

ENGINE

Cylinders (3) 21 1/2" dia x 28"
 Tractive Effort (85%) 55,000
 Factor of Adhesion 3.77

VALVE GEAR

Walschaert
 Piston Valves
 Travel 6 1/2"
 Lap 1 1/2"
 Lead 1/4"

BOILER

Work Press 220 lb per sq in
 Grate Area 68 sq. ft.
 Heating Surface Sq. ft.
 Firebox & C.C. 274
 Syphons 80
 Tubes & Flues 3613
 Arch Tubes 13
 Superheater 780
4,760

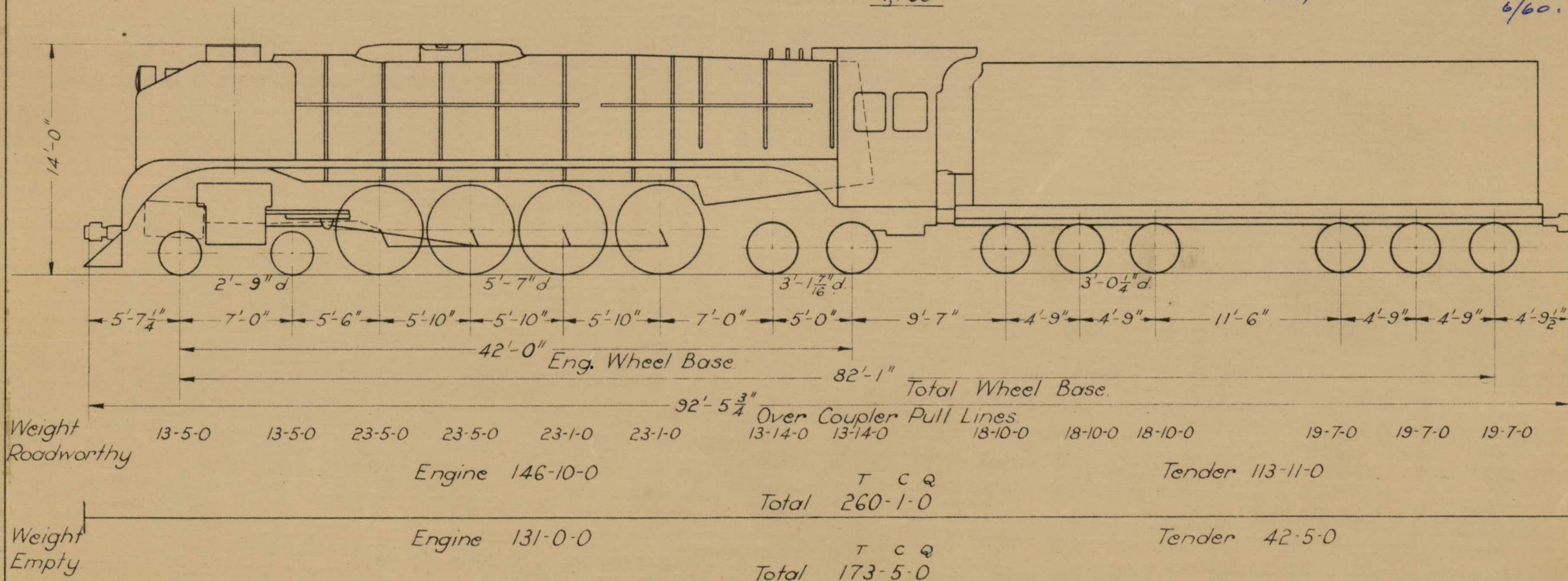
TENDER

Water 14,000 Galls.
 Fuel 180 Cwt

Built at Newport Workshops
 1941 No. 220

NUMBER PLATES REMOVED
 ENGINE STORED, 30.4.58
 R.S. 58/4535

821,860 miles
 Engine permanently stored at
 Newport as historical exhibit
 6/60.



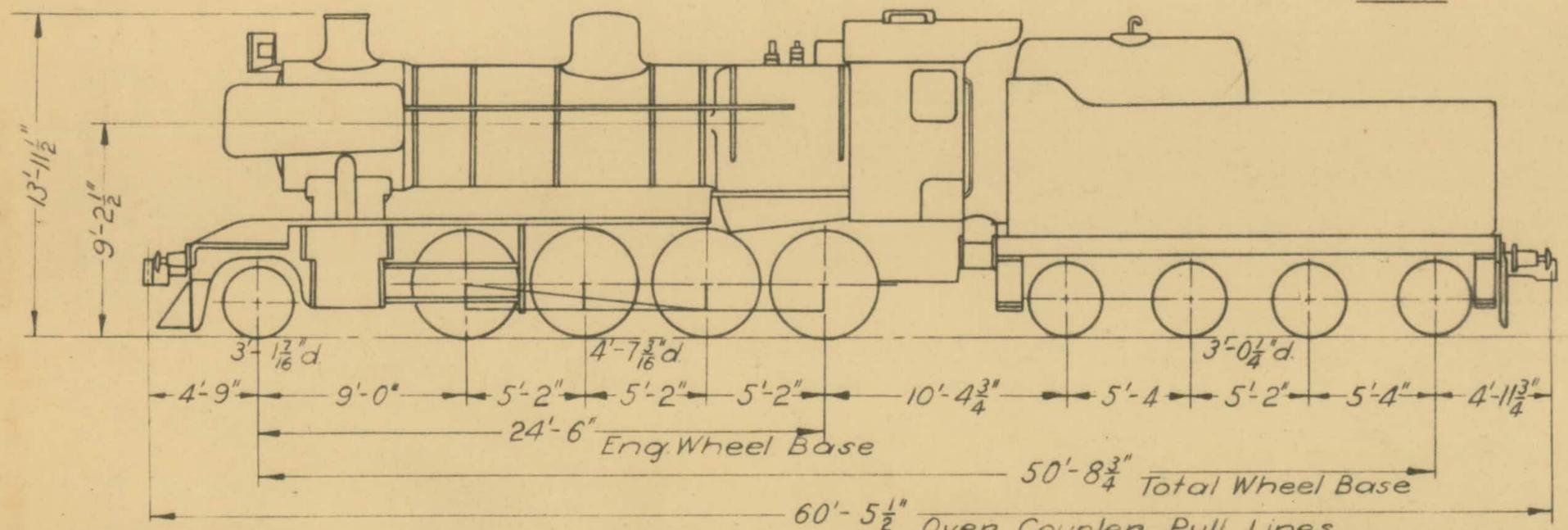
VICTORIAN RAILWAYS

LOCO
 CLASS

H

Date: 4-6-52

ENGINE		VALVE GEAR	BOILER	TENDER	Numbers of Locomotives.
Cylinders (2)	20"x26"	Walschaert	Work Press 180 lb. per sq. in	Oil 1500 Galls.	530 - 559 (Incl.)
Tractive effort (85%)	29,460	Piston Valves 10"	Grate Area 31 sq. ft.	Water 4100 Galls.	
Factor of adhesion	4.35	Travel $4\frac{5}{8}"$ Lap $1\frac{1}{8}"$	Heating Surface (sq. ft.)		Total 30
		Lead $\frac{1}{4}"$	Firebox 118		
			Arch Tubes 9		
			Tubes & Flues 1,317		
			Superheater 218		
			<u>1,662</u>		



Built 1954

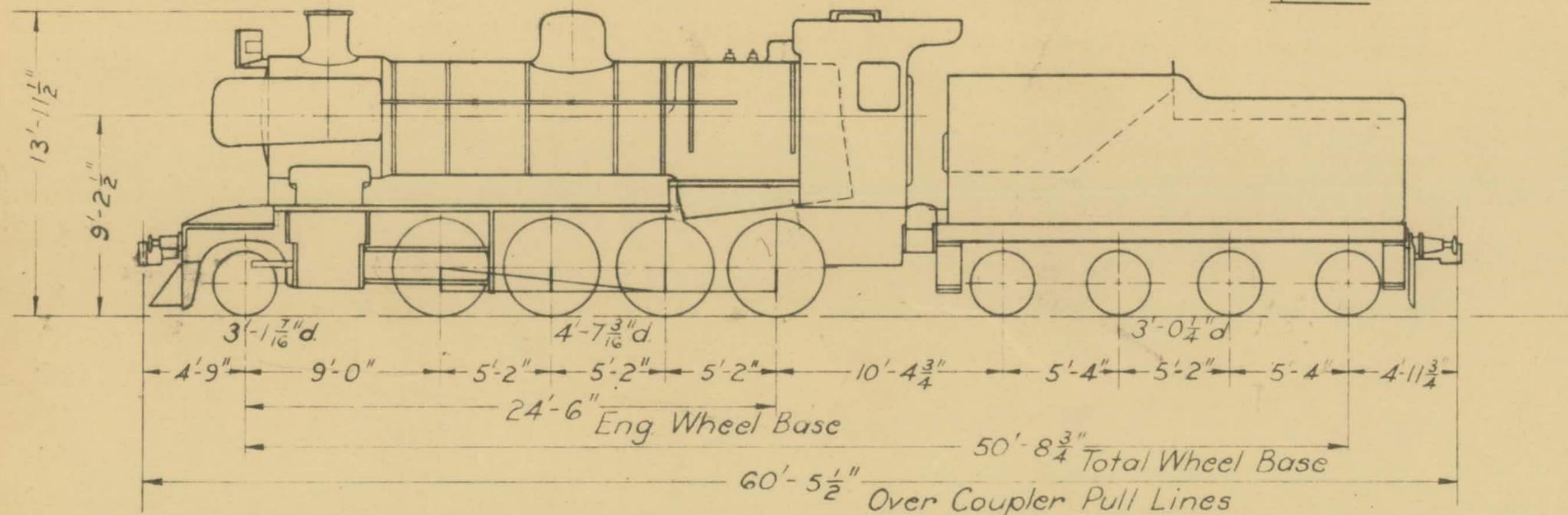
Weight Roadworthy	9-12-0	14-10-0	14-5-0	14-10-0	14-2-0	11-6-0	11-6-0	12-0-0	12-0-0
		Engine 66-19-0					Tender 46-12-0		
						T	C	Q	
						Total 113-11-0			
Weight Empty		Engine 62-7-0					Tender 22-1-0		
						T	C	Q	
						Total 84-8-0			

VICTORIAN RAILWAYS

LOCO CLASS **J** OIL BURNING

Date: 26-8-53

ENGINE		VALVE GEAR	BOILER	TENDER	Numbers of Locomotives
Cylinders (2)	20" d x 26"	Walschaert	Work. Press, 180 lb. per sq. in	Coal 7 tons	Built by Vulcan Foundry Ltd
Tractive Effort (85%)	29,460 lb	Piston Valves 10"	Grate Area 31 sq. ft	Water 4,200 galls.	500 to 529 inclusive
Factor of Adhesion	4.35	Travel $4\frac{5}{8}$ " Lap $1\frac{1}{16}$ "	Heating Surface (sq. ft)		
		Lead $\frac{1}{4}$ "	Firebox 118		Total 30
			Arch Tubes 9		
			Tubes & Flues 1,317		
			Superheater 238		
			<u>1,682</u>		



Built 1954

Weight Roadworthy	9-12-0	14-10-0	14-5-0	14-10-0	14-2-0		
	Engine 66-19-0					T. C. Q	Tender 45-16-0
						Total	112-15-0
Weight Empty	Engine 62-7-0					T. C. Q	Tender 20-1-0
							Total

VICTORIAN RAILWAYS

LOCO CLASS J COAL BURNING

Date: 4-6-52

ENGINE

Cylinders (2) 20" d x 26"
 Tractive Effort (85%) 28,650 lb
 Factor of Adhesion 4.16

VALVE GEAR

Walschaert
 Piston Valves 10"
 Travel $4\frac{5}{8}$ "
 Lap $1\frac{1}{16}$ "
 Lead $\frac{1}{4}$ "

BOILER

Work. Press. 175 lb. per sq. in.
 Grate Area 25.75 sq ft
 Heating Surface (sq. ft.)
 Firebox 125
 Tubes & Flues 1317
 Superheater 238
1680

