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SOCIETY CONTACT INFORMATION

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MINUTES OF MEETING HELD FRIDAY 16 MAY 2018, AT THE SURREY HILLS NEIGHBOURHOOD CENTRE, 1 BEDFORD AVENUE, SURREY HILLS, VICTORIA.

Present: – Glenn Cumming, Graeme Dunn, Michael Formaini, Ray Gomerski, Chris Gordon, Judy Gordon, Bill Johnston, David Jones, Keith Lambert, David Langberg, David Langley, Neil Lewis, Andrew McLean, Phillip Miller, Laurie Savage, Peter Silva, David Stosser and Andrew Wheatland.

Apologies: – Wilfrid Brook, Brian Coleman, Rod Smith, Chris King, Brian Sherry and Andrew Waugh.

The President, Mr. David Langley, took the chair & opened the meeting at 20:03 hours.

Minutes of the March 2018 Meeting: – Accepted as read. Phillip Miller / Peter Silva. Carried.

Business Arising: – Reference to the removal of the Clayton Road level crossing should also have included Centre Road.

Reference to the removal of the Rosanna Road level crossing should also have read Lower Plenty Road and should have included Grange Road.

Correspondence: – Letter to Wilfrid Brook thanking him for his service to the SRSV Committee.

Letter to Jon Churchward thanking him for his service to the SRSV as Honorary Auditor for many years.

Phillip Miller / Andrew Wheatland. Carried.

Reports: – Nil.

General Business: – Phillip Miller spoke about signalling arrangements at South Geelong. And discussed working of signals and allegations of signals being passed at danger.

Phillip Miller noted that the illuminated track diagram on the signal control panel at Carrum is labelled "Integra" and asked if there are any other "Integra" panels. It was thought that Chelsea is the same. Phillip also asked why Integra was chosen for this panel but no answer was provided. Integra was a Swiss company.

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

- Caulfield – Oakleigh will be closed for three weeks commencing 29 May 2018 for level crossing removal works. During this time Oakleigh will be reduced to two (2) platforms and two (2) crossovers.
- Control of Macleod will be transferred to Epping by the end of this year.

Keith Lambert noted that a list of stations and sidings in Western Australia was published in the VR Weekly Notice in 1940.

It was reported that the occupation for the level crossing removal works at Grange Road and Lower Plenty Road was extended due to insufficient time to complete the signal construction work.

The extension of the line from South Morang to Mernda is expected to open in July 2018.

(Front cover) Harden South was one of two boxes that controlled the important yard at Harden/Murrumburrah on the Main South line to Albury. Both boxes at Harden were provided by February 1918, and appear to have been provided as part of the duplication and expansion of the South line. Both boxes were large elevated box – Harden South was 38'10" long, 12' wide and 12' above rail level – and both contained Type A (tappet) frames. By 1989, the 76 lever frame at Harden South contained a few white spare levers. Above the frame can be seen the two cast iron Standard Block Instruments that worked the section to Wallendbeen (Demondrille Junction could technically be switched in but hardly ever was). The section to Harden North was worked by Track Block. The goods lines to Harden North had been worked by Tyers 3 wire permissive block instruments, the last in NSW, but these had gone by the time I got to Harden. The boxes at Harden are now out of use, replaced by CTC, but both boxes still stand. Photo Andrew Waugh

A recent failure of the axle counters on the Dandenong Line is believed to have been related to the data communications network.

Andrew Wheatland reported on the commissioning of three (3) sets of new boom barriers at level crossings on the Puffing Billy Railway and the construction of a new platform at Cockatoo.

Andrew McLean provided a report after a recent inspection of gauge conversion works on the Yelta Line and the Murrayville Line.

Syllabus Item: – The President introduced Member Michael Formaini to present the Syllabus Item.

Michael presented a selection of slides from his collection titled "Railfanning in the early Seventies".

A number of locations were viewed with a variety of rollingstock and signalling equipment seen including Victoria, Newcastle, Perth, Commonwealth Railways and fan trips.

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

Meeting closed at 22:26 hours.

The next meeting will be on Friday 20 July, 2018 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 16/18 to WN 24/18, 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 alterations.

27.04.2018 **Macleod** **(SW 88/18 & 90/18, WN 16 & 17)**

On Friday, 27.4., Down Controlled Automatic 110 and Up Controlled Automatic 113 were converted to controlled Homes and renumbered MCD110 and MCD113 respectively.

Signal post telephones were not provided. The DTRS must be used to obtain permission to pass these signals at Stop. Only verbal permission is required to pass these signals.

Amend Diagram 107/12 (Dennis – Macleod).

(01.05.2018) **Southern Cross – North Melbourne** **(WN 18)**

Diagrams 33/18 (Southern Cross – North Melbourne Passenger Lines) and 35/18 (North Melbourne – Macaulay) replaced 41/14 and 9/15 respectively.

(01.05.2018) **Birregurra – Colac** **(SW 140/18, WN 18)**

Diagram 54/17 (Birregurra – Colac) replaced 50/17 and 118/14.

(01.05.2018) **North Bendigo Workshops** **(SW 126/18, WN 18)**

Operating Procedure 107 (North Bendigo Workshops) was re-issued due to the alterations to the notice boards at the Down end of the sidings. SW 36/18 was cancelled.

(01.05.2018) **Mitiamo** **(SW 138/18, WN 18)**

Operating Procedure 79 (Mitiamo) was issued. This describes procedures for train operations at Mitiamo, the terminating/orginating of trains at Mitiamo, the transfer of the corridor Master Key, and assisted train loading at Mitiamo.

(01.05.2018) **Epsom – Echuca** **(SW 139/18, WN 18)**

Operating Procedure 108A (Epsom – Echuca, Operation of Sidings) was reissued. This describes updated operating procedures at Elmore, and the manual operation of the Raywood Road level crossing, new operating procedures for Rochester, and the procedures for originating and terminating trains at both these stations and the transfer of the corridor Master Key. SW 189/17 is cancelled.

02.05.2018 **Ararat** **(SW 128/18, WN 18)**

On Tuesday, 2.5., a Stop Board lettered "Stop Board 1 Obtain authority from Ararat Yard Signaller prior to proceeding" was provided for Up trains at 272.000 km on the Maryborough line. An Up Location Board was provided at 269.330 km on the Maryborough line.

02.05.2018 **Richmond** **(SW 112/18, WN 18)**

On Wednesday, 2.5., Automatic D72 was upgraded to have a LED tri-colour head.

03.05.2018 **Fairfield – Alphington** **(SW 78/18, WN 17 & 18)**

On Thursday, 3.5., the grade separation at Grange Road was brought into service. A new overline bridge was provided at 9.891 km. New pedestrian footbridges were provided at Hamilton St (9.885 km) and Ravenscourt Place (10.025 km).

Automatics S262, S269, S278, S283, and S292 were provided. All of the new signals are LED (UGL tri-colour) heads mounted on tilt mast posts and provided with train stops.

Rail vehicle detection is by axle counters. On the Down line, axle counter sections will commence at 9.348 km (4 metres on the Down side of Station Street Fairfield) and end at 10.679 km (28 metres on the Down

side of Yarralea St Alphington). On the Up line, axle counter sections will commence at 10.633 km (18 metres on the Up side of Yarralea St Alphington) and end at 9.312 km (21 metres on the Up side of Station St Fairfield).

Electromagnetically locked emergency gates were provided at Station Street Fairfield (9.322 km).

The signalling power supply between Fairfield and Alphington was upgraded from 2.2kV to 3.3kV.

03.05.2018 Heidelberg – Rosanna – Macleod (SW 78/18, WN 17 & 18)

On Thursday, 3.5., the new duplicated line between Heidelberg and Rosanna Junction and the grade separation at Lower Plenty Road (15.889 km) were brought into service. Rosanna Junction was abolished.

The existing single line between Heidelberg and Rosanna will become the Down line. The new Up line will pass through a new 65 metre tunnel adjacent to the existing tunnel. Crossover HBD046 was provided at Heidelberg, and both ends of the crossover are provided with dual control point machines.

The St James Rd pedestrian crossing (15.315 km) was provided with automatic pedestrian gates.

A new double track viaduct was provided. The viaduct is 275 metres long and extends from 15.775 km to 16.050 km. The approach ramps extend for a further 200 metres in both directions. The ramps have a gradient of 1 in 40.

A new Rosanna station was provided on the viaduct at 15.775km. The new station has two 160 metre side platforms

Homes HDB140, HDB142, HDB144, HDB148, and HDB152 were provided. Automatics HDB044 (with co-acting signal), HDB053 (with co-acting signal), S445, S461 (with co-acting signal), S450, S468, and S475 were provided. All of the new signals are LED (UGL tri-colour) heads mounted on tilt mast posts and equipped with train stops. All Home signals are provided with a post telephone.

The Medium Speed Warning aspect on Homes HDB140, HDB142, HDB148, HDB152 are approach operated and speed proven.

Rail vehicle detection is by axle counters. On the Down line, axle counter sections will commence at 12.727 km (at Automatic S369) and end at 16.416 km (at Automatic S489). On the Up line, axle counter sections will commence at 16.416 km (at Automatic S488) and end at 12.727 km (at Automatic S370).

