

Landscape Assessment Report
Native Plant Nursery and Guided Walk at the Hillocks
Dart Valley Station
Glenorchy
10 March, 2024



INTRODUCTION

This report provides an assessment of the actual and potential landscape character and visual amenity effects of a proposed nursery and visitor facility at the Hillocks, Glenorchy.

The report includes:

- Outline of Assessment Methodology
- Summary of Statutory Context
- Landscape Description
- Summary of the Proposal
- Landscape Assessment
- Conclusions
- Attachments

ASSESSMENT METHODOLOGY

This report assesses the landscape and character effects, and the visual effects of the proposal.

For the purposes of this assessment the following definitions, as set out in NZILA's Landscape Assessment Guidelines, are used.

- a. Landscape character is "each landscape's distinctive combination of physical, associative, and perceptual attributes".¹
- b. Landscape effects are "an adverse or positive outcome for a landscape value as a consequence of changes to a landscape's physical attributes".²
- c. Visual effects "are effects on landscape values as experienced in views [and] contribute to our understanding of landscape effects".³

When describing effects, the following hierarchy of adjectives⁴ are used:

- Very Low;
- Low;
- Moderate – Low;
- Moderate;
- Moderate – High;
- High;
- Very High.

¹ Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022, p271

² Ibid, p271

³ Ibid, p142

⁴ Ibid, p140

STATUTORY CONTEXT

1. Under the QLDC District Plan the site is zoned Rural and is identified as having outstanding landscape values (ONL) and significant historic heritage features (the Hillocks are listed as a category 3 Heritage Feature). The site is located within the Ōturu (Diamond Lake, Mount Alfred and surrounds) Wahi Tupuna (with significant values identified as Mahika kai, nohoaka, pounamu, kāika, archaeological values, wāhi taoka). The site also contains a modified watercourse.

LANDSCAPE DESCRIPTION

2. The landscape is part of the glacial and fluvial outwash plains of the Te Awa Whakatipu /Dart River between the isolated mountain of Mt Ari/Alfred (1375masl) to the east and the Humboldt Mountains (2348masl) to the west. To the south is the convergence of the Te Awa Whakatipu/Dart and Rees river valleys north of the top of Lake Wakatipu. The braided Te Awa Whakatipu/Dart River dominates much of the flats with an alluvial terrace rising above the active floodplain on the eastern side of the river below the slopes of Mt Ari/Alfred. The subject site is immediately adjacent to the eastern bank of the Te Awa Whakatipu/Dart River.

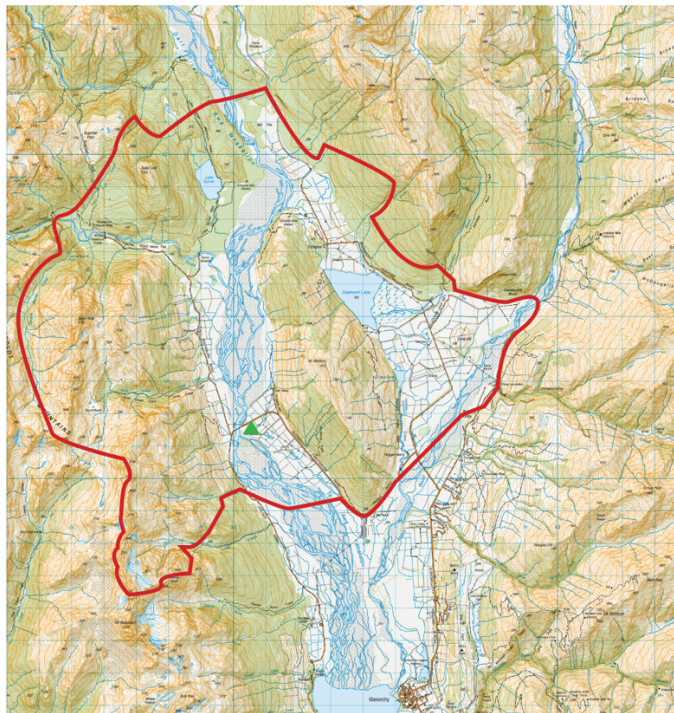


Figure 1. Topographic Map of region showing Ōturu (Diamond Lake, Mount Alfred, and surrounds) ONL boundary and approximate site of proposal (green triangle)



Figure 2. Aerial photograph showing extent of property (shaded turquoise) and approximate site of proposal (green triangle).

