BEFORE A PANEL OF INDEPENDENT HEARING COMMISSIONERS AT WELLINGTON

I MUA NGĀ KAIKŌMIHANA WHAKAWĀ MOTUHEKE O TE WHANGANUI-A-TARA

IN THE MATTER	**of the Resource Management Act 1991**
AND	
IN THE MATTER	**of the hearing of submissions on Te Mahere - Rohei Tūtohua the Wellington City Proposed District Plan**
HEARING TOPIC:	Stream 9 – Infrastructure and Risks

STATEMENT OF EVIDENCE OF MATTHEW ARMIN LINDENBERG ON BEHALF OF KĀINGA ORA – HOMES AND COMMUNITIES

(PLANNING)

27 MAY 2024

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1. EXECUTIVE SUMMARY

1.1 My full name is Matthew Armin Lindenberg, and I hold the position of Technical Director – Planning at Beca Ltd. I have been engaged by Kāinga Ora - Homes and Communities (**Kāinga Ora**) to provide evidence in support of its primary and further submissions on the Infrastructure and Transport chapters in the Proposed Wellington District Plan (**PDP**).

1.2 The key points addressed in my evidence are:

(a) General support for:

(i) the overall approach proposed by the Council in relation to the management of sensitive activities within proximity of the gas transmission network;

(b) The need for further amendments to the provisions proposed by the Council in relation to:

(i) the objectives and policies of the Infrastructure chapter provisions, in particular to align the wording of these provisions with both the Wellington Regional Policy Statement (**WRPS**) as well as the National Policy Statement on Urban Development 2020 (**NPS-UD**);

(ii) the notification provision contained within proposed rule INF-R22 (National Grid); and

(iii) Transport chapter standards TR-S1 (Vehicle trip generation) and TR-S7.2(d) (Cycling and micromobility device parking).

1.3 A copy of my proposed amendments and changes sought to the provisions under consideration in Hearing Stream 9 is included in **Attachment B** of this statement of evidence. I confirm that the version

of relief in my evidence represents the full "updated" set of relief requested by Kāinga Ora in relation to this topic.

1.4 In my opinion, the changes sought in the Kāinga Ora submission and discussed within my evidence, will provide greater alignment between the PDP, the NPS-UD and the purpose, principles and provisions of the RMA.

2. INTRODUCTION

2.1 My name is Matthew Armin Lindenberg and I hold the position of Technical Director – Planning at Beca Ltd. I have the qualifications and experience set out in my 'Statement of Experience', included as **Attachment A** to this statement.

2.2 I am familiar with the national, regional and district planning documents relevant to the PDP.

2.3 I am providing planning evidence on behalf of Kāinga Ora in respect of submissions made on the PDP specific to Hearing Stream 9, specifically in relation to the provisions within the Infrastructure and Transport chapters of the PDP. I was not involved with the preparation of the primary and further submissions, however I can confirm that I have read these submissions made by Kāinga Ora in relation to this Hearing Stream.

2.4 In preparing this evidence I have read the Section 32 and Section 42A reports together with the associated appendices prepared by Council staff, in particular:

(a) The Section 42A report, Hearing Stream 9 – Transport, prepared by Mr. Andrew Wharton;

(b) The Section 42A report, Hearing Stream 9 – Infrastructure, prepared by Mr. Thomas Anderson; and

(c) The Section 42A report, Hearing Stream 9 – Infrastructure – Part 2: Sub-chapters, also prepared by Mr. Anderson.

2.5 I have also read and considered the evidence prepared on behalf of Kāinga Ora by:

(a) Ms. Megan Taylor (Transport).

Code of Conduct

2.6 Although this is a Council hearing, I have read the Environment Court's Code of Conduct contained in the Environment Court Practice Note 2023 and agree to comply with it. My qualifications as an expert are set out in **Attachment A** to this statement. I confirm that the issues addressed in this statement of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

3. SCOPE OF EVIDENCE

3.1 This statement of evidence addresses submission points relating to Hearing Stream 9 of the PDP. Specifically, my evidence will address the infrastructure and transport provisions contained within Part 2 – District-wide Matters / General District-wide Matters / Infrastructure and Transport chapters of the PDP, as well as the newly proposed National Grid sub-chapter provisions.

3.2 I consider further amendments are required to the provisions to better align the PDP with the NPS-UD and the purpose and principles of the RMA. I have consolidated this statement into six key topics to address my amendments, as follows:

(a) Objectives and Policies;

(b) Rule INF-R22 (National Grid);

(c) Rule INF-R23 (Sensitive activities within the gas transmission network); and

(d) Transport chapter standards TR-S1 And TR-S7.2(d);

3.3 This evidence has also been prepared to give consideration to, and provide assessment where relevant, as to the Section 32 / 32AA

requirements set out in the RMA. I provide commentary later in this evidence as to why I consider that the relief sought throughout this statement:

(a) Is efficient, effective and the most appropriate means to achieve the objectives that the PDP is seeking to achieve, as well as the overarching objectives and strategic direction set out in higher-order documents such as the NPS-UD and the WRPS; and

(b) That the benefits of the relief sought will outweigh the costs, in relation to the potential environmental, economic, social and cultural effects which could be anticipated from the implementation of the relief sought.

4. OVERVIEW OF KĀINGA ORA'S SUBMISSION

4.1 For context, I now turn to summarising the key matters / issues addressed in the Kāinga Ora submission points relating to Hearing Stream 9 (Infrastructure and Risks).

4.2 In brief, Kāinga Ora sought amendments to clarify the focus / nature of adverse effects to be addressed by the PDP provisions, as well as how the framework of rules relating to sensitive activities strike an appropriate balance between the enablement of growth over time, whilst ensuring the management of any relevant adverse effects relating to the potential creation of land use incompatibilities.

4.3 Specifically, the Kāinga Ora submission and further submisision focussed on the framework of provisions within the PDP relating to the management of sensitive activities in proximity to both the National Grid as well as the gas transmission network, as well as a number of specific rules within the Transport chapter in relation to vehicle generation and cycling/micromobility parking and charging facilities.

5. RELEVANT STRATEGIC AND POLICY CONTEXT

5.1 Under the NPS-UD, Wellington City is defined as a Tier 1 urban environment (with the Council defined as a Tier 1 local authority). Tier

1 urban environments are the largest and fastest growing urban environments in New Zealand and the NPS-UD provides clear and strong policy direction for Councils and decision makers to enable and provide for adequate opportunity for land development to meet the housing and business needs of the community.

5.2 The NPS-UD anticipates and directs that New Zealand's key urban environments need to grow and change over time, and planning frameworks need to be responsive and adaptive to the changing needs and expectations of people, communities and future generations. This anticipated urban growth and intensification also needs to take place, particularly in the context of Tier 1 urban environments, alongside the infrastructure networks which are required to serve and service these urban areas and the many people who rely on their cities (and their associated infrastructure) to provide for their social, cultural and economic wellbeing.

5.3 The WRPS provides consistent policy direction to guide the planning of Wellington Region, and acknowledges the balance that is required in order to manage potential adverse effects of new development on infrastructure – whilst at the same time managing the potential adverse effects of infrastructure of the surrounding environment and communities.

5.4 Key policies within the WRPS which articulate the balance needing to be struck between the management of growth and development, alongside the management of infrastructure are Policies 8 and 39. I note that both these policies within the WRPS provide clear direction with regard to the need to manage the potential adverse effects associated with "*incompatible subdivision, use and development*", particularly in relation to regionally significant infrastructure.

6. PDP OBJECTIVES AND POLICIES

6.1 Kāinga Ora made submissions points regarding the objectives and policies of both the Infrastructure and Transport chapters of the PDP. In summary, these submissions sought to:

(a) Articulate the balance more clearly between enabling and providing for infrastructure, whilst appropriately managing effects of these activities on the community; and

(b) Reduce ambiguity, and improve clarity, of various objectives and policies.

Objective INF-O3 and Policy INF-P7

6.2 I reach the following conclusions regarding the Kāinga Ora submissions1 seeking amendments to Objective INF-O3 and Policy INF-P7:

(a) I support the amendment (for clarity) proposed by the Council reporting office in relation to Objective INF-O3, noting retention of the reference to "*including reverse sensitivity effects*", does not frame the objective solely to the issue of reverse sensitivity, but simply notes that this is an effect to be considered under Objective 3.

(b) In relation to Policy INF-P7, I recommend re-naming the policy heading, to focus on "incompatible subdivision, use and development" rather than "reverse sensitivity".

(c) Utilising the wording of "incompatible subdivision, use and development" provides, in my opinion, a clear connection to the specific range of methods referred to in the policy wording and the associated rules and standards which follow. Not meeting these rules / standards would then mean the ability to achieve the outcome sought by Policy P7 could be compromised.

(d) In my opinion, reframing the policy heading in this manner better aligns with the policy direction of the WRPS – noting the absence of the phrase "reverse sensitivity" from, of relevance, Policy 8[2] and 39[3] of the RPS, as well as the focus of Policy 8

[1] Sub No. 391.110, 391.111 and 391.120
[2] Policy 8: Protecting regionally significant infrastructure – regional and district plans
[3] Policy 39: Recognise the benefits from renewable energy and regionally significant infrastructure – consideration

of the RPS which does specifically relate to incompatible subdivision, use and development.

(e) In addition, re-framing the policy heading to "incompatible subdivision, use and development" provides clarity of the issues / effects which can be assessed when a sensitive activity / use is being proposed. In my opinion, this is a clearer and more certain framing of the policy, as issues relating to reverse sensitivity effectively require an activity / use to be established first – at which point any nuisance would then need to be experienced (e.g. by a sensitive activity); followed by the potential for that nuisance to give rise to a sensitive activity then making a complaint with regard to the lawfully established infrastructure. In addition, given the direction of Policy INF-P7 would also apply to the alteration of existing sensitive activities, I consider that the focus of the policy on "reverse sensitivity" effects of altering existing sensitive activities would be inappropriate – and the focus of the effects to be considered and managed would be the extent to which any proposed alteration to existing sensitive activities could give rise to any "incompatibility effects".

7. RULES AND STANDARDS

Rule INF-R22 (National Grid)

7.1 Regarding the Kāinga Ora submission4 seeking amendments to Rule INF-R22 regarding buildings, structures and activities within the National Grid Yard, I reach the following conclusions:

(a) I support the retention of the reference within the Permitted Activity part of notified Rule INF-R22 (now proposed to be Rule INF-NG-R58) which enables appropriate development and activities within the National Grip Yard. In my opinion, the proposed Permitted Activity rule framework is consistent with similar rule frameworks which I have been involved with in other territorial authority planning frameworks (such as

[4] Sub No. 391.125 – 391.127

Auckland's Unitary Plan as well as the recently reviewed Waikato District Plan).

(b) I have proposed amendments to the notification clause within the rule – again consistent with other such clauses in the aforementioned planning frameworks in other territorial authorities – which clarifies that any such applications do not have to be automatically notified to Transpower as a 'default position', but to provide clarity that Transpower will be the key party to be considered to be notified through the resource consent process where compliance with the rule and associated standards cannot be achieved.

(c) I consider that the standard RMA notification tests provide the Council with the ability to identify Transpower as a potentially affected party for any resource consent application which cannot comply with the Permitted activity rule / standards.

Rule INF-23 (Sensitive activities within the Gas Transmission Network)

7.2 Regarding the Kāinga Ora further submissions[5] regarding Rule INF-R23, I generally support the Council's proposed amendments and recommendations – including that any buffer area to be identified either side of the gas transmission network should be spatially defined, mapped and identified in the PDP maps, for ease of interpretation and application of the rule. I also note that the submission by FirstGas (304.17) seeks the addition of a new rule / standard which would apply to residential activities (sensitive activities) located "*within 20m of the gas transmission pipeline and/or within 30m of the above ground related infrastructure*".

7.3 In terms of any mapped buffer area – and its application to particular rules / standards within the PDP – I consider it would be helpful to plan users for the identified 'buffer area' distance to directly correspond / relate to any associated rules / standards. For this reason, I consider it would be helpful to clarify that the 'buffer area' proposed to be mapped

[5] FS89.62 and FS89.63

and included within the PDP would be for a distance of 30m either side of the gas transmission network.

Transport Chapter Standards (TR-S1 and TR-S7.2(d))

7.4 Regarding the Kāinga Ora submissions6 seeking amendments to Transport chapter standards TR-S1 (Vehicle trip generation) and TR-S7.2(d) (Cycling and micromobility device parking), I reach the following conclusions:

(a) I support the assessment and conclusions drawn by Ms Taylor (Transport evidence, on behalf of Kāinga Ora) in relation to appropriate vehicle trip generation thresholds. I consider that the thresholds recommended by the Council are low – particularly in the context of a Tier 1 urban environment as defined by the NPS-UD. By comparison to other similar standards utilised by Tier 1 territorial authorities around the country (such as Auckland, by way of example), those proposed by the Council are as much as 10 x less (in the case of residential activities). The Operative Auckland Unitary Plan sets a threshold for residential activities at 100 new dwellings (the equivalent of approximately 1,000 vehicle movements per day). Through Auckland Council's proposed Plan Change 79, the Council proposed to reduce the operative threshold for residential activities to between 40-60 new dwellings (the equivalent of 400-600 vehicle movements per day).

(b) I therefore consider the Council's recommended threshold for TR-S1 (200 vehicles movements per day for light vehicles on local roads, equivalent to between 20 new dwellings) are too low in the context of New Zealand's primary Tier 1 urban environments. For this reason, I propose and support an increased threshold for light vehicles to at least 500 vehicle movements per day (equivalent to 50 new dwellings).

(c) In relation to Standard TR-S7.2(d), I propose amendments to the requirement for residential on-site parking spaces needing

[6] Sub No. 391.150, 391.151 & 391.153

electrical vehicle charging. I consider the need for electrical charging facilities for any/every car parking space to be overly onerous – in particular in situations where the residential unit already provides a dedicated car parking space (such as in a garage or basement car park). I consider the need for such dedicated cycling / micromobility charging facilities is better targeted to those developments where a residential unit is proposing a dedicated internal car park space (noting the direction of the NPS-UD for Tier 1 local authorities to no longer prescribe minimum car parking requirements in their district plans), rather than instances where developments may provide communal outdoor car parking spaces for residents.

(d) I therefore recommend amending the requirement to specify that the provision of charging facilities is limited to those residential units which are proposing to incorporate a dedicated car park space (as per my amendments proposed in **Attachment B**).

8. SECTION 32 / 32AA CONSIDERATIONS

8.1 In respect of a Section 32 / 32AA evaluation of the issued raised above, along with the proposed amendments to provisions which I have recommended (as set out in **Attachment B**), I provide the following assessment and commentary:

(a) I consider that the amendments I have recommended are the most appropriate means to achieve:

(i) The creation of effective and efficient, well-functioning urban environments, which will provide for ongoing development and change over time;

(ii) Enablement of development of sensitive activities in appropriate locations, where it can be demonstrated that identified rules and standards can be complied with. I consider my recommended amendments to provisions strike an appropriate balance to build into the PDP a framework of provisions which balances the need to

enable and provide for future urban growth opportunities, whilst also ensuring that potential adverse effects on infrastructure can be appropriately identified and assessed;

(b) I consider that the potential benefits associated with my recommended amendments include:

(i) The creation of a package of PDP provisions which enable and provide for future development opportunities to accommodate sensitive activities, whilst also enabling existing infrastructure activities and regionally significant infrastructure to continue to provide for the needs of the region without their operations being unduly constrained or compromised.

9. CONCLUSION

9.1 A summary of the changes that are sought through my evidence are included at **Attachment B**. The changes are shown in green as a markup.

9.2 It is my opinion that the underlying principles that have informed the proposed changes sought by Kāinga Ora will better align the PDP with the NPS-UD, the WRPS and the purpose and principles of the RMA.

Matthew Lindenberg
27 May 2024

ATTACHMENT A:

STATEMENT OF EXPERIENCE – MATHEW LINDENBERG

Matthew Lindenberg:

I am a Planner and hold the position of Technical Director - Planning at Beca Limited. I hold a Master of Science in Geography (Second Class Honours) and a Bachelor of Science, both from the university of Auckland. I am an Associate member of the New Zealand Planning Institute

I have over 20 years' planning and resource management experience, providing technical direction on a number of key projects, particularly focussing on strategic and policy planning. I have been involved in a number of plan review and plan change processes, including the recent Independent Hearings Panel ("IHP") hearings on the proposed Auckland Unitary Plan (PAUP). In particular, I have been a member of planning teams for policy planning projects including:

(a) Numerous IPI / ISPP plan change processes relating to implementation of NPS-UD intensification policy direction, in particular plan changes relating to Auckland Council, Wellington City Council, Christchurch City Council as well as the Waimakariri District Council;

(b) The Whangarei District Plan Urban and Services Plan Changes submission, hearing and appeal processes;

(c) The Waikato District Council Stage One District Plan Review submission, hearing and appeal processes;

(d) Submission and hearings processes in relation to numerous plan changes to the Auckland Unitary Plan (including PC3, PC4, PCs 14-17, PC23, PC26 and PC34);

(e) The submission, hearing and appeals process in relation to Tauranga City Council's Plan Change 27 (Flooding from intense rainfall);

(f) The Kaipara District Plan review and development of objectives and policies (for the 'Land Use and Development Strategy' and 'Residential' chapters) for the notification of that Plan;

(g) The Plan Variation for the site known as 'The Landing' at Hobsonville Point (undertaken through the Housing Accords and Special Housing Areas legislative process) on behalf of Hobonsville Land Company;

(h) The Kerikeri-Waipapa Structure Plan (2007) on behalf of the Far North District Council; and

(i) The preparation of the Local Development Framework and Core Strategy (the 'Spatial Plan') during my time working at the London Borough of Bexley in the United Kingdom, including leading the 'Affordable Housing' and 'Sustainability / Climate Change' workstreams as part of the plan development process

I have also prepared and presented evidence on numerous PAUP hearing topics on behalf of Kāinga Ora in front of the IHP. I subsequently prepared and presented evidence in the Environment Court on behalf of Kāinga Ora in relation to appeals on the PAUP related to the carparking and transport provisions as well as the Residential zone provisions.

