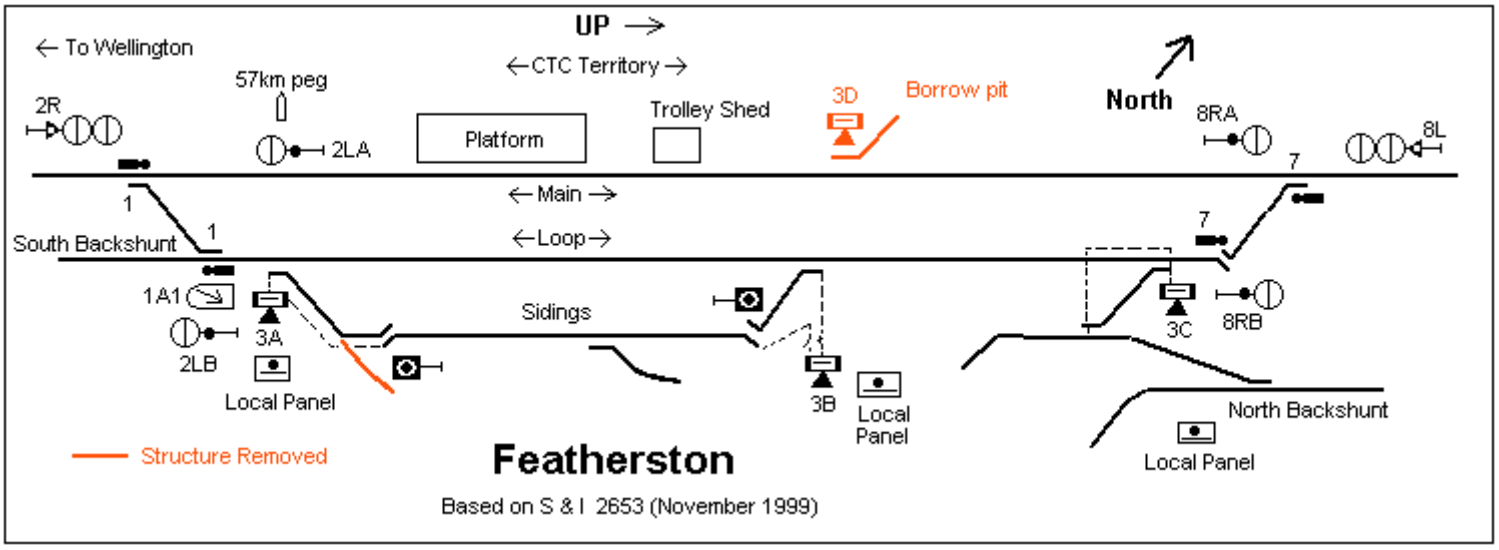

Note: This Local Instruction is dated March 1989. The diagram above is based on a Signalling & Interlocking circular (S & I) dated November 1999. I will make any necessary corrections to the diagram when I obtain a 1989 S&I.

NEW ZEALAND RAILWAYS

Local Instruction No. L286
Sheet No.1
No. of Sheets 9

FEATHERSTON
LOCAL INSTRUCTION FOR SIGNALMAN

To be read in conjuction with the current Circular S&I for Featherston.

This local instruction cancels Local Instruction No.L246.

1. STATION CONTROL PANEL

The station control panel provided in the station building gives control of all points and signals.

Facilities are also provided to switch control from the station control panel to the local control panels for shunting purposes.

(a) Track Indications

The red track indication lights on the station control panel, when illuminated, indicate the presence of trains.

(b) Signal Levers No.2 and No.8

Lever No.2 controls the Up Home signal 2R and in conjunction with the signalman at Upper Hutt the Departure signals 2LA and 2LB.

Lever No. 8 controls the Down Home signal 8L and Up Starting signals 8RA and 8RB.

Lever No.2 placed in the position "2R" will clear the Up Home signal, provided track and points conditions permit. Lever No.8 placed in the position "8L" will clear the Down Home signal, provided track and points conditions permit. To clear either of the Down Departure signals the Signalman at Featherston must telephone the C.T.C. Operator at Upper Hutt and request the slot release on 2L signal. The white indication light "Down Departure Slot" will be illuminated when the release has been given.

Place No.1 points lever in the required position, check that the points are correctly set and turn lever No.2 to the position "2L" and the appropriate Departure signal 2LA or 2LB will clear provided track conditions permit.

To clear either of the Up Starting signals BRA or BRB place No.7 points lever in the required position, check that the points are correctly set and turn lever No. 8 to the position 8R; the apppropriate starting signal will then clear provided track conditions permit. Signal control levers must be restored mid-position after the train has passed.

