

# Network Information Book

## Hunter Valley West

### Dubbo (inc) to Gulgong (inc) via Merrygoen Merrygoen to Werris Creek / Gap (exc)

OGW-30-24

#### Applicability

Hunter Valley

#### Publication Requirement

Internal / External

#### Primary Source

Local Appendices North Volume 3, West Volumes 2 & 3  
Route Access Standard – Intrastate Network Section Pages I4 & I7

#### Document Status

Version #	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
3.2	30 Aug 2023	Configuration Management Administrator	Corridor Assets & Operational Representative	Configuration Manager	Head of Operations Standards

#### Amendment Record

Amendment Version #	Date Reviewed	Clause	Description of Amendment
1.0	19 Apr 2016		First release of document
1.1	18 Jul 2016	Various	East Narromine location removed & locations Narromine, Narromine South West. Dubbo West & Werris Creek (Gap) updated.
1.2	18 Sep 2017	1.13, 2.12 & 2.26	TOA & LPA information added into Narromine and Gulgong section information. Diagram legend updated.

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## Table of Contents

Safety interface agreement references added.			
1.3	24 Jul 2018	2.2, 2.6, 2.9 & 2.12.5	Update to level crossings at Goobang North, Peak Hill, Narwonah & Narromine. Werris Creek / Gap diagram updated.
1.4	21 May 2019	1.6, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.15.2, 2.15.3, 2.17, 2.21, 2.23, 2.24, 2.26	Dubbo yard shunting restriction added. Manual operation switch details added to level crossings at Dubbo, Fletchers Siding, Mendooran, Dunedoo & Birriwa. Inland Rail signal infrastructure changes made to Goonumbla, Alectown West, Mickibri, Peak Hill, Tomingley West, Wyanga & Narwonah text & diagrams. New Fletchers Siding – Ballimore diagram added. Corrections to Gulgong text & diagram.
1.5	29 Oct 2019	1.1, 1.6, 2.15.3, 2.23, 2.26, 2.34	Network Control Board contact details updated. Myall St Dubbo pedestrian crossing, Racecourse Rd Dunedoo & Warrumbungles Way Binnaway crossing details updated. Gulgong location text updated. Goonumbla, Minore, Dubbo, Troy Junction, Dunedoo & Binnaway diagrams updated.
2.0	13 Aug 2020	Various	Interlockings & Sidings and Level Crossings table updated. Goobang to Narwonah locations updated with Inland Rail changes. Merrygoen loop extension and ground frames details updated. Station Street Gulgong updated. Various diagrams updated and new diagrams included.
2.1	26 Oct 2020	2.2, 2.8, 2.34	Goobang North diagram updated. Tomingley West location updated. Binnaway text and diagram updated.
2.2	27 Aug 2021	1.6, 1.13, 2.13, 2.14, 2.15, 2.20, 2.34	Level Crossings table and drawing legend updated. Elong Elong text & diagram updated. Narromine South West, Narromine, Dubbo & Binnaway diagrams updated
2.3	21 Dec 2021	1.4, 2.14, 2.15, 2.26	Adjacent Train Control section Country Regional Network references updated. Narromine & Gulgong locations & Dubbo diagram updated.
2.4	10 Feb 2022	1.1, 2.7, 2.14, 2.17, 2.18	Board Extent updated. Narromine, Dubbo & Troy Junction CRN interface requirements added. Dubbo East Junction resignalling updated. Peak Hill 2, Dubbo & Troy Junction diagrams updated.
3.0	29 Jul 2022	Various	Goobang Junction to Dubbo West locations moved to Hunter North West NIB, Unfenced lines, Dubbo and Springridge locations updated. Dubbo, Troy Junction, Gulgong & Binnaway diagrams updated.
3.1	3 Nov 2022	1.6, 2.1, 2.3	Level Crossings table, Fletchers Siding location & diagram updated. Dubbo & Fletchers Siding – Ballimore diagrams updated.
3.2	30 Aug 2023	1.6, 1.11, 2.1, 2.5, 2.6, 3.1, 3.6	Level Crossings table & Wayside Monitoring Systems sections updated. Dubbo & Connemarra locations updated, Muronbung, Elong Elong, Dunedoo, Werris Creek - Gap & The Gap – Caroon diagrams updated. Elong Elong – Mendooran diagram added.

## Table of Contents

<b>Table of Contents .....</b>	<b>3</b>
<b>1 General Information .....</b>	<b>5</b>
1.1 Board Extent .....	5
1.2 Safeworking System .....	5
1.3 Applicable Rules .....	5
1.4 Adjacent Train Control Boards / Centres .....	5
1.5 Section Operating Equipment / Notes.....	6
1.5.1 Motorised Point Machines .....	6
1.5.2 Interlockings and Sidings.....	6
1.5.3 Unfenced lines.....	6
1.6 Level Crossings.....	7
1.7 Maximum Permitted Speeds and Permanent Speed Restrictions.....	7
1.8 Maximum Train Length .....	18
1.9 Structure Clearances .....	18
1.10 Communications .....	18
1.11 Wayside Monitoring Systems.....	19
1.12 Ruling Gradients .....	19
1.13 Curve and Gradient Data .....	19
1.14 Drawing Legend .....	20
<b>2 Locations and Sections Information .....</b>	<b>21</b>
2.1 Dubbo (DBO) .....	21
2.1.1 General Arrangements .....	21
2.1.2 Shunting Yard.....	22
2.1.3 Level Crossings .....	24
2.1.4 Country Regional Network Interface Requirements.....	27
2.2 Troy Junction (TRJ).....	30
2.2.1 General Arrangements .....	30
2.2.2 Country Regional Network Interface Requirements.....	30
2.3 Fletchers Siding (DFI) .....	33
2.4 Ballimore (BLR) .....	41
2.5 Muronbung (MBG) .....	43
2.6 Elong Elong (ELG) .....	45
2.7 Mendooran (MNO) .....	48

## Table of Contents

2.8	Merrygoen (MRG) .....	50
2.8.1	General Arrangements .....	50
2.8.2	Merrygoen Long Trains Procedure .....	51
2.9	Dunedoo (DND) .....	55
2.10	Birriwa (BRW) .....	58
2.11	Gulgong North .....	62
2.12	Gulgong (GLG) .....	63
<b>3</b>	<b>Werris Creek (The Gap) to Neilrex Section .....</b>	<b>68</b>
3.1	Werris Creek (The Gap) .....	68
3.2	Caroona (CCO) .....	71
3.3	Springridge (SPR) .....	74
3.4	Tamarang (TMR) .....	77
3.5	Premier (PRE) .....	80
3.6	Connemarra (CSP) .....	82
3.7	Weetaliba (WTL) .....	86
3.8	Binnaway (BNA) .....	89
3.9	Neilrex (NLX) .....	94

## 1 General Information

### 1.1 Board Extent

Dubbo (inclusive) DO28 signal 462.655km, DO1 signal 460.334km & TJ23 signal 466.219km

Gulgong (inclusive) GG5 signal 459.792km

Werris Creek/Gap (exclusive) 15-62 signal 599.720km

This area is controlled by Hunter West Network Controller, Network Control Centre North (NCCN)

Contact Numbers:

Phone: (02) 4902 7916

Emergency: (02) 4902 7976

Train Transit Manager: (02) 4902 9410

*Mon – Fri 1400hrs to 0600hrs and weekends, this board and Hunter North West are controlled by Hunter West Network Controller NCCN.*

*Phone: (02) 4902 7916*

*Emergency: (02) 4902 7976*

### 1.2 Safeworking System

#### Train Management and Control System (TMACS)

Troy Junction (exc) to Merrygoen (inc) to Gulgong (exc)

Merrygoen (exc) to Werris Creek (Gap) (exc)

#### Rail Vehicle Detection System

Dubbo and Troy Junction

Gulgong Up starter (GG8) to Ulan - (Upper Hunter 3 controls section from Ulan)

#### Yard Working

Gulgong GG5 to GG2 @ 340.981km

Operator's Key – All sidings

Work on Track in sidings and Gulgong yard require a manual TOA.

### 1.3 Applicable Rules

The Network Rules and Procedures apply to the sections covered by this Information Book.

### 1.4 Adjacent Train Control Boards / Centres

ARTC Upper Hunter 3	Phone 02 4902 7905	Emergency	02 4902 7965
ARTC North	Phone 02 4902 7902	Emergency	02 4902 7962
ARTC Junee TOCO	Phone 02 6924 9801		
Country Regional Network – North West Control	Phone:		02 4028 9501
Country Regional Network – South West Control	Phone:		02 4028 9502

## 1.5 Section Operating Equipment / Notes

### 1.5.1 Motorised Point Machines

All motorised points have a fixed frog; i.e. there are no Swingnose points between Dubbo - Gulgong or Merrygoen to Werris Creek (exc).

### 1.5.2 Interlockings and Sidings

Km	Interlocking, Station, Platform or Siding	Length of Passenger Platform in Metres
462.209	Dubbo	220
461.889	Dubbo North Junction	
466.219	Troy Junction	
468.943	Fletchers Siding	
496.213	Ballimore	
502.901	Muronbung	
514.351	Elong Elong	
551.863	Mendooran	
417.798	Merrygoen	76
387.903	Dunedoo	61
370.425	Birriwa	
341.500	Gulgong North	
340.636	Gulgong	91
435.793	Neilrex	
458.678	Binnaway	Main, 91
483.601	Weetaliba	
503.139	Connemarra	
528.259	Premer	Main, 61
548.612	Tamarang	
564.690	Springridge	Main, 61
581.959	Caroona	
599.610	Werris Creek (Gap)	

### 1.5.3 Unfenced lines

Rail Traffic Crew are reminded of the risk of accidents on unfenced lines.

All cases of injury to animals must be reported to the Network Controller.

## 1.6 Level Crossings

ALCAM ID is the number allocated from the Australian Level Crossing Assessment Model used by rail and road managers across Australia. It's a national database for assessing risk which is overseen by a National Committee and supported by the Rail Industry Safety Standards Board (RISSB).

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
<b>Dubbo to Gulgong</b>							
712	098	Darling Street Dubbo	Main West	462.342	Road	Public	Half Boom Flashing Lights - (duplicated)
711	101	Fitzroy Street Dubbo	Main West	461.640	Road	Public	Half Boom Flashing Lights
269	068	Golden Highway / Cobbora Road Dubbo	Dubbo - Coonamble	463.280	Road	Public	Half Boom Flashing Lights
123		Myall Street Dubbo	Dubbo - Coonamble	463.540	Pedestrian	Public	Pedestrian Gates & Lights
270		Muller Street Dubbo	Dubbo - Coonamble	463.926	Road	Public	Stop Signs
271	057	River Street Dubbo	Dubbo - Coonamble	464.160	Road	Public	Primary Flashing Lights
272	113	Purvis Lane Dubbo	Dubbo - Coonamble	465.764	Road	Public	Half Boom Flashing Lights
1254		Sale Yard Road Fletchers Siding	Troy Junction - Merrygoen	467.454	Road	Public	Half Boom Flashing Lights
1255		Emergency Access Road Fletchers Siding	Troy Junction - Merrygoen	467.690	Road	Public	Stop Signs
1256	060	Yarrandale Road Fletchers Siding	Troy Junction - Merrygoen	468.721	Road	Public	Half Boom Flashing Lights
3709		Fletchers Siding Lxing	Troy Junction - Merrygoen	471.337	Road	Private	Stop Signs
3710		Fletchers Siding Lxing	Troy Junction - Merrygoen	472.290	Road	Private	Stop Signs
1883		Boothenba Dubbo Road Fletchers Siding	Troy Junction - Merrygoen	474.470	Road	Public	Stop Signs
3711		Beni Lxing	Troy Junction - Merrygoen	475.300	Road	Private	Stop Signs
3712		Beni Lxing	Troy Junction - Merrygoen	476.470	Road	Private	Stop Signs
1257		Old Mendooran Road Beni	Troy Junction - Merrygoen	477.219	Road	Public	Stop Signs
1258	069	Dunedoo Road Beni	Troy Junction - Merrygoen	477.774	Road	Public	Primary Flashing Lights

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
3713		Beni Lxing	Troy Junction - Merrygoen	478.337	Road	Private	Stop Signs
1259		Beni Road Beni	Troy Junction - Merrygoen	479.484	Road	Public	Stop Signs
3714		Beni Lxing	Troy Junction - Merrygoen	480.812	Road	Private	Stop Signs
3715		Beni Lxing	Troy Junction - Merrygoen	482.173	Road	Private	Stop Signs
3716		Beni Lxing	Troy Junction - Merrygoen	483.085	Road	Private	Stop Signs
1884		Elong Road Beni	Troy Junction - Merrygoen	484.433	Road	Public	Stop Signs
1260	070	Elong Road Barbigal	Troy Junction - Merrygoen	485.740	Road	Public	Primary Flashing Lights
3717		Barbigal Lxing	Troy Junction - Merrygoen	487.671	Road	Private	Stop Signs
3718		Ballimore Lxing	Troy Junction - Merrygoen	490.400	Road	Private	Stop Signs
3719		Ballimore Lxing	Troy Junction - Merrygoen	492.097	Road	Private	Stop Signs
3720		Ballimore Lxing	Troy Junction - Merrygoen	492.520	Road	Private	Stop Signs
3721		Ballimore Lxing	Troy Junction - Merrygoen	493.620	Road	Private	Stop Signs
1261		A'Courts Road Ballimore	Troy Junction - Merrygoen	494.250	Road	Public	Stop Signs
1262		Federation Street Ballimore	Troy Junction - Merrygoen	495.557	Road	Public	Stop Signs
1263		Ballimore Road Ballimore	Troy Junction - Merrygoen	496.533	Road	Public	Stop Signs
3722		Ballimore Lxing	Troy Junction - Merrygoen	497.891	Road	Private	Stop Signs
1264		Public Road (301L) - CLOSED - Ballimore	Troy Junction - Merrygoen	499.178	Road	Public	Stop Signs
1265		Public Road (302L) Ballimore	Troy Junction - Merrygoen	499.198	Road	Public	Stop Signs
1266		Ballimore Lxing	Troy Junction - Merrygoen	501.351	Road	Public	Stop Signs
1267		Muronbung Lxing	Troy Junction - Merrygoen	502.598	Road	Public	Stop Signs

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
3723		Muronbung Lxing	Troy Junction - Merrygoen	503.926	Road	Private	No Control
1269		Muronbung Lxing	Troy Junction - Merrygoen	506.742	Road	Public	Stop Signs
1270		Muronbung Lxing	Troy Junction - Merrygoen	509.510	Road	Public	Stop Signs
3724		Elong Elong Lxing	Troy Junction - Merrygoen	510.554	Road	Private	Stop Signs
3725		Elong Elong Lxing	Troy Junction - Merrygoen	510.987	Road	Private	Stop Signs
3726		Elong Elong Lxing	Troy Junction - Merrygoen	511.812	Road	Private	Stop Signs
1271		Elong Elong Lxing	Troy Junction - Merrygoen	513.743	Road	Public	Stop Signs
1272		Elong Elong Lxing	Troy Junction - Merrygoen	514.688	Road	Public	Stop Signs
1273		Elong Elong Lxing	Troy Junction - Merrygoen	515.332	Road	Public	Stop Signs
3727		Elong Elong Lxing	Troy Junction - Merrygoen	517.263	Road	Private	Stop Signs
3728		Elong Elong Lxing	Troy Junction - Merrygoen	518.490	Road	Private	Stop Signs
3729		Elong Elong Lxing	Troy Junction - Merrygoen	520.381	Road	Private	Stop Signs
3730		Elong Elong Lxing	Troy Junction - Merrygoen	522.292	Road	Private	Stop Signs
3731		Elong Elong Lxing	Troy Junction - Merrygoen	524.070	Road	Private	Stop Signs
3732		Elong Elong Lxing	Troy Junction - Merrygoen	524.244	Road	Private	Stop Signs
1274		Tonniges Road Elong Elong	Troy Junction - Merrygoen	525.853	Road	Public	Stop Signs
1885		Elong Elong Lxing	Troy Junction - Merrygoen	532.089	Road	Public	Stop Signs
1886		Elong Elong Lxing	Troy Junction - Merrygoen	536.334	Road	Public	Stop Signs
3733		Mendooran Lxing	Troy Junction - Merrygoen	542.550	Road	Private	Stop Signs
3734		Mendooran Lxing	Troy Junction - Merrygoen	543.950	Road	Private	Stop Signs

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
3735		Mendooran Lxing	Troy Junction - Merrygoen	547.330	Road	Private	Stop Signs
1275		Mendooran Lxing	Troy Junction - Merrygoen	549.128	Road	Public	Stop Signs
3736		Mendooran Lxing	Troy Junction - Merrygoen	550.134	Road	Private	Stop Signs
1276		Yarrow Road Mendooran	Troy Junction - Merrygoen	552.146	Road	Public	Stop Signs
3737		Mendooran Lxing	Troy Junction - Merrygoen	553.145	Road	Private	Stop Signs
1277		Wallaroo Road Mendooran	Troy Junction - Merrygoen	555.827	Road	Public	Stop Signs
1278	071	Coopers Corner Mendooran	Troy Junction - Merrygoen	556.954	Road	Public	Primary Flashing Lights
1279		Beni Crossing Road Merrygoen	Troy Junction - Merrygoen	559.126	Road	Public	Stop Signs
3738		Merrygoen Lxing	Troy Junction - Merrygoen	560.997	Road	Private	Stop Signs
1280		Mendooran / Neilrex Road Merrygoen	Troy Junction - Merrygoen	561.520	Road	Public	Stop Signs
1435		Diggles Street (Merrygoen Yard)	Gulgong - Merrygoen	417.524	Road	Public	Stop Signs
3688		Merrygoen Lxing	Gulgong - Merrygoen	415.400	Road	Private	No Control
3687		Merrygoen Lxing	Gulgong - Merrygoen	413.642	Road	Private	No Control
3686		Merrygoen Lxing	Gulgong - Merrygoen	412.674	Road	Private	No Control
1434		Wongoni Road Merrygoen	Gulgong - Merrygoen	409.799	Road	Public	Stop Signs
1433		Digilah Road Merrygoen	Gulgong - Merrygoen	403.281	Road	Public	Stop Signs
1872		Merrygoen Lxing	Gulgong - Merrygoen	399.680	Road	Public	Stop Signs
3685		Dunedoo Lxing	Gulgong - Merrygoen	398.313	Road	Private	No Control
3684		Dunedoo Lxing	Gulgong - Merrygoen	397.240	Road	Private	No Control
1432	072	Castlereagh Highway Lيامنا	Gulgong - Merrygoen	395.999	Road	Public	Primary Flashing Lights

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
1431		Patrick Lane Dunedoo	Gulgong - Merrygoen	394.204	Road	Public	Stop Signs
3683		Dunedoo Lxing	Gulgong - Merrygoen	392.010	Road	Private	No Control
1430	073	Racecourse Road Dunedoo	Gulgong - Merrygoen	389.501	Road	Public	Primary Flashing Lights
1429		Whiteley Street Dunedoo	Gulgong - Merrygoen	388.467	Road	Public	Stop Signs
1767		Dunedoo Lxing	Gulgong - Merrygoen	387.873	Road	Public	No Control
1428	074	Sullivan Street Dunedoo	Gulgong - Merrygoen	387.570	Road	Public	Primary Flashing Lights
3682		Dunedoo Lxing	Gulgong - Merrygoen	387.047	Road	Private	No Control
3681		Dunedoo Lxing	Gulgong - Merrygoen	385.418	Road	Private	No Control
3680		Dunedoo Lxing	Gulgong - Merrygoen	384.432	Road	Private	No Control
3679		Dunedoo Lxing	Gulgong - Merrygoen	383.346	Road	Private	No Control
1427		Fairfield Road Dunedoo	Gulgong - Merrygoen	382.782	Road	Public	Stop Signs
3678		Dunedoo Lxing	Gulgong - Merrygoen	381.716	Road	Private	No Control
3677		Dunedoo Lxing	Gulgong - Merrygoen	380.047	Road	Private	No Control
3676		Dunedoo Lxing	Gulgong - Merrygoen	378.900	Road	Private	No Control
3675		Dunedoo Lxing	Gulgong - Merrygoen	378.128	Road	Private	No Control
3674		Dunedoo Lxing	Gulgong - Merrygoen	377.190	Road	Private	No Control
3673		Dunedoo Lxing	Gulgong - Merrygoen	376.043	Road	Private	No Control
3672		Dunedoo Lxing	Gulgong - Merrygoen	375.660	Road	Private	No Control
1426		Dunedoo Lxing	Gulgong - Merrygoen	374.273	Road	Public	Stop Signs
3671		Dunedoo Lxing	Gulgong - Merrygoen	372.360	Road	Private	No Control

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
3670		Dunedoo Lxing	Gulgong - Merrygoen	371.035	Road	Private	No Control
1425	075	Craboon Road Birriwa	Gulgong - Merrygoen	370.215	Road	Public	Primary Flashing Lights
3669		Gulgong Lxing	Gulgong - Merrygoen	367.675	Road	Private	No Control
1424		Gingers Lane Gulgong	Gulgong - Merrygoen	366.106	Road	Public	Stop Signs
1423		Gulgong Lxing	Gulgong - Merrygoen	364.879	Road	Public	Stop Signs
3668		Gulgong Lxing	Gulgong - Merrygoen	363.900	Road	Private	No Control
3667		Gulgong Lxing	Gulgong - Merrygoen	362.666	Road	Private	No Control
3666		Gulgong Lxing	Gulgong - Merrygoen	361.680	Road	Private	No Control
1422		Whistons Lane Gulgong	Gulgong - Merrygoen	360.332	Road	Public	Stop Signs
3665		Gulgong Lxing	Gulgong - Merrygoen	359.440	Road	Private	No Control
1871		Gulgong Lxing	Gulgong - Merrygoen	357.958	Road	Public	Stop Signs
3664		Puggoon - Private Lxing Gulgong	Gulgong - Merrygoen	357.290	Road	Private	No Control
3663		Gulgong Lxing	Gulgong - Merrygoen	356.188	Road	Private	No Control
3662		Gulgong Lxing	Gulgong - Merrygoen	354.357	Road	Private	No Control
1421		Pugoon Road Gulgong	Gulgong - Merrygoen	353.754	Road	Public	Stop Signs
1420		Gulgong Lxing	Gulgong - Merrygoen	352.547	Road	Public	Stop Signs
3661		Gulgong Lxing	Gulgong - Merrygoen	351.420	Road	Private	No Control
3660		Gulgong Lxing	Gulgong - Merrygoen	349.770	Road	Private	No Control
1419		Gulgong Lxing	Gulgong - Merrygoen	348.604	Road	Public	Stop Signs
1418		Jacksons Lane Gulgong	Gulgong - Merrygoen	346.934	Road	Public	Stop Signs

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
3659		Gulgong Lxing	Gulgong - Merrygoen	346.331	Road	Private	No Control
3658		Gulgong Lxing	Gulgong - Merrygoen	345.100	Road	Private	No Control
3657		Gulgong Lxing	Gulgong - Merrygoen	343.957	Road	Private	No Control
1417		Barneys Reef Road Gulgong	Gulgong - Merrygoen	342.489	Road	Public	Stop Signs
3656		Gulgong Lxing	Gulgong - Merrygoen	342.200	Road	Private	Stop Signs
1416		Black Lead Lane Gulgong	Gulgong - Merrygoen	341.945	Road	Public	Stop Signs
1415		Tullawang Street Gulgong	Gulgong - Merrygoen	341.510	Road	Public	Stop Signs
1414	076	Station Street Gulgong	Gulgong - Merrygoen	340.925	Road	Public	Primary Flashing Lights
<b>Merrygoen to The Gap</b>							
1873		Merrygoen Lxing	Merrygoen – Gap	419.310	Road	Public	Stop Signs
743		Dennykymyne Road Merrygoen	Merrygoen – Gap	421.487	Road	Public	Give Way Signs
3689		Merrygoen Lxing	Merrygoen – Gap	421.809	Road	Private	Stop Signs
1335		Binnaway Road Merrygoen	Merrygoen – Gap	423.821	Road	Public	Stop Signs
3690		Merrygoen Lxing	Merrygoen – Gap	424.424	Road	Private	Stop Signs
3691		Merrygoen Lxing	Merrygoen – Gap	425.671	Road	Private	Stop Signs
3692		Merrygoen Lxing	Merrygoen – Gap	429.494	Road	Private	Stop Signs
1336		Caigan Lxing Neilrex	Merrygoen – Gap	431.807	Road	Public	Stop Signs
3693		Neilrex Lxing	Merrygoen – Gap	435.227	Road	Private	Stop Signs
1337		Neilrex Road Neilrex	Merrygoen – Gap	436.092	Road	Public	Stop Signs
3694		Neilrex Lxing	Merrygoen – Gap	436.917	Road	Private	Stop Signs
3695		Neilrex Lxing	Merrygoen – Gap	438.345	Road	Private	Stop Signs

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
3696		Neilrex Lxing	Merrygoen – Gap	439.049	Road	Private	Stop Signs
3697		Neilrex Lxing	Merrygoen – Gap	440.598	Road	Private	Stop Signs
3698		Neilrex Lxing	Merrygoen – Gap	443.052	Road	Private	Stop Signs
3699		Binnaway Lxing	Merrygoen – Gap	443.510	Road	Private	Stop Signs
3700		Binnaway Lxing	Merrygoen – Gap	445.124	Road	Private	Stop Signs
3701		Binnaway Lxing	Merrygoen – Gap	445.627	Road	Private	Stop Signs
1338		Piambra Lxing	Merrygoen – Gap	447.725	Road	Public	Stop Signs
3702		Binnaway Lxing	Merrygoen – Gap	448.403	Road	Private	Stop Signs
3703		Binnaway Lxing	Merrygoen – Gap	450.415	Road	Private	Stop Signs
3704		Binnaway Lxing	Merrygoen – Gap	451.924	Road	Private	Stop Signs
3705		Binnaway Lxing	Merrygoen – Gap	452.890	Road	Private	Stop Signs
3706		Binnaway Lxing	Merrygoen – Gap	454.599	Road	Private	Stop Signs
1339	122	Warrumbungles Way Binnaway	Merrygoen – Gap	455.605	Road	Public	Primary Flashing Lights
1340		Sanitary Depot Binnaway	Merrygoen – Gap	456.204	Road	Public	Stop Signs
3707		Binnaway Lxing	Merrygoen – Gap	457.184	Road	Private	Stop Signs
1341		Yeulba Street Binnaway	Merrygoen – Gap	458.019	Road	Public	Stop Signs
1342		Renshaw Street Binnaway	Merrygoen – Gap	458.386	Road	Public	Stop Signs
1874		Bullinda Street Binnaway	Merrygoen – Gap	458.482	Road	Public	Give Way Signs
1875		Yarran Street Binnaway	Merrygoen – Gap	458.588	Road	Public	Give Way Signs
1876		Yeulba Street Binnaway	Merrygoen – Gap	458.705	Road	Public	Give Way Signs

