

DRIVERS ROUTE KNOWLEDGE DIAGRAMS

MAIN WEST (BLUE MOUNTAINS) LINE

EMU PLAINS
LAPSTONE
GLENBROOK
BLAXLAND
WARRIMOO
VALLEY HEIGHTS
SPRINGWOOD
FAULCONBRIDGE
LINDEN
WOODFORD
HAZELBROOK
LAWSON
BULLABURRA
WENTWORTH FALLS
LEURA
KATOOMBA
MEDLOW BATH
BLACKHEATH
MT VICTORIA
BELL
NEWNES JUNCTION
EDGECOMBE
ZIG ZAG
LITHGOW

Effective Date: August 2026

Version: 5.12

Explanatory Notes:

Navigate to your area of interest via the station index or by using links created in Adobe bookmarks.

This document is approved for **route knowledge only**.

Do not use these diagrams for any safety related purpose without validating the information against a controlled source or in the field.

Information in these diagrams is uncontrolled.

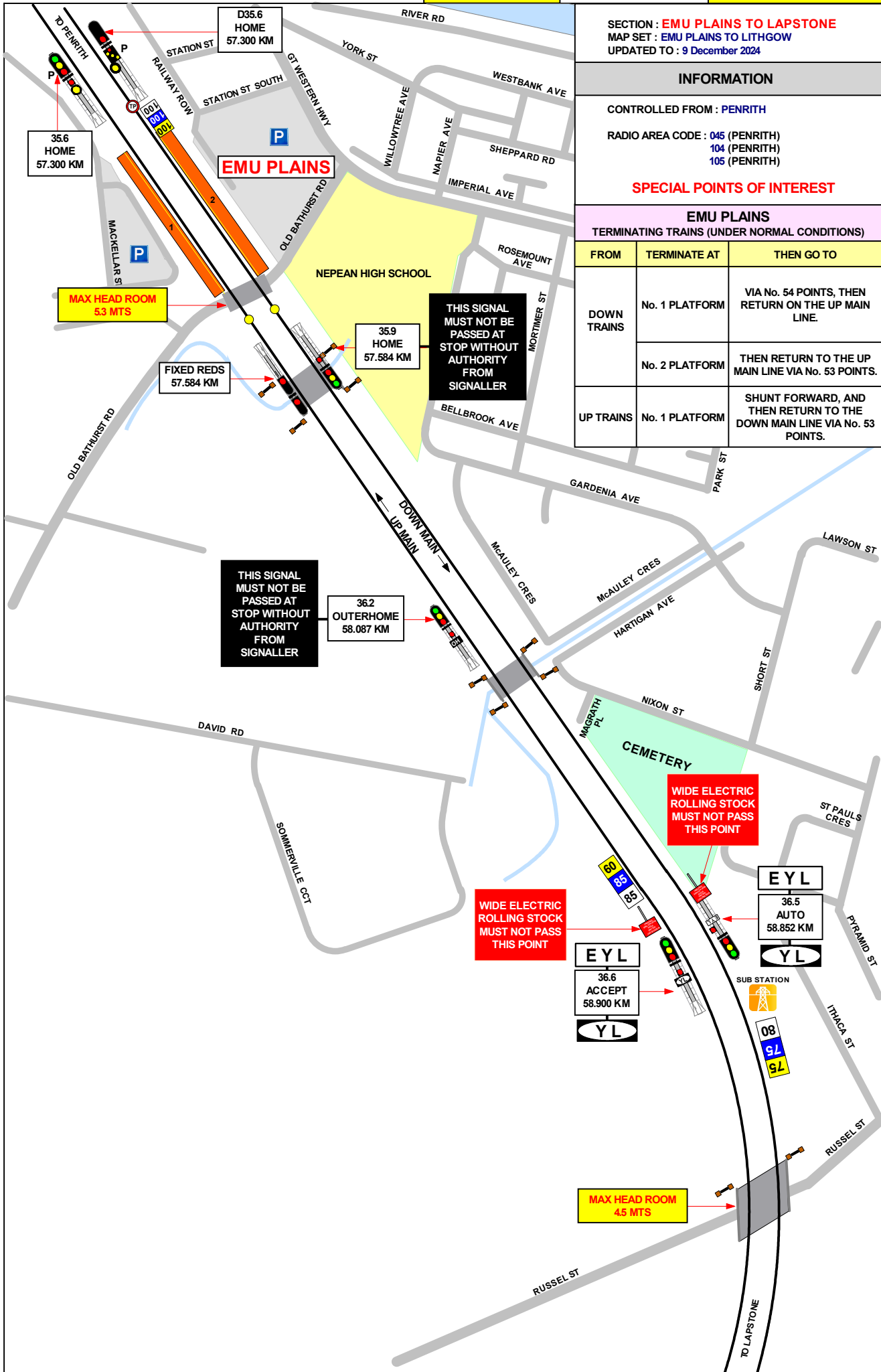
Please report any updates to
gis.support@transport.nsw.gov.au



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Location: CM Record No.D2015/572



SECTION : **EMU PLAINS TO LAPSTONE**
MAP SET : EMU PLAINS TO LITHGOW
UPDATED TO : 3 March 2021

INFORMATION

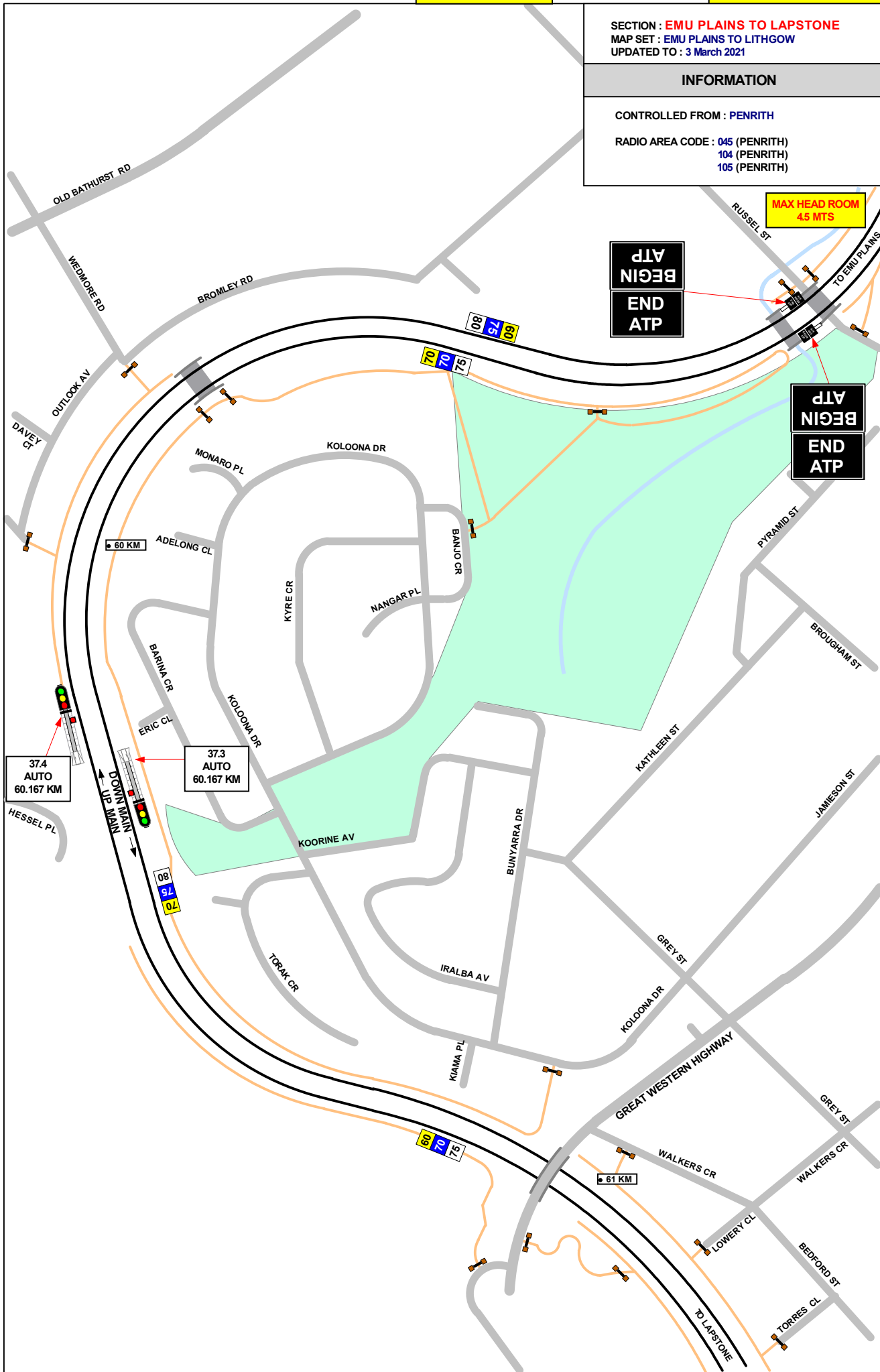
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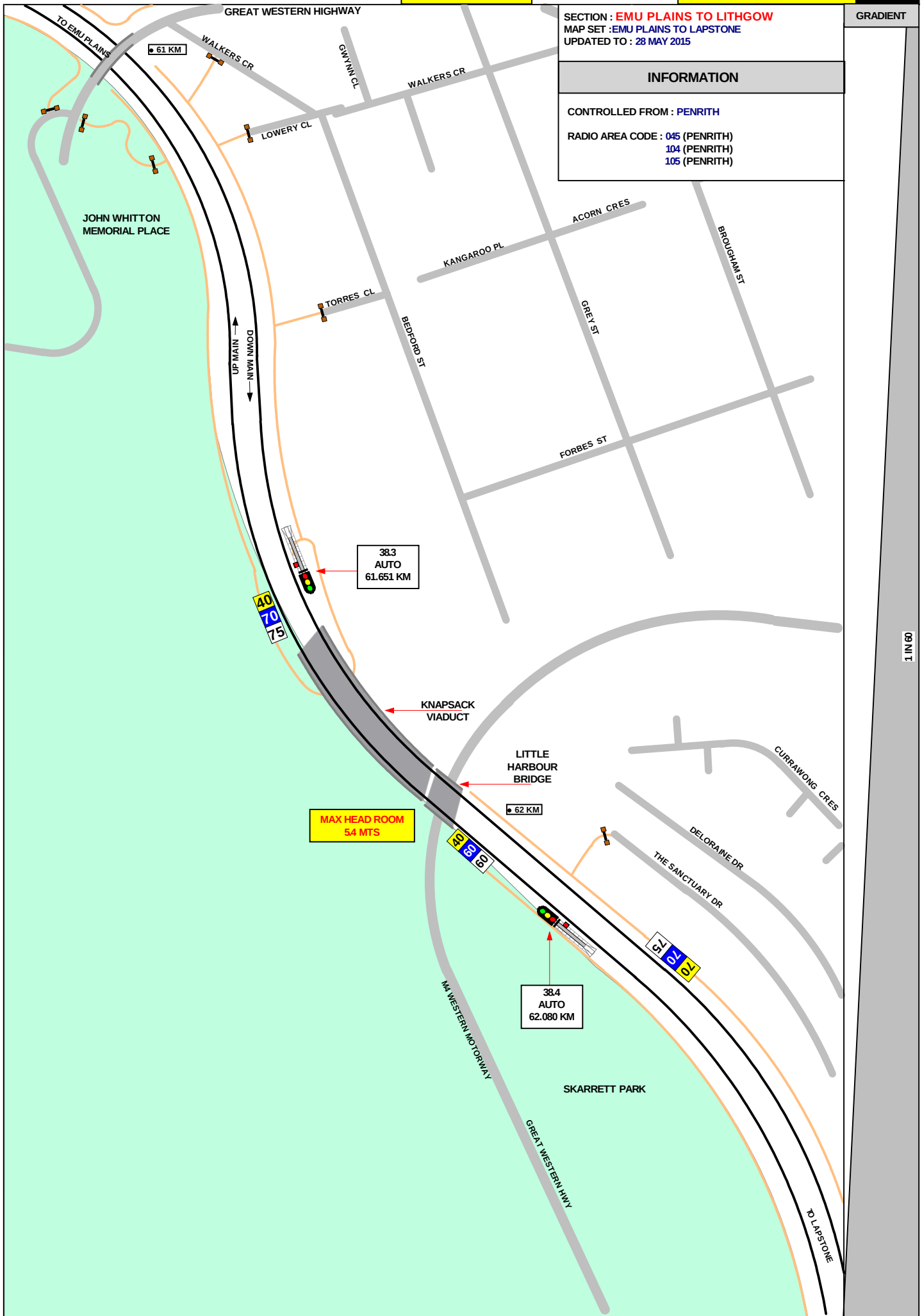
RADIO AREA CODE : **045** (PENRITH)
104 (PENRITH)
105 (PENRITH)

**MAX HEAD ROOM
4.5 MTS**

**BEGIN
ATP**
**END
ATP**

**BEGIN
ATP**
**END
ATP**





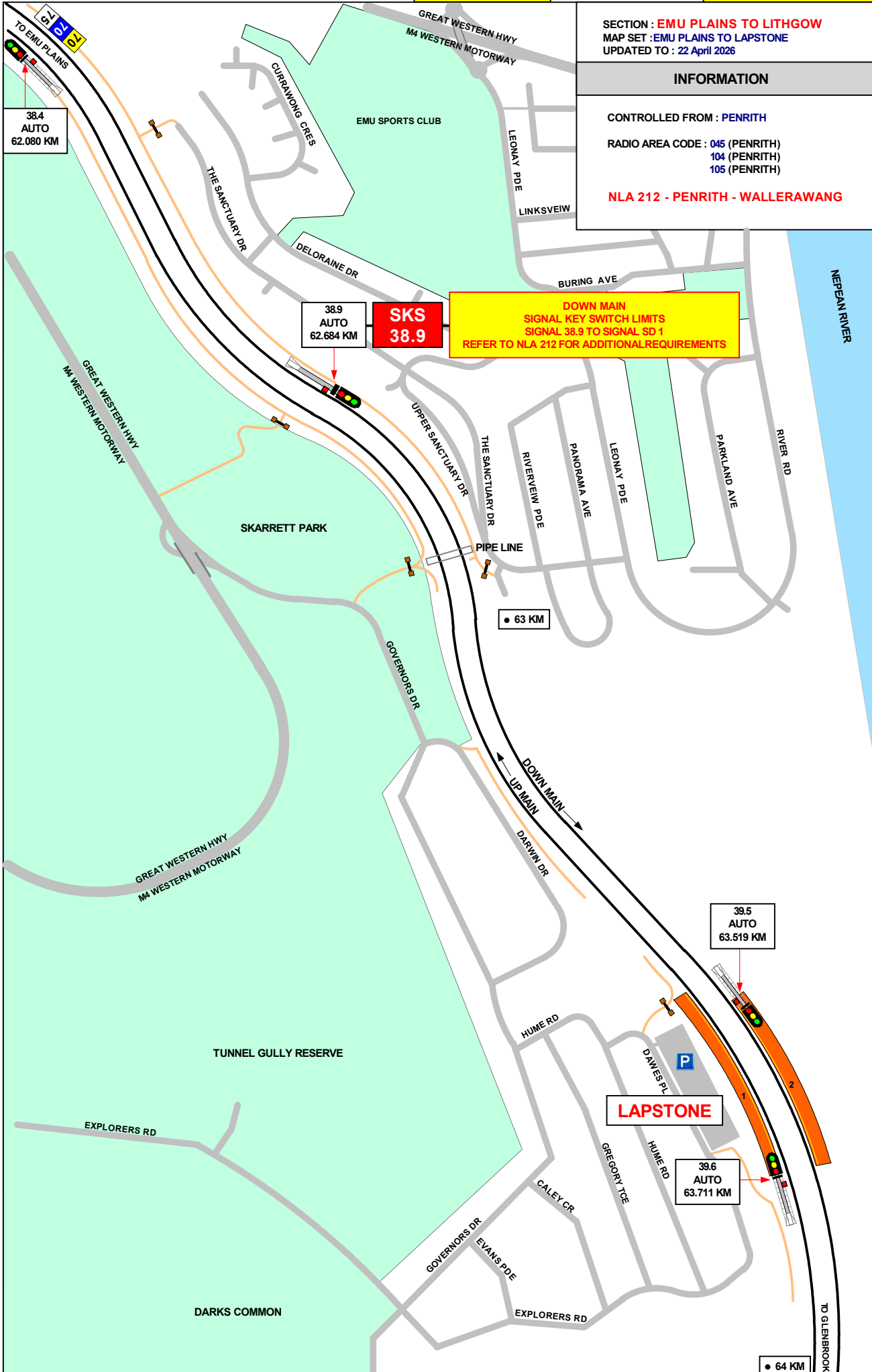
SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **EMU PLAINS TO LAPSTONE**
 UPDATED TO : 22 April 2026

INFORMATION

CONTROLLED FROM : **PENRITH**

RADIO AREA CODE : **045** (PENRITH)
104 (PENRITH)
105 (PENRITH)

NLA 212 - PENRITH - WALLERAWANG



DOWN MAIN
 SIGNAL KEY SWITCH LIMITS
 SIGNAL 38.9 TO SIGNAL SD 1
 REFER TO NLA 212 FOR ADDITIONAL REQUIREMENTS

LAPSTONE

SECTION : EMU PLAINS TO LITHGOW
MAP SET : LAPSTONE TO GLENBROOK TUNNEL
UPDATED TO : 4 March 2026

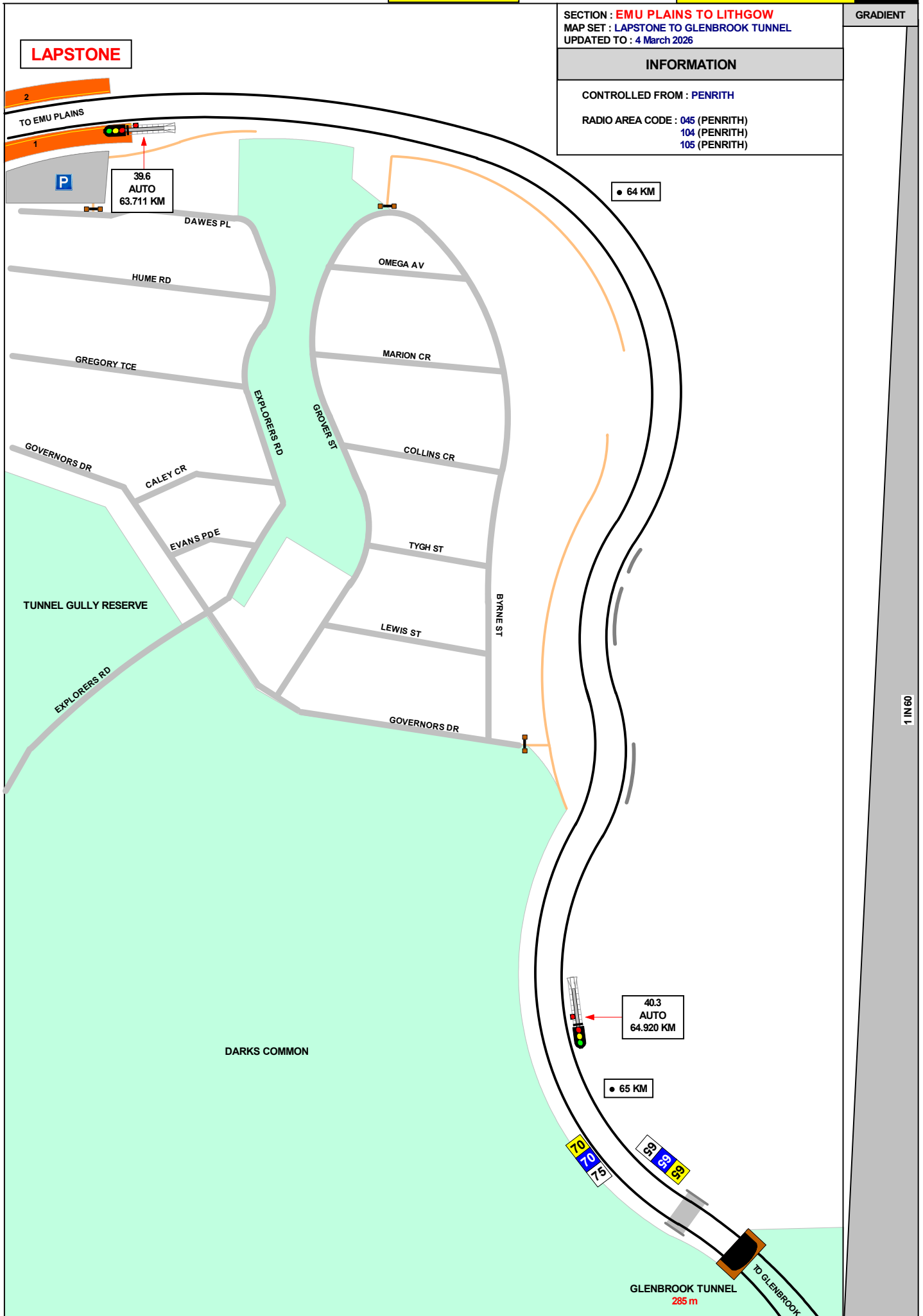
INFORMATION

CONTROLLED FROM : PENRITH

RADIO AREA CODE : 045 (PENRITH)
104 (PENRITH)
105 (PENRITH)

