

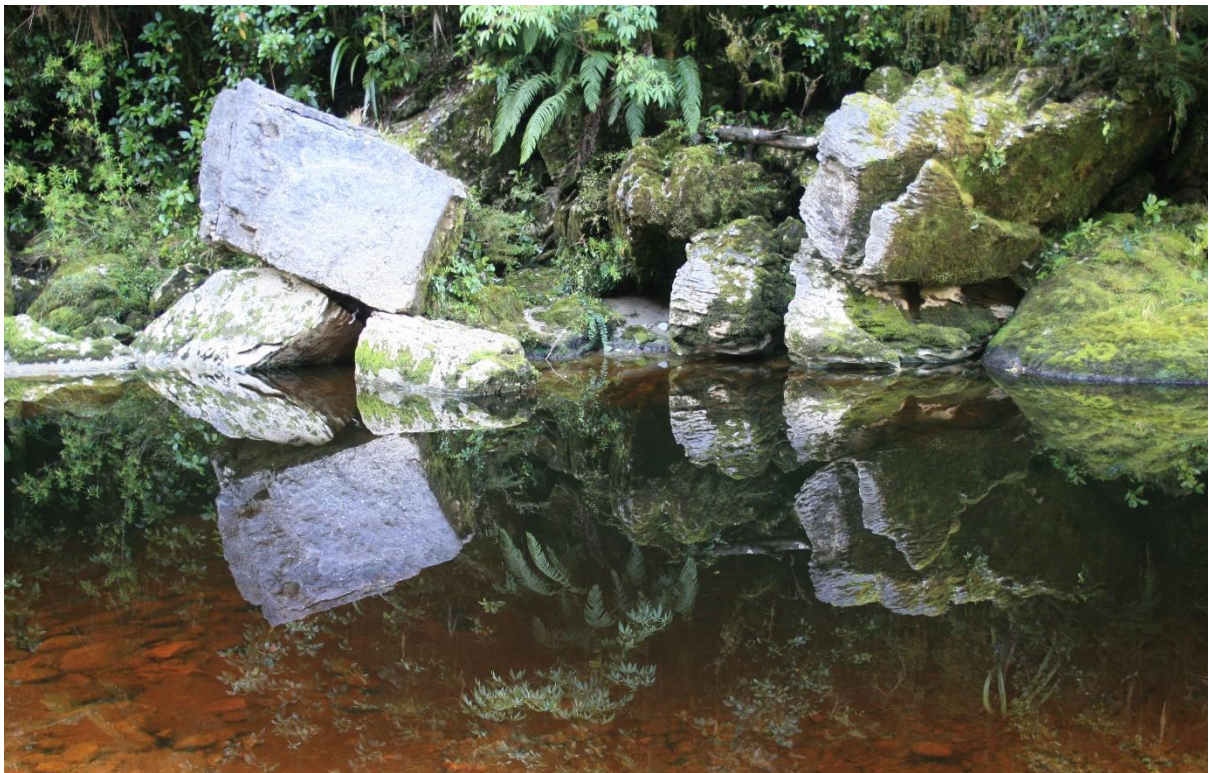
Department of Conservation

ŌPĀRARA BASIN TRACK STRUCTURES

Landscape and Visual Assessment

28 AUGUST 2020

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ŌPĀRARA BASIN TRACK STRUCTURES

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1 INTRODUCTION

1.1 BACKGROUND

The Department of Conservation (DOC) are seeking a resource consent under the Resource Management Act 1991 (RMA) to construct a series of track and road upgrades and various structures proposed to be located in the Ōpārara Basin. The proposal is located within the Kahurangi National Park, north west Westland.

WSP has been commissioned by the Department of Conservation to prepare a Landscape and Visual Assessment to assess the landscape and visual effects of the proposal.

An assessment of effects is required to ascertain any potential adverse effects of the proposal on landscape and visual amenity. This assessment responds to the Department of Conservations proposal to upgrade the surface and width of approximately 600ms of tracks, form approximately 730ms of new tracks, construct a new footbridge, cantilevered walkway structure, viewing platform, staircase, interpretation area and 16kms of roading upgrades in the Ōpārara Basin area.

The project site (which comprises several physically separated sites for development) is located approximately 25km north of Karamea, within the Kahurangi National Park. The Project begins where McCallums Mill Road crosses Break Creek No.2 and extends into the Ōpārara Basin where the Ōpārara Arch, Moria Gate, Mirror Tarn and other natural features are found.

It is considered that the primary issue is whether the proposed upgrades to an existing road, walking tracks (new and upgraded), and various structures are appropriate in this setting or not. In this regard both landscape and visual effects are relevant.

It is also acknowledged that tourism is and continues to be a major activity on the West Coast of the South Island. The Ōpārara Basin is no exception to this, forming a key visitor destination accommodating a regular influx of tourists attracted to the highly natural setting and its notable natural formations within the limestone landscape – including several arches and cave networks. It is understood that the existing road, some of the track and structures infrastructure are reaching or have exceeded capacity urgently requiring upgrading. The proposal also seeks to provide better access for those with limited mobility. It is anticipated that the proposed upgrades and additional structures will provide improved, safe access for an increased number of visitors into the future while better responding to natural landscape patterns and processes. As such the proposal is not likely to trigger additional landscape character or visual effects that would be unacceptable given the scale of the changes when the contextual setting is taken into account which includes existing human-induced modifications. It is also acknowledged that one of the purposes of the National Park environment is to allow for the access and enjoyment of the natural environment.

1.2 SITE VISIT

On August 6, 2020 a site visit was conducted. Mr Malcolm Hansen (Works Officer – Department of Conservation) also attended the site visit. The purpose of Mr Hansen’s attendance was to explain the background to the proposal and the current issues at hand. Mr Hansen also explained the various specifics of the proposal in order that the assessor could better understand the physical extent of the proposed changes to the site. From the main carpark area at ‘Ōpārara Arch Carpark’, the

Ōpārara Arch Track and Moria Gate tracks were walked. The track from the northern carpark area to Mirror Tarn was also walked.

McCallums Mill Road was driven slowly in both directions (including passing by the site for the proposed viewing/interpretation area) where the various changes and the nature of these changes were described by Mr Hansen. Photographs were obtained at regular locations throughout the site visit (other than along the road for safety reasons as road maintenance works were underway), to provide a record of the existing condition of the various sites and the previous and existing site modifications which are often where the proposed changes will be located. Some of the Ōpārara Arch track upgrades were being constructed while the site visit was underway. In this regard these particular upgrades' construction methodology and degree of improvements were clearly observed and understood.

This assessment is prepared recognising the statutory framework of the Resource Management Act in accordance with Schedule 4, clause 2(b)¹ which seeks that, in any assessment of a proposed activity, consideration is given to landscape and visual effects. The assessment considers the following effects:

- Broad scale effects - particularly on the natural character of the Park which, as a national park holds the second highest level of national conservation value (the first being a 'World Heritage Area').
- Localised landscape effects arising from the proposal within the track corridors' environment, including effects on visual amenity.
- Positive landscape effects on landscape and natural character and visual amenity arising from the proposal following remediation works as proposed.

1.3 RESULTS OF ASSESSMENT

The proposal will be located within a national park which demands a higher level of management of effects that are likely to be generated by any proposed changes. In effect, the landscape quality is considered at least equal to or above 'Outstanding Natural Landscape' status. The landscape setting that the proposed changes would fall within is unique and has very high levels of natural character.

Pertinent to the national park setting is whether the proposal is appropriate (or not). The proposal will introduce several modifications to the area (each of which are relatively small) which among other things will include a bridge and suspended walkway structure. However, current natural elements, patterns and processes will remain largely unchanged and will continue to prevail.

Regarding the effects of the proposal on the landscape character and visual amenity the following conclusions are reached:

¹ Matters that should be considered when preparing an assessment of effects on the environment. Subject to the provisions of any policy statement or plan, any person preparing an assessment of the effects on the environment should consider the following matters:

(b) any physical effect on the locality, including any landscape and visual effects:

At the broad scale, the effects on landscape character, natural character and visual amenity will fall between at worst 'very low'² to nil on the seven-point scale³ of effects. This is due to the relatively small scale of the proposal which is contributed to by the narrow tracks' corridors and a single road corridor all of which have a small construction footprint. The proposal introduces only a few typically 'short-stop traveller' track-related built forms. These modifications to the otherwise highly natural landscape are observed from a generally limited and focussed viewing environment.

At the local scale (from the track users' perspective), the effects on visual amenity will be at their worst; 'moderate-low'⁴, and over time, 'low'⁵. This is largely since the area is partly developed already with tracks and various structures even though the baseline environment retains very high natural values (**Figure 1**).

The specifics of the proposal include interventions that would be expected to varying degrees along any short-stop traveller track within a national park, including Kahurangi. What is being proposed is not without precedent.

Based on the above and given the national park status of the area where the proposal is located, the effects on landscape, natural character and visual amenity at the broad scale arising from the proposal will be 'very low' or nil. Overall, the proposal is appropriate to the character of the setting where the various proposed new features and upgrades would not be unexpected in this type of environment. The proposed design and construction methodology will optimise a 'best fit' with the landscape.

