

**Before a Panel Appointed by the
Dunedin City Council**

in the Matter of

The Resource Management Act 1991 (**RMA**)

And

In the Matter of

Proposed Variation 2 of the Second Generation
Dunedin District Plan – Appeals Version (**2GP**)

Brief of Evidence of **Hugh Dudley Forsyth**
on behalf of DDS Properties Limited
(Submission 242 – Requested Site 195)

Dated 5th August 2022

1. Qualifications and experience

- 1.1 My name is Hugh Dudley Forsyth. I am a landscape architect with 29 years of experience and am a registered member of the New Zealand Institute of Landscape Architects.
- 1.2 My professional experience has included urban development and landscape planning in New Zealand and the United Kingdom. I have operated my own Consultancy since 2008, 'Site Environmental Consultants Ltd', which has a focus on landscape planning and development. Over the past 4 years I have provided evidence associated with the rural section of the current Proposed Dunedin City Second Generation District Plan.
- 1.3 In preparing this evidence I have read:
 - a) The landscape report and visual attachment prepared in support of the initial submission from Mr. Paul Rogers, DDS Properties Limited, March 2021;
 - b) Dunedin City Council s42 report, section 5.4.18, Part 774 Allanton-Waihola Rd (RS195); and
 - c) The relevant sections of the Dunedin City Council Proposed Second Generation District Plan (**district plan**);
- 1.4 I have read the Code of Conduct for Expert Witnesses, section 7, in the Environment Court Practice Note 2014. This evidence has been prepared in accordance with it and I agree to comply with it. I believe the evidence lies within my field of professional expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2. Scope of evidence

- 2.1 I have been asked by Emma Peters, Sweep Consulting Limited, planner for the applicant, to provide landscape evidence in support of the submission to rezone 744 Allanton-Waihola Road. In preparation of this evidence, I have reviewed the landscape report and visual evidence that I completed in March 2021 for the same submission.
- 2.2 This review led me to reconsider part of the proposed planting schedule. An updated concept plan shows these changes and is included as figure three in a separate A3 attachment to my evidence¹. My 2021 landscape report remains the basis of the opinions I express in this evidence.
- 2.3 My main evidence includes the following structure:
 - a) Landscape context;
 - b) Statutory context

¹ 'Attachment 1 – Visual Evidence, 774 Allanton Waihola Road, Allanton, August 2022'

- c) The proposal;
- d) Landscape and visual effects assessment;
- e) Policy assessment;
- f) Conclusion

3. Methodology

- 3.1 My evidence reflects the methodology set out in 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', New Zealand Institute of Landscape Architects Te Pito Ora². This framework was confirmed in March 2021 and replaces the Queenstown Environment Court framework applied in my original landscape report.
- 3.2 Where I use a scale of effect the 7-point scale of 'very low, low, moderate - low, moderate, moderate - high, high, very high' is applied. The ratings of 'low' to 'low-moderate' are equivalent to the assessment of 'minor' on a technical planning scale.

4. Landscape Definition

- 4.1 The New Zealand Institute of Landscape Architect ('**NZILA**') practice note 'Landscape Assessment and Sustainable Management' (2010) provides the following definition:
- "Landscape is the cumulative expression of natural and cultural features, patterns and processes in a geographical area, including human perceptions and associations"*
- 4.2 I agree with this definition and apply the physical, perceptual, and associative factors suggested by the NZILA guidelines to describe landscape character in my evidence.

5. Executive summary

- 5.1 The Applicant proposes to rezone part of 774 Allanton-Waihola Road from Rural to Township and Settlement and Large Lot Residential 1 zones in order to provide for between 213 – 341 lots within an area of approximately 55ha. The proposal includes environmental restoration and enhancement, adjacent retail and on-site working options, and public transport.
- 5.2 My original assessment of landscape and visual effects found the potential adverse landscape effects to be '**moderate-high**' in the short term and '**moderate-low**' in the medium-to-long term. I also found the potential adverse visual effects to be '**moderate-high**' in the short term and '**moderate-low**' in the medium-to-long term. I confirm that, following review of this proposal, these assessments remain my opinion.

² 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', 5 May 2021.

