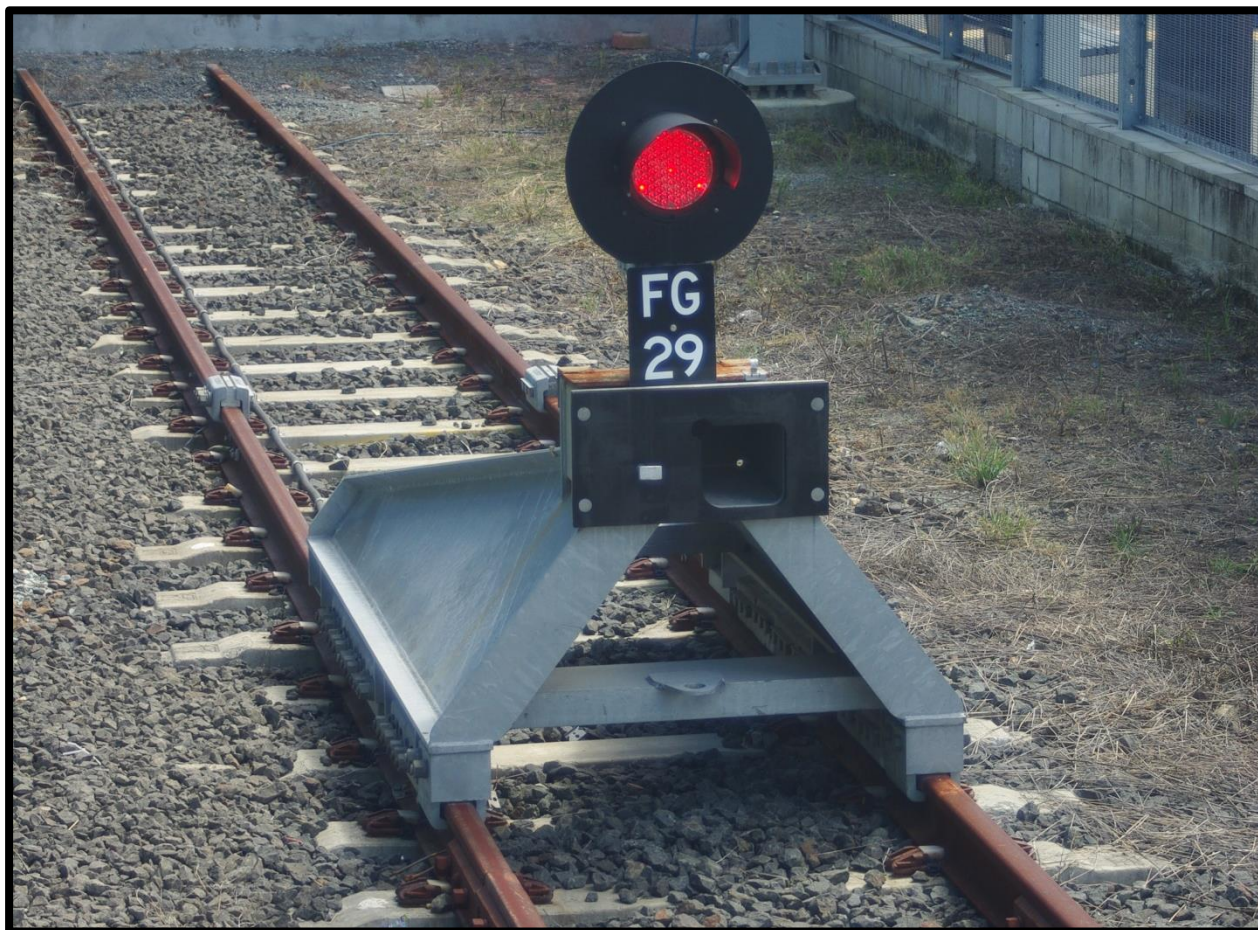


PROCEED ORDER

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Photographed in 2014 one of the signals at the end of the line at Ferny Grove. Signal FG 29 displays only a fixed single red aspect and shows a more modern practice to number red lights/signals on stop blocks. The subject of our feature article this issue is the signalling that existed at Ferny Grove in 1979 when new signalling and electrification were commissioned.

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Signalling Ferny Grove 1979

Ferny Grove has been the terminal station of the line since 1955 when the section from Dayboro closed. The Ferny Grove line was the first line to be electrified in the Brisbane Suburban Area, commissioned in 1979, and in the process was fully re-signalled. Mechanically interlocked signal cabins at Newmarket, Enoggera and Mitchelton were decommissioned as were semaphore signals at other stations along the line including Ferny Grove. The new colour light signalling installed in 1979 at Ferny Grove has seen only a few changes in the last 33 years.