● 64 KM

1 IN 60



SECTION : EMU PLAINS TO LITHGOW
 MAP SET : LAPSTONE TO GLENBROOK
 UPDATED TO : 1 June 2026

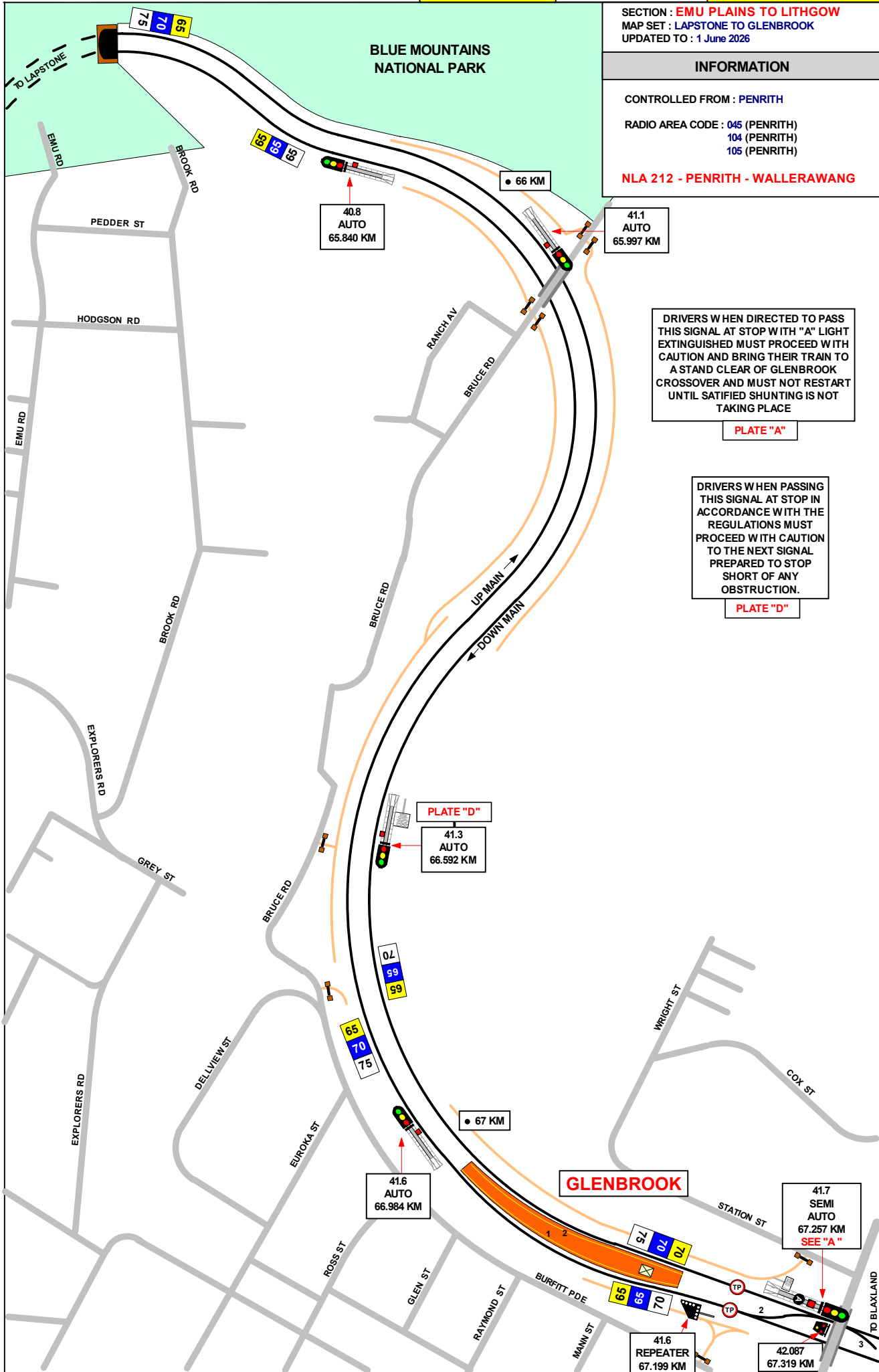
INFORMATION

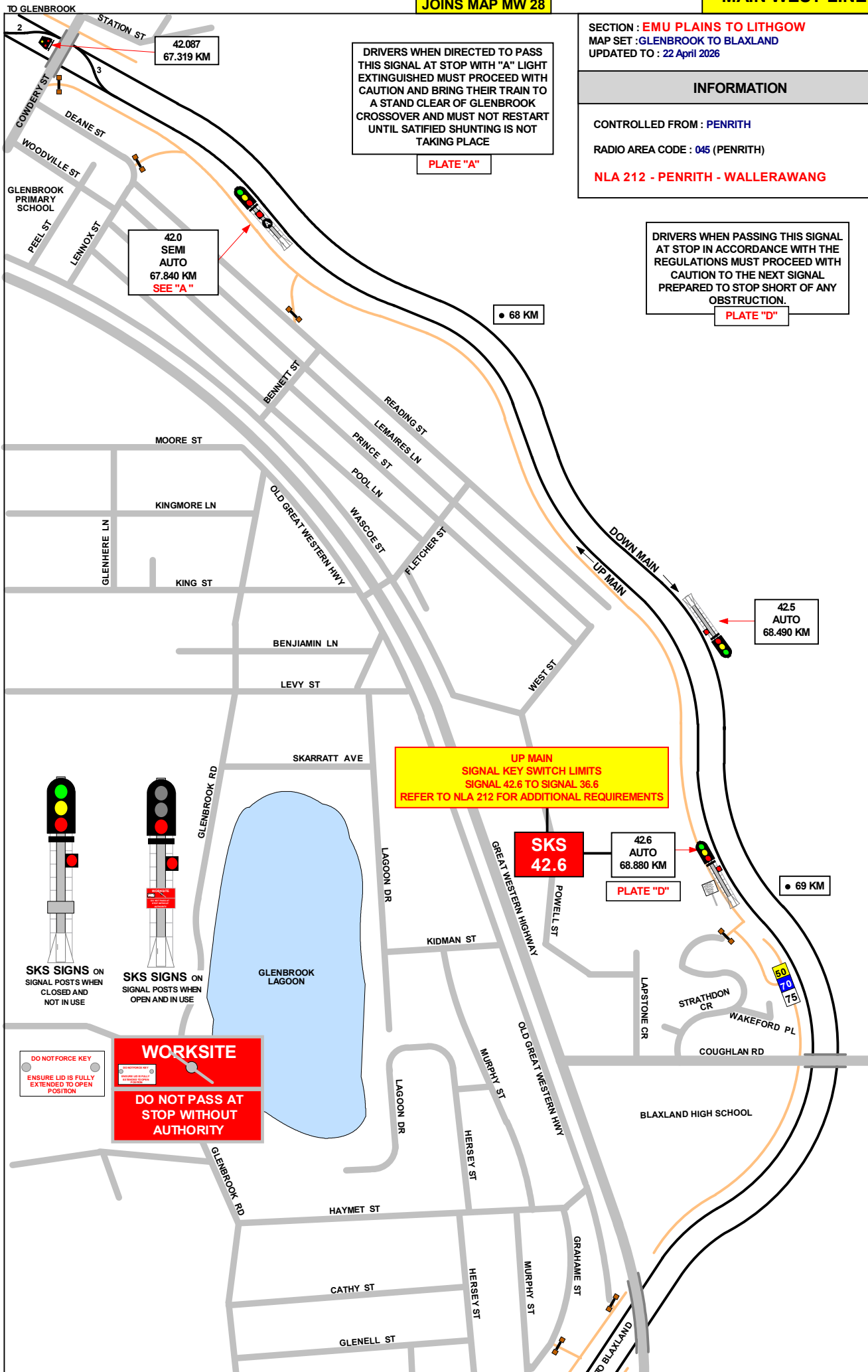
CONTROLLED FROM : PENRITH

RADIO AREA CODE : 045 (PENRITH)
 104 (PENRITH)
 105 (PENRITH)

NLA 212 - PENRITH - WALLERAWANG

GRADIENT



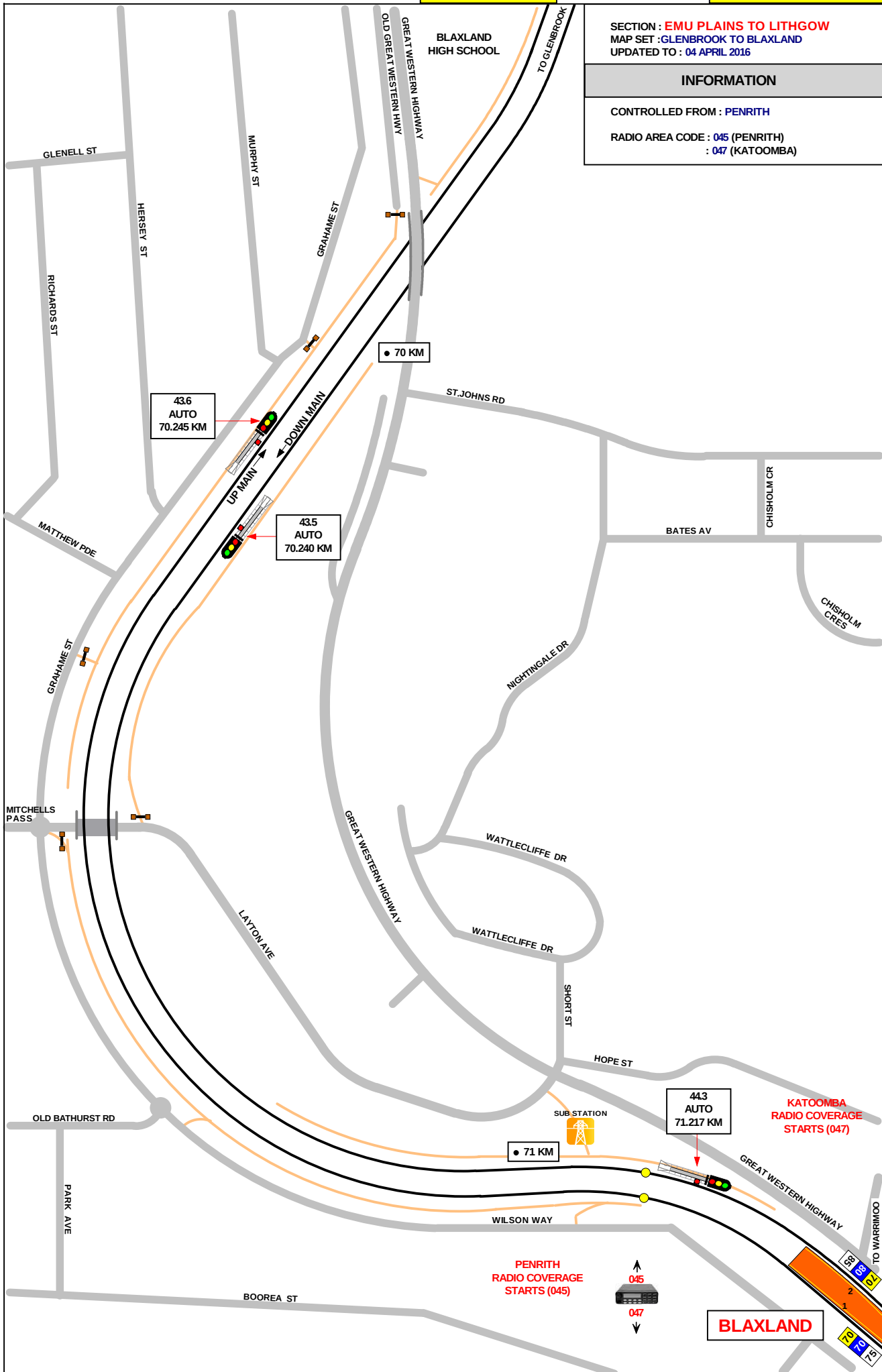


SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : GLENBROOK TO BLAXLAND
 UPDATED TO : 04 APRIL 2016

INFORMATION

CONTROLLED FROM : **PENRITH**

RADIO AREA CODE : **045** (PENRITH)
 : **047** (KATOOMBA)



BLAXLAND

SECTION : EMU PLAINS TO LITHGOW
MAP SET : BLAXLAND TO WARRIMOO
UPDATED TO : 04 APRIL 2016

INFORMATION

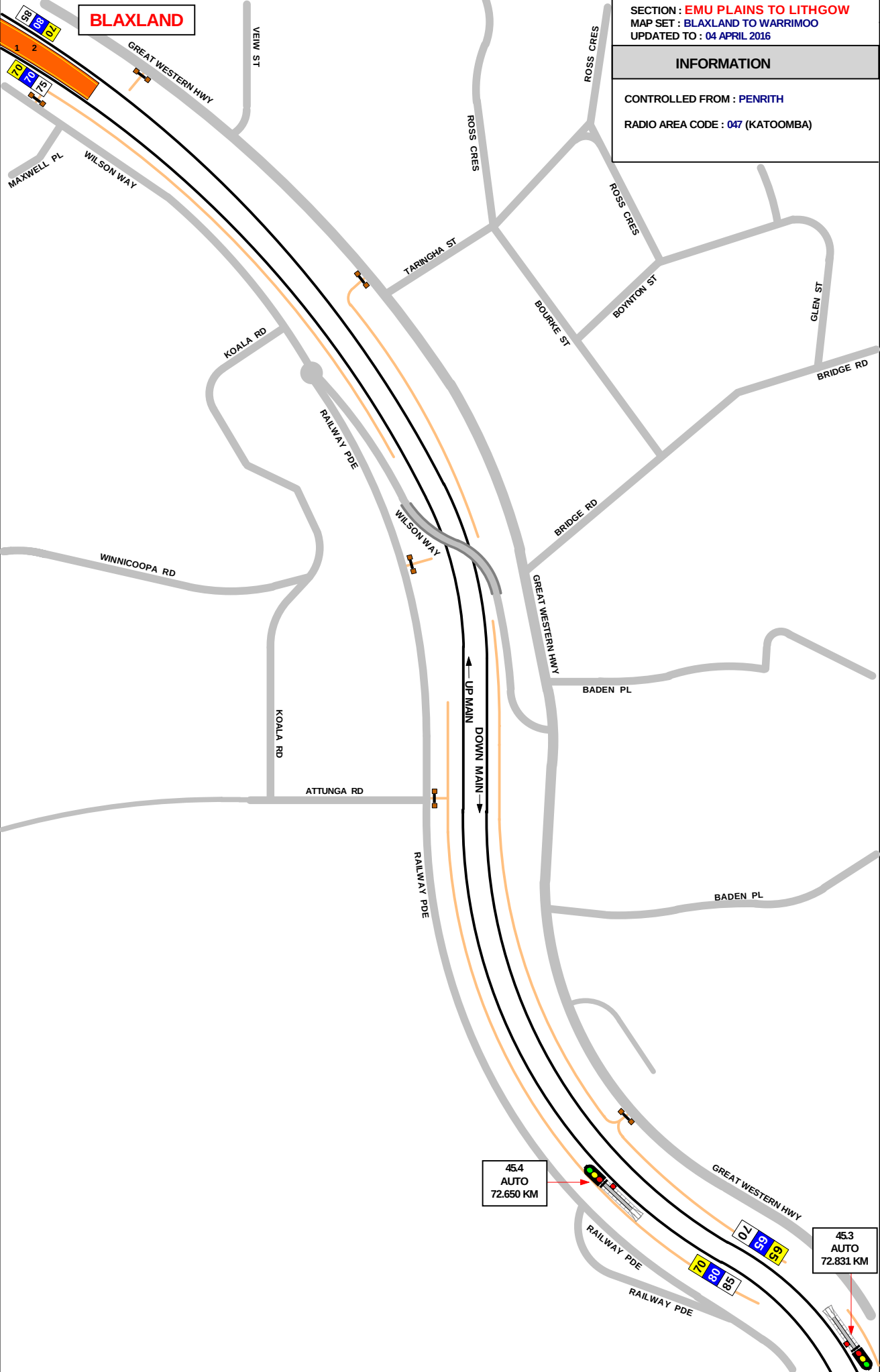
CONTROLLED FROM : PENRITH
RADIO AREA CODE : 047 (KATOOMBA)

GRADIENT

1 IN 60

1 IN 100

1 IN 66



SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **WARRIMOO TO VALLEY HEIGHTS**
UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM : **PENRITH / OMCC**

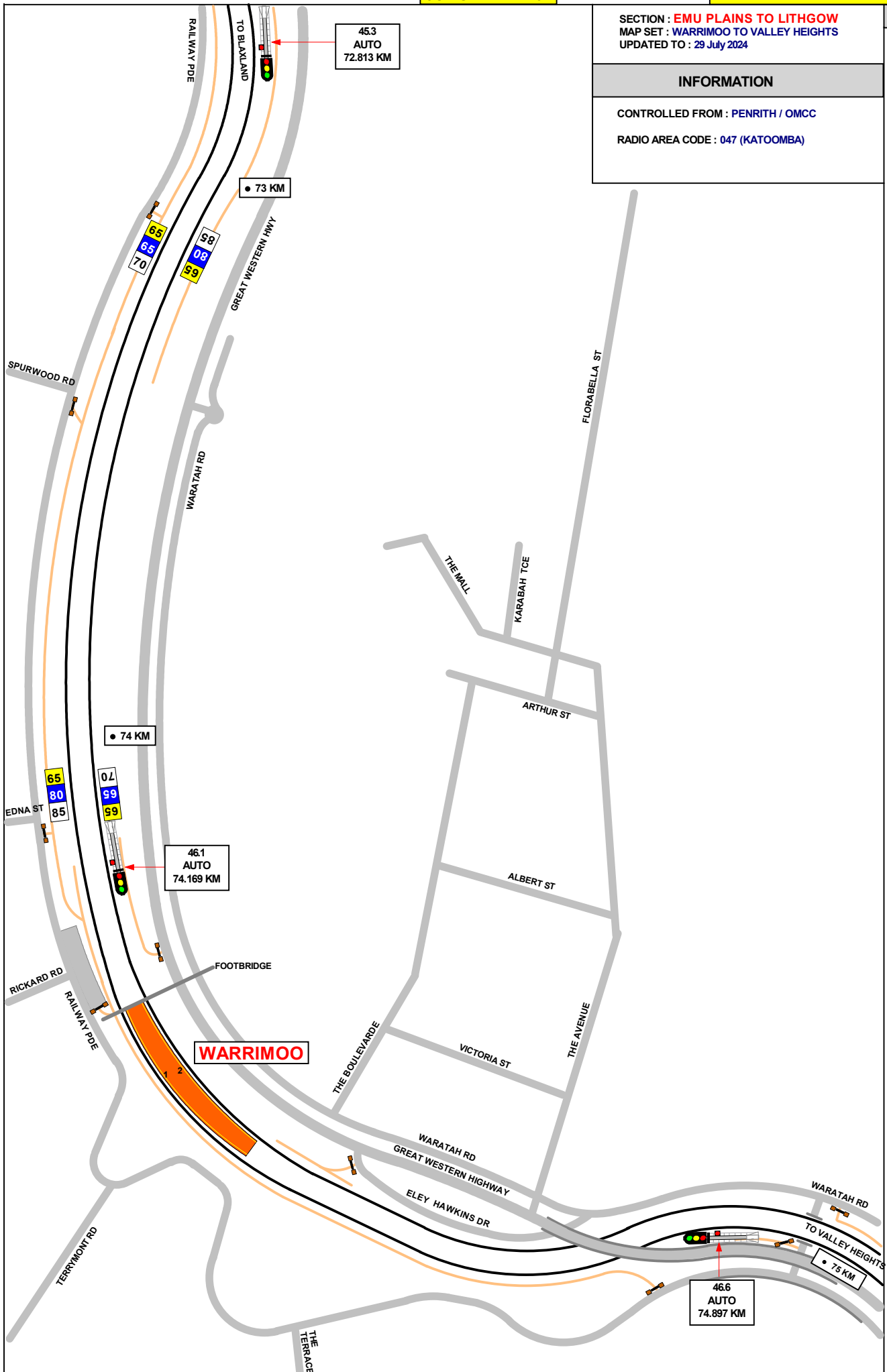
RADIO AREA CODE : **047 (KATOOMBA)**

GRADIENT

1 IN 68

1 IN 60

1 IN 97

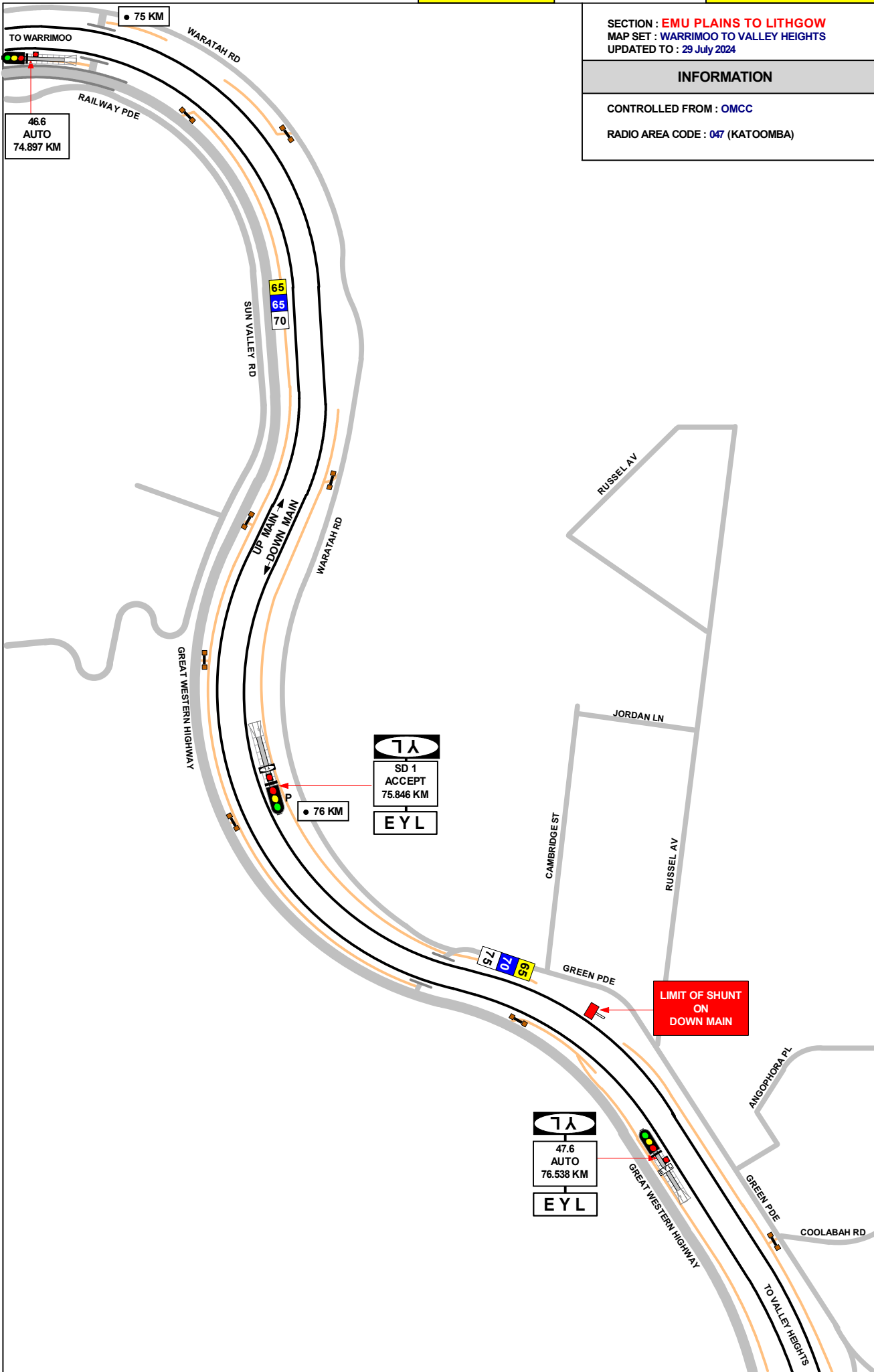


SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **WARRIMOO TO VALLEY HEIGHTS**
UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM : OMCC

RADIO AREA CODE : 047 (KATOOMBA)



SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **VALLEY HEIGHTS**
 UPDATED TO : 22 April 2026

INFORMATION

CONTROLLED FROM : OMCC

RADIO AREA CODE : 047 (KATOOMBA)

