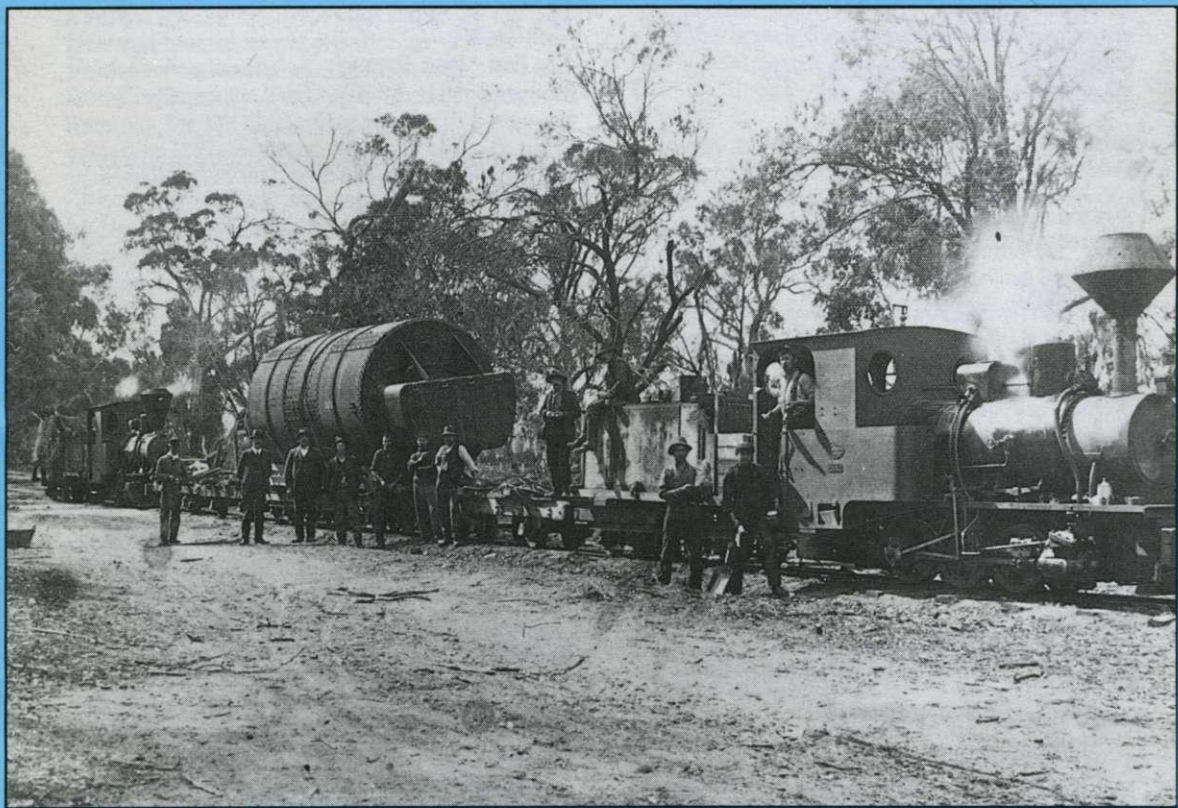


GOODWOOD

**A History of the Goodwood Timber and
Tramway Company, Port Albert, Victoria**

By Mike McCarthy



Light Railway Research Society of Australia Inc.



**Light Railway Research Society
of Australia Inc.**

PO Box 21, Surrey Hills Vic 3127

COUNCIL

President: Bill Hanks (059) 44 3839

Secretary: Jack Stock (03) 888 7346

New South Wales Division

Address: 18 Rodney Avenue, Beecroft
NSW 2119

President: Jeff Moonie (047) 53 6302

Secretary: Craig Wilson (02) 484 7984

Meetings

Melbourne: Second Thursday, every second month at 8.00 pm, Uniting Church Hall, Ashburn Grove, Ashburton.

Sydney: Fourth Wednesday, every second month, Woodstock Community Centre, Church Street, Burwood at 7.30 pm

Adelaide: Fourth Thursday, every second month at 8.00 pm, 150 First Avenue, Royston Park. Contact A Lockyer (08) 296 9488 for details.

Subscriptions: \$31.50 per year covering 4 issues Light Railways, 6 issues Light Railway News and information on Society activities, publications etc. Airmail rates on application. To Membership Officer, PO Box 21, Surrey Hills VIC 3127. Back numbers Light Railways and other publications from LRRSA Sales, 21 Temple Road, Belgrave South Vic 3160.

Light Railways Editor: Norm Houghton, PO Box 1128, Geelong 3220. Phone (052) 21 7007 or (Home) (052) 29 4805. Articles, photographs and letters welcome.

Cover Photo: *Mona*, the second Krauss locomotive, hauling the new boiler to the mill in April 1912 with the Orenstein and Koppel, *Lila*, helping at the rear. The narrow cuttings and overhanging trees must have made this particular journey quite hazardous.

Photo: E.G. Stuckey Collection

No. 124 Vol. XXXI

APRIL

1994

ISSN 0 727 8101

PP 342588/00002

Australia Post Publication No. VBQ 1339

CONTENTS

Introduction.....	3
Construction.....	6
The Port Albert Tramway.....	7
Operating the Port Albert Line.....	9
The Mill.....	10
Logging.....	12
Accidents.....	14
Conflict.....	17
The Locomotives.....	21
Rolling Stock.....	25
The Township.....	25
Management.....	26
Closure.....	27
Today.....	29

EDITORIAL

This is a special issue of *Light Railways* devoted to the remarkable enterprise known as the Goodwood Timber & Tramway Company based at Port Albert.

The author, Mike McCarthy, is an experienced researcher and writer in the field of regional sawmilling histories and presents this account based on archival research, site surveys and interviews with knowledgeable participants and local residents.

Whilst every effort is made to ensure the accuracy of articles published in *Light Railways* errors may creep in. Additional information is being discovered all the time, and this sometimes contradicts previous information.

If you see any errors, or can add information, please contact the editor and so help us to record the full history of Australia's light railways.

Articles and news items are always welcome and should be forwarded direct to the editor.

Norm Houghton

GOODWOOD TIMBER AND TRAMWAY COMPANY

by M. J. McCarthy

INTRODUCTION

Situated approximately 250 km east of Melbourne, the township of Port Albert had already passed its prime at the turn of the century. It owed its existence to early coastal shipping that serviced the inland before the completion of the Gippsland and Great Southern Railways superseded this form of transport late in the nineteenth century.

Prior to the arrival of rail the only land route to the capital was over the Sale Road, not much more than a bush track cut through virgin forest. So the port grew and became an important centre of trade from which overland tracks radiated to the west, north and east. Consequently, Port Albert was chosen as the terminus for the Great Southern Railway which opened in 1892. However, the irony of the decision soon surfaced in that, with the construction of the railway, goods and produce travelled west to Melbourne along this new life-line and almost overnight Port Albert lost its claim to importance. It subsequently became the centre of a small fishing industry.

Within a short time the district as a whole underwent a metamorphosis which saw a dramatic change in its reason for being. The businesses built around the Port as a district centre and a destination point for trade disappeared to be replaced by new industries in beef cattle, dairying and, notably, sawmilling.

The extraction of timber from the hinterland forests beyond Port Albert predated the railway but was generally limited to that required to meet local needs. Although species suitable for hardwood sawmilling, such as Messmate and Grey Box, were to be found in reasonable quantities¹ the dominant species, Yellow Stringybark, was not considered suitable for building construction purposes. Furthermore, the prohibitive cost of transport to Melbourne prevented effective exploitation. This was the situation until James Mason of Hodgkinson proved the worth of Yellow Stringybark for wharf construction and for other uses where strength and durability, particularly in damp conditions, were required.² He changed the perception that Yellow Stringybark was prone to attack from worms and termites and could show that it was less susceptible to damage from these sources than most other species. Essentially, Mason established Yellow Stringybark as an alternative to Western Australian Karri, Ironbark from New South Wales and, in some appli-

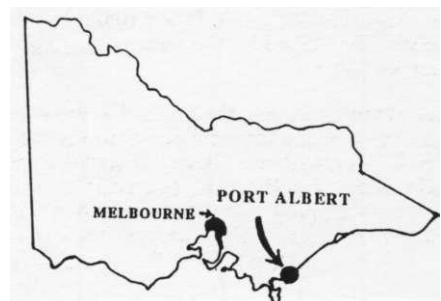
cations, Victorian Red Gum. From that time, until around 1890 when the demand for wharf timber declined, large quantities of the timber were despatched from Port Welshpool, 18 km west of Port Albert.³

The Victorian Railways also became aware of Yellow Stringybark as a valuable material for bridge construction and sleepers. When the railway opened to Port Albert it wasn't long before mills were in operation sending thousands of sleepers as well as construction timber through Alberton and later, when the branch line opened, through Yarram. In March 1908 there were 27,000 sleepers at Alberton Railway Station with 20-30,000 more, ready for delivery.⁴

Among the early sawmillers involved with this trade were the Anderson brothers with their 'North Devon Sawmills', and R.A. Piera with his 'Cosmopolitan Sawmills' near Wron Wron. At nearby West Alberton T.H. Best operated his 'West Alberton Sawmill', and the 'Mullundung Sawmills' at Woodside were owned by the redoubtable G.W. 'Billy' Knott.⁵

Knott was of particular interest in that, having established his mill, he proposed, in April 1907, to construct a broad gauge tramway to Alberton, through Yarram, to carry his timber to market.⁶ He went as far as having the route surveyed and paid the Victorian Railways Department a deposit for the supply of 60 pound per yard rails. But he met his match in an intransigent Alberton Shire Council which would not allow the tramway to run through Yarram.⁷

Forced to abandon his plans Knott lost his deposit to the Railways Department.⁸ He then shifted to Heyfield early in 1909 having first relocated his plant to Boodyarn for a short time early in that year.

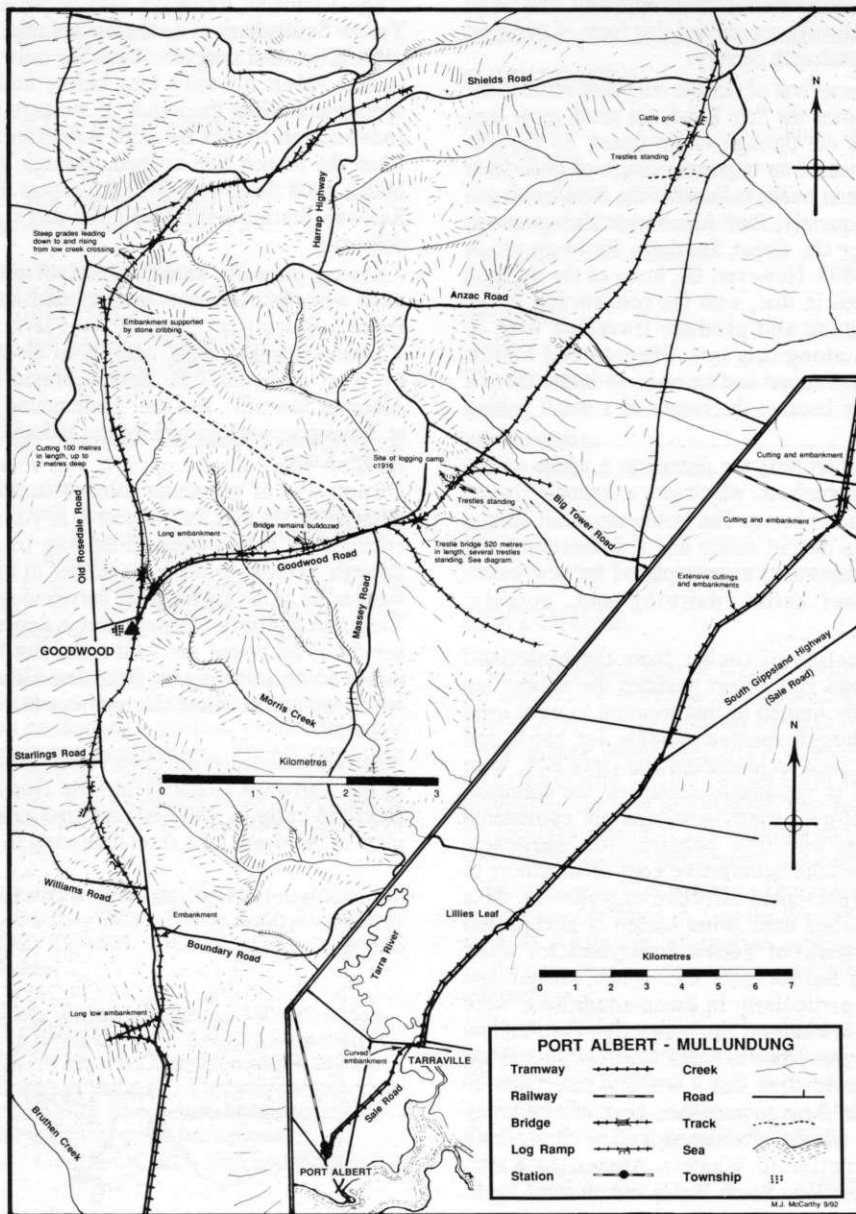


The sawmilling industry in this part of the State was then very much in its infancy. However, the underlying opinion, fuelled by Mason's experience in the 1880's and the enthusiasm of prominent sawmillers such as Knott, was that it had great potential. But it needed a strong will, drive and, more than anything else, a lot of money to help it to grow. Although no-one could have known then, even before the closure of Knott's mill in 1909, the

seed had been sown to bring these necessary elements together.

