

North Coast Line System North

Information Pack

Rocklands to Cairns



Queensland Rail does not warrant the fitness for purpose or accuracy of this information.

North Coast Line System North

Information Pack

Version Information

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- Complete review and update

Version 3.0: 05/10/2016

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Introduction

The detail provided in this pack relates to infrastructure and operational information necessary to develop an Access Application. This information is indicative of the network sufficient for developing a concept. However, critical details will need to be confirmed by Queensland Rail.

It is envisaged that Access Seekers will liaise closely with Queensland Rail Limited (Queensland Rail) to formulate a detailed operation specification as part of a full access agreement negotiation. Operational parameters outlined in this pack may be varied by mutual agreement with Queensland Rail.

All Rail Transport Operators wishing to operate in Queensland require accreditation in accordance with the Rail Safety National Law (RSNL) and need to consider, including but not limited to, the following aspects of typical rail operations:

- Provisioning, stabling or stowing areas for rollingstock
- Train crewing
- Safeworking
- Training
- Route knowledge
- Environmental requirements
- Track standards
- Signalling and traction systems, standards and constraints
- Safety training
- Management of risk
- Rollingstock registration and Train authorisation
- Legal issues as contained in Queensland Rail's Access Undertaking, Access Agreements and information contained in this pack

Rail Transport Operators will be required to be accredited by Office of the National Rail Safety Regulator (ONRSR), hold an Access Agreement with Queensland Rail and meet any conditions and precedents specified in the Access Agreement prior to commencing operations.

Accreditation means an applicant has confirmed that they are able to meet the requirements to carry out rail operations. ONRSR must be satisfied that the applicant has demonstrated:

- Effective management and control of rollingstock
- Competence and capacity to manage risks to safety associated with railway operations
- Competence and capacity to implement the required safety management system and has met the legislative requirements
- Financial capacity, or public risk insurance arrangements for potential liabilities

Contact details for ONRSR are:

Brisbane

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Level 7, 410 Ann Street

Brisbane QLD 4000

PO Box 3461, Rundle Mall

Adelaide SA 5000

onrsr.com.au

Rail Transport Operators need to be aware of and comply with other general legislation, including but not limited to Workplace Health & Safety, environmental and heritage legislation.

This Information Pack is an UNCONTROLLED DOCUMENT and is provided for information purpose only. Queensland Rail does not make any representation or warranty, express or implied, as to the accuracy, suitability or completeness of the information. To the extent that any inconsistency arises between this Information Pack and the Access Agreement or Queensland Rail's Access Undertaking, the provisions of the Access Agreement and Queensland Rail's Access Undertaking shall prevail.

General Information

The North Coast Line is located alongside coastal Queensland between Cairns (16°55' S - 145°46' E) in the north and Nambour (26°63' S - 152°95' E) in the south. The line extends over approximately 1400 km excluding sections of Aurizon network between Parana and Rocklands in central Queensland and Kaili and Durroburra in north Queensland.

Due to the length of this System there will be two information packs, **SOUTH** - Nambour to Parana and **NORTH** - Rocklands to Cairns.

North



The North Coast Line (North) System (NCL System North) carries the following:

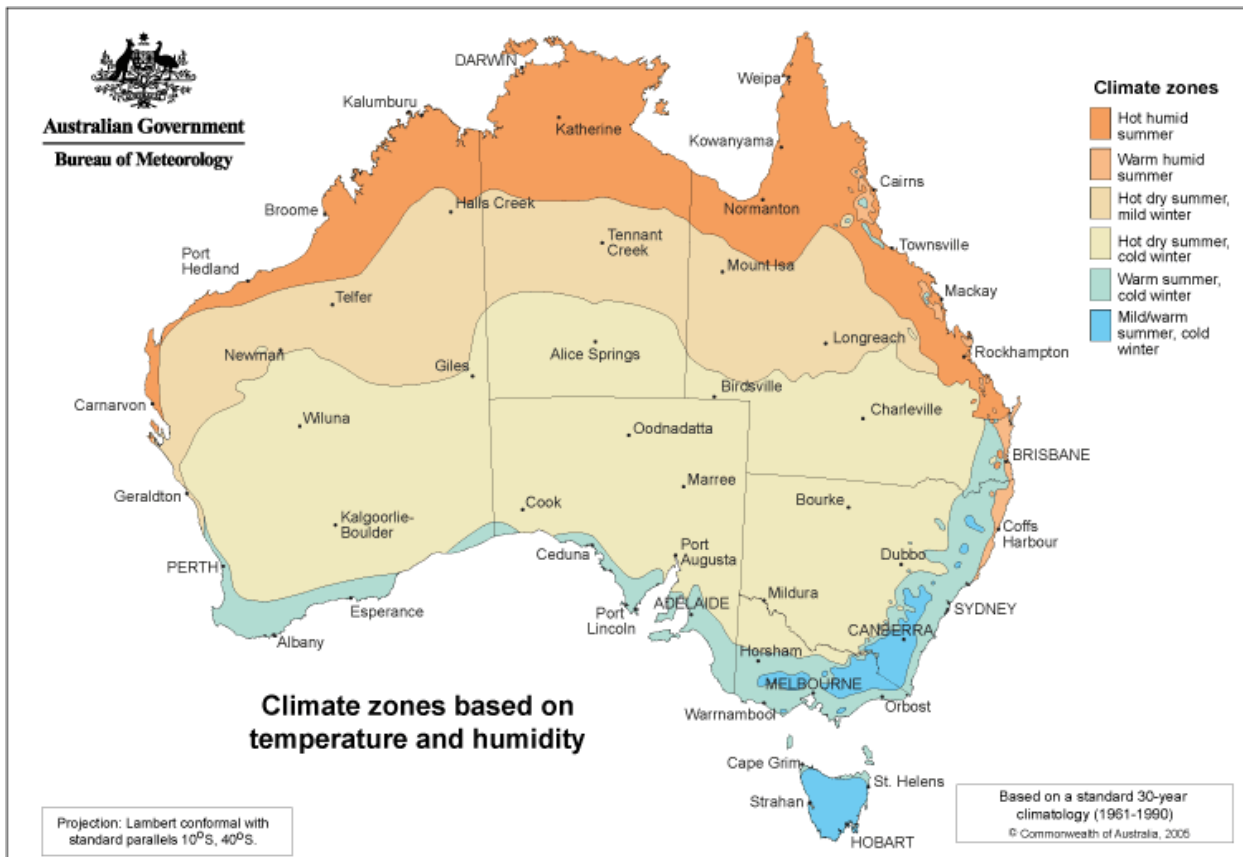
- various freight products, including containerised and industrial freight, minerals, livestock and bulk commodities including sugar and grain
- containerised freight services operating between Brisbane and major centres in central and north Queensland, including Rockhampton, Mackay, Townsville and Cairns
- sugar traffic hauled from sugar mills to the Ports of Mackay and Townsville
- minerals traffic from the Mount Isa Line running on the North Coast Line from Stuart to the Port of Townsville
- industrial products, e.g. cement and fuel, hauled on the North Coast Line from the Port of Townsville to Stuart before joining the Mount Isa Line to commence its journey to the mining centres of Cloncurry and Mount Isa
- acid hauled on the North Coast line from the Sun Metals Refinery to Stuart before travelling on the Mount Isa Line to the Phosphate Hill fertiliser plant

Long distance passenger and high-speed Tilt Train services also operate on the line servicing central and north Queensland.

The NCL System North adjoins three Aurizon rail systems including the Aurizon Blackwater System at Rocklands, the Aurizon Goonyella System at Yukan, and the Aurizon Newlands System between Kaili and Durroburra.

Descriptive distances within this document (unless otherwise stated) are based on physical kilometre posts in the field and are to be used only as location descriptors/chainage; they do not compensate for equalities resulting from deviations. Access charges and performance statistics are generated using actual through distances derived from relevant Working Plan and Sections and reflected on Line Code Diagrams. Generally, distances originate from the junction of the branch and commence at 0 km.

General Climate



The NCL System North extends north of the Tropic of Capricorn and is in a warm to hot climate. The summer months from December to February experience the highest rainfall and can also be accompanied by thunderstorms and occasional tropical cyclones in northern tropical regions. The winter months from June to August is generally regarded as the most pleasant with low rainfall, comfortable temperatures during the day, and cool nights.

The following sub-sections specify general climatic parameters. For latest and more specific information potential Rail Transport Operators should consult the Australian Bureau of Meteorology at [Queensland Weather and Warnings \(bom.gov.au\)](https://www.bom.gov.au).

Temperature

Compared to the south, northern Queensland is hotter and much more humid.

In Cairns, summer temperatures reach over 31°C during the day. However, the true temperatures experienced by people in the tropical region are higher due to the humidity levels that often reach over 75%. The nighttime temperatures in Cairns during summer drop to a balmy 24°C. During winter, days reach 26°C and drop to 17°C at night. In Rockhampton, winter temperatures can drop to around 10°C at night.

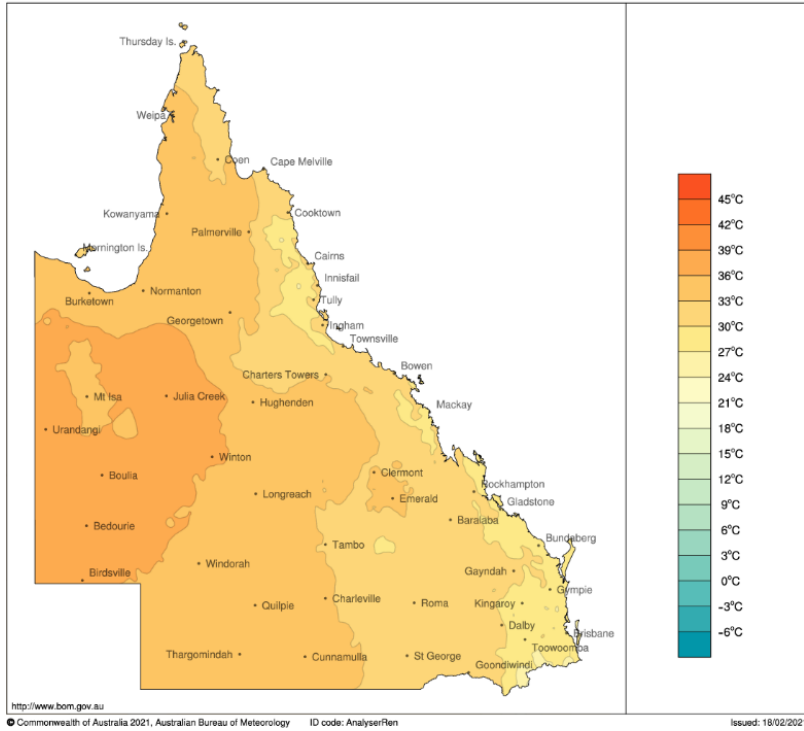
Hot days (classed as days with maximum temperatures exceeding 35°C) on Queensland's eastern seaboard are comparatively low. Cairns and Mackay, for example, have on average fewer than 5 hot days per year.

Annual evaporation is typically much higher in inland parts of Queensland than in coastal and sub-coastal areas. Average annual pan evaporation is less than 2,400 mm in many coastal and sub-coastal areas. However, Townsville is the exception. It has a drier climate despite being on the coast, and an average annual pan evaporation of 2,588 mm.

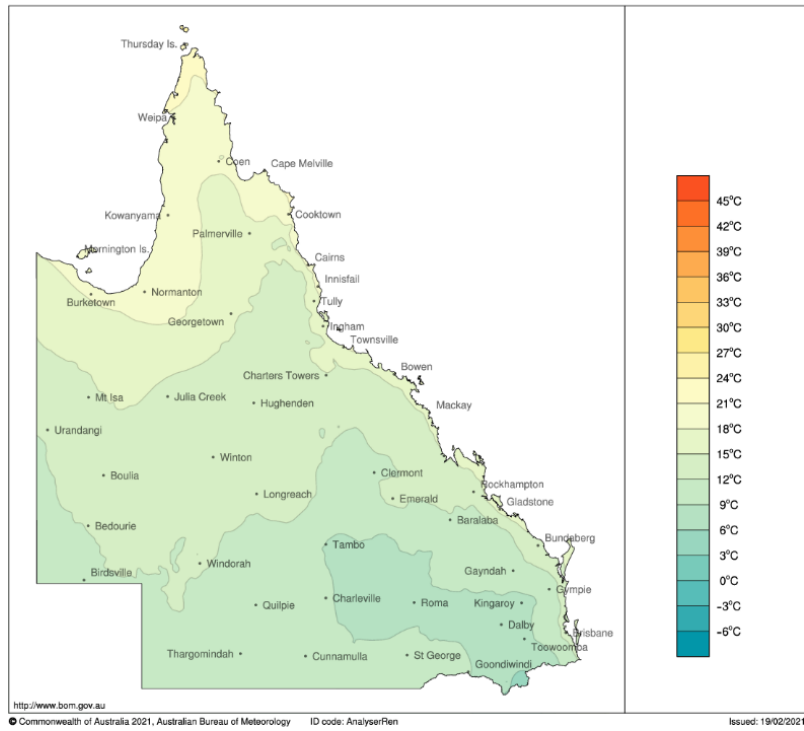
During periods of high temperature it may be an operational requirement to impose temporary speed restrictions – heat restrictions (reducing the train operating speed) over various sections of the track to minimise the risk of incident.

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Average Oct to Apr max. temperature 30-year climatology (1991 to 2020)
Australian Bureau of Meteorology

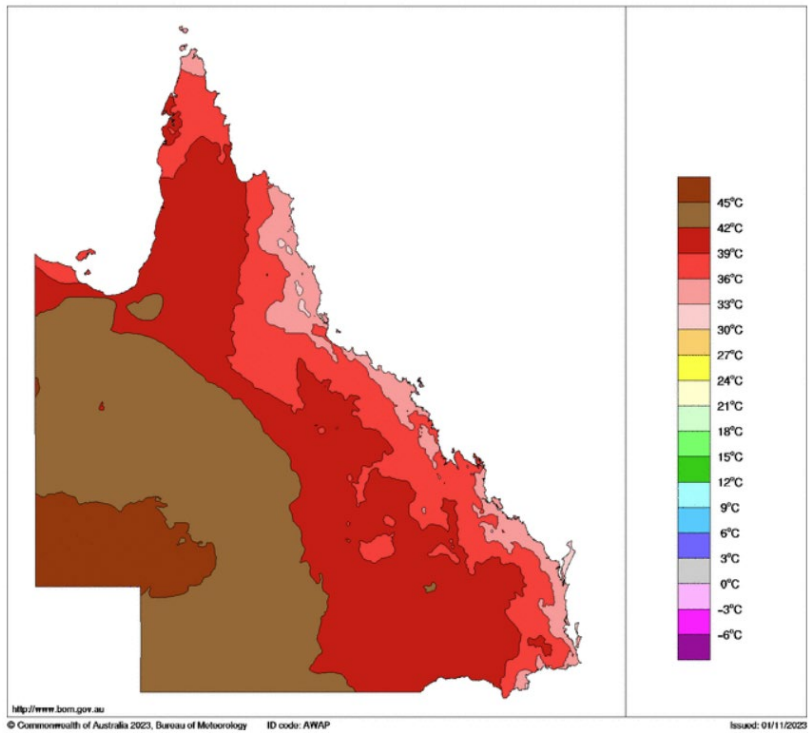


Average Apr to Oct min. temperature 30-year climatology (1991 to 2020)
Australian Bureau of Meteorology

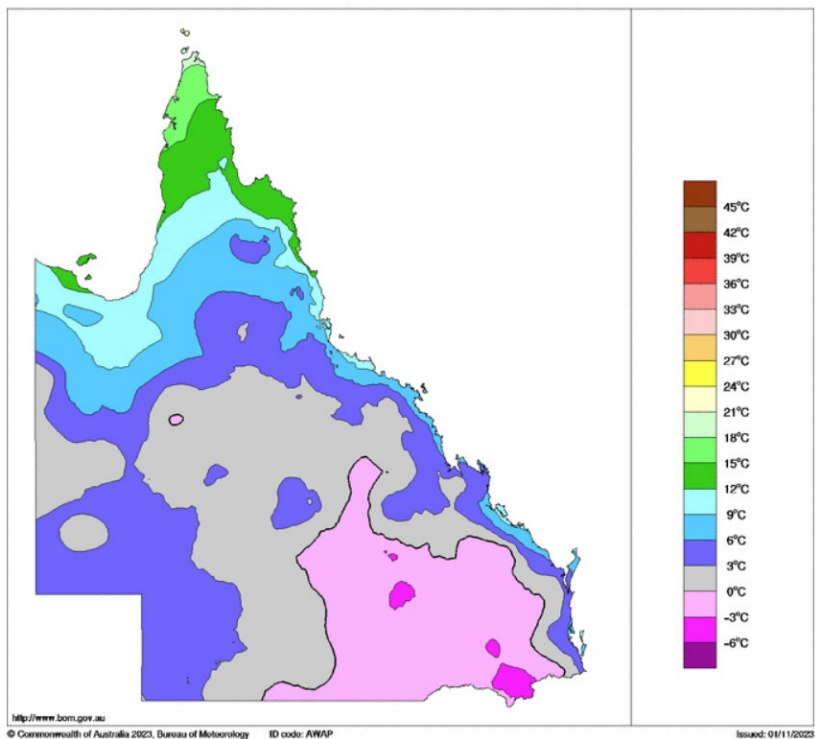


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Highest Maximum Temperature (°C) 1 November 2022 to 31 October 2023
Australian Bureau of Meteorology



Lowest Minimum Temperature (°C) 1 November 2022 to 31 October 2023
Australian Bureau of Meteorology



Humidity

This region could experience prolonged periods of high humidity and potential Rail Transport Operators should consider this when planning/designing for rollingstock and machinery to operate on this System.

Rainfall

In the north, rainfall is mostly associated with the northern Australian Monsoon and tropical cyclones. Summer thunderstorms are frequent as well. As a result, days with 'very heavy rainfall' (classed as days with at least 30 mm of rain) are common along Queensland's northeastern seaboard. As a matter of fact, far north Queensland is renowned for being the wettest region in Australia, especially around the towns of Tully and Babinda.

Rainfall is mostly confined to the summer months in the northern tropics, where in excess of 90% of the annual total is recorded between November and April.

Flooding of low-lying areas is likely to occur as an indirect result of cyclones and heavy coastal rains. In these instances, floodwaters can affect this System and sometimes force the System to be closed for days.

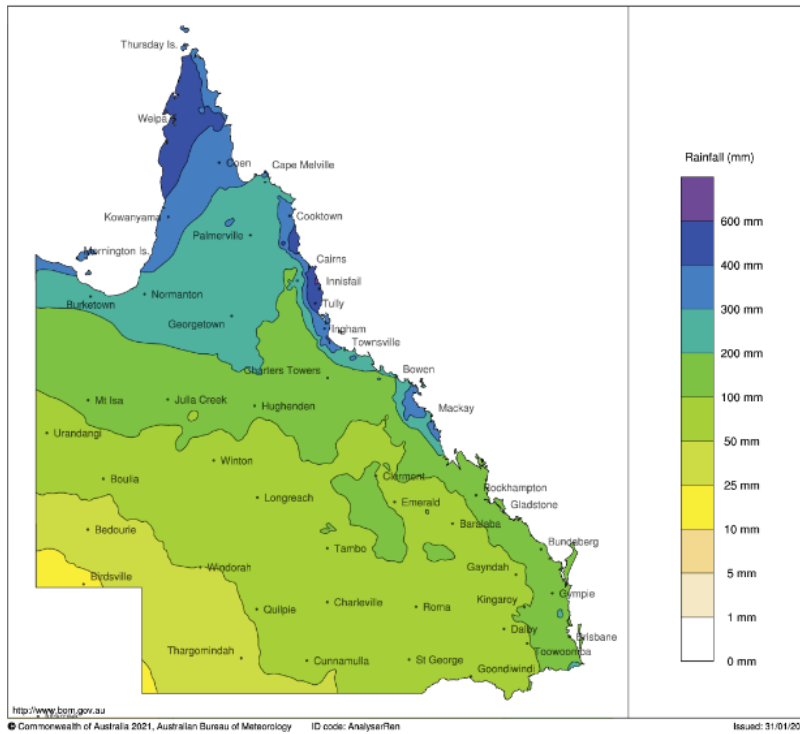
Cyclone

Tropical lows, which develop from November to April, occasionally deepen to cause tropical cyclones. Tropical cyclones frequently foster high winds, heavy flood-producing rainfall (especially when a cyclone moves over high ground), and coastal storm surges.

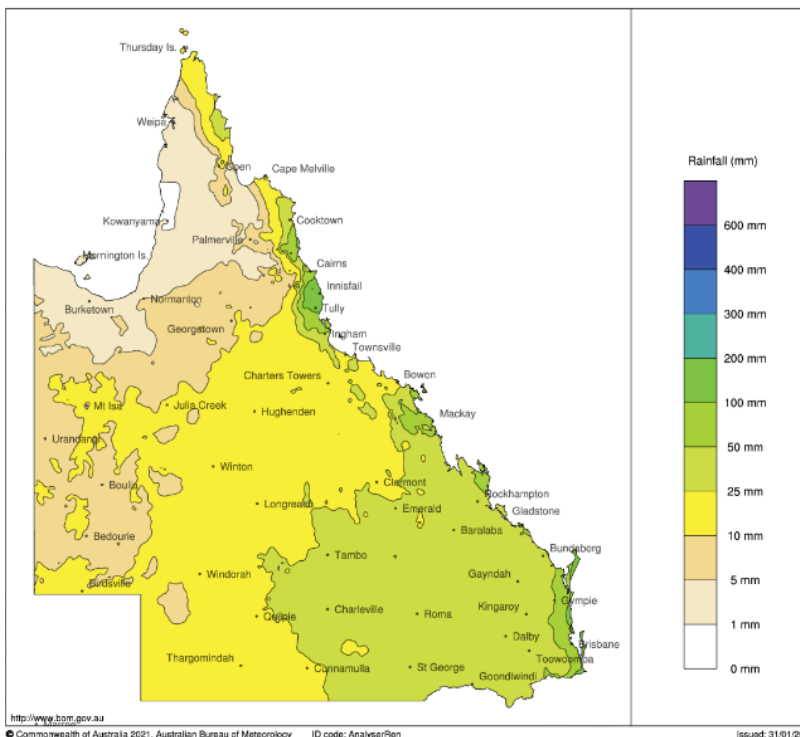
Cyclones have the capability of affecting the entire North Coast Line due to "knock on" effects. In general, observations suggest there has been a rise in extreme severe weather events due to climate change and that tropical cyclones are travelling slower and southward, with increasing rainfall intensity giving rise to potentially extreme associated flooding.

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Average January rainfall 30-year climatology (1991 to 2020)
Australian Bureau of Meteorology

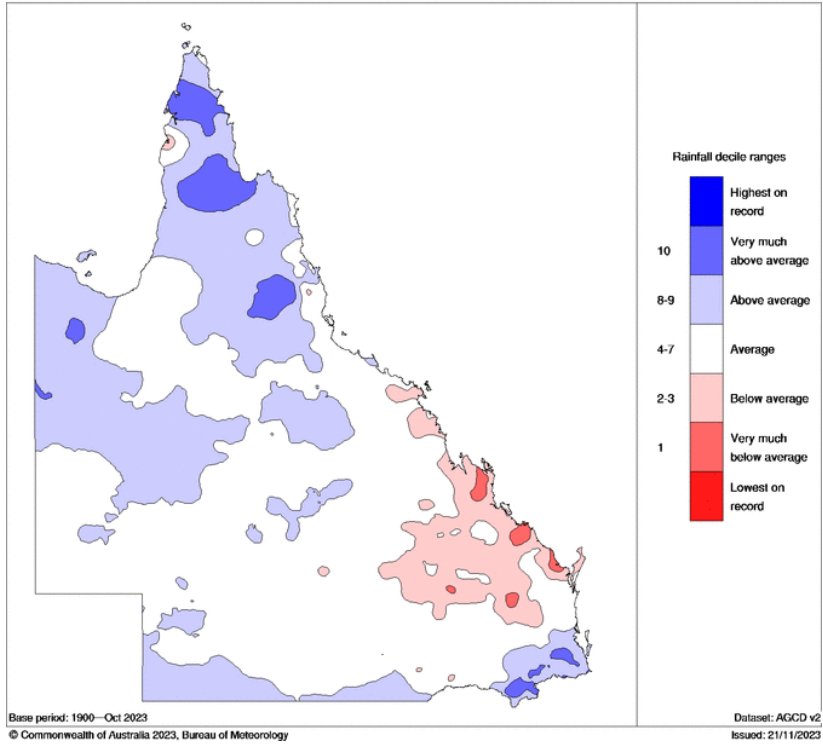


Average June rainfall 30-year climatology (1991 to 2020)
Australian Bureau of Meteorology

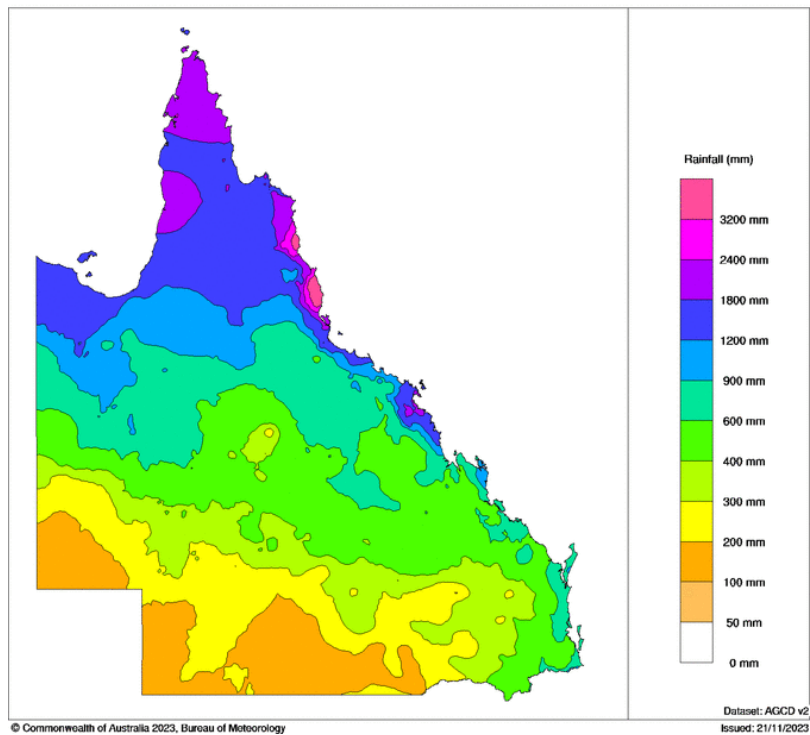


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Queensland rainfall deciles 1 November 2019 to 31 October 2023
Australian Gridded Climate Data



Queensland total rainfall (mm) 1 November 2022 to 31 October 2023
Australian Gridded Climate Data



Description of the Railway

Information on track, rollingstock, train operations, freight and container operations on this System are contained in *MD-10-533 Operational Route Manual*.

The maximum permissible speeds through the divergent road of turnouts are governed by the angle of that turnout as follows:

Angle of Turnout	Max Speed
1 in 12 tangential	40 km/h
1 in 16 tangential and conventional	50 km/h
1 in 25 tangential with swing nose	80 km/h
All other turnouts	25 km/h

In general, curves (with the exception of turnout curves from the divergent road) are transitioned.

Basic Track Configuration

Basic track configuration is detailed in APPENDIX B - SCHEMATIC LAYOUT.

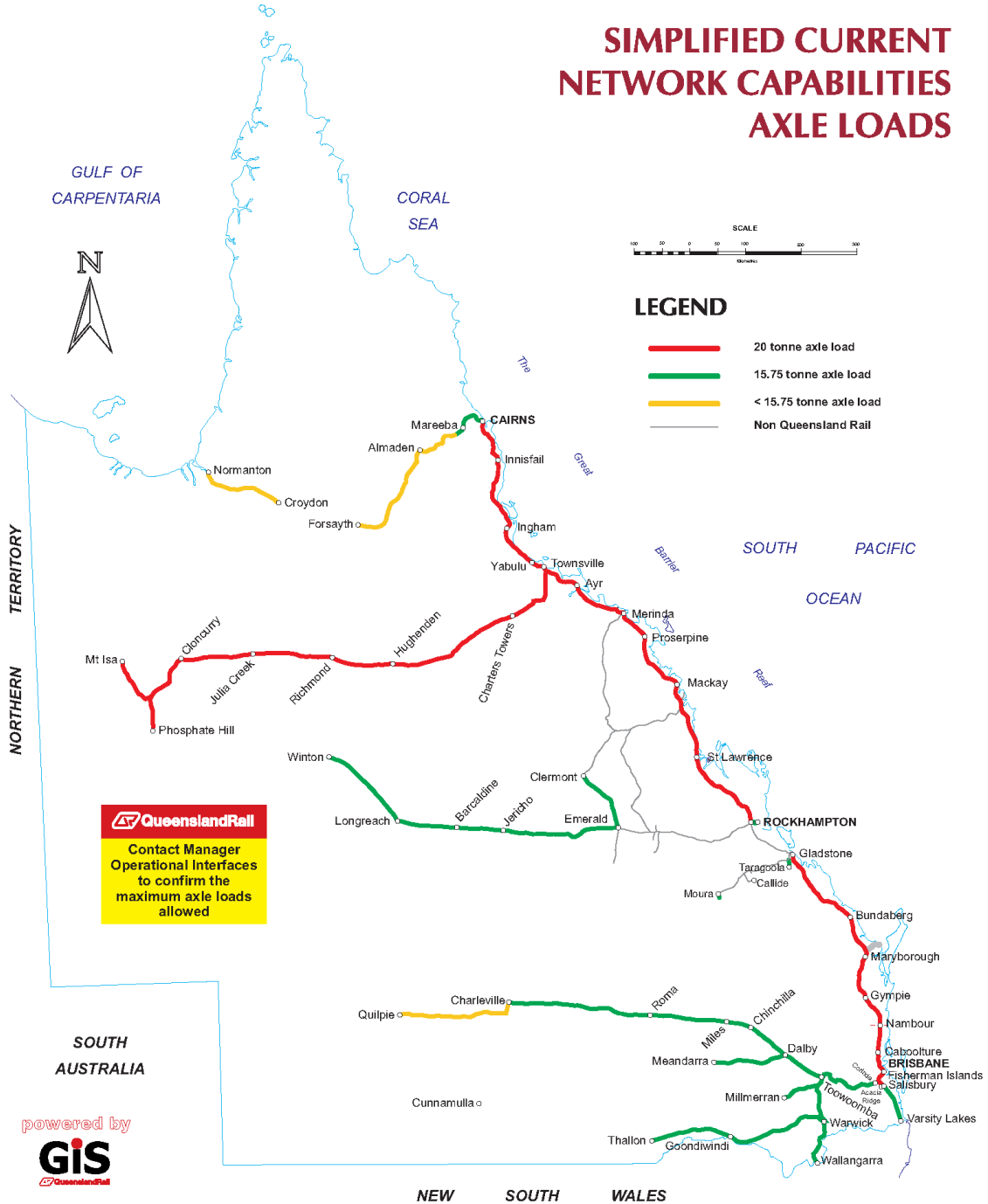
Track Data and Grade Diagrams for the major routes are included in APPENDIX E.

Axle Loadings

The main line and passing loops are rated at a maximum axle load of 20 t. As well as maximum load, axle spacings also need to comply with Module 2 of *MD-10-194 Interface standards*. Some sidings and/or yards may be rated at less than 20 t axle load.



SIMPLIFIED CURRENT NETWORK CAPABILITIES AXLE LOADS



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Based MD-10-533 (Version 5.0)
Last Schematic Update - 13th September 2019

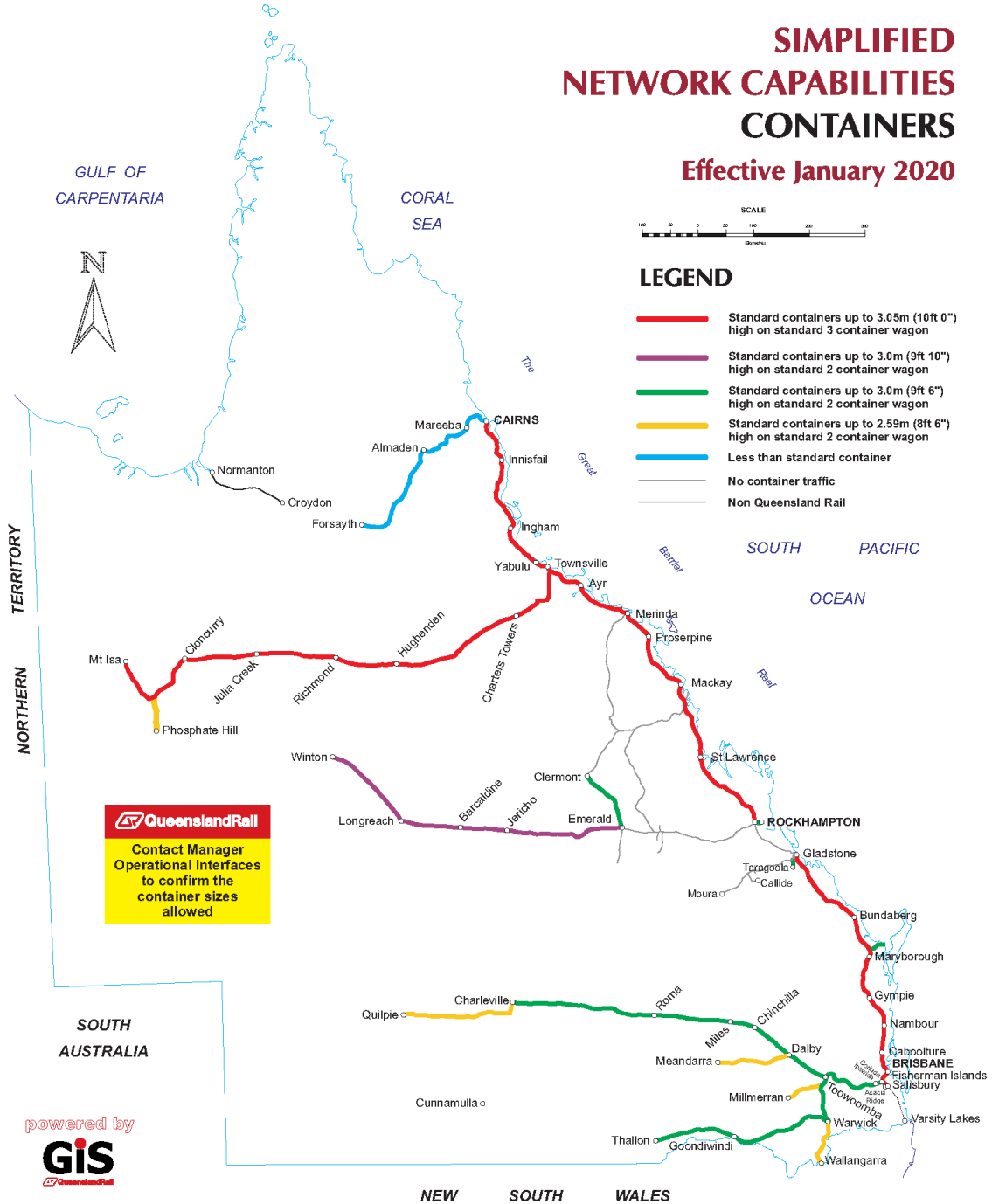
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SIMPLIFIED NETWORK CAPABILITIES CONTAINERS

Effective January 2020



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Last Schematic Update - 26th September 2019

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Rocklands to Mackay

The NCL System North connects with Aurizon Blackwater System at Rocklands.

Rockhampton (elevation 8 m) defines the northern extent of Queensland Rail’s electrified network. At Glenmore Junction (elevation 11 m), 3 km north, and across the Fitzroy River, the Yeppoon Branch connects to the North Coast Line.

From Glenmore Junction, the North Coast Line heads north west along the coastal plain, closely following the Bruce Highway to Marlborough (elevation 87 m), crossing the Styx River then on to St Lawrence (elevation 12 m).

From St Lawrence the North Coast Line heads north to Kalarka (elevation 11 m), north north west to Sarina (elevation 18 m) in the heart of the sugar country then north to Mackay (elevation 9 m).

Transfer sidings at Yukan (elevation 17 m) provide access between the Aurizon Goonyella System and the North Coast Line. Within the Yard, #1 Transfer Road, #2 Transfer Road and 94 lb Siding as well as the “no run wire” on the North Coast Line main line are electrified.

Within this section there are a number of Cane Tramway Crossings.

The maximum allowable speed is 100 km/h for freight trains. Refer *MD-10-533 Operational Route Manual* for special restrictions.

The maximum grade (not compensated for horizontal alignment) that a northbound (Down) train will encounter is 1 in 49 near Kalarka whilst for a southbound (Up) train, the maximum grade is 1 in 49 also near Kalarka.

Corridor	Rocklands to Rockhampton	Rockhampton to Mackay
Line Section Code	395	403, 831, 832, 833, 677, 680, 408, 840, 409, 475
No. of Tracks	1	1
Route Km	3.974	319.727
Track Km	3.974	319.727
Electrified	Yes	No

Corridor		Rocklands to Rockhampton	Rockhampton to Mackay	
Safeworking System		RCS ¹	RCS within Rockhampton area and RCS/ATP ² elsewhere	
Control Centre		Rockhampton	Rockhampton/Townsville	
Crossing Loops	No.	0	24	
	Location and length		Glenmore (710pp ³), Parkhurst (923pp), The Caves (712pp), Yaamba (812pp), Glen Geddes (707pp), Kunwarara (1075pp), Princhester (717pp), Marlborough (724pp), Kooltandra (1255pp), Ogmore (701pp), Wumalgi (715pp), St. Lawrence (1070pp), Kalarka (738pp), Elalie (703pp), Carmila (700pp), Orkobie (711pp), Ilbilbie (706pp), Koumala (1026pp), Yukan (700pp), Sarina (718pp), Dawlish (705pp), Balberra (708pp), Rosella (724pp), Mackay (810pp)	
Bridges	Timber	No. of Bridges	0	11
		No. of Spans	0	81
		Length (m)	0	400.6
	Steel	No. of Bridges	0	6
		No. of Spans	0	67
		Length (m)	0	943.4
Concrete	No. of Bridges	4	86	
	No. of Spans	44	363	
	Length (m)	440	4271.58	
No. of Overbridges	Timber	0	2	
	Steel	0	2	
	Concrete	0	5	
Tunnels	Number	0	0	
	Length (m)	0	0	
Curves (% of total track)	<80 km/h	12	1.7	
	<60 km/h	0	0.2	
Maximum Allowable Axle Load (tal)		20		
Track Structure	Rail Mass (kg/m)	60/41	50/53/60	
	Jointed	CWR ⁴	CWR/LWR ⁵	
	Sleeper Type	C ⁶ , T ⁷	T/S 1 in 4 ⁸ , 100% S ⁹ , C	
Max Container Height (m)		3.05		
Allowable Gross Tonnes p.a. ('000)		11,000	10,000	

Fencing along this corridor complements adjacent land usage and will be maintained at its current standard.

¹ Remote Controlled Signalling

² Automatic Train Protection

³ Power Points

⁴ Continuous Welded Rail

⁵ Long Welded Rail

⁶ Concrete Sleeper

⁷ Timber Sleeper

⁸ Predominantly timber with every fourth sleeper steel

⁹ Steel Sleeper

Mackay to Durroburra (1157.600 km)

From Mackay (elevation 9 m), the railway passes under Archibald Street past the angle to the Marian Branch (now closed beyond 0.750 km – Bruce Highway Level Crossing at tip of Angle), then under Nebo Road before crossing the Pioneer River and on to Erakala (elevation 11 m) and the angle to the Mackay Harbour Branch.

From Erakala, the NCL System North continues north west to Durroburra, just north of Merinda (elevation 8 m), where the Aurizon Newlands System runs from Durroburra to Kaili.

Within this section there are a number of Cane Tramway Crossings.

The maximum allowable speed is 100 km/h for freight trains. Refer *MD-10-533 Operational Route Manual* for special restrictions.

The maximum grade (not compensated for horizontal alignment) that a southbound (Up) train will encounter is 1 in 44 whilst for a northbound (Down) train, the maximum grade is 1 in 44, both located around Kuttabul.

Corridor		Mackay to Durroburra	
Line Section Code		836, 685, 843, 844, 205	
No. of Tracks		1	
Route Km		187.088	
Track Km		187.088	
Electrified		No	
Safeworking System		RCS/ATP	
Control Centre		Townsville	
Crossing Loops	No.	13	
	Location and length	Farleigh (702pp), Aminungo (750pp), Kuttabul (752pp), Mount Ossa (703pp), Calen (705pp), Yalboroo (863pp), Bloomsbury (708pp), Thoopara (716pp), Proserpine (697pp), Bubiato (700pp), Longford Creek (1029pp), Mookarra (845pp), Merinda (702pp)	
Bridges	Timber	No. of Bridges	2
		No. of Spans	16
		Length (m)	85.6
	Steel	No. of Bridges	6
		No. of Spans	52
		Length (m)	676.9
	Concrete	No. of Bridges	61
		No. of Spans	239
		Length (m)	3419.6

Corridor		Mackay to Durroburra
No. of Overbridges	Timber	2
	Steel	2
	Concrete	5
Tunnels	Number	0
	Length (m)	0
Curves (% of total track)	<80 km/h	3
	<60 km/h	1
Maximum Allowable Axle Load (tal)		20
Track Structure	Rail Mass (kg/m)	50/53/60
	Jointed	CWR
	Sleeper Type	C, S
Max Container Height (m)		3.05
Allowable Gross Tonnes p.a. ('000)		10,000

Fencing along this corridor complements adjacent land usage and will be maintained at its current standard.

Kaili (1166.870 km) to Stuart

From Kaili, the North Coast Line follows the Bruce Highway to Home Hill (elevation 11 m), crosses the Burdekin River into Ayr (elevation 10 m) and continues to Nome (elevation 19 m).

This section of track is vulnerable to flooding during the wet season around Guthalungra, Gumlu and between Giru and Cromarty.

The 10 km section from Nome to Stuart (elevation 18 m) is double track. Stuart is the junction of the North Coast Line and Mt Isa Line.

The maximum allowable speed is 100 km/h Durroburra to Nome then 80 km/h Nome to Stuart.

The maximum grade (not compensated for horizontal alignment) that a southbound (Up) train will encounter is 1 in 44 near Giru whilst for a northbound (Down) train, the maximum grade is 1 in 50 near Guthalungra.

Corridor	Kaili to Home Hill	Home Hill to Stuart
Line Section Code	208	689, 480, 481
No. of Tracks	1	1 to Nome then 2 to Stuart
Route Km	82.787	81.204
Track Km	82.787	91.602
Electrified	No	

Corridor		Kaili to Home Hill	Home Hill to Stuart
Safeworking System		RCS/ATP	
Control Centre		Townsville	
Crossing Loops	No.	8	6
	Location and length	Kaili (1414pp), Wathana (701pp), Wilmington (692pp), Guthalungra (1026pp), Gumlu (1085pp), Bobawaba (720pp), Inkerman (703pp), Home Hill (700pp)	Ayr (955pp), Pioneer (698pp), Barratta (700pp), Giru (832pp), Cromarty (701pp), Storth (698pp)
Bridges	Timber	No. of Bridges	2
		No. of Spans	24
		Length (m)	118.3
	Steel	No. of Bridges	8
		No. of Spans	109
		Length (m)	876.9
Concrete	No. of Bridges	21	
	No. of Spans	82	
	Length (m)	812.65	
No. of Overbridges	Timber	0	
	Steel	0	
	Concrete	0	
Tunnels	Number	0	
	Length (m)	0	
Curves (% of total track)	<80 km/h	1	
	<60 km/h	0	
Maximum Allowable Axle Load (tal)		20	
Track Structure	Rail Mass (kg/m)	50/53/60	
	Jointed	CWR	
	Sleeper Type	C	
Max Container Height (m)		3.05	
Allowable Gross Tonnes p.a. ('000)		10,000	14,000

Fencing along this corridor complements adjacent land usage and will be maintained at its current standard.

Stuart to Purono

From Stuart the double track continues into Townsville stopping south of Boundary Street. Crossing over Boundary Street the single line continues east to South Yard and Townsville Jetty or west to Townsville Station, constructed over the Ross River.

¹⁰ Predominantly timber with every third sleeper steel

From Townsville Station (elevation 3 m), trains continue west to Garbutt (elevation 5 m) then north west, bounded in the west by the Paluma Range and east by the coastline.

Yabulu, 21 km north of Garbutt, is the junction of the Cobarra Balloon Loop.

Corridor		Stuart to Townsville	Townsville to Purono
Line Section Code		891	852, 142, 333, 853
No. of Tracks		2	1
Route Km		8.984	26.119
Track Km		17.961	26.119
Electrified		No	
Safeworking System		RCS	
Control Centre		Townsville	
Crossing Loops	No.	0	2
	Location and length		Garbutt (805tp ¹¹), Deeragun (800tp)
Bridges	Timber	No. of Bridges	0
		No. of Spans	0
		Length (m)	0
	Steel	No. of Bridges	0
		No. of Spans	0
		Length (m)	36.5
Concrete	No. of Bridges	3	
	No. of Spans	25	
	Length (m)	670.1	
No. of Overbridges	Timber	0	
	Steel	0	
	Concrete	0	
Tunnels	Number	0	
	Length (m)	0	
Curves (% of total track)	<80 km/h	4	
	<60 km/h	1	
Maximum Allowable Axle Load (tal)		20	
Track Structure	Rail Mass (kg/m)	47/50	41/47/53
	Jointed	CWR	CWR
	Sleeper Type	C, S	100% S (except for small sections of concrete at level crossings and low profile concrete trial sections)
Max Container Height (m)		3.05	
Allowable Gross Tonnes p.a. ('000)		16,000	11,000

The maximum allowable speed is 80 km/h except for the part from Townsville to Cobarra Junction (1365 km), where the maximum allowable speed is 100 km/h.

40% of this corridor is fenced. Fencing complements adjacent land usage and will be maintained at its current standard.

Purono to Cairns

The railway heads north west, bounded in the west by the Paluma Range and east by the coastline to Bambaroo (elevation 15 m). From here, the railway heads north to Ingham (elevation 12 m) through the Lumholz National Park and on to Cardwell (elevation 7 m). From Cardwell, the railway heads up to Tully (elevation 16 m) crossing the Murray River on the way.

Wet season inundation of the railway is common in this area, particularly over the Murray River Flats, where the track can be closed for 6-7 days.

Corridor		Purono to Portsmith	Portsmith to Cairns
Line Section Code		854, 855, 857, 417, 315	316
No. of Tracks		1	1
Route Km		310.321	2.845
Track Km		310.321	2.845
Electrified		No	
Safeworking System		DTC ¹²	DTC to 1674.100 km then RCS UTC ¹³ in Portsmith Yard
Control Centre		Townsville	Townsville/Portsmith
Crossing Loops	No.	22	2
	Location and length	Purono (712tp), Kurukan (701tp), Rollingstone (703tp), Mutarnee (699tp), Bambaroo (706tp), Pombel (701tp), Ingham (705tp), Hinchinbrook (701tp), Conn (701tp), Cardwell (731tp), Kennedy (688tp), Bilyana (701tp), Tully (506 m), El Arish (688tp), Silkwood (754tp), Boogan (729tp), Innisfail (717tp), Waugh (657tp), Babinda (678tp), Deeral (718tp), Alooomba (787tp), Kamma (725tp)	Portsmith (900pp), Cairns (439pp)
Bridges	Timber	No. of Bridges	23
		No. of Spans	95
		Length (m)	477.45
	Steel	No. of Bridges	35
		No. of Spans	199
		Length (m)	1857.71

¹² Direct Traffic Control

¹³ Universal Traffic Control

Corridor		Purono to Portsmith	Portsmith to Cairns	
	Concrete	No. of Bridges	95	3
		No. of Spans	425	15
		Length (m)	4355.75	112.7
No. of Overbridges	Timber	2	0	
	Steel	0	0	
	Concrete	0	0	
Tunnels	Number	0	0	
	Length (m)	0	0	
Curves (% of total track)	<80 km/h	8	15	
	<60 km/h	3	0	
Maximum Allowable Axle Load (tal)		20		
Track Structure	Rail Mass (kg/m)	41/47/50/53	41/47/53	
	Jointed	CWR/LWR	CWR	
	Sleeper Type	90% S, 10% C (scattered throughout section), some timber in turnouts	S	
Max Container Height (m)		3.05		
Allowable Gross Tonnes p.a. ('000)		3,000		

The maximum allowable speed is 80 km/h.

The maximum grade (not compensated for horizontal alignment) that a southbound (Up) train will encounter is 1 in 33 whilst for a northbound (Down) train, the maximum grade is 1 in 33 in the El Arish area.

Glenmore to Fields Siding (11.296 km)

After leaving the North Coast Line at Glenmore (elevation 11 m), the railway heads east skirting the Mount Archer National Park to Fields Siding.

The maximum allowable speed is 60 km/h.

The maximum grade (not compensated for horizontal alignment) that a westbound (Up) train will encounter is 1 in 50 whilst for an eastbound (Down) train, the maximum grade is 1 in 50.

Corridor	Glenmore to Nerimbera	Nerimbera to Fields Siding
Line Section Code	410	411
No. of Tracks	1	1
Route Km	9.000	2.300
Track Km	9.000	2.300
Electrified	No	

Corridor		Glenmore to Nerimbera	Nerimbera to Fields Siding
Safeworking System		Ordinary staff	
Control Centre		Townsville	
Crossing Loops	No.	3	1
	Location and length	North Rockhampton (443tp), Lakes Creek (332 m), Nerimbera (405 m)	Fields Siding (449 m)
Bridges	Timber	No. of Bridges	6
		No. of Spans	64
		Length (m)	321.8
	Steel	No. of Bridges	0
		No. of Spans	0
		Length (m)	0
	Concrete	No. of Bridges	0
		No. of Spans	0
		Length (m)	0
No. of Overbridges	Timber	2	0
	Steel	0	0
	Concrete	2	0
Tunnels	Number	0	0
	Length (m)	0	0
Curves (% of total track)	<80 km/h		
	<60 km/h		
Maximum Allowable Axle Load (tal)		15.75	
Track Structure	Rail Mass (kg/m)	41	
	Jointed	SWR ¹⁴	
	Sleeper Type	T	
Max Container Height (m)		2.65	
Allowable Gross Tonnes p.a. ('000)		1,000	

Fencing along this corridor complements adjacent land usage and will be maintained at its current standard.

Erakala to Mackay Harbour

The angle at Erakala (elevation 11 m) allows traffic from the north and the south to reach the port facilities at Mackay Harbour.

The maximum allowable speed is 80 km/h.

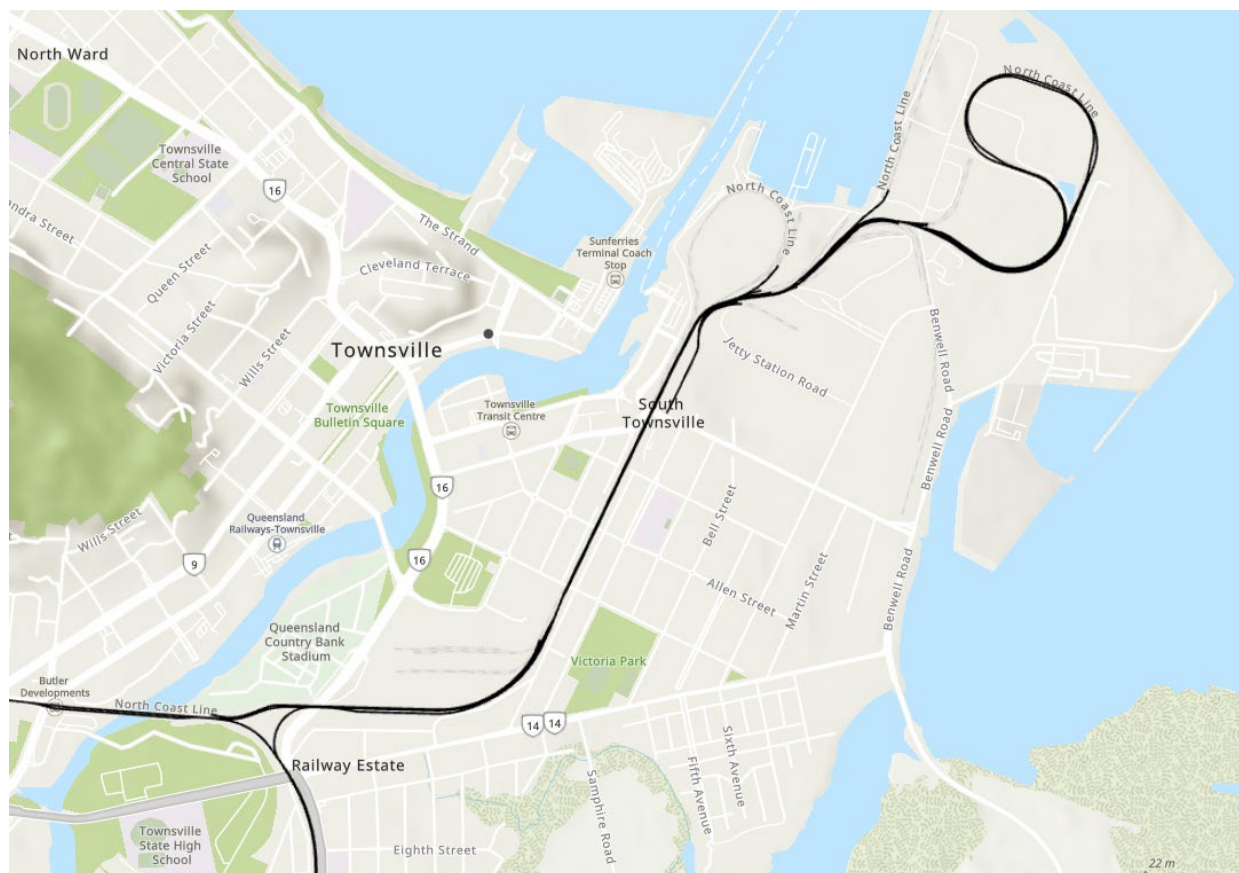
The maximum grade (not compensated for horizontal alignment) that a westbound (Up) train will encounter is 1 in 140 whilst for an eastbound (Down) train, the maximum grade is 1 in 152.