NLA 212
 REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS

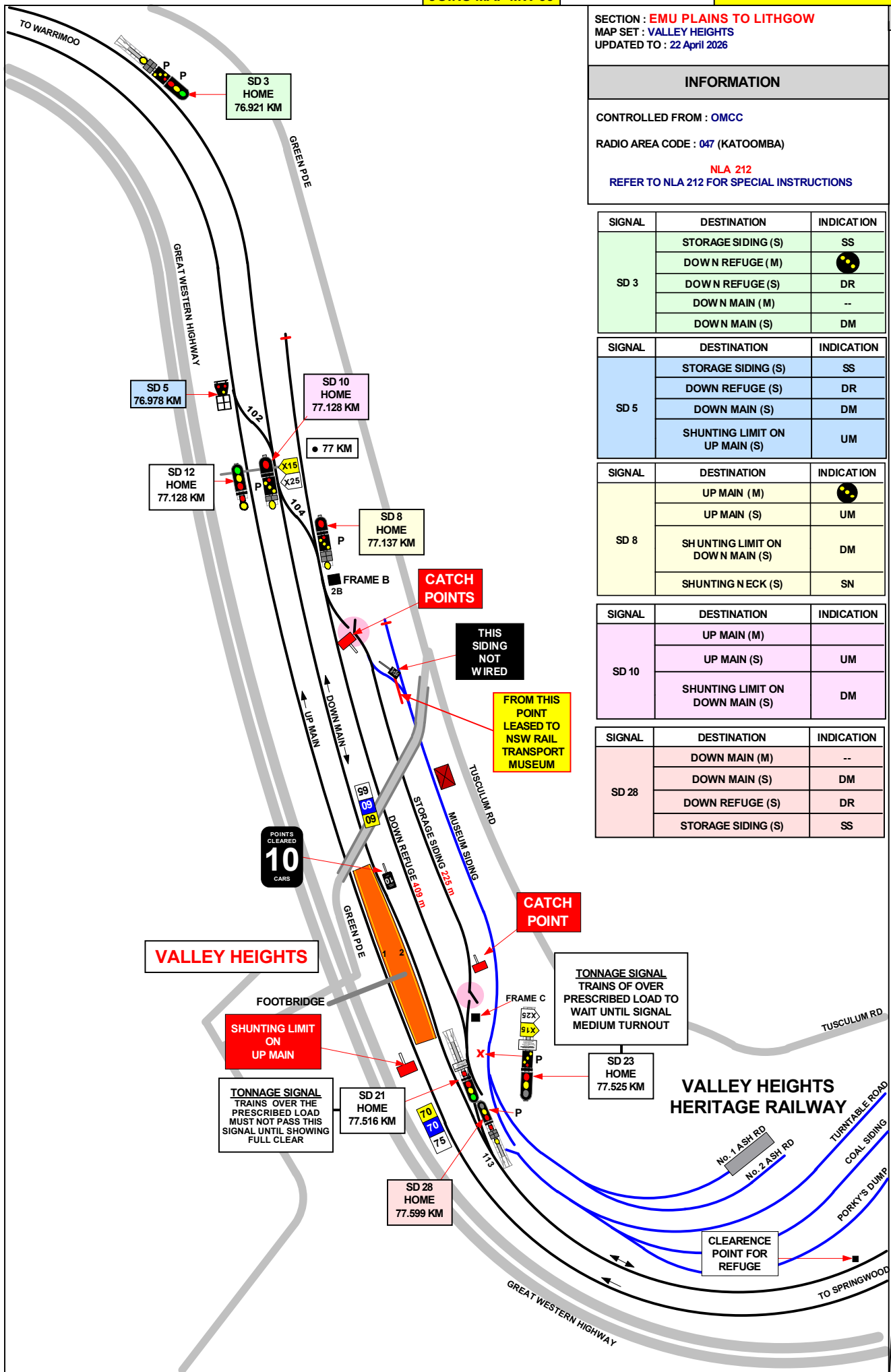
SIGNAL	DESTINATION	INDICATION
SD 3	STORAGE SIDING (S)	SS
	DOWN REFUGE (M)	
	DOWN REFUGE (S)	DR
	DOWN MAIN (M)	--
	DOWN MAIN (S)	DM

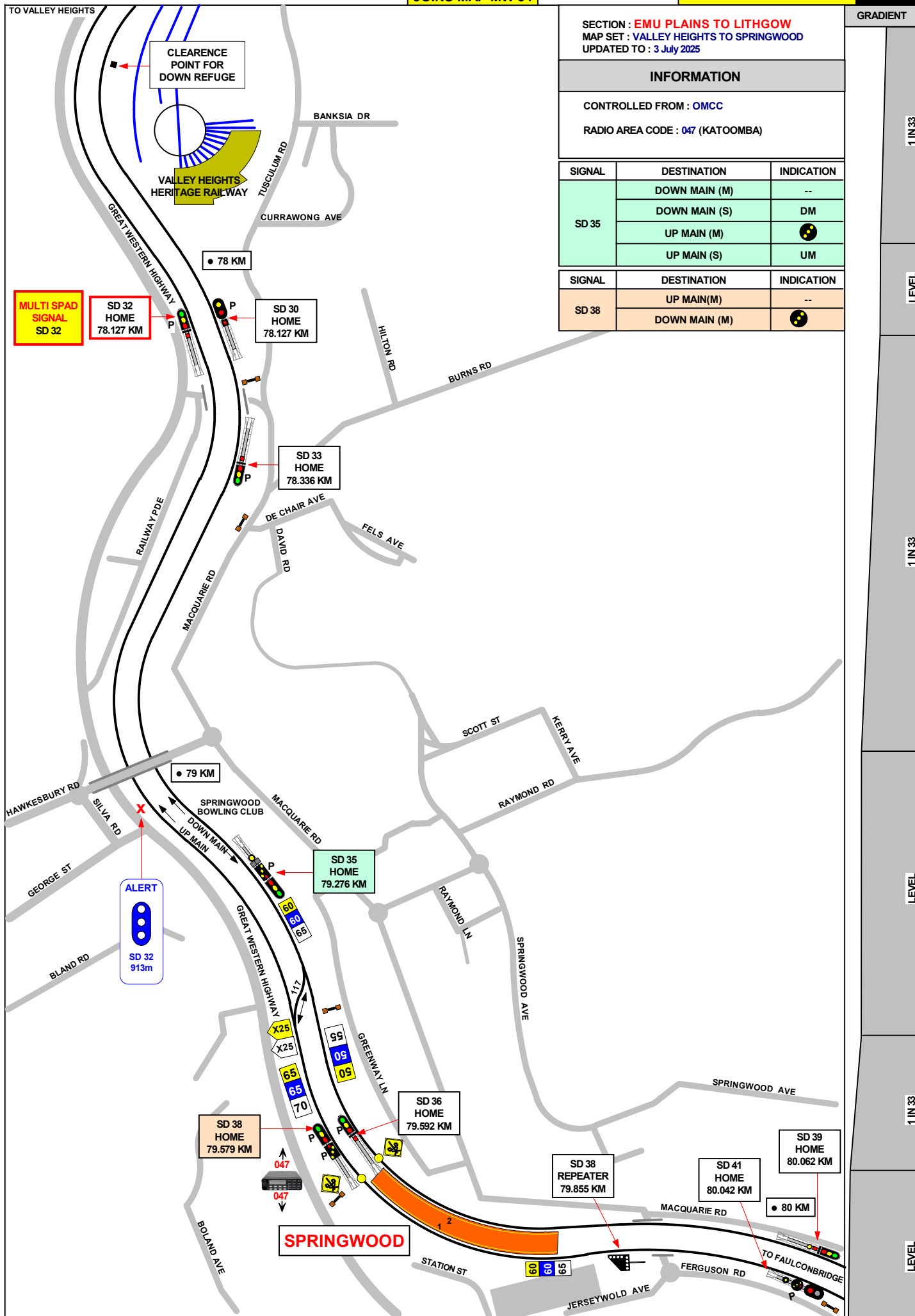
SIGNAL	DESTINATION	INDICATION
SD 5	STORAGE SIDING (S)	SS
	DOWN REFUGE (S)	DR
	DOWN MAIN (S)	DM
	SHUNTING LIMIT ON UP MAIN (S)	UM

SIGNAL	DESTINATION	INDICATION
SD 8	UP MAIN (M)	
	UP MAIN (S)	UM
	SHUNTING LIMIT ON DOWN MAIN (S)	DM
	SHUNTING NECK (S)	SN

SIGNAL	DESTINATION	INDICATION
SD 10	UP MAIN (M)	
	UP MAIN (S)	UM
	SHUNTING LIMIT ON DOWN MAIN (S)	DM

SIGNAL	DESTINATION	INDICATION
SD 28	DOWN MAIN (M)	--
	DOWN MAIN (S)	DM
	DOWN REFUGE (S)	DR
	STORAGE SIDING (S)	SS





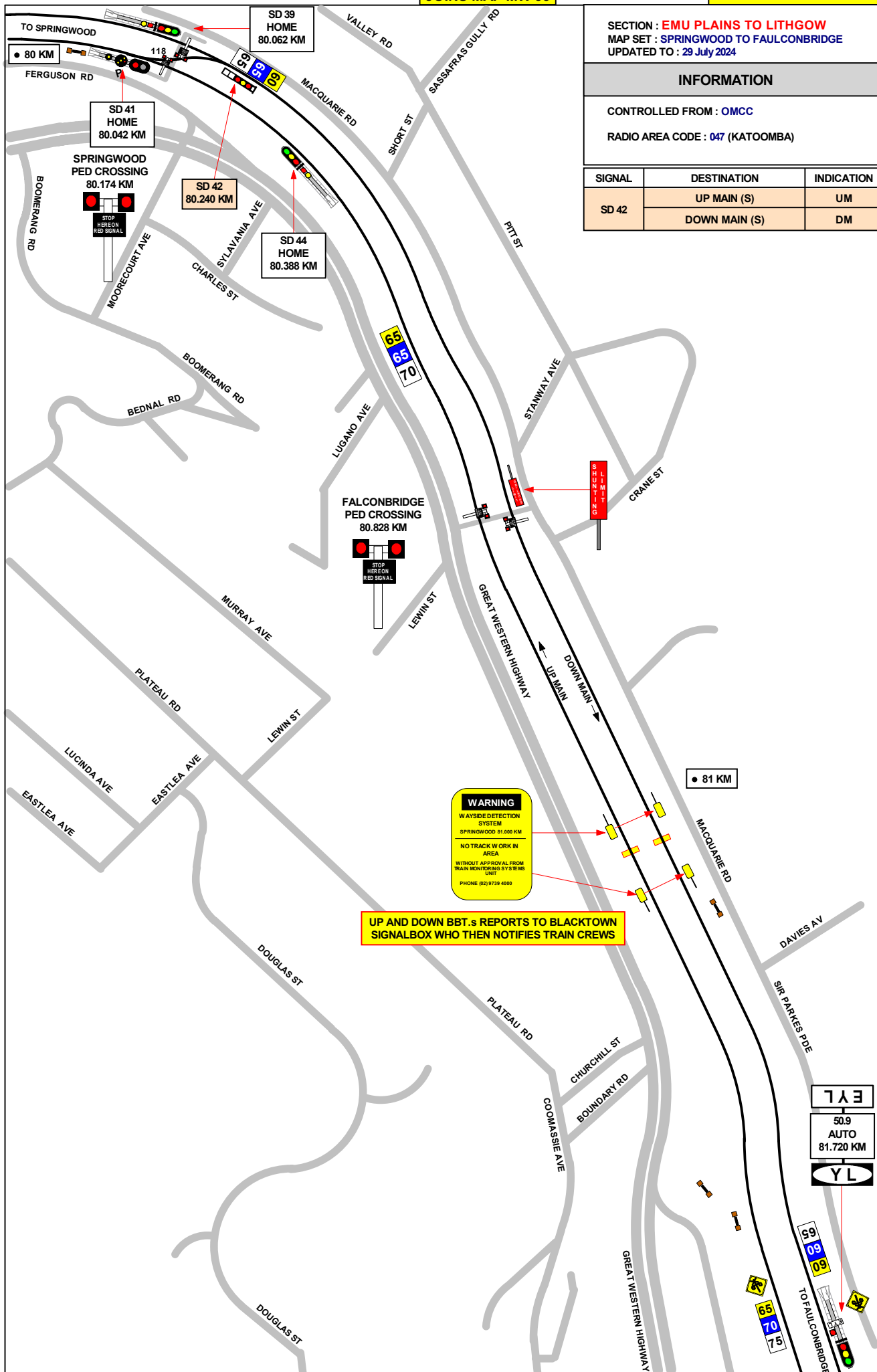
SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **SPRINGWOOD TO FAULCONBRIDGE**
 UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM : **OMCC**

RADIO AREA CODE : **047 (KATOOMBA)**

SIGNAL	DESTINATION	INDICATION
SD 42	UP MAIN (S)	UM
	DOWN MAIN (S)	DM



UP AND DOWN BBT.s REPORTS TO BLACKTOWN SIGNALBOX WHO THEN NOTIFIES TRAIN CREWS

SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **SPRINGWOOD TO FAULCONBRIDGE**
UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM : OMCC

RADIO AREA CODE : 047 (KATOOMBA)

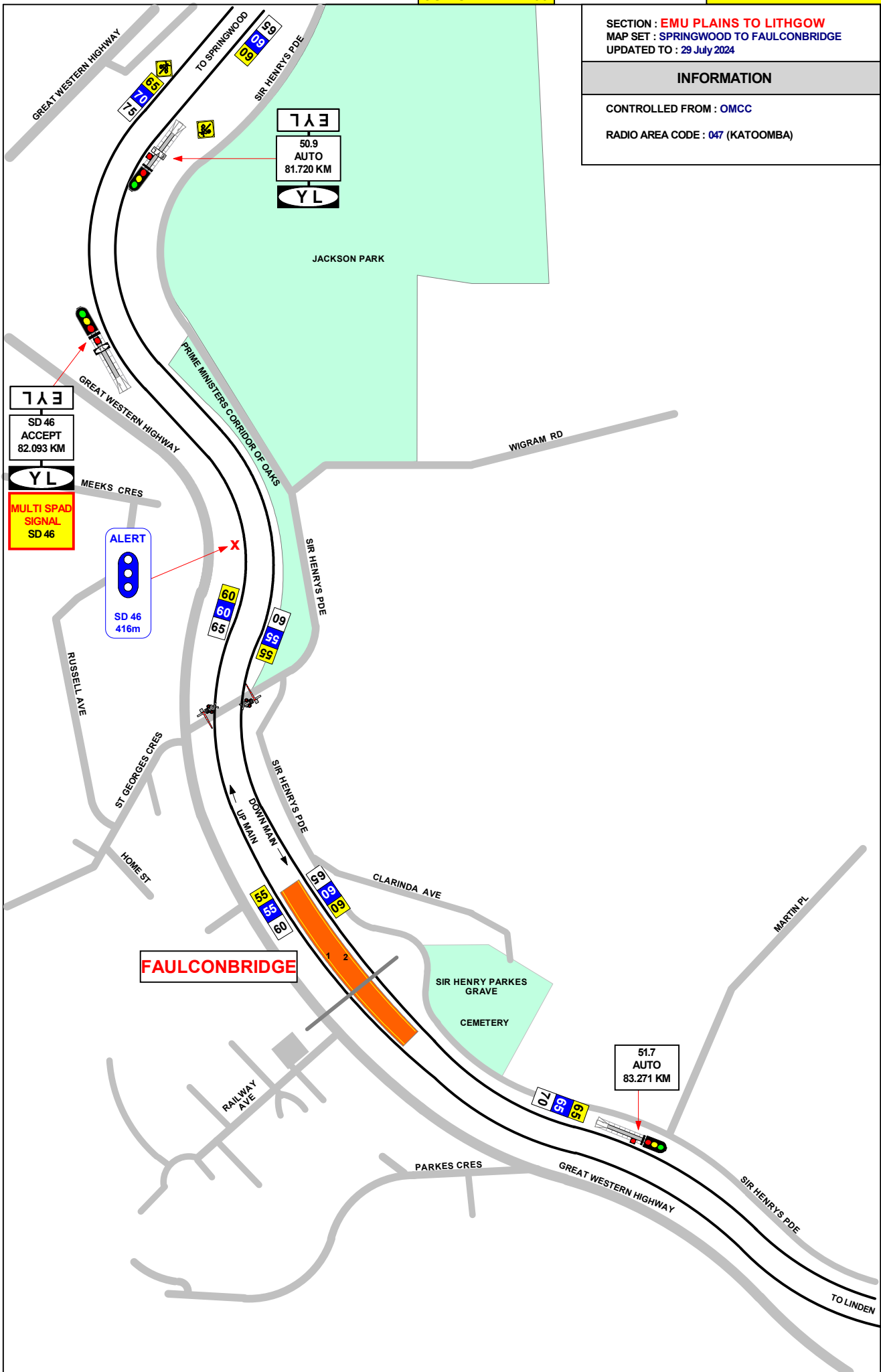
GRADIENT

1 IN 31

1 IN 33

LEVEL

1 IN 31



SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **FAULCONBRIDGE TO LINDEN**
UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM : OMCC

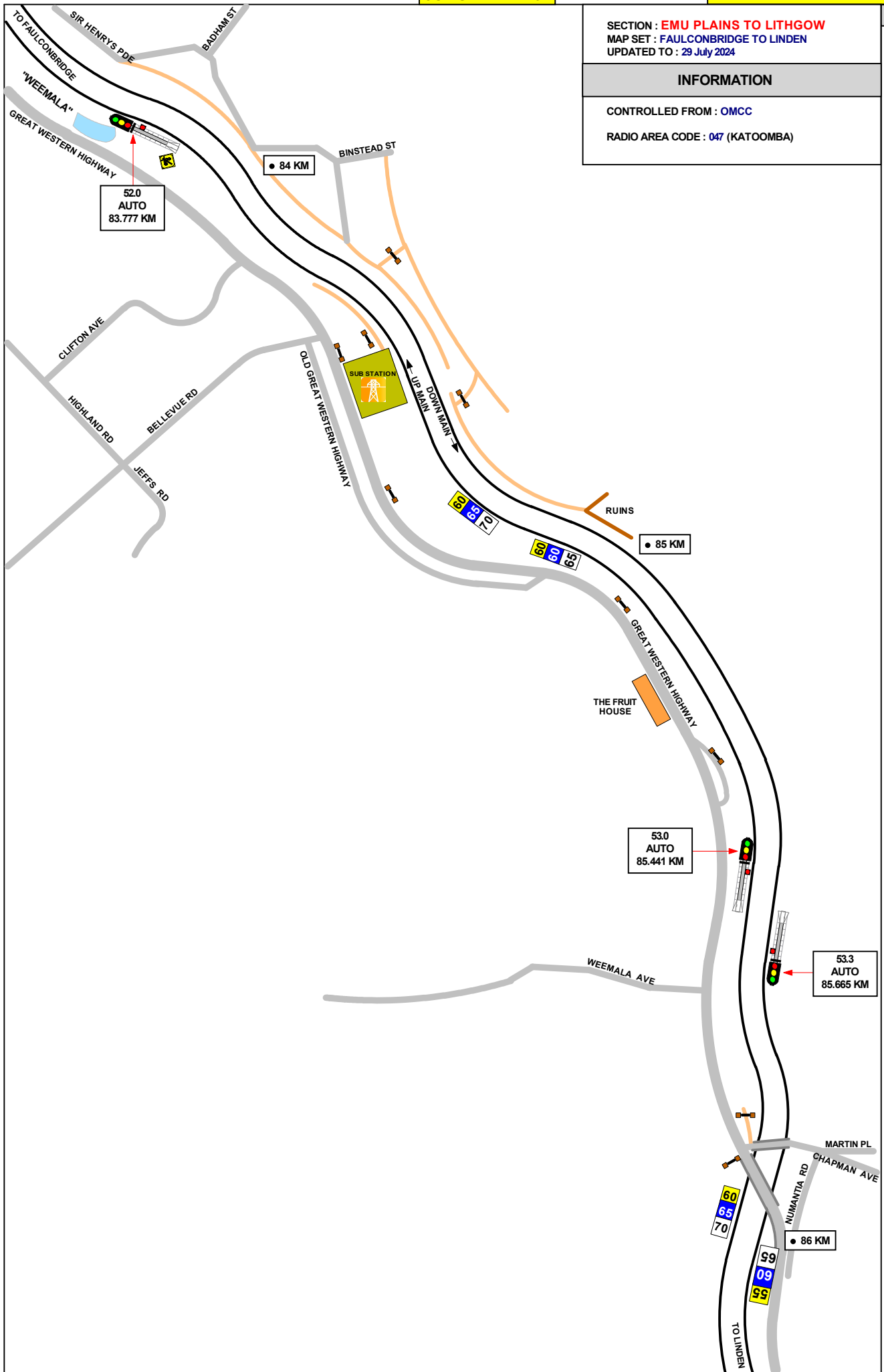
RADIO AREA CODE : 047 (KATOOMBA)

GRADIENT

1 IN 31

1 IN 33

1 IN 31



SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **LINDEN TO WOODFORD**
UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM : OMCC

RADIO AREA CODE : 047 (KATOOMBA)

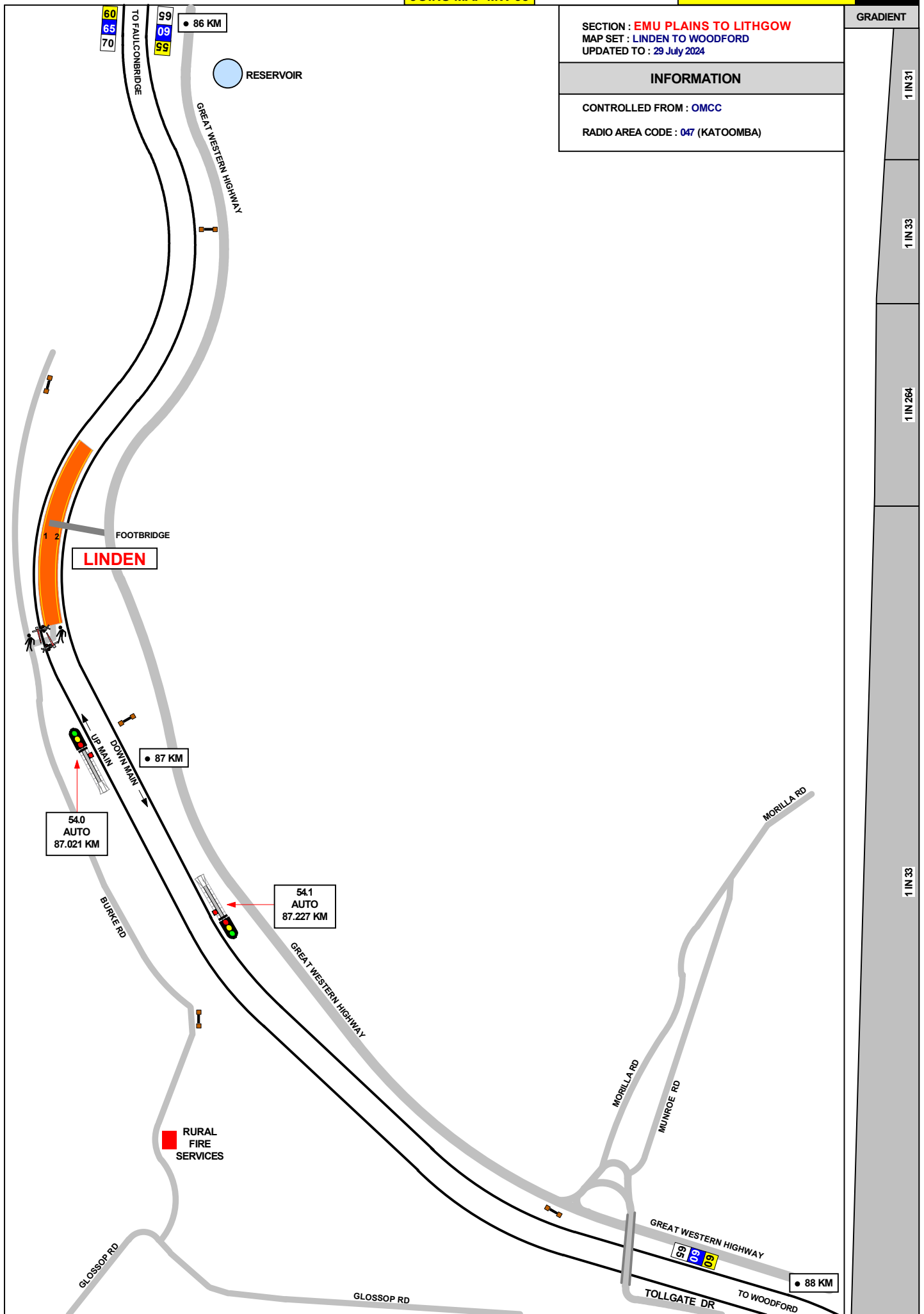
GRADIENT

1 IN 31

1 IN 33

1 IN 264

1 IN 33



SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **LINDEN TO WOODFORD**
 UPDATED TO : **29 July 2024**

