PROCEED ORDER

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Ground frame levers at Isis Junction. This was a QR2 pattern ground frame which used levers from signal cabins which were cut down and modified to make the ground frame. In this case old pattern number plates were used however both types (old pattern and new pattern) were used. The lower parts of the ground frame were fabricated, and the operator typically stood on a small fabricated metal platform adjacent the ground frame. This ground frame was slightly unusual as it had a separate lever for the flashing lights and half-booms. Other ground frames near level crossings used relay interlocking to start the flashing lights flashing before clearing the signal.

Contents

Goondiwindi Panel

Goondiwindi is a large town and has been a major station on the southwestern line since the line opened in 1908. The line was extended beyond Goondiwindi in 1910 to Talwood, to Thallon (the current terminus) in 1911 and ultimately to Dirranbandi in 1913.

In 1987 Train Order working was introduced on the southwestern line from Warwick to Goondiwindi, and signalling alterations were made at Goondiwindi at the same time. The limits of Goondiwindi yard on the western end were extended to include the State Wheat Board siding within the yard limits. The new panel in the station office was commissioned on Tuesday 10th February 1987.

The panel only shows the western end of Goondiwindi yard and is of a long narrow design. The wooden frame holds the metal facia to which the printed diagram is fixed. The panel appears to sit on two round posts which possibly contain the electrical wiring, but the panel also appears to be affixed to the wall. Below the panel is a magneto telephone also mounted on the wall. Various LED indications and switches for each signal and other functions are mounted on the panel making it an Individual Function Switch (IFS) type. This panel incorporated a number of slightly unusual features which were either rare or possibly unique in Queensland.

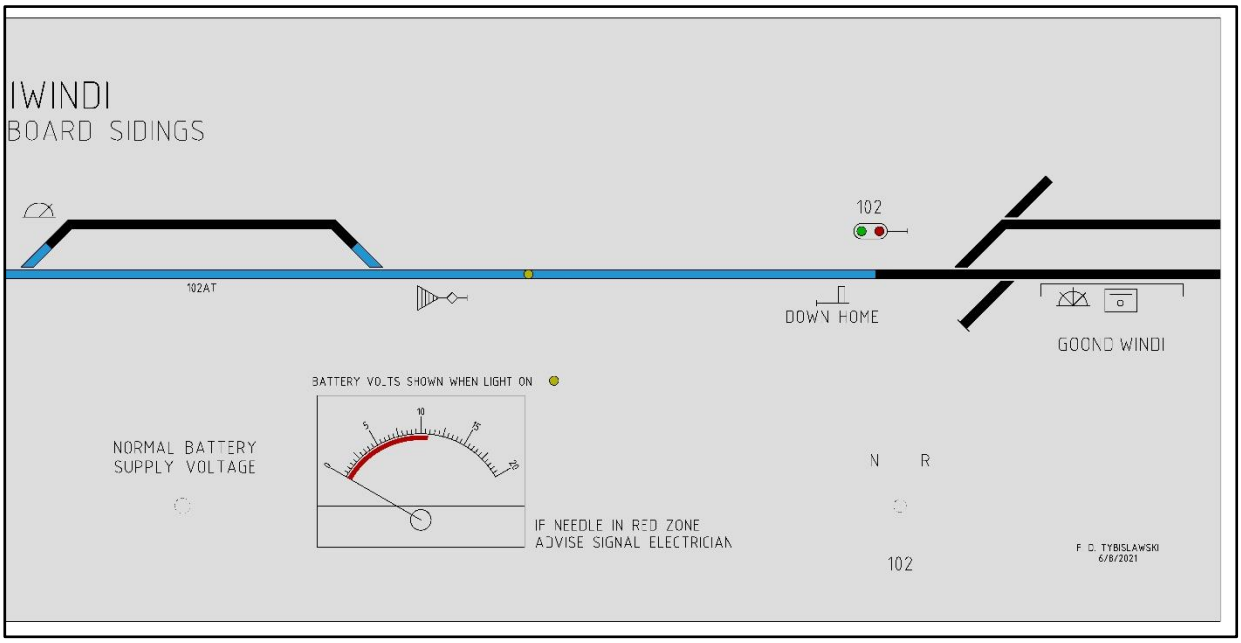
A two-aspect colour light signal (yellow over red) and numbered GI 101 was placed at the western end of the extended yard and was designated as the Down Outer Home signal. The existing semaphore Down Home signal, operated from the lever frame at the western end of the station building remained. A two-aspect colour light signal (yellow over red) and numbered GI 102 was provided and designated as the Up Starter signal. The Up Starter signal permitted trains to move outside the Down Home signal to access the sidings or proceed west towards Thallon and Dirranbandi.

