BEFORE A PANEL OF INDEPENDENT HEARING COMMISSIONERS IN THE WAIKATO REGION

I MUA NGĀ KAIKŌMIHANA WHAKAWĀ MOTUHEKE WAIKATO

UNDER the Resource Management Act 1991 (RMA)

AND

IN THE MATTER of Proposed Variation 3 to the Waikato Proposed District Plan (PDP)

STATEMENT OF EVIDENCE OF DAVID MANSERGH (Landscape)

Dated 20 June 2023

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INTRODUCTION

1. My full name is David Graham Mansergh. I am a qualified Landscape Architect and Recreation Planner. I am a Registered Member of the New Zealand Institute of Landscape Architects ("NZILA"). My qualifications include a Diploma in Parks and Recreation Management with Distinction (completed in 1988), a Bachelor of Landscape Architecture with Honours (completed in 1990) and a Master of Landscape Architecture (completed in 1992), all from Lincoln University, Canterbury.

2. I have been a Director of Mansergh Graham Landscape Architects Ltd since 1996. Before this, I was employed by the company as a landscape architect (1992 - 1996). I have also worked for the Department of Conservation (1986 – 1988) and before that, the Department of Lands and Survey (1985).

3. During my career, I have been involved in the preparation of and/or the peer review of a significant number of visual and landscape assessments for a wide range of activities and developments.

4. I have provided advice to both councils (regional and district) and applicants/submitters on landscape planning matters and the implications of changes to various regional and district planning provisions.

5. I have extensive experience in spatial analysis, including the preparation of accurate digital elevation models and digital surface models, and visual catchment analysis using different techniques in GIS.

6. My relevant experience includes:

    a) The preparation of landscape and visual assessment reports for a wide range of application types, including proposed plan changes, industrial developments, land use changes, subdivision and urban developments.

    b) The preparation of landscape analysis and planning recommendations for several regional and district plan reviews over

the last 30 years, including an assessment of landscape opportunities and constraints to the growth of Ngaaruawaahia for Waikato District Council (Council), the assessment of the potential effect of different height constraints on high rise development on views of Mount Maunganui, and an analysis of the sensitivity of Mangere Maunga to development within the Mahunga Drive Business – Light Industrial Zone.

c) The review and provision of advice to Hamilton City Council around landscape sensitivity and the effectiveness of the proposed landscape provisions contained in the Rotokauri North Private Plan Change.

7. I was involved in the NZILA Landscape Planning Initiative, tasked with developing the 'best practice' approach for landscape and visual assessment in New Zealand and provided feedback on the more recent update to the guidelines. I am currently part of the team reviewing and updating the best practice guidelines for the preparation of photomontages and digital models.

8. I have presented evidence at resource management hearings before Councils, the (then) Planning Tribunal and the Environment Court. I also acted as an Independent Commissioner at the Rangitikei District Plan hearings (Landscape Section).

9. I have been engaged by Council to assess the effects of the implementation of the intensification planning instrument (IPI) on the existing cultural view shafts from Tuurangawaewae Marae (Tuurangawaewae, Marae or Tuurangawaewae Marae) to the Haakarimata Range and Taupiri Maunga in response to concerns raised by the Marae (and other submitters).

CODE OF CONDUCT

10. I have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and agree to

comply with it. I confirm that the opinions expressed in this statement are within my area of expertise except where I state that I have relied on the evidence of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

BACKGROUND

11. In response to the requirements of the IPI, Council intends to alter the Proposed Waikato District Plan (PDP) by way of Variation 3 to incorporate the changes required by section 77G of the Resource Management Act 1991 (RMA).

12. Section 77G requires all Tier 1 territorial authorities, which includes Waikato District Council, to incorporate the Medium Density Residential Standards (MDRS), set out in schedule 3A, into all relevant residential zones, unless otherwise amended to be less enabling by the application of a qualifying matter.

13. Variation 3 identifies the areas within the district these standards will be applied and makes the consequential amendments to the relevant planning provisions. Because the existing Medium density residential zone (MRZ) contained in the PDP does not achieve the requirements set out in Schedule 3A RMA, a new zone called Medium density residential zone 2 (MRZ2) is introduced.

14. In response to the submissions received, which raised concerns about the effects of intensified development on the view shafts towards the Haakarimata Range and urban character around Tuurangawaewae, Council engaged Mansergh Graham Landscape Architect to assess the landscape and visual effects on Tuurangawaewae from development potentially enabled by Variation 3 and other submissions received.

SCOPE OF MY EVIDENCE

15. My evidence addresses the following:

    a) The key issues raised in the relevant submissions.

    b) The relevant planning provisions and instruments.

    c) The landscape values and status of the Haakarimata and Taupiri Ranges.

    d) The value of the Haakarimata Range to local Maaori and Tuurangawaewae.

    e) The identification of the existing cultural view shafts of the Haakarimata Range and Taupiri Maunga from Tuurangawaewae.

    f) The approach taken for the identification and analysis of effects on the existing cultural view shafts.

    g) The general and specific findings of my analysis.

    h) Make recommendations around how the concerns raised through the Tuurangawaewae submission might be addressed.

16. My evidence is limited to identifying how development enabled by the various planning scenarios contained in the district plans, Variation 3 and the submission from Kāinga Ora will affect the cultural view shaft between Tuurangawaewae and the Haakarimata Ranges and Taupiri Maunga.

17. While I have considered the cultural perspective of the relevant submitters in my assessment, I do not present evidence on how the loss of views of the Haakarimata Ranges and Taupiri Maunga from Tuurangawaewae may affect the Te Aō Māori worldview in terms of the relationship between Whenua, Whakapapa, Hikoi and Korero tuku iho as this is outside my areas of expertise. I will however provide a brief explanation, from a landscape

architectural perspective, as to the overlap between the concepts of "landscape" and "whenua", which will help to explain the relevance of my evidence and how it may assist in this cross-cultural paradigm.

18. I make recommendations around how this might be achieved and managed through the Variation 3 process.

EXECUTIVE SUMMARY

19. Tuurangawaewae and other supporting submissions seek to understand how Variation 3 will affect existing urban character in and around the Turangawaewae and if development will encroach into the culturally sensitive views of Haakarimata Ranges and/or Taupiri Maunga. The Kāinga Ora submission seeks to maximise development potential under the IPI.

20. The Haakarimata Ranges and Taupiri Maunga are identified in the Operative Waikato District Plan (ODP) and Proposed Waikato District Plan (PDP) as outstanding natural features (ONFs). The relevant planning instruments recognise and provide for the relationship between Maaori and the ONFs.

21. The view shafts that connect Tuurangawaewae, the Haakarimata Range, Taupiri Maunga and the Waikato and Waipaa awa have been modelled using GIS viewshed and skyline analysis tools.

22. The view shafts are important to local Maaori for cultural reasons.

23. Development under the ODP, PDP and Variation 3, and the relief proposed by the Kāinga Ora submission, would encroach into the identified cultural view shafts of the Haakarimata Range and Taupiri Maunga to varying extents.

24. Effects on the existing cultural view shafts are most likely to result from development within the blocks immediately adjacent to the Marae, and in the case of the relief sought in the Kāinga Ora submission, development within the blocks bounded by Lower Waikato Esplanade, Great South Road,

and Ellery Street East. Development outside this area is less likely to intrude into the existing cultural view shafts.

25. Urban intensification under Variation 3 (as notified but without the urban fringe) will affect the existing open spatial and urban character around Tuurangawaewae, potentially resulting in a more enclosed experience.

26. I understand the Council's ability to amend Variation 3 to address the issues raised in the submissions by Tuurangawaewae and others is limited by scope constraints. I understand the development envelope parameters cannot be reduced to be less enabling than the existing relevant zone provisions of the PDP. I am also aware there are restrictions on amendments arising from natural justice and the ability for people to be involved in planning processes that might impact on them.

27. The effects on the existing cultural view shafts can be addressed in relation to Area D (described in paragraph 158 below) by imposing a qualifying matter under section 77I(a) of the RMA. The recommended qualifying matter retains the existing PDP Medium density residential zone (MRZ) height, height in relation to boundary and building coverage parameters around Tuurangawaewae.

28. It is also recommended that a further matter of restricted discretion be added to Medium density residential zone 2 (MRZ2) Rules MRZ2-S2 (height), MRZ2-S3 (height in relation to boundary) and MRZ2-S5 (building coverage) to ensure any of the potential effects on the cultural view shafts from Tuurangawaewae arising from any non-compliance with those standards are assessed.

SUBMISSIONS

29. To gain an understanding of the issues raised, I have reviewed the following submissions:

No.	SUBMITTER
35	Tuurangawaewae Marae

71	Jodie Bell
72	Estate of Te Puea Herangi
87	Marae Tukere
98	Tuurangawaewae Rugby League and Cultural Club
106	Kāinga Ora
114	Waikato Tainui

30. In the following section of my evidence, I only address those parts of the above submissions that are relevant to the effects of Variation 3 (and the implementation of the IPI) and associated requests from Kāinga Ora on the landscape and urban amenity of Tuurangawaewae.

Tuurangawaewae Marae [35]

31. The submission from Tuurangawaewae Marae (35) seeks to amend the zoning around the marae for the following reasons (landscape related):

> *Section 6 E and Section 6 F should be extended to include the surrounding areas of Tuurangawaewae marae. This includes significant cultural and historic areas.*
>
> *Not to include the surrounding area of Tuurangawaewae Marae. This includes River Road, Regent Street, Kent Street, George Street, Edward Street, King and Queen Street. It will affect the natural character, historic landscape, heritage and well-being of the area.*
>
> *…*
>
> *3 storey/11 meter structures would diminish the cultural significance of Tuurangawaewae Marae and more importantly the Kiingitanga. The buildings would also pose as a distraction and blight on the aesthetic landscape of the area. The area chosen for the Marae were based on its location to the Waikato River, confluence with the Waipaa River and cultural view shafts to Taupiri Maunga and Hakarimata Range. These important attributes should not be diminished by property developers who will not appropriately consider our views.*[1][Emphasis added]

Jodie Bell [71]

32. Of relevance to the effects on the cultural view shafts from Tuurangawaewae, the Bell submission states:

> *Connecting Maaori to areas that are of cultural value – ie Marae, Awa and Maunga. The western view of connectivity to townships has been applied to establish qualifying matters but doesn't consider the importance of Tuurangawaewae Marae.*

[1] Submission 35

33. The Bell submission supports the lower Waipa Esplanade being included in the MRZ2 zone.

Estate of Te Puea Herangi [72] and the Turangawaewae Rugby League and Cultural Club [98]

34. These submissions (identical submission points) seek the area surrounding Tuurangawaewae Marae, including River Road, Regent Street, Kent Street, George Street, and Edward Street, King and Queen Street is not rezoned to "MDRS" as it will affect the natural character, historic landscape, heritage and well-being of the area.

35. The submission goes on to say:

> *3 storey/11 meter structures would diminish the cultural significance of Tuurangawaewae Marae and more Importantly the Kiingitanga. The buildings would also pose as a distraction and blight on the aesthetic landscape of the area. The area chosen for the Marae were based on its location to the Waikato River, confluence with the Waipaa River and cultural view shafts to Tauplri Maunga and Hakarimata Range. These important attributes should not be diminished by property developers who will not appropriately consider our views.*

Marae Tukere [87]

36. Regarding Tuurangawaewae, the Tukere submission identifies that the impact on the Marae should be considered by the Council and that a buffer should be established between the Marae and any intensified housing development. The submission states:

> *I also wish to elevate the importance of Te Ture Whaimana and adverse impacts on the awa through any proposed development and the status of Tuurangawaewae Marae as a significant place of historical and cultural importance and therefore requiring a buffer zone from intensified housing developments.*

Waikato Tainui [114]

37. The Waikato Tainui submission identified the significant landmarks within their rohe as including the Waikato and Waipaa Rivers, the sacred mountains of Taupiri, Karioi, Pirongia and Maungatautari, and the west coast harbours of Whaaingaroa (Raglan), Manukau, Aotea and Kawhia

Moana, the eastern areas of Tikapa Moana (Firth of Thames), and principally, New Zealand's longest river, Te Awa o Waikato.

38. The submission states:

> *Whilst not identified in the Proposed District Plan Decisions Version as a Site of Significance, Tuurangawaewae Marae is a site of significance to Waikato-Tainui and the Kiingitanga.*

39. Concerns raised include:

- *The proposed building heights of the MRZ2 Zone would visually obstruct Tuurangawaewae whanau views of the marae and possibly the awa.*
- *The multi storey buildings will also add as a distraction to the importance and status of the marae and Kiingitanga.*

40. The submission seeks that the area around Tuurangawaewae is treated as a qualifying matter as this better reflects the significance of Tuurangawaewae regarding section 6(e) and 6(f) of the RMA.

Kāinga Ora [106]

41. The key Kāinga Ora submission points with the potential to affect the cultural view shaft from Tuurangawaewae and the surrounding urban character include:

a) That the MRZ and MRZ2 zones are combined into a single zone and the provisions of the MRZ2 zone be applied to the combined zone.

b) That a new High density residential zone (HRZ) to 22m is introduced to the PDP and applied within 400m of the town centre.

c) An additional height allowance of 24.5m within the Town centre zone (TCZ) and Commercial zone (COMZ).

Analysis of Submissions

42. From a landscape and urban character perspective, the key issues raised in the submission from Tuurangawaewae and other supporting submissions, are twofold:

a) How development to the levels permitted by Variation 3 will affect the existing urban character in and around the Marae; and

b) To what extent will an increase in the permitted building height and density encroach on the visual and metaphysical connection between the Haakarimata Range, Taupiri Maunga and Tuurangawaewae?

43. The key issues raised in the Kāinga Ora submission seek to maximise development potential within Ngaaruawaahia (and other towns covered by the submission).

RELEVANT PLANNING AND POLICY PROVISIONS

44. I do not provide a detailed analysis of the various planning provisions contained in the various planning scenarios as this is provided in the section 42A report on behalf of the Council.

45. Rather I draw attention to the following objectives and policies contained in the PDP that guide the identification and management of the district's Outstanding Natural Landscapes and Features and the relationship between Maaori and the whenua. These include:

a) *PDP NFL-01 (1): Outstanding Natural Features and Outstanding Natural Landscapes and their attributes are recognised and protected from inappropriate subdivision, use and development.*

b) *PDP NFL-01 (2): Avoid adverse effects of activities on the attributes of Outstanding Natural Features and Outstanding Natural Landscapes outside the coastal environment, and if avoidance is not possible remedy or mitigate the adverse effects, by:*

(a) Requiring buildings and structures to be integrated into the Outstanding Natural Landscape or feature to minimise any visual impacts;

(b) …

(c) Requiring subdivision and development to retain views of Outstanding Natural Landscapes and features from public places

c) *PDP – NFL-P3(1): Provide for the consideration of cultural and spiritual relationships of Maaori with Outstanding Natural Features and Outstanding Natural Landscapes as part of subdivision, use and development.*

d) *PDP – NFL-P3(3): Provide for Maaori cultural and customary uses of natural resources, including land, water and other natural resources as an integral part of identified Outstanding Natural Features and Outstanding Natural Landscapes.*

e) *MV-01(2): Recognise that only tangata whenua can determine effects on their values, traditions, resources, waters, sites of significance, waahi tapu, other taonga and taonga species.*

f) *MV-02: The connections between tangata whenua and their ancestral lands, water, sites of significance, waahi tapu, other taonga and taonga species are protected or enhanced.*

g) *MV-P3(2): Recognise the historic and contemporary relationships of Ngaa iwi o Tainui to Karioi, Taupiri, Hakarimata Range, Hunua and Pirongia maunga.*

h) *MV-P5(1): Manage the effects of subdivision and land use on Maaori values, in particular those arising from the following:*

…

(1)(i) Activities within identified landscape and natural character areas, on or within the vicinity of maunga and other landforms or sites of cultural significance; and

(2)(f) Recognising and providing for tangata whenua relationships with ancestral lands, water, sites, waahi tapu and other taonga to be maintained or strengthened.

i) *MV-P8: That Council work with Iwi and hapuu to develop guidance material that sits alongside the Plan and provides district plan users with a foundational understanding of Maaori concepts, tikanga, values and mana whenua of the district.*

EXISTING LANDSCAPE VALUES OF THE HAAKARIMATA RANGE AND TAUPIRI MAUNGA

Haakarimata and Taupiri Outstanding Natural Features

46. The Haakarimata Range and the Taupiri Range, including Taupiri Maunga, are identified as Outstanding Natural Features (ONF) and Significant Natural Areas (SNA) in both the OPD and PDP.

47. The Haakarimata and Taupiri Ranges are identified as ONFs in the *Waikato District Landscape Study* (WDLS), which was undertaken by Boffa Miskell to inform the PDP. The study was completed in 2017, updating previous work by Boffa Miskell undertaken for the previous plan review.

48. Boffa Miskell applied the *Amended Pigeon Bay*[2] approach to the identification and analysis of the district's landscapes. This was the best professional practice approach at the time of the study and included consideration of the following factors:

> 1. *The natural science factors, the geological, topographical, ecological, and dynamic components of the landscape;*
> 2. *Its aesthetic values including memorability and naturalness;*
> 3. *Its expressiveness (legibility); how obviously the landscape demonstrates the formative processes leading to it;*
> 4. *Transient values: occasional presence of wildlife; or its values at certain times of the day or of the year;*
> 5. *Whether the values are shared or recognised;*
> 6. *Its value to tangata whenua, and;*
> 7. *Its historical associations.*[3]

49. Each landscape was assessed in terms of the following:

> 1. *Biophysical features, patterns and processes may be natural and/or cultural in origin, and range from the geology and landform that shape a landscape to the physical artefacts such as roads that mark human settlement and livelihood.*
> 2. *Sensory qualities are landscape phenomena as directly perceived by humans, such as the view of a scenic landscape, or the distinctive smell and sound of the foreshore.*
> 3. *Associative meanings are spiritual, cultural or social associations with particular landscape elements, features or areas such as pa, kainga, tupuna awa, mahinga kai and waahi tapu, or other sites of historic events or heritage. Associative activities are patterns of social activity*

[2] From *Wakatipu Environmental Society Incorporated v Queenstown Lakes District Council* [2000] NZRMA 59.
[3] Page 12. *Waikato District Landscape Study*. Boffa Miskell Ltd. 2017.

> *that occur in particular parts of a landscape or example popular walking routes or fishing spots.*[4]

50. I am in general agreement with the findings of the Boffa Miskell assessment as it relates to the Haakarimata and Taupiri ONFs.

51. For this evidence, which is largely focussed on the effects of development enabled by the various planning scenarios on the cultural view shafts to the Haakarimata Range and Taupiri Maunga from Tuurangawaewae, I will not discuss all the factors that Boffa Miskell considered in their assessment in detail. Rather I concentrate on the key sensory and associative values relevant to the Tuurangawaewae and associated submissions.

52. The WDLA recognises and considered the differences between the Eurocentric approach to landscape assessment and the Maaori approach to Whenua. The report states:

> *Landscape is a multi-dimensional concept and includes natural science, heritage, cultural, aesthetic and a number of other values. Landscapes are valued differently by different people for a range of reasons. Our world views, upbringing and education will all influence our response to particular landscapes. Maaori understanding of, and attitudes to, landscape can be significantly different from those of non-Maaori. For most of us, our connection to the landscapes around us is deep-rooted. It is likely to involve culture, heritage, memories and much more. Therefore, it is essential that the process of evaluation adopted by this study is as transparent as possible. For this reason, the collaboration and inclusion of evaluation by the Waikato District Council's Iwi Reference Group is an important part of understanding the Maaori world view and value attributed to landscape.*[5]

53. The WDLA assesses the Haakarimata and Taupiri Ranges separately in terms of their biophysical, sensory and associative values, and provides a supporting cultural narrative.

54. The following evaluation criteria were in the supporting narrative:

> *The mauri (for example life force) and mana (for example prestige) of the place or resource holds special significance to Maaori.*
>
> *Waahi tapu. The place or resource is a waahi tapu of special, cultural, historic and or spiritual importance to Maaori.*

[4] Page 12. IBID
[5] Page 13. IBID

Korero-o-mua refer to places that are important due to particular historical and traditional associations (in pre-European history).

Rawa tuturu means the cultural value of places that provide, or once provided, important customary resources to tangata whenua. Customary resources might include food and materials necessary to sustain life in pre-European and post-European times.

Hiahiatanga tuturu means those parts of the landscape that are important for the exercise of tikanga – the principles and practices to maintain the mauri of parts of the natural world. This might be a place where a particular ritual is performed or a particular feature that is noted for its ability to identify the boundaries of ancestral tribal lands that is acknowledged in iwi or hapuu oratory.

Whakaaronui o te waa refers to the contemporary relationships tangata whenua have with Maaori heritage places. Appreciation of features for their beauty, pleasantness, and aesthetic values is important to tangata whenua. Recreational values attributed to features are also important to tangata whenua as they illustrate the relationship that individuals and groups can have with the environment.[6]

55. Key findings for the Haakarimata Range are summarised in the following table. Relevant extracts from the WDLA are found in Annexure 1 of that study. (**Emphasis added**):

HAAKARIMATA RANGE	
FACTOR	*SUMMARY OF ASSESSMENT*
Sensory	• *Forms the dominant skyline and defining boundary between western and central Waikato District.* • *The range is highly recognisable from wider viewing points from the south and east.* • *Acts as a waypoint.* • *High transient values associated with seasonal and weather conditions.* • *The legibility of the formative natural processes is still evident.* • *Relationship with the Waikato River.* • *Form the backdrop to Ngaruawahia and Taupiri.* • *Has very high levels of aesthetic coherence*
Associative	• ***Very high cultural heritage significance to tangata whenua locally*** • *District wide the feature is high recognisable and well known for its recreational and historical importance.* • ***Mauri: Recognised and supported by Waikato Tainui River Settlement Trust.*** • ***Koorero-o-mua: Associations with the placement of boundary markers along the ridgeline.*** • ***Rawa tuuturu: Values associated with a conciliatory feast at various marae between the Ngaati Maniapoto and the Waikato people in the 17th century, leading to the naming of the hills Haakari-kai-mata (shortened to Haakarimata).*** • ***Whakaaronui o te waa: Values associated with the landform.***

[6] Page 13 of the Waikato District Landscape Assessment. Boffa Miskell. 2017.

The WDLA evaluates the landscape status of the Haakarimata Range as follows (**Emphasis added**):

Outstanding Natural Feature: Haakarimata Range[7]		
Biophysical attributes:	*Sensory attributes:*	*Associative attributes:*
• *Very high natural science factors associated with the scale and quality of the biotic and abiotic processes occurring within the bush covered* • *slopes of the Haakarimata Range.* • *Natural vegetation vary throughout the bush covered slopes of the Range.*	• *High levels of legibility of the formative processes with the wetland remaining dynamic in its biotic and abiotic processes. The aesthetic coherence is very high diminishing at its edged as a result of adjoining agricultural land use.* • *Transient values associated with season change in flora and weather conditions create a range of experiences within the range.*	• *High to very high levels of shared and recognised values.* • *Very high cultural heritage values associated prolific food source the wetlands (sic) provided to Maaori.* • ***Significant recorded cultural values associated with the feature for tangata whenua.*** • *High historic heritage values.*

56. Key findings for the Taupiri Range are summarised in the following table. Relevant extracts from the WDLA are attached as **Annexure 1** to my evidence.

TAUPIRI RANGE	
FACTOR	*SUMMARY OF ASSESSMENT*
Sensory	• *Forms the dominant skyline and defining boundary between western and central Waikato District.* • *The range is highly recognisable from wider viewing points from the south and east.* • *Taupiri maunga acts as a waypoint.* • *High transient values associated with seasonal and weather conditions.* • *The legibility of the formative natural processes is still evident.* • *Relationship with the Waikato River.*
Associative	• *Taupiri is a sacred mountain which included fortified paa and now forms one of Waikato's most sacred and well know urupa.* • *Very significant to the local landscape Taupiri is closely recognised with Turangawaewae and the kiingitanga.* • *Renowned cultural significance of Taupiri.* • *Taupiri maunga and the Taupiri Gap (Waikato River) form the gateway between the central and northern Waikato District.* • *Mauri: Culturally significant sites located within Taupiri Range, including Te Iringa, Te Uapata and Otahau Paa which is located on the fringes of the Taupiri Range.*

[7] Page 110. IBID

	• *Waahi tapu: Mount Taupiri is a sacred mountain and burial ground for the Waikato-Tainui tribe. Te Putu built Taupiri paa on the summit of a spur where he resided until his murder in 1700s* • *Hiahia tuuturu: Urupa*

57. The WDLA evaluates the landscape status of the Taupiri Range as follows (Emphasis added):

Outstanding Natural Feature: Taupiri Range – Bush Covered Slopes[8]		
Biophysical attributes:	*Sensory attributes:*	*Associative attributes:*
• *Very high natural science factors associated with the scale and quality of the biotic and abiotic processes occurring within the bush covered slopes of the Taupiri Range.* • *Natural vegetation vary throughout the bush covered slopes of the Range.*	• *High levels of legibility of the formative processes with the wetland remaining dynamic in its biotic and abiotic processes. The aesthetic coherence is very high diminishing at its edged as a result of adjoining agricultural land use.*	• *High to very high levels of shared and recognised values.* • ***Very high cultural heritage values associated prolific food source the wetlands (sic) provided to Maaori.*** • ***Significant recorded cultural values associated with the feature for tangata whenua.***

THE VALUE OF THE HAAKARIMATA RANGE TO LOCAL MAAORI AND TUURANGAWAEWAE

58. Landscape assessment involves identifying and valuing the attributes contributing to landscape and urban character. This includes recognising the physical environment, associative meanings, and perceptual experiences associated with places.

59. The various concepts and relationships between people and the landscape, that contribute to its values are identified in the following diagram. The relationship between Western and Maaori world views on landscape/whenua is shown as the integration of the three dimensions of landscape—physical, associative, and perceptual—along with maatauranga. This understanding forms the basis of landscape assessment

[8] Page 110. IBID

work according to the *Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines*.

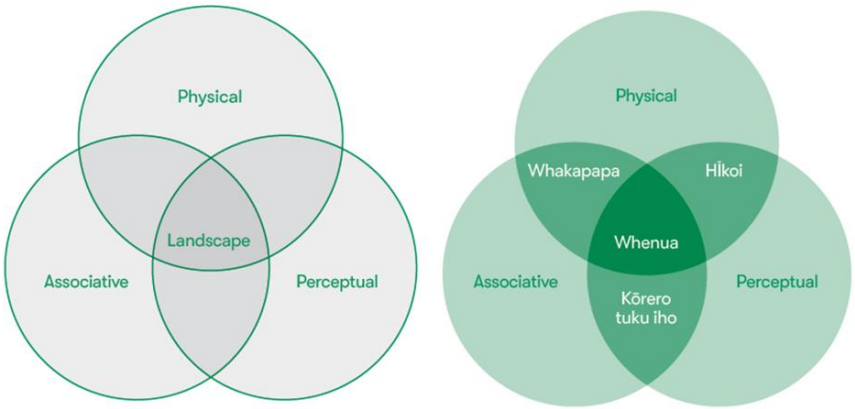

Figure 1: The integration of three dimensions of landscape—physical, associative, and perceptual—along with maatauranga

60. I do not attempt to provide a detailed explanation of the relationship between local iwi and whenua in my evidence as this will be provided by the witnesses for Turangawaewae and, while I understand the relationship between the various maaturanga[9] factors identified above, in terms of how it fits within the paradigm of landscape, I do not consider myself to be an expert in terms of the overlapping dimensions of *Whakapapa*, *Hikoi* and *Korero tuku iho*[10].

61. I do however understand that these concepts are basic tenants of the Maaori worldview of whenua and a key component of maaturanga.

62. I have relied upon information attained during discussions with various members of the Tuurangawaewae Marae, and the evidence presented by the Marae representatives at expert conferencing in forming my

[9] Māori traditional knowledge and knowledge systems.

[10] *Whakapapa: the genealogy and layers of landscape and people (reflective of an overlap between biophysical and associative dimensions).[c] Hikoi: walking and talking with landscape and people— experiencing and perceiving the land in all its entirety (reflective of an overlap between the biophysical and perceptual dimensions).[c] Kōrero tuku iho: ancestral knowledge passed down through generations interconnected through time, place, and people—pūrākau (reflective of an overlap between perceptual and associative values).* Page 72. Te Tangi a te Manu.

understanding of the importance of the physical and metaphysical relationship between the tangata and the whenua (Haakarimata and Taupiri Ranges).

63. From my discussions with the representatives of the Tuurangawaewae Marae Committee, and other background research I have undertaken, it is my understanding that the importance and value of the connection between the Marae and the Haakarimata Ranges and Taupiri Maunga go well beyond the physical, associative and perceptual components of the landscape, and include metaphysical associations inherent in its Whakapapa, Hikoi and Koorero tuku iho.

64. It is my understanding that the explorer Rakataura, from the Tainui waka, set boundary markers along the Hākarimata Range, creating the claim for the peoples who would live there, and in the Māori world view, connecting tangata with atua and tiipua (the god and supernatural entities).

65. As such the visual and metaphysical connections between Waikato-Tainui and the Haakarimata Range are highly valued from a Maaori perspective, and as the seat of the Maaori Kiingitanga, Tuurangawaewae is a particularly important place in the landscape.

66. While I do not provide evidence on how these factors contribute to the existing landscape values and the values associated with the physical and metaphysical relationship between Tuurangawaewae, Waikato awa, Waipa awa, the Haakarimata Ranges and the Taupiri Ranges, or how they might be affected by urban intensification and increased height, there is sufficient evidence to conclude from a landscape assessment perspective, that this relationship is important and valued. This reinforces the conclusions reached in the WDLA.

67. In my opinion, from a landscape perspective, an important part of the connection is the existing view shafts that visually connect Tuurangawaewae, the Haakarimata Range, Taupiri Maunga and the Waikato and Waipaa awa.

EXISTING CULTURAL VIEW SHAFTS OF THE HAAKARIMATA RANGE AND TAUPIRI MAUNGA

68. Based on my understanding of the importance of the visual and metaphysical association and connection between Tuurangawaewae and the Haakarimata Range and Taupiri Maunga, urban intensification resulting from a change to the existing planning provisions has the potential to affect these values.

Existing Views and Visual Character

69. From a landscape architectural perspective, Haakarimata Ranges and Taupiri Maunga form part of the visual catchment experienced from within Tuurangawaewae.

70. Views from the Marae towards the enclosing topography can be separated into four broad groups. These are:

    a) Group 1: Extensive panoramic views of the southern half of the Haakarimata Range from the western side of the Marae looking across the Waikato awa towards the centre of Ngaaruawaahia.

    b) Group 2: Broken views of the northern half of the Haakarimata Range, between the existing trees and buildings, from the northern side of the Marae, Regent Street and River Road.

    c) Group 3: Broken views of the northern half of the Haakarimata Range and Taupiri Maunga, between the existing trees and buildings to the east of the Marae.

    d) Group 4: Frames views of parts of the ridgeline from the centre of the Marae.

71. A map showing the four groups is attached as **Annexure 2** to my evidence.

72. While I will provide an existing visual amenity value rating for each view location, representing the value of the view from a landscape aesthetic

perspective, I acknowledge that this rating does not necessarily reflect the value to local Maaori from a cultural perspective.

Group 1: Views to the West

73. From the western side of the Marae, the Group 1 views towards the Haakarimata Range are characterised by the predominance of vegetation and other natural elements within the foreground and backdrop of the available view shafts. The bush-clad Haakarimata Range forms the skyline backdrop, broken only by the occasional tree in the foreground. Existing buildings within the residential areas and town centre on the western side of the river are substantially screened by the river back vegetation, meaning that the view across the river to the skyline landform is contiguous in character and natural in appearance, with the main landscape features that add value to the view, visually linked. The predominance of natural features, with only small snippets of building visible between the trees, adds to the existing visual amenity values by creating a visual link with the hill country beyond.

74. From a landscape assessment perspective, the Group 1 views have a *High* amenity value of all the groups, and are potentially the most susceptible to change, with any increase in the building visibility potentially reducing existing amenity values associated with the natural appearance of the various view shafts and/or encroaching into the view of the Haakarimata Range beyond.

75. While it is less likely that the existing mature trees growing within the riverside reserve on either side of the river will be removed, exposing the areas beyond to view, which are subject to the Variation 3 rezoning, potential exists for development within these areas to be seen through the gaps in the vegetation above it (depending on building height provisions).

76. The Group 1 views include the view from VL2, VL6 and VL7. Panoramic photographs from these locations are found in **Annexure 3** attached to my evidence.

Group 2: Views to the Northwest

77. The Group 2 views look towards the north part of the Haakarimata Range and are framed by existing vegetation and buildings within the Marae and along Regent Street and River Road. From these locations, while existing buildings and infrastructure influences the character of the view to a greater extent, the view is still dominated by greenery and vegetation in the foreground, which direct views over or between the more visually subservient buildings to the north.

78. From a landscape assessment perspective, the existing amenity value of this set of views is *Moderate-High*. While less susceptible to character change from an increase in residential density and increased building height, such development in the foreground of these views has the potential to encroach into the existing views of the Haakarimata Range and increase the visual prominence of urban development within the view shaft.

79. The Group 2 views include the view from VL3 and VL5. Panoramic photographs from these locations are found in Annexure 3 to my evidence.

Group 3: Views to the Northeast

80. From River Road to the east of Tuurangawaewae, the Haakarimata Range and Taupiri Maunga are experienced as distant backdrop features beyond the residential scale development in the foreground.

