

APPENDIX 5.5 PROVISION CASCADE – Water supply, stormwater, wastewater

Issue to be addressed	Objective	Policies	Rules	Conditions / Assessment Criteria
Integration of three waters infrastructure with land uses	<p>6.4.1 Objective – Integration of infrastructure with subdivision, land use and development (a) Infrastructure is provided for, and integrated with, subdivision, use and development.</p> <p>6.4.6 Objective – Stormwater and drainage (a) The hydrological characteristics of the natural drainage processes are retained <u>where new subdivision, development or land use is proposed.</u></p>	<p>4.1.4 Policy – Staging of development</p> <p>4.7.5 Policy – Servicing Requirements</p> <p>4.7.6 Policy – Co-ordination between servicing and development and subdivision</p> <p>6.1.13 Policy – Future growth areas (a) Require infrastructure services to be <u>planned, developed and co-ordinated with development to ensure it a standard that enables the service can to</u> be extended to future growth areas where <u>and when</u> appropriate.</p> <p>6.1.16 Policy – Water conservation (a) Encourage water conservation measures and, where appropriate, low impact</p>	<p>Rule 14.3.1 P12 Service connections for subdivision</p>	<p>14.3.1.8 (1) All new lots created as part of a subdivision other than a <u>utility allotment, access allotment</u> or reserve <u>allotment</u>, must be designed and located so that provision is made for access and <u>service connections</u> up to the <u>boundary</u> of the lot for: (a) Wastewater; (b) Water supply; (c) Stormwater (a management system that complies with <u>Rule 14.1.1.1</u>); (d) Electricity supply; (e) Telecommunications that is hard-wired or wireless; and (f) Vehicle access that complies with <u>Rule 14.12.1.1</u>.</p> <p>(2) <u>Rule 14.3.1.8(1)(a)</u> does not apply to any allotment that is served by a site-contained wastewater system in accordance with <u>Rule 14.1.1.3</u>.</p> <p>(3) Within all zones, except the Rural, and Country Living and Village Zones <u>where there is no reticulated water supply</u>, the water supply required under <u>Rule 14.3.1.8 (1)(b)</u> must be adequate for fire-fighting purposes <u>in accordance with New Zealand Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008. Compliance with this Code of Practice can</u></p>

		<p>stormwater design and facilities.</p> <p>6.4.2 Policy – Provide adequate infrastructure</p> <p>(a) Ensure adequate provision of infrastructure, including land transport networks, where land is subdivided <u>creating one or more additional lots, excluding reserve or conservation lots, access and utility allotments</u>, or its use <u>significantly changed or intensified, needing additional or upgraded infrastructure</u>.</p>		<p><u>typically be achieved through connection to a Council reticulated water supply.</u></p> <p><u>(4) Within the Rural, Country Living and non-reticulated Village Zones, where a subdivision is for the purposes of an additional house or workplace building, provision shall be made for an adequate supply of water and access to water supplies for fire-fighting purposes in accordance with New Zealand Fire Service Firefighting Water Services Code of Practice SNZ PAS 4509:2008.</u></p> <p><u>(5) Rule 14.3.1.8(1)(b) and (c) do not apply to any Rural or Country Living Zone site.</u></p>
		<p>6.4.3 Policy – Infrastructure Location and Services</p> <p>(a) Ensure subdivision, use and development are provided with infrastructure and services to a level that is appropriate to its location and intended use including:</p> <ul style="list-style-type: none"> (i) Three waters (water, wastewater and stormwater <u>supply management</u>); (ii) Telecommunication services; (iii) Electricity services; and 	<p>Rule 14.3.3 RD7</p> <p><u>Access and service connections for subdivision that do not comply with one or more of the conditions of 14.3.1.8</u></p>	<p><u>Discretion is restricted to:</u></p> <ul style="list-style-type: none"> <u>a) The adequacy of the service connection;</u> <u>b) The functional and operational needs of, and benefits derived from, the infrastructure;</u> <u>c) Site design, layout and amenity;</u> <u>d) Visual, streetscape and amenity effects; and for vehicle access;</u> <u>e) Land transport network safety and efficiency;</u> <u>f) The extent to which the safety and efficiency of rail and road operations will be adversely affected, including:</u> <ul style="list-style-type: none"> <u>i. The outcome of any consultation with KiwiRail; NZTA; Waikato District Council, as the rail or road controlling authority;</u>