Goodwood Timber and Tramway Company

In 1903 I. Hetherington arrived at Yarram to take up his appointment as District Forest Officer for the State Forests Branch. His inspection of the region revealed the dominance of Yellow Stringbark in the Mullundung Forest, 32 km east of Yarram, which,



despite being over matured, was considered excellent for beams and bridge timber. In an official sense little came of Hetherington's favourable reports although it may have been through his efforts that Billy Knott took the interest that he did. However, the potential of the forest made a lasting impression on Hetherington.⁹

By 1908 he had left the government service and had opened his own timber yard in Yarram¹⁰ but soon departed this concern to investigate opportunities in Western Australia. He tried his luck in Kalgoorlie and found employment as a tramlayer with the Kalgoorlie and Boulder Firewood Company.

A director of the Company was John Coughlan. Through casual conversation Coughlan became aware of Hetherington's background and favourable views of the Mullundung Forest and decided to personally assess its worth. He arrived at Yarram in November 1909 with Jim Doyle, a relative and Company Secretary. For several weeks the pair inspected the forest and, having determined that Hetherington's statements were accurate, planned an expansion of their interests to Victoria. They intended to install a major mill 32 km north-east of Port Albert.¹¹

Coughlan and Doyle returned to Western Australia in January 1910 to elicit support from other potential subscribers and to arrange for the formation of a company. History tells us that formal incorporation

of the Goodwood Timber and Tramway Company did not occur until 9 February 1912¹² but this did not prevent Coughlan and Doyle from setting the wheels in motion.

Using their accumulated wealth from the Kalgoorlie goldfields, they set to work to install the mill on a site selected in the headwaters of Morris Creek. Although initially known as 'Mullundung', in time, the locality was to be more commonly known as 'Goodwood'.

Clearly a tramway to connect mill site and railhead was a key priority and no time was wasted in addressing the question of its destination and route. Several alternatives were considered but the option of terminating the line at Alberton, which was closer to the planned mill site, was soon discounted in favour of Port Albert. The proximity to the port of the bridge over the Tarra River at Tarraville was the main reason for the decision. This was the only existing structure in the district that could carry locomotive hauled trains over the river. A third option of laying the line to Woodside, where a new jetty was proposed for the transport of wheat and wool, was also quickly dismissed when it became obvious that the jetty was unlikely to be built in the time-frame required by the company (it was never constructed).¹³ The opportunity of having alternate routes for the despatch of timber, by either sea or rail was not lost on Coughlan and Doyle either. Port Albert offered these options.¹⁴

Mona at the head of a log train most probably on the northern log line, in 1912. Note the numbered log trucks and the light 20 lb rails.
Photo: A. Robinson Collection.



The destination having been decided, Doyle, while still back in Kalgoorlie, applied to the Alberton Shire Council for permission to lay a tramway from Port Albert to the Mullundung forest. He also set Jim Collins to the task of surveying the route. Collins had been brought back to Victoria to manage the construction of the tramway. Previously he had worked at the Comet mill near Wandong and had later headed west in search of his fortune on the goldfields.¹⁵ The Alberton Shire Council briefly discussed the matter of the tramway at its February meeting in 1910 while Collins was busy deciding the detail of the planned route.

The Councillors' opinion of such intrusions on Shire roads had clearly not mellowed and they would only consider the proposal provided the applicants followed the very stringent guidelines that had been rejected by Knott three years earlier. Coughlan and Doyle obviously were not happy with this result and returned to Victoria to meet with the Shire and discuss their concerns.¹⁶

At the Council meeting in March 1910 Doyle presented a thorough case clearly aimed at pressuring the Council for a more favourable decision. A 2 ft gauge tramway was proposed and he explained that everything was organised awaiting the Council's decision. Doyle had gone as far as having called tenders for the supply of sleepers for the tramway.¹⁷ Work would start immediately permission was given, as ten miles of rails were to be landed in Melbourne on 26 March 1910. The Council's concerns over protecting local business were explained away by Doyle's assurance that the Company would not interfere with any existing industry. He allayed Council's fears concerning damage to the Bruthen Creek bridge by saying that the locomotive they planned to use would weigh no more than 10 tons. He gave an assurance that, if this presented a problem, the Company would pay for the strengthening of the bridge. He said that a sum of £25,000 was to be spent on the enterprise including tramway bridges. Doyle provided a detailed explanation of the Company's plan to construct the tramway within road easements but well clear of made road surfaces. The only exceptions would be in the few instances where joint use of a stretch of road was unavoidable.

Doyle planned his case well and saved his strongest statement to last. He completed the presentation intimating that the Council could purchase the tramway when the Company had finished milling. In a district where transport in winter was a major problem this was music to many councillors' ears and proved to be significant in gaining support for the proposal. Interestingly, the Council's previously stated objection to such tramways, which first sur-

faced in Knott's time and concerned the running of a tramway through a town where horse drawn traffic was dominant, was not only completely forgotten but was turned on its head! Some Councillors invited Doyle to construct the line through BOTH Yarram and Alberton so that it could serve both communities! Doyle graciously declined.

Doyle left the meeting happy that he had gained some support from the Councillors but he was still without the formal permission he needed to use the Shire roads for the tramway.¹⁸

Both he and Coughlan met with the Council again a fortnight later but this time with the confidence that they were to discuss the detail of how bridge maintenance and other costs were to be borne and not whether the tramline was to be built. At the end of the meeting, the Company found that it could start work the following day and could 'make cuttings and fillings where necessary' alongside the Shire roads.¹⁹

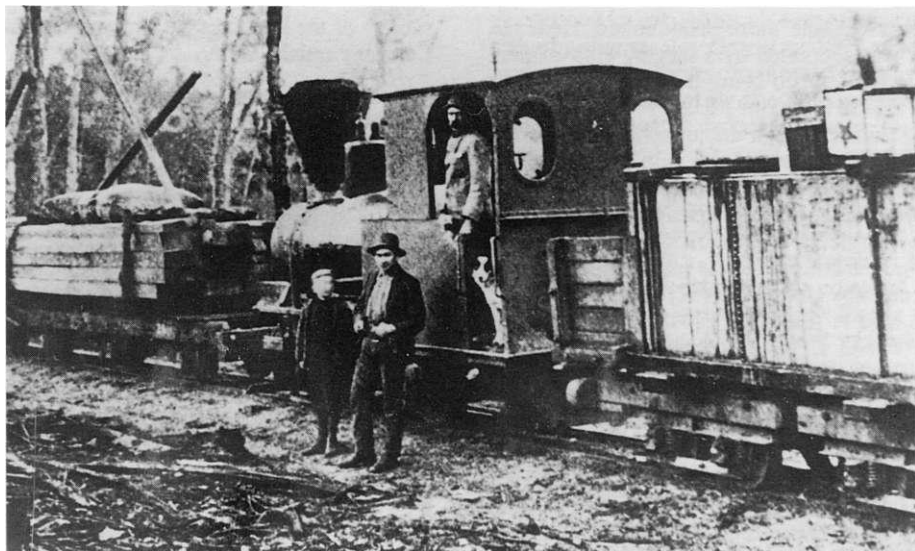
Construction

Work started as planned on 24 March 1910 with eight men preparing earthworks for the tramway and constructing Company dwellings in Port Albert.²⁰

By 27 April, under the management of Jim Collins, rail laying had reached McGrath's hotel at Tarraville, a distance of some six kilometres.²¹ The rapid progress was made possible by the flatness of the terrain north-east of Port Albert, although a lengthy embankment, which led to the Tarra River bridge, must have consumed considerable effort.

With the distance from the railhead rapidly becoming longer the need for a locomotive to help with the work was great. The arrival by rail of the first locomotive, a brand new Krauss 0-4-0 wt, around 20 April was both timely and evidence of the firm's drive and efficiency. It was assembled within a few days, conducted its first trial run on 27 April 1910 and was duly named *Amie* in the style adopted by the Company's sister organisation in Western Australia.²²

With *Amie* busy at work hauling the rails and sleepers, progress continued to be rapid. The Company had planned to have the line completed by July 1910 and, typical of its style, it duly achieved that target.²³ It was a well constructed tramway with substantial cuttings and embankments necessary to maintain consistent grades. But this does not mean that it was an easy haul. The ruling grade on the line was 1 in 16,²⁴ a surprisingly steep ascent in what is a flat, largely featureless, expanse of country. In fact most of the region fitted this description, but, in the area immediately to the north of the South Gippsland Highway and south of Boundary Road, severe



Lila with tender stacked with kerosene tins and a load of sleepers en route to the railway station in 1912.
Photo: M.J. McCarthy Collection.

grades were found. This made necessary the incorporation of a reversing point in the latter case. The minimum curve on the line was 2.25 chains radius and the maximum speed of locomotives was 8 mph.²⁵

Controversy accompanied the rapid progress made in constructing the tramway. Not all local people welcomed the Company into their community and it is not difficult to understand why. In an area noted for its poor roads, a tramway, sharing bridges and culverts, was likely to add to the deterioration of public assets despite the Company's assurances regarding meeting maintenance costs. But even more alarming was the prospect of combining horse and steam traffic on the same right-of-way.

In June 1910, the Shire was presented with a lengthy petition objecting to the tramway. The reaction of the Council was a testimony to Doyle's good work. The petition made allegations regarding the construction standards adopted and the tramway's encroachment onto the centre of the road at culverts and bridges. The Council rejected the petition as fallacious and even questioned the authenticity of many signatures. Council, clearly, now supported the Company and the tramway it was constructing.²⁶ The first load of timber, on twelve trucks and hauled by *Amie*, was sent over the line on Friday 29 July 1910.²⁷

The Port Albert Tramway

From its Port Albert terminus on the west side of the rail yard, a feature of the Goodwood Tramway was the efficiency and simplicity of its trackwork. A single line of rails, which passed between two derrick cranes and the goods siding, was all that was required to handle the extensive traffic in sleepers and construction timber.²⁸ It said much for the volume of business done by this back corner of the Victorian rail network that the tramway blocked off practically all access for other types of traffic. The fact that no-one seemed to mind is perhaps not all that surprising when the annual tonnage through Port Albert before the arrival of the Goodwood Company's tramway was a mere 280 tons.²⁹

Although a complete plan of track arrangements at Port Albert has not been located, a loop siding must have been provided to the south of the cranes. This would have been necessary to enable the locomotive to organise its train for the return journey to the mill. In the way of trackwork at the southern terminus there would have been nothing else; simplicity was the order of things.

The 2 ft gauge rails curved past the buffer stop that marked the terminus of the Great Southern Railway and turned to the north-east to cross and then follow the Sale Road. Minimal earthworks were required over the first five kilometres with a slight mound being all that was needed for drainage. But closer to the junction of the Alberton-Tarraville Road the

earthworks became more pronounced. Here the tramway was supported by a lengthy embankment alongside the road to bring it to the Tarra River bridge at 5.5 km from Port Albert.

Having passed through the township of Tarraville the northern-most side of the Sale Road was followed for a further five kilometres to "Lillies Leaf." Here a water tank, fed from a nearby well, was provided for servicing the locomotive.³⁰ For a short stretch the rails switched to the south side of the road to avoid swampy ground before crossing again to the opposite side to resume the journey to the north-east.³¹ As with all road crossings along the line warning signs protected road traffic.

The Pound Road intersection was crossed after a further 1.5 km and, at 15 km from Port Albert, the tramway turned north onto the Old Rosedale Road. To this point it had climbed a mere 15 metres on an average grade of 1 in 1000 and there was little need for heavy earthworks. However, between Tarraville and Lillies Leaf, the nature of the ground was significantly different from that experienced earlier. Gone was the sandy soil to be replaced by swampy ground which required drains alongside the formation.

A short distance along Old Rosedale Road, the Yarram Sale Road (now South Gippsland Highway) crossed passed and the flat terrain quickly changed to low foothills. This made necessary extensive embankments as high as 2.5 metres and cuttings of similar depth. Culverts and a couple of bridges, among the very few examples on the outlet tramway, not shared with road traffic could be found here and the tramway swung to the road's east side in search of a more favourable grade. It was in this section that the ill-fated *Mona* exploded killing its driver in 1914.

Eight kilometres on, the tramway crossed, what was to be, the alignment of the Woodside Railway. It then veered from the east side of the road easement to join the road so that it could cross the Bruthen Creek bridge. It was this bridge that was the

subject of the maintenance agreement between the Company and the Shire.