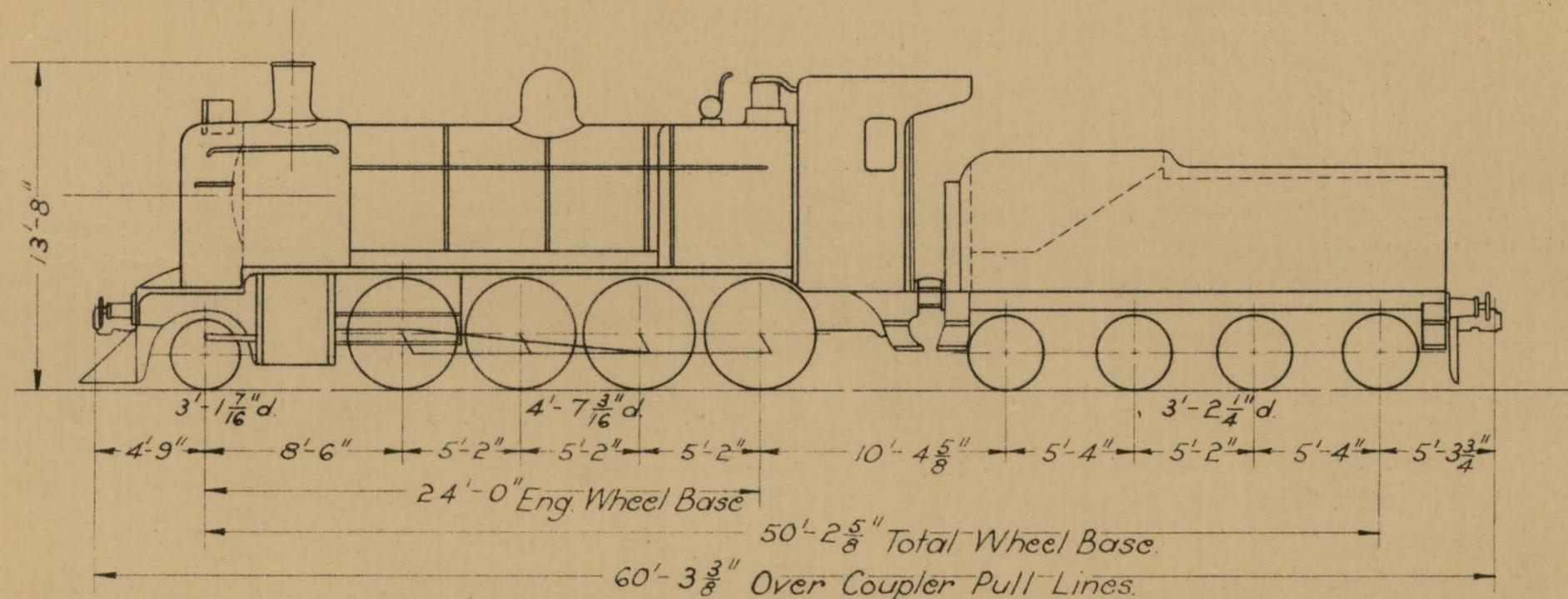
TENDER

Coal 5 Tons.
 Water 4,200 Galls.

Numbers of Locomotives

Built at Newport Workshops

22-7-64	140	in 1922	169	in 1941
14-3-62	141	" "	170	" "
8-8-58	142	" "	171	" "
	143	" "	172	" "
	144	" "	173	" "
29-10-58	145	" "	174	" "
12-12-60	146	1923	175	" "
	147	" "	176	" "
15-2-60	148	" "	177	" "
	149	" "	178	" "



Weight Roadworthy	9-5-0	13-2-0	13-5-0	13-10-0	13-5-0	10-1-2	10-1-2	11-1-0	11-1-0
		Engine	62-7-0			T	C	Q	Tender 42-5-0
				Total	104-12-0				

Weight Empty	Engine	57-15-0		Total	76-5-0			Tender	18-10-0
--------------	--------	---------	--	-------	--------	--	--	--------	---------

150	"	1940	179	"	1943
151	"	"	180	"	"
152	"	"	181	"	"
153	"	"	182	"	"
154	"	"	183	"	"
155	"	"			
156	"	"	184	"	1946
157	"	"	185	"	"
158	"	"	186	"	"
159	"	"	187	"	"
160	"	"	188	"	"
			189	"	"
161	"	1941	190	"	"
162	"	"	191	"	"
163	"	"	192	"	"
164	"	"			
165	"	"			
166	"	"			
167	"	"			
168	"	"			
			Total	5352	

51
50
49
46

31-3-65 = 45 No.

VICTORIAN RAILWAYS

LOCO CLASS **K**

Date: 4-6-52

GENERAL

Tractive Effort Starting 47,000 lb. max.
 Tractive Effort Continuous 25,200 lb. at 30 m.p.h. (F.F.)
 " " " 18,000 lb. at 44 m.p.h. (W.F.)
 Speed Maximum 75 m.p.h.
 Braking Effort 44,000 lb. max.

ELECTRICAL

Nominal Locomotive Voltage 1500 v D.C.
 Motors (6) Type EE 519
 402 H.P. max.
 Gear Ratio 63/16

Numbers of Locomotives
 Built by English Electric Co. Ltd.
 1952-53
 1150-1174

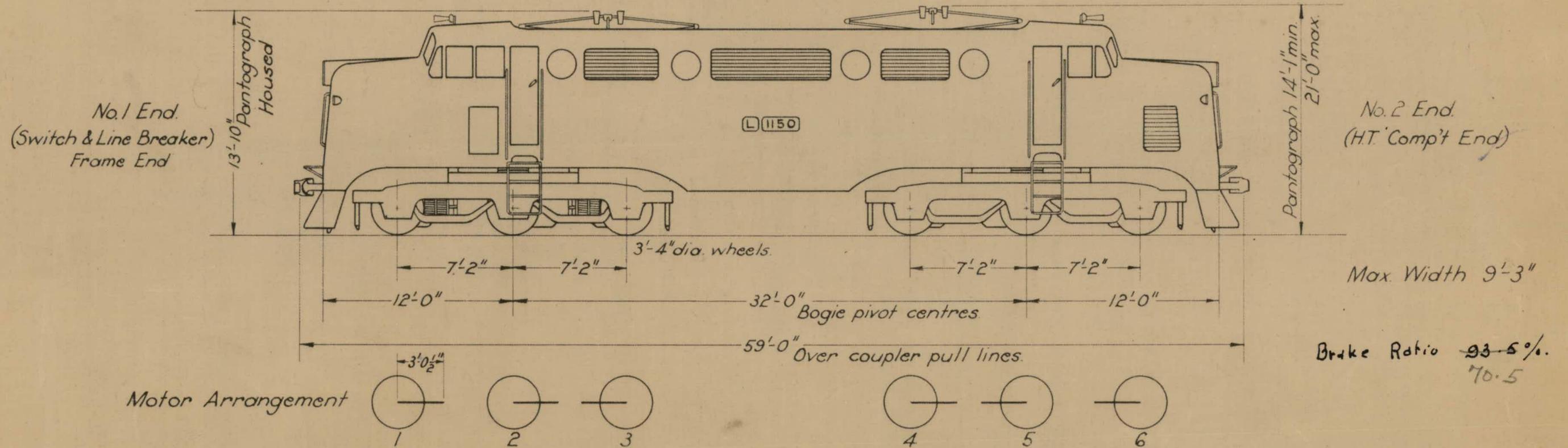
Total 25

ADHESION

Traction 25.2% } Nominal Static
 Braking 23.5% } Load 16T-3C-2Q
 Traction 24.8% } Static Load
 Braking 23.1% } 16T-8C-3Q

MOTOR GROUPS

1. 6 in Series
2. 2 parallel groups of 3 in series.
3. 3 parallel groups of 2 in series.



Brake Ratio ~~93.5%~~
70.5

Nominal Static Weights.	16-3-2	16-3-2	16-3-2	16-3-2	16-3-2	16-3-2	Total Weight	T C Q 97-1-0
Calculated	Static Weights.	15-18-1	16-3-2	16-8-3	16-8-3	16-3-2	15-18-1	
	T.E. & Motor Torque	14-15-0	14-16-3	18-15-0	14-2-2	17-10-1	17-1-2	
	Transfer Weights	16-17-2	17-6-3	14-3-3	18-13-3	15-0-1	14-19-0	
	Braking							
	Transfer Weights							

VICTORIAN RAILWAYS
 LOCO CLASS L ELECTRIC LOCO

Date: ~~4-6-52~~ 5-5-53

GENERAL

Tractive Effort, Starting 15,400 lbs.
 Factor of Adhesion 23 %
 Maximum Speed 12 m.p.h.

ENGINE

G.M. diesel, series 71, 6 cylinder, two stroke
 Bore $4\frac{1}{4}$ " Stroke 5"
 Rated Horsepower 150
 Maximum engine r.p.m. 1950
 "Allison" Torque Converter with
 rear disconnect clutch T.C.R.D. 575

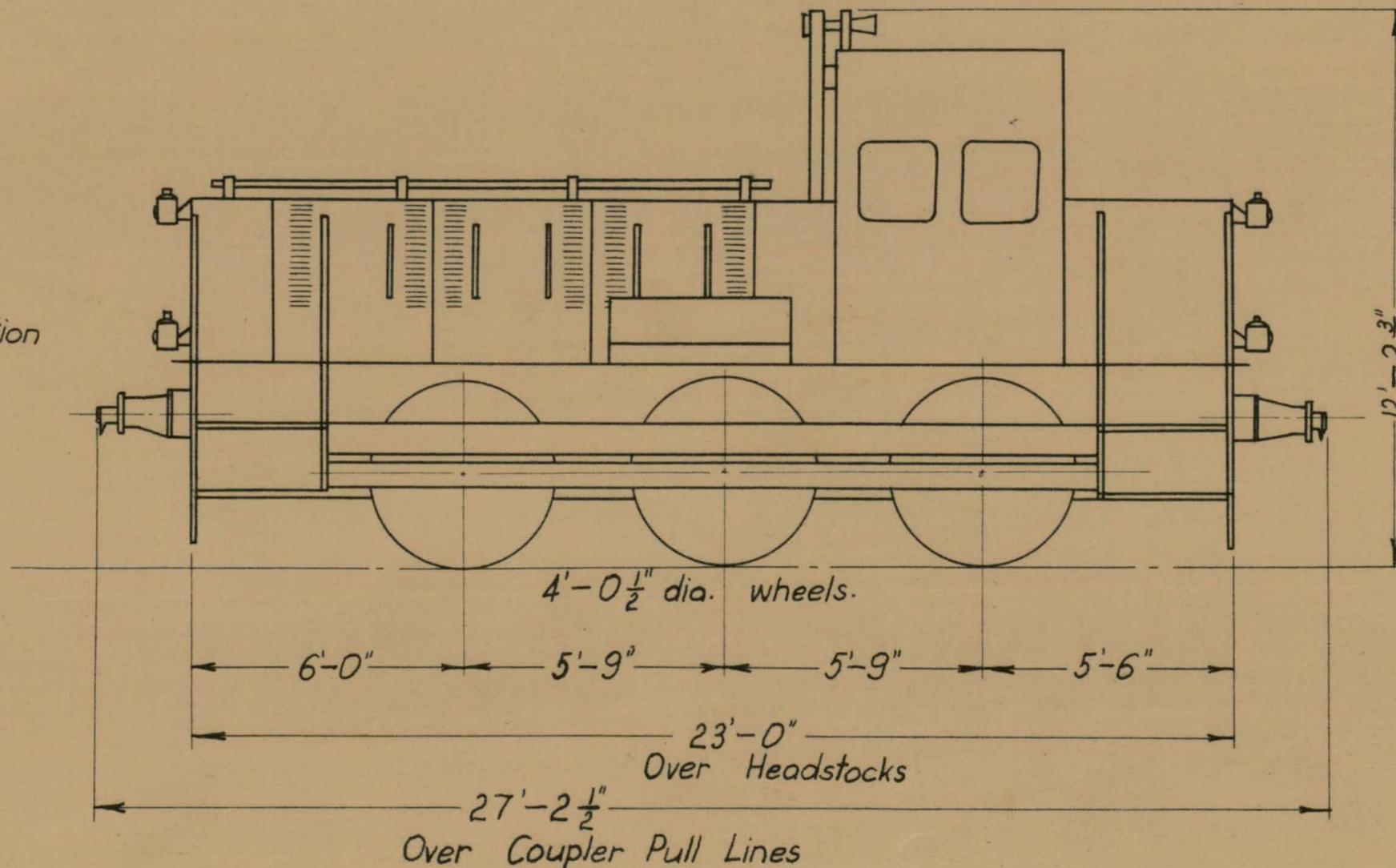
CAPACITIES

Fuel Oil 370 Galls.
 Lubricating Oil 6 "
 Cooling water 10 "
 Torque Converter Oil 10 "
 Reverse Gearbox Oil 21 "

BATTERIES

24 volt 180 A.H.
 Built at Newport
 Workshops 1959
 Nos 231, 232
 Total 2.

