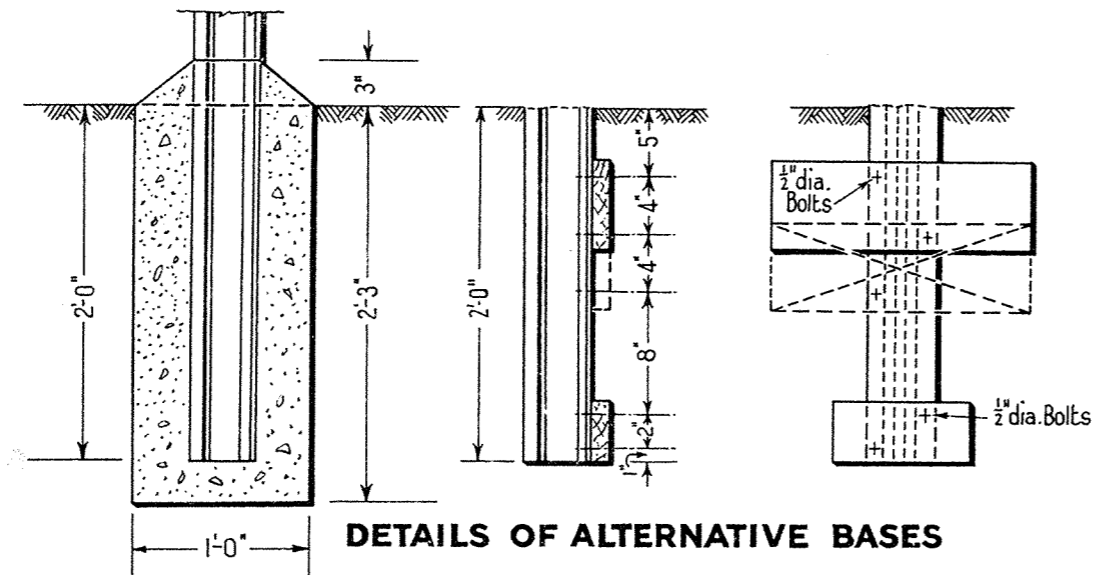
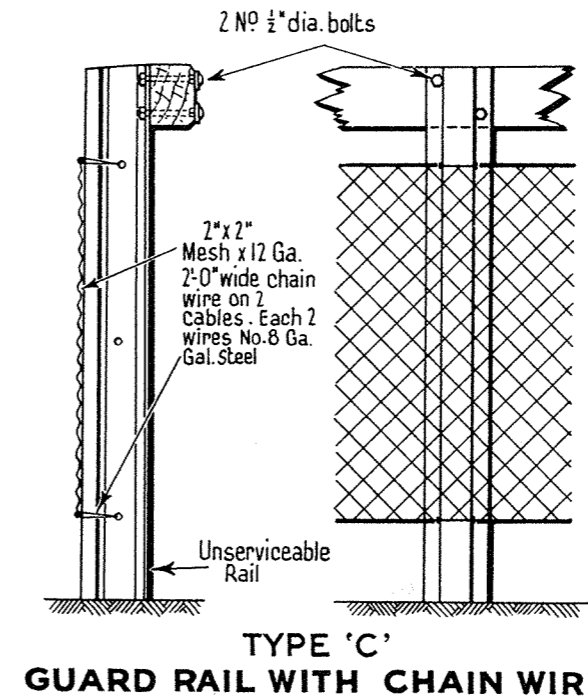
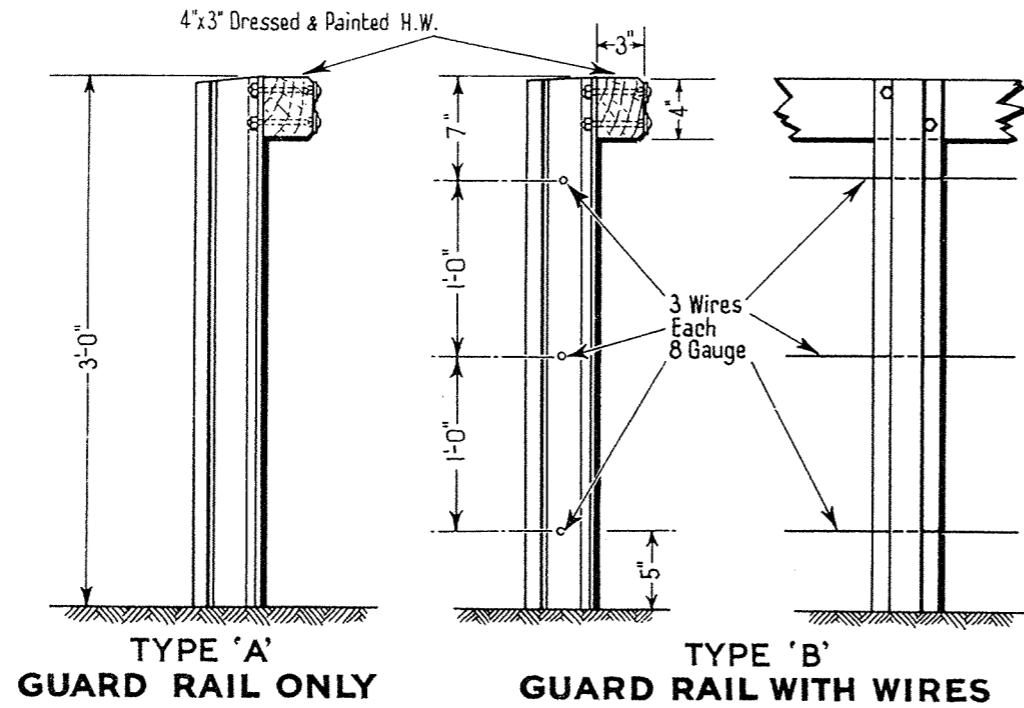
This plan supersedes Plan No 452/56

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
 DETAILS FOR USE OF OLD RAILS AS FENCE POSTS

Approved
[Signature]
 Chief Civil Engineer
 Drawn by
[Signature]
 Senior Architect

Adopted
 18/7/58
PLAN NO F 540

Rev'n	Date	Amendment	Amended by

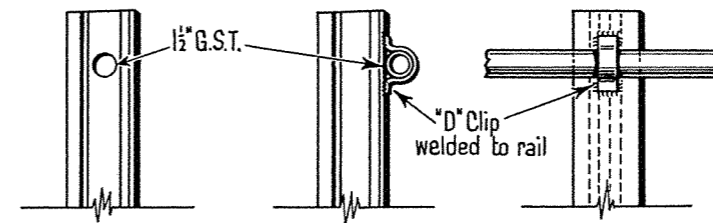
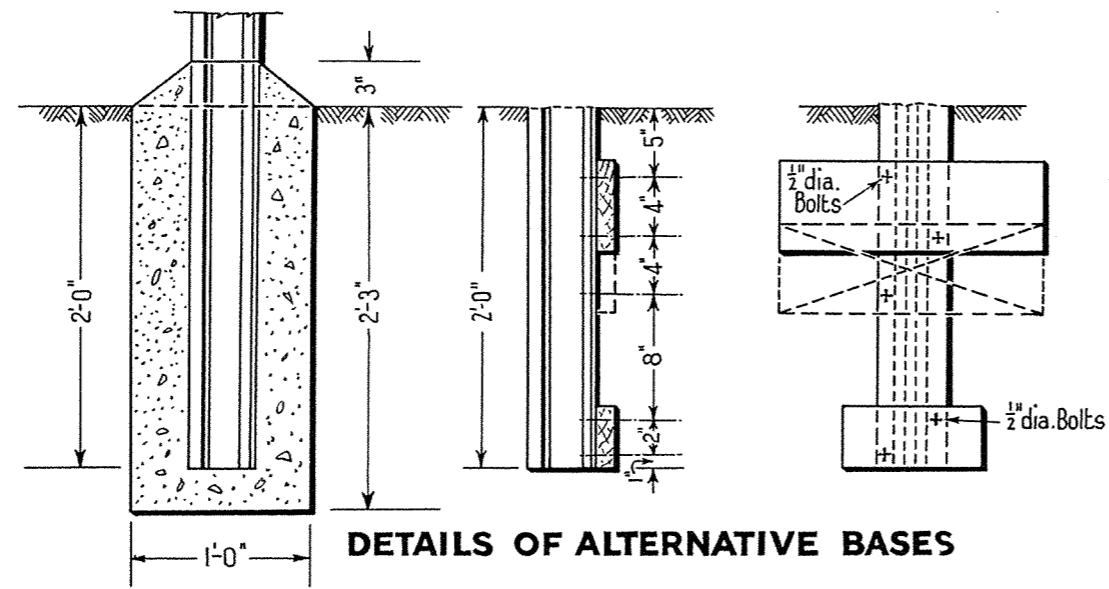
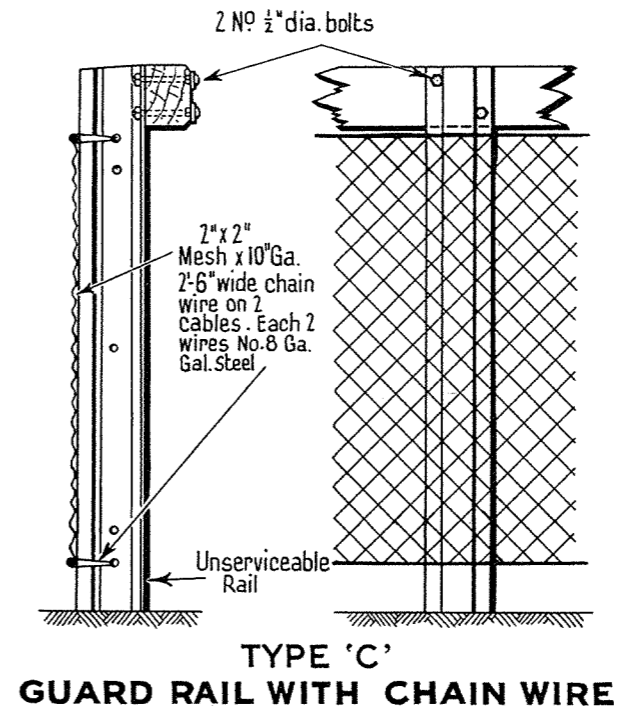
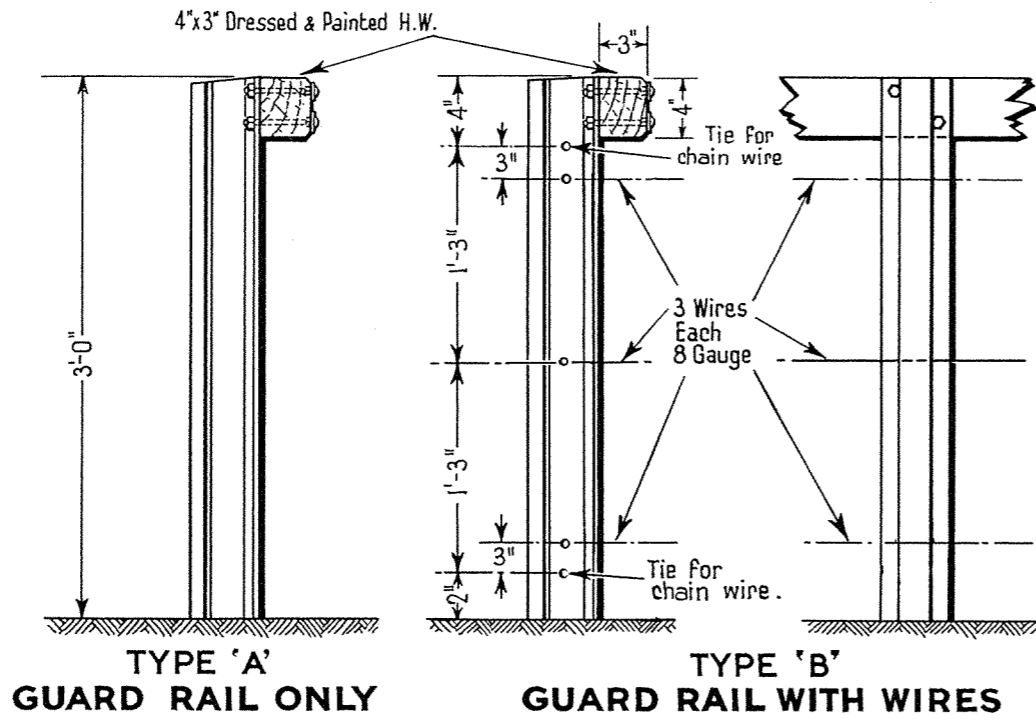


ALTERNATIVES FOR TOP RAIL

NOTE : Where Concrete is not available a Yankee Strut is to be used.
Surplus Boiler Tubes to be used when available.

Revision	Date	Amendment	Checked

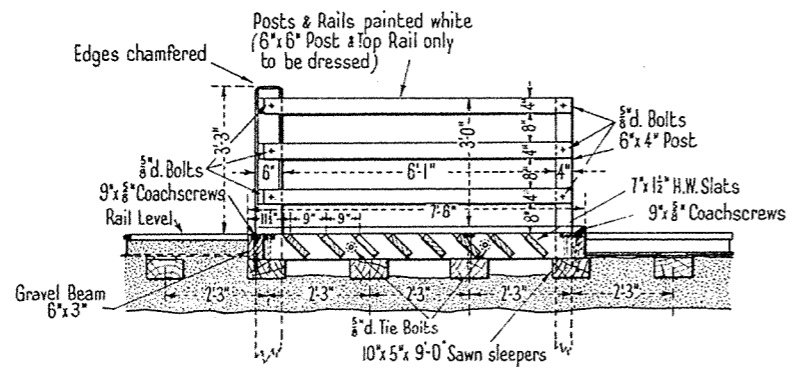
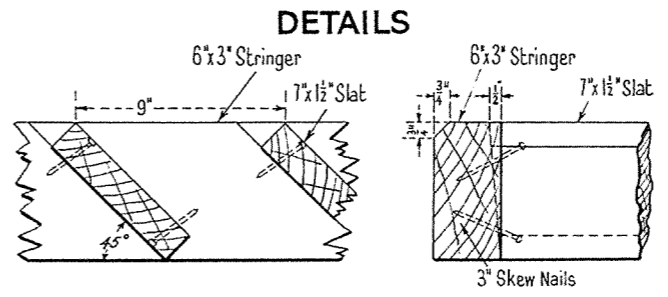
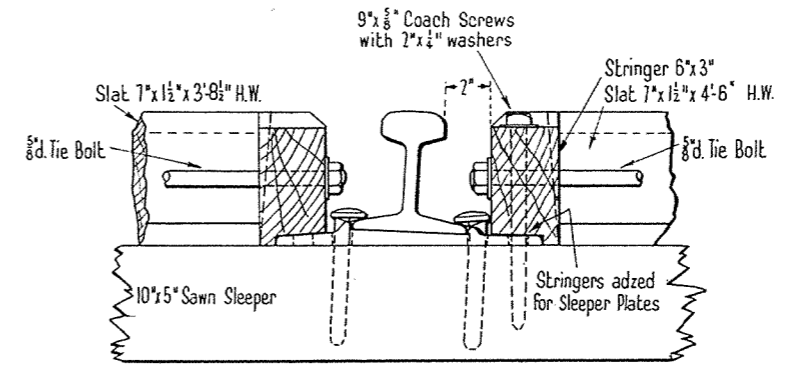
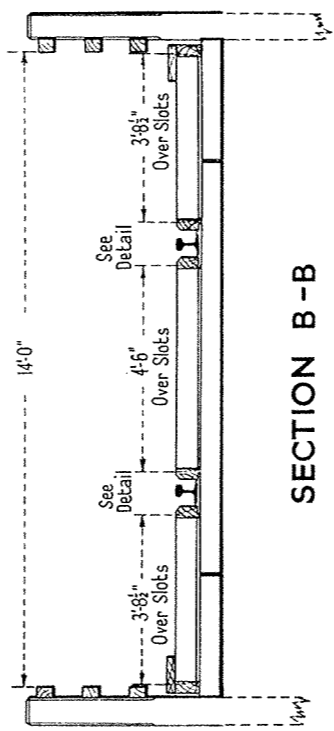
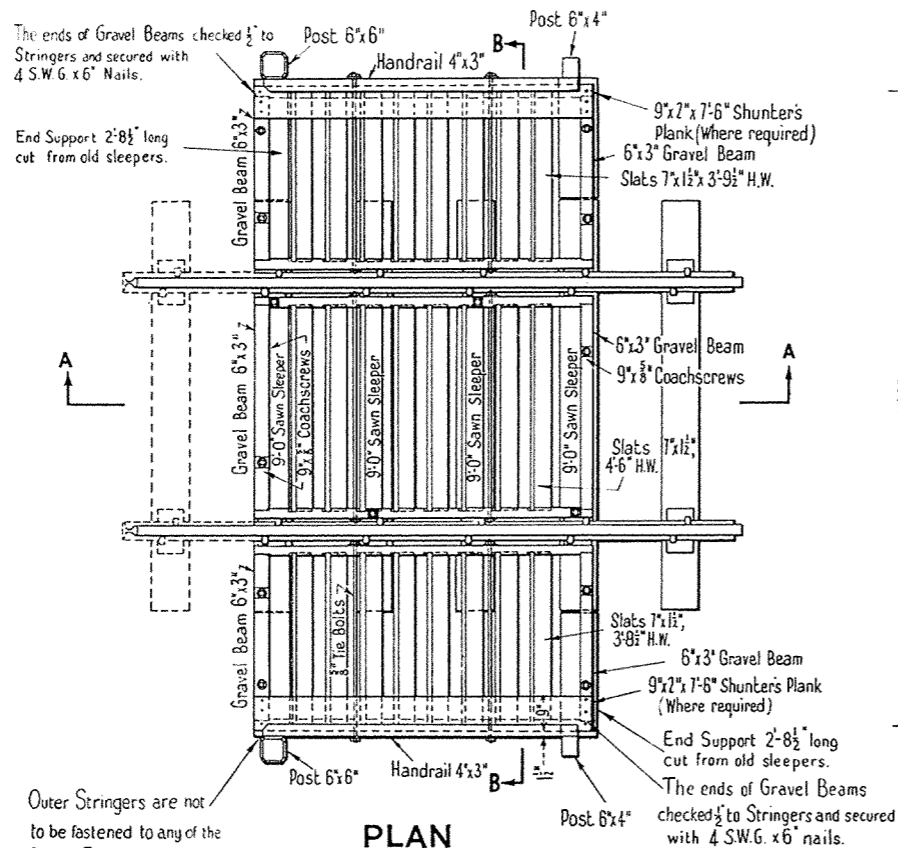
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	27.7.58
TYPES OF FENCING USING OLD RAIL POSTS FOR GUARD RAILS		Chief Civil Engineer	PLAN No.
		Drawn by A.W.A.	Checked by E.A.E.
		<i>[Signature]</i>	F 541
		Senior Architect	



NOTE: Where Concrete is not available a Yankee Strut is to be used. Surplus Boiler Tubes to be used when available.

Revision	Date	Amendment	Checked
'A'	21.7.65	Change in mesh & height of chain wire.	

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING TYPES OF FENCING USING OLD RAIL POSTS FOR GUARD RAILS		Approved <i>[Signature]</i> Chief Civil Engineer 29.7.58	Adopted 29.7.58
Drawn by A.W.A.	Checked by E.A.E.	PLAN No. F541A	
Senior Architect <i>[Signature]</i>			



NOTE: This grid is suitable for 80 lb. and heavier rail

QUANTITIES FOR ONE GRID
TIMBER (Lengths shown for 80, 90 & 94 lb. Rails)

Gravel Beams	6" x 3"	4/3-8 1/2"	2/4-6"
Timbers, Sawn	10" x 5"		4/9-0"
Posts	6" x 6"	7/6-6"	
Posts	6" x 4"	2/6-6"	
Rails	4" x 3"	6/6-10 1/2"	
Stringers	6" x 3"	6/7-6"	
Slats	7" x 1 1/2"	16/3-8 1/2"	8/4-6"
Shunters Planks (where required)	9" x 2"	2/7-6"	

IRONWORK

Bolts 5/8" x 10"	12 No
5/8" Tie Bolts	2/5-0 1/2", 4/4-4"
Coachscrews 9" x 5/8"	14 No
Wire Nails, 3"	3 lb.
Washers 2" x 1/2" with 5/8" d. holes	38 No
Nails 4 S.W.G. x 6"	24 No

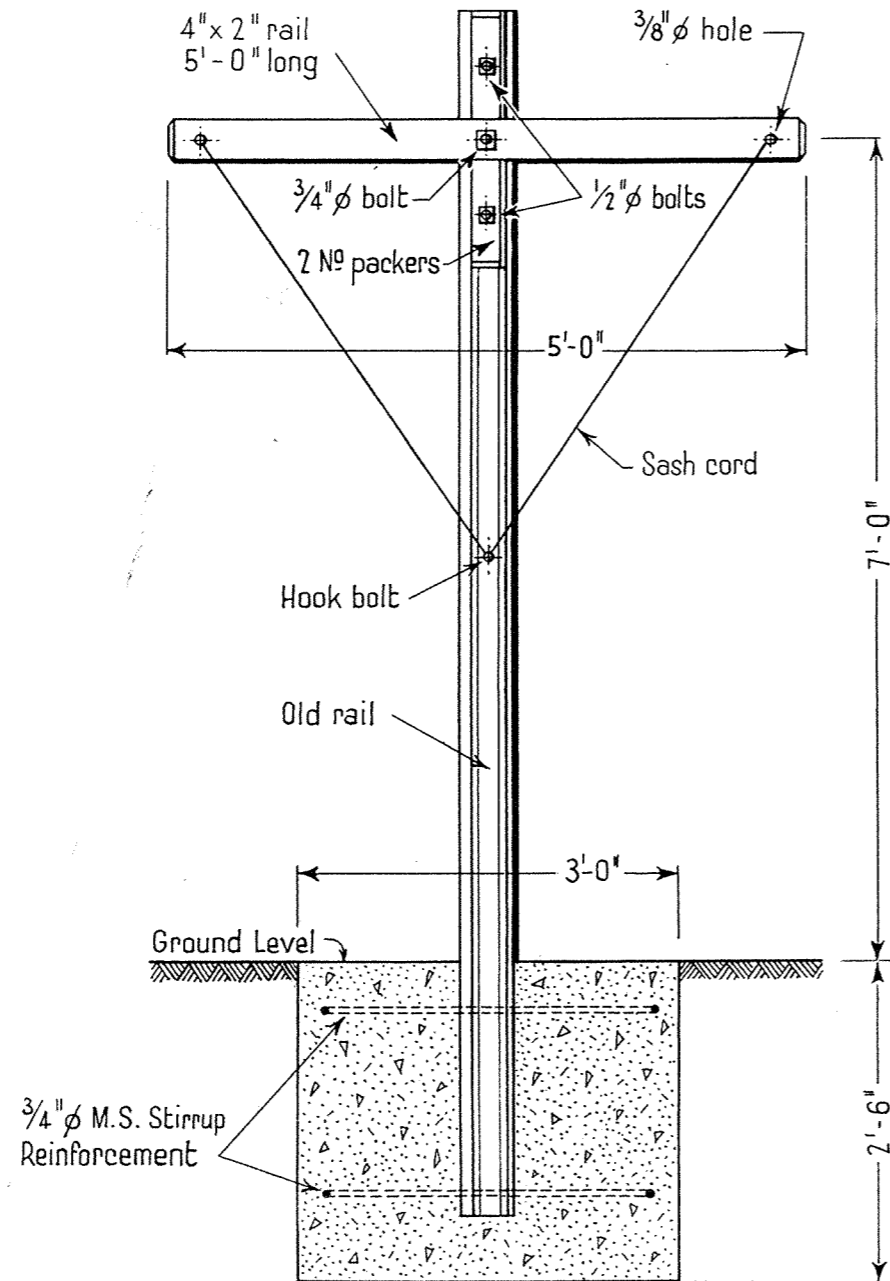
Note: This Plan supersedes Plan No F542

SECTION A-A

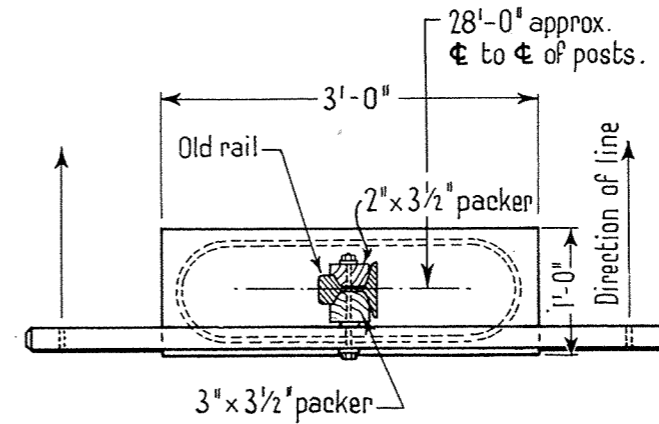
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
CATTLE GRID
Scales: 1/2" & 3" = 1'-0"

Approved
R. S. S.
Chief Civil Engineer
Traced by
E. W. B.
Checked by
G. E. M.
A. A. P.
Eng' of Machy & W. Sy.
Adopted
1959
PLAN NO
F542

Rev	Date	Amendment	Amended by
A	9.1.1960	Fixing of grid to guard posts removed. Timbers and fastenings amended	<i>R.S.S.</i>



ELEVATION



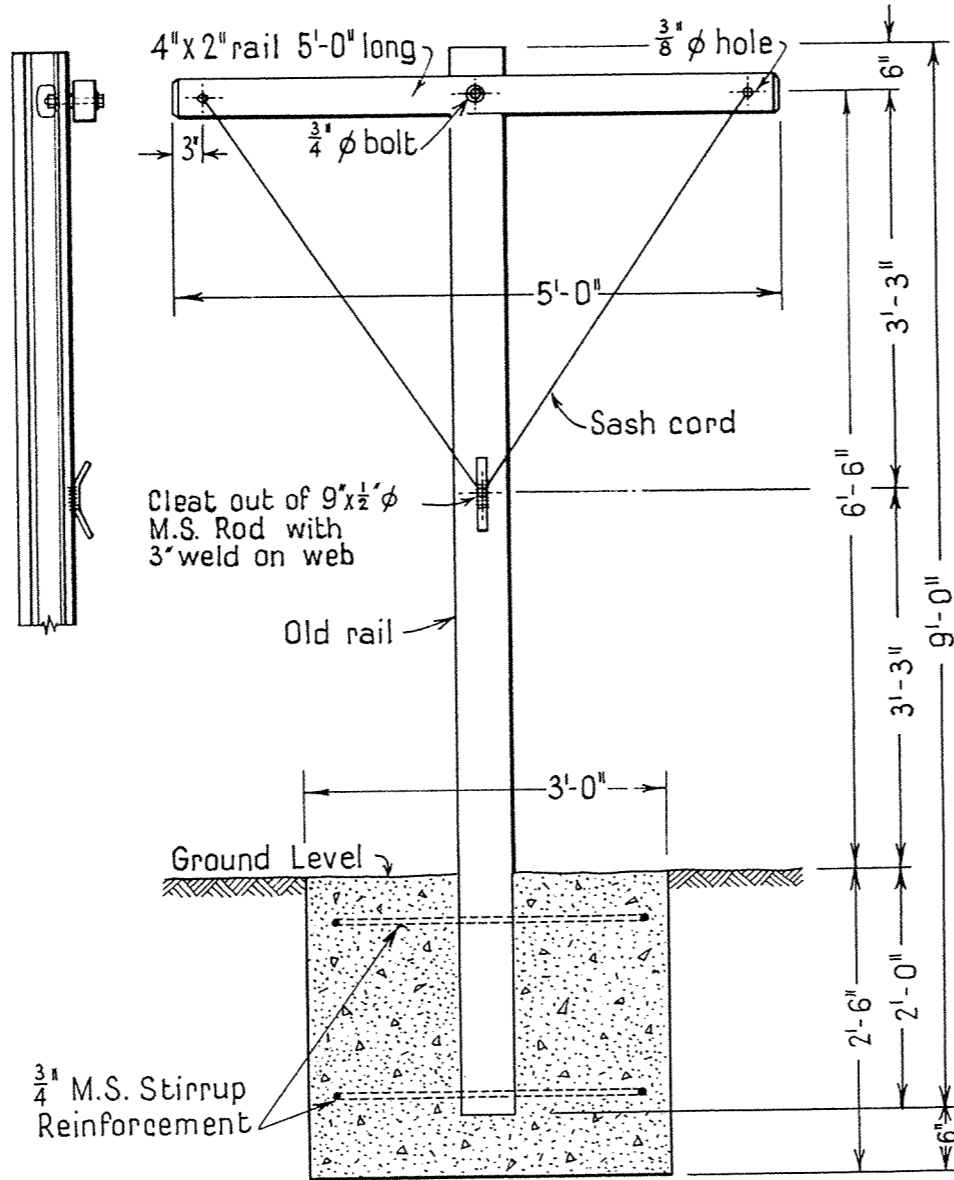
PLAN

NOTE:- 20 lin. ft. of cord provided
 60 lin. ft. of wire provided
 (Schedule Item 588)

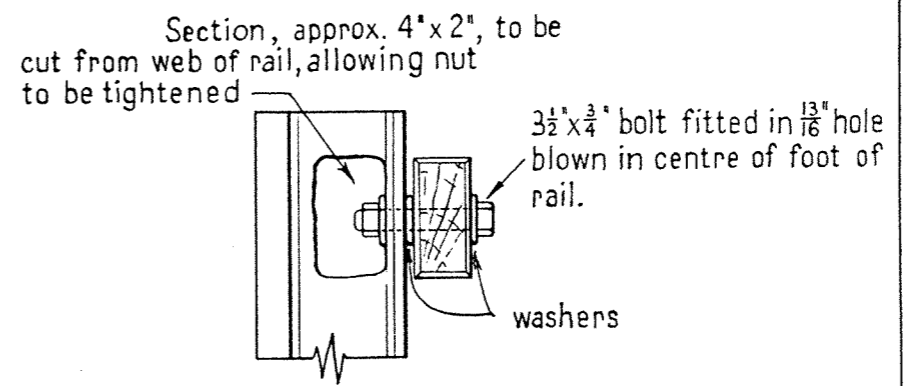
All Timbers to be Red Gum.

Rev'n	Date	Amendment	Chkd.

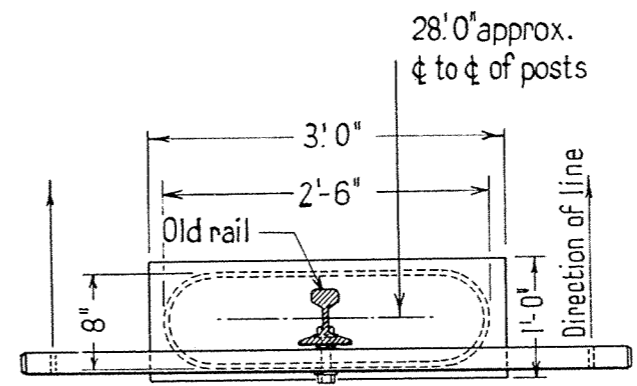
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	10.11.58
DEPARTMENTAL RESIDENCES		Chief Civil Engineer	
OLD RAIL POST CLOTHES LINE		Drawn by M.O.	Checked by E.A.E.
Scale: 1" = 1'-0"		<i>[Signature]</i>	PLAN No. F543
		Senior Architect	



ELEVATIONS



DETAIL



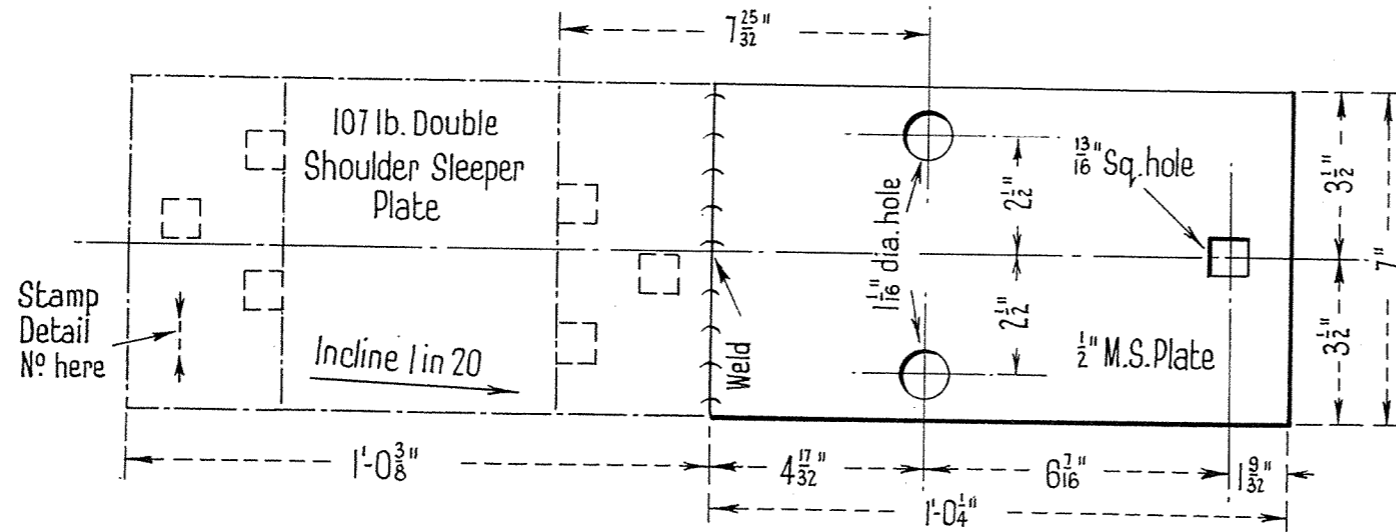
PLAN

NOTE: -20 lin. ft. of cord provided
 60 lin. ft. of wire, galvanised, stranded, signal, 7/ 056" provided.
 Timber to be Red Gum

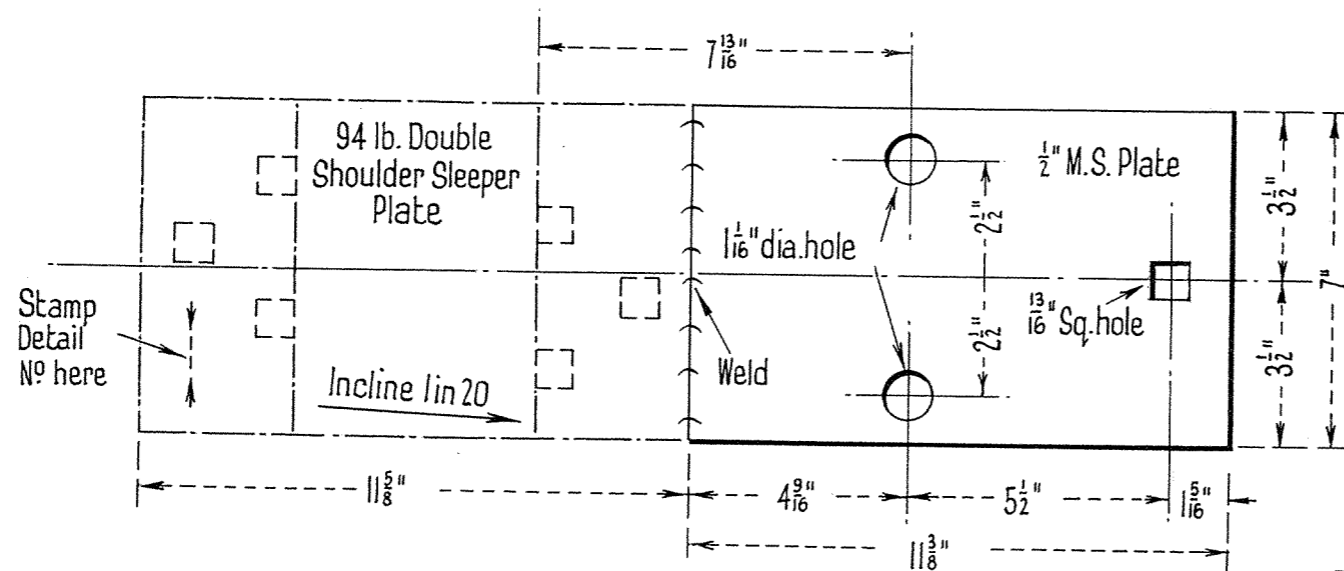
This Plan supersedes Plan F 543

Rev'n	Date	Amendment	Chkd.
"A"	24.10.63	Wire specified. Packers eliminated. Crossarm attached direct to rail. - Hook bolt replaced by cleat.	

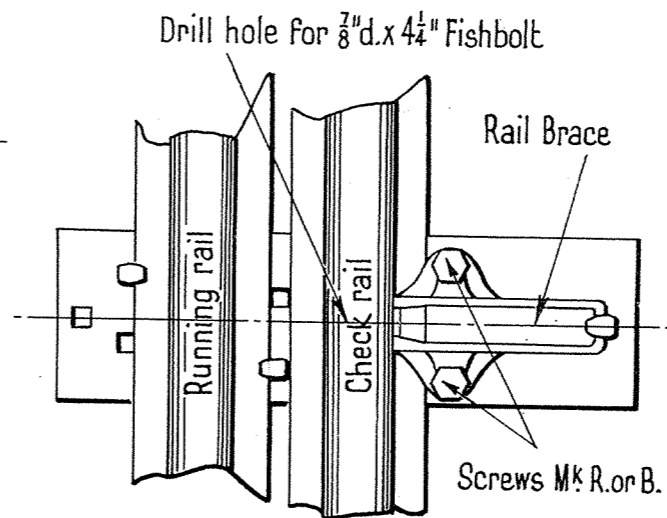
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer.	
DEPARTMENTAL RESIDENCES		Drawn by	Checked by
OLD RAIL POST CLOTHES LINE			E. A. E.
Not to scale.		<i>[Signature]</i> Senior Architect	PLAN No. F543A



BRACE PLATE — (For 107 lb. rail)
Detail No. 1091



BRACE PLATE — (For 94 lb. rail)
Detail No. 1092



TYPICAL ARRANGEMENT
(107 lb. here shown)

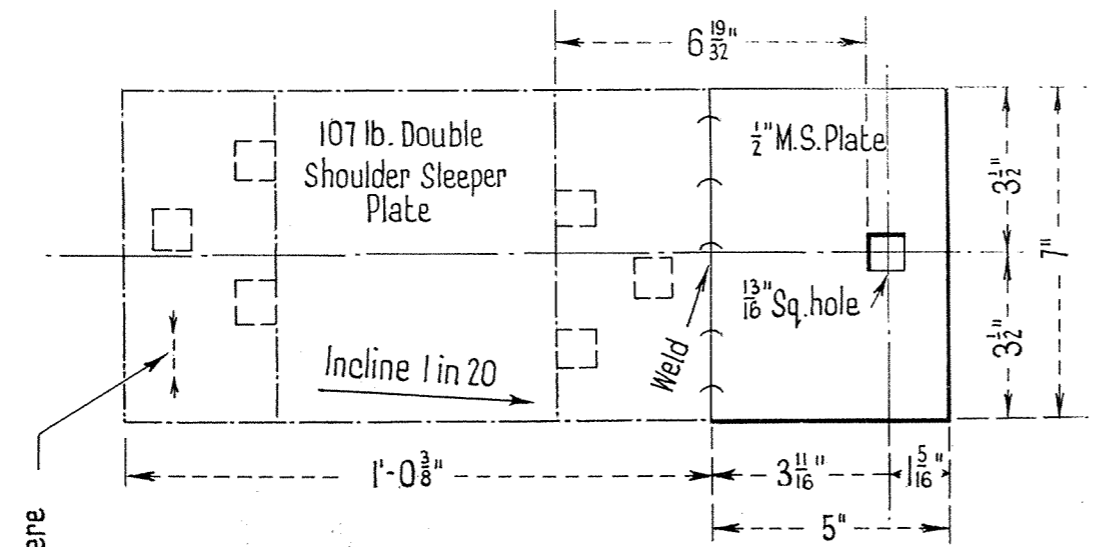
This plan supersedes Plan F472

Rev'n	Date	Amendment	Amended by

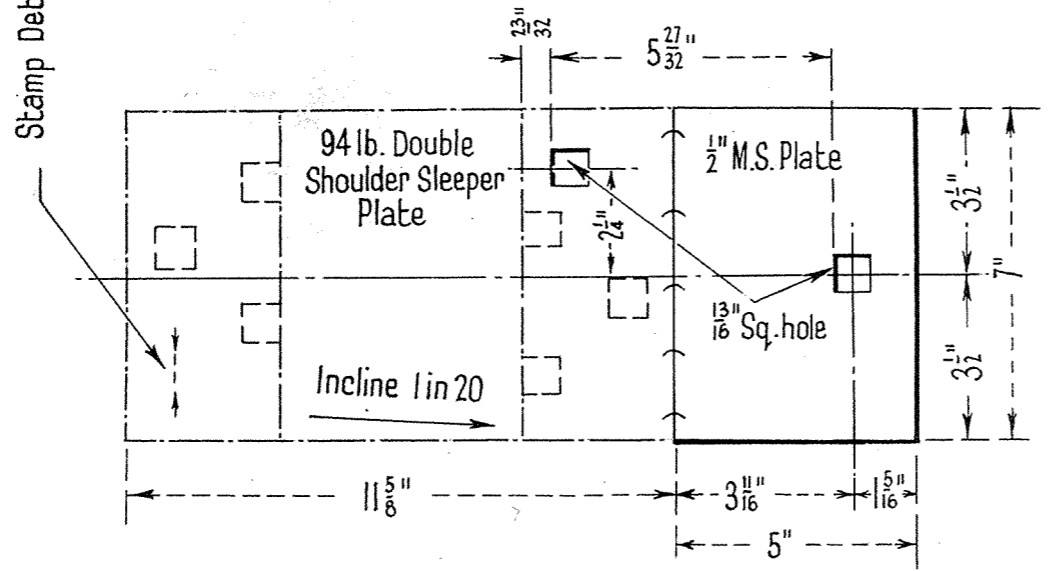
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
CHECK RAIL BRACE
PLATES 94 & 107 LB.
3 1/2" FLANGWAY

Approved
[Signature]
Chief Civil Engineer
Drawn by
S. F.
Checked by
G. E. M.
A. A. P.
Eng. of Machy & Water Sy.

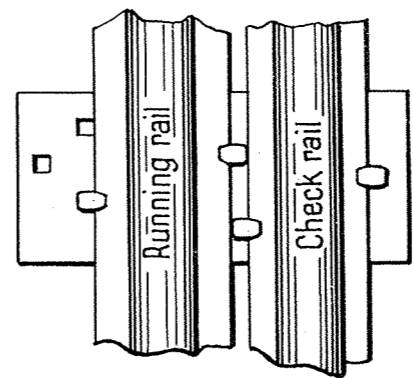
Adopted
1959
PLAN NO
F544



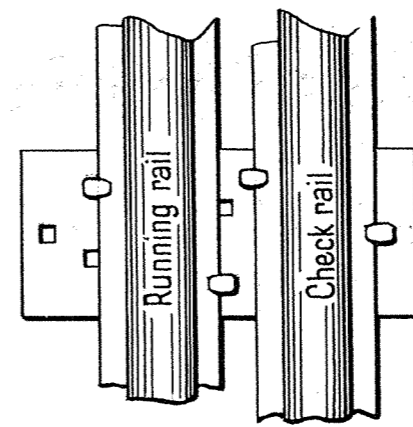
SLEEPER PLATE — (for 107 lb. rails)
Detail No. 1093



SLEEPER PLATE — (for 94 lb. rails)
Detail No. 1094



107 lb. rail



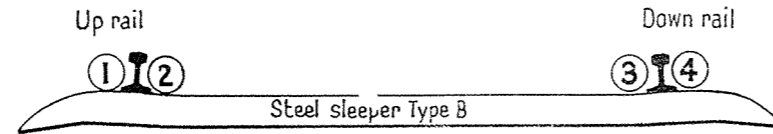
94 lb. rail

TYPICAL ARRANGEMENT

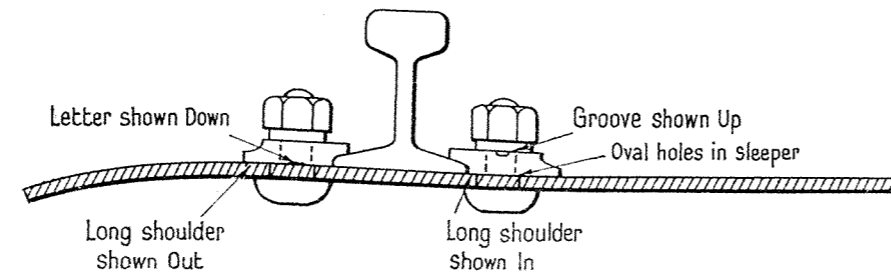
This plan supersedes Plan F 234

Rev'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		Approved <i>[Signature]</i> Chief Civil Engineer	Adopted 1959
STANDARD DRAWING		Drawn by S. F.	Checked by G. E. M.
CHECK RAIL SLEEPER PLATES 94 & 107 LB.		A. A. P. Eng ^r of Machy & Water Sy.	
3 1/2" FLANGWAY		PLAN No F545	



POSITION OF FASTENING ASSEMBLIES



TYPICAL ASSEMBLY OF RAIL TO SLEEPER

In the Tables the symbols represent the position of Bolts and Clips as follows :-

- "O" Long shoulder on bolt Out from rail
- "I" " " " " " In towards rail
- "D" Groove or Letter on Clip Down
- "U" " " " " " Up

The combination of oval holes in sleepers, reversible clips and off centre oval shoulder bolts permit adjustments to suit the gauge requirements as tabulated.

A Sleeper assembly consists of
1 No Steel Sleeper Type B
4 No Bolts and Nuts
2 No Grooved Clips
2 No Lettered Clips
4 No 1" Spring Washers Type 1944

TABLE OF ASSEMBLIES

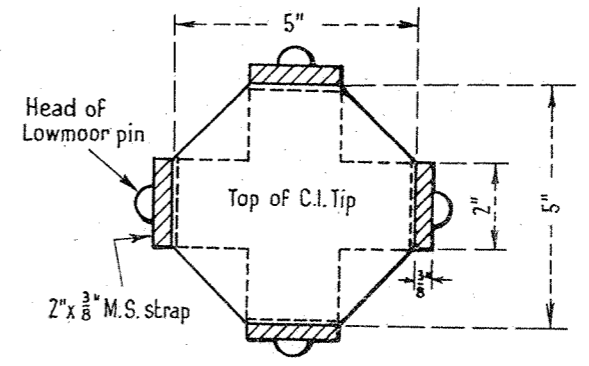
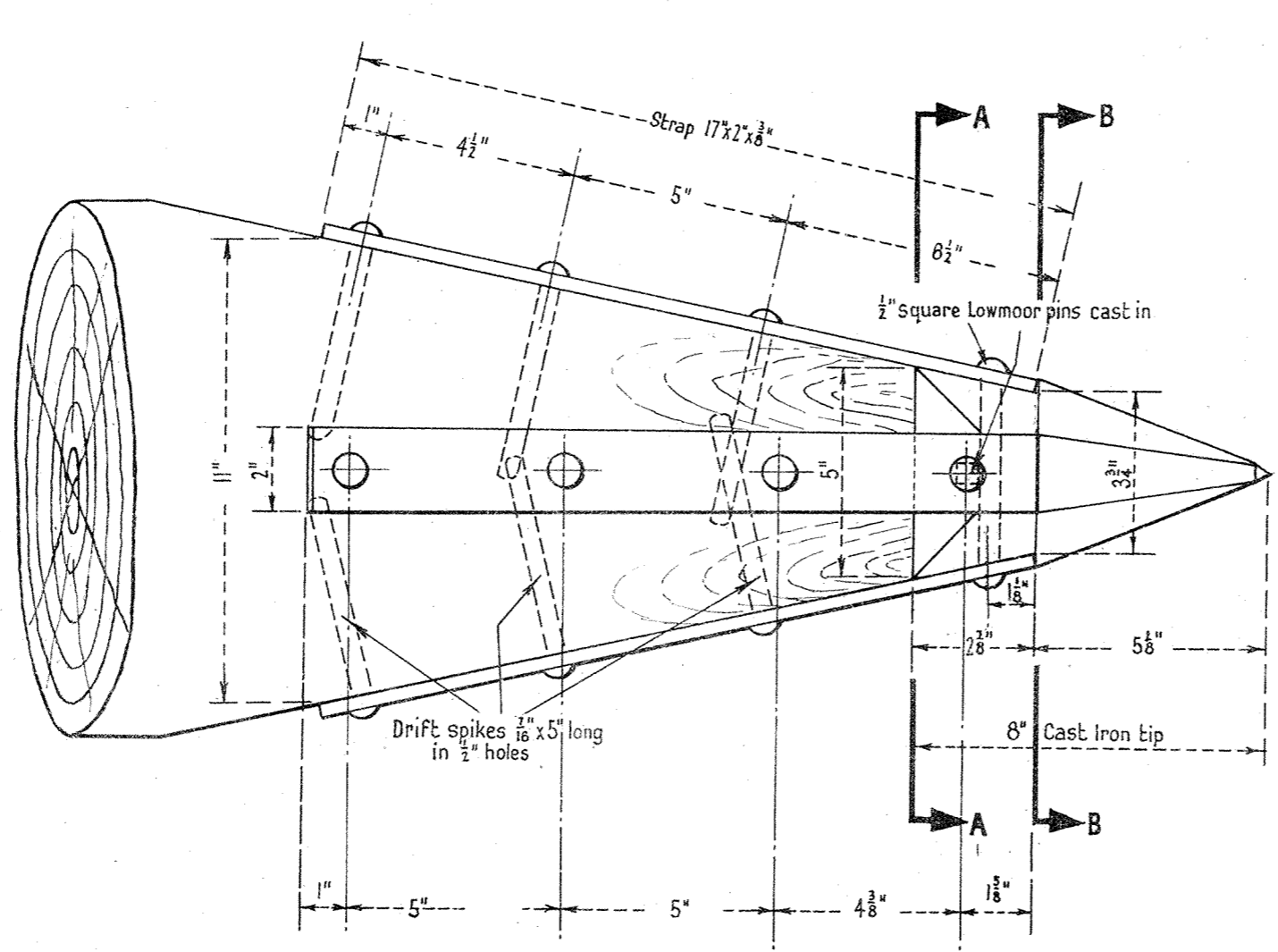
5'-3" GAUGE				
RAIL	Lettered Clip		Grooved Clips	
	60 D 60 AS	OD OU	IU OU	IU ID

5'-3 $\frac{1}{8}$ " GAUGE				
60 D 60 AS	OD OU	IU OU	ID OU	OU OU

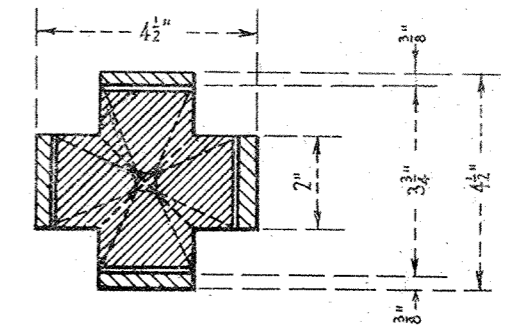
5'-3 $\frac{1}{4}$ " GAUGE				
60 D 60 AS	OU OU	ID OU	ID OD	OU ID

5'-3 $\frac{3}{8}$ " GAUGE				
60 D 60 AS	OU ID	ID OD	OU OD	ID ID

Revision	Date	Amendment	Amended by
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING STEEL SLEEPERS FASTENING ASSEMBLY For Type B with 60 lb.rails			Approved <i>[Signature]</i> Chief Civil Engineer Drawn by N.A. Checked by G.E.M. K.S. Eng of Machy & W.Sy
			Adopted 1959 PLAN NO F546



PLAN AT A-A



PLAN AT B-B

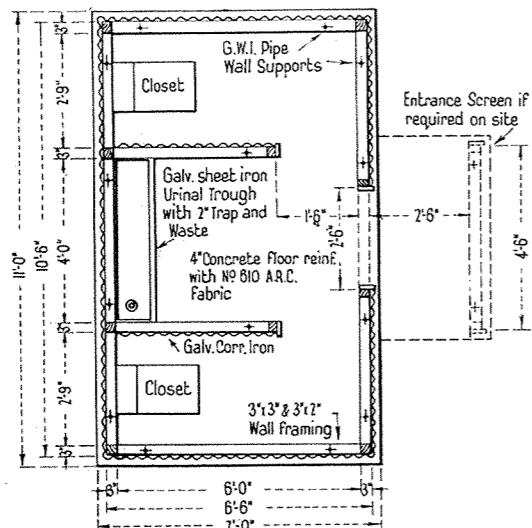
Scale : 3" = 1'-0"

Rev'n	Date	Amendment	Amended by

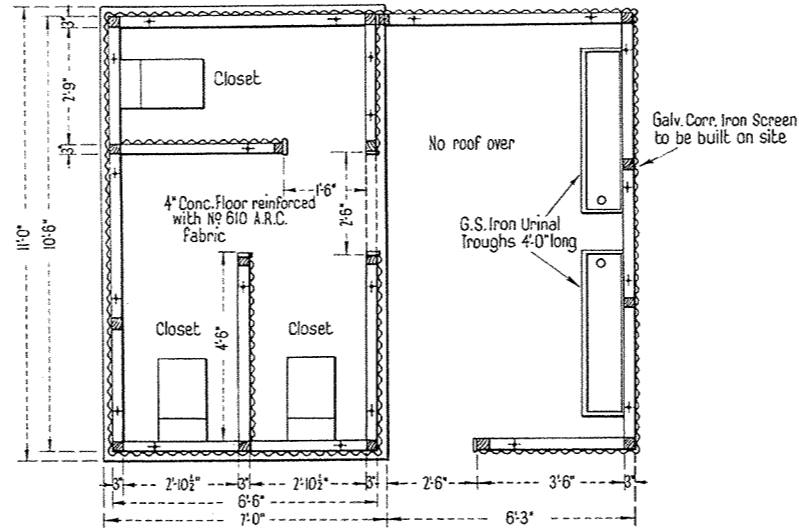
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
PILE SHOE

Approved
 Chief Civil Engineer
 Drawn by J.N.H.
 Checked by
 L.A.S.
 Eng^s of Structural Design

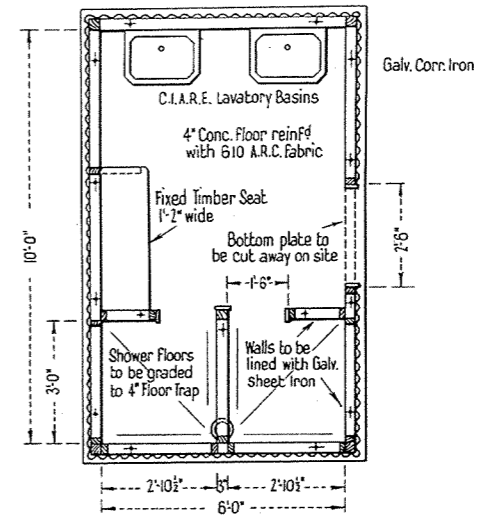
Adopted
 12.8.07
PLAN NO
F547



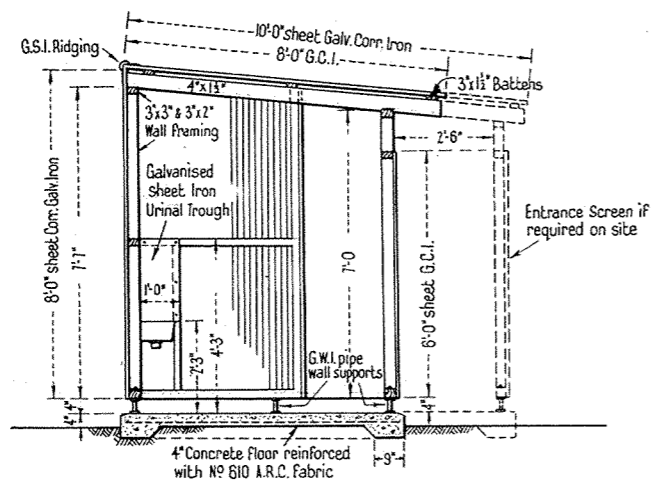
SANITARY BLOCK TYPE "A" FOR 16 MEN



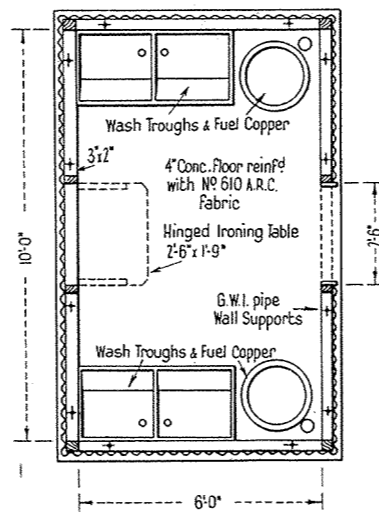
SANITARY BLOCK TYPE "B" FOR 25 MEN



ABLUTION BLOCK FOR 20 MEN TYPE "C"



TYPICAL CROSS SECTION



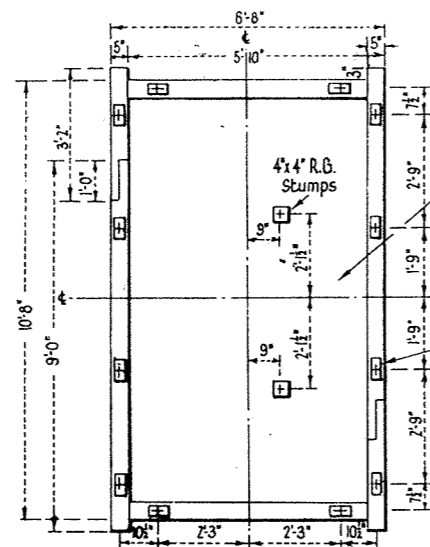
LAUNDRY BLOCK FOR 20 MEN TYPE "D"

Similar building to be provided as Boiler Room if required

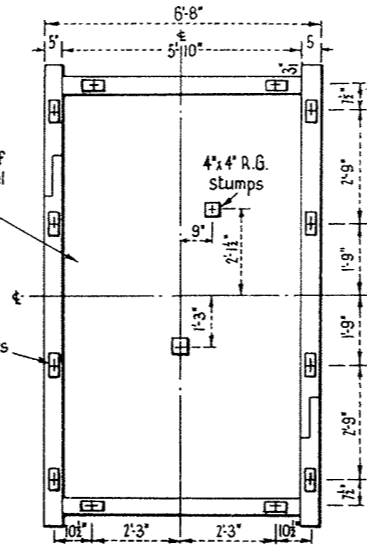
NOTE: This Plan should be read in conjunction with Plan No F 549

Revision	Date	Amendment	Amended by

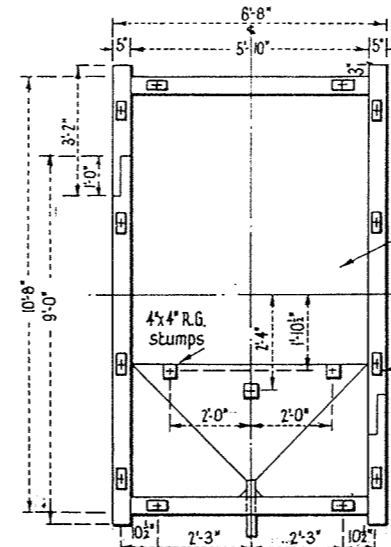
VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>[Signature]</i>	DEC. 1959
DETAILS OF AMENITIES BUILDING		Chief Civil Engineer	PLAN No
FOR STAFF CAMPS		Drawn by W.B./E.B. Checked by W.B.	
		<i>[Signature]</i>	F548
		Senior Architect	



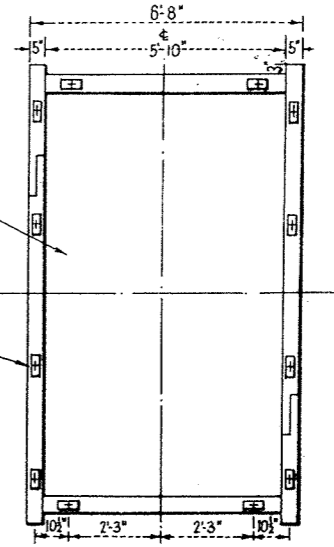
SANITARY BLOCK TYPE "A"



SANITARY BLOCK TYPE "B"

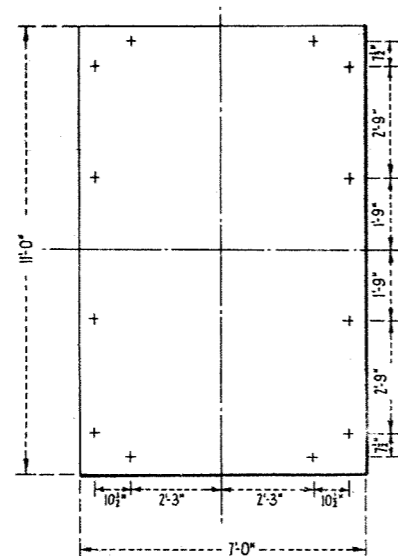


ABLUTION BLOCK TYPE "C"

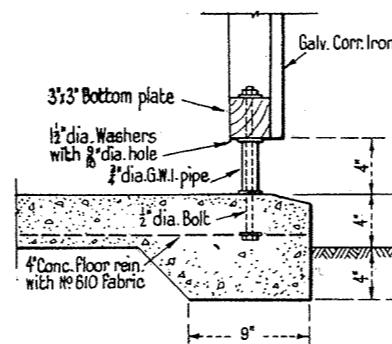


LAUNDRY BLOCK TYPE "D"

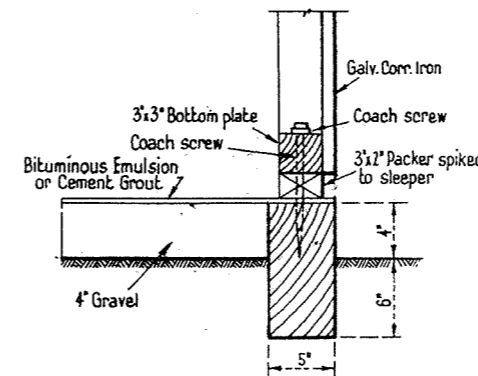
FOUNDATIONS FOR TEMPORARY CAMPS SHOWING POSITION OF HOLES FOR COACH SCREWS



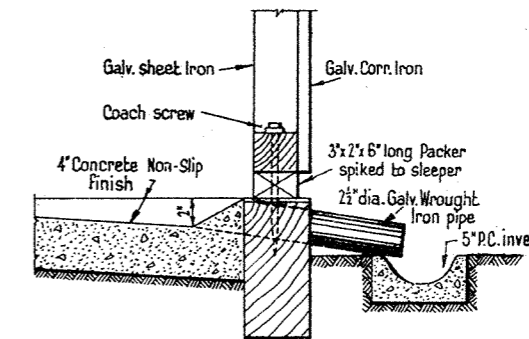
TYPICAL CONCRETE SLAB FOUNDATIONS FOR PERMANENT BUILDINGS SHOWING POSITION OF BOLTS UNDER EXTERNAL WALLS POSITION OF BOLTS UNDER INTERNAL WALLS TO BE THE SAME AS FOR TEMPORARY BUILDINGS



DETAIL OF G.W.I. PIPE WALL SUPPORT CONCRETE BASE



DETAIL OF FLOOR & WALL SUPPORT SLEEPER BASE



DETAIL OF FLOOR IN SHOWERS SLEEPER BASE

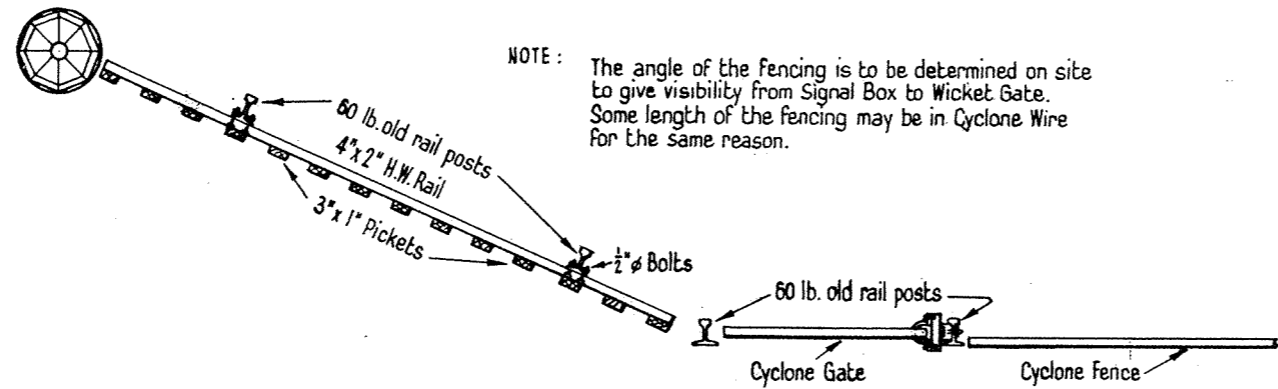
NOTE: This Plan should be read in conjunction with Plan No F548

Revision	Date	Amendment	Amended by

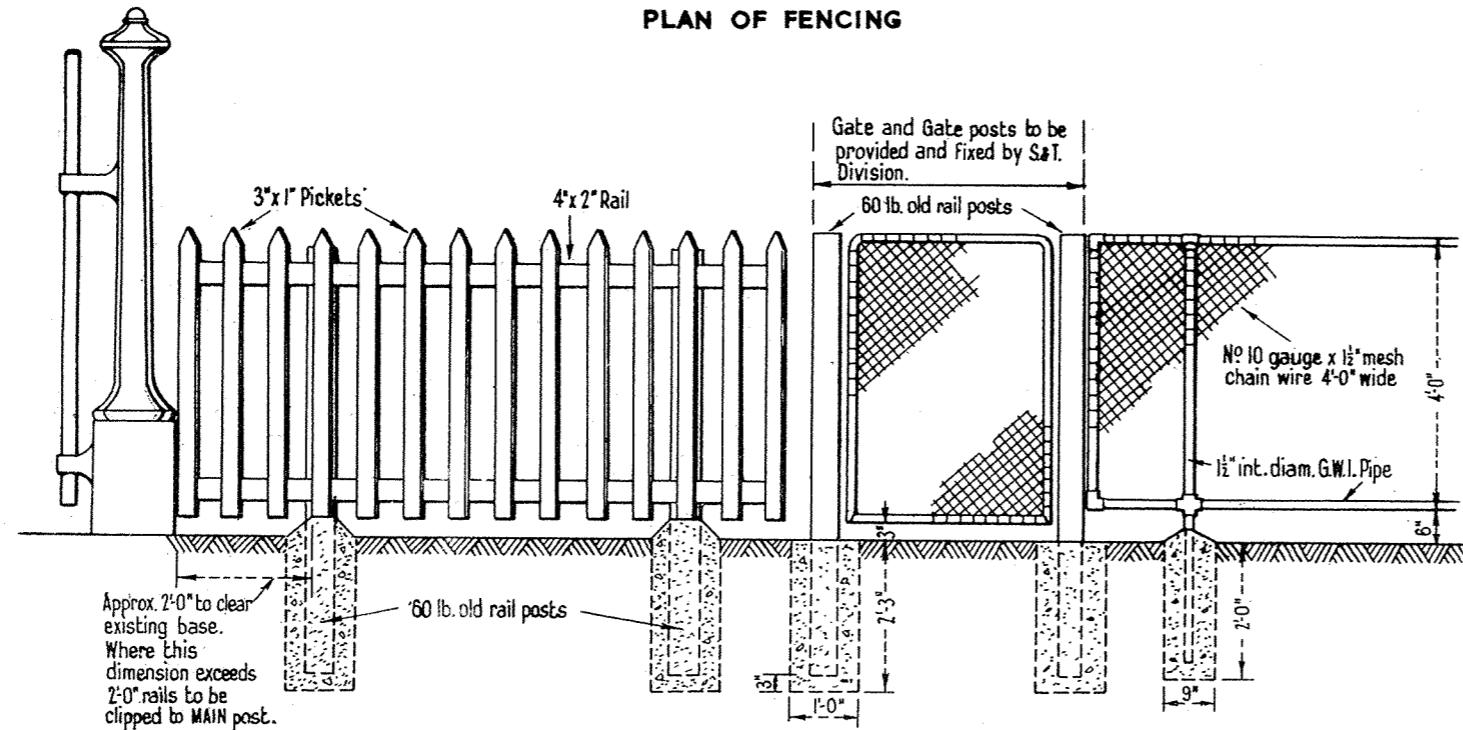
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
 FOUNDATION DETAILS OF
 AMENITIES BUILDINGS FOR
 STAFF CAMPS

Approved
[Signature]
 Chief Civil Engineer
 Drawn by
 W.B./E.B.
 Checked by
 W.B.
[Signature]
 Senior Architect

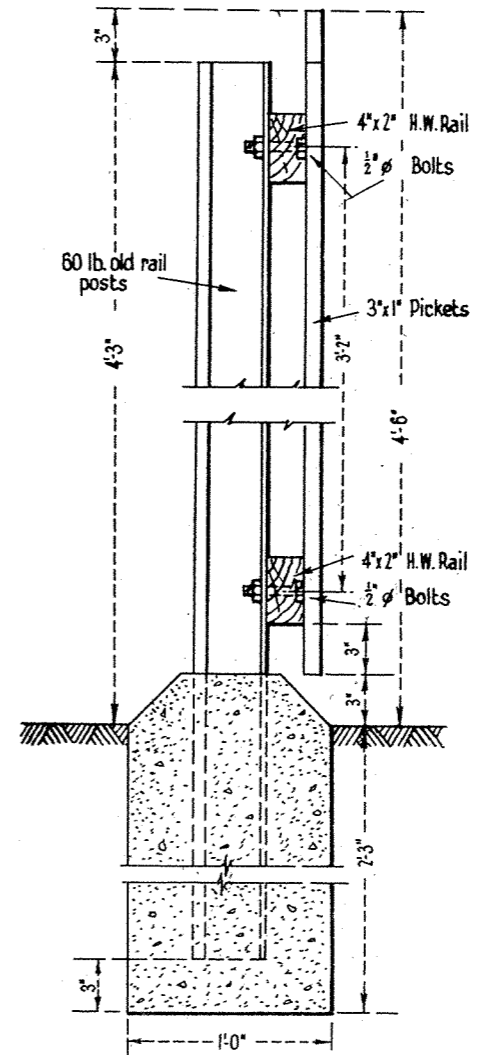
Adopted
 DEC. 1959
 PLAN No
F549



PLAN OF FENCING



ELEVATION OF FENCING



SECTION THROUGH PICKET FENCE

Rev'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS - WAY & WORKS BRANCH
STANDARD DRAWING
 WING FENCING AT
 INTERLOCKED GATES

Approved by
 Chief Civil Engineer
 Drawn by C.S./E.B.
 Checked by W.B.
 126
 Senior Architect

Adopted
 DEC. 1959
 PLAN NO
F550

Y LAYOUT POINTS. V-NOSED

ARRANGEMENT		LAYOUT	90 & 94 LB. RAIL		107 & 110 LB. RAIL	
			No 1 SPREADER	No 2 & 3 SPREADER	No 1 SPREADER	No 2 & 3 SPREADER
INTERLOCKED	INSULATED	COMMON, SINGLE COMPOUND, DOUBLE COMPOUND.	TA. 201	TA. 202	TA. 101	TA. 102
HAND WORKED	INSULATED	COMMON, SINGLE COMPOUND	TA. 203	TA. 202	TA. 103	TA. 102
" "	" "	DOUBLE COMPOUND	TA. 204	TA. 202	TA. 204	TA. 102
HAND WORKED	NON-INSULATED	COMMON, SINGLE COMPOUND	TA. 303	TA. 402	*TA. 103	*TA. 102
" "	" "	DOUBLE COMPOUND	*TA. 204	TA. 402	*TA. 204	*TA. 102

Y LAYOUT POINTS OTHER THAN V-NOSED

ARRANGEMENT		LAYOUT	80, 90, 100 LB. RAIL		}	Drilled & Bushed one end only. Opposite end to be field drilled to suit.		
			No 1 SPREADER	No 2 & 3 SPREADER				
INTERLOCKED	INSULATED	COMMON, SINGLE COMPOUND, DOUBLE COMPOUND	TA. 501	TA. 502				
HAND WORKED	INSULATED AND NON-INSULATED	COMMON, SINGLE COMPOUND	*TA. 503	*TA. 502				
" "	" "	DOUBLE COMPOUND	*TA. 504	*TA. 502				

Y LAYOUT CATCH POINTS

ARRANGEMENT		LAYOUT	ALL WEIGHTS 80 - 110 LB. RAIL
INTERLOCKED	INSULATED	OPERATED FROM SIDE ADJACENT TO SWITCH	TA. 105
" "	" "	OPERATED FROM SIDE OPPOSITE TO SWITCH	TA. 106
HAND WORKED	NON-INSULATED	OPERATED FROM SIDE ADJACENT TO SWITCH	TA. 107

NOTES:

- All Interlocked Points are to be equipped with insulated Spreaders.
- * Insulated Spreaders used in lieu of Non-insulated Spreaders.
- No 3 Spreaders are used only with 22'-6", 94 & 107 lb., V-nosed Points and 18'-0", 80, 90 & 100 lb. Y Layout Points, other than V-nosed.
- To be ordered separately :- Spreader Bolts IF 3116 for V-nosed Points.
Spreader Pins IF 52 for other than V-nosed Points.

This plan supersedes Plan No F479 & No F480

Rev'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING SPREADERS ORDERING LIST FOR Y LAYOUT POINTS	Approved <i>[Signature]</i> Chief Civil Engineer	Adopted JAN. 1960
	Drawn by K.W.D. Checked by G.E.M.	PLAN No F552
	- A. A. P. Eng. of Machy & W.S.	

