IN THE ENVIRONMENT COURT AT AUCKLAND

I TE KŌTI TAIAO O AOTEAROA KI TĀMAKI MAKAURAU

Decision [2024] NZEnvC 064

IN THE MATTER OF appeals under clause 14 of Schedule 1 of

the Resource Management Act 1991

BETWEEN THE SURVEYING COMPANY

LIMITED

(ENV-2022-AKL-000086)

WEL NETWORKS LIMITED

(ENV-2022-AKL-000081)

Appellants

AND WAIKATO DISTRICT COUNCIL

Respondent

Court: Alternate Environment Judge L J Newhook sitting alone under s

279 of the Act

Last case event: Joint memorandum dated 18 March 2024

Date of Order: 5 April 2024

Date of Issue: 5 April 2024

CONSENT ORDER

- A: Under section 279(1)(b) of the Resource Management Act 1991, the Environment Court, by consent, <u>orders</u> that:
 - (1) The TRPT Transportation chapter in the Proposed Waikato District
 Plan be amended in accordance with **Appendix 1** to this order
 (additions marked as <u>underlined</u> and deletions as <u>strikethrough</u>); and
 - (2) this order partially resolves WEL's interest and fully resolve TSC's interest in Topic 4.2. The appeals otherwise remain extant.
- B: Under section 285 of the Resource Management Act 1991, there is no order as to costs.

REASONS

Introduction

[1] This consent determination relates to appeals by The Surveying Company (**TSC**) and WEL Networks Ltd (**WEL**) against parts of the decisions of the Waikato District Council (**Council** or **Respondent**) in respect of the Proposed Waikato District Plan (**PDP**).

Background

- [2] TSC is a multi-disciplinary Property Development Consultancy that has been providing Planning, Surveying and Civil Engineering services throughout the Waikato, Auckland and Hauraki Districts for the past 30 years. WEL owns, operates and develops electricity distribution infrastructure in the Waikato Region.
- [3] Both TSC and WEL made a submission and further submission on the PDP seeking, amongst other relief, amendments concerning the transport tables which set out the access leg and road conditions for the various zones.
- [4] The specific relief sought by TSC and WEL with respect to Topic 4.2 and the decision on these are addressed under the headings below.

TSC

- [5] In its submission, TSC opposed the access leg and right of way widths for residential zones in Table 12 on the basis that they were excessive, would result in the inefficient use of land and would prevent infill development in existing urban areas.
- [6] With respect to Table 13 and the access leg and right of way widths for rural zones, TSC opposed these on the basis they were too wide. TSC also opposed the requirement in Table 13 to seal access and rights of way in both the rural and rural lifestyle zones, submitting that metal access ways were more appropriate and consistent with the character of rural areas.
- [7] On 17 January 2022, an Independent Hearing Panel (**IHP**) on behalf of the Respondent made decisions on the submissions regarding infrastructure. The IHP rejected TSC's submissions in relation to Tables 12 and 13 noting that while the widths in the PDP were wider than those in neighbouring district's plans, they were not unreasonable and were more appropriate to the Waikato District.¹

WEL

- [8] The original submission by WEL sought the inclusion of a new rule to provide for a utility corridor in the road reserve free of tree plantings and in accordance with (what are now labelled) Tables 12 and 13, for new subdivision and development within all zones.
- [9] While the IHP acknowledged the concerns of WEL, they did not consider that there was an intention for utility corridors to be completely free of trees² and thus rejected the submission.

Appeals

[10] Following the IHP decisions, TSC and WEL subsequently filed these appeals seeking, in relation to this consent order:

¹ Decision Report 13: Infrastructure at [183].

² Decision Report 13: Infrastructure at [107].

- (a) TSC to reduce the access leg and right of way widths in Tables 12 and 13 of the TRPT chapter and remove the need to seal rural accesses from Table 13, in accordance with the Land development and subdivision infrastructure standards;³ and
- (b) WEL the addition of a new rule into the All infrastructure (**AINF**) chapter which requires a utility corridor in the road reserve free of tree plantings and in accordance with (what are now labelled) Tables 12 and 13, for new subdivision and development.
- [11] The above aspects of the two appeals have been allocated to Topic 4.2: Infrastructure All other matters. The consent order resolves TSC's interest in Topic 4.2 and partially resolves WEL's interest.
- [12] The following parts of the WEL appeal allocated to Topic 4.2 are not resolved by the consent order and remain extant:
 - (a) The relief sought in paragraphs 4.4, 4.9, 4.21, 4.24, 4.29, 4.40, regarding amendments to the AINF All infrastructure and EGEN Electricity generation chapters of the PDP decisions version.
- [13] Kāinga Ora Homes and Communities (**Kāinga Ora**) has given notice of an intention to become a party to TSC's appeal under section 274 of the Act. It is noted that there are no interested parties to the parts of the WEL appeal addressed in this consent order.