The signalling scheme provided at Ferny Grove in 1979 was very simple indeed and is shown in Diagram 1 on the following page. The signalling consisted of one controlled signal (KA24), one automatic signal (F165), a four-lever electrically released ground frame, and a unique pair of free-standing illuminated signs on the platform. The signalling at Ferny Grove was directly associated with the signalling and interlocking at Keperra, hence the signal number at Ferny Grove bearing the mnemonic KA, derived from Keperra.

The signal controlling train movements into Ferny Grove was a two-aspect (yellow and red) automatic signal numbered F165, placed on the left-hand side of the line, prior to the wooden trestle bridge before the station. This signal displayed a yellow aspect when the main line was clear into the platform and applied to the red light on the stop blocks at the end of the line. The way the track circuit (165A) is drawn on the diagram indicates that only one train could occupy the section of line beyond the signal, through the platform and to the stop blocks. If two trains were to follow each other to Ferny Grove, only when the first train was shunted off the main line to the loop (or siding) could another train be admitted to Ferny Grove via this automatic signal.

The signal controlling trains departing Ferny Grove was a three-aspect (green, yellow and red) signal numbered KA24, placed on the right-hand side of the line, on the Keperra side of the Arbor Street level crossing which at that time did not have flashing lights installed. The signalman at the Mayne Control Centre would clear this signal from the panel at Mayne when required for trains to depart Ferny Grove. The signal could be cleared well in advance of the trains anticipated departure time without causing the Samford Road level crossing to activate. In the event of failure of the telemetry (signalling communications) between Mayne and Keperra/Ferny Grove, traincrew could use an emergency push button located on the signal post to attempt to clear the signal when authorised by Control.

Access to the loop line and siding at the Keperra end was by the four-lever electrically released ground frame, released from Mayne, with the signalman operating Electric Release number 813. The ground frame was a QR1 pattern and the levers applied as follows:

- 1 - Release
- 2 - Lockbars and Plungers No.3 & No.4 points.

3 - Points, catch points and disc to Loop

4 - Crossover to siding

The loop was electrified but the siding, with a short dead-end towards Keperra, was not wired and therefore not available for electric trains.

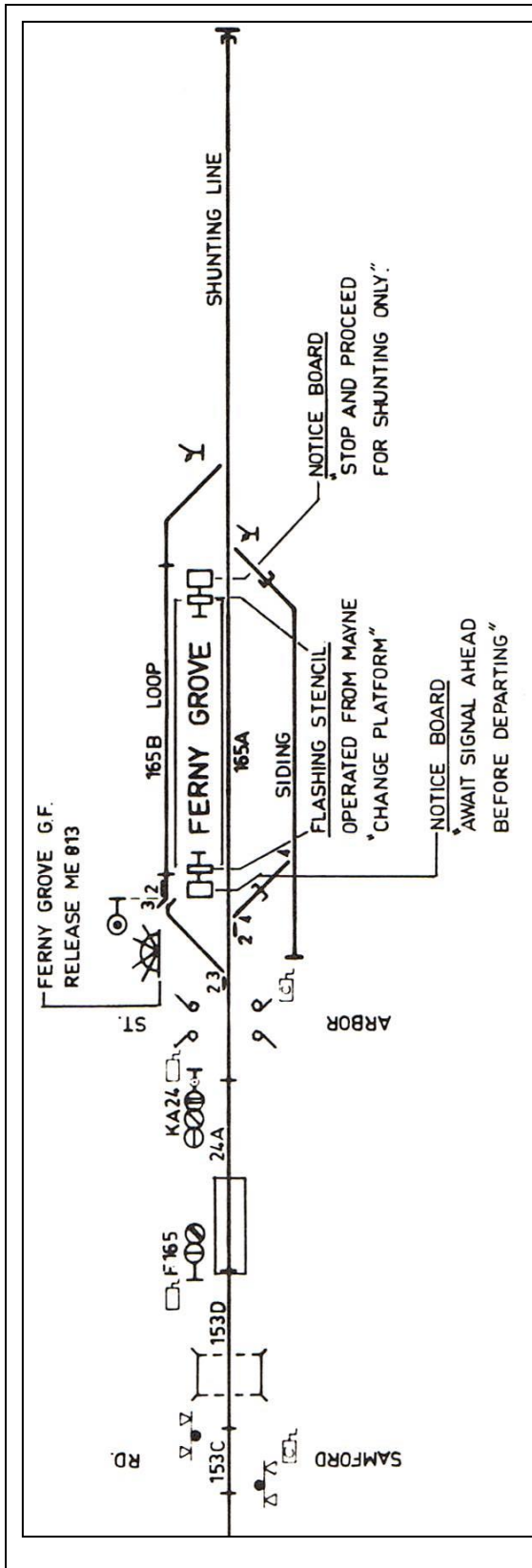


Diagram 1: Signalling diagram dated 28-11-1979 showing the two signals, the four-lever ground frame, and the "Change Platform" signs.

