8

John Newell

MODELLING THE RAILWAYS OF QUEENSLAND

CONVENTION 2008

I am deeply honoured to be here this morning to present the keynote address to this Convention. When I consider the challenge of presenting a paper on the nominated topic, "Where else but Queensland" I just have to look at the audience in front of me. "Where else but Queensland" would such a diverse group of people gather on a perfectly gorgeous day to listen to a diverse group of presenters deliver topics that they hope will interest and enthuse their respective audiences. And a challenge it is, because in my paper, I hope not only to provide exemplars of Queensland's railways' uniqueness, but to suggest justifications for those aspects of the state's railways that are unusual but usual.

I am going to do this by looking firstly at the settlement of the colony in the early to mid 1800s, and then build on this to look at how the method of settlement influenced the way in which our railways developed and were operated. The underlying theme that I am using to develop this paper is based on "accidents of history".

Interestingly, these "accidents" and the way in which Queensland Railways has operated within their constraints do transfer to practical and unique modelling opportunities.

Accidents of history have been enunciated by scholars for many years to describe happenings and developments at a point in time that can have profound effects on the history of an entity, and are very often difficult to rectify. People at the time who see their actions as nothing but a positive step forward, do not know, or comprehend, that their actions will in fact, be seen later as impediments, often costly, to further growth and development.

Queensland's extensive coastline punctuated by fine river estuaries and deepwater harbours that were eminently suitable for shipping set the scene for what we might regard, from a contemporary railway development point of view, as a series of individual, significant accidents of history that would have far reaching effects. Many of these effects were felt for well up to one hundred years later, with some still playing a part in QR operations until very recently.

Settlers soon found their way along the coastline, making their homes and developing settlements around these river estuaries and harbours that made supplies easy to bring in, and produce easy to send out. As people moved inland to take up land for farming and grazing, the coastal settlements grew, eventually becoming towns, fulfilling a role as service centres for the settlers out in the hinterland, and later in western parts of the state.

Thus we have points of settlement along the coast – Brisbane; Ipswich; Maryborough; Bundaberg; Gladstone; Rockhampton (Port Alma); Mackay; Bowen; Townsville; Cairns and Cooktown – all with the potential to develop into medium to large ports. Comparing this high number of separate and relatively independent coastal and river estuary developments with that in other states, it becomes evident that from the outset, it was a case of "Uniquely Queensland" – a decentralised pattern of settlement that was so different from the way in which other states developed.

9

In the mid 1800s, our forebears saw opportunities to further open up and develop the young colony of Queensland by building railways to overcome transport difficulties in getting supplies to settlers in rural areas, and transporting produce to larger, usually coastal centres for processing or export.

In association, the railways would also transport people to and from the then isolated settlements scattered throughout the state.

It is not surprising, given the length of the Queensland coastline with its towns now developing as substantive entities in their own respective rights, that many of them saw themselves as starting points for railways to open up and service the settlers in "their" hinterland.

In Queensland a number of isolated road and railway systems developed, each system based on a settlement that was to all intents and purposes located very close to suitable port facilities. While this on its own may not have been significant from the uniquely Queensland point of view, it was the stoic individuality of the developing coastal towns that caused our railway system in particular to take on its own characteristic features that set it aside from other Australian systems, all of which are basically centralised in nature.

In New South Wales and Victoria in particular roads and railways stretched out from the capital cities. In New South Wales, for example Sydney and Newcastle became the major ports, with the railways and roads feeding to these two places.

The policy of decentralisation therefore played a major role in the expansion of transport and communication networks and the way in which they operated, with a consequent effect on the development of ports along the Queensland coastline.

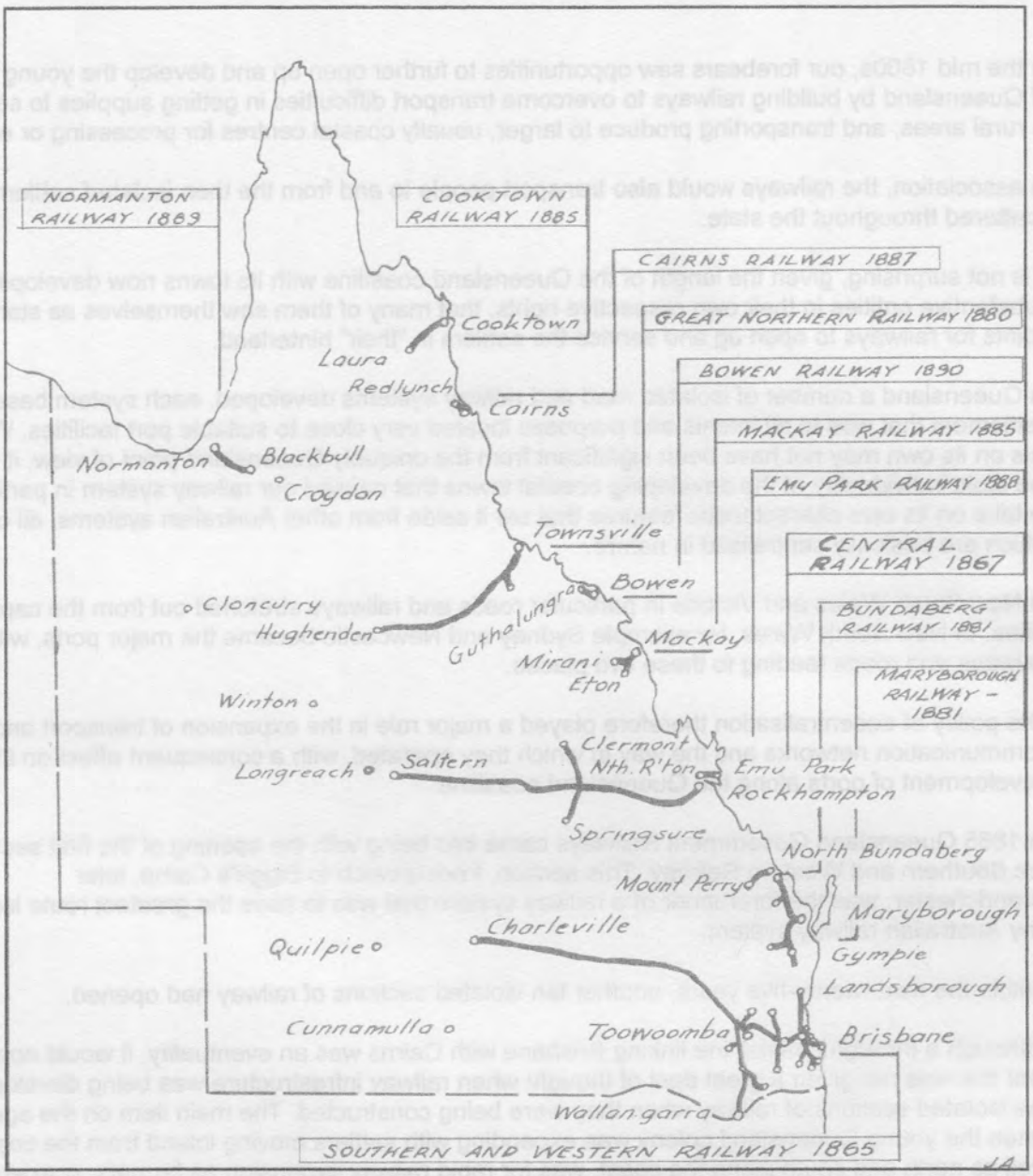
In 1865 Queensland Government Railways came into being with the opening of the first section of the Southern and Western Railway. This section, from Ipswich to Bigge's Camp, later Grandchester, was the forerunner of a railway system that was to have the greatest route length of any Australian railway system.

Within the next twenty-five years, another ten isolated sections of railway had opened.

Although a through coastal line linking Brisbane with Cairns was an eventuality, it would appear that this was not given a great deal of thought when railway infrastructure was being developed on the isolated sections of railway when they were being constructed. The main item on the agenda when the young Queensland colony was expanding with settlers moving inland from the coast as well as north and south along the coast, was for rapid railway expansion as farmers, graziers and settlers generally called for transport for food, produce and stock.

The placement of infrastructure in a certain location because it is the best place at the time certainly suited the current and short term needs of that town and its railway. Goods and passengers could easily and freely be moved between rail and ship and vice versa. However, over longer periods of time, as the settlement grows and develops the location of the infrastructure may, in fact no longer be suitable as it is causing inconvenience, or it cannot be further developed because of space or geographical constraints.

We now return to accidents of history, and in hindsight evaluate the effects that this early railway expansion was to have on later development when the isolated sections of line would eventually be linked. In this paper, we will examine the way that railway infrastructure was set up in several centres from which isolated sections of line were constructed and how this affected future railway development in those places.



The isolated railway construction in Queensland that led to the decentralised railway system is illustrated above. All construction shown took place in the twenty-five years between 1865 and 1890. The long term character and ethos of Queensland Railways had its beginnings in this system, one that marked QR as being a railway with its own unique pattern of operation, infrastructure and rollingstock.

In particular, we follow developments in Ipswich; Maryborough; Bundaberg; Rockhampton; Mackay; Bowen and Townsville. We also look at several other examples that illustrate the "Uniquely Queensland" theme – Gladstone; Wallangarra and Signal Cabins.

In the developmental phase in Queensland's isolated railways, in particular at the coastal termini, railway infrastructure was located as close as possible to the port facilities, or if this was not feasible, in locations close by suitable to the general direction that the railway line was to follow,

Often, the solution is not an easy one, and attempts to implement alternatives do not always make things more convenient. In fact the solution may itself become another "accident of history" that will prevail and niggle away until a major decision is made to either commit high level funding to relieve the problem, or to leave it be and continue to suffer the inconvenience.

From small developments such as our early railway construction, accidents of history can have profound effects on the way in which development of a region, state or even our nation occurs. Railway infrastructure put in place in Queensland in the mid to late 1800s has influenced railway development over the years, and still influences railway development today. In turn, many railway decisions made today, almost certainly will have significant influence in years to come.

One major aspect of the development of Queensland Railways centred around the light construction and sharp curves, even on main lines, brought about by the attitude of the politicians of the day that they would build railways using a minimum of funding. This affected rollingstock with Queensland Railways persevering with light, small boilered locomotives and short carriages for over one hundred years. However, while retaining the short length of rollingstock, engineers did optimise height and width, to the extent that they are not much less than standard and broad gauge carriages in other states.

This paper is not about rollingstock, but about railway infrastructure and how operations have been determined by the constraints that were imposed through decisions made in the mid to late 1800s.

Ipswich

Ipswich is probably Queensland Railways' most comprehensive accident of history. It came very close to becoming the capital city of the young colony as its position as head of navigation meant that it was the major port for the settlement of the southern and south western parts of Queensland. When the government of the day decided to build a railway towards the Darling Downs, Ipswich was regarded as the logical starting point and eastern terminus. And this is where a series of far reaching "accidents" began.

I was fortunate to have been born in Ipswich, growing up in North Ipswich just a stone's throw from the railway workshops, the roundhouse and the north yard where most shunting and marshalling of goods trains took place. Living only twenty minutes walk from the city centre, the activities of the railway were integral to my daily life. From my primary school on the nearby hill, Ipswich North State School, I could look down on the workshops and roundhouse to observe and listen to the wide range of goings-on.

My paternal grandfather was a moulder at the railway workshops, and had a keen interest in trains. He was the prime motivator in developing my interests in both railways and photography.

It was a common practice in the 1940s and 1950s, before the advent of television, for families to go "window shopping" usually on a Friday night. My family partook of this activity at least once or twice a month. My grandparents, my mother and father and I – and later my brother and sisters as they joined the family – would set out on our walk to town.

This entailed what my grandfather said was a shortcut through the north yard on a defined public track. It was not really a shortcut but in effect a means by which he could show me, and explain to me, the various items of rolling stock there and the shunting movements of the two PB15s and the C16s, C17s and B18¼s on arriving and departing main line coal trains, and the general goods trains to and from the Fassifern and Brisbane Valley branches.

Thus the twenty minute walk to town became, for my grandfather and myself, a forty-five or fifty minute walk. The rest of the family had gone ahead, with arrangements made to meet up later,

The best was yet to come. On our arrival in town, and whilst my parents and grandmother were enjoying themselves window shopping, my grandfather and I would position ourselves in the very dimly lit Bottle Alley, which was a laneway between Nicholas and Ellenborough Streets, parallel to the main line at the western end of Ipswich station platform, and at carriage roof height and

opposite the Ipswich Signal Cabin. From our position we commanded a fine view of the western end of the station, the south yard, and the main line as it curved slightly under the Ellenborough Street overbridge, heading westwards to Toowoomba and other points west and south west. My understanding is that my first venture to Bottle Alley with my grandfather was when I was about two years old, around the time World War 2 was drawing to a close. While I do not have recollection of that particular occasion, I must have been impressed because my grandfather – and my father - saw fit to take me back there on a fairly regular basis, both on Friday nights and during the day when they were able to, and until I was old enough to go there alone – aged around 9 or 10.

What I didn't realise until much later in my life, and I don't think others would have realised either, was that what I saw on a daily basis around Ipswich and regarded as usual happenings were in fact unusual in the context of railways Australia wide, and even world-wide. From that one spot in Bottle Alley, one saw a number of these "unusual but usual" events take place on a daily basis, in some cases, many times each day.