(<https://www.dropbox.com/sh/dqn6ur9dmxbqubr/AADZbAIVCafzNMjZGNAWNSkna?dl=0>)

6. Landscape Context

- 6.1 The site is located on a rectangular area of farmland that lies between Allanton-Waiholā Road ('SH.1') and Taieri River and immediately south/west of Allanton Village. The Brighton coastal hill range forms the site backdrop to the south/east of SH.1. Taieri River provides a natural boundary north/west to the north/west and also marks the route of the Dunedin/Milton railway line, on the site side of the river.
- 6.2 Mature conifer shelter belts are established on the fence boundaries at either end of the site, with a further shelter belt located mid site and extending perpendicular from the highway in two sections. These shelterbelts are significant landscape features in the mostly open land that can be seen from the highway and also regulate the availability of views into it for passing motorists³.
- 6.3 Present site land use includes stocking of cattle and cropping for silage. Cropping appears to be restricted to the outer sections of the south/west and mid site ridges and to the north/west of a farm track that runs through the middle of the site. The cattle are restricted to the inner part of the farm, between this track and SH.1⁴. The site is approximately 630m wide, along the axis of the mid ridge, with the track being midway.
- 6.4 Further field areas lie in an extended river meadow by the Taieri River, to the northern corner of the site⁵. The remainder of the farm which lies on the north/west side of the railway line⁶.
- 6.5 Access to the farm is currently from SH.1 and lies approximately 320m south/west of the Allanton site boundary. The full highway boundary is approximately 930m in length and takes approximately 34 seconds to pass at 100kph, which was the speed of most vehicles observed during site visit.
- 6.6 The previous farmhouse is located approximately 55m from the road boundary and currently tenanted⁷. Several large storage sheds are located by it and a double open barn is sited under the north/east side of the shelter belt that extend from the farmhouse to the mid site track.
- 6.7 A further group of large conifers provides shelter to the south/west of the farmhouse⁸. There are no other structures on site apart from cattle feeding and watering troughs and fencing. Control of the outer cropping areas is via electric fencing.

³ 'Landscape Analysis Diagram', Figure 2, Attachment 1

⁴ Viewpoint 5, Figure 8, Attachment 1

⁵ Viewpoint 2, Figure 5, and Viewpoint 13, Figure 13, Attachment 1

⁶ Viewpoint 10, Figure 13, Attachment 1

⁷ Viewpoint 4, Figure 7, Attachment 1

⁸ Viewpoint 6, Figure 9, Attachment 1

- 6.8 Three low ridges run north/west toward Taieri River from the edge of SH.1 and provide the main structure for the site landscape. The ridges extend from the lower slopes of the coastal hills and are broad but relatively consistent in elevation until their tips, which rise in small dome forms, with steep side slopes at their end point. The headland areas are noticeable when viewed from the highway or Taieri River Bridge to the north/east⁹.
- 6.9 The mid site ridge divides the site into two catchments with the south/west catchment being the largest and containing a medium sized wetland that drains to the Taieri¹⁰. Native wetland plants are present but show the effects of past browse and pugging. Wide views of the inner site and the land to the north/west are available from this headland. These also include the wetland and the river meadow terrace, railway line, and Taieri Bridge to the north.
- 6.10 The south/west ridge forms the southern boundary and is marked by a rise in the highway as it passes over and the screening of the site provided by the shelter belt when approaching from the south. This section of the road provides the widest field of view the site from southern road approach, but only for approximately 340m distance.
- 6.11 This part of the site is characterized by a relative lack of modification and structures and an open pastoral character within a legible landform structure. The two main site ridges and wetland area are visible from this part of the boundary. Open pasture that descends from the highway boundary to a riparian stream in the base of the closest gully¹¹. Distant views include the tree canopy on the far side of Taieri River and the Maungatua Ranges in the distance.
- 6.12 The third ridge underlies both part of the site and the land adjacent and between it and Centre Road to the north/east. A conifer shelter belt on adjacent land prevents views to commercial rural business from the site and approaching motorists.
- 6.13 Visibility
- Public site views are available from SH.1 and from Centre Road, as it crosses the Taieri River Bridge. Private views are available to three adjacent residents located on the south/east side of SH.1.
- 6.14 The farmhouse and its background shelter belt form the main focus for views from vehicles leaving Allanton and travelling southwards. The central ridge headland is elevated from this viewpoint and draws attention. Pasture falls away from the road and rises up to the central farm track¹². This road section provides views for approximately 15 seconds when travelling at 100kph, allowing for a slower start from the village. The

⁹ Viewpoint 1, Figure 4, Viewpoint 5, Figure 8, Attachment 1

¹⁰ Viewpoint 8, Figure 11, Attachment 1

¹¹ Viewpoint 7, Figure 10, Attachment 1

¹² Viewpoint 4, Figure 7, and Viewpoint 5, Figure 8, Attachment 1

south/west catchment is less visible from this side of the road and the coastal hills provide the main focus.