3. The wider landscape is defined by the sustained actions of glaciers that during various ice ages resulted in creating the steep mountainous slopes evident on both sides of the valley. It is dominated by mountains, with permanent snow and ice fields on the higher peaks, and glacial carved river valleys that lead off from the main divide towards Lake Wakatipu. The landscape is part of the dramatic mountain and glaciated valley scenery that defines the iconic landscapes of the district and country. The landscape is dominated by natural landforms where the natural processes that have shaped and continue to shape the landscape are highly evident, and these dramatic landscapes of mountains, river valleys and lakes are part of the iconic mountain and lake landscapes of the district. Transient values of the landscape are experienced in multiple ways including seasonal changes in snow levels, daily changes in weather conditions and sunlight, and changes in rainfall and with it changes in the flows of rivers and waterfalls, as well as subtle seasonal changes in vegetation.



Figure 3. Drone image showing Pikirakatahi / Mount Earnslaw in upper centre of photo, the surrounding steep mountainous slopes that have been formed by the actions of glaciers, and the Te Awa Whakatipu/Dart River. The forested slopes on the right of the image is the western side of Ari/Mount Alfred.

4. The western parts of the property (including the subject site and the land to the north of the Dart/Routeburn Rd), and also the neighbouring property to the south are notable for the number of 'Hillocks' found across them. The Hillocks are low-lying mounds that range in height from between two meters and eighteen meters above the otherwise flat terraces and are a unique and defining natural feature of the local landscape. Their formation had originally been considered to be a large kame field that was formed from large rocks that had been brought down by glacial

action and deposited here when this had been the terminus of the glacier.⁵ A more recent Canterbury University study⁶ confirms they are part of a rock avalanche debris field. These very large rocks that fell around 8000 years ago from high in the Humboldt Mountains. Over time windblown dust and dirt gathered on and below the rocks providing suitable soil conditions for native shrubs and trees to become established.

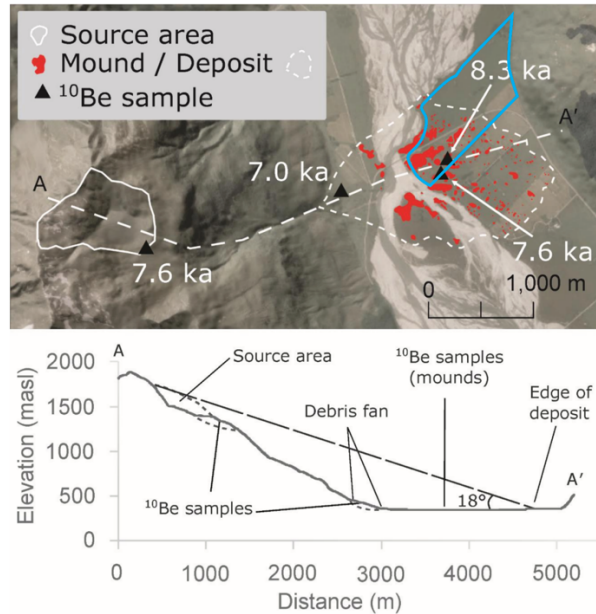


Figure 4. Canterbury University study diagram showing dispersal field of giant rocks that fell from the Humboldt Mountains. The outer perimeter of the property boundary has been added to the image and is shown with a blue line.



Figure 5. Drone image showing the Hillocks as they appear in 2023. The approximate location of the outer perimeter of the project property boundary is shown with a blue line. The Glenorchy Routeburn Rd is seen on the lower left hand side. Note there is DOC marginal strip between the western boundary (shown at the bottom of the image besides the banks of Te Awa Whakatipu/Dart River).