Agreement reached between the parties

[14] Following the filing of the appeals, TSC and WEL entered into direct discussions with Council regarding the parts of their appeals in Topic 4.2. While discussions on other points of the appeals continue, the parties have now agreed on proposals which would partially resolve WEL's interest and fully resolve TSC's interest in Topic 4.2. It is noted that the agreement reached between TSC and Council

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³ Table 3.2 Roading Design of NZS 4404:2010 Land development and subdivision infrastructure standards.

has been supported through expert transportation advice obtained on behalf of Council.

[15] The agreed amendments to the TRPT – Transportation chapter of the PDP decisions version as a result of this consent order are contained within **Appendix 1** to this order (additions marked as <u>underlined</u> and deletions as <u>strikethrough</u>).

TSC

[16] During negotiations it was acknowledged by TSC and the Council that a reduction in the access width minimum requirements for two to four allotments or activities within residentially zoned land was appropriate. This was on the basis that the reductions enabled the efficient use of land for smaller developments which generate less vehicular traffic, whilst also maintaining a suitable access width for emergency vehicle access. Given the agreed reduction in width, both parties also agreed it was appropriate to amend Table 12 to require a passing bay for longer accesses (75m+) which are less than 5m in width. It is considered that this consequential amendment will enable safe vehicle passing where it may not be safe or efficient to require a vehicle to reverse down an access to enable passing.

[17] With respect to access widths in Table 13 which applies to rural and rural lifestyle zones, it was agreed by both parties that amending row two to enable narrower access for two to four allotments or activities (as opposed to two to three), would have minimal impacts on traffic generation.

[18] In terms of minimum total seal width requirements in Table 13, it was acknowledged by the parties that the Regional Technical Infrastructure Standards⁴ (RITS) requires a sealed carriageway for rural residential activities and notes that if the entrance of an access is off an unsealed road, no additional surfacing is required. It was also acknowledged during discussions that while unsealed accesses are appropriate for rural activities in the General Rural Zone (GRUZ), unsealed accesses in the Rural Lifestyle Zone (RLZ) were more likely to result in dust or amenity concerns. On this basis, and taking into account the RITS requirements, both parties

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⁴ Dated May 2018.

considered it was appropriate to reduce the minimum total seal width requirements in Table 13, on the basis that an advice note would be introduced specifying that:

- (a) In the RLZ and GRUZ, where the access connects to an unsealed road, an all weather surface is an acceptable permitted standard; and
- (b) In the GRUZ, where the access connects to a sealed road, the first section is to be sealed (as per the RITS) and it is an acceptable permitted standard for the remainder of the access to be an all weather surface.

[19] Rather than using the term 'unsealed' access in Table 13, the parties agreed it was more appropriate to adopt the term 'all weather surface', as used in the Nelson Tasman Development Manual.⁵ As the PDP does not contain a definition for 'all weather surface', a consequential amendment is required to the Interpretation chapter of the PDP to introduce this definition.

WEL

[20] During negotiations the parties to the WEL appeal acknowledged the risk trees posed to utilities and the need to provide for adequate berm space, free of trees, for utility corridors. It was on this basis that the parties agreed to amend rules TRPT-R5 and TRPT-R6 of the TRPT chapter to include a permitted standard stating that new trees must be planted at least 1.5m from underground services or 1m with a root protection barrier approved by the relevant network utility operator. In addition to this, the parties further agreed that it was appropriate to amend the existing advice note for Table 12 to inform plan users that the RITS contains further details on road carriageway and berm requirements, including separation of trees from underground services and root barrier protection requirements.

[21] It was noted during discussions between the parties that Figure 11 – Attachment to Tables 12 and 13 in the TRPT chapter shows a tree within the area recorded as 'services'. As per the advice note, the purpose of Figure 11 is to define the various aspects of the road as set out in Tables 12 and 13 (i.e., berm, carriageway, total seal width, road width etc.). However, as Tables 12 and 13 do not mention

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⁵ Dated July 2019.

