

Preliminary outline as a result of reconciling Zip line spatial data with archaeological survey data from scoping walkover with Adrian Januszkiewicz.

Acknowledged is material referenced and adopted from Reuben Rorrison, Adrian Januszkiewicz and Paul Button.

The proposal

The proposal follows the same operational model as the Applicant's established Rotorua Canopy Tours operation in the North Island, which is a registered B-Corp that has won multiple awards through demonstrating measurable improvements in forest health through partnership with the Canopy Conservation Trust. The positive outcomes measured at their North Island operation is a result of ongoing pest and weed control and native forest restoration, funded by visitor contributions.

The proposed activity is located on public conservation land administered by the Department of Conservation (DOC) and therefore requires a concession.

In principle this is a relatively light touch enterprise to the sites underlying ecology and heritage and recreation values.

The site has DOC visitor tracks with nearby Camping and Picnicking along with existing canyoning enterprise within the gorge below the Queenstown-Glenorchy Road Bridge.

The proposed activity is located within an area already used for low-impact recreation, adjacent to the existing commercial canyoning business also operating within the reserve.

The experience will allow visitors to traverse a sequence of four ziplines and short connecting walking tracks following the 12 Mile Creek corridor from the Queenstown-Glenorchy Road down to the 12 Mile Delta carpark. The activity is designed to provide an immersive forest experience while generating ongoing funding for forest restoration through visitor contributions.

As the site and project engages with historic gold mining features and the original bridle track between Queenstown and Glenorchy and is associated with existing recorded archaeological site E41-113 Gold workings. Kopuwai Archaeology has been engaged to complete desktop research, has undertaken a scoping walkover with Adrian Januszkiewicz, followed by a more detailed foot survey to understand with site values for context around archaeological, recreational and to lesser extent ecologically values

and impacts. The walkover and survey work has now been reconciled with Paul Button's spatial Zip line access and route data and forms the basis for the scoping observations and points for resolution and along with an outline of the statutory process requirements and stakeholder engagement to streamline the respective HNZ authority application and DOC permissions application.



Figure 1 Example of zip line launch platform

A review of the ecological report by Restore NZ Reuben Rorrison has been undertaken and contact has been made with Paul Button who has provided spatial data and images which I uploaded into my GIS spatial software along with archaeological sites and the results from my 20 11 2025 survey with summary spatial plan attached and Google map with images. KML file attached.