		(iv) Adequate water supply within urban areas for firefighting purposes.		<p>ii. Any characteristics of the proposed use that will make compliance unnecessary;</p> <p>g) Traffic generation by the activities to be served by the vehicle access;</p> <p>h) Mitigation to address safety and/or efficiency of vehicle access, including access clearance requirements for fire-fighting purposes;</p> <p>i) The foreseeable needs for access by emergency services and their vehicles;</p> <p>j) Location, design, construction and materials of the vehicle access;</p> <p>k) Safety for all users of the vehicle access and/or intersecting road including but not limited to vehicle occupants or riders and pedestrians.</p>
			<p>Rule 14.11.1 PI Stormwater systems for new development or subdivision</p>	<p>14.11.1.1</p> <p>(a) New development or subdivision must have a stormwater system that complies with all of the following conditions:</p> <p>(i) Operates by gravity;</p> <p>(ii) Manages stormwater through a Stormwater Management Plan in the following manner:</p> <p>A. Primary systems detain or retain runoff from all impervious surfaces during a 10% Annual Exceedance Probability storm event to ensure that the rate of any stormwater discharge off-site is at or below pre-development rates; and</p> <p>B. Secondary overflows are conveyed to a system or drainage path designed to collect concentrated stormwater during events up to and including a 1% Annual Exceedance Probability; or</p>

				<p>C. A controlled discharge to a network or receiving environment that will have equivalent capacity (as in (i) and (ii) above) once the catchment is fully developed.</p> <p>(iii) Stormwater management measures must be in place and operational upon the completion of subdivision and/or development;</p> <p>(iv) Systems must be designed using rainfall data specific to the area in which the property is located and be adjusted for a climate change temperature increase of 2.1°C;</p> <p>(v) Stormwater management measures, including low impact design measures, must be implemented as appropriate in accordance with the following drainage hierarchy:</p> <p>A. Retention of rainwater/stormwater for reuse;</p> <p>B. Soakage techniques;</p> <p>C. Infiltration rate of a minimum of 7mm/hour;</p> <p>D. Treatment, detention and gradual release to a watercourse;</p> <p>E. Treatment, detention and gradual release to a piped stormwater system.</p> <p>F. <u>Stormwater treatment shall address water quality; downstream erosion and scour effects; and cumulative volume effects.</u></p> <p>(vi) Where land is subject to instability, stormwater discharges directly to ground occurs only where the ground conditions have been identified as being suitable to absorb such discharges</p>
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				<p>without causing, accelerating or contributing to land instability and downstream effects either on the site or on neighbouring properties;</p> <p>(vii) Connection of new development to any existing stormwater drainage system must not result in the minimum level of service not being met or the minimum level of capacity being exceeded. Alteration of the existing receiving stormwater network drainage system to achieve minimum level of service or additional onsite detention volume to ensure existing capacity will be required.</p> <p>Notes:</p> <p>(iii)-(i) Acceptable means of compliance for the provision, design and construction of stormwater infrastructure, including low impact design features, are contained within the Regional Infrastructure Technical Specifications (RITS). Refer also to Waikato Stormwater Management Guideline and Waikato Stormwater Run-off Modelling Guideline.</p> <p>(iii) A stormwater discharge consent may also be required from the Waikato Regional Council.</p>
			<p>Rule 14.1.1.1 P3 Wastewater servicing for new development or subdivision</p>	<p>14.1.1.3</p> <p>(a) New development or subdivision must have a wastewater system that complies with the following conditions:</p> <p>(i) Is connected to public, reticulated wastewater network; or</p> <p>(ii) Is connected to a community-scale wastewater system; or</p>

				(iii) Is provided with a site-contained, alternative method of wastewater disposal that complies with AS/NZS 1547:2012.
			<p>Rule 14.11.1 P11 Water supply servicing for new development or subdivision</p>	<p><u>14.11.1.1</u> (a) New development or subdivision must have a water supply system that complies with the following conditions: (i) Is connected to any available public, reticulated water supply system nearby; (ii) In addition to connection to reticulated supply for potable water, may also use rainwater harvesting (installation of rain storage tanks for water conservation) to supplement water supply, but not for potable uses.</p>
			<p>Rule 14.11.2 RD1 Stormwater systems for new development or subdivision that does not comply with one or more of the conditions of <u>Rule 14.11.1.1</u></p>	<p>Discretion is restricted to:</p> <ul style="list-style-type: none"> (a) The likely effectiveness of the system to avoid flooding, nuisance or damage to other buildings and sites; (b) The capacity of the system and suitability to manage stormwater. (c) The potential for adverse effects to the environment in terms of stormwater quantity and stormwater quality effects.
			<p>Rule 14.11.2 RD3 Wastewater servicing for new development or subdivision that do not comply with one or more of the conditions of <u>Rule 14.11.1.3</u></p>	<p>Discretion is restricted to:</p> <ul style="list-style-type: none"> (a) Health and safety of the occupants; (b) Capacity of the system; (c) Infiltration capacity of the soil; (d) Location, including proximity to waterways and effects on habitats; (e) Contamination of downstream properties by wastewater.