North Coast Line System North
Information Pack

Corridor		Erkala to Mackay Harbour	
Line Section Code		682, 116	
No. of Tracks		1	
Route Km		11.211	
Track Km		11.211	
Electrified		No	
Safeworking System		RCS	
Control Centre		Townsville	
Crossing Loops	No.	0	
	Location and length		
Bridges	Timber	No. of Bridges	0
		No. of Spans	0
		Length (m)	0
	Steel	No. of Bridges	0
		No. of Spans	0
		Length (m)	0
	Concrete	No. of Bridges	3
		No. of Spans	5
		Length (m)	75
No. of Overbridges	Timber	0	
	Steel	0	
	Concrete	5	
Tunnels	Number	0	
	Length (m)	0	
Curves (% of total track)	<80 km/h	18	
	<60 km/h	0	
Maximum Allowable Axle Load (tal)		20 Mackay Harbour Station, sugar and grain balloons, otherwise 15.75	
Track Structure	Rail Mass (kg/m)	41	
	Jointed	CWR	
	Sleeper Type	T	
Max Container Height (m)		2.65	
Allowable Gross Tonnes p.a. ('000)		3,000	

This corridor runs through cane fields and is generally unfenced.

Townsville to Townsville Jetty



The Townsville Jetty branch is predominantly double track and features a number of balloon loops and sidings serving industry at the Port of Townsville. There are no passing loops on this section of the railway. However, crossovers permit ease of operation from one track to the other.

The maximum allowable speed is 15 km/h.

The maximum grade (not compensated for horizontal alignment) that a westbound (Up) train will encounter is 1 in 114 whilst for an eastbound (Down) train, the maximum grade is 1 in 150.

Corridor	Townsville to Townsville Jetty
Line Section Code	477, 489, 490, 487, 137,
No. of Tracks	2
Route Km	3.203
Track Km	14.198
Electrified	No
Safeworking System	RCS

Corridor		Townsville to Townsville Jetty	
Control Centre		Townsville	
Crossing Loops	No.	0	
	Location and length		
Bridges	Timber	No. of Bridges	0
		No. of Spans	0
		Length (m)	0
	Steel	No. of Bridges	0
		No. of Spans	0
		Length (m)	0
	Concrete	No. of Bridges	0
		No. of Spans	0
		Length (m)	0
No. of Overbridges	Timber	0	
	Steel	0	
	Concrete	1	
Tunnels	Number	0	
	Length (m)	0	
Curves (% of total track)	<80 km/h	0	
	<60 km/h	0	
Maximum Allowable Axle Load (tal)		20	
Track Structure	Rail Mass (kg/m)	41/50/60	
	Jointed	CWR/Jointed	
	Sleeper Type	T, S, C	
Max Container Height (m)			
Allowable Gross Tonnes p.a. ('000)			

This corridor is partially fenced.

Operational Constraints - Infrastructure

Queensland Rail is focused on the safety of its employees, customers and the general public. As such, Queensland Rail may impose blanket speed restrictions on the network as a precautionary measure during extreme heat in the summer months. These hot weather protocols are aimed at reducing the risk of an incident from track instability.

When the rail temperature reaches 56°C (approximately an air temperature of 37°C) a hot weather patrol will be undertaken by Queensland Rail personnel to observe and determine the condition of the track structure. On the basis of this inspection, a blanket speed restriction may be imposed if signs of track instability have been observed. All Rail Transport Operators will be informed of the speed restriction and duration of restriction by Townsville Network Control. Uniform measures for hot weather are specified in the safety standard *MD-10-143 Civil - Hot Weather Precautions for Track Stability*. A copy of this standard is available on request.

Temporary speed restrictions may also be put in place during and after the completion of maintenance activities. The extent of the restriction will depend upon the type of maintenance activity and the risk of track misalignments. All speed restrictions put in place on the network due to maintenance activities will be appropriately signed for drivers.

Force Majeure Events may also see the imposition of speed restrictions or track closures. The extent and severity of any speed restrictions are dependent on the event.

Operational Constraints - Rollingstock

All rollingstock that operates on Queensland Rail network must be authorised by Queensland Rail. All rollingstock configurations must also be authorised by Queensland Rail.

As part of the Access Application Process, the Rail Transport Operator must demonstrate that the rollingstock has been designed, constructed, modified, appropriately tested and configured in a manner that complies with the agreed Rollingstock Interface Standards in its Interface Risk Management Plan.

MD-10-194 Interface Standards provides some standard outlines that are included in APPENDIX G Rollingstock Outlines herein. Queensland Rail can advise which rolling stock outline applies to a specific route. This may be one of the standard outlines in APPENDIX G or an additional outline.

Maximum Train Length

The maximum length of trains is determined by:

- restrictions for crossing/passing other trains
- requirements for braking performance of the train
- capacity of the route
- drawgear capacity
- train handling
- requirements for road/pedestrian access across the track

Where it is necessary for a train to cross, pass or be passed by another train, the maximum train length allowable shall be such that the comparison train length (that is, the static length plus a defined allowance for stretching and train handling) is not longer than the crossing loop length.

Variations of train length for a particular train configuration are possible. However, all changes need to be agreed as part of the access agreement negotiations.

Sectional Running Times

Trains travelling south to Brisbane are travelling in the Up Direction whilst trains travelling north to Cairns are travelling in the Down Direction.

The sectional running times, expressed in minutes, for 80 km/h locomotive-hauled container trains currently operating on NCL System North are contained in APPENDIX F.

The sectional running times are “Pass to Pass” times for a running move and do not reflect acceleration and deceleration characteristics of the trains.

Proposed train configurations would need to be confirmed by the relevant operator against infrastructure constraints to determine if the sectional running times can be achieved. If the sectional running times cannot be achieved then different arrangements, including for access charges, may need to be negotiated as part of the access agreement negotiations.

Changes to the sectional running times for the System are possible over time. Any changes would need to be confirmed as part of the access agreement negotiations.

Incident Recovery Time and Management

Incident recovery time and management is dependent on the nature, severity and location of each unique incident that may occur on this System.

To enable a quick response in case of emergency, latitudes and longitudes of some passing loops where the general direction of the railway alters are detailed below:

Location	Latitude	Longitude
Rockhampton	23° 23' S	150° 30' E
Yamba	23° 07' S	150° 22' E
Kunwarara	22° 54' S	150° 08' E
Marlborough	22° 48' S	149° 53' E
Styx	22° 36' S	149° 38' E
St Lawrence	22° 21' S	149° 31' E
Carmila	21° 54' S	149° 25' E
Yukan	21° 31' S	149° 13' E
Sarina	21° 25' S	149° 13' E
Mackay	21° 08' S	149° 10' E
Erakala	21° 07' S	149° 07' E
Mount Ossa	20° 57' S	148° 50' E
Bloomsbury	20° 42' S	148° 35' E
Proserpine	20° 24' S	148° 34' E
Bowen	20° 00' S	148° 13' E
Merinda	20° 00' S	148° 10' E
Gumlu	19° 52' S	147° 41' E
Home Hill	19° 39' S	147° 24' E
Pioneer	19° 32' S	147° 19' E
Giru	19° 30' S	147° 06' E
Stuart	19° 20' S	146° 50' E
Townsville	19° 15' S	146° 48' E
Purono	19° 11' S	146° 34' E
Mutarnee	18° 57' S	146° 17' E
Ingham	18° 38' S	146° 09' E
Cardwell	18° 16' S	146° 01' E
Bilyana	18° 07' S	145° 54' E
Tully	17° 55' S	145° 56' E
Innisfail	17° 31' S	146° 01' E
Deeral	17° 13' S	145° 55' E
Gordonvale	17° 05' S	145° 47' E
Cairns	16° 55' S	145° 46' E
Marian	21° 10' S	148° 59' E

Rail/Road Interfaces

Rail Transport Operators on the NCL System North will encounter 637 Rail/Road Interfaces (see APPENDIX C for details) categorised as follows:

Type of Interface	No. of Interfaces
Public (Active with Flashing Light / Boom Gate Protection)	202
Public (Passive Protection - Signs)	183
Occupation (Private Access)	249
QR Maintenance	3

Rollingstock Braking Rate

The signalling system and flashing light protection at rail/road interfaces has been designed to cater for the variety of trains that currently use this System.

The required stopping distances for the train are specified in *MD-10-194 Interface Standards*. Queensland Rail can advise which braking curve is applicable to the particular route.

Trackside Detection Equipment

Queensland Rail continues to focus on derailment prevention technologies along the NCL System North. These systems provide a simultaneous alarm to the train driver and Townsville Network Control that detects problems outside normal operating parameters. These alarms indicate a potential failure, allowing intervention by train drivers and Train Control to reduce the risk of derailments on the line.

Dragging Equipment Detector (DED)

Dragging Equipment Detectors (DEDs) detect anything that may be dragging underneath a train which may indicate that a wheel or wagon is derailed and provides appropriate alarms. DEDs are located at the following sites:

Location	KM Point
Kunwarara	705.200
Home Hill	1251.000
Macdesme	1256.199
Storch	1305.100
Mt St John	1351.000

Hot Bearing Detector (HBD) / Hot Wheel Detector (HWD)

These devices detect faulty bearings on rollingstock that are projecting heat and noise signatures outside the normal operating parameters. On the NCL System North, HBDs/HWDs are located at:

Location	KM Point
Kunwarara	705.200
Storch	1305.100
Mount St John	1351.000

Wheel Impact Load Detector (WILD) / Overload & Imbalanced Load Detector (OILD)

Wheel Impact Load Detectors (WILDs) identify flat wheels on rollingstock. Left undetected, these defective rollingstock wheels can cause severe damage to the network resulting in the closure of the track.

Overloaded or unevenly loaded wagons can cause excessive train and track forces that can lead to a derailment. Queensland Rail's overload and imbalanced load detectors (OILDs) are non-trade certified weigh in motion systems that measure passing wheel and axle weights and will issue alarms if the values recorded exceed set thresholds.

The WILDs/OILDs on the NCL System North are located at:

Location	KM Point
Kunwarara	705.200
Storch	1305.100
Mount St John	1351.000

Environmental Monitoring System (EMS)

As part of Queensland Rail's infrastructure management system, remote Environmental Monitoring Systems (EMSEs) are located at sites historically impacted by seasonal flooding. These EMSEs provides critical real time information on flood (river level) and waterway flow, air temperature, rainfall gauge and rail temperature. Alerts are sent to both field staff and the Townsville Network Control as a warning for increased monitoring.

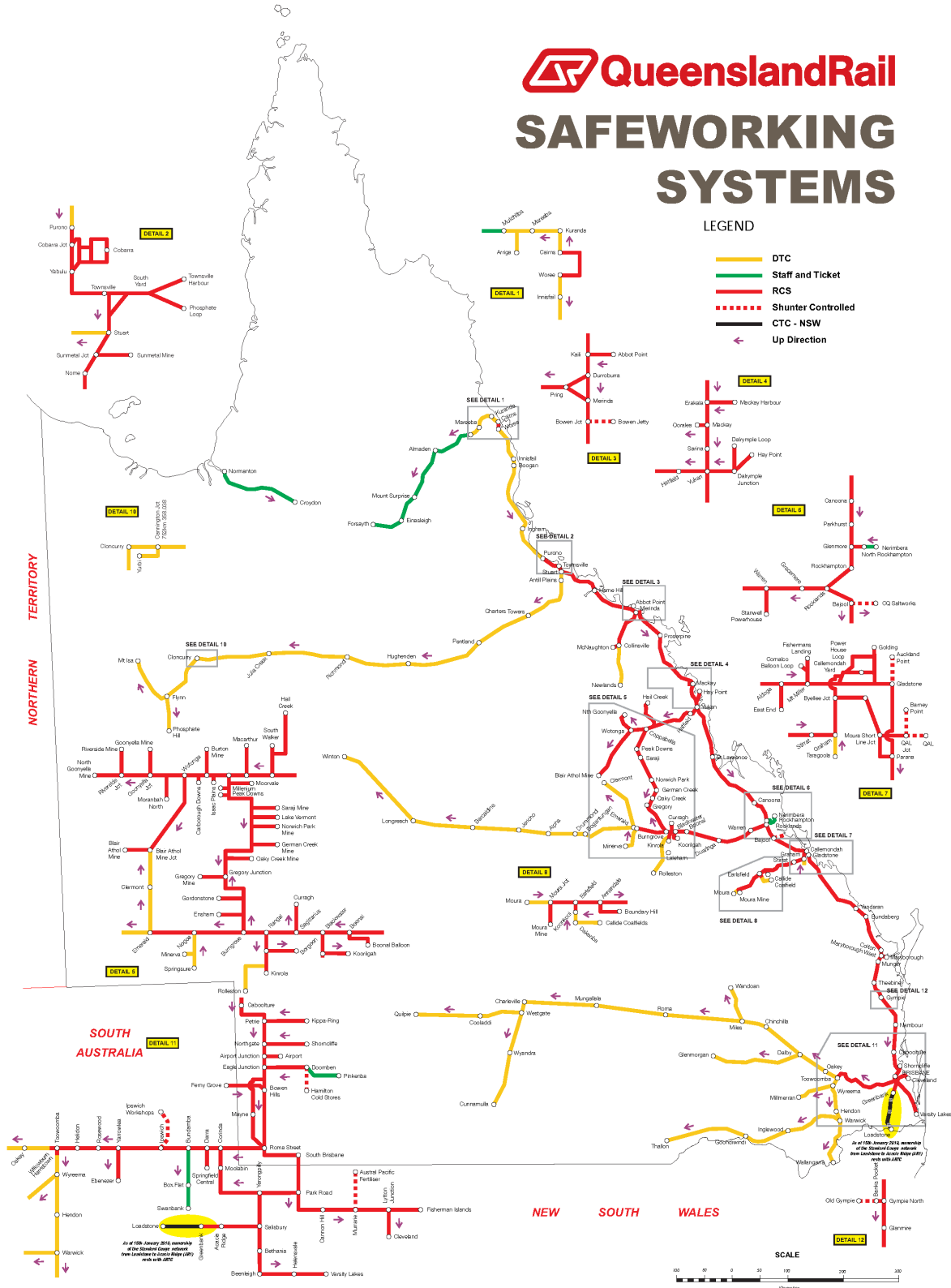
Operational Systems & Train Control

The NCL System North is operated by Remote Control Signalling (RCS) in conjunction with Automatic Train Protection (ATP) to Purono and Direct Traffic Control (DTC) from Purono to Woree. Woree to Cairns is RCS.

Staff and Ticket operates the Yeppoon Branch between North Rockhampton and Fields Siding.

Train control rests with Rockhampton for Rockhampton to Parkhurst and Glenmore to Fields Siding whilst for Parkhurst to Cairns including the branches, train control rests with Townsville.

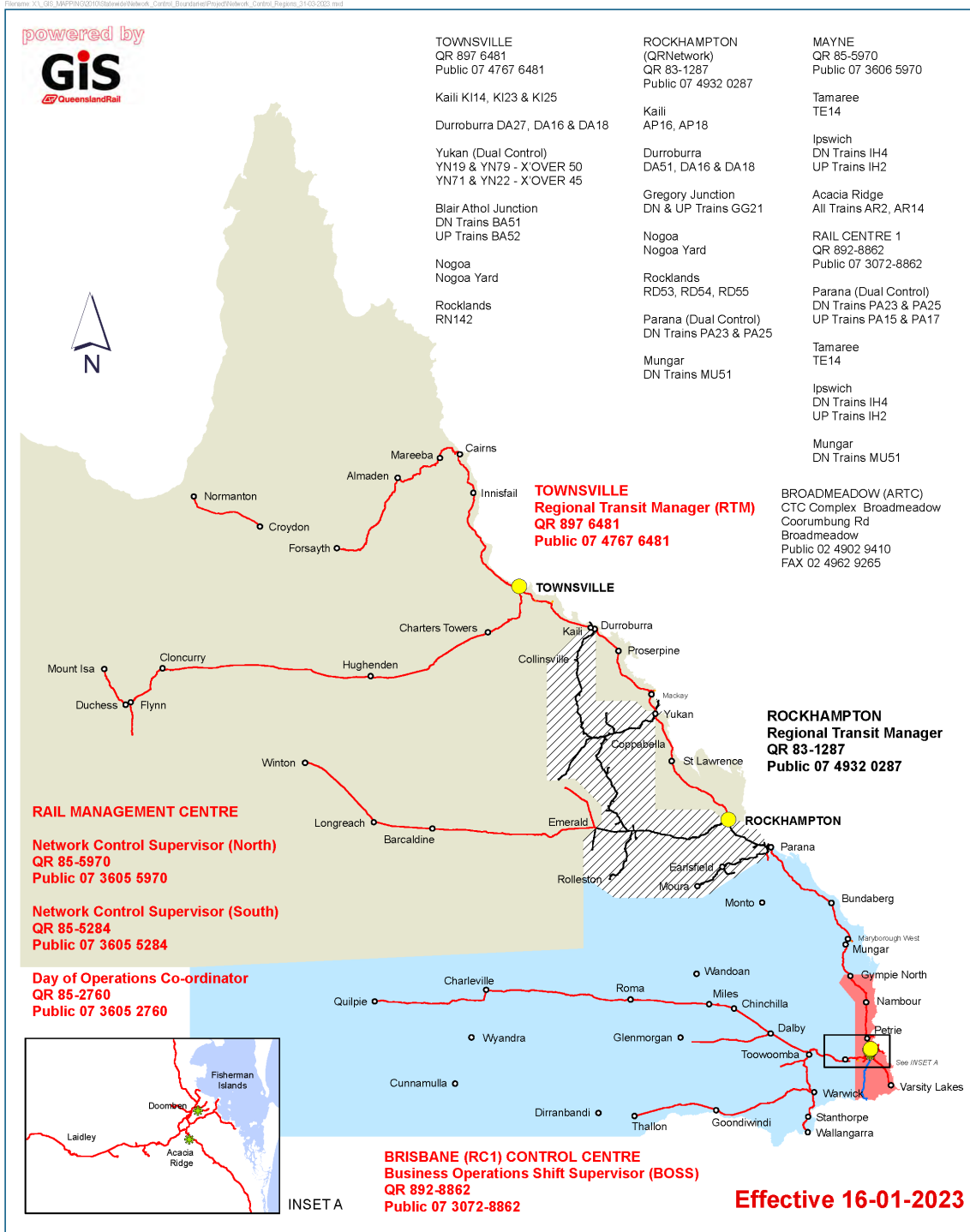
QueenslandRail SAFEWORKING SYSTEMS



Safeworking_QRNetwork
(Drawing Modified - October - Kippa-Ring - RCS)

10/2023 - 19

North Coast Line System North
Information Pack



0 85,000 170,000 340,000
Metres
1:6,723,564 (when printed at A3)

Data Sources:
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Legend

- Network Control Centres
- Stations
- ✱ Signalling Centres
- ARTC
- AURIZON
- PRIVATE
- QUEENSLAND RAIL
- Aurizon Network
- RMC [BSA]
- Townsville
- RC1Control

COMPANY

QueenslandRail

NETWORK CONTROL REGIONS and SIGNALLING CENTRES

CREATED BY JPL - BPR003
LAST MODIFIED JPL - 03 APR 2018

A3 SIZE

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Information Systems

ViziRail is the key software system designed as a tool for use in integrated scheduling, possession planning, monitoring and reporting on the Queensland Rail network.

Functionality includes the following modules:

- Train Notices
- Train Monitoring
- Network Incident Recording
- Train Consists
- Speed Restrictions
- Planning Graphs
- Train Scheduling
- Possessions

Telecommunications

Communications between Driver and Controller is via the QLD Rail UHF analogue radio system (Train Control Radio - TCR) or the Enhanced Radio System (ERS) (a Digital Mobile Radio (DMR) technology), which utilise a number of Queensland Rail channels and frequencies. Transceivers should utilise the “auto” setting, so that the channel or Talk Group is selected to suit the geographical location. Frequency specification and coverage details are available as part of the Access Application Process.

Access to the Maintenance Supervisory Radio System (MSR) can be gained by using Queensland Rail telephone extensions depending on location or via the UHF MSR system or ERS utilising Queensland Rail channels and frequencies.

In addition, all locomotives and other power vehicles (including Multiple Units and Miscellaneous Vehicles such as Rail Motors) must carry a second UHF radio operating on Queensland Rail Channel 150 (TX 411.375 MHz and RX 411.375 MHz). This provides on-board and wayside communications including end to end, train to train and train to track maintenance teams over an average distance of 8-10 km.

All train control and maintenance supervisory radio channels utilise mobile to base subaudio tones. No subaudible is used on Wayside channel 150.

Communications on board locomotives must conform to Queensland Rail's safety standard *MD-10-86 Telecommunications – Mobile Voice Radio Communications Systems*.

Rail Operations and the Environment

Queensland Rail is committed to operating in a sustainable and environmentally responsible manner in support of a resilient rail network that delivers value and benefit for our customers, our people, the community and the environment. [Click here](#) to access our Environment and Sustainability Policy.

Additional Information relating to environmental management at Queensland Rail can be viewed at [Environment \(queenslandrail.com.au\)](https://www.queenslandrail.com.au/Environment).

All Rail Transport Operators operating on the Queensland Rail network are required to comply with all current state and federal legislation relating to the management and protection of the environment. Specific environmental management requirements (including noise management) are included and agreed to in all Access Agreements.

Rail Transport Operators must determine if any environmental approvals/authorities are required for the activities/operations proposed. If permits or approvals are required, they must be obtained from the relevant regulator prior to the commencement of the activities/operations. Copies of all environmental authorities administered by the Department of Environment, Science and Innovation (DESI) within Queensland are available upon request from DESI and can be found at environment.des.qld.gov.au.

Air Quality and Contamination Impacts

Lift off or loss of material from uncovered or unsealed wagons, or fugitive product deposits from loading can have a negative impact on local air quality values and result in contamination of the surrounding environment. This contamination can impact environmental values and cause damage to rail infrastructure.

In accordance with legislative obligations, Rail Transport Operators must take all reasonable and practicable measures to prevent the loss of product during transport on Queensland Rail's network.

Environmental Noise Management

While noise from the operation of a railway is exempt from environmental nuisance provisions under the Queensland Environment Protection Act 1994, Queensland Rail strives to manage noise associated with its operations and the operations of other network users wherever reasonable and practical.

As the rail manager, Queensland Rail works closely with customers regarding environmental issues, and provides feedback to Rail Transport Operators to allow them to investigate and address as applicable, noise related issues that may be associated with their assets or operations.

There are various sources of noise from a railway and to aid efficient and effective noise reduction, a range of noise management measures are utilised by Queensland Rail. These are detailed at queenslandrail.com.au/inthecommunity/environment/noisemanagement.

Rail noise and vibration requirements and criteria outlined in the Department of Transport and Main Roads (DTMR) Interim Guideline – Operational Railway Noise and Vibration (IGORNV) are applicable where a change to infrastructure or operations is likely to result in a significant change to noise impacts to nearby noise sensitive place(s). Queensland Rail will work with third-party operators to understand and support the management of these impacts.

IGORNV can be accessed via the following link:

tmr.qld.gov.au/business-industry/Technical-standards-publications/Transport-noise-management-code-of-practice.aspx

Opportunities to manage/minimise rail noise must be considered as part of access planning, captured in Environmental Investigation and Risk Management Report (EIRMR) and control measures must be discussed and agreed as part of the Interface Risk Management Plan (IRMP) development.

Where practicable, priority should be given to the management of rail noise at its source. This approach will deliver a benefit to more of Queensland Rail's neighbours than can be achieved through the delivery of fixed, last line treatments such as noise barriers. Physical noise barriers should only be considered, where suitable source-based treatments are not available.

Wheel Squeal & Flanging

Wheel squeal is caused by friction forces between the top of rail and wheel interface, whereas flanging noise is predominantly caused by friction forces between the side of rail and wheel

interface. Continuous or sustained wheel squeal produced primarily on the low rail side is distinct from discontinuous “flanging noise” that is produced on the high rail side. Continuous wheel squeal is of a high level, and Queensland Rail’s experience is that it may cause significant community reaction, while flanging noise is of a lower level and is more accepted by the community.

Generally, tighter radius curves (i.e. under 300 metre radius), when associated with a number of rollingstock factors that promote wheel squeal, may result in squeal being produced. Rollingstock factors that may promote wheel squeal include:

- Higher wheel hardness
- Stiff primary suspensions
- High centre plate friction
- Worn wheel treads
- Misaligned axles
- Unmatched wheel tread diameters, and
- Incorrectly adjusted side bearers

Noise Complaints

Queensland Rail is committed to act towards its neighbours in a considerate and reasonable manner. This good neighbour commitment assumes a reasonable degree of tolerance from neighbours and a commitment by Queensland Rail to take action where appropriate.

Where Queensland Rail receives complaints about noise from railway activities for which Queensland Rail may be responsible, Queensland Rail responds to those complaints and maintains records of those complaints in accordance with its Safety and Environmental Management System (SEMS).

Where available, generic data will be supplied on request to a third-party operator who is proposing operations within a defined network. That data will indicate those areas where Queensland Rail has received prior complaints relating to its train operations. It will be made available when a third-party operator is undertaking the development of EIRMR as part of its Access Agreement conditions.

Third Party Requirements

Any Rail Transport Operator applying for access to Queensland Rail’s network shall be required to commission an environmental investigation of the proposed operations. This investigation will be conducted by a suitably qualified person, reasonably acceptable to both parties.

In response to the findings of such an investigation, the operator shall produce an EIRMR that identifies the risks of environmental harm associated with the operation and provides proposed controls to address the risks. This shall be reviewed by, and agreed with, Queensland Rail.

In addition, the operator shall have in place documented standards and procedures that, amongst other things, have regard for the issues, risk and control measures identified in the EIRMR. Further guidance on environmental risk investigation and management can be found in Queensland Rail's Access Undertaking.

Any SEMS documentation (wholly or partially) identified as specifically relating to the control of corridor infrastructure (below rail) environmental issues, will be made available to the operator to assist in formulating appropriate and consistent operational (above rail) controls within their EIRMR or documented standards/procedures.

Future Infrastructure Improvements

Capacity Enhancements

Queensland Rail welcomes opportunities to work with customers with a view to transporting additional tonnages on this System.

We encourage Rail Transport Operators, mining companies and/or processors to engage with Queensland Rail at the earliest possible opportunity. This will allow sufficient time to work through detailed capacity analysis and to determine the network upgrades necessary and negotiate appropriate commercial arrangements.

Capacity enhancements will continue to be delivered for future projects provided that contracted tonnages:

- are sufficient to justify the necessary capital investment on commercial terms; and
- adequate notice is given from the time of contracting capacity to deliver the required enhancements.

Infrastructure Management and Access

APPENDIX B - SCHEMATIC LAYOUT is colour coded to indicate Management of Infrastructure and Access.

Third party access to non-Queensland Rail managed infrastructure is by commercial arrangement with the relevant party.

The initial point of contact for Queensland Rail managed below rail assets is:

General Manager Commercial and Rail Access
305 Edward Street
Brisbane Qld 4001
Email: aarf.freight@qr.com.au

APPENDIX A Definitions

Access Agreement

Access Agreement means an agreement between Queensland Rail and an Access Holder for the provision of Access.

Access Undertaking

A document approved by the Queensland Competition Authority (QCA) in accordance with the QCA Act 1997 (Q) that sets out principles for negotiating access to Queensland Rail's declared services.

Accreditation

Accreditation in accordance with Part 3 Division 4 of the Rail Safety National Law (RSNL) and "Accredited" has a similar meaning.

Automatic Train Protection (ATP)

Automatic Train Protection is a computer-controlled system designed to make sure the train:

- does not exceed the current speed limit;
- does not exceed the limit of authority generated by the interlocking (and usually indicated by a signal at STOP);
- does not make unreasonable train movements during shunting, when stationary, or at startup

Automatic Warning System (AWS)

Automatic Warning System is designed to

- provide an in-cab visible and audible indication of the aspect displayed in the next signal

- prompt and warn the train driver of a RESTRICTED signal aspect displayed in the next signal
- stop the train if the driver fails to acknowledge the AWS alarm of a RESTRICTED signal aspect

Axle Counter

At some locations in Remote Controlled Signalling (RCS) Territory an axle counter system has been provided to detect occupancy of a section of track.

An axle counter at each end of a section determines whether an axle is entering or leaving the section and counts the number of axles passing the counter in each direction. By keeping an accurate count of axles into the section, then the number of axles out of the section, the system can determine if the section is occupied or not.

Block Train

A train consisting entirely of similar classes of wagons of axle loads over 12.2 tonnes marshalled together for a certain class of traffic. The definition is also extended to cover trains in which 12 or more such wagons loaded to more than 12.2 tonnes gross per axle are included within a length of 315 metres or less of the train.

Comparison Train Length

The total length in metres of a train including the locomotives. For the purpose of comparison with the length of crossing loops, it is defined as the static train length + 2% of the static train length for train handling allowance + 125mm per vehicle for coupler and drawgear tolerances.

Continuous Welded Rail (CWR)

Rail that has mechanical rail joints spaced at greater than 220 m intervals or has no mechanical rail joints at all.

Crossing Loop Length

The maximum length in metres of the train which can be accommodated in the loop to allow normal operation of the signalling systems for crossing or passing movements.

Daily Train Plan (DTP)

Collectively, the scheduled times for all Train Services operating on Queensland Rail's Rail Infrastructure and any Planned Possession on a particular day.

Declared Infrastructure

Infrastructure declared as available for access by third-party operators in accordance with the QCA Act 1997 (Q).

Declared Services

Services declared as available for access by third-party operators in accordance with the QCA Act 1997 (Q).

Design Neutral Temperature

The rail temperature at which the track is designed to be stress free as defined in Queensland Rail's Civil Engineering Publication CEP.26 "Rail Stressing Manual".

Direct Traffic Control (DTC)

Direct Traffic Control (DTC) is an absolute block safeworking system used to control the movement of trains in non-signalled territory.

Central to DTC is an on-board DTC computer which displays authorities stored in its database. The relevant authority is activated by the train crew following an exchange of codes between the crew and the controller. Codes are exchanged verbally using the train control radio.

The procedures governing the operation of DTC are detailed in Queensland Rail's standard *MD-10-113 Direct Traffic Control Manual*.

Dragging Equipment Detector (DED)

A mechanism positioned on sections of track to detect any dragging equipment on train.

Dragging Equipment Detector Alarm (DED Alarm)

Part of the Queensland Rail System which advises the Train Controller by a computer prompt message that a D.E.D. has been activated and the train driver by a recorded voice message.

Electric Train Staff

A 'token' system of train working between interlockings on single lines in non-track-circuited areas, where release of a token is controlled by electrically connected and interlocked instruments.

Electromagnetic Compatibility (EMC)

The ability of an equipment or system to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to anything in that environment.

Environmental Monitoring System (EMS)

Remote environmental monitoring systems providing critical information regarding temperature, rainfall and stream levels.

EPP (Noise)

Environmental Protection (Noise) Policy 2019, Subordinate Legislation to the Queensland Environmental Protection Act 1994.

Force Majeure Event

Means any cause, event or circumstance, or combination of causes, events or circumstances, which is beyond the reasonable control of the Party affected thereby and which by the exercise

of due diligence such Party is not reasonably able to prevent or overcome, including but not limited to, results of abnormal weather conditions, act of God, breakdown of any facilities or machinery or unavailability of essential equipment, strikes or other industrial dispute.

Hot Wheel & Bearing Detector (HWD/HBD)

Heat sensors located at strategic locations on the system that identify abnormal temperatures in wheels and wheel bearings as the train passes over, transmits a signal to the train control panel that necessitates an inspection of the suspect wagon and remedial action.

Line Code or Line Section Code (LSC)

Line Code is a unique alpha-numeric identifier applied to a section of track on Queensland Rail's network and usually runs from junction point to junction point. Each numeric identifier is unique and can be further rolled up into Corridors using the alpha identifier.

Long Welded Rail (LWR)

Rail that has mechanical rail joints spaced at intervals between 110m and 220m.

Master Train Plan (MTP)

Collectively, the scheduled times as advised by Queensland Rail from time to time for all Train Services operating on Queensland Rail's Rail Infrastructure where such scheduled times remain unchanged from week to week, and any Planned Possessions.

Nominal Rail Size

Rail sizes 20, 31 and 41 kg/m are all nominal rail sizes used to group together a range of rail types and sizes originally designated in the imperial unit "lb/yd". The term "nominal" is used in recognition of the variation in the dimensions, mass and engineering properties of the rails in this category.

Ordinary Staff and Ticket Working

A token-based system of safeworking where the movement of trains on bi-directional single lines is on possession of a staff token or ticket. Each section of single line has a unique token.

Rail Transport Operator

A person who has, or is seeking, Access from Queensland Rail to operate Train Services on the Rail Infrastructure and who is, or who will become Accredited in respect of those Train Services.

Remote Controlled Signalling (RCS)

A system of safeworking where train movements are governed by aspects displayed in colour light signals which are controlled from a remote location and by the passage of trains. Some colour light signals and points may be released by the Train Controller to be operated from a local area by using:

- a local control panel;
- an electrically released shunting frame;
- a zone released shunting system, or
- emergency push buttons.

Rail Transport Operators' trains are expected to meet existing signalling standards to ensure track circuits and other signalling equipment operate safely and effectively. In particular, Queensland Rail's standard *MD-10-76 Signalling Principles* must be complied with.

Remote Train Overview Application (RTOA)

A PC based system providing real time operational information, gathering information on train running and rail network status for immediate and continuously updated display and historical analysis.

Being a multi-tier client-server application, different levels of access/security ensure confidentiality of an Operator's train performance statistics.

Rollingstock Authorisation Process

The process for determining and validating rollingstock compliance to the agreed interface standards and authorising these to be used as part of a train on the network.

Short Welded Rail (SWR)

Rail that has mechanical rail joints spaced at intervals less than 110m.

Staff and Ticket

The Staff and Ticket System allows for the movement of trains over a bidirectional track.

The Staff and Ticket System operates (in accordance with Queensland Rail's standard *MD-10-114 Staff and Ticket Manual*) on the principle of absolute block working, which provides that only one train will be authorised to be on any one section at any one time.

Standard Train

The predominant type of train operating on the line/system.

Train Authorisation

The process for acceptance of a train made up of authorised rollingstock to be operated on specified routes with stated conditions or restrictions.

Unit Train

A train composed entirely of one class and one drawgear classification of rollingstock.

Universal Traffic Control (UTC)

A PC based train control supervisory system that provides the means to remotely control train movements over a large area and provide management and train users with real time train related information.

ViziRail

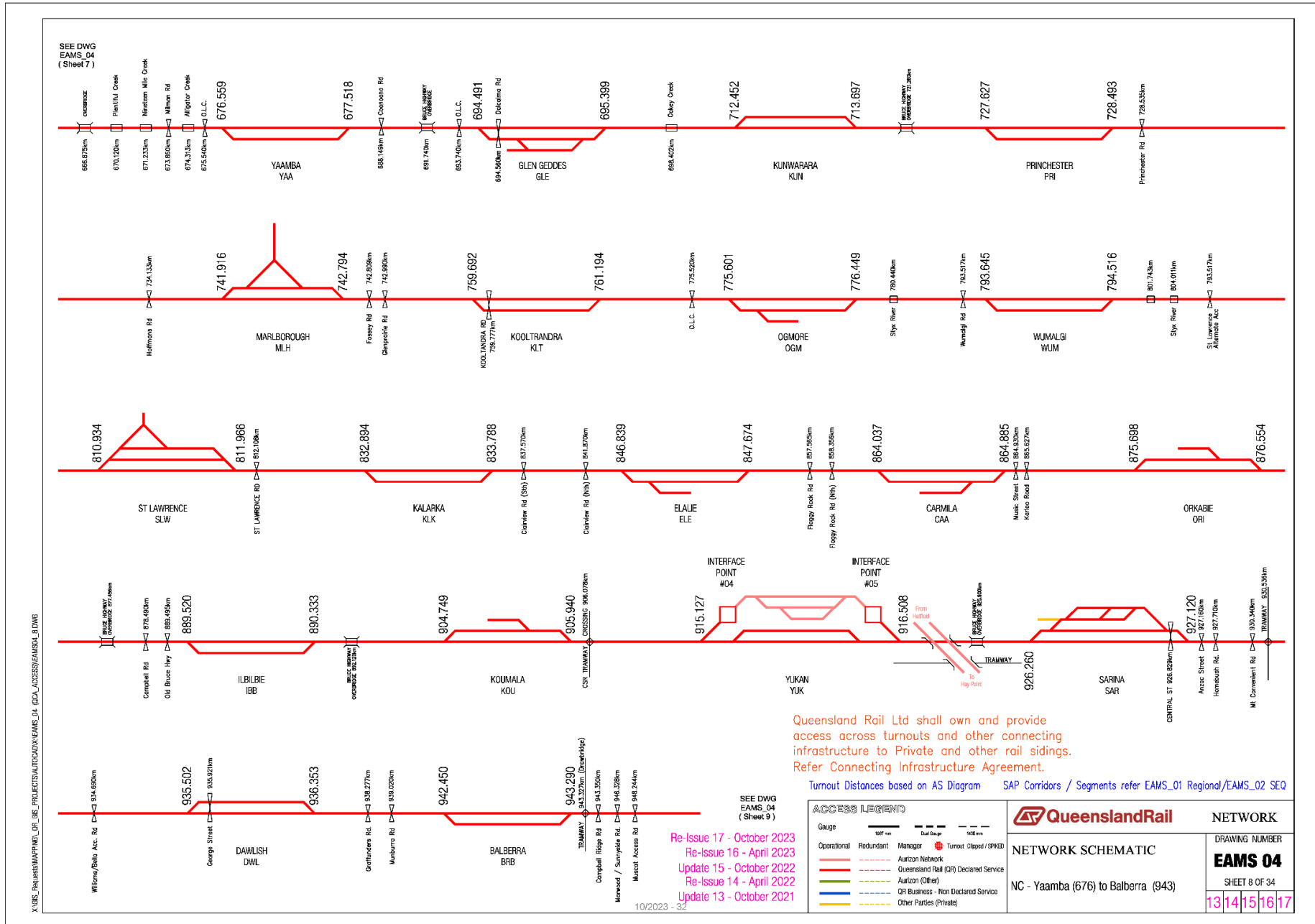
A fully integrated scheduling, possession planning, monitoring and reporting tool for managing the Queensland Rail below-rail network.

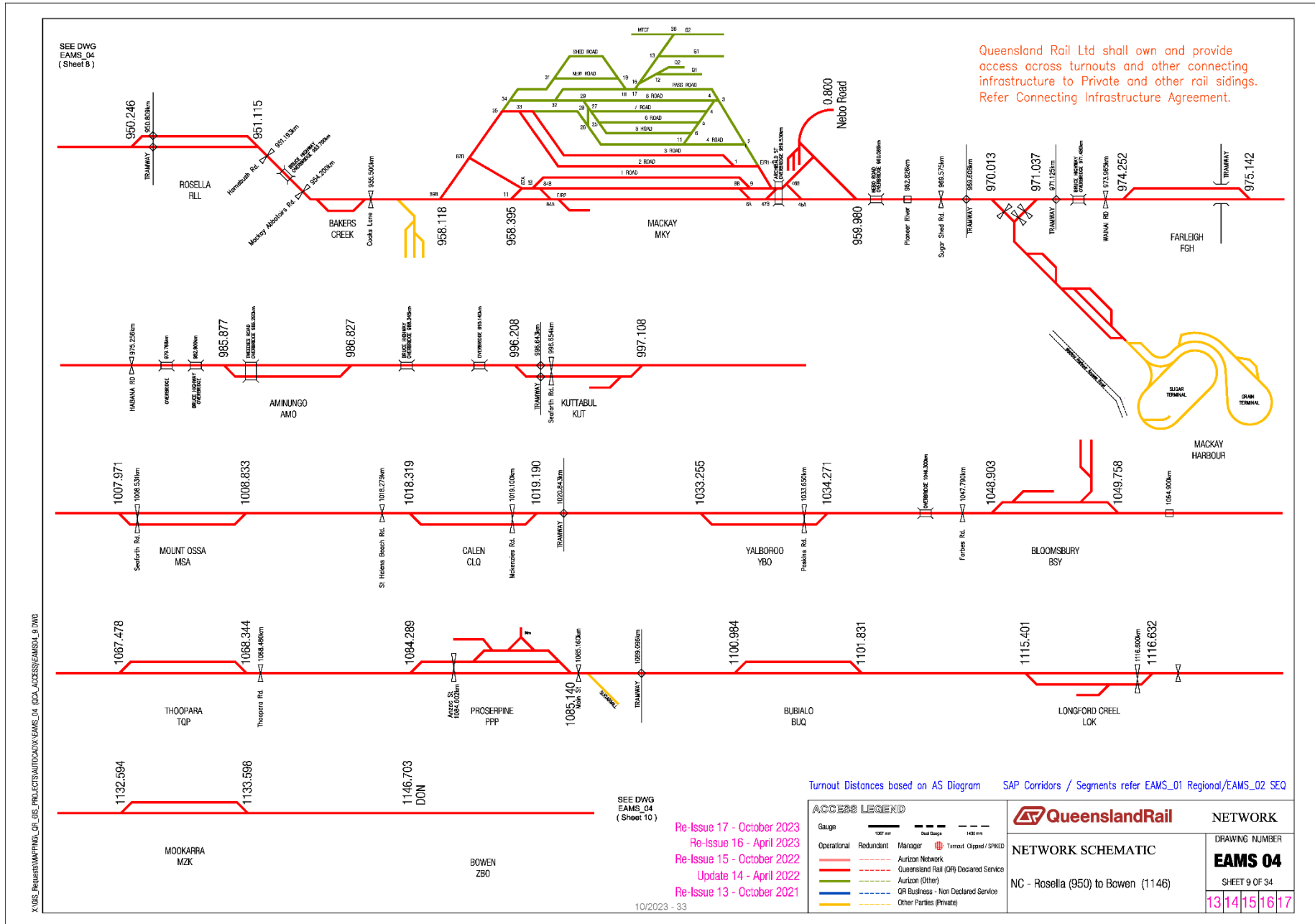
ViziRail also supports the provision of all QCA and the Department of Transport and Main Roads reporting requirements.

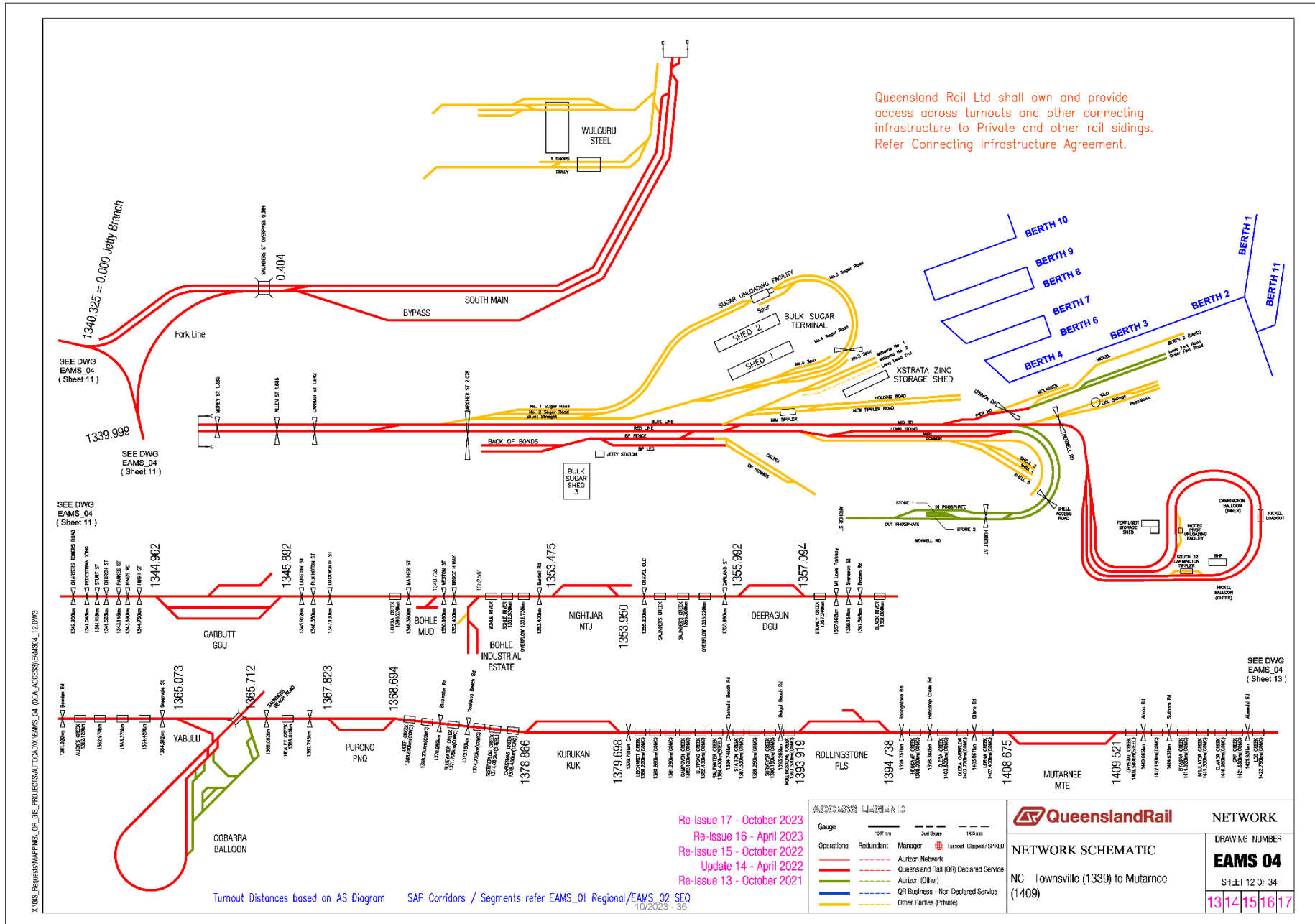
Wheel Impact Load Detector (WILD)

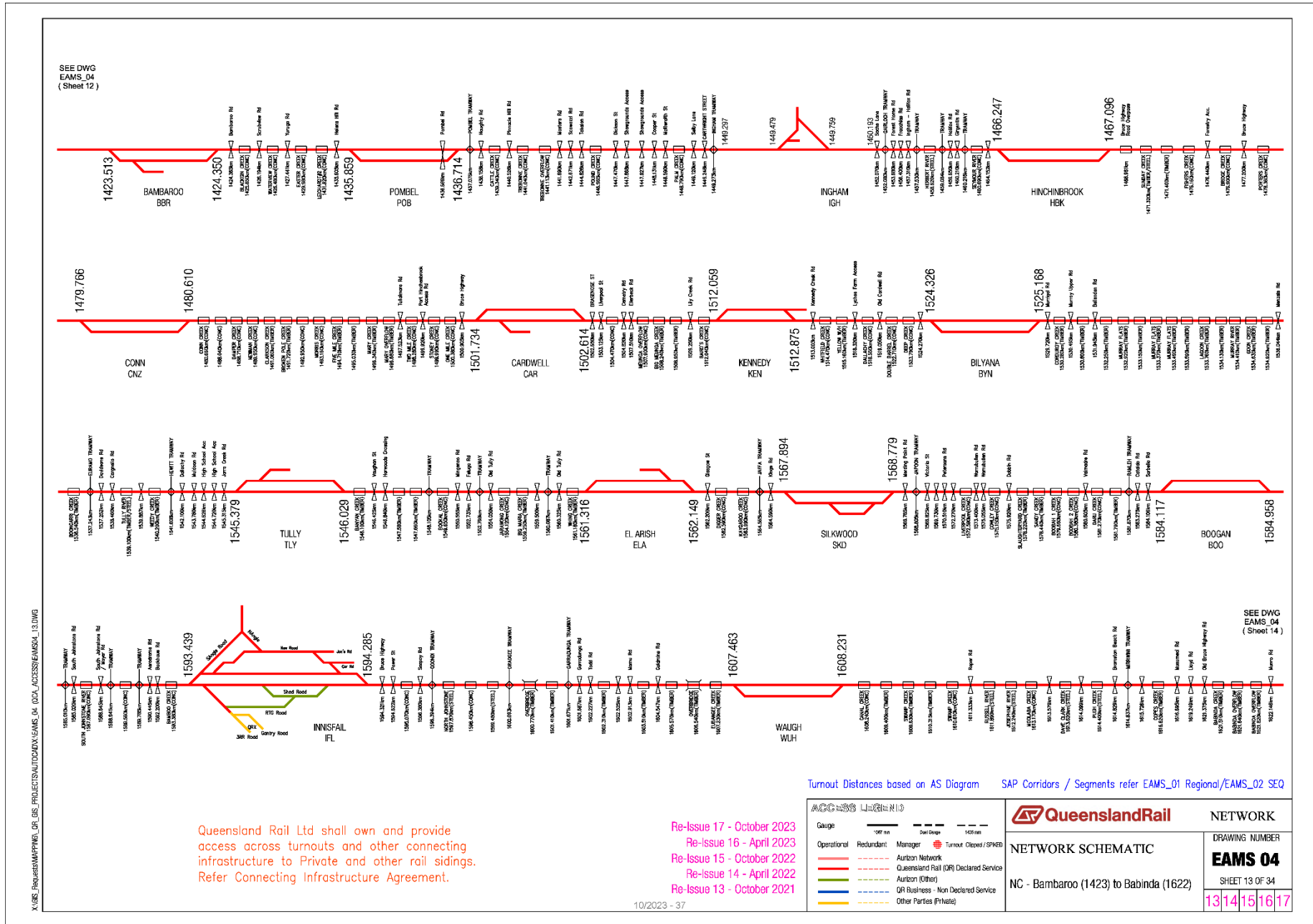
In track monitoring system to identify wheel flats.