(c) Points Control Levers No.1 & No.7

The operation of these levers will not move the points unless the points can be moved without danger to traffic. This will be indicated by the points "Free" (F) indication, above the lever concerned, being illuminated. The "N" and "R" indication above the points levers indicate that the points are correctly positioned and secured. (See Section 7 of these instructions).

(d) Control Changeover Lever No.3

Lever No.3 will normally be in the "C" position and an illuminated letter "C" above the lever will indicate that the signalling is under the control of the station control panel, in the station building. For details of operation see Section (3) (b)of these instructions.

2. ATTENDED/UNATTENDED CONTROL

Provision has been made for Featherston to be unattended for signalling purposes when trains are running without tablet. When Featherston is unattended Signal 2LA is controlled directly by the C.T.C. Operator, Upper Hutt. Signal 8RA is controlled from a pushbutton on the station platform and Signals 2RABC and 8LABC will clear automatically for the passage of trains through the main line.

(a) To Change to Attended Operation

(i) By pressing the "Indication Check" pushbutton check that all indications are normal.

If No. 2L Signal is clear the C.T.C. Operator must be requested to place the signal in the "Stop" position. II any other signal is clear and a train is approaching, the appropriate signal lever should be reversed to prevent a signal reversion.

(ii) Place No.5 lever in the "Attended" position and check that the "In" indication illuminates.

(b) To Change to Unattended Operation

(i) Check that all levers are in the normal position and that the tablet instruments are closed.

(ii} Place No.5 lever in the "Unattended" position check that all indications are extinguished.

3. APPROACH LOCK RELEASE

Electrically operated time releases work automatically on all signals. With a train approaching a clear signal, it will not be possible to move the points or clear a conflicting signal until 90 seconds after the signal has been restored to "Stop".

4. SHUNTING SIDINGS AT FEATHERSTON

A. Shunting Without Local Control

Shunting from loop to sidings or south backshunt may be carried out by station staff, after conferring with the C.T.C. Operator Upper Hutt, without obtaining local control.

Switchlocks 3A, 3B & 3C are free for shunting from the loop to sidings or south backshunt when 1 & 7 main line points are set for the Main Line.

1 and 7 points are automatically locked and cannot be operated from the station control panel when any of the switchlock doors 3A, 3B or 3C are opened.

B. Shunting Under Local Control

Local control panels are provided adjacent to the Loop to Sidings points for the control of points and signals when shunting. These panels shall be used by station staff only.

(i) Procedure for Obtaining Local Control

To changeover to local control for shunting purposes, the following procedure adopted:-

Station Control Panel

(a) Check that Signal Levers No.2 and No.8 are in the mid-position and that the red lights above the levers are illuminated.

(b) Check that points Levers No.1 and No.7 are in the normal position and that the "N" indication lights above the levers are illuminated.

(C)Turn lever No.3 to position "L".

(d) Proceed to the appropriate control panel.

Local Control Panel

(a) Check that the white "Control Changeover" lever the red signal control lever and the black points control lever on the local control panel are in the normal position.

The letter "L" at the top of the local control panel will now be illuminated to show that local control is available.

(b) Switch the white "Control Changeover" lever to the position "L". The points and signal indication lamps and the "Block Open" indication light will then be illuminated to show that local control has been obtained.

(ii) Shunting from Local Control Panels

When local control has been obtained as detailed in Section 4B(i) above, the switchlocks can be released by the opening of the switchlock door. The switchlocked points are locked whenever they are placed in the normal position. Main Line points, starting and departure signals and low speed lights on the Home signals can be controlled from the control panels.

At the north end shunting out on to the main line must comply with Tablet Regulation No.9. Movements over No.7 points can be controlled from either the local control panels situated adjacent to the loop to sidings points (38) or (3C). The interlocking is so arranged, however, that only one or other of these two local control panels can be operated at anyone time. If it is necessary to transfer control from one local control panel to the other all levers in the first panel must be restored to normal before proceeding to the other panel where the operation of the white "Control Changeover" lever will release the local control panel for the control of the signals and points.

At the south end shunting out onto the main line is controlled by the Down Departure signal 2LA and 2LB. To clear the Down Departure signal from the local control panel the Operator must telephone the C.T.C. Operator at Upper Hutt and request the slot release on 2L, and then turn the signal lever to position "L".

If a train shunts out over the main line points, the "Block Open" indication light on the local control panel will be extinguished. This light will be illuminated again when the train clears the main line points track and the block section has been vacant for 30 seconds.

(iii) Restoration of Control to the Station Control Panel

To restore control to the Station Control Panel the following procedure must be followed:-

Switchlock

Place the switchlocked points normal and lock them. Close and Padlock the switchlock door.