- 6.15 Views into the south/west catchment are available for motorists travelling north and for approximately 340m. The two main site ridges and wetland area between are visible mid distance. Open pasture descends from the road edge to the fenced stream in the closest gully¹³. Distant views include the tree canopy on the far side of Taieri River and the Maungatua Ranges. This view is available for approximately 13 seconds when travelling at 100kph.
- 6.16 Three adjacent residences are located on rural life-style blocks on the lower coastal slopes on the opposite and side of the highway and include numbers 759, 771, and 795 Allanton-Waiholo Road. These residences are estimated to be located between 10m and 18m above the highway and at an off-set between 90 – 140m from its boundary. These residents are assessed as having wide views over the site, over Taieri River, and views to the open plains area due north/west and to the distant Maungatua Range, at approximately 10km distance.
- 6.17 Landscape factors observed during site visits include:

Physical

- containment by the lower north/west slopes of the coastal hills and the highway on the south/east site boundary;
- boundary planting of conifer shelter belts to the south/west and north/east;
- a site landscape structure formed around the linear form of three main ridges;
- the separation of the site into two main catchments, either side the central ridge;
- a rolling pastoral farm landscape adjacent to the highway, containing cattle;
- cropping on the more elevated headland areas, in the north/west half of the site;
- wetland areas and riparian gullies extending into the site;
- river body and terrace margins on the lower north/west site boundary; and
- steep highway embankments on parts of the south/east site boundary.

Associative

- boundary infrastructure, including SH.1, Taieri River Bridge, and the railway;
- hill side rural residential settlement and shelter planting on adjacent hill slopes;
- shelter belts, farmhouse and buildings, farm tracks, livestock and crops;

¹³ Viewpoint 7, Figure 10, Attachment 1

- vegetation and riparian patterns reflecting waters influence and flood pattern within the site and adjacent to Taieri River; and
- the form and khaki/brown of the coastal hills and silhouette to the south/east.

Perceptual

- views to pasture and headland areas from SH.1;
- heavy traffic when passing the site on SH.1;
- brief views to the north/west ridge areas from Taieri River Bridge;
- wetland plants, and flood meadows near to the river's edge;
- a sense of isolation in the lower north/east parts of the site; and
- long views across over the inner site and hills fields from the ridge tips and over the fields and Plains to the north/west.

7. Statutory Context

7.1 The submission is seeking a zone change and not for a specific resource consent activity and its assessment is considered to fall within strategic objectives 2.2.4 and 2.6.2.1. These address the topics of a 'Compact and Accessible City' and 'Dunedin has Quality Housing Choices and Adequate Urban Land Supply'.

7.2 The relevant objectives and policies are considered to include objective 2.4.1 Form and Structure of the Environment and policy 2.6.2.1, subclauses D(i) and D(vi). Objective 2.4.1 addresses the form and structure of the urban environment and is referenced in policy 2.6.2.1, which is applied as the main framework for policy assessment in section 10 of my evidence.

7.3 Objective 2.4.1 Form and Structure of the Environment

The elements of the environment that contribute to residents' and visitors' aesthetic appreciation for and enjoyment of the city are protected and enhanced. These include:

1. *important green and other open spaces, including green breaks between coastal settlements;*
2. *trees that make a significant contribution to the visual landscape and history of neighbourhoods;*
3. *built heritage, including nationally recognised built heritage;*
4. *important visual landscapes and vistas;*
5. *the amenity and aesthetic coherence of different environments; and*
6. *the compact and accessible form of Dunedin.*

7.4 Policy 2.6.2.1

Identify areas for new residential zoning based on the following criteria:

- d. considering the zoning, rules, and potential level of development provided for, the zoning is the most appropriate in terms of the objectives of the Plan, in particular:*
 - i. the character and visual amenity of Dunedin's rural environment is maintained or enhanced (Objective 2.4.6);*
 - vi. the elements of the environment that contribute to residents' and visitors' aesthetic appreciation for and enjoyment of the city are protected or enhanced. These include:*
 - 1. important green and other open spaces, including green breaks between coastal settlements;*
 - 2. trees that make a significant contribution to the visual landscape and history of neighbourhoods;*
 - 3. built heritage, including nationally recognised built heritage;*
 - 4. important visual landscapes and vistas;*
 - 5. the amenity and aesthetic coherence of different environments; and*
 - 6. the compact and accessible form of Dunedin ([Objective 2.4.1](#)).*

8. The Proposal

8.1 The proposal is set out in detail in the landscape report submitted in March 2021. The following sections of my evidence provide a summary of the proposals objectives, the main details, and proposed staging. I also outline of where I have made some amendments to the original concept.

8.2 Proposal objectives

The proposal seeks to change the zoning of the present rural site to create a planned residential area of between 92 (750m²) – 154 (400m²) units (Township and Settlement zone) and approximately 41 (2000m²) units (Large Lot Residential 1 zone)¹⁴. Addressing the natural site flood cycle that affects the site and the resilience of the main ridge areas are key factors in achieving this outcome.

8.3 The proposal includes measures that will support retention of stormwater and its management. These apply at street and individual lot level as well as across the wider site, through large-scale reintroduction of native terrestrial and wetland planting. Design

¹⁴ Appendix 1

controls apply at individual lot level that seek to build in energy efficiency and low visual impact¹⁵.

8.4 This approach includes the following objectives:

- zone change to enable two levels of residential density;
- road access to be established from Centre Road (all private access and exit);
- on-site living and working support, e.g., superette/café and home business units;
- off-site food retail site to service the community and wider Allanton township;
- a street, house, and site strategy for sustainable stormwater management;
- development controls to promote energy efficiency and limit reverse effects;
- on-site processing of all human waste (stage two);
- provide safe walking and cycling;
- community transport links: investigate establishing a commuter rail link or an electric bus route from Milton to the site to Dunedin.

8.5 Staging

The site falls into two catchments either side of the central ridge. The north/east catchment, between the central ridge and the north/east boundary, is adopted as the area for stage one. The south/west catchment, including the main wetland area, is adopted as stage two.

8.6 Stage One – anticipated establishment

- New access from Centre Road;
- Collector road to mid ridge;
- Centre Road retail
- 50% of walking/cycling track established;
- Headland and boundary planting to north/east boundary ridge and north/east face of mid ridge;
- Highway planting along full extent of boundary;
- Native planting to rear of mid site conifer shelter belt;
- Planting to riparian water way mid catchment, extending to highway;
- Establish electric bus service

¹⁵ Appendix 2

Expected yield:

- Area 10 - Township and Settlement – 154 - 92 units
- Area 14b and Area 14c – Large Lot Residential 1 – 27 units

8.7 Stage Two – anticipated establishment

- Extend collector road to south/west site corner
- Complete boundary planting on south/west boundary
- Native planting on outer face of south/west ridge
- Protection and enhancement planting of main wetland area
- On site home office space
- On site cafe/food retail
- Establish on site waste treatment with primary and secondary treatment

Expected yield:

- Area 10 - Township and Settlement – 154 - 92 units
- Area 14b and Area 14c – Large Lot Residential 1 – 14 units

8.8 Amendments have been made to the proposed planting along the highway boundary. Native planting has been substituted for the exotic species proposed in the 2021 landscape report. This is partly in response to potential concerns that highway authorities may have for tall trees adjacent to the highway. A further reason is to provide consistency across the site and to extend potential corridors and habitat for insects and birds¹⁶.

9. Landscape and Visual Effects Assessment

9.1 This section of my evidence provides an assessment of the potential **adverse** landscape and visual effects that I consider may result from the proposal being implemented. The NZILA assessment guidelines indicate that landscape effects always involve physical change and that visual effects flow from those changes.

9.2 I undertook an assessment of landscape and visual effects that was included the original submission for 774 Allanton-Waiholā Road. In this assessment I reported in terms of short term and medium – long term effects but did not specify a time frame for each category. To clarify, **short-term** refer to 0 – 10 years and **medium-to-long term** refers to 10+ years in that report and in my current evidence.