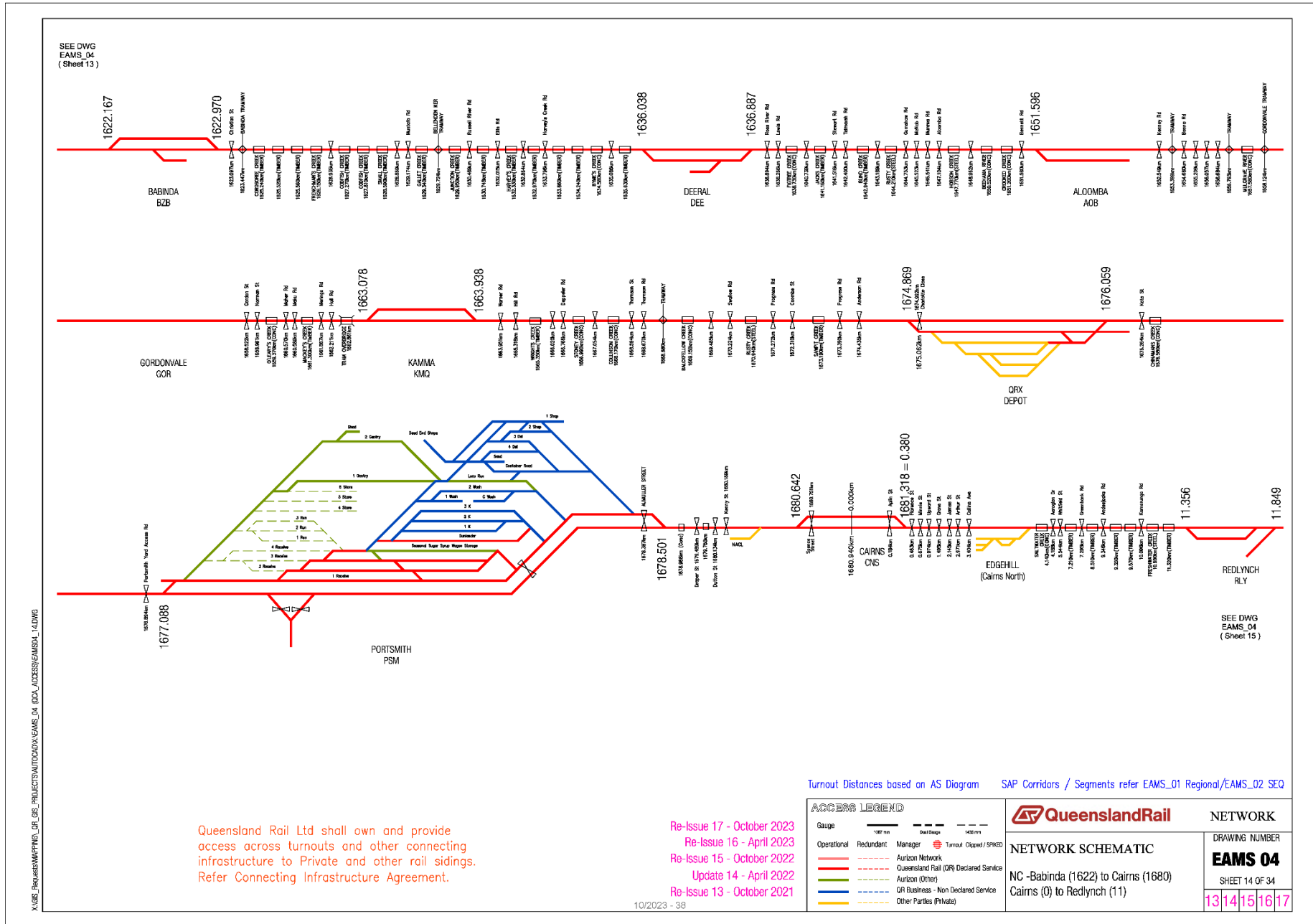
APPENDIX B Schematic Layout











APPENDIX C Rail/Road Interface Details

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_05354	Glenmore to Nerimbera	BRIDGE STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05355	Glenmore to Nerimbera	FITZROY BRIDGE PEDESTRIAN ACC	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05356	Glenmore to Nerimbera	GOODSALL STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05357	Glenmore to Nerimbera	PROPERTY ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_05359	Glenmore to Nerimbera	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05360	Glenmore to Nerimbera	FITZROY RIVER ACCESS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05361	Glenmore to Nerimbera	LAKES CREEK ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05362	Glenmore to Nerimbera	HARTINGTON STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05363	Glenmore to Nerimbera	BARKERS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05364	Glenmore to Nerimbera	NERIMBERA SCHOOL ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05365	Glenmore to Nerimbera	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06315	Glenmore to Nerimbera	GLENMORE ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_06618	Glenmore to Nerimbera	FRASER ST. PEDESTRIAN ACCESS	1. PUBLIC	R3. PASSIVE - STOP
LXR_06624	Glenmore to Nerimbera	HORACE STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_07433	Glenmore to Nerimbera	TRANSFER STATION ACCESS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05394	Interface Pt 07 to Rockhampton	JELLICOE STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05395	Interface Pt 07 to Rockhampton	PORT CURTIS ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05396	Interface Pt 07 to Rockhampton	DIESEL SHED ACCESS	3. PRIVATE	R3. PASSIVE - STOP
LXR_06184	Interface Pt 07 to Rockhampton	PEDESTRIAN	3. PRIVATE	R5. UNPROTECTED
LXR_06259	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_06275	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_06354	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_06355	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_06356	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_06357	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_06358	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_06359	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_06360	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_06363	Rockhampton Yard & Sidings	ROCKHAMPTON YARD	3. PRIVATE	R5. UNPROTECTED
LXR_05397	Rockhampton to Parkhurst	STANLEY ST. / DENISON ST.	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05398	Rockhampton to Parkhurst	DERBY STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05399	Rockhampton to Parkhurst	WILLIAM STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05400	Rockhampton to Parkhurst	DENHAM STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05401	Rockhampton to Parkhurst	FITZROY STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05402	Rockhampton to Parkhurst	ARCHER STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05403	Rockhampton to Parkhurst	CAMBRIDGE STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05404	Rockhampton to Parkhurst	ALBERT STREET (BRUCE HIGHWAY)	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05405	Rockhampton to Parkhurst	NORTH STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05406	Rockhampton to Parkhurst	BOLSOVER STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05407	Rockhampton to Parkhurst	GLENMORE ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05408	Rockhampton to Parkhurst	MAIN STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05409	Rockhampton to Parkhurst	RICHARDSON ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05410	Rockhampton to Parkhurst	FARM STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05411	Rockhampton to Parkhurst	BOUNDARY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05350	Parkhurst to Mackay	FARRELLYS LANE	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05351	Parkhurst to Mackay	COOKS LANE	1. PUBLIC	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_05412	Parkhurst to Mackay	WILLIAM PALFREY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05413	Parkhurst to Mackay	DAWSON ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05414	Parkhurst to Mackay	MELDRUM ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05416	Parkhurst to Mackay	BAKERS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05417	Parkhurst to Mackay	ROSSMOYA ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05419	Parkhurst to Mackay	MILMAN ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05420	Parkhurst to Mackay	FAIRY BOWER ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05421	Parkhurst to Mackay	YAAMBA SIDING ACCESS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05424	Parkhurst to Mackay	CANOONA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05425	Parkhurst to Mackay	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05426	Parkhurst to Mackay	RD AT CANOONA (ON STOCK ROUTE)	1. PUBLIC	R3. PASSIVE - STOP
LXR_05427	Parkhurst to Mackay	DALCALMAH ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05428	Parkhurst to Mackay	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05430	Parkhurst to Mackay	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05431	Parkhurst to Mackay	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05432	Parkhurst to Mackay	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05433	Parkhurst to Mackay	BRETT ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05434	Parkhurst to Mackay	PRINCHESTER SIDING ACCESS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05436	Parkhurst to Mackay	HOFFMANS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05438	Parkhurst to Mackay	FOSSEY DRIVE	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05439	Parkhurst to Mackay	GLENPRAIRIE ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05441	Parkhurst to Mackay	LANDSBERGS ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05442	Parkhurst to Mackay	PINE MOUNTAIN ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05443	Parkhurst to Mackay	KOOLTANDRA ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05444	Parkhurst to Mackay	STRATHMUIR STATION ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_05445	Parkhurst to Mackay	BOWMAN STATION ACCESS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05446	Parkhurst to Mackay	OAKDEAN STATION ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05447	Parkhurst to Mackay	BRIGALOW STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00648	Parkhurst to Mackay	ABATTOIRS ACCESS ROAD.	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00716	Parkhurst to Mackay	MUSIC STREET-CARMILA BEACH RD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00892	Parkhurst to Mackay	MARWOOD-SUNNYSIDE ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00957	Parkhurst to Mackay	FREDRICK HOARE DRIVE	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01008	Parkhurst to Mackay	ST LAWRENCE ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01077	Parkhurst to Mackay	WUMALGI EAST ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01707	Parkhurst to Mackay	CONNORS RD ON PRIVATE SIDING	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01782	Parkhurst to Mackay	COLONIAL DRV CLAIRVIEW RD NTH	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04092	Parkhurst to Mackay	GORMAN STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04093	Parkhurst to Mackay	HOME BUSH ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04095	Parkhurst to Mackay	CHELONA - SANDIFORD ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04098	Parkhurst to Mackay	BALBERRA ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04099	Parkhurst to Mackay	CENTRAL STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04100	Parkhurst to Mackay	ANZAC STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04102	Parkhurst to Mackay	SARINA / HOME BUSH ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04105	Parkhurst to Mackay	MCMAHONRD WILLIAMS/BELLA ACCRD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04106	Parkhurst to Mackay	BOYDS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04107	Parkhurst to Mackay	DAWLISH ROAD (GEORGE STREET)	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04108	Parkhurst to Mackay	MUNBURRA ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04109	Parkhurst to Mackay	BARTOLO ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04110	Parkhurst to Mackay	MILL ACCESS ROAD	3. PRIVATE	R1. ACTIVE - LIGHTS
LXR_04111	Parkhurst to Mackay	ARMSTRONG BEACH ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_04112	Parkhurst to Mackay	KEATING'S ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04113	Parkhurst to Mackay	BAILEY'S ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04114	Parkhurst to Mackay	OONOOIE ROAD	5. QR MAINTENANCE	R2. ACTIVE - BOOM GATES
LXR_04115	Parkhurst to Mackay	THE GLEN ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04116	Parkhurst to Mackay	BORGS ACC RD/QR MAINTENANCE RD	5. QR MAINTENANCE	R3. PASSIVE - STOP
LXR_04117	Parkhurst to Mackay	NORTH INNESTON ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04118	Parkhurst to Mackay	SOUTH INNESTON ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04120	Parkhurst to Mackay	B & M BELLA ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04122	Parkhurst to Mackay	TEDLANDS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04123	Parkhurst to Mackay	BERARDI ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04124	Parkhurst to Mackay	ARCHIES ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04125	Parkhurst to Mackay	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04126	Parkhurst to Mackay	THOMSETS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04127	Parkhurst to Mackay	PRICES ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04128	Parkhurst to Mackay	MT. CHRISTIAN STATION ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04129	Parkhurst to Mackay	OLD BRUCE HIGHWAY	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04130	Parkhurst to Mackay	BELLA ACCESS, KOOTA ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04131	Parkhurst to Mackay	GAVIGLIAS RD GUNTERSHELL ACCRD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04135	Parkhurst to Mackay	KARLOO ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04136	Parkhurst to Mackay	FLAGGY ROCK RD (DOUGLAS RD)	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04348	Parkhurst to Mackay	HARTWIG'S STATION ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04349	Parkhurst to Mackay	STYX ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04350	Parkhurst to Mackay	ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04352	Parkhurst to Mackay	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04353	Parkhurst to Mackay	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_04355	Parkhurst to Mackay	FRANK'S ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04357	Parkhurst to Mackay	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04359	Parkhurst to Mackay	SCHNIEDERS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04360	Parkhurst to Mackay	L.G. AND A.C. HARDWICK ACC RD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04361	Parkhurst to Mackay	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04363	Parkhurst to Mackay	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04365	Parkhurst to Mackay	NORTH FLAGGY ROCK ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04367	Parkhurst to Mackay	TINERTA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04370	Parkhurst to Mackay	SMITHS STOCK CROSSING	3. PRIVATE	R3. PASSIVE - STOP
LXR_04379	Parkhurst to Mackay	LANDING ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04381	Parkhurst to Mackay	LOLAMA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04389	Parkhurst to Mackay	MT CONVENIENT ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04391	Parkhurst to Mackay	PLATHS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04396	Parkhurst to Mackay	IWERS RD (BOWLES ACCESS RD)	1. PUBLIC	R3. PASSIVE - STOP
LXR_04399	Parkhurst to Mackay	MUSCAT ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04400	Parkhurst to Mackay	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04401	Parkhurst to Mackay	HAMILTON ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06080	Parkhurst to Mackay	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06082	Parkhurst to Mackay	KALARKA STATION CROSSING	3. PRIVATE	R3. PASSIVE - STOP
LXR_06083	Parkhurst to Mackay	COLONIAL DRV CLAIRVIEW RD STH	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_06084	Parkhurst to Mackay	BLUE WATER HUTS ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06085	Parkhurst to Mackay	ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_06086	Parkhurst to Mackay	CAMPBELLS - CREBERS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_06188	Parkhurst to Mackay	HARES STATION ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_07215	Parkhurst to Mackay	STLAWRENCECRK QR TEMP CON XING	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_07240	Parkhurst to Mackay	4. QLD RAIL MAINTENANCE XING	3. PRIVATE	R3. PASSIVE - STOP
LXR_07470	Parkhurst to Mackay	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_07497	Parkhurst to Mackay	EMERGENCY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05266	Erakala to Mackay Harbour	SOUTHERN LEG OF NCL ANGLE	3. PRIVATE	R3. PASSIVE - STOP
LXR_05267	Erakala to Mackay Harbour	NORTHERN LEG OF NCL ANGLE	3. PRIVATE	R3. PASSIVE - STOP
LXR_05268	Erakala to Mackay Harbour	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05269	Erakala to Mackay Harbour	GLENELLA / RICHMOND ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05272	Erakala to Mackay Harbour	PIONEER STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05273	Erakala to Mackay Harbour	QR MAINTENANCE CROSSING	3. PRIVATE	R3. PASSIVE - STOP
LXR_06671	Erakala to Mackay Harbour	SPILLERAVE PRIVATE SDG LFTFORK	1. PUBLIC	R3. PASSIVE - STOP
LXR_06672	Erakala to Mackay Harbour	SPILLER AVE PRIVATE SDG R-FORK	1. PUBLIC	R3. PASSIVE - STOP
LXR_06302	Paget to Marian	JEFFCOAT STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_07614	Paget to Marian	JEFFCOAT STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05278	Mackay to I'face Pt 02 (Drbra)	DEBELLA YARD ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05279	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05280	Mackay to I'face Pt 02 (Drbra)	KOOLACHU ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05281	Mackay to I'face Pt 02 (Drbra)	BLAIR ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05282	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05283	Mackay to I'face Pt 02 (Drbra)	UP RIVER ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05284	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05285	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05286	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05287	Mackay to I'face Pt 02 (Drbra)	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05288	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05289	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_05291	Mackay to I'face Pt 02 (Drbra)	MAIN / FAUST STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05292	Mackay to I'face Pt 02 (Drbra)	ANZAC ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05293	Mackay to I'face Pt 02 (Drbra)	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05294	Mackay to I'face Pt 02 (Drbra)	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05295	Mackay to I'face Pt 02 (Drbra)	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05296	Mackay to I'face Pt 02 (Drbra)	LASCELLES AVE	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05297	Mackay to I'face Pt 02 (Drbra)	GUNYARRA ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05298	Mackay to I'face Pt 02 (Drbra)	THOOPARA ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05304	Mackay to I'face Pt 02 (Drbra)	O'DONNELLS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05305	Mackay to I'face Pt 02 (Drbra)	DOUGHERTYS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05306	Mackay to I'face Pt 02 (Drbra)	PASKINS ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05307	Mackay to I'face Pt 02 (Drbra)	OPP CATHU-O'DONNELL RIVER RD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05308	Mackay to I'face Pt 02 (Drbra)	PROPERTY ACCESS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05309	Mackay to I'face Pt 02 (Drbra)	WALES ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05310	Mackay to I'face Pt 02 (Drbra)	WALES ROAD PEDESTRIAN ACCESS	1. PUBLIC	P3. PASSIVE
LXR_05311	Mackay to I'face Pt 02 (Drbra)	KAMO ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05312	Mackay to I'face Pt 02 (Drbra)	FORBES ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05313	Mackay to I'face Pt 02 (Drbra)	MACKENZIES ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05314	Mackay to I'face Pt 02 (Drbra)	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05315	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05316	Mackay to I'face Pt 02 (Drbra)	BLACKROCK CREEK ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05317	Mackay to I'face Pt 02 (Drbra)	WINTONS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05318	Mackay to I'face Pt 02 (Drbra)	WAGOORA - YALBOROO ACCESS RD.	3. PRIVATE	R3. PASSIVE - STOP
LXR_05319	Mackay to I'face Pt 02 (Drbra)	TO DURNSFORDS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05320	Mackay to I'face Pt 02 (Drbra)	WAGOORA - YALBOROO ACCESS RD	1. PUBLIC	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_05321	Mackay to I'face Pt 02 (Drbra)	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05322	Mackay to I'face Pt 02 (Drbra)	MOUNT PELION ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05323	Mackay to I'face Pt 02 (Drbra)	MC DERMOTTS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05324	Mackay to I'face Pt 02 (Drbra)	PRATTS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05325	Mackay to I'face Pt 02 (Drbra)	MOUNT OSSA / SEAFORTH ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05326	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05327	Mackay to I'face Pt 02 (Drbra)	OFF BUTHURRA ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05329	Mackay to I'face Pt 02 (Drbra)	NARPI SCHOOL ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05330	Mackay to I'face Pt 02 (Drbra)	GEEBERGA STATION ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05331	Mackay to I'face Pt 02 (Drbra)	KUTTABUL/MNT JUKE SRD SEAFRTHRD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05332	Mackay to I'face Pt 02 (Drbra)	OFF HOPFS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05333	Mackay to I'face Pt 02 (Drbra)	EDMUNDS ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05334	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05335	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05336	Mackay to I'face Pt 02 (Drbra)	ZUNKERS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05337	Mackay to I'face Pt 02 (Drbra)	OLD LEAP STATION ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05338	Mackay to I'face Pt 02 (Drbra)	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05339	Mackay to I'face Pt 02 (Drbra)	MAPALO ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05340	Mackay to I'face Pt 02 (Drbra)	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05341	Mackay to I'face Pt 02 (Drbra)	KOCHS ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05342	Mackay to I'face Pt 02 (Drbra)	KNOBELS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05343	Mackay to I'face Pt 02 (Drbra)	HABANA - FARLEIGH ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05345	Mackay to I'face Pt 02 (Drbra)	WAINAI ROAD - CHRISTOE ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05346	Mackay to I'face Pt 02 (Drbra)	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05349	Mackay to I'face Pt 02 (Drbra)	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_04420	Mackay to I'face Pt 02 (Drbra)	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00759	Mackay to I'face Pt 02 (Drbra)	SUGAR SHED ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05124	Mackay to I'face Pt 02 (Drbra)	GORDON GLEN ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05125	Mackay to I'face Pt 02 (Drbra)	EDEN LASSIE ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05126	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05130	Mackay to I'face Pt 02 (Drbra)	MIOWERA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05132	Mackay to I'face Pt 02 (Drbra)	ROMA PEAK ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05133	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05134	Mackay to I'face Pt 02 (Drbra)	GLEN ERIN TRAIL RIDES ACC RD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05137	Mackay to I'face Pt 02 (Drbra)	MALONEY LANE	1. PUBLIC	R3. PASSIVE - STOP
LXR_05138	Mackay to I'face Pt 02 (Drbra)	BOOTOOLOO ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05139	Mackay to I'face Pt 02 (Drbra)	OFF BOOTOOLOO ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05140	Mackay to I'face Pt 02 (Drbra)	OFF BOOTOOLOO ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05141	Mackay to I'face Pt 02 (Drbra)	OFF BOOTOOLOO ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05143	Mackay to I'face Pt 02 (Drbra)	LEYTON ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05144	Mackay to I'face Pt 02 (Drbra)	KELLYS LANE	1. PUBLIC	R3. PASSIVE - STOP
LXR_05146	Mackay to I'face Pt 02 (Drbra)	WHEELERS LANE	1. PUBLIC	R3. PASSIVE - STOP
LXR_05147	Mackay to I'face Pt 02 (Drbra)	NURSERY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05148	Mackay to I'face Pt 02 (Drbra)	BRUCE HIGHWAY (BIG RED)	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05156	Mackay to I'face Pt 02 (Drbra)	LAURISTON STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05157	Mackay to I'face Pt 02 (Drbra)	LINLEY STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05158	Mackay to I'face Pt 02 (Drbra)	BRUCE HIGHWAY (MYLES STREET)	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_06078	Mackay to I'face Pt 02 (Drbra)	HOLCOMBE ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_06221	Mackay to I'face Pt 02 (Drbra)	CAPING ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_06223	Mackay to I'face Pt 02 (Drbra)	OFF BOOTOOLOO ROAD	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_06224	Mackay to I'face Pt 02 (Drbra)	OFF BOOTOOLOO ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06522	Mackay to I'face Pt 02 (Drbra)	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06667	Mackay to I'face Pt 02 (Drbra)	QR MAINTENANCE ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05161	Interface Pt 01 to Home Hill	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05162	Interface Pt 01 to Home Hill	MOUNT LUCE STATION ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05164	Interface Pt 01 to Home Hill	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05167	Interface Pt 01 to Home Hill	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05169	Interface Pt 01 to Home Hill	GLENORE ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05170	Interface Pt 01 to Home Hill	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05171	Interface Pt 01 to Home Hill	NEVADA ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05173	Interface Pt 01 to Home Hill	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05175	Interface Pt 01 to Home Hill	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05176	Interface Pt 01 to Home Hill	TONDARA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05177	Interface Pt 01 to Home Hill	DESALIS STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05178	Interface Pt 01 to Home Hill	UNNAMED ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05179	Interface Pt 01 to Home Hill	WAKALA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05180	Interface Pt 01 to Home Hill	WAKALA STATION ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05181	Interface Pt 01 to Home Hill	ROCKY PONDS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05183	Interface Pt 01 to Home Hill	RANGEMORE ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05184	Interface Pt 01 to Home Hill	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05185	Interface Pt 01 to Home Hill	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05186	Interface Pt 01 to Home Hill	GLENYARRA STATION ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05187	Interface Pt 01 to Home Hill	ACCESS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05188	Interface Pt 01 to Home Hill	DANIEL ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05189	Interface Pt 01 to Home Hill	OLD BOWEN ROAD / BRUCE HIGHWAY	1. PUBLIC	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_05190	Interface Pt 01 to Home Hill	FREDERICKSFIELD ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05191	Interface Pt 01 to Home Hill	HOMESTEAD ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05192	Interface Pt 01 to Home Hill	GEORGEES ROAD / BRUCE HIGHWAY	1. PUBLIC	R3. PASSIVE - STOP
LXR_05193	Interface Pt 01 to Home Hill	GEORGEES ROAD / BRUCE HIGHWAY	1. PUBLIC	R3. PASSIVE - STOP
LXR_05194	Interface Pt 01 to Home Hill	GEORGEES ROAD / BRUCE HIGHWAY	1. PUBLIC	R3. PASSIVE - STOP
LXR_05195	Interface Pt 01 to Home Hill	FIRST STREET AND HURNEY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05196	Interface Pt 01 to Home Hill	SIXTH STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05197	Interface Pt 01 to Home Hill	TENTH STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04515	Interface Pt 01 to Home Hill	OPPOSITE CAPE CREEK ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_07526	Interface Pt 01 to Home Hill	GEORGEES ROAD (ON SIDING)	1. PUBLIC	R3. PASSIVE - STOP
LXR_07370	Home Hill to Nome	RAILWAY STREET (ON SIDING)	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05571	Home Hill to Nome	MARRON ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_06656	Home Hill to Nome	MILBURN ROAD (ON SIDING)	1. PUBLIC	R4. PASSIVE - GIVE WAY
LXR_05198	Home Hill to Nome	FOURTEENTH A STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05199	Home Hill to Nome	KIRKNIE ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05200	Home Hill to Nome	BRUCE HIGHWAY (ON SIDING)	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05201	Home Hill to Nome	CLARE ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05203	Home Hill to Nome	GIDDY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05204	Home Hill to Nome	MIRRIGAN ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05206	Home Hill to Nome	DRYSDALE STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05207	Home Hill to Nome	ALBERT STREET AND LYNCH STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05208	Home Hill to Nome	ROBINS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05210	Home Hill to Nome	SEXTON ST. PEDESTRIAN ACCESS	1. PUBLIC	P3. PASSIVE
LXR_05211	Home Hill to Nome	SPILLER STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05213	Home Hill to Nome	DRYSDALE STREET	1. PUBLIC	R1. ACTIVE - LIGHTS

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_05214	Home Hill to Nome	DRYNIE ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05218	Home Hill to Nome	LOCHINVAR ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05219	Home Hill to Nome	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05220	Home Hill to Nome	JERONA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05221	Home Hill to Nome	HODEL ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05222	Home Hill to Nome	MC LENNAN ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05223	Home Hill to Nome	WALTON STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05224	Home Hill to Nome	CROMARTY ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_05225	Home Hill to Nome	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05226	Home Hill to Nome	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05227	Home Hill to Nome	A.I.M.S. ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05228	Home Hill to Nome	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05230	Home Hill to Nome	ALLENDALE STATION ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05231	Home Hill to Nome	BENTLEY DRIVE	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00679	Home Hill to Nome	BRUCE HIGHWAY	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_03086	Home Hill to Nome	OFF NOME ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_03087	Nome to Stuart	MUNTALUNGA ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_03088	Nome to Stuart	COAST ROAD (SUNNYSIDE STREET)	1. PUBLIC	R3. PASSIVE - STOP
LXR_03089	Nome to Stuart	COAST ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_03091	Nome to Stuart	PARTINGTON YARD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_01013	Nome to Stuart	SOUTHWOOD ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_06802	Nome to Stuart	SUNNYSIDE STREET (ON SIDING)	1. PUBLIC	R4. PASSIVE - GIVE WAY
LXR_06803	Nome to Stuart	JULAGO CATTLE YRD ACC RD SDING	1. PUBLIC	R3. PASSIVE - STOP
LXR_06867	Nome to Stuart	SOUTHWOOD ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_06868	Nome to Stuart	HUNTER STREET	1. PUBLIC	R1. ACTIVE - LIGHTS

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_06230	Nome to Stuart	SOUTHWOOD ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_07339	Stuart Yard	STUART YARD ACC RD STH ON LOOP	3. PRIVATE	R3. PASSIVE - STOP
LXR_06710	Stuart to Townsville Jty Fork	RAILWAY AVENUE	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00956	Stuart to Townsville Jty Fork	OONONBA RD.	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00727	Stuart to Townsville Jty Fork	RACECOURSE RD (BRUCE HIGHWAY)	1. PUBLIC	R3. PASSIVE - STOP
LXR_01042	Stuart to Townsville Jty Fork	QUEENS ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01043	Stuart to Townsville Jty Fork	BOUNDARY STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01734	Stuart to Townsville Jty Fork	LAKESIDE DRIVE	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_03018	Stuart to Townsville Jty Fork	JENSEN STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_06945	Townsville Jetty & Loops	QR MAINTENANCE ROAD	3. PRIVATE	R5. UNPROTECTED
LXR_06946	Townsville Jetty & Loops	SLUG TRAIL CROSSING	3. PRIVATE	R3. PASSIVE - STOP
LXR_06947	Townsville Jetty & Loops	CENTENARY DRIVE (NORTH)	3. PRIVATE	R3. PASSIVE - STOP
LXR_06948	Townsville Jetty & Loops	CENTENARY DRIVE (EAST)	3. PRIVATE	R3. PASSIVE - STOP
LXR_07246	Townsville Jetty & Loops	BHP TIPPLER POINTS ACCESS ROAD	3. PRIVATE	R5. UNPROTECTED
LXR_07247	Townsville Jetty & Loops	CANNINGTON PORT ACC RD REARENT	3. PRIVATE	R3. PASSIVE - STOP
LXR_07425	Townsville Jetty & Loops	INCITEC PEDESTRIAN WALKWAY	1. PUBLIC	R5. UNPROTECTED
LXR_05644	Townsville Jetty & Loops	MOREY STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_05645	Townsville Jetty & Loops	ALLEN STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05646	Townsville Jetty & Loops	CANNAN STREET	1. PUBLIC	P3. PASSIVE
LXR_05647	Townsville Jetty & Loops	ARCHER STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05648	Townsville Jetty & Loops	BENWELL ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_06233	Townsville Jetty & Loops	QUEENSLAND RAIL ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06445	Townsville Jetty & Loops	LENNON DRIVE (ON SIDINGS)	1. PUBLIC	R3. PASSIVE - STOP
LXR_06235	Townsville Jty Fork to Purono	STURT STREET	1. PUBLIC	P3. PASSIVE
LXR_07095	Townsville Jty Fork to Purono	ENTERPRISE ST. ON BOHLE SIDING	1. PUBLIC	R4. PASSIVE - GIVE WAY

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_07097	Townsville Jty Fork to Purono	PRIVATE ACC RD ON BOHLE SIDNG	3. PRIVATE	R5. UNPROTECTED
LXR_07224	Townsville Jty Fork to Purono	TVILLE STN STAFFCARPARK WLKWAY	5. QR MAINTENANCE	P3. PASSIVE
LXR_03019	Townsville Jty Fork to Purono	QR MAINTENANCE ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_03021	Townsville Jty Fork to Purono	WESTON STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_03023	Townsville Jty Fork to Purono	PURONO PARKWAY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_03025	Townsville Jty Fork to Purono	BRABON ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01748	Townsville Jty Fork to Purono	MOUNT LOW PARKWAY	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01037	Townsville Jty Fork to Purono	CHURCH STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01038	Townsville Jty Fork to Purono	KINGS ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01039	Townsville Jty Fork to Purono	HUGH STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01041	Townsville Jty Fork to Purono	CHARTERS TOWERS RD (CAUSEWAY)	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01044	Townsville Jty Fork to Purono	STURT STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00397	Townsville Jty Fork to Purono	BOWDEN ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00620	Townsville Jty Fork to Purono	DUCKWORTH STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00668	Townsville Jty Fork to Purono	INGHAM ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00743	Townsville Jty Fork to Purono	GARLAND ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00777	Townsville Jty Fork to Purono	MATHER STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00778	Townsville Jty Fork to Purono	LANGTON STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00779	Townsville Jty Fork to Purono	PILKINGTON STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01084	Townsville Jty Fork to Purono	GREENVALE STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01085	Townsville Jty Fork to Purono	SAUNDERS BEACH ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01714	Townsville Jty Fork to Purono	NORTH SHORE BOULEVARD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04572	Townsville Jty Fork to Purono	PARKES ST. PEDESTRIAN ACCESS	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04574	Townsville Jty Fork to Purono	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00008	Purono to Woree	ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_00011	Purono to Woree	MIDGENOO ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_00053	Purono to Woree	HIGH SCHOOL ACCESS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00185	Purono to Woree	ENDEVOUR FOUNDATION ACCESS RD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00248	Purono to Woree	DICKSON STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_00446	Purono to Woree	PORT HINCHINBROOK ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00491	Purono to Woree	ACCESS RD FROM BACKHAUS STREET	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_00522	Purono to Woree	3. PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00528	Purono to Woree	SUNBEAM ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00554	Purono to Woree	MCLLOUDS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00555	Purono to Woree	NICHOLSON ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00558	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_00563	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_00604	Purono to Woree	SCRUBVIEW ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00605	Purono to Woree	BELLENDEN ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_00618	Purono to Woree	CARTWRIGHT STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00653	Purono to Woree	HALIFAX - LUCINDA POINT ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00715	Purono to Woree	BRUCE HIGHWAY	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00731	Purono to Woree	BRUCE HIGHWAY	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00803	Purono to Woree	GORDON STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00804	Purono to Woree	HIGHLEIGH ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00834	Purono to Woree	MCILLWRAITH STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00836	Purono to Woree	BRUCE H/WAY / PALMERSTON DRIVE	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00837	Purono to Woree	PINE STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_00872	Purono to Woree	INGHAM - HALIFAX ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00914	Purono to Woree	BRAMSTON BEACH ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_01045	Purono to Woree	BUTLER STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01046	Purono to Woree	OLD TULLY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01055	Purono to Woree	MEYER AVE/INNISFAIL JAPOON RD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01585	Purono to Woree	LIVERPOOL STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_01712	Purono to Woree	SEE POY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01718	Purono to Woree	DALLACHY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01732	Purono to Woree	BRASENOSE STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_01733	Purono to Woree	THOMSON ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01744	Purono to Woree	ELLERBECK ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01751	Purono to Woree	KENNEDY CREEK ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01755	Purono to Woree	WARRUBULLEN ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01770	Purono to Woree	PINNACLE HILL ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01772	Purono to Woree	TULLAMORE ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01793	Purono to Woree	CHRISTIAN STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_01797	Purono to Woree	MENZELS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01800	Purono to Woree	MUNRO STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01801	Purono to Woree	TOKALON ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01810	Purono to Woree	WARRUBULLEN ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01815	Purono to Woree	DAVIDSON ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01820	Purono to Woree	HELENS HILL ROAD	1. PUBLIC	R4. PASSIVE - GIVE WAY
LXR_01870	Purono to Woree	MERINGASUGAREXPERMNT STN ACCRD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01871	Purono to Woree	UNNAMED ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01872	Purono to Woree	GRIMSHAW ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01873	Purono to Woree	MCNAB ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01874	Purono to Woree	MEERAWA ROAD	1. PUBLIC	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_01875	Purono to Woree	ASSMEN / ALOOMBA ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01876	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01877	Purono to Woree	MOLLER ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01878	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01879	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01881	Purono to Woree	KENNY ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01882	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01883	Purono to Woree	CANE SIDING ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01884	Purono to Woree	BANNA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01885	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01886	Purono to Woree	OLD BRUCE HIGHWAY	1. PUBLIC	R3. PASSIVE - STOP
LXR_01887	Purono to Woree	OLD BRUCE HIGHWAY	1. PUBLIC	R3. PASSIVE - STOP
LXR_01890	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01892	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01893	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01894	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01895	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01896	Purono to Woree	OLD FERRY ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01900	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01903	Purono to Woree	NELSON ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01904	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01905	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01906	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01907	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01908	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_01909	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01910	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01911	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01912	Purono to Woree	UNNAMED ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01913	Purono to Woree	MUSTAFA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01914	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01915	Purono to Woree	RUSSELL RIVER ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01916	Purono to Woree	ELLIS ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01917	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01918	Purono to Woree	HARVEY CREEK ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01919	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01920	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01921	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01922	Purono to Woree	ROSS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01923	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01924	Purono to Woree	LEWIS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01925	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01926	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_01927	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01928	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01929	Purono to Woree	UNNAMED ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01930	Purono to Woree	PROPERTY ACCESS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01931	Purono to Woree	STEWART ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01932	Purono to Woree	TIDMARSH ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01933	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_01934	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01935	Purono to Woree	CANE BIN HAULAGE ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01936	Purono to Woree	OLD BRUCE HIGHWAY	1. PUBLIC	R3. PASSIVE - STOP
LXR_01937	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01938	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01939	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01940	Purono to Woree	LLOYD ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01941	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01942	Purono to Woree	MUSUMECI ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01943	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01945	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01946	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01948	Purono to Woree	OPP HOSKIN ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01950	Purono to Woree	ROPER ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01951	Purono to Woree	QR MAINTENANCE ROAD	3. PRIVATE	R5. UNPROTECTED
LXR_01953	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01955	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01956	Purono to Woree	GOLDMINE ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_01957	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01959	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01960	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01962	Purono to Woree	GARRADUNGA ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01964	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01965	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_01978	Purono to Woree	BENTLEY PARK ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_01979	Purono to Woree	SWALLOW ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01981	Purono to Woree	PROGRESS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_01982	Purono to Woree	COOMBS STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_02650	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04575	Purono to Woree	TOOLAKEA BEACH ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04576	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04578	Purono to Woree	SETTER ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04579	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04580	Purono to Woree	TOOMULLA BEACH ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04581	Purono to Woree	CLEMANT STATE FOREST ACCESS RD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04582	Purono to Woree	BALGAL BEACH ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04583	Purono to Woree	ROLLINGSTONE STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04584	Purono to Woree	HENCAMP CREEK ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04585	Purono to Woree	OLLERA CREEK ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04586	Purono to Woree	LOUND ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04587	Purono to Woree	OFF BARRILGIE ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04588	Purono to Woree	AMOS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04590	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04591	Purono to Woree	SUTHERS ROAD	1. PUBLIC	R4. PASSIVE - GIVE WAY
LXR_04592	Purono to Woree	DEEHIN ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04594	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04595	Purono to Woree	ABSWOLD ROAD	1. PUBLIC	R4. PASSIVE - GIVE WAY
LXR_04597	Purono to Woree	BAMBAROO ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04598	Purono to Woree	YURUGA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04599	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_04600	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04601	Purono to Woree	RAILWAY ROAD / POMBEL ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04603	Purono to Woree	RAILWAY ROAD / HAUGHTY ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04604	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04605	Purono to Woree	MASTERS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04606	Purono to Woree	SCOVAZZIS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04607	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04608	Purono to Woree	MOREHEAD ST. / SHOWGROUNDS ACC	1. PUBLIC	R3. PASSIVE - STOP
LXR_04609	Purono to Woree	SHOWGROUNDS PEDESTRIAN ACCESS	1. PUBLIC	P3. PASSIVE
LXR_04611	Purono to Woree	SHOWGROUNDS PEDESTRIAN ACCESS	1. PUBLIC	P3. PASSIVE
LXR_04612	Purono to Woree	SHOWGROUNDS PEDESTRIAN ACCESS	1. PUBLIC	P3. PASSIVE
LXR_04613	Purono to Woree	COOPER STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04614	Purono to Woree	SELBY LANE / ANNE STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_04616	Purono to Woree	SACHS LANE	1. PUBLIC	R3. PASSIVE - STOP
LXR_04618	Purono to Woree	FORESTHOME ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04619	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04620	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04621	Purono to Woree	FRACCHIAS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04623	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04624	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04625	Purono to Woree	GIRGENTIS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04628	Purono to Woree	SUNDAY CREEK ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04629	Purono to Woree	STATE FOREST ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04630	Purono to Woree	FORESTRY ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04631	Purono to Woree	CEMETERY ROAD	1. PUBLIC	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_04632	Purono to Woree	LILY CREEK ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04633	Purono to Woree	LYCHEE FARM ACCESS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04634	Purono to Woree	OLD CARDWELL ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04635	Purono to Woree	BILYANA ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04636	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04637	Purono to Woree	MURRIGAL ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04638	Purono to Woree	MURRAY UPPER ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04642	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04643	Purono to Woree	CARGNELLO ROAD	1. PUBLIC	R4. PASSIVE - GIVE WAY
LXR_04644	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04645	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04648	Purono to Woree	DEAN ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04649	Purono to Woree	HIGH SCHOOL ACCESS ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04650	Purono to Woree	VAUGHAN STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_04651	Purono to Woree	PRIVATE ACCESS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04653	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04654	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04655	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04656	Purono to Woree	FELUGA ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04658	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04659	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04660	Purono to Woree	OLD TULLY ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04661	Purono to Woree	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04664	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04666	Purono to Woree	OLD TULLY ROAD	1. PUBLIC	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_04667	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04670	Purono to Woree	SILKWOOD - JAPOON ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04672	Purono to Woree	VICTORIA STREET	1. PUBLIC	P3. PASSIVE
LXR_04673	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04674	Purono to Woree	PETERSONS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04675	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04676	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04678	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04679	Purono to Woree	DOBBIN ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04680	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04681	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04682	Purono to Woree	VALMADRE ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04683	Purono to Woree	FARM ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04684	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04686	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04687	Purono to Woree	CATALDO ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04690	Purono to Woree	SORBELLO ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04696	Purono to Woree	SOUTH JOHNSTONE ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04697	Purono to Woree	MCILLRATH ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_04698	Purono to Woree	ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04700	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04702	Purono to Woree	AERODROME ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04703	Purono to Woree	ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_04704	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_04708	Purono to Woree	MAMU ROAD	1. PUBLIC	R1. ACTIVE - LIGHTS

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_04723	Purono to Woree	HESP / BENNETT ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04728	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06634	Purono to Woree	ROYSTON STREET	1. PUBLIC	P3. PASSIVE
LXR_06636	Purono to Woree	FOSTER ROAD	1. PUBLIC	P3. PASSIVE
LXR_06684	Purono to Woree	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06731	Purono to Woree	QLD RAIL PEDESTRIAN ACC RD	1. PUBLIC	P3. PASSIVE
LXR_06734	Purono to Woree	QLD RAIL YARD CROSSING	3. PRIVATE	R3. PASSIVE - STOP
LXR_06735	Purono to Woree	QLD RAIL STATION YARD ACC RD	3. PRIVATE	R5. UNPROTECTED
LXR_07066	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R5. UNPROTECTED
LXR_07088	Purono to Woree	BOWEN STREET PEDESTRIAN ACCESS	1. PUBLIC	P3. PASSIVE
LXR_07089	Purono to Woree	ROLLINGSTONE STN PED ACCESS	1. PUBLIC	P3. PASSIVE
LXR_07189	Purono to Woree	TEMPORARY CONSTRUCTION ACC RD	3. PRIVATE	R3. PASSIVE - STOP
LXR_07561	Purono to Woree	MAHER ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_07562	Purono to Woree	DEPLER ROAD	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_07456	Purono to Woree	PEDESTRIAN ACCESS PATH	1. PUBLIC	P3. PASSIVE
LXR_05479	Purono to Woree	BLUEWATER DRIVE	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_05480	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05482	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_05483	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_05484	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_05485	Purono to Woree	MACMILLAN STREET	3. PRIVATE	R3. PASSIVE - STOP
LXR_05489	Purono to Woree	SEAFARM AQUACULTURE ACCESS RD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05490	Purono to Woree	GLASGOW STREET	1. PUBLIC	R3. PASSIVE - STOP
LXR_05491	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_05493	Purono to Woree	DOUGLAS ROAD	1. PUBLIC	R3. PASSIVE - STOP

ASSET CODE	CORRIDOR	CROSSING NAME	CROSSING TYPE	CROSSING PROTECTION
LXR_05642	Purono to Woree	PROPERTY ACCESS ROAD	3. PRIVATE	R4. PASSIVE - GIVE WAY
LXR_06195	Purono to Woree	PRIVATE ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06201	Purono to Woree	QRAIL PEDESTRIAN TRAFFIC ONLY	1. PUBLIC	P3. PASSIVE
LXR_06209	Purono to Woree	ACCESS ROAD	3. PRIVATE	R3. PASSIVE - STOP
LXR_06211	Purono to Woree	GORDONVALE PEDESTRIAN WALKWAY	1. PUBLIC	P3. PASSIVE
LXR_06238	Purono to Woree	QR MAINTENANCE ROAD	3. PRIVATE	R5. UNPROTECTED
LXR_06240	Purono to Woree	KINGS ROAD	1. PUBLIC	R3. PASSIVE - STOP
LXR_06285	Purono to Woree	QR MAINTENANCE ROAD	3. PRIVATE	R5. UNPROTECTED
LXR_07483	Woree to Cairns	RECOVERY WAY FORMERLY WASTE ST	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00610	Woree to Cairns	SPENCE STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_00696	Woree to Cairns	AUMULLER STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_01739	Woree to Cairns	DUTTON STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_02652	Woree to Cairns	KATE STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_02659	Woree to Cairns	APLIN STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES
LXR_04739	Woree to Cairns	DRAPER STREET	1. PUBLIC	R1. ACTIVE - LIGHTS
LXR_04740	Woree to Cairns	KENNY STREET	1. PUBLIC	R2. ACTIVE - BOOM GATES

APPENDIX D Speed Boards

Corridor	KM Point	Description	Speed Board	
<i>TRK C164 MNL Rockhampton - Parkhurst</i>	639.188	UP SPEED	10	
	639.312	DOWN SPEED	25	
	642.192	DOWN SPEED	R25/50	
		UP SPEED	25	
	643.095	DOWN SPEED	50	
		UP SPEED	L25/50	
	644.247	DOWN SPEED	80	
		UP SPEED	50	
	648.325	DOWN SPEED	R25/80	
		UP SPEED	80	
	<i>TRK C153 MNL Parkhurst - Mackay</i>	649.473	DOWN SPEED	80
			UP SPEED	L25/80
		650.109	DOWN SPEED	100
		651.003	UP SPEED	80
652.100		DOWN SPEED	T120	
		UP SPEED	T100	
654.750		DOWN SPEED	T100	
655.230		UP SPEED	T120	
657.645		DOWN SPEED	90	
		UP SPEED	100	
658.358		DOWN SPEED	60	
		UP SPEED	90	
658.795		DOWN SPEED	90	
		UP SPEED	60	
660.039	DOWN SPEED	100		
662.831	DOWN SPEED	70		
663.297	DOWN SPEED	60		
	UP SPEED	70		
663.998	DOWN SPEED	R50/60		
664.620	DOWN SPEED	100		
664.871	DOWN SPEED	25		
	UP SPEED	50		
665.005	DOWN SPEED	100		
	UP SPEED	80/25L		
673.450	DOWN SPEED	80		
674.450	UP SPEED	80		
676.539	DOWN SPEED	80/25R		
	UP SPEED	100		
677.254	DOWN SPEED	70		

Corridor	KM Point	Description	Speed Board
		UP SPEED	80
	677.545	DOWN SPEED	70
		UP SPEED	L25/70
	677.724	DOWN SPEED	100, T120
		UP SPEED	70
	678.792	UP SPEED	80
	679.361	UP SPEED	W80
	683.000	DOWN SPEED	T160
		UP SPEED	T120
	683.791	UP SPEED	W120
	686.873	DOWN SPEED	W90
	687.952	DOWN SPEED	90
		UP SPEED	100, T160
	688.352	DOWN SPEED	100, T140
		UP SPEED	90
	689.097	UP SPEED	W90
	690.856	DOWN SPEED	W60
	691.689	DOWN SPEED	60
		UP SPEED	100, T140
	692.092	DOWN SPEED	80
		UP SPEED	60
	694.130	DOWN SPEED	70
		UP SPEED	90
	694.469	DOWN SPEED	R25/70
	694.480	UP SPEED	70
	694.600	DOWN SPEED	80
	695.422	DOWN SPEED	90
		UP SPEED	L25/80
	695.811	DOWN SPEED	100
	696.747	UP SPEED	80
	701.698	DOWN SPEED	60
		UP SPEED	100
	701.967	DOWN SPEED	90
		UP SPEED	60
	702.880	DOWN SPEED	100, T120
		UP SPEED	90
	712.433	DOWN SPEED	L25/100
		UP SPEED	100, T120
	713.319	DOWN SPEED	100
		UP SPEED	R25/100
	715.784	DOWN SPEED	90
		UP SPEED	100
	716.209	DOWN SPEED	100
		UP SPEED	90

Corridor	KM Point	Description	Speed Board
	717.146	DOWN SPEED	W60
	717.563	DOWN SPEED	60
		UP SPEED	100
	718.194	DOWN SPEED	70
		UP SPEED	60
	719.121	DOWN SPEED	60
		UP SPEED	70
	720.417	DOWN SPEED	50
		UP SPEED	60
	721.151	DOWN SPEED	90
		UP SPEED	50
	721.589	UP SPEED	W50
	722.455	DOWN SPEED	60
		UP SPEED	90
	723.109	DOWN SPEED	50
		UP SPEED	60
	723.347	DOWN SPEED	60
		UP SPEED	50
	724.483	DOWN SPEED	90
		UP SPEED	60
	725.873	DOWN SPEED	80
		UP SPEED	90
	727.605	DOWN SPEED	R25/80
		UP SPEED	80
	728.507	DOWN SPEED	100
		UP SPEED	L25/80
	730.485	UP SPEED	80
	731.438	DOWN SPEED	90
		UP SPEED	100
	731.809	DOWN SPEED	100
		UP SPEED	90
	734.070	UP SPEED	100
	734.466	UP SPEED	80
	734.955	DOWN SPEED	90
	735.229	DOWN SPEED	100
		UP SPEED	90
	736.815	DOWN SPEED	90
		UP SPEED	100
	737.537	DOWN SPEED	100, T120
		UP SPEED	90
	740.003	DOWN SPEED	W80
	740.540	UP SPEED	T120
	740.590	DOWN SPEED	80
	741.898	DOWN SPEED	L25/80

Corridor	KM Point	Description	Speed Board
		UP SPEED	100
	742.833	DOWN SPEED	100
		UP SPEED	R25/100
	744.071	UP SPEED	90
	745.635	DOWN SPEED	90
		UP SPEED	100
	746.374	DOWN SPEED	70
		UP SPEED	90
	747.318	DOWN SPEED	50
		UP SPEED	70
	747.530	DOWN SPEED	80
		UP SPEED	50
	747.918	DOWN SPEED	100
		UP SPEED	80
	750.541	DOWN SPEED	90
		UP SPEED	100
	751.362	DOWN SPEED	80
		UP SPEED	90
	751.745	DOWN SPEED	100
		UP SPEED	80
	755.650	DOWN SPEED	80
		UP SPEED	100
	756.180	DOWN SPEED	90
		UP SPEED	80
	758.353	DOWN SPEED	80
	759.676	DOWN SPEED	R25/80
		UP SPEED	90
	760.628	DOWN SPEED	90
		UP SPEED	L25/80
	761.032	DOWN SPEED	100
	761.951	UP SPEED	80
	774.200	DOWN SPEED	80
	775.460	UP SPEED	100
	775.584	DOWN SPEED	R25/80
	776.466	DOWN SPEED	100
		UP SPEED	L25/80
	777.879	UP SPEED	80
	778.989	DOWN SPEED	80
		UP SPEED	100
	779.860	DOWN SPEED	100
		UP SPEED	80
	789.325	DOWN SPEED	W60
	790.254	DOWN SPEED	60
		UP SPEED	100

Corridor	KM Point	Description	Speed Board
	792.229	DOWN SPEED	80
		UP SPEED	60
	793.395	DOWN SPEED	60
		UP SPEED	80
	793.627	DOWN SPEED	R25/80
		UP SPEED	60
	794.524	DOWN SPEED	80
		UP SPEED	L25/80
	795.400	DOWN SPEED	60
		UP SPEED	80
	797.681	DOWN SPEED	70
		UP SPEED	60
	798.471	DOWN SPEED	80
		UP SPEED	70
	800.426	DOWN SPEED	100
		UP SPEED	80
	809.479	DOWN SPEED	80
	810.917	DOWN SPEED	L25/80
		UP SPEED	100
	811.985	DOWN SPEED	80
		UP SPEED	R25/80
	813.031	DOWN SPEED	100, T140
		UP SPEED	60
	814.063	UP SPEED	W60
	822.657	DOWN SPEED	T120
		UP SPEED	T140
	824.311	UP SPEED	T120
	824.544	DOWN SPEED	90
		UP SPEED	100
	825.006	DOWN SPEED	100
		UP SPEED	90
	831.570	DOWN SPEED	80
	832.872	DOWN SPEED	R25/80
		UP SPEED	100
	833.807	DOWN SPEED	80
		UP SPEED	L25/80
	834.820	DOWN SPEED	60
		UP SPEED	80
	836.556	DOWN SPEED	80
		UP SPEED	60
	838.495	DOWN SPEED	70
	838.785	DOWN SPEED	80
		UP SPEED	70
	840.483	DOWN SPEED	60

Corridor	KM Point	Description	Speed Board
		UP SPEED	80
	841.662	DOWN SPEED	100
		UP SPEED	60
	842.713	UP SPEED	W60
	846.806	DOWN SPEED	R25/100
		UP SPEED	100
	847.683	DOWN SPEED	100, T160
		UP SPEED	L25/100
	848.709	UP SPEED	W100
	856.042	DOWN SPEED	W100
	857.000	DOWN SPEED	T100
	857.417	UP SPEED	T160
	858.816	DOWN SPEED	T140
		UP SPEED	T100
	859.490	UP SPEED	W100
	863.181	DOWN SPEED	W80
	864.017	DOWN SPEED	R25/80
		UP SPEED	100, T140
	864.897	DOWN SPEED	60
		UP SPEED	L25/80
	865.252	DOWN SPEED	80
		UP SPEED	60
	865.712	DOWN SPEED	100
	867.461	UP SPEED	80
	874.775	DOWN SPEED	80
	875.675	DOWN SPEED	L25/80
		UP SPEED	100
	876.579	DOWN SPEED	60
		UP SPEED	R25/80
	877.668	DOWN SPEED	100
		UP SPEED	60
	878.919	UP SPEED	W60
	880.951	DOWN SPEED	90
		UP SPEED	100
	884.633	DOWN SPEED	60
		UP SPEED	90
	886.736	DOWN SPEED	80
		UP SPEED	60
	887.756	UP SPEED	W60
	889.490	DOWN SPEED	R25/80
		UP SPEED	100
	890.352	DOWN SPEED	80
		UP SPEED	L25/80
	891.779	DOWN SPEED	50

Corridor	KM Point	Description	Speed Board
		UP SPEED	80
	892.508	DOWN SPEED	80
		UP SPEED	50
	893.450	DOWN SPEED	90
		UP SPEED	80
	894.488	DOWN SPEED	100
		UP SPEED	90
	899.717	DOWN SPEED	100
		UP SPEED	90
	903.621	DOWN SPEED	80
	905.029	DOWN SPEED	L25/70
		UP SPEED	100
	905.774	DOWN SPEED	60
		UP SPEED	70
	905.969	DOWN SPEED	50
		UP SPEED	R25/60
	906.100	DOWN SPEED	100
		UP SPEED	50
	908.036	DOWN SPEED	80
	908.353	DOWN SPEED	100
		UP SPEED	80
	913.980	DOWN SPEED	80
	915.092	DOWN SPEED	L25/80
		UP SPEED	100
	915.208	DOWN SPEED	L25/80
	916.101	DOWN SPEED	80
		UP SPEED	R25/80
	916.519	DOWN SPEED	100
		UP SPEED	R25/80
	917.547	UP SPEED	80
	920.951	DOWN SPEED	80
	921.359	UP SPEED	100
	921.863	UP SPEED	80
	924.230	DOWN SPEED	80
	926.054	DOWN SPEED	60
	926.213	DOWN SPEED	L25/60
		UP SPEED	100
	927.162	DOWN SPEED	80
		UP SPEED	R25/60
	930.599	DOWN SPEED	100
	931.916	UP SPEED	80
	934.055	DOWN SPEED	80
	935.482	DOWN SPEED	L25/80
		UP SPEED	100

Corridor	KM Point	Description	Speed Board
<i>TRK C107 MNL Mackay - I'face Pt02 Drbra</i>	936.368	DOWN SPEED	80
		UP SPEED	R25/80
	937.128	DOWN SPEED	100
	937.770	UP SPEED	80
	942.422	DOWN SPEED	R25/80
		UP SPEED	100
	943.312	DOWN SPEED	80
		UP SPEED	L25/80
	944.780	DOWN SPEED	100
		UP SPEED	80
	948.530	DOWN SPEED	80
	950.241	DOWN SPEED	L25/80
		UP SPEED	100
	950.796	DOWN SPEED	70
	951.158	DOWN SPEED	100
		UP SPEED	R25/80
	952.300	UP SPEED	80
	953.170	DOWN SPEED	90
	954.199	UP SPEED	90
	954.791	DOWN SPEED	90
		UP SPEED	80
	955.714	DOWN SPEED	80
	956.094	UP SPEED	90
	957.320	UP SPEED	100
	957.779	DOWN SPEED	R25/70
		UP SPEED	70
	958.106	DOWN SPEED	L25
		UP SPEED	70
	958.389	DOWN SPEED	25
		UP SPEED	70
	960.011	DOWN SPEED	100
		UP SPEED	25
961.845	UP SPEED	80	
963.424	DOWN SPEED	80	
969.618	UP SPEED	100	
970.003	DOWN SPEED	R50/80	
	UP SPEED	80	
971.050	DOWN SPEED	80	
	UP SPEED	L25/80	
971.141	DOWN SPEED	90	
971.444	DOWN SPEED	100	
972.346	UP SPEED	80	
972.678	DOWN SPEED	80	
974.236	DOWN SPEED	L25/80	

