THE NARROW GAUGE RAILWAYS OF QUEENSLAND

BY GREG STEPHENSON (MAY 1995)

INTRODUCTION:

Most of us were taught that Queensland Railways was a narrow gauge railway. This obviously depends on your perspective. Given the amount of 3'6"gauge that existed in Queensland, Northern Territory, South Australia, West Australia and Tasmania, you could argue about what is the Australian standard gauge.

I soon realised that there was another group of railways used throughout Australia other than the Government systems. Many of these were industrial lines and of "narrow" gauges.

This overview highlights some of the areas where these narrow gauge lines were and are used in Queensland. 2' and 2'6" gauge tramways are the main focus. I have used some broad categories to describe the main types however this is not an exhaustive listing.

SHIRE TRAMWAYS:

In the era before reliable cars and good roads, the railways were the preferred method of transport. There was much lobbying for the Government to extend their system. Where this was not undertaken Divisional Boards and later Shire Council's sought approval to construct tramways. Some were constructed to 3'6" gauge such as the Beaudesert Shire Tramway closed in 1944; Cairns-Mulgrave Tramway which became part of the QGR's Sunshine Route; the Aramac Shire Tramway lasted until the mid 1970's and used two diesel mechanical locomotives in its final years. These tramways had a family resemblance to the QGR.

The Maroochy Shire had the distinction of owning two (2) tramways of different gauges - Nambour to Mapleton on 2 foot gauge using Shay locomotives and Palmwoods to Buderim on 2'6" gauge using a Shay and a Krauss locomotive.

The 2' gauge Geraldton Shire Tramway became the QGR's Innisfail Tramway and had the distinction of being their most profitable line before the advent of the Central Queensland heavy coal lines. The system was eventually sold to Mourilyan and South Johnstone sugar mills in 1978.

The Douglas Shire operated a 2' gauge system from Mossman to Port Douglas until 1959. This provided the main outlet for the Mossman Sugar Mill until the Captain Cook Highway to Cairns was opened. Bagged sugar was hauled in open wagons.

The Shire Tramways tended to operate with a minimum of equipment. Short trains were operated due in part to the standards of construction and due to the loads offering. Coaching stock was limited to several vehicles and most trains operated as "mixed". Facilities were limited with many stations being halts where goods were unloaded direct from the train.

Many of the Shire Tramways connected with the QGR requiring transfer sidings etc. These could make an interesting model.

Perhaps the best documented is the Innisfail Tramway. After Council ownership, it passed to the QGR and settled down to a routine of bringing cane from Nerada to South Johnstone Mill and carting sugar from this Mill and Mourilyan Mill to Mourilyan Harbour. Initially bagged sugar was hauled in open wagons. Later sugar boxes were added to open wagon underframes for bulk sugar. A number of locomotives were used at various times including 0-6-0T Fowlers (6), 4-6-0T ex W. D. Hunslets (3), an 0-6-0T Krauss ex Irvinebank and 0-6-2 Tender Fowlers (3). The diesel mechanical fleet consisted of 2 RMP/Baguleys and 7 Com-Eng (Qld) locos. A maximum of 110 open wagons were used.

MINING TRAMWAYS:

Much of Queensland was developed through mining ventures. Many mines used tramways within the mines for transporting ores to crushers and in the refineries. Tramways were and are still used in underground applications. A preserved example exists at the Acland Mine Museum on the Darling Downs.

Mines like all industries required transport of their products to markets. Some relied on narrow gauge railways. The mining ventures at Rocky Bluff, Stannary Hills and Irvinebank used a 2 foot gauge tramway to connect to the 3'6" gauge Chillagoe Railway and Mines Co Railway at Boonmoo. The tramway was opened in various sections between 1902 and 1906 and operated by the Stannary Hills Mines and Tramway Company Ltd and the Irvinebank Mining Company. As well as the mining products, goods and passengers were carried.

The Queensland Government through its Irvinebank State Treatment Works acquired the system in 1919 and 1922. The system was closed in 1936.

Loco manufacturers represented included Krauss (0-4-0WT, 0-6-0T), Falcon (2-6-0T), Borsig (4-4-2) and Avonside (0-6-2T). Many of the locos operated with locally built bogie tenders.