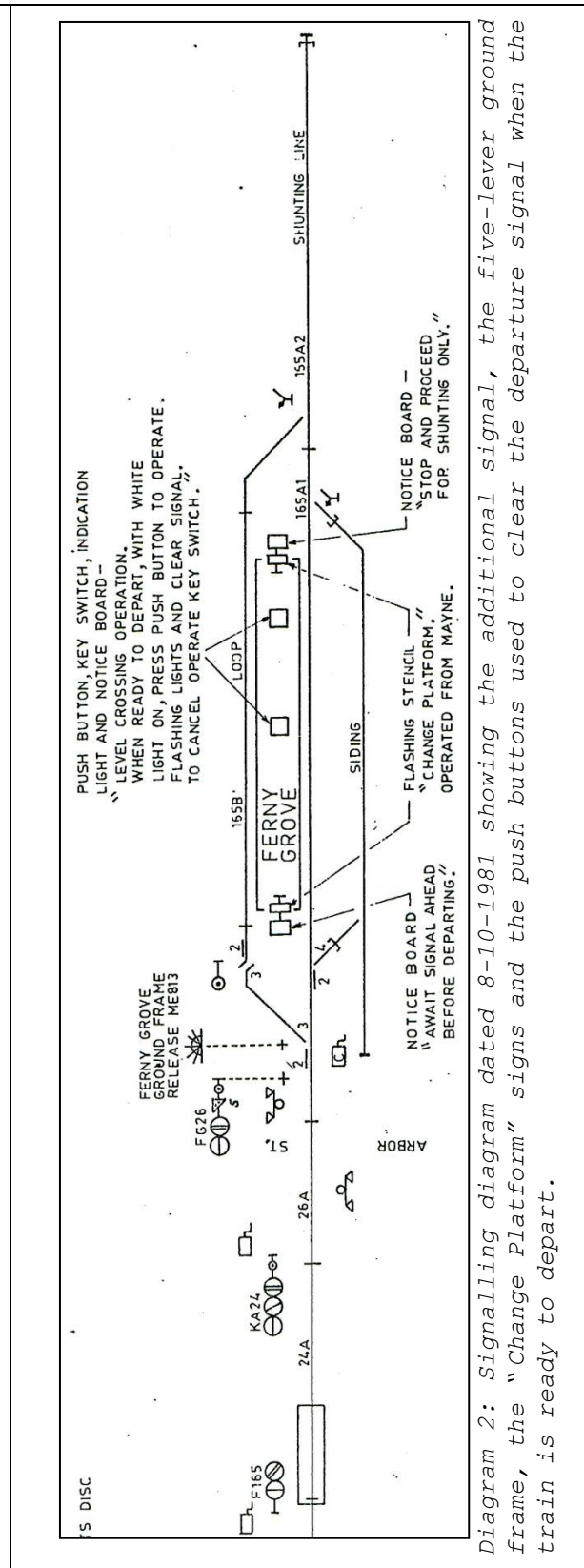


Diagram 2: Signalling diagram dated 8-10-1981 showing the additional signal, the five-lever ground frame, the "Change Platform" signs and the push buttons used to clear the departure signal when the train is ready to depart.

The most unusual feature associated with the signalling system were the two illuminated "Change Platform" signs, one at each end of the platform. The purpose of these signs was to alert the traincrew of the need for them to shunt their train from the main platform to the loop platform,

either by the dead-end at the Dayboro end, or via the electrically released ground frame at the Keperra end. The signs were illuminated and flashed when the corresponding button was pressed on the control panel at the Mayne Control Centre with the signs continuing to flash until the same button was pulled to cancel the operation of the signs.

By 1981 the Arbor Street level crossing had been provided with flashing lights and this required some signalling changes at Ferny Grove as shown in Diagram 2. Due to the proximity of the level crossing to the station platform another signal was added on the Ferny Grove side of the crossing so that a train could be held at the platform, facing a red signal, allowing road traffic to use the crossing. This new signal, numbered FG26, was a two-aspect (green and red) signal located on the right-hand side of the line, between the platform and Arbor Street level crossing. The signal also had a position light shunt signal mounted on the post and this shunt signal was operated from an additional lever on the ground frame. The existing four-lever ground frame was either extended or replaced to become a five-lever QR1 pattern ground frame with lever No.5 operating the position light shunt signal. Signal FG26 also had an emergency push button the same as signal KA24. A former Network Controller at Mayne who worked at Ferny Grove around this time provides the following notes on train operations at Ferny Grove.