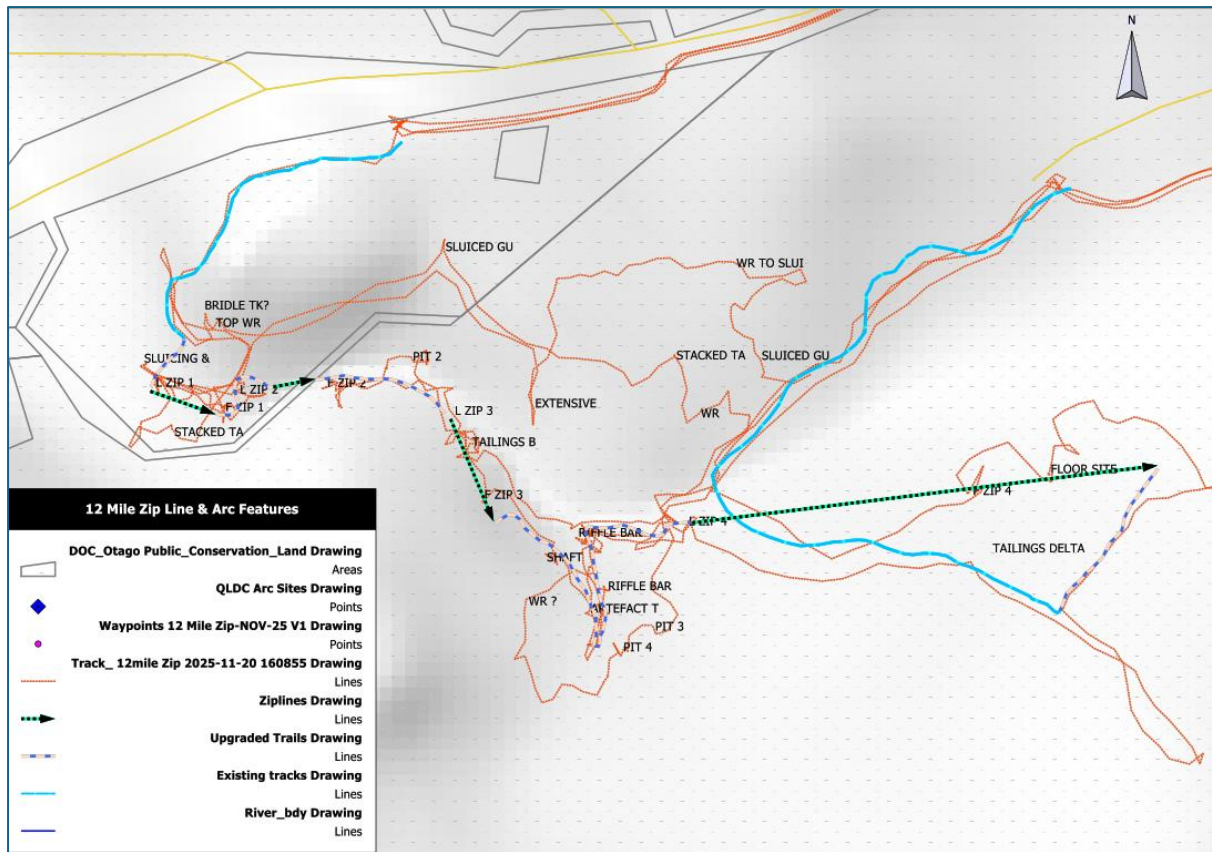


Figure 2 Archaeological survey tracks and waypoints from 20 11 2025 overlaid with Zipline data from Paul Button

Heritage Legislation

As an archaeological site protected under Heritage NZ Act 2014 physical modification and disturbance to archaeological sites and artefacts will require an archaeological assessment to inform an archaeological authority application to Heritage NZ who independently assess and grant conditions on the proposed effects to the heritage on the site.

The Conservation Act 1987 provides for the protection of historic resources. This includes protection of historic resources within public conservation land guided by general policy, conservation management strategies and conservation plans.

Specifically, under the Otago Conservation Management Plan (Otago CMS) NaPALIS IDs 2800591 Twelve Mile Delta Recreation Reserve, 2800724 & Twelve Mile or Few Creek Marginal Strip.

As a Department of Conservation (DOC) administered site we also need to comply with the Conservation 1987 Act which provides for the protection of historic resources and will assess and provide consent conditions relating to site heritage values associated with the concession permission application.

Historic heritage is defined under the Heritage NZ Act 2014 as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- historic sites, structures, places, and areas
- archaeological sites;
- sites of significance to Māori, including wahi tapu;
- surroundings associated with the natural and physical resources (RMA section 2).

Site Heritage

Heritage wise this is a rich and diverse site with some distinctive and distinguishing features from early transport bridle path evidence and various sequences of gold mining incised off earlier lake terraces down into the 12-mile delta and up and among the river gorge and on up into the upstream catchment of the Twelve mile earlier known as the Few Creek.

The delta area while a river delta is backed by large high terrace faces historically old lake shore which have several incised gulches created from water race powered alluvial gold sluicing, giving rise to extensive outwash fans on both sides of the Twelve Mile along with various gold working endeavours either side up the tighter gorge section.

Respective flood events have truncated and created a series of stepped lower terraces along with the extensive camping and picnicking lake shore development for recreational use and featuring DOC tracks to Bobs Cove and the Mt Crichton Loop (Sam Summers).

What is surprising is the amount of heritage evidence and fabric remaining in such relative proximity to Queenstown. Sluicing riffle bars, occupation evidence, extensive contorted rough herring bone stacked tailings have been sluiced out of gulches and gullies either side of the gorge section with associated sluice boxes serviced for sluicing by a network of water races. The upper section of the gorge appears to have remnants of an earlier bridle trail linking Queenstown with Glenorchy. Among the features especially on the true right are numerous prospect pits and shafts consistent rectangular straight sided that would been used with windlass pulleys to prospect and mine the alluvial gold below.



