

21.23.13 Kane Road and Luggate -Tarras Highway: Schedule of Landscape Values

General Description of the Area

The Kane Road and Luggate – Tarras Highway area corresponds to the expansive and flat outwash terraces on the northern side of Mata-au (Clutha River) (true left side), between Hāwea Flat and Luggate. To the south and west is Mata-au (Clutha River) PA (ONF). The northern boundary of the area adjoins 21.23.14 Hāwea Moraine and the east boundary abuts Hāwea South North Grandview PA (ONL) (at its northern end), and the ONL taking in Great Rock and Trig Hill along its central and southern boundary.

Physical Attributes and Values

Geology and Geomorphology • Topography and Landforms • Climate and Soils • Hydrology • Vegetation • Ecology • Settlement • Development and Land Use • Archaeology and Heritage • Mana whenua

Landforms and land types

1. The surficial geology of the area includes outwash gravels and glacial till from the glaciers that formed the Upper Clutha Basin and Lake Wānaka.
2. The outwash plains throughout the western, central, and north-eastern portion of the area are from the Albert Town Glacial Advance. More recent fluvial processes of erosion and sedimentation have reworked some older alluvium.
3. The elevated terraces in the vicinity of Glenfoyle (south-eastern portion of the area) correspond to outwash from the Luggate Glacial Advance. These are interspersed with river alluvium and aggrading fans aligning with the Crook Burn valley.
4. The sequence of landforms includes:
 - a. Lagoon Valley, along the toe of the Grandview Range.
 - b. The elevated alluvial terraces and fans with steep risers in the vicinity of Glenfoyle.
 - c. A series of degradational terraces dropping down to the river, where fluvial erosion has cut into the glacial outwash gravels to create a slightly undulating topography in places.
 - d. The sequence of steep terrace risers stepping down to the river and Crook Burn valley. Numerous small shallow gullies eroded into the terrace risers create a distinct wavering ribbon effect.
5. The relatively free-draining brown and pallic soils with reasonable fertility, reflected in pastoral farming and more intensive farming under irrigation.

Hydrological features

6. A series of steeply incised unnamed streams that drain across the outwash terraces to discharge to Mata-au (Clutha River). These channels tend to flow only during prolonged rainfall.
7. Irrigation reservoirs/ponds throughout the outwash plains, with varying levels of permanent water.

Ecological features and vegetation types

8. Particularly noteworthy indigenous vegetation features include:

- a. Limited amounts of mixed grey – sweet briar shrubland and kanuka on terrace risers, scarps, and throughout gullies.
 - b. SNA B (E18B) which comprises a mosaic of short tussock grassland, cushionfields and herbfields is located on the edge of the expansive outwash plain overlooking the Mata-au (Clutha River).
9. Other distinctive vegetation types include:
- a. Conifer shelter belts occur throughout the area and conifer woodlots occur in the vicinity of the Luggate - Tarras Highway and McKay Road.
 - b. Native and exotic amenity plantings associated with rural living, including roadside hedges, driveway avenues, shelter trees around dwellings, and large gardens.
 - c. Extensive areas of improved pasture used for dairying and over winter grazing as well as areas used for cropping are favourable seasonal feeding grounds for paradise shelduck, South Island oystercatcher, black-billed gull and spur-winged plover.
10. Rank exotic grassland present along road margins and across terrace risers, scarps and throughout gullies may be utilised by skinks.

Land use patterns and features

- 11. Pastoral farming or cropping. The area includes intensive dairying on either side of Kane Road and to the south of Luggate – Tarras Highway. Properties tend to be much larger than 20ha with large-scale farm buildings, stockyards, long and straight shelterbelts and farm tracks, pivot irrigation, and informal airport infrastructure evident. Low earth bunding is used in places to provide protection for farm storage areas.
- 12. Rural dwellings tend to comprise homesteads and worker cottages with very few rural living dwellings evident, excepting along the river edge and on McKay Road. Dwellings tend to be reasonably well-integrated by amenity and/or farm plantings, while workers cottages are more exposed and utilitarian in character. Two consented but unbuilt platforms on the east side of Kane Road.
- 13. The few rural living properties within the area (relative to its size), are generally located towards the southern end of the area, positioned to overlook Mata-au (Clutha River) ONF or scattered along the edges of Luggate – Tarras Highway.
- 14. Quarries near the intersection of McKay Road and the Luggate – Tarras Highway (including native plantings in places).
- 15. Neighbouring land uses which have an influence on the landscape character of the area due to their scale, character, and/or proximity include:
 - a. Mata-au (Clutha River) PA (ONF) immediately adjoining the area to the west, which includes the Upper Clutha River Track on the true right side of the river, the Newcastle Track on the true left side of the river, and part of the Hāwea River Track near the north-western boundary of the area. The steep scarps of the river corridors form a strong natural landscape edge to the area.
 - b. Hāwea South North Grandview PA (ONL) and the ONL along the western boundary of the area, which includes the Grandview Mountain Track network. The proximity and large scale of the mountains means that they form a dramatic backdrop to the area.