Up Controlled Automatic 101 (S508) and Down Controlled Automatic (102) at McLeod were converted to controlled Homes and renumbered MCD101 and MCD102 respectively. Signal post telephones were not provided. Verbal permission to pass these signals at Stop is given by the Signaller Macleod

At Macleod the 11P key switch on the panel and associated emergency point handle were abolished.

The defined station limits at Heidelberg are from HDB140 to HDB044 on the Down Line, and from HDB152 to HDB053 on the Up Line.

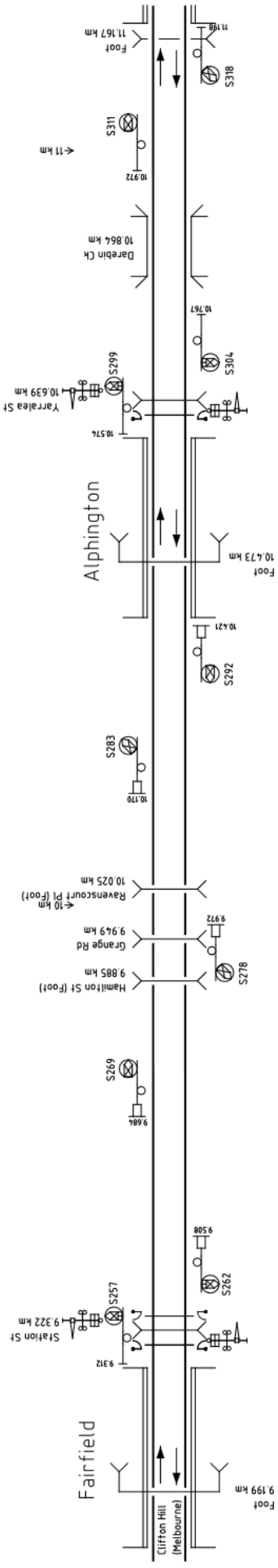
The signalling power supply between Eaglemont and Rosanna was converted from 2.2kV to 3.3kV.

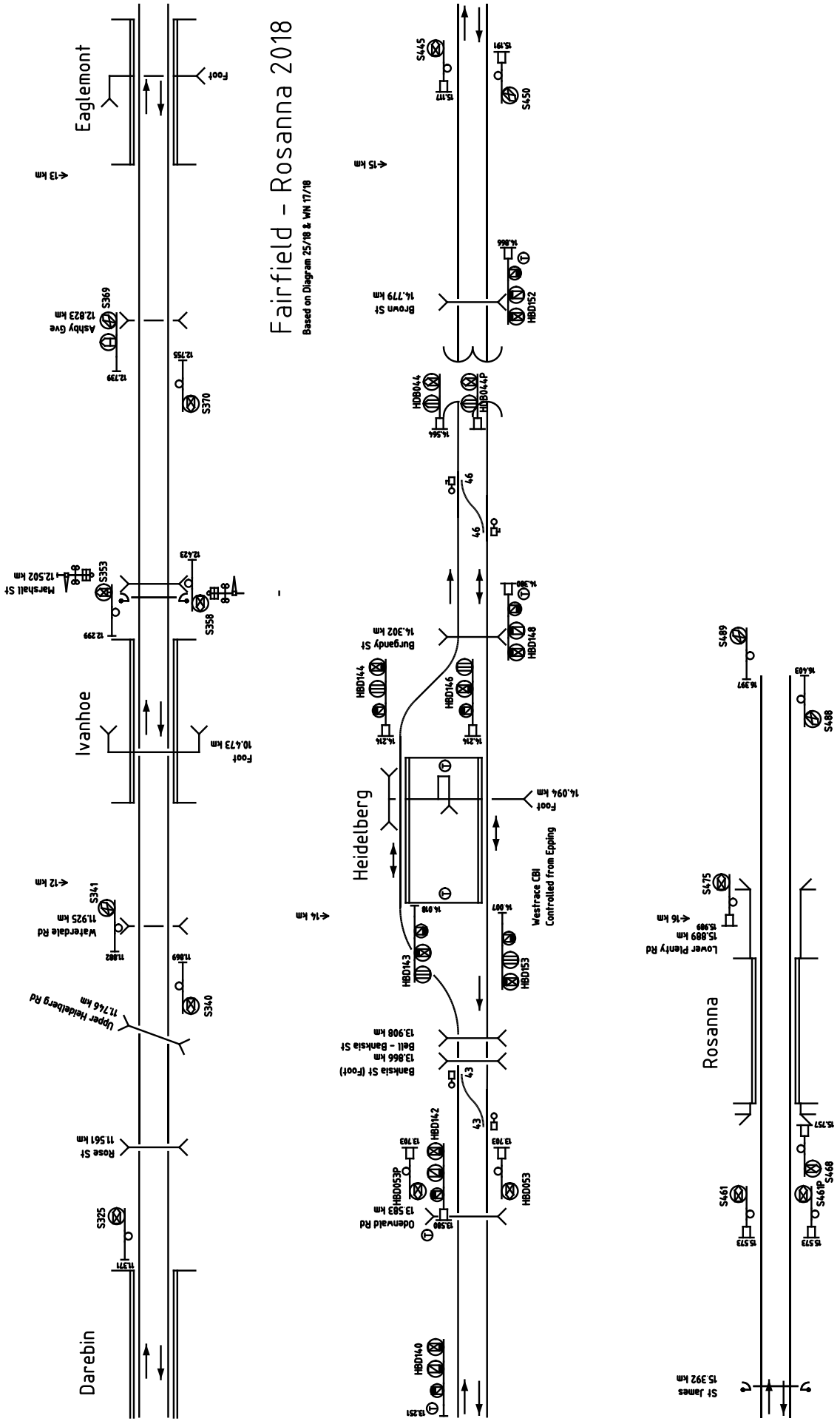
Diagram 25/18 (Dennis – Macleod) replaced 107/12.

The Clifton Hill Group Operating Procedures (L1-OPS-PRO-011) was reissued. New clauses 2 & 3 were added.

04.05.2018 Pakenham (SW 99/18, WN 18)

On Friday, 4.5., circuit alterations were made to the controls of the Main St crossing. Circular SW 62/18 is cancelled




Fairfield - Rosanna 2018
Based on Diagram 25/18 & WN 17/18
Darebin
Ivanhoe
Eaglemont
Heidelberg
Rosanna
Upper Heidelberg Rd 11.746 km
Rose St 11.561 km
Waterdale Rd 11.925 km
Marshall St 12.502 km
Ashby Gve 12.823 km
Foot 10.473 km
Foot 14.094 km
Bell - Bankia St 13.908 km
Bankia St (Foot) 13.866 km
Odenwald Rd 13.583 km
Burgandy St 14.302 km
Brown St 14.779 km
Lower Plenty Rd 15.889 km
St James 15.392 km
Westrace CBI
Controlled from Epping
S325
S340
S341
S353
S358
S369
S370
S445
S450
S461
S461P
S468
S475
S488
S489
HBD140
HBD142
HBD143
HBD144
HBD146
HBD148
HBD152
HBD153
HBD053
HBD053P
HDB044
HDB044P

04.05.2018 Frankston (SW 101/18, WN 19)

On Friday, 4.5., the Cricklewood Ave pedestrian crossing was provided with motorised pedestrian gates and electro-magnetically latched emergency gates.

Up Controlled Automatic F1368 (48) and Down Controlled Automatic F1359 (75) were interlocked with the operation of the pedestrian crossing. For Up movements from No 1 Road, F1368 will clear when the movement has passed Home 47; from No 2 Road, F1368 will clear when Home 46 is cleared; from No 3 Road, F1368 will clear when the movement has passed Home 45; and from Nos 4, 5, or 6 Roads, F1368 will clear when the movement occupies Points 62. Clearance of Automatics F1359 and F1368 is time delayed by 15 seconds if the controlling lever is reversed with a train on the track circuit in the rear of the signal.

Diagram 37/18 (Bonbeach – Frankston) replaced 25/15. SW 81/18 is cancelled.

05.05.2018 Dandenong (SW 120/18, WN 19)

On Saturday, 5.5., No 9 Track was reduced to 110 metres to allow for the construction of new turnouts. The baulks were relocated. Amend Diagram 9/18 (Dandenong – Hallam)

07.05.2018 Dunolly – Yelta (SW 129/18, 135/18, 136/18, 137/18, 141/18, 152/18, 153/18, WN 154/18, WN 18 & 19)

At 1800 hours on Monday, 7.5., with the return of the Absolute Occupation between Dunolly and Yelta, the following alterations formally took effect[1].

Dunolly

Dunolly remains an Intermediate Train Order station. Standard gauge trains operate through No 2 Road, and broad gauge trains through No 1 Road. The junction is a fixed gauge splitter. Only one train can be at Dunolly at one time.

Down Home DLY6 applies to moves from Maryborough to either No 1 or No 2 Roads to the Down end fouling point.

Down Home DLY36 (left hand doll of bracket post for moves towards Yelta) and Up Home DLY26 (for moves from Yelta) were restored to service.

