SCHED9 — SCHEDULE OF OUTSTANDING NATURAL FEATURES

Unique identifier	Name	Landscape values and characteristics
ONF-1	Kākahu Bush/Te Kākaho	**Biophysical — High** • The limestone escarpment is one of a number of outcrops in the Timaru District, clearly showing the underlying geology. • Kākahu Bush/Te Kākaho includes interesting geological features such as large limestone boulders, balancing rock formations and large rock pinnacles. • The only known marble carboniferous rocks found in New Zealand are contained within Kākahu Bush/Te Kākaho and identified as a Geopreservation Area. • A mosaic of regenerating forest is found within Kākahu Bush/Te Kākaho Scenic Reserve and adjacent areas, including pockets of older mixed hardwood forests in the gullies and younger kanuka forests on the hillslopes. • Limestone areas and native vegetation remnants of high ecological value around Kakahu Bush support the habitat of the endangered pekapeka/long-tailed bat. **Sensory — Moderate to High** • Limestone outcrops are highly legible and form a distinctive natural pattern in the landscape with high aesthetic value. • Kākahu/Te Kākaho Bush retains a high level of naturalness and memorability due to its native vegetation and geology. **Associative — High** • Kākahu Bush/Te Kākaho provides an easily accessible walking track through the native bush clad hillside. • Numerous cultural rock caves/shelters are located along the limestone escarpment in addition to a midden/oven located on the lower lying flat land. • The Māori cultural landscape is also associated with the Kākahu River (Te Kākaho); it was used as a mahika kai source. Birds were gathered from the bush itself. Therefore, both the bush and river include habitat for taonga species. Additionally, the umu indicates that this area was used for processing of mahika kai. Therefore, this area is a relatively complete example where physical evidence links to mana whenua use and practices of the area. • The historic Kākahu lime kiln, identified as a Geopreservation Site, is made of marble and lime which dates back to the 1880s. • Several historic sites including huts, a house and garden, and tramway are located either within or near Kākahu Bush/Te Kākaho. • Diverse fossils are found within the Te Kākaho/Kakahu River. The ONF also intersects with the following Sites and Areas of Significance to Māori: SASM-7 and SASM-15. Values pertaining to these areas are also set out in SCHED6 and form part of the Associative values of this ONF.
ONF-2a	Downlands limestone features -	**Biophysical — High**

	Ōpihi Cliffs/ Raincliff Road/ Taniwha Gully	• A number of limestone escarpments and outcrops occur in the downlands between the Te Ana a Wai/Tengawai and Ōpihi Rivers that are typical for the area, clearly showing the underlying geology. • Native vegetation remnants, with specialised limestone species of high ecological value are present around various outcrops. • Limestone areas around support the only known habitat of the endangered pekapeka (long-tailed bat) population in the eastern South Island. • Native vegetation remnants, with specialised limestone species of high ecological value, are present.[1] **Sensory — Moderate to High** • Limestone outcrops are legible landscape features that are highly expressive of their formation. • Numerous escarpments extend along the valley sides forming a distinctive natural pattern in the landscape. • Hanging Rock and other outcrops around the Raincliff Bridge are widely known in the community as a striking and memorable limestone landscape along the Ōpihi River. • Some of the large escarpments and individual rocks below limestone scarps are highly impressive formations with varying visibility from public roads. **Associative — High** • The South Canterbury Downlands is a cohesive landscape that is of significance to mana whenua. • Numerous caves and rock art sites are located in the area which represent significant mana whenua values. Some of these drawings are visible from the road (fenced off areas). • The caves and rock art are a link to the past, ancestors and whakapapa. Rock art is taongka and is predominately located in South Canterbury while it is not known to exist in the North Island. • In the vicinity of Hanging Rock lies the well-known prehistoric art site of Ōpihi Taniwha rock drawings, a Geopreservation Site which has received wāhi tūpuna (sacred ancestors) registration under Heritage New Zealand recognising it as a nationally significant Māori ancestral site. • The rock shelters were used as resting places, as part of the Ara Tawhito that allowed travel from the coast inland to Te Manahuna. • Hanging Rock area provides excellent recreational opportunities for rock climbers. ONF-2a also intersects with the following Sites and Areas of Significance to Māori: SASM-9 and SASM-16. ONF-2b also intersects with the following Sites and Areas of Significance to Māori: SASM-7 and SASM-16. ONF-2c also intersects with the following Sites and Areas of Significance to Māori: SASM-7 and SASM-9. ONF-2d also intersects with the following Sites and Areas of Significance to Māori: SASM-16. ONF-2n, ONF-2o, ONF-2p and ONF-2q also intersect with the following Sites and Areas of Significance to Māori: SASM-9.
ONF-2b ONF-2c	Downlands limestone features - Upper Waitohi (Pigeon Rock and Coles/ Limestone Road)	
ONF-2d ONF-2e ONF-2f ONF-2g	Downlands limestone features - Raincliff/Rockpool/Mt Gay	
ONF-2h ONF-2i ONF-2j ONF-2k ONF-2l ONF-2m ONF-2n ONF-2o ONF-2p ONF-2q	Downlands limestone features - Totara Valley (Hazelburn, Braeburn, Glen Hays, Sterndale, Rockdale, Darvel, Brothers Road)	