81. The increased distance between the viewer and the Range results in a reduction in the visual prominence of the topographical features, particularly when compared to the Group 1 and 2 views. The open space associated with the adjacent Rugby League training ground, and the relatively low levels of development within the block to the east contribute to a more open neighbourhood character.

82. The existing visual amenity value of the existing views to the Northeast is *Moderate*, enhanced by the views between buildings to the contained

topographical features beyond and the open spatial characteristics of the Rugby League club.

83. The potential exists for increased development density to block views of the Haakarimata Range and Taupiri Maunga.

84. The Group 4 views are represented by VL4. A panoramic photograph from this location is found in Annexure 3 to my evidence.

Group 4: Narrow Views Between Buildings

85. The final set of views represents the views of the Haakarimata Range attainable between the buildings and vegetation within the Marae.

86. While these types of views are less frequent, subject to greater variation depending on viewer locations, and are experienced within the context of the various buildings that make up the Marae, I have been advised that they can be as important as some of the other, more expansive views of the surrounding hill country topography.

87. Existing visual amenity values are highly variable from the centre of the Marae (in amongst the buildings) and range from *Very Low* to *High*.

88. Again, the potential exists for increased development density to intrude into the views of the Haakarimata Range. Taupiri Maunga is generally unseen from inside the Marae, screened by the existing buildings and plantings along River Road.

89. The Group 4 views are represented by VL1. A panoramic photograph from this location is found in Annexure 3 to my evidence.

ANALYSIS APPROACH

90. To assess and quantify how urban intensification enabled by Variation 3 and/or requested by Kāinga Ora might affect the visual connections between Tuurangawaewae and the surrounding valued landscape I used the following iterative approach.

91. The general analysis approach involved:

a) Using lidar and photogrammetric mesh modelling to build high-resolution digital terrain and surface models.

b) Identification of the existing visual catchment.

c) Identification of existing cultural view shafts between Tuurangawaewae and the Haakarimata Range and Taupiri Maunga.

d) Identification of key features within the cultural view shafts that block existing views.

e) Identification of the height at which development would potentially encroach into the existing cultural view shafts (potential effect).

f) Analysis of the effects of the various existing planning scenarios (ODP, PDP, Variation 3 and the relief sought by Kāinga Ora in its submission) on the existing cultural view shafts.

g) Identification of a set of recommendations to address the concerns of the Tuurangawaewae submitter.

Digital Terrain and Surface Modelling

92. Lidar and photogrammetric mesh data were used to build a high-resolution Digital Elevation Model (1m DEM) and a high-resolution Digital Surface Model (1m DSM). These models were used to identify the visual catchment surrounding the site, and the existing cultural view shafts and were used in the 3D procedural model.

93. Lidar was used to verify the view shafts and identify the heights of buildings and vegetation for procedural modelling.

Zone of Theoretical Visibility Analysis

94. Zone of Theoretical Visibility (ZTV) modelling was undertaken to identify which parts of the Haakarimata Range and Taupiri Maunga are the most

visible from Tuurangawaewae by calculating the cumulative visual catchment and the cumulative view shafts from the following locations within Tuurangawaewae:

a) The seven view location points, identified on-site by Tuurangawaewae representatives; and

b) An analysis grid, comprising 35 points spaced at 50m intervals across the marae (except where buildings occur).

95. Analysis of the ZTV maps shows that most of the eastern side of the Haakarimata Range and the southern aspect of Taupiri Maunga are potentially visible from Tuurangawaewae. This can be seen in the ZTV analysis maps attached as **Annexure 4** to my evidence.

96. The difference in colour between the ZTV derived using the DEM and the ZTV derived using the DSM indicates that the ONFs are partially or entirely screened from some of the analysis points within the Marae meaning that it is not possible to see the features from all locations. Areas in red indicate those parts of the landscape that are visible from more locations (cumulatively) than those areas shown in blue.

97. A cumulative analysis approach rather than a single-point analysis approach was used as this better represents the extent of the views experienced from within the Marae. This approach better addresses the concern expressed by the Marae representatives during my site visit, that they were concerned with the potential loss of views from all parts of Tuurangawaewae, rather than any specific location.

98. The rapid cut-off in the extent of the DSM ZTV around the Marae is an indication that existing (non-ground) features in the landscape, such as vegetation and buildings, play a significant role in screening the low-lying parts of the surrounding landscape from view.

99. This is an indication that development under a certain height located outside of the ZTV is likely to be screened from view from Tuurangawaewae.

100. I verified the ZTV analysis during my visit to Tuurangawaewae. The extent of the available visual catchment can also be seen in the photographs taken from each of the identified view location points found in Annexure 2.

Procedural Modelling of Building Envelopes and Building Mass Models

101. Procedural modelling was used to generate the development envelopes and mass models used in the skyline analysis. The models generated took into account the various setback, height at the boundary, recession angle and maximum height provisions of each planning scenario to be developed and tested.

102. Building massing models were generated by importing the footprints of existing buildings into each developable property visible from the Marae and scaling them to fit the maximum coverable parameters within the setback provisions of each planning scenario. Buildings have not been modelled for the LIZ/GIZ as these will not affect views from Tuurangawaewae.

103. The use of both the potential development envelopes and building mass models allows an understanding of the difference between the two analysis approaches to be visualised.

104. Images, aligned to a 50mm focal length photograph from each of the view locations, were generated from the model and distributed for submitter conferencing. A copy of the images is attached in **Annexure 5** to my evidence.

Skyline Analysis

105. To understand how the existing features in the foreground and middle distance affect existing views of the Haakarimata Ranges and Taupiri Maunga, and how development under each planning scenario might affect

these views and experiences, the "near skyline" was identified for each analysis point within the grid.

106. An annotated photograph showing the difference between the "near skyline" and the "true skyline" is attached in **Annexure 6** to my evidence.

107. Skyline analysis was undertaken for the existing environment and each of the planning scenarios by using procedural modelling to generate the massing models for the permitted building envelope for each property. Potential screening afforded by existing vegetation was not assessed because of the likelihood that it could be removed at any time as relatively little protection is afforded to the existing vegetation within private property.

108. The potential effects of the following planning scenarios have been considered:

PLANNING SCENARIO	ZONE NAME	ZONE CODE	PERMITTED ENVELOPE & BUILDING COVERAGE PARAMETERS			
			Base Height	Max Height	Height Control Plane Angle	Building Coverage
ODP	Living Zone	LZ	2.5m	7.5m	37^0	40%
	New Residential Zone	NRZ	2.5m	7.5m	37^0	40%
	Light Industrial Zone	LIZ	2.5m	10	45^0	70%
	Business Zone	BZ	2.5m	10	37^0	80%
PDP	General Residential Zone	GRZ	2.5m	8m	45^0	40%
	Medium-Density Residential Zone	MRZ	3m	11m	45^0	45%
	Town Centre Zone	TCZ	2.5m*	12m	45^0	100%
	Commercial Zone	COMZ	2.5m*	12m	45^0	100%
	General Industrial Zone	GIZ	3m	15m	45^0	70%
VARIATION 3	General Residential Zone	GRZ	2.5m	8m	45^0	40%
	Medium Density Residential Zone 2	MRZ2	4m	11m	60^0	50%
	Town Centre Zone	TCZ	2.5m*	12m	45^0	100%
	Commercial Zone	COMZ	2.5m*	12m	45^0	100%
KĀINGA ORA	Town Centre Zone	TCZ*	+	24.5m	+	100%
	Commercial Zone	COMZ*	+	24.5m	+	100%
	High-Density Residential Zone	HDRZ	19m	22m	60^0	70%

**Additional/Diff set back requirements where adjoin different zone. + Not specified in the submission*

109. This approach assumes a worst-case scenario in that it assumes that all properties will be developed individually and to their maximum potential under each planning scenario. This is however an accepted and widely

used urban planning approach and is used to help determine the relative and cumulative effects of urban development.

110. While development to the intensity modelled through this approach is unlikely to occur as maximum building coverage rules apply, by considering the effect of the entire envelope, the effect of a complying building anywhere within the site is taken into consideration. Again, this is a relatively common approach and is used in the analysis of the effects of development where the general envelope is known and understood, but the detailed design is yet to be undertaken.

111. Procedural modelling was used to identify the potential development envelopes for each zone for the ODP, PDP, Variation 3 and the relief requested by Kāinga Ora and used to identify how such development might affect the "near skyline", that is the skyline formed by development between the Marae and the Haakarimata and Taupiri Ranges, allowing the identification of the lowest view shaft possible to the topographic features beyond.

112. By calculating the difference in height between the "near skyline" (the lowest part of the view shaft) and the underlying ground surface, the height at which future development will potentially protrude into the cultural view shaft can be calculated on a lot-by-lot basis.

113. To allow for variations in the height calculations due to topographic variation and variation in the near skyline, maximum, minimum, and average heights were calculated.

114. This allows the identification of areas where development enabled by the various planning scenarios would:

    a) Encroach into the existing cultural view shafts from Tuurangawaewae (the environment as it existed at the time of my analysis);

b) Encroach into the theoretical cultural view shaft if development occurred to its maximum potential under the ODP, PDP, Variation 3 and relief requested by Kāinga Ora, without consideration of the screening effect of existing vegetation.

c) Encroach into the theoretical cultural view shaft if development occurred to its maximum potential under the ODP, PDP, Variation 3 and relief requested by Kāinga Ora with consideration of the screening effect of existing vegetation.

115. 3D views of the analysis envelopes and the resulting cumulative skyline is attached as **Annexure 7** to my evidence.

116. A schematic cross-section of the relationship between the existing view shaft and potential development that might intrude into it is contained in **Annexure 8** attached to my evidence. The cross section illustrates in simple terms, how features or potential development in the foreground of the view can intrude into the existing views of the Haakarimata Range beyond.

117. A map showing the average height values for the properties around the Marae where an increase in development density and height has the greatest potential to encroach in the existing cultural view shaft, for both the existing environment and the developable building envelope under the PDP is found in **Annexure 9** attached to my evidence. Properties with no identified value have are located beyond the “near skyline”.

3VR Modelling

118. The procedural model was further developed to demonstrate the findings of the ZTV and cultural view shaft analysis in a more easily understood format. The extent to which the various building envelopes and maximum permittable building masses potentially intrude into the existing cultural view shafts from each view location was exported to a 3VR web-compatible format and used during the consultation and expert conferencing.

119. The following scenarios were included:

a) ODP.

b) PDP.

c) Variation 3 as notified.

d) Variation 3 without an urban fringe qualifying matter.

e) The relief sought by the Kāianga Ora submission.

f) My recommendations to address to concerns raised in the Tuurangawaewae submission.

120. The model can be found at the following address: Variation 3 Mass Modelling - 360 VR (arcgis.com). [11]

121. The procedural model was also used to verify the findings of the analytical model and test my recommendations. The submitters who attended the expert conferencing were made aware that the model was available to test various "what if" scenarios.

FINDINGS UNDER EACH PLANNING SCENARIO

122. From my analysis, I have identified the extent of the Tuurangawaewae visual catchment and which parts of the Haakarimata ONF and Taupiri ONF are contained within it. I have also identified the extent of the existing cultural view shafts that emanate from the Marae and the potential for future development enabled by the various planning scenarios to intrude into the view shafts.

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11 https://mgla.maps.arcgis.com/apps/360vr/index.html?id=bb505cf860514f53a1ad5e4871e4f9f5

General Findings

123. Views of the base of the Haakarimata Ranges are mostly obscured by the existing vegetation and buildings surrounding the Marae (including along Great South Road).

124. Views of the Haakarimata Range to the west are less obstructed than views to the north and northeast due, in part, to the presence of the Waikato River.

125. The extent to which the existing development within the neighbouring blocks to the north (Regent Street) and the east (River Road) already encroaches into the views of the Haakarimata Range is influenced by the particular planning scenario under which the development occurred.

126. The taller a development is, the greater the potential that it will intrude into the existing views of the Haakarimata Ranges.

127. The greater the site coverage, the greater the potential that existing views of the Haakarimata Ranges between buildings will be lost.

128. Development to the building envelope limits permitted by the ODP, PDP and Variation 3 planning scenarios, and the relief proposed by the Kāinga Ora submission would encroach to various degrees into the existing views of the Haakarimata Range.

129. A change in the ratio of built elements to natural elements will change the characteristics of the view towards the Haakarimata Range and Taupiri Maunga.

130. Effects on existing views of the Haakarimata Range are most likely to result from development within the blocks immediately adjacent to the Marae, and in the case of the relief sought in the Kāinga Ora submission, development within the blocks bounded by Lower Waikato Esplanade, Great South Road, and Ellery Street East.

131. The further away from the Marae that development is, the less likely it is to intrude into the existing views of the Haakarimata Range due to a combination of viewing angle, existing screening (including potential screening by future development) and topographical variance.

132. Urban intensification under Variation 3, as notified and without the urban fringe will affect the existing open spatial and urban character around Tuurangawaewae, potentially resulting in a more enclosed experience.

Specific Findings

Group 1 Views and Group 3 Views (Where Relevant)

133. The Group 1 views from the Marae to the west are predominantly natural, with existing development within the town centre mostly screened by the tall trees and riverside vegetation growing within the Marae, along the riverbanks, within the riverside reserve and the residential areas within the township. The natural character values of this view are enhanced by the view of the Waikato awa, an ONL, and the visual connection to the Haakarimata Range beyond.

134. Of relevance is that all the buildings within the cultural view shafts from the Marae are seen below the “near skyline” (through the trees in the background, rather than protruding above them). As such, the existing built form remains visually subservient to the natural elements that contribute to the view. While building visibility will increase during the winter, when some of the deciduous species along the riverbank lose their leaves, in my opinion, this will not be enough to overtly change the natural characteristics of the view.

135. My analysis shows that this situation would remain if development enabled under the ODP, PDP, Variation 3 as notified and Variation 3 without the urban fringe was to occur. In my opinion, from a landscape perspective, the level of intrusion into the existing cultural view shaft would be small and would not likely change how the Haakarimata Ranges were experienced from Tuurangawaewae.

136. My analysis also shows that the introduction of 22m high HRZ and 24.5m height limits in the TCZ and COMZ, as seen in the map attached as **Annexure 10** to my evidence, would allow development that would protrude into the cultural view, disrupting views of the Haakarimata Range beyond.

137. From a landscape perspective, in a worst-case scenario (that is developed to the maximum levels achievable under the provisions), this has the potential to adversely affect the existing natural characteristics of the views by severing the visual connection between the Marae and the ONF.

138. If this was to occur, in my opinion, existing natural characteristics of the view would be severely diminished, with the urban form becoming the dominant character driver.

139. I note that while the level of development that would be enabled by the adoption of these provisions does appear somewhat fanciful and it is difficult to imagine it occurring, the provisions would open up the opportunity for developers to construct 7 to 8-storey high buildings that, depending on location, would encroach into the cultural view shaft.

140. While I am unable to advise the level at which encroachment of development into the existing cultural view shaft becomes unacceptable from a cultural landscape perspective, from a landscape character perspective, I consider that this will occur when urban development becomes the dominant influence on existing visual amenity.

141. This will likely occur when the cumulative massing of buildings results in:

    a) Protrusion of buildings above the ”near skyline”.

    b) The loss of views between buildings due to a combination of site coverage, and building design attributes (setback, roof pitch etc).

c) The loss of screening and visual integration provided by existing tall trees in the landscape (needing to be removed to allow development to occur).

Group 2 and 4 Views, and Group 3 Views (Where Relevant)

142. The type and extent of landscape effect on Tuurangawaewae from development on the eastern side of the Waikato awa (around the Marae) differ from the Group 1 views across the river in that:

a) The views towards the Haakarimata Ranges and Taupiri Maunga are influenced to a greater extent by the presence of existing buildings.

b) There is no natural landscape buffer between Tuurangawaewae and adjacent neighbourhood areas to help mitigate the effects of intensification.

143. Existing residential development in and around Regent Street and River Road has a greater influence on the existing cultural view shafts in this area. While buildings in the area are generally less than 7.5m high, they have a greater influence on the existing cultural view shaft due to proximity.

144. The existing buildings are in relative balance with the other natural elements that contribute to the view meaning that they contribute equally to the characteristic of the view without overt influence. Development levels appear consistent with that allowed under the ODP.

145. My analysis shows that development enabled by the existing MRZ zone (PDP) and/or the proposed MRZ2 (Variation 3 either with or without the urban fringe), would likely change this balance, meaning that potential exists for development under either zone to encroach into the existing cultural view shafts and alter the characteristics of the streetscape by changing the relationship between the existing width of the road (which is fixed) and the height of the buildings bounding it.

146. Urban intensification, per the density standards, may result in taller buildings being constructed closer to the road. The zoning would allow buildings up to 3 storeys high to be developed across up to 50% of each site. The removal of any existing mature trees from within a development site would result in fewer opportunities for visual integration and contribute to a more urban streetscape character.

147. This will potentially alter the existing height-to-width ratio of the street and see a more overt change in the building typologies experienced within it. The result of this will likely be a more visually contained streetscape with an increased overview of the Marae. The change in building typologies is also likely to have similar effects on the near skyline and views between the buildings, as outlined previously.

148. The average existing height-to-width ratio in the blocks surrounding the marae is approximately 1H:8W (excluding open space areas). While it is generally accepted that a height-to-width ratio greater than 1H:3W is preferred from the perspective of path enclosure, to provide directional legibility and hierarchy, and to direct views, this only works well where the desired view shaft runs along the road. From a cultural viewpoint perspective, particularly when considering views from outside the Marae between the buildings to Taupiri Maunga, a higher height-to-width ratio is better. The height-to-width ratio under the MRZ2 provisions is likely to be closer to approximately 1H:2W.

149. Currently, Taupiri Maunga is mostly screened from view with a narrow visual connection attainable from some locations along River Road between the existing buildings to the west. This is seen in the photograph from VL 4 found in Annexure 3 to my evidence.

150. A key difference between the PDP MRZ and Variation 3 MRZ2 zones is the permittable building envelope, with the height at the boundary and recession plane angle associated with the MRZ potentially allowing greater visual penetration between buildings than that associated with the MRZ2

zone. As such, development under the existing MRZ parameters is less likely to have the same level of intrusion as MRZ2 development.

151. To minimise the potential effect on the existing cultural view shaft to achieve the relief sought in the Tuurangawaewae submission, further development and intensification would need to be restricted to levels comparable with the provisions of the ODP (GRZ) within the southern part of the neighbourhood block bounded by Great South Road, Regent Street and River Road, and properties adjoining River Road adjacent to the Marae.

152. As to be outlined in the legal submissions for Council, the issue of scope means that, as I understand it, it is not possible to change the underlying zoning or introduce a qualifying matter that makes the provisions of the proposed MRZ2 zone less enabling than the underlying MRZ in the PDP though the IPI process.

153. As such, the relief sought by Tuurangawaewae is not able to be achieved for these views as it would require the planning controls in the existing MRZ (proposed MRZ2) to revert to the controls under the GRZ in the ODP, and thus be less enabling.

154. I discuss this further in the recommendations section of my evidence.

<u>Cultural Landscape Values</u>

155. From my review of the relevant background information, interpretation of what I have been told about the cultural values of the views and metaphysical connection with the surrounding landscape, I have concluded that the Haakarimata Ranges and Taupiri maunga are landscapes of significant value to local iwi and that the maintenance of a visual and metaphysical link between the Haakarimata Ranges and Tuurangawaewae marae is of great importance to the marae for cultural reasons.

RECOMMENDATIONS

156. To address the potential effects of loss of views of the Haakarimata Ranges and Taupiri Maunga, and to reduce the extent that urban intensification affects the existing urban character in and around Tuurangawaewae, it is my recommendation that the zoning parameters identified in *Recommended Zoning– Map 21*, attached in Annexure 11 to my evidence be adopted.

157. However, I understand there are legal constraints on the scope of amendments that can be made through Variation 3. I understand that development envelope parameters cannot be reduced to be less enabling than the existing relevant zone provisions of the PDP, along with natural justice considerations. My recommendation is therefore limited by the constraints of scope.

158. I therefore recommend that development within the blocks identified as "A", "B", "C" and/or "D" on *Recommended Zoning– Map 21* attached as **Annexure** 11 to my evidence should not exceed the qualifying matter envelope parameters identified in the following table:

BLOCK CODE	PLAN	RECOMMENDED ZONE	CODE	BUILDING ENVELOPE PARAMETERS			
				Height in relation to boundary		Building Coverage	Height
				Base Height	Height Control Plane Angle		
A	Var 3	Medium Density Residential Zone 2 with no QM	MRZ2	4m	60^0	50%	11m
B	PDP	Commercial Zone	COMZ	2.5m	45^0	100%	12m
C	PDP	Town Centre Zone	TCZ	2.5m	45^0	100%	12m
D	Var 3	Medium Density Residential Zone 2 with QM envelope parameters applied.	MRZ2	3m	45^0	45%	11m

Note: The General Industrial Zone is shown on Map 21 for context only.

159. My recommendation is limited to the zoning of the blocks identified within the "high potential effects" area (indicated as a blue dashed line on Map

21 in Annexure 11). The development envelope parameters that would be introduced by the implementation of the MRZ2 Zone (Variation 3 without the urban fringe) in the zoning outside this area are less likely to affect the existing views of the Haakarimata Range to the same extent and/or will have less effect on the urban character of the streetscapes surrounding the Marae. Non-complying development outside of the high potential effects area will need to be carefully assessed.

160. It should be noted that my recommendations do not fully address the issues raised in the Tuurangawaewae Marae submission. This would require a reduction in the height, building coverage and height in relation to boundary parameters which I understand is outside of the scope of Variation 3.

161. If "scope" was not a factor, it is my opinion that the concerns raised in the Tuurangawaewae (and other similar) submissions would be better addressed if the building envelope parameters within the areas identified as "D" on my recommendation plan (Map 21) were equivalent to the GRZ provisions contained in the ODP. This would mean that the existing cultural view shaft and height-to-width ratios that characterise the urban area immediately adjacent to the Marae would remain relevantly unchanged.

162. It is however my understanding that this option is not able to be considered as part of the IPI process and could only occur through a separate plan change process.

POTENTIAL PROTECTION MECHANISMS

163. I have considered how the cultural view shafts from Tuurangawaewae might be protected through the district planning process and have reached the conclusion that it would be better to manage the view shafts as follows:

    a) Identify the existing view shaft between Tuurangawaewae and the Haakarimata Range, Taupiri Maunga and the Waikato awa as a culturally significant view shaft.

b) Protect the existing cultural view shaft by placing controls over the permitted development parameters for properties where development is likely to introduce into the cultural view shaft.

c) Introduce assessment criteria to ensure that the effects of any restricted discretionary or discretionary application on the cultural view shafts are considered.

164. I prefer the above approach over the establishment of a defined view shaft within the district plan because:

a) Except for the Rangiriri battlefield view shafts, this approach is not used in the PDP.

b) View shafts more commonly emanate from a single point and are relatively narrow. A view shaft encompassing the entire Haakarimata Range and Taupiri Maunga would need to cover a field of view of approximately 160 degrees.

c) It will be easier for a Council planner to establish if a proposed building is complaint with the height restriction than if it will protrude into the cultural view shaft.

d) Building envelope controls are less likely to be disputed than view shaft controls, which might be subject to challenge if the view shaft changes over time.

165. If accepted, it is my understanding that the above approach can be achieved as a qualifying matter under the IPI process. Support for this approach is provided in the section 42A report.

CONCLUSIONS

166. It is clear to me from a landscape architectural perspective that an important cultural relationship exists between the Tuurangawaewae Marae, the Waikato awa, the Haakarimata Range and Taupiri Maunga, and that while made manifest through the visual connection that exists between the Marae and the topographic feature, the value of this

association to the Maaori is far greater than the aesthetic qualities of the view seen within the cultural view shafts identified in my assessment.

167. This connection is inherently recognised in the district plan which identifies the Haakarimata Range as an Outstanding Natural Feature. The assessment of which also takes cultural consideration and values into consideration.

168. The effects on the existing cultural view shafts can be addressed in relation to Area D by imposing a qualifying matter under section 77I(a) of the RMA. Council's planner, Ms Hill, has referred to this as the 'Tuurangawaewae Marae Surrounds" qualifying matter in the section 42A report[12]. This retains the existing PDP MRZ height, height in relation to boundary and building coverage in Area D which was rezoned from MRZ to MRZ2 in Variation 3. I acknowledge this does not fully address the submission by Tuurangawaewae due to scope issues.

169. I also recommend that a further matter of restricted discretion be added to Rules MRZ2-S2, MRZ2-S3 and MRZ2-S5 to ensure any of the potential effects on the cultural view shafts from Tuurangawaewae arsing from any non-compliance with the permitted height, coverage and height in relation to boundary standards are assessed.

Dave Mansergh
20 June 2023

[12] Section 42A report, Revision 1 dated 19 June 2023, Section 3.21 "Issues of Significance of Maaori", paragraph 420, bullet point 4.

Annexure 1 - Relevant extracts from the Waikato District Landscape Assessment

WAIKATO DISTRICT
LANDSCAPE STUDY

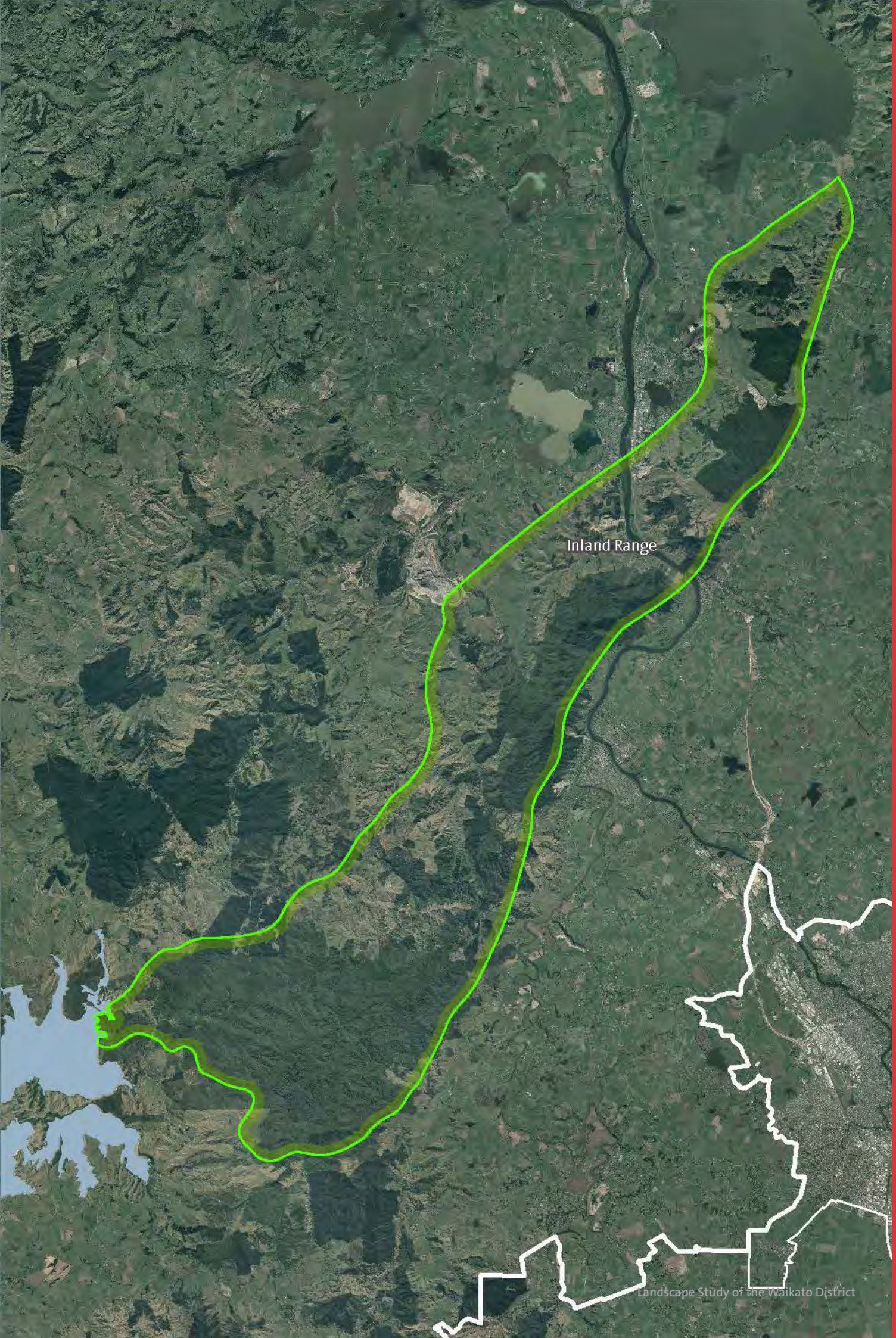
Boffa Miskell

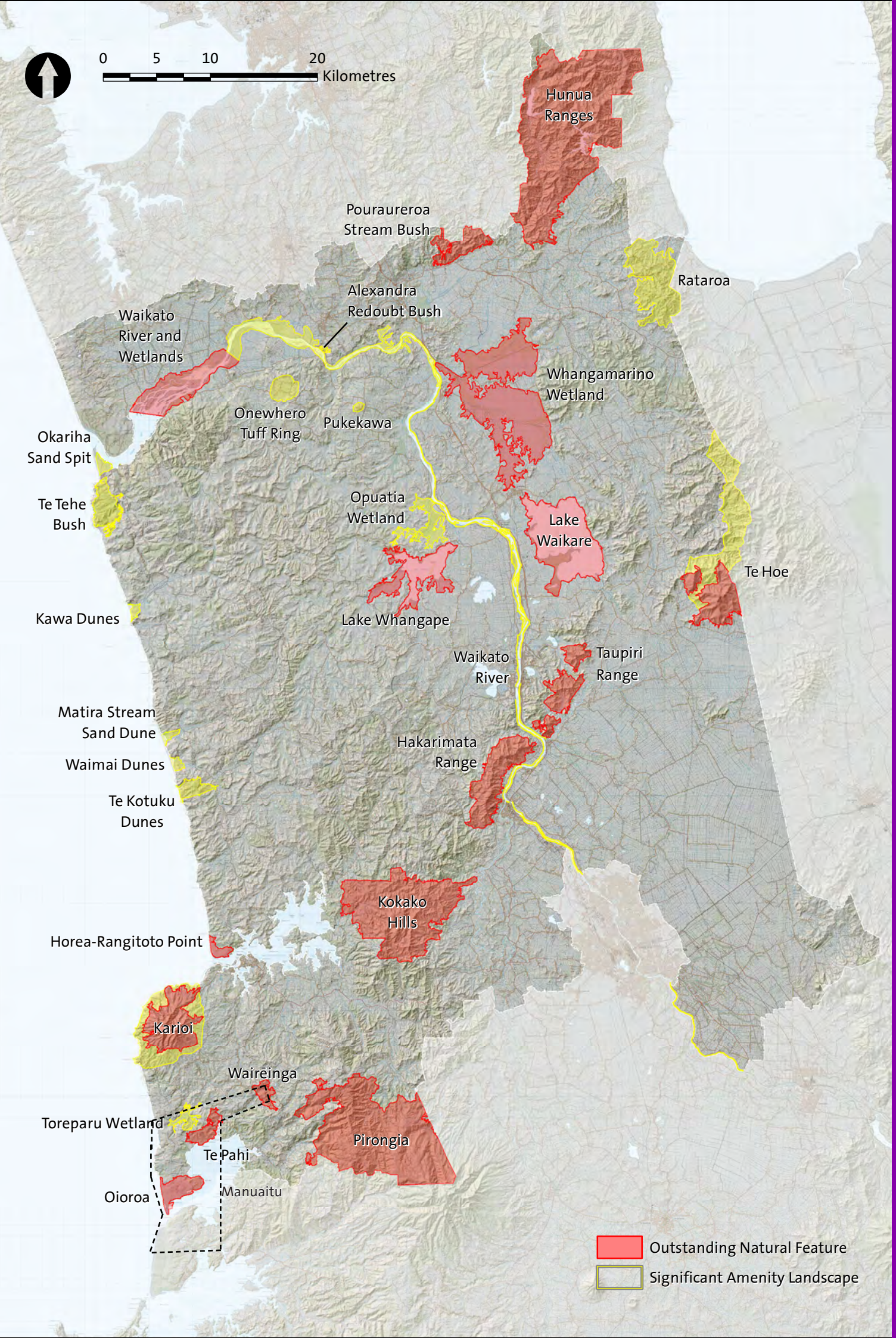
Inland Range

The Hakarimata and Taupiri Range form a dividing range between the plains landscapes of the Lowland Plains and the Northern Wetlands. The Hakarimata and Taupiri Range are part of a Mesozoic rock formation that is part of what is known as the Newcastle Group. The Hakarimata Formation, one of the four formations in the Newcastle group, is the oldest and comprises unfossiliferous indurated siltstone and sandstones at its base (Scholfied, 1967).

The Hakarimata Range is covered in mostly native bush cover and is protected through the DOC Hakarimata Scenic Reserve. Numerous walking tracks and mountain bike tracks provide opportunity for public recreation and interaction with this landscape. The range, along with the Waikato River, forms a striking boundary between the plains landscape to the east and the Coastal Hills to the west (DOC, 2016a).

The Taupiri Range is divided from the Hakarimata Range by the Waikato River, which forms a wider gorge that extends northward, opening into the Northern Wetlands landscape near Huntly. Modification to the range is evident, from agricultural land use to mining. Also sited within this character area is the renowned Taupiri urupaa, nationally renowned, which is linked with Turangawaewae Marae and the Kingitanga. Like the Hakarimata Range, the Taupiri Range forms a strong landmark boundary between landscape types and is iconic within the District.