Width over
 side rod protection
 $9' - 5\frac{5}{8}"$



Weight
 Roadworthy

	T.C.	T.C.	T.C.
	9-6	11-15	9-1
Total		T.C.	
		30-1	

VICTORIAN RAILWAYS

LOCO. CLASS **M** DIESEL HYDRAULIC SHUNTER

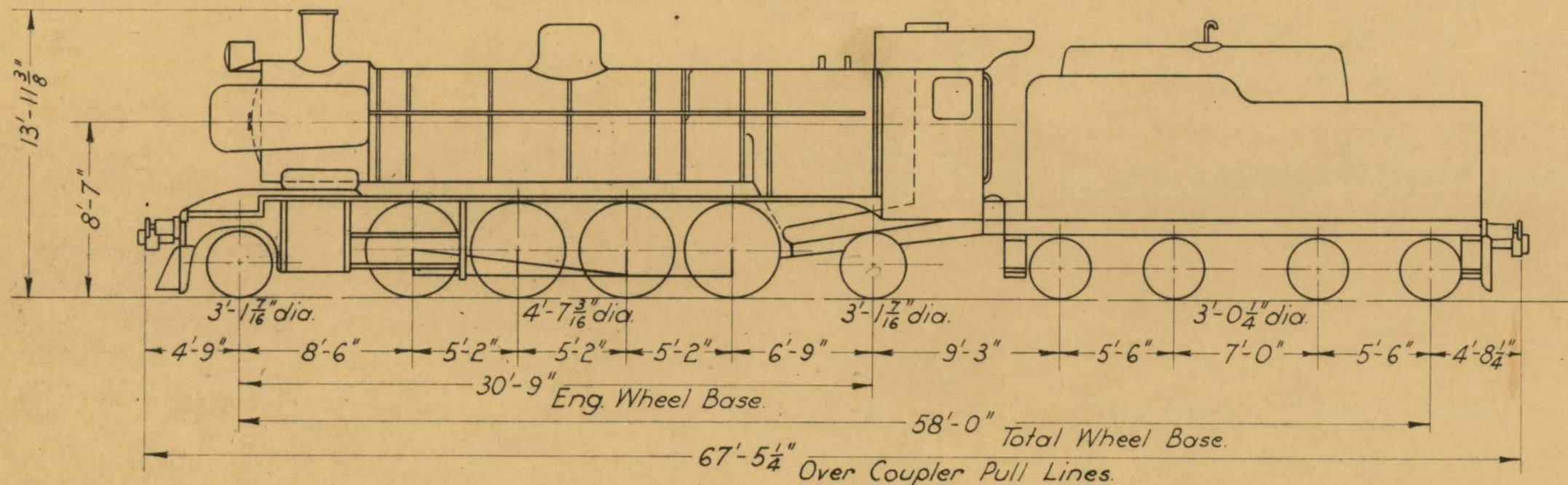
DATE-9-4-59

P6W
37428

ENGINE		VALVE GEAR	BOILER	TENDER
Cylinders (2)	20" x 26"	Walschaert	Work Press. 185 lb per sq. in.	Oil 1,500 Galls.
Tractive Effort (85%)	30,280	Piston Valves 10"	Grate Area 31 sq. ft.	Water 4,700 "
Factor of Adhesion	4.04	Travel $4\frac{5}{8}$ " Lap $\frac{1}{16}$ "	Heating Surface (sq. ft.)	
		Lead $\frac{1}{4}$ "	Firebox & C.C. 168	
			Arch Tubes 9	
			Syphon 26	
			Tubes & Flues 1,250	
			Superheater 324	
			<u>1,777</u>	

Numbers of Locomotives

430	Built at Newport
431	Workshops 1950-1951
432	Total 3
	Converted to oil burning 1954-1955.



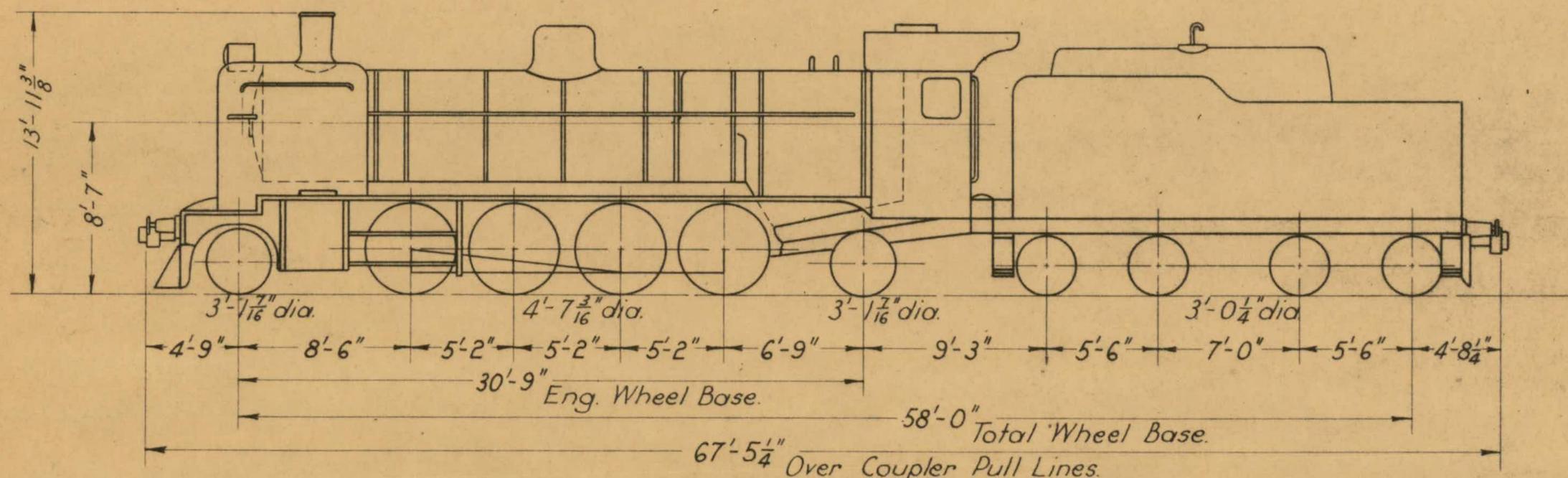
Weight Roadworthy	10-1-2	13-14-0	13-17-0	13-14-0	13-6-0	11-7-2	12-0-0	12-0-0	13-12-0	13-12-0
		Engine	76-0-0			T. C. Q.	Tender	51-4-0		
				Total	127-4-0					
Weight Empty		Engine	69-6-2			T. C. Q.	Tender	24-4-0		
				Total	93-10-2					

VICTORIAN RAILWAYS

LOCO CLASS **N** OIL BURNING

Date: 15-2-55

ENGINE		VALVE GEAR	BOILER	TENDER	Numbers of Locomotives
Cylinders (2)	20" x 26"	Walschaert	Work. Press. 185 lb. per sq. in.	Oil 1500 Galls.	450 to 499 Built by North
Tractive Effort (85%)	30,280	Piston Valves 10"	Grate Area 31 sq. ft.	Water 4700 "	British Loco. Co.
Factor of Adhesion	4.04	Travel 4 ⁵ / ₈ " Lap 1 ¹ / ₁₆ "	Heating Surface (sq. ft.)		1949-1951
		Lead ¹ / ₄ "	Firebox & C.C. 168		Total 27
			Arch Tubes 9		
			Syphon 26		
			Tubes & Flues 1250		
			Superheater 324		
			<u>1777</u>		



451	
452	476
453	
454	479
	480
456	
457	482
458	483
459	484
460	
	488
464	489
466	492
	493
	496
469	497
470	498
	499

Converted to oil burning
1951-1956

Weight Roadworthy	10-1-2	13-14-0	13-17-0	13-14-0	13-6-0	11-7-2	12-0-0	12-0-0	13-12-0	13-12-0
		Engine	76-0-0				Tender	51-4-0		
				Total		T. C. Q.				
						127-4-0				
Weight Empty		Engine	69-6-2				Tender	24-4-0		
				Total		T. C. Q.				
						93-10-2				

VICTORIAN RAILWAYS

LOCO CLASS **N** OIL BURNING

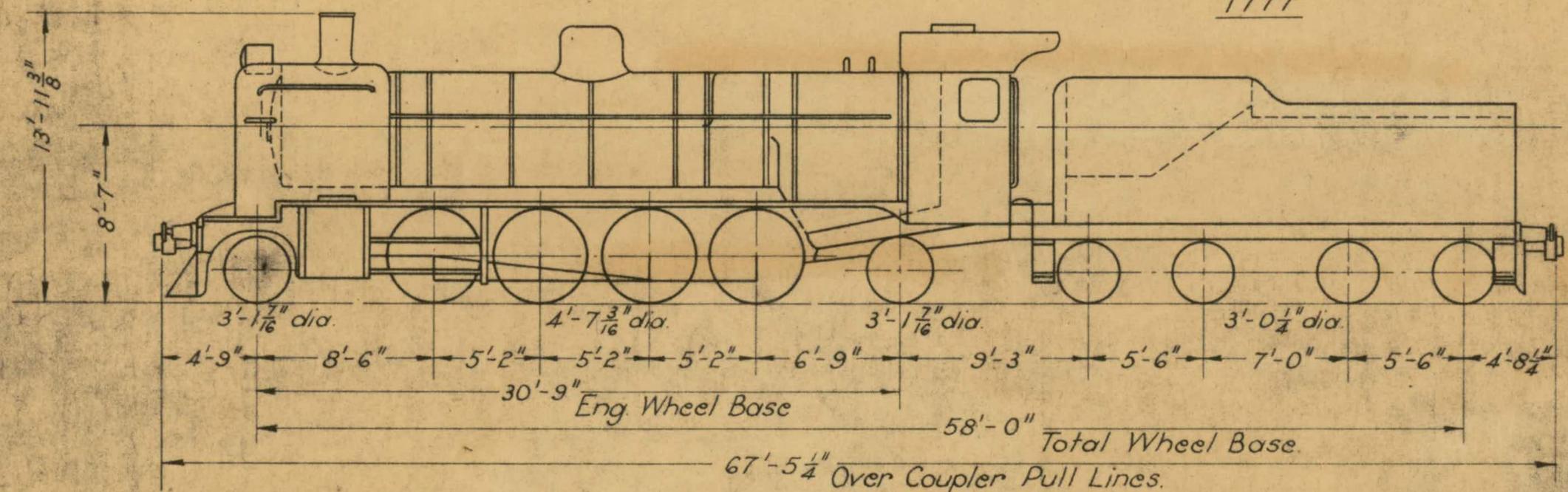
Date: 15-2-55

AGW
37478

ENGINE	VALVE GEAR	BOILER	TENDER
Cylinders (2) 20" x 26"	Walschaert	Work. Press. 185 lb. per sq. in.	Coal 6 Tons.
Tractive Effort (85%) 30,280	Piston Valves 10"	Grate Area 31 sq. ft.	Water 4700 Galls.
Factor of Adhesion 4.04	Travel $4\frac{5}{8}"$, Lap $1\frac{1}{16}"$	Heating Surface (sq. ft.)	
	Lead $\frac{1}{4}"$	Firebox & CC. 168.	
		Arch Tubes 9	
		Syphon 26	
		Tubes & Flues 1250	
		Superheater 324	
		<u>1777</u>	

Numbers of Locomotives.
450 to 499 Built by North
British Loco Co.
1949-1951
Total 40

- | | |
|-------|-------|
| 450 | 473 |
| ★ 451 | 475 |
| ★ 452 | ★ 476 |
| ★ 453 | 478 |
| ★ 454 | ★ 479 |
| 455 | ★ 480 |
| ★ 456 | 481 |
| ★ 457 | ★ 482 |
| ★ 458 | ★ 483 |
| ★ 459 | ★ 484 |
| ★ 460 | 486 |
| 462 | 487 |
| 463 | ★ 488 |
| ★ 464 | ★ 489 |
| ★ 466 | ★ 492 |
| 467 | ★ 493 |
| 468 | ★ 496 |
| ★ 469 | ★ 497 |
| ★ 470 | ★ 498 |
| 472 | ★ 499 |



★ Converted to oil burning
1951-1956.