Y LAYOUT POINTS. V-NOSED

ARRANGEMENT		LAYOUT	90 & 94 LB. RAIL		107 & 110 LB. RAIL	
			No 1 SPREADER	No 2 & 3 SPREADER	No 1 SPREADER	No 2 & 3 SPREADER
INTERLOCKED	INSULATED	COMMON, SINGLE COMPOUND, DOUBLE COMPOUND.	TA.201	TA.202	TA.101	TA.102
HAND WORKED	INSULATED	COMMON, SINGLE COMPOUND	TA.203	TA.202	TA.103	TA.102
" "	" "	DOUBLE COMPOUND	TA.204	TA.202	TA.204	TA.102
HAND WORKED	NON-INSULATED	COMMON, SINGLE COMPOUND	TA.303	TA.402	*TA.103	*TA.102
" "	" "	DOUBLE COMPOUND	*TA.204	TA.402	*TA.204	*TA.102
INTERLOCKED	INSULATED RAIL CLAMP POINT LOCK	COMMON, SINGLE COMPOUND, DOUBLE COMPOUND.	TA.119	TA.120	TA.219	TA.119

Y LAYOUT POINTS OTHER THAN V-NOSED

ARRANGEMENT		LAYOUT	80, 90, 100 LB. RAIL		}	Drilled & Bushed one end only. Opposite end to be field drilled to suit.		
			No 1 SPREADER	No 2 & 3 SPREADER				
INTERLOCKED	INSULATED	COMMON, SINGLE COMPOUND, DOUBLE COMPOUND	TA.501	TA.502				
HAND WORKED	INSULATED AND NON-INSULATED	COMMON, SINGLE COMPOUND	*TA.503	*TA.502				
" "	" "	DOUBLE COMPOUND	*TA.504	*TA.502				
INTERLOCKED	INSULATED RAIL CLAMP POINT LOCK	COMMON, SINGLE COMPOUND, DOUBLE COMPOUND	TA.419	TA.419				

Y LAYOUT CATCH POINTS

ARRANGEMENT		LAYOUT	ALL WEIGHTS 80 - 110 LB. RAIL	
INTERLOCKED	INSULATED	OPERATED FROM SIDE ADJACENT TO SWITCH	37/8880	TA.105
" "	" "	OPERATED FROM SIDE OPPOSITE TO SWITCH	37/8900	TA.106
HAND WORKED	NON-INSULATED	OPERATED FROM SIDE ADJACENT TO SWITCH		TA.107
INTERLOCKED	INSULATED	RAIL CLAMP POINT LOCK		TA.205

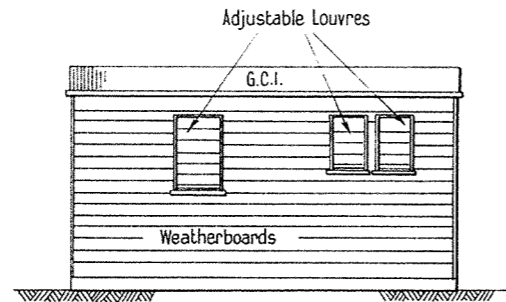
NOTES: All Interlocked Points are to be equipped with insulated Spreaders.
 * Insulated Spreaders used in lieu of Non-insulated Spreaders.
 No 3 Spreaders are used only with 22'-6", 94 & 107 lb., V-nosed Points and 18'-0", 80, 90 & 100 lb. Y Layout Points, other than V-nosed.
 To be ordered separately :- Spreader Bolts 1F3116 for V-nosed Points.
 Spreader Pins 11F52 for other than V-nosed Points.

Signal & Communications
Supervisor
No. 5 District

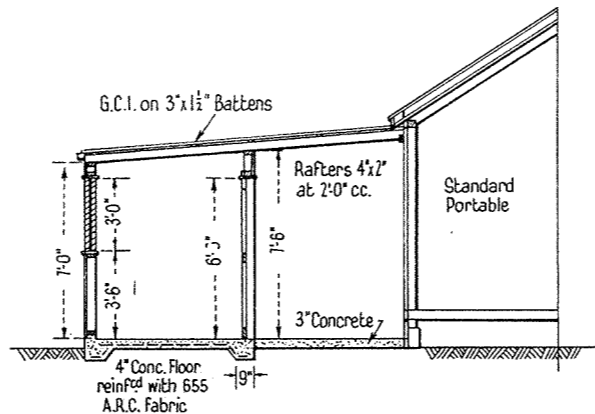
This plan supersedes Plan No F479 & No F480

"A"	10.7.74	Spreader details for Rail Clamp Point Lock added	K.S.
Rev'n	Date	Amendment	Amended by

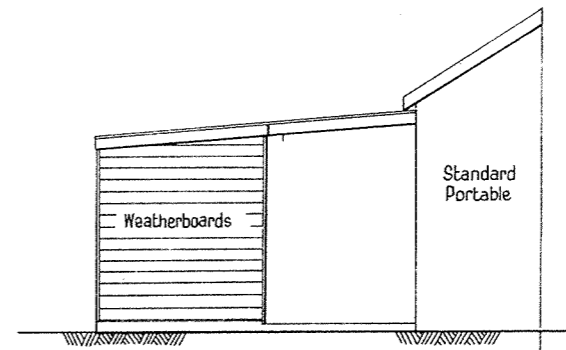
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH STANDARD DRAWING		Approved <i>[Signature]</i> Chief Civil Engineer	Adopted JAN. 1960
Drawn by K.W.D.	Checked by G.E.M.	PLAN No F552A	
		-A.A.P. Eng. of Machy & W.Sy	



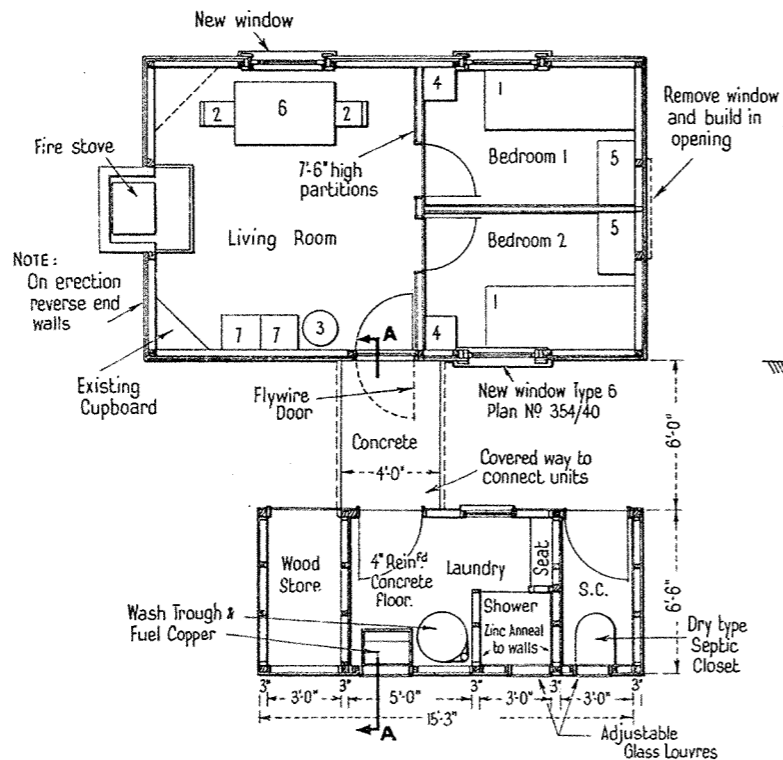
FRONT ELEVATION



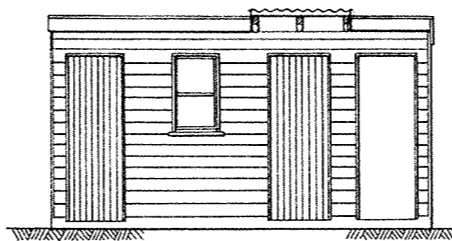
SECTION A-A



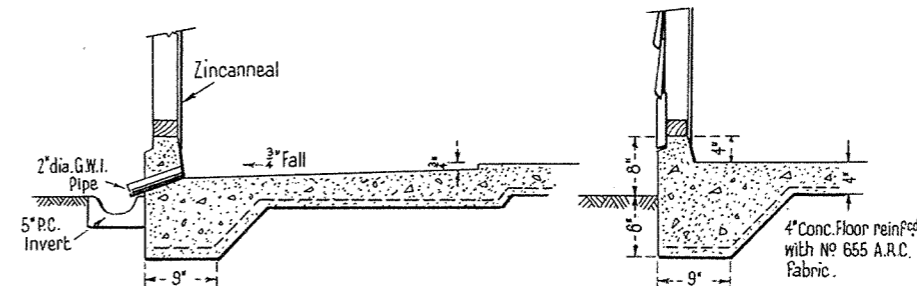
RIGHT ELEVATION



PLAN
SUBDIVISION OF 20'x12' PORTABLE
WITH OUTBUILDING



REAR ELEVATION



SHOWER FLOOR DETAIL

FLOOR DETAIL

FURNITURE SCHEDULE	
1	Bed
2	Chair
3	Meat Safe
4	Bedside Table
5	Wardrobe
6	Meal Table 4'-0" x 2'-6"
7	Food Locker
	Store Schedule Items
	to Plan 94/50
	- - 476/50
	- - 597/28
	- - 164/47

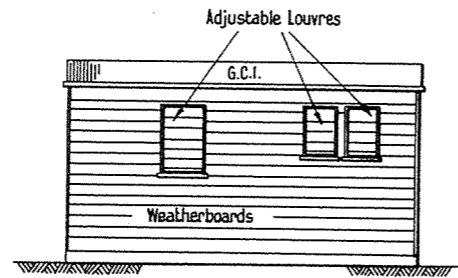
NOTE: This Plan supersedes Plan No 318A/56 & Plan No 260/57

Revision	Date	Amendment	Amended by

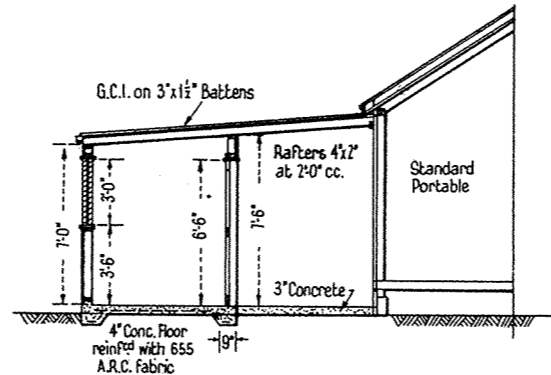
VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
STAFF LIVING ACCOMMODATION
SUBDIVISION OF 1911 STANDARD
PORTABLE WITH SEPARATE
AMENITIES OUTBUILDING

Approved
Chief Civil Engineer
Drawn by
Checked by
Senior Architect

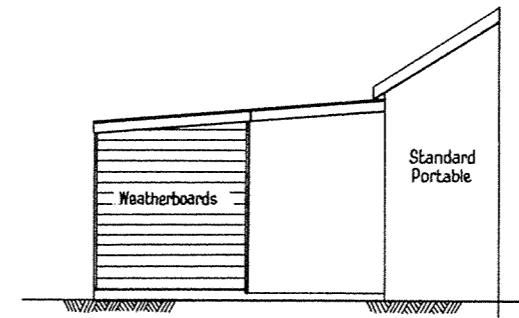
Adopted
JULY 1960
PLAN No
F553



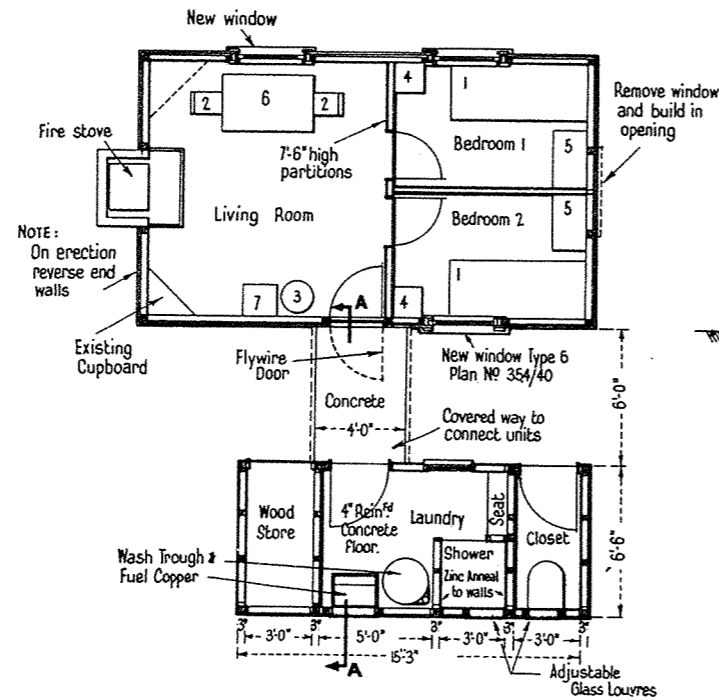
FRONT ELEVATION



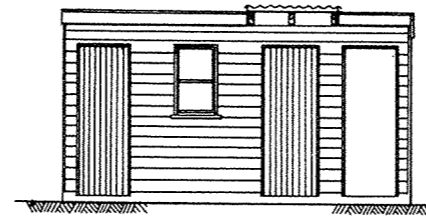
SECTION A-A



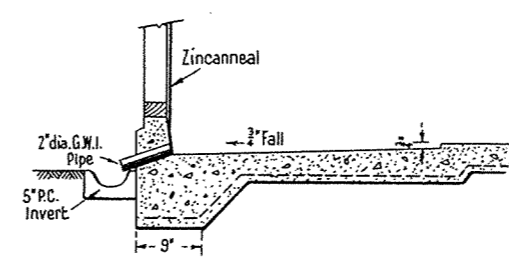
RIGHT ELEVATION



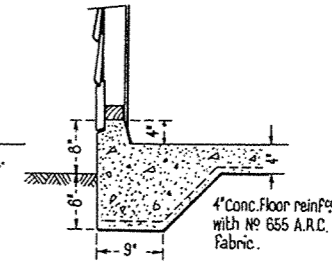
PLAN
SUBDIVISION OF 20'x12' PORTABLE
WITH OUTBUILDING



REAR ELEVATION



SHOWER FLOOR DETAIL



FLOOR DETAIL

FURNITURE SCHEDULE		
1	Bed	} Store Schedule Items
2	Chair	
3	Meat Safe	
4	Bedside Table	to Plan 94/50
5	Wardrobe	- - 476/50
6	Meal Table 4'-0" x 2'-6"	- - 597/28
7	Food Locker, Steel 2 Compartment	} Stores Schedule Item

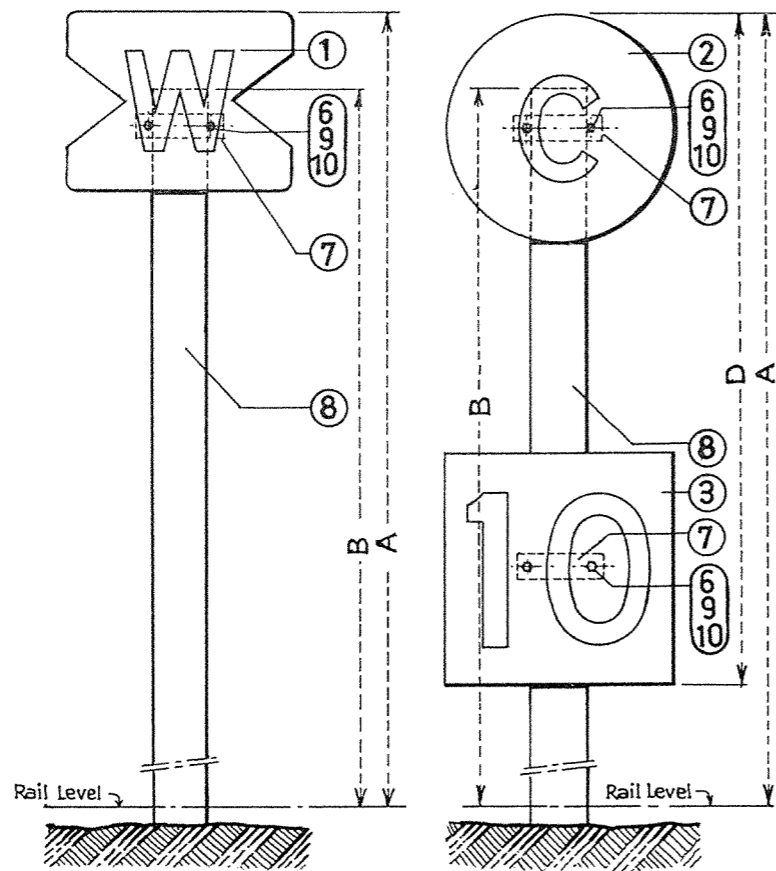
NOTE: This plan supersedes Plan No 318A/56 & Plan No 260/57
Septic closet to be provided if adjacent Y.R. buildings are similarly equipped.

Revision	Date	Amendment	Amended by
A	15-2-63	Revision of Item 7, Food Locker; & Septic Closet	

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
STAFF LIVING ACCOMMODATION
SUBDIVISION OF 1911 STANDARD
PORTABLE WITH SEPARATE
AMENITIES OUTBUILDING

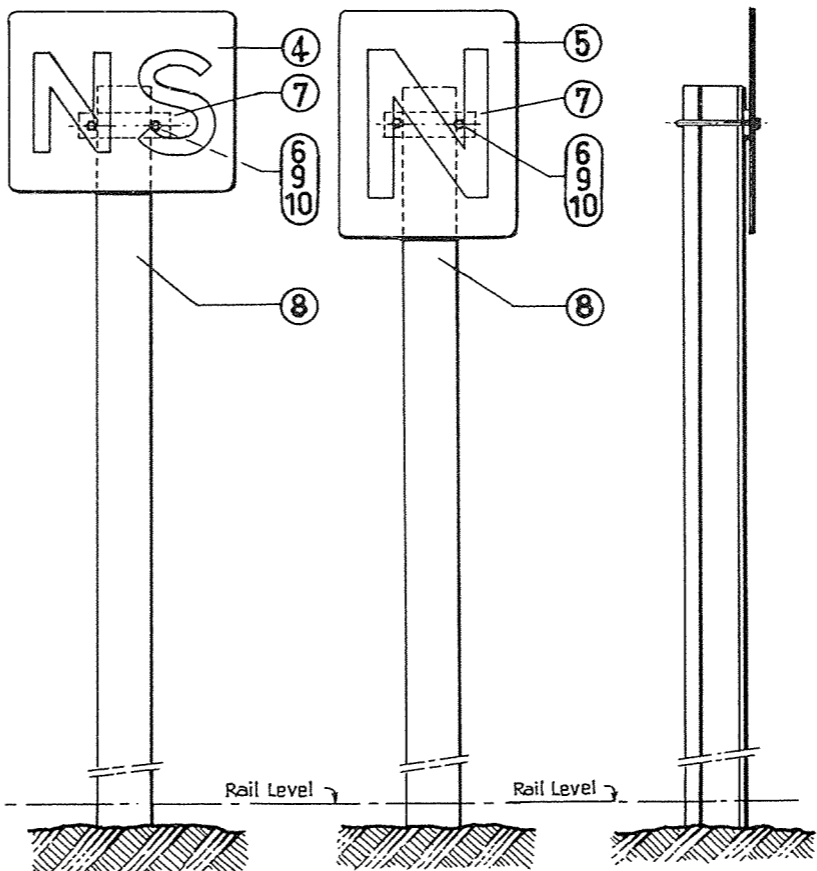
Approved
Chief Civil Engineer
Drawn by
Checked by
Senior Architect

Adopted
JULY 1960
PLAN No
F553A



WARNING SIGNAL

CAUTION SIGNAL



N. S. SIGNAL

N. SIGNAL

TYPICAL ELEVATION

Item N°	Description	Electrified Suburban Lines	Other Lines
11	Transit Box	1	1
10	Fibre Washer	20	16
9	Self-Locking Nut	20	16
8	Post	8	6
7	Sign Bracket	10	8
6	U Bolt	10	8
5	N Sign	2	2
4	N S Sign	2	
3	Speed Sign	2	2
2	Caution Sign	2	2
1	Warning Sign	2	2
		N° per set	

NOTE:- Posts, 60 lb. unserviceable rail, to be supplied by District Engineer and to be painted white above ground level.
Speed sign numerals as shown or as ordered.

Dimension	Outside tracks or between tracks over 16'-9" centres.	Between tracks 16'-9" centres & under.
A	7' - 0"	3' - 2"
B	6' - 6"	2' - 8"
D	4' - 5"	3' - 10"

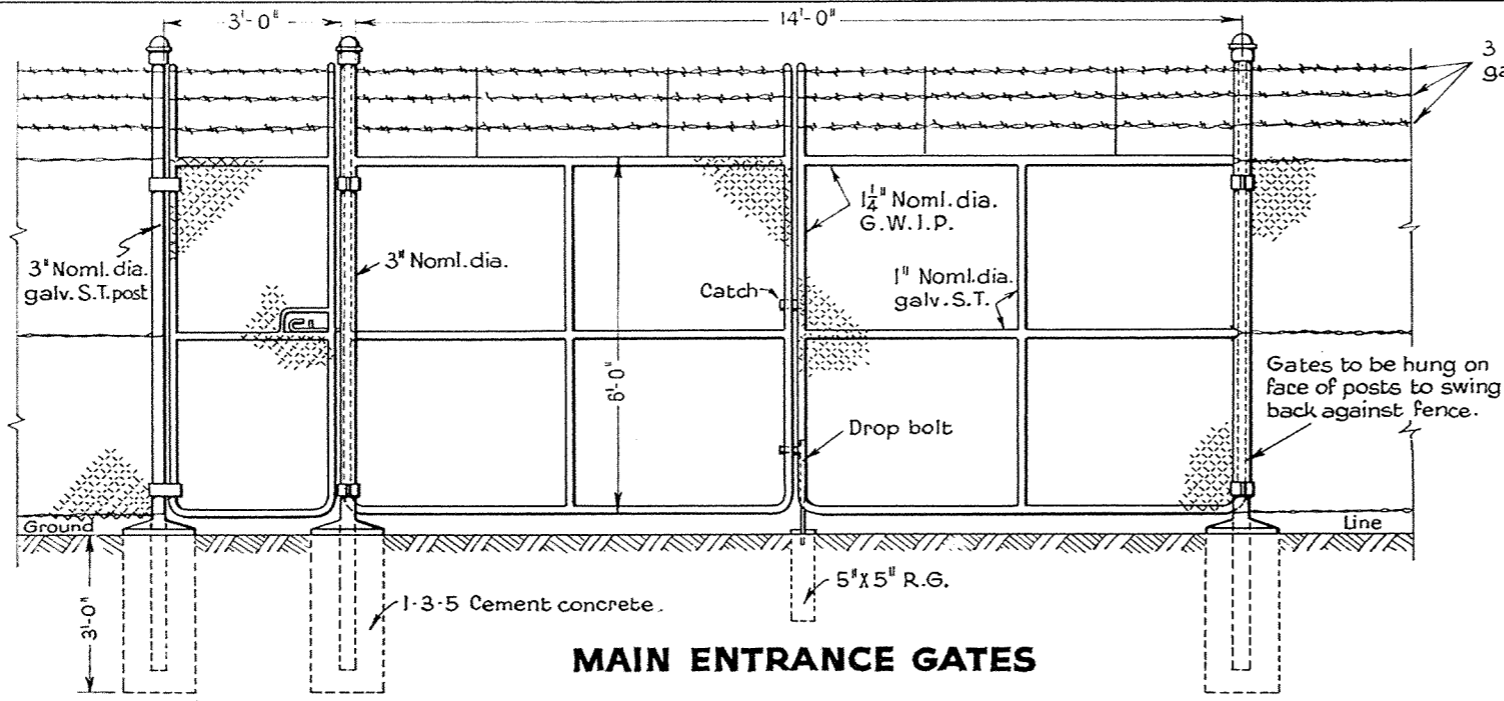
For dimension A = 7'-0", post to be located at 5'-9" from nearest rail between tracks.
" 6'-3" " " " " outside tracks.

Rev'n	Date	Amendment	Amended by

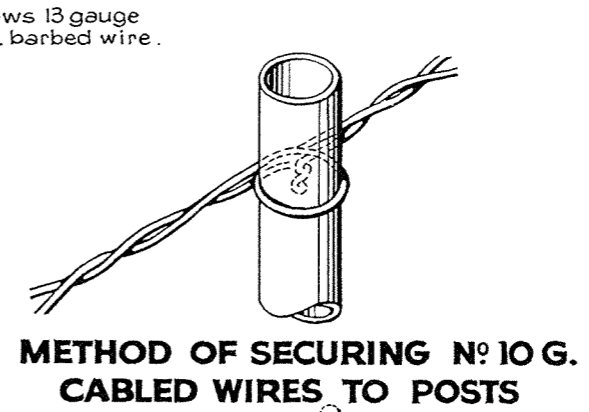
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING

SPECIAL PERMANENT WAY
WARNING AND CAUTION SIGNALS

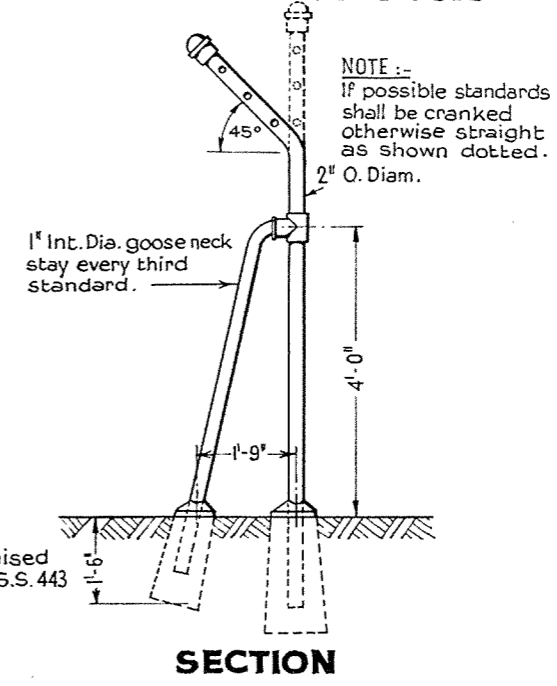
Approved <i>S. B. D. 29.4.68</i> Chief Civil Engineer	Adopted 1968
Drawn by AJO/M.O.	Checked by D.S.
Engineer of M.&W.S.	PLAN N° F556



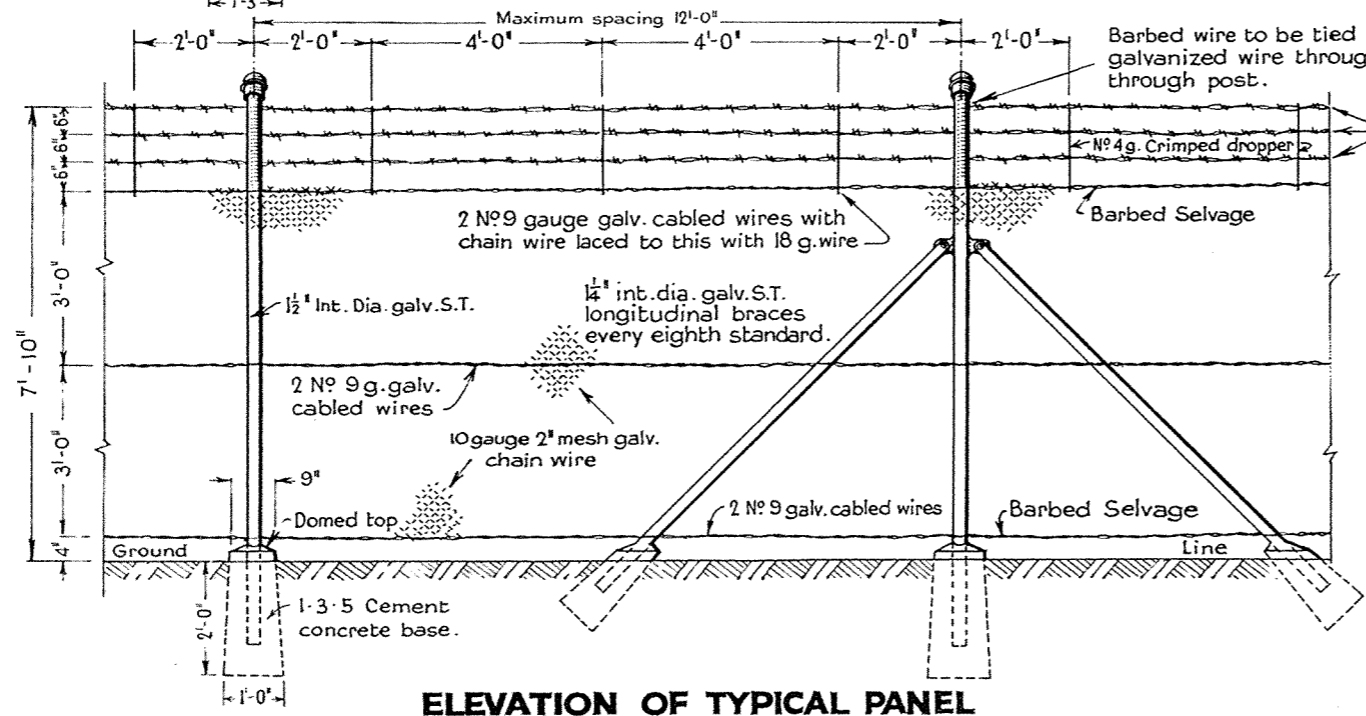
MAIN ENTRANCE GATES



METHOD OF SECURING NO 10 G. CABLED WIRES TO POSTS



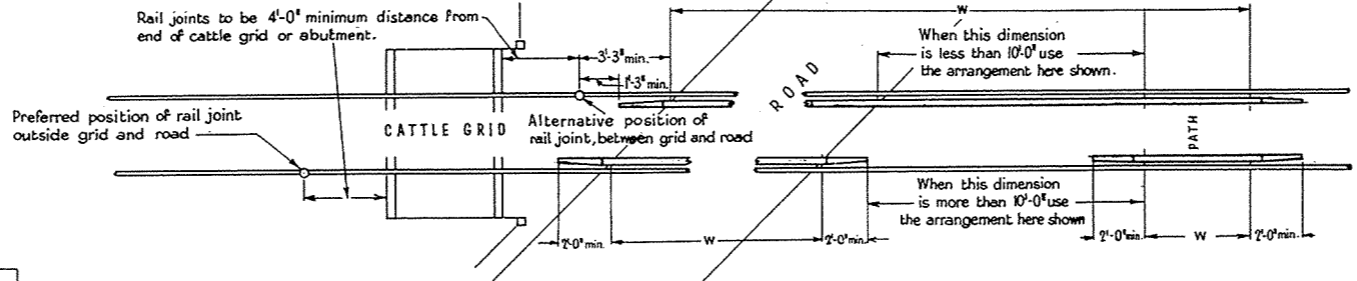
SECTION



ELEVATION OF TYPICAL PANEL

VICTORIAN RAILWAYS-WAYS & WORKS BRANCH
STANDARD DRAWING
CHAIN WIRE FENCING
 No Scale

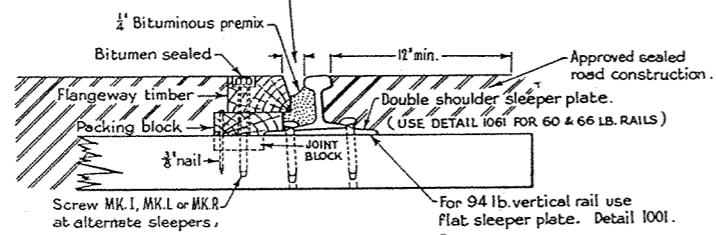
Rev'n	Date	Amendment	Amended
Approved		Adopted	
Chief Civil Engineer		1963	
Drawn by	Checked by	PLAN NO	
E.A.E./M.C.		F 557	
Senior Architect			



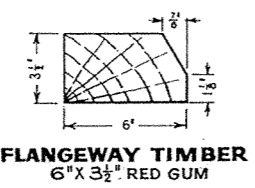
NOTE :-
 Sleeper spacing under flangeway.
 Timbers to be approx. 2'-1".
 10'x5' selected red gum sleepers
 to be used under flangeway timbers.

FLANGEWAYS			
TRACKS USED BY LOCOMOTIVES			
RAIL IN CHAINS OVER 10	8-10	7-8	UNDER 7
FLANGEWAY	2 3/4'	2 1/2'	2 1/4'
TRACKS NOT USED BY LOCOMOTIVES			
2 1/2' ALL FLANGEWAYS			

TYPICAL LEVEL CROSSING WITH FLANGEWAY TIMBERS



TYPICAL SECTION OF RAIL WITH FLANGEWAY TIMBERS

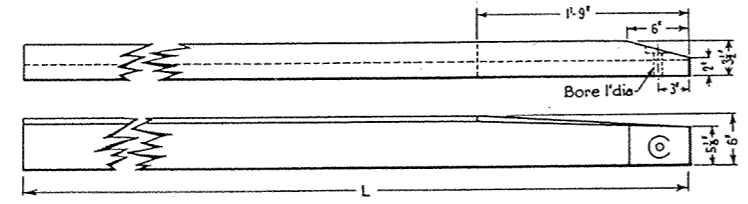


FLANGEWAY TIMBER
 6" X 3 1/2" RED GUM

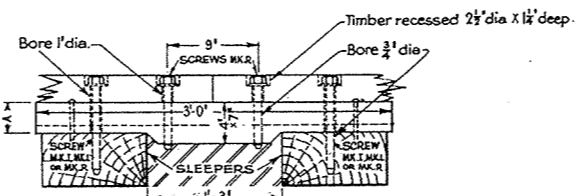
RAIL	HOW LAID	A	BLOCKS	
			PACKING	JOINT
60 LB.	1 IN 20	1 1/4"	5063	5084
66 LB.	1 IN 20	1 1/4"	6083	6084
75 LB.	1 IN 20	1 1/4"	7083	7084
80 LB.	1 IN 20	2 1/4"	8083	8084
94 LB.	VERTICAL	2 3/4"	1083	1084
	1 IN 20	2 3/4"	2083	2084
107 LB.	VERTICAL	3 1/4"	3083	3084
	1 IN 20	3 1/4"	4083	4084

BLOCK DETAIL NOS.

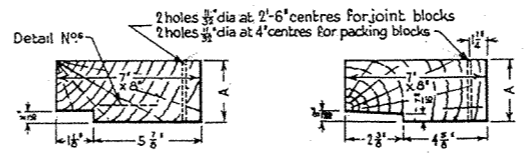
PACKING BLOCKS RED GUM



DETAIL OF FLANGEWAY TIMBER END

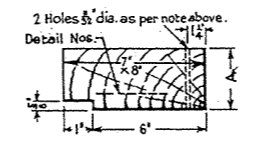


DETAIL AT JOINT IN FLANGEWAY TIMBERS

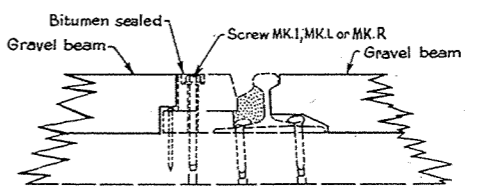


END SECTION COMMON TO PACKING AND JOINT BLOCKS

RAIL LAID VERTICAL 75, 80, 94 & 107 LB. RAILS
 RAIL LAID 1 IN 20

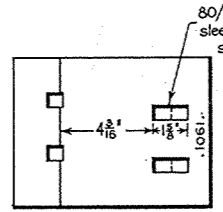


END SECTION COMMON TO PACKING AND JOINT BLOCKS 60 & 66 LB RAILS



TYPICAL NOTCHING OF GRAVEL BEAM TIMBERS

NOTE :- Gravel beam to be held down with chair screws MK.I, MK.L or MK.R with 1" washers under head. Timber recessed 2 1/2" dia. x 1 1/4" deep.



SLEEPER PLATE FOR 60 & 66 LB RAILS

80/90 lb. single shouldered sleeper plate slotted as shown.

This Plan supersedes Plans N° F438^A and F439^A.

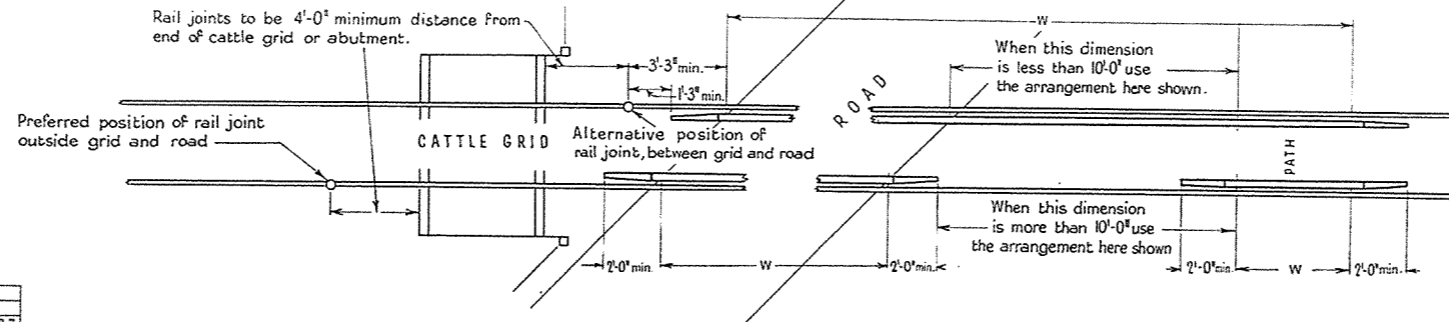
NOTES :- Joint to be arranged to be between two suitable sleepers. - Ends of flangeway timbers to be adzed to form entry splay and secured to the first or second sleeper from edge of road or path. - Joint to be given a coat of emulsified bitumen. - Sides and bottom of rail through timber to be cleaned and given one good coat of emulsified bitumen. Flangeway timber joint screws are to be MK.R. - Holding down screws are to be as follows :-
 MK.R. for 60 & 66 lb rails, MK.L for 75 & 80 lb rails, MK.L for 94 & 107 lb rails.
 Nails are to be as follows :-
 4" x 8" for 60 to 80 lb rails, 6" x 8" for 94 & 107 lb rails.

ORDERING PARTICULARS REQUIRED :-
 No. and length of flangeway timbers (End & Plain)
NOTE :- Length of flangeway timbers - width W + 4'-0" min.
 No. of PACKING BLOCKS
 " " SLEEPER PLATES (Use detail 1061 for 60 & 66 lb rails)
 " " SCREWS MK. R.
 " " SCREWS MK. I.
 " " SCREWS MK. L.
 " " DOGSPIKES 6"
 " " NAILS 4" x 3"
 " " NAILS 6" x 3"
 " " WASHERS, ROUND, 2 1/2" x 6" x 1 1/8" ROUND HOLE.

Revision	Date	Amendment	Amended by

Victorian Railways - Way and Works Branch
STANDARD DRAWING
LEVEL CROSSINGS
FLANGEWAY TIMBERS
 FOR
60, 66, 75, 80, 94 & 107 LB. RAILS

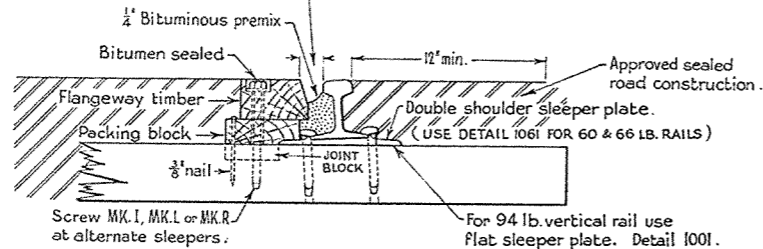
Approved
 Chief Civil Engineer
 Adopted
 1949
 Drawn by
 K.W.D./M.O.
 Checked by
 G.E.M.
 A.A.P.
 Eng' of Mach & W.S.
PLAN N°
F558



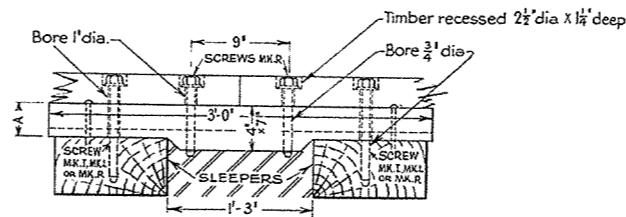
NOTE :-
 Sleeper spacing under flangeway.
 Timbers to be approx. 2'-1".
 10" x 5" selected red gum sleepers to be used under flangeway timbers.

FLANGEWAYS	
TRACKS USED BY LOCOMOTIVES	
RAD. IN CHAINS	OVER 10
6-10	7-8
UNDER 7	
FLANGEWAY	2 1/2' 2 3/4' 2 7/8' 2 3/4'
TRACKS NOT USED BY LOCOMOTIVES	
	2 3/4' ALL FLANGEWAYS

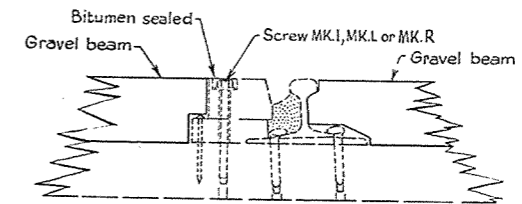
TYPICAL LEVEL CROSSING WITH FLANGEWAY TIMBERS



TYPICAL SECTION OF RAIL WITH FLANGEWAY TIMBERS

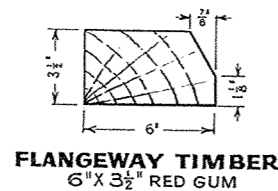


DETAIL AT JOINT IN FLANGEWAY TIMBERS



TYPICAL NOTCHING OF GRAVEL BEAM TIMBERS

NOTE:- Gravel beam to be held down with chair screws MK.I, MK.L or MK.R with 1" washers under head. Timber recessed 2 1/2" dia. x 1 1/4" deep.

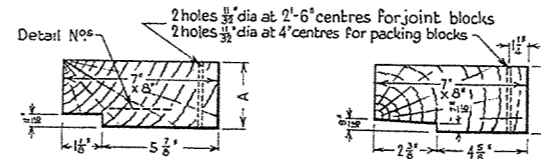


FLANGEWAY TIMBER 6" X 3 1/2" RED GUM

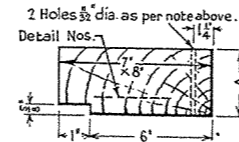
RAIL	HOW LAID	A	BLOCKS	
			PACKING	JOINT
60 LB.	1 IN 20	1 3/4"	5083	5084
66 LB.	1 IN 20	1 7/8"	6083	6084
75 LB.	1 IN 20	1 3/4"	7083	7084
80 LB.	1 IN 20	2 1/4"	8083	8084
94 LB.	VERTICAL	2 3/4"	1083	1084
	1 IN 20	2 5/8"	2083	2084
107 LB.	VERTICAL	3 3/8"	3083	3084
	1 IN 20	3 1/2"	4083	4084

BLOCK DETAIL Nos.

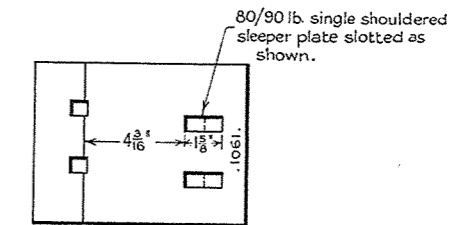
PACKING BLOCKS RED GUM



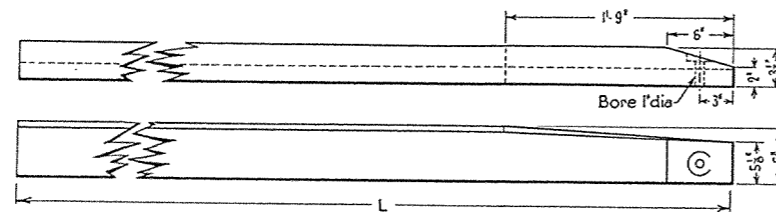
END SECTION COMMON TO PACKING AND JOINT BLOCKS
RAIL LAID VERTICAL 75, 80, 94 & 107 LB. RAILS
RAIL LAID 1 IN 20



END SECTION COMMON TO PACKING AND JOINT BLOCKS 60 & 66 LB RAILS



SLEEPER PLATE FOR 60 & 66 LB. RAILS



DETAIL OF FLANGEWAY TIMBER END

NOTES :- Joint to be arranged to be between two suitable sleepers. - Ends of Flangeway timbers to be adzed to form entry splay and secured to the first or second sleeper from edge of road or path. - Joint to be given a coat of black bituminous sealing compound. - Sides and bottom of rail through timber to be cleaned and given one good coat of black bituminous sealing compound. Flangeway timber joint screws are to be MK.R. - Holding down screws are to be as follows :-
 MK.R. for 60 & 66 lb. rails, MK.L for 75 & 80 lb. rails, MK.L for 94 & 107 lb rails
 Nails are to be as follows :-
 4" x 3/8" for 60 to 80 lb. rails, 5" x 3/8" for 94 & 107 lb. rails.

ORDERING PARTICULARS REQUIRED :

- No. and length of Flangeway timbers (End & Plain)
- NOTE :-** Length of Flangeway timbers = width W + 4'-0" min.
- No. of PACKING BLOCKS.
- JOINT BLOCKS
- SLEEPER PLATES. (Use detail 1061 for 60 & 66 lb rails)
- SCREWS MK. R.
- SCREWS MK. L.
- SCREWS MK. L.
- SCREWS MK. L.
- DOG SPIKES 6"
- NAILS 4" x 3/8"
- NAILS 6" x 3/8"
- WASHERS, ROUND, 2 1/2" x 1/2" x 1/16" ROUND HOLE.

Revision	Date	Amendment	Amended by
'A'	19-11-71	Black bituminous sealing compound in lieu of emulsified bitumen.	K.S.

Victorian Railways - Way and Works Branch
STANDARD DRAWING
LEVEL CROSSINGS
FLANGEWAY TIMBERS
 FOR
60, 66, 75, 80, 94 & 107 LB. RAILS

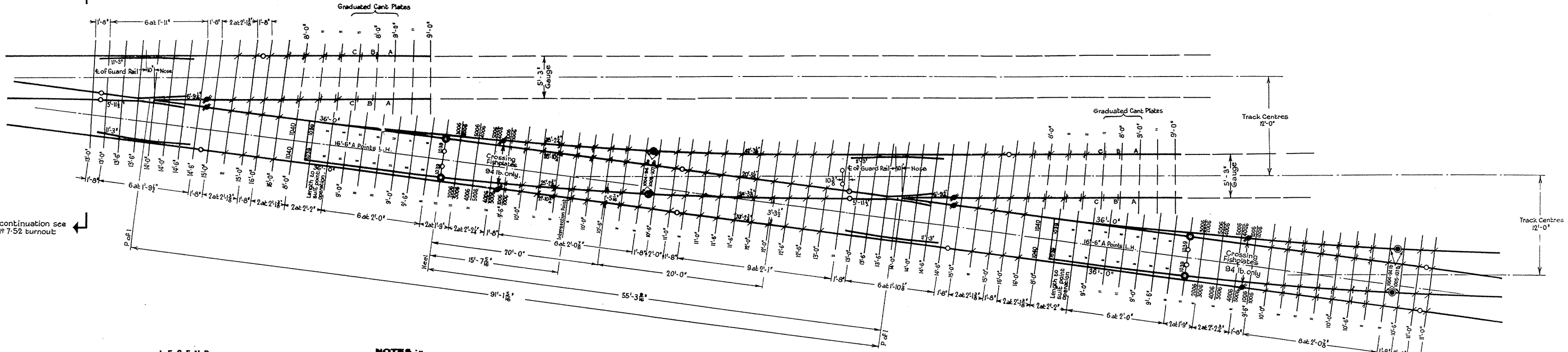
Approved
 Chief Civil Engineer
 Drawn by K.W.D./M.O.
 Checked by G.E.M.
 A.A.P.
 Eng' of Mech. & W.S.

Adopted
1949
PLAN No
F558A

This Plan supersedes Plans No F438^A and F439^A.

For continuation see
Nº 7-52 turnout.

For continuation see
Nº 7-52 turnout.



LEGEND:

- Track Joint
- Insulated Joint
- Point Heels
- Crossing Fishplates
- Rail Anchors
- Tangent Point
- Sleeper Plates Flat
 - 94 lb 1001
 - 107 lb 1002
- Chairs M.S. 1039, 1040.
- Lug Plates 1006, 2006, 3006, 4006, 5006.
- Sleeper Plates Flat for Insulated Joints 1004 (94 lb), 1005 (107 lb).

NOTES :-

- For tie plates omit 2 N° chains, 1039, and use 2 N° tie plates 1047 and 2 N° braces 1048, per set of points.
- For track joints in lieu of insulated joints use 1001 or 1002 flat sleeper plates.
- Timbers, in full line, 12" x 6" to lengths shown.
- Sleepers in broken line, 10" x 5" x 8'-0", and 10" x 5" x 9'-0".
- Sleeper plates shown are for 1st class siding standard.
- For non-plated standard delete sleeper plates 1001 and 1002.

TURNOUT DATA	
NUMBER	7-52
ANGLE	7°-34'-06.6"
V-END INTERSECTION LENGTH	6'-31"
WING END INTERSECTION LENGTH	5'-11 1/2"
TOTAL LENGTH	12'-03 1/2"
HEEL OPENING	10 1/2"
MOUTH OPENING	9 1/2"
THICKNESS OF TOE	3/4"
LENGTH OF SWITCH	16'-6"
SWITCH ANGLE	1°-33'-15-0"
HEEL SPREAD	5 1/2"
TOE OVERHANG	12'-6 1/2"
OUTER RAIL RADIUS	464.09'
TANGENT ADJACENT TO WING END OF CROSSING	10 1/2'
THEORETICAL LEAD (HEEL TO P OF I OF CROSSING)	55'-3 1/8"
PRACTICAL LEAD (TOE END OF STOCKRAIL TO NOSE OF V CROSSING)	84'-9 1/2"
1940 DESIGN, 1/2" NOSE	84'-9 1/2"
1964 DESIGN, 3/4" NOSE	84'-6 1/2"

Revision	Date	Amendment	Amended

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH

STANDARD DRAWING

LADDER TURNOUTS
Nº 7-52 16'-6" A POINTS
94 & 107 LB. A.S.
12'-0" CENTRES

NOT TO SCALE

Approved
A.A.P.
Chief Civil Engineer

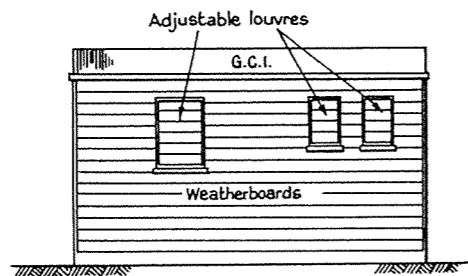
Adopted
1964

PLAN Nº
F559

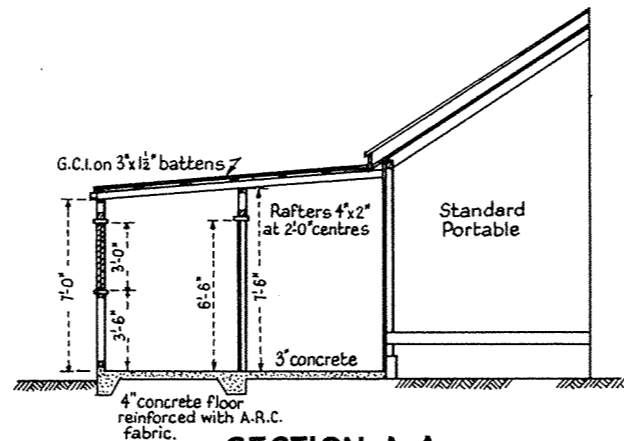
Drawn by
K.W.D./ M.O.

Checked by
G.M.

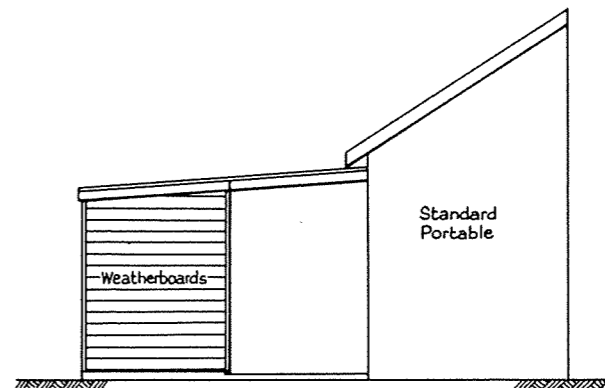
A.A.P.
Engineer of Mach. & W.S.



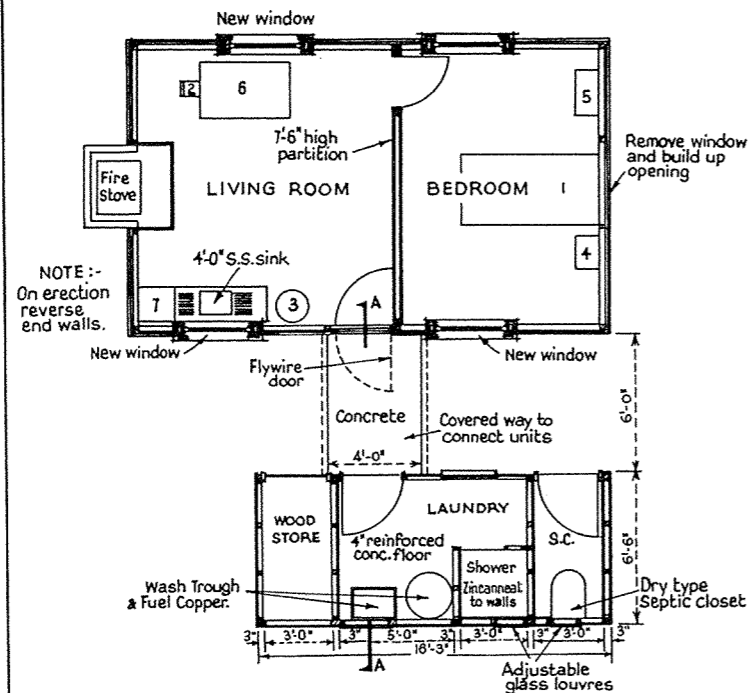
FRONT ELEVATION



SECTION A-A

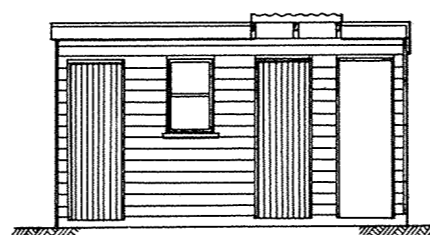


RIGHT ELEVATION

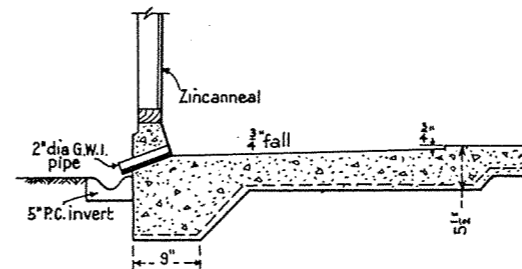


PLAN

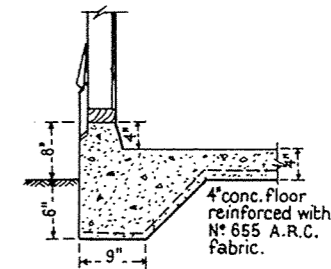
SUBDIVISION OF 20'x12' PORTABLE WITH OUTBUILDING



REAR ELEVATION



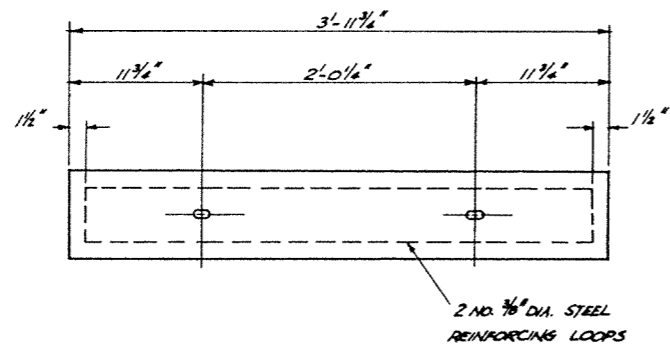
SHOWER FLOOR DETAIL



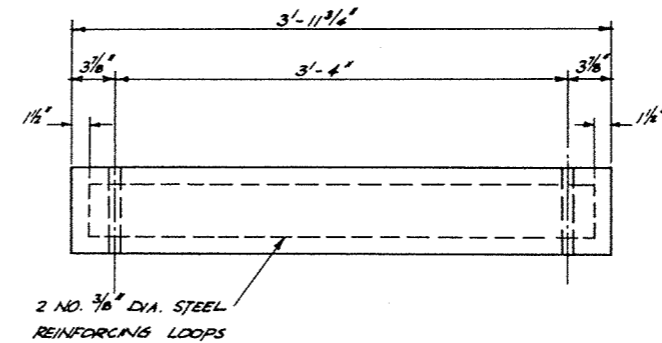
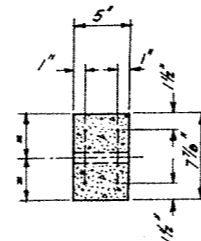
FLOOR DETAIL

FURNITURE SCHEDULE		
1	Bed	} Store Schedule Items
2	Chair	
3	Meat Safe	
4	Bedside Table	To plan 94/50
5	Wardrobe	" 416/50
6	Meal Table 4'-0" x 2'-6"	" 591/28
7	Food Locker	Store Schedule Item 104/47

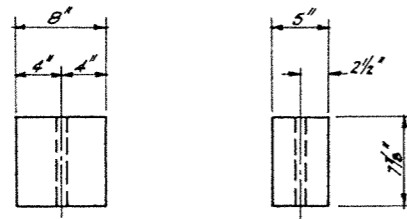
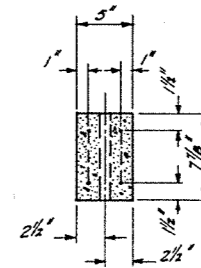
Revision	Date	Amendment	Amended By
VICTORIAN RAILWAYS - WAY & WORKS BRANCH STANDARD DRAWING STAFF LIVING ACCOMMODATION SUBDIVISION OF 1947 STANDARD PORTABLE WITH SEPARATE AMENITIES OUTBUILDING.			
Approved <i>[Signature]</i> Chief Civil Engineer		Adopted DEC. 1965	
Drawn by <i>[Signature]</i> Senior Architect		Checked by <i>[Signature]</i> E.A.E.	
		PLAN N° F561	



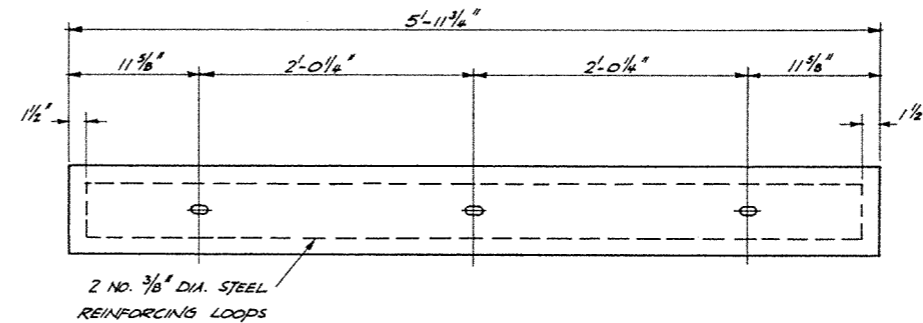
STRETCHER



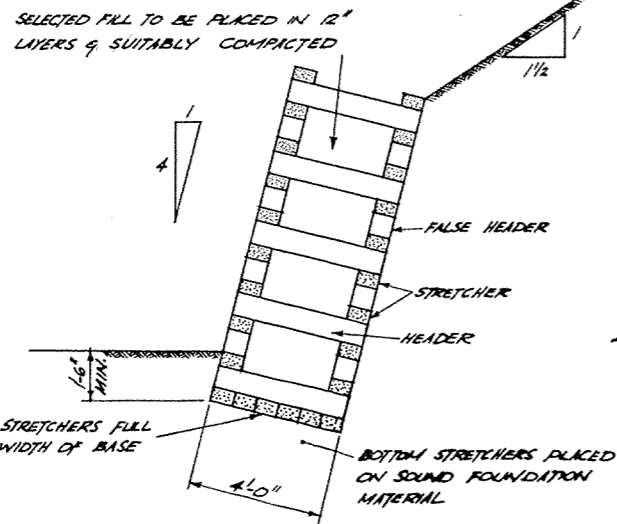
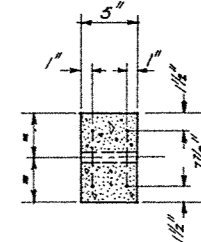
HEADER



FALSE HEADER

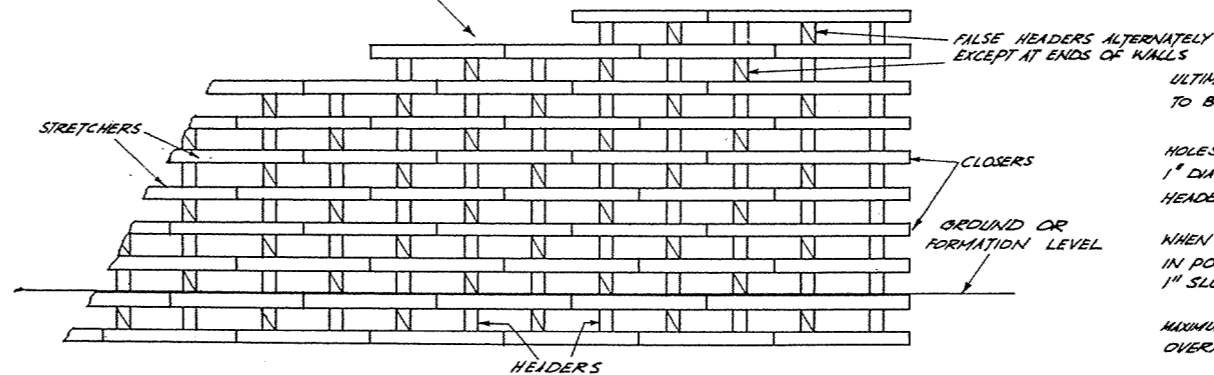


CLOSER



TYPICAL SECTION OF CRIB WALL

TYPICAL MANNER IN WHICH WALLS TAPERED TO FINISH



ELEVATION OF CRIB WALL

ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE TO BE 4000 LB. PER SQ. INCH AT 28 DAYS

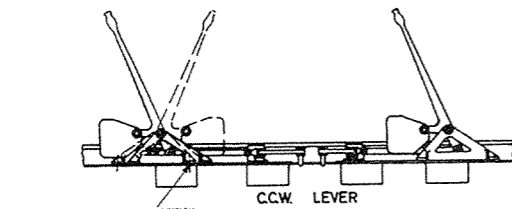
HOLES CAST IN STRETCHER & CLOSER TO BE 1" DIA. x 1 1/2" LONG, IN HEADER & FALSE HEADER 1" DIA.

WHEN ASSEMBLED, CRIB UNITS TO BE HELD IN POSITION WITH 3/4" DIA. RODS THROUGH 1" SLOTS & HOLES

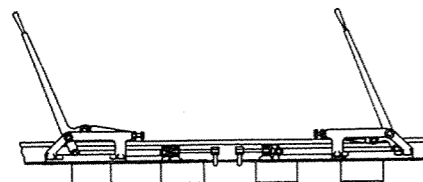
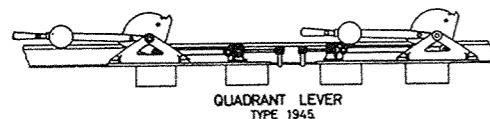
MAXIMUM HEIGHT OF WALL TO BE 15 FT. OVERALL FROM BASE

MINIMUM RADIUS OF CURVATURE: 330 FT
LENGTH OF WALL IN MULTIPLES OF 4 FT.

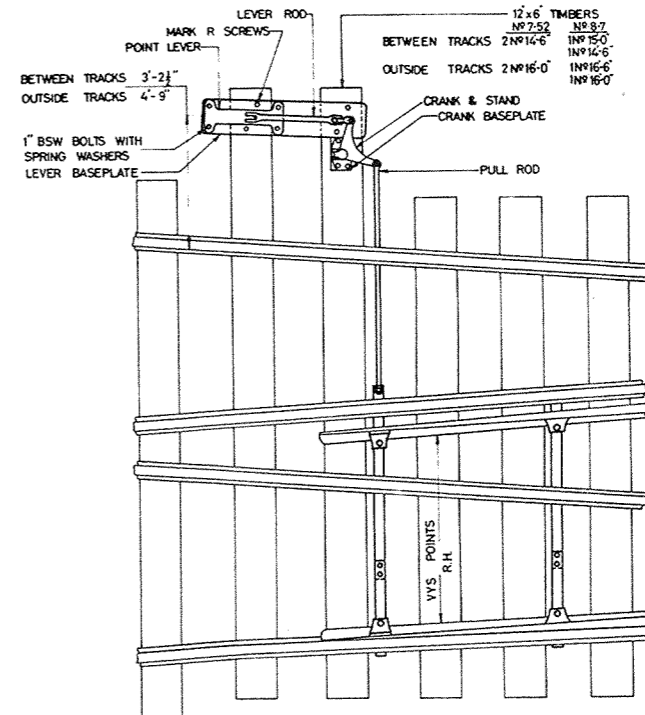
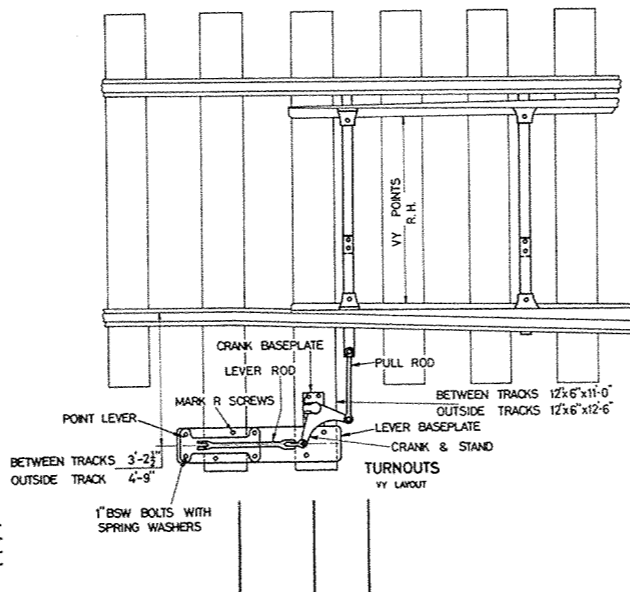
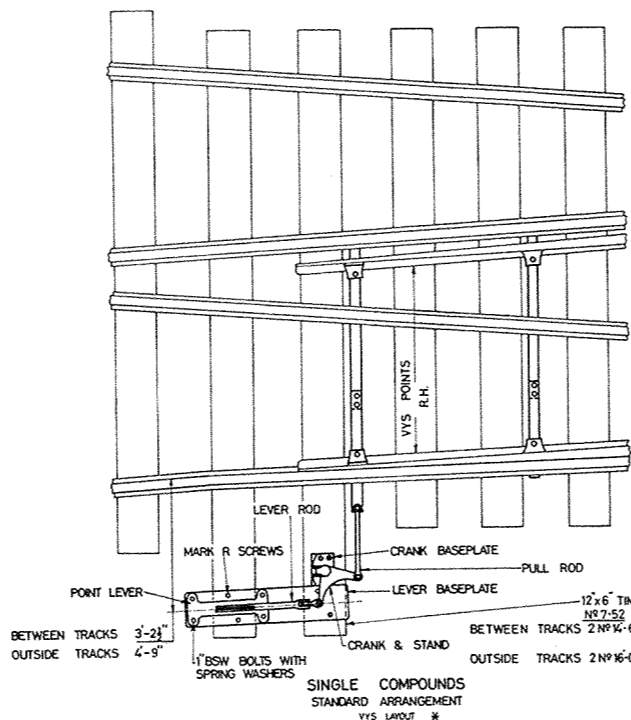
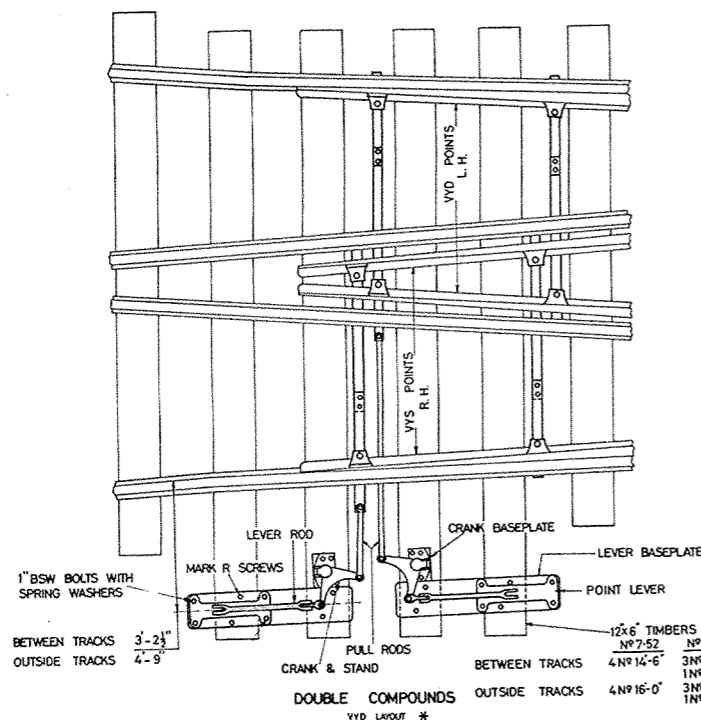
VICTORIAN RAILWAYS - WAY & WORKS BRANCH		APPROVED	ADOPTED
STANDARD DRAWING		<i>[Signature]</i>	FEB. 1967
CRIB WALLS		3.2.67 CHIEF CIVIL ENGINEER	PLAN No.
		DRAWN BY P.F.B.	CHECKED BY K.W.W.
		<i>[Signature]</i>	F562



WHEN LEVER IS USED IN THIS POSITION, TIMBER TO BE COUNTERBORED FOR HEADS OF BOLTS.



TYPICAL ELEVATIONS



MATERIAL	94 & 107 LB LAYOUTS			DIRECTIONS FOR INSTALLING
	VY	VYS	VYD	
POINT LEVER, TYPE AS AUTHORIZED.	1	1	2	ADJUSTABLE SPREADERS 1. INSTALL N°1 SPREADER USING TWO SPREADER BOLTS IF 3116. 2. LOOSEN THE SPREADER JOINT, SET POINTS TO 5" THROW. RE-TIGHTEN THE JOINT. 3. INSTALL N°2 AND N°3 SPREADERS IN A SIMILAR MANNER. 4. TIGHTEN ALL NUTS AND INSERT SPLIT PINS IN SPREADER BOLTS. 5. TRY THE SWITCHES AT NORMAL AND REVERSE TO ENSURE FULL BEARING AGAINST THE STOCKRAIL IN EACH POSITION. CCW LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED 2" CLEAR OF THE STOCKRAIL WHEN THE SWITCH IS HOME AGAINST THE STOCKRAIL. 3. MARK OFF BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 4. TEST OPERATION. W.S.A. LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. TOTALLY RELEASE THE SPRING COMPRESSION SCREW. 3. PLACE THE LEVER IN VERTICAL POSITION. 4. MARK OFF BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 5. ADJUST THE SPRING COMPRESSION SCREW TO HOLD THE SWITCHES TO THE STOCKRAIL. 6. TIGHTEN THE LOCKNUT ON THE SPRING COMPRESSION SCREW. 7. TEST OPERATION. Q.45 LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED CLEAR OF LEVER ROD, CRANK OR OTHER OBSTRUCTION WHEN THE SWITCH IS HOME AGAINST THE STOCKRAIL. 3. MARK OFF BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 4. TEST OPERATION.
CRANK & STAND ASSEMBLY TA 110.	1	1	2	
LEVER ROD FOR CCW & W.S.A. LEVERS TA 111.	1	1	2	
LEVER ROD FOR Q.45 LEVERS TA 211.	1	1	2	
PULL ROD, BETWEEN TRACK, TA 212.	1	1	1	
PULL ROD, OUTSIDE TRACK, TA 212.	1	1	1	
PULL ROD, BETWEEN TRACK, TA 212.	1	1	1	
PULL ROD, OUTSIDE TRACK, TA 212.	1	1	1	
LEVER BASEPLATE 1112	1	1	2	
CRANK BASEPLATE 1038	1	1	2	
MARK R SCREWS	8	8	16	
BOLTS HEX RD. HEX. 1" BSW X 2 1/2" LONG	4	4	8	
SPRING WASHERS TYPE 1944	4	4	8	
PULL RODS TA 312 OR TA 412 TO BE FITTED AT SINGLE COMPOUNDS WHEN ALTERNATIVE ARRANGEMENT IS REQUIRED				
REFERENCE PREVIOUS STANDARD ARRANGEMENT F 513.				
* QUANTITIES LISTED ABOVE ARE FOR PORTION OF LAYOUTS SHOWN				

VICTORIAN RAILWAYS - WAY & WORKS BRANCH

POINT LEVERS
END PULL ARRANGEMENT

APPROVED: *S. D. W. 24.5.67*
CHIEF CIVIL ENGINEER

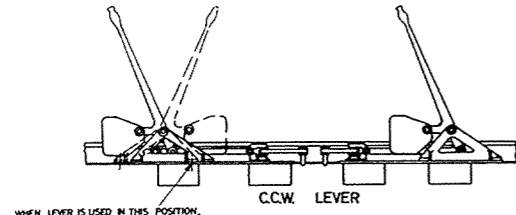
ADOPTED: **MAY 1967**

DRAWN BY: *[Signature]* CHECKED BY: *[Signature]*

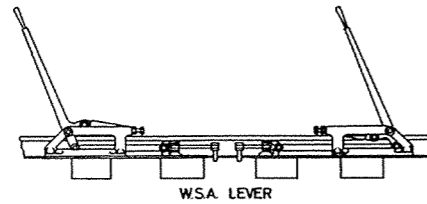
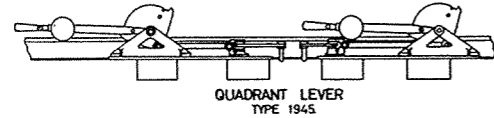
PLAN N° **F 564**

ENGINEER OF M & W. S.