⁵ Hayward, B.W; Kenny, J.A and Johnston, M.R (1999) Inventory and Maps of. Important Geological Sites and Landforms in the Nelson and Marlborough Regions

⁶ McColl, S. T., and T. R. Davies. "Evidence for a rock-avalanche origin for 'The Hillocks' "moraine", Otago, New Zealand." *Geomorphology* 127.3-4 (2011): 216-224. See also <https://naturemaps.nz/maps/#/viewer/openlayers/484>

5. About 30 pre-European sites are known to exist in the Glenorchy area and it is understood that some of the sites were for the processing of pounamu.⁷ The Te Awa Whakatipu/Dart River area was an important camping spot for parties travelling to the west coast via the Hollyford Valley and a source for pounamu. 'Pikirakatahi (Mount Earnslaw) was of crucial significance to many generations that journeyed to that end of the Whakatipu-wai-maori and beyond'.⁸ The district plan identifies Maori Ti Pits and a paved area on the true right (western) side of the river on the other side of the Dart River Bridge.⁹ This is outside of the subject property. I am not aware of any identified heritage sites within the subject property.
6. Ngai Tahu has a strong traditional association with Pikirakatahi (Mount Earnslaw) and the region. The following is taken from information provided for Crown Pastoral Review of Earnslaw Station.¹⁰
 - a. "Ngai Tahu Association with Pikirakatahi: The creation of Pikirakatahi (Mt Earnslaw) relates in time to Te Waka o Airaki and the efforts of Tu Te Rakiwhanoa. It is said that during its formation a wedge of pounamu was inserted into this mountain, which is the highest and most prominent peak in this block of mountains. The mountain is also linked to travels of Rakaihautu, who dug out the great lakes of the interior with his ko (~spade), known as Tu Whakaroria and later renamed Tuhiraki at the conclusion of the expedition.
 - b. For Ngai Tahu, traditions such as this represent the links between the cosmological world of gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations and document the events which shaped the environment of Te Wai Pounamu and Ngai Tahu as an iwi."
 - c. Pikirakatahi stands as guardian over the pounamu resource and marks the end of a trail, with the tohu (marker) to the pounamu resource sitting opposite on Koroka (Cosmos Peak). The tupuna (ancestors) had considerable knowledge of whakapapa, traditional trails, places for gathering kai (food) and other taonga, ways in which to use the resources of the land, the relationship of people with the land and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All these remain important to Ngai Tahu today.
 - d. The origins of the name "pikirakatahi" have been lost, but it is known that many places and physical features have more than one name, reflecting the traditions of the successive iwi who peopled the land. It is likely that the name relates to Rakaihautu or subsequent people, as most of the prominent lakes, rivers, mountains of the interior take their name from the journey of Rakaihautu.
 - e. The retrieval of large amounts of pounamu from this source, so far inland and over a range of physical barriers, attests to the importance of this resource to the economy and customs of the iwi over many generations. The people would also gather native birds for kai and firewood with which to cook and provide warmth, from the forests covering the lower flanks of Pikirakatahi. Strategic marriages between hapu strengthened the kupenga (net) of whakapapa and this rights to use the resources of the mountain. It is because of these patterns of activity that Pikirakatahi continues to be important to runanga located in Otago, Murihiku and beyond. These runanga carry responsibilities of kaitiaki in relation to the area, and are represented by the tribal structure, Te Runanga o Ngai Tahu."
7. From the mid nineteenth century prospectors followed these routes as they unsuccessfully looked for gold, or lands on the lower West Coast suitable for settlement. Later the flats on both sides of

⁷ Kai Tahu Ki Otago, Natural Resource Management Plan 2005, p132

⁸ Ibid, p133

⁹ Queenstown Lakes District Council - Proposed District Plan Decisions Version (Dec 2022), 26.12:700

¹⁰ Crown Pastoral Land Tenure Review, Earnslaw Station P0047 Conservation Resources Report. LINZ, 2010. p44.

the Te Awa Whakatipu/Dart River, including the subject site were almost fully cleared of native vegetation and sown in exotic grasses, and then grazed by cattle and sheep with this activity continuing to the present day.

