

The Narrow Gauge Environment — More than just canefields

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Since narrow gauge railways are usually built with smaller radius curves, smaller structure gauges, lighter rails, etc., they can be substantially cheaper to build, equip, and operate than standard gauge or broad gauge railways, particularly in mountainous or difficult terrain. The lower costs of narrow gauge railways mean they are often built to serve industries and communities where the traffic potential would not justify the cost of building a standard or broad gauge line.

Narrow gauge railways also have specialized use in mines and other environments where a very small structure gauge makes a very small loading gauge necessary.

On the other hand, standard gauge or broad gauge railways generally have a greater haulage capacity and allow greater speeds than narrow gauge systems.

Historically, many narrow gauge railways were built as part of specific industrial enterprises and were primarily industrial railways rather than general carriers. Significant lengths of sugarcane railways still operate in the Queensland canefields.

Sugarcane railways are a classic example of this practice. They were built to collect the cane directly from the field, originally with portable track laid directly into the paddock where the cane was cut, transport it to the mill, storage until crushed and then to transport the products and by-products from the crushing process. In many locations, the bagged sugar and molasses were transported to the port or Queensland Railway transport by the cane railway. Filter mud, a by-product of the processing, was returned to the farms by cane railway.

Sugar mills are large businesses seeking to maximise their return on investments by seeking the most economical means of transport. Only Victoria and Macknade Mills still use cane railways for the transport of raw sugar. Molasses is transported by Queensland Rail or truck. Filter mud is collected by spreader trucks for transport and application directly to the paddock. In some locations, cane railways are being removed and in other areas they are being extended.

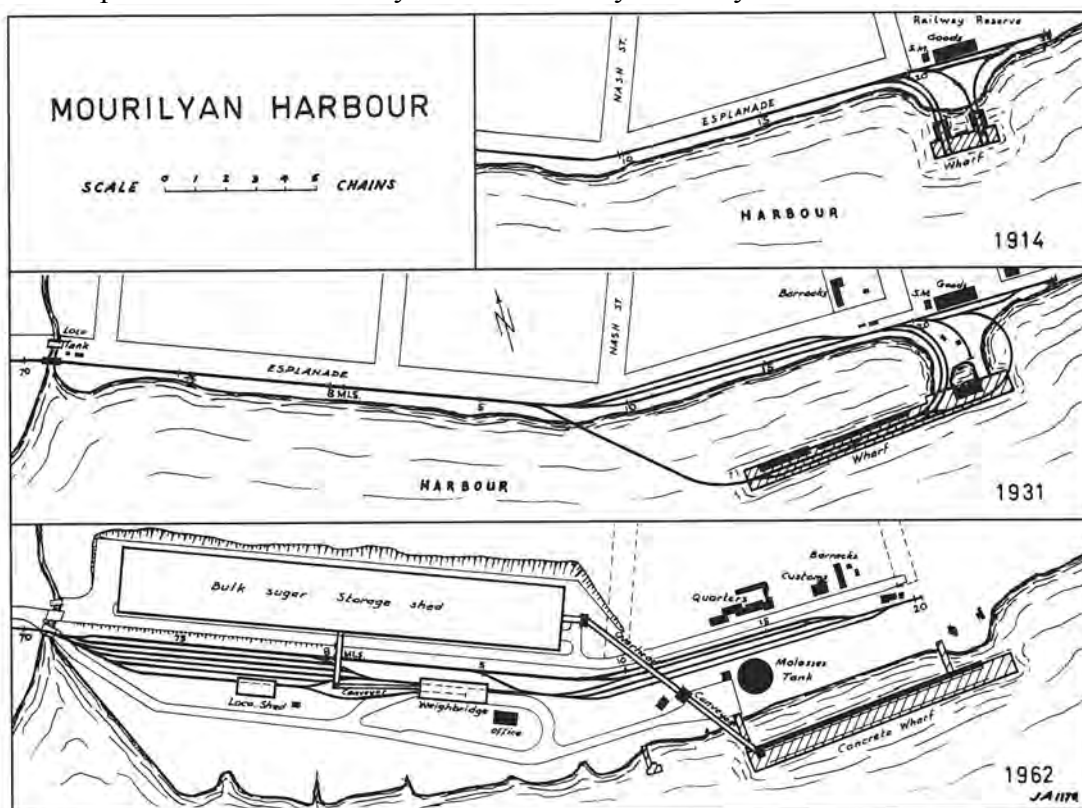
Mills have also used their cane railway networks for other fringe activities. Moreton Central Mill at Nambour ran passenger services to Coolumb in the early part of the twentieth century whilst Mossman, Hambleton, Mulgrave and South Johnstone Mills ran tourist train ventures in the 1980's and 1990's.