ATTACHMENT B:

RELIEF SOUGHT

This entire chapter has been notified using the RMA Part One, Schedule 1 process (P1 Sch1).

Proposed amendments recommended through evidence on behalf of Kāinga Ora shown in green text ~~strikethrough~~ and underline (27 May 2024).

Tūāhanga

Infrastructure

INF	Infrastructure

Introduction

Infrastructure plays a critical role in the successful functioning of Wellington City and the lives of Wellingtonians. Whether it is the provision or disposal of water through the three waters network, facilitating the movement of people and goods through the transport network, or in the provision of infrastructure by network utility operators, infrastructure is central to our daily lives.

This chapter of the District Plan seeks to provide for the operation, maintenance and development of infrastructure within the City. The definition of Infrastructure in the RMA includes “structures for transport on land by cycleways, rail, roads, walkways, or any other means”. Given this, the Infrastructure Chapter includes provisions for the transport network matters concerning the operation, maintenance, repair and renewal, upgrading and development of the transport network and connections to the transport network.

Infrastructure is critical for the economic, social, cultural and environmental wellbeing of people and communities, and to provide for their health and safety at a national, regional and local scale, including through:

1. The effective, safe, secure and efficient transmission or distribution of electricity, gas, fuel or energy;
2. An integrated, efficient and safe transport network for the movement of people and goods by land, air or water, including public transport, walking, cycling, private vehicles;
3. Effective, reliable and future-proofed communications networks and services; and
4. Effective, resilient, efficient and safe water, wastewater and stormwater, networks and services.

However, infrastructure can also give rise to adverse effects on surrounding land uses and the environment which require consideration. Likewise, surrounding land uses can give rise to reverse sensitivity effects on infrastructure. This chapter sets out provisions addressing these effects.

The provisions within this chapter apply on a City-wide basis. As such the rules in the zone chapters and earthworks chapter do not apply to infrastructure unless specifically stated within an infrastructure rule or standard. Likewise, the rules in the overlay chapters do not apply to infrastructure. Instead, infrastructure sub-chapters address the requirements particular to the overlays as follows:

- INF-CE (Coastal Environment and Natural Character);

- INF-ECO (Significant Natural Areas);
- INF-NFL (Outstanding Natural Landscapes, Outstanding Natural Features, Special Amenity Landscapes, Ridgelines and Hilltops;
- INF-NH (Natural Hazards); and
- INF-OL (Other Overlays).

The provisions of the overlay sub-chapters apply in addition to the provisions of this chapter. In the case of conflict with any provisions of this chapter and a sub-chapter, the provisions of the sub-chapter will prevail.

Further, the Resource Management Act, and therefore the District Plan, share the same broad definition of 'infrastructure', which includes airport and port facilities, and renewable electricity generation. Notwithstanding that, this Infrastructure Chapter (including the infrastructure sub chapters) does not apply to activities that fall under the definition of airport purposes or airport related activities (which are dealt with in the Airport Zone chapter), ~~or~~ the definition of port or operational port activities (which are dealt with in the Port Zone chapter), or the definition of Renewable Electricity Generation Activity (which are dealt with in the Renewable Electricity Generation chapter). Any infrastructure in the airport or port areas that is inconsistent with those definitions is managed by the provisions in this Infrastructure Chapter.

Lastly, the Act and therefore District Plan definition of 'infrastructure' includes three waters infrastructure. The Three Waters chapter applies in terms of land development effects on three waters infrastructure, however this chapter applies to the construction, operation and maintenance of the infrastructure itself.

Infrastructure which is proposed to be located within legal road is subject to the provisions of this chapter. All roads have an underlying zoning, and as such the zone based provisions in this chapter apply.

Additional regulatory requirements, separate to the District Plan, are also relevant to infrastructure, including:

1. The National Policy Statement on Electricity Transmission;
2. The Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (NESETA);
3. The Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016 (NESTF);
4. The National Code of Practice for Utility Operators' Access to Transport Corridors;
5. The New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001); and
6. Electricity (Hazards from Trees) Regulations 2003.

In the case of conflict with any provision of this plan and any national environmental standard (including the NESETA or the NESTF), under Section 43B of the Act the provisions of the national environmental standards will prevail.

Other relevant District Plan provisions
It is important to note that in addition to the provisions in this chapter, the following Part 2: District-Wide chapters may also be of relevance, including: • **Subdivision** - The Subdivision Chapter contains provisions which manage subdivision of land. • **Light and glare** - The Light Chapter contains specific provisions relating to light spill and the management of effects on residential areas. • **Noise** - The Noise Chapter contains specific controls in relation to noise, including effects standards NOISE-S1 (maximum noise levels). • **Signs** - The Signs Chapter contains specific controls in relation to signage, including official signs, the effects of signs on road safety, and third party signage. • **Contaminated land** - The Contaminated Land Chapter manages the use and development of Contaminated Land or potentially Contaminated Land. • **Hazardous substances** - The Hazardous Substances Chapter contains provisions to manage Hazardous Substances. • ~~**Trees** — The Notable Tree chapter contains specific provisions relating to the management of Notable Trees.~~ • **Designations** Resource consent may therefore be required under rules in this chapter as well as other chapters. Unless specifically stated in a rule or in this chapter, resource consent is required under each relevant rule. The steps to determine the status of an activity are set out in the General Approach chapter.

Objectives	
INF-O1	**The benefits of infrastructure** The national, regional and local benefits of infrastructure are recognised and provided for.
INF-O2	**Adverse effects of infrastructure** The adverse effects of infrastructure on the environment are managed, while recognising: 1. The functional and operational need of infrastructure; and 2. That positive effects of infrastructure may be realised locally, regionally or nationally.
INF-O3	**Adverse effects on infrastructure** Manage the adverse effects, including reverse sensitivity effects ~~of~~ of subdivision use and development on the function and operation of infrastructure.
INF-O4	**Infrastructure availability** Safe, effective and resilient infrastructure is available for, and integrated with, existing and planned subdivision, use and development.
INF-O5	**Transport network** The transport network: 1. Improves connectivity, enabling people of all ages and abilities, and goods to move safely and effectively regardless of transport mode; 2. Supports well-functioning urban environments; 3. Supports the health and well-being of people; and 4. Supports development infrastructure, additional infrastructure and green infrastructure.
INF-O6	**Amateur radio configurations** The adverse effects of amateur radio configurations on the environment are managed.
Policies	
INF-P1	**Recognising and providing for infrastructure** Recognise the benefits of infrastructure by: 1. Enabling the safe, resilient, effective and efficient operation, maintenance, repair, minor upgrade or removal of existing infrastructure; 2. Enabling investigation, monitoring and navigation activities associated with infrastructure operations; 3. Providing for significant upgrades to, and the development of new infrastructure; and 4. Providing for the functions and responsibilities of infrastructure as lifeline utilities during an emergency.
INF-P2	**Coordinating infrastructure with land use, subdivision, development and urban growth** Enable the efficient coordination, integration and alignment of infrastructure planning and delivery with land use, subdivision, development and urban growth so that existing and future land use and infrastructure is integrated, efficient and aligned.
INF-P3	**Technological advances** Provide flexibility to adopt new technologies for infrastructure that: 1. Allow for the re-use of redundant services and structures; 2. Increase resilience, safety or reliability of networks and services; 3. Result in environmental benefits or enhancements; or 4. Promote environmentally sustainable outcomes.
INF-P4	**Undergrounding of infrastructure** Encourage the undergrounding of new infrastructure in urban areas where it is practicable and technically feasible.
INF-P5	**Adverse effects of infrastructure** Manage the adverse effects of upgrades to, or the development of new infrastructure, including effects on: 1. Natural and physical resources; 2. Amenity values; 3. Sensitive activities; 4. The identified values of Overlays; 5. The safe and efficient operation of other infrastructure; and 6. The health, well-being and safety of people and communities.
INF-P6	**Consideration of the adverse effects of infrastructure**

	When considering the adverse effects of infrastructure on the environment recognise that there may be situations where all adverse effects, including construction effects, cannot be avoided, and as such must be remedied or mitigated through having regard to the following: 1. The extent to which adverse effects can be avoided, remedied or mitigated may be constrained by the functional or operational need of the infrastructure; 2. The time, duration, or frequency of adverse effects; 3. The necessity of the infrastructure including: a. The need to quickly repair and restore disrupted services; and b. The impact of not operating, repairing, maintaining, upgrading, removing or developing infrastructure; 4. Existing infrastructure including: a. The complexity and connectedness of networks and services; and b. The potential for co-location and shared use of infrastructure corridors; 5. Anticipated outcomes for the receiving environment and the degree to which past modifications have compromised the achievement of those outcomes; 6. The benefits derived from the infrastructure at a local, regional and national scale; and 7. The extent to which the infrastructure is integrated with, and necessary to support, planned urban development.
INF-P7	~~**Reverse sensitivity**~~ **Incompatible subdivision, use and development** Manage the establishment or alteration of sensitive activities near existing lawfully established infrastructure, including by: 1. Requiring subdivision of sites containing the National Grid to: a. Retain the ability for the network utility operator to access, operate, maintain, repair and upgrade National Grid; and b. Ensure that future buildings, earthworks and construction activities maintain safe electrical clearance distances under all building and National Grid operating conditions; 2. Managing land disturbance and activities sensitive to gas transmission to avoid or mitigate potential adverse effects of, and on, gas transmission pipelines; 3. Requiring subdivision of sites containing a gas transmission ~~pipeline~~ network to retain the ability for the network utility operator to access, operate, maintain, repair and upgrade the gas transmission pipeline; and 4. Managing the activities of others through set-backs and design controls where it is necessary to achieve appropriate protection of infrastructure.
INF-P8	**Amateur radio configurations** Design, construct and locate amateur radio configurations to minimise adverse effects on the existing and anticipated amenity of adjoining properties and the surrounding area.
INF-P9	**Upgrading and development of the transport network** Enable the upgrading and development of the transport network where, as far as practicable, it: 1. Integrates with the existing transport network and any other planned network upgrades or development; 2. Does not compromise the safe and effective functioning of the transport network; 3. Responds to site and topographical constraints including opportunities to reduce the effects of earthworks on landscape and ecological values; 4. Provides for high levels of connectivity within and between transport modes; 5. Provides for pedestrian, cycling and micromobility safety and connectivity including access to and usability of public open spaces and access to public transport services; and 6. Provides transport corridors which: a. Allocate adequate space in the corridor for walking, cycling, micromobility, public transport (including stops), loading and parking, vehicles, infrastructure and street trees; and b. Include street trees that are suitable for their specific locations in the road reserve, where these: i. Are a species appropriate to the site's growing conditions including soil, slope, aspect, wind, drought and salt tolerance; ii. Contribute to high quality public amenity through species diversity, habitat and food source value and appearance (mature height, stem girth and form); iii. Have low maintenance requirements and high tolerance to pruning; iv. Are selected and sited to minimise safety risks for pedestrians, especially at night; v. Are sited to avoid compromising traffic safety sightlines in respect of traffic lights, signs, intersections, bus stops, pedestrian crossings and vehicle crossings; and vi. Are sited and planted to avoid compromising buildings, structures or infrastructure.
INF-P10	**Classification of roads** Classify roads according to the Waka Kotahi New Zealand Transport Agency's One Network Framework.
~~**INF-P11**~~	~~**Connections to roads**~~ ~~Enable safe and effective connections between sites and the transport network by requiring connections to roads to address:~~ ~~1. The One Network Framework classification, characteristics and operating speed of the road and the number and types of vehicles accessing the site;~~ ~~2. Opportunities to share and minimise the number of connections;~~ ~~3. Public health and safety including the safe functioning of the transport network and the safety of pedestrians, cyclists and micromobility device users; and~~ ~~4. Site or topography constraints including reduced visibility.~~
INF-P11~~12~~	**Infrastructure within roads**

	Encourage the use of roads for other infrastructure, including where it is accordance with the National Code of Practice for Utility Operators' Access to Transport Corridors 2019.
INF-P12~~13~~	**Infrastructure within riparian margins** Provide for infrastructure within riparian margins where: 1. Natural character is maintained; and 2. The infrastructure activity is designed to minimise the adverse effects on the natural character.
Rules for Infrastructure - General	
INF-R1	**Operation, maintenance and repair, or removal of existing above and underground infrastructure and ancillary vehicle access tracks**
All Zones	1. Activity status: **Permitted** Where: a. All above ground structures that are no longer required for the operation of the infrastructure are removed within twelve months of being replaced or becoming redundant; b. Compliance is achieved with INF-S1; and c. Compliance is achieved with the following standards: i. In relation to existing underground infrastructure, INF-S2; ii. INF-S3; and iii. INF-S12.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with INF-R1.1.a and INF-R1.1.c cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P3, INF-P5 and INF-P6.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with INF-R1.1.b cannot be achieved.
INF-R2	**New underground infrastructure (including customer connections), and upgrading of existing underground infrastructure**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with INF-S1; and b. Compliance is achieved with the following standards: i. INF-S2; ii. INF-S3; iii. INF-S7; and iv. INF-S12 Note: Aboveground ancillary structures are provided for in INF-R7.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with INF-R2.1.b cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P3, INF-P4, INF-P5 and INF-P12~~13~~.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with INF-R2.1.a cannot be achieved.
INF-R3	**Upgrading of existing aboveground infrastructure**
All Zones	1. Activity status: **Permitted**

	Where: a. Compliance is achieved with INF-S1; and b. Compliance with the following standards is achieved: i. INF-S3; ii. INF-S4; and iii. INF-S12.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with the requirements of INF-R3.1.b cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5 and INF-P6.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with INF-R3.1.a cannot be achieved.
INF-R4	**New vehicle access tracks for infrastructure**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with INF-S3 and INF-S7.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R4.1 cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P5, INF-P6 and INF-P12~~13~~.
INF-R5	**New aboveground customer connection ~~line~~**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with INF-S5.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R5.1 cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P5 and INF-P6.
INF-R6	**Temporary infrastructure**
All Zones	1. Activity status: **Permitted** Where: a. All temporary infrastructure structures cease operating and are removed from the site within 12 months of the work commencing; b. Compliance is achieved with INF-S1; and c. Compliance is achieved with the following standards: i. INF-S3; ii. INF-S6; iii. INF-S7; iv. INF-S8; v. INF-S9; vi. INF-S10; vii. INF-S12; and viii. INF-S14~~15~~.
All Zones	2. Activity status: **Restricted Discretionary**

	Where: a. Compliance with the requirements of INF-R6.1.a or INF-R6.1.c cannot be achieved. Matters of discretion are: 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P3, INF-P5, INF-P6 and INF-P12~~13~~
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with the requirements of INF-R6.1.b cannot be achieved.
INF-R7	**Structures associated with infrastructure including:** 1. **Substations (including switching stations);** 2. **Transformers;** 3. **Gas transmission and distribution structures;** 4. **Energy storage batteries not enclosed by a building; ~~and~~** 5. **Communications kiosks~~.~~; and** **6. Bus Shelters.**
All Zones	1. Activity status: **Permitted** Where: a. In the General Rural ~~Production, Rural Lifestyle~~ or General Industrial Zones, the maximum building and structure height standard for that Zone is complied with. In all other zones INF-S6 must be complied with; b. Any substation, ~~gas regulation valve and/or~~ takeoff station or energy storage batteries are set back at least 2m from a residential site side or rear boundary (but not a road boundary); c. Compliance is achieved with INF-S7 and INF-S14~~15~~; and d. Compliance is achieved with INF-S1.
All Zones	2. Activity Status: **Restricted Discretionary** Where: a. Compliance with the requirements of INF-R7.1.a, INF-R7.1.b or INF-R7.1.c cannot be achieved. Matters of discretion are: 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5 INF-P6 and INF-P12~~13~~.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with the requirements of INF-R7.1.d cannot be achieved.
INF-R8	**New infrastructure contained within existing buildings**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with INF-S1.
All Zones	2. Activity status: **Non-Complying** Where: a. Compliance with the requirements of INF-R8.1.a cannot be achieved.
INF-R9	Navigational aids, sensing and environmental monitoring equipment (including air quality and meteorological)
All Zones	1. Activity status: **Permitted** Where:

	a. Compliance is achieved with the following standards: i. INF-S3; ii. INF-S6; iii. INF-S7; iv. INF-S8; and v. INF-S12.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with the requirements of INF-R9.1.a cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P12~~13~~.
INF-R10	**New overhead lines and associated support structures that convey telecommunications or electricity below 110kV**
General Rural Zone Large Lot Residential Zone General Industrial Zone Light Industrial Zone Airport Zone Hospital Zone Port Zone Stadium Zone Tertiary Education Zone	1. Activity status: **Permitted** Where: a. Compliance is achieved with the following standards: i. INF-S3; ii. INF-S6; iii. INF-S7; iv. INF-S8; and v. INF-S12.
General Rural Zone Large Lot Residential Zone General Industrial Zone Light Industrial Zone Airport Zone Hospital Zone Port Zone Stadium Zone Tertiary Education Zone	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R10.1 cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P5, INF-P6 and INF-P12~~13~~.
All other Zones	3. Activity status: **Discretionary**
INF-R11	**Telecommunications or radiocommunication activities (not otherwise provided for by another rule in this table and not regulated by the NESTF)**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with the following standards: i. INF-S6; ii. INF-S7;