My early years also entailed a number of long distance train journeys along the Queensland North Coast Line and into New South Wales via both Kyogle and Wallangarra. Again, without really being aware, happenings that occurred several times daily on these routes later came to me as being somewhat unusual from a general railway point of view. In retrospect, many of these occurrences could have been avoided with some forethought and foresight by railway planners and the railway operator, Queensland Railways.

By 1859 when Queensland became a separate colony from New South Wales, the settlement of Ipswich was developing in and around the hilly country through which the Bremer River flowed. The major reason for construction of the Southern and Western Railway was to serve inland development, with people, livestock and goods being carried between Ipswich and Brisbane by steamer on the Bremer and Brisbane Rivers. Although the township and majority of the population was located on the south bank of the Bremer River, railway construction commenced from the north side, with a wharf branch and workshops set up there.

At the place where the main part of the township was located, the Bremer, although not a wide river, flowed through a relatively broad and deep watercourse. The intention was to build a bridge across the river and locate the main station on the south bank. The bridge was completed not long before the official opening of the railway on 1 July 1865.

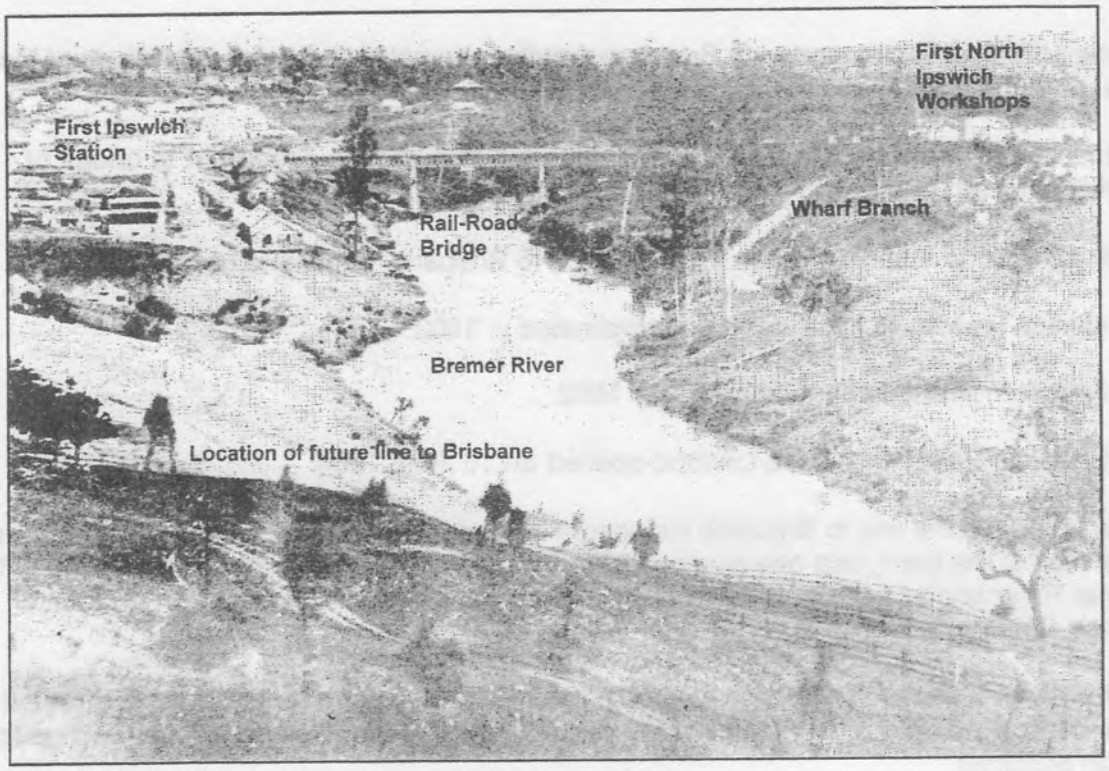
It was a dual rail/road bridge, with the railway line on the western side. The situation here was that the river was crossed immediately on departing the Ipswich railway station, in a northerly direction for a journey that was to proceed in a westerly direction. The original line skirted the banks of the Bremer River and adjacent hilly country, eventually settling on a general westerly course from the location of the present Wulkuraka station.

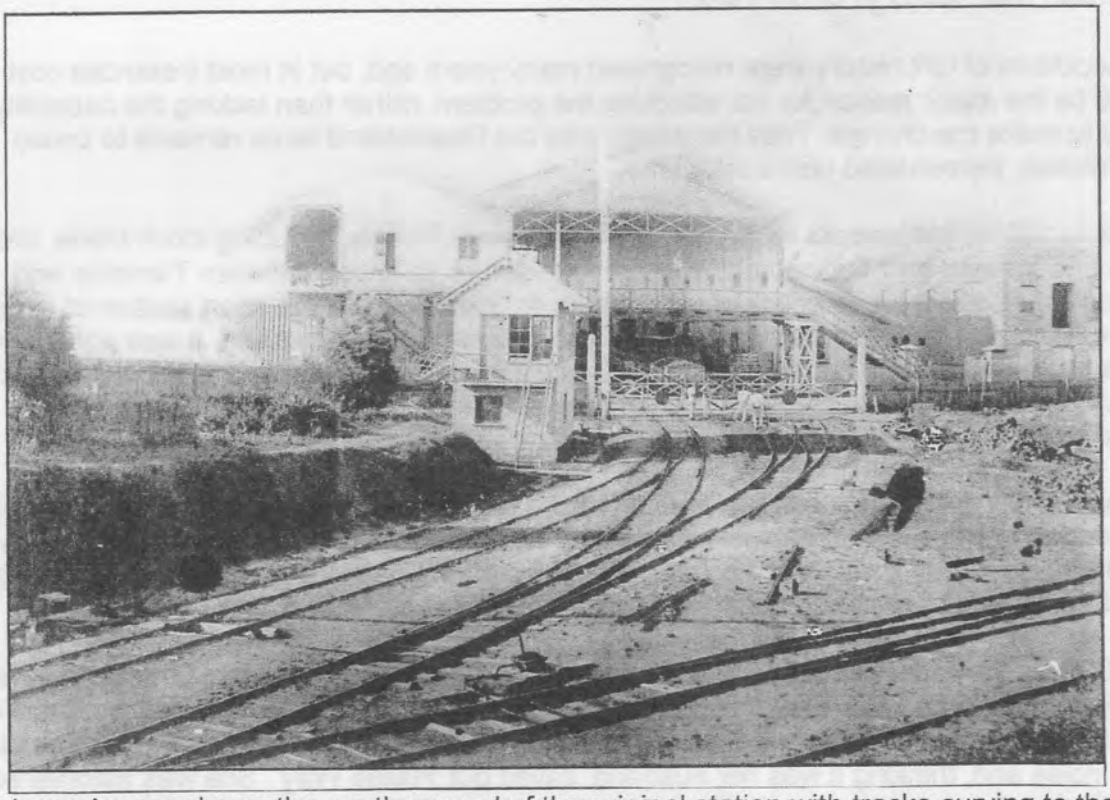
Developments that influenced the character of operations at Ipswich included:

- In 1875, as part of the linking of Ipswich with Brisbane, the original route was abandoned and replaced by a more direct line that proceeded west from Ipswich station and crossed the Bremer River by a through truss bridge at Sadliers Crossing, just prior to meeting the original line at Wulkuraka.

Had the original line been constructed on this alignment, much of the character of the operations at Ipswich would not have surfaced. The accident of history in the placement of the original station and railway workshops on opposite banks of the river did give Ipswich its railway ethos. This accident of history, was propagated by the hilly nature of the south bank of the river, and the development of a town there, not allowing room for a main station and a railway workshops.

The two images on the following page show Ipswich as it was ca1865. The upper view looks upstream along the Bremer River towards the dual rail/road bridge. The nature of the country to the south of the river – the left of the photograph – gives some reason to the construction of the first railway in the way that it was done, in regard to its location and the infrastructure required, in particular the substantial bridge that was crossed just after leaving the station.





The lower image shows the southern end of the original station with tracks curving to the west. This would be the main line to Toowoomba when the line was rerouted via Sadliers Crossing. The tracks to the right initially went to locomotive facilities, but later formed the track leading to Brisbane.

It was when the line was extended to Brisbane that the character of railway operations at Ipswich really came to the fore, as did the uniquely Queensland unusual but usual way of life.

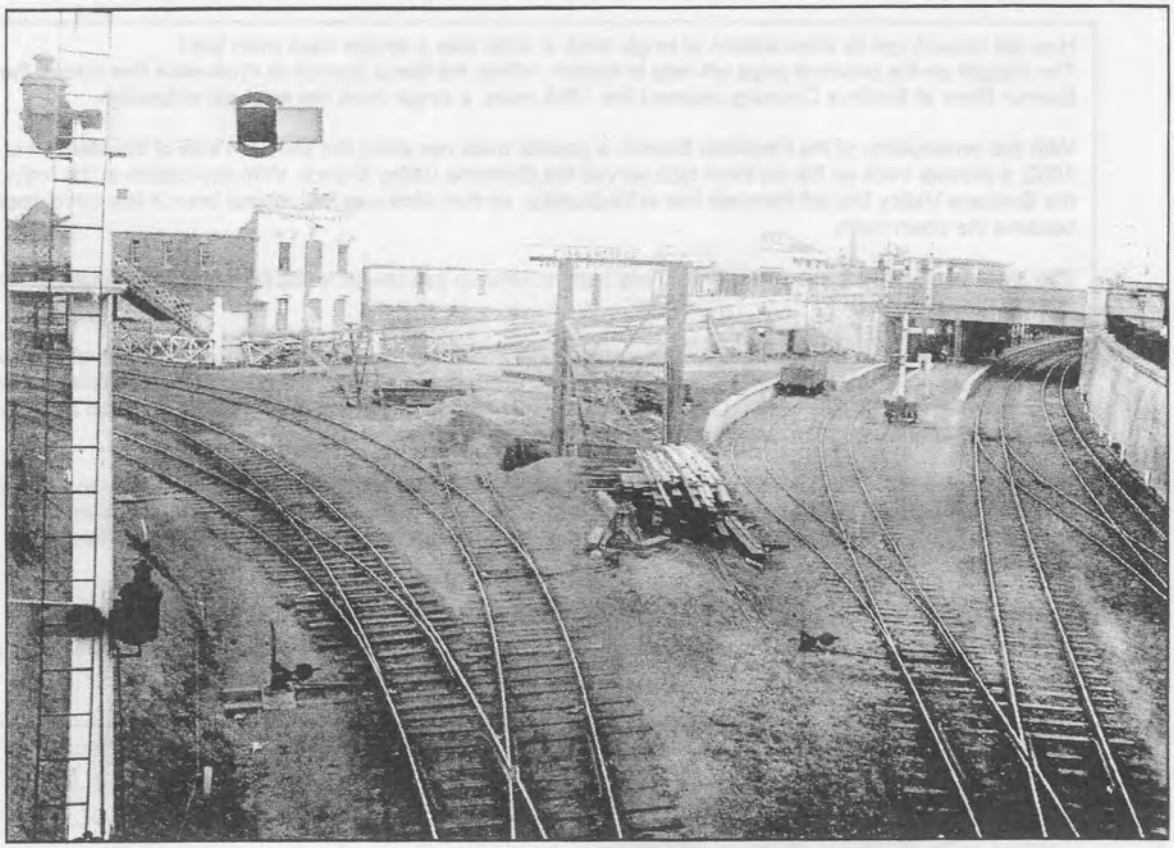
- Original line to Grandchester/Toowoomba departed from station directly on to bridge of significant length and height – combined rail/road bridge.
- Ipswich's second station, built on the direct line to Brisbane, came into use in 1887.
- The section Ipswich to Wulkuraka was duplicated in 1902.
- The Fassifern Branch opened on 12 July 1882
- The Brisbane Valley Branch to Lowood opened on 16 June 1884
- Plans to extend the line to Brisbane included a line from North Ipswich, crossing the Bremer River east of the town, and one curving sharply to the east between the southern end of the Bremer River bridge and the Ipswich station, Both plans required reversing in and out of Ipswich station.
- In 1914, a third station for Ipswich was commenced to the west of Ellenborough Street. It was never completed, and remained for many years as a large island platform with footings for the station buildings.
- Single track section in Main Line
  - Up main leads to Fassifern Branch
  - Down main leads to South Yard

Some accidents of QR history were recognised many years ago, but in most instances cost was stated to be the major reason for not attacking the problem, rather than lacking the capability or capacity to make the change. Thus the where else but Queensland issue remains to cause inconvenience, perpetuated until a later time.

In the early 1950s, bottlenecks to the efficient movement of trains, including stock trains, around Gympie and Ipswich and Toowoomba were recognised. A deviation between Tamaree and Monkland would avoid a bottleneck of stock trains at Gympie, while the short section of single track main line and limited yard capacity at Ipswich also needed to be addressed. It was agreed that after the rearrangement of the Toowoomba yards was complete, Gympie and Ipswich would be attended to. In the long run, changes at Gympie and Ipswich came too late to be of any use to stock trains.

The Devil's Gully timber trestle bridge was a feature of the Ipswich scene from the time the line was extended to Brisbane until it was replaced by an embankment with a road underpass in the early 1960s. Suburban trains shunting into the dock platform had to encroach on to the bridge as part of the shunting operation – not a very common practice on any railway.

