Okere Adventures

Okere Falls Reserve, 761 SH33, Rotorua

Application for Concession and Resource Consent for Commercial Recreation

18728AP2
15 May 2019

cheal

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Application for Concession and Resource Consent for Commercial Recreation

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APPLICATION DETAILS

Authority: Department of Conservation and Rotorua Lakes Council

The Applicant: Okere Adventures

Address for Service: Cheal Consultants Limited, PO Box 396, Rotorua 3040

Address for Invoice: Okere Adventures, PO Box 969, Rotorua 3040

Site Details:

Recreation Sites:

Street Address ..... Trout Pool Road
Legal Description ..... Sections 7-8 BLK VI Rotoiti SD
Record of Title SA53B/482
Area 19.2372ha
District Plan Zoning ..... Reserve 1 – Conservation Reserve
Owner/Status ..... Scenic Reserve

Street Address ..... 811 State Highway 33, Okere Falls
Legal Description ..... Taheke Papakinga 30 Block
Record of Title SA25D/902
Area 20.3430ha
Zoning ..... Rural 1 – Working Rural
Owners ..... The Proprietors of Okere 1B3C3 and adjoining blocks (Maori Freehold Land)

Parking Site:

Street Address ..... unnamed Maori roadway, Okere Falls
Legal Description ..... Okere 1B3C3B2
Record of Title SA41D/238
Area 1,232m²
Zoning ..... Residential 4
Owners ..... Rawiri Te Putu Raiwhara Kingi

Activity for which Consent is sought:

A Concession (lease/licence) and resource consent are sought to establish a commercial recreation activity within the Okere Falls Scenic Reserve. The proposal is a non-complying activity under the Rotorua District Plan.

1. INTRODUCTION

A concession and resource consent are sought to establish a zipline activity within the Okere Scenic Reserve and crossing over to the adjacent Maori owned rural land. The applicant is Okere Adventures which is a joint venture between the operator of Rotorua Rafting and Maori landowners from Ngati Hinekiri and Ngati Hinerangi. Parking is to be established on a privately-owned site. Customer check-in and preparation will occur in conjunction with Rotorua Rafting's existing site which is accessed from a Maori roadway.

Minimal disturbance to existing indigenous vegetation is anticipated and new riparian plantings are proposed to form part of the tour activity. Landscape effects will be minimised by using small, low platforms and avoiding the need for new buildings.

In accordance with Section 88 of the Resource Management Act 1991 (RMA) and the Conservation Act 1987, the following report provides a site description, description of the proposal, consideration of the relevant rules and standards, Environmental Impact Assessment/Assessment of Environmental Effects and consideration of the relevant objectives and policies of the District Plan and the Conservation Management Strategy. Conditions of approval are discussed and lastly the proposal is assessed against Part 2 of the RMA.

Appended to this report are the plans, Assessment of Potential Ecological Effects from Wildland Consultants and the Traffic Impact Assessment from Traffessionals.

2. SITE DESCRIPTION

2.1 Activity Site

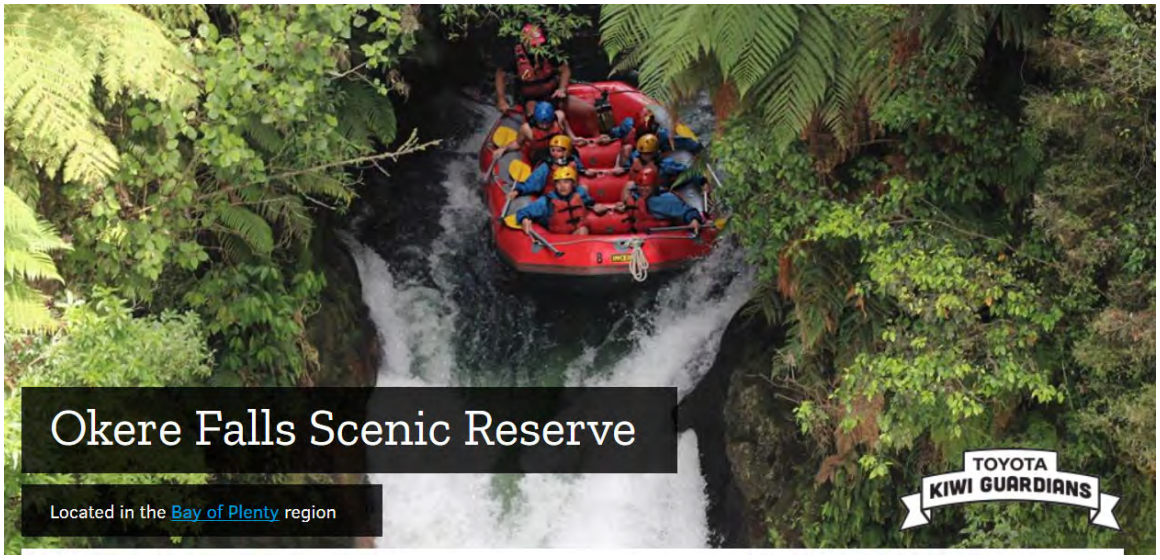
The ziplines are to be located over the Okere Falls Scenic Reserve and the adjacent Maori rural land to the east. The Okere Falls Scenic Reserve contains a popular short walk, the remnants of an old hydro electric power station and sites of cultural value. A ridge walk has recently been constructed which allows for a loop track. The reserve is Crown land administered by the Department of Conservation and governed by the Lake Rotoiti Scenic Reserve Board who is mandated to control and manage the reserve (Gazette No. 63 on 15 June 2017).

The Kaituna River flows through the site and currently there are five commercial operators providing rafting tours on the river. The walk through the small reserve is popular due to its proximity to Rotorua, accessibility from a State Highway, easy distance and gradient for walking, scenic waterfall and river views, historical information provided along the walk, indigenous forest and ability to observe the river rafting. The reserve contains a large public carpark. A cycleway from Paengaroa to Okere Falls is nearing construction completion.

An archaeological site is identified at the south western boundary of the site (U15/636), which is identified as a house floor. H1.39 is also identified on the subject site which is described in the District Plan as 'Steps down to the former Government Power Works'. Despite being a Scenic Reserve, the site is not an Outstanding Natural Feature or Landscape or a Significant Natural Area as defined by the District Plan.

The Department of Conservation website describes the reserve as:

This reserve has significant Maori cultural and spiritual value and features the waterfalls of the Kaituna River, including the highest commercially rafted waterfall in the world.



History and culture
Flowing through the Okere Falls Scenic Reserve, which is rich in resources, the Kaituna River has been highly valued by the people of the area for centuries.

This reserve has significant Maori cultural and spiritual value.

The river name 'Kaituna' (kai = food, tuna = eels) reveals much about its significance as a food source. Below the four main waterfalls are numerous with large eel holes. Further down the river, whitebait were caught in great numbers, koura (freshwater crayfish) were another local delicacy.

Innumerable battles have been fought on its shores to guard the important food sources.

The river was the site of New Zealand's first hydro-electic power station.

It is the traditional river of Ngati Pikiao, who have made their home here for many years. In 1984, the Waitangi Tribunal confirmed Ngati Pikiao as the traditional owners of the river.[1]

[1] Source: https://www.doc.govt.nz/parks-and-recreation/places-to-go/bay-of-plenty/places/okere-falls-scenic-reserve/ retrieved 31 March 2019

The sites are identified in Image 1 below.

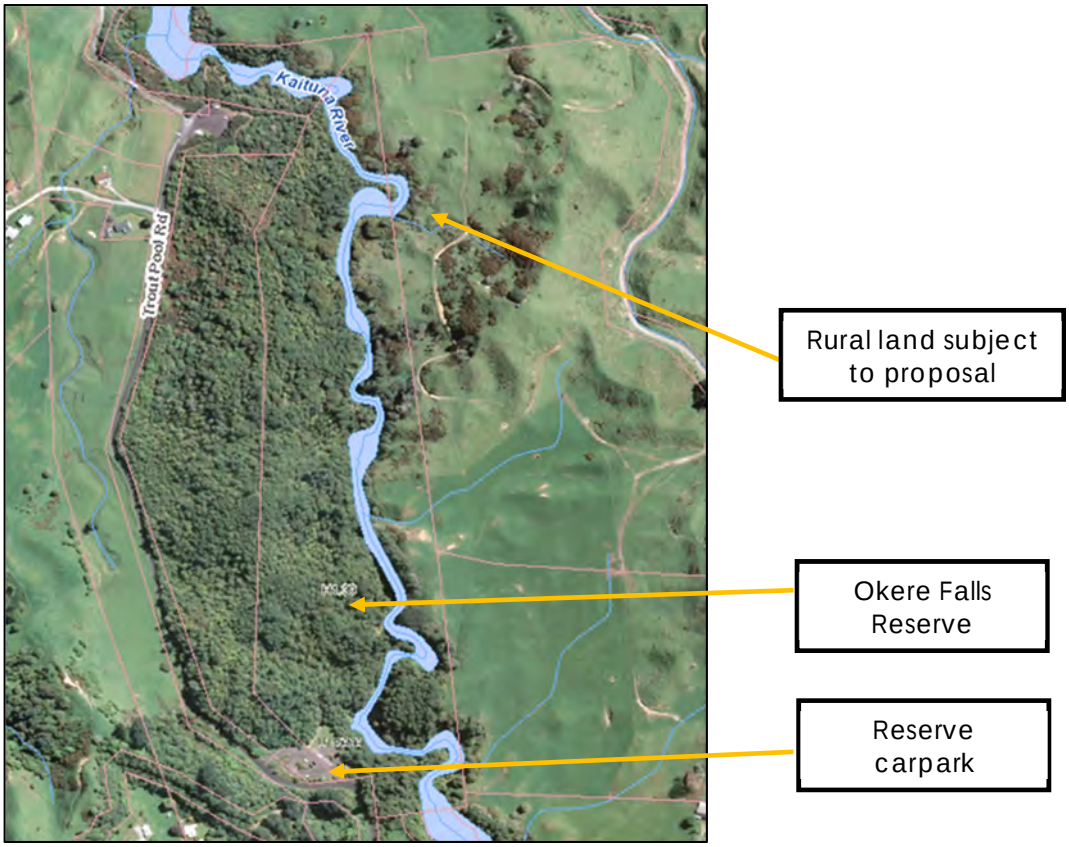


Image 1: Subject site (Source: Geyserview, RLC)

The subject site is zoned as *Reserve 1 – Conservation Reserves*, which are described in the District Plan as *publicly owned land administered by the Crown and the Rotorua District Council and includes esplanade reserve areas and strips. The conservation reserves include areas of native bush and unique biodiversity areas that are nationally and regionally significant such as Mt Ngōngōtahā Scenic Reserve. Conservation reserves have a range of highly valued cultural and historical characteristics that are worth protecting for future generations and provide for recreation activities and public access to water bodies.*

The site is outside of the Airport Obstacle Clearance Limitation Surface as shown in Image 2 below.

Signage within the reserve advises that local Maori were involved in the early development of tourism in the area and operated a ferry across the top of the river before the bridge was constructed. Local guides took tourists to the lake and river. The Okere River has hosted tourists for over 100 years and was originally developed as a spa resort. Photos of the reserve are included below.

Image 2: Path to viewing area below proposed zipline 1

Image 3: Okere Falls

Image 4: Okere Falls Reserve Carpark

Image 5: Former power station site

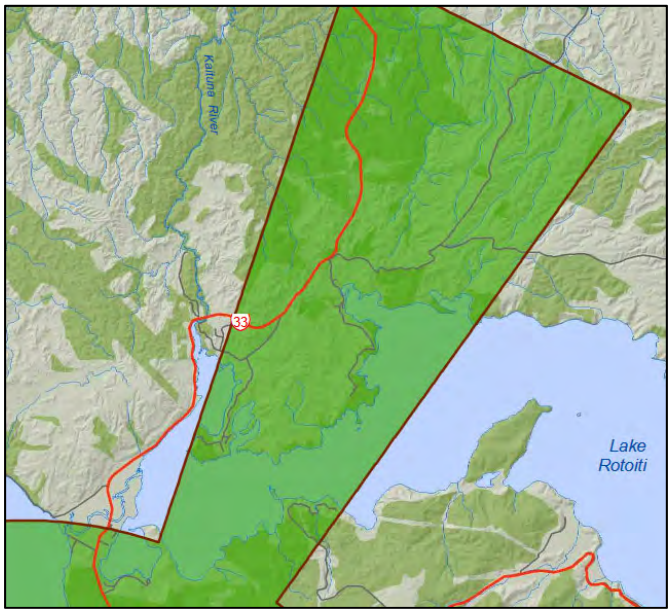


Image 6: Rotorua Airport Clearance to Obstacle Limitation Surface

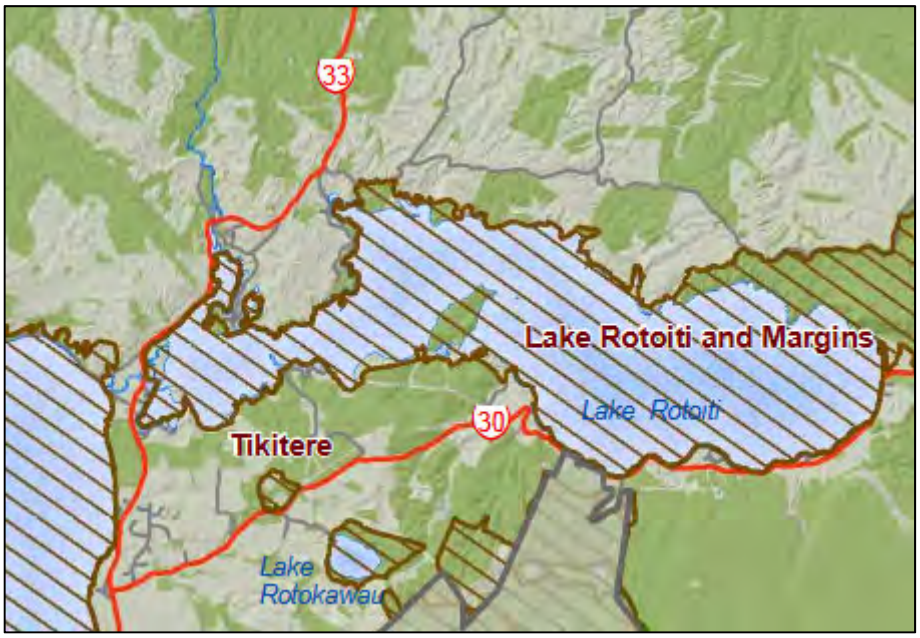


Image 7: District Plan Outstanding Natural Features and Landscapes

An 'Assessment of potential ecological effects for a proposed zipline at Okere' has been completed by Wildlands and is enclosed in Appendix 3. The report advises that the reserve has a high level of human use from the existing walking tracks and river-based activities. The cultural and ecological significance of the Kaituna River is a key reason for the location of the proposed zipline attraction.

2.2 Parking and Check-in Sites

It is proposed to utilise the existing Rotorua Rafting site for customer check-ins. The Rotorua Rafting site is located at 761 State Highway 33 and accessed via an unnamed sealed Maori roadway. The roadway is a short no-exit road serving a small number of rural and lifestyle lots. The State Highway is particularly wide in this location with two lanes, a central median, parallel parking on the lake side of the road and a large side median on the west side of the road – resulting in a total formed width of almost 19 metres adjacent the intersection.

The Rotorua Rafting site contains a large barn style building and covered deck, used for customer check-ins. The site also contains approximately 18 sealed parks and indigenous amenity plantings. A small stream/drain is located on the north side of the Rotorua Rafting site and two stream crossings provide access to the Rotorua Rafting parking area from the Maori roadway.

Parking for Okere Adventures will be in the paddock north of the Rotorua Rafting site (Okere 1B3C3B2 owned by Rawiri Kingi and 1232m^2). The area is flat with a gentle grade towards the south. A gate and gravel access are already formed to the site from the east boundary which is delineated with a hedge. Post and wire fencing is established on the north boundary. The flat area available for parking is approximately 20m x 40m – providing for approximately 20 car parks. The south boundary is not fenced. The parking site is within the Residential 4 Zone and is outside of the Lake Rotoiti flood level identified in the Rotorua District Plan.

North of the parking area is a 4ha site, Okere 1B3C3B3B, which is owned by the same owners as the rural site which is to contain 2 ziplines and riparian planting. This site can be utilised for additional parking if demand exceeds the capacity of the 1,232m^2 parking site. This site is within the Rural 1 Zone.

At the State Highway intersection with Okere Falls Road (which becomes Trout Pool Road and is used to access the reserve), there are 'no parking' yellow lines on the lake side of the State Highway, a central turning median, two lanes and a very wide side median for vehicles turning left into the road (such as vehicles travelling from the Rotorua Rafting check-in site to the Scenic Reserve) – resulting in a formed width of approximately 12 metres. The road has a posted speed limit of 70km/hr. Although there have been no serious crashes in the locality recently, safety improvements have been approved by NZTA and potentially the speed limit will be reduced to 60km/hr.

Image 8: Rotorua Rafting building and parking

Image 9: Okere Adventures proposed parking area

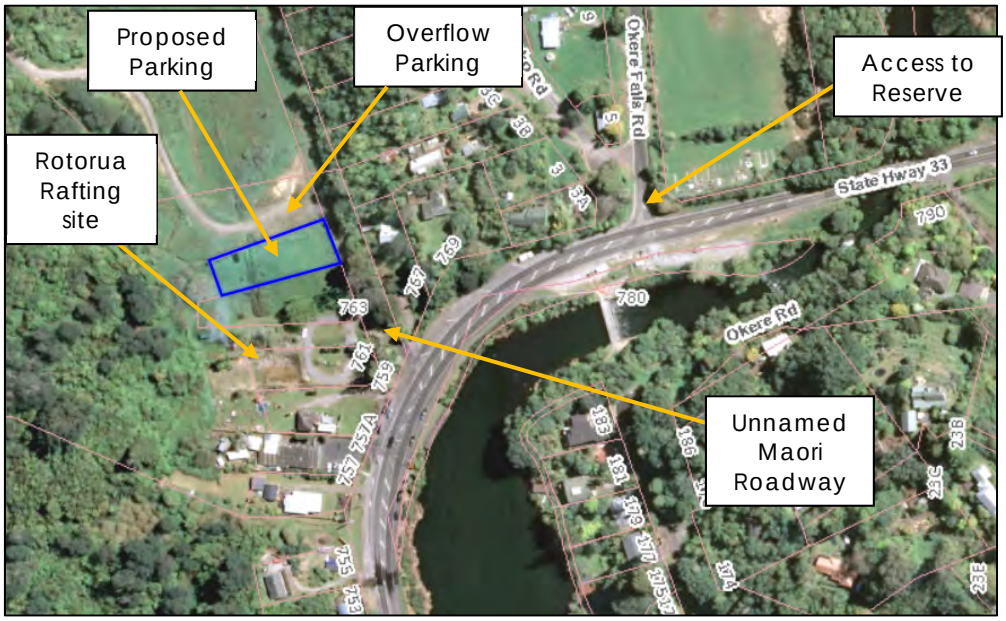


Image 10: Proposed car parking location

Image 11: Lake Rotoiti Flood Level (Rotorua District Plan)

2.3 Surrounding Environment

The surrounding area is comprised of the lakefront settlement, rural and forestry land.

The popular Okere Falls Store is located to the south of the Rotorua Rafting premises, with one residential site located between the two businesses. Further south, residential sites line the State Highway on its west side and to the east of the road is the Okere Arm of Lake Rotoiti.

Adjoining the Okere Falls Scenic Reserve on its north boundary is the Council owned Trout Pools Reserve. The Trout Pools Reserve is designated (RDC835) for 'destination' but zoned Rural 1. The reserve is the location that rafts exit the river. It contains a large sealed carpark, shown in the following image. Potentially visitors do not make the distinction between the Council reserve and the Okere Falls Reserve, although a change to the walking path style and width is evident onsite. North of the Trout Pools Reserve is a Significant Natural Area (Upper Kaituna 678 reference in the District Plan) over the Kaituna River and its margins.

Adjoining the Okere Falls Scenic Reserve on its south boundary is the Hinerangi Urupa. To the east of the Hinerangi Urupa is the Taheke 8C Development Area (District Plan notation) although this area is currently part of the farm.

West of Okere Falls Road is Hoko Road which contains a commercial site and a small number of residential sites elevated above the surrounding land and set amongst native vegetation.

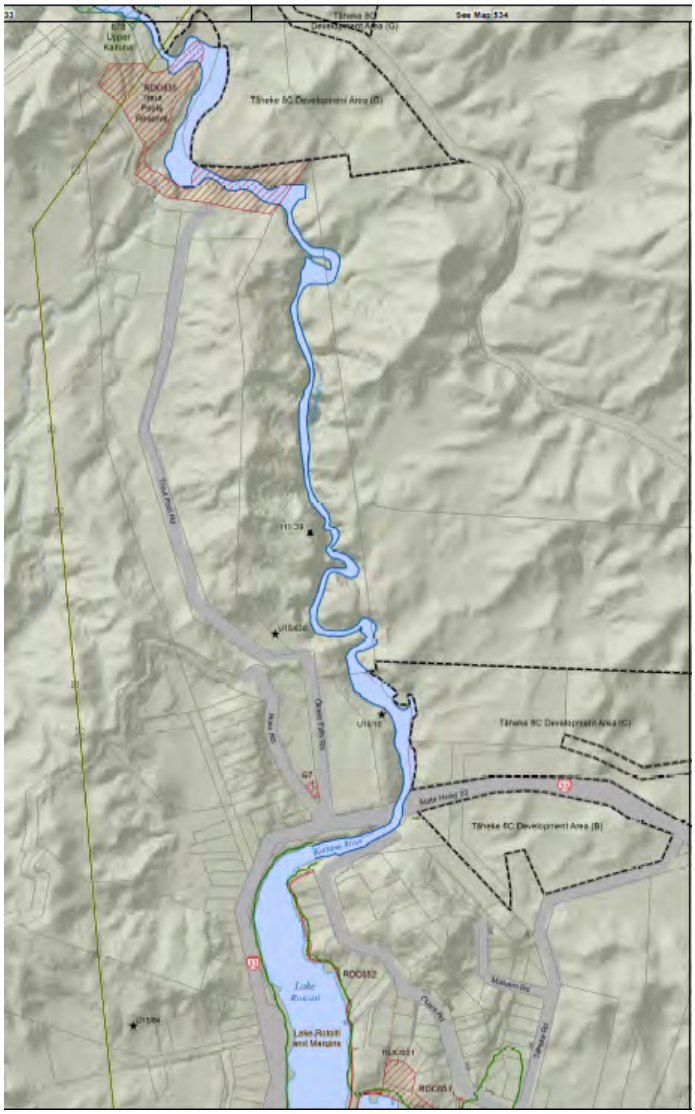


Image 12: District Plan Map 370

Image 13: View from the Okere Falls Scenic Reserve ridge track of Trout Pools Reserve carpark and surrounding rural and forestry land

3. DESCRIPTION OF PROPOSAL

3.1 Proposal Details

It is proposed to establish and operate a zipline recreational activity over the Okere Scenic Reserve and the neighbouring Maori rural land to the east. Customers will pay online and prepare at the existing Rotorua Rafting premises (with new parking to be established on a neighbouring site) and then will be transported by van to the first zipline. Six ziplines are proposed with small entry and exit platforms, resulting in a total of twelve platforms. Ten platforms will be within the Okere Falls Scenic Reserve and two platforms will be located on the adjacent rural land.

Included with the proposal is planting of riparian indigenous vegetation as part of the tours, within both the reserve and the rural land.

Tours are proposed to operate every 30 minutes (with a minimum booking requirement) from 8am to 5pm then 7pm to 9pm weather conditions permitting, 7 days a week. The full tour is to take approximately 3 hours and the tour duration may be reduced for the evening tours. Tour groups will include up to 10 participants, therefore the activity can cater for up to 70 participants at once if all tours are fully booked.

3.2 Structures

It is proposed to construct low timber platforms at the entry and exit of each zipline. The 'T' shaped platforms will be approximately 900 to 945mm wide and 2.745 to 2.9m long and 5m^2. The height of the platforms will be kept low, at a maximum of approximately 500mm.

Each end of the ziplines will be supported by a post of approximately 500mm above ground level and the 'zipline' will consist of a 12mm diameter galvanised wire rope with three anchors and a smaller safety wire rope.

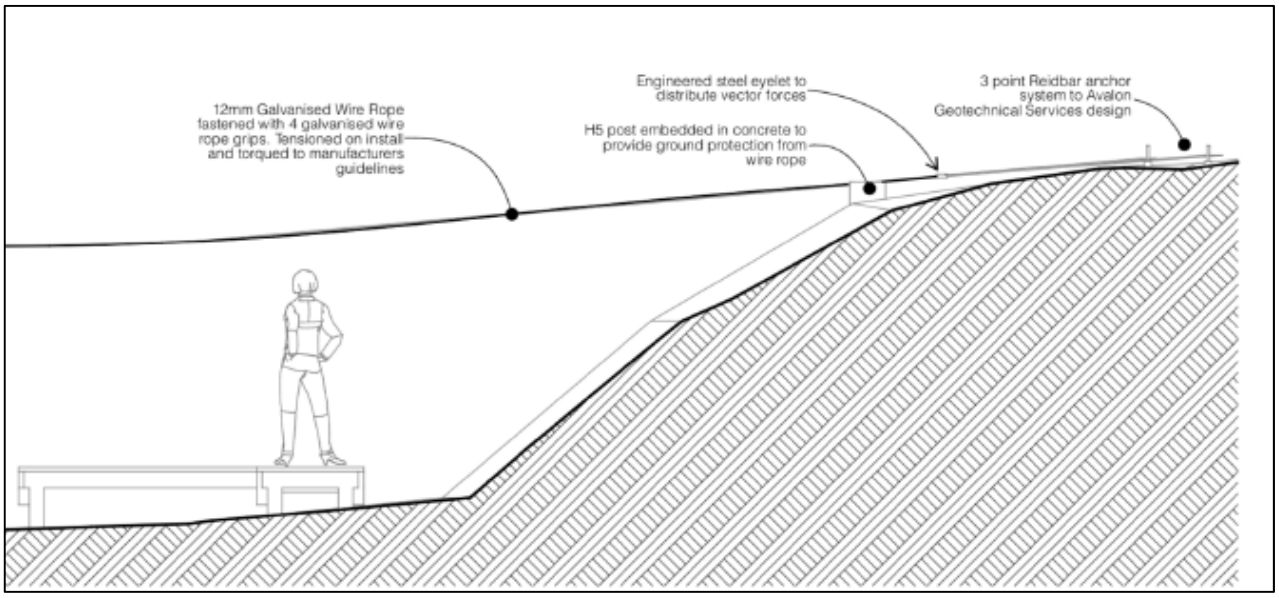


Image 14: Typical cross section of zipline and platform

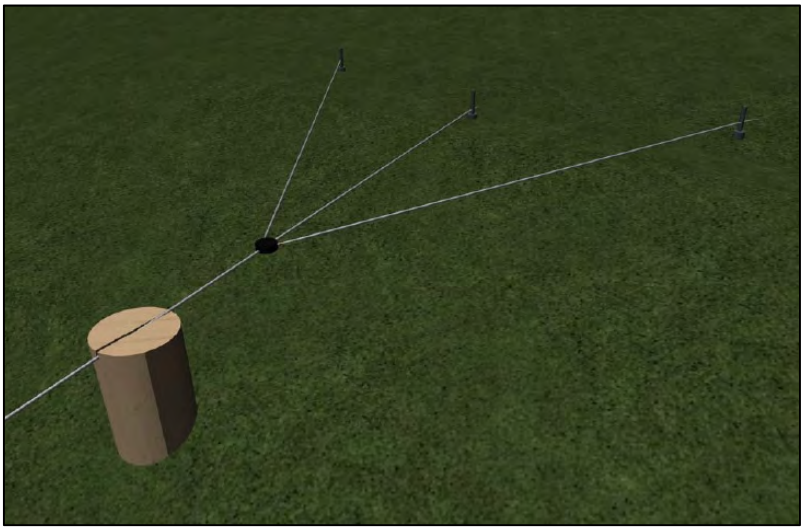


Image 15: Artist's impression of zipline anchors

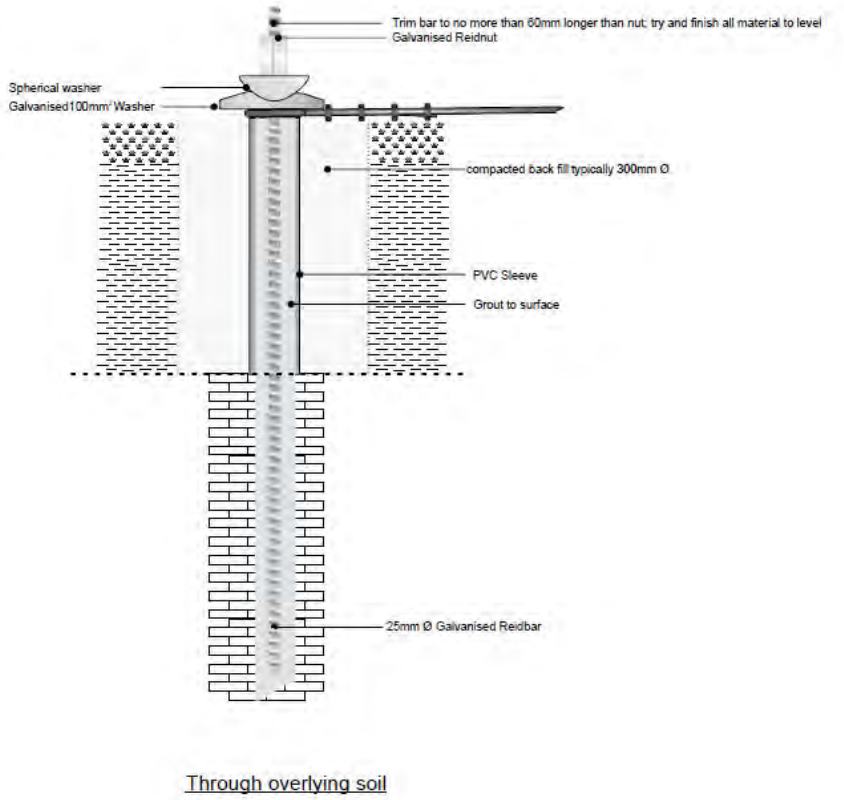


Image 16: Cross section of anchors

The below image from the Rotorua District Plan shows that the site is within Zone A in regards to soft ground potential. Zone A is described as – *Areas of volcanic-derived rock and soils. Volcanic processes by their very nature are high-energy. No soft ground is expected in Zone A as the dominant processes preclude the conditions necessary for its development.* The site is not affected by fault lines but is potentially susceptible to landslides. The landslide risk is mitigated by the vegetated nature of the land. The method of anchoring the cables allows for adjustment at the time of construction which avoids the need for preliminary geotechnical testing and assessment. A statement of preliminary design comments from Avalon Geotechnical Services is appended.

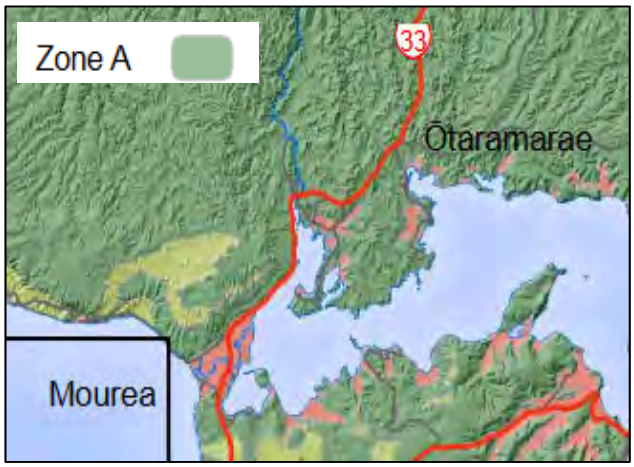


Image 17: Rotorua District Plan, Areas of Soft Ground Potential

Image 17: Rotorua District Plan, Areas of Potential Fault Line Impact

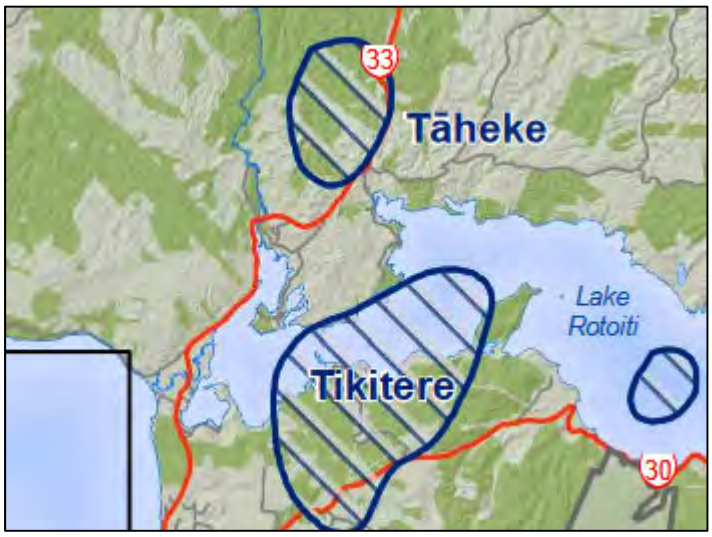


Image 18: Rotorua District Plan, Geothermal Systems

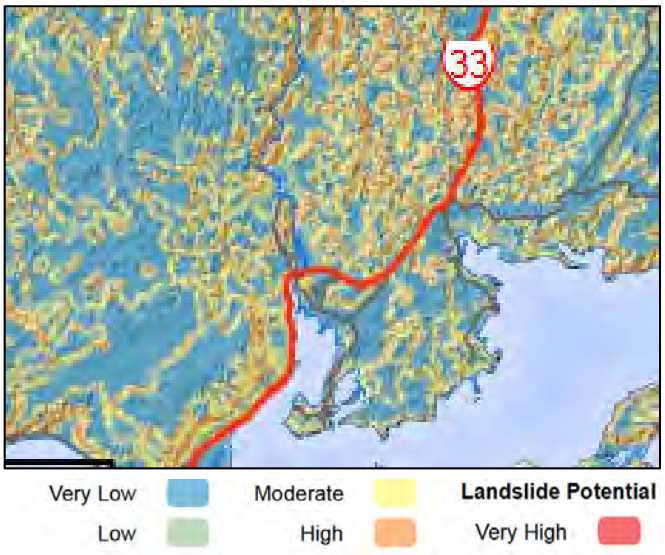


Image 19: Rotorua District Plan, Landslide Potential

3.3 Services

Services are not required within the reserve or rural land. The existing Rotorua Rafting site includes customer toilets which will be available to zipline customers also, avoiding the need for any new water and wastewater connections. A reticulated wastewater system serves the community. Water is provided to Rotorua Rafting premises by a spring and no notable increase in water demand is expected from the zipline activity. The activity does not require any additional power or phone connections.

3.4 Vegetation Clearance

Vegetation clearance will be required for the formation of the proposed tracks, platforms and trimming of vegetation will be required for some of the ziplines. Detail is provided in the appended report from Wildlands.