Archaeological and heritage features and their locations

- 16. Cob Cottage at 324 Luggate – Tarras Road (Ref. 531). Along with the cob buildings, a wooden house is also recorded as part of the site's archaeological record (archaeological site G40/35). This is currently used as a museum

17. The Stone Ruin at the Landreth property, 342 Kane Road (Ref. 512).
18. Wooden and cob buildings and structures, near 480 Luggate-Tarras Highway (archaeological site G40/26).
19. Stone cottage up the Crookburn Gully, reputedly associated with an early pastoral run (archaeological site G40/34).
20. MacKay Road Miners Trail, extending north-west from the intersection of Kane Road alongside the riverbank, with another fragment also identified around 2.5km south-east of Albert Town (archaeological site G40/243).

Mana whenua features and their locations

21. The entire area is ancestral land to many whānau within the iwi of Kāi Tahu whānui and, as such, all landscape is significant, given that whakapapa, whenua, and wai are all intertwined in te ao Māori.
22. The southern part of the area overlaps the mapped wāhi tūpuna Mata-au (Clutha River) and Te Rua Tūpāpaku.
23. The Mata-au (Clutha River) is a Statutory Acknowledgement under the Ngāi Tahu Claims Settlement Act 1998.
24. Te Rua Tūpāpaku is recorded as a fortified permanent pā.

Associative Attributes and Values

Mana whenua creation and origin traditions • Mana whenua associations and experience • Mana whenua metaphysical aspects such as mauri and wairua • Historic values • Shared and recognised values • Recreation and scenic values •

Mana whenua associations and experience

25. Kāi Tahu whakapapa connections to whenua and wai generate a kaitiaki duty to uphold the mauri of all important landscape areas.
26. The Mata-au (Clutha River) takes its name from a Kāi Tahu whakapapa that traces the genealogy of water. On that basis, the Mata-au is seen as a descendant of the creation traditions.
27. The Mata-au (Clutha River) was part of inland mahika kai trails and was also a key transportation route for pounamu from inland areas to settlements on the coast.
28. Te Rua Tūpāpaku is a kāika mahika kai located on the Mata-au (Clutha River) where weka, tuna (eels) and kauru (cabbage tree root) were gathered. It is also recorded as a fortified permanent pā.
29. The mana whenua values associated with this area include, but may not be limited to, wāhi taoka, ara tawhito, mahika kai, nohoaka, urupā, pā, wāhi tapu.

Historic attributes and values

30. The agricultural history and development of the area follows a similar trajectory to other locales in the Upper Clutha, with low-intensity pastoralism transitioning to more intensive farming and settlement over time. However, when compared to nearby areas like the Hāwea Flat, the development of this latter type of agriculture appears to have been limited by marginal quality of the land in the area. Most recorded heritage and archaeological sites in the area relate to these historic agricultural attributes.
31. The southern periphery of the area, along the Mata-au (Clutha River), is important as a focal point of mining during the 19th century and numerous archaeological sites have been recorded in the vicinity

(though mostly outside the area). Mining along the riverbank in this area is mainly understood to relate to sluicing and dredging operations during the late 19th - early 20th centuries.

32. The area encompasses much of an early European communication route alongside the Upper Clutha up from Cromwell. For the most part this has evolved into the Luggate - Tarras Highway, but fragments of an earlier miners' trail have also been identified in the RCL (G40/243) and a 'paper railway' winds across the landscape.

Shared and recognised attributes and values

33. Valued as part of the expansive swathe of overtly production-focused rural land throughout the terraces on the eastern side of Mata-au (Clutha River). The more open rural terraces form a contrast with the more developed and inhabited western side of the river and are of importance to the sense of spaciousness and identity of the Upper Clutha Basin as a working rural landscape.
34. The popularity of SH8A as a scenic vehicular and cycling route between Wānaka and the Lindis Pass and which reads as a spacious rural gateway to the Upper Clutha Basin.
35. The popularity of the Upper Clutha River, Newcastle, Eastern Hills and Grandview tracks nearby or within the area.