8. The subject site is part of Dart Valley Station. This farm was first acquired by Andrew Fraser in 1884 under a rural deferred payment lease, with timber stable, woolshed, store, cottage and sheep yards constructed by 1887. Fraser's obituary (1925) describes how the Hillocks was covered with dense, heavy, tumataguara (matagouri)¹¹. An unpublished archaeological assessment of the farm buildings notes it was a strong example of a small rural holding, in contrast to the size of the primarily high country runs in the area.

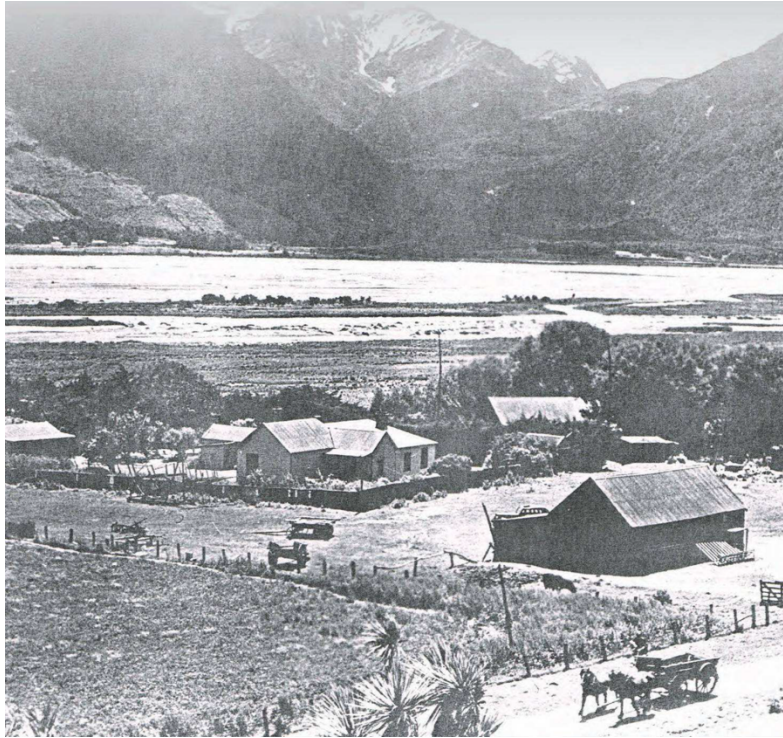


Figure 6. Dart View Farm taken in 1920's showing house and outbuildings (Glenorchy Museum, original credit Alexander Turnbull Library).

9. The landscape vegetation on the flats is predominantly pastoral exotic grasses interspersed with small patches of native rushlands of *Juncus edgariae* and the native sedge *Carex coriacea* (rautahi) in the lower lying wetland areas. There are exotic shelter trees, including poplar and *pinus radiata*, growing on the southern boundary fence line. There is a marginal strip managed by the Department of Conservation on the western end of the subject site. This adjoins the Te Awa Whakatipu/Dart River and lined with exotic trees, including willows, and indigenous shrubland and tree species including kowhai, ti/cabbage trees, and matagouri.
10. The Glenorchy Routeburn Rd bisects Dart Valley Station with its cottages and sheds located on the northern side of the road. The project site is primarily on the south side of the road, one existing building located on the site. It is a corrugated steel farm shed adjacent to the Glenorchy Routeburn Road that a number of years ago was converted to a roadside art gallery and which as a condition of sale to the current owners, is subject to a lifetime lease to a relative of the previous owner.

¹¹ Lake Wakatipu Mail, Issue 3652, 25 August 1925, p4.



Figures 7 and 8. View of existing farm shed that has been converted into a gallery

11. Located beside one of the Hillocks, on the south side of the road, is a series of three large steel construction supports that were used to construct the Te Awa Whakatipu/Dart River Bridge. These have been placed here since the bridge opened in 1974.



Figure 9. View of construction supports



Figure 10. Drone image of proposed project site showing: (1) existing farm building that has been converted into an art gallery; (2) small patches of native rushlands; (3) marginal strip; (4) channeled waterway; (5) mounded soil deposit from channeling stream; 6 exotic trees growing along southern boundary (indicated in blue).