[1] Frank, H [90.20]

		Values pertaining to these areas are also set out in SCHED6 and form part of the Associative values of this ONF.
ONF-3	Limestone Valley Escarpment	**Biophysical — High** • Distinctive limestone escarpment, showing its underlying geology and erosional processes. • Remnant and regenerating native vegetation can be found around the base along the southern part of the escarpment and around boulders which have high ecological values. • A majority of this limestone escarpment is contained within a QEII covenant. **Sensory — High** • Limestone outcrops are legible landscape features that are highly expressive of their formation. • High level of openness and naturalness with limited built modification • Limestone outcrops create distinctive shadow patterns at various times of the day. • The escarpment dominates the views along the valley, which contains largely open, extensive grassland. This creates a distinctive sense of place within this landscape to the east of Cave Hill and impressive views of the limestone outcrops. **Associative — Moderate to High** • Impressive views of limestone outcrops. • Numerous Māori caves/rock shelters and rock art are found along this limestone escarpment. • The wetland at the base of the valley beneath the limestone outcrops is home to taonga species, which are species that have an intrinsic value to KNgāi Tahu. • The Ta Ana-a-Wai/ (Tengawai) River was an important pathway to Te Manahuna (the Mackenzie Basin), and the protection of ancient Māori rock art (Kā tuhituhi o neherā) that developed in the catchment are related to the use of the catchment for trade and travel — tīpuna would have rested in the rock shelters. The ONF also intersects with the following Sites and Areas of Significance to Māori: SASM-8. Values pertaining to this area are also set out in SCHED6 and form part of the Associative values of this ONF.
ONF-4	Mt Horrible	**Biophysical — High** • Mt Horrible contains the youngest volcanics in the South Island consisting of a 25m sequence of olivine basalt lava flows, which is also listed as a Geopreservation Site of regional significance • Lava beds from Mt Horrible lie beneath Timaru and extend to the coastal cliffs near Dashing Rocks at the north end of Waimataitai/Caroline Bay. • Distinctive native vegetation cover of regenerating bush with high ecological value follows along the volcanic escarpment. **Sensory — High** • Steep slopes and basalt columns of Mt Horrible are highly legible in the surrounding landscape delineating it as an extinct volcano. • Mt Horrible's visual connection with the Pureora/Pareora River valley enhances its memorability values.

		Associative — Moderate • Mt Horrible provides recreational opportunities for rock climbers on quality basalt. • Timaru 'bluestone' originates from the volcanic rock of lava flows from the extinct Mt Horrible. • Claremont Bush below the escarpment provides a habitat for a range of ~~T~~tao~~ngk~~a species, while tī kōuka is present across the escarpment. • The Pureora/Pareora River was a mahi~~ngk~~a kai for mana whenua living in the area. Historic sources specifically associate the river and its catchment with tuna and tī kōuka. • Parts of the Pureora/Pareora River contain ~~W~~wāhi ~~T~~tapu sites. • Mt Horrible is the source of Te Wharetawhiti, which is a recorded mahi~~ngk~~a kai site. The ONF also intersects with the following Sites and Areas of Significance to Māori: SASM-8. Values pertaining to this area are also set out in SCHED6 and form part of the Associative values of this ONF.
ONF-5	Dashing Rock	**Biophysical — High** • Internationally significant loess section and geopreservation site (New Zealand Geopreservation Inventory, 2018) and the only internationally significant geopreservation site in the District. • Contrasting composition of black volcanic basalt and yellow/brown loess deposits (GNS Science, 2013) • Mixture of exotic and native vegetation found along the Dashing Rocks walkway and the beach below including macrocarpa (*Cupressus macrocarpa*), toetoe (*Austroderia toetoe*), mountain flax (Phormium cookianium), cabbage tree (*Cordyline australis*), harakeke (*Phormium tenax*) and pittosporum species. • Surrounded by a modified landscape including both industrial buildings and residential dwellings. • Presence of erosion with drainage measures and barriers • Bird species present include variable oystercatchers (*Haematopus unicolor*), and southern black billed gulls (*Larus dominicanus*) • Seals and penguins have been known to occasionally frequent the bay (Timaru District Council, 2013) **Sensory — Moderate to High** • Highly legible basalt terraces from ancient lava flows and loess cliffs which are expressive of their formative processes • Striking rock formations with high aesthetic value • Underlying geology remains coherent while vegetation and land use above the cliff face is modified and varied • Waves create a dramatic coastline at the base of the rocks with sea spray and erosion occurring, especially during stormy weather. • Expansive views of the Timaru coastline, including the Port to the south of Waimataitai/Caroline Bay. **Associative — High** • This part of the Timaru coastline stretching from the Waitarakao/Washdyke Lagoon to Waimataitai/ ~~(~~Caroline Bay~~)~~ was an important source of mahinga kai for K~~N~~gāi Tahu. Immediately west of the rock pools there was a small oven or midden found containing