3.5 Access and Parking

In order to avoid the requirement for additional buildings, it is proposed to utilise the Rotorua Rafting building and premises located at 761 SH33 for customer check-in, safety briefings, fitting of safety gear and storage of safety equipment. This allows an efficient use of resources. Customer and staff parking will be provided in the area neighbouring the Rotorua Rafting carpark (Okere 1B3C3B2). Although the parcel is approximately 1232m^2 the area proposed for parking is a regular shaped and flat area of approximately 800m^2. It is proposed to form the parking and access in gravel prior to commencing zipline tours and retaining the remaining land in grass. The formed parking will provide for approximately 20 parks, based on Rotorua District Plan's parking dimensions (NZS). Amenity planting will be undertaken around the perimeter of the parking area during the first planting season after construction. The plantings will be native and similar to the landscaping that has been established at the Rotorua Rafting parking area. Stormwater will be managed to avoid erosion or flooding of neighbouring sites.

The Maori roadway sealed width will be extended in accordance with the recommendations of the appended Traffic Impact Assessment.

Tour participants will arrive at the parking site either via a shuttle from Rotorua or by private motor vehicle. A shuttle is operated by Rotorua Rafting and they estimate approximately 30% of customers use this service which avoids the need for parking for these customers. Check-in, safety equipment fitting etc will then take place at the Rotorua Rafting premises before the tour group is transferred to the Scenic Reserve main carpark on Okere Falls Road/Trout Pool Road via van. Once the tour is complete (approximately 3 hours), Okere Adventures will return participants to their parked car or to Rotorua. Based on the Rotorua Rafting experience, the nature of the activity results in a higher number of occupants per private motor vehicle than usual, as tours are booked in advance and most participants choose to undertake the tour with a group of friends or associates which lends itself to carpooling.

Image 20: Proposed parking location

Image 21: Unnamed Maori Roadway, looking towards the state highway intersection

Image 22: Looking south at the State Highway from the intersection

Image 23: Looking east at the State Highway from the intersection (towards the Okere Falls Road intersection)

3.6 Signage

No additional signs are proposed. The existing Rotorua Rafting signs shall be amended to provide for the zipline also, without increasing the size of the signs. The text will comply with the NZTA requirements.

Image 24: Existing Rotorua Rafting Signage

3.7 Earthworks

No major earthworks are required to give effect to the proposal. The cables will be secured with a drilled anchor system which avoids the need for earthworks to construct large foundations. The ziplines have been designed to work with the natural landform to avoid earthworks or elevated platforms. Proposed walkways will be formed to provide for single file access. Steps may be required in some places. The longest walkway proposed (approximately 320m) is on the rural land with some of the proposed walkway already formed as a farm track. Sediment and erosion controls will be installed where necessary during the construction of the track over the rural land.

4. STATUTORY CONSIDERATIONS

4.1 Reserves Act 1977

19 Scenic Reserves

(1) It is hereby declared that the appropriate provisions of this Act shall have effect, in relation to reserves classified as scenic reserves—

(a) For the purpose of protecting and preserving in perpetuity for their intrinsic worth and for the benefit, enjoyment and use of the public, suitable areas possessing such qualities of scenic interest, beauty or natural features or landscape that their protection and preservation are desirable in the public interest.

(b) For the purpose of providing, in appropriate circumstances, suitable areas which by development and the introduction of flora, whether indigenous or exotic, will become of such scenic interest or beauty that their development, protection and preservation are desirable in the public interest.

(2) It is hereby further declared that every scenic reserve classified for the purposes specified in subsection (1)(a) shall be so administered and maintained under the appropriate provisions of this Act that—

(a) Except where the Minister otherwise determines, the indigenous flora and fauna, ecological associations and natural environment and beauty shall as far as possible be preserve, and for this purpose, except where the Minister otherwise determines, exotic flora and fauna shall as far as possible be exterminated.

(b) The public shall have freedom of entry and access to the reserve, subject to the specific powers conferred on administering bodies by sections 55 and 56, to any bylaws under this Act applying to the reserve and to such conditions and restrictions as the administering body considers to be necessary for the protection and well-being of the reserve and for the protection and control of the public using it.

(c) To the extent compatible with the principal or primary purposes of the retention and preservation of the natural or scenic values, open portions of the reserve may be developed for amenities and facilities where these are necessary to enable the public to obtain benefit and enjoyment from the reserve.

(d) Where historic, archaeological, geological, biological or other scientific features are present in the reserve, those features shall be managed and protected to the extent compatible with the principal or primary purpose of the reserve:
provided that nothing in this paragraph shall authorise the doing of anything with respect to fauna that would contravene any provision of the Wildlife Act 1953 or any regulations or Proclamation or notification under that Act or the doing of anything with respect to archaeological features in any reserve that would contravene any provision of the Heritage New Zealand Pouhere Taonga Act 2014.

(e) To the extent compatible with the principal or primary purpose of the reserve, its value as a soil, water and forest conservation area shall be maintained.

(3) It is hereby further declared that every scenic reserve classified for the purposes specified in subsection (1)(b) shall be so administered and maintained under the appropriate provisions of this Act that—

(a) Except where the Minister otherwise determines, the flora and fauna, ecological associations and natural environment and beauty shall as far as possible be preserved.

(b) The public shall have freedom of entry and access to the reserve, subject to the specific powers conferred on administering bodies by sections 55 and 56, to any bylaws under this Act applying to the reserve and to such conditions and restrictions as the administering body considers to be necessary for the protection and well-being of the reserve and for the protection and control of the public using it.

(c) To the extent compatible with the principal or primary purposes of the retention and preservation of the natural or scenic values, open portions of the reserve may be developed for amenities and facilities where these are necessary to enable the public to obtain benefit and enjoyment from the reserve.

(d) Where historic, archaeological, geological, biological or other scientific features are present in the reserve, those features shall be managed and protected to the extent compatible with the principal or primary purpose of the reserve:
provided that nothing in this paragraph shall authorise the doing of anything with respect to fauna that would contravene any provision of the Wildlife Act 1953 or any regulations or Proclamation or notification under that Act or the doing of anything with respect to archaeological features in any reserve that would contravene any provision of the Heritage New Zealand Pouhere Taonga Act 2014.

(e) To the extent compatible with the principal or primary purpose of the reserve, its value as a soil, water and forest conservation area shall be maintained.

It is considered the proposal is consistent with the provisions outlined above from Section 19 of the Reserves Act 1977. The proposal does not conflict with the purpose of the reserve and the applicant will contribute to the control of exotic pest species. Freedom of entry to the reserve will not be affected. The proposed facilities will enable the public to obtain additional benefit and enjoyment from the reserve in accordance with (2)(c). Disturbance to archaeological sites is not proposed. The report from Wildlands shows that there will be some minor loss of vegetation however new indigenous planting will be undertaken and pest control has the potential for ecological benefits. The proposal has been designed to avoid the need for large structures or landform modification, thereby protecting the beauty of the reserve.

4.2 Resource Management Act 1991

Part 6

Section 88 of the RMA allows any person to make a resource consent application, provided it is in the prescribed form and includes, in accordance with Schedule 4, an assessment of environmental effects in such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.

Schedule 4 of the RMA lists those matters that should and must be included in an assessment of environmental effects, as well those matters that should be considered. These matters are referenced throughout the body of this report confirming that the application meets all the requirements of Section 88.

In accordance with Section 104(1) and when considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2 of the RMA, have regard to:

a) Any actual and potential effects on the environment of allowing the activity; and

ab) Any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and

b) Any relevant provisions of:
- *i) A national environmental standard.*
- *ii) Other regulations.*
- *iii) A national policy statement.*
- *iv) A New Zealand coastal policy statement.*
- *v) A regional policy statement or proposed regional policy statement.*
- *vi) A plan or proposed plan; and*

c) Any other matter the consent authority considers relevant and reasonably necessary to determine the application.

The carparking is considered a non-complying activity in the Residential 4 Zone and the ziplines are a discretionary activity in the Reserve and Rural Zones. Section 104D of the RMA applies to non-complying activities and prescribes that consent can only be granted if either the adverse effects are minor or the activity is not contrary to the objectives and policies of the plan.

In terms of addressing the requirements of the RMA, an assessment of environmental effects is provided in Section 7 of this report where it has been considered the effects on both the immediate and surrounding area are less than minor. The District Plan objectives and policies are discussed in Section 8 of this report. Based on these assessments, it is considered that the application is able to be granted.

4.3 National Policy Statements

There are currently five National Policy Statements being:

- National Policy Statement on Electricity Transmission.
- National Policy Statement for Renewable Electricity Generation.
- New Zealand Coastal Policy Statement.
- National Policy Statement for Freshwater Management.
- National Policy Statement on Urban Development Capacity.

The National Policy Statements are not considered relevant to the proposal.

4.4 National Environmental Standards

There are currently the following national environmental standards:

- National Environmental Standards for Air Quality.
- National Environmental Standard for Sources of Drinking Water.
- National Environmental Standards for Telecommunication Facilities.
- National Environmental Standard for Electricity Transmission Activities.
- National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health.
- National Environment Standards for Plantation Forestry.

Only the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) is considered relevant to this proposal. The NESCS controls the following activities:

1. Removing or replacing all or part of, a fuel storage system.
2. Sampling the soil.
3. Disturbing the soil.
4. Subdividing the land.
5. Changing the land use.

Some soil disturbance will be required for the formation of new walking tracks. The rural land (with two ziplines and a walking track between) and residential 4 land (parking area) is not considered a HAIL site. Both sites have been used for grazing without any evidence of previous sheep dips or other potential HAIL activities.

In regards to the reserve, the site used to contain a hydro power station. The station was constructed between 1899 and 1901 and was the New Zealand government's first hydro-electric power scheme; built to power Rotorua which was a major tourism centre[2]. The station was closed in September 1939 and dismantled during the early 1940s. As the site has previously been a power station (B4 on the HAIL list), it is considered that areas of the site which were subject to the activity are considered a 'piece of land'. The previous power station site is evident onsite and immediately adjacent to and sometimes within, the flow of the river. Soil disturbance within this area is not proposed.

The soil disturbance required within the reserve is very minor in scale and can comply with the permitted activity standards for soil disturbance under the NESCS if necessary. None of the zipline anchors or platforms are within close proximity of the historical power station site. A change in land use under the NESCS is when the proposed use creates more sensitivity to contaminated soil than the existing use. The site is used for recreational purposes currently and the proposed zipline will not increase the sensitivity to contaminated soil and therefore is not considered a 'change of land use' under the NESCS. Accordingly, resource consent or further assessment under the NESCS is not required.

Image 25: 1944 aerial photo of reserve and surrounding rural land[1]

[2] Source: Engineering New Zealand – Okere Falls Power Station https://www.engineeringnz.org/our-work/heritage/heritage-records/okere-falls-power-station/

Image 26: 1967 aerial photo of reserve and surrounding rural land[3]

Image 27: 1980 aerial photo of reserve and surrounding rural land[4]

[3] Source: Retrolens
[4] Source: Retrolens

5. DISTRICT PLAN REQUIREMENTS

The subject sites are contained within three different zones - the Reserve Zone, the Rural 1 Zone and the Residential 4 Zone. The sites are identified on Planning Map 370 of the Rotorua District Plan. The sites are not subject to any District Plan overlays such as Outstanding Landscape Areas, Significant Natural Areas or Fault Lines. There are two heritage points of interest in the Reserve being an archaeological site at the south western boundary of the site (U15/636 – house floor) and H1.39 (steps down to the former power station shown in image 2).

Within the reserve, outdoor recreational activities are permitted and buildings for recreational activities are restricted discretionary. In accordance with Rule 2 in table 10.5 any activity not expressly provided for is a discretionary activity. The Council has advised that *commercial* outdoor recreational activities are not included under 'outdoor recreational activities' and therefore the proposal will be considered a discretionary activity. The activity is expected to comply with the noise limits of the District Plan.

Within the Rural 1 Zone, commercial outdoor recreation is discretionary in accordance with Rule 41 in Table 9.5.

Within the Residential 4 Zone - the proposed parking area - the activity status for commercial outdoor recreational activities is not expressly stated and under Rule 3 of table 4.5 the proposal is a non-complying activity.

Parking Requirement

Indoor and outdoor commercial recreation facilities and places of assembly (includes churches, community facilities, convention centres, marae and all like activities) require 1 park for every 10 persons the building or activity is designed to cater for. With 30 minute intervals between tours, tour groups of 10 participants and a 3 hour tour completion time, the activity can cater for up to 70 participants at once – resulting in a requirement for 7 carparks.

6. CONSULTATION

The applicant has undertaken consultation with Iwi and neighbours. Ngati Pikiao were confirmed as the traditional owners of the river in 1984 by the Waitangi Tribunal[5]. A part of the Kaituna River is subject to a statutory acknowledgement for Ngāti Pikiao who are a Te Arawa Iwi. Te Arawa have a statutory acknowledgement of geothermal resources in the locality (and stretching as far Rotokawa). Use of geothermal resources is not proposed.

[5] Signage at Okere Falls Scenic Reserve

A brief record of consultation between the applicant and Ngāti Pikaio is provided below.

- July 24th, 2018: Initial meeting with Lake Rotoiti Scenic Reserve board to introduce the proposal. Five of the six Scenic Reserve Board members are Ngati Pikiao. The applicant was advised that the next step was to consult with Okere Inc. who represent both hapū that occupy Ōkere being Ngāti Hinekiri and Ngāti Hinerangi.

- September 10th, 2018: Proposed venture tabled with Okere Inc. representing the land holdings of both Ngāti Hinekiri and Ngāti Hinerangi. Following the meeting the applicant was directed to proceed with due diligence on the feasibility of the project.

- December 17th, 2018: Informed by the Scenic Reserve Board to continue with due diligence.

- January 18th, 2019: Meeting with Okere Inc. Board to update on feasibility of venture and discuss co-operation between both parties. The Board advised that they were supportive of the venture and had been relaying information through to their respective Hapū.

- 14th April, 2019: Okere annual general meeting at Taheke Marae. Proposal formally approved with no opposition.

Written approval has been received from:

- Ngāti Hinekiri.
- Ngāti Hinerangi.
- Piki Thomas as the representative of 'The Proprietors of Okere No. 1B No. 3C No. 3B 3 and Adjoining Block' who are landowners to the parcels to the west of the proposed parking area (shown in the following image) and the farmland adjoining the east side of the scenic reserve (to contain 2 ziplines and riparian planting) as well as other neighbouring farmland.
- Manu Hodge of 759 SH33 (Maori Freehold land registered to Charles Kingi).

Image 28: The Proprietors of Okere No. 1B No. 3C No. 3B 3 and Adjoining Block

Consultation has also been undertaken with the Department of Conservation, NZTA and some other neighbouring landowners. No opposition has been noted. The Traffic Impact Assessment has been provided to NZTA for review.

7. ASSESSMENT OF ENVIRONMENTAL EFFECTS

7.1 Introduction to Effects

It is proposed establish and operate a zipline activity within the Okere Falls Scenic Reserve with two ziplines crossing over to the neighbouring rural land. The reserve is already intensively used for recreation and commercial recreation. The zipline proposal has been designed in sympathy with the cultural and landscape values of the reserve. Vegetation disturbance is necessary but will be minimised. Potential effects of the proposal include:

- Landscape effects.
- Ecological effect.
- Cultural effects.
- Traffic effects.
- Noise effects.
- Effects on character and amenity.
- Safety, and
- Economic and social effects.

The proposal requires a concession from the Department of Conservation and resource consent from the Rotorua Lakes Council. Economic effects cannot be considered by the Department of Conservation. Under Section 104(3) the Council must not have regard to any effect on a person who has given written approval to the application. The application is for a non-complying activity under the District Plan.

Each of the above listed matters are assessed in the following subsections.

Disturbance to archaeological or historic heritage sites is to be avoided.

7.2 Permitted Baseline

Under Section 104(2) of the RMA the Council can choose to disregard the effects of the permitted baseline. The reserves and rural zones provides for outdoor recreation as a permitted activity and the ziplines and platforms do not constitute 'buildings' under the District Plan. Therefore the proposal could be established as a permitted activity if it were not a commercial activity.

The RMA allows for the Department of Conservation to undertake activities within the reserve, such as construction of buildings and walking tracks, without District Council resource consent.

7.3 Ecological Effects

The report by Wildland Consultants advises that the greatest effects of the proposal will result from clearance and trimming of vegetation during the construction and maintenance of walking tracks, platforms and ziplines and that construction of walking tracks, platforms and ziplines should be undertaken in a low-impact manner. Options for mitigation at this site include intensive sustained pest control and indigenous revegetation.

Wildlands has considered that overall, the zipline project *has some potential for adverse effects, although relatively minor, but there is also considerable potential for positive ecological effects and for high quality ecological interpretation for participants. If the potential adverse effects which have been identified are avoided or minimised, the overall adverse ecological effects of the proposed zipline development will be minor. Intensive sustained pest control, along with weed control, has the potential to improve the state of the reserve and populations of indigenous species.*

The proposal has been designed to minimise the area of vegetation disturbance by utilising existing tracks as much as practicable. Additional detail is included in the appended Wildlands report. Mobile gear will be used during construction without the need for vegetation clearance for construction vehicles. Indigenous vegetation disturbance is not required for parking areas.

The established indigenous vegetation is on the true left side (west) of the river whilst the true right side has little indigenous vegetation. Indigenous planting on the true right side of the river will be undertaken as part of tours and this will expand the area of vegetation cover. Riparian planting can provide benefits such as reducing the amount of phosphorus entering waterways from agriculture, reducing erosion and sedimentation of waterways thereby improving water quality and providing shade to waterways which is advantageous for native fish species and trout.

The community group 'Predator Free Okere Falls' is working towards eradication of rats, possums and mustelids in the area by 2025 with traps. The proposal can bolster the efforts of this group towards the common goal.

The suggested mitigation listed in section 13.2 and 13.3 of the Wildlands report are anticipated conditions of the concession.

7.4 Landscape Effects

The reserve is a Scenic Reserve and the proposal has been designed in sympathy with the visual and landscape qualities of the reserve. The reserve is not an Outstanding Natural Feature or Landscape (ONFL) under the District Plan. The scenic qualities of the reserve generally are viewed from within the reserve, rather than from outside of the reserve. The reserve's scenic qualities are derived from the river within the reserve. The reserve is a narrow band of indigenous vegetation surrounded by farmland on its east, north and west. The State Highway and Urupa separates the reserve from the lake which is an ONFL. Residences are established to the west of Hoko Road.

The reserve has a history of anthropogenic activity and an old power station turbine is on display within the reserve's walking tracks and the power station location is still evident within the river. The tracks include stairs and safety rails.

The ziplines have been designed to avoid the need for alteration to the landform or large raised platforms. No buildings are proposed. The ziplines will consist of a small low timber platform (up to 500mm high), three anchor points and a low timber post at each end with two wire cables spanning the distance between the anchors. A barrier will be included near the start of the cables to prevent unauthorised access to the lines for safety reasons. None of the structures will be bright colours. The low profile and small footprint of the platforms ensure that these do not have adverse effects on the landscape and visual qualities of the reserve. The platforms will also be set amongst vegetation, further diminishing their visibility.

The design has utilised existing walking tracks within the reserve with only short new tracks required to access the proposed ziplines. The longest proposed new tracks within vegetated areas are from the reserve carpark to platform 1 at the start of zipline 1 (approximately 50m) and from platform 2 at the end of zipline 1 to platform 3 at the start of zipline 2 (approximately 85m). The remainder of the proposed tracks within the reserve are very short, i.e. less than 20m. The platform at the end of zipline 3 and the platform at the beginning of zipline 4 are in close proximity of each other, less than 5m apart. Similarly, the end of zipline 2 and the start of zipline 3 are in close proximity. This minimises the area of disturbance from an ecological and visual aspect.

Outside of the reserve, on the rural land, a longer new track will be constructed to connect ziplines 5 and 6. This track has greater potential for visual effects due to its length, gradient and lack of existing vegetation (other than pasture). Small soil batters on the steeper areas of the proposed walking track over the rural land shall be planted to avoid adverse visual effects when viewed from the DoC and Council reserves. The rural land is only visible from a few locations within the reserves due to the screening effect of the existing vegetation within the reserves. The topography of the land prevents views of the proposed walking track from the State Highway and east of the rural site.

Within the reserve on the east side of the river margin the area is sparsely vegetated and mostly consists of grass and so appears as rural land rather than part of the reserve. This area is to be planted with natives as part of the tour activity and eventually will appear as part of the vegetated reserve.

The zipline cables will cross the river. The river margins are not devoid of un-natural structures, with viewing platforms, rails, signs and the like as well as the historic power station remnants within the river. The cables will be visible from some locations, including river viewing areas. The main cable will be 12mm diameter and steel. At the river crossings, the cables will be at a height which provides a vegetated backdrop thereby mitigating the visual effect for persons viewing the river. Outside of the river crossings, the cables will be either above or through the tree canopy, limiting their visibility and mitigating potential adverse visual effects. When in use, persons on the zipline will be highly visible for a few seconds each ride, with a tour group consisting of at least two guides and up to ten customers. Zipline users will be attached via a harness, not a built structure. Ziplines are now widespread throughout New Zealand and the world and photographs of ziplines within forested areas are readily available on the internet and can be experienced locally. Overall the adverse visual effects of the ziplines are expected to be less than minor and are mitigated by the design which avoids buildings and large platforms.

The Applicant has provided the following artist's impression (not a photo-simulation) of the cables from two key viewpoints.

Image 29: Artist's impression of cables at the waterfall

Image 30: Artist's impression of cables from the powerhouse viewpoint

7.5 Noise Effects

The ziplines themselves are relatively quiet when in operation with a low-pitched whir and noise from riders is dependent upon individuals. It is anticipated that the majority of riders will be quiet, particularly beyond the first zipline however some individuals may choose to scream or yell. The existing noise environment consists of birds, traffic noise and the transient noise from rafters and walkers. A half hour gap between the commencement of tour groups is proposed with each group consisting of up to ten visitors and two to four tour guides. A period of quiet is proposed for approximately 1 hour between 5pm and 7pm each evening. Given the established noise environment with rafters and walkers the adverse effects of the noise from the proposal are expected to be minor.

7.6 Cultural Effects

The awa and its margins are of cultural significance to Iwi. Ngāti Pikiao have a history of settlement around the headwaters and the awa and its margins have been valued as a source of kai, plants for weaving and medicinal purposes, access to other locations via the awa, burials within the caves and for ritual cleansings after battles. An urupa is also located adjacent the reserve. The ziplines have been designed to avoid disturbance to culturally significant sites. Consultation with Iwi commenced early in the project and consequently a partnership has been formed with the neighbouring Maori landowners and written approval provided by Ngāti Hinerangi and Ngāti Hinekiri. This has allowed Tangata Whenua considerations to be incorporated into the proposal. The proposal provides for the cultural history and values of the area to be shared with tour participants.

7.7 Effects on Recreational Values

The proximity of the State Highway and residential settlements, presence of man-made features, small width of the reserve and the established rafting operations ensure that the reserve does not provide a pristine or wilderness experience in the New Zealand context. The reserve is used extensively for recreation, primarily for walking the tracks and rafting. Observing rafting is a popular use in the reserve. The proposed tours will utilise some of the existing walking tracks and licence fees paid to the Department can be used in part to cover any increase cost of track maintenance. The tracks are already popular with walkers and sightseers and so the addition of the tours will not result in a major change to the amenity and value of the tracks for recreational use. Given the popularity of the tracks and the established commercial tourism within the reserve, the proposal is expected to be consistent with the existing recreational values and provides an additional recreational offering.

7.8 Traffic Effects

The proposal will increase traffic to the parking site and the reserve. Zipline participants will arrive at the parking site via private motor vehicle or shuttle from Rotorua. After check-in and safety fittings etc. a staff member will drive the tour group to the reserve and park in the Okere Falls Scenic Reserve carpark. After the tour, the driver will return the participants to their parked vehicles or to Rotorua. At a minimum, there will be 30 minutes between tours – resulting in up to three ingoing vans and three outgoing vans (driven by experienced staff) to the reserve each hour (e.g. 11am incoming and outgoing van, 11.30am ingoing and outgoing van, 12 noon ingoing and outgoing van). When all tours are booked there may be a need to drop off and pick up participants and guides via van rather than leaving the van parked at the reserve carpark – thereby increasing the number of vehicle movements and decreasing the demand for carparks.

The State Highway is particularly wide in this locality and improvements to the State Highway have been approved by NZTA. Due to the provision of adequate parking onsite, tour participants are unlikely to cross the State Highway as pedestrians. Improvements, such as widening of the Maori roadway, are proposed in accordance with the appended Traffic Impact Assessment. The Traffic Impact Assessment concludes that from a traffic engineering perspective there is no significant reason the proposal cannot be granted consent.

7.9 Parking

Parking for approximately 20 vehicles is to be formed in close proximity of the Rotorua Rafting check in site. The parking area provides for convenient and practical access to the check in area. The number of parks is expected to be sufficient for the demand and additional area is available if necessary. The District Plan requires only 1 park per 10 persons the activity is designed for – with the proposed zipline only requiring approximately 7 parks. The applicant has advised that approximately 30% of rafting customers utilise the shuttle service from Rotorua. Assuming a similar uptake and based on 80% occupancy of tours each half hour, with an average of 3 persons per private motor vehicle then approximately 16 customer parks will be required during the peak. The shuttle service and employment of Okere residents also minimises the number of staff parks required. Accordingly 20 formed parks and the provision for additional parks if required, is considered appropriate.

Shuttles to the reserve main carpark will occur at a maximum every 30 minutes – resulting up to three incoming and three outgoing shuttles per hour with a maximum demand of 7 parks. The main carpark at the reserve provides more than 30 parks and accordingly the proposal is not expected to put undue pressure on the demand for parks.

7.10 Health and Safety

A draft Safety Operation Plan is appended to the concession application. The applicant is an experienced adventure tourism operator and familiar with managing safety risks through tour guide training. Barriers will be installed on the ziplines to physically prevent persons from accessing the ziplines without authorisation.

7.11 Character and Amenity

7.11.1 Reserve Land

The proposed tourism activity is consistent with the established character and amenity of the reserve. The reserve is popular with walkers and is utilised for commercial rafting. Viewpoints for the rafting activity are an attraction also. The reserve is within close proximity of a main road and is already popular with tourists. Accordingly, the proposed recreation tourism is consistent with this established character and amenity.

7.11.2 Rural Land

The proposal includes rural land adjoining the reserve. Once established with plantings, the site will appear as an extension to the reserve rather than a commercial recreational activity within a rural site. As such, no adverse effects on the character and amenity of the rural land are anticipated.

7.11.3 Residential 4 Land

The proposed parking area is zoned Residential 4. Residential development to the east of the Maori roadway is separated from the site by elevation and vegetation. West and north of the proposed parking site is rural 1 zoned land (written approval provided). At the end of the Maori roadway is a small cluster of rural-residential sites, also within the Rural 1 Zone. South of the proposed parking area is an undeveloped site, access to the rural land to the west and the Rotorua Rafting premises. A residential site is located south of Rotorua Rafting then the Okere Falls Store. Accordingly the established land uses in the immediate area are comprised of rural, residential and commercial activities. The character and amenity is reflective of the combination of uses and so cannot be considered that of a typical rural, residential or commercial area. The State Highway traffic also influences the character and amenity of the area with traffic noise.

Amenity planting will be established around the perimeter of the proposed parking area and no additional advertising signs are proposed. The existing Rotorua Rafting sign will be amended to incorporate the zipline without increasing the size of the sign. The proposed parking area is not visible from the State Highway and is located within a small valley which prevents views from further afield. The proposed carpark with amenity planting will fit with the established character and amenity of the locality due to the area already containing a mix of rural, residential and commercial activities.

7.12 Social and Economic Effects

The proposed zipline activity will provide local jobs. The Maori landowners of the surrounding rural land are to financially benefit from the activity and the tours allow the rich cultural history and value of the area to be expressed to visitors. Licence fees will be paid to the Department of Conservation and indigenous tree planting of riparian areas is also proposed. The activity will contribute to pest control in the reserve (and potentially the wider area) with the details to be worked out with the Department of Conservation. A community group, Predator Free Okere Falls, undertakes animal pest control and efforts should be coordinated with this group's operations also to provide the most effective outcome. Accordingly a number of beneficial social and economic effects are expected to arise from the proposed activity. Economic effects cannot be considered by the Department of Conservation.

7.13 Summary

The proposed zipline activity is consistent with the established tourism and recreation activities within the reserve. The proposal has been designed to minimise ecological, landscape and visual effects by utilising existing walking tracks where possible, using the natural landform for the ziplines rather than constructing large elevated platforms and avoiding the need for additional car parking areas in the reserve. Indigenous vegetation planting in grassed areas will be undertaken as part of the tours – providing beneficial ecological effects. The activity will contribute to pest control with the details to be worked through with the Department of Conservation. No new buildings are proposed and the activity will utilise the Rotorua Rafting premises for customer check-in, storage of safety equipment and fitting of safety equipment etc. A new gravel carpark will be formed on privately owned flat land in close proximity to the Rotorua Rafting premises. Additional overflow parking is available if required. The number of parks to be formed exceeds the number required under the District Plan and is expected to be adequate. The traffic effects have been assessed by a qualified and experienced traffic engineer and the effects found to be acceptable.

Consultation with Iwi was undertaken from the inception of the proposal and has resulted in written approval provided by the Hapu of the area and a partnership with Maori landowners.

Overall, the adverse effects of the proposal are expected to be minor and the activity has the potential to result in positive effects for ecological values and will enhance the recreational offerings and social and economic effects will ensue.

8. RELEVANT POLICIES AND OBJECTIVES

A number of policy documents are relevant to the proposal including the Conservation Management Strategy, Rotorua Lakes Recreation Strategy and the District Plan. These are considered below.

8.1 Rotorua Lakes Recreation Strategy

The Rotorua Lakes Recreation Strategy aims to ensure that a diverse range of recreational opportunities are available to the community, while recognising and providing for the physical, biological, social and cultural characteristics of the lakes.

Strategy principles:

- Principle 1: Management agencies will seek to recognise and protect the existing environmental and physical characters of individual lakes and parts of lakes.
- Principle 2: A diverse range of recreational opportunities and types will be promoted.
- Principle 3: The Rotorua Lakes Recreation Strategy will provide a policy context that will guide management of the Rotorua Lakes.

The proposal is clearly consistent with the Rotorua Lakes Recreation Strategy.

8.2 Bay of Plenty Conservation Management Strategy

8.2.1 Overview

The Bay of Plenty Conversation Management Strategy (CMS) dates from 1997 to 2007 and is currently under review.

The reserve is located very close to the boundary of the Management Area 3 (Otanewainuku- Te Aroha) and Management Area 5 (Rotorua). Wildlands advised that they consider the reserve should be included within Area 3. The Okere Falls Scenic Reserve is not specified in the CMS appendix, specifically not a part of the list 'Land administered by the Department' – potentially because the site is governed by the Lake Rotoiti Scenic Reserve Board; however Table 4.5.2 identifies the Okere Falls Scenic Reserve within the Rotorua Management Area. Wildlands have advised that the site is within the Otanewainuku - Te Aroha Management Area from an ecological perspective. The Otanewainuku – Te Aroha Management Area section of the CMS does not contain anything of specific relevance to the site with exception to archaeological sites and therefore it is not considered below. Some objectives and policies of the Rotorua Management Area are considered relevant and are included below. Other objectives of the CMS which are not site specific have been considered below where relevant to the proposal.

2.2 Tangata Whenua

Objective

The practical expression (by effective consultation and establishment of Charters of Partnership) of the Principles of the Treaty of Waitangi in all aspects of the Department's responsibilities for management of natural and historic resources.

The proposal has been designed with effective consultation with Tangata Whenua.

8.2.2 Historic Resources and Wahi Tapu

The site is identified in Section 4.4 Historic Resources and Wahi Tapu (Sacred Places), specifically within the 'Table 4.5.1 Priority Sites for Archaeological Survey and Assessment for Management Purposes'. This section states that 'the conservation of historic resources is important to ensure a representative range of historic resources will survive to be passed onto future generations. The proposal avoids disturbance to historic and archaeological sites.

4.4 Historic Resources and Wahi Tapu

Objectives

1. *Recognition by the community of its responsibilities for conservation.*
2. *Conservation of representative examples of the diversity of the Conservancy's remaining natural resources.*
3. *The conservation of historic resources and Wähi Tapu.*

8.2.3 Rotorua Management Area

This management area includes the Rotorua lakes, a series of high quality, wetlands of international importance for vegetation, culture, water foul and fisheries and has extensive areas of native forest.

Rare, endangered and vulnerable species include:

- Vegetation: King Fern (*Cyclosorus interruptus, Thelypterls*); wood rose (*Caleana minor, calchillus robertsonii*); thermal orchids.
- Fauna: Kokako, saddleback, kiwi, weka, skinks, gecko, indigenous freshwater fish, two species of bats. There are 14 birds of national importance and five species of regional importance.

The management issues identified for the Rotorua Management Area are as follows:

Rotorua Management Area

Issues

1. *The lack of joint management objectives of the Department and Rotorua District Council results in a lack of complementary recreational management.*
2. *The high public usage can threaten natural and historic resources, for example by fire, litter and pollution of water bodies (see 4.5.1 Visitor Opportunities).*
3. *Many important natural and historic resources are not legally protected or recognised. Some are vulnerable to degradation and destruction (e.g. geothermal site modification) (see Appendix 3).*
4. *Rubbish dumping in many reserves near Rotorua attracts animal pests, contributes to plant pests and is unsightly (see 4.6.6 Rubbish and Spoil Dumping).*
5. *Present classification of some reserves does not reflect their natural and historic resource requirements.*

The proposed activity relies in part on the natural and historic resources of the reserve as a feature of the tours. Accordingly litter around the ziplines will be actively managed by the concessionaire.

Management

1. *Develop joint recreation objectives with the Rotorua District Council and develop and maintain facilities in accord with the objectives.*
2. *Manage sites frequently used by the public by providing appropriate facilities and public education e.g. highly developed road ends such as at Lake Okataina and limited facilities on the southern side of-Lake Tarawera Scenic Reserve.*
3. *Continue to provide high quality information on recreation opportunities.*
4. *Allow low impact ecotourism concessions.*
5. *Work with concessionaires to improve their interpretation of natural and historic resources.*
6. *Work with local authorities to minimise fly-dumping of rubbish in reserves (see 4.6.6 Rubbish and Spoil Dumping).*
7. *Undertake a historic resource inventory on lands administered by the Department (see 4.4 Historic Resources and Wähi Tapu (Sacred Places)).*
8. *Reclassify the following are stewardship areas.*
9. *Increase awareness of natural and historic resources, particularly those associated with geothermal areas (see 4.1 Relationship with Tangata Whenua, 4.2.2 Advocacy and Education for Conservation Management, 4.6. 7 Concessions).*

The proposal will raise awareness of the natural and historic resources of the reserve (and also cultural values). The proposal is considered a low impact ecotourism concession in accordance with 4 above. The reserve already contains a large public carpark and public bathrooms. Bathroom facilities will also be available outside of the reserve at the check-in facility.