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
29		Watt Street Binnaway	Merrygoen – Gap	459.146	Road	Public	Give Way Signs
3577		Binnaway Lxing	Merrygoen – Gap	461.165	Road	Private	Stop Signs
3578		Binnaway Lxing	Merrygoen – Gap	464.839	Road	Private	Stop Signs
3579		Binnaway Lxing	Merrygoen – Gap	465.840	Road	Private	Stop Signs
3580		Binnaway Lxing	Merrygoen – Gap	468.480	Road	Private	Stop Signs
3581		Binnaway Lxing	Merrygoen – Gap	470.049	Road	Private	Stop Signs
3582		Binnaway Lxing	Merrygoen – Gap	470.710	Road	Private	Stop Signs
3583		Binnaway Lxing	Merrygoen – Gap	472.926	Road	Private	Stop Signs
30		Woods / Dowd Road Binnaway	Merrygoen – Gap	475.393	Road	Public	Stop Signs
3584		Binnaway Lxing	Merrygoen – Gap	476.567	Road	Private	Stop Signs
3585		Weetaliba Lxing	Merrygoen – Gap	478.190	Road	Private	Stop Signs
3586		Weetaliba Lxing	Merrygoen – Gap	482.019	Road	Private	Stop Signs
3587		Weetaliba Lxing	Merrygoen – Gap	482.571	Road	Private	Stop Signs
31		Bolton Creek Road Weetaliba	Merrygoen – Gap	483.940	Road	Public	Stop Signs
3588		Weetaliba Lxing	Merrygoen – Gap	486.666	Road	Private	Stop Signs
32		Nieble Siding Road Weetaliba	Merrygoen – Gap	488.798	Road	Public	Stop Signs
3589		Weetaliba Lxing	Merrygoen – Gap	491.856	Road	Private	Stop Signs
3590		Weetaliba Lxing	Merrygoen – Gap	494.732	Road	Private	Stop Signs
1821		Oakey Creek Yard Bomera	Binnaway - Gap	495.670	Road	Public	Stop Signs (duplicated)
3591		Bomera Lxing	Binnaway - Gap	498.555	Road	Private	Stop Signs

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
33	542	Black Stump Way Connemarra	Binnaway - Gap	503.485	Road	Public	Half Boom Flashing Lights
3592		Connemarra Lxing	Binnaway - Gap	504.147	Road	Private	Stop Signs
34		Toolangata Road Bomera	Binnaway - Gap	509.015	Road	Public	Stop Signs
3593		Bomera Lxing	Binnaway - Gap	511.852	Road	Private	Stop Signs
3594		Bomera Lxing	Binnaway - Gap	514.628	Road	Private	Stop Signs
3595		Premier Lxing	Binnaway - Gap	518.650	Road	Private	Stop Signs
3596		Premier Lxing	Binnaway - Gap	526.650	Road	Private	Stop Signs
35		Ellerslie Street / Bundella Road Premier	Binnaway - Gap	527.764	Road	Public	Stop Signs
36		Bundella Road / off Ellerslie Street Premier	Binnaway - Gap	528.549	Road	Public	Stop Signs
3597		Premier Lxing	Binnaway - Gap	532.592	Road	Private	Stop Signs
1822		Bundrila Road Premier	Binnaway - Gap	533.699	Road	Public	Stop Signs
3598		Yannergee Lxing	Binnaway - Gap	535.228	Road	Private	Stop Signs
3599		Yannergee Lxing	Binnaway - Gap	537.125	Road	Private	Stop Signs
3600		Yannergee Lxing	Binnaway - Gap	539.990	Road	Private	Stop Signs
3601		Yannergee Lxing	Binnaway - Gap	541.484	Road	Private	Stop Signs
1823		Beltana Road Yannergee	Binnaway - Gap	544.381	Road	Public	Stop Signs
1897		Tamarang Lxing	Binnaway - Gap	545.608	Road	Public	Stop Signs
37		Quirindi Road Tamarang	Binnaway - Gap	549.440	Road	Public	Give Way Signs
3602		Tamarang Lxing	Binnaway - Gap	550.250	Road	Private	No Control
3603		Springridge Lxing	Binnaway - Gap	553.010	Road	Private	Stop Signs

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
3604		Springridge Lxing	Binnaway - Gap	554.640	Road	Private	Stop Signs
38	541	Tungenbone Road Springridge	Binnaway - Gap	557.336	Road	Public	Half Boom Flashing Lights
3605		Springridge Lxing	Binnaway - Gap	559.126	Road	Private	Stop Signs
39		Yarramen Road Springridge	Binnaway - Gap	562.285	Road	Public	Give Way Signs
40		Steele Street Springridge	Binnaway - Gap	565.015	Road	Public	Stop Signs
3606		Springridge Lxing	Binnaway - Gap	565.860	Road	Private	Stop Signs
3607		Springridge Lxing	Binnaway - Gap	566.308	Road	Private	Stop Signs
1824		Quirindi Road Springridge	Binnaway - Gap	567.314	Road	Public	Stop Signs
41		Tribella Lxing Springridge	Binnaway - Gap	568.883	Road	Public	Stop Signs
3608		Springridge Lxing	Binnaway - Gap	571.418	Road	Private	Stop Signs
3609		Springridge Lxing	Binnaway - Gap	572.010	Road	Private	Stop Signs
3610		Springridge Lxing	Binnaway - Gap	578.318	Road	Private	Stop Signs
42		Quirindi - Spring Ridge Road Carroona	Binnaway - Gap	581.094	Road	Public	Stop Signs
43		Mission / Walhallow Lxing Carroona	Binnaway - Gap	582.301	Road	Public	Stop Signs
44		Rossmar Park Road Carroona	Binnaway - Gap	582.841	Road	Public	Stop Signs
45		Stock Route Carroona	Binnaway - Gap	584.594	Road	Private	Stop Signs
46		Carroona - Breeza Road Carroona	Binnaway - Gap	585.017	Road	Public	Stop Signs
3612		Carroona Lxing	Binnaway - Gap	585.660	Road	Private	Stop Signs
3613		Carroona Lxing	Binnaway - Gap	586.485	Road	Private	Stop Signs
3614		Carroona Lxing	Binnaway - Gap	587.652	Road	Private	Stop Signs

## General Information

ALCAM ID	Cerberus ID	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
3615		Caroona Lxing	Binnaway - Gap	588.276	Road	Private	Stop Signs
47		Werris Creek - Caroona Road Caroona	Binnaway - Gap	589.462	Road	Public	Stop Signs
3616		Gap Lxing	Binnaway - Gap	590.167	Road	Private	Stop Signs
48	517	Kamilaroi Highway Bakana	Binnaway - Gap	592.581	Road	Public	Primary Flashing Lights
3617		Gap Junction Lxing	Binnaway - Gap	595.779	Road	Private	Stop Signs
49	540	Gap Road The Gap	Binnaway - Gap	598.593	Road	Public	Half Boom Flashing Lights
3618		Gap Junction Lxing	Binnaway - Gap	599.618	Road	Private	Stop Signs

## 1.7 Maximum Permitted Speeds and Permanent Speed Restrictions

Refer the Route Access Standard - Intrastate Network Section Pages I4, & I7.

## 1.8 Maximum Train Length

The maximum train length is as per Planning approval.

*EXCEPTION: 4-5 times annually Interstate Intermodals run via West, when 1500m trains are allowed, but only able to cross at Merrygoen. (see Merrygoen long trains procedure)*

## 1.9 Structure Clearances

Refer Route Access Standards for Rolling Stock Outlines.

## 1.10 Communications

The National Train Communications System (NTCS) is the Primary communications system for the ARTC controlled rail network and is mandatory for all operators to operate their locomotives using a NTCS ICE (In-Cabin Equipment) Unit as the primary communications device.

A standard ICE unit is installed with the following components

- Telstra NextG™ transceiver
- Iridium satellite transceiver
- UHF Radio
- GPS

## General Information

The ICE unit primary communications is via the Telstra NextG™ and backup communications is provided via the Iridium Satellite network. The ICE unit will automatically call the appropriate Network Control Centre (Broadmeadow or Junee) based on GPS location when the routine and emergency buttons are pressed.

The UHF radio is used for the Local Train Radio - Train to Train and Train to Track Side communications.

## UHF Local Train Radio (LTR) frequency details

## Channel Name WB

Frequency: 450.050 MHz (UHF),

Bandwidth: 12.5 KHz,

EIRP: 41W (remote/low density areas), 8.3W (medium & high density areas)

Tx CTCSS: 173.8 Hz

Rx CTCSS: NA

Selcall: disabled

## Channel Name Mountain Radio (WB)

Frequency: 450.050 MHz (UHF),

Bandwidth: 12.5 KHz,

EIRP: 41W (remote/low density areas), 8.3W (medium & high density areas)

Tx CTCSS: 103.5 Hz

Rx CTCSS: NA

Selcall: disabled

Alternate Communication for this section is by mobile or satellite phones.

## 1.11 Wayside Monitoring Systems

Dubbo to Wellington 461.200km – TfNSW site

## 1.12 Ruling Gradients

Down	1 in 75
Up	1 in 60

## 1.13 Curve and Gradient Data

For all Curve and Gradient data, refer to the ARTC Internet.

[https://extranet.artc.com.au/eng\\_network-config\\_cd.html](https://extranet.artc.com.au/eng_network-config_cd.html)

## 1.14 Drawing Legend

	Standard gauge track		Dual gauge track
	Advisory Sign or Location Sign		Speed sign
	Pedestrian Crossing		Passive Protection Level Crossing
	Active Protection Level Crossing – Flashing Lights		Active Protection Level Crossing – Lights and Boom
	Bridge or Overpass		Underpass
	River/Creek or Significant river bridge or Viaduct		Station or Platform
	Tunnel		Crossover
	Turnout		Catchpoint
	Derail		Points Operating Mechanism
	Point Indicator		Mechanical Frame
	Automatic Signals		Controlled Signals
	Dwarf Signals		Signal number reference
	Distant Signal		Repeater Signal
	Overheight Detectors		Wayside Equipment

## 2 Locations and Sections Information

### 2.1 Dubbo (DBO)

Dubbo is the junction of the main line Orange to Cobar and the branch lines to Coonamble and Werris Creek via Merrygoen.

#### 2.1.1 General Arrangements

Dubbo is a Rail Vehicle Detection System location.

There is a substantial non-track circuited Shunting Yard (including multiple sidings) located on the Down side adjacent to the Loop line, utilising ground frames and non-interlocked points. The Shunting Yard is managed by the ARTC Network Controller.

Dubbo includes Troy Junction and Dubbo East Junction.

Train Order Interface location Dubbo West and Train Order siding location Fletchers are adjacent Train Order Working sections.

Train Order Working sections Begin / End at Troy Junction on both lines.

Dubbo and the adjacent Train Order Interface locations are separated by back to back Yard Limit Signs and Begin / End Train Order Working signs.

There is no section between each location.

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*NOTE: Several major roads are crossed by the railway in Dubbo and care must be taken to minimise level crossing operation times.*

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#### Begin and End Train Orders

A BEGIN TRAIN ORDER WORKING sign is located at 460.334km (DO1 signal Up Direction) to indicate the start of (CRN) Train Order Working in the up direction to Orange.

An END TRAIN ORDER WORKING sign is located at 460.334km (DO1 signal) to indicate the start of (CRN) Train Order Working in the up direction to Orange.

A BEGIN TRAIN ORDER WORKING sign is located at 462.655km (DO28 signal) to indicate the start of Train Order Working in the down direction to Narromine.

An END TRAIN ORDER WORKING sign is located at 462.655km (DO28 signal) to indicate the end of Train Order Working in the up direction from Narromine.

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*NOTE: Drivers travelling between Dubbo and Dubbo West must be in possession of a Train Authority.*

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#### Starting Signals

Starting signals DO25, DO10, and DO12 will display a white pulsating aspect when in the clear position.

Starting signals must not be cleared until competent workers have advised possession of a train order for the section ahead.

#### Operation of Points and Signals

The points and signals at Dubbo are operated from Network Control Centre North.

All indications are displayed on the control panel at Network Control Centre North.

## Locations and Sections Information

All points worked from Network Control Centre North are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

The points and signals at Dubbo East Junction are part of the Dubbo interlocking. Dubbo East Junction is the junction of the main line to Cobar and the Triangle loop between the main line and the Merrygoen branch line.

**Operation of Power-operated Points in an Emergency**

All points worked from Network Control Centre North are electrically power-operated.

If these points fail to operate correctly, the Network Controller must try to restore the points to their previous position to allow trains to continue running. However, if it is necessary to alter the route, the points may be manually operated.

The Signals maintenance representative must be promptly advised of the circumstances.

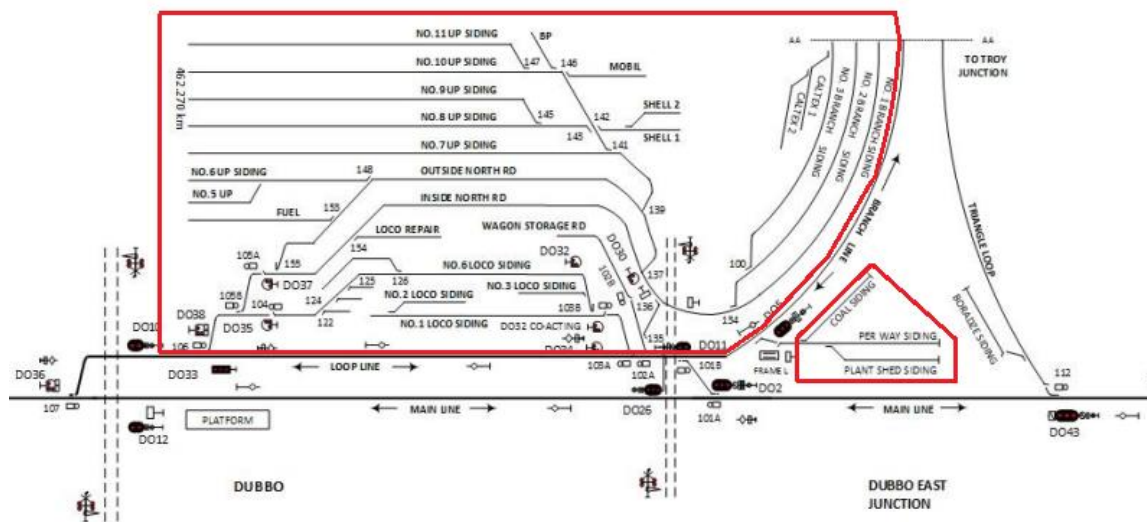
**Triangle Loop**

The Triangle loop is connected to the main line at the Dubbo East junction end and to the Merrygoen line at the Troy Junction end of Dubbo yard.

The points leading from the main line to the Triangle loop at Dubbo East Junction number 112 points and the points leading from the Merrygoen line to the Triangle loop number 114 points are controlled and operated by the Network Controller from Network Control Centre North.

**2.1.2 Shunting Yard**

Dubbo non-track circuited area bounded by "clear of" 106, 103, 102 points, J Frame and L Frame is designated as a shunting yard as illustrated below:



The following sidings are included in the non-track circuited shunting yard:

**Perway Siding**

The Perway siding is connected to Merrygoen branch line. The points leading from the branch line to the siding and the catchpoint in the siding are operated from frame L, which is located on the Down side of the branch line.

Frame L is unlocked by 152 release from Network Control Centre North.

## Locations and Sections Information

**Caltex Siding**

The Caltex siding is a dead-end siding connected on the Up side of No. 3 Storage siding.

Catchpoints are provided in the siding and, when not in use, must be secured by a point clip and SL lock.

**Shell Siding**

The Shell siding is a dead-end siding connected to the Sydney end of No. 8 Up siding.

Catchpoints are provided in the siding and, when not in use, must be secured in the open position by a point clip and SL lock.

**Branch Storage Sidings**

The Branch storage sidings are connected to the Merrygoen line. The crossover between the Merrygoen line and the sidings is operated from frame J, which is located on the Down side of the Merrygoen line and is unlocked by a key from releasing switch JK.

Releasing switch JK is electrically released by J release from the Network Controller NCCN Broadmeadow.

When the train is clear of the Cobbora Road level crossing, the Competent Worker will restore frame J and return the key to releasing switch JK, and then advise the Network Controller.

**Shunting Restriction**

Multiple locomotives are not permitted when shunting is to occur into and out of number 8 and 9 roads. An advisory sign is located adjacent to 143 points at 461.905km.

Refer safety interface agreement IA1404 for Pacific National sidings information.

**WORK ON TRACK WITHIN THE SHUNTING YARD**

“Work on Track as per ANWT 300 Planning work in the Rail Corridor - Working Safely on Track in Shunting Yards applies.”

Before permitting any work on track to commence, the following instructions must be strictly adhered to:

- identify yourself to the ARTC Network Controller
- advise of your location
- give details of the worksite, including limits, utilising the hierarchy of controls regarding protection. Acceptable protection would be a combination of two or more of these examples;
  - Points clipped and SL locked to prevent rail traffic access to the worksite (exclude rail traffic)
  - “Tagged” (PO name and contact number) Red flag or STOP sign/light clamped in the four foot at the protection limits
  - An adjoining work on track authority that prevents unauthorised rail traffic access to the protection limits if applicable,
  - Blocking facilities from Network Control if applicable,
  - Three Railway Track Signals placed at the protection limits, or
  - Handsignaller/s if applicable

## Locations and Sections Information

Where rail traffic is within the protection area or has the ability to impact workers the Protection Officer must put a control in place to manage this hazard such as:

- Tagged Red flag or STOP sign/light clamped in the four foot in clear display visible for rail traffic in conjunction with the listed protection methods

### 2.1.3 Level Crossings

#### Fitzroy Street Level Crossing

Type F flashing lights, bells, half boom barriers and pedestrian "Don't Walk" lights and sirens are provided at Fitzroy Street level crossing at 461.640km.

A highway pre-warning sign for Fitzroy St level crossing is provided on Cobbora Road.

#### Propelling over the Level Crossing

When a propelling movement is to be carried out over Fitzroy Street level crossing, the Competent Worker at frame B must walk in advance of the propelling movement to ensure that the gates are closed to road traffic and that warning is given to pedestrians, before instructing the Driver to proceed across the roadway.

#### Manual Operation Switch for the Level Crossing

A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of Fitzroy Street level crossing.

Once operated, the commencement of the level crossing warning equipment will be delayed for approximately 8 seconds to allow the road traffic signals at Darling Street and Talbragar Street to change phase.

Cancellation of the level crossing warning equipment by use of the manual operation switch is required as the warning indications **will not be cancelled automatically** when the rear of the train has cleared the level crossing.

The manual operation switch MUST be kept closed and secured by an SL lock when not in use.

#### Darling Street Level Crossing

Type F flashing lights, half-boom barriers pedestrian warning lights and sirens are provided at Darling Street level crossing at 462.324km.

The warning equipment automatically operates on approach when signals DO10 or DO12 are set to proceed aspects in the Down Direction or signal DO28 with DO36 set to proceed aspects for either the Up Main or Loop.

Facilities are provided to integrate the level crossing warning equipment with road traffic signals at the intersections of Darling Street and Talbragar Street. The facilities provide advance warning of the approach of a train to the road traffic signalling system so that road traffic will be kept clear of the level crossing during the passage of a train.

Trains held at DO10 or DO12 in the Down direction or DO28 in the Up direction will not receive a proceed indication until the road traffic signals at Darling Street and Talbragar Street have changed phase to clear the level crossing of road traffic and the boom gates at Darling Street level crossing have descended.

## Locations and Sections Information

## Shunting

Shunting movements up to DO10 and DO12 signals in the Down direction will not cause the automatic operation of Darling Street level crossing provided they are maintained at STOP by the Network Controller.

## Manual Operation Switch for the Level Crossing

A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of Darling Street level crossing.

Once operated, the commencement of the level crossing warning equipment will be delayed for approximately 8 seconds to allow the road traffic signals at Darling Street and Talbragar Street to change phase.

Cancellation of the level crossing warning equipment by use of the manual operation switch is required as the warning indications **will not be cancelled automatically** when the rear of the train has cleared the level crossing.

The manual operation switch MUST be kept closed and secured by an SL lock when not in use.

**Cobbora Road Level Crossing**

Type F flashing lights and bells are provided at Cobbora Road level crossing at 463.290km.

The warning equipment is automatically controlled by track circuit for Up or Down trains on the main line and triangle loop, and manually controlled by operator's pushbutton units for trains shunting the Branch storage sidings.

## Operator's Pushbutton Units for the Level Crossing

Three operator's pushbutton units are provided to manually control the warning equipment at Cobbora Road level crossing during shunting operations.

The operator's pushbutton units are located as follows:

- one unit is mounted on the side of the signal relay cabinet adjacent to Frame K
- one unit is on the Up side of the Merrygoen branch line on the Troy Junction side of the level crossing
- and one unit is on the Up side of the Merrygoen branch line next to frame J.

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**NOTE:** *Once the level crossing is activated from any of the 3 operator's push buttons, one of the 3 operator's push buttons MUST also be used to cancel the level crossing. The level crossing will NOT automatically cancel after a shunting train traverses the crossing on either the Branch line or the No 1 Branch Storage Siding. Appropriate signage is provided at each operator's push button location.*

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A 'white' indicator light is provided inside the pushbutton box adjacent to Frame J. When the light is illuminated it will indicate that the level crossing will cancel automatically when a shunting train departing towards Troy Junction clears the track circuit.

When a shunting movement to or from the Branch storage sidings or the Triangle loop will be required to obstruct the level crossing, the Competent Worker must unlock the operator's pushbutton unit and depress the "Start" pushbutton for one second to cause the warning equipment to operate, before hand-signalling the train over the level crossing.

The warning indications will be cancelled automatically when the rear of the shunting movement has cleared the level crossing.

## Locations and Sections Information

If the movement is not proceeded with, the warning indications must be cancelled by pressing the "Cancel" pushbutton in either of the operator's pushbutton units for one second.

The operator's pushbutton units must be kept closed and secured by an SL lock when not in use.

**Myall Street Pedestrian Crossing**

Pedestrian gates, lights and audible devices are provided at Myall Street pedestrian crossing at 463.540km. The warning equipment is automatically controlled by track circuit for Up or Down rail traffic movements on the branch line.

A Shunters Pushbutton is provided at Frame J and at Myall Street level crossing for shunting operations at Frame J.

**Manual Operation Switch for Myall Street Pedestrian Crossing**

A manual operation switch for use by Competent Workers in accordance with ARTC Network Rule ANGE 218 is installed on the side of Myall Street pedestrian crossing equipment Hut.

The manual operation switch MUST be kept closed and secured by an SL lock when not in use.

**River Street Level Crossing**

Type F flashing lights and bells are provided at River Street level crossing at 464.160km.

The warning equipment is automatically controlled by track circuit for Down and Up trains.

**Night Operation of Level Crossing Bell**

Between the hours of 2200 and 0600 each day, the level crossing bell will be automatically switched off and a siren will be switched on instead of the warning bell. A siren has been provided on each side of the level crossing.

The bell or siren is silenced when the approaching train is passing over the level crossing and the leading end of the train is beyond the roadway.

A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of River Street level crossing equipment hut. The manual operation switch MUST be kept closed and secured by an SL lock when not in use.

**Purvis Lane Level Crossing**

Type F flashing lights, bells and boom gates are provided at Purvis Lane level crossing at 465.764km.

The warning equipment is automatically controlled by track circuit for Down and Up trains. The warning equipment automatically operates on approach when signals TJ23 or TJ24 are set to proceed aspects in the Up Direction.

**2.1.4 Wayside Monitoring System**

Main Line Dubbo to Wellington at 461.200km. TfNSW has installed the following equipment:

- WCM - Wheel Condition Monitor
- RailBAM - Railway Bearing Acoustic Monitor
- BIM - Brake Inspection Monitor
- WPM - Wheel Profile Monitor

### 2.1.5 Country Regional Network Interface Requirements

#### Work on Track

The following instructions will apply if work on track will be conducted which:

- extends into the UGLRL controlled area, or
- requires protection to be provided by the UGLRL Network Control Officer.

Where any work on track activity within the ARTC Network requires protection from the adjacent CRN Network, the UGLRL Network Control Officer, ARTC Network Controller and the Protection Officer must establish a conference call to agree upon:

- affected rail traffic movements
- location of work
- required protection arrangements
- duration of work.

#### Local Possession Authorities (LPA)

The limits of an LPA must not extend beyond the Operational Interface at DO1 Signal.

#### Back-to-Back LPAs

Where back-to-back LPAs are implemented, the following instructions will apply:

- Worksites and rail traffic that need to move from CRN territory to ARTC territory are authorised and supervised by the ARTC Possession Protection Officer (PPO).
- Worksites and rail traffic that need to move from ARTC territory to CRN territory are authorised and supervised by the UGLRL PPO.

Where work is being undertaken at or over the interface boundary the following will apply:

- The UGLRL PPO and the ARTC PPO must confer and come to a clear understanding of the worksite protection to be established over the CRN and ARTC interface boundary.
- When the work at or over the interface boundary is completed, the UGLRL PPO and ARTC PPO must ensure that possession protection is removed.

#### UGLRL only LPA

Where a UGLRL only LPA is to be obtained, the UGLRL Possession Protection Officer must request the ARTC Network Controller to protect the possession limit by placing blocking facilities on DO25 signal for the duration of the possession.

Where work is being undertaken within 500m of the protecting limits, a Work on Track Authority adjoining the entry end limit must be implemented for the duration of the work.

#### ARTC only LPA

Where work is being undertaken within 500m of the protecting limits, a Work on Track Authority adjoining the entry end limit must be implemented for the duration of the work.

**Track Occupancy Authority (TOA)**

The UGLRL Network Control Officer is responsible for implementing a TOA when a worksite is established on the CRN Network up to the Operational Interface at DO1 Signal.

The ARTC Network Controller is responsible for implementing a TOA when a worksite is established on the ARTC Network up to the Operational Interface at DO1 Signal.

When a TOA worksite extends beyond DO1 Signal or the worksite is located within 500m of DO1 Signal, separate TOA's must be issued by the UGLRL Network Control Officer and the ARTC Network Controller.