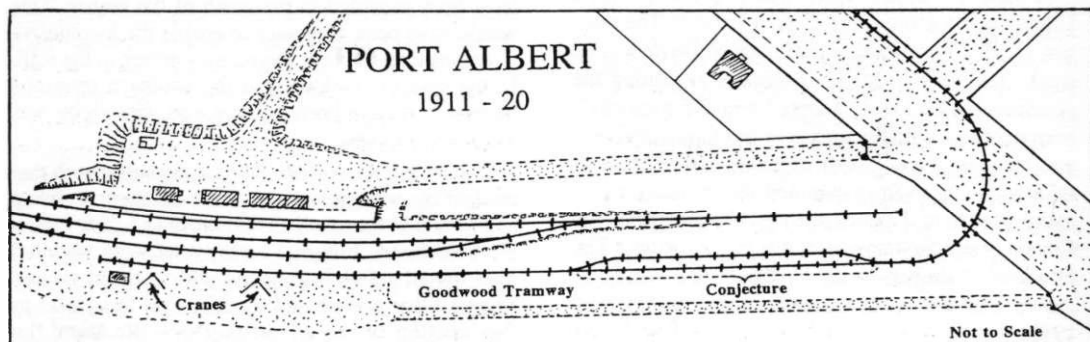
By this point the countryside had returned to a flat brush-covered plain and again the earthworks became minor and only required a side channel for drainage.

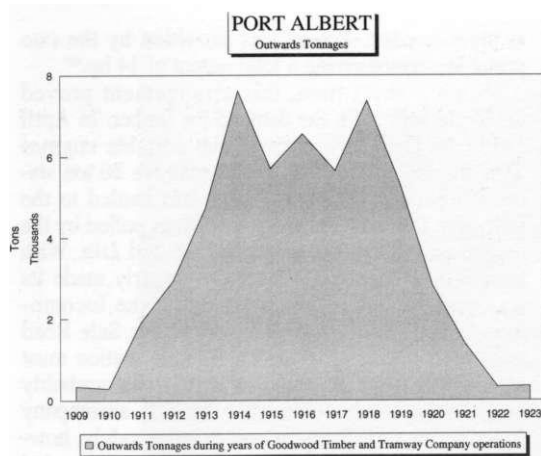
At 24 km from Port Albert, what is now Napier Road, was crossed. The tramway, still on the east side of Old Rosedale Road, commenced the final 2.5 km stretch leading to the low hills of the Mullundung Forest and the State Forest boundary.

Over the 26.5 km from Port Albert the gain in height to the forest boundary was a mere 55 metres however the following kilometre presented an entirely different picture with a climb of 50 metres to be negotiated. At its steepest it represented a grade of 1 in 16. A switchback, known as the "Dead End," was constructed because the prohibitive grade would have prevented safe and efficient traffic. The tramway veered to the west to enter the Dead End, the top section of which rejoined the Rosedale Road 300 metres from the point where it had deviated. The Dead End had the capacity to hold two trains.³²

A kilometre towards the mill, and just before the Boundary Road intersection, the tramway crossed to the west side and then left the roadway. It headed at an angle through thick scrub-land to skirt the tributaries of Morris Creek which rise in this area. Williams Road was crossed and, in the following two kilometres, a low bridge, along with a short siding and two log loading ramps installed in later years of operation, were passed. The tramway then turned back to the north, to pass over Starling and Rosedale Roads in quick succession.

The final kilometre to the mill saw the tramway, on an almost level grade, pass through dense scrub with many twists and turns to avoid gullies before it reached its destination at 32 km from Port Albert.





Operating the Port Albert Line

A single return journey to the port was made each day from 29 July 1910, when the first load was hauled by *Amie*. Although larger loads were occasionally despatched, a normal train consisted of between 12 and 15 trucks. Mostly it was sawn timber that was carried but normally two trains each week carried sleepers and piles.³³

Amie was joined by a second Krauss locomotive in February 1911. Of 0-6-0 wt arrangement the new engine was named *Mona*. *Mona* was purchased because, by this time, the log tramway to the north of the mill had been extended to the point where *Amie* alone could no longer handle all the traffic on both log and timber lines.

The journey into Port Albert always commenced with the load being pushed away from Goodwood with the locomotive at the train's rear. This was necessary because the reversal at the Dead End, 5.5 km south of the mill, put the engine at the opposite end of the train. By adopting this practice the engine was at the front for most of the trip.³⁴

From the Dead End it was a reasonably straight run with only the stop at Lillies Leaf for water to interrupt the journey. The train would usually arrive at around 11.00 am when the loaded trucks would be detached and the empties collected.³⁵ The trucks would then be loaded with kerosene, chaff and other provisions for the return journey to the mill.

Wally Spurr was the Tallyman in charge of receiving and despatching timber at Port Albert and he was aided by John Morris. Spurr and Morris would normally unload the timber onto stacks alongside the tramway and then make up the orders for despatch over the broad gauge to Melbourne.³⁶

The Company proposed at the outset that it would consider despatching timber by sea from Port Albert

as opposed to rail. Although some timber was sent away by this means, clearly nothing of substance eventuated. However, in August 1910, Captain Jamieson, representing the Geelong Steamship Company, visited the district to promote the interests of his Company.³⁷ Thirty tons of timber were subsequently despatched on *SS Hastings* in March 1911, in what was probably something of an experiment.³⁸ It seems it was not repeated.

The journey back to the mill was usually interrupted by stops to collect chaff at the corner of Sale and Pound Roads, and bread and papers for the mill residents at the corner of Old Rosedale and Sale Roads. Reid, the local baker, would leave his completed orders for collection by the train crew. This example of community trust eventually came unstuck when it was found that someone was pinching the Goodwood bread!³⁹

The remainder of the journey was usually a mirror image of the inwards trip. The only exception was a brief stop between the Sale Road and the Bruthen Creek bridge. This was necessary to allow a build up of steam to tackle the steep pinches in the low hills that marked the forest section of the line.⁴⁰

Both the drivers and the locomotives were rotated between bush work, timber haulage and, with the locomotives, maintenance. The drivers at the outset were Bert Dudley, Bill Toogood and Jim Collins Jr.⁴¹ Collins, the son of the mill manager, was employed as the guard on the train but, despite not having his 'steam ticket', drove the engine as much as anyone. A. Coughlan was also driving at one time.⁴² Charley Farley was a guard on both timber and log trams.

When the Mullundung hall opened in June 1913, a special train was run to convey the guests to the opening function. The following report of the journey gives a contemporary description of a trip on the line:

The first 'station' was Tarraville just opposite McGrath's hotel, where 'our comedian ... embraced the opportunity,' and began dilating on the popular beauty spots of the town, and the famous men and women it had produced. He was growing sentimental, till a halt was made at Lillies Leaf but nothing stronger than water was imbibed - this time by the engine. And what a thirst! Taking a northerly course, the engine emitted something more substantial than sparks, which kept the passengers alive. The first thought was that those aboard were searching for sandflies, but the ominous odour of fire soon brought home the truth. 'Our comedian's' attention was directed to his top coat, in the lining of which a live coal had been deposited. The laugh was against him this time. A stop or two to get up steam for a run

*up grade afforded an opportunity for the passengers to stretch their legs. Seated again, good pace was made over Reedy Creek, and past the picturesque properties of Messrs S. Lyons, Jones and Lancaster, till a 'Dead End' was reached Here the trucks preceded the engine in a north-easterly direction, up a grade, a swerve around to the nor'ard and here was Mullundung, where the incessant whirr of mill machinery proclaimed it to be a hive of industry.*⁴³

With the demand for timber increasing and longer journeys necessary on the log line, as well as a need to provide back-up support for the other two locomotives, a third engine arrived at Goodwood during October 1913.⁴⁴ It was of Orrenstein and Koppel manufacture with a 0-4-0 wheel arrangement and was named *Lila*. The impact of its arrival was almost immediate. On 28 October 1913, the largest load of timber to be despatched from the mill left for Port Albert. The train consisted of 34 trucks containing 14,000 super feet of timber and 680 sleepers. All three locomotives were attached to handle the load.⁴⁵ It is likely that this single instance was experimental, perhaps aimed at reducing the number of journeys per week, as there were no further reports of such occurrences.

The Mill

Well before the tramway was completed, the Company set about erecting its milling plant. On 18 May 1910 a portable steam engine passed through Yarram en-route to Goodwood drawn by a team of 16 bullocks.⁴⁶ With another similar unit it was to provide the power to drive the saws. Under the guidance of G.A. Tidy⁴⁷ the mill was soon completed and started work full-time in June 1910.⁴⁸

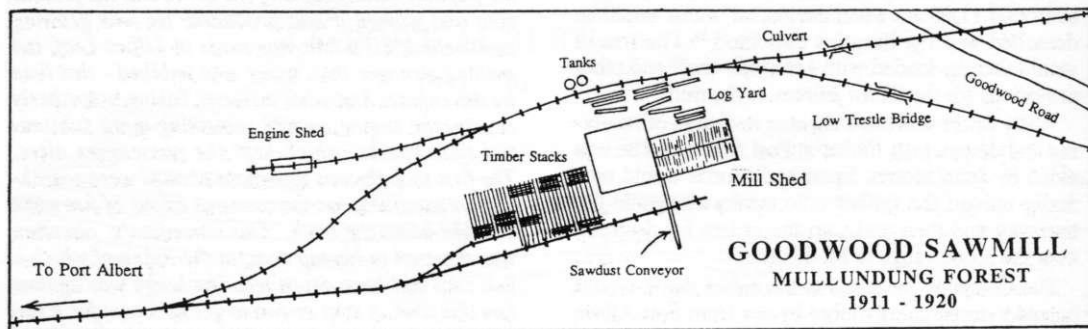
In its initial form the plant was fairly typical for its day. It comprised a single 5 ft diameter breaking-down saw for cutting logs into large slabs or 'flitches' and a rip-saw for cutting the required thicknesses of timber. A docking-saw cut the timber to the required length and a picket-saw produced the small-

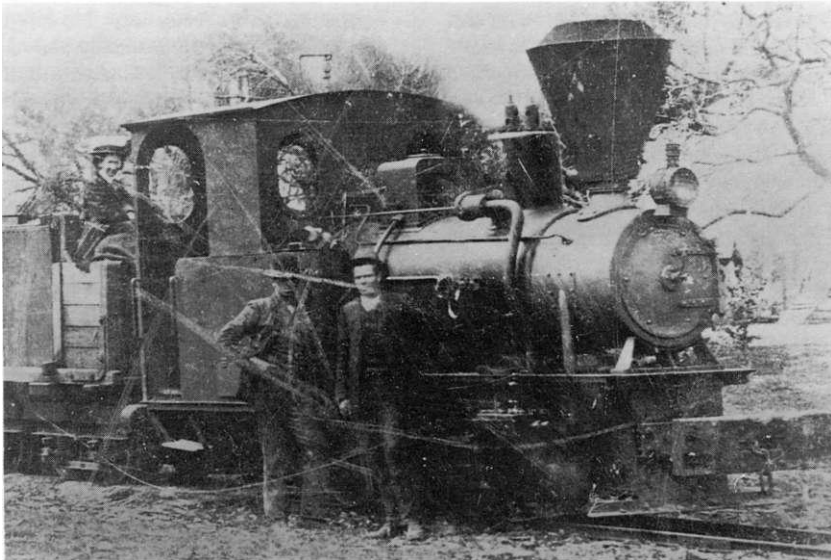
er sizes needed. Power was provided by the two portable engines giving a total output of 14 hp.⁴⁹

Within a short time, this arrangement proved unable to cope with the demand for timber. In April 1912, the Company replaced the portable engines with one larger unit served by a massive 30 ton stationary boiler.⁵⁰ The new boiler was hauled to the mill upon four bogies by a special train pulled by the second and third locomotives, *Mona* and *Lila*. With a crew of a dozen men the train gingerly made its way north with the boiler dwarfing the locomotives.⁵¹ The narrow cuttings north of the Sale Road and the overhanging trees of the forest section must have presented particular challenges and probably explains the number of men required to accompany the boiler on its journey. It was to arrive safely, however, seemingly without incident. One discarded portable engine was sold some time later to the Victorian Government for pumping purposes in East Gippsland.⁵²

The existing single saw breaking-down bench was replaced with a 'Hoffman Travelling Bench' which incorporated twin circular saws and could handle the largest of logs to be found in the Mullundung Forest. In total, with the provision of an additional rip-bench, capacity doubled to around 60,000 super feet of sawn timber per week.⁵³ The effect of this was immediate. Outwards tonnages from Port Albert railway station grew dramatically between 1912 and 1914, the period immediately following the enlargement of the mill. In 1912 around 2900 tons of timber were despatched whereas two years later output had grown to close on 7600 tons.⁵⁴ Even the Forests Department was impressed by the determination of the Company to install as modern a plant as possible. The Department featured the Goodwood mill and tramway in its Annual Report for 1912 and described it as a mill 'of the most modern type'.⁵⁵

The rebuilt Goodwood mill also had other features which set it apart from most Victorian sawmills. A visitor would note the absence of whirring belts and





Lila and tender at the mill Although not officially allowed, passengers were often carried on the train or in the locomotive.