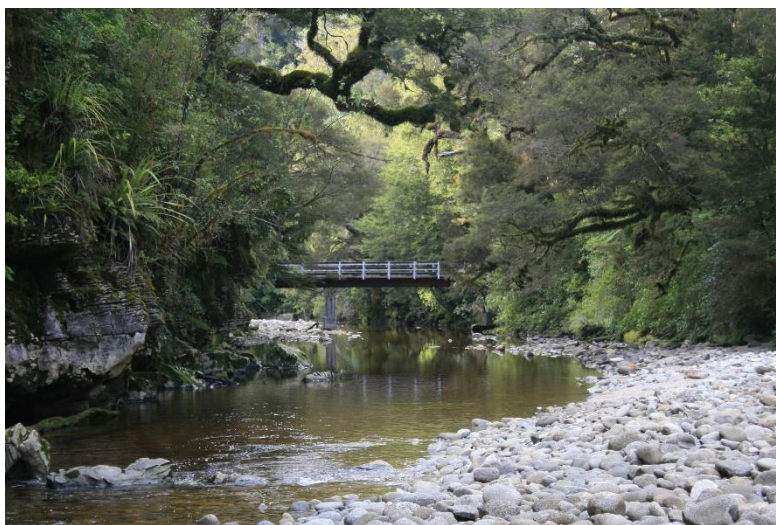


Figure 1 McCallums Mill Road vehicle bridge seen from the Ōpārara River. Photograph by J.Head August 2020.

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² **Very Low:** Very low or no modification to key elements/features/characteristics of the baseline or available views, i.e. approximating a 'no-change' situation.

³ From 'Very High' to 'High' to 'Moderate-High' to 'Moderate' to 'Moderate-Low' to 'Low' to 'Very Low': Defined and agreed at NZILA assessment methodology workshop (Christchurch), Dec 4, 2017 (part of a national roadshow facilitated by retired Environment Court Judge Gordon Whiting). Results currently being compiled.

⁴ **Moderate-Low:** A moderate to low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate to low level of effect on the perceived amenity derived from it.

⁵ **Low:** A low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a low level of effect on the perceived amenity derived from it. (Oxford English Dictionary Definition: Low: adjective-below average in amount, extent, or intensity).

2 SITE CONTEXT AND SITES

2.1 SITE CONTEXT

The DOC Kahurangi National Park visitor information brochure states:

“Wilderness, diversity and sanctuary - these are the images that best describe Kahurangi National Park. Formed in 1996, it protects much of the north-western corner of the South Island. Weaving through the park, is a network of tracks from the easy to the very challenging. The oldest and the most famous is the Heaphy Track. A number of interesting short walks cater for the day-tripper.”

And;

“The natural diversity of Kahurangi and its importance as a wilderness area are a result of its size and its diverse and ancient geology. Kahurangi is New Zealand’s second largest natural protected area; it has some of the country’s oldest rocks and landforms, and spectacular areas of limestone and marble sculptured into caves, arches and stunning outcrops by water. The variety of rock types, coupled with the range of altitudes and landforms (plateaux, valley floors, glaciated mountain-top and rocky coastline) provide a diverse range of habitats for plants and animals.”

Further, the proposal’s Assessment of Environmental Effects⁶ (AEE) provides an adequate description of the contextual setting in which the various sites are found:

“The Ōpārara Basin is a spectacular and sensitive part of Kahurangi National Park in the Buller District at the northern end of the South Island’s West Coast. This area is home to the largest limestone river caves in Australasia, subfossil bones of extinct birds, amphibians and reptiles as well as unique living fauna including birds, bats, snails and plants, many of which are Threatened or At Risk.

The Ōpārara Basin provides a rare opportunity for the visitor to experience a diverse cross-section of the ecological and other values that are represented in the park. There is perhaps no other place on mainland New Zealand where the opportunity of seeing such a wide range of avifauna is available outside of a predator-proof fence; where a spectacular karst landscape and towering tall forests can be experienced by people across all ages and abilities.”

The above descriptions are consistent with observations made during the site visit.

2.2 SITE(S) DESCRIPTION

While the Ōpārara Basin is the ‘site’, the site is essentially separated into a series of largely physically separated locations where the various changes are proposed. These consist of the following and will be discussed in turn under their own headings.

- Mirror Tarn carpark link track

⁶ Ōpārara Arches Project Assessment of Environmental Effects; prepared by Richard Nichol Ecology for the Department of Conservation; 2 April 2020 (page 1).

- Ōpārara Arch track
- Moira Gate staircase
- Mirror Tarn viewing structure
- Ōpārara Road viewing area and interpretation site
- McCallums Mill Road upgrade

Mirror Tarn carpark link track

The location for this track is on level terrain and traverses through an area clothed in dense, tall native vegetation typical of the area, linking the main carpark to the south and the smaller northern carpark. Trees, shrubs and groundcover plants are present. The 'site' is 350m long and follows a cleared trap-line through the forest where predator traps are regularly set. It is presumed that once the public track is formed, predator traps will be located elsewhere for health and safety reasons. Part of the route skirts the bank of the Ōpārara River. As the site is used for predator control purposes, the route is already partly modified, although only to a very small degree.

Ōpārara Arch track

The location for this approximately 1km long track is on variable, generally hilly terrain passing through beech-podocarp forest and small gullies - extending from the Ōpārara Arch carpark to the Ōpārara Arch. Part of the site extends beside and above the Ōpārara River. There are opportunities to access the river bed itself from parts of the track via small clearings formed where trees have fallen in storms. The site includes some existing track works built to 'day visitor/short stop traveller' standard, while other parts are currently undeveloped, clothed in dense native vegetation including trees, shrubs and ground covers. Limestone 'blocks' and bedrock are evident in places emerging through the forest litter and vegetation. The site currently includes approximately 130m of existing track that will be retired and rehabilitated. Other features include flights of steps and balustrading - some of which will also be retired and removed. The northern extent of the site links with the informal, but well-worn viewing area under the Ōpārara Arch - the largest natural limestone arch in New Zealand.

Moria Gate staircase

This site is confined to a short section of limestone bedrock and loose limestone blocks at the entrance to the Moria 'cave' limestone arch. This site is an approximately 20 minute walk from the southern carpark area. At present the site includes the well-worn steep, slippery and difficult natural 'staircase' entry point down into the cave. A chain is threaded through three steel eyelets fixed into the cave wall on one side which provides a type of 'safety handrail' for people (**Figure 2**). It is the only public access into the limestone arch. The access area where the changes are proposed is very small and because of this focussed use has become well worn by people tracking soil and grit into the cave. This has abraded the rock and discoloured it.



Figure 2 Existing access down into the Moria Gate. Chain 'hand rail' at left threaded through eyelets. Photo provided by client.

Mirror Tarn viewing platform

The site for the Mirror Tarn viewing platform is located in an area approximately 15m² on the edge of Mirror Tarn. Mirror Tarn is a small roughly circular freshwater lake which is possibly a remnant of a meander loop of the Ōpārara River. It is understood that the site once included a timber jetty that extended into the lake. The terrain for the site grades gently down to the lake surface and forms the well-worn terminus for the Mirror Tarn track (**Figures 3, 4**). This walking track is formed to minimal standards. The lake edge to the site includes exposed tree roots and marshy ground including some small riparian grasses. The ground is compacted close to the lake edge – evidence that visitors are walking over the tree roots. Some trees are located on either side of the platform site framing the view to the lake. Other trees – *Rapanea salicina* (toro) are located within the construction footprint, some of which are dead or in poor condition.

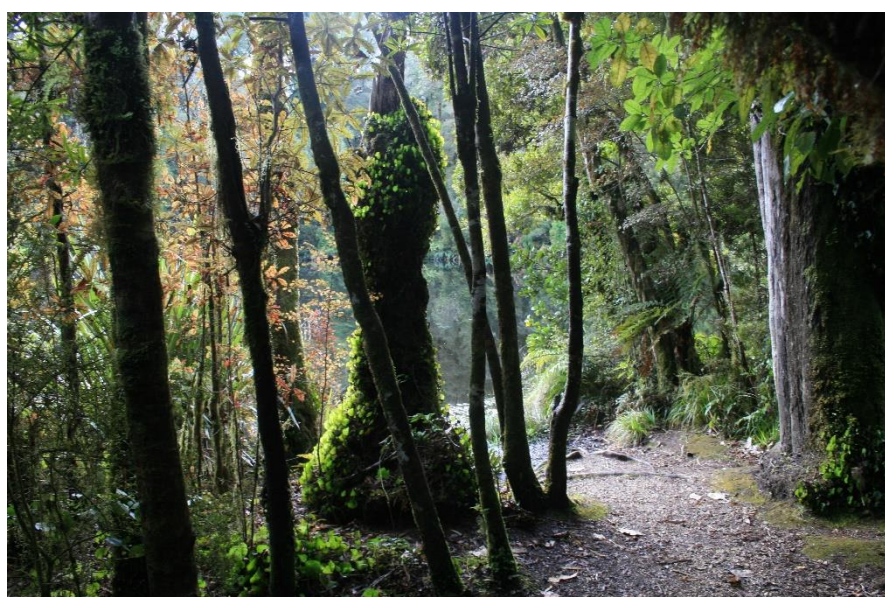


Figure 3 (previous page) Approaching the site for the Mirror Tarn viewing platform. Photograph by J.Head 6 August 2020.



Figure 4 Mirror Tarn viewing platform site. Photograph by J.Head 6 August 2020.