The usual method of operation for trains crossing at Ferny Grove was for the first train to arrive in the main platform then shunt to the loop platform via the dead-end. The second train would then arrive at the main platform and the Guard of the second train would operate the ground frame to allow the first train to depart from the loop platform.

If a third train was to cross the second train, the second train would then shunt to the loop platform via the dead-end. The whole process would be repeated with the Guard of the arriving train operating the ground frame for the departing train. The last train to arrive (that will not remain for a cross) would simply remain on the main platform then depart.

If the signalman at Mayne Control Centre was to clear signal FG26 before the train was ready to depart the platform, the level crossing would activate and block road traffic for an unnecessary period. To fix this problem two sets of buttons and switches were provided on Ferny Grove platform, which were operated by the train Guard. Two sets of button/switches were provided in order that they would be close to the Guard depending on what type or length of train was standing at the platform. The signalman at Mayne could now pre-set the signal so it was ready to clear to a green aspect, but remained showing a red aspect, until the train was ready to depart, and the Guard operated the button on the platform. As long as the next signal KA24 was showing a green or yellow aspect, and after a short delay while the level crossing lights activated, signal FG26 would clear to a green aspect. Just why the signal carried the number FG26 and not KA26 is unclear as the normal practice was to have the signal number based on the interlocking to which it belonged.



Above: Ferny Grove station as captured in 1989 by an unknown photographer from the Arbor Street level crossing looking towards the platforms.

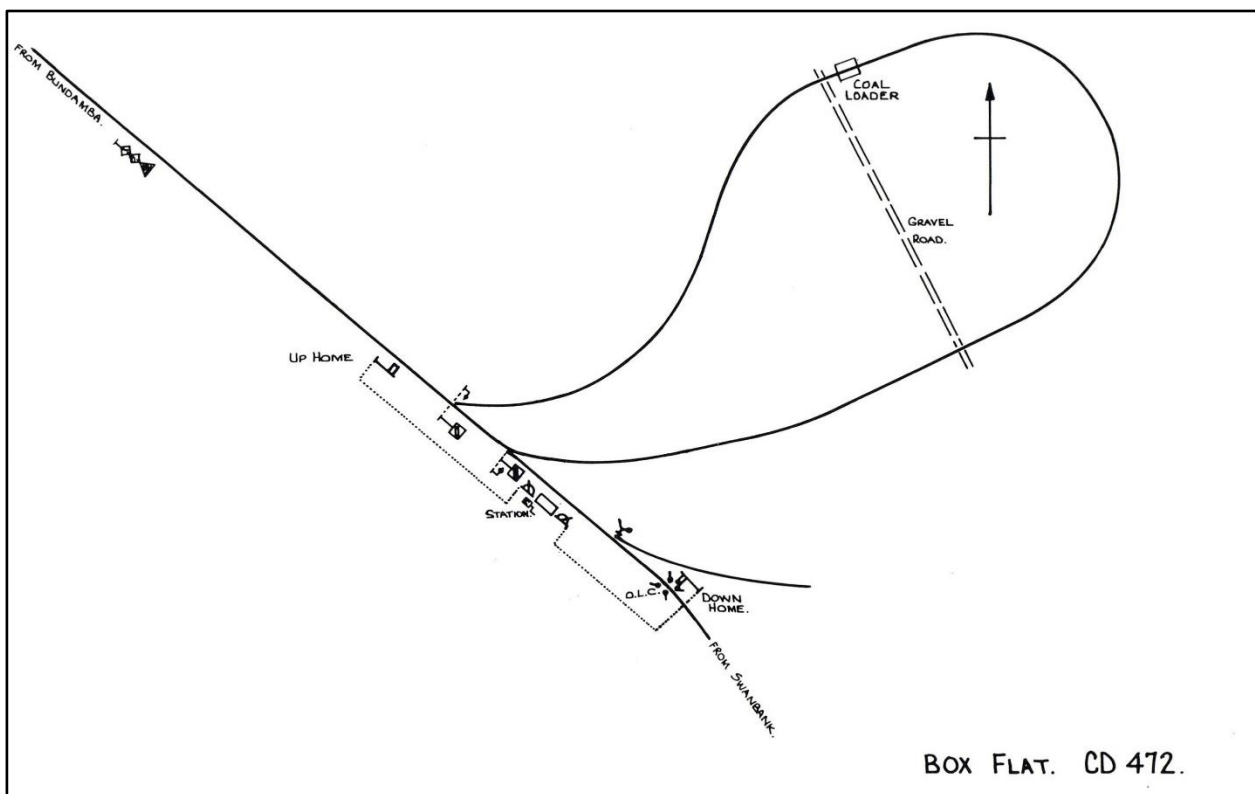
In mid-1986 an instruction to staff issued on Circular Memo still referred to signal FG26 and the operation of the key switch on the platform to clear the signal when ready to depart Ferny Grove. In 1996 Ferny Grove was re-signalled and at this time the ground frame was removed, electrically operated points provided, and departure signals provided on both platforms at the Keperra end. At the Dayboro end trailable facing points and permanently lit single aspect (red) signals provided at the end of both platforms. Attached to these signals were signs which stated that Drivers must contact the signalman at Mayne for permission to pass the fixed red aspect. The un-wired siding was also removed at this time. All signals at this time were numbered with a signal mnemonic of KA for Keperra.