Above: Replica drawing of Goondiwindi Panel left hand portion.

The track between the Down Outer Home signal and the Up Starter signal was track circuited to indicate when it was occupied. Also, an Approach track circuit was provided to indicate when a train was waiting at or approaching the Down Outer Home signal GI 101. A red switch was provided for each signal and when placed in the N or Normal position the signal was at 'stop'. When the switch was placed in the R or Reverse position the signal cleared to a yellow 'proceed' aspect. It should be noted that the panel indications showed a green light despite the fact that the actual signal displayed a yellow aspect. This is standard for most types of signal control panels.

The track circuit indications used yellow LED's which in another example (Toowoomba to Marshalling Yards panel) are on when the track is unoccupied and off when the track is occupied. Near the centre of the panel a red LED indicated when the flashing lights at the Leichardt Developmental Road level crossing are activated.

Examining the switches from left to right, the switch at the left-hand end of the panel turned all indication LED's on the panel off and was used when the station was unattended. The red switch below signal GI 101 controlled that signal as mentioned above. The next switch from the left was a keyswitch to further control signals GI 101 and 102. When the keyswitch was placed in the 'free' position the red switches for signals GI 101 and 102 would operate as normal. If the keyswitch was placed in the 'blocked' position the key could be removed and both signals GI 101 and 102 were held at 'stop'. If a train was shunting in the sidings and not occupying the track circuits, or a rail vehicle such as a hi-rail or track machine was in the area, a positive means of control to prevent the signals being accidentally cleared for another train was needed. Placing the keyswitch in the 'blocked' position gave positive protection for trains between the Down Outer Home and Down Home signals, and peace of mind for the person operating the panel that a mistake could not be made. This feature on a local control panel has not been identified on other panels.



Above: Replica drawing of Goondiwindi Panel right hand portion.

The next switch from the left controlled the blue 'call' lights. Call lights, more common in CTC Territory, are blue rotating lights which when lit tell shunters or traincrew to contact the person in charge for information or instructions. Goondiwindi was one of the rare locations outside CTC Territory to be fitted with blue 'call' lights. Two 'call' lights were provided, one near each end of the State Wheat Board siding. The switch to control the blue 'call' lights had two positions, 'lit' and 'out'. Above the 'out' position was a red LED, it is unclear what this red LED indicated when it was lit.

Above: The three-lever frame outside the station building - only lever No.3 remains in use.

The next switch was another keyswitch which was used to cut the panel in or out. When the panel was cut in the switches on the panel were active and when the panel was cut out all switches were disabled except the switch controlling the panel indications. The red LED above the 'out' position possibly indicates the cutting out process was successful.

To cut out the panel both switches for signals GI 101 and 102 had to be at 'proceed' and the 101/102 Control keyswitch had to be in the 'free' position.

The next switch to the left of the voltmeter appears to be a three-position switch that did not control anything except for selecting what power supply or voltage the adjacent voltmeter was indicating. Photographic evidence indicates the switch was normally left in the centre or vertical position. If it was necessary to check the normal (external) power supply the switch could be turned to the left, likewise, to check the state of the battery voltage the switch would be turned to the right. This is not necessarily something the Station Master would need to do unless there was a fault, and the signal electricians needed the information. A yellow LED located to the right of the voltmeter indicated when battery voltage was being indicated. A red line added to the voltmeter indicated the range where a low voltage should be reported to the signal electricians. It would appear the Station Master had some responsibility in monitoring the voltage of the signalling system and reporting faults. The placement of a voltmeter on a signal control panel is again a rare and unusual feature.

The last switch on the panel and below signal GI 102 is the control switch for that signal as described previously.