'landscaping' with respect to roads, the parties considered that the location of the tree within the area 'services' would be at odds with the agreed amendments to TRPT-R5 and TRPT-R6, and could cause confusion to plan users. It was on this basis that the parties agreed to delete the tree from Figure 11 of the TRPT chapter as a consequential amendment.

Section 32AA Assessment

TSC

- [22] It is agreed by all of the parties that the amendments to the TRPT chapter of the PDP decisions version are the most appropriate to achieve the objectives of the RMA on the following basis:
 - (a) The objectives of the proposal are to enable a more efficient use of land through the reduction in access width standards and to provide for unsealed accesses in the rural environment more in keeping with rural character;
 - (b) The objectives are an appropriate way to achieve the purpose of the Act as the management of the physical resource (land) will provide for people and communities social and economic wellbeing and safeguard the life supporting capacity of soil;
 - (c) Reducing the accessway requirements will result in more cost effective development as less expense will be incurred for land required for the driveway and the cost of surfacing. This efficiency will be passed onto the eventual purchaser. This assists in the economic well-being of the land owner and developer. The health and safety of people and communities is provided in accordance with s5(2) with sufficient driveway access to properties for infrastructure and services including emergency services; and
 - (d) Section 7(b) requires particular regard be given to the efficient use and development of natural and physical resources. Reducing the width of

the accessways will achieve this by enabling more efficient use of the land resource.

[23] An analysis of TSC's proposal is set out in the table below. Option 1 is retaining the provisions of the PDP as per the decisions version. Option 2 is to reduce access widths for Tables 12 and 13 in respect to smaller development scenarios. Option 3 is to amend Table 13 in respect to sealing standards for smaller development scenarios (which could be done in tandem with Option 2).

	Keep Access Widths in Decisions Version (Option 1)	Reduce Access Widths (Option 2)	Amend Seal Standards in Rural zones (Option 3)
Benefits and costs – Environmental	Benefits: Less dust generated from unsealed accesses in the rural environment Costs: Greater amount of impervious	Benefits: Less impervious surfaces that generate stormwater runoff to manage Costs: Greater risk of scouring and	Refer Option 2
Benefits and costs – Social	Benefits: Increased visibility for drivers and room for emergency vehicles	erosion in heavy rainfall events Benefits: More land available for other uses Emergency access	Benefits: May maintain rural amenity by reducing amount of sealed surface
	Costs: Less land available for other uses (e.g., residential living)	maintained Costs: Narrower widths may reduce amenity values for some users Potential for conflict between accessway users	Costs: Need for further agreement with joint users on maintenance requirements
Benefits and costs – Cultural	No cultural benefits or costs identified	No cultural benefits or costs identified	No cultural benefits or costs identified
Benefits and costs – Economic	Benefits:	Benefits:	Benefits: Cheaper to construct the access

	Less maintenance costs for sealed roads Costs: Greater cost of constructing the accesses	Cheaper to construct the access Costs: No major costs identified	Costs: Greater cost of maintaining unsealed accesses		
Employment	No major	No major	No major		
growth	impacts on	impacts on	impacts on		
	employment	employment	employment		
Economic	Minimal effects	Minimal effects	Minimal effects		
growth	on economic	on economic	on economic		
	growth	growth	growth		
Risk of acting or	The information	The information	The information		
not acting	available is	available is	available is		
	sufficient to	sufficient to	sufficient to		
	provide an	provide an	provide an		
	informed	informed	informed		
	assessment of the	assessment of the	assessment of the		
	planning	planning	planning		
	alternatives and	alternatives and	alternatives and		
	costs and	costs and	costs and		
	benefits	benefits	benefits		

- [24] The agreed amendments (which are a mix of Option 2 and Option 3) are considered to be efficient and effective in achieving the relevant objectives of the PDP, notably:
 - (a) UFD-O1 which seeks to provide for a compact urban form and SD-O4 which seeks to provide a variety of housing types. The amendments to Table 12 will reduce the land area necessary for accesses to rear lot development which can support a compact urban form and provide flexibility to support a variety of housing types;
 - (b) AINF-O3 which seeks to provide infrastructure while taking into account the qualities and characteristics of the surrounding environments and community well-being. The agreed amendments to Table 12 will continue to enable safe and accessible rear lot access whilst recognising a reduced access width is suitable in the urban context. The amendments to Table 13 recognise and provide for situations where a fully sealed access is not necessary in respect to the use of the land; and

- (c) AINF-O8 which seeks to provide for an integrated land transport network in which adverse effects are avoided, remedied or mitigated. The agreed amendments have been proposed as a method to respond to potential adverse effects of the original provisions from an environmental, social and economic perspective.
- [25] In summary, it is agreed by all of the parties that the above amendments to the TRPT chapter of the PDP decisions version are the most appropriate to achieve the objectives of the PDP and the purpose of the RMA.

