# **SOMERSAULT**

May 2014 Vol 37, No 3

## SIGNALLING RECORD SOCIETY OF VICTORIA INC



#### SOCIETY CONTACT INFORMATION

Published by the Signalling Record Society Victoria Inc (A0024029F)

EDITOR: Andrew Waugh, 28 Amelia St McKinnon, VIC, 3204

Phone (03) 9578 2867 (AH), (03) 9348 5724 (BH), email andrew.waugh@gmail.com PRESIDENT: David Langley, P.O. Box 8, Avenel, VIC, 3664, Phone (03) 5796 2337

SECRETARY and MEMBERSHIP OFFICER: Glenn Cumming,

Unit 1/4-6 Keogh St, Burwood, VIC 3125. Phone (03) 9808 0649 (AH)

NSW CONTACT: Bob Taaffe, 63 Hillcrest Rd, Tolmans Hill, TAS, 7007, Phone: (03) 6223 6126

QUEENSLAND CONTACT: Phil Barker

PO Box 326, Samford, QLD, 4520, Phone: (07) 3289 7177, email: signal-1@bigpond.com

Unless articles use copyrighted information, articles may be reprinted without prior permission but acknowledgment is required. Opinions expressed in articles appearing in SOMERSAULT or supplements are not necessarily those of the S.R.S.V. (Inc.)

### MINUTES OF MEETING HELD FRIDAY 21 MARCH, 2014, SURREY HILLS NEIGHBOURHOOD CENTRE, 1 BEDFORD AVENUE, SURREY HILLS

Present: – Ken Ashman, Wilfrid Brook, Brett Cleak, Glenn Cumming, John Dennis, Graeme Dunn, Steven Dunne, Vance Findlay, Michael Formaini, Ray Gomerski, Chris Gordon, Judy Gordon, Bill Johnston, David Jones, Chris King, Keith Lambert, David Langley, Steve Malpass, Andrew McLean, Laurie Savage, Brian Sherry, Rod Smith, David Stosser and Andrew Wheatland.

Apologies: – Jon Churchward, Michael Menzies, Tom Murray, Greg O'Flynn, Peter Silva, Andrew Waugh and Bob Whitehead.

The President, Mr. David Langley, took the chair & opened the meeting at 20:27 hours, following the 2014 Annual General Meeting.

Minutes of the November 2013 Meeting: – Accepted as published. Michael Formaini / Bill Johnston. Carried.

Business Arising: - Nil.

Minutes of the February 2014 Meeting: - Accepted as read. Michael Formaini / Bill Johnston. Carried.

Business Arising: - Nil.

Correspondence: – Invoice from Surrey Hills Neighbourhood Centre for hire of meeting room for 2014.

Payment sent to Surrey Hills Neighbourhood Centre for hire of meeting room for 2014.

Letter to Victorian Telecommunications Museum thanking them for hosting the visit on Friday 28 February 2014.

Letter from SRSV member Brian Coleman suggesting consideration of a pensioner / retiree membership category.

Letter to SRSV member Brian Coleman advising that a pensioner / retiree membership category will not be offered at this time. Laurie Savage / Ken Ashman. Carried.

Reports: - Glenn Cumming asked for suggestions for the 2014 signal box tour. Suggestions put forward included Caulfield – Dandenong and Pakenham.

General Business: – Keith Lambert provided details about various works in the Metropolitan District. A summary of the discussion follows: –

- The rearrangements at Franklin Street including the removal of the Gauntlet Track were described.
- Further track & signal alterations at Franklin Street are planned for July 2014.
- Track & signal alterations at Sunshine are planned for the Easter 2014 weekend.

(Front cover) When the standard gauge was constructed through Glenrowan in 1960 the broad gauge yard was extensively rebuilt and an extended crossing loop was provided. This is a picture of the Down arrival home signals in October 1980. The points are set for the platform road and the calling-on is off. Glenrowan was track locked, like most crossing stations on main lines, and calling-on signals were probably provided at the far end of extended crossing loops to facilitate shunting moves into an occupied road. Where the points were closer to the signal box, hand signals would have sufficed. When this photograph was taken in October 1989, clearing of the calling-on arm would have been very rare. Indeed, the station spent most of its time switched out. However, one day a week it was switched in so the Down morning and Up midday Albury passengers could call. The signalman had nothing much to do between these two trains and was happy to pull off the calling-on so that I could take a photo.

- The grade separation at Springvale Road, Springvale, will be commissioned over five days across the Easter 2014 weekend along with commissioning of new signalling arrangements.
- The last day of operation of Flemington Racecourse Signal Box is planned for Friday 23 May 2014.
- It was noted that the hand gates at Ascot Vale Road on the Racecourse Line were fitted with electrical detection.
- The commissioning of the new signalling arrangements between Kensington Essendon is planned for the Queens Birthday weekend in June 2014.
- Works on the new stabling sidings at Calder Park are expected to start soon with completion expected by mid 2015. This work is required to allow grade separation at Main Road, St Albans. The new stabling sidings are expected to be located on the Up side of Holden Road level crossing.
- Grade separation works at North Road, Ormond, Burke Road, Gardiner, Mountain Highway, Bayswater and Blackburn Road, Blackburn, are expected to commence in 2015.
- The Bayside Rail Improvement Project (BRIP) on the Frankston Line for Xtrapolis trains is planned for completion by October 2014.

Steve Malpass spoke about the new crossing loop at Warncoort to be commissioned this weekend. 300 metre overlaps will be provided to allow simultaneous arrivals. Brett Cleak advised that a circular had been issued late this afternoon advising that the commissioning of Warncoort Loop had been deferred again.

Chris Gordon advised that the South Kensington – Sunshine Regional Rail Link (RRL) would be commissioned over six days across the Easter 2014 weekend.

Andrew McLean described the junction of the RRL with the Geelong Line and had seen the junction referred to as Manor North Junction (located south of Manor Loop) and West Werribee Junction. What is the correct name?

Chris Gordon advised that track & signal alterations at Franklin Street would commence on Saturday 21 June 2014 and continue for three weeks.

Brian Sherry noted that the tracks over the North Melbourne flyover would become two dual gauge tracks.

Chris Gordon advised that the Broadmeadows Suburban Lines would be connected to the RRL Lines at Spion Kop in October 2014.

Andrew Wheatland advised that driver training for the Regional Rail Link would commence in July 2014.

Syllabus Item: - The President introduced Member Ken Ashman from Hamilton, New Zealand.

Ken was in Melbourne for a level crossing conference and was requested to present a Syllabus Item at short notice.

Ken addressed the meeting on a range of topics including developments in level crossing protection in New Zealand and the Auckland re-signalling in conjunction with the Auckland electrification project.

The presentation was accompanied by a series of digital images and samples of hardware to demonstrate the concepts being explained.

