

Appendix 8: Structure Plan Options Assessment

Purpose

The purpose of this assessment is to compare the proposal as lodged against the Northern Growth Development Area (NGA) Structure Plan and outline the rationale for any areas in which there is inconsistency.

PDP requirements

The NGA Structure Plan establishes the framework for coordinated development across the Mt Welcome and Muri Road blocks, ensuring integrated land use, transport, and infrastructure outcomes. The Structure Plan defines the layout of key roading corridors, pedestrian and cycle connections, open space networks, and the sequencing of bulk infrastructure required to support urban development.

The Structure Plan encompasses both the Mt Welcome and Muri Road developments, and seeks to ensure a coordinated and consistent approach to urban form, transport, and servicing across the wider catchment. The Muri Road Block, located immediately north of Mt Welcome and under separate ownership, is integrated within the overall framework. Both developments will share key infrastructure, including transport connections, pedestrian links, wastewater storage and a water reservoir site. Collaborative discussions between the landowners are ongoing to coordinate the design and delivery of infrastructure across the shared boundary. The Structure Plan itself is set out in DEV-NG-Figure 1 at the end of the DEV-NG Chapter of the PDP:

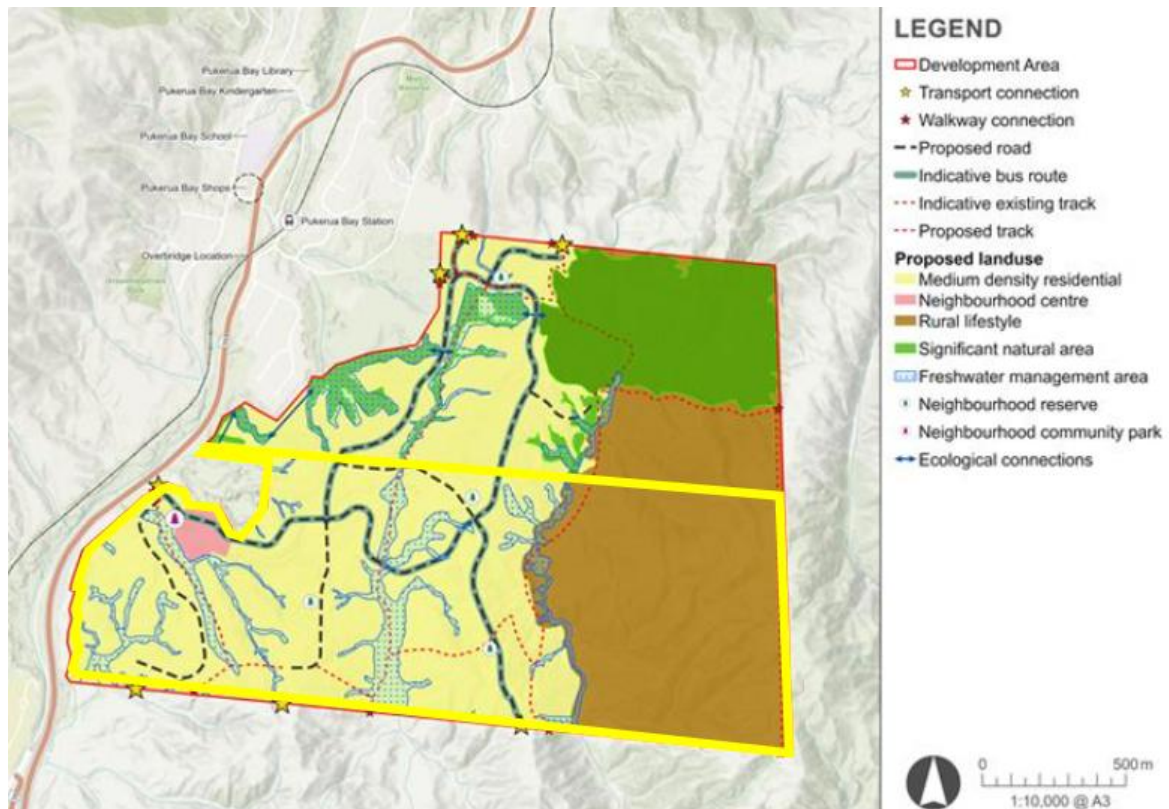


Figure 1: Structure Plan with site boundaries marked out

The following provisions in the PDP reference the Structure Plan as follows (key directive phrases underlined for emphasis):