			<p>Rule 14.11.2 RD10 Water supply that does not comply with Rule 14.1.1.(P1). Discretion is restricted to: (a) Health and safety of the occupants; and (b) Sufficiency of supply for fire-fighting.</p>	Nil
			Consents and assessment criteria for subdivision and multi-unit developments in the urban zones.	
			The extent and location of zoned new development areas / growth	
Enabling maintenance and upgrades	<p>6.1.1 Objective – Development, operation and maintenance of infrastructure (a) Infrastructure is developed, operated and maintained and upgraded to benefit the enhance social, economic, cultural and environmental well-being of the district.</p>	<p>6.1.2 Policy - Development, operation and maintenance</p> <p>(a) Provide for the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure throughout the district by recognising:</p> <ul style="list-style-type: none"> (i) Functional and operational needs; (ii) Location, route and design needs and constraints; (iii) Locational constraints related to the need to 	<p>Rule 14.3.1 P1 The operation, maintenance, repair and removal of existing infrastructure</p> <p>Rule 14.3.1 P2 Minor upgrading of existing infrastructure</p>	<p>Nil</p> <p>14.3.1.1 (1) The realignment, configuration, relocation or replacement of infrastructure and associated structures that meet all of the following conditions:</p> <ul style="list-style-type: none"> (a) Are within 5m of the existing alignment or location; (b) Do not increase the height of any existing pole or support structure by more than +5% 40% to a maximum

<p>access suitable resources or sites;</p> <p>(iv) The benefits of infrastructure to people and communities;</p> <p>(v) The need to quickly restore disrupted services; and</p> <p>(vi) Its role in servicing existing consented and planned development.</p> <p><u>(vii) The need to access infrastructure.</u></p>		<p><u>height of 20m in all zones except the Rural Zone, Industrial Zone, Industrial Zone Heavy and Motor Sport and Recreation Zone;</u></p> <p>(c) Do not increase the diameter (width) of any existing pole or support structure by more than <u>+5-50% or 100% increase in the case of a double pole in ALL zones;</u></p> <p>(d) Do not increase the diameter of any existing above-ground pipe by more than <u>+5%300mm;</u> and</p> <p>(e) Do not increase the area of any existing above-ground structure by more than <u>+5%25%.</u></p> <p>(2) Alterations and additions to overhead electricity and telecommunication lines on existing poles or support structures involving any of the following:</p> <p>(a) The addition of conductors to form a twinned or duplex-pairing;</p> <p>(b) The reconductoring of the line with higher capacity conductors;</p> <p>(c) The resagging of conductors;</p> <p>(d) The addition of longer, more efficient insulators;</p> <p>(e) The addition of earth wires (which may contain telecommunication lines), earthpeaks and lightning rods;</p> <p>(f) The addition, replacement or relocation of transformers <u>or visually similar fixtures;</u></p> <p>(g) The addition, replacement or relocation of circuits and conductors;</p> <p>(h) The addition or replacement of telecommunication lines and fittings;</p>
<p>6.1.3 Policy - Technological advances</p> <p>(a) Provide flexibility for infrastructure operators to <u>use new technological advances adopt new technologies</u> that:</p> <p>(i) Improve access to, and <u>enable the efficient use of, networks and services or development of infrastructure;</u></p> <p>(ii) Allow for the reuse of redundant <u>services infrastructure</u> and structures <u>where appropriate; and</u></p> <p>(iii) <u>Result in positive environmental and community outcomes Increase resilience, safety</u></p>		

<p style="text-align: center;"><u>or reliability of networks and services;</u></p> <p style="text-align: center;"><u>(iv) Result in environmental benefits and enhancements; or</u></p> <p style="text-align: center;"><u>(v) Promote environmentally sustainable outcomes including green infrastructure and the increased utilisation of renewable resources.</u></p> <p>6.1.4 Policy – Infrastructure benefits</p> <p>(a) Have regard to the benefits that infrastructure provides, including:</p> <ul style="list-style-type: none"> (i) Enabling enhancement of the quality of life and residential standard for people and communities; (ii) Providing for public health and safety; (iii) Enabling the functioning of business and growth and development; (iv) Managing adverse effects on the environment; (v) Enabling the transportation of freight, goods and people; (vi) Enabling interaction and communication; and (vii) Providing for lifeline utility services. 		<ul style="list-style-type: none"> (i) The replacement of existing crossarms with crossarms of an alternative design; (j) The increase in voltage of electric lines up to 110kV; or (k) The installation of mid-span electricity poles in existing networks to address clearances in New Zealand Electrical Code of Practice for Electrical Safe Distances 34:2001 ISSN 0114-0663 (NZECP34:2001). <p>(3) The addition, replacement or relocation of existing antennas where:</p> <ul style="list-style-type: none"> (a) The antennas shall not increase in-the face area by more than 20% of the relevant-permitted-standard for new panel antennas and shall not increase the diameter of dish antenna by more than 20% of the relevant permitted standard for a new dish antenna; and (b) The antennas shall not increase in height by more than 20% of the relevant permitted standard for new dish and panel antennas. <p>Earthworks activities associated with the minor upgrading of existing infrastructure must comply with the conditions of Rule 14.3.1.3.</p> <p>(4) The minor upgrading of existing infrastructure must not remove any tree identified in Schedule 30.2.</p> <p>(5) Any trimming of a tree identified in Schedule 30.2 associated with the minor upgrading of existing infrastructure must be undertaken in accordance with the conditions of Rule 14.3.1.4.</p>
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6.1.9 Policy - Environmental effects, community health, safety and amenity

- (a) Require the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure and its associated structures to avoid, remedy or mitigate adverse effects on the environment, community health, safety and amenity.