Ōpārara Road viewing area and interpretation structure

The approximately 800m² cleared site where the interpretation experience is proposed is located on a high point in the landscape, accessed from McCallums Mill Road approximately two thirds of the way in from the western end of the road near Break Creek No.2. It is understood that the site was previously cleared to form a winch site in the 1960s where logs were hauled to this high point to be processed following logging processes. This would have caused the clearance (deliberate or through crushing) of much of the surrounding vegetation. The vegetation around the site is therefore relatively young with the oldest trees being approximately 50 years old. As the site has been kept cleared for road maintenance purposes (stockpiling of materials and parking vehicles) grasses and other weed species have established where light is available.

McCallums Mill Road upgrade

This site includes the existing McCallums Mill Road corridor. The road forms the only public trafficable link between Break Creek No.2 near the road end / turnaround and the Main Ōpārara carpark 16km to the north west. The road is signposted at 35kph. Presently the road meanders, including some blind bends and changes in grade with some steep sections and drop-offs. The road surface is unsealed with open drains at the sides, 93 culvert crossings, and has few areas where vehicles can comfortably pass one another. In places steep exposed cut faces are seen above the road. The terrain below the road is typically covered in dense native forest. Vegetation cover at the sides of the road is variable and includes mixed secondary indigenous vegetation although potentially large emergent species such as rimu, rata, totara and kahikatea remain. The forest is typically second generation following logging. Other vegetation cover includes wetland areas, pakihi, various weed species, and a line of Tasmanian blackwoods. The existing environment in which the road passes through is described in detail in the AEE and is not repeated here other than to state that the description of the road and the broader road corridor aspects accords with observations made during the site visit.

2.3 SITES LANDSCAPE CHARACTER – SUMMARY

The level of existing landscape character sits on a continuum – from ‘very high’ which describes a pristine environment with no modifications to ‘very low’ which would fit an urban setting. Most sites are located somewhere between these two extremes. The sites as described above extend beyond their construction footprints. For example, while the changes to McCallums Mill Road are largely confined to the constructed road corridor, the road has a contextual setting. This setting includes the vegetated roadsides. When describing landscape character, the nearby context needs to be considered too as it is part of the overall.

All of the sites described above (other than the Mirror Tarn carpark link track) include built or unbuilt modifications already. These range from well-worn pedestrian routes to bridges and staircases and so forth. However - all of the sites are within or adjacent to highly natural settings (surrounding indigenous vegetation, limestone formations, Ōpārara River). For this reason, the various sites (which largely include built modifications) still retain ‘high’ levels of landscape and natural character (**Figure 5**) because the underlying natural features and abundant vegetation cover clearly dominate the various settings.

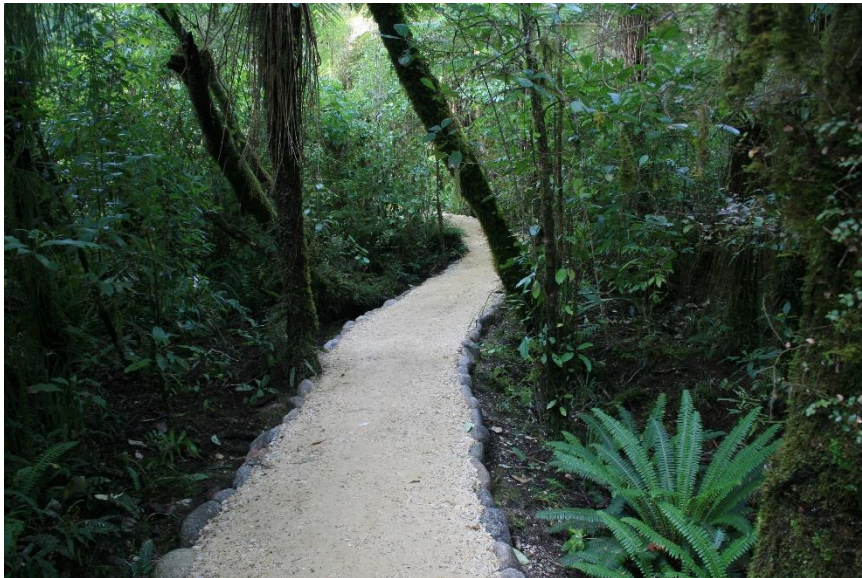


Figure 5 Recently upgraded section of the Ōpārara Arch track using the ‘on-ground’ construction technique where the limestone crushed chip is placed on the ground retained inside the stone edging. This track has not yet weathered. Photograph by J.Head 6 August 2020

3 PROPOSAL

The specifics of the proposal are described in thorough detail in the AEE and are not repeated here. In short, the proposal includes six separate interventions summarised below:

McCallums Mill Road upgrade (16kms)

- Upgrades to culverts and roadside drains.
- Removal of areas of roadside vegetation including five rimu trees with DBH of 100-200mm.
- Formation of new cut batter slopes.
- Upgrades to bridges.
- Reducing gradients in places.
- Widening the trafficable surface to provide a uniform 5.5m wide carriageway.
- Formation of new concrete dish channelling to replace roadside drains.
- Formation of new chipseal road surface in some sections.
- Formation of 28 safe pull off areas.
- Construction of new vehicle safety barriers and warning signs.

Ōpārara Road viewing area and interpretation structure

- Resurface existing 800m² cleared site with AP20 lime chip or river gravels to provide safe vehicle access and parking for up to 16 vehicles. The perimeter will be edged with limestone rocks to provide seating and a safety barrier.
- Remove a section of vegetation to provide clear views out across the basin landscape.
- Construction of interpretation panels inside open-sided roofed structure.

Moria Gate staircase

- Removal of chain and eyelet 'handrail'.
- Installation of timber/steel staircase and handrails. Step treads will be steel self-cleaning type.

Ōpārara Arch track

- Upgrades to the walking track to 'Short Stop Traveller' standard (600m x 1.2m wide).
- Removal of areas of vegetation from track construction footprint.
- Formation of new sections of track to 'Short Stop Traveller' standard (380m x 1.2m wide).
- Construction of a viewing area/river access point.
- Construction of an all-steel 1.2m wide by approximately 100m long cantilevered walkway structure with 10m long x 1.2m wide timber/self-cleaning deck 'lead-in' ramp (**Figure 6**).
- Construction of a timber/steel pedestrian bridge 1.2m wide.
- Areas of limestone gravity retaining walling below some new sections of track (225m).
- Relocation of single large limestone 'block' from above to below the track.

- Widening of existing timber footbridge to 1.2m and raising handrail height to 1.2m above decking.
- Installation of limestone ‘mattress’ at Ōpārara Arch viewing area (approximately 9m²).
- Replacement of 200mm diameter buried culvert pipes with 300mm diameter pipes.
- Removal of retired structures, hessian material and partial revegetation of retired sections of track.

Mirror Tarn carpark link track

- Formation of new track to ‘Short Stop Traveller’ standard (350m x 1.2m wide).
- Removal of areas of vegetation from track construction footprint.
- Construction of a river viewing area.
- Installation of 300mm diameter culvert pipes below track where necessary.

Mirror Tarn viewing platform

- Removal of 1-2 small toro trees (50-125mm trunk diameter at breast height) from construction footprint. Removal of one larger dead tree.
- Installation of viewing platform. Timber sub-structure. Self-cleaning steel decking set approximately 400mm above water level. Steel balustrades. On-grade access from existing path.

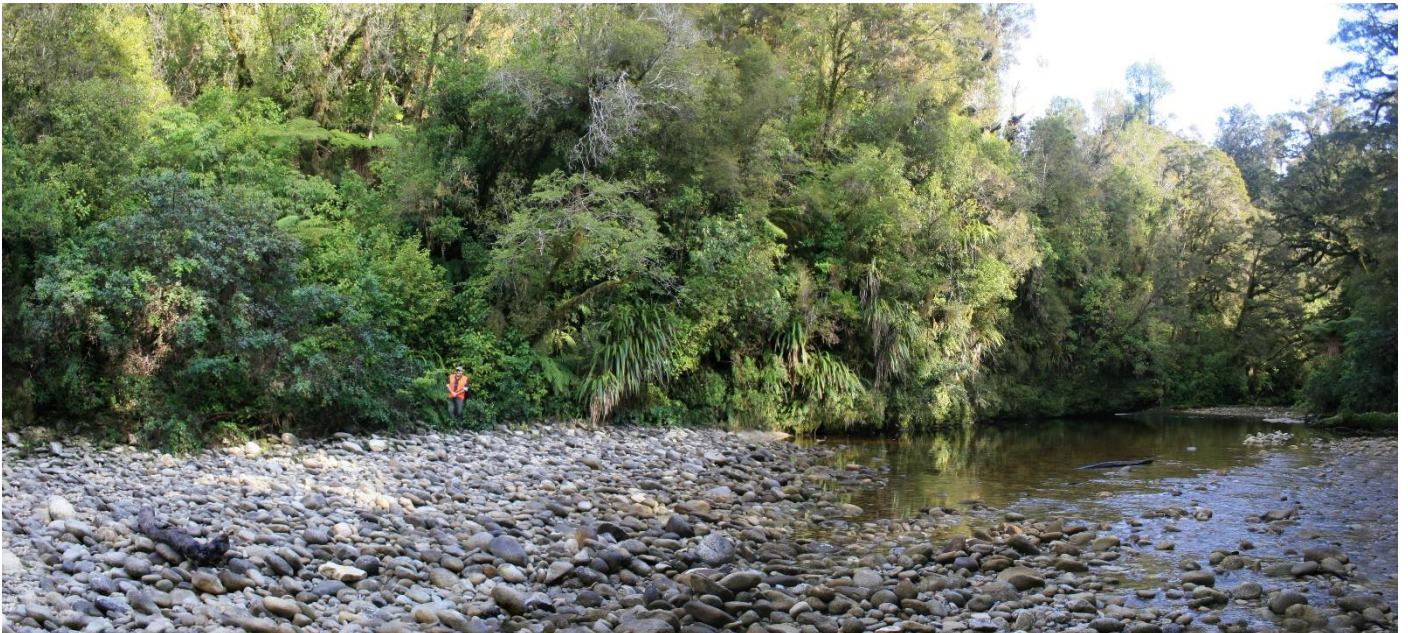


Figure 6 View from the Ōpārara riverbed back to the area where the suspended walkway will be located. The height of the walkway decking will be approximately three times the height of the figure in the photograph and will extend to the right where it will round the limestone bluff overhanging the river. Photograph by J.Head 6 August 2020