	iii. INF-S8; iv. INF-S9; v. INF-S10; and vi. INF-S12,; and ~~vii. INF-S15.~~ b. Compliance is achieved with INF-S1.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with the requirements of INF-R11.1 cannot be achieved. Matters of discretion are: 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P5, INF-P7 and INF-P12~~13~~.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with the requirements of INF-R11.1.b cannot be achieved.
INF-R12	**New telecommunications poles and new antennas (regulated by the NESTF that do not meet the permitted activity standards in those Regulations)**
All Zones	1. Activity status: **Controlled** Where: a. The width of any panel antenna does not exceed 0.8m; b. The diameter of any dish antenna located in the road reserve does not exceed: i. 0.6m in a residential zone; or ii. 0.9m in all other zones; c. The diameter of any dish antenna not located in the road reserve does not exceed: i. 0.6m in a residential zone; or ii. 2.0m in all other zones; d. Compliance is achieved with INF-S8; and e. Compliance is achieved with INF-S1. Matters of control are: 1. The functional and operational needs of, and benefits from, the infrastructure, including the potential impact on the levels of service or health and safety if the work is not undertaken; and 2. The amenity values of the relevant zone and the extent to which any adverse visual amenity effects can be managed.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R12.1.a, INF-R12.1.b, INF-R12.1.c and INF-R12.1.d cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P12~~13~~.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with the requirements of INF-R12.1.e cannot be achieved.
INF-R13	**New antenna attached to a building (regulated by the NESTF that do not meet the permitted standards in the NESTF)**
All Zones	1. Activity status: **Controlled** Where: a. A new panel antenna does not exceed a maximum face area of $2m^2$; ~~and~~ b. The antenna does not exceed a height of 5m above the point of attachment to the building; c. In any residential zone, the lowest point at which the antenna is attached to the building is at least 15m above the ground; and d. INF-S1 is complied with. Matters of control are: 1. The functional and operational needs of, and benefits from, the infrastructure, including the potential impact on the

	levels of service or health and safety if the work is not undertaken; and 2. The amenity values of the relevant zone and the extent to which any adverse visual amenity effects can be managed.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R13.1.a, INF-R13.1.b or INF-R13.1.c cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5 and INF-P6.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with the requirements of INF-R13.1.d cannot be achieved.
INF-R14	**New telecommunications cabinets (regulated by the NESTF that do not meet the permitted standards of the NESTF)**
All Zones	1. Activity status: **Controlled** Where: a. A single, standalone telecommunications cabinet does not exceed a footprint of 2.5m^2 or a height of 2m; b. A group of telecommunications cabinets do not exceed a footprint of 3m^2; and c. Compliance is achieved with INF-S7 and INF-S14~~15~~. Matters of control are: 1. The functional and operational needs of, and benefits from, the infrastructure, including the potential impact on the levels of service or health and safety if the work is not undertaken; and 2. The amenity values of the relevant zone and the extent to which any adverse visual amenity effects can be managed.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R14.1 cannot be achieved. Matters of discretion are: 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P12~~13~~.
INF-R15	**Infrastructure buildings and structures not provided for by any other rule in this table**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with all bulk and location standards for the zone in which the building or structure is located; b. Compliance is achieved with INF-S7 and INF-S14~~15~~; and c. Compliance is achieved with INF-S1.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with the requirements of INF-R15.1.a or INF-R15.1.b cannot be achieved. Matters of discretion are: 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P12~~13~~.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with the requirements of INF-R15.1.c cannot be achieved.
INF-R16	**New electricity lines and associated support structures (including poles and towers) that convey electricity of 110kV or above**
All Zones	1. Activity status: **Restricted Discretionary**

	Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P12~~13~~.
INF-R17	**New aboveground pipelines**
All Zones	1. Activity status: **Discretionary**
INF-R18	**New water, wastewater and stormwater pump stations**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with the following standards: i. INF-S2; ii. INF-S3; iii. INF-S6; iv. INF-S7; v. INF-S12; and vi. INF-S14~~15~~.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R18.1 cannot be achieved. Matters of discretion are: 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P3, INF-P5, INF-P6 and INF-P12~~13~~.
INF-R19	**New water treatment plants**
General Rural Zone Large Lot Residential Zone General Industrial Zone Light Industrial Zone Airport Zone Hospital Zone Port Zone Stadium Zone Tertiary Education Zone	1. Activity status: **Permitted** Where: a. Relevant zone bulk and location standards are complied with; and b. Compliance is achieved with the following standards: i. INF-S2; ii. INF-S3; iii. INF-S7; iv. INF-S12;and v. INF-S14~~15~~.
General Rural Zone Large Lot Residential Zone General Industrial Zone Light Industrial Zone Airport Zone Hospital Zone Port Zone Stadium Zone	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R19.1 cannot be achieved. Matters of discretion are: 1. The extent and effect of non-compliance with any relevant standard not met as specified in the associated assessment criteria for the infringed standard; and 2. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P12~~13~~.

Tertiary Education Zone	
All other Zones	3. Activity status: **Discretionary**
INF-R20	**New wastewater treatment plants**
General Rural Zone Large Lot Residential Zone General Industrial Zone Light Industrial Zone Airport Zone Hospital Zone Port Zone Stadium Zone Tertiary Education Zone	1. Activity status: **Restricted Discretionary** Matters of discretion are: 1. The matters set out in INF-P1, INF-P2, INF-P3, INF-P5, INF-P6 and INF-P1213.
All other Zones	2. Activity status: **Discretionary**
INF-R21	**Amateur radio configuration**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with INF-S7 and INF-S11; and b. Compliance is achieved with INF-S1.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of INF-R21.1.a cannot be achieved. Matters of discretion are: 1. The matters set out in INF-P8 and INF-P1213.
All Zones	3. Activity status: **Non-Complying** Where: a. Compliance with the requirements of INF-R21.1.b cannot be achieved.
~~INF-R22~~	~~**Buildings, structures and activities in the National Grid Yard**~~
~~All Zones~~	~~1. Activity status: **Permitted**~~ ~~Where:~~ ~~a. The activity is not a sensitive activity;~~ ~~b. The building or structure is not used for the handling or storage of hazardous substances (Hazardous Substances (Hazard Classification) Notice 2020) with explosive or flammable intrinsic properties (except this does not apply to the accessory use and storage of hazardous substances in domestic-scale quantities); and~~ ~~c. The structure is a fence not exceeding 2.5m in height;~~ ~~d. The building is an uninhabited farm or horticultural structure or building (but not commercial greenhouses, protective canopies, wintering barns, produce packing facilities, or milking/dairy sheds (excluding ancillary stockyards and platforms);~~ ~~e. Alterations and additions to an existing building or structure for a sensitive activity, which does not involve an increase in the building height or building footprint; or~~ ~~f. An accessory building associated with an existing residential activity that is less than 10m^2 in footprint and 2.5m in height;~~ ~~g. Infrastructure undertaken by a network utility operator as defined in the Resource Management Act 1991 or any part of electricity infrastructure that connects to the National Grid; and~~ ~~h. Compliance is achieved with INF-S12.~~
~~All Zones~~	~~2. Activity status: **Non-complying**~~

	~~Where:~~ ~~a. Compliance with INF-R22.1 cannot be achieved.~~ ~~Notification status:~~ ~~An application for resource consent made in respect of rule INF-R22.2 is precluded from being publicly notified.~~ ~~Notice of any application for resource consent under this rule must be served on Transpower New Zealand Limited in accordance with Clause 10(2)(i) of the Resource Management (Forms, Fees, and Procedures) Regulations 2003.~~
INF-R22~~23~~	**Sensitive activities, including the erection of buildings for sensitive activities, within the Gas Transmission ~~Pipeline Corridor~~ Network**
All Zones	1. Activity status: **Restricted Discretionary** Matters of discretion are: 1. The extent to which the proposed activities are likely to compromise the stability and integrity of the gas transmission ~~pipeline~~ network and the operation, maintenance and upgrading of the~~pipeline~~; 2. The risk of hazards affecting public or individual safety, and the risk of property damage; 3. Measures proposed to avoid or mitigate potential adverse effects on the gas transmission ~~pipeline~~ network ; 4. The outcome of any consultation with the owner and operator of the gas transmission pipeline; and 5. Whether the sensitive activity could be located a greater distance from the gas transmission pipeline. Notification status: An application for resource consent made in respect of rule INF-R23 is precluded from being publicly notified. Notice of any application for resource consent under this rule must be served on the owner and operator of the Gas Transmission ~~Pipeline~~ Network in accordance with Clause 10(2)(i) of the Resource Management (Forms, Fees, and Procedures) Regulations 2003. Note: 1. This rule also applies to the establishment of a sensitive activity in an existing building, or any change of land use to a sensitive activity. 2. If a resource consent application is made under this rule, the owner and operator of the Gas Transmission Pipeline will be considered an affected person in accordance with section 95E of the Act and notified of the application, where written approval is not provided.
~~INF-R24~~	~~**Connections to roads**~~
~~All Zones~~	~~1. Activity status: **Permitted**~~ ~~Where:~~ ~~a. The connection provides site access for sites with no driveway, on-site parking or loading; and~~ ~~b. Compliance is achieved with INF-S16;~~ ~~or~~ ~~c. The connection provides site access to an Urban Road (except a Transit Corridor) or a Rural Road (except National Highway) as identified in mapped in the road classification overlay; and~~ ~~d. Compliance is achieved with INF-S17.~~
~~All Zones~~	~~2. Activity status: **Restricted Discretionary**~~ ~~Where:~~ ~~a. Compliance with the requirements of INF-R24.1 cannot be achieved.~~ ~~Matters of discretion are:~~ ~~1. The matters in INF-P13.~~
INF-R23~~25~~	**New roads**
All Zones	1. Activity status: **Restricted Discretionary** Where: a. Compliance is achieved with the following standards: i. INF-S3; ii. INF-S16~~18~~; and iii. Compliance with the requirements of New Zealand Standard NZS6806:2010 Acoustics — Road Traffic Noise — New and Altered Roads. Clause iii shall apply only to new roads predicted to carry at least 2,000 annual average daily traffic (AADT) at the design year. In circumstances where NZS6806:2010 Acoustics — Road Traffic Noise —

	New and Altered Roads does not apply, as listed in paragraph 1.3.1 of NZS6806:2010 Acoustics — Road Traffic Noise — New and Altered Roads. Matters of discretion are: 1. The classification of the proposed road and how the proposed aligns with INF-S12~~13~~; and 2. Design of the road. Section 88 information requirements for applications: 1. Applications under this rule must provide, in addition to the standard information requirements: a. A detailed design road safety audit in accordance with the NZTA Road Safety Audit Procedures for Projects — Guidelines, Transfund New Zealand Manual No. TFM9 2013; and b. A classification assessment of the proposed road(s) against the Waka Kotahi New Zealand Transport Agency One Network Framework 2021.
All Zones	2. Activity status: **Discretionary** Where: a. Compliance with the requirements of INF-R25.1 cannot be achieved. Section 88 information requirements for applications: 1. Applications under this rule must provide, in addition to the standard information requirements: a. A detailed design road safety audit in accordance with the NZTA Road Safety Audit Procedures for Projects — Guidelines, Transfund New Zealand Manual No. TFM9 2013; and b. A classification assessment of the proposed road(s) against the Waka Kotahi New Zealand Transport Agency One Network Framework 2021
INF-R24~~26~~	**Structures and vegetation near railway level crossings**
All Zones	1. Activity status: **Permitted** Where: a. Compliance is achieved with INF-S15~~14~~.
All Zones	2. Activity status: **Discretionary**

Standards

INF-S1	**Health and safety**	
All Zones	1. The maximum exposure levels must not exceed the levels specified in NZS 2772:1999 'Radiofrequency Fields — Maximum exposure levels — 3kHz to 300 GHz.'; and 2. Infrastructure that emits electric and magnetic fields must comply with the International Commission on Non-ionising Radiation Protection Guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz — 100 Hz), Health Physics 99(6):818-836; 2010, and the recommendations from the World Health Organisation monograph Environmental Health Criteria (No 238, 2007).	
INF-S2	**Underground infrastructure**	
All Zones	1. The utility structures must be located underground and must not be on or within a natural waterbody, except where it is: a. Attached to and/or incorporated within an existing bridge structure; b. Within an existing attached conduit or duct; or c. Installed beneath a waterbody (without disturbance of the bed). 2. For the installation or upgrading of pipelines, a gauge pressure of 2000 kilopascals must not be exceeded.	
INF-S3	**Earthworks**	
All Zones	1. Earthworks must not create a dust nuisance; 2. As soon as practical, but not later than three months after the completion of earthworks or stages of earthworks, the earthworks area must be stabilised with vegetation or sealed, paved, metalled or built over; 3. Trenching must be progressively closed and stabilised such that no more than 120m of continuous trench is exposed to erosion at any one time; 4. Land disturbed for the operation, repair, renewal,	

	upgrading or maintenance of utilities must be stabilised by re-vegetation, grassing or other suitable means as soon as practicable after completion of the works to avoid erosion and scouring; and 5. Works must not result in any instability of land or structures at or beyond the boundary of the property where the land disturbance occurs.	
INF-S4	**Upgrading of aboveground infrastructure**	
All Zones	1. The realignment, relocation or replacement of a line, pipe (excluding a liquid petroleum or gas transmission pipeline), telecommunication pole, pole, tower, conductor, switch, transformer or ancillary structure must be located within 5m of the existing structure; 2. A pole must not be replaced with a tower; 3. A replacement pole, tower or telecommunication pole must not exceed the height of the replaced pole or tower or telecommunication pole, or the maximum structure height provided for in INF-S8, whichever is higher; 4. The diameter or width of a replacement pole or telecommunications pole: a. Must not exceed twice that of the replaced pole at its widest point; or b. Where a single pole is replaced with a pi pole, the width of the pi pole structure must not exceed 4.2m; 5. A replacement tower's footprint must not exceed the width of the tower by more than 25%; 6. The upgrade must not include additional towers; 7. A maximum of two additional poles may be provided where it is necessary to achieve the conductor clearances required by NZECP 34:2001; and 8. The realignment, relocation or replacement of any other structure or building: a. Must be within 5m of the alignment or location of the original structure or building; b. Must not increase the footprint of the structure or building by greater than 30%.	
INF-S5	**New aboveground customer connections**	
All Zones	1. The connection must not exceed three additional poles; and 2. The diameter of conductors, lines, pipes or cables must not exceed ~~30mm~~43mm.	
INF-S6	**Structures**	
All Zones	1. The height of new buildings and structures must not exceed a maximum height of 3.5 metres; or 2. The maximum area of new buildings and structures is: a. $20m^2$ in Residential Zones; or b. $30m^2$ in all other Zones.	
INF-S7	**Riparian setbacks**	
All Zones	1. No infrastructure shall be located on or in land within 10 metres of the bed of any river. This setback does not apply to infrastructure that is located within formed legal road or crosses a river along a bridge.	
INF-S8	**Height of electricity and telecommunication poles and associated antennas, lines and single pole support structures and meteorological masts**	
All Zones	1. Telecommunication poles, associated antennas, lines and single pole support structures, must not exceed a maximum height of the permitted height for the relevant zone, plus 5 metres; 2. A further 5 metres in height is afforded where two or more infrastructure providers are co-located on the same structure; 3. Meteorological masts must not exceed a maximum height of the permitted height for the relevant zone, plus 25 metres, except for a Residential Zone where the maximum height is the zone height; and 4. Where a telecommunication pole and associated antennas, lines and single pole support structure and meteorological masts are located on a site that is not road reserve and adjoins a Residential Zone boundary, the	

	relevant building recession plane standard for that boundary must be complied with.	
INF-S9	**Antenna size**	
All Zones	1. A panel antenna: a. must not exceed a width of 0.7m; and b. when in a road reserve, must fit within an envelope of 3.5m in length and 0.7m in width; 2. A dish antenna must not exceed a diameter of 1.2m; 3. Omni directional 'whip' or dipole antenna must not exceed: a. 1.6m in vertical length; b. 60mm in diameter; and c. 1.5m in horizontal length; 4. A headframe must not exceed: a. 2.5m in diameter in Residential Zones (except when located in a road); or b. 6m in diameter in all other zones.	
INF-S10	**Height of antenna attached to buildings**	
All Zones	1. If the antenna is attached to a vertical surface, the top of the antenna must not extend more than 5m above the top of that surface, directly above the point at which the antenna is attached to the building; or 2. In all other cases, the top of the antenna mist not be more than 5m above the point at which the antenna is attached to the building; and 3. If the building is in a Residential Zone, the lowest point at which the antenna is attached to the building must be at least 15m above the ground.	
INF-S11	**Amateur radio configurations**	
All Zones	1. Supporting structures and poles must comply with the following: a. Must not exceed 102mm in diameter; or b. A maximum of one support structure greater than 102mm where the maximum height of the supporting structure must not exceed the relevant zone building height, the horizontal diameter of the pole or supporting structure must not exceed 800mm, the structure must be set back 1.5m from any boundary, and any guy wires used to support the pole must not exceed 10mm in diameter; 2. Dish antennas located less than 5m above ground must not exceed a maximum horizontal diameter of 4m and must have a minimum boundary setback of 1m. Dish antennas situated more than 5m above ground have a maximum diameter of 1.2m; and 3. The maximum height of antennas mounted on buildings using a supporting structure less than 102mm diameter shall be 18m in the Residential Zones and 18m or the relevant permitted or actual Building Height plus 5m (whichever is greatest) in all other Zones.	
~~INF-S12~~	**~~Buildings, structures and activities in the National Grid Yard~~**	
~~All Zones~~	~~1. The building or structure must have a minimum vertical clearance of 10m below the lowest point of a conductor under all transmission line and building operating conditions; or~~ ~~2. Must meet the safe electrical clearance distances required by New Zealand Electrical Code of Practice for Safe Electrical Distances (NZECP 34:2001) ISSN 01140663 under all transmission line and building operating conditions.~~ ~~3. The building or structure must be located at least 12m from the outer visible edge of a foundation of a National Grid transmission line tower or pole, except where it:~~ ~~a. Is a fence not exceeding 2.5m in height that is located at least:~~ ~~i. 6m from the outer visible edge of a foundation of a National Grid transmission line tower; or~~ ~~ii. 5m from the outer visible edge of a foundation of a National Grid transmission line pole.~~ ~~b. Is an artificial crop protection structure or crop support structure not exceeding 2.5m in height and~~	-