The presentation was thoroughly enjoyed by those present.

At the completion of the Syllabus Item, Ken was thanked for the entertainment & this was followed by acclamation from those present.

#### Meeting closed at 22:24 hours.

The next meeting will be on Friday 16 May, 2014 at the Surrey Hills Neighbourhood Centre, Bedford Avenue, Surrey Hill, commencing at 20:00 hours (8.00pm).

#### SIGNALLING ALTERATIONS

The following alterations were published in WN 7/14 to WN 17/14 and ETRB A circulars. The alterations have been edited to conserve space. Dates in parenthesis are the dates of publication, which may not be the date of the alteration.

17.02.2014 Emu Loop (SW 29/14, WN 7)

From Thursday, 17.2., the trailable point crossing loop at Emu Loop will not be available for use. The points at each end of the loop will be secured for the Up Loop track with the trailable point banner removed. Emu Loop will only be available for follow-on moves. The limit of authority for a Train Order issued to Emu Loop will be the 'F' (Fouling) board at the far end of the loop in the direction of travel.

17.02.2014 Shepparton – Tocumwal

(TON 46/14, WN 7)

On Thursday, 17.2., the track between 183.050 km (Post SHP28) to 251.000 km was booked back into service. TON 33/14 is cancelled.

(18.02.2014) Deer Park West

(SW 26/14, WN 7)

The permission to resume line speed once the train has cleared the points after receiving a Clear Medium Speed aspect at Home 2/20 (see SW 247/13) is cancelled. Trains must not exceed Medium Speed before arriving at Home 1/22.

18.02.2014 Melbourne Yard

(SW 49/14, WN 8)

On Friday, 18.2., Melbourne Yard Siding 10 was reduced in length by 9 metres to 161 metres. Amend Diagram 94/13 (West Tower – Melbourne Yard).

25.02.2014 Corio (TON 51/14, WN 8)

On Tuesday, 25.2., the Corio Independent Goods Line was booked out of service to allow a crossover to be renewed. Points 35 at Corio and Points 43 at North Geelong C were secured normal.

26.02.2014 Panmure (SW 31/14, WN 8)

On Wednesday, 26.2., boom barriers were provided at the passive level crossing at Panmure – Laang Rd (242.030 km). The boom barriers are operated by a level crossing predictor. Trains travelling at more than 50 km/h at the predictor boards may accelerate before arriving at the level crossing. RFR level crossing predictor indicator boards, healthy state and yellow indicator boards, and remote monitoring were provided. Amend Diagram 98/13 (Panmure – Sherwood Park).

02.03.2014 Dunolly

(SW 27/14 & 28/14, WN 7)

Between Tuesday, 25.2., and Sunday, 2.3., the signalling was altered to allow train crews to work trains to and from the secondary corridor (Korong Vale line) while Dunolly is unattended.

The existing plunger locked junction points were replaced by new Points DLY29 situated 325 metres further out. Points DLY29 are equipped with a dual control point machine.

Keyswitch boxes are provided on the equipment cabinet outside the signaller's building at the Down end of the station platform. The signaller's keyswitch box contains keyswitches to control Homes DLY6, DLY26, DLY28, & DLY36/38 and Points DLY29. It also contains an 'attended'/'unattended' mode keyswitch and ST21, E, and F pattern Fortress Locks. At the other end of the equipment cabinet is the train crew's keyswitch box. This contains a keyswitch to set the route to the secondary corridor (Korong Vale line) and indications for Home DLY36. (Note: SW27/14 states that indications are provided for DLY26, but photographs included in Operating Procedure 84 show that the indication is labelled DLY36.)

At Points DLY27, keyswitches are provided to set the route to the secondary corridor and to control the flashing lights at Thompson Rd. Indications are also provided for DLY36. These keyswitches are only operational when Dunolly is in the 'attended' mode. When Home DLY38 is cleared from this keyswitch it will not track cancel, and Points DLY29 will not auto restore.

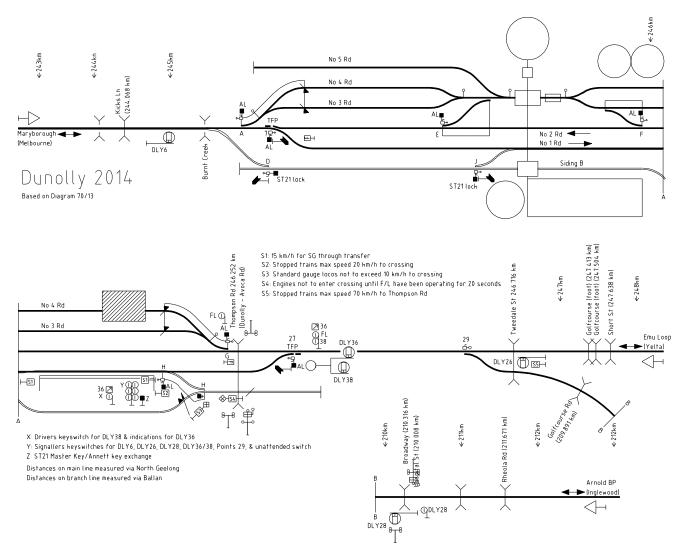
A keyswitch is provided at Home DLY28 to call the route from that signal to No 2 Road.

The signal quadrants on the station platform were abolished, together with the keyswitches for Homes 1 and 3, and the duplicate locks for the ST21, E and F pattern keys. The signal quadrant for Post 2 at the former junction points was abolished, together with the keyswitch control for Home 4.

Signal posts and points were renumbered.

The broad gauge trailable and non-trailable points are secured by E and F pattern Annett locks. The keys are secured in duplicate locks in the signaller's keyswitch box. Release of the Annett keys requires an ST21 corridor Master key to be locked in the ST21 lock in the keyswitch box and Homes DLY6, DLY26, and DLY28 restored to stop. While the E and F pattern Annett keys are out of the locks, the Master Key is secured in the lock and the arrival Homes are secured at stop.

In normal operation, trains on the primary corridor (Mildura line) can work through unattended, including crossing at the trailable loop. Homes DLY6, DLY26, and DLY36 will normally be at Proceed.



Trains may enter or leave the secondary corridor (Korong Vale line) while Dunolly is unattended. The Train Order can be issued to the Korong Vale line at either Maryborough or Dunolly, and the Train Order will instruct the Driver to 'key' Home DLY38. The Driver will bring the train to a stand with the locomotive at the Down end of the platform. The Driver will use the keyswitch in the Train Crews keyswitch box to call DLY38 (provided the 'DLY38 available' indicator is lit). This will restore Homes DLY26 and DLY36 to stop. After a timeout period, Points DLY29 will be called reverse. Home DLY38 will clear when Points DLY29 are detected reverse. Points DLY29 will automatically restore to normal when the train clears the points, and Homes DLY26 and DLY36 will then automatically clear. An Up train from the secondary corridor may be issued with a Train Order to Dunolly or through Dunolly to Maryborough. Operation of the signalling is similar to that described for Down trains, except that the train is brought to a stand at Home DLY28 and the route is called from the keyswitch there.