Lake Issues

1. *The many agencies and groups with an interest in management of lakes lack common management objectives.*
2. *The water quality of many Rotorua lakes has been significantly degraded by inappropriate land management of catchments and discharges, thus reducing the quality of ecosystems for native aquatic life.*
3. *Stock access to lake shore and riparian margins has adverse effects on indigenous vegetation, aquatic ecosystems and water quality.*
4. *The impacts of introduced plants and animals dominate most lakes means that those lakes without these pests are very important (see 4.3.6 Plant Pests, 4.3.7 Animal Pests).*
5. *Lakes with mainly indigenous species are vulnerable to the introduction of plant and animal pests (see 4.3.6 Plant Pests, 4.3.7 Animal Pests).*

The proposal includes riparian planting and fencing out stock in accordance with 3 above. Pest management is also proposed which accords with 4 and 5 above.

Lake Management

1. *Legally protect lakes that are to be managed for their natural resources.*
2. *Work with landowners and local authorities to protect and rehabilitate lake shore and riparian margins (see 4.3.9 Ecosystem Rehabilitation and Restoration).*
3. *Seek agreement of joint management objectives for the Rotorua Lakes.*
4. *Work with landowners and local authorities to manage catchments in ways that protect the lakes (see 4.2.3 Statutory Planning).*
5. *Work with landowners, local authorities and recreational groups to prevent the introduction of plant and animal pests to lakes (see 4.3.6 Plant Pests, 4.3.7 Animal Pests).*
6. *Raise public awareness of the importance of conservation of lakes (see 4.2.2 Advocacy and Education for Conservation Management).*
7. *Control aquatic macrophytes. 3.6.4 Indigenous Vegetation.*

Riparian planting is proposed which accords with 2 above.

Priority activities for the Rotorua Management Area:

- Seek better protection of lake margins.
- Seek better protection and management of geothermal surface features.
- Manage recreation and tourism on land administered by the department by:
  - Providing information and interpretation.
  - Providing appropriate facilities.
  - Developing joint management objectives with the Rotorua District Council; and
  - Allowing appropriate recreation and tourism concessions.
- Develop cooperative management objectives to areas such as Mount Tarawera Mokia Island.
- Eradicate Old Man's Beard in consultation with other agencies.
- Restrict the spread of wallabies and control possums and goats.
- Complete inventory of remaining lands not legally protected.
- Seek conservation of volcanic domes.
- Undertake an archaeological survey of the 13 sites identified in 4.4 Historic Resources and *wāhi tapu*(Sacred Places).

The proposal provides for appropriate recreation and tourism activity as outlined above.

4.6.7 Concessions

Objective

Concessions that ensure the conservation of natural and historic resources, the recognition of cultural values and accurate interpretation and also provide for the following (one or both):

- *Public enjoyment.*
- *Business.*

The proposal has recognised the cultural values of the locality and provides for accurate interpretation, public enjoyment and business. The proposal will avoid adverse effects on historic resources and has the potential to result in positive effects for the natural resources of the reserve. Accordingly, the proposed concession is consistent with the above objective of the CMS. The CMS also identifies the following issues for concessions, all of which the proposal avoids. New buildings in the reserve are not proposed which avoids the potential issue regarding the scale of expense for removal. Iwi consultation has been undertaken and resulting in a partnership with hapu whereby site interpretation (verbally during tours) will be undertaken in conjunction with hapu, therefore avoiding cultural insensitivity. The proposal for a new concession and issues 5 to 7 are not relevant.

Concession Issues

1. *Structures and facilities which may become the Department's responsibility if businesses fail result in the expense of removal and rehabilitation.*
2. *Site interpretation associated with some concession operations can conflict with Departmental objectives and be culturally and environmentally insensitive.*
3. *Tangata whenua want concessionaires to consult with them.*
4. *Not all concessionaires consult with tangata whenua.*
5. *Concessions that result in perceptions of proprietary rights especially when livelihoods depend on them can result in difficulties at time of review e.g. grazing concessions that are critical to the viability of farms.*
6. *Uses under the terms of some old leases and licences may be damaging natural and historic resources on lands administered by the Department and restricting access.*
7. *Beekeeping at some sites can impact on native bird species through competition for nectar.*

The proposed concession is consistent with the CMS.

8.3 Rotorua District Plan, Part 10 – Reserves, Community Assets and Water

Objective 10.3.1

Maintain the high amenity, natural, cultural and historical values of reserves and provide for public recreation and access, whilst managing the adverse effects of activities, buildings and structures.

Policy 10.3.1.1

Manage the adverse effects of buildings, structures and activities on the amenity of the reserve environment and ensure that it is consistent with the purpose for which the land is held or the relevant reserve management plan.

Policy 10.3.1.2

Restrict new buildings and structures on conservation reserves within 25 metres from water bodies, whilst allowing activities and minor structures for reserve management and public access, as well as the operation, maintenance and upgrade of existing structures.

Policy 10.3.1.3

Manage adverse effects of activities on ancestral land, water, sites, wāhi tapu and other tāonga through recognition of the relationship of tangata whenua with the land and associated resources.

The proposal is considered to maintain the high amenity, natural, cultural and historical values of the reserve and is consistent with Policies 10.3.1.1, 10.3.1.2 and 10.3.1.3 above.

Objective 10.3.5

Recognising the value of lake structures and activities on the surface of the water, whilst the adverse effects are avoided, remedied or mitigated, including cumulative effects on the natural character and functioning of water bodies and their margins, as well as Māori culture and traditions.

Policy 10.3.5.1

Enable recreational and commercial activities, structures and buildings to occur on the surface of lakes and rivers, where adverse effects on the natural character and functioning of water bodies and their margins and Māori culture and traditions are avoided, remedied and mitigated, ensuring that, in particular:

1. *Existing lake structures continue to be used in a manner that does not increase adverse effects on the lake and lakeside settlements.*
2. *New lake structures are enabled where:*
   - a. *Reasonable need can be demonstrated for the lake structure, having regard to:*
     - *The existing provision and availability of similar facilities in the surrounding area.*
     - *The contribution of the new lake structure to the social wellbeing of the community, the recreational values and use of the lakes, as well as environmental wellbeing.*
   - b. *The public use of the lake and adjoining public areas are not unduly affected.*
   - c. *The design of the lake structure takes into account shore morphology and lake depth and functional needs of water craft using the lake structure.*
   - d. *The lake structure is in keeping with the character and amenity of the surrounding land, water and environment.*
   - e. *It will not adversely affect sites of cultural significance to tangata whenua.*

Policy 10.3.5.2

Activities on the surface of water are managed to minimise any potential conflict between those activities.

The proposal is not considered to have adverse effects on the Kaituna River and its margins. No activity is proposed on the surface of the water.

8.4 Rotorua District Plan – Rural Zone

Objective 9.3.1

A reduction in nutrient losses from rural land uses to improve the water quality of lakes, rivers, streams and wetlands, indigenous biodiversity and ecosystem functions.

Policy 9.3.1.1

Manage the adverse effects of new rural land use activities within the lake and river catchments that have the potential to increase nutrient losses into streams, rivers, wetlands and lakes.

Policy 9.3.1.2

Encourage land use and land management changes that achieve a reduction in nutrient losses and provide for restoration and enhancement of indigenous biodiversity and ecological functioning.

Policy 9.3.1.3

Promote indigenous re-vegetation, including the legal protection of land and riparian areas that contribute to improving water quality, in particular on land that is:

- *Susceptible to erosion along lakeshore and other riparian margins.*
- *Adjoining already protected features.*
- *In area of existing indigenous vegetation or biodiversity or where indigenous vegetation fragments can be reconnected as an ecological corridor.*

The proposed riparian planting potentially provides for a water quality benefit for the river in accordance with objective 9.3.1 and as encouraged by policies 9.3.1.2 and 9.3.1.3.

Objective 9.3.2
Rural land that can be efficiently used for a wide range of productive uses.

The proposal affects a small riparian area of a very large rural landholding ensuring that the options for productive land uses are not impeded by the proposal. Accordingly the proposal is consistent with objective 9.3.2.

Objective 9.3.3
The character and amenity values of the rural environment are maintained and enhanced.
Policy 9.3.3.1
Ensure land use change does not create adverse effects on rural character and amenity values.
Policy 9.3.3.2
Enable activities that enhance the rural character and amenity in the rural zone, including:
- *Diverse land uses.*
- *Maintaining the diverse landscape types.*
- *A low density of buildings and generous separation distances between dwellings and other buildings.*
- *Buildings that are sub-ordinate to the surrounding landscape.*
- *An open vegetated landscape.*
- *No continuous ribbons of residential development along roads.*
- *Low levels of artificial light.*
- *Unobtrusive and limited signage.*
- *Minimal earthworks or changes to landform associated with new subdivision, use or development.*

Policy 9.3.3.3
Manage the establishment of commercial and industrial activities that are unconnected with the rural economy that may adversely affect the vitality and viability of urban, commercial and industrial zones.
Policy 9.3.3.6
Avoid, remedy or mitigate the adverse effects of activities on the transport network when they could affect the function of the road within the road hierarchy and the safe and effective functioning of the wider transport network by:
- *Providing on-site vehicle parking, loading and turning and safe vehicle and pedestrian access to a road.*
- *Considering the impact of increased traffic movements on the transport network, including the wider network intersections.*

The proposal is consistent with objective 9.3.3 and its relevant underlying policies. The area of rural land affected by the zipline proposal is adjacent the river margin and therefore suitable for riparian planting and retirement. No new buildings are proposed. Signage within the rural zone is not proposed and earthworks will be mitigated with planting and kept to a minimum for single file walking paths. The activity is not suitable for an urban, commercial or industrial zone and so will not affect the vitality and viability of those areas (policy 9.3.3.3). The traffic effects are considered acceptable, with no direct operational traffic on the rural land aside from the delivery of indigenous plants.

Objective 9.3.4
New sensitive activities are located and managed to avoid potential reverse sensitivity effects on lawfully established activities in the rural environment.

The proposal is not expected to result in any potential for reverse sensitivity. The proposed ziplines cross onto a large rural landholding with the landowners' consent. No other rural landholdings are affected by the proposal due to the significant separation distance.

8.5 District Plan Residential Zone

Objective 4.3.1
A level of amenity that provides residents with:
- *A northerly outlook.*
- *Side and rear yards that provide aural and visual amenity.*
- *Residential levels of noise.*
- *Safe parking and turning areas where required.*
- *Street surveillance.*
- *Orientation to maximise energy efficiency.*

The proposed use of the Residential 4 zoned site is not residential and so has not been designed to provide the onsite amenity described in objective 4.3.1. Amenity planting will be provided around the perimeter of the site and no buildings are proposed. The proposed use will not impede the amenity of neighbouring residential sites in regards to sunlight, parking, street surveillance etc. The proposal will increase traffic to the site however the State Highway influences the noise environment already. The distance from the State Highway to the parking site is approximately 60m, ensuring that vehicles accessing the site are traveling at a low speed, thereby reducing noise.

Objective 4.3.2
The character and amenity values of the residential zones are maintained and enhanced.
Policy 4.3.2.4
Maintain the following qualities and characteristics of the Residential 4 zone:
- *Low density residential areas.*
- *A mix of single storey and two-storey buildings.*
- *A high proportion of outdoor open living space.*
- *A variety of building design and materials.*
- *Building that does not dominate the natural character of the lake and its margin.*
- *A sense of space around buildings.*
- *Low levels of noise.*
- *Low traffic levels.*

The proposed carparking area with amenity planting is consistent with the character and amenity of the locality with established commercial activities, rural land and residential land. Policy 4.3.2.4 focuses on buildings, and buildings are not proposed. The parking will provide a more intense level of activity on the site than a standard dwelling in regards to traffic movements.

Objective 4.3.3

Non-residential activities in residential zones that are domestic in scale and character and do not have an adverse impact on the amenity values and character of the residential zones, or the vitality and viability of the City Centre or Commercial zones.

Policy 4.3.3.1

Manage the location and design of buildings for non-residential activities to ensure that the activity is in keeping with the appearance and character of the residential zone sought in Objective 4.3.2 and Policies 4.3.2.1 to 5.

Policy 4.3.3.2

Prevent the establishment of non-residential activities where they would be more appropriately located in a commercial, industrial or city centre zone and would have an adverse effect on the vitality and viability of those zones.

Policy 4.3.3.3

Avoid adverse effects of noise, vibration, light, smoke, fumes, odours or other sources of disturbance that are detrimental to the amenity of the residential zones.

Policy 4.3.3.4

Ensure the location of community activities avoids, remedies or mitigates adverse effects on the quality of residential amenity in the residential zones.

Policy 4.3.3.5

Avoid, remedy or mitigate the potential adverse effects of non-residential activities, including community activities, through the provision of:

- *Sufficient on-site parking, loading and turning.*
- *Landscaping to maintain and enhance the quality of residential amenity, primarily the streetscape.*
- *Noise mitigation measures.*

The proposed parking on the residential zoned site is not at a residential scale and therefore is not consistent with the first intent of objective 4.3.3. Adverse effects on the established character and amenity values of the locality is not anticipated as the site borders rural land and is within an area that contains commercial activities. The activity is not able to be undertaken within the city centre of commercial zones, due to its need for proximity to the proposed zipline within the reserve and the lack of nearby city centre or commercial zones. Accordingly the proposal will not have any adverse impacts on the visibility or vitality of these zones and therefore does not conflict with the second and third aspects of objective 4.3.3. Sufficient parking is proposed and amenity planting will be undertaken in accordance with policy 4.3.3.5.

8.6 Summary

The proposal is consistent with the reserve and rural objectives and policies and some elements are encouraged by the rural objectives and policies, such as riparian planting with indigenous species. The proposal is not encouraged by the residential zone objectives and policies but is not contrary to the objectives and policies overall.

9. SECTION 104D CONSIDERATIONS

As identified, the proposal is considered a non-complying activity due to the proposed parking area within the Residential 4 Zone and therefore Section 104D of the RMA is relevant for the resource consent. In accordance with Section 104D, a consent authority may only grant an application for a non-complying activity if either:

1. It is satisfied that the effects on the environment will be minor.
2. The activity will not be contrary to the objectives and policies of any plan or proposed plan in respect of that activity.

Only one of these pathways need apply for the application to be considered under Section 104 and to be granted under Section 104B. Based on the assessments in Sections 7 and 8 of this report, it is submitted that the effects will be minor and the Section 104D gateway test is satisfied. Therefore, the proposal can be considered for granting.

10. NOTIFICATION

10.1 Concession Notification

The Conservation Act 1987 section 17SC specifies that the Minister must publicly notify every application for—

(a) A lease; or
(b) A licence for a term (including renewals) of more than 10 years.

The application must therefore be publicly notified by the Department.

10.2 Resource Consent Public Notification

Under Section 95A of the RMA the resource consent application is not precluded from public notification.

Section 95A specifies that a consent application must be publicly notified if it is required to be publicly notified by the District/Regional Plan or a rule in a NES or the Council decides that the activity will have or is likely to have adverse effects on the environment that are more than minor (in accordance with Section 95D) or the applicant requests public notification. The applicant is not requesting public notification and public notification is not required by the District Plan or a NES rule.

Section 95D(a) requires Council to disregard any effect on persons who own or occupy land on which the activity will occur or any land adjacent to the subject site. Also Section 95D(b) allows Council to disregard the effects related to the permitted baseline.

As discussed in Section 7 of this report, it is considered that the effects of the proposal are less than minor. There are no special circumstances that necessitate public notification and public notification will be undertaken by the Department of Conservation for the concession application. Accordingly, there is no need to publicly notify the resource consent application to satisfy an assumed public interest.

10.3 Resource Consent Limited Notification

Section 95B specifies the criteria for limited notification of resource consent applications. The proposal is not precluded from limited notification by the District Plan or a NES rule.

Under Section 95E Council must determine whether any persons are affected, including protected customary rights groups or persons who have a statutory acknowledgment on the land or adjacent to the proposal. Ngāti Pikiao have a statutory acknowledgement area of the river and consultation has been undertaken and hapu approval obtained.

Under Section 95E(1) of the RMA a person is considered affected in relation to an activity, if the activity's adverse effects on the person are minor or more than minor (but are not less than minor). The proposed zipline is within Department of Conservation estate and rural land. The written approval of the rural landowners has been provided and so they are not considered affected parties in accordance with Section 95E(3)(a) of the RMA. The ziplines will be a significant distance from any other neighbouring landowners and therefore no other parties are considered affected by this element of the proposal.

It is proposed to utilise the existing Rotorua Rafting building and facilities for customer check-ins etc which avoids the need for new buildings. Parking will be formed on a nearby site which is separated from the Rotorua Rafting site by two parcels of land. The owners of one parcel have provided written approval and are therefore not affected. The owners of the other parcel have not provided written approval. Accordingly, the owners of 763 SH33 may be considered an affected party. The land is currently vacant and a condition of consent is suggested to require privacy fencing or landscaping to be reviewed and required if the site is utilised for residential purposes in the future.

Access is via the State Highway and consultation has commenced with NZTA but written approval from NZTA has not yet been received. North of the proposal parking area is an area for overflow parking (if demand necessitates it) and the landowners have provided written approval. Adjoining the overflow parking site is a vacant 1.4872ha rural site of multiple-owned Maori land.

Across the Maori roadway from the site are residential properties which are elevated above the site and screened with vegetation. Any potential adverse effects on these landowners and occupiers are expected to be less than minor. The proposed parking site is located near the start of the Maori roadway and traffic will be minimised with shuttles. The traffic effects have been considered by a qualified and experienced traffic engineer and some widening of the carriageway proposed. The increased traffic is expected to result in less than minor adverse effects for the other road users. Traffic noise from the site is expected to be relatively low due to the short distance and low speed environment and the ambient noise environment from the State Highway.

South of the Rotorua Rafting site is 759 SH33 which is a residential site. Manu Hodge has provided written approval to the proposal as the owner of this site, however the name on the title is Charles Kingi. A timber fence provides screening between 759 and the Rotorua Rafting site. The proposal will increase the level of pedestrian activity at the Rotorua Rafting site but is not expected to affect the number of vehicle movements. No changes to buildings onsite are proposed. Accordingly adverse effects on the owners and occupiers of 759 SH33 are expected to be less than minor.

11. RECOMMENDED CONDITIONS

Recommended conditions of the concession include:

1. Platforms shall be constructed in accordance with the following (from the Wildlands report):

    - Clearance and trimming of tall trees (particularly podocarps, tawa, pukatea and any indigenous trees over c.30 cm dbh) should be avoided.
    - Disturbance of epiphytes within the tawa-pukatea forest should be avoided.
    - Physical contact with trees (large branches and trunks in particular) should be avoided when construction materials and tools are being transported.
    - Defined low impact routes should be used for carrying in construction materials and tools, to reduce the area of understorey vegetation which is trampled.
    - Indigenous plant seedlings within proposed platform locations should be removed carefully where possible and then used for site rehabilitation.
    - Soil disturbance and erosion during construction should be avoided as much as possible. This is particularly important at Platforms 2, 4 and 5, which are located on narrow ridges.
    - Damage to bark or roots of trees adjacent to the platforms should be avoided.
    - Materials used for platform construction should be suited to the environmental conditions present. Options for platform materials include treated timbers (dried well prior to use), steel, hardwood timbers, fibreglass and glass.
    - Actions to be undertaken during construction include (if required):
        - Restoration of all natural drainage patterns.
        - Restoration of natural ground surface.
        - Restoration of natural soil, including a humus layer.
        - Replacement of groundcover plants.
    - Actions to be implemented following construction should include:
        - Facility users should be constrained to the platforms, to avoid ongoing incremental trampling damage to the forest floor.
        - Any vegetation trimming that is required for maintenance should be minimised and undertaken with care to avoid damaging podocarps, tawa, pukatea and any indigenous trees over c.30 cm dbh.

2. Walking tracks shall be constructed in accordance with the following:

    - Walking tracks should follow a path of 'least resistance' so that the clearance of trees can be avoided.
    - Clearance or trimming of tall trees, particularly podocarps, should be avoided or kept to a minimum.
    - Physical contact with trees (large branches and trunks in particular) should be avoided when construction materials are being transported.
    - Defined low impact routes should be used for carrying in construction materials and tools to reduce the area of understorey vegetation which is trampled.
    - Indigenous understorey plant seedlings within the track route should be removed carefully where possible and then used for site rehabilitation.
    - No large lateral roots of any tree should be cut or damaged.
    - Soil compaction should be avoided as much as possible.

- All bark damage should be avoided.
- The area of ground disturbance should be kept to a minimum.
- A suitably qualified and experienced ecologist should assess the final proposed track routes and provide advice on an alternative route if the selected routes contain features of importance.
- Only 'clean' gravel or other track materials should be used, free of weed propagules and pest animals (such as plague skink (Lampropholis delicata).
- Trees should not be marked with attachments that could result in bark damage (biodegradable flagging tape can be used if required, to be removed when construction is completed).
- Apart from avoiding the features identified above, track construction should also avoid, as much as possible, alteration of natural drainage patterns. The creation of small impoundments should be avoided.
- Facility users should be constrained to the formal tracks and defined gathering points, to avoid ongoing incremental trampling damage to the forest floor.
- Actions to be undertaken during track construction include (if required):
  - Restoration of all natural drainage patterns.
  - Restoration of natural ground surface.
  - Restoration of natural soil, including a humus layer.
  - Replacement of groundcover plants.
  - Removal of all markings and unnecessary artificial objects.
  - Any vegetation trimming required for maintenance should be kept to a minimum and undertaken with care to avoid damaging podocarps, tawa, pukatea and any indigenous trees over c.30 cm dbh.

3. A weed management plan shall be developed for the monitoring and removal of weeds that occur in the Reserve around the ziplines or establish in the future.

4. Weed management shall be implemented in accordance with the Weed Management Plan.

5. A pest animal control plan should be developed and where possible shall be coordinated with the Department of Conservation, Predator Free Ōkere Falls and any landowners in the area who are currently controlling pest animals or are interested in being involved. The recommendations of the Wildlands report shall be taken into account in preparing the pest animal control plan. The report provides recommendations on bait stations and monitoring. The plan shall outline the proposed controls, timeframes for implementation and ongoing requirements.

6. The pest animal control plan shall be provided to the Department of Conservation prior to tours commencing.

7. The requirements of the pest animal control plan shall be undertaken.

8. Restoration planting with indigenous species suitable to the location shall be incorporated into the activity. Planting shall be fenced from stock where appropriate and maintained.

Recommended conditions of the resource consent:

1. The activity shall be undertaken in general accordance with the application including formation of parking, implementation of amenity planting and signage.
2. The parking requirement may be reviewed 6 months and 18 months after tours first commence to ensure the number of parks is sufficient for the demand.
3. Amenity planting, consistent with the style of the planting established for the Rotorua Rafting premises, shall be implemented around the perimeter of the proposed parking area.
4. The existing signs may be amended to contain advertising for Okere Adventures with Rotorua Rafting and any changes shall comply with the following:
    - Signs shall not be similar to or the same as any traffic sign in regards to shape and colour and liable to be mistaken for a traffic sign.
    - Signs shall not be made of or have affixed to it, any reflective material that is likely to reflect the light from the headlights of any approaching vehicle.
    - Signs shall not have information displayed by means of a flashing or revolving mechanism have or have affixed to it, any moveable part intended to draw attention to the advertisement.
    - The spacing between lines of text must be not less than 50mm.
    - Lettering must not be less than:
        - 120mm in height where the advertisement of a specified kind is installed on any road or in any place visible from a road with a speed limit less than 70km/h.
        - 160mm in height where the advertisement of a specified kind is installed on any road or in any place visible from a road with a speed limit of 70km/h or more.
5. Stormwater from the proposed parking area will be managed to avoid erosion and flooding of neighbouring sites.
6. Soil disturbance shall be controlled to avoid erosion and sedimentation of waterways.
7. Any excess cut material deposited outside of the proposed walking track on the rural land shall be replanted within the first planting season following construction.
8. The conditions of consent may be reviewed if a dwelling is constructed on the site at 763 SH33 with consideration as to requiring privacy fencing along the common boundary.

12. RMA PART II

Part 2 of the RMA contains Sections 5, 6, 7 and 8. The assessments contained in Sections 7 and 8 of this report are subject to the matters contained in Part 2 of the RMA.

Section 5 sets out the purpose of the RMA, which is to promote the sustainable management of natural and physical resources and is supported by sections 6, 7 and 8. Sections 6 and 7 contain the "matters of national importance" and "other matters" respectively and Section 8 provides for the principles of the Treaty of Waitangi.

The proposal will provide for the preservation of the natural character of the river and its margins with sensitive design and riparian planting proposed. The reserve is not considered an Outstanding Natural Feature and Landscape under the District Plan. The proposal will not impede public access to the river. The proposal provides for the relationship of Maori with the ancestral lands, water, sites, waahi tapu, other taonga and customary rights. The proposal has been refined in consultation with Tangata Whenua. The proposal is not expected to have adverse effects on historic heritage

features and effects on indigenous vegetation will be mitigated. The proposal is consistent with Section 6 of the RMA.

The proposal provides for kaitiakitanga and the ethic of stewardship and includes partnership with Maori landowners. The sharing of facilities with Rotorua Rafting provides for the efficient use of resources in accordance with 7(b). The proposal is expected to maintain amenity values, ecosystems, the quality of the environment and the habitat of trout.

The proposal will not affect the ability to achieve the principles of the Treaty of Waitangi.

Overall, the activity can be considered suitable for the site and in applying a broad judgement over the matters contained in Part 2 of the RMA the proposal is consistent with the principles and purpose of the RMA.

13. CONCLUSION

A concession and resource consent are sought for the establishment and operation of a zipline activity within the Okere Falls Scenic Reserve and neighbouring farmland. No new buildings are required and parking will be established within a nearby vacant residential site which borders rural land. The activity will be operated in conjunction with the Rotorua Rafting activity with the existing building providing for customer check-in, equipment storage etc.

The zipline has been designed in sympathy with the scenic, cultural and ecological values of the reserve. The design avoids the need for any buildings including raised platforms. Indigenous vegetation planting within the rural and reserve land is proposed as part of the tours and contributions to pest management will be undertaken.

Written approval from hapu has been provided and the proposal will provide a partnership with Maori landowners. The tour will provide cultural, historical and ecological education and allow participants to engage in indigenous tree planting.

The reserve is relatively narrow and is popular with walkers and provides for commercial and recreational rafting. Accordingly the proposal is consistent with the established uses. Overall the adverse effects are considered minor and benefits will arise from pest control and revegetation.

We certify that the information contained herein is in accordance with the requirements of the Resource Management Act 1991 and that the Applicant has a legal obligation to comply with any Conditions imposed should the Application be approved and given effect to.

ELLA TENNENT
CHEAL CONSULTANTS LIMITED
15 May 2019

Appendix 1

Record of Title

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**SA53B/482**
Land Registration District	**South Auckland**
Date Issued	19 November 1993

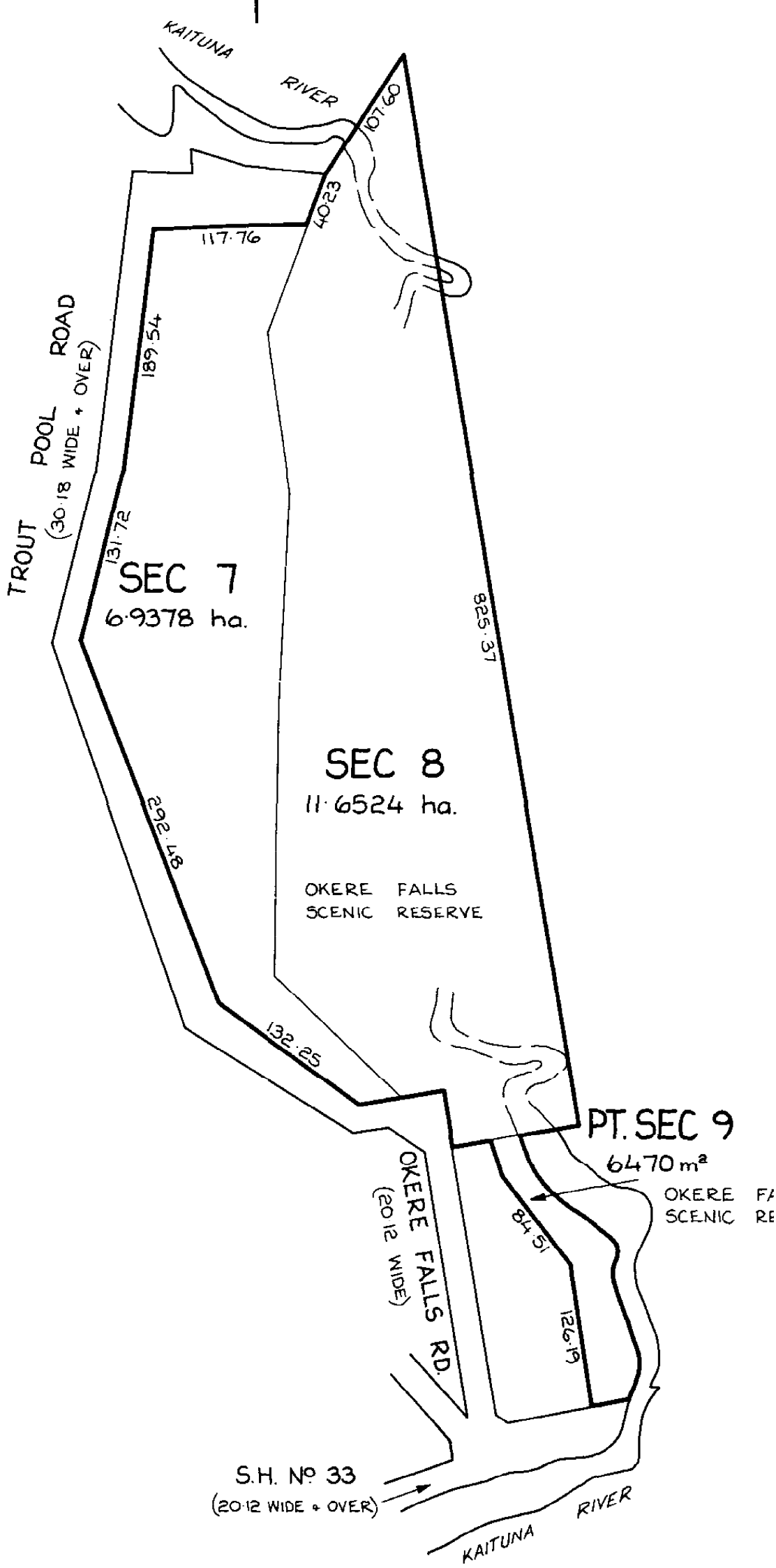
Prior References
SA52C/792 SA6D/1221

Estate	Fee Simple
Area	19.2372 hectares more or less
Legal Description	Section 7-8 and Part Section 9 Block VI Rotoiti Survey District
Purpose	Scenic Reserve

Registered Owners
Her Majesty the Queen

Interests

B532272.1 Notice pursuant to Section 94C Transit New Zealand Act 1989 declaring the adjoining State Highway 33 to be a limited access road - 15.3.1999 at 9:20 am


KAITUNA RIVER
107.60
40.23
117.76
189.54
131.72
TROUT POOL ROAD
(30.18 WIDE + OVER)
SEC 7
6.9378 ha.
825.37
SEC 8
11.6524 ha.
OKERE FALLS
SCENIC RESERVE
292.48
132.25
PT. SEC 9
6470 m²
OKERE FA
SCENIC RE
OKERE FALLS RD.
(20.12 WIDE)
84.51
126.19
S.H. Nº 33
(20.12 WIDE + OVER)
KAITUNA RIVER

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**SA25D/902**
Land Registration District	**South Auckland**
Date Issued	25 March 1980

Prior References
SAPR274/97

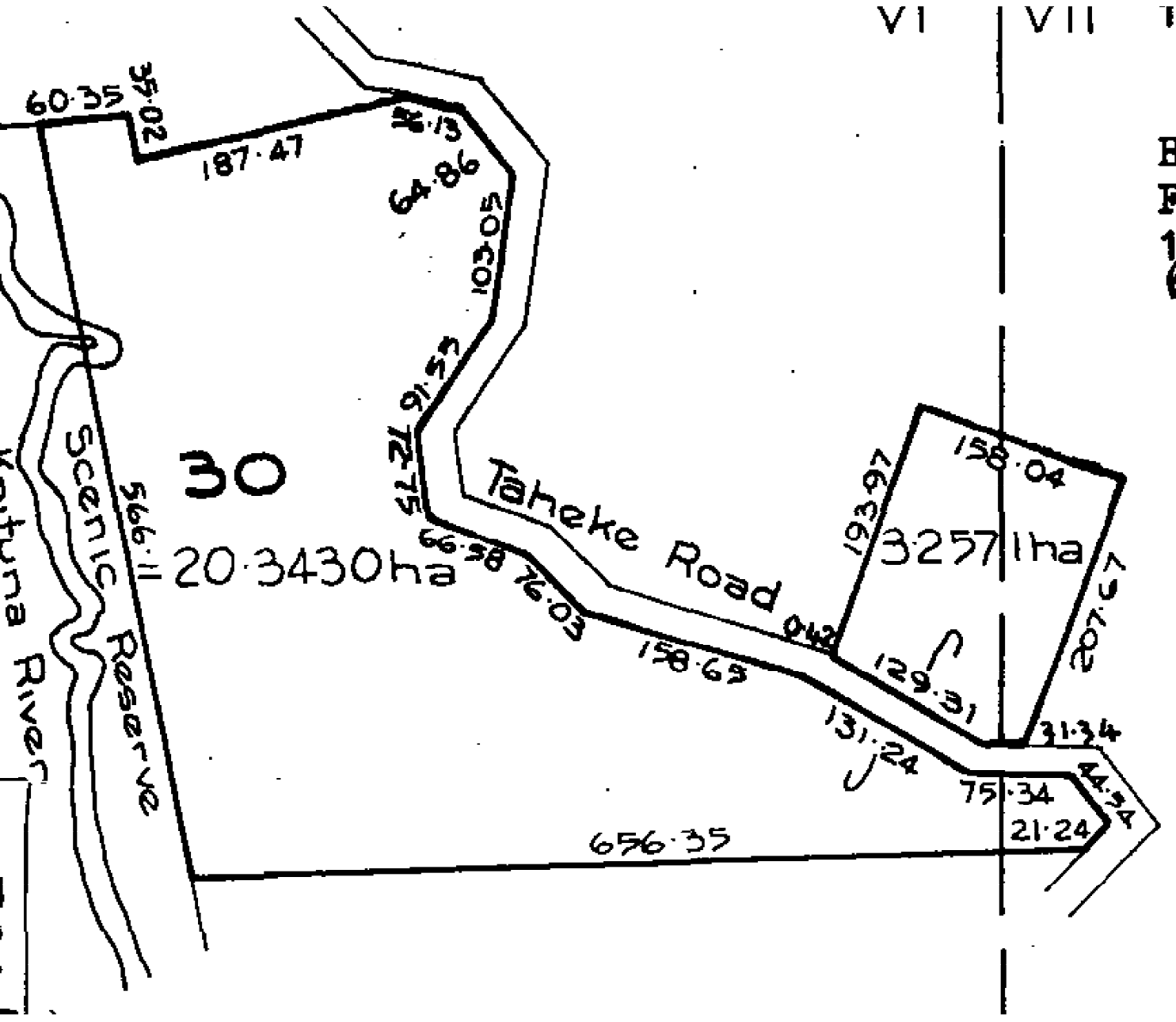
Estate	Fee Simple
Area	23.6007 hectares more or less
Legal Description	Taheke Papakainga 30 Block