MOONLIGHT HYDRAULIC SLUICING CLAIM, MORE CREEK, Otago.

Mining Handbook.

Figure 3 example of hydraulic sluicing method that would of been employed in the gorge and of old lake shore terraces at Twelve Mile.

Out beyond the gorge the high terraces on either side have been sluiced expanding the existing river delta fan, with remnants of sludge channels and possible tent/hut floor occupation sites.

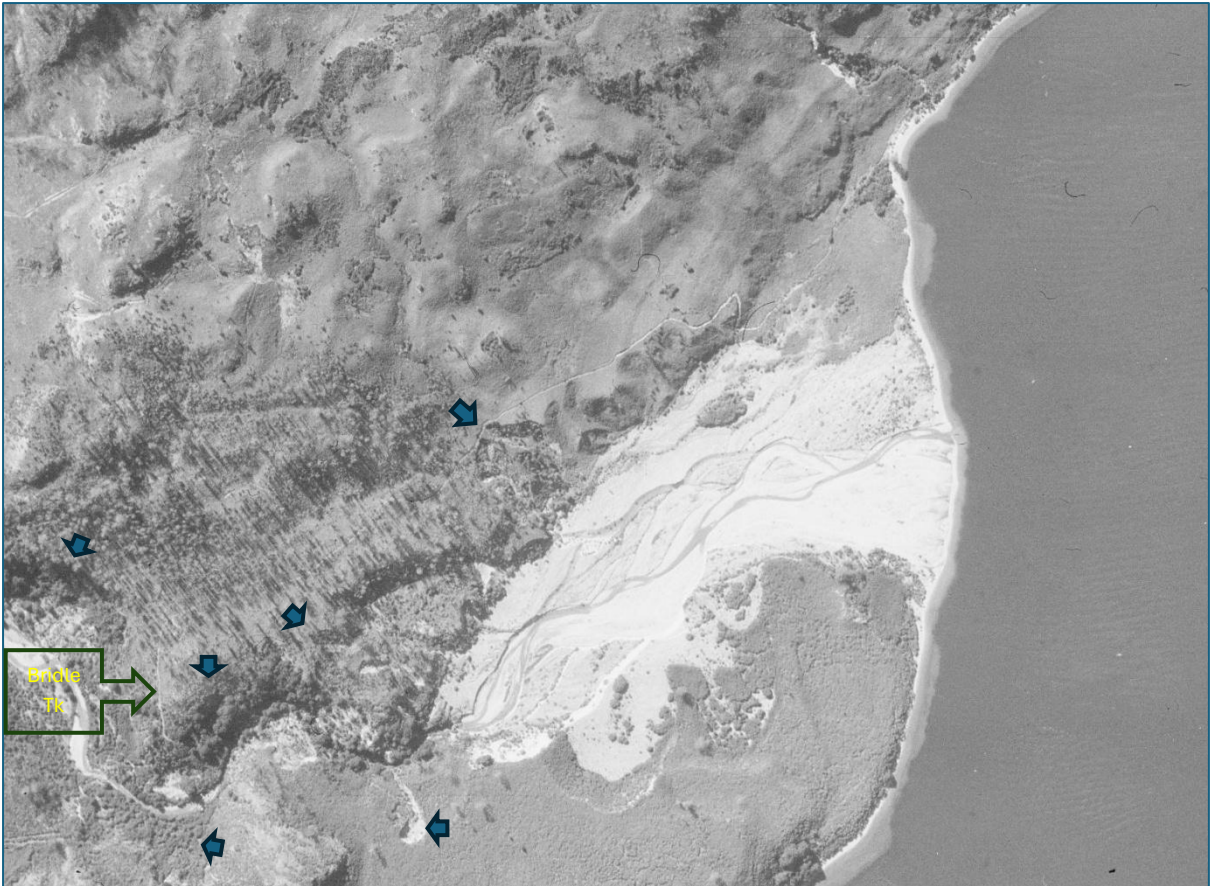


Figure 4 Retro lens arieal SN842_2290_83 1954 12 Mile cropped showing various gold working within the gorge and off the old lake terraces & bridle track further up the gorge

The area was designated Good Templars or a friendly reserve in 1876 SO5732. A mining claim was surveyed on Nov 23 1889 for Fred Finch on the lower true right high terraced area SO5752. A mining claim for the lower True Left below the bridle trail and out to the lake was surveyed for James Burfield Calland in Nov 1899 SO5762



Figure 5 Three miners pose with a pioneer windlass at a lead mine – similarly used for gold prospecting and mining. Image from the Wisconsin Historical Society.