In the Cloncurry Area the Wee MacGregor Mine used a 2' gauge tramway which had 1 in 50 grades, 2 chain radius curves and a tunnel. A 0-4-0T Krauss was used to haul ore with firewood, mine timber and general stores forming a return loading. The tramway operated between 1915 and 1926.

Tramways have been used as part of quarrying activities. Some examples include Beerburrum where the MRC quarry was connected to the QGR station by tramway. The "locomotive" was a tipping wagon frame fitted with a motorcycle engine. A tramway with diesel locomotives was used in the construction of the Somerset Dam.

TIMBER TRAMWAYS:

A & D Munro operated a 2'6" gauge timber tramway at Hampton near Toowoomba. Two (2) Shay locomotives were used. The sawmill was connected by tramway to the QGR at Hampton on the Crows Nest branch.

Tramways were used in other areas such as Lahey Bros at Canungra and on the Atherton Tablelands, however these were generally to wider gauges.

TOURIST TRAMWAYS:

A number of Tourist Attractions use narrow gauge equipment as part of their developments. Some of these include Seaworld, Melaleuca Station (Chinderah), Dreamworld, Big Pineapple, Gingertown and Sugarworld (Edmonton). South Johnstone and Mossman Sugar Mills provide a tourist service. Mulgrave Mill at Gordonvale offered the Mulgrave Rambler for several years during the early 1990's.

SUGAR TRAMWAYS:

The most significant user of narrow gauge equipment in Queensland and Australia is the Queensland Sugar industry. Of the twenty-five (25) mills in Queensland all but two (2) have cane tramways. Today these are truly described as Cane Railways with bogie diesel locomotives, remote controlled locomotives, remote controlled brake wagons, prestressed concrete sleepers and mechanised track maintenance equipment. Major tramway extensions are underway in the Mackay and Ingham areas.

The Sugar tramways can be categorised into various eras. The pre-mechanisation era from the turn of the century to about 1960 was characterised by steam locos mostly tank engines 0-4-0T, 0-4-2T, 0-6-0T and 0-6-2T. Most overseas manufacturers would be represented like Fowler, Dick Kerr, Krauss, O & K, Decauville, Sharp Stewarts, Hunslet, Baldwin and Australian Perry and Bundaberg Foundry. Whole stick trucks were used and sugar was shipped in bags. Light rail often poorly maintained was common.

In the transition period, mechanical harvesting appears as do diesel mechanical locomotives initially RMP Baguley's and Drewry's from England eventually to be surpassed by local products from Clyde and Commonwealth Engineering. Most of these were 0-6-0 DM. Mechanical harvesting introduced cane bins which were often added to old whole stick trucks and were typically of 2 to 3 ton capacity.

The last steam locomotives were retired from active service at Millaquin and QUNABA mills in Bundaberg in 1979 and Marian Mill at Mackay in 1980.

The 1970's saw the introduction of the bogie locomotive from E M Baldwin & Sons of Castle Hill in NSW. They dominated this market until the late 1980's. Commonwealth Engineering built one bogie loco in 1977. Eimco and Bundaberg/Hunslet introduced their bogie locos in the early 1990's.

The recent trend has been the gauge conversion of ex Queensland Railway DH and SRA 73 class locos. The availability of these locos has virtually eliminated the demand for new locos. It will be interesting to see the development after these sources have been exhausted.

Perhaps we might see a bogie C-C loco. Many mills use two older 0-6-0's coupled for single driver operation.

Cane bins have progressed to 6 tonne capacity and experiments and prototypes are around for larger capacity bins. Mossman Mill is unique in using a bogie cane-tainer system.

Mourilyan, Victoria and Macknade Mills still dispatch bulk sugar by tramway. Other items likely to be seen include work trains with crib rooms, ballast hoppers, tool wagons and even "porta loos". Poison trains and grass cutters are operated. Mechanised maintenance equipment such as ballast tampers are in use.