Dunolly must be attended for Through trains that need to shunt, and for the arrival and departure of trains working in Nos 3, 4 or 5 Roads. The signaller must be in attendance 30 minutes before the arrival or departure of the train or, when a cross is scheduled, 30 minutes before the issue of the opposing Train Order.

To place Dunolly into 'attended mode', the signaller must first obtain permission from the Train Controller and the 'attended' keyswitch in the Signaller's keyswitch cabinet turned to 'attended'. Then Homes DLY6, DLY26, and DLY36 must be restored to Stop from the Signaller's keyswitches. When operating in attended mode, Points DLY29 and all Home signals can be operated from the Signaller's keyswitch panel. Points DLY29 and Home DLY38 can be operated from the keyswitch near Points DLY27. The keyswitches in the Driver's keyswitch cabinet will not be operative and the 'available' lights will be extinguished. The Annett keys may be removed for local shunting.

To place Dunolly into 'unattended mode', the signaller must obtain permission from the Train Controller. The Annett keys are to be restored to their locks, Points DLY29 restored to normal, and Homes DLY6, DLY26, and DLY36 cleared. The 'attended' keyswitch is then turned to 'unattended'. The Signaller must confirm that the 'unattended' light is lit, and the 'available' light in the Driver's keyswitch cabinet is lit.

It is not necessary for Dunolly to be attended when a train is working in Nos 3, 4, or 5 Roads unless another train is to be worked through Dunolly. After a train has arrived into Nos 3, 4, or 5 Roads the signaller may cease duty. Prior to doing so, the signaller must secure the E and F pattern Annett keys in the locks in the signaller's keyswitch panel, secure the Home signals at Stop, and obtain the permission of the Train Controller.

The issuing of a Train Order to shunt within Location Boards (Book of Rules Section 18 Rule 30) is not permitted in the Dunolly – Arnold BP section.

Diagram 70/13 (Dunolly) replaced 136/11. Operating Procedure 84 (Dunolly) was reissued and SW 36/13 was cancelled.

03.03.2014 Cheltenham (SW 57/14, WN 9)

On Monday, 3.3., Crossover 7 and Points 11 were provided with in-bearer point machines which are available for dual control. The emergency point crank handle in the signal bay was secured out of service.

(04.03.2014) Dunolly (SW 32/14, WN 9)

Diagram 70/13 (Dunolly) replaced 136/11.

(11.03.2014) Essendon (SW 60/14, WN 10)

The following instructions must be followed to prevent the co-ordinated traffic lights from flashing amber. When an Up train is to be signalled from Nos 1 or 2 Platforms to the Up line, Points 29 (at the Down end of the platforms) must lie for the track the train is departing from. Points 29 must not be moved to the opposite lay until Homes 18 or 22 display a proceed aspect.

11.03.2014 Book of Rules – Section 36 (SW 34/14, WN 9)

On Tuesday, 11.3., version 3.2 of the Book of Rules, Section 36 (RFR Rules) will replace version 3.0. SW 4/14 is cancelled. The alterations are concerned with the new signalling between Sunshine and Deer Park West. The main alterations are: Rules 6.5, 6.6, 6.7, 6.8, & 6.9 were amended to provide for localised axle counter resets, to provide for 'next train' axle counter resets, and to allow for blocking commands to be applied to points or tracks to prevent trains from being signalled towards affected sections.

#### 11.03.2014 Sunshine – Deer Park West

(SW 33/14, 35/14, 37/14, WN 9)

Between Saturday, 8.3., and Tuesday, 11.3., the line between Sunshine and Deer Park West was resignalled. (See the entries for 26 April 2014 later in this issue for a diagram of the new signalling.) Homes DPK919 & DPK922, Automatics MW137, MW140, MW143, MW150, MW153, MW159, MW160, MW169, MW170, MW176, MW179, MW186, MW194, A201 & A208 were provided.

At Deer Park West, Down Home 2/6, Down Dwarf 2/18, Up Home 2/20, & Up Dwarf 2/10 were renumbered DPW730, DPW732, DPW726, & DPW724 respectively. Points 9 & 11 were renumbered 624 & 630 respectively. A low speed light was provided on Up Home DPW726. Points 819 & 821, and Crossover 820 remain secured normal.

Homes 1/2, 1/20, & 1/22 at Deer Park, and 2/4 at Deer Park West, Banner Indicator 2/6BI, and Automatics NA522, SA571, & NA574 were abolished. Home 1/16 was converted to an Automatic and renumbered MW176. Automatic SA497 was renumbered MW137.

The Young St pedestrian crossing was relocated 5 metres in the Down direction (to 14.126 km) and provided with automatic wicket gates. The Tower St pedestrian crossing was relocated 5 metres in the Down direction (to 14.445 km) and also provided with automatic wicket gates.

All track circuits between Sunshine and Deer Park West are now worked by axle counters, including the operation of the level crossings at Fitzgerald Rd, Station St, & Robinsons Rd, and the pedestrian wickets at Young St, Tower St, Ardeer Station, West Street, and Deer Park station access.

The Sunshine ElectrologIXS controls the trackside infrastructure on the Ballarat line from Sunshine to the Young St pedestrian crossing. The Deer Park ElectrologIXS was commissioned to control the trackside infrastructure from the Young St pedestrian crossing to Deer Park West.

Control of the line between Homes SUN909/SUN910 at Sunshine to Deer Park West Junction has been transferred from Ballarat to Centrol. The signaller, Ballarat, will continue to control the end of the double line at Deer Park West Junction (Posts DPW730 & DPW732) and beyond. The signaller, Sunshine, will continue to control Home SUN914.

All Automatic signals between Sunshine and Deer Park West can be restored to, and held at, Stop by the signaller.

Diagram 10/14 (Ardeer – Rockbank) replaced 2/14. Operating Procedure 67 (Sunshine – Bungaree) was reissued and now only applies from Deer Park West. SW 9/14 was cancelled.

12.03.2014 Buckley (SW 38/14, WN 10)

On Wednesday, 12.3., boom barriers were provided at the passive level crossing at Considines Rd (100.574 km). The boom barriers are operated by a level crossing predictor. Trains travelling at more than 50 km/h at the predictor boards may accelerate before arriving at the level crossing. RFR level crossing predictor

indicator boards, healthy state and yellow indicator boards, and remote monitoring were provided. Amend Diagram 40/13 (Waurn Ponds - Winchelsea).

