

APPENDIX C
LANDSCAPE UNITS PPC28 SITE

Landscape Units

Kaka Hill

Key Characteristics:

- large steep hill with distinctive conical form expressing volcanic lithology, highest part of site at 459m asl
- distinctive “knobby knees” form part of broad base slopes expressing weaker more easily weathered volcanic-derived bedrock similar to Olive and Botanical Hills
- *“Gully slope areas generally contain hummocky ground, terracettes and landslide backscarps indicative of previous deep seated slope mass movement”¹*
- reasonably straight fluvial dissection creating small gullies and narrowly rounded interfluves as Kaka Stream side-streams (mostly ephemeral), a splayed hand effect
- small wetlands and seeps in places
- mosaic of vegetation comprising a mix of grassland and woody vegetation, a mix of shrubland and mature trees, a mix of native and exotic with a gradient from mostly exotic weed species interspersed with native species to mostly indigenous, a mix of naturalising exotic species, regenerating indigenous and remnants of more mature indigenous
- mostly woody vegetation expressed as a textured mosaic in shades of green and brown; wilding conifers recently sprayed and browning off
- supports kanuka and matagouri cover on summit, an SNA
- the overall impression is one of naturalising exotic species interspersed with native vegetation remnants and regenerating native shrubland, broadleaf woodland and kanuka.
- Very little overt cultural imprint limited to tracking, fence lines and a power line; and firebreak along top ridge separating from Hira Forest



Kaka Hill viewed from Botanical Hill Photo: A Steven February 2022

Attributes:

Legibility: high overall; micro features obscured by woody cover, clearly visible under grassland

Intactness and Natural Character: moderate-high; visible interference with natural vegetation pattern and process; tracking and firebreak scarring

¹ P2 Tonkin + Taylor Geology Report to PPC28

Openness: very high (no structures evident)

Open Character/Enclosure: moderate-high due to prevalence of woody cover and degree of landform complexity through fluvial dissection; however expansive views from elevated locations

Simplicity/Complexity: more complex due to prevalence of woody cover, mosaic vegetation pattern and dissected landform, and track scarring

Visual Coherence: moderate-high; overall consistency in vegetation and landform patterns with few discordant elements, limited to track scarring and some unnatural grassland shapes/edges

Kaka Stream Valley (including Kaka-Maitai terraces)

Key Characteristics:

- low angle valley floor debris fans and alluvial terraces/floodplain, the gentlest topography of the site; includes parts of gentler lowest slopes of Kaka Hill, where cleared for pasture
- central stream feature, meandering in a narrow incised floodplain
- lower reach at confluence with Maitai River located in a broader U shaped terraced plain of alluvium; has been artificially realigned and combined with drains to enable agricultural use of the area. This area forms a distinctive sub-unit.
- includes an elbow of the Maitai River with a high eroding grassy bank
- dominant green pasture cover, irregular patches and clumps of trees and shrubs mostly exotic; lines of vegetation along fences
- several wet seepages expressed by reeds and rank grass; linear drains in places
- location of farm base including historic buildings/structures; power line runs through
- contains winding gravel access road connecting to Ralphine Way



Kaka Stream Valley viewed from Sharlands Hill. Kaka Stream in alluvial fans and terraces in centre (greener flatter areas); confluence with Maitai River near bottom of image; southeast side of Malvern Hills left to right across top of image. Part of Kaka Hill on middle right. Photo: A Steven February 2022

Attributes:

Legibility: moderate-high overall; macro and micro features visible under grassland; vegetation patterns partially express landform and drainage pattern

Intactness and Natural Character: moderate-low; widespread interference with natural vegetation pattern and process with most areas cleared for pasture; drainage lines and stream realignment; tracking scars; linear fence lines emphasised by vegetation; contains visible non-natural elements of buildings, structures, roading; power line crosses

Openness: high; buildings and human activity/occupation visible evident but contained to one node surrounded by extensive open space

Open Character/Enclosure: open spatial character is strong due to prevalence of grass cover and simpler low angle landforms; more broadly contained in the bottom of a relatively small valley

Simplicity/Complexity: comparatively simpler landform and vegetation structure and pattern

Visual Coherence: moderate; overall consistency in vegetation and landform patterns; logical location of farm base node; some discordant elements such as linear drains, fence lines, track scarring and some unnatural shapes/edges to variations in vegetation cover

Southeast Malvern Hills (refer Photo above)

Key Characteristics:

- steep southeast facing side of the broadly curving ridge (true right of Kaka Stream valley)
- fluvially dissected to create a rhythm of spurs and gullies coming off a broadly rolling summit, the true right side streams of Kaka Stream (mostly ephemeral)
- gully sides typified by hummocky topography and small scarps as evidence of “*very old ancient, prehistoric slope instability*”; more recent smaller scale soil slides and debris flows within gullies common especially towards head of valley on steeper slopes
- dominant green pasture cover with patches and clumps of woody vegetation over cleared areas on less steep slopes at south end, including the patch of mature kanuka identified on the SP; other patches contain a diversity of native species such as kanuka, mahoe, titoki, makomako, pukatea, mamaku, pate, coprosma and ferns and lianes² dominant woody shrub cover over steeper slopes at northern end; summit ridge in open grassland
- several wet seepages expressed by reeds and rank grass, one containing a mature kahikatea
- contains winding gravel farm road and three tracks connecting valley floor to summit ridge
- farm track along length of summit ridge