	~~located at least 8m from a National Grid transmission line pole that:~~ ~~i. Is removable or temporary to allow a clear working space of 12m from the pole for maintenance; and~~ ~~ii. Allows all weather access to the pole and a sufficient area for maintenance equipment, including a crane; or~~ ~~iii. Meets the requirements of clause 2.4.1 of New Zealand Electrical Code of Practice for Safe Electrical Distances (NZECP 34:2001) ISSN 01140663.~~	
INF-S12~~13~~	**Design of roads**	
	1. Roads must provide for traffic in accordance with Table 1 — INF: Design of Roads — One Network Framework; 2. Roads must be designed to achieve design speeds in accordance with Table 1 — INF: Design of Roads — One Network Framework; 3. Roads must have at least the minimum widths in accordance with Table 1 — INF: Design of Roads — One Network Framework: a. Minimum total, legal width; and b. Minimum width to provide for: i. Pedestrians; ii. Cycling; iii. Micromobility; iv. Stationary vehicles including car parking, bus stops, loading areas as well as build outs for traffic calming or additional infrastructure; v. Vehicles; vi. Infrastructure; and vii. Street trees. 4. The maximum gradient of roads must be in accordance with Table 1 — INF: Design of Roads — One Network Framework; 5. Curves in roads must meet the following minimum values: a. K Values for crest vertical curves and sag vertical curves must be in accordance with Table 4 — INF: Road Vertical Curves and Horizontal Curves; and b. R Values for horizontal curves must be in accordance with Table 4 — INF: Road Vertical Curves and Horizontal Curves. 6. Street trees must be provided in accordance with: a. Table 1 — INF: Design of Roads — One Network Framework; b. Street trees must not be planted in the Infrastructure Berm; c. When street trees are required in accordance with Table 1 — INF: Design of Roads — One Network Framework, they must be provided in accordance with the number of trees per Size Class at Maturity set out in Table 2 — INF: Street Trees and species in accordance with Table 3 — INF: Street Tree Species List; d. Street tree planting must meet the requirements set out in Table 2 — INF: Street Trees for the following: i. Horizontal Setback Distances from Underground Infrastructure; ii. Horizontal Setback Distances from Structures; iii. Minimum Berm Width; iv. Minimum Topsoil Depth; and v. Minimum Soil Volume. 7. Each street tree must be provided with a root barrier to a depth of 600mm below the surface; and 8. Streetlighting must be provided in accordance with the following: a. Streetlighting must be designed in accordance with NZ Transport Agency document M30 Specification and Guidelines for Road Lighting Design (2014); b. Streetlighting lamps must be on the NZ Transport Agency List of M30 Approved Luminaires (2021); c. Streetlighting columns must be in accordance with the NZ Transport Agency M26:2012 and M26A:2017 Specification for Lighting Columns; and d. Streetlighting columns in Local Street, Activity	

	Street, Main Street, Urban Corridor or Rural Road must be a minimum of 8m in height.	

Table 1 — INF: Design of Roads — One Network Framework

One Network Framework Classification	Expected maximum vehicle volume (vehicles per day)	~~Target speed (km/h)~~	Maximum gradient	Minimum width (m)							Number of street trees
				Footpath	Cycles	Traffic (must provide unhindered vehicle access including firetruck access)	• Stationary vehicles (parking/bus stop/loading) and • Build outs for cycle and micromobility parking, street trees • Passing bays	Infrastructure berm	Street tree berm	Legal width	
Urban											
Local Street M5 P3 No Vehicle Access at Frontage	250	~~10~~	12.5%	2 x 1.8	0	1 x 3.5	1 x 2.5 (alternating sides of road)	2 x 1.0	0	11.6	As per Table 2 – INF: Street Trees

Typical Plan and Cross Section

Local Street M5 P3	1000	~~30~~	12.5%	2 x 1.8	0	2 x 2.9	0	2 x 1.0	2 x 2.0	15.4	As per Table 2 – INF: Street Trees

Typical Plan and Cross Section

Local Street M5 P4 [e.g. Bickerton Rise, Churton Park]	2000	~~30~~	12.5%	2 x 1.8	0	2 x 3.0	1 x 2.2	2 x 1.0	2 x 2.0	17.8	As per Table 2 – INF: Street Trees

Typical Plan and Cross Section

Local Street M4 [e.g. Washington Avenue, Brooklyn]	3000	~~50~~	12.5%	2 x 1.8	2 x 1.8 (cycle lane)	2 x 3.0	2 x 2.6	2 x 1.0	2 x 2.0	24.4	As per Table 2 – INF: Street Trees

Typical Plan and Cross Section

Civic Space [e.g. Cuba Mall, Civic Square]		Discretionary resource consent required

Activity Street [e.g. Ottawa Rd, Ngaio]	8000	~~30-50~~	5%	2 x 2.4	2 x 1.8 (cycle lane)	2 x 3.2	2 x 2.6	2 x 1.0	2 x 2.0	26.0	As per Table 2 – INF: Street Trees

Typical Plan and Cross Section

Main Street [e.g. Johnsonville Rd, Johnsonville]	8000	~~30~~	5%	2 x 3.0	2 x 2.0	2 x 3.2	2 x 2.6	2 x 1.0	2 x 2.0	27.6	As per Table 2 – INF: Street Trees
Typical Plan and Cross Section  											
City Hub [e.g. Lambton Quay]		Discretionary resource consent required									

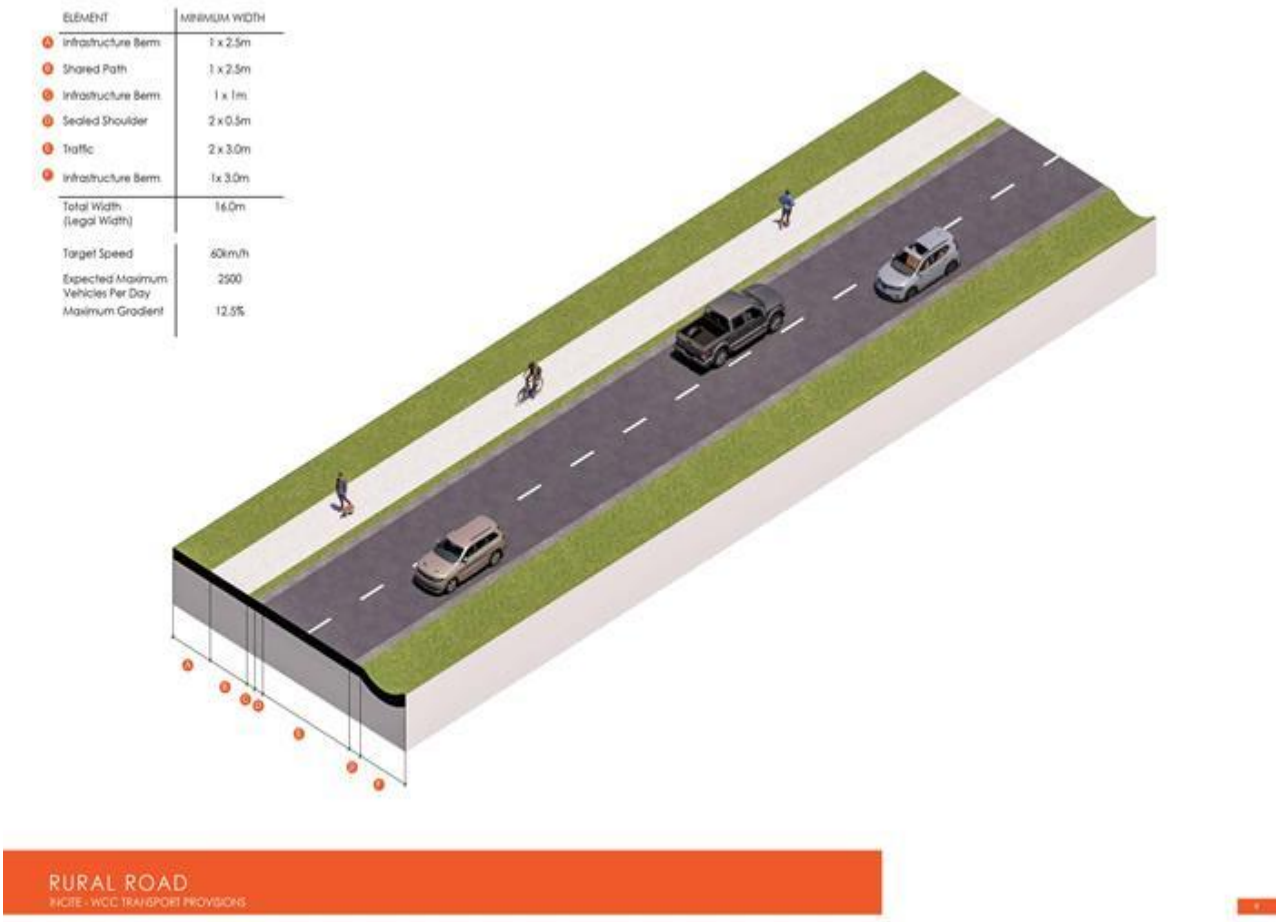
Urban Connector [e.g. Burma Rd, Middleton Rd]	8000	~~50~~	12.5%	2 x 1.8	2 x 2.0	2 x 3.2	2 x 2.6	2 x 1.0	2 x 2.0	25.2	As per Table 2 – INF: Street Trees

Typical Plan and Cross Section

Transit Corridor [e.g. Hutt Rd, Wellington]		Discretionary resource consent required
Rural		
Rural Stopping Place		Discretionary resource consent required

Rural Road [e.g. Takarau Gorge Rd]	2500	~~60~~	12.5%	1 x 2.5 (shared, separated path)	0	2 x 3.0	2 x 0.5 (sealed shoulder)	1 x 2.5 (between property boundary and path) 1 x 1.0 (between path and road shoulder 1 x 3.0 (side without path)	NA	16.0	NA

Typical Plan and Cross Section



Peri-urban Road		Discretionary resource consent required
Rural Connector		Discretionary resource consent required
National Highway		Discretionary resource consent required

Table 2 — INF: Street Trees

Size class at maturity (Stem diameter at 1.5m	**Height at maturity**	**Minimum number of trees per 100m of road**	**Horizontal setback distances from underground infrastructure (m)**		**Horizontal setback distances from structures (m)**			**Minimum berm Width (m)**	**Minimum topsoil depth (m)**	**Minimum soil volume (m^3)**
			• **Manholes, drainage catchments, surface**	• **Transmission gas pipelines; and**	• **Hard surfaces (footpaths etc);**	• **Pavers;** • **Lightly loaded**	• **Street lights**			

above ground)			**openings for underground infrastructure;** • **Trunk water mains;** • **Stormwater pipes >300mm diameter;** • **Sewer pipes >300mm diameter;** • **Distribution gas pipelines; and** • **Distribution or customer connection electricity lines**	• **Transmission electricity lines**	• **Road kerbs;** • **Vehicle crossings; and** • **Masonry walls**	**structures (bus shelters, garages etc); and** • **Heavily loaded structures (houses etc)**				
<300mm Tree species must be selected from the list in Table 3 — INF: Street Tree Species List	3-8	4	0.50	4.0	0.6	0.7	5.0	1.5	0.5	10.0
300 - 600mm Tree species must be selected from the list in Table 3 — INF: Street Tree Species List	5-10	4	1.5	4.0	1.0	1.5	5.0	2.0	0.6	12.0

Table 3 — INF: Street Tree Species List

Botanical name	Common name	Size class	Height (m)
Acer campestre	Field Maple	<300mm	8
Alnus Cordata	Italian Alder	<300mm	8
Arbutus unedo	Strawberry Tree	<300mm	8
Banksia integrifolia	Coast Banksia	<300mm	8
Dodonaea viscosa	Ake Ake	<300mm	3
Fraxinus griffithii	Evergreen Ash	<300mm	5
Leptospermum nitidum	Tea Tree	<300mm	5
Liriodendron Tulipfera Fastigiatum	Upright Tulip Tree	<300mm	8
Melia Azedarach	Persian Lilac	300mm	8
Olea europaea	European Olive	<300mm	5
Parrotia persica	Persian Ironwood	<300mm	5
Sophora microphylla	Kowhai	<300mm	8
Sophora tetraptera	Large-leaved Kowhai	<300mm	8
Sorbus aucuparia	Mountain Ash	<300mm	5
Acer negundo	Box Maple	300 - 600mm	10
Cordyline australis	Cabbage Tree	300 - 600mm	8

Eucalyptus ficifolia	Red Flowering Gum	300 - 600mm	8
Fraxinus oxycarpa	Claret Ash	300 - 600mm	10
Ginkgo biloba	Maidenhair Tree	300 - 600mm	10
Ginkgo biloba “Fastigiata”	Upright Maidenhair Tree	300 - 600mm	10
Knightia excelsa	Rewarewa	300 - 600mm	10
Liquidambar styraciflua	American Sweetgum	300 - 600mm	10
Liriodendron Tulipfera	Tulip Tree	300 - 600mm	10
Platanus Acerifolia	London Plane	300 - 600mm	10
Platanus Orientalis	Oriental Plane	300 - 600mm	10
Taxodium Distichum	Swamp Cypress	300 - 600mm	10
Ulmus carpinifolia	Smooth Leaved Lime	300 - 600mm	10
Ulmus Hollandica	Upright Elm	300 - 600mm	10
Zelkova serrata	Zelkova	300 - 600mm	10

Table 4 — INF: Road Vertical Curves and Horizontal Curves

Operating speed (km/h)	Minimum K value for Crest Vertical Curves	Minimum K value for Sag Vertical Curves	Minimum R value for Horizontal Curves
≤20	15	3	20
21-30	17	3	30
31-40	20	3	40
41-50	33	4	50
51-60	50	6	Specific design
61-70	71	8	Specific design
71-80	100	10	Specific design

INF-S13~~14~~	**Sight Triangles for Railway Level Crossings**	
	Buildings, structures, plantings or other visual obstructions must not be located within the restart sightline areas of railway level crossings as shown in the shaded areas of Figure 1 — INF: Restart Sightlines and Figure 2 – INF: Approach Sightlines below.	Assessment criteria where the standard is infringed: 1. Effects on the safety and efficiency of rail and road transport.

Figure 1 — INF: Restart Sightlines

Figure 1 – INF: Restart Sightlines

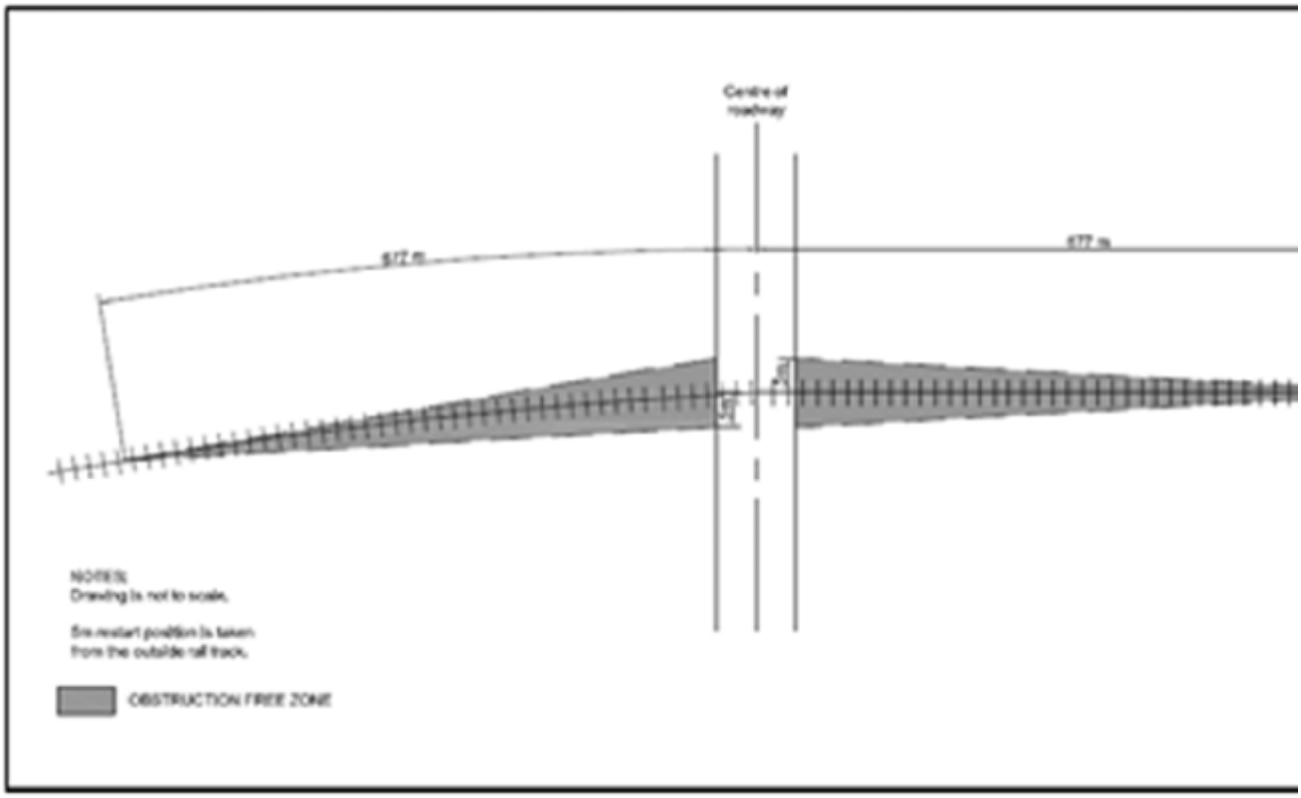
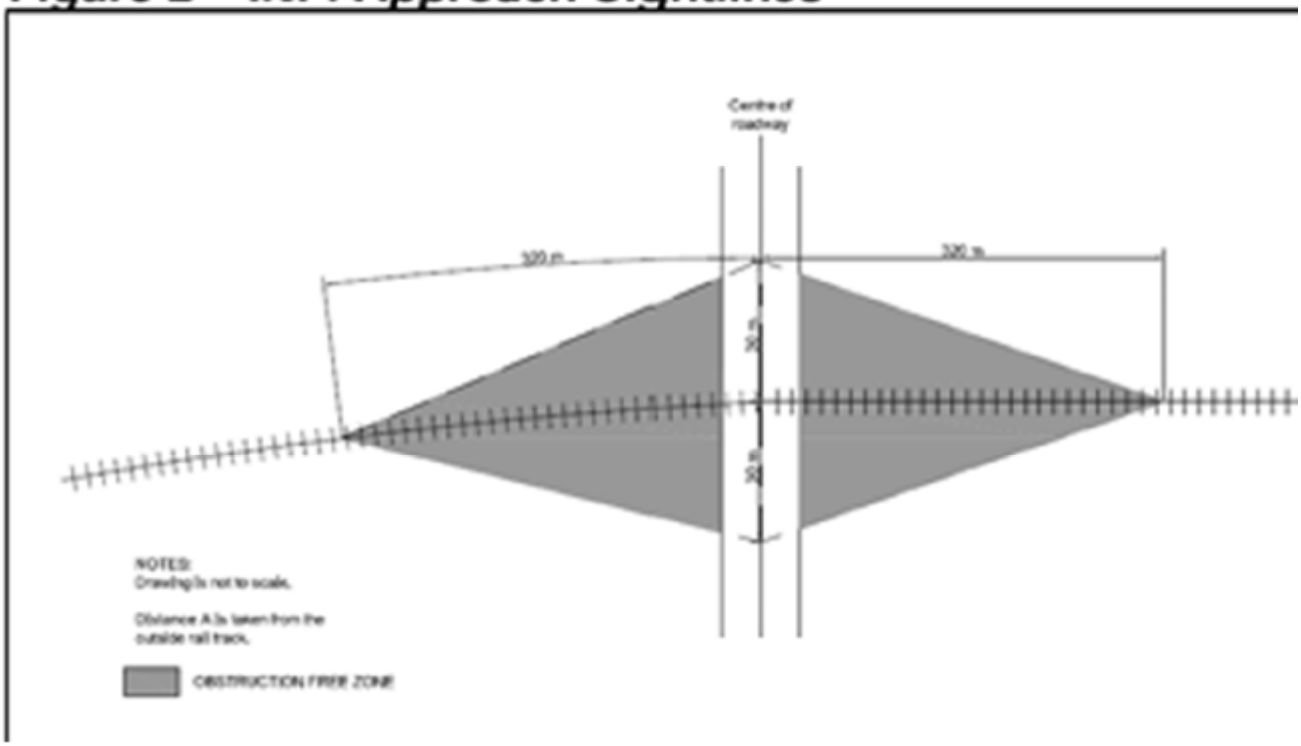