6.5.6 Policy – Network utility location

- (a) Encourage the location of network utility infrastructure within transport corridors where the function, safety and efficiency of the transport network will not be compromised.

	<p>(7) The conditions in Rule 14.3.1.1(1) do not apply to road network activities or other lineal transport networks.</p>
<p>Rule 14.3.1 P4 Earthworks activities associated with infrastructure</p>	<p>14.3.1.3 (1) Any earthworks associated with infrastructure must comply with all of the following conditions:</p> <ul style="list-style-type: none"> (a) Do not exceed a volume of more than 2,500m³ for any single activity; (b) Do not exceed an area of more than 2,500m² for any single activity; (c) Within 10m of a watercourse (excluding artificial watercourses) or 20m of Mean High Water Springs do not exceed a volume of more than 5m³ and an area of more than 5m² for any single activity, excluding existing rail infrastructure; (d) Erosion and sediment controls are implemented and maintained to retain sediment on the site of the earthworks activity; (e) All fill material used must be clean fill; (f) Areas exposed by earthworks activities are to be recontoured and replanted within 6 months of the commencement of the earthworks; (g) Earthworks shall not obstruct or divert any stormwater overland flow path or in such a way as to result in changed stormwater drainage patterns on another site; (h) Earthworks are not located within: any Historic Heritage sites identified within Appendix Schedule 30.1; any Maaori

Sites or Areas of Significance within Schedule 30.3 or 30.4; the dripline of any Notable Tree within Schedule 30.2; any Heritage Precinct; or any Significant Natural Area.

- (2) Rule 14.3.1.3(1)(f) does not apply to earthworks required to establish a foundation or surface that will ultimately be sealed or constructed upon.
- (3) Earthworks associated with infrastructure in Landscape and Natural Character Areas must not:
 - (a) Exceed 1.5m in height in relation to the cut or fill batter face; and
 - (b) Use imported soil, other than the placement of aggregate/metal on any access track or in association with laying underground infrastructure; and
 - (c) Disturb or move more than 50m³ or exceed an area of 250m² in a Significant Amenity Landscape sand dune over any consecutive 12 month time period; and
 - (d) Disturb or move more than 50m³ or exceed an area of 250m² in a High or Outstanding Natural Character area of the coastal environment over any consecutive 12 month time period; and
 - (e) Disturb or move more than 50m³ or exceed an area of 250m² in an Outstanding Natural Feature or Outstanding Natural Landscapes over any consecutive 12 month time period.

			<p>Rule 14.3.3 RD1 Minor upgrading of existing infrastructure that does not comply with one or more of the conditions of Rule 14.3.1.1 which are relevant to the activity proposed</p>	<p>Discretion is restricted to:</p> <ul style="list-style-type: none"> i. The functional and operational needs of, and benefits derived from, the infrastructure; ii. Visual, streetscape and amenity effects; iii. Transport road network safety and efficiency; iv. Management of sediment and dust, including the staging of works; v. The volume, extent and depth of the earthworks activities; vi. The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site; vii. Any flood or land stability risks; viii. Visual, landscape and amenity effects; ix. Whether alternative methodologies avoiding the need to affect any tree identified in Schedule 30.2 have been adequately considered.
			<p>Rule 14.3.3 RD2 Earthworks associated with infrastructure that do not comply with one or more of the conditions of Rule 14.3.1.3</p>	<p>Discretion is restricted to:</p> <ul style="list-style-type: none"> (a) Management of sediment and dust, including the staging of works; (b) The volume, extent and depth of the earthworks activities; (c) The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site, including Maaori Sites and Areas of Significance and any Heritage Items; (d) Any flood or land stability risks; and (e) Visual, landscape and amenity effects.