INFORMATION

CONTROLLED FROM : **OMCC**

RADIO AREA CODE : **047 (KATOOMBA)**

GRADIENT

1 IN 33

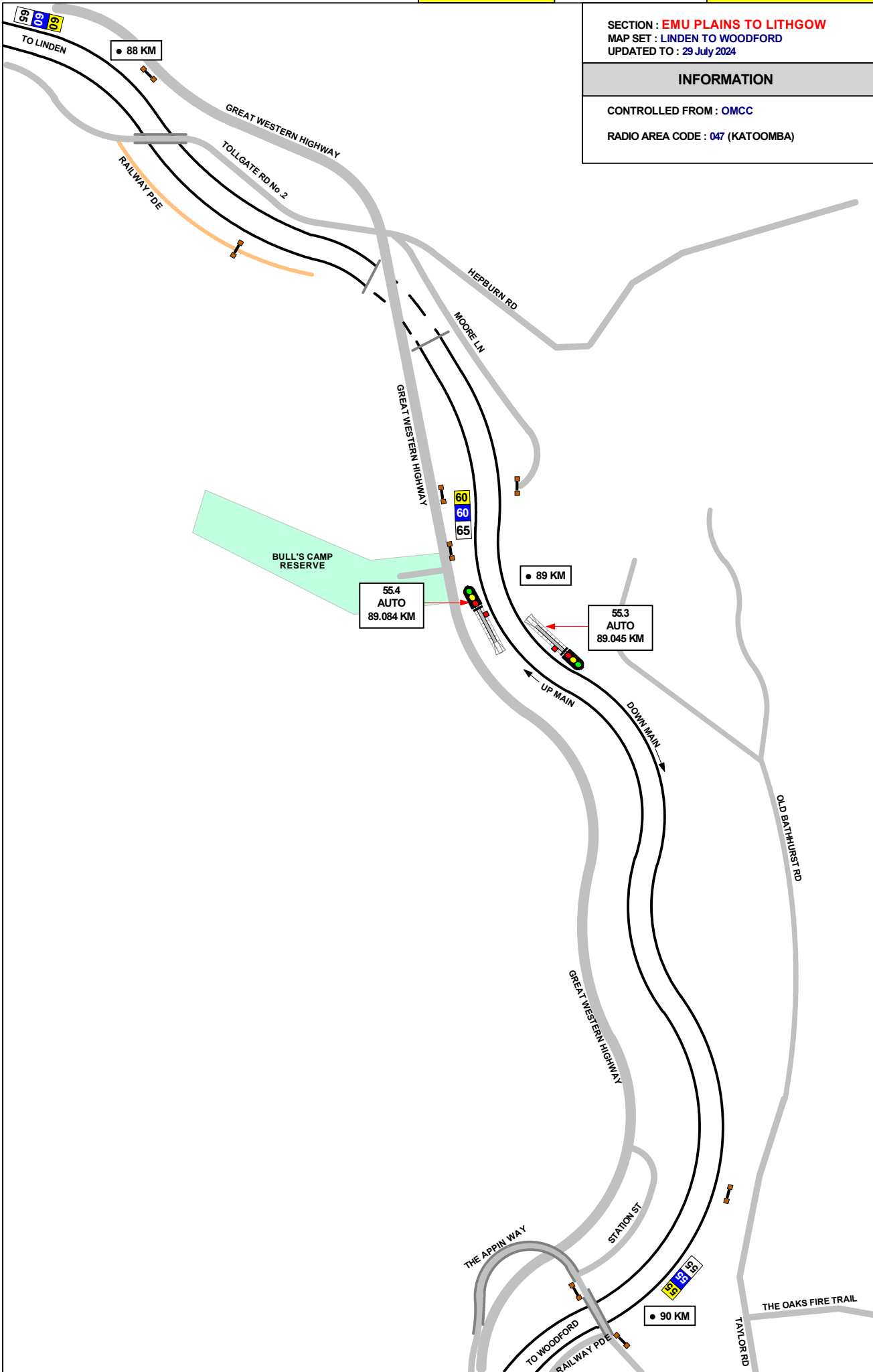
1 IN 40

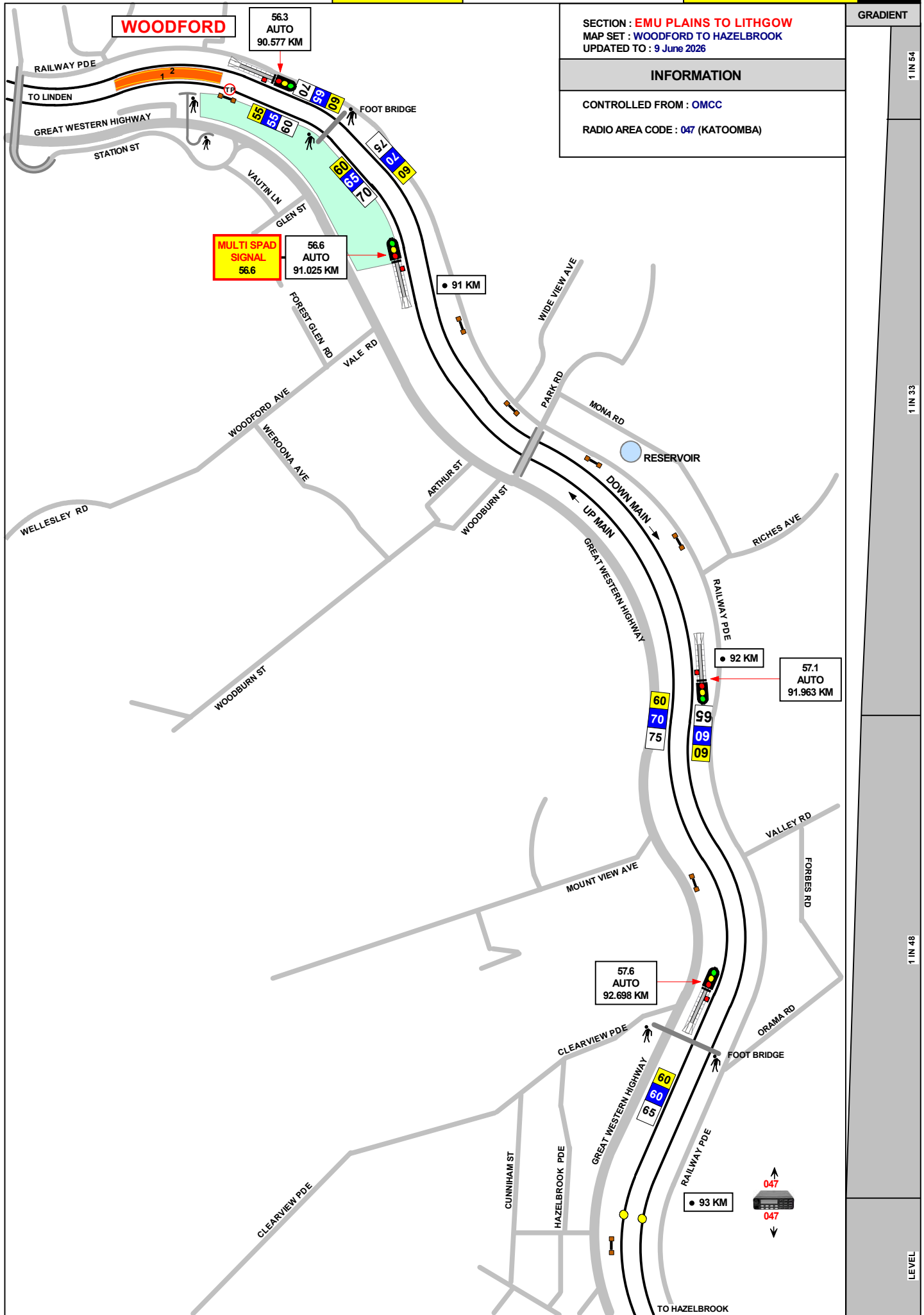
1 IN 66

1 IN 51

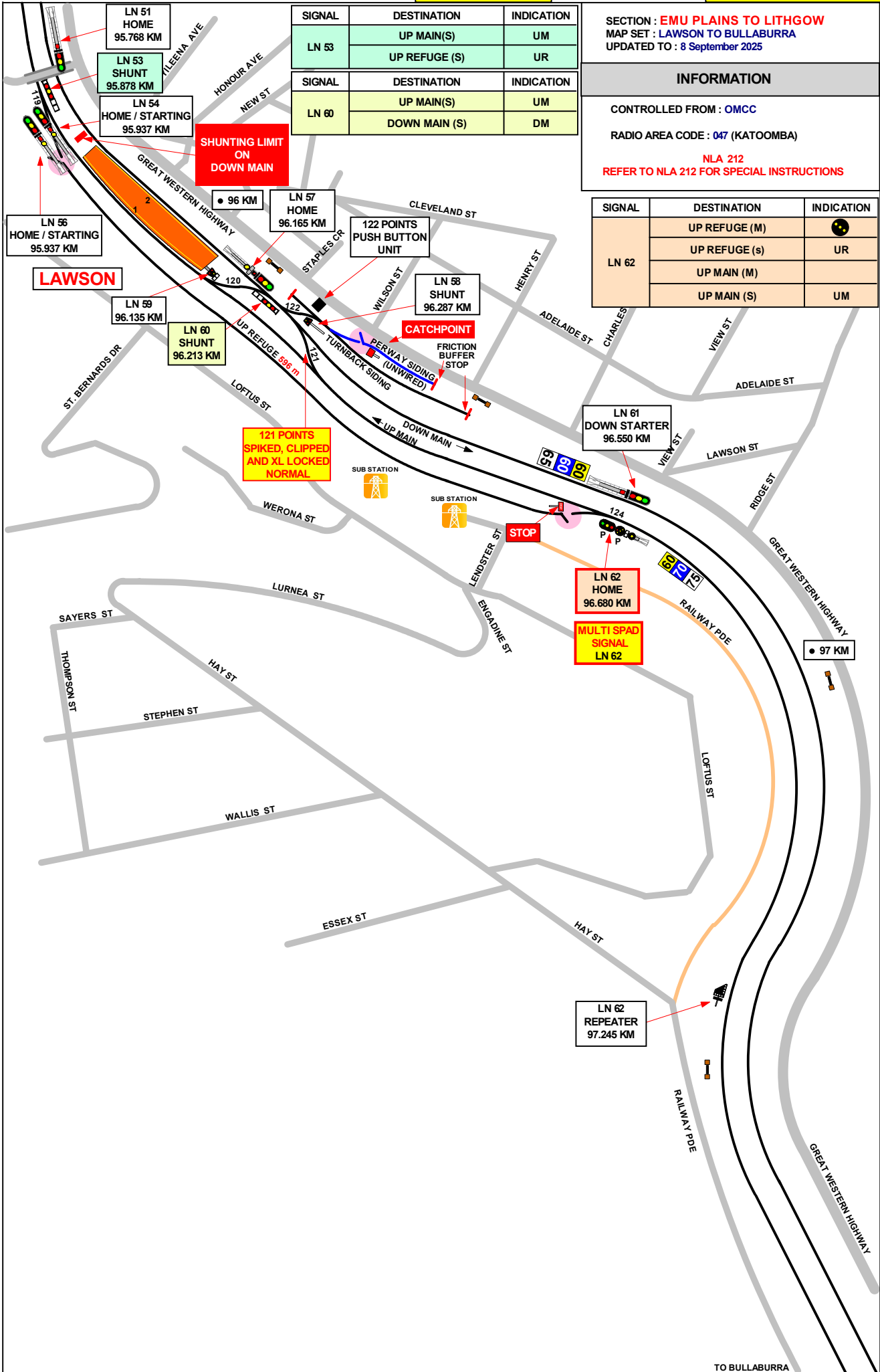
1 IN 50

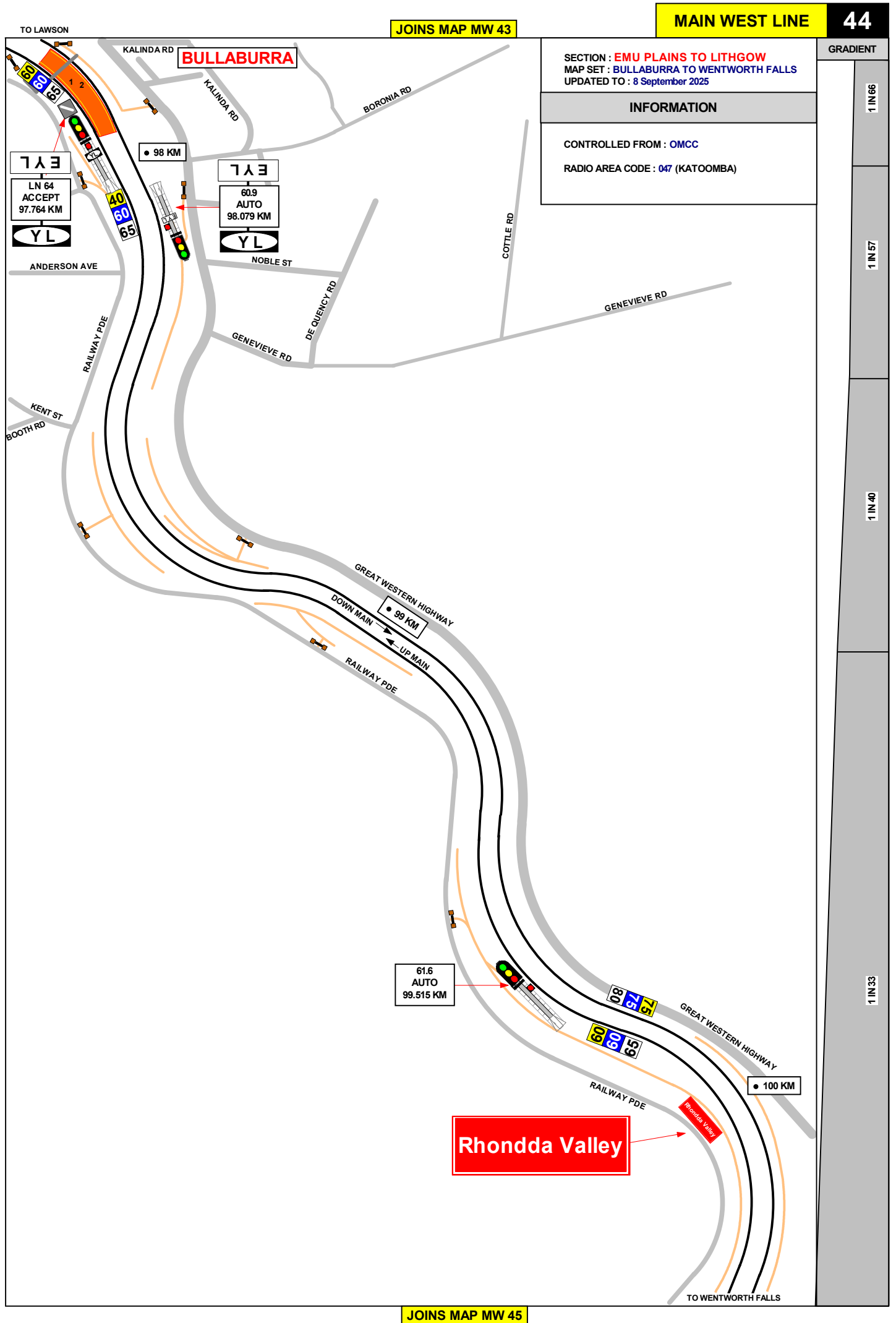
1 IN 54











SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **BULLABURRA TO WENTWORTH FALLS**
 UPDATED TO : 8 September 2025

INFORMATION

CONTROLLED FROM : **OMCC**

RADIO AREA CODE : **047** (KATOOMBA)