**Track Work Authorities (TWA)**

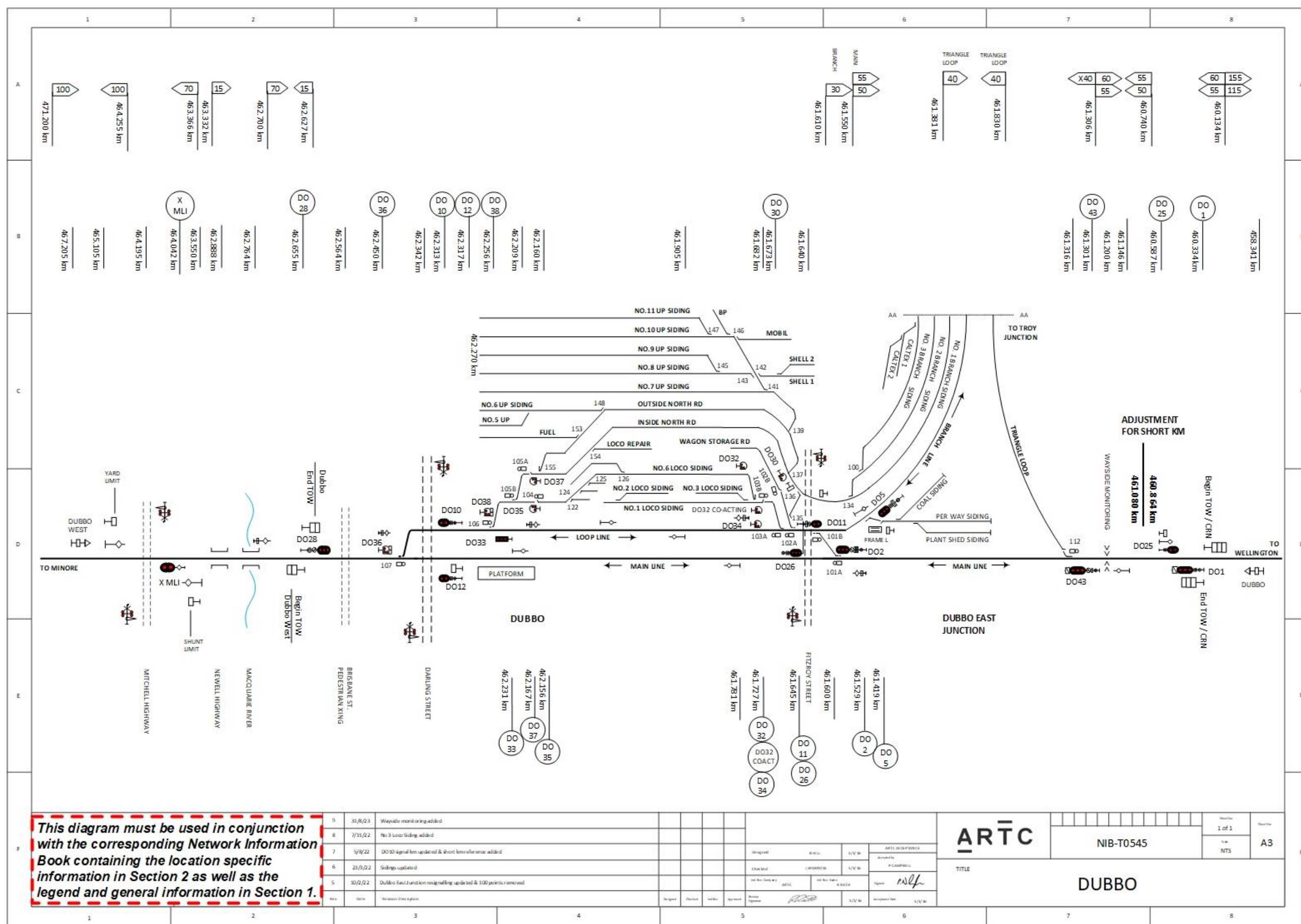
The ARTC Network Controller is responsible for implementing a TWA when a worksite is established on the ARTC Network up to the Operational Interface at DO1 Signal.

The UGLRL Network Control Officer is responsible for implementing a TWA when a worksite is established on the CRN Network up to the Operational Interface at DO1 Signal.

TWAs must not extend beyond the operational interface at DO1 Signal.

**Route Control Blocking (RCB)**

The use of RCB is not permitted in the ARTC Network.



## 2.2 Troy Junction (TRJ)

### 2.2.1 General Arrangements

The points and signals in the Troy Junction area are all part of the Dubbo interlocking.

Troy Junction is the junction of the main line to Merrygoen and the branch line to Coonamble.  
Refer to Safety Interface Agreement IA3000.06 for details on the Coonamble line.

Troy Junction is the end of Rail Vehicle Detection System and the beginning of Train Order Working towards Merrygoen and Coonamble.

#### Begin and End Train Orders

A BEGIN TRAIN ORDER WORKING sign is located at 466.219km (TJ24 signal) to indicate the start of (ARTC) Train Order Working in the down direction to Merrygoen.

An END TRAIN ORDER WORKING sign is located at 466.219km (TJ24 signal) to indicate the end of (ARTC) Train Order Working in the up direction from Merrygoen.

A BEGIN TRAIN ORDER WORKING sign is located at 466.219km (TJ23 signal) to indicate the start of (CRN) Train Order Working in the down direction to Coonamble.

An END TRAIN ORDER WORKING sign is located at 466.219km (TJ23 signal) to indicate the end of (CRN) Train Order Working in the up direction from Coonamble.

#### Operation of Points and Signals

The points and signals at Troy Junction are operated from Network Control Centre North.

All indications are displayed on the control panel at Network Control Centre North.

All points worked from the Network Control Centre North are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

When TJ20/21 signal is cleared for the Main line to Merrygoen, a white band of lights will be displayed.

When TJ20/21 signal is cleared for the Branch line to Coonamble, a pulsating white light will be displayed.

### 2.2.2 Country Regional Network Interface Requirements

#### Work on Track

The following instructions will apply if work on track will be conducted which:

- extends into the UGLRL controlled area, or
- requires protection to be provided by the UGLRL Network Control Officer.

Where any work on track activity within the ARTC Network requires protection from the adjacent CRN Network, the UGLRL Network Control Officer, ARTC Network Controller and the Protection Officer must establish a conference call to agree upon:

- affected rail traffic movements
- location of work
- required protection arrangements
- duration of work.

**Local Possession Authorities (LPA)**

The limits of an LPA must not extend beyond the Operational Interface at signal TJ23.

**Back-to-Back LPAs**

Where back-to-back LPAs are implemented, the following instructions will apply:

- Worksites and rail traffic that need to move from CRN territory to ARTC territory are authorised and supervised by the ARTC Possession Protection Officer (PPO).
- Worksites and rail traffic that need to move from ARTC territory to CRN territory are authorised and supervised by the UGLRL PPO.

Where work is being undertaken at or over the interface boundary the following will apply:

- The UGLRL PPO and the ARTC PPO must confer and come to a clear understanding of the worksite protection to be established over the CRN and ARTC interface boundary.
- When the work at or over the interface boundary is completed, the UGLRL PPO and ARTC PPO must ensure that possession protection is removed.

**UGLRL only LPA**

Where a UGLRL only LPA is to be obtained, the UGLRL Possession Protection Officer must request the ARTC Network Controller to protect the possession limit by applying blocking facilities to exclude rail traffic entry to the CRN for the duration of the possession.

Where work is being undertaken within 500m of the protecting limits, a Work on Track Authority adjoining the entry end limit must be implemented for the duration of the work.

**ARTC only LPA**

Where work is being undertaken within 500m of the protecting limits, a Work on Track Authority adjoining the entry end limit must be implemented for the duration of the work.

**Track Occupancy Authority (TOA)**

The UGLRL Network Control Officer is responsible for implementing a TOA when a worksite is established on the CRN Network up to the Operational Interface at signal TJ23.

The ARTC Network Controller is responsible for implementing a TOA when a worksite is established on the ARTC Network up to the Operational Interface at signal TJ23.

When a TOA worksite extends beyond the Operational Interface at signal TJ23 or the worksite is located within 500m of signal TJ23, separate TOA's must be issued by the UGLRL Network Control Officer and the ARTC Network Controller.

**Track Work Authorities (TWA)**

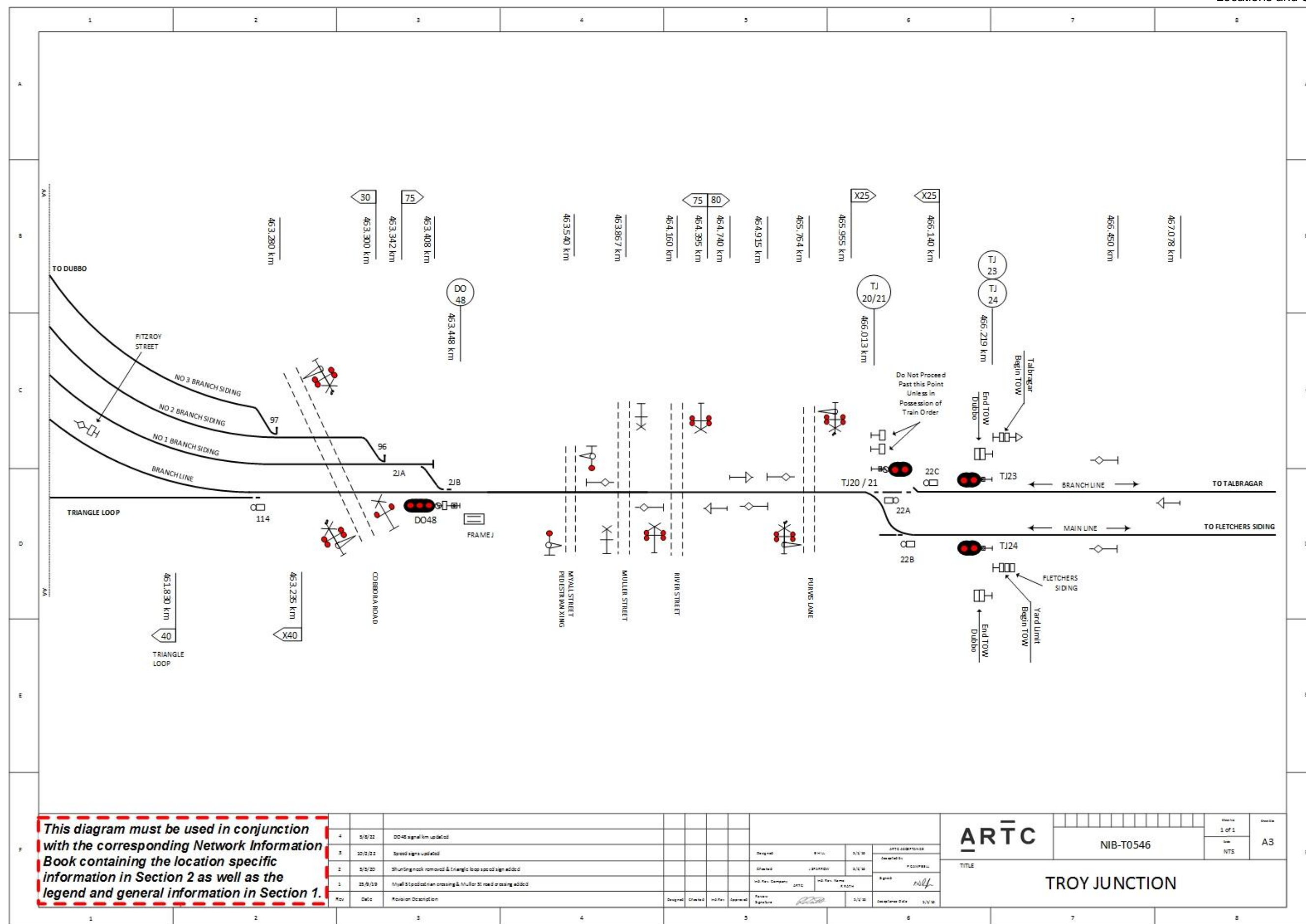
The ARTC Network Controller is responsible for implementing a TWA when a worksite is established on the ARTC Network up to the Operational Interface at signal TJ23.

The UGLRL Network Control Officer is responsible for implementing a TWA when a worksite is established on the CRN Network up to the Operational Interface at signal TJ23.

TWAs must not extend beyond the operational interface at signal TJ23.

**Route Control Blocking (RCB)**

The use of RCB is not permitted in the ARTC Network.



## 2.3 Fletchers Siding (DFI)

### General Arrangements

Fletcher's Siding is a Train Order Siding location but a private siding.

Dubbo (Troy Junction) and Fletchers are discreet locations separated by back to back Start / End Train Order Working Signs.

There is no section between the locations.

Fletchers Location begins at TJ24 and is adjacent to Dubbo (Troy Junction). Trains may return to TJ24 on a train order with shunt access or a Location Authority.

All sidings at Fletcher's are clear of Train Order Territory.

Loop length: 1359m (no crossing trains without Fletchers agreement)

Refer safety interface agreement IA1405.

### Begin and End Train Orders

A BEGIN TRAIN ORDER WORKING sign is located at 466.219km (TJ24 signal) to indicate the start of Train Order Working in the Down direction.

An END TRAIN ORDER WORKING sign is located at 466.219km (TJ24 signal) to indicate the end of Train Order Working in the Up direction.

### Yard Limits

A YARD LIMIT sign is located at 472.558km to indicate the Fletchers yard limit in the up direction.

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*NOTE: Drivers travelling between Dubbo/Troy Junction and Fletcher's Siding must be in possession of a Train Authority. A train may return to Dubbo from Fletchers Siding on a Location Authority.*

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### Shunting Limits

A SHUNT LIMIT sign is located at 472.058km to indicate the Fletchers shunt limit in the down direction.

### Ground Frames

Frame A

Frame A is located on the Down side of the main line adjacent to the points and provides access to the siding.

Frame A is unlocked by an Operator's key unlocking Duplex Lock A. This reverts X MLI to STOP.

Frame B

Frame B is located on the Down side of the main line adjacent to the points and provides access to the siding.

Frame B is unlocked by an Operator's key.

**Sale Yard Road Level Crossing**

Type F flashing lights, bells and boom barriers are provided at Sale Yard Road level crossing at 467.454km.

Sale Yard Road Level Crossing warning equipment is automatically controlled by track circuit for Up or Down trains on the main line, and manually controlled by the operation of main line indicator pushbuttons for V MLI at Sale Yard Road and Yarrandale Road level crossings or Duplex Lock A at Fletchers Siding when trains are shunting on the main line.

U MLI at 467.342km facing Down traffic is automatically controlled by track circuits and normally displays a Yellow aspect to enforce that the Rail Vehicle Operator should be proceeding with caution on approach to the Fletchers Siding. U MLI displays a Red aspect when at stop and will suppress the level crossing warning equipment for rail traffic approaching the level crossing in the down direction. A landmark board at 466.219km is provided on the Down approach to the 'U' MLI.

V MLI at 467.566km facing Up traffic displays a yellow aspect when the warning equipment at the level crossing is in working order. A Yellow aspect is displayed in lieu of a white aspect as it will be located adjacent to the Troy Junction landmark board which is a fixed caution on approach to TJ24 signal. V MLI displays a Red aspect when at stop and will suppress the level crossing warning equipment for rail traffic approaching the level crossing in the up direction. V MLI will revert to STOP when the N° 2 V MLI Pushbutton at Sale Yard Road or N° 1 V MLI Pushbutton at Yarrandale Road or Duplex Lock A at Fletchers Siding is operated by competent workers.

The level crossing will clear after 120 seconds and can be reactivated by the V MLI pushbutton at either Sale Yard Road or Yarrandale Road level crossings.

**Yarrandale Road Level Crossing**

Type F flashing lights, bells and boom barriers are provided at Yarrandale Road level crossing at 468.721km.

The warning equipment is automatically controlled by track circuit for Up or Down trains on the main line, and manually controlled by the operation of main line indicator pushbuttons when trains are shunting on the main line.

W MLI at 468.603km facing Down traffic displays a yellow aspect when the warning equipment at the level crossing is in working order. A Yellow aspect is displayed in lieu of a white aspect due to Mechanical Point Indicators being installed on the main line at A Points and B Points at Fletchers Siding. W MLI displays a Red aspect when at stop and will suppress the level crossing warning equipment for rail traffic approaching the level crossing in the down direction. W MLI will revert to STOP when the W MLI Pushbutton or Duplex Lock A at Fletchers Siding is operated by competent workers.

The level crossing will clear after 120 seconds and can be reactivated by the W MLI pushbutton.

X MLI at 468.734km facing Up traffic displays a Pulsating White aspect when the warning equipment at the level crossing is in working order and V MLI at Sale Yard Road level crossing is clear. A Yellow aspect is displayed when the warning equipment at the level crossing is in working order and V MLI at Sale Yard Road level crossing is at Stop. X MLI displays a Red aspect when at stop and will suppress the level crossing warning equipment for rail traffic approaching the level crossing in the up direction. X MLI will revert to STOP when the X MLI Pushbutton or Duplex Lock A at Fletchers Siding is operated by competent workers.

The level crossing will clear after 120 seconds and can be reactivated by the X MLI pushbutton."

### Duplex Lock A

Duplex Lock A is provided on the Main Line near frame A to enable the operation of the warning equipment at Yarrandale Road level crossing to be cancelled for rail traffic shunting the Fletchers siding.

The top lock of Duplex lock A is unlocked by the Operator's key.

When the Operator's key is turned in the top lock, this will cancel the level crossing warning equipment and release the key from the bottom lock.

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**WARNING:** *To avoid delays to road traffic, the operator's key must not be removed from the duplex lock until all shunting movements have been completed and the rail traffic is ready to depart.*

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### Main Line Indicator

A Main Line Indicator (MLI) is provided in the up direction for the Yarrandale Road level crossing. "X" MLI is facing to up directional rail traffic and is located on the Country side of the level crossing. The MLI displays a pulsating white or yellow indication when warning equipment at a level crossing is in working order and a red indication when at STOP.

A Main Line Indicator (MLI) is provided in the down direction for the Yarrandale Road level crossing.

W MLI is facing to down directional rail traffic and is located on the Sydney side of the level crossing. The MLI displays a yellow indication when warning equipment at a level crossing is in working order and a red indication when at STOP.

The warning equipment is automatically controlled by track circuits for up and down directional rail traffic on the main line. Provided "X" or "W" MLI is clear, approaching rail traffic will activate the operation of the level crossing.

The MLI can be placed at stop by either of two methods;

- Through the use of the Set/Cancel Button located on X or W MLI. With rail traffic stopped on the approach track to the MLI, if the Cancel button is pressed for one second the MLI will be placed at STOP. Placing the MLI at STOP will cancel the operation of the level crossing after 120 seconds.
- Through the operation of the duplex lock at Frame A will cause X or W MLI to return to the STOP position. If rail traffic occupies either of the approach tracks within 120 seconds of the MLI being placed at STOP the level crossing warning equipment will operate but will cease operation after the 120 seconds has elapsed.

Either MLI may be cleared provided Duplex lock A is restored to the Normal position and the route in the departing direction is clear. To clear either MLI, the "Set" button located on the MLI must be pressed for one second. This will commence the operation of the level crossing warning equipment and once the half boom barriers are fully descended the MLI will display a pulsating white indication.

**Main Line Operations****Up Through Trains**

As the train proceeds past the Yarrandale Road Up W7-4B sign, the operation of the level crossing warning equipment will commence automatically. On approach to the Yarrandale Road crossing, the Train Crew will observe a pulsating white aspect in 'X' MLI, providing the crossing is operating normally. If 'V' MLI ahead (at Sale Yard Road level crossing) is at stop, the Train Crew will observe a steady yellow aspect in 'X' MLI.

In the event that 'X' MLI is at stop, Yarrandale Road level crossing warning equipment will not operate and the Train Crew must stop and set 'X' MLI via the driver's pushbuttons. This will commence the operation of the level crossing warning equipment and when the boom barriers are fully lowered, 'X' MLI will display a pulsating white aspect if 'V' MLI at Sale Yard Road level crossing is clear or 'X' MLI will display a steady yellow aspect if 'V' MLI is at stop.

As the train proceeds past the Sale Yard Road Up W7-4B sign, the operation of the level crossing warning equipment will commence automatically. On approach to the Sale Yard Road level crossing, the Train Crew will observe a steady yellow aspect in 'V' MLI, providing the crossing is operating normally.

In the event that 'V' MLI is at stop, the Sale Yard Road level crossing warning equipment will not operate and the Train Crew must stop and set 'V' MLI via the driver's

pushbuttons. This will commence the operation of the level crossing warning equipment and when the boom barriers are fully lowered, 'V' MLI will display a steady yellow aspect. "

**Down Through Trains**

As the train proceeds past the Sale Yard Road Down W7-4B sign, the operation of the Sale Yard Road level crossing warning equipment will commence automatically.

On approach to the Sale Yard Road level crossing, the Train Crew will observe a steady yellow aspect in 'U' MLI, providing the crossing is operating normally.

In the event the 'U' MLI is at stop, the crossing warning equipment at Sale Yard Road may or may not be operating due to a signalling system failure. There will be no Drivers or Shunters pushbuttons at the level crossing to cancel the crossing operation. Therefore, the Network Rules for failed and emergency operation of level crossing equipment shall be followed.

As the train proceeds past the Yarrandale Road Down W7-4B sign, the operation of the level crossing warning equipment will commence automatically. On approach to the Yarrandale Road crossing, the Train Crew will observe a steady yellow aspect in 'W' MLI providing the crossing is operating normally.

In the event 'W' MLI is at stop, the Yarrandale Road level crossing warning equipment will not operate and the Train Crew must stop and set 'W' MLI via the driver's pushbuttons. This will commence the operation of the crossing warning equipment and when the boom barriers are in the fully lowered position, 'W' MLI will display a steady yellow aspect.

**Shunting Operations - Fletchers Siding****Duplex Lock**

The operation of 'A' Duplex Lock will place 'V' MLI, 'W' MLI and 'X' MLI at stop. The controls for 'V' MLI and 'X' MLI will permit the re-clearing of the respective MLI using the Drivers pushbutton unit with 'A' Duplex Lock reverse. This is to allow a train to depart towards Dubbo out of Fletchers Siding with proceed aspects in the X MLI and V MLI in order to reduce excessive crossing warning times and negate the need to stop at each MLI."

**Down Arriving Trains**

For a Down Train arriving at the Fletchers Siding the Shunter at the Fletchers Siding must insert the Operators key into 'A' Duplex lock. The operation of the lock will place the 'V' MLI at Sale Yard Road level crossing and 'X' MLI and 'W' MLI at Yarrandale Road level crossing to stop.

The Shunter must remove the '1A' key and insert into Frame A No.1A Lever lock and manually operate 'A' points reverse.

On approach to the Yarrandale Road level crossing, the Train Crew will observe a red aspect in 'W' MLI. The Train must stop at 'W' MLI and the Train Crew or Shunter must manually operate the level crossing warning equipment using the Shunters Pushbutton. When the boom barriers are in the fully lowered position, the Train Driver can shunt over the level crossing with 'W' MLI at stop. The level crossing operation will cancel once the last wagon is clear of the crossing intersection.

If the crossing operation is required to be manually cancelled, the Shunter or Train Crew must depress 'Level Crossing Cancel' button for 2 seconds and the crossing operation will cancel after the boom barriers have reached the raised position.

**Up Departing Up Train**

When a Up Train is ready to depart from the Fletchers Siding (either out of the Siding or from the Main Line), the Train Crew or Shunter must depress the 'Indicator Clear' button in N° 1 'V' MLI Pushbutton unit located adjacent to 'X' MLI Pushbutton unit. This will not operate Sale Yard Road level crossing providing the train is clear of the Sale Yard Road Up W7-4B sign.

The Train Crew or Shunter must then depress the 'Indicator Clear' button in 'X' MLI Pushbutton unit. The Yarrandale Road crossing will begin to operate and 'X' MLI will clear once the boom barriers are fully lowered.

The Train Crew will observe a pulsating white aspect in 'X' MLI if 'V' MLI ahead is cleared. If 'V' MLI is at stop, Train Crew will observe a steady yellow aspect in 'X' MLI.

On approach to the Sale Yard Road crossing, the Train Crew will observe a steady yellow aspect in 'V' MLI, providing the crossing is operating normally. In the event 'V' MLI is at stop, the Train Crew can set the MLI using the N° 2 'V' MLI Pushbutton unit located adjacent to 'V' MLI.

Prior to fulfilling the train order for the section, 'A' points at Fletchers Siding must be restored back to the normal position, and '1A' key restored in the 'A' Duplex lock.

**Dunedoo Road Level Crossing**

Type F flashing lights and bells are provided at Dunedoo Road level crossing at 477.774km.

The warning equipment is automatically controlled by track circuit for Up or Down rail traffic movements on the main line.

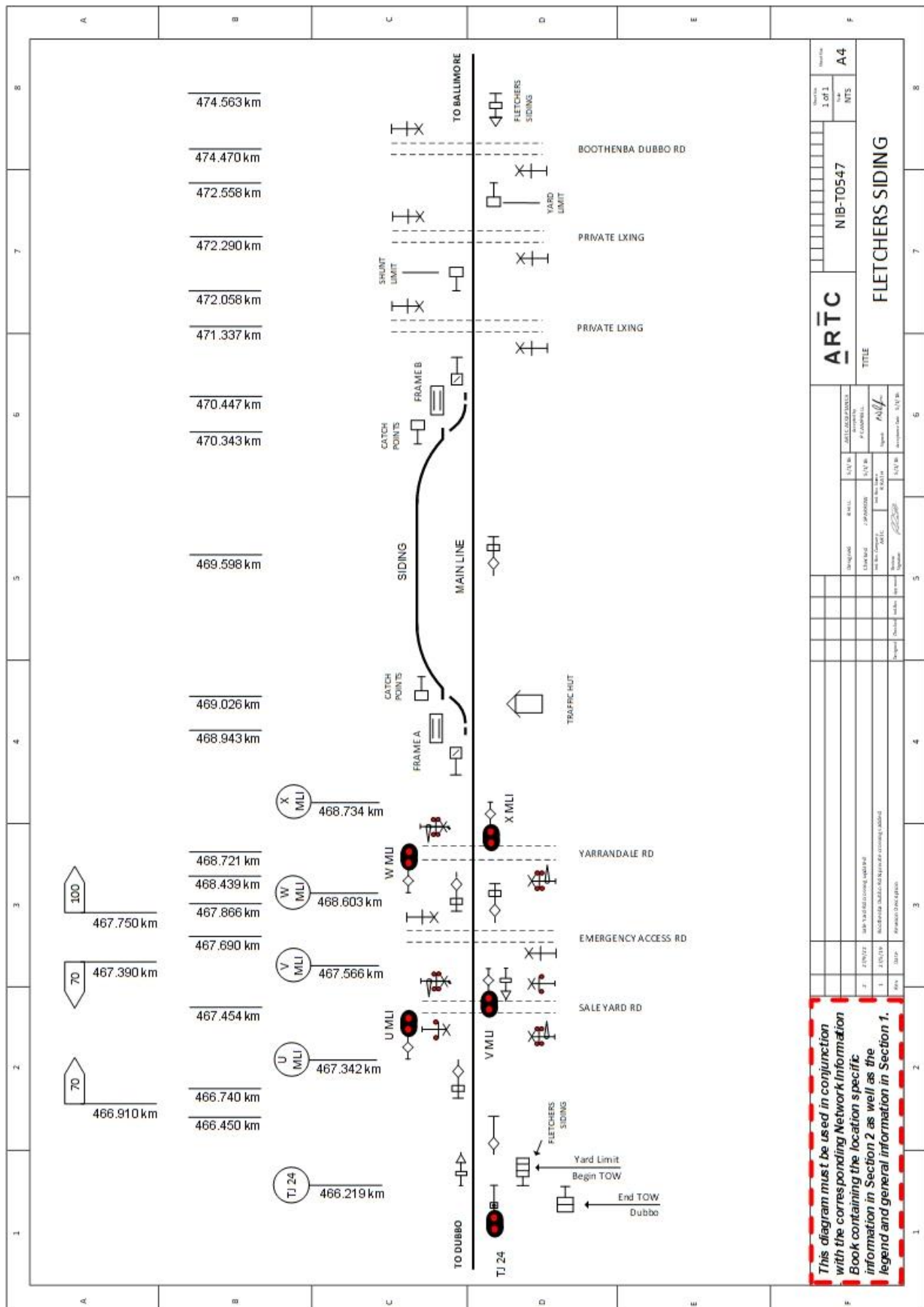
A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of Dunedoo Road level crossing equipment hut. The manual operation switch **MUST** be kept closed and secured by an SL lock when not in use.