Figure 2 – INF: Approach Sightlines



INF-S14~~15~~	**Connection to roads - sites with pedestrian, cycling and micromobility site access only**	
	1. For sites with frontage to a road:	

	a. The direct legal road frontage must have a width of at least 1.8m. 2. For sites with no frontage to a road: a. Access must be provided to a road via an access easement with a width of at least 1.8m.	
~~INF-S16~~	~~**Connection to roads - driveways**~~	
-	~~1. The number of vehicle crossings per site must not exceed one;~~ ~~2. The minimum design vehicle for a vehicle crossing is a 5.20m x 1.94m vehicle (99th percentile vehicle);~~ ~~3. For Urban Roads, the length of a vehicle crossing parallel to the road must be no more than:~~ ~~a. 3m for Driveways Level 1; or~~ ~~b. 6m for Driveways Level 2 and 3.~~ ~~4. For Rural Roads:~~ ~~a. The vehicle crossing must be sealed between the road carriageway and the property boundary; and~~ ~~b. The entry and exit turn radius of the vehicle crossing must each be at least 9.0m;~~ ~~5. Where the vehicle crossing incorporates a pedestrian, cycling or micromobility path, the crossfall of the path must meet not exceed 2.5%;~~ ~~6. The vehicle crossing for a site with frontage to two or more roads must connect to the road with the lower number of vehicle movements per day;~~ ~~Vehicle crossings must not be located within 10m of an intersection tangent point as shown as the heavy line between Points A and B in Figure 2 — INF: Vehicle Crossings in Relation to Intersections. In addition, vehicle crossings for Driveways Level 2 and 3 must not be located at the top of a T-intersection as shown as the heavy line between Points C and D in Figure 2 — INF: Vehicle Crossings in Relation to Intersections;~~ ~~7. The distance from vehicle crossings to railway crossings must be at least 30m, measured from the nearest edge of the vehicle crossing to the nearest railway track;~~ ~~8. Connections to the road reserve must provide clear visibility splays for pedestrian safety from 1.0m above ground level as shown in Figure 3 — INF: Driveway Visibility Splays and Sight Distances. Driveways Levels 2 and 3 must provide the visibility splay on the left hand exit side only. For Driveways Level 1 where the driveway is within 2.0m of the adjoining property boundary, the visibility splay is not required if a 75mm high speed hump is installed 1.0m from the road boundary;~~ ~~9. Sight distances from vehicle crossings as shown in Figure 3 — INF: Driveway Visibility Splays and Sight Distances; and~~ ~~10. Must comply with Table 5 — INF: Minimum Sight Distances at Vehicle Crossings.~~ ~~Note: Limited Access Roads may have additional or different requirements under the Government Roading Powers Act 1989.~~	-

~~Figure 2 — INF: Vehicle Crossings in Relation to Intersections~~

~~Figure 3 — INF: Driveway Visibility Splays and Sight Distances~~

~~Table 5 — INF: Minimum Sight Distances at Vehicle Crossings~~

~~Frontage speed limit (km/h)~~	~~Driveway level 1 Minimum sight distance (m) (see Figure 3 — INF: Driveway Visibility Splays and Sight Distances)~~	~~Driveways levels 2 & 3 Minimum sight distance (m) (see Figure 3 — INF: Driveway Visibility Splays and Sight Distances)~~
~~30~~	~~25~~	~~25~~
~~40~~	~~30~~	~~35~~
~~50~~	~~40~~	~~45~~

~~60~~	~~55~~	~~65~~
~~70~~	~~70~~	~~85~~
~~80~~	~~96~~	~~105~~

~~INF—S17~~	~~**Intersections**~~	
-	~~1. Intersections must be designed to ensure safe connectivity of roads for all road users and must take into account the expected traffic flows once development is complete;~~ ~~2. Intersections must be formed at 90°; and~~ ~~3. Minimum sight distances at intersections as shown in Figure 4 — INF: Sight Distances at Intersections must comply with Table 6 — INF: Minimum Sight Distances at New Intersections.~~	-

Figure 4 — INF: Sight Distances at Intersections

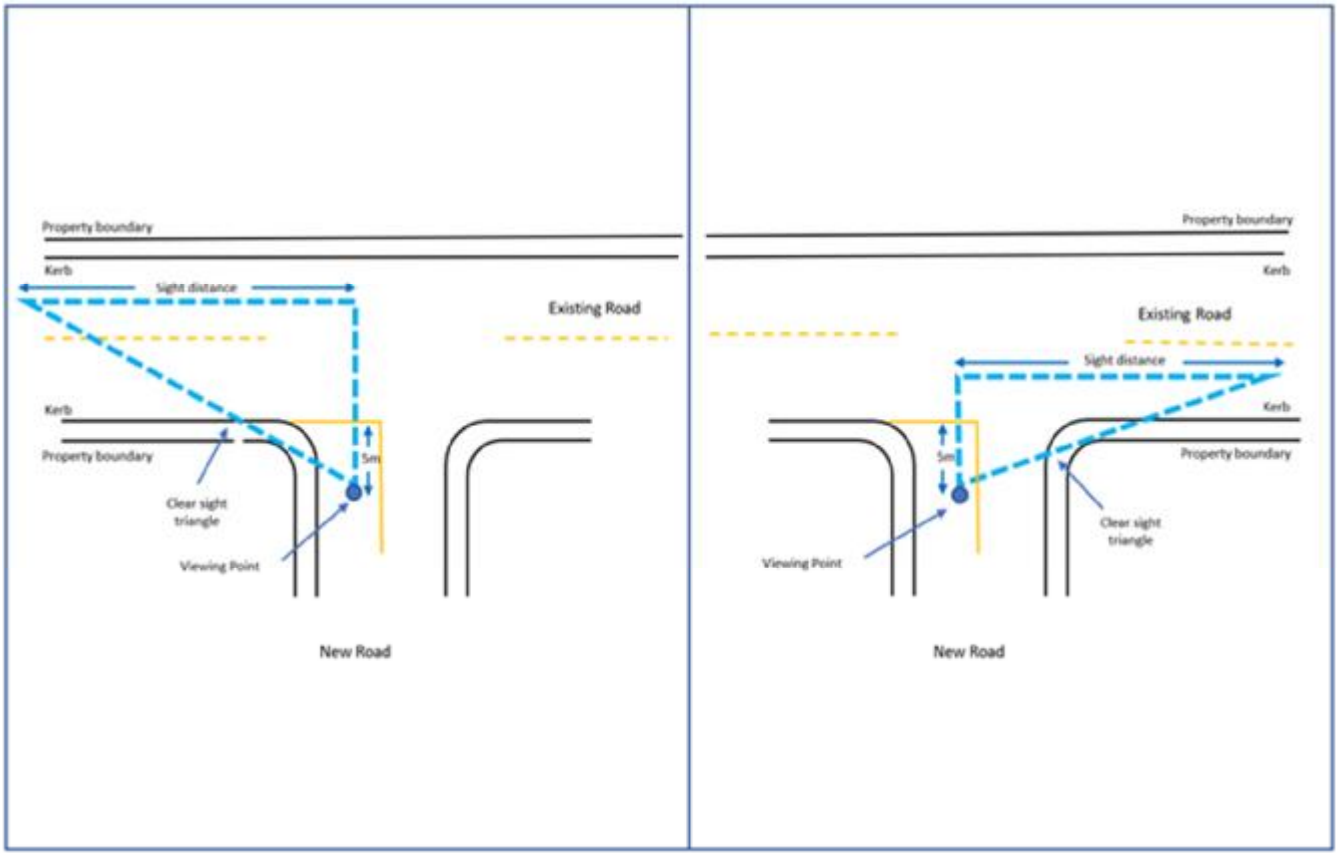


Table 6 — INF: Minimum Sight Distances at New Intersections

Operating speed (km/h) of Existing Road	**Minimum sight distance (m) (see Figure 4 — INF: Sight Distances at Intersections)**
<30	50
≤31-40	75
41-50	100
51-60	125
61-70	150
71-80	180

INF-S16~~18~~	**Cabinets, electric vehicle charging stations, temporary infrastructure and temporary electricity generators and self-contained power units to supply existing infrastructure, bus shelters and any other infrastructure structure or infrastructure building not otherwise provided for that are located within the road reserve or rail corridor**

	1. The structure must not exceed: a. Maximum height above ground level of 2.5m; and b. Maximum footprint of $6m^2$.	Assessment criteria where the standard is infringed: 1. Local, regional and national benefits of the infrastructure or community facilities; 2. Any adverse effects on the streetscape and the amenity values of the area; 3. The amenity of adjoining sites; 4. Traffic and pedestrian safety including sightlines and visibility of traffic signage; 5. Design and siting of the infrastructure or community facilities; 6. Any operational or functional needs of the infrastructure or community facilities; and 7. Any topographical and other site constraints that make compliance with the permitted standard impracticable.

This chapter does not contain provisions that have legal effect.

Proposed amendments recommended through evidence on behalf of Kāinga Ora shown in green text ~~strikethrough~~ and underline (27 May 2024)..

Tūāhanga — TBC

Infrastructure — National Grid

INF-NG	Infrastructure — National Grid

Introduction

This sub-Chapter applies to infrastructure within the National Grid Subdivision Corridor Overlays:

It applies in addition to the principal Infrastructure Chapter.

Other relevant District Plan provisions

It is important to note that in addition to the provisions in this chapter, the following Part 2: District-Wide chapters may also be of relevance, including:

Subdivision - The Subdivision Chapter contains provisions which manage subdivision of land.
Light and glare - The Light Chapter contains specific provisions relating to light spill and the management of effects on residential areas.
Noise - The Noise Chapter contains specific controls in relation to noise, including effects standards NOISE-S1 (maximum noise levels).
Signs - The Signs Chapter contains specific controls in relation to signage, including official signs, the effects of signs on road safety, and third party signage.
Contaminated land - The Contaminated Land Chapter manages the use and development of Contaminated Land or potentially Contaminated Land.
Hazardous substances - The Hazardous Substances Chapter contains provisions to manage Hazardous Substances.

Resource consent may therefore be required under rules in this chapter as well as other chapters. Unless specifically stated in a rule or in this chapter, resource consent is required under each relevant rule. The steps to determine the status of an activity are set out in the General Approach chapter.

Objective	
Infrastructure — The National Grid	
INF-NG-O7	**The National Grid** The national significance and benefits of the National Grid are recognised, and the National Grid is protected and provided for.
Policies	
Infrastructure — National Grid	
INF-NG-P58	**Benefits of the National Grid** Recognise and provide for the benefits of the National Grid by enabling the operation,

	maintenance and upgrade of the existing National Grid and the establishment of new electricity transmission resources.
INF-NG-P59	**Operation, and maintenance and minor upgrade of the National Grid** Provide for the operation, maintenance and minor upgrade of the National Grid while managing the adverse effects of these activities.
INF-NG-P60	**Upgrading and development of the National Grid** Recognise and provide for the benefits of the National Grid by enabling the operation, maintenance and upgrade of the existing National Grid and the establishment of new electricity transmission resources.
INF-NG-P61	**Adverse effects on the National Grid** Protect the safe and efficient operation, maintenance and repair, upgrading, removal and development of National Grid from adverse effects by: 1. Avoiding land uses (including sensitive activities) and buildings and structures within the National Grid Yard that may directly affect or otherwise compromise the National Grid 2. Avoiding ~~reverse sensitivity~~ adverse effects from incompatible subdivision, use and development on the National Grid. 3. Only allowing subdivision within the National Grid Subdivision Corridor where it can be demonstrated that the National Grid will not be compromised taking into account: a. The impact of the subdivision layout and design on the operation, maintenance, and potential upgrade and development of the National Grid, including the ability for continued reasonable access to existing transmission assets for maintenance, inspections and upgrading; b. The ability of any potential future development to comply with NZECP 34.2001 New Zealand Electrical Code of Practice for Electrical Safety Distances; c. The extent to which the design and layout of the subdivision demonstrates that a suitable building platform(s) for a principal building or dwelling can be provided outside of the National Grid Yard for each new lot; d. The risk to the structural integrity of the National Grid; e. The extent to which the subdivision design and consequential development will minimise the risk of injury and/or property damage from the National Grid and the potential reverse sensitivity on and amenity and nuisance effects of the National Grid assets; f. The nature and location of any proposed vegetation to be planted in the vicinity of the National Grid; and g. The outcome of any consultation with, and technical advice from, Transpower. 4. Only allowing earthworks within the National Grid Yard where it can be demonstrated that the safe and efficient functioning, operation, maintenance and repair, upgrading and development of the National Grid will not be compromised, taking into account: a. The extent to which the earthworks may compromise the safe access to and operation, maintenance and repair, upgrading and development of the National Grid; b. The stability of land within and adjacent to the National Grid; c. Risks relating to health or public safety, including the risk of property damage; and d. Technical advice provided by the owner and operator of the National Grid.
INF-NG-P62	**Upgrading of the National Grid** Provide for the upgrading of the National Grid while: 1. Seeking to avoid adverse effects on areas identified in SCHED10 – Outstanding Natural Features and Landscapes, SCHED12 - High Coastal Natural Character Areas, SCHED8 - Significant Natural Areas, SCHED11 – Special Amenity Landscapes; and remedy or mitigate any adverse effects from the upgrade which cannot be avoided; 2. Having regard to the extent to which adverse effects have been avoided, remedied or mitigated by the route, site and method selection when considering major upgrades; 3. Recognising the constraints arising from the operational need and functional need of the National Grid, when considering measures to avoid, remedy or mitigate any adverse effects; 4. Recognising the potential benefits of upgrades to the National Grid to people and communities; and 5. Where appropriate, major upgrades should be used as an opportunity to reduce existing adverse effects of the National Grid.

INF-NG-P63	**Development of the National Grid** Provide for the development of the National Grid 1. In urban zoned areas, development should minimise adverse effects on urban amenity and should avoid material adverse effects on the Commercial and Mixed-Use zones, and areas of high recreational or amenity value and existing sensitive activities. 2. Seek to avoid the adverse effects of the National Grid within areas identified in SCHED10 – Outstanding Natural Features and Landscapes, SCHED8 - Significant Natural Areas, and SCHED11 – Special Amenity Landscapes, outside the coastal environment. 3. Where the National Grid has a functional need or operational need to locate within the coastal environment, manage adverse effects by: a. Seeking to avoid adverse effects on areas identified in SCHED10 – Outstanding Natural Features and Landscapes, SCHED12 – High Coastal Natural Character Areas, SCHED8 - Significant Natural Areas, SCHED11 – Special Amenity Landscapes, and the Coastal Margin. b. Where it is not practicable to avoid adverse effects on the values of the areas in SCHED10 – Outstanding Natural Features and Landscapes, SCHED12 - High Coastal Natural Character Areas, SCHED8 - Significant Natural Areas, SCHED11 – Special Amenity Landscapes; and the Coastal Margin because of the functional needs or operational needs of the National Grid, remedy or mitigate adverse effects on those values. c. Seeking to avoid significant adverse effects on: i. other areas of natural character ii. natural attributes and character of other natural features and natural landscapes iii. indigenous biodiversity values that meet the criteria in Policy 11(b) of the NZCPS 2010 d. Avoiding, remedying or mitigating other adverse effects to the extent practicable; and e. Recognising there may be some areas within SCHED10 – Outstanding Natural Features and Landscapes, SCHED12 - High Coastal Natural Character Areas, SCHED8 - Significant Natural Areas, SCHED11 – Special Amenity Landscapes; and the Coastal Margin, where avoidance of adverse effects is required to protect the identified values and characteristics. 4. Remedy or mitigate any adverse effects from the operation, maintenance, upgrade, major upgrade or development of the National Grid which cannot be avoided, to the extent practicable; and 5. When considering the adverse effects in respect of 1-3 above; a. Have regard to the extent to which adverse effects have been avoided, remedied or mitigated by the route, site and method selection; and b. Consider the constraints arising from the operational needs or functional needs of the National Grid, when considering measures to avoid, remedy or mitigate any adverse effects.