The land involves Part Sec 1 SO24167 Scenic Reserve; Sec 54 Recreation Reserve; Pt Sec 39 Recreation Reserve. The archaeological sites and features above and below ground are protected under the Heritage NZ Act 2014 and under the heritage provisions of the Conservation Act 1987. A full detailed archaeological impact assessment is required for HNZ and DOC, covering aspects of the zip line launch and recovery structures that involve surface and subsurface earth works (i.e. platform piles) and for access tracks from carparking to launch platforms and from recovery platforms and to carpark collection, where archaeological sites and or features are engaged with to be disturbed or modified (i.e. benching zip line access through a section of tailings) for adaptive reuse and user engagement.

The priority where possible is to preserve heritage sites and features in situ and avoid disturbance or impacts. Those sections which require sensitive disturbance/modification for structure installation and or access for adaptive re-use will require assessment of effects and consents from t HNZ and DOC and likely subject to archaeological monitoring during surface and subsurface earthworks on archaeological sites and features – i.e. platform piling and zip line flight path or access tracking associated with tailings. For HNZ, an archaeological authority application will be required to gain full approval, and a concession application will be required for DOC

with the Conservation Act and its heritage provisions covering both pre and post 1900 heritage values.

As the site is administered by the Department of Conservation and engages with archaeological sites and features I recommend engagement with Matt Schmidt Senior Archaeologist for DOC who will be assessing this project, and the supporting archaeological assessment and permissions application, for a joint site visit and survey with the key Zip Line project team and Kopuwai Archaeology.

Matt is very experienced and we have worked together in our respective roles for some time on projects involving recreational engagement with NZ heritage. Early engagement and collaboration inform and expedite the outcomes and consent approvals. With DOC as land administrator and Matt Schmidt engagement this also expedites the [Heritage New Zealand Pouhere Taonga](#) (HNZ) archaeological consenting process.

Early engagement with applying for an Archaeological Authority is recommended and involves contacting (HNZ) early, discussing this project, and submitting an application (Form A) via their portal, detailing the site, potential impacts, and your management plan, and supporting archaeologist's assessment. Refer <https://www.heritage.org.nz/archaeology/affecting-an-archaeological-site> which I can assist and guide you through in tandem with engaging with DOC .

Mana whenua

Lake Wakatipu (Whakatipu-wai-Māori) has rich Māori history, with areas like Whakātipu-wai-māori as important staging points (nohoaka) for travel, and its waters used for waka (canoes); while specific marked "Mana Whenua Trails" aren't widely advertised, routes like the Routeburn Track and trails around Queenstown, Sunshine Bay, Mt Crichton connect to these traditional networks, with Ngāi Tahu heritage deeply embedded in the landscape's legends, such as the giant Matau forming the lake itself. Modern tracks often follow or intersect these ancient pathways, reflecting centuries of use for food gathering (māhi-ngā-kai) and travel.

Lake Wakatipu (Whakatipu-wai-māori) is a designated [Statutory Acknowledgement Area](#) under the Ngāi Tahu Claims Settlement Act 1998, meaning the Crown formally recognizes Ngāi Tahu's special cultural, spiritual, and traditional ties to the lake.

Because of the ancient land trails passing the Twelve Mile and the Lake Wakatipu Waterway highway and their deep association with the lake it would be a courtesy to share this proposal with Aukaha and Te Ao Mārama Incorporated and evidence of consultation will be required as part of submitting the HNZ application.

Ecological Report

A review of the ecological report by Restore NZ Reuben Rorrison was helpful in further understanding the project, along with the ecological values which have been influenced by the extensive alluvial mining within the 12 Mile Reserve and proposed recreational facility.