4 LANDSCAPE ASSESSMENT

4.1 MIRROR TARN CARPARK LINK TRACK

This includes an approximately 350m length of 1.2m wide track linking McCallums Mill Road just north of the Ōpārara River bridge crossing with the Mirror Tarn carpark further to the north. The purpose of this track is to discourage visitors from walking up McCallums Mill Road which carries motorised vehicles.

This track will follow an existing trap line on generally level ground which has been partially cleared of vegetation. Some remaining vegetation will be removed to construct the 1.2m wide track. No trees with a DBH⁷ of greater than 50mm will be removed to construct the track. The track will be formed away from larger trees where necessary. The track will be constructed in an 'on ground' method by setting river boulders into the ground at the edges and backfilling between these edge restraints with crushed, compacted limestone chip. The top surface of the track will be approximately 200mm above the surrounding forest floor.

In terms of landscape effects⁸, there will be a change in that a formed track will be introduced to an area where a track does not exist. Further, there will be some excavation at the edges to form the rock edging and to level and fill some high and low points respectively along the route.

Partway along the track a small viewing area will be formed overlooking the Ōpārara River. This will be formed at track grade, retained where necessary with limestone rocks and backfilled with aggregate material and compacted. This area will measure approximately 3m wide x 2m deep.

There are no other structures proposed along this track other than standard DOC signage at either end.

It is understood that construction effects will be minimised by using a small mechanical digger which will access the route from either end as there are a pair of trees mid-way along the track route that block the digger's passage. The track will be formed to pass between these two trees at a pinch-point.

Any potentially adverse visual effects⁹ will be limited to when on the track, or from the carpark and McCallums Mill Road looking towards the end points. There is no other (easy) public access.

Given that tracks are an existing and expected part of the developed context of the Ōpārara basin, and due to the small scale of the path, on the seven-point scale¹⁰ of effects, this part of the proposal

⁷ Trunk diameter at breast height ('DBH') when standing beside the tree.

⁸ 'Landscape effects' concern changes to the physical setting or character of the landscape which may or may not be seen but are otherwise understood to exist.

⁹ Changes to the landscape that can be seen and may affect widely held amenity values.

¹⁰ Defined and agreed at NZILA assessment methodology workshop (Christchurch), Dec 4, 2017 (part of a national roadshow facilitated by retired Environment Court Judge Gordon Whiting). Results currently being compiled.

will have 'low'¹¹ adverse landscape and visual effects. At the broader basin-wide scale the landscape and visual effects will be 'very low' to nil.

4.1.1 POSITIVE EFFECTS

- Provides a more accessible route for pest control which may have further benefits on reducing pests in the area.

4.2 ŌPĀRARA ARCH TRACK¹²

This track comprises several different construction methodologies and structures. Each are discussed in turn and an overall assessment finding of the entire track from the carpark to the Ōpārara Arch is provided at the end of the section.

On-ground tracks: Like the Mirror Tarn carpark link track described above part of this track includes an 'on-ground' track construction methodology (approximately 600m). Other parts of the upgraded track skirt banks which 'retain' the track at its uphill side (approximately 380m). In these instances, the boulder edging will be installed on the downhill side of the track only, before the 200mm or so crushed limestone chip track surface is backfilled (**Figure 7**). Trackside drains and culverts will be installed as and where necessary to facilitate drainage. Culverts will be 300mm in diameter, black in colour. If parts of the culverts are visible at the inlet and outlet ends, the black colour will be appropriately recessive (**Figure 10**).

Other sections of the proposed track upgrades will be relocated but kept within the existing tracks construction bench. The purpose of this is to avoid areas where track undermining occurs. Following realignment, the retired side areas of the bench will be revegetated (**Figure 8**).

The above track construction includes upgrades to an existing track surface with no departure from the existing track bench. Therefore, on the seven-point scale¹³ of effects, this part of the proposal will have 'very low'¹⁴ to nil adverse landscape and visual effects.

¹¹ **Low:** A low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a low level of effect on the perceived amenity derived from it. (Oxford English Dictionary Definition: Low: adjective-below average in amount, extent, or intensity).

¹² The Ōpārara Arch track construction methodology needs to respond to variations in the terrain and vegetation cover. In this regard a degree of flexibility needs to be allowed for in terms of actual lengths of different types of tracking.

¹³ Defined and agreed at NZILA assessment methodology workshop (Christchurch), Dec 4, 2017 (part of a national roadshow facilitated by retired Environment Court Judge Gordon Whiting). Results currently being compiled.

¹⁴ **Very Low:** Very low or no modification to key elements/features/characteristics of the baseline or available views, i.e. approximating a 'no-change' situation.



Figure 7 Ōpārara track; Upgrades here include raising the track surface by 200mm and retaining the edges with limestone rocks in gaps where there is no existing bedrock. Photograph by J.Head 6 August 2020



Figure 8 Ōpārara track; Upgrades here include relocating the track surface to the left of the figure to avoid undermining currently occurring downhill of the track. The retired section of track bench will be revegetated. Photograph by J.Head 6 August 2020.

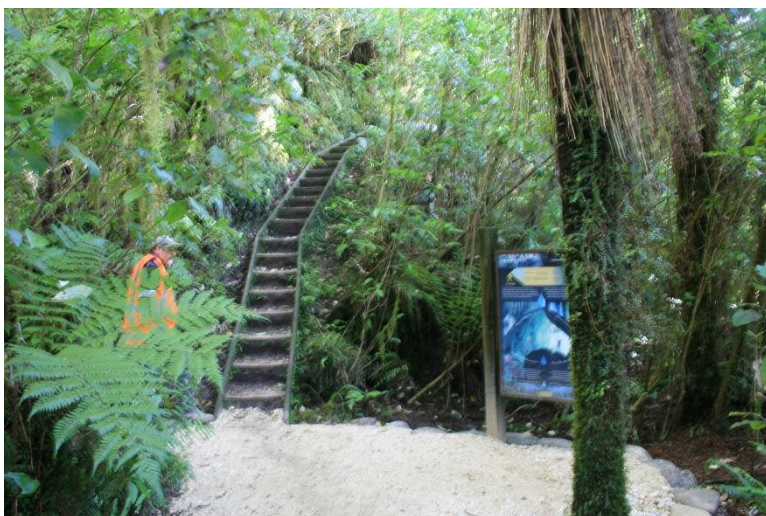


Figure 9 (left) Ōpārara track; Timber staircase which will be removed as the new track will extend at grade to the left of the interpretation panel. **Figure 10** (right) 200mm PVC culvert that will be replaced with 300mm diameter black PVC type. Photographs by J.Head 6 August 2020.

Ōpārara River view point: At present a level viewing area/safe river access point has been built near the carpark end of the track (**Figure 10**). A second structure is proposed further along the track in an area where the bank has been eroded by alluvial processes. This erosion has been exacerbated by people sidling down the bank here to walk out onto the river flats where there is a clear gap in the vegetation. The intent is to construct a similar feature using large limestone rocks to both retain the bank and provide a deliberate, robust access point where people can step down to the river without further damaging the bank. Potential adverse landscape effects will be 'low' as the structure is low-key, avoids substantial earthworks and uses local rock materials hand-placed in an informal manner. Adverse visual effects will be 'low' in the short term before the rock weathers and vegetation establishes on and around it – particularly when viewed from the river flats where initially it will have a degree of contrast. Over time these visual effects will decrease to 'very low' to nil. At the broader basin-wide scale the landscape and visual effects will be nil.