An area of interest for modellers is dual gauge. Many mills with access to the QGR had sections of dual gauge where 3'6" gauge QGR wagons were shunted and hauled by 2' gauge mill locos. This system operates at Kalamia Mill in Ayr. Dual gauge also existed at Victoria Mill, Pleystowe, Bingera, Fairymead and Millaquin. In the Ayr area, sections of dual gauge are appearing where the 2' gauge Kalamia Mill is operating into the 3'6" gauge Pioneer Mill territory. It is possible to see a 2' gauge rebuilt DH waiting to pass a 3'6"gauge rebuilt DH.

The sugar industry provides good prototype choices for all eras being modelled and is a prototype destined for growth and change in the future.

SOURCES OF INFORMATION:

Enclosed is a selected bibliography of references on Queensland narrow gauge. On some prototypes very little has been published. Some of the references provide good background without being specific tramway references.

Specific railway titles such as those published by ARHS and LRRSA concentrate on the railway and are often useful, however some photographic sources are poor for obscure or

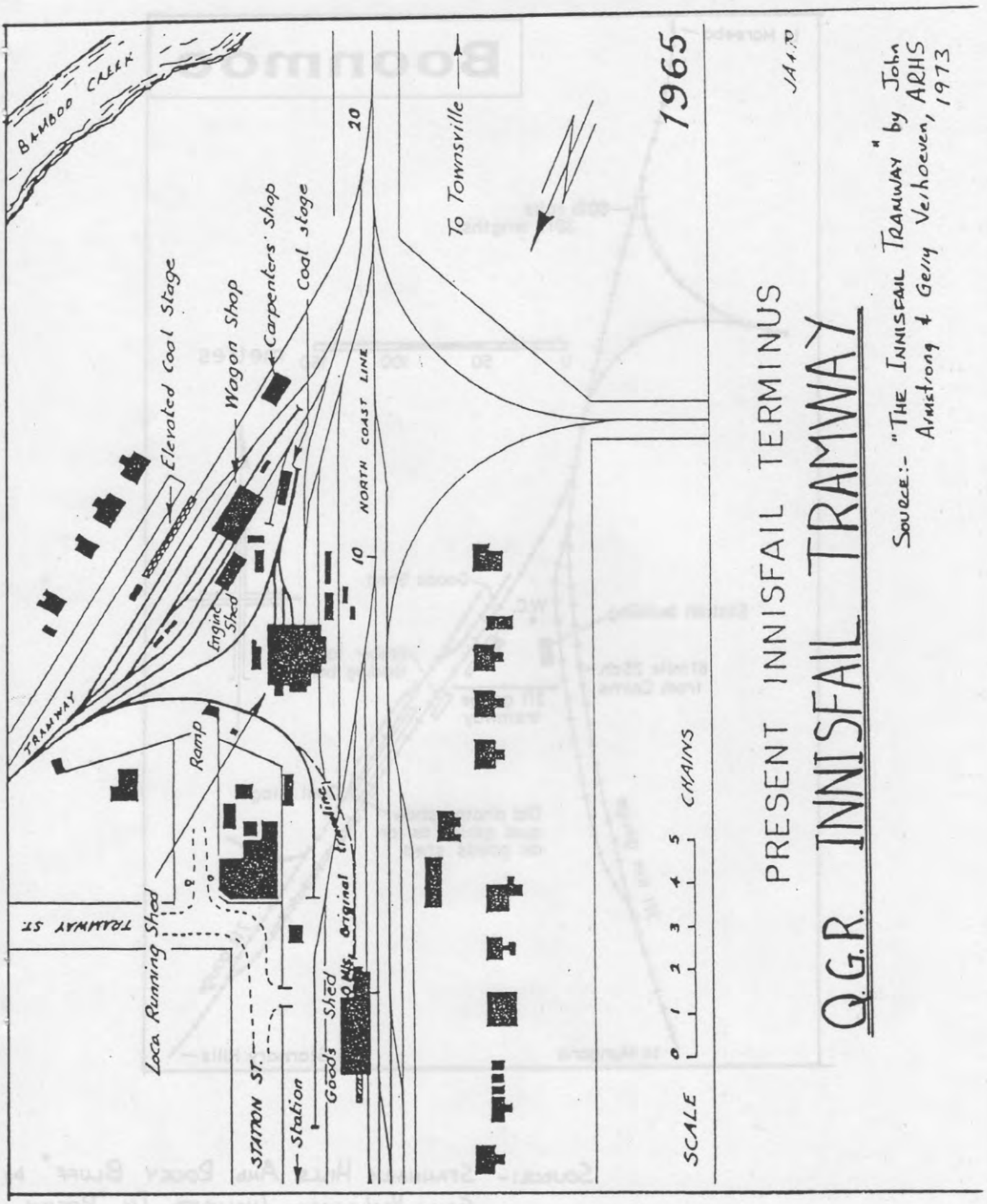
remote areas. Unfortunately many of the books are now out of print but may occasionally be obtained from specialist dealers - at a price.