Photo: M.J. McCarthy Collection

spinning shafts. They were there, but were to be found beneath the floor to provide a safer working environment. The mill was built on stilts to provide for this. Likewise, rather than employ a 'sawdusty' to wheel the sawdust to the pit or heap to be burnt, a conveyor carried the waste away from beneath the three saws.⁵⁶

Water for the mill boiler was a significant problem especially following the arrival of the new 'monster' which required copious quantities besides that needed for locomotive purposes. For much of the year, the Mullundung Forest was relatively dry and Morris Creek, to be found nearby, was a bed of sand and clay. So a pipeline, 3.2 km in length, was provided to bring water from Reedy Creek. An 8 hp steam engine, perhaps one of those which previously powered the mill, drove the pump.⁵⁷ Until his death, caused by a heart attack while at work, Irishman Tom Flithe, was the driver of the pump engine.⁵⁸ About 30 men in total were employed at the mill including a youthful William Collins, the second son of Jim Collins the manager. Heaton and Wallace were employed on the rip-bench while Adams was the mill engine driver.⁵⁹

Adams is noted for some quick thinking that saved the mill from destruction by fire in January 1913. Although bush fires in the Mullundung Forest were not uncommon, on this occasion, strong northerly winds brought a large blaze dangerously close to the

mill and township. All hands turned out to fight the fire which, despite their efforts, reached the mill precincts, destroyed ten huts and set fire to the log yard. The mill itself would have been razed had it not been for the intelligent action of Adams who turned the steam pipe onto the fire and saved the plant.⁶⁰

The principal output of the mill was sawn timber but the Company also supplied piles and poles and around 1000 sleepers a week to the Railways Department.⁶¹ Among the Company's principal customers were government departments, with the Railways and Public Works Departments dominating. In 1911 over 80% of the output was sold to the Victorian Railways.⁶² The dominance of the Railways Department as a customer saw Goodwood timber being used for several major projects. Perhaps the most notable was the Flinders Street Viaduct duplication in 1912⁶³ where the piles driven for this work came from the Mullundung Forest. With an average annual growth factor of around 60%, production grew at an amazing rate during the first four years. This was helped by the massive expansion in plant capacity over that time.⁶⁴ Except for the period immediately following the outbreak of the war this was a period of general growth in timber production in Victoria.⁶⁵ No doubt the Goodwood mill benefited from the demand which caused this. However, it is particularly notable that the Victorian railway net-

work grew, on average, by 138 km a year⁶⁶ over this period and provided a strong market for the heavy timbers and sleepers produced by the Goodwood mill.⁶⁷

From 1914 to 1918 output stabilised at around 6000 tons a year, although in 1918 production rose to its second highest peak of 7000 tons. Much of the increase was due to large orders from the Defence Department. The decline that set in from 1918 was as dramatic as the earlier rise and output in the final year of operation declined to a mere 1000 tons.⁶⁸ The cause was a combination of a declining resource as fallers had to go further and further into the forest in search of logs and the cut back in railway construction and defence orders that occurred during that time.⁶⁹

Logging

Extensive and well constructed log tramways were laid by the Company into the forests to the north and east of the mill with the first being built to the north. Work on this line commenced in 1910, soon after the mill started working,⁷⁰ and was completed in two stages. The first, of about 3.5 km in length, was completed, through to what became known as Anzac Road, by September 1912.⁷¹ A second stage saw the tramway extended a further three kilometres to the north-east during 1913.

The northern log line was distinguished by its extremes. In places it had the bare minimum of earthworks necessary to carry a locomotive hauled train, whereas elsewhere, the work was nothing short of spectacular. In parts it was very evenly graded with evidence of the care taken by its constructors to ensure that this was so, but within a short distance could suddenly commence a demanding 1 in 25 climb. Over all, the northern line was a compromise between good planning and the "rough and ready" pragmatism one normally associates with the log extraction tramways.

On leaving the log yard a small culvert, which marked the edge of the mill precinct, was crossed. Beyond here, a short climb brought the tramway to the top of a small ridge. This section required little formation or drainage work but this was to change in the descent towards Morris Creek. Here the tramway was carried on a long earth-formed embankment interrupted by a small bridge that spanned a tributary of the main creek.

Continuing its descent into the deep gully through which Morris Creek runs and having passed over another small bridge, the tramway crossed the creek in a remarkable fashion. The rails were laid almost in the creek bed and were separated from the stream by only a very low embankment. For approximately

75 metres the tramway travelled longitudinally up the creek bed before it gradually closed on the opposite bank. A culvert, less than a half a metre in height, carried the rails over what water there was. The Company had clearly gambled on the infrequency of heavy rain as a rise of only a few centimetres would have covered the rails.

Equally remarkable was the climb up the opposite side of the gully. Still headed to the north, the tramway entered a cutting approximately 150 metres in length and close to 3 metres deep for much of its distance. It was virtually straight over its full length and highlighted the high quality of engineering the Goodwood Company usually employed in its transport and milling work.

Emerging from the cutting the tramway continued to climb and the first of several log ramps was reached at two kilometres from the mill. Here bullocks, in combination with the locomotives, made use of block and tackle for the task of loading the Yellow Stringybark logs.

A kilometre further and the grade levelled as the tramway passed out of the catchment of Morris Creek to arrive at a short siding which served a log ramp a short distance beyond the summit. The siding marked the initial terminus of the line opened around September 1912.

During 1913 the tramway was extended to the north-east. Instead of following a contoured route to reach Shields Road, as it is now known, the Company laid the tramway across country. At that time rails were scarce and expensive and the need to save on cost may have made a short cut necessary at the expense of some hard work for the locomotives.

A grade of close to 1 in 50 over a kilometre brought the tramway to a long embankment and a low bridge at the bottom of the gully. The rise of 1 in 25 over half a kilometre beyond the bridge would probably have taxed the small locomotives even without a load. This gully was the scene of much logging activity and a loading ramp was provided a short distance beyond the bridge to service this.

After a turn to the east, Shields Road (then merely a track) was crossed twice in quick succession before the tramway resumed its journey to the north-east. A log ramp and siding were provided close to Shields Road to collect logs from the west side of the Kangaroo Swamp area to the north.

The final terminus was reached after a further crossing of Shields Road and then Harrap Highway. A log ramp on the south side of the line in fairly level country marked this location at a point seven kilometres from the mill.⁷²

Until the area had been cut through, around August 1915, this tramway provided nearly all the

logs for the mill. By this time the Company was ready to shift its operations and over the following two months the rails were incorporated into a new line built to the east and north-east of the mill towards Kangaroo Swamp.⁷³

The new route was built to the same standard as the main line to Port Albert and differed substantially from the northern log line. It joined with the earlier tramway on the edge of the log yard and then, on an up grade, curved sharply to the east. Shortly after it had passed over a small bridge at the edge of the mill yard the tramway crossed Goodwood Road at an angle and came to the first and highest of six trestle bridges. The bridge over Morris Creek was around 6.5 metres above the creek bed and close to 20 metres in length.

The tramway followed a route parallel to Goodwood Road for about another kilometre to where the second trestle bridge was found. It was not quite as tall as the Morris Creek bridge but it was a substantial structure nevertheless. Beyond the bridge the line maintained a similar proximity to Goodwood Road with a very even grade as it followed the 110 metre contour. The tramway had climbed a mere 10 metres since it left the mill. A third trestle spanned a gully around two kilometres from the mill and was similar to the previous structures.

Another kilometre and still following a level grade, the tramway arrived at the junction of the Massey's Hill branch. This line was most probably laid during the second half of 1915.⁷⁴ The exact route is not known as it is shown only in an indicative form on contemporary maps and, due to later bulldozing activity, no evidence remains on the ground. However, it passed south along the ridge leading to the lower reaches of Morris Creek and most likely followed the present day route of Massey's Road for much of the distance.

The mainline continued from the junction in an easterly direction and passed over Goodwood Road at an acute angle. A short distance further the longest and most spectacular of the trestle bridges was met. The bridge contained 26 spans and was 156 metres long and, at its highest, was six metres above the creek. (See diagram on page 15).⁷⁵

Curving to the north-east the tramway commenced the first significant rise since the initial climb out of the mill and half a kilometre further arrived at the fifth and smallest of the trestle bridges. It consisted of five spans over a distance of around 30 metres and carried the rails five metres above the creek bed.

Immediately on the north side of the bridge was the initial terminus of the eastern log line. A logging camp was established here to cater for the crews and sleeper-cutters operating in the area. A branch line,

Lila shifting the mill boiler, presumably at the closure of the mill in 1920. The Orenstein and Koppel was, within a few years, to be incorporated into Ezard's hybrid geared locomotive at Warburton. Photo: A. Robinson Collection.



approximately a kilometre in length, was laid to the east of the camp around 1916 but is unlikely to have operated for long as the timber in the area proved to be disappointing.⁷⁶ Consequently, in the following year, the Company focussed its activity further to the north. Sixty pound per yard rails were hired from the Victorian Railways during the second half of 1917.⁷⁷ They were put to use in a six kilometre extension to the north-east which brought the tramway to its terminus a short distance beyond Shields Road.⁷⁸ The first four kilometres were on a down grade of around 1 in 130 and, over the distance, several bush tracks were crossed. At the bottom of the grade was found the sixth and last of the trestle bridges. Again it was a substantial structure of around 70 metres in length.

The construction of the bridges was a tribute to the engineering competence of the builders. The only iron used being in the rails and track fittings. A tenon and mortice arrangement attached the heavy cross timbers to the piles while the support bearers were notched into the cross timbers. (See diagram) The rails and sleepers were carried on bearers adzed flat on the top to carry the sleepers and on the bottom where the bearers met the support bearers. Props to the side of each trestle supported the structures laterally while the rails and bearers provided stability over the length of the bridge. Low cost, quick, stable and very effective. Many trestles still stand today!⁷⁹

A short distance beyond, a cattle grid was passed at the fence-line of the only area of private property traversed by the Goodwood tramways. The property was logged by the Company and a substantial log ramp, 50 metres beyond the grid, was used for this purpose.⁸⁰

On a gradual rising grade the tramway continued for a further two kilometres to the terminus at a point a short distance beyond Shields Road. Logs were brought south from the Kangaroo Swamp area as well as from the immediate bush to be loaded here.

The eastern log line was in operation until the mill closed. It was a tramway of distinct contrast to the earlier line; a higher standard of construction was adopted with particular attention being given to providing easy and consistent grades. It was this policy that led to the construction of the six trestle bridges. The earlier line, although well built, sacrificed good grades for the savings in material and other construction costs.

The reason for this difference in approach is not entirely understood however Jim Collins was manager by the time the later line was built and this may have been a factor. It is not unreasonable to expect the Western Australians to bring the construction standards employed on the firewood tramways at

Kalgoorlie with them and, perhaps unwisely, to adopt a similar approach at the outset in the Mullundung Forest. But, more likely, the effect of more hospitable country enabling easier grades, and the need to avoid the cost of wear and tear on locomotives that occurred on the earlier line prompted the change in approach. The many accidents that occurred on the northern line may also have contributed to a change in approach.

It is worth noting that logging was also carried out from the main outlet tramway south of the mill. In particular, the section between Starlings Road (as it is now) and Williams Road featured several loading sites and at least one short siding to extract logs and sleepers from that region.⁸¹

The bush operations of the mill were extensive with eight to ten men, mostly on contract, felling the trees in the bush. A similar number were engaged in driving bullock teams and anywhere between 25 and 50 men were cutting sleepers. Tramway employees included a train crew of two and a small team of tramway maintenance workers. In 1912, including sleeper cutters, the Company employed 145 hands.⁸² Until his death in February 1919, Pat O'Neill was the bush boss for the Goodwood.⁸³

The process of logging was typical of most sawmilling ventures with the fallers cutting down the trees and then sizing the trunks into log lengths. Bullock teams hauled the logs to the tramway landings.