Inland Range


0 5 10 20 Kilometres
Hunua Ranges
Pouraureroa Stream Bush
Rataroa
Alexandra Redoubt Bush
Waikato River and Wetlands
Whangamarino Wetland
Onewhero Tuff Ring
Pukekawa
Okariha Sand Spit
Te Tehe Bush
Opuatia Wetland
Lake Waikare
Te Hoe
Kawa Dunes
Lake Whangape
Waikato River
Taupiri Range
Matira Stream Sand Dune
Hakarimata Range
Waimai Dunes
Te Kotuku Dunes
Kokako Hills
Horea-Rangitoto Point
Karioi
Wairēinga
Toreparu Wetland
Pirongia
Te Pahi
Oioroa
Manuaitu
Outstanding Natural Feature
Significant Amenity Landscape

Taupiri Range

Biophysical

The Taupri Range forms part of a continuous geological formation with the Hakarimata Range as a Mesozoic rock formation of the Newcastle Group. Divided by the Waikato River the modification to the landform is apparent from the existing State HIghway and cultural and productive land use practices on the wider range, including quarrying to the east. The native vegetation cover is interspersed with productive land use including forestry and stock grazing.

A recent change to the land form has resulted from the new State Highway which cuts through the ranges at its southern end. Landform patterns are significantly changed in its immediate area alongside the existing quarries that are sited along the southwestern slopes of the foothills.

Sensory

The bush covered slopes and ridgelines form a dominant skyline and defining boundary between northern and central Waikato District. Mountain is highly recognisable from wider viewing points from the south and east forming a waypoint. The legibility of the formative natural processes are evident with its relationship with the Waikato River, which cuts between the Hakarimata Range. Transient values are largely associated with seasonal and weather conditions.

Associative

Taupiri is a sacred mountain which included fortified paa and now forms one of Waikato's most sacred and well know urupa. Very significant to the local landscape Taupiri is closely recognised with Turangawaewae and the kiingitanga.

Shared and recognised values for the community largely relate to the formative backdrop and boundary the range provides along with the renowned cultural significance of Taupiri. The mountain and the Waikato River which cuts between the Hakarimata and Taupiri Range forms a gateway between the central and northern Waikato District.

Southerrn end of Taupiri Range
Source: Waikato District Council

Cultural Narrative

Hapuu associations | Ngaati Naho, Ngaati Hine, Ngaati Wairere, Ngaati Makirangi, Ngaati Mahuta, Ngaati Whaawhaakia, Ngaati Kuiaarangi and Ngaati Tai

Marae | Matahuru, Te Hoe o Tainui and Taniwha – Tangoao.

Mauri

The Taupiri urupaa is located within the Taupiri Range, therefore the Taupiri Range is recognised as a cultural and spiritual web. There are a number of culturally significant sites located within Taupiri Range, including Te Iringa, Te Uapata and Otahau Paa which is located on the fringes of the Taupiri Range.

Tautoko ngaa Paemaunga o Taupiri he waahi motuhake koorero hohonu hoki ki ngaa whakapapa o Waikato.[4]

Waahi tapu

Mount Taupiri is a sacred mountain and burial ground for the Waikato-Tainui tribe. Te Putu built Taupiri paa on the summit of a spur where he resided until his murder in 1700s. Te Putu was buried at the paa, which need became tapu (scared) and was abandoned. Early European travellers in the area were obliged by iwi to cross to the other side of the Waikato River to avoid the scared area.

Koorero-o-mua

The Waikato river provides a physical and sustenance for the Waikato-Tainui people. The spirits of ancestors mingle with its waters, which is used in rituals.

In the early 19th century Kaitotehe was the home of Pootatau Te Wherowhero, the paramount chief of Ngaati Mahuta who became the first Maaori King. English explorer and artist George French Angas visited Kaitotehe in 1844 and painted a scene depicting a hui (meeting) taking place in the village. Taupiri mountain is seen in the background on the other side of the Waikato River (which is not visible below the far palisade). The lower peak on the far right shows signs of the terraces of Te Putu's abandoned paa. To its left, in about the middle of the painting, is a still-lower bush-clad hill, which was the burial ground in Te Putu's time and below which his home of Te Mata-o-tutonga stood.

Rawa tuuturu

I ngaa waa o mua tika taau, engari kaare mohio i tenei waa te oranga o ngaa rawa tuupuna kia tu mataara kaitiaki hoki. [4]

Hiahia tuuturu

The ability to access and effectively utilise land is intrinsically linked to the ability of Waikato-Tainui to provide for the environmental, social, spiritual, cultural, and economic health and wellbeing of Waikato-Tainui. Land can have distinct or, at times, overlapping values depending on the use of the land. For example, land set aside as an urupaa (burial site) has a different environmental, social, spiritual, cultural, and economic value than land set aside for WaikatoTainui economic initiatives.

Tautoko ka tanumia a taatou huanga puumau tonuu ki Taupiri Kuao.[4]

4. Input by Hero Potini (Ngaati Tamaoho)

Whakaaronui o te waa

Many Waikato tribes lived at paa on the banks of the Waikato river, and the last part of the pepeha denotes this activity, the importance of their chiefs and the taniwha that lived in the river. Ngaruawahia was also the home of Potatau Te Wherowhero, the first Maaori King who led the Kiingitanga movement from 1858- 1860. It is the home of the Maaori dynasty and the current Maaori King, Tuheitia Paki.[5]

Maaori undertake a series of pest management pratices within the range, including goat culling and possum trapping. The experiences ganined by rangatahi undertaking such activity re-enforces the role of kaitiakitanga and mana matauranga to local mana whenua, with the ability to learn more about conservation techniques, methodologies and strategies.

Overview

For Waikato-Tainui all land has mauri and all land has value to Waikato-Tainui. The mauri of much of the land within the rohe of Waikato-Tainui has been adversely affected by its historical and current use. Waikato-Tainui seeks to restore the mauri of the land in balance with achieving the environmental, social, cultural, spiritual, and economic aspirations of Waikato-Tainui. Waikato-Tainui recognises that restoring the mauri of land needs to occur in partnership with the wider community, local authorities, government, and commercial and industrial users

The ability to access and effectively utilise land is intrinsically linked to the ability of Waikato-Tainui to provide for the environmental, social, spiritual, cultural, and economic health and wellbeing of Waikato-Tainui. Land can have distinct or, at times, overlapping values depending on the use of the land. For example, land set aside as an urupaa (burial site) has a different environmental, social, spiritual, cultural, and economic value than land set aside for Waikato-Tainui economic initiatives.

5. Waikato-Tainui Te Kauhanganui Incorporated, 2013

Landscape Evaluation

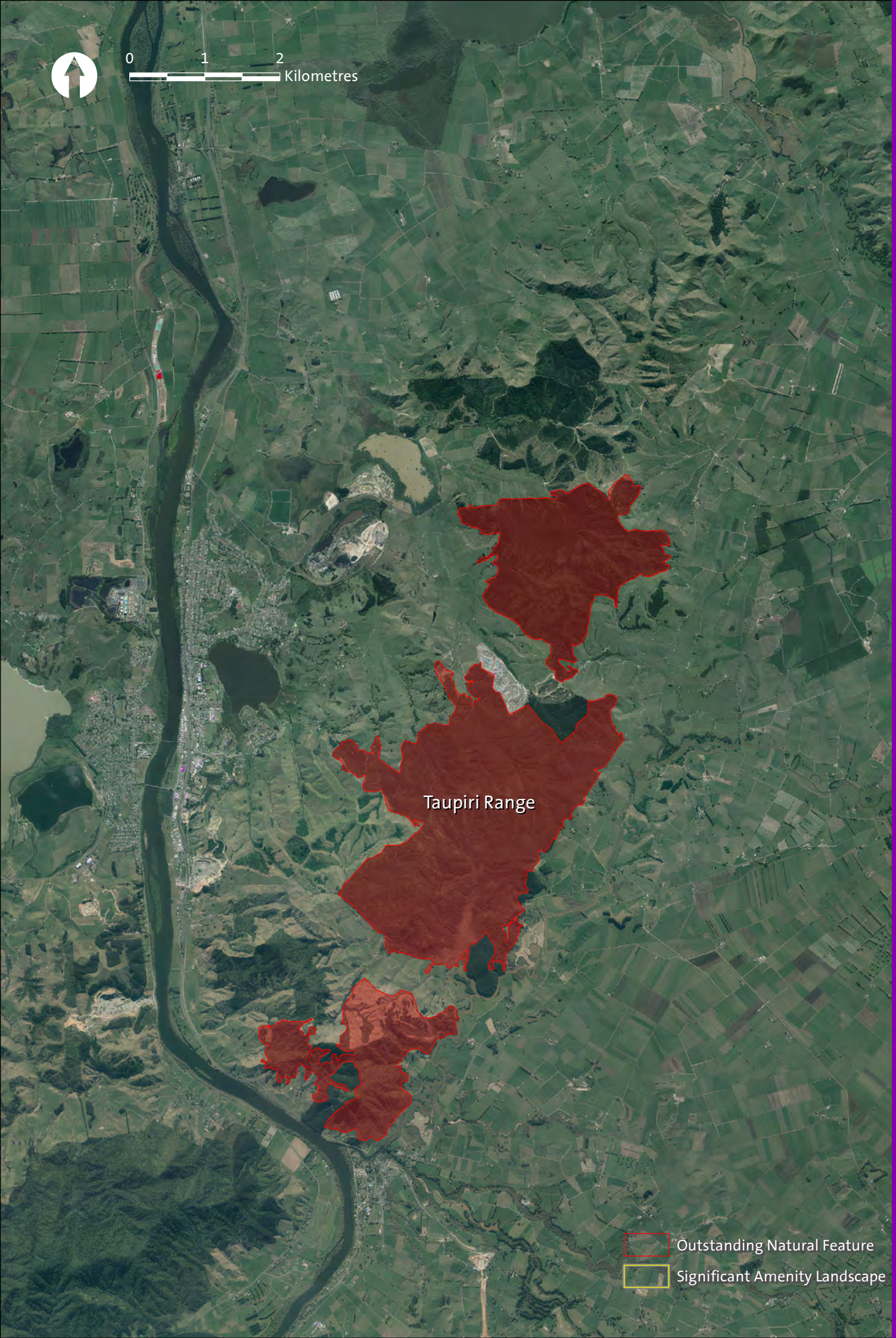
Outstanding Natural Feature: Taupiri Range - Bush covered slopes

Biophysical attributes:	Sensory attributes:	Associative attributes:
• Very high natural science factors associated with the scale and quality of the biotic and abiotc processes occuring within the bush covered slopes of the Taupiri Range. • Natural vegetation vary throughout the bush covered slopes of the Range.	• High levels of legibility of the formative processes with the range remaining dynamic in its biotic and abiotic processes. The aesthetic coherence is very high diminishing at its edged as a result of adjoining agricultural land use.	• High to very high levels of shared and recognised values. • Very high cultural heritage values associated prolific food source the wetlands provided to Maaori. • Significant recorded cultural values associated with the feature for tangata whenua.

Threats:

Threats to the character and qualities of the river margins and wetland area include:

- Earthworks, quarrying and excavation that results in large scale scarring of the landscape and features, resulting in loss of legible landform, ridglines and native vegetation cover.
- Modification to the visually legible ranges skyline profile from earthworks, structures, buildings and vegetation clearance.
- Built development within the bush clad slopes resulting in a loss of naturalness.
- Built development resulting in loss of dominant vegetation cover and clearance of native bush cover contributing to the overall aesthetic coherence. Recognising some built development can be accomodated through sensitive design.


0
1
2
Kilometres
Taupiri Range
Outstanding Natural Feature
Significant Amenity Landscape

Hakarimata Range

Biophysical

Like the Taupri Range, the Hakarimata Range forms part of a continuous geological formation with as a Mesozoic rock formation of the Newcastle Group. Divided by the Waikato River the modification to the landform is apparent from the existing State HIghway and cultural and productive land use practices on the wider range, including quarrying on its western foothills. Rising to a summit of 374m the native bush vegetation cover is of high ecological value.

The biotic values are high comprising a lowland broadleaf-podocarp dominated forest including large rata and rimu. The bush reserve also contains a number of threatened plants including the native daphne/topara.

Sensory

The bush covered slopes and ridgelines form a dominant skyline and defining boundary between western and central Waikato District. The range is highly recognisable from wider viewing points from the south and east forming a waypoint. Recreational use of the range is prevalent with numerous walking tracks throughout the feature.

The legibility of the formative natural processes are evident with its relationship with the Waikato River, which extends alongside the range to the east. Forming a backdrop to the settlments of NGaruawahia and Taupiri the range has very high levels of aesthetic coherence. Similarly the high transient values are largely associated with seasonal and weather conditions.

Associative

The range is of very high cultural heritage significance to tangata whenua locally. District wide the feature is high recognisable and well known for its recreational and historical importance. The local historic heritage values are well known through the access from recreational tracks and interpretation managed by the Department of Conservation.

Historical significance of the historical rail line which provided access for coal mining operations. A 750,000 litre water reservoir, established in 1922, once served the town of Ngaruawahia and is now also a feature of the Waterworks Walk wihtin the range.

Hakarimata Range
Source: Waikato District Council

Cultural Narrative

Hapuu associations | Ngaati Naho, Ngaati Hine, Ngaati Wairere, Ngaati Makirangi, Ngaati Mahuta, Ngaati Whaawhaakia, Ngaati Kuiaarangi and Ngaati Tai

Marae | Matahuru, Te Hoe o Tainui, Taniwha – Tangoao.

Mauri

The mauri for this site is recognised and supported by Waikato Tainui River Settlement Trust. – replaces the original narrative by Iwi.

He waahi ngaaakaunuitia ki ngaa whakapapa o Waikato/Tainui.[4]

Waahi tapu

This pepeha (tribal saying) of the Waikato people, denotes the significance and the spiritual connection that tangata whenua have with the river and the land. The Waikato River was the primary source of food, transport, ritual and tradition for Maaori - it was their life blood. Taupiri maunga (mountain) is the sacred mountain of Waikato-Tainui. It was the historical Paa site of the Waikato Chief Te Putu but after his slaying, the mountain became the burial ground of the Maaori Kings and Maaori Queen and also the people of Waikato-Tainui.[3]

Ae orite ki ngaa waahi katoa mena kii mai he waahi tapu raatou katoa e tapiri nei ki ngaa waahi tapu a raatou kaitiaki. [4]

Koorero-o-mua

Six hundred years ago the Tainui tohunga Rakataura sent out Rotu and Hiaora to place a boundary marker on the Haakarimata Range to define the lands of Tainui. The marker was mauri koohatu, a talismanic stone intended to ensure a permanent abundance of forest birds for food (DOC, 2016a).

Rawa tuuturu

Haakarimata owes its name to a conciliatory feast at various marae between the Ngaati Maniapoto and the Waikato people in the 17th century. The feast is said to have consisted of mainly uncooked delicacies and the hills were subsequently named Haakari-kai-mata which means the mountain of 'uncooked food', now shortened to Hakarimata. [35]

Tautoko ka tu mataara toonu ki ngaa ngaarara e whaka mate ngaa rawa me ngaa taonga Maaori. [4]

Hiahia tuuturu

Parcels of privately owned Maaori land exists within the range, aimed at ensuring a sense fo cultural ownership and cultural connectedness to the Hakarimata Range for present and future generations.

Whakaaronui o te waa

The Hakarimata Range is one of a succession of ranges running roughly north to south and forming the western boundary of the Waikato Basin. Sandstone, siltstone and greywacke, which have been strongly folded, faulted and overlain by other sedimentary rocks, form the Hakarimata Range and adjacent land. To the north and west of the range is one of New Zealand's major coal producing areas.

He waahi motuhake tonuu ki ngaa huanga me ngaa haapori o te rohe e whiikoi ki runga ngaa ara ki roto nei. [4]

3. Input by Karl Flavell (Ngaati Te Ata).

4. Input by Hero Potini (Ngaati Tamaoho).

There are a number of quarries working within the Taupri range that source greywacke. Local Maaori work at these quarries.

Maaori undertake a series of pest management practices within the range, including goat culling and possum trapping. The experiences ganined by rangatahi undertaking such activity re-enforces the role of kaitiakitanga and mana matauranga to local mana whenua, with the ability to learn more about conservation techniques, methodologies and strategies.

Overview

For Waikato-Tainui all land has mauri and all land has value to Waikato-Tainui. The mauri of much of the land within the rohe of Waikato-Tainui has been adversely affected by its historical and current use. Waikato-Tainui seeks to restore the mauri of the land in balance with achieving the environmental, social, cultural, spiritual, and economic aspirations of Waikato-Tainui. Waikato-Tainui recognises that restoring the mauri of land needs to occur in partnership with the wider community, local authorities, government, and commercial and industrial users

The ability to access and effectively utilise land is intrinsically linked to the ability of Waikato-Tainui to provide for the environmental, social, spiritual, cultural, and economic health and wellbeing of Waikato-Tainui. Land can have distinct or, at times, overlapping values depending on the use of the land. For example, land set aside as an urupaa (burial site) has a different environmental, social, spiritual, cultural, and economic value than land set aside for Waikato-Tainui economic initiatives.

Landscape Evaluation

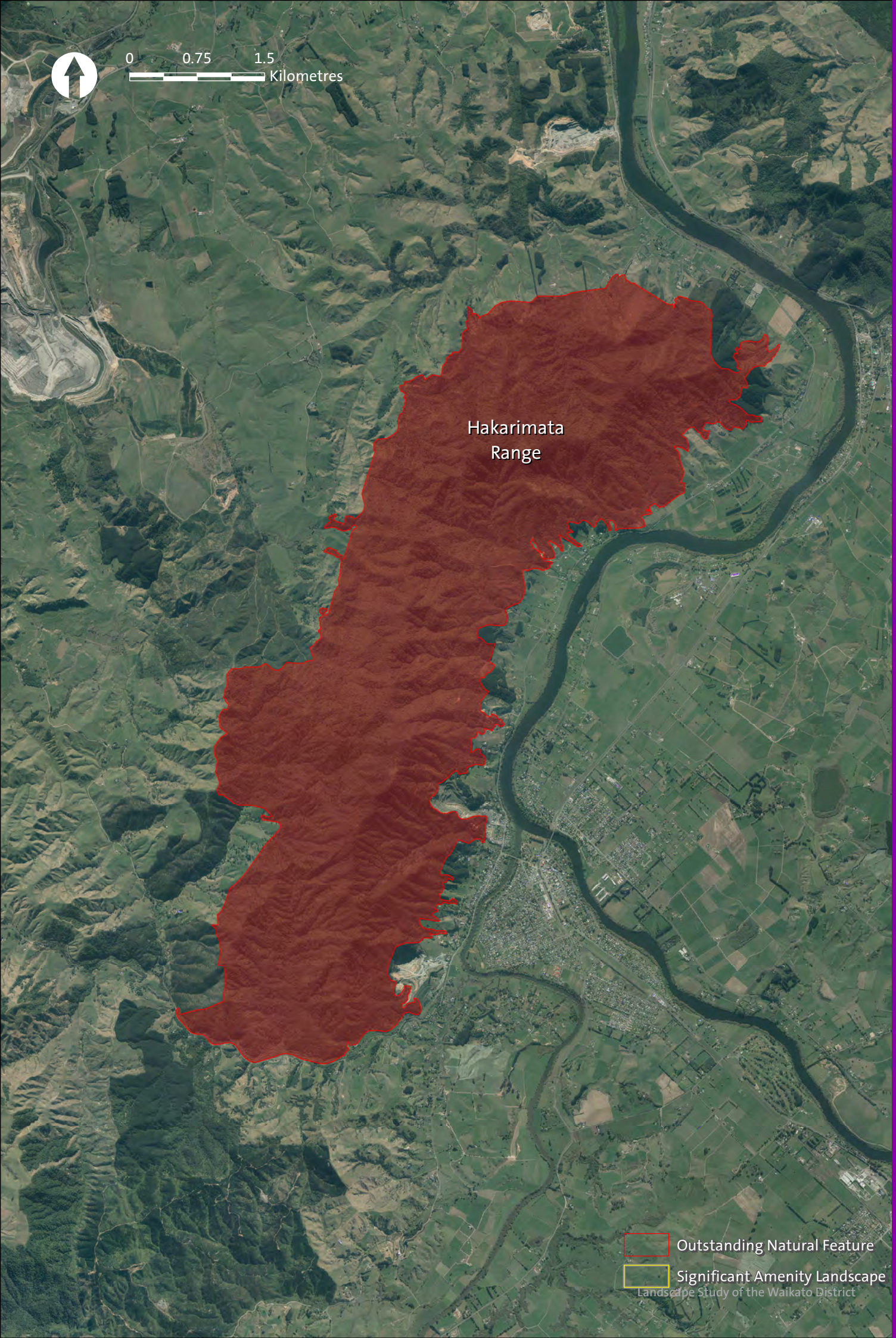
Outstanding Natural Feature: Hakarimata Range

Biophysical attributes:	Sensory attributes:	Associative attributes:
• Very high natural science factors associated with the scale and quality of the biotic and abiotc processes occuring within the bush covered slopes of the Hakarimata Range. • Natural vegetation vary throughout the bush covered slopes of the Range.	• High levels of legbility of the formative processes with the wetland remaining dynamic in its biotic and abiotic processes. The aesthetic coherence is very high diminishing at its edged as a result of adjoining agricultural land use. • Transient values associated with season change in flora and weather conditions create a range of experiences within the range.	• High to very high levels of shared and recognised values. • Very high cultural heritage values associated prolific food source the wetlands provided to Maaori. • Significant recorded cultural values associated with the feature for tangata whenua. • High historic heritage values.

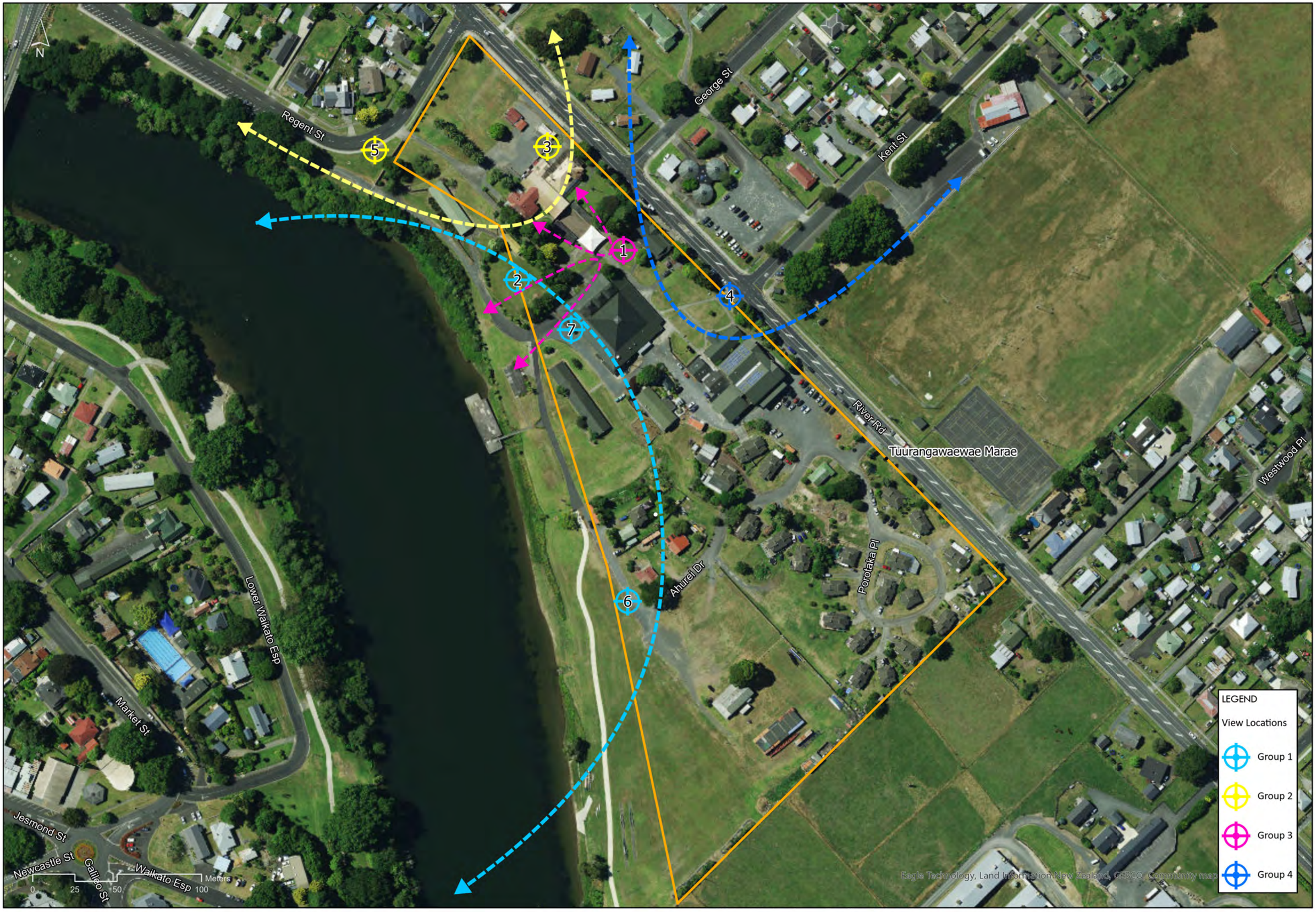
Threats:

Threats to the character and qualities of the river margins and wetland area include:

- Earthworks, quarrying and excavation that results in large scale scarring of the landscape and features, resulting in loss of legible landform, ridglines and native vegetation cover.
- Modification to the visually legible ranges skyline profile from earthworks, structures, buildings and vegetation clearance.
- Built development within the bush clad slopes resulting in a loss of naturalness.
- Built development resulting in loss of dominant vegetation cover and clearance of native bush cover contributing to the overall aesthetic coherence. Recognising some built development can be accomodated through sensitive design.


0
0.75
1.5
Kilometres
Hakarimata
Range
Outstanding Natural Feature
Significant Amenity Landscape
Landscape Study of the Waikato District

Annexure 2 - View Locations and Analysis Group Map



View Locations and Analysis Groups

Scale 1:2,000 at A3 | June 2023 | Map No-13 | R0

Annexure 3 - View Location Photographs

View Location Data

NZTM Easting:	1789952
NZTM Northing:	5829392
Focal length:	50mm
Photographer	Dave Mansergh
Camera:	Canon EOS D5 Full Frame Digital with EF 50mm F/1.4 USM (Prime)
Date:	3rd March 2023

Image should be viewed at a distance of 491 mm to approximate actual scale when printed at A3

View Location Data

NZTM Easting:	1789889
NZTM Northing:	5829375
Focal length:	50mm
Photographer	Dave Mansergh
Camera:	Canon EOS D5 Full Frame Digital with EF 50mm F/1.4 USM (Prime)
Date:	3rd March 2023

Single image frame size

Image should be viewed at a distance of 214 mm to approximate actual scale when printed at A3

VL2 - Panoramic Photograph From Tuurangawaewae Marae (Looking Northwest)

View Location Data

NZTM Easting:	1789906
NZTM Northing:	5829454
Focal length:	50mm
Photographer	Dave Mansergh
Camera:	Canon EOS D5 Full Frame Digital with EF 50mm F/1.4 USM (Prime)
Date:	3rd March 2023

Single image frame size

Image should be viewed at a distance of 211 mm to approximate actual scale when printed at A3

VL3 - Panoramic Photograph From Tuurangawaewae Marae (Looking Northwest)

View Location Data

NZTM Easting:	1790015
NZTM Northing:	5829365
Focal length:	50mm
Photographer	Dave Mansergh
Camera:	Canon EOS D5 Full Frame Digital with EF 50mm F/1.4 USM (Prime)
Date:	3rd March 2023

Single image frame size

Image should be viewed at a distance of 230 mm to approximate actual scale when printed at A3

VL4 - Panoramic Photograph From River Road (Looking Northeast)

View Location Data

NZTM Easting:	1789805
NZTM Northing:	5829452
Focal length:	50mm
Photographer	Dave Mansergh
Camera:	Canon EOS D5 Full Frame Digital with EF 50mm F/1.4 USM (Prime)
Date:	3rd March 2023

Single image frame size

Image should be viewed at a distance of 217 mm to approximate actual scale when printed at A3

VL5 - Panoramic Photograph From Regent Street (Looking Northeast)

View Location Data

NZTM Easting:	1789954
NZTM Northing:	5829185
Focal length:	50mm
Photographer	Dave Mansergh
Camera:	Canon EOS D5 Full Frame Digital with EF 50mm F/1.4 USM (Prime)
Date:	3rd March 2023

Single image frame size

Image should be viewed at a distance of 238 mm to approximate actual scale when printed at A3

VL6 - Panoramic Photograph From Ahurei Drive (Looking Northwest)

View Location Data

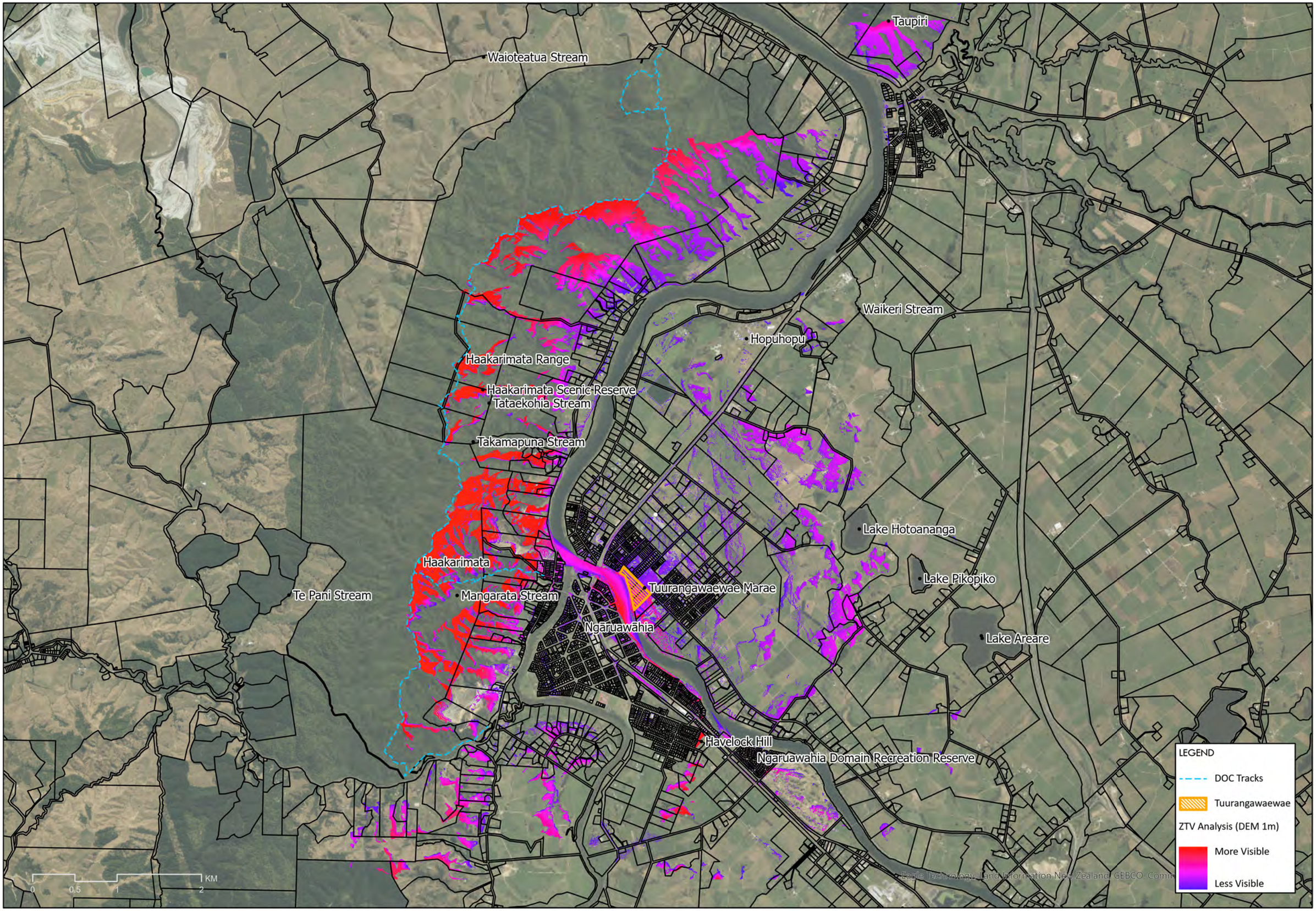
NZTM Easting:	1789921
NZTM Northing:	5829346
Focal length:	50mm
Photographer	Dave Mansergh
Camera:	Canon EOS D5 Full Frame Digital with EF 50mm F/1.4 USM (Prime)
Date:	3rd March 2023

Single image frame size

Image should be viewed at a distance of 209 mm to approximate actual scale when printed at A3