Film and video sources may provide useful information. Some museums such as ANGRMS at Woodford and ILRMS in Wollongong have extensive collections of equipment which may provide inspiration for that special project. With the sugar industry the opportunity still exists to watch and photograph a very active prototype.

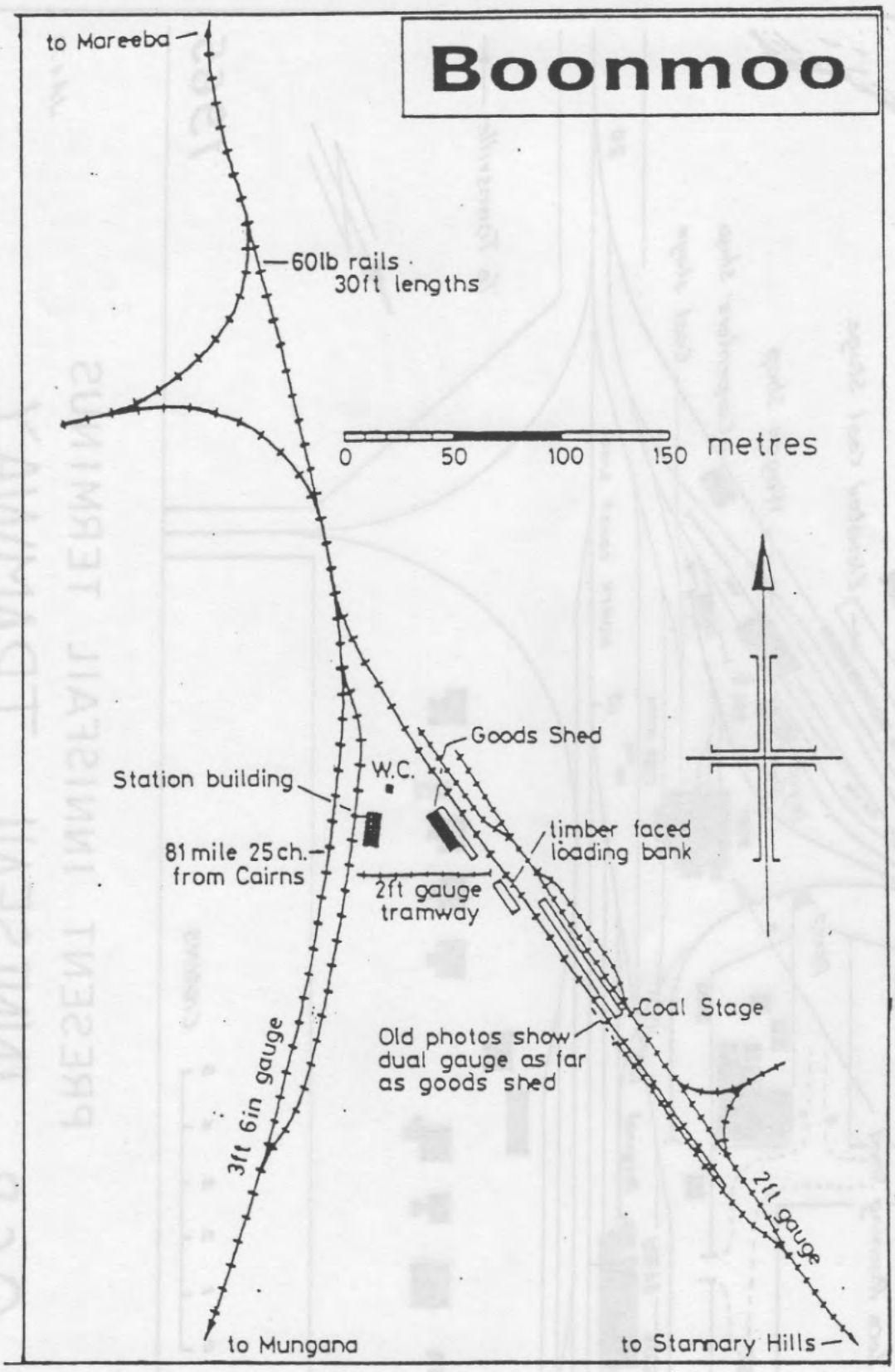
CONCLUSION

This has been a very brief overview of the use of narrow gauge tramways in Queensland. There is scope for modelling a variety of eras and industries. Train lengths can vary from a loco with a single carriage to cane trains with 200 plus bins.