13.03.2014 Terang (SW 39/14, WN 10)

On Thursday, 13.3., boom barriers were provided at the passive level crossing at Pontings Rd (215.170 km). The boom barriers are operated by a level crossing predictor. Trains travelling at more than 50 km/h at the predictor boards may accelerate before arriving at the level crossing. RFR level crossing predictor indicator boards, healthy state and yellow indicator boards, and remote monitoring were provided. Amend Diagram 44/13 (Camperdown - Terang).

20.03.2014 Dunolly (TON 56/14, WN 12)

On Thursday, 20.3., Points E were booked out of service due to wear on the stock rail. Points E were secured normal.

23.03.2014 Pirron Yallock (SW 45/14, WN 11)

On Sunday, 23.3., boom barriers were provided at the flashing lights at Tomahawk Creek Rd (165.681 km) (aka the Timboon – Colac Rd) on the Down side of Colac. The boom barriers are operated by a level crossing predictor. Trains travelling at more than 50 km/h at the predictor boards may accelerate before arriving at the level crossing. RFR level crossing predictor indicator boards, healthy state and yellow indicator boards, and remote monitoring were provided. Amend Diagram 52/13 (Birregurra - Colac).

24.03.2014 Irrewarre (SW 46/14, WN 11)

On Monday, 24.3., boom barriers were provided at the passive level crossing at Pyles Rd (145.886 km). The boom barriers are operated by a level crossing predictor. Trains travelling at more than 50 km/h at the predictor boards may accelerate before arriving at the level crossing. RFR level crossing predictor indicator boards, healthy state and yellow indicator boards, and remote monitoring were provided. Amend Diagram 52/13 (Birregurra - Colac).

27.03.2014 Toolamba (TON 80/14, WN 15)

On Thursday, 27.3., No 2 Road was booked back into service. TON 229/13 is cancelled.

30.03.2014 South Kensington - Sunshine (SW 51/14, WN 13)

As from 0300 hours on Sunday, 30.3., the RRL lines between South Kensington (3.908 km) and Sunshine (12.750 km on the Down line, and 12.513 km on the Up line) were transferred to V/Line p/l. This includes the connections to the GEB sidings and Brooklyn Loop at Sunshine.

31.03.2014 Lethbridge (SW 54/14, WN 13)

On Monday, 31.3., level crossing testing equipment was provided at Russell Street/Station Street (99.193 km). The equipment will be installed adjacent to the level crossing, and 800 metres on the Up and Down sides of the level crossing.

(01.04.2014) Bell (SW 102/14, WN 13)

Commencing forthwith, when Bell is switched in and being operated remotely the Signaller must not attempt to clear any signal at Bell when the signal is being time released. The Signaller must wait for the time release to expire before attempting to clear a signal.

(01.04.2014) Cheltenham (SW 103/14, WN 13)

Commencing forthwith, the Signaller must operate Points 7 & 11 individually. When setting the route, the Signaller must ensure that the first points called have detected in the required position before attempting to call the second set of points.

02.04.2014 Cheltenham (SW 109/14, WN 16)

On Wednesday, 2.4., Crossover 7 and Points 11 were booked out of service and secured normal.

06.04.2014 Southern Cross (SW 111/14, WN 15)

On Sunday, 6.4., alterations were made to the Smartlock, FEP, and train describer. These alterations involved:

- Provision of a medium speed overlap for Down Home 723 (Down Through Suburban line) towards the RRL track with Points 911 normal. This allows a train to be signalled from Home 723 to Platform 15 while a second train is being signalled from the Up RRL track towards Platform 16 or from Platform 16 to the Down RRL track.
- Allowing a V/Line train from Flinders Street to be routed towards Platforms 15 or 16 from Home 725 without needing to stop at Home 723.
- Provision for setting a long route from Home 725 past Home 723 directly into Platforms 15 or 16.

09.04.2014 Gisborne (SW 53/14, WN 13)

On Tuesday, 9.4., two new posts were provided at the Up end of the platforms at 64.063 km. Signal heads have not yet been fitted. Amend Diagram 36/11 (Riddles Creek – Woodend).

07.04.2014 Grovedale (SW 50/14, WN 13)

Between Sunday, 29.3., and Monday, 7.4., the points to the new stabling siding were installed at 86.491 km. The points face Down trains and are secured normal. The facing for the new passenger platform was provided between 84.530 km and 84.710 on the Up side of the line. Amend Diagram 40/13 (Waurn Ponds – Winchelsea).

09.04.2014 Corio (TON 83/14, WN 16)

On Wednesday, 9.4., the Corio Independent Goods Line was booked back into service. TON 79/14 is cancelled.

13.04.2014 Terang (SW 57/14, WN 14)

On Sunday, 13.4., boom barriers were provided at the flashing lights at the Terang - Framlingham Rd (222.406 km). The boom barriers are operated by a level crossing predictor. Trains travelling at more than 50 km/h at the predictor boards may accelerate before arriving at the level crossing. RFR level crossing predictor indicator boards, healthy state and yellow indicator boards, and remote monitoring were provided. Amend Diagram 98/13 (Panmure – Sherwood Park).

14.04.2014 Warrnambool (SW 58/14, WN 14)

On Monday, 14.4., boom barriers were provided at the passive crossing at Walsh Rd (269.985 km) at the Up end of the West Vic Siding. Healthy state indicators, yellow whistle boards, and remote monitoring were provided.

The boom barriers operate automatically for Down movements. Operation for Up movements is by a V5PSW keyswitch at the crossing. A board lettered "Shunting trains must not enter roadway until booms are horizontal" is provided between the Up end points and the level crossing opposite the keyswitch. Vehicles must not be left between the 'Attend to Derail' sign and the level crossing during shunting as this will cause the boom barriers to operate continuously.

Amend Diagram 2/13 (Warrnambool - West Vic Siding).

(15.04.2014) Warracknabeal (SW 60/14, WN 15)

Operating restrictions at Kelsell St (349.130 km) mean that all trains must work through Warracknabeal with Down Home A and Up Home H at Stop. The B and E pattern Annett Keys have been withdrawn from their respective locks and secured. Approach operation of the flashing lights at Kelsell St will be disabled and control of the flashing lights must be by the test switch. Notice boards lettered "Do not enter crossing unless flashing lights are operating" are provided on each side of Kelsell St.

Warracknabeal will continue to be an Intermediate Train Order Station, but Through Train Orders must not be issued.

The driver of a Down train must bring the train to a stand at Down Home A and obtain a forward section Train Order. The Train Controller will then authorise the Driver to pass Down Home A at Stop. The Driver must ensure that the flashing lights are operating prior to entering the Henty Hwy (348.289 km) and then operate Kelsell St by means of the test switch.

The driver of an Up train must bring the train to a stand at Up Home H and obtain a forward section Train Order. The Train Controller will then authorise the Driver to pass Up Home H at Stop. The Driver must operate Kelsell St by means of the test switch. When approaching the Henty Hwy, the Driver must ensure that Up Home J is at proceed and must observe the 15 km/h speed restriction between the platform and the level crossing.