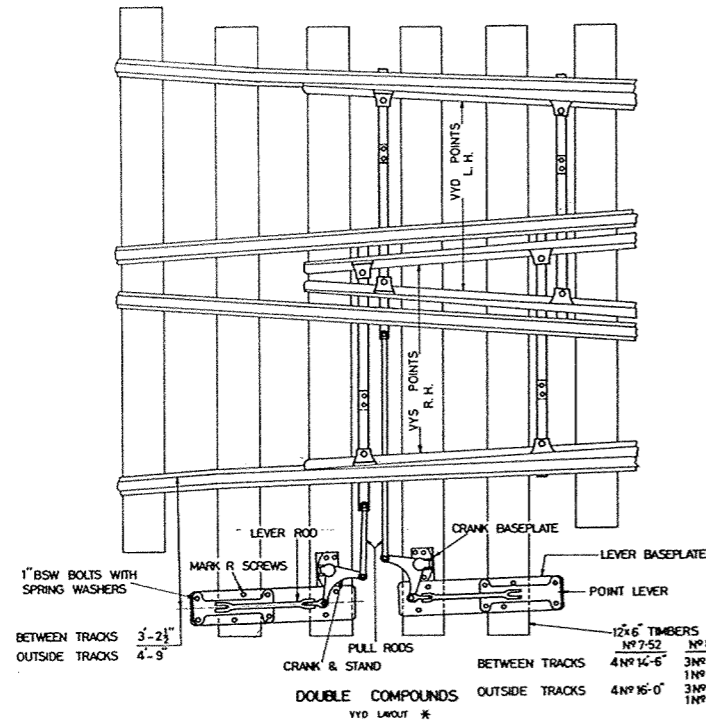
REVISION	DATE	AMENDMENT	AMENDED



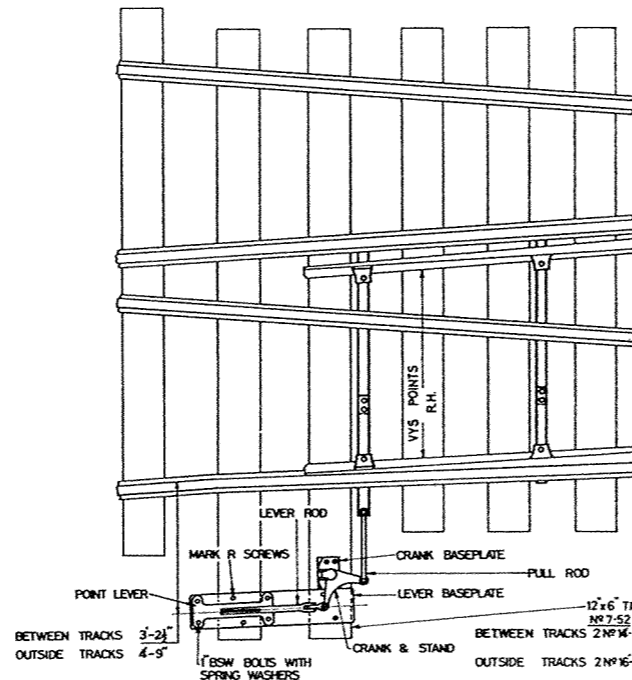
WHEN LEVER IS USED IN THIS POSITION, TRACK TO BE COUNTERPOISED FOR HEADS OF BOLTS.



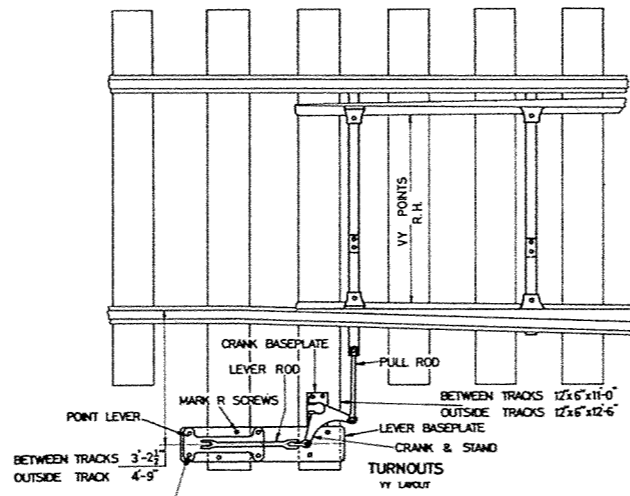
TYPICAL ELEVATIONS



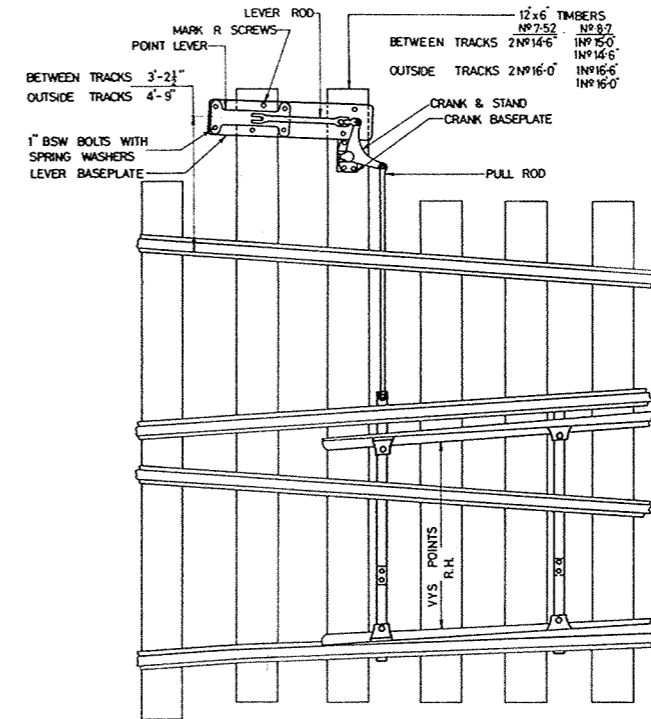
DOUBLE COMPOUNDS
VYS LAYOUT *



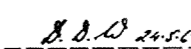


SINGLE COMPOUNDS
STANDARD ARRANGEMENT
VYS LAYOUT *




TURNOUTS
VY LAYOUT

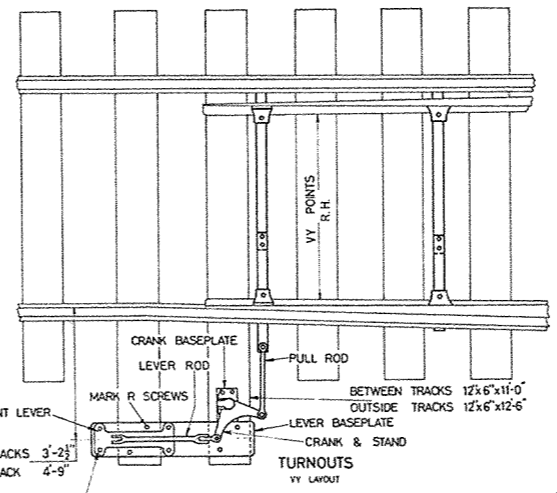
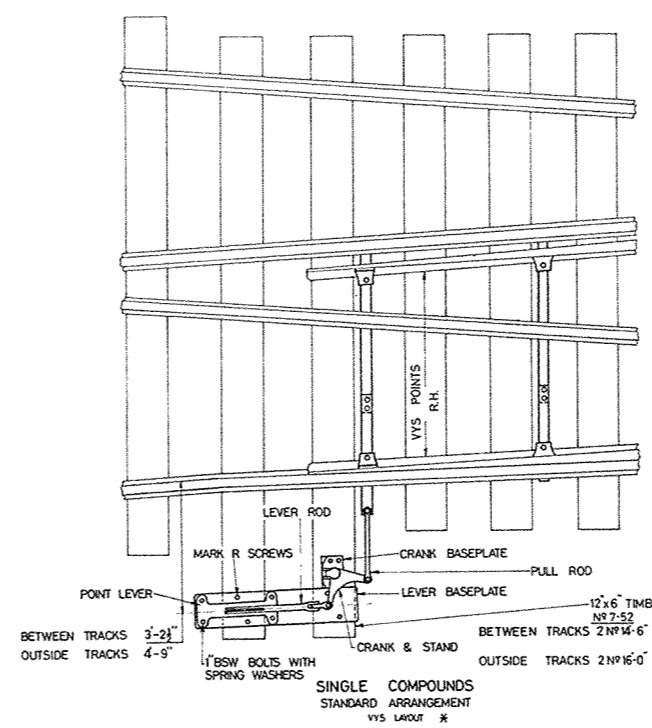
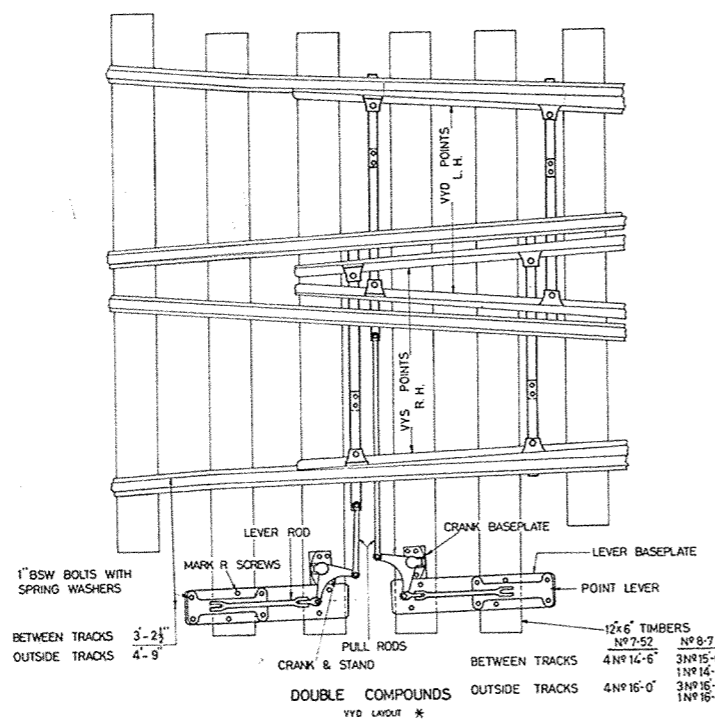
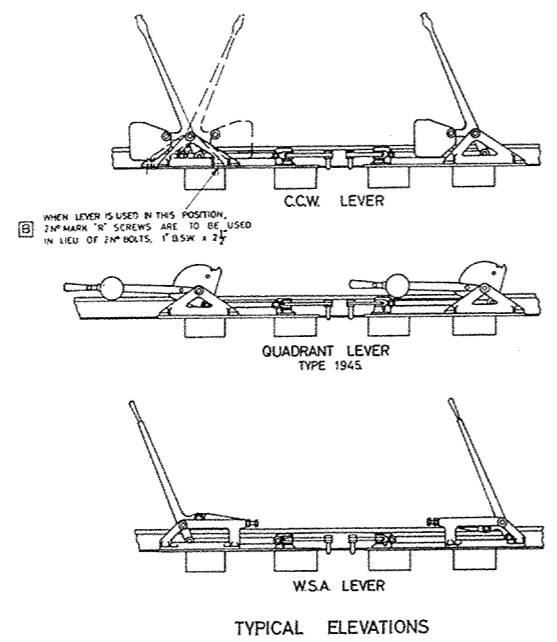


SINGLE COMPOUNDS
ALTERNATIVE ARRANGEMENT
VYS LAYOUT *

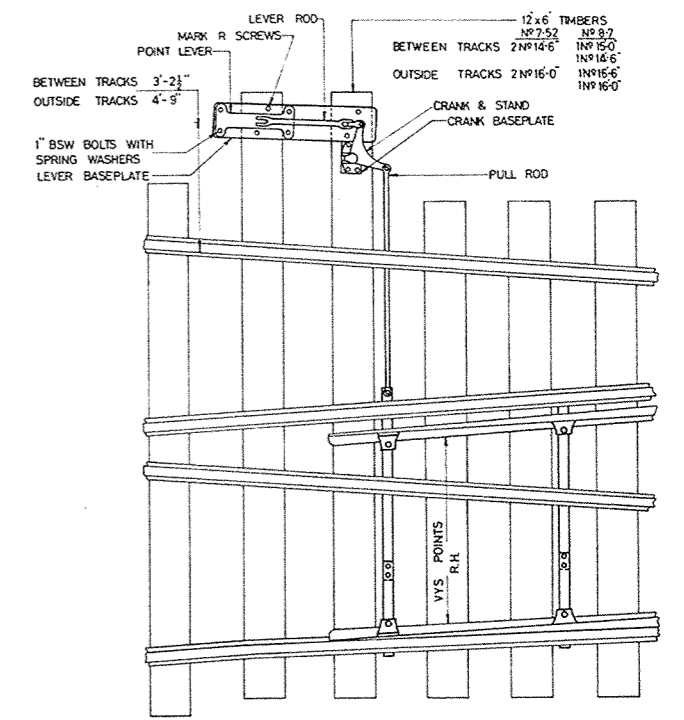
MATERIAL	94 & 107 LB LAYOUTS			DIRECTIONS FOR INSTALLING
	VY	VYS	VYD	
POINT LEVER, TYPE AS AUTHORIZED	1	1	2	ADJUSTABLE SPREADERS 1. INSTALL N#1 SPREADER USING TWO SPREADER BOLTS IF 3116 2. LOOSEN THE SPREADER JOINT, SET POINTS TO 5" THROW, RE-TIGHTEN THE JOINT 3. INSTALL N#2 AND N#3 SPREADERS IN A SIMILAR MANNER 4. TIGHTEN ALL NUTS AND INSERT SPLIT RING IN SPREADER BOLTS. 5. TRY THE SWITCHES AT NORMAL AND REVERSE TO ENSURE FULL BEARING AGAINST THE STOCKRAIL IN EACH POSITION. C.C.W. LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED 2" CLEAR OF THE TIMBER WHEN THE SWITCH IS HOME AGAINST THE STOCKRAIL. 3. MARK OFF, BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 4. TEST OPERATION. W.S.A. LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. TOTALLY RELEASE THE SPRING COMPRESSION SCREW. 3. PLACE THE LEVER IN VERTICAL POSITION WITH SWITCHES HALF OPEN. 4. MARK OFF, BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 5. ADJUST THE SPRING COMPRESSION SCREW TO HOLD THE SWITCHES TO THE STOCKRAIL. 6. TIGHTEN THE LOCKNUT ON THE SPRING COMPRESSION SCREW. 7. TEST OPERATION. Q45 LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED CLEAR OF LEVER ROD, CRANK OR OTHER OBSTRUCTION WHEN THE SWITCH IS HOME AGAINST THE STOCKRAIL. 3. MARK OFF, BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 4. TEST OPERATION.
CRANK & STAND ASSEMBLY TA 110	1	1	2	
LEVER ROD FOR C.C.W. & W.S.A. LEVERS TA 111	1	1	2	
LEVER ROD FOR Q45 LEVERS TA 211	1	1	2	
PULL ROD, BETWEEN TRACK, TA 112	1	1	1	
PULL ROD, OUTSIDE TRACK, TA 212	1	1	1	
PULL ROD, BETWEEN TRACK, TA 312	-	-	1	
PULL ROD, OUTSIDE TRACK, TA 412	-	-	1	
LEVER BASEPLATE 1112	1	1	2	
CRANK BASEPLATE 1038	1	1	2	
MARK R SCREWS	8	8	16	
BOLTS HEX. RD. HEX. 1" BSW X 2 1/2" LONG	4	4	8	
SPRING WASHERS TYPE 1944	4	4	8	
PULL RODS TA 312 OR TA 412 TO BE FITTED AT SINGLE COMPOUNDS WHEN ALTERNATIVE ARRANGEMENT IS REQUIRED.				
REFERENCE PREVIOUS STANDARD ARRANGEMENT F 50 & F 455				
* QUANTITIES LISTED ABOVE ARE FOR PORTION OF LAYOUTS SHOWN. THIS METHOD OF MOUNTING POINT LEVERS MAY BE USED IN OTHER LAYOUTS AS FOLLOWS: 1" LAYOUT, WITH C.L. CHAIRS, CRANK BASE PLATE 2038 IN LIEU OF 1038. X LAYOUT, CRANK BASE PLATE 3038 IN LIEU OF 1038. PULL ROD TA 012 (ORDERED TO LENGTH REQUIRED).				
VICTORIAN RAILWAYS - WAY & WORKS BRANCH				APPROVED  CHIEF CIVIL ENGINEER
POINT LEVERS END PULL ARRANGEMENT				ADOPTED MAY 1967 PLAN NO F564A
DRAWN BY:  CHECKED BY:  ENGINEER OF W & W. S.				

A	30-7-68	APPLICATION TO 'X' & 'Y' LAYOUTS ADDED.	
REVISION	DATE	AMENDMENT	APPROVED

Signal & Telegraph Supervisor No. 5 DISTRICT



B	25-8-71	ALTERNATE METHOD OF SECURING C.C.W. LEVER	
A	30-7-68	APPLICATION TO 'X' & 'Y' LAYOUTS ADDED.	
REVISION	DATE	AMENDMENT	AMENDED



SINGLE COMPOUNDS ALTERNATIVE ARRANGEMENT VYS LAYOUT *

MATERIAL	94 & 107 LB LAYOUTS			DIRECTIONS FOR INSTALLING
	VY	VYS	VYD	
POINT LEVER, TYPE AS AUTHORIZED	1	1	2	ADJUSTABLE SPREADERS 1. INSTALL #1 SPREADER USING TWO SPREADER BOLTS IF 3116 2. LOOSEN THE SPREADER JOINT, SET POINTS TO 5" THROW. RE-TIGHTEN THE JOINT. 3. INSTALL #2 AND #3 SPREADERS IN A SIMILAR MANNER. 4. TIGHTEN ALL NUTS AND INSERT SPLIT PINS IN SPREADER BOLTS. 5. TRY THE SWITCHES AT NORMAL AND REVERSE TO ENSURE FULL BEARING AGAINST THE STOCKRAIL IN EACH POSITION. C.C.W. LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED CLEAR OF THE TIMBER WHEN THE SWITCH IS HOME AGAINST THE STOCKRAIL. 3. MARK OFF, BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 4. TEST OPERATION. W.S.A. LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. TOTALLY RELEASE THE SPRING COMPRESSION SCREW. 3. PLACE THE LEVER IN VERTICAL POSITION WITH SWITCHES HALF OPEN. 4. MARK OFF, BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 5. ADJUST THE SPRING COMPRESSION SCREW TO HOLD THE SWITCHES TO THE STOCKRAIL. 6. TIGHTEN THE LOCKNUT ON THE SPRING COMPRESSION SCREW. 7. TEST OPERATION. Q45 LEVER 1. BOLT THE LEVER TO THE BASE PLATE AND CONNECT UP THE RODDING. 2. SET THE BASE OF THE LEVER SO THAT THE WEIGHT IS SUSPENDED CLEAR OF LEVER ROD, CRANK OR OTHER OBSTRUCTION WHEN THE SWITCH IS HOME AGAINST THE STOCKRAIL. 3. MARK OFF, BORE FOR MARK R SCREWS AND TURN IN THE SCREWS. 4. TEST OPERATION.
CRANK & STAND ASSEMBLY TA 110	1	1	2	
LEVER ROD FOR C.C.W. & W.S.A. LEVERS TA 111	1	1	2	
LEVER ROD FOR Q45 LEVERS TA 211	1	1	2	
PULL ROD, BETWEEN TRACK, TA 112	1	1	1	
PULL ROD, OUTSIDE TRACK, TA 212	1	1	1	
PULL ROD, BETWEEN TRACK, TA 312	-	-	1	
PULL ROD, OUTSIDE TRACK, TA 412	-	-	1	
LEVER BASEPLATE 1112	1	1	2	
CRANK BASEPLATE 1038	1	1	2	
MARK R SCREWS	8	8	16	
BOLTS HEX HD. HEX. 1" BSW x 2 1/2" LONG	4	4	8	
SPRING WASHERS TYPE 1944	4	4	8	
FULL RODS TA 312 OR TA 412 TO BE FITTED AT SINGLE COMPOUNDS WHEN ALTERNATIVE ARRANGEMENT IS REQUIRED.				
REFERENCE PREVIOUS STANDARD ARRANGEMENT F 512 & F 556				
* QUANTITIES LISTED ABOVE ARE FOR PORTION OF LAYOUTS SHOWN. THIS METHOD OF MOUNTING POINT LEVERS MAY BE USED IN OTHER LAYOUTS AS FOLLOWS: 'Y' LAYOUT, WITH G.I. CHAIRS, CRANK BASE PLATE 2038 IN LIEU OF 1038. 'X' LAYOUT, CRANK BASE PLATE 3038 IN LIEU OF 1038. PULL ROD TA 412 (ORDERED TO LENGTH REQUIRED).				

VICTORIAN RAILWAYS WAY & WORKS BRANCH

POINT LEVERS

END PULL ARRANGEMENT

APPROVED

J. D. D. 24567
CHIEF CIVIL ENGINEER

ADOPTED

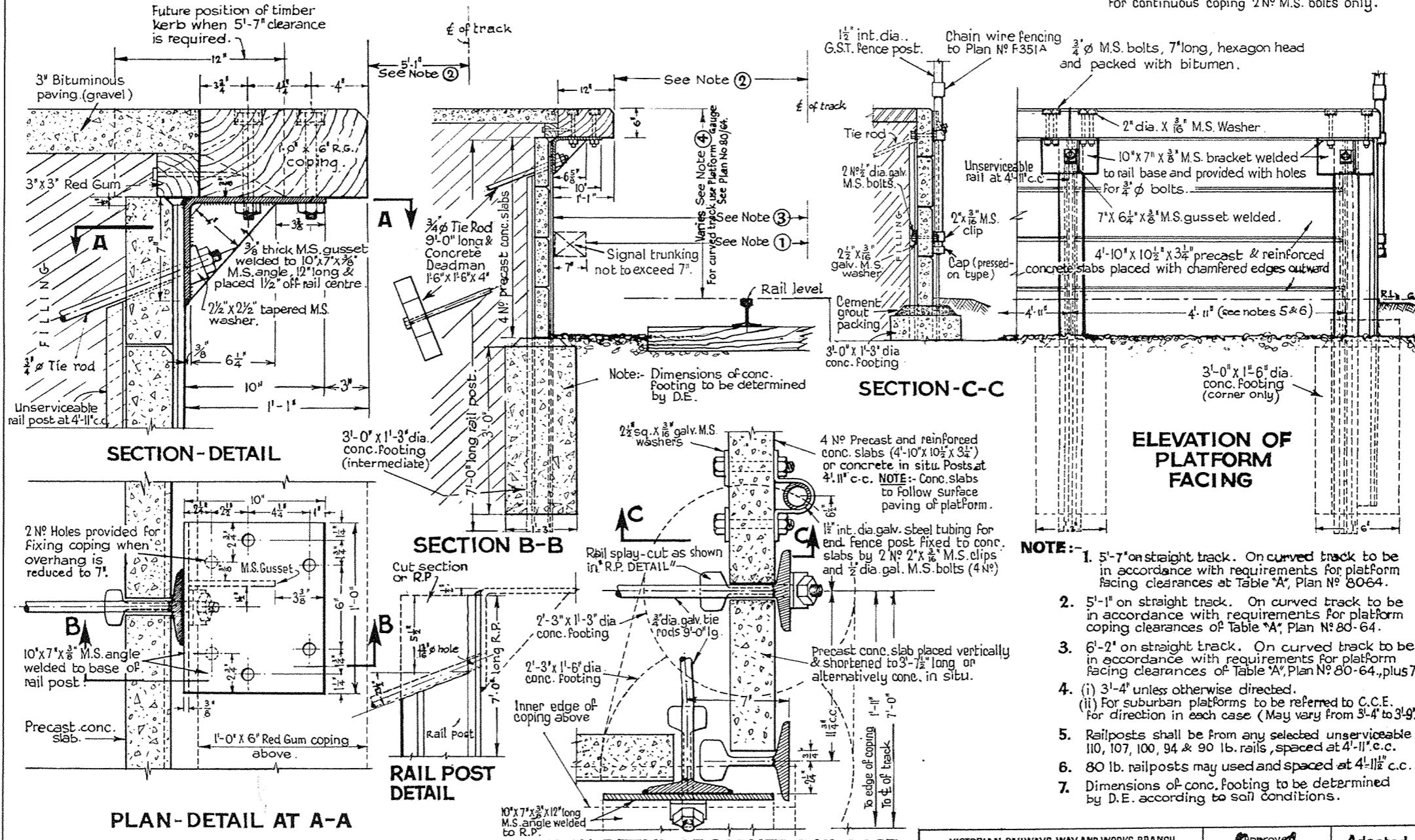
MAY 1967

DRAWN BY: *Ed* CHECKED BY: *Ed*

ENGINEER OF M. & W. S.

PLAN No F564^B

NOTE :- At joints of R.G. coping, use 4 No M.S. bolts for continuous coping 2 No M.S. bolts only.

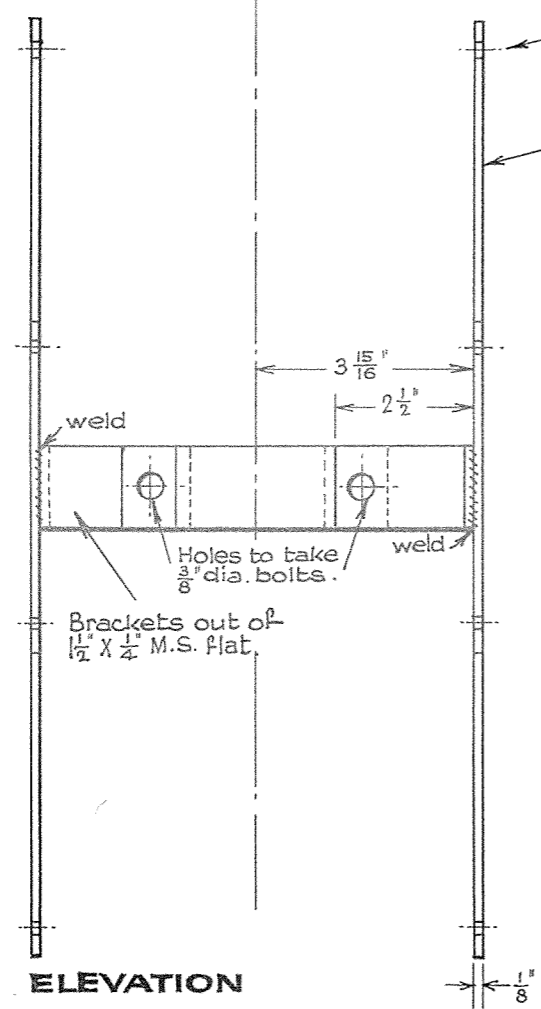


- NOTE:-**
- 5'-7" on straight track. On curved track to be in accordance with requirements for platform facing clearances at Table 'A', Plan No 80-64.
 - 5'-1" on straight track. On curved track to be in accordance with requirements for platform coping clearances of Table 'A', Plan No 80-64.
 - 6'-2" on straight track. On curved track to be in accordance with requirements for platform facing clearances of Table 'A', Plan No 80-64, plus 7".
 - (i) 3'-4" unless otherwise directed.
(ii) For suburban platforms to be referred to C.C.E. for direction in each case (May vary from 3'-4" to 3'-9").
 - Railposts shall be from any selected unserviceable 110, 107, 100, 94 & 90 lb. rails, spaced at 4'-11" c.c.
 - 80 lb. railposts may be used and spaced at 4'-11 1/2" c.c.
 - Dimensions of conc. footing to be determined by D.E. according to soil conditions.

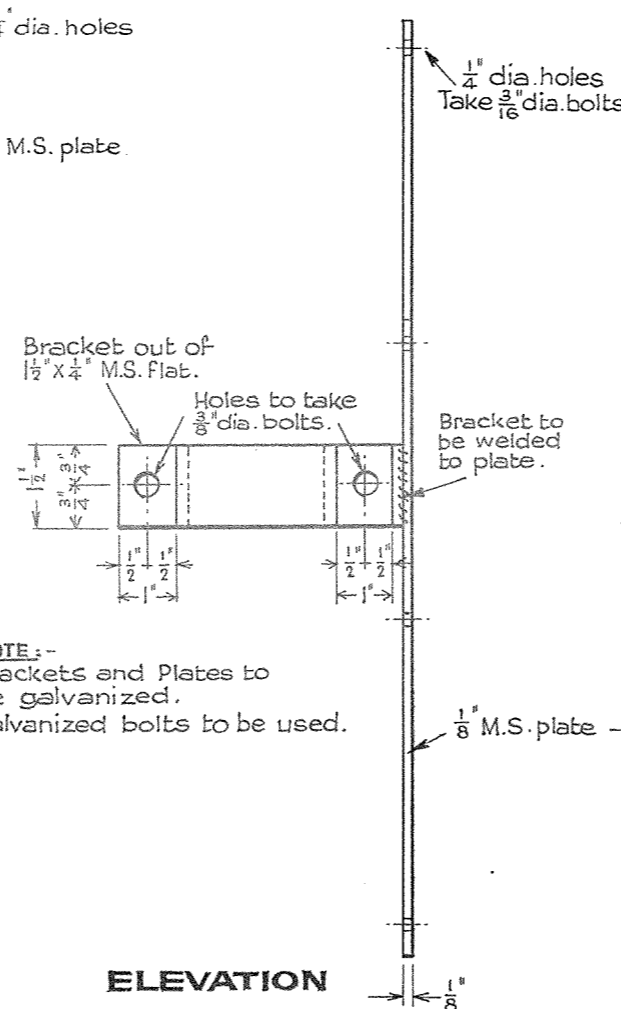
'B'	20.9.71	Concrete deadman shown.	D.B.C.
'A'	18.6.70	Dimensions adjusted for curved track & longer posts.	K.J.
Rev'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING
 DETAILS OF PLATFORM FACING FOR PASSENGER PLATFORM (WITH SIGNAL TRUNKING)

Approved
D. D. D. 1968
 Chief Civil Engineer
 Adopted
Apr. 1968
 Drawn by
 K.J./M.O.
 Checked by
 K.J.
 Senior Architect
PLAN No F566^B

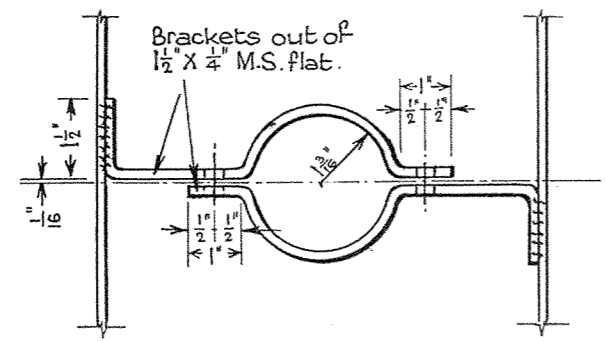


ELEVATION

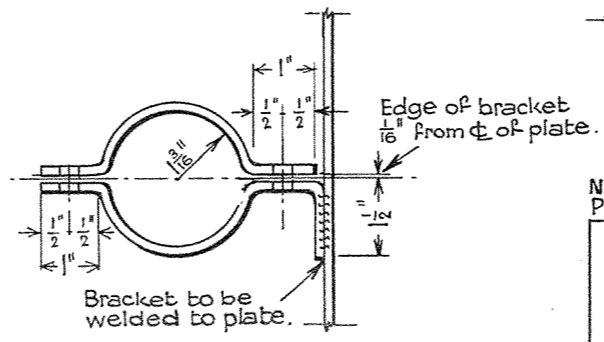


ELEVATION

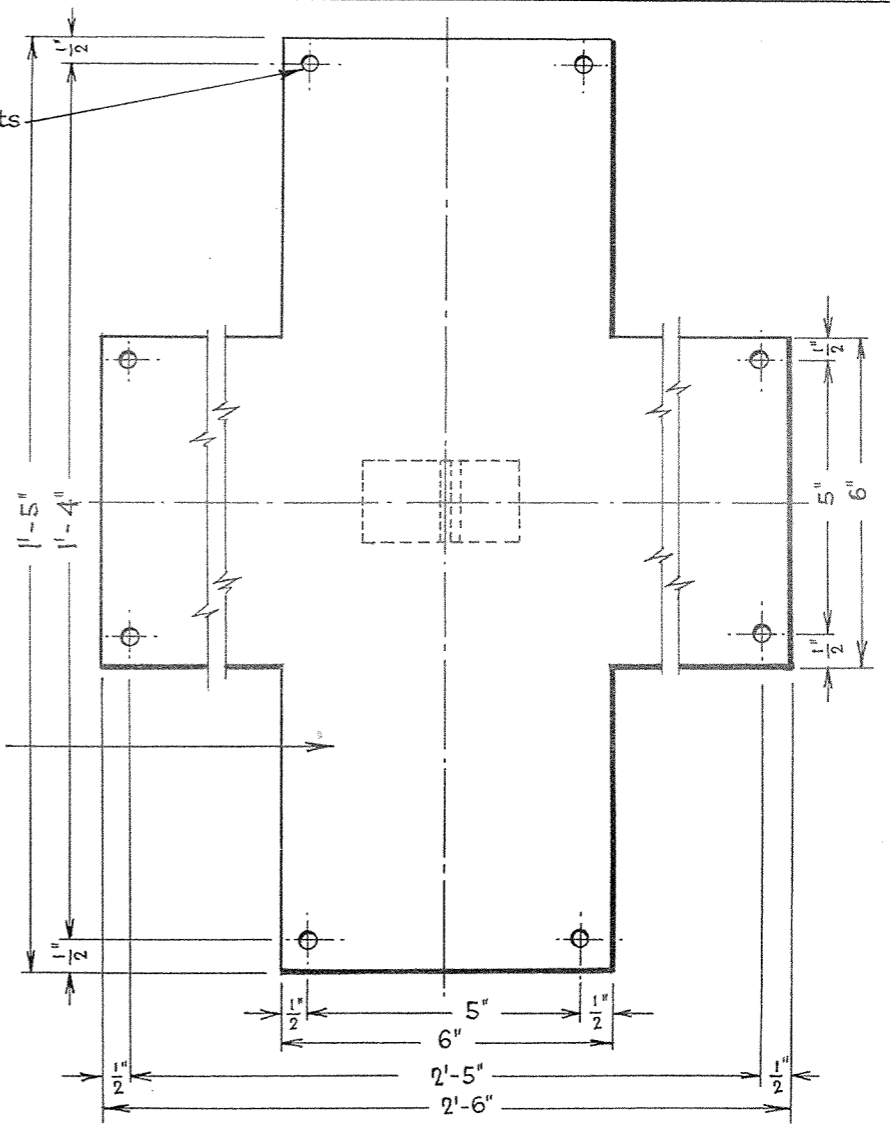
NOTE:-
Brackets and Plates to be galvanized.
Galvanized bolts to be used.



PLAN - Type 2



PLAN - Type 1



END ELEVATION

NOTE:- This plan supersedes
Plan No F468

Revis'n	Date	Amendment	Amended by
		Approved <i>G.E.S.</i> 23/70 Chief Civil Engineer	Adopted /
		Drawn by G.E.S./M.O	Checked by /
		<i>P.B.</i> Senior Architect	PLAN No F567

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING
MOUNTINGS FOR TYPE "A"
SUBURBAN STATION
NAME PLATES

NOTES: Plates to be vitreous enamelled black letters on white background.
 All holes to be $\frac{1}{4}$ " dia., fitted with approved, loose, non-ferrous eyelets.

Minimum size of lettering -

	HEIGHT	WIDTH OF LINE
TYPE A	5"	$\frac{5}{8}$ "
TYPE B	8"	1"

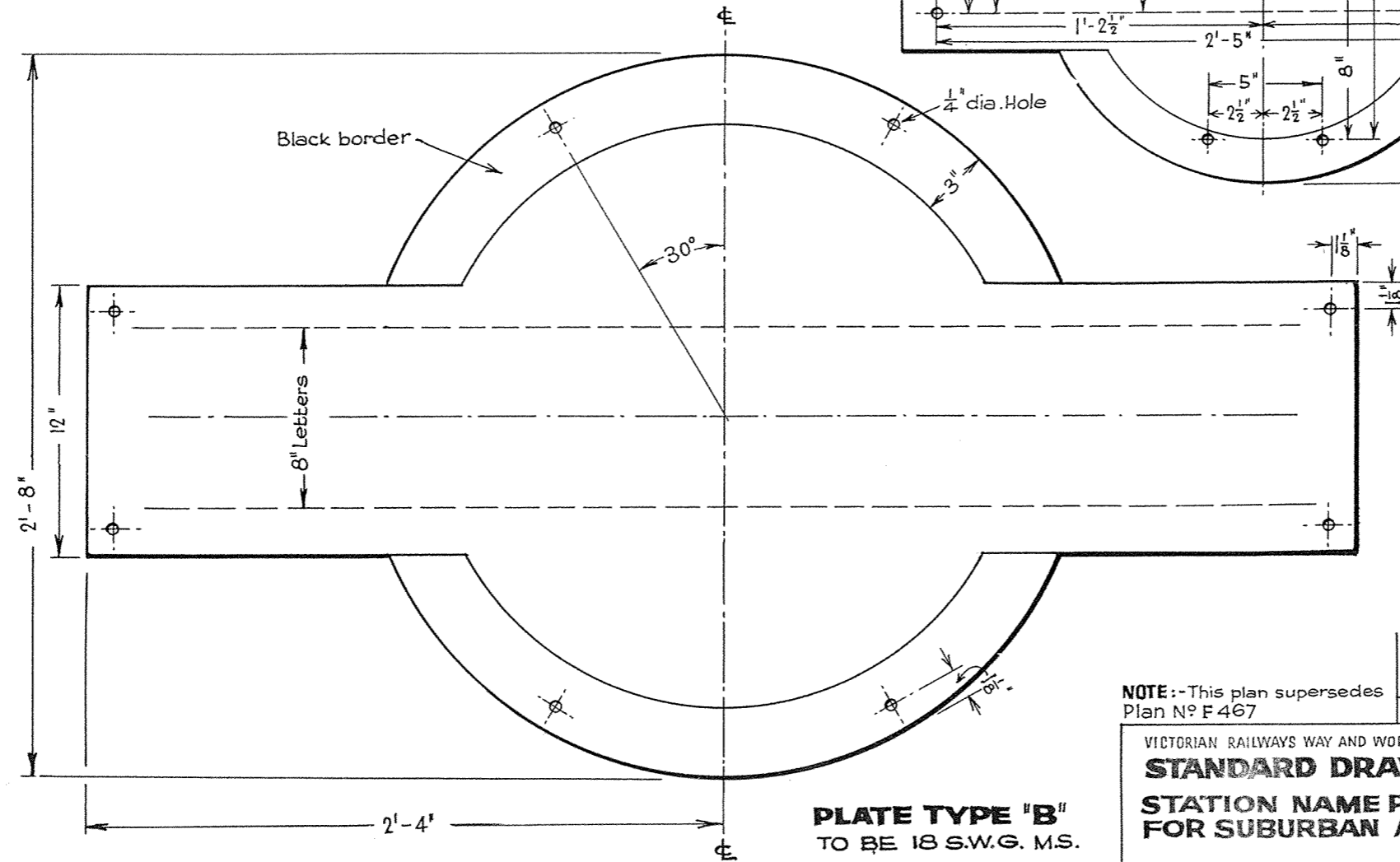


PLATE TYPE "B"
 TO BE 18 S.W.G. M.S.

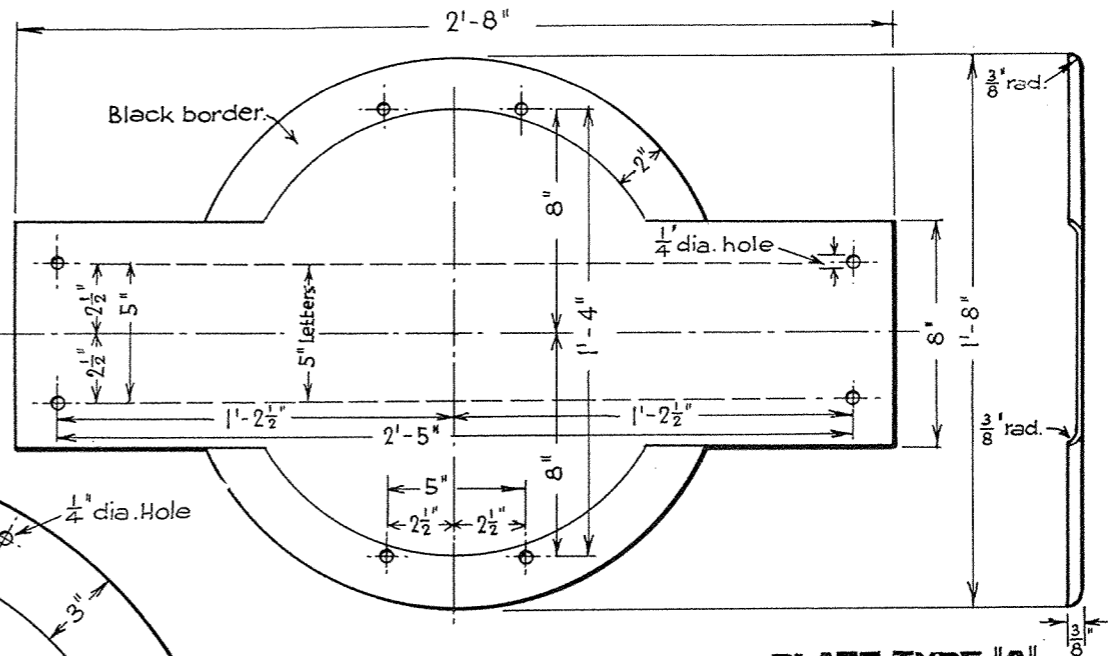
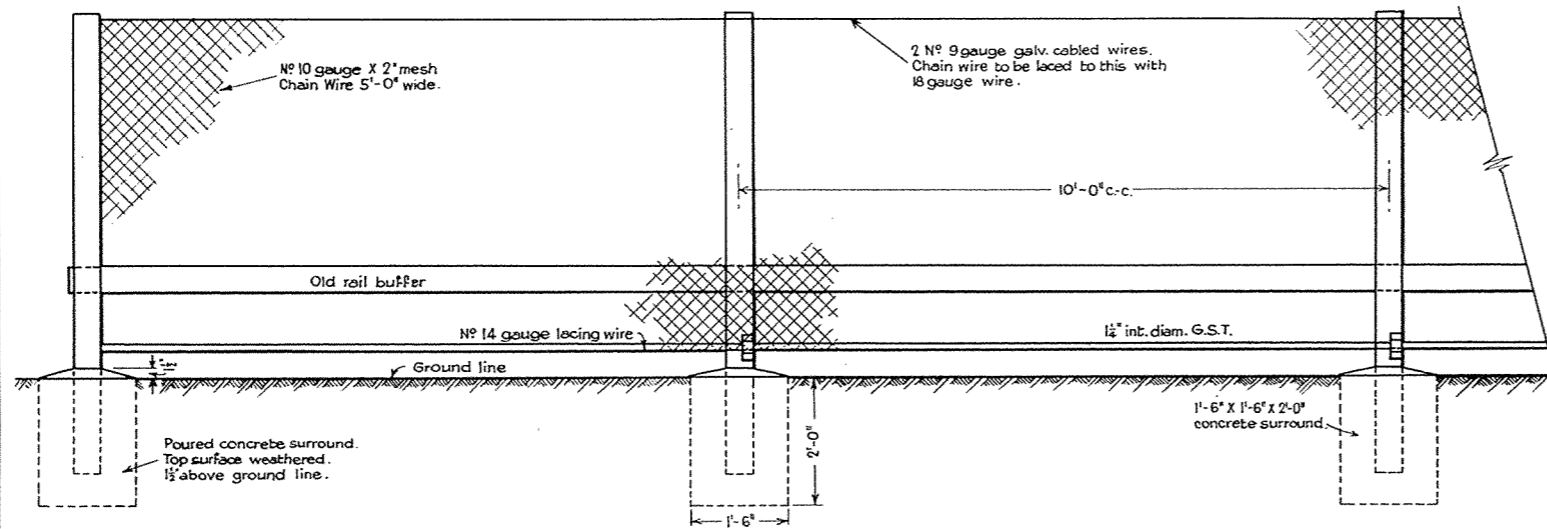


PLATE TYPE "A"
 TO BE 20 S.W.G. M.S.

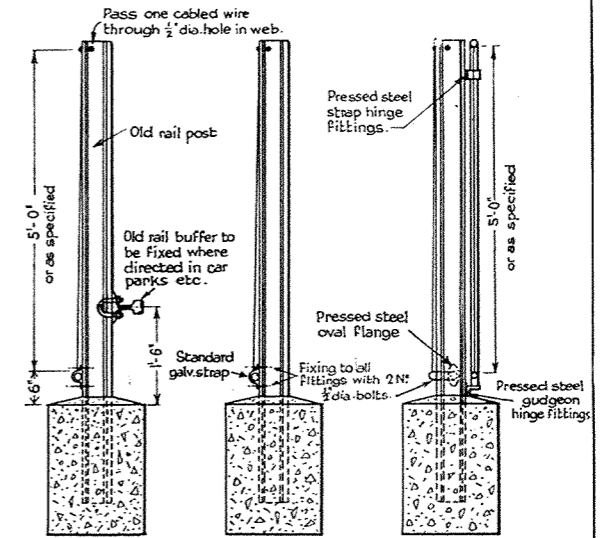
NOTE:-This plan supersedes Plan N^o F 467

VICTORIAN RAILWAYS WAY AND WORKS BRANCH
STANDARD DRAWING
STATION NAME PLATES
FOR SUBURBAN AREA

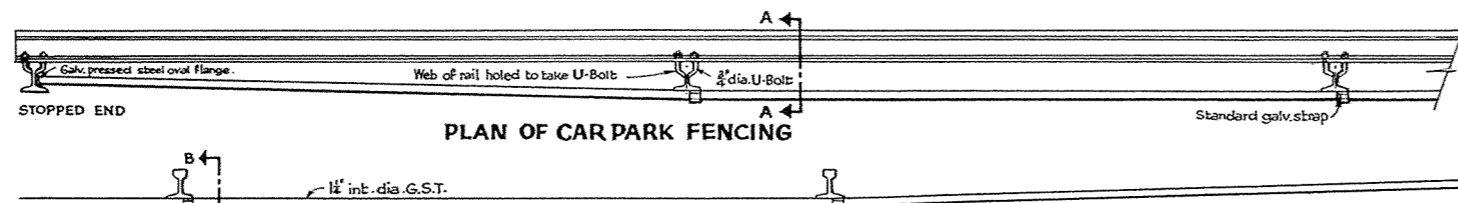
Revis'n	Date	Amendment	Amended by
		Approved <i>D. B. W. 3.11.69</i> Chief Civil Engineer	Adopted
		Drawn by G.E.S./M.O.	Checked by
		<i>G.S.</i> Senior Architect	PLAN N^o F568



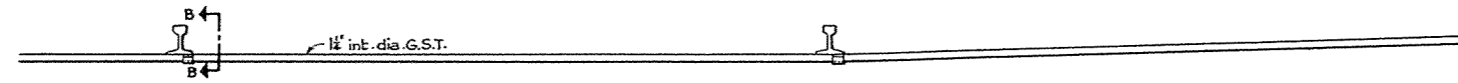
ELEVATION OF TYPICAL CAR PARK FENCE WITH BUFFER RAIL



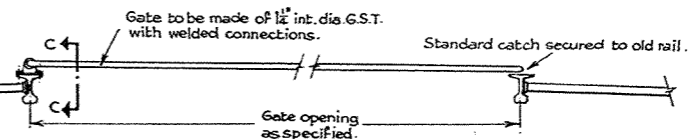
SECTION A-A SECTION B-B SECTION C-C



PLAN OF CAR PARK FENCING

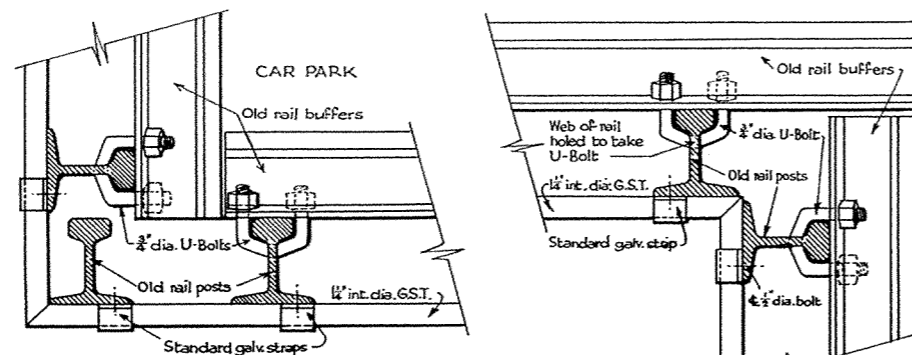


PLAN OF TYPICAL BOUNDARY FENCE WITHOUT BUFFER RAIL



Gate covering to be No 10 ga. X 2' mesh. Chain wire. Laced to gate with No 14 ga. lacing wire.

CAR PARK



PLAN OF ALTERNATE CORNERS OF CAR PARK FENCING

Revision	Date	Amendment	Amended by

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH
STANDARD DRAWING

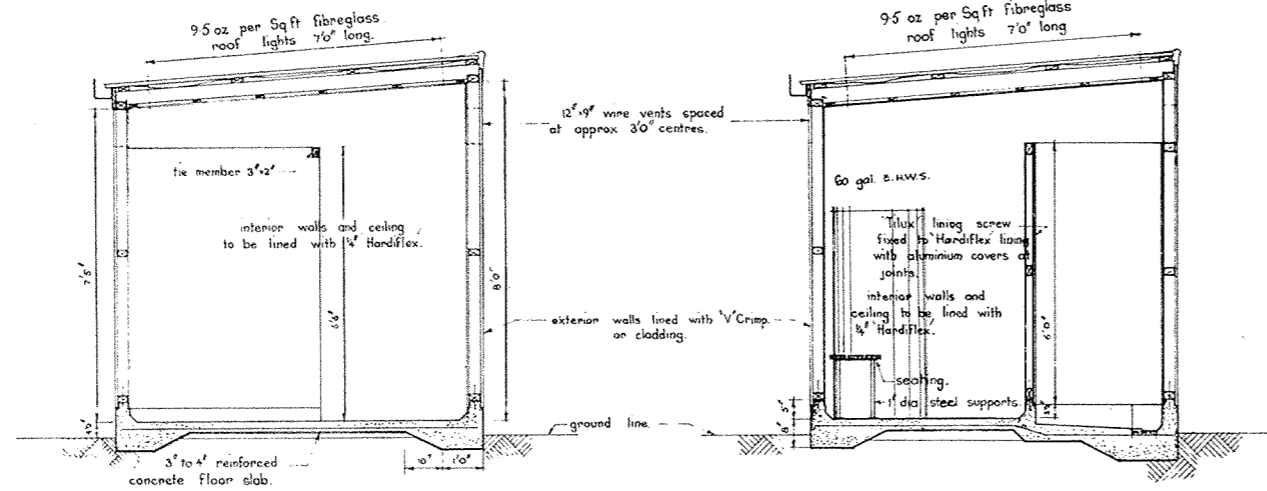
Approved: *J. B. O.* 12.3.70
 Chief Civil Engineer

Adopted: Dec. 1969

Drawn: B.F.J./M.O. Checked: *[Signature]*

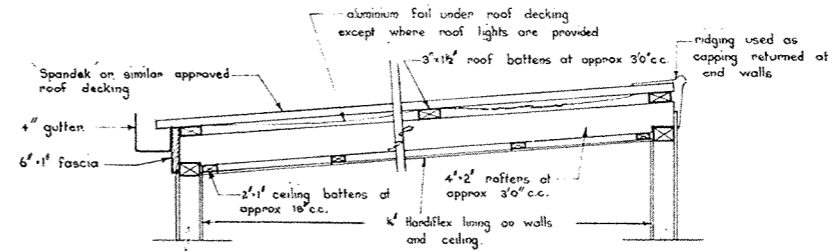
Senior Architect

PLAN No F569

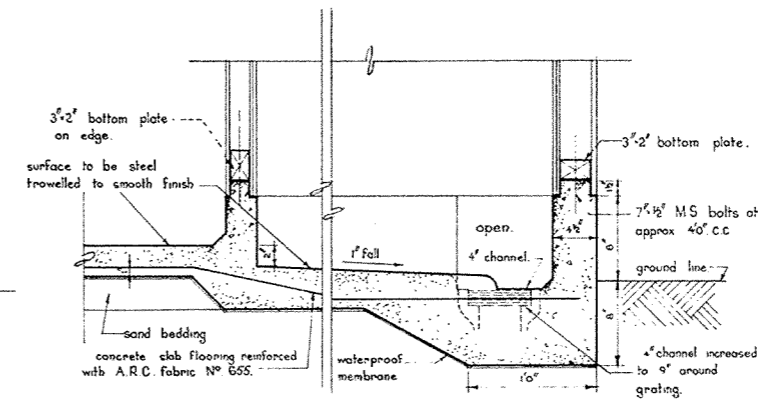


SECTION A.A.
scale: 1/2" = 1'-0"

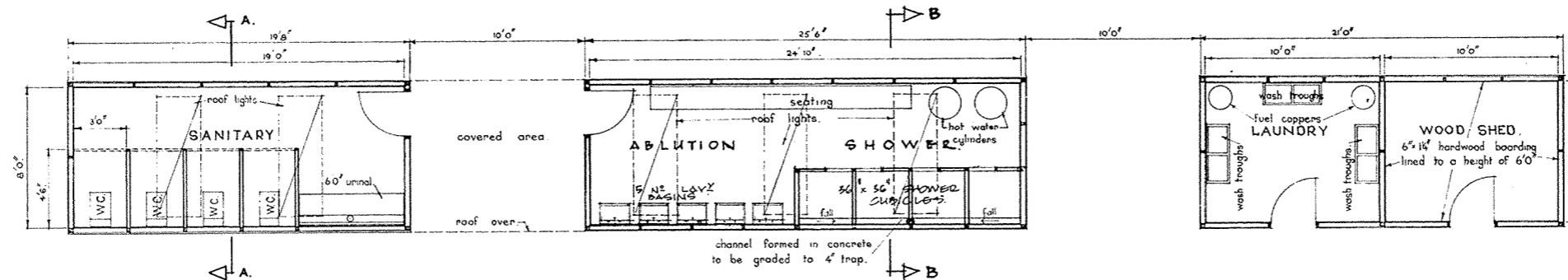
SECTION B.B.
scale: 1/2" = 1'-0"



ROOF DETAILS.
scale: 1/2" = 1'-0"



DETAIL OF SHOWER FLOORS.
scale: 1/2" = 1'-0"



PLAN.
scale: 1/4" = 1'-0"

A	7/19/70	Position of Lavatory Basins and Showers reversed.	A.G.H.
Rev'd	Date	Amendment	Amended.

VICTORIAN RAILWAYS WAY AND WORKS BRANCH.		Adopted 20/06/1970	
STANDARD DRAWING		Chief Civil Engineer.	
SANITARY FACILITIES		JUNE 1970	
FOR		PLAN N ^o	
CYCLIC MAINTENANCE CAMPS.		F570 ^A	
		Drawn by D.V./	Checked by E.A.E.
		Senior Architect.	

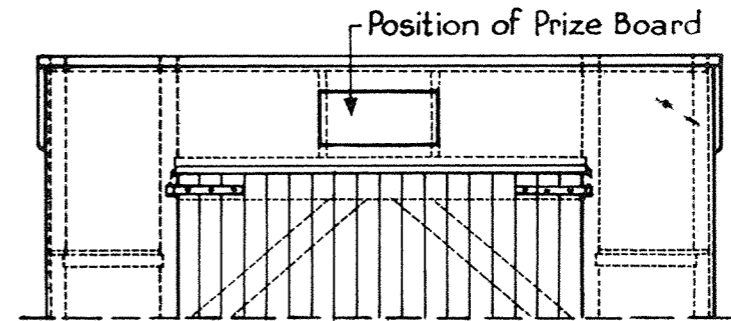

GEELONG DISTRICT
Nº 4 W GANG
FIRST PRIZE
MECHANISED
TRACK MAINTENANCE

3'-0"


GEELONG DISTRICT
MOST IMPROVED
MANUAL TRACK MAINTENANCE
FIRST

1'-6"

1'-6"



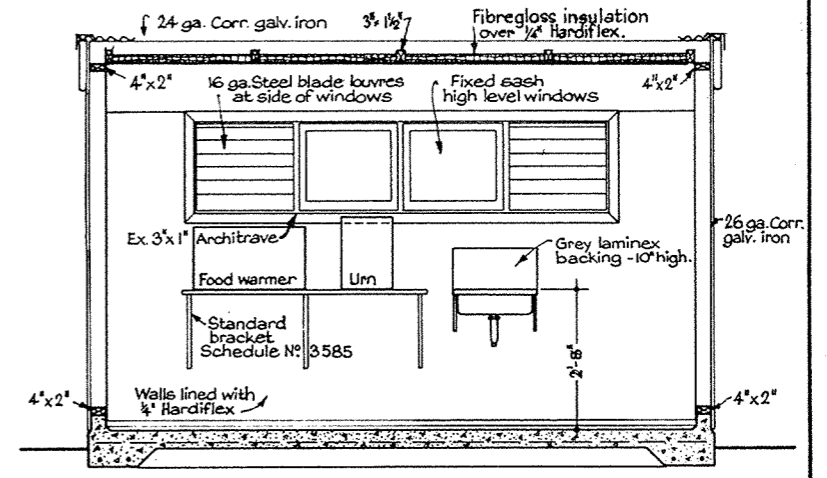
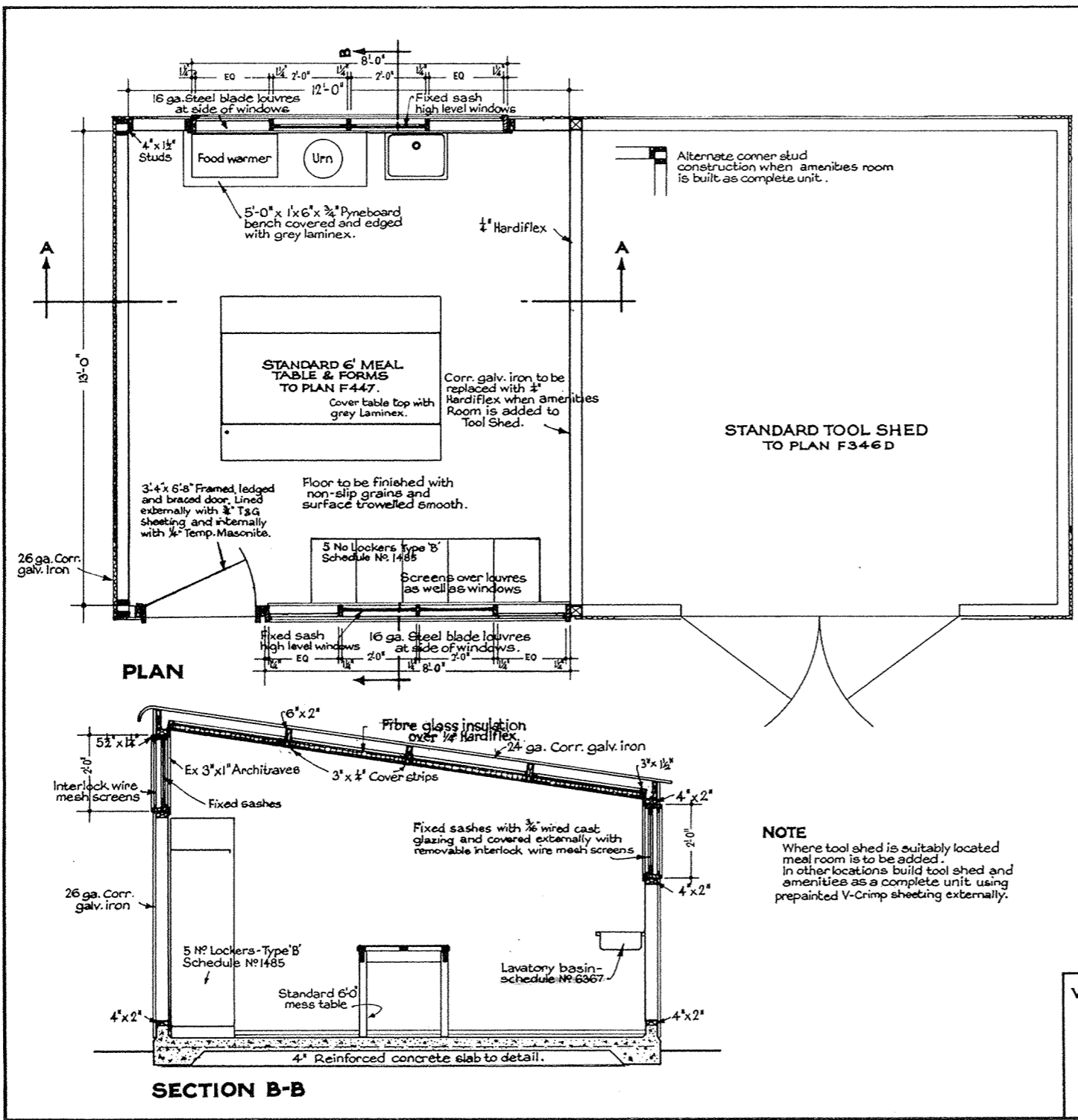
PORTION OF TOOL SHED
Not to Scale

NOTES :

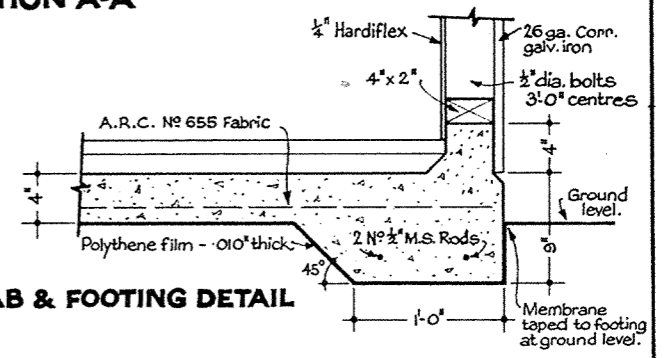
1. District name 'GEELONG' is typical only and should be varied for the particular site.
2. Gang number '4W' is also typical.
3. 'FIRST' may be 'SECOND' or 'THIRD' as ordered.
4. White letters on black background.
5. One inch thick board bolted to shed framing.
6. This Plan supersedes Plan Nº F 369.
7. The Prize Board is to be affixed to the Prize Length Ganger's Headquarters Shed.

Rev.	Date	Amendment	Amended by

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH STANDARD DRAWING		Approved  Chief Civil Engineer	Adopted SEPT. 1970
GANG TOOL SHEDS PRIZE BOARDS	Drawn by  Senior Architect	Checked PLAN No.	F572



SECTION A-A



'A'	18.6.71	Window dimensions added.	B.F.J
Revision	Date	Amendment	Amended by

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH

STANDARD DRAWING

PERMANENT WAY TOOL SHED AND AMENITIES ROOM

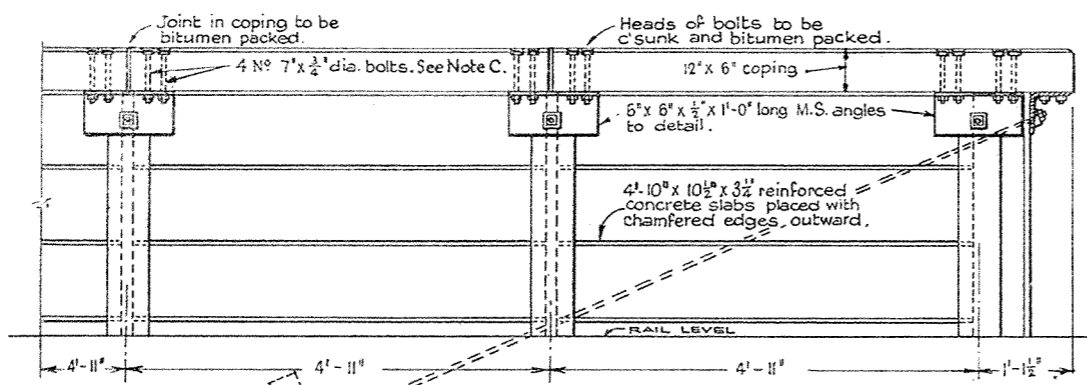
Approved **J.S.O.** Chief Civil Engineer

Adopted **DEC. 1970**

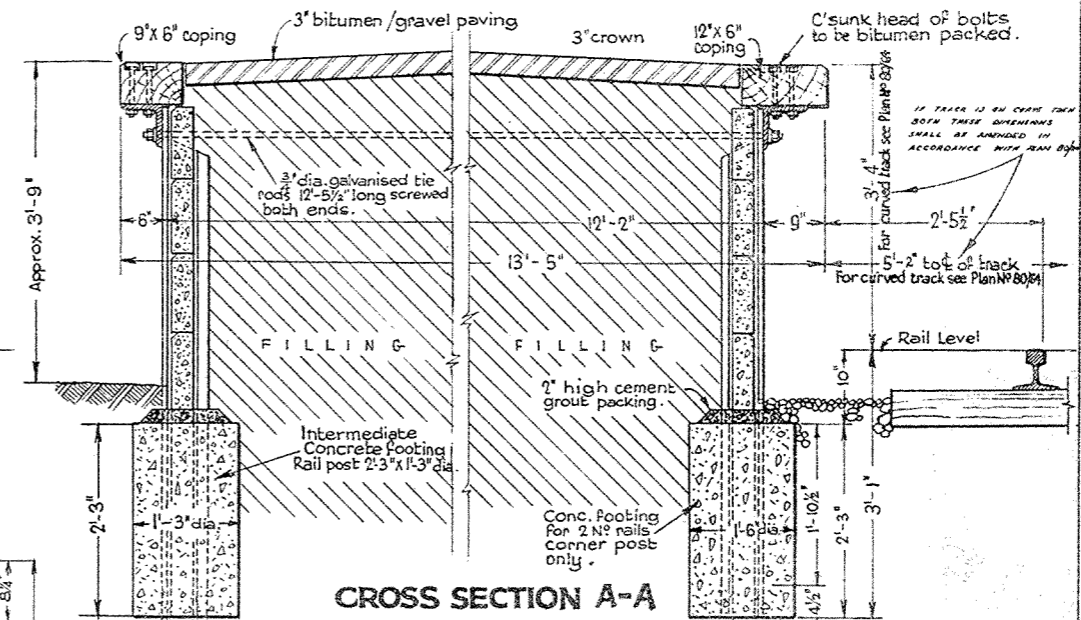
Drawn [] Checked []

Senior Architect **D.R.L.**

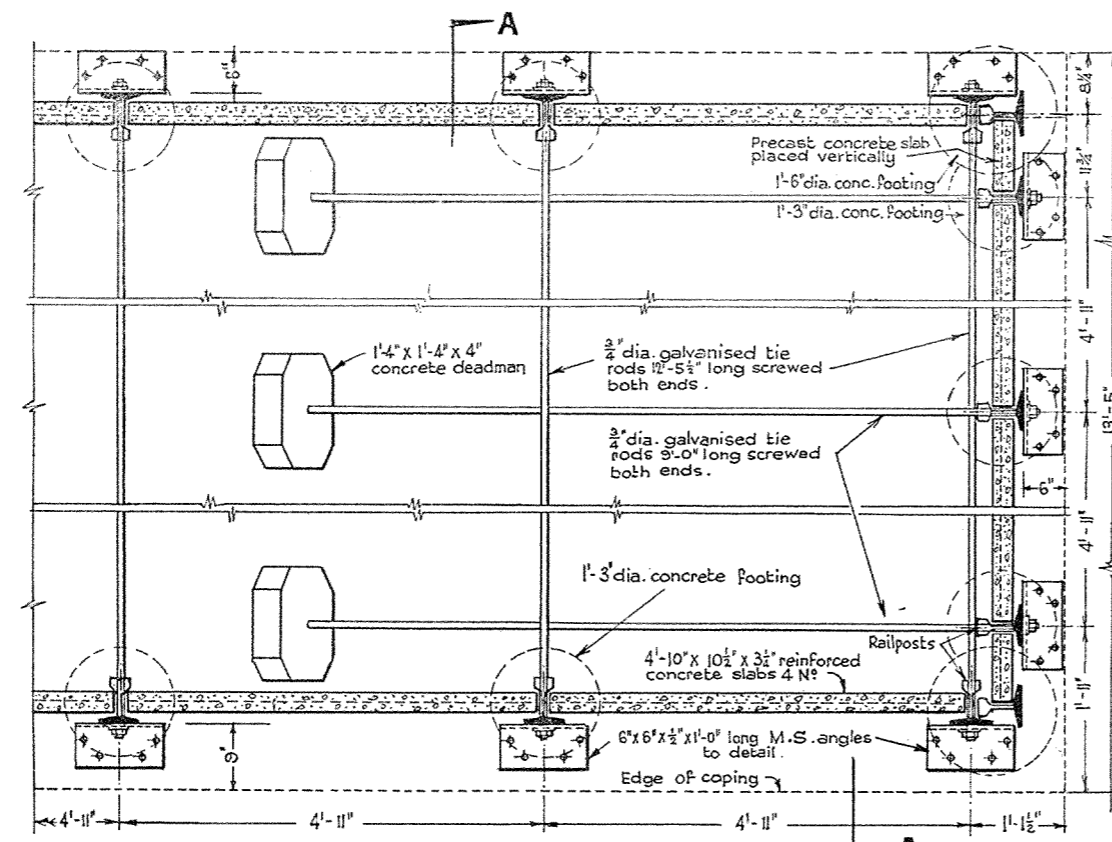
PLAN No F573A



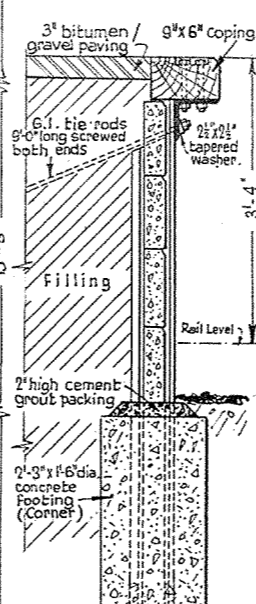
ELEVATION TO RAIL



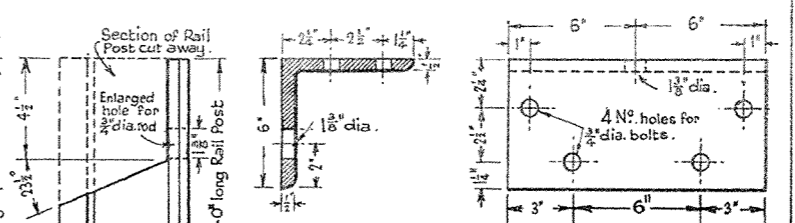
CROSS SECTION A-A



PLAN



SECTION AT END



DETAIL OF M.S. ANGLE

DETAIL OF RAIL POST

NOTES

- A. Railposts shall be from any selected unserviceable 110, 107, 100, 94, 90, & 80 lb. rails.
- B. 80 lb Railposts to be spaced at 4'-11 1/2" centres.
- C. For fixing continuous coping to M.S. bracket use only 2 No. M.S. bolts.
- D. Where soil conditions are doubtful the size of concrete footings to be determined by the District Engineer.
- E. For alignment of facing adjacent to crossing work refer to C.C.E.
- F. For clearance on curved track see Plan No. 80/64.

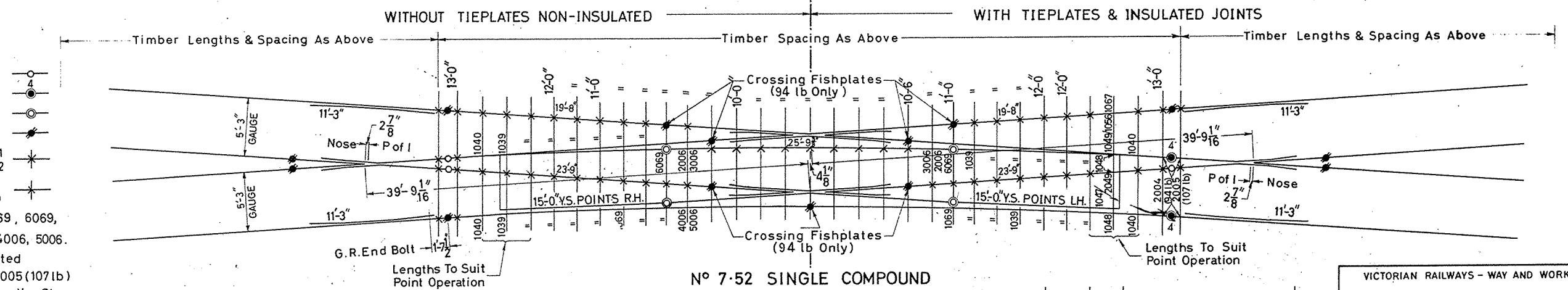
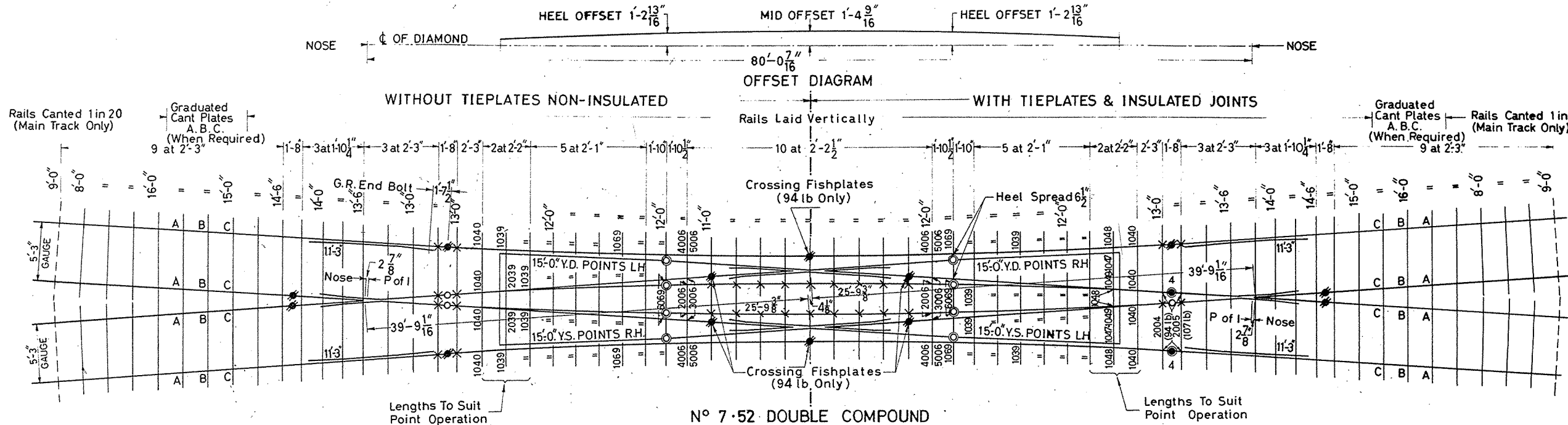
Rev'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS WAY AND WORKS BRANCH

STANDARD DRAWING

DETAILS OF PLATFORM FACING FOR GOODS PLATFORM

Approved <i>R. B. M. O.</i> Chief Civil Engineer	Adopted MAY 1971
Drawn by R.B./M.O.	Checked by K.J.
Senior Architect	PLAN NO F574



- LEGEND**
- Track Joint
 - Insulated Joint, 4-Hole
 - Point Heels
 - Crossing Fishplates
 - Sleeper Plates Flat
 - 94 lb 2001
 - 107 lb 2002
 - 94 lb 1010
 - 107 lb 1009
 - Chairs M.S. 1039, 2039, 1040, 1069, 6069,
 - Lug Plates Step 2006, 3006, 4006, 5006.
 - Sleeper Plates Flat For Insulated Joints 2004 (94 lb), 2005 (107 lb)
 - Crossing Timbers 12x6" To Lengths Shown

COMPOUND DATA	
V CROSSING	Number 7-52A
	Angle 7°34'06.6"
	V End Intersection Length 6'-9"
	Wing End Intersection Length 7'-2"
	Overall Length 13'-11"
	Heel Opening 10"
	Mouth Opening 11"
K CROSSING	Number 7-52A
	Angle 7°34'06.6"
	Intersection Length Short 8'-10"
	Intersection Length Long 12'-11"
	Overall Length 21'-9"
	Opening At Short End 11"
POINTS	Thickness Of Toe 1"
	Length Of Switch 15'-0"
	Switch Angle 1°42'37.5"
	Heel Angle 2°33'52.86"
	Heel Spread 6 1/2"
	Stock Rail Length Curved 32'-6 1/2"
	Stock Rail Length Straight 23'-9"
	Toe Overhang 4'-8"
	Outer Rail Radius 588'-0"
	Gauge Between Stock Rails At Toe Of Points 5'-3 1/4"
	Gauge At Heels Straight Tracks 5'-2 1/4"
	Gauge Through Curved Tracks 5'-3"
	Gauge At Centres Of K Crossing 5'-2 1/4"
	P. Of I. To P. Of I. On Centre Line Of Diamond 79'-6 1/2"

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH

STANDARD DRAWING

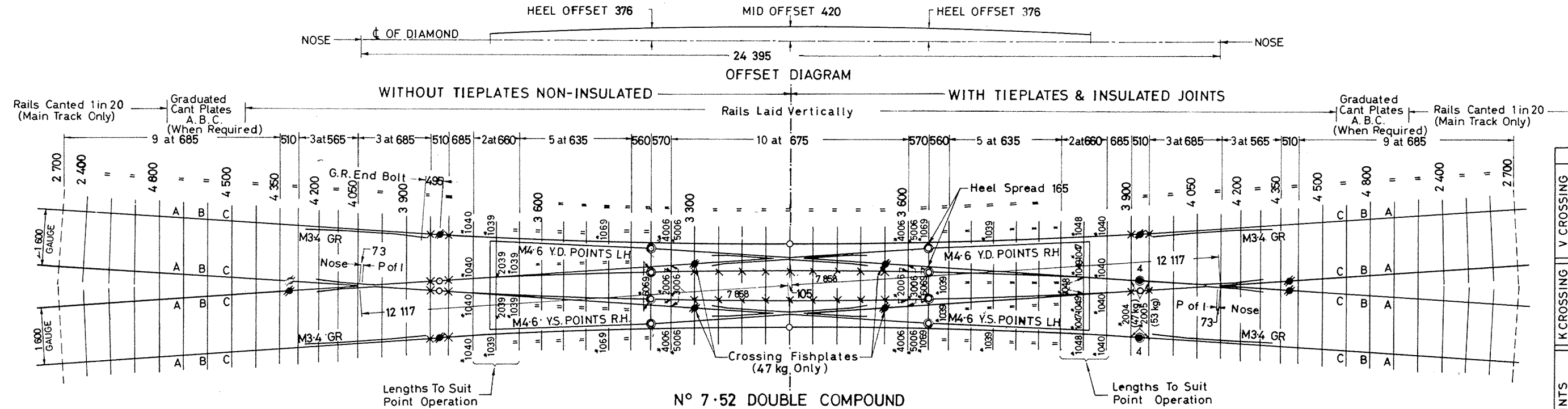
COMPOUNDS DOUBLE & SINGLE

No. 7-52 94 & 107 LB.A.S.