¹⁶ Appendix 3

9.3 Landscape Effects

My 2021 site assessment was that potential adverse landscape effects would be **'moderate-high'** in the short term and **moderate-low** in the medium to long term. The short-term effects considered the change in land use that would initially occur while the long-term effects considered the new landscape pattern and character that could reasonably be expected to emerge. I confirm my initial assessment of landscape effects and outline the reasons in the following sections of my evidence.

- 9.4 The site is not included in landscape or biodiversity overlays in the district plan. This does not mean the landscape has less value to those who most know or have been familiar with it, but it does not include the factors that lead it to being considered of higher value within an RMA context.
- 9.5 I agree with the district plan assessment and also consider that the values of the site can be increased by building on existing areas and features of higher value and managing the relationship between topography, and riparian and flood patterns as assets.
- 9.6 My site visits indicated that the site fell into two main character areas which included the outer ridge and river and flood plain area, north/west of the central farm track, and the inner farm areas that extended between this track and the highway. The outer landscape includes the ridge headlands, the wetland area between the south/west and central ridge, and the river meadow terrace that abuts the river and is the route of the Dunedin/Milton railway line.
- 9.7 The inner farm landscape is more open and was less influenced by topography although containing small gullies and spurs that descend from the highway boundary. Rolling pasture cover is consistent across the highway boundary with the exception of the base of the central ridge. This area contains the present farm access road, farmhouse, sheds, barn and shelter belts.
- 9.8 The land area near the river and including the wetland areas, river terrace/river meadows and the outer extent of the ridge headlands reflect the influence of the river in terms of vegetation, riparian patterns, and erosion. The ridgelines appear resistant to erosion and are dominant features within this part of the site and provide variation with a relatively small area. This inner part of the site conveyed a sense of place and amenity that wasn't apparent in the open farmland.
- 9.9 A change from wholly rural land use activity to a mixed residential and rural parkland character will result in the adverse effects of earthworks, construction, and road creation. Additional vehicles will be on site and large machinery will be present that would not normally be expected in a rural environment. All of these factors will tend to diminish the scale of the landscape that is visible from the road in the initial stages and this change

is likely to be perceived as adverse by adjacent neighbours and those who pass by regularly on the highway and are familiar with the site.

- 9.10 My expectation is that the proposal, if consented, will in the medium term, lead to a positive change of character. This opinion is based on the extent of planting, wetland and riparian protection and enhancement that is provided within the proposal. I anticipate a general change from mostly open rural pastoral landscape to a rural/residential character of development within an extensive framework of vegetation that will continue to develop and further define the eventual character of this landscape.
- 9.11 An area of 13.56ha of new planting or areas of protection and enhancement is scheduled, and equates to approximately 24.5% of site area. Once established this planting will continue to develop for several decades and, as it matures, native species are likely to be spread to other local areas by birds, furthering its positive landscape effect.
- 9.12 I also anticipate that the larger bands of native shrubs and trees to the north/west of the site will extend the rivers character back into the inner site, in a positive way, and reinforce the landform of the outer ridge faces, as well as characterize the presence of the lower wetland areas. Planting will extend along the full highway boundary and into the mid site area, currently containing the shelter belt.
- 9.13 In addition, walking tracks of 2.5kms in length are proposed for stage one with a further 7km of cycle and walking track proposed for stage two. These tracks will be open for use by Allanton residents as well as residents and will represent a significant addition to the amenity of the township and that will safe and not compromised by the highway.
- 9.14 The housing development will represent an extension of Allanton Township and will have some characteristics of intensive development to those used to the present site. However, much of the housing will be fully or partly screened from outside view by the planting proposed along the full extent of the highway boundary. Some views into the site remain and are not considered to be a negative factor. Construction conditions apply to all residential housing which will lessen their off site impact, including recessive roof colours.

9.15 Visual Effects

My assessment of adverse visual effects in March 2021 was that they would be '**moderate-high**' in the short term and **moderate-low** in the medium to long term. This conclusion was reached on the basis of present public site visibility from SH.1 and the expectation that much of this visibility will be reduced as the project develops. This remains my opinion.