Recreation attributes and values

36. The Sandy Point Conservation Area with car parking and access to the river track and Eastern Hills tracks.
37. Freedom camping ground at intersection of Kane Road and Luggate - Tarras Highway (outside the area).
38. Deep Gully Eastern Hills Loop Track.

Perceptual (Sensory) Attributes and Values

Legibility and Expressiveness • Coherence • Views to the area • Views from the area • Naturalness • Memorability • Transient values • Remoteness / Wildness • Aesthetic qualities and values •

Legibility and expressiveness attributes and values

39. The generally planar character of the outwash terraces interspersed with gentle undulations, along with the aggrading fans (in the vicinity of Crook Burn) are expressive of the interaction of the glacial and fluvial processes that have shaped the Upper Clutha Basin.
40. The fans / scarps in the vicinity of Glenfoyle are expressive of alluvial processes.
41. The series of degradational terraces and eroded terrace risers and scarps leading down to Mata-au (Clutha River) are expressive of the fluvial processes of river erosion.

Particularly important views to and from the area

42. The almost continuous sequence of attractive and sweeping mid to long-range views from Kane Road, Luggate – Tarras Highway and the local road network across the outwash plains. The pastoral and cropping land use of the area and linear shelterbelts contribute a strong 'working farm' rural character, with the visibility of pivot irrigation infrastructure lending an industrial rural landscape impression in places. The distinctly working rural character or limited visibility of built development reinforces the rural impression and also reinforces the connection of the area to the proximate pastoral mountain context (Grandview Range PA (ONL)). The openness, spaciousness, and planar character of the majority of the area seen from the road, set against a continuous mountain or scarp backdrop, confers a memorable sense of a 'big sky' landscape.

43. The more intimate and close-range views afforded around Glenfoyle where the complex landform and vegetation patterns serve to close down views and imbue a strong sense of enclosure and containment.
44. Distant views from the summit of Mount Iron PA (ONF), where the panoramic vistas take in the expansive rural river terraces and prominent scarps extending across the area.
45. The expansive long-range 'rural' views from the elevated urban areas of Luggate to the south, in which the area forms part of the broad sweep of the Upper Clutha Basin rural plains, framed by a continuous circle of dramatic mountains (ONL). Also the views from SH6 near the airport where the continuity of the outwash plain is legible, with Mata-au (Clutha River) eroded into the outwash.
46. Highly attractive views from the Grandview Track network (ONL) to the east, in which the area reads as part of the expansive working rural landscape that appears to dominate the Upper Clutha Basin from this orientation.

Naturalness attributes and values

47. Perceptions of naturalness and of a spacious rural character are largely maintained for people visiting the landscape, although this is undermined to some extent by the presence of pivot irrigation infrastructure driveways, gateways, signage, and the like.
48. Human intervention as intensively managed farmland is evident. The terrace risers and scarps, and close proximity of Mata-au (Clutha River) and the mountain context, contribute a moderating influence with respect to the perception of naturalness.

Memorability attributes and values

49. Memorable to residents and locals as part of the 'rural hinterland' of the Upper Clutha Basin and as a seemingly spacious and open, overtly working rural landscape.

Transient attributes and values

50. Seasonal pasture and crop colours.
51. The changing shadow patterns from shelter belts and the changing light patterns across the undulating moraine and face of the 'rippled' terraces faces.
52. The presence of stock and wildlife such as hawks.

Remoteness/wildness attributes and values

53. Rural tranquillity and quietness are currently experienced in those parts of the area away from Kane Road and Luggate – Tarras Highway, where there are low traffic volumes and the levels of activity are consistent with 'working farmland'.
54. A dark night-sky impression contributes to feelings of remoteness.

Aesthetic attributes and values

55. The experience of all of the values identified above from public and private viewpoints.
56. More specifically, this includes:
 - a. Attractive rural and 'big sky' views across large open and flat paddocks to the terrace risers, scarps of the area, and the mountains framing the Upper Clutha Basin.
 - b. Strong rural character, with large areas of open space – either pastoral or cropping – seen bisected by linear shelterbelts, and with built development displaying a distinctly rural character.

- c. The juxtaposition between the tamed and flat rural land of the area and the rougher character and steep landform profiles along the river corridor and ranges along the western and eastern sides of the area.