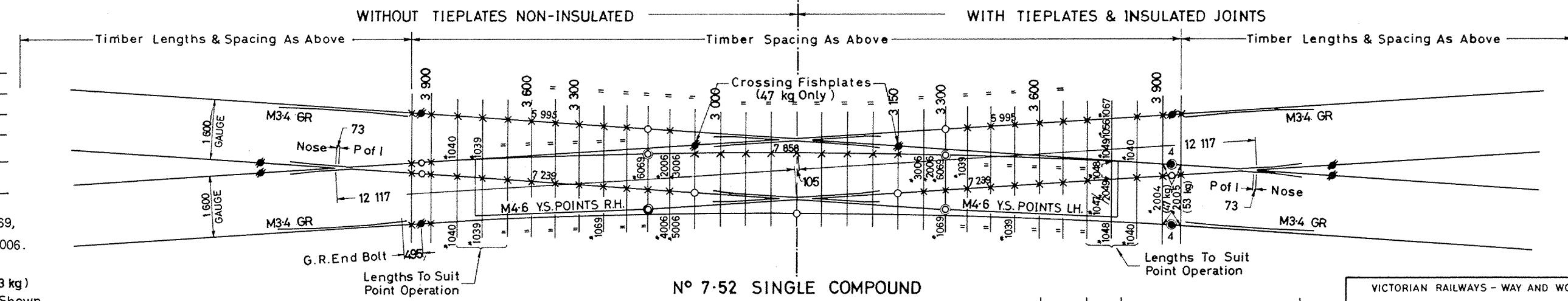
MILD STEEL CHAIRS

Approved Chief Civil Engineer Drawn by J.H.M. & M.T.D. Checked by K.W.D.	Adopted 1971 PLAN No F575 Engineer of Mach & W.S.
---	---

Revision	Date	Amendment	Amended



No 7-52 DOUBLE COMPOUND



No 7-52 SINGLE COMPOUND

- LEGEND**
- Track Joint
 - Insulated Joint, 4-Hole
 - Point Heels
 - Crossing Fishplates
 - Sleeper Plates Flat
 - 47 kg 2001
 - 53 kg 2002
 - 47 kg 1010
 - 53 kg 1009
 - Chairs M.S. 1039, 2039, 1040, 1069, 6069,
 - Lug Plates Step 2006, 3006, 4006, 5006.
 - Sleeper Plates Flat For Insulated Joints 2004 (47 kg), 2005 (53 kg)
 - Crossing Timbers 300x150 To Lengths Shown

COMPOUND DATA	
V CROSSING	Number 7-52A
	Angle 7°34'06.6"
	V End Intersection Length 2 064
	Wing End Intersection Length 2 197
	Overall Length 4 261
	Heel Opening 272
	Mouth Opening 290
K CROSSING	Number 7-52A
	Angle 7°34'06.6"
	Intersection Length Short 2 702
	Intersection Length Long 3 947
	Overall Length 6 648
	Opening At Short End 287
POINTS	Thickness Of Toe 10
	Length Of Switch 4 572
	Switch Angle 1°42'37.5"
	Heel Angle 2°33'52.86"
	Heel Spread 165
	Stock Rail Length Curved 9 925
	Stock Rail Length Straight 7 239
	Toe Overhang 1 422
	Outer Rail Radius 179 220
	Gauge Between Stock Rails At Toe Of Points 1 610
	Gauge At Heels Straight Tracks 1 597
	Gauge Through Curved Tracks 1 600
	Gauge At Centres Of K Crossing 1 594
	P. Of I. To P. Of I. On Centre Line Of Diamond 24 250

NOTE-ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE INDICATED

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH

STANDARD DRAWING

COMPOUNDS DOUBLE & SINGLE
No 7-52 47 & 53 kg.A.S.
MILD STEEL CHAIRS

Approved
Chief Civil Engineer

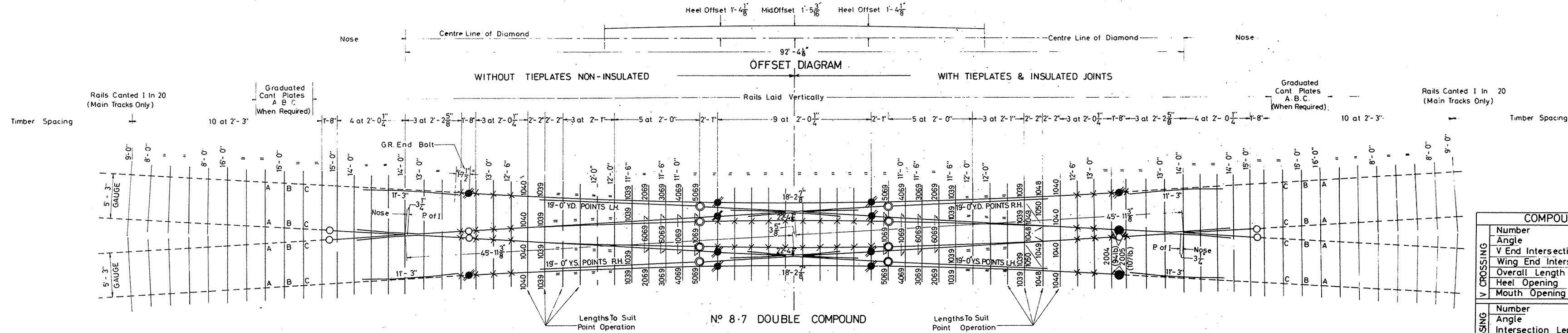
Adopted 1975

Drawn by P.W.J. Checked by K.P.M.

PLAN No MF 575

Engineer of Mach&W.S.

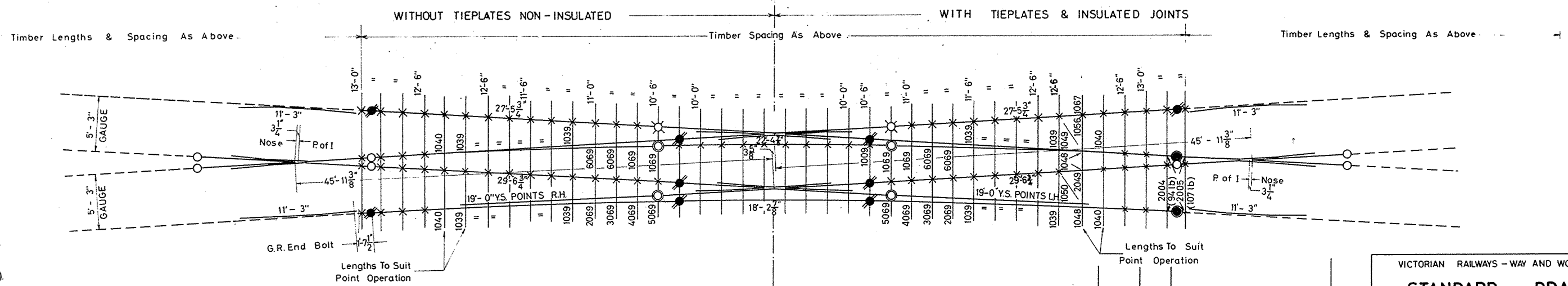
Revision	Date	Amendment	Amended



COMPOUND DATA	
V CROSSING	Number 8-7 A
	Angle 6°33'24.80"
	V End Intersection Length 7'-2 1/2"
	Wing End Intersection Length 9'-2 1/2"
	Overall Length 16'-5"
	Heel Opening 1'-0 1/2"
	Mouth Opening 9 1/2"
K CROSSING	Number 8-7 A
	Angle 6°33'24.80"
	Intersection Length Short 9'-2"
	Intersection Length Long 11'-3"
	Overall Length 20'-5"
	Opening At Short End 9 1/2"
POINTS	Thickness Of Toe 1/2"
	Length Of Switch 19'-0"
	Switch Angle 1°33'18.0"
	Heel Angle 2°25'12.82"
	Heel Spread 7 1/2"
	Stock Rail Length Curved 29'-6 1/4"
	Stock Rail Length Straight 29'-6 1/4"
	Toe Overhang 8'-5 1/2"
	Outer Rail Radius 762'-0"
	Gauge Between Stock Rails At Toe Of Points 5'-3 1/2"
	Gauge At Heels Straight Tracks 5'-2 1/2"
	Gauge Through Curved Tracks 5'-2 1/2"
	Gauge At Centres Of K Crossing 5'-2 1/2"
	P Of I To P Of I On Centre Line Of Diamond 92'-4 1/8"

LEGEND

- Track Joint
- Insulated Joint
- Point Heels
- Crossing Fishplates
- Sleeper Plates Flat 94 lb 2001
- Sleeper Plates Flat 107 lb 2002
- Sleeper Plates Flat 94 lb 1010
- Sleeper Plates Flat 107 lb 1009
- Chairs M.S. 1039, 1040, 1069, 2069, 6069.
- Lug Plates Step 2006, 3006, 4006, 5006.
- Sleeper Plates Flat For Insulated Joints 2004 (94 lb), 2005 (107 lb).
- Crossing Timbers 12x6" To Lengths Shown.



№ 8-7 SINGLE COMPOUND

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH

STANDARD DRAWING

COMPOUNDS DOUBLE & SINGLE
№ 8-7 94 & 107lb.A.S.
MILD STEEL CHAIRS

Approved Chief Civil Engineer

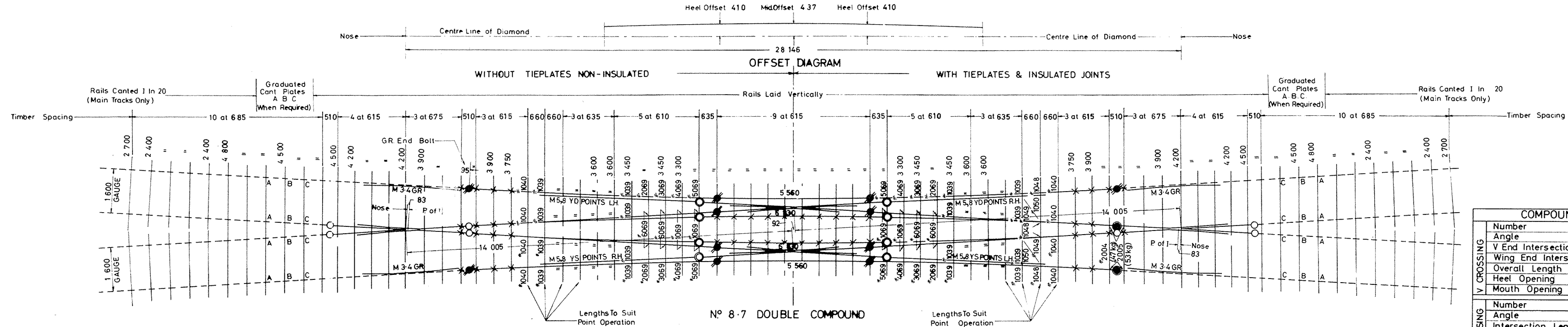
Adopted **1971**

Drawn by B.C. Checked by K.W.D.

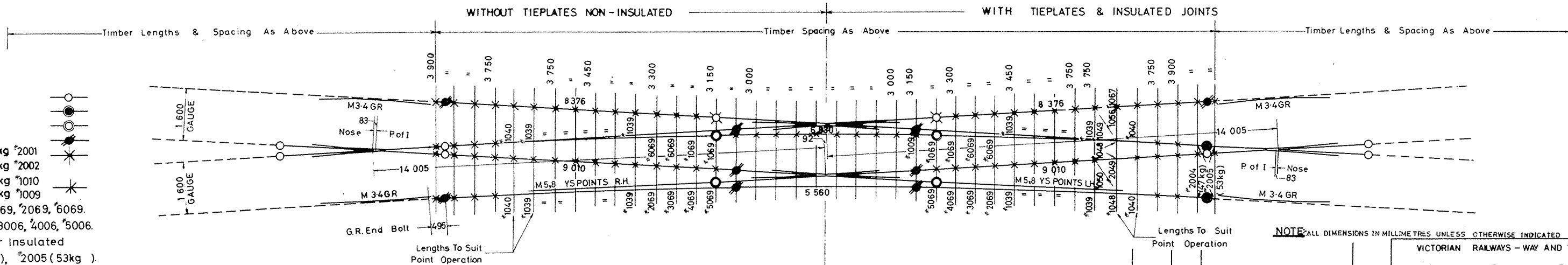
Engineer of M.&W.S.

F576

Revision	Date	Amendment	Amended



No. 8-7 DOUBLE COMPOUND



No. 8-7 SINGLE COMPOUND

COMPOUND DATA	
Number	8-7 A
Angle	6°33'24.80"
V End Intersection Length	2 197
Wing End Intersection Length	2 807
Overall Length	5 004
Heel Opening	320
Mouth Opening	251

Number	8-7 A
Angle	6°33'24.80"
Intersection Length Short	2 794
Intersection Length Long	3 429
Overall Length	6 223
Opening At Short End	250

Thickness Of Toe	10
Length Of Switch	5 791
Switch Angle	1°33'18.0"
Heel Angle	2°25'12.82"
Heel Spread	194
Stock Rail Length Curved	9 010
Stock Rail Length Straight	9 010
Toe Overhang	2 585

Outer Rail Radius	232 260
Gauge Between Stock Rails	
At Toe Of Points	1 610
Gauge At Heels Straight Tracks	1 597
Gauge Through Curved Tracks	1 600
Gauge At Centres Of K Crossing	1 594
P Of I. To P Of I.	
On Centre Line Of Diamond	28 146

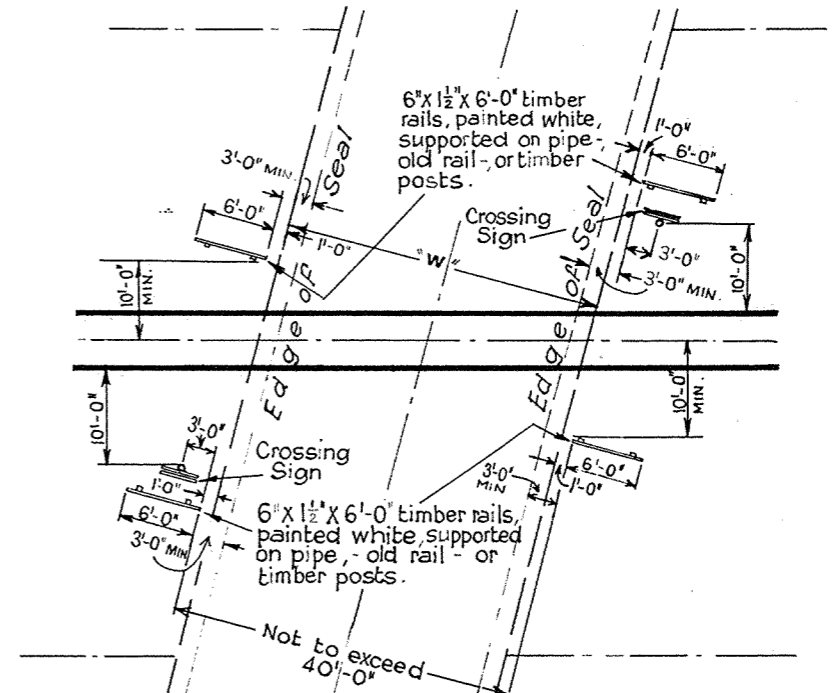
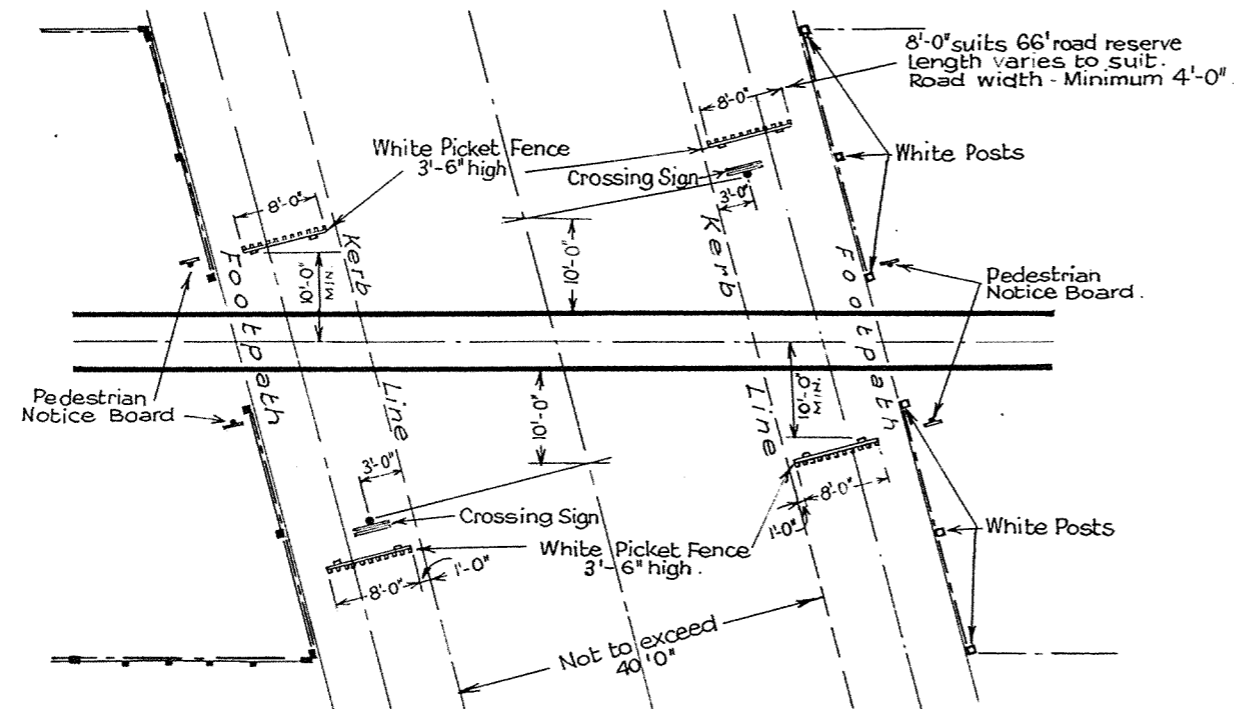
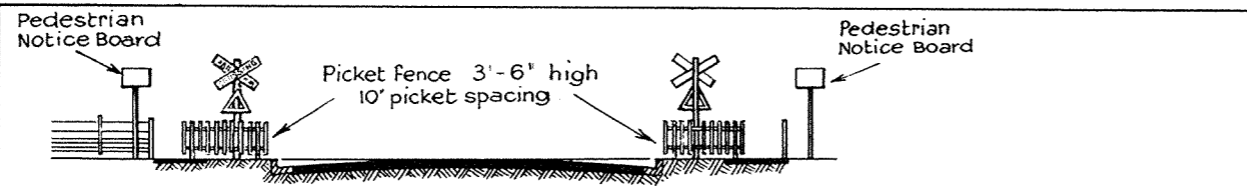
- LEGEND**
- Track Joint
 - Insulated Joint
 - Point Heels
 - Crossing Fishplates
 - Sleeper Plates Flat 47 kg #2001
 - Sleeper Plates Flat 53 kg #2002
 - Sleeper Plates Flat 47 kg #1010
 - Sleeper Plates Flat 53 kg #1009
 - Chairs M.S. #1039, #1040, #1069, #2069, #6069.
 - Lug Plates Step #2006, #3006, #4006, #5006.
 - Sleeper Plates Flat For Insulated Joints #2004 (47 kg), #2005 (53 kg).
 - Crossing Timbers 300x150 To Lengths Shown.

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE INDICATED

Revision	Date	Amendment	Amended

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH
STANDARD DRAWING
 COMPOUNDS DOUBLE & SINGLE
 No. 8-7 47kg & 53kg A.S.
 MILD STEEL CHAIRS

Approved
 Chief Civil Engineer
 Drawn by P.W.J. Checked by K.P.M.
 Adopted
 1975
 PLAN No.
MF 576
 Engineer of M.&W.S.



TYPICAL ARRANGEMENT: URBAN CROSSING
(Generally, where provision is made for footpaths.)

Left side shows arrangement where fencing is maintained.
Right side shows arrangement where fencing is not maintained.

NOTES : CROSSING WIDTH: Existing widths are not to be altered without instructions from the Chief Civil Engineer.
WHITE PAINTING :- All marker posts, picket fence panels and post-and rail panels to be painted white.
CROSSING SIGNS :- Each crossing to be equipped with at least 2 No Crossing Signs. (S.A.A. Type B, D or F, as approved) and erected generally at 10 ft. from the nearest rail at LEFT SIDE of approach road. Special cases : As circumstances dictate.
At minor, little used roads, white marker posts may be used in lieu of white panels, at the discretion of the District Engineer.

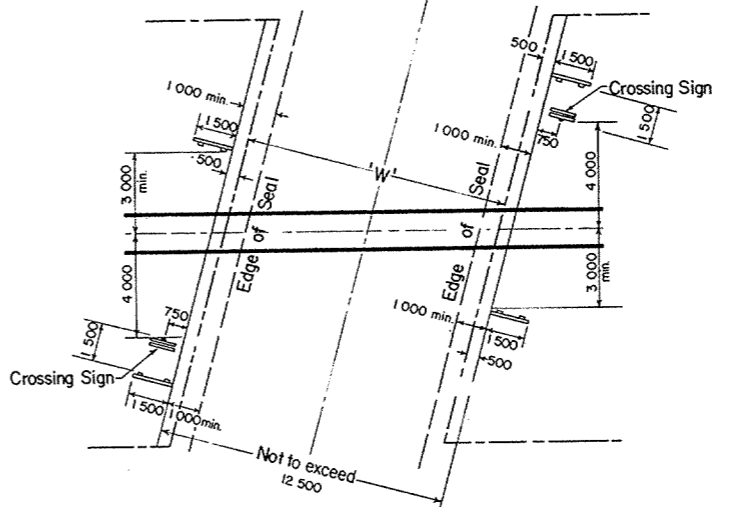
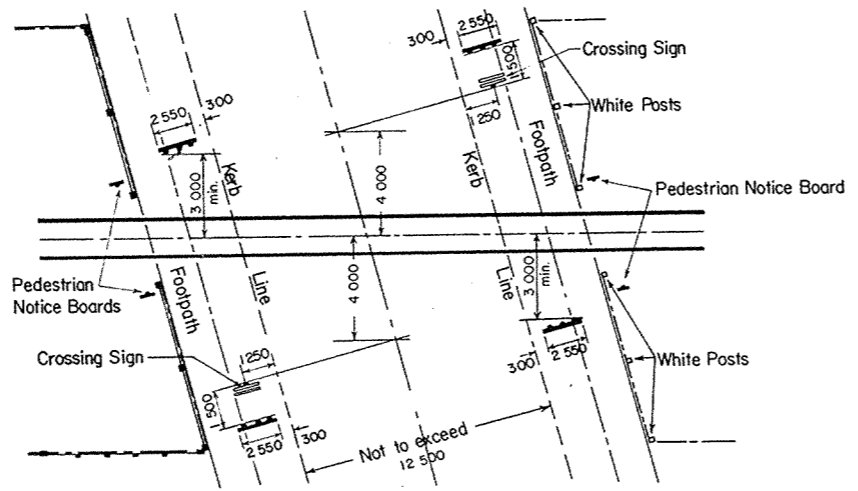
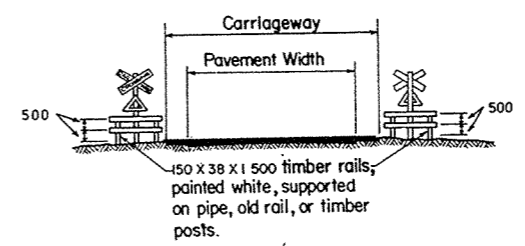
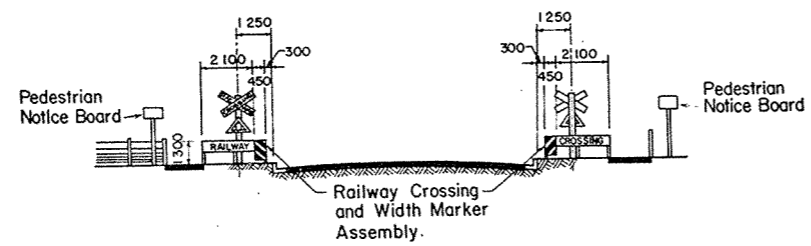
TYPICAL ARRANGEMENT: RURAL CROSSING
(Generally where there are no footpaths)

"W" denotes trafficable width of road (Sealed section + gravel shoulder)
At locations where fencing is maintained, when wing fencing requires renewal, it is to be replaced as standard boundary fencing, the white panels removed from the wing fence and erected in accordance with this plan. - The necessity for the provision of wing fencing and cattle grids is to be determined by the District Engineer.

NOTE : This plan supersedes Plan No F 525

Revision	Date	Amendment

VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved <i>J. B. B.</i> 17.5.72	Adopted FEB. 1972
STANDARD DRAWING		Chief Civil Engineer	PLAN No. F 577
P.C.R. (OPEN) CROSSING		Drawn by <i>J. B. B.</i>	
Typical arrangement for urban and rural locations.		Checked by <i>J. B. B.</i>	Engineer of Planning



TYPICAL ARRANGEMENT : URBAN CROSSING
(Generally where provision is made for footpaths.)

TYPICAL ARRANGEMENT : RURAL CROSSING
(Generally where there are no footpaths)

Left side shows arrangement where fencing is maintained.
Right side shows arrangement where fencing is not maintained.

"W" denotes trafficable width of road (Sealed section & gravel shoulder).
At locations where fencing is maintained, when wing fencing requires renewal, it is to be replaced as standard boundary fencing, the white panels removed from the wing fence and erected in accordance with this plan. The necessity for the provision of wing fencing and cattle grids is to be determined by the District Engineer.

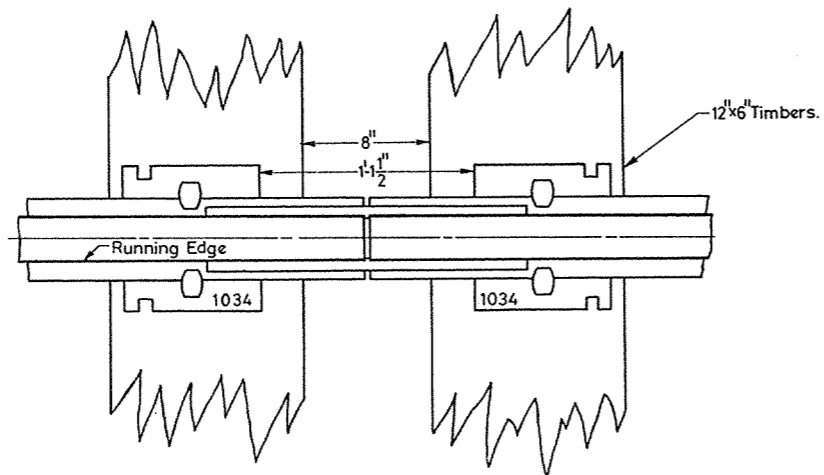
NOTES : CROSSING WIDTH : Existing widths are not to be altered without instructions from the Chief Civil Engineer.
WHITE PAINTING : All marker posts and post and rail panels to be painted white.
CROSSING SIGNS : Each crossing to be equipped with at least 2 N° Crossing Signs. (S.A.A. Type B, D or F, as approved) and erected generally at 4 000 from centre line of nearest track at LEFT SIDE of approach road. Special cases (as circumstances dictate). At minor, little used roads, white marker posts may be used in lieu of white panels, at the discretion of the District Engineer.
PROTECTIVE FENCING : Railway crossing and width marker assembly (S.A.A. Type RLC - L) or timber rails may be used at any crossing at the discretion of the District Engineer.

NOTE : This plan supersedes Plan N° F577A

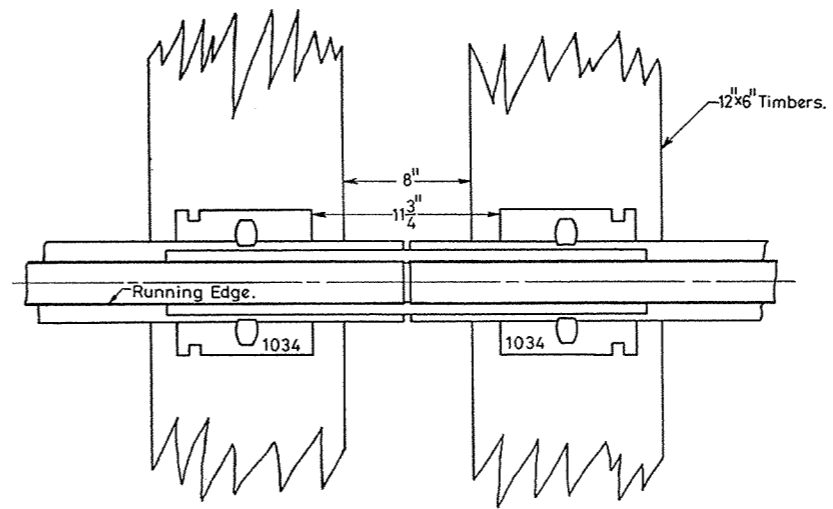
All dimensions in millimetres unless noted otherwise.

REV#	DATE	DESCRIPTION	REV'D BY	APP'D BY	DESIGNED	DRAWN
A	DEC 80	Replacement of Picket Fences with G9-32 and G9-33 signs with width markers.			N. D. C.	R. E. T.
B	NOV 81	Guard fencing height, position and description altered.			TRACED L. M. W.	ADOPTED DEC 1980

APPROVALS CHAIRMAN LEVEL CROSSING COMMITTEE	DESIGNED N. D. C.	DRAWN R. E. T.	VICTORIAN RAILWAYS P.C.R. (OPEN) CROSSING Typical arrangement for urban and rural locations.	CHIEF CIVIL ENGINEER STANDARD PLAN F577B
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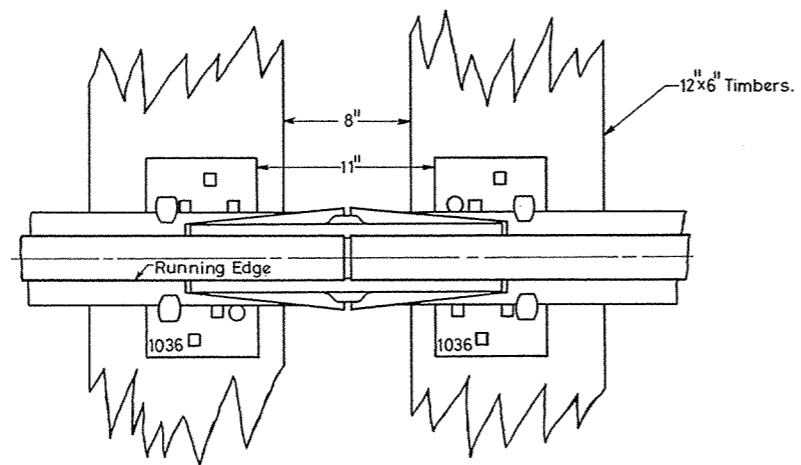


4 HOLE ARRANGEMENT 80-94LB.A.S.



6 HOLE ARRANGEMENT 80-94LB.A.S.

DOGSPIKES IN REVERSE POSITION.



4 HOLE ARRANGEMENT 100-110 LB.A.S.

WEIGHT.	DETAIL No.
80, 90 & 94LB.A.S.	1034
100, 107 & 110LB.A.S.	1036

WHEN JOINT IS INCLINED TO TIMBERS THE SPACING BETWEEN SLEEPER PLATES WILL REMAIN UNCHANGED.

THIS PLAN SUPERSEDES PLAN No.F381A.

Rev'n	Date	Amendment	Amend

VICTORIAN RAILWAYS-WAY & WORKS BRANCH.		APPROVED. <i>A. D. D</i> 16.10.72 CHIEF CIVIL ENGINEER.	ADOPTED. 1972
SLEEPER PLATES 1 in 20 FOR TYPE 1939 INSULATED JOINTS (INSTALLATION)		DRAWN BY: <i>J. V. W.</i>	PLAN No. F578
		CHECKED BY: <i>K. W. D.</i>	
		<i>K. W. D.</i> ENGINEER OF M.&W.S.	



TYPE "A"



TYPE "E"

NOTES:

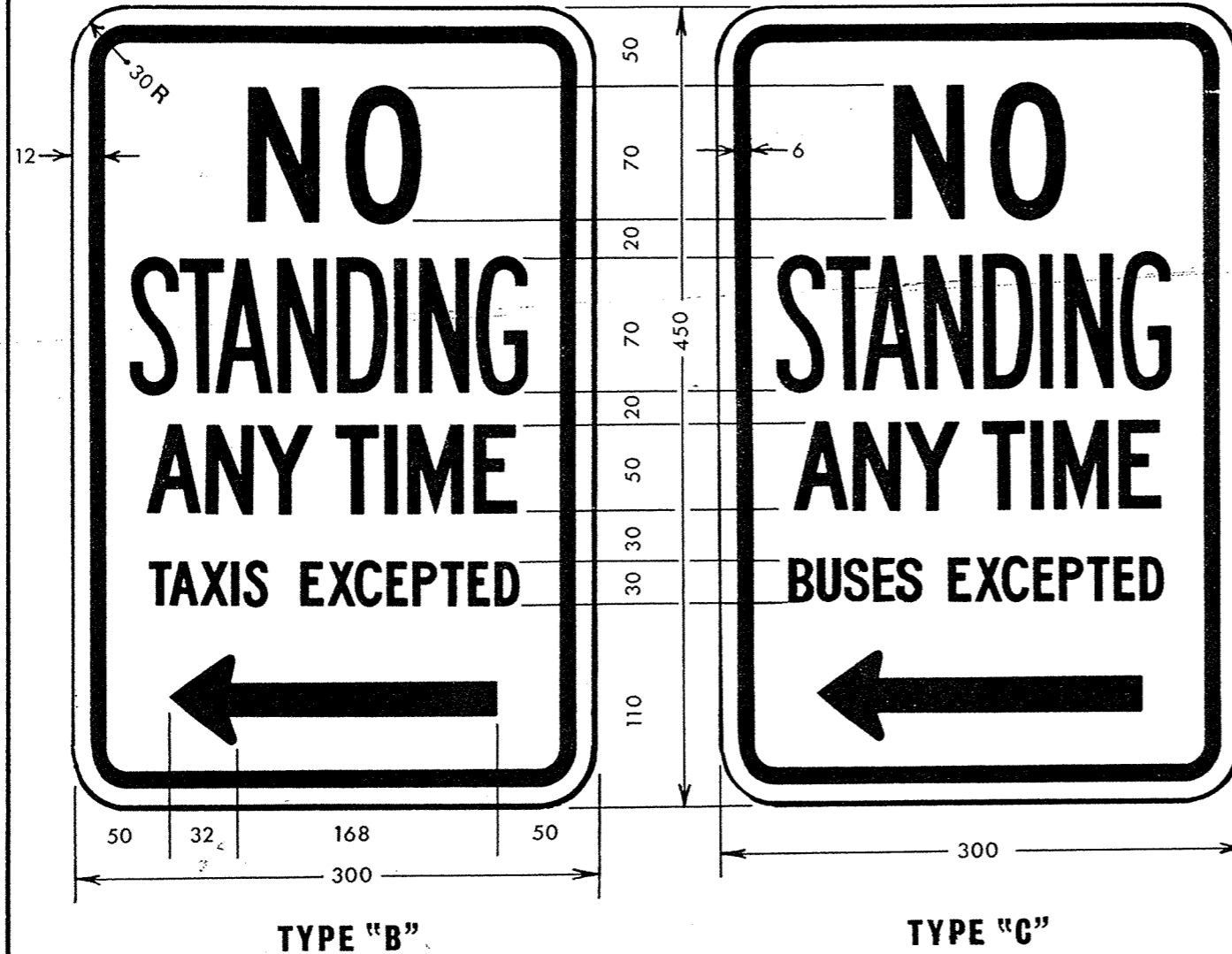
1. LEGEND: Signs to have RED legend on WHITE background.
2. LETTERING: (Reference AS No. 1743 & 1744-1975)
70mm "NO" is series "B"
"STANDING" series "A"
50mm "NO" is series "C"
OTHERWISE series "B"
30mm series "D"
3. BASE MATERIAL: 1.6 Gauge enamelling quality sheet steel (e.g. Lysaght's Lynamel).
4. PREPARATION: Sheets to be degreased, acid pickled neutralized and dried.
5. APPLICATION & FINISH: Signs to be coated on all surfaces with grip coat vitreous enamel, followed by a white coat on the face, then, silk screened with vitreous enamel.
Each coating of vitreous enamel to be separately fused at 800°C.
6. MOUNTING: Signs to have 2 No. holes with brass eyelets of 12mm internal dia. to 450mm centres on a vertical line. Signs to be mounted in accordance with PLAN NO. 185/76.

Signs to have arrows either left, right or both ways as required.

Revis'n	Date	Amendment	Amended by
"A"	3.5.76	Notes 2, 3, 4, 5, 6 & 7 altered.	P.K.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH
STANDARD DRAWING
PARKING CONTROL SIGNS
TYPES "A" & "E"

APPROVED <i>K.B.M.C.</i> Chief Civil Engineer		Adopted Nov. 1972
Drawn by K.B. M ^c .O.	Checked by <i>R.A.F.</i>	PLAN No. MF579^A
ENGINEER OF TRACK & DRAINAGE		



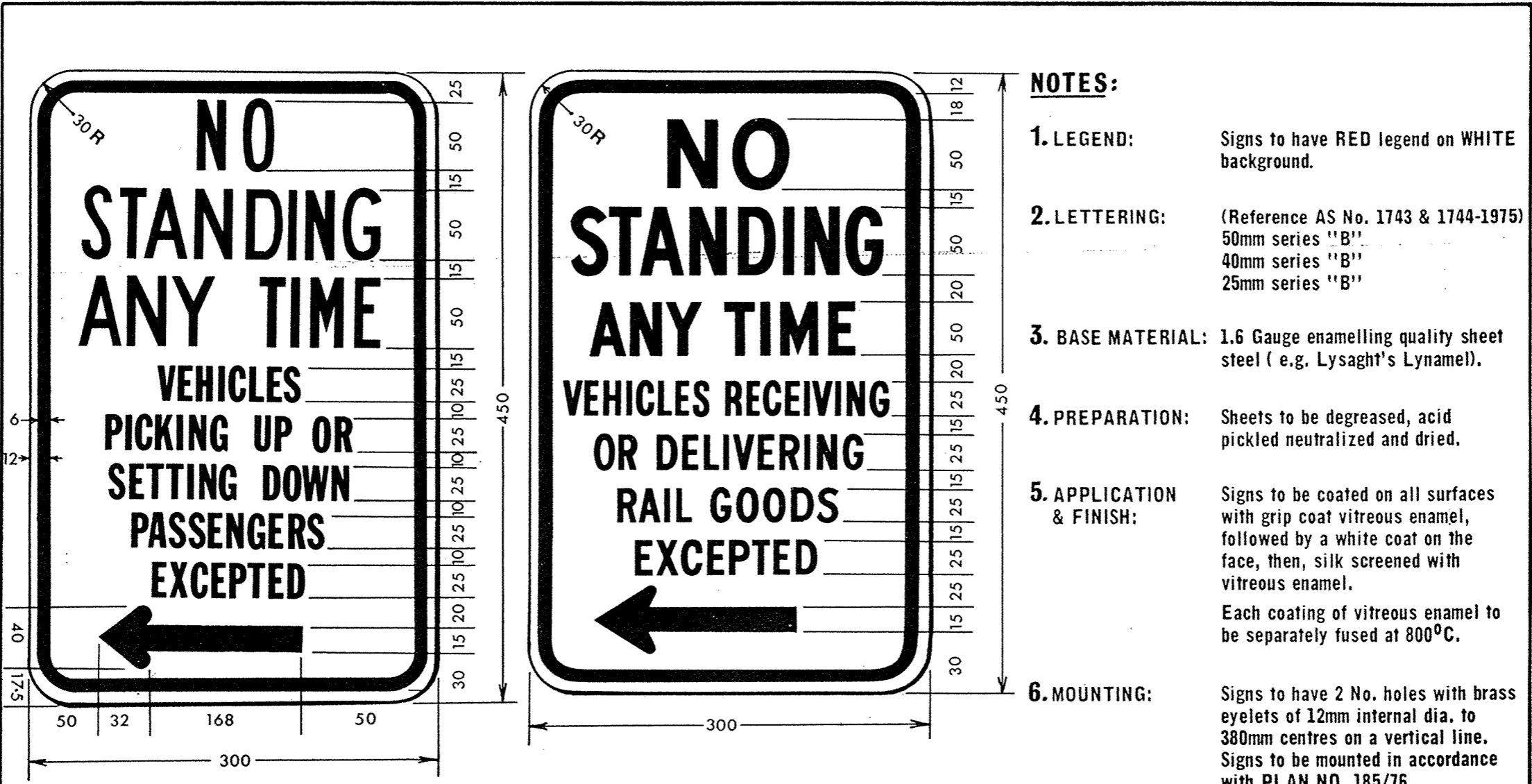
NOTES:

1. **LEGEND:** Signs to have RED legend on WHITE background.
2. **LETTERING:** (Reference AS No. 1743 & 1744-1975)
 70mm "NO" is series "B"
 "STANDING" series "A"
 50mm series "B"
 30mm series "B"
3. **BASE MATERIAL:** 1.6 Gauge enamelling quality sheet steel (e.g. Lysaght's Lynamel).
4. **PREPARATION:** Sheets to be degreased, acid pickled neutralized and dried.
5. **APPLICATION & FINISH:** Signs to be coated on all surfaces with grip coat vitreous enamel, followed by a white coat on the face, then, silk screened with vitreous enamel.
 Each coating of vitreous enamel to be separately fused at 800°C.
6. **MOUNTING:** Signs to have 2 No. holes with brass eyelets of 12mm internal dia. to 380mm centres on a vertical line. Signs to be mounted in accordance with PLAN NO. 185/76.

Signs to have arrows either left, right or both ways as required.

"A"	3.5.76	Notes 2, 3, 4, 5, 6 & 7 altered.	P.K.
Revis'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		APPROVED <i>[Signature]</i> Chief Civil Engineer	Adopted Nov. 1972
STANDARD DRAWING		Drawn by K. B. M'D.	Checked by <i>[Signature]</i>
PARKING CONTROL SIGNS		PLAN No.	
TYPES "B" & "C"		MF580^A	
		ENGINEER OF TRACK & DRAINAGE	



- NOTES:**
- 1. LEGEND:** Signs to have RED legend on WHITE background.
 - 2. LETTERING:** (Reference AS No. 1743 & 1744-1975)
50mm series "B"
40mm series "B"
25mm series "B"
 - 3. BASE MATERIAL:** 1.6 Gauge enamelling quality sheet steel (e.g. Lysaght's Lynamel).
 - 4. PREPARATION:** Sheets to be degreased, acid pickled neutralized and dried.
 - 5. APPLICATION & FINISH:** Signs to be coated on all surfaces with grip coat vitreous enamel, followed by a white coat on the face, then, silk screened with vitreous enamel.
Each coating of vitreous enamel to be separately fused at 800°C.
 - 6. MOUNTING:** Signs to have 2 No. holes with brass eyelets of 12mm internal dia. to 380mm centres on a vertical line. Signs to be mounted in accordance with PLAN NO. 185/76.

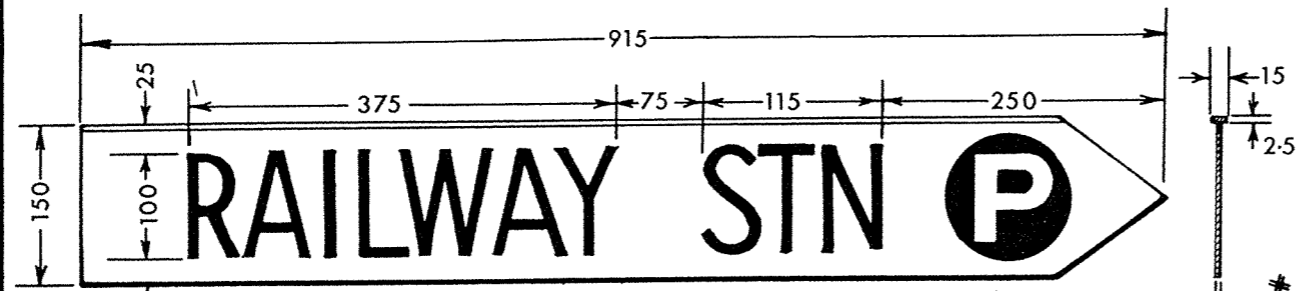
TYPE "M"

TYPE "D"

Signs to have arrows either left, right or both ways as required.

"A"	3.5.76	Notes 2, 3, 4, 5, 6 & 7 altered.	P.L.
Revis'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		APPROVED	Adopted
STANDARD DRAWING		<i>[Signature]</i>	Nov.1972
		Chief Civil Engineer	
Drawn by	Checked by		PLAN No.
V.G.	<i>[Signature]</i>		MF581A
		<i>[Signature]</i>	
		ENGINEER OF TRACK & DRAINAGE	



TYPE "F"



TYPE "G"

NOTES:

1. LEGEND: TYPE F: BLACK scotchcal legend on WHITE scotchlite background. Except (P) to be WHITE scotchlite on BLACK scotchcal.
TYPE G: GREEN scotchcal legend on WHITE scotchlite background. Arrow standard for 230mm.
2. LETTERING: (Reference AS No. 1743 & 1744-1975)
400mm series "D"
100mm series "B"
(P) 100mm series "F"
90mm series "B"
80mm series "E"
3. BASE MATERIAL: TYPE F: No.50 S.T.5. high tensile Stress Aluminium alloy "T" section.
TYPE G: 2.0 Gauge No.60-61 high tensile Stress Aluminium alloy with 3mm deep x 16mm wide swage 9mm in from edges.
4. PREPARATION: Blanks are to be degreased, etched and desmuted.
5. METHOD OF APPLICATION: Scotchlite and Scotchcal to be applied under heat and pressure.

Signs to have arrows either left, right or both ways as required.

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING		APPROVED <i>[Signature]</i> Chief Civil Engineer	Adopted Nov.1972
		Drawn by W.L.	Checked by <i>[Signature]</i> ENGINEER OF TRACK & DRAINAGE
PARKING CONTROL SIGNS TYPES "F" & "G"			

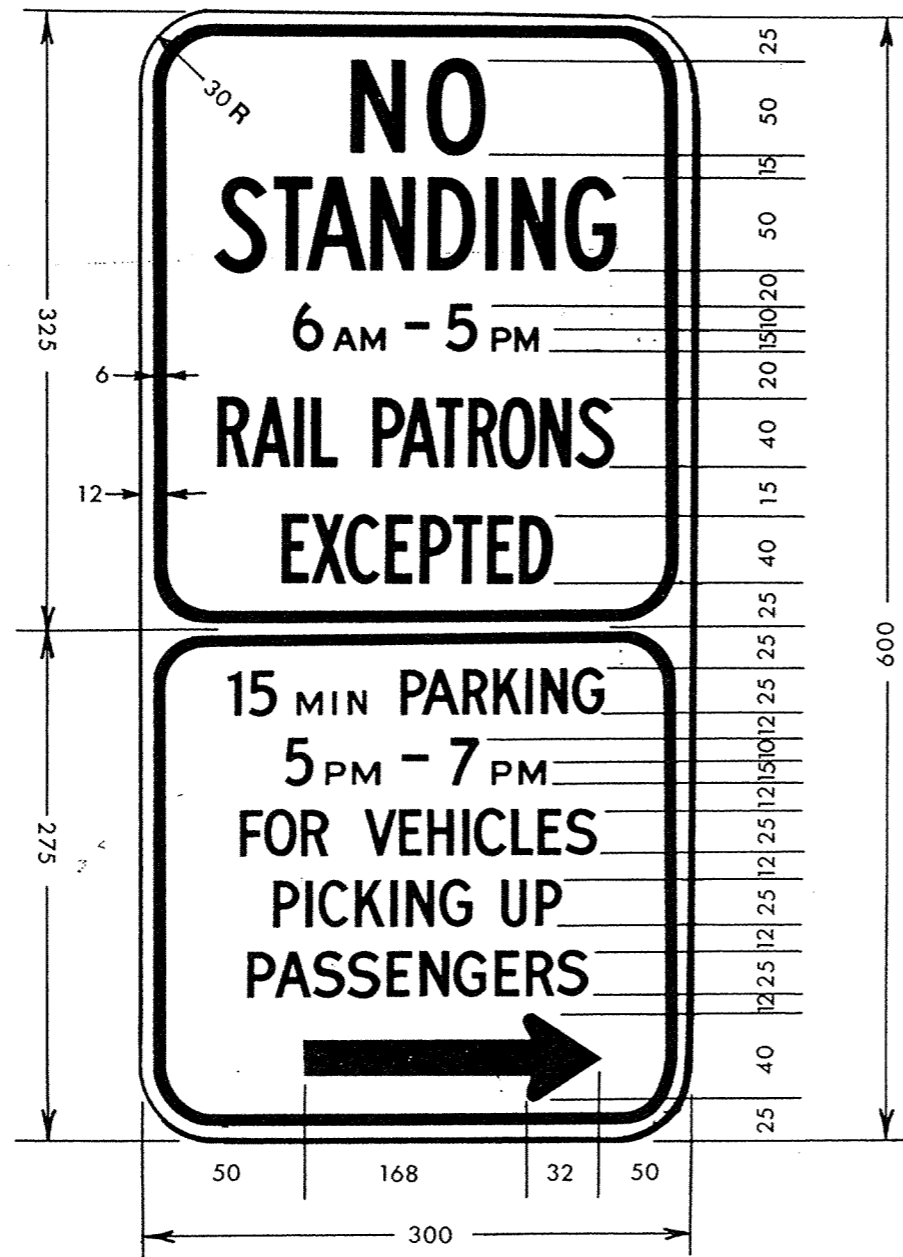


NOTES:

1. LEGEND: All lettering to be GREEN on a WHITE background.
2. LETTERING: (Reference AS No. 1743 & 1744-1975)
 100mm series "B"
 80mm series "B"
 50mm series "C"
3. BASE MATERIAL: 1.6 Gauge enamelling quality sheet steel (e.g. Lysaght's Lynamel).
4. PREPARATION: Sheets to be degreased, acid pickled neutralized and dried.
5. APPLICATION & FINISH: Signs to be coated on all surfaces with grip coat vitreous enamel, followed by a white coat on the face, then, silk screened with vitreous enamel.
 Each coating of vitreous enamel to be separately fused at 800°C.
6. MOUNTING: Signs to have 2 No. holes with brass eyelets of 12mm internal dia. to 450mm centres on a vertical line. Signs to be mounted in accordance with PLAN NO. 185/76.

"A"	3.5.76	Notes 2, 3, 4, 5, 6 & 7 altered.	P.K.
Revis'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		APPROVED <i>J.S.O.</i>	Adopted Nov. 1972
STANDARD DRAWING		Chief Civil Engineer	
CAR PARK SIGN		Drawn by W.L.	Checked by <i>S.H.</i>
TYPE "H"		<i>P.K.</i>	PLAN No. MF583^A
		ENGINEER OF TRACK & DRAINAGE	



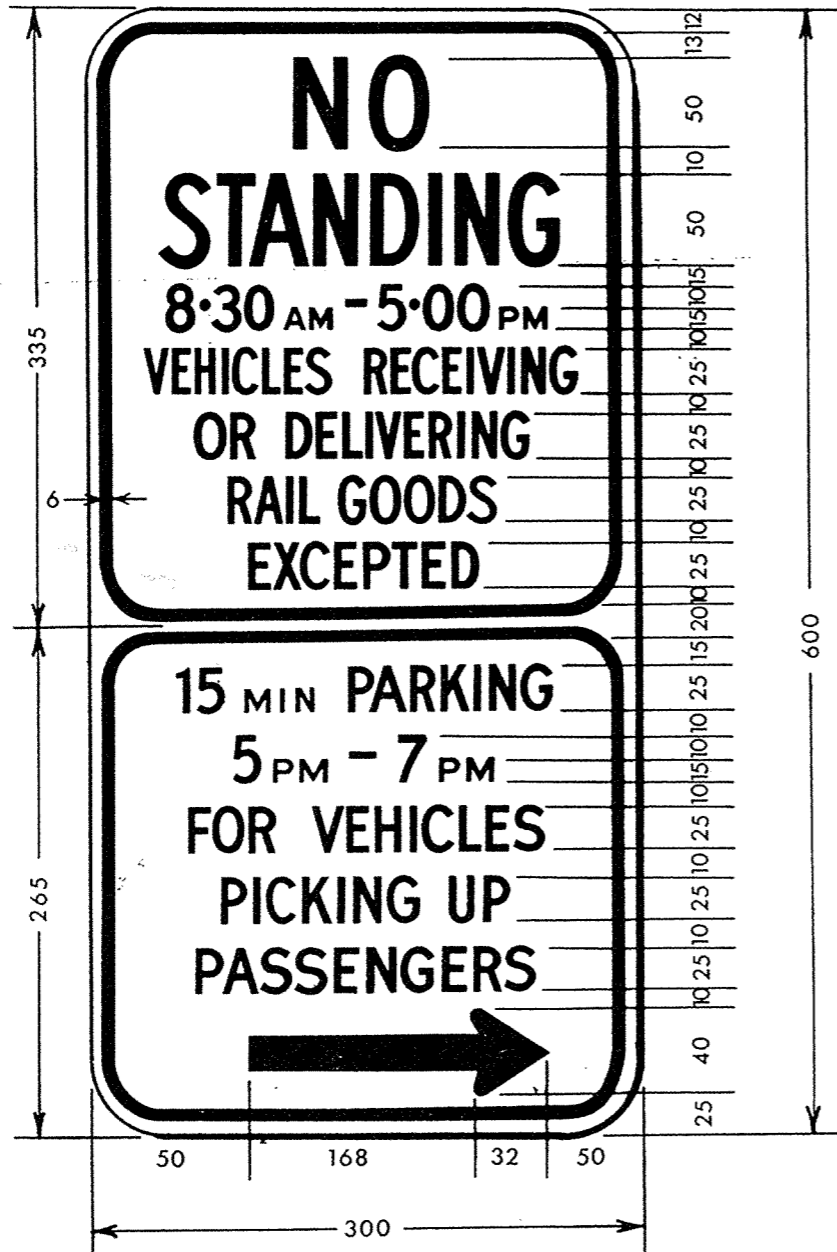
Signs to have arrows either left, right or both ways as required.

NOTES:

1. LEGEND: The top portion of the sign has a RED legend on a WHITE background. The lower portion has a GREEN legend on a WHITE background.
2. LETTERING: (Reference AS No. 1743 & 1744-1975)
50mm "NO" series "G"
"STANDING" series "B"
40mm series "A"
25mm series "D"
3. BASE MATERIAL: 1.6 Gauge enamelling quality sheet steel (e.g. Lysaght's Lynamel).
4. PREPARATION: Sheets to be degreased, acid pickled neutralized and dried.
5. APPLICATION & FINISH: Signs to be coated on all surfaces with grip coat vitreous enamel, followed by a white coat on the face, then, silk screened with vitreous enamel.
Each coating of vitreous enamel to be separately fused at 800°C.
6. MOUNTING: Signs to have 2 No. holes with brass eyelets of 12mm internal dia. to 450mm centres on a vertical line. Signs to be mounted in accordance with PLAN NO. 185/76.

"A"	3.5.76	Notes 2, 3, 4, 5, 6 & 7 altered.	P.K.
Revis'n	Date	Amendment	Amend by

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH STANDARD DRAWING		APPROVED <i>[Signature]</i> Chief Civil Engineer	Adopted Nov. 1972
		Drawn by J. R. D.	Checked by R. A. F.
		<i>[Signature]</i> ENGINEER OF TRACK & DRAINAGE	



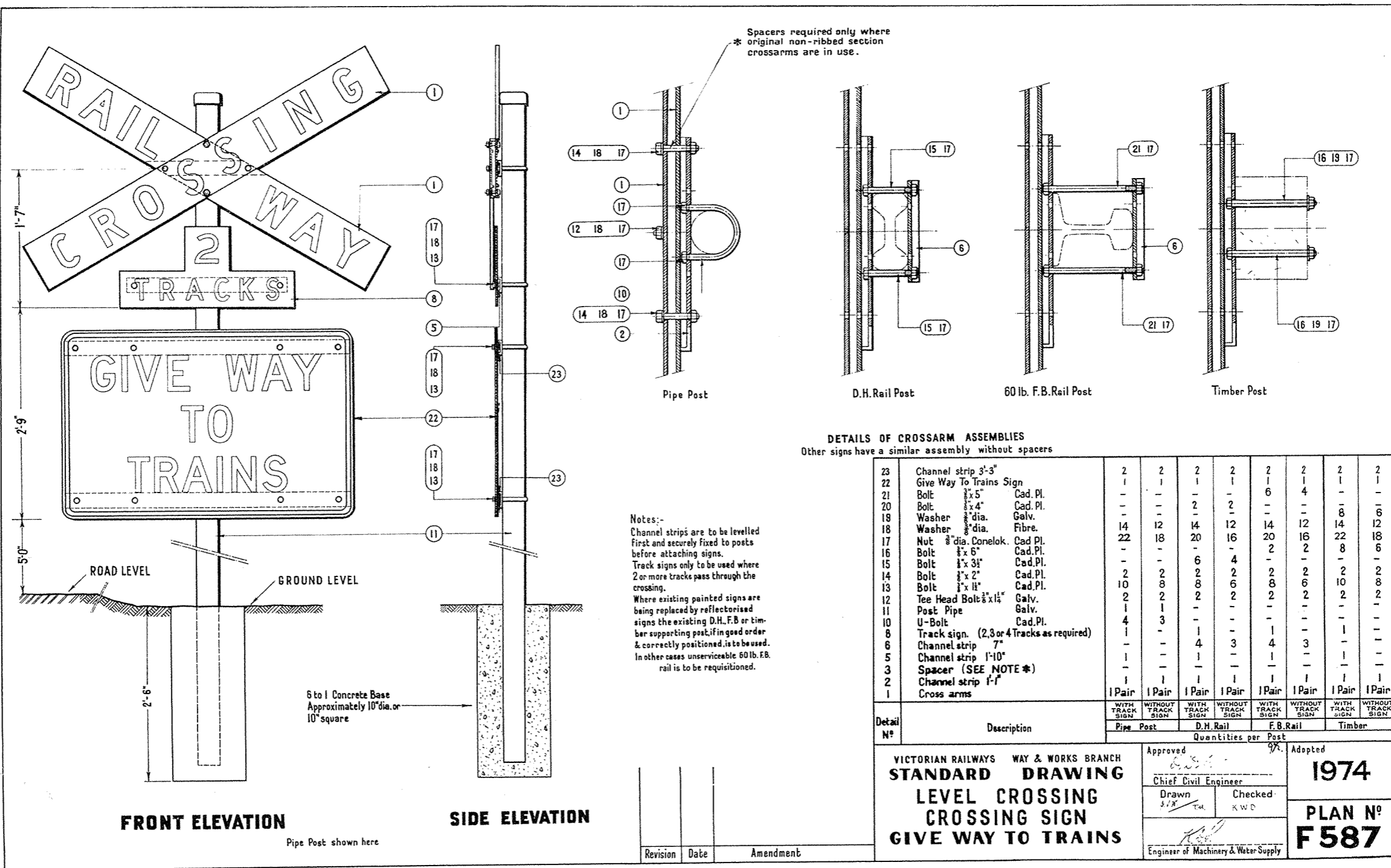
Signs to have arrows either left, right or both ways as required.

NOTES:

1. **LEGEND:** The top portion of the sign has a RED legend on a WHITE background.
The lower portion has a GREEN legend on a WHITE background.
2. **LETTERING:** (Reference AS No. 1743 & 1744-1975)
50mm "NO" is series "C"
"STANDING" series "B"
25mm series "B"
3. **BASE MATERIAL:** 1.6 Gauge enamelling quality sheet steel (e.g. Lysaght's Lynamel).
4. **PREPARATION:** Sheets to be degreased, acid pickled neutralized and dried.
5. **APPLICATION & FINISH:** Signs to be coated on all surfaces with grip coat vitreous enamel, followed by a white coat on the face, then, silk screened with vitreous enamel.
Each coating of vitreous enamel to be separately fused at 800°C.
6. **MOUNTING:** Signs to have 2 No. holes with brass eyelets of 12mm internal dia. to 450mm centres on a vertical line. Signs to be mounted in accordance with PLAN NO. 185/76.

"A"	3.5.76	Notes 2, 3, 4, 5, 6 & 7 altered.	P.K.
Revis'n	Date	Amendment	Amend ^d by

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		APPROVED	Adopted
STANDARD DRAWING		<i>A. D. W.</i>	Nov. 1972
		Chief Civil Engineer	
Drawn by	Checked by	PLAN No.	
<i>J.R.O.</i>	<i>R.A.F.</i>		
		<i>R.D.</i>	MF 585 ^A
		ENGINEER OF TRACK & DRAINAGE	



DETAILS OF CROSSARM ASSEMBLIES
Other signs have a similar assembly without spacers

Detail N°	Description	Quantities per Post							
		Pipe Post		D.H. Rail		F.B. Rail		Timber	
23	Channel strip 3'-3"	2	2	2	2	2	2	2	2
22	Give Way To Trains Sign	1	1	1	1	1	1	1	1
21	Bolt 3/8" x 5" Cad. Pl.	-	-	-	-	6	4	-	-
20	Bolt 3/8" x 4" Cad. Pl.	-	-	2	2	-	-	-	6
19	Washer 3/8" dia. Galv.	-	-	-	-	-	-	8	6
18	Washer 3/8" dia. Fibre.	14	12	14	12	14	12	14	12
17	Nut 3/8" dia. Conelok. Cad. Pl.	22	18	20	16	20	16	22	18
16	Bolt 1/2" x 6" Cad. Pl.	-	-	-	-	2	2	8	6
15	Bolt 1/2" x 3 1/2" Cad. Pl.	-	-	6	4	-	-	-	-
14	Bolt 1/2" x 2" Cad. Pl.	2	2	2	2	2	2	2	2
13	Bolt 1/2" x 1 1/2" Cad. Pl.	10	8	8	6	8	6	10	8
12	Tee Head Bolt 3/8" x 1 1/2" Galv.	2	2	2	2	2	2	2	2
11	Post Pipe Galv.	1	1	-	-	-	-	-	-
10	U-Bolt Cad. Pl.	4	3	-	-	-	-	-	-
8	Track sign. (2, 3 or 4 Tracks as required)	1	-	1	-	1	-	1	-
6	Channel strip 7"	-	-	4	3	4	3	-	-
5	Channel strip 1'-10"	1	-	1	-	1	-	1	-
3	Spacer (SEE NOTE *)	-	-	-	-	-	-	-	-
2	Channel strip 1'-1"	1	1	1	1	1	1	1	1
1	Cross arms	1 Pair	1 Pair	1 Pair	1 Pair	1 Pair	1 Pair	1 Pair	1 Pair

Notes:-
Channel strips are to be levelled first and securely fixed to posts before attaching signs.
Track signs only to be used where 2 or more tracks pass through the crossing.
Where existing painted signs are being replaced by reflectorised signs the existing D.H., F.B. or timber supporting post, if in good order & correctly positioned, is to be used. In other cases unserviceable 60 lb. F.B. rail is to be requisitioned.

FRONT ELEVATION

SIDE ELEVATION

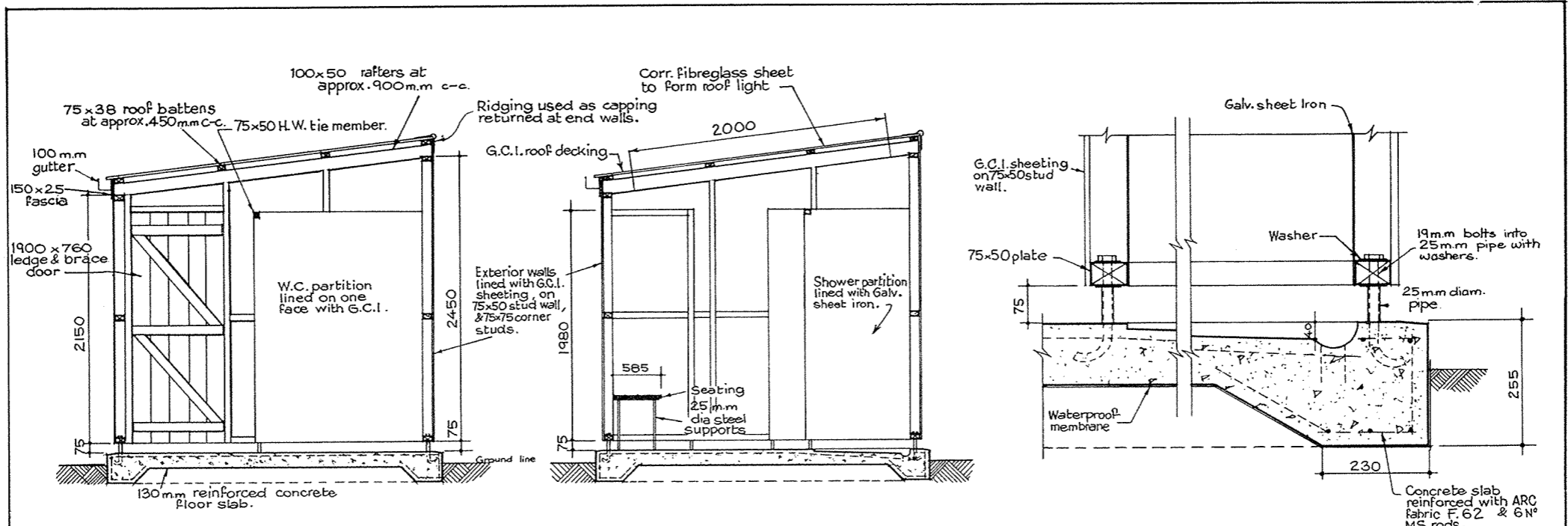
Pipe Post shown here

VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING
LEVEL CROSSING
CROSSING SIGN
GIVE WAY TO TRAINS

Approved
Chief Civil Engineer
Drawn
Checked
Engineer of Machinery & Water Supply

Adopted
1974
PLAN N° F587

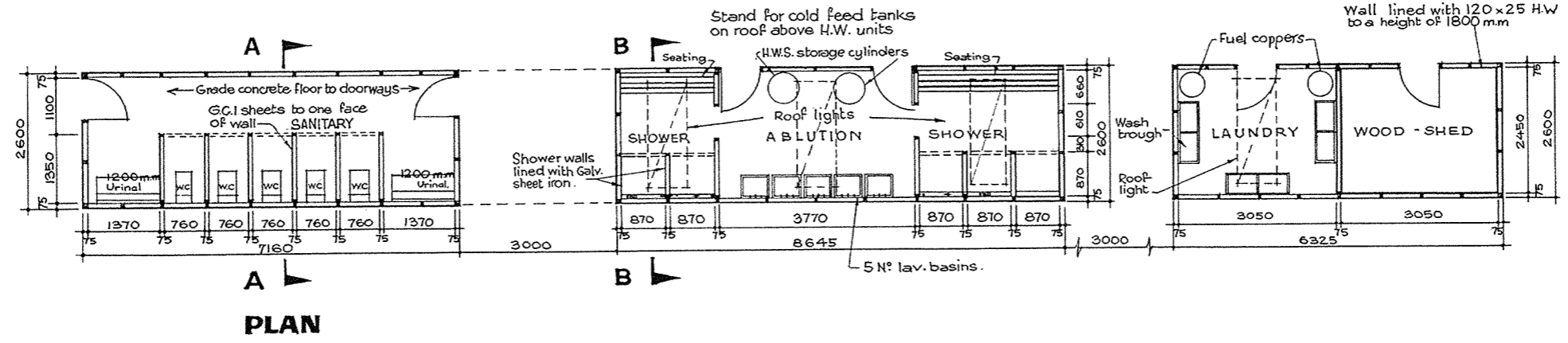
Revision	Date	Amendment



SECTION A-A

SECTION B-B

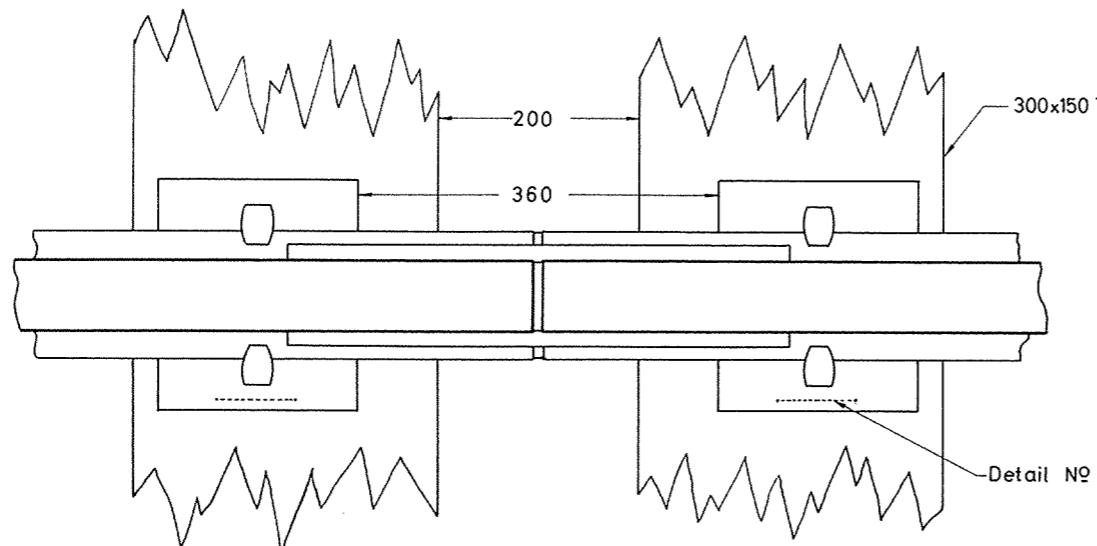
DETAIL OF SHOWER FLOOR



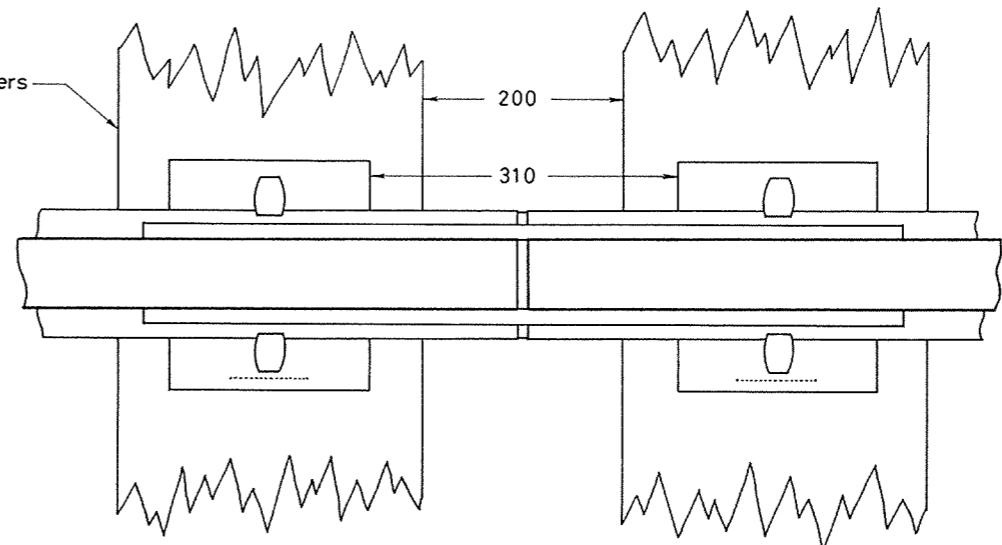
PLAN

Rev'n	Date	Amendment	Amended

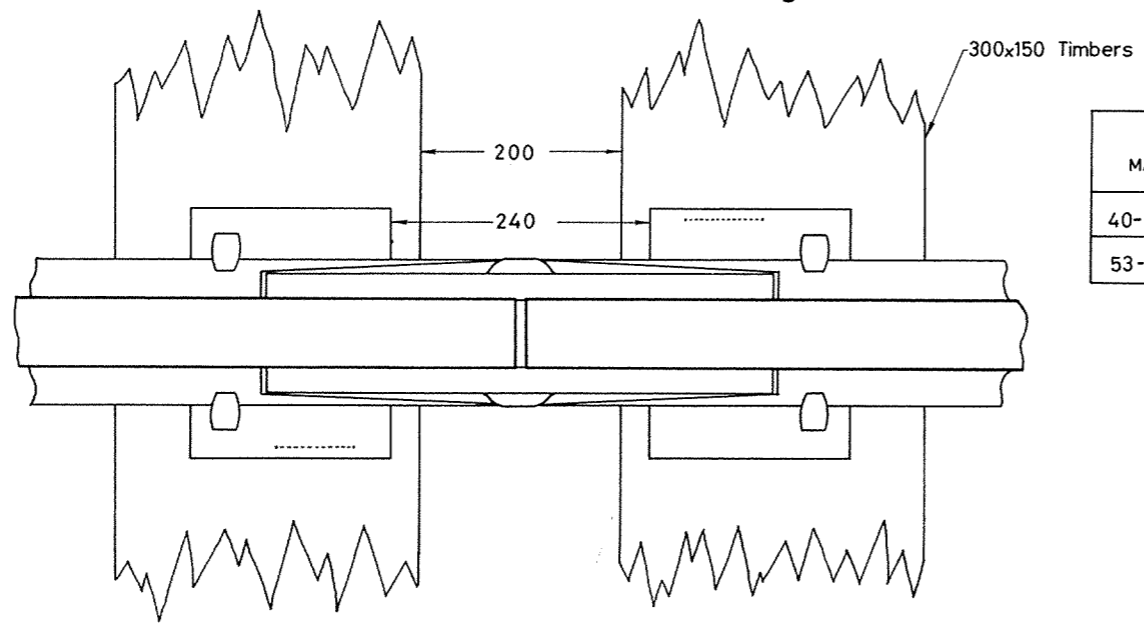
VICTORIAN RAILWAYS-WAY AND WORKS BRANCH		Approved	Adopted
STANDARD DRAWING		<i>S. J. J.</i> 179-74	SEPT 1974
SANITARY FACILITIES		Chief Civil Engineer	PLAN N°
FOR CYCLIC		Drawn by	F588
MAINTENANCE CAMPS		J. J. F.	Checked by
FOR 50 MEN		<i>J. J. F.</i>	Senior Architect



4 HOLE ARRANGEMENT 40-50 kg



6 HOLE ARRANGEMENT 40-50 kg
DOGSPIKES IN REVERSE POSITION



4 HOLE ARRANGEMENT 53-60 kg

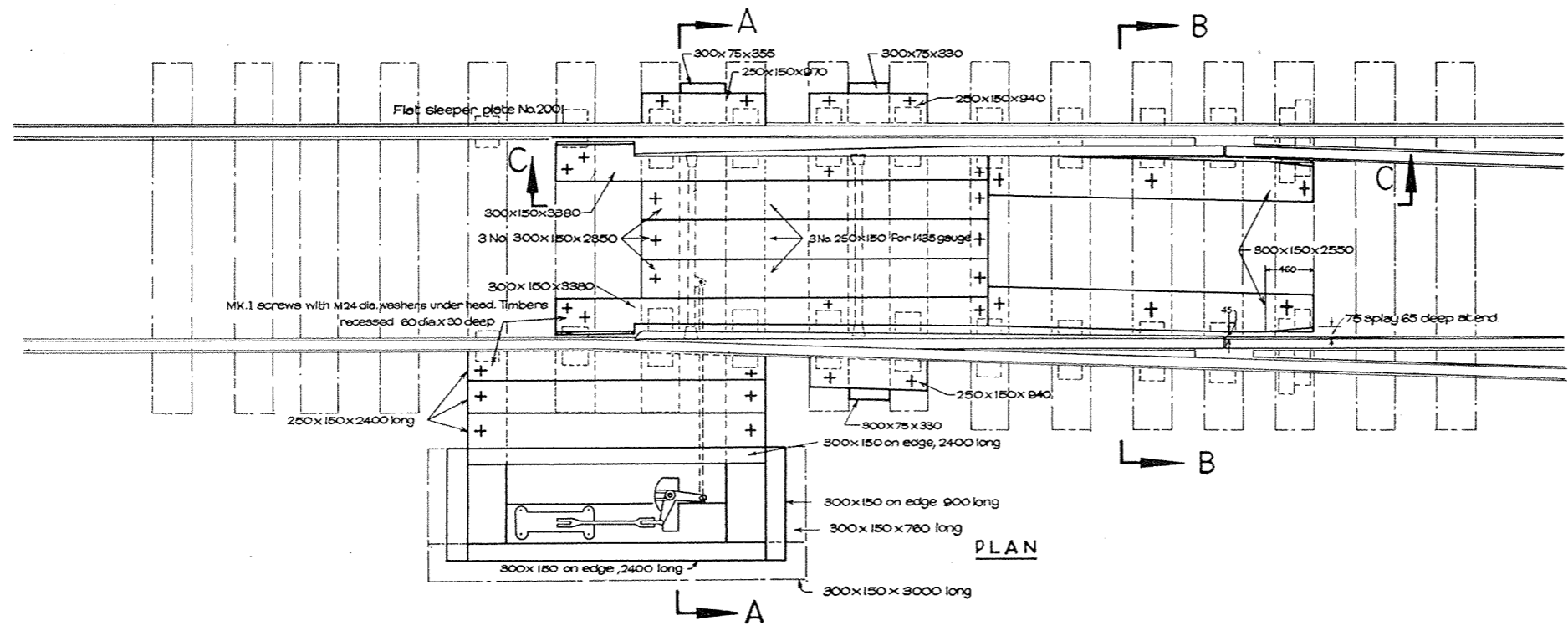
MASS	DETAIL N ^o	
	Thickness of plate : 16	Thickness of plate : 25
40-50 kg	1004	2004
53-60 kg	1005	2005

WHEN JOINT IS INCLINED TO TIMBERS, THE SPACING BETWEEN SLEEPER PLATES WILL REMAIN UNCHANGED.
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SHOWN.