The signalling will normally be in the unattended mode with Homes DLY6, DLY26, and DLY36 at clear for standard gauge moves on the Yelta line. Homes DLY28 and DLY38 for broad gauge moves on the Korong Vale line will be at Stop. A Down broad gauge movement must be stopped at the platform where the Driver will operate the keyswitch for DLY38. This will restore DLY26/DLY36 to stop and call DLY38. Similarly, an Up broad gauge movement must be stopped at DLY28 where the Driver will call the route from the keyswitch.

The Signaller's keyswitch box is effectively out of use. An E pattern Annett key was provided in the Signaller's keyswitch box on the platform. Nos 3, 4, & 5 Roads are not available for rail traffic. Points A at the Up end and G at the Down end are secured normal. The key switch for Points 29 (the junction points) became a pilot lever and must be operated by the Signaller if Dunolly is operated in the attended mode.

Amend Diagram 64/17 (Dunolly).

Operating Procedure 84 (Dunolly) was reissued and SW 216/17 was cancelled.

St Arnaud

All points and signals were abolished. Posts 1, 2, 3, 4, 6, & 7 were abolished. The quadrant levers on the platform for the Homes on Post 1 & 7 were abolished. The miniature levers on the platform for the Homes on Posts 2, 3, 4, & 6 were abolished. The Annett Key Exchange Apparatus on the platform and the Annett Keys were abolished. Points L, B, & C were abolished, as was the associated signalling equipment at each set of points. Nos 2 & 3 Roads, with the Up and Down extensions of 3 Road, were abolished. The Approach Section Indicator Board and notice boards at the Down end of the platform were abolished.

The flashing lights at Sunraysia Highway (298.558 km), Howitt St (298.949 km), and Millett St (299.420 km) were not commissioned. Trains will be flagged across the Sunraysia Highway, and both Howitt and Millett Street are closed to road traffic. The flashing lights at Wimmera Highway (299.656 km) are now automatic for all train movements. The maximum speed between Sunraysia Highway (298.558 km) and Wimmera Highway (299.658 km) will be 40 km/h.

Emu Loop

The loop was restored to use.