Weight Roadworthy.	10-1-2	13-14-0	13-17-0	13-14-0	13-6-0	11-7-2	12-4-0	12-4-0	12-2-3	12-2-3
		Engine	76-0-0			T. C. Q.	Tender	48-13-2		
						Total		124-13-2		
Weight Empty		Engine	69-6-2			T. C. Q.	Tender	21-13-2		
						Total		91-0-0		

VICTORIAN RAILWAYS

LOCO CLASS **N** COAL BURNING

Date: 4-6-52

LIST OF NA LOCOMOTIVES.

16th July, 1953.

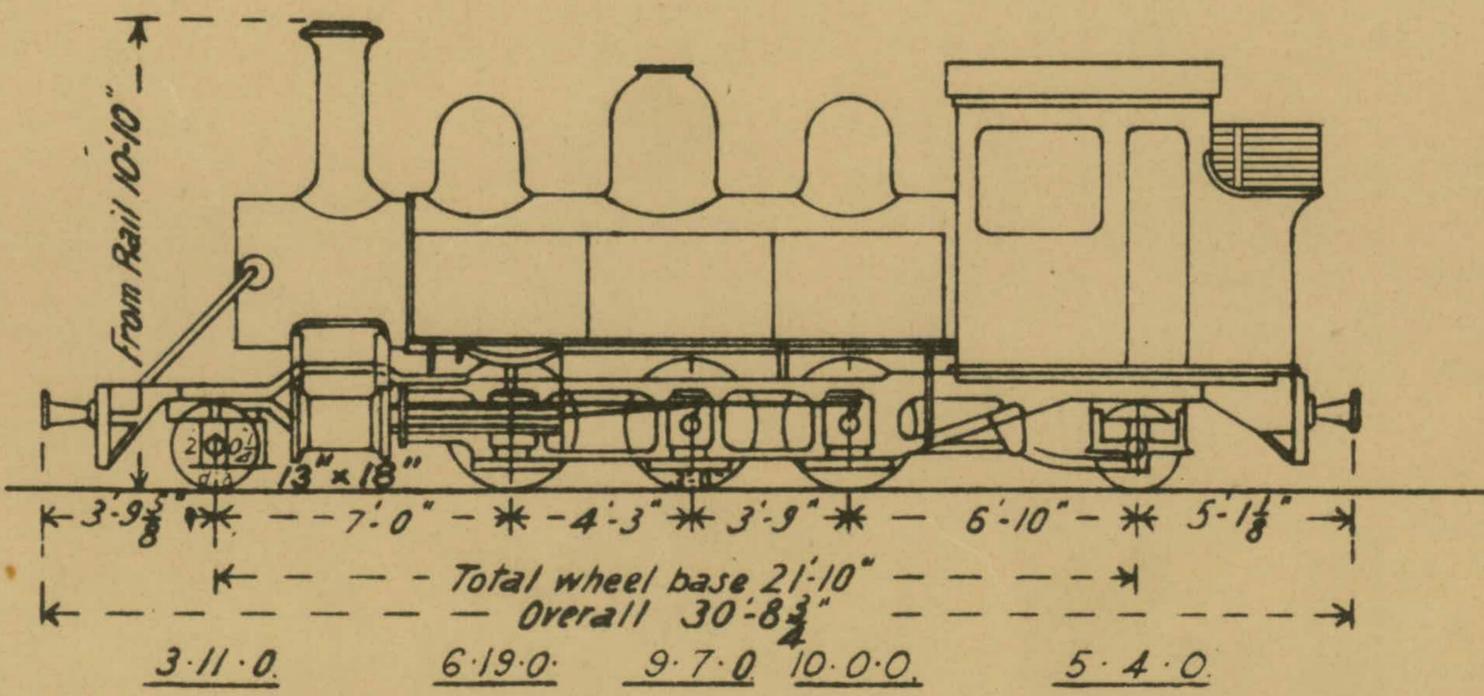
H. 31.12.64. - 4 No.

Loco. No.	Manufactured	Scrapped	Loco. No.	Manufactured	Scrapped	Locoa. No.	Manufactured	Scrapped
1	Baldwin L Works 1898							
2	" "							
3	N	<i>29/11/55 held for historical purposes.</i>						
4	N							
5	N	4.7.58						
6	N							
7	N							
8	N	28.1.55.						
9	N	15.4.54.						
10	N							
11	N							
12	N							
13	N	5-9-59						
14	N							
15	N	5.5.54.						
16	N							
17	N	2-9-53						

— **NARROW GAUGE.** —

==== **CLASS** ====

{ <u>HEATING SURFACE</u> Fire box 47.0 Tubes 477.0 Total. <u>524.0</u>	N A	{ <u>CAPACITY</u> Water..... 780 Galls. Fuel..... 40 Cwts.
	2'-6" - GAUGE Grate Area. 9.03	



Total weight (roadworthy) ^{T.C.A.} 35.1.0. ^{T.C.A.} 27.18.0. (Empty)

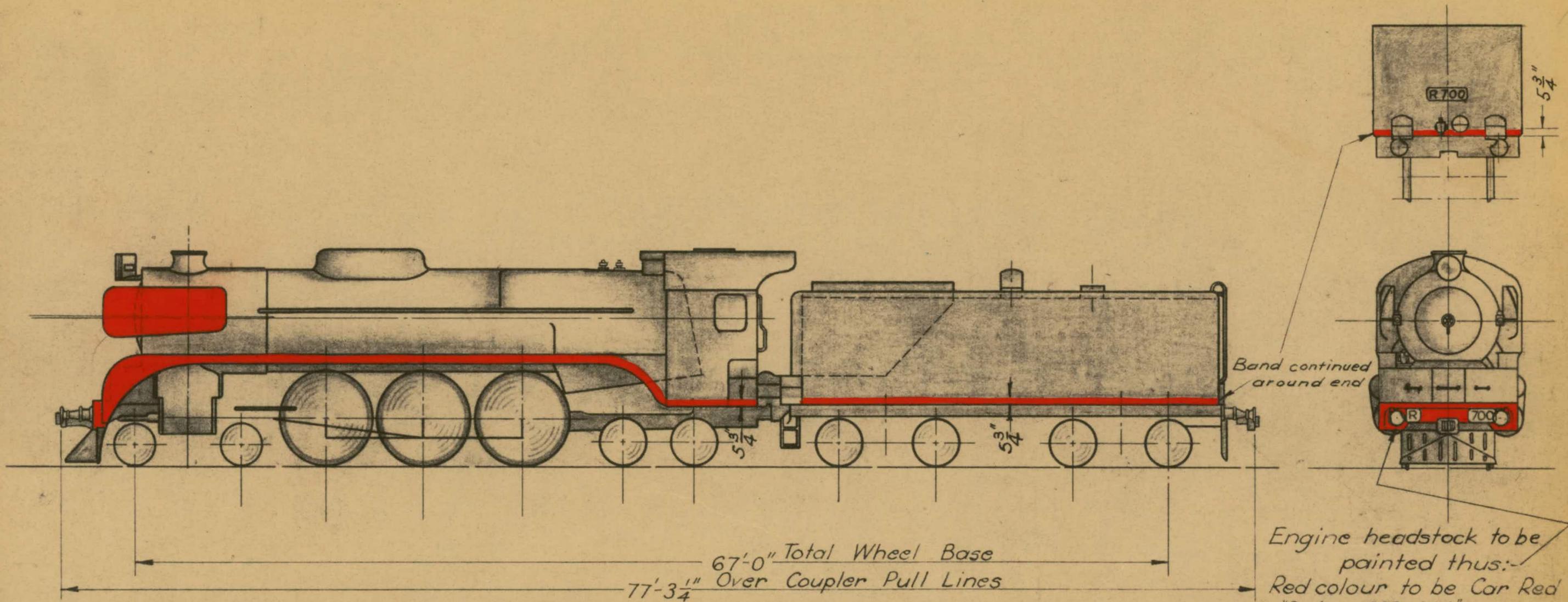
Tractive power 12,515 lbs. (180 lbs. press^{re}) (80%)

Newport Workshops. 1900-15 Nos. 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 17.

Total 12 ~~8~~ x 1/4 4

As at 15.9.62
4 No.

Date: 4-6-52



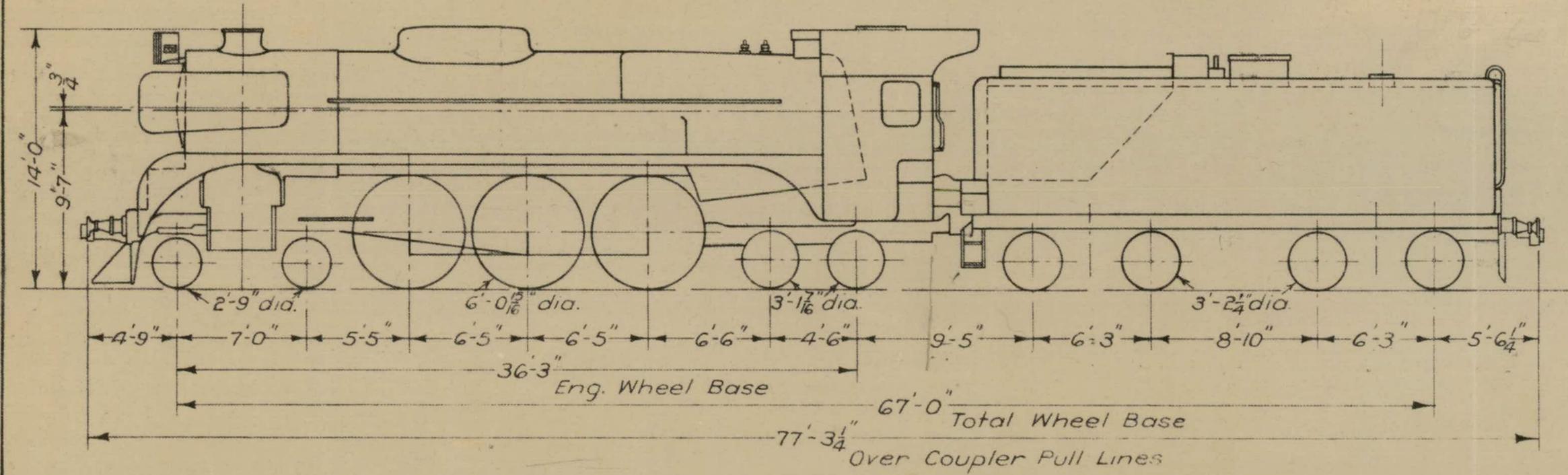
VICTORIAN RAILWAYS

LOCO CLASS **R 9845**
 PAINTING OF COLOUR BANDS
 DRAWN D.F. 18.12.50

20
58533

ENGINE	VALVE GEAR	BOILER	TENDER	Numbers of Locomotives
Cylinders (2) $21\frac{1}{2} \times 28$	Walschaert	Work. Press. 210 lb. per sq. in.	Coal 6 Tons	700 to 769
Tractive Effort (85%) 32,080	Piston Valve 11"	Grate Area 42 sq. ft.	Water 9,000 Galls	Built by North British Loco. Co.
Factor of Adhesion 4.08	Travel $6\frac{1}{2}$ " Lap $1\frac{1}{2}$ "	Heating Surface Sq. Ft.		1951-1952
	Lead $\frac{3}{16}$ "	Firebox & C.C. 221		Total 70-69-68
		Syphon 64		70. 67-65-65
		Tubes & Flues 1958		64 744
		Superheater 462		755
		2,705		702. 2/11/61

70. ~~67-65-65~~
64 744
755
702. 2/11/61
716. 4.5.62
714. 28/11/62
754. 22.3.63
732 2/4/65