12. The Hillocks continue to be heavily trampled by stock, with multiple animal tracks formed on their sloping faces. The muddy indentations of these tracks are highly visible. There are mature matagouri and kowhai on some slopes though a large number of matagouri are dead in the ground likely from the effects of stock trampling roots and cattle chewing bark. A small number of native shrubs are self-establishing. There is little evidence of native seedlings and it is likely any that have begun to grow are soon eaten by stock.



Figures 11 – 18. Drone images showing evidence of: (1) extensive stock trampling on hillocks and wetland areas; and (2) current state of main stands of matagouri. Many matagouri are standing dead or dying, with also a number mature matagouri fallen to the ground.



Figures 19. Photo showing some of the matagouri that are standing dead in the ground, along with indications of bark stripping by livestock.

13. A small creek crosses the project site. The creek only flows after rain, and is routinely dry. There is evidence it has been routinely trenched, with the last occurrence likely to be around ten to twenty years ago prior to the current owners purchasing the property. Soil from the trenching has been placed to form a long ridge on the creek's banks.



Figure 20. Drone image showing (1) the straight line of the channeled stream directly along the base of a Hillock and (2) the soil mounded in a line on the north bank.



Figure 21. View of creek in early December and at a time when sections have no water. Also note this is a crossing point for stock.



Figure 22. Image showing close up of the channeled stream directly along the base of a Hillock and the soil mounded in a line on the north bank. Note the dead matagouri whose bark has been stripped on the southern bank.

14. Areas of the flats are low-lying and are routinely waterlogged. In 2022 Simon Beale, Senior Ecologist, Beale Consultants Limited undertook an assessment to identify any Natural Wetlands at the Hillocks. His report identified:
- a. “The property contains natural depressions and areas of impeded drainage between and around the base of some of the hillocks that are subject to periodic inundation and ponding due to wet weather related runoff events.”
 - b. “Two watercourses extend through the property and have been channelised in the past to assist in land drainage for farming purposes.”
 - c. “These natural depressions and damp areas support scattered rushland and sedgeland communities of varying density and coverage within the prevailing exotic pasture grassland. The rushlands are dominated by the native rush *Juncus edgariae* and the sedgelands, the native sedges *Carex sinclairii* and *Carex coriacea* (rautahi).”
 - d. “The property at the Hillcocks contains five natural wetlands that are relatively confined in area. The growth form of the wetlands are rushlands dominated by the native rush *Juncus edgariae*. The wetlands are subject to periodic ponding during wet weather.”
 - e. “These wetlands are low in diversity and have been affected by stock grazing.”
 - f. “The sedge rautahi exists across large areas of damp pasture bordering the natural wetlands. The growth of rautahi in these areas has been assessed as sub-dominant to the exotic grassland, i.e. <50% of the overall vegetation cover and therefore do not qualify as natural wetlands in accordance with the NES Freshwater Regulations 2020. In places these areas are heavily infested with Californian thistle.”



Figure 23. Plan image of the five wetlands identified on the proposed project site in the Beale report.



Wetland 1



Wetland 2



Wetland 3



Wetland 4



Wetland 5

Figures 24-28. Images of wetlands 1-5 as provided in Beale report

15. The Awa Whakatipu/Dart valley is exposed to high winds that come from two main directions. In summer the prevalent wind are the strong, hot and drying nor-west winds, while the strong, colder south-west winds winter occur throughout the year. The Hillocks, uniquely for the region, provide natural shelter from both these winds, with their rounded profile deflecting upwards the main flow of winds that blow up and down the valley.
16. The Glenorchy Routeburn Road bisects the property and is on the northern boundary of the project site. The road is sealed from Glenorchy until it crosses to the western side of Te Awa Whakatipu/Dart River. The Glenorchy Routeburn Road provides access to some of New Zealand's great walks, the Routeburn, the Greenstone Caples track, and access to Mount Aspiring and Fiordland National Parks.
17. Driving from Glenorchy the road travels due below Ari / Mount Alfred. A number of Hillocks come into view, with these located on a neighbour's property (see Figure 30). The road turns gradually to the left providing an iconic view north up the Te Awa Whakatipu/Dart valley. This provides a highly memorable vista over green paddocks towards the peaks and forest clad valleys of the main divide. This view has been made famous due to an adapted version featuring as Isengard in the Lord of the Rings Trilogy.