Corridor	KM Point	Description	Speed Board
		UP SPEED	80
	975.168	DOWN SPEED	80
		UP SPEED	R25/80
	975.303	DOWN SPEED	100
	976.470	UP SPEED	80
	981.984	DOWN SPEED	80
		UP SPEED	100
	982.700	UP SPEED	90
	984.278	DOWN SPEED	100
		UP SPEED	80
	985.857	DOWN SPEED	R50/100
		UP SPEED	100
	986.848	DOWN SPEED	100
		UP SPEED	L50/100
	992.800	DOWN SPEED	80
	994.110	UP SPEED	100
	996.193	DOWN SPEED	R25/80
		UP SPEED	80
	997.123	DOWN SPEED	100
		UP SPEED	L25/80
	998.200	UP SPEED	80
	1,003.264	DOWN SPEED	90
		UP SPEED	100
	1,004.963	DOWN SPEED	100
		UP SPEED	90
	1,006.622	DOWN SPEED	80
		UP SPEED	100
	1,007.695	UP SPEED	90
	1,007.964	DOWN SPEED	R25/80
		UP SPEED	80
	1,008.850	DOWN SPEED	80
		UP SPEED	L25/80
	1,011.291	DOWN SPEED	60
		UP SPEED	80
	1,012.600	DOWN SPEED	80
		UP SPEED	60
	1,013.722	DOWN SPEED	90
		UP SPEED	80
	1,016.440	UP SPEED	90
	1,016.557	DOWN SPEED	80
	1,018.269	DOWN SPEED	R25/80
		UP SPEED	100
	1,019.210	DOWN SPEED	80
		UP SPEED	L25/80

Corridor	KM Point	Description	Speed Board
	1,020.950	DOWN SPEED	100
	1,022.000	UP SPEED	80
	1,025.203	DOWN SPEED	90
		UP SPEED	100
	1,025.738	DOWN SPEED	80
		UP SPEED	90
	1,026.791	DOWN SPEED	100
		UP SPEED	80
	1,031.330	DOWN SPEED	90
		UP SPEED	100
	1,031.800	DOWN SPEED	80
	1,033.220	DOWN SPEED	R25/80
		UP SPEED	90
	1,034.287	DOWN SPEED	100, T120
		UP SPEED	L25/80
	1,035.868	UP SPEED	80
	1,036.481	DOWN SPEED	W80
	1,037.089	DOWN SPEED	80
		UP SPEED	100
	1,037.439	DOWN SPEED	100
		UP SPEED	80
	1,040.377	DOWN SPEED	70
		UP SPEED	100
	1,040.912	DOWN SPEED	60
		UP SPEED	70
	1,041.082	DOWN SPEED	100
		UP SPEED	60
	1,042.000	UP SPEED	W60
	1,043.447	DOWN SPEED	80
		UP SPEED	100
	1,043.712	DOWN SPEED	60
		UP SPEED	80
	1,045.627	DOWN SPEED	100
		UP SPEED	60
	1,046.500	UP SPEED	W60
	1,047.660	DOWN SPEED	80
	1,048.890	DOWN SPEED	L25/80
		UP SPEED	100
	1,049.800	DOWN SPEED	100
		UP SPEED	R25/80
	1,050.860	UP SPEED	80
	1,052.822	DOWN SPEED	T120
		UP SPEED	T100
	1,058.587	DOWN SPEED	T100

Corridor	KM Point	Description	Speed Board
		UP SPEED	T120
	1,059.751	DOWN SPEED	T120
		UP SPEED	T100
	1,062.013	DOWN SPEED	W80
	1,062.543	DOWN SPEED	80
		UP SPEED	100, T120
	1,063.994	DOWN SPEED	70
		UP SPEED	80
	1,065.310	DOWN SPEED	90
		UP SPEED	70
	1,066.430	DOWN SPEED	80
	1,067.460	DOWN SPEED	L25/80
		UP SPEED	90
	1,068.362	DOWN SPEED	80
		UP SPEED	R25/80
	1,068.707	DOWN SPEED	100
	1,069.485	UP SPEED	80
	1,082.960	DOWN SPEED	80
	1,084.150	DOWN SPEED	60
		UP SPEED	100
	1,084.269	DOWN SPEED	L25/60
		UP SPEED	60
	1,085.193	DOWN SPEED	60
		UP SPEED	R25/50
	1,085.651	DOWN SPEED	80
		UP SPEED	60
	1,086.388	DOWN SPEED	90
	1,087.996	DOWN SPEED	80
	1,090.554	DOWN SPEED	100
	1,091.090	UP SPEED	80
	1,099.750	DOWN SPEED	80
	1,100.969	DOWN SPEED	L25/80
		UP SPEED	100
	1,101.854	DOWN SPEED	100, T140
		UP SPEED	R25/80
	1,102.965	UP SPEED	80
	1,103.768	UP SPEED	W80
	1,112.056	DOWN SPEED	T120
		UP SPEED	T140
	1,113.971	DOWN SPEED	W80
	1,114.514	DOWN SPEED	80
	1,115.635	DOWN SPEED	R25/80
		UP SPEED	100, T120
	1,116.440	DOWN SPEED	60

Corridor	KM Point	Description	Speed Board
		UP SPEED	80
	1,116.642	DOWN SPEED	100
		UP SPEED	L25/60
	1,117.882	UP SPEED	80
	1,119.852	DOWN SPEED	T140
		UP SPEED	T100
	1,120.529	UP SPEED	W100
	1,123.933	DOWN SPEED	W100
	1,124.593	DOWN SPEED	T100
		UP SPEED	T140
	1,132.575	DOWN SPEED	L25/100
		UP SPEED	100
	1,133.624	DOWN SPEED	100
		UP SPEED	R25/100
	1,145.040	DOWN SPEED	70
	1,145.950	UP SPEED	100
	1,146.050	DOWN SPEED	60
		UP SPEED	80
	1,146.250	DOWN SPEED	70
		UP SPEED	60
	1,146.706	DOWN SPEED	90
		UP SPEED	L25/70
	1,153.850	UP SPEED	80
	1,154.940	DOWN SPEED	80
	1,155.970	DOWN SPEED	L25/R25/60
		UP SPEED	90
	1,156.917	DOWN SPEED	50
		UP SPEED	60
	1,156.933	UP SPEED	L25/R25
	1,157.270	DOWN SPEED	80
		UP SPEED	50
<i>TRK C101 MNL I'face Pt01 - Home Hill</i>	1,167.830	DOWN SPEED	R25/80
		UP SPEED	80
	1,168.709	DOWN SPEED	80
		UP SPEED	L25/80
	1,169.438	DOWN SPEED	100
	1,169.748	UP SPEED	80
	1,177.370	DOWN SPEED	R25/80
		UP SPEED	100
	1,178.240	DOWN SPEED	100
		UP SPEED	L25/80
	1,179.310	UP SPEED	80
	1,192.445	DOWN SPEED	80
		UP SPEED	100

Corridor	KM Point	Description	Speed Board
	1,193.614	UP SPEED	90
	1,193.960	DOWN SPEED	R25/80
		UP SPEED	80
	1,194.870	DOWN SPEED	100
		UP SPEED	L25/80
	1,196.025	UP SPEED	80
	1,200.645	DOWN SPEED	T120
	1,202.850	UP SPEED	T120
	1,209.817	DOWN SPEED	80
	1,210.975	DOWN SPEED	L25/80
		UP SPEED	100, T120
	1,211.860	DOWN SPEED	90, T110
		UP SPEED	R25/80
	1,213.288	DOWN SPEED	100, T120
		UP SPEED	80, T110
	1,215.200	UP SPEED	T120
	1,220.260	DOWN SPEED	T120
		UP SPEED	T100
	1,222.238	DOWN SPEED	W80
	1,222.810	DOWN SPEED	80
	1,224.160	DOWN SPEED	L25/80
		UP SPEED	100, T120
	1,225.037	DOWN SPEED	100, T120
		UP SPEED	R25/80
	1,226.375	UP SPEED	80
	1,226.939	UP SPEED	W80
	1,231.450	DOWN SPEED	T100
		UP SPEED	T120
	1,234.696	DOWN SPEED	80
	1,235.867	DOWN SPEED	R25/80
		UP SPEED	100
	1,236.756	DOWN SPEED	100
		UP SPEED	L25/80
	1,238.027	UP SPEED	80
	1,247.398	DOWN SPEED	80
	1,248.500	UP SPEED	100
	1,248.954	DOWN SPEED	L25/80
		UP SPEED	80
	1,249.219	DOWN SPEED	L25/80
		UP SPEED	R25/80
	1,250.092	DOWN SPEED	80
		UP SPEED	R25/80
	1,250.543	DOWN SPEED	R25/80
		UP SPEED	80

TRK C086 MNL Home Hill - Nome

Corridor	KM Point	Description	Speed Board
	1,251.425	DOWN SPEED	W40
	1,252.160	DOWN SPEED	40
		UP SPEED	80
	1,253.470	DOWN SPEED	80
		UP SPEED	40
	1,254.185	UP SPEED	W40
	1,255.438	DOWN SPEED	60
		UP SPEED	80
	1,255.700	DOWN SPEED	80
		UP SPEED	60
	1,258.503	DOWN SPEED	50
		UP SPEED	80
	1,258.738	DOWN SPEED	70
		UP SPEED	50
	1,260.101	DOWN SPEED	L25/60
		UP SPEED	70
	1,261.320	DOWN SPEED	80
		UP SPEED	R25/60
	1,261.618	DOWN SPEED	80
	1,266.211	DOWN SPEED	50
		UP SPEED	80
	1,266.732	DOWN SPEED	80
		UP SPEED	50
	1,267.752	DOWN SPEED	50
		UP SPEED	80
	1,268.063	DOWN SPEED	80
		UP SPEED	50
	1,269.307	DOWN SPEED	R25/80
		UP SPEED	80
	1,270.016	UP SPEED	R25/80
	1,270.174	DOWN SPEED	100
		UP SPEED	L25/80
	1,271.332	UP SPEED	80
	1,274.770	DOWN SPEED	80
		UP SPEED	100
	1,275.027	DOWN SPEED	100
		UP SPEED	80
	1,280.745	DOWN SPEED	80
	1,282.091	DOWN SPEED	R25/80
		UP SPEED	100
	1,282.969	DOWN SPEED	100, T140
		UP SPEED	L25/80
	1,284.110	UP SPEED	80
	1,284.935	UP SPEED	W80

Corridor	KM Point	Description	Speed Board
<i>TRK C134 MNL Nome - Stuart</i>	1,288.823	DOWN SPEED	W80
	1,289.653	DOWN SPEED	80
		UP SPEED	100, T140
	1,293.210	DOWN SPEED	L25/80
		UP SPEED	80
	1,294.209	DOWN SPEED	80
		UP SPEED	R25/80
	1,300.336	DOWN SPEED	R25/80
		UP SPEED	80
	1,301.239	DOWN SPEED	90
		UP SPEED	L25/80
	1,302.151	DOWN SPEED	100
	1,302.250	UP SPEED	80
	1,304.109	DOWN SPEED	90
		UP SPEED	100
	1,304.402	DOWN SPEED	100
		UP SPEED	90
	1,306.065	DOWN SPEED	80
	1,307.183	DOWN SPEED	L25/80
		UP SPEED	100, T120
	1,308.090	DOWN SPEED	100
		UP SPEED	R25/80
	1,309.839	DOWN SPEED	80
	1,310.469	DOWN SPEED	60
		UP SPEED	80
	1,310.905	DOWN SPEED	100
		UP SPEED	60
	1,311.887	UP SPEED	W60
	1,312.621	DOWN SPEED	90
		UP SPEED	100
	1,315.123	DOWN SPEED	100
		UP SPEED	90
	1,316.920	DOWN SPEED	T120
		UP SPEED	T100
	1,319.397	DOWN SPEED	W80
	1,319.940	DOWN SPEED	80
	1,320.312	UP SPEED	100, T120
	1,321.206	DOWN SPEED	80
		UP SPEED	80
	1,323.388	DOWN SPEED	80
1,323.664	DOWN SPEED	60	
1,324.601	DOWN SPEED	70	
1,325.581	DOWN SPEED	80	
1,326.846	DOWN SPEED	90	

Corridor	KM Point	Description	Speed Board
<i>TRK C134 DMN Nome - Stuart</i>	1,327.585	DOWN SPEED	80
	1,328.191	DOWN SPEED	70
	1,328.200	DOWN SPEED	L50
		UP SPEED	80
	1,328.545	DOWN SPEED	80
	1,329.377	DOWN SPEED	80
	1,329.690	DOWN SPEED	L25/80
	1,330.156	DOWN SPEED	R25/80
	1,330.575	DOWN SPEED	80
	1,330.820	DOWN SPEED	25
	1,331.784	UP SPEED	80
	1,332.380	DOWN SPEED	25
	1,334.074	DOWN SPEED	L50/80
		UP SPEED	L50/80
	1,336.585	DOWN SPEED	80
	1,338.155	DOWN SPEED	80
		UP SPEED	40
	1,339.874	DOWN SPEED	40
	1,339.910	UP SPEED	25
	1,323.470	UP SPEED	60
	1,323.662	UP SPEED	70
	1,324.775	UP SPEED	80
	1,325.571	UP SPEED	70
	1,325.880	UP SPEED	80
	1,328.620	UP SPEED	L25/80
	1,328.729	UP SPEED	80
	1,329.947	UP SPEED	R25/80
	1,330.151	DOWN SPEED	R25/80
		UP SPEED	80
	1,330.389	UP SPEED	25
	1,330.640	UP SPEED	L25
	1,331.359	UP SPEED	25
	1,331.784	UP SPEED	80
	1,332.380	DOWN SPEED	25
	1,334.200	DOWN SPEED	L50
		UP SPEED	80
	1,336.384	DOWN SPEED	80
	1,338.155	DOWN SPEED	80
		UP SPEED	40
	1,339.910	DOWN SPEED	40
	UP SPEED	25	
<i>TRK C189 MNL Stuart - T'ville Jty Fork</i>	1,339.996	UP SPEED	R15/40
<i>TRK C202 MNL T'ville Jty Fork - Purono</i>	1,340.330	UP SPEED	L25
	1,340.988	UP SPEED	40

Corridor	KM Point	Description	Speed Board
<i>TRK C158 MNL Purono - Woree</i>	1,344.215	UP SPEED	40
	1,344.920	UP SPEED	R25/60
	1,345.395	UP SPEED	L25/60
	1,345.930	UP SPEED	80
	1,348.400	UP SPEED	100
	1,348.760	DOWN SPEED	80
	1,352.335	DOWN SPEED	80
	1,353.746	DOWN SPEED	60
	1,355.982	UP SPEED	100/50L
	1,357.136	UP SPEED	100
	1,364.032	UP SPEED	80
	1,365.053	UP SPEED	R25/80
	1,365.670	UP SPEED	R25/80
	1,367.693	DOWN SPEED	25
		UP SPEED	80
	1,368.714	DOWN SPEED	80
		UP SPEED	25
	1,378.840	UP SPEED	80
	1,378.865	DOWN SPEED	L25/70
	1,379.701	UP SPEED	R25/70
	1,379.801	DOWN SPEED	80
	1,393.913	DOWN SPEED	L25/70
	1,394.740	UP SPEED	R25/70
	1,394.839	DOWN SPEED	80
	1,408.603	UP SPEED	80
	1,408.671	DOWN SPEED	R25/70
	1,409.524	UP SPEED	L25/70
	1,409.644	DOWN SPEED	80
	1,423.462	UP SPEED	80
	1,423.504	DOWN SPEED	R25/70
	1,424.380	DOWN SPEED	80
		UP SPEED	L25/70
	1,435.839	DOWN SPEED	R25/70
		UP SPEED	80
	1,436.640	DOWN SPEED	25
	1,436.734	DOWN SPEED	80
		UP SPEED	L25/70
	1,436.815	DOWN SPEED	40
	1,437.129	DOWN SPEED	80
		UP SPEED	60
	1,448.962	DOWN SPEED	50
	1,449.200	DOWN SPEED	25
	UP SPEED	50P	
1,449.301	UP SPEED	10	

Corridor	KM Point	Description	Speed Board
	1,449.760	DOWN SPEED	80
		UP SPEED	25
	1,450.880	UP SPEED	25W
	1,451.201	DOWN SPEED	70
	1,451.989	DOWN SPEED	40
		UP SPEED	70
	1,452.172	DOWN SPEED	80
		UP SPEED	40
	1,457.565	DOWN SPEED	40
		UP SPEED	80
	1,457.646	DOWN SPEED	80
		UP SPEED	40
	1,459.744	DOWN SPEED	50
		UP SPEED	80
	1,460.245	DOWN SPEED	60
		UP SPEED	50
	1,461.157	DOWN SPEED	40
		UP SPEED	60
	1,461.591	DOWN SPEED	60
		UP SPEED	40
	1,462.398	DOWN SPEED	80
		UP SPEED	60
	1,466.231	DOWN SPEED	R25/70
		UP SPEED	80
	1,467.109	DOWN SPEED	80
		UP SPEED	L25/70
	1,479.692	DOWN SPEED	R25/70
		UP SPEED	80
	1,480.710	DOWN SPEED	80
		UP SPEED	L25/70
	1,494.154	DOWN SPEED	70
		UP SPEED	80
	1,496.816	DOWN SPEED	80
		UP SPEED	70
	1,500.416	DOWN SPEED	70
		UP SPEED	80
	1,501.684	UP SPEED	70
	1,501.689	DOWN SPEED	L25/60
	1,502.716	DOWN SPEED	80
		UP SPEED	R25/50
	1,507.388	DOWN SPEED	60
		UP SPEED	80
	1,508.137	DOWN SPEED	70
		UP SPEED	60

Corridor	KM Point	Description	Speed Board
	1,508.763	DOWN SPEED	80
		UP SPEED	70
	1,511.963	DOWN SPEED	L25/70
		UP SPEED	80
	1,512.960	DOWN SPEED	70
		UP SPEED	R25/70
	1,514.789	DOWN SPEED	80
		UP SPEED	70
	1,523.725	DOWN SPEED	70
		UP SPEED	80
	1,524.305	DOWN SPEED	R25
	1,525.171	DOWN SPEED	80
		UP SPEED	L25/70
	1,537.194	DOWN SPEED	60
		UP SPEED	80P
	1,537.314	DOWN SPEED	80P
		UP SPEED	60
	1,538.790	DOWN SPEED	60
		UP SPEED	80
	1,539.400	DOWN SPEED	80
		UP SPEED	60
	1,541.565	DOWN SPEED	50
		UP SPEED	80
	1,542.071	UP SPEED	50
	1,542.673	DOWN SPEED	50
		UP SPEED	40
	1,543.264	DOWN SPEED	80
		UP SPEED	50
	1,544.831	DOWN SPEED	70
	1,545.300	UP SPEED	70
	1,545.356	DOWN SPEED	L25/70
	1,546.048	UP SPEED	R25/60
	1,546.483	DOWN SPEED	80
		UP SPEED	70
	1,552.716	DOWN SPEED	40
		UP SPEED	80
	1,552.865	DOWN SPEED	80
		UP SPEED	40
	1,555.126	DOWN SPEED	50
		UP SPEED	80
	1,555.425	DOWN SPEED	60
		UP SPEED	50
	1,555.696	DOWN SPEED	70
		UP SPEED	60

Corridor	KM Point	Description	Speed Board
	1,557.777	DOWN SPEED	50
		UP SPEED	70
	1,558.746	DOWN SPEED	80
		UP SPEED	50
	1,560.047	DOWN SPEED	40
		UP SPEED	80
	1,560.147	DOWN SPEED	70P
		UP SPEED	40
	1,560.732	UP SPEED	80
	1,561.296	DOWN SPEED	L25/70
	1,562.188	DOWN SPEED	80
		UP SPEED	R25/70
	1,564.520	DOWN SPEED	40
	1,564.618	UP SPEED	40
	1,567.871	DOWN SPEED	R25/70
		UP SPEED	80
	1,568.703	DOWN SPEED	10
	1,568.769	UP SPEED	L25/70
			L25/70P
	1,568.882	DOWN SPEED	80
		UP SPEED	10
	1,568.970	UP SPEED	30
	1,575.411	DOWN SPEED	50
		UP SPEED	80
	1,576.385	DOWN SPEED	80
		UP SPEED	40
	1,577.556	DOWN SPEED	50
		UP SPEED	80
	1,578.621	DOWN SPEED	80
		UP SPEED	50
	1,581.749	DOWN SPEED	40
	1,582.150	UP SPEED	60
	1,584.097	DOWN SPEED	L25/60
		UP SPEED	80
	1,584.976	UP SPEED	R25/70P
	1,585.055	DOWN SPEED	80
	1,585.440	UP SPEED	50
	1,586.582	DOWN SPEED	60
		UP SPEED	80
	1,587.002	DOWN SPEED	80
		UP SPEED	60
	1,587.859	DOWN SPEED	W40
	1,588.885	DOWN SPEED	40
		UP SPEED	80

Corridor	KM Point	Description	Speed Board
	1,588.975	DOWN SPEED	80
		UP SPEED	40
	1,589.737	DOWN SPEED	60
		UP SPEED	80
	1,589.830	DOWN SPEED	80
	1,590.511	UP SPEED	60
	1,592.823	DOWN SPEED	60
		UP SPEED	80
	1,593.433	DOWN SPEED	25
		UP SPEED	60
	1,594.382	DOWN SPEED	80
	1,594.614	UP SPEED	25P
	1,594.650	UP SPEED	D
	1,594.685	UP SPEED	8
	1,595.100	UP SPEED	W8
	1,595.300	UP SPEED	50
	1,596.159	DOWN SPEED	70
		UP SPEED	80
	1,596.354	DOWN SPEED	50
		UP SPEED	70
	1,596.434	DOWN SPEED	80
		UP SPEED	50
	1,599.979	DOWN SPEED	50
		UP SPEED	80
	1,600.177	DOWN SPEED	60P
	1,601.622	DOWN SPEED	40
		UP SPEED	60
	1,601.751	DOWN SPEED	60
		UP SPEED	40
	1,602.561	DOWN SPEED	40
	1,602.974	DOWN SPEED	80
		UP SPEED	60
	1,606.291	DOWN SPEED	50
		UP SPEED	60
	1,607.441	DOWN SPEED	R25/70
		UP SPEED	50
	1,608.229	DOWN SPEED	80
		UP SPEED	L25/70
	1,609.576	DOWN SPEED	70
		UP SPEED	80
	1,609.872	DOWN SPEED	50
		UP SPEED	70
	1,610.098	DOWN SPEED	80
		UP SPEED	50

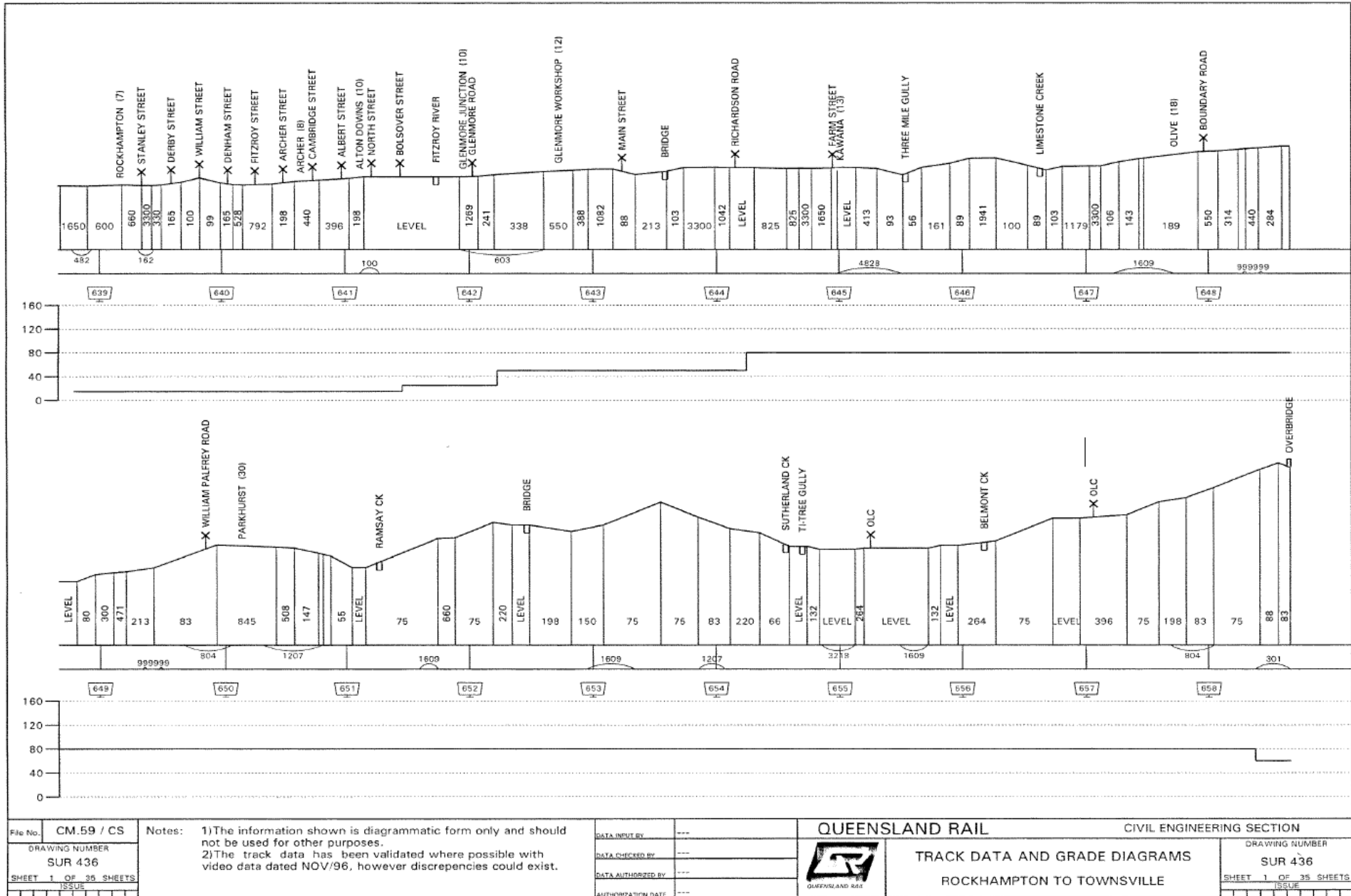
Corridor	KM Point	Description	Speed Board
	1,610.939	DOWN SPEED	70
		UP SPEED	80
	1,611.301	DOWN SPEED	60
		UP SPEED	70
	1,611.467	DOWN SPEED	70
		UP SPEED	60
	1,612.955	DOWN SPEED	80
		UP SPEED	70
	1,614.798	DOWN SPEED	40
		UP SPEED	80
	1,614.882	DOWN SPEED	80
		UP SPEED	40
	1,618.552	DOWN SPEED	50
		UP SPEED	80
	1,618.805	DOWN SPEED	80
		UP SPEED	50
	1,619.315	DOWN SPEED	W40
	1,619.835	DOWN SPEED	40
		UP SPEED	80
	1,620.181	DOWN SPEED	80
		UP SPEED	40
	1,621.106	DOWN SPEED	40
		UP SPEED	80
	1,621.433	DOWN SPEED	50
		UP SPEED	40
	1,622.165	DOWN SPEED	L25/50
		UP SPEED	50
	1,622.971	DOWN SPEED	60
		UP SPEED	R25/50
	1,623.410	DOWN SPEED	60
	1,623.500	UP SPEED	60
	1,625.930	DOWN SPEED	40
		UP SPEED	80
	1,626.218	DOWN SPEED	60
		UP SPEED	40
	1,626.454	DOWN SPEED	80
		UP SPEED	60
	1,627.218	DOWN SPEED	70
		UP SPEED	80
	1,627.667	DOWN SPEED	50
		UP SPEED	70
	1,627.882	DOWN SPEED	80
		UP SPEED	50
	1,628.896	DOWN SPEED	60

Corridor	KM Point	Description	Speed Board
		UP SPEED	80
	1,629.104	DOWN SPEED	80
		UP SPEED	60
	1,629.674	DOWN SPEED	40
		UP SPEED	80
	1,629.775	DOWN SPEED	60
		UP SPEED	40
	1,630.448	DOWN SPEED	40
		UP SPEED	60
	1,630.702	DOWN SPEED	80
		UP SPEED	40
	1,631.222	UP SPEED	W40
	1,631.674	DOWN SPEED	W40
	1,632.194	DOWN SPEED	40
		UP SPEED	80
	1,632.593	DOWN SPEED	80
	1,632.654	UP SPEED	40
	1,633.174	UP SPEED	W40
	1,633.667	DOWN SPEED	50
		UP SPEED	80
	1,634.400	DOWN SPEED	80
		UP SPEED	50
	1,636.035	DOWN SPEED	R25/70
		UP SPEED	80
	1,636.899	DOWN SPEED	80
		UP SPEED	L25/70
	1,642.744	DOWN SPEED	60
		UP SPEED	80
	1,643.707	DOWN SPEED	80
		UP SPEED	60
	1,645.655	DOWN SPEED	50
		UP SPEED	80
	1,646.277	DOWN SPEED	80
		UP SPEED	50
	1,651.560	DOWN SPEED	R25/60
		UP SPEED	80
	1,652.359	DOWN SPEED	30
		UP SPEED	60
	1,652.525	UP SPEED	L25
	1,652.642	DOWN SPEED	50
		UP SPEED	30
	1,653.690	DOWN SPEED	80
		UP SPEED	40
	1,654.968	DOWN SPEED	50

Corridor	KM Point	Description	Speed Board
		UP SPEED	80
	1,655.344	DOWN SPEED	60
		UP SPEED	50
	1,655.762	DOWN SPEED	80
		UP SPEED	60
	1,656.740	DOWN SPEED	40
		UP SPEED	80
	1,656.836	UP SPEED	40
	1,658.490	UP SPEED	L25
	1,659.171	DOWN SPEED	80
		UP SPEED	40
	1,659.720	UP SPEED	W40
	1,659.922	DOWN SPEED	40
		UP SPEED	80
	1,660.127	DOWN SPEED	60
		UP SPEED	40
	1,661.915	DOWN SPEED	80
		UP SPEED	60
	1,663.072	DOWN SPEED	L25/60
		UP SPEED	80
	1,663.966	DOWN SPEED	70
		UP SPEED	R25/70
	1,664.311	DOWN SPEED	60
		UP SPEED	70
	1,665.001	DOWN SPEED	50
		UP SPEED	60
	1,665.273	DOWN SPEED	80
		UP SPEED	50
	1,670.114	DOWN SPEED	60
		UP SPEED	80
	1,671.927	DOWN SPEED	80
		UP SPEED	60
	1,673.150	UP SPEED	80
	1,673.203	DOWN SPEED	40
	1,673.908	DOWN SPEED	50
		UP SPEED	40
	1,674.862	DOWN SPEED	R25/80
		UP SPEED	50
<i>TRK C212 MNL Woree - Cairns</i>	1,676.066	DOWN SPEED	80
		UP SPEED	L25/80
	1,677.079	DOWN SPEED	L25/80
		UP SPEED	80
	1,677.364	DOWN SPEED	R10/80
		UP SPEED	80

Corridor	KM Point	Description	Speed Board
	1,677.624	DOWN SPEED	80
		UP SPEED	L10/80
	1,678.354	DOWN SPEED	60
		UP SPEED	80
	1,678.503	DOWN SPEED	60
		UP SPEED	R25
	1,679.457	DOWN SPEED	30
		UP SPEED	50
	1,679.603	DOWN SPEED	60
		UP SPEED	30
	1,679.700	DOWN SPEED	W20
	1,680.067	DOWN SPEED	20
		UP SPEED	60
	1,680.623	UP SPEED	20
	1,681.320	DOWN SPEED	20
		UP SPEED	25
<i>TRK C158 Pass Loop 1 @Pombel</i>	1,436.643	DOWN SPEED	25
<i>TRK C158 Pass Loop 1 @Silkwood</i>	1,568.703	DOWN SPEED	10
<i>TRK C158 Pass Loop 1 @Boogan</i>	1,584.900	DOWN SPEED	10
	1,584.901	DOWN SPEED	10
<i>TRK C158 Pass Loop 1 @Innisfail</i>	1,594.200	DOWN SPEED	10
<i>TRK C158 Siding @Aloomba</i>	1,651.662	UP SPEED	10
	1,652.456	DOWN SPEED	10
<i>TRK C212 Pass Loop 1 @Portsmith</i>	1,677.176	DOWN SPEED	10
	1,678.364	UP SPEED	10


APPENDIX E Track Data & Grade Diagrams



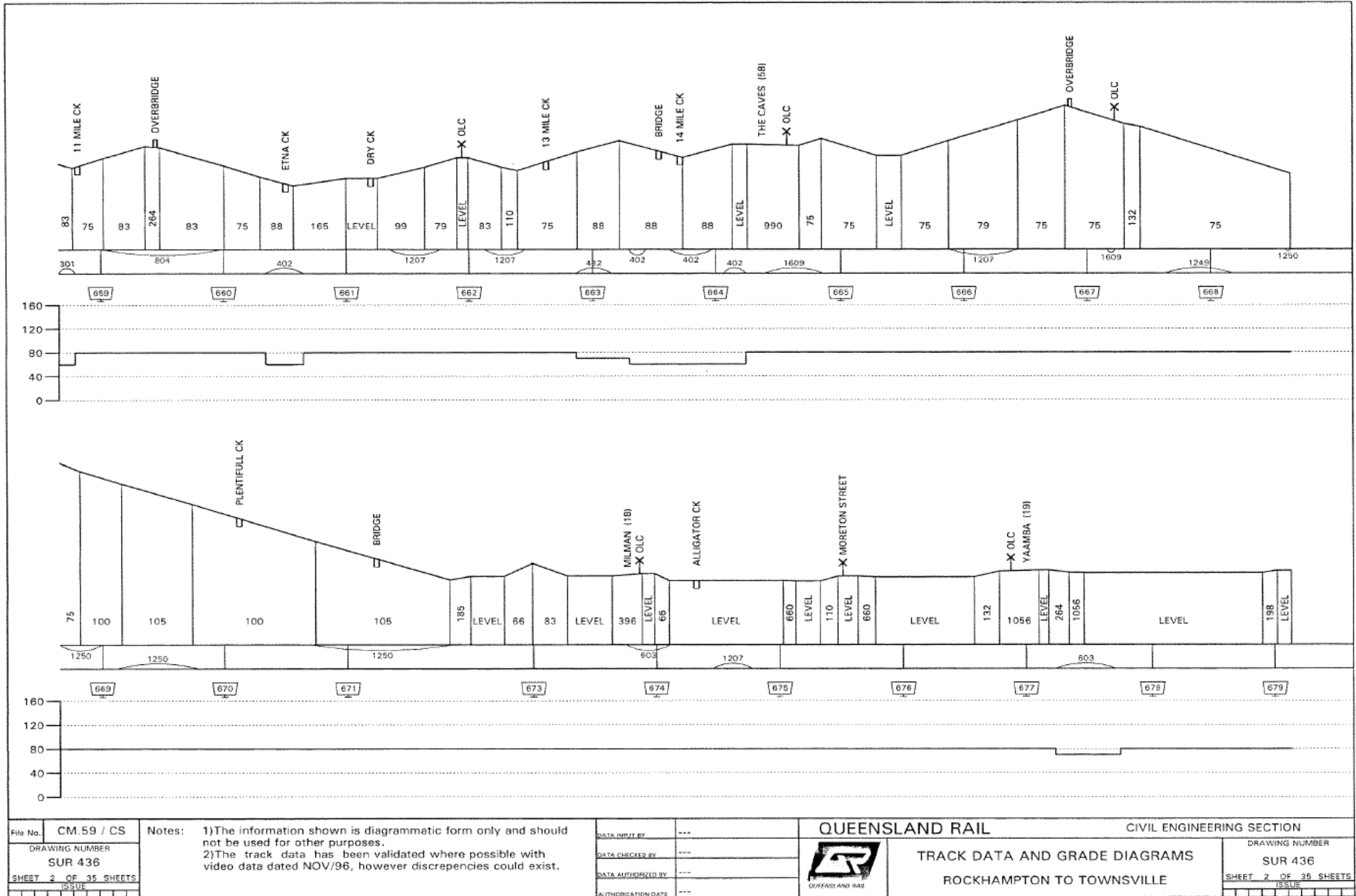
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DRAWING NUMBER	SUR 436
SHEET 1 OF 35 SHEETS	ISSUE

Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

DATA INPUT BY	---
DATA CHECKED BY	---
DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
		DRAWING NUMBER	
TRACK DATA AND GRADE DIAGRAMS		SUR 436	
ROCKHAMPTON TO TOWNSVILLE		SHEET 1 OF 35 SHEETS	
		ISSUE	




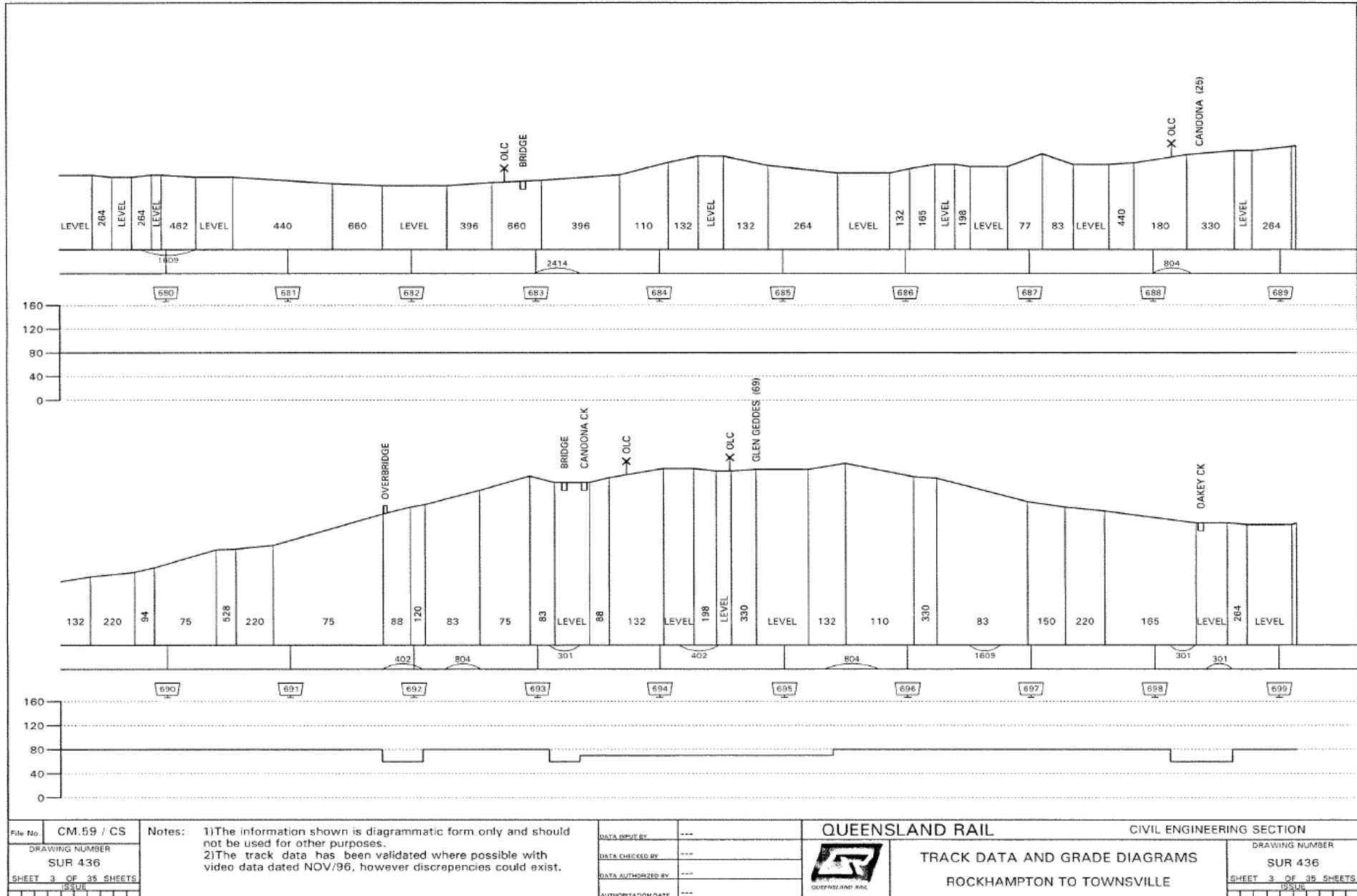



File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
SHEET 2 OF 35 SHEETS	
ISSUE	

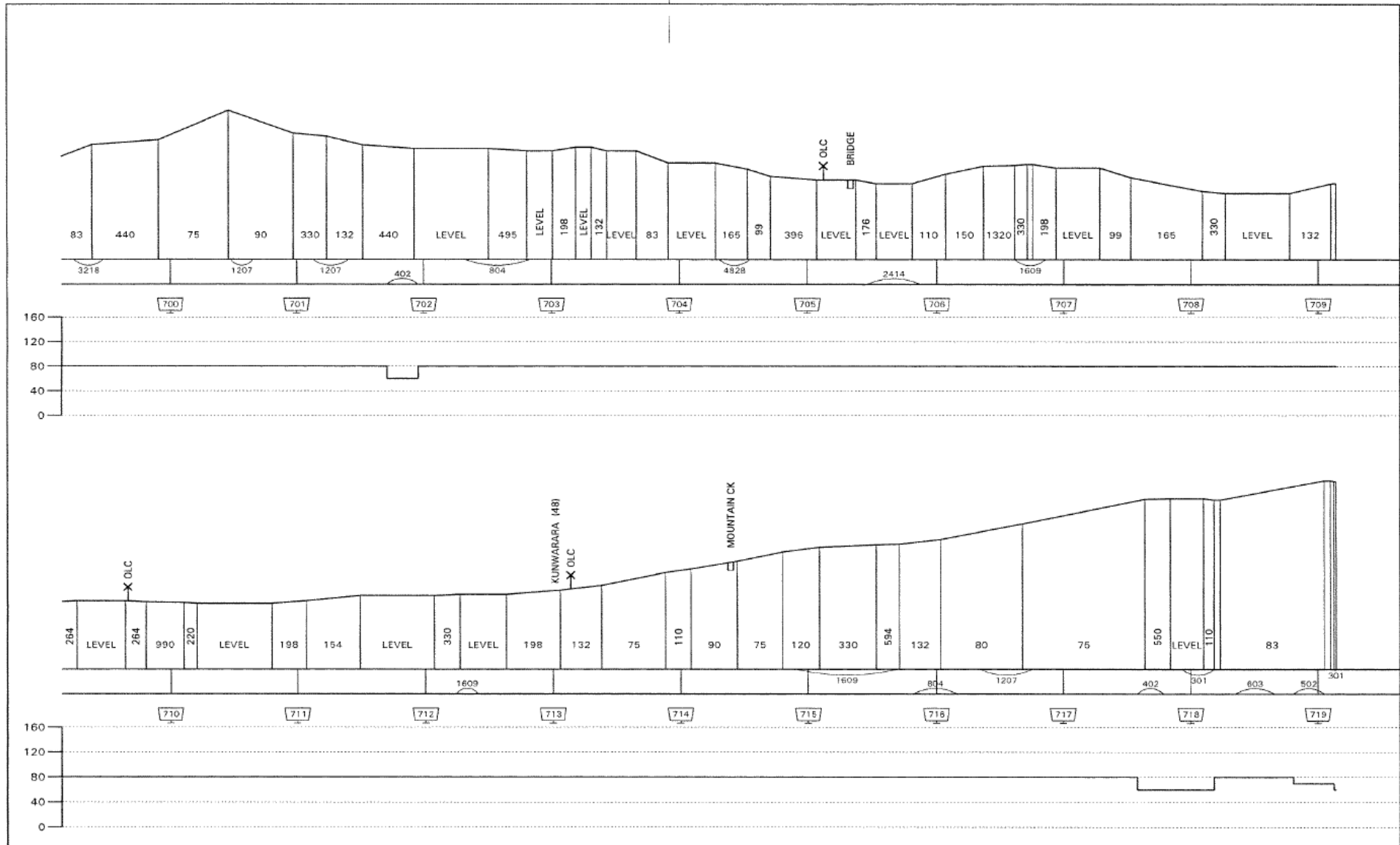
Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.


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DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

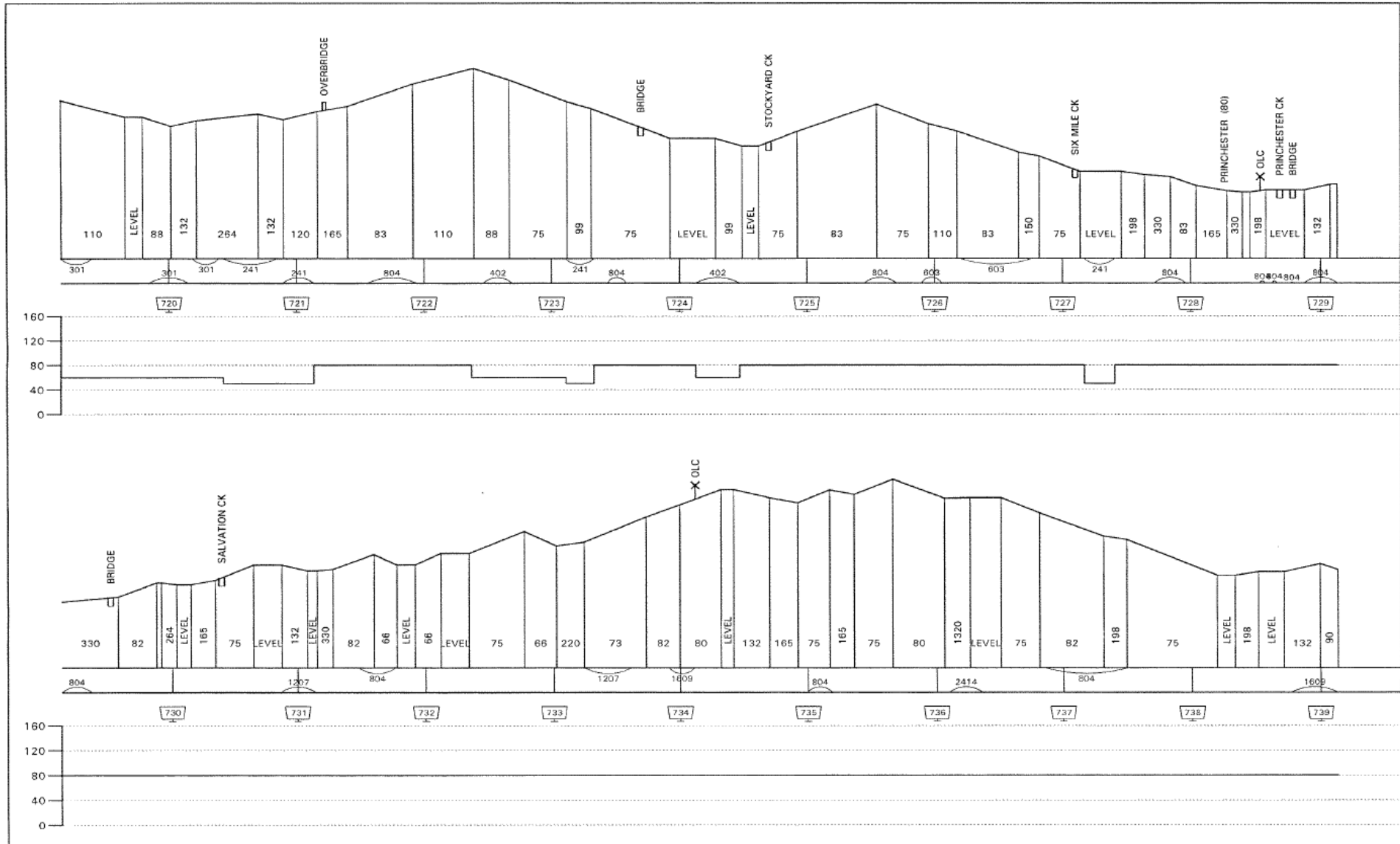
QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
		DRAWING NUMBER	
TRACK DATA AND GRADE DIAGRAMS		SUR 436	
ROCKHAMPTON TO TOWNVILLE		SHEET 2 OF 35 SHEETS	
		ISSUE	




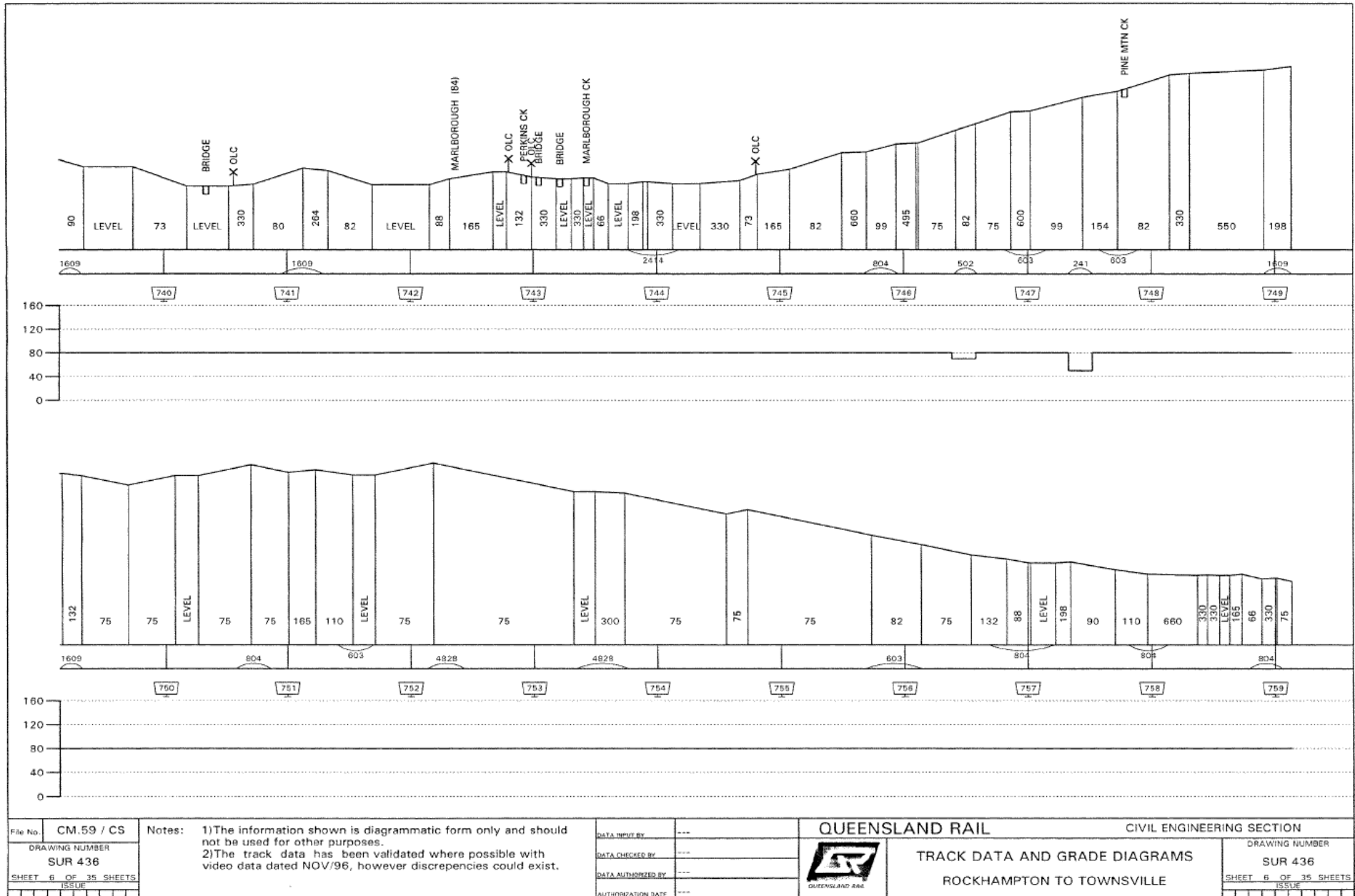
File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---	 QUEENSLAND RAIL CIVIL ENGINEERING SECTION TRACK DATA AND GRADE DIAGRAMS ROCKHAMPTON TO TOWNSVILLE	DRAWING NUMBER SUR 436
DRAWING NUMBER SUR 436	DATA CHECKED BY: ---	DRAWING NUMBER SUR 436		
SHEET 3 OF 35 SHEETS	DATA AUTHORIZED BY: ---	SHEET 3 OF 35 SHEETS		
ISSUE	AUTHORIZATION DATE: ---	ISSUE		