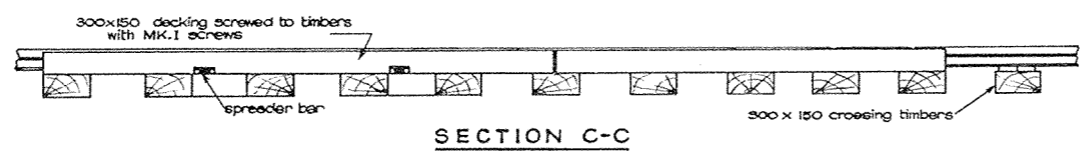
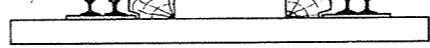
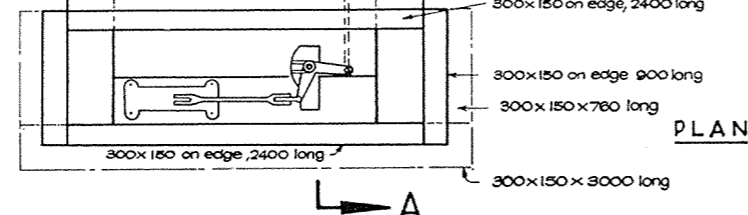
THIS PLAN SUPERSEDES PLAN N^o F 360B

Rev'n	Date	Amendment	Amet'd

VICTORIAN RAILWAYS..WAY & WORKS BRANCH		APPROVED <i>S.S.D.</i> 4.2.75 CHIEF CIVIL ENGINEER	ADOPTED 1975
SLEEPER PLATES FLAT . FOR TYPE 1939 INSULATED JOINTS (INSTALLATION)		DRAWN BY <i>M.B.</i>	CHECKED BY <i>R.B.</i>
		<i>K.D.S.</i> ENGINEER OF M & W.S.	PLAN N^o F 589

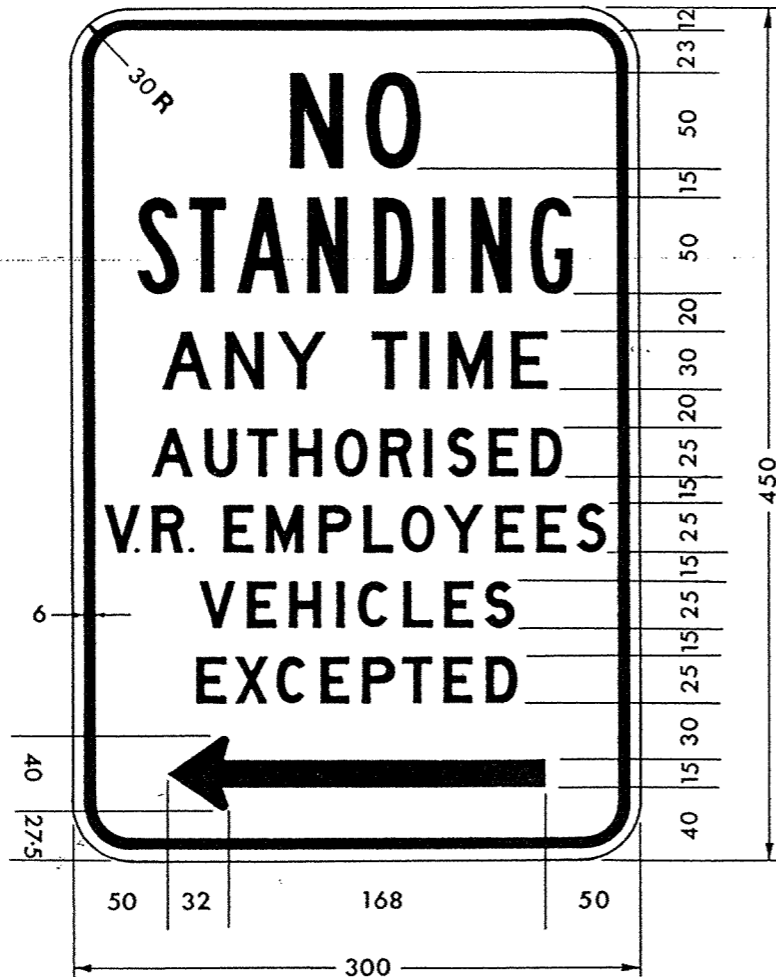


NOTE: Timbers to be notched for pull rod rails and rail chairs where necessary.
 Timbering of levers to suit lever arrangement.
 + Denotes screws MK.1 with M24 dia. washers under head. Timbers recessed 60 dia. x 30 deep.



THIS PLAN SUPERSEDES PLAN No. 873/75

VICTORIAN RAILWAYS - WAY AND WORKS BRANCH		APPROVED	ADOPTED
STANDARD DRAWING		<i>D.S.D. 12.374</i> Chief Civil Engineer	MARCH 1976
METHOD OF TIMBERING BETWEEN POINTS FOR 47kg MATERIAL M4.6 SWITCH		Drawn by <i>D.R.D.</i>	Checked by <i>[Signature]</i>
		<i>A.W.T.</i> ENGINEER OF TRACK & DRAINAGE	PLAN No. F591



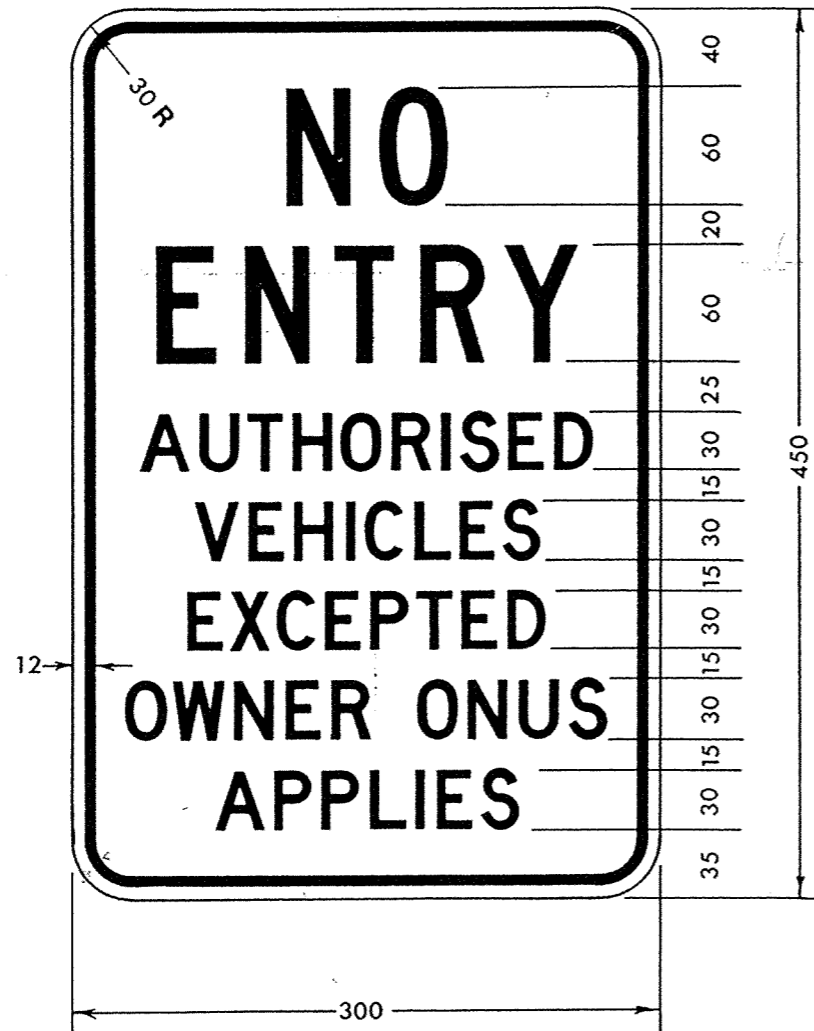
Signs to have arrows either left, right or both ways as required.

NOTES:

1. LEGEND: All lettering to be RED on a WHITE background
2. LETTERING: (Reference AS No. 1743 & 1744-1975)
50mm "NO" is series "C"
"STANDING" series "B"
30mm series "D"
25mm series "D"
3. BASE MATERIAL: 1.6 Gauge enamelling quality sheet steel (e.g. Lysaght's Lynamel).
4. PREPARATION: Sheets to be degreased, acid pickled neutralized and dried.
5. APPLICATION & FINISH: Signs to be coated on all surfaces with grip coat vitreous enamel, followed by a white coat on the face, then, silk screened with vitreous enamel.
Each coating of vitreous enamel to be separately fused at 800°C.
6. MOUNTING: Signs to have 2 No. holes with brass eyelets of 12mm internal dia. to 380mm centres on a vertical line. Signs to be mounted in accordance with PLAN NO. 185/76.

Revis'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		APPROVED	Adopted
STANDARD DRAWING		<i>[Signature]</i> Chief Civil Engineer	May 1976
PARKING CONTROL SIGN		Drawn by <i>P. K.</i>	PLAN No.
TYPE "U"		Checked by <i>[Signature]</i>	F592
		<i>[Signature]</i> ENGINEER OF TRACK & DRAINAGE	

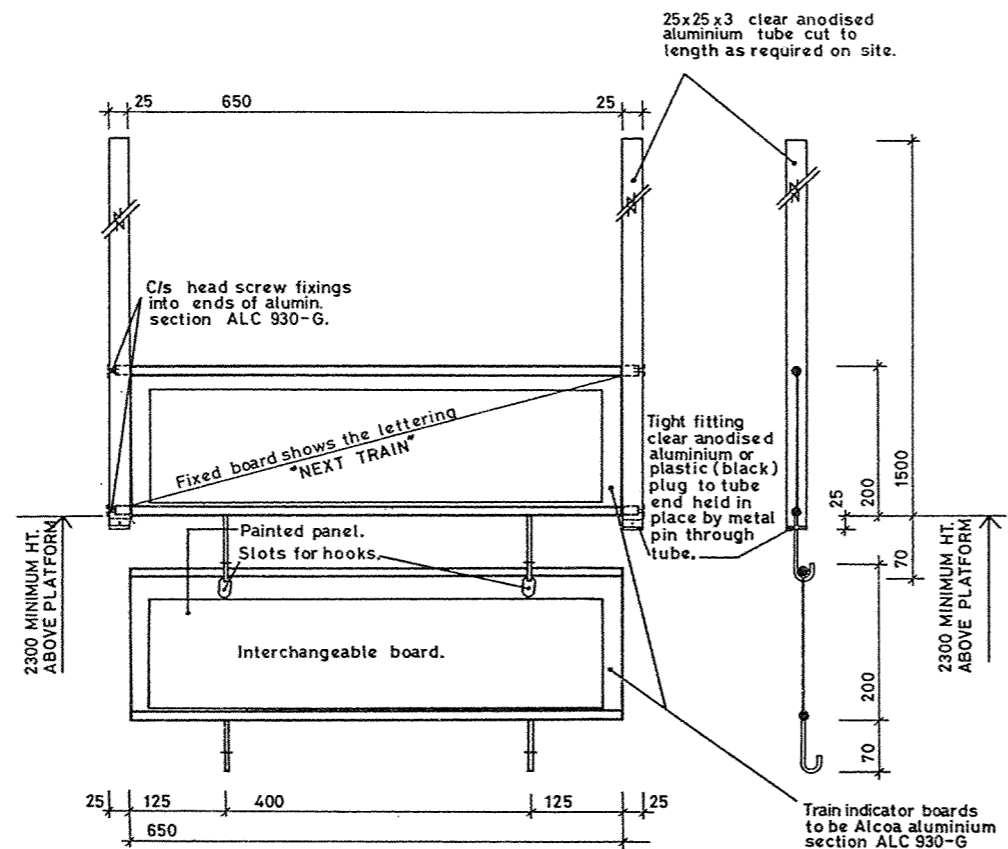


NOTES:

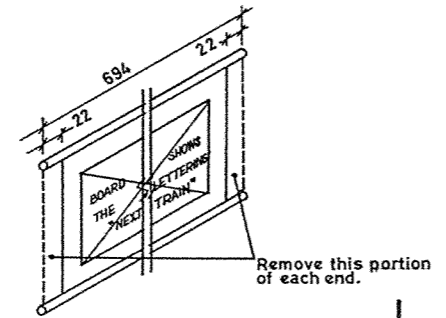
1. LEGEND: All lettering to be RED on a WHITE background
2. LETTERING: (Reference AS No. 1743 & 1744-1975)
60mm series "C"
30mm series "C"
3. BASE MATERIAL: 1.6 Gauge enamelling quality sheet steel (e.g. Lysaght's Lynamel).
4. PREPARATION: Sheets to be degreased, acid pickled neutralized and dried.
5. APPLICATION & FINISH: Signs to be coated on all surfaces with grip coat vitreous enamel, followed by a white coat on the face, then, silk screened with vitreous enamel.
Each coating of vitreous enamel to be separately fused at 800°C.
6. MOUNTING: Signs to have 2 No. holes with brass eyelets of 12mm internal dia. to 380mm centres on a vertical line. Signs to be mounted in accordance with PLAN NO. 185/76.

Revis'n	Date	Amendment	Amended by

VICTORIAN RAILWAYS—WAY AND WORKS BRANCH		APPROVED <i>[Signature]</i>	Adopted
STANDARD DRAWING		Chief Civil Engineer	May 1976
PARKING CONTROL SIGN		Drawn by <i>P.K.</i>	PLAN No.
TYPE "V"		Checked by <i>[Signature]</i>	
		<i>[Signature]</i>	F 593
		ENGINEER OF TRACK & DRAINAGE	



ELEVATION INDICATOR BOARD
SCALE 1:5



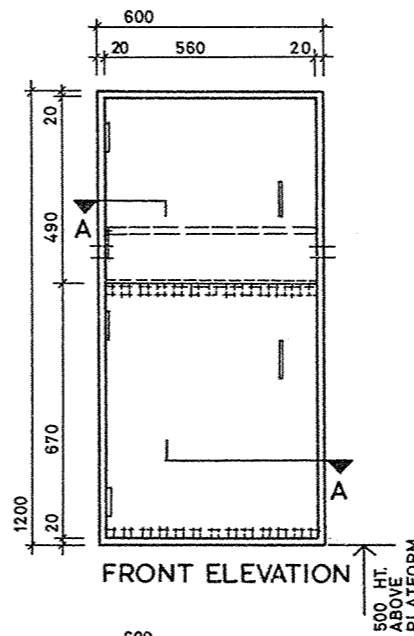
DETAIL AT ENDS OF
FIXED BOARD

25x25x3 clear anodised aluminium tube cut to length as required on site.

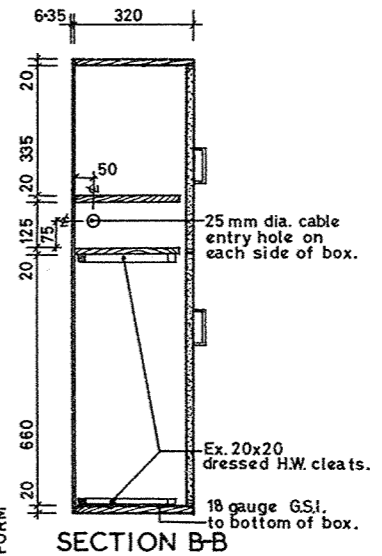
Tight fitting clear anodised aluminium or plastic (black) plug to tube end held in place by metal pin through tube.

Train indicator boards to be Alcoa aluminium section ALC 930-G clear anodised finish and having yellow coloured enamel painted panels of 600x130 with black coloured lettering as required on both sides.

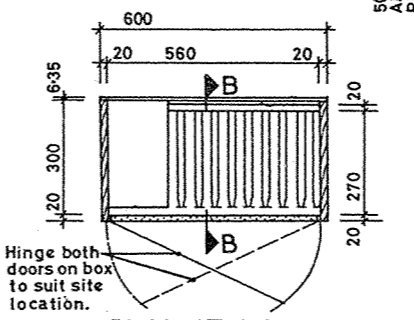
SECTION



FRONT ELEVATION



SECTION B-B



PLAN AT A-A

SCALE 1:10

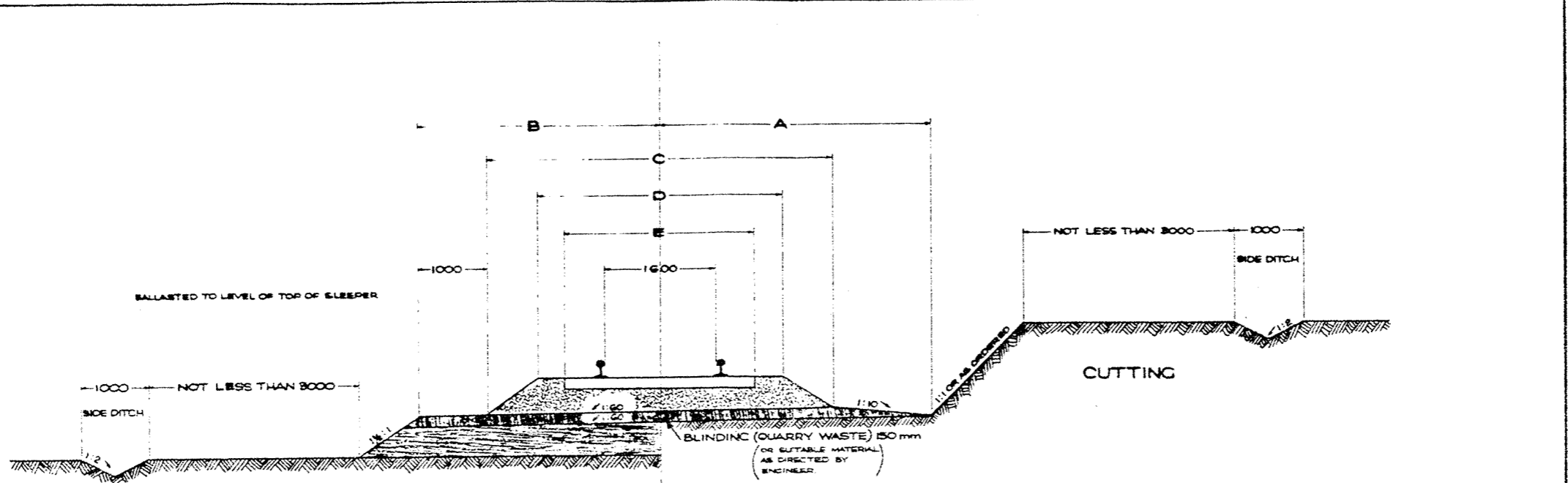
MATERIALS

Box carcass to be out of 20mm thick dressed H.W. and 635mm tempered Masonite to back.
2 no. doors to be of Marvplate - faced 19mm thick pyneboard having 10mm dressed H.W. edge strips, 75mm brass butt hinges and 75mm long x9.5mm dia. U door pulls NP finished. Provide locks as required.
Paint finish to box carcass.

REVIS'N	DATE	AMENDMENT	AMENDED BY

VICTORIAN RAILWAYS — WAY AND WORKS BRANCH
STANDARD DRAWING
DETAILS OF HANGING INDICATOR BOARDS
& COMBINED MICROPHONE
& INDICATOR BOARD BOX.

APPROVED <i>[Signature]</i> CHIEF CIVIL ENGINEER		ADOPTED MAY 1977
DRAWN BY J.A.F.	CHECKED BY J.N.H.	PLAN No.
SENIOR ARCHITECT <i>[Signature]</i>		F595



NOTE:
CROSSFALL SHOULD BE UNIFORM
OVER WIDTH OF FORMATION
FOR 1 TRACK.

TYPE OF TRACK	A	B	C	D	E	MIN. DEPTH OF BALLAST UNDER SLEEPER
MAIN LINES, LONG OR CONT. W.R. CONCRETE SLEEPERS	4000	3500	5000	3480	2670	300
MAIN LINES, LONG OR CONT. W.R. TIMBER SLEEPERS	4000	3500	5100	3560	2750	300
MAIN LINES, RAIL UP TO 83% LONG TIMBER SLEEPERS	4000	3300	4500	3350	2750	250
BRANCHES	3700	3200	4400	3050	2750	150

345
345
295
195

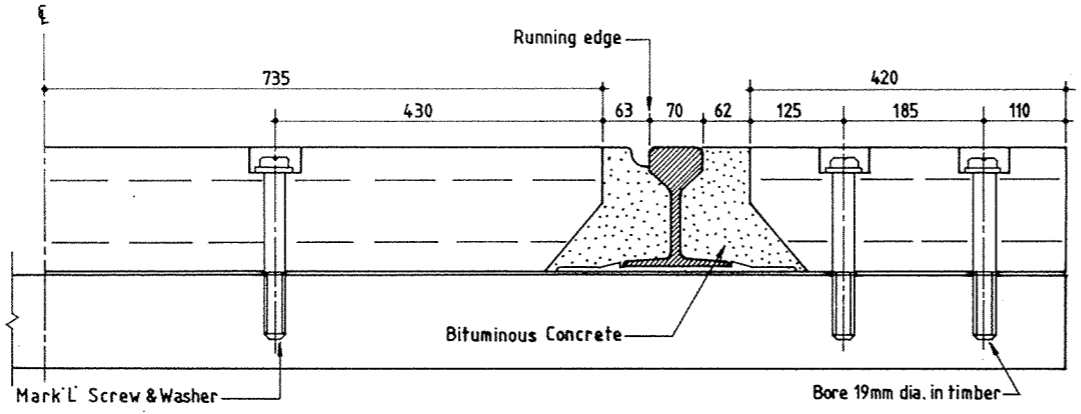
*in gullies 1-6
ballast depth increases by 45mm*

ALL DIMENSIONS IN MILLIMETRES

REVISION	DATE	AMENDMENT	AMENDED BY

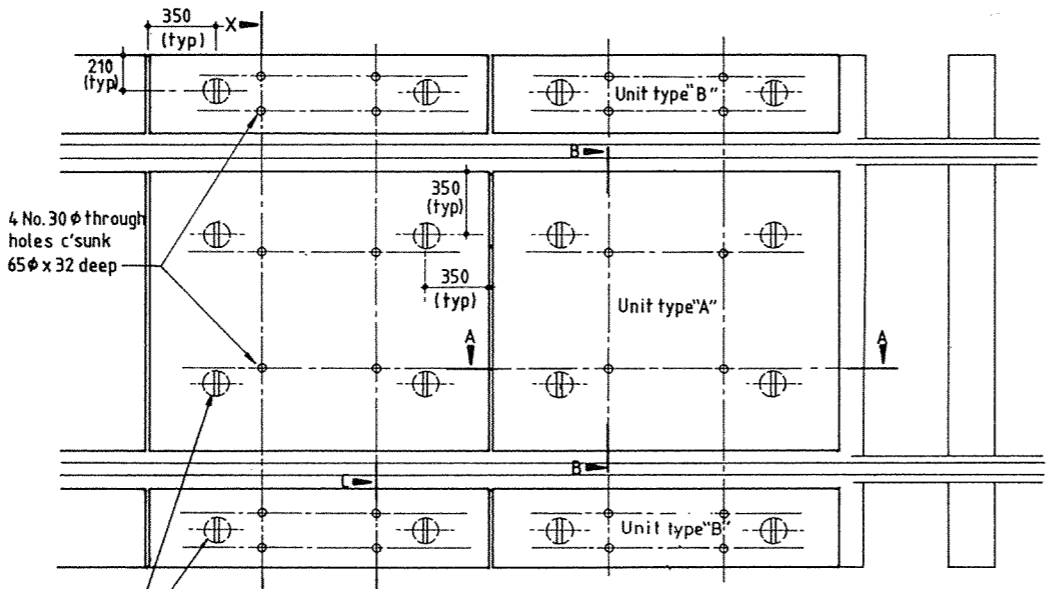
VICTORIAN RAILWAYS — WAY AND WORKS BRANCH
STANDARD DRAWING
TRACK FORMATION & BALLAST
FOR NEW TRACK CONSTRUCTION

APPROVED <i>[Signature]</i> CHIEF CIVIL ENGINEER		ADOPTED OCT. 1978
DRAWN BY D.I.K.	CHECKED BY D.L.S.	PLAN No.
ENGINEER OF T & D		F598



HALF SECTION X-X

- NOTES —
1. Minimum compressive strength of concrete shall be 30 MPa at 28 days
 2. Top surface to be rough screed finish
 3. Sleepers through paved area to be spaced at 610 mm centres
 4. 165 mm deep slabs are suitable for use with 47 kg & 53 kg rails
 5. Slabs are suitable for use with standard sleepers. (2700 long)

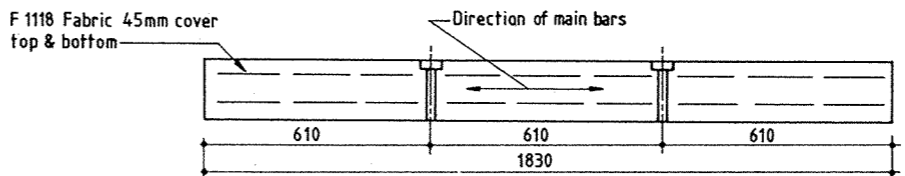


4 No. 30 ϕ through holes c'sunk 65 ϕ x 32 deep

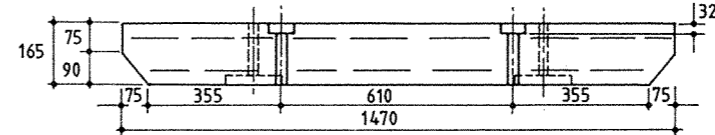
Lifting holes 150 x 25 with 50 ϕ x 25 deep recess on underside slab

N.B. Sleepers are to be spaced at 610 centres through paved areas. (Standard sleeper spacing in open track 885 centres)

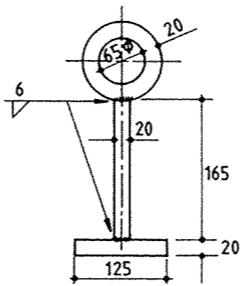
PLAN



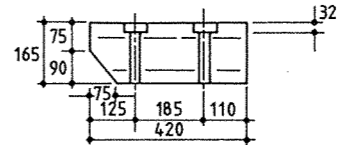
SECTION A-A
Typical for units type A & B



SECTION B-B
Unit type A


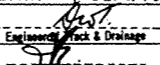


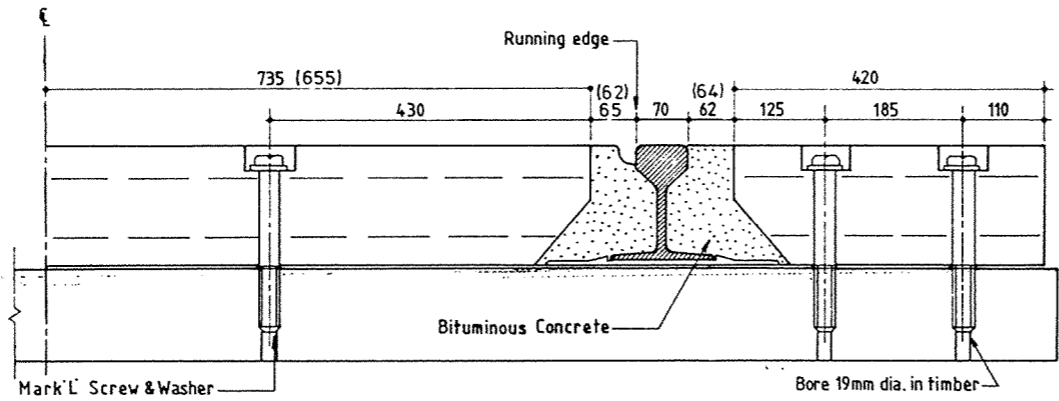
LIFTING HOOK



SECTION C-C
Unit type B

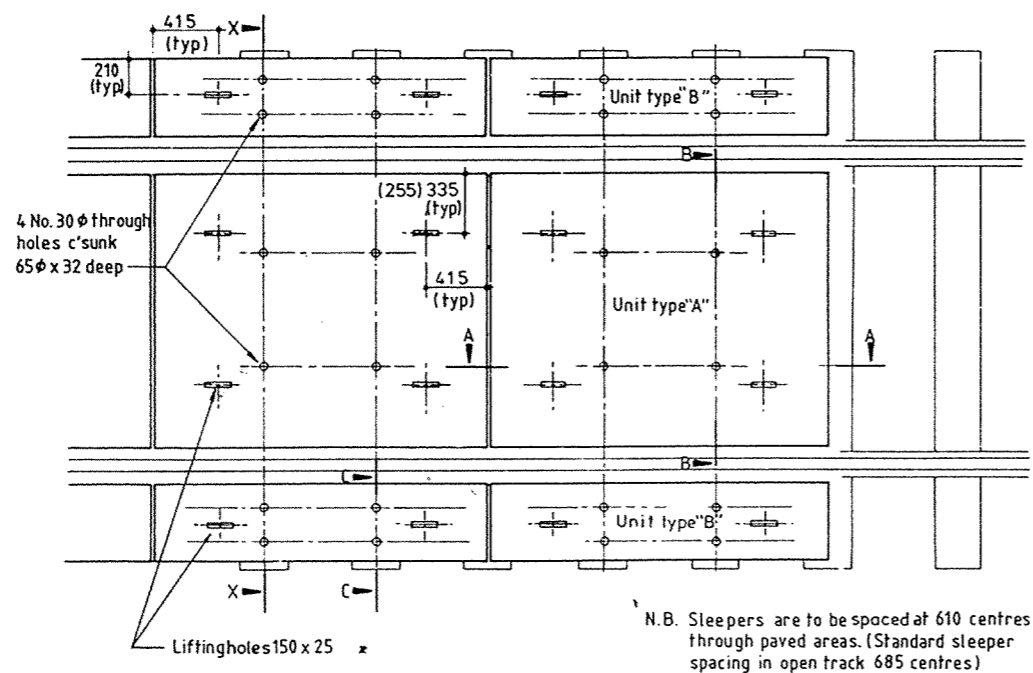
ALL DIMENSIONS ARE IN MILLIMETRES

APPROVALS	REV#	DATE	DESCRIPTION	REV#	APP'D	DESIGNED	DRAWN	VICTORIAN RAILWAYS CONCRETE PAVING UNITS	 CHIEF CIVIL ENGINEER STANDARD PLAN F600
						TRACED D.I.K.	ADOPTED SEPT. 78		
						 CHIEF DESIGN ENGINEER			



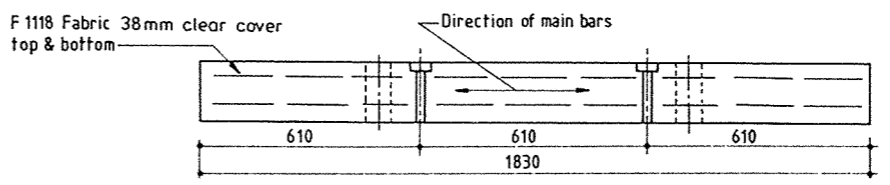
HALF SECTION X-X

- NOTES —
1. Minimum compressive strength of concrete shall be 40 MPa at 28 days
 2. Top surface to be rough screed finish
 3. Sleepers through paved area to be spaced at 610 mm centres
 4. 165 mm deep slabs are suitable for use with 47 kg & 53 kg rails
 5. Slabs are suitable for use with standard sleepers. (2700 long for broad gauge trackwork & 2600 long on standard gauge)
 6. Slabs to be manufactured in accordance with AS1480-1982
 7. For tolerance see clause 24-8 of the above code
 8. Dimensions for use on standard gauge trackwork shown in brackets

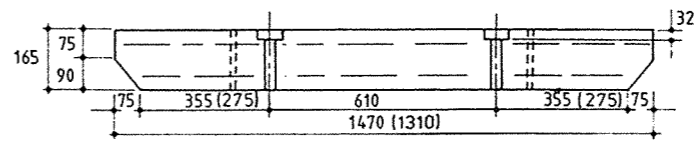


PLAN

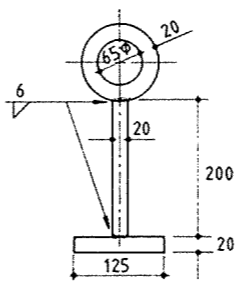
N.B. Sleepers are to be spaced at 610 centres through paved areas. (Standard sleeper spacing in open track 685 centres)



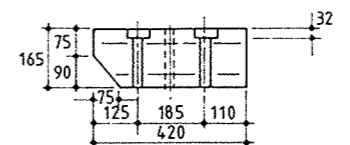
SECTION A-A
Typical for units type A & B



SECTION B-B
Unit type A



LIFTING HOOK



SECTION C-C
Unit type B

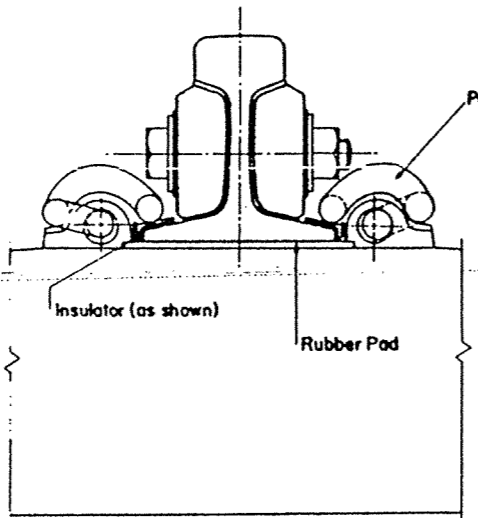
(Common to broad gauge & standard gauge trackwork)

ALL DIMENSIONS ARE IN MILLIMETRES

REV	DATE	DESCRIPTION	REV'D BY	APP'D BY	APPROVALS	REV	DATE	DESCRIPTION	REV'D BY	APP'D BY	DESIGNED	DRAWN
D	2-83	Concrete strength increased A.S. code updated	RT	[Signature]		A	5-80	Change to Lifting Holes & Notes 6 & 7 added	[Signature]	[Signature]	TRACED D I K	ADOPTED A. C. SEPT. 78
B	11-81	Dimensions added to provide for standard gauge units & lifting holes altered.				C	5-82	Change lifting holes on type A units	N.D.C.	[Signature]	Engineer of Track & Drainage	
									N.D.C.	[Signature]	CHIEF DESIGNER	

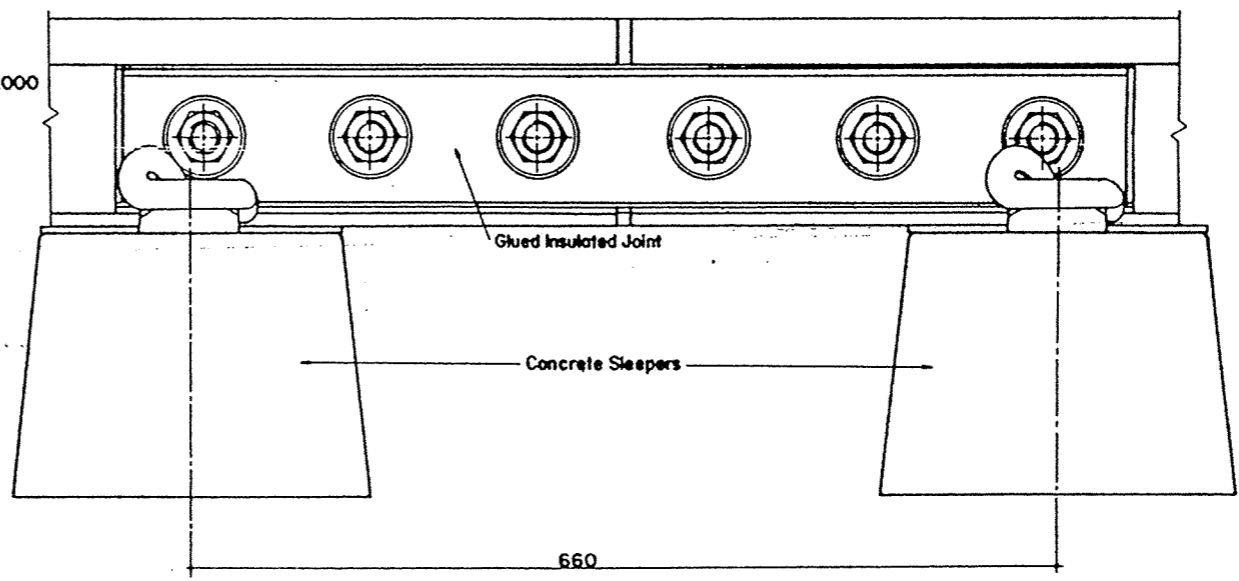
VICTORIAN RAILWAYS
CONCRETE PAVING
UNITS

[Signature]
CHIEF CIVIL ENGINEER
STANDARD PLAN
F 600D



Pandrol E Clip PR2000

Insulator (as shown)
Rubber Pad



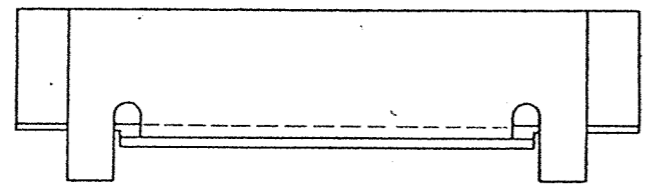
Glued Insulated Joint

Concrete Sleepers

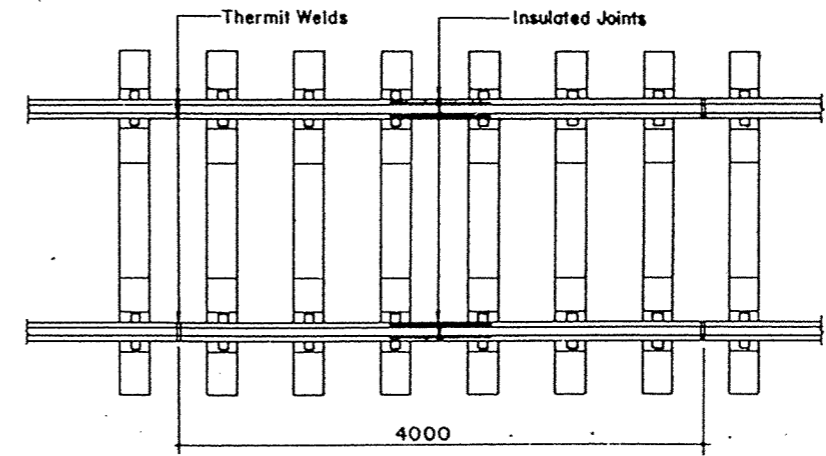
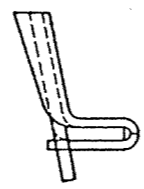
660

NOTES-

Centre distances of sleepers may be varied to allow for easier application of rail clips.
Foot of rail under insulator to be free of epoxy resin.
Rail to be centrally located between sleeper rail fastening shoulders.



Modified Composite Insulator
(White Nylon) for Glued
Insulated Joints to Drg.No. 254-78



Thermit Welds

Insulated Joints

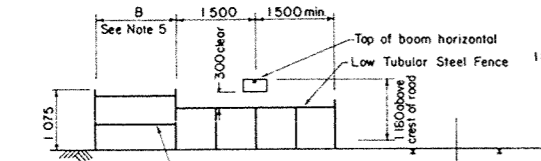
4000

ALL DIMENSIONS ARE IN MILLIMETRES

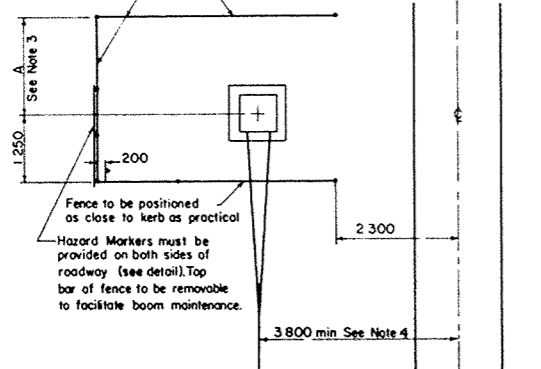
APPROVALS	REV'S	DATE	DESCRIPTION	M/F	D/P'S	DESIGNED	DRAWN
						P.W.J.	P.W.J.
						TRACED	ADOPTED
						D.I.K.	OCT. 1978

VICTORIAN RAILWAYS
GLUED INSULATED JOINTS
ON CONCRETE SLEEPERS
GENERAL ASSEMBLY

S. J. BENT
CHIEF CIVIL ENGINEER
STANDARD PLAN
F601



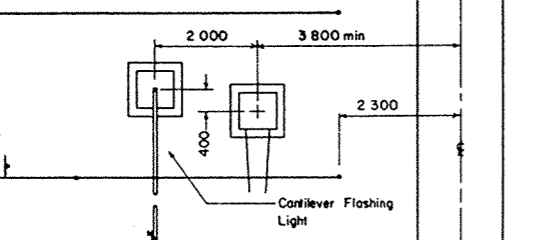
ELEVATION



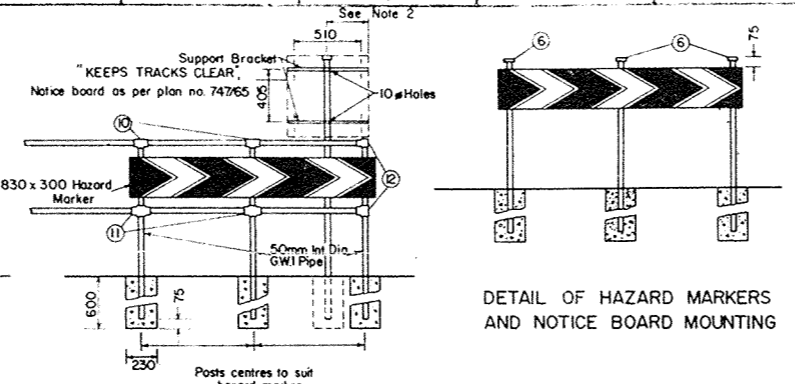
PLAN

BOOM ENCLOSURE DETAILS

- NOTES
- 1 BOOM ENCLOSURE TO BE CLEARED, LEVELLED, POISONED AGAINST WEEDS, COVERED WITH A POLYTHENE MEMBRANE AND SURFACED WITH 75mm OF CRUSHED ROCK.
 - 2 HEIGHT OF LOW TUBULAR STEEL FENCING TO SUIT VARIATIONS IN CROSSFALL OF ROAD AND HEIGHT OF KERB. TOP OF FENCE TO BE HORIZONTAL.
 - 3 FOR BOOM 3 490 OR LESS, A=1 550 MIN FOR BOOM GREATER THAN 3 490, A=1 850 MIN FOR CLEARANCES LESS THAN THOSE ABOVE, FENCING ADJACENT TO COUNTERWEIGHTS TO BE OF CHAINWIRE MESH TO STANDARD PLAN NO F531A.
 - 4 ABSOLUTE MIN CLEARANCE FROM G LINE TO BOOM MAST=3 000
 - 5 LENGTH B OF HIGH TUBULAR STEEL FENCING TO BE PROVIDED WHEN REQUIRED BY SITE CONDITIONS.



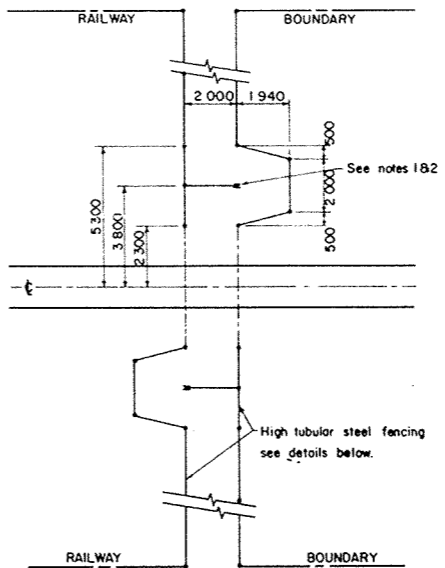
PLAN OF BOOM ENCLOSURE WITH CANTILEVERED FLASHING LIGHTS



DETAIL OF HAZARD MARKERS AND NOTICE BOARD MOUNTING

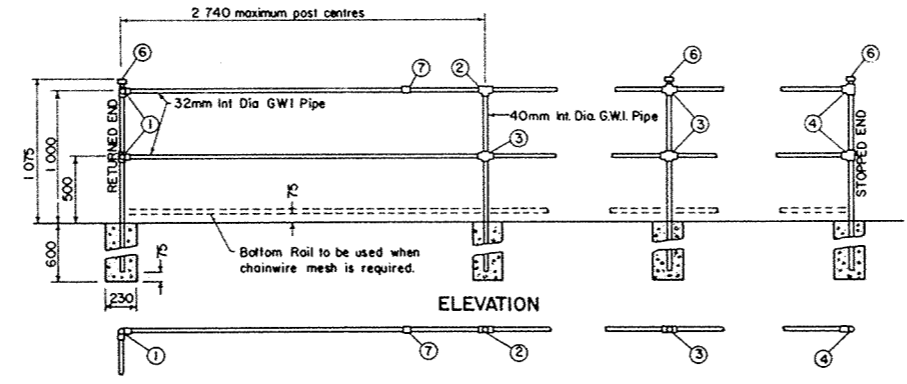
No	DESCRIPTION
1	Split pipe clip, corner 40mm(through)X32mm(butl)
2	Split pipe clip, tee 32mm - X40mm -
3	Split pipe clip, cross 40mm - X32mm -
4	Split pipe clip, tee 40mm - X32mm -
5	Split pipe clip, tee 50mm - X32mm -
6	Cap (press on type) 50mm or 40mm
7	Screw socket for 32mm Int dia rail
8	Adjustable corner fitting, socket rail size 32mm
9	ring post size 40mm
10	Split pipe clip, tee 32mm (through) X 50mm (butl)
11	Split pipe clip, cross 50mm - X32mm -
12	Split pipe clip, corner 50mm - X32mm -

- NOTES
- 1 "KEEP TRACKS CLEAR", NOTICE BOARD AND LEFT OR RIGHT "CHEVRON" TYPE HAZARD MARKER TO BE MOUNTED ON 50 INT DIA G.W.I PIPE FOR DETAILS OF MOUNTING BRACKETS SEE PLAN NO 185/76 (2 BRACKETS TO BE USED ON EACH VERTICAL PIPE)
 - 2 THE OUTER EDGE OF THE NOTICE BOARD IS TO BE POSITIONED IN LINE WITH OUTER EDGE OF BOOM ENCLOSURE.
 - 3 SUPPORT BRACKET SHALL BE MADE FROM 38 X 7mm M/S FLAT, HEAVY GALVANISED AND DRILLED WITH 10mm Ø HOLES
 - 4 NOTICE BOARD TO BE DRILLED WITH 10mm Ø HOLES AS SHOWN AND MOUNTED AS PER PLAN NO 185/76



PLAN OF STANDARD CRIB CROSSING FOR SINGLE TRACK

- NOTES
- 1 FOR BOOM BARRIER WALKWAYS USE "DO NOT CROSS" NOTICE BOARD AS PER PLAN NO 627/71, 2 NO BACK TO BACK.
 - 2 FOR OTHER SITUATIONS USE "BEWARE OF TRAINS" NOTICE BOARD, 2 NO BACK TO BACK.
 - 3 DIMENSIONS TO G OF TRACK MAY BE USED FOR CRIB CROSSINGS IN MULTIPLE TRACK ARRANGEMENTS

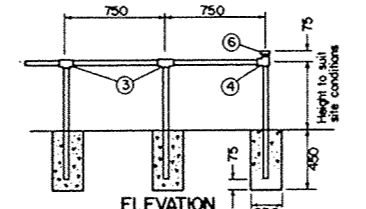


ELEVATION

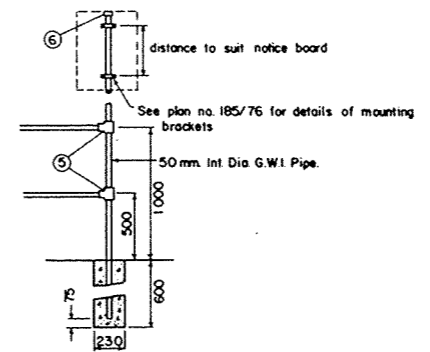
PLAN

HIGH TUBULAR STEEL FENCING FOR CRIB CROSSING AND FOR BOOM ENCLOSURE

- NOTE
- WHEN CHAINWIRE MESH IS REQUIRED FOR FENCING, PLACE MIDDLE RAIL 75mm FROM GROUND LINE AS SHOWN. CHAINWIRE 40mm x 2.5mm DIA OR 50mm x 3.15mm DIA HEAVY GALVANISED.



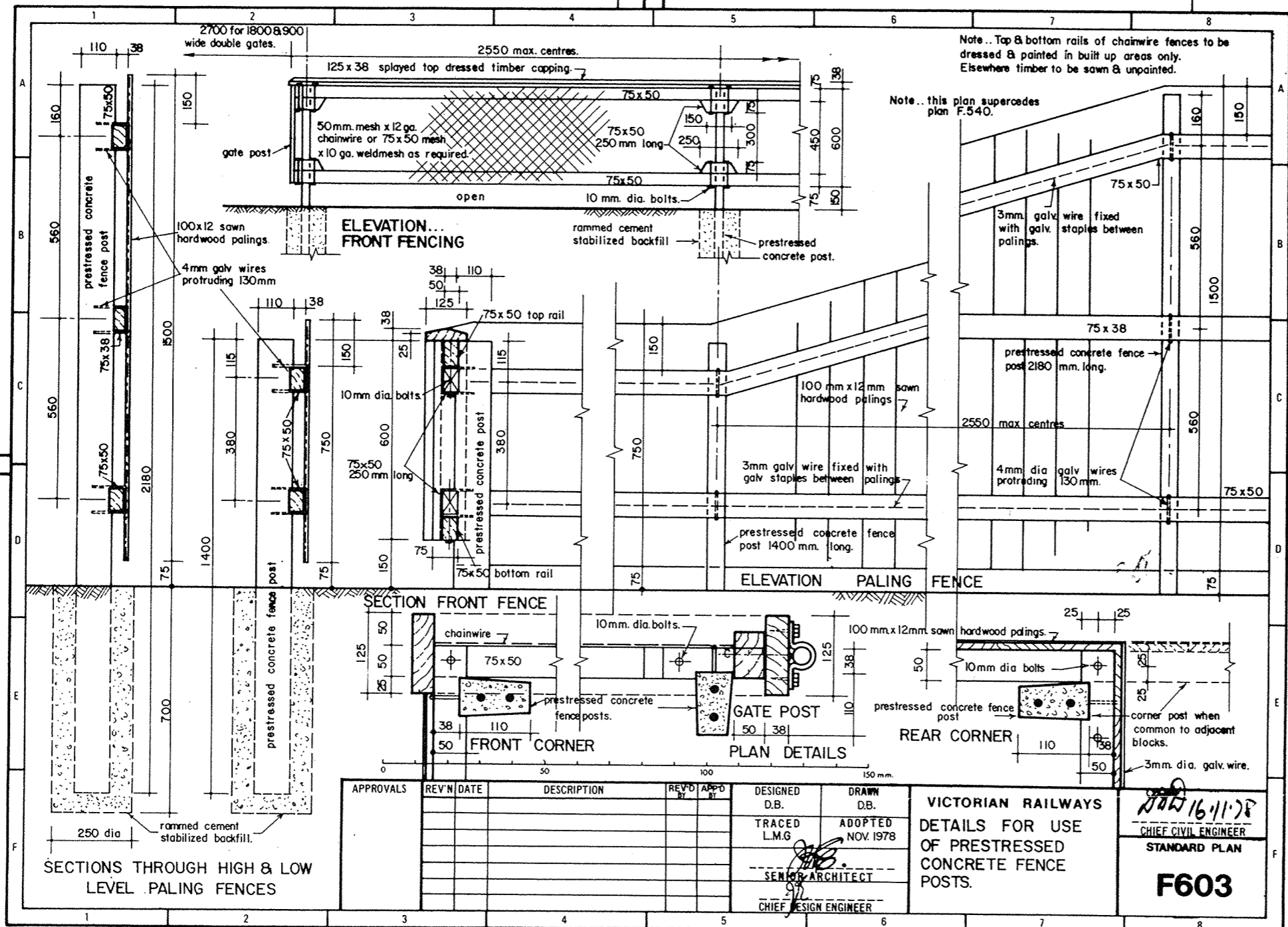
ELEVATION



MOUNTING OF CRIB CROSSING NOTICE BOARDS

ALL DIMENSIONS ARE IN MILLIMETRES

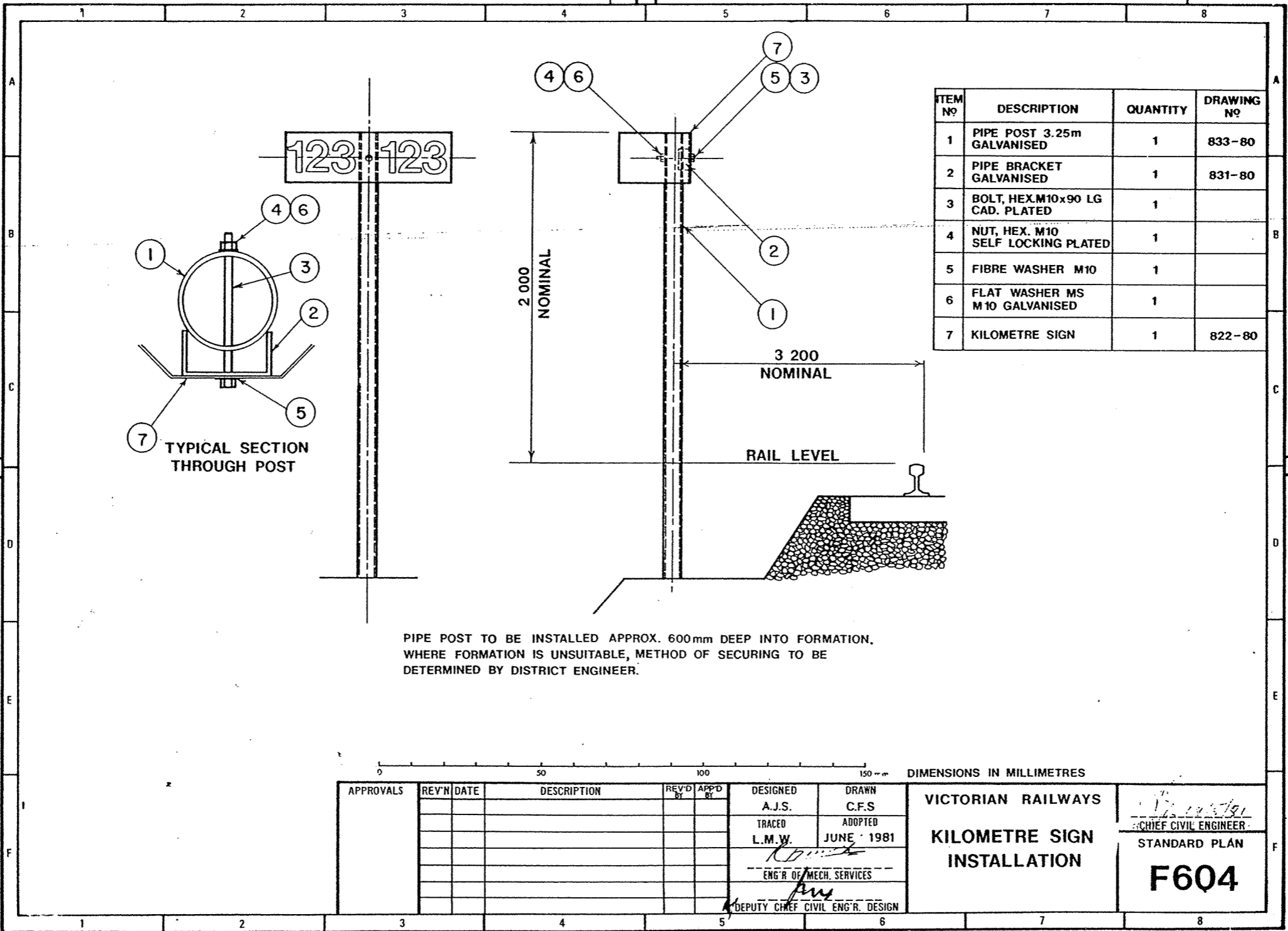
APPROVALS	REV'S	DATE	DESCRIPTION	REV'S	DATE	DESCRIPTION	DESIGNED	DRAWN	VICTORIAN RAILWAYS	
							J.P.L	J.P.L	TUBULAR STEEL FENCING FOR BOOM ENCLOSURES AND STANDARD CRIB CROSSINGS	
							L.M.G	ADOPTED DEC. '78	STANDARD PLAN	
									F602	



APPROVALS	REV'N	DATE	DESCRIPTION	REV'D BY	APP'D BY	DESIGNED D.B.	DRAWN D.B.
						TRACED L.M.G.	ADOPTED NOV. 1978
						SENIOR ARCHITECT	
						CHIEF DESIGN ENGINEER	

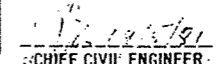
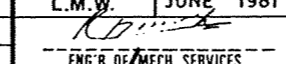
VICTORIAN RAILWAYS
 DETAILS FOR USE
 OF PRESTRESSED
 CONCRETE FENCE
 POSTS.

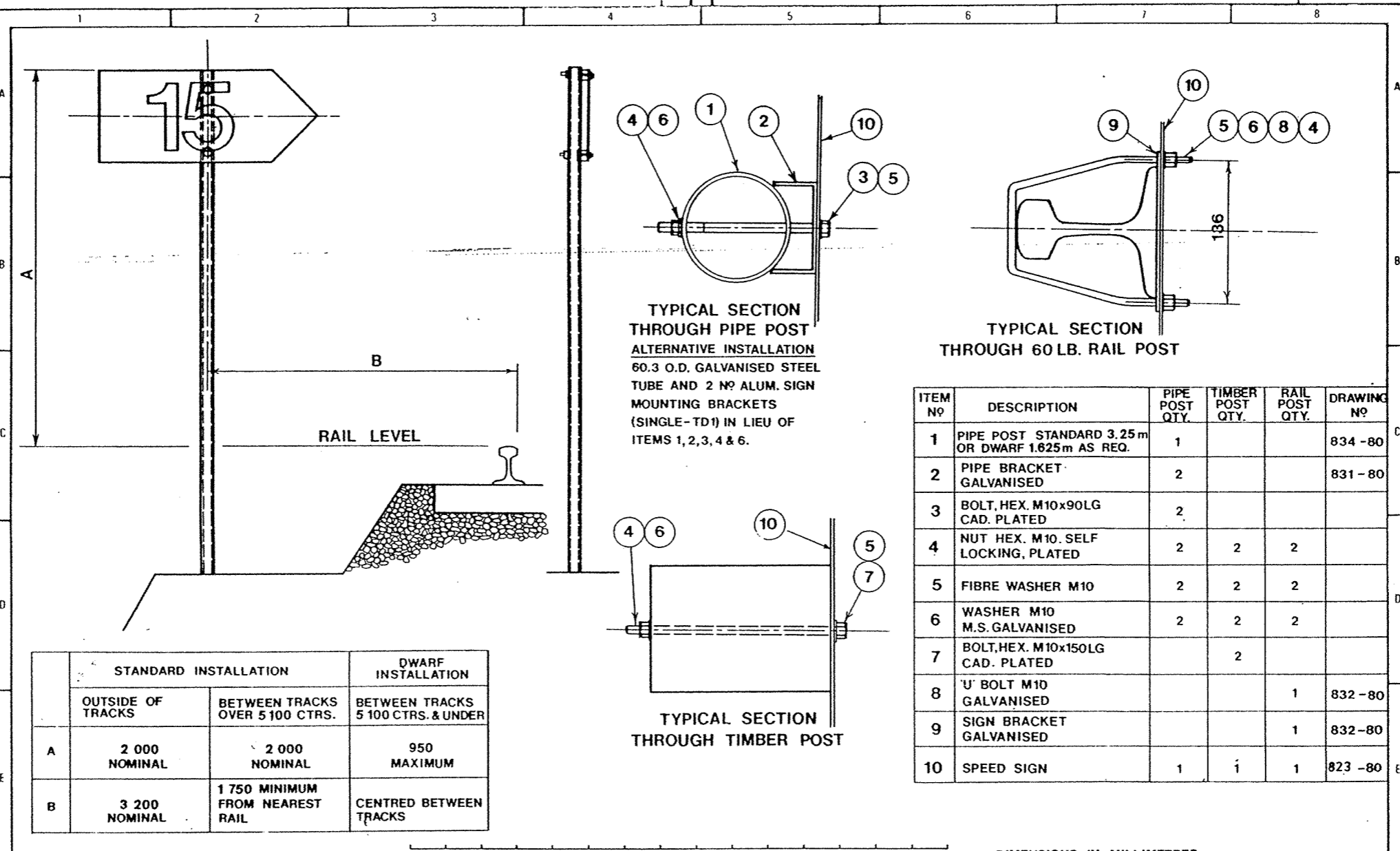
16/11/78
 CHIEF CIVIL ENGINEER
 STANDARD PLAN
F603



ITEM NO	DESCRIPTION	QUANTITY	DRAWING NO
1	PIPE POST 3.25m GALVANISED	1	833-80
2	PIPE BRACKET GALVANISED	1	831-80
3	BOLT, HEX.M10x90 LG CAD. PLATED	1	
4	NUT, HEX. M10 SELF LOCKING PLATED	1	
5	FIBRE WASHER M10	1	
6	FLAT WASHER MS M10 GALVANISED	1	
7	KILOMETRE SIGN	1	822-80

PIPE POST TO BE INSTALLED APPROX. 600mm DEEP INTO FORMATION, WHERE FORMATION IS UNSUITABLE, METHOD OF SECURING TO BE DETERMINED BY DISTRICT ENGINEER.

APPROVALS	REV'N	DATE	DESCRIPTION	REV'D BY	APP'D BY	DESIGNED	DRAWN	VICTORIAN RAILWAYS KILOMETRE SIGN INSTALLATION	 CHIEF CIVIL ENGINEER STANDARD PLAN F604
						A.J.S.	C.F.S.		
						TRACED	ADOPTED		
						L.M.W.	JUNE 1981		
						 ENGR OF MECH. SERVICES DEPUTY CHIEF CIVIL ENGR. DESIGN			



	STANDARD INSTALLATION		DWARF INSTALLATION
	OUTSIDE OF TRACKS	BETWEEN TRACKS OVER 5.100 CTRS.	BETWEEN TRACKS 5.100 CTRS. & UNDER
A	2 000 NOMINAL	2 000 NOMINAL	950 MAXIMUM
B	3 200 NOMINAL	1 750 MINIMUM FROM NEAREST RAIL	CENTRED BETWEEN TRACKS

ITEM No	DESCRIPTION	PIPE POST QTY.	TIMBER POST QTY.	RAIL POST QTY.	DRAWING No
1	PIPE POST STANDARD 3.25 m OR DWARF 1.625 m AS REQ.	1			834 -80
2	PIPE BRACKET GALVANISED	2			831 -80
3	BOLT, HEX. M10x90LG CAD. PLATED	2			
4	NUT HEX. M10. SELF LOCKING, PLATED	2	2	2	
5	FIBRE WASHER M10	2	2	2	
6	WASHER M10 M.S. GALVANISED	2	2	2	
7	BOLT, HEX. M10x150LG CAD. PLATED		2		
8	'U' BOLT M10 GALVANISED			1	832 -80
9	SIGN BRACKET GALVANISED			1	832 -80
10	SPEED SIGN	1	1	1	823 -80

PIPE POST TO BE INSTALLED APPROX. 600mm DEEP INTO FORMATION. WHERE FORMATION IS UNSUITABLE, METHOD OF SECURING TO BE DETERMINED BY DISTRICT ENGINEER.

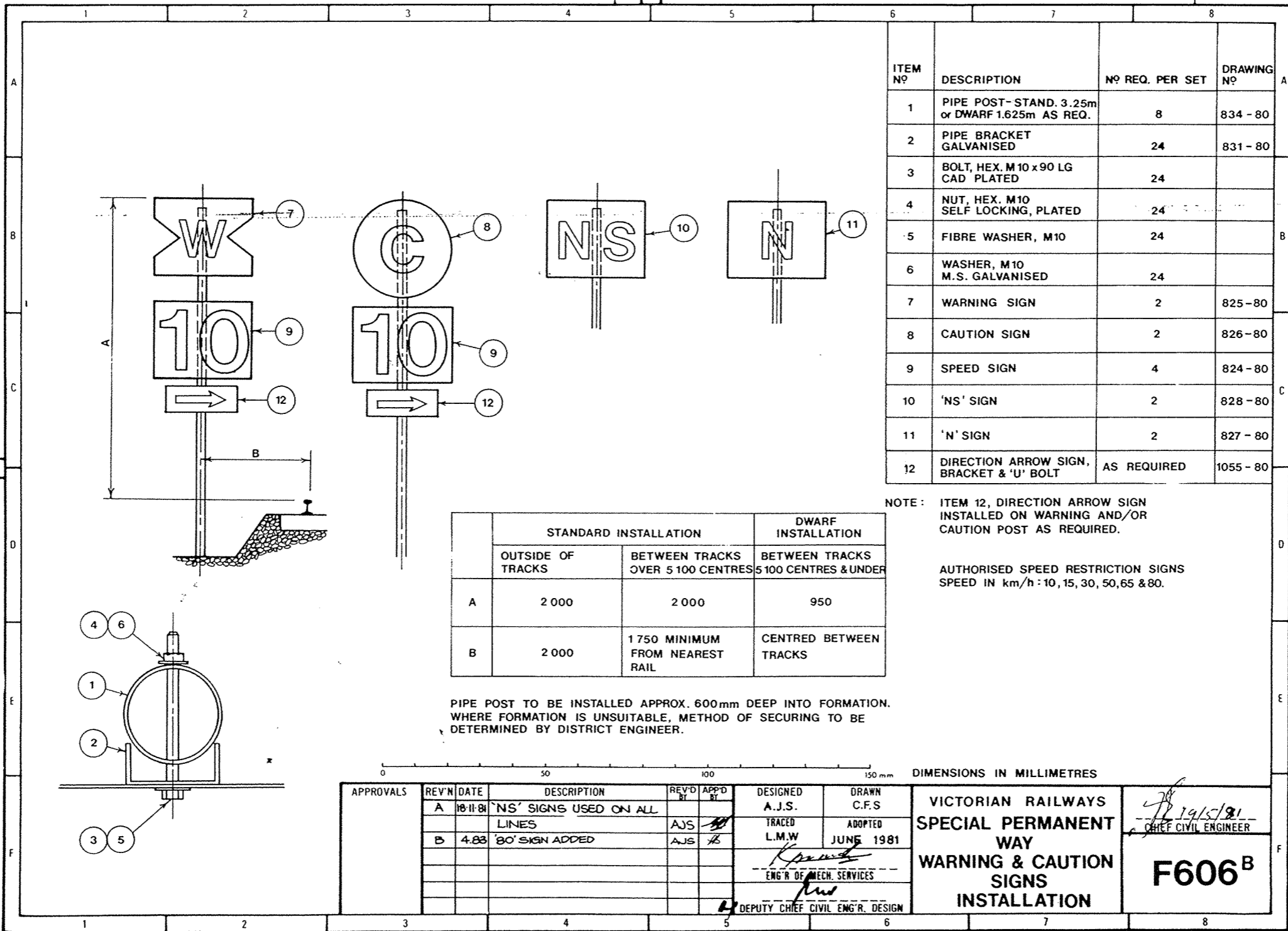
APPROVALS	REV'N	DATE	DESCRIPTION	REV'D BY	APP'D BY

DESIGNED A.J.S.
 TRACED L.M.W.
 DRAWN C.F.S.
 ADOPTED JUNE 1981.
[Signature]
 ENGR OF MECH. SERVICES
 DEPUTY CHIEF CIVIL ENGR. DESIGN

VICTORIAN RAILWAYS
**SPEED RESTRICTION
 SIGN - CURVE
 INSTALLATION**

[Signature] 19/1/81
 CHIEF CIVIL ENGINEER
F605

0 50 100 150 mm DIMENSIONS IN MILLIMETRES



ITEM NO	DESCRIPTION	NO REQ. PER SET	DRAWING NO
1	PIPE POST- STAND. 3.25m or DWARF 1.625m AS REQ.	8	834-80
2	PIPE BRACKET GALVANISED	24	831-80
3	BOLT, HEX. M10 x90 LG CAD PLATED	24	
4	NUT, HEX. M10 SELF LOCKING, PLATED	24	
5	FIBRE WASHER, M10	24	
6	WASHER, M10 M.S. GALVANISED	24	
7	WARNING SIGN	2	825-80
8	CAUTION SIGN	2	826-80
9	SPEED SIGN	4	824-80
10	'NS' SIGN	2	828-80
11	'N' SIGN	2	827-80
12	DIRECTION ARROW SIGN, BRACKET & 'U' BOLT	AS REQUIRED	1055-80

	STANDARD INSTALLATION		DWARF INSTALLATION
	OUTSIDE OF TRACKS	BETWEEN TRACKS OVER 5 100 CENTRES	BETWEEN TRACKS 5 100 CENTRES & UNDER
A	2 000	2 000	950
B	2 000	1 750 MINIMUM FROM NEAREST RAIL	CENTRED BETWEEN TRACKS

NOTE: ITEM 12, DIRECTION ARROW SIGN INSTALLED ON WARNING AND/OR CAUTION POST AS REQUIRED.