Good use was made of available resources and typical of the efficiency of the Goodwood operation was the practice of using the locomotive to help with loading logs onto wagons. Block and tackle, attached to a convenient tree, made this possible. The blocks and wire ropes could be set in minutes and attached to the locomotive to save the effort of hand winching the logs.⁸⁴

Accidents

The operation of the log trams was not without its hazards and the Goodwood mill had its share of accidents, including fatalities. An early such incident involved Bill Toogood, a 26 year old guard or brakesman on the line, who, like most of the employees, had come from Western Australia. Toogood had left the Mill at 2.30 pm, on 11 October 1911, aboard a train which consisted of six empty trucks. Bill Dudley was driving the engine and the destination was a log landing five kilometres away. This was the fifth such trip that day.⁸⁵ The accident occurred at the commencement of the return journey and, at the Coroner's Inquiry, William Hayward, a bush hand, gave the following account:

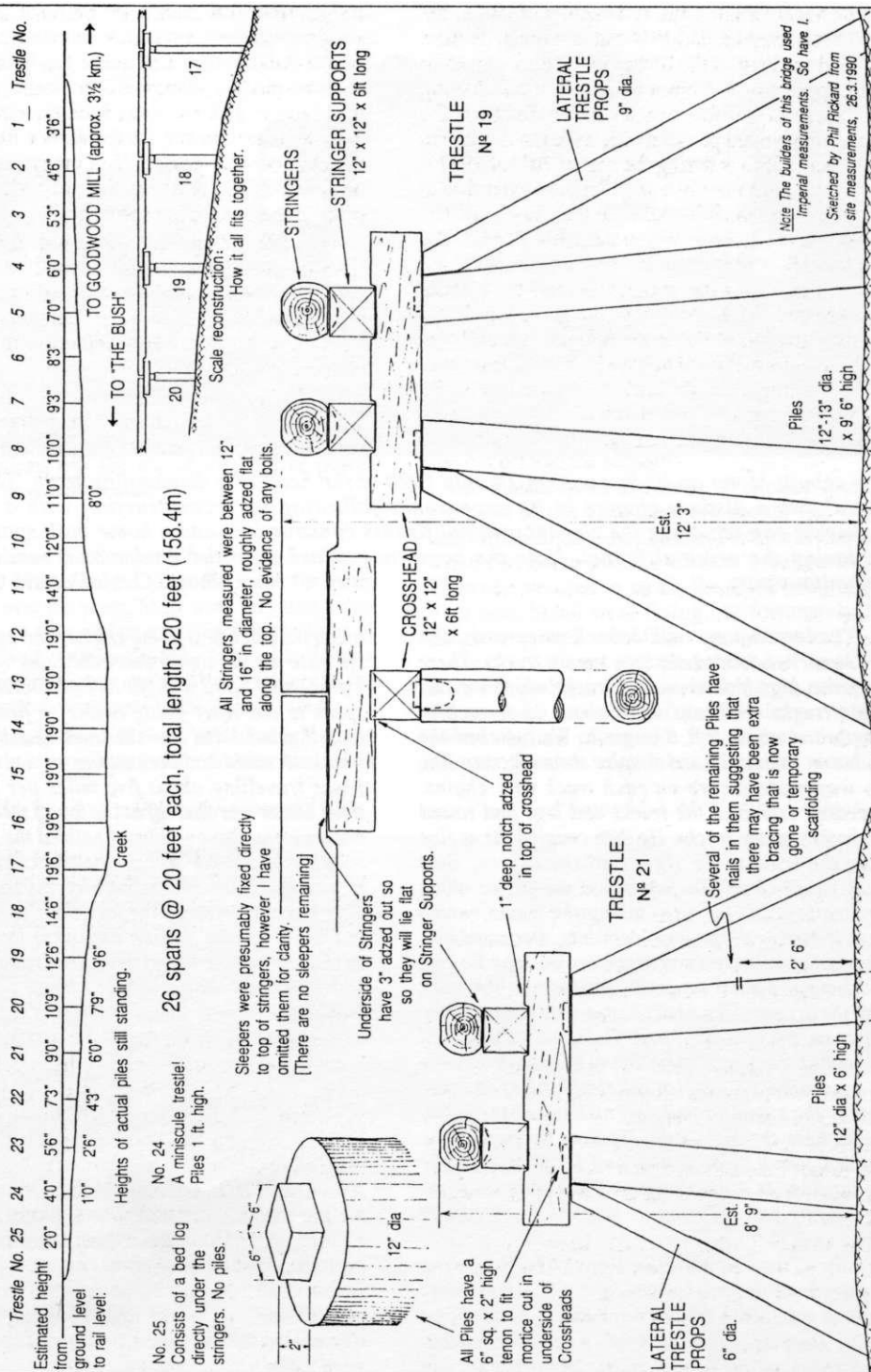
GOODWOOD TIMBER & TRAMWAY COMPANY, 2 ft gauge
MULLUNDUNG FOREST, nr. PORT ALBERT, VICTORIA

MULLUNDUNG FOREST, nr. PORT ALBERT, VICTORIA

Reconstruction of trestle bridge based on remains 3½ km. E.N.E. of Goodwood Mill.

Side Elevation, facing south, showing ground profile and bridge outline to scale.

I have arbitrarily numbered the spans 1 to 26, commencing from the Mill end of the bridge for identification purposes.





The rebuilt Mona on its last trip on 14 July 1920 at the head of a dismantling train. The locomotive shows a distinct change in its appearance following its reconstruction with a somewhat makeshift cab replacing the elegant original Krauss construction, and a home-built spark arrester replacing the original funnel. Note the horseshoe attached to the tender as a reminder of its calamitous past.

Photo: C. McDermid Collection.

In company with John Rowley and John O'Connor we loaded six logs on six trucks. There were two logs loaded on two trucks which we call bogie trucks. The logs were about 25 ft each in length and about 5 ft 6 in girth. We twitched the chains on each truck and coupled them together. The top was made secure on each truck with chains. Deceased examined the trucks and logs and raised the brakes on the trucks. He then coupled the engine onto the trucks. He signalled the driver, Bert Dudley, 'all clear'. Dudley moved the engine along the line towards the mill, taking the trucks, which were loaded with the logs, with him. Deceased was sitting on the last truck near the brake. John Rowley and I accompanied the train. We rode on the truck with the deceased for about half-a-mile distant to the points on top of a small hill. Deceased then backed his loaded train onto some empty trucks which were on a side line. He coupled the empty trucks on, gave Dudley the signal to pull out, and kicked the empty trucks onto the main line. He then uncoupled the empties, which John Rowley and I took back to the log landing. At 4 pm Patrick O'Neill rode up to the log landing and informed us that the deceased had been killed.⁸⁶

Dudley, the engine driver gave the following account from the point where he and Toogood were about to commence the journey back:

Deceased, after the empty trucks were uncoupled, put down the brakes on the loaded trucks, got

up on the truck next to the engine, and sat on the top. He gave me the signal that everything was all right. I proceeded down a slight incline. Deceased did not speak to me. After going twelve or fifteen chains I looked around and saw the truck next to the engine which deceased had been sitting on was off the road I was travelling about five miles per hour at the time. Steam was shut off at the top of the incline. The brakes were also on. When I noticed the truck off the road the logs were still on the truck, which seemed to turn half over and the logs left the truck. As soon as it lost the weight of the logs the engine stopped I got down off the engine and went to look where deceased was. I found him underneath the logs which were on the ground.... I found I could not do anything to relieve him. I uncoupled the engine and went to the mill on the engine for assistance.⁸⁷

The exact cause of the accident was never found, the trucks were virtually new, the rails were to gauge and the logs appeared to have been secured to the trucks properly.⁸⁸

Five years later William Ford was killed unloading the log trucks at the mill. The accident occurred on 12 August 1916 when, in departure from normal practice, Ford attempted to loosen a jammed log from a truck using a cant hook while standing in the path of the log. As the log rolled off the truck he tripped and the log rolled over him. He died shortly after.⁸⁹

Accidents involving log trucks were common and were occasionally fatal. On the section of line below the mill, Bill Watts was killed in an accident involving runaway trucks on 16 January 1920. It seems he was working with three others loading logs when he went to push a loaded truck out of the way. While doing this, unknown to him, the ten loaded trucks on the line behind him began to move. Within moments, he was crushed between the trucks and killed.⁹⁰

Many other accidents, with less tragic results, occurred over the mill's life testifying to the hazardous nature of the business. But it would be fair to say that the Goodwood Company seemed to experience an unusually high number. This could probably be explained by the significantly larger numbers of employees at the Goodwood mill compared to the average Victorian mill. The large scale nature of the bush operations and the use of locomotive power would also have contributed.

Conflict

The opposition the Company faced from local residents at the outset seemed to set the scene for many skirmishes over the years. Most were very minor and did little more than add an annoyance to the lives of those involved. Others though, seemed to have a greater effect on people and resulted in letters to the local papers and complaints to the Shire Council.

One such early incident really added weight to the argument that you should not combine horse and

steam traffic on the same right-of-way. It occurred in January 1912 and involved an altercation between John Bett's grocery wagon, on its way to Goodwood, and one of the Company's engines.

It seems that the leader of the three horses pulling the wagon was 'not quite educated to modern means of transport.' The horse swerved towards the locomotive on a section of the Old Rosedale Road where rail and road were close together. The wagon hit the engine throwing the wagon driver, L. Beagley, out and scattered groceries in all directions.

Probably in something approaching a state of panic the engine driver stopped the train and sought to release Beagley who was buried beneath the remains of his vehicle. He emerged battered and bruised but otherwise unhurt and helped clear the wreckage of the wagon. The horse which caused the strife took fright during the episode, decided it had had enough and ran off into the scrub!⁹¹

The incident was the cause of another round of criticism of the Company. No sooner had it died down than an almost identical accident occurred when the horse pulling Clulow's bakers cart at Tarraville decided to tackle the Goodwood engine! This time bread went flying but fortunately Jack Seagreaves, the driver of the cart, was not hurt.⁹²

Accidents always prompted a flood of local comment but perhaps the greatest debate in relation to the tramway arose out of the fire danger that the steam engines presented. For, despite the spark arrester fitted to each locomotive, the wood fuel

Mona at the head of a log train around 1913.

Photo: M.J. McCarthy Collection.





One of the Krauss locomotives in the log yard of the mill. The structure to the right of the locomotive is, presumably, the mill office. The photo is believed to have been taken around 1912.

Photo: A. Robinson Collection

almost guaranteed at least a small shower of sparks as the train made its way along the tramway. Tracksides fires were common during the summer and prompted considerable comment, especially from farmers next to the tramway. However the concerns reached a high point during the summer of 1915-16 when a succession of such fires set the local press alight as well!

Complaints from farmers and residents alike were headlined in the *Gippsland Standard* and, under considerable community pressure, the Council debated the matter at its regular meeting. A suggestion that the locomotives should be restricted to running at night when the fire risk was much less prompted the Council to invite Russell, the Company's local Director, to attend a meeting to discuss the matter.

Russell was affronted by the suggestion and took the Council to task claiming that the locomotives had not caused any of the fires and had become the scapegoat for any blaze that started in the district. He claimed that the cause of the problem was not the steam engines but the laziness of the farmers. He argued that they allowed their grass to grow too long and left combustible material, such as tree branches, lying around! Russell asserted that the locomotives were fitted with good ash pans and special spark arresters to prevent fires from starting. But, on a conciliatory note, he suggested that coal could be used to lessen the risk of sparks.

The Council, and in particular, Barlow the Shire President, did not believe Russell. Barlow had followed an engine the previous week and had seen fires started by it. As a consequence, despite Russell's protests, the Council passed a motion preventing the Company from running trains between 9 a.m. and 4 p.m. from 20 December 1916 to 20 March 1917.⁹³ The Company complied with the demand but it does not appear that the night running in summer was repeated for any subsequent year.

By this time relations with the Council were strained for other reasons as well. The Company had guaranteed that it would meet a share of maintenance costs associated with the structures the tramway shared with road vehicles. At the outset, when Coughlan and Doyle were keen to gain support, this assurance was easily given, but when it came to paying up, the Company was reluctant to comply.

Russell met with the Council on the matter and declined to provide the timber necessary for bridge repairs free of charge. He claimed the tramway, in truth, had saved wear and tear on the Council's roads. The President produced the agreement which clearly stated the Company's obligation. Forced to retreat on that point Russell took a different tack. He debated the necessity of the repairs with the Shire Engineer or, as the Council Minutes described it, 'The Engineer and Mr Russell discussed technicalities and a breeze almost eventuated'.⁹⁴ The engineer won and the Company contributed both money and materials towards the maintenance of bridges and culverts.



Left: The remains of Mona after the tragic boiler explosion on 1 September 1914, which killed the driver, Bill Dudley. The violence of the accident is clearly evident with the locomotive having been thrown several metres from the rails.

Photo: A. Robinson Collection

Right: The remains of Mona following the boiler explosion. It is clear from the photograph that the point of failure was at the back end of the boiler.

Photo: E.G. Stuckey Collection



Below: Another view of Mona following the explosion. Note the flangeless centre driving wheels of the overturned locomotive.

Photo: A. Robinson Collection



Floods, Accidents and other Disruptions

Officialdom was not the only cause of disruption to the tramway. Floodwaters around Lillies Leaf occasionally prevented trains from getting through for days on end. This was especially the case in 1916 and 1919 when the spring rains were very heavy.⁹⁵

Such events created havoc for Dave Johnston and others whose job it was to maintain the tramway. The track crew patrolled the line on a pump trolley or 'yankee car', as it was known, repairing wash-aways, tightening fish bolts and clearing fallen trees and branches from the rails. Perhaps because of this attention, accidents were not as common on the tramway to Port Albert as they were in the bush but, nevertheless, they could be serious in the extreme.