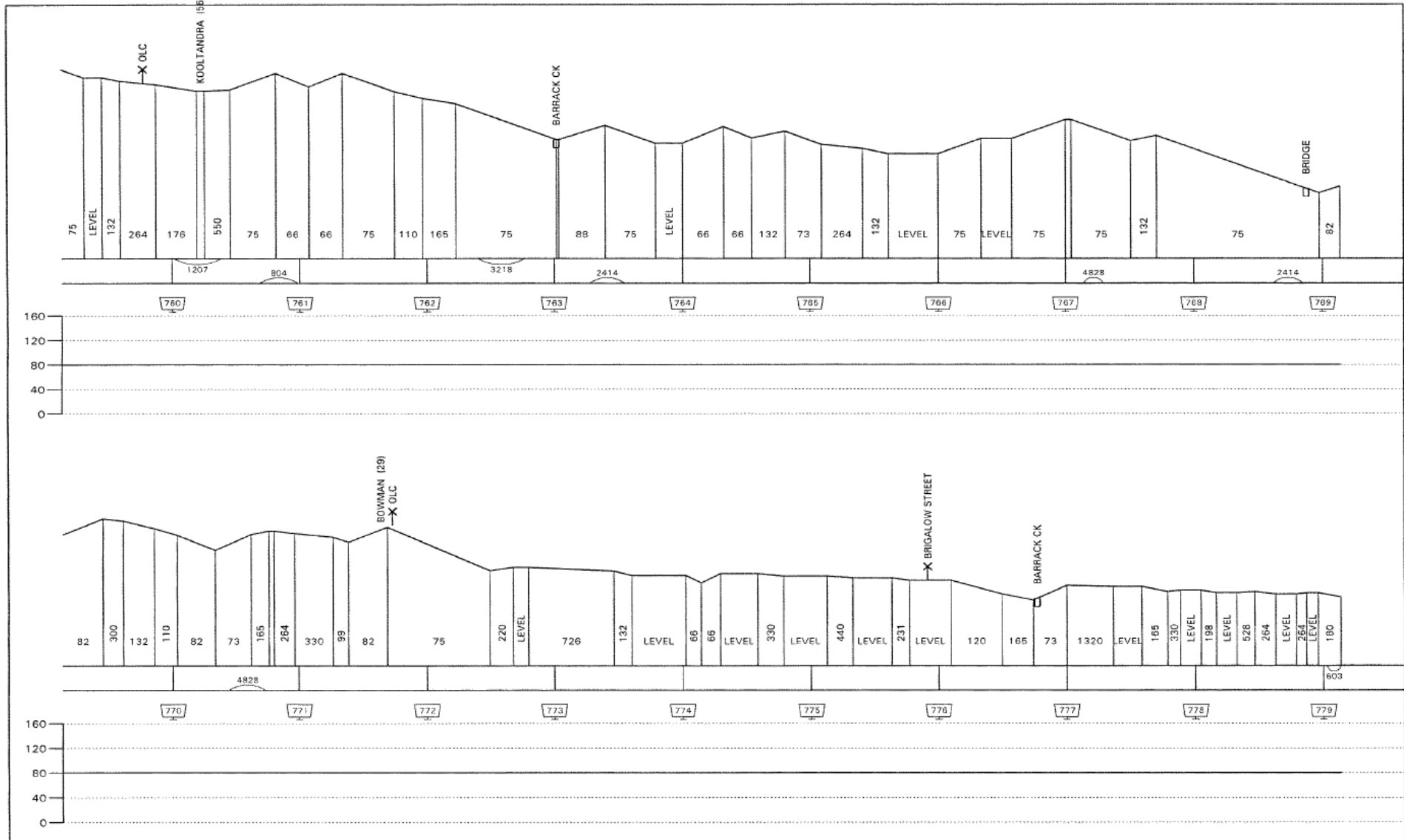



File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---	QUEENSLAND RAIL  CIVIL ENGINEERING SECTION	DRAWING NUMBER SUR 436
DATA CHECKED BY: ---		TRACK DATA AND GRADE DIAGRAMS		DRAWING NUMBER SUR 436
DATA AUTHORIZED BY: ---		ROCKHAMPTON TO TOWNVILLE		SHEET 4 OF 35 SHEETS
AUTHORIZATION DATE: ---				ISSUE

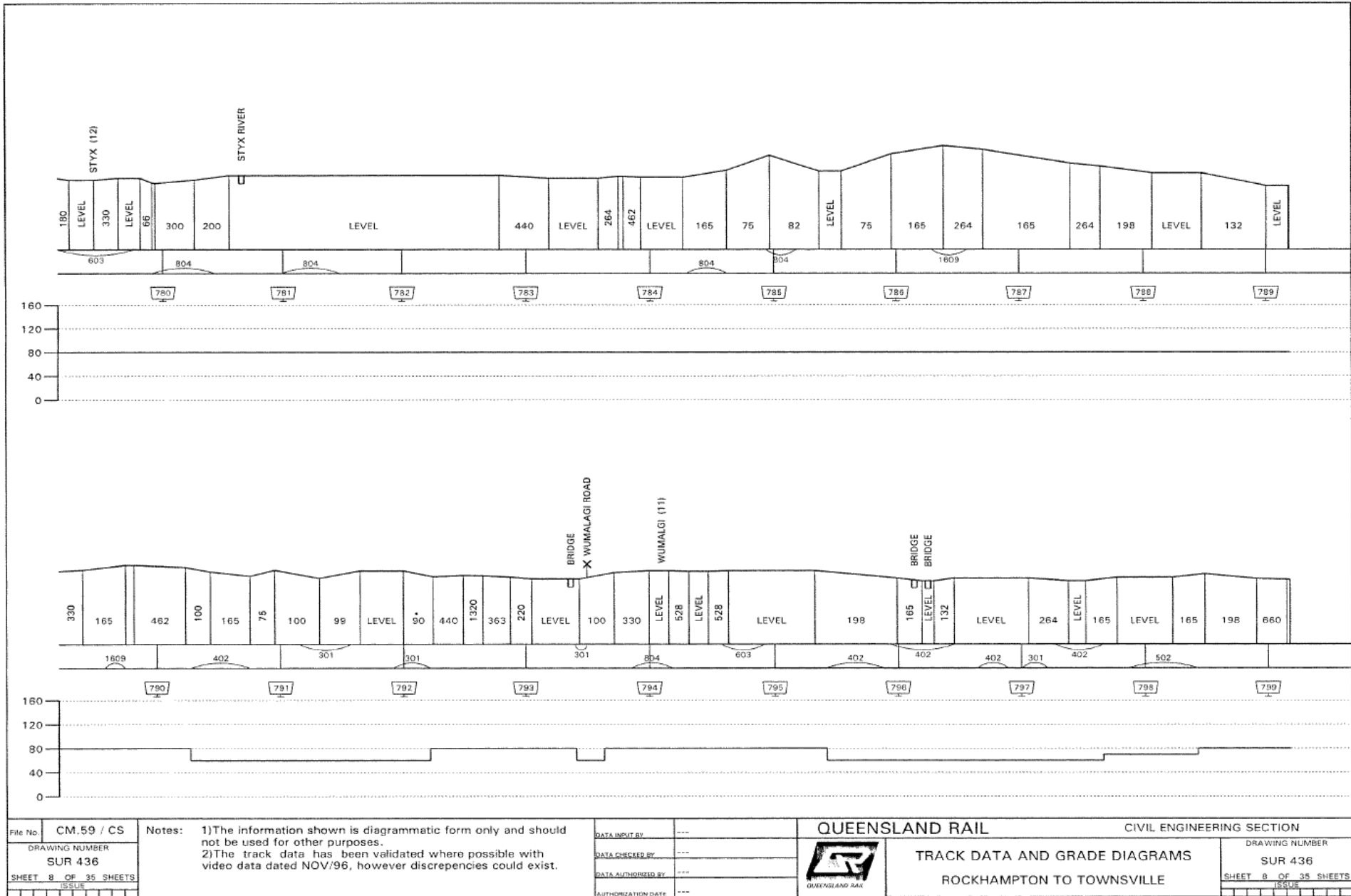


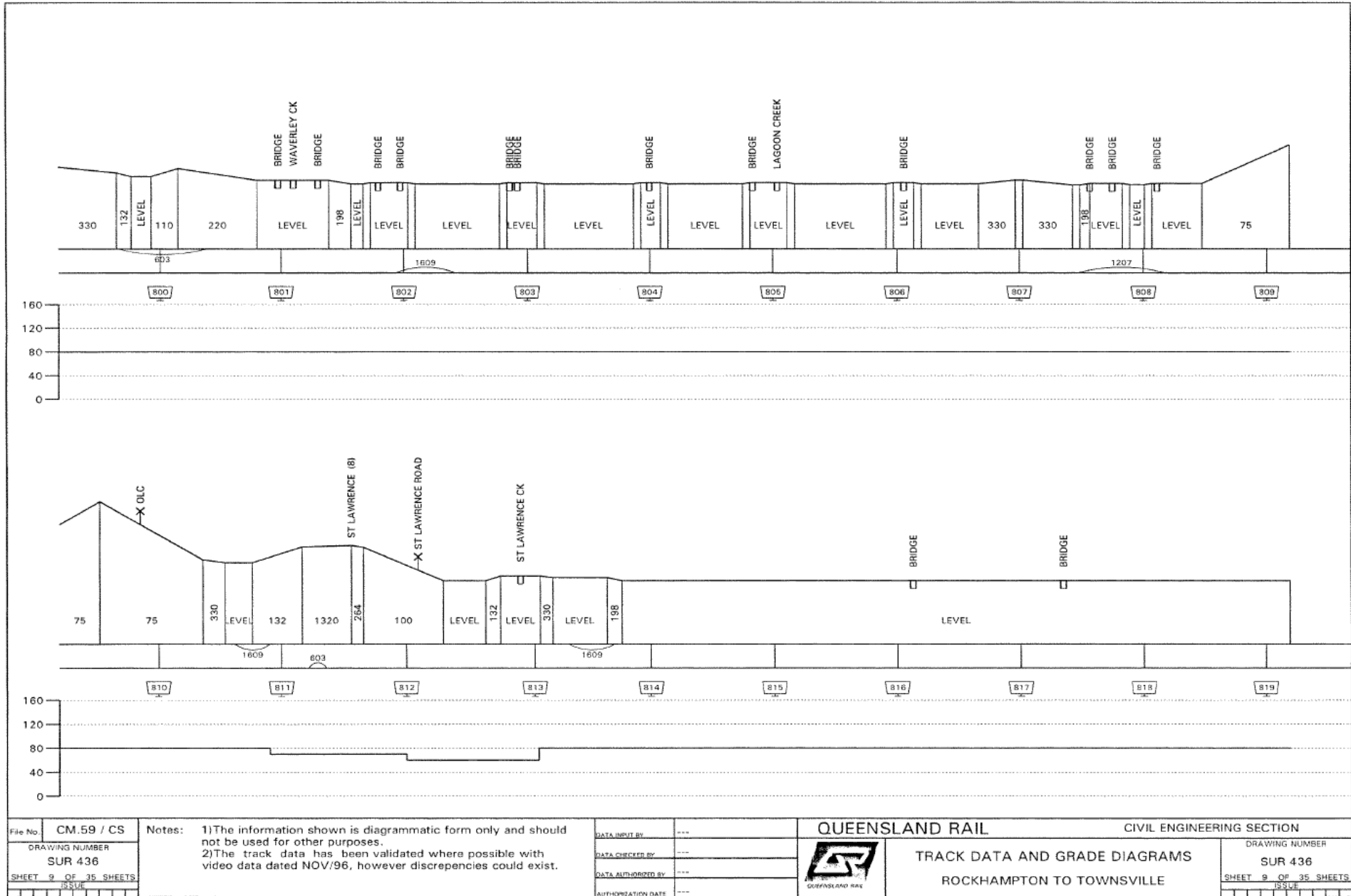
File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---	QUEENSLAND RAIL  CIVIL ENGINEERING SECTION	DRAWING NUMBER SUR 436
SHEET 5 OF 35 SHEETS		DATA CHECKED BY: ---		TRACK DATA AND GRADE DIAGRAMS
ISSUE		DATA AUTHORIZED BY: ---	ROCKHAMPTON TO TOWNSVILLE	SHEET 5 OF 35 SHEETS
		AUTHORIZATION DATE: ---		ISSUE





File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---		QUEENSLAND RAIL	CIVIL ENGINEERING SECTION
DRAWING NUMBER SUR 436		DATA CHECKED BY: ---		TRACK DATA AND GRADE DIAGRAMS	DRAWING NUMBER SUR 436
SHEET 7 OF 35 SHEETS		DATA AUTHORIZED BY: ---		ROCKHAMPTON TO TOWNSVILLE	SHEET 7 OF 35 SHEETS
ISSUE		AUTHORIZATION DATE: ---			ISSUE




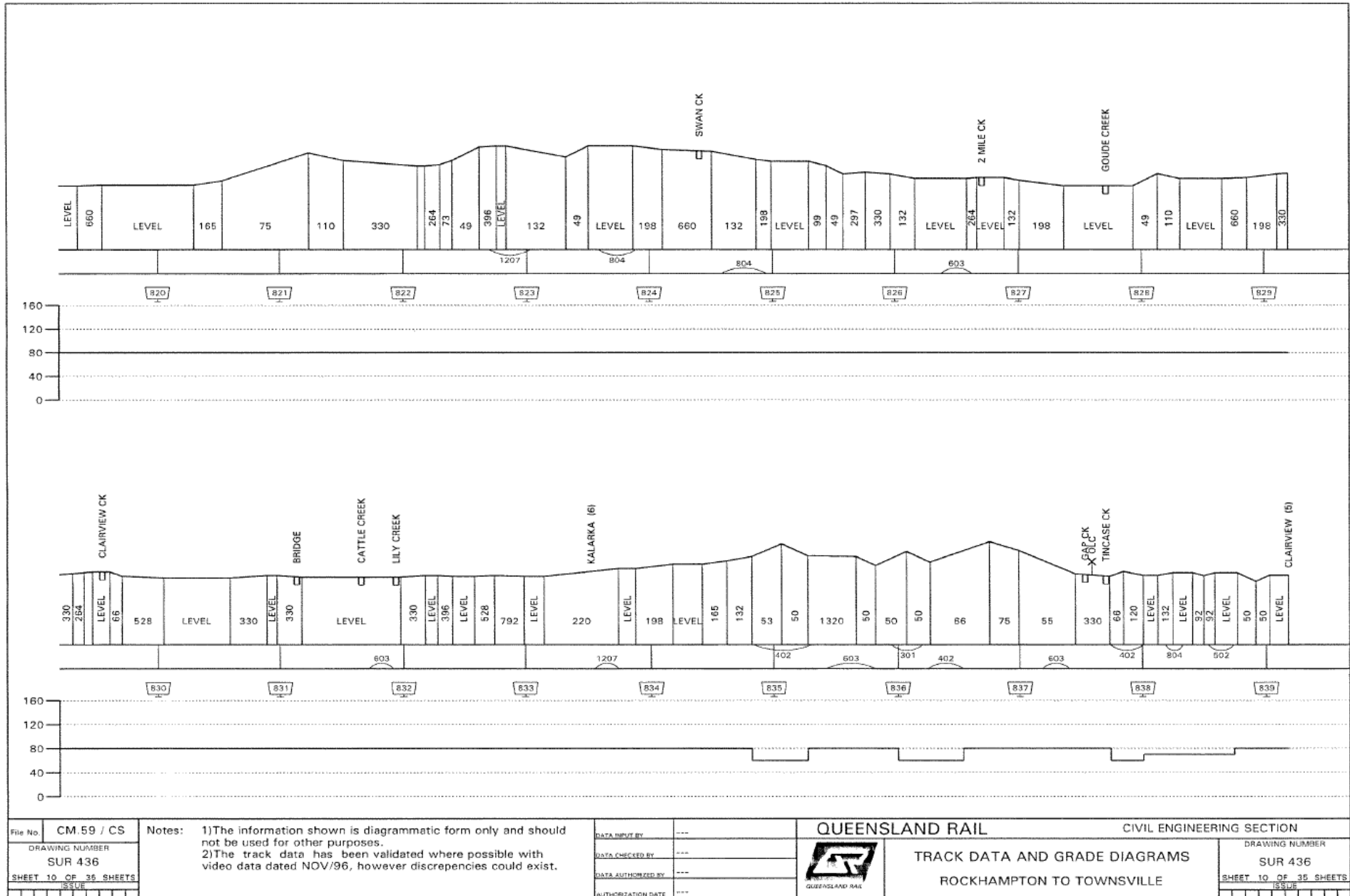


File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
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Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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DATA AUTHORIZED BY	---
AUTHORISATIVE DATE	---


QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
		DRAWING NUMBER
TRACK DATA AND GRADE DIAGRAMS		SUR 436
ROCKHAMPTON TO TOWNVILLE		SHEET 9 OF 35 SHEETS
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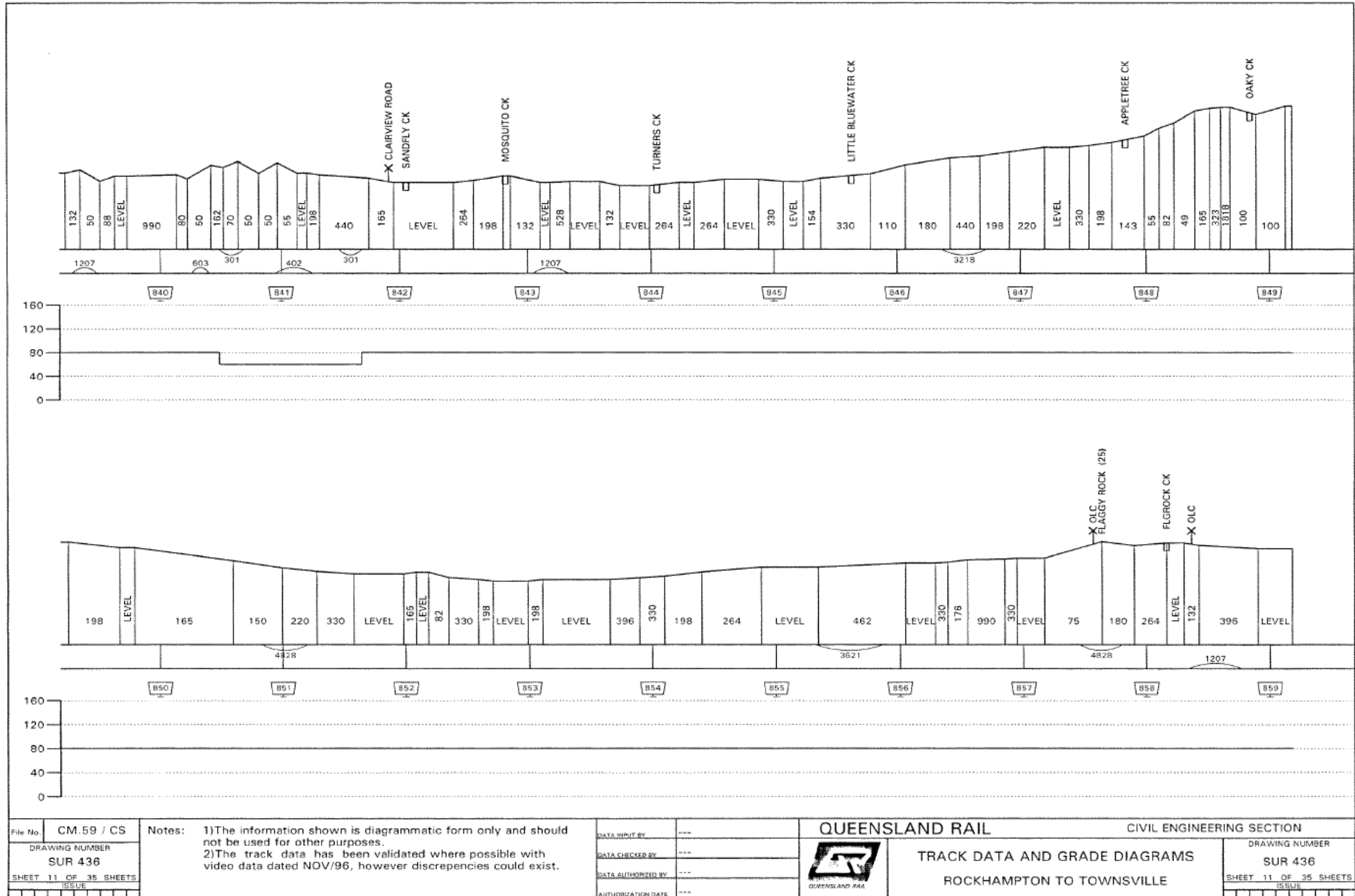


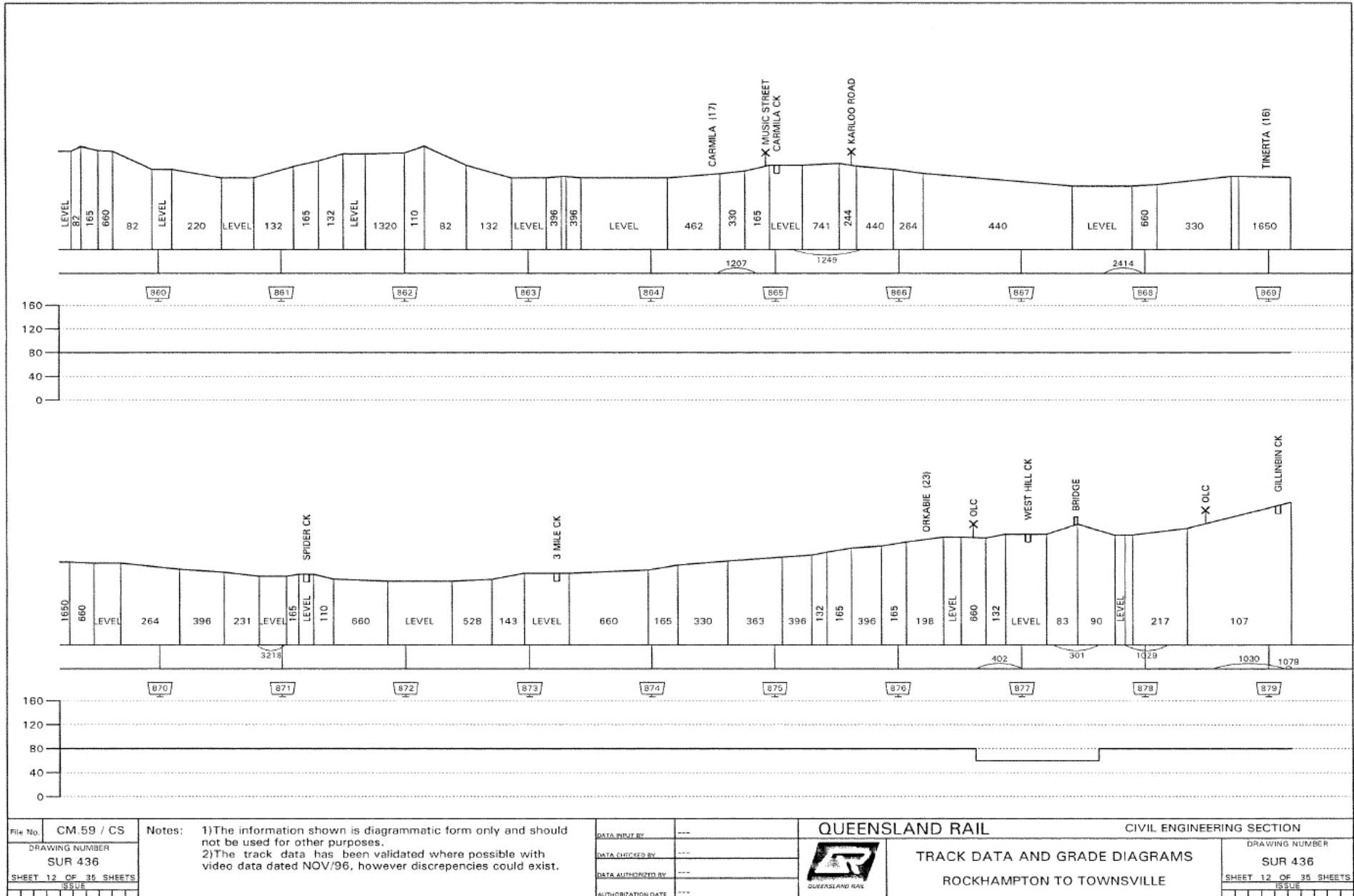
File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
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Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

DATA INPUT BY	---
DATA CHECKED BY	---
DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

 QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
TRACK DATA AND GRADE DIAGRAMS		DRAWING NUMBER SUR 436	
ROCKHAMPTON TO TOWNVILLE		SHEET 10 OF 35 SHEETS ISSUE	




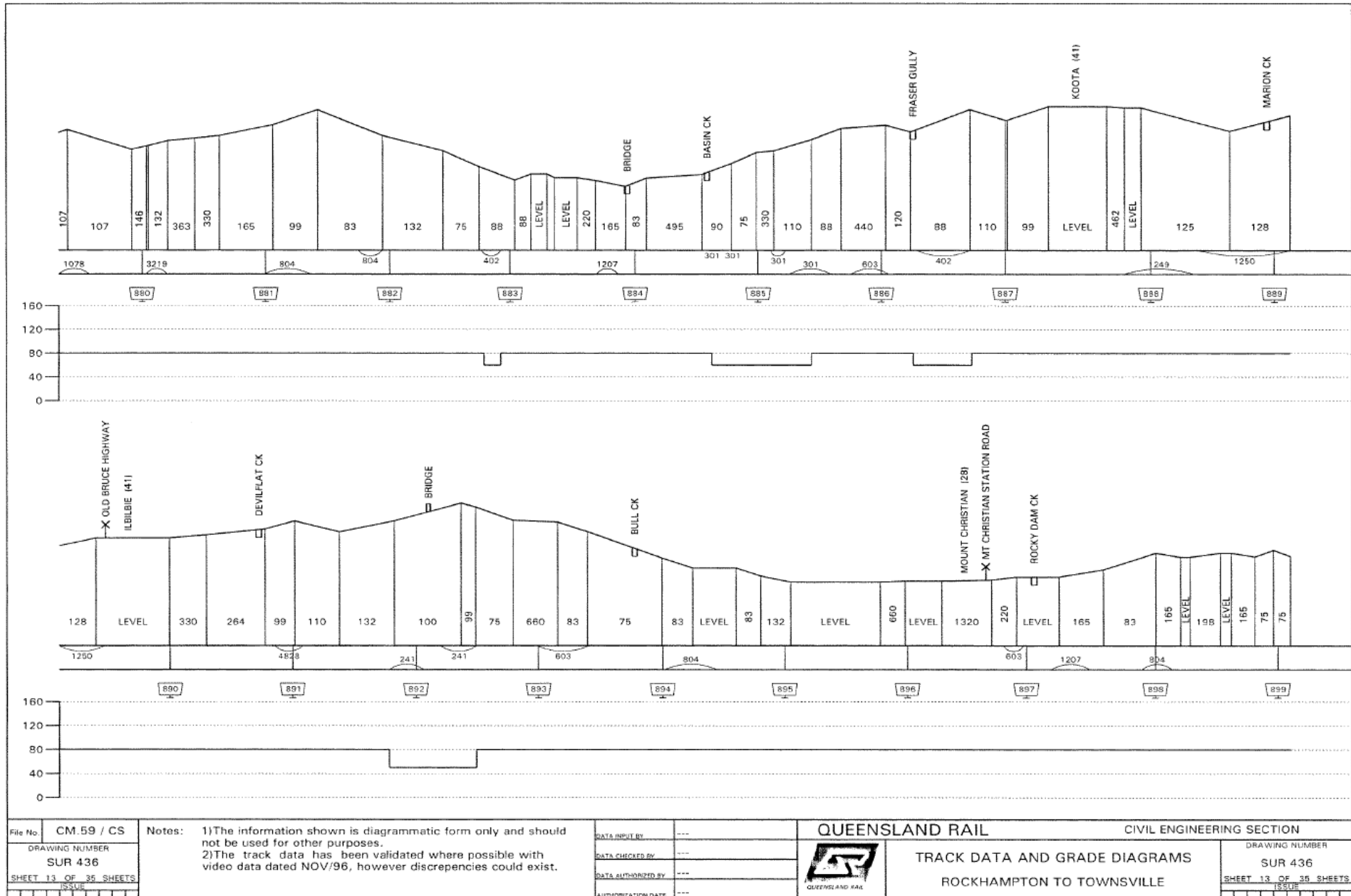


File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
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Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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AUTHORIZATION DATE	---


QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
		TRACK DATA AND GRADE DIAGRAMS	
ROCKHAMPTON TO TOWNVILLE		DRAWING NUMBER SUR 436	
		SHEET 12 OF 35 SHEETS	
		ISSUE	

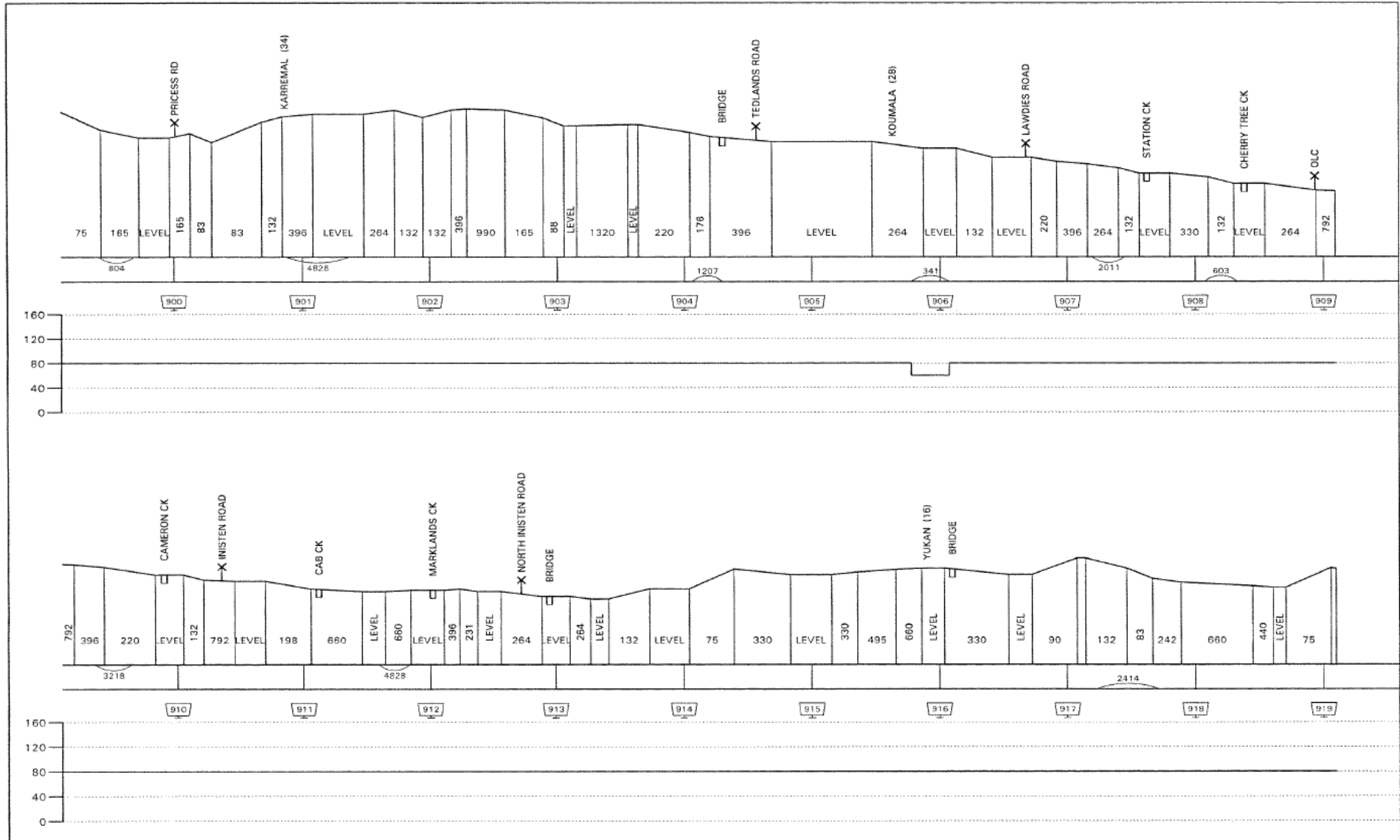



File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
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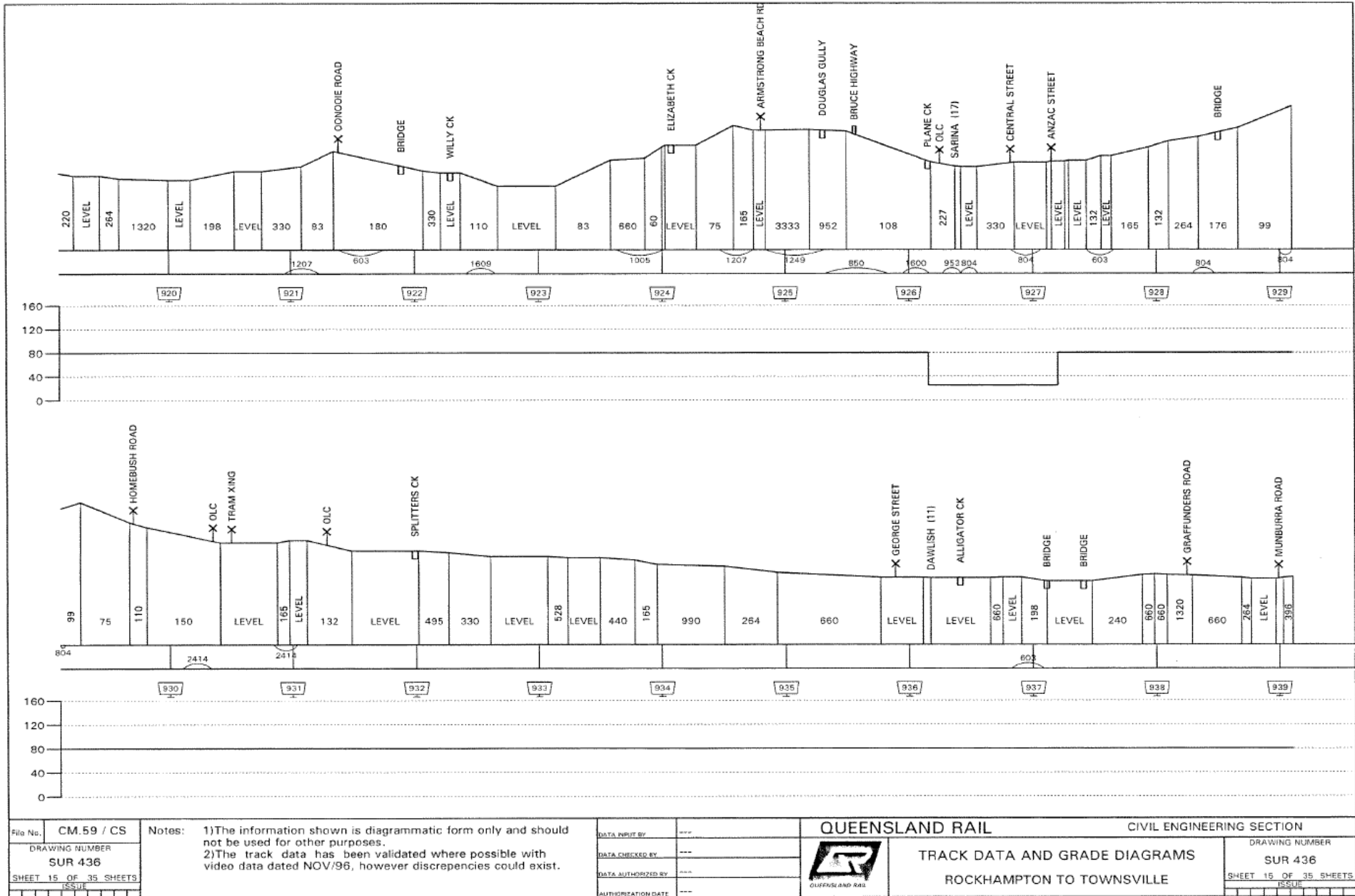
Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

DATA INPUT BY	---
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DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
		DRAWING NUMBER
TRACK DATA AND GRADE DIAGRAMS		SUR 436
ROCKHAMPTON TO TOWNSVILLE		SHEET 13 OF 35 SHEETS
		ISSUE




File No.: CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---	 QUEENSLAND RAIL CIVIL ENGINEERING SECTION	DRAWING NUMBER: SUR 436
SHEET 14 OF 35 SHEETS ISSUE		DATA CHECKED BY: ---		TRACK DATA AND GRADE DIAGRAMS ROCKHAMPTON TO TOWNVILLE
		DATA AUTHORIZED BY: ---		
		AUTHORIZATION DATE: ---		



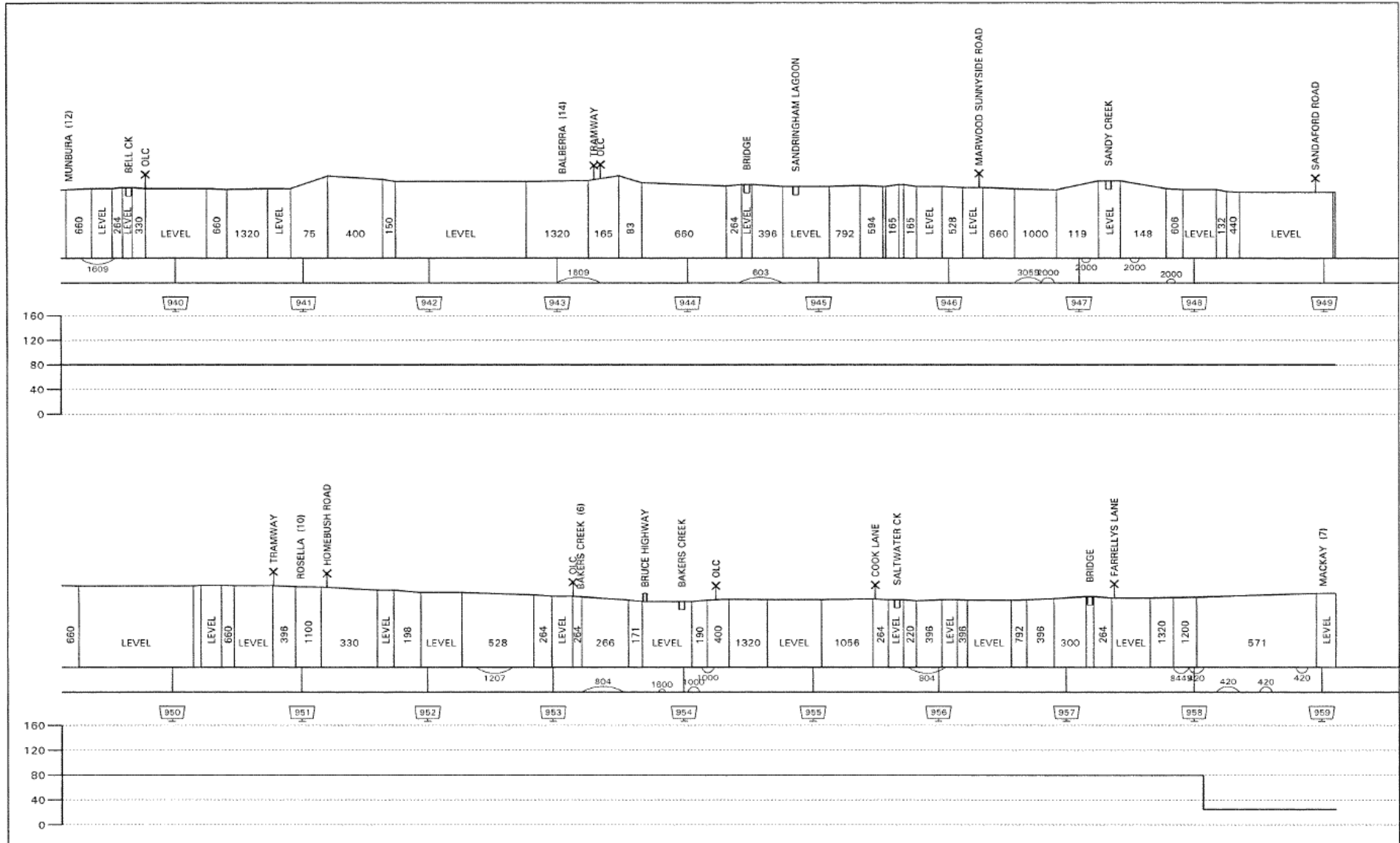
File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
SHEET 15 OF 35 SHEETS	ISSUE


Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

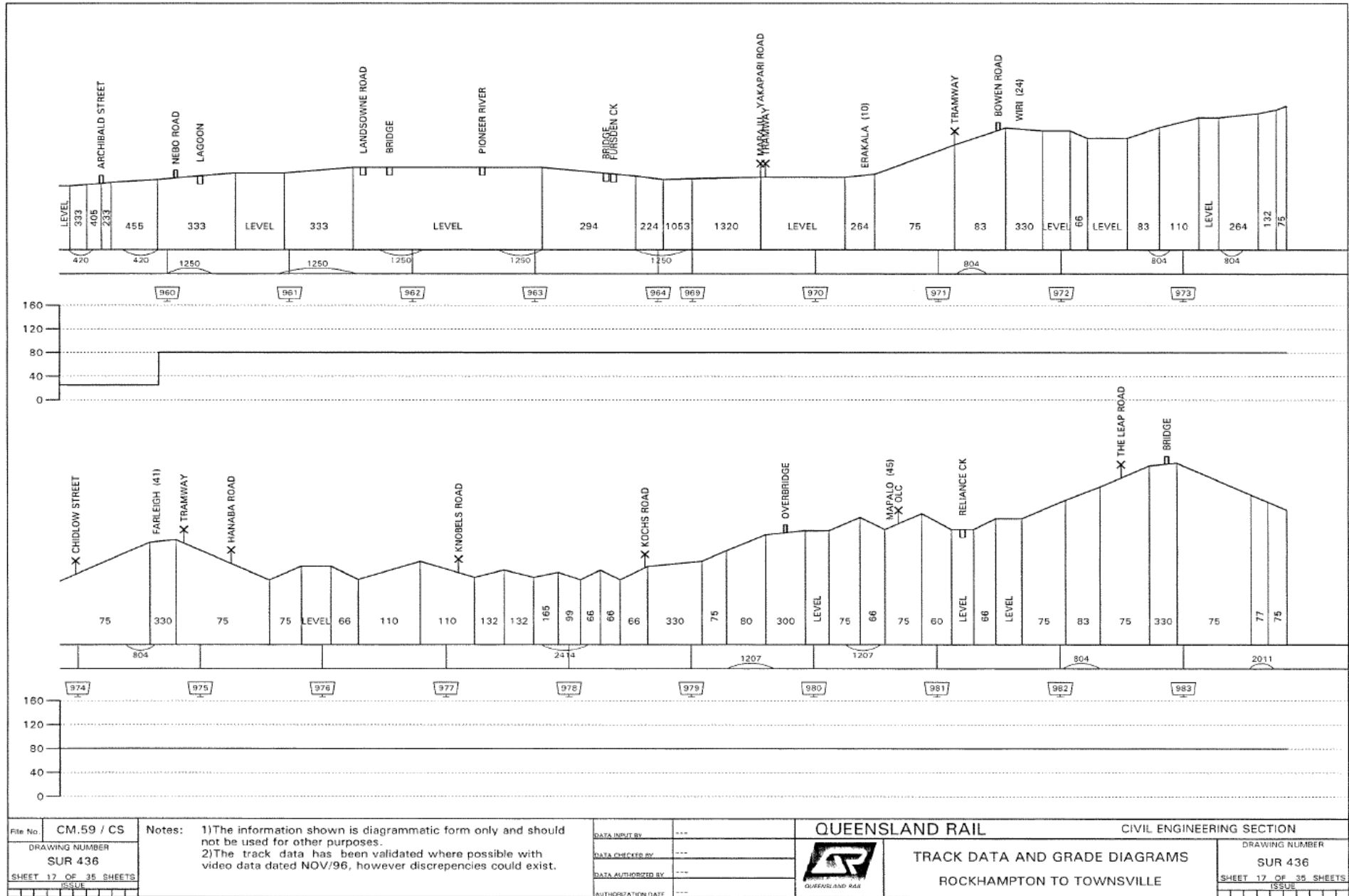
DATA PREPARED BY	---
DATA CHECKED BY	---
DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
		DRAWING NUMBER	
TRACK DATA AND GRADE DIAGRAMS		SUR 436	
ROCKHAMPTON TO TOWNVILLE		SHEET 15 OF 35 SHEETS	
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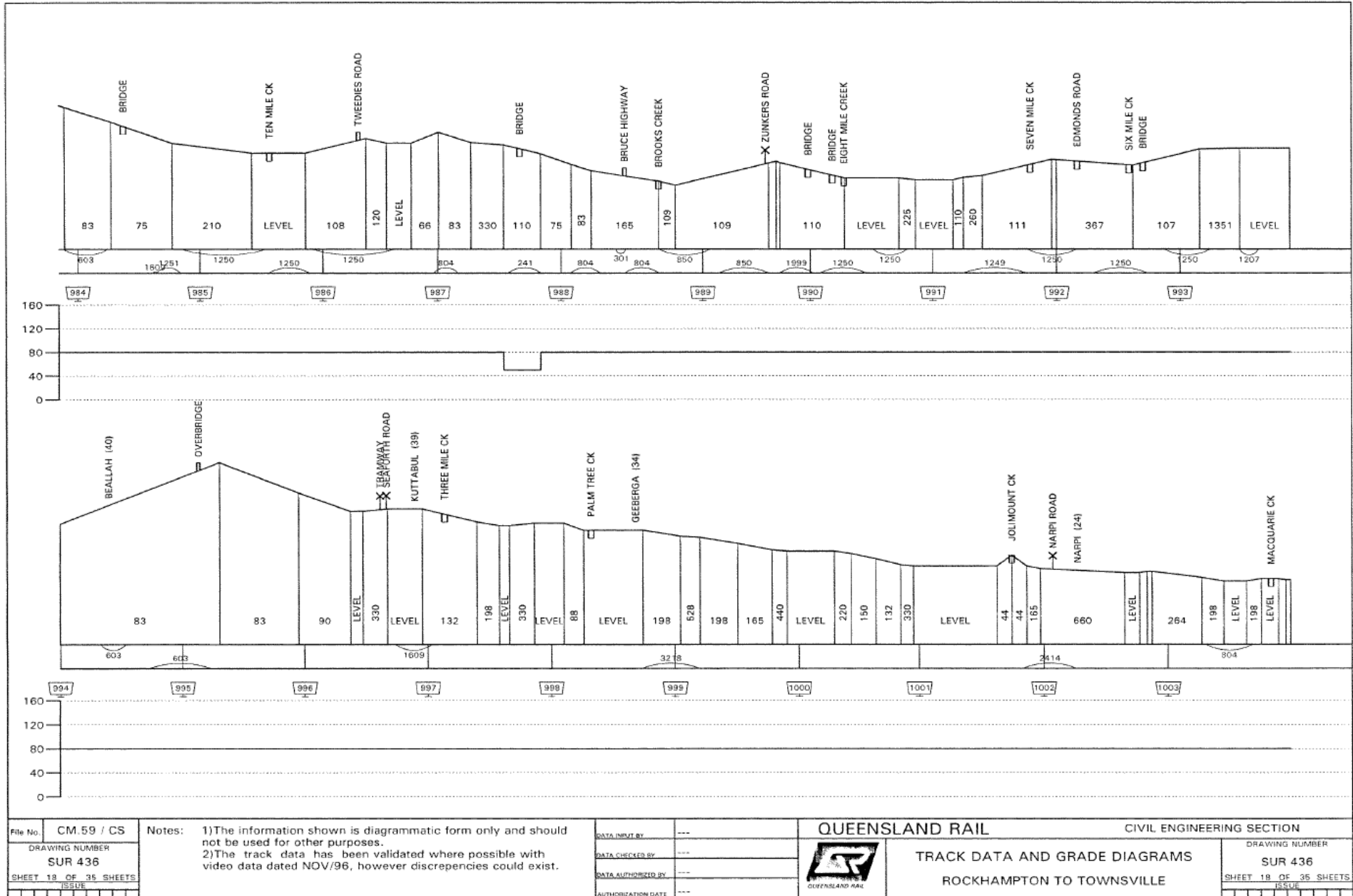




File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---	 <p>QUEENSLAND RAIL</p>	CIVIL ENGINEERING SECTION
DRAWING NUMBER SUR 436		DATA CHECKED BY: ---		TRACK DATA AND GRADE DIAGRAMS
SHEET 16 OF 35 SHEETS		DATA AUTHORIZED BY: ---		ROCKHAMPTON TO TOWNVILLE
ISSUE		AUTHORIZATION DATE: ---		DRAWING NUMBER SUR 436
				SHEET 16 OF 35 SHEETS
				ISSUE




File No: CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---		QUEENSLAND RAIL	CIVIL ENGINEERING SECTION	
DRAWING NUMBER: SUR 436		DATA CHECKED BY: ---			TRACK DATA AND GRADE DIAGRAMS	DRAWING NUMBER: SUR 436
SHEET 17 OF 35 SHEETS		DATA AUTHORIZED BY: ---			ROCKHAMPTON TO TOWNVILLE	SHEET 17 OF 35 SHEETS
ISSUE		AUTHORISATION DATE: ---				ISSUE

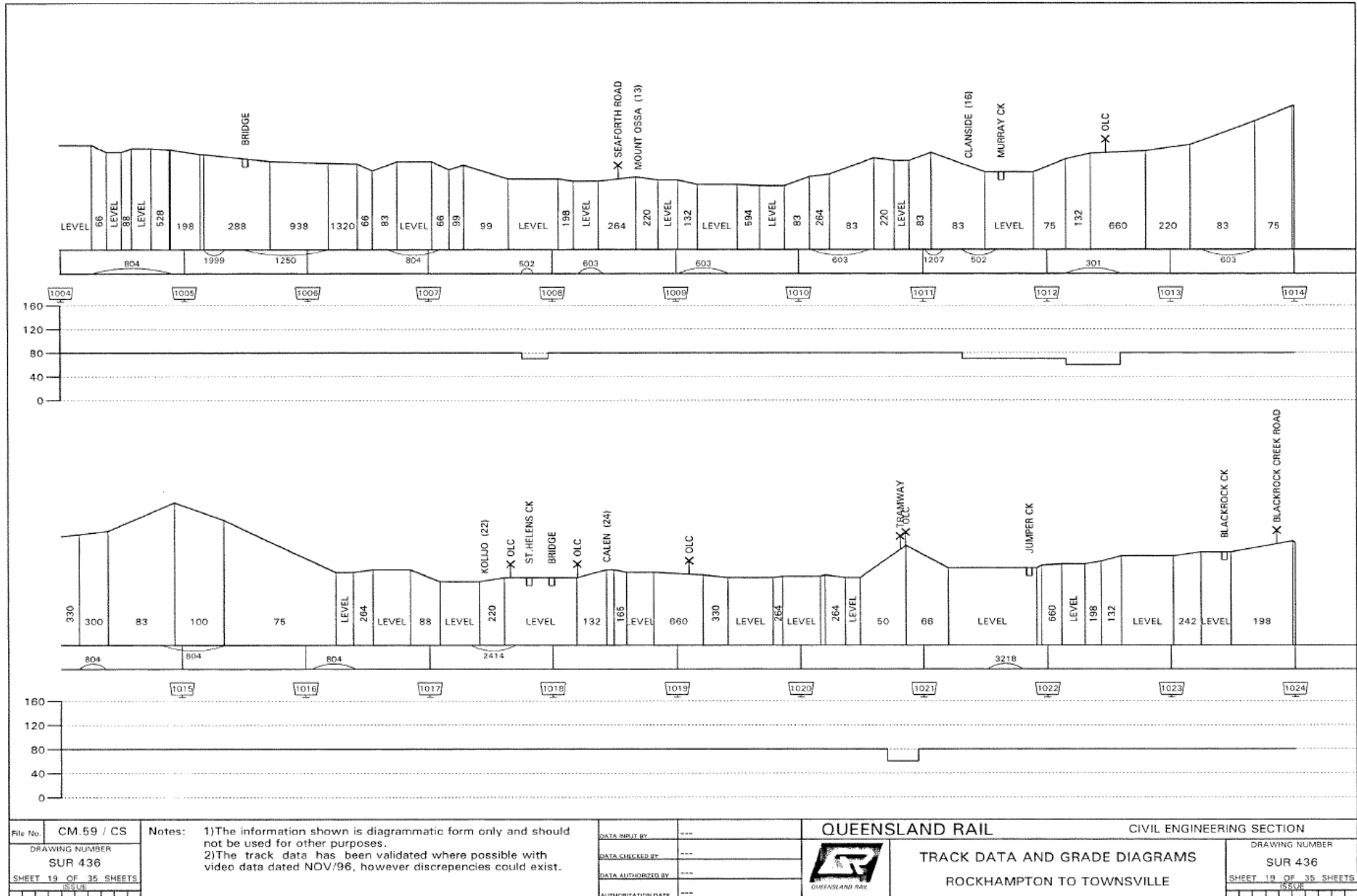


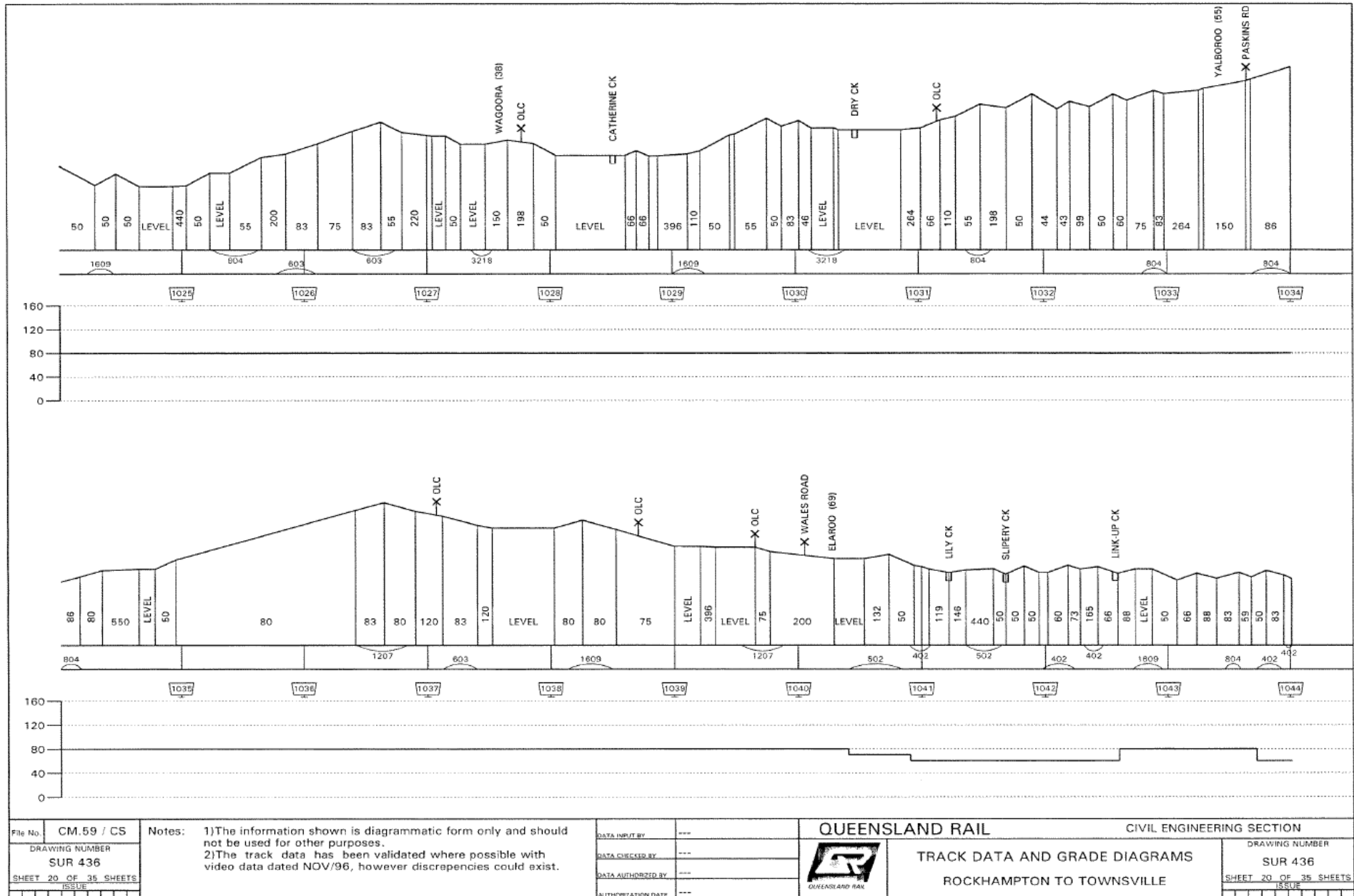
File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
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Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
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TRACK DATA AND GRADE DIAGRAMS		SUR 436	
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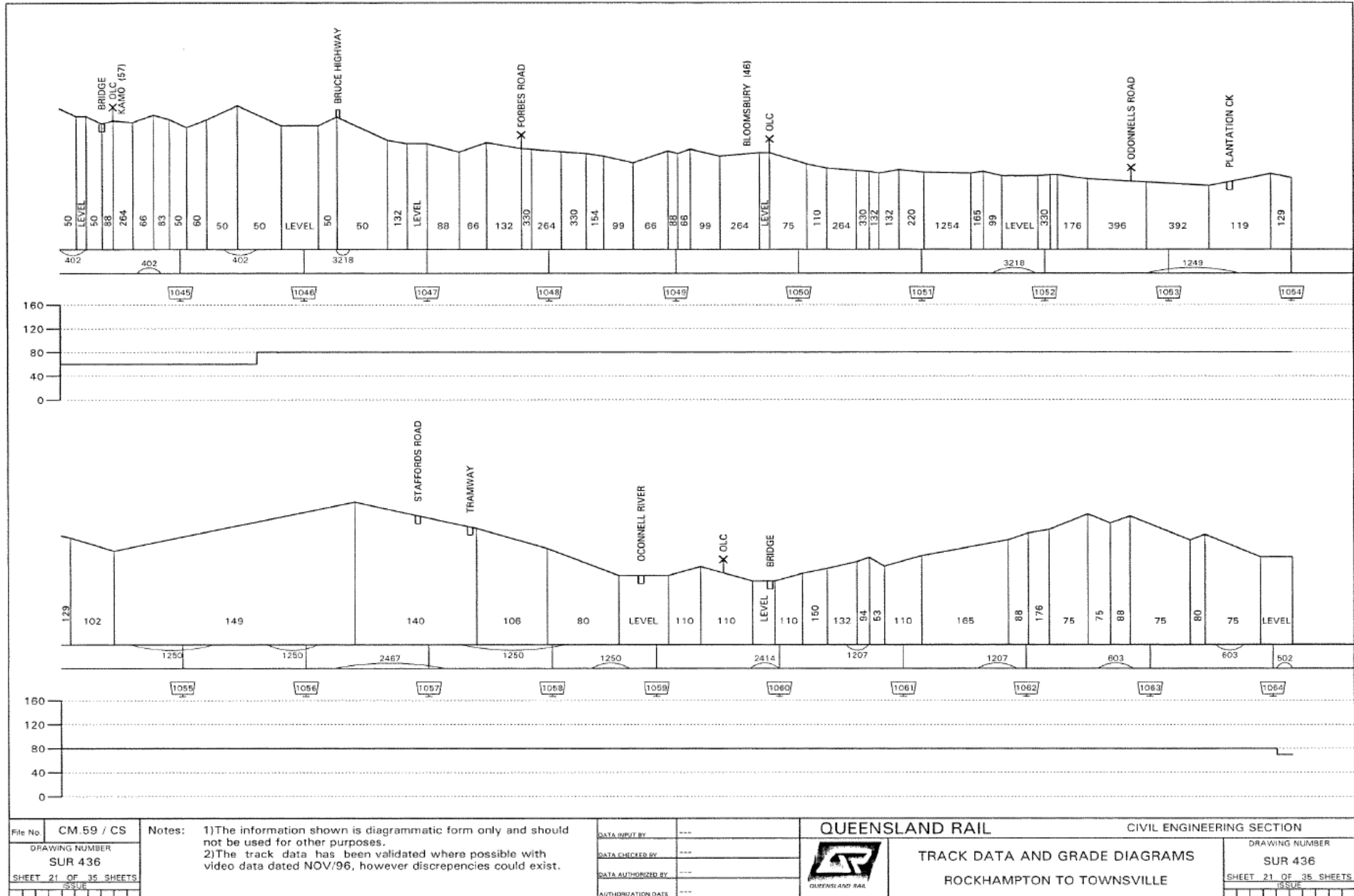
Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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 DATA CHECKED BY: ---
 DATA AUTHORIZED BY: ---
 AUTHORIZATION DATE: ---