Registered Owners
The Proprietors of Okere 1B3C3 and Adjoining Blocks

Interests

7979818.1 Status Order determining the status of the within land to be Maori Freehold Land - 29.10.2008 at 9:00 am

8952876.1 CAVEAT BY MIGHTY RIVER POWER LIMITED - 23.12.2011 at 3:25 pm


V I
V II
60·35
35·02
187·47
64·86
103·05
91·53
72·75
566·11
20·3430ha
30
Scenic Reserve
Kaituna River
Taheke Road
66·38
76·03
158·63
193·97
158·04
3257 1ha
129·31
131·24
31·34
44·34
75·34
21·24
656·35

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**SA41D/238**
Land Registration District	**South Auckland**
Date Issued	08 July 1988

Prior References
SAPR283/3

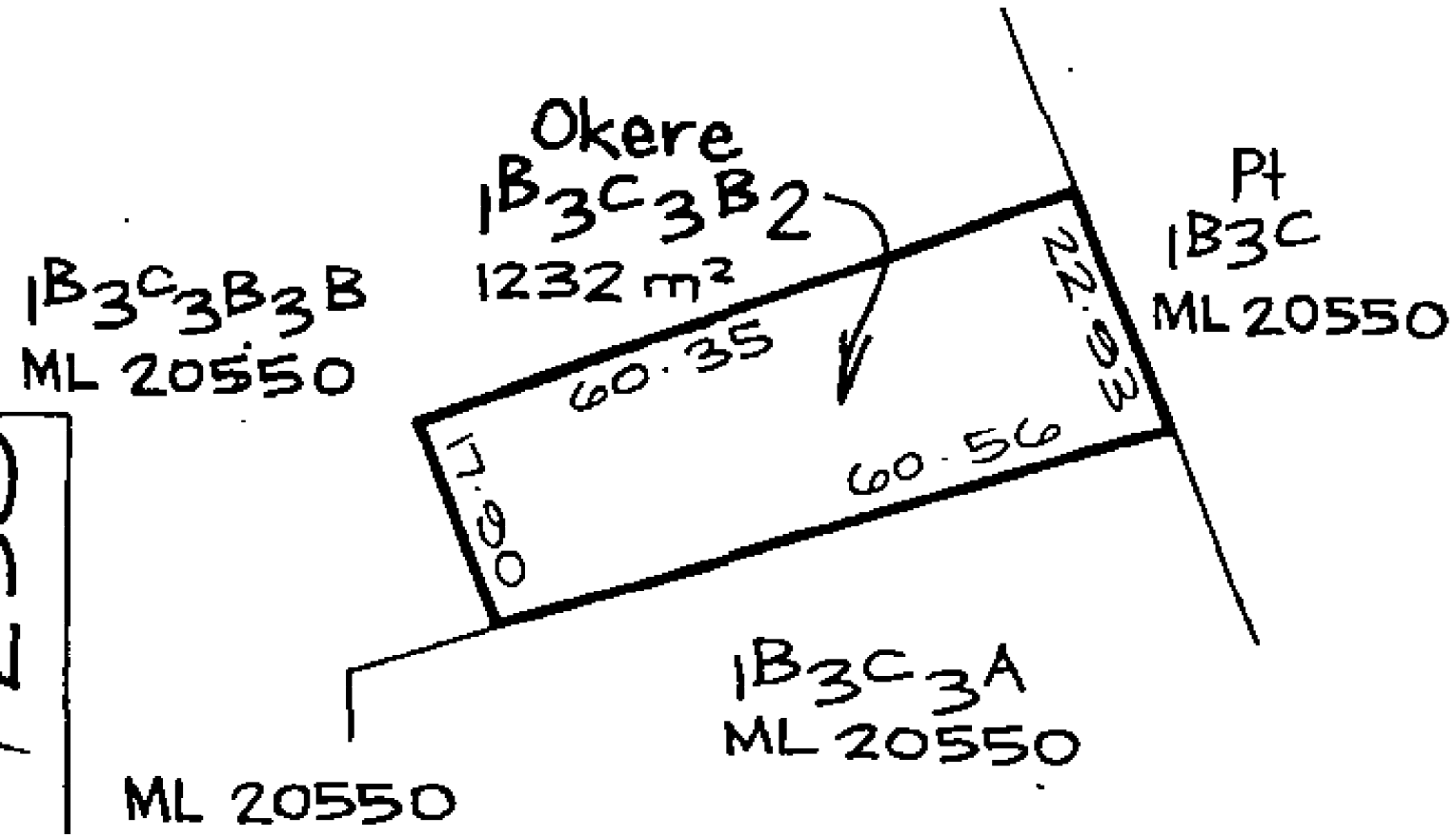
Estate	Fee Simple
Area	1232 square metres more or less
Legal Description	Okere 1B3C3B2 Block

Registered Owners
Rawiri Te Putu Raiwhara Kingi

Interests

The within land is no longer Maori Freehold Land - See H805887.5

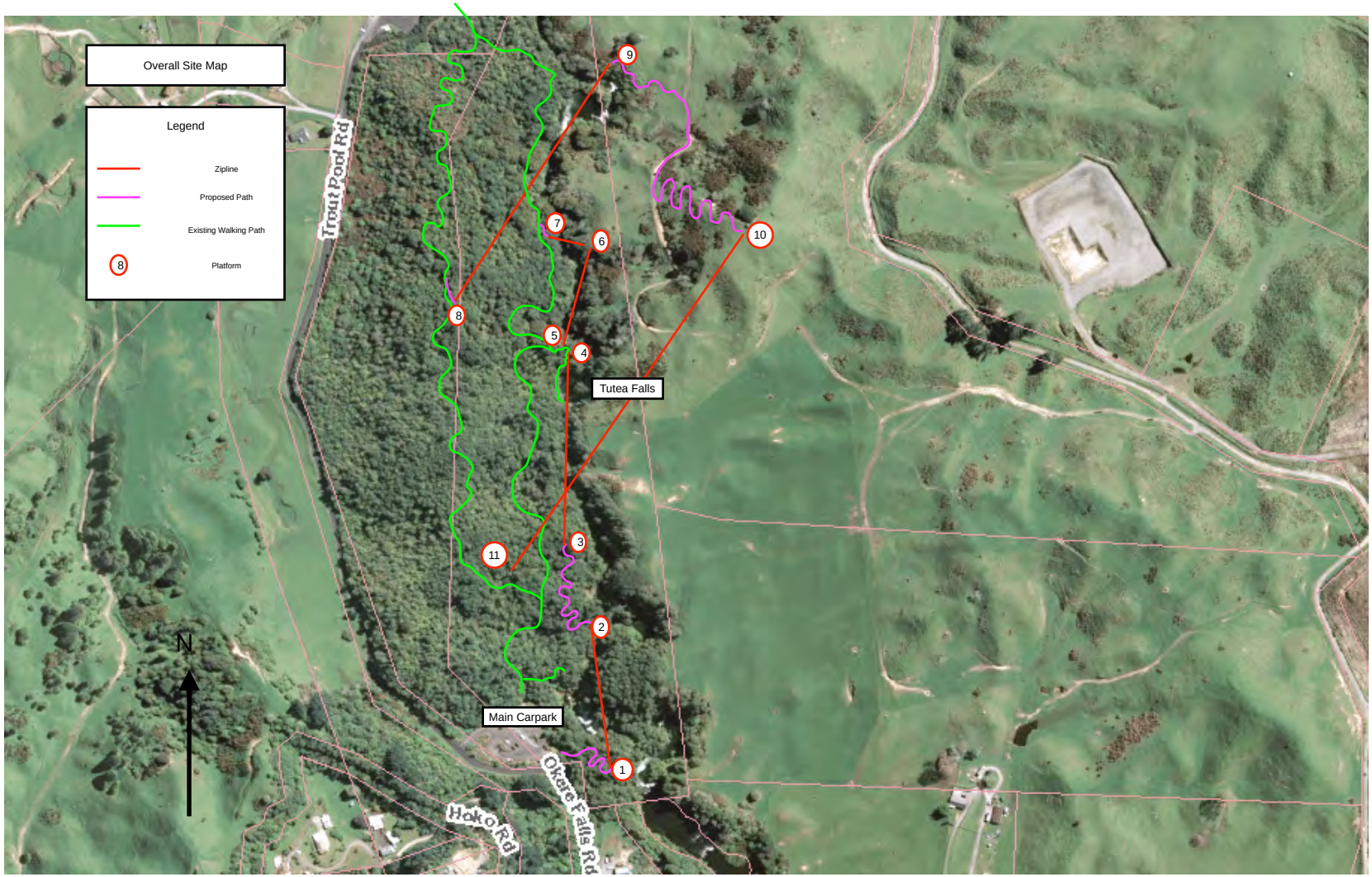
H813738 Mortgage to ANZ Banking Group (New Zealand) Limited - 8.8.1988 at 9:05 am


Okere
1B3C3B2
1232 m²
1B3C3B3B
ML 20550
60.35
22.03
Pt
1B3C
ML 20550
60.56
20.70
1B3C3A
ML 20550
ML 20550

Appendix 2

Plans

Overall Site Plan



OKERE Adventures

Office Address: 761 State Highway 33, Okere Falls Rotorua

Proposed Activity Address: Okere Falls Scenic Reserve - Troutpool Road

Land Owners: Crown/ DOC have ownership of the Scenic Reserve. Platform 9& 10 are located on Maori Land Block Taheke Papakaigia 30 Owned and Managed by Okere Inc.

Proposed Activity: Eco/Cultural Guided Zipline tour through the scenic reserve showcasing and enhancing the Okere Falls Scenic Reserve with six ziplines ranging from 40m to 400m.

Engineering/Design: Avalon Engineering will be designing building/certifying anchors/ exact location of lines and building the course due to their available technology and experience in both zipline building and minimal impact construction techniques required in difficult and protected sites.

1:100 at A3

OKERE
Adventures

Riparian Planting: To enhance the area and give back Okere Adventures will be replanting the river right riparian boundary. Each tour will plant one native tree in a pre-dug hole which will then have a name tag added to the tree so clients can feel connected to improving the area.

Once the outlined area is full, we will then move to the western face of the reserve where currently bracken and gorse is overrunning native vegetation.

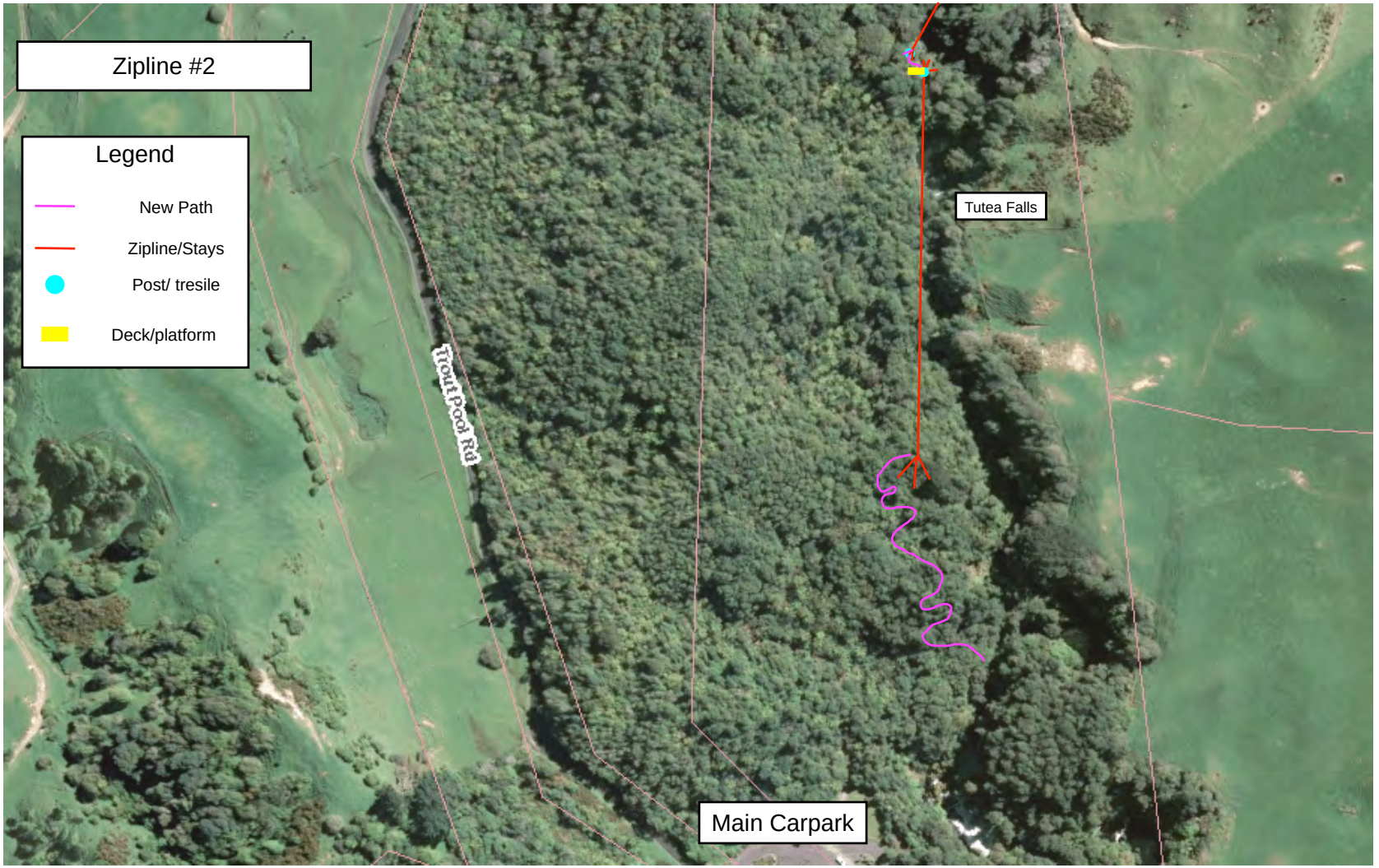
Exotic Plant removal:
Okere Adventures will employ groundsmen to help in the preservation of the area including removal of non-native plants like Gorse, Blackberry, and bracken. These areas will again be replanted with native vegetation.

OKERE
Adventures

Zipline Placement: Zipline 1 located to the side of the "Powerhouse" waterfalls. To minimise the visual impact we have offset the line from directly above the waterfalls to reduce any scenic implications from the viewing platforms.

Track Placement:
All track building will be created by building up as opposed to cutting tracks to eliminate the risk of damaging any roots. A permeant surface will be placed using Geotextile matting to separate between organic material and gravel. The tacks will be single track with guides briefing clients to ensure they stay on the track.

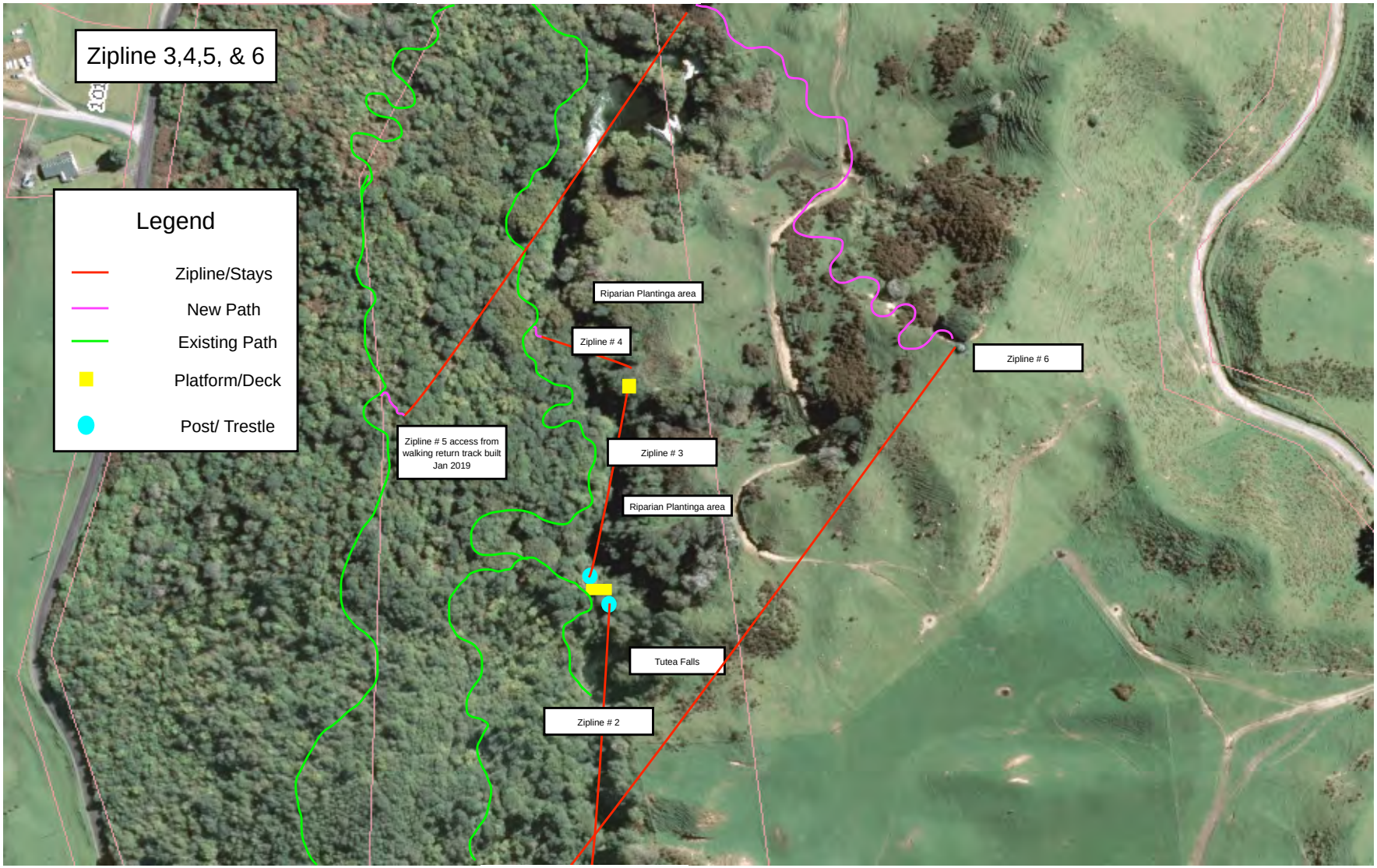
Land Owners:
Crown/ DOC have ownership of the Scenic Reserve with two anchors sitting on Maori Land Block Taheke Papakaigia 30 Managed by Okere Inc.



OKERE
Adventures

Zipline Placement: Zipline 2 is over the jewel of Okere Falls which is Tutea falls. To minimise the visual impact, we have chosen the highest possible takeoff and landing locations to keep the line above the line of sight to keep the untouched visual aspect for photographers and site seers alike.

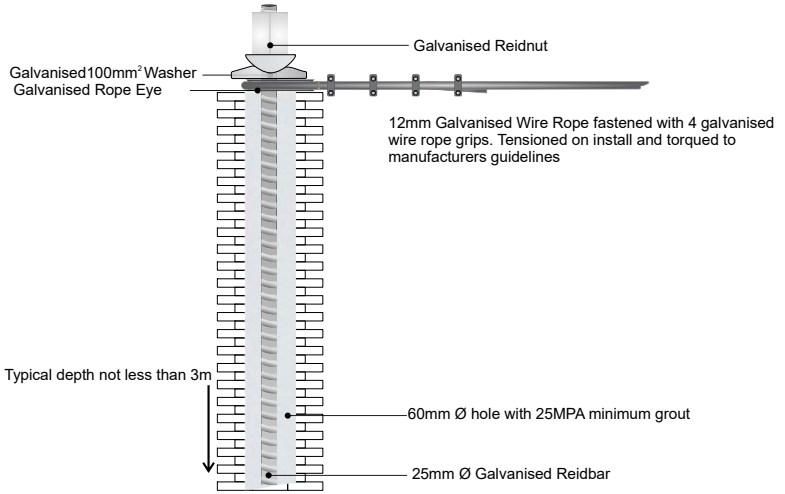
Track Placement:
All track building will be created by building up as opposed to cutting tracks to eliminate the risk of damaging any roots. A permeant surface will be placed using Geotextile matting to separate between organic material and gravel. The tacks will be single track with guides briefing clients to ensure clients stay on the track.



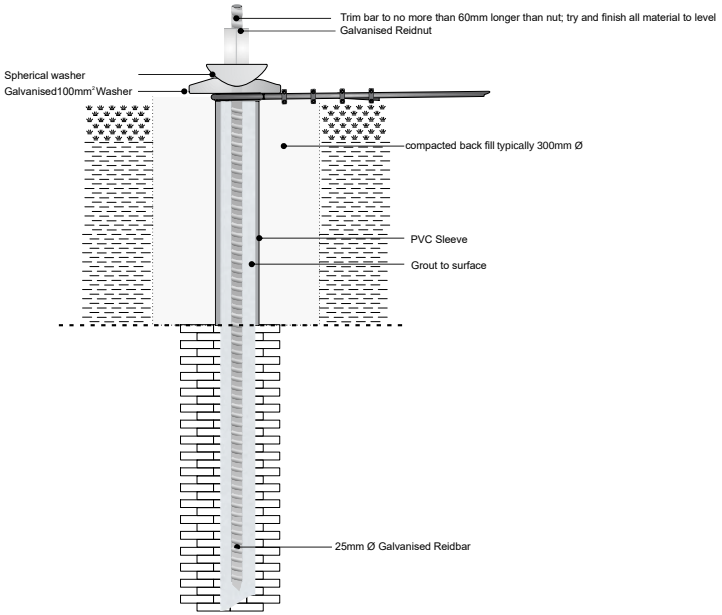
OKERE Adventures

Zipline Placement: Ziplines have been designed to utilise the topography of the land to reduce the impact on vegetation. Zipline 6 has been designed to get an overall view on the area and to reduce traffic movement on Troutpool Road by bringing clients back to the starting point.

Typical Anchor Detail



Direct to rock



Through overlying soil

Rotorua River Rafting Anchor Concept

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www.avalonltd.co.nz

Indicative concept for light anchoring of Zip lines for Rotorua Rafting - No testing or load work has been completed however this typically only affects depth of anchor

Not to scale

AVALON // GEOTECHNICAL SERVICES

OKERE Adventures

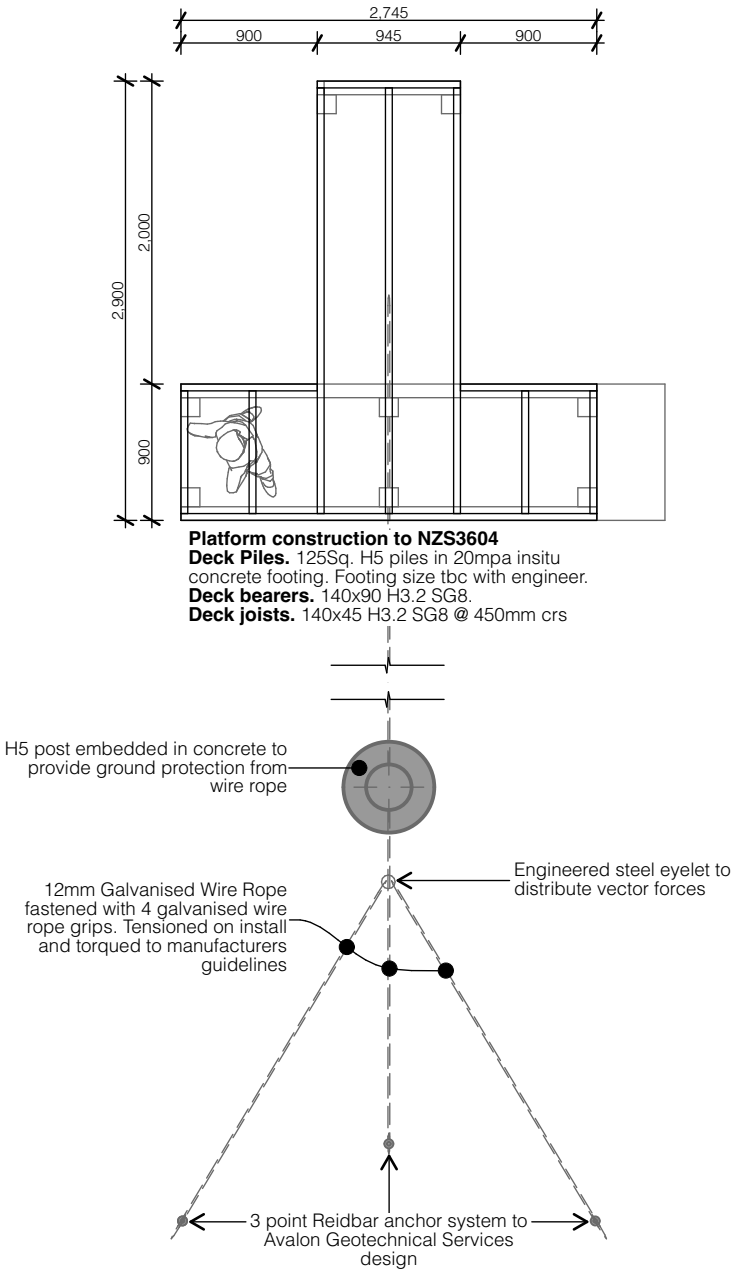
Anchor Detail: Okere Adventures has chosen Avalon Geotechnical and Engineering services to design and build the course due to their extensive knowledge and construction systems which will moderately reduce impacts to the area by using multiple micro anchor systems which have a minimal footprint.

Tools required will be pneumatic augers to drill 100mm ø holes up to 16m deep. These operate with a 150m range from vehicle reducing the requirement for heavy machinery into the reserve.

Concrete Grout will be poured using a concrete pump from vehicles on the track with 150m line to reduce the impact of trodding through construction paths bringing materials.

Galvanised Line will be used at minimal thickness allowed for line rating to reduce visual impact.

A black coloured line has been looked into to again reduce visual impact but due to the fact of wear and tear it was decided against.



Platform construction to NZS3604
Deck Piles. 125Sq. H5 piles in 20mpa insitu concrete footing. Footing size tbc with engineer.
Deck bearers. 140x90 H3.2 SG8.
Deck joists. 140x45 H3.2 SG8 @ 450mm crs

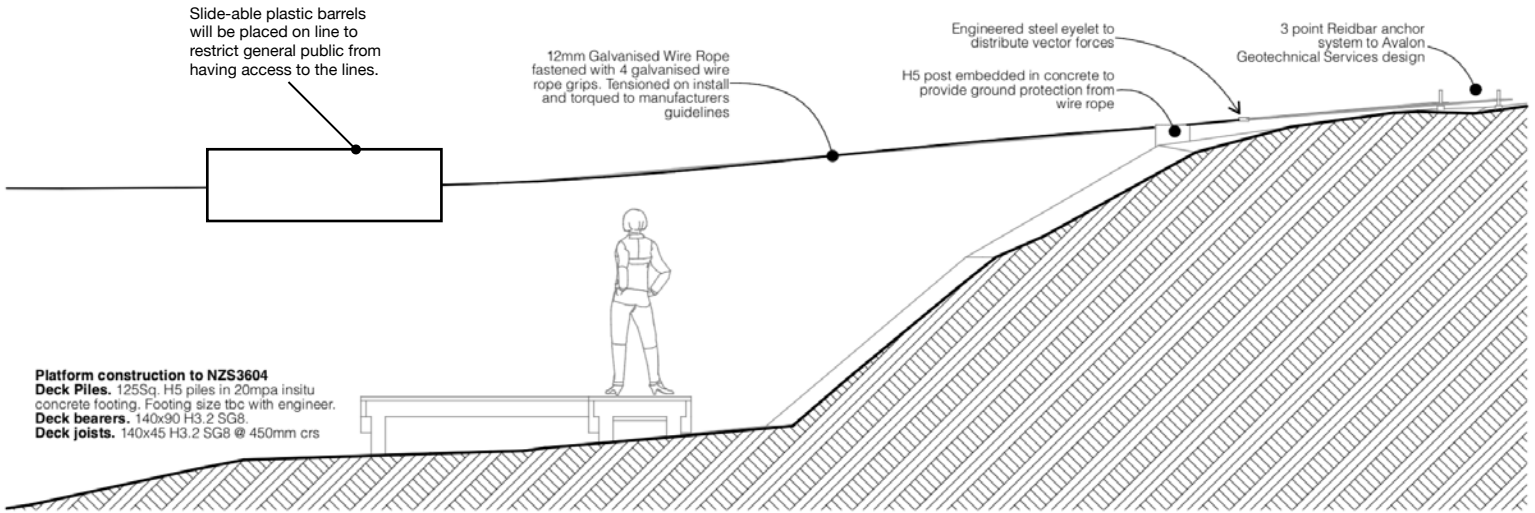
OKERE Adventures

Typical Anchor/Platform Detail:

Multiple anchors will reduce footprint while increasing load capacity. The zipline will then run on a 200mm H5 post to provide ground protection.

Platforms will be built to **NZS3604** to provide ground protection in high traffic locations again.

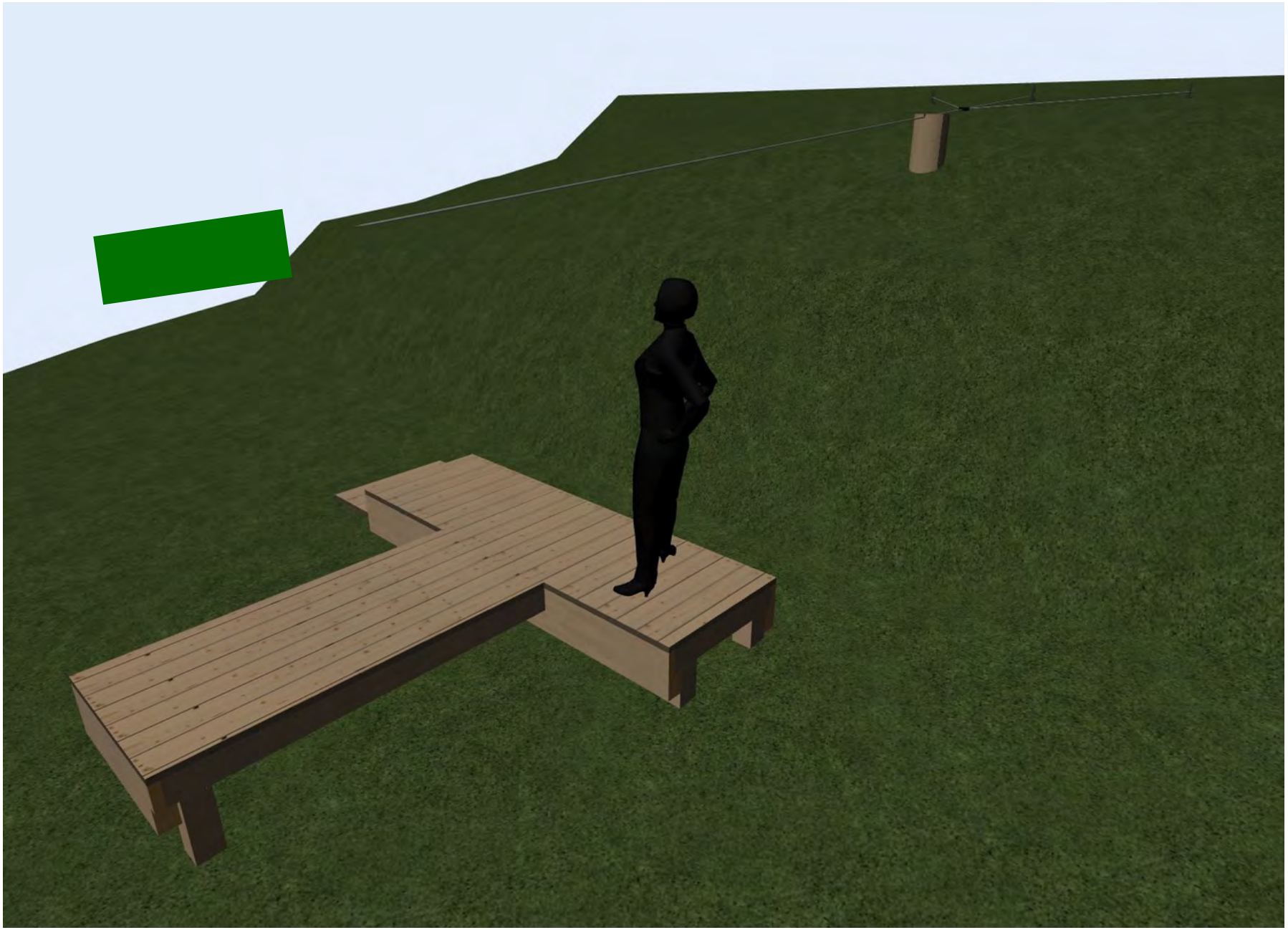
Platforms will be kept natural colour to match existing infrastructure of DOC's walkways and paths.



OKERE Adventures

Typical Cross-section: This is a typical cross-section for the design of the course by using the natural topography to generate natural platforms and increase stability on lines.