Figure 29. Plan of camera location and direction for figures 30-34.



Figure 30. Driving from Glenorchy it is Hillocks located on a neighbour's property that are the first Hillocks to come into view (Viewpoint 1 in figure 29).



Figure 31. Views looking west to the Te Awa Whakatipu/Dart River Bridge when travelling west along Glenorchy Routeburn Road. The next view (figure 32) is taken at a point just past the large tree on the right, beside the road. (Viewpoint 2 in figure 29)



Figure 32. Views looking north to the headwaters of Te Awa Whakatipu/Dart River when travelling west along Glenorchy Routeburn Road. (Viewpoint 3 in figure 29)

18. The road then follows a fully straight course for 900 meters, due west from the base of Ari/Mount Alfred until it crosses the Te Awa Whakatipu/Dart River bridge. 200 meters along this stretch of road a number of Hillocks appear on the south side, and then at 400 meters more Hillocks appear on the northern side of the road fully obscuring view to the north and south.
19. The distinctive forms of the Hillocks are clearly visible from the road, with the road travelling between them. For those travelling towards the bridge the Hillocks frame the view on the Humboldt mountains directly ahead. For those travelling in the opposite direction the view is framed on the steep regenerating forest on Ari/Mount Alfred's western slopes.



Figure 33. View travelling west along Glenorchy Routeburn Road. When travelling closer to the Te Awa Whakatipu/Dart River bridge the views to the north and south of the road, when travelling along Glenorchy Routeburn Road, are fully obscured by the Hillocks. The Humboldt Mountains are in the distance. (Viewpoint 4 in figure 29)



Figure 34. View travelling east along Glenorchy Routeburn Road, with Ari/Mount Alfred in the distance. (Viewpoint 5 in figure 29)

SUMMARY OF THE PROPOSAL

Complete details of the proposal are contained within the Assessment of Environmental Effects prepared by Cue Environmental. In summary, the proposal is made up of the following components. See Appendix for the site plan, building plans, elevations and planting plans for the proposal

Establishment of a native plant nursery and supporting facilities

20. The purpose of the proposal is to:
- a. Establish a Native Plant Nursery so extensive native planting can be undertaken across the site, such that the Hillocks and its wetland areas can be returned to its pre-farming ecological makeup.
 - b. Make plants from the nursery available for local community planting projects and retail sale.
 - c. Use contemporary technologies, including augmented reality experiences of the past and future makeup of the landscape, to increase the appeal of the nursery.
 - d. Offer a guided walk across the landscape to engage the community and visitors with the environmental vision of the project, and inspire those interested with the part they can play in helping realise this vision both in this landscape and the back in the places they live.

Native Plant Nursery facility

21. The Native Plant Nursery Facility, Welcome Centre and Plant display area provides:
- a. A suitable environment for raising seedlings, placing them in plastic planting containers and leaving them to 'harden' before being taken out to be planted. This includes a naturally lit shed to store equipment, and for 'potting up' plants, and a series of shade cloth shelters and shade cloth canopies to protect plants from direct sunlight and strong winds.
 - b. Welcome facilities for visitors to learn about the project. This includes a retail counter, indoor and outdoor interactive display spaces, and community workshop space. It also includes toilets, and also covered facilities to store parkas, gumboots and equipment for those wanting to volunteer time helping in the nursery.

Native Planting Restoration Strategy

22. An extensive planting strategy has been developed to reintroduce native species on sites on the south side of the Glenorchy Routeburn Road including wetland species in low-lying areas, and native shrub and tree species on the Hillocks themselves. An estimated 105,000 plants will be required for this first phase of the project.