QUEENSLAND RAIL CIVIL ENGINEERING SECTION
 TRACK DATA AND GRADE DIAGRAMS
 ROCKHAMPTON TO TOWNVILLE


DRAWING NUMBER SUR 436
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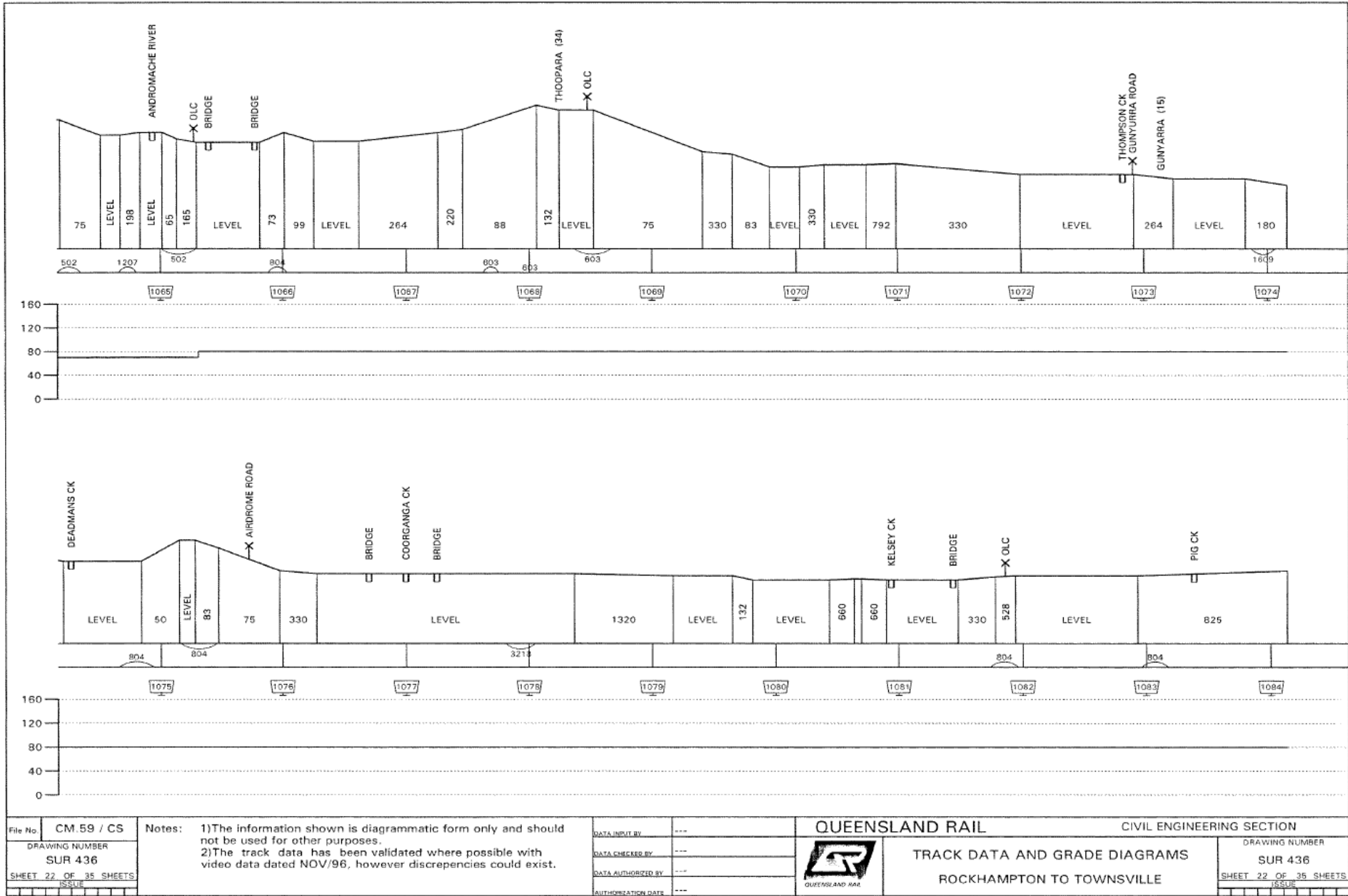



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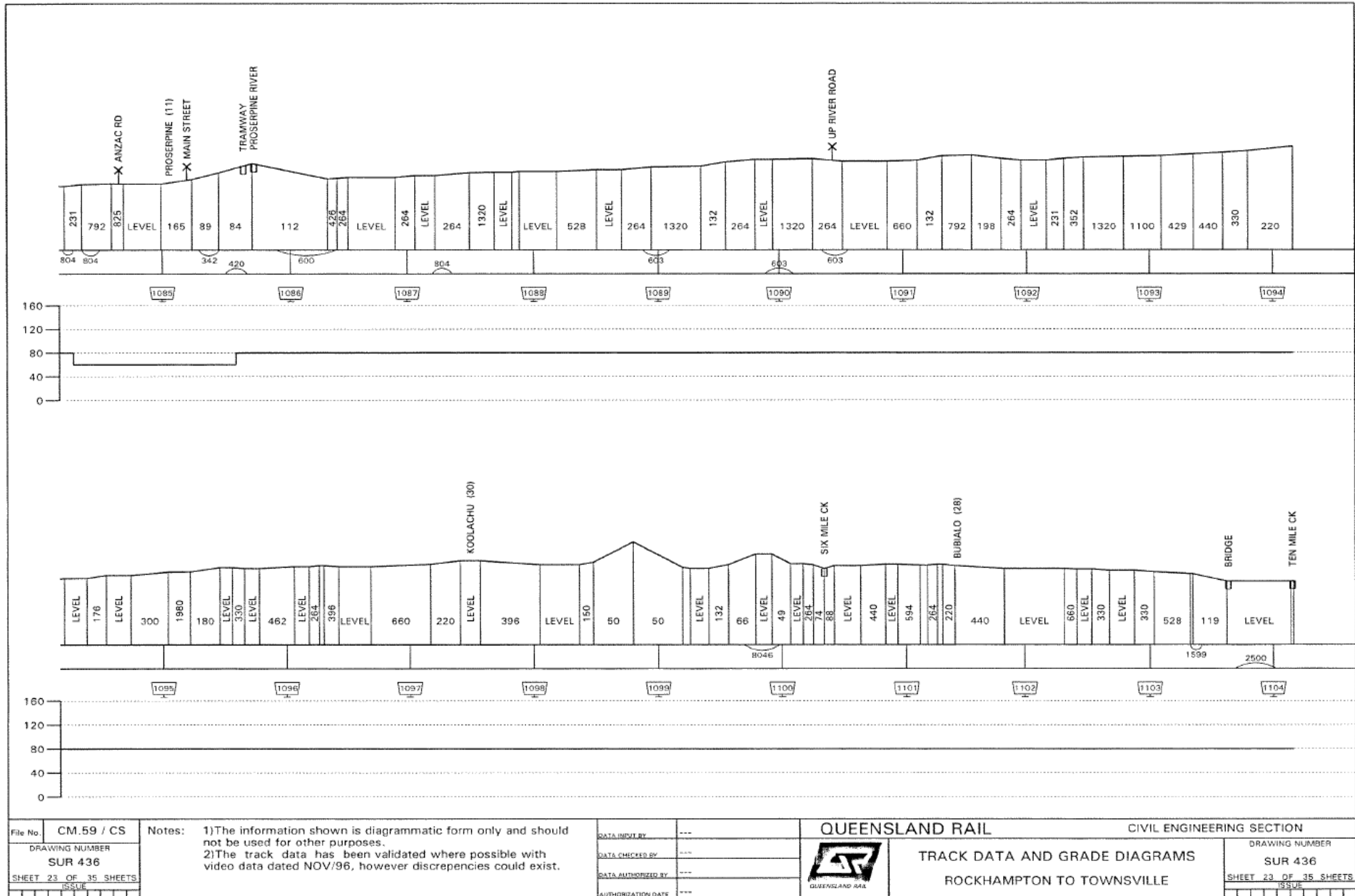
Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
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TRACK DATA AND GRADE DIAGRAMS		SUR 436
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File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---	QUEENSLAND RAIL  TRACK DATA AND GRADE DIAGRAMS ROCKHAMPTON TO TOWNVILLE	CIVIL ENGINEERING SECTION
DRAWING NUMBER SUR 436		DATA CHECKED BY: ---		DRAWING NUMBER SUR 436
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Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

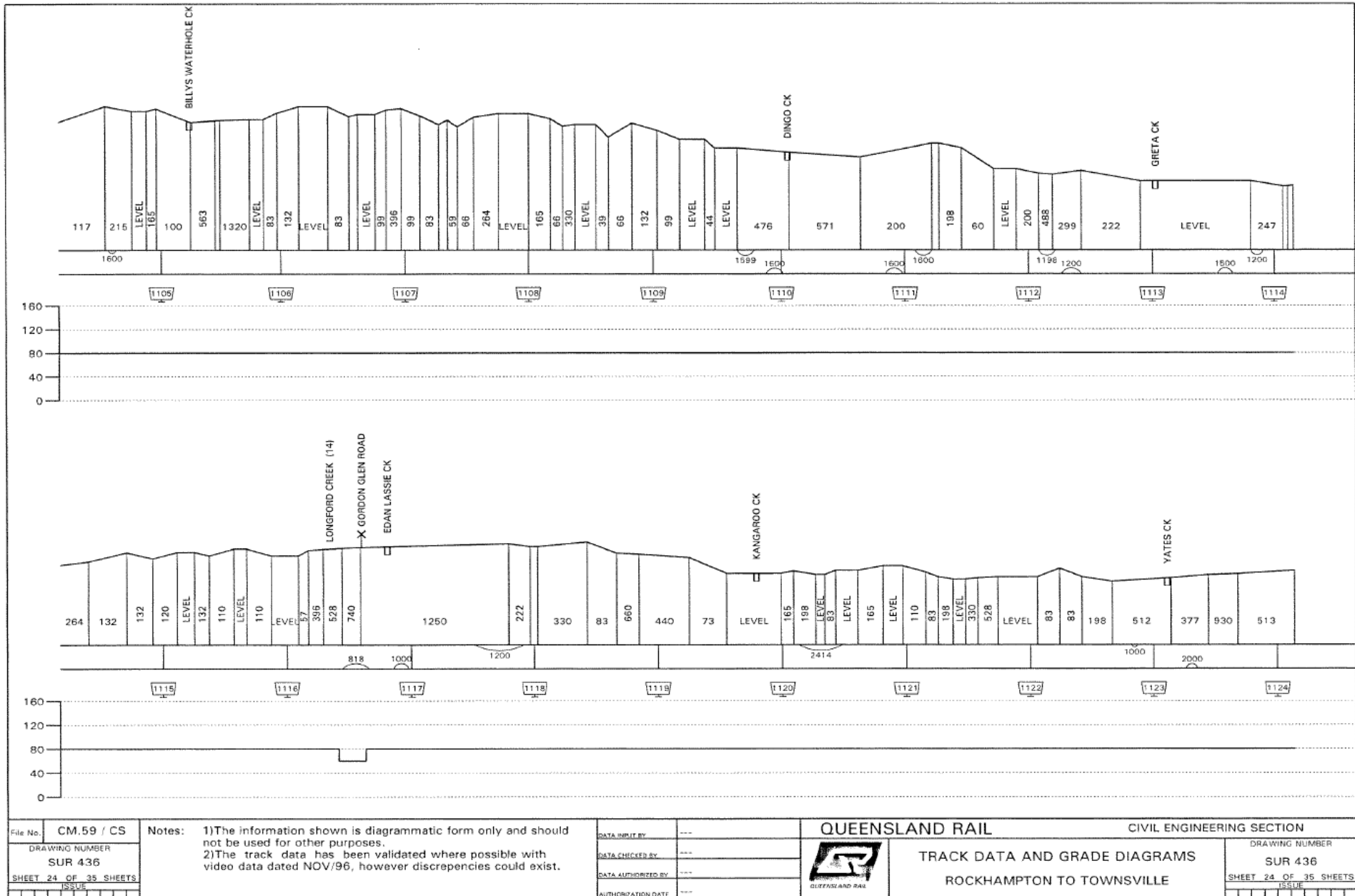
DATA INPUT BY ---
 DATA CHECKED BY ---
 DATA AUTHORIZED BY ---
 AUTHORIZATION DATE ---

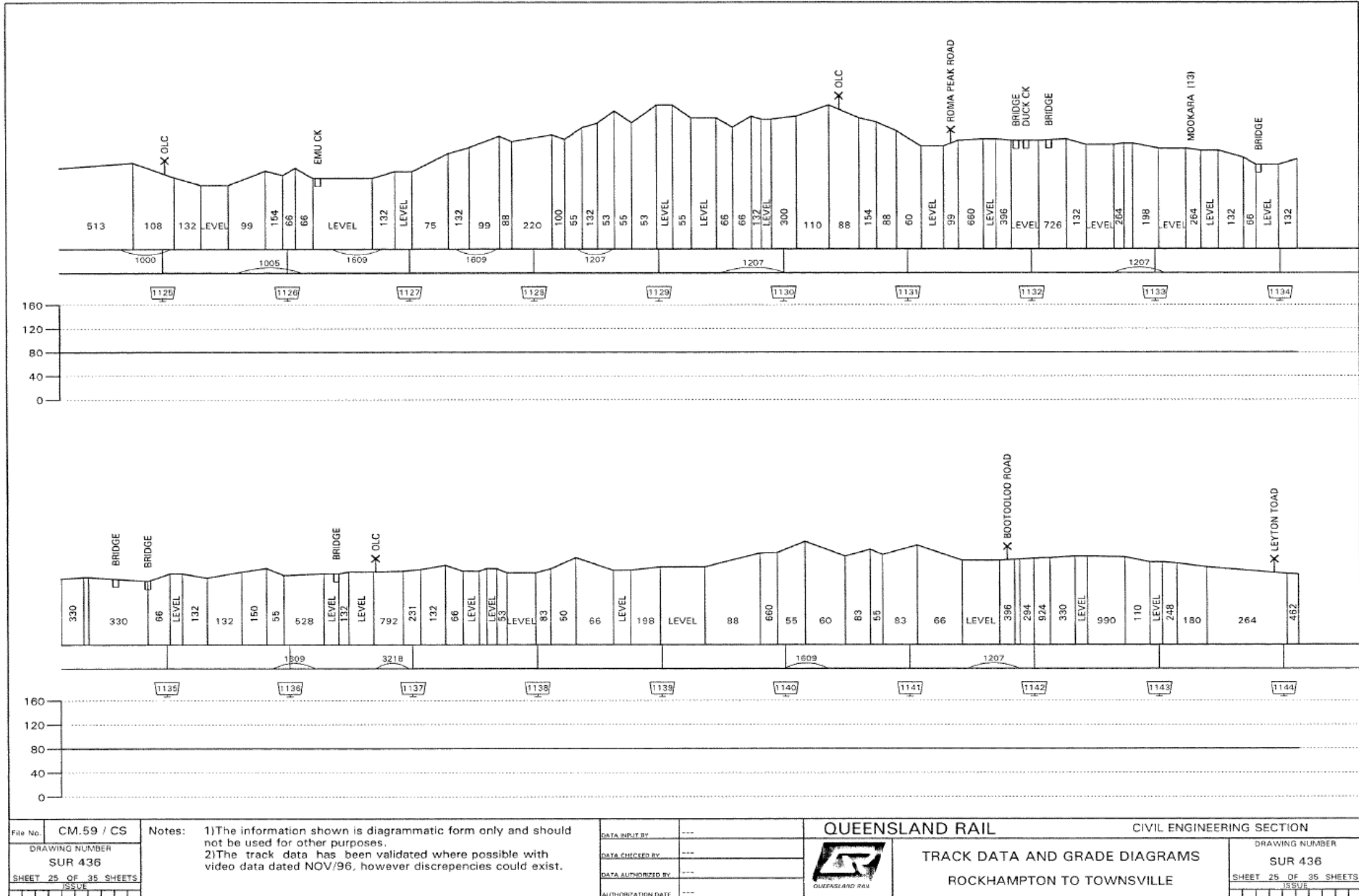
QUEENSLAND RAIL CIVIL ENGINEERING SECTION

TRACK DATA AND GRADE DIAGRAMS
 ROCKHAMPTON TO TOWNSVILLE

DRAWING NUMBER SUR 436
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Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

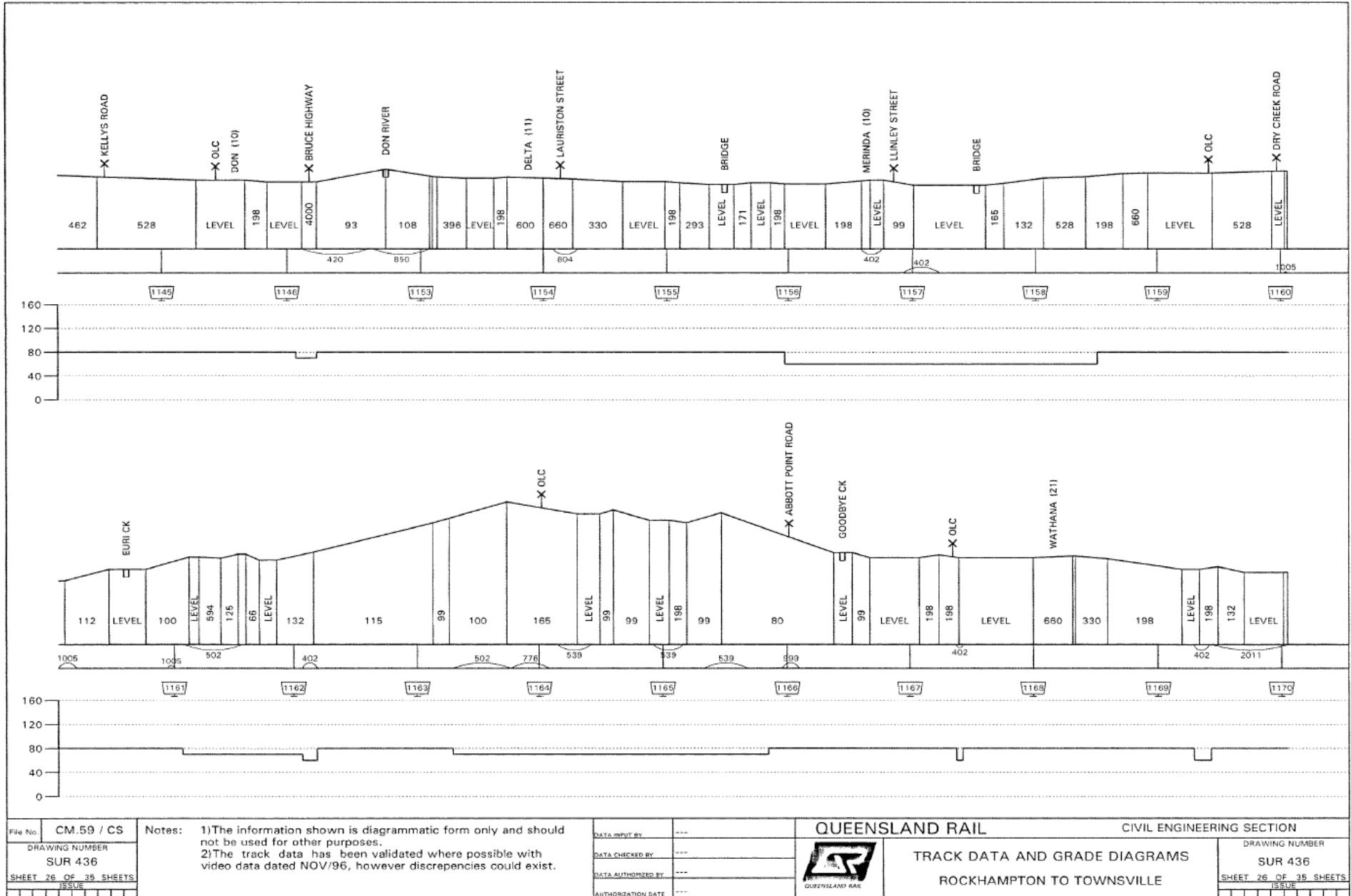
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AUTHORIZATION DATE	---

QUEENSLAND RAIL



CIVIL ENGINEERING SECTION
TRACK DATA AND GRADE DIAGRAMS
ROCKHAMPTON TO TOWNSVILLE


DRAWING NUMBER	SUR 436
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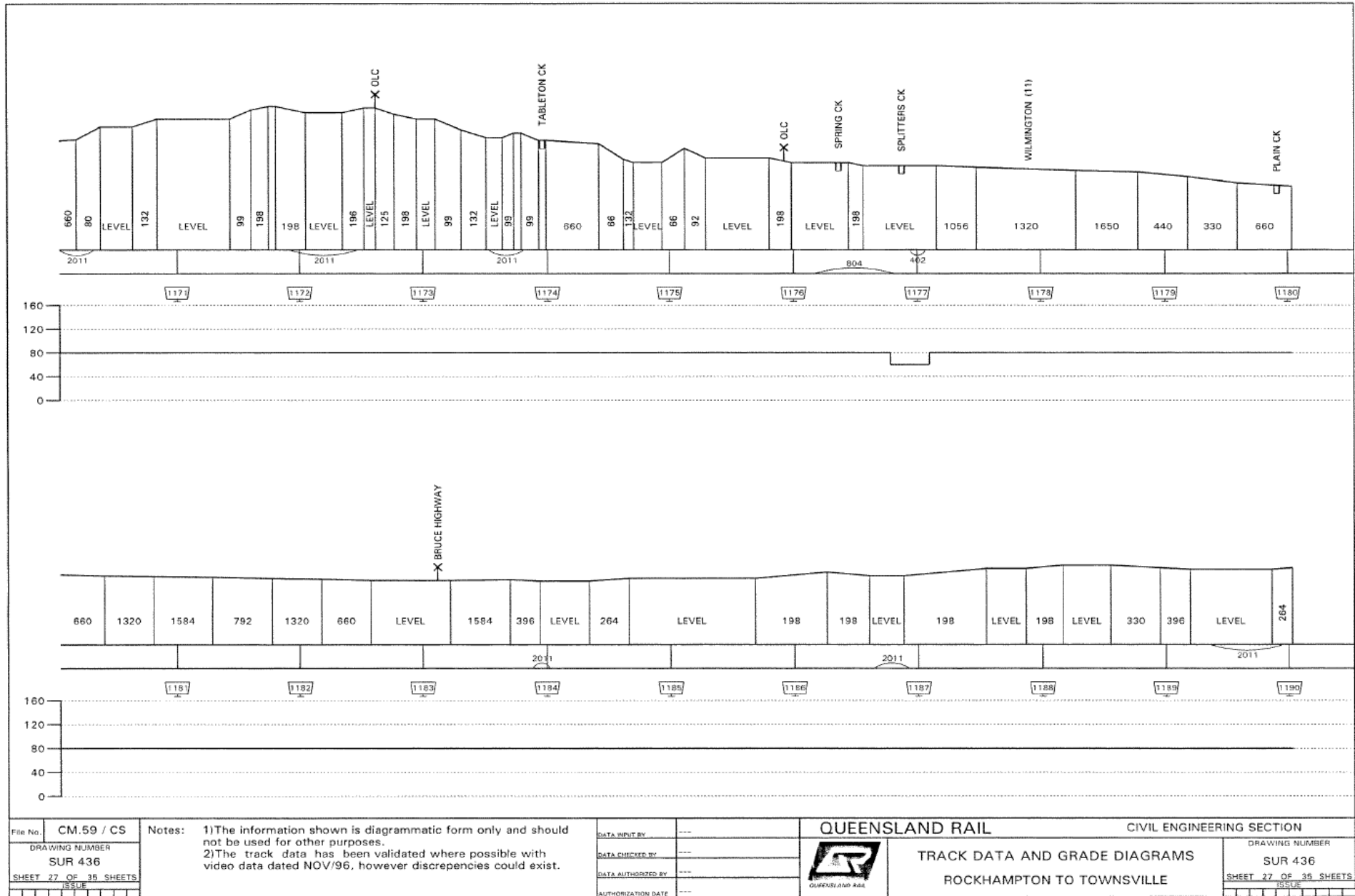
File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
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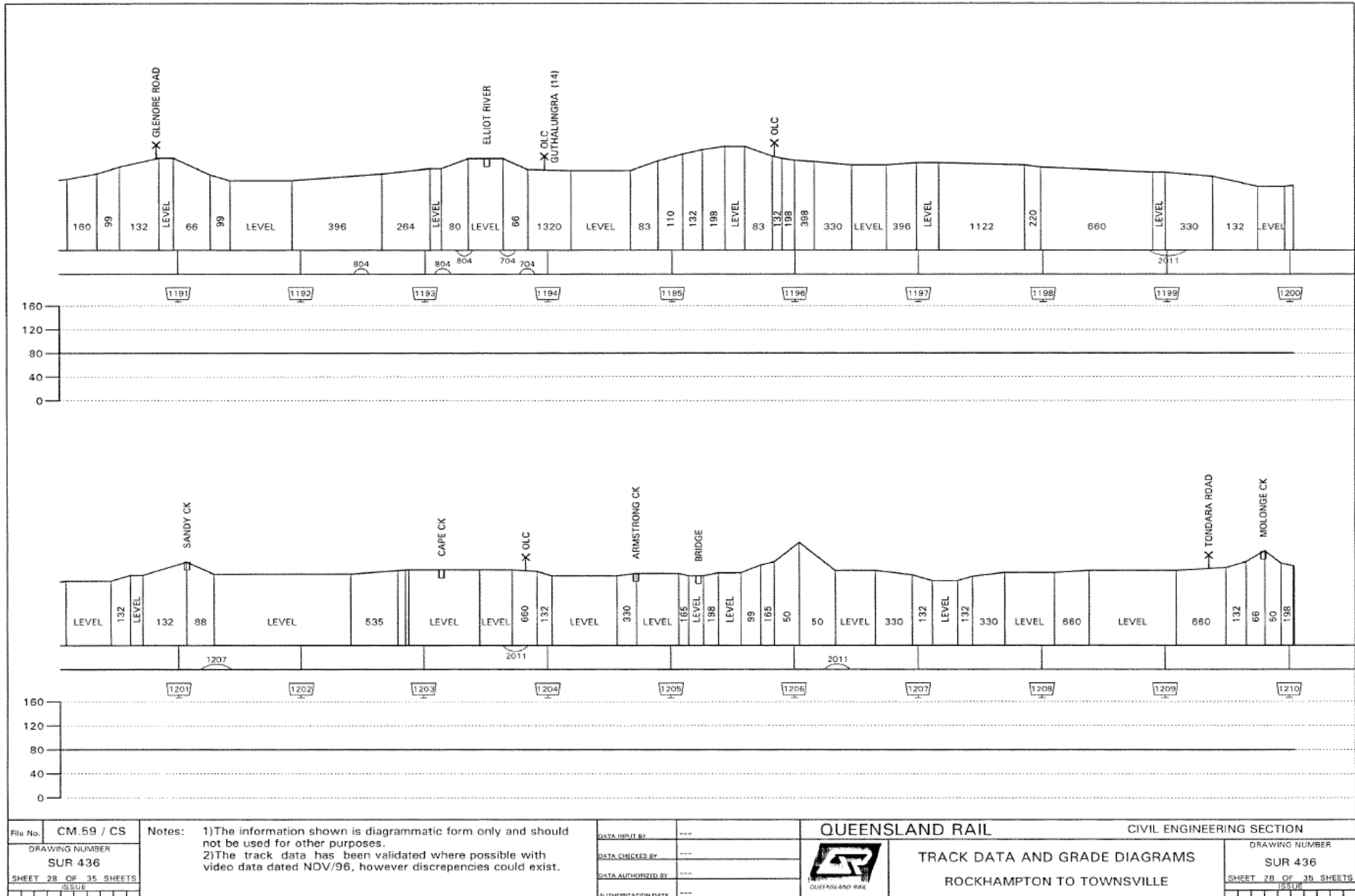
Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.


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DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

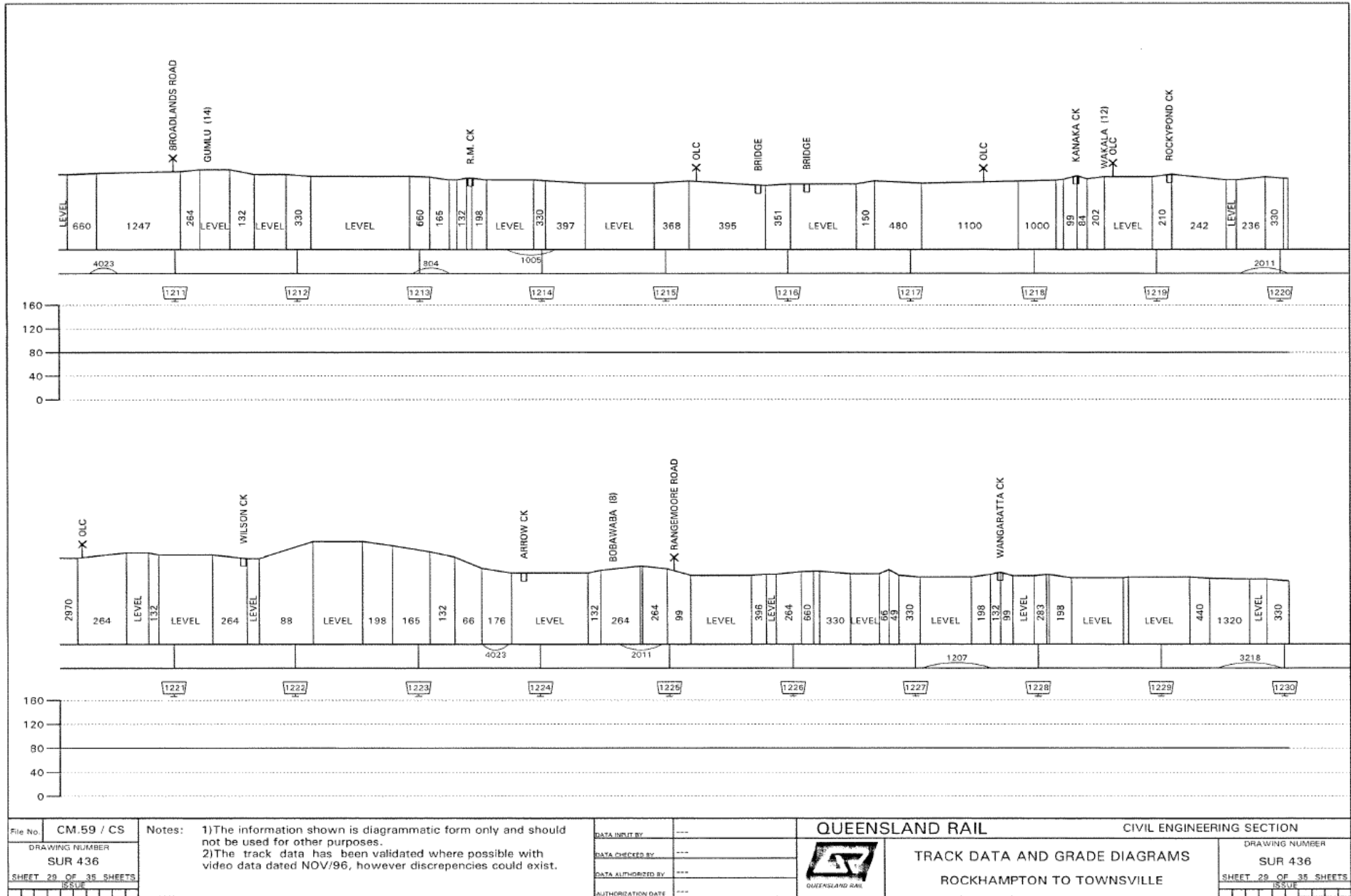
QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
		DRAWING NUMBER
TRACK DATA AND GRADE DIAGRAMS		SUR 436
ROCKHAMPTON TO TOWNVILLE		SHEET 26 OF 35 SHEETS
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File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NDV/96, however discrepancies could exist.	DATA INPUT BY: ---	QUEENSLAND RAIL  CIVIL ENGINEERING SECTION TRACK DATA AND GRADE DIAGRAMS ROCKHAMPTON TO TOWNSVILLE	DRAWING NUMBER SUR 436
DRAWING NUMBER SUR 436		DATA CHECKED BY: ---		DRAWING NUMBER SUR 436
SHEET 28 OF 35 SHEETS		DATA AUTHORIZED BY: ---		SHEET 28 OF 35 SHEETS
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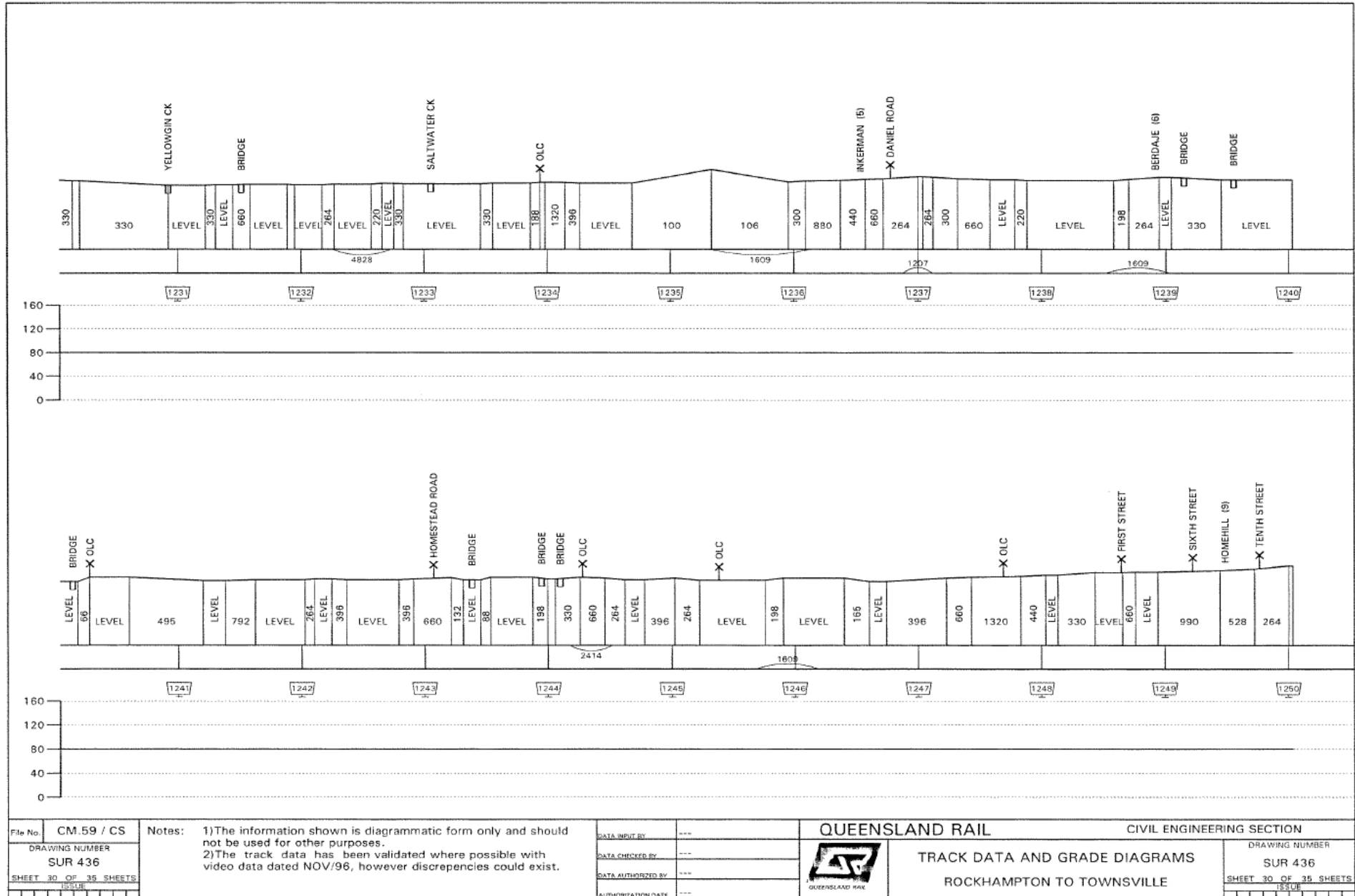


File No.	CM.59 / CS
DRAWING NUMBER	SUR 436
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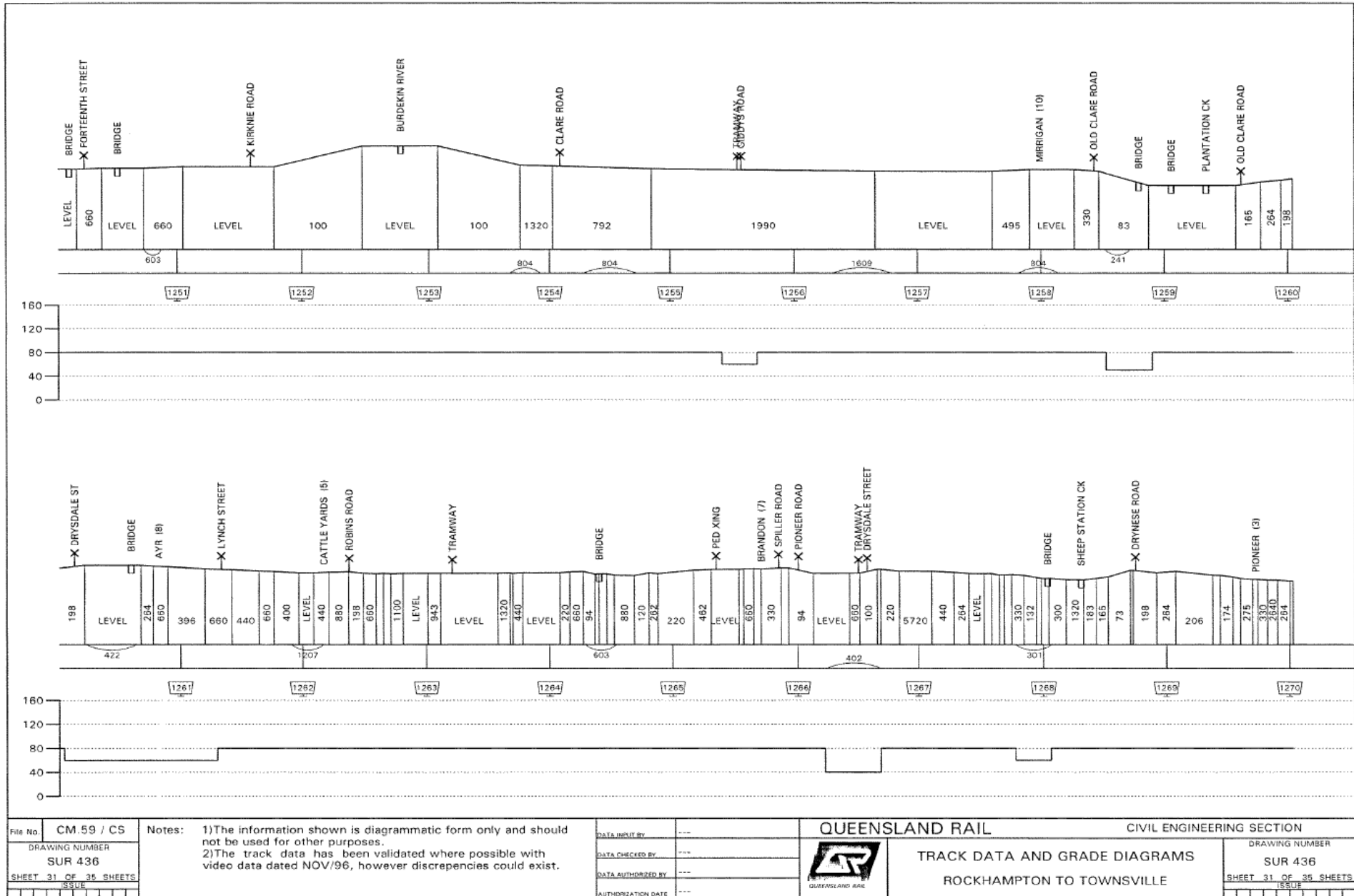
Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
		DRAWING NUMBER	
TRACK DATA AND GRADE DIAGRAMS		SUR 436	
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File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---	QUEENSLAND RAIL CIVIL ENGINEERING SECTION TRACK DATA AND GRADE DIAGRAMS ROCKHAMPTON TO TOWNVILLE	DRAWING NUMBER SUR 436
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DRAWING NUMBER	SUR 436
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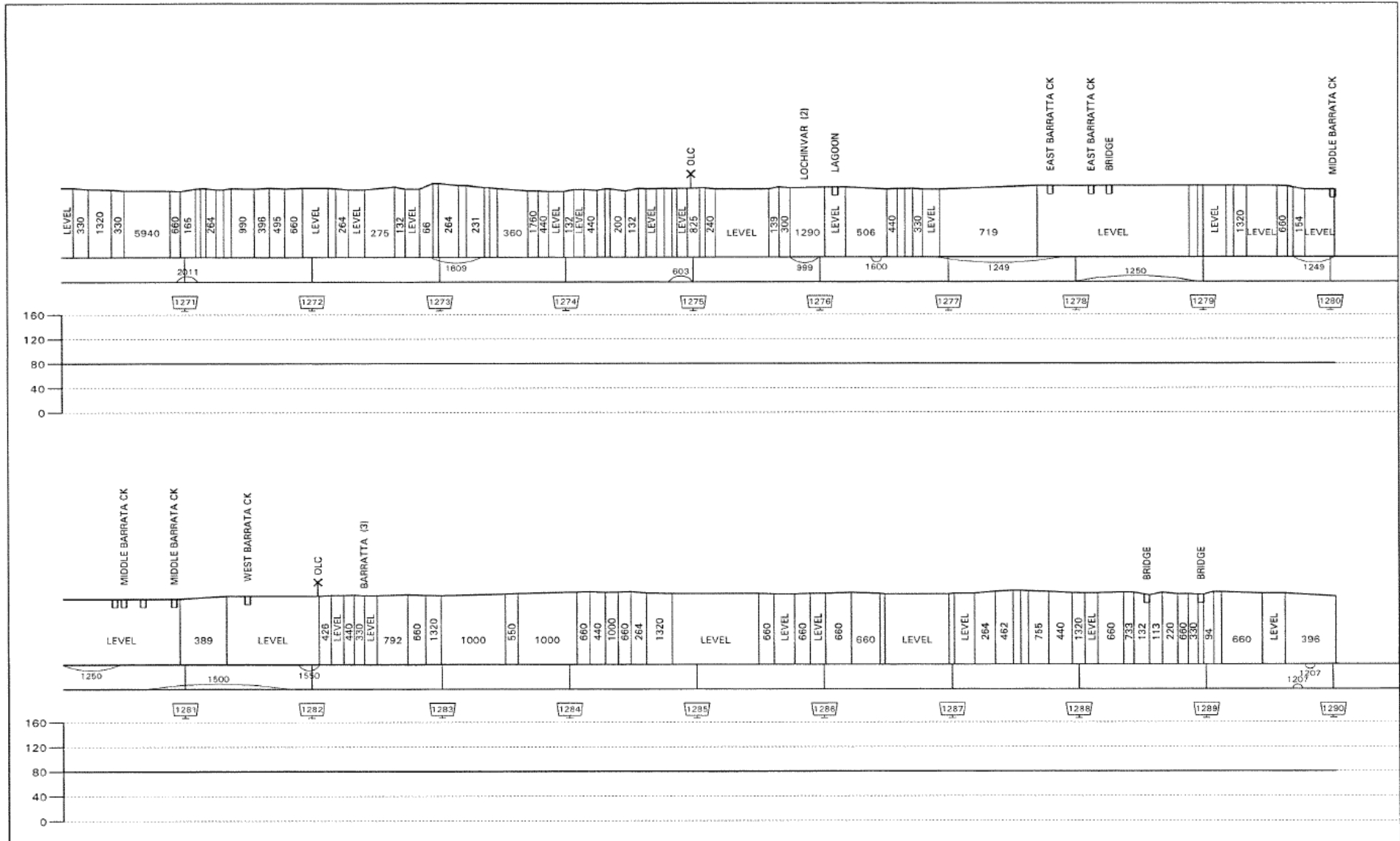
Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.