(15.04.2014) Lake Boga (SW 65/14, WN 15)

Diagram 104/13 (Lake Boga) replaced 42/13 due to the level crossing upgrade at Long Lake Rd.

(15.04.2014) Kilmore East (SW 63/14, WN 15)

The Refuge Siding has been booked out of use. Points 12 have been secured normal, and the point lever, Annett lock, and rodded derail/wheel crowder have been abolished. Crossover 16 has been booked out of use and secured normal. Levers 12 & 16 have been sleeved normal.

(15.04.2014) Broadford (SW 62/14, WN 15)

The trailing crossover at the Up end of the platforms has been abolished. The points have been secured normal, and the point lever and Annett lock have been abolished. The duplicate Annett lock on lever 21 has been removed and the lever sleeved normal.

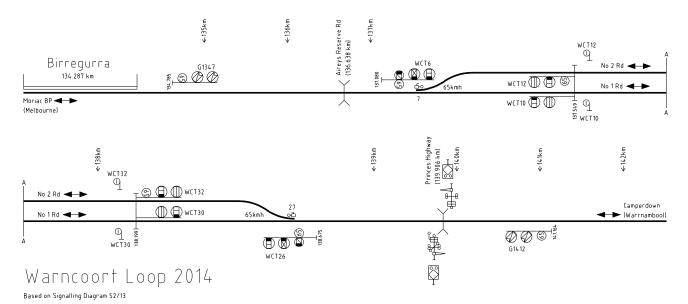
Amend Diagram 22/12 (Broadford – Tallarook).

15.04.2014 South Kensington – Sunshine (SW 59/14, WN 15)

On Tuesday, 15.4., the signals on the RRL between South Kensington and Sunshine will be illuminated. The RRL will remain under absolute occupation.

16.04.2014 Warncoort Loop (SW 42/14, 43/14, 44/14, 49/14, 61/14, WN 11, 12 & 15)
On Wednesday 16.3., after the passage of Train 8205, Warncoort Loop was provided at 137.884 km. The

On Wednesday 16.3., after the passage of Train 8205, Warncoort Loop was provided at 137.884 km. The loop is worked from a WestCAD display at Centrol.



Warncoort Loop is an Intermediate Train Order Terminal Station. The single line sections Moriac Block Point – Warncoort Loop – Camperdown replaced the section Moriac Block Point - Camperdown.

The crossing loop is 650 metres in the clear, with an additional 300 metres standing room between the Departure Homes and the fouling point at each end (Note that the crossing loop has an official capacity of 650 metres). Posts G1347, WCT6, WCT10, WCT12, WCT26, WCT30, WCT32, & G1412 were provided. Points 7 & 27 were provided. Both of these points are high speed (65 km/h) points. Train stop (TSS) TPWS was provided at all Home signals, and overspeed (OSS) TPWS was provided on the approach to Homes WCT6 and WCT26. CCTV cameras are provided at WCT6 and WCT26, repeated to Centrol, to allow the Train Controller to sight the end of train markers. Local train radio between trains and Centrol will not be provided at Warncoort Loop.

When Homes WCT12 or WCT32 displays Clear Medium Speed, the speed restriction will only apply until the train is clear of the points.

All track circuits at Warncoort Loop are operated by axle counters. Blocking commands for non track circuited vehicles and road rail vehicles are provided between Down Repeating G1347 and Down Home WCT6, and between Up Repeating G1412 and Up Home WCT26. Axle counter resets – Infrastructure works resets can be undertaken in these sections. Blocking commands for non-track circuited vehicles and road rail vehicles are NOT provided for either No 1 or No 2 Road between Homes WCT6 and WCT 26. Consequently road-rail vehicles are NOT permitted to on or off track between Homes WCT6 and WCT26.

If the remote control from Centrol fails the loop will operate automatically. Any signals or points reversed when the remote control fails will be restored to normal by the passage of the next train. Afterwards, the first train to approach the loop will be automatically signalled into No 1 Road. If a second train approaches while the first train is arriving into No 1 Road, or is in No 1 Road, the second train will be automatically signalled into No 2 Road. In automatic mode, trains may arrive simultaneously into No 1 and No 2 Roads. V5PSW keyswitches are provided 20 metres in the rear of each Departure Home to call the route for departing trains. These keyswitches will only be operational if the remote control has failed. Operation of the keyswitch will call the points and then clear the appropriate Departure Home provided the track circuit to the opposing Repeating signal is clear. The called route will be cancelled by the passage of the train, or it can be manually cancelled using the keyswitch.

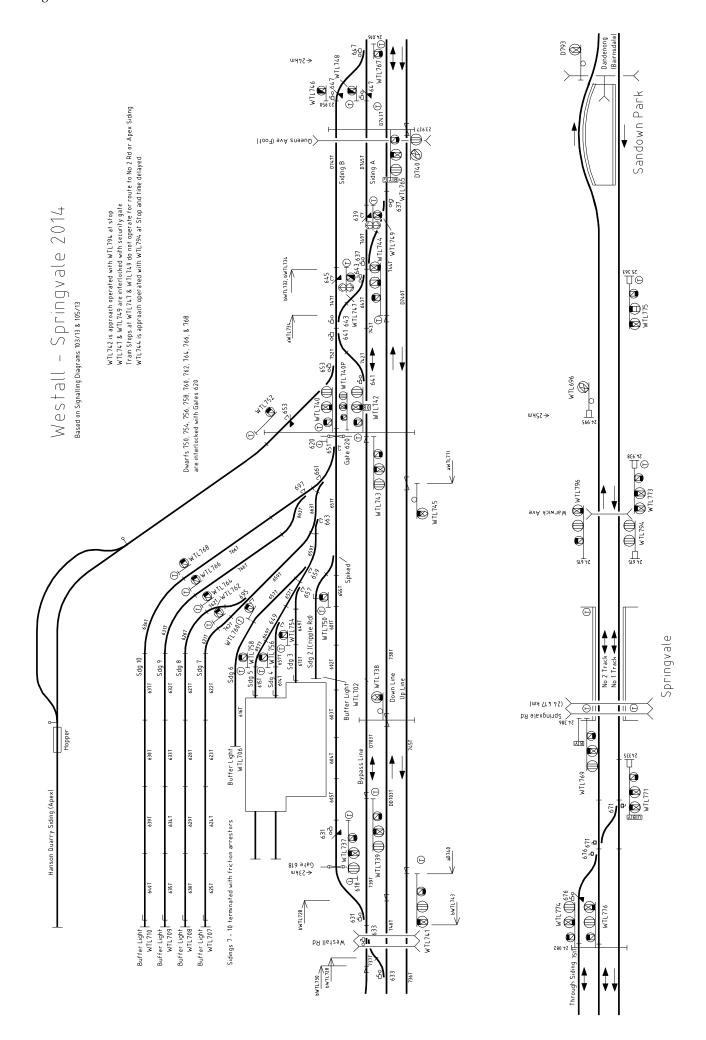
An emergency control VDU is located in the signal equipment room at Warncoort Loop. This can take control of the points and signals at Warncoort Loop when the Train Controller gives a release. If the remote control has failed, the local signaller can forcibly take control by operating a release icon on the VDU. Control will be transferred to the local VDU after a 5 minute rundown. The release icon must only be used under instructions from the Train Controller.