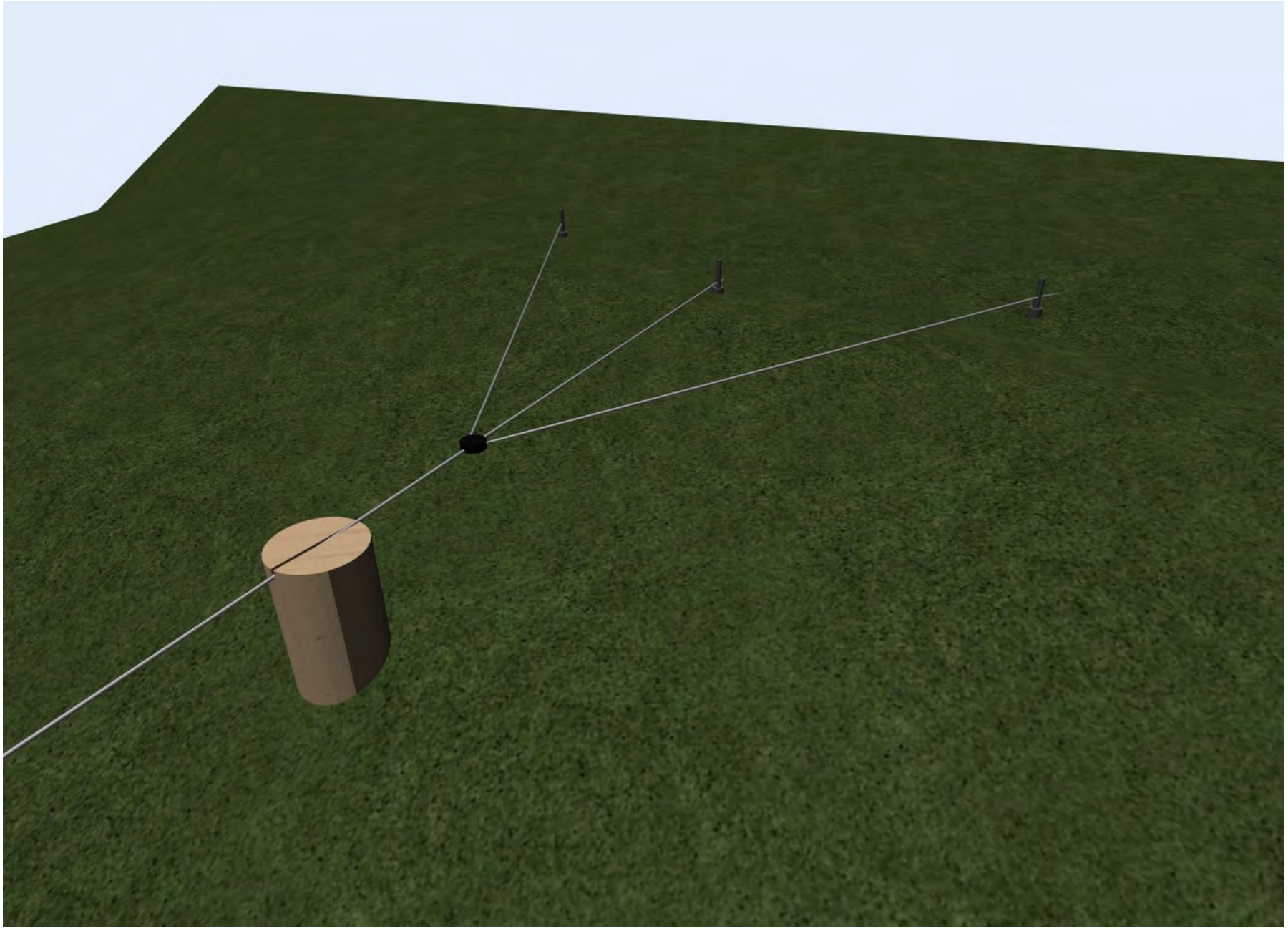
Public Safety: Restricting Public access to the lines and tampering with anchors is something that will be different fro each site. Every platform will have a plastic barrel attached to the line to restrict any public from attempting to slide down the line. It will be 1.5m long and will be pushed down the line after every tour to block from public use.



OKERE
Adventures

Anchor Detail : Using ground anchors as opposed to trees will enable us to keep minimal impacts and structures. It also enables us to have a leave no trace approach to the venture. All anchors and structures are able to be removed with little damage.

Clients will use natural topography of the land to seperate from platform and become suspended.



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Anchor Detail:

Appendix 3

Ecological Assessment
from Wildlands

ASSESSMENT OF POTENTIAL ECOLOGICAL EFFECTS FOR A PROPOSED ZIPLINE AT ŌKERE

providing outstanding ecological services to sustain and improve our environments

Wildlands

R4893a

ASSESSMENT OF POTENTIAL ECOLOGICAL EFFECTS FOR A PROPOSED ZIPLINE AT ŌKERE

Contract Report No. 4893a

February 2019

Project Team:
Angela Simpson - Field assessment, report author
Ella Buckley - Field assessment
William Shaw - Field assessment, report author
Jacqui Wairepo - Review of herpetofauna sections

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CONTENTS

Reviewed and approved for release by:

W.B. Shaw
Director/Principal Ecologist
Wildland Consultants Ltd

1. INTRODUCTION

A zipline tourist attraction, to be called Ōkere Adventures, is currently being planned by Rotorua Rafting within the Ōkere Falls Scenic Reserve. Ōkere Falls Scenic Reserve is administered by the Department of Conservation and is located about 20 kilometres northeast of Rotorua. Rotorua Rafting commissioned Wildland Consultants to provide an assessment of ecological effects of the proposed attraction.

This report provides a description of vegetation and habitats at the site and an assessment of ecological effects. A selection of site photographs is provided, along with species lists for plants and fauna. Various suggestions are provided for measures to avoid, minimise, or mitigate for potential adverse effects.

2. METHODS

A review of existing information about the site and ecological context was compiled.

High resolution aerial photographs (BOPLASS 2015/2017) of the project area were obtained and printed at a scale suitable for field use (1:1,000).

An initial site visit was undertaken with the client on 13 December 2018 to develop a good understanding of the proposed tourist attraction. A second walk-through site visit was undertaken on 10 January 2019 to evaluate the potential ecological effects of the proposed zipline, including both during construction and ongoing operation. A third site visit was undertaken on 14 February 2019 to visit the locations of proposed platforms which had been added to the proposed zipline route following the first two visits.

Vegetation and habitat types present were identified, described, and mapped using the aerial photographs and ArcGIS 10.6.

A list of vascular plants observed at the site was compiled (provided in Appendix 1). Bird species observed were recorded (Appendix 2). Photographs were taken of the proposed locations for structures (Appendix 3).

Ecological values of the site and potential ecological effects of the proposed tourist attraction were assessed. Options to avoid, minimise, or mitigate any adverse effects were evaluated.

3. ECOLOGICAL CONTEXT

3.1 Overview

Ōkere Falls Scenic Reserve is located on the southern margin of the Ōtānewainuku Ecological District, within Rotorua District, in the Bay of Plenty Region (Figure 1).

The following overview is from Beadel (2006) and Wildland Consultants (2009).

Data Acknowledgment This map contains data which is licensed by LINZ for re-use under the Creative Commons Attribution 4.0 International licence. Report: 4893 Client: Ref: 01 2000 Path: E:\gis\OkereAdventures\mxd\ File: Figure_1_Location_A4.mxd	Figure 1. Location of Okere Falls Scenic Reserve within Otanewainuku Ecological District. 0 1,000 2,000 m	Wildlands www.wildlands.co.nz, 0508 WILDNZ Scale: 1:40,000 Date: 11/02/2019 Cartographer: TP/TK Format: A4

Ōtānewainuku Ecological District is roughly rectangular, covering *c.*188,700 hectares. The boundaries follow the coast between Ōtānewainuku and Matatā, the edge of the Rangitāiki Plains, and the northern boundary of the catchments of the Rotorua Lakes.

Deeply incised gorges in the ignimbrite plateau are characteristic of this District. There are four bioclimatic zones within Ōtānewainuku Ecological District: coastal, semi-coastal, lowland, and submontane.

Prior to human arrival much of this Ecological District would have been covered with primary forest dominated by tawa (*Beilschmiedia tawa*) with podocarps and northern rata (*Metrosideros robusta*) common. Some of the primary forest would have been cleared or modified by Māori burning, although most would have still been present by the time of European arrival (*c.*1840). Since 1840, there has been extensive logging of forest and clearance for farming.

Approximately 24% of Ōtānewainuku Ecological District is protected as reserves or covenanted areas (Beadel 2006). A relatively large proportion of these protected areas are in the lowland bioclimatic zone (46% of this zone is subject to formal protection). The semi-coastal bioclimatic zone is under-represented, with only 10.5% protected.

3.2 Fauna

3.2.1 Avifauna

Forest birds present in the Ecological District include North Island kōkako (*Callaeas cinerea wilsoni*; At Risk-Recovering, as per Robertson *et al*. 2017), koekoeā/long-tailed cuckoo (*Eudynamys taitensis*; At Risk-Naturally Uncommon), tītitipounamu/North Island rifleman (*Acanthisitta chloris granti*; At Risk-Declining), kārearea/New Zealand falcon (*Falco novaeseelandiae*; At Risk-Recovering), kererū (*Hemiphaga novaeseelandiae*), popokatea/whitehead (*Mohoua albicilla*), toutouwai/North Island robin (At Risk-Declining), korimako/bellbird (*Anthornis melanura melanura*), pīpīwharauroa/shining cuckoo (*Chrysococcyx lucidus*), North Island brown kiwi (*Apteryx mantelli*; At Risk-Declining), and ruru/morepork (*Ninox novaeseelandiae novaeseelandiae*).

3.2.2 Bats

Pekapeka-tou-roa/long-tailed bats (*Chalinolobus tuberculatus* North Island; Threatened-Nationally Critical, as per O'Donnell *et al*. 2017) are widespread throughout the North Island (O'Donnell 2005). Long-tailed bats and pekapeka/central lesser short-tailed bats (*Mystacina tuberculata rhyacobia*; At Risk-Declining) have been recorded within Ōtānewainuku Ecological District.

3.2.3 Herpetofauna

Copper skink (*Oligosoma aeneum*), striped skink (*Oligosoma striatum*; At Risk-Declining as per Hitchmough *et al*. 2016), crenulate skink (*Oligosoma* aff. *infrapunctatum* 'crenulate'; At Risk-Relict), common gecko (*Woodworthia maculata*), and forest gecko (*Mokopirirakau granulatus*; At Risk-Declining) have been recorded

within Ōtānewainuku Ecological District (Department of Conservation Bioweb herpetofauna database, 16 January 2019).

Hochstetter's frog (*Leiopelma hochstetteri*; At Risk-Declining as per Burns *et al.* 2018) occur in low numbers within Otawa Forest and more widespread in unmodified catchments in the southern Kaimai range (Beadel 2006). The introduced green and golden bell frog (*Litoria aurea*) and the southern bell frog (*Litoria raniformis*) have been also been recorded in the district, and are believed to be widespread.

3.3 Ōkere Falls Scenic Reserve

Ōkere Falls Scenic Reserve is *c.*20 hectares and has a narrow rectangular shape, *c.*900 metres long and *c.*300 metres wide. The Kaituna River flows through the eastern side of the reserve and Trout Pool Road occurs along the western boundary.

The reserve has significant local history. It was traditionally an important fishing spot. Māori battles were fought on the banks of the Kaituna River and the caves near the waterfalls were used as retreats and hiding places. In 1907, a series of stairs (known as "Hinemoa's Steps") was carved into a rock face by early Europeans to provide access for tourists to a viewing area of Tutea Falls. Between 1901 and 1936 a hydro-electricity power station operated on the river. Remains of the powerhouse are visible on the river margins.

A formed path leads from the first car park on Trout Pool Road north to another car park at the end of Trout Pool Road, near the Trout Pools. Side-tracks lead to "Hinemoa's Steps" and sites for viewing the waterfalls.

4. EXISTING INFORMATION

4.1 Site context

Ōkere Falls Scenic Reserve is the southernmost of a contiguous series of indigenous forest reserves along the upper Kaituna River. To the north are an unnamed Scenic Reserve and the Kaituna River Scenic Reserve.

Three Significant Natural Areas (SNAs) also occur alongside the river: SNA 667 Kaituna River, SNA 677 Te Iringa, and SNA 678 Upper Kaituna (Rotorua Lakes Council 2016). Vegetation within these areas is predominantly forest dominated by tawa, rewarewa (*Knightia excelsa*), and kāmahi (*Weinmannia racemosa*) (Wildland Consultants 2009). There are occasional emergent rimu (*Dacrydium cupressinum*) and local stands of tānekaha (*Phyllocladus trichomanoides*) on ridges. Mangeao (*Litsea calicaris*), pukatea (*Laurelia novae-zelandiae*), Hall's tōtara (*Podocarpus laetus*), tāwari (*Ixerba brexioides*), and hīnau (*Elaeocarpus dentatus*) are also present. There are local areas of secondary scrub.

4.2 Kaituna River

The Kaituna River is one of the best protected, most complete, and largest ignimbrite gorge systems within the Bay of Plenty Region (Wildland Consultants 2004a), *c.*50 kilometres long.

Lake Rotoiti, in the Rotorua Lakes complex, is the source of the Kaituna River. Lake Rotorua drains into Lake Rotoiti via the Ōhau Channel. Lakes Rotorua and Rotoiti are two of the largest lakes within the Rotorua lakes complex. The Rotorua lakes and their catchments are contained within the Okataina Volcanic Centre and largely occupy drowned valleys, cut off by rhyolite domes and lava flows. Lake Rotorua occupies a separate drowned caldera which is linked hydrologically, but is geologically discrete from the balance of the Okataina Volcanic Centre.

The Kaituna River was formed approximately 19,000 years ago, when an eruption from the Haroharo caldera affected the northern end of the Okataina Volcanic Centre, cutting off the western end of Lake Rotoiti, forcing the outlet towards the coast, via the Ōkere arm of Lake Rotoiti. The outlet of Lake Rotoiti is at Ōkere, in the north-western sector of the lake. In 2009, a diversion wall was constructed in Lake Rotoiti to direct flow from the Ōhau Channel into the Kaituna River.

The Kaituna River has eroded the surface layer of earthquake flat breccia, and cut into the underlying Mamaku ignimbrite, forming deeply-cut gorges in places. The combination of Mamaku ignimbrite, climatic conditions, connections with surrounding catchments, and relative inaccessibility give the Kaituna River a largely natural landscape context.

In places the gorges which have been cut by the Kaituna River are up to 100 metres deep. The gorge corridor is a ribbon of predominantly indigenous vegetation that passes through extensive pine plantations and farmland. In places the ribbon of indigenous vegetation is thin, with farmland and/or forestry on the edges of the gorge. Wilding pines have established locally within the strip of indigenous vegetation along the Kaituna River corridor.

South of Paengaroa, near the boundary of the Tauranga Ecological District, the river emerges from the gorge and continues to flow north through horticultural and agricultural land. Within about one kilometre of the sea, part of the river flows into the Maketū Estuary while the remainder flows directly into the Bay of Plenty at Te Tumu (the "Kaituna Cut").

4.3 Vegetation and habitats

The original vegetation within the gorges of the Kaituna River and within Ōkere Falls Scenic Reserve would have been semi-coastal tawa-dominant forest with emergent podocarps and northern rata throughout (Wildland Consultants 2004b). Kohekohe (*Dysoxylum spectabile*) was probably common, at least in the lower reaches of the river. Tanekaha and Hall's totara would have been dominant on well-drained dry ridges and spurs associated with the incised stream gorges.

Most of the original vegetation within Ōkere Falls Scenic Reserve was destroyed by fires (Clarkson and King 1987). The vegetation is now predominantly secondary indigenous forest, dominated by kāmahi and rewarewa. However, there is a local remnant of tawa-pukatea forest which reflects the original forest cover (Clarkson and King 1987).

Vegetation and habitats present within Ōkere Falls Scenic Reserve were described by Wildland Consultants (1998), as:

1. Rewarewa/kāmahi forest
2. Tawa-pukatea forest
3. Kāmahi forest
4. Lawson's cypress-swamp cypress-Japanese cedar forest
5. Kāmahi/whauwhaupaku forest
6. Rārahu fernland
7. Grassland and specimen trees and shrubs

The more modified areas (Vegetation Types 4, 6, and 7) were mainly in the southern- and northern-most parts of the site. Indigenous forest in the remainder of the reserve was predominantly Vegetation Type 1 with local areas of Types 2, 3, and 4 (Clarkson and King 1987).

4.4 Flora

Two taxa of local significance were previously recorded in Ōkere Falls Scenic Reserve; *Lycopodiella cernua* (mātukutuku) and *Peperomia urvilleana* (wharanui) (Wildland Consultants 1998).

A very large population of para (*Ptisana salicina*) (At Risk-Declining as per de Lange *et al.* 2018) has been recorded within forest on the banks of the Kaituna River downstream from Ōkere Falls Scenic Reserve (Wildland Consultants 2004b). This is near to the southern distribution limit for para in the central North Island.

4.5 Avifauna

Substantial numbers of little shag (*Phalacrocorax melanoleucos brevirostris;* kawau paka) previously nested in trees along the Kaituna River within Ōkere Falls Scenic Reserve prior to the early 1990s (WBS, pers. obs.).

Mātātā/North Island fernbird (*Bowdleria punctata vealeae*; At Risk-Declining as per Robertson *et al*. 2017), toutouwai/North Island robin (At Risk-Declining) have been recorded near the Kaituna River, north of Ōkere Falls Scenic Reserve (Wildland Consultants 2004b). Kawau/black shag (*Phalacrocorax carbo novaehollandiae*; At Risk-Naturally Uncommon) and parera/grey duck (*Anas superciliosa*; Threatened-Nationally Critical) are known to utilise habitat on the Kaituna River. There are also a few records of whio/blue duck (*Hymenolaimus malacorhynchos*; Threatened-Nationally Vulnerable) on the river (Wildland Consultants 2004b). A few North Island brown kiwi were recorded north of Ōkere Falls in the early 1980s (Wildland Consultants 2004b) and there is also a recent record from that area.

Common indigenous forest birds have also been recorded within indigenous forest alongside the Kaituna River, including kererū, grey warbler (*Gerygone igata*) and tūī (*Prosthemadera novaeseelandiae novaeseelandiae*) (Wildland Consultants 2009).

4.6 Bats

Pekapeka-tou-roa/long-tailed bats have been recorded within the Kaituna River gorge, north of Ōkere Falls Scenic Reserve. They are likely to traverse the river gorge and associated streams and forest margins. Long-tailed bats have reasonably large home ranges (Borkin and Parsons 2010) and have previously been recorded in the Mangorewa and Rotoehu catchments (Wildland Consultants 2004b).

4.7 Freshwater fish

The Kaituna River supports a wide range of indigenous fish species (Beadel 2006). Species occurring in the river include long-finned eels (*Anguilla dieffenbachii*), redfinned bullies (*Gobiomorphus huttoni*), and banded kōkopu (*Galaxias fasciatus*). Introduced fish species present include brown trout (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*).

5. OVERVIEW OF PROPOSED ZIPLINE DEVELOPMENT

5.1 Overview

The following section has been adapted from information supplied by the client.

The zipline tour is intended to be an ecotourism attraction which enables people to learn about the environment in a fun-filled way. The tour will operate from Rotorua Rafting, located at 761 State Highway 33, Ōkere Falls. Participants will be guided from the first car park on Trout Pool Road, through a series of six ziplines and accompanying walking tracks. The tour will form a loop and finish back at the first car park on Trout Pool Road. The ziplines will criss-cross above the Kaituna River. This will provide opportunities for guides to educate participants about the cultural and environmental significance of the area.

5.2 Footprint of the proposed development

There are estimated to be 10 tours per day and 3600 tours per year. Tours will be undertaken during daylight hours and possibly also at night. Night tours may include viewing of glow worms.

The venture will require a number of features to be constructed within Ōkere Falls Scenic Reserve:

- Walking trails suitable for movements of 50,400 people per year (in groups of 14 people per tour, including ten participants and four guides).
- Safety ‘routes’ connecting all platforms.
- Up to ten ground-based platforms.

- Wire cable linking the entire course from the start platform to the final landing platform.

No new toilet facilities or car parking will be installed in the Reserve.

Two ground-based platforms (Platforms 10 and 11) will be located within Māori Land Block Taheke Papakainga 30, on the eastern side of the Reserve. This land is managed by Ōkere Incorporation.

5.3 Tour layout

The guided tours will progress through the forest at ground and canopy levels and will cover approximately 1,000 metres, following a walking trail, and the zipline (there will be six sections of zipline cable to navigate). Each section of zipline will be separated by a platform positioned at ground level.

Groups will be shuttled from Rotorua Rafting to begin and end the tour from the first car park on Trout Pool Road. The tour will begin and end with a forest walk along formed tracks. Participants will be harnessed into a cable safety system, traversing from platform to platform via ziplines. A continuous belay system will be used.

5.4 Zipline structures

The course has been planned to enable the zipline to travel downslope based on differences in elevation of the hillslopes and the zipline platforms. Ground-based platforms will be constructed at the start of each zipline section. These platforms will act as launching and landing areas. Each platform will be a T-shaped structure which is 2.7 metres by 2.0 metres and *c*.0.9 metres wide. A series of grout-filled anchor tubes will be inserted into the ground a short distance from each platform to anchor and stabilise the zipline. The zipline will run through a wooden post to provide protection of the ground from the wire rope. Safety devices or fences will be attached to the structures to prevent the general public from using the ziplines after hours.

Ziplines will be located so that they do not affect the view of the waterfalls or river from any of the existing viewpoints on the walking path.

No platforms or ziplines will be attached to trees.

5.5 Construction methods

Equipment required to build the platforms will be carried in. Tools and machinery required to install the anchors will include a portable pneumatic auger and a portable concrete pump. These will be operated from a vehicle on the existing walking path (up to 150 metres away).

Lead lines for each section of zipline will be laid using a non-pyrotechnic line launcher. Temporary ropes will be installed, set and tested. Dead fall and small branches will be assessed and vegetation will be trimmed along the zipline route. Once the route is finalised, the permanent heavy gauge zipline will be fastened into position with the anchors and tensioned.

5.6 Walking tracks

Walking tracks are to be constructed from the first car park on Trout Pool Road to Platform 1, from Platform 2 to Platform 3, from Platform 6 to Platform 7, from Platform 10 to Platform 11, and from Platform 12 to the track that was constructed in December 2018 (see Figure 2).

These tracks (*c.*490 metres long in total) will be single person width. They will be formed with a permanent surface such as gravel or pumice. Geotextile matting will be used to separate the gravel or pumice from the ground. Tracks will be built-up to eliminate the risk of damaging any tree roots. Small steps are likely to be required in places.

Additional unformed routes will be made between some of the platforms, and between the platforms and the existing walking path. These routes will be used for emergency exits or maintenance.

5.7 Environmental benefits

The client intends to instil a strong sense of environmental care and sustainability in this tour. Actions which have been highlighted by the client include:

- Minimising effects of track building and vegetation clearance
- Establishing a planting area on the true-right side of the river
- Reinvesting a $10 portion of each ticket sold to Ōkere Falls Scenic Reserve via the Scenic Reserve Board.

Funds made available to the Scenic Reserve would be used to assist with eradication of pest plants and pest animals (in association with Predator Free Ōkere Falls), employing full time caretakers of the reserve, providing education and raising awareness of conservation efforts.

6. VEGETATION AND HABITATS IN THE RESERVE

Five vegetation and habitat types were identified within Ōkere Falls Scenic Reserve and are described below. Vegetation and habitats are described in detail at specific locations in the following subsections. See Figure 3 for location details.

1. Rewarewa/kāmahi forest

Most of the reserve consists of forest dominated by kāmahi with emergent rewarewa. Mamaku (*Cyathea medullaris*) is common in some of the smaller valleys and kiekie (*Freycinetia banksii*), rangiora (*Brachyglottis repanda*), and makomako (*Aristotelia serrata*) are common along the banks of the river.

Kōtukutuku (*Fuchsia excorticata*), kanono (*Coprosma grandifolia*), *Coprosma lucida*, porokaiwhiri (*Hedycarya arborea*), ponga (*Cyathea dealbata*), and māpou (*Myrsine australis*) are scattered in places. Māhoe (*Melicytus ramiflorus*

subsp. *ramiflorus*), kawakawa (*Piper excelsum* subsp. *excelsum*), and karamū (*Coprosma robusta*) are common in the understorey. Ground cover is sparse and includes *Asplenium oblongifolium*, kiokio (*Parablechnum novae-zelandiae*), *Carex uncinata*, hangehange (*Geniostoma ligustrifolium* var. *ligustrifolium*), and saplings of the canopy and understorey species.

2. Tawa-pukatea forest

A remnant (*c.*0.78 hectares) of primary forest dominated by tawa and pukatea occurs alongside the river in the northern part of the reserve. Tītoki (*Alectryon excelsus* subsp. *excelsus*), kohekohe, and hīnau are scattered in the canopy. Kiekie is abundant on trees and banks near the river. Epiphytes are common including *Astelia hastata* and *Peperomia urvilleana*. The understorey and ground cover is similar to that of Vegetation Type 1, however *Lastreopsis hispida*, nīkau (*Rhopalostylis sapida*), supplejack (*Ripogonum scandens*), and rangiora are also common.

3. Kāmahi forest

This description is from Wildland Consultants (1998). This local area of forest is dominated by a dense canopy of kāmahi with rewarewa and lancewood (*Pseudopanax crassifolius*) scattered throughout. Māhoe, karamū, and patē (*Schefflera digitata*) are common in the understorey. Kiokio and hen and chicken fern dominate the ground cover.

4. Whauwhaupaku-māhoe-māpou scrub

This type comprises scrub dominated by a mixture of early-mid successional plant species. Whauwhaupaku (*Pseudopanax arboreus*), māhoe, and māpou are the dominant species present, to about five metres tall. Other species scattered throughout include *Coprosma lucida*, patē, and kanono. There are patches of rārahu, kiokio, blackberry (*Rubus fruticosus* agg.), Japanese honeysuckle (*Lonicera japonica*), and Spanish heath (*Erica lusitanica*).

5. Exotic grasses-rārahu grassland

This type comprises grassland dominated by a mixture of exotic grasses and herbs including cocksfoot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), browntop (*Agrostis capillaris*), dandelion (*Taraxacum officinale*), foxglove (*Digitalis purpurea*), and lotus (*Lotus pedunculatus*). There are patches dominated by rārahu (bracken; *Pteridium esculentum*), and local patches of gorse (*Ulex europaeus*) and *Paesia scaberula* occur on the forest margins. There are occasional barberry (*Berberis glaucocarpa*), blackberry, and Spanish heath (*Erica lusitanica*). A fence line is present to prevent stock access from the adjacent property into the forest.

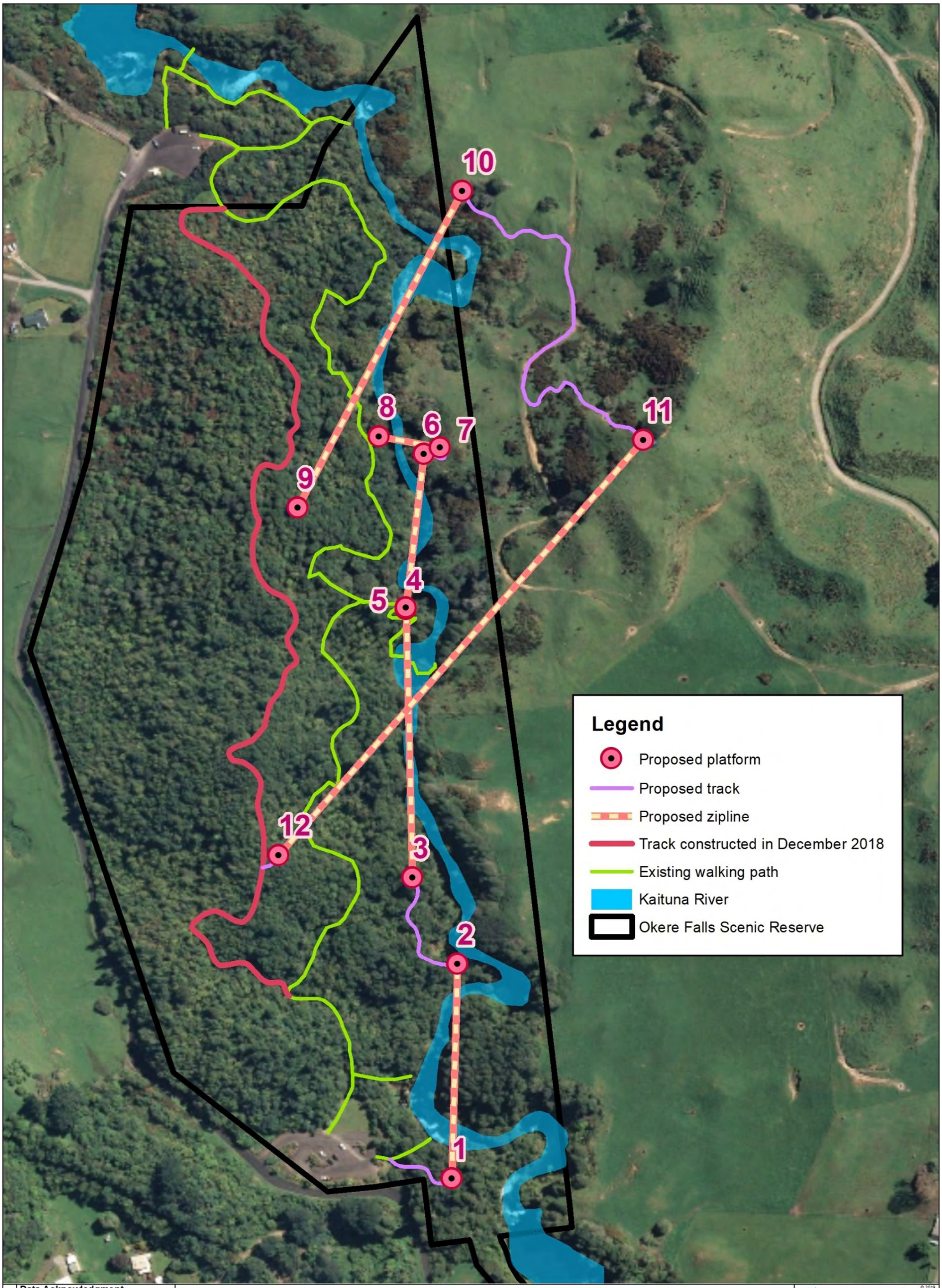

Figure 2. Proposed route of Okere Adventures tour.

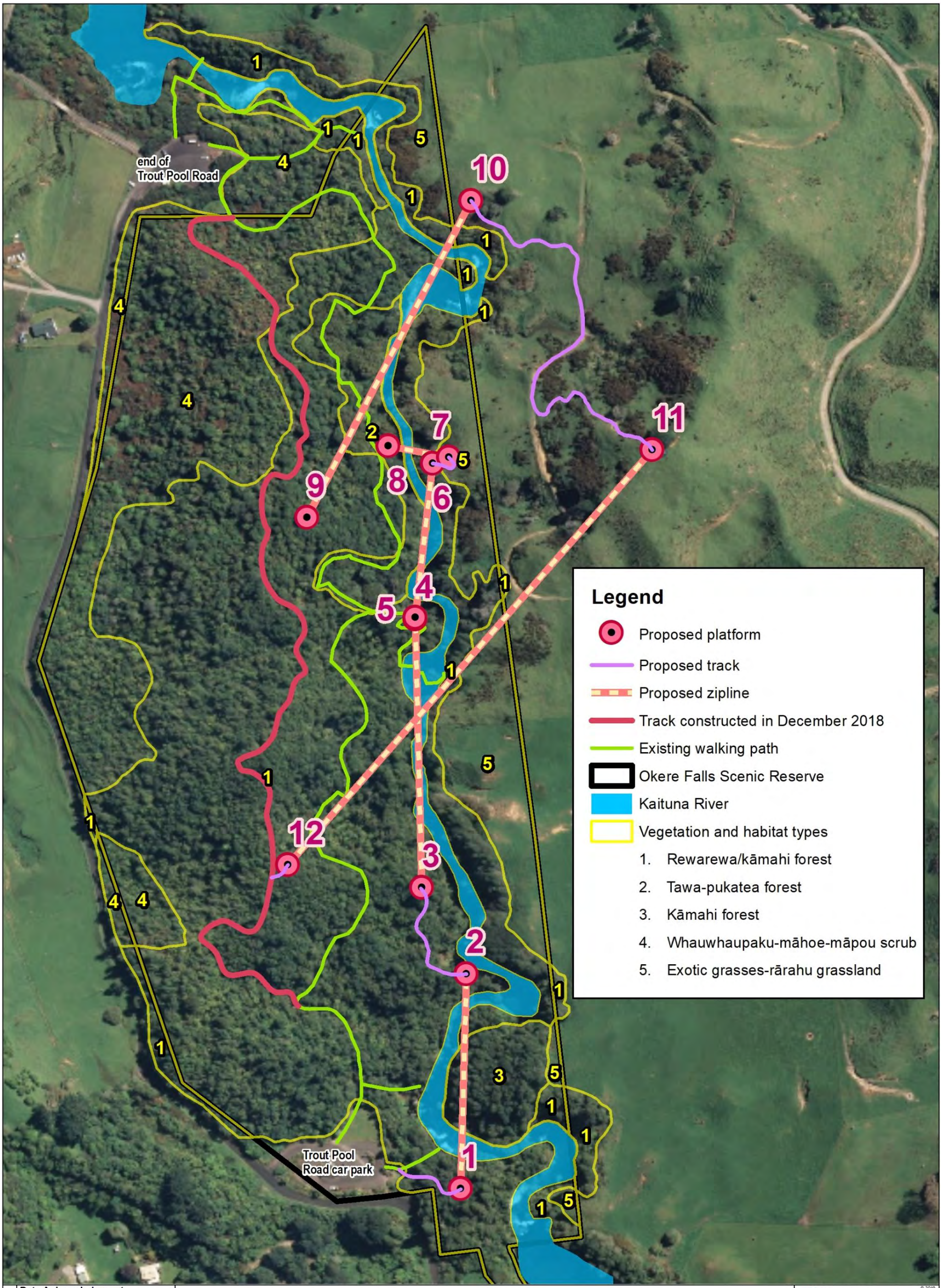

Figure 3. Vegetation and habitat types within Okere Falls Scenic Reserve.

7. VEGETATION AND HABITATS AT PROPOSED PLATFORM SITES

7.1 Platform 1

The proposed start of the zipline is on top of a small hill in the southern part of the reserve. Vegetation within the location of this platform is forest dominated by kāmahi (to about six metres tall). There are small trees and saplings of māpou, whauwhaupaku, rangiora, porokaiwhiri, *Pittosporum colensoi*, kanono, toropapa (*Alseuosmia macrophylla*), *Coprosma lucida*, and hangehange scattered throughout. Rārahu, *Asplenium oblongifolium*, and mingimingi (*Leucopogon fasciculatus*) are scattered in the understorey. Ground cover is dominated by leaf litter with seedlings of the canopy species and a few patches of *Asplenium flaccidum* and mosses.

7.2 Platform 2

This is the proposed landing platform for the first section of zipline. This location is on a very narrow ridge with a steep cliff on the northern side. Vegetation is dominated by kāmahi with several emergent rewarewa (*c.*50 cm diameter at breast height (dbh)). *Metrosideros fulgens* and kiekie are common. Hangehange, māhoe, ponga, kanono, *Asplenium oblongifolium*, and rangiora are scattered throughout.

7.3 Platform 3

This is the proposed launching platform for the section of zipline which will pass above Tutea Falls. Vegetation within the location of the platform is predominantly kāmahi and a few emergent rewarewa, with kanono and hangehange scattered in the understorey. A rimu (*c.*30 centimetres dbh) is present to the immediate west of the platform location.

7.4 Platform 4

Platform 4 is a proposed landing platform. The proposed location is on top of a narrow ridge which juts into a bend of the Kaituna River. To the west of Platform 4, the existing walking path makes a sharp bend before heading downhill to "Hinemoa's Steps". A wooden fence is currently present on this bend in the path to prevent walkers from straying down the ridge.

Bare ground is common on the top of this ridge where there is an unofficial route to the river. Exposed tree roots are present. Patches of mosses, *Rytidosperma gracile*, and sweet vernal (*Anthoxanthum odoratum*) occur on the route margins, with occasional catsear (*Hypochaeris radicata*), *Morelotia affinis*, and tūrutu (*Dianella nigra*). Within the bare area, there is a koromiko (*Hebe stricta* var. *stricta*, *c.*1.2 metres tall), a kāmahi seedling (*c.*40 centimetres tall), and a few seedlings of *Coprosma lucida*.