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DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

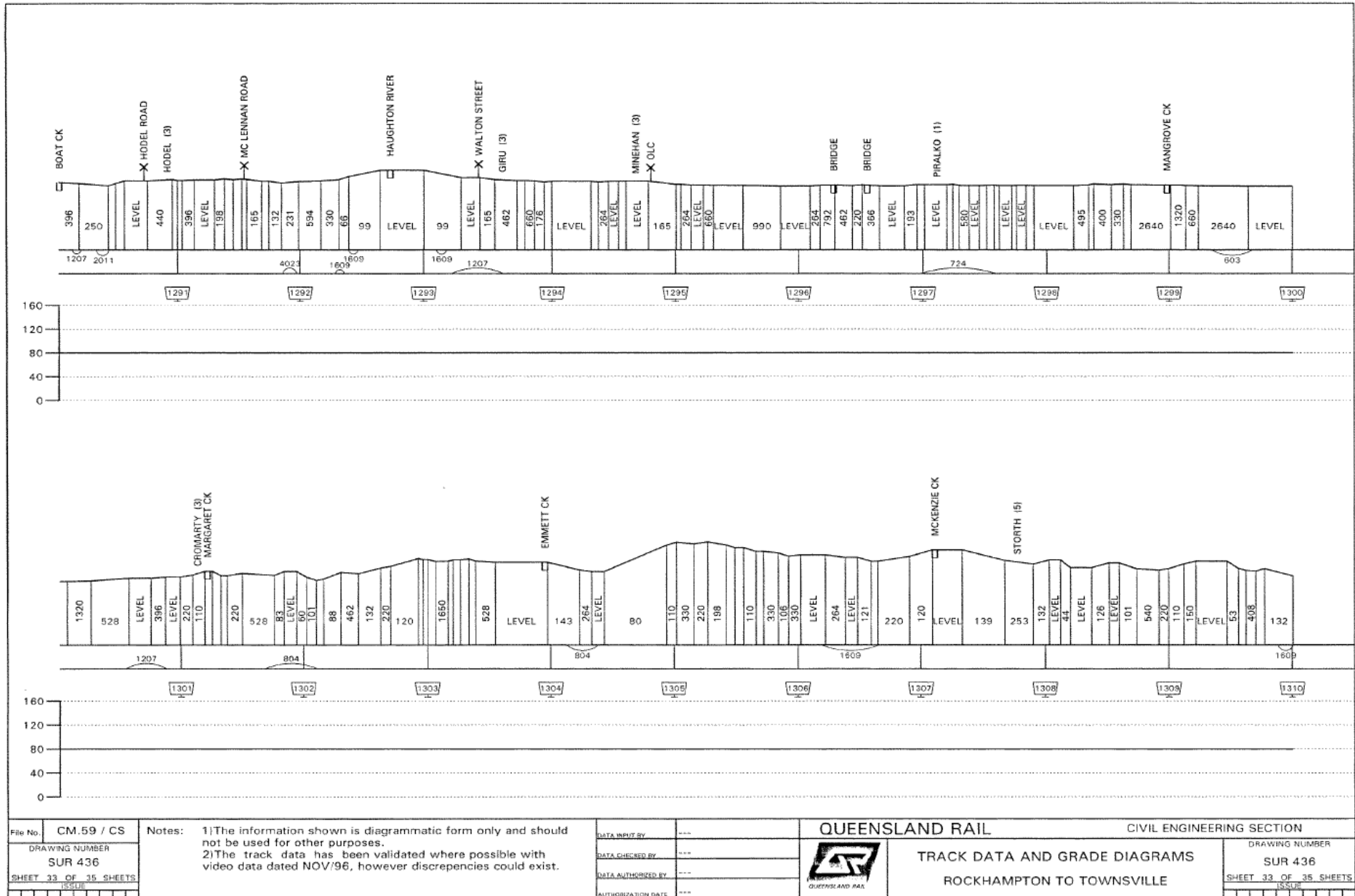


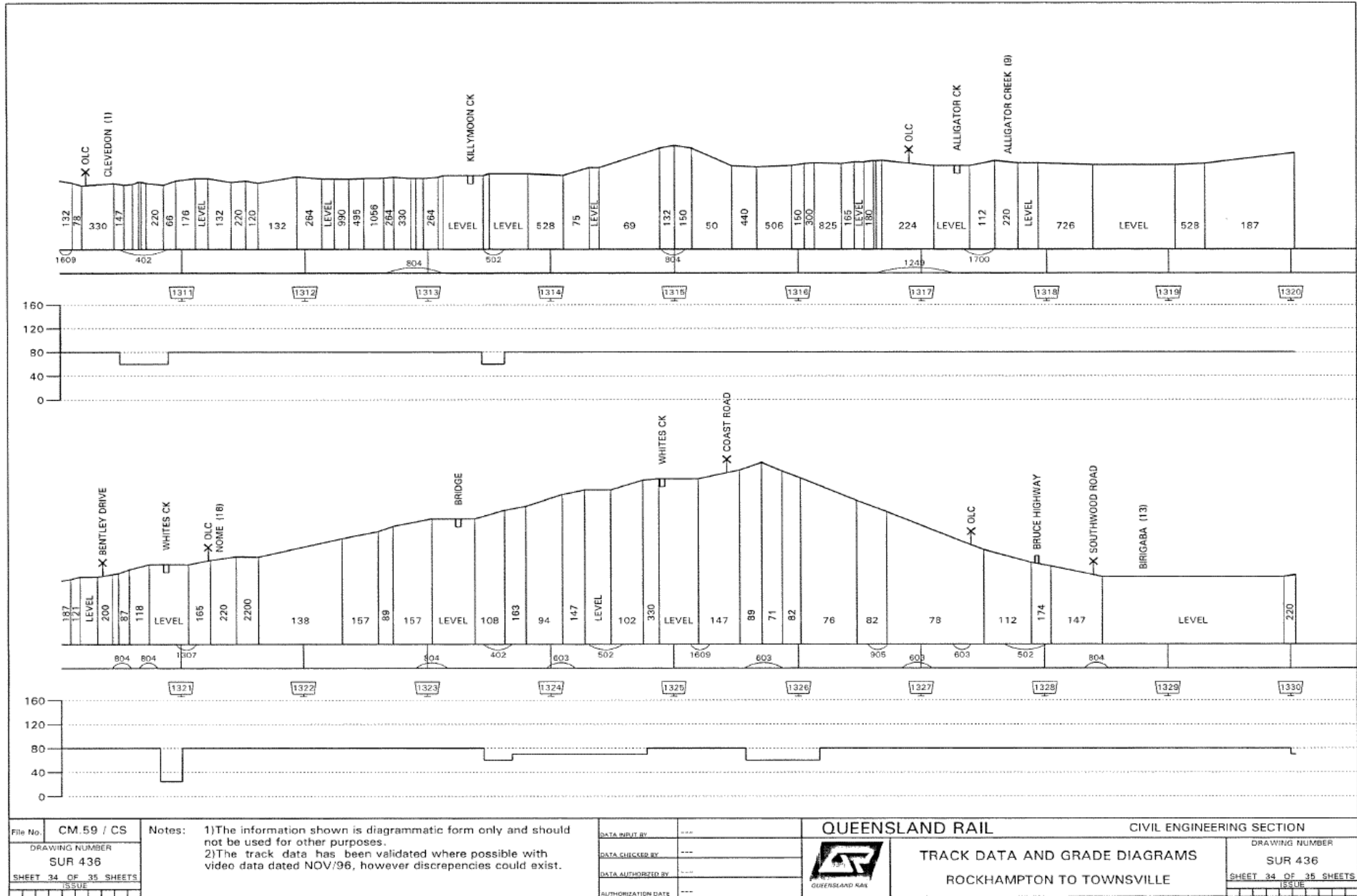
QUEENSLAND RAIL CIVIL ENGINEERING SECTION
 TRACK DATA AND GRADE DIAGRAMS
 ROCKHAMPTON TO TOWNVILLE

DRAWING NUMBER	SUR 436
SHEET 31 OF 36 SHEETS	ISSUE



File No. CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY: ---	QUEENSLAND RAIL  CIVIL ENGINEERING SECTION	DRAWING NUMBER	
DRAWING NUMBER SUR 436		DATA CHECKED BY: ---		TRACK DATA AND GRADE DIAGRAMS	DRAWING NUMBER SUR 436
SHEET 32 OF 35 SHEETS		DATA AUTHORIZED BY: ---		ROCKHAMPTON TO TOWNVILLE	SHEET 32 OF 35 SHEETS
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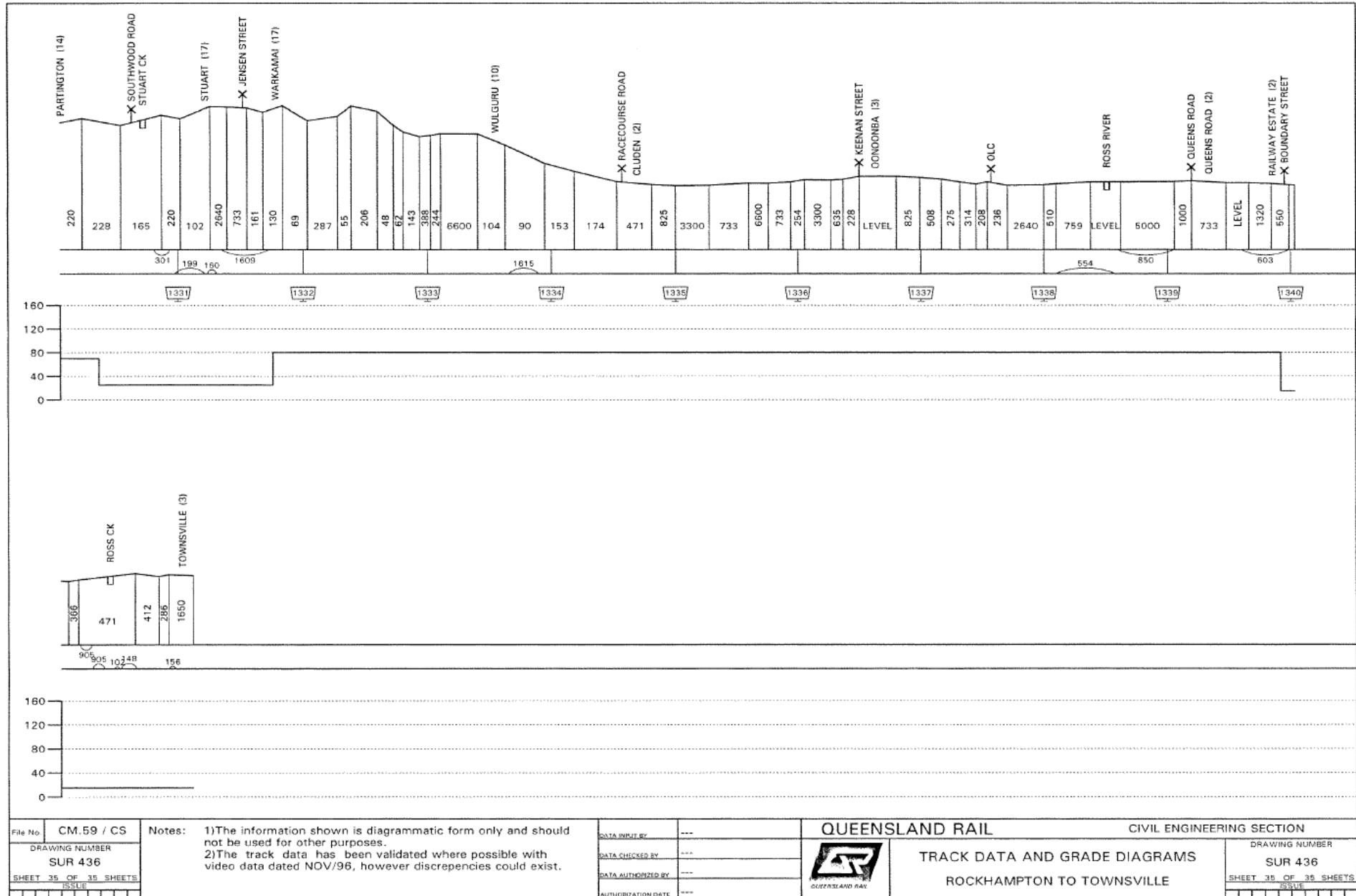


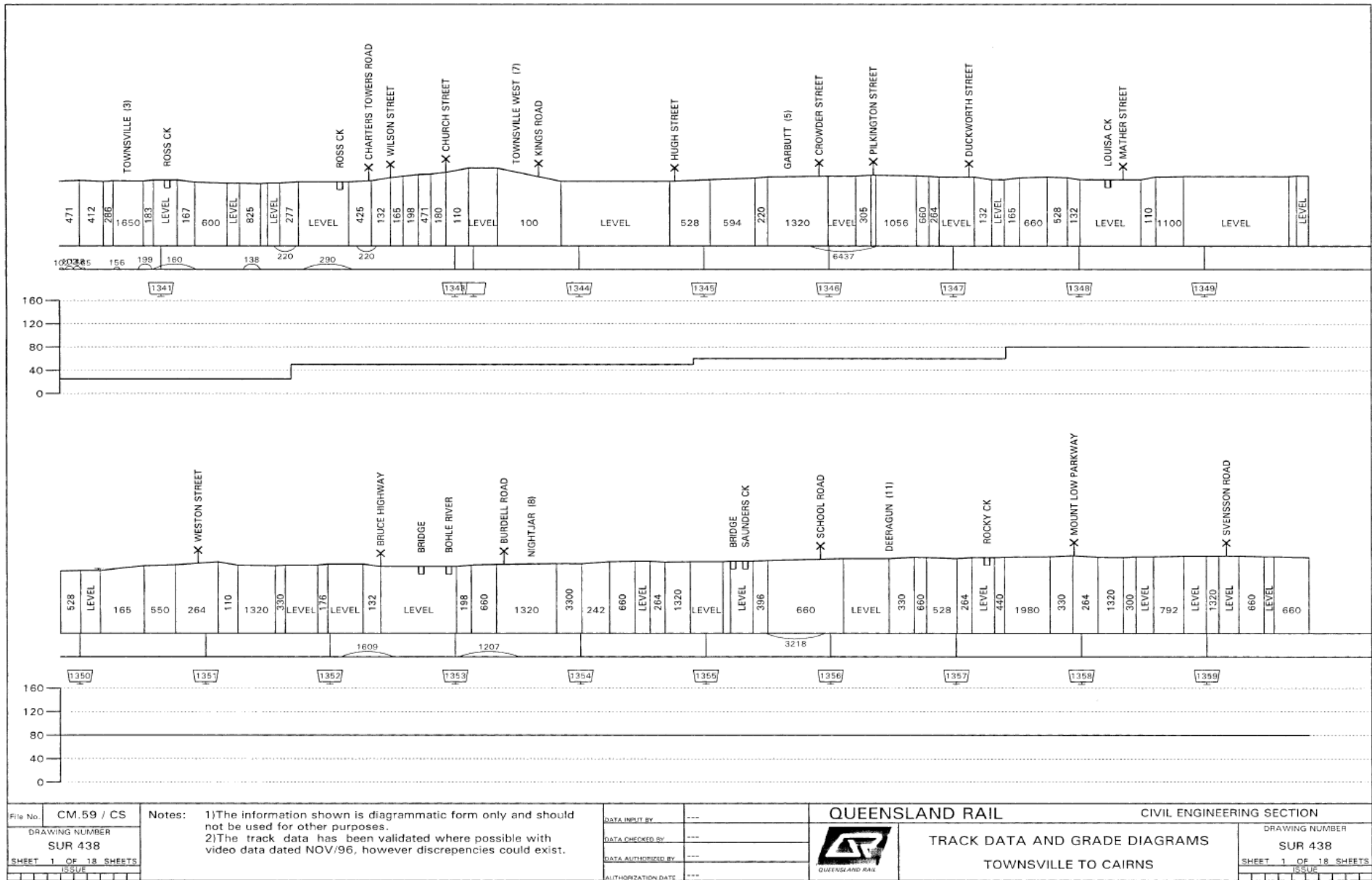
File No.	CM 59 / CS
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Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

DATA INPUT BY	---
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DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
		DRAWING NUMBER
TRACK DATA AND GRADE DIAGRAMS		SUR 436
ROCKHAMPTON TO TOWNVILLE		SHEET 34 OF 35 SHEETS
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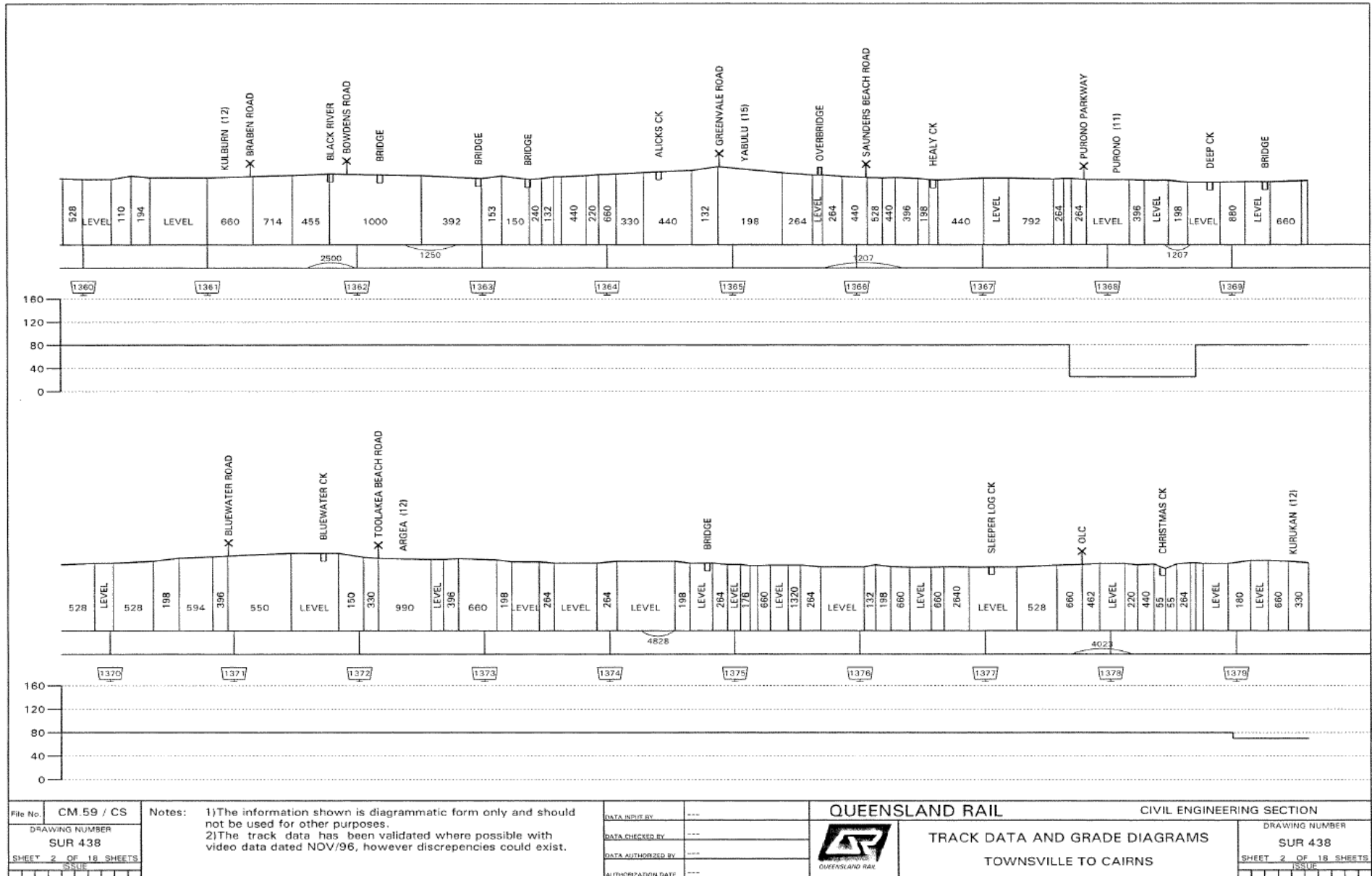


File No.	CM.59 / CS
DRAWING NUMBER	SUR 438
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Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

DATA INPUT BY	---
DATA CHECKED BY	---
DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
		DRAWING NUMBER
TRACK DATA AND GRADE DIAGRAMS		SUR 438
TOWNVILLE TO CAIRNS		SHEET 1 OF 18 SHEETS
		ISSUE



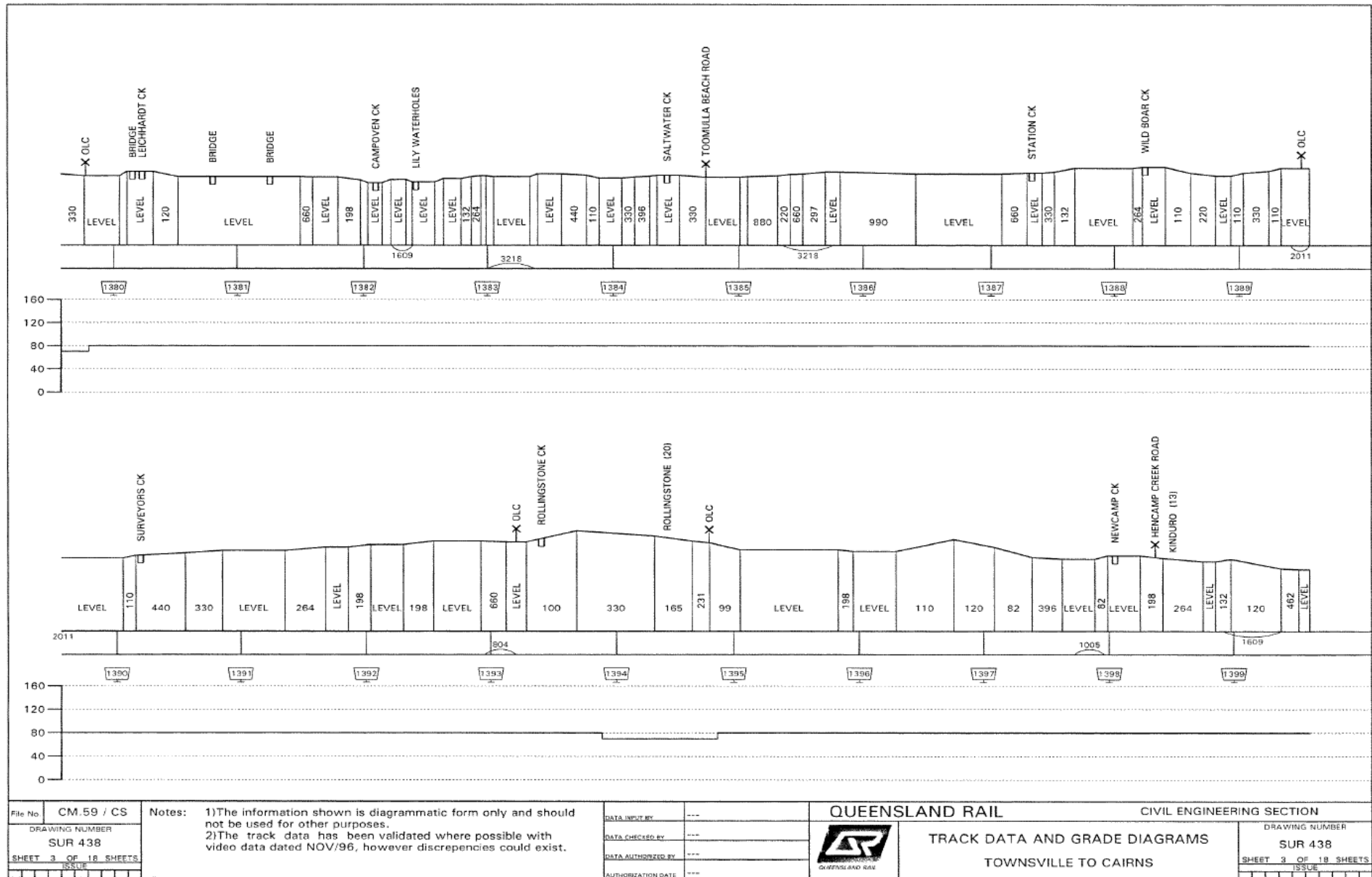
File No: CM.59 / CS
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 SHEET 2 OF 18 SHEETS

Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

DATA INPUT BY: ---
 DATA CHECKED BY: ---
 DATA AUTHORIZED BY: ---
 AUTHORIZATION DATE: ---

QUEENSLAND RAIL CIVIL ENGINEERING SECTION
 TRACK DATA AND GRADE DIAGRAMS
 TOWNVILLE TO CAIRNS
 DRAWING NUMBER: SUR 438
 SHEET 2 OF 18 SHEETS




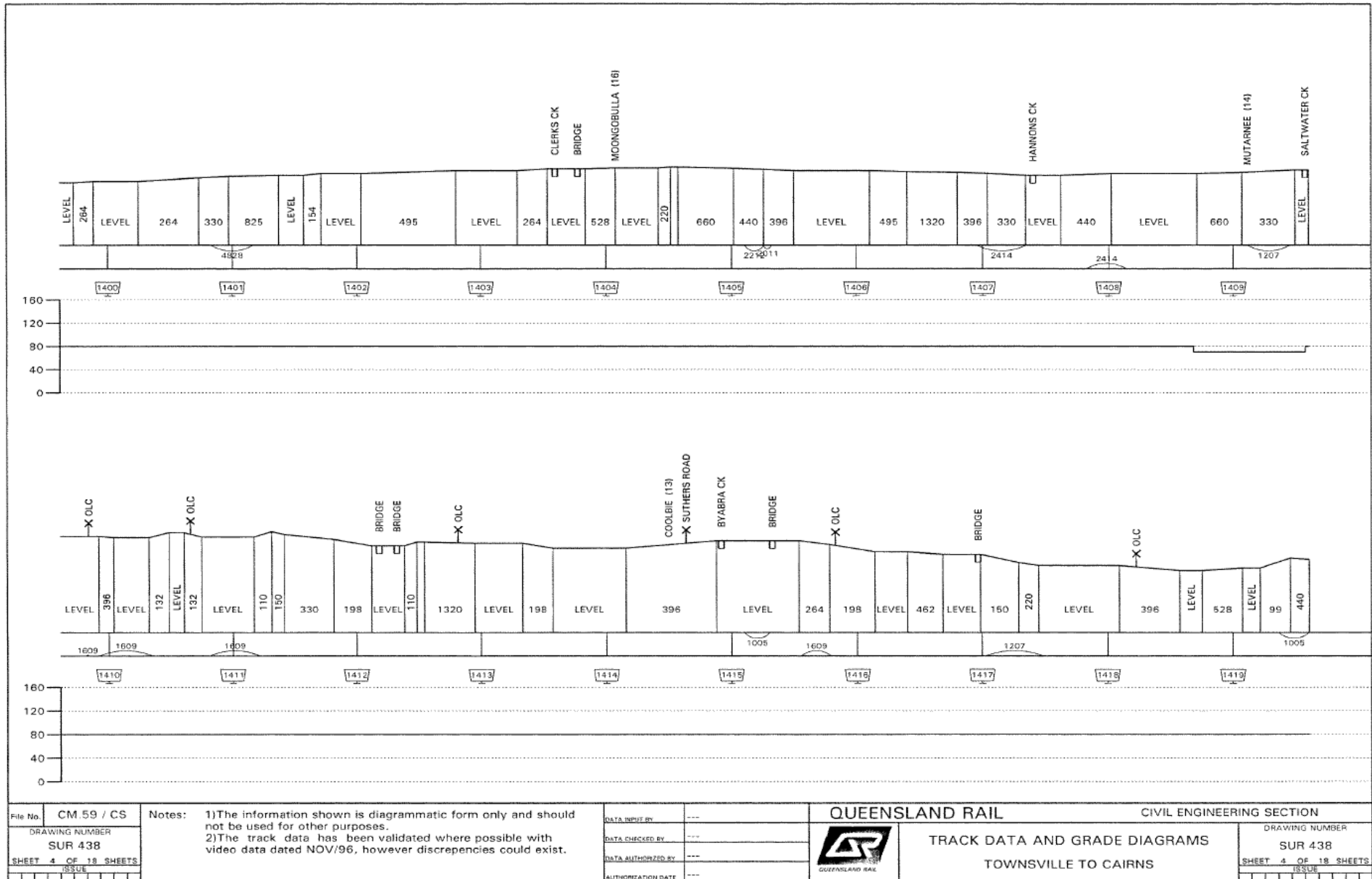


File No.	CM.59 / CS
DRAWING NUMBER	SUR 438
SHEET 3 OF 18 SHEETS	
ISSUE	

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 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
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TRACK DATA AND GRADE DIAGRAMS		SUR 438	
TOWNSVILLE TO CAIRNS		SHEET 3 OF 18 SHEETS	
		ISSUE	

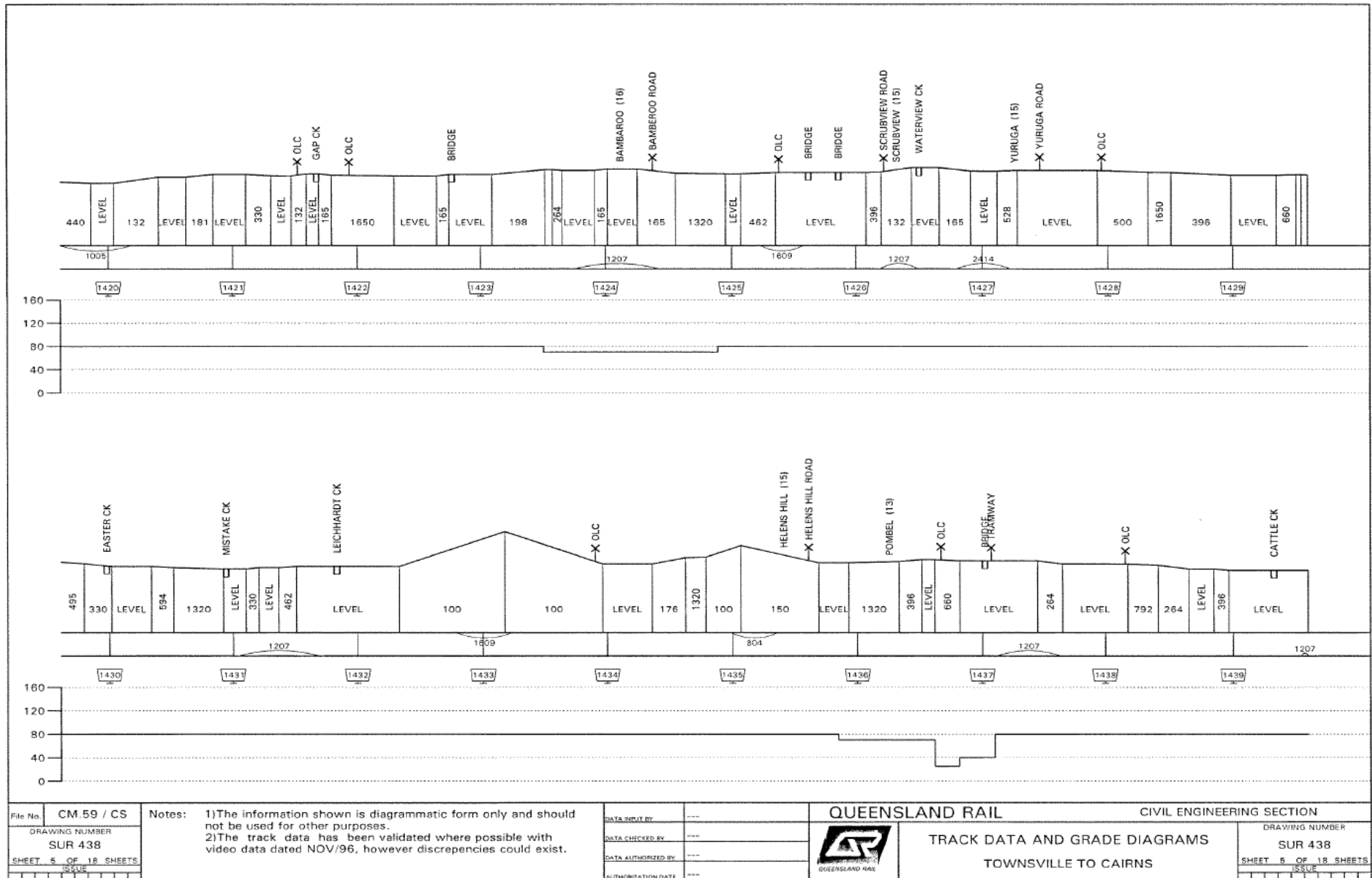


File No. CM.59 / CS
 DRAWING NUMBER SUR 438
 SHEET 4 OF 18 SHEETS
 ISSUE

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QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
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TOWNSVILLE TO CAIRNS		SHEET 4 OF 18 SHEETS	
		ISSUE	

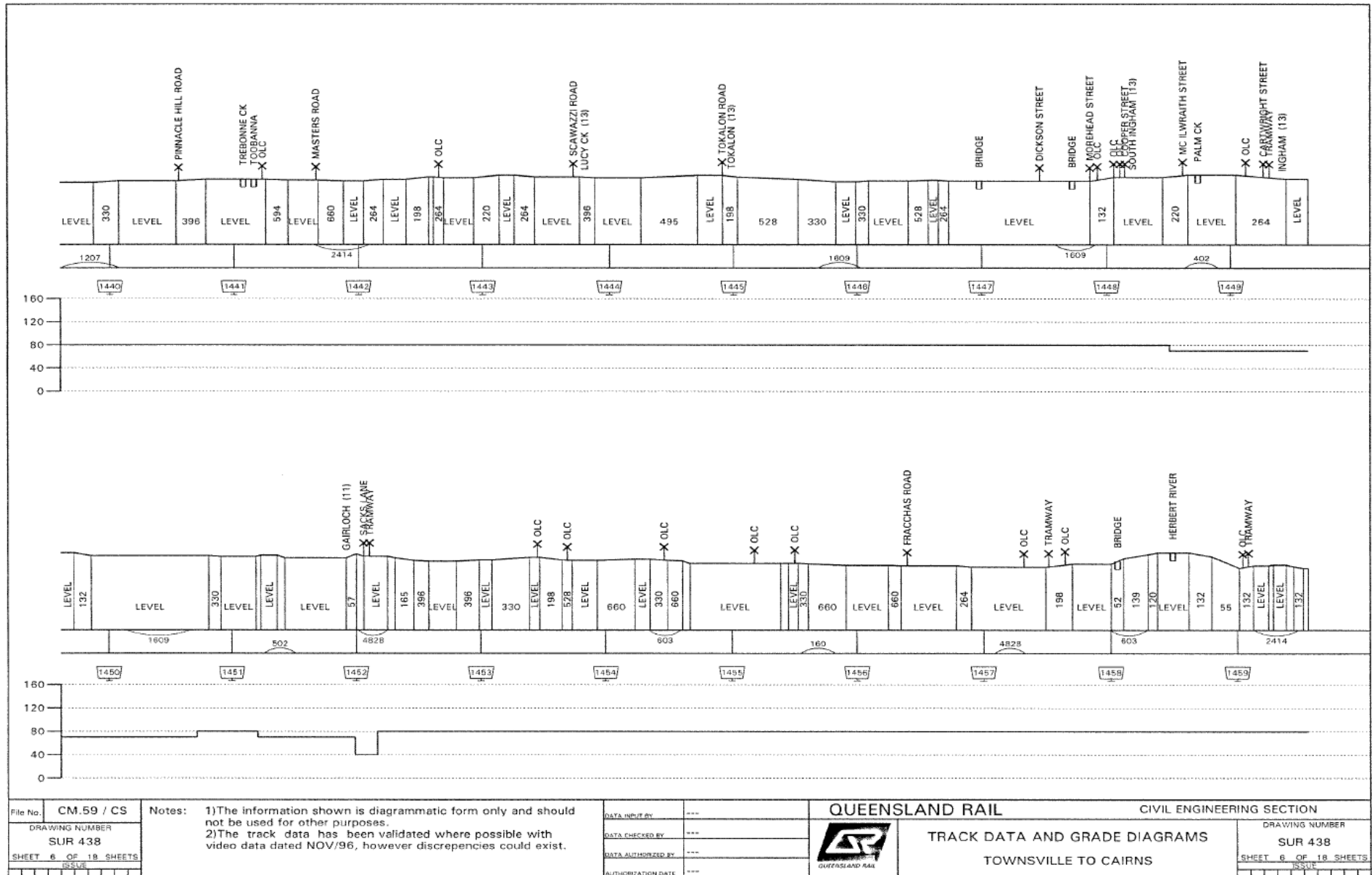


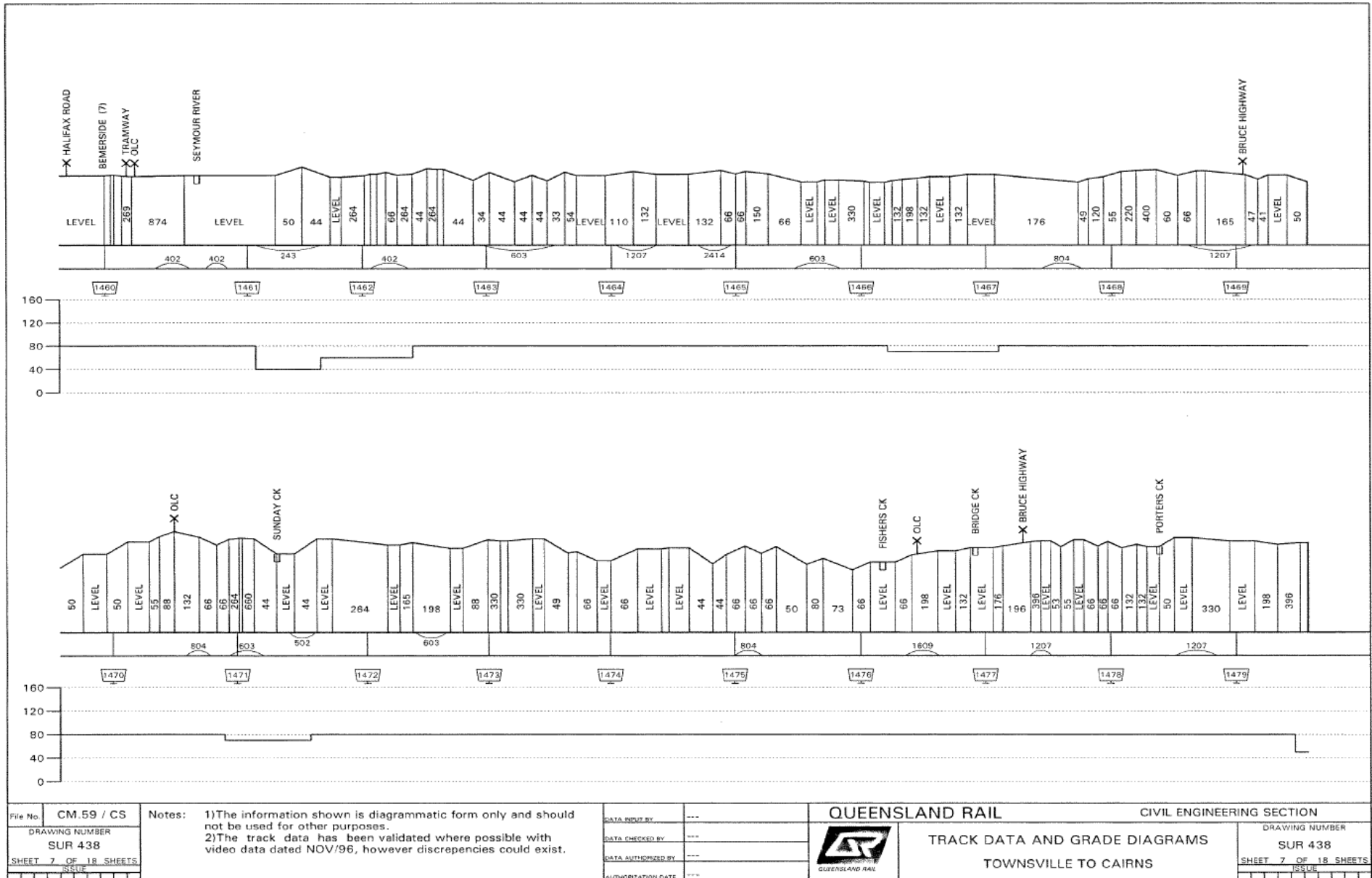
File No.	CM.59 / CS
DRAWING NUMBER	SUR 438
SHEET 5 OF 18 SHEETS	ISSUE

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 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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DATA CHECKED BY	---
DATA AUTHORIZED BY	---
AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
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TOWNSVILLE TO CAIRNS		SHEET 5 OF 18 SHEETS
		ISSUE




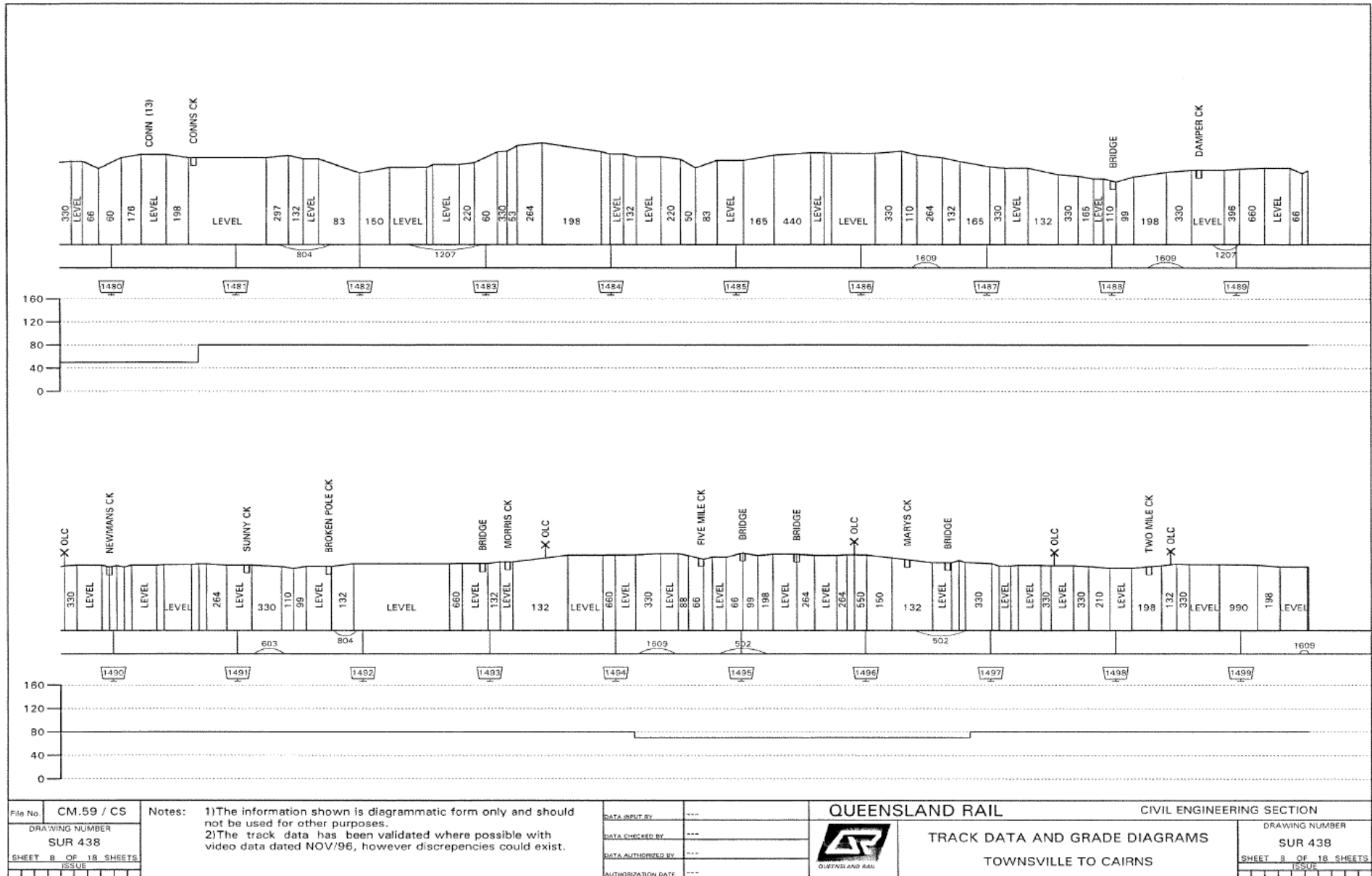


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SHEET 7 OF 18 SHEETS	

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 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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AUTHORIZATION DATE	---


QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
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TRACK DATA AND GRADE DIAGRAMS		SUR 438
TOWNSVILLE TO CAIRNS		SHEET 7 OF 18 SHEETS

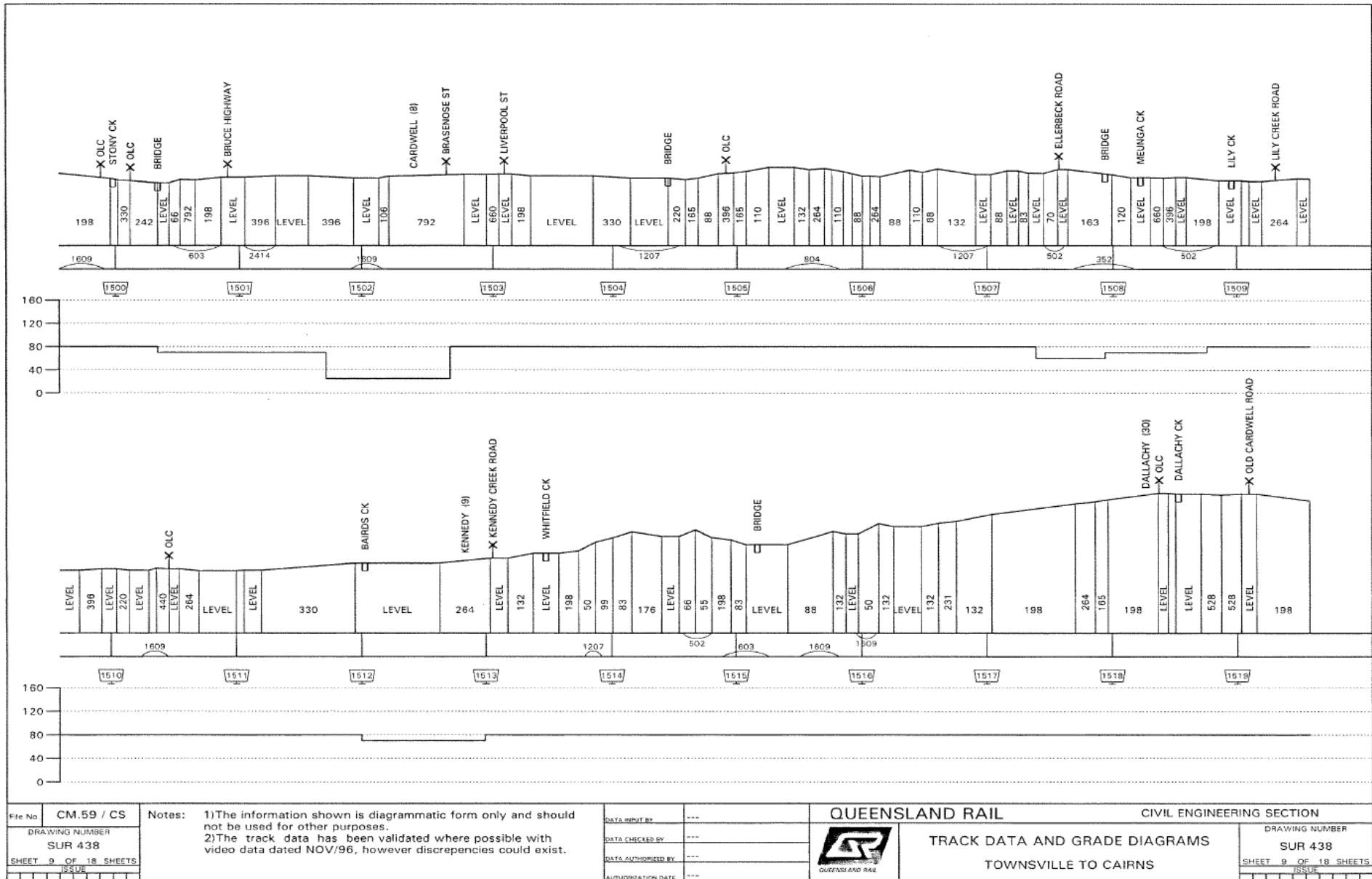


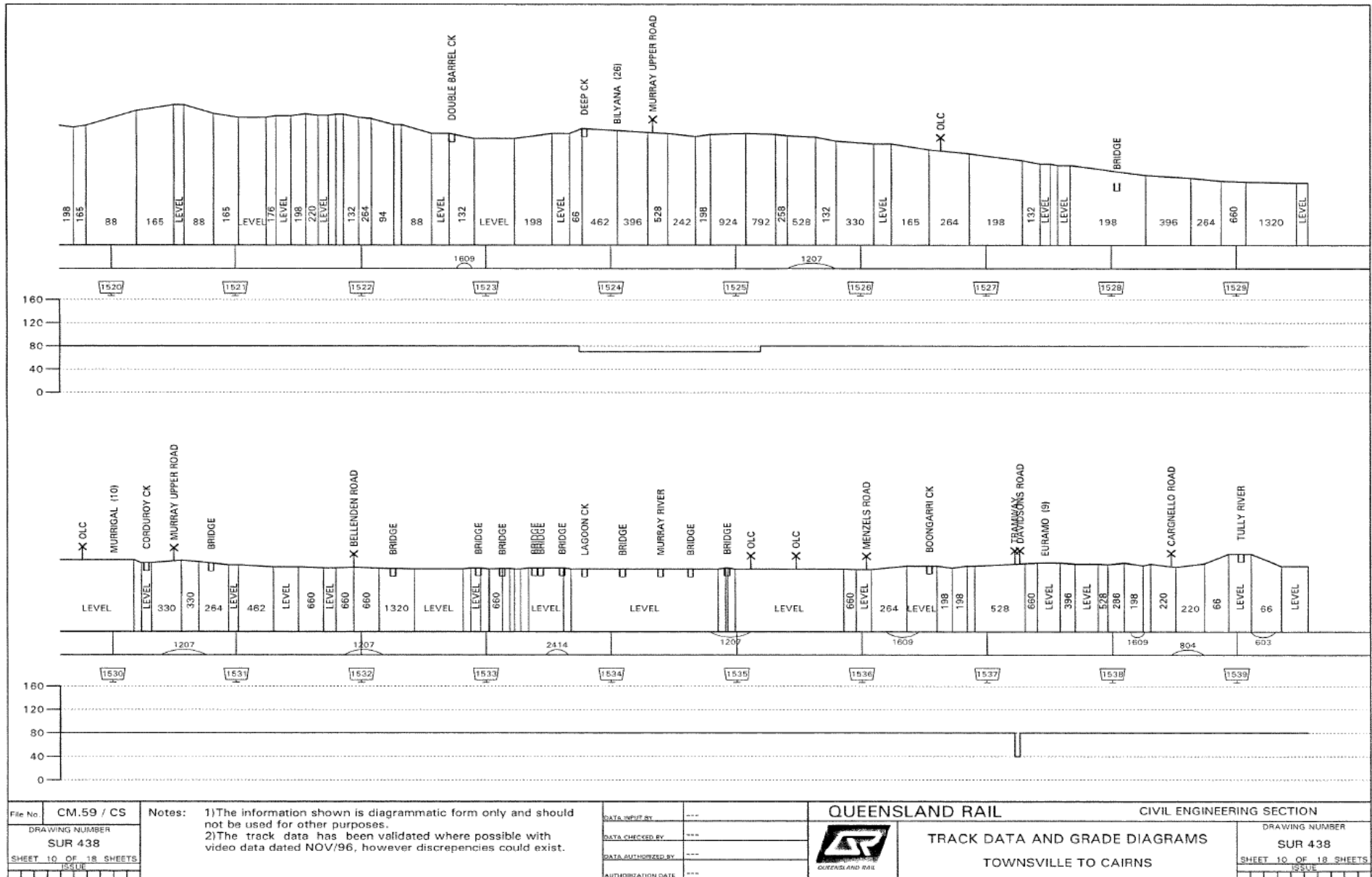
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DRAWING NUMBER	SUR 438
SHEET 8 OF 18 SHEETS	ISSUE

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 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
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TOWNSVILLE TO CAIRNS		SHEET 8 OF 18 SHEETS
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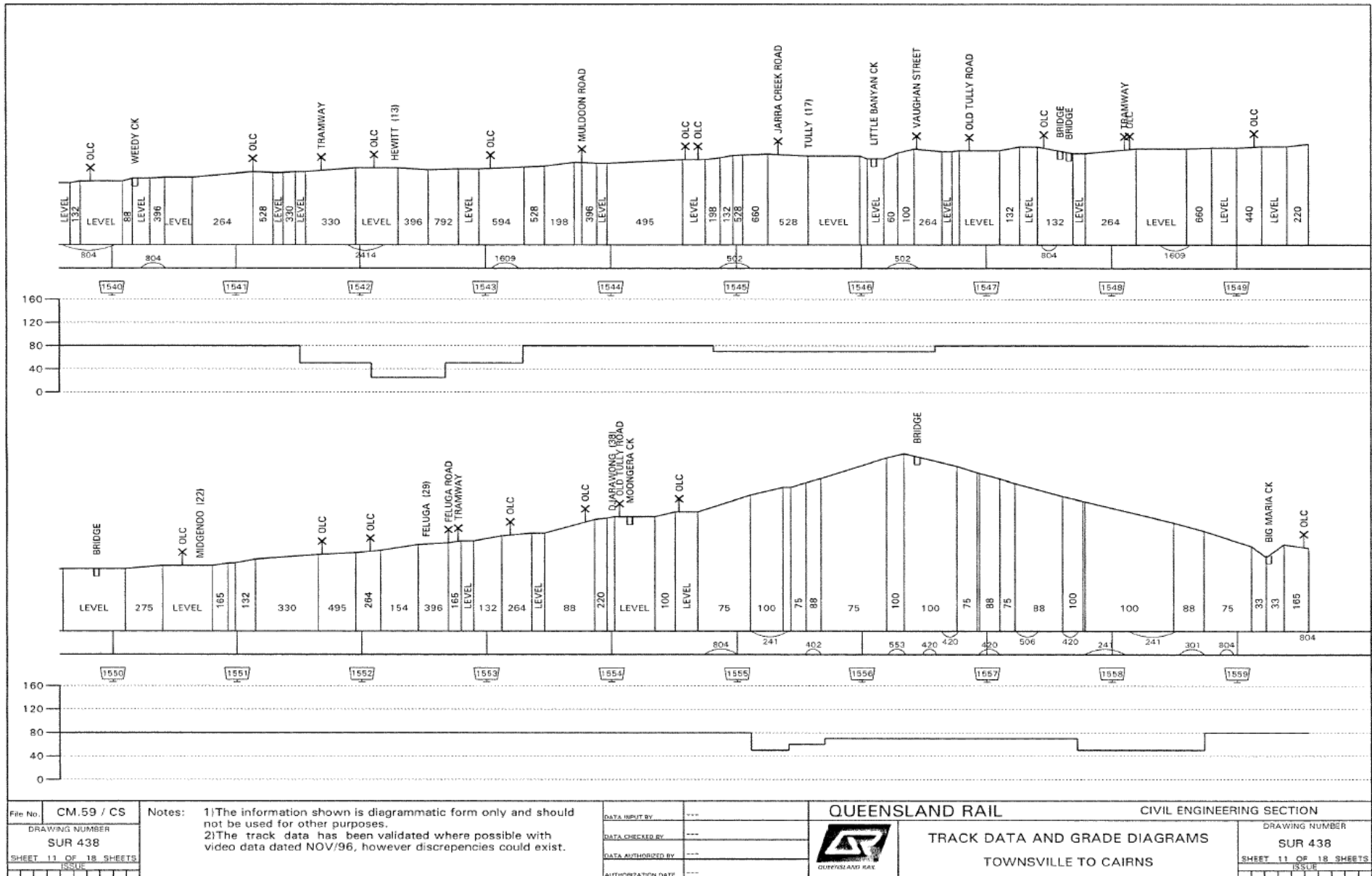


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DRAWING NUMBER	SUR 438
SHEET 10 OF 18 SHEETS	