<p>Providing for new infrastructure and managing the effects</p>	<p>6.1.1 Objective – Development, operation and maintenance of infrastructure (a) Infrastructure is developed, operated and maintained and upgraded to benefit the enhance social, economic, cultural and environmental well-being of the district.</p> <p>6.1.8 Objective – Infrastructure in the community and identified areas (a) Infrastructure takes into account the qualities and characteristics of surrounding environments and community well-being.</p> <p>6.4.1 Objective – Integration of infrastructure with subdivision, land use and development (a) Infrastructure is provided for, and integrated with, subdivision, use and development.</p>	<p>6.1.2 Policy - Development, operation and maintenance</p> <p>(a) Provide for the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure throughout the district by recognising:</p> <ul style="list-style-type: none"> (i) Functional and operational needs; (ii) Location, route and design needs and constraints; (iii) Locational constraints related to the need to access suitable resources or sites; (iv) The benefits of infrastructure to people and communities; (v) The need to quickly restore disrupted services; and (vi) Its role in servicing existing consented and planned development. <p>6.1.4 Policy – Infrastructure benefits</p> <p>(a) Have regard to the benefits that infrastructure provides, including:</p>	<p>Rule 14.3.1 P4 Earthworks activities associated with infrastructure</p>	<p>14.3.1.3</p> <p>(1) Any earthworks associated with infrastructure must comply with all of the following conditions:</p> <ul style="list-style-type: none"> (a) Do not exceed a volume of more than 2,500m³ for any single activity; (b) Do not exceed an area of more than 2,500m² for any single activity; (c) Within 10m of a watercourse (excluding artificial watercourses) or 20m of Mean High Water Springs do not exceed a volume of more than 5m³ and an area of more than 5m² for any single activity, excluding existing rail infrastructure; (d) Erosion and sediment controls are implemented and maintained to retain sediment on the site of the earthworks activity; (e) All fill material used must be clean fill; (f) Areas exposed by earthworks activities are to be recontoured and replanted within 6 months of the commencement of the earthworks; (g) Earthworks shall not obstruct or divert any stormwater overland flow path or in such a way as to result in changed stormwater drainage patterns on another site; (h) Earthworks are not located within: any Historic Heritage sites identified within Appendix Schedule 30.1; any Maaori Sites or Areas of Significance within Schedule 30.3 or 30.4; the dripline of any Notable Tree within Schedule 30.2; any Heritage Precinct; or any Significant Natural Area.
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	<p>6.4.6 Objective – Stormwater and drainage</p> <p>(a) The hydrological characteristics of the natural drainage processes are retained <u>where new subdivision, development or land use is proposed.</u></p>	<ul style="list-style-type: none"> (i) Enabling enhancement of the quality of life and residential standard for people and communities; (ii) Providing for public health and safety; (iii) Enabling the functioning of business and growth and development; (iv) Managing adverse effects on the environment; (v) Enabling the transportation of freight, goods and people; (vi) Enabling interaction and communication; and (vii) Providing for lifeline utility services. <p>6.1.9 Policy - Environmental effects, community health, safety and amenity</p> <p>(a) Require the development, operation, maintenance, repair, replacement, upgrading and removal of infrastructure and its associated structures to avoid, remedy or mitigate adverse effects on the environment, community health, safety and amenity.</p>		<ul style="list-style-type: none"> (2) Rule 14.3.1.3(1)(f) does not apply to earthworks required to establish a foundation or surface that will ultimately be sealed or constructed upon. (3) Earthworks associated with infrastructure in Landscape and Natural Character Areas must not: <ul style="list-style-type: none"> (a) Exceed 1.5m in height in relation to the cut or fill batter face; and (b) Use imported soil, other than the placement of aggregate/metal on any access track or in association with laying underground infrastructure; and (c) Disturb or move more than 50m³ or exceed an area of 250m² in a Significant Amenity Landscape sand dune over any consecutive 12 month time period; and (d) Disturb or move more than 50m³ or exceed an area of 250m² in a High or Outstanding Natural Character area of the coastal environment over any consecutive 12 month time period; and (e) Disturb or move more than 50m³ or exceed an area of 250m² in an Outstanding Natural Feature or Outstanding Natural Landscapes over any consecutive 12 month time period.
		<p>6.5.6 Policy – Network utility location</p> <p>(a) Encourage the location of network utility infrastructure within transport corridors where the function, safety and</p>	<p>Rule 14.3.1 P6 Pipe and cable bridge structures for the conveyance of electricity, telecommunications,</p>	<p>14.3.1.5</p> <p>(1) Pipe and cable bridge structures that meet all of the following conditions:</p> <ul style="list-style-type: none"> (a) Do not exceed 25m total length; (b) Do not exceed 1m width; (c) Do not exceed 1m depth; (d) Are not located in an Identified Area.