In a particular instance at Port Albert, the tally-man, Wally Spurr had a remarkable escape from what seemed certain death. Spurr and his assistant, John Morris, were engaged loading timber from the stack onto a tramway truck. Once it was loaded, they pushed the truck along the line to where the waiting railway trucks stood. As they prepared to unload the timber, without warning, the unsecured load shifted and caused the truck to tip over on top of the startled

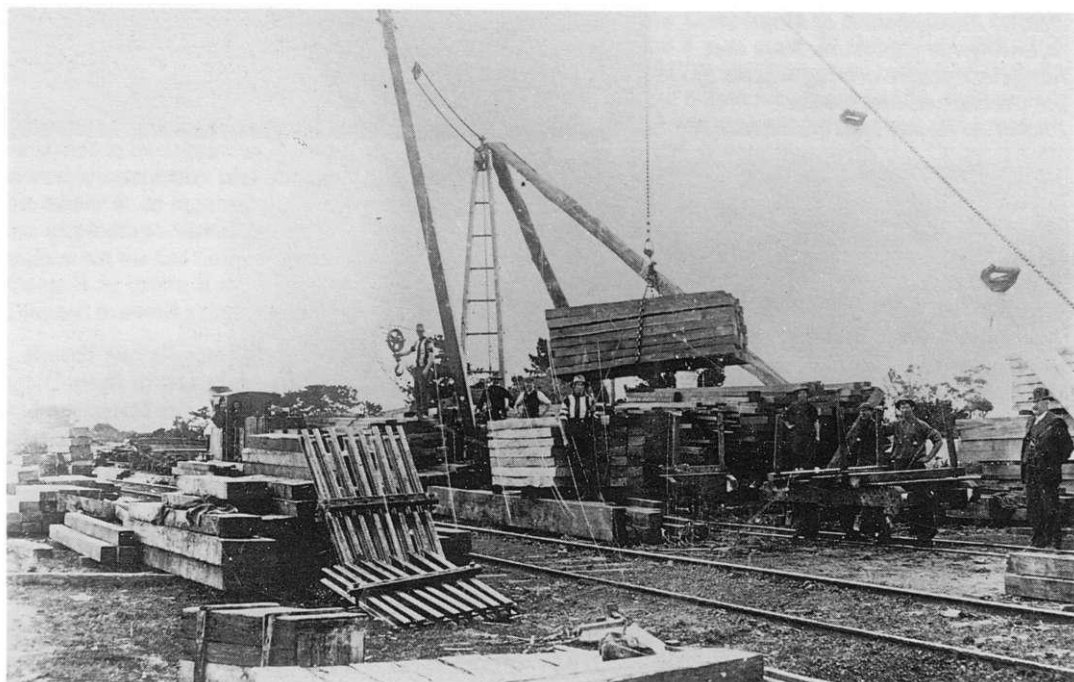
twosome. The force of the cascading timber threw Spurr across the three metre space separating the tramway and railway and into the path of a broad gauge locomotive moving along the siding. He saved himself by clinging to the cow-catcher as the engine dragged him along. Spurr had most of his clothing ripped off and was treated for shock, but was not badly hurt. Morris sustained a fractured thigh and lost several teeth. Both were lucky to escape with their lives.⁹⁶

The explosion of the second Krauss, *Mona*, on 1 September 1914 was the most tragic accident to occur on the line. It is the one incident which is known by just about all who have some knowledge of the Goodwood mill.

Mona had left Port Albert at 11.00 am, as scheduled, for the return trip to the mill with a consist of 12 empty trucks. Along the way, the driver, Bert Dudley, and the guard, Joseph Zapelli, collected 20 kerosene cases and 60 bags of chaff for delivery to the mill. Zapelli, who survived the accident told the following:

Unloading sleepers at Port Albert railway station. Wally Spurr was in charge of operations at the station and, at that time, two cranes were employed in trans-shipping timber from the Goodwood tramway to the broad gauge. Note Lila at the head of the train.

Photo: M.J. McCarthy Collection



When we got to the second cutting on the Rosedale Road, 13 or 14 miles from Port Albert, the tram was stopped. We started off again, and when at the top of the hill all of a sudden I was thrown in the air and heard the noise of an explosion. I was thrown out of the engine. I was dazed and tried to find where Dudley was. I found him lying on the ground under the engine cabin. He was 10 or 12 feet from the rails. I said to him 'This is terrible'. Dudley said 'What has happened?' I told him 'Mona had burst'. Dudley said 'Where am I?' I told him 'on top of the big cutting.' A man came and helped lift the cabin off Dudley's legs and then went for assistance. I was with Dudley when the doctor arrived. I had no idea how the accident occurred, not being an expert or holding a certificate. There was plenty of water showing in the gauge. I said to Dudley previous to the accident 'the engine is going well', and he said 'yes'. Dudley made no complaint about the engine. He asked if I thought we would get over the second cutting, suggesting we would not get over the second hill, we had not sufficient steam. We never failed to get over the cuttings. The same remark was often made when approaching a hill. Dudley attended to the engine in a proper manner. The engine is about three years old. It was new when the Company bought it.⁹⁷

The force of the explosion was sufficient to knock nearby trees down, blow apart the track-bed and twist rails in all directions. It was heard at the mill and rattled the crockery on the shelf of the Woodside store, three kilometres away. Zapelli was extraordinarily lucky to survive. He was leaning out of the cab at the time and was simply thrown clear and left practically uninjured. The unfortunate Dudley's injuries were caused by him having been thrown against a stump. He died the following day.⁹⁸

A testimony from the Inspector of Boilers revealed that 'some parts were blown 300 yards away and the safety valve may have been blown half a mile away. The boiler was practically new and was dated 1910'.

The investigation and subsequent inquiry into the accident could find no definite cause, although it was the clear that the boiler barrel had broken away from the fire box. Zapelli was adamant that there was plenty of water in the gauge and metallurgical tests on the part that failed indicated that it was up to standard. It is unlikely the true cause will never be known. However, if later rumours are to be believed, Zapelli may have been mistaken about the water level. If the locomotive had insufficient water the crown of the firebox may have been exposed on the up-grade causing the boiler to fail. This would account for the nature of the boiler failure.

The Locomotives

The Company drew on the Western Australian experience of its principals in the selection of its locomotive power. Low operating and permanent way costs, and flexibility in the type of terrain to be found in the Mullundung Forest were ensured by the employment of small, two foot gauge 0-4-0 and 0-6-0 engines. Elsewhere in Victoria they may have been underpowered for the loads to be hauled and the grades to be negotiated. However, in the gentle hills of the Mullundung Forest and along the long stretch of coastal plains south of the forest, they were ideal.

But the Company worked them hard. Before 1916 at least one engine was usually rostered off under repair, according to annual reports. The half yearly report at 30 June 1915 even placed the blame for the poor profit performance of the firm at that time on the need to stop the mill because of trouble with the locomotives.⁹⁹ The sensitivity of the Company's profit to the availability of engine power had not previously been understood and clearly action had to be taken to solve this problem. They found that the solution lay in a higher standard of log tramway construction that was less taxing on locomotives, and a quicker turnaround of locomotives under repair. To that time the delays in returning locomotives to service after repair were due to the need for major work to be undertaken in Melbourne. Collins reduced the problem by equipping a workshop at the mill with a lathe and other equipment. He also employed a first-class engine driver and locomotive fitter to carry out the work.¹⁰⁰ He found he could lower repair costs and increase availability by doing this.

The Company was to purchase three locomotives for use at Goodwood. It seems likely that all were purchased new although this is absolutely certain only with *Mona*, the second Krauss. In Western Australia the sister Company had adopted a practice of giving its locomotives four-letter female names. This custom was adopted for the Victorian operations as well, the names being *Amie*, *Mona* and *Lila*. These are likely to have been random selections that matched the desired patterns and not derivatives from a particular source. Name plates were not carried but *Mona* had her name painted on the cab side. Presumably the other locomotives did as well although this is not evident in photographs.

Amie

The Goodwood Company's first locomotive arrived at Port Albert during April 1910 and was duly named *Amie*.¹⁰¹ Some doubt still exists as to the identity of this and, also, the second Krauss locomotive *Mona*. Even *Amie*'s wheel arrangement has not been conclusively established. All photographs of



Above: The Goodwood mill prior to its reconstruction in 1912. Many of the posts in the ground are still evident today.

Photo: Australasian 18/11/11.

Below: A view over the back of the log yard with the tramway in the foreground. The standard of housing construction, in the background, was typical for the Goodwood mill. In its heyday it was very much a sophisticated small township.

Photo: A. Robinson Collection



Krauss locomotives on the Goodwood line depict 0-6-0 arrangements (where wheels are discernible). However early references in the ARHS *Bulletin*¹⁰² suggest that one Krauss locomotive was a 0-4-0 wt and, if this is correct, analysis of Krauss builders lists strongly supports its identity to be B/N 5947 of 1908.¹⁰³

The fate of *Amie* after the closure of the Goodwood tramway is not known. However, more than once during its life, it was reported to be in a 'terrible state'.¹⁰⁴ Furthermore, in August 1915, an engineer's report suggested that it would be cheaper to buy a new locomotive than repair it.¹⁰⁵ Therefore it is quite feasible that *Amie* was scrapped, possibly even before the closure of the mill.

Mona

In February 1911, the second Krauss locomotive arrived and was named *Mona*.¹⁰⁶ According to the 1914 Coroner's report, prepared at the time of *Mona*'s boiler explosion, the construction date of its boiler was 1910. This supports *Mona* being either B/N 6415 or 6416 of 1910.¹⁰⁷ Also, photographs of the *Mona*'s frame and wheels at the time of the explosion show that her wheel arrangement was 0-6-0. This further supports *Mona* being either 6415 or 6416.

Following the destruction of the engine it was rebuilt and returned to service in August 1915,¹⁰⁸ almost twelve months after the explosion. It was practically a new locomotive as almost everything above the frames, including the funnel and cab, were destroyed in the explosion. In its rebuilt form *Mona* presented a strange appearance with a long thin funnel protruding above a wide conical spark arrester reminiscent of that fitted to the Orenstein and Koppel, *Lila*. The rebuilt cab closely resembled the original Krauss product but presented a less robust appearance and was without a full height back. Notably, the tender normally attached to the rebuilt *Mona* carried a horseshoe for luck!

The last dismantling train on the line, on 14 July 1920,¹⁰⁹ was operated by *Mona*. The locomotive was then passed to Cameron and Sutherland, Machinery Merchants. At the time of her sale she was described as having outside cylinders 8.25 in x 12 in; wheels 21 in diameter with 4 ft 7 in wheelbase and boiler 6 ft 6 in x 2 ft 7 in diameter with 67 tubes 1.75 in diameter and 140 lb pressure giving a tractive effort of 4700 lb. Its weight in steam was 9.5 tons and the tank capacity was 150 gallons.¹¹⁰

Along with *Lila*, *Mona* was sold to J.F. Ezard in January 1928¹¹¹. Ezard combined both into a single, geared locomotive which he used at Warburton and later at Erica.

Lila

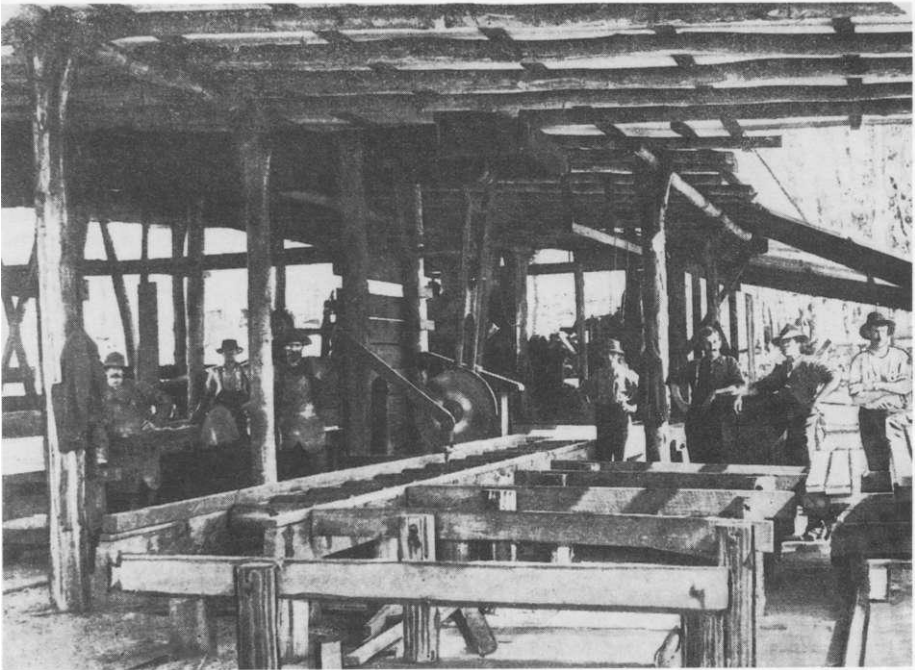
The third locomotive arrived in October 1913. It was a 0-6-0 wt of Orenstein and Koppel manufacture but, like its sister Krauss locomotives, some doubt exists as to its exact identity. Orenstein and Koppel builder's lists suggest it is most likely either 4755 or 4756 of 1911.¹¹² It was to the Australian Metal Co Ltd in Melbourne that both were despatched in 1911, but subsequent movements are unknown. Almost certainly one of them went to Port Albert as the Goodwood Timber and Tramway Company's *Lila*.

On the closure of the Company's Mullundung operations, along with *Mona*, *Lila* was sold to Cameron and Sutherland and eventually formed part of Ezard's hybrid geared locomotive. At the time of the sale she was described as having outside cylinders 8.25 in x 12 in, wheels 20.5 in diameter with 4 ft 1 in wheelbase and steel boiler 6ft6in x 2ft6in diameter with 62 tubes 1.25 in diameter and 140 lb pressure giving a tractive effort of 4600 pounds. Its weight in steam was said to be 8.25 tons.¹¹³

The workshop at the mill also produced some items of rolling stock. The sparsity of water, both in the bush and over most of the long haul into Port Albert, made necessary the use of tenders for the locomotives. They were crude but functional affairs with a large rectangular tank at the rear and a small wooden framed fuel box at the front. A hand pump and hose transferred water to the locomotive, there being no permanent connection between engine and tender. The lack of permanence went further in that the tenders (there were at least two) were seemingly swapped freely from locomotive to locomotive and even from underframe to underframe. The tender assembly was attached to a stout wooden base allowing it to be lifted free of either a standard timber truck or a pair of sprung bogies fitted with bolsters which constituted its running-gear. Carried on the tenders were a tool box, hand pump and hose, and a jack for putting derailed trucks back on the rails.¹¹⁴

Rolling Stock

The rolling stock employed by the Goodwood Timber and Tramway Company was sophisticated by Victorian sawmilling standards. Both timber and log trucks were of similar construction with solid wooden frames held with cross bolts. Axle boxes were provided with access flaps for greasing. Above the frame, log trucks were fitted with bolsters and, occasionally, stanchions for securing the load. Timber trucks were fitted with light bolsters and stanchions. Braking was achieved through a side lever connected to rodding which applied die wooden brake blocks to the wheels.