Other signals shown on the panel but without any indications are located adjacent to and operate in conjunction with the Leichardt Developmental Road level crossing. The location of signal levers to control those signals are indicated on the panel as are the location of the blue 'call' lights and telephones. The telephone located near signal GI 101, the Down Outer Home signal, was connected to the Assistant Station Master and Toowoomba Control. Other telephones located near the State Wheat Board siding were connected to the Goondiwindi signal telephone circuit and allowed communication with the Assistant Station Master. The right-hand side of the panel shows the station building, the relative position of the signal panel and the three-lever interlocking machine outside the station building.

By July 1991 Train Order Working had been extended beyond Goondiwindi to Dirranbandi. In May 1999 Direct Traffic Control was implemented between Warwick and Goondiwindi to replace Train Order Working. This does not appear to have caused any changes to the signal control panel. In November 1999 signalling alterations took place at Goondiwindi to commission the new GrainCorp (east) sidings, but again this had no impact on the signal panel as the new siding was at the eastern end of the yard in an area not shown on the signal panel.

In March 2000 Direct Traffic Control was extended to Dirranbandi and no signalling changes appear to have occurred that required alterations to the signal panel. During late 2002 and late 2003 more track and signalling alterations took place at Goondiwindi. These alterations took place at the eastern end of Goondiwindi and had no impact on the signal

panel. In October 2006 signals GI 101 ad 102 were decommissioned and removed, the Up Home signal which was fixed at 'stop' was also removed. It would appear that the panel was decommissioned at this time although it has remained in the station building.

Above: Goondiwindi station in November 1991 with the Dirranbandi Mail at the platform prior to departure west. The three-lever interlocking machine and signal repeater on the end of the station building are visible. The position of the station building, the three-lever frame and the Down Home signal operated by lever No.3 are all indicated on the signal panel diagram.

Signalling Earlsfield 1968

Earlsfield is a station on the Moura Short Line which once played an important part as the junction station for the Moura Short Line and the branch lines to Biloela and Koorngoo. The line through the site of Earlsfield opened on the 3rd of May 1924 when the section from Rannes to Callide opened, later the line was extended through to Thangool on the 24th of August 1925. The line to Thangool has since been shortened back to Biloela and more recently to Callide Coalfields. The branch to Koorngoo is closed.

When the Moura Short Line was constructed from South Gladstone to Moura it bisected the Rannes to Thangool line at Earlsfield. Initially there was no connection between the Thangool line and the Moura Short Line with only a diamond crossing existing. This is probably the only location in Queensland where two branch lines of the same gauge, crossed at a diamond crossing with no connection from one line to the other. The

signalling at Earlsfield at this time is detailed in Weekly Notice 41 dated the 12th of October 1967, as follows:

> *The new Gladstone-Moura railway crosses the Rannes-Thangool Branch by means of a diamond crossing inserted at Earlsfield, 79m57ch, Moura line, which is at 21m62ch, Thangool branch. The signalling arrangements are as follows. On the Moura Line a Down Stop signal is situated 220 yards from and on the Gladstone side of the diamond crossing. An Up Stop signal on the Moura Line is situated 220 yards from and on the Moura side of the crossing. On the Thangool Branch an Up Stop signal is located 110 yards from and on the Rannes side of the crossing. A Down Stop signal on the Thangool Branch is located 110 yards from and on the Thangool side of the crossing. Beacons have been erected 440 yards out from the Stop signals approaching from each of the four directions. All signals and beacons are on the right-hand side of the line. The signals are operated from a four-lever frame adjacent to the crossing and are interlocked so that signals cannot be cleared for both lines at the one time. The signals on the Moura Line are normally at "Proceed" and those on the Thangool Branch are normally at "Stop". Trains on the Moura Line in either direction will approach Earlsfield prepared to stop at the relevant Stop signal. If the signal is at "Proceed" the train will proceed without stopping. A Thangool Branch train in either direction shall stop at the relevant Stop signal and the guard shall proceed to and unlock the lever frame, check if the Moura Line is clear of trains, and if that line is clear, place both signals on it at Stop and set the signal for his train to proceed over the crossing. After the train has cleared the crossing the guard will restore the Thangool Branch signal to the "Stop" position and place both Moura Line signals to "Proceed" and rejoin the train. Earlsfield is not a train staff station and will be worked unattended in the manner abovementioned. (WN 41-1967p10)*

Later in 1967 it was advised that it was intended to open Earlsfield as a Train Staff Station and on the 22nd of January 1968 the Moura Short Line opened for limited traffic under Ordinary Staff and Ticket regulations. The Circular Memo issued for the opening of the Moura Short Line gave the following details about Earlsfield and the signalling diagram on the next page applied.