Summary of Landscape Values

Physical • Perceptual (Sensory) • Associative

Rating scale: seven-point scale ranging from **Very Low** to **Very High**.

very low	low	low-mod	moderate	mod-high	high	very high
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The physical, associative, and perceptual attributes and values described above for the Kane Road and Luggate - Tarras Highway area can be summarised as follows:

- 57. **Moderate physical values** relating to the sequence of glaciofluvial terrace landforms, terrace risers and scarps and aggrading fans, the productive soils (with irrigation) and associated agricultural land uses, the mana whenua features associated with the area, the historic features of the area, and the strong patterns of rural land use.
- 58. **Moderate associative values** relating to the mana whenua associations of the area, the historic features, and the identity of the area as a part of the rural hinterland of the Upper Clutha Basin.
- 59. **Moderate perceptual values** relating to the expressiveness of the terrace, riser/scarp and fan landforms, the strong coherence of rural vegetation and land use patterns, the sweeping rural views across the (predominantly) open and spacious terraces that shape the identity of this part of the basin as a distinctly working rural landscape, the low-key rural tranquillity and quietness (in places), and the moderate level of naturalness, with rural living remaining subordinate to pasture/cropping and vegetation.

Landscape Capacity

The landscape capacity of the Kane Road and Luggate -Tarras Highway area for a range of activities is set out below.

- i. **Commercial recreational activities** – **some** landscape capacity for small-scale and low-key activities that: integrate with and complement/enhance existing recreation features; are located to optimise the screening and/or filtering benefit of natural landscape elements; designed to be of a small scale and 'low-key' rural character; integrate landscape restoration and enhancement (where appropriate); and enhance public access (where appropriate).
- ii. **Visitor accommodation and tourism related activities** – **some** landscape capacity for visitor accommodation activities that are located to optimise the screening and/or filtering benefit of natural landscape elements; designed to be of a small scale and 'low-key' rural character; integrate landscape restoration and enhancement (where appropriate); and enhance public access (where appropriate). **Very limited** landscape capacity for tourism related activities that are: visually recessive; designed to be small scale and have a low key 'rural' character; integrate landscape restoration and enhancement (where appropriate); and enhance public access (where appropriate).
- iii. **Urban expansions** – **extremely limited or no** landscape capacity.
- iv. **Intensive agriculture** – **some** landscape capacity where the quality of views and aesthetic attributes and values are maintained or enhanced.

- v. **Earthworks – limited** landscape capacity to absorb earthworks associated with trails, farming, rural living/visitor accommodation/tourism related activities, and recreational tracks that maintain naturalness and expressiveness values and integrate with existing natural landform patterns.
- vi. **Farm buildings – some** landscape capacity for modestly-scaled buildings that reinforce the existing rural character.
- vii. **Mineral extraction – limited** capacity for farm-scale quarries and expansion of existing quarries that that maintain or enhance the quality of views, naturalness values and aesthetic values.
- viii. **Transport infrastructure – limited** landscape capacity to absorb additional infrastructure that is of a modest scale and low-key rural character.
- ix. **Utilities and regionally significant infrastructure – limited** landscape capacity for additional district-scale infrastructure that is buried or located such that they are screened from external view. In the case of utilities such as overhead lines or cell phone towers which cannot be screened, these should be designed and located so that they are not visually prominent. In the case of the National Grid, **limited** landscape capacity in circumstances where there is a functional or operational need for its location and structures are designed and located to limit their visual prominence, including associated earthworks. **Very limited** capacity for other larger-scale regionally significant infrastructure.
- x. **Renewable energy generation – some** landscape capacity for small-scale wind or solar generation located where topography or mature vegetation ensures it is not highly visible from public places. **Some** landscape capacity for larger-scale commercial renewable energy generation as long as it is screened from public places.
- xi. **Forestry – limited** landscape capacity for scattered woodlots of up to 10 hectares in area.
- xii. **Rural living – very limited** landscape capacity to absorb additional rural living without cumulative adverse effects on associative and perceptual values. The rural character of the area is vulnerable to fragmentation and ‘domestication’ through rural living development, particularly along the edge of Mata-au (Clutha River). Generally, such an outcome could undermine the impression of this part of the Upper Clutha Basin as a spacious working rural landscape. For development along the edge of Mata-au (Clutha River) PA it is important that new development is difficult to see from the ONF, to protect the associative and perceptual values of the ONF. More generally, any additional rural living should be set well back from roads and public tracks; co-located with existing development; integrated by existing landform and/or existing vegetation; designed to be of a small scale and spacious, ‘low-key’ rural character; integrate landscape restoration and enhancement (where appropriate); enhance public access (where appropriate); and should maintain the impression of expansive rural views from public vantage points.

Plant and Animal Pests

- A. Plant pest species include wilding conifers, hawthorn, crack willow, broom, and lupin.
- B. Animal pest species include rabbits, stoats, feral cats, possums, hedgehogs, rats, and mice.