The prototypes could be used as feeders to main lines on a larger layout or, as I prefer, as an entity in their own right. The scope and potential is only limited by the imagination.

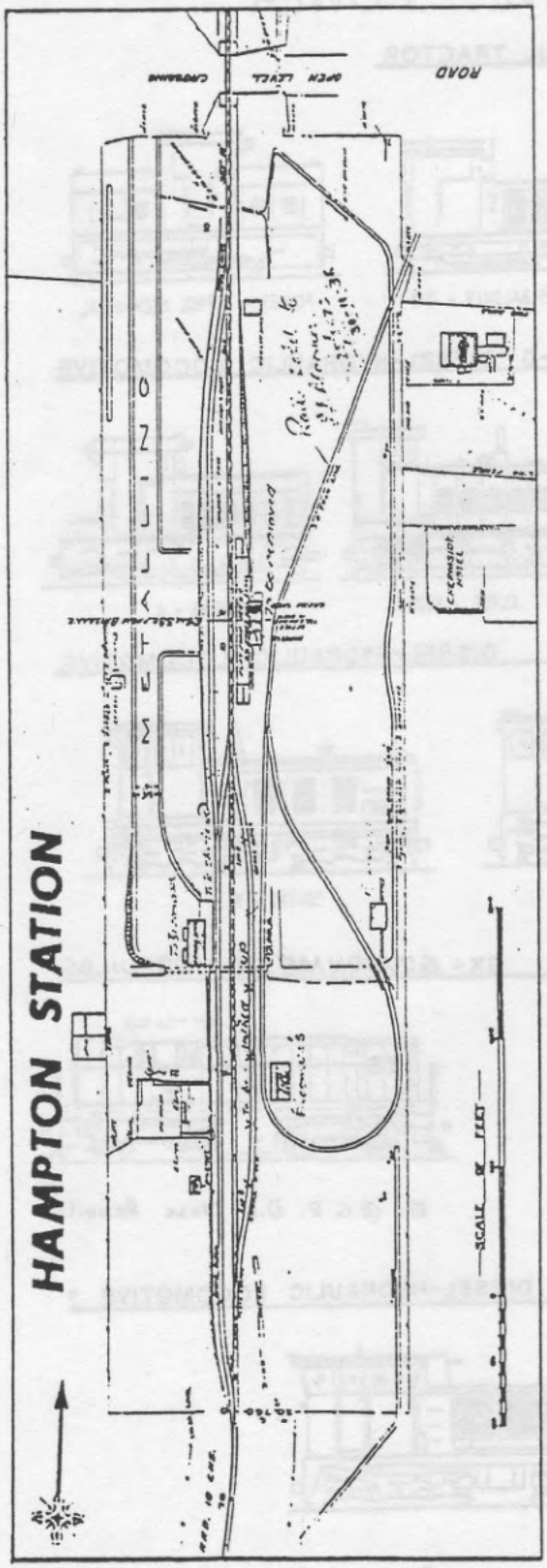

BAMBOO CREEK
Elevated Coal Stage
Wagon Shop
Carpenters' Shop
Coal stage
20
NORTH COAST LINE
To Townsville
1965
JA.D
Engine Shed
10
TRAMWAY
Ramp
Original tramline
TRAMWAY ST.
Loco Running Shed
STATION ST.
Station
Goods Shed
PRESENT INNISFAIL TERMINUS
Q.G.R. INNISFAIL TRAMWAY
SCALE
0 1 2 3 4 5 CHAINS
SOURCE:- "THE INNISFAIL TRAMWAY" by John Armstrong & Gerry Verhoeven, ARHS 1973