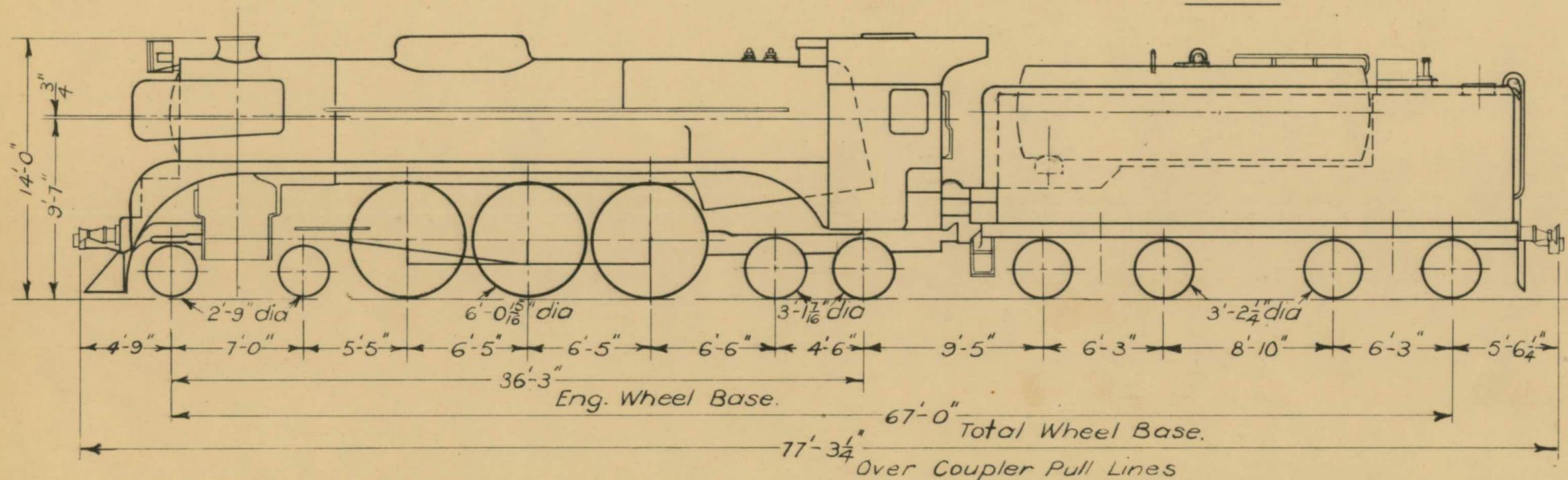


Weight Roadworthy	11-12-0	11-12-0	19-10-0	19-10-0	19-10-0	12-19-0	12-19-0	19-4-0	19-4-0	20-14-0	20-14-0
	Engine 107-12-0						Tender 79-16-0				
	T C Q						Total 187-8-0				
Weight Empty	Engine 98-9-0						Tender 33-16-0				
	T C Q						Total 132-5-0				

VICTORIAN RAILWAYS

LOCO CLASS R

ENGINE	VALVE GEAR	BOILER	TENDER	Numbers of Locomotives
Cylinders (2) $2\frac{1}{2} \times 28$ Tractive Effort (85%) 32,080 Factor of Adhesion 4.0	Walschaert Piston Valves 11" Travel $6\frac{1}{2}$ " Lap $1\frac{1}{2}$ " Lead $\frac{3}{16}$ "	Work. Press. 210 lb. per sq. in. Grate Area 42 sq. ft. Heating Surface Sq. Ft. Firebox & C.C. 221 Syphon 64 Tubes & Flues 1958 Superheater 462 <hr/> 2,705	Oil 2000 Galls Water 8000 Galls	Built by North British Loco. Co. 1952 Total 2



748
Converted to oil burning
1955
719
CONVERTED 7-6-57

Weight Roadworthy	11-14-0	11-14-0	19-1-0	19-1-0	19-1-0	13-3-0	13-3-0	18-6-2	18-6-2	21-7-0	21-7-0	
	Engine 107-17-0						T. C. Q		Tender 79-7-0		Total 187-4-0	
Weight Empty	Engine 98-14-0						T. C. Q		Tender 35-7-0		Total 134-1-0	

VICTORIAN RAILWAYS

LOCO CLASS **R** OIL BURNING

Date: 12-7-55

ENGINE

Cylinders (2) 21½" x 28"
 Tractive Effort (85%) 32,080 lb.
 Factor of Adhesion 4.08

VALVE GEAR

Walschaert
 Piston Valves 11"
 Travel 6½" Lap 1½"
 Lead ⅜"

BOILER

Work. Press. 210 lb per sq in.
 Heating Surface Sq. Ft.
 Firebox & C.C. 221
 Syphon 64
 Tubes & Flues 1,958
 Superheater 443
2,686

TENDER

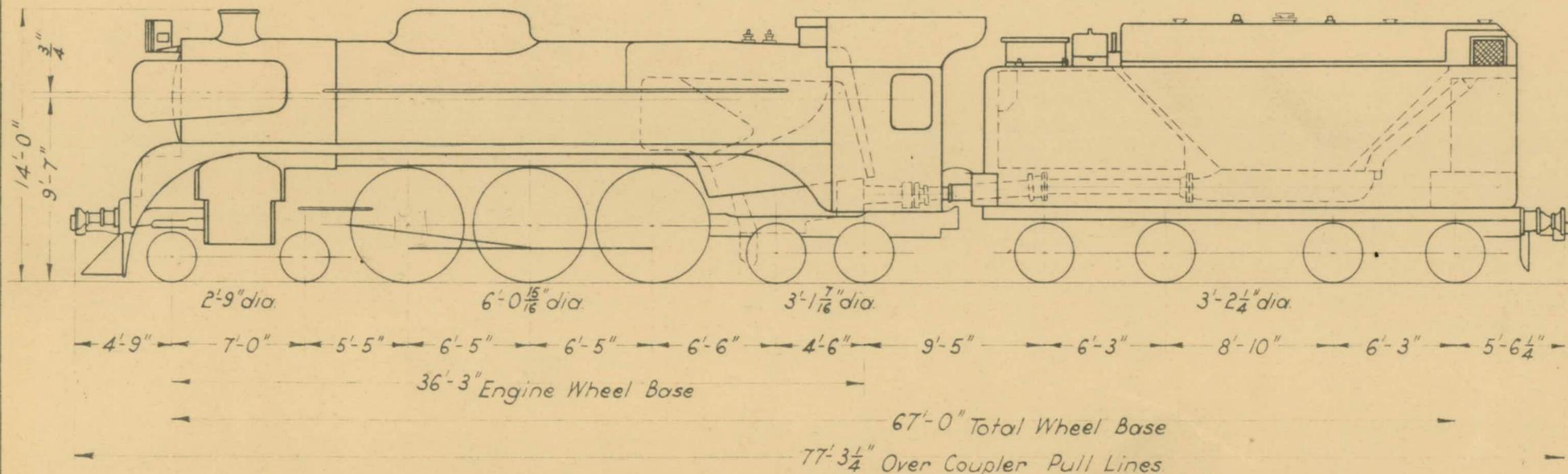
Pulv. Brown Coal { 9 Tons
 746 Cubic Ft.
 Water 6,000 Gallons

Numbers of Locomotives

≡ Built by North
 British Loco Co

Converted to Pulv Fuel
 Firing 1954

NIL.



Weight	11-12-0	11-12-0	19-10-0	19-10-0	19-10-0	11-19-0	11-19-0	18-4-0	18-4-0	19-7-0	19-7-0
Roadworthy			Engine	105-12-0		Total	T C Q 180-14-0	Tender	75-2-0		
Weight Empty			Engine	97-2-0		Total	T C Q 136-7-0	Tender	39-5-0		

VICTORIAN RAILWAYS

LOCO CLASS **R** PULVERISED FIRING STUG EQUIPMENT

Date: 24-8-54

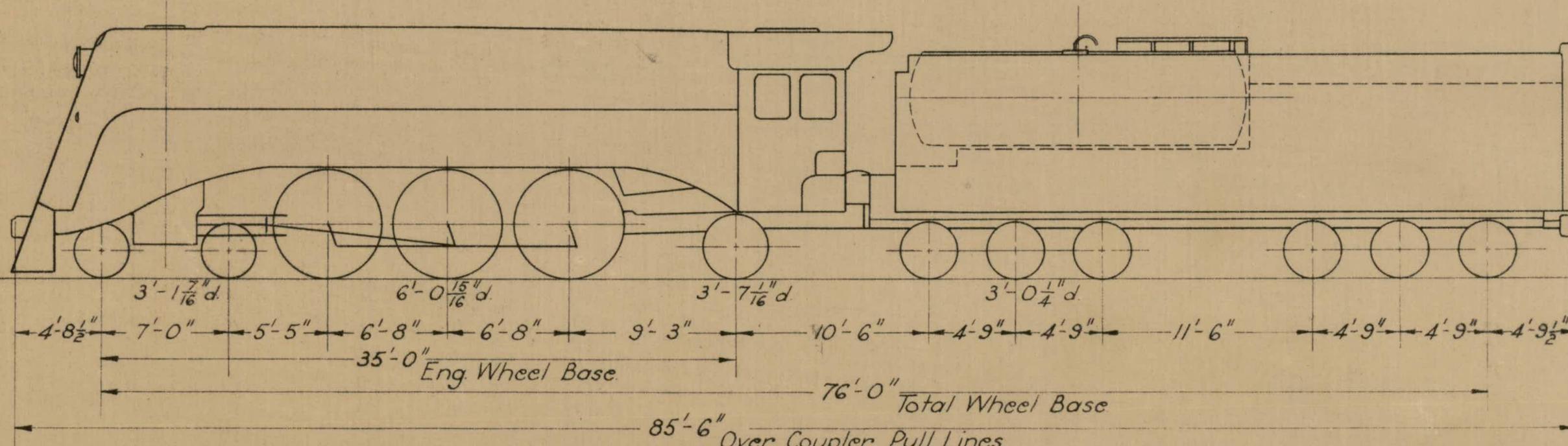
ENGINE
 Cylinders (3) $20\frac{1}{2}$ " d. x 28"
 Tractive Effort (85%) 41,670 lb.
 Factor of Adhesion 3.79

VALVE GEAR
 Walschaert
 Piston Valves
 Travel
 Lap
 Lead
 Exh. Lap.

BOILER
 Work. Press. 200 lb. per sq. in.
 Grate Area 50 sq. ft.
 Heating Surface Sq. Ft.
 Firebox & C.C. 229
 Arch Tubes 11
 Syphon 52
 Tubes & Flues. 2861
 Superheater 570
3723

TENDER
 Oil 2000 Galls.
 Water 12600 Galls.

Numbers of Locomotives
 Built at Newport Workshops
 1928 1929 1930
 300 — Matthew Flinders
 301 — ~~Sir Thomas Mitchell~~
 302 — ~~Edward Henty~~
 303 — ~~C. J. Latrobe.~~
 Converted to oil burning 1951-52
 Total ~~4~~ ~~3~~ ~~2~~ ~~1~~



Weight Roadworthy	12-0-0	12-0-0	23-10-0	23-10-0	23-10-0	20-0-0	17-10-0	17-10-0	17-10-0	18-19-0	18-19-0	18-19-0
			Engine	114-10-0						Tender	109-7-0	
						Total	223-17-0					
Weight Empty			Engine	102-5-0						Tender	44-13-0	
						Total	146-18-0					

VICTORIAN RAILWAYS
 LOCO CLASS **S** OIL BURNING

Date: 4-6-52

GENERAL

Tractive Effort Starting 63800 lb.
 Tractive Effort Continuous 53,500 lb.
 Speed Continuous 9.5 m.p.h.
 Speed Maximum 83 m.p.h.

ENGINE

Type G.M. Diesel 16-567C Two Stroke.
 Rated H.P. 1800.
 Cylinders (16) 8½" bore x 10" stroke.
 Speed 275 to 835 r.p.m.

ADHESION

25% of Nominal Static Weight.

ELECTRICAL MACHINES

Main Generator type E.M.D. D-12
 Continuous Rating 2200 Amps.

Auxiliary Generator type E.M.D. A-7519
 Constant Voltage 74v 10kw.

Traction Motors (6) type E.M.D. D37.
 Gear Ratio 59/18.

CAPACITIES

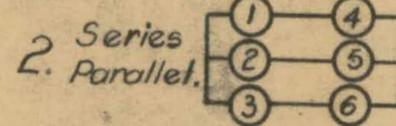
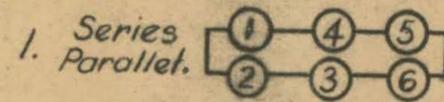
Fuel Oil 1500 galls.
 Lubricating Oil 165 "
 Cooling Water 175 "

BATTERIES

64 Volts 385 A.H. @ 5 hr. rate.

Built by Clyde Engineering Co. Pty. Ltd.
 1957-58 Nos. 300 to 309.

MOTOR GROUPS.