**Elong Road Level Crossing**

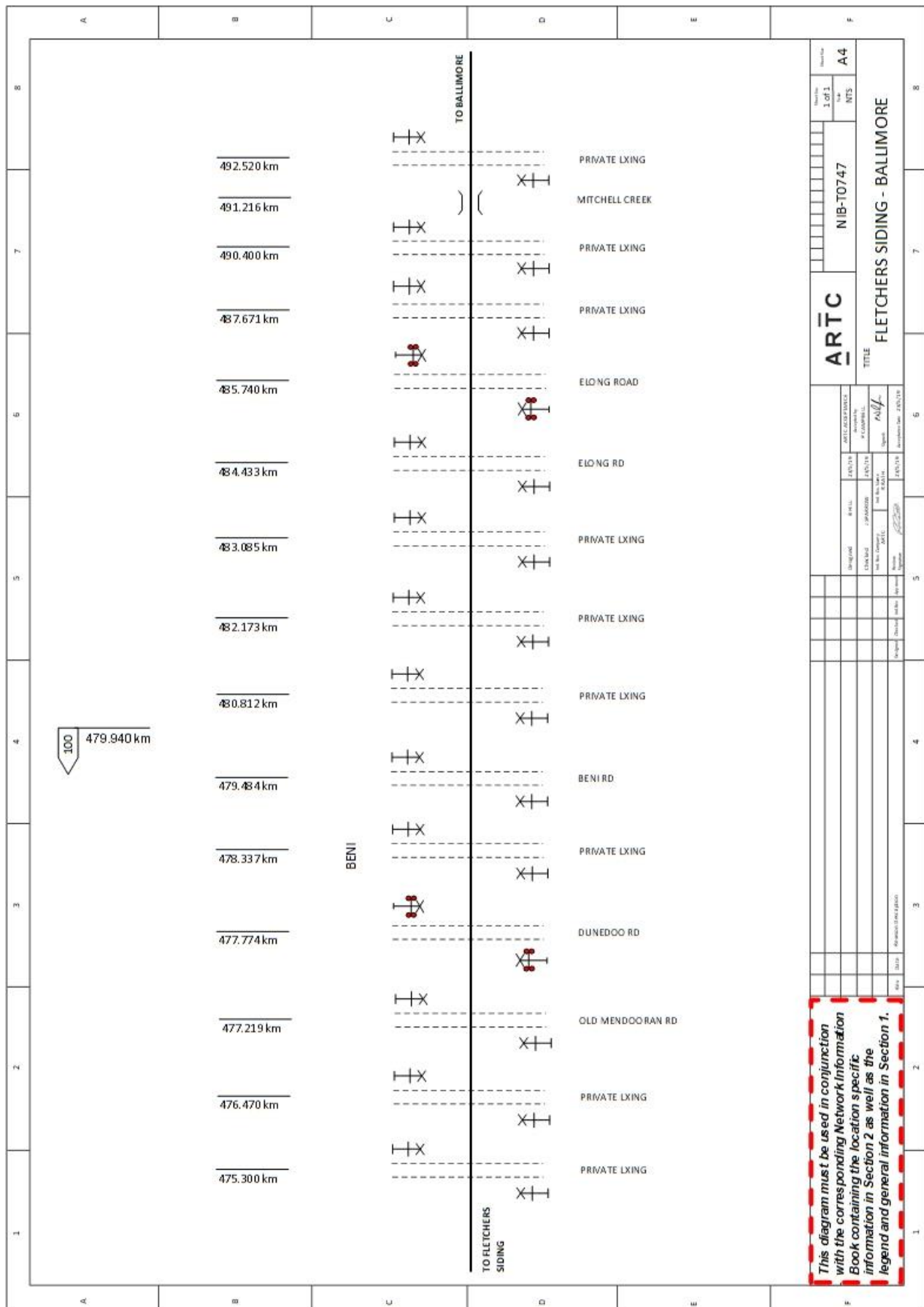
Type F flashing lights with bells are provided at Elong Road level crossing at 485.740km. The warning equipment is automatically controlled by track circuit for Up or Down rail traffic movements on the main line.

A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of Dunedoo Road level crossing equipment hut. The manual operation switch **MUST** be kept closed and secured by an SL lock when not in use.

## Locations and Sections Information



## Locations and Sections Information



## 2.4 Ballimore (BLR)

### General Arrangements

Ballimore is a Train Order Siding location.

All sidings at Ballimore are clear of Train Order Territory.

Loop length: 250m - plus 249m

### Yard Limits

A YARD LIMIT sign is located at 494.760km to indicate the Ballimore yard limit in the down direction.

A YARD LIMIT sign is located at 497.564km to indicate the Ballimore yard limit in the up direction.

### Shunting Limits

A SHUNT LIMIT sign is provided at 497.064km to indicate the Ballimore shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 495.270km to indicate the Ballimore shunting limit in the up direction.

### Ground Frames

Frame A

Frame A is located on the Down side of the main line adjacent to the points and provides access to the siding.

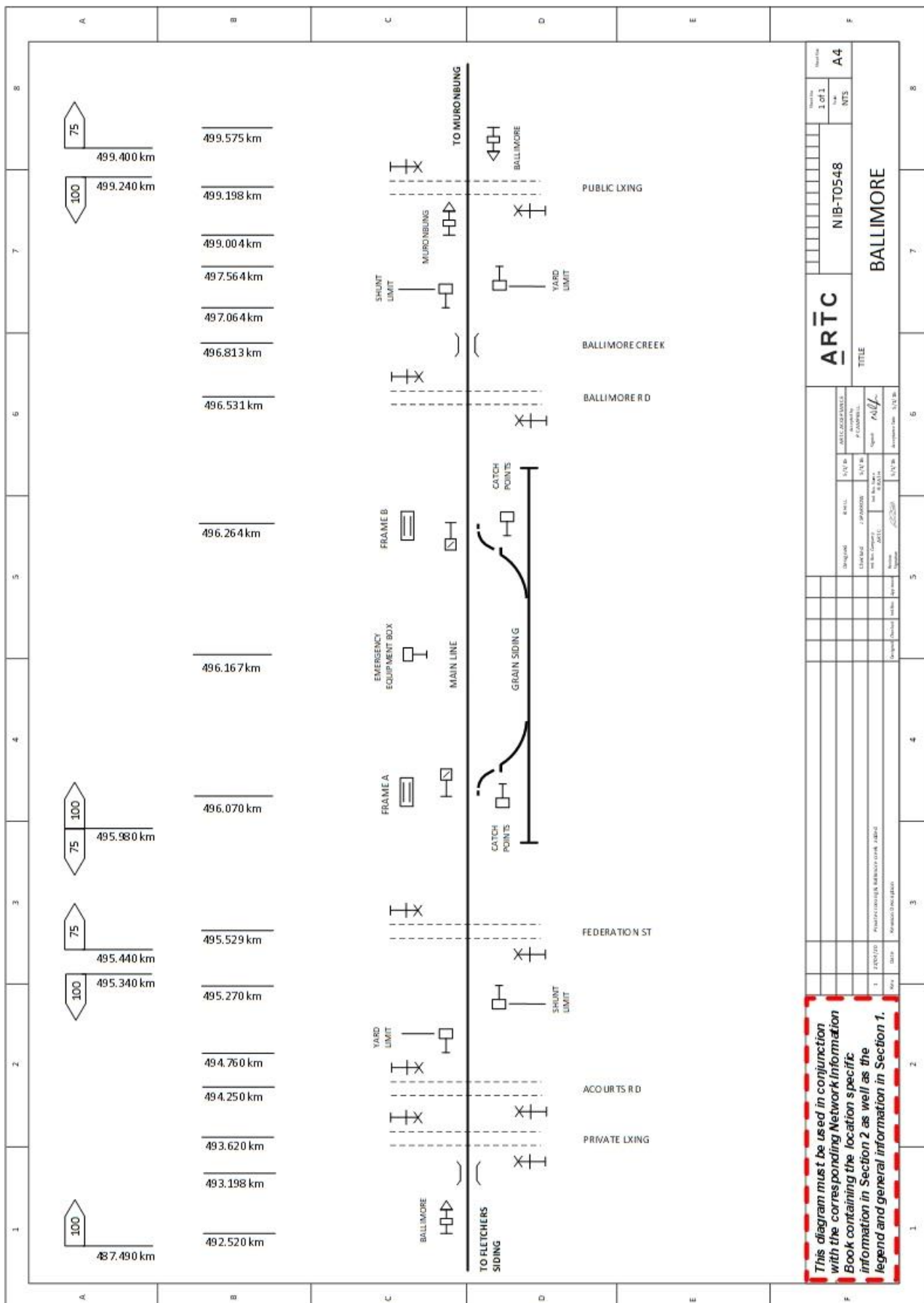
Frame A is unlocked by an Operator's key.

Frame B

Frame B is located on the Down side of the main line adjacent to the points and provides access to the siding.

Frame B is unlocked by an Operator's key.

## Locations and Sections Information



## 2.5 Muronbung (MBG)

### General Arrangements

Muronbung is a Train Order Siding location.

All sidings at Muronbung are clear of Train Order Territory.

Loop length: 519m

### Yard Limits

A YARD LIMIT sign is located at 501.305km to indicate the Muronbung yard limit in the down direction.

A YARD LIMIT sign is located at 504.564km to indicate the Muronbung yard limit in the up direction.

### Shunting Limits

A SHUNT LIMIT sign is provided at 504.064km to indicate the Muronbung shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 501.805km to indicate the Muronbung shunting limit in the up direction.

### Ground Frames

#### Frame B

Frame B is located on the Up side of the main line adjacent to the points and provides access to the siding.

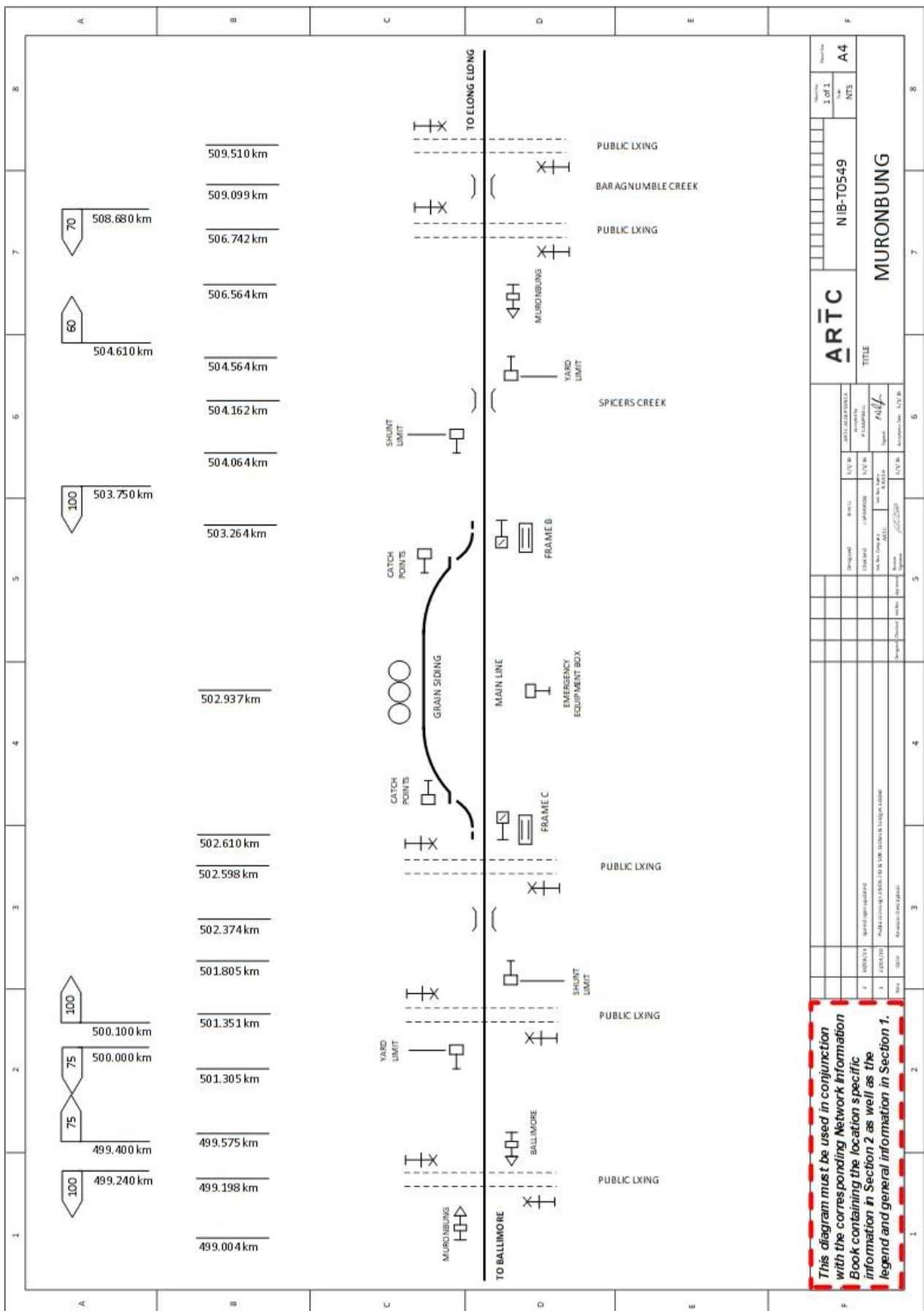
Frame B is unlocked by an Operator's key

#### Frame C

Frame C is located on the Up side of the main line adjacent to the points and provides access to the siding.

Frame C is unlocked by an Operator's key.

## Locations and Sections Information



## 2.6 Elong Elong (ELG)

### General Arrangements

Elong Elong is a Train Order Siding location. All sidings at Elong Elong are clear of Train Order Territory.

Siding length – 635m

Grain Siding length – 289m

### Yard Limits

A YARD LIMIT sign is located at 512.377km to indicate the Elong Elong yard limit in the down direction.

A YARD LIMIT sign is located at 516.136km to indicate the Elong Elong yard limit in the up direction.

### Shunting Limits

A SHUNT LIMIT sign is provided at 515.635km to indicate the Elong Elong shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 512.877km to indicate the Elong Elong shunting limit in the up direction.

### Ground Frames

All interlocked points at Elong Elong are operated from ground frames.

Derails and DERAILED warning signs are installed on the loop siding.

#### Frame B

Frame B is located on the down side of the main line adjacent to the points and provides access to the siding. Frame B is unlocked by an OP1 Operators key. Upon operation of point lever 2B to the reverse position, the key to release Frame C is available if required.

Removal of the key for Frame C will lock lever 2B in the reverse position and Frame B cannot be returned until Frame C has been restored.

#### Frame C

Frame C is located on the up side of the siding adjacent to the points and provides access to the grain siding.

Frame C is unlocked by key from No. 2B lever in Frame B.

#### Frame D

Frame D is located on the down side of the main line adjacent to the points and provides access to the siding. Frame D is unlocked by an OP1 Operators key. Upon operation of point lever 2D to the reverse position, the key to release Frame E is available if required.

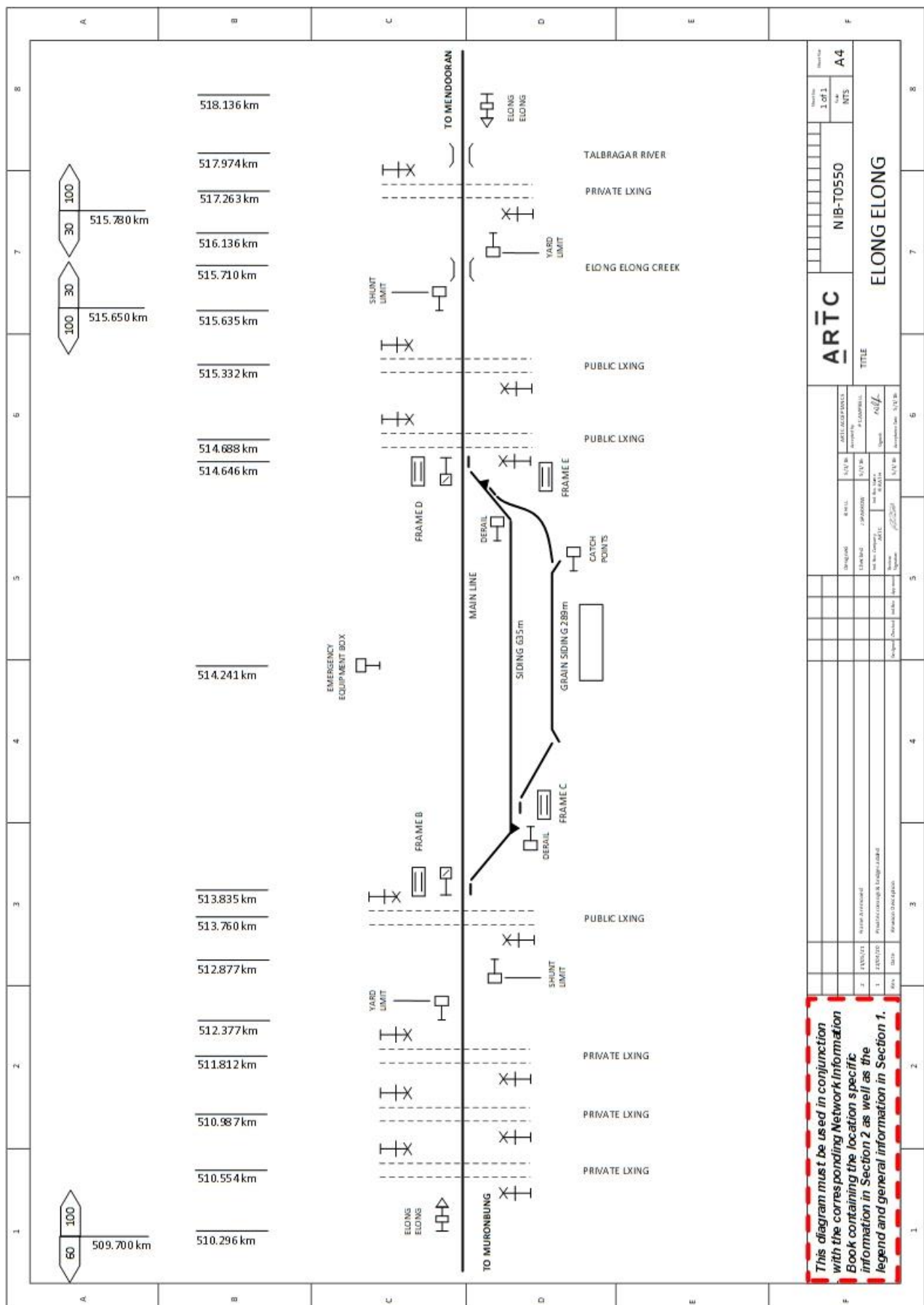
Removal of the key for Frame E will lock lever 2D in the reverse position and Frame D cannot be returned until Frame E has been restored.

#### Frame E

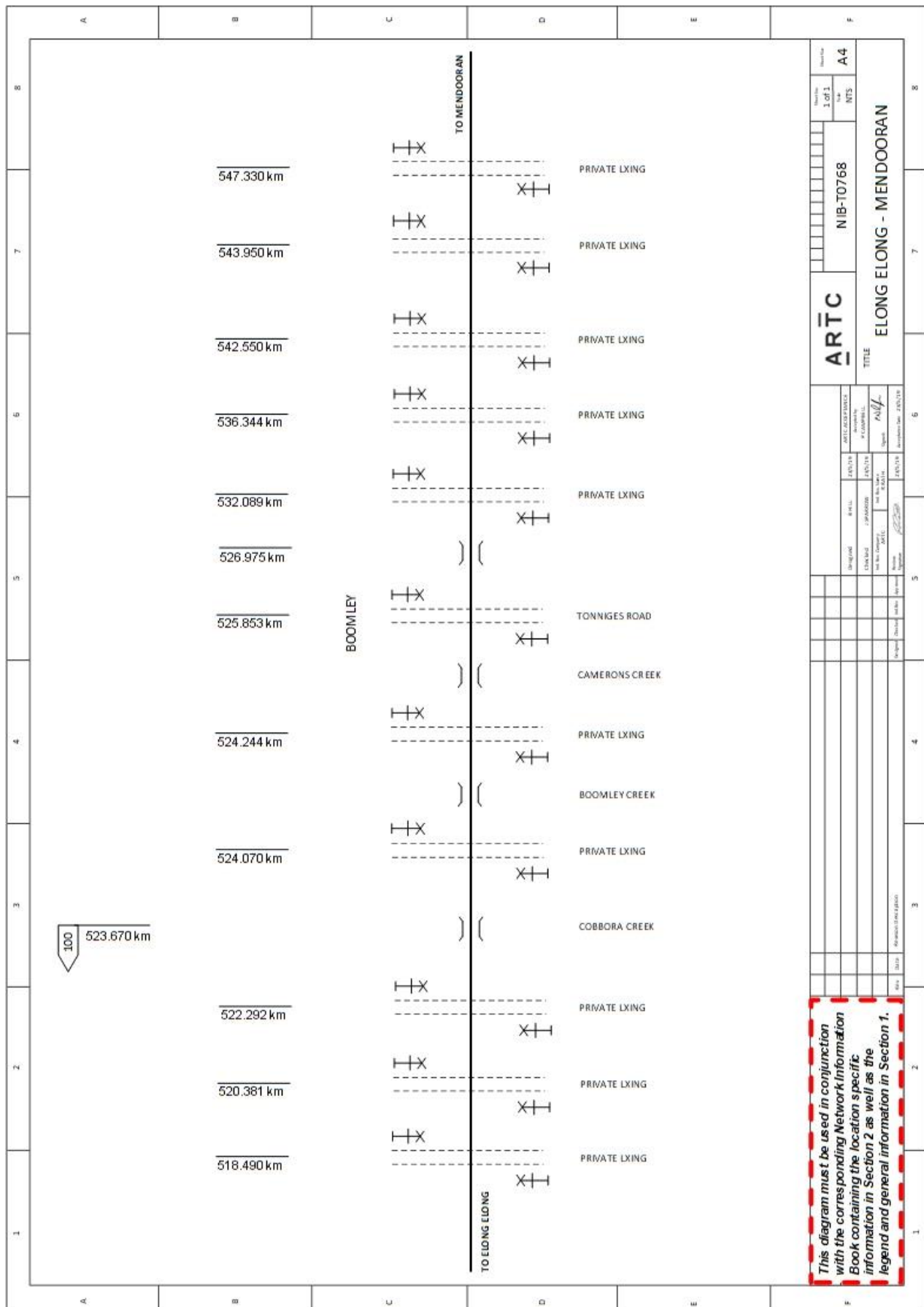
Frame E is located on the up side of the siding adjacent to the points and provides access to the grain siding.

Frame E is unlocked by key from No. 2D lever in Frame D.

## Locations and Sections Information



## Locations and Sections Information



## 2.7 Mendooran (MNO)

### General Arrangements

Mendooran is a Train Order Siding location.

All sidings at Mendooran are clear of Train Order Territory.

Loop length 615m plus 76m shunting neck.

### Yard Limits

A YARD LIMIT sign is located at 549.981km to indicate the Mendooran yard limit in the down direction.

A YARD LIMIT sign is located at 553.475km to indicate the Mendooran yard limit in the up direction.

### Shunting Limits

A SHUNT LIMIT sign is provided at 552.941km to indicate the Mendooran shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 550.515km to indicate the Mendooran shunting limit in the up direction.

### Ground Frames

#### Frame B

Frame B is located on the Down side of the main line adjacent to the points and provides access to the siding.

Frame B is unlocked by an Operator's key

#### Frame C

Frame C is located on the Down side of the main line adjacent to the points and provides access to the siding.

Frame C is unlocked by an Operator's key.