WEL

- [26] The objective of WEL's appeal point is to protect underground services. This will achieve the Purpose of the RMA as it will provide for the social, economic, and cultural well-being of the community and for their health and safety in accordance with section 5(2), who depend on the continued functioning of the underground infrastructure.
- [27] An analysis of WEL's proposal is laid out in the table below. Option 1 is to do nothing and rely on the resource consent process to protect network utility assets from potential damage through tree roots. Option 2 is to introduce rules to require separation between trees and network utilities.

	Option 1	Option 2
Benefits and	Benefits:	Benefits:
costs –	More flexibility for tree	Less remedial works
Environmental	planting	required
	Costs:	Costs:
	Additional repairs required	Less options for planting
	involving more land	trees in the berm
	disturbance and potentially	Less room available for
	tree removal	trees
Benefits and	Benefits:	Benefits:
costs – Social	No social benefits	Less disturbance through
	identified	remedial works
		Greater security of
	Costs:	electricity and supply of
	Disruption and noise from	services
	repair works	Less disruption to
		neighbourhoods from
		repair works

		Protects health and safety of workers Costs: Less space for amenity trees
Benefits and costs – Cultural	No cultural benefits or costs identified	No cultural benefits or costs identified
Benefits and costs – Economic	Benefits: Less compliance costs Costs: Cost of remedial works if tree roots damage network utilities	Benefits: Likely to have less remedial work required Less disruption to the electricity supply Reduced need to open the road berm to repair damage from tree roots Costs: If unable to comply with
		the rules this would trigger a consent process which would incur cost to the applicant
Employment	No major employment effects anticipated.	No major employment effects anticipated.
Economic	No effect on economic	No effect on economic
growth	growth	growth
Risk of acting or	The information available	The information available is
not acting	is sufficient to provide an informed assessment of the planning alternatives	sufficient to provide an informed assessment of the planning alternatives and
	and costs and benefits.	costs and benefits.

- [28] Based on the above analysis, introducing rules to require separation between trees and network utilities is considered the most appropriate way to achieve the objectives of the PDP, notably:
 - (a) SD-O5 and AINF-O7 seek to integrate new development with infrastructure. The amendments provide for street trees to be planted in an integrated and efficient way, taking into account the operational needs of underground infrastructure;
 - (b) SD-O10 and AINF-O2 seek to protect infrastructure from reverse sensitivity effects. The amendments in respect to TRPT-R5 and TRPT-R6 aim to address this potential effect by setting in place standards to protect underground services from potential tree root encroachment; and

- (c) AINF-O3 seeks to provide infrastructure whilst taking into account the qualities and characteristics of the surrounding environments and community well-being. The amendments will enable trees to be planted on the road network to maintain and enhance amenity values whilst seeking to protect underground services.
- [29] In summary, it is agreed by all of the parties that the above amendments to the TRPT chapter of the PDP decisions version are the most appropriate to achieve the objectives of the PDP and the purpose of the RMA.

Consideration

- [30] In making this order the Court has read and considered:
 - (a) The notices of appeal dated 1 March 2022; and
 - (b) The Joint Memorandum of the parties dated 18 March 2024.
- [31] The Court is making this order under section 279(1) of the Act, such order being by consent, rather than representing a decision or determination on the merits. The Court understands for present purposes that:
 - (a) All parties to the proceedings have executed the memorandum requesting this order; and
 - (b) All parties are satisfied that all matters proposed for the Court's endorsement fall within the Court's jurisdiction, and conform to the relevant requirements and objectives of the Act including, in particular, Part 2.
- [32] The Court is satisfied that the changes sought are within the scope of TSC and WEL's submissions and appeals.