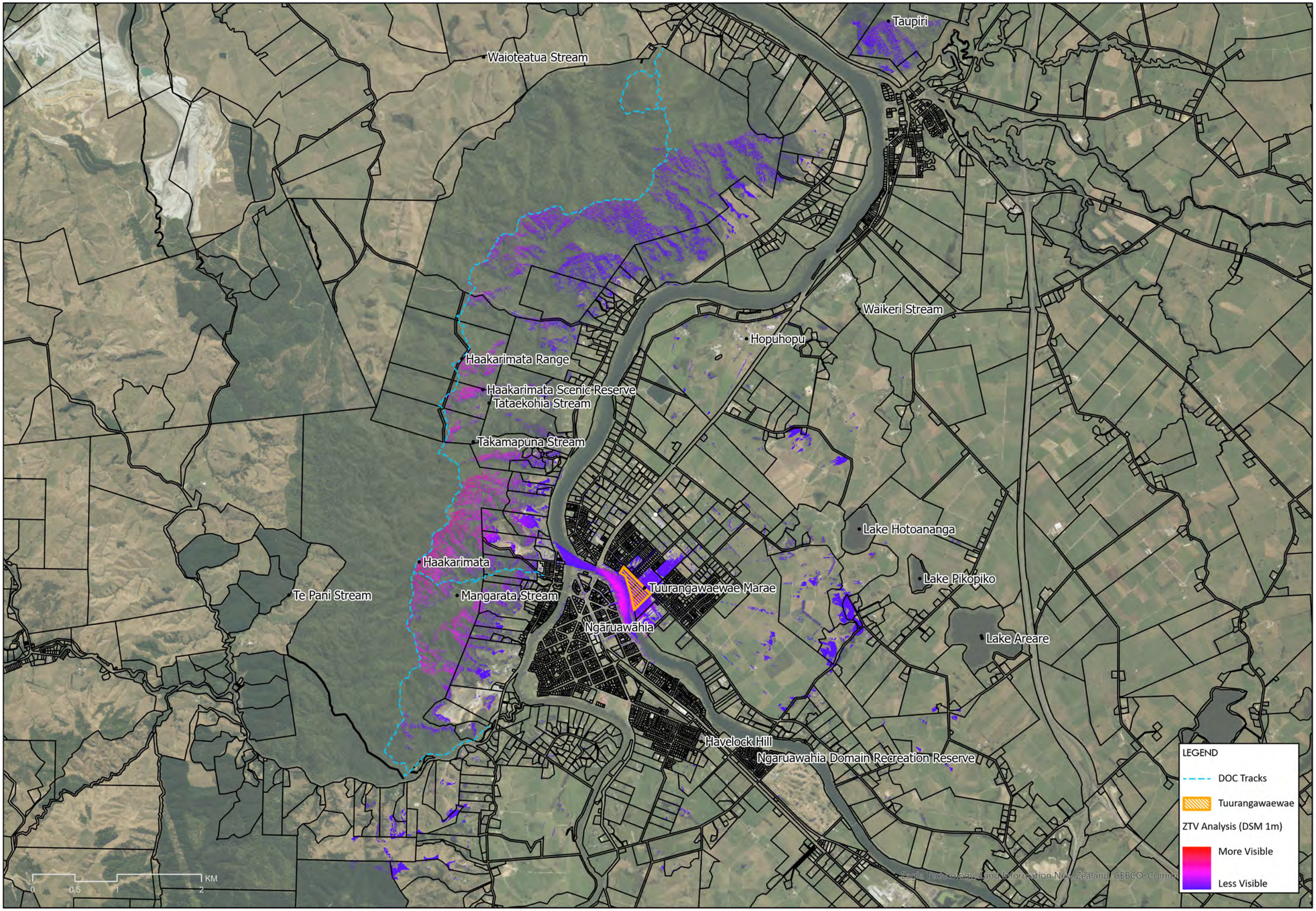
VL7 - Panoramic Photograph From Tuurangawaewae Marae (Looking Northwest)

Annexure 4 - ZTV Analysis Maps



Zone of Theoretical Visibility (DEM)

Scale 1:40,000 at A3 | June 2023 | Map No-01 | R0



Zone of Theoretical Visibility (DSM)

Variation 3 Viewshaft Analysis

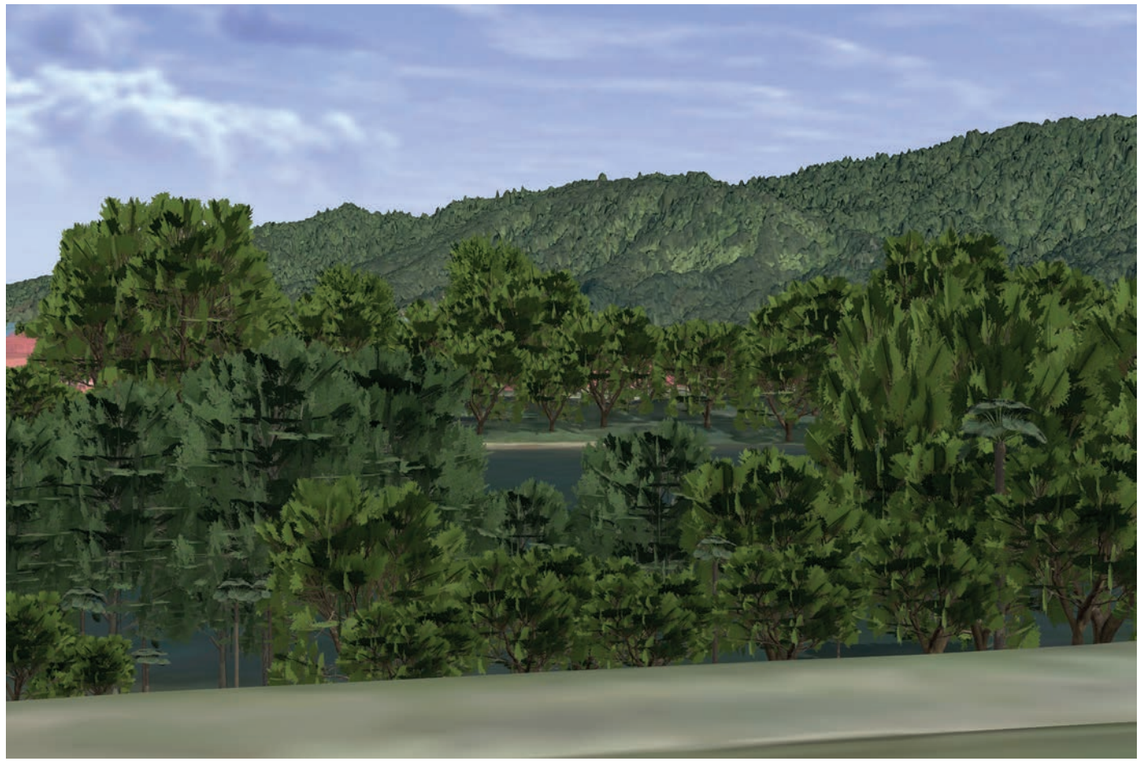
Scale 1:40,000 at A3 | June 2023 | Map No-02 | R0

mansergh graham LANDSCAPE ARCHITECTS

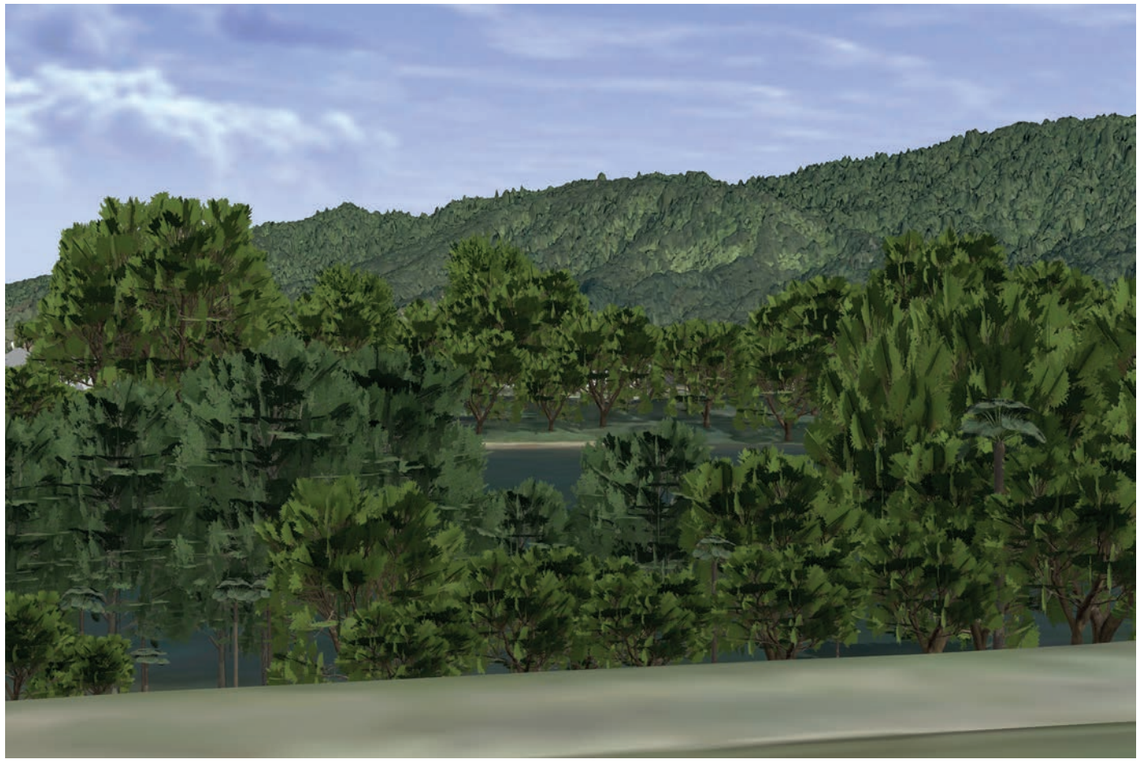
Annexure 5 - Images from the 3D Model

Photograph Showing Existing View

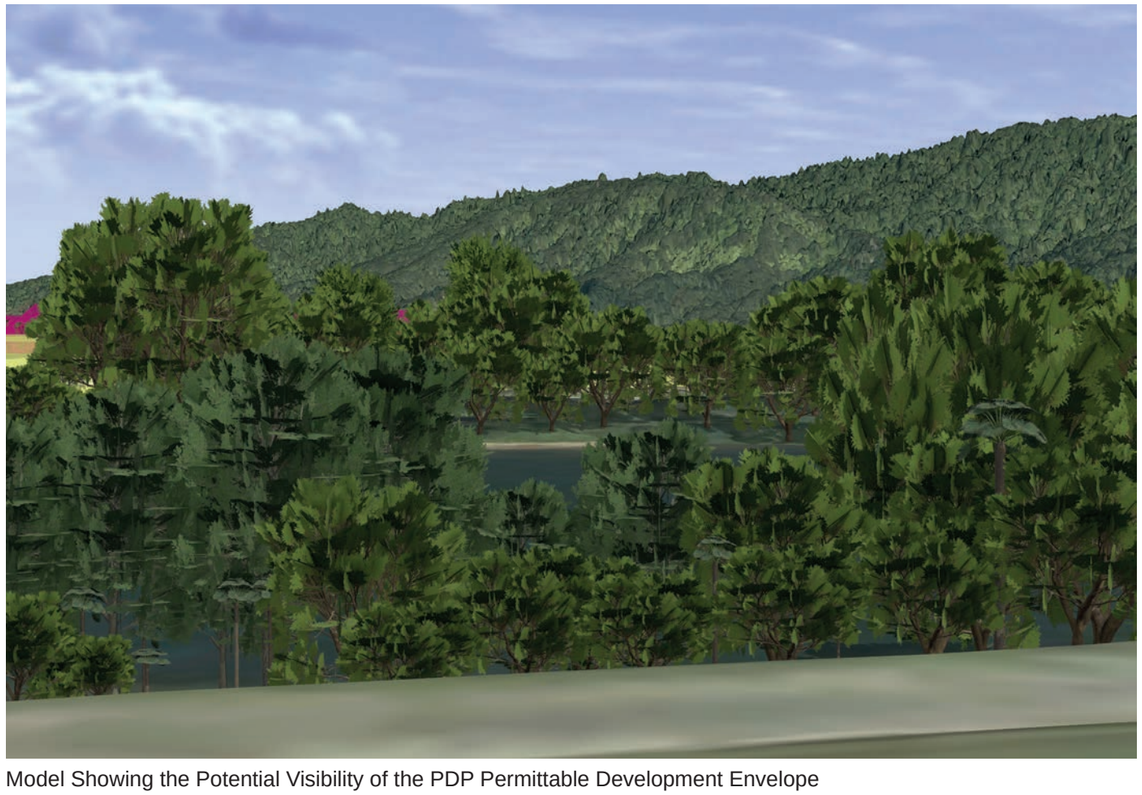
Model Showing the Existing View



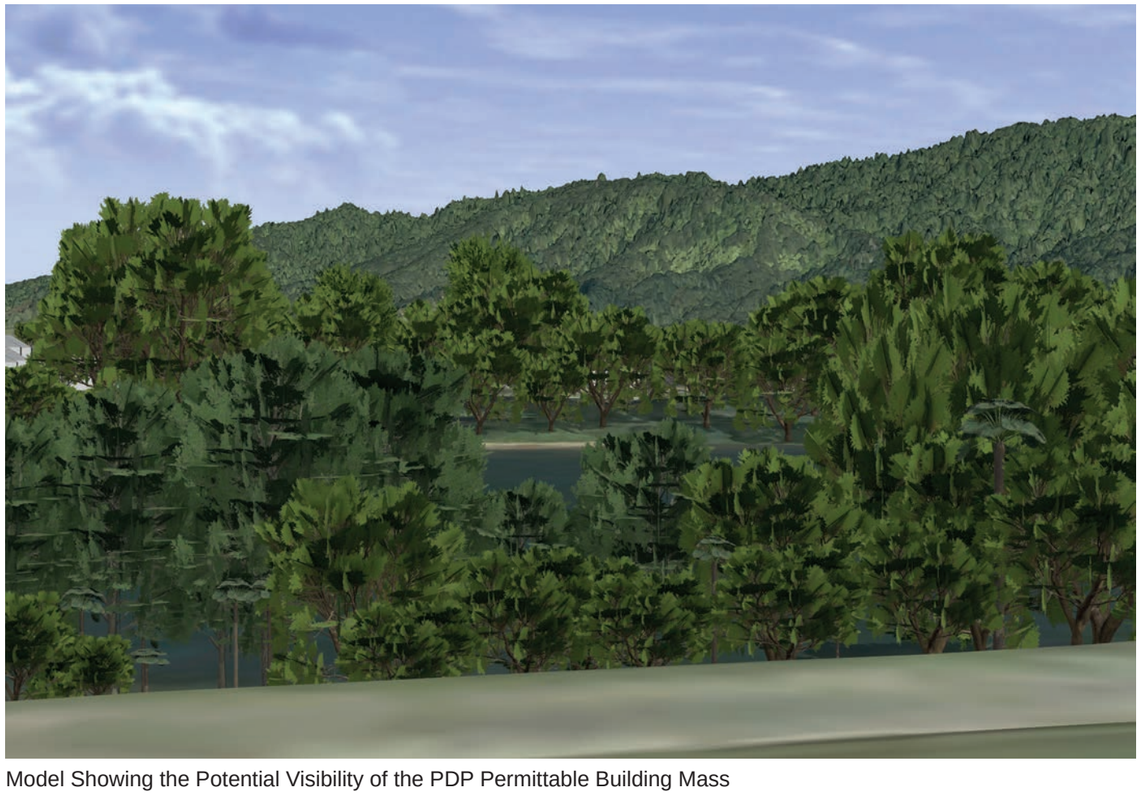
Model Showing the Potential Visibility of the ODP Permittable Development Envelope



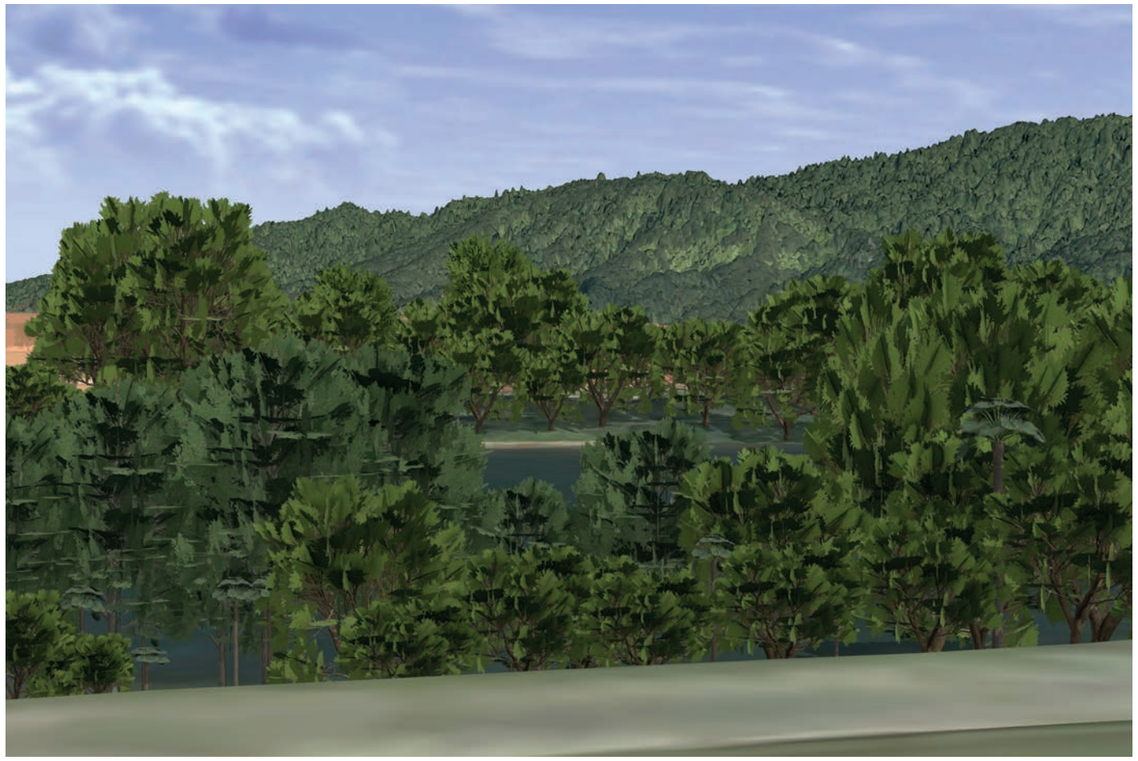
Model Showing the Potential Visibility of the ODP Permittable Building Mass



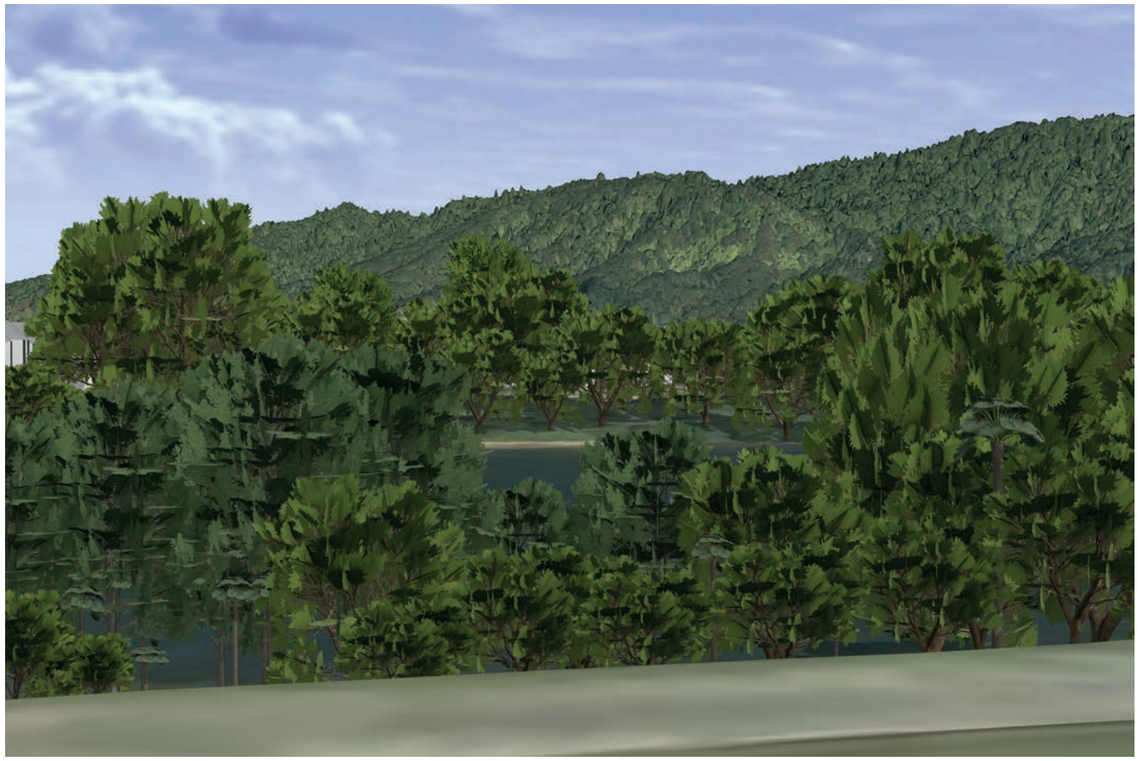
Model Showing the Potential Visibility of the PDP Permittable Development Envelope



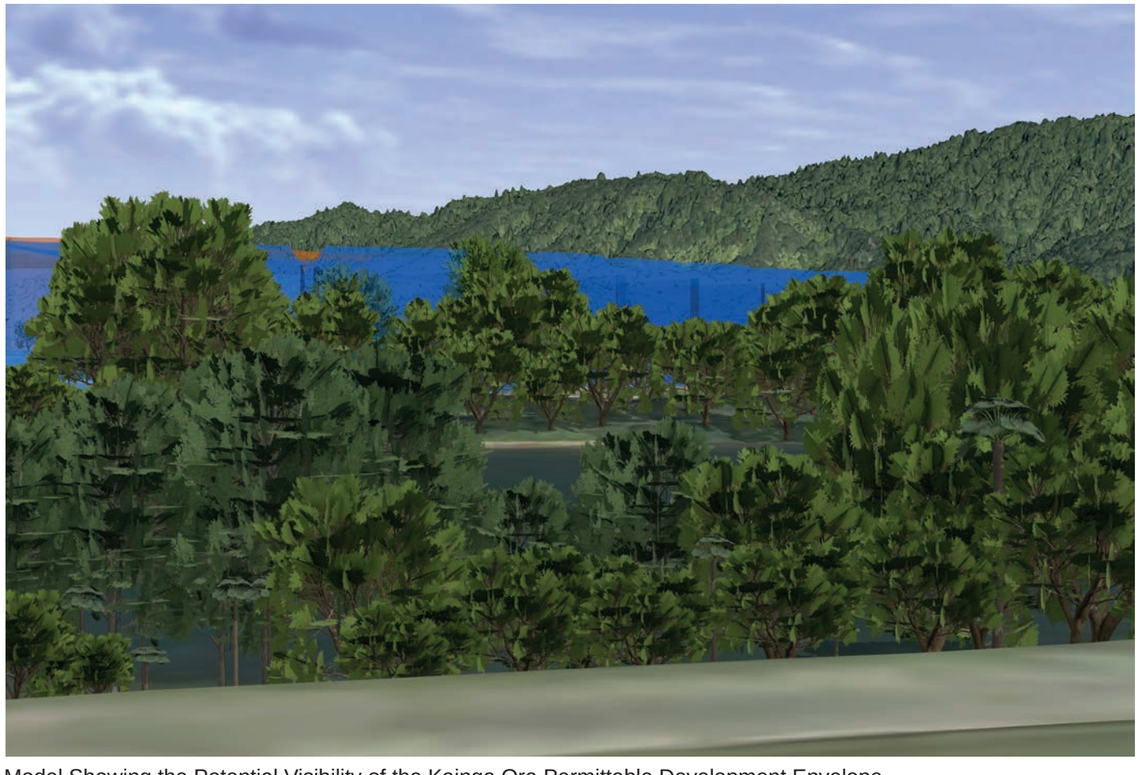
Model Showing the Potential Visibility of the PDP Permittable Building Mass



Model Showing the Potential Visibility of the Variation 3 Permittable Development Envelope

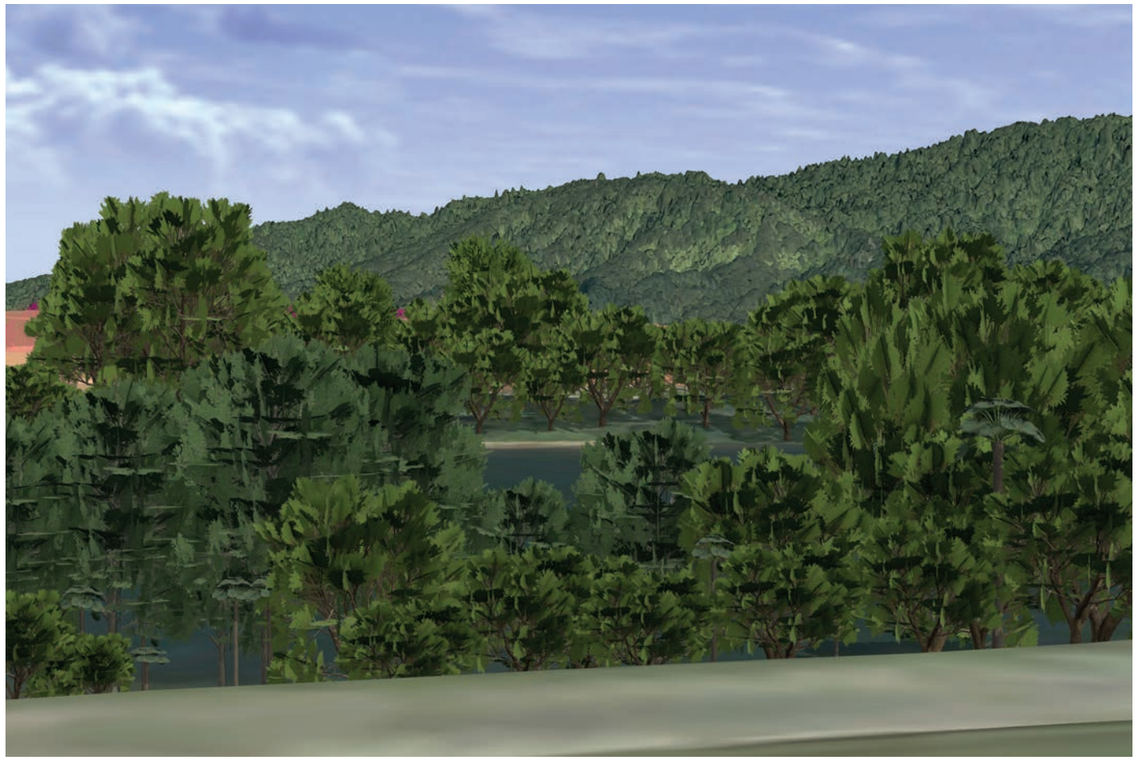


Model Showing the Potential Visibility of the Variation 3 Permittable Building Mass

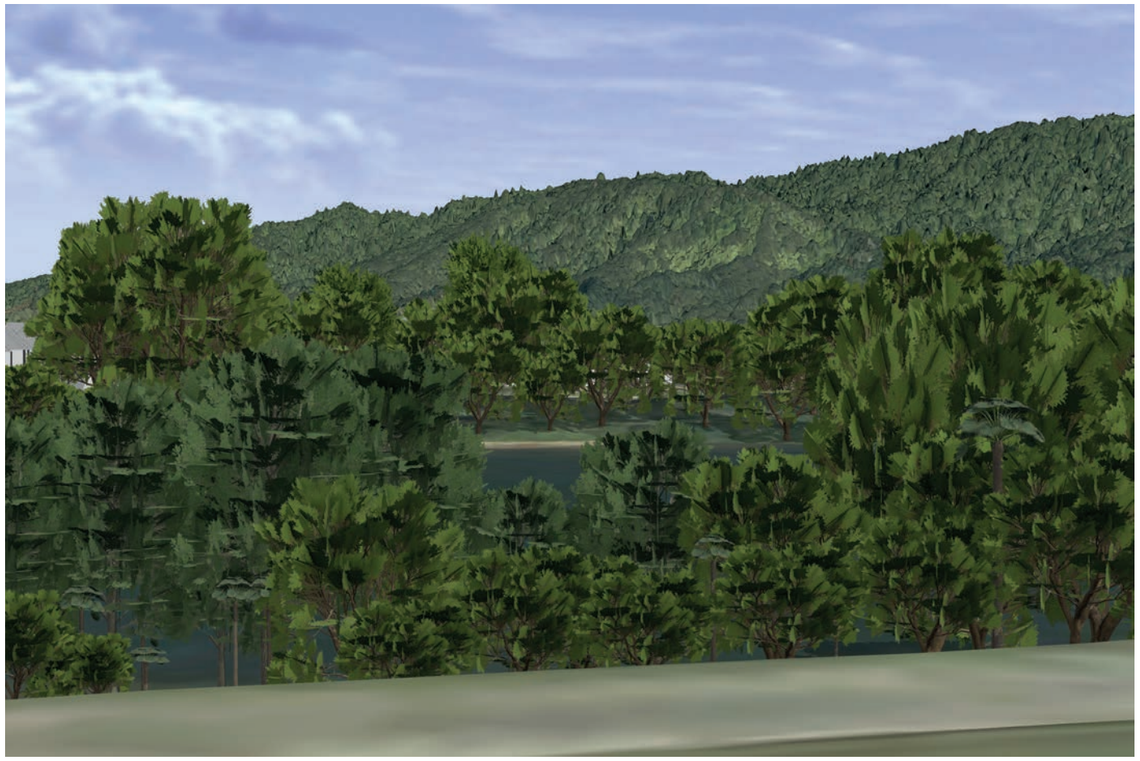


Model Showing the Potential Visibility of the Kainga Ora Permittable Development Envelope

Model Showing the Potential Visibility of the Kainga Ora Permittable Building Mass

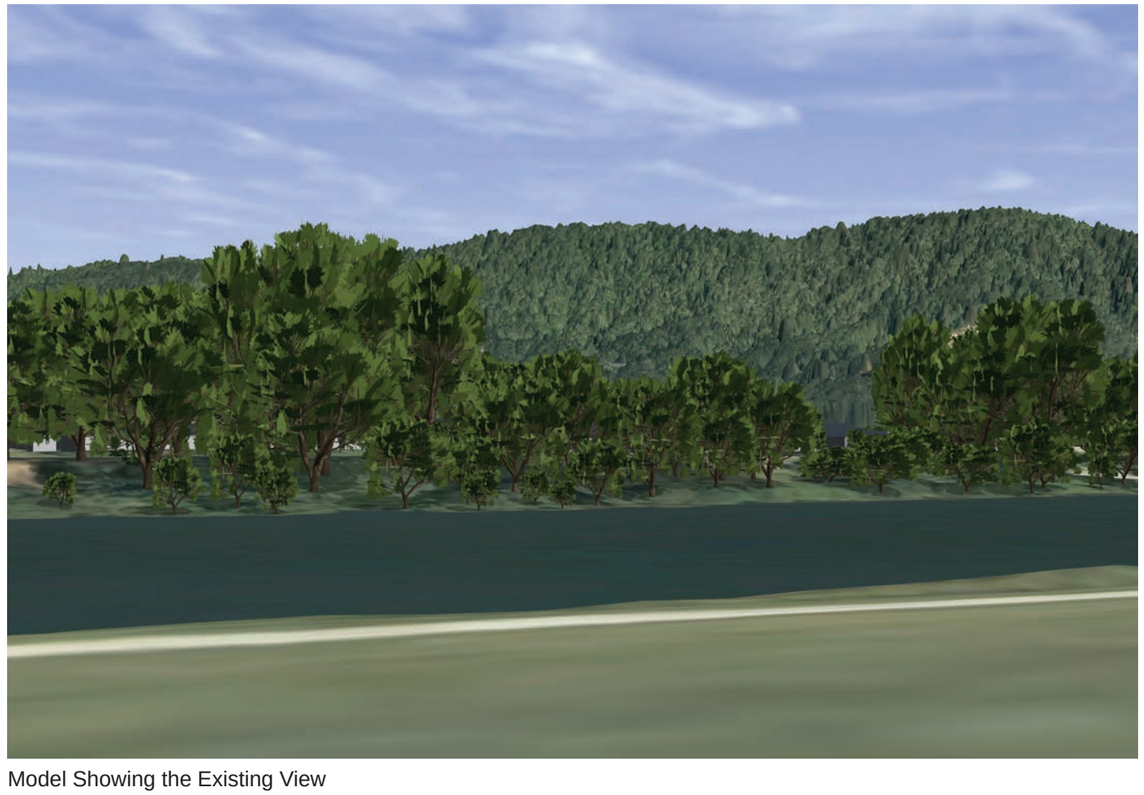


Model Showing the Potential Visibility of the Recommended Permittable Development Envelope