On either side of the unofficial route, there is a dense cover of shrubs (about two metres tall) and ferns. Species present are *Coprosma lucida*, koromiko, kiokio, and rārahu. There are dense patches of *Metrosideros fulgens* (from ground level to *c.*1.3 metres tall), particularly on the northern side of the route.

Two rewarewa trees (approximately 30 centimetres dbh and 20 centimetres dbh) occur between the proposed location of Platform 4 and the existing barrier for the walking path. *Asplenium oblongifolium* and *Drymoanthus adversus* are epiphytic on the larger rewarewa tree.

Forest surrounding this site is dominated by kāmahi and rewarewa with abundant *Metrosideros fulgens*.

7.5 Platform 5

Platform 5 is on top of the same narrow ridge as Platform 4. It is located to the north of the wooden fence that is intended to prevent walkers from using the unofficial route down the ridge. There is a vertical cliff above the river at the proposed location of Platform 5 which will act as the zipline launching site.

Vegetation present at this location is very similar to that at the proposed location of Platform 4. Bare ground, *Rytidosperma gracile*, and sweet vernal occur in the centre of the site. A wooden viewing platform was here previously (early 1990s) but it is now an unofficial viewing spot. Shrubs of *Coprosma lucida*, koromiko, and mingimingi (about two metres tall) occur on either side, with patches dominated by *Metrosideros fulgens*, kiokio, and rārahu. A few tūrutu are present. Forest surrounding this site is dominated by kāmahi and rewarewa with abundant *Metrosideros fulgens*.

7.6 Platform 6

Platform 6 is a proposed landing platform. This location is predominantly rārahu fernland with patches of exotic grasses and herbs such as cocksfoot, Yorkshire fog, browntop, dandelion, foxglove, narrow-leaved plantain (*Plantago lanceolata*), and lotus. There are occasional kiokio, blackberry, and ponga seedlings.

7.7 Platform 7

This is a proposed launching platform, which will be a short walk from Platform 6. This location is predominantly grassland dominated by exotic grasses and herbs with patches of rārahu and *Paesia scaberula*.

7.8 Platform 8

Platform 8 is a proposed landing platform. This location is within forest dominated by kāmahi (*c.*15-20 metres tall) with occasional rewarewa. In the understorey (to about eight metres tall) there are scattered māhoe, ponga, kawakawa, *Coprosma lucida*, and kanono. Whilst the ground cover is dominated by leaf litter, there are local seedlings and saplings of porokaiwhiri, rewarewa, hangehange, and scattered kiokio, *Pteris macilenta*, and *Pneumatopteris pennigera*. *Metrosideros fulgens* occurs in the canopy and locally on tree trunks.

This platform is located approximately five metres from the existing walking path.

7.9 Platform 9

Platform 9 is proposed to be the launching platform for the second longest section of zipline. This platform is located within forest dominated by kāmahi with occasional emergent rewarewa (*c.*15-20 metres tall). There are a few ponga, māhoe, and porokaiwhiri in the understorey (to about four metres tall). Karamū, kiokio, whekī (*Dicksonia squarrosa*), kanono, *Coprosma tenuifolia*, and hangehange are scattered in the understorey. There are a few *Asplenium oblongifolium* in the ground cover, although leaf litter is the dominant cover. *Metrosideros fulgens* and leather-leaf fern (*Pyrrosia eleagnifolia*) occur epiphytically in places.

This platform will be located approximately 10 metres from the track that was constructed in December 2018.

7.10 Platform 10

This is proposed to be the landing platform for the second longest section of zipline. This site is predominantly grassland dominated by exotic grasses and herbs with patches of rārahu, gorse, and *Paesia scaberula*. Blackberry, Spanish heath, and barberry occur locally.

7.11 Platform 11

This platform will be the launching platform for the final section of zipline. At *c.*375 metres, this will be the longest section of zipline on the tour. Vegetation present at this location is grassland dominated by exotic grasses and herbs.

7.12 Platform 12

Platform 12 is proposed to be the final landing platform on the zipline tour. This platform is located near to the track which was constructed in December 2018.

Vegetation present within this location is low secondary forest (*c.*5-6 metres tall) dominated by kāmahi. Understorey shrubs and saplings present (to about two metres tall) are hangehange, mingimingi, koromiko, *Coprosma lucida*, and whauwhaupaku. There is some rārahu (bracken) scattered in places. Leaf litter dominates the ground cover, with sparsely scattered hound's tongue fern (*Microsorum pustulatum*), tūrutu, kiokio, and seedlings of porokaiwhiri and akepiro (*Olearia furfuracea*).

8. VEGETATION AND HABITATS ON PROPOSED WALKING TRACK ROUTES

8.1 Track to Platform 1 (*c.*50 metres)

This track will lead from the first car park on Trout Pool Road to the top of the hill where Platform 1 is to be located. There is a gain of approximately seven metres elevation between the car park (285 metres above sea level (asl)) and the hill top (292 metres asl). Vegetation on this proposed track route is forest (to about eight metres tall) dominated by kāmahi, māhoe, and porokaiwhiri, with a few

emergent rewarewa. Saplings are common in the understorey with ponga, whekī, and mamaku scattered in places, and kawakawa, kiokio, and hangehange scattered throughout.

8.2 Track from Platform 2 to Platform 3 (*c.*85 metres)

This track will climb up the narrow ridge then contour above the river valley to Platform 3. There is an increase in elevation from Platform 2 (289 metres asl) to Platform 3 (298 metres asl) of approximately nine metres. Vegetation on this track route is kāmahi forest with a few emergent rewarewa. Saplings are abundant in the understorey, particularly in a gap in the canopy. A few ponga and a large radiata pine (*Pinus radiata*; *c.*60 centimetres dbh) occur in the shallow valley near Platform 3.

8.3 Track from Platform 6 to Platform 7 (*c.*25 metres)

Platform 6 (278 metres asl) is approximately six metres lower in elevation than Platform 7 (284 metres asl). This proposed track will lead uphill through an area which is currently grassland dominated by exotic grasses with patches of rārahu.

8.4 Track from Platform 8 to Platform 9

Platform 8 (273 metres asl) is approximately 34 metres lower in elevation than Platform 9 (307 metres asl). From Platform 8, the tour will follow the existing walking path and the track which was constructed in December 2018, to Platform 9.

8.5 Track from Platform 10 to Platform 11 (*c.*320 metres)

This track will lead uphill through farmland to the location of Platform 11 on a hilltop. An existing farm track will be used for a section of this track.

8.6 Track from Platform 12 to track constructed in December 2018 (*c.*15 metres)

This track will lead uphill along a broad ridge to join the track which was constructed in December 2018. Vegetation on this proposed track route is forest dominated by kāmahi (about eight metres tall), with a few emergent rewarewa. Understorey plant species, which are scattered throughout, include kiokio, hangehange, whauwhaupaku, and tūrutu.

9. FLORA

A total of 108 vascular plant species were recorded during the site visits, including 81 indigenous and 27 introduced plant species (listed in Appendix 1).

Peperomia urvilleana (wharanui) was observed within the tawa-pukatea forest (Vegetation Type 2) in Ōkere Falls Scenic Reserve. This species is of local significance because it typically occurs in more coastal areas and is relatively uncommon in lowland forest at such a distance inland.

Four of the indigenous vascular plants recorded within the site have a national-level threat classification, including three species of rātā (*Metrosideros diffusa*, *Metrosideros fulgens*, and *Metrosideros perforata*) which are classified as Threatened-Nationally Vulnerable (as per de Lange *et al.* 2018) and mānuka (*Leptospermum scoparium* agg.; At Risk-Declining) which has been planted at this site. These species are in the Myrtaceae plant family which is at risk of infection by myrtle rust (*Austropuccinia psidii*), a potentially devastating fungal disease which arrived in New Zealand in May 2017 and has no known treatment. Along with other species in the Myrtaceae family, the threat status of mānuka and these species of rātā has been elevated as a precautionary measure based on the potential threat posed by myrtle rust. However, these species are otherwise common and widespread in the local environment.

10. FAUNA

10.1 Avifauna

Eight indigenous and four exotic bird species (listed in Appendix 2) were seen or heard during the site visits. Most of the species recorded are considered to be common forest birds, although toutouwai/North Island robin is classified as At Risk-Declining (as per Robertson *et al*. 2017). Toutouwai/North Island robin are relatively common in Ōtānewainuku Ecological District compared to other parts of New Zealand because there are extensive tracts of indigenous forest and exotic plantation forest which provide suitable habitat.

Other indigenous and exotic bird species that are typically common in indigenous forest within this Ecological District are also likely to utilise the habitats present on a regular basis, but were not recorded during the site visits.

10.2 Bats

Pekapeka-tou-roa/long-tailed bats have been recorded within the Kaituna River gorge, north of Ōkere Falls Scenic Reserve. They may utilise crevices or flaky bark in the tawa-pukatea forest for roosting, or even some of the larger kāmahi.

10.3 Herpetofauna

No reptiles or amphibians were observed during the site visit and there are no records within five kilometres of this site in the Department of Conservation Bioweb herpetofauna database (Department of Conservation 16 January 2019). Herpetofauna surveys have not been undertaken at the site, or in adjoining areas.

Due to predation pressure which is likely to be high at the site, any lizard species which are present may have low population densities. Indigenous lizards are highly cryptic and can be difficult to find when in low numbers.

Various lizard species (Section 3.2.3 above) have been recorded in Ōtānewainuku Ecological District (Department of Conservation Bioweb herpetofauna database, 16 January 2019), and may utilise habitat within Ōkere Falls Scenic Reserve. Large

clumps of epiphytes, such as *Astelia hastata*, and crevices which are present in the old trees are suitable for arboreal lizards to live in, whilst understorey habitats and leaf litter are suitable for a range of terrestrial skink species.

10.4 Pest animals

Possum (*Trichosurus vulpecula*) browse sign was noted during the field assessment. The typical mainland suit of pest animals will be present within the site, including possums, hedgehogs (*Erinaceus europaeus*), rats (*Rattus norvegicus* and *R. rattus*), mustelids (*Mustela* spp.), and feral cats (*Felis catus*). These species are all known to eat birds eggs, and most will also kill chicks and adult birds. Due to the significant habitat for indigenous avifauna available within the site, there would be merit in implementing an ongoing intensive pest animal control programme.

Possums can also alter vegetation composition by heavily browsing favoured food trees, disrupting vital ecological processes such as flowering, fruiting, seed dispersal and germination, competing with indigenous wildlife for food.

Some pest animal control has been initiated within Ōkere Falls Scenic Reserve as part of the community initiative called "Predator Free Ōkere Falls"[1]. This initiative was recently established at Ōkere Falls with the aim of reducing the abundance of introduced pest animals in the area to protect terrestrial and water bird species.

11. ECOLOGICAL VALUES

Ecological values at the site are summarised in Table 1. Most of the reserve has a cover of good quality secondary rewarewa/kāmahi forest, which is of moderate ecological value. There is a small area of remnant tawa-pukatea forest, of high ecological value. Most of the proposed zipline route will utilise the rewarewa/kāmahi forest. One platform will be located in regenerating scrub and four platforms are to be located in exotic-dominant grassland. Both of these types have low ecological value. The first section of the proposed zipline will pass above kāmahi forest (moderate ecological value) but no platforms are to be installed within this vegetation type.

This site contains a typical suite of indigenous forest birds. Limited numbers of indigenous bats and lizards may be present.

Table 1: Relative ecological values of vegetation and habitats within the parts of Ōkere Falls Scenic Reserve proposed for use as a guided zipline tour.

Vegetation Type	High	Moderate	Low
1. Rewarewa/kāmahi forest		✓	
2. Tawa-pukatea forest	✓		
3. Kāmahi forest		✓	
4. Whauwhaupaku-māhoe-māpou scrub			✓
5. Exotic grasses-rārahu grassland			✓

[1] https://givealittle.co.nz/org/predator-free-okere-falls Accessed on 14 November 2018.

12. POTENTIAL ECOLOGICAL EFFECTS

12.1 Overview

Potential ecological effects of the proposed Ōkere Adventures guided tour relate to vegetation clearance for the walking tracks, construction of platforms and ziplines, noise disturbance, displacement of fauna, and weed invasion, each of which is discussed below.

12.2 Vegetation clearance

12.2.1 Platforms and zipline

Vegetation clearance will be required to create cleared areas for the installation of each platform. The zipline cable will be anchored at each platform.

Eight of the proposed platforms (Platforms 1, 2, 3, 4, 5, 8, 9, and 12) are to be located within vegetation and habitats of moderate ecological value. Some larger trees - including rewarewa, kāmahi, māhoe, porokaiwhiri - occur at the proposed locations of most of these platforms. Clearance of larger trees for platform construction would result in adverse effects. No indigenous podocarps occur at platform locations, although one rimu occurs very near to Platform 3. Clearance of this rimu is not desirable because rimu are scarce in the reserve and it could be used as a feature of the zipline tour.

Four of the proposed platforms (6, 7, 10, and 11) will be within areas of low ecological value (exotic grasses-rārahu grassland, Vegetation Type 5). Vegetation clearance for these platforms will have no more than minor effects because this is an exotic-dominant habitat.

The zipline will pass through the forest at a variety of heights. As such, it is likely that all parts of the forest structure (i.e. from the forest floor to the tops of the emergent trees) will be vulnerable to some degree of disturbance during the construction phase of this project. In places, selected individual trees and/or saplings may need to be cleared or trimmed to create an open gap that this large enough for users of the zipline to pass through. The effects of such clearance will be adverse in the long-term if damage is caused to emergent or canopy trees. Clearance of understorey trees, shrubs, and ferns will have minor effects.

Trimming of vegetation will be required where the zipline is to traverse through the forest canopy. This will be required at the construction phase and potentially during regular maintenance. Most of the sections of zipline pass through areas of moderate ecological value (rewarewa/kāmahi forest, Vegetation Type 1). However, the section of zipline between Platforms 9 and 10 passes through high value tawa-pukatea forest. Vegetation trimming may cause increased risk of localised windfall because of increased wind penetration into the forest canopy. Because of the small size of this remnant, damage to large trees is not only undesirable from an ecological standpoint, but also from an economic standpoint as these will be one of the main viewing attractions for users of the zipline. The potential effects of vegetation trimming for

zipline construction and maintenance are likely to be minor if damage to larger trees (particularly those within Vegetation Type 4) is avoided.

Damage to the trunks of trees and trampling of understorey vegetation may occur when platform materials are being carried to the platform locations. This damage is unlikely to kill trees and understorey vegetation will recover relatively quickly, so ecological effects will be minor.

12.2.2 Walking tracks

The proposal will result in establishment of walking tracks that provide access to the start of the guided experience and routes between several of the platforms. It is likely that track construction will incorporate benching and the use of steps on sloping surfaces, drainage works, and hardening of track surfaces using gravel or pumice.

Smaller, unformed routes will also be required as 'safety routes' for clients and/or guides between some of the platforms, and between the platforms and the existing path. Vegetation clearance is not required for these routes. Minimal trimming of vegetation may be required and, as such, will have only minor effects.

Clearance of vegetation for the track to Platform 1 would have minor adverse effects. This is because the forest on this hillside is relatively young and no large trees will require clearing.

Clearance of vegetation for the track between Platforms 2 and 3 would have minor adverse effects. This is because the forest on this hillside is relatively young and no large trees will require clearing. The section of track on the steep narrow ridge will require careful planning to prevent erosion and ensure participant safety.

The track from Platform 12 to the track which was constructed in December 2018 will have no more than minor effects on indigenous vegetation and habitats. The forest is relatively young and no large trees will be cleared.

The tracks between Platforms 6 and 7 and Platforms 10 and 11 will be within exotic-dominated vegetation. No more than minor effects on indigenous vegetation and habitats will result from construction of these tracks.

Other potential adverse effects of track construction could include:

- Damage to the roots or trunks of adjacent trees.
- Altered drainage patterns.
- Soil compaction.
- Weed invasion.

It is important that large lateral roots, in particular, are not severed during track construction. Large roots should either be avoided or protected by using either fill, steps, or short sections of boardwalk. Damage to bark on adjacent trees should be avoided as it becomes a potential site for attack by fungal pathogens and/or insects.

Natural drainage patterns should be retained, and tracks and other structures should not impede water flows or allow new poorly-drained sites to develop, as that could adversely affect existing vegetation.

Participants should be kept on tracks, to avoid understorey trampling and soil compaction adjacent to facilities.

Weed invasion is discussed further below.

Overall, the potential effects of track construction are likely to be minor if care is taken with route selection (e.g. avoid felling of trees, damage to major roots and root plates, and damage to tree trunks).

12.3 Weed invasion

Increased human traffic within the Reserve as a result of this tourist attraction could potentially lead to an increased occurrence and distribution of pest plants. Seeds attached to the clothing and/or shoes of participants may dislodge whilst participants are using the tracks, platforms, or ziplines. Pest plants are particularly likely to germinate and become an issue on track margins, although certain pest plant species also grow well under a forest canopy. Without adequate care, over time, pest plants could become a significant issue. In addition, formed tracks will allow easier dispersal of pest plants by wind and fauna. The significance of this potential effect is likely to be minor if care is taken with regular weed monitoring and control and education of participants.

12.4 Fauna displacement during construction

There is some likelihood, albeit limited, that birds, bats, lizards, and invertebrates using the site during the construction period will be subject to disturbance. Most birds and invertebrates that are potentially subject to disturbance are highly mobile and will be able to deal with localised disturbance. As such, it is expected that the potential displacement effects on birds and invertebrates will be no more than minor.

Indigenous skinks and geckos may utilise habitat at each of the proposed platform locations and along the track routes. Vegetation clearance associated with construction of the platforms and walking tracks has the potential to disturb, or cause injury and/or mortality to indigenous lizards (skinks and geckos). Indigenous lizards are absolutely protected under the Wildlife Act (1953) which is administered by the Department of Conservation, and it is illegal to disturb or remove habitats of indigenous lizards without a Wildlife Authority Act issued by the Department. Due to the very localised nature of the platform sites and the limited amount of new tracks, any potential effects on lizards are, however, likely to be minor.

Long-tailed bats may utilise trees in the tawa-pukatea forest and other forest types in the area. No platforms or walking tracks are to be constructed within the tawa-pukatea vegetation type but the zipline between Platforms 9 and 10 will pass above this forest. There is potential, albeit slight, that long-tailed bats (if present) could be disturbed during installation of the zipline. No larger trees are to be felled, so no potential bat roosts are to be destroyed.

12.5 Noise disturbance during guided tours

Large numbers of visitors (14 per tour, 50,400 people per year) using a confined forested area may have some effects on nesting and breeding of indigenous avifauna. Some noise disturbance during the guided tours (and during construction) is expected. However, there is an existing walking track, and rafting and kayaking tourism activities already take place within this Reserve. Any additional effects of noise disturbance on fauna within the reserve will be no more than minor.

13. OPTIONS TO AVOID OR MINIMISE POTENTIAL ADVERSE ECOLOGICAL EFFECTS

13.1 Overall intent

The major focus for construction and use of the guided zipline tour should be to avoid or minimise adverse effects. This is because of the moderate to high ecological value of forest vegetation in the Ōkere Falls Scenic Reserve, and also because of the need to protect the environment and ecological features that users of the facility will want to see and experience. Avoidance and minimisation of potential adverse ecological effects are addressed below.

13.2 Construction of platforms and zipline installation

Actions which should be undertaken to avoid and minimise ecological effects associated with vegetation clearance within the Reserve during platform construction and zipline installation are outlined below:

- Clearance and trimming of tall trees (particularly podocarps, tawa, pukatea, and any indigenous trees over *c.*30 cm dbh) should be avoided.
- Disturbance of epiphytes within the tawa-pukatea forest should be avoided.
- Physical contact with trees (large branches, and trunks in particular) should be avoided when construction materials and tools are being transported.
- Defined low impact routes should be used for carrying in construction materials and tools, to reduce the area of understorey vegetation which is trampled.
- Indigenous plant seedlings within proposed platform locations should be removed carefully where possible and then used for site rehabilitation.
- Soil disturbance and erosion during construction should be avoided as much as possible. This is particularly important at Platforms 2, 4, and 5, which are located on narrow ridges.
- Damage to bark or roots of trees adjacent to the platforms should be avoided.

- Materials used for platform construction should be suited to the environmental conditions present. Options for platform materials include treated timbers (dried well prior to use), steel, hardwood timbers, fibreglass, and glass.

Actions to be undertaken during construction include (if required):

- Restoration of all natural drainage patterns.
- Restoration of natural ground surface.
- Restoration of natural soil, including a humus layer.
- Replacement of groundcover plants.

Actions to be implemented following construction should include:

- Facility users should be constrained to the platforms, to avoid ongoing incremental trampling damage to the forest floor.
- Any vegetation trimming that is required for maintenance should be minimised and undertaken with care to avoid damaging podocarps, tawa, pukatea, and any indigenous trees over *c.*30 cm dbh.

13.3 Track construction

Actions which should be undertaken to avoid and minimise ecological issues associated with vegetation clearance in the Reserve during track construction are provided below:

- Walking tracks should follow a path of 'least resistance' so that the clearance of trees can be avoided.
- Clearance or trimming of tall trees, particularly podocarps, should be avoided or kept to a minimum.
- Physical contact with trees (large branches, and trunks in particular) should be avoided when construction materials are being transported.
- Defined low impact routes should be used for carrying in construction materials and tools to reduce the area of understorey vegetation which is trampled.
- Indigenous understorey plant seedlings within the track route should be removed carefully where possible and then used for site rehabilitation.
- No large lateral roots of any tree should be cut or damaged.
- Soil compaction should be avoided as much as possible.
- All bark damage should be avoided.
- The area of ground disturbance should be kept to a minimum.

- A suitably qualified and experienced ecologist should assess the final proposed track routes, and provide advice on an alternative route if the selected routes contain features of importance.
- Only 'clean' gravel or other track materials should be used, free of weed propagules and pest animals (such as plague skink (*Lampropholis delicata*).
- Trees should not be marked with attachments that could result in bark damage (biodegradable flagging tape can be used if required, to be removed when construction is completed).
- Apart from avoiding the features identified above, track construction should also avoid, as much as possible, alteration of natural drainage patterns. The creation of small impoundments should be avoided.
- Facility users should be constrained to the formal tracks and defined gathering points, to avoid ongoing incremental trampling damage to the forest floor.

Actions to be undertaken during track construction include (if required):

- Restoration of all natural drainage patterns.
- Restoration of natural ground surface.
- Restoration of natural soil, including a humus layer.
- Replacement of groundcover plants.
- Removal of all markings and unnecessary artificial objects.
- Any vegetation trimming required for maintenance should be kept to a minimum and undertaken with care to avoid damaging podocarps, tawa, pukatea, and any indigenous trees over *c.*30 cm dbh.

Overall

The completed project should - with the noticeable exceptions of the formed walking tracks, platforms, and zipline - look like a natural forest ecosystem (allowing six months or so for the groundcover to recover following track construction). To limit use by the general public, unformed routes should not be obvious from the existing walking path and track.

13.4 Fauna

Lizards

Lizards are unlikely to be adversely affected due to the low likelihood of them being encountered and also because of the small scale and local effects of the proposal.

Bats

Bats should not be affected as no larger trees are to be felled and it is unlikely that any potential bat roosts will be affected.

13.5 Noise disturbance

Noise levels should be kept low while tours are in progress to enhance the ecological experience for participants and other users of the reserve. This will also minimise disturbance to the forest environment and indigenous fauna.

13.6 Weed invasion

Staged removal of pest plants which are currently present within the Reserve would enhance the ecological values of the Reserve, maintain vegetation in good condition, and also enhance the experience of tour participants.

A weed management plan should be developed to address monitoring and removal of any weeds that occur in the Reserve or establish in the future. Active monitoring and regular weed control is most effective if it is undertaken while infestations are small. Education about pest plants and their control could be included in the zipline tours.

14. MITIGATION

14.1 Overview

This project will result in some relatively minor adverse ecological effects, primarily associated with construction of the platforms and walking tracks. There may also be adverse effects if any large trees are damaged as a result of infrastructure establishment or maintenance. The ecological effects of the development and ongoing use of this tourist attraction in the Reserve should be mitigated by undertaking activities that enhance the ecological integrity of the vegetation and habitats.

Options for mitigation works in Ōkere Falls Scenic Reserve are restoration planting, intensive sustained pest animal control, weed control, and biosecurity checks.

14.2 Pest animal control

Overall Intent

Possums and rats are likely to be the pest animals having the greatest impacts on indigenous plants and animals within Ōkere Falls Scenic Reserve. Long-term intensive control of introduced pest animals would improve the habitat quality and enhance the populations of indigenous fauna within this reserve. It is viable to implement intensive sustained pest animal control throughout the entire reserve because of its relatively small size, elongated shape, and the presence of a network of existing walking tracks.

To maximise the effectiveness of pest animal control, a pest animal control plan should be developed and pest control operations should be coordinated with the Department of Conservation, Predator Free Ōkere Falls, and any landowners in the area who are currently controlling pest animals or are interested in being involved.

Possum and rat reinvasion from the surrounding area is likely to be rapid and ongoing, so control would need to occur year-round.

Pest Control Network

A network of bait stations and/or kill traps would be suitable for the control of possums, rats, and stoats.

Traps for possums (e.g. Sentinel, Trapinator, Goodnature A12) should be installed at *c.*100 metre intervals, which would require only *c.*25 traps.

Rat control traps (DOC 200, Victor, and/or Goodnature A24 self-resetting traps) should be installed at *c.*50 metre intervals. Bait stations could also be installed on the same grid, for the control of rats and mice. At this spacing *c.*90-100 rat stations would be required.

DOC 200 traps will also catch stoats. A small number of DOC 250 traps could also be used as these are suitable for ferrets.

Cage traps should be used to control feral cats. This trapping method enables any pet cats caught incidentally to be returned to their owners.

For ease of access, it would be suitable to install pest animal control stations alongside Trout Pool Road, existing walking tracks, and the forest margin on the eastern side of the river, with other pest animal control lines interspersed between.

Traps should be checked at least monthly, however fortnightly checks are required between September and March to align with the breeding season of birds, which is when the risk of predation is highest. All pest control should be undertaken by suitably trained, skilled, and experienced personnel. Appropriate information needs to be provided for visitors, to advise them of the use of baits and/or traps.

Once pest animal control has been established and is implemented consistently across the entire Reserve, it would be appropriate to extend pest control to other areas of indigenous forest downstream from the Trout Pool.

Monitoring

A series of chewcards located throughout the site could be used to monitor the presence of pest animals and tracking tunnels could be used for rodent monitoring. Pest animal monitoring should be undertaken prior to the establishment of pest animal control and at least annually thereafter. Results of this pest animal monitoring should be used to adapt the pest control methods used over time in response to any changes in the number of individuals or species of pests detected.

There would be merit in undertaking five-minute bird count monitoring in association with pest control implemented in the Reserve. This could provide baseline data for regular long-term monitoring of outcomes of pest control. Standardised methods should be followed, as per Hartley and Greene (2012). Data could be analysed to assess any changes in bird species diversity and numbers over time. Other animals observed during the bird monitoring should be recorded. Monitoring locations should be relatively evenly spaced out across the site. However, locations should be chosen which have easy access and are close to areas of key habitat for birds of interest (such as river margins).

Bird monitoring should be repeated twice a year, in spring and summer/late summer. Undertaking of monitoring at approximately the same time of year is important because the behaviour and chance of recording some birds varies with the seasons.

14.3 Weed control

As noted above, a weed management plan should be developed and there should be regular monitoring, control, and follow-up control of weeds throughout the reserve. The aim of monitoring should be to rapidly detect invasive plant species and to implement control as required. This is easy to do if an experienced observer checks these sites on a three-monthly basis and provides advice on the required control response(s). Follow-up control should be undertaken of any invasive weed species.

14.4 Biosecurity

Active promotion of the importance of biosecurity should be included in the zipline tours. The introduction of species of fungi, bacteria, or plants and animals which are not naturally found in indigenous forest such as Ōkere Falls Scenic Reserve can pose serious risks to natural ecosystems. A routine should be implemented prior to each tour where the clothing and footwear of participants are inspected and any mud, pest animals or plant propagules are removed. A footwear cleaning station (with a disinfectant such as Trigene) should be used. This will reduce the introduction of pest organisms into the reserve and therefore reduce costs of pest animal and plant control. Education about pest animals and pest plants, and their control could be included in the tours. Promotion of biosecurity is particularly suited to these types of operations because it leads to an increased general awareness of this issue and tour participants will often be from other parts of New Zealand and other countries (and may be recent arrivals in New Zealand).

14.5 Restoration planting

Ōkere Adventures have indicated that they plan to include indigenous planting as an activity during the tours. Two potential sites have been identified for restoration planting: within exotic grassland on the eastern side of the Kaituna River, and on the western side of the reserve within a regenerating area. Although there is the potential that indigenous vegetation will naturally regenerate within these areas, restoration planting would speed up this process and provide a valuable educational opportunity for the tours. It will be necessary to ensure that domestic grazing/browsing animals do not have access to restoration planting sites.

Locally-sourced species should be used for planting that are representative of vegetation within Ōkere Falls Scenic Reserve. Restoration planting should include a range of early and mid-successional species (such as karamū, mānuka, and kānuka), which will establish a canopy cover relatively quickly. Later successional species (such as rewarewa and rimu) should also be planted at the same time. These are slower-growing species which are longer-lived and will create a tall indigenous canopy.

A brief planting plan should be developed which includes the areas to be planted, planting prescriptions, and maintenance.

15. CONCLUSIONS

The proposed Ōkere Adventures guided zipline tour will utilise Ōkere Falls Scenic Reserve which is a relatively small reserve predominantly covered with secondary indigenous forest. The reserve already has a high level of human use from the existing walking tracks and river-based activities. The cultural and ecological significance of the Kaituna River is a key reason for the proposed location of the proposed zipline attraction.

The greatest effects of the tour will result from clearance and trimming of vegetation during the construction and maintenance of walking tracks, platforms, and ziplines. There is some potential for adverse ecological effects if any larger trees, particularly within the tawa-pukatea forest remnant, are cleared or damaged, although this is unlikely.

Construction of walking tracks, platforms, and ziplines should be undertaken in a low-impact manner.

Options for mitigation at this site relate to intensive sustained pest control and indigenous revegetation, especially the former. Ongoing control of pest animals and pest plants should be undertaken throughout the reserve. Over time, this could be scaled-up to include other indigenous forest areas alongside the Kaituna River, to the north of the reserve. Inclusion of biosecurity and restoration planting activities will provide hands-on educational opportunities for participants while also reducing opportunities for pest invasion and increasing the area of indigenous vegetation.

Overall, this project has some potential for adverse effects, albeit relatively minor, but there is also considerable potential for positive ecological effects, and for high quality ecological interpretation for participants. If the potential adverse effects which have been identified are avoided or minimised, the overall adverse ecological effects of the proposed zipline development will be minor. Intensive sustained pest control, along with weed control, has the potential to improve the state of the reserve, and populations of indigenous species.

ACKNOWLEDGMENTS

Sam Sutton of Rotorua Rafting initiated the project, provided information on the proposal, and led a useful walk-through visit of the site to show the proposed route.

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LIST OF VASCULAR PLANT SPECIES RECORDED WITHIN ŌKERE FALLS SCENIC RESERVE DURING SITE VISITS

INDIGENOUS SPECIES

Gymnosperms

Dacrydium cupressinum	rimu
Podocarpus totara var. *totara*	tōtara

Monocot. trees and shrubs

Cordyline australis	tī kōuka, cabbage tree
Rhopalostylis sapida	nīkau

Dicot. trees and shrubs

Alectryon excelsus subsp. *excelsus*	tītoki
Alseuosmia macrophylla	toropapa, karapapa, matukuroimata
Aristotelia serrata	makomako, wineberry
Brachyglottis repanda	rangiora
Coprosma grandifolia	kanono, raurēkau, raurākau, manono
Coprosma lucida	karamū, kāramuramu, glossy karamū
Coprosma robusta	karamū, kāramuramu
Coprosma tenuifolia	
Dodonaea viscosa (planted)	akeake
Dysoxylum spectabile	kohekohe
Elaeocarpus dentatus	hīnau, whīnau
Fuchsia excorticata	kōtukutuku, kōnini
Geniostoma ligustrifolium var. *ligustrifolium*	hangehange
Hebe stricta var. *stricta*	koromiko, kōkōmuka
Hedycarya arborea	porokaiwhiri; pigeonwood
Knightia excelsa	rewarewa
Laurelia novae-zelandiae	pukatea
Leptospermum scoparium agg. (planted)	mānuka
Leucopogon fasciculatus	mingimingi
Litsea calicaris	mangeao
Melicytus ramiflorus subsp. *ramiflorus*	māhoe
Myrsine australis	māpou, matipou, māpau
Olearia furfuracea	akepiro, tanguru
Piper excelsum subsp. *excelsum*	kawakawa
Pittosporum colensoi	rautāwhiri, rautāhiri
Pittosporum tenuifolium	kōhūhū, rautāhiri, rautāwhiri
Pseudopanax arboreus	whauwhaupaku, puahou, five finger
Pseudopanax crassifolius	horoeka, lancewood
Schefflera digitata	patē

Weinmannia racemosa	kāmahi

Monocot. lianes

Freycinetia banksii	kiekie
Ripogonum scandens	supplejack, kareao

Dicot. lianes

Metrosideros diffusa	rātā
Metrosideros fulgens	rātā
Metrosideros perforata	aka
Muehlenbeckia australis	puka
Rubus cissoides agg.	tātarāmoa, tātaraheke , bush lawyer

Lycopods and psilopsids

Huperzia varia	whiri-o-Raukatauri
Lycopodium deuterodensum	puakarimu
Lycopodium volubile	waewaekoukou

Ferns

Adiantum cunninghamii	huruhuru tapairu, maidenhair fern
Asplenium bulbiferum	mouku, hen and chicken fern
Asplenium flaccidum	makawe, ngā makawe o Raukatauri
Asplenium oblongifolium	huruhuru whenua
Asplenium polyodon	petako
Austroblechnum lanceolatum	rereti, nini
Cyathea dealbata	ponga, silver fern
Cyathea medullaris	mamaku
Dicksonia squarrosa	whekī
Hymenophyllum demissum	irirangi, piripiri, filmy fern
Hymenophyllum sanguinolentum	piripiri, filmy fern
Icarus filiformis	pānako
Leptopteris hymenophylloides	heruheru
Microsorum pustulatum	kōwaowao, pāraharaha, hound's tongue fern
Microsorum scandens	mokimoki
Paesia scaberula	mātātā
Parablechnum novae-zelandiae	kiokio
Pneumatopteris pennigera	pākau
Pteridium esculentum	rārahu, bracken
Pteris macilenta	titipo, sweet fern
Pteris tremula	turawera, shaking brake
Pyrrosia eleagnifolia	leather-leaf fern

Orchids

Drymoanthus adversus

Earina autumnalis	raupeka
Earina mucronata	peka-a-waka

Grasses

Microlaena stipoides	pātītī, meadow rice grass
Rytidosperma gracile	

Sedges

Carex healyi	matau
Carex uncinata	kamu matau a Maui, kamu
Morelotia affinis	

Monocot. herbs (other than orchids, grasses, sedges, and rushes)

Astelia hastata	kahakaha
Dianella nigra	tūrutu
Phormium tenax	harakeke, flax (planted)

Composite herbs

Senecio bipinnatisectus	Australian fireweed

Dicot. herbs (other than composites)

Acaena anserinifolia	piripiri, hutiwai
Haloragis erecta subsp. *erecta*	toatoa
Peperomia urvilleana	wharanui

NATURALISED AND EXOTIC SPECIES

Gymnosperms

Chamaecyparis lawsoniana	Lawson's cypress
Pinus radiata	radiata pine

Dicot. trees and shrubs

Berberis glaucocarpa	barberry
Cotoneaster glaucophyllus	cotoneaster
Erica lusitanica	Spanish heath
Leycesteria formosa	Himalayan honeysuckle
Rubus sp. (*R. fruticosus* agg.)	blackberry
Ulex europaeus	gorse
Lonicera japonica	Japanese honeysuckle

Lycopods and psilopsids

Selaginella kraussiana	creeping clubmoss, selaginella

Grasses

Agrostis capillaris	browntop
Anthoxanthum odoratum	sweet vernal
Dactylis glomerata	cocksfoot
Holcus lanatus	Yorkshire fog

Monocot. herbs (other than orchids, grasses, sedges, and rushes)

Crocosmia ×crocosmiiflora	montbretia
Tradescantia fluminensis	tradescantia

Composite herbs

Cirsium vulgare	Scotch thistle
Erigeron sumatrensis	broad-leaved fleabane
Hypochaeris radicata	catsear
Jacobaea vulgaris	ragwort
Mycelis muralis	wall lettuce
Taraxacum officinale	dandelion

Dicot. herbs (other than composites)

Digitalis purpurea	foxglove
Lotus pedunculatus	lotus
Plantago lanceolata	narrow-leaved plantain
Prunella vulgaris	selfheal
Ranunculus repens	creeping buttercup

LIST OF AVIFAUNA RECORDED WITHIN ŌKERE FALLS SCENIC RESERVE DURING SITE VISITS

BIRDS

Indigenous

Gerygone igata	riroriro; grey warbler
Hirundo neoxena neoxena	welcome swallow
Petroica longipes	toutouwai; North Island robin
Phalacrocorax melanoleucos brevirostris	kawau paka; little shag
Prosthemadera novaeseelandiae novaeseelandiae	tūī
Rhipidura fuliginosa placabilis	pīwakawaka; North Island fantail
Todiramphus sanctus vagans	kōtare sacred kingfisher; New Zealand kingfisher
Zosterops lateralis lateralis	silvereye; tauhou

Introduced

Carduelis carduelis	goldfinch
Emberiza citrinella	yellowhammer
Turdus merula	Eurasian blackbird
Turdus philomelos	song thrush

SITE PHOTOGRAPHS

Plate 1: Proposed location of Platform 1. 10 January 2019.