NLA 212
REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS

GRADIENT

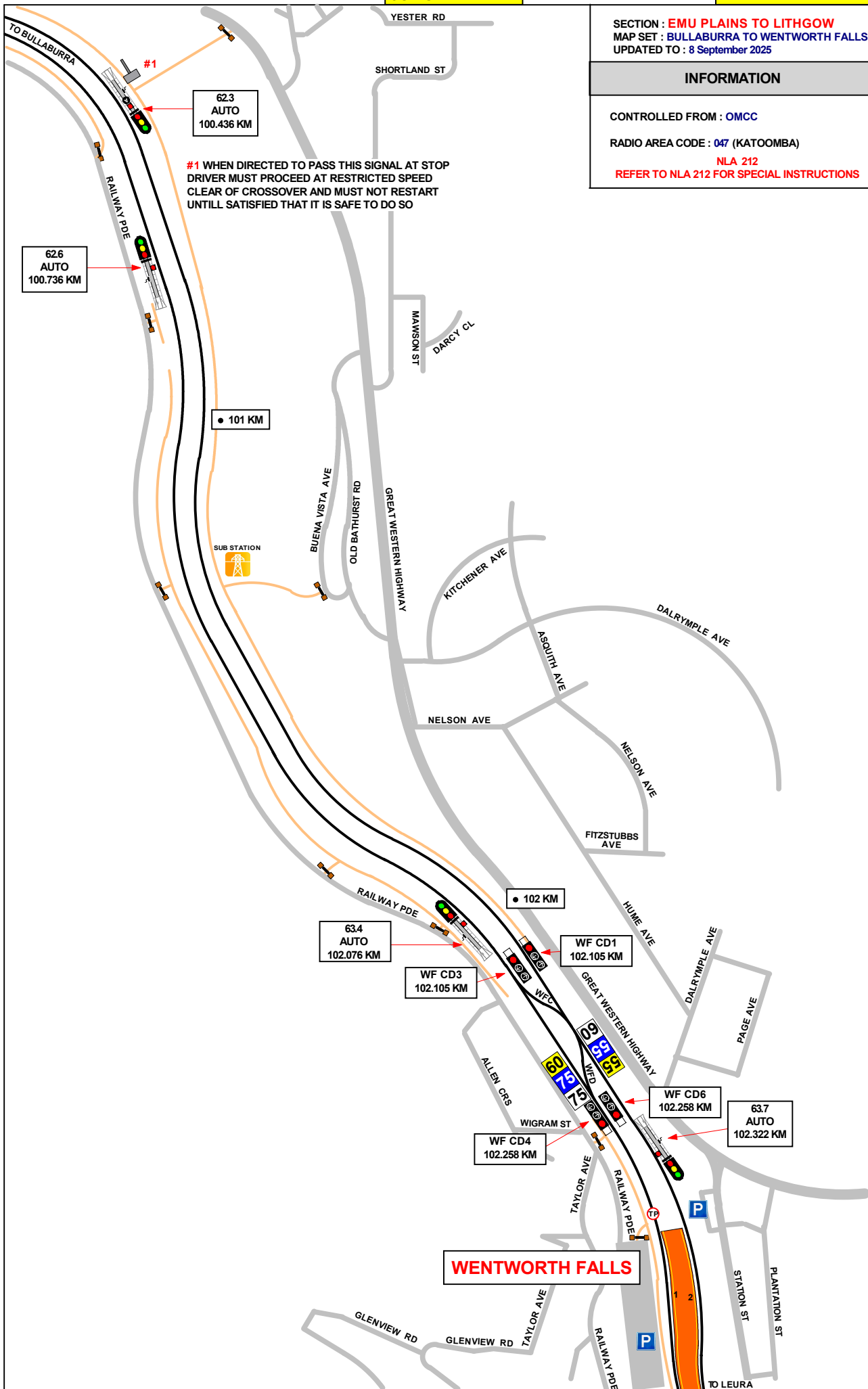
1 IN 33

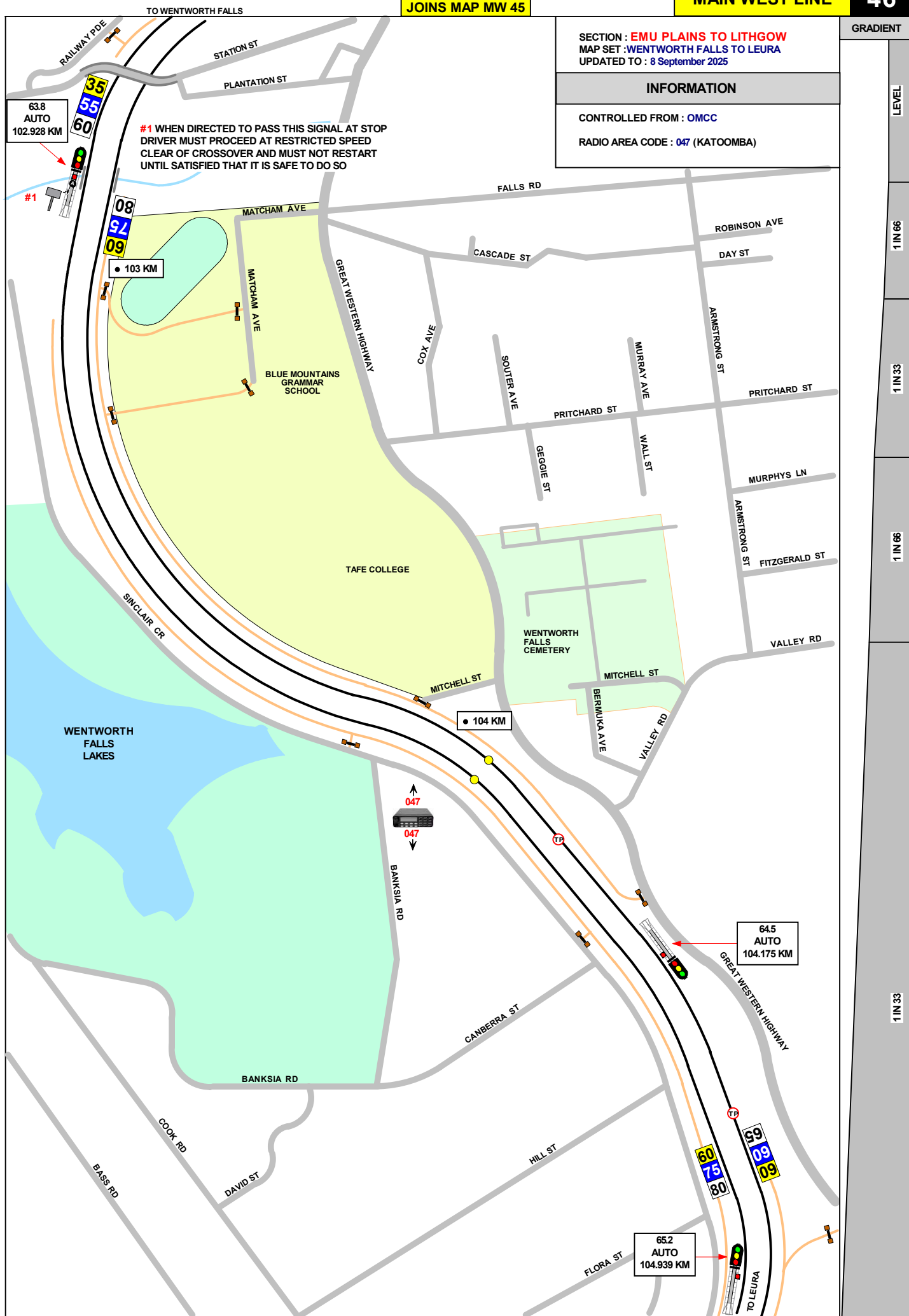
1 IN 73

LEVEL

1 IN 330

LEVEL



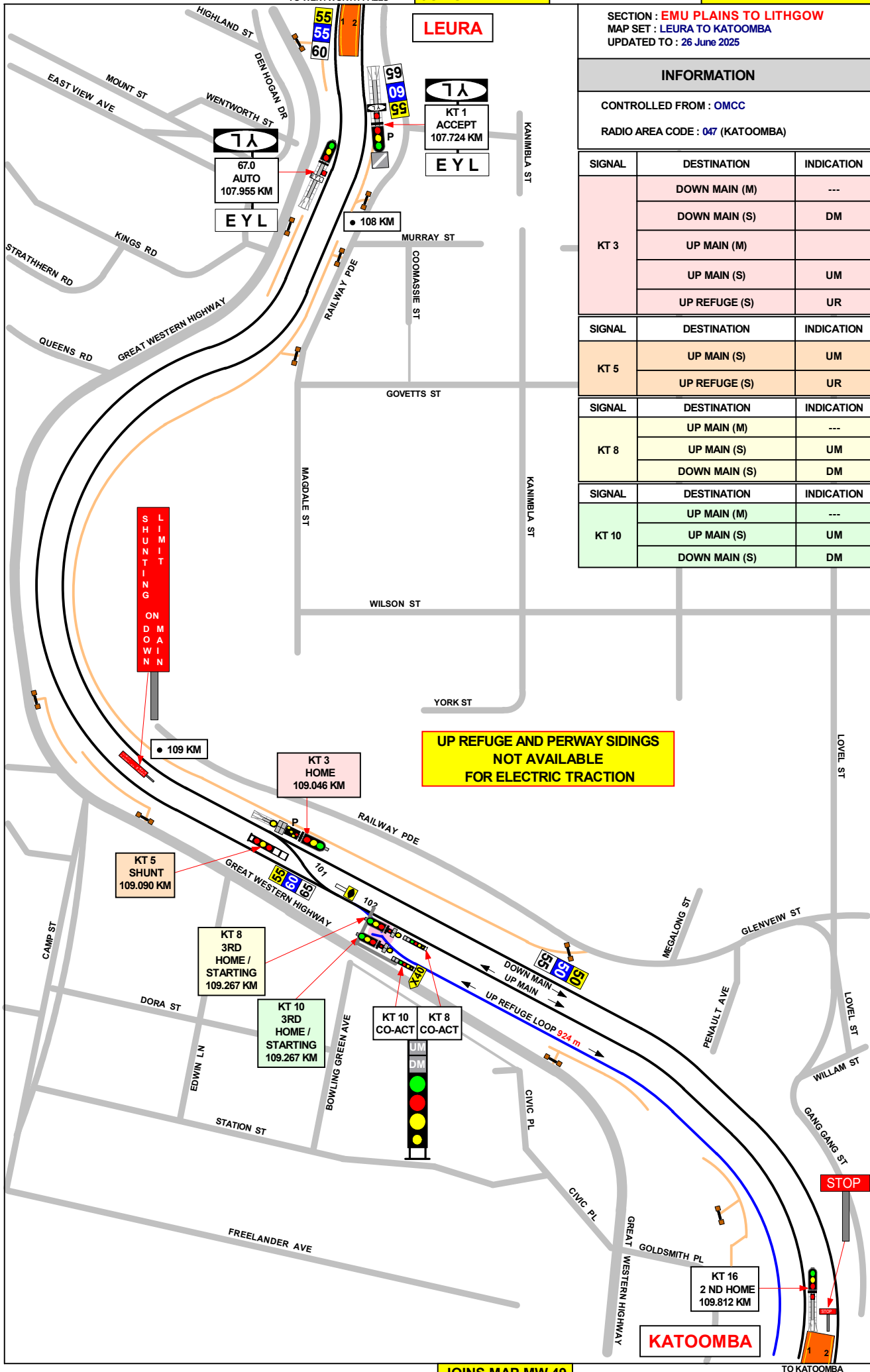


RADIO AREA CODE : 047 (KATOOMBA)



TO WENTWORTH FALLS

JOINS MAP MW 47



SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **LEURA TO KATOOMBA**
UPDATED TO : 26 June 2025

INFORMATION

CONTROLLED FROM : OMCC

RADIO AREA CODE : 047 (KATOOMBA)

SIGNAL	DESTINATION	INDICATION
KT 3	DOWN MAIN (M)	---
	DOWN MAIN (S)	DM
	UP MAIN (M)	
	UP MAIN (S)	UM
	UP REFUGE (S)	UR
SIGNAL	DESTINATION	INDICATION
KT 5	UP MAIN (S)	UM
	UP REFUGE (S)	UR
SIGNAL	DESTINATION	INDICATION
KT 8	UP MAIN (M)	---
	UP MAIN (S)	UM
	DOWN MAIN (S)	DM
SIGNAL	DESTINATION	INDICATION
KT 10	UP MAIN (M)	---
	UP MAIN (S)	UM
	DOWN MAIN (S)	DM

GRADIENT

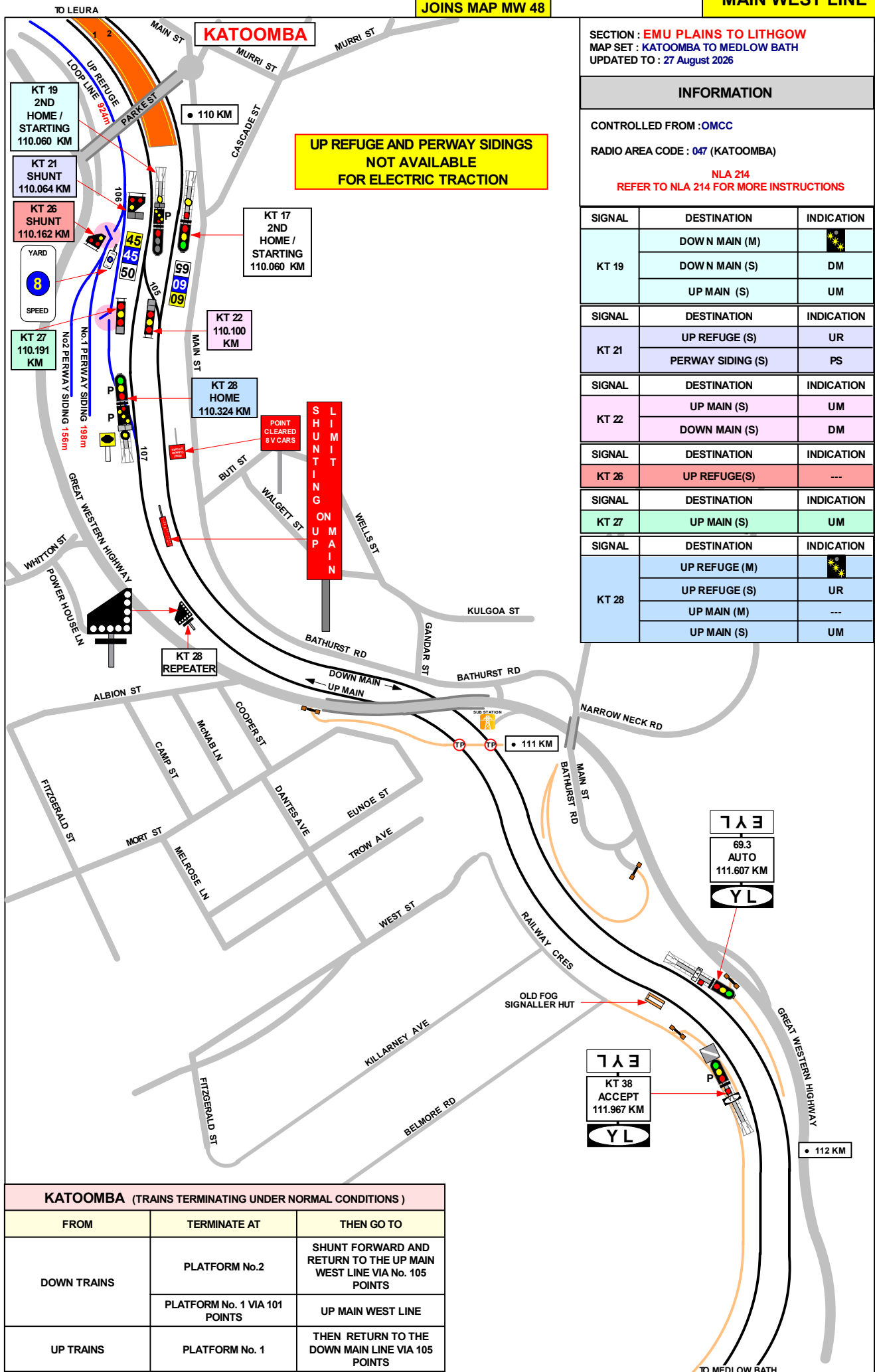
1 IN 33

LEVEL

UP REFUGE AND PERWAY SIDINGS
NOT AVAILABLE
FOR ELECTRIC TRACTION

JOINS MAP MW 49

TO KATOOMBA



SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **KATOOMBA TO MEDLOW BATH**
 UPDATED TO : 25 August 2026

INFORMATION

CONTROLLED FROM : OMCC
 RADIO AREA CODE : 047 (KATOOMBA)
 048 (MT VICTORIA)

NLA 212
 REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS

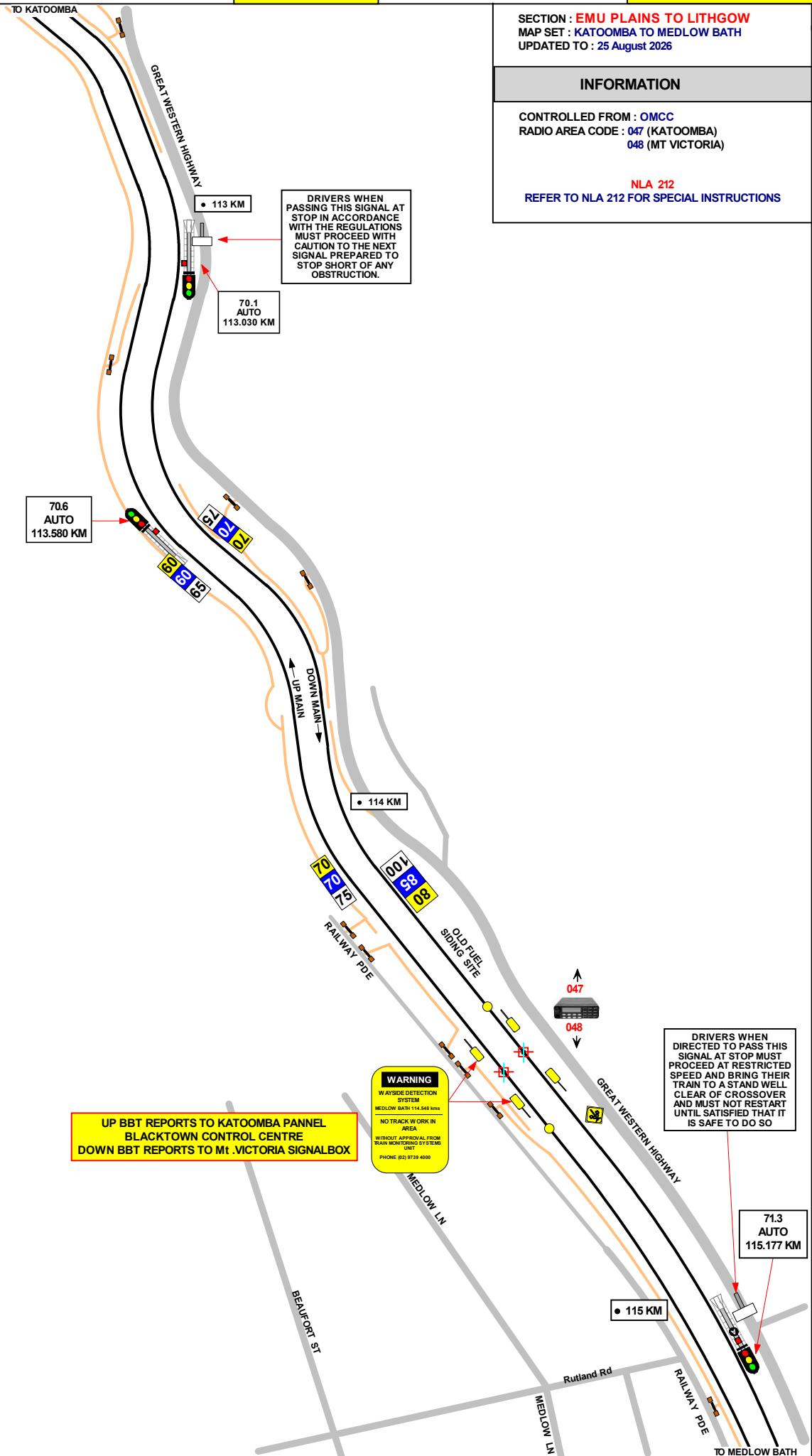
GRADIENT

1 IN 132

LEVEL

1 IN 66

1 IN 264





SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **MEDLOW BATH TO BLACKHEATH**
 UPDATED TO : 18 March 2026

INFORMATION

CONTROLLED FROM : **OMCC**

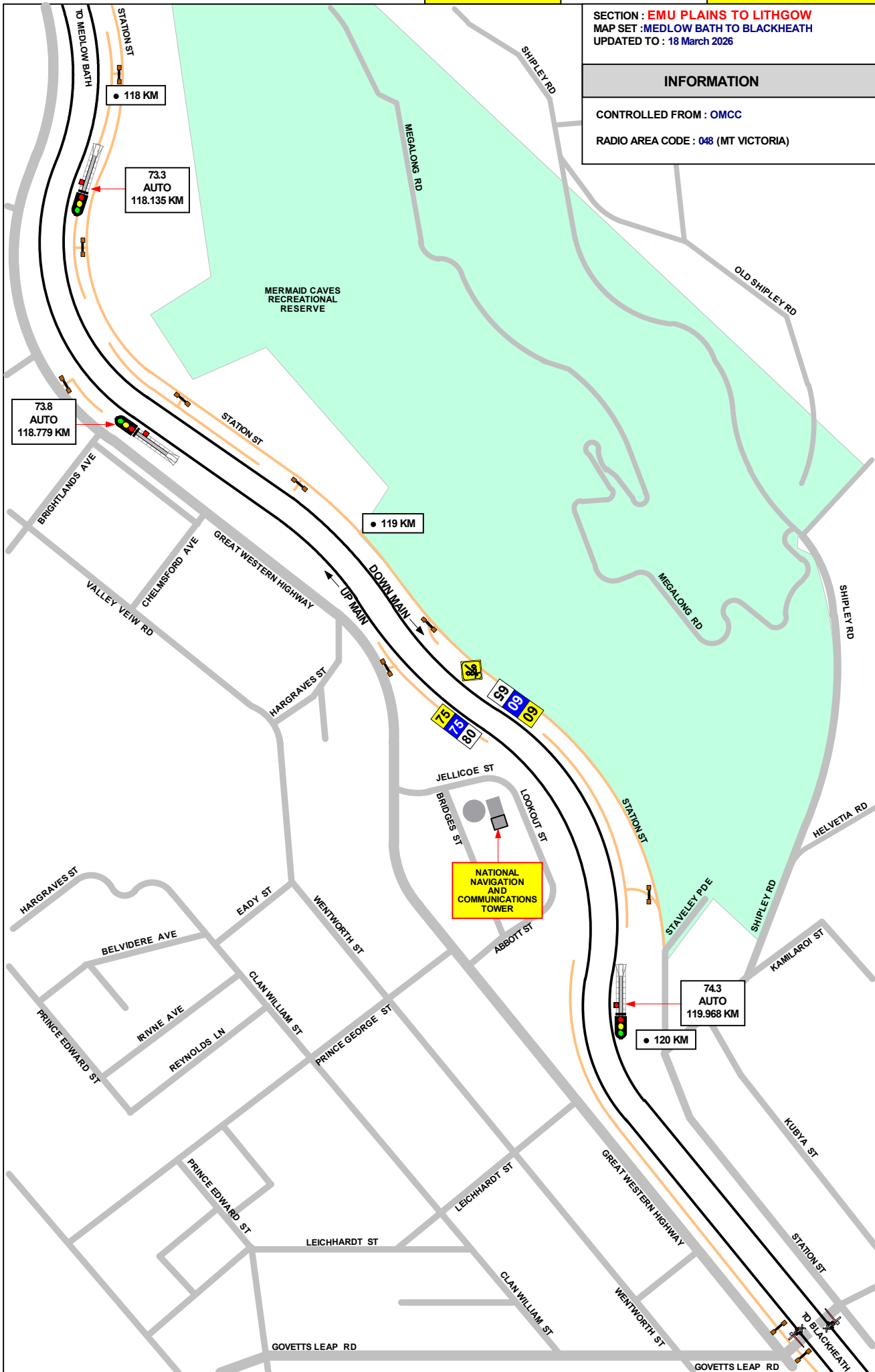
RADIO AREA CODE : **048** (MT VICTORIA)

GRADIENT

LEVEL

1 IN 60

LEVEL



JOINS MAP MW 54

SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **BLACKHEATH TO MT VICTORIA**
UPDATED TO : 29 July 2024