Two points noted

1. With proposed small beech tree & vegetation removal this should be cut to stump to avoid disturbance to heritage sites and fabric. As any earth works or subsurface disturbance could affect surface and below surface archaeology.
2. As recorded the Zip line 4 landing and access is in a sensitive alluvial herb field a past extensive tailing delta created from extensive sluicing into the high remnant sluiced terrace faces behind camping/picnic area on the true left on 12 Mile River and on the true right that current DOC track to Bobs Cove traverses. The alluvial fan terraces have a number of shallow remnant historic sludge channels draining out from the high sluiced terrace across the delta out and down into the 12 Mile River. These were noted in the archaeological survey along with possible camp floor sites.

The mitigation proposed by Reuben to protect and manage current and future foot traffic effects on alluvial herb field values is endorsed and supported to confine effects to both ecological and cryptic shallow archaeological tailings channel features. I suspect from a visitor user aspect if visitors are wandering off track to take advantage of the views that can be gained from being near the crest of the various terraces.

Archaeological impact assessment to date

Informed by

- Desk top research
- 20 11 2025 walk over with Adrian & further survey field work
- *Reuben's Ecology report*
- *Paul Button spatial data and photos.*

Observations & points for resolution

1. The upgrade approach track to Zip 1 launch differs from my site visit and survey with Adrian of the 20 11 2025 compared to the spatial data provided by Paul.

2. Based on the 20 11 2025 walkover Zip 1 upgrade track access traverses a sluicing channel to access the briefing and Zip 1 launch platform. Tailings and sluicing's were observed above this which Pauls spatial plan data route appears to traverse through from the carpark.
3. Potentially the access to Zip 1 launch platform may engage with the historic bridle track. Both Zip 1 launch options appear to engage with heritage values and warrant further on the ground survey and investigation to determine the preferred option. Pauls route option is more direct.
4. Assess and confirm route alignment and treatment methods for traversing/navigating heritage (tailings & sluicing's) for traversing between
 - a. recovery of Zip 2 to launch of Zip 3 – engagement & traverse of tailings /sluicing's
 - b. recovery of Zip 3 to launch of Zip 4 – benching of tailings and traverse of tailings, traverse of shaft/s and access route to sluice gulch and out down through deep sluice channel.

Note -Zip 3 cut & bench through a small section of tailings for zip line path clearance (confirmation of scale & degree of modification and management of surplus tailings)
5. The survey identified further artefacts – occupation artefacts, flat iron and more cast riffle bars along the proposed route up the side to sluiced gulch and down within the gold sluicing gold recovery channel. While I have some proposals, this is best dealt with by engaging directly with DOC Senior Archaeologist Matt Schmdit.
6. As noted by *Reuben* in his ecological report the siting and construction of the recovery platform off Zip 4 and access out needs to be sensitive minimal with access confined to minimise additional desire line impacts.

Recommendations

- Submit this as supporting information for the DOC Concession application.
 - With a condition that an archaeological authority from HNZ be a condition of granting a concession.
- On granting of Concession
 - If not already in progress engage with Aukaha and Te Ao Mārama Incorporated in regard to ancient Kā Tahu trails by land and by Lake Wakatipu and their special cultural, spiritual, and traditional ties to the lake.

- Engage with Matt Schmidt Senior Archaeologist for DOC directly or indirectly through Kopuwai Archaeology to arrange as soon as possible a joint site visit and survey with key Zip Line project team and Kopuwai Archaeology to survey and assess zip lines, related structure and access alignments and corresponding project and solution methods for light footprint impacts on the sites heritage, ecological and recreational values.
- Review and clarify points noted for resolution – 1 to 6 above
- Compile archaeological assessment

This project and its location with its inherent natural, heritage and cultural values make for a great holistic recreational experience to be enhanced by both story telling by the guides and interpretation on these values and the aligned ecological restoration and predator monitoring and trapping.