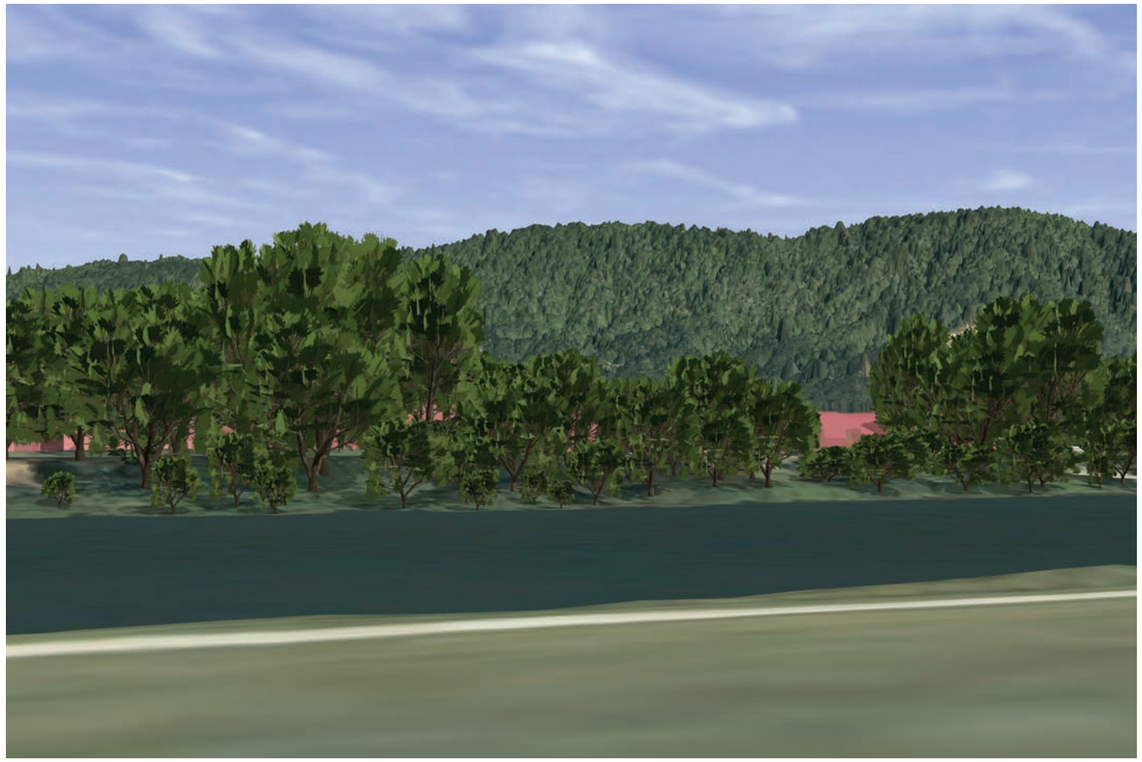


Model Showing the Potential Visibility of the Recommended Permittable Building Mass

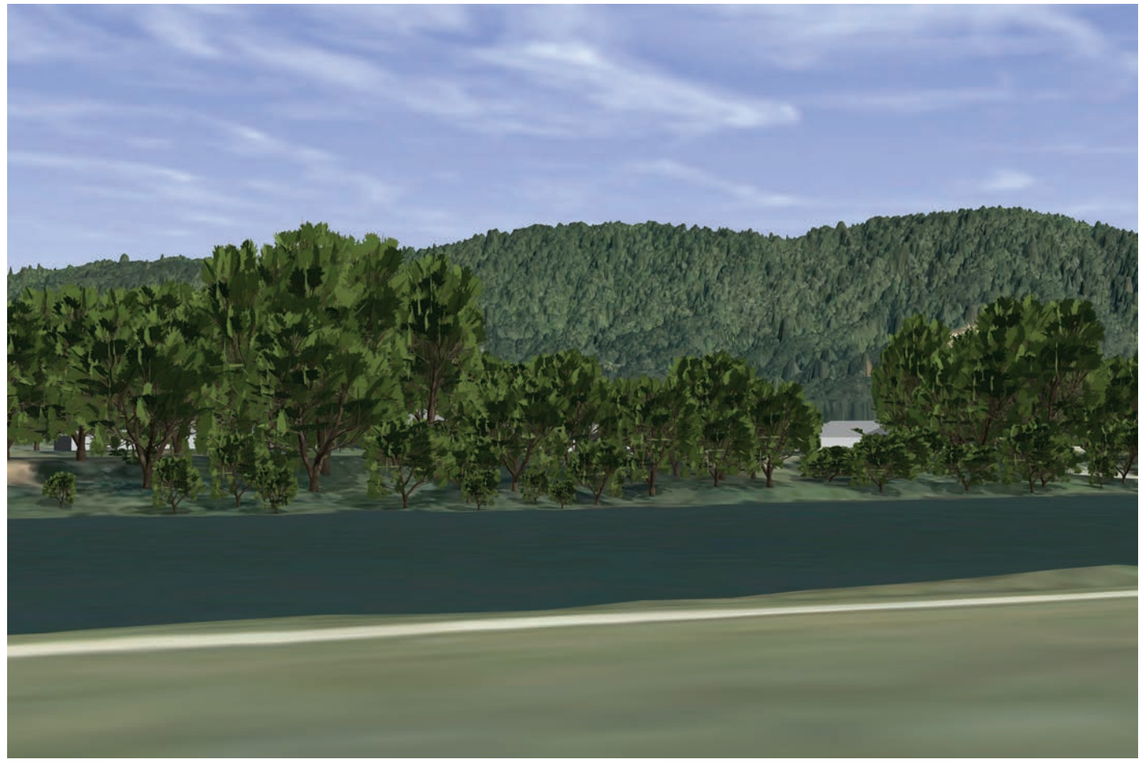
Photograph Showing Existing View



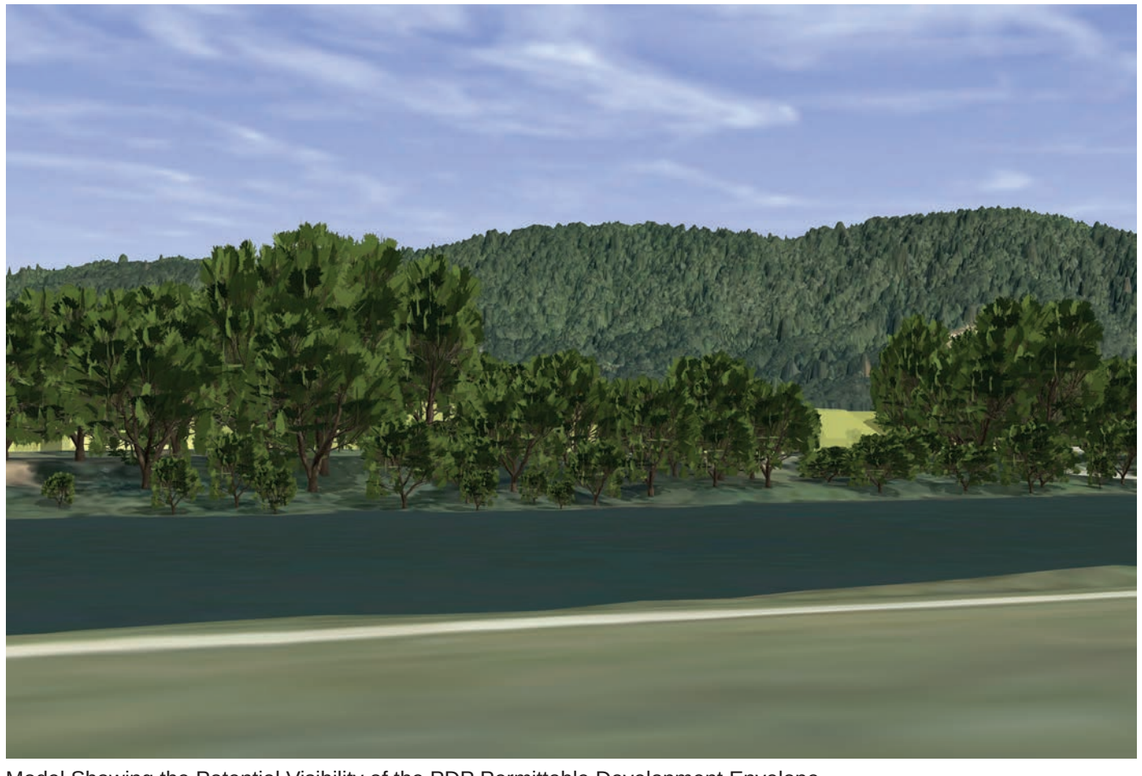
Model Showing the Existing View



Model Showing the Potential Visibility of the ODP Permittable Development Envelope

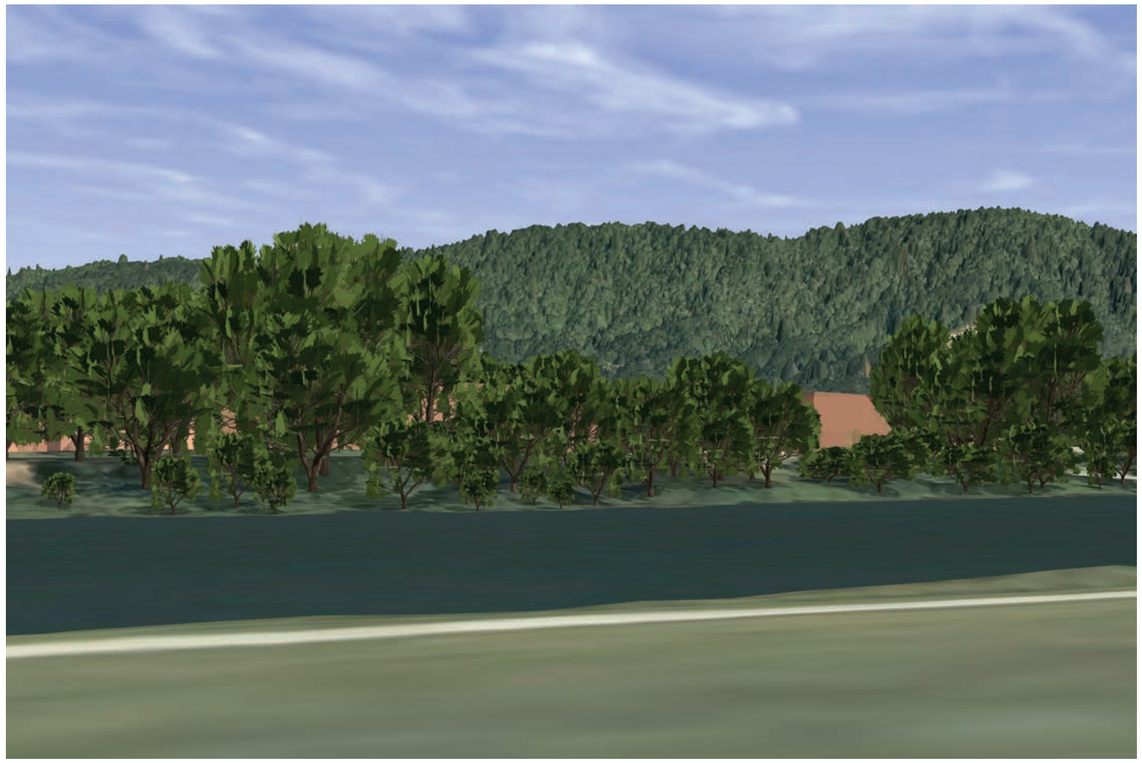


Model Showing the Potential Visibility of the ODP Permittable Building Mass

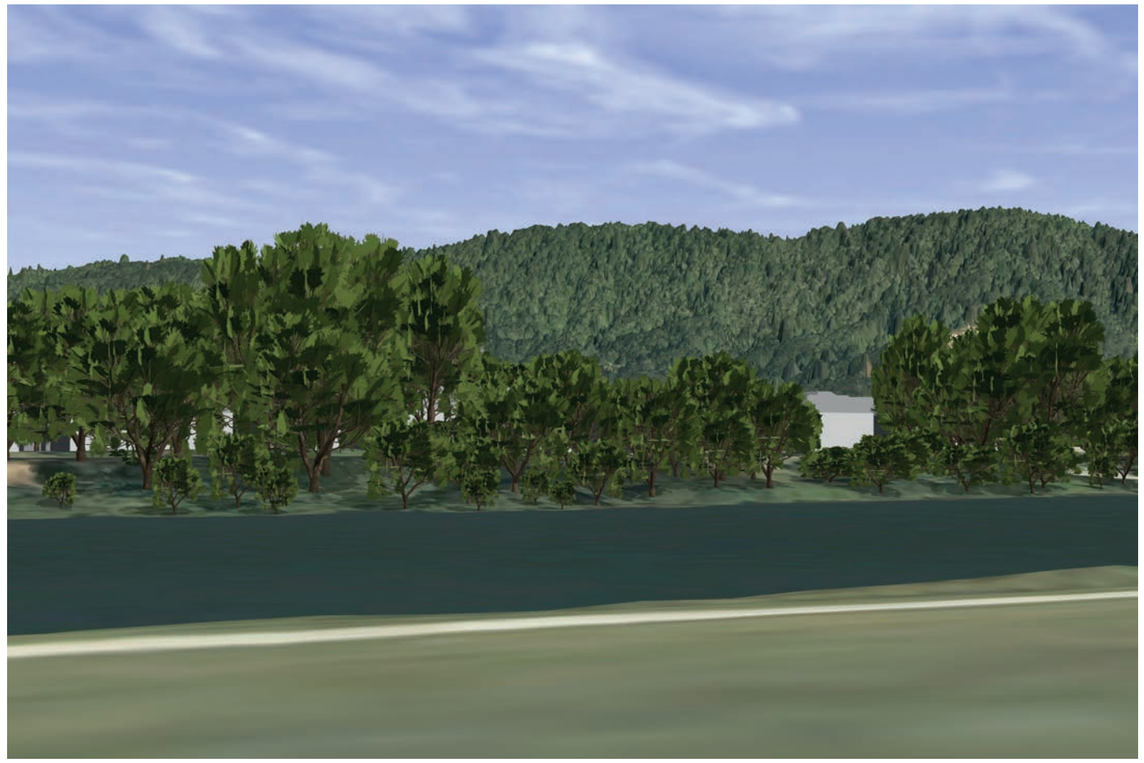


Model Showing the Potential Visibility of the PDP Permittable Development Envelope

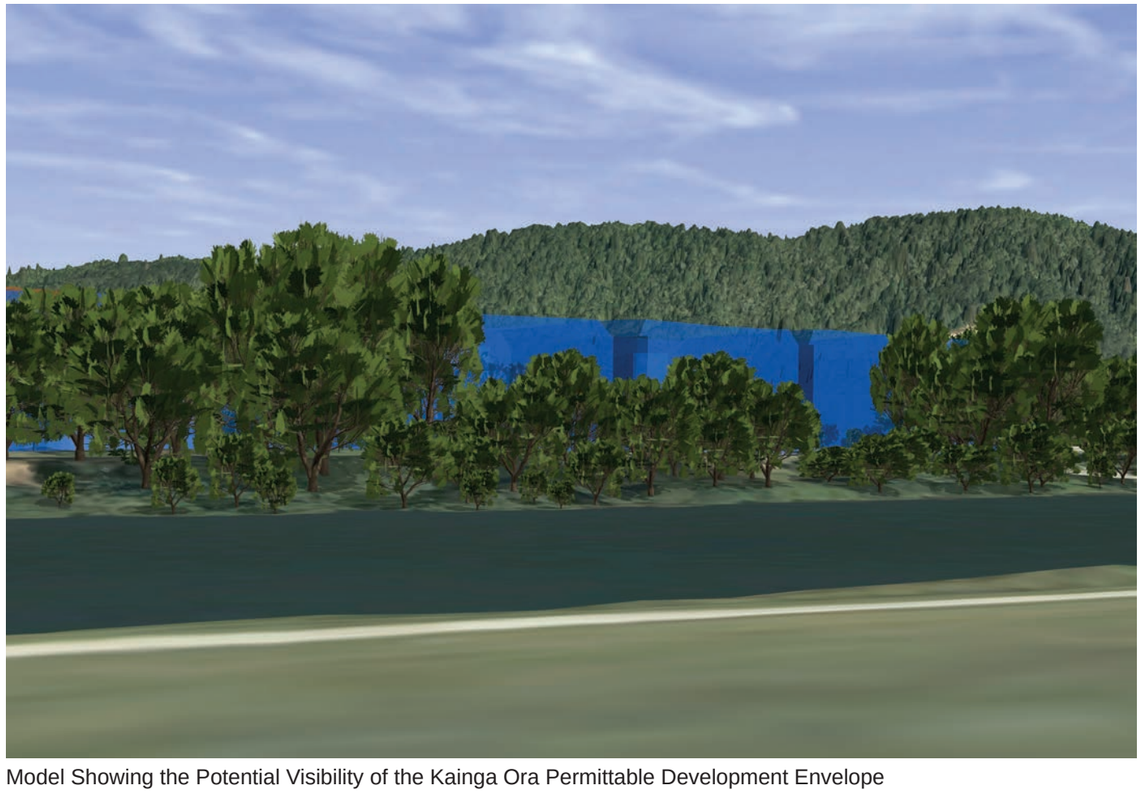
Model Showing the Potential Visibility of the PDP Permittable Building Mass



Model Showing the Potential Visibility of the Variation 3 Permittable Development Envelope

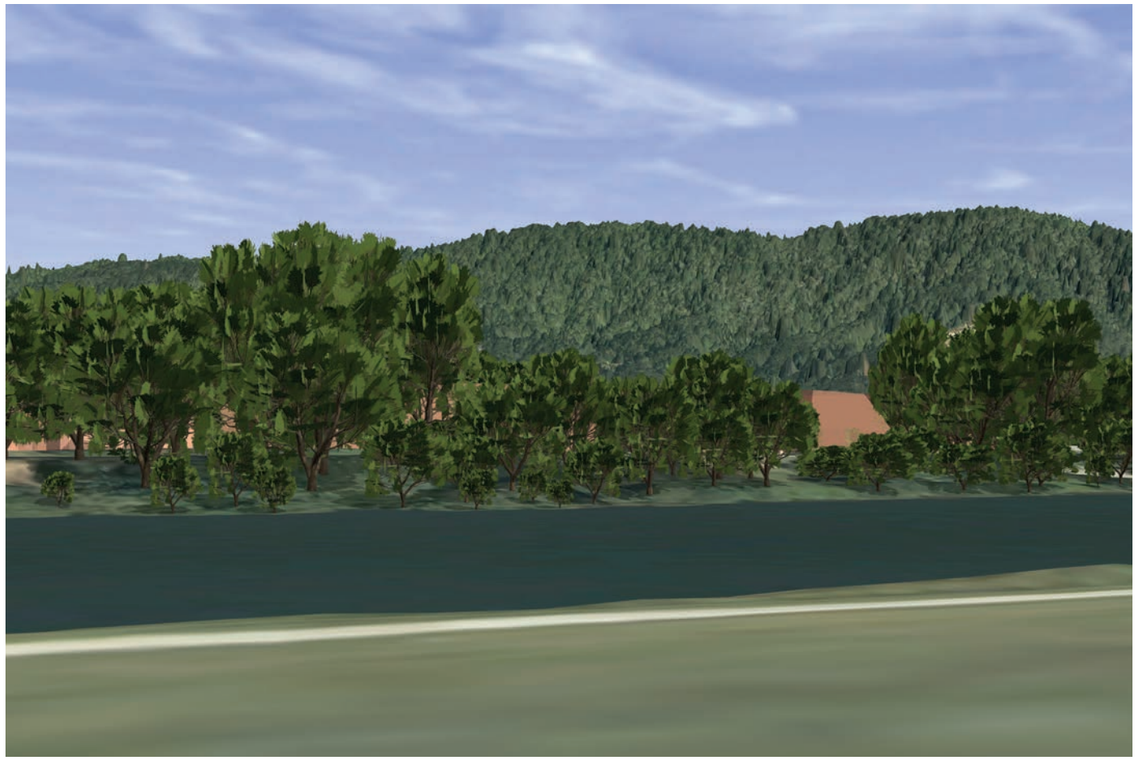


Model Showing the Potential Visibility of the Variation 3 Permittable Building Mass

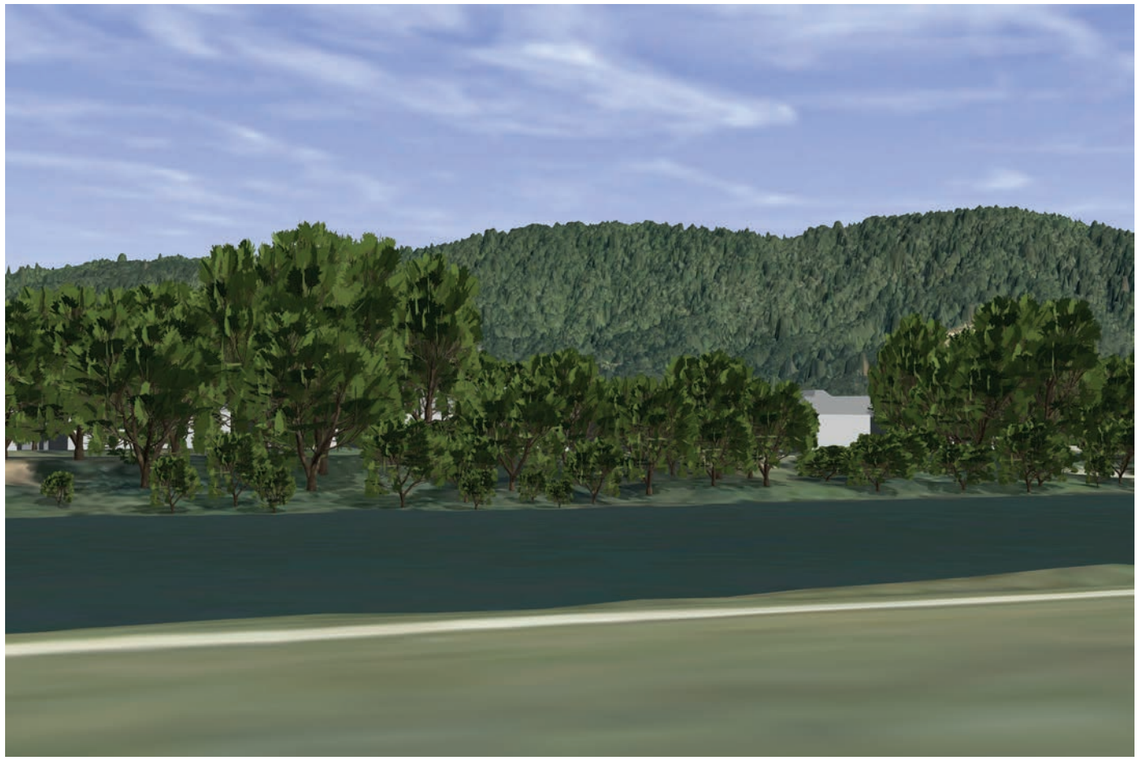


Model Showing the Potential Visibility of the Kainga Ora Permittable Development Envelope

Model Showing the Potential Visibility of the Kainga Ora Permittable Building Mass

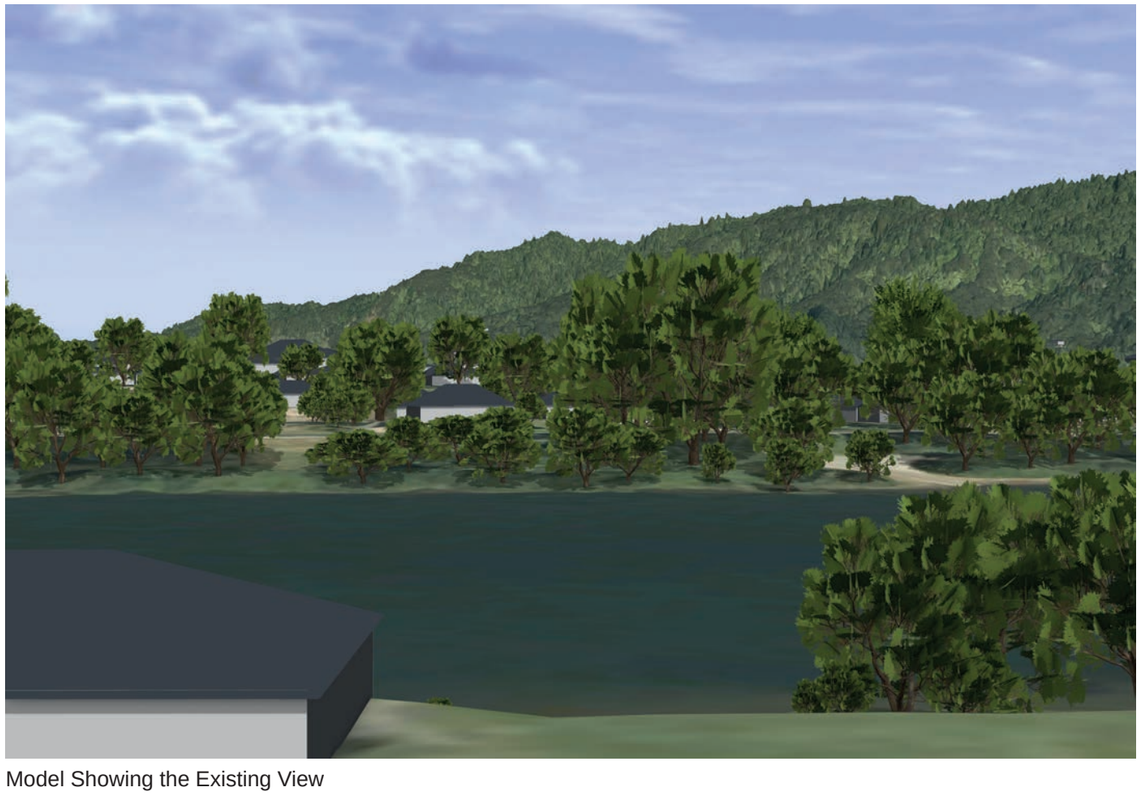


Model Showing the Potential Visibility of the Recommended Permittable Development Envelope



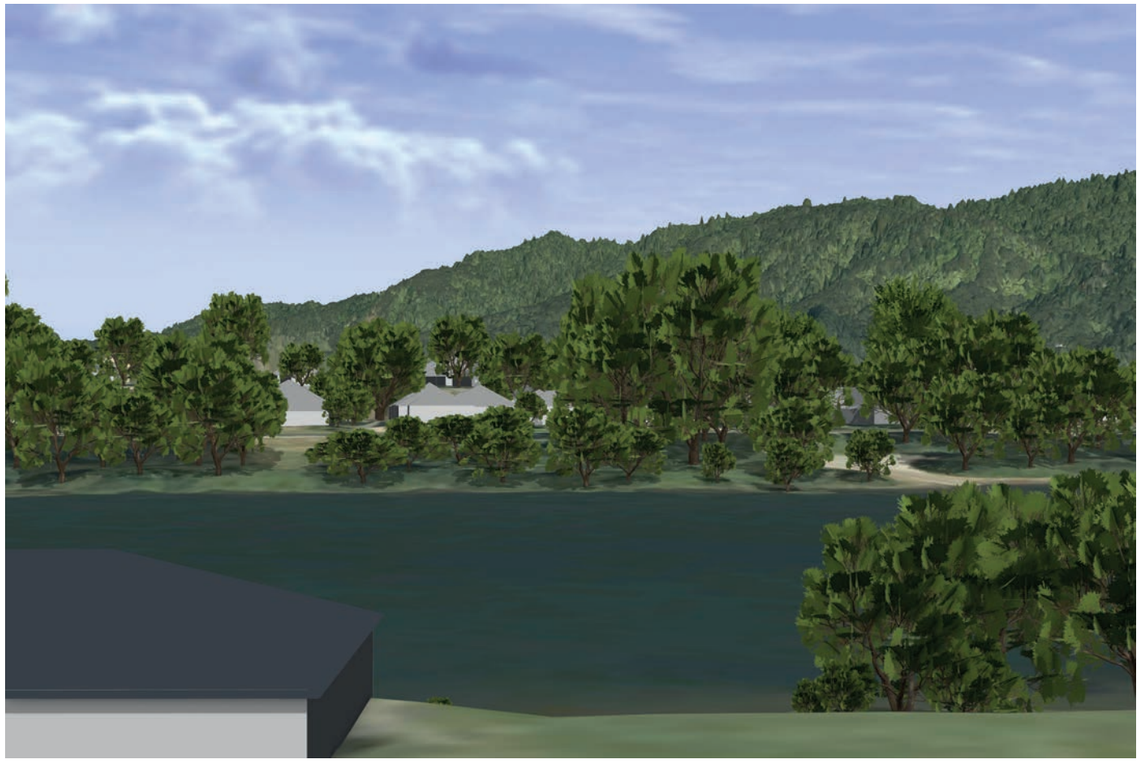
Model Showing the Potential Visibility of the Recommended Permittable Building Mass

Photograph Showing Existing View

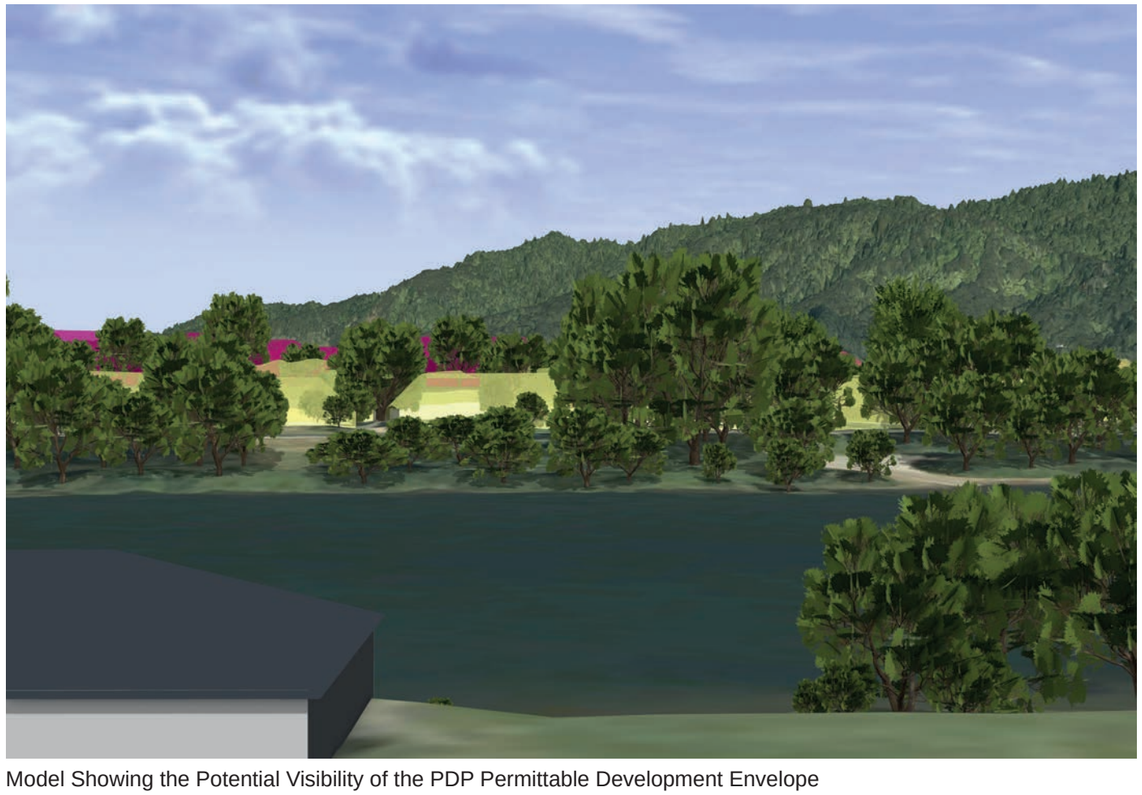


Model Showing the Existing View

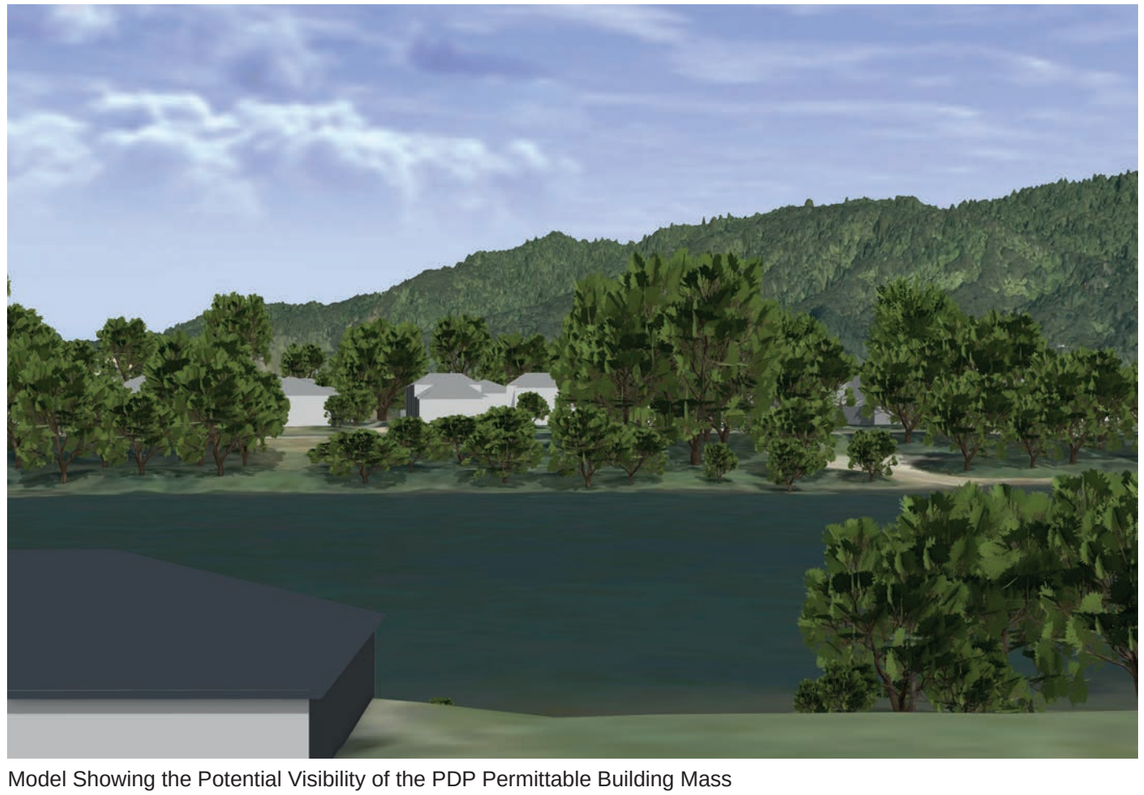
Model Showing the Potential Visibility of the ODP Permittable Development Envelope