Local Control Panel

(a) Place the signal and points control levers in the normal position. Check that the signal is indicated at "Stop" and the points "N" indication is illuminated.

(b) Turn the white "Control Changeover Lever" to position "C".

(C) Return to the station control panel.

Station Control Panel

(b) The panel will now show the signals at "Stop" and the points "N" indications illuminated. Light above lever No.3 will be illuminated.

(b) Turn lever No.3 to the "C" position. The "L" light will extinguish and the "C" light above No.3 lever will be illuminated to show that control has been restored to the station control panel.

C. No.1 Arrow Indicator

No.1 A.I. can be illuminated by operating No.1 A.I. lever in the south local control panel when No.1 points are normal.

It will not be possible to move No.1 points for 30 1 A.I. has been replaced to the stop position.

5. SIGNALLING OF TRAINS NOT TO BE SHUNTED

The signalling of all trains which are not required to shunt at Featherston must be carried out from the station control panel. The local control panels are provided to facilitate shunting only.

6. EMERGENCY CONTROL

An emergency key operated control lever E2L is provided on the station control panel for the slot release on 2L Down Departure signal in emergency conditions.

To clear either of the Departure signals 2LA or 2LB under emergency conditions place No.1 points lever in the required position and check that the points are correctly set, insert key in No.2L lock, turn it to the left and observe that the "Slot Release" indication light is illuminated. Place lever No.2 on the station control panel in the position 2L and the appropriate "Down Departure" signal will clear provided track conditions permit.

The key for emergency control lever 2L must the appointed place and MUST NOT be used unless instructions are received from Train Control.

7. MOTOR POINTS

Motor points at Featherston are of the G.R.S. type. In the event of a points failure, the standard procedure as detailed in the booklet "Duties of Hand Signalmen and the Hand Operation of Motor Points" must be followed.

Crank handles are locked in detector boxes as shown on the Circular S & I. The crank handle must be replaced and locked in its detector box before the associated signals signalling over the points can be cleared.

8. FAILURE OF CONTROLS

(a) Points Fail to Move

This will be shown by the points indications remaining unchanged after a points lever has been operated. Before assuming that the points have failed:-

1. First check that the 'F' light for the points being operated is illuminated. If not:-

2. Check that all signals leading over the points are at "Stop".

3. Check that the points track circuit is clear. If the points can still not be operated it will be necessary to isolate and hand wind the points (see Traffic Code Instruction No.36 Clause (5)).

(b) Points Operate but Fail to Complete Movement

This will be shown by the points indications becoming and/or remaining extinguished after a lever has been operated.

Try to clear a signal leading over those points; if this clears it shows that points have moved correctly and that the panel indication light circuit only is faulty, e.g the lamp may have burnt out.

If the signal does not clear it will be necessary to isolate and hand wind the points in accordance with instruction (Traffic Code Instruction No.36, Clause (5)) The points should also be checked for any obstruction before being hand operated.

(C) Signals Fail to Clear

See also Traffic Code Instruction No.36 (Clause 6) Centralised Traffic Control Regulation No.5 in case of Signals 2LA and 2LB.

1. Check that the track circuits ahead of the signal are clear.

2. Check that all points are correctly set.

3. Check that opposing signals are at "Stop".

In the event of a signal still not operating, a train may be authorised to pass the signal at Stop without isolating and hand operating the motor points over which the signal applies, provided the points indications of the motor points are correctly illuminated for the appropriate route and correspond to the position of the respective points levers.

If no points indication can be obtained, the procedure as set out for failure of points must be followed.

In all cases of failure the Signal Maintainer MUST be advised immediately.

9. LEVEL CROSSING ALARMS

Signals 2R and 2L will be delayed in clearing when a train is closely approaching Bell Street level crossing.

To avoid excessive operation of alarms, signals leading over level crossings should not be cleared with a train standing in front of them until the train is ready to proceed.

If a signal that leads over a level crossing is replaced to ’Stop’ with a train approaching it, the level crossing alarms will continue to operate until the approach lock release time delay has operated (see Paragraph 3).

10. POWER FAILURES

A standby generator has been provided at Featherston. In the event of a power supply failure the standby generator will restore the supply after approximately 10 seconds.

An indication of the power failure will be given by the illumination of the "Standby Running" light. The times that this indication is illuminated are to be entered in the train register by the Signalman to give the Signal Maintainer an indication when refuelling will be necessary.

If any signal at Featherston was clear at the time of the failure, the signal will revert to "Stop" and it will be necessary for the Signalman to place the signal lever to "Stop".

Mr XXXXXXX
Manager
RAIL TRANSPORT

March 1989