- DEV-NG-O2.1: This objective requires that subdivision, use and development must achieve a well-functioning urban environment consistent with the Structure Plan;
- DEV-NG-P1: This policy enables use and development that is in accordance with the Structure Plan;
- DEV-NG-P2: This policy is to provide for subdivision that is in accordance with the Structure Plan, including by:
 - Recognising and enhancing ecological values of the Development Area, including by creating buffer areas around SNA and ecological corridors in the locations identified on the Structure Plan; and
 - Demonstrating that use and development within the Freshwater Management Areas identified on the Structure Plan considers regional plan provisions and the NES-F; adopts designs for stormwater treatment devices that are consistent with Water Sensitive Urban Design; recognises and provides opportunities to enhance freshwater ecology and public access to freshwater bodies and resilience to flood risk;
- DEV-NG-P3 – This policy is to only allow subdivision, use and development that is not in accordance with the Structure Plan where it is demonstrated that it is appropriate for such subdivision, use or development to occur within the Development Area, having regard to a range of criteria;
- DEV-NG-P4 – This policy seeks to avoid subdivision, use or development that is not in accordance with the Structure Plan where these constrain, limit or compromise intended development as set out in the Structure Plan, result in adverse effects that cannot be appropriately avoided, remedied and mitigated, or does not provide sufficient infrastructure to service its needs and/or constrains, limits or compromises the efficient provision of infrastructure to service the Structure Plan;
- DEV-NG-R1 – This rule provides for activities in accordance with the Structure Plan as permitted activities;
- DEV-NG-R1 This rule provides for earthworks in accordance with the Structure Plan as a permitted activity;
- DEV-NG-R3 – This rule regulates subdivision, it requires the design and layout of the subdivision is in accordance with and gives effect to the Structure Plan (subdivision not in accordance with the Structure Plan is a Discretionary Activity under R3.4); and
- DEV-NG-R4 - This rule provides for activities not otherwise provided for, which are undertaken in accordance with the Structure Plan (if that requirement is not met then activities are Discretionary under R4.2).

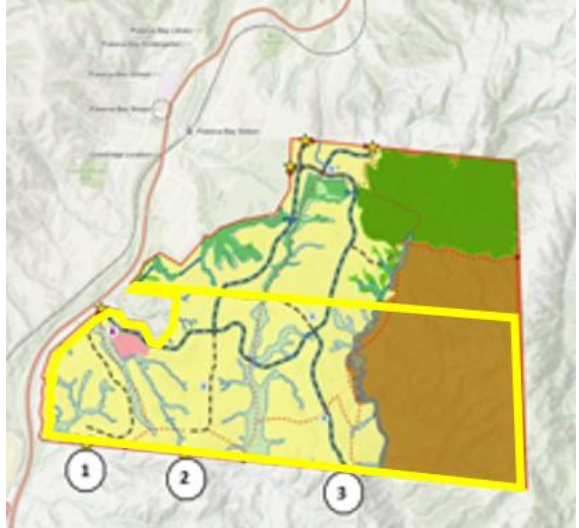
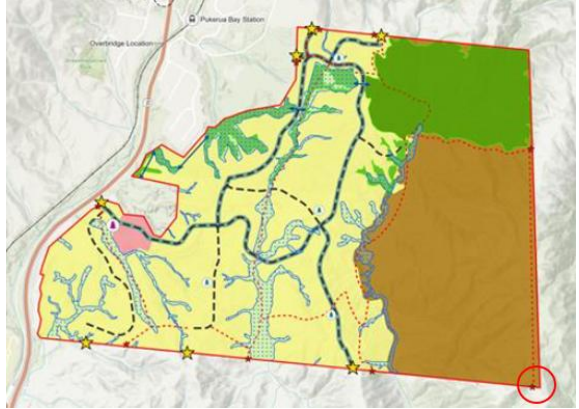
Structure Plan compliance assessment

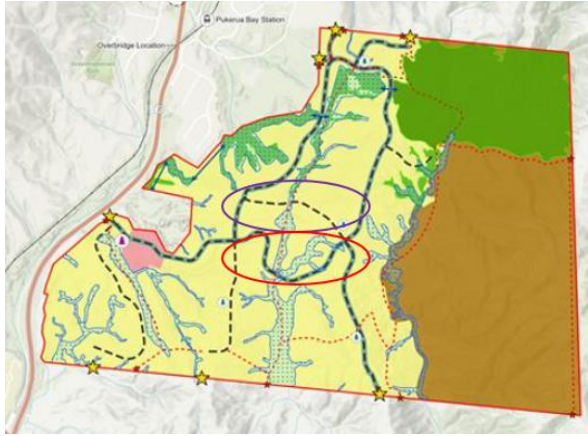
Table 1 below outlines: the features of the structure plan; any description provided in the Chapter introduction or within the provisions as to the purpose of the mapped features; and an assessment of how the proposal is ‘consistent’ or ‘in accordance’ as required by the Chapter provisions.

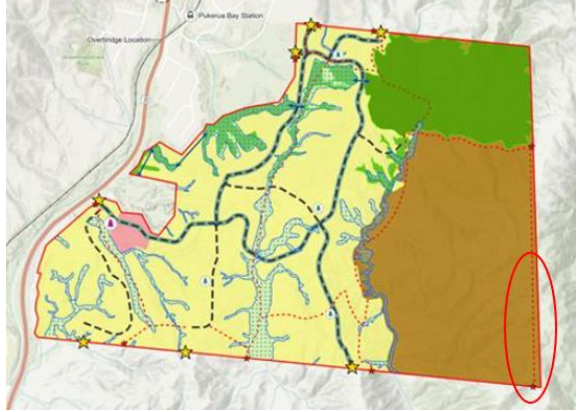
The options assessment provided below the table then provides an explanation in relation to those aspects that are identified as entirely consistent with the Structure Plan, in terms of the rationale, and considers the options and implications in that regard.