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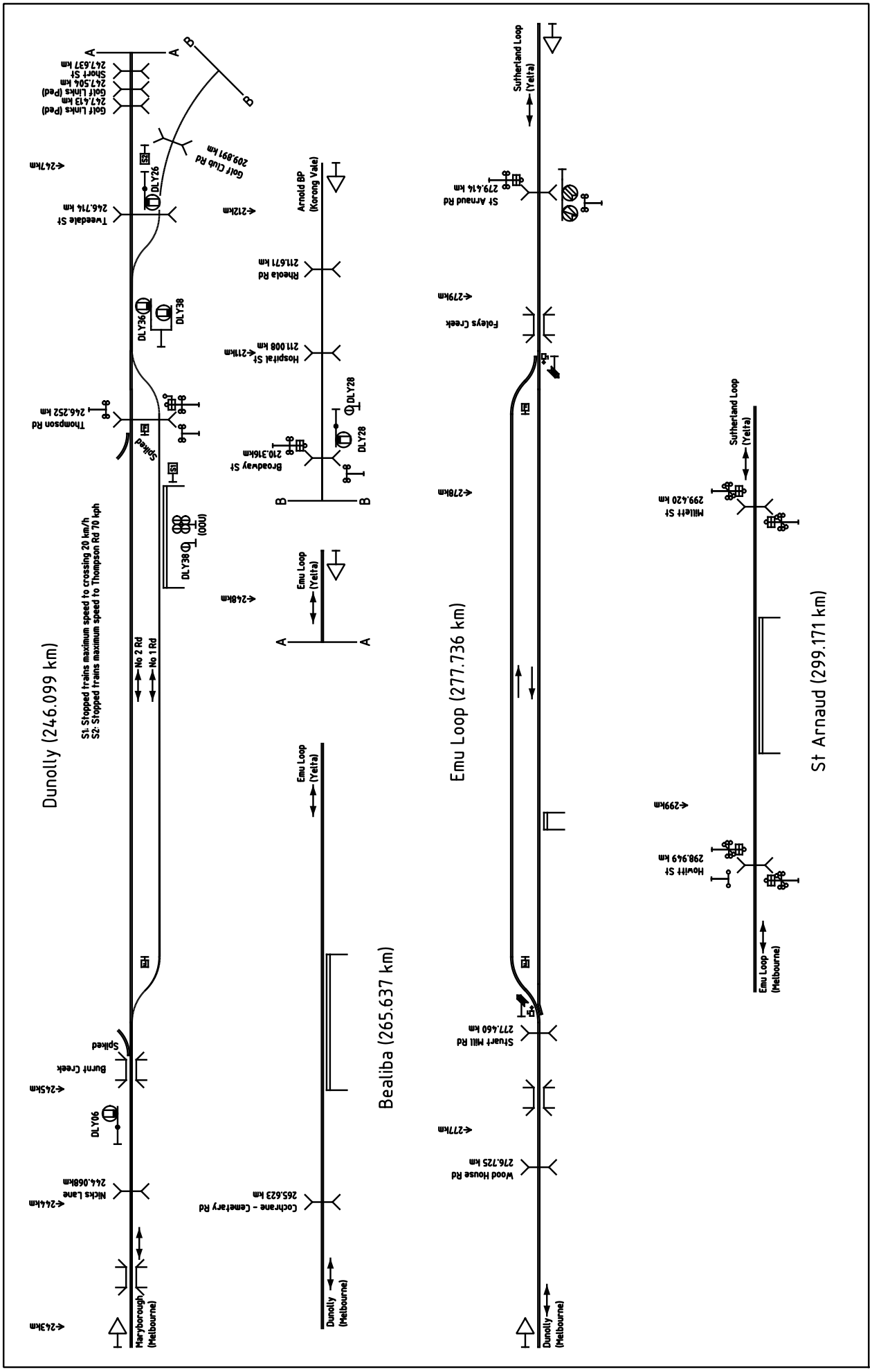
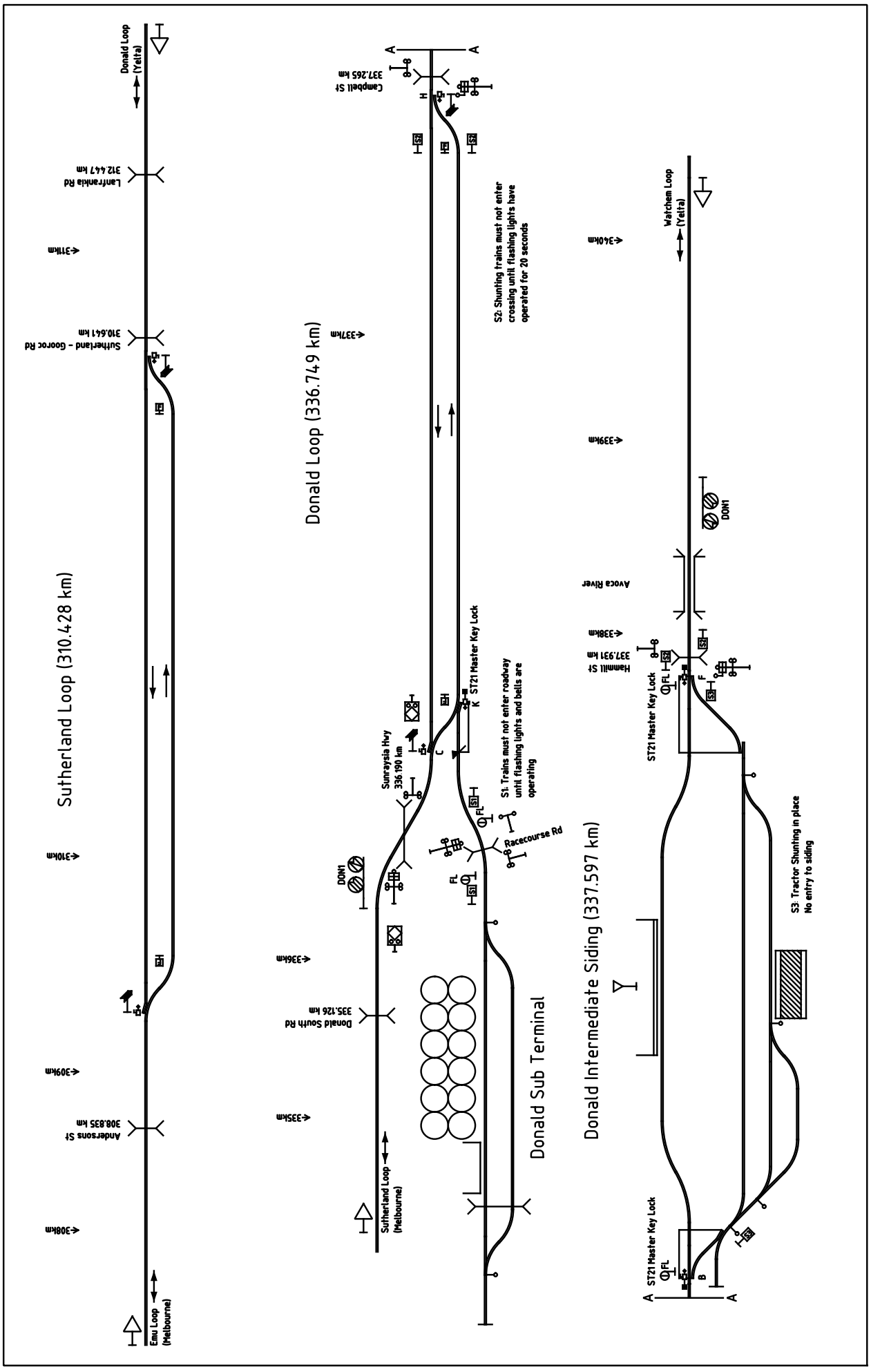
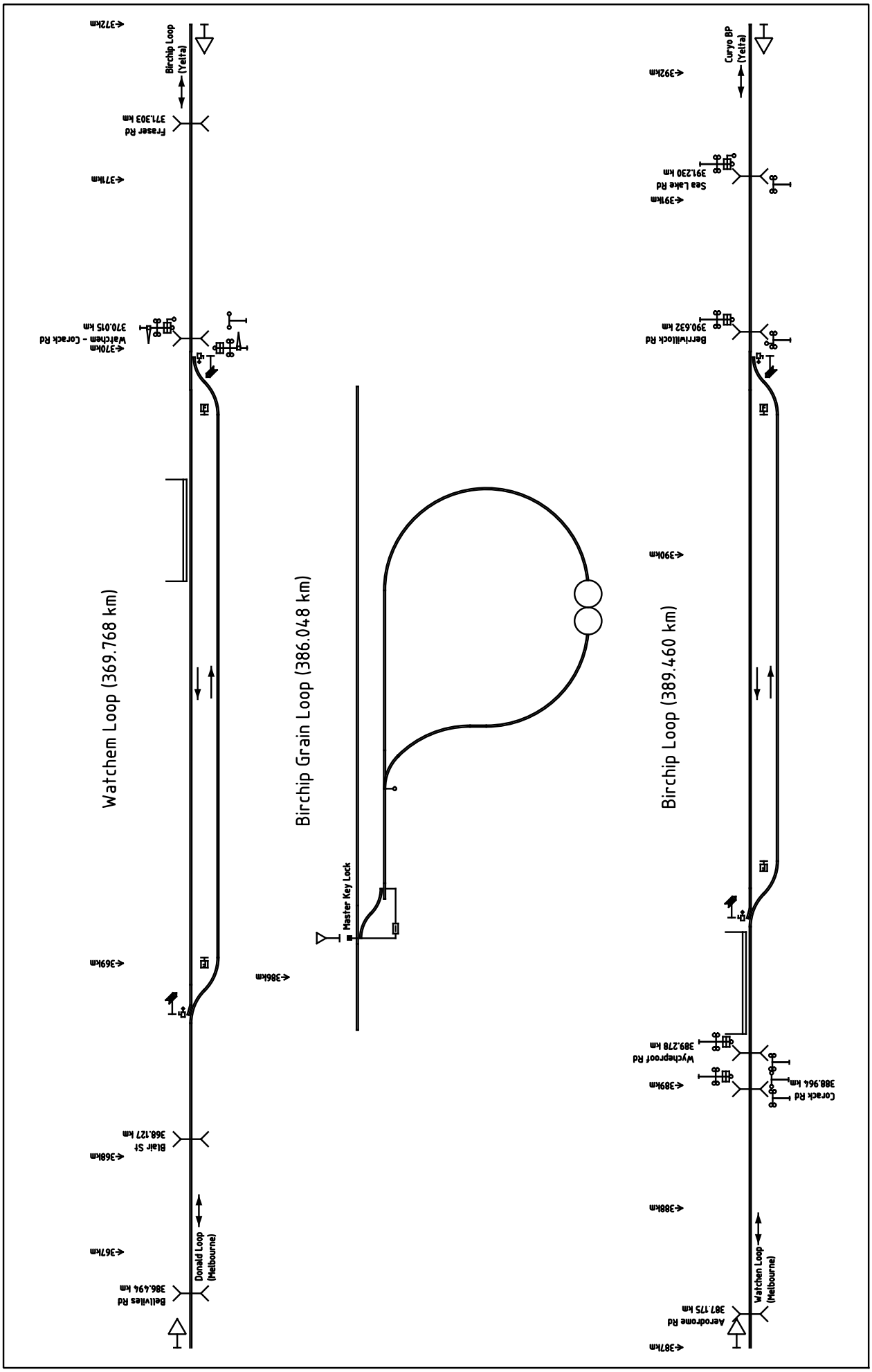
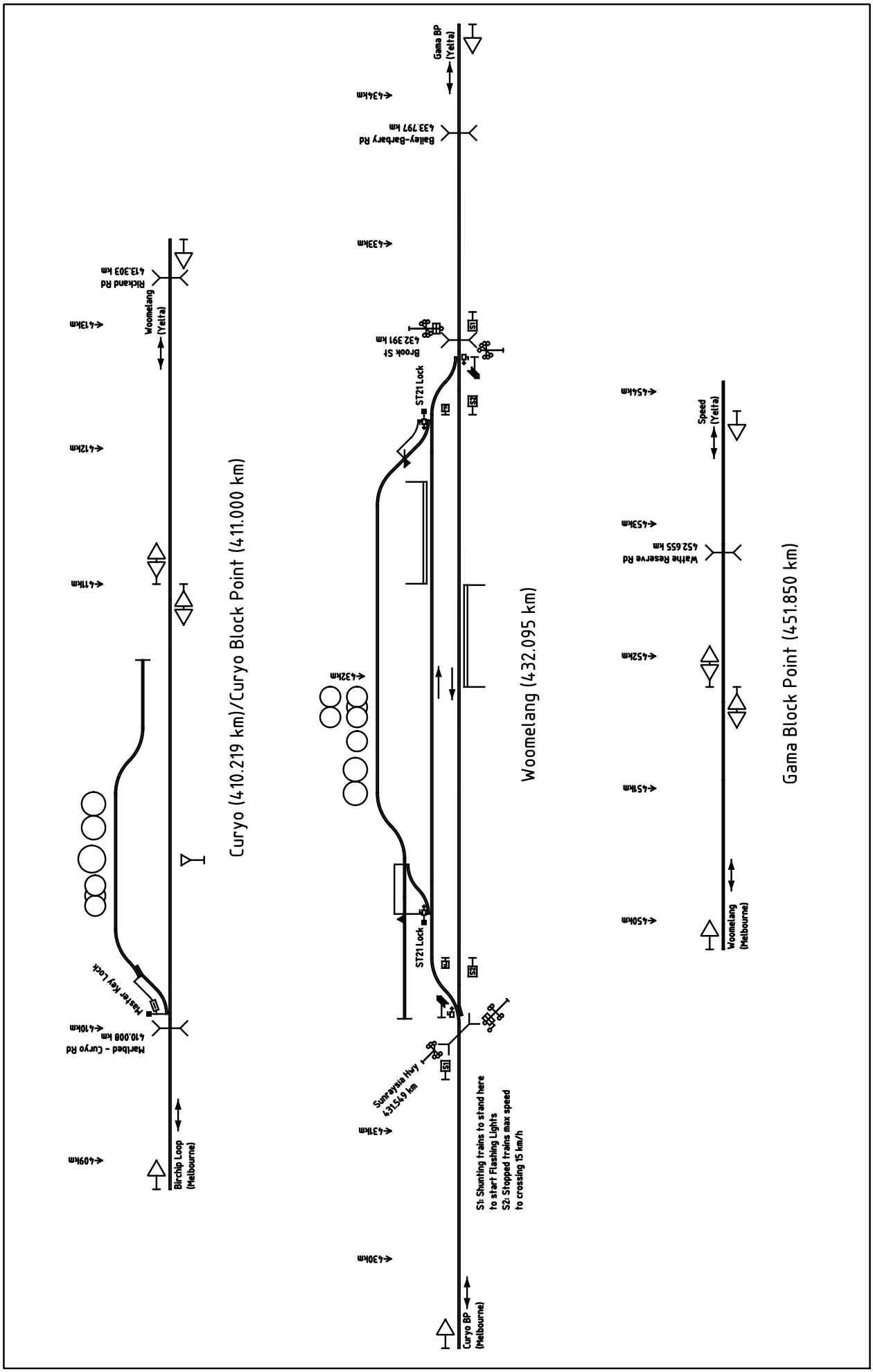
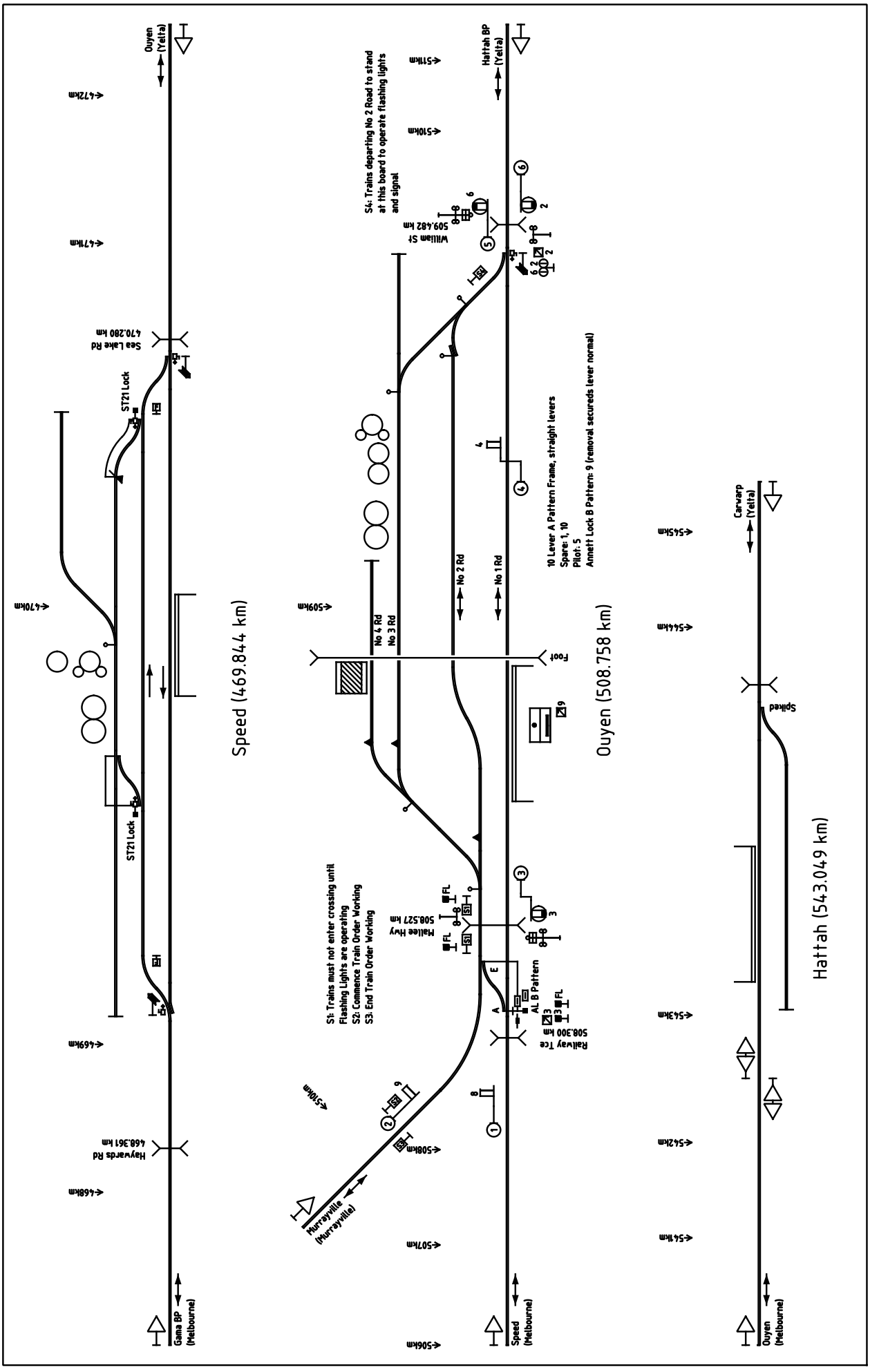
[1] Formal diagrams of the line have not yet been published. These diagrams were prepared from information supplied by Brian Coleman, who inspected the line shortly after it was opened, and information in the Weekly Operational Notice. In reading these diagrams please note that commissioning was a drawn out process. These diagrams are intended to show the situation as at press.