Order

- [33] The Court orders, by consent, that:
 - (a) The TRPT Transportation chapter in the Proposed Waikato District Plan be amended in accordance with **Appendix 1** to this order (additions marked as <u>underlined</u> and deletions as <u>strikethrough</u>);
 - (b) Pages 8 and 9 of Annexure 1 of TSC's appeal and paragraph 4.15 of WEL's appeal, relating to Tables 12 and 13 in the TRPT chapter, rules TRPT-R5 and TRPT-R6 and Figure 11 in the TRPT chapter, are otherwise dismissed;
 - (c) The following parts of the WEL appeal assigned to Topic 4.2 are not resolved by the consent order and remain extant:
 - (i) The relief sought in paragraphs 4.4, 4.9, 4.21, 4.24, 4.29, 4.40, regarding amendments to the AINF All infrastructure and EGEN Electricity generation chapters of the PDP decisions version; and
 - (d) There is no order as to costs.

Sperior

L J Newhook Alternate Environment Judge



Appendix 1 – Tracked change version of the agreed amendments to the Interpretation and TRPT chapters

1. New definition – 'All weather access'

Term	Definition							
All weather access	Means construction of a carriageway with							
	adequate drainage, a sound subgrade, dust free							
and compacted graded aggregates that result								
	a carriageway that is usable by vehicles in all							
	weather conditions.							

2. Amendment to TRPT-R5

TRPT-R5	Operation, maintenance and minor upgrading of existing public roads, State Highways and associated road network activities							
All zones	(I) Activity status: PER							
	Activity-specific standards:							
	(b) Operation, maintenance and minor upgrading of existing public roads, State Highways, rail corridors and associated rail network and road network activities must comply with the following standards:							
	(i) The works occur within the road reserve or railway corridor;							
	(ii) Works within the road or railway corridor must be for the purpose of:							
	(2) Maintaining or improving effectiveness or efficiency consistent with the function of the existing public road or railway corridor; or							
	(3) Maintaining or improving safety for road users or adjacent properties; and							
	(i) Lighting shall be designed and located to comply with the Australia New Zealand Roading Lighting Standard 1158, (series) – Lighting for Roads and Public Spaces: 2005; and							
	(ii) Any earthworks must comply with Rule AINF-R8.; and							
	(v) New trees must be planted at least 1.5m from underground services, or Im with a root protection barrier approved by the relevant network utility operator.							

3. Amendment to TRPT-R6

TRPT-R6	New public roads, including where the road has been identified									
	on the planning maps as an indicative road, and associated road									
AII	network activities									
All zones	(I) Activity status: PER									
	Activity-specific standards:									
	(a) New public roads, including where the road has been identified on the planning maps as an indicative road, and associated road network activities must comply with the following standards:									
	(i) The public road is located within road or unformed									
	road as shown on the planning maps;									
	(ii) The public road is not located within an Identified Area;									
	(iii) The design requirements of Tables 12 or 13 based on									
	their function within the Road Hierarchy as set out in Table 4 – Functions of roads within the Road									
	Hierarchy, except:									
	(2) Any National routes or Regional arterial roads shall be subject to Rule TRPT-R6(2);									
	(3) The specified minimum Road/right of way reserved widths in Tables 12 or 13 do not include any additional width required for a turning head;									
	(4) Any private access, right of way or access allotment over 70m in length must be constructe to be in accordance with the highest dimensions required for an access allotment in Tables 12 or 13; and									
	(5) The requirements of Tables 12 or 13 shall not apply to taxiways within the TKAZ – Te Kowhai airpark zone;									
	(iv) Within road or unformed road located within the Tamahere RLZ – Rural lifestyle zone, all roads must:									
	(v) Comply with the minimum widths specified in Figure 12; and									
	(vi) Have swale drains on both sides of the carriageway capable of collecting all road runoff and overland flow towards the road or right of way from a 20% Annual Exceedance Probability event; and									
	(vii) In areas of poorly-drained soils, either the stormwater is to be directed to areas with higher infiltration, or infiltration systems are to be constructed.									
	(viii) Within road or unformed road located within the RPZ – Rangitahi peninsula zone, the relevant access and road requirements of the Rangitahi Structure Plan take priority over the standards in Table 12 or 13 in the event of any conflict;									
	(ix) The road connection between Wayside Road and Travers Road comprising the extension of Bragato Way, Te Kauwhata:									

- (x) All roads and vehicle accesses shall be constructed in accordance with Table 12 and Figures 14, 15 and 16; and
- (xi) Stormwater collection must be through grassed swales prior to reaching reticulated systems; and
- (xii) Any earthworks must comply with Rule AINF-R8.; and
- (xiii) New trees must be planted at least 1.5m from underground services, or Im with a root protection barrier approved by the relevant network utility operator.