Table 1: Assessment of proposal against Structure Plan

Structure Plan Feature (DEV-NG-Figure 1)	Description	Assessment
Northern Growth Development area	No specific context or direction in DEV-NG Chapter relating to feature apart from the red polygon in DEV-NG-Figure 1.	Consistent / in accordance – The extent of the structure plan sets out the development area and applies to multiple landholdings. The proposed Mt Welcome development is entirely within the boundaries of the Structure Plan area, except for the new intersection and wastewater main upgrades proposed with SH59 road reserve. However the intersection is within the same location as a yellow star indicating a transport connection, the extent of the development is therefore generally consistent with the development area envelope in red.
Transport Connections <i>(indicated by seven yellow stars on the outer boundaries of the structure plan area)</i>	<p>There is little guidance in the DEV-NG as to what sort of transport connections these should be, apart from there needing to be an appropriate connection to SH59, “Transport connections” are referenced in DEV-NG-P2 as follows:</p> <p style="padding-left: 40px;"><i>b. Recognises and provides for transport connections at the boundaries of the Development Area where opportunities exist, including an appropriate</i></p>	<p>Not fully consistent or in accordance – The Structure Plan shows four transport connections indicated by yellow stars on the western and southern application site boundaries.</p> <p>The plans show that there is an appropriate roading connection with SH59 in the area indicated with a star on the western side of the site (refer Transport Assessment for information on appropriate design of intersection).</p> <p>However, there is only one roading connection provided to the boundary to the south. This is at the southern end of the upper terrace of Lot 1 DP 534864 (marked as #2 on the map below) where a collector road is proposed to the boundary of the site. The road network in the proposed roading network at both locations #1 and #3 terminates at cul-de-sacs.</p>

	<p><i>connection to State Highway 59;</i></p> <p>It is assumed for the purpose of this assessment that these yellow stars are road connections, as walking connections are indicated separately with red stars.</p>	
<p>Walkway connection (red stars)</p>	<p>DEV-NG-P2 references track routes which terminate at these stars:</p> <p><i>4. Provides a transport network layout and design that:</i></p> <p>...</p> <p><i>d. Provides for active transport and open space connectivity, including by incorporating legal public access along indicative track routes identified on the Structure Plan, and providing for opportunities to create recreational and open space linkages;</i></p>	<p>Not fully consistent or in accordance – The Structure Plan shows four walkway connections indicated by red stars on the west and southern application site boundaries.</p> <p>The plans (see Figure 9 below) show that there are walkway connections proposed in close proximity to all stars on the western and southern application site boundaries, with the exception of the eastern most star.</p> 
<p>Proposed road</p>	<p>DEV-NG-P2 references roads as follows:</p> <p><i>4. Provides a transport network layout and design that:</i></p> <p>...</p> <p><i>c: Provides for roads shown as indicative bus routes as</i></p>	<p>Not fully consistent or in accordance – For the most part, the proposed road layout is consistent with the Structure Plan including the north/south road alignments across the site, and the two roading connections to the development to the north. These are provided in the proposal in the same general area on the plans.</p> <p>However, there is only one west/east connection between Lot 1 DP 534864 and Lot 2</p>

	<p><i>Collector Roads, and other roads as Access Roads;</i></p>	<p>DP 534864 on the plans (the area highlighted with a purple oval in the figure below).</p> <p>There is no secondary roading connection proposed in the area highlighted below with a red oval.</p> <p>Further, the proposed east-west collector road is on the northern boundary of the area of the site zoned NCZ in the proposed plans, rather than located centrally within the NCZ as shown on the Structure Plan.</p> 
<p>Indicative bus route (green line on proposed roads)</p>	<p>Policy DEV-NG-P2 indicates that these bus routes should be collector roads:</p> <p><i>c. Provides for roads shown as indicative bus routes as Collector Roads, and other roads as Access Roads</i></p>	<p>Not fully consistent or in accordance – While the roading typology proposed as part of the Mt Welcome development enables a future bus route from the west to the east and north of the site (by way of a bus-enabled collector road), the roading on stages 15 to 19 on Lot 2 DP 534864 is not designed for a bus route to the south-east. Instead, a bus route is enabled through a bus-enabled collector road typology to the southern boundary in the upper terrace of Lot 1 DP 534864 (stages 5 to 9).</p>
<p>Indicative existing track</p>		<p>Not applicable – There is no public access or existing walking tracks on the application site.</p>
<p>Proposed track (pink dashed line)</p>	<p>The structure plan does not specify if these are walking tracks, but it is assumed due to them terminating at red stars marked “walkway connection”.</p>	<p>Not fully consistent or in accordance – Walking tracks are provided for in these general locations, with the exception of the eastern most track that connects the Muri Block to the North to the Skaiffe Block to the South.</p>