Diagram 52/13 (Birregurra – Colac) replaced 136/12. Operating Procedure 56 (Warncoort Loop) was issued. Version 3.3 of the Book of Rules Section 36 (RFR Rules) replaced section 3.2.

#### 21.04.2014 Westall – Springvale – Sandown Park

(SW 115/14, WN 14)

On Monday, 21.4., the Springvale Road grade separation was brought into use and the level crossing was abolished. The existing Springvale station was replaced by a new station situated under Springvale Rd with 160 metre platforms. A new overline road bridge was provided at Warwick Ave (24.676 km) on the Down side of the station.



The Up and Down lines were slued between 23.927 km and 24.995 km. The existing Up platform and station building at Springvale were abolished (the Down platform had been previously removed).

The lines were resignalled between Westall and Sandown Park.

Homes WTL765, WTL769, WLT771, WTL773, WTL774, WTL775, WTL776, WTL794, & WTL796, Automatic WTL696, and Dwarfs WTL746, WTL748, & WTL767 were provided. Points 676, Hayes Derail & Crowder 676, & Crossover 671 were provided. Up Home D794 at Sandown Park was replaced by a new Automatic signal with the same number on a tilt mast.

Up Homes WTL765, WTL767, and WTL771 are fitted with theatre route indicators. These display 'U' if the route is set for the Up track, 'B' if set for the Bypass Track, 'Y' if set for Yard (Through line), or 'G' if set for the Hansen Quarry Siding. Homes WTL769 & WTL771 may display a Medium aspect for moves to the Through line if Dwarf WTL767 is displaying a proceed aspect. Down Home WTL794 is fixed at Stop and a fixed train stop is provided. Up Homes WTL773 and WTL775 are provided with TPWS (TSS) in addition to train stops. Points 676 and Crossover 671 are equipped with in-bearer point machines. Derail 676 is operated by a dual control point machine.

Homes WTL794 (Westall) and Automatics WTL777 & D771 (Sandown Park) were abolished. Crossover 699 at the Down end of Springvale was abolished. The 5P keyswitch at Springvale to control Automatic WTL777 was abolished. The miniature levers at Sandown Park that formerly controlled the Up and Down Home signals were abolished.

Diagrams 103/13 (Clayton – Springvale) and 105/13 (Sandown Park – Yarraman) replaced 59/13 & 105/12 respectively.

#### (22.04.2014) Restoring a signal to Stop (Metro)

(SW 105/14, WN 16)

Commencing forthwith, the Senior Network Controller or Senior Officer Metrol will instruct the Signaller to restore a signal to Stop. Before instructing the Signaller, the Senior Network Controller or Senior Officer must ensure, beyond all doubt, that there is no Driver in the leading compartment of the affected train. Platform staff or other suitable employees may be used to personally check that there is no Driver in the leading compartment. If there is a Driver, irrespective of whether the Driver is to operate the train, the signal must not be restored to Stop until the Driver has been informed of the reason for restoring the signal.

#### (22.04.2014) Warncoort Loop

(SW 68/14, WN 16)

Commencing forthwith, No 2 Road was booked out of service. Points 7 & 27 were secured normal.

Warncoort Loop will remain an Intermediate Train Order Terminal location and follow-on movements may be made. An Up train can be issued with a Train Order to Warncoort Loop while a Train Order is in force for the Marshall – Moriac BP section for a train to shunt at Waurn Ponds.

#### 22.04.2014 Warncoort Loop

(SW 71/14 & 75/14, WN 17)

On Tuesday, 22.4., No 2 Road was booked back into service. SW 68/14 was cancelled.

Operating Procedure 56 (Warncoort Loop) was issued. The automatic mode will only be in operation if the remote control system has failed and the emergency panel is logged out. To ensure that automatic mode is available when necessary, the emergency panel must be logged out when not being used.

#### 26.04.2014 South Kensington – Footscray

(SW 113/14 & 116/14, WN 14)

On Saturday, 26.4., the Main Suburban line was resignalled between South Kensington and the approach to Hopkins St bridge at Footscray.

Automatics SKN143, SKN150, and SKN658 were renumbered SKN659, SKN658, and SKN656 respectively. Automatics SKN653, SKN754, M197, M209, & M212 were provided. The aspects on M221 were altered. Home SKN754 was provided with an illuminated letter 'A'. All signals have LED heads.

Automatics M194, M205, M214, & SKN655 were abolished.

Diagrams 24/14 (North Melbourne & Macaulay), 20/14 (South Kensington), & 18/14 (South Kensington – Spotswood) replaced 76/13, 74/13, & 97/13 respectively.

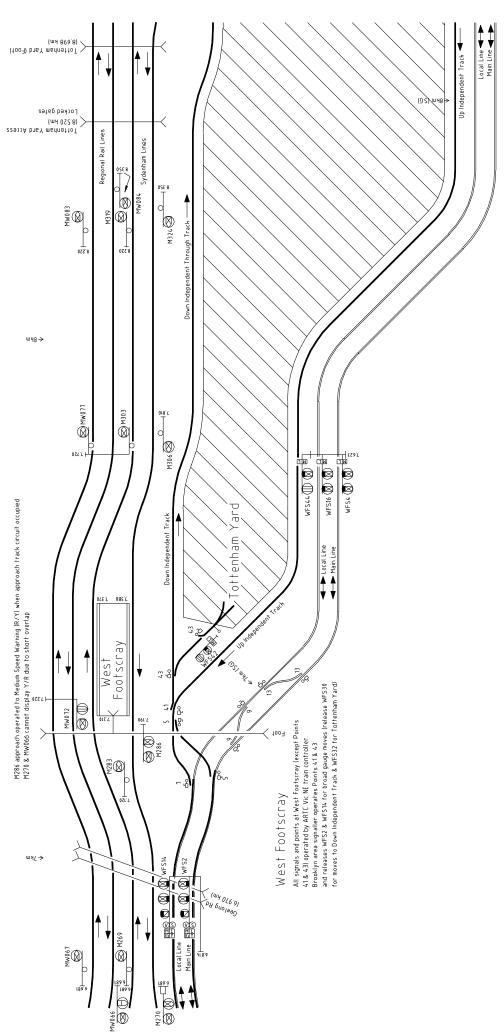
#### 26.04.2014 South Kensington - Sunshine