Devil's Gully is the wide, deep gully along Marsden Parade, linking Brisbane Street and River Road. A woman named Mrs Stewart used to walk from Gordon Street to meet her husband as he walked home from work at the boiling down works on the banks of the Bremer River. One day, she heard a noise and, thinking it was her husband, called out 'Halloa Willy'. She was astonished by a 'sudden wave of a thunderous nature' coming along the gully. When her husband arrived a little later, Mrs Stewart was very upset and frightened and said she had seen 'the devil himself'. The gully has been called Devil's Gully ever since.



How did Ipswich get its short section of single track in what was a double track main line?
The images on the previous page will help to explain. When the direct Ipswich to Wulkuraka line across the Bremer River at Sadliers Crossing replaced the 1865 route, a single track ran west out of Ipswich.

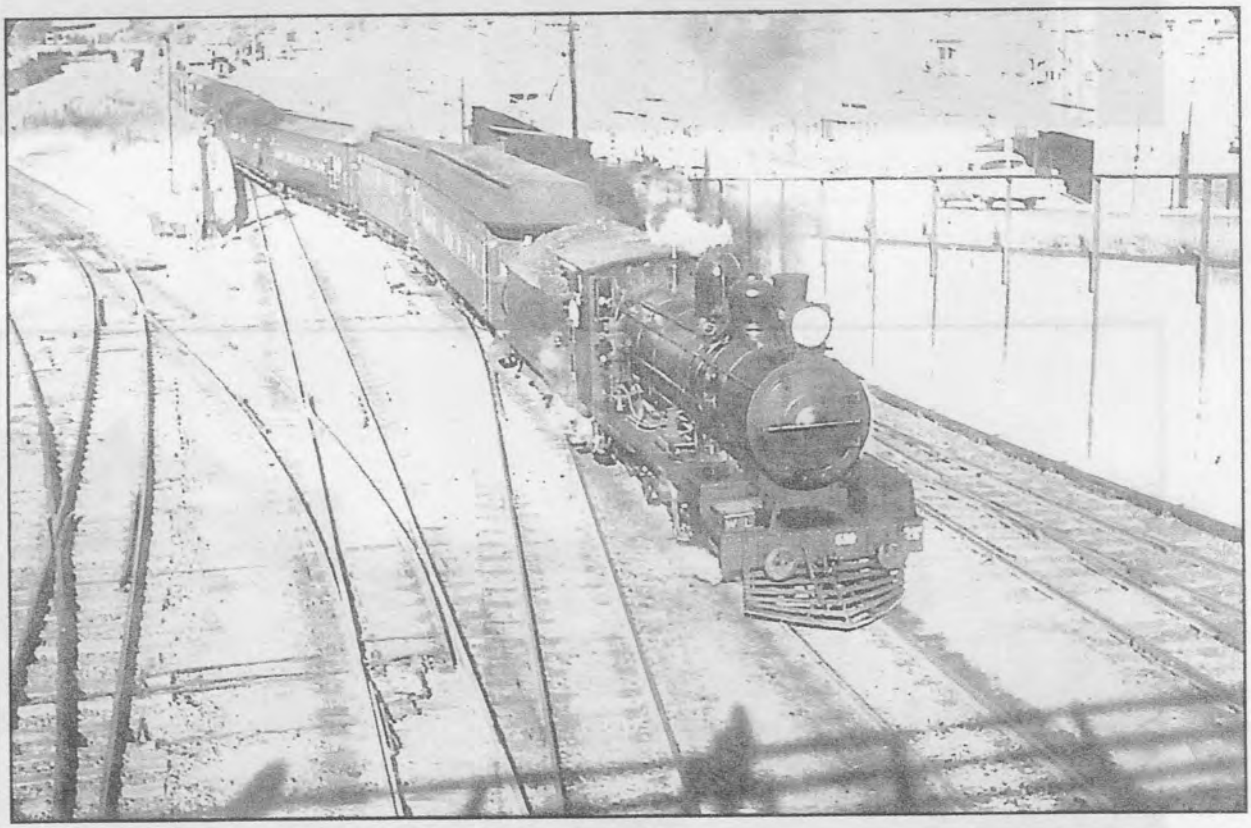
With the construction of the Fassifern Branch, a parallel track ran along the southern side of the Main Line. By 1902, a parallel track on the northern side served the Brisbane Valley Branch. With duplication of the main line, the Brisbane Valley line left the main line at Wulkuraka, so that what was the original branch line out of Ipswich became the down main.

The crossover shown in the upper image was used to take up passenger trains from Ipswich's single platform back to the up main.

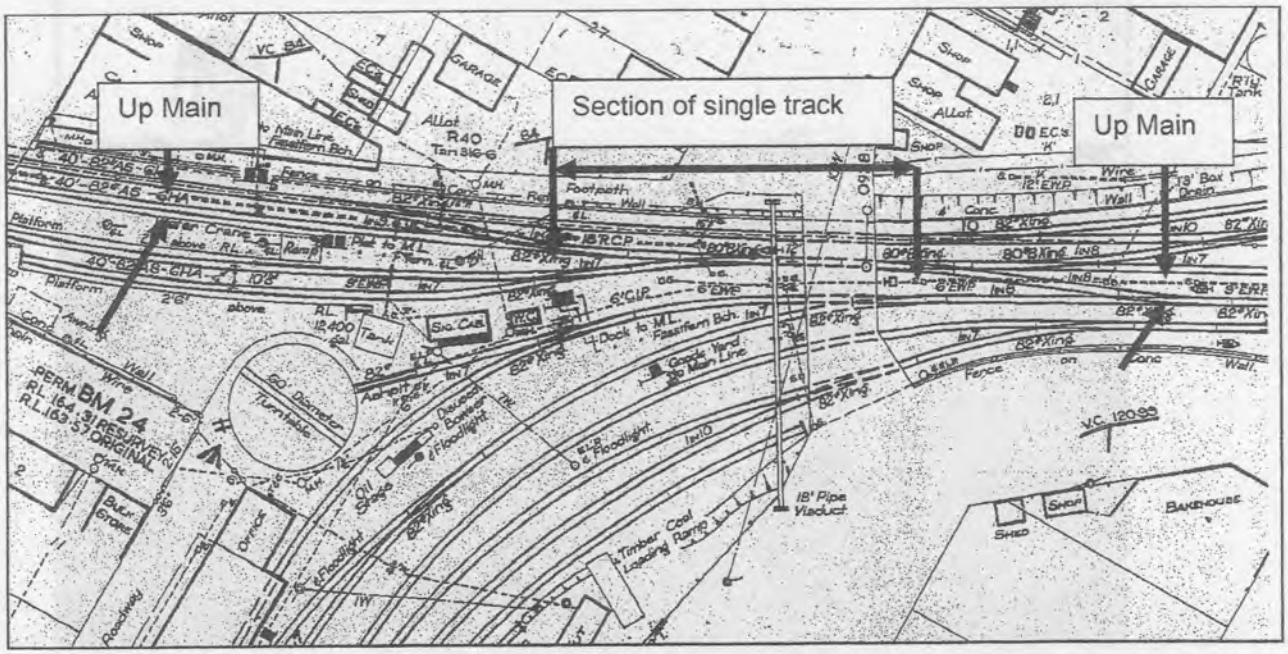
In 1914 an attempt was made to relieve congestion at Ipswich with its single platform in a narrow cutting by commencing work on a new station, to the west of the Ellenborough Street overbridge. An island platform with a dock platform at the western end was built, with foundations for buildings. However, the work did not proceed and the platform remained in situ for over sixty years. This is illustrated below.

It was at the point of construction of this platform that the crossover was reversed – see lower image and the up and down main lines directed each side of the island. Had the new station come into being this altered trackwork would not have caused any problems, and there would have been a complete double track from Brisbane to Grandchester.

However, QR was left with the operational legacy of the unfinished station for over sixty years.



The railway workers' train heading into the south yard to cross the river to the North Ipswich workshops. Out of sight at the rear of the train is the locomotive that brought the train from Brisbane, The locomotive hauling the train brought the first three carriages from Grandchester.



This diagram shows the short length of track that is effectively single track in the double track section from Brisbane to Grandchester, a distance of 70km. While no great delays were encountered, in times of heavy traffic when grain trains and cattle trains worked through Ipswich, the signalmen were kept on their toes channelling trains through this piece of trackwork.

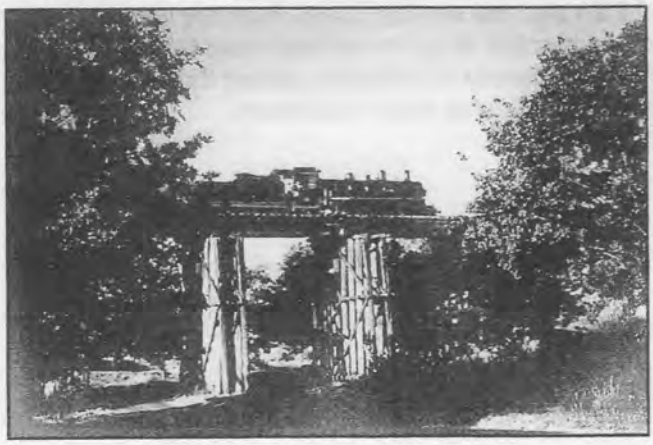
Rail Motors

A number of rail motor services operated out of or through Ipswich, to Dugandan, Toogoolawah, Yarraman, Gatton, Rosewood and Grandchester. Of particular interest was the down Dugandan motor on weekdays.

The motor would arrive in the western dock platform at Ipswich with its two trailers full of shop and office workers, secondary school students and cream churns for the Booval butter factory. The motor needed to be turned prior to its mid-morning return trip to Dugandan. As the turntable at Ipswich could only accommodate the motor and one trailer, a rather novel method was used to remove the second trailer and place it at the back of the dock platform for the afternoon trip up the branch.

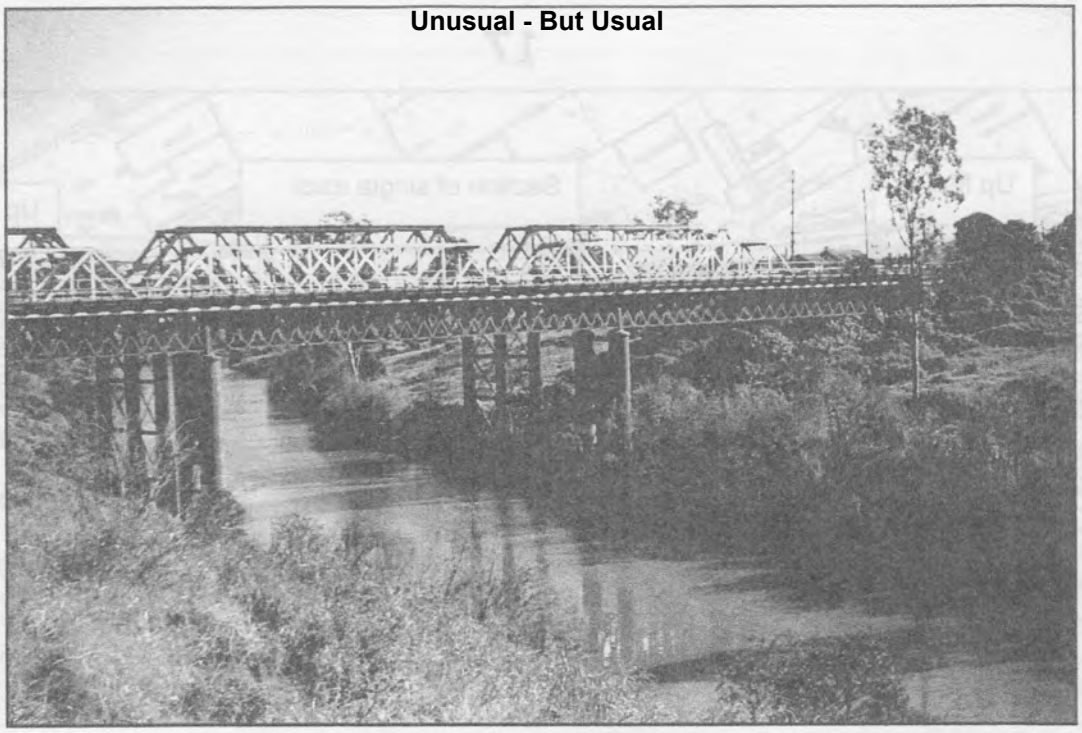
The complete unit would reverse out of the dock platform, and proceed along the up main a short distance to allow the motor access to the turntable. When the motor stopped, the second trailer was detached with the guard on board, and the motor proceeded to the turntable with one trailer attached.

After this, the points would be set for the dock and the signalman would wave a green flag to alert the guard in the trailer on the main line, who would allow the trailer gravitate to the dock platform, controlling it with the hand brake.



Devil's Gully Bridge providing a good view of its height and substantial construction.

Trains being relocated from the main platform to the down dock platform regularly shunted over this bridge.



The three bridges over the Bremer River at Ipswich. Most shunting of trains in the north and south yards took place over the larger bridge to the rear. The middle bridge was mostly used for light engines proceeding between Ipswich and the locomotive depot at North Ipswich.