		
Medium density residential	The DEV-NG chapter has rules relating to activities in this zone.	Consistent / in accordance – The proposed subdivision enables this land use generally where it is zoned for this purpose on the site.
Neighbourhood centres	The DEV-NG chapter has rules relating to activities in this zone.	Consistent / in accordance – The proposed subdivision enables this land use generally where it is zoned for this purpose on the site.
Rural Lifestyle	The DEV-NG chapter has rules relating to activities in this zone.	Consistent / in accordance – The proposed subdivision enables this land use generally where it is zoned for this purpose on the site.
Significant natural area	N/A - the structure plan does not show SNA on the application site.	Consistent / in accordance – while the Structure Plan does not show SNA on the application site (possibly in error), Schedule 7 and the planning maps show two SNA: SNA029 and SNA225. The scheme plans show 5m buffers around these SNA, legal protection in perpetuity through conservation covenants in Appendix 7 proposed conditions of consent, and the Ecological Assessment addresses Appendix 17 requirements.
Freshwater management area	The DEV-NG does not require avoidance of Freshwater Management Areas, but rather directs that they be considered for restoration and enhancement, public access and flood management. They also indicated where other regulation and guidance may apply.	<p>Consistent / in accordance – As outlined in the Application (refer Section 15.11 effects on ecosystems), all waterbodies, including Freshwater Management Areas have been assessed to determine ecological values present and to identify opportunities for restoration and enhancement to achieve positive ecological outcomes.</p> <p>The Ecological Assessment has applied the effects management hierarchy consistent with</p>

	<p>The intention of these areas is set out in the introduction:</p> <p><i>The Freshwater Management Areas identify opportunities to maintain and enhance terrestrial and freshwater ecology and improve water quality. They can also provide for water sensitive design approaches to stormwater management including catchment scale detention devices; provide increased resilience to flood hazards; connect the community to water and provide for passive recreation, and; create high quality amenity for the community. Other activities may also need to locate or be undertaken within these areas to enable the wider development of the area, such as infrastructure or earthworks. The Freshwater Management Areas also acknowledge provisions that already apply to subdivision, use and development in these areas under the District Plan, Natural Resources Plan, NPS-FM and the NES-F.</i></p> <p>Further, Policy DEV-NG-P2.8 gives direction on the purpose of these areas:</p> <p><i>8. Demonstrates that use and development within the Freshwater Management Areas identified on the Structure Plan:</i></p> <p><i>a. Considers regional plan provisions and the regulations in the NES-F;</i></p> <p><i>b. Is consistent with Water Sensitive Urban Design</i></p>	<p>NES-F requirements, and Wellington Water's WSUD guide has been applied.</p> <p>Through an iterative process with ecologists, developers and engineers, the development avoids as much natural wetland and stream loss as practicable while achieving broader development outcomes. Around half of the affected wetland area is to be remedied through the development of wetland stormwater retention areas with front end treatment systems (i.e. treatment prior to the wetland). Any residual lost wetland will be offset.</p> <p>The Ecological Assessment finds that the proposal will not just maintain indigenous biodiversity on site, but that it will significantly restore and improve degraded habitats on the Site.</p> <p>As such, the proposal is consistent with the Structure Plan with respect to Freshwater Management Areas.</p>
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	<p><i>principles and Wellington Water's 'Water Sensitive Design for Stormwater: Treatment Device Design Guideline' (Version 1.1, 2019) for the design of any relevant stormwater treatment devices;</i></p> <p><i>c. Recognises and provides opportunities to enhance freshwater ecology, public access to and along freshwater bodies, and resilience to flood risk;</i></p>	
Neighbourhood reserve	<p>DEV-NG-P2 references a neighbourhood parks as follows:</p> <p><i>10. Provides parks, reserves, pathways and open space areas including a neighbourhood community park and neighbourhood parks, and gully and hilltop reserves where opportunities exist; and</i></p>	<p>Consistent / in accordance – The Structure Plan shows two neighbourhood reserves generally in the areas shown on the Upper Terrace of Lot 1 DP 534864 (stages 5 to 9) as well as in Lot 2 DP 534864 (stages 15 to 19). The proposal includes four reserves (exclusive of the neighbourhood community park near the NCZ) and therefore exceeds the requirements of the Structure Plan.</p>
Neighbourhood community park	<p>DEV-NG-P2 references a neighbourhood community park as follows:</p> <p><i>11. Provides parks, reserves, pathways and open space areas including a neighbourhood community park and neighbourhood parks, and gully and hilltop reserves where opportunities exist; and</i></p>	<p>Consistent / in accordance – The Structure Plan shows a neighbourhood community park located to the west of the Neighbourhood Centre. The proposal includes a park in this area.</p>
Ecological connections	<p>DEV-NG-R3 requires that ecological corridors are</p>	<p>Consistent / in accordance – The Structure Plan shows an Ecological Connection with a blue</p>

	identified on a scheme plan as being 50m wide, with a planting plan and monitoring and maintenance programme, and details of how the area will be legally protected in perpetuity.	arrow to the north-west of the application site. The plans show this ecological connection and in the proposed conditions in Appendix 7 there is a planting plan and monitoring and maintenance programme, and details of how the area will be legally protected in perpetuity.
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Options assessment where proposal not consistent / in accordance with Structure Plan