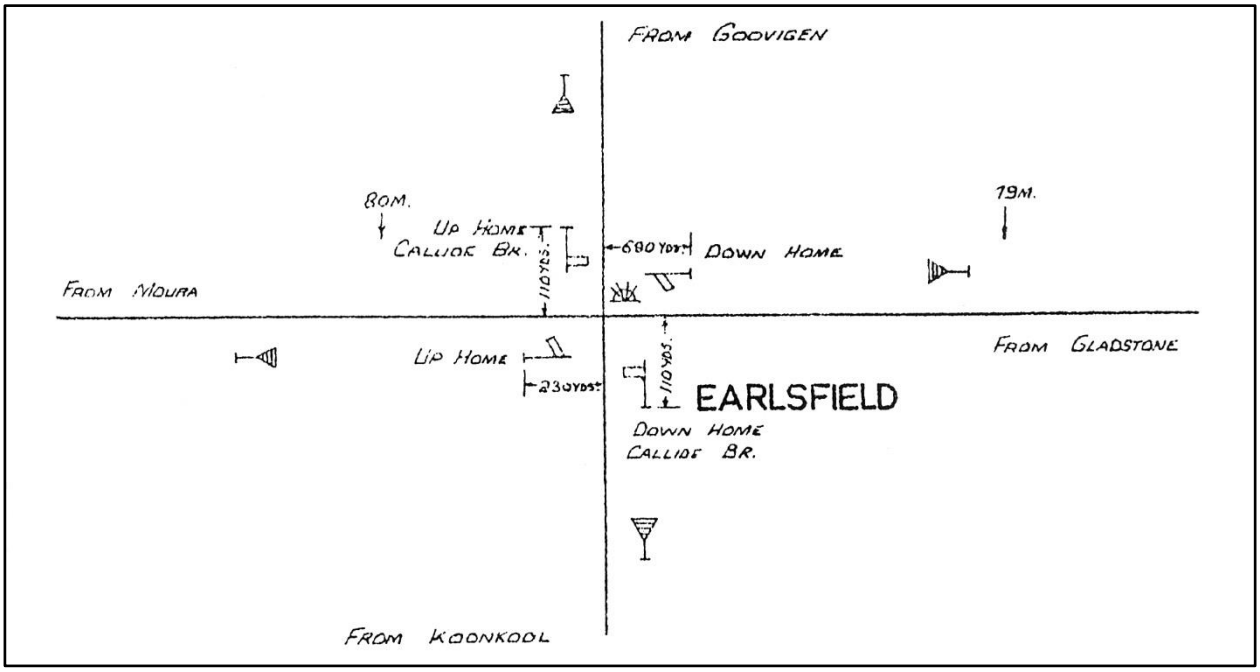
Signalling:
No connection with the Callide line exists at present at Earlsfield and the following signalling has been provided.

Moura Line:

Up Home signal normally at Clear
Down Home signal normally at Clear
Up Beacon
Down Beacon

Callide Line:

Up Home signal normally at Stop
Down Home signal normally at Stop
Up Beacon
Down Beacon



All signals are operated from a four-lever frame adjacent to the diamond crossing. Trains working through the Callide line will be required to stop at the Home signal and the fireman will walk in and place the Moura Line signals to Stop after ascertaining that no Moura train is within viewing distance and then signal his train through. In the event of a Moura train being within view this train will receive preference for the diamond crossing.

Staff Sections:

Annandale - Earlsfield	Ordinary Staff	red diamond
Earlsfield - Belldeen	Ordinary Staff	yellow half diamond

Staffing:

Two Night Officers.

FORGOTTEN STATIONS

Dronfield was a station on the Malbon to Duchess extension (Mt Isa line) and was located at 532 Miles 51 Chains, or 20 miles 9 chains from the junction at Malbon. It appears to have opened with the line between Malbon and Duchess in 1912. The 1935 General Appendix stated that the signals would normally be at 'proceed' and were not lit at night. In 1940 the Up and Down Home signals were removed. A station yard plan from 1971 shows only a short loop siding with choke blocks at each end, a small galvanised iron shed was near the Mt Isa end of the siding and a pole mounted telephone existed nearby.