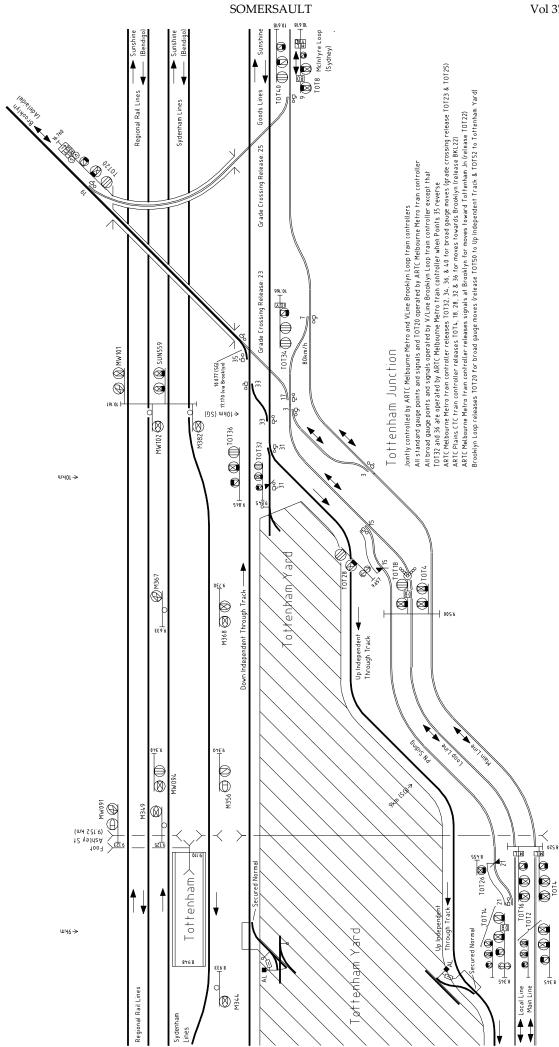
(SW 67/14, 70/14, 74/14 WN 16 & 17)

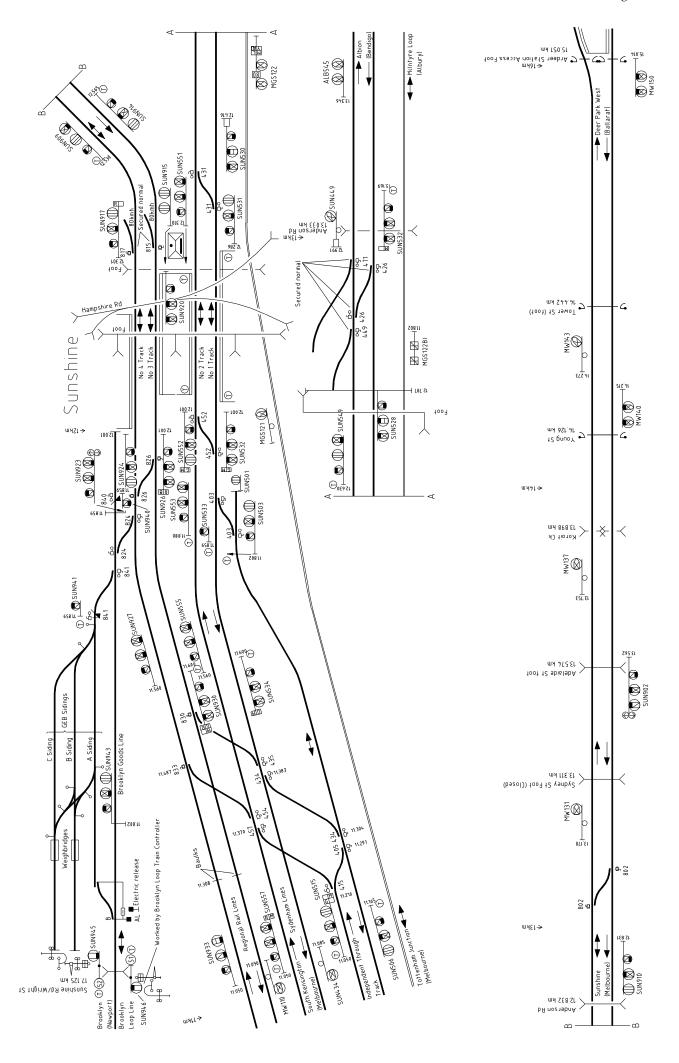
Between Saturday, 19.4., and Saturday, 26.4., the signalling on the Regional Rail Lines (RRL) between South Kensington and Sunshine was commissioned.

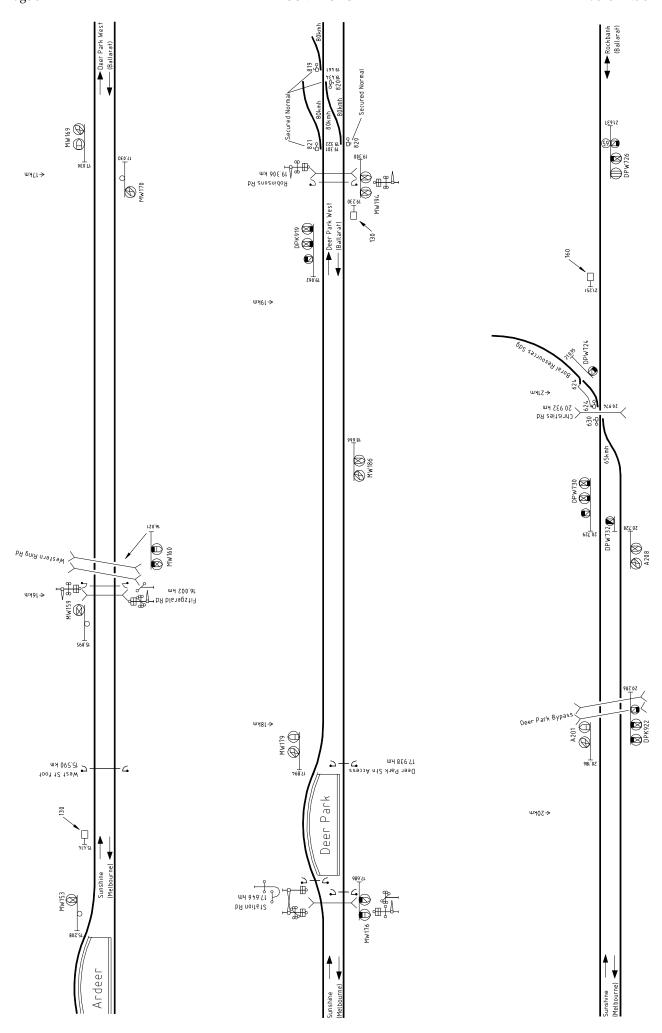
Home SKN972 and Automatics MW040, MW041, MW044, MW045, MW049, MW050, MW053, MW054, MW056, MW057, MW060, MW063, MW064, MW066, MW067, MW072, MW077, MW083, MW084, MW091, MW094, MW101, MW102, & MW110 were provided.