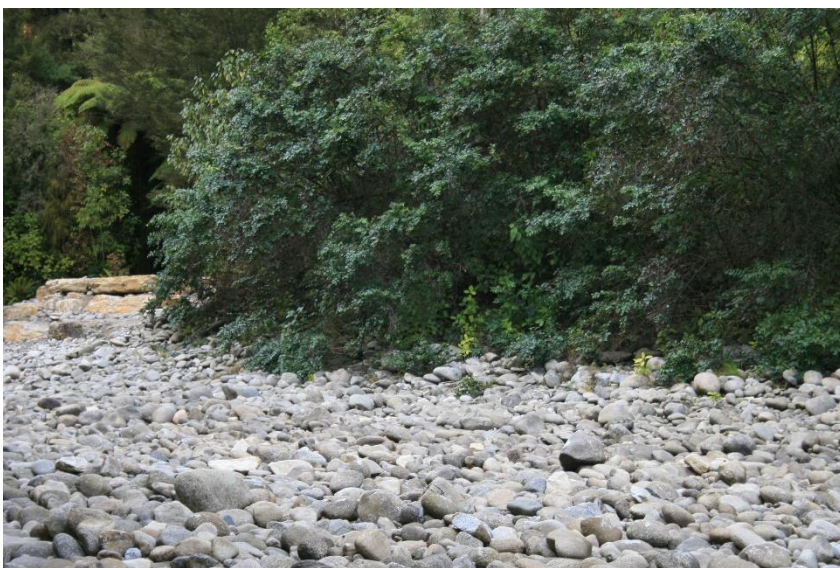


Figure 10 View from the Ōpārara riverbed. Rockwork (unweathered) associated with bank stabilisation works / public viewpoint and riverbed access point at left. Photograph by J.Head 6 August 2020.

Figure 11 (above, right) Stony Creek limestone that will be used in the track upgrades. Photograph by J.Head 6 August 2020.

Dry wall retained tracks: Some new sections of the track (approximately 250m) that traverse steeper slopes and cross low points in the terrain will require a more substantial retaining structure below the track surface. This will be via a hand-built limestone rock gravity type retaining wall using local 'Stony Creek Limestone' (**Figure 11**), with the wall built wider at the bottom, with the top set flush with or just above the track surface. All walling will be no taller than 1.6m and in most instances will be much less than this. As the limestone rocks are 'dry' stacked and backfilled with site soil, ferns and other small plants removed during construction will be replanted into the joint gaps – the intent of which will be to eventually clothe the rock wall in foliage. Where required for safety reasons, a timber balustrade and handrail will be located to one or both sides of the track.

This type of track will require vegetation removal to construct it. The track will pass through areas where no track currently exists. Further, there will be a vertical element to the track contributed by the retaining wall below the track and potentially balustrading above it which will be visible from some vantage points from the Ōpārara River. In the short term (up to 3-5 years) there will be greater visual effects than in the medium to long term after which the rock will have weathered and the plants will have established on and in front of the wall. Landscape effects will not change as this

section of the track will always be a new intervention. Partly balancing out the landscape effects is the retirement of other sections of track, including structures such as steep staircases and balustrades.

On balance the sections of dry wall retained tracks will have a 'low' adverse landscape effects. Adverse visual effects will be 'moderate'¹⁵ in the short term reducing after 3-5 years to 'low' and very 'low' to nil where the track and walling below it weathers and becomes screened by vegetation cover. At the broader basin-wide scale the landscape and visual effects will be nil.

Suspended walkway: This all-steel structure will be approximately 100m long and will be essentially 'hung' off the slope angling up at 5 degrees from its start point at the south, then level off as it passes around the corner where a limestone bedrock 'bluff' juts into the river corridor. After this point the suspended walkway extends on a level grade linking with the end of the new footbridge. The structure will be approximately 6m above the Ōpārara River bed where the river gravels meet the bank. Construction will comprise a series of bespoke curved uprights and cabling. The deck will be a steel self-cleaning type. All visible steel components will be finished in Resene 'Ironsand'.

Construction will require a 6m wide strip of vegetation removal but will not require any earthworks.

While the suspended walkway will be a new intervention to the area, it will provide a considerably easier walking experience to the Ōpārara Arch, including for mobility impaired people. The walkway will also provide a more intimate, easy and safe experience of the Ōpārara River. Nonetheless it will be an intervention in an area where no other structures are present, and it will require an area of vegetation removal to construct and to provide ongoing unobstructed access for those walking along it.

The potentially adverse landscape and visual effects will be covered next after the discussion on the new bridge as the two structures are physically connected and will have similar landscape and visual effects and public responses to these effects.

New bridge: A new bridge (approximately 15m long with a deck width of 1.2m) is proposed to cross another unnamed gully. The purpose of this bridge is to continue from the new suspended walkway maintaining a relatively level access between the start of the track and the Ōpārara Arch terminus. The final detailed design of the bridge is not yet complete at the time of writing this. It is understood that the intent of the bridge design is to make it as visually 'lightweight' as possible. This would be achieved by using a steel lattice work truss, with steel self-cleaning deck and steel balustrading. Handrails will be timber. The steel work will be painted in Resene 'Ironsand' which is a recessive colour¹⁶ and will tone in appropriately with the surrounding substrates and vegetation cover. Some vegetation will be required to be removed to construct the bridge.

On balance, and on purely landscape grounds, any adverse landscape effects of the suspended walkway and bridge will be 'moderate' as both are new, engineered structures introduced into a highly natural setting, skirting above a river, crossing a stream and gully feature.

¹⁵ **Moderate:** A moderate level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate level of effect on the perceived amenity derived from it. (Oxford English Dictionary Definition: Moderate: adjective-average in amount, intensity or degree).

¹⁶ 8% Light reflectance value ("LRV"). Simply put, black is 0% while white is 100%.

Adverse visual effects will be slightly lower than this in the short term at 'moderate-low'¹⁷ reducing to 'low' after 3-5 years as vegetation growth re-establishes. It is also acknowledged that the recessive colour and 'transparent' construction methodology goes some way towards ensuring that these interventions have a good level of compatibility with the colours of their highly vegetated context.

Potentially adverse visual effects will primarily fall on those using the walkway and bridge, but also those looking up at the structures from the Ōpārara River where the suspended walkway in particular will be clearly visible – more so when people are walking along it. For some, this will reduce their privacy and wild experience of this part of the Ōpārara River. The walkway and people on it may be considered an unwelcome distraction.

It is also acknowledged that for some, there will be a favourable response to the structures. Visitors using the structures will be in the area to get to the Ōpārara Arch and walk through the forest. The structures will improve that experience for most people, but not all. Some may see the structures as diluting or 'urbanising' the 'wild' experience of the Ōpārara Basin.

Both the suspended walkway and bridge provides an easier access for walkers who currently have to climb up and down a steep bluff. This access bluff track includes a timber staircase, edging and balustrade/handrails. The proposal will retire this section of the track and remove the introduced structures. The retired route will be partly planted with ferns, and natural recolonization of indigenous species will be otherwise left to occur naturally.

In landscape terms the proposed suspended walkway and bridge by nature will rest 'lightly on the land'. The forest will continue to evolve and endure either side of, below and above these structures. Earthworks are very limited (bridge fixings) or nil (suspended walkway). Colours are recessive. This all goes some way towards an appropriate solution or 'fit for site'. To this extent it is considered on balance that the level of landscape and visual effects on the seven-point scale will be moderate-low in the short term and as the vegetation establishes, over time the effects will reduce to 'low'. At the broader basin-wide scale the landscape and visual effects will be 'very low'.

¹⁷ **Moderate-Low:** A moderate to low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate to low level of effect on the perceived amenity derived from it.

Bridge improvements: An existing timber bridge over an unnamed stream/gully will be upgraded in width and balustrade/handrail height (**Figure 12**). Existing deck width is approximately 1m. The proposed deck width will be 1.2m. Bridge improvements will include replacement of the decking with a self-cleaning steel deck. The balustrades will be rebuilt on extended bridge joists. As the modifications are very small, improve access including those with impaired mobility and include changes to an existing structure any landscape and visual effects will be 'very low'. At the broader basin-wide scale the landscape and visual effects will be nil.

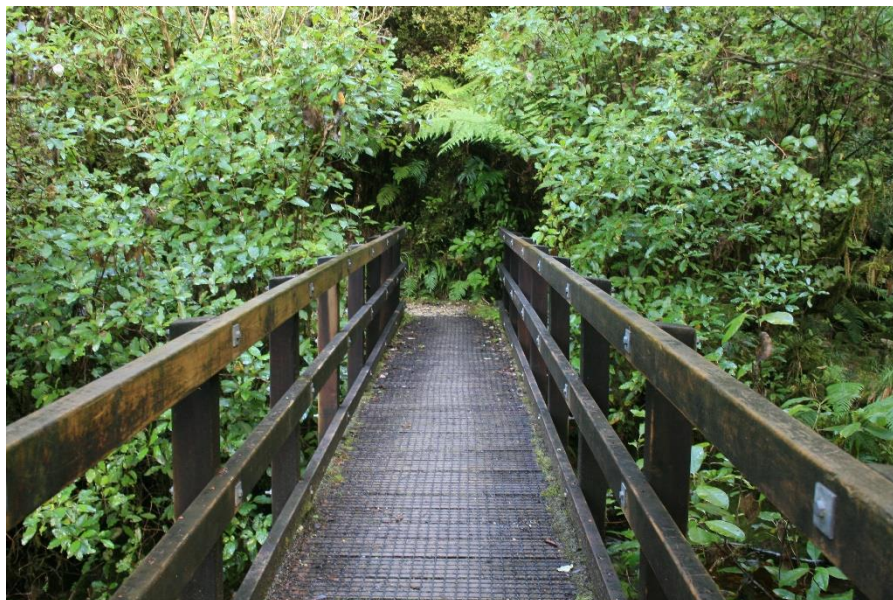


Figure 12 Existing bridge that will be upgraded to cater better for all abilities. Photograph by J.Head August 2020.