- 9.16 A site wide planting program is proposed, with the highway planting to be undertaken in the first planting season following consent. The construction of a new access from

Centre Road will be established before residential development and it is likely that this planting will have 1 -2 years growth subsequent to this being completed and the first residential developments are consented and begun.

- 9.17 Once established, this planting will provide a substantial screening and filtering effect to site views for those passing. It can be expected to reach 2 – 3m at 8 years in these conditions. Beyond this period, the planting will fill out and provide form, and seasonal variation in parts, e.g., kōwhai flowering.
- 9.18 Stage two will not be undertaken until stage one is complete. Motorists will continue to have brief views of this part of the farm until the planting along this boundary begins to develop.
- 9.19 The inhabitants of 759, 771, and 795 Allenton-Waiholā Road are likely to continue to have a wide perspective of the site and the ongoing development. My expectation is that the character of these views will change and become more positive as the full extent of the planting begins to become apparent. These residents will also have access to the future walking tracks and the wider site routes they offer.

10. Statutory Assessment

- 10.1 Policy 2.6.2.1 requires the consideration of a range of criteria when identifying areas for new residential zoning. Those clauses considered applicable are contained in policy 2.6.2.1 (d). This policy also looks back to, and covers, Policy 2.4.1, referenced in section 7 of my evidence.

10.2 2.6.2.1. (d).

- i the character and visual amenity of Dunedin's rural environment is maintained or enhanced (Objective 2.4.6);*
- vii. the elements of the environment that contribute to residents' and visitors' aesthetic appreciation for and enjoyment of the city are protected or enhanced. These include:*
 - 1. important green and other open spaces, including green breaks between coastal settlements;*
 - 2. trees that make a significant contribution to the visual landscape and history of neighbourhoods;*
 - 4. important visual landscapes and vistas;*
 - 5. the amenity and aesthetic coherence of different environments; and*
 - 6. the compact and accessible form of Dunedin ([Objective 2.4.1](#)).*

10.3 Character and Visual Amenity

As discussed in section 9.4 and 9.5 of my evidence the present site has not been assessed as being of higher landscape or biodiversity value in the district plan. I do not consider that the proposed development will represent a loss of character values or visual amenity once it is established.

10.4 My opinion is that the views from the highway have merit but are quite fleeting do not differ from views available many other parts of the highway boundary in this part of the district. In addition, both site residents and present inhabitants of Allanton will be able to access the parts of the site that appeared to me to provide the higher area of amenity.

10.5 Contribution of Trees to the Visual Landscape and Neighbourhood History

The original Taieri landscape would have reflected extensive wetland areas and stretches of open water, similar to the areas of Waihola and surrounds. The proposed development will return some of that character in parts while also providing a range of street tree planting in addition to the wide native replanting areas.

10.6 Important Visual Landscapes and Vistas

The present landscape is likely to be important for the residents opposite the site but there is no evidence that many other Allanton residents connect with it in a meaningful way. No significant trees are present on site, which is bounded by a stretch of busy highway where it is dangerous stop and is not safe for pedestrians.

10.7 The Amenity and Aesthetic Coherence of Different Environments

The concept development has considered the present elements of the natural environment in its site development and the potential offered by the ridge headland terrain for walking tracks and vegetation. Extensive walking and cycling opportunities are proposed and on-site amenities have been considered that will provide for socializing and potentially working from the site. I consider the proposal is unusual, and possibly unique, in what it offers in the context of other Dunedin development.

10.8 The Compact and Accessible Form of Dunedin (Objective 2.4.1).

The Spatial Plan emphasized the strategic direction of maintaining a compact city. The national urban growth has challenged this objective in parts, though the underlying values of sustainable transport and retaining productive rural land remain commonly held values.

10.9 The proposal is contrary to this objective but also offers a range of landscape, amenity, and environmental approaches that are not available close to Dunedin or the land supply currently available. This would be the first ground up development built on sustainable

design principles and containing waste on site and making provision for low carbon impact commuting..

10.10 The proposal directly addresses an area of flood compromised rural land and turns these factors into an advantage to provide for an ecological and riparian framework that will enable the utilization of this site for productive purpose in a way that present rural land use will not be able to.

10.11 While providing many new dwellings the change in land use will also mitigate the potential adverse effects of present and continued rural land use, in the form of run-off of dissolved nutrients. The site will be self-sufficient in many respects, with on-site waste treatment being significant among these features.