Walking Path

23. Visitors will have the option of being guided in small groups along an 850 meter walking path alongside the Hillocks to see the planting work underway. This includes:
- a. A compacted gravel footpath that follows a looped route through the site and which avoids wetland areas. The route has little or no incline.
 - b. The path is suitable for an electric golf-cart so a fully accessible visit is possible.

Footbridge and Dart River Viewing Area

24. At one point along the walking path walkers are given the option to cross over a small creek, and then walk partway up the side of the southern-most hillock to a viewing platform. From the viewing platform the upper Dart River/Te Awa Whakatipu, surrounding mountains, and glaciers can be seen.
- a. The timber footbridge is balustraded on both sides and fully spans the watercourse
 - b. The path to the viewing area is a continuous boardwalk to avoid the need for any earthworks.
 - c. The path is of a design and gradient to be fully wheelchair accessible.
 - d. The path has seats and resting places along the way and at the viewing area.

- e. People return from the viewing area via the same path, rejoining the walk at the same point they left it.

Landscape Viewing Hides

- 25. Three viewing hides are provided that allow walkers to understand the stories of this landscape including how the Hillocks were formed, about the moa and pouakai (Haast Eagle) that used to live here, how snow and ice have shaped this landscape, and the native plants now being planted. The hides are located along the walk and include the following features:
 - a. They are open to the landscape on either one or two sides so people can readily see framed its current form.
 - b. Walkers will go into the hides and be given the option to wear VR goggles so the moa, pouakai and the giant boulders of the Hillocks can be 'virtually seen' in the present-day landscape.
 - c. At the final hide walkers will be able to choose a native plant, that, at the right time of the planting season, will be planted on their behalf. While in the hide they will be able to watch the plant virtually grow both its roots and branches, before then walking back to the nursery to see again the ecological restoration work underway.

Carpark area

- 26. A graveled fenced carpark area is provided, on an already raised area of the property, with a gate and fenced walking path that leads to the Nursery and Welcome Centre. There is a vehicle access link that leads from the carpark to the Nursery that is for the use of nursery vehicles needing to access the Nursery potting up and hardening up areas. The footpath and vehicle access link follow an adjoining route that for health and safety reasons is separated by a fence.

Services

- 27. A septic tank system is provided for the 4 toilets located in the nursery area, with black and grey water pumped to a drainage field located over 50 meters from any wetland or waterbody.
- 28. Power, freshwater and cabled data are routed to all buildings through underground piping buried beneath graveled paths.

LANDSCAPE ASSESSMENT

Current farming practices at the site

29. For the last 140 years the farming activities of Dart Valley Station have been focused on farming beef cattle and sheep. However the current size of the station is 70 hectares, with the station's size making it uneconomic to develop the woolsheds, yards and other built infrastructure required to run its own cattle herd and/or sheep.
30. Currently the land is grazed through an annual grazing lease arrangement by a neighbouring landowner's sheep and cattle. Operational requirements results in this being undertaken intermittently with high stocking rates required to ensure effectiveness when grazing takes place.

Effects of current farming practices

31. Many years of grazing the land has resulted in livestock scarring the hillocks, compressing its soil, and resulting in these animal trails forming multiple ridges of various widths formed across all of the Hillocks (see figures 11-18).
32. Current farming practices are causing the death of many mature matagouri, likely through livestock trampling of their root base and also from some bark stripping (see figure 19).
33. Trampling of soil and wetland features has also occurred across low-lying areas (see item 11 above). The Beale report identifies five discrete areas of rushland as natural wetlands in accordance with the NES Freshwater Regulations 2020, with other areas prone to being waterlogged.

Effects of the proposal on wetland areas.