Model Showing the Potential Visibility of the ODP Permittable Building Mass

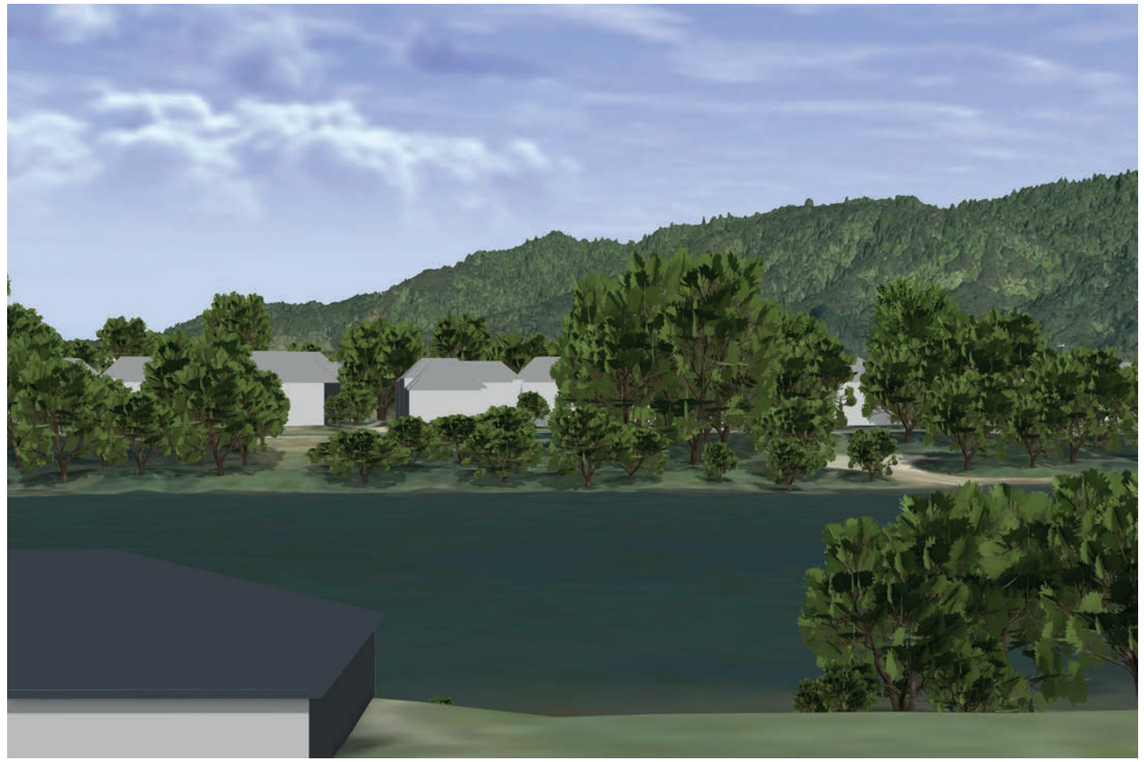


Model Showing the Potential Visibility of the PDP Permittable Development Envelope

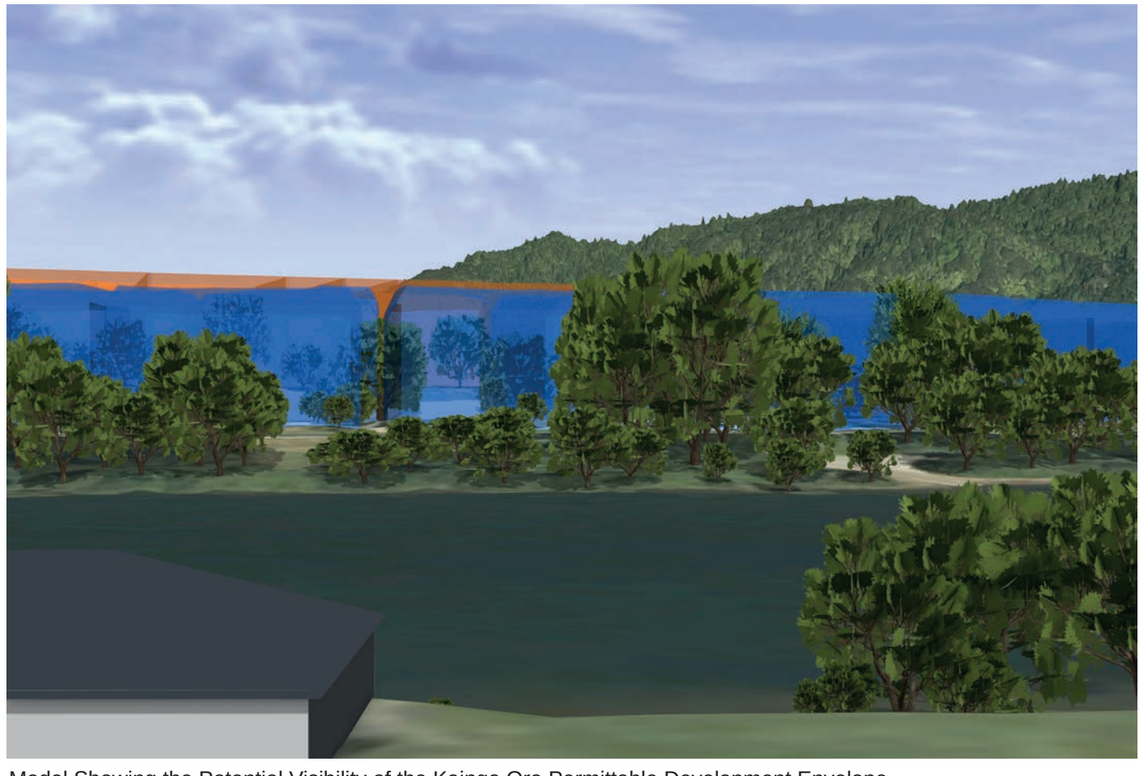


Model Showing the Potential Visibility of the PDP Permittable Building Mass

Model Showing the Potential Visibility of the Variation 3 Permittable Development Envelope

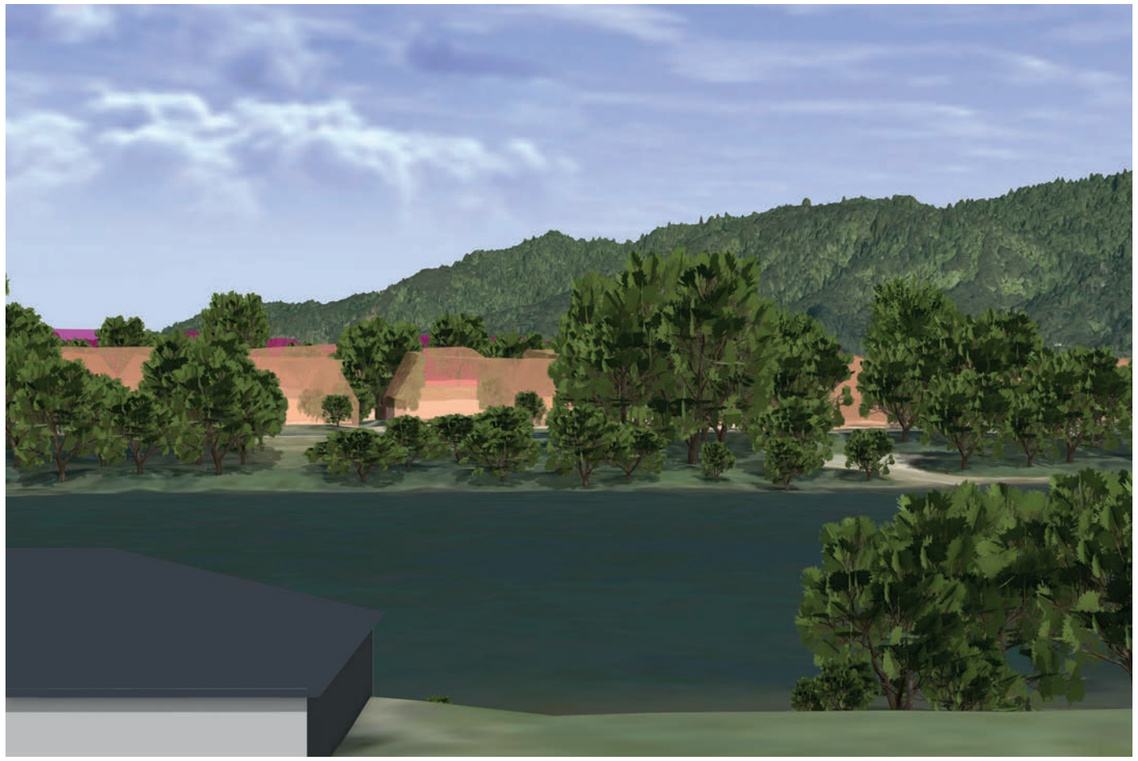


Model Showing the Potential Visibility of the Variation 3 Permittable Building Mass

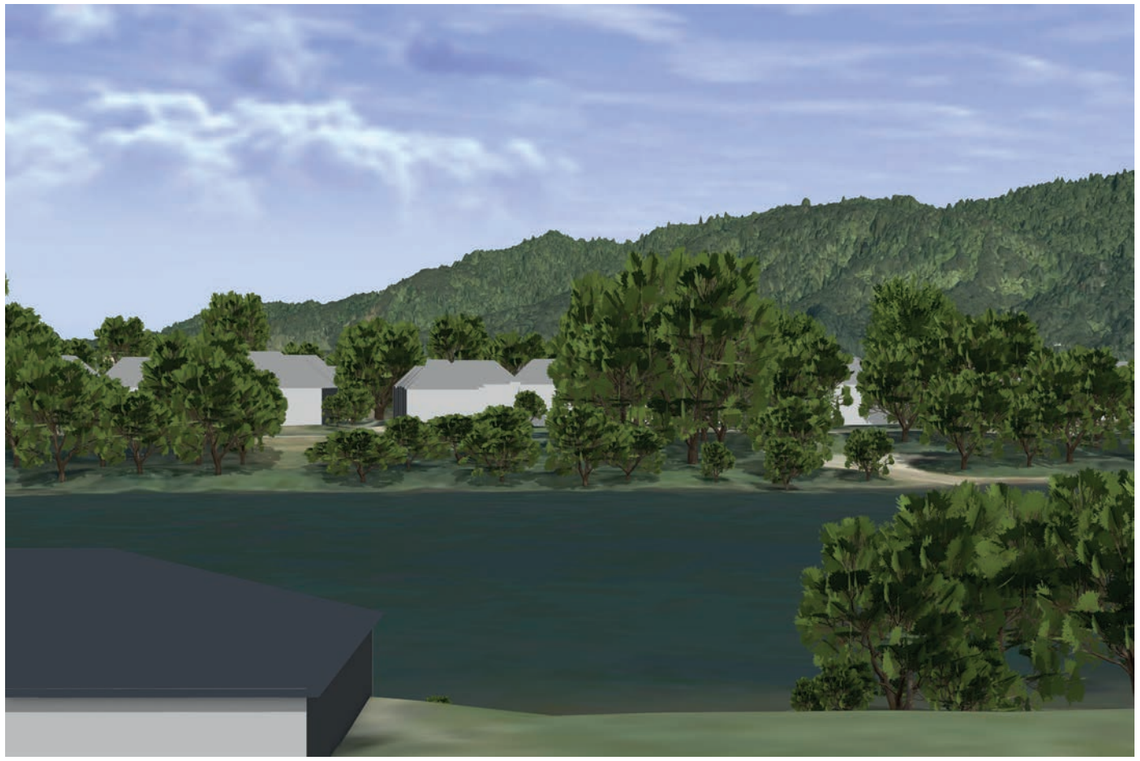


Model Showing the Potential Visibility of the Kainga Ora Permittable Development Envelope

Model Showing the Potential Visibility of the Kainga Ora Permittable Building Mass



Model Showing the Potential Visibility of the Recommended Permittable Development Envelope



Model Showing the Potential Visibility of the Recommended Permittable Building Mass

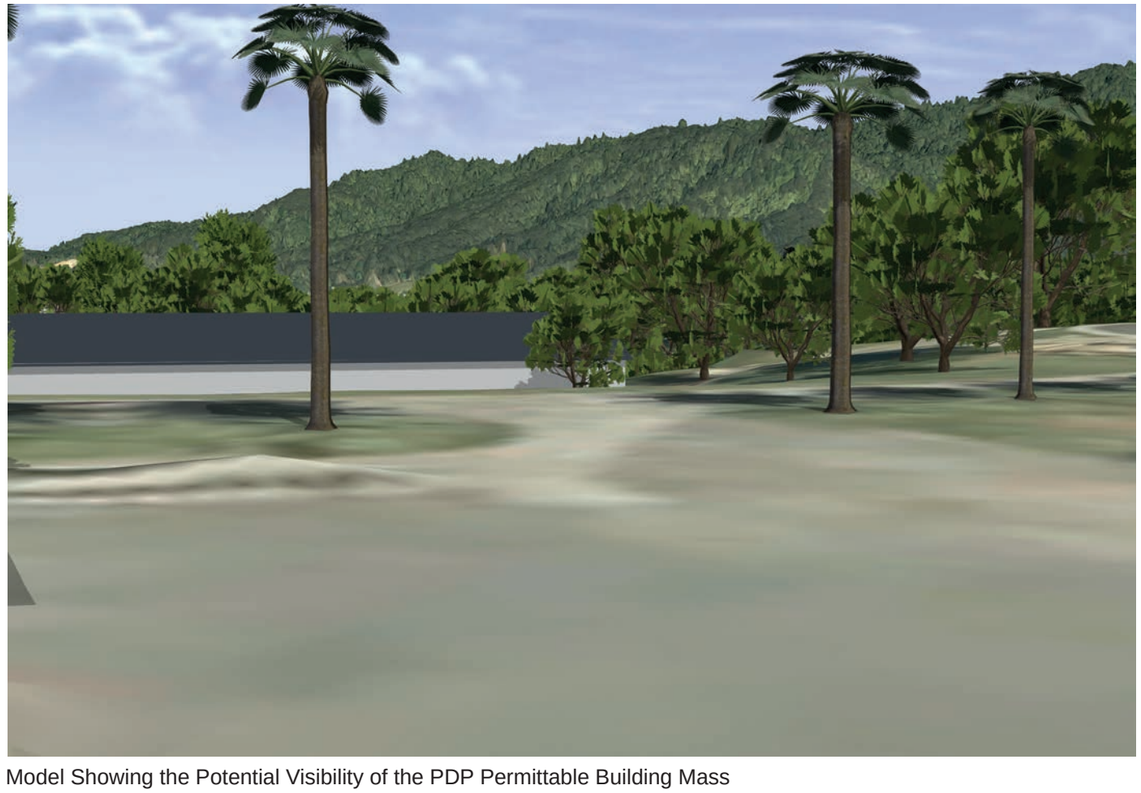
Photograph Showing Existing View

Model Showing the Existing View

Model Showing the Potential Visibility of the ODP Permittable Development Envelope

Model Showing the Potential Visibility of the ODP Permittable Building Mass

Model Showing the Potential Visibility of the PDP Permittable Development Envelope



Model Showing the Potential Visibility of the PDP Permittable Building Mass

Model Showing the Potential Visibility of the Variation 3 Permittable Development Envelope

Model Showing the Potential Visibility of the Variation 3 Permittable Building Mass

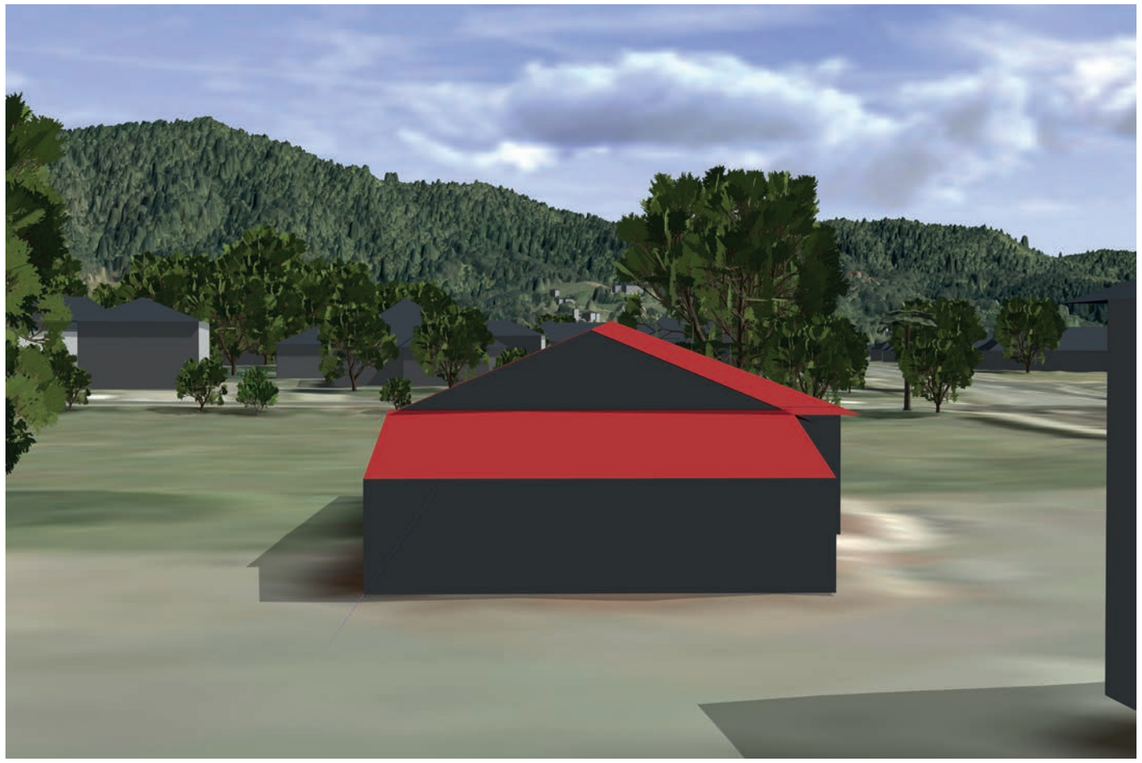
Model Showing the Potential Visibility of the Kainga Ora Permittable Development Envelope

Model Showing the Potential Visibility of the Kainga Ora Permittable Building Mass

Model Showing the Potential Visibility of the Recommended Permittable Development Envelope

Model Showing the Potential Visibility of the Recommended Permittable Building Mass

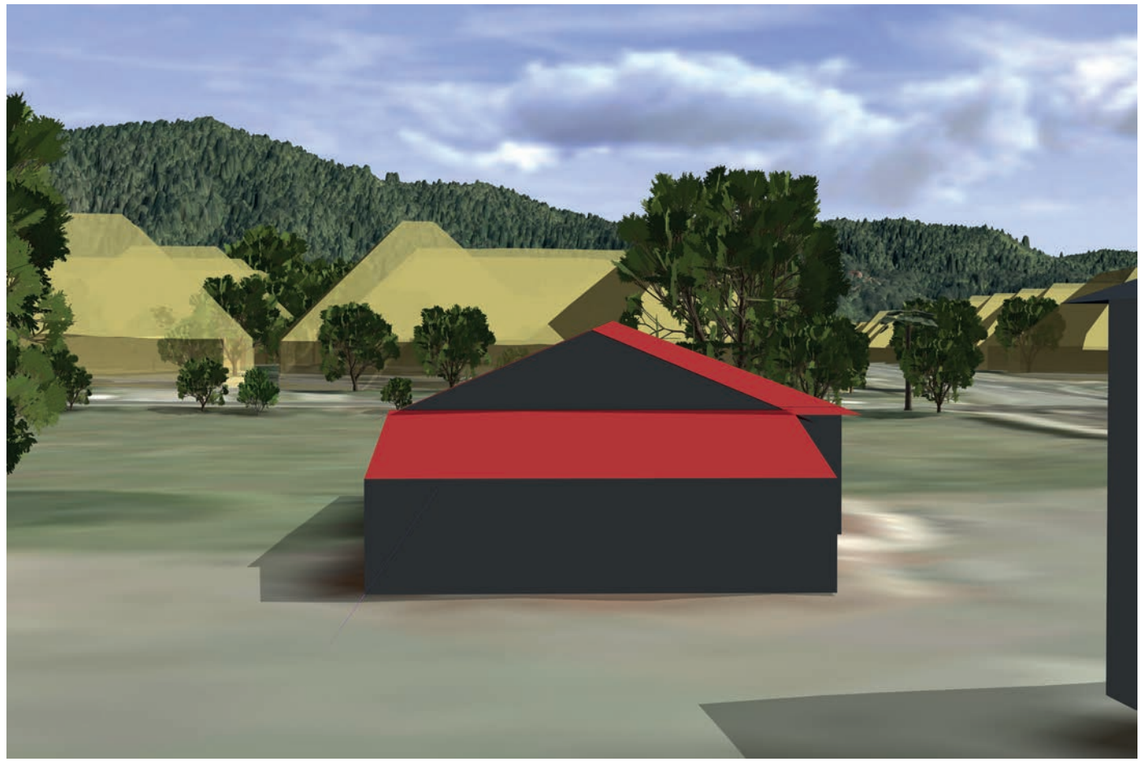
Photograph Showing Existing View



Model Showing the Existing View

Model Showing the Potential Visibility of the ODP Permittable Development Envelope

Model Showing the Potential Visibility of the ODP Permittable Building Mass



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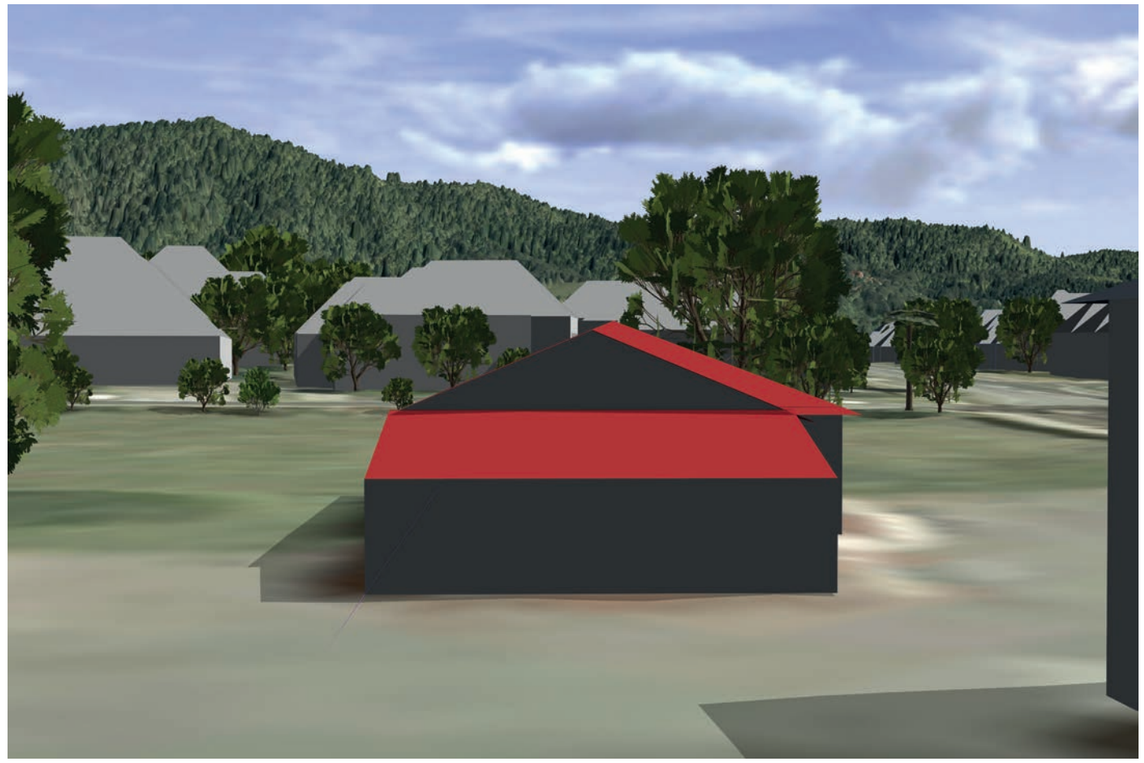
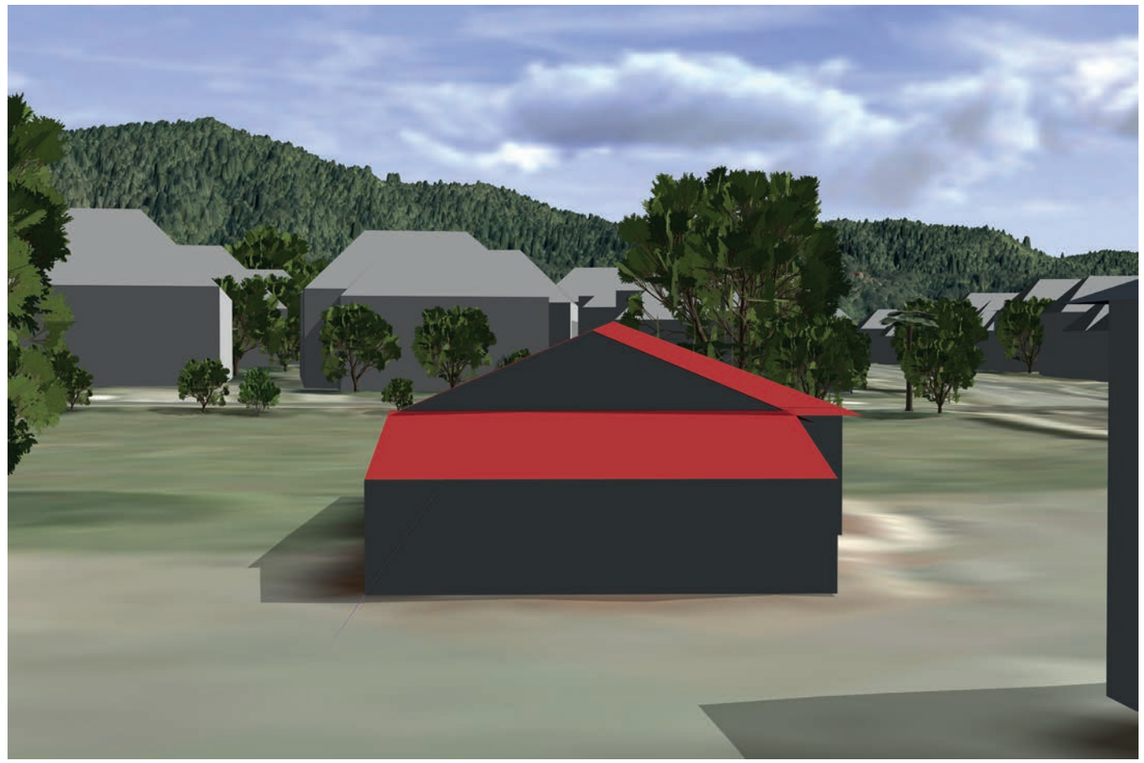
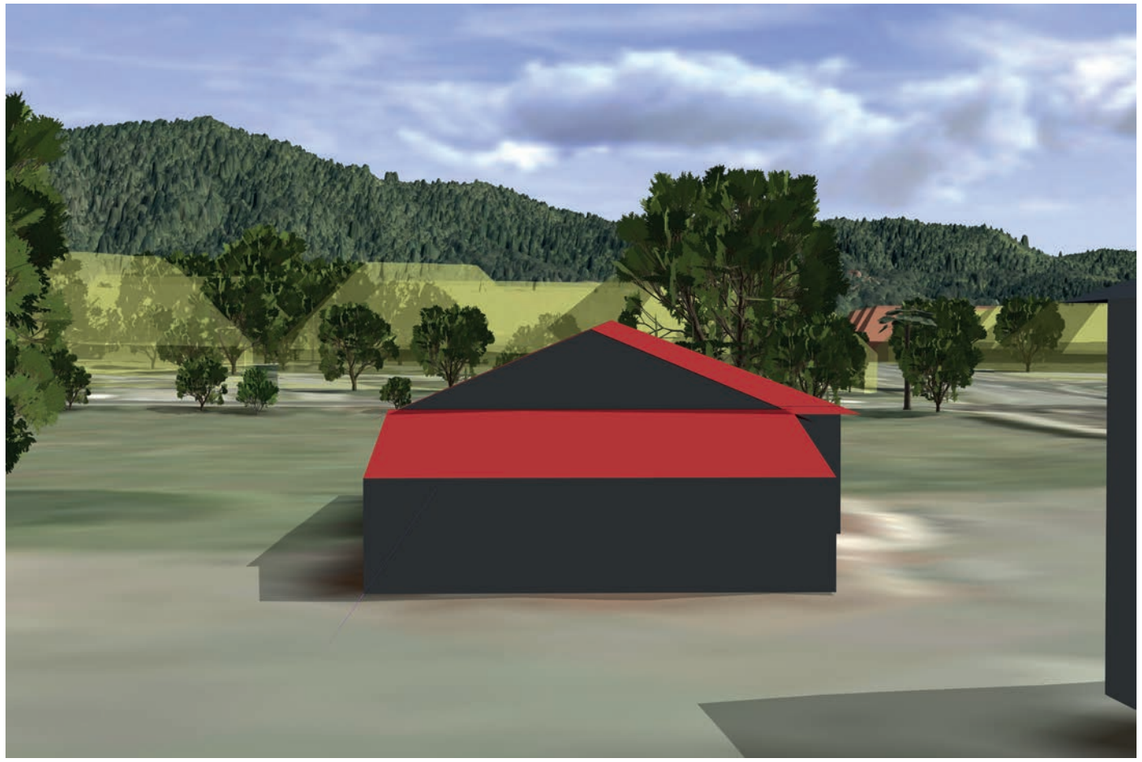


Model Showing the Potential Visibility of the PDP Permittable Building Mass

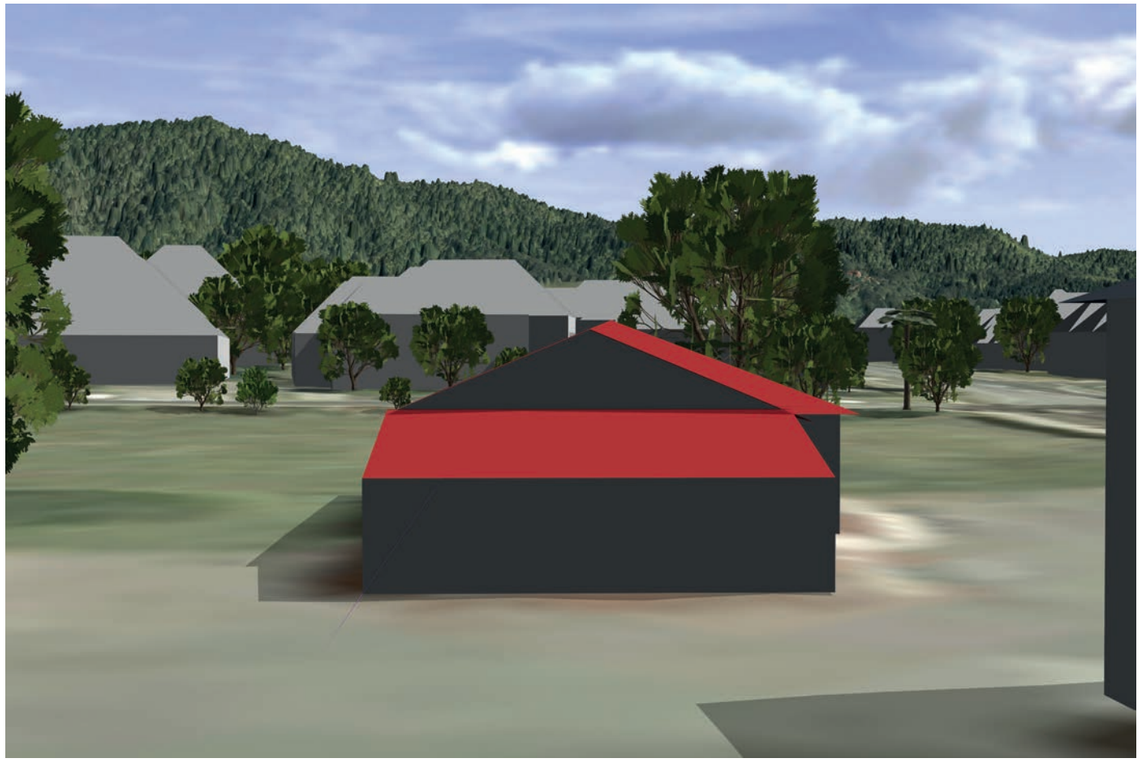
Model Showing the Potential Visibility of the Variation 3 Permittable Development Envelope



Model Showing the Potential Visibility of the Variation 3 Permittable Building Mass