INFORMATION

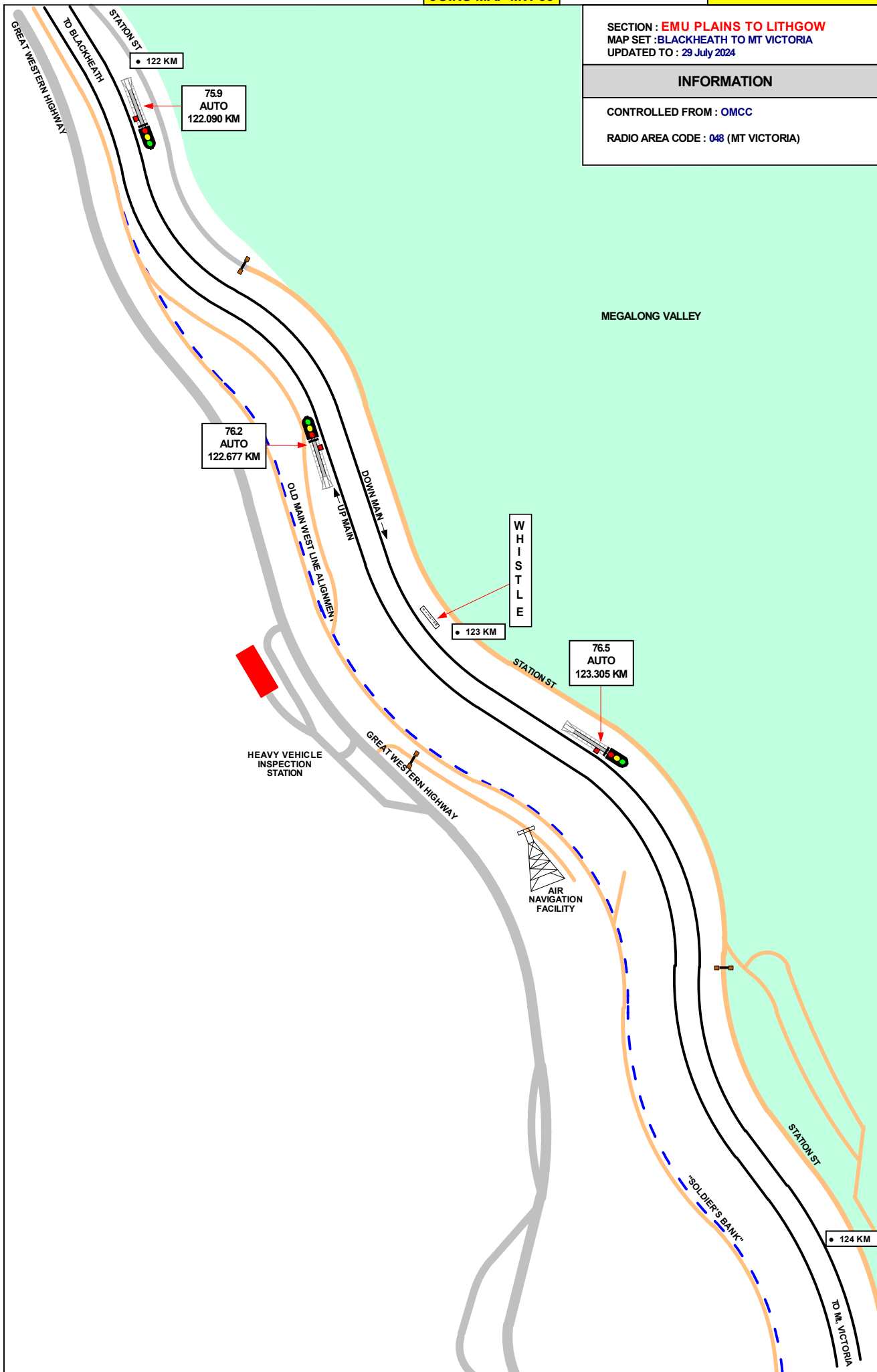
CONTROLLED FROM : **OMCC**

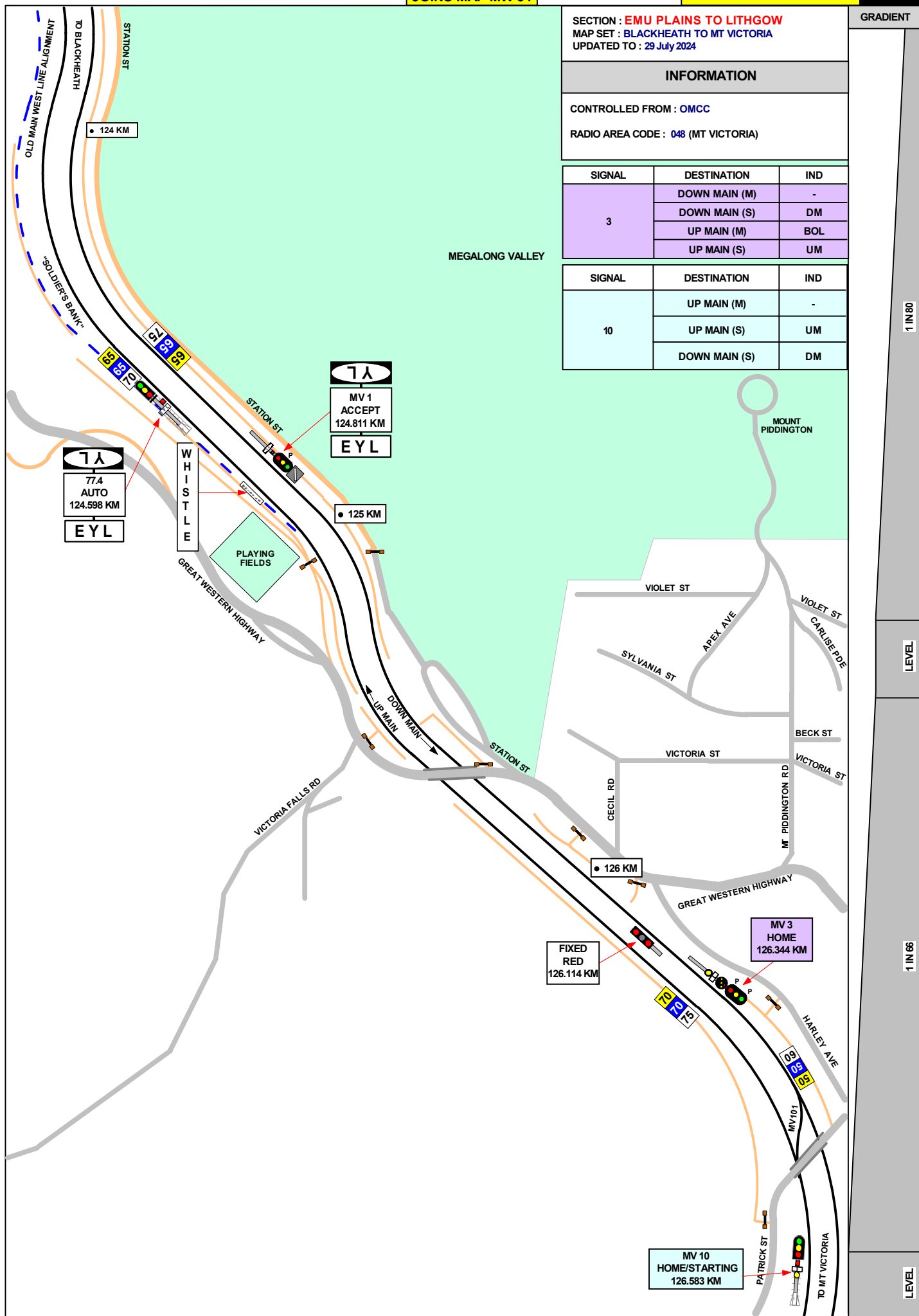
RADIO AREA CODE : **048** (MT VICTORIA)

GRADIENT

1 IN 200

1 IN 80





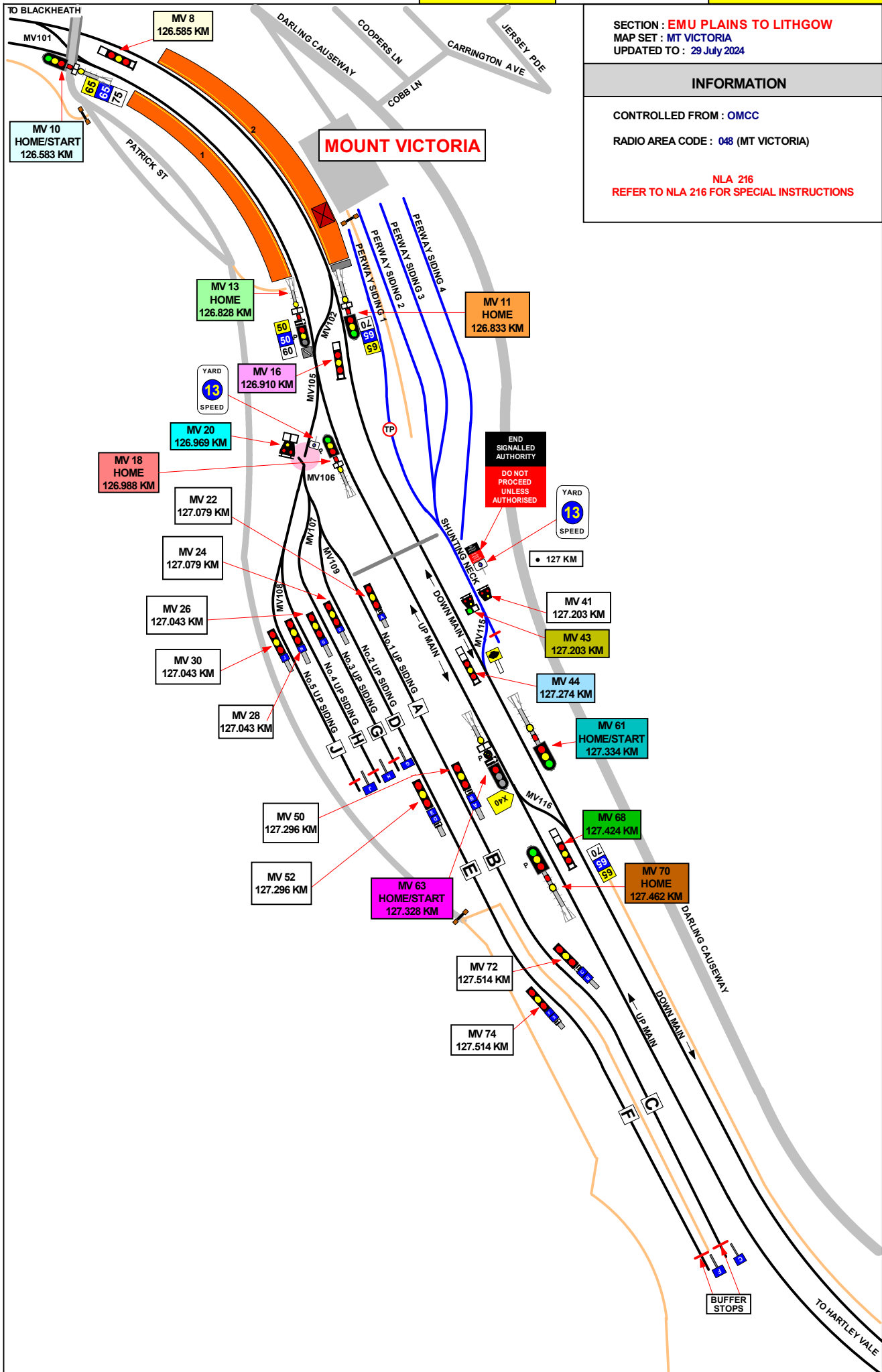
SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **MT VICTORIA**
UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM : OMCC

RADIO AREA CODE : 048 (MT VICTORIA)

NLA 216
REFER TO NLA 216 FOR SPECIAL INSTRUCTIONS



SECTION : EMU PLAINS TO LITHGOW
MAP SET : MT VICTORIA
UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM: OMCC

RADIO AREA CODE : 048 (MT VICTORIA)

NLA 216
REFER TO NLA 216 FOR SPECIAL INSTRUCTIONS

SIGNAL	DESTINATION	IND
10	UP MAIN (M)	-
	UP MAIN (S)	UM
	DOWN MAIN (S)	DM

SIGNAL	DESTINATION	IND
8	DOWN MAIN (S)	DM

SIGNAL	DESTINATION	IND
13	UP MAIN (M)	-
	UP MAIN (S)	UM
	No.1 UP SIDING (S)	U1
	No.2 UP SIDING (S)	U2
	No.3 UP SIDING (S)	U3
	No.4 UP SIDING (S)	U4
	No.5 UP SIDING (S)	U5

SIGNAL	DESTINATION	IND
11	DOWN MAIN (M)	-
	DOWN MAIN (S)	DM
	UP MAIN (S)	UM
	No.1 UP SIDING (S)	U1
	No.2 UP SIDING (S)	U2
	No.3 UP SIDING (S)	U3
	No.4 UP SIDING (S)	U4
	No.5 UP SIDING (S)	U5

SIGNAL	DESTINATION	IND
16	DOWN MAIN (S)	DM

SIGNAL	DESTINATION	IND
18	UP MAIN (M)	-
	UP MAIN (S)	UM
	DOWN MAIN (S)	DM

SIGNAL	DESTINATION	IND
20	UP MAIN (S)	UM
	DOWN MAIN (S)	DM

SIGNAL	DESTINATION	IND
43	DOWN MAIN (S)	-

SIGNAL	DESTINATION	IND
44	DOWN MAIN (S)	DM
	PERWAY SIDING (S)	PS

SIGNAL	DESTINATION	IND
61	DOWN MAIN (M)	-
	DOWN MAIN (S)	-

SIGNAL	DESTINATION	IND
63	DOWN MAIN (M)	BOL
	DOWN MAIN (S)	DM

SIGNAL	DESTINATION	IND
68	UP MAIN (S)	UM
	DOWN MAIN (S)	DM

SIGNAL	DESTINATION	IND
70	UP MAIN (S)	-
	UP MAIN (S)	-

SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **MOUNT VICTORIA TO HARTLEY VALE**
UPDATED TO : 29 July 2024

INFORMATION

CONTROLLED FROM : OMCC

RADIO AREA CODE : 048 (MT VICTORIA)

GRADIENT

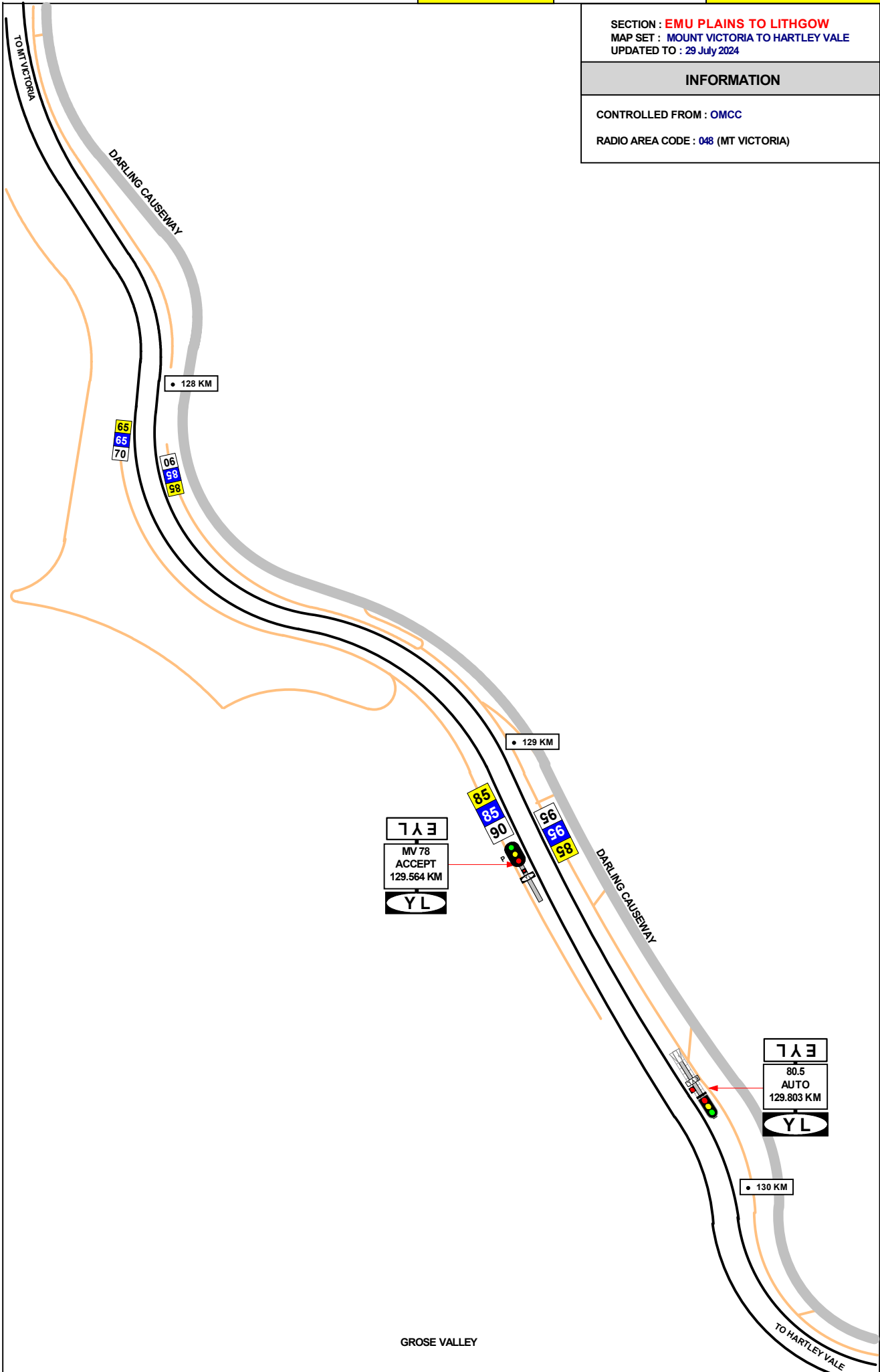
LEVEL

1 IN 99

LEVEL

1 IN 100

LEVEL



1 IN 70



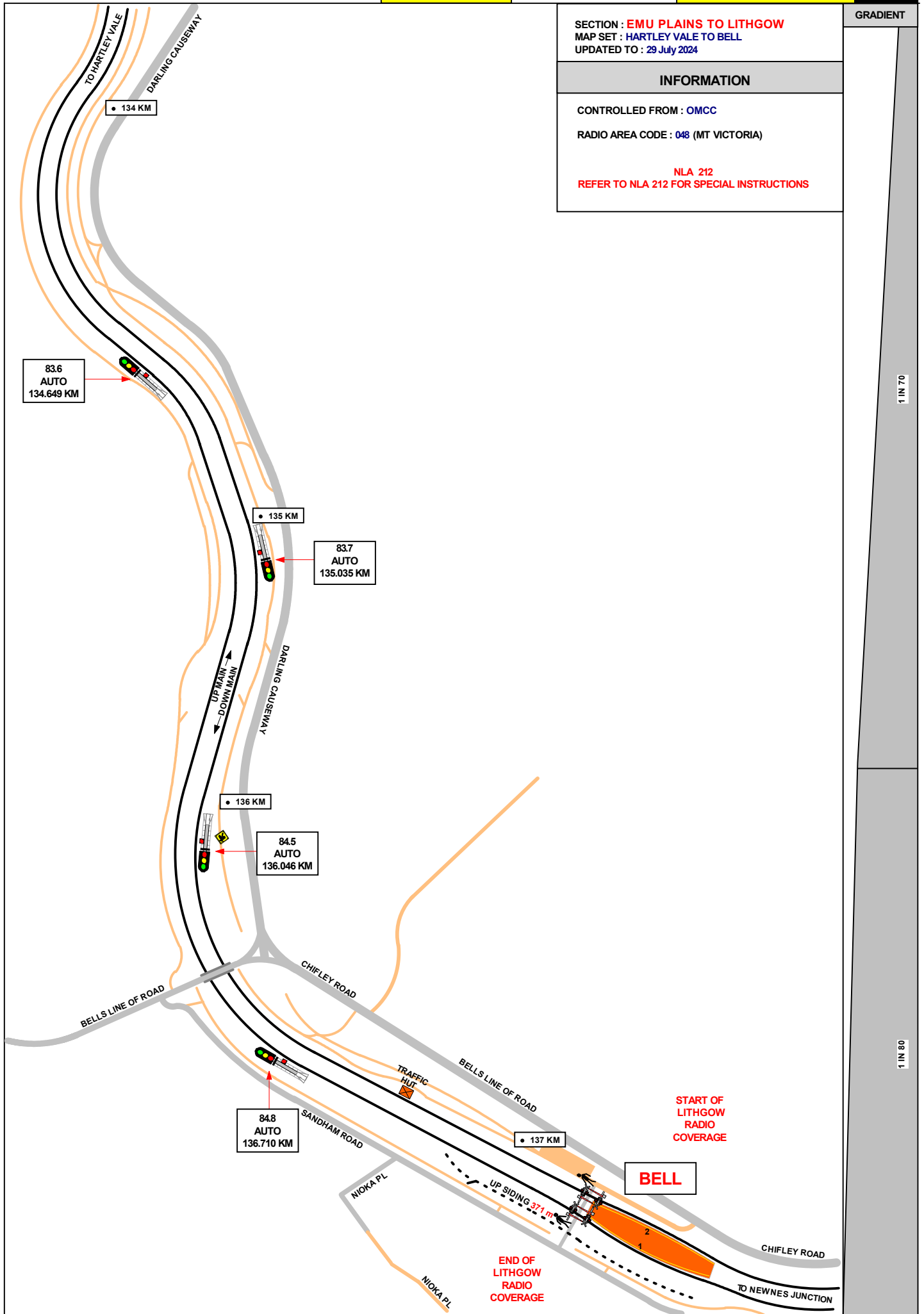
SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **HARTLEY VALE TO BELL**
UPDATED TO : 29 July 2024

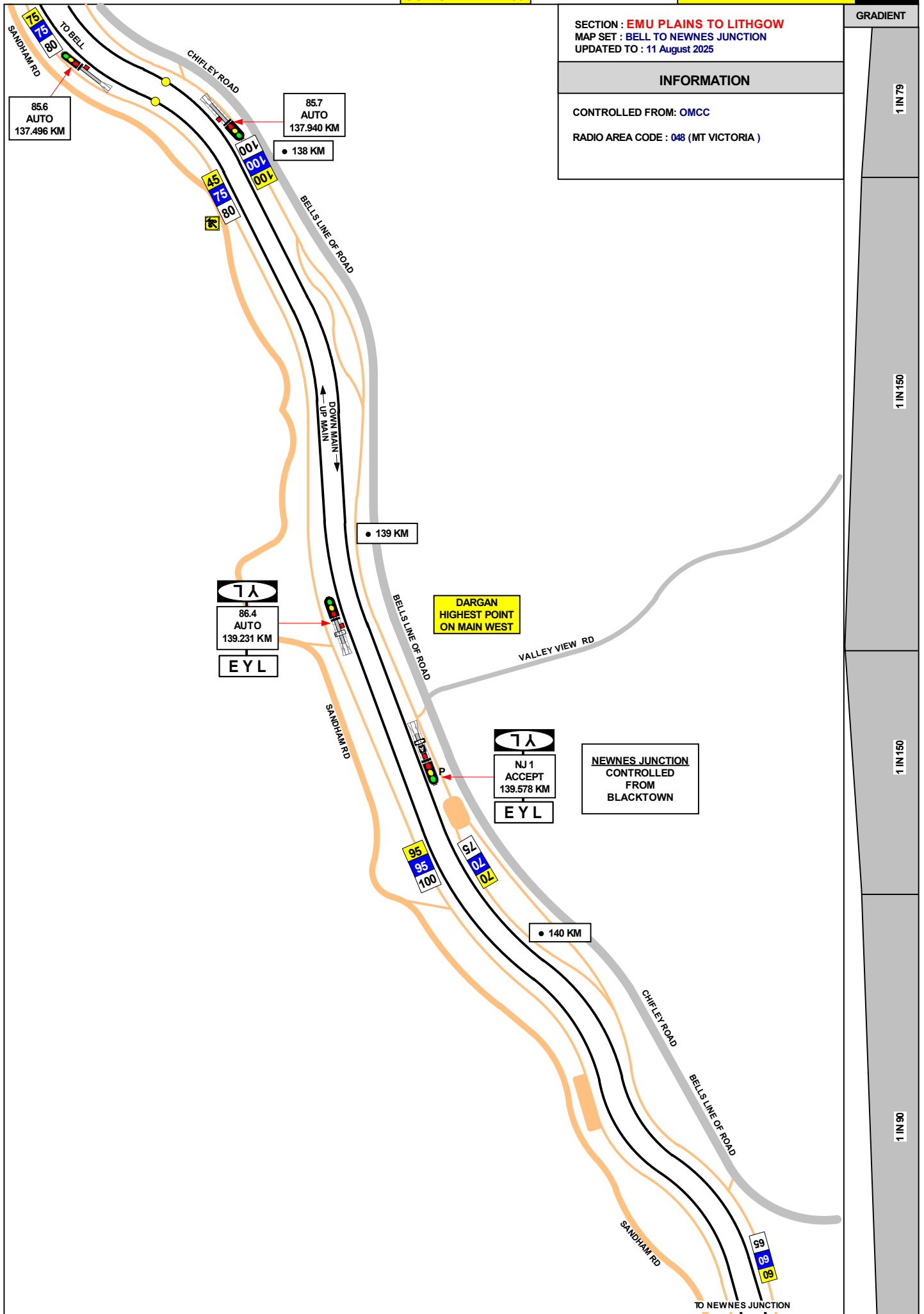
INFORMATION

CONTROLLED FROM : **OMCC**

RADIO AREA CODE : **048** (MT VICTORIA)

NLA 212
REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS





SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **NEWNES JUNCTION**
UPDATED TO : **29 July 2024**