		<p>efficiency of the transport network will not be compromised.</p> <p>6.1.5 Policy – Natural hazards and climate change</p> <p>(a) Encourage the design and location of infrastructure to take account of natural hazards and the effects of climate change.</p> <p>6.1.10 Policy – Infrastructure in identified areas</p> <p>(a) Ensure consideration of the values, qualities and characteristics of Significant Natural Areas, Landscape and Natural Character Areas and Heritage Items, <u>Heritage Precincts, and Maaori Sites and Areas of Significance, including Waahi Tapu and Waahi Tapu Areas</u>, when proposing new infrastructure or undertaking significant upgrades to existing infrastructure.</p> <p>6.1.11 Policy – Undergrounding new infrastructure</p> <p>(a) Encourage new infrastructure to be placed underground unless:</p> <p>(i) The adverse effects on the environment are greater than placing the</p>	<p>water, wastewater, stormwater and gas</p> <p>Rule 14.3.1 P8 Service connections</p> <p>Rule 14.3.3 RD2 <u>Earthworks</u> associated with infrastructure that do not comply with one or more of the conditions of <u>Rule 14.3.1.3</u></p> <p>Rule 14.3.3 RD4 Pipe and cable bridge structures for the conveyance of electricity, telecommunications, water, wastewater, stormwater and gas:</p> <p>(a) That do not comply with one or more of the conditions of <u>Rule 14.3.1.5</u>; or</p> <p>(b) Are located within Identified areas</p>	<p></p> <p>14.3.1.7 <u>There is no connection to an area, façade or item specifically listed in Schedule 30.1.</u></p> <p>Discretion is restricted to:</p> <p>(a) Management of sediment and dust, including the staging of works;</p> <p>(b) The volume, extent and depth of the <u>earthworks</u> activities;</p> <p>(c) The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site, <u>including Maaori Sites and Areas of Significance and any Heritage Items</u>;</p> <p>(d) Any flood or land stability risks; and</p> <p>(e) Visual, landscape and amenity effects.</p> <p>Discretion is restricted to:</p> <p>(a) The functional and operational needs of, and benefits derived from, the <u>infrastructure</u>;</p> <p>(b) Visual, streetscape and amenity effects,</p> <p>(c) Public safety;</p> <p>(d) Effects on the values, qualities and characteristics of any Identified Area;</p>
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		<p>infrastructure above ground;</p> <p>(ii) A natural or physical feature or structure renders underground placement impractical or undesirable; or</p> <p>(iii) There are significant operational, functional, technical, cultural, historic heritage or economic reasons that require the infrastructure to be above ground.</p> <p>6.1.12 Policy – Co-location of compatible facilities</p> <p>(a) Encourage compatible infrastructure to share location or facilities where operational advantages can be achieved orand adverse effects are reduced-avoided, remedied or mitigated.</p> <p>6.1.13 Policy – Future growth areas</p> <p>(a) Require infrastructure services to be planned, developed and co-ordinated with development to ensure it a standard that enables the service can to be extended to</p>	<p>Rule 14.3.3 RD6 The following activities that does not comply with Rule 14.3.1.7:</p> <p>(a) CCTV systems attached to existing buildings and structures</p> <p>(b) Service connections</p> <p>(c) Minor infrastructure s tructures.</p>	<p>Discretion is restricted to:</p> <p>(a) The functional and operational needs of, and benefits derived from, the activity, and</p> <p>(b) Effects on the specific values, qualities and characteristics of the item specifically listed in Schedule 30.1.</p>
			<p>Rule 14.11.1 P4 Below ground pipelines for the conveyance of water, wastewater and stormwater</p>	<p>14.11.1.4</p> <p>(a) Below-ground Pipelines for the conveyance of water, wastewater and stormwater that comply with all of the following:</p> <p>(i) Any aboveground section of a pipeline must comply with the following:</p> <p>A. Not exceed 25m in length, and</p> <p>B. Not exceed 300mm in diameter.</p> <p>(ii) Is not located within an Identified Area.</p> <p>(b) The maximum dimensions in Rule 14.1.1.14(a)(i) do not apply to any above-ground section of pipeline which is attached to or contained within the superstructure of a bridge.</p>
			<p>Rule 14.11.1 P5 Below ground pipelines for the conveyance of water, wastewater and stormwater located within an Identified Area</p>	<p>14.11.1.5</p> <p>(a) Below ground pipelines for the conveyance of water, wastewater and stormwater located within an Identified Area that comply with all of the following:</p> <p>(i) There are no aboveground sections of pipeline within an Identified Area.</p> <p>(ii) Are not within a site or area in Schedule 30.1 or 30.3 or 30.4.</p>