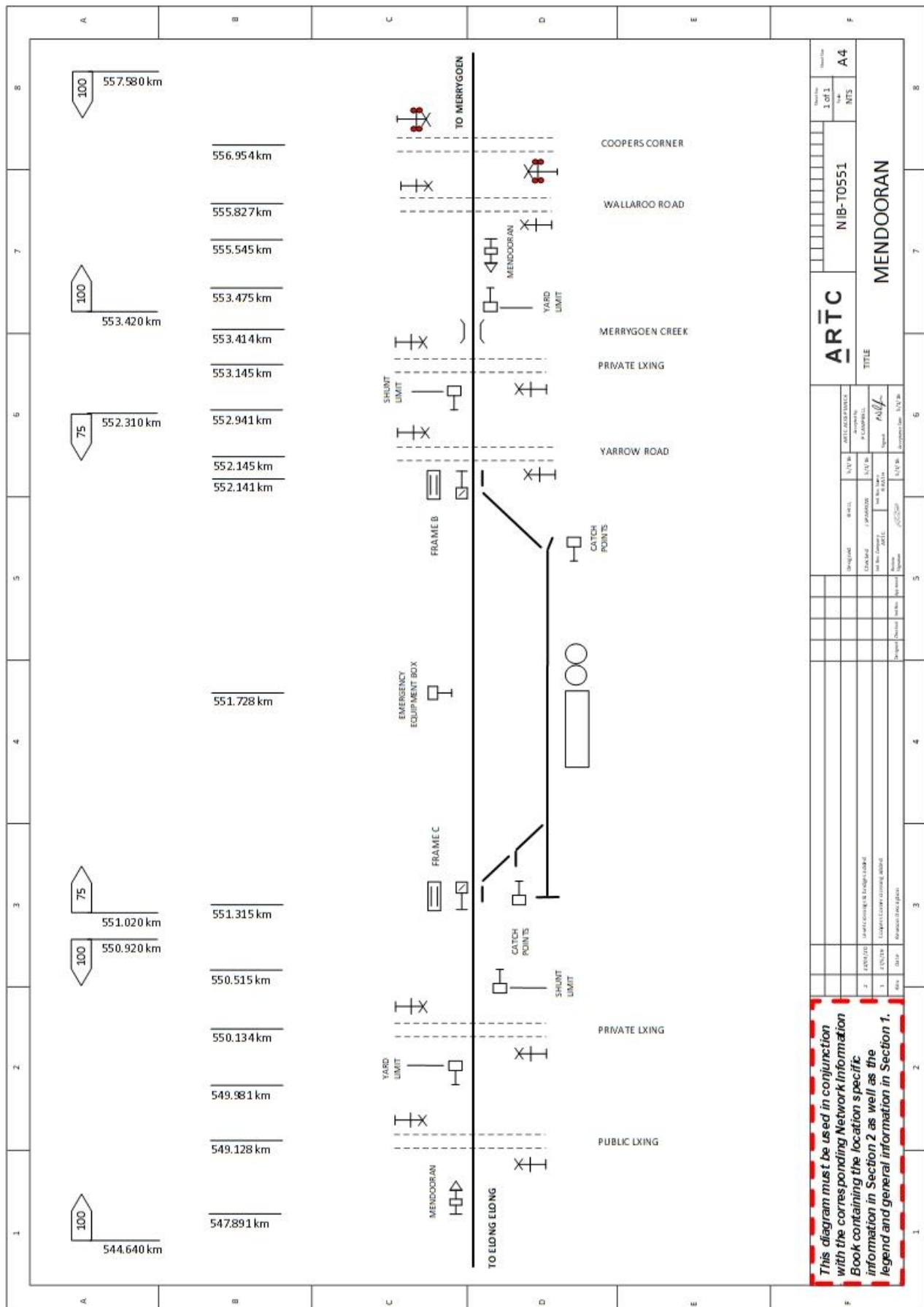
### Coopers Corner Level Crossing

Type F flashing lights with bells are provided at Coopers Corner level crossing at 556.954km.

The warning equipment is automatically controlled by track circuit for Up or Down rail traffic movements on the main line.

A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of Coopers Corner level crossing equipment hut. The manual operation switch MUST be kept closed and secured by an SL lock when not in use.

## Locations and Sections Information



## 2.8 Merrygoen (MRG)

Merrygoen is the junction between the Gulgong to Werris Creek line and the Dubbo to Merrygoen line.

### 2.8.1 General Arrangements

Merrygoen is a Train Order Siding location.

All sidings at Merrygoen are clear of Train Order Territory.

Loop length 1550m (Clearance Point at 417.607km to catch points at 419.157km)

#### Yard Limits

A YARD LIMIT sign is located at 560.000km to indicate the Merrygoen yard limit in the down direction from Dubbo.

A YARD LIMIT sign is located at 415.954km to indicate the Merrygoen yard limit in the down direction from Gulgong.

A YARD LIMIT sign is located at 421.870km to indicate the Merrygoen yard limit in the up direction from Binnaway.

#### Shunting Limits

A SHUNT LIMIT sign is provided at 561.270km to indicate the Merrygoen shunting limit in the up direction towards Dubbo.

A SHUNT LIMIT sign is provided at 416.454km to indicate the Merrygoen shunting limit in the up direction towards Gulgong.

A SHUNT LIMIT sign is provided at 421.370km to indicate the Merrygoen shunting limit in the down direction towards Binnaway.

#### Ground Frames

##### Frame F

Frame F is a 2-lever frame which is located on the up side of the Main line on the Sydney Side of 2F crossover and is released by an Operators Key.

##### Frame E

Frame E is a 3-lever frame which is located on the up side of the Main Line on the Country Side of 2E Crossover and is released by an operators key.

Frame E lever 3 will release a key for Frame D.

##### Frame D

Frame D is located on the down side of the siding adjacent to the southern points and provides access to the sidings.

Frame D is unlocked by a key from Frame E lever 3.

##### Frame A

Frame A is a 2-lever frame located on the up side of the Main Line adjacent to the northern points and provides access to the loop.

Frame A is released by an Operators Key

## Locations and Sections Information

## Frame B

Frame B is a 2-lever frame located on the down side of the Loop Line and provides access to the grain siding.

Frame B is released by an Operators Key.

## Frame C

Frame C is located on the down side of the siding adjacent to the northern points and provides access to the goods siding.

Frame C is released by an Operators Key.

## 2.8.2 Merrygoen Long Trains Procedure

On occasions, trains reverse or cross at Merrygoen, that are longer than the loop line allows, and so the train is occupying both the loop and the main lines. When a train is longer than the crossing length permits, the Train Order System requires a particular process to be followed to ensure safe operation.

If there is only a single train reversing direction, then no special process is required. However, if there are two trains and neither can be locked away clear of Train Order territory, the Network Controller is permitted to show one train “clear of the Main” provided a “Road Occupancy” is placed on the Main.

When the procedure is used, the first train to depart must be shown on the Main, with the other train being shown “in the siding”.

### Intermodal Long Trains

Occasionally, Pacific National intermodal trains run Goobang Junction to Gulgong via Merrygoen, due to closedowns. This special procedure allows two long trains to reverse direction at Merrygoen. The Network Controller is permitted to show one train “clear of the Main” provided a “Road Occupancy” is placed on the Main.

Pacific National cross two long trains with the assistance of extra competent workers and an extra set of suitable locomotives. The first long train (Up or Down) “AAA” to arrive proceeds towards Binnaway end of yard and proceeds no further than the Merrygoen Down Shunt Limit Sign. This train fulfils its Train Authority and is issued a Location Authority (LA).

The second long train “BBB” arrives at the Yard Limit Sign, and will be issued a Proceed Restricted Authority (PRA). After consulting with train “AAA”, train “BBB” proceeds slowly through the yard towards Binnaway section, until rear of train is clear of the turnouts. Under authority of the Location Authority, the spare locomotives are then attached to the rear of this train. Then train “BBB”s PRA is fulfilled on the “Main”.

The original locomotives from train “BBB” now attach to the rear of train “AAA”. Then the Location Authority can be fulfilled, showing train “AAA” in the “siding”, but placing a “Road Occupancy” on the Main to protect train “AAA”.

Ensuring that PTOS is updated with the first locomotive change, a “Proceed Authority with shunt access” will be issued to train “BBB” to depart. Train “BBB” now sets the road and departs.

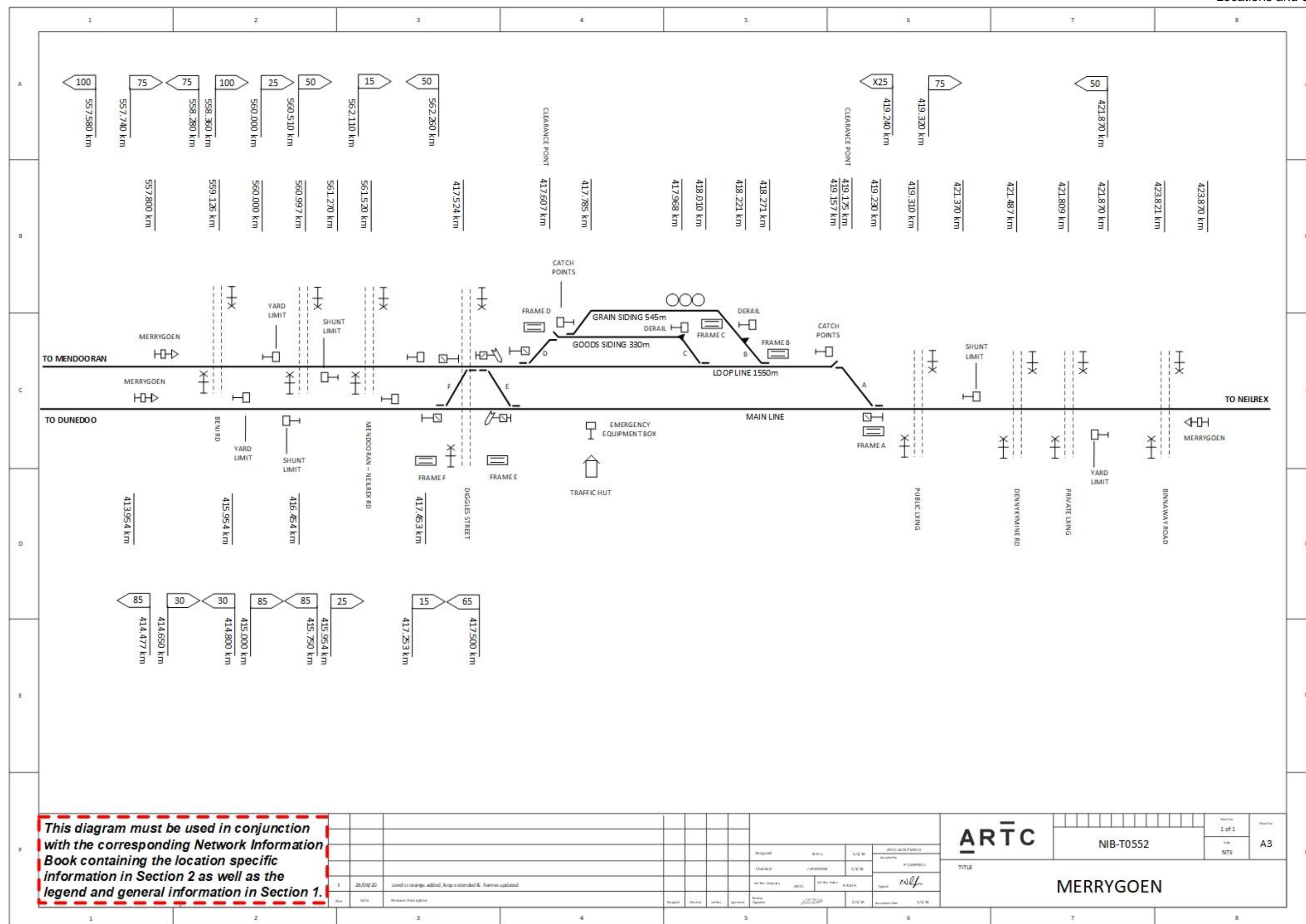
After Train “BBB” has reported departure and ensuring that PTOS is updated with the locomotive change for train “AAA”, a Proceed Authority with shunt access will be issued. Train “AAA” proceeds into the section until the rear locomotives are near the turnouts. These locomotives are

## Locations and Sections Information

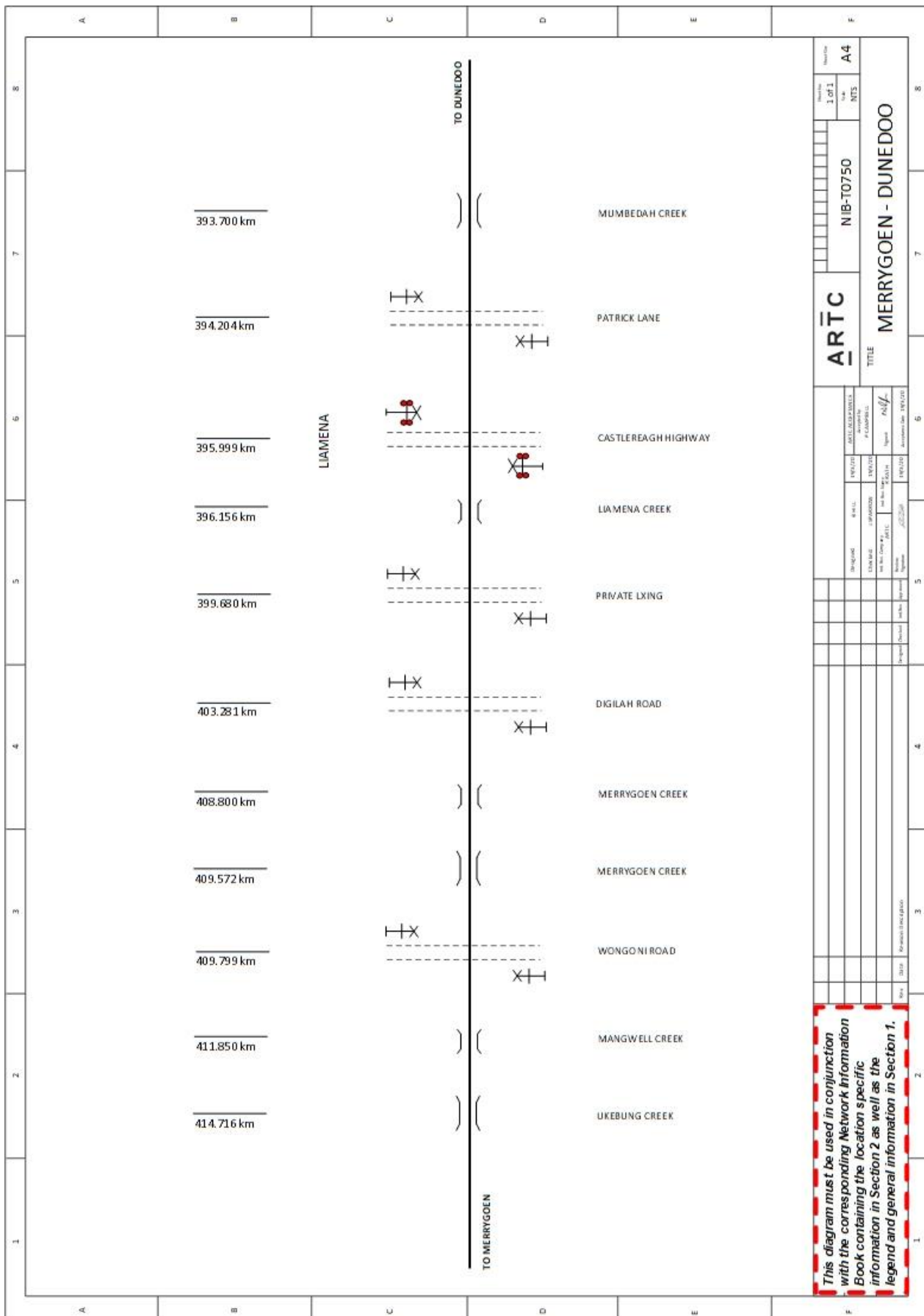
now detached and run-around to the front of the train or stowed in the siding for the next train. The Departure Report cannot be taken until the spare locomotives are clear of the main.

If only one long train needs to reverse direction at Merrygoen, the train proceeds towards Binnaway until rear of train is clear of the turnouts. Under Shunt Access or a Location Authority, the spare locomotives are now attached to the rear of this train.

Once PTOS is updated with the locomotive change, a Proceed Authority with shunt access will be issued. This train proceeds into the section until the rear locomotives are near the turnouts. These locomotives are now detached and run-around to the front of the train or stowed in the siding for the next train. The Departure Report cannot be taken until the spare locomotives are clear of the main.



## Locations and Sections Information



## 2.9 Dunedoo (DND)

### General Arrangements

Dunedoo is a Train Order Siding location.

All sidings at Dunedoo are clear of Train Order Territory.

Loop length 729m

### Yard Limits

A YARD LIMIT sign is located at 386.203km to indicate the Dunedoo yard limit in the down direction.

A YARD LIMIT sign is located at 390.241km to indicate the Dunedoo yard limit in the up direction.

### Shunting Limits

A SHUNT LIMIT sign is provided at 389.261km to indicate the Dunedoo shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 386.803km to indicate the Dunedoo shunting limit in the up direction.

### Ground Frames

#### Frame B

Frame B is located on the Down side of the main line adjacent to the crossover and provides access to the Grain siding.

Frame B is unlocked by key from Duplex Lock B that is located next to the Frame. Duplex Lock B is unlocked by Operators' Key.

#### Frame D

Frame D is located on the Up side of the main line adjacent to the crossover and provides access to the Perway siding.

Frame D is unlocked by key from Duplex Lock D that is located next to the Frame. Duplex Lock D is unlocked by Operators' Key.

#### Frame C

Frame C is located on the Up side of the main line adjacent to the crossover and provides access to the Grain siding.

Frame C is unlocked by key from Duplex Lock C that is located next to the Frame. Duplex Lock C is unlocked by Operators' Key.

### Shunting Arrangements at Dunedoo

Rail Traffic required to shunt at Dunedoo will be required to obtain the release from Duplex Lock B, D or C. Taking Duplex Lock B, D or C will cancel X MLI and provided the area over Sullivan Street Level crossing is clear the level crossing will be prevented from operating if the rail traffic shunts onto the approach track.

Shunter's pushbuttons (Level Crossing Start / Cancel) are located adjacent to X MLI. Rail Traffic shunting across Sullivan Street must use the pushbutton to activate the level crossing protection.

Following shunting movements the Competent Worker must restore all duplex locks prior to departure.

## Locations and Sections Information

Rail Traffic departing in the Up direction **must** clear X MLI via the MLI pushbutton (MLI Set / Cancel) provided at X MLI. Pressing the 'Set' button will operate Sullivan Street level crossing and after 15 seconds X MLI will clear.

If the movement is not proceeded with, the warning indications **must** be cancelled by pressing the "Cancel" in the MLI pushbutton units.

All pushbutton units **must** be kept closed and secured by an SL lock when not in use.

**Sullivan Street Level Crossing**

Type F flashing lights with bells are provided at Sullivan Street level crossing at 387.570km.

The warning equipment is automatically controlled by track circuits for Up and Down rail traffic movements on the main line.

For Up direction trains X MLI will provide a pulsating white indication indicating that Sullivan Street level crossing will operate on approach.

A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of Sullivan Street level crossing equipment hut. The manual operation switch **MUST** be kept closed and secured by an SL lock when not in use.

**Racecourse Road Level Crossing**

Type F flashing lights with bells are provided at Racecourse Road level crossing at 389.501km.

The warning equipment is automatically controlled by track circuits for Up and Down rail traffic movements on the main line.

A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of Racecourse Road level crossing equipment hut. The manual operation switch **MUST** be kept closed and secured by an SL lock when not in use.

**Emergency Equipment Box**

An emergency equipment box is provided on Up side of the main line.

The box is secured by SL lock.

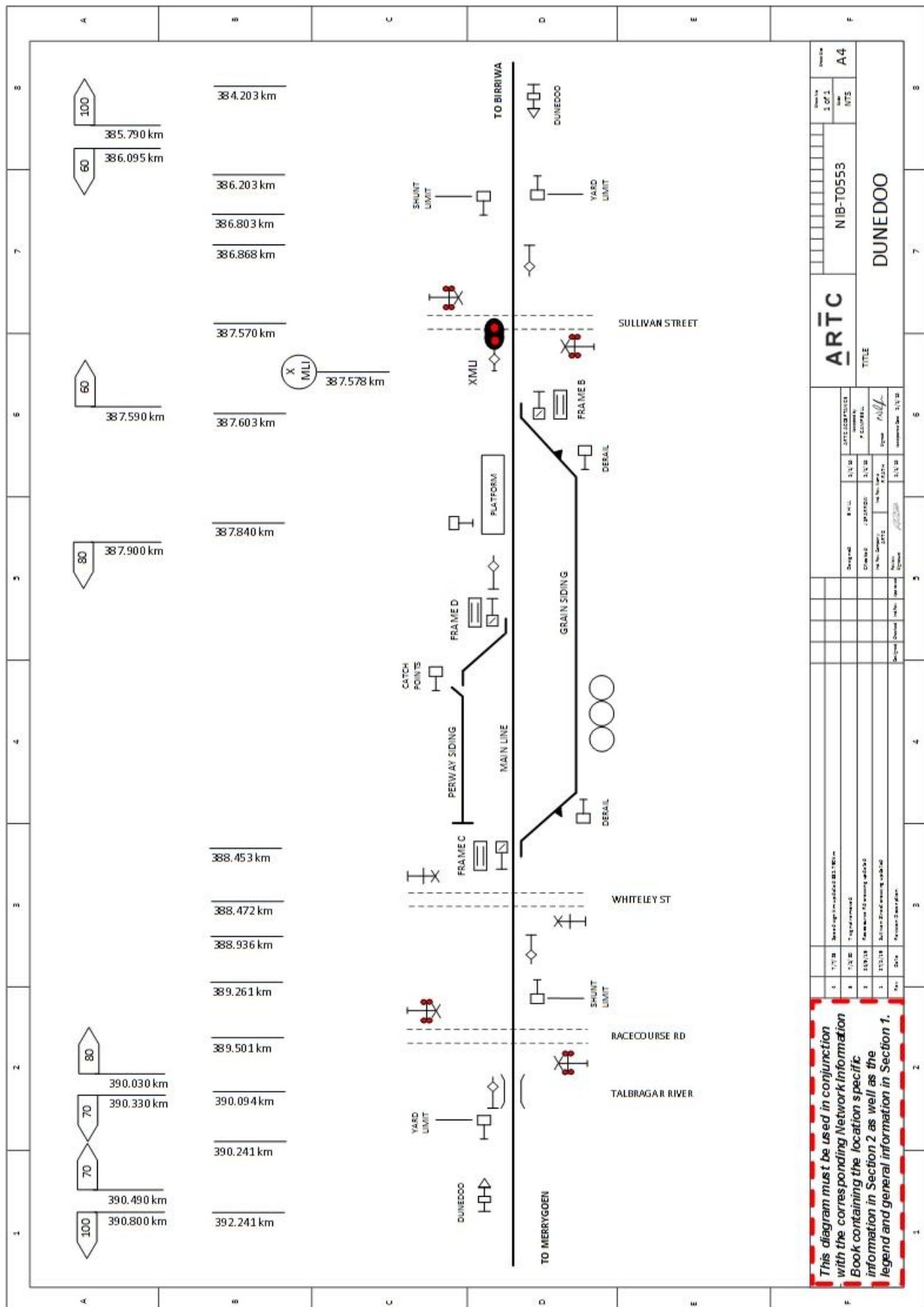
**Derails on Loop Siding**

Derails working in conjunction with Nos. 2B and 2C main line points are provided at each end of the loop siding. Reflectorised notice boards inscribed "Derail" are provided adjacent to each derail.

Vehicles may be left in the loop siding for loading, provided that the following instructions are carried out:

- When programming wheat loading operations at Dunedoo that will involve vehicles being left in the loop siding, the Network Controller NCCN must be advised of the working in sufficient time to ensure that train crossings are not programmed at Dunedoo.
- When vehicles are left in the loop siding, the train crew must advise the Network Controller that the vehicles are in place with sufficient brakes applied and give an assurance that the derails are in the normal position.
- When vehicles are removed from the siding, the train crew must advise the Network Controller that the loop siding is clear.

## Locations and Sections Information



## 2.10 Birriwa (BRW)

### General Arrangements

Birriwa is a Train Order Siding location.

All sidings at Birriwa are clear of Train Order Territory.

Loop length 542m

### Yard Limits

A YARD LIMIT sign is located at 368.950km to indicate the Birriwa yard limit in the down direction.

A YARD LIMIT sign is located at 372.203km to indicate the Birriwa yard limit in the up direction.

### Shunting Limits

A SHUNT LIMIT sign is provided at 371.703km to indicate the Birriwa shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 369.450km to indicate the Birriwa shunting limit in the up direction.

### Ground Frames

Frame A

Frame A is located on the Up side of the main line adjacent to the crossover and provides access to the Grain siding.

Frame A is unlocked by key from Duplex Lock A that is located next to the Frame. Duplex Lock A is unlocked by Operators' Key.

Frame C

Frame C is located on the Up side of the main line adjacent to the crossover and provides access to the Grain siding.

Frame C is unlocked by key from Duplex Lock C that is located next to the Frame. Duplex Lock C is unlocked by Operators' Key.

### Craboon Road Level Crossing

Type F flashing lights with bells are provided at Trunk Road 55 level crossing at 370.215km.

The warning equipment is automatically controlled by track circuits for Up and Down rail traffic movements on the main line.

For Up direction rail traffic, X MLI will provide a pulsating white indication indicating that Castlereagh Hwy level crossing will operate on approach.

A manual operation switch for use by Competent Workers in accordance with the instructions detailed in ARTC Network Rule ANGE 218 is installed on the side of Craboon Road level crossing equipment hut. The manual operation switch MUST be kept closed and secured by an SL lock when not in use.

**Shunting Arrangements at Birriwa**

Rail Traffic required to shunt at Birriwa will be required to obtain the release from Duplex Lock A or C. Taking Duplex Lock A or C will cancel X MLI and provided the area over Castlereagh Hwy Level crossing is clear the level crossing will be prevented from operating if the rail traffic shunts onto the approach track circuit.

Shunter's pushbuttons (Level Crossing Start / Cancel) are located adjacent to X MLI. Rail Traffic shunting across Castlereagh Hwy must use the pushbutton to activate the level crossing protection.

Following shunting movements the Competent Worker must restore Duplex Lock A and C prior to departure.

Rail Traffic departing in the Up direction must clear X MLI via the MLI pushbutton (MLI Set / Cancel) provided at X MLI. Pressing the 'Set' button will operate Castlereagh Hwy level crossing and after 15 seconds X MLI will clear.

If the movement is not proceeded with, the warning indications must be cancelled by pressing the "Cancel" in the MLI pushbutton units.