Plate 2: Proposed location of Platform 2. 10 January 2019.

Plate 3: Proposed location of Platform 3. 10 January 2019.

Plate 4: Proposed location of Platform 4. 10 January 2019.

Plate 5: View from proposed location of Platform 4 towards proposed location of Platform 3 (indicated by red box). 10 January 2019.

Plate 6: View from proposed location of Platform 5 across the river to proposed location of Platform 6 (indicated by red box). 13 December 2018.

Plate 7: Existing track barrier near proposed location of Platforms 4 (right) and 5 (left). 10 January 2019.

Plate 8: View from proposed location of Platform 6 across the river to proposed location of Platform 5 (indicated by red box). 10 January 2019.

Plate 9: Proposed location of Platform 8. 13 December 2018.

Plate 10: Proposed location of Platform 9. 13 December 2018.

Plate 11: Proposed location of Platform 12. 14 February 2019.

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Appendix 4

Traffic Impact Assessment
from Traffessionals

1 May 2019

Ella Tennant
Cheal Consultants Ltd

Dear Ella,

Safety Assessment for Proposed Zipline Operation, Okere Adventures, 761 SH 33 Okere Falls

Introduction

This is a brief assessment of a proposed Zipline recreational activity, which Okere Adventures is wishing to attach to the existing Rotorua Rafting business located at 761 SH33 in Okere Falls, which is beside Lake Rotoiti approximately 15km north of Rotorua (refer Figure 1). A traffic impact assessment undertaken by Sigma Consultants Ltd in February 2016 for Rotorua Rafting is also referred to.

In summary, it is concluded that the proposal is satisfactory from a traffic engineering perspective in terms of operation and safety, but with some suggested conditions(s) of consent.

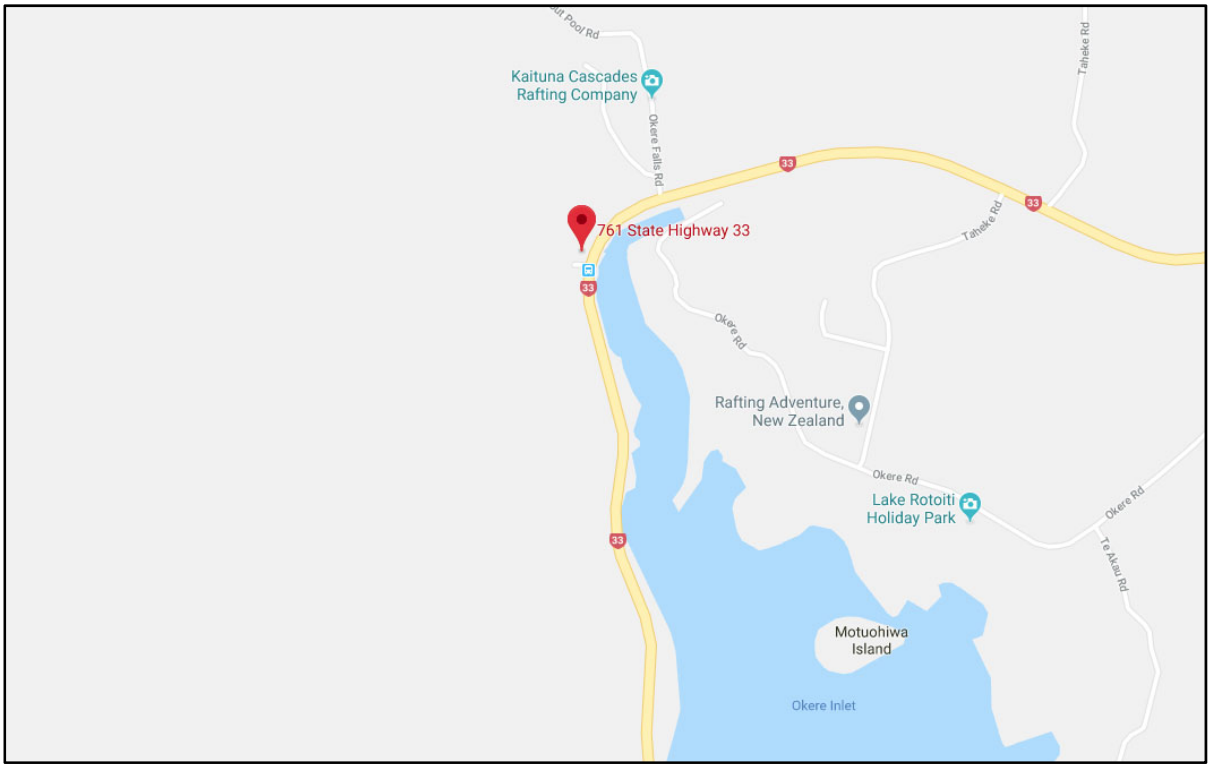

Figure 1: Site Location

Site Description

Rotorua Rafting is an existing operation with on-site car parking and access from SH33 as shown below in Figure 1. The local speed limit is currently 70 km/hr, although a lower speed limit is currently being considered by NZTA for likely implementation in the near future (most likely 60 km/hr, as 70 km/hr speed limits will no longer be used), as well as provision of a pedestrian refuge island which exact location has not yet been specified.

Nearby activities include general lakeside recreational activities, and the Okere Falls Store which was observed around lunchtime on Sunday April 14, 2019 to generate a reasonably slow but steady influx of visitors and pedestrian traffic. Carriageway width in the vicinity is varying and quite generous, allowing for a 3m wide flush median as well as room for on-street parallel parking on both sides of the highway. Figure 2 shows the general arrangement of main activities in the area.

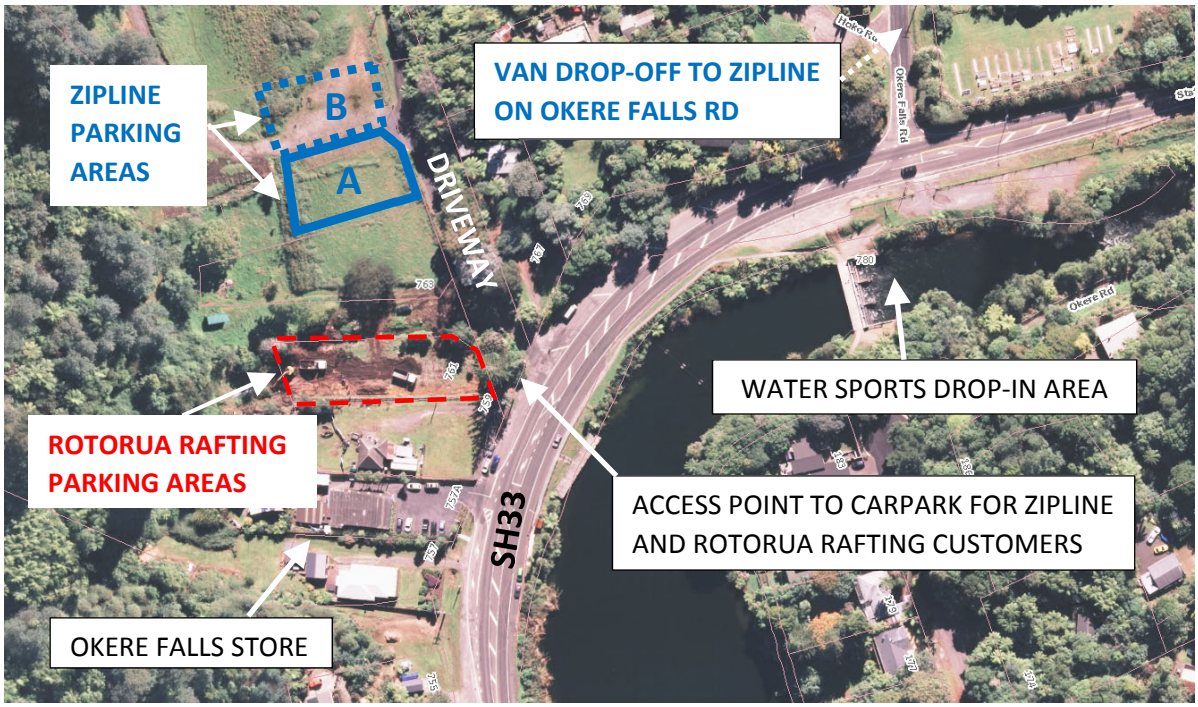

Figure 2: Aerial photo showing access points and car parking areas

In terms of crash history, there were five reported incidents in the past five years in the vicinity of Rotorua Rafting and Okere Falls Road, two of them involving minor injury, as shown below in Figure 3. Three of these crashes were loss-of-control type, and the remaining two involved turning vehicle collisions at the Okere Falls Road intersection. These crash types and the observed pedestrian activity crossing the road, suggest that a reduction of the existing 70 km/hr speed limit is both desirable and appropriate.

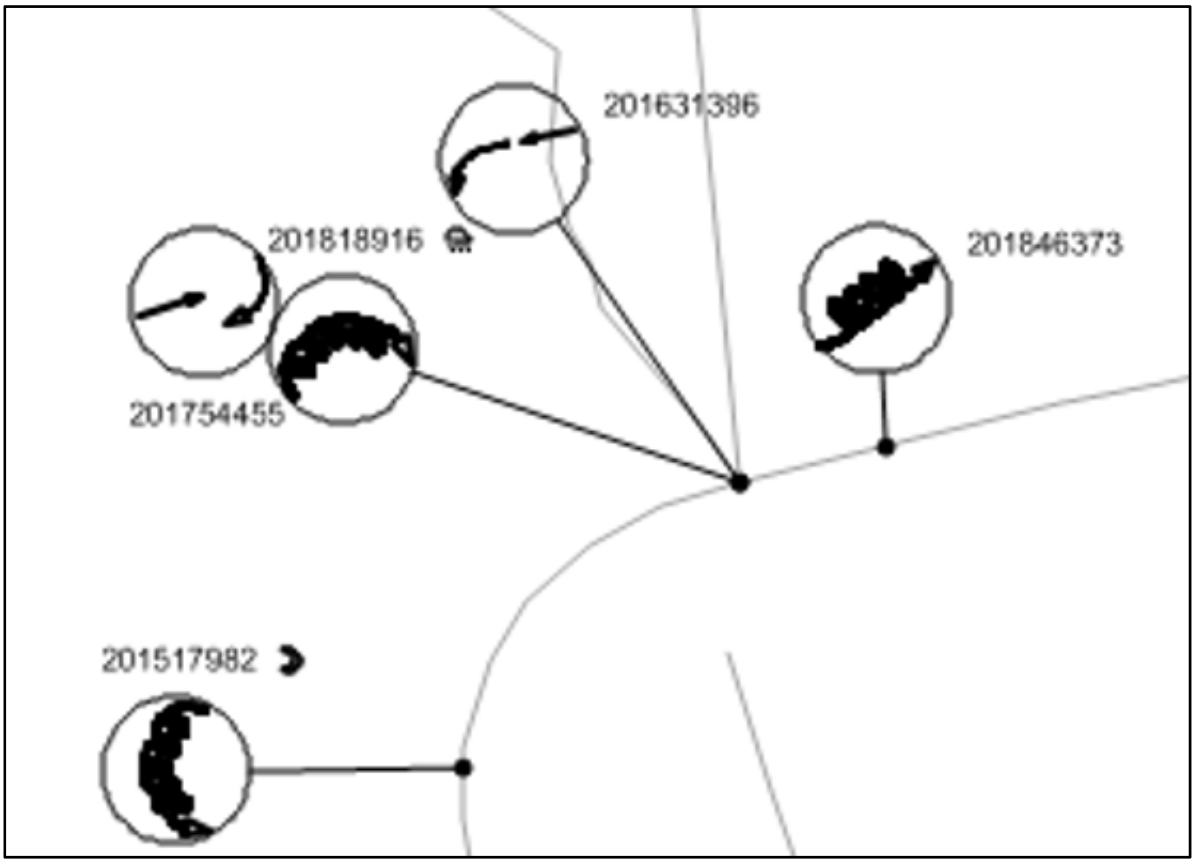

Figure 3: Reported Crashes 2014 – 2018

Proposed Car Parking Arrangements and Expected Parking Demand

Customers to the existing Rotorua Rafting business arrive by either shuttle or their own vehicle, and use the parking area shown in red in Figure 2. The proposed Zipline activity is effectively an expansion of the same operator's activities - utilising the same building to meet initially, and then head off by shuttle to the Zipline activity which will be via Okere Falls Road.

In terms of parking demand, the Zipline operation is expected to operate as follows:

- 3 hr tour duration
- 30 min interval between tours
- Tour group approximate maximum of 10 customers with two staff each
- Approximately 25-30% of patrons arrive to the site by shuttle from Rotorua, the rest by private vehicle (this is based on client estimate of the existing Rotorua Rafting activity).
- An average of approximately 3 customers arrive in each vehicle (based on a conservative client estimate).

Based on the above assumptions, maximum customer parking demand for the Zipline activity could be expected to be for around 15 vehicles at any one time. Staff can either park in Area A on the site or cycle or walk to site, and apparently most do live locally.

Parking Area A as shown in Figure 2 is currently a grassy paddock, and is proposed to be hard surfaced for provision of Zipline patron parking. This area is approximately 20m x 38m and will be able to accommodate at least 20 vehicles in a 90 degree layout. It is expected that this should be adequate to accommodate Zipline customer and staff parking, but if in practice this turns out to be not the case then an option exists to also hard surface the adjacent Area B which is of similar area. It is suggested that this option be included as consent condition.

Access and Shuttle Movements on SH33

Access for Zipine patrons to and from SH33 is via a sealed shared driveway with very good sightlines of approximately 130m in both directions, as shown in Figure 4 below. Austroads Safe Intersection Sight Distance (SISD) for 70 km/hr design speed is some 141m, but based on road geometry it is estimated that 85% operating speeds may be lesser than this (affirmed by the 2016 Sigma Consultants TIA), and the expected NZTA reduction of the speed limit should ensure that. Once at their rallying point at the Rotorua Rafting building, they are shuttled to Okere Falls Road where the Zipline activity is located. Driver sightlines for exiting vehicles at Okere Falls Road is similarly very good, with approximately 130m to the south and 300m to the north, refer Figure 5. Right-turning vehicles at both locations are able to utilise a 3m wide flush median. In the meantime before any speed limit reductions are implemented, it is suggested that some roadside vegetation as shown on Figures 4 & 5 in red could be cleared to slightly improve driver sightlines from the access and Okere Falls Road.

Figure 4: Looking left and right from shared driveway onto SH33

Figure 5: Looking left and right from Okere Falls Road onto SH33

The shared driveway has a seal width of approximately 4m that flares out as it meets SH33. Estimated traffic volumes on this shared driveway in the Sigma Consultants report (where it is referred to as the Maori Roadline) were at around 30 vehicle trips per day for the existing residential and farm activities, plus the Rotorua Rafting vehicle activity. In order to minimise the chance of conflicting movements on the driveway area closest to SH33, which could result in entering vehicles queuing back onto the highway, a section of driveway seal widening is recommended as shown in Figure 6. This will enable driveway queuing of up to four or five exiting vehicles and still allow entering drivers to get past.

Figure 6: Proposed driveway seal widening

Overall based on site observations and reported crash history in the vicinity, it is concluded that the proposed public access and shuttle arrangement is satisfactory in terms of operation and safety. The reduced speed limit being proposed does seem appropriate given the observed roadside parking and pedestrian activities, and will result in a safer road environment in terms of this proposal. It is noted that the Rotorua Rafting parking is contained onsite, and the Zipline will be able to provide sufficient onsite parking also.

Conclusion

In summary, it is concluded that from a traffic engineering perspective there is no significant reason this proposal cannot be granted consent. However, some conditions of consent are recommended:

- Subject to justification by Rotorua District Council, Parking Area B may also be requested to be hard surfaced for provision of car parking for Zipline customers. A review may occur within 6 months, and also one year after start of operation.

- Driveway seal widening is undertaken as described to attain a minimum seal width of 5m for up to 25m from SH33.

In addition, it is suggested that consideration be given to removing some roadside vegetation on the east side of SH33 for purpose of increasing driver sightlines.

Yours faithfully,

Duncan Campbell
Principal Traffic Engineer & Director
TRAFFESSIONALS Ltd

Appendix 5

Preliminary Design Comments from Avalon Geotechnical Services

Ref: Opps 2019 - Okere Adventures – Zipline Systems

18/02/19\

Preliminary Design Comments

Dear Sam

As requested, please find some preliminary design calculations for the zip lines for your project. As the project progresses, we will further develop these to confirm work as we address each unique location. This approach allows us to manage and minimise impact to the environment and apply a minimum impact approach for each station and to anchor each station according to the geology.

All design work is based on meeting BS.EN.15567-1 - 2007 Construction and Safety Requirements which is used as the basis for the Activity Safety Guideline, High Wire & Swing. This ASG is to meet the requirements of the HSWA 2015, Adventure Activities Regulations 2011.

The geology of the site is reasonably well described, and we do not believe there would be any benefit in geotechnical testing for the projection. This would be both time and cost prohibitive, however geological understanding of each site can be gained while drilling and where issues are encountered a solution or change in design can be made to suit that specific location. If we are concerned in the early stage with a location, we can carry out some initial test drilling to confirm design prior to production work.

I have detailed a loading scenario based on a 400m zipline with a 2-person load using 12mm wire rope with various deflection angles. Typically, most ziplines run around 140° so the 12mm will meet the need the need for strength however some of the design decision will be around the factor of safety (FOS) that is decided on for your peace of mind. In the load lifting industry, wire rope rigging this is typically 4 however with the calculation at 160 degrees the actual FOS is around 8:1.

As we progress the work, we will carry out load testing, on site measuring of the deflection angle and confirm the indicated calculations. We would also recommend as good practice that this information is reviewed by a suitable engineer to confirm safety and system suitability.

Regards

Kip Mandeno

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Calculations

Design Calculation		
INPUTS		
Systems FOS	4	number
Anchor FOS	100%	addition to system FOS
Wire Rope Diameter	12.00	mm
Person load on Zipline	2	kN
Length of zipline	400	m
Deflection of zipline	120	degrees in centre
OUTPUTS		
MBS of wire rope	9250.00	6/19 IWRCg
WLL of rope as per FOS	22.69	kN
Total load of cable & persons	4.43	kN
Load on Anchors	4.43	kN
% of load to WLL off wire rope	19.52	%
Anchor strength requirement	17.72	kN minimum to system FOS
Anchor strength requirement	35.43	kN to meet FOS + safety %

Design Calculation		
INPUTS		
Systems FOS	4	number
Anchor FOS	100%	addition to system FOS
Wire Rope Diameter	12.00	mm
Person load on Zipline	2	kN
Length of zipline	400	m
Deflection of zipline	140	degrees in centre
OUTPUTS		
MBS of wire rope	9250.00	6/19 IWRCg
WLL of rope as per FOS	22.69	kN
Total load of cable & persons	4.43	kN
Load on Anchors	6.47	kN
% of load to WLL off wire rope	28.54	%
Anchor strength requirement	25.90	kN minimum to system FOS
Anchor strength requirement	51.80	kN to meet FOS + safety %

Design Calculation		
INPUTS		
Systems FOS	4	number
Anchor FOS	100%	addition to system FOS
Wire Rope Diameter	12.00	mm
Person load on Zipline	2	kN
Length of zipline	400	m
Deflection of zipline	160	degrees in centre
OUTPUTS		
MBS of wire rope	9250.00	6/19 IWRCg
WLL of rope as per FOS	22.69	kN
Total load of cable & persons	4.43	kN
Load on Anchors	12.75	kN
% of load to WLL off wire rope	56.21	%
Anchor strength requirement	51.01	kN minimum to system FOS
Anchor strength requirement	102.02	kN to meet FOS + safety %

Appendix 6

Written Approvals

Written Approval of Affected Persons

pursuant to Section 88 of the Resource Management Act 1991

DESTINATION ROTORUA — Rotorua District Council

Please note:

Before completing this form please read the *Information Sheet* on the reverse. If you still have queries you would like answered, please contact the Planning Services Department at Rotorua District Council, phone (07) 348 4199 or fax (07) 346 3143.

For office use only:			
- P/file:			
- Form checked for completeness:	☐		
- Plan signed:	☐		
- All owners/occupiers	Yes/No		
- Checked by:		Date:	

Application Details

Applicant's Full Name: Okere Adventures

Address of proposed activity: Zipline at Okere Falls Scenic Reserve and 811 SH33 and parking at Okere 1B3C3B2

Brief description of proposed activity: *(State exactly what has been agreed to, i.e., to erect a garage 1.5m from the side boundary with my property.)*

Construct and operate 6 ziplines in the Okere Falls Scenic Reserve with two ziplines crossing over to the neighbouring rural land. Parking will be formed at Okere 1B3C3B2 and the customer check-in will occur at the Rotorua Rafting site at 761 SH 33. The ziplines will include timber platforms of approximately 5sqm and approximately 500mm high, two wire cables, 3 point Reidbar anchor system with timber post and plastic barrels to prevent unauthorised use. New tracks will be required between the ziplines.

Affected Person/s

Affected Person's Full Name(s): Mark Hodge

Postal Address: 759 S.H. 33 Okere Falls

Phone: 07 3624214 Fax:

I am / we are the authority to sign on behalf of the OWNER(S) / ~~OCCUPIER(S)~~ of the property located at: 759 S.H. 33 Okere Falls.

(delete one)

[PLEASE NOTE: In most instances the Council will require the approval of ALL legal owners and the occupiers of the affected property, e.g., consent from BOTH Mr and Mrs Smith is required, or all trustees.]

Affected Person/s Approval

NOTE: You should only sign below if you fully understand the proposal, and if you support or have no opposition to the proposal you have been asked to consider. You are under no obligation to sign this form. There is an information sheet on the back of this form for your information. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.

1 I/We have been given details of the full and final proposal including a copy of the application form, assessment of the environmental effects and plans.

2 I/We understand that the aspects of non-compliance with the Rotorua District Plan to which I/we are giving my/our written approval are as follows:

(a) All commercial recreation activities in the Reserve Zone require resource consent

(b) All commercial recreation activities within the reserve require a concession from the Department of Conservation

(c)

3 I/We confirm that we have signed and dated the plans of the proposal and the assessment of environment effects prepared by the Applicant, and have attached the signed documents to this form.

4 I/We understand and accept that once I/we give my/our approval the Council cannot take account of any actual or potential effect of the activity and/or proposal upon me/us when considering the application and the fact that any such effect may occur shall not be relevant grounds upon which the Council may refuse to grant the application; and

5 Further, I/we understand that at any time before the final decision is made on the application, I/we may give notice in writing to the Council that this approval is withdrawn, under S104(4) of the Resource Management Act 1991.

Signed: M Hodge Signed:

Dated 7-5-2019

1061 Haupapa Street
Private Bag RO3029
Rotorua

Phone: 07 – 348 4199 Fax: 07 – 346 3143
E-mail: mail@rdc.govt.nz
Web: www.rdc.govt.nz

Doc No. IT-643206
Ref: 65-26-026
Version 1 – 17/06-08

INFORMATION SHEET

So you are an affected party

What does this mean?

It means your neighbour or someone in your area is undertaking an activity which:

a) is not permitted as of right under the Rotorua District Plan, and
b) could potentially have an effect on you.

This could include something like the size of a garage which is proposed to be closer to your shared boundary than permitted under the District Plan, or something larger, such as an outdoor stadium in your neighbourhood which may have noise and traffic impacts.

What is required of the applicant?

Council determines who may be affected by a proposal and it is then the applicant's role to approach each owner or occupier and:

- explain the application and what consent is sought for;
- show you plans of the proposal;
- show you an assessment of the environmental effects of the proposal (explain how the proposal may affect you).

What is required of you?

If you have NO OBJECTIONS to the proposal, then you may sign the documents to show that you consent. You will need to sign the affected parties form, the plans and the assessment of environmental effects.

Do not sign these documents unless you consent to the proposed activity as, if you have signed these forms, Council will not take into account any effect on you.

If you OBJECT to the proposal, then the person proposing the application may:

- withdraw the application
- change the application to meet your concerns
- decide to have the application notified

If the application is notified by Council, it gives you an opportunity to make a formal submission on the proposal and explain the reasons for your objection.

What if you change your mind?

If you decide to support the proposal, then you should contact the person proposing the development or Council as this may save the applicant from costly notification fees and procedures.

If you decide that you no longer support the proposal, you can withdraw your consent, but only up until the date of a hearing or when the consent has been granted by Council. Once the hearing has been held or the Council granted consent, you are not able to challenge Council's decision.

Can you make the consent conditional?

No, you may not make your approval conditional on, for example, a particular roof colour being used. You may, however, make a private arrangement with your neighbour about such matters. Alternatively, they may change the plan or proposal to meet your requests.

What if you have further questions?

If you have any concerns about signing an affected parties form, you should seek independent advice or contact a Council Planner for further clarification.

1061 Haupapa Street
Private Bag RO3029
Rotorua

Phone: 07 – 348 4199
E-mail: mail@rdc.govt.nz
Web: www.rdc.govt.nz

Fax: 07 – 346 3143

Doc No. IT-643206
Ref: 65-26-026
Version 1 – 17/06-08

OKERE

Okere Adventures Iwi Consultation Acknowledgment

The Applicant Sam Sutton Director of Okere Adventures has been in iwi consultation in relation to the development of a 7 Stage Zipline through Okere Falls Scenic Reserve and adjoining land Taheke Papakainga 30. Under ownership and management of Okere Inc.

Okere Advenutres has been consulting with;
Piki Thomas of Ngati Hinikiri
" " of Ngati Hinerangi

which are the two Hapū affected.

I/ We acknowledge that we have seen the locations of the proposed ziplines and acknowledge that they aren't situated around any Urupa or Tapu sites.

I/We will be signing off on all plans submitted through the application proposal.

I/We understand that after the venture has been approved we are unable to withdraw our acceptance until the current concession has expired.

Hinekiri

Signed _____

Name Piki Thomas

Date 2.3.19

Hinerangi

Signed _____

Name Piki Thomas

Date 2.3.19

Overall Site Plan

OKERE Adventures

Office Address: 761 State Highway 33, Okere Falls Rotorua

Proposed Activity Address: Okere Falls Scenic Reserve - Troutpool Road

Land Owners: Crown/ DOC have ownership of the Scenic Reserve. Platform 9& 10 are located on Maori Land Block Taheke Papakaigia 30 Owned and Managed by Okere Inc.

Proposed Activity: Eco/Cultural Guided Zipline tour through the scenic reserve showcasing and enhancing the Okere Falls Scenic Reserve with six ziplines ranging from 40m to 400m.

Engineering/Design: Avalon Engineering will be designing building/certifying anchors/ exact location of lines and building the course due to their available technology and experience in both zipline building and minimal impact construction techniques required in difficult and protected sites.

Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: PIKI THOMAS Date: 2.3.19

Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: Piki Thomas

Date: 2.3.19

OKERE Adventures

Riparian Planting: To enhance the area and give back Okere Adventures will be replanting the river right riparian boundary. Each tour will plant one native tree in a pre-dug hole which will then have a name tag added to the tree so clients can feel connected to improving the area.

Once the outlined area is full, we will then move to the western face of the reserve where currently bracken and gorse is overrunning native vegetation.

Exotic Plant removal:
Okere Adventures will employ groundsmen to help in the preservation of the area including removal of non-native plants like Gorse, Blackberry, and bracken. These areas will again be replanted with native vegetation.

OKERE
Adventures

Zipline Placement: Zipline 1 located to the side of the "Powerhouse" waterfalls. To minimise the visual impact we have offset the line from directly above the waterfalls to reduce any scenic implications from the viewing platforms.

Track Placement:
All track building will be created by building up as opposed to cutting tracks to eliminate the risk of damaging any roots. A permeant surface will be placed using Geotextile matting to separate between organic material and gravel. The tacks will be single track with guides briefing clients to ensure they stay on the track.

Land Owners:
Crown/ DOC have ownership of the Scenic Reserve with two anchors sitting on Maori Land Block Taheke Papakaigia 30 Managed by Okere Inc.

Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: Piki Thomas Date: 2.5.19

OKERE
Adventures

Zipline Placement: Zipline 2 is over the jewel of Okere Falls which is Tutea falls. To minimise the visual impact, we have chosen the highest possible takeoff and landing locations to keep the line above the line of sight to keep the untouched visual aspect for photographers and site seers alike.

Track Placement:
All track building will be created by building up as opposed to cutting tracks to eliminate the risk of damaging any roots. A permeant surface will be placed using Geotextile matting to separate between organic material and gravel. The tacks will be single track with guides briefing clients to ensure clients stay on the track.

Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: PIKI THOMAS Date: 2.3.19

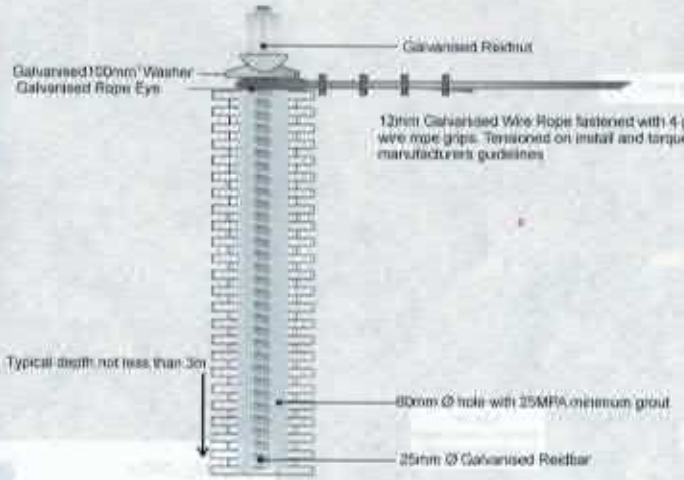
OKERE Adventures

Zipline Placement: Ziplines have been designed to utilise the topography of the land to reduce the impact on vegetation. Zipline 6 has been designed to get an overall view on the area and to reduce traffic movement on Troutpool Road by bringing clients back to the starting point.

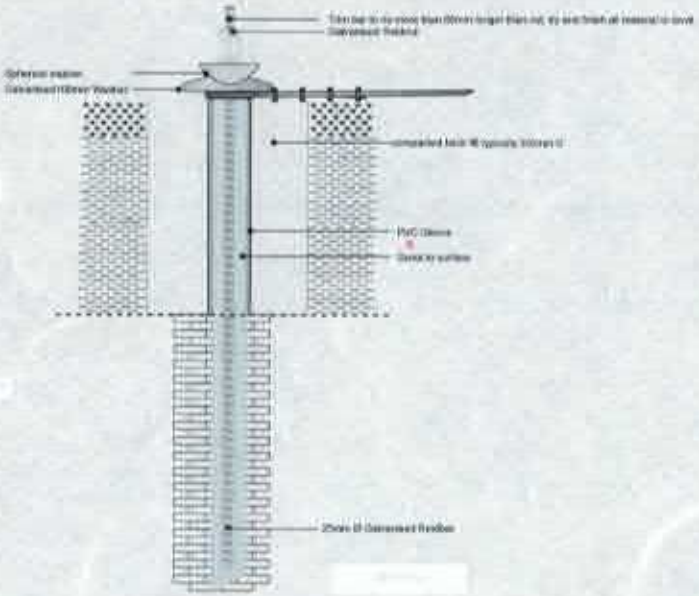
Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: PIKI THOMAS Date: 2.3.19

Typical Anchor Detail



Direct to rock



Through overlying soil

Rotorua River Rafting Anchor Concept

AVALON INDUSTRIAL SERVICES LTD

Indicative concept for light anchoring of Zip lines for Rotorua Rafting - No testing or load work has been completed however this typically only affects depth of anchor

Not to scale

AVALON // GEOTECHNICAL SERVICES

Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: PIKI THOMAS Date: 2.3.19

OKERE Adventures

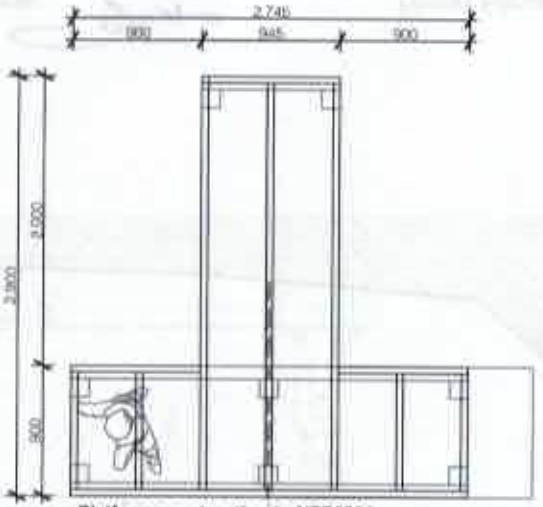
Anchor Detail: Okere Adventures has chosen Avalon Geotechnical and Engineering services to design and build the course due to their extensive knowledge and construction systems which will moderately reduce impacts to the area by using multiple "soil nail" anchor systems which have a minimal footprint.