		<p>future growth areas where and when appropriate.</p> <p>6.1.16 Policy – Water conservation</p> <p>(a) Encourage water conservation measures and, where appropriate, low impact stormwater design and facilities.</p> <p>6.4.7 Policies – Stormwater</p> <p>(a) Ensure that stormwater and drainage infrastructure for subdivision, land use and development:</p> <p>(i) Adopts, where appropriate, a best-practice low impact design approach to the management of stormwater;</p> <p>(ii) Manages stormwater in accordance with a drainage hierarchy, with a preference for on-site treatment at-source management;</p> <p>(iii) Minimises impervious surfaces to reduce stormwater run-off;</p> <p>(iv) Retains pre-development hydrological conditions as far as practicable;</p> <p>(v) Does not increase the flow of stormwater runoff</p>	<p>Rule 14.11.1 P6 Pump stations for the conveyance of water, wastewater and stormwater</p> <p>Rule 14.11.1 P7 Stormwater treatment, detention and retention facilities or devices</p> <p>Rule 14.11.1 P8 Stormwater ponds or wetlands</p> <p>Rule 14.11.1 P9 Ventilation facilities, drop shafts and manholes</p> <p>Rule 14.11.1 P10 Below ground reservoirs</p> <p>Rule 14.11.2 RD4 Below ground pipelines that do not comply with one or more of the</p>	<p>14.11.1.6 (a) Pump stations for the conveyance of water, wastewater and stormwater that complies with the following conditions: (i) Is not located within an Identified Area. (ii) Not exceed 10m² in area above-ground; (iii) Not exceed 3m in height.</p> <p>14.11.1.7 (a) Stormwater treatment, detention and retention facilities or devices, excluding stormwater wetlands or ponds that comply with the following: (i) is not a stormwater wetland or pond.</p> <p>14.11.1.8 (a) Stormwater ponds or wetlands that comply with the following: (i) The area of the pond or wetland does not exceed the equivalent site building coverage conditions applicable to the zone.</p> <p>14.11.1.8 (a) Ventilation facilities, drop shafts and manholes that comply with the following: (i) Are not located within an Identified Area.</p> <p>14.11.1.9 (a) Below ground reservoirs that comply with all of the following: (i) Are not located within an Identified Area; or (ii) Are not located within road or unformed road.</p> <p>Discretion is restricted to: (a) The functional need and operational need of, and benefits derived from, the infrastructure;</p>
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		<p>onto <u>adjoining properties adjacent land</u> or flood plains, or reduce storage capacity on-site;</p> <p>(vi) Provides a stormwater catchment management plan for future urban development; and</p> <p>(vii) Promotes clean water reuse and groundwater recharge where practicable;-</p> <p>(viii) <u>Avoids, remedies or mitigates the generation of contaminants from urban development, particularly from high contaminant generating car parks and high use roads; and</u></p> <p>(ix) <u>Is supported by a stormwater management plan</u></p>	<p>conditions of Rules 14.11.1.4 and 14.11.1.5</p> <hr/> <p>Rule 14.11.2 RD5 Pump stations for the conveyance of water, wastewater and stormwater located within an Identified Area, <u>or larger than the area/height limits of Rule 14.11.1.6</u></p> <hr/> <p>Rule 14.11.2 RD6 Stormwater ponds or wetlands, that serve more than one site, located within:</p> <ul style="list-style-type: none"> (i) Residential Zone (ii) Rangitahi Peninsula Zone (iii) Village Zone (iv) Country Living Zone (v) Road and unformed road (vi) Identified Area. <hr/> <p>Rule 14.11.2 RD7 Outfall structures located within an Identified Area</p>	<p>(b) Visual, streetscape and amenity effects;</p> <p>(c) Road network safety and efficiency;</p> <p>(d) The risk of hazards to public or individual safety, and risk of property damage; and</p> <p>(e) Effects on the specific values, qualities and characteristics of any Identified Area.</p>
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			<p>Rule 14.11.2 RD8 Ventilation facilities, drop shafts and manholes that do not comply with one or more of the conditions of Rule 14.11.1.9</p>	
			<p>Rule 14.11.2 RD9 Below ground reservoirs located within an Identified Area or road or unformed road</p>	
			<p>Rule 14.11.3 D1 Water treatment plants not located within road and or unformed road or an Identified Area</p>	Nil
			<p>Rule 14.11.3 D2 Wastewater treatment plants located within the following: <ul style="list-style-type: none"> (i) Industrial Zone (ii) Industrial Zone Heavy (iii) Motor Sport and Recreation Zone (iv) Rural Zone (v) Country Living Zone (vi) Reserve Zone </p>	Nil
			<p>Rule 14.11.3 D3 Above ground reservoirs not located within an Identified Area</p>	Nil

			<p>Rule 14.1.1.4 NC1 Water treatment plants located within the following:</p> <p>(i) Road and or unformed road; or</p> <p>(ii) Identified Area</p>	Nil
			<p>Rule 14.1.1.4 NC2 Wastewater treatment plants located within the following:</p> <p>(ix)(i) Residential Zone</p> <p>(ix)(ii) Rangitahi Peninsula Zone</p> <p>(ix)(iii) Village Zone</p> <p>(ix)(iv) Business Zone</p> <p>(ix)(v) Business Town Centre Zone</p> <p>(ix)(vi) Tamahere Business Zone</p> <p>(ix) Te-Kowhai Airpark Zone</p> <p>(ix)(vii) Road and unformed road</p> <p>(ix)(viii) Identified Area</p>	Nil
			<p>Rule 14.1.1.4 NC3 Above ground reservoirs located within an Identified Area</p>	Nil