As outlined in Table 1 above, the aspects of the Proposal which are not fully 'consistent' or 'in accordance' with the Structure Plan are:

1. Rooding connections to the south – there is one rooding connection to the southern boundary in the proposed development rather than the three rooding connections shown in the Structure Plan;
2. Indicative bus route – there is not a bus-enabled collector road within Lot 2 DP 534864 (stages 15 to 19) to the south-east, instead, a bus route is enabled through a collector road typology to the southern boundary in the Upper Terrace through Lot 1 DP 534864 (stages 5 to 9).
3. East-west rooding connections – there is only one west/east rooding connection in the proposed development rather than two shown in the Structure Plan.
4. Eastern walking track and walkway connection – there is no track provided in the eastern most potion of the Site that connects the Muri Block to the North to the Skaiffe Block to the South.

Below is an assessment for each inconsistency, and explanation of why the Structure Plan is not the preferred option in each instance.

Transport connections to the south

As outlined above, there is one rooding connection to the southern boundary in the proposed development rather than the three rooding connections shown in the Structure Plan. The road network on both the Lower Terrace of Lot 1 DP 534864 (#1 in Figure 1 below) as well as in Lot 2 DP 534864 (#2 in Figure 1 below) terminate at cul-de-sacs with no specific provision for a future through road to the property to the south of the site.

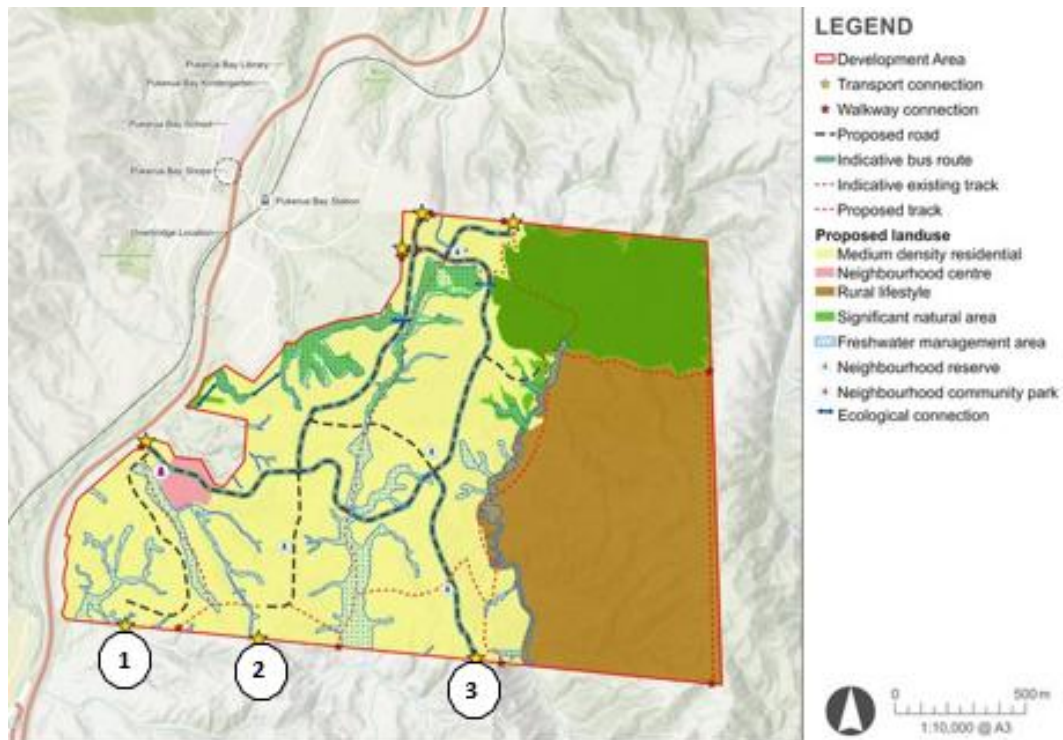
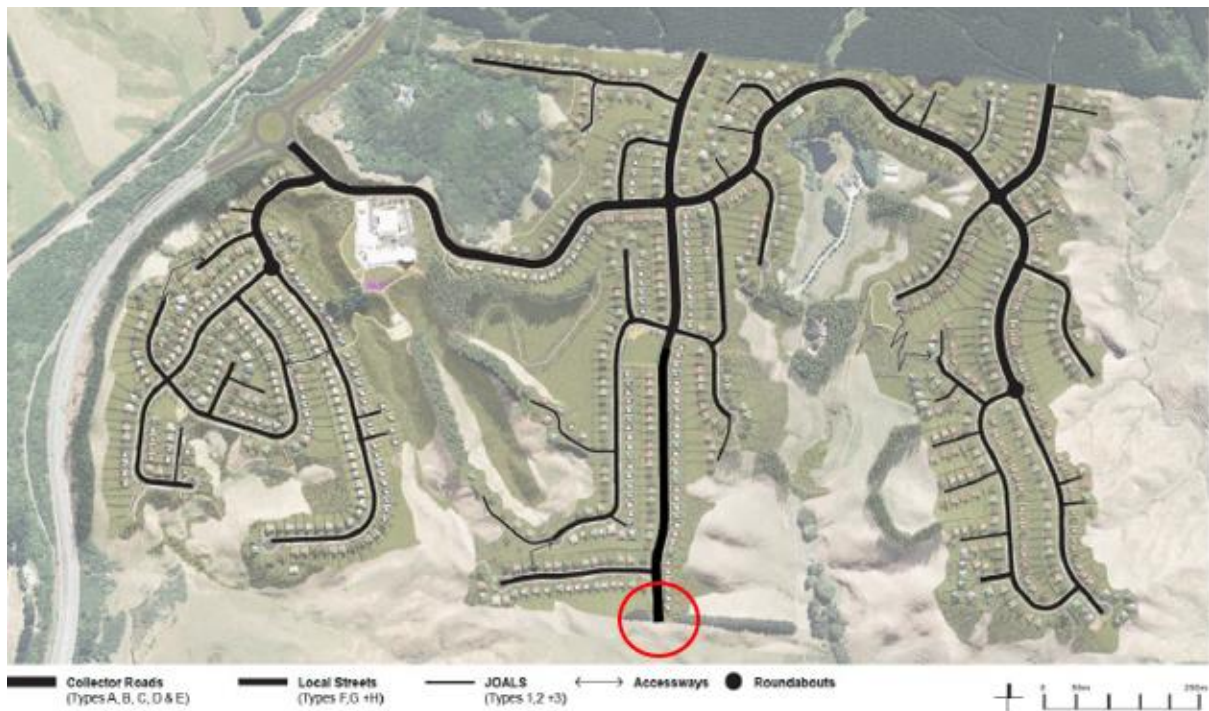