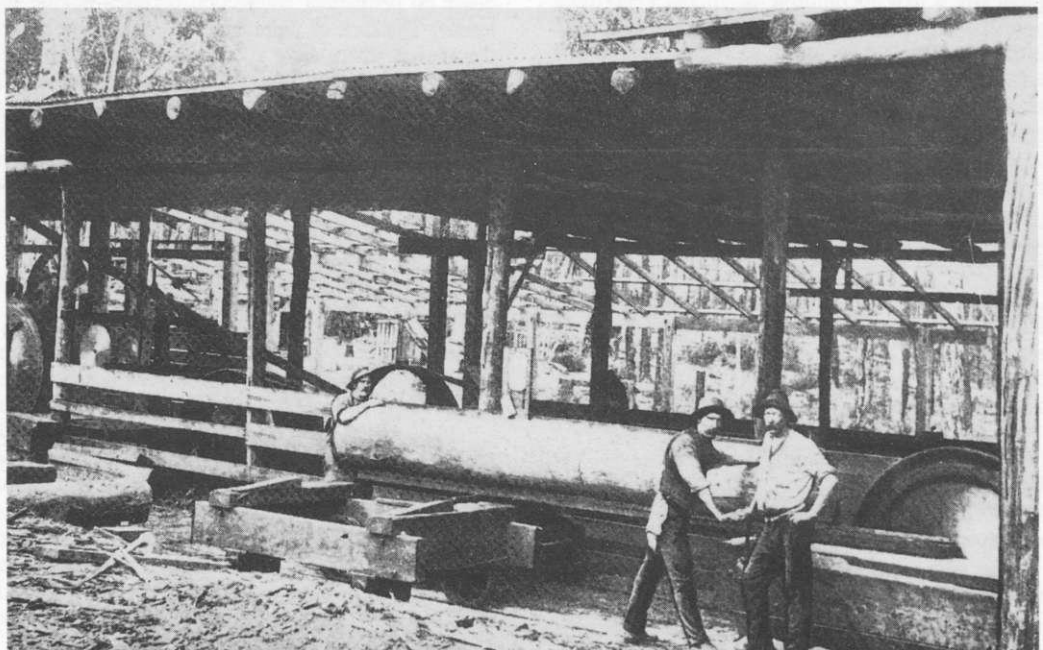


The docking-saw and, in the background, the rip bench at the Goodwood mill taken in 1911.

Photo: Australasian 18/11/11

The breaking-down bench at the Goodwood mill in 1911.

Photo: Australasian 18/11/11



The Company also had in its possession several wooden and steel framed bogies of a design similar to that used by the Rubicon Lumber and Tramway Company at Alexandra (Vic). They were placed beneath at least one locomotive tender but it seems that others were also used from time to time for carrying large loads such as boilers.¹¹⁵

The trucks were well maintained by Anton Christensen, the mill carpenter. To ensure that they were properly lubricated, Christensen inspected each regularly and checked the brakes before each trip.¹¹⁶ His task of keeping track of the trucks was made easier by having each individually numbered. The highest number detected on photographs is 34 but total numbers are not known.

The Township

A characteristic of the Goodwood mill was the township that quickly developed to support it. Most bush sawmills provided rudimentary accommodation for the men working there and often married couples would occupy larger two or three-room cottages. Some mill-owners provided a mess hut, often run by the wife of an employee, but rarely did facilities

develop beyond what was essential to provide basic sleeping accommodation and meals. At best only at the larger mills might a mill hall be provided for after work and weekend entertainment.

The Goodwood mill was almost unique in Victoria regarding the facilities provided and the degree of organisation associated with the settlement. The only other example known to the author was Collins' Ryson Creek sawmill north of Longwarry, which seemed to achieve a similar level of permanence, in the late 1890s.

A visitor to the mill during the later months of 1910 would have gained the impression that it appeared similar to a mining township in its infancy. The Company was then busy building several two-room dwellings for its employees but the visitor would have noticed that tents and bark huts were still common.¹¹⁷

This was largely the situation until around the end of 1912, but even by this time, some additional services were provided. Fred Grano, a tobacconist and hairdresser from Yarram, had established a branch of his business at the mill and extended his services to that of a general store.¹¹⁸ Meanwhile, Yarram mer-

A snig team in the Goodwood hush at a log landing with tramway in the middleground.

Photo: A. Robinson Collection



chant, John Bett, had established a store in competition with Grano under the motto of 'small profits'.¹¹⁹ A Post Office, served thrice weekly with mail deliveries, was provided by the Company.¹²⁰ The mill was also linked to Port Albert by telephone, the Goodwood Company being among the first in the district connected.

On the sporting side, even before the mill and tramway were complete, a Goodwood team had entered the local football competition with the colours of green and white.¹²¹ The team was to compete over most of the period of the mill's existence although it combined with the Port Albert team under the name of 'Port-Goodwood' along the way. It had a tough, aggressive reputation with at least one fatality to its record by the time it left the competition!

By 1913 the settlement had changed to resemble a small township. Gone were the tents and in their place stood fine weatherboard residences.

The Goodwood Union Hall opened in June of that year and the first of many functions was held there. A special train brought guests from Port Albert and Yarram. A correspondent to the *Gippsland Standard* wrote:

*'Goodwood is a township of mushroom growth, numbering over a score of residences, a blacksmith's shop, the Company's store and large office and two boarding houses. The population numbers over one hundred. The little town is up-to-date, even to a water supply, conducted by a main from Reedy Creek two miles distant - a scheme carried out by the Goodwood Company. The streets have not so far been named although one householder claims to be situated in High Street.'*¹²²

A year or so later the township boasted named streets and had truly taken the style of a country town. A visitor to the Goodwood sports carnival, an annual event, was to remark that;

'There is now a small township, boasting of its sports ground, tennis court, hall and other places of amusement. To the visitor, it is a queer little hamlet, laid out in typical town style with its streets, lanes etc., cottages with their flower and vegetable gardens and there is even a street composed of bark 'bungalows'. This is Burke Street, but where the better class cottages stand is Collins Street.'

The visitor further commented that he enjoyed a meal at Mrs Wallace's 'Cafe Chantant' that 'would do credit to any metropolitan cafe'.¹²³

In 1912 Mrs Wallace had taken over the business of Fred Grano who, it seems, had operated in conjunction with the Company's No. 1 boarding-house.¹²⁴ She advertised under the name of 'The

New Store'.¹²⁵ A Miss Lucas ran the No. 2 boarding-house.¹²⁶

Despite the growth in population, as the mill expanded and output grew, clearly the residents could not support two general stores. Because of this, it seems, both Mrs Wallace and John Brett shut down their stores around 1913. The Company then opened its own but found difficulty in making it pay and tried to sell the concern in 1915. The war may have been an influencing factor at this time as many men left to join the army. However, the store struggled on for another 12 months before its ultimate closure in 1916.¹²⁷ Mrs Wallace was to operate the No. 1 boarding house until its closure in 1919.¹²⁸

The Goodwood Union Hall was perhaps the most used public facility at the Mill. Many dances, concerts and other functions were held there over the years as well as Catholic and Methodist church services. The hall also served as a school from January 1914 to the end of 1919.¹²⁹

The unusual sophistication in community development that occurred at Goodwood was most probably linked to the large number of employees and families present at the mill. It may also have been a consequence of the Goodwood community predating the commencement of sawmilling in the Mullundung Forest. Many men and their families had worked and lived together in Western Australia before coming to Victoria. At the time of opening the mill the community had no tie with the existing district population from either a social or commercial viewpoint. The mill workers did not know the townspeople and the local residents did not know them. The mill was regarded as a 'foreign mill'. Indeed, at the time the proposal to restrict train running to night was mooted, a cry by Russell, representing the Company, that it would send the Company broke, was met by an attitude that it was 'just too bad'. It was 'foreign money' and not 'local money' involved. The other factor of course, was that the mill was 32 km from Port Albert and 10 km from Woodside, the nearest town. So it is not too surprising that the mill residents tended to stick to themselves and develop their own facilities and structures to support their life styles.

Management

At the outset, John Coughlan, in the capacity of General Manager, managed the Company with the assistance of Jim Doyle, the office manager and prospective Company Secretary.¹³⁰ Both moved from Western Australia to take up their roles. But, in what was something of a coup, both resigned from their positions in January 1912 when the Company was formally incorporated. At that time, Coughlan and

Doyle were hosting a visit from the Company Chairman, William H. Stanley and Alex Porter, a Director, both from the West. The Company had made a loss to that time and they were critical of some aspects of its operation. The resignation of Coughlan and Doyle may have been the result of that visit. Jim Collins Snr was made mill manager, in charge of all local operations, and E.A. Jamieson took on the job of local administrator.¹³¹ A consequence of this change was the enlargement of the plant and the acquisition of the 'Hoffman Travelling Bench' to increase production and operational efficiency. The impact was almost immediate with the Company reporting its first profit during the second half of 1912.¹³²

Following the restructuring of management, Houghton Russell, a Director residing in Melbourne, became Managing Director while Porter became Company Secretary. All maintained their positions until the closure of the mill except Stanley, who retired on 30th June 1916. He was replaced by Porter. Collins, in fact, continued to manage the Company's milling operations in Victoria for some years (including later in the Noojee district.)¹³³

The Company maintained an office in Port Albert where Jamieson kept the books. This situation continued until June 1917 when, with the Company devoting increased attention towards its plans for a mill in the Noojee district, Jamieson moved to Melbourne. Here he continued his administrative duties for the Mullundung operation in addition to the Noojee work.¹³⁴ While Collins was involved with developing the Noojee proposals, Thompson, the mill foreman, took on an assistant manager's role.

From the records that remain, it is clear that profits closely matched, in pattern, the level of output with one exception. Repairs to the locomotives, in particular the rebuilding of *Mona*, significantly reduced profit in what was already a poor year in 1915. This had a twin effect in that not only were the repairs to the engines a heavy expense, but the prolonged absence of both *Mona* and *Lila* forced the temporary closure of the mill as well.¹³⁵

Closure

The decline of the Company's fortunes in the Mullundung Forest began in 1916 when the number of orders from the Victorian Railways Department declined considerably. In the 1917 annual report, the

The Hoffman Travelling Bench installed in the Goodwood mill in 1912. With other improvements, such as a larger boiler and engine and the provision of a conveyor to remove sawdust, production at the mill was to increase significantly.

Photo: A. Robinson Collection





The Goodwood sawmill post the 1912 enlargement of the milling plant. Note the sawdust conveyor. In the context of Victorian sawmilling this was an innovative and unusual addition to the mill
Photo: A. Robinson Collection

Directors suggested, for the first time, that the forest was unlikely to sustain the mill for more than a couple of years; very different from the exhortations at the start when it was claimed the mill had a life of 20 years!¹³⁶

In 1917, the Company closed its Port Albert office and immediately sparked off rumours concerning the mill's imminent closure. Letters from the Company and reports refuting the rumours appeared in the local papers but these seemed to only fuel the speculation that the mill would soon shut. By June 1918, with plans being prepared and negotiations underway regarding the Noojee proposal, the Company could no longer deny that it was planning to wind down operations in the Mullundung Forest. Over the following twelve months activity about the mill reduced and the Company began to pay-off employees. During the year farewells were held for many men who had been there since the outset. This was to continue into 1919 with the No 1 boarding-house closure and the departure of Mrs Wallace.

Finally, late in 1919, the Company announced the impending shut down of the mill with Cameron and Sutherland, Melbourne machinery agents, having purchased the locomotives and tramway.¹³⁷

The mill operated on a reduced basis until around March 1920 when all operations ceased.¹³⁸ The tramway was dismantled almost immediately with most of the light weight rails owned by the Company being despatched to Noojee where they were exchanged with the Loch Valley Timber and Tramway Company for the 60lb per yard rails from the Sorrento Tramway. It is noted, however, that the Company sold a large quantity of 20lb per yard rails to the Buln Buln Shire for a road construction tramway from the Drouin South quarry.¹³⁹ It is likely the Company's new 3 ft 6 in gauge tramway in the Latrobe Valley, near Noojee, incorporated the rails leased from the Railways Department. Much of the mill equipment would also have been moved to Noojee.