		remnants of fish, seal, moa, smaller bird and kurī (dog) bones (Department of Conservation, 1995). Being close to the Te Waipounamu Eastern Coastal Trail it is likely that this was a destination when travelling along the eastern coastline of the South Island. • Known to be a wild part of the Timaru coastline with historic shipwrecks of the Benvenue and City of Perth (New Zealand History, 2011) • Widely recognised feature within the Timaru community as a popular recreational destination (e.g. the feature is part of the Hectors' Coastal Track). • Swimming, mountain biking and walking are popular activities with many taking the time to explore the rocks. The ONF also intersects with the following Sites and Areas of Significance to Māori: SASM-3, SASM-3b, SASM-13. Values pertaining to this area are also set out in SCHED6 and form part of the Associative values of this ONF.
ONF-6	Claremont Bush	**Biophysical — High** • Excellent regeneration of totara, matai, mahoe, hen and chicken ferns, coprosma, cabbage trees, matipo and kowhai can be found in the area. • Reserve with native vegetation and walking tracks located along the eastern extent of the Mt Horrible escarpment. • High diversity of ground beetles, some of them endemic to South Canterbury.[2] **Sensory — High** • A public walking track leads through bush which includes kahikatea and kowhai, as well plentiful birdlife. • Opportunity for recreation and environmental education close to nearby settlements. **Associative — Moderate to High** • Area below the escarpment provides a habitat for a range of ~~T~~taon~~g~~ka species for mana whenua and tī kōuka is present across the escarpment. • Protection of taon~~g~~ka species and their habitat is critical, as they are reminder to mana whenua (Arowhenua) of how life used to be and is a connection to the past. • Regenerating bush contains a mix of species similar to low-land areas prior to large scale European modification. It provides a physical reminder of the landscape that provided immense resources to mana whenua.
ONF-7	Ōpihi Gorge	**Biophysical — High** • Biophysical values relate to vegetation, but the geomorphic formation also is notable. • Exposed rock slopes and outcrops display clearly the underlying sandstone, greywacke and mudstone geology. • The areas of regenerating indigenous vegetation are interspersed with exotic vegetation, such as gorse, broom and sycamore.

[2] Frank, H [90.21]

		• Areas of intact indigenous vegetation represent a dry-habitat forest type that is now extremely uncommon and supports a number of threatened plant species. • Plant communities include indigenous hardwood forest with remnant podocarp trees and regenerating forest containing kanuka. • Rocky and forested gorge areas provide suitable habitat for endangered long-tailed bat, various bird and lizard species. **Sensory — High** • Formative processes are clearly obvious with various rock outcrops and the overall incised form of the gorge where it cut its way through the downlands. • High aesthetic values exist in the Ōpihi Gorge, with its dramatic incised canyon, steep slopes, grand scale and coherent regrowth cover. • The dense native regrowth and rugged rock outcrops/ erosion in the gorge provide for an impressive and remote experience within the gorge. **Associative — High** • A walkway leads into the gorge from the Fairlie side and keen trampers can continue through the gorge. • The Ōpihi Gorge and River was the principal travel route from Arowhenua to the rich kāika mahika kai (food gathering place) of Te Manahuna/ ~~(~~Mackenzie Basin~~)~~. • The area is of significant cultural value to Arowhenua. The ONF also intersects with the following Sites and Areas of Significance to Māori: SASM-16. Values pertaining to this area are also set out in SCHED6 and form part of the Associative values of this ONF.