Advice note:

Where the standards of Table 12 or 13 do not specify a specific dimension and instead state this aspect is subject to a specific design; this aspect of the road is considered to be exempt when determining a permitted activity under Rule TRPT-R6(1). The design of that specific aspect of the road is therefore subject to a separate certification process by the relevant road controlling authority.

4. Amendment to Table 12:

Table 12 – Access and road standards (GRZ – General residential zone, MRZ – Medium density residential zone, LLRZ – Large lot residential zone, SETZ – Settlement zone, LCZ – Local centre zone, COMZ – Commercial zone, TCZ – Town centre zone, GIZ – General industrial zone, HIZ – Heavy industrial zone, TKAZ – Te Kowhai Airpark zone, RPZ – Rangitahi Peninsula zone and MSRZ – Motorsport and recreation zone)

	General	General					Seal Width				General	
Road Type	Number of Allotments or Activities	Design Speed (km/h)	Design Vehicle (RTS 18 Vehicle)	*Minimum Road/ROW Reserve Width (m)	Minimum Trafficable Carriagew ay (m)	Minimu m Median Provisio n (m)	Parking Provision	Minimum Total Seal Width (m) Does not include concrete kerb width	Minimum Services (m)	Minimum Footpath / Shared path (m)	Kerb and Channel / Water- table	Turning Area for no exit roads (RTS 18 Vehicle)
Access and road standa				. – Medium dens CZ – Town centr							one, LCZ – L	ocal centre
Access leg to an allotment (GRZ – General residential zone, MRZ – Medium density residential zone, LLRZ – Large lot residential zone, SETZ – Settlement zone)	I	N/A	8m Rigid	4	N/A							
Access leg to an allotment (LCZ – Local centre zone, COMZ – Commercial zone, TCZ – Town centre zone, GIZ – General industrial zone and HIZ – Heavy industrial zone)	I	N/A		6	N/A							
Private access, including ROWs and access allotments (GRZ – General residential zone, MRZ – Medium density residential zone, LLRZ – Large lot	2 to 4	N/A		8 4.7. A passing bay shall be provided along an access where the access is less	5 3.5	N/A	N/A	4 3.5	Unsealed 1.2m on at least one side	N/A	Nib on one side, mountable on other	Subject to specific design that has been certified

residential zone, SETZ – Settlement zone)				than 5m wide and has a total length greater than 75m.								
Private access, including ROWs and access allotments (LCZ – Local centre zone, COMZ – Commercial zone, TCZ – Town centre zone, GIZ – General industrial zone and HIZ – Heavy industrial zone)	2 to 8	N/A		10	6		N/A	6			Mountable	Subject to specific design that has been certified
Access allotment (GRZ – General residential zone, MRZ – Medium density residential zone, LLRZ – Large lot residential zone, SETZ – Settlement zone)	5 to 8	N/A		8	5		Optional	5			Mountable	Yes
Service Lane (LCZ – Local centre zone, COMZ – Commercial zone, TCZ – Town centre zone, GIZ – General industrial zone and HIZ – Heavy industrial zone)	N/A	N/A	Subject to specific design that has been certified	8	6		No parking	6	Subject to specific design that has been certified	Optional	Non- mountable	Subject to specific design that has been certified
Local Road (GRZ – General residential zone, MRZ – Medium density residential zone, LLRZ – Large lot residential zone, SETZ – Settlement zone)	>8	50	8m Rigid	20	6	None	Im on each side	8		I.8m on each side		8m Rigid
Local Road (LCZ – Local centre zone, COMZ – Commercial zone, TCZ – Town centre zone, GIZ – General industrial zone and HIZ – Heavy industrial zone)			19m Semi		9		Optional	9				19m Semi