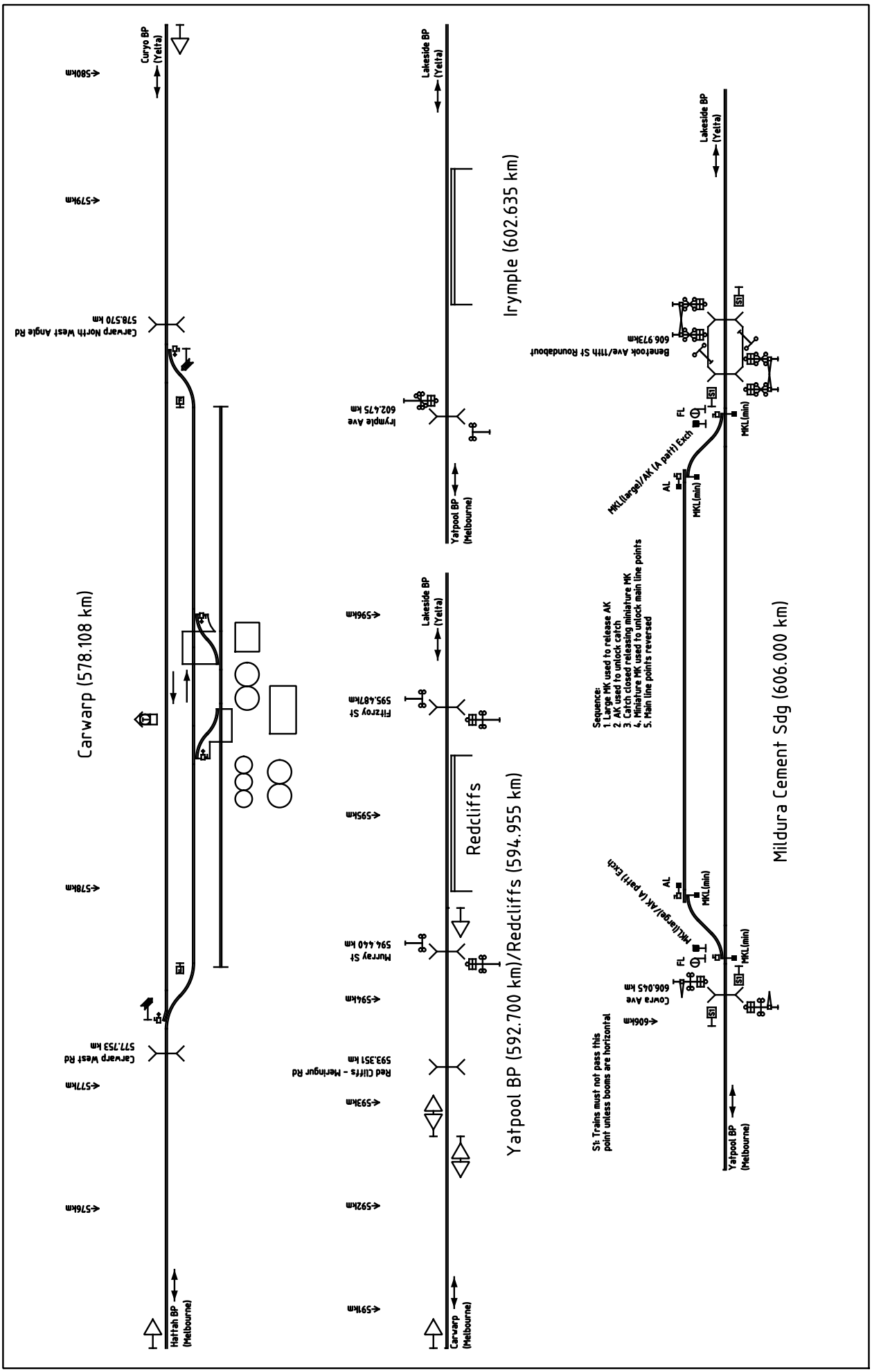

Dunolly (246.099 km)
Bealiba (265.637 km)
Emu Loop (277.736 km)
St Arnaud (299.171 km)
S1: Stopped trains maximum speed to crossing 20 km/h
S2: Stopped trains maximum speed to Thompson Rd 70 kph
Maryborough (Melbourne)
Dunolly (Melbourne)
Emu Loop (Yelta)
Sutherland Loop (Yelta)
Emu Loop (Melbourne)
No 2 Rd
No 1 Rd
Spiked
Burnt Creek
Nicks Lane 244.068km
Thompson Rd 246.252 km
Tweedale St 246.714 km
Golf Club Rd 209.891 km
Golf Links (Ped) 247.637 km
Short St 247.504 km
Golf Links (Ped) 247.413 km
Arnold BP (Korong Vale)
Rhecola Rd 211.671 km
Hospital St 211.008 km
Broadway St 210.316km
Cochrane - Cemetary Rd 265.623 km
St Arnaud Rd 279.414 km
Foleys Creek
Stuart Mill Rd 277.460 km
Wood House Rd 276.725 km
Millett St 299.420 km
Howitt St 298.949 km
DLY06
DLY26
DLY36
DLY38
DLY28
(000)
243km
244km
245km
247km
212km
211km
248km
278km
279km
277km
299km