Figure 1: Structure plan with roading connections required to the south labelled as 1 - 3

Both a Structure Plan compliant roading network and the proposed option were considered through an iterative design process informed by planning, ecology, development and engineering expertise. This process identified that only the central southern alignment is technically viable, primarily due to steep topography and ecological constraints within the Skaiffe Block to the south. Accordingly, the central route #2 only has been retained as the provisional southern link toward the Skaiffe Block as shown in Figure 2 below.



Source: Adapted from ITA (page 33)

Figure 2: Proposed roading hierarchy, with collector road level connection to the south

It is also important to note that the Skaiffe Block remains zoned rural, with no current development plans or aspirations. No ecological or geotechnical field investigations have been undertaken, and any assessment to date has been at a desktop level. The landowner will be required before level only. Should the southern connection be progressed in future, detailed site investigations and engagement with

If development of the Skaiffe Block proceeds in the future, it would already benefit from direct access to SH59. Together with the provisional upper-terrace connection through Mt Welcome, this should provide sufficient transport connectivity. The feasibility of extending this provisional central connection further south within the NGA remains uncertain, as such works would likely involve significant earthworks and may not be practical.

The following section summarises the outcomes of the engineering assessment for the three key transport connections identified within the Structure Plan (section 8.10.1 of the Infrastructure Report). These connections numbered 1–3, correspond to the annotations presented in Figure 1 of the Structure Plan above.

1. **Lower Route #1:** The proposed transport connection traverses the lower terrace of the development. As identified within the technical assessments, this part of the site is constrained by streams, wetlands, and freshwater management areas. The wetland and gully system appears to extend along the site boundary. Even if the ecological constraints could be mitigated, the topography would soon force any potential road alignment westward toward SH59. Given that the Skaiffe Block already has a direct intersection with SH59, this connection would effectively create a short loop between the existing intersection and the new Mt Welcome roundabout, providing access only to a single local road within the lower terrace of Mt Welcome.

As illustrated in Figure 3 below, there are two gully systems between the lower route #1 and the existing interception that would require significant earthworks and works in waterbodies including reclamation.