AUTHORISED SPEED RESTRICTION SIGNS
SPEED IN km/h : 10, 15, 30, 50, 65 & 80.

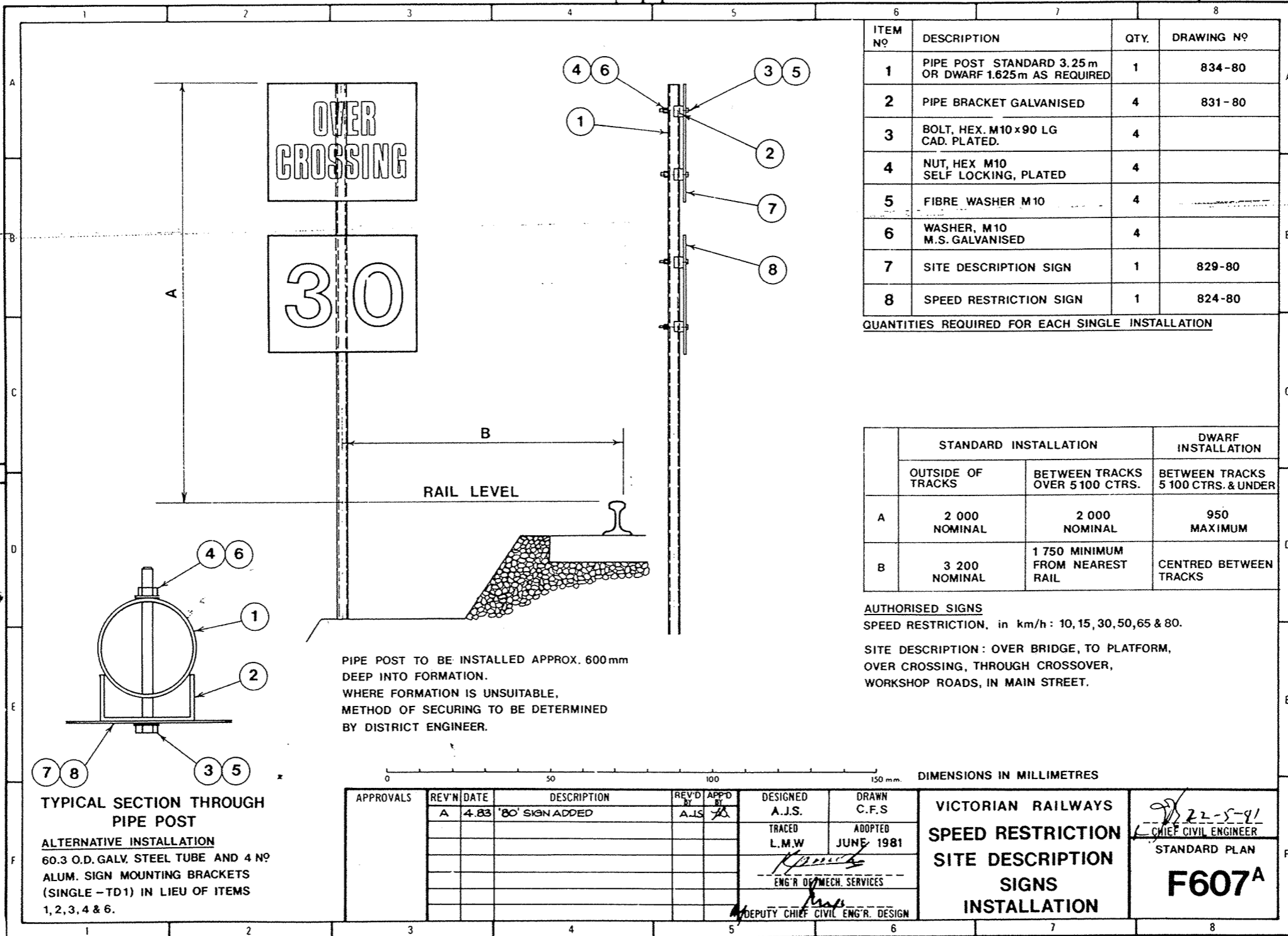
PIPE POST TO BE INSTALLED APPROX. 600mm DEEP INTO FORMATION. WHERE FORMATION IS UNSUITABLE, METHOD OF SECURING TO BE DETERMINED BY DISTRICT ENGINEER.

0 50 100 150 mm DIMENSIONS IN MILLIMETRES

APPROVALS	REV'N	DATE	DESCRIPTION	REV'D BY	APP'D BY	DESIGNED	DRAWN
	A	10-11-81	'NS' SIGNS USED ON ALL LINES	AJS	[Signature]	A.J.S.	C.F.S.
	B	4-88	'80' SIGN ADDED	AJS	[Signature]	TRACED L.M.W.	ADOPTED JUNE 1981
						[Signature]	ENG'R OF MECH. SERVICES
						[Signature]	DEPUTY CHIEF CIVIL ENG'R. DESIGN

VICTORIAN RAILWAYS
SPECIAL PERMANENT
WAY
WARNING & CAUTION
SIGNS
INSTALLATION

19/5/81
[Signature]
CHIEF CIVIL ENGINEER
F606^B



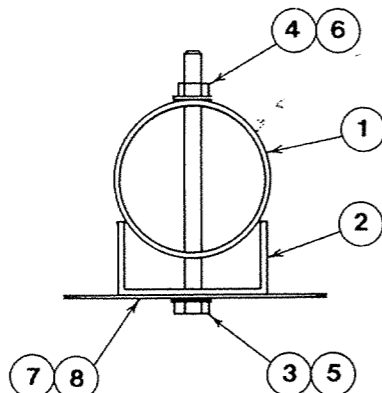
ITEM NO	DESCRIPTION	QTY.	DRAWING NO
1	PIPE POST STANDARD 3.25 m OR DWARF 1.625 m AS REQUIRED	1	834-80
2	PIPE BRACKET GALVANISED	4	831-80
3	BOLT, HEX. M10x90 LG CAD. PLATED.	4	
4	NUT, HEX M10 SELF LOCKING, PLATED	4	
5	FIBRE WASHER M10	4	
6	WASHER, M10 M.S. GALVANISED	4	
7	SITE DESCRIPTION SIGN	1	829-80
8	SPEED RESTRICTION SIGN	1	824-80

QUANTITIES REQUIRED FOR EACH SINGLE INSTALLATION

	STANDARD INSTALLATION		DWARF INSTALLATION
	OUTSIDE OF TRACKS	BETWEEN TRACKS OVER 5 100 CTRS.	BETWEEN TRACKS 5 100 CTRS. & UNDER
A	2 000 NOMINAL	2 000 NOMINAL	950 MAXIMUM
B	3 200 NOMINAL	1 750 MINIMUM FROM NEAREST RAIL	CENTRED BETWEEN TRACKS

AUTHORISED SIGNS
SPEED RESTRICTION, in km/h: 10, 15, 30, 50, 65 & 80.

SITE DESCRIPTION: OVER BRIDGE, TO PLATFORM, OVER CROSSING, THROUGH CROSSOVER, WORKSHOP ROADS, IN MAIN STREET.



TYPICAL SECTION THROUGH PIPE POST
ALTERNATIVE INSTALLATION
60.3 O.D. GALV. STEEL TUBE AND 4 NO. ALUM. SIGN MOUNTING BRACKETS (SINGLE - TD1) IN LIEU OF ITEMS 1, 2, 3, 4 & 6.

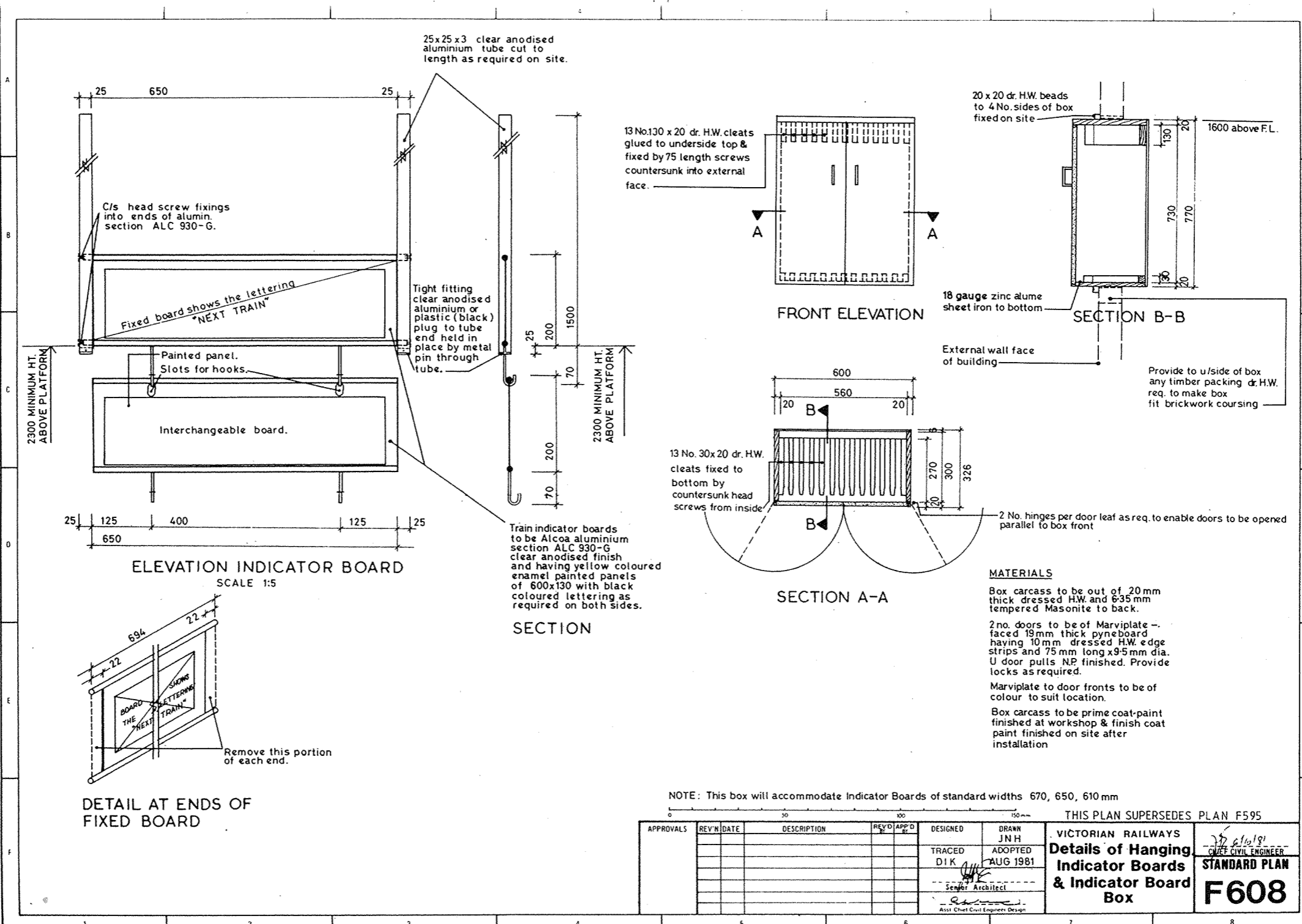
PIPE POST TO BE INSTALLED APPROX. 600mm DEEP INTO FORMATION. WHERE FORMATION IS UNSUITABLE, METHOD OF SECURING TO BE DETERMINED BY DISTRICT ENGINEER.

0 50 100 150 mm. DIMENSIONS IN MILLIMETRES

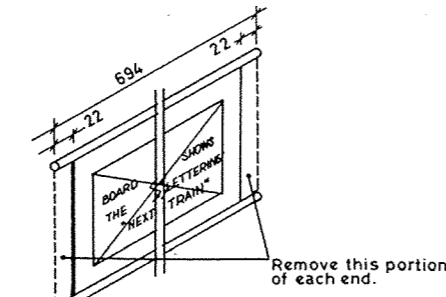
APPROVALS	REV'N	DATE	DESCRIPTION	REV'D BY	APP'D BY	DESIGNED	DRAWN
	A	4.83	'80' SIGN ADDED	A.J.S.	[Signature]	A.J.S.	C.F.S.
						TRACED L.M.W.	ADOPTED JUNE 1981
						[Signature]	ENG'R OF MECH. SERVICES
						[Signature]	DEPUTY CHIEF CIVIL ENG'R. DESIGN

VICTORIAN RAILWAYS
SPEED RESTRICTION
SITE DESCRIPTION
SIGNS
INSTALLATION

22-5-81
[Signature]
CHIEF CIVIL ENGINEER
STANDARD PLAN
F607^A



ELEVATION INDICATOR BOARD
SCALE 1:5



DETAIL AT ENDS OF
FIXED BOARD

FRONT ELEVATION

SECTION B-B

SECTION A-A

MATERIALS

Box carcass to be out of 20 mm thick dressed H.W. and 635 mm tempered Masonite to back.
 2 no. doors to be of Marvplate - faced 19mm thick pyneboard having 10 mm dressed H.W. edge strips and 75 mm long x 9.5 mm dia. U door pulls N.P. finished. Provide locks as required.
 Marvplate to door fronts to be of colour to suit location.
 Box carcass to be prime coat-paint finished at workshop & finish coat paint finished on site after installation

NOTE: This box will accommodate Indicator Boards of standard widths 670, 650, 610 mm

THIS PLAN SUPERSEDES PLAN F595

APPROVALS	REV'N	DATE	DESCRIPTION	REV'D	APP'D	DESIGNED	DRAWN	VICTORIAN RAILWAYS	
						TRACED D I K	J N H	Details of Hanging Indicator Boards & Indicator Board Box	
						Senior Architect	ADOPTED AUG 1981	STANDARD PLAN	
						Asst Chief Civil Engineer Design		F608	

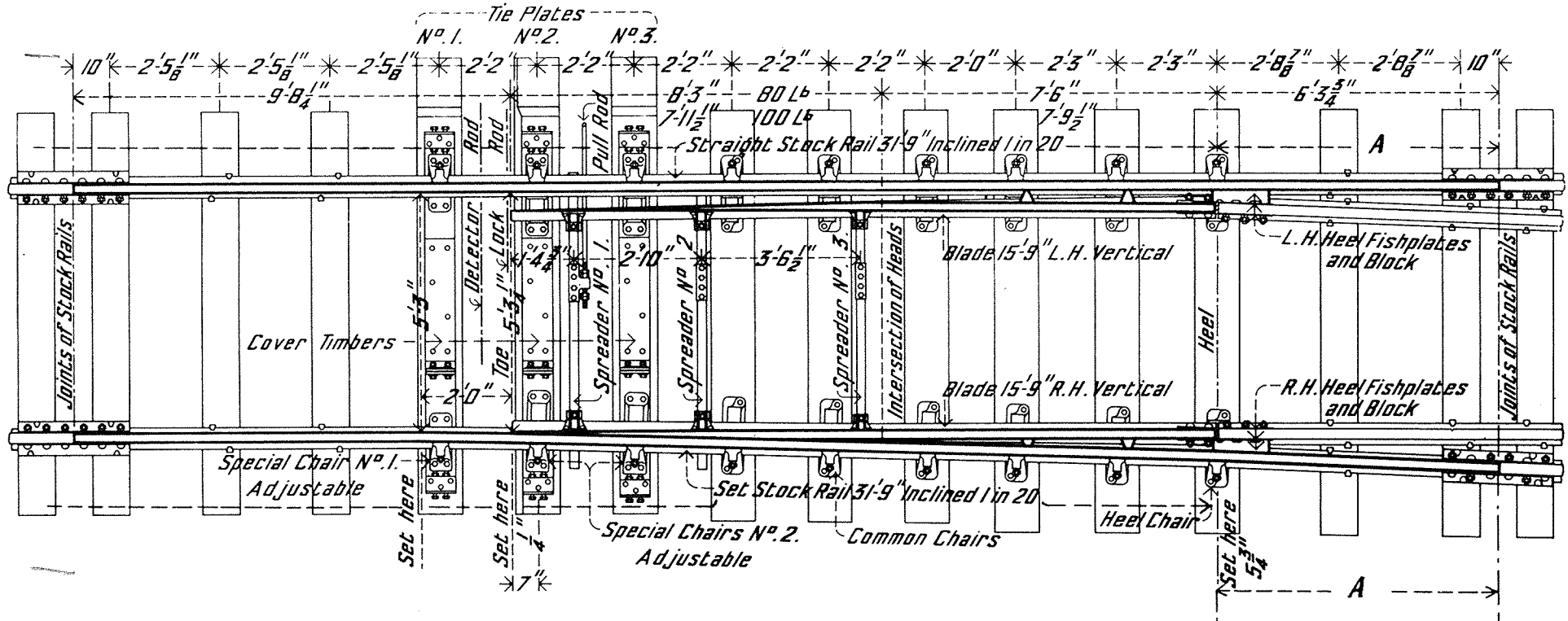
NOTES :

ADZING OF TIMBERS. The three (3) timbers behind heel of point blades (A on diagram) must be adzed under the stock rails only, to allow for the running out of the inclination of stock rails of 1 in 20 to the vertical on turnout; reducing the adzing by 1/16 at each sleeper

INSTALLATION OF TIE PLATES.—Tie plates must only be provided under special directions from Head Office
Where tie plates are installed, holes for the chair screws are to be bored, with $\frac{1}{2}$ " augers, centrally with the holes in the tie plates. The chairs are to be adjusted thereon by the adjusting screws to provide for 5' 3 1/4" gauge at the toe, before the chair screws are finally tightened down
Where tie plates are not installed 4 ordinary slide chairs are to be provided in place of the 6 special chairs (Nos. 1 and 2).

SPREADER RODS.—Spreader rods Nos. 1, 2 and 3 are provided by the Signals and Telegraph Branch

PULL RODS.—
For Non-interlocked Points—
Pull rods for hand operated spur, quadrant, Thompson and Taylor levers are to be provided by the Way and Works Branch
For Interlocked Points—
Pull rods are provided by the Signals and Telegraph Branch



Timbers 12" x 6" x 10' 0" at heel	1 No.	Tie Plates, Nos. 1, 2 and 3 as required	1 Set	Heel Fishplates, cast steel, left hand	1 Pair
" " 10' 1" at toe	1 No.	Chairs, slide ordinary	10 No.	" " cast steel, right hand	1 Pair
" " 10' 2" at toe	1 No.	" " adjustable, No. 2	4 No.	" Fishbolts, 1 1/4" dia. x 5 1/2" special	4 No.
" " 10' 3" at toe	1 No.	" " dummy adjustable, No. 1	2 No.	" Block Bolts, 1 1/4" dia. x 9 1/2", 9 1/4" & 10 1/4" long, 2 each	6 No.
" 10" x 5" x 9' 0" toe end	3 No.	Chair Pins, 3/4" dia. x 6 1/2"	42 No.	Pull Rod, type as ordered	1 No.
" " 9' x 6" under blade	3 No.	" Bolts, 1" dia. x 6 1/2"	18 No.	Spreader, Nos. 1, 2 and 3	1 Set
" " 10' 0" under blade & behind heel	4 No.	" Screws, 1" dia. x 7 1/2"	24 No.	Washers, spring, 1" x 3/4" x 3/16 for chair bolts	18 No.
" " 8" x 2" x 2' 8 1/2" cover for tie plates	3 No.	Stock Rail, 31' 9", set	1 No.	Washers, flat, 1 1/16" dia. x 3/4" for chair screws	24 No.
		" " straight	1 No.		
		Blade, 15' 9", left hand	1 No.		
		" " right hand	1 No.		
		Heel Block, C.I., left hand	1 No.		
		" " right hand	1 No.		

VICTORIAN RAILWAYS—WAY & WORKS BRANCH

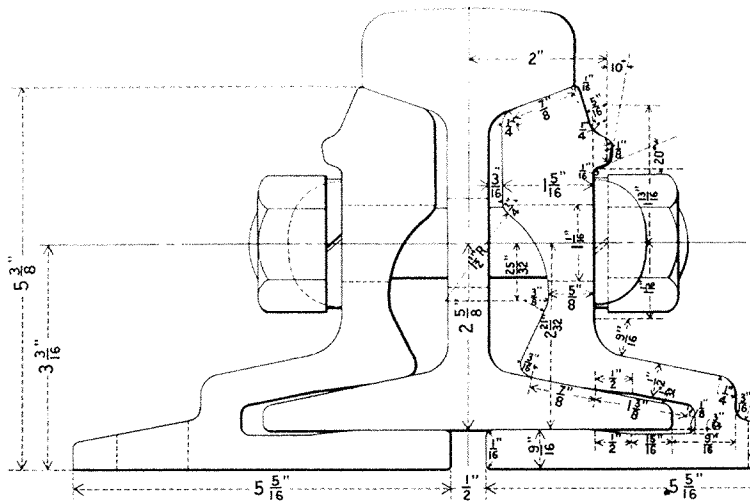
STANDARD DRAWING

Points for 5ft. 3in. Gauge Railways

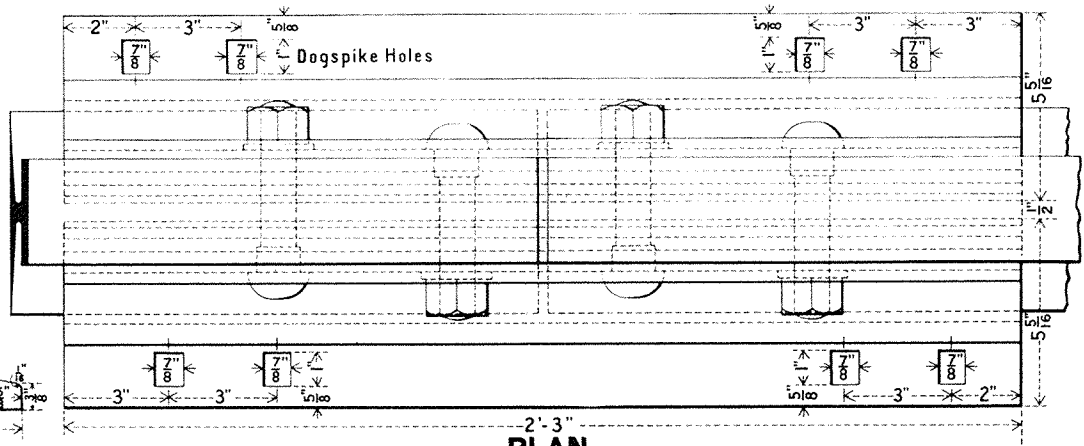
General Arrangement of "Y" lay-outs for curves of 800 ft. radius, 80 lb. and 100 lb. rails (right hand)

Adopted 3rd APRIL, 1925
No Scale

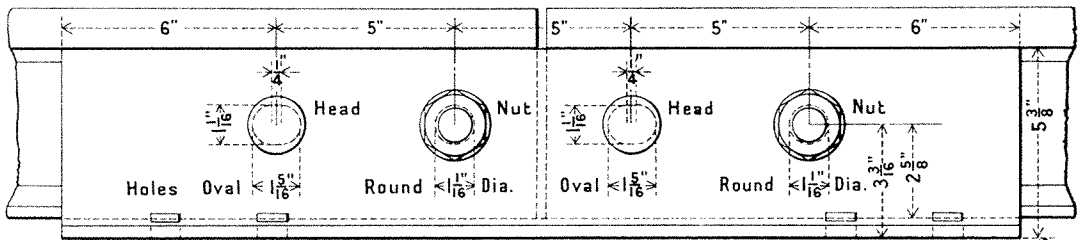
Edw. Sellard
Chief Engineer of Way and Works



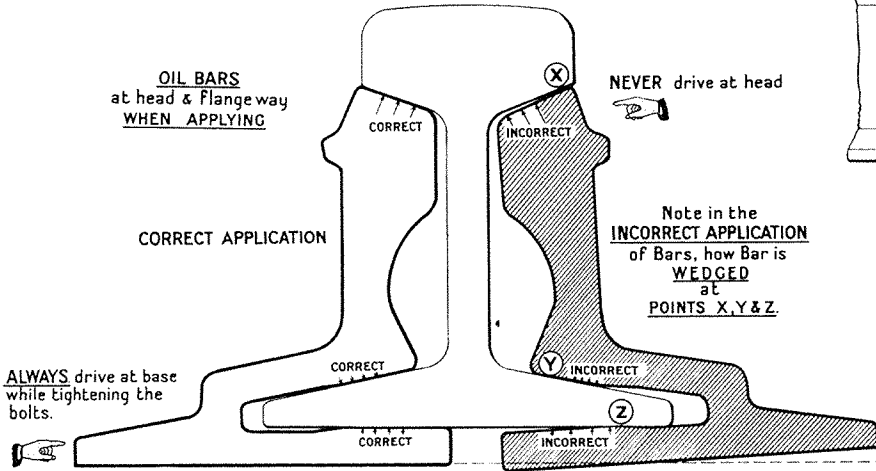
SECTION



PLAN



SIDE ELEVATION



OIL BARS at head & Flangeway WHEN APPLYING

NEVER drive at head

Note in the INCORRECT APPLICATION of Bars, how Bar is WEDGED at POINTS X, Y & Z.

CORRECT APPLICATION

ALWAYS drive at base while tightening the bolts.

CONTINUOUS JOINT
CORRECT AND INCORRECT APPLICATION

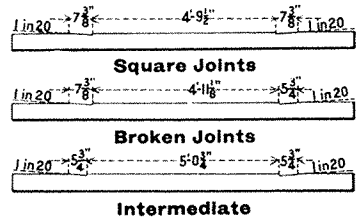
SLEEPER ADZING
100 LB. RAILS

1" DIA FISHBOLT
A.S. 100 LB. RAILS

SPRING WASHER
FOR 1" DIA. FISHBOLTS

TABLE OF QUANTITIES				
ITEM	Number per Joint	Average Number per Mile of Track	Average Weight	Average Weight per Mile of Track
Fishplates, continuous types	1 pair	235	128 lb.	13.5 tons
Fishbolts, 1" x 4 3/4"	4	940	1.9 lb.	16 cwt.
Spring Washers, 1" x 3/8" x 3/16"	4	940	2 oz.	117.5 lb.

NOTE.—ADZING OF SLEEPERS. —The joint sleepers must be adzed to a greater depth and width than the intermediates as shown on diagram hereon.



Victorian Railways—Way and Works Branch
Standard Drawing
CONTINUOUS RAIL JOINT
Aust. Standard 100-lb. Rail 4 Bolts Alternately Reversed

Adopted 1st May, 1925
No Scale

Ed. Gallard
Chief Engineer Way and Works

AREA DRAINED BY STANDARD CULVERTS

Drainage Area in Sq. Miles	WATERWAY IN SQUARE FEET		
	Flat, Sandy Country	Ordinary Country	Steep, Rocky Country
	c = 30	c = 40	c = 60
1	18	24	36
1 1/2	24	32	48
2	30	40	60
2 1/2	41	55	82
3	50	67	100
3 1/2	68	91	136
4	85	113	170
5	100	134	200
7	129	168	258
10	169	225	338
15	230	307	460
20	284	378	568
30	385	513	770
40	477	636	954
50	564	752	1128
60	646	862	1292
70	726	968	1452
80	802	1070	1604
90	877	1169	1754
100	949	1265	1898
120	1087	1450	2174
140	1221	1628	2442
160	1350	1800	2700
180	1474	1966	2948
200	1595	2127	3190
250	1791	2500	3582
300	2163	2883	4326
400	2683	3578	5366
500	3172	4229	6344
600	3639	4852	7278

WATERWAY REQUIRED FOR LARGE DRAINAGE AREAS

Sizes of Culverts	Waterway sq. feet	AREA DRAINED		
		Flat, Sandy Country c = 30	Ordinary Country c = 40	Steep, Rocky Country c = 60
9" x 9"	.56	3.0	2.1	.8
1'6" x 9"	1.12	8.0	5.4	2.2
1'6" x 1'6"	2.25	20.9	13.4	5.5
2'3" x 1'6"	3.37	34.7	23.6	9.4
2'3" x 2'3"	5.06	59.6	40.6	16.1
3'9" x 1'6"	5.62	68.6	46.7	18.5
3'9" x 2'3"	8.43	118.8	80.3	31.8
2 opes 3'9" x 1'6"	11.25	173.1	117.9	46.8
2 opes 3'9" x 2'3"	16.87	297.1	202.5	80.3
12" dia	.78	4.8	3.4	1.3
18" "	1.76	14.6	9.9	3.9
2'0" "	3.14	31.6	21.5	8.5
2'6" "	4.91	57.3	39.0	15.6
3'0" "	7.07	93.2	63.5	25.2
3'6" "	9.62	140.5	95.7	38.0
4'0" "	12.53	199.8	136.2	54.0
4'6" "	15.90	274.5	187.1	74.2
5'0" "	19.63	363.6	247.7	98.3
6'0" "	28.27	591.4	402.9	159.9
7'0" "	38.49	892.3	608.0	241.3
8'0" "	50.27	1273.8	868.0	344.5

KERNOT'S FORMULA $A = c K \frac{3}{4}$

A = Waterway in square feet
 K = Drainage area in sq. miles
 c = { 30 for flat sandy country
 { 40 for ordinary country
 { 60 for steep, rocky country

Victorian Railways—Way and Works Branch

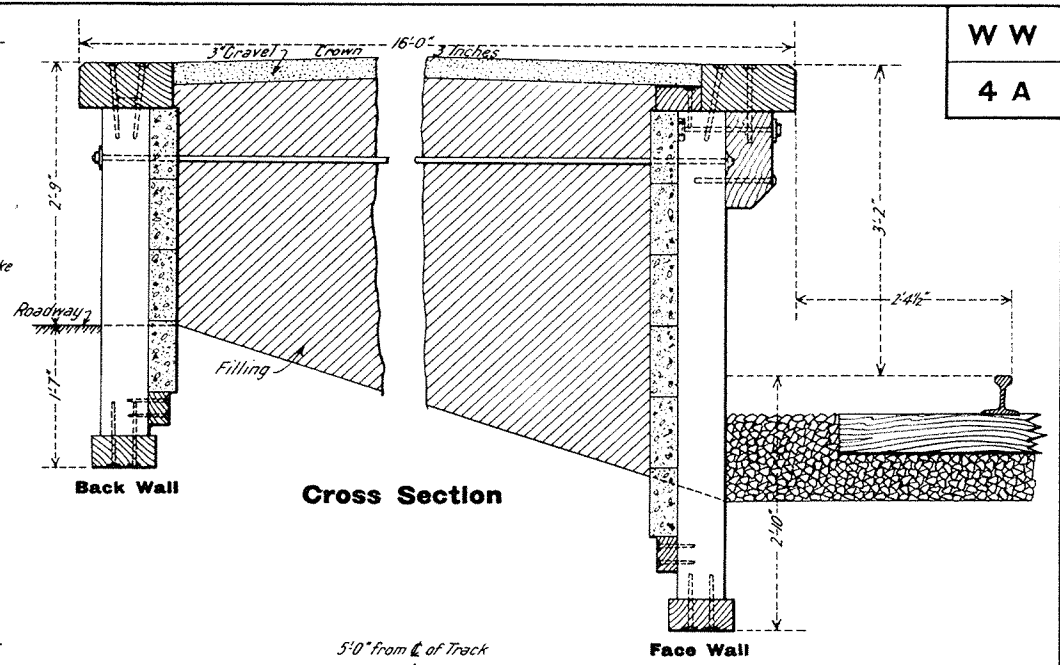
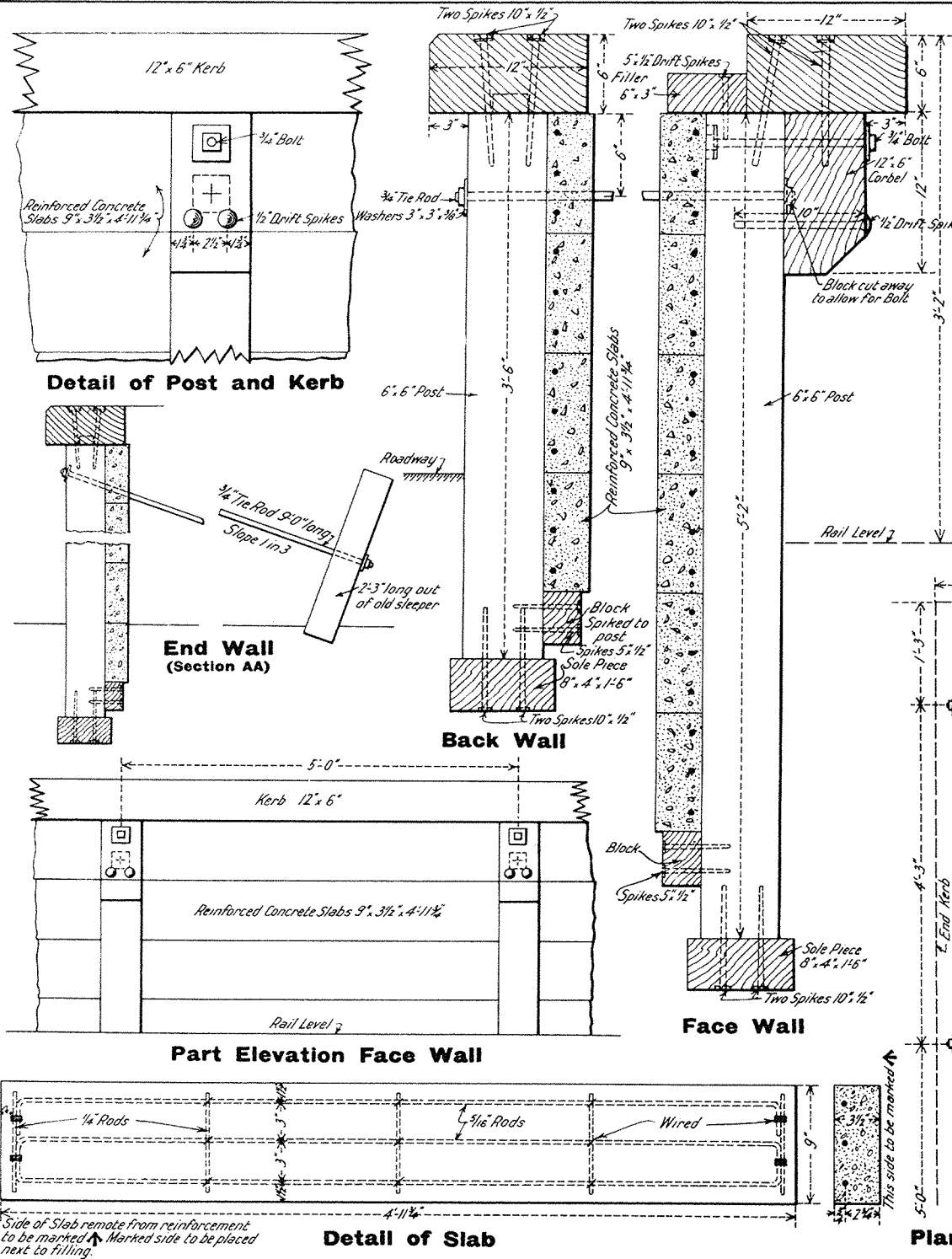
WATERWAY

Kernot's Formula

Area drained by Standard Culverts, and
 Waterway required for large drainage areas

Adopted 1st October, 1925

Edw. Seward
 Chief Engineer Way and Works



SCHEDULE OF QUANTITIES.

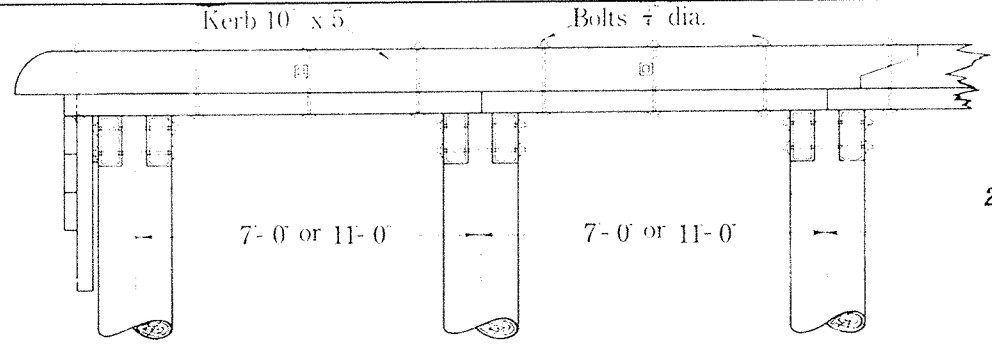
Per Bay of 5 feet			Per End 16 feet Wide		
Item	No.	Quantity	Item	No.	Quantity
Coping 12" x 6"	-	5.00 c. ft.	Coping 12" x 6"	1	8.00 c. ft.
Posts 6" x 6"	1 ea. 3' 6" & 5' 2"	2.17 "	Dead Men	3	1.26 "
Corbel 6" x 6" x 12"	1	0.25 "	Posts 6" x 6" x 5'	3	3.75 "
Filler 6" x 3"	-	0.63 "	Sole Pieces 8" x 4" x 1' 6"	3	1.00 "
Sole Piece 8" x 4" x 1' 6"	2	0.67 "	Blocks 4" x 3" x 3"	3	0.12 "
Blocks	2	-	R. C. Slabs	12	171 lbs. each
R. C. Slabs	10	171 lbs. each	Tie Rods 9" x 1/2"	3	41 " "
Tie Rod 1/2" x 15' 3"	1	23.0 "	Washers 3" x 3" x 3/8"	6	5.64 " "
Bolts 12 1/4" x 1/2"	1	2.23 "	Drift Spikes 10" x 1/2"	12	-
Washers 3" x 3" x 3/8"	4	3.76 "	" " 5" x 1/2"	6	10.32 lbs.
Drift Spikes 10" x 1/2"	8	-			
" " 5" x 1/2"	6	7.38 "			

Victorian Railways—Way and Works Branch
 Standard Drawing of
GOODS PLATFORM
 Filled Type with Precast Concrete Slab Facing

Scales { Details 1 in. to 1 ft.
 Other 1/2 in. to 1 ft.

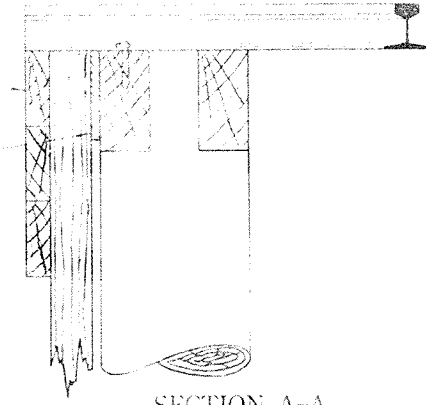
Edo Galland
 Chief Engineer of Way and Works

Plan of Corner

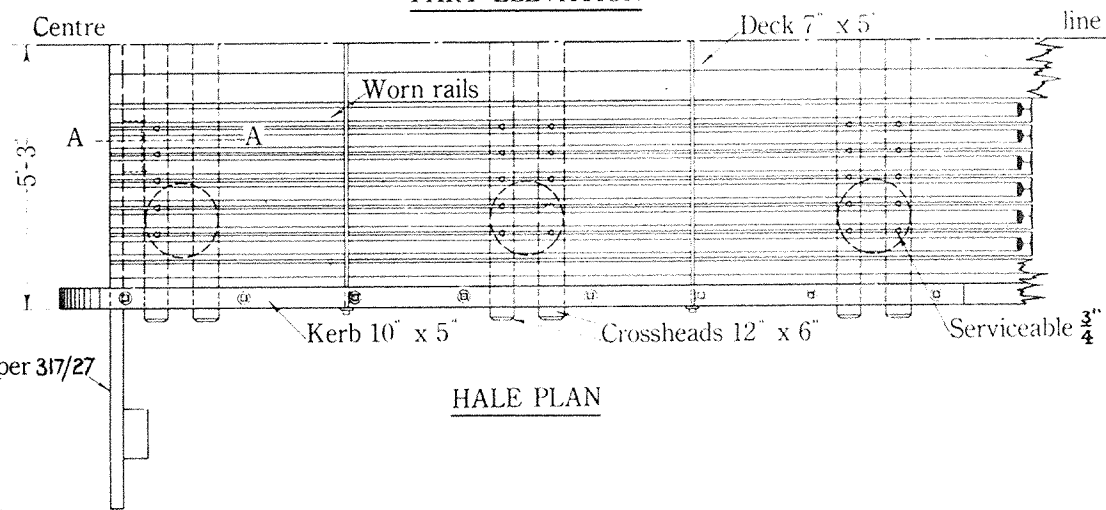


PART ELEVATION

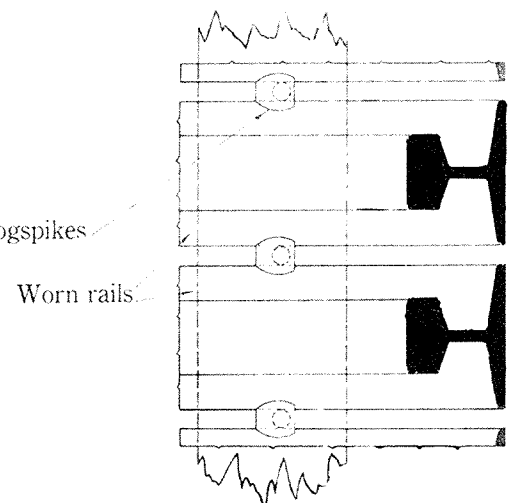
Sheeting not less than 4" thick
2" Packing loosely nailed



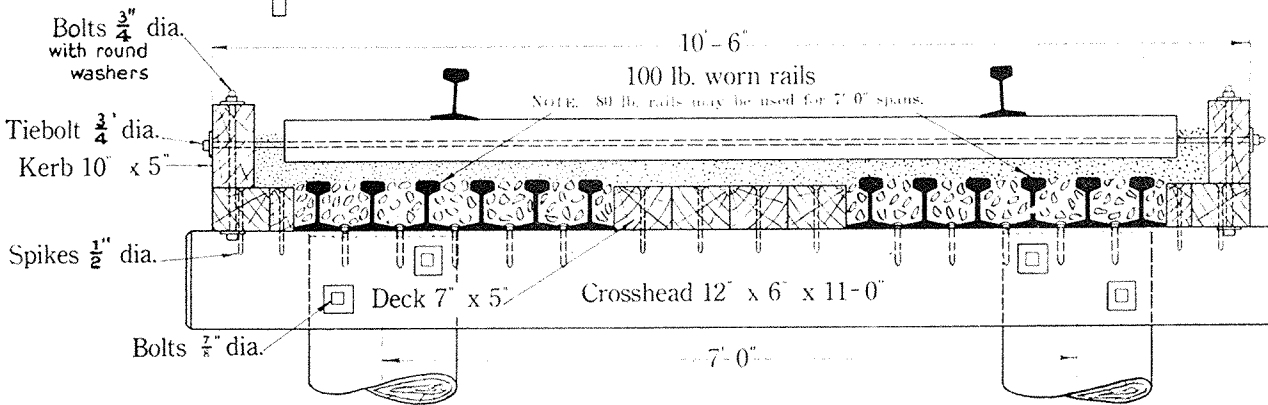
SECTION A-A



HALE PLAN



DETAIL OF FASTENING TO CROSSHEAD



CROSS SECTION

VICTORIAN RAILWAYS WAY & WORKS BRANCH
STANDARD DRAWING

Strengthening Longitudinal Deck Timber Bridge with Rails

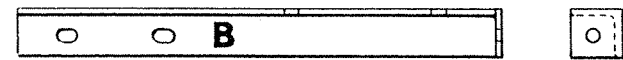
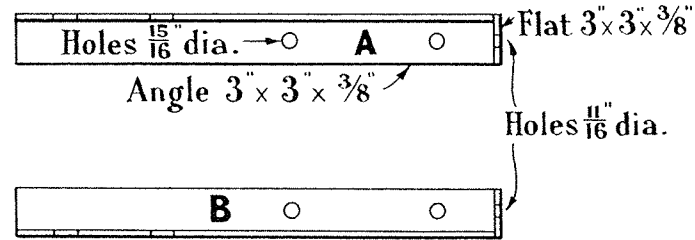
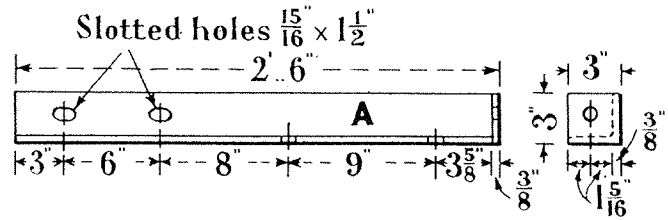
7'-0" or 11'-0" span
(Cooper's E 35 loading)

W. Hallard

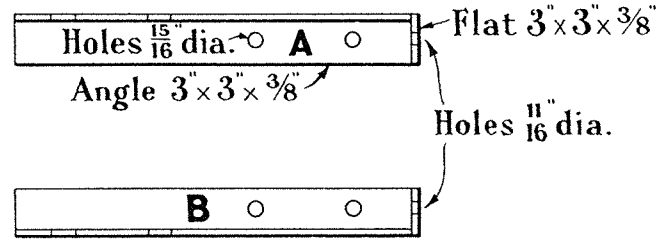
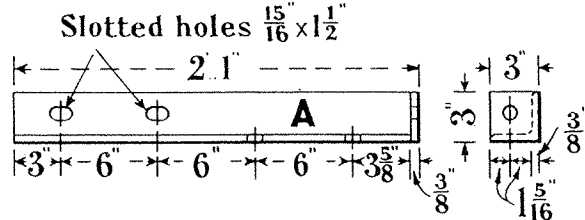
Chief Engineer of Way and Works

NOTE: Ballast between rails to be 2 1/2" gauge broken metal and to be obtained and placed by Works Gang when fixing rails. Rails shown in span lengths. All joints must be over Piers. Longer lengths may be used.

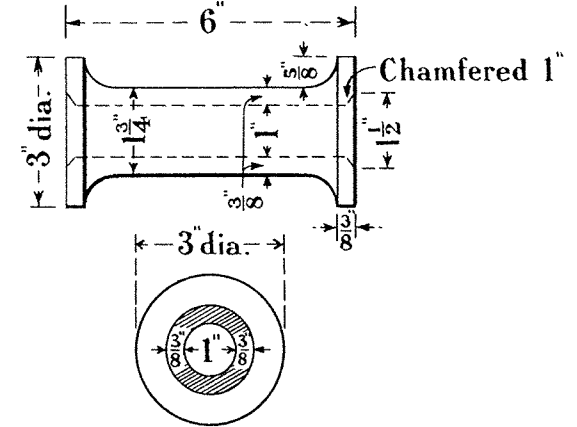
Adopted December, 1925.
No Scale



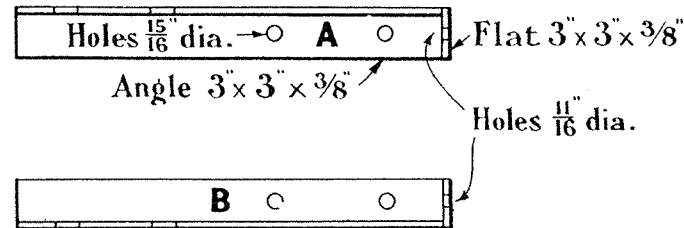
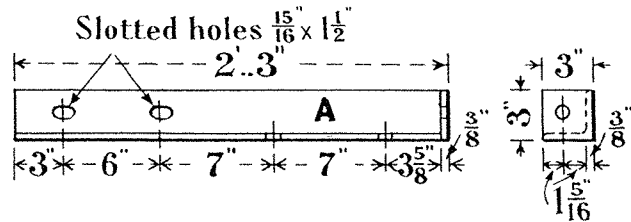
**ANGLE IRON FOR
20 FT. OPES.**



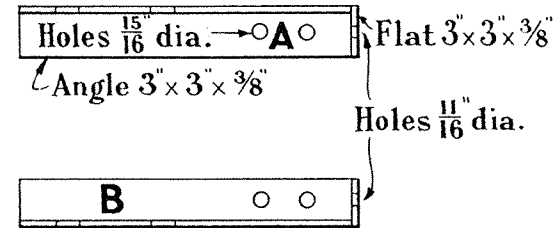
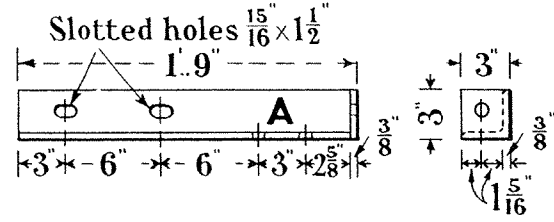
**ANGLE IRON FOR
11 FT. OPES.**



CAST IRON FERRULE



**ANGLE IRON FOR
15 FT. OPES.**



**ANGLE IRON FOR
7 FT. OPES.**

NOTE.—“A” refers to left end of UP Crosshead or right end of DOWN Crosshead.
“B” refers to right end of UP Crosshead or left end of DOWN Crosshead.

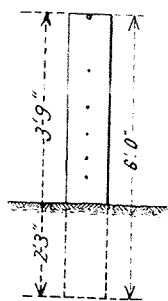
Victorian Railways—Way and Works Branch

**STANDARD DRAWING OF
ANGLE IRONS & FERRULES**
For TIMBER BRIDGES

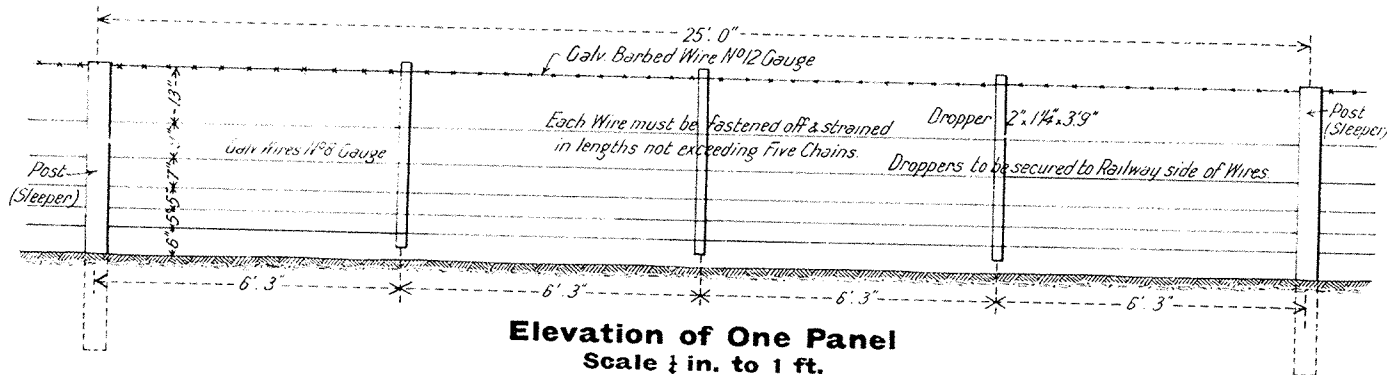
Adopted November 1926.

NO SCALE

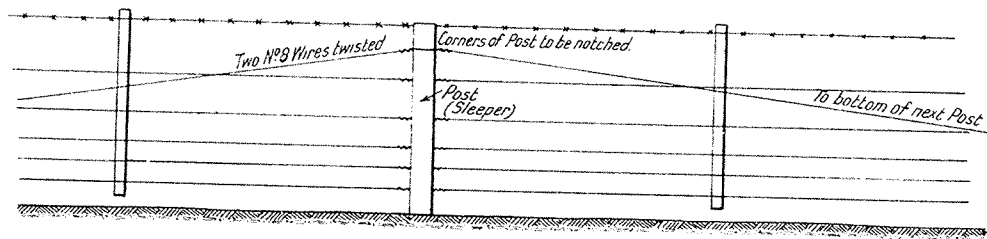
Edo Ballard.
Chief Engineer Way & Works



Cross Section
Scale 1/4 in. to 1 ft.

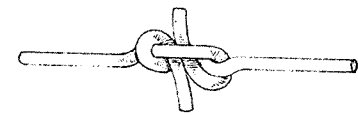
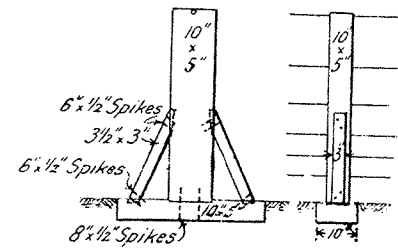


Elevation of One Panel
Scale 1/4 in. to 1 ft.

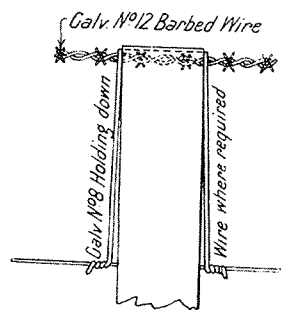


Straining Post
(Every 14th post)
Scale 1/4 in. to 1 ft.

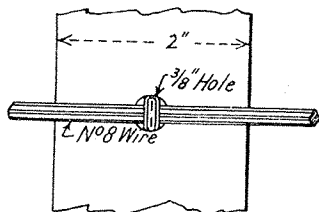
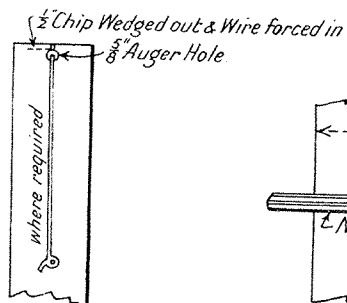
Posts with Sills and Struts
(Where ordered)
Scale 1/4 in. to 1 ft.



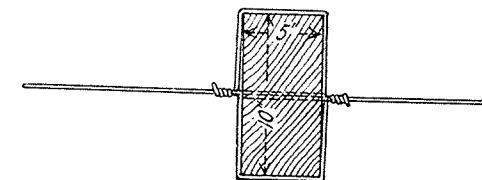
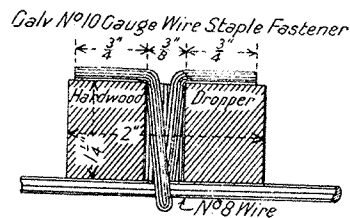
Intermediate Joint of Wire
1/2 full size



Fastening Barbed Wire to Posts
(Every 8th post)
Scale 1 in. to 1 ft.



Dropper Fastenings
1/2 full size



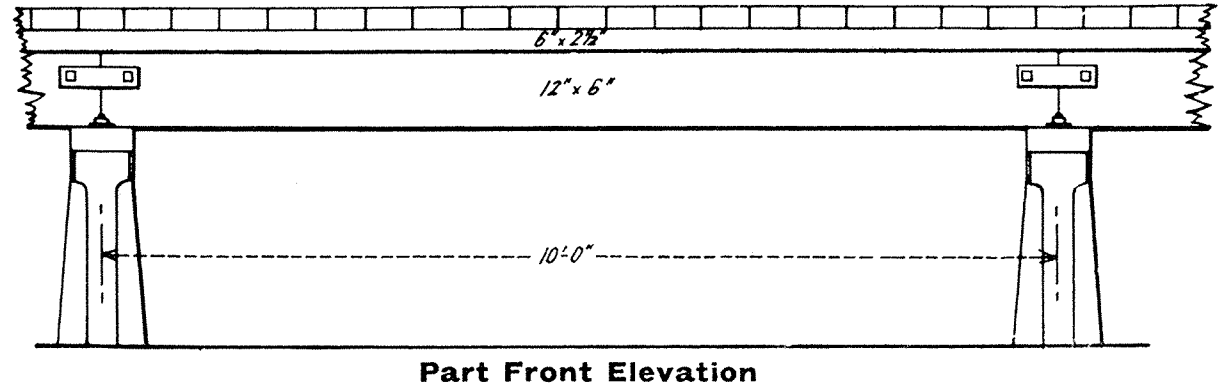
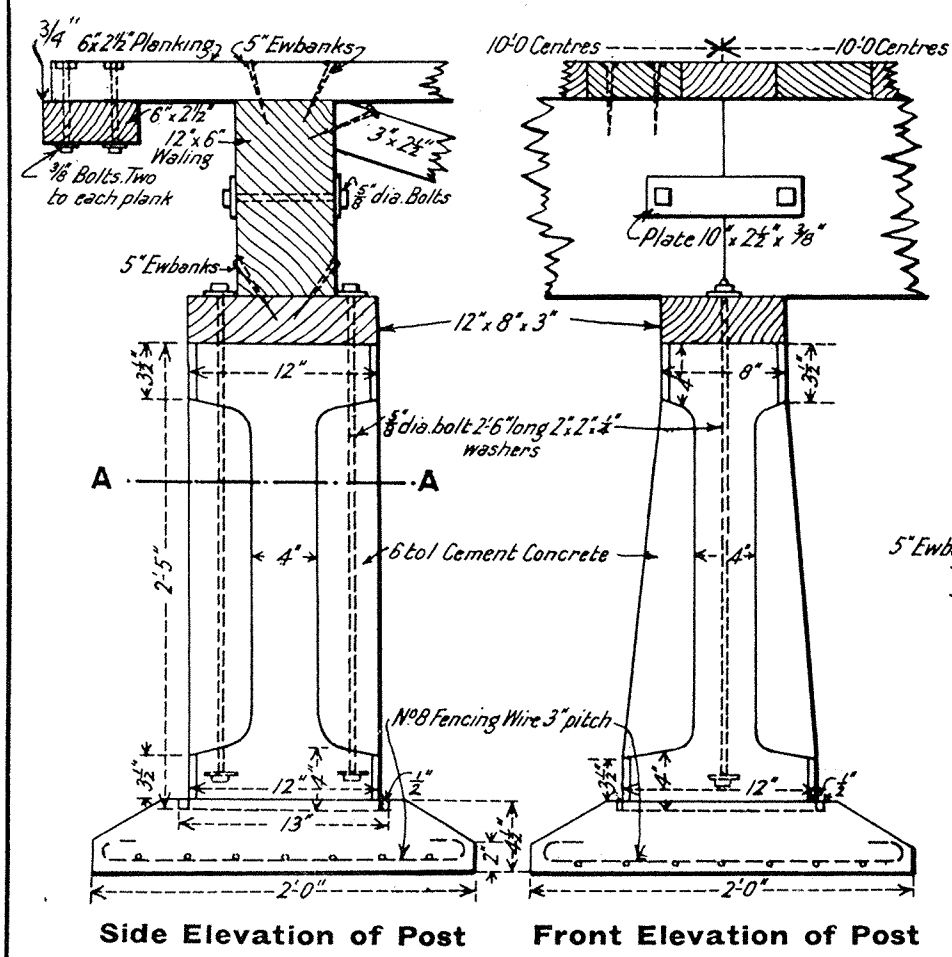
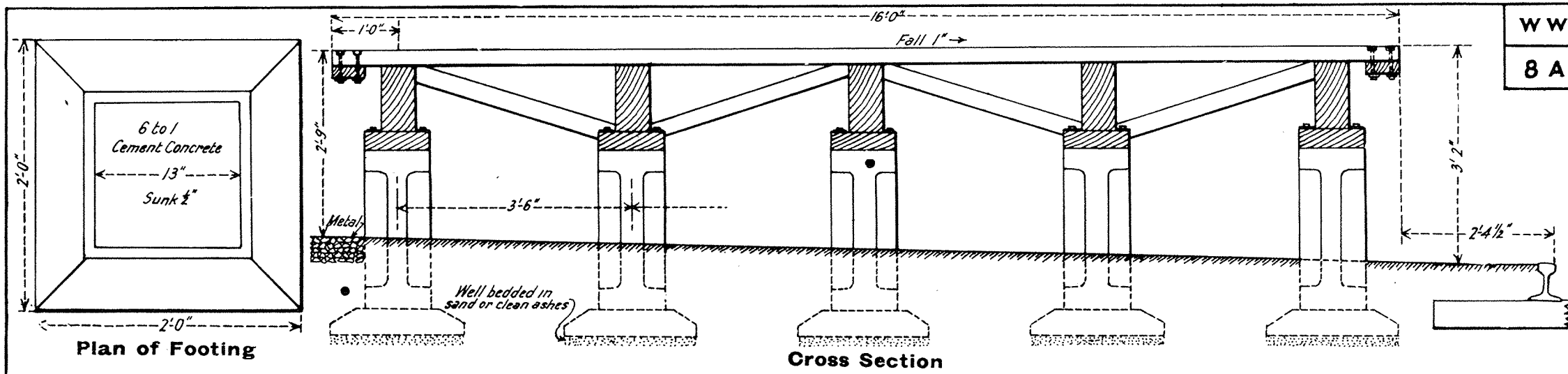
Fastening Off of Wires
Scale 1 in. to 1 ft.

SCHEDULE OF QUANTITIES				
Per length of 10 lineal chains				
Item	No.	Weight		
Post (sleeper)	27	—		
Droppers 2' x 1' x 3' 9"	79	—		
Wire, galvanized, No. 8 gauge (including allowance for straining)	—	250 lbs.		
Wire, barbed, No. 12 gauge	—	44 lbs.		
Fasteners, No. 10 gauge wire	—	5 "		
Sills and struts not included in above				

Victorian Railways—Way & Ways Branch
Standard Drawing of
DROPPER FENCING
for Railways Boundaries

Scales—As shown

Edw. Gallard.



SCHEDULE OF QUANTITIES
Per bay 10 feet long, 16 feet wide

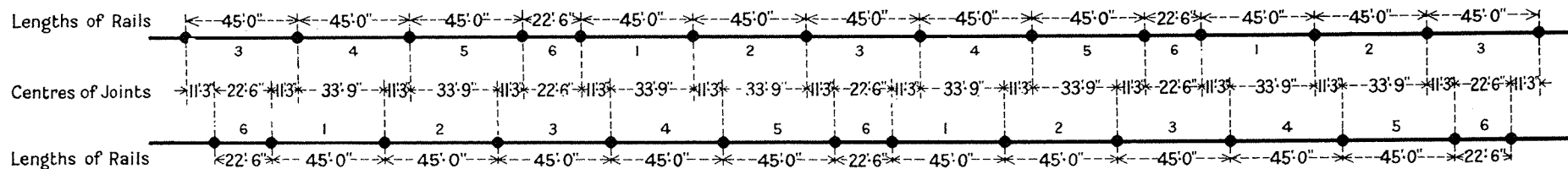
Item	No.	Quantity	Weight	Item	No.	Quantity	Weight
Planking 6" x 2 1/2"	—	35.41 c. ft.	—	Bolts 1/8" x 6 1/2"	5	—	0.9 lbs. each
Beams 12" x 6"	—	25	—	" " x 6"	80	—	0.27 " "
Sills and Struts	—	1.58	—	Washers 2" x 2" x 1/4"	20	—	0.26 " "
Concrete posts	5	1.44	216 lbs. each	" " 1 1/2" x 1 1/2" x 1/4"	80	—	0.08 " "
Concrete Footings	5	1.18	—	Plates 10" x 2 1/2" x 7/8"	10	—	2.54 " "
Ewbanks 5"	218	—	21.8	Excavation	—	1.3 c. yds	—
Bolts 3/4" x 2' 6"	10	—	2.9			per bay	

Victorian Railways—Way & Works Branch
Standard Drawing of
GOODS PLATFORM
Pre-cast Concrete with Timber Deck

Scales { Details 1 in. to 1 foot
Other 1/2 in. to 1 foot

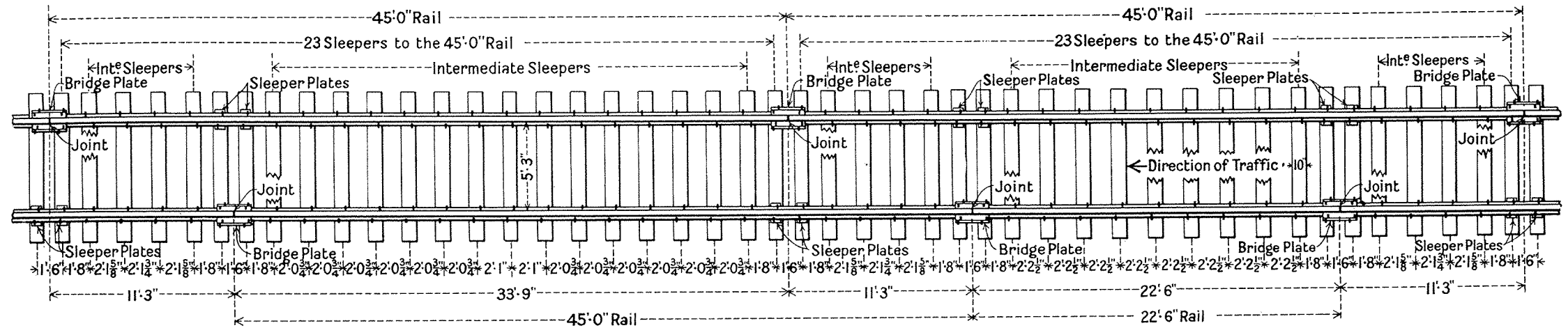
E. Ballard
Chief Engineer Way & Works

Adopted 1st July, 1926



NOTE Joints shown thus

DIAGRAM OF LENGTHS OF RAILS AND POSITION OF JOINTS



PLAN SHOWING SPACING OF SLEEPERS AND POSITION OF BRIDGE AND SLEEPER PLATES

NOTES.—Intermediate Sleepers are to be adzed 1 in 20.
 Joint Sleepers are to be adzed flat for Bridge and Sleeper Plates.
 Sleeper Plates to be used on Intermediate Sleepers on curves of 20 chains radius and under, and Sleepers adzed flat.
 Rail Anchors where required to be fixed as directed.
 The two Outside Spikes must lead in the direction of traffic on Double Track (as shown above) and down hill on Single Track
 For Schedules of Quantities see Standard Drawings WW12a for 90 lb. Track and WW11a for 110 lb. Track.

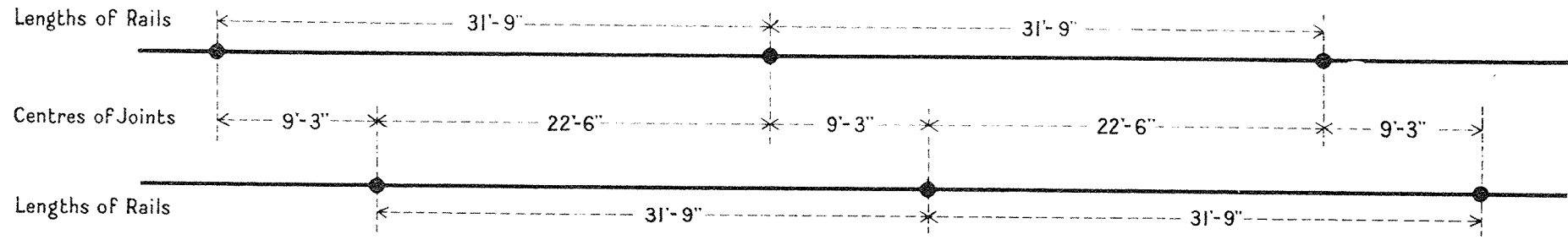
Victorian Railways—Way and Works Branch.

Standard Drawing of
90 and 110 lb. TRACK WITH BRIDGE JOINT

Adopted 1st September, 1925

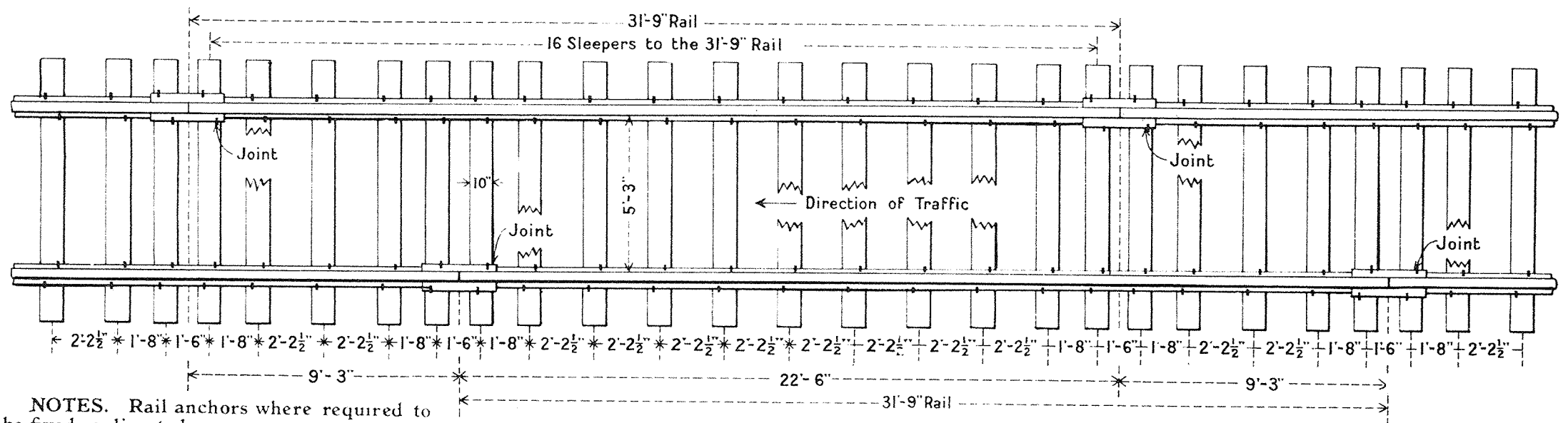
No Scale

Edw. Ballard
 Chief Engineer of Way and Works



NOTE - Joints shown thus

DIAGRAM SHOWING POSITION OF JOINTS



NOTES. Rail anchors where required to be fixed as directed.

The two Outside Spikes must lead in the direction of traffic on Double Track (as shown above) and down hill on Single Track.

PLAN SHOWING SPACING OF SLEEPERS

SCHEDULE OF QUANTITIES						
Item	Size	Weight Each	Per 31' 9" of Single Track		Per Mile of Single Track	
			Number	Cwts.	Number	Tons
Rails "O" Class	31' x 9"	847·600	2	15·136	333	126·004
Fishplates - -	30"	37·845	4	1·352	666	11·252
Fishbolts - -	1" x 4 3/4"	1·901	12	·204	1,998	1·696
Spring Washers -	1" x 3/8" x 5/16"	·177	12	·019	1,998	·158
Dogs (spikes round)	4 3/8" x 5"	·775	64	·442	10,656	3·687
Sleepers - -	9' x 10" x 5"	224·000	16	32·000	2,664	266·400

Victorian Railways Way and Works Branch

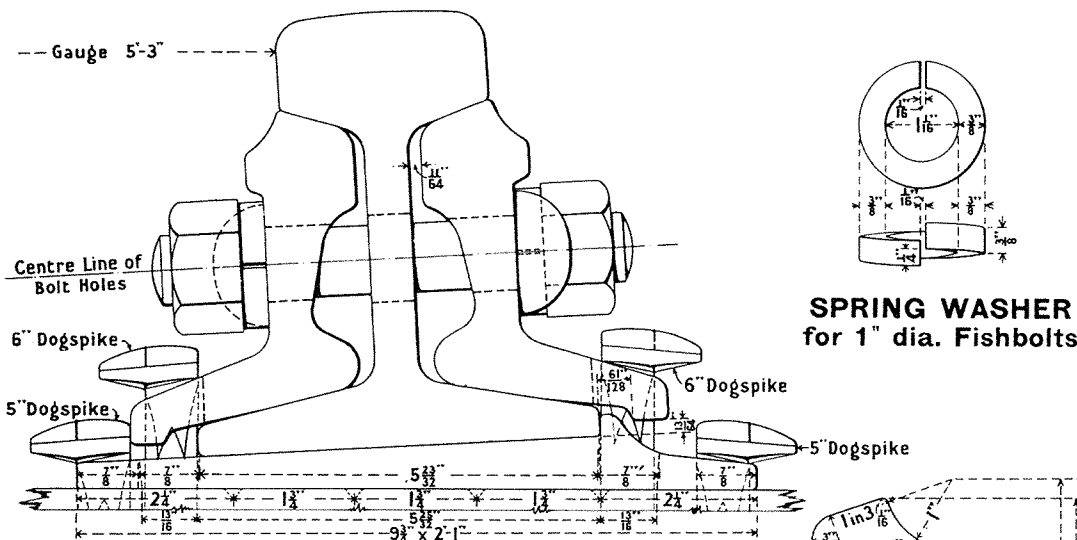
Standard Drawing of
80 lb. TRACK
with 31' 9" Rails and Unequal Stagger Joints

No Scale

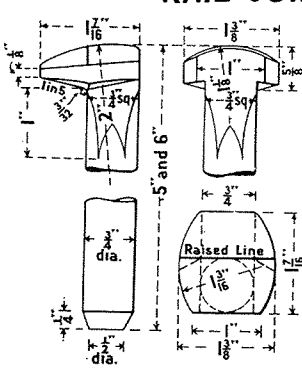
E. H. Ballard

Adopted 15th Sept., 1926

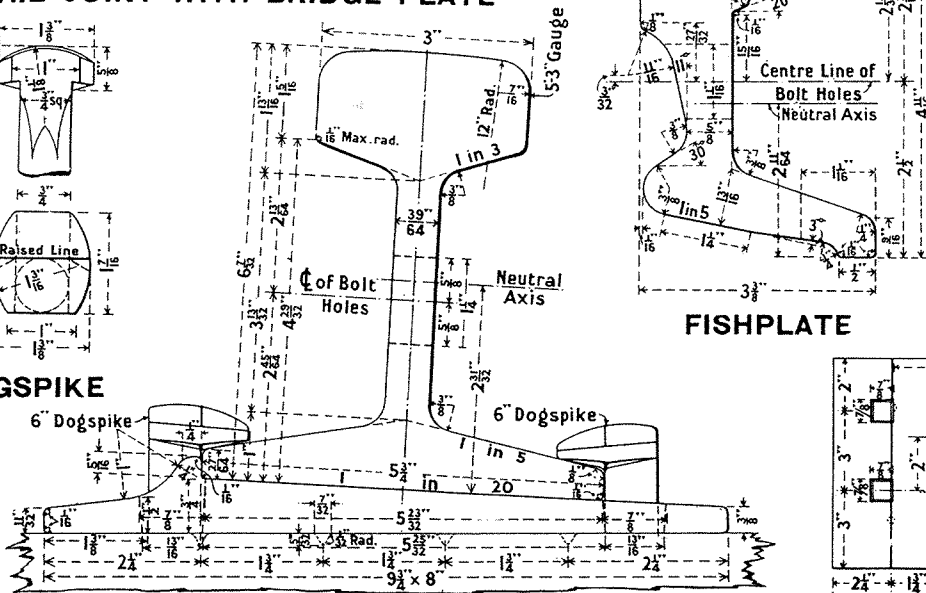
Chief Engineer of Way and Works



RAIL JOINT WITH BRIDGE PLATE

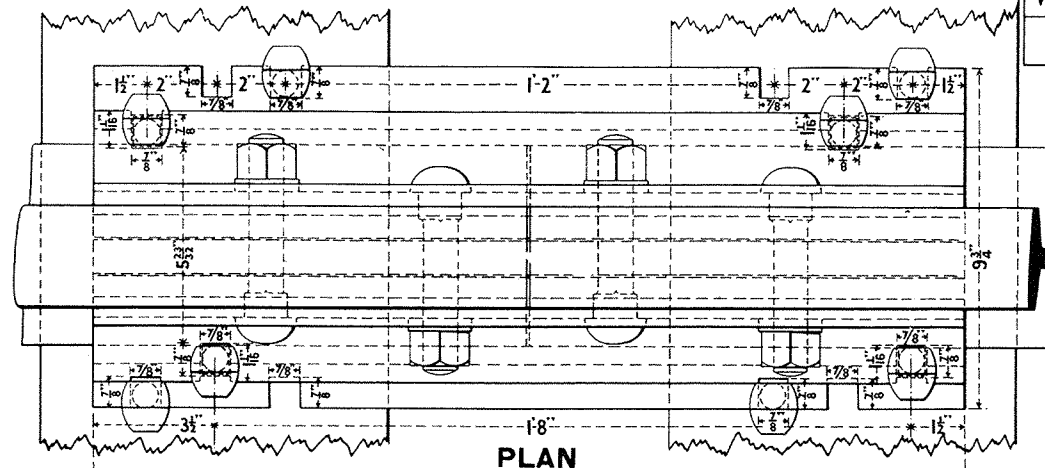


4" DIA. DOGSPIKE

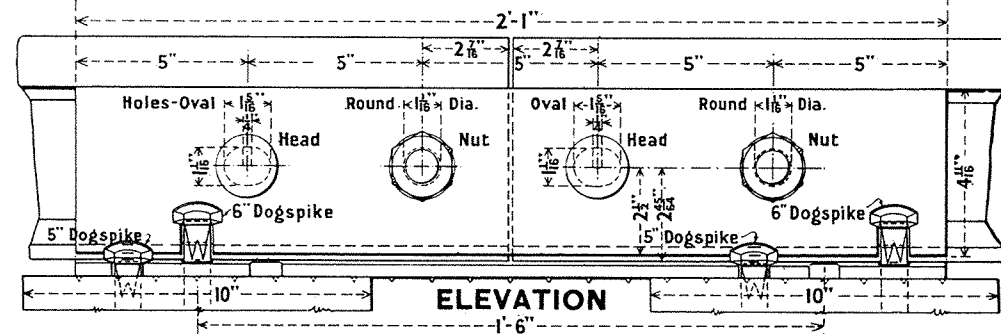


FISHPLATE

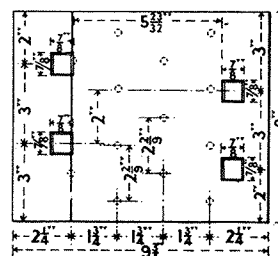
RAIL WITH SLEEPER PLATE



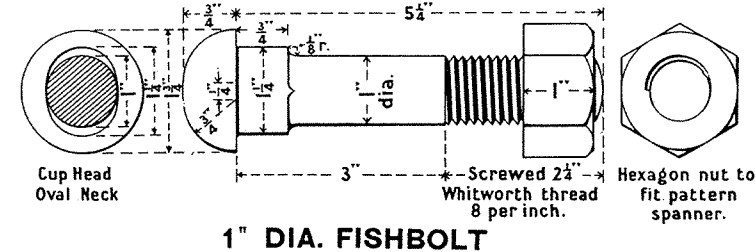
PLAN



ELEVATION



PLAN OF SLEEPER PLATE



1" DIA. FISHBOLT

Cup Head Oval Neck
Screwed 2 1/4" Whitworth thread 8 per inch.
Hexagon nut to fit pattern spanner.