However, the core reason for the existence of cane railways is the transport of sugar cane. The future of cane railways comes down to the economics of individual locations. Whilst cane railways are seen to be an economical means of transportation they will remain in use.

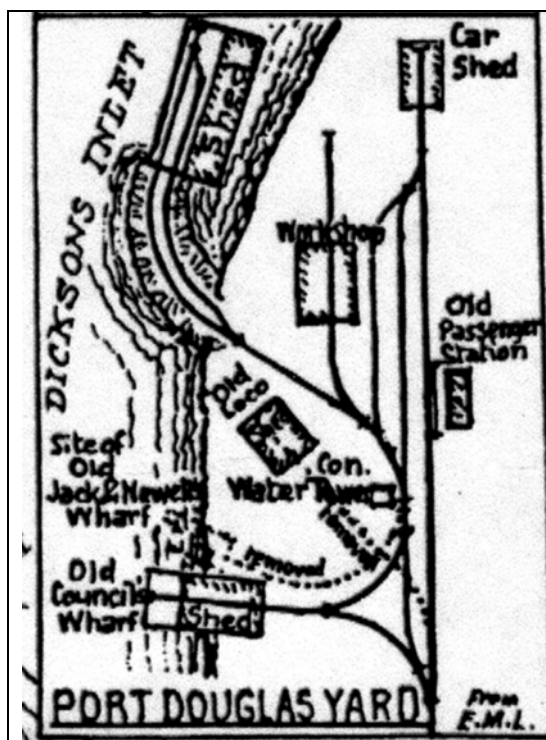
The following pages illustrate some aspects of interaction of these narrow gauge railways with their environment. For modellers, they provide scope to provide many desired features in small areas because of the close interaction of cane railways with their environment.

Narrow Gauge Connections to Wharves

At Mourilyan Harbour near Innisfail, bagged and later bulk sugar was carried by the QGR's 2 foot gauge Innisfail Tramway. This system passed to the adjoining sugar mills and raw sugar is now transported to the harbour by truck. Tramway track layouts are shown below:



Source: *The Innisfail Tramway*, John Armstrong and G.H. Verhoeven, LRRSA, 2000



Source: ARHS Bulletin, March 1956






Victoria & Macknade Mills, Ingham still use their tramway to transport raw sugar to the Lucinda Point loading wharf. This railway is running through an area of saltwater mangroves.

The Douglas Shire Tramway carried bagged sugar from Mossman to Port Douglas with the tramway extending onto the wharf.





Proximity to Houses and Building

Sugar mills were the reason for the existence of many coastal towns and cane railways were often superimposed onto existing town layouts. In many locations, the cane railways are on narrow easements through farms and run close to buildings. The railways are generally unfenced.

	<p>Mossman Mill, Mossman At Miallo, the cane railway squeezes through between the houses.</p>
<p>Babinda Mill, Babinda The southern entry to Babinda Mill was along the footpath of the local streets.</p>	
	<p>Mulgrave Mill Much of the cane land in the former Hambleton Mill area between Edmonton and Redlynch has been converted to housing. The cane railway runs on easements between suburban backyards and crosses numerous residential streets.</p>