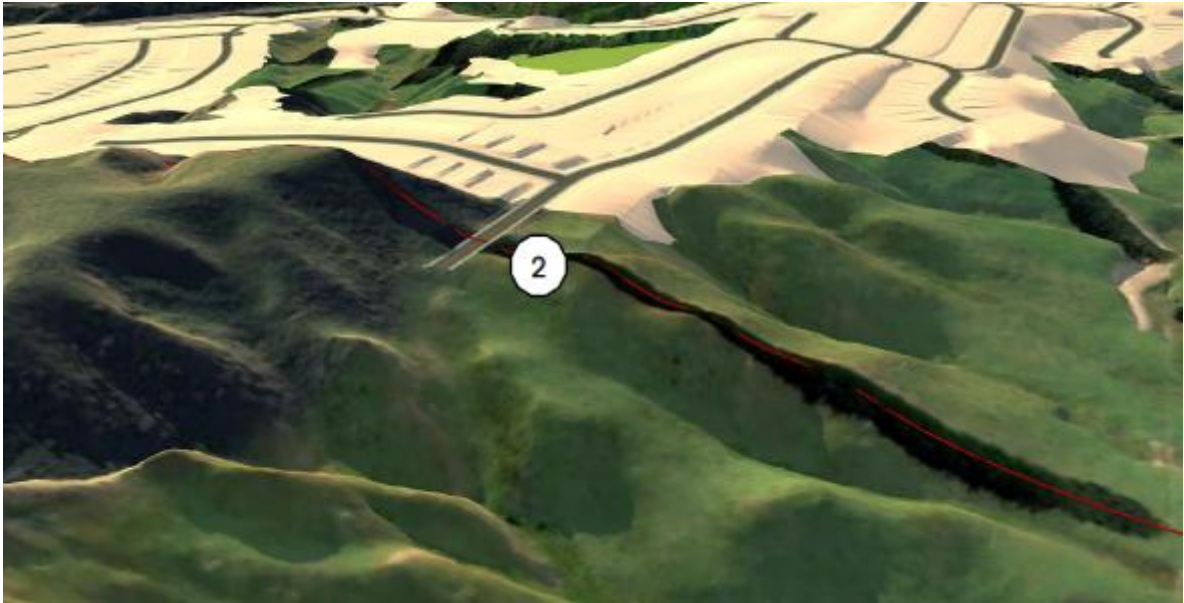
Source: Infrastructure Report (page 25)

Figure 3: Lower terrace #1

In summary, this potential connection is significantly constrained both ecologically and topographically and would offer limited additional connectivity or value to the wider transport network within the Northern Growth Area. For this purpose, no transport link has been provided for. The objectives and policies provide scope for applications to respond to site constraints as follows:

- DEV-NG-O2.2 – seeks that the “built urban form responds to the natural landform”;
 - DEV-NG-P2.2(b) – requires that development should consider integrating the “transport network with the existing landform to the extent practicable”; and
 - DEV-NG-P3.1(b) – requires that development should consider “the integration of topographical, natural, physical characteristics, constraints, and opportunities”.
2. **Central Route #2:** This option provides the most viable connection, linking directly to the upper terrace of Mt Welcome, which is suitable for development. However, any continuation further south is limited by steep terrain and would require substantial earthworks. While it could potentially support future development within the Skaiffe Block, its feasibility remains dependent on future land-use decisions. A further extension south into Plimmerton Farms is unlikely to be feasible. Provision has nevertheless been made for a possible connection by way of a roading connection of the boundary to be

vested in Council, this will provide connectivity should development of the Skaiffe Block proceed in the future.



Source: Infrastructure Report (page 25)

Figure 4: Central route #2

3. **Upper Route (#3):** Follows a steep ridgeline and terminates soon after the development boundary. The alignment is flanked by steep embankments and stream corridors, limiting any practical extension south. No meaningful connectivity or development opportunity would result from this option. For this purpose, no transport link has been provided within the civil design.



Figure 5: Transport Connection “3”

Conclusion

The introduction to the NGDA (emphasis added) outlines how “The Structure Plan provides indicative access locations, road layouts and bus routes.” Structure Plans provide a high-level guide for consenting processes, where specific site constraint and opportunities are assessed. The site constraints, especially topographical and ecological constraints, have informed the preferred layout of the development.

The preferred layout is assessed against the criteria in DEV-NG-P3 in Appendix 5 of this application. Overall, the proposed road layout is more consistent with DEV-NG-P3 than the Structure Plan as it better responds to the topographical, natural, physical characteristics, constraints, and opportunities of the Development Area.

Indicative bus route

As outlined above, there is not a bus-enabled collector road within Lot 2 DP 534864 (stages 15 to 19) to the south-east, instead, a bus route is enabled through a collector road typology to the southern boundary in the Upper Terrace through Lot 1 DP 534864 (stages 5 to 9).

For the same reasons outlined in the section above, the central area of the site provides a more viable route for a bus based on topography and the zoning of the land to the south.

As above, further extension south into Plimmerton Farms is unlikely to be feasible. Provision has nevertheless been made for a possible connection through a collector road vested in Council to the boundary should development of the Skaiffe Block proceed in the future.

East west roading connections

As outlined in Table 1, there is only one west/east roading connection in the proposed development rather than two required by the Structure Plan in the area shown in purple in Figure 6 below. There is no roading connection as indicated below in red.