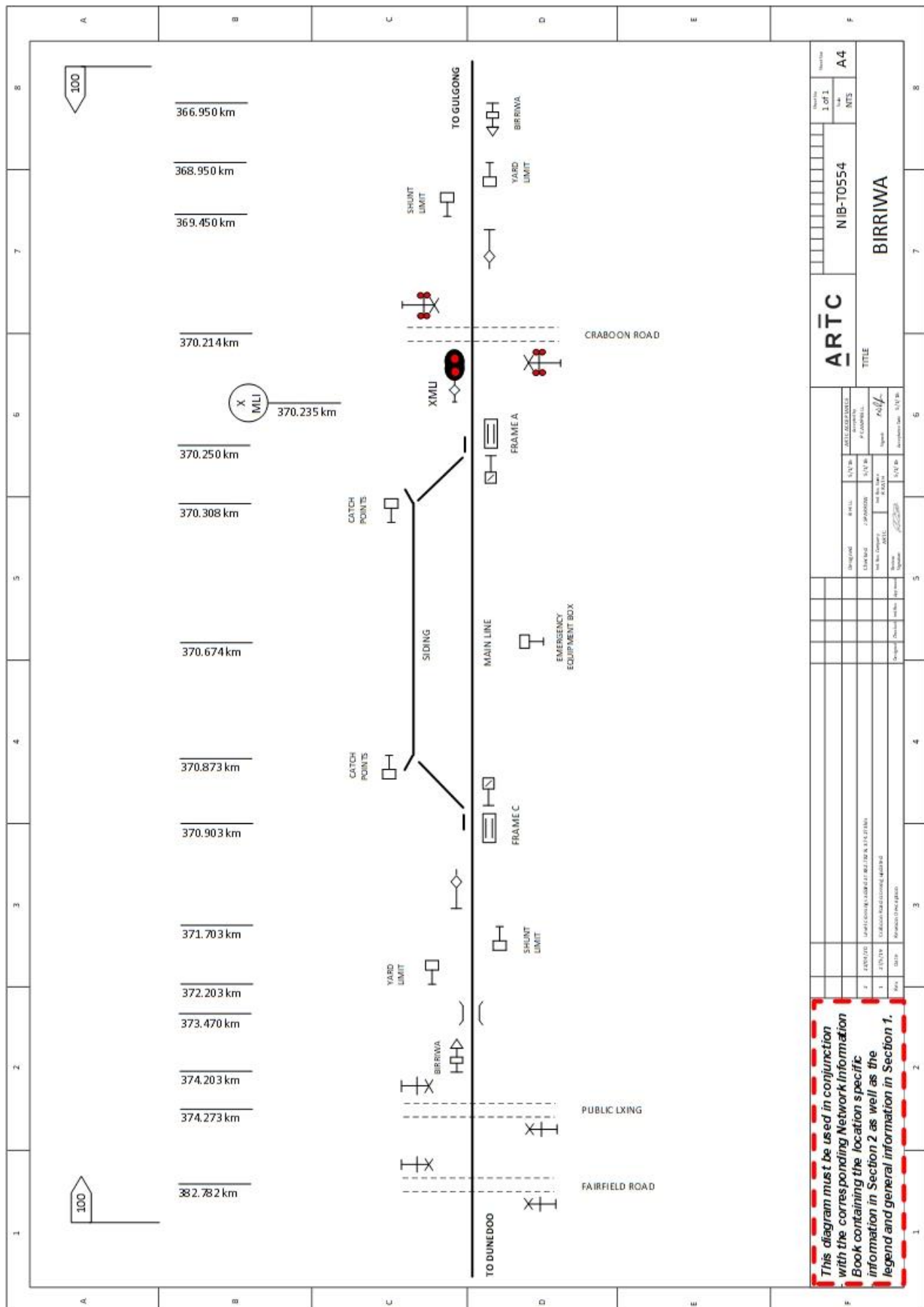
All pushbutton units must be kept closed and secured by an SL lock when not in use.

**Emergency Equipment Box**

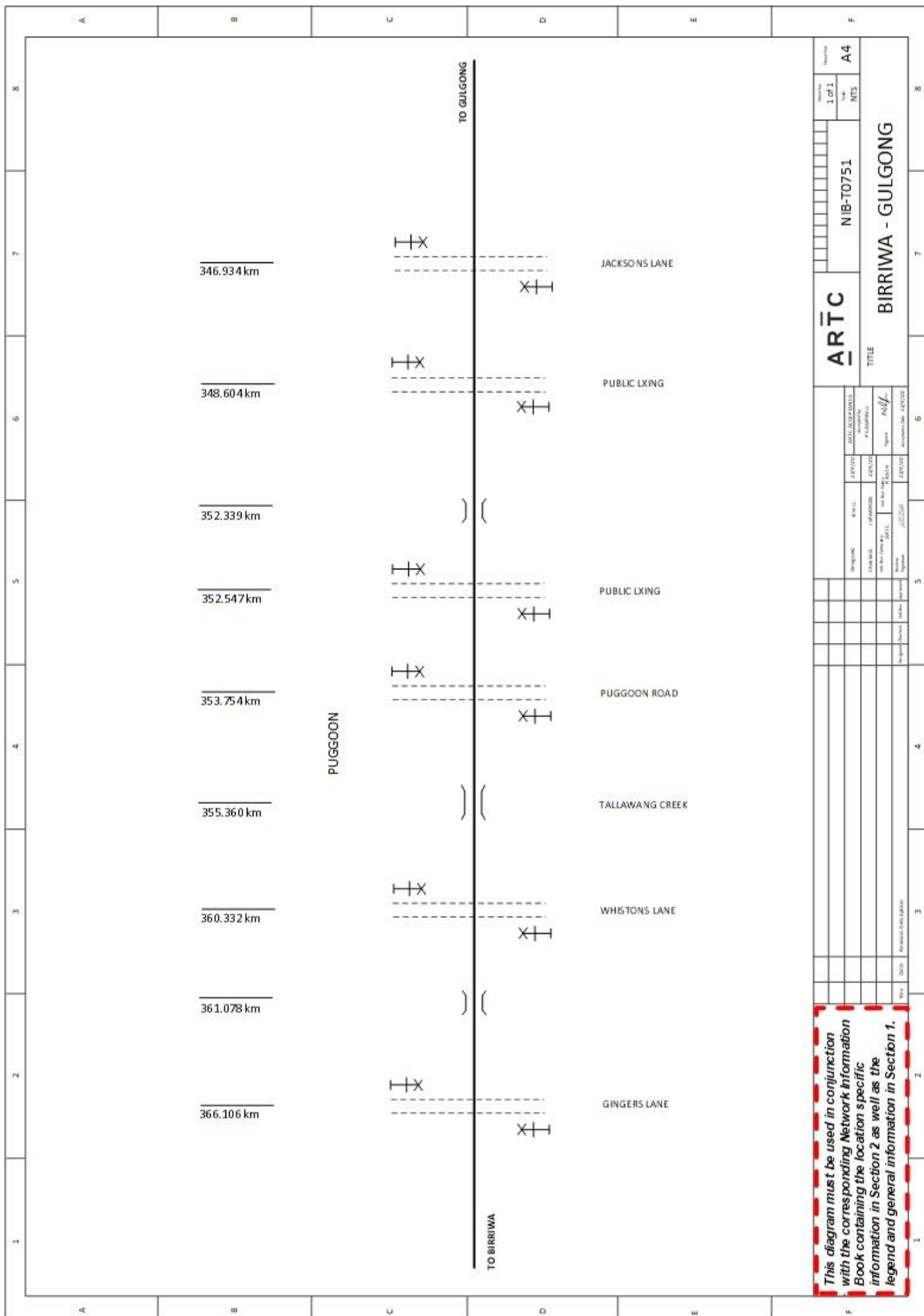
An emergency equipment box is provided on the Down side of the Main line.

The box is secured by SL lock.

## Locations and Sections Information



## Locations and Sections Information



## 2.11 Gulgong North

### General Arrangements

Gulgong North is a Train Order Interface location.

Gulgong North and Gulgong are discreet locations separated by back to back Yard Limit Signs.

There is no section between these locations.

### Begin and End Train Orders

An END TRAIN ORDER WORKING sign is located on GG2 signal at 340.981km to indicate the end of Train Order Working in the Up direction.

A BEGIN TRAIN ORDER WORKING sign is located at 340.981km to indicate the start of Train Order Working in the Down direction.

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*NOTE: Drivers travelling between Gulgong and Gulgong North must be in possession of a Train Authority. Trains required to shunt between Gulgong and Gulgong North must have a Proceed Authority with shunt access.*

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### Yard Limits

A YARD LIMIT sign is located at 343.000km to indicate the Gulgong North yard limit in the up direction.

### Shunting Limits

A SHUNT LIMIT sign is provided at 341.925km to indicate the Gulgong North shunting limit in the down direction.

## 2.12 Gulgong (GLG)

Gulgong is the junction of the Mudgee to Merrygoen line and the Ulan to Gulgong line. Track kilometres change at the station, with 460.680km via Ulan and 340.636km via Mudgee, continuing onto Merrygoen and beyond.

### General Arrangements

Gulgong is an unattended permissive yard location controlled from A Frame. There is track circuiting from GG5 to GG2 signals and Rail Vehicle Detection System from Up Starter GG8 to Ulan.

Gulgong is clear of Train Order Territory but back-to-back with Gulgong North TOW location.

Gulgong has been defined as a non-junction location, with stop blocks on the disused Mudgee line.

Up starting signal GG8 for the Gulgong to Ulan section is controlled from the Network Control Centre North.

All other signals are controlled by rail traffic crew operating A Frame at Gulgong.

For track vehicles under the control of Protection Officers, no signal is to be passed at stop without the Protection Officer undertaking a risk assessment and gain permission to enter the yard from Network Control. Protection Officers permitting rail traffic to pass GG2 or GG4 signal at stop must first operate the level crossing by using the Operators Push Button near B frame and ensure the level crossing warning equipment operates for a minimum of 30 seconds prior to rail traffic movement towards the level crossing.

Loop length 681m

### Begin and End Train Orders

An END TRAIN ORDER WORKING sign is located on GG2 signal at 340.981km to indicate the end of Train Order Working in the Up direction.

A BEGIN TRAIN ORDER WORKING sign is located at 340.981km to indicate the start of Train Order Working in the Down direction.

### Yard Limits

A YL/EYL sign is located on GG5 signal at 459.792km (via Ulan) to indicate the Gulgong yard limits in the down direction.

A YARD LIMIT sign is located at 343.000km to indicate the Gulgong North yard limit in the up direction.

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**NOTE:** Drivers travelling between Gulgong and Gulgong North must be in possession of a Train Authority. Rail traffic required to shunt between Gulgong and Gulgong North must have a Proceed Authority with shunt access.

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### TOA & LPA Permissive Yards

#### Safeworking Arrangements

Where the location of a proposed Track Occupancy Authority (TOA) for a fixed worksite or a track vehicle movement or a Local Possession Authority (LPA) includes or extends into an Unattended Location where Permissive Yard Limits exist, the section either side of the Unattended Location must also be included within the limits of the TOA or LPA.

## Locations and Sections Information

This requirement is to ensure that rail traffic cannot approach the Permissive Yard Limit of an Unattended Location and will apply where signals exist to define the Yard Limit of the Location.

## Exceptions

This requirement will not apply to a worksite within an unattended location where the points can be secured to prevent access to the portion of track within the TOA or LPA limits.

Where a worksite is located within or a track vehicle journey extends into an Unattended Junction Location where one or both branch lines are terminal lines and the Network Controller confirms that there is no rail traffic on the lines it will not be necessary to obtain a TOA or LPA for the adjacent sections on the terminal line or lines.

**Shunting Limits**

A SHUNT LIMIT sign is provided at 341.925km to indicate the Gulgong North shunting limit in the down direction.

**Operation of Points and Signals****Ground Frames**

All interlocked points at Gulgong are operated from ground frames, which are released by keys from frame A.

Frame A is located near the traffic hut at the station platform. It contains the operating keys for B, C & E frames.

## Frame B

Frame B is located on the Up side of the main line adjacent to the points and provides access to the loop and goods siding.

Frame B is unlocked by a key from No. 3 lever in frame A.

## Frame C

Frame C is located on the Down side of the main line adjacent to the points and provides access to the loop. Frame C is detected reversed by RVDS and displayed at Network Control.

Frame C is unlocked by a key from No. 3 lever in frame A.

## Frame E

Frame E is located on the Down side of the Mudgee Branch line adjacent to the crossover and provides access to the Loop line and the Goods siding.

No. 4 lever in frame E is unlocked by a key from No. 3 lever in frame A.

**Working of Rail Traffic**

## Down Through Traffic

- GG5 signal must not be passed until Network Control gives permission to enter the Yard irrespective of indication.
- Once permission to enter the yard has been obtained from Network Control, the rail traffic may proceed to A Frame.
- Obtain the appropriate Authority for the following section and manipulate A Frame to clear GG4 Signal which will also activate the level crossing for 15 seconds prior to GG4 clearing.

## Locations and Sections Information

## Down Traffic Entering the Loop line

- Stop at GG5 Signal.
- GG5 signal must not be passed until Network Control gives permission to enter the Yard irrespective of indication
- Obtain the key for C Frame from A Frame.
- Operate C Frame to set the road for the Loop. As the competent person in charge of the yard at that point, allow the rail traffic to proceed into the Loop.
- Restore C frame to normal and return key to A frame

## Down Traffic Departing the Loop line

- Gain authority from Network Control to operate A Frame.
- Obtain key for B frame from A frame. Set the road from Loop to Main Line.
- Use the Operators Push button adjacent to B frame to activate the level crossing. Ensure the level crossing warning equipment operates for a minimum of 30 seconds prior to rail traffic movement towards the level crossing.
- Proceed to main line with appropriate Authority.
- Restore B frame to normal and return key to A frame.

## UP Through Traffic

- Stop at GG2 Signal and obtain permission to enter the yard from Network Control.
- Walk to A frame and clear GG2 signal which will activate the level crossing for 15 seconds prior to GG2 clearing.
- Rail traffic can then proceed to GG8 signal and obey the indication.

## Up Traffic Entering the Loop or Goods Siding

- Stop at GG2 Signal and obtain permission from Network Control to enter the yard.
- Walk to A frame and obtain the key for B Frame. Operate B frame to set the road for the Loop or Goods Siding.
- Activate the level crossing by using the Operators Push Button adjacent to B Frame and ensure the level crossing operates for a minimum of 30 seconds prior to rail traffic movement towards the level crossing.
- As the competent person in charge of the yard at that point, allow the rail traffic to proceed into the Loop or Goods Siding.
- Restore B Frame to normal and return key to A Frame

## Up Traffic Departing the Loop Line

- Gain authority from Network Control to operate A Frame
- Obtain C Frame key from A frame. Set C Points to Main line.
- Request Network Control to clear GG8 signal for departure.
- Once GG8 signal has cleared, rail traffic may proceed.
- Restore C frame to normal and return key to A frame.

**Signage**

"DO NOT PROCEED BEYOND THIS SIGNAL UNLESS AUTHORISED BY THE NETWORK CONTROLLER" signage is provided on GG5 and GG2 signals. Rail Traffic Crews must obtain the Network Controllers authority prior to entering the Gulgong Yard Limits.

**Station Street Level Crossing**

Type F flashing lights and bells are provided at Station Street level crossing at 340.925km.

The warning equipment is automatically controlled by track circuit for Down and Up rail traffic, subject to the clearance of the signals on either side of the crossing and can also be manually controlled by an operator's pushbutton unit for rail traffic shunting at Gulgong.

If rail traffic approaches Down signal GG4 or Up home signal GG2 at stop, the setting of the applicable signal route will cause the level crossing warning indicators to be displayed but clearing of the signals will be delayed for 15 seconds.

If it becomes necessary to hold rail traffic at either GG4 or GG2 signal after the signal has been cleared, the level crossing warning indicators will continue to be displayed for a period of 120 seconds after the signal is returned to stop and will then cancel automatically.

**Operator's Pushbutton Unit for the Level Crossing**

An operator's pushbutton unit is provided in a box adjacent to frame B.

When a shunting movement is required which will obstruct the level crossing, the Competent Worker must unlock the operator's pushbutton unit and depress the "Start" pushbutton for one second to cause the warning equipment to operate. Ensure warning indications operate for 30 seconds before handsignalling the rail traffic over the crossing.

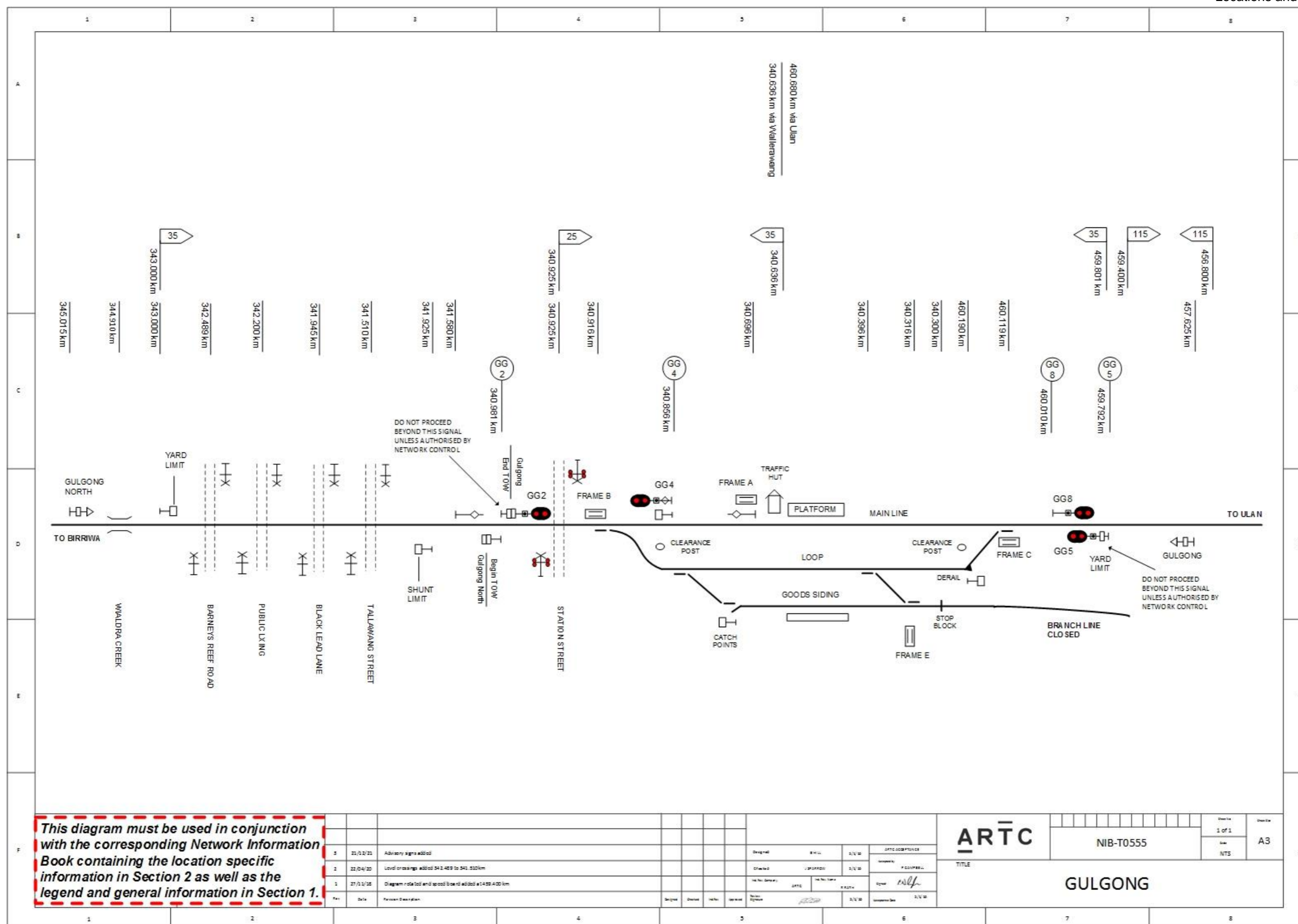
The warning indications will be cancelled automatically when the rear of the shunting movement has cleared the level crossing.

If the movement is not proceeded with, the warning indications must be cancelled by pressing the "Cancel" pushbutton in the operator's pushbutton unit for one second.

The operator's pushbutton unit must be kept closed and secured by an SL lock when not in use.

**Manual Operation for Station Street Level Crossing Warning Equipment**

A manual operation switch is provided on the outside of the Station Street level crossing equipment hut. The manual operation switch is unlocked by SL key and provided for use by Qualified Workers in accordance with ARTC Network Rule ANGE 218 'Type F Level Crossing Management', Procedures ANPR 715 'Protecting Type F Level Crossings' and ANPR 717 'Using Emergency Roadside Warning Equipment'.



### 3 Werris Creek (The Gap) to Neilrex Section

#### 3.1 Werris Creek (The Gap)

Werris Creek (The Gap) is a junction at the down end of Werris Creek yard between the Muswellbrook to North Star line and the Werris Creek to Binnaway line.

##### **Begin and End Train Orders**

An END TRAIN ORDER WORKING sign is located at 416.028km (599.720km from Binnaway) to indicate the end of Train Order Working in the Up direction.

A BEGIN TRAIN ORDER WORKING sign is located at 416.028km to indicate the start of Train Order Working in the Down direction.

Werris Creek signal 15-62 (416.028km) is the end of TOW and begin Yard Limit for Werris Creek.

Werris Creek signal 15-61 will display a pulsating white Band of Lights when cleared for the route towards Binnaway. Signal 15-61 is remotely controlled by NCCN North board and 15-61 signal will only be cleared once rail traffic is in possession of a Train Authority.

##### **Shunting Limits**

A SHUNT LIMIT sign is provided at 415.978km to indicate the Werris Creek shunting limit in the down direction towards Binnaway.

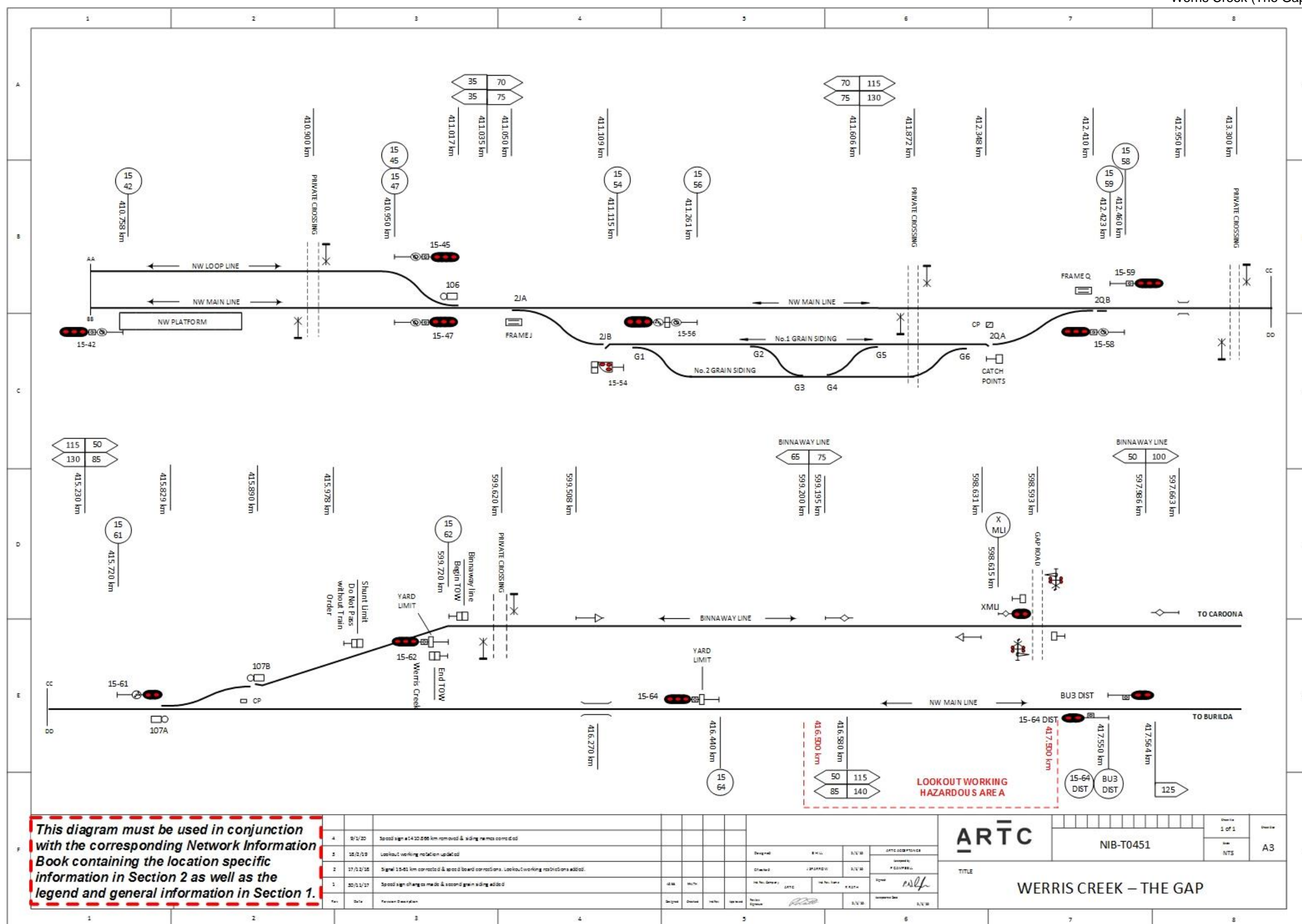
##### **Gap Road Gap Level Crossing**

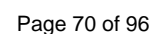
Type F flashing lights bells and half boom barriers are provided at the Gap Road level crossing at 598.593km. Automatic activation via axle counters.

X MLI facing Up trains at 598.615km will normally display a pulsating white aspect. X MLI will display a Red aspect when a train is occupying the crossing track circuit or the Down approach track circuit.

##### **Breeza Road Bakana Level Crossing**

Type F flashing lights and bells are provided at the Breeza Road (Kamilaroi Highway) level crossing at 592.581km. Automatic activation via axle counters.





### 3.2 Carroona (CCO)

#### **General Arrangements**

Carroona is a Train Order Siding location.

All sidings at Carroona are clear of Train Order Territory.

Loop length: 405m

#### **Yard Limits**

A YARD LIMIT sign is located at 580.352km to indicate the Carroona yard limit in the down direction.

A YARD LIMIT sign is located at 583.520km to indicate the Carroona yard limit in the up direction.

#### **Shunting Limits**

A SHUNT LIMIT sign is provided at 583.020km to indicate the Carroona shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 580.907km to indicate the Carroona shunting limit in the up direction.