<p>Development increases impermeability and can create significant increases in stormwater</p>	<p>6.4.6 Objective – Stormwater and drainage (a) The hydrological characteristics of the natural drainage processes are retained <u>where new subdivision, development or land use is proposed.</u></p>	<p>6.1.16 Policy – Water conservation (a) Encourage water conservation measures and, where appropriate, low impact stormwater design and facilities.</p> <p>6.4.7 Policies – Stormwater (a) Ensure that stormwater and drainage infrastructure for subdivision, land use and development: (i) Adopts, where appropriate, a best-practice low impact design approach to the management of stormwater; (ii) Manages stormwater in accordance with a drainage hierarchy, with a preference for <u>on-site treatment at-source management;</u></p>	<p>Rule 14.11.1 P1 Stormwater systems for new development or subdivision</p> <p>Note: Rule 14.11.1.2 P2 The establishment of impervious surfaces associated with new development is deleted and moved to the Zone Rules</p>	<p>14.11.1.1 (a) New development or subdivision must have a stormwater system that complies with all of the following conditions: (i) Operates by gravity; (ii) Manages stormwater <u>through a Stormwater Management Plan</u> in the following manner: A. Primary systems detain <u>or retain</u> runoff from all impervious surfaces during a 10% Annual Exceedance Probability storm event to ensure that the rate of any stormwater discharge off-site is at or below pre-development rates; and B. Secondary overflows are conveyed to a system or drainage path designed to collect concentrated stormwater during events up to and including a 1% Annual Exceedance Probability; or C. A controlled discharge to a network or receiving environment that will have equivalent capacity</p>
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		<ul style="list-style-type: none"> (iii) Minimises impervious surfaces to reduce stormwater run-off; (iv) Retains pre-development hydrological conditions as far as practicable; (v) Does not increase the flow of stormwater runoff onto adjoining properties <u>adjacent land</u> or flood plains, or reduce storage capacity on-site; (vi) Provides a stormwater catchment management plan for future urban development; and (vii) Promotes clean water reuse and groundwater recharge where practicable; (viii) <u>Avoids, remedies or mitigates the generation of contaminants from urban development, particularly from high contaminant generating car parks and high use roads; and</u> (ix) <u>Is supported by a stormwater management plan.</u> 		<p>(as in (i) and (ii) above) once the catchment is fully developed.</p> <ul style="list-style-type: none"> (iii) Stormwater management measures must be in place and operational upon the completion of subdivision and/or development; (iv) Systems must be designed using rainfall data specific to the area in which the property is located and be adjusted for a climate change temperature increase of 2.1°C; (v) Stormwater management measures, including low impact design measures, must be implemented as appropriate in accordance with the following drainage hierarchy: <ul style="list-style-type: none"> G. Retention of rainwater/stormwater for reuse; H. Soakage techniques; I. Infiltration rate of a minimum of 7mm/hour; J. Treatment, detention and gradual release to a watercourse; K. Treatment, detention and gradual release to a piped stormwater system. L. <u>Stormwater treatment shall address water quality; downstream erosion and scour effects; and cumulative volume effects.</u> (vi) Where land is subject to instability, stormwater discharges directly to ground occurs only where the ground conditions have been identified as being suitable to absorb such discharges without causing, accelerating or contributing to land instability and
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downstream effects either on the site or on neighbouring properties;

(vii) Connection of new development to any existing stormwater drainage system must not result in the minimum level of service not being met or the minimum level of capacity being exceeded. Alteration of the existing receiving stormwater network drainage system to achieve minimum level of service or additional onsite detention volume to ensure existing capacity will be required.

Notes:

~~(iii)~~ (i) Acceptable means of compliance for the provision, design and construction of stormwater infrastructure, including low impact design features, are contained within the [Regional Infrastructure Technical Specifications \(RITS\)](#). Refer also to [Waikato Stormwater Management Guideline](#) and [Waikato Stormwater Run-off Modelling Guideline](#).

(iii) A stormwater discharge consent may also be required from the Waikato Regional Council.

			<p>Rule 14.11.2 RDI Stormwater systems for new development or subdivision that does not comply with one or more of the conditions of Rule 14.11.1.1</p> <p>Note: Rule 14.11.1.2 P2 The establishment of impervious surfaces associated with new development is deleted and moved to the Zone Rules</p>	<p>Discretion is restricted to:</p> <ul style="list-style-type: none"> (a) The likely effectiveness of the system to avoid flooding, nuisance or damage to other buildings and sites; (b) The capacity of the system and suitability to manage stormwater. (c) <u>The potential for adverse effects to the environment in terms of stormwater quantity and stormwater quality effects.</u>
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