IRVINEBANK - STANNARY HILLS



SOURCE:- "STANNARY HILLS AND ROCKY BLUFF" by Gerry Verhoeven. INCLUDED IN "ROCKY BLUFF TO DENMARK", L.R.R.S.A. 1986

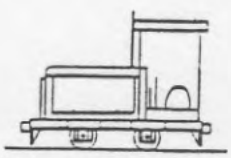
A & D MUNRO TIMBER TRAMWAY



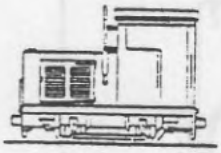
SOURCE : LIGHT RAILWAYS
Nº 114 OCTOBER 1991

AUSTRALIAN SUGAR RAILWAY MOTIVE POWER

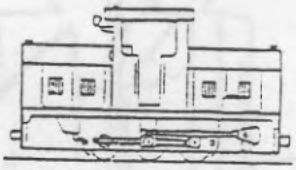
GENERATION 1 RAIL TRACTOR



PLANET - PETROL MECHANICAL

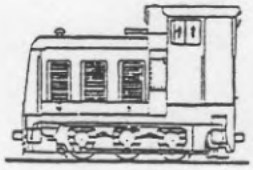


E.M.BALDWIN - DH2

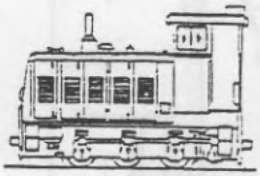


FOWLER - PETROL MECHANICAL

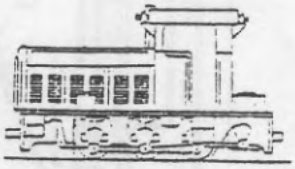
GENERATION 2 0-6-0 DIESEL-HYDRAULIC LOCOMOTIVE



CLYDE - DH1-71

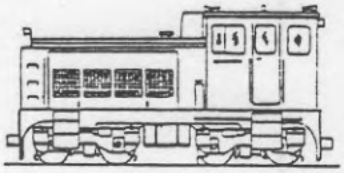


CLYDE - HG3R

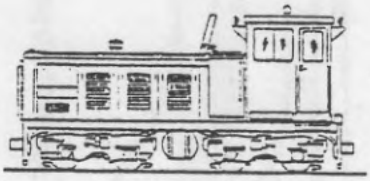


COMENG - A

GENERATION 3 B-B DIESEL-HYDRAULIC LOCOMOTIVE

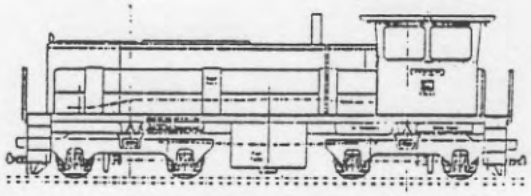


E.M.BALDWIN - DH28B

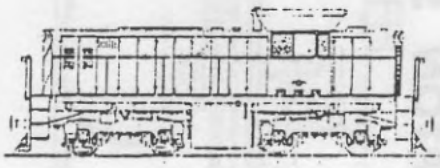


COMENG - N

GENERATION 4 B-B EX-GOVERNMENT REBUILDS

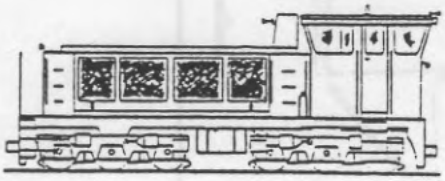


Ex S.R.A. 73 Class Rebuilt



Ex Q.G.R. D.H. Class Rebuilt

GENERATION 5 C-C DIESEL-HYDRAULIC LOCOMOTIVE ?



Source • RAIL AUSTRALIA Nº 8 March/April 1988
• AMRM Nº 83 March/April 1977
• LIGHT RAILWAY NEWS Nº 104 Feb 1995

NOT TO SCALE