#### **Ground Frames**

Frame E

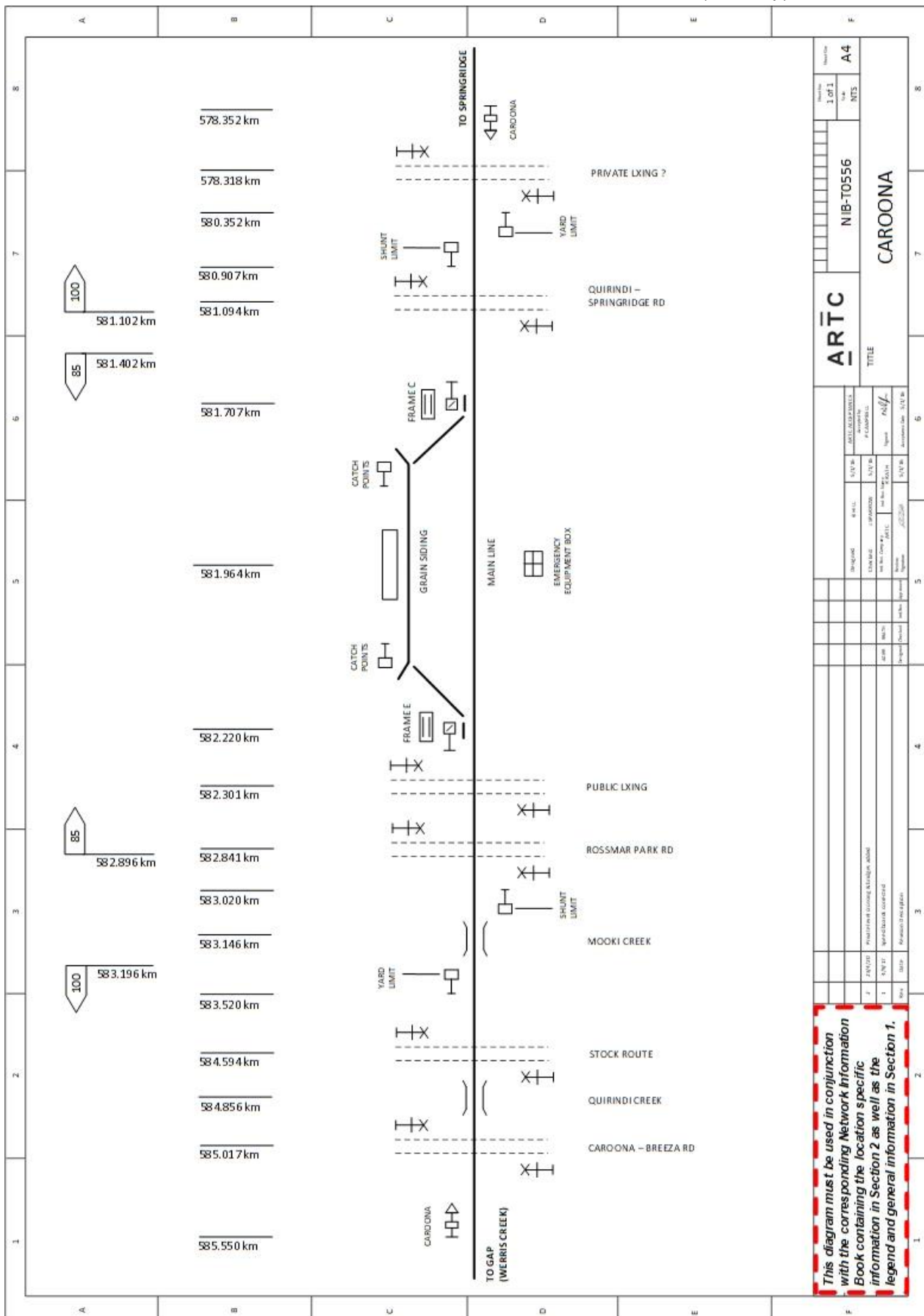
Frame E is located on the Down side of the main line adjacent to the points and provides access to the siding.

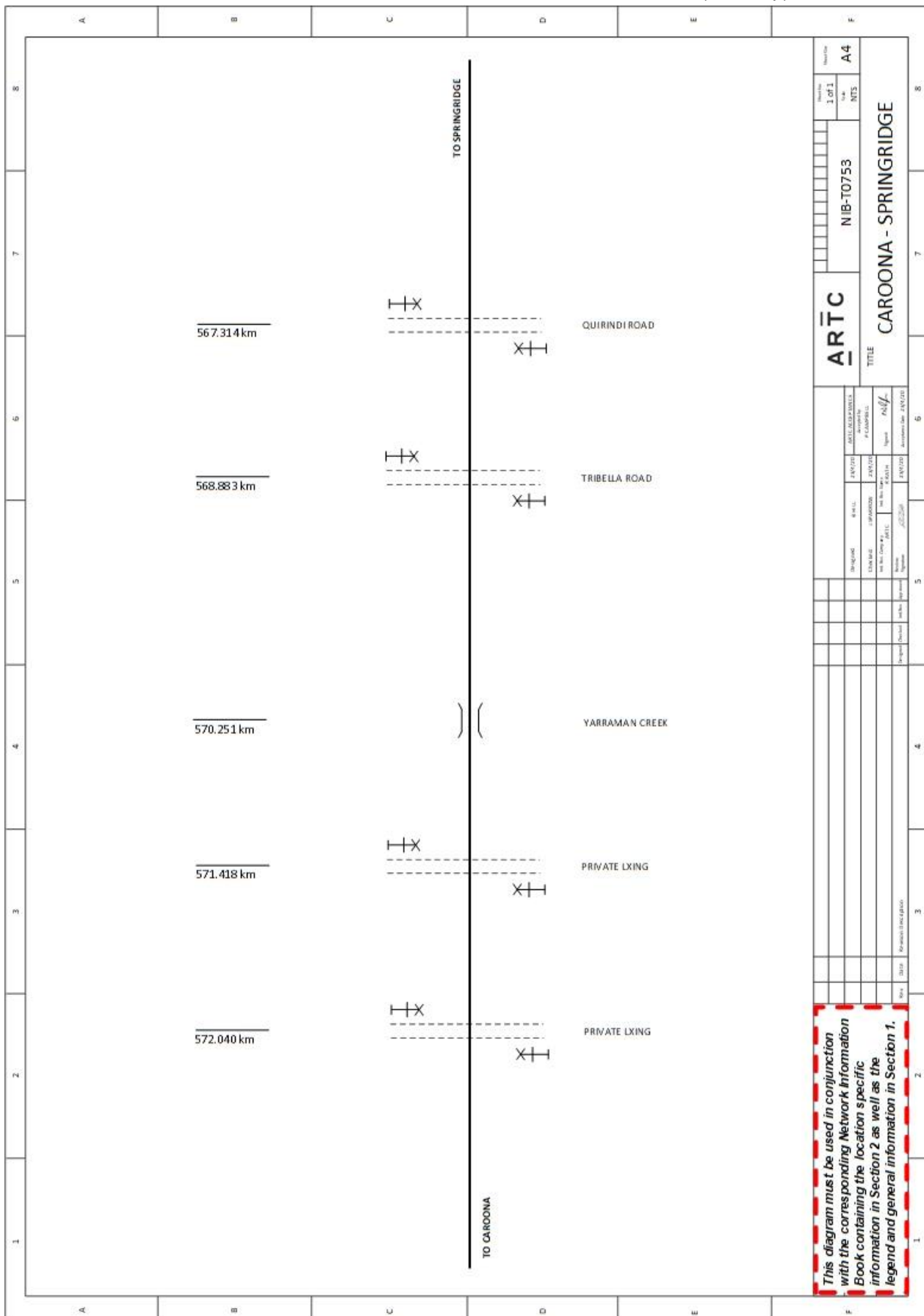
Frame E is unlocked by an Operator's key.

Frame C

Frame C is located on the Down side of the main line adjacent to the points and provides access to the siding.

Frame C is unlocked by an Operator's key.





### 3.3 Springridge (SPR)

#### General Arrangements

Springridge is a Train Order Siding location.

All sidings at Springridge are clear of Train Order Territory.

Loop length: 400m

Siding 1000m

#### Yard Limits

A YARD LIMIT sign is located at 562.640km to indicate the Springridge yard limit in the down direction.

A YARD LIMIT sign is located at 566.229km to indicate the Springridge yard limit in the up direction.

#### Shunting Limits

A SHUNT LIMIT sign is provided at 565.700km to indicate the Springridge shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 563.140km to indicate the Springridge shunting limit in the up direction.

#### Ground Frames

##### Frame B

Frame B is located on the Down side of the main line adjacent to the points and provides access to the loop.

Frame B is unlocked by an Operator's key.

##### Frame C

Frame C is located on the Down side of the main line adjacent to the points and provides access to the siding.

Frame C is unlocked by an Operator's key.

##### Frame E

Frame E is located on the Down side of the main line adjacent to the points and provides access to the loop and the siding.

Frame E is unlocked by an Operator's key.

Lever 1 is released by an operator's key and when pulled reverse restores the MPI to indicate that the points are no longer set and locked, withdraws the Facing Point Lock for 2E points and releases Lever 2

Lever 2 is released by Lever 1 and when pulled reverse sets 2E points reverse, operates the derail reverse (off the rail), and releases Lever 3. This sets the road from the Main Line to the Loop Line.

Lever 3 is released by Lever 2 and when pulled reverse sets 3E crossover reverse. This sets the road from the Main Line to the Siding.

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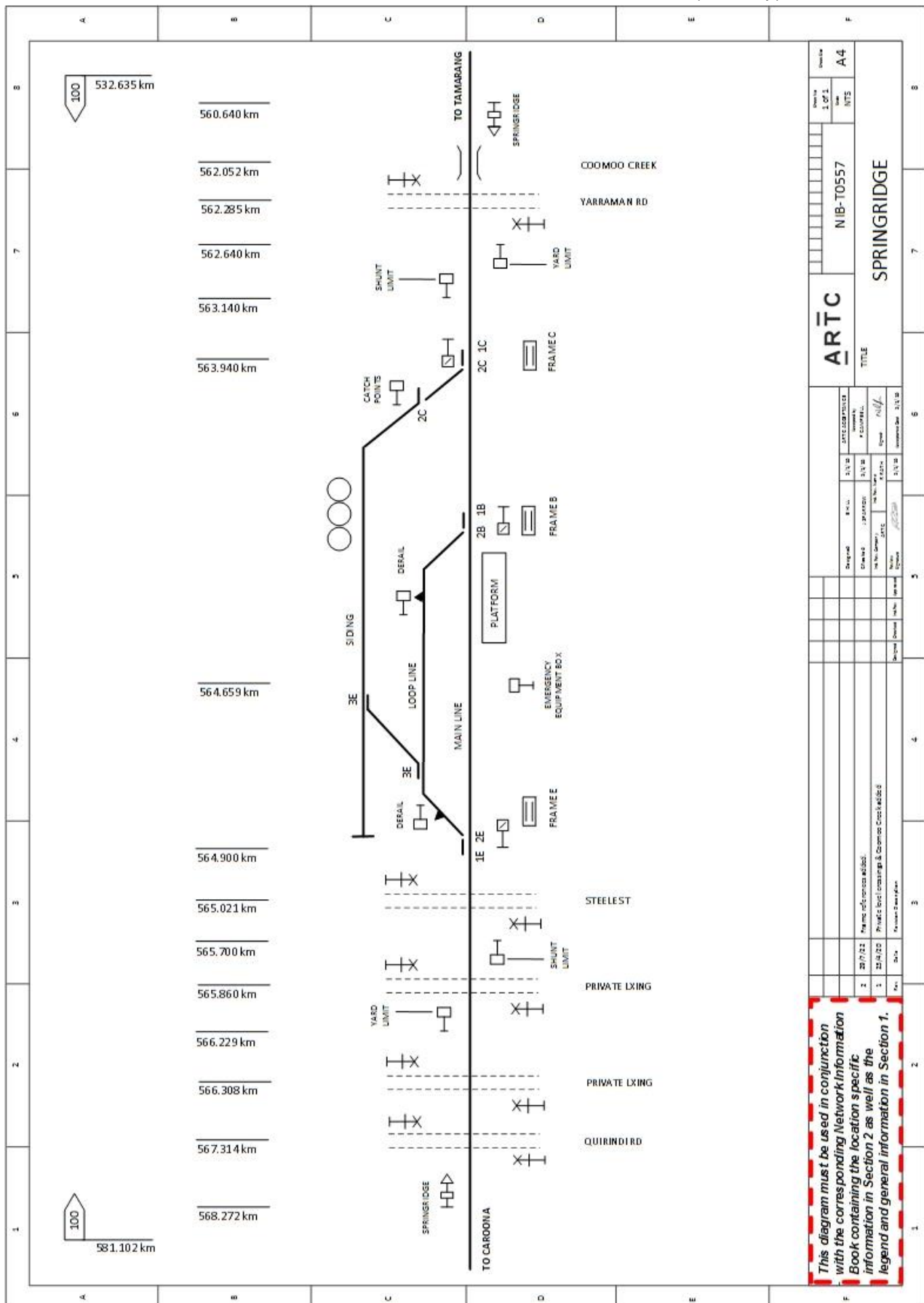
*NOTE: 3E Points are normally set normal. A train in the siding moving in the DN direction would proceed towards the siding stop block.*

*3E points cannot be operated to reverse without 2E points being first set to reverse*

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**Tungenbone Road Level Crossing**

Type F flashing lights, bells and half-booms, are provided at the Tungenbone Road level crossing at 557.336km. Automatic activation via axle counters.



### 3.4 Tamarang (TMR)

#### **General Arrangements**

Tamarang is a Train Order Siding location.

All sidings at Tamarang are clear of Train Order Territory.

Loop length: 383m

#### **Yard Limits**

A YARD LIMIT sign is located at 547.015km to indicate the Tamarang yard limit in the down direction.

A YARD LIMIT sign is located at 550.100km to indicate the Tamarang yard limit in the up direction.

#### **Shunting Limits**

A SHUNT LIMIT sign is provided at 549.600km to indicate the Tamarang shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 547.515km to indicate the Tamarang shunting limit in the up direction.

#### **Ground Frames**

Frame A

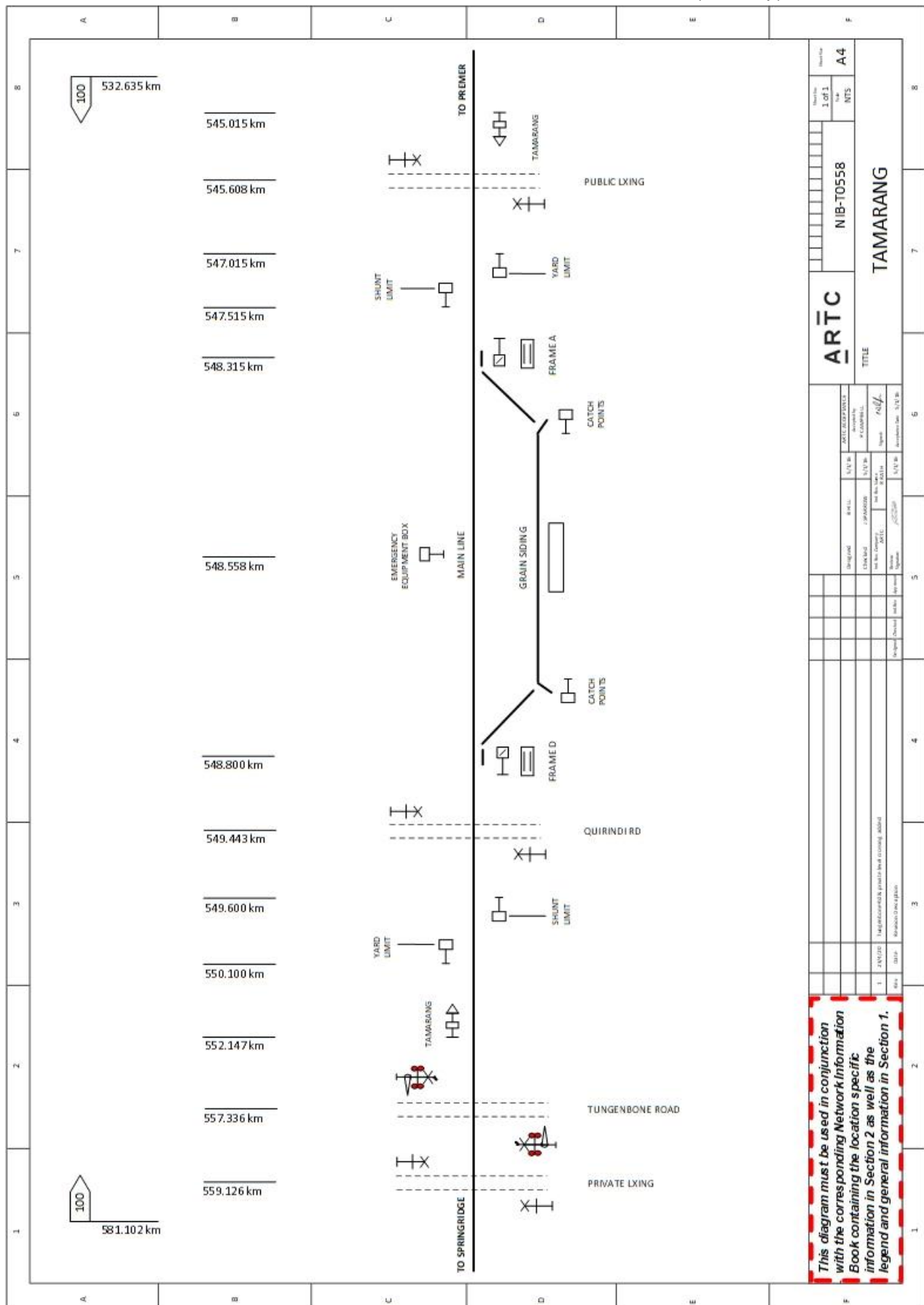
Frame A is located on the Down side of the main line adjacent to the points and provides access to the loop.

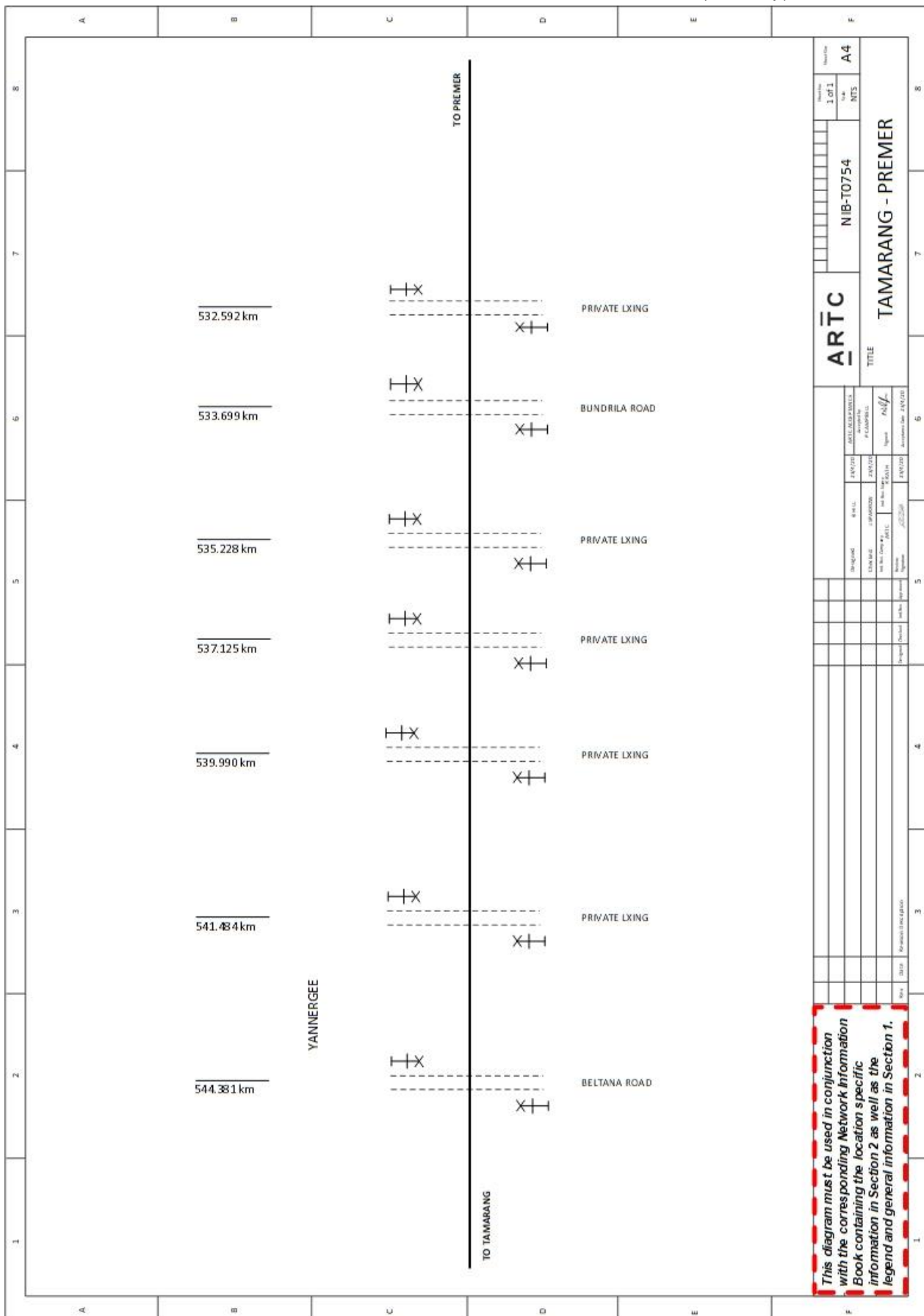
Frame A is unlocked by an Operator's key.

Frame D

Frame D is located on the Down side of the main line adjacent to the points and provides access to the loop and the siding.

Frame D is unlocked by an Operator's key.





### 3.5 Premier (PRE)

#### General Arrangements

Premer is a Train Order Siding location.

All sidings at Premer are clear of Train Order Territory.

Loop length: 489m

Goods siding 226m

Silo siding 600m      Grain siding 700m      total 1300m

#### Yard Limits

A YARD LIMIT sign is located at 525.498km to indicate the Premer yard limit in the down direction.

A YARD LIMIT sign is located at 529.849km to indicate the Premer yard limit in the up direction.

#### Shunting Limits

A SHUNT LIMIT sign is provided at 529.349km to indicate the Premer shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 525.998km to indicate the Premer shunting limit in the up direction.

#### Ground Frames

##### Frame A

Frame A is located on the Down side of the main line adjacent to the points and provides access to the loop.

Frame A is unlocked by an Operator's key.

##### Frame B

Frame B is located on the Down side of the main line adjacent to the points and provides access to the loop.

Frame B is unlocked by an Operator's key.

##### Frame C

Frame C is located on the Down side of the main line adjacent to the points and provides access to the silo road.

Frame C is unlocked by an Operator's key.

##### Frame E

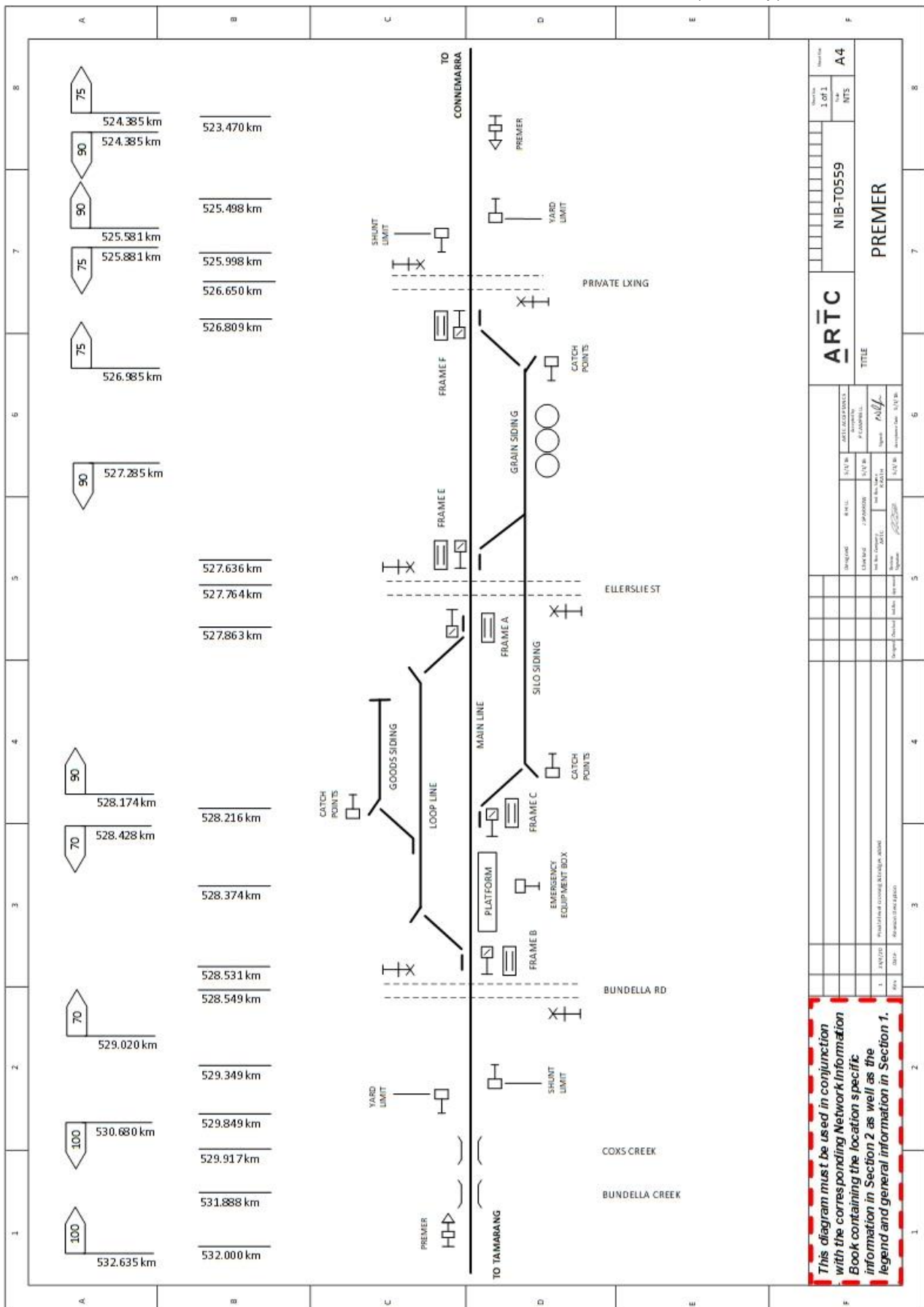
Frame E is located on the Up side of the main line adjacent to the crossover and provides access to the siding.

Frame E is unlocked by an Operator's key.

##### Frame F

Frame F is located on the Up side of the main line adjacent to the points and provides access to the grain siding.

Frame F is unlocked by an Operator's key.



### 3.6 Connemarra (CSP)

#### General Arrangements

Connemarra is a Train Order Siding location.

The dead-end siding at Connemarra is clear of Train Order Territory.

Siding length: 365m

#### Yard Limits

A YARD LIMIT sign is located at 502.000km to indicate the Connemarra yard limit in the down direction.

A YARD LIMIT sign is located at 504.652km to indicate the Connemarra yard limit in the up direction.

#### Shunting Limits

A SHUNT LIMIT sign is provided at 504.152km to indicate the Connemarra shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 502.516km to indicate the Connemarra shunting limit in the up direction.

#### Ground Frames

Frame B is located on the Up side of the main line adjacent to the points and provides access to the siding.

Frame B is unlocked by key from Duplex Lock B that is located next to the Frame.

Duplex Lock B is unlocked by Operators' Key.

#### Black Stump Way Level Crossing

Type F flashing lights with bells and half boom barriers are provided Black Stump Way level crossing at 503.485km.

The warning equipment is automatically controlled by track circuits for Up and Down directional rail traffic on the main line.