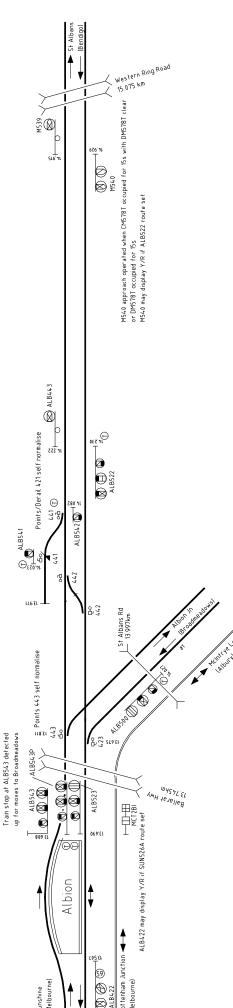
The RRL VDUs at Centrol were altered to include the section of line between South Kensington and Sunshine. All track circuits on the new lines will be operated by axle counters. All signals will be equipped with TPWS.











A level crossing is provided at 8.520 km to provide access to Tottenham Yard. This crossing will remain closed with locked gates and road barriers. A pedestrian crossing is provided at 8.698 km to provide access to Tottenham Yard.

The lines will continue to be under Absolute Occupation. Baulks are provided at  $3.850 \, \text{km}$  (Down RRL)/ $3.365 \, \text{km}$  (Up RRL) South Kensington and SUN933 (Down RRL)/MW110 (Up RRL) Sunshine.

Diagrams 18/14 (Footscray – Spotswood) & 36/14 (West Footscray – Tottenham) replaced 97/13 and 113/13 respectively.

## 26.04.2014 Sunshine (SW 66/14, 69/14 & 114/14, SWP 4/14, WN 15, 16 & 17)

On Saturday, 26.4., the existing junction (Points 625 & 635) to the Ballarat line was abolished. The Ballarat line was slued to run via a temporary connection through the new Platforms 3 & 4. The junction to the Ballarat line is now via Crossovers 430/830 & 455/833 at the Up end of Sunshine. The Brooklyn Loop line and the GEB Sidings have been connected to Tracks 3 & 4. Crossover 802 on the Ballarat line was brought into use to provide access from the Up Ballarat line to Track 4. On the Bendigo line, the Anderson St level crossing was replaced by an underpass.

Platform 3 is 160 metres and Platform 4 is 232 metres.

The following signalling alterations took place on the V/Line side of Sunshine station. Homes SUN915, SUN917, SUN920, SUN923, SUN924, SUN926, SUN927, SUN930, SUN933, & SUN943 and Dwarfs SUN940 & SUN941 were provided. Up Home SUN902 was fitted with arrow type route indicators. Homes SUN762 & SUN763 were renumbered SUN946 & SUN945 respectively. Up Home SUN916 was lit but not commissioned. All RRL signals are equipped with TPWS. Crossovers 802, 824, & 826, Points 830, 833, & 841, and Derail/Crowders 840 & 841 were brought into use. Points 815 & 817 were provided, but not commissioned, and were secured normal. Crossover 802 & 826, Points 815, 817, 830, & 833 are equipped with in-bearer point machines.

The following signalling alterations took place on the Metro side of Sunshine station. Down Home SUN557 was provided with a theatre route indicator displaying 'R' for moves to the RRL and 'M' for moves to the Main Line. The 'b' light on Down Home SUN551 was altered to provide for approach operation. Uncontrolled Home SUN549 was converted to a controlled Home signal, the illuminated letter 'A' was removed, and a low speed light was provided. Down Controlled Automatic SUN733 was replaced by an (uncontrolled) Automatic SUN449 mounted on a tilt mast and TPWS(TSS) was provided. Up Automatic M482 was replaced by Home SUN526. Home SUN526 is provided with a theatre route indicator which will only display 'M' (as the turnouts to the RRL will not be commissioned). TPWS(TSS&OSS) was provided.

Signals numbered in the SUN9xx series and points in the 8xx series are now worked from the RRL VDU at Centrol (except Home SUN946 which is worked by the Brooklyn Loop Train Controller). Signals numbered in SUN5xx series and points in the 4xx series remain worked from Sunshine signal box.

The Sigview monitoring system at Sunshine was abolished and the Sunshine WestCAD system was altered to display the status of the RRL to Ardeer. The Ballarat VDU will have the indications on the Up side of MW150/MW153 at Ardeer removed.

Diagram 34/14 (Sunshine) replaced 93/13. Northern Group Operating Procedure 9 (Sunshine – Albion Failure of Signals) was reissued due to the division of responsibility for operating the points and signals at Sunshine.

26.04.2014 Albion (SW 114/14, WN 15)

On Saturday, 26.4., Albion was resignalled and a short Siding B was provided. Siding B trails into the Down line on the Down side of the Western Highway overpass and is not wired.

Down Controlled Automatic M487 was renumbered ALB545. Up Automatic M492 was replaced by a new Automatic ALB422 on a tilt mast. Down Home ALB98 was replaced by a new Home ALB543 on a cantilever post. Home ALB543P, and Dwarfs ALB541 & ALB542 were provided. Up Home ALB88 was relocated 338 metres in the Down direction and renumbered ALB522. Up Home ALB86 was converted to an Automatic signal and renumbered M540. Homes ALB92 & ALB94 were renumbered ALB500 & ALB523 respectively. Automatic M517 was renumbered ALB443. Posts ALB422, ALB522, ALB523, ALB543, ALB545, M487, & M540 were provided with TPWS. Points 95 & 97 were renumbered 443 & 423 respectively. Points 441 and Derail/Crowder 441 were provided.

The Albion panel in the Sunshine signal box was abolished. Albion is now worked as part of the existing WestCAD system at Sunshine.

Diagram 15/14 (Albion – St Albans) replaced 91/13.

26.04.2014 Ginifer (SW 131/14, WN 17)

On Saturday, 26.4., the automatic pedestrian boom barriers at Mulhall Drive foot crossing (16.098 km) at Ginifer station were replaced by automatic pedestrian gates.

26.04.2014 Gisborne (SW 64/14, WN 15)

Between Saturday, 19.4., and Saturday, 26.4., Up Homes GIS10 & GIS12 were replaced by new posts 29 metres further out (at 64.063 km). Up Co-acting Home GIS10P was relocated 29 metres further out to a point opposite GIS10. Amend Diagram 36/11 (Riddles Creek – Woodend).



This wonderful wooden bracket at Harden North box (NSW) was photographed by David Langley on 6 April 1985.