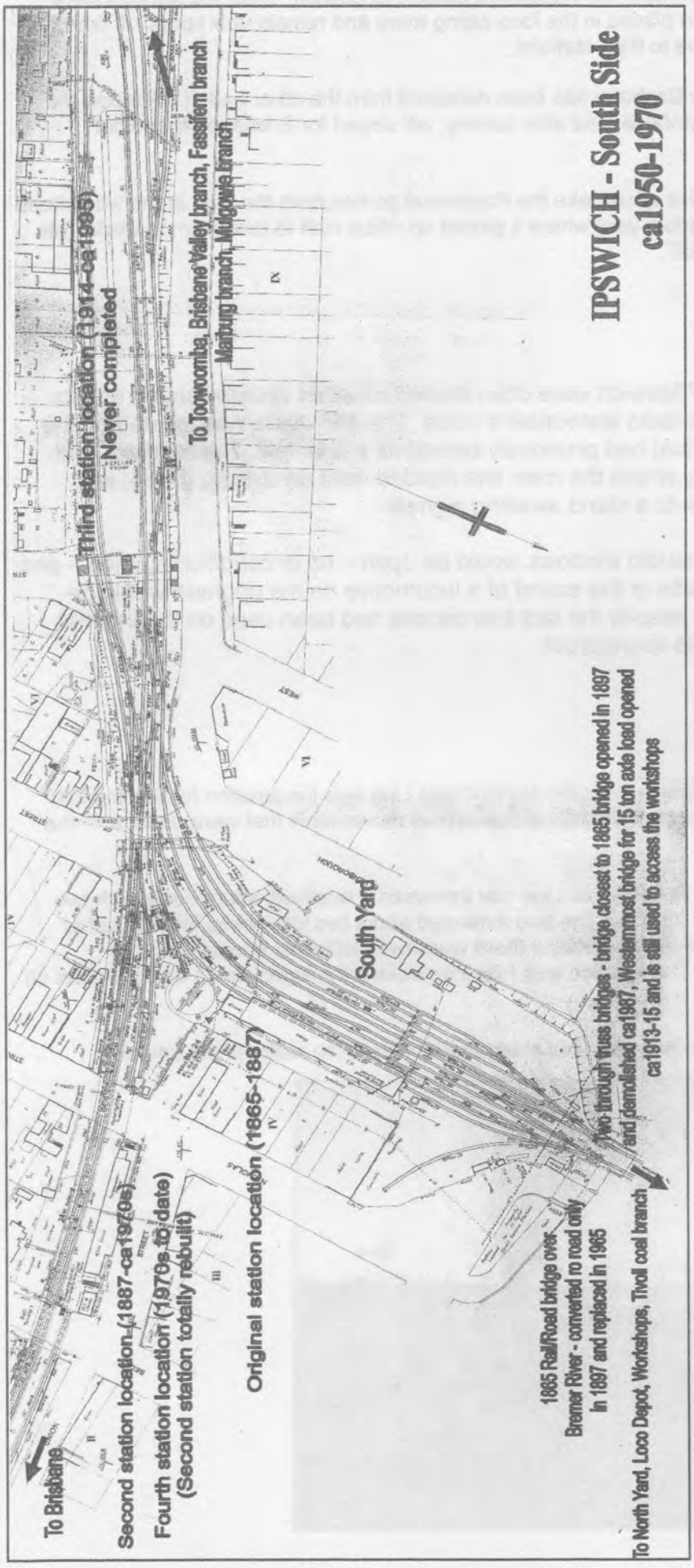
The bridge in the foreground is the original rail/road bridge opened in 1865, and in the form shown in this image, a road only bridge.

Other interesting features regarding operations at Ipswich included:

- Fassifern Valley Branch
  - Path of trains - South Yard to and from branch
- Daily goods with passenger accommodation attached Ipswich to Toowoomba
  - Steam hauled (sometimes double headed)
  - Returning locomotives to South Western Division
  - Purchase ticket at station, walk to South Yard to board train
- Daily, round the clock general shunting operations took place over the large through girder bridge over the Bremer River,
- Morning and afternoon workers' trains (to and from Ipswich Workshops)

The Workers' Train

Queensland Railways most notable workers' train was the service to and from the Ipswich Railway Workshops at North Ipswich. The train was for a number of years actually three trains – a wooden Evans suburban seven car set that commenced its journey in Brisbane, added three carriages at Bundamba, then joined at Ipswich with a train that had come from Rosewood.



This diagram illustrates the trackwork and infrastructure at Ipswich, as it was from around 1914 until the mid 1970s. Shown here are the main line linking Brisbane and Toowoomba, and the south yard. The north yard, where most making up and breaking down of goods and coal trains took place was situated across the Bremer River, at the bottom of the diagram. Also across the river were the thirty-eight stall roundhouse and the North Ipswich Workshops, the largest in the state, employing around 3,500 workers at its peak in the 1950s.

The track layout, strategic importance and the consequential operational aspects at Ipswich made it uniquely Queensland:

- Terminus of the western portion of the Brisbane suburban services
- Central to what was for many years the largest coal field in Queensland
- The operational base for the Fassifern Branch, Brisbane Valley Branch, Marburg Branch, Mulgowie Branch and the Bundamba-Redbank Loop line.
- Home to a large steam depot that provided locomotives for suburban services, branch line trains, coal trains and shunting duties
- The short single track section in the double track main line
- The locations and design of the passenger stations and the south yard over the years, did nothing to make day to day operations easy, particularly for the signalmen who had to perform with great dexterity, especially in busy periods and when cattle and grain trains were timetabled.

The photograph several pages to the fore shows this train, now with fourteen vehicles, crossing from the main line to the south yard then across the Bremer River to the workshops. The train engine is C16 No. 659, which brought the Rosewood portion to Ipswich. After the workers have disembarked, the train would be placed in the loop siding there and remain until knock off time, when it would return the workers to their stations.

The locomotive that came from Brisbane has been detached from the other end. It will follow the train, taking the points to the turntable, and after turning, will depart for Brisbane on another suburban train.

About an hour later, a locomotive would take the Rosewood portion from the train at the workshops and push the carriages to the south yard where it picked up office staff to take them to work. This train was known as "The Clerical".

Over the Air

Listeners to radio station 4IP Ipswich were often treated to rather unusual sound effects that often overshadowed the radio announcer's voice. The 4IP studio was located on the top floor of a brick structure that had previously served as a flour mill. The northern wall adjoined the railway property where the main line headed west on a rising grade, and where trains frequently came to a stand awaiting signals.

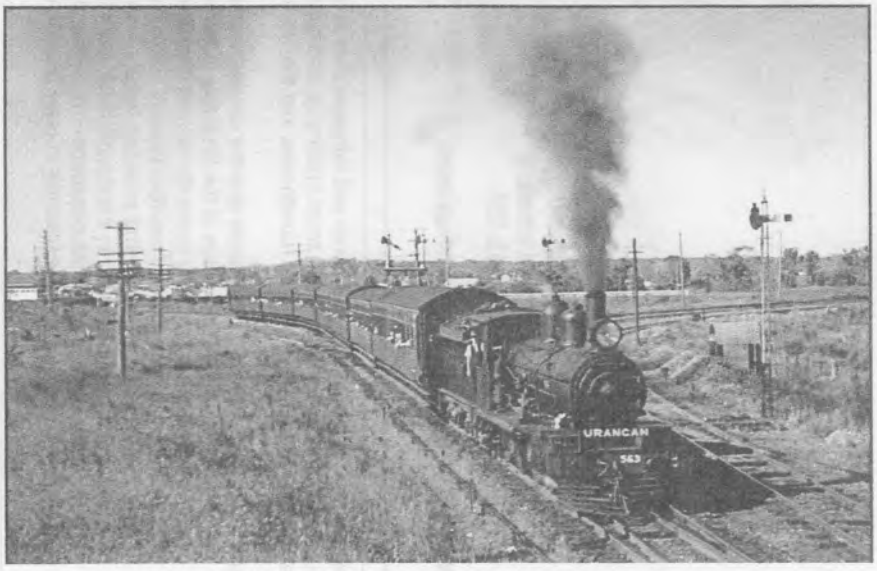
In warm to hot weather, the studio windows would be open – no airconditioning then – and from time to time a train whistle or the sound of a locomotive on the upgrade would be heard over the air. This was despite the fact that caneite had been used on the internal walls to try to make the studio soundproof.

Baddow

Baddow, previously Croydon Junction, on the North Coast Line was the junction for the line into Maryborough, and the focal point for a range of operational movements that were unusual in the Australian context.

Baddow consisted of the main North Coast Line that traversed a relatively sharp curve with two legs of an angle that branched from this line and extended about two kilometres into the rather substantial station at Maryborough. At Baddow there were two platforms, one on each Maryborough leg of the angle. The location was fully interlocked, the signal cabin being low-set on the northern platform.

Train operations changed over the years, but always remained in the realm of the unusual.



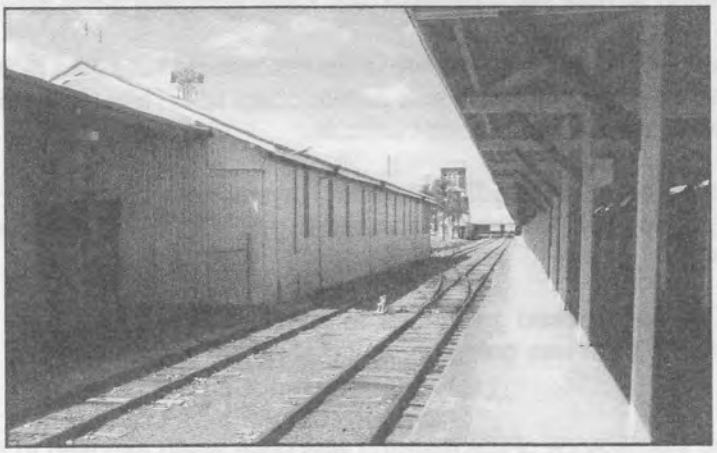
Through down and up goods trains ran through on the main line, changing the staff as they did so. Loading to and from through trains was placed on the loop beside the main line, and delivered and collected by a shunt train from Maryborough.

However, it was the main line passenger train operations that generated most interest and provided workings that would do justice and maintain interest on any model railway.

Until the early 1950s when all passenger trains were hauled by steam locomotives operations through Baddow required a number of train movements for each train between midnight and dawn most nights of the week.

On a Friday night Baddow was a busy place, dealing with main line passenger and goods trains, as well as trains from the Monto branch.

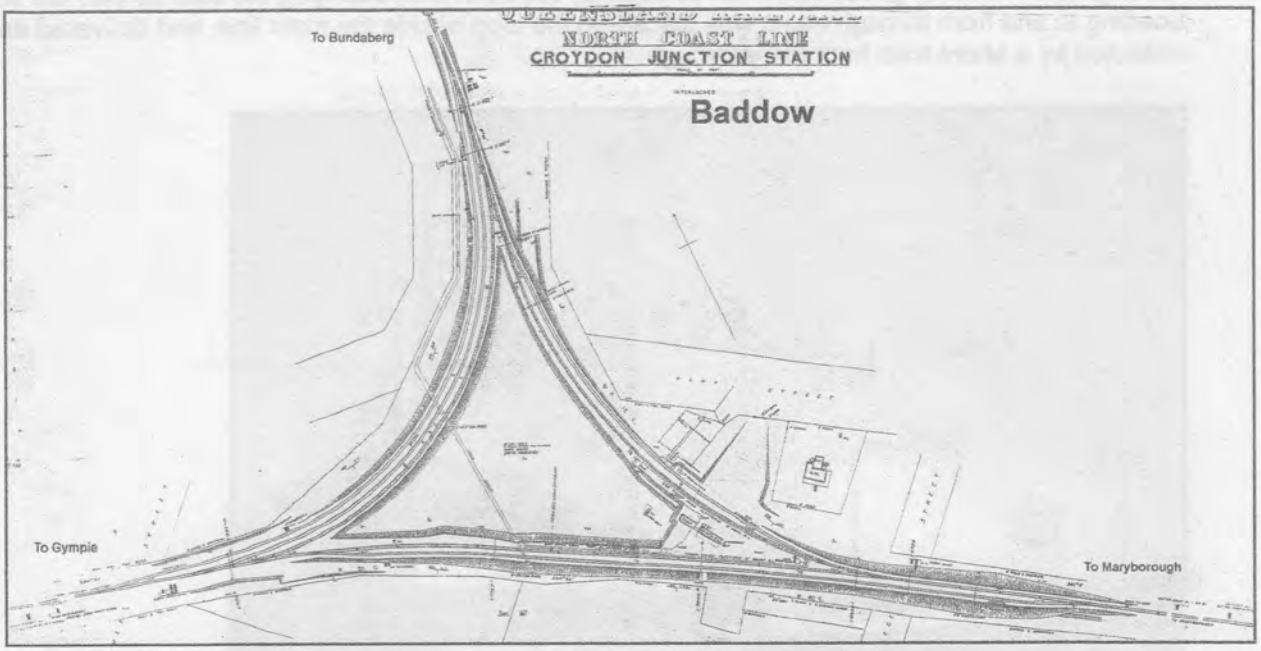
In steam days, the Bundaberg day and night trains ran directly into Maryborough using the leg of the angle that was appropriate to the direction of travel. After coming to a stand at Maryborough the incoming locomotive was detached and ran forward several metres. At the same time, a fresh locomotive was attached at the other end, to haul the train to its destination.



At the appointed time for departure, the train left the platform and once again passed Baddow, taking the other leg of the angle as it went on its way. Once the train cleared the Maryborough platform, the locomotive that had brought the train in was then free to depart for the locomotive depot. As there was no release crossover at the Maryborough platform, incoming locomotives were effectively trapped until the train occupying the platform had departed.