Rules for Infrastructure — National Grid		
INF-NG-R58		**Buildings, structures and activities in the National Grid Yard**
	All Zones	1. Activity status: **Permitted** Where: a. New activities are not a sensitive activity; b. The building or structure is not used for the handling or storage of hazardous substances (Hazardous Substances (Hazard Classification) Notice 2020) with explosive or flammable intrinsic properties (except this does not apply to the accessory use and storage of hazardous substances in domestic-scale quantities); c. Fences do not exceed 2.5m in height; d. The building is an uninhabited farm or horticultural structure or building (but not commercial greenhouses, protective canopies, wintering barns, produce packing

	facilities, or milking/dairy sheds (excluding ancillary stockyards and platforms); e. Alterations and additions to an existing building or structure for a sensitive activity, which does not involve an increase in the building height or building footprint; f. Construction of an accessory building associated with an existing residential activity that is less than 10m^2 in footprint and 2.5m in height; g. Infrastructure undertaken by a network utility operator as defined in the Resource Management Act 1991 or any part of electricity infrastructure that connects to the National Grid; and h. Compliance is achieved with INF-NG-S18.
All Zones	2. Activity status: **Non-complying** Where: a. Compliance with INF-NG-R67.1 cannot be achieved. Notification status: An application for resource consent made in respect of rule INF-NG-R67.2 is precluded from being publicly notified. ~~Notice of any application for resource consent under this rule must be served on Transpower New Zealand Limited in accordance with Clause 10(2)(i) of the Resource Management (Forms, Fees, and Procedures) Regulations 2003.~~ When deciding whether any person is affected in relation to this rule for the purposes of section 95E of the RMA, the Council will give consideration to any adverse effects on Transpower.

INF-NG-R59	**Operation, maintenance, repair of existing National Grid infrastructure:** • **Within the coastal environment.**
All Zones	1. Activity status: **Permitted**
INF-NG-R60	**Upgrading of existing National Grid infrastructure within the coastal environment:** • **Outside of high coastal natural character areas; and** • **Outside of coastal margins or riparian margins.**
All Zones	1. Activity status: **Permitted**
INF-NG-R61	**Upgrading of existing National Grid infrastructure within the coastal environment:** • **Within high coastal natural character areas; or** • **Within coastal or riparian margins.**

All Zones	1. Activity status: **Restricted Discretionary** Matters of discretion are: 1. The matters in INF-NGP67.
INF-NG-R62	**New National Grid (NG)) infrastructure within the coastal environment:** • **Outside of high coastal natural character areas; and** • **Outside of coastal or riparian margins.**
All Zones	1. Activity status: **Permitted**
INF-NG-R63	**New National Grid (NG) infrastructure within the coastal environment:**

	• **Within high coastal natural character areas; or** • **Within coastal or riparian margins.**
All Zones	1. Activity status: **Discretionary**
INF-NG-R64	**Operation, maintenance and repair of existing National Grid (NG) infrastructure within outstanding natural features and outstanding landscapes, special amenity landscapes or identified ridgelines and hilltops (including within the coastal environment)**
All Zones	1. Activity status: **Permitted**
INF-NG-R65	**Upgrading of existing National Grid (NG) infrastructure within outstanding natural features and outstanding landscapes, special amenity landscapes or identified ridgelines and hilltops**
All Zones	1. Activity status: **Restricted Discretionary** Matters of discretion are: 1. The matters in INF-NG-P67

Standards

INF-NG-S18	**Buildings, structures and activities in the National Grid Yard**	
All Zones	1. The building or structure must have a minimum vertical clearance of 10m below the lowest point of a conductor under all transmission line and building operating conditions; or 2. Must meet the safe electrical clearance distances required by New Zealand Electrical Code of Practice for Safe Electrical Distances (NZECP 34:2001) ISSN 01140663 under all transmission line and building operating conditions. 3. The building or structure must be located at least 12m from the outer visible edge of a foundation of a National Grid transmission line tower or pole, except where it: a. Is a fence not exceeding 2.5m in height that is located at least: i. 6m from the outer visible edge of a foundation of a National Grid transmission line tower; or ii. 5m from the outer visible edge of a foundation of a National Grid transmission line pole. b. Is an artificial crop protection structure or crop support structure not exceeding 2.5m in height and located at least 8m from a National Grid transmission line pole that: i. Is removable or temporary to allow a clear working space of 12m from the pole for maintenance; and ii. Allows all weather access to the pole and a sufficient area for maintenance equipment, including a crane; or iii. Meets the requirements of clause 2.4.1 of New Zealand Electrical Code of Practice for Safe Electrical Distances (NZECP 34:2001) ISSN 01140663.	

Proposed amendments recommended through evidence on behalf of Kāinga Ora shown in green text ~~strikethrough~~ and underline (27 May 2024).

Ngā Tautuhinga

Definitions

ACTIVE TRANSPORT	means forms of transport that involve physical effort.

~~**ANCILLARY TRANSPORT NETWORK INFRASTRUCTURE**~~	~~means infrastructure located within the road reserve or railway corridor that supports the transport network and includes:~~ ~~1. traffic control signals, signs and devices;~~ ~~2. light poles;~~ ~~3. post boxes;~~ ~~4. landscaped gardens, artwork and sculptures;~~ ~~5. public transport stops and shelters;~~ ~~6. train stations;~~ ~~7. public toilets; and~~ ~~8. road or rail furniture.~~

CYCLE	means a transportation device that has at least two wheels and that is designed primarily to be propelled by the ~~muscular energy~~ physical effort of the rider to rotate pedals. It includes electric cycles.

TRANSPORT NETWORK	means all public rail, public roads, sea freight and passenger ferries, public pedestrian, cycle and micromobility facilities, public transport and associated infrastructure. It includes: a. Train stations; b. Bus stops and shelters; ~~c. Bus shelters; and~~ c. Park and Ride areas; d. Rapid transit stops and shelters; and e. Ferry terminals.

Tūāhanga

Infrastructure

INF-R7	**Structures associated with infrastructure including:** 1. **Substations (including switching stations);** 2. **Transformers;**

	3. **Gas transmission and distribution structures;** 4. **Energy storage batteries not enclosed by a building;** ~~**and**~~ 5. **Communications kiosks**~~**.**~~**; and** 6. **Electrical vehicle charging stations.**

Tūnuku

Transport

TR	Transport

Introduction

The purpose of the Transport Chapter is to manage on-site transport facilities and the effects of high vehicle trip-generating use and development. Matters concerning the operation, maintenance, repair and renewal, upgrading and development of the transport network and connections to the transport network are provided in the Infrastructure Chapter. This is a result of the RMA definition of infrastructure, which includes “structures for transport on land by cycleways, rail, roads, walkways, or any other means”.

Wellington City Council has adopted a 'Sustainable Transport Hierarchy' which has been published as part of the Council’s Parking Policy (2020) and Paneke Pōneke Bike Network Plan 2022, which places walking, cycling and public transport at the top of the hierarchy. Private vehicles are towards the bottom of the hierarchy. This reflects the City's goal of being carbon neutral by 2050, and creating a more sustainable transport system to get there. The provisions in this Transport chapter support this goal by requiring the provision of cycling and micromobility parking with new development. This chapter therefore complements the intensification provisions within the zone chapters which seek to provide a more compact urban form close to public transport and the City's walking and cycling network.

This chapter recognises that some activities generate high volumes of traffic which may have significant adverse effects on the transport network and adversely affect the amenity of adjacent land use activities. These activities require assessment to ensure these effects are managed effectively. However, where an activity is not a high vehicle trip-generating use and can be reasonably expected to occur within a zone, then any effects associated with an absence of on-site carparking and associated loss of on street carparking from that activity should not be considered as an adverse residential amenity effect.

On-site transport facilities such as site access, carparking, and parking for bicycles and other micromobility devices also need to be designed effectively to ensure people’s safety and wellbeing is maintained. This chapter provides specific design requirements for these facilities.

Overall, the Chapter seeks to:

- Enable a range of transport modes, where the effects of those activities are appropriately managed;
- Encourage the uptake of alternative transport modes other than the private vehicle;
- Manage any adverse effects arising from high trip generating activities; and
- Maintain the health, safety and wellbeing of on-site transport facilities.

Other relevant District Plan provisions
It is important to note that in addition to the provisions in this chapter, the following Part 2: District-Wide chapters may also be of relevance, including:

- **Historic Heritage and Sites and Areas of Significance to Māori** - Specific provisions for the protection of these sites are located in the Sites and Areas of Significance to Māori Chapter and Historic Heritage Chapter.
- **Earthworks** - The Earthworks Chapter manages the adverse effects of earthworks on the environment, including visual amenity values and stability of land plus adverse health and safety effects, damage to property and the creation or increase in the risk of natural hazards.
- **Light** - The Light Chapter contains specific provisions relating to light spill and the management of effects on residential areas.
- **Noise** - The Noise Chapter contains specific controls in relation to noise, including effects standards NOISE-S1 (maximum noise levels).
- **Signs** – The Signs Chapter contains specific controls in relation to signage, including official signs, the effects of signs on road safety, and third party signage.
- **Contaminated land -** The Contaminated Land Chapter manages the use and development of Contaminated Land or potentially Contaminated Land.
- **Hazardous substances** - The Hazardous Substances Chapter contains provisions to manage Hazardous Substances.
- **Trees** – The Notable Tree chapter contains specific provisions relating to the management of Notable Trees.

Resource consent may therefore be required under rules in this chapter as well as other chapters. Unless specifically stated in a rule or in this chapter, resource consent is required under each relevant rule. The steps to determine the status of an activity are set out in the General Approach chapter.

Objective

TR-O1	**Purpose** Land use and development is managed to ensure that: 1. High trip generating activities do not compromise the safety and effectiveness of the transport network; 2. A range of transport modes are provided for; 3. Reliance on private vehicles is reduced; 4. New development provides appropriate on-site facilities for cycling and micromobility users; and 5. Safe and ~~effective~~ functional on-site parking, loading, access and manoeuvring is provided.

Policies

TR-P1	**High vehicle trip generationng ~~use and development~~** Provide for high vehicle trip generating activities where they: 1. Safely and effectively integrate with the transport network, including planned network upgrades and service improvements; and 2. Provide for pedestrian, cycling, micromobility and public transport modes at an appropriate scale to the nature of the high vehicle trip generating activity; Or 3. Are in the Airport Zone's Terminal Precinct or East Side Precinct.
TR-P2	**Enabled activities** Enable on-site transport facilities and driveways that: 1. Provide for the safe and ~~effective~~ functional use of the site and functioning of the transport network; 2. Meet the reasonable demands of site users; and 3. Promote the uptake and use of pedestrian, cycling, micromobility and public transport modes; and 4. Provide parking for cycles and micromobility devices that is sheltered, convenient and secure, and end-of-journey showers and lockers for staff in new substantial buildings for commercial, tertiary education and healthcare activities.

TR-P3	**Managed activities** Only allow on-site transport facilities and driveways that do not meet standards where: 1. The transport facilities and driveways are ~~effective~~ safe and functional in meeting the operational needs and functional needs of the activity on the site; 2. The safety and effectiveness of the transport network is not compromised; 3. Public health and safety, including the safety of pedestrians, cyclists and micromobility users travelling through any parking areas, is not compromised; 4. The projected demand for loading spaces or cycling and micromobility parking will be lower than that required in the standards or can be accommodated by public, shared or reciprocal arrangements; 5. Safe and effective access for firefighting purposes is provided with reference to NZS 4404:2010 and the New Zealand Fire Service Firefighting Water Supplies Code of Practice SNA PAS 4509:2008; and 6. There are site and topographical constraints that make compliance unreasonable.
~~INF-P11~~ TR-P4	**Connections to roads** Enable safe and effective connections between sites and the transport network by requiring connections to roads to address: 1. The One Network Framework classification, characteristics and operating speed of the road and the number and types of vehicles accessing the site; 2. Opportunities to share and minimise the number of connections; 3. Public health and safety including the safe functioning of the transport network and the safety of pedestrians, cyclists and micromobility device users; and 4. Site or topography constraints including reduced visibility.
Rules: Land use activities	
TR-R1	**All activities except for trip generation, site access, on-site cycling and micromobility paths, and on-site vehicle parking and manoeuvring**
All Zones	1. Activity status: **Permitted** Where: a. Compliance with the following standards is achieved: i. TR-S2; ii. TR-S3; iii. TR-S8; and iv. TR-S9.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of TR-R1 cannot be achieved Matters of discretion are: 1. The extent and effect of non-compliance with any relevant Standard as specified in the associated assessment criteria for the infringed standards; and 2. The matters in TR-P3. Notification status: An application under Rule TR-R1 is precluded from being publicly notified.
TR-R2	**Vehicle ~~T~~trip generation**
Airport Zone's Terminal	1. Activity status: **Permitted**

Precinct or East Side Precinct	
All Zones except Terminal Precinct, East Side Precinct	2. Activity status: **Permitted** Where: a. Compliance with TR-S1 is achieved; and ~~c. T~~the activity is not: i. a service station; or ii. a drive-through activity.
All Zones except Terminal Precinct, East Side Precinct	3. Activity status: **Restricted Discretionary** Where: a. Compliance with any of the requirements of TR-R2.~~1~~2 cannot be achieved. Matters of discretion are: 1. The matters in TR-P1. Notification status: An application under Rule TR-R2 is precluded from being publicly notified. Section 88 **information requirements** for applications: Applications under Rule TR-R~~1.2.a~~ 2.3 must provide an Integrated Transport Assessment by a suitably qualified transport engineer or transport planner. The Waka Kotahi NZ Transport Agency guidelines "Research Report 422: Integrated Transport Assessment Guidelines, November 2010" should be used to inform any Integrated Transport Assessment.
TR-R3	**~~Site access~~ Driveways**
All Zones	1. Activity status: **Permitted** Where: a. Compliance with TR-S5 and TR-S6 is achieved~~; and~~ b. ~~The access is not to a State Highway~~.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with the requirements of TR-R3.1 cannot be achieved. Matters of discretion are: 1. The matters in TR-P3 Notification status: An application under Rule TR-R3 is precluded from being publicly notified.
TR-R4	**On-site pedestrian, cycling and micromobility paths**
All Zones	1. Activity status: **Permitted** Where: a. Compliance with TR-S4 is achieved.
All Zones	2. Activity status: **Restricted Discretionary**

	Where: a. Compliance with the any of the requirements of TR-R4.1.a cannot be achieved. Matters of discretion are: 1. The matters in TR-P3. Notification status: An application under Rule TR-R4 is precluded from being publicly or limited notified.
TR-R5	**On-site vehicle parking and manoeuvring**
All Zones	1. Activity status: **Permitted** Where: a. Compliance with TR-S7 is achieved; and b. It does not include ramps, turntables, lifts or stackers.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with the requirements of TR-R5.1 cannot be achieved. Matters of discretion are: 1. The matters in TR-P3. Notification status: An application under Rule TR-R45 is precluded from being publicly notified.
TR-R~~5~~6	**Car sharing activities**
All Zones	1. Activity status: **Permitted** Where: a. Compliance with the requirements of TR-S7 is achieved.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with the requirements of TR-R5.1 cannot be achieved. Matters of discretion are: 1. The matters in TR-P3. Notification status: An application under Rule TR-R~~5~~6 is precluded from being publicly notified.
~~INF-R24~~ TR-R7	**Connections to roads**
All Zones	1. Activity status: **Permitted** Where: a. The connection provides site access for sites with no driveway, on-site parking or loading; and b. Compliance is achieved with ~~INF-S16~~ TR-S10; or c. The connection provides site access to an Urban Road (except a Transit Corridor) or a Rural Road (except National Highway) as identified ~~in~~ and mapped in the road classification overlay; and d. The access is not to a State Highway; and

	e. Compliance is achieved with ~~INF-S17~~ TR-S11.
All Zones	2. Activity status: **Restricted Discretionary** Where: a. Compliance with the requirements of ~~INF-R24.1~~ TR-R7.1 cannot be achieved. Matters of discretion are: 1. The matters in ~~INF-P13~~ TR-P4. Notification status: An application under Rule TR-R7 is precluded from being publicly notified.

Standards

TR-S1	**Vehicle trip generation**

1. Activities must not exceed the following maximum vehicle movement thresholds**:**

Type of vehicle	**Maximum number of vehicle movements**
Light	~~2~~500 per day (not state highways)~~to/from a local road~~
Light	100 per day to/from the state highway
Heavy	8 per week

2. For the purpose of the above assessments:

a. An on-site carpark associated with a residential activity is considered to generate 10 light vehicle movements per day;
b. Vehicle movements per day must be assessed as average vehicle movements per day, averaged over a full seven-day week; and
c. Vehicle movements per week must be assessed as average vehicle movements per week, averaged over a full 52-week year.