6

Rock relocation: A large limestone rock (**Figure 13**), currently perched just above a section of retained track is precarious and will need to be relocated. It is understood that the rock will be 'skidded' down the slope and placed opposite and just below the track in the same orientation. Any scarring caused by moving the rock will be remediated and revegetated. The landscape and visual effects of this at all scales will be nil.



Figure 13 View from the Ōpārara track. Large limestone block at right above track. Photograph by J.Head 6 August 2020

Ōpārara Arch viewing area limestone ‘mattress’: This will be placed at the existing signposted Ōpārara Arch viewing area just inside the arch. The area here is undergoing substantial trampling (**Figure 14**). The purpose of the ‘mattress’ is to provide a durable surface which will form a safe level access and viewing ‘platform’ and can be removed (if required)¹⁸ as it is placed on the ground. Construction involves a layer of geotextile placed on the ground, followed by successive layers of crushed limestone built up to provide a level surface. The edges of the mattress will be retained by local limestone rocks. No excavation is required. This will form the northern end and terminus of the Ōpārara Arch track. Any potential adverse landscape effects of this feature will be ‘very low’ as the construction includes no modification of the site other than placing similar local materials onto it. Potential adverse visual effects will be similarly ‘very low’ to nil, as over time it will be difficult to discern this intervention from the permanent surrounding limestone substrates. At the broader basin-wide scale the landscape and visual effects will be ‘very low’.



Figure 14 View from the end of the Ōpārara track at/under the arch. The mattress will be placed over the limestone bedrock to provide a level surface and protect the rock (at lower right/top of stairs). The timber stairs will be removed. The new track will enter the arch near the top right of the photograph. Photograph by J.Head 6 August 2020

¹⁸ The mattress is intended to be permanent, but the fact that it is ‘removeable’ means that the bedrock floor of the cave underneath the mattress will be left unaffected and protected.

4.2.1 POSITIVE EFFECTS – ŌPĀRARA ARCH TRACK

- the rockwork which will arrest ongoing erosion of a section of the Ōpārara River bank and provide safe, non-destructive bank access for visitors to the river corridor.
- Relocating the large limestone rock which will improve safety.
- Reducing the extent of ascents/descents which will have benefits on erosion processes (steeper track grades are more prone to erosion).
- Protection of part of the Ōpārara Arch's bedrock limestone floor with the removable 'mattress'.
- Relocating a section of the track within its current bench away from an area undergoing undermining and revegetating this retired benched area which will arrest the undermining.
- Enlarging the culvert pipes which will facilitate drainage reducing blockages, surface flooding and washouts including vegetation removal.
- Providing visitors with a safe, physically separated but intimate view of the Ōpārara River which may discourage some people from needing to walk down onto the riverbed which may have negative effects on wildlife.
- Directing visitors away from a potentially unsafe section of the Ōpārara Arch.

4.3 MIRROR TARN VIEWING PLATFORM

This platform will be 4m wide x 3m deep and the top of the steel self-cleaning deck will be set approximately 400mm cantilevered above the water level. It is understood that the water level does not change to any degree that would necessitate a higher deck level. The timber substructure and piles will be located to avoid any trees and tree roots. No part of the structure will be located in the water. The last 10m or so of the path will be regraded up slightly as it approaches the platform to enable an on-grade transition between the path and the decking. Timber platform piles closest to the water's edge will be 'isolated' (sleeved) type to prevent ripples on the lake which as its name suggests has 'mirror-like' qualities in certain conditions. The platform will be surrounded on three sides where necessary to comply with safety requirements and to prevent people walking onto the lake margins. The design detail of the platform is yet to be finalised, however it will be a relatively simple structure as described above.

Potential adverse landscape and visual effects will be 'low' particularly as one approaches the structure which to a degree will fill the existing viewshaft to the lake (**Figures 3,4**). However, the surrounding forest is the clearly dominant element in the nearby context even though the structure will be the only built form. The verticality of the balustrade uprights will have a compatibility with the verticality of the surrounding clean trunks. It is understood that a jetty was once located here, which provides a degree of precedent and expectation for a viewing platform in this location at the end of the track. At the broader basin-wide scale the landscape and visual effects will be nil.

4.3.1 POSITIVE EFFECTS

- Physically preventing people stepping onto exposed tree roots and onto the lake margin.

4.4 MORIA GATE STAIRCASE¹⁹

This part of the proposal includes a staircase located in the entrance to the Moria Gate limestone arch (**Figure 15**). The purpose of the staircase is to provide safe access for people entering the arch.



Figure 15 looking down into the entrance to the Moria Gate cave. Photograph by J.Head 6 August 2020

Presently people must negotiate several large limestone ‘blocks’ formed from roof falls. The blocks are steep and slippery made worse with people scrambling up and down them with grit lodged in their footwear essentially polishing the surfaces. The rocks are frequently wet. A chain fixed to one side of the cave wall threaded through three eyelets screwed into the limestone provides the only ‘handrail’. The staircase will include timber or steel stringers with steel, self-cleaning treads. Overall staircase width will be approximately 750mm (single-file). Steel handrails will be fixed at both sides. No modifications to the limestone bedrock or loose blocks is necessary as the staircase will essentially pass above these features and will be fixed at top and bottom.

The potential adverse landscape effects will be ‘moderate-low’. There are no other built structures anywhere near the Moria Gate other than signage and tracking. As such the staircase will, to an extent ‘stand out’ when close to it. Potential visual effects will be similar at ‘moderate to low’. These effects are exacerbated by the confined nature of the space in which the stairs will be found where they will be a key intervention and to an extent dominate the cave entrance.

¹⁹ The Ōpārara Arch track construction methodology needs to respond to variations in the terrain and vegetation cover. In this regard a degree of flexibility needs to be allowed for in terms of actual lengths of different types of tracking.

It is acknowledged that the stairs will be perceived by many as a welcome relief and a positive addition to the landscape enabling safe access through a difficult, potentially hazardous area. For others they will appear urban in nature, diminishing the highly natural experience of the 20minute walk into the Moria Gate. At the broader basin-wide scale the landscape and visual effects will be nil.

4.4.1 POSITIVE EFFECTS

- Removing the eyelets from the limestone wall.
- Arresting the erosion and discoloration of the limestone blocks at the entrance to the cave.

4.5 ŌPĀRARA ROAD VIEWING AREA AND INTERPRETATION STRUCTURE

This area currently exists as a historically cleared area at a short pull-off from McCallums Mill Road. As it is on a high point in the landscape it has been selected as a location for a viewing area with an associated carpark and interpretation panels protected from the elements by an open-sided roofed structure. There is no vegetation clearance proposed to make way for the structures. However, an area of vegetation will be removed to provide a view shaft to the north, across part of the Ōpārara Basin.

The viewing area will be part and parcel of the road corridor and as such will not be an unexpected element. Other gravel pull-offs will have been passed by before this area is reached, and so the effect of a 'layby' of sorts will not be unexpected. The small shelter (approximately 5m long x 2.5m wide x 4m tall with a pitched roof) will be located against the forest edge where it will have a foliage backdrop and won't appear on a skyline. The shelter's structure and roofing will be Resene/Colorsteel 'Karakā' (LRV 25%) which is a natural, recessive colour that will not stand out against the vegetation it is located next to. The interpretation panels will be like the type currently found at the Ōpārara Arch carpark which are well designed and appropriate to the setting.

The carpark surfacing will be crushed limestone chip or river gravels which is a locally occurring material which will appear low-key. Large limestone rocks sourced from the existing Ōpārara Quarry will be placed around the edge of the carpark. These rocks will have a flat top for sitting on and will also be high enough to prevent vehicles inadvertently driving over the carpark edge into the surrounding vegetation.

The vegetation clearance for the viewshaft will be carried out carefully. The ground below the viewshaft left devoid of vegetation where trees and taller shrubs are removed will be replanted with local indigenous plants, filling in any gaps. This will reduce the likelihood of weed species establishing.

Potential adverse landscape effects of this part of the proposal will be 'low' as there will be minimal earthworks and other physical changes involved. Vegetation clearance will be limited to a discrete area and will be augmented with additional ground cover species. Potential visual effects will be 'very low' or 'positive' as the area will be improved from its current state which is a weedy clearing. At the broader basin-wide scale the landscape and visual effects will be nil.

4.5.1 POSITIVE EFFECTS

- Developing an area that is currently weedy and prone to weed spread to and from here.

4.6 MCCALLUMS MILL ROAD UPGRADES

The 16km length of McCallums Mill Road will be upgraded to provide safer vehicular and non-vehicular access into the Ōpārara Basin. This will include vegetation clearance, earthworks, carriageway widening, new and alternative road surfacing treatments and stormwater control, replacement culverts, bridge upgrades, erection of signage and barriers, formation of some temporary cleanfill sites/cut to waste dumps and revegetation of disturbed areas.

Generally, such upgrades are part and parcel of ongoing improvements to any roading network - such as this one that is experiencing a gradual increase in visitor numbers, and vehicle sizes over the years.

There will be some adverse landscape effects of the road upgrades, including the removal of five rimu trees with DBH measurements of 100 – 200mm²⁰. Other landscape effects include the earthworks and physical widening of the carriage way including the formation of 28 individual gravel pull-off areas²¹. Other physical changes to the site where the road upgrades are proposed include vegetation removal which will include complete removal in some areas where road widening and battering back of slopes is required. However, over time the perception of these changes will gradually reduce as the batter slopes become vegetated.