It's hard to imagine the frenzy of activity at Maryborough in the days of nail trains, Urangan Branch rail motors and locomotive hauled trains and a range of other passenger trains from time to time. Looking very forlorn, Maryborough in this image is but a very small part if its former glory. The platform road dead end without alocomotive release crossover can be seen clearly.

Mail



As a child, I experienced this set of train movements on a number of occasions during journeys with my parents to visit my mother's sister in Bundaberg. I remember most of them, probably the earliest when I was about four years old, not long after World War 2 had ended. The train had taken its customary stop at Maryborough, passengers had reboarded after having visited the refreshment rooms, and unbeknown to me, a fresh locomotive was on the western end of the train.

As we set out to complete our journey, it became obvious to me that we were going back in the direction that we had come from.

"We're going backwards'" I said to anyone in the compartment who would listen.

"Yes, they're taking you home because you had the window open all night and we're all cold and covered in coal'" said a man sitting opposite.

I had to check this out. I had ventured on to the end veranda of the carriage before we arrived in Maryborough, and there was no significant wind or coal dust. I would go out there again to see if the man was right. I walked to the door to the veranda, opened it and "Woosh!" a strong, cold current of air hit me, with coal dust landing all over me – the train was really galloping along now.

I had not noticed, but four American sailors in their brilliant white uniforms occupied the seat facing the door. (This was probably one of the older long distance side corridor cars still in use then, that had no partition separating the end row of seats from the end vestibule.)

As the strong current of air howled around me and I huddled to protect myself from it, one of the sailors – who were also in a huddle trying to avoid the wind – shouted to me, "Get inside and close that @#$%&* door kid. It's @#$%&* cold."

I closed the door, now convinced that we were indeed going back to Brisbane. When I was back with my parents, my father explained to me what was going on, and that we were really heading to Bundaberg.

At that young age, without realising the significance of the matter, I was once again exposed to the Queensland Railways unusual but usual ethos.

There were occasions when the Bundaberg train was hauled part way by diesel and part by steam, with steam usually on the Maryborough – Bundaberg section. Procedures in Maryborough were similar to those when steam was used for the entire journey.

When diesels were used throughout the journey on Bundaberg trains, the train ran through Baddow on the main line before coming to a stand beyond the points at the northern or southern end, depending on the direction of travel. A steam locomotive – later a diesel – would be waiting on the appropriate leg of the angle, and when it had the road, would attach to the rear of the train to haul it into Maryborough, the train locomotive still attached at the other end.

After platform work with the steam locomotive detached, the diesel was now able to continue its journey.

Because of the necessity to reverse steam hauled trains travelling through Baddow into Maryborough, the Bundaberg day train often ran with a van at each end, an unusual arrangement for a Queensland long-distance train. The overnight mails and passenger trains – the ascribed name depending on the way that the train was described in the timetable – ran part of the way with the van and baggage car at the front of the train, and a passenger car with specially fitted tail light brackets trailing.

Sunlander operations through Baddow required the train to reverse into or out of the southern leg of the angle, depending on whether it was a down or an up train.

When it first started in service in 1953, the Sunlander was restricted to fourteen vehicles, later extended to up to over twenty vehicles in the 1980s.

The procedure for a down – Brisbane to Cairns – train involved the train arriving from Brisbane and being admitted to the southern leg of the angle as if it was travelling into Maryborough. However, it would stop at the platform, at an appropriate spot for any passengers travelling north from Maryborough to entrain and to have their luggage placed in the baggage car.

When all was ready, the train would reverse to the south on to the main line, wait for points and signals, then proceed on its way northwards.

The southbound or up Sunlander ran through Baddow until the van was south of the points for the southern leg of the angle. When cleared, the train reversed around the southern leg of the angle until it stopped appropriately at the platform to detrain passengers from the north and unload their baggage. With platform work complete, and points and signals set, the Sunlander moved forward on to the main line to complete its journey to Brisbane.

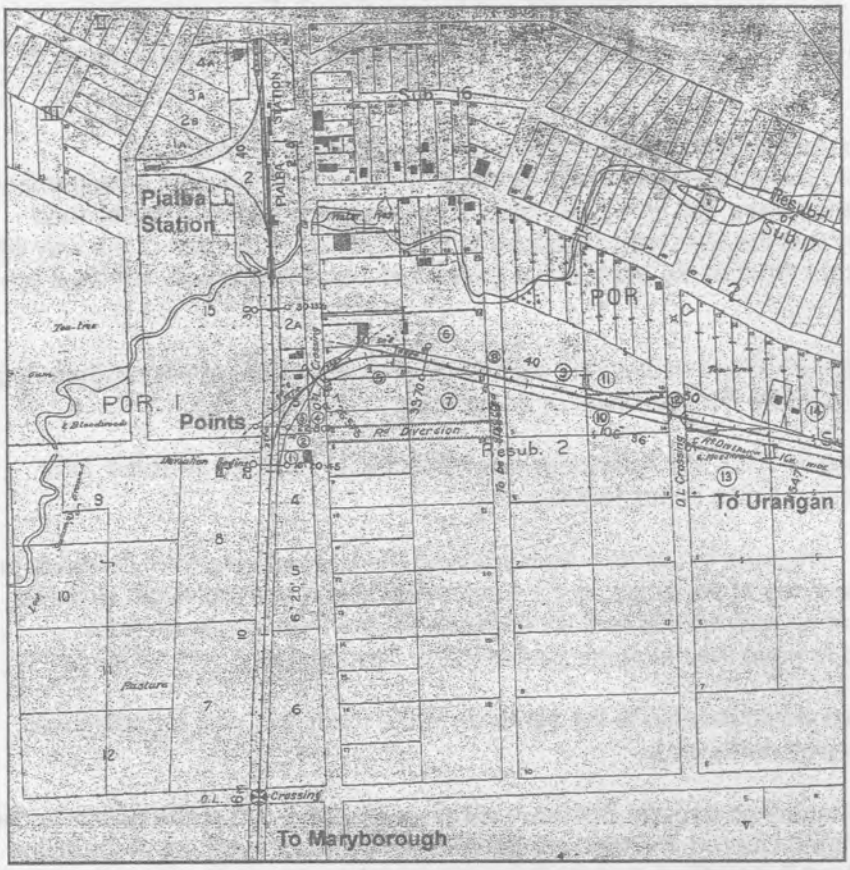
Passengers to and from Maryborough were transported in a special train that was timed to meet the Sunlander. This special train usually comprised a locomotive and van with passenger accommodation. In steam days, the locomotive was normally a PB15 from the yard shunt, or if this was not available, a C16, C17 or even a B18¼ or BB18¼ - whatever could be spared at the time. Later, after steam operations ceased, a DH was the normal motive power for the connecting train.

Pialba

Pialba, on the Urangan Branch, is an example of a relatively simple station environment, but one that provided interesting operations when trains passed by. The line from Maryborough to Urangan, with Pialba an intermediate station, was served for many years by rail motors, locomotive hauled passenger trains and goods trains. The passenger service on the line was a pseudo commuter service to and from Maryborough, whilst the goods service conveyed reasonable

tonnages to stations along the line, in particular, to and from the port services from the long jetty at Urangan.

Rail motors and locomotive hauled passenger trains from Maryborough to Urangan ran directly into the Pialba platform. After completing platform work, the train reversed towards Maryborough until the front of the train was clear of the junction points. When the points were set for Urangan, the train moved off, through the points and across Pialba's main street wending its way to the terminus.



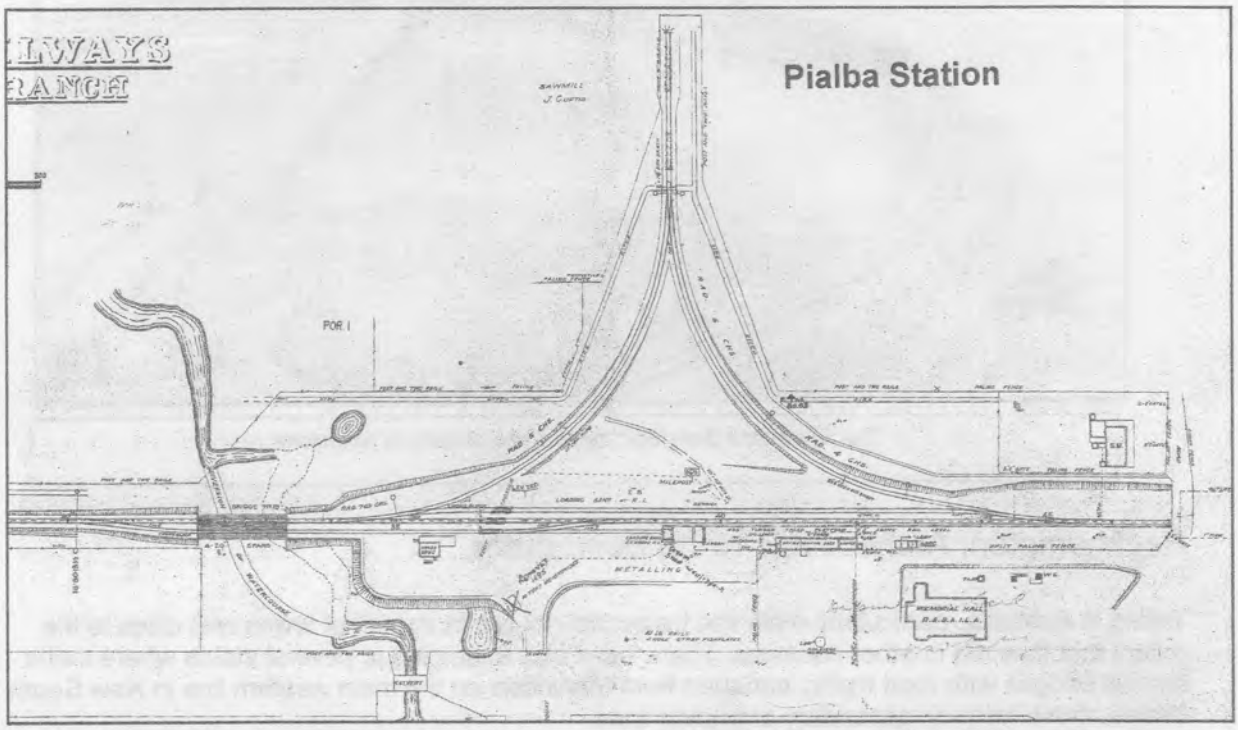
The arrangement at Pialba is illustrated in this diagram. The time taken by trains and rail motors in accessing the platform can be appreciated – probably five or so minutes in either direction.

A special train carrying railway employees and their families to the annual picnic at Urangan crosses Pialba's main street after taking the points at the junction with the short section of track into Pialba station.

Trains from Urangan, after crossing the street and passing through the points at Pialba came to a stand with the rear of the train clear of the points. When the road was set, the train reversed into the platform. After platform work, the train departed, proceeding directly towards Maryborough.

On the other hand, goods trains would leave part of the train on the main line, while the locomotive worked into and out of the station area with only the Pialba wagons, detaching or attaching them from the total consist as required.

Given the time-consuming movements by having to double-track each time the Pialba station stop was made, one wonders why the station, including goods facilities, was not moved past the points towards Maryborough and established there, on the through line. This could have been done when the extension was constructed to Urangan and would have saved many years of inconvenience, particularly to passengers. Room would have been available for the relocation over a period of many years, but this never happened.

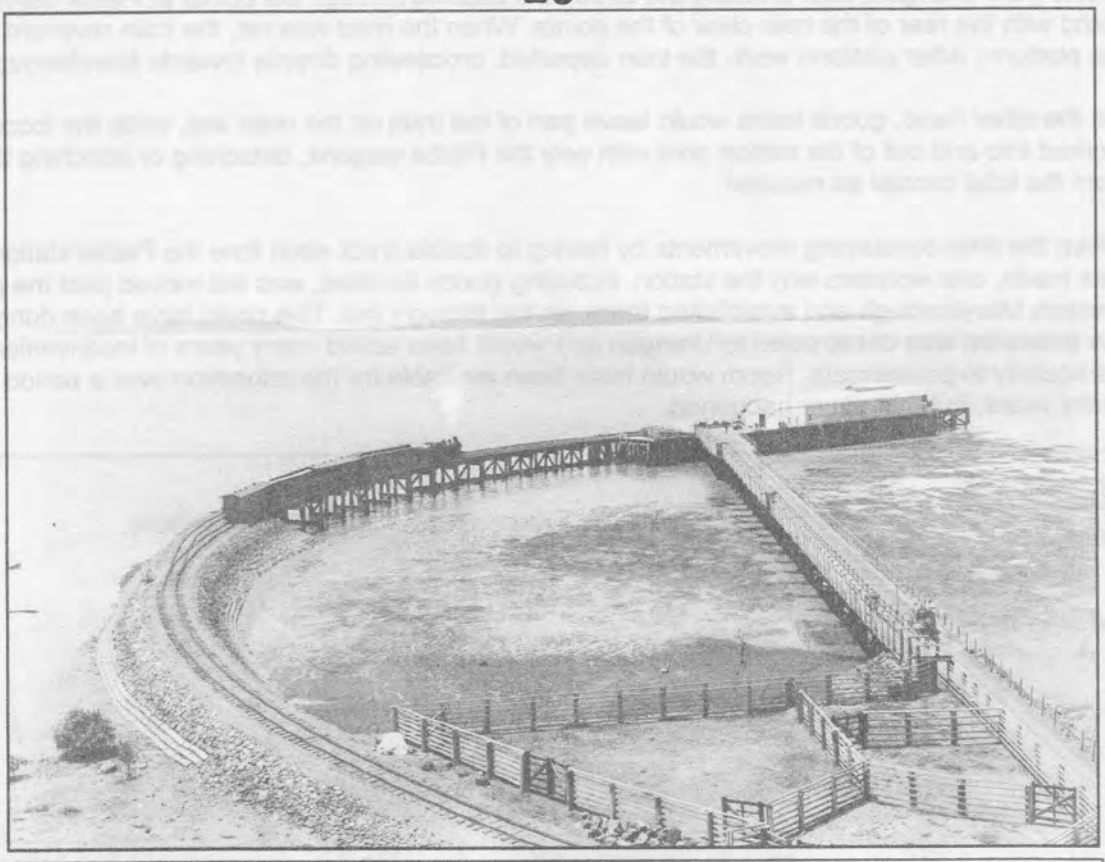


The track arrangement at Pialba is based on a typical Queensland Railways branch line terminus, which it was for seventeen years. In the 1950s on Saturdays, the station hosted two trains at the one time. A Maryborough – Urangan goods arrived in the yard at 11.40am, followed by a Maryborough bound rail motor at 11.45am. The rail motor departed at 11.45am with the goods continuing on its way at 12.00pm.