INFORMATION

CONTROLLED FROM : **OMCC**

RADIO AREA CODE : **048 (MT VICTORIA)**

NLA 212
REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS

SIGNAL	DESTINATION	INDICATION
NJ 3	DOWN MAIN (M)	---
	DOWN MAIN (S)	DM
	COAL SIDING (S)	CS

SIGNAL	DESTINATION	INDICATION
NJ 5	COAL SIDING (S)	CS

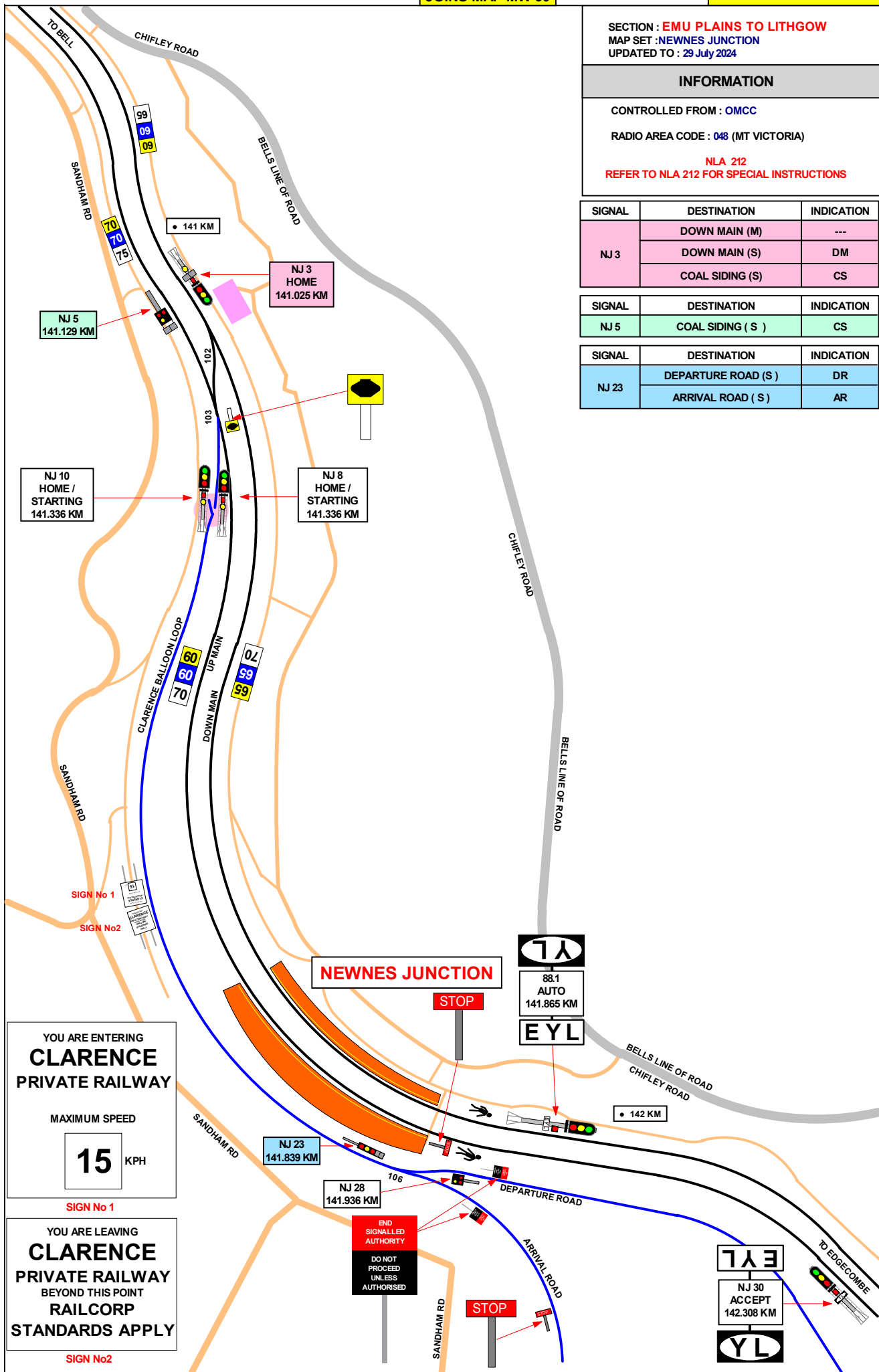
SIGNAL	DESTINATION	INDICATION
NJ 23	DEPARTURE ROAD (S)	DR
	ARRIVAL ROAD (S)	AR

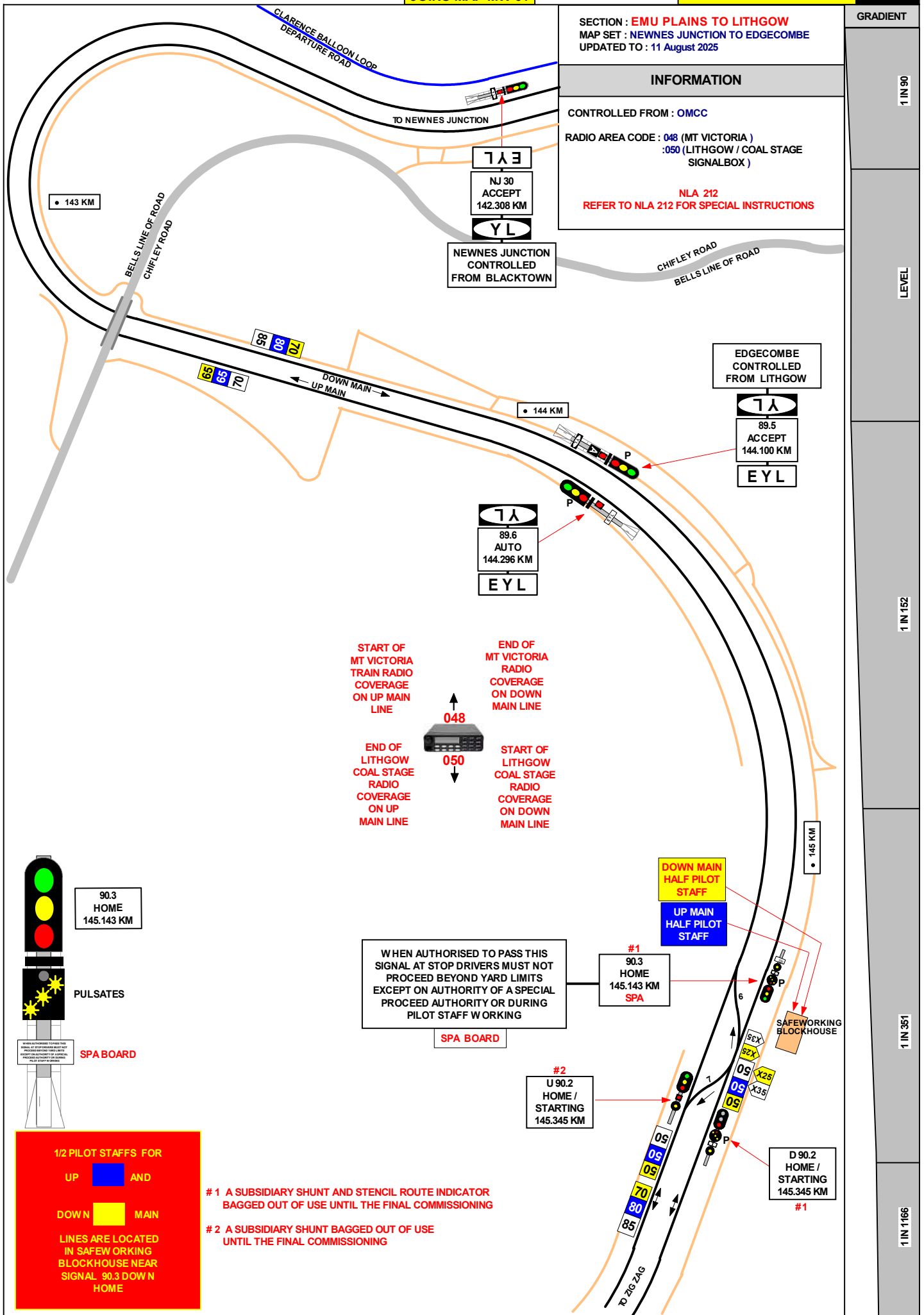
GRADIENT

1 IN 90

LEVEL

1 IN 90





SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **EDGECOMBE TO TUNNEL 4**
UPDATED TO : 8 May 2020

INFORMATION

CONTROLLED FROM : **LITHGOW**

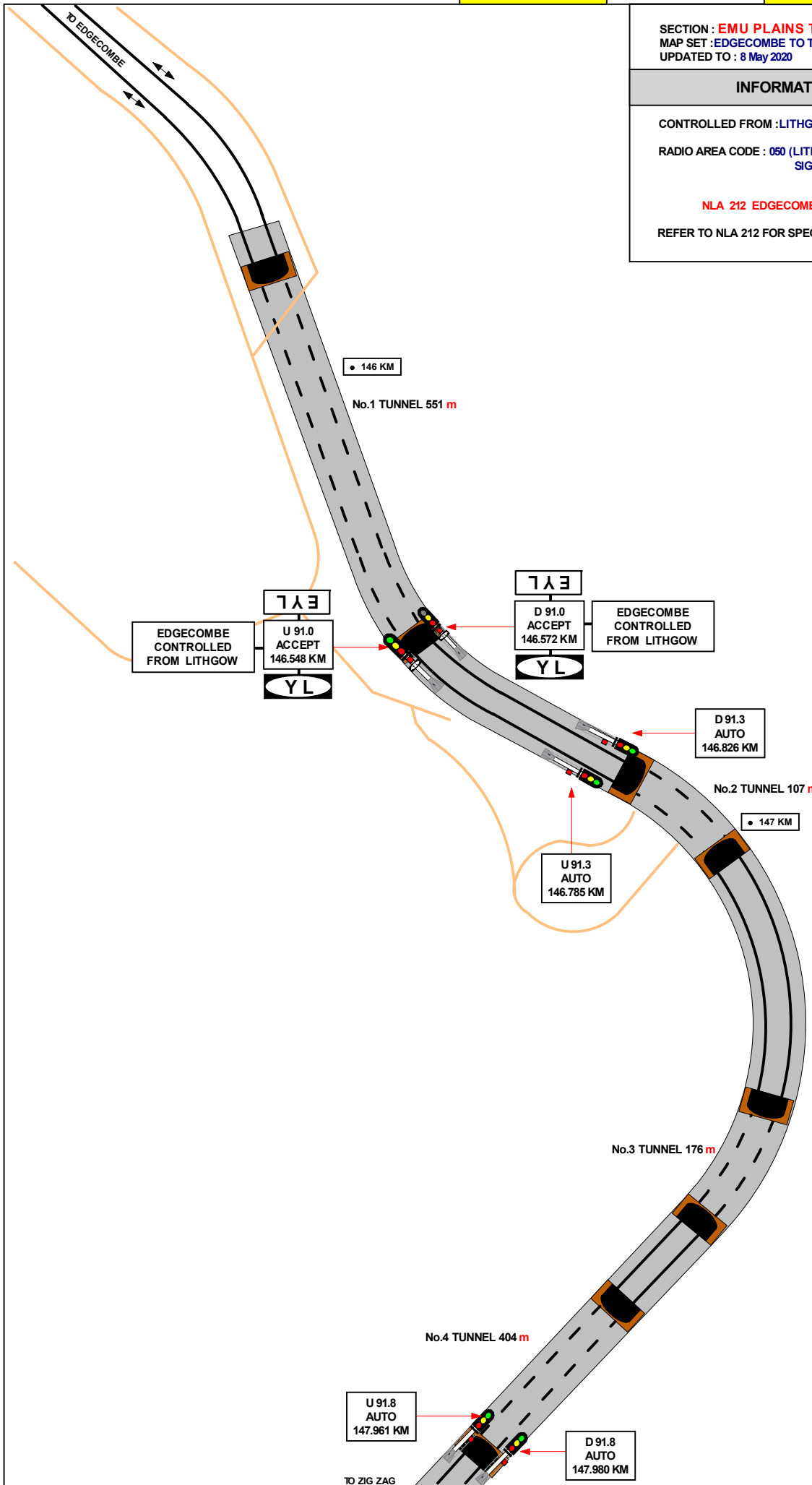
RADIO AREA CODE : **050** (LITHGOW / COAL STAGE
SIGNAL BOX)

NLA 212 EDGECOMBE - ZIG ZAG

REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS

1 IN 1166

1 IN 90



SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **TUNNEL 4 TO ZIG ZAG**
 UPDATED TO : 26 November 2021

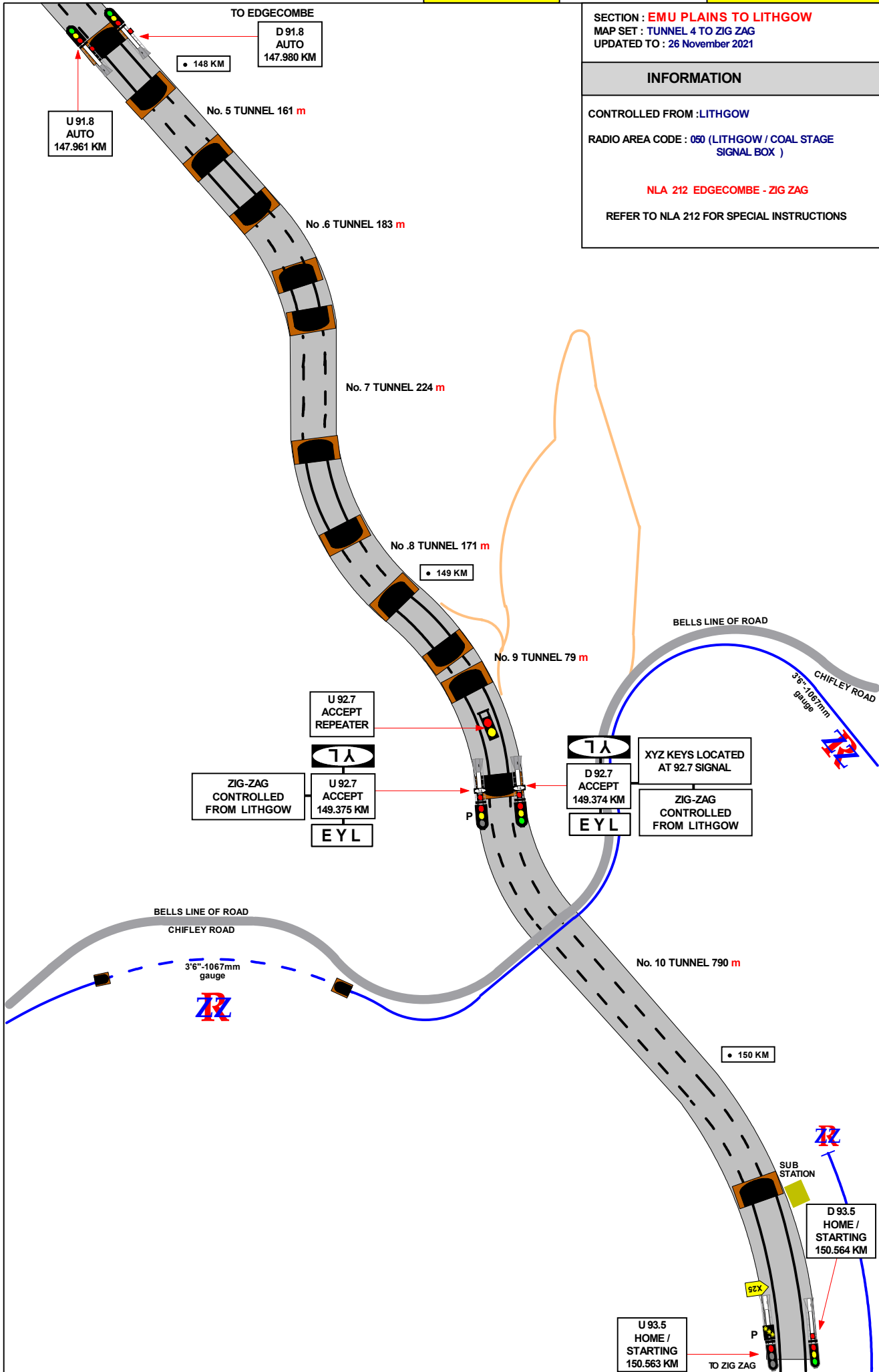
INFORMATION

CONTROLLED FROM : **LITHGOW**

RADIO AREA CODE : **050 (LITHGOW / COAL STAGE
 SIGNAL BOX)**

NLA 212 EDGECOMBE - ZIG ZAG

REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS



JOINS MAP MW 64

TO EDGECOMBE

SECTION : **EMU PLAINS TO LITHGOW**
MAP SET : **ZIG ZAG TO OAKLEY PARK**
UPDATED TO : 11 August 2025

GRADIENT

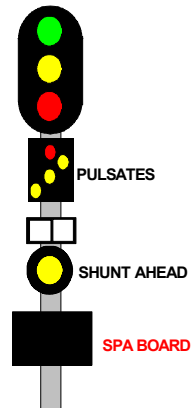
INFORMATION

CONTROLLED FROM : **LITHGOW**RADIO AREA CODE : **050 (LITHGOW / COAL STAGE
SIGNAL BOX)****NLA 212 EDGECOMBE - ZIG ZAG**

REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS

SIGNAL	DESTINATION	INDICATION
D 93.6	UP MAIN	UM
	DOWN MAIN	DM

D 93.6
HOME /
STARTING
150.755 KM
SPA



1/2 PILOT STAFFS FOR

UP

AND

DOWN

MAIN

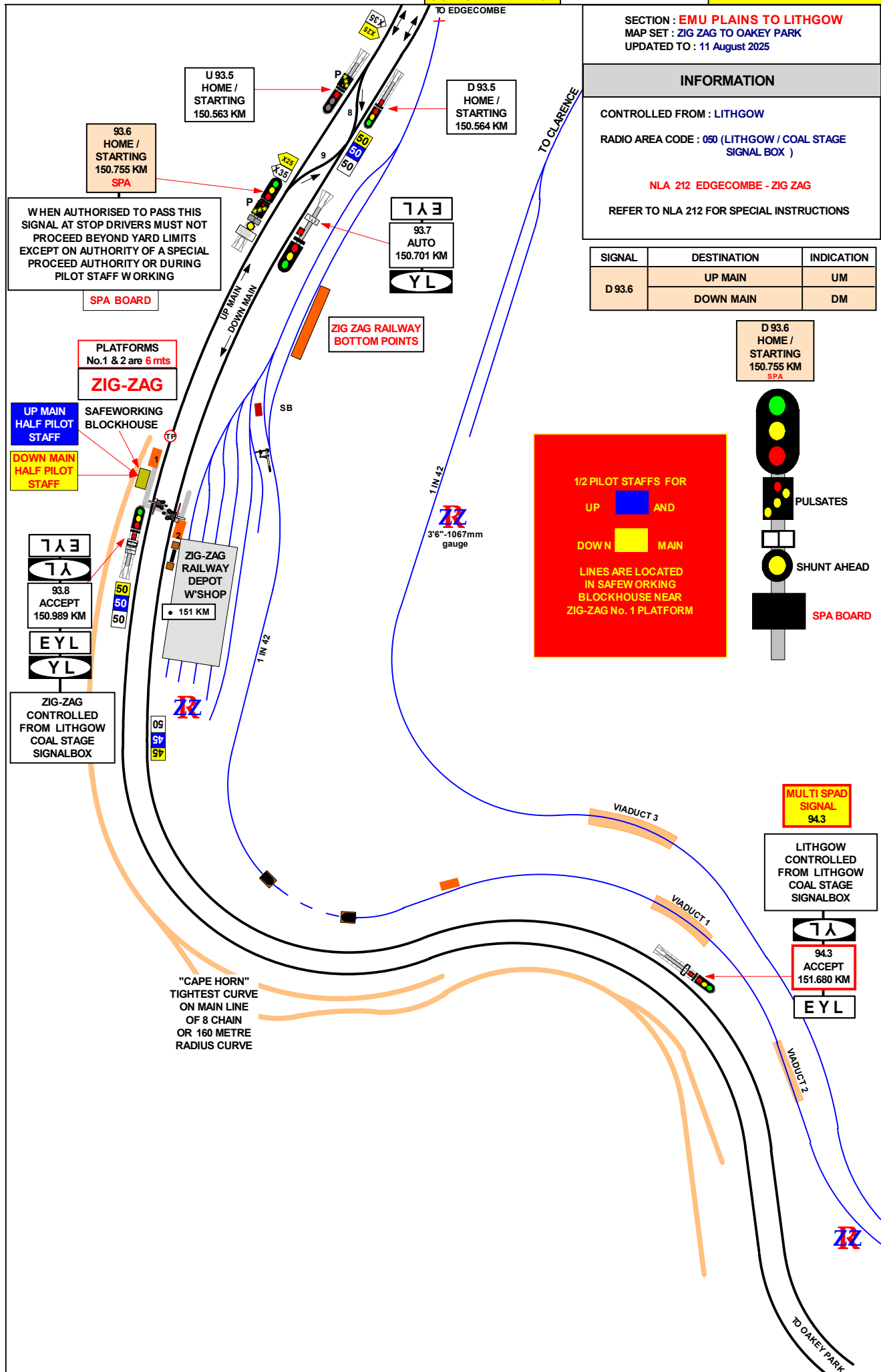
LINES ARE LOCATED
IN SAFEWORKING
BLOCKHOUSE NEAR
ZIG-ZAG No. 1 PLATFORM

MULTI SPAD
SIGNAL
94.3

LITHGOW
CONTROLLED
FROM LITHGOW
COAL STAGE
SIGNALBOX

94.3
ACCEPT
151.680 KM
EYL

JOINS MAP MW 66



U 93.5
HOME /
STARTING
150.563 KM

D 93.5
HOME /
STARTING
150.564 KM

93.6
HOME /
STARTING
150.755 KM
SPA

WHEN AUTHORISED TO PASS THIS
SIGNAL AT STOP DRIVERS MUST NOT
PROCEED BEYOND YARD LIMITS
EXCEPT ON AUTHORITY OF A SPECIAL
PROCEED AUTHORITY OR DURING
PILOT STAFF WORKING

SPA BOARD

PLATFORMS
No.1 & 2 are 6 mts

ZIG-ZAGUP MAIN
HALF PILOT
STAFFSAFEWORKING
BLOCKHOUSEDOWN MAIN
HALF PILOT
STAFF**ZIG ZAG RAILWAY
BOTTOM POINTS**

ZIG-ZAG
RAILWAY
DEPOT
W'SHOP
• 151 KM

EYL
93.8
ACCEPT
150.989 KM
EYL
YL

ZIG-ZAG
CONTROLLED
FROM LITHGOW
COAL STAGE
SIGNALBOX

"CAPE HORN"
TIGHTEST CURVE
ON MAIN LINE
OF 8 CHAIN
OR 160 METRE
RADIUS CURVE

VIADUCT 3

VIADUCT 1

VIADUCT 2

TO OAKLEY PARK

"CAPE HORN"
TIGHTEST CURVE
ON MAIN LINE
OF 8 CHAIN
OR 160 METRE
RADIUS CURVE



943
ACCEPT
151.680 KM

MULTI SPAD
SIGNAL
943

EYL

LITHGOW
CONTROLLED
FROM LITHGOW
COAL STAGE

• 152 KM

45
45
50

02
02
09

DOWN MAIN

UP MAIN

• 153 KM

95.0
STARTING
153.035 KM

95.1
HOME
153.179 KM

OAKEY PARK

SUB STATION

SPEED LIMIT
IN YARD
15 kph

POINTS
INDICATOR

72
153.404 KM

6 / 7 FRB
153.450 KM

1 FRB
153.450 KM

SUB STATION SIDING
137 mts

77

81

78

79

TO LITHGOW

SECTION : EMU PLAINS TO LITHGOW
MAP SET : ZIG ZAG TO OAKEY PARK
UPDATED TO : 15 April 2024

INFORMATION

CONTROLLED FROM : LITHGOW

RADIO AREA CODE : 050 (LITHGOW / COAL STAGE
SIGNAL BOX)