TR-S2	**Cycling and ~~M~~micromobility device parking, and staff showers and lockers**

1. Cycling and micromobility device parking must be provided in accordance with Table TR-7. 2. Showers and lockers for staff cycling and micromobility trips to new buildings for commercial activities, tertiary education and healthcare activities must be provided in accordance with Table TR-7A.	Assessment criteria where the standard is infringed: 1. The availability of alternative, safe and secure cycling and micromobility parking, and showers and lockers if relevant, that meets the needs of the intended users, in a nearby accessible location; 2. Whether parking can be provided and maintained in a jointly-used cycling and micromobility parking area; and 3. Site limitations, configuration of buildings and activities, demonstrated user requirements and operational requirements.

Table 7 – TR: Minimum number of on-site cycling and micromobility device parking spaces

Activity	**Minimum number of on-site cycling and micromobility device parking spaces** **Both short stay and long stay must be provided**

	Short stay (visitors)	Long stay (staff*, residents, students)
Any activity in the following zones: • City Centre • Metropolitan • Local Centre • Neighbourhood Centre • Mixed Use	~~Nil~~ In accordance with the rest of this table if one or more short stay car parks are provided on-site, otherwise Nil.	In accordance with the rest of this table
Commercial activity	Minimum 2, 0.05 per 100 m^2 GFA or as per specific activity below	Minimum 1, 0.1 per 100m^2 GFA or as per specific activity below
• Entertainment and Hospitality Activity	0.1 per person that the site is designed to accommodate; ~~or as per specific activity below~~	Minimum 1, 0.1 per staff member* ~~or as per specific activity below~~
Community facility	0.1 per person that the site is designed to accommodate	Minimum 1, 0.1 per staff member*
Educational facility	As per specific activities below	
1. Childcare services	Minimum 2	Minimum 1, 0.1 per staff member*
2. Tertiary education facility	Minimum 2	Minimum 1, 0.1 per student and 0.1 per staff member*
Emergency service facilities	Minimum 2	Minimum 1, 0.1 per staff member*
Healthcare activity	Minimum 2, 1 per 100m^2 GFA	Minimum 1, 0.1 per staff member*
Industrial activity	Minimum 2	Minimum 1, 0.1 per 100m^2GFA
Residential	1 per 10 residential units	Minimum 1 per residential unit.**
• Hostels	1 per 10 beds	Minimum 1, 1 per 3 beds
• Retirement villages	Minimum 1, plus 0.1 per residential unit	Minimum 1, plus Minimum 0.1 per residential unit** and 0.1 per staff member*
Where the calculation of required parking spaces results in a fractional space, the fraction must be rounded up or down to the nearest full space.		

* The number of staff members is the maximum number of full or part time staff members on the site at any one time.
** The cycle and micromobility device parking space cannot be located within the residential unit itself. A lockable, residential unit-specific storage facility such as a garage or storage locker is an acceptable solution, provided it can fit the cycle space dimensions in Figure 1 – TR: Cycle and micromobility parking. This may be a communal facility.

Table 7A – TR: On-site showers and lockers

Number of additional long stay cycle/micro-mobility device parks required under Table 7 as a result of construction of a new building for commercial, tertiary education or healthcare activities		**Minimum number of showers and lockers required on-site for staff cycling and micromobility trips**
1.	1 – 10	None
2.	11 – 100	a. 1 shower per every 10 staff cycle/micromobility parks required b. 1 locker per every staff cycle/micromobility park required
3.	> 100	a. 1 shower per every 10 staff cycle/micromobility parks required b. 1 locker per every staff cycle/micromobility park required
4.	The minimum internal dimensions of each locker required is: height 85 cm, depth 45 cm, width 20 cm.	

TR-S3	**Cycling and ~~M~~micromobility parking design**

1. Where ~~short stay~~ cycling and micromobility parking spaces are required to be provided by TR-S2, and that are not in a lockable, residential unit-specific storage facility such as a garage or storage locker dedicated to that residential unit, they must include stands, aisles and spaces that meet the ~~following~~ minimum specifications in Figure 1 – TR: Cycle and micromobility parking and Table 7 – TR: Minimum distance from centre of stand to a wall or kerb.~~:~~
   ~~a. Stands must be sized and spaced to accommodate cycle dimensions of 1200mm high, 1800mm long and 600mm wide;~~
      a. Note that all dimensions in Figure 1 – TR and Table 7B – TR are based on cycle envelopes and a 1.0 m long cycle stand. Adjust if using different stands or if providing for different types of cycles.
      b. Where a range is given, the upper value is preferred for ease of use, but the lower value is the minimum standard.
      c. The minimum aisle width for manoeuvring cycles to/from parking, per Australian Standard 2890.3 is 1.5 m, or 2.0 m for multi-tier parking or cycle lockers. Aisle widths are measured between the parking space envelopes, not between stands.
2. Hanging racks or vertical stands that require lifting of the bicycle must not exceed 50% of number of spaces.
3. At least one in every four cycle/micromobility parks on a site

Assessment criteria where the standard is infringed:

1. The safety and effectiveness of the cycling and micromobility parking spaces;
2. Site limitations, configuration of buildings and activities, user requirements and operational requirements; and
3. The safety of pedestrians, cyclists and micromobility users using the road, accessways and walkways.

must meet the standards for “large cycles” in Figure 1 – TR.

4. Except for a lockable, residential unit-specific storage facility, each stand must provide a locking point that is securely anchored to an immovable object and must allow the frame and at least one wheel to be secured, with the frame able to be secured by a U-lock (also known as a “D-lock”)

~~a. Stands must be securely anchored to an immovable object.~~

~~b. Stands must allow the cycling or micromobility device frame and, in the case of cycles, at least one wheel, to be secured.~~

2. Short stay ~~C~~cycling and ~~M~~micromobility parking facilities required to be provided by TR-S2 must be located:
   i. So they are easily accessible for users, within 20m of the primary entrance;
   ii. So they ~~do not impede~~ are clear of pedestrian thoroughfares ~~including areas used by people whose mobility or vision is restricted~~ to provide safety for all pedestrians, including at-risk groups such as pedestrians with mobility and vision impairments, and children;
   iii. To be clear of vehicle parking or manoeuvring areas; and
   iv. ~~Short stay cycling and micromobility parking facilities must~~ To be available during the activity's hours of operation and must not be impeded by any structure, storage of goods, landscape planting or other use; and

3. ~~Where l~~Long stay cycling and micromobility parking spaces ~~are~~ required to be provided by TR-S2~~,~~:
   a. ~~they~~ must be located~~: l~~in a covered area where access by the general public is excluded~~, and at least one wheel is able to be secured~~; and
   b. must be electric charging-ready by being serviced with an electrical cable conduit from the electricity supply to the parking space or the collective parking facility.

~~Note: Refer to 'Cycle Parking Planning and Design, Waka Kotahi 2019'.~~

Figure 1 – TR: Cycle and micromobility parking

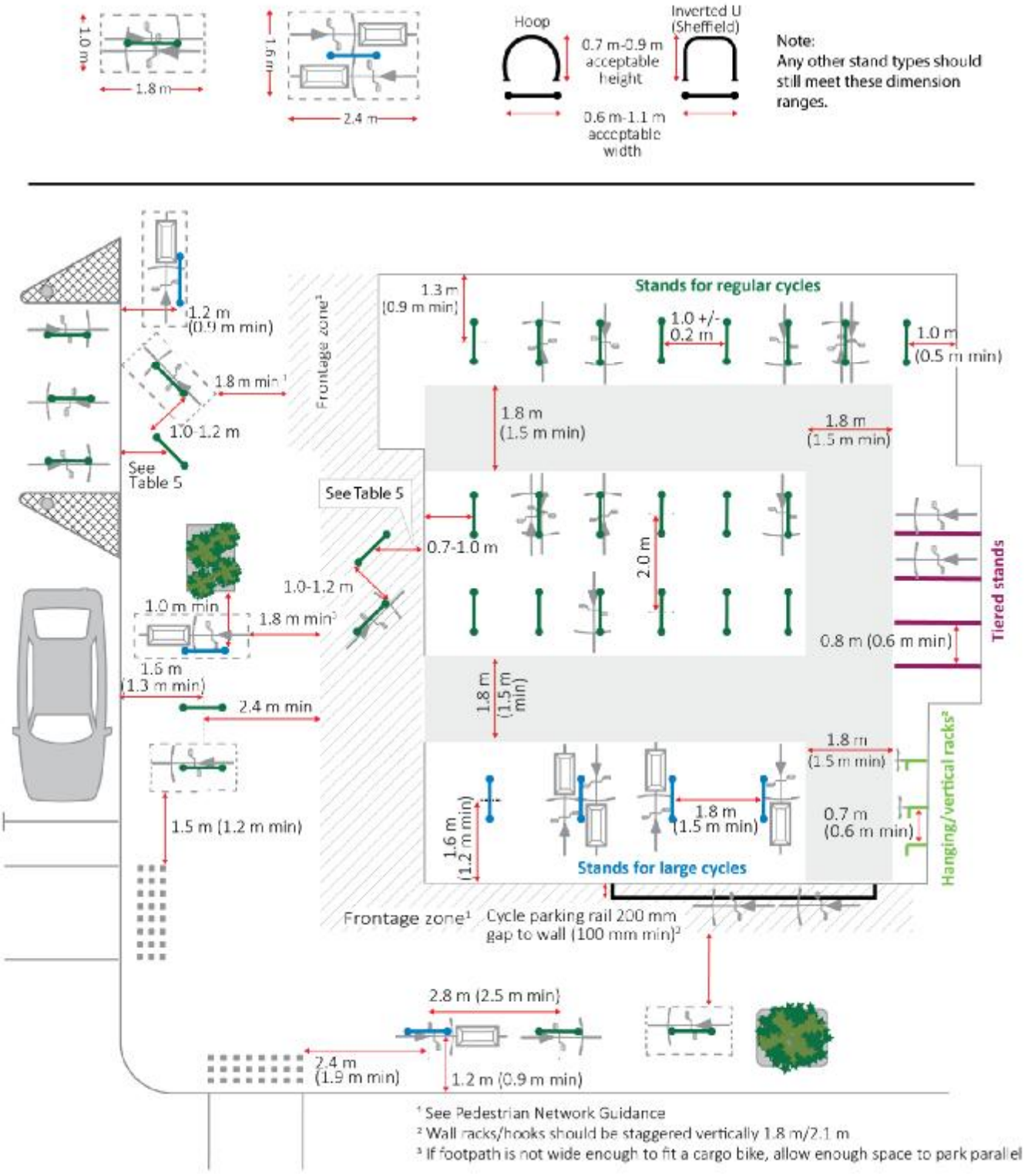


Table 7B – TR: Minimum distance from centre of stand to a wall or kerb

Use this Table when Figure 5A refers to "See Table 5".

	Orientation				
	Parallel				Perpendicular
	0°	22.5°	45°	67.5°	90°
With clearance	0.9 m	1.0 m	1.1 m	1.2 m	1.3 m
Without clearance	0.5 m	0.6 m	0.7 m	0.8 m	0.9 m

Note: source of Figure 1-TR and Table 7B-TR is the Cycling parking planning and design: Cycling Network Guidance Technical Note (Version 3, 9 December 2022) Figure 16: cycle parking envelopes, typical stand dimensions and layouts, and Table 5: minimum distance (in metres) from centre of stand to a wall or kerb.

TR-S4	On-site pedestrian, cycling and micromobility paths
1. On-site pedestrian, cycling and micromobility paths must achieve the following: a. Provide pedestrian access from the road to each residential unit on the site; b. Provide cycling and micromobility access from the road to each building on the site that provides cycle and micromobility device storage; ~~c. Connect to minimum width of 1.8m at the road boundary;~~ d. Have a minimum formed width of 1.2 m or, for paths accessing more than 1 residential unit, 1.5 m; and e. If stairs are necessary between cycling and micromobility storage and the legal road, a wheeling ramp at least 300 mm wide on one side of the stairs must be provided.	
TR-S5	**Classification of driveways**
1. Driveways must be classified according to Table 8 – TR: Classification of Driveways.	

Table 8 – TR: Classification of driveways

Driveway use	Resulting driveway classification
1. 1-30 light vehicle movements per day*; or 2. No more than 2 heavy vehicle movement per week**	Driveway Level 1
3. 31-60 light vehicle movements per day*; or 4. 3-4 heavy vehicle movements per week**	Driveway Level 2
5. 61-200 light vehicle movements per day*; or 6. 5-8 heavy vehicle movements per week**	Driveway Level 3
7. 201 or more light vehicle movements per day*; or 8. 9 or more heavy vehicle movements per week**	Specific design as part of High Trip Generating activity consideration

* Vehicle movements per day must be assessed as average vehicle movements per day, averaged over a full seven day week;

** Vehicle movements per week must be assessed as average vehicle movements per week, averaged over a full 52 week year.

TR-S6	Design of driveways

1. The minimum design vehicle used for a driveway must be a 4.91 m x 1.87 m vehicle (85th percentile vehicle); and 2. Driveways must be designed to achieve the design speeds, minimum widths, maximum gradients and seal requirements in Table 9 – TR: Design of Driveways; and 3. Where driveways will result in any building served from the driveway to be more than 70 m away from a legal road, the full length of the driveway must provide unhindered access for fire appliances in accordance with the vehicle access standards in the NZ Fire Service Firefighting Water Supplies Code of Practice SNA PAS 4509:2008.	

Table 9 – TR: Design of driveways

Classification	Design speed (km/h)	Maximum gradient	Minimum Width (m)				
			Footpath	~~Cycling and micromobility~~	Vehicles (must provide unhindered vehicle access)	Infrastructure berm	Overall legal width
Driveway Level 1	• 10	• 25% (1 : 4) • 2 m transition length for changes in grade >12.5% (1 : 8) • For sites where the driveway rises to meet the road, 5% (1 : 20) maximum gradient within 6 m of road boundary	• Shared in vehicle lane	• ~~Shared in vehicle lane~~	• 1 x 3.0 • Passing bays at 50 m maximum spacing; • Clear line of sight between passing bays	Shared in vehicle lane	• 3.0 + any passing bays
Driveway Level 2	• 10	• 20% (1 : 5) • 2 m transition length for changes in grade >12.5% (1 : 8) • For sites where the driveway rises to meet the road, 5% (1 : 20) maximum	• 1 x 1.0	• ~~Shared in vehicle lane~~	• 2 x 3.0 for the first 6.0 m from the road boundary; • 1 x 3.0 for the rest of the driveway; • Passing bays at 50 m maximum spacing; • Clear line of sight between passing bays	Shared in vehicle lane	• 4.0 + any passing bays

		gradient within 6 m of road boundary					
Driveway Level 3	• 20	• 16% (1 : 6.25) • 2m transition length for changes in grade >12.5% (1 : 8) • For sites where the driveway rises to meet the road, 5% (1 : 20) maximum gradient within 6 m of road boundary	• 1 x 1.5	• ~~Shared in vehicle lane~~	• 2 x 3.0	• 1 x 1.0	• 8.5

TR-S7	**Design requirements for on-site vehicle parking, circulation and manoeuvring**

1. Where provided on a site, car parking spaces and associated circulation and manoeuvring areas must be designed to accommodate a 4.91 m x 1.87 m vehicle (85th percentile vehicle) as the minimum design vehicle, with 300mm clearance per side to obstructions and a minimum outside turning radius of 5.8 m;

2. If the site is located in an area where no fully reticulated water supply system is available, or the development will result in any building served from the driveway to be more than 70 m away from a legal road with a fully reticulated water supply system including hydrants, then circulation and manoeuvring areas must:

    a. Have a minimum unobstructed width of 4 m;
    b. Have a minimum formed width of 3.5 m;
    c. Have a minimum height clearance of 4 m; and
    d. Be designed to be free of obstacles that could hinder access for emergency vehicles;

    These TR-S7.2 standards override other vehicle access, circulation and manoeuvring standards to the extent of any conflict.

3. Car parking spaces must:
    a. Comply with the minimum dimensions of Figure 5 – TR: Parking and Table 10 – TR: Parking Space Dimensions;
    b. Have a maximum gradient of 5% (1 : 20) in any direction; and

c. Have a minimum height clearance of its vehicle access and any associated garage door of:
   i. 2.3 m for spaces where the general public have access; and
   ii. 2.1 m for all other spaces; and
d. Have a minimum height clearance of its vehicle access and any associaedCommercial/industrial 2.3
e. For residential on-site car parking spaces within a dedicated garage or basement car parking space, be electric vehicle-charging-ready by being serviced with an electrical cable conduit from the electricity supply to the edge of the ~~carpark~~ car parking area;

4. ~~Blind~~ Car parking aisles closed at one end must extend at least 1 m at the closed end beyond the last parking space they provide access to;

5. On-site circulation and manoeuvring areas must have a maximum gradient of 12.5% (1 : 8);

6. On-site circulation and manoeuvring areas must be provided so that vehicles can enter and exit the site in a forward direction, except where:
   a. The site has no more than three parking spaces;
   b. Any reversing would be for a distance no more than 30 m; and
   c. The road is a Local Street;

7. On-site circulation and manoeuvring areas must not be located on:
   a. The public road reserve; or
   b. Areas provided for parking, loading or storage; and

~~8. On-site parking, circulation and manoeuvring must not include ramps, turntables, lifts or stackers.~~

Note: Where parking is provided, the New Zealand Building Code D1/AS1 New Zealand Standard for Design for Access and Mobility – Buildings and Associated Facilities (NZS: 4121-2001) sets out requirements for the number and design of parking spaces for people with disabilities and for accessible routes from the parking spaces to the associated activity or road.