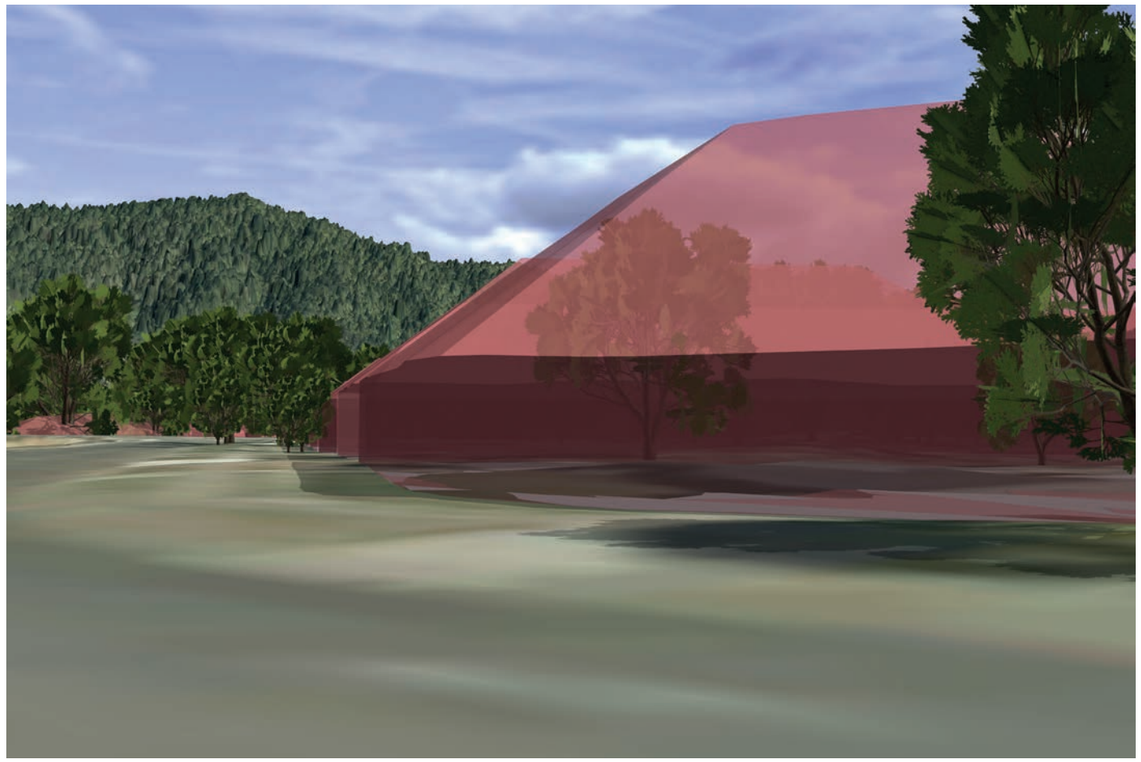
Model Showing the Potential Visibility of the Recommended Permittable Development Envelope



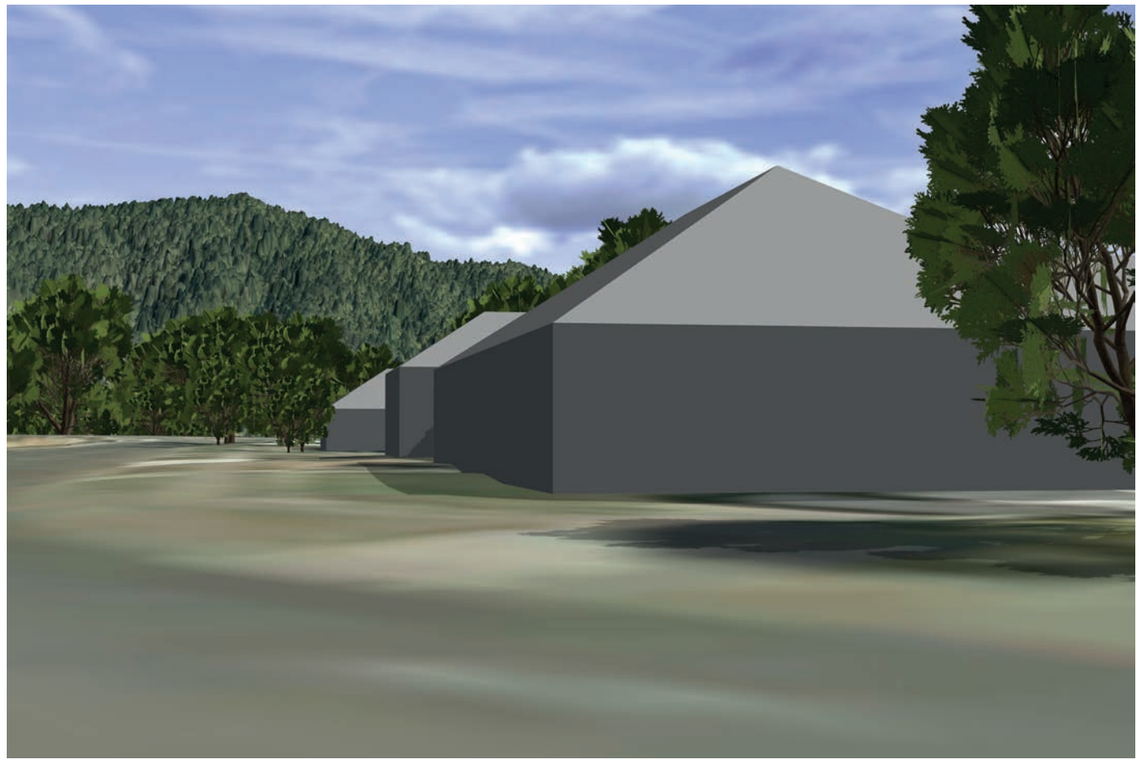
Model Showing the Potential Visibility of the Recommended Permittable Building Mass

Photograph Showing Existing View

Model Showing the Existing View

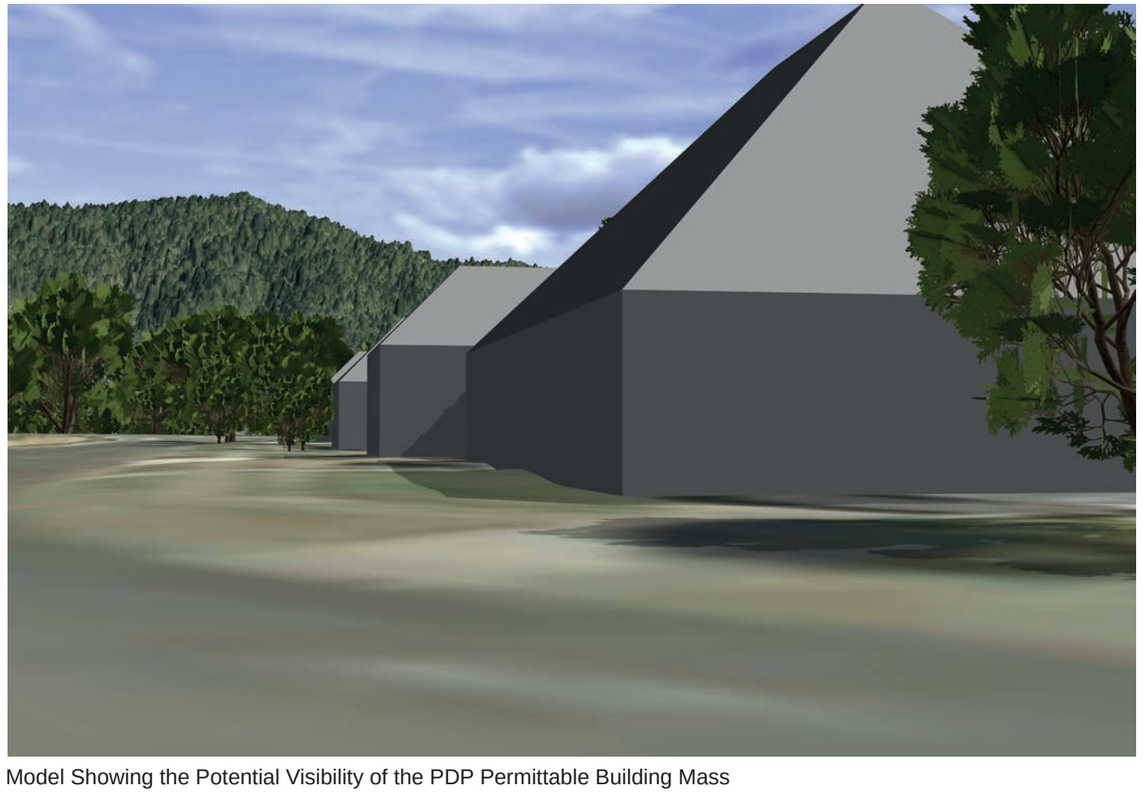


Model Showing the Potential Visibility of the ODP Permittable Development Envelope

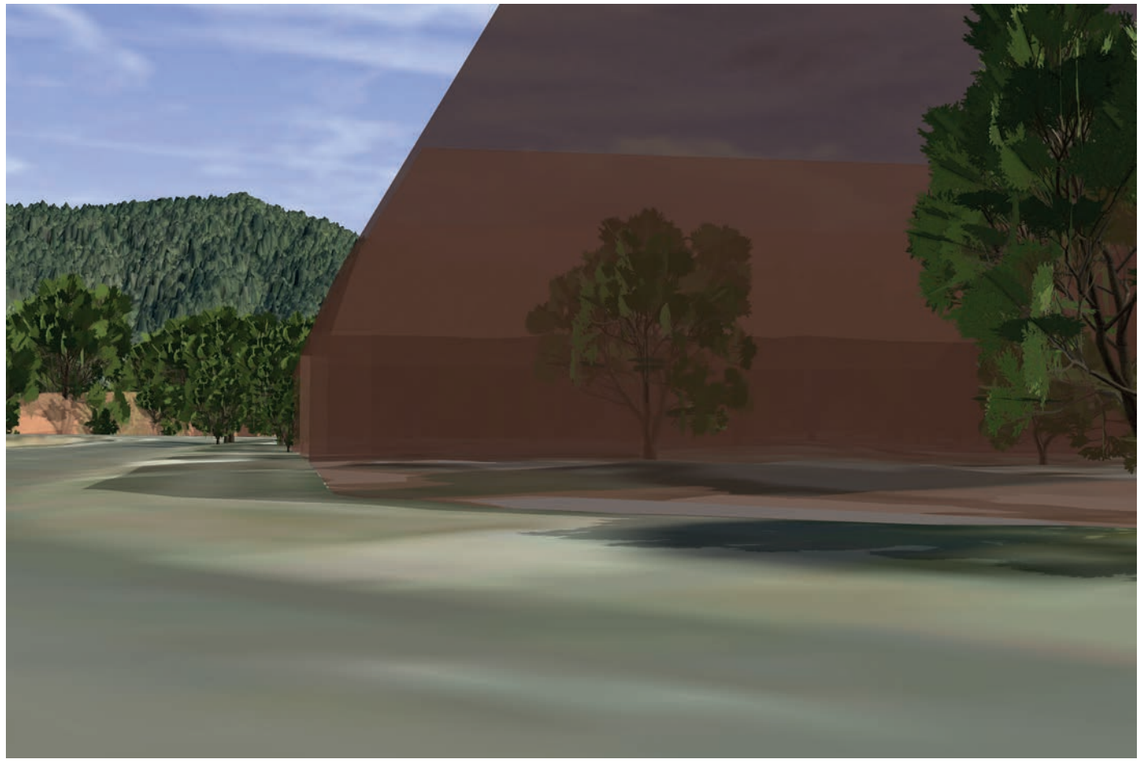


Model Showing the Potential Visibility of the ODP Permittable Building Mass

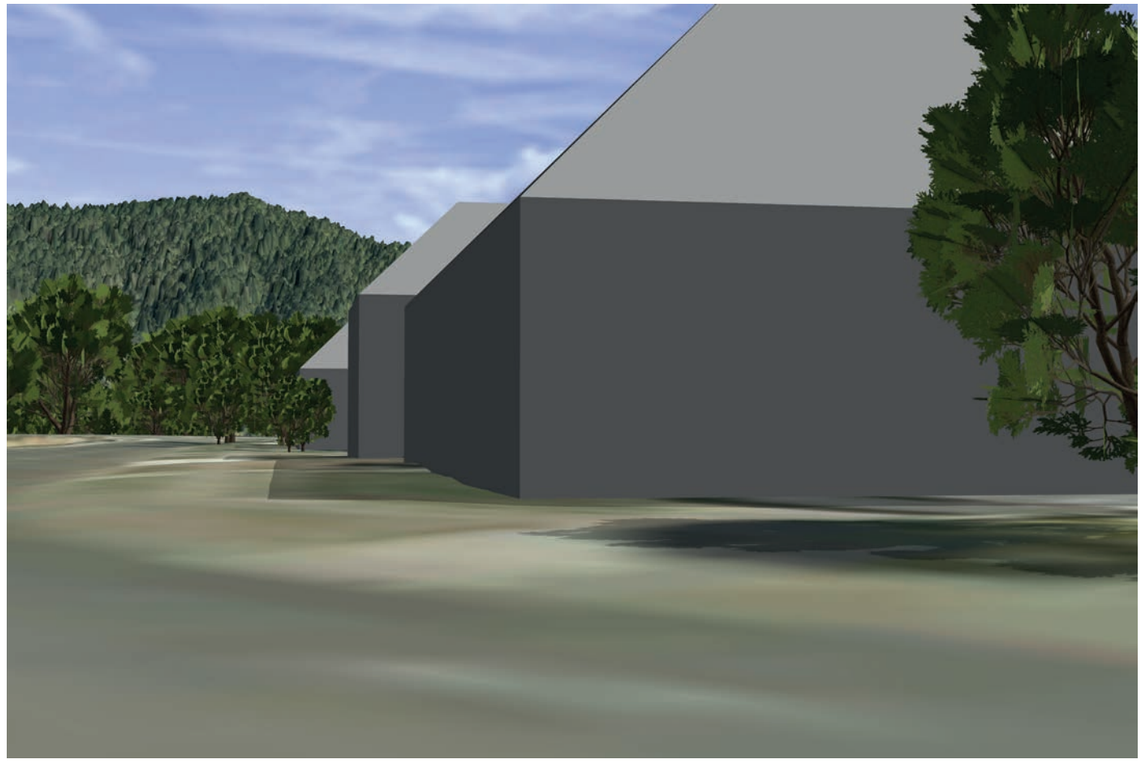
Model Showing the Potential Visibility of the PDP Permittable Development Envelope



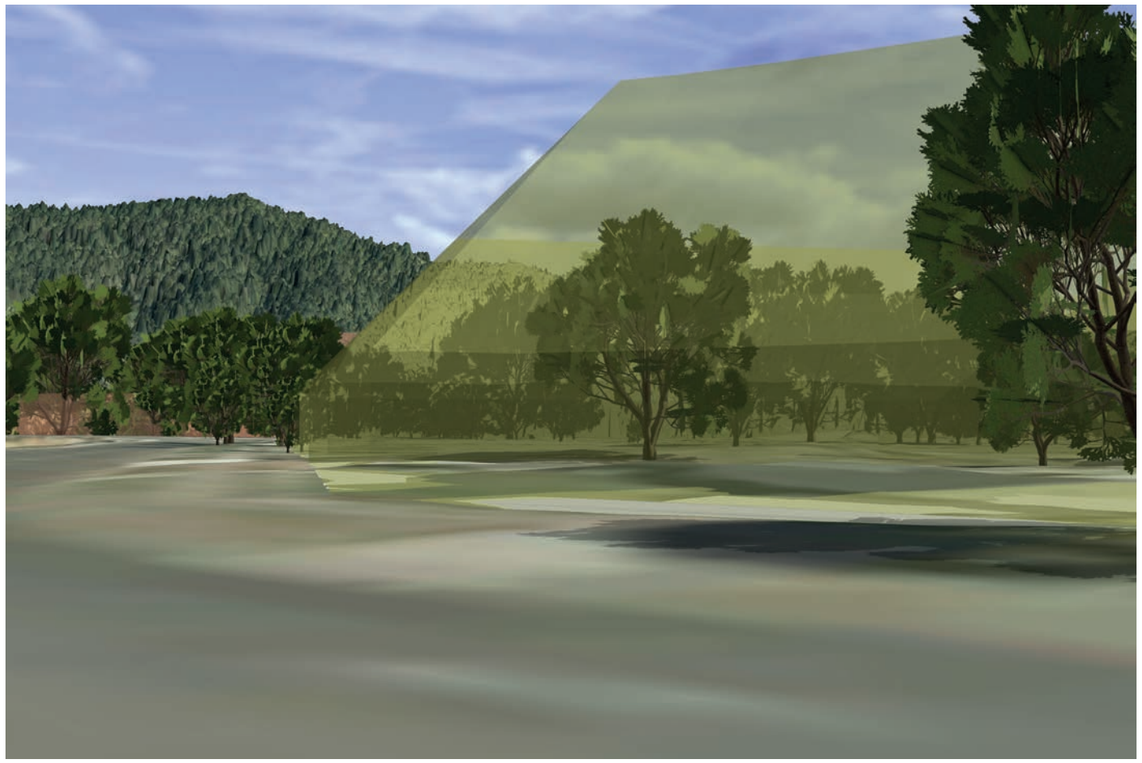
Model Showing the Potential Visibility of the PDP Permittable Building Mass



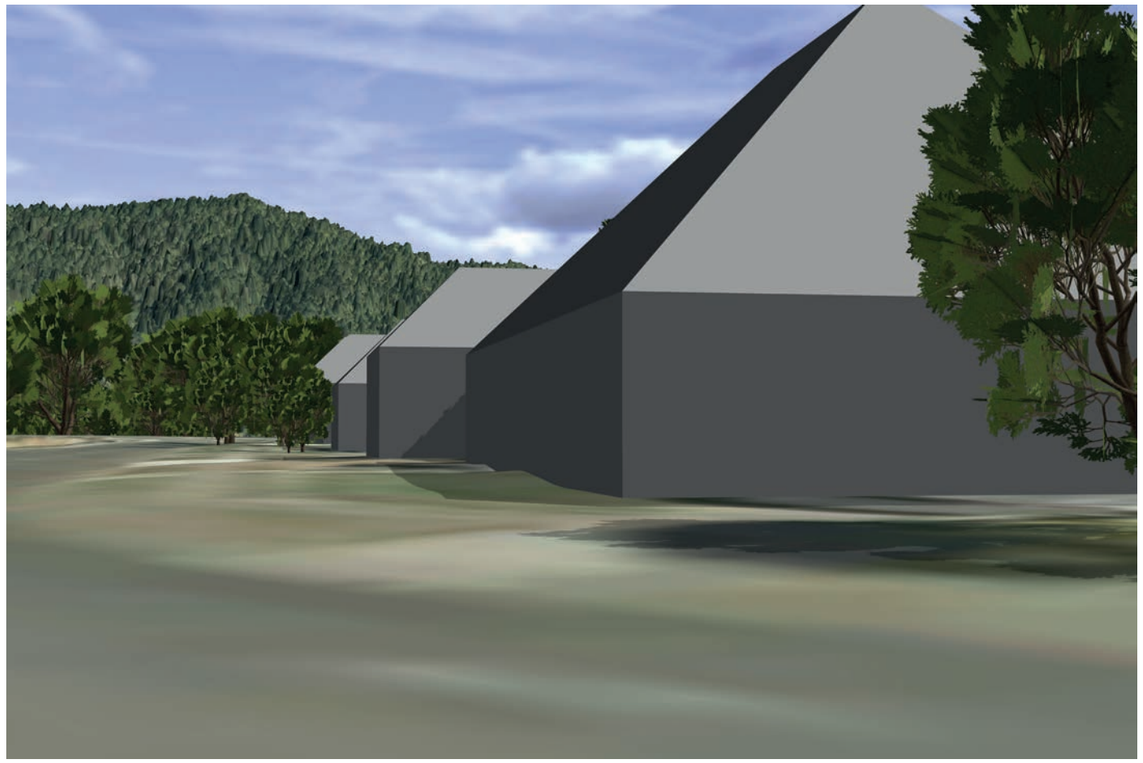
Model Showing the Potential Visibility of the Variation 3 Permittable Development Envelope



Model Showing the Potential Visibility of the Variation 3 Permittable Building Mass

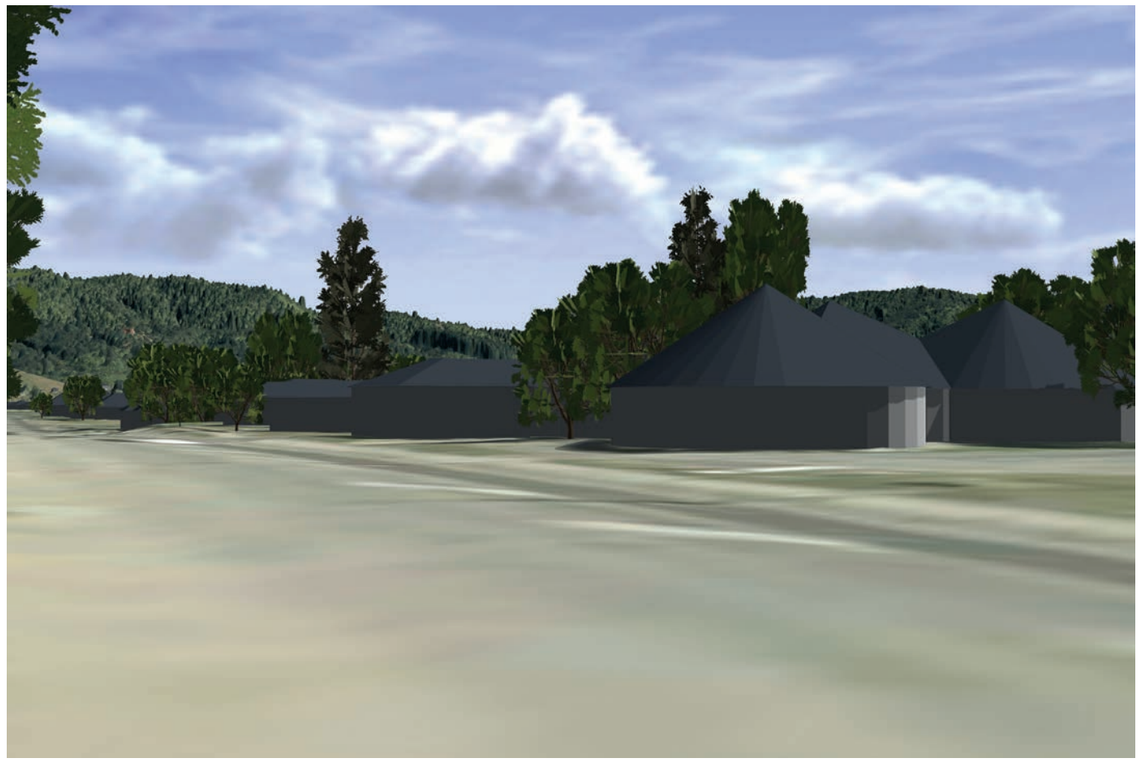


Model Showing the Potential Visibility of the Recommended Permittable Development Envelope

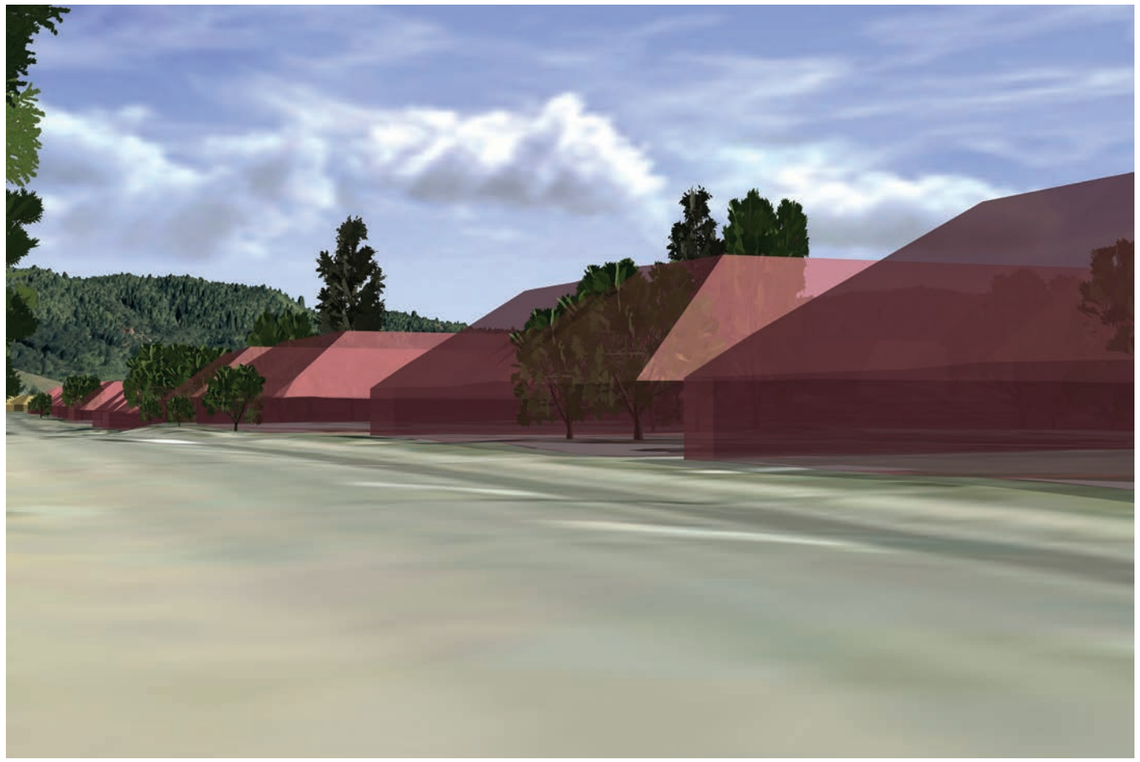


Model Showing the Potential Visibility of the Recommended Permittable Building Mass

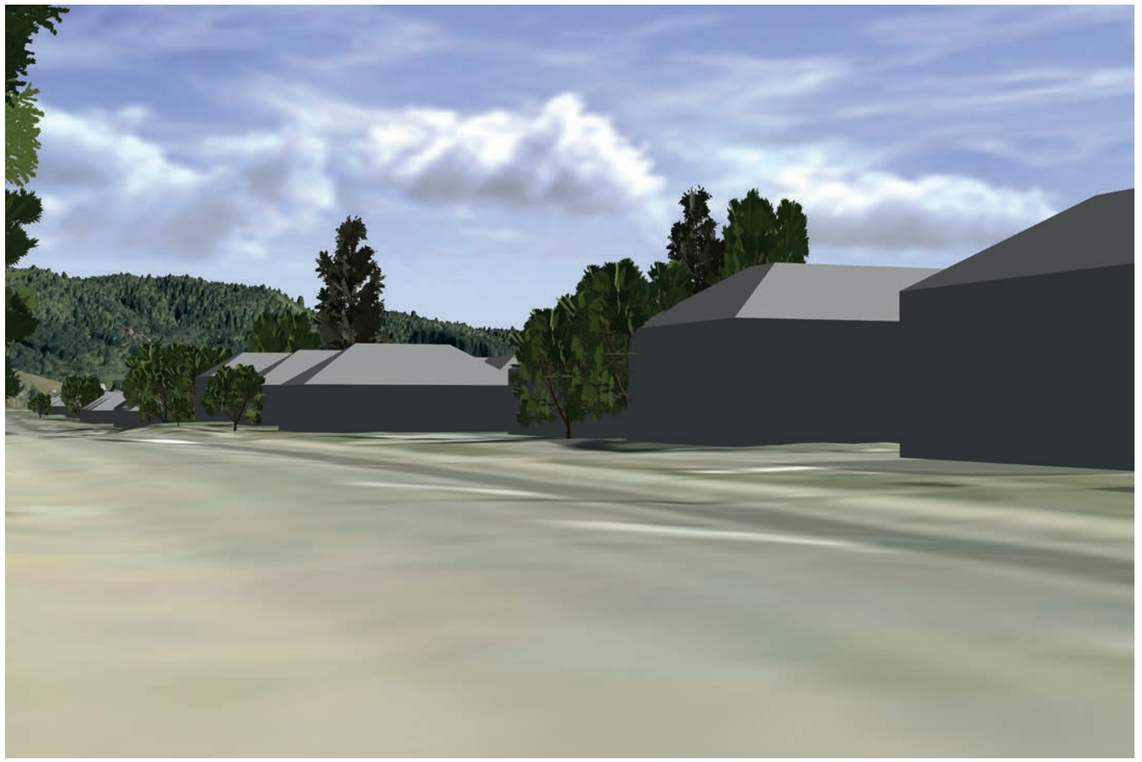
Photograph Showing Existing View



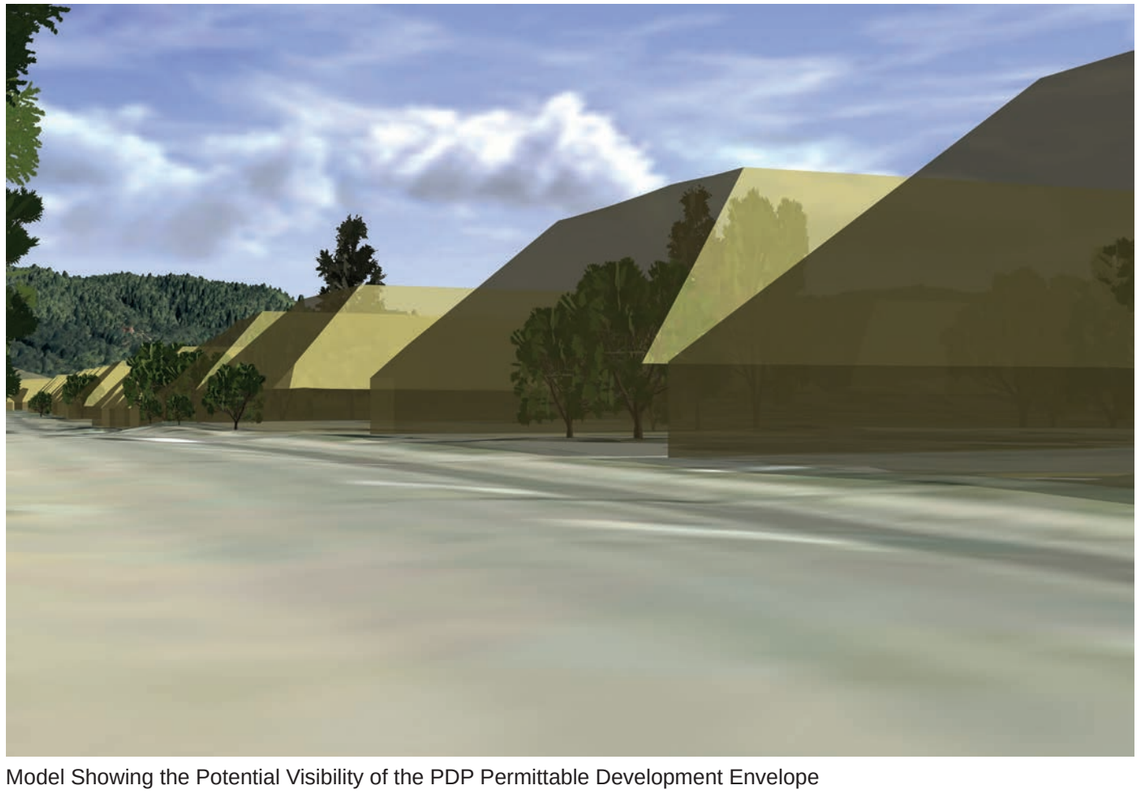
Model Showing the Existing View



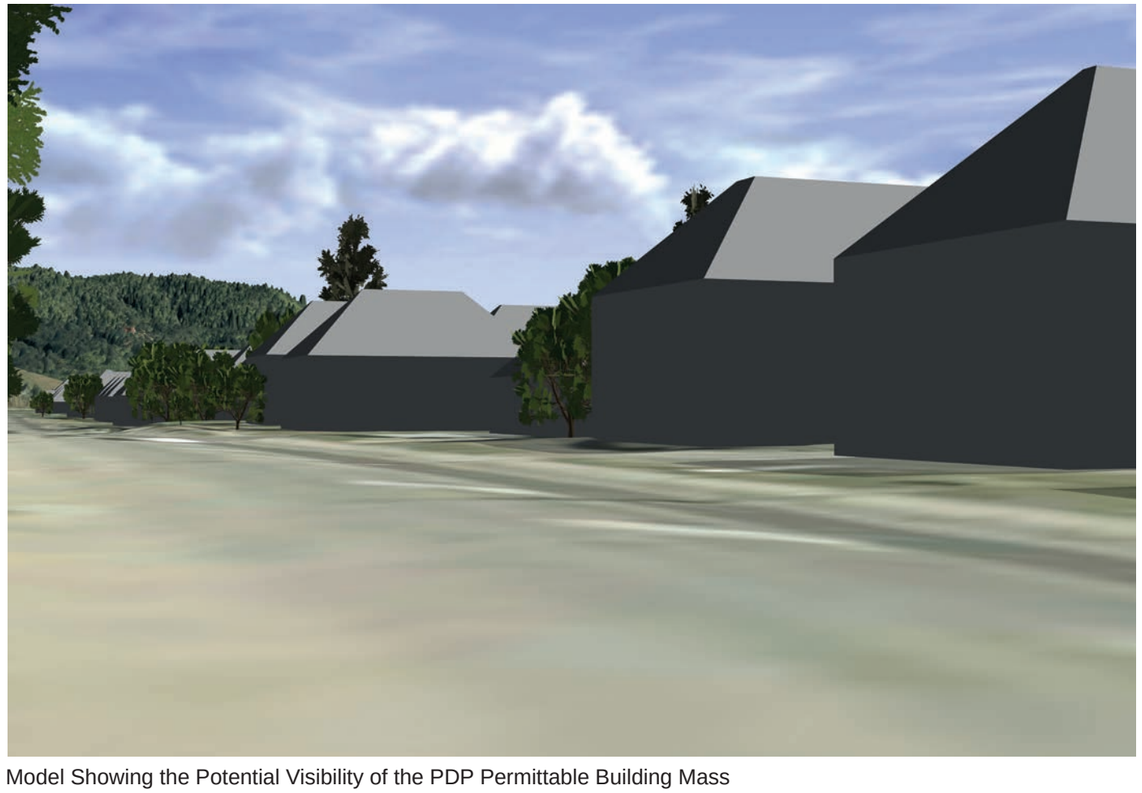
Model Showing the Potential Visibility of the ODP Permittable Development Envelope