Gladstone

In the late 1800s, with the North Coast Line becoming a reality, north-south services were being introduced. However, the through line was still well and truly some years from completion. Around 1897, in order to convey passengers heading north around the missing link between Gladstone and Rockhampton, the "Gladstone Boat Mail" was introduced to convey passengers overnight from Brisbane to Gladstone where, next morning, they would board a coastal steamer for the sea voyage to Rockhampton.

The image on the next page shows a train proceeding onto the jetty at Gladstone. The journey was aboard Queensland Railways' own steamer, the S.S. Premier". Passengers for ports north of Rockhampton, such as Townsville travelled on the S.S. "Barcoo".



The "Gladstone Boat Mail" moves onto the jetty at Gladstone.

Rockhampton, Archer Park, North Bundaberg

Trains in Australia, particularly main line trains, did not run in streets of towns and cities to the extent that they did in other countries. There were also examples in several states where trains shared bridges with road traffic, but apart from Menindee on the main western line in New South Wales, these were on secondary or branch lines.

Queensland is notable for main line street running in Rockhampton and Bundaberg, and with now superseded median strip running in Mackay and Cairns. There was also significant street trackage in the Newstead-Wool Stores precinct in Brisbane.

Denison Street in Rockhampton had double track laid down the centre of the street, and normal up and down running was practised. The northern end of the old Rockhampton station was at the start of the southern end of Denison Street, with the main platform on the up line.

The section from Rockhampton to North Rockhampton was controlled by block section. For safety, each train traversing the street section was provided with a hand bell, which the fireman rang continuously, leaning out of the locomotive cab window as the train ran along the street.

To add to the interest, a station, Archer Park, was located at the northern end of Denison Street, but off to the side. This station was interlocked, and required trains to cross over tracks and run off the street into the platform. Archer Park was used by Yeppoon and Emu Park trains and rail motors on a daily basis. On its journey along the street, the train stopped as required to pick up and set down passengers at the William Street intersection – a "d" stop - and pulled off the road into Archer Park station, a timetabled stop. The trip along the street from Rockhampton to Archer Park took nine minutes to cover 1.4 kilometres.

After leaving Archer Park, the train returned to street running for a short distance before it regained its own right of way leading to the bridge over the Fitzroy River.

Like the original Rockhampton station, Archer Park had an overall roof covering two tracks.

In recent times, Archer Park has become disused as passenger services to Yeppoon and Emu Park have ceased, and is now a museum. Rockhampton station has been relocated to a site adjacent to the original station, but still feeds into Denison Street. The double track down the street and across the Alexandra Bridge over the Fitzroy River has been relegated to single track, the surplus track having been removed from the street.

North Bundaberg and Bundaberg itself had street running – two examples of secondary line operation and one that involved the main north coast line. In Bundaberg, the line that originally ran to Pemberton, and survived in truncated form until the 1970s when shunt trains ran down Quay Street for about one kilometre.

On the north side of the Burnett River, a long siding ran down the centre of Perry Street serving industries at its eastern end. Part of this line was also the original line to the wharf during the construction of the Bundaberg Railway towards Mt Perry in the late 1800s.

The interesting section of operation was that between the point where the North Coast Line came off the Burnett River bridge and where the main line and the branch to Mt Perry separated.

After crossing the bridge, the northbound line entered Perry Street, crossing one lane of traffic to join the siding in the middle of the street. This portion of Perry Street was also the Bruce Highway that had crossed the river on a long bridge to the east of the railway bridge. Rail and road ran together for a short distance – one block – when the highway took a right turn, crossing the railway, to head north.

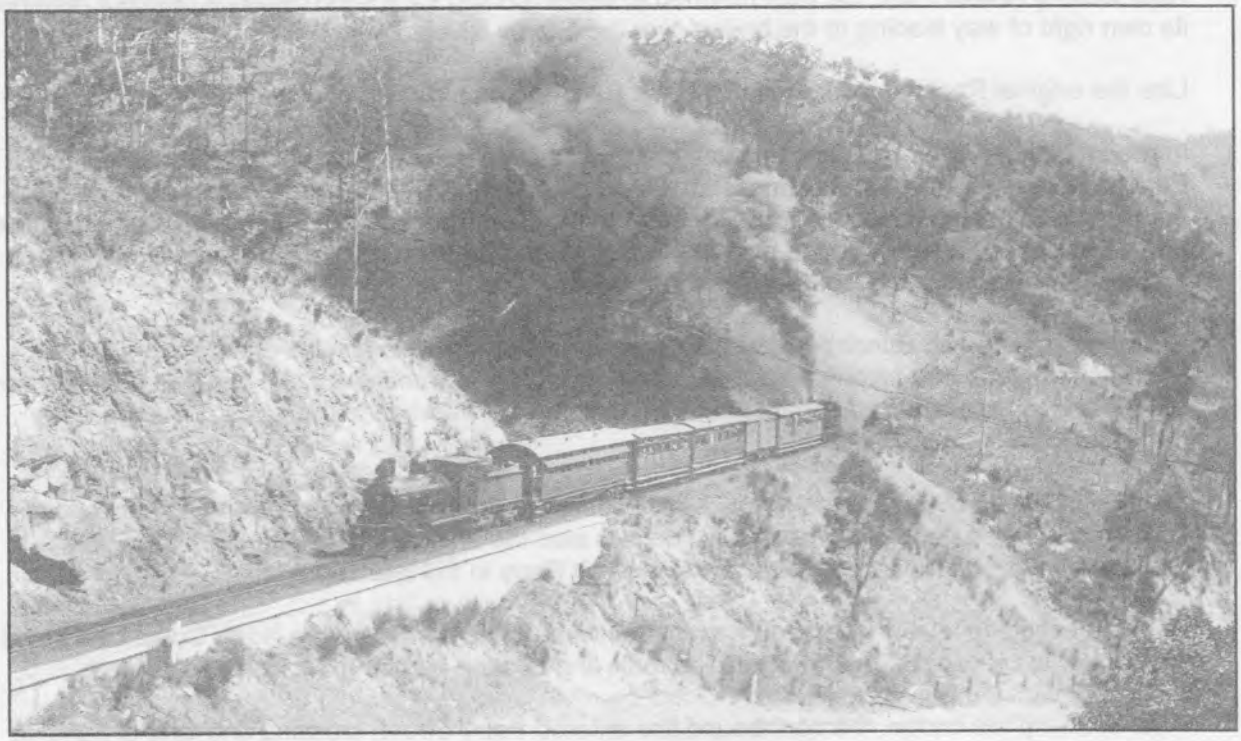
The railway line re-entered the railway reserve and passed through North Bundaberg station, before traversing the points that formed the junction with the Mt Perry branch. Surprisingly, for over seventy years, the branch was accessed along the straight leg of the points, while the main line took the curved leg. It is only in recent years – since electrification – that the points have been altered to allow the main line to proceed along the straight leg.

Today, the railway still runs the one block along Perry Street, but the Bruce Highway crosses the river on a new bridge to the west of the railway bridge and passes over the railway line before dropping down to Hinkler Street and exiting Bundaberg northbound.

Another feature of the Bundaberg railway scene that was unusual – like that at Ipswich – was that the steam locomotive depot was located across a river with a significant bridge separating the depot from the station and the goods facilities.

Mt Morgan

28



Queensland Railways operated one of only two ABT rack railways in Australia, the other being the Mt Lyell company's railway between Queenstown and Strachan in Tasmania. The basic difference between the two systems was that in Queensland, the train locomotive remained on the consist, while the rack locomotive banked from the rear on the climb, and led from the front on the descent. In Tasmania, the ABT locomotive was the train locomotive and was attached at the front for the entire journey in both directions.

In Queensland, the line from Rockhampton through Mount Morgan to the Dawson and Callide valleys was constructed with a short ABT rack system between Moonmera and Moongan. This necessitated the stationing of ABT rack locomotives at Moonmera to assist conventional locomotives over the 2.4 kilometre climb. With almost a kilometre of 1 in 16½ and an average grade of 1 in 20.3 passenger train times over this section were quite slow.

The above view shows a typical passenger train on this line at the time, a B15 class as the train locomotive and a 6D13½ as the ABT banking locomotive.

Note the shades over the windows of the first carriage – a feature common to many carriages in use on main lines and branches in the central and northern parts of Queensland. The train also has a goods wagon in the consist, again a common feature on main line and branch line passenger trains in Queensland over the years.

The rack section was replaced by a deviation in 1952, the deviation being 3.2 kilometres longer than the original line it replaced.

Steam hauled passenger trains ran from the opening of the line until 1946, when as an economy measure, rail motors took over. After an incident with a rail motor on the steep grade, steam hauled passenger trains returned to the line with the issue of the November 1948 timetable. After the deviation was opened, a combination of steam hauled passenger services and rail motor services operated. This continued until 1962/63 when rail motors took over completely. Passenger services between Rockhampton and Mount Morgan ceased in the early 1970's.

Mackay

Mackay, like Bowen, saw railway construction commence from a site very close to the shipping facilities. The line proceeded in a general westerly direction, to what is now Paget, as it found its way to the original terminus at Marian. In doing so, it made a couple of turns in Mackay itself so that for a short distance it ran parallel to the main streets.

The first station was in Tennyson Street, close to the goods and locomotive facilities. With the coming of the through North Coast Line, the Tennyson Street station was unsuitably located as a line through the station faced too many geographical obstacles.

By turning the line through 180 degrees as it approached Tennyson Street so that it ran parallel to Boddington Street, the problem was solved. The second Mackay station was located in Boddington Street, and remained there until 1990 when the railway was relocated away from the town to run a more direct and shorter route crossing the Pioneer river upstream of the existing bridge, eliminating 17 level crossings on the then existing track.

The present Mackay passenger station and freight yard are located at Paget.

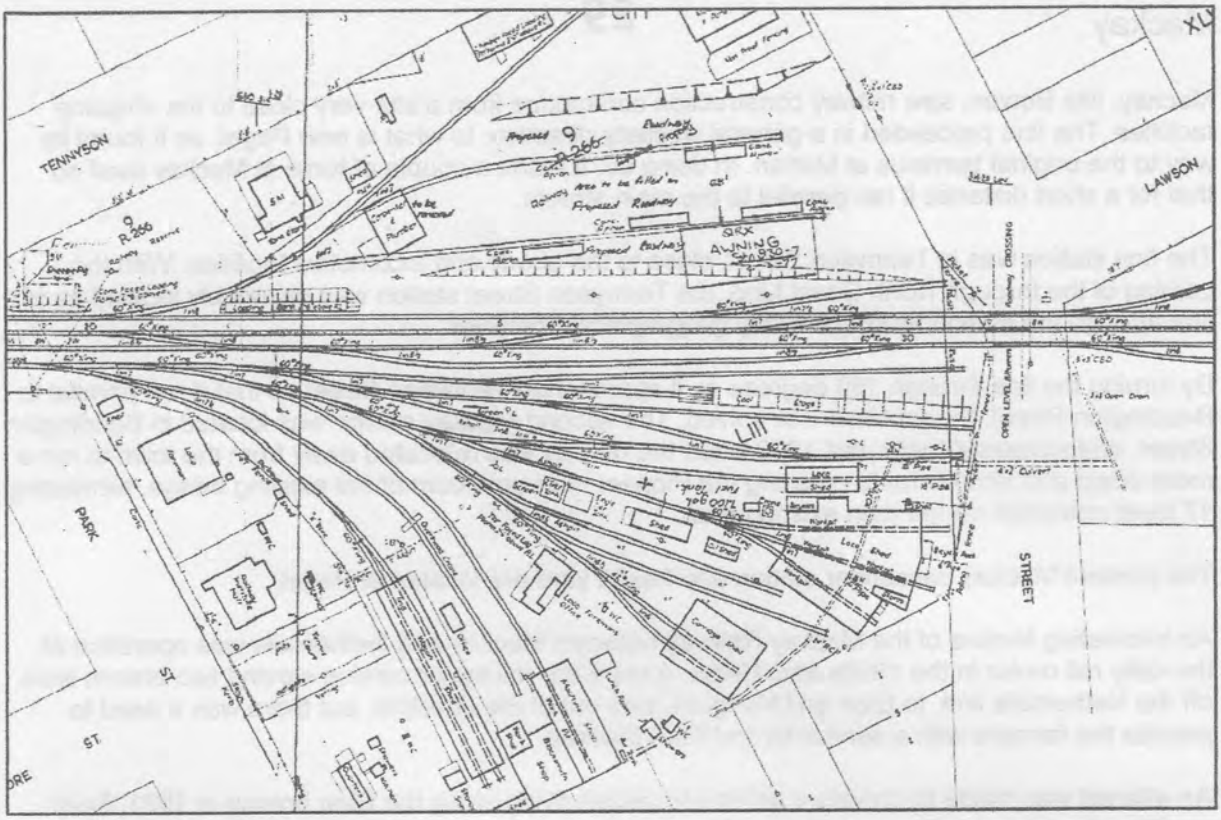
An interesting feature of the Mackay Railway between Mackay and Netherdale was operation of the daily rail motor in the 1930s and 1940s. A separate rail motor service serving two branch lines off the Netherdale line, to Eton and Kungurri, was out of the question, but there was a need to provide the farmers with a service to and from Mackay.