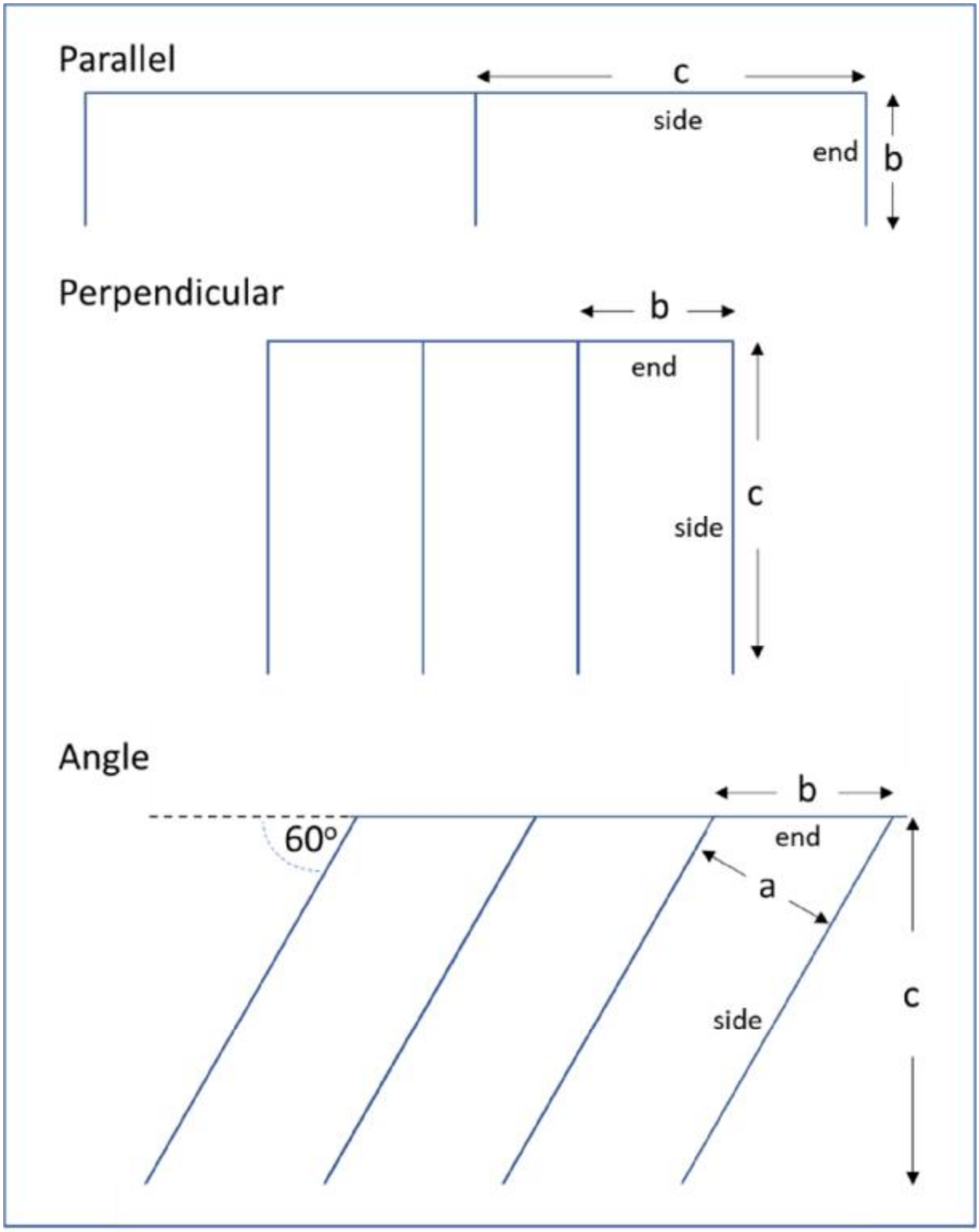
Table 10 – TR: Parking space dimensions

Parking space type	Dimension a* (m)	Dimension b* (m)	Dimension c* (m)	Minimum aisle width (m)
Parallel (permanently unobstructed sides and ends)	-	2.1	6.0	3.6

Additional clearance requirement for each obstructed side or end (e.g. fence, wall, column)	-	+0.3	+0.3	
Perpendicular (permanently unobstructed sides and ends)	-	2.5	5.0	6.2
Additional clearance requirement for each obstructed side or end (e.g. fence, wall, column or inside garage)	-	+0.3	+0.3	
Additional clearance requirement both ends obstructed (e.g. inside garage)	-	-	+0.4	
Additional aisle width for accessing garage door that is less than 2.7m wide				+0.8
Angle - 60 degrees (permanently unobstructed sides)	2.5	2.9	5.1	4.6
Additional clearance requirement for each obstructed side (e.g. fence, wall, column)	+0.3	+0.33	-	
Additional clearance requirement if one end obstructed (e.g. fence, wall, column)			+0.6	

*Dimensions a, b and c are shown in Figure 5 - TR: Parking

Figure 5 – TR: Parking



TR-S8	Provision of on-site loading areas
1. ~~2.~~ No on-site loading areas are required for buildings with a building footprint [OR gross floor area] of less than 450 m^2~~.~~; and 2. ~~1.~~ At least one on-site loading area must be provided ~~for~~ on a site with one or more buildings	

~~with~~ that have a building footprint [OR gross floor area] of 450 m^2 or more.~~; and~~	

TR-S9	**Design requirements for on-site loading, circulation and manoeuvring**
7. On-site loading and associated circulation and manoeuvring areas must be designed to accommodate an 8.0 m x 2.5 m medium rigid truck as the minimum design vehicle, with 300 mm clearance per side to obstructions and a minimum outside turning radius of 10.0 m; 8. Loading areas must have a minimum height clearance of 4.5 m; and 9. Loading, circulation and manoeuvring areas must not be located on the public road reserve.	

~~INF-S15~~ TR-S10	**Connection to roads – sites with pedestrian, cycling and micromobility site access only**
1. For sites with frontage to a road: a. The direct legal road frontage must have a width of at least 1.8m. 2. For sites with no frontage to a road: a. Access must be provided to a road via an access easement with a width of at least 1.8m.	

~~INF-S16~~ TR-S11	**Connection to roads - driveways**
1. The number of vehicle crossings per site must not exceed one; 2. The minimum design vehicle for a vehicle crossing is a 5.20 m x 1.94 m vehicle (99th percentile vehicle); 3. For Urban Roads, the length of a vehicle crossing parallel to the road must be no more than: a. 3 m for Driveways Level 1; or b. 6 m for Driveways Level 2 and 3. 4. For Rural Roads: a. The vehicle crossing must be sealed between the road carriageway and the property boundary; and b. The entry and exit turn radius of the vehicle crossing must each be at least 9.0 m; 5. Where the vehicle crossing incorporates a pedestrian, cycling or micromobility path, the crossfall of the path must meet not exceed 2.5% (1 : 40); 6. The vehicle crossing for a site with frontage to two or more roads must connect to the road with the lower number of vehicle movements per day; 7. Vehicle crossings must not be located within 10m of an intersection tangent point as shown as the heavy line between Points A and B in Figure 2 – INF: Vehicle Crossings in Relation to Intersections. In addition, vehicle crossings for Driveways Level 2 and 3 must not be located at the top of a T-intersection as shown as the heavy line between Points C and D in Figure 2 – INF: Vehicle Crossings in Relation to Intersections; 8. The distance from vehicle crossings to railway crossings must be at least 30 m, measured from the nearest edge of the vehicle crossing to the nearest railway track;	

9. Connections to the road reserve must provide clear visibility splays for pedestrian safety from 1.0 m above ground level as shown in Figure 3 – INF: Driveway Visibility Splays and Sight Distances. Driveways Levels 2 and 3 must provide the visibility splay on the left hand exit side only. For Driveways Level 1 where the driveway is within 2.0 m of the adjoining property boundary, the visibility splay is not required if a 75 mm high speed hump is installed 1.0 m from the road boundary; 10. Sight distances from vehicle crossings as shown in Figure 3 – INF: Driveway Visibility Splays and Sight Distances; and 11. Must comply with Table 5 – INF: Minimum Sight Distances at Vehicle Crossings. Note: Limited Access Roads may have additional or different requirements under the Government Roading Powers Act 1989.	

Figure 2 – ~~INF~~TR: Vehicle Crossings in Relation to Intersections

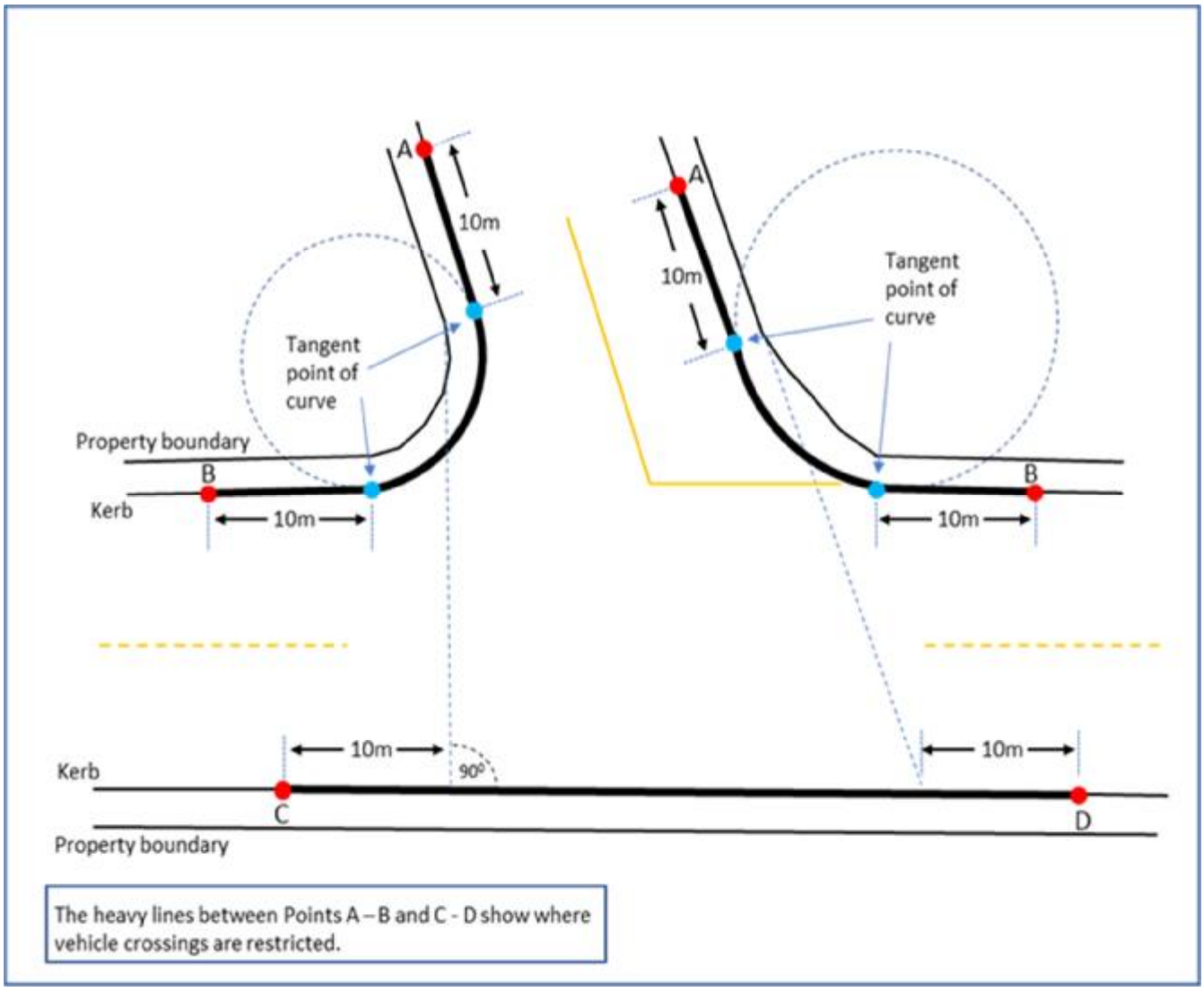


Figure 3 – ~~INF~~TR: Driveway Visibility Splays and Sight Distances

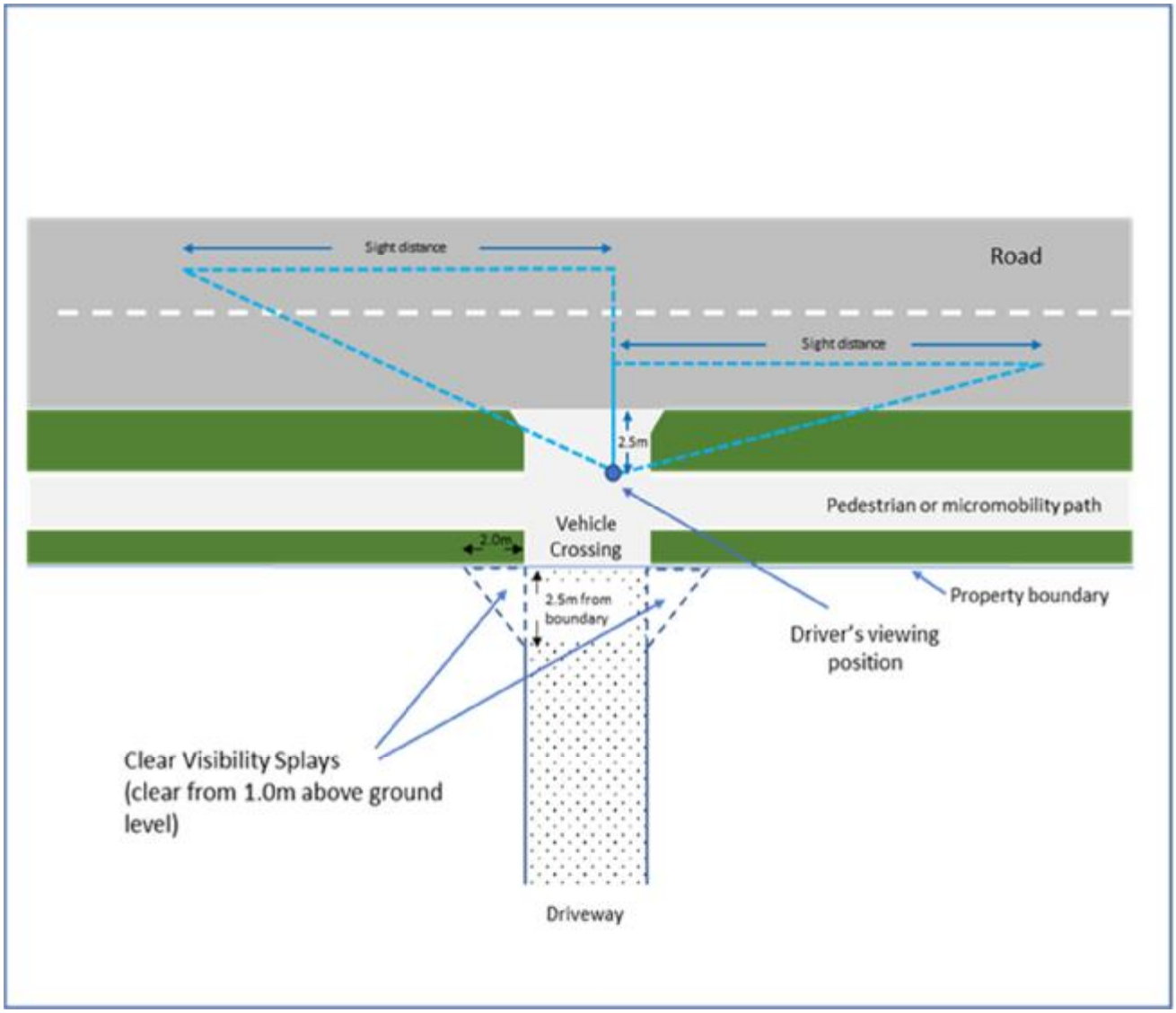


Table 5 – ~~INF~~TR: Minimum Sight Distances at Vehicle Crossings

Frontage speed limit (km/h)	Driveway level 1 Minimum sight distance (m) (see Figure 3 – INF: Driveway Visibility Splays and Sight Distances)	Driveways levels 2 & 3 Minimum sight distance (m) (see Figure 3 – INF: Driveway Visibility Splays and Sight Distances)
30	25	25
40	30	35
50	40	45
60	55	65
70	70	85
80	96	105

He Rohe Kāinga Mātoru-Waenga

Medium Density Residential Zone

MRZ-S3	Height in relation to boundary
3. Where the boundary forms part of a legal right of way, ~~entrance~~ access strip, access ~~site~~ allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, ~~entrance~~ access strip, access ~~site~~ allotment, or pedestrian access way.	

He Rohe Wharenoho Mātoru-Nui

High Density Residential Zone

HRZ-S3	Height in relation to boundary
~~5.~~ 4. In relation to 1, 2 and 3 above, where the boundary forms part of a legal right of way, ~~entrance~~ access strip, access ~~site~~ allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, ~~entrance~~ access strip, access ~~site~~ allotment, or pedestrian access way.	

He Rohe Tuawhenua Whānui

General Rural Zone

GRUZ-S6	Height in relation to boundary within the Makara Beach and Makara Village Precinct
3. ~~Where the site abuts a boundary shared with an access strip, access lot, public accessway or right of way, the measurement must be taken from the furthest boundary.~~ Where the boundary forms part of a legal right of way, access strip, access allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, access strip, access allotment, or pedestrian access way. This standard does not apply to: a. A boundary with a road; b. Solar panel and heating components attached to a building provided these do not exceed the height in relation to boundary by more than 500mm; and	

	c. Satellite dishes, antennas, aerials, chimneys, flues, architectural or decorative features (e.g., finials, spires) provided that none of these exceed 1m in diameter and do not exceed the height in relation to boundary by more than 3m measured vertically.

He Rohe Hōhipera

Hospital Zone

HOSZ-S2	Height in relation to boundary
2. In relation to the above, where the boundary forms part of a legal right of way, ~~entrance~~ access strip, access ~~site~~ allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, ~~entrance~~ access strip, access ~~site~~ allotment, or pedestrian access way.	

He Rohe Mātātoru

Tertiary Education Zone

TEDZ-S3	Height in relation to boundary
2. In relation to the above, where the boundary forms part of a legal right of way, ~~entrance~~ access strip, access ~~site~~ allotment, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, ~~entrance~~ access strip, access ~~site~~ allotment, or pedestrian access way.	