11. Summary and Recommendation

11.1 The present site character reflects a modified farming landscape that extends along the boundary of SH.1 and is significantly influenced by the series of low linear ridges that underlie it and the outside effect that Taieri River brings to bear on the water table within lower gully areas. The inner areas contain open pastureland and are subject to flooding in part.

11.2 The proposal to create an ecologically based mixed large lot and smaller lot development within an extensive framework of native planting will lead to a change of land use and character. The initial adverse landscape and visual effects are considered to be '**moderate-high**' on a scale of 'very low, low, moderate - low, moderate, moderate - high, high, very high'.

11.3 Subsequent to plant growth, enhancement and protection of wetland areas, and protection and planting of riparian areas it can be expected that these effects will diminish. Contributing factors are expected to be the development of vegetation mass, incursion of native bird species, a high level of wetland water quality, removal of stock, and the potential benefit of experiencing the higher value and more interesting features of the wider site area through accessible walking and cycling tracks.

11.4 My conclusion is that the longer term, 10+ years, effects will both be **moderate-low** on this same scale. In my view the proposal has a lot to recommend it on environmental and amenity grounds and I would recommend the rezoning sought be approved to enable its establishment.

Hugh Forsyth

Registered Landscape Architect

Appendix 1

Site Areas

Table One – Proposed Site Areas

Area	Proposed zone	Ha	Lot Size	Yield (est.)	Site Area
	Offsite				
8.	Food retail/Centre Road	0.5	5000m ²	Service retail	Off site
	Onsite				
9.	Work from site/café	0.75			1.37%
Total		1.25ha			
10.	Township + Settlement	9.9	450 / 750m ²	92 – 154	
11.	Township + Settlement	3.1	450m ²	48	
12.	Township + Settlement	9.9	450 / 750 m ²	70 – 139	
13.	Township + Settlement	1.5	1000m ²	10	
14.	Large Lot Residential	11.6	2000 m ²	25	
Total		36ha		245 – 376	65.45%
15.	Wetland zone	7.54			
16.	Riparian / stormwater	1.24			
18.	Native structure planting	2.75			
19.	Native highway planting	2.03			
		13.56 ha			24.65%
Other	Access/waste treatment	4.69ha			8.53%
Total area (TBC by survey)		55ha			100%

Appendix 2

Development Conditions

Table Two: Proposed conditions

Key: applies / permitted ● does not apply / precluded ●

Condition	Town and Settlement	Large Lot Residential 1
250m ² maximum residential unit FA ¹	●	
300m ² maximum residential FA		●
Maximum building height of 5.5m from existing or modified ground level, per level	●	●
Maximum building height of 6m from existing or modified ground level		●
External wall length - maximum 20 m length	●	
External wall length - maximum 25m length		●
External materials: Wood, natural stone, concrete	●	●
Block, plaster, brick	●	●
Stainless steel (exposed) and mirror glass	●	●
Concrete paving: Tint to 50% LRV ²	●	●
External wall colours: 40% max. LRV	●	
Roof colours: 5% below LRV of walls	●	
External wall colours: 35% max. LRV		●
Roof colours: 5% below LRV of walls		●
Retaining walls: 2.0 m max. above existing or modified ground level. Colour - 50% or less LRV	●	●
Retaining offset: 2 m max. from house on all sides	●	
Retaining offset: 4 m max. from house on all sides		●
Water tanks: 40,000 litre tank, 1m above ground	●	●
Water tanks: 35% LRV max – locate from public view	●	●

1 FA means Floor Area. Maximum floor area for residential units excludes attached garages

2 LRV refers to light reflectivity values – Resene Colour Chart BS5252

Appendix Three

Provisional site planting list

Chantal Whitby

Hudson Associates, Landscape Architects

Cell: 020 4139 2760

Amenity tree planting list

Small sized street trees:

- *Cornus* 'Eddies White Wonder' (white flowering dogwood)*
- *Malus* 'Arrows Gold' (yellow fruiting crabapple)*
- *Prunus serrulata* 'Shirotae' (Mount Fuji cherry tree)*
- *Prunus yedoensis* (Yoshino cherry)*
- *Sorbus aucuparia* 'Josephs Rock' (cream berry rowan)*
- *Ulmus glabra* 'Pendula' (weeping elm)*