An attempt was made to provide a service to people living along the Eton branch in 1931. Each weekday morning a rail motor left Kungurri at 6.10 a.m. On arrival at Newbury Junction, through passengers for Mackay detrained, to spend an hour in the then-existing refreshment room, while the rail motor made a return journey to Eton, where its stop-over was only five minutes. Once back on the main line with its detained passengers aboard, it ran express to Mackay. A similar service was provided for the return journey in the afternoon.

With improvement to roads in the area, the service was discontinued in the mid 1950s.

Mackay steam locomotive depot, illustrated on the next page, was unique in Queensland, and possibly Australia in that it had a three stall roundhouse, served by points rather than a turntable. Locomotives turned on the angle at the end of Boddington Street, where the previous North Coast Line made its 180 degree turn to face it in the right direction for trains to continue their way north.

Trains carrying export sugar and other goods passed through this yard, partook of some street running past the old wharves alongside the Pioneer River, then crossed a long bridge to the port.



Mackay steam locomotive depot

Bowen

Significant features of interest to modellers:

- Passenger station was on a balloon loop.
- All trains proceeded clockwise around the loop.
- Trackwork where loop begins would be of interest on a model railway.
- Likewise, the old locomotive depot, goods and passenger facilities and jetty precinct is an interesting modelling prospect.
- The town's jetty was built in 1865. It still stands, although it has undoubtedly been repaired many times. With the coming of the railway to Bowen, a substantial set of railway tracks was laid on the jetty.

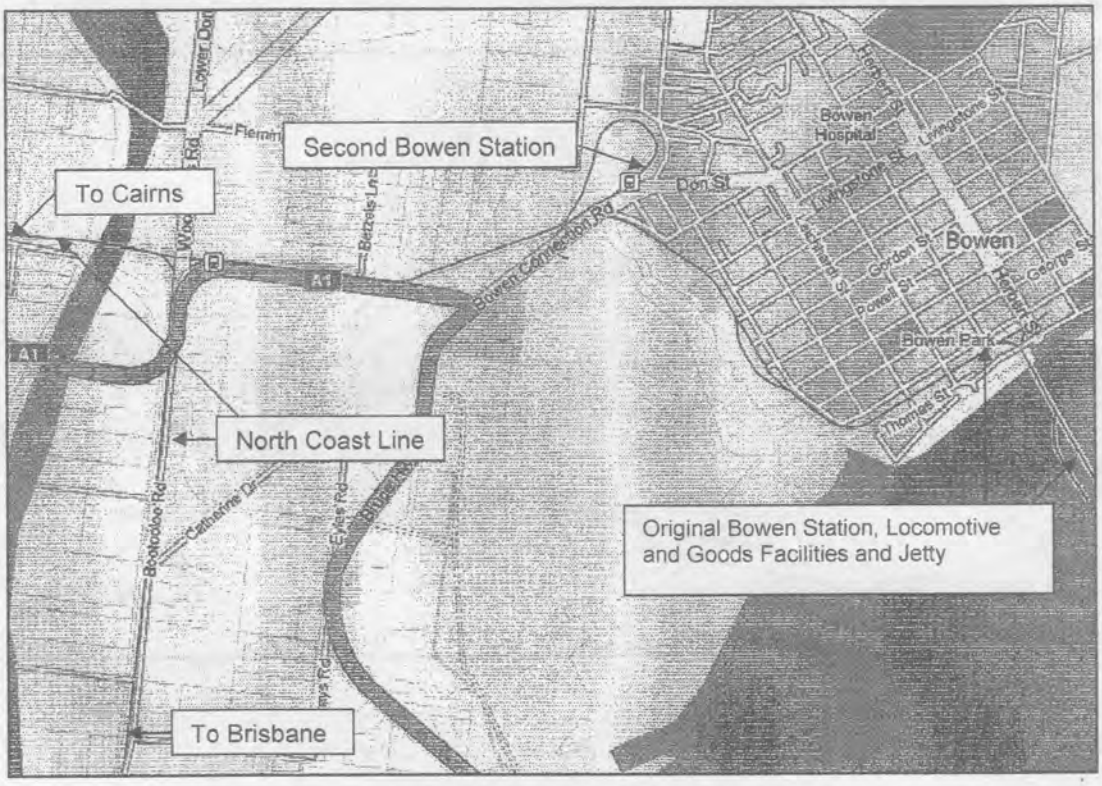
The town of Bowen dates back to 1859 when Captain Henry Daniel Sinclair sailed from Rockhampton in search of a suitable port north of Rockhampton. He found a good harbour which he named Port Denison, after the Governor of New South Wales. In March 1861 the Queensland government declared Port Denison an official port of entry, allowing for the future development of the region. When named in April 1861, Bowen was the northernmost town in Queensland.

Like other places along the Queensland coastline, Bowen was quickly seen by early settlers as a good port of entry from which to explore the hinterland and set up properties for farming and grazing. It had a reasonably deep anchorage ideally suited as a port for bringing in settlers and supplies, and exporting produce from the properties.

As with Maryborough and Mackay when a railway was mooted, the starting point or terminus at the Bowen end was a location very close to the port facilities for ease of transfer of passengers and goods. Consequently, the first services ran from this point, with suitable passenger, locomotive and goods facilities provided.

When the through north coast line came to Bowen, the passenger station site was obviously not suitable, as any attempt to extend the line to make the station a through station was thwarted by the lack of space beyond – the port facilities and settlement provided very real impediments. A Baddow – Maryborough situation could have been possible, but instead Queensland Railways decided to construct a large balloon loop on the opposite side of the town where there was more space, moving the passenger station so that it became a through station on the loop.

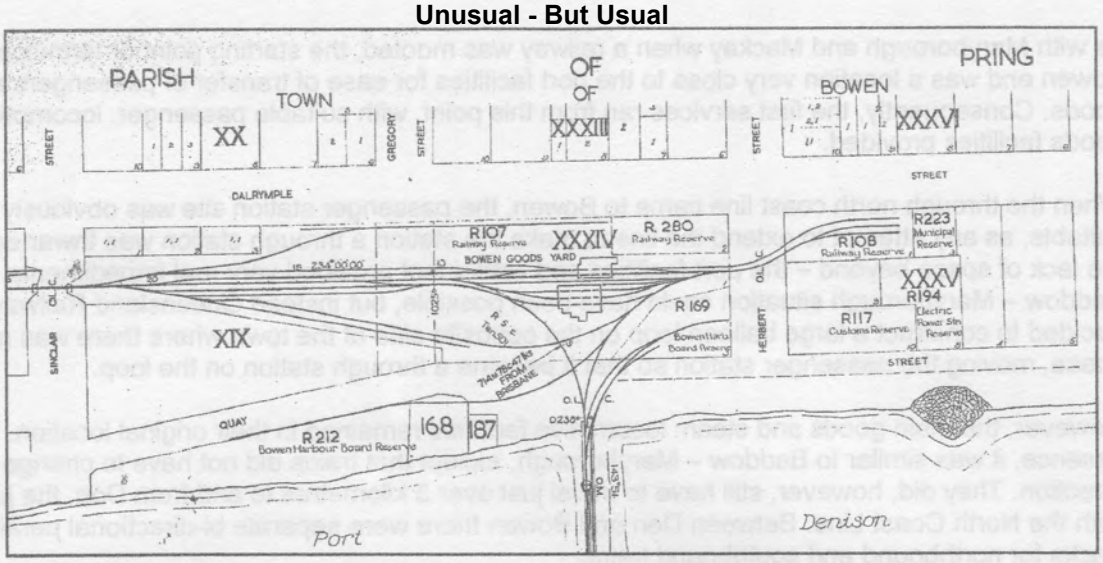
However, the main goods and steam locomotive facilities remained in their original location. In essence, it was similar to Baddow – Maryborough, except that trains did not have to change direction. They did, however, still have to travel just over 3 kilometres to and from Don, the junction with the North Coast Line. Between Don and Bowen there were separate bi-directional parallel tracks for northbound and southbound trains.



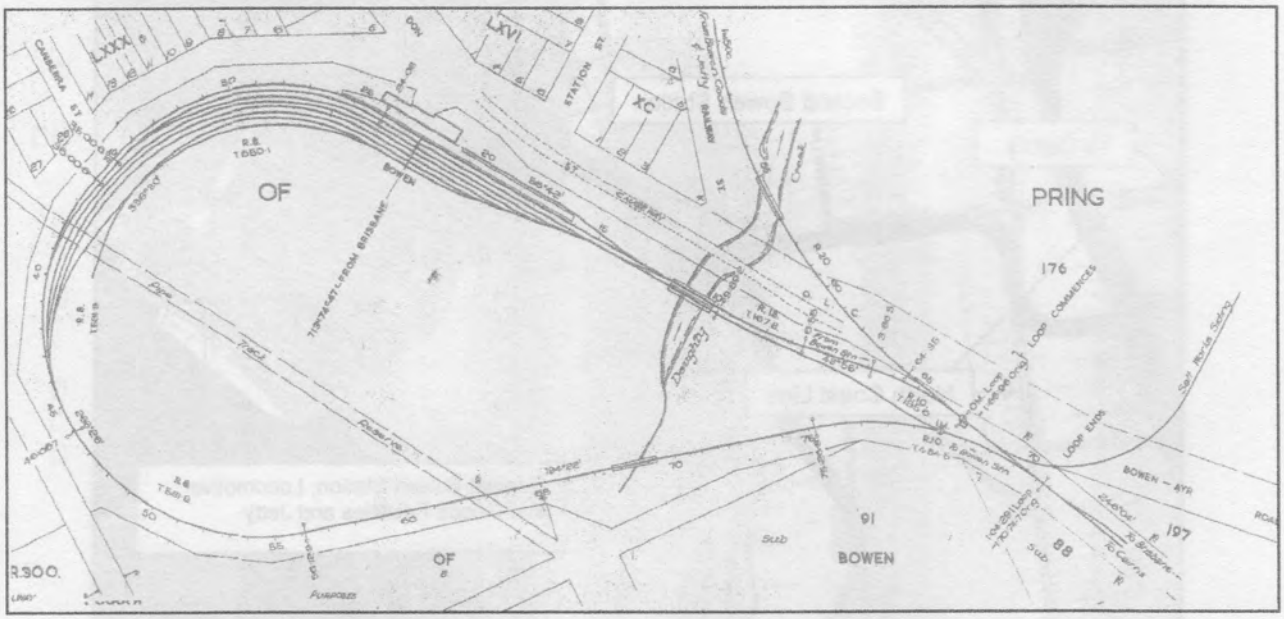
This overall view of Bowen shows clearly the arrangement of the railway facilities. The original Bowen Railway, opened in 1890, commenced on the waterfront near the jetty and proceeded in a general northerly direction to Guthalungra. This line is now part of the North Coast Line.

This view shows that when the North Coast Line was constructed, a through extension of the line beyond the original Bowen station would have been impracticable.

All trains proceeded in a clockwise direction around the loop, with the station platform on the left side. From time to time after Sunlander times were revised in the 1970s, it sometimes happened that, for example, a late running northbound train would be at the platform while a southbound train waited behind it, ready to move into the platform after the other train had departed.



Bowen locomotive depot and goods facilities. The line leading on to the 800 metre long jetty can be seen ay the bottom of the diagram. As in a number of other towns that hosted early railway development, the original location shown her for Bowen did not lend itself at all well to through running when the North Coast Line was constructed.



Innisfail

If one was a golfer playing the Innisfail Golf Course, it was likely that from time to time a carefully set up shot might need to be aborted as a railway locomotive ventured across the fairway in front of you. This came about because the railway easement that contained the turning angle at Innisfail was excised from golf course land – undoubtedly an unusual circumstance.

Kajabbi

Where else but Queensland would you load up to seven cattle trains a day making maximum use of a small yard in the cattle season, April to September, with minimum daylight hours.

One very small town that is just a pinprick on a map of Queensland, was once one of the largest cattle trucking centres in the state. Today, it is a quiet, laid back town whose rail connection with the outside world has been closed and lifted.