For Down direction rail traffic X MLI will provide a pulsating white indication indicating that Black Stump Way level crossing will operate on approach.

Rail Traffic required to shunt at Connemarra will be required to obtain the release from Duplex Lock B. Taking Duplex Lock B will cancel X MLI and provided the area over Black Stump Way level crossing is clear the level crossing will be prevented from operating if the rail traffic shunts onto the approach track.

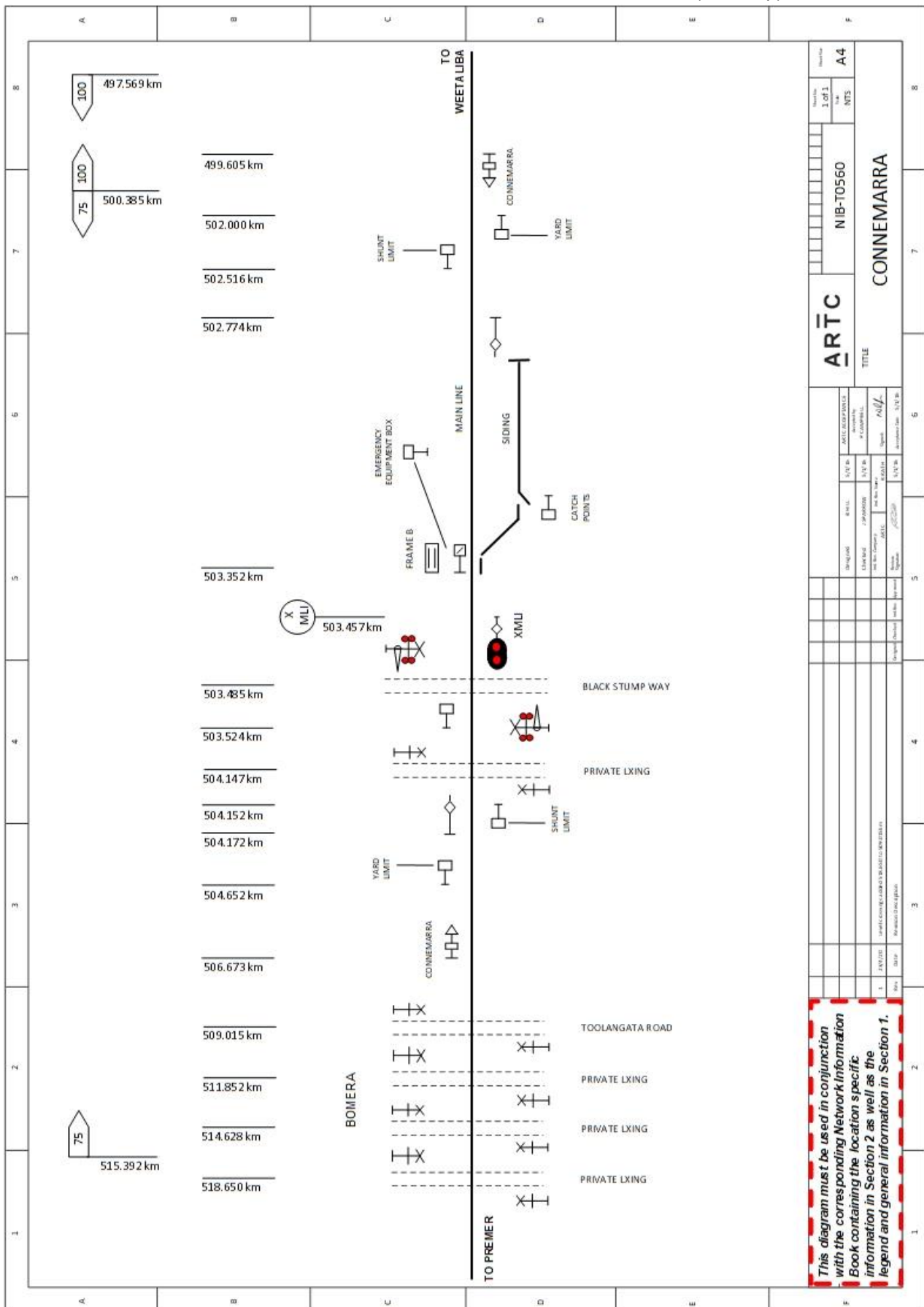
Shunter's pushbuttons (Level Crossing Start / Cancel) are located adjacent to X MLI. Rail Traffic shunting across Black Stump Way must use the pushbutton to activate the level crossing protection.

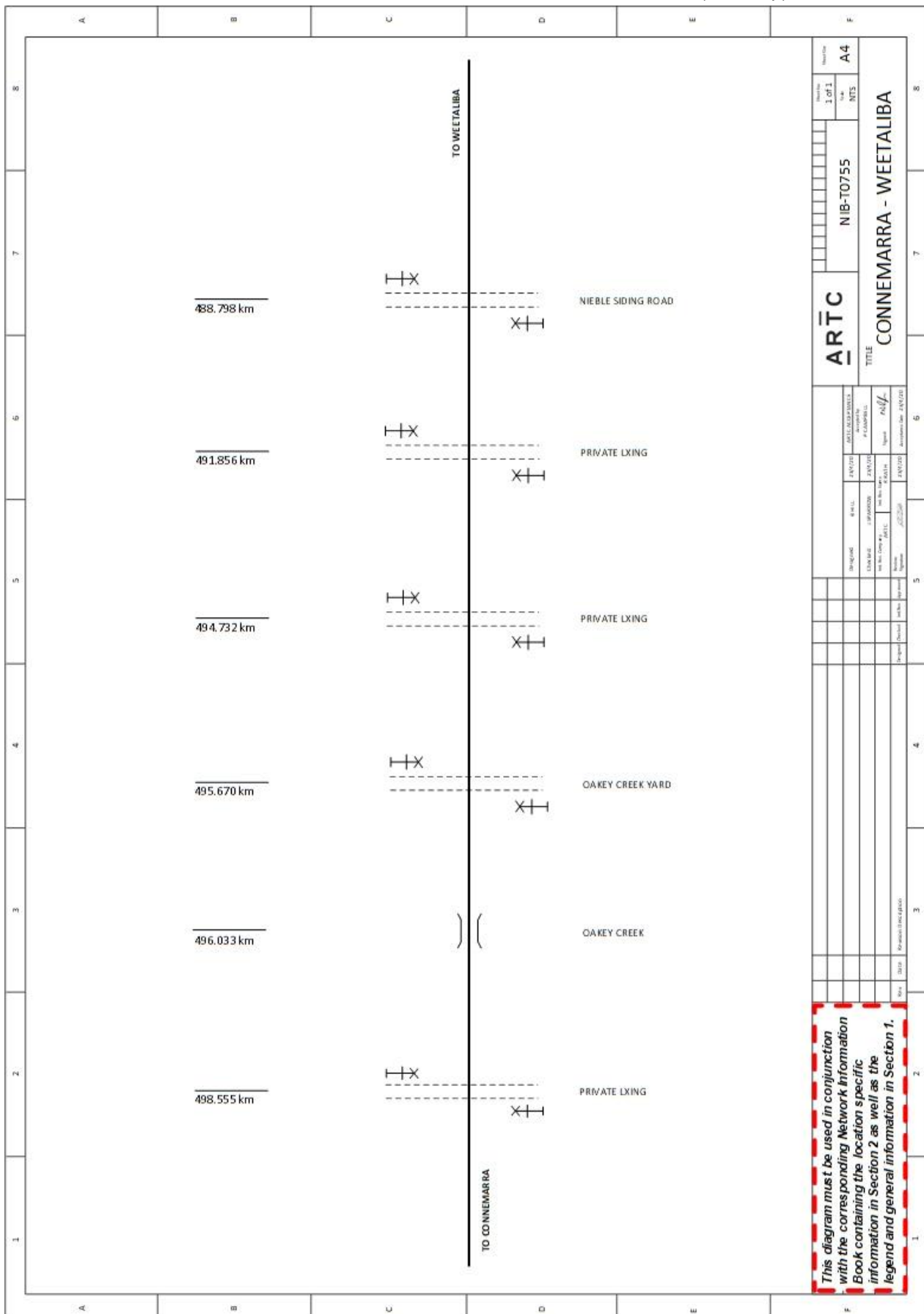
Following shunting movements competent workers must restore Duplex Lock B prior to departure.

Rail Traffic departing in the Down direction must clear X MLI via the MLI pushbutton (MLI Set / Cancel) provided at X MLI. Pressing the 'Set' button will operate Black Stump Way level crossing and after 15 seconds X MLI will clear.

Werris Creek (The Gap) to Neilrex Section

If the movement is not proceeded with, the warning indications must be cancelled by pressing the "Cancel" in the MLI pushbutton units.





### **3.7 Weetaliba (WTL)**

#### **General Arrangements**

Weetaliba is a Train Order Siding location.

All sidings at Weetaliba are clear of Train Order Territory.

Loop length: 437m

#### **Yard Limits**

A YARD LIMIT sign is located at 482.000km to indicate the Weetaliba yard limit in the down direction.

A YARD LIMIT sign is located at 485.177km to indicate the Weetaliba yard limit in the up direction.

#### **Shunting Limits**

A SHUNT LIMIT sign is provided at 484.677km to indicate the Weetaliba shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 482.565km to indicate the Weetaliba shunting limit in the up direction.

#### **Ground Frames**

##### **Frame C**

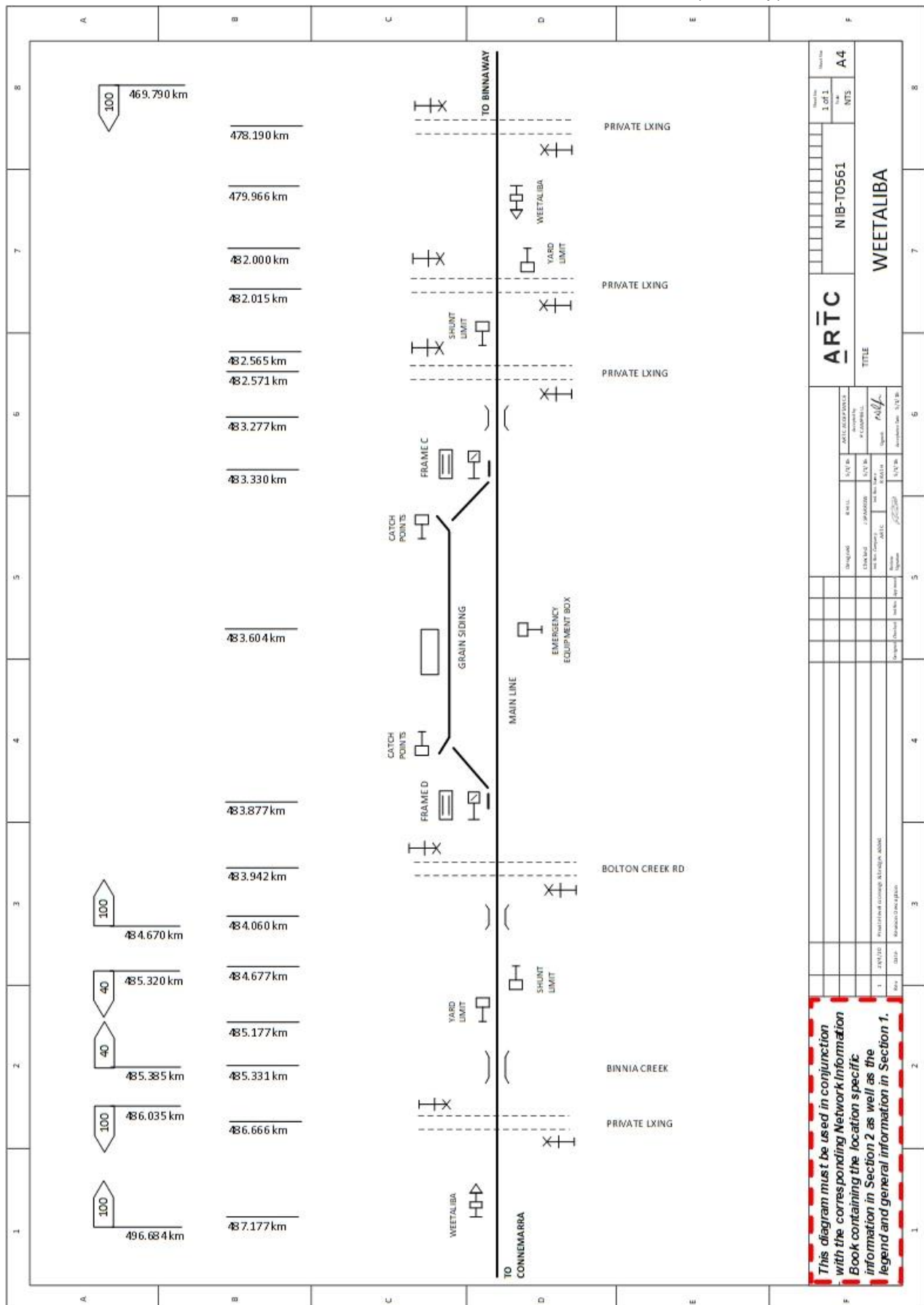
Frame C is located on the Up side of the main line adjacent to the points and provides access to the loop.

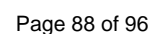
Frame C is unlocked by an Operator's key.

##### **Frame D**

Frame D is located on the Up side of the main line adjacent to the points and provides access to the loop.

Frame D is unlocked by an Operator's key.





### 3.8 Binnaway (BNA)

#### General Arrangements

Binnaway is a Train Order Siding location.

All sidings at Binnaway are clear of Train Order Territory.

Loop length 550m

The line to Gwabegar is closed, with stop blocks installed at northern end of yard.

Binnaway has been declared to be not a junction.

#### Yard Limits

A YARD LIMIT sign is located at 455.320km to indicate the Binnaway yard limit in the down direction from Merrygoen.

A YARD LIMIT sign is located at 460.470km to indicate the Binnaway yard limit in the up direction from Werris Creek.

#### Shunting Limits

A SHUNT LIMIT sign is provided at 459.970km to indicate the Binnaway shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 457.198km to indicate the Binnaway shunting limit in the up direction.

CHECK POSITION OF POINTS signs are located at 458.050km and 459.241km facing arriving trains, as Frame H can be locked either normal or reverse.

#### Ground Frames

All ground frames at Binnaway are unlocked by Operator's Key.

##### Frame F

Frame F is located on the Down side of the main line adjacent to the points and provides access to the Triangle road and the Grain siding.

Lever 2F operates a derailer, with the derailer on rail when points normal.

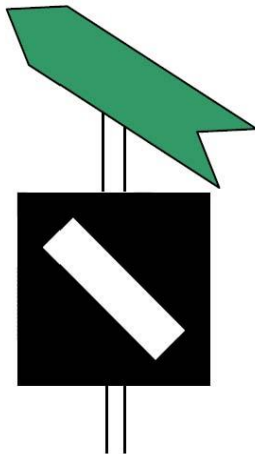
##### Frame H

Frame H is located on the Up side of the main line adjacent to the points and provides access from the Branch line to the Main line.

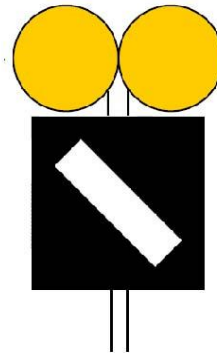
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**NOTE:** *Frame H is provided with a special locking arrangement so that the points may be left locked in either the normal or reverse position to permit a train to be despatched into the section without having to restore the points to normal.*

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Points are set and locked  
for the Main Line to  
Merrygoen



Points are set and locked  
for the Branch Line to  
Werris Creek

## Frame J

Frame J is located on the Up side of the main line adjacent to the points and provides access from the main line to the loop siding.

Lever 2J operates a derailer, with the derailer on rail when points normal.

Frame J can only be locked in the normal position.

## Frame K

Frame K is located on the Down side of the loop siding adjacent to the crossover and provides access from the loop siding to the silo siding.

## Frame E

Frame E is located on the Up side of the main line adjacent to the crossover and provides access from the main line to the loop siding.

## Frame C

Frame C is located on the Down side of the main line adjacent to the crossover and provides access from the main line to the loop siding and the loop siding to the goods siding.

Lever 2C operates a derailer, with the derailer on rail when points normal.

## Warrumbungles Way Level Crossing

Type F flashing lights and audible devices are provided at Warrumbungles Way level crossing at 455.605km. The warning equipment is automatically controlled by axle counter track circuits for Up or Down rail traffic movements on the Main Line. Advance Warning Lights are provided on both road approaches to the level crossing.

### Testing of Level Crossing Warning Equipment

The Level Crossings will be remotely monitored from the Network Control Centre North Broadmeadow by the 4Site (Cerberus) Alarm Monitoring System.

### Failure of the Cerberus monitoring equipment

In the event of a failure of the Cerberus monitoring equipment a daily test must be implemented by the Signal Electrician Dubbo in accordance with ARTC Network Rule ANGE 218.

## Werris Creek (The Gap) to Neilrex Section

The 'Test' switch box is located on the outside of the Level Crossing Equipment Hut and is opened by the test key obtained from the ARTC Provisioning Centre at Dubbo.

## Emergency Operation of the Level Crossing Warning Equipment

Emergency switches are provided to isolate the warning equipment in the event of a failure. The 'Emergency Switch Box' is located on the Level Crossing Equipment Hut and is opened by the Emergency keys obtained from the ARTC Provisioning Centre at Dubbo. The Level Crossing warning equipment must be operated in accordance with ARTC Network Rule ANGE 218 'Type F Level Crossing Management', Procedures ANPR 715 'Protecting Type F Level Crossings' and ANPR 717 'Using Emergency Roadside Warning Equipment'.

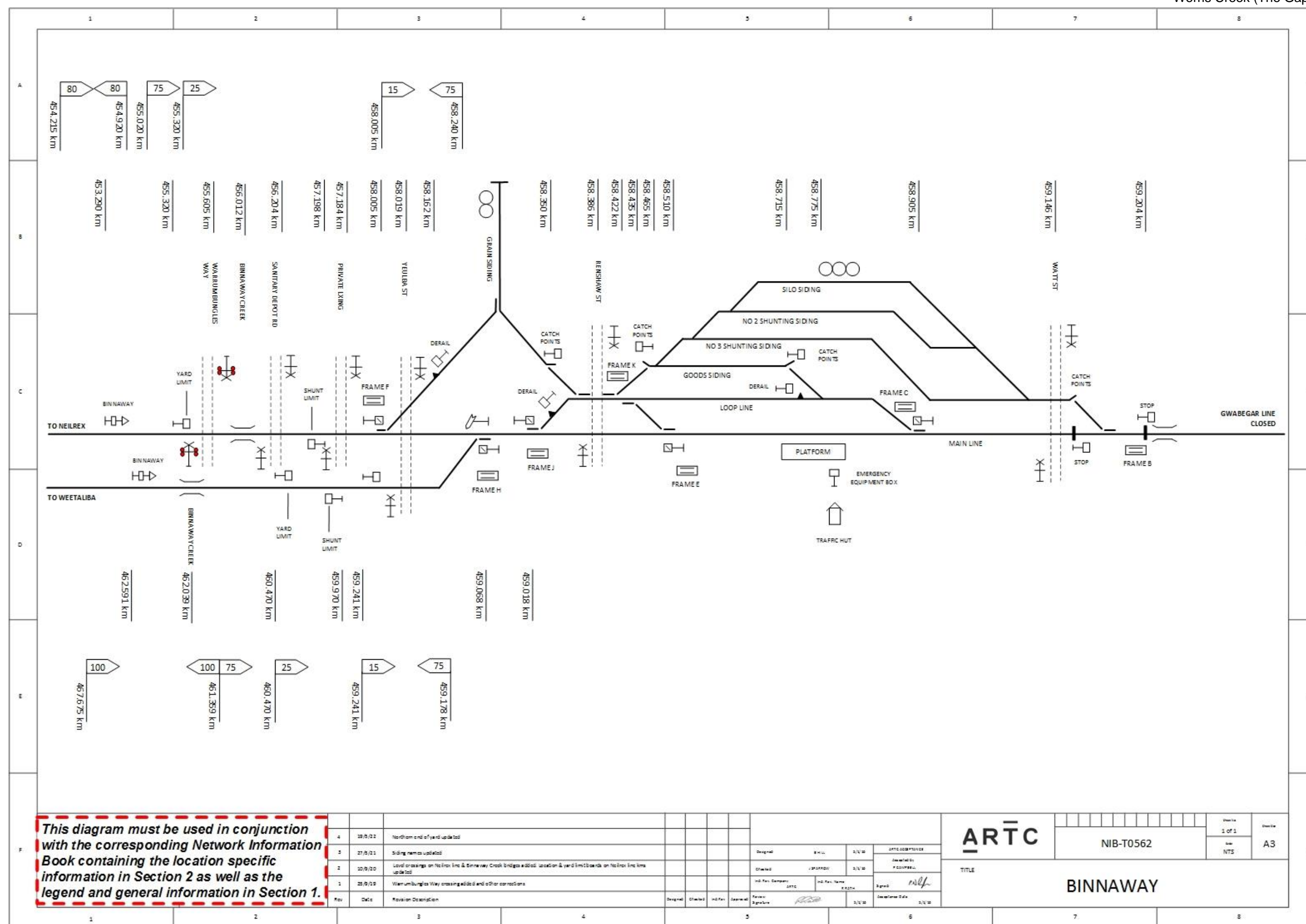
## Manual Operation of the Level Crossing Warning Equipment

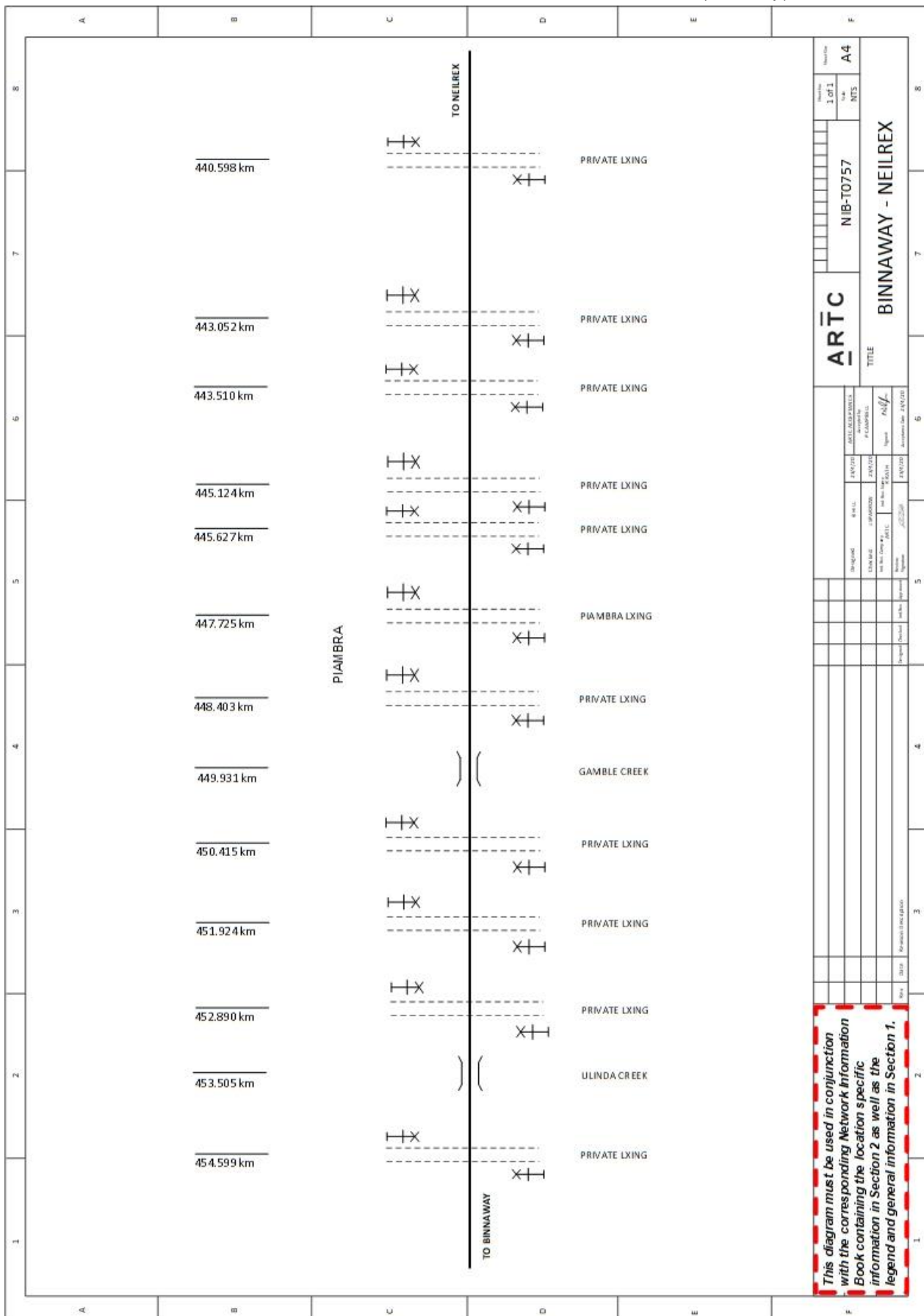
A manual operation switch for use by Competent Workers in accordance with ARTC Network Rule ANGE 218 is installed on the side of Level Crossing Equipment Hut.

The manual operation switch **MUST** be kept closed and secured by an SL lock when not in use.

## Axle Counters

If an axle counter incorrectly shows a section as occupied due to a miscount of axles, power failure or incorrect operation, the system must be reset by a Competent Signalling Infrastructure Representative. The axle counter must not be reset without the Network Controllers authorisation. The axle counter procedure for resetting of axle counters within train order working territory is specified within ARTC procedure ESI-05-03 axle counter TOW territory. A reset panel is mounted externally to the Level Crossing Equipment Hut.





### 3.9 Neilrex (NLX)

#### **General Arrangements**

Neilrex is a Train Order Siding location.

All sidings at Neilrex are clear of Train Order Territory.

Loop length 462m

#### **Yard Limits**

A YARD LIMIT sign is located at 434.192km to indicate the Neilrex yard limit in the down direction.

A YARD LIMIT sign is located at 437.373km to indicate the Neilrex yard limit in the up direction.

#### **Shunting Limits**

A SHUNT LIMIT sign is provided at 436.873km to indicate the Neilrex shunting limit in the down direction.

A SHUNT LIMIT sign is provided at 434.717km to indicate the Neilrex shunting limit in the up direction.

#### **Ground Frames**

Frame C

Frame C is located on the Up side of the main line adjacent to the points and provides access to the grain siding.

Frame C is unlocked by an Operator's key.

Frame D

Frame D is located on the Up side of the main line adjacent to the points and provides access to the siding.

Frame D is unlocked by an Operator's key