34. The proposal removes livestock from the site. This will stop stock trampling of wetland areas, and also low lying lands. It will also remove animal faecal matter from the property reducing water pollution from run off. This will directly enhance water quality on the property's wetland areas and two watercourses, and also downstream effect for water flowing off-property and into Te Awa Whakatipu/Dart.¹²
35. The ecological restoration plan included planting native wetland species in wetland areas enhancing the natural character of the wetlands. Other low lying areas that have a prevalence of exotic grasses and Californian thistle, with existing native sedge rautahi present. The proposal shows these will be planted with native wetland species, increasing the area of land that would be identified as natural wetlands in accordance with the NES Freshwater Regulations 2020, enhancing the natural character and scale of the wetlands on the property.¹³

Effects of the proposal on enhancing and maintaining indigenous biodiversity

36. The proposal's primary focus is to repurpose Dart Valley Station from a pastoral focus to one that is based on establishing a profitable native plant nursery that raises eco-sourced native plants for use on ecological restoration projects and for general sale.
37. The proposal will deliver an extensive native planting project with 105,000 native plants established over 14 hectares in the project's first five years of operation. This will substantially increase the native biodiversity qualities of the property. It will also provide valuable connectivity for native birds travelling between the regenerating forests on Ari/Mount Alfred and

¹² 3.2.4.3 The natural character of the beds and margins of the District's lakes, rivers and wetlands is preserved, or enhanced where possible, and protected from inappropriate subdivision, use and development.

3.2.4.4 The water quality and functions of the District's lakes, rivers and wetlands are maintained or enhanced.

¹³ 3.3.20 Manage subdivision and / or development that may have adverse effects on the natural character and nature conservation values of the District's lakes, rivers, wetlands and their beds and margins so that their life-supporting capacity is safeguarded; and natural character is maintained or enhanced as far as practicable.

the forested hillsides of the Humboldt Mountains located on the western side of the Te Awa Whakatipu/Dart River. These aspects support objectives to protect the distinctive natural environments and ecosystems of the District.¹⁴

Enabling evolving forms of agricultural land use in rural areas

38. The proposed activity establishes a farm-based plant nursery for raising locally eco-sourced native plants, that are then planted on the property, and as those activities near completion support other restoration planting projects in the district.
39. Such activities meet to a high standard, objectives that enable 'evolving forms of agricultural land use in rural areas' that do not conflict with protection of the landscape values and ONLs.¹⁵
40. The Beale report identifies how the Hillocks physical form makes this land prone to waterlogging. Given the recognised heritage qualities of the Hillocks it is questionable, given the trampling effects arising from allowing cattle and sheep to graze over them continues to be an acceptable activity.
41. The size of the farm, and the difficulty of managing stock in terms of both its lowlying nature and across its unique Hillocks forms strongly suggest that its past dependence on grazing cattle and sheep is both economically marginal and in terms of ensuring effective environmental stewardship increasingly problematic, with the proposal supporting provisions that support the retirement of marginal land in which indigenous biodiversity values [...] are protected or enhanced.¹⁶

Location of nursery to provide protection from harsh winds

42. The area is prone to strong winds that come from both the south-west and north-west. The intensity of the winds and also the way they blow from almost opposite directions can make findings a suitable site to grow seedlings challenging.
43. The specific location of the nursery uses the natural forms of the Hillocks to maximise the level of available shelter from these winds, while also ensuring they do not impede access to sunlight, with the nursery located in a site with a very beneficial microclimate. It also complements requirements to minimise visibility of farm buildings and locations of high farming activity.

¹⁴ 3.2.4 The distinctive natural environments and ecosystems of the District are protected.

3.2.4.1 Development and land uses that sustain or enhance the life-supporting capacity of air, water, soil and ecosystems, and maintain indigenous biodiversity.

3.2.4.6 The values of significant indigenous vegetation and significant habitats of indigenous fauna are protected.

¹⁵ 3.2.1.1 Enable continuation of existing farming activities and evolving forms of agricultural land use in rural areas except where those activities conflict with: a. protection of the landscape values of Outstanding Natural Features or Outstanding Natural Landscapes;

¹⁶ 21.21.3.1 For the implementation of relevant policies, in considering a subdivision or development proposal, the Council will have regard to the extent to which indigenous biodiversity values, in particular the habitat of any threatened species, or environments identified as chronically or acutely threatened on the Land Environments New Zealand (LENZ) threatened environment status, are protected or enhanced.

21.21.3.3 For the implementation of policy 6.3.2.6, in considering a subdivision or development proposal, the Council will have regard to the extent to which any marginal farming land is to be retired and reverted to indigenous vegetation.