Kajabbi was central to extensive cattle stations, and was very accessible to properties further away, from which cattle were either walked or trucked.

Cattle would be brought into Kajabbi on foot from many properties in the Gulf Country. In the mid 1960s, road trains began to bring most of the cattle to the railhead until in the 1990s, road transport was used to link the properties with larger centres such as Mount Isa, Cloncurry and Julia Creek.

In the season from late April to late September usually four or five cattle trains a day, sometimes seven, pulled out of Kajabbi to rattle through the colourful countryside to Cloncurry before heading eastward on their long journey to meatworks – or agistment – on the coast.

Kajabbi was an intermediate station on the lines from Cloncurry to Mt Cuthbert and Dobbyn. It was always a cattle loading centre, eventually becoming the terminus of the branch from Cloncurry when the Mt Cuthbert and Dobbyn extensions closed.

This image shows the Kajabbi's rather meagre facilities. The line from Cloncurry curves past the station building then heads straight towards the clearing in the top centre of the photograph, Some distance down this long straight was Oona, junction for the Mt Cuthbert and Dobbyn lines.

The loop on the eastern side continued for some distance, with the angle and its long eastwards extension coming off the northern end. The loop rejoined the main line just past where the northern leg of the angle branched away.

The main line ended at stop blocks, the distance from the northern points of the loop being a little longer than two block cattle trains plus two locomotives,

A goods shed and loading platform were located on a loop on the western side of the main line.

Cloncurry, Toowoomba

The stations and other passenger facilities at Cloncurry and Toowoomba, like Maryborough, were originally constructed to serve lines that were in operation at the time. Thus Toowoomba originally served the line from Brisbane and then as the line was constructed towards the west a triangular junction was installed.

Even when the Southern Line to Wallangarra came into being, it proceeded north, then west before turning south. To make the southern line more direct, the Drayton deviation was constructed proceeding south from the station, very close to nearby buildings then running alongside city streets before gaining its own right of way for the climb to Harristown.

Passenger trains between Brisbane and the western line are assisted into and out of the station by a locomotive attached to the rear of the train. This happens even today with the Westlander.

All locomotive, goods and passenger infrastructure at Cloncurry was built at the eastern end of the town on the through line to Mount Cuthbert and Dobbyn. With the coming of the Mount Isa line in the 1920s, a triangular junction was built to the south of the town, with passenger trains hauled in by a locomotive attached to the rear.

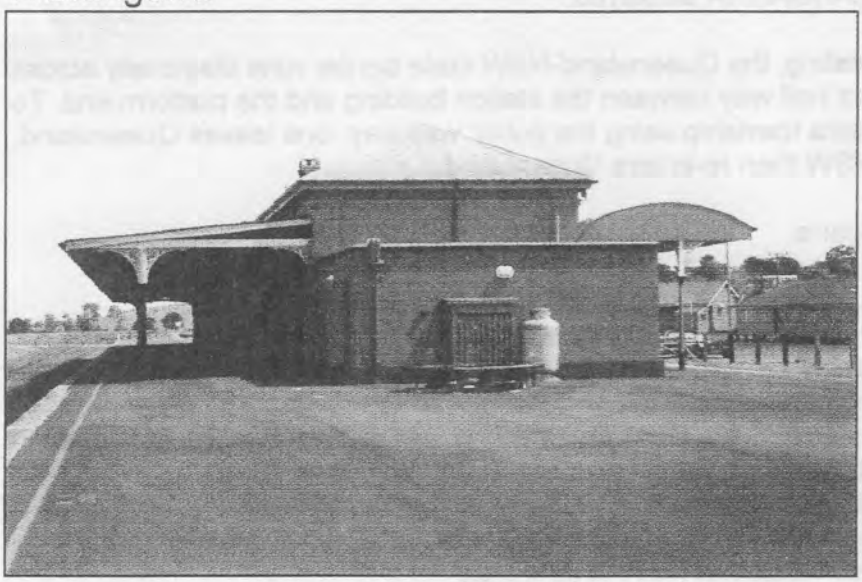
In the 1960s with the rehabilitation of the Mount Isa line, a new passenger station was constructed south of the town, to the east of the triangular junction. The locomotive depot was also moved and located within the triangle. Goods facilities remained in the original location, near the original station.

Like a number of other stations in Queensland, Cloncurry had an overall roof covering the tracks.

Use of term Signal Cabin

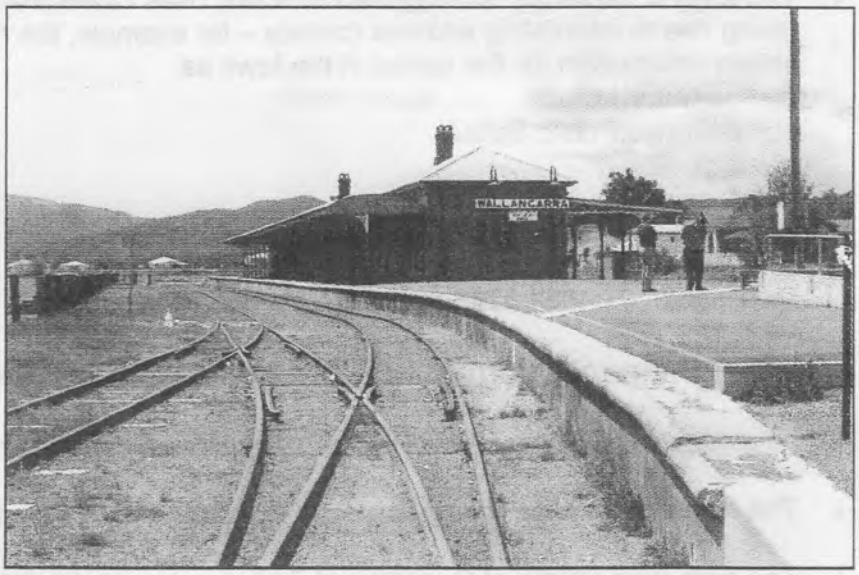
Another unique feature of Queensland Railways is the use of the term Signal Cabin, rather than Signal Box, as it is called in other states. QR did not, as a rule, place the name of the cabin on the external wall as did New South Wales and Victoria.

Wallangarra



These two images taken from the New South Wales end (top) and the Queensland end (lower) show the Queensland – New South Wales border (the white line across the platform in the top image) and the distinctive awning designs. The Queensland bullnose awning is on the right while the New South Wales cantilever awning is on the left.

The different awning styles reflected standard station architectural practice in each respective colony.



The Wallangarra railway station came into use in 1888 when the Queensland 3'6" gauge Southern Line from Warwick and the New South Wales (NSW) 4'8½" gauge Northern Line that extended from Tenterfield met there.

Over time, the building was extended at the southern (NSW) end and in 1910, it reached its ultimate length, as it remains today. The building was constructed by Queensland Railways and it is entirely within that state.

However, as a practical demonstration of the fact that it served trains from two colonies – or states after federation in 1901 - the roof architecture reflected the standard practices of the different colonies as they were at that time.

The roof on the western side of the building, the side that catered for Queensland Railways trains, was of bull-nosed type, while the eastern, or NSW roof followed their skillion design.

To add to the unusual nature of the building, the station nameboards at each end of the building conformed to each state's different spelling of the name of the town. The board at the Queensland end had the spelling WALLAN-GARRA, while that at the NSW end spelled out WALLANGARRA, without the hyphen.

The hyphen was eventually removed from the Queensland spelling, and today, both station nameboards have the word WALLANGARRA displayed.

To make matters even more interesting, the Queensland-NSW state border runs diagonally across the platform at the NSW end, about half way between the station building and the platform end. To access the platform from Wallangarra township using the public walkway, one leaves Queensland, walks about fifty metres through NSW then re-enters Queensland.

Other unusual facts about Wallangarra:

- Wallangarra has a twin town, Jennings just across the state border.
- NSW passenger trains ran almost entirely into Queensland to disembark/embark passengers.
- Queensland Railways goods trains ran into NSW to transhipment goods to and from NSW trains – the transhipment yards were entirely within NSW.
- The dual gauge turning angle was entirely within Queensland, but extended at the apex back into NSW to the munitions storage facility which was in NSW.
- All station staff were QR employees.
- The station master – a QR employee – lived in a low set brick house, not like any other QR station master's house, that was located in NSW in Jennings.
- The town of Jennings, although within NSW, uses Queensland phone numbers and postcode, giving rise to interesting address formats – for example, the NSW Department of Education shows information for the school in the town as:

  Jennings Public School
  High Street
  Jennings
  via Wallangarra NSW 4383

  Phone 07 4684 3273 Fax 07 4684 3354

Other significant information about Queensland Railways

- All except the Cooktown and Normanton Railways were eventually linked together.
- The North Coast Line linking Brisbane to Cairns was not completed until 1924.
- The total route length of Queensland Railways reached a maximum of over 10,000 km.
- Along the North Coast Line, there are a number of crossings where cane railways and QR cross on the level. Over time, many of these crossings have been replaced by grade separation – overpasses – and by the use of drawbridges.
- At the end of the Second World War in 1945 the QR could be described as a giant light railway
- A feature of QR was the use of wagons fitted with guards compartments.

  The most notable was the KKB cattle wagon with a guards compartment at one end and drover's compartment at the other end. Although they were mainly used on cattle trains it was a common sight to see them on other freight trains, mainly locals.

  Other types still in use after 1945 were the CB, COB, CHB, NB and NWB.
- Most Queensland railway bridges were constructed from the local hardwood timber. It was readily available and cheaper than imported ironwork for bridges.

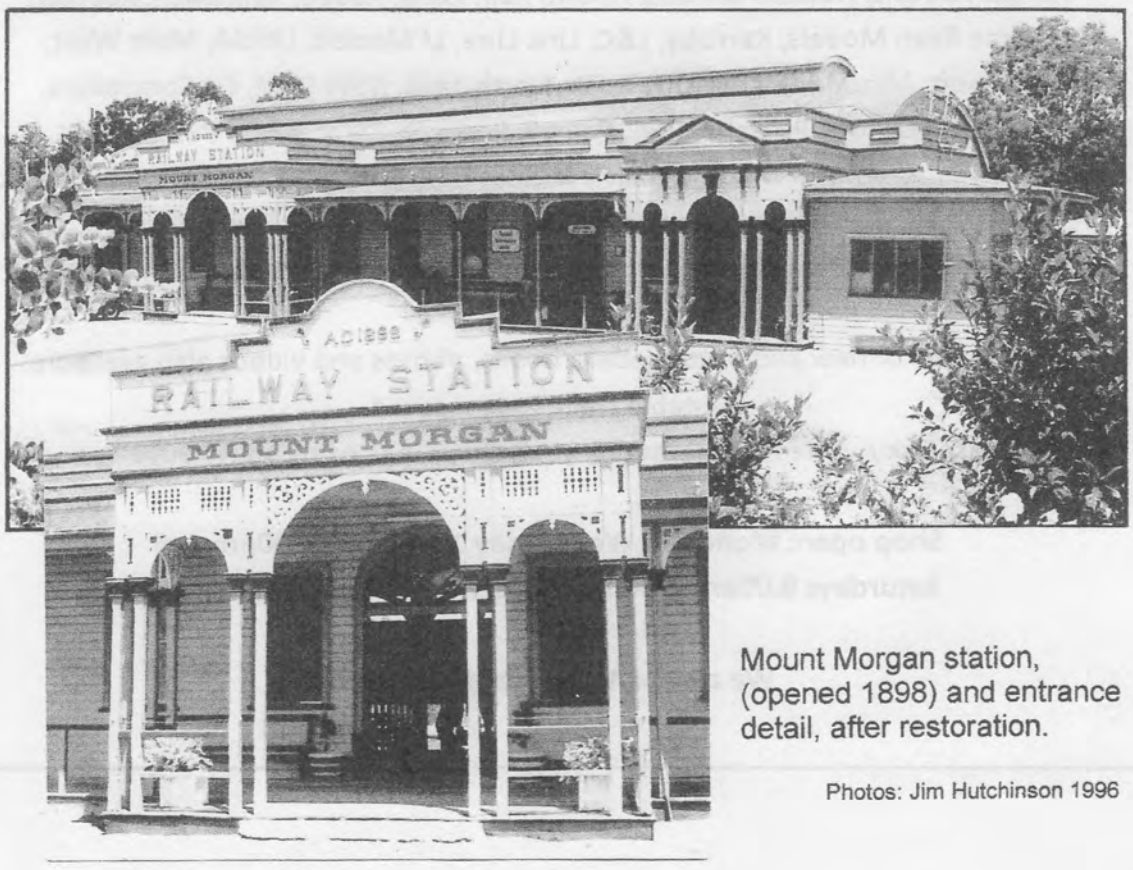
  It was also cheaper to construct timber bridges than large embankments. In later years many large timber bridges were replaced with embankments and culverts.

This paper is far from complete – it merely brings out only part of the uniqueness of Queensland Railways. It has not addressed the locomotive and rolling stock issues that make Queensland Railways different, nor does it attempt to cover the vast nature of Queensland's cane railways.

However it has, hopefully, provided an insight into the somewhat accidental way in which QR evolved in many of its operational practices.

Acknowledgements:

- Arthur Robinson
- John Armstrong
- John Knowles
- John Oxley Library
- QR Limited
- Stan Moore
- The Workshops Rail Museum



Mount Morgan station, (opened 1898) and entrance detail, after restoration.

Photos: Jim Hutchinson 1996