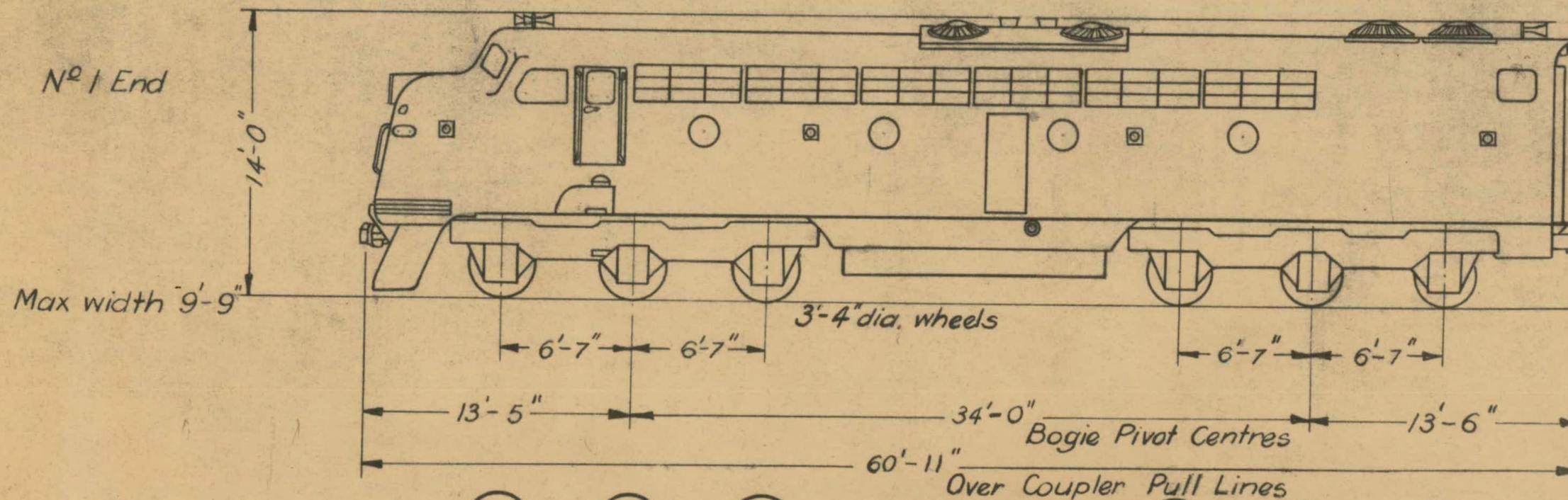
Field Shunting

3. 46%
 4. 74%

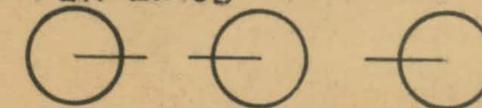
Number Name

300	Mathew Flinders.
301	Sir Thomas Mitchell.
302	Edward Henty.
303	G.J. Latrobe.
304	George Bass.
305	Hamilton Hume.
306	John Batman.
307	John Pascoe Fawkner.
308	Sir Redmond Barry.
309	William Lonsdale.

Total 10



Motor Arrangement



Nominal static weights

1 19-0-0
 2 19-0-0
 3 19-0-0

4 19-0-0
 5 19-0-0
 6 19-0-0

Total Weight T. C. Q.
 114-0-0

VICTORIAN RAILWAYS

LOCO. CLASS **S** MAIN LINE DIESEL ELECTRIC

Date 5-9-57

GENERAL.

Tractive Effort Starting 38,080 lb
 Tractive Effort Continuous 33,880 lb
 Speed Continuous 7½ m.p.h.
 Speed Maximum 62 m.p.h.

ENGINE.

Type G.M. Diesel Model 567 CR.
 Rated H.P. 950.
 Cylinders (8) 8½" bore x 10" stroke.
 Speed 275 to 835 r.p.m.

ADHESION.

Traction 25% Normal Static Load = 17-0-0 T. C. Q.

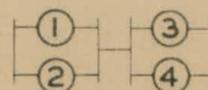
ELECTRICAL MACHINES.

Main Generator type E.M.D. D-15
 Continuous Rating 1500 Amps.

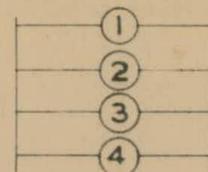
Auxiliary Generator type Delco Model A7159.
 Constant Voltage 75 v. 10 Kw.
 Traction Motors (4) type E.M.D. D-29.
 Gear Ratio 63/14

MOTOR GROUPS.

1. Series - Parallel



2. Parallel



3. Parallel with Fields Shunted.

CAPACITIES.

Fuel Oil 750 galls. imp.
 Luricating Oil 108 galls. imp.
 Cooling Water 150 galls. imp.

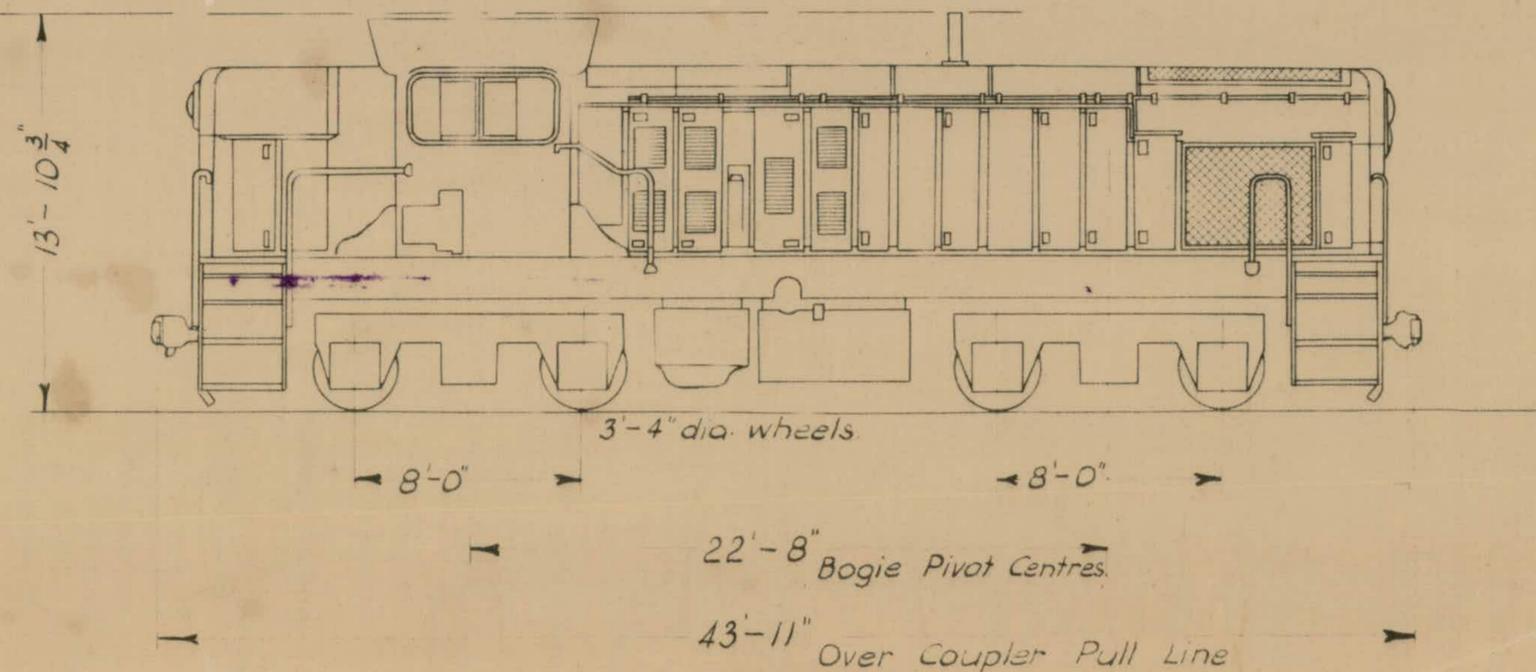
BATTERIES.

64 Volts, 284 A.H.

Numbers of Locomotives
 Built by Clyde Engineering Co. Pty. Ltd
 1959 Nos 347 to 356

Total 10.

No 1. END.



No 2 END.

Max. width, 9'-5"

Motor Arrangement.

Nominal Static Weights.



T. C. Q.
 Total Weight 68-0-0

VICTORIAN RAILWAYS
 LOCO T GENERAL PURPOSE
 CLASS T DIESEL ELECTRIC
 DATE:- 14-7-59

LOCOMOTIVES

Undermentioned locomotives placed in running on the dates shown.

T/	376	(Diesel-electric)		9-7-64
T	377	"	"	31-1-64
T	378	"	"	12-8-64
T	379	"	"	26-8-64
T	380	"	"	9.9.64
T	381	"	"	24.9.64
T	382	"	"	5.10.64
T	383	"	"	16.10.64.

GENERAL.

Tractive Effort Starting 38,080 lb.
 Tractive Effort Continuous 28,000 lb.
 Speed Continuous 9½ mph.
 Speed Maximum 62 mph.

ENGINE.

Type GM. Diesel Model 567C
 Rated HP 950
 Cylinders (8) 8½" bore x 10" stroke
 Speed 275 to 835 r.p.m.

ADHESION.

Traction 25% Normal Static Load = $\overset{T}{17}-\overset{C}{0}-\overset{R}{0}$

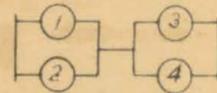
ELECTRICAL MACHINES.

Main Generator type EMD D-15
 Continuous Rating 1500 Amps

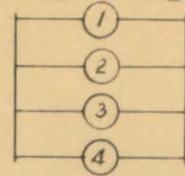
Auxiliary Generator type Delco Model A7159
 Constant Voltage 75 v 10 Kw
 Traction Motors (4) type EMD D-19
 Gear Ratio 63/14

MOTOR GROUPS.

1. Series - Parallel



2. Parallel



CAPACITIES.

Fuel Oil 750 galls. imp.
 Lubricating Oil 108 galls. imp.
 Cooling Water 180 galls. imp.

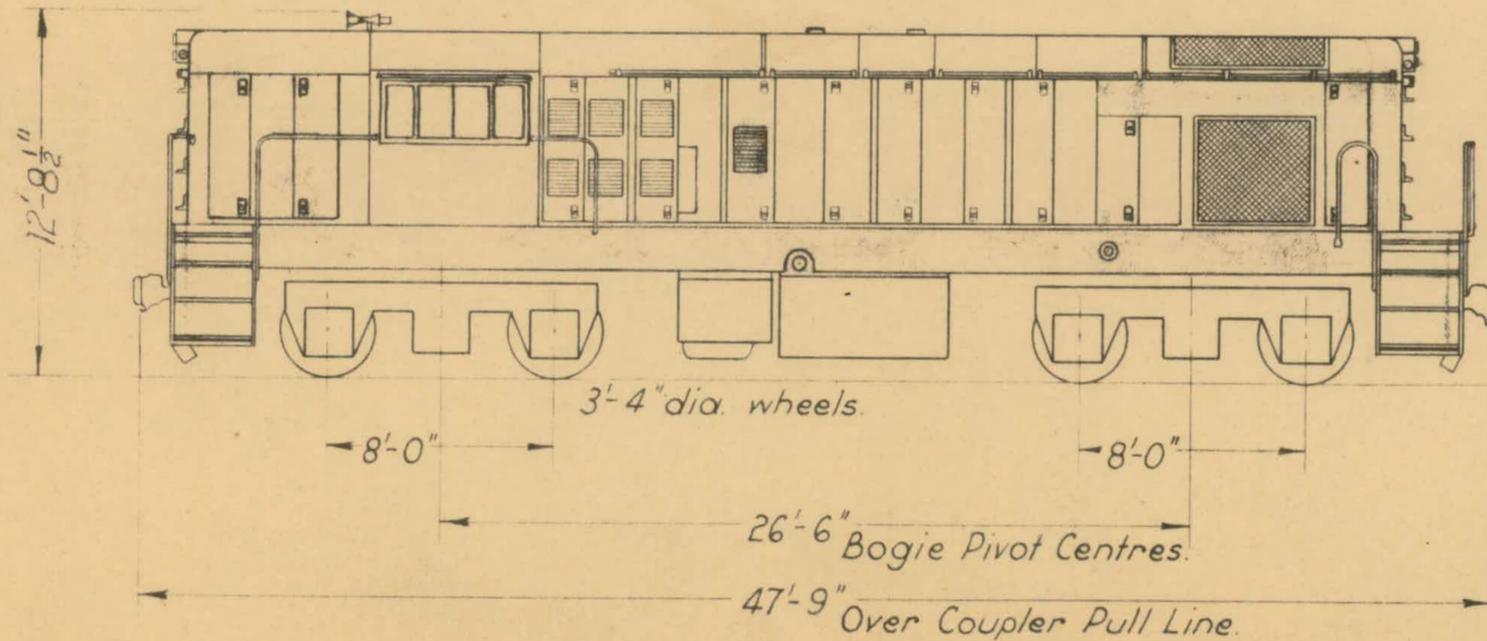
BATTERIES.