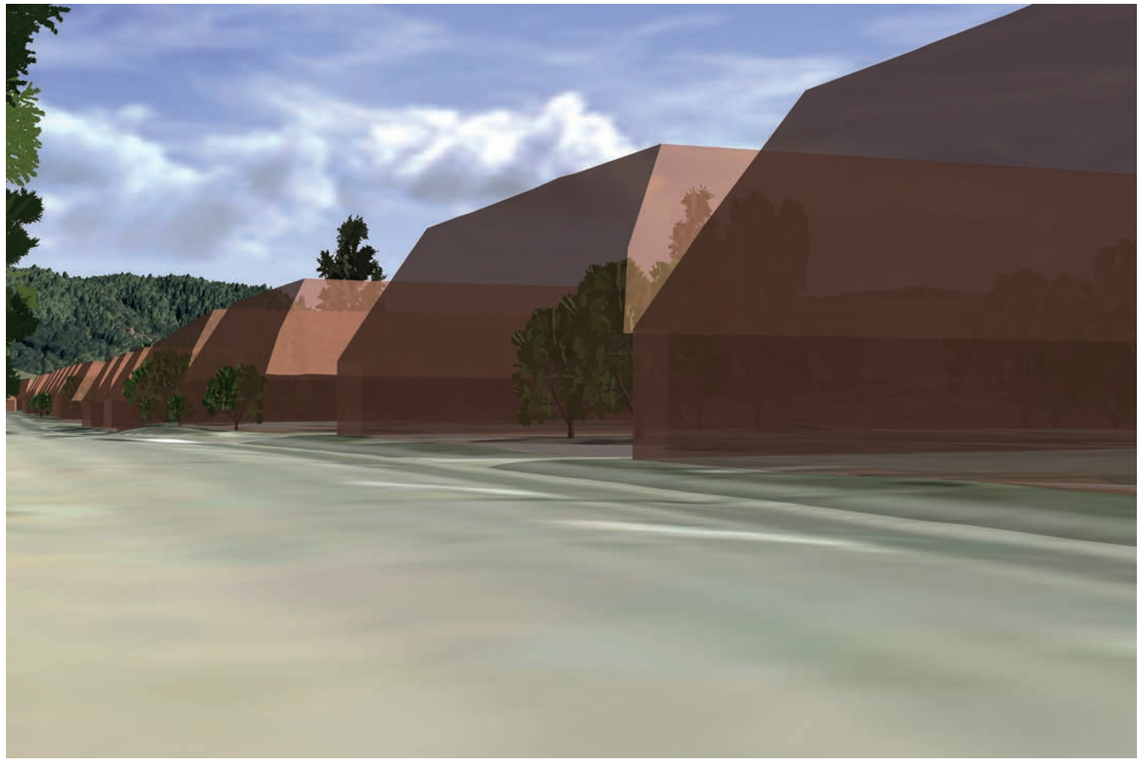
Model Showing the Potential Visibility of the ODP Permittable Building Mass



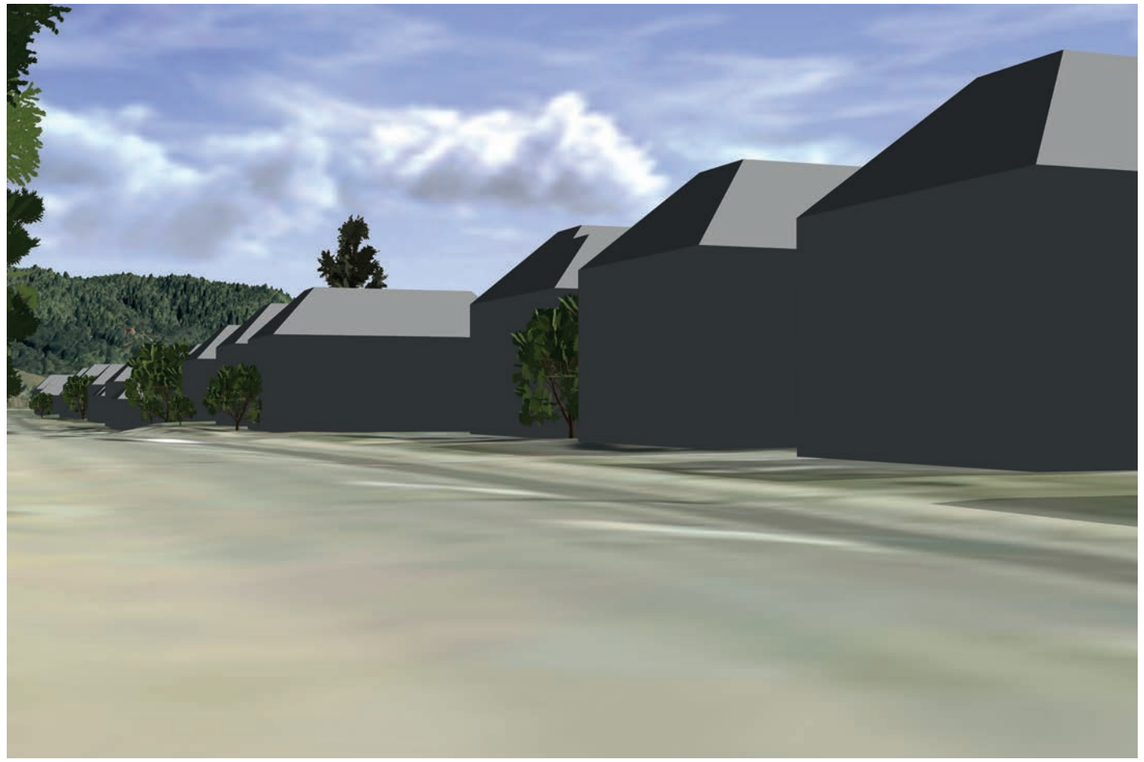
Model Showing the Potential Visibility of the PDP Permittable Development Envelope



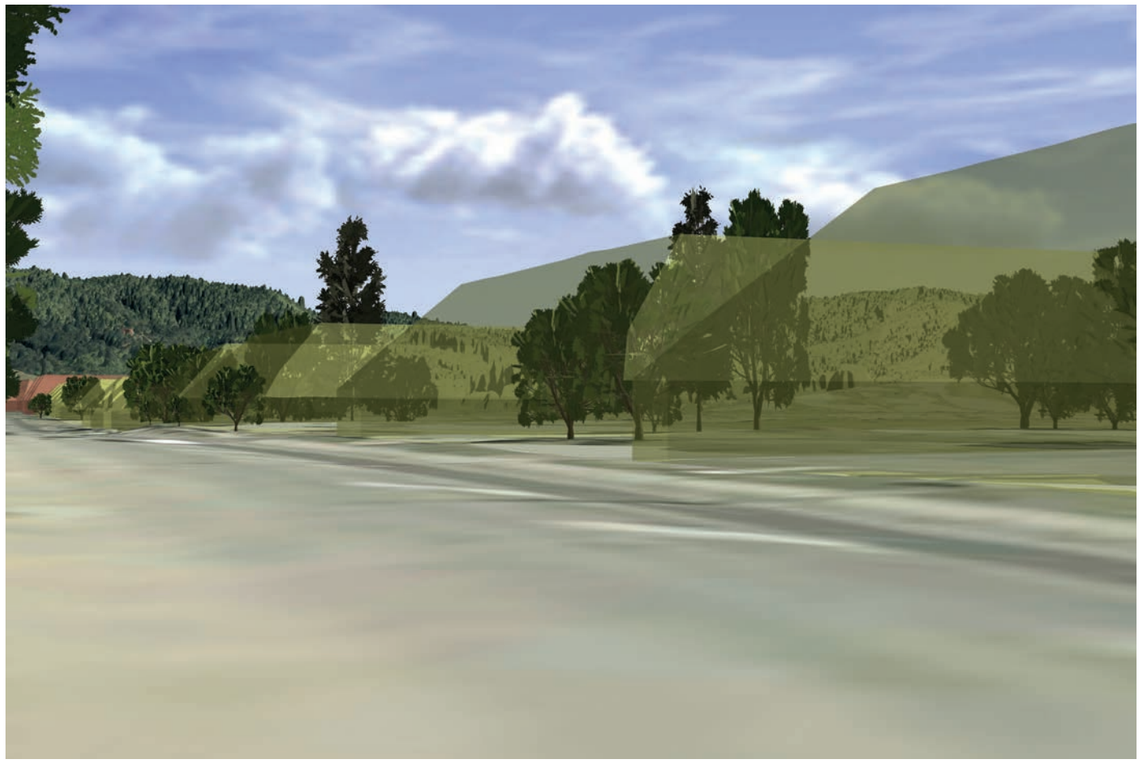
Model Showing the Potential Visibility of the PDP Permittable Building Mass



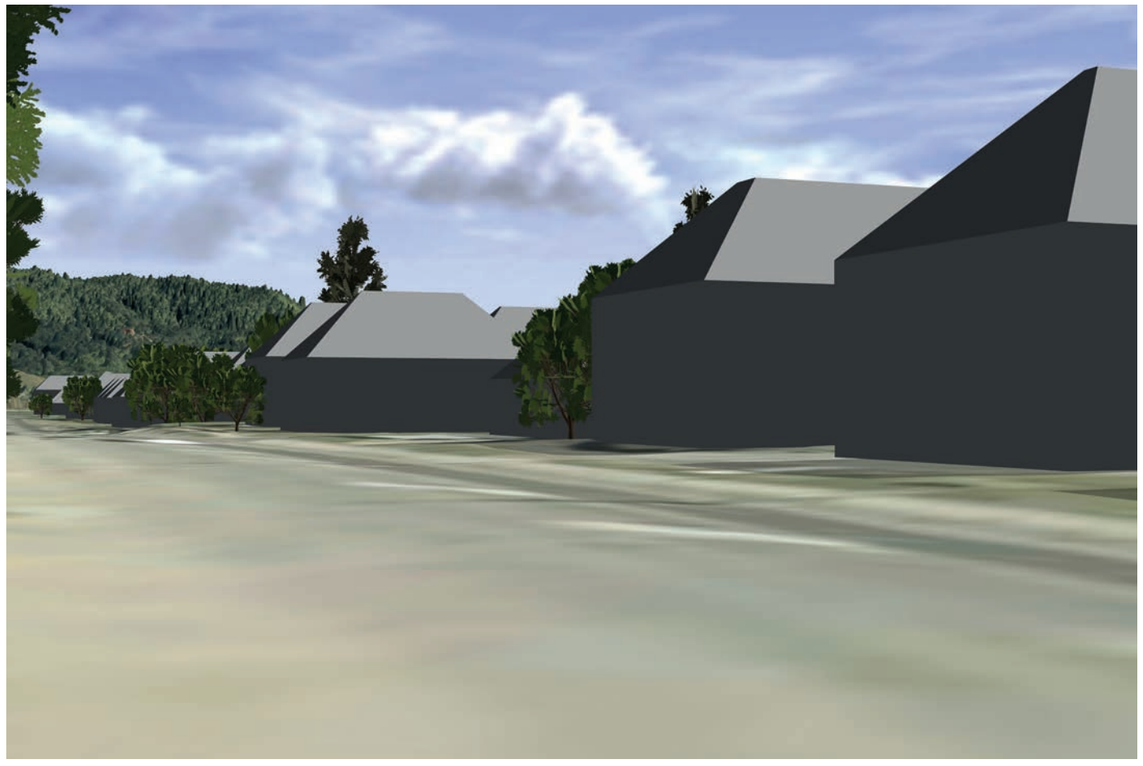
Model Showing the Potential Visibility of the Variation 3 Permittable Development Envelope



Model Showing the Potential Visibility of the Variation 3 Permittable Building Mass



Model Showing the Potential Visibility of the Recommended Permittable Development Envelope



Model Showing the Potential Visibility of the Recommended Permittable Building Mass

Annexure 6 - Near Skyline Diagram

TRUE SKYLINE

NEAR SKYLINE

View Location Data

NZTM Easting:	1789906
NZTM Northing:	5829454
Focal length:	50mm
Photographer	Dave Mansergh
Camera:	Canon EOS D5 Full Frame Digital with EF 50mm F/1.4 USM (Prime)
Date:	3rd March 2023

SINGLE IMAGE FRAME SIZE

Image should be viewed at a distance of 211 mm to approximate actual scale when printed at A3

NEAR SKYLINE & TRUE SKYLINE

VARIATION 3 VIEWSHAFT ANALYSIS | JUNE 2023 | R0

mansergh graham LANDSCAPE ARCHITECTS

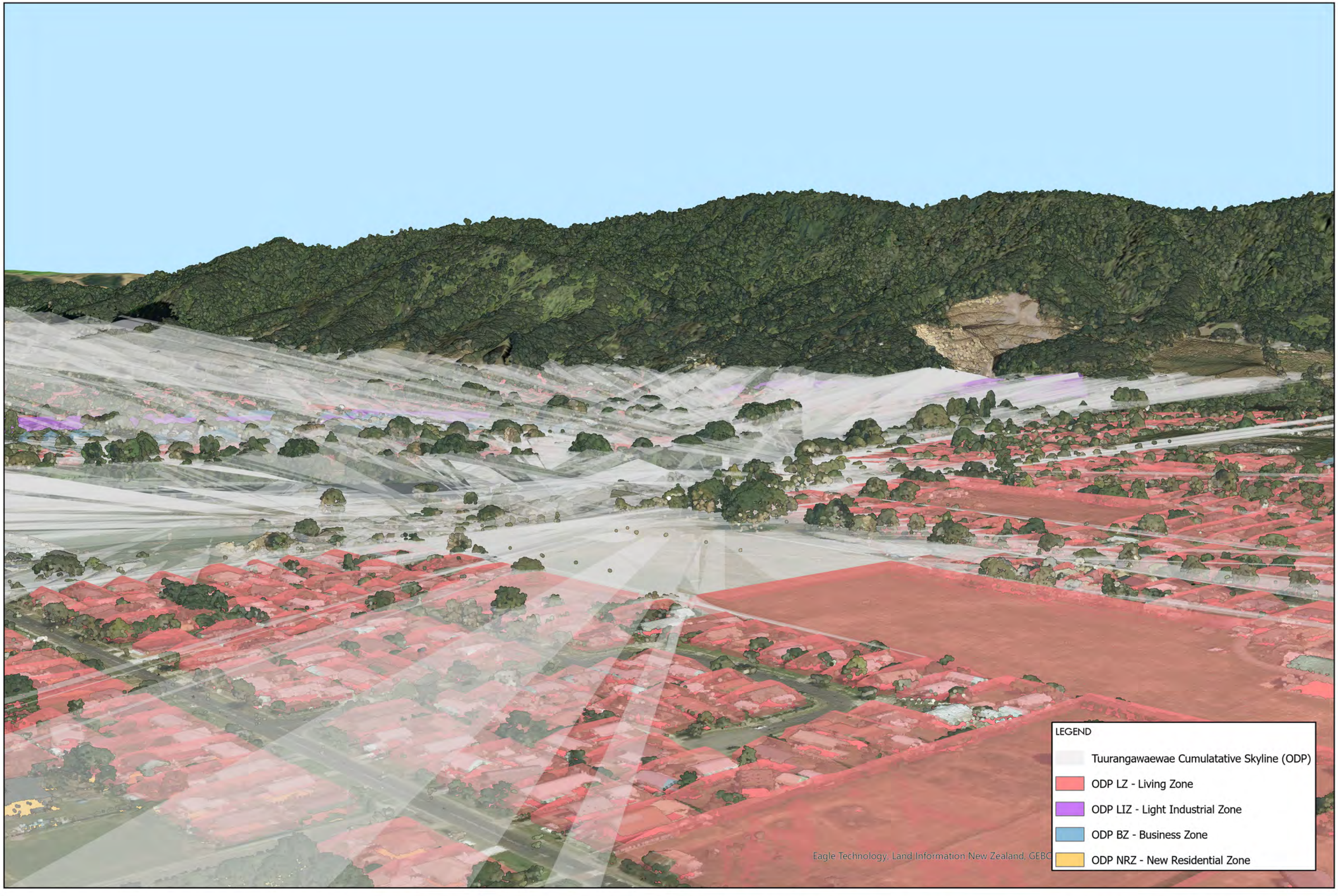
Annexure 7 - Skyline Analysis3D

Existing Cultural View Shaft From Tuurangawaewae Marae (3D)

Variation 3 Viewshaft Analysis

Scale: N/A at A3 | June 2023 | Map No-13 | R0

manaergh graham
LANDSCAPE ARCHITECTS



Skyline Analysis of the development Envelopes Achievable Under The ODP (3D)

Variation 3 Viewshaft Analysis

Scale: N/A at A3 | June 2023 | Map No-09 | R0

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LANDSCAPE ARCHITECTS

LEGEND

- PDP MRZ - Medium Density Residential Zone
- PDP GRZ - General Residential Zone
- PDP COMZ - Commercial Zone
- PDP GIZ - General Industrial Zone
- PDP TCZ - Town Centre Zone
- Tuurangawaewae Cumulatative Skyline (PDP)

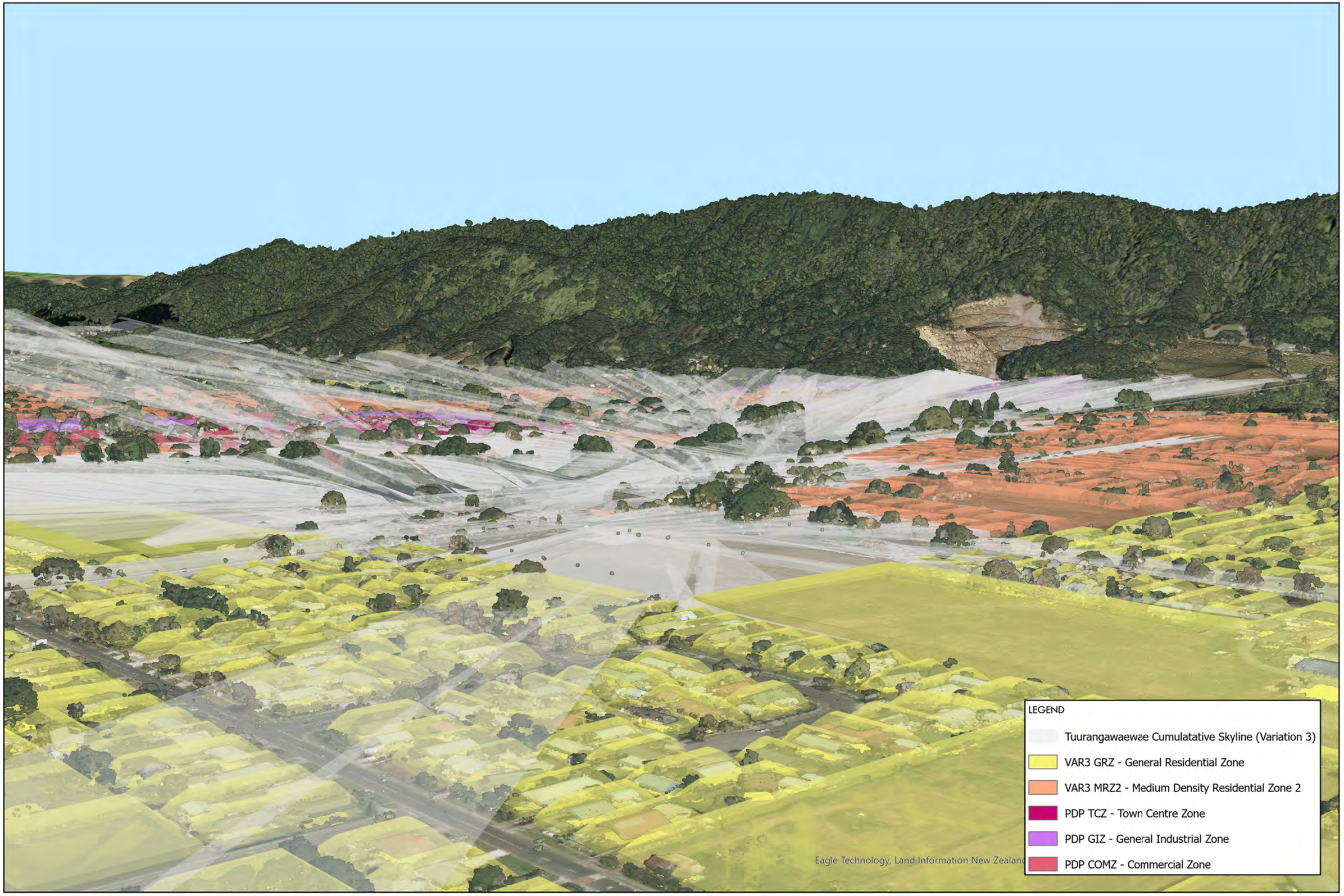
Eagle Technology, Land Information New Zealand, GEBC

Skyline Analysis of the development Envelopes Achievable Under The PDP (3D)

Variation 3 Viewshaft Analysis

Scale: N/A at A3 | June 2023 | Map No-13 | R0

mansergh graham LANDSCAPE ARCHITECTS



Skyline Analysis of the development Envelopes Achievable Under The Variation 3 (3D)

LEGEND

- Tuurangawaewae Cumulatative Skyline (KĀINGA ORA)
- ODP LIZ - Light Industrial Zone
- Kainga Ora HDZ - High Density Residential Zone
- Kainga Ora COMZ - Commercial Zone
- VAR MRZ2 - Medium Density Residential Zone 2

Eagle Technology, Land Information New Zeal

Skyline Analysis of the development Envelopes Achievable Under The Kainga Ora (3D)

Variation 3 Viewshaft Analysis

Scale: N/A at A3 | June 2023 | Map No-11 | R0

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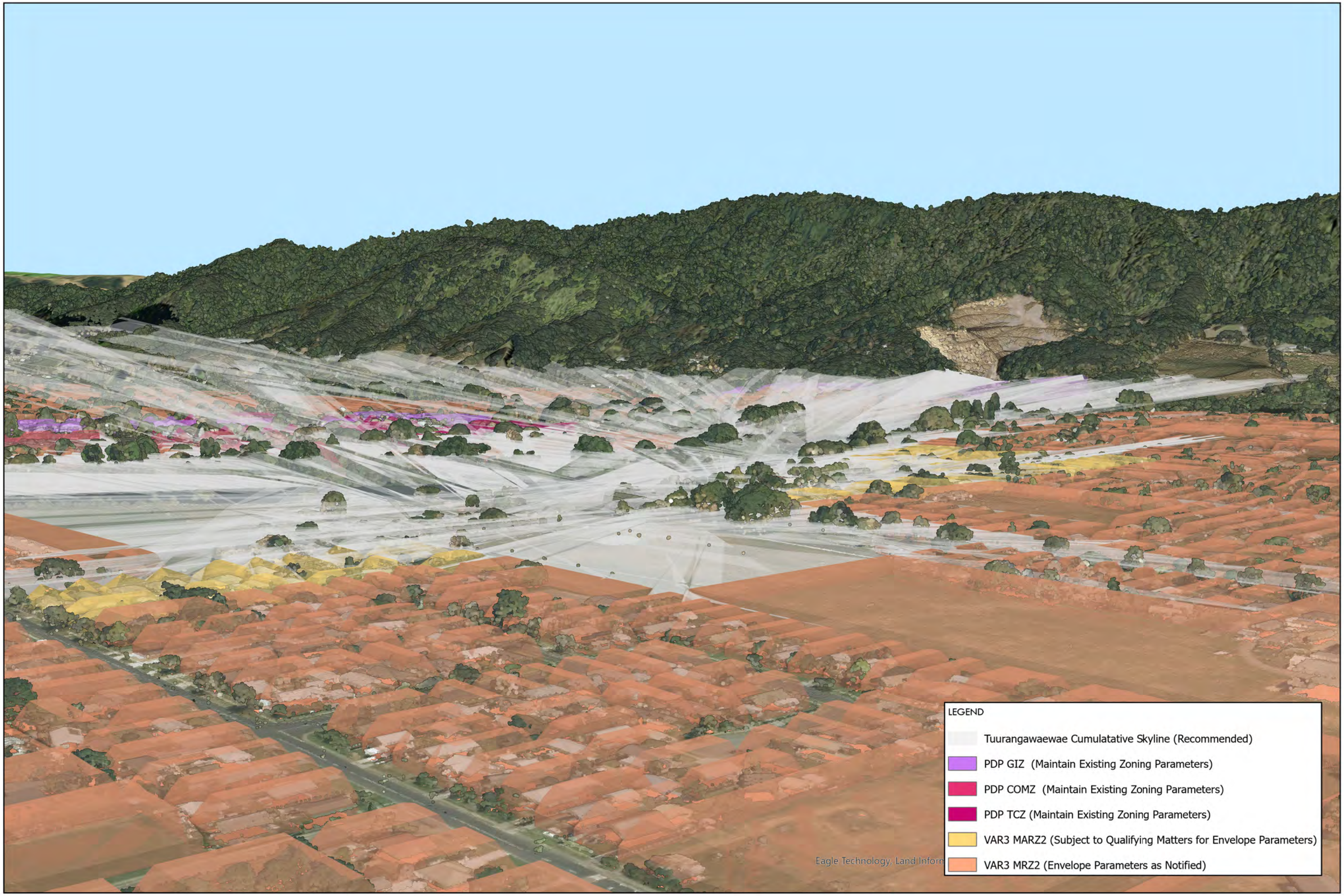

Skyline Analysis of the development Envelopes Achievable Under The Recommended (3D)

Variation 3 Viewshaft Analysis

Scale: N/A at A3 | June 2023 | Map No-12 | R0

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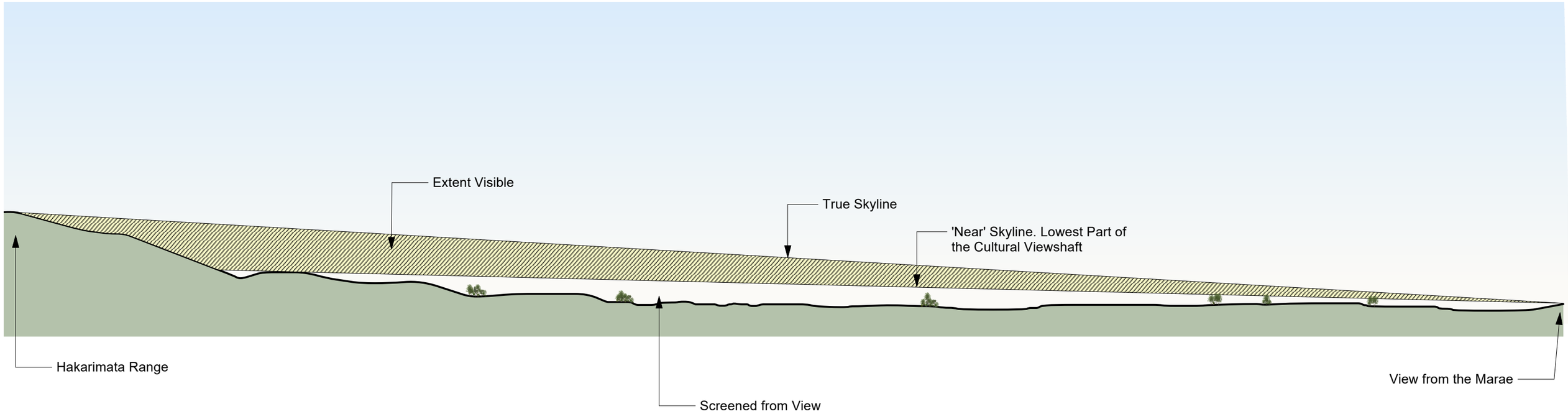
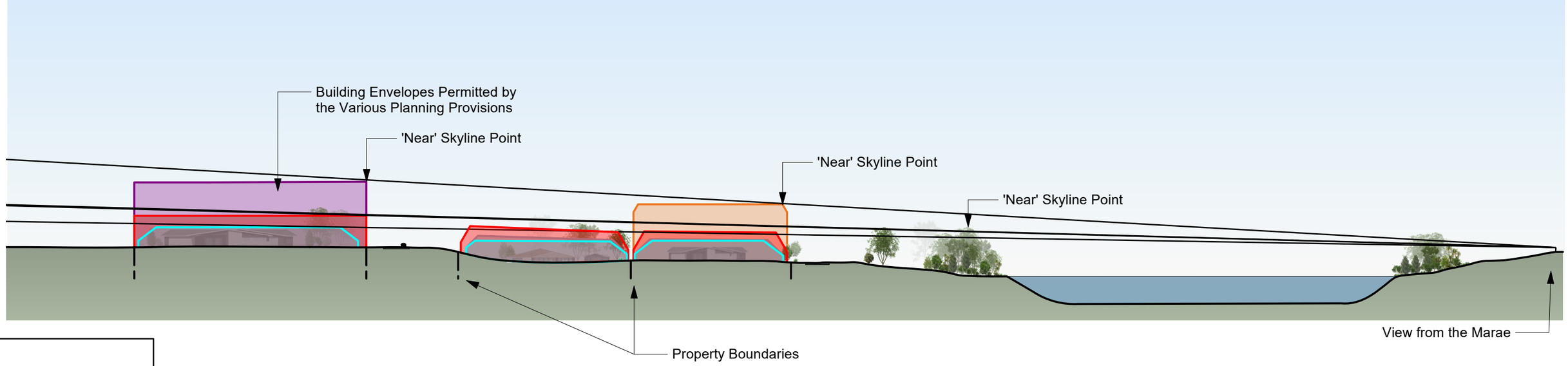
Annexure 8 - Schematic View Shaft Cross Section



1 View from the Marae looking towards the Hakarimata Range
Scale: 1:8000



Key

- ODP
- PDP
- MRZ2
- Kainga Ora HRZ
- Kainga Ora TCZ

2 Different Viewshafts by Different Envelope Parameters
Scale: 1:1500

Annexure 9 - Average Height to View Shaft Maps

Note: Properties with no data showing are below the "Near Skyline"

LEGEND

Tuurangawaewae

Height To View Shaft (Existing)

- 0 - 7.5m
- 7.5 - 8m
- 8 - 11m
- 11 - 12m
- 12 - 22m
- 22 - 24.5m
- Above 24.5m
- Existing Buildings
- Property Titles

Average Height To Intrusion Into Cultural View Shaft (Existing View shaft)

Note: Properties with no data showing are below the "Near Skyline"

LEGEND

Tuurangawaewae

Height To View Shaft (PDP)

- 0 - 7.5m
- 7.5 - 8m
- 8 - 11m
- 11 - 12m
- 12 - 22m
- 22 - 24.5m
- Above 24.5m
- Property Titles
- Existing Buildings

Average Height To Intrusion Into Cultural View Shaft (PDP View Shaft)

Variation 3 Viewshaft Analysis

Scale 1:5,000 at A3 | June 2023 | Map No-03 | R0

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Annexure 10 - Kāianga Ora Map

N

0 0.13 0.25 0.5 KM

LEGEND

Kainga Ora HDZ (22m)

Kainga Ora COMZ (24.5m)

Eagle Technology, Land Information New Zealand, GEBCO

HRZ and COMZ Height Relief Sought By Kainga Ora

Variation 3 Viewshaft Analysis

Scale 1:5,000 at A3 | June 2023 | Map No-20 | RD

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Annexure 11 - Recommended Qualifying Matters (Parameters Map)

Zones located outside of the Potential Effects Area and/or do not have a Recommended Block Code are provided for context only.

BLOCK CODE	PLAN	RECOMMENDED ZONE	CODE	BUILDING ENVELOPE PARAMETERS			
				Height in relation to boundary		Building Coverage	Height
				Base Height	Height Control Plane Angle		
A	Var 3	Medium Density Residential Zone 2 with no QM	MRZ2	4m	60º	50%	11m
B	PDP	Commercial Zone	COMZ	2.5m	45º	100%	12m
C	PDP	Town Centre Zone	TCZ	2.5m	45º	100%	12m
D	Var 3	Medium Density Residential Zone 2 with QM envelope parameters applied.	MRZ2	3m	45º	45%	11m

LEGEND

- Tuurangawaewae (Underlying Zoning Not Shown)
- High Potential Effects Area
- VAR3 MARZ2 (Subject to Qualifying Matters for Envelope Parameters)
- PDP TCZ (Maintain Existing Zoning Parameters)
- PDP GIZ (Maintain Existing Zoning Parameters)
- VAR3 MRZ2 (Envelope Parameters as Notified)
- PDP COMZ (Maintain Existing Zoning Parameters)
- Recommended Block Code

This plan shows the zoning scenario recommended to address the issues raised in the Submission 35 Tuurangawaewae Marae (and associated supporting submissions) to Variation 3. This plan must be read in conjunction with the Evidence of David Graham Mansergh

1 KM
0.5

Recommended Qualifying Matters (Envelope Parameters)

Variation 3 Viewshaft Analysis

Scale 1:6,000 at A3 | June 2023 | Map No-21 | R0

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