Matt Sole

Kopuwai Archaeology

Dec 2025 (with minor revision Jan 2026 for supporting concession application)



Figure 6 20251120_120722 12 Mile E41-113 site & Zipline project - zip 3 flight path over tailings requiring benching



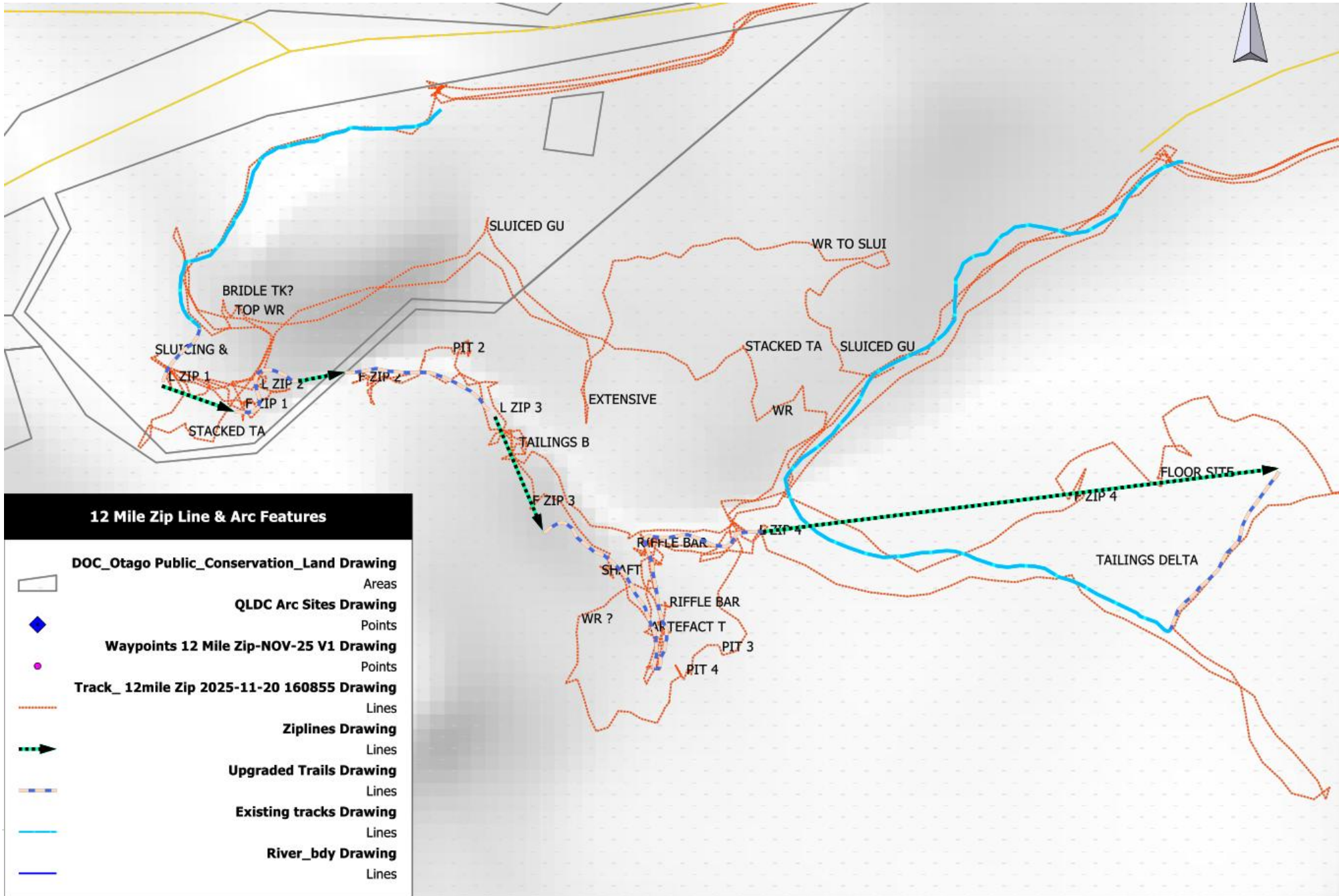
Figure 7 20251120_121439 12 Mile E41-113 site & Zipline project - proposed access route over tailings Zip 3 to Zip 4



Figure 8 20251120_151918 12 Mile E41-113 site & Zipline project- sluice box out of sluicings above DOC track



Figure 9 20251120_145842 12 Mile E41-113 site & Zipline project - view of sluce box riffle bars



Arch Survey 12 mile Zip Line E41/113

Write a description for your map.

Legend

- ▲ 2025-11-20 16:08:55
- ★ Feature 1
- Feature 2