64 Volts, 284 A.H.

Numbers of Locomotives
 Built by Clyde Engineering Co. Pty. Ltd.
 1955 Nos 320 to 346

Total 27.

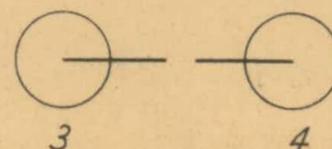
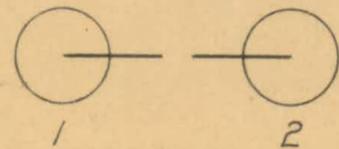
Nº1 End



Nº2 End

Max. width, 9'-5"

Motor Arrangement



Nominal Static Weights

Total Weight $\overset{T}{68}-\overset{C}{0}-\overset{R}{0}$

VICTORIAN RAILWAYS
 LOCO. CLASS T GENERAL PURPOSE
 DIESEL ELECTRIC

Date: 14-6-55

GENERAL

Tractive effort 10,850 lb. max
 Adhesion 23%
 Max speed { 10 m.p.h (high speed range)
 { 1 1/2 " (low " ")
 Battery 12 volt
 Brakes Handbrake only

ENGINE

FORDSON "MAJOR" diesel
 Rated horsepower 40
 Max engine r.p.m. 1,600

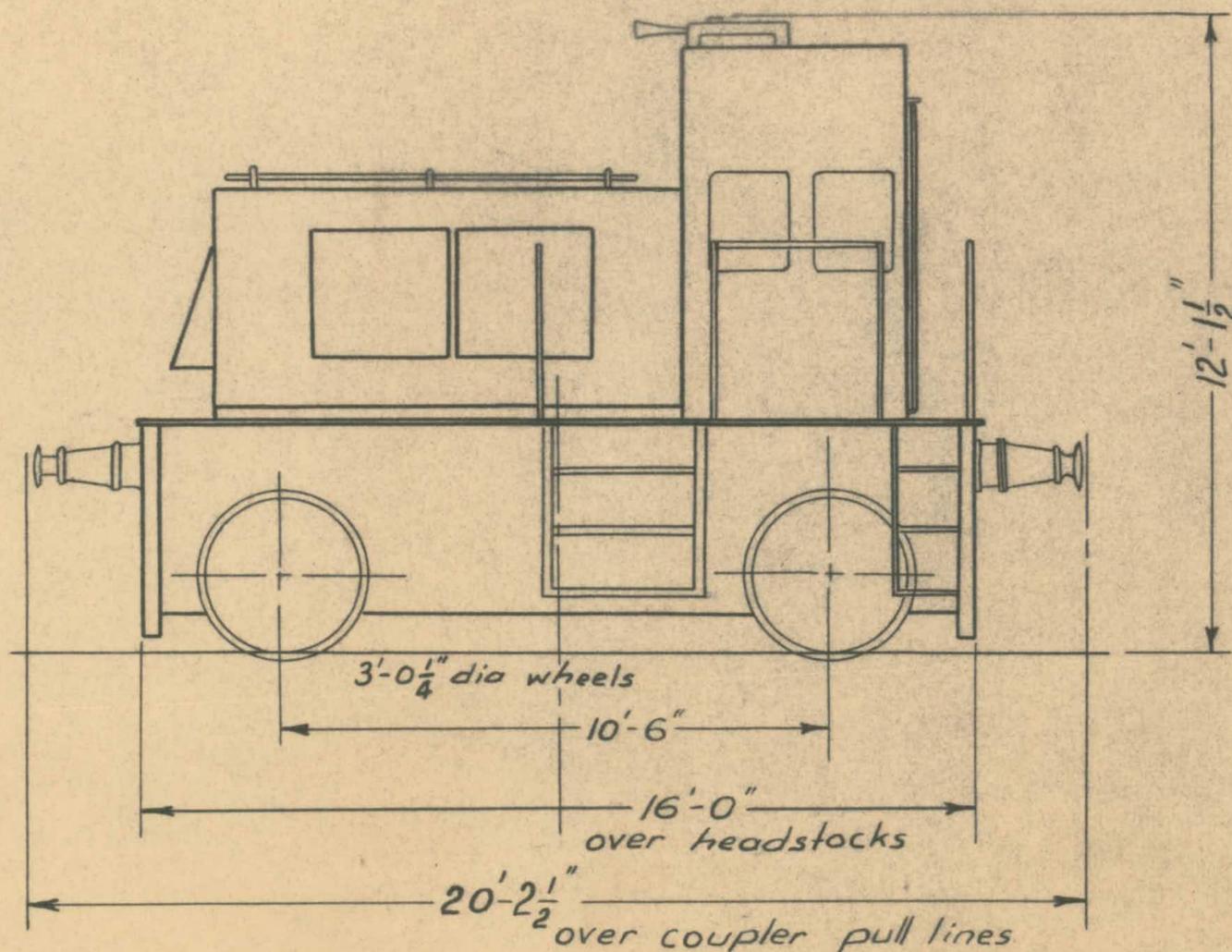
CAPACITIES

Fuel 15 gals
 Lub. oil 1 1/2 "
 Trans. oil 40 "
 Cooling water 3 1/2 "

TRANSMISSION

1 Hydraulic pump, RAYMOND 4^A duplex
 4 Hydraulic motors RAYMOND 8 P.M.
 Chains from motors to axles

Width over shunters' steps = 9'-5"



Built at Newport Workshops 1959
 Nos 56
 Into service

Weight roadworthy	T	C		
	10	5		
total			T	C
			21	3

	T	C
	10	18

	T	C
	21	3

VICTORIAN RAILWAYS
 Loco. ✓ CAR
 Class. ✓ SHUNTER
 Date. 20-11-59

ENGINE

Mercedes-Benz, 12 cylinder, 4 cycle,
naturally aspirated diesel
Model MB 820B, 660 HP.

Transmission — Krupp hydraulic
Model 2W1D 46

Cooling — Behr automatic hydrostatic system

Width over footplates
9'-7"

No 1. End

Brake Percentage

Air 62%

3-3

1-7 1/2

Roadworthy Weight
Total

CAPACITIES

Fuel Oil — 720 Gal.
Lubricating Oil — 23 Gal.
Cooling Water — 93 Gal.
Transmission Oil — 48 Gal.

GENERAL

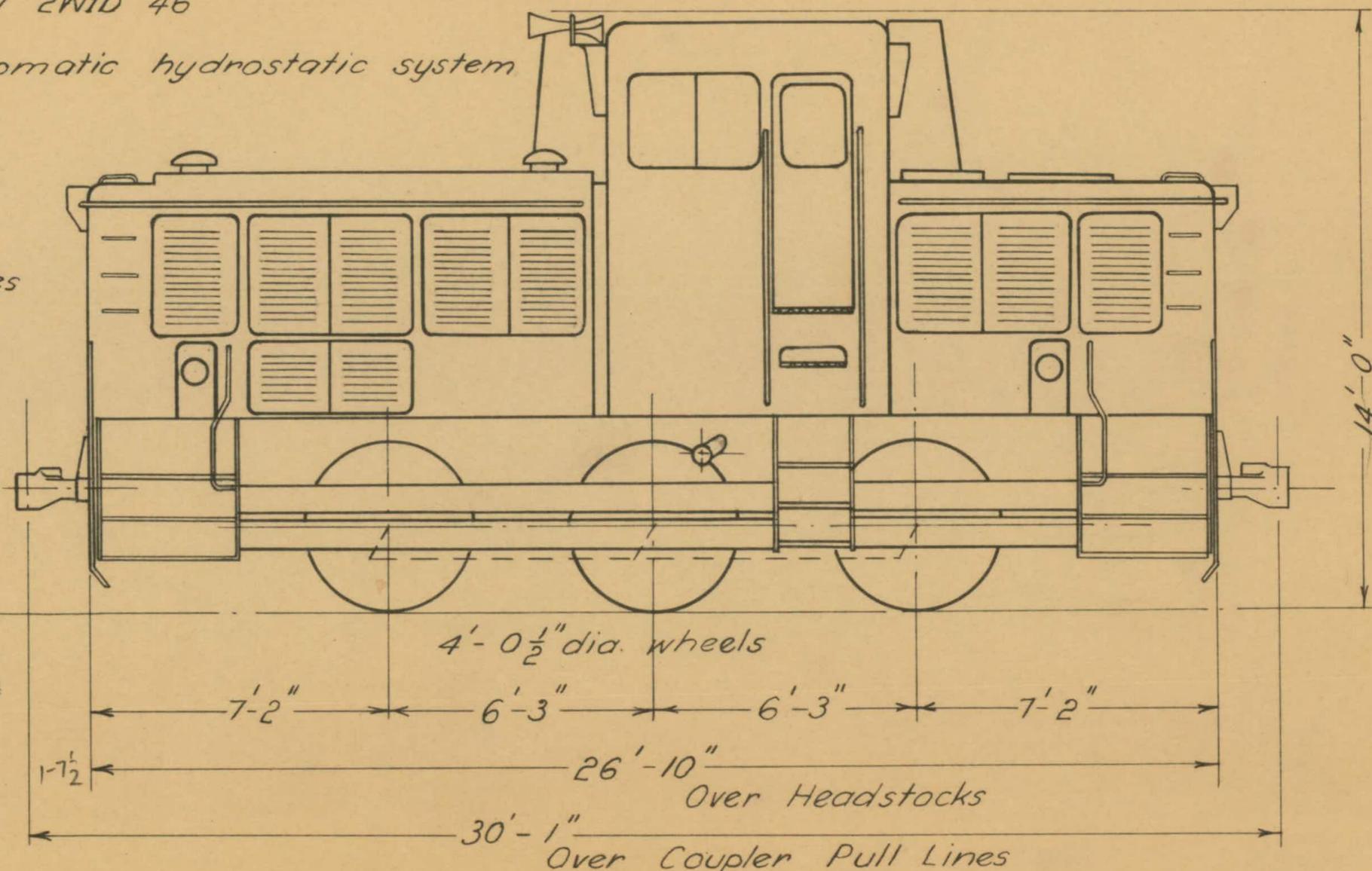
Tractive Effort, Starting 27,000 lb.
Factor of Adhesion 25 %
Maximum Speed (TOWING) 40 m.p.h.
(POWERING) 25 "

BATTERIES

32 Volt 305 Amp.Hr.

Built by
Tulloch Ltd. 1959-60
Nos. 241 to 265
Total 25

No 2 End



4'-0 1/2" dia. wheels

7'-2" 6'-3" 6'-3" 7'-2"

26'-10" Over Headstocks

30'-1" Over Coupler Pull Lines

14'-0"

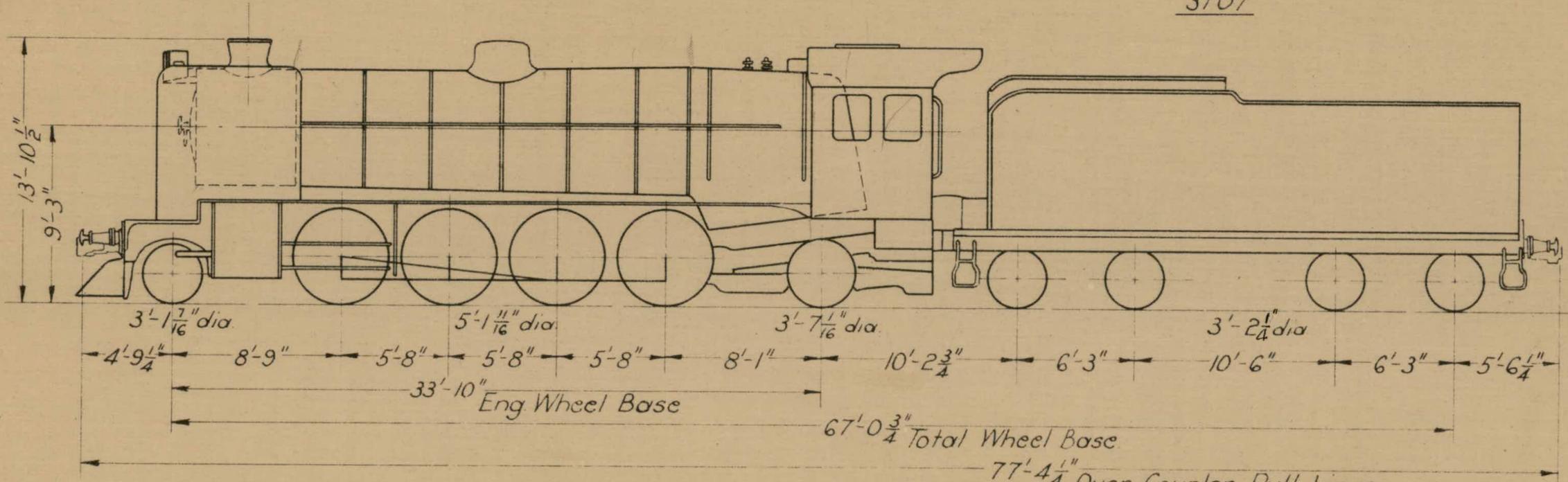
VICTORIAN RAILWAYS

LOCO. CLASS W DIESEL HYDRAULIC SHUNTER

16 T. 16 T. 16 T.
48 T.

ENGINE	VALVE GEAR	BOILER	TENDER
Cylinders (2)	22" d x 28" Walschaert	Work. Press. 205 lb. per sq. in.	Coal 9 Tons
Tractive Effort (85%)	39,360 lb	Grate Area. 42 sq. ft.	Water 8600 Galls.
Tractive Effort with booster	48,360 "	Heating Surface Sq Ft	
Factor of Adhesion	4.28	Firebox & C.C. 199	
Factor of Adhesion with booster	4.40	Syphon 52	
		Tubes & Flues 2364	
		Superheater 492	
		<u>3107</u>	