Table of Quantities for Standard 110lb. Track with Bridge Joints

Item	Size	Weight each	Per 45ft. of Single Track		Per Mile of Single Track	
			NUMBER	CWT.	NUMBER	TONS
Rails	45'-0"	1653-080	2	29-520	214	157-928
Rails	22'-6"	825-910	—	—	42	15-486
Fishplates	25"	38-730	4	1-380	256	8-853
Fishbolts	1" x 54"	2-011	8	-143	1,024	-919
Spring Washers	1" x 3/8" x 3/8"	-177	8	-013	1,024	-081
Bridge Plates	25" x 9 1/2"	38-100	2	-680	256	4-354
Sleeper Plates	8" x 9 1/2"	12-100	4	-432	512	2-766
Dogspikes	4" x 6"	-900	16	-129	2,048	-823
Dogspikes	4" x 5"	-775	84	-581	9,954	3-444
Sleepers	9' x 10" x 5"	224-000	23	46-000	2,703	270-300

—NOTE—
For Track Plan see
Standard Drawing
No. W.W. 9A

PROPERTY	RAIL	
	RAIL	FISHPLATE
Area of Section	10-82 ⁰⁰	5-64 ⁰⁰
Weight per Yard	110-29lbs.	—
Area of Head	42-10%	2-70 ⁰⁰
Area of Web	20-16%	2-18 ⁰⁰
Area of Base	37-74%	4-08 ⁰⁰
Moment of Inertia	58-25	11-16
Section Modulus-Head	17-89	4-44
Section Modulus-Base	19-66	5-14

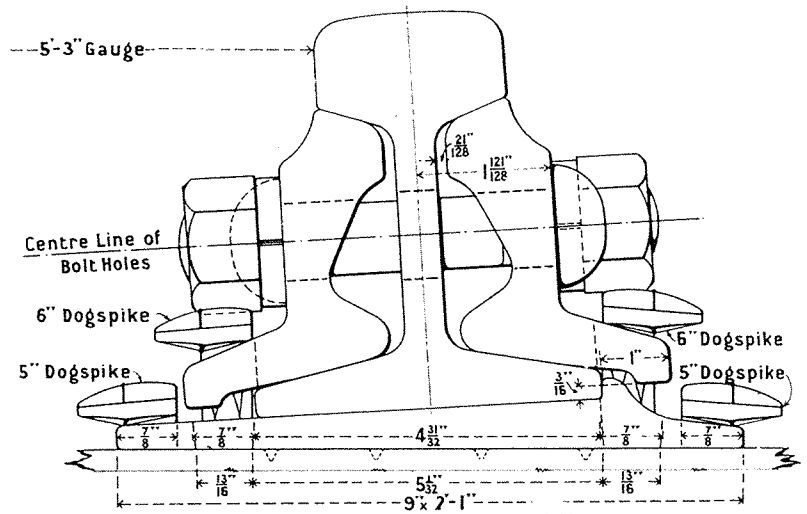
Victorian Railways—Way and Works Branch

Standard Drawing of 110lb. STEEL RAIL and JOINT with Bridge Plate

Adopted 15th Sept., 1926

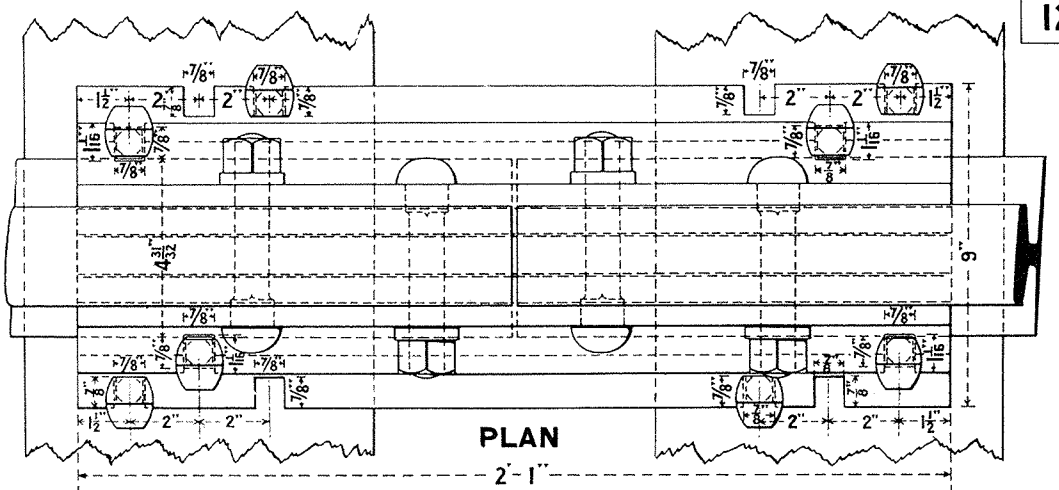
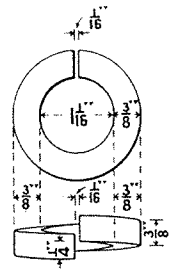
No Scale

W. W. Ballard.
Chief Engineer of Way and Works

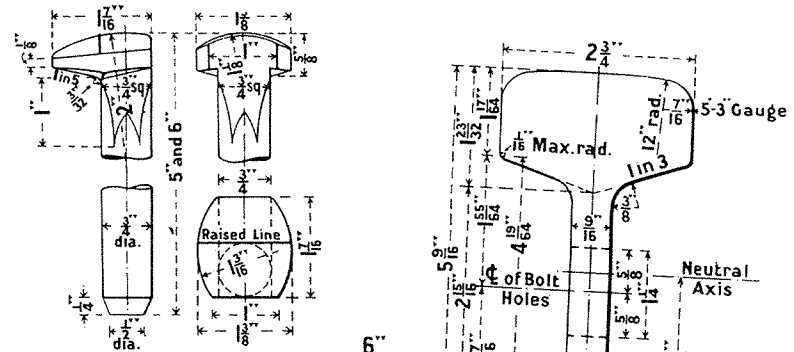


RAIL JOINT WITH BRIDGE PLATE

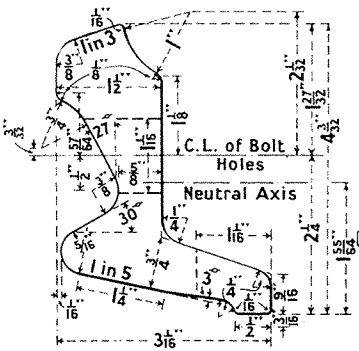
SPRING WASHER for 1" dia. Fishbolt



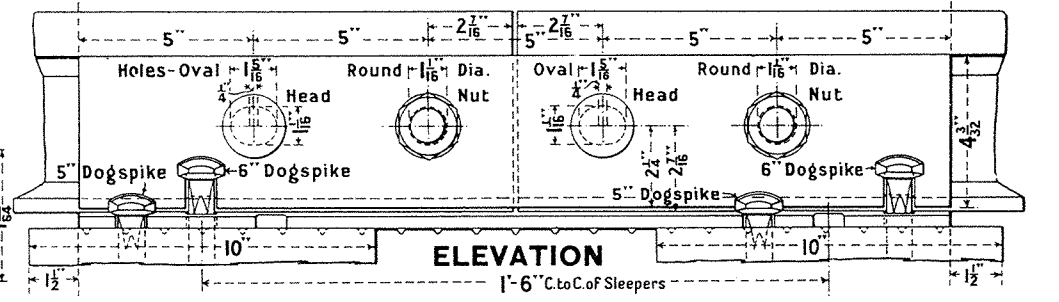
PLAN



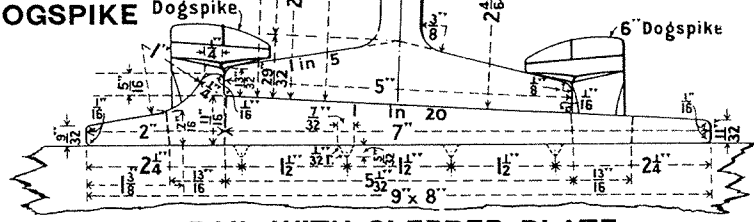
4 1/2" DIA. DOGSPIKE



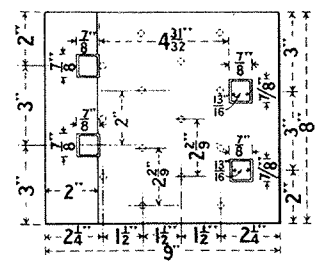
FISHPLATE



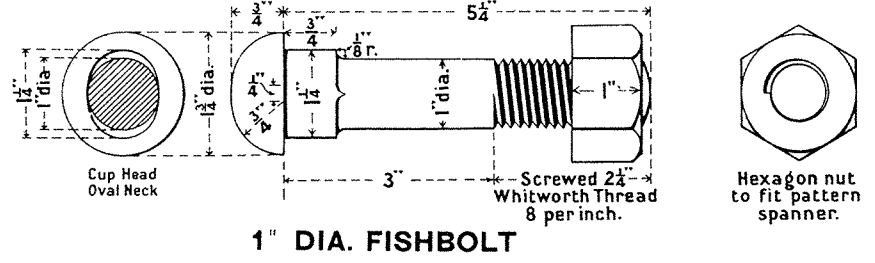
ELEVATION



RAIL WITH SLEEPER PLATE



PLAN OF SLEEPER PLATE



1" DIA. FISHBOLT

—NOTE—
For Track Plan see
Standard Drawing
No W.W. 9A

Table of Quantities for Standard 90lb. Track with Bridge Joints						
Item	Size	Weight each	Per 45ft. of Single Track		Per Mile of Single Track	
			NUMBER	CWT.	NUMBER	TONS
Rails	45'-0"	1366-830	2	24-408	214	130-581
Rails	22'-6"	682-830	—	—	42	12-803
Fishplates	25"	33-010	4	179	512	7-545
Fishbolts	1" x 5 1/2"	2-011	8	143	1,024	919
Spring Washers	1" x 1 1/2"	1-177	8	1013	1,024	881
Bridge Plates	25" x 9"	31-200	2	557	256	4-354
Sleeper Plates	8" x 9"	9-800	4	350	512	2-240
Dogspikes	3" x 6"	900	18	144	2,048	823
Dogspikes	3" x 5"	775	84	581	9,912	3-430
Sleepers	9' x 10" x 5"	224-000	23	46-000	2,703	270-300

PROPERTY	SECTIONS	
	RAIL	FISHPLATE
Area of Section	8-95"	4-85"
Weight per Yard	91-20lbs.	—
Area of Head	44-13%	3-95"
Area of Web	19-45%	1-74"
Area of Base	36-42%	3-26"
Moment of Inertia	37-08	6-85
Section Modulus-Head	13-04	3-07
Section Modulus-Base	13-72	3-68

Victorian Railways—Way and Works Branch
Standard Drawing of
90lb. STEEL RAIL and JOINT with Bridge Plate
Adopted 1st Nov., 1926
No Scale
Edw. Ballard.
Chief Engineer of Way and Works

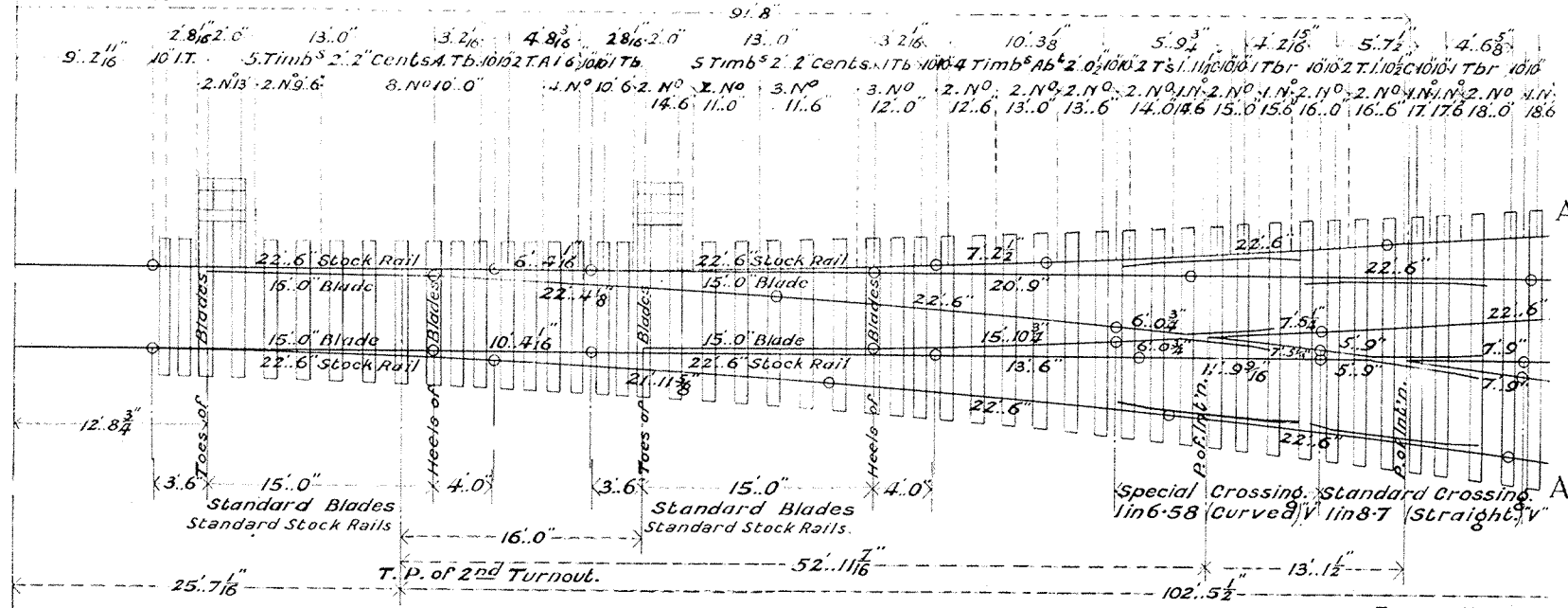
SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	14.6"	12x6	4	16.0"	10x5
1	13.0"		3	15.6"	
1	12.0"		4	15.0"	
1	10.0"		5	14.6"	
1	22.0"	10x5	4	14.0"	
1	21.6"		3	13.6"	
2	21.0"		3	13.0"	
1	20.6"		2	12.6"	
1	20.0"		2	12.0"	
1	19.6"		3	11.6"	
1	19.0"		2	11.0"	
1	18.6"		4	10.6"	
2	18.0"		7	10.0"	
2	17.6"		2	9.6"	
3	17.0"		4	2.11	
4	16.6"				

Material	N ^o	Length	Details
Blades	4	15.0"	Standard
Stock Rls	4	22.6"	
Crossings	1	13.6"	"V" in 9-73 St ^d
	1	13.6"	"V" in 8-7
	1	13.6"	"V" in 6-58 Sp ^l
Rails and Closures	16	22.6"	Standard
	1	22.48"	
	1	21.118"	
	1	20.9"	
	1	15.104"	
	1	14.08"	
	1	13.118"	
	1	13.6"	
	1	11.98"	
	1	10.416"	
	1	7.22"	
	1	6.416"	
Guard Rls	6	11.0"	Standard

T.P. of 1st Turnout.



For continuation see below

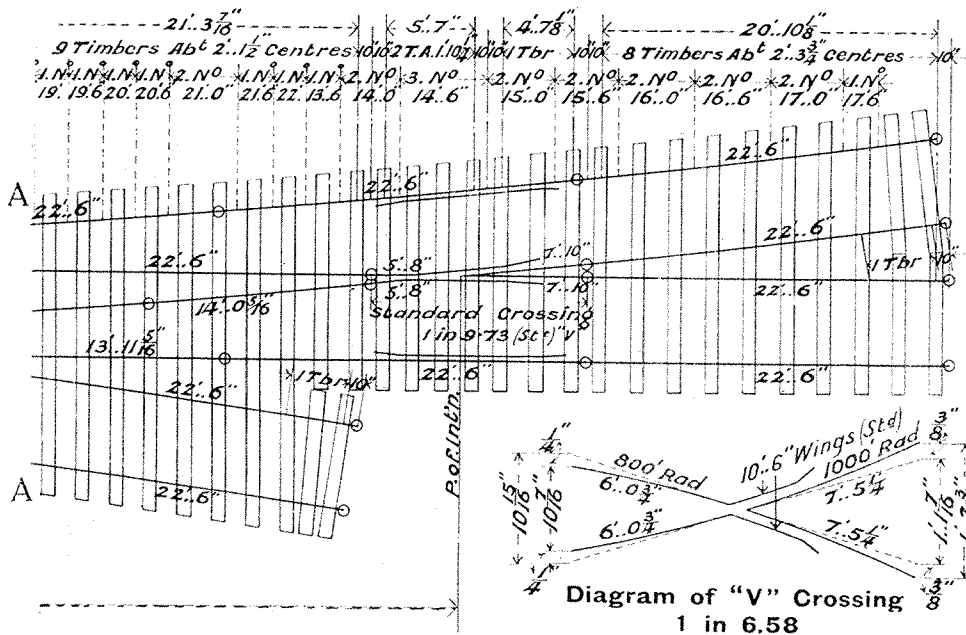
NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for. Dimensions relating to Timber spacing are to the nearest 1/4".



Victorian Railways—Way and Works Branch
Standard Drawing of
**GENERAL ARRANGEMENT FOR
MODIFIED THREE THROW TURNOUT**
For Curves of 800 feet followed by 1000 feet
For 60 lb. "D" Class Rails
C. B. Ballard
Adopted 1st Nov., 1926 NO SCALE Chief Engineer of Way & Works

SCHEDULE OF QUANTITIES

Material	No	Length	Details
Blades	2	15'.0"	Standard.
"	2	12'.0"	"
Stock Rls.	2	22'.6"	"
"	2	20'.0"	"
Crossings	1	13'.6"	"V" in 9-73. Standd.
"	1	13'.6"	"V" in 7-52. Standd.
"	1	13'.6"	"V" in 6-44. Special.
Rails and Closures	14	22'.6"	Standard.
"	1	18'.3"	"
"	1	13'.11 $\frac{1}{2}$ "	"
"	3	13'.8 $\frac{3}{4}$ "	"
"	1	13'.7 $\frac{1}{8}$ "	"
"	3	13'.6"	"
"	1	13'.3"	"
"	1	13'.2 $\frac{1}{2}$ "	"
"	1	9'.11 $\frac{1}{8}$ "	"
"	1	8'.9 $\frac{3}{8}$ "	"
"	1	7'.5 $\frac{1}{8}$ "	"
"	1	7'.2 $\frac{1}{2}$ "	"
Guard Rls.	6	11'.0"	Standard.

List of Timbers

No	Length	Size	No	Length	Size
1	15'.6"	12"x6"	3	16'.0"	10"x5"
1	13'.0"	" "	5	15'.6"	" "
1	12'.6"	" "	2	15'.0"	" "
1	10'.0"	" "	4	14'.6"	" "
2	21'.6"	10"x5"	3	14'.0"	" "
1	21'.0"	" "	3	13'.6"	" "
1	20'.6"	" "	3	13'.0"	" "
1	20'.0"	" "	2	12'.6"	" "
1	19'.6"	" "	2	12'.0"	" "
1	19'.0"	" "	3	11'.6"	" "
3	18'.6"	" "	4	11'.0"	" "
1	18'.0"	" "	4	10'.6"	" "
4	17'.6"	" "	8	10'.0"	" "
2	17'.0"	" "	2	9'.6"	" "
3	16'.6"	" "	4	2'.11"	" "

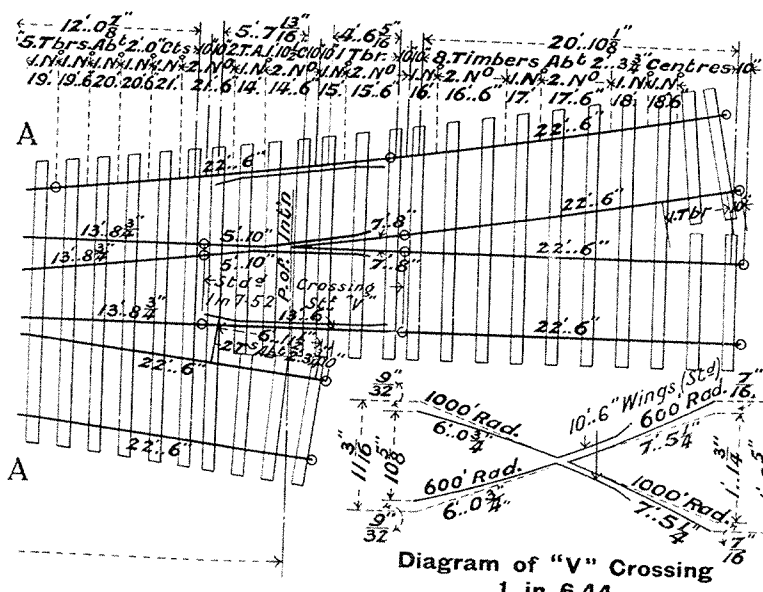
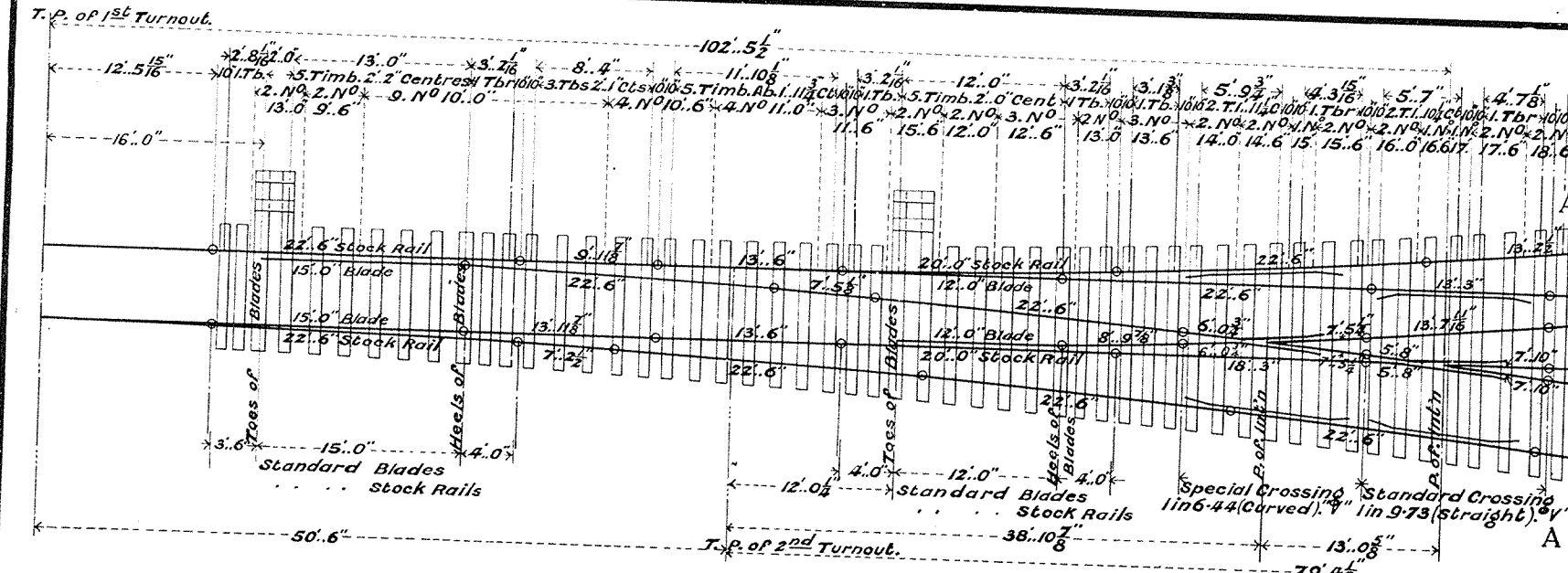
Victorian Railways—Way and Works Branch

Standard Drawing of
GENERAL ARRANGEMENT FOR
MODIFIED THREE THROW TURNOUT

For Curves of 1000 feet followed by 600 feet
For 60 lb. "D" Class Rails

Ed. Ballard

Adopted 1st Nov., 1926 NO SCALE Chief Engineer of Way & Works



NOTES

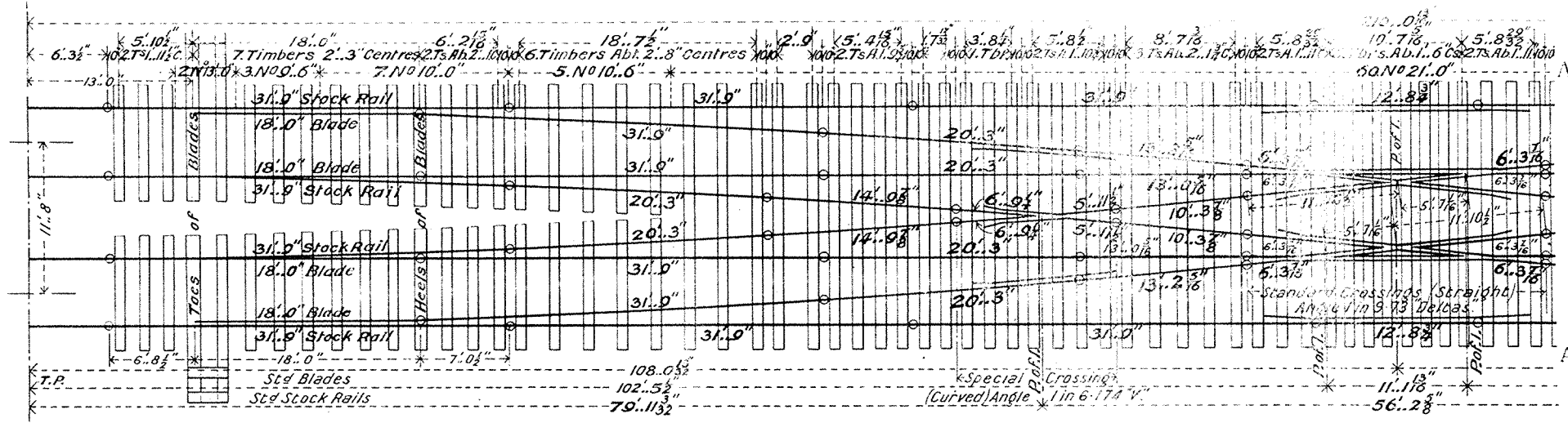
The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

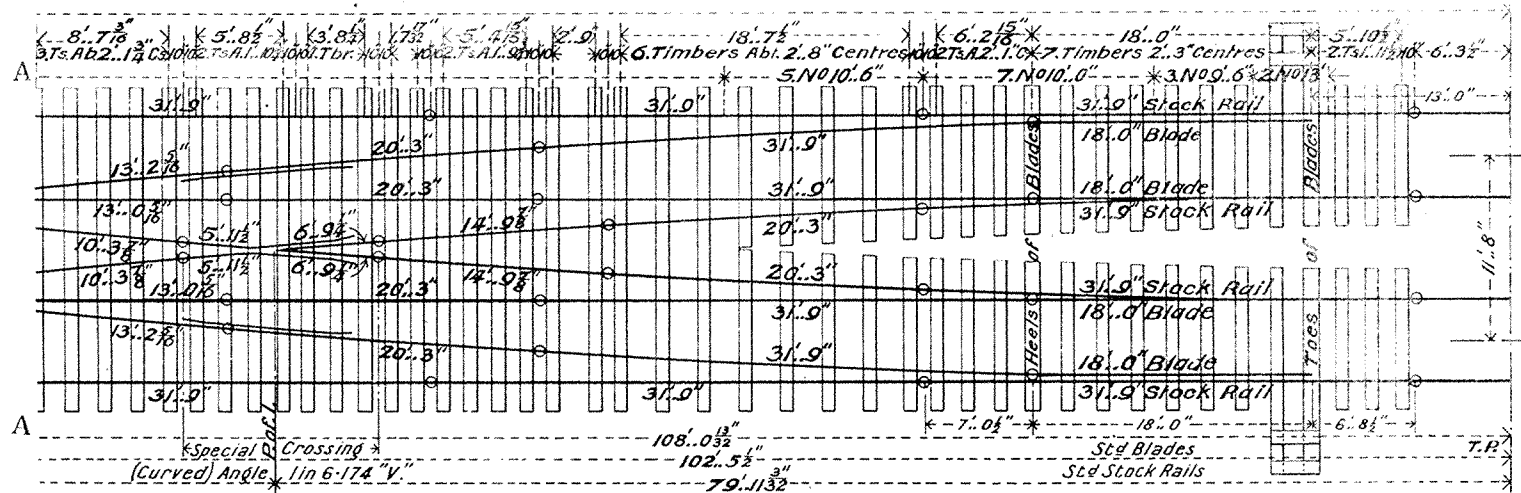
The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".



For Continuation see below



NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

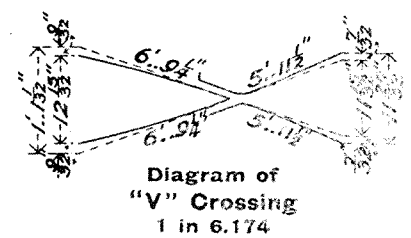
Dimensions relating to Timber spacing are to the nearest $\frac{1}{4}$ "

SCHEDULE OF QUANTITIES

Material	No	Length	Details
Blades	8	18.0"	Standard
Stock Rail	8	31.9"	
Crossings	2	12.8 $\frac{3}{4}$ "	V in 6-174 sp!
..	2	23.9"	Delta in 9-73 Std
Rails and Closures	12	31.9"	Standard
..	4	20.3"	
..	4	14.9 $\frac{5}{8}$ "	
..	4	13.2 $\frac{7}{8}$ "	
..	4	13.0 $\frac{5}{8}$ "	
..	2	12.8 $\frac{3}{8}$ "	
..	4	10.3 $\frac{7}{8}$ "	
Guard Rails	2	21.0"	Standard
..	4	11.0"

List of Timbers required

No	Length	Size
4	13.0"	12x6
4	10.0"	..
60	21.0"	10x5
4	13.0"	..
20	10.6"	..
24	10.0"	..
12	9.6"	..
8	3.2"	..



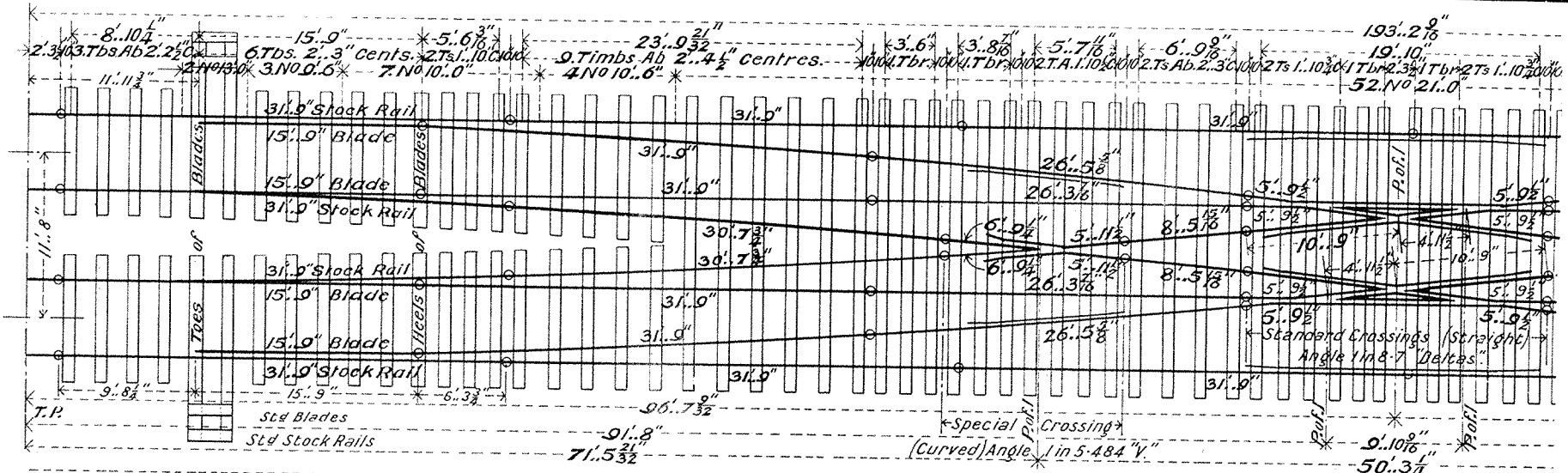
Victorian Railways Way and Works Branch

Standard Drawing of DELTA CROSSOVER

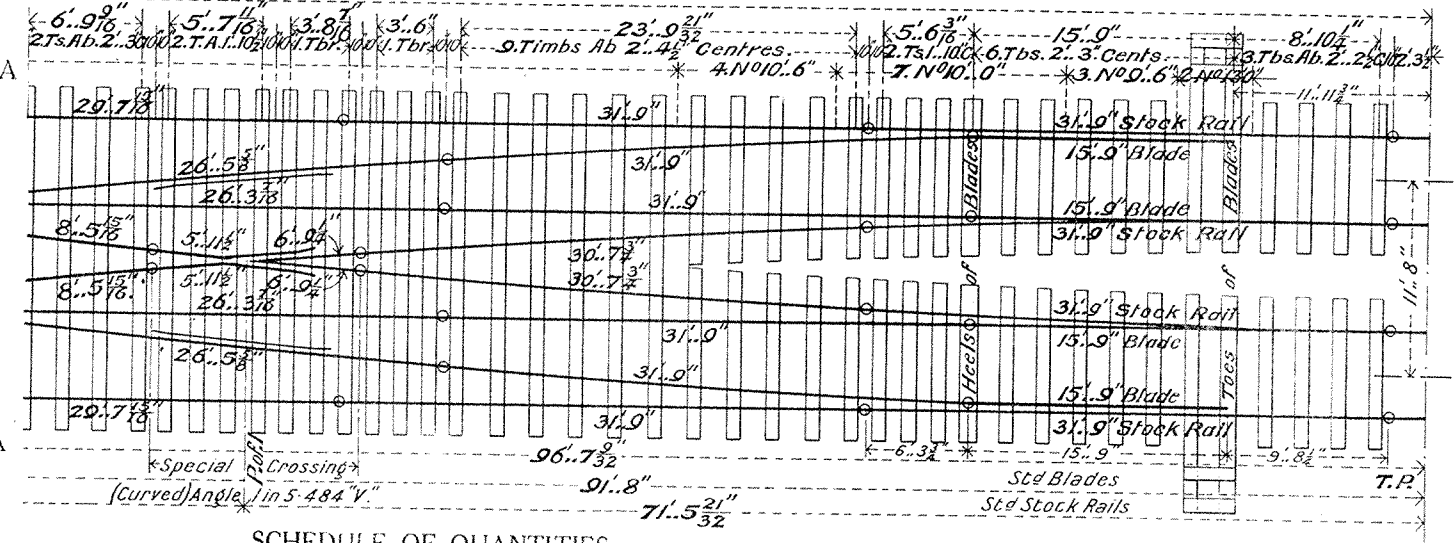
for Curves of 1000 ft. Radius

100 lb. "P" Class Rails

E. D. Ballard.
Chief Engineer of Way and Works



For Continuation see below



NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for. Dimensions relating to Timber spacing are to the nearest 1/4".

SCHEDULE OF QUANTITIES

Material	No	Length	Details
Blades	8	15.9"	Standard
Stock Rail	8	31.0"	
Crossings	2	21.6"	"Delta" in 8-7 std
..	2	12.8 1/2"	"V" in 5-48 sp!
Rails	14	31.9"	Standard
and	4	30.7 3/4"	
Closures	2	29.7 1/8"	
..	4	26.5 3/8"	
..	4	8.5 1/8"	
Guard RIs	2	21.0"	Standard
..	4	11.0"	

List of Timbers required

No	Length	Size
4	13.0"	12x6
4	10.0"	..
52	21.0"	10x5
4	13.0"	..
16	10.0"	..
24	10.0"	..
12	9.6"	..
8	3.2"	..

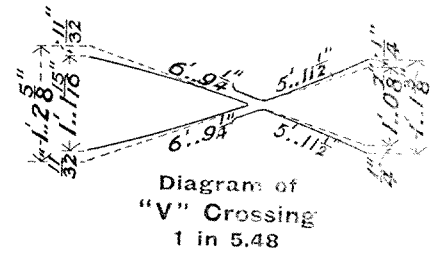


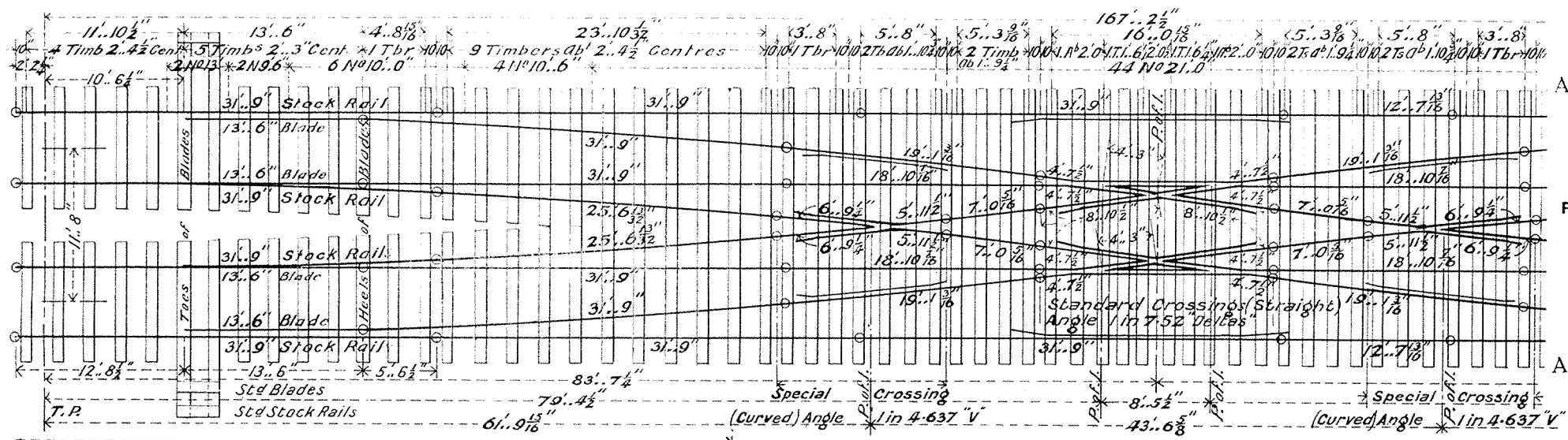
Diagram of "V" Crossing 1 in 5.48

Victorian Railways Way and Works Branch

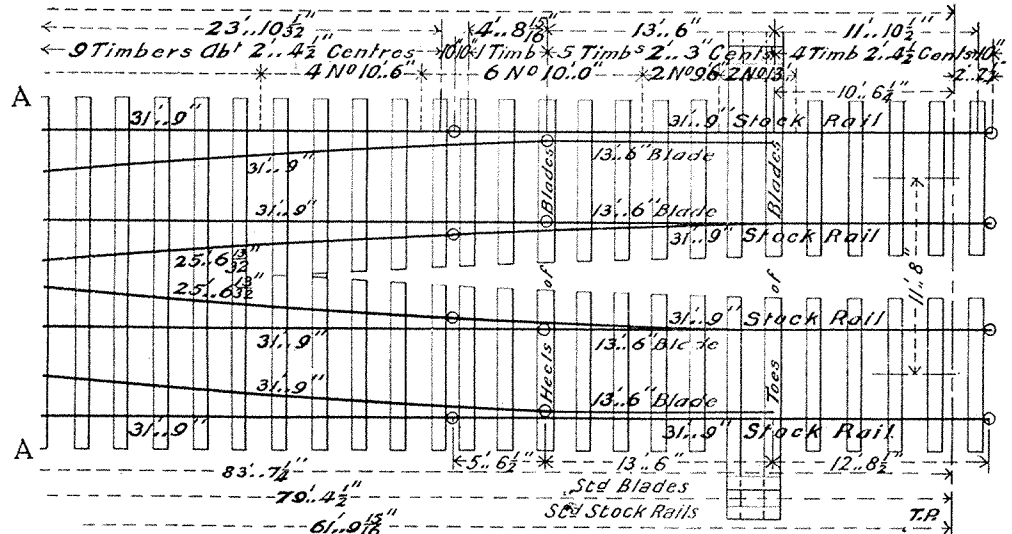
Standard Drawing of DELTA CROSSOVER

For Curves of 800 ft. Radius

100 lb. "P" Class Rails



For Continuation see below

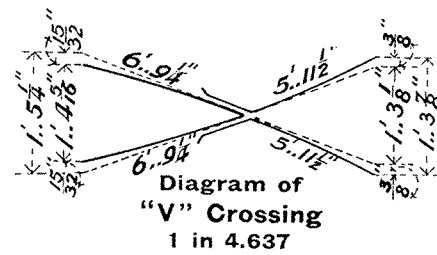


SCHEDULE OF QUANTITIES

Material	No	Length	Details
Blades	8	13.6"	Standard
Stock Rails	8	31.9"	
Crossings	2	12.84"	V in 4-637 sp!
"	2	17.9"	Delta in 7-52 Std
Rails	14	31.9"	Standard
and	4	25.632"	
Closures	4	19.176"	
"	4	18.1076"	
"	2	12.776"	
"	4	7.076"	
Guard Rls.	2	21.0"	Standard
"	4	11.0"	

List of Timbers required

No	Length	Size
4	13.0"	12x6
4	10.0"	"
44	21.0"	10x5
4	13.0"	"
16	10.6"	"
20	10.0"	"
8	9.6"	"
8	3.2"	"



NOTES

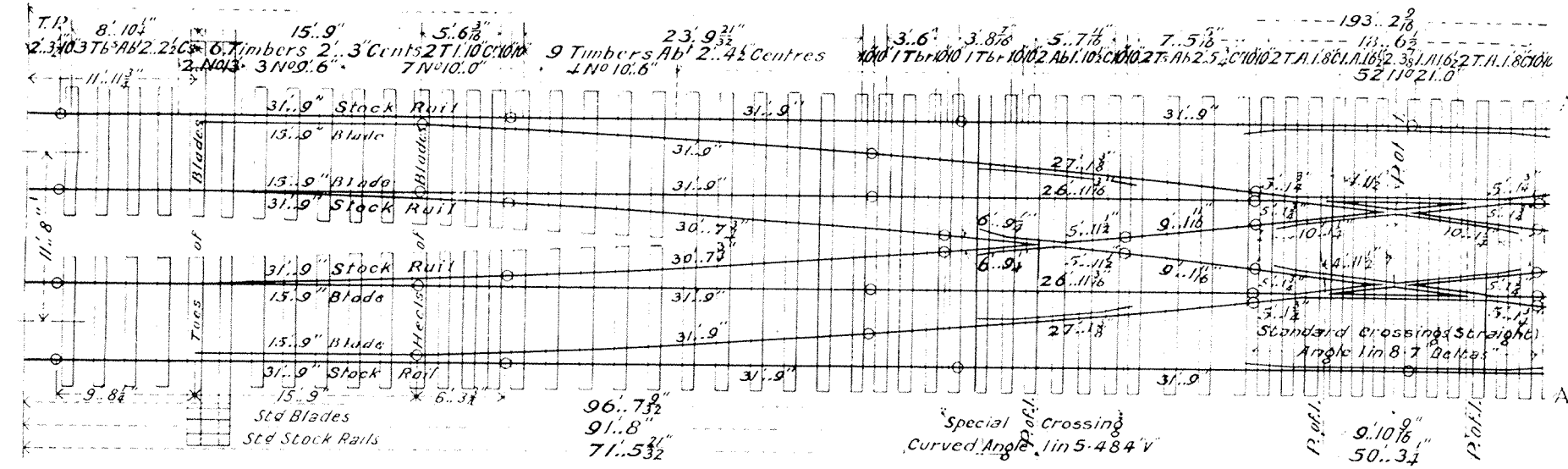
The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

12" Timbers to be placed centrally under Heels and Toes of Blades.

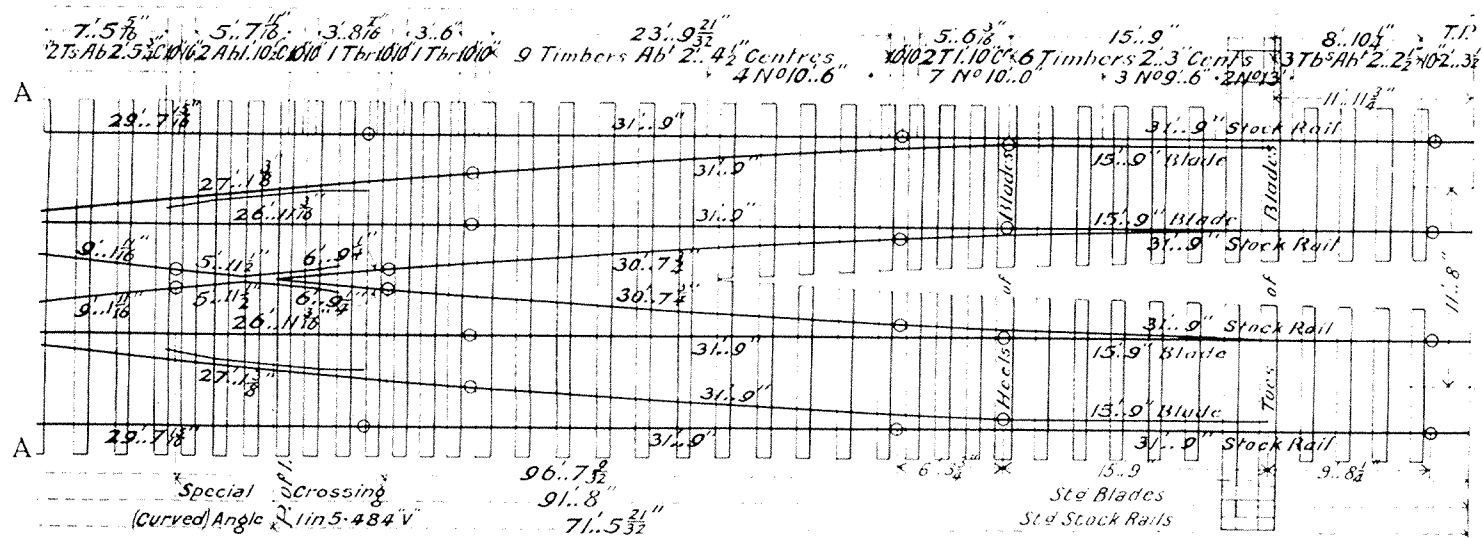
The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for. Dimensions relating to Timber spacing are to the nearest 1/4".

Victorian Railways - Way and Works Branch
Standard Drawing of
DELTA CROSSOVER
For Curves of 600 ft. Radius
80 lb. "O" Class Rails



For Continuation see below



NOTES

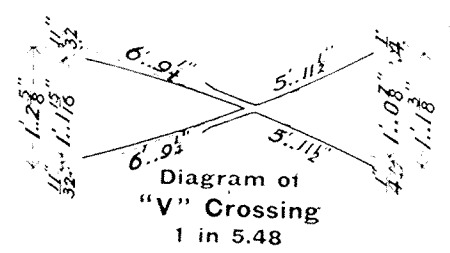
The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.
 12" Timbers to be placed centrally under Heels and Toes of Blades.
 The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.
 Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.
 Dimensions relating to Timber spacing are to the nearest $\frac{1}{4}$ ".

SCHEDULE OF QUANTITIES

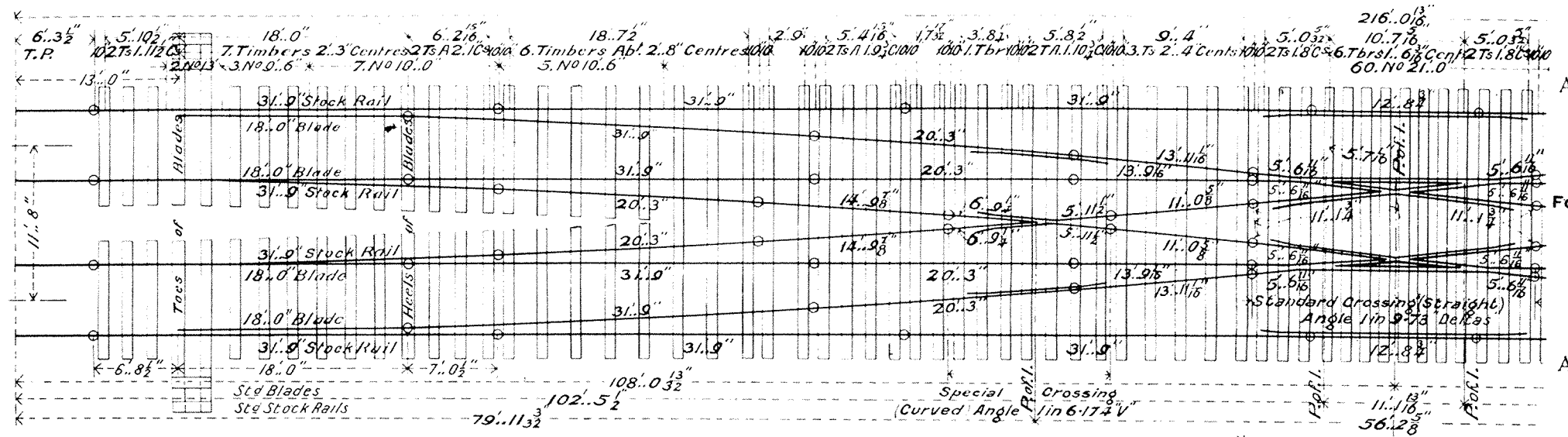
Material	No	Length	Details
Blades	8	15.9"	Standard
Stock Rails	8	31.9"	
Crossings	2	20.22"	Delta 1 in 8.7 Std
"	2	12.84"	V 1 in 5.48 Sp
Rails	14	31.0"	Standard
and	4	30.74"	
Closures	2	29.716"	
"	4	27.183"	
"	4	26.116"	
"	4	9.116"	
Guard Rails	2	21.0"	Standard
"	4	11.0"	

List of Timbers required

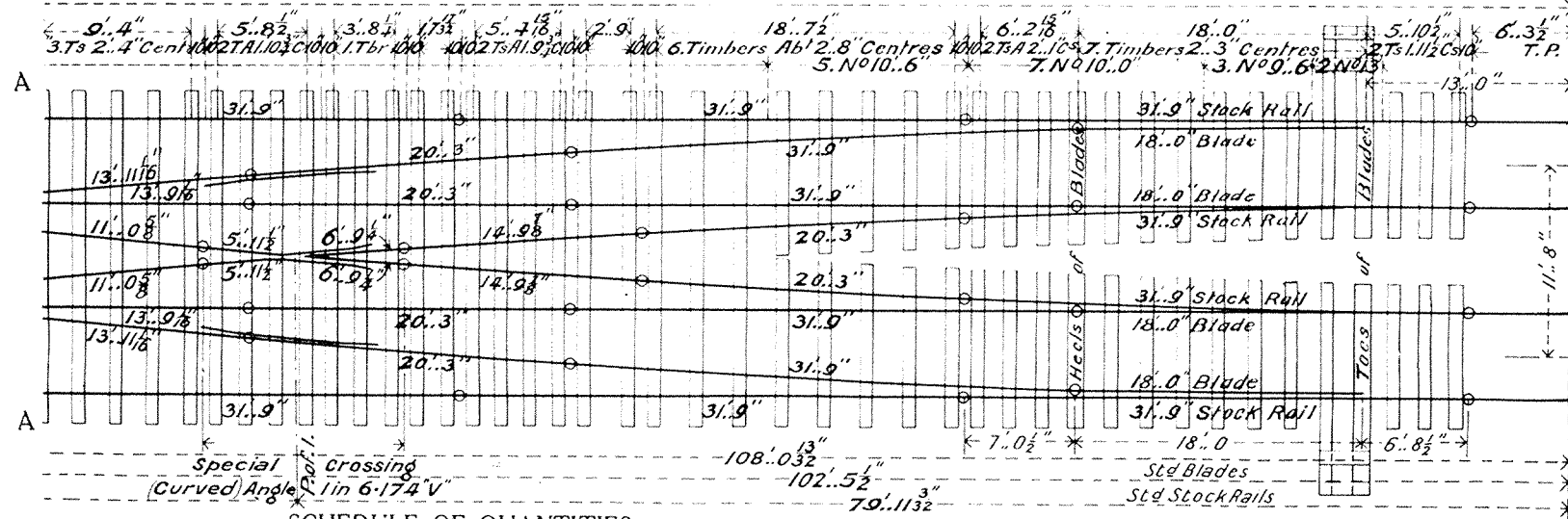
No	Length	Size
4	13.0"	12"6"
4	10.0"	"
52	21.0"	10"5"
4	13.0"	"
16	10.6"	"
24	10.0"	"
12	9.6"	"
8	3.2"	"



Victorian Railways Way and Works Branch
 Standard Drawing of
DELTA CROSSOVER
 For Curves of 800 ft. Radius
 80 lb. "O" Class Rails



For Continuation see below



NOTES

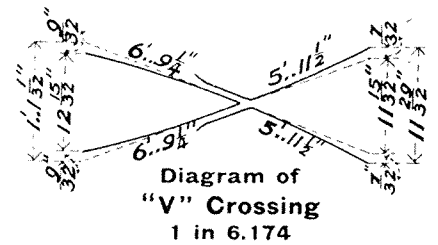
The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.
 12" Timbers to be placed centrally under Heels and Toes of Blades.
 The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.
 Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.
 Dimensions relating to Timber spacing are to the nearest 1/4".

SCHEDULE OF QUANTITIES

Material	No	Length	Details
Blades	8	18.0"	Standard
Stock Rails	8	31.9"	
Crossings	2	12.83"	"V" in 6-174 Sp!
"	2	22.32"	Delta in 9-73 std
Rails and Closures	16	31.9"	Standard
"	12	20.3"	
"	4	14.98"	
"	4	13.116"	
"	4	13.916"	
"	2	12.83"	
"	4	11.08"	
Guard Rails	2	21.0"	Standard
"	4	11.0"	

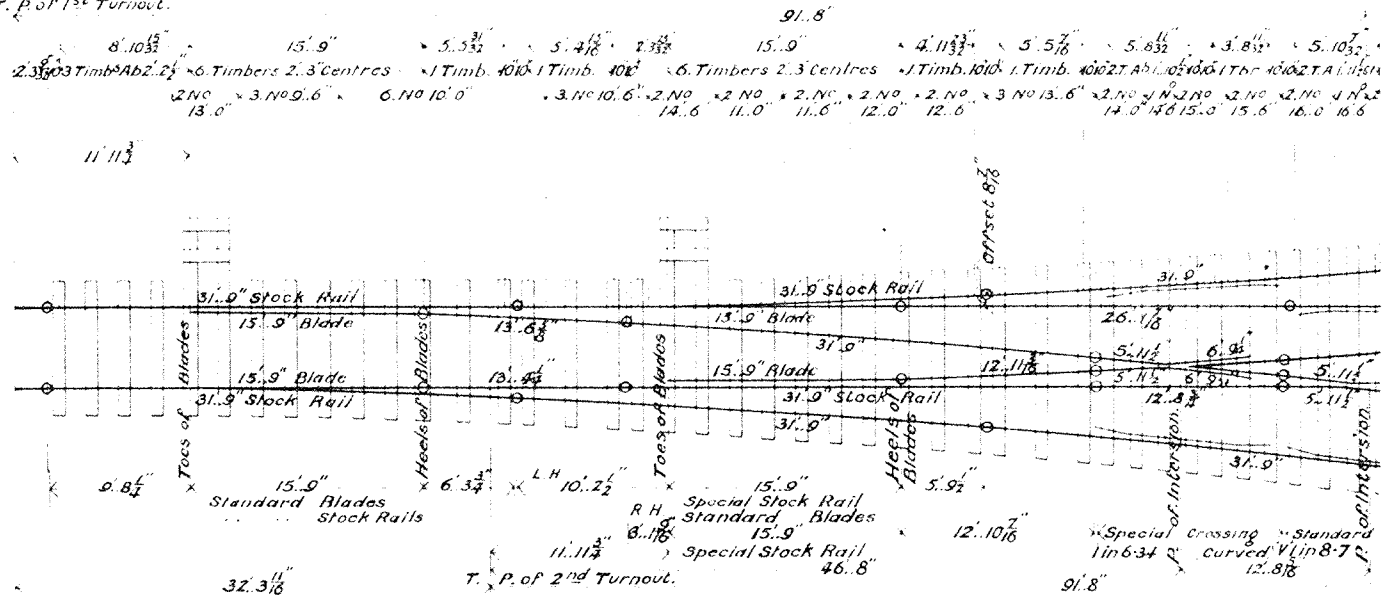
List of Timbers required

No	Length	Size
4	13.0"	12x6"
4	10.0"	"
60	21.0"	10x5"
4	13.0"	"
20	10.6"	"
24	10.0"	"
12	9.6"	"
8	3.2"	"



Victorian Railways Way and Works Branch
 Standard Drawing of
DELTA CROSSOVER
 For Curves of 1000 ft. Radius
 80 lb. "O" Class Rails

T. P. of 1st Turnout.



SCHEDULE OF QUANTITIES

List of Timbers

No	Length	Size	No	Length	Size
1	14.6	12.6	3	17.0	10.5
1	13.0		2	16.6	
1	12.0		4	16.0	
1	10.0		4	15.6	
1	27.6	10.5	4	15.0	
1	24.0		1	14.6	
1	23.6		2	14.0	
1	23.0		3	13.6	
1	22.6		1	13.0	
1	22.0		2	12.6	
1	21.0		1	12.0	
1	20.6		2	11.6	
1	20.0		2	11.0	
1	19.6		3	10.6	
1	19.0		5	10.0	
1	18.6		3	9.6	
3	18.0		4	3.2	
2	17.6				

Material	No	Length	Details
Blades	4	15.9"	Standard
Stock Rls	4	31.9"	2 St ^d 2 Spcl
Crossings	2	15.2"	1 in 8.7 St ^d
	1	12.8 ³ / ₄	1 in 6.34 Spcl
Rails	1	32.4 ¹ / ₂	
and	10	31.9"	Standard
Closures	1	31.2 ³ / ₄	
	1	29.1 ¹ / ₆	
	1	28.7 ¹ / ₆	
	1	26.1 ¹ / ₆	
	1	13.6 ⁸ / ₈	
	1	13.4 ⁴ / ₄	
	1	12.1 ¹ / ₆	
	1	12.8 ³ / ₄	
Guard Rls	6	11.0"	Standard

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.
 12 Timbers to be placed centrally under Heels and Toes of Blades.
 The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.
 Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.
 Dimensions relating to Timber spacing are to the nearest 1/4".

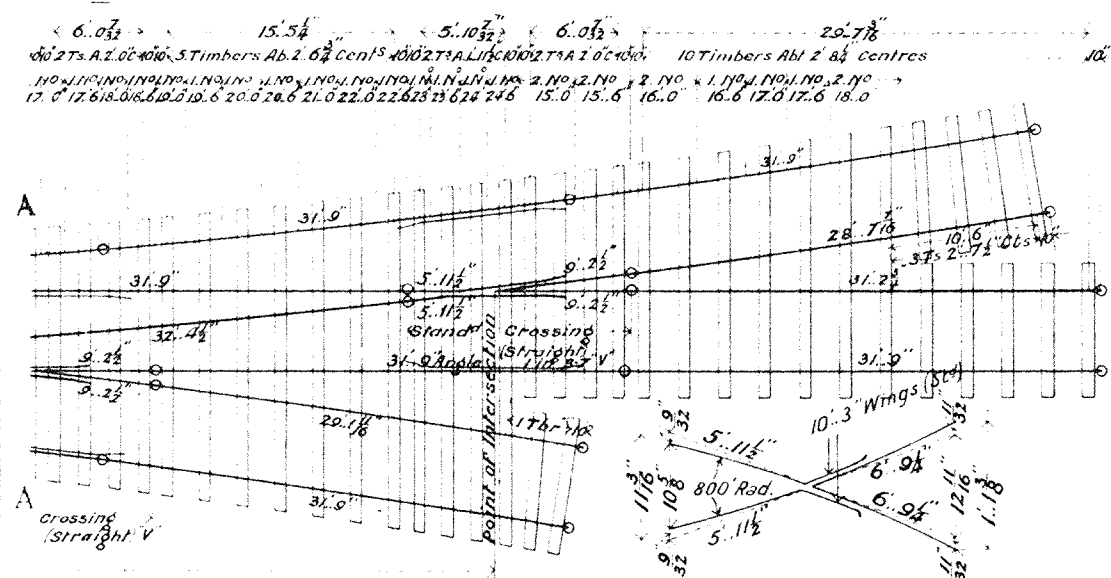


Diagram of "V" Crossing 1 in 6.34

Victorian Railways—Way and Works Branch
 Standard Drawing of
GENERAL ARRANGEMENT FOR MODIFIED THREE THROW TURNOUT
 For Curves of 800 feet followed by 800 feet
 For 80 lb. and 100 lb. Rails
 Adopted 1st Nov. 1926 NO SCALE Chief Engineer of Way & Works

SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	14.6"	12x6	5	15.6"	10x5"
1	13.0"	..	3	15.0"	..
1	12.6"	..	5	14.6"	..
1	10.0"	..	4	14.0"	..
1	22.0"	10x5"	4	13.6"	..
1	21.6"	..	3	13.0"	..
1	20.6"	..	1	12.6"	..
1	20.0"	..	2	12.0"	..
1	19.0"	..	2	11.6"	..
1	18.6"	..	1	11.0"	..
2	18.0"	..	3	10.6"	..
3	17.6"	..	5	10.0"	..
3	17.0"	..	2	9.6"	..
2	16.6"	..	4	3.2"	..
3	16.0"	..			

For continuation see below

NOTES

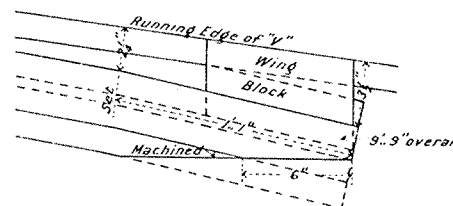
The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for. Dimensions relating to Timber spacing are to the nearest 1/4".

DETAIL



Both Wings to be machined thus (Head and Flange)

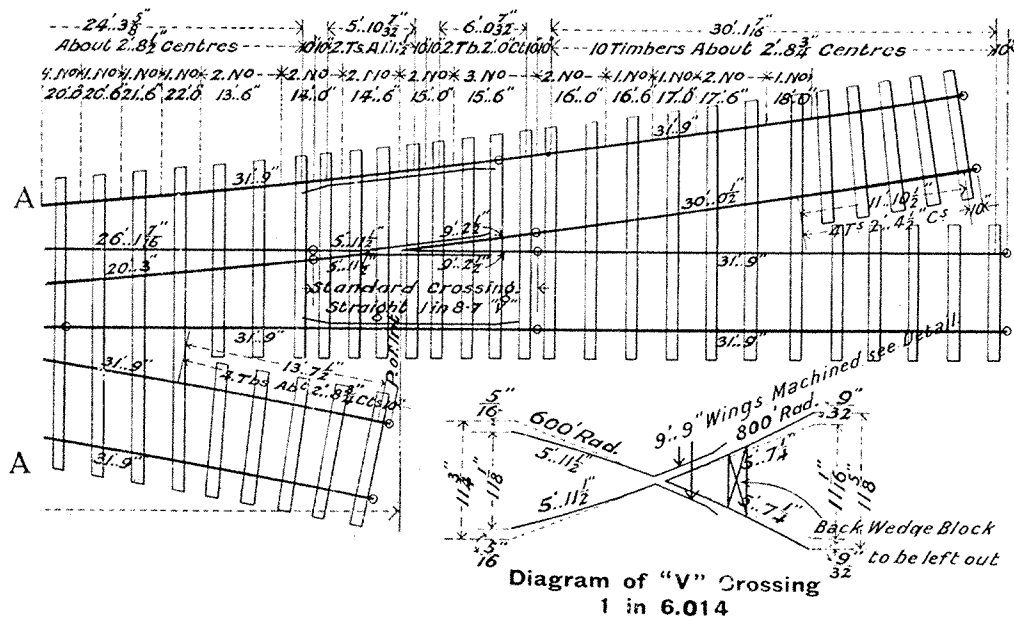
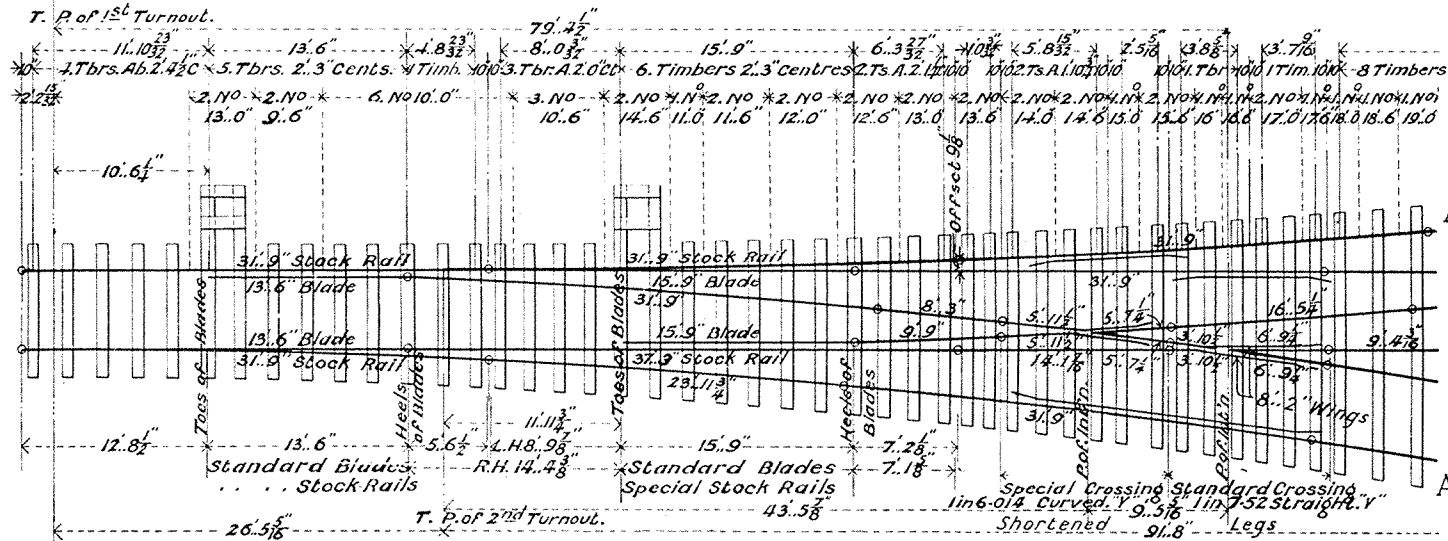
Victorian Railways—Way and Works Branch

Standard Drawing of
GENERAL ARRANGEMENT FOR
MODIFIED THREE THROW TURNOUT

For Curves of 600 feet followed by 800 feet
For 80 lb. and 100 lb. Rails

Ed. Baillard.

Adopted 1st Nov., 1926 NO SCALE Chief Engineer of Way & Works

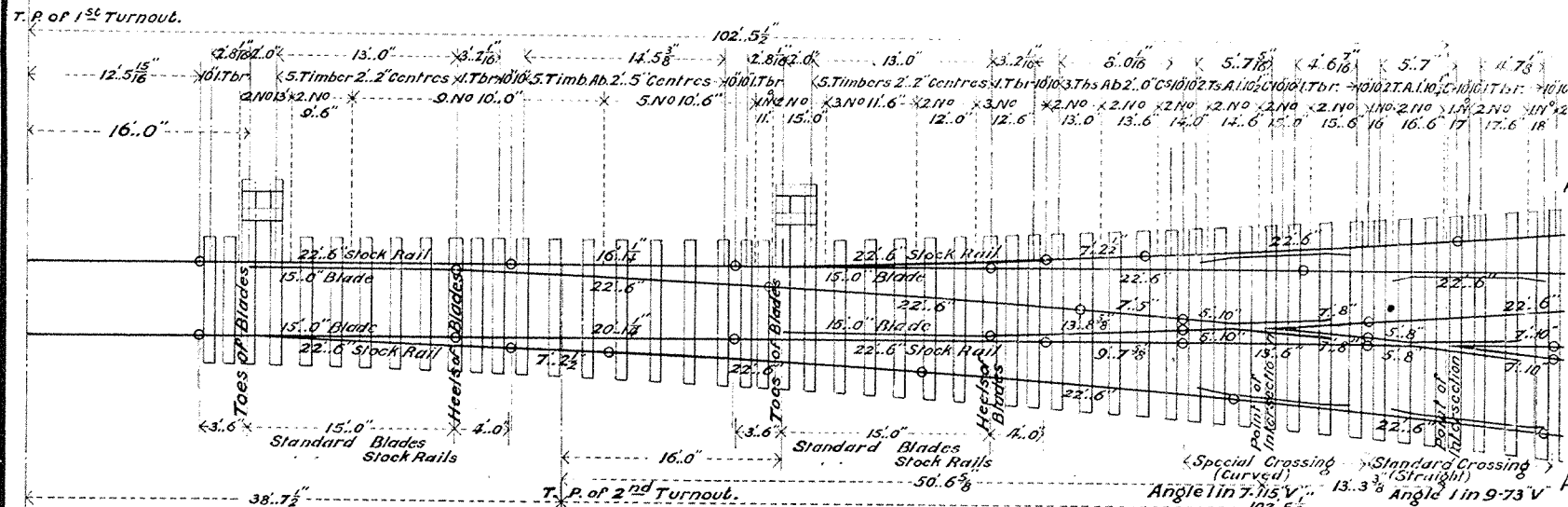


SCHEDULE OF QUANTITIES

List of Timbers

No	Length	Size	No	Length	Size
1	15.0"	12x6"	3	16.0"	10x5"
1	13.0"	" "	4	15.6"	" "
1	12.6"	" "	6	15.0"	" "
1	10.0"	" "	4	14.6"	" "
1	21.6"	10x5"	5	14.0"	" "
1	21.0"	" "	3	13.6"	" "
1	20.5"	" "	3	13.0"	" "
1	20.0"	" "	2	12.6"	" "
1	19.6"	" "	2	12.0"	" "
1	19.0"	" "	3	11.6"	" "
2	18.6"	" "	1	11.0"	" "
1	18.0"	" "	5	10.6"	" "
3	17.6"	" "	8	10.0"	" "
3	17.0"	" "	2	9.6"	" "
4	16.6"	" "	4	2.11"	" "

Material	No	Length	Details
Blades	4	15.0"	Standard
Stock Rls	4	22.6"	" "
Crossings	2	13.6"	"V" in 9-73 Standd.
"	1	13.6"	"V" in 7-115 Special.
Rails and Closures	18	22.6"	Standard.
"	1	20.9"	" "
"	1	20.1 1/2"	" "
"	1	16.2 3/8"	" "
"	2	16.1 1/4"	" "
"	1	13.8 3/8"	" "
"	1	13.6"	" "
"	1	9.7 3/8"	" "
"	1	7.5"	" "
"	2	7.2 1/2"	" "
Guard Rls	6	11.0"	Standard.