New signalling commissioned in 2012 appears to operate from a new interlocking provided at Ferny Grove and all signals at Ferny Grove are now numbered FG. This includes the two permanently lit red aspects on the stop blocks which are numbered as signals. Similar red lights on the stop blocks at the end of the line at Cleveland are not numbered nor are the single aspect (red) signals at the end of the Airport line at the Domestic Airport station. The only other red light placed on a stop block and known to be numbered like a signal was at Robina when it was the terminus of the Gold Coast line, with the signal appropriately numbered "RA END".

Signalling Box Flat 1982

In late 1982 preparations were well advanced to provide the necessary infrastructure to allow export coal trains to operate from Box Flat to Fisherman Islands. The loop siding at Box Flat (part of the former loop line to Redbank) had been removed and replaced with a conventional balloon loop with trains travelling in an anti-clockwise direction around the loop.

The existing 'Bogside' departmental siding still remained and continued to serve as the access siding for the Queensland Pioneer Steam Railway depot located adjacent to the siding. The points to the 'Bogside' siding were operated from a standard non-reversible lever and the points were secured against interference by a HP (Hudson Patrick) points lock.



Simple semaphore Up and Down Home signals were the only signals required and an Up Approach Beacon was also provided. The Approach Beacon had two

reflectorised metal signs to indicate the normal position of the Trailable Facing Points (TFP's) provided to enter and depart the new balloon loop. The points closest to Bundamba were set for right hand running while the next set of points were set for left hand running to enter the balloon loop. With this arrangement it was not necessary to manually operate any points to enable an empty coal train from Bundamba to enter the balloon, load coal, and depart again back towards Bundamba.

The semaphore signals were operated from two single wrought iron levers, one located on each side of the station building. A telephone was provided in a locked box on the wall of the station to contact Bundamba or Bundamba Racecourse stations. The phone was a small wooden magneto telephone with chrome plated bells and was in remarkably good condition considering its location and potential for vandalism and theft.



Above: An empty spoil train pauses at Box Flat in 1989 to change the Ordinary Staff before proceeding onwards to Swanbank. The trailable facing points indicator (in reverse) can be seen above the wagons and the Up Home signal at 'proceed' is at the rear of the train.

GOONDIWINDI PANEL - 2022 UPDATE

(Refer to *Proceed Order* No.12 Oct-Dec 2021)

In the 12th issue of *Proceed Order* an article appeared discussing the decommissioned Goondiwindi signal panel. In mid-2022 I was able to inspect this signal panel and made two observations which supplement or correct information in the previous article.

(1) The panel has an engraved plastic facia not a metal one as previously suspected from photographic evidence.

(2) The voltmeter switch is only a two-position switch normally standing vertically and showing external power voltage. A spring-loaded position to the right allows testing of the battery voltage.

Otherwise, the panel was as described however the operation of certain features of the panel, or just how the indications were displayed remains unclear. The panel was to be replaced with one depicting the DTC Block Limit Boards however that did not take place despite the fact that new artwork was prepared for the replacement.

On The Network - ETCS

In late 2022 a site visit was arranged to view the progress on installation of ETCS at two locations. The first location was Redbank Workshops, now called Progress Rail, where the suburban fleet is being retrofitted with the required equipment. The second location inspected was Sandgate where field equipment has been installed and initial testing has been undertaken.



Above: Sandgate signal SE13 soon to be replaced with Block Limit Marker SDE 5413. Note that the new signs have a three-letter mnemonic and in this case, the number allocated partly matches the old signal number.