Some areas of the road upgrades will be more extensive than others and so the adverse landscape effects will vary. Because McCallums Mill Road already exists and is being upgraded, any adverse landscape effects need to be considered in light of this existing baseline which includes a road and associated features. It is considered here that any potential landscape effects of the roading upgrades will be overall 'moderate-low' reducing over time to 'low' and 'very low' as the revegetation of any disturbed ground or new batter slopes establishes through the proposed revegetation and natural plant colonisation processes.

Adverse visual effects in the short to medium term (up to 3 years) will be 'moderate' in places and in other places 'high'²² depending on the level of construction and quantum of physical changes. These effects are therefore temporary, considered primarily as 'construction effects'. Over time this level of effect will gradually reduce throughout the road corridor and after 3 years following revegetation processes, any adverse landscape and visual effects will reduce to 'very low' or nil as the road verges return to a vegetated state and any changes associated with the roading upgrades will be either indiscernible or expected as typical of New Zealand's rural roading network. At the broader basin-wide scale the landscape and visual effects will be nil.

4.7 SUMMARY OF EFFECTS AT THE BASIN-WIDE SCALE

The above discusses each intervention in detail and provides a finding of the potential adverse landscape and visual effects for each. The extent of the receiving environment considered is assumed to be small – largely because of the confined nature of the various sites.

²⁰ Draft detailed design documents for McCallums Mill Road upgrades, prepared by WSP; 8 August 2020.

²¹ Ibid.

²² **High:** Major change to the characteristics or key attributes of the receiving environment and/or visual context within which it is seen; and/or a major effect on the perceived amenity derived from it.

An assessment of landscape and visual effects, however, can be considered at any scale. The size of the receiving environment where any potential adverse landscape and visual effects are confined to can alter too. In this regard, the broader Ōpārara Basin contextual scale is important to consider. At this larger scale, other aspects come into play such as the generally developed character of the area for tourism. The Ōpārara Arch carpark includes several buildings and interpretation sites. This area is considered to be the main hub where visitors will stop and explore from. This 'start point' provides a clue as to the level of development that will be anticipated to occur in the wider area along the various tracks. This expectation will likely include the presence of well-formed tracks and other associated structures. The basin has high natural values, but it is not pristine. However, the contextual setting is highly natural, and these natural processes and patterns are predominant. The consistency and intactness of the natural setting provides a high level of capacity for sensitively designed, appropriate development. At the basin-wide scale, any potentially adverse landscape and visual effects will be 'very-low' to nil. The 'very-low' level of effects refers to the suspended walkway and to a slightly lesser extent, the bridge located along the Ōpārara Arch track.

Notwithstanding this, the proposal includes several measures that go some way towards minimising the landscape and visual effects of the proposal. These include:

- Upgrading sections of track and forming new sections of track with locally occurring materials, laid in a naturalistic way on the ground, minimising excavation.
- Locating the structures off the ground, rather than excavating and setting them down into their settings.
- Using visually lightweight materials for the structures where possible.
- Using recessive colours for the structures.
- Removing other structures and retiring sections of track (**Figure 16**).
- Revegetating the new limestone retaining walling and retired sections of track.
- Avoiding the removal of large trees where possible.
- Providing a more memorable, comfortable and safe experience from the journey into the area along McCallums Mill Road to the Main Ōpārara Arches carpark catering for most ages and abilities.



Figure 16 (previous page) Ōpārara track; Difficult section of timber stairs passing under possibly hazardous area (potential for rockfall). This section of track will be retired, and the stairs removed. An alternative safe more accessible access to the arch entrance is proposed. Photograph by J.Head 6 August 2020.

5 STATUTORY ASSESSMENT

The statutory documents have been assessed by the planner and are included in the AEE.

The below statutory documents are also considered in this report as they are relevant to the proposal particularly regarding landscape matters.

- Kahurangi National Park Management Plan 2001
- West Coast Te Tai o Poutini Conservation Management Strategy 2010

Kahurangi National Park Management Plan 2001

“The overall Vision and Objectives for Kahurangi National Park is that the Park will be a place known for its “diversity”, “sanctuary” and “wilderness” (Section 1.4); and “uncluttered by intrusive structures” and “remote and undeveloped” (Section 1.5)...”²³

The proposal will not adversely affect nor depart from the above vision. Levels of diversity, sanctuary and wildness will be unchanged as the specifics of the proposal are relatively small given the vastness of the Park context. In addition, the proposed changes are generally located next to or overlaying existing modifications or, where not, are located very close to areas that have been modified. Any new structures proposed are relatively small, visually ‘lightweight’ and finished in recessive colours. This will allow for the natural elements to continue to be the dominant element in the various settings where the structures are located. The area where the changes are proposed is relatively developed and less remote than other parts of the Park. As such, the proposal will not be considered incongruous in this highly visited setting.

The policy under Section 3.1 under ‘Biodiversity’ seeks: *“To preserve the indigenous biodiversity of the Park and maintain the integrity of its natural ecosystems as the highest management priority.”*

Indigenous biodiversity (plants and animals) will be affected by the proposal as there will be physical changes to the landscape/habitat in several locations. However, any effects on biodiversity are likely to be very low. Any reduction in biodiversity will be partially offset with the retiring of parts of the existing track which will be revegetated and recolonised with plants.

The policy under Section 3.2 under ‘Landscape’ seeks: *“To preserve and protect the landscape and scenic values of the Park.”*

The landscape and scenic values of the Park will not be adversely affected other than to a ‘very low’ degree or ‘nil’ as discussed above in the assessment of landscape and visual effects section. This is due to the scale of the changes (very small), the nature of the changes (upgrading existing visitor access capabilities – which is a current activity) and the design of the changes (visually ‘lightweight’ structures, recessive colours), and the generally concealed nature of the changes within the highly natural and luxuriant forest context.

Implementation 3 requires that; *“...any new structures are not intrusive, are sensitively designed to blend in to the natural environment, are coloured in sympathy with the*

²³ Section 4.2 Concessions.

surrounding environment, are of high quality and are located sensitively to avoid ridge tops and other sensitive areas or are located adjacent to existing structures.”

Compliance with Implementation 3 is largely discussed above under the discussion regarding the policy under Section 3.2. In addition, the materiality of the various structures (final design details to be completed) including the suspended walkway, bridge, Mirror Tarn viewing platform and Moria Gate stairs largely comprise steel elements. This material is robust and long-lasting, requires minimal maintenance and provides a ‘visually lightweight’ outcome. While the largely timber interpretation shelter is located on a highpoint in the landscape, it is not located on a ridgeline. It will also have a vegetated backdrop. The majority of the proposal is located where it replaces and upgrades existing modifications to the site, or where not, the proposal is located close to areas where existing modifications have been made in the past.

Implementation 5 requires; “...earth and vegetation disturbance is kept to a minimum in facility development and that the site is rehabilitated as nearly as possible to a natural state.”

The majority of earth and vegetation disturbance is confined to the upgrades to McCallums Road. Areas of vegetation clearance, cutting and filling is proposed. The quantum of these areas is kept to a minimum as the trafficable width is kept as narrow as possible at 5.5m while providing a safe road environment. Removal of only five secondary growth trees (100-200mm DBH) is required. All other vegetation removal includes vegetation cover smaller than this. The removal or potential damage to large trees is otherwise avoided through careful roading corridor design. This has been achieved by locating the formed road surface and roadside drains away from taller trees and locating the pull-off areas in locations where tall or otherwise valued vegetation cover is not present. Any areas left bare of vegetation following construction will be revegetated using locally occurring indigenous species.

Implementation 6 requires new development to not cause undue damage to the geological and natural features

Any physical effects on the underlying geological and natural features will not be unduly damaged by the proposal. This has been achieved by ‘suspending’ structures (suspended walkway, bridge, Mirror Tarn viewing platform, Moria Gate stairs) off the base rock in these locations. This avoids benching or other forms of intrusive construction techniques with potentially adverse landscape effects. This construction methodology allows for nature to recolonise unfettered around the structures.

Implementation 10 states that; “...cave and karst features located in areas of the Park in the West Coast Tai Poutini Conservancy, in line with the West Coast Cave and Karst Strategy [are managed]”.

As discussed above the areas of limestone underlying parts of the proposal will be physically affected to a minimal degree due to the construction methodology and design of the structures.

The Department of Conservation Western South Island Region Cave and Karst Operational Plan was revised in 2018. It notes karst environments form a key part of the Department’s visitor sites. Policy 31 states: *“Any physical structures and track surfacing should be installed only to manage health and safety and/or prevent damage to site values. This should occur in a way that it does not impact the values of the cave or karst.”*

Structures been discussed under Implementation 6 and 10 above. Upgraded and new tracks and the visitor viewing area at the Ōpārara Arch adopts an ‘on-ground’ design and construction

methodology where tracks are not excavated down into the setting, but are built above it, retained at the edges by dry-stacked river stones or local limestone. Tracks are proposed to be no wider than 1.2m which is a minimum width requirement to facilitate those with impaired mobility.

The policy under Section 4.1 'Visitor Services and Management' seeks: *"To provide for a range of appropriate activities in the Park, subject to the preservation of its intrinsic natural and historic and cultural values and the protection of the remote and wilderness qualities of the Park."*

The proposal comfortably achieves the above policy for the several reasons discussed above under Section 5 of this LVA.