James Collins Snr followed the mill to Noojee and managed the Company's affairs there until 1924 when he returned to the Yarram area with his sons James Jnr, William and Geoff.¹⁴⁰ The three sons formed J. Collins and Bros Pty Ltd and operated a mill on the Bruthen Creek.¹⁴¹ James Jnr sold his share to his brothers in 1968. The two remaining brothers were to operate a mill close to the Yarram railway station until quite recently.¹⁴²

The Goodwood Timber and Tramway Company's operation at Mullundung was an oddity amongst

Victorian sawmills. Shareholders invested heavily in a Company to establish an industry on a large scale in a part of Victoria which had seen sawmilling only on a minor scale in the past. The Company spent large sums on plant and equipment to handle large quantities of timber over a long period. Amongst Victorian mills its output was above average and its lifespan at the one site was longer than would normally be expected. However it did not live up to the expectations of those who invested with great faith, hope and optimism in 1910. Nevertheless, it was a successful operation having declared profits in most years of operation.

The Company also displayed an unusual degree of concern about employee amenities. Although most facilities were provided by the mill residents and not the firm, the Company was supportive in a real sense, donating timber, money and labour for most projects.

The dark side of the Company's operations, however, concerned the number and severity of accidents that occurred on the tramways and in the bush. Hardly a month went by without someone being seriously injured or worse. At least six men lost their lives at the mill over the ten years. Life in the bush at any sawmill was often perilous but the Goodwood Company seemed to fair worse than most.

Today

Goodwood today is little changed from the months immediately following the mill's closure. Most structures were moved away from the township or were dismantled for the materials. The area has been well visited by bottle and artefact hunters as it is easily accessed by car. But it offers plenty for the explorer, especially one interested in tramway remains.

The tramway route from Port Albert can be readily followed from the Old Rosedale Road turn-off on the South Gippsland Highway. Further to the south, the only substantial remains to be seen are near the Tarra River bridge.

The section along Old Rosedale Road, particularly around the Bettys Road intersection, has many high embankments and deep cuttings to interest the explorer.

North of Napier Road, the tramway is evident by its embankment, although badly eroded in parts. The Dead End is easily found but it is expedient to locate the upper section first and find the bottom section from its junction point. If you wish to investigate this location on the ground, permission should be sought first as the Dead End is now on private property.

The section between Williams and Starlings Road is easily followed and has plenty of interest in log loading ramps and sidings. Sleepers, although well decayed, are prolific in this area.

From Old Rosedale Road to the mill, the line can be followed, but the more scattered nature of sleeper remains makes it difficult in places.

The mill site is in open bushland and is quickly found by the stumps, which supported the buildings, still being in the ground. Perhaps this is a further testament to the durability of Yellow Stringybark! Around the site and leading into the bush to the north, tramway formations can be traced without much difficulty. It is a very open forest in this area and the locations of most major facilities are readily found. Likewise the hut sites, arranged in their 'streets', can be located on the north side of the mill. At the site of the engine shed can be found discarded iron work including firebars, brake parts and, perhaps of greatest significance, the back sheet from a Krauss firebox.

The most interesting log tramway remains are located on the Kangaroo Swamp line to the north-east of the mill. The formation over the first 2.5 km is difficult to discern on the north side of Goodwood Road, but from the bridge immediately past Massey Road, the tramway is more readily located and followed. From here, the remains of impressive trestle bridges, some with trestles standing, log landings and sidings can be found.

A kilometre below Shields Road the tramway has been obliterated by logging and nothing remains from there on.

The northern line is easy to locate at the top end of the mill yard but soon after crossing Goodwood Road it becomes very indistinct for 200-300 metres. The faint remains of the lineside drainage ditch are the only guides through much of this section. Further to the north, however, the impressive embankments and cuttings that characterised this line are easily found and followed. Two sidings and three log loading ramps can be found in addition to several low bridges.

The section between Shields Road and Harraps Highway has been obliterated by recent replanting. Although faint in places, beyond Harraps Highway, the tramway can be discerned, until the terminus, marked by a log loading ramp on the south side of the line, is reached. For a comprehensive field report of this line, see *Light Railway News* Number 78, October 1990.



The fourth and longest of the trestle bridges on the eastern log line. Many of these trestles were standing at the time of writing. Photo: A. Robinson Collection

Acknowledgments

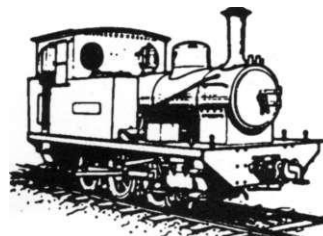
I would like to thank the following people for their contributions:

Dave Barry, the late John Buckland, Barbara Collins, Peter Collins, Peter Evans, Mrs H Griffiths, Bill Hanks, Colin Harvey, Norm Houghton, Kathleen Murphy, Phil Rickard (especially for his excellent bridge diagram), Anne-Marie Robinson, Frank Stamford, Jack Stock, the late John Youl.

References

1. Forests Commission of Victoria, File 30/2919
2. Yarram Chronicle, 19 December 1890
3. Notes taken in regard to Mason's enterprise at Nine Mile Creek from mainly the Yarram Chronicle
4. Gippsland Standard, 4 March, 1908
5. Gippsland Standard, 8 January, 1908
6. Government Gazette, 1907 Licence 25/832
7. Gippsland Standard, 29 March 1912
8. Gippsland Standard, 20 May 1908
9. Gippsland Standard, 29 March 1912
10. Gippsland Standard, 20 May 1908
11. Gippsland Standard, 29 March 1912
12. Company Records, PRO Series 934 Unit c55/3/4
13. South Gippsland Chronicle, 5 March 1910
14. South Gippsland Chronicle, 24 August 1910
15. Jim Collins as told to Dave Barry
16. Gippsland Standard, 11 February 1910
17. Gippsland Standard, 2 March 1910
18. Gippsland Standard, 11 March 1910
19. Gippsland Standard, 23 March 1910
20. Gippsland Standard, 29 April 1910
21. Gippsland Standard, 29 April 1910
22. Gippsland Standard, 29 April 1910
23. Gippsland Standard, 3 August 1910
24. Public Works Dept File 15/1636, PRO Series 384 Box 298
25. Letter Shire of Alberton to Department of Public Works 20.3.16
26. Gippsland Standard, 18 May 1910
27. Gippsland Standard, 3 August 1910
28. Victorian Railways Station Plan, 2 August 1912
29. Victorian Railways Annual Report, 1910
30. Letter Doyle Jas to Shire of Alberton 3.5.1910
31. Order-In-Council, PWD file 15/1636, PRO Series Box 298
32. Jim Collins as told to Dave Barry
33. Letter Shire of Alberton to Department of Public Works 20.3.16
34. Jim Collins as told to Dave Barry
35. Gippsland Standard, 11 September 1914
36. Gippsland Standard, 11 November 1914
37. Gippsland Standard, 24 August 1910
38. Gippsland Standard, 29 March 1911
39. Gippsland Standard, 15 December 1915
40. Gippsland Standard, 25 June 1913
41. J. Collins interview. From notes taken by D. Barry
42. Goodwood Timber & Tramway Company timesheets in possession of P. Collins.
43. Gippsland Standard, 25.6.1913
44. Gippsland Standard, 31 October 1913
45. Gippsland Standard, 29 October 1913
46. Gippsland Standard, 18 May 1910
47. Australasian, 18 November 1911
48. Gippsland Standard, 24 June 1910

49. Gippsland Standard, 29 March 1912
50. Gippsland Standard, 29 March 1912
51. Photographic evidence
52. Gippsland Standard, 18 July 1913
53. Forests Department Annual Report 1912
54. Victorian Railways Annual Reports 1910-1920
55. Forests Department Annual Report 1912
56. Forests Department Annual Report 1912
57. Forests Department Annual Report 1912
58. Gippsland Standard, 8 January 1913
59. Timesheet March 1911, Goodwood Timber & Tramway Co held by B. Collins
60. Gippsland Standard, 15 January 1913
61. Forests Department Annual Report 1912
62. Gippsland Standard, 9 June 1911
63. Government Gazette 1912
64. Victorian Railways Annual Reports 1909-1924
65. Victorian Year Books 1910-1915
66. Victorian Year Books 1937-38
67. Victorian Railways to '62, Harrigan Leo J., Victorian Railways 1962
68. Victorian Railways Annual Reports 1909-1924
69. Annual Reports, Goodwood Timber & Tramway Co Pty Ltd
70. Gippsland Standard, 17 November 1911
71. Gippsland Standard, 16 October 1912
72. Most of the detail concerning the northern log line was discovered through on-site inspections during the period 1981-1990
73. Gippsland Standard, 27 October 1915
74. G.T. & T. Co Half Yearly Report, 31.12.1915, PRO Series 934 Unit C55/3/4 File 703
78. Forests Commission File 30/2929
Note: The exact date for the construction of the Massey's Hill line is unknown however 1.5 miles of new tram otherwise unaccounted for was mentioned in this report. It would seem that this is most likely referring to the Massey's Hill branch.
75. P. Rickard site inspection 26.3.90
76. G.T. & T. Co Half Yearly Report 30.6.1917
77. Goodwood Timber & Tramway Company Half Yearly Report 30 June 1917.
79. Detailed notes of construction method taken by P. Rickard in 1990
80. Site visit in 1990
81. Site visits between 1981 and 1990 also Gippsland Standard 16 January 1920
82. Forests Department Annual Report 1912
83. Gippsland Standard, 12 February 1919
84. Gippsland Standard, 29 March 1912
85. Gippsland Standard, 11 September 1914
86. Coroners Inquest Toogood W.L. PRO Series 24 Box 888/1172
87. Coroners Inquest Toogood W.L. PRO Series 24 Box 888/1172
88. Yarram Standard, October. 1912
89. Gippsland Standard, 16 August 1916
90. Gippsland Standard, 16 January 1920
91. Gippsland Standard, 24 January 1912
92. Gippsland Standard, 20 December 1912
93. Gippsland Standard, 13 October 1910
94. Gippsland Standard, 9 June 1916
95. Gippsland Standard, 5 September 1919
96. Gippsland Standard, 11 November 1914
97. Coroners Inquest Dudley Wm, PRO Series 24 Box 915/30
98. Coroners Inquest Dudley Wm, PRO Series 24 Box 915.30
99. Half Yearly Report 30 June 1915, Goodwood Timber & Tramway Company, PRO Series 934 Unit C55/3/4 File 703
100. Half Yearly Report 30 June 1915, Goodwood Timber & Tramway Company, PRO Series 934 Unit C55/3/4 File 703
101. ARHS Bulletin - 391 - May 1970
102. ARHS Bulletin No 125 March 1948
103. 'Krauss Locomotives in Australia', Builders list compiled by Craig Wilson and John Browning, (unpublished)
104. Letter to James Collins from engineer 8 August 1915
105. Letter in possession of P. Collins
106. Gippsland Standard, 8 February 1911
107. Coroners Inquest Dudley Wm, PRO Series 24 Box 915/30
108. Half Yearly Report 30 June 1915, Goodwood Timber & Tramway Company, PRO Series 934 Unit C55/3/4 File 703
109. Photographic evidence
110. Gippsland Standard, 16 January 1920
111. ARHS Bulletin No 125, March 1948
112. 'Orenstein & Koppel Locomotives in Australia', Wilson Craig and Browning John, unpublished list
113. ARHS Bulletin No 125 March 1948
114. Photographic evidence
115. Photographic evidence
116. Yarram Standard, 16.10.1912
117. Gippsland Standard, 29 March 1912
118. Gippsland Standard, 13 July 1910
119. Gippsland Standard, 20 July 1910
120. Gippsland Standard, 29 March 1912
121. Gippsland Standard, 3 June 1910
122. Gippsland Standard, 25 June 1913
123. Gippsland Standard, 2 March 1917
124. Gippsland Standard, 30 June 1915
125. Gippsland Standard, 22 May 1912
126. Gippsland Standard, 26 June 1912
127. Goodwood Timber & Tramway Company Half Yearly Reports 1915-16, PRO Series 934 c55/3/4 File 703
128. Gippsland Standard, 11 June 1919
129. Education Department File 3825, PRO Series 795 Unit 2880
130. Goodwood Timber & Tramway Company, PRO Series 934 Unit C55/3/4 File 703
131. Gippsland Standard, 26 January 1912
132. Goodwood Timber & Tramway Company Half Yearly Report 1912, PRO Series 934 Unit C55/3/4 File 703
133. Goodwood Timber & Tramway Company Half Yearly Reports 1912-20, PRO Series 934 Unit C55/3/4 File 703
134. Gippsland Standard, 20 June 1917
135. Half Yearly Report 30 June 1915, Goodwood Timber & Tramway Company, PRO Series 934 Unit C55/3/4 File 703
136. Goodwood Timber & Tramway Company Half Yearly Report 30 June 1917
137. Gippsland Standard, 16 January 1920
138. 'Beyond the Ninety Mile', Boddy Doris M., 1973
139. Gippsland Independent, 7 January 1920
140. Jim Collins as told to John Youl, January 1976
141. James Collins Jr as told to the late J.W. Youl, former secretary of the Victorian Sawmillers Association and district forester, January 1976
142. Inner Bark, May 1972, contribution by J.H. Clark Forest





Mona at what appears to be a log landing on the northern log tramway in about 1912.

Photo: A. Robinson Collection