Medium sized street trees:

- *Arbutus unedo* (Irish strawberry tree)
- *Acer capillipes* (snake bark maple tree)*
- *Fraxinus ornus* (flowering manna ash)*
- *Magnolia kobus* (white flowering yulan magnolia)*
- *Magnolia grandiflora* 'Blanchard' (evergreen magnolia)
- *Pyrus calleryana* 'Aristocrat' (ornamental pear)*
- *Sophora microphylla* (kōwhai)

Large sized street trees:

- *Fraxinus excelsior* 'Purple Spire' (purple ash tree)*
- *Metrosideros* 'umbellata' (southern rata)

Area 15 Wetland and riparian planting list

- *Austroderia richardii* (toetoe)**
- *Carex secta* (purei)*
- *Carex virgata* (swamp sedge)* **
- *Carpodetus serratus* (marble leaf)***
- *Coprosma lucida* (shiny karamu)***
- *Coprosma propinqua* (mingimingi)**
- *Coprosma rotundifolia* (mikimiki)***
- *Cordyline australis* (cabbage tree)**
- *Dacrycarpus dacrydioides* (kahikatea)* **
- *Dacrydium cupressinum* (rimu)***
- *Elaeocarpus hookerianus* (pokaka)***
- *Griselinia littoralis* (broadleaf)***
- *Hoheria angustifolia* (narrow-leaved lacebark)***
- *Kunzea ericoides* (kānuka)***
- *Leptospermum scoparium* (mānuka)****
- *Myrsine australis* (matipo)***
- *Myrsine divaricata* (weeping matipo)**
- *Olearia odorata* (scented tree daisy)***
- *Olearia lineata* (twiggy tree daisy)****

- *Phormium tenax* (harakeke/flax)* **
- *Plagianthus regius* (ribbonwood)**
- *Pittosporum eugenoides* (lemonwood)***
- *Pittosporum tenuifolium* (kōhūhū)***
- *Podocarpus hallii* (Hall's totara)***
- *Pseudopanax crassifolius* (lancewood)***
- *Sophora microphylla* (kōwhai)***
- *Veronica salicifolia* (koromiko)****

• suitable for long periods of inundation.

** suitable for areas which are water-free for the majority of time but become inundated with water during high rain and flood events.

*** suitable for upper bank zone of riparian planting, in dry areas.

**** tolerates having damp feet but does not like being water logged for long periods.

Area 18 Native Structure Planting

- *Aristotelia serrata* (wineberry)
- *Carpodetus serratus* (marble leaf)
- *Coprosma rhamnoides* (twiggy coprosma)
- *Griselinia littoralis* (broadleaf)
- *Hoheria angustifolia* (narrow-leaved lacebark)*
- *Lophomyrtus obcordata* (rōhutu)*
- *Myrsine australis* (matipo)
- *Olearia avicenniifolia* (mountain akeake)
- *Olearia lineata* (twiggy tree daisy)
- *Olearia odorata* (scented tree daisy)
- *Plagianthus regius* (ribbonwood)*
- *Pittosporum eugenoides* (lemonwood)
- *Pittosporum tenuifolium* (kōhūhū)
- *Podocarpus hallii* (Hall's totara)*
- *Podocarpus totara* (totara)*
- *Pseudopanax crassifolius* (lancewood)
- *Sophora microphylla* (kōwhai)*

* species on the important native tree list (appendix 10A.3 of the 2GP)

Area 19 Highway Planting List

- *Austroderia richardii* (toetoe)
- *Carex secta* (*purei*)
- *Carex virgata* (swamp sedge)
- *Coprosma lucida* (shiny karamu)
- *Coprosma propinqua* (mingimingi)
- *Coprosma rotundifolia* (mikumiki)
- *Cordyline australis* (cabbage tree)
- *Dacrycarpus dacrydioides* (*kahikatea*)*
- *Hoheria angustifolia* (narrow-leaved lacebark)*
- *Myrsine divaricata* (weeping matipo)
- *Phormium tenax* (harakeke/flax)
- *Plagianthus regius* (ribbonwood)*
- *Pseudopanax crassifolius* (lancewood)
- *Sophora microphylla* (*kōwhai*)*

* species on the important native tree list (appendix 10A.3 of the 2GP)