Street Running – Mixing It With Road Vehicles






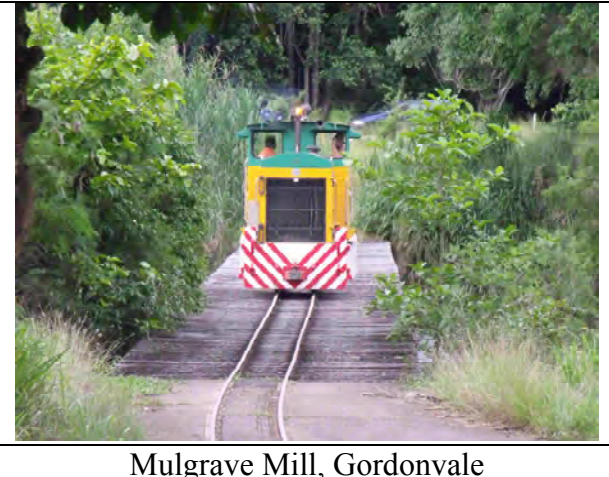
Superimposing cane railways onto existing town layouts often resulted in them running down existing road reserves. When they were built, the cane railways were the dominant type and often only reliable form of transport. As time progressed and roads and motor vehicles improved, cane trains are forced to share their former domain with road vehicles. We now see two thin ribbons of steel through a sea of asphalt.

	
Nambour Mill, Nambour	South Johnstone Mill, South Johnstone
	
Mossman Mill, Mossman	Millaquin Mill, Bundaberg

Dual Purpose Bridges

On Queensland Rail, the only example of a road/rail bridge still in use is over the Burdekin River between Ayr and Home Hill. However, there were and still are numerous examples in use on cane railways. They range from simple single span, single lane timber structures to high level prestressed concrete bridges. Some of the original dual purpose bridges have been rebuilt as separate structures often with the cane railway maintaining the original alignment and parts of the original structure. The construction and maintenance costs were usually shared between the Sugar Mill and the local Council or Main Roads.

Whilst many of the smaller timber structures have been removed or rebuilt, there are recent examples of new concrete dual purpose bridges being constructed.

	
	<p>Mossman Mill, Mossman</p>
	
<p>Mackay Sugar</p>	<p>Tully Mill, Tully</p>
	
<p>Former Fairymead Mill</p>	<p>Mulgrave Mill, Gordonvale</p>



Mackay Sugar – Pioneer River, Marian



Mackay Sugar – Pioneer River, Mia Mia

Recycled QGR Railways

In a number of areas, the former QGR “right of way” has been used for the construction of cane railways. Typical QGR facilities can be identified.



Bingera Mill, Wallaville
Former Morganvale Branch. Wallaville Station building remains in use as “crib” rooms for loco crews.



Bingera Mill, Wallaville
Former Morganvale Branch. Typical QGR overhead bridge still exists albeit in poor condition.



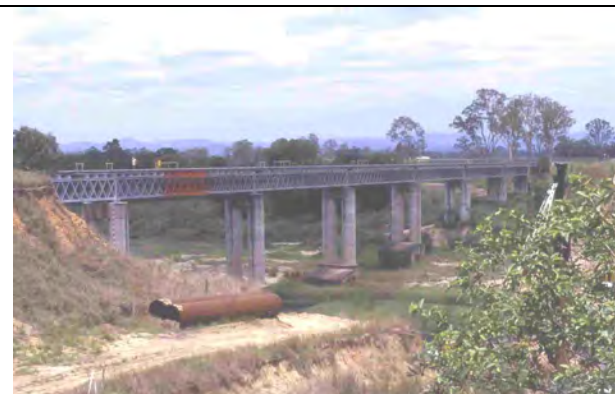
Isis Mill, Cordalba
Former QGR Dalarnil Branch. Typical QGR goods shed remains at Cordalba.



Mackay Sugar, Mirani
Former Netherdale Branch. Former Mirani Station is used by community groups.



Mackay Sugar – Palm Tree Creek, Garbutt
Former Netherdale Branch. Typical QGR timber
trestle bridge is now used by cane trains.



Pioneer River – Mirani
Former Netherdale Branch. At one time, this
bridge was used by both QGR and cane trains.
Only cane trains now use it.

Tourist Ventures

Some times it is more than the physical environment that impacted on these railways. It may also be the economic and social environment. In the early part of the 20th Century, Nambour Sugar Mill provided a tourist tram service from Nambour to Coolum.

In the 1980's and 1990's, some northern mills diversified into tourist ventures. Most of these were relatively short lived. However, the Bally Hooley service still operates at Port Douglas, albeit no longer owned by the mill and now operated by volunteers.



Mossman Mill – Bally Hooley Express



Hambleton Mill – Sugarworld Shuttle



Mulgrave Mill – Mulgrave Rambler



South Johnstone Mill – Turtle Express