Collector Road (GRZ – General residential zone, MRZ – Medium density residential zone, LLRZ – Large lot residential zone, SETZ – Settlement zone)	>100	50	8m Rigid	22	6	Subject to specific design that has been certified	2.5m on each side	II		1.8m on each side		8m Rigid
Collector Road (LCZ – Local centre zone, COMZ – Commercial zone, TCZ – Town centre zone, GIZ – General industrial zone and HIZ – Heavy industrial zone)			19m Semi		7			12				19m Semi
Arterial Road (GRZ – General residential zone, MRZ – Medium density residential zone, LLRZ – Large lot residential zone, SETZ – Settlement zone)	N/A	60	19m Semi	30	10	3	Recessed 2.5m on each side	13		I.8m on each side		N/A
Arterial Road (LCZ – Local centre zone, COMZ – Commercial zone, TCZ – Town centre zone, GIZ – General industrial zone and HIZ – Heavy industrial zone)												
Local roads in Lorenzen Bay Structure Plan Area	>8	50-80 (max)	N/A	17 (Complies with Figure 13)	6		2.5 metres on alternative sides	II	Subject to specific design that has been certified	I.5 metres on one side of the road	Subject to specific design that has been certified	Yes
Roads in Te Kauwhata Structure Plan area	>	50-80 (max)	N/A	20	Refer to Figures 14 -16 (cross-sections)							

Advice notes:

The Regional Infrastructure Technical Specifications May 2018 contains further details on road <u>carriageway and berm</u> width/design requirements, <u>including separation of trees from underground services and root barrier protection requirements</u>.

Figure 11 illustrates the various parts of the road (seal width, berm etc.) defined in Tables 12 and 13.

*Accesses shall have a minimum height clearance of 4.0m and a maximum gradient of 1 in 5 (with minimum 4.0m transition ramps of 1 in 8) except where the access terminates less than 135m from the nearest road that has reticulated water supply (included hydrants).

5. <u>Amendment to Table 13:</u>

Table 13 – Access and road standards (GRUZ – General rural zone and RLZ – Rural lifestyle zone)

	General	General				Seal Width				Berms		General	
Road Type	Number of Allotmen ts or Activities	Design Speed (km/h)	Design Vehicle (RTS 18 Vehicle)	*Minimu m Road/RO W Reserve Width (m)	Minimum Trafficabl e Carriage way (m)	Minimum Median Provision (m)	Parking Provision	Minimum Total Seal Width (m) Does not include concrete kerb width	Minimum Services (m)	Minimum Footpath / Shared path (m)	Kerb and Channel / Water- table	Turning area for no exit roads (RTS 18 Vehicle)	
		-	G	RUZ – Gene	eral rural zon	e and RLZ –	Rural lifesty	yle zone					
Access leg to an allotment	I	N/A	8m Rigid	6	N/A								
Private access, including ROWs and access allotments	2 to 3-4	N/A		6	3	N/A	N/A	3 <u>**</u>	Subject to specific design that has been certified	N/A	Optional	Subject to specific design that has been certified	
Access allotment	4- <u>5</u> to 8	N/A	1	10	5			5 <u>**</u>	-			Yes	
Local	>8	Subject to specific design	Subject to specific design that has been certified	20	6	No		6		Subject to specific design that has been certified	RLZ – Rural lifestyle zone - nibs along seal	8m Rigid	
Collector < 1000 adt	>100		19m Semi	20	7	Subject to specific		8.5			edge. All others		
Collector > 1000 adt or Arterial	N/A	110		20	7	design that has been certified		10			to specific design that	N/A	

				has been	
				certified.	

Advice notes:

*Accesses shall have a minimum height clearance of 4.0m and a maximum gradient of 1 in 5 (with minimum 4.0m transition ramps of 1 in 8)

** In the RLZ and GRUZ where the access connects to an unsealed road, an all weather surface is an acceptable permitted standard. In the GRUZ, where the access connects to a sealed road, the first section is to be sealed (as per the Regional Infrastructure Technical Specifications May 2018) and it is an acceptable permitted standard for the remainder of the access to be an all weather surface

6. Amendment to Figure 11:

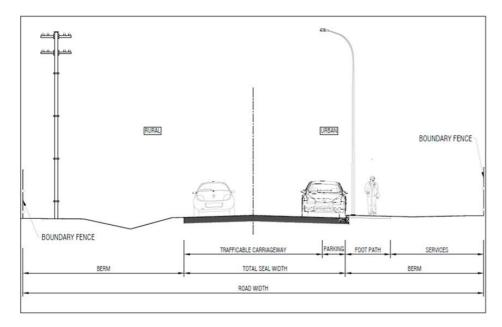


Figure 11 – Attachment to Tables 12 and 13

Advice note: The purpose of Figure 11 is to define the various aspects of the road as set out in Tables 12 and 13. Figure 11 is not intended to prescribe a preferred road layout.