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 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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QUEENSLAND RAIL		CIVIL ENGINEERING SECTION	
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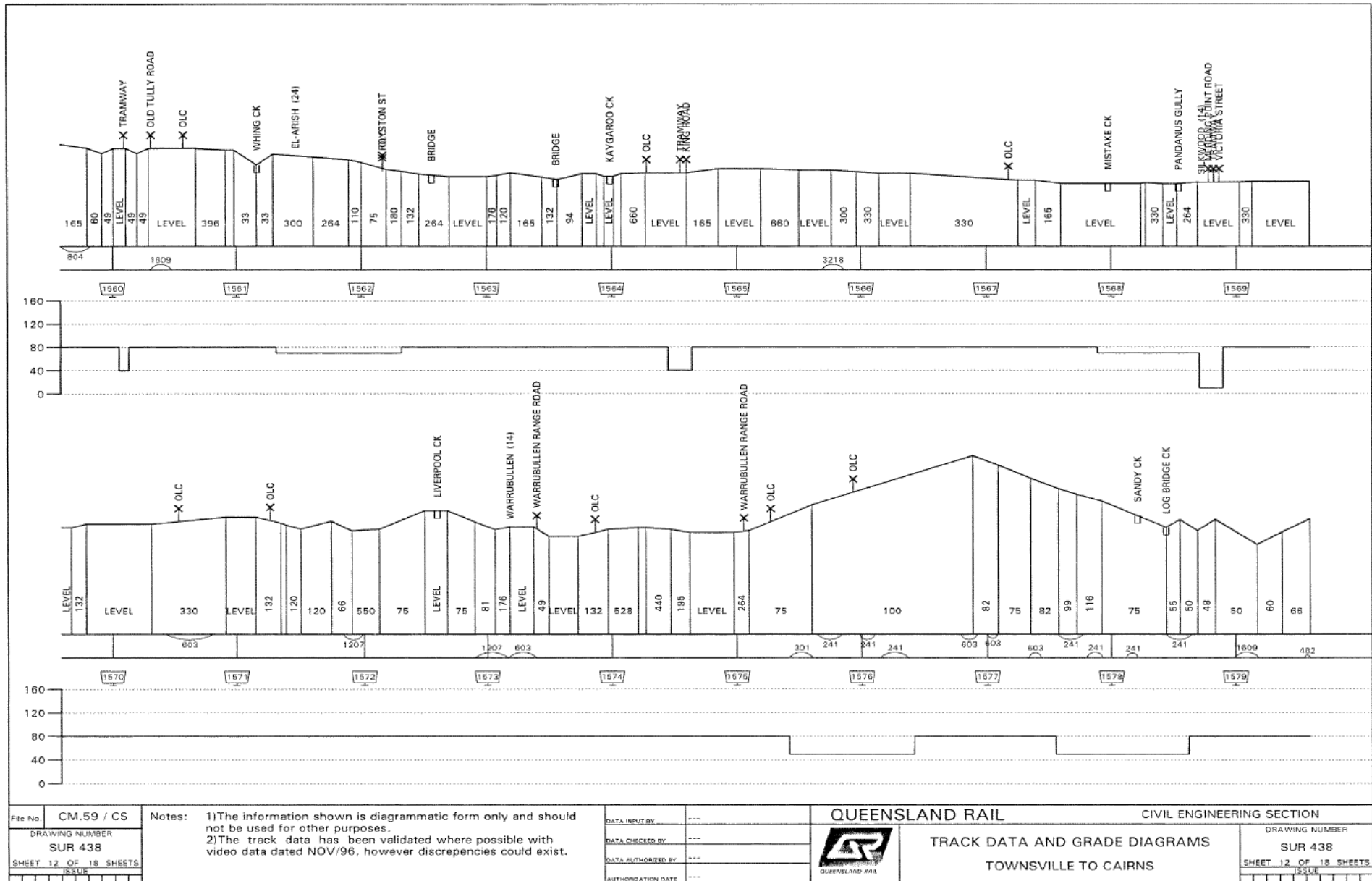


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DRAWING NUMBER	SUR 438
SHEET	11 OF 18 SHEETS
ISSUE	

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QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
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TOWNSVILLE TO CAIRNS		SHEET 11 OF 18 SHEETS
		ISSUE

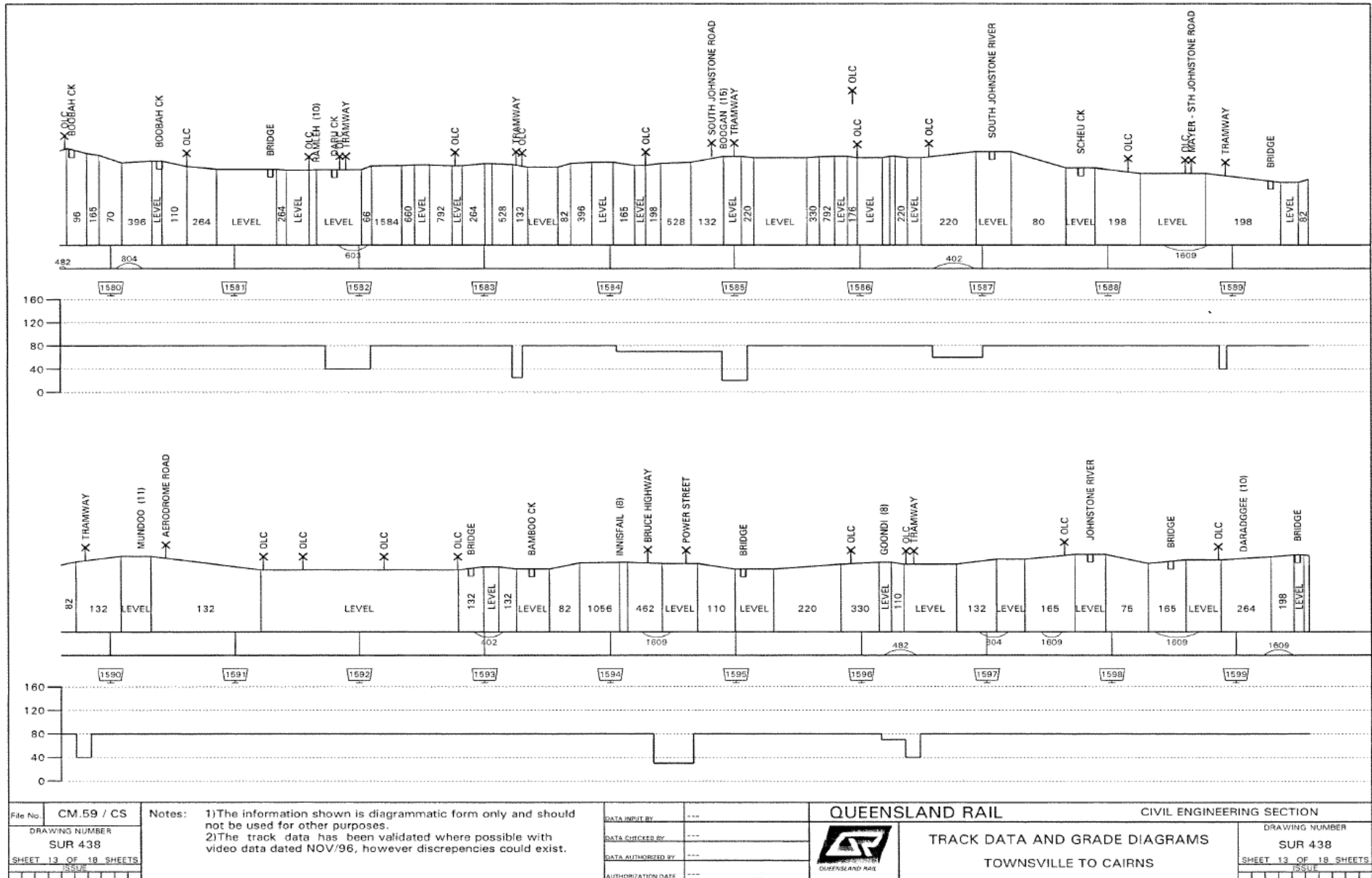


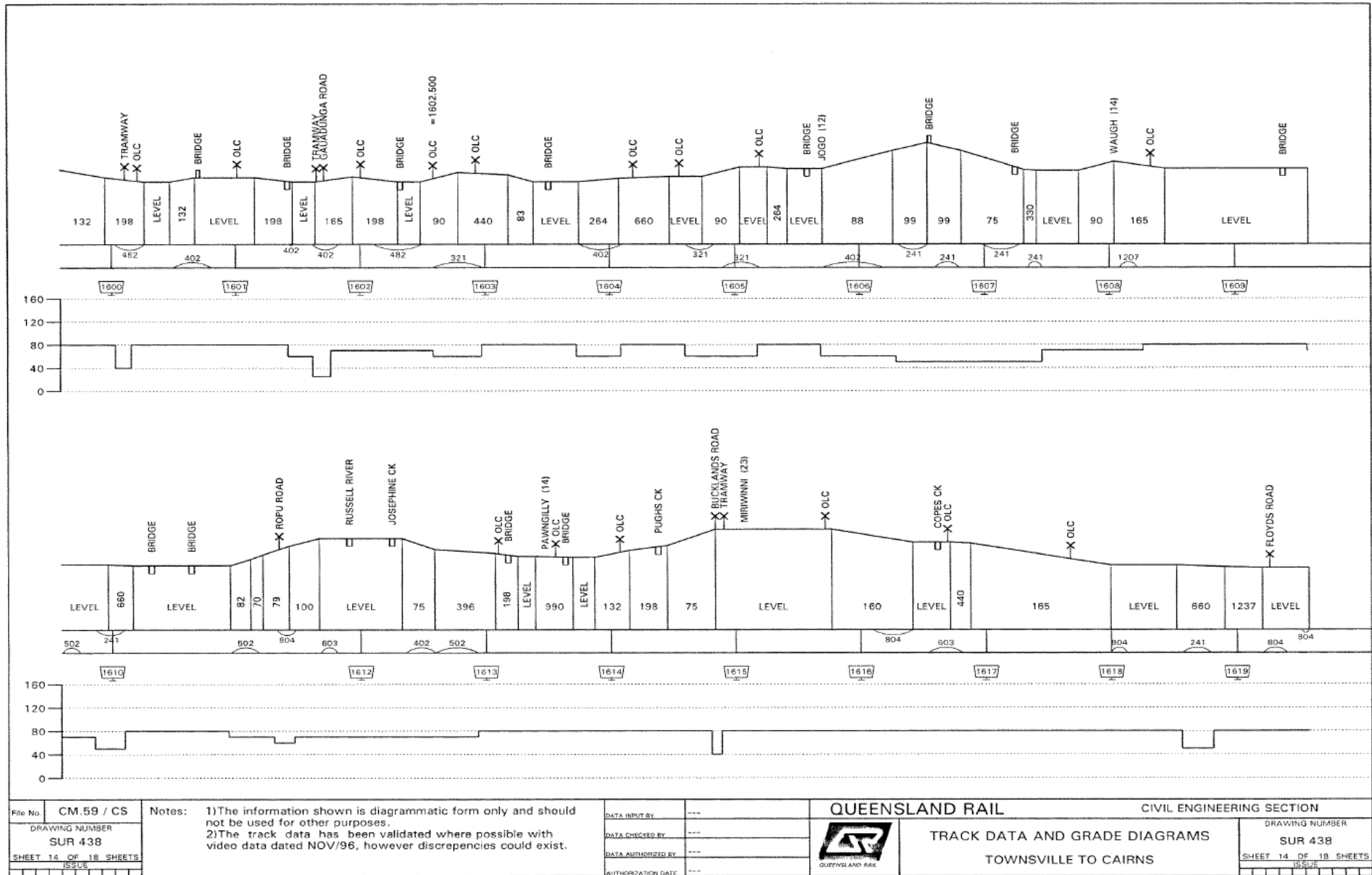
File No.	CM.59 / CS
DRAWING NUMBER	SUR 438
SHEET 12 OF 18 SHEETS	ISSUE

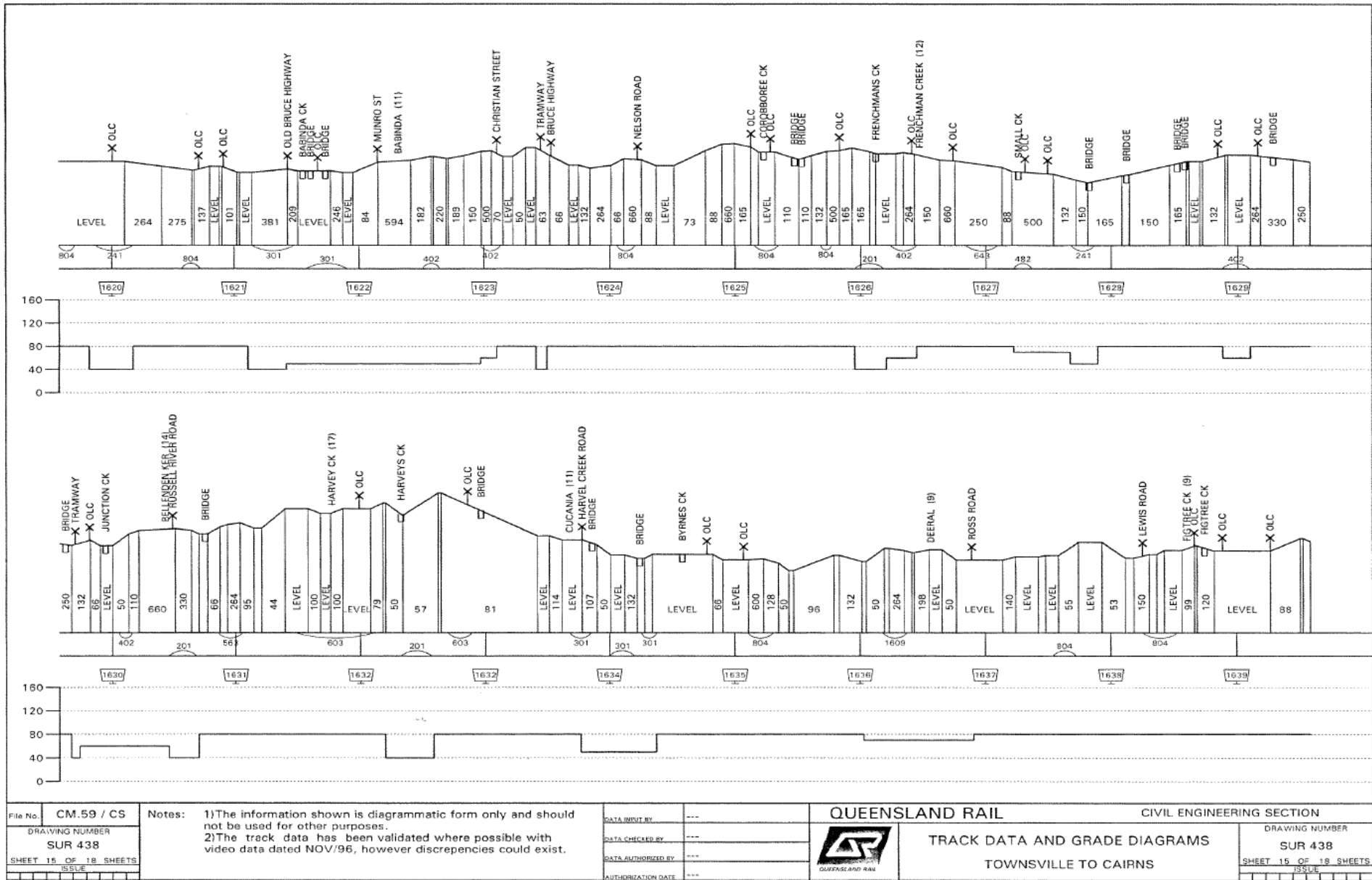
Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

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AUTHORIZATION DATE	---

QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
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TOWNSVILLE TO CAIRNS		SHEET 12 OF 18 SHEETS
		ISSUE








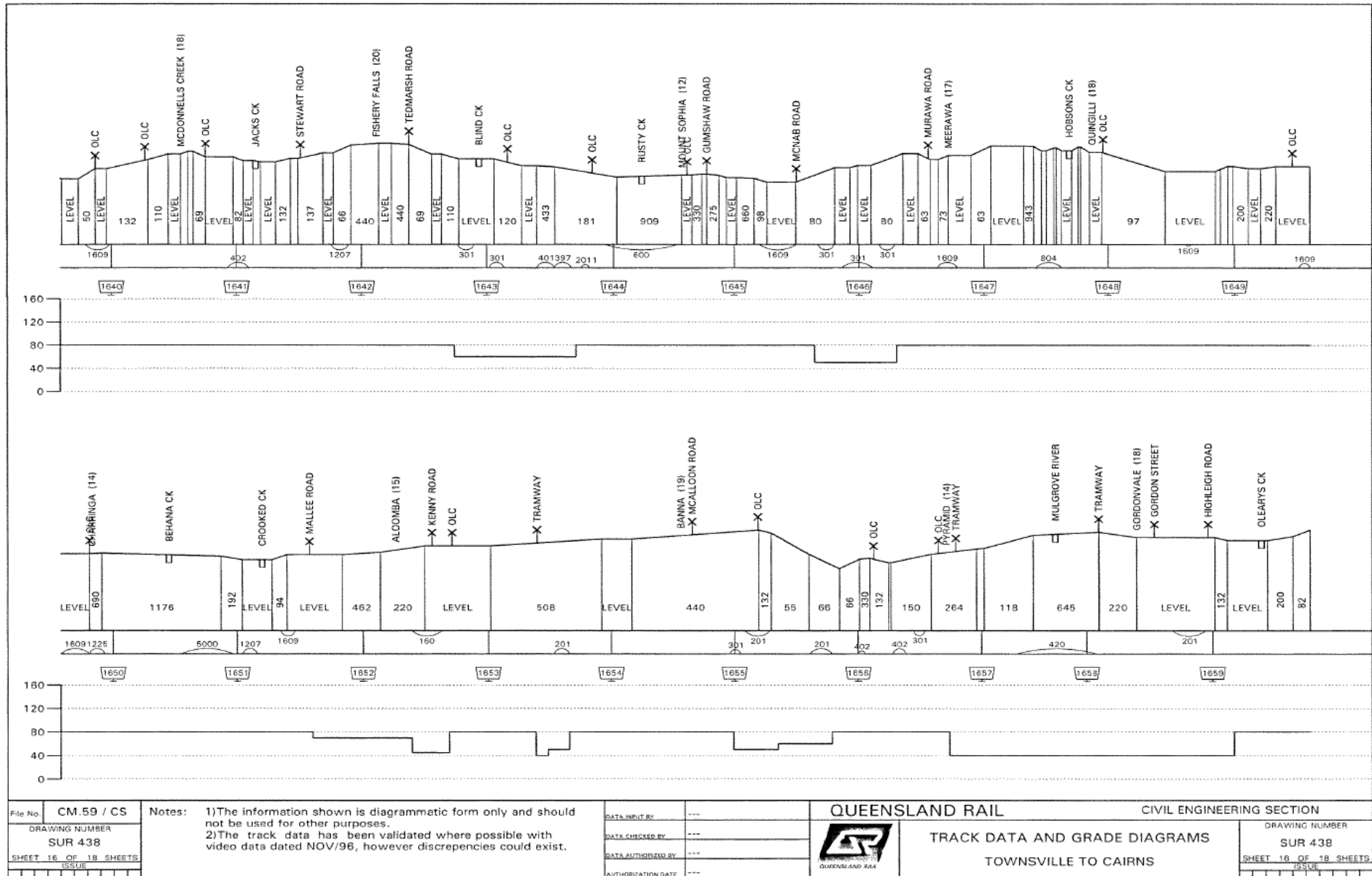
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SHEET	15 OF 18 SHEETS


Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes.
 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.

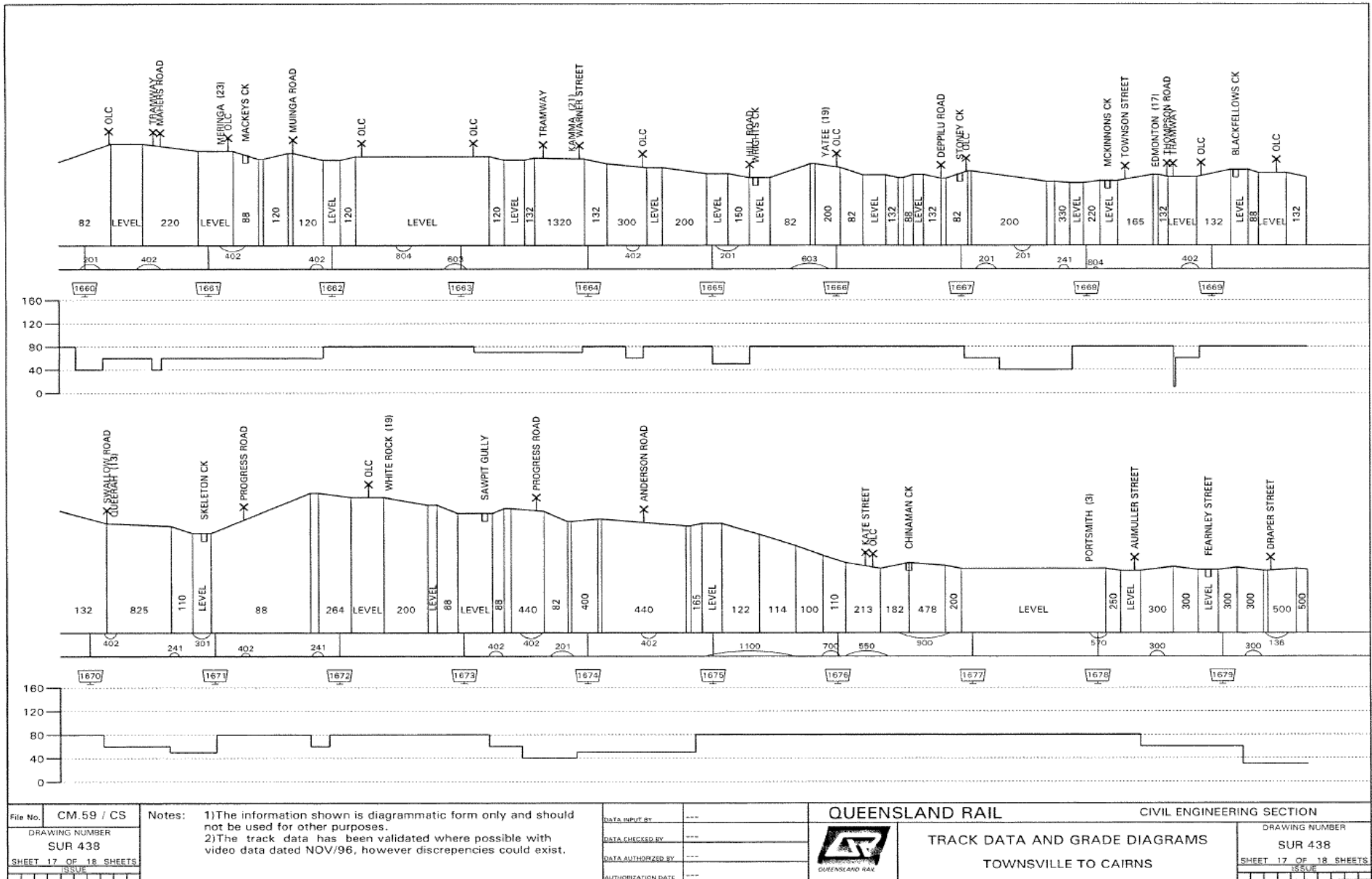
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QUEENSLAND RAIL		CIVIL ENGINEERING SECTION
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TOWNSVILLE TO CAIRNS		SHEET 15 OF 18 SHEETS

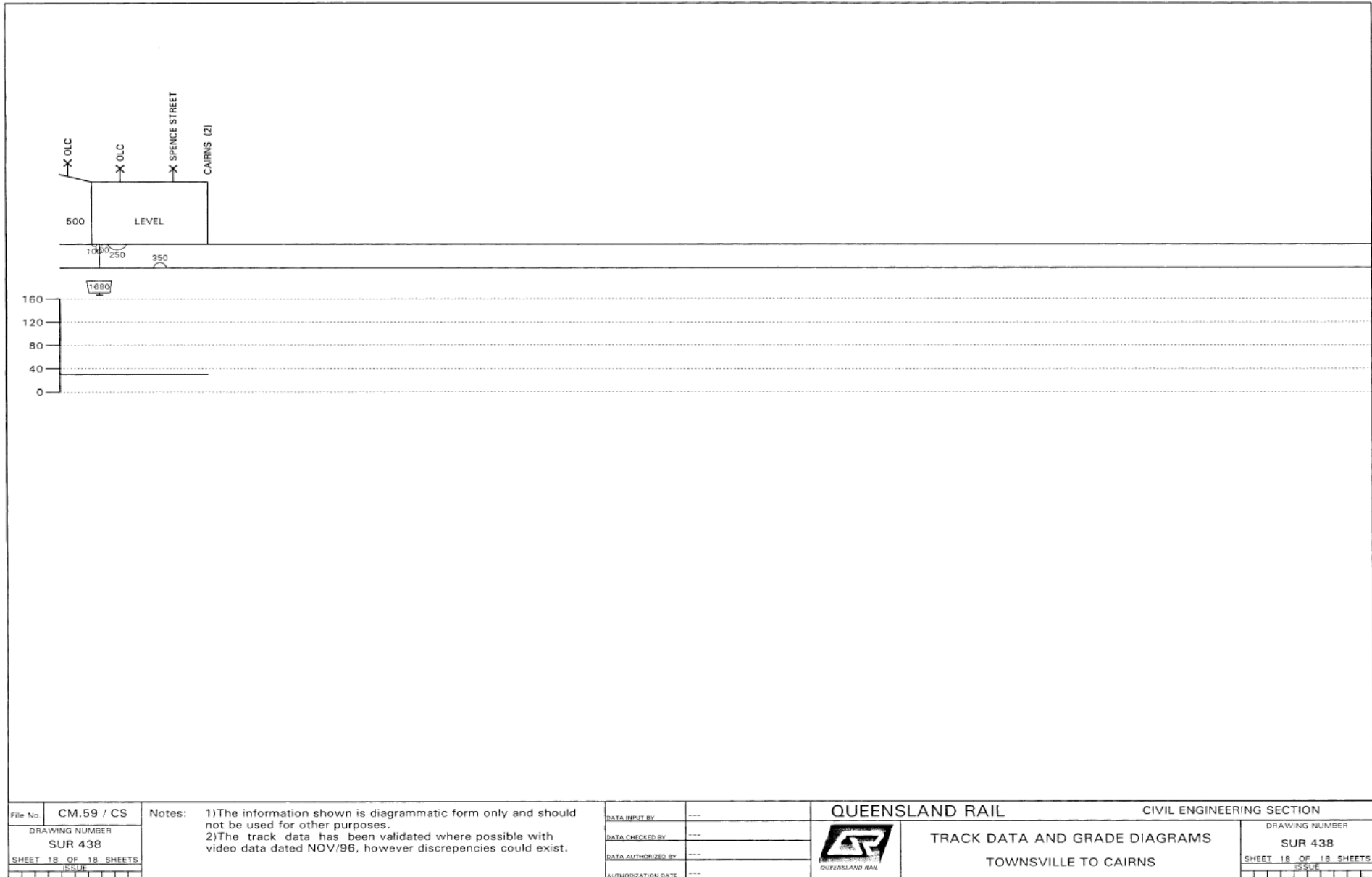





File No.	CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY	---	QUEENSLAND RAIL  CIVIL ENGINEERING SECTION	DRAWING NUMBER	SUR 438	DRAWING NUMBER	SUR 438
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			DATA AUTHORIZED BY	---		TOWNSVILLE TO CAIRNS			
			AUTHORIZATION DATE	---					



File No.	CM.59 / CS	Notes: 1)The information shown is diagrammatic form only and should not be used for other purposes. 2)The track data has been validated where possible with video data dated NOV/96, however discrepancies could exist.	DATA INPUT BY	---	QUEENSLAND RAIL  CIVIL ENGINEERING SECTION	DRAWING NUMBER	SUR 438	DRAWING NUMBER	SUR 438
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			DATA AUTHORIZED BY	---		TOWNSVILLE TO CAIRNS	ISSUE	ISSUE	
		AUTHORIZATION DATE	---						



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			AUTHORIZATION DATE	---				

APPENDIX F Sectional Running Times

		80k_Freight	
Location	Location	Up	Down
Rockhampton	Glenmore Junction	12	14
Glenmore Junction	Parkhurst	7	8
Parkhurst	The Caves	12	14
The Caves	Yaamba	12	10
Yaamba	Glen Geddes	17	15
Glen Geddes	Kunwarara	15	17
Kunwarara	Princhester	17	20
Princhester	Marlborough	10	14
Marlborough	Kooltandra	15	16
Kooltandra	Ogmore	14	13
Ogmore	Wumalgi	15	15
Wumalgi	St. Lawrence	17	15
St. Lawrence	Kalarka	20	18
Kalarka	Elalie	15	13
Elalie	Carmila	14	15
Carmila	Orkobie	9	10
Orkobie	Ilbilbie	14	14
Ilbilbie	Koumala	14	14
Koumala	Yukan QR	11	8
Yukan QR	Sarina	14	11
Sarina	Dawlish	9	10
Dawlish	Balberra	6	6
Balberra	Rosella	6	8
Rosella	Mackay	14	15
Mackay	Erakala	6	7
Erakala	Farleigh	7	7
Farleigh	Aminungo	11	13
Aminungo	Kuttabul	9	10
Kuttabul	Mt. Ossa	12	9
Mt. Ossa	Calen	10	10
Calen	Yalboroo	13	13
Yalboroo	Bloomsbury	18	15
Bloomsbury	Thoopara	16	16
Thoopara	Proserpine	17	15
Proserpine	Bubialo	20	17
Bubialo	Longford Creek	12	12
Longford Creek	Mookarra	13	16

		80k_Freight	
Location	Location	Up	Down
Mookarra	Bowen Junction	10	13
Bowen Junction	Merinda	5	7
Merinda	QNIP02	1	4
QNIP02	Durroburra	1	1
Durroburra	Kaili	7	8
Kaili	QNIP01	2	2
QNIP01	Wathana	1	1
Wathana	Wilmington	9	9
Wilmington	Guthalungra	14	14
Guthalungra	Gumlu	13	13
Gumlu	Bobawaba	10	10
Bobawaba	Inkerman	9	9
Inkerman	Home Hill	10	10
Home Hill	Ayr	13	11
Ayr	Pioneer	11	9
Pioneer	Barratta	10	10
Barratta	Giru	8	11
Giru	Cromarty	7	6
Cromarty	Storth	7	6
Storth	Nome	13	10
Nome	Julago	6	5
Julago	Sun Metals Junction	1	1
Sun Metals Junction	Partington	3	2
Partington	Stuart	3	3
Stuart	Stuart Yard	5	5
Stuart Yard	Cluden	6	7
Cluden	Ooonoonba	2	2
Ooonoonba	Townsville Fork Points	2	1
Townsville Fork Points	Townsville New Station	6	6
Townsville New Station	Garbutt	15	15
Garbutt	Bohle Industrial Siding	8	8
Bohle Industrial Siding	Nightjar	1	1
Nightjar	Deeragun	3	3
Deeragun	Cobarra New Leg	8	8
Cobarra New Leg	Cobarra Old Leg	1	1
Cobarra Old Leg	Purono	3	3
Purono	Kurukan	12	14
Kurukan	Rollingstone	14	16
Rollingstone	Mutarnee	16	11
Mutarnee	Bambaroo	14	11
Bambaroo	Pombel	11	11

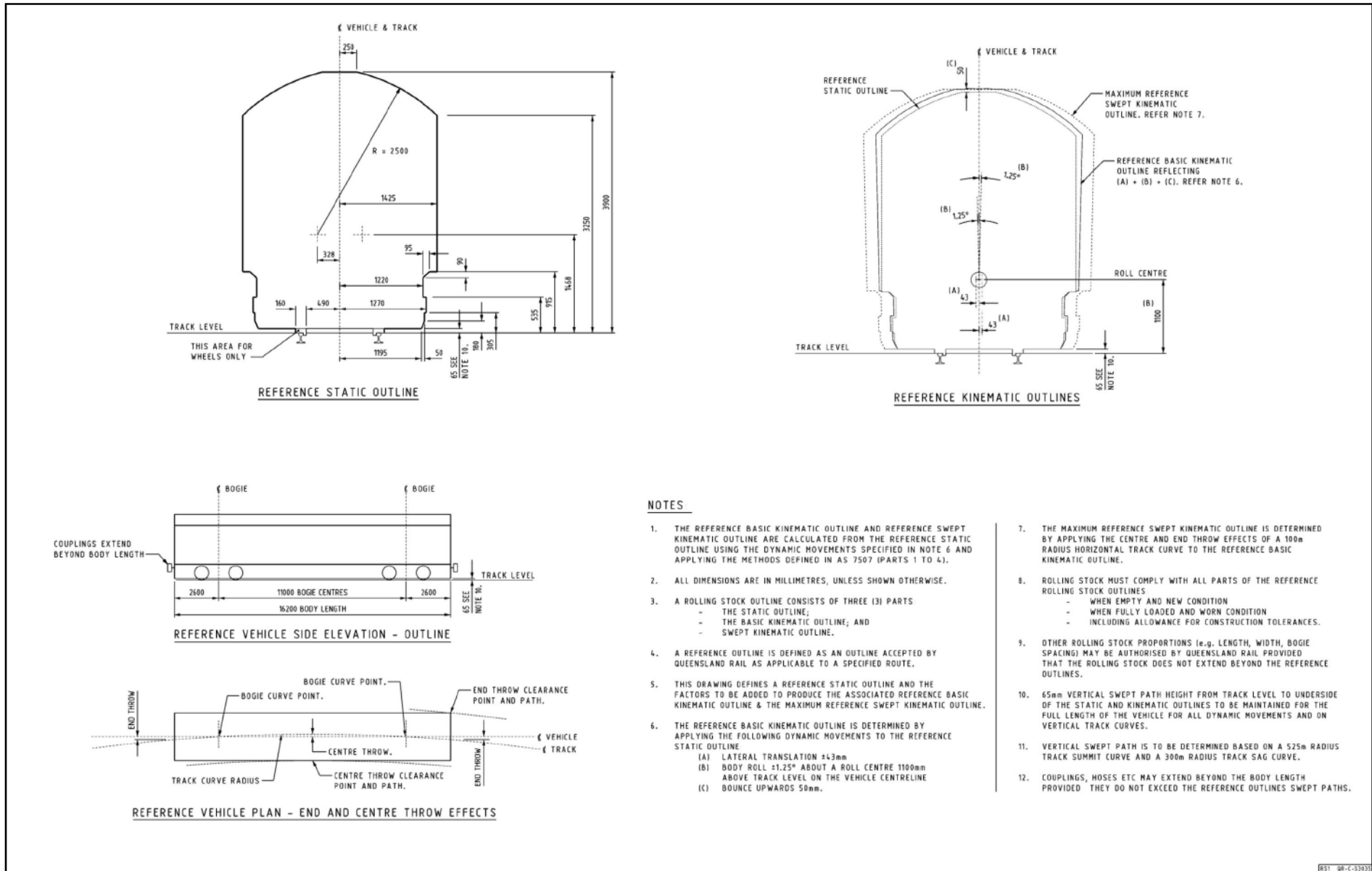
		80k_Freight	
Location	Location	Up	Down
Pombel	Ingham	15	12
Ingham	Hinchinbrook	20	20
Hinchinbrook	Conn	15	14
Conn	Cardwell	19	18
Cardwell	Kennedy	12	12
Kennedy	Bilyana	10	10
Bilyana	Hewitt	20	17
Hewitt	Tully	5	5
Tully	El Arish	19	18
El Arish	Silkwood	8	8
Silkwood	Boogan	19	17
Boogan	Mundoo	9	9
Mundoo	Innisfail	11	8
Innisfail	Waugh	21	21
Waugh	Babinda	18	17
Babinda	Deeral	17	16
Deeral	Aloomba	15	13
Aloomba	Gordonvale	8	7
Gordonvale	Kamma	7	10
Kamma	Woree QRX SDG	10	12
Woree QRX SDG	Portsmith	8	7
Portsmith	Cairns		
Mackay	Walkerston	10	10
Walkerston	Marian	18	18
Erakala	Mackay Harbour	17	13
Home Hill	Carstairs	15	20
Ayr	Kalamia Mill	25	25
Pioneer	Pioneer Sugar Mill	20	15
Giru	Invicta (Giru) Sugar Mill	10	10
Julago	Stuart Meatworks SDG	5	5
Stuart	Stuart Yard	5	5
Stuart Yard	Cluden	6	7

North Coast Line System North
Information Pack

		80k_Freight	
Location	Location	Up	Down
Townsville Fork Points	Townsville	5	5
Townsville	Townsville Jetty	5	5
Townsville New Station	Townsville	2	2

APPENDIX G Rollingstock Outlines

Reference Rolling Stock Outline RS1

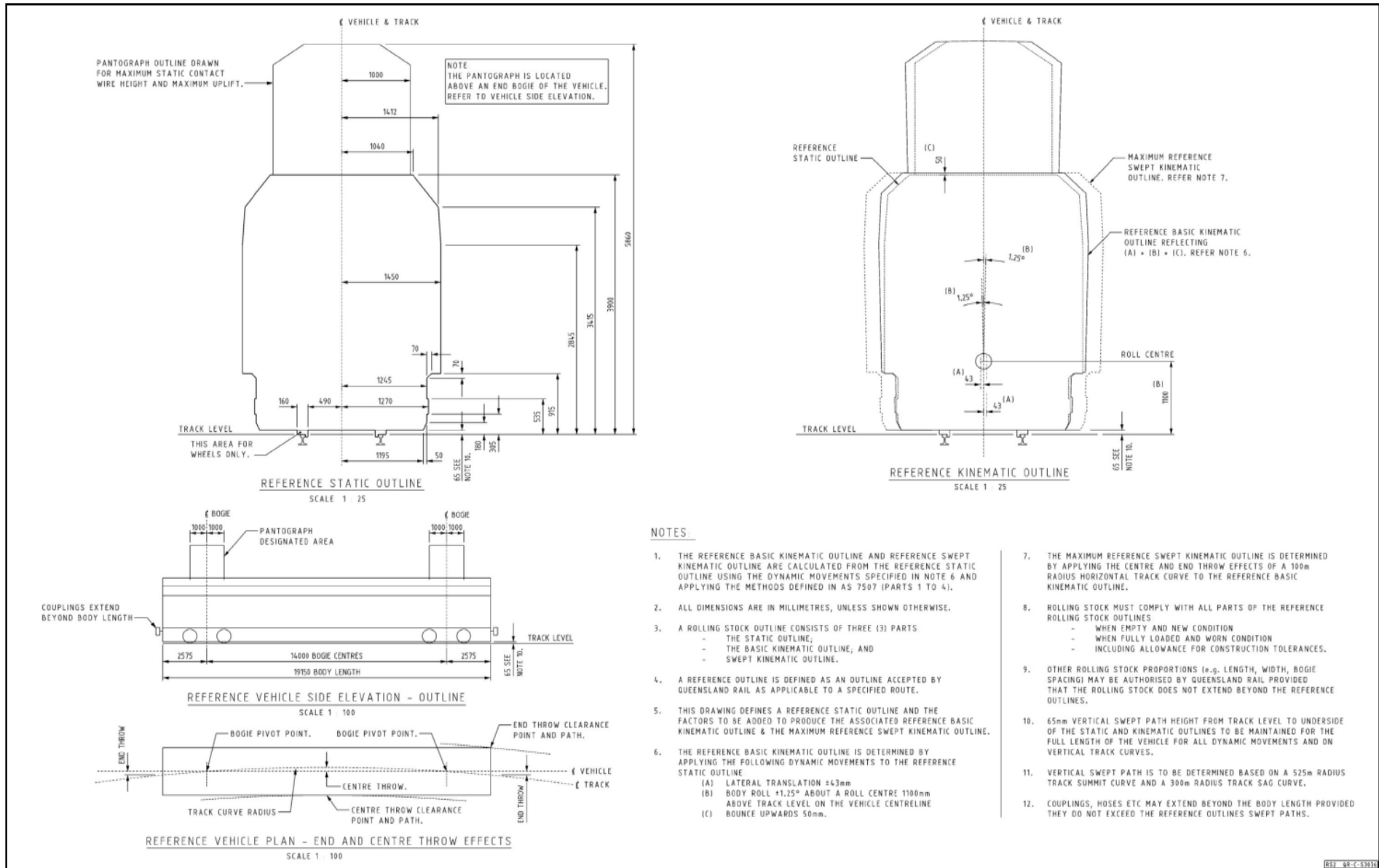


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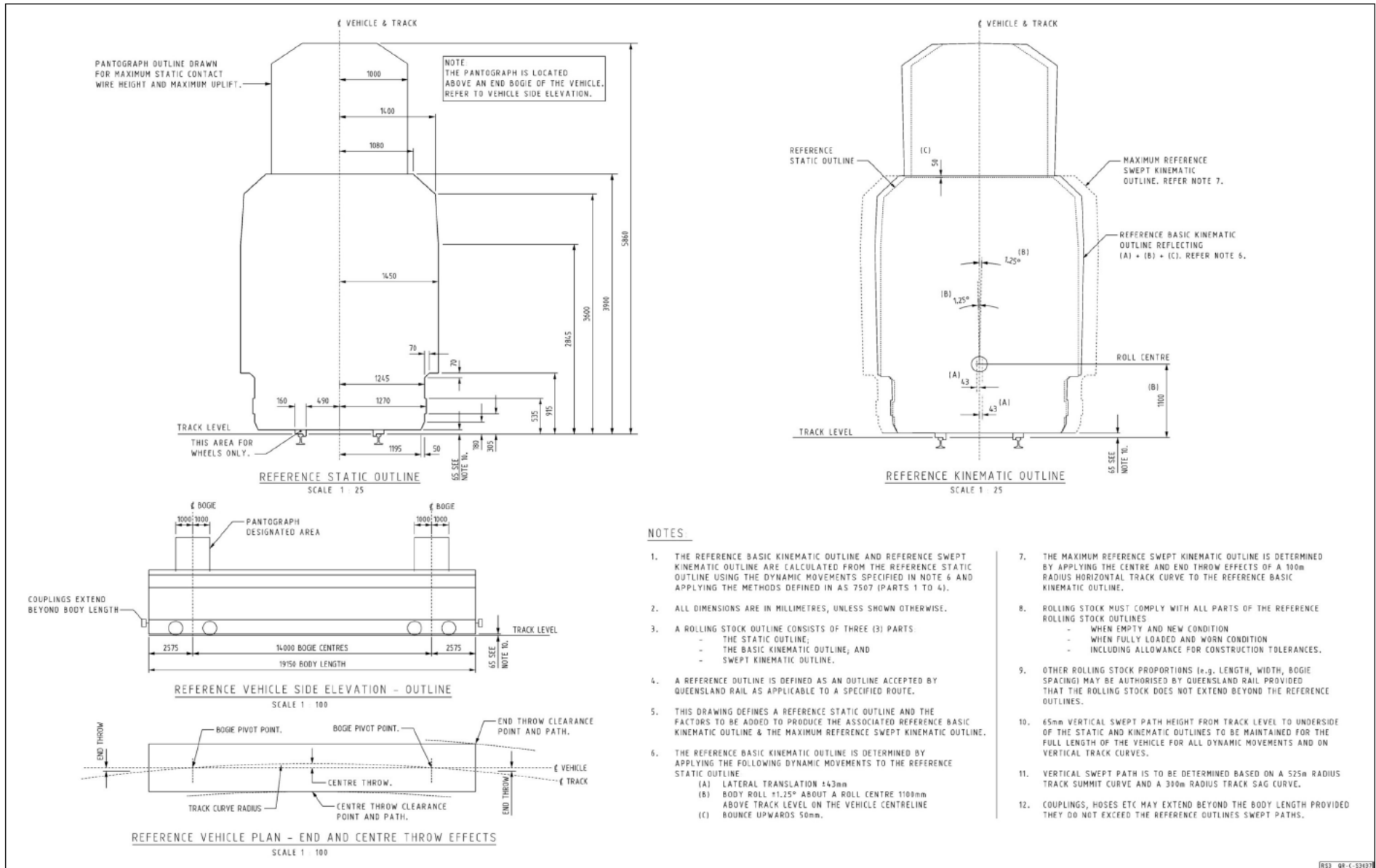
1. THE REFERENCE BASIC KINEMATIC OUTLINE AND REFERENCE SWEEP KINEMATIC OUTLINE ARE CALCULATED FROM THE REFERENCE STATIC OUTLINE USING THE DYNAMIC MOVEMENTS SPECIFIED IN NOTE 6 AND APPLYING THE METHODS DEFINED IN AS 7507 (PARTS 1 TO 4).
2. ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS SHOWN OTHERWISE.
3. A ROLLING STOCK OUTLINE CONSISTS OF THREE (3) PARTS
 - THE STATIC OUTLINE;
 - THE BASIC KINEMATIC OUTLINE; AND
 - SWEEP KINEMATIC OUTLINE.
4. A REFERENCE OUTLINE IS DEFINED AS AN OUTLINE ACCEPTED BY QUEENSLAND RAIL AS APPLICABLE TO A SPECIFIED ROUTE.
5. THIS DRAWING DEFINES A REFERENCE STATIC OUTLINE AND THE FACTORS TO BE ADDED TO PRODUCE THE ASSOCIATED REFERENCE BASIC KINEMATIC OUTLINE & THE MAXIMUM REFERENCE SWEEP KINEMATIC OUTLINE.
6. THE REFERENCE BASIC KINEMATIC OUTLINE IS DETERMINED BY APPLYING THE FOLLOWING DYNAMIC MOVEMENTS TO THE REFERENCE STATIC OUTLINE
 - (A) LATERAL TRANSLATION ± 43 mm
 - (B) BODY ROLL $\pm 1.25^\circ$ ABOUT A ROLL CENTRE 1100mm ABOVE TRACK LEVEL ON THE VEHICLE CENTRELINE
 - (C) BOUNCE UPWARDS 50mm.
7. THE MAXIMUM REFERENCE SWEEP KINEMATIC OUTLINE IS DETERMINED BY APPLYING THE CENTRE AND END THROW EFFECTS OF A 100m RADIUS HORIZONTAL TRACK CURVE TO THE REFERENCE BASIC KINEMATIC OUTLINE.
8. ROLLING STOCK MUST COMPLY WITH ALL PARTS OF THE REFERENCE ROLLING STOCK OUTLINES
 - WHEN EMPTY AND NEW CONDITION
 - WHEN FULLY LOADED AND WORN CONDITION
 - INCLUDING ALLOWANCE FOR CONSTRUCTION TOLERANCES.
9. OTHER ROLLING STOCK PROPORTIONS (e.g. LENGTH, WIDTH, BOGIE SPACING) MAY BE AUTHORISED BY QUEENSLAND RAIL PROVIDED THAT THE ROLLING STOCK DOES NOT EXTEND BEYOND THE REFERENCE OUTLINES.
10. 65mm VERTICAL SWEEP PATH HEIGHT FROM TRACK LEVEL TO UNDERSIDE OF THE STATIC AND KINEMATIC OUTLINES TO BE MAINTAINED FOR THE FULL LENGTH OF THE VEHICLE FOR ALL DYNAMIC MOVEMENTS AND ON VERTICAL TRACK CURVES.
11. VERTICAL SWEEP PATH IS TO BE DETERMINED BASED ON A 525m RADIUS TRACK SUMMIT CURVE AND A 300m RADIUS TRACK SAG CURVE.
12. COUPLINGS, HOSES ETC. MAY EXTEND BEYOND THE BODY LENGTH PROVIDED THEY DO NOT EXCEED THE REFERENCE OUTLINES SWEEP PATHS.

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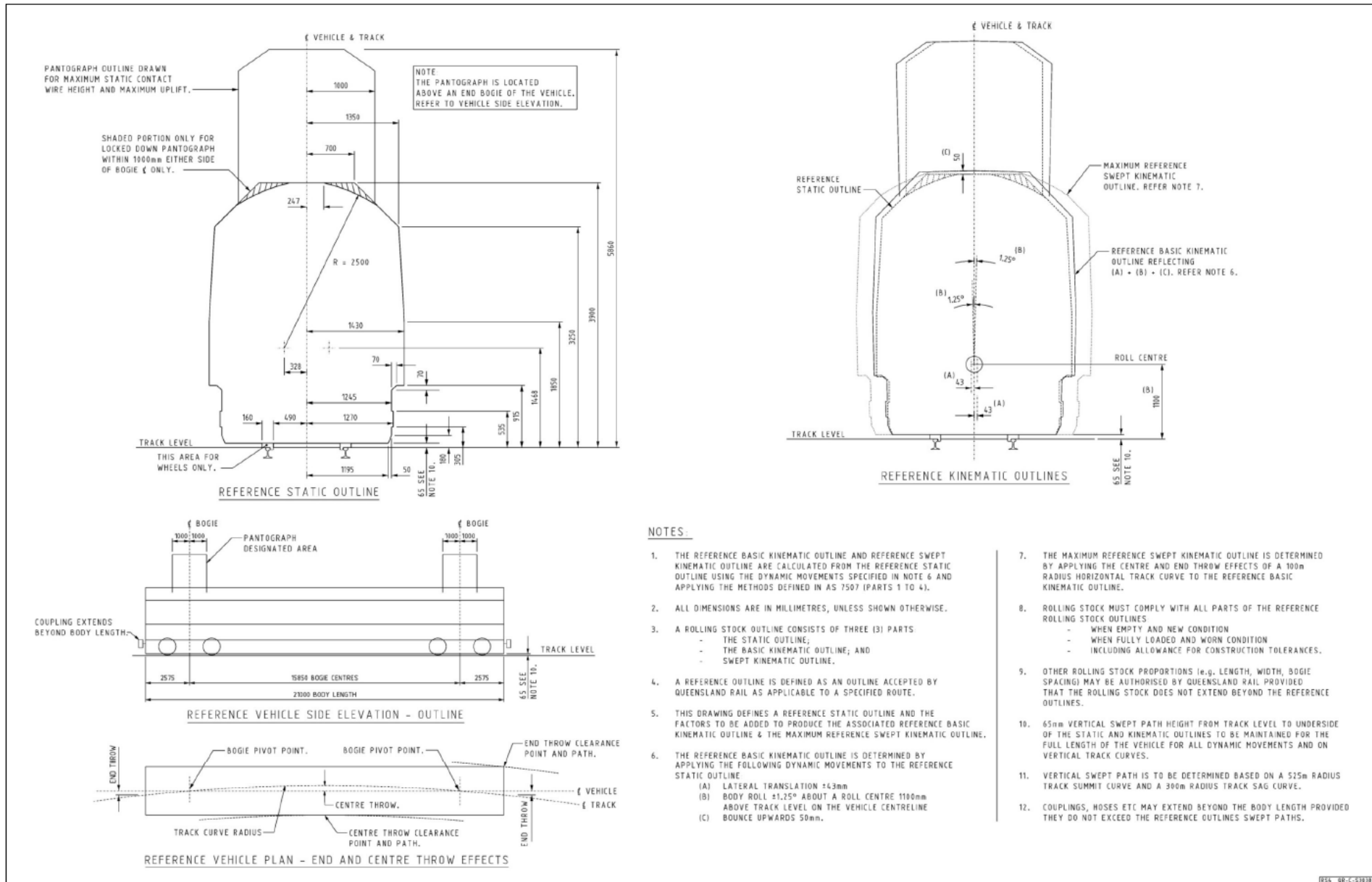
Reference Rolling Stock Outline RS2



Reference Rolling Stock Outline RS3



Reference Rolling Stock Outline RS4



NOTES

1. THE REFERENCE BASIC KINEMATIC OUTLINE AND REFERENCE SWEEP KINEMATIC OUTLINE ARE CALCULATED FROM THE REFERENCE STATIC OUTLINE USING THE DYNAMIC MOVEMENTS SPECIFIED IN NOTE 6 AND APPLYING THE METHODS DEFINED IN AS 7507 (PARTS 1 TO 4).
2. ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS SHOWN OTHERWISE.
3. A ROLLING STOCK OUTLINE CONSISTS OF THREE (3) PARTS
 - THE STATIC OUTLINE;
 - THE BASIC KINEMATIC OUTLINE; AND
 - SWEEP KINEMATIC OUTLINE.
4. A REFERENCE OUTLINE IS DEFINED AS AN OUTLINE ACCEPTED BY QUEENSLAND RAIL AS APPLICABLE TO A SPECIFIED ROUTE.
5. THIS DRAWING DEFINES A REFERENCE STATIC OUTLINE AND THE FACTORS TO BE ADDED TO PRODUCE THE ASSOCIATED REFERENCE BASIC KINEMATIC OUTLINE & THE MAXIMUM REFERENCE SWEEP KINEMATIC OUTLINE.
6. THE REFERENCE BASIC KINEMATIC OUTLINE IS DETERMINED BY APPLYING THE FOLLOWING DYNAMIC MOVEMENTS TO THE REFERENCE STATIC OUTLINE
 - (A) LATERAL TRANSLATION ± 43 mm
 - (B) BODY ROLL $\pm 1.25^\circ$ ABOUT A ROLL CENTRE 1190mm ABOVE TRACK LEVEL ON THE VEHICLE CENTRELINE
 - (C) BOUNCE UPWARDS 50mm.
7. THE MAXIMUM REFERENCE SWEEP KINEMATIC OUTLINE IS DETERMINED BY APPLYING THE CENTRE AND END THROW EFFECTS OF A 100m RADIUS HORIZONTAL TRACK CURVE TO THE REFERENCE BASIC KINEMATIC OUTLINE.
8. ROLLING STOCK MUST COMPLY WITH ALL PARTS OF THE REFERENCE ROLLING STOCK OUTLINES
 - WHEN EMPTY AND NEW CONDITION
 - WHEN FULLY LOADED AND WORN CONDITION
 - INCLUDING ALLOWANCE FOR CONSTRUCTION TOLERANCES.
9. OTHER ROLLING STOCK PROPORTIONS (e.g. LENGTH, WIDTH, BOGIE SPACING) MAY BE AUTHORISED BY QUEENSLAND RAIL PROVIDED THAT THE ROLLING STOCK DOES NOT EXTEND BEYOND THE REFERENCE OUTLINES.
10. 65mm VERTICAL SWEEP PATH HEIGHT FROM TRACK LEVEL TO UNDERSIDE OF THE STATIC AND KINEMATIC OUTLINES TO BE MAINTAINED FOR THE FULL LENGTH OF THE VEHICLE FOR ALL DYNAMIC MOVEMENTS AND ON VERTICAL TRACK CURVES.
11. VERTICAL SWEEP PATH IS TO BE DETERMINED BASED ON A 525m RADIUS TRACK SUMMIT CURVE AND A 300m RADIUS TRACK SAG CURVE.
12. COUPLINGS, HOSES ETC MAY EXTEND BEYOND THE BODY LENGTH PROVIDED THEY DO NOT EXCEED THE REFERENCE OUTLINES SWEEP PATHS.

RS4 QR-C-51074