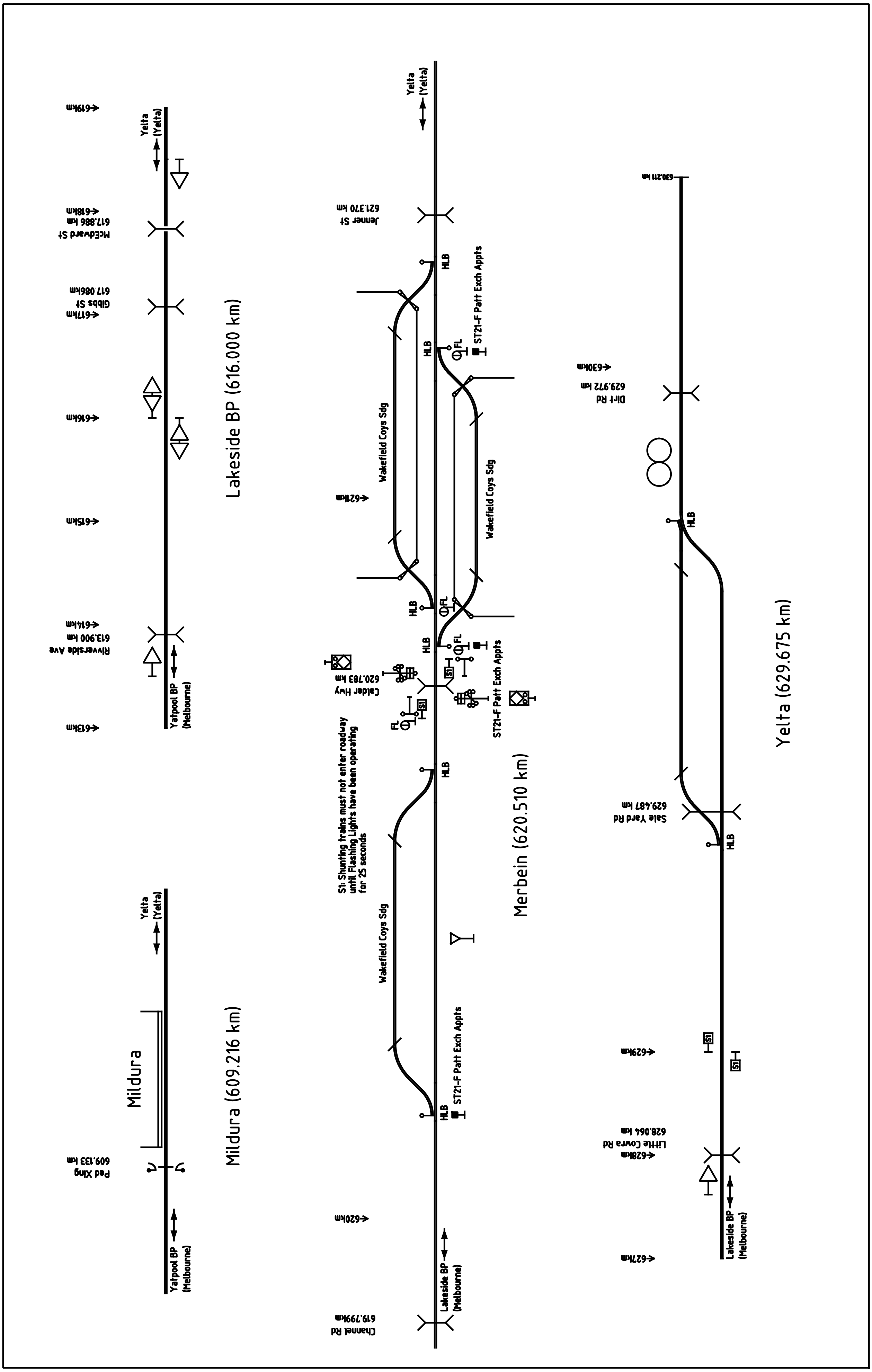

Sutherland Loop (310.428 km)
Donald Loop (336.749 km)
Donald Intermediate Siding (337.597 km)
Donald Sub Terminal
Donald Loop (Yelta)
Lanfrankia Rd 312.447 km
Sutherland - Goorce Rd 310.641 km
Andersons St 308.835 km
Emu Loop (Melbourne)
Campbell St 337.265 km
Sunraysia Hwy 336.190 km
Donald South Rd 335.126 km
Racecourse Rd
Sutherland Loop (Melbourne)
S1: Trains must not enter roadway until flashing lights and bells are operating
S2: Shunting trains must not enter crossing until flashing lights have operated for 20 seconds
ST21 Master Key Lock
DON1
Watchem Loop (Yelta)
Hammill St 337.931 km
Avoca River
S3: Tractor Shunting in place No entry to siding
308km
309km
310km
311km
335km
336km
337km
338km
339km
340km


Watchem Loop (369.768 km)
Birchip Grain Loop (386.048 km)
Birchip Loop (389.460 km)
Birchip Loop (Yelta)
Curyo BP (Yelta)
Fraser Rd 371.303 km
Sea Lake Rd 391.230 km
Watchem - Corack Rd 370.015 km
Berriwillock Rd 390.632 km
Master Key Lock
Wycheproof Rd 389.278 km
Corack Rd 388.964 km
Blair St 368.127 km
Bellviles Rd 386.494 km
Donald Loop (Melbourne)
Watchen Loop (Melbourne)
Aerodrome Rd 387.175 km
372km
371km
370km
369km
368km
367km
386km
390km
392km
391km
389km
388km
387km


Curyo (410.219 km)/Curyo Block Point (411.000 km)
Woomelang (432.095 km)
Gama Block Point (451.850 km)
Curyo BP (Melbourne)
Birchip Loop (Melbourne)
Woomelang (Yelta)
Rickard Rd 413.303 km
Maribed - Curyo Rd 410.008 km
Master Key Lock
Sunraysia Hwy 431.549 km
Brook St 432.391 km
ST21 Lock
ST21 Lock
Bailey-Barbary Rd 433.797 km
Gama BP (Yelta)
Speed (Yelta)
Waihe Reserve Rd 452.655 km
Woomelang (Melbourne)
S1: Shunting trains to stand here to start Flashing Lights
S2: Stopped trains max speed to crossing 15 km/h


Speed (469.844 km)
Ouyen (508.758 km)
Hattah (543.049 km)
Ouyen (Yelta)
Gama BP (Melbourne)
Haywards Rd 468.361 km
Sea Lake Rd 470.280 km
ST21 Lock
ST21 Lock
Hattah BP (Yelta)
William St 509.482 km
Malee Hwy 508.527 km
Railway Tce 508.300 km
AL B Pattern
Foot
No 4 Rd
No 3 Rd
No 2 Rd
No 1 Rd
10 Lever A Pattern Frame, straight levers
Spare: 1, 10
Pilot: 5
Annett Lock B Pattern: 9 (removal secureds lever normal)
S1: Trains must not enter crossing until Flashing Lights are operating
S2: Commence Train Order Working
S3. End Train Order Working
S4: Trains departing No 2 Road to stand at this board to operate flashing lights and signal
Murrayville (Murrayville)
Speed (Melbourne)
Carwarp (Yelta)
Spiked
Ouyen (Melbourne)
469km
468km
470km
472km
473km
506km
507km
508km
509km
510km
511km
542km
543km
544km
545km


Curyo BP (Yelta)
580km
579km
Carwarp North West Angle Rd 578.570 km
578km
577km
Carwarp West Rd 577.753 km
576km
Hattah BP (Melbourne)
Carwarp (578.108 km)
Lakeside BP (Yelta)
596km
Fitzroy St 595.487km
595km
Redcliffs
Murray St 594.440 km
594km
Red Cliffs - Meringur Rd 593.351 km
593km
592km
591km
Carwarp (Melbourne)
Yatpool BP (592.700 km)/Redcliffs (594.955 km)
Lakeside BP (Yelta)
Irymple Ave 602.475 km
Yatpool BP (Melbourne)
Irymple (602.635 km)
Lakeside BP (Yelta)
Benetook Ave/11th St Roundabout 606.973km
MKL(min)
MKL(large)/AK (A path) Exch
AL
MKL(min)
Sequence:
1. Large MK used to release AK
2. AK used to unlock catch
3. Catch closed releasing miniature MK
4. Miniature MK used to unlock main line points
5. Main line points reversed
MKL(large)/AK (A path) Exch
AL
MKL(min)
FL
MKL(min)
Towra Ave 606.045 km
606km
St: Trains must not pass this point unless booms are horizontal
Yatpool BP (Melbourne)
Mildura Cement Sdg (606.000 km)


Lakeside BP (616.000 km)
Mildura (609.216 km)
Mildura
Merbein (620.510 km)
Yelta (629.675 km)
Wakefield Coys Sdg
ST21-F Patt Exch Appts
S1: Shunting trains must not enter roadway until Flashing Lights have been operating for 25 seconds
Calder Hwy 620.783 km
Jenner St 621.370 km
Channel Rd 619.799km
Riverside Ave 613.900 km
Gibbs St 617.086km
McEdward St 617.886 km
Ped Xing 609.133 km
Dirt Rd 629.972 km
Sale Yard Rd 629.487 km
Little Cowra Rd 628.064 km
630.211 km
Yatpool BP (Melbourne)
Lakeside BP (Melbourne)
Yelta (Yelta)

Sutherland

No 3 Road was abolished. The non-trailable point machines, Master Key locks & rodded connections were abolished.

The trailable loop is temporarily not available for use and all trains will operate via the Up Loop. Sutherland Loop is defined as an Intermediate Train Order station and will be available for follow-on movements. When a Train Order is issued to Sutherland Loop, the order will only apply to the 'F' or 'CP' boards at the departure end of the loop.

Swanwater

The siding was abolished. The main line points, point levers, Master Key locks, rodded connections, and catch points were abolished. The intermediate siding board was abolished.