Numbers of Locomotives
Built at Newport Workshops



- 27 in 1929 4.3.59
- 28 " " 27-7-59
- 29 " " 6.2.61
- 30 " " "
- 31 SCRAPPED 19.12.58. NPT.
- 33 " " 13-7-59
- 34 " " "
- 35 " " 29.10.58
- 36 " "(Without booster)
- 37 SCRAPPED. 16.8.57.
- 38 " 1937 (SC) 13.6.60.
- 39 " 1938
- 40 " "
- 41 " 11/58
- 42 " "
- 43 SCRAPPED. 12.4.57.
- 44 " " Without Booster 19-2-59
- 45 " " WN 28/1954 20-7-59
- 46 " 1942
- 47 " "
- 48 " " 23.1.59
- 49 " 1943 24-4-59
- 50 " " Without Booster
- 51 scrapped 26-6-59
- 52 " 16.4.59
- 53 SCRAPPED. 11.10.57.
- 54 " 7-8-59
- 55 " 5-12-58
- 56 " "

Weight	9-7-0	18-14-0	17-18-0	18-17-0	19-1-0	19-2-0	20-6-0	20-6-0	20-18-0	20-18-0
Roadworthy		Engine 102-19-0				T C Q		Tender 82-8-0		
					Total	185-7-0				

Weight Empty		Engine 93-6-0				T C Q		Tender 35-0-0		
					Total	128-6-0				

WITHOUT BOOSTER

Weight	9-4-0	18-12-0	17-16-0	18-15-0	17-14-0	16-13-0
Roadworthy		Engine 98-14-0				T C Q
					Total	181-2-0
						Tender 82-8-0

Weight Empty		Engine 89-1-0				T C Q		Tender 35-0-0		
					Total	124-1-0				

Total 28 21 X 25
17 14 4 23 24
16 18 3 22 21
11 8 6

VICTORIAN RAILWAYS

LOCO CLASS X

Date: 4-6-52

ENGINE

VALVE GEAR

BOILER

TENDER

Numbers of Locomotives

Cylinders (2) 22" d x 28"
 Tractive Effort (85%) 39,360 lb.
 Tractive Effort with booster 48,360 "
 Factor of Adhesion 4.28
 Factor of Adhesion with booster 4.40

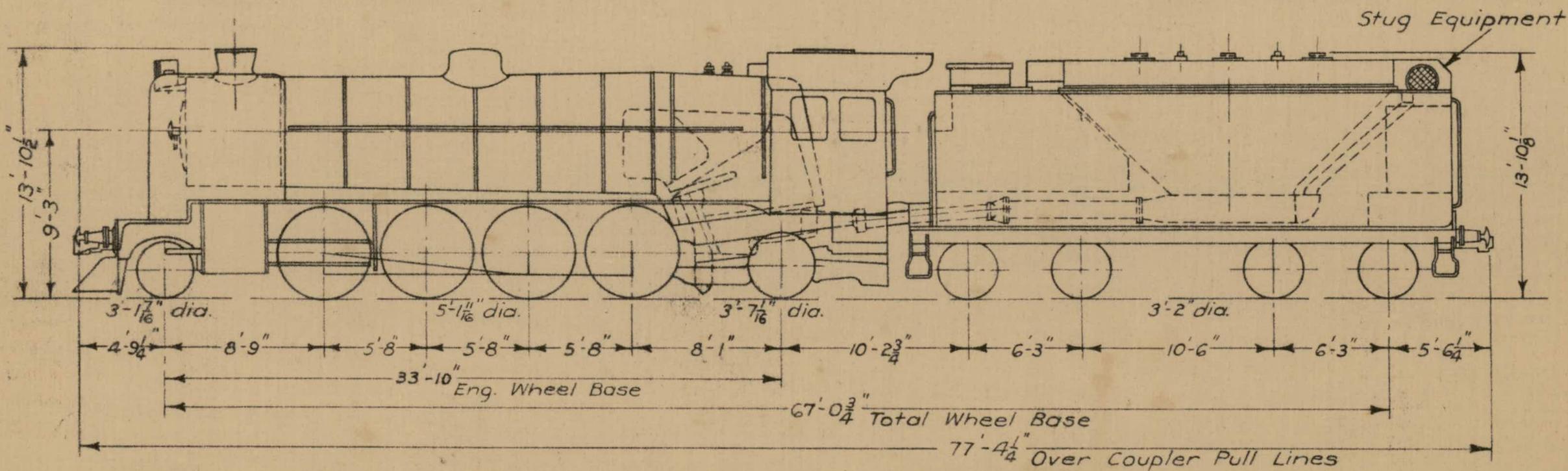
Walschaert
 Piston Valves 10" dia.
 Travel 4 5/8" Lap 1/16"
 Lead 4/4"

Work. Press. 205 lb. per sq. in
 Heating Surface Sq. Ft.
 Firebox & C.C. 199
 Syphon 52
 Tubes & Flues 2364
 Superheater 492

Pulv. Brown Coal 10-4-0
 766.5 c. ft.
 Water 6600 Galls

32 Built at Newport W'shops
 1929
 Converted to Pulv. Fuel Firing
 1950

No. 32. **SCRAPPED.** 2. 8. 57.
 NEWPORT.



Weight Roadworthy	9-8-0	18-10-0	17-15-0	18-15-0	19-6-0	19-6-0	19-13-2	19-13-2	21-6-0	21-6-0
		Engine 103-0-0				T. C. Q	Tender 81-19-0			
		Total				184-19-0				
Weight Empty		Engine 93-7-0				T. C. Q	Tender 42-5-0			
		Total				135-12-0				

No.

VICTORIAN RAILWAYS

LOCO CLASS X PULVERISED FUEL FIRING
 CLASS X STUG EQUIPMENT

Date: 4-6-52

GENERAL

Tractive Effort Starting. 35,800 lb.
 Tractive Effort Continuous. 12,000 lb.
 Speed Continuous. 15 m.p.h.
 Speed Maximum. 40 m.p.h.

ENGINE

Type G.M. Diesel 6/567c. Two Stroke.
 Rated H.P. 650
 Cylinders (6) 8½" bore x 10" stroke.
 Speed 275 to 800 r.p.m.

ADHESION

Traction 25% Normal Static Load.
 $\frac{T}{C.G.} = 16-0-0.$

ELECTRICAL MACHINES

Main Generator type E.M.D. D-25C
 Continuous rating 1280 Amps.
 Auxiliary Generator type Delco Model A7159-A4
 Constant Voltage 75 V. 10 K.W.
 Traction Motors (4) Type G.E. 237
 with H class insulation of fields.
 Gear Ratio 74/23 - No. 101 to 118
 80/17 - No. 119 to 123
 79/18 - No. 124 & 125

MOTOR GROUPS

1. Parallel.
2. Parallel with 50% field shunt.

CAPACITIES

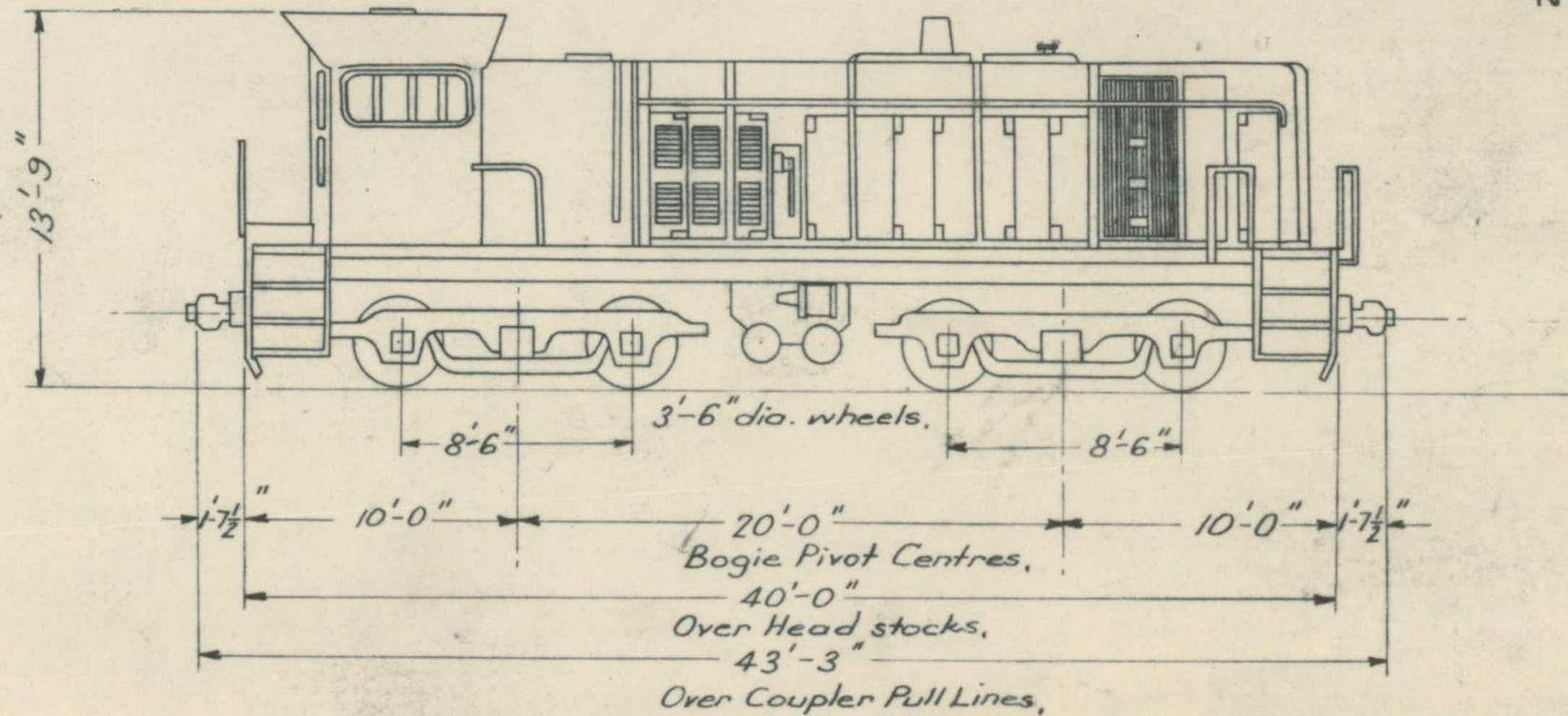
Fuel Oil. 1000 gal. imp.
 Lubricating Oil. 103 gal. imp.
 Cooling Water. 130 gal. imp.

BATTERIES

64 Volts, 300 A.H. at 5 Hr. Rate.
 Numbers of Locomotives
 Built by Clyde Engineering Co. Pty. Ltd.
 1963 No. 101 to 120
 1964 No. 121 to 125
 Total 25.

No. 124 & 125 - 4'-8½" Gauge.

No. 1 End.



No. 2 End.

Max. width 9'-6"

Bogies supplied by V.R.
 Reconditioned cast steel bogies Drg. Y 10650 from M cars.

T. C. G.
 Total Weight 64-0-0

Motor Arrangement.
 Nominal Static Weights.

VICTORIAN RAILWAYS
 LOCO. CLASS **Y** GENERAL PURPOSE & SHUNTING DIESEL ELECTRIC

DATE: 5-9-63