West Coast Te Tai o Poutini Conservation Management Strategy 2010

The West Coast Te Tai o Poutini Conservation Management Strategy 2010 *"...establishes objectives for the integrated management of natural and historic resources, including species managed under a number of different Acts, and for recreation, tourism and other conservation purposes in the West Coast Tai Poutini Conservancy. It is the key conservation management tool which the Department uses to implement legal, policy and strategic direction..."*

Section 3.3.4.3 states that where change is proposed, it must seek to ensure the proposed change is integrated with appropriate regard to the effects that the change will have on the landscape's broader character. Management of natural landscapes should ensure the effects of change are accounted for beyond the immediate site and across time.

The proposal is relatively very small when considered against the Park landscape's vast size and broader character. To a large degree the proposal includes the upgrading of existing structures with better designed ones, located in more appropriate areas to enable safer levels of access for a wider band of physical abilities and age groups. All disturbed areas following the implementation of the proposal will be restored back to their natural state through active revegetation or managed recolonization of vegetation cover – all using locally occurring indigenous species. It is also acknowledged that the proposal only partly 'breaks new ground' and that part of the proposal overlies areas where there are already modifications present to convey visitors through this part of the Park.

Policies 2-4 under 3.3.4.3: *'Management of geodiversity and landscapes'* require landscape assessments to be conducted on an as-needed basis when considering proposals to develop utilities on public conservation lands and waters and take account of viewfields and the mountainous backdrop of the Conservancy.

The discussion in the body of the LVA above and the recommendations following this section serve to lessen any potentially adverse effects that may arise from the proposal, which to a large extent comprises an expected outcome for the area as it essentially upgrades existing activity. The proposal will not affect viewfields or the Conservancy's mountainous backdrop. Long term effects of the proposal will be 'very low' or 'nil' or 'positive' as the various sites where the changes are proposed are completely revegetated and enable ongoing natural succession processes to occur.

Under Section 3.6.1.5 Frontcountry sites are discussed as *"...[being] located adjacent to formed and maintained roads or highways and include facilities such as picnic and camping areas, toilets, water supplies, signs, interpretation panels, lookout points, wharves, boat ramps, shelters, bridges, carparks and easy walking tracks, including high-grade tracks of short duration that cater for all ages and most abilities. There are also many opportunities for*

more extensive exploration of public conservation lands, especially on tracks or walkways that traverse, or lead to, places that have particular scenic attractions or historic features. Indeed, for many people the chance to explore a wide diversity of truly wild landscapes without the burden of carrying overnight equipment and supplies is what particularly distinguishes the West Coast Te Tai o Poutini as a recreational environment and, as a consequence, use of such tracks is increasing steadily. Many opportunities are associated with actively managed historic places and many of the tracks themselves are historic."

The proposal includes several Frontcountry sites. The objectives state that such sites:

1. To provide a range of day-use recreational opportunities located within easy reach of roads and highways, with facilities that meet high visitor asset management standards.
2. To enable people to explore a wide diversity of natural landscapes and a range of historical and cultural heritage, located within relatively easy reach of vehicle access, without the burden of carrying overnight equipment or supplies.

The proposal comfortably meets the above objectives. Policy 1 under 3.6.1.5 states that:

"Frontcountry sites should be managed to meet the desired outcomes described in Part 4 of this CMS..."

This includes under 4.2.1.3 Geodiversity, landforms and landscapes in 2020: (relevant excerpts)

The overall character of geodiversity, landforms and landscapes in Karamea Place is maintained in its 2010 condition, a summary of which is presented below....

...Many of the more striking landforms in the Conservancy occur in these areas of younger sedimentary rocks, especially in the limestone areas of the Ōpārara basin.... In the Ōpārara basin, limestones are confined to a fairly narrow belt but within this belt are three of New Zealand's most impressive natural arches and more than 60 caves (including the complex Honeycomb Hill system which has over 70 entrances)

...Many landforms in Kahurangi National Park are considered internationally, nationally or regionally important. ...The vast cave systems of karst areas contain spectacular cave formations (speleothems) and fossil remains. The limestone Ōpārara Arch is the largest of its kind in Australasia...

The proposal will not adversely affect the character of the geodiversity, landforms and landscapes where the Frontcountry sites are located to any more than a 'very low' degree. This is largely due to the small scale of the proposal and the design and construction methodology that promotes a 'light' connection with the land. In most cases the proposal will have nil or positive effects.

6 RECOMMENDATIONS

To ensure that any potentially adverse landscape and visual effects are satisfactorily addressed and minimised, the following recommendations are made:

- Preliminary design drawings are provided to be approved by the landscape architect before detail design commences.
- That structures are preferably constructed in steel, or at least the parts including the deck/step treads and elements above the deck (balustrades/handrails). Steel will provide the same level of strength as timber; however, steel provides the opportunity for more durable, visually lighter structures that will compete less with the surrounding natural patterns.
- All visible steelwork is finished in Resene/Colorsteel 'Ironsand'. This is a recessive grey/brown hue colour (LRV 8%) which will be highly compatible with the colours of the vegetation in the local area.
- That all of the interpretation structure (posts and framework roof, spouting and downpipes, and trim) is finished in 'Karakā'. In this more open setting, this colour will have a high level of compatibility with the backdrop vegetation. It is important that the structure is recessive and by finishing it all in the same colour, no individual parts of the building will 'stand out'.
- Where possible, avoiding locating new sections of tracks where trees with a DBH of 400mm and above would be adversely affected.
- Utilising a narrow construction track footprint (maximum 2m other than the area where the suspended walkway will require a 3m maximum construction footprint).
- Using hand labour to excavate sections of the track in highly sensitive areas – such as near trees and tree roots.
- Minimising cut and fill by battering back to stable ground and or match existing ground profiles wherever possible and revegetating.
- Rocks placed beside the tracks use riverstones where the track is close to the river, or on old river terraces, and limestone where the track is on higher terrain away from the river.
- All areas of earthworks be battered back to natural, stable slopes and that these areas be adequately prepared for planting and revegetated using locally occurring species.
- All retired sections of track be partly revegetated, and that natural processes of recolonization of local species be encouraged.
- All retired structures and non-natural materials be carefully removed from the site and disposed of appropriately.
- Using helicopters to ferry in small mechanical diggers and the like and supplies which lessens the impact on the landscape of transporting items overland.

The points above are to ensure that the proposal has the best possible 'fit' with its settings from the outset and that natural processes are encouraged to continue unobstructed.

7 CONCLUSION

The proposal will allow for a 16km long road upgrade and approximately 1330ms of new walking track and track upgrades including some structures to be established in the Kahurangi National Park within the Ōpārara Basin. The proposal is located extending from Break Creek No.2 on McCallums Mill Road to the Ōpārara Main Carpark 16kms to the northwest. Part way along McCallums Mill Road is the 'Ōpārara Arch carpark where most of the parts of the proposal can be walked from. The setting for the proposal exhibits very high landscape and natural character values contributed to by the luxuriant rain forest and underlying limestone formations and Ōpārara River which are a large part of the attraction for visiting the area. Due to the national park status of the landscape context where the proposal will be located it can be safely assumed that the existing baseline environment is one of highly intact natural character augmented by high scientific and natural values.

With regards to the potential adverse landscape and visual effects of the proposal, the following conclusions were reached. Firstly, at the broad scale the effects of the proposal on landscape, natural character and visual amenity will be 'very low' to nil. This is due to the very small footprints of the various parts of the proposal, some parts of which upgrade existing historic modifications within a large contiguous landscape. Natural elements, patterns and processes will remain intact and continue to prevail. This is due to the concealed parts of the proposal where the various changes will not be inter-visible, hidden from view by abundant vegetation cover and/or topography.

Secondly, at the local scale (concerning users of the road and tracks themselves), and despite the small construction footprints, the effects on landscape character and visual amenity will be 'moderate-low' to 'low'. This is because, for track users, the track will always be nearby and/or visible. Occasionally, structures will be encountered along the route. Such built interventions are often part and parcel of any 'short stop traveller' experience. As such they will be seen juxtaposed with an area holding high natural values.

The proposal has minimised any potentially adverse effects through 'avoidance' and 'remediation'. Avoidance, in that minimal compliant road and track widths and construction footprints are proposed. Structures will be designed and constructed to be as visually 'lightweight' as possible, finished in recessive colours that will have a high level of compatibility with the surrounding natural colours and textures of the setting. In most instances the proposal will be visually 'absorbed' by mature indigenous vegetation cover through deliberate revegetation and natural recolonization of plant material.

This will all go some way towards reducing the physical and visual effects of the modifications to the landscape. In addition, 'remediation' is a fundamental component of the proposal. All disturbed ground will either support the various elements of the proposal or where this is not the case – such as retired sections of track, will be returned to the pre-existing natural state.

Despite the moderate localised effects, the proposal will not appear or be perceived as incongruous in its national park setting. Other road upgrades, tracks and built infrastructure, similar to this proposal currently occur in other national parks where short-stop traveller walks are found. There is an expectation by users of the road access in and the tracks themselves that this type and level of built intervention is acceptable. Therefore, the nature of the proposal, and the activities it will support, will be compatible within the highly natural landscape setting. The suspended walkway section of the track has the greatest visual effects of the proposal. This is due to its location on a steep bank and limestone bluff above the Ōpārara River where it and walkers on it will be visible

from the river corridor below. However, a suite of design controls has been considered from the outset to optimize this part of the proposal's 'fit' within the landscape.