For continuation see below

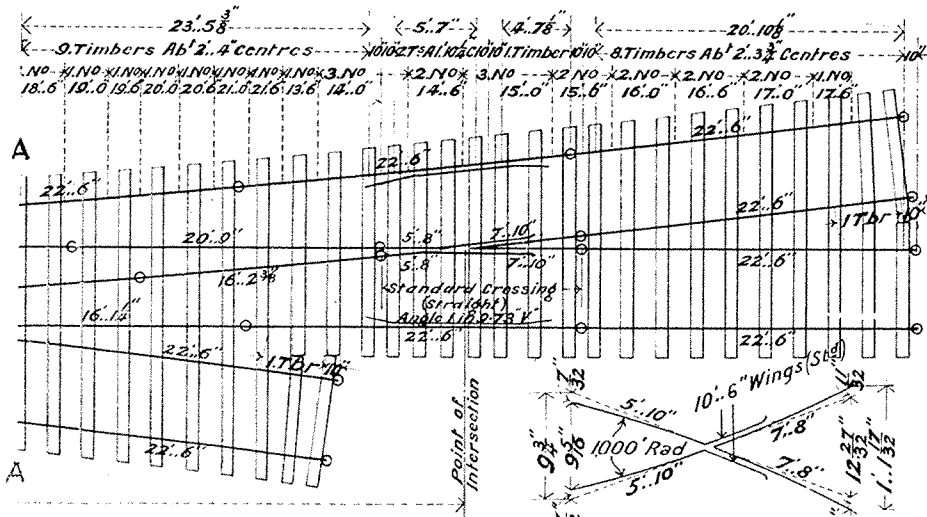


Diagram of "V" Crossing 1 in 7.115

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

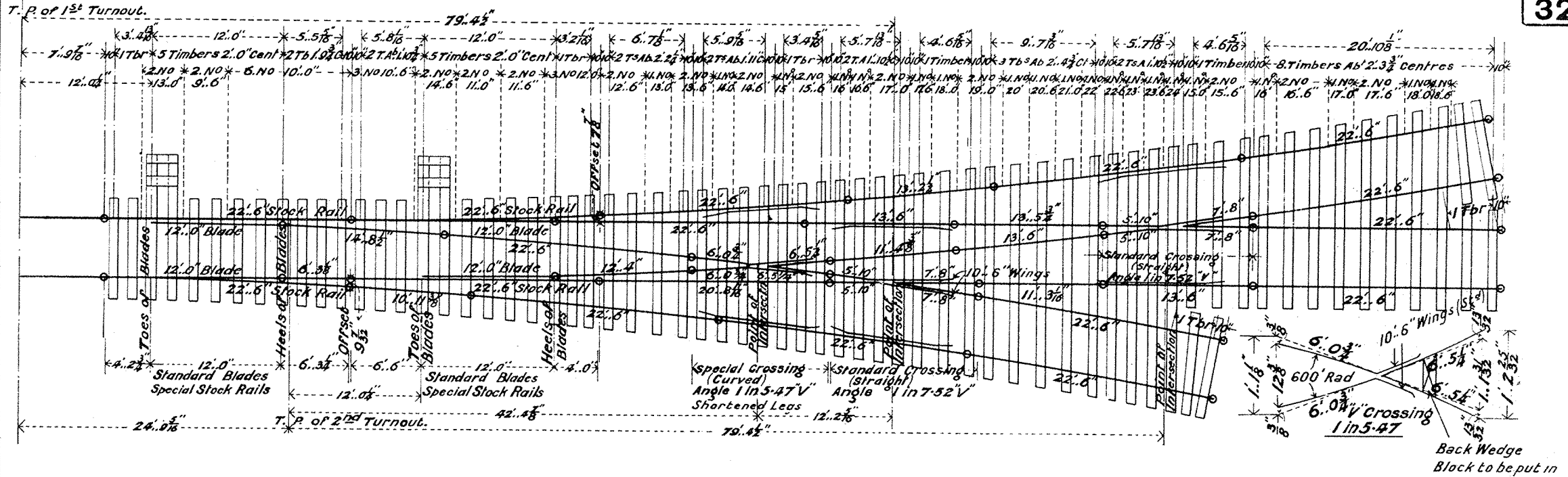
Rail lengths shown on the Drawing are the lengths after expansion has been allowed for. Dimensions relating to Timber spacing are to the nearest 1/4".

Victorian Railways—Way and Works Branch

Standard Drawing of
GENERAL ARRANGEMENT FOR
MODIFIED THREE THROW TURNOUT

For Curves of 1000 feet followed by 1000 feet
For 60 lb. "D" Class Rails

C. Ballantyne



SCHEDULE OF QUANTITIES

List of Timbers

No	Length	size	No	Length	size
1	14.6"	12x6"	3	16.6"	10x5"
1	13.0"	"	2	16.0"	"
1	12.0"	"	4	15.6"	"
1	10.0"	"	2	15.0"	"
1	24.0"	10x5"	3	14.6"	"
1	23.6"	"	1	14.0"	"
1	23.0"	"	2	13.6"	"
1	22.6"	"	2	13.0"	"
1	22.0"	"	2	12.6"	"
1	21.0"	"	2	12.0"	"
1	20.6"	"	2	11.6"	"
1	20.0"	"	2	11.0"	"
2	19.0"	"	3	10.6"	"
1	18.6"	"	5	10.0"	"
2	18.0"	"	2	9.6"	"
3	17.6"	"	4	2.11"	"
3	17.0"	"			

Material	No	Length	Details
Blades	4	12.0"	Standard
Stock Rails	4	22.6"	Special
Crossings	2	13.6"	V in 7.52 std
	1	12.6"	V in 5.47 sp!
Rails and Closures	12	22.6"	Standard
	1	20.8 1/2"	
	3	14.8 1/2"	
	1	13.6"	
	1	13.2 1/2"	
	1	12.4"	
	1	11.4 3/8"	
	1	11.3 1/8"	
	1	10.1 1/8"	
	1	6.3 3/8"	
Guard Rls.	6	11.0"	Standard

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Diagram of "V" Crossing
1 in 5.47

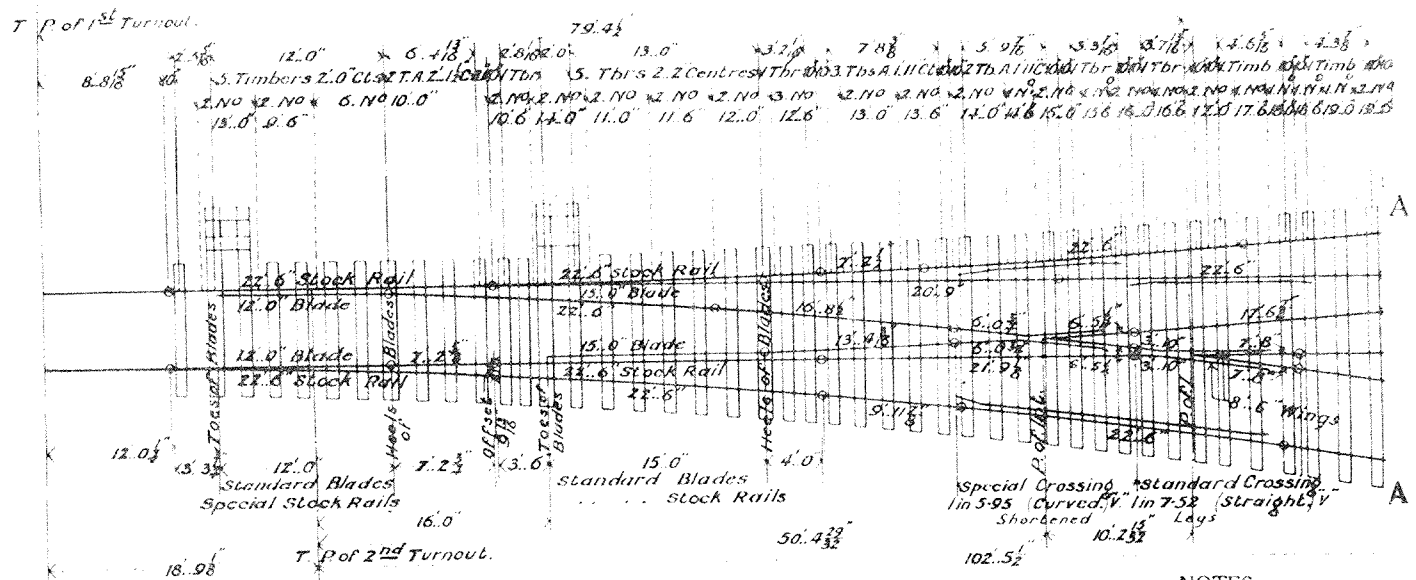
Victorian Railways—Way and Works Branch

Standard Drawing of
GENERAL ARRANGEMENT FOR
MODIFIED THREE THROW TURNOUT

For Curves of 600 feet followed by 600 feet
For 60 lb. "D" Class Rails

Adopted 1st Nov., 1926 NO SCALE Chief Engineer of Way & Works

Ed. Ballard



SCHEDULE OF QUANTITIES

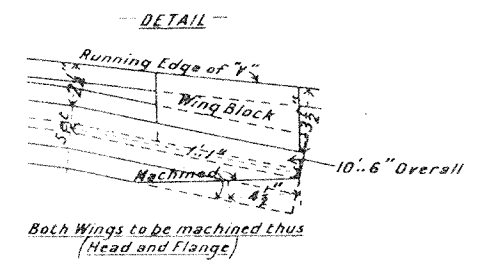
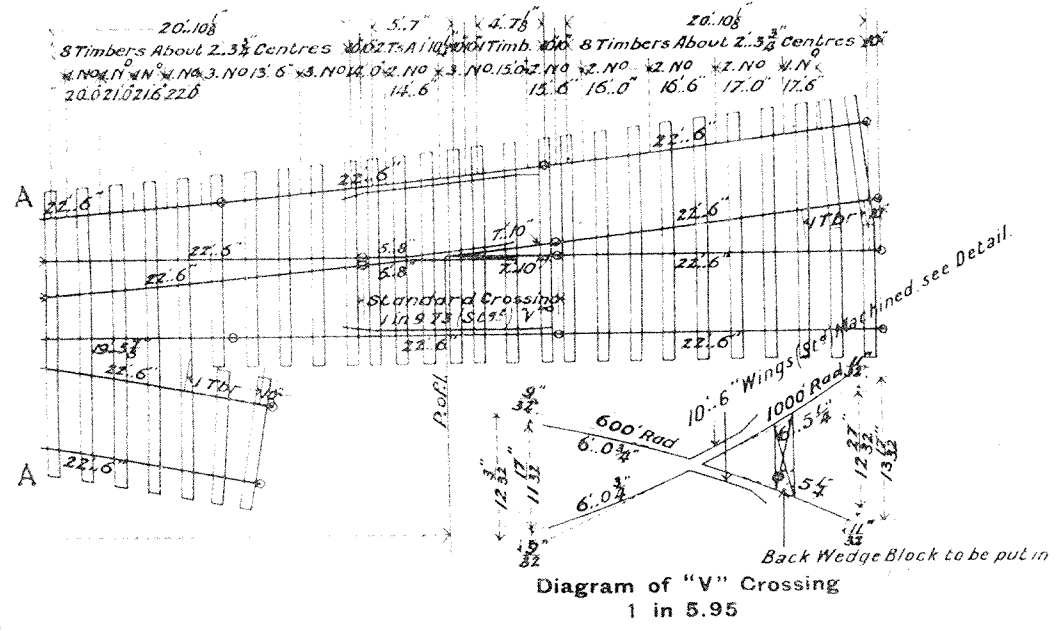
List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	12.0		4	16.0	10.5
1	13.0		3	15.0	
1	12.0		3	15.0	
1	10.0		3	14.6	
1	22.0	10.5	6	14.0	
1	21.6		5	13.6	
1	21.0		3	13.0	
1	20.0		3	12.6	
2	19.6		1	12.0	
1	19.0		2	11.6	
1	18.6		2	11.0	
1	18.0		2	10.6	
2	17.6		5	10.0	
4	17.0		2	9.6	
3	15.6		4	2.11	

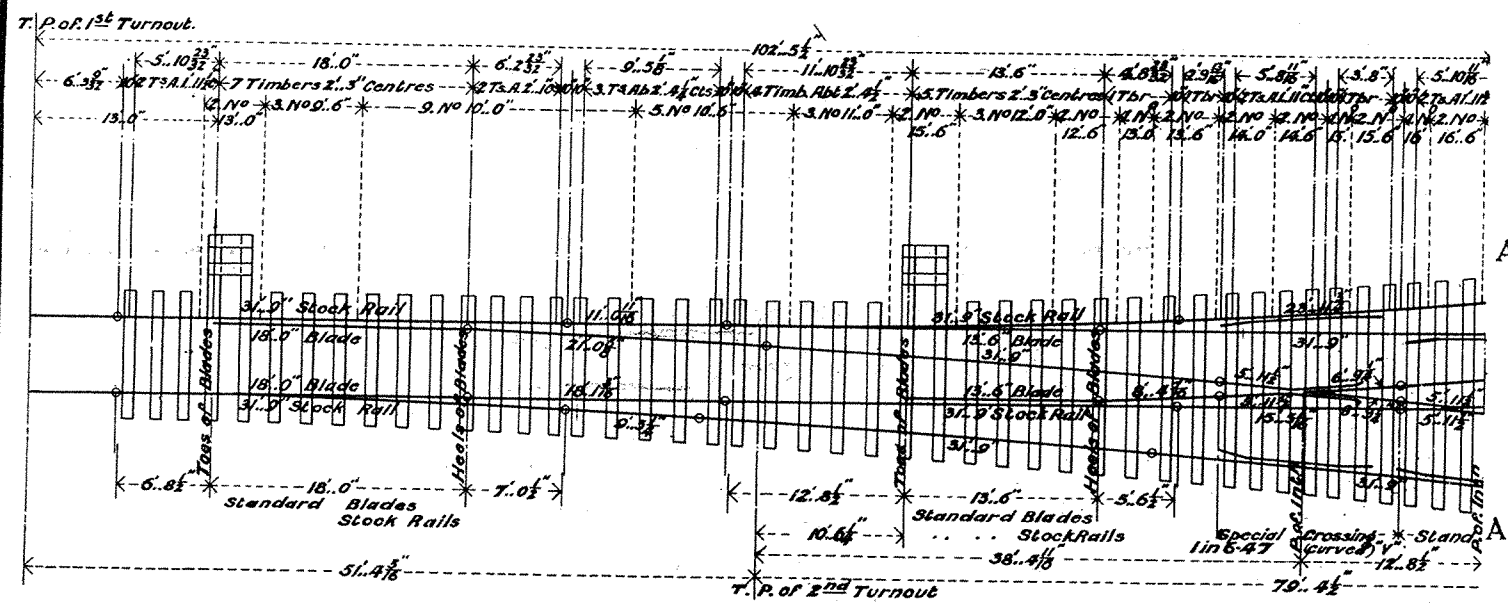
NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown
 12" Timbers to be placed centrally under Heels and Toes of Blades.
 The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.
 Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.
 Dimensions relating to Timber spacing are to the nearest 1/4"

Material	N ^o	Length	Details
Blades	2	15.0	Standard
	2	12.0	
Stock Rails	4	22.6	2 st ^d 2 sp!
Crossings	1	13.6	V in 9.73 st ^d
	1	11.6	V in 7.52
	1	12.6	V in 5.95 sp!
Rails	16	22.6	Standard
and	1	21.98	
Closures	1	20.9	
	1	19.58	
	1	17.68	
	1	16.88	
	1	13.48	
	1	9.18	
	1	7.28	
	1	7.28	
Guard Ris	1	21.0	Standard
	4	11.0	



Victorian Railways—Way and Works Branch
 Standard Drawing of
**GENERAL ARRANGEMENT FOR
 MODIFIED THREE THROW TURNOUT**
 For Curves of 600 feet followed by 1000 feet
 For 60 lb. "D" Class Rails
 Adopted 1st Nov., 1926 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES

List of Timbers

Nº	Length	Size	Nº	Length	Size
1	15.6	12x6	3	17.6	10x5
1	13.0		2	17.0	
1	12.6		3	16.6	
1	10.0		2	16.0	
1	24.0	10x5	5	15.6	
1	23.6		2	15.0	
1	23.0		2	14.6	
1	22.6		2	14.0	
1	22.0		2	13.6	
1	21.6		2	13.0	
1	21.0		1	12.6	
1	20.6		3	12.0	
1	20.0		3	11.0	
1	19.6		5	10.6	
1	19.0		8	10.0	
1	18.6		3	9.6	
2	18.0		4	3.2	

For continuation see below

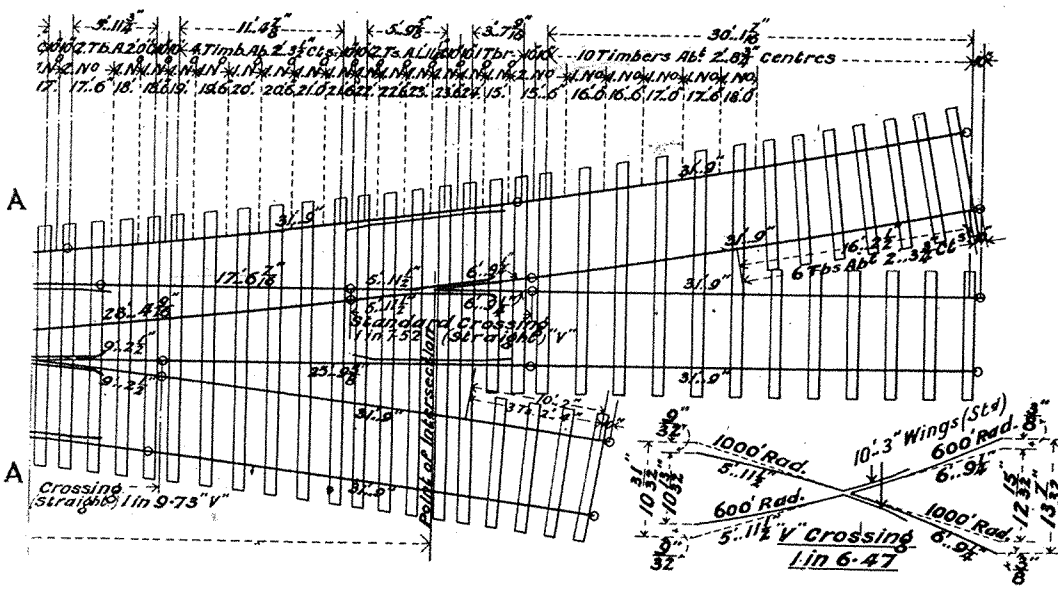


Diagram of "V" Crossing
1 in 6.47

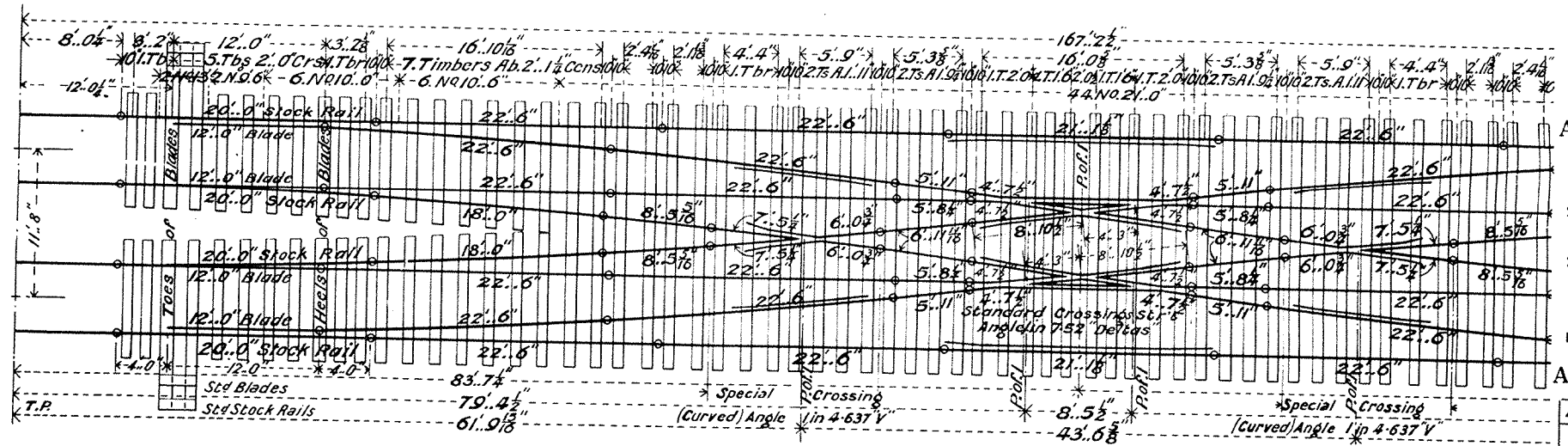
NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown
12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.
Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.
Dimensions relating to Timber spacing are to the nearest 1/4"

Material	Nº	Length	Details
Blades	2	18.0	Standard
	2	13.6	
Stock Rls	4	31.9	
Crossings	1	15.2	V in 9.73 Std
	1	12.8	V in 7.52
	1	12.8	V in 6.47 Sp
Rails and Closures	1	31.9	Standard
	1	28.4	
	1	25.9	
	1	23.1	
	1	21.0	
	1	18.1	
	1	17.6	
	1	15.5	
	1	11.0	
	1	9.5	
	1	8.4	
Guard Rls	6	11.0	Standard

Victorian Railways—Way and Works Branch
Standard Drawing of
GENERAL ARRANGEMENT FOR
MODIFIED THREE THROW TURNOUT
For Curves of 1000 feet followed by 600 feet
For 80 lb. and 100 lb. Rails



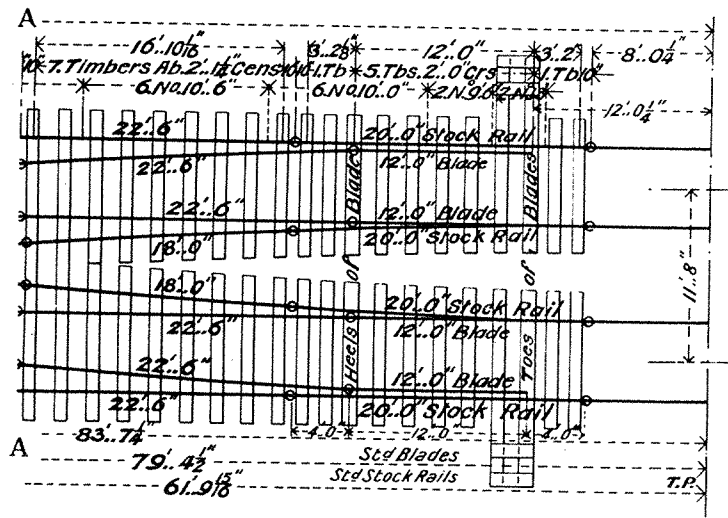
SCHEDULE OF QUANTITIES

List of Timbers required.

No	Length	Size
4	13.0"	12x6
4	10.0"	..
44	21.0"	10x5
4	13.0"	..
24	10.6"	..
20	10.0"	..
8	9.6"	..
8	2.11"	..

For continuation see below

Material	No	Length	Details.
Blades	8	12.0"	Standard
Stock Rails	8	20.0"	..
Crossings	2	13.6"	V in 4-637 Sp!
..	2	17.9"	Delta in 7-52 st!
Rails	24	22.6"	Standard
and	2	21.18"	..
Closures	4	18.0"	..
..	4	8.57"	..
..	4	6.116"	..
..	4	5.11"	..
..	4	5.84"	..
Guard Rls	2	21.0"	Standard
..	4	11.0"	..



NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

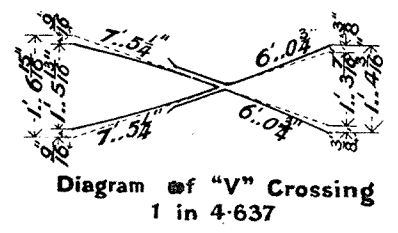


Diagram of "V" Crossing
1 in 4-637

Victorian Railways—Way and Works Branch

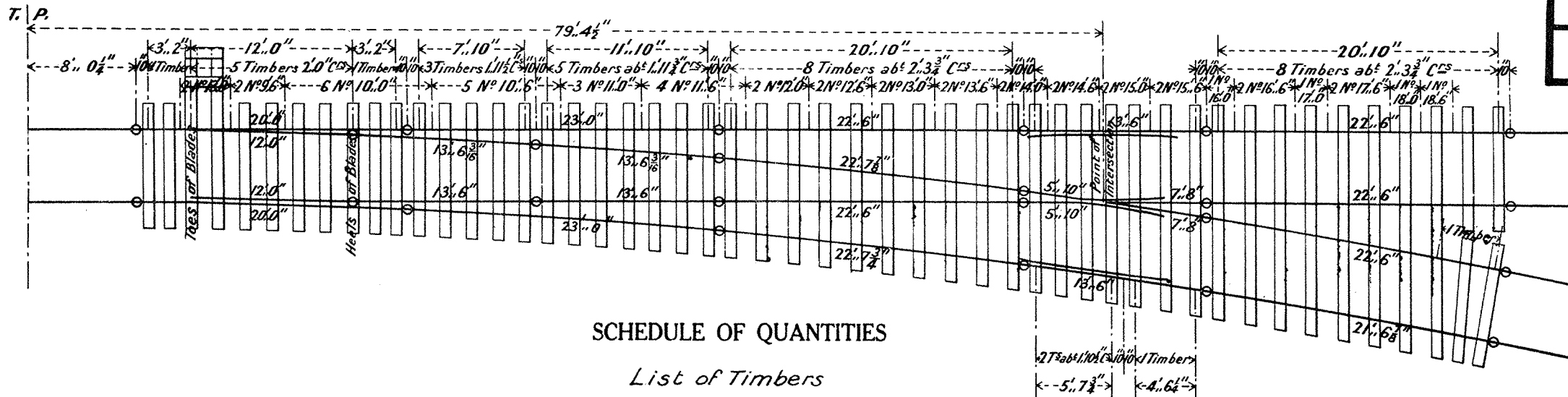
Standard Drawing of

GENERAL ARRANGEMENT FOR
DELTA CROSSOVER

For Curves of 600 feet radius

For 60 lb. "D" Class Rails

Edw. Balland



SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	13' .0"	12"x6"	2	14' .0"	10"x5"
1	10' .0"	..	2	13' .6"	..
1	18' .6"	10"x5"	3	13' .0"	..
1	18' .0"	..	2	12' .6"	..
2	17' .6"	..	2	12' .0"	..
1	17' .0"	..	4	11' .6"	..
2	16' .6"	..	3	11' .0"	..
1	16' .0"	..	5	10' .6"	..
2	15' .6"	..	5	10' .0"	..
2	15' .0"	..	2	9' .6"	..
2	14' .6"	..			

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Material	N ^o	Length	Details
Blades.	2	12' .0"	Standard
Stock Rls.	2	20' .0"	"
Crossings.	1	13' .6"	" Win 7-52
Rails	2	23' .0"	"
and Closures.	1	22' .7 3/4"	"
..	5	22' .6"	"
..	1	21' .6 7/8"	"
..	2	13' .6 3/8"	"
..	4	13' .6"	"
Guard Rls.	2	11' .0"	Standard

Victorian Railways—Way and Works Branch

Standard Drawing of

GENERAL ARRANGEMENT FOR

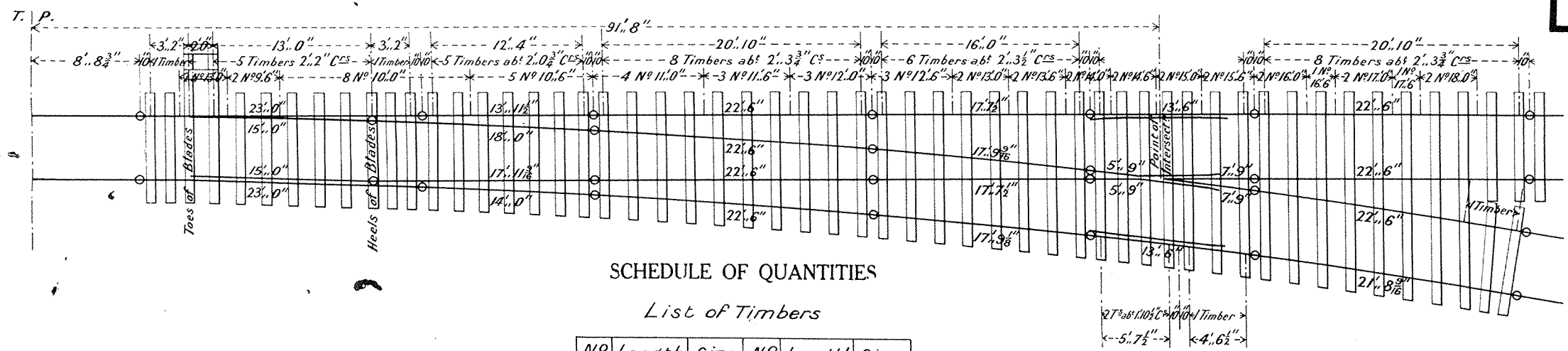
TURNOUT

For Curves of 600 feet radius

For 60 lb. "D" Class Rails

Edw. Galland

Adopted March 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	13'. 0"	12x6"	2	14'. 0"	10x5"
1	10'. 0"	"	2	13'. 6"	"
2	18'. 0"	10"x5"	3	13'. 0"	"
1	17'. 6"	"	3	12'. 6"	"
2	17'. 0"	"	3	12'. 0"	"
1	16'. 6"	"	3	11'. 6"	"
2	16'. 0"	"	4	11'. 0"	"
2	15'. 6"	"	5	10'. 6"	"
2	15'. 0"	"	7	10'. 0"	"
2	14'. 6"	"	2	9'. 6"	"

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Material	N ^o	Length	Details
Blades.	2	15'. 0"	Standard
Stock Rls.	2	23'. 0"	"
Crossing.	1	13'. 6"	" Vlin 8-7
Rails	7	22'. 6"	"
and	1	21'. 8 7/8"	"
Closures.	1	18'. 0"	"
"	1	17'. 11 7/8"	"
"	1	17'. 9 7/8"	"
"	1	17'. 9 7/8"	"
"	2	17'. 7 1/2"	"
"	1	14'. 0"	"
"	1	13'. 11 1/2"	"
"	2	13'. 6"	"
Guard Rls.	2	11'. 0"	Standard

Victorian Railways—Way and Works Branch

Standard Drawing of

GENERAL ARRANGEMENT FOR

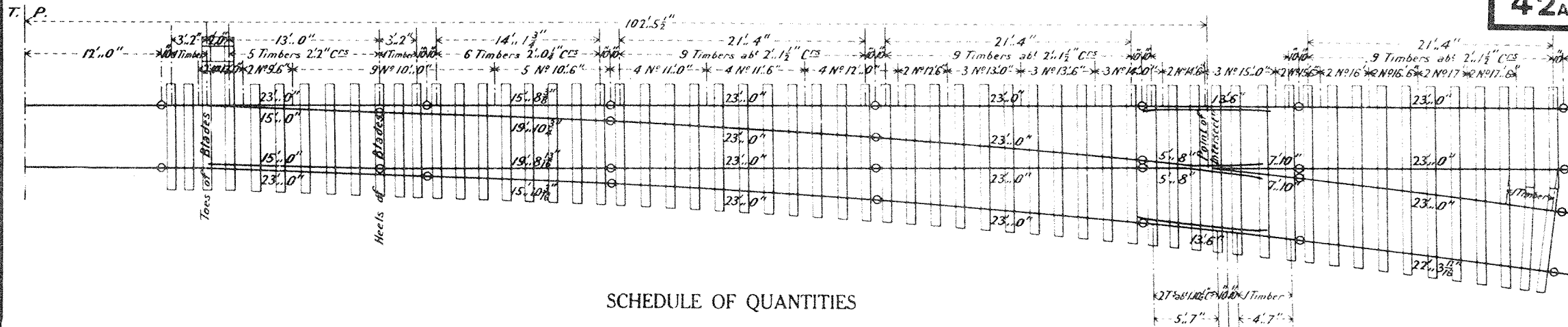
TURNOUT

For Curves of 800 feet radius

For 60 lb. "D" Class Rails

Edw. Galland

Adopted March 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	13'-0"	12x6"	3	13'-6"	10x5"
1	10'-0"	"	4	13'-0"	"
2	17'-6"	10x5"	2	12'-6"	"
2	17'-0"	"	4	12'-0"	"
2	16'-6"	"	4	11'-6"	"
2	16'-0"	"	4	11'-0"	"
2	15'-6"	"	5	10'-6"	"
3	15'-0"	"	8	10'-0"	"
2	14'-6"	"	2	9'-6"	"
3	14'-0"	"			

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Material	N ^o	Length	Details
Blades.	2	15'-0"	Standard
Stock Ris.	2	23'-0"	"
Crossing.	1	13'-6"	" K/in 9-73
Rails	11	23'-0"	"
and	1	22'-3 3/8"	"
Closures.	1	19'-10 3/8"	"
"	1	19'-8 3/8"	"
"	1	15'-10 3/8"	"
"	1	15'-8 3/8"	"
"	2	13'-6"	"
Guard Ris.	2	11'-0"	Standard

Victorian Railways—Way and Works Branch

Standard Drawing of

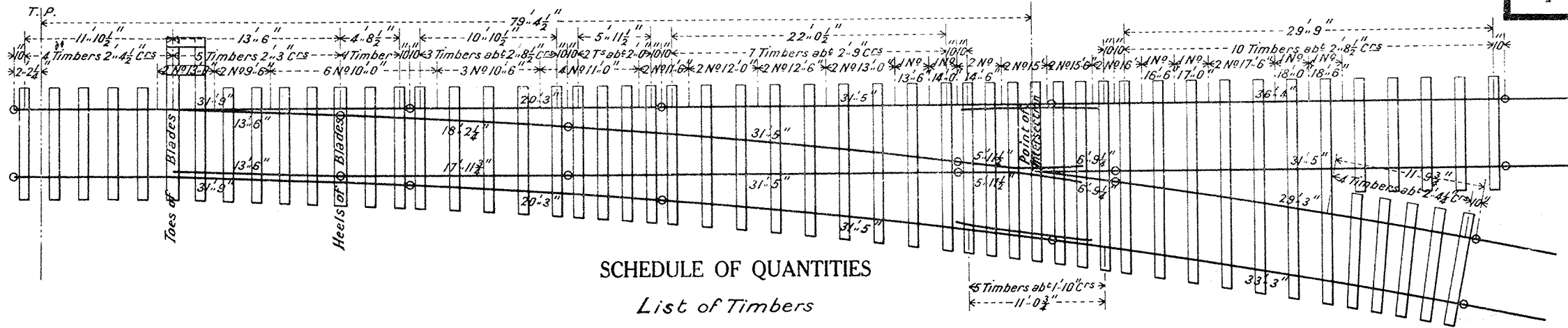
GENERAL ARRANGEMENT FOR

TURNOUT

For Curves of 1000 feet radius

For 60 lb. "D" Class Rails

Adopted March 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES
List of Timbers

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.
12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.
Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.
Dimensions relating to Timber spacing are to the nearest 1/4".

N ^o	Length	Size	N ^o	Length	Size
1	13'.0"	12x6"	1	14'.0"	10x5"
1	10'.0"	..	1	13'.6"	..
1	18'.6"	10x5"	3	13'.0"	..
1	18'.0"	..	2	12'.6"	..
2	17'.6"	..	2	12'.0"	..
1	17'.0"	..	2	11'.6"	..
1	16'.6"	..	4	11'.0"	..
2	16'.0"	..	3	10'.6"	..
2	15'.6"	..	5	10'.0"	..
2	15'.0"	..	2	9'.6"	..
2	14'.6"	..			

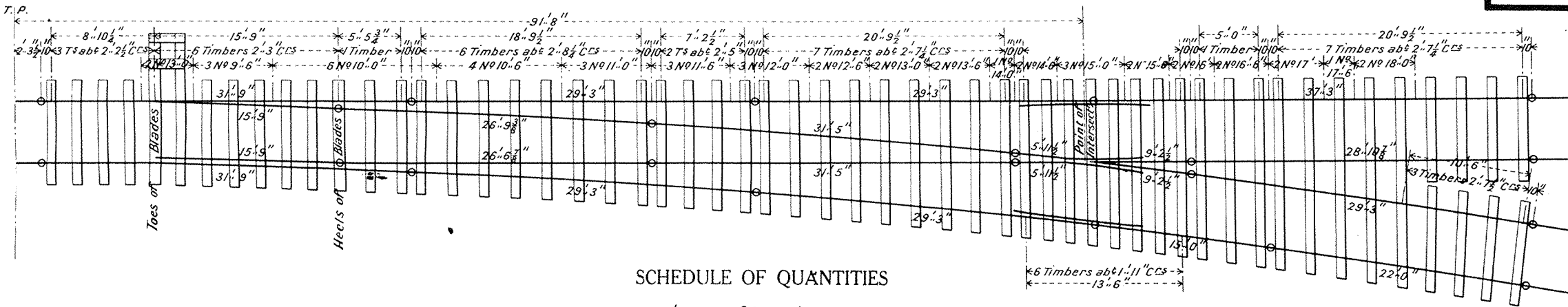
Material	N ^o	Length	Details
Blades.	2	13'.6"	Standard
Stock Ris.	2	31'.9"	..
Crossing.	1	12'.8 3/4"	" V in 7-52
Rails	1	36'.4"	..
and	1	33'.3"	..
Closures.	5	31'.5"	Standard.
..	1	29'.3"	..
..	2	20'.3"	..
..	1	18'.2 1/2"	..
..	1	17'.11 1/2"	..
Guard Ris.	2	11'.0"	Standard.

Victorian Railways—Way and Works Branch
Standard Drawing of
GENERAL ARRANGEMENT FOR
TURNOUT

For Curves of 600 feet radius
For 80 lb. and 100 lb. Rails

E. W. Galland

Adopted March 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES
List of Timbers

No	Length	Size	No	Length	Size
1	13'.0"	12"x6"	1	14'.0"	10"x5"
1	10'.0"		2	13'.6"	
2	18'.0"	10"x5"	3	13'.0"	
1	17'.6"		2	12'.6"	
2	17'.0"		3	12'.0"	
2	16'.6"		3	11'.6"	
2	16'.0"		3	11'.0"	
2	15'.6"		4	10'.6"	
3	15'.0"		5	10'.0"	
2	14'.6"		3	9'.6"	

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Material	No	Length	Details
Blades.	2	15'.9"	Standard
Stock Ris.	2	31'.9"	" V lin 8:7
Crossing.	1	15'.2"	
Rails	1	37'.3"	
and	2	31'.5"	Standard
Closures.	5	29'.3"	
	1	28'.10 3/8"	
	1	26'.9 3/8"	
	1	26'.6 3/8"	
	1	22'.0"	
	1	15'.0"	
Guard Ris.	2	11'.0"	Standard

Victorian Railways—Way and Works Branch

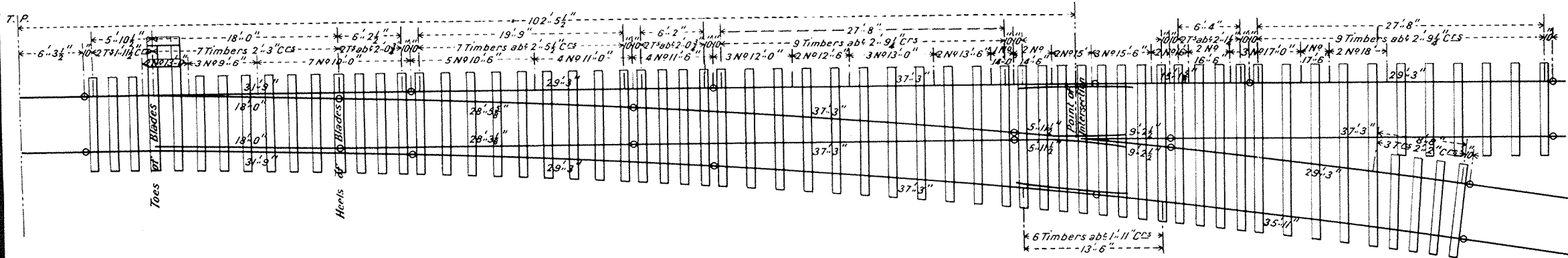
Standard Drawing of
GENERAL ARRANGEMENT FOR
TURNOUT

For Curves of 800 feet radius

For 80 lb. and 100 lb. Rails

Edw. Dalland

Adopted March 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.
12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.
Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.
Dimensions relating to Timber spacing are to the nearest 1/4".

List of Timbers

No	Length	Size	No	Length	Size
1	13'. 0"	12 x 6"	1	14'. 0"	10 x 5"
1	10'. 0"	..	2	13'. 6"	..
2	18'. 0"	10 x 5"	4	13'. 0"	..
1	17'. 6"	..	2	12'. 6"	..
3	17'. 0"	..	3	12'. 0"	..
2	16'. 6"	..	4	11'. 6"	..
2	16'. 0"	..	4	11'. 0"	..
3	15'. 6"	..	5	10'. 6"	..
2	15'. 0"	..	6	10'. 0"	..
2	14'. 6"	..	3	9'. 6"	..

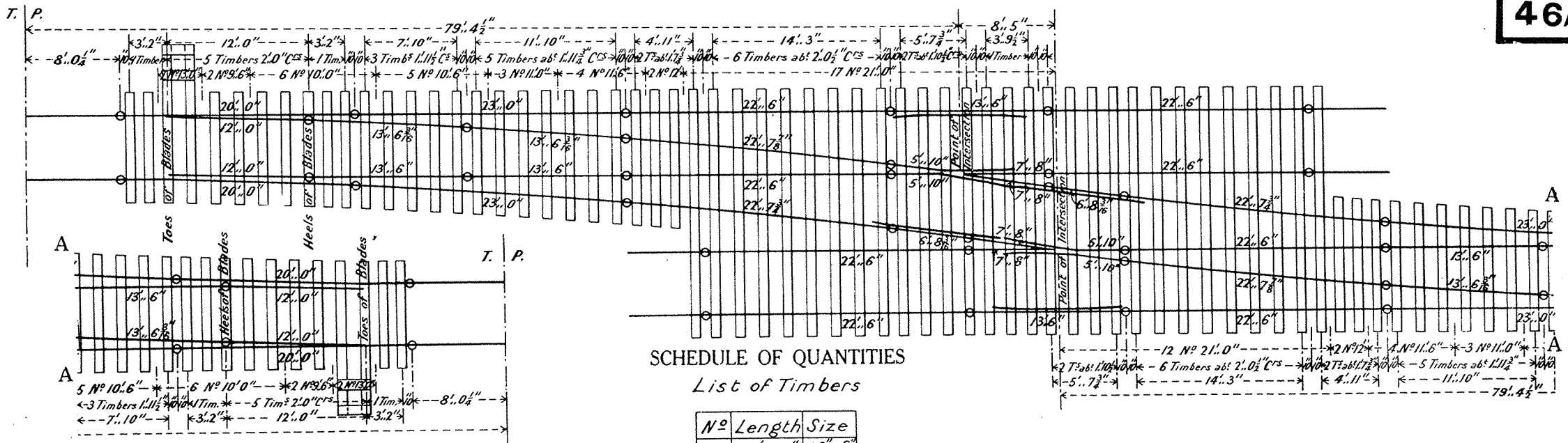
Material	No	Length	Details
Blades	2	18'. 0"	Standard
Stock Rls.	2	31'. 9"	..
Crossing	1	15'. 2"	V in 9:73
Rails	5	37'. 3"	..
and	1	35'. 11"	..
Closures.	4	29'. 3"	..
..	1	28'. 5 1/2"	..
..	1	28'. 3 1/2"	..
..	1	15'. 1 1/2"	..
Guard Rls.	2	11'. 0"	Standard

Victorian Railways—Way and Works Branch

Standard Drawing of
GENERAL ARRANGEMENT FOR
TURNOUT

For Curves of 1000 feet radius
For 80 lb. and 100 lb. Rails

Adopted March 1927 NO SCALE Chief Engineer of Way & Works
Ed. R. Randall



SCHEDULE OF QUANTITIES
List of Timbers

N ^o	Length	Size
2	13'. 0"	12" x 6"
2	10'. 0"	" "
29	21'. 0"	10" x 5"
2	13'. 0"	" "
4	12'. 0"	" "
8	11'. 6"	" "
6	11'. 0"	" "
10	10'. 6"	" "
10	10'. 0"	" "
4	9'. 6"	" "

Material	N ^o	Length	Details
Blades	4	12'. 0"	Standard
Stock Ris	4	20'. 0"	" "
Crossings	2	13'. 6"	" V ^s in 7-52
Rails	4	23'. 0"	" "
and	8	22'. 6"	" "
Closures.	2	22'. 7 ³ / ₈ "	" "
"	2	22'. 7 ³ / ₄ "	" "
"	4	13'. 6 ³ / ₈ "	" "
"	6	13'. 6"	" "
"	2	6'. 8 ³ / ₈ "	" "
Guard Ris.	4	11'. 0"	Standard

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

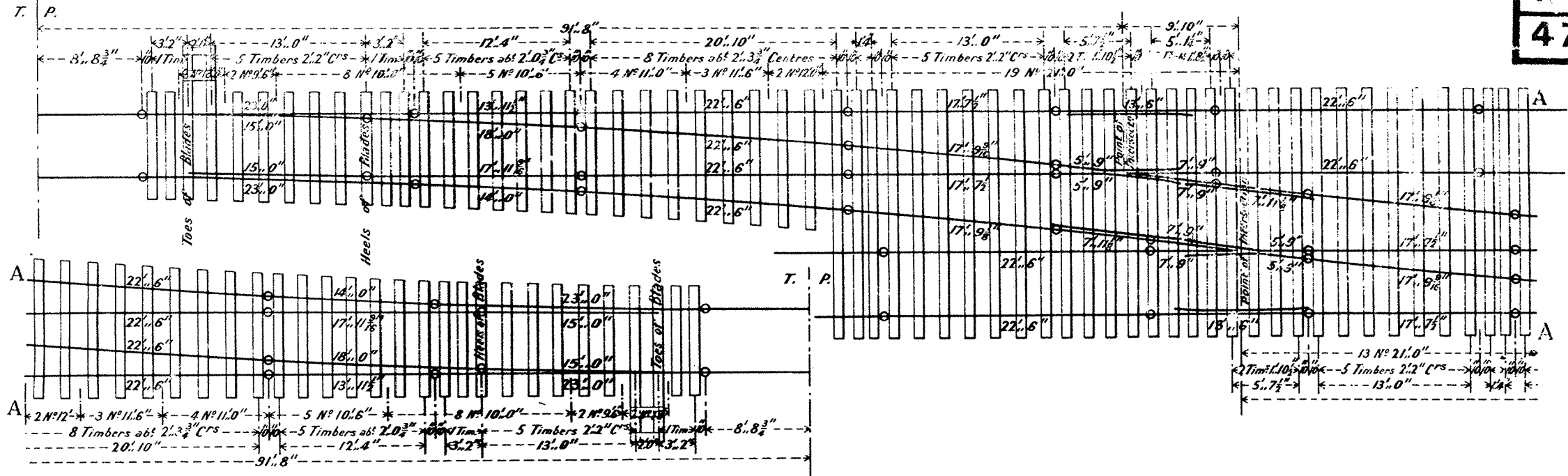
Victorian Railways—Way and Works Branch

Standard Drawing of
GENERAL ARRANGEMENT FOR
CROSSOVER

For Curves of 600 feet radius
For 60 lb. "D" Class Rails

G. W. Ballard

Adopted March 1927 NO SCALE Chief Engineer of Way & Works



NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size
2	13'. 0"	12" x 6"
2	10'. 0"	" "
32	21'. 0"	10" x 5"
2	13'. 0"	" "
4	12'. 0"	" "
6	11'. 6"	" "
8	11'. 0"	" "
10	10'. 6"	" "
14	10'. 0"	" "
4	9'. 6"	" "

Material	N ^o	Length	Details
Blades	4	15'. 0"	Standard
Stock Rls	4	23'. 0"	"
Crossings	2	13'. 6"	" V ^s 1 in 8-7
Rails	12	22'. 6"	"
and	2	18'. 0"	"
Closures.	2	17'. 11 1/2"	"
"	2	17'. 9 3/8"	"
"	2	17'. 9 3/8"	"
"	4	17'. 7 1/2"	"
"	2	14'. 0"	"
"	2	13'. 11 1/2"	"
"	2	13'. 6"	"
"	2	7'. 11 1/8"	"
Guard Rls	4	11'. 0"	Standard

Victorian Railways—Way and Works Branch

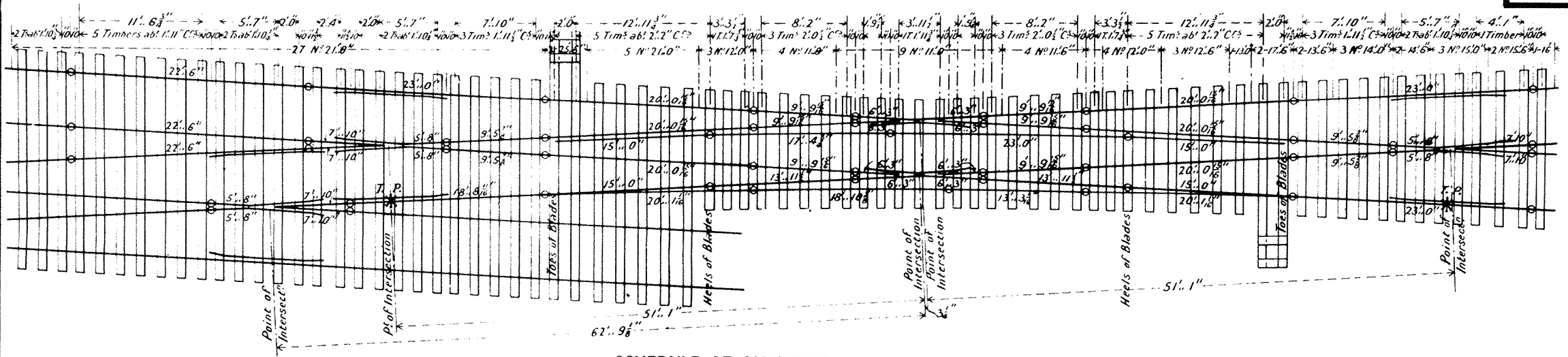
Standard Drawing of
GENERAL ARRANGEMENT FOR
CROSSOVER

For Curves of 800 feet radius

For 60 lb. "D" Class Rails

G. H. Galland

Adopted March 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES

List of Timbers

Nº	Length	Size	Nº	Length	Size
1	25' 6"	12' 6"	2	14' 6"	10' 5"
1	17' 6"	-	3	14' 0"	-
2	12' 0"	-	2	13' 6"	-
1	25' 6"	10' 5"	1	13' 0"	-
32	21' 0"	-	3	12' 6"	-
1	17' 6"	-	5	12' 0"	-
1	16' 0"	-	8	11' 6"	-
2	15' 6"	-	9	11' 0"	-
3	15' 0"	-			

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Material	Nº	Length	Details
Blades	4	15' 0"	Standard
Stock Rls	2	20' 0 7/8"	Special
"	2	20' 1 7/8"	"
Crossings	3	13' 6"	Standard V ^s 1 in 9.73
"	2	12' 6"	" K ^s "
Rails and Closures	4	23' 0"	"
"	3	22' 6"	"
"	4	20' 0 5/8"	"
"	1	18' 10 3/8"	"
"	1	18' 8 7/8"	"
"	1	17' 4 3/4"	"
"	2	13' 11 1/2"	"
"	1	13' 3 1/2"	"
"	6	9' 9 3/4"	"
"	4	9' 5 3/8"	"
Guard Rls	6	11' 0"	Standard

Victorian Railways—Way and Works Branch

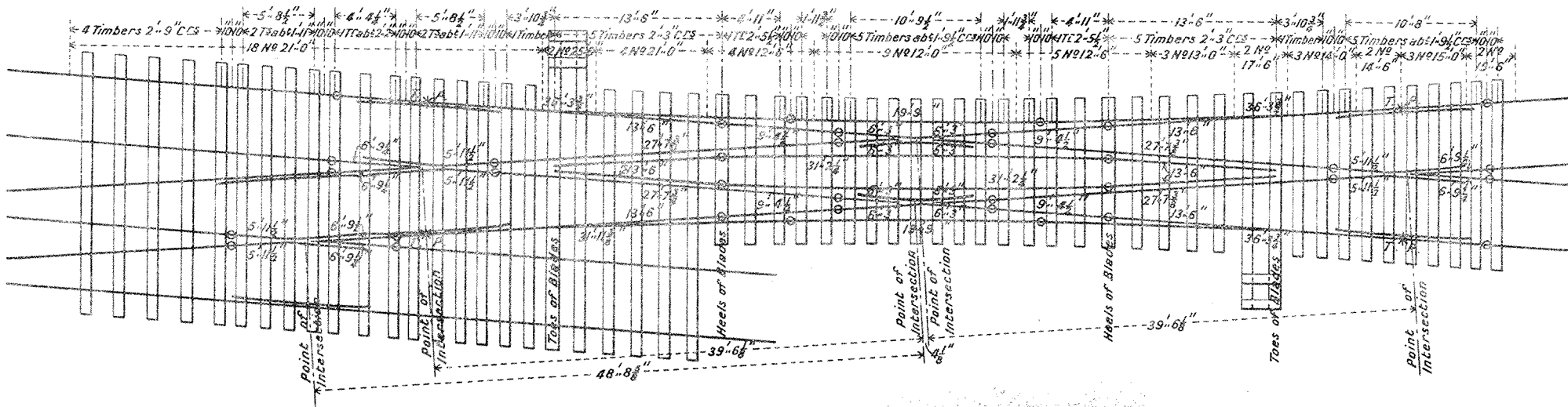
Standard Drawing of
GENERAL ARRANGEMENT FOR
SINGLE COMPOUND

For Curves of 1000 feet radius

For 60 lb. "D" Class Rails

G. H. Randall

Adopted March 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	25'.6"	12x6"	3	15'.0"	10"x5"
1	17'.6"	"	2	14'.6"	"
2	12'.6"	"	3	14'.0"	"
1	25'.6"	10"x5"	3	13'.0"	"
22	21'.0"	"	7	12'.6"	"
1	17'.6"	"	9	12'.0"	"
2	15'.6"	"			

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Material	N ^o	Length	Details
Blades	8	13'.6"	4 Stand ^d 4 Special
Stock Rls	3	36'.3 3/4"	Special
"	1	31'.11 3/4"	"
"	4	27'.78"	"
Crossings.	3	12'.8 3/4"	V ^s 1 in 7-52 Stand ^d
"	2	12'.6"	K ^s 1 in 7-52 "
Rails	2	31'.2 3/4"	
and	2	19'.9"	
Closures.	4	9'.4 1/2"	
Guard Rls.	6	11'.0"	Standard.

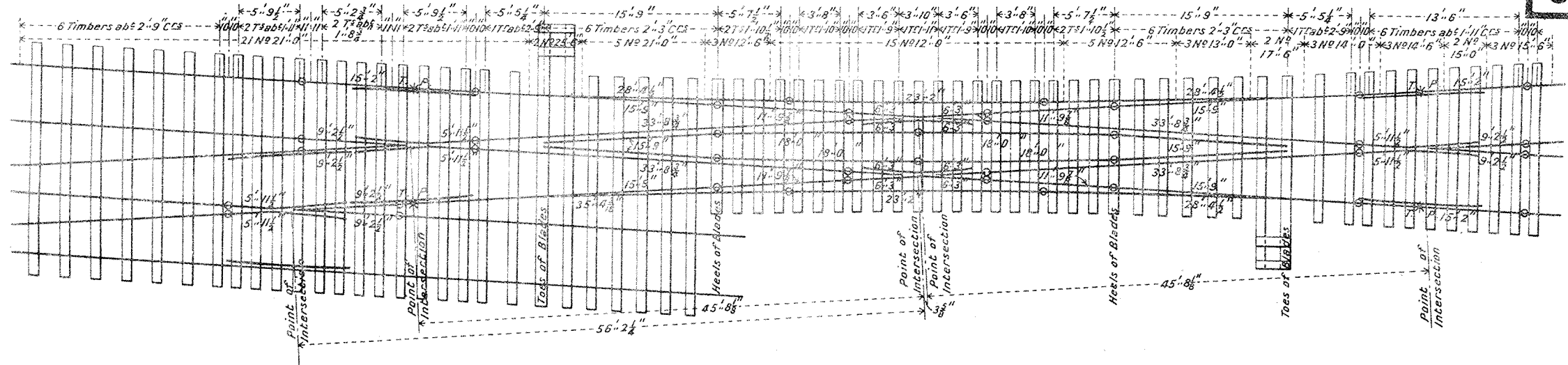
Victorian Railways—Way and Works Branch

Standard Drawing of
GENERAL ARRANGEMENT FOR
DOUBLE COMPOUND

For Curves of 600 feet radius

For 80 lb. and 100 lb. Rails

Adopted May, 1927 NO SCALE Chief Engineer of Way & Works
G. M. Galland



SCHEDULE OF QUANTITIES

List of limbers

N ^o	length	Size	N ^o	Length	Size
1	25'.6"	12"x6"	2	15'.0"	10"x5"
1	17'.6"	"	3	14'.6"	"
2	12'.6"	"	3	14'.0"	"
1	25'.6"	10"x5"	3	13'.0"	"
26	21'.0"	"	6	12'.6"	"
1	17'.6"	"	15	12'.0"	"
3	15'.6"	"			

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the track to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Material	N ^o	Length	Details
Blades	8	15'.9"	4 Stand ^d 4 Special
Stock Rls	1	35'.4 7/8"	Special
"	4	33'.8 1/2"	"
"	3	28'.4 1/2"	"
Crossings.	3	15'.2"	V ³ /in 8-7 Stand ^d
"	2	12'.6"	K ² /in 8-7 "
Rails	2	23'.2"	
and	4	18'.0"	
Closures.	4	11'.9 1/8"	
	3	15'.2"	
Guard Rls.	6	11'.0"	Standard.

Victorian Railways—Way and Works Branch

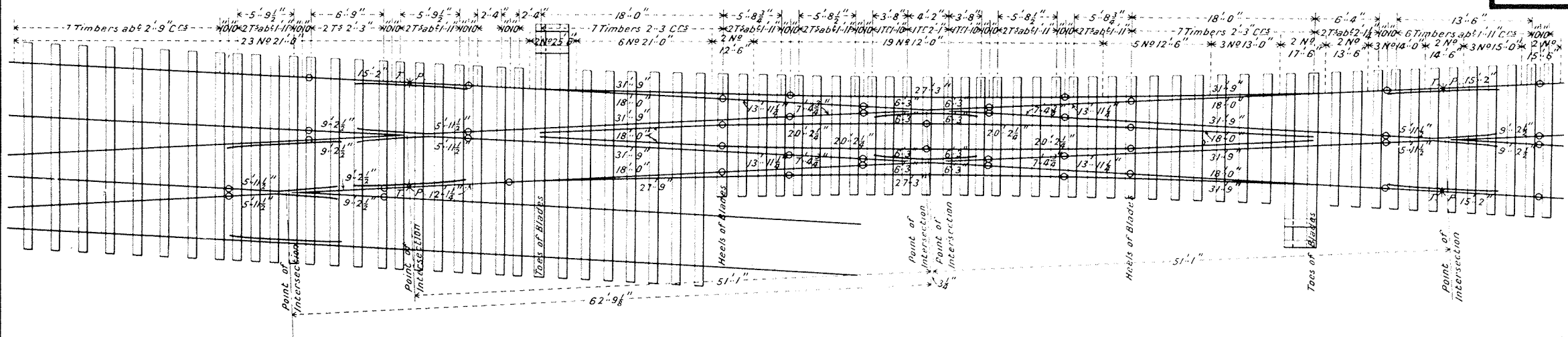
Standard Drawing of
GENERAL ARRANGEMENT FOR
DOUBLE COMPOUND

For Curves of 800 feet radius

For 80 lb. and 100 lb. Rails

E. D. Randall

Adopted May, 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	25'-6"	12 x 6	3	15'-0"	10 x 5
1	17'-1"	"	2	14'-6"	"
2	12'-6"	"	3	14'-0"	"
1	25'-6"	10 x 5	2	13'-6"	"
29	21'-0"	"	3	13'-0"	"
1	17'-6"	"	5	12'-6"	"
2	15'-6"	"	19	12'-0"	"

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Material	N ^o	Length	Details
Blades	8	18'-0"	4 Stand ^d 4 Special
Stock Rls	7	31'-9"	Special
"	1	27'-9"	"
Crossings	3	15'-2"	V ^s in 9-73 Stand ^d
"	2	12'-6"	K ^s in 9-73 "
Rails	2	27'-3"	"
and	4	20'-2 1/2"	"
Closures	3	15'-2"	"
"	4	13'-11 1/4"	"
"	1	12'-1 1/2"	"
"	4	7'-4 1/2"	"
Guard Rls	6	11'-0"	Standard

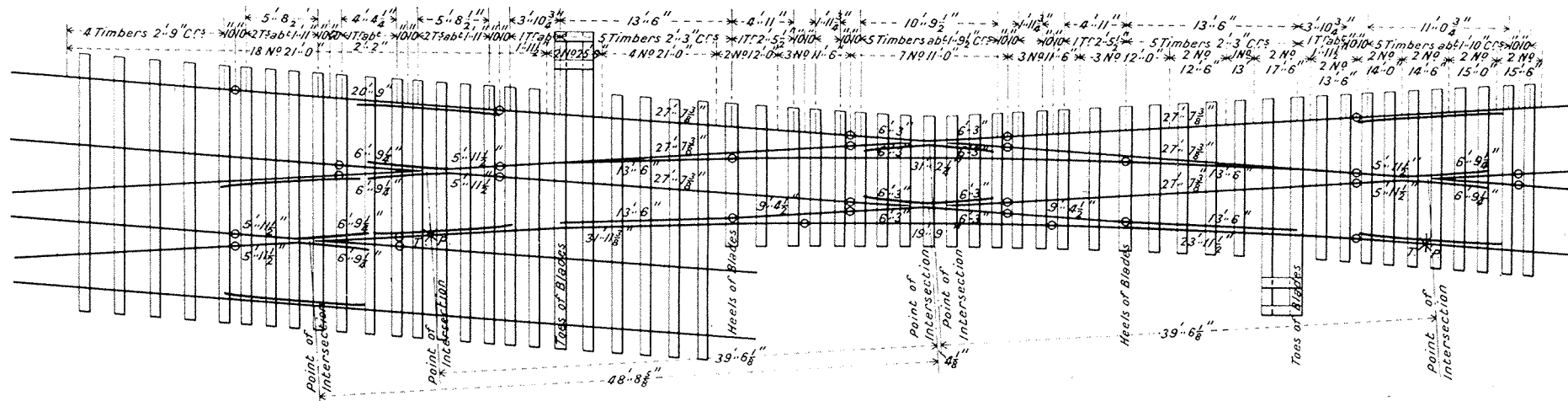
Victorian Railways—Way and Works Branch

Standard Drawing of

GENERAL ARRANGEMENT FOR
DOUBLE COMPOUND

For Curves of 1000 feet radius

For 80 lb. and 100 lb. Rails



SCHEDULE OF QUANTITIES

List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	25' 6"	12 x 6"	2	14' 6"	10 x 5"
1	17' 6"	" "	2	14' 0"	" "
2	12' 0"	" "	2	13' 6"	" "
1	25' 6"	10 x 5"	1	13' 0"	" "
1	17' 6"	" "	3	12' 0"	" "
2	15' 6"	" "	6	11' 6"	" "
2	15' 0"	" "	7	11' 0"	" "

Material	N ^o	Length	Details
Blades	4	13' .6"	Standard.
Stock Rls	1	31' .11 $\frac{3}{8}$ "	Special
" "	2	27' .7 $\frac{3}{8}$ "	"
" "	1	23' .11 $\frac{1}{2}$ "	"
Crossings	3	12' .8 $\frac{3}{4}$ "	V ^s 1 in 7-52 Stand ^d
" "	2	12' .6"	K ^s 1 in 7-52 "
Rails	1	31' .24"	
and	4	27' .7 $\frac{3}{8}$ "	
Closures.	1	20' .9"	
" "	1	19' .9"	
" "	2	9' .4 $\frac{1}{2}$ "	
Guard Rls.	6	11' .0"	Standard.

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest $\frac{1}{4}$ ".

Victorian Railways—Way and Works Branch

Standard Drawing of

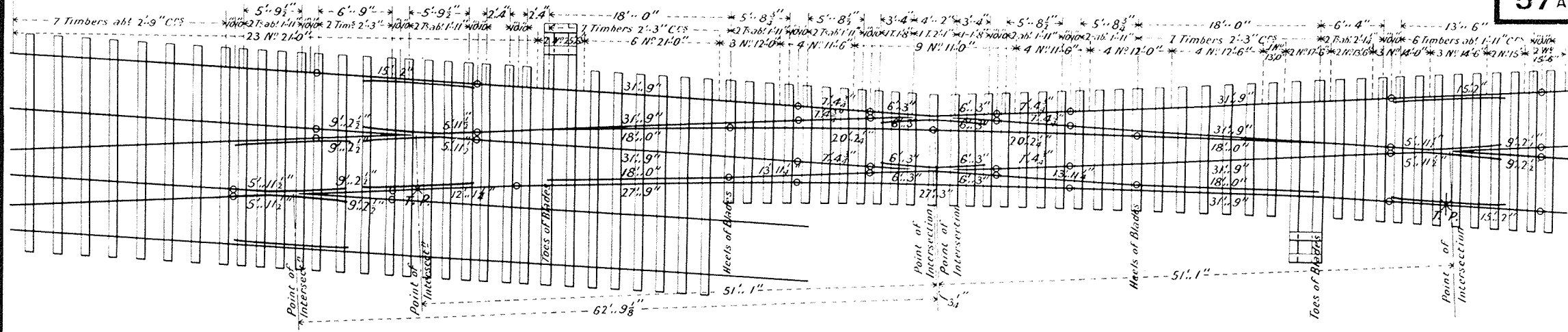
GENERAL ARRANGEMENT FOR
SINGLE COMPOUND

For Curves of 600 feet radius

For 80 lb. and 100 lb. Rails

Edmund Galland

Adopted May, 1927 NO SCALE Chief Engineer of Way & Works



SCHEDULE OF QUANTITIES
List of Timbers

N ^o	Length	Size	N ^o	Length	Size
1	25'. 6"	12 x 6"	3	14'. 6"	10 x 5"
1	17'. 6"	"	3	14'. 0"	"
2	12'. 0"	"	2	13'. 6"	"
1	25'. 6"	10 x 5"	1	13'. 0"	"
29	21'. 0"	"	4	12'. 6"	"
1	17'. 6"	"	5	12'. 0"	"
2	15'. 6"	"	8	11'. 6"	"
2	15'. 0"	"	9	11'. 0"	"

Material	N ^o	Length	Details
Blades	4	18'. 0"	Standard.
Stock Ris	3	31'. 9"	Special
"	1	27'. 9"	"
Crossings	3	15'. 2"	V ¹ / ₂ in 9-73 Standard
"	2	12'. 6"	K ¹ / ₂ in 9-73 "
Rails	4	31'. 9"	Standard
and	1	27'. 3"	"
Closures	2	20'. 2 ¹ / ₄ "	"
"	3	15'. 2"	"
"	2	13'. 11 ¹ / ₄ "	"
"	1	12'. 1 ¹ / ₄ "	"
"	6	7'. 4 ¹ / ₂ "	"
Guard Ris.	6	11'. 0"	Standard.

NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail

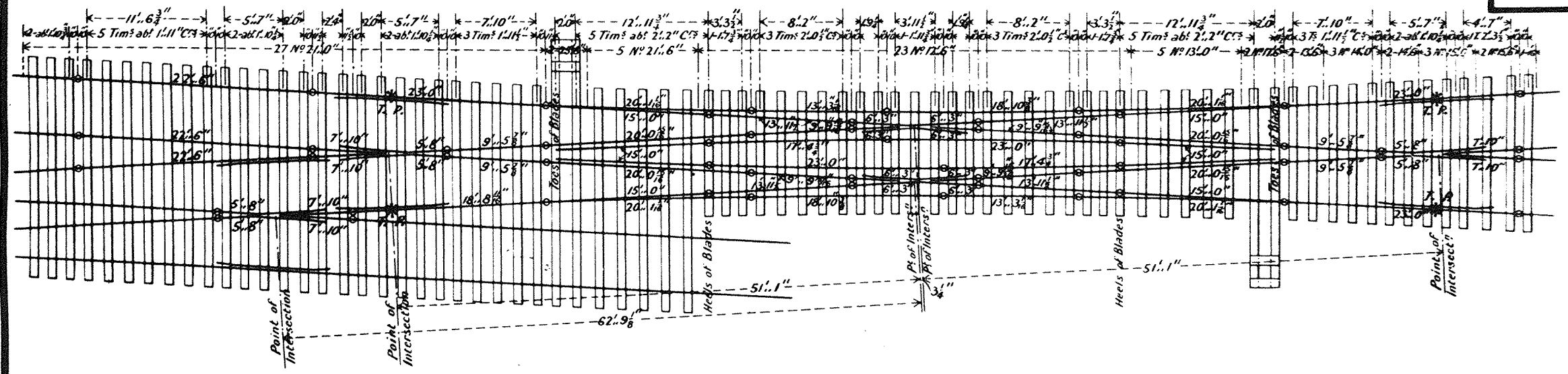
Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.

Dimensions relating to Timber spacing are to the nearest 1/4".

Victorian Railways—Way and Works Branch
Standard Drawing of
GENERAL ARRANGEMENT FOR
SINGLE COMPOUND

For Curves of 1000 feet radius
For 80 lb. and 100 lb. Rails

Adopted May, 1927 NO SCALE Chief Engineer of Way & Works
Edmund Randall



SCHEDULE OF QUANTITIES
List of Timbers

Nº	Length	Size	Nº	Length	Size
1	25' .6"	12" x 6"	2	15' .6"	10" x 5"
1	17' .6"	" "	3	15' .0"	" "
2	12' .6"	" "	2	14' .6"	" "
1	25' .6"	10" x 5"	3	14' .0"	" "
5	21' .6"	" "	2	13' .6"	" "
27	21' .0"	" "	5	13' .0"	" "
1	16' .0"	" "	21	12' .6"	" "
1	17' .6"	" "			

NOTES

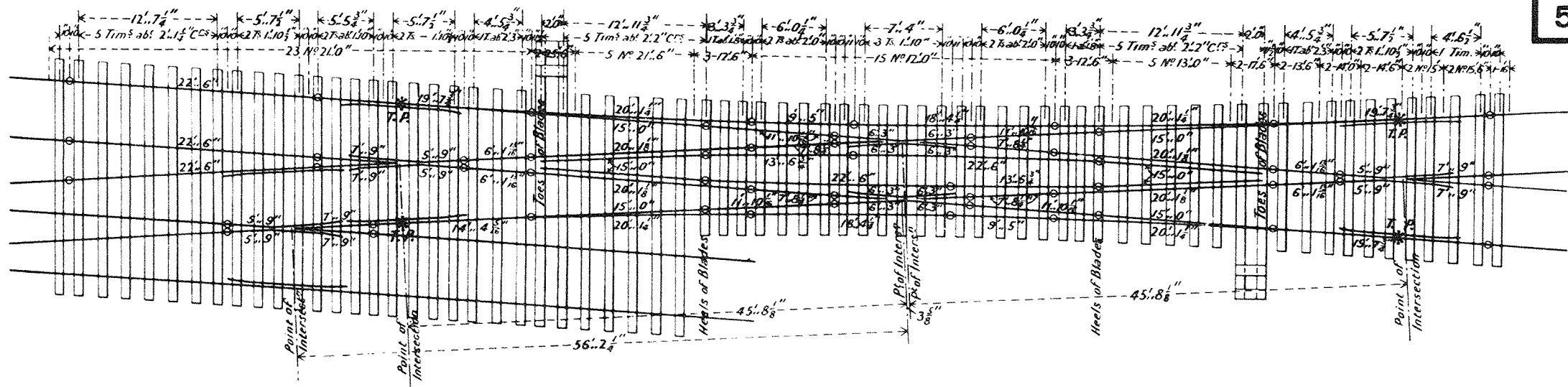
The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.
12" Timbers to be placed centrally under Heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail.
Rail lengths shown on the Drawing are the lengths after expansion has been allowed for.
Dimensions relating to Timber spacing are to the nearest 1/4".

Material	Nº	Length	Details
Blades	8	15' .0"	4 Standard 4 Special
Stock Ris	4	20' 1 1/8"	Special
"	4	20' 0 3/8"	"
Crossings	3	13' .6"	V ^s lin 9 73 Standard
"	2	12' .6"	K ^s lin 9 73 "
Rails and Closures	5	23' .0"	
"	3	22' .6"	
"	2	18' 10 3/8"	
"	1	18' 8 3/8"	
"	2	17' 4 3/8"	
"	4	13' 11 3/8"	
"	2	13' 3 3/8"	
"	4	9' 9 3/8"	
"	4	9' 5 3/8"	
Guard Ris	6	11' .0"	Standard

Victorian Railways—Way and Works Branch
Standard Drawing of
GENERAL ARRANGEMENT FOR
DOUBLE COMPOUND
For Curves of 1000 feet radius
For 60 lb."D" Class Rails

Adopted May, 1927 NO SCALE Chief Engineer of Way & Works
L. H. Ballard



NOTES

The timber spacing shown on this Plan has been arranged for Blocked Crossings and must be placed as shown.

12" Timbers to be placed centrally under heels and Toes of Blades.

The lengths of Timbers are given for the purpose of ordering only. In laying they are to be cut in conformity with the curves to the standard length beyond the Rail

Rail lengths shown on the Drawing are the lengths after expansion has been allowed for

Dimensions relating to Timber spacing are to the nearest 1/4".

SCHEDULE OF QUANTITIES
List of Timbers

Nº	Length	Size	Nº	Length	Size
1	25' 6"	12" x 6"	2	15' 6"	10" x 5"
1	17' 6"	-	2	15' 0"	-
2	12' 6"	-	2	14' 6"	-
1	25' 6"	10" x 5"	2	14' 0"	-
5	21' 6"	-	2	13' 6"	-
23	21' 0"	-	5	13' 0"	-
1	17' 6"	-	4	12' 6"	-
1	16' 0"	-	15	12' 0"	-

Material	Nº	Length	Details
Blades	8	15' 0"	4 Standard 4 Special
Stock Rails	4	20' 14"	Special
"	4	20' 18"	"
Crossings	3	13' 6"	1/8" in 87 Standard
"	2	12' 6"	1/8" in 87
Rails	5	22' 6"	Standard
and Closures	3	19' 7 3/8"	
"	2	18' 4 1/2"	
"	1	14' 4 1/8"	
"	2	13' 6 3/8"	
"	4	11' 10 1/8"	
"	2	9' 5"	
"	4	7' 8 1/4"	
"	4	6' 1 1/8"	
Guard Rails	6	11' 0"	Standard

Victorian Railways—Way and Works Branch
Standard Drawing of
GENERAL ARRANGEMENT FOR
DOUBLE COMPOUND

For Curves of 800 feet radius
For 60 lb. "D" Class Rails

Adopted May, 1927 NO SCALE Chief Engineer of Way & Works
Edw. Barrand