Attributes:

Legibility: high overall; macro and micro features visible under grassland; vegetation patterns express landform and drainage pattern

Intactness and Natural Character: moderate-low; widespread interference with natural vegetation pattern and process with most areas cleared for pasture; numerous tracking/roading scars; fence line follows ridge naturally; power line crosses

Openness: very high; no buildings or structures apart from power line crossing

Open Character/Enclosure: open spatial character is strong over southern part due to prevalence of grass cover; more enclosed in north end due to woody cover and narrowing of valley; more broadly, contained as side of a relatively small valley

Simplicity/Complexity: moderately complex over northern part due to gully/spur structure and woody vegetation cover; simpler over southern part due to larger scale and clearance of woody cover

Visual Coherence: moderate-high; overall consistency in landform and vegetation patterns which relate well to landform; fence line relates well to landform; tracking obvious visible scars crossing slopes; summit track follows landform

2 information provided by T Haddon June 2022

Northwest Malvern Hills

Key Characteristics:

- steep to rolling northwest to west (seaward) facing side of the broadly curving ridge
- less dissected and exhibits larger-scale slumping and sliding forming broader rounded shoulders and basins with uneven topography and planar headwalls
- former woody weed cover recently cleared so land is largely devoid of woody vegetation cover with expanses of pasture grass and colonising post clearance vegetation; a clump of mature kanuka remains on basin at south end
- surface erosion evident in places as irregular pale patches
- very sharp transition to wooded areas on adjacent land
- wet seeps evident due to greener rank grass, reeds etc; a few small stockwater ponds



Northwest seaward side of the Malvern Hills ridge between Walters Bluff to right and Atawhai on left. Source: Google earth street view

Attributes:

Legibility: high; macro and micro features visible under grassland; wet areas evident; absence of natural vegetation patterns; clean natural skyline

Intactness and Natural Character: moderate-low; almost complete interference with natural vegetation pattern and process with area recently cleared of extensive gorse cover; minor track and fence line elements; man-made ponds; power line crosses

Openness: very high; no buildings or structures apart from power line crossing

Open Character/Enclosure: open spatial character is strong; completely open to the sea; expansive views from crest and shoulders

Simplicity/Complexity: simple landform structure and landcover to the point of being bland

Visual Coherence: moderate-high; overall consistency in vegetation and landform structure; fence line and tracking relate poorly to landform; summit track follows landform

South Malvern Hills

Key Characteristics:

- steeper east and south facing self-contained fluvial basin draining into Bradford Park and contiguous with Olive Hill
- separated from Kaka Stream valley by a low sweeping saddle north of Olive Hill
- fluvially dissected with several spur and gully forms around its curving basin form
- farm road runs through upper part around the contour to attain rolling ridge summit; road continues along ridge summit to south and north
- land above road largely in pasture; land below road largely densely wooded with a mix of native and exotic of similar appearance to the cover on Branford Park and Olive Hill

- contains patches of mature kanuka; heavy visual texture with a variety of green and brown colours



South Malvern Hills basin viewed from Branford Park. Photo: A Steven

Attributes:

Legibility: high; macro form of basin easy to read despite woody cover

Intactness and Natural Character: moderate-high; almost complete interference with natural vegetation pattern and process above road with area cleared and under pasture; road is a visible scar; character of densely wooded landscape below road is highly natural

Openness: very high; no buildings or structures

Open Character/Enclosure: open spatial character is strong above road; lower half of basin more enclosed and intimate, inwardly focused

Simplicity/Complexity: reasonably complex with fluvial dissection and woody cover within a relatively small basin

Visual Coherence: moderate-high; overall consistency in vegetation and landform structure; roading is visually obvious but follows landform well. Upper edge of woody vegetation follows landform well so that whilst the open grassy ridge is unnatural a coherent pattern is retained. Stark contrasts with wooded reserve area on west boundary.

Overall the Kaka Stream valley landscape has a strongly rural character expressing pastoral land use, with a high level of openness due to the singular farm base. The pastoral land use is expressed as a more rugged hill farm in a landscape that is naturally woody, both naturalised exotic species and remnant/regenerating native species, expressing a less cultivated and more natural character. It is a self-contained and more intimate landscape separate from the urban areas of Nelson. It has an asymmetrical structure with the large higher and somewhat “wilder” Kaka Hill on the east side and the lower less dramatic southeast Malvern Hill ridge forming the west side. It is also narrower and more closed in in the north part, and expands out to the south.

The western side of the Malvern Hills ridge is a comparatively bland, but very open and undeveloped area of upper ridge side-slope running above the suburbs of Walters Bluff, Bayview and Capeview (due to recent clearance of gorse). The southern end of the Malvern Hills ridge is a self-contained wooded shady basin more connected to Bradford Park and Olive Hill.