Cope Cope

The siding was abolished. The main line points, point levers, Master Key locks, rodded connections, and catch points were abolished. The intermediate siding board was abolished.

Donald

The crossing loop was restored to use.

The Donald Sub Terminal siding and the Intermediate siding will remain out of use. Points B, F & K were secured normal.

Nos 2 and 6 Roads were abolished. The Down end of No 3 Road was abolished. Catch points rodded to the main line points were provided at the Down end to provide roll-out protection.

Litchfield

The siding was abolished. The main line points, point levers, Master Key locks, rodded connections, and catch points were abolished. The notice boards and key switches for local operation of the Borung Highway crossing (353.111 km) were abolished. The intermediate siding board was abolished.

Watchem

No 3 Road was abolished. The non-trailable point machines, Master Key locks & rodded connections were abolished.

The trailable loop is temporarily not available for use and all trains will operate via the Up Loop. Watchem Loop is defined as an Intermediate Train Order station and will be available for follow-on movements. When a Train Order is issued to Watchem Loop, the order will only apply to the 'F' or 'CP' boards at the departing end of the loop.

Birchip Grain Loop

The main line points are secured with a Master Key lock. Trains to Birchip Grain Loop will be issued with a Train Order to proceed to the siding and lock away. When the train has entered the siding and cleared the catch points, the points are to be restored normal and the Master Key removed from the lock and retained by a competent employee. Under no circumstances is the Master Key to be left unattended at the points. SW 147/06 is cancelled, and the instructions for securing the main line points by point clip and padlock will no longer apply.

No Train Orders are to be issued for a through movement in the Watchem Loop – Birchip Loop section while a train is locked away in the Birchip Grain Loop AND the train crew hold a Master Key.

Birchip

The crossing loop was restored to use.

The loop siding for the steel grain silos leading from No 2 Road and the loop siding for the cement grain silos leading from No 1 Road were abolished. The associated non-trailable point machines, Master Key locks & rodded connections were abolished. Posts 2 & 3 were abolished together with the associated key switches.

Kinnabulla

The siding was abolished. The main line points, point levers, Master Key locks, rodded connections, and catch points were abolished. The intermediate siding board was abolished.

Curyo/Curyo BP

The siding will remain out of use and the points secured normal.

Watchupga

This siding was removed in 2009.

Woomelang

The siding will remain out of use and the points secured normal.

The trailable loop is temporarily not available for use and all trains will operate via the Up Loop. Woomelang Loop is defined as an Intermediate Train Order station and will be available for follow-on

movements. When a Train Order is issued to Woomelang Loop, the order will only apply to the 'F' or 'CP' boards at the departing end of the loop.

Lascelles

The siding was abolished. The main line points, point levers, Master Key locks, rodded connections, and catch points were abolished. The Master/Annett key exchange apparatus, push buttons, and notice boards for local operation of the Sunraysia Highway crossing (443.262 km) were abolished. The intermediate siding board was abolished.

Gama/Gama BP

This siding was removed in 2009.

Turriff

This siding was removed in 2009.

Speed

The trailable loop is temporarily not available for use and all trains will operate via the Up Loop. Speed Loop is defined as an Intermediate Train Order station and will be available for follow-on movements. When a Train Order is issued to Speed Loop, the order will only apply to the 'F' or 'CP' boards at the departing end of the loop.

The siding will remain out of use and the points secured normal.

Tempy

The siding was abolished. The main line points, point levers, Master Key locks, rodded connections, and catch points were abolished. The intermediate siding board was abolished.

Ouyen

All traffic will operate via No 1 Road and the yard is not available for rail traffic.

The main line signals (Posts 1, 3, 4, 5, & 6) were restored to use. Up Home Post 2 from the Murrayville line was secured normal.

The main line points (A, E, and G) have been secured normal. The Works Siding leading from No 1 Road has been abolished, together with the Annett lock and key.

Nunga

This siding was removed in 2009.

Kiamal

This siding was removed in 2009.

Hattah

The Up and Down Home signals were abolished. The Down end points leading to the maintenance siding (No 2 Road) were secured normal.

Carwarp

The trailable loop is temporarily not available for use and all trains will operate via the Up Loop. Carwarp Loop is defined as an Intermediate Train Order station and will be available for follow-on movements. When a Train Order is issued to Carwarp Loop, the order will only apply to the 'F' or 'CP' boards at the departing end of the loop.

The siding will remain out of use and the points secured normal.

Redcliffs

The siding was abolished. The main line points, point levers, Master Key locks, rodded connections, and derails/crowders points were abolished. The Up and Down two position Automatic signals and the associate key switches were abolished.

Mildura Cement Siding

The dead-end siding leading from the loop siding was abolished. The loop siding will be retained as a maintenance siding, but will be temporarily out of use with the points secured.

Sarnia Packing Coy Siding, Mildura (607.695 km)

The siding was abolished. The main line points, point levers, Master Key locks, rodded connections, and catch points were abolished.

Mildura

Operating Procedure 93 (Mildura) – SW 20/00 – was cancelled.

Mildura Oil Siding (611.000 km)

The siding was abolished. The main line points, point lever, Master Key locks, rodded connection, and derail were abolished.

Merbein

Operating Procedure 94 (Merbein) was reissued to cover the issue of Train Orders between Carwarp and Yelta. SW 189/15 and SW 43/15 were cancelled.

Amend Diagrams 111/14 (Bealiba – Emu), St Arnaud (74/06), Sutherland – Cope Cope (14/08), Donald Loop – Morton Plains (70/12), Birchip – Woomelang (4/07), Lascelles – Nunga (6/07), Ouyen – Carwarp (10/15), Yatpool – Irymple (16/14) and Mildura – Yelta (28/16).

The Network Service Plan was amended. The track from Maryborough to Yelta was relocated from Section 2.09 to Section 2.24. Section 2.09 was renamed 'North Geelong to Maryborough'. Section 2.24 was renamed Maryborough – Yelta.

07.05.2018 **South Morang** **(SW 98/18, WN 18)**

Between Friday, 4.5., and Monday, 7.5., the friction buffer stops at the ends of Nos 1 & 2 Roads were replaced by baulks. Buffer lights SMG174 and SMG184 were provided (but the circular was not clear which light was on which road). The fixed train stops at 26.060 km will remain.

Amend Diagram 96/11 (Epping – South Morang).

(08.05.2018) **North Geelong – Maryborough** **(TON 57/18, WN 19)**

The Train Operating Data for this line has been altered. This section has been retitled "North Geelong to Maryborough", and the details for the Maryborough – Yelta section were moved to Section 2.24. The maximum speed between Maryborough and Dunolly is 80 km/h, and from Dunolly to Yelta is 60 km/h. The speed over the points at a crossing loop will be 40 km/h on the straight, and 30 km/h for the diverge.

(08.05.2018) **Pakenham** **(SW 99/18 & 118/18, WN 18 & 19)**

SW 62/18 was cancelled, after alterations were made to the circuits at the Main St level crossing. SW 99/18 was also cancelled.

11.05.2018 **St Arnaud** **(SW 166/18, WN 20)**

On Friday, 11.5., the flashing lights at Howitt Street (298.949 km) and Millett Street (299.429) were restored to use and the roads reopened. SW 155/18 is cancelled.

(15.05.2018) **Woomelang Loop** **(SW 167/18, WN 20)**

Effective forthwith, Woomelang Loop has been restored to use and may be used to cross trains. The intermediate siding remains secured out of use. SW 153/18 is cancelled.

(15.05.2018) **Watsonia – Eltham** **(SW 133/18, WN 20)**

Diagram 21/13 (Watsonia – Eltham) replaced 47/18 as in service.

(22.05.2018) **Camperdown – Terang** **(SW 182/18, WN 20)**

Diagram 52/17 (Camperdown – Terang) replaced Diagrams 24/16 (?) and 30/14 (Camperdown – Terang) as in service.

23.05.2018 **Newport Workshops** **(SW 135/18, WN 22)**

On Wednesday, 23.5., No 2 Garden Platform track was returned to service. The points leading between No 2 and No 3 Garden platform tracks were unspiked. SW 53/11 was cancelled.

24.05.2018 **Tottenham Yard** **(TON 68/18, WN 22)**

On Thursday, 24.5., Tottenham Yard West No 9 Road was booked out of service.

25.05.2018 **Seymour** **(SW 181/18, WN 20)**

On Friday, 25.5., (or Saturday 26?) Down Repeating E913 was replaced by a new Down Repeating signal E903 located at 90.399 km on the Down side of Tallarook platform.

Amend Diagram 156/11 (Seymour). SW 113/18 was cancelled.

25.05.2018 **Hampton** **(SW 136/18, WN 21)**

On Friday, 25.5., the Down side pedestrian gates at Hampton St were replaced by magnetic pedestrian gates and electromagnetically latched emergency gates.

28.05.2018 **Heidelberg – Macleod** **(SW 131/18, WN 22)**

Between Friday, 25.5., and Monday, 28.5., the following alterations took place:

- A data upgrade was performed on the Westrace to fix route locking issues associated with Home HDB140.
- The St James Rd pedestrian crossing was commissioned, with Express/Stopping selection interlocking with Automatic S468.
- The emergency point handle at Macleod was removed, together with its associated 11P keyswitch
- The 5P key switch on Home MCD111 was removed.