NLA 212 EDGECOMBE - ZIG ZAG

REFER TO NLA 212 FOR SPECIAL INSTRUCTIONS

SIGNAL	DESTINATION	INDICATION
95.1	DOWN SIDINGS	DS
	DOWN MAIN	DM
	UP MAIN	UM

SIGNAL	DESTINATION	INDICATION
72	No.2 RECEPTION SIDING	2R
	No.1 RECEPTION SIDING	1R



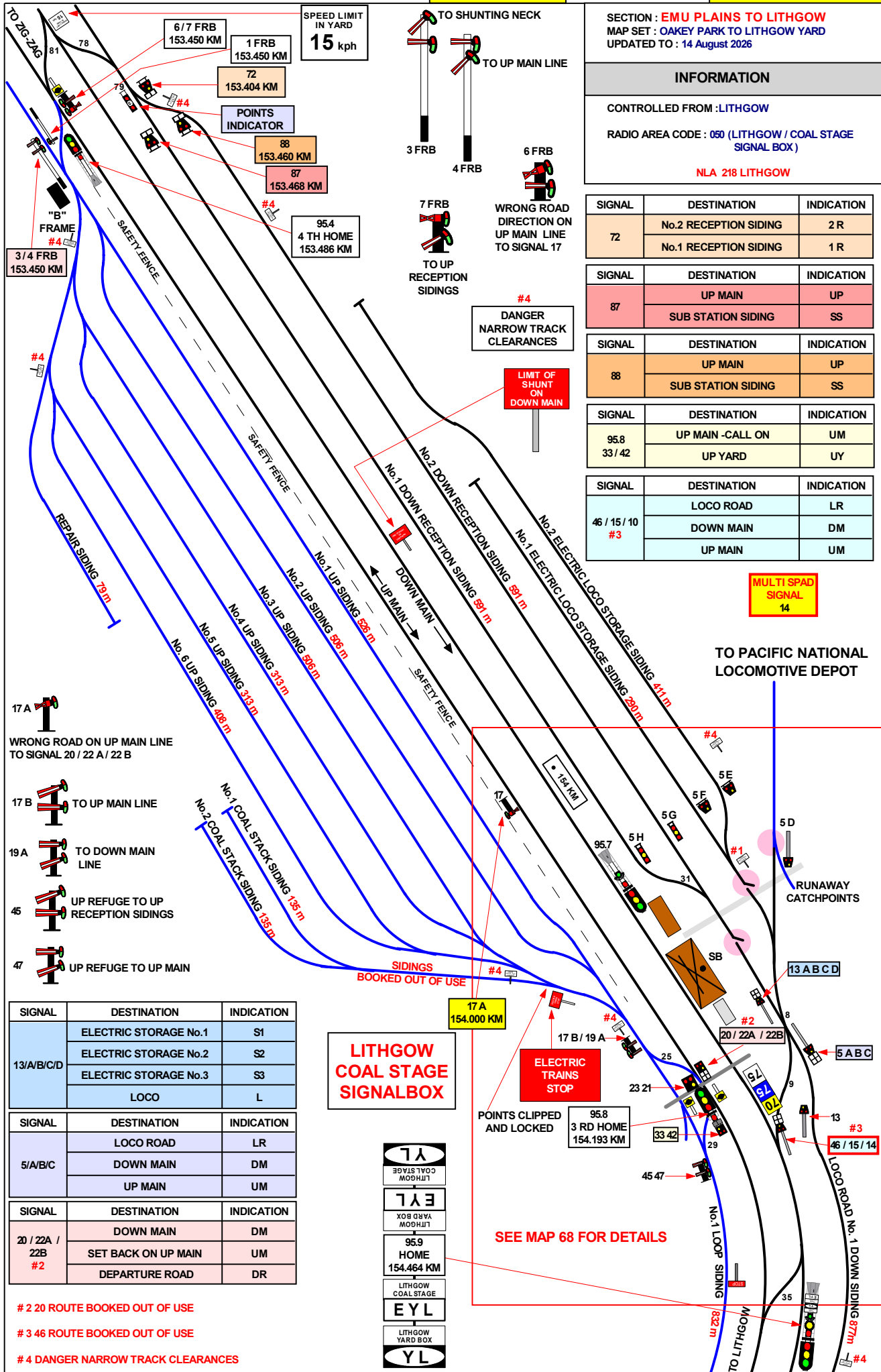
WRONG ROAD DIRECTION ON UP MAIN
LINE TO SIGNAL 17

6 FRB



TO UP RECEPTION SIDINGS

7 FRB



SECTION : EMU PLAINS TO LITHGOW
 MAP SET : LITHGOW COAL STAGE
 UPDATED TO : 14 August 2026

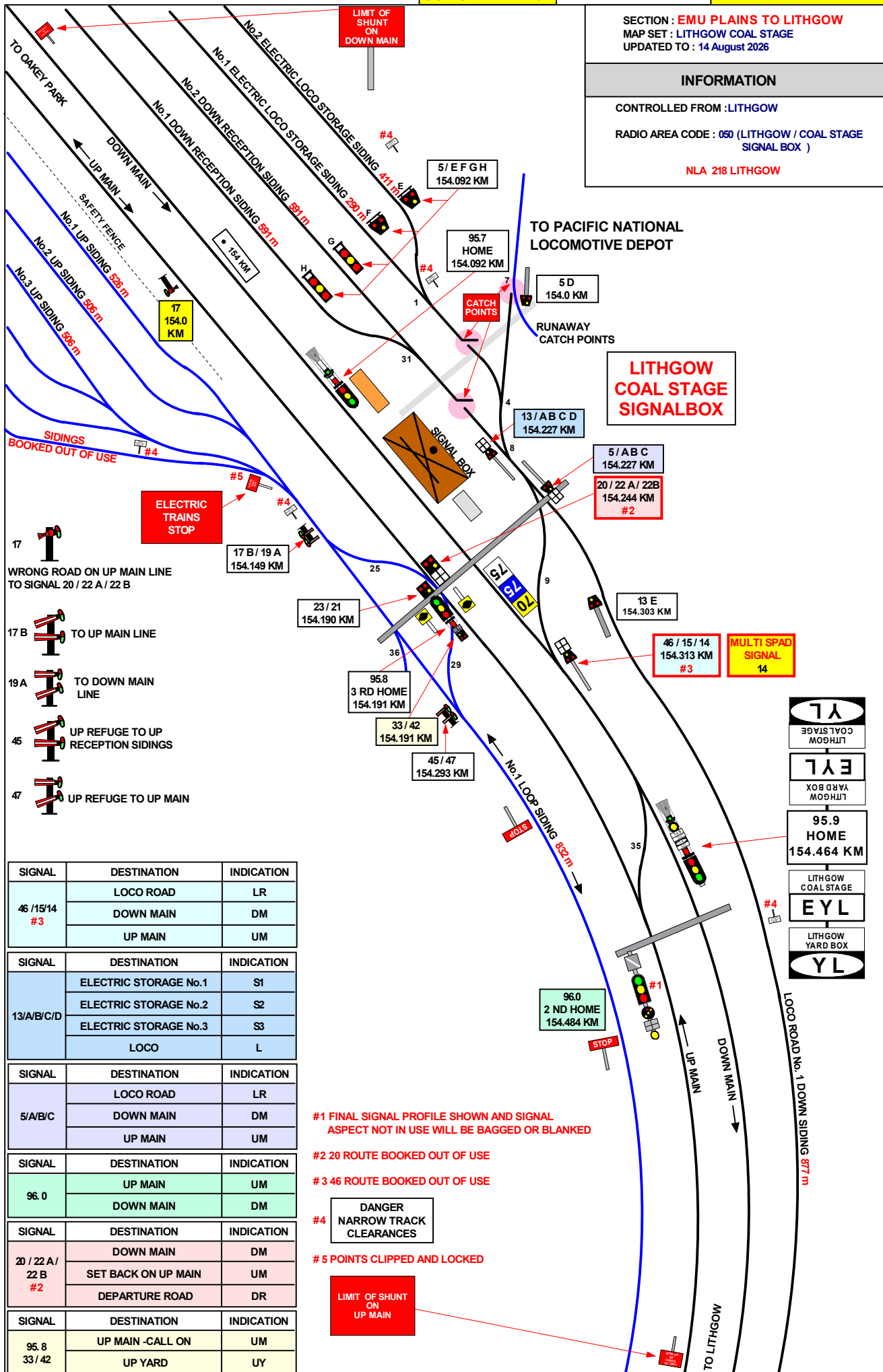
INFORMATION

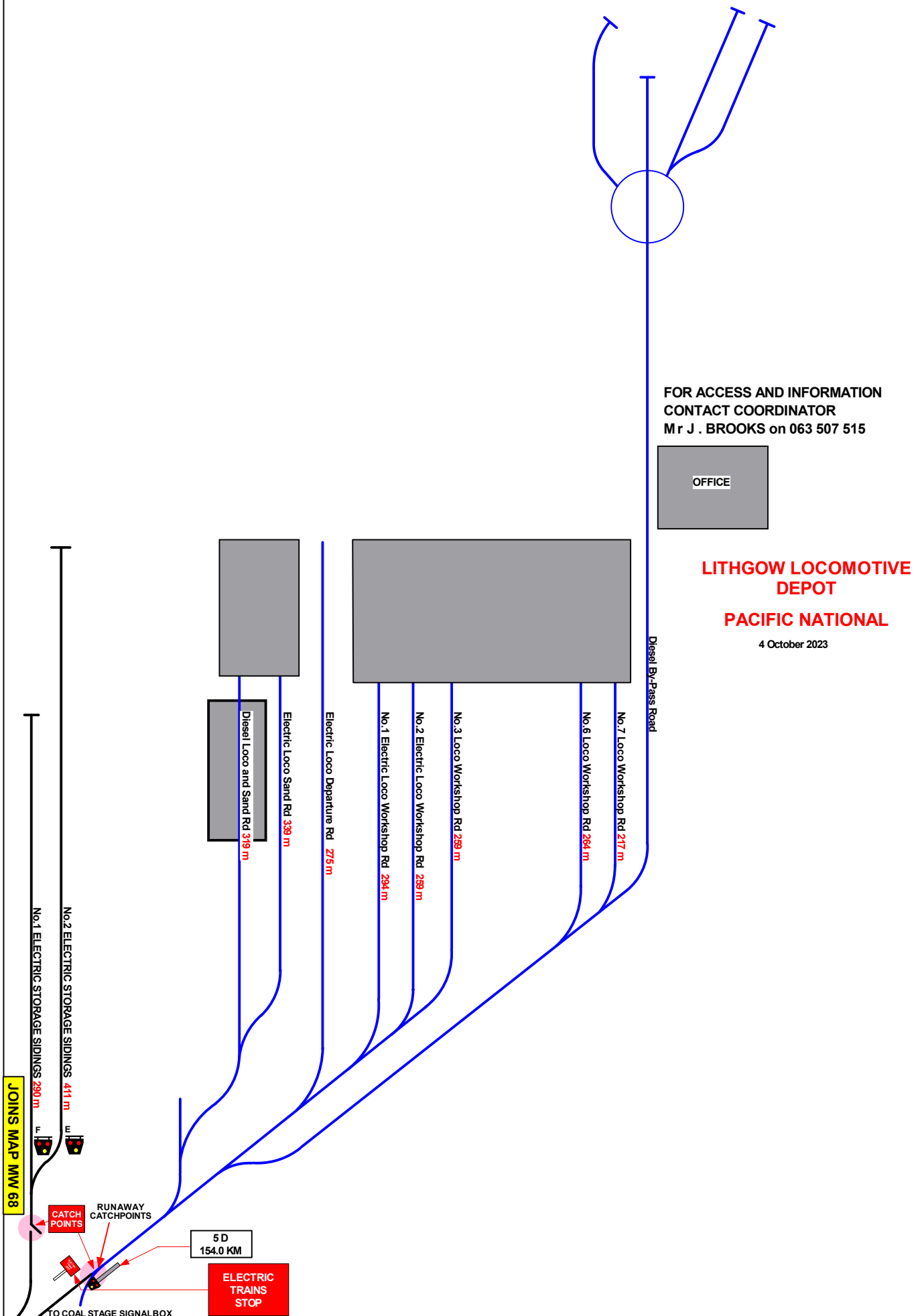
CONTROLLED FROM : LITHGOW

RADIO AREA CODE : 050 (LITHGOW / COAL STAGE
 SIGNAL BOX)

NLA 218 LITHGOW

GRADIENT





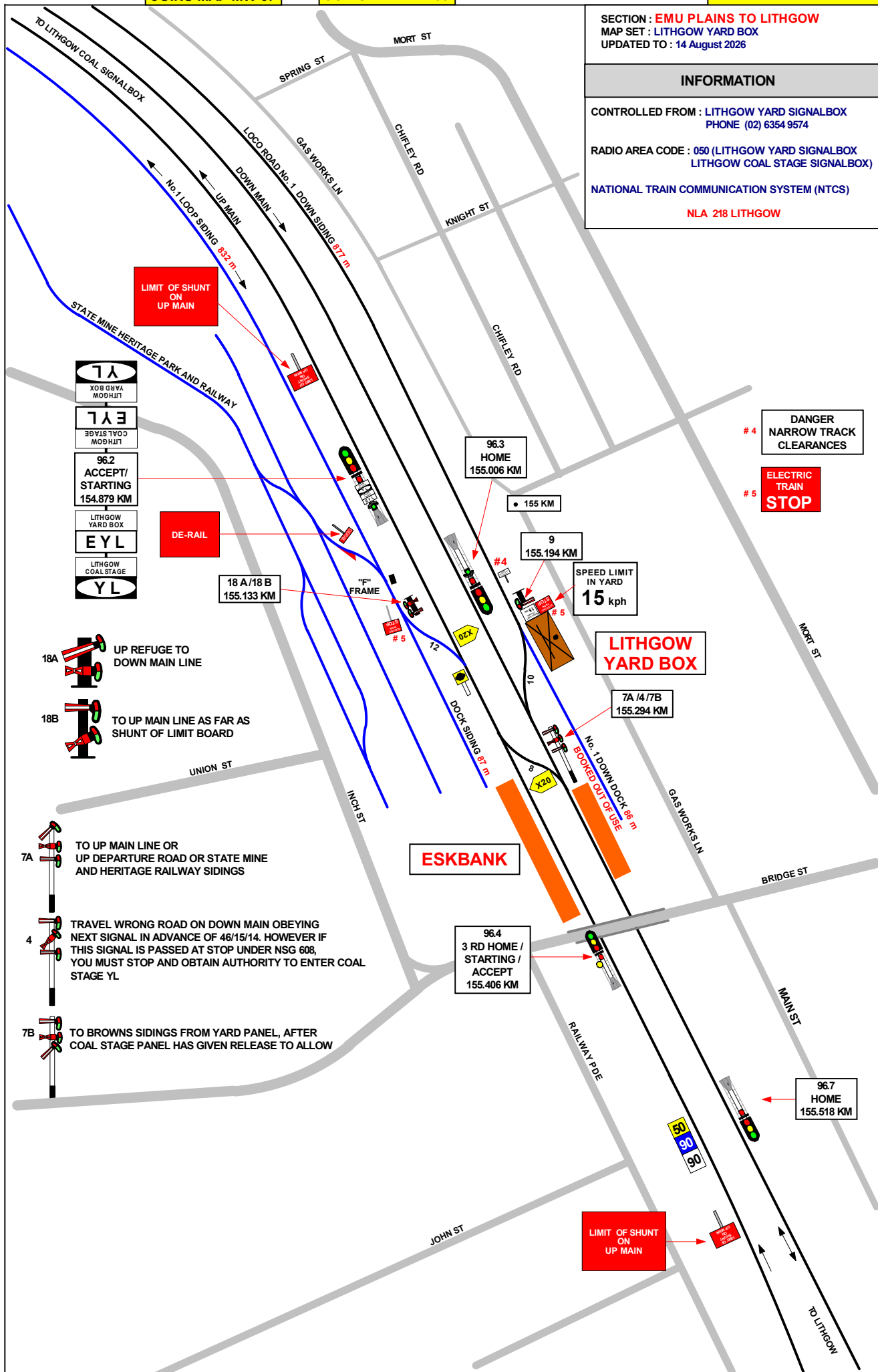
SECTION : **EMU PLAINS TO LITHGOW**
 MAP SET : **LITHGOW YARD BOX**
 UPDATED TO : 14 August 2026

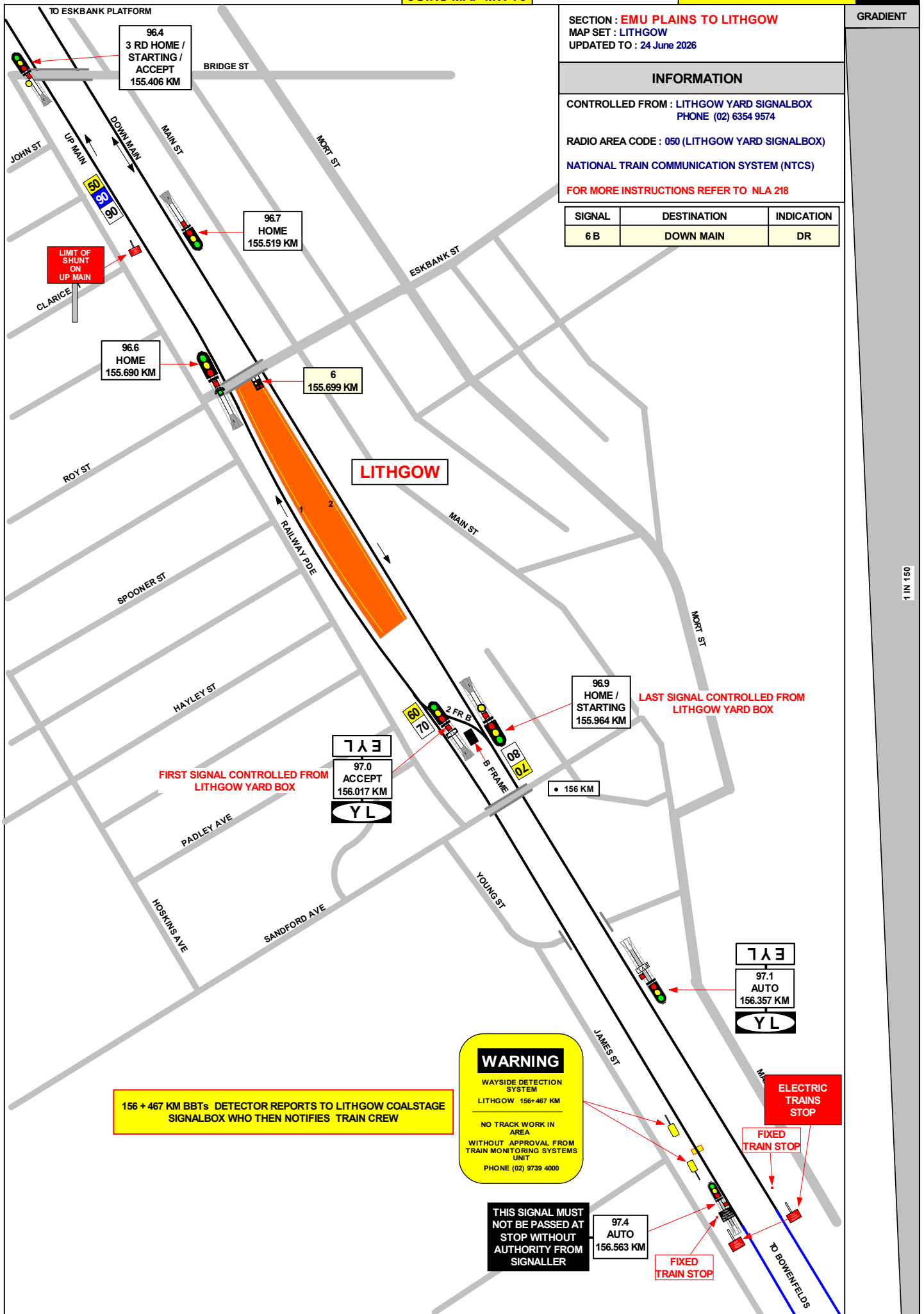
INFORMATION

CONTROLLED FROM : **LITHGOW YARD SIGNALBOX**
 PHONE (02) 6354 9574

RADIO AREA CODE : **050 (LITHGOW YARD SIGNALBOX
 LITHGOW COAL STAGE SIGNALBOX)**

NATIONAL TRAIN COMMUNICATION SYSTEM (NTCS)
NLA 218 LITHGOW





CONTROL PANELS	DEPARTMENTAL	PUBLIC
PENRITH PANEL-----	83 824-----	02 4780 3824
KATOOMBA PANEL-----	87 401-----	02 9851 7401
MT VICTORIA PANEL 1-----	88 837-----	02 6354 9837
MT VICTORIA PANEL 2-----	88 887-----	02 6354 9887
ZIG-ZAG TRAFFIC HUT-----	88 569-----	NA
LITHGOW COAL STAGE-----	88 524-----	63 549 524
LITHGOW YARD-----	88 574-----	63 549 574
LITHGOW STATION-----	88 565-----	63 549 565

STATIONS	DEPARTMENTAL	PUBLIC
BELL-----	NA-----	02 4787 8452
BLACKHEATH-----	83 992-----	02 4780 3992
BLAXLAND-----	83 806-----	02 4739 1620
BULLABURRA-----	NA-----	02 4780 3935
EMU PLAINS-----	NA-----	02 4735 2506
FAULCONBRIDGE-----	83 906-----	02 4780 3906
GLENBROOK-----	83 805-----	02 4739 1753
HAZELBROOK-----	83 913-----	02 4780 3913
KATOOMBA-----	83 965-----	02 4782 1902
LAPSTONE-----	83 813-----	02 4780 3813
LAWSON-----	83 914-----	02 4780 3914
LEURA-----	83 933-----	02 4780 3933
LINDEN-----	NA-----	02 4780 3915
LITHGOW-----	88 565-----	02 6354 9507
MEDLOW BATH-----	NA-----	02 4782 1902
MOUNT VICTORIA-----	88 838-----	02 6354 9838
SPRINGWOOD-----	83 905-----	02 4780 3915
VALLEY HEIGHTS-----	83 105-----	02 4780 3105
WARRIMOO-----	NA-----	02 4780 3808
WENTWORTH FALLS-----	NA-----	02 4780 3931
WOODFORD-----	NA-----	02 4780 3910