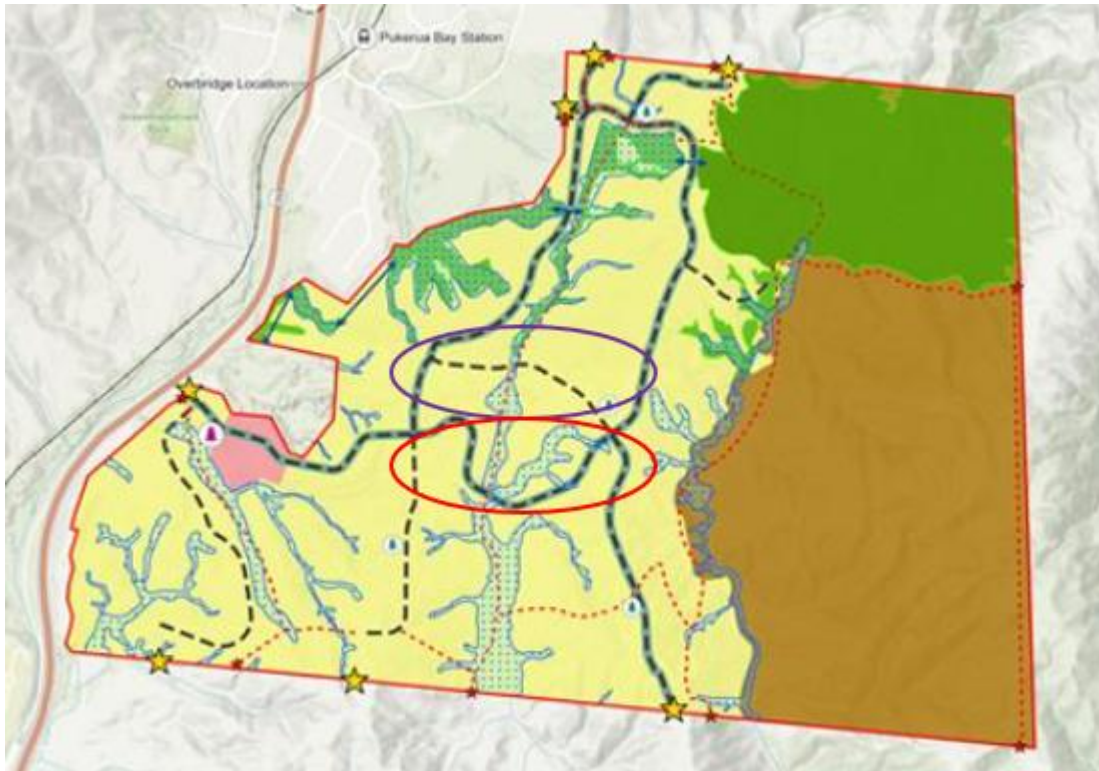


Figure 6: East West Rading connections

This is because the Applicant does not own the land where this indicative road is located. Lot 5003 will be retained by the Mount Welcome Block Trust for continued farming use. If this landowner wished to subdivide in the future, they too would be subject to the Structure Plan.

However, the development is designed in such a way in that it does not preclude a future roading link in this location. This could feasibly be provided in the location marked with a red arrow in Figure 7 below.



Figure 7: Potential Future East West Roading connections

Eastern walking track and walkway connection

Walking tracks are provided for in the general locations in the Structure Plan, with the exception of the eastern most track that connects the Muri Block to the North to the Skaiffe Block to the South.

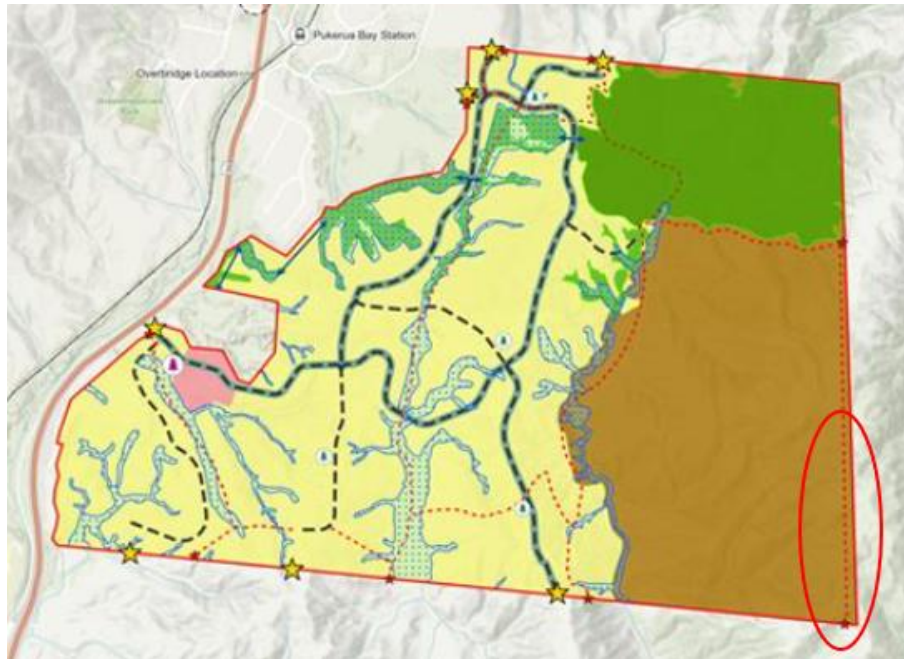


Figure 8: Eastern walking track connections

This is because the Applicant does not own the land where this indicative road is located. Lot 5003 will be retained by the Mount Welcome Block Trust for continued farming use. If this landowner wished to subdivide in the future, they too would be subject to the Structure Plan.

However, the development is designed in such a way in that it does not preclude a future pedestrian link in this location. Figure 9 below is an excerpt from the Master Plan and Landscape Urban Design Strategy showing where a future walking connection to the east could be provided from the development.



Figure 9: Potential future eastern walking track connections