Amend Diagram 25/18 (Dennis – Macleod).

(29.05.2018) **Ararat – Maryborough** **(TON 67/18, WN 22)**

The Train Operating Data for Ararat – Maryborough has been updated.

(29.05.2018) Woomelang (SW 195/18, WN 22)

The intermediate siding has been restored to use. SW 167/18 is cancelled. (Note this Circular also states that Woomelang Loop was restored to use.)

29.05.2018 Caulfield – Oakleigh - Huntingdale (SW 162/18 & 166/18, WN 22 & 24)

At 2100 hours on Tuesday, 29.5., the line between Caulfield and Westall will be taken out of use to allow work to commence on bringing in the new elevated section of line between Caulfield and Oakleigh into use and on resignalling Oakleigh – Huntingdale.

Caulfield

Points 613, 623, and 633 were abolished. Homes CFD712, CFD733, & CFD735 were abolished.

Caulfield – Oakleigh

The level crossings at Grange Rd (12.567 km), Koornang Rd (13.447 km), Murrumbeena Rd (14.338 km), and Poath Rd (15.377 km) were abolished. The pedestrian crossing at Koornang Rd (13.451 km) was abolished.

Automatics CFD612, D376, D387, D390, D397, D407, D410, D417, D420, D427, D441, D442, D451, D456, D473, & D474 were abolished.

The existing stations at Carnegie (13.542 km) and Murrumbeena (14.429 km) were closed.

Oakleigh

No 1 Track (Back Platform) and Sidings B and C were abolished. Homes 8, 12, 14, 16, 22, 24, 40, 42, 44, 50, 54, & 58 were abolished. Dwarfs 10, 28, 30, 36, 38, & 62 were abolished. Points 7, 9, 11, 27, 29, 31, 33, 43, & 51 were abolished. Catch 27 was abolished.

The geographical relay interlocking and panel at Oakleigh were abolished.

Huntingdale

Automatic D546 was abolished.

End£

SIGNALING AND INTERLOCKING ON THE VICTORIAN RAILWAYS[1]

A Resume of Standard Practice by the Engineer of Signals and Interlocking

F.M. Calcutt

The track mileage open for traffic on the Victorian Railways aggregates 4,338 miles, as follows:

Six track	3 ¼ Miles
Four track	2 ¼ Miles
Three track	2 ½ Miles
Two track	299 ½ Miles
Single track	3107 ½ Miles
Sidings	596 Miles

There are 226 signal cabins containing 6,508 interlocking levers in service, the largest number of levers in one cabin being 260.

The interlocking apparatus in general use is of the lever locking type of McKenzie & Holland's pattern No 6. This type of apparatus has been in use on these railways since 1874; it has given good service, but has the disadvantage that certain special locking cannot be done with it and the parts become very unwieldy in a large apparatus. It is intended by a simple modification of parts gradually to replace it by a system of lever, cam, and tappet locking[2].

For actuation of points and locking bars, 1 ¼-in external diameter pipe, weighing about 5 lbs per yard, is used, 6-in plugs being welded in each end and screwed to Whitworth standard of 7 threads per inch for a length of 1½ in. Couplings are 2½ in. long and care is taken when screwing up rods that the adjacent ends are butted up tightly. Lazy jack compensator horizontal type are used and rodding is carried in anti-friction roller frames where the axle of wheel rolls over the extent of travel rods; these roller frames are spaced as rule 8 ft apart.

At interlocked stations all facing points are bolt locked by the same lever that operates the locking bar, the bolt passing through a stretcher bar secured to point blades by plugs and cotters. In a few instances switch and lock movement is done by one lever with an escapement crank. Locking bars as now used are 45 ft long of 2 in x 2 in x ¼-in angle iron working inside the rail. Catch blades or derails, are used only to protect passenger tracks from contrary movements out of sidings. Signals are operated by single

[1] This article was originally published in the US signalling journal 'The Signal Engineer' of February 1910 p302-5 (it can be read using the following URL: https://hdl.handle.net/2027/umn.31951000875220c?urlappend=%3Bseq=307). The US spelling and grammatical errors have been left as is. The article was originally illustrated with four photographs: two at Flinders Street "A", and two at North Melbourne Junction. These have not been included as the reproduction is poor. The article is of great interest. It shows that the VR signal engineers were taking an active interest in US signalling practices as early as 1909 (bearing in mind that this journal only commenced publication in June 1908). However, there is no mention of the potential to use any US signalling techniques; the article is purely a description of practice at the time. The article is full of small details that were not recorded elsewhere.

[2] The VR Style A cam and tappet apparatus. The first was installed in May 1910 at Flinders Street D.

wire, the standard now being galvanized steel (17x7 strand, breaking stress, 2,200 lbs.). Wire pulleys are of pressed steel, single, double or treble, "Pease" type, carried on pegs spaced on an average of 30 ft. apart.

The home, distant and starting signal arms are 4 ft. 9 in long, of the center-balanced type, the distant arm being fishtailed at the end. Signal arms show two positions only and work in the lower quadrant.

Discs are now used for all shunting movements in and out of sidings, and a special "Calling on" signal is used at stations where the main arm is locked by a track circuit. It has a short arm and shows only a green light when clear, the red glass in spectacle being replaced by a thin sheet iron plate. This calling on signal is placed under the home arm and when off allows a driver to come on, but only as far as he can see that the track is clear.

Where more than two tracks are in use the signal masts are placed over them on signal bridges spanning the tracks.

The faces of all Home, Distant and Disc signals are painted red, and the standard glasses in use on all signals are red for danger and green for clear; experiments are being conducted with a view of providing a distinctive night indication for distant signals, but this matter has not yet been settled[1].

At the larger stations the use of splitting signals is being abolished wherever possible; the outside signals lead right into station and they are electrically back locked in such a way that, although the signalman can put them to danger, he cannot release the locking of points and lock bars to be traversed by train until the latter has passed over a treadle clear of them[2]. These signals are clearly shown in print of Flinders Street Station.

It has not been found necessary to provide self-adjusting wire compensators; adjusting screws are provided a lower end for all Home signals, and for Distant signals adjustment is provided by means of a draft wheel, the free end of chain coming up through floor of cabin to a ratchet winding drum behind the lever.

At facing points, the signal wires pass through detectors with slides detecting each blade[3].

At stations where a view of platform track from cabin is obstructed the rails are insulated at each end and bonded together; the signal lever applying to this section is equipped with an electric lock which is operated by a local battery through a relay[4].

Electric locks are also used for controlling the movements of trains into each end of station where there are two cabins, and at Flinders Street Station the lever locks are coupled to the track circuit as well. Insulating blocks are made of a hard variety of eucalyptus wood, stiffened with two iron plates on each side of center.

On double lines absolute blockworking is in force, the instruments being of the needle type. On the suburban lines some of the busy sections have been equipped with the Lock and Block System, and considerable extensions of this system are now in hand[5].

On single lines, the main trunk lines are equipped with either the electric train staff (Webb & Thompson's) or electric tablet (Tyer's), the less important lines being worked under the train staff and tickets system.

At intermediate non-staff stations on single lines, the facing points are secured by either a Staff, Tablet or Annett lock, and at intermediate staff stations (where not fully interlocked) the facing points are secured by a plunger lock interlocked with wire of home signal. All the stations on single lines were there are loops are not yet equipped with either of the above arrangements, but the work has been authorized and is now in progress[6].

The suburban traffic is very heavy, about 1,400 trains arriving and departing from Flinders Street-Princes Bridge Terminal every day. A considerable bulk of this traffic has to be coped with during the rush hours of morning and evening; the headway between following trains is therefore necessarily limited and steps are being taken to shorten the block sections where required.

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[1] Yellow lights had been trialled in June 1907 at Malvern and Spencer St, Coligny-Welch lamps in July 1909 at Melbourne Goods Yard and Armadale; and a flashing light at Richmond in October 1910.

[2] The 'splitting signals' in this paragraph appear to be a second junction signal in the rear of the actual junction signal. Clearing of the appropriate arm at this outer junction signal would hold the road through the actual junction. Calcutt is saying that these outer junction signals were being replaced by a single arm signal that held the road through being backlocked by a treadle. Unfortunately, the signals cannot be clearly seen in the reproduced photograph.

[3] It appears that detectors only started to be used in Victoria in June 1902.

[4] Track locking at Seymour on the back platform road had been provided February 1907. Note that this did not use a reverser on the signal. Instead the track circuit operated a lever lock on the home signal, preventing it from being cleared if the track was occupied.

[5] Extensive installations of SYX lock and block were planned, but did not eventuate. Instead, the VR moved decisively to track block where the starting signal was controlled by continuous track circuiting through the section. At some places conventional Winters block working was superimposed, at others there was only an annunciator and bell circuit. This change in policy was probably due to the development of the Reid's patent signal reverser. Well within a decade, however, track block had been superseded by AC automatic signalling.

[6] In other words, not all points on single lines were equipped with Staff, Annett, Tablet, or Plunger locks, but there was an active program to carry out these installations.