Tools required will be pneumatic augers to drill 100mm ø holes up to 16m deep. These operate with a 150m range from vehicle reducing the requirement for heavy machinery into the reserve.

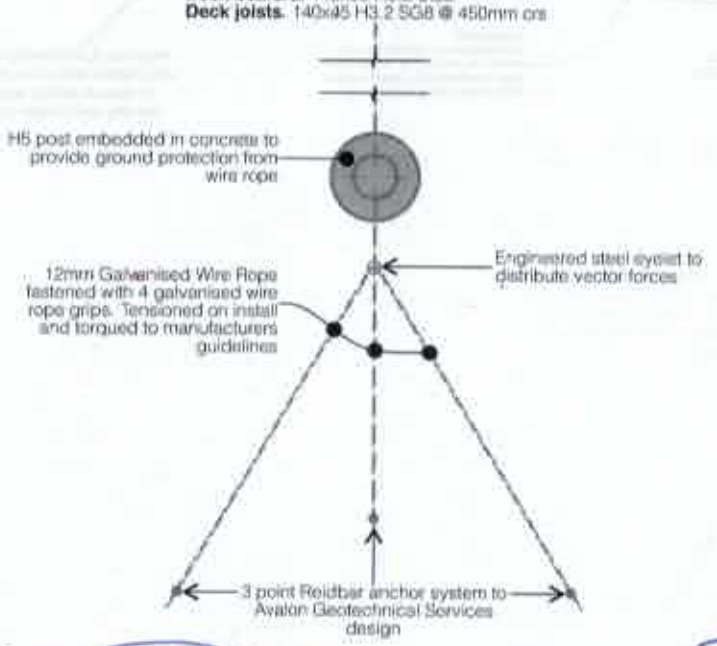
Concrete Grout will be poured using a concrete pump from vehicles on the track with 150m line to reduce the impact of trodding through construction paths bringing materials.

Galvanised Line will be used at minimal thickness allowed for line rating to reduce visual impact.

A black coloured line has been looked into to again reduce visual impact but due to the fact of wear and tear it was decided against.



Platform construction to NZS3604
Deck Piles. 125Sq. H5 piles in 20mpa insitu concrete footing. Footing size tbc with engineer.
Deck bearers. 140x90 H3.2 SG8.
Deck joists. 140x45 H3.2 SG8 @ 450mm crs



Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: PIKI THOMAS Date: 2.8.19

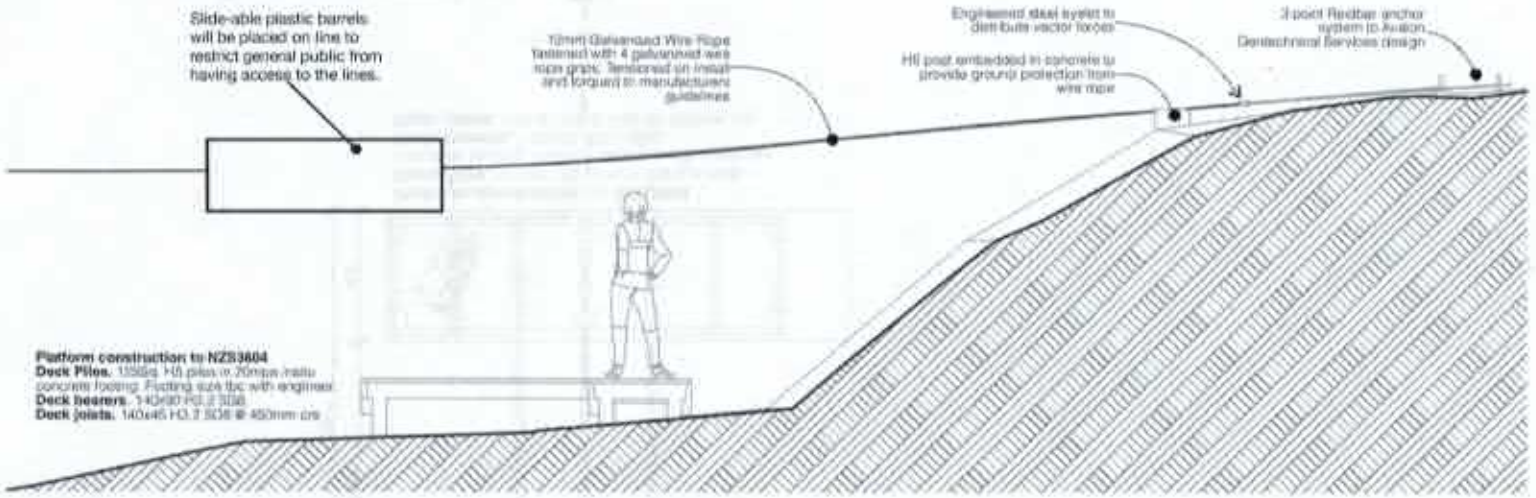
OKERE Adventures

Typical Anchor/Platform Detail:

Multiple anchors will reduce footprint while increasing load capacity. The zipline will then run on a 200mm H5 post to provide ground protection.

Platforms will be built to **NZS3604** to provide ground protection in high traffic locations again.

Platforms will be kept natural colour to match existing infrastructure of DOC's walkways and paths.



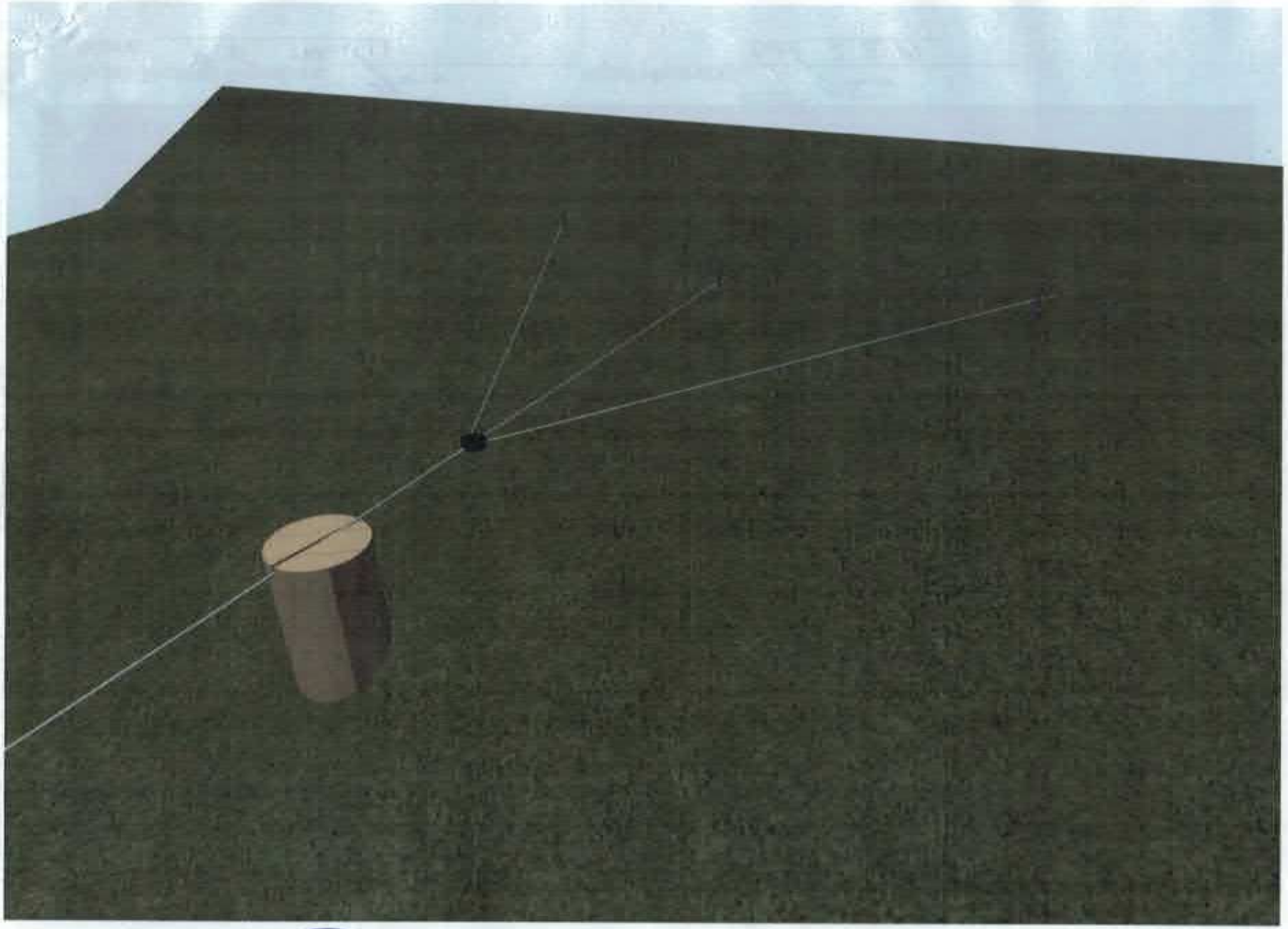
Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: Piki Thomas Date: 2.3.19

OKERE Adventures

Typical Cross-section: This is a typical cross-section for the design of the course by using the natural topography to generate natural platforms and increase stability on lines.

Public Safety: Restricting Public access to the lines and tampering with anchors is something that will be different for each site. Every platform will have a plastic barrel attached to the line to restrict any public from attempting to slide down the line. It will be 1.5m long and will be pushed down the line after every tour to block from public use.

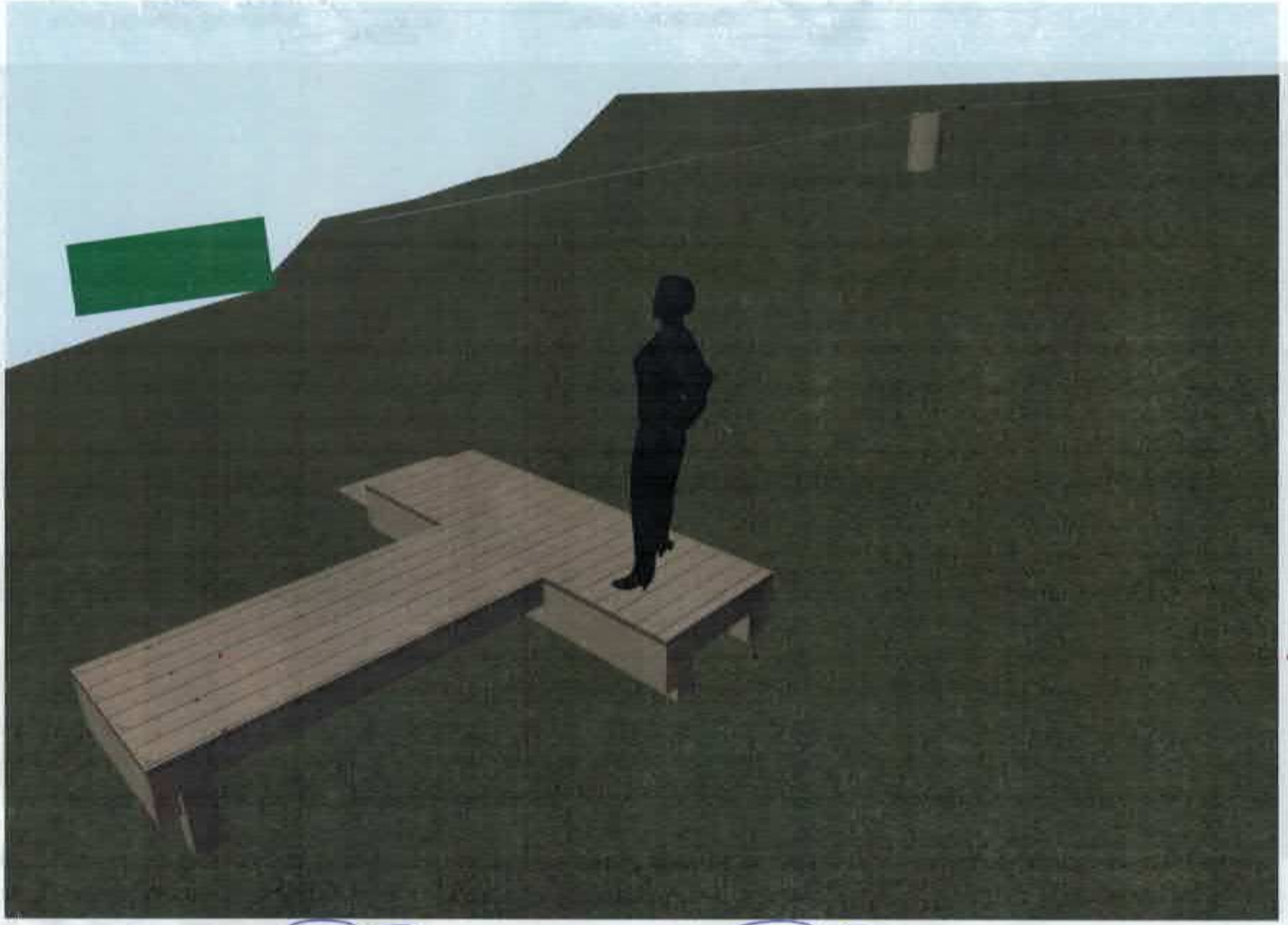


OKERE
Adventures

Anchor Detail:

Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: PIKI THOMAS Date: 2.3.19



Ngati Hinekiri Signature: _____ Ngati Hinerangi: _____

Name: PIKI THOMAS Date: 2.3.19

OKERE
Adventures

Anchor Detail : Using ground anchors as opposed to trees will enable us to keep minimal impacts and structures. It also enables us to have a leave no trace approach to the venture. All anchors and structures are able to be removed with little damage.

Clients will use natural topography of the land to seperate from platform and become suspended.

Written Approval of Affected Persons

pursuant to Section 88 of the Resource Management Act 1991

Please note:

Before completing this form please read the *Information Sheet* on the reverse. If you still have queries you would like answered, please contact the Planning Services Department at Rotorua District Council, phone (07) 348 4199 or fax (07) 346 3143.

For office use only:			
- P/file:			
- Form checked for completeness:			☐
- Plan signed:			☐
- All owners/occupiers			Yes/No
- Checked by:		Date:	

Application Details

Applicant's Full Name: Okere Adventures

Address of proposed activity: Zipline at Okere Falls Scenic Reserve and 811 SH33 and parking at Okere 1B3C3B2

Brief description of proposed activity: *(State exactly what has been agreed to, i.e., to erect a garage 1.5m from the side boundary with my property.)*

Construct and operate 6 ziplines in the Okere Falls Scenic Reserve with two ziplines crossing over to the neighbouring rural land. Parking will be formed at Okere 1B3C3B2 and the customer check-in will occur at the Rotorua Rafting site at 761 SH 33. The ziplines will include timber platforms of approximately 5sqm and approximately 500mm high, two wire cables, 3 point Reidbar anchor system with timber post and plastic barrels to prevent unauthorised use. New tracks will be required between the ziplines.

Affected Person/s

Affected Person's Full Name(s): Piki Thomas (Chairperson)

Postal Address: C/- Kusabs Lasike Ltd Chartered Accountants, PO Box 441, Rotorua 3040

Phone: 027 244 8784 Fax:

I am / we are the authority to sign on behalf of the OWNER(S) / ~~OCCUPIER(S)~~ of the property located at: Okere 1B3C3B2 and Adjoining Blocks Inc

(delete one)

[PLEASE NOTE: In most instances the Council will require the approval of ALL legal owners and the occupiers of the affected property, e.g., consent from BOTH Mr and Mrs Smith is required, or all trustees.]

Affected Person/s Approval

NOTE: You should only sign below if you fully understand the proposal, and if you support or have no opposition to the proposal you have been asked to consider. You are under no obligation to sign this form. There is an information sheet on the back of this form for your information. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.

1 I/We have been given details of the full and final proposal including a copy of the application form, assessment of the environmental effects and plans.

2 I/We understand that the aspects of non-compliance with the Rotorua District Plan to which I/we are giving my/our written approval are as follows:

(a) All commercial recreation activities in the Reserve Zone require resource consent

(b) All commercial recreation activities within the reserve require a concession from the Department of Conservation

(c)

3 I/We confirm that we have signed and dated the plans of the proposal and the assessment of environment effects prepared by the Applicant, and have attached the signed documents to this form.

4 I/We understand and accept that once I/we give my/our approval the Council cannot take account of any actual or potential effect of the activity and/or proposal upon me/us when considering the application and the fact that any such effect may occur shall not be relevant grounds upon which the Council may refuse to grant the application; and

5 Further, I/we understand that at any time before the final decision is made on the application, I/we may give notice in writing to the Council that this approval is withdrawn, under S104(4) of the Resource Management Act 1991.

Signed:  Piki Thomas Signed:

Dated 24.04.2019

So you are an affected party

What does this mean?

It means your neighbour or someone in your area is undertaking an activity which:

a) is not permitted as of right under the Rotorua District Plan, and
b) could potentially have an effect on you.

This could include something like the size of a garage which is proposed to be closer to your shared boundary than permitted under the District Plan, or something larger, such as an outdoor stadium in your neighbourhood which may have noise and traffic impacts.

What is required of the applicant?

Council determines who may be affected by a proposal and it is then the applicant's role to approach each owner or occupier and:

- explain the application and what consent is sought for;
- show you plans of the proposal;
- show you an assessment of the environmental effects of the proposal (explain how the proposal may affect you).

What is required of you?

If you have NO OBJECTIONS to the proposal, then you may sign the documents to show that you consent. You will need to sign the affected parties form, the plans and the assessment of environmental effects.

Do not sign these documents unless you consent to the proposed activity as, if you have signed these forms, Council will not take into account any effect on you.

If you OBJECT to the proposal, then the person proposing the application may:

- withdraw the application
- change the application to meet your concerns
- decide to have the application notified

If the application is notified by Council, it gives you an opportunity to make a formal submission on the proposal and explain the reasons for your objection.

What if you change your mind?

If you decide to support the proposal, then you should contact the person proposing the development or Council as this may save the applicant from costly notification fees and procedures.

If you decide that you no longer support the proposal, you can withdraw your consent, but only up until the date of a hearing or when the consent has been granted by Council. Once the hearing has been held or the Council granted consent, you are not able to challenge Council's decision.

Can you make the consent conditional?

No, you may not make your approval conditional on, for example, a particular roof colour being used. You may, however, make a private arrangement with your neighbour about such matters. Alternatively, they may change the plan or proposal to meet your requests.

What if you have further questions?

If you have any concerns about signing an affected parties form, you should seek independent advice or contact a Council Planner for further clarification.

1061 Haupapa Street
Private Bag RO3029
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Phone: 07 – 348 4199 Fax: 07 – 346 3143
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Web: www.rdc.govt.nz

Doc No. IT-643206
Ref: 65-26-026
Version 1 – 17/06-08

Appendix 7

HAIL comments from Bay of Plenty Regional Council (BOPRC)

18 December 2018

Hannah Julian
Cheal Consultants Ltd
PO Box 396
Rotorua

Sent via email attachment

Dear Hannah

Site Contamination Enquiry : Okere Falls Reserve

In response to your enquiry regarding the above site, we advise that we were unable to locate any information on our register regarding Hazardous Activities and Industries List (HAIL) activity or contamination.

A HAIL activity is a past or present activity occurring on site that has the potential to cause contamination (e.g. service station, timber treatment site, horticultural site, automotive dismantlers etc). The list of HAIL activities was compiled by the Ministry for the Environment (MfE). Please view their web site for further information.

The Bay of Plenty Regional Council has not yet assessed every site in the region where a hazardous activity is, or has taken place. Therefore there is a possibility that a HAIL activity may have occurred or is occurring on the site.

If you are concerned that a HAIL activity may have taken place, the cautious way to proceed would be to undertake an independent audit of the site.

We recommend you also contact the **Rotorua Lakes Council**, which may hold additional information about this site that we are unaware of.

If you wish to discuss the matter further, please contact me at 0800 884 881 extension 9453 or Emma.Joss@boprc.govt.nz.

Yours faithfully

Emma Joss
Senior Regulatory Project Officer

for General Manager Regulatory Services

Appendix 8

Dept of Conservation
Concession Forms

Department of Conservation
Te Papa Atawbai

Applicant Information Form 1a
Notified or Non-notified process

We recommend that you contact your usual permissions advisor, or the appropriate Department of Conservation Office to discuss the application prior to completing the application forms - see appendix for contact details.

Please provide all information requested in as much detail as possible. Applicants will be advised if further information is required before this application can be processed by the Department.

This form must be completed for all longer term applications (ie not one-off applications), then please fill in and attach the form(s) for the activities you wish to undertake. If extra space is required for answering please attach and label according to the relevant section.

Once you have filled in your application form, please complete this checklist to ensure that all components of your application form are complete. This will help prevent any possible delays in the processing of your application:

- ☑ Legal status registration number (if not an individual) 9429047427426
- N/A Written testimonials (if required)
- ☑ Written consultations (if applicable)
- ☑ All appropriate activity application forms - for concessions we require the applicant information form **and** relevant activity form(s)
- ☑ Supporting evidence for Environmental Impact Assessment (if required)
- ☑ Supporting information and detail including maps, site plans, building plans as required in activity forms. **Note some applications require GPS Co-ordinates**
- ☑ Supporting evidence for details of activity forms
- ☑ Have you read the section regarding the liability of the applicant for payment of fees?
- ☑ **Have you signed your application?**

All efforts in putting together a detailed application are greatly appreciated and will allow the Department to effectively and efficiently process your application.

A. Applicant Details

Applicant Name (full name of registered company or individual)	Okere Adventures Ltd							
Legal Status of applicant (tick)	**Individual**		**Registered Company**	✓	**Trust**		**Incorporated Society**	
Other (please specify full details)								
Please supply the company, trust or incorporated society registration number:	9429047427426							
If an individual please supply your date of birth (this is a unique identifier for you):								
Trading Name (if different from Applicant name)	Okere Adventures							
Postal Address	PO Box 969 Rotorua 3040							
Street Address (if different from Postal Address)								
Registered Office of Company or Incorporated Society (if applicable)	Business Hq 308 Queen Street East Hastings 4122							
Phone	021 026 07441		**Website**					
Contact Person and role	Sam Sutton, CE							
Phone			**Cell Phone**	021 026 07441				
Email	samkaituna@gmail.com							
Contact Person and role	Ella Tennent, planning consultant for concession application							
Phone			**Cell Phone**	027 322 5414				
Email	ellat@cheal.co.nz							

B. Activities applied for

Please fill in all the forms that are applicable in order to cover all the activities the applicant wishes to undertake on public conservation land. Please tick below the forms that have been completed, and attach.

ACTIVITY		FORM	✓
Grazing		2a	
Land use:			
A.	Tenanting and/or using existing DOC facility/structure	3a	
B.	Use of public conservation land for private/commercial facility/structure	3b	✓
C.	Easements across public conservation land including right of way, stock access, convey electricity, drain sewerage, waterpipes etc	3c	
Guiding/Tourism/Recreation:			
A.	Walking/Hiking/Tramping/Hunting/Fishing/Horses/4WD activities etc	4a	✓
B.	Watercraft activities	4b	
C.	Aircraft activities	4c	
Filming		5a	
Sporting Events		6a	
Other (activities that may not be sufficiently covered in the above forms)		7a	

C. Background Experience of Applicant

Please provide relevant information relating to the applicant's ability to carry out the proposed activity (e.g. details of previous concessions, membership of professional organisations and relevant qualifications). Attach details and label Attachment 1a:C.

Sam Sutton is the owner of Rotorua Rafting and has been the business owner since 2011.

Rotorua Rafting operates within the Okere Scenic Reserve and is an existing concessionaire.

Has the Applicant or any of the company directors, trustees, partners, or anyone involved with the Application been convicted of any offence? Does the Applicant or any of the company directors, trustees, partners, or anyone involved with the Application have any current criminal charges pending before the court? If yes, please supply details.

No

D. Testimonials

Please attach two written testimonials, together with the names, occupations, addresses and phone numbers of two people who will vouch for the proficiency of the applicant in the proposed activity. At least one testimonial should contain information in relation to the financial viability and standing of the applicant. These testimonials are to be labelled Attachment 1a:D.

E. Consultation Undertaken

Most applications require consultation with whanau/hapu/iwi (local Maori), and other interested parties. Please read the information on the DOC website and contact the nearest Department of Conservation office to discuss what is required. Written expert views, advice or opinions concerning your proposal may also be attached to support the application. Attach any proof of consultation to the application and label Attachment 1a:E.

4 meetings with Okere Scenic Trust Board including 22 July 2018 and 17 December 2018, numerous meetings with Okere Incorporated and hapu groups (written approval provided). Refer to appended report.

F. Insurance

Concessionaires are required to indemnify the Minister against any claims or liabilities arising from their actions. If this application is approved, the applicant will be required to hold Public Liability, and possibly Statutory Liability and/or vehicle insurance. The level of cover will depend on the nature of the activity. Please contact the nearest Department of Conservation office to discuss what is required.

G. Public Notification

Some activities and/or types of concession applications require public notification if the Department forms an intent to grant the concession. This increases the time and cost of processing the concession. The usual circumstances when public notification is required are thus:

- The Application is for exclusive use of public conservation land (ie a lease);
- The Application is for a licence for a term longer than 10 years;
- Other concessions do not require public notification unless the adverse effects of the activity are such that it is required.

A permissions advisor can advise you as to the type of concession your activity requires and whether or not it needs notification.

H. Fees and costs

Processing Fees:

Section 60B of the Conservation Act contains the statutory provisions regarding processing fees.

The Department recovers all direct and indirect costs to process a concession application from Applicants regardless of whether the application is approved or declined. The cost of processing a concession depends on whether the application needs to be notified or not (see Public Notification section above), and/or whether the application is a standard application or is complicated/complex.

The cost of processing a standard non-notified concession is likely to be between **$2065 and $2565 plus GST**. If the application is assessed as complex, covers multiple regions, or includes more than 20 individual locations, this fee is likely to be higher. The Department will send an estimate of costs to the Applicant once the application has been assessed.

The cost of processing a standard notified concession is likely to be between **$3500 and $5500 plus GST**. This fee is likely to be higher if the application is assessed as complex, covers multiple regions, or if a hearing is required. The Department will send an estimate of costs to the Applicant once the application has been assessed. The Department will re-estimate the cost and provide this to the Applicant if further costs are likely due to significant public interest during the public notification process.

Applicants are entitled to request an estimate of costs at any point but the Department may impose a charge for preparing such an estimate. Estimates are not binding.

The Department will ordinarily invoice the Applicant for processing fees after a decision has been made on the application but in some cases interim invoices will be issued. If at any stage an application is withdrawn the Department shall invoice the Applicant for the costs incurred by the Department up to that point. Applicants are required to pay the processing fees within 28 days of receiving an invoice. The Director-General is entitled to recover any unpaid fees as a debt.

The Director-General of Conservation has discretion to reduce or waive processing fees. If your application is for landing aircraft for personal recreational use you may be eligible for a reduction of 50% of the processing fee.

The Department may obtain further information either from the applicant or from any other relevant source in order to process the application. The applicant will be advised of any information obtained from other sources. The cost of obtaining such information will be charged to and recovered from the applicant. The applicant will be informed as soon as practicable from receipt of the application if further information is required before this application form can be fully processed by the Department.

Ongoing Fees:

If your application is approved, you will also be required to pay annual fees throughout your concession. These are:

- Annual management fee to cover administration time; and/or
- Monitoring fee (if required) to cover the cost of monitoring the effects of your activity; and/or
- Activity fee per head (if a recreation concession), or a minimum fee per year; and/or
- Annual rental (if a land use concession eg lease)

Please contact the nearest Department of Conservation office to discuss the applicable fee and processing timeframe for the application.

Terms and Conditions for an Account with the Department of Conservation:

Have you held an account with the Department before? (Please tick)	Yes	✓	No	
If yes, under what name:	Rotorua Rafting, customer number 52445			

1. I/We agree that the Department of Conservation can provide my details to the Department's Credit Checking Agency to enable it to conduct a full credit check.
2. I/We agree that any change which affects the trading address, legal entity, structure of management or control of the applicant's company (as detailed in this application) will be notified in writing to the Department of Conservation within 7 days of that change becoming effective.
3. I/We agree to notify the Department of Conservation of any disputed charges within 14 days of the date of the invoice.
4. I/We agree to fully pay the Department of Conservation for any invoice received on or before the due date.
5. I/We agree to pay all costs incurred (including interest, legal costs and debt recovery fees) to recover any money owing on this account.
6. I/We agree that the credit account provided by the Department of Conservation may be withdrawn by the Department of Conservation, if any terms and conditions of the credit account are not met.
7. I/We agree that the Department of Conservation can provide my details to the Department's Debt Collection Agency in the event of non-payment of payable fees.

Declaration

I certify that the information provided on this application form and all attached additional forms and information is to the best of my knowledge true and correct.

Note: The Minister can vary any concession granted if the information given in this application contains inaccuracies.
Cheal Note: Signed on behalf of client as he is out of the country at present.

Signature (Applicant)		**Date**	16 May 2019
Signature (Witness)		**Date**	16 May 2019
Witness Name	Trudy Harding		
Witness Address	C/o Cheal Consultants Ltd, 4 Horomatangi Street, Taupo		

This application is made pursuant to Sections 17R and 17S of the Conservation Act 1987 [and (where applicable) Section 49 of the National Parks Act 1980/Section 59A of the Reserves Act 1977].

Applicants should familiarise themselves with the relevant provisions of the Conservation Act 1987, the Reserves Act 1977 and the National Parks Act 1980 relating to concessions.

Once the application is complete, the Minister has 20 days within which to advise the applicant whether the application is declined on the grounds that the application does not comply with or is inconsistent with the provisions of the Act or any relevant Conservation Management Strategy or Conservation

Management Plan. If the Minister does not so advise the applicant the application will be processed in accordance with Section 17T of the Conservation Act 1987.

The purpose of collecting this information is to enable the Department to process your application. The Department will not use this information for any reason not related to that purpose.

Applicants should be aware that provisions of the Official Information Act might require that some or all information in this application be publicly released.

For Departmental use

Credit check undertaken			
Comments :			
Signed		**Name**	
Approved (Tier 4 manager or above)		**Name**	

Department of Conservation
Te Papa Atawhai

Appendix 1: Who to contact?

If you have a query relating to a permit or concession the offices below specialise in the following topics. For queries relating to topics not listed below contact the office closest to where you are based.

Hamilton

Contact our Hamilton office for:

- agriculture, beehive, vehicle, ski field and grazing concessions

Permissions Team
Private Bag 3072
Hamilton 3240
Ph +64 27 200 9648
Email: permissionshamilton@doc.govt.nz

Christchurch

Contact our Christchurch office for:

- Retail, ski field, access/easements, Wild Animal Recovery Operations (WARO) and helihunting concessions
- Sounds Foreshore authorisations and all permits relating to Marine Mammals

Permissions Advisor (Support)
Private Bag 4715
Christchurch Mail Centre
Christchurch 8140
Ph +64 3 371 3700
Email: permissionschristchurch@doc.govt.nz

Hokitika

Contact our Hokitika office for:

- Events, vehicle, boating, access/easements, grazing and extraction of materials concessions
- Mining and access arrangements.

Permissions Advisor (Support)
Private Bag 701
Hokitika 7842
Ph +64 3 756 9117
Email: permissionshokitika@doc.govt.nz

Dunedin

Contact our Dunedin office for:

- Aircraft (other than helihunting and WARO), boating, ski field, access/easement and grazing concessions.

Permissions Advisor (Support)
PO Box 5244
Dunedin 9058
Ph +64 3 477 0677
Email: permissionsdunedin@doc.govt.nz

Concession Application
Form 3b – Private/commercial facility/structures

The Department recommends that you contact the Department of Conservation Office closest to where the activity is proposed to discuss the application prior to completing the application forms. Please provide all information requested in as much detail as possible. Applicants will be advised if further information is required before this application can be processed by the Department.

This form is to be used when the proposed activity is the building or use of any private or commercial facility or structure on public conservation land managed by the Department of Conservation. Examples may include lease of land to erect an information centre; authorisation to erect a weather station; or construct or lease a private/commercial campground or lodge. This form is to be completed in conjunction with either Applicant Information Form 1a (longer term concession) or Applicant Information Form 1b (one-off concession) as appropriate.

Please complete this application form, attach Form 1a or Form 1b, and any other applicable forms and information and send to permissions@doc.govt.nz. The Department will process the application and issue a concession if it is satisfied that the application meets all the requirements for granting a concession under the Conservation Act 1987.

If you require extra space for answering please attach and label according to the relevant section.

A. Description of Activity

Please describe the proposed activity in detail – where the site is located, please use NZTM GPS coordinates where possible, what you intend to use the building for, whether you intend to make any changes to the infrastructure.

Please include the name and status of the public conservation land, the size of the area for which you are applying and why this area has been chosen.

If necessary, attach further information including a map, a detailed site plan and drawings of proposal and label Attachment 3b:A.

Operation of a zipline commercial recreation activity within the Okere Falls Scenic Reserve. Refer to the attached reports and plans for further details.

B. Alternative sites considered

If your application is to **build, extend or add** to any permanent or temporary structures or facilities on public conservation land, please provide the following details:

- Could this structure or facility be reasonably located outside public conservation land? Provide details of other sites/areas considered.
- Could any potential adverse effects be significantly less (and/or different) in another conservation area or another part of the conservation area to which the application relates? Give details/reasons

The applicant considered lower areas of the river. Hapu indicated early on in the consultation process that their preference was for all tourism activities to occur inthe one location rather than affecting other areas of the Awa.
The cultural, ecological and historical values of the reserve are a major component of the proposal.

C. Larger area

Is the size of the area you are applying for **larger** than the structure/facility **YES / NO**

If **yes**, please detail the size difference in the box below, and answer the following 3 questions, if **no** please go on to the next section:

Is this necessary for safety or security purposes? **YES / NO**

Is this necessary as an integral part of the activity? **YES / NO**

Is this essential to carrying on the activity? **YES / NO**

If the answer to any of the above is yes, please provide details and attach supporting evidence if necessary and label Attachment 3b:C.

D. Exclusive possession

Do you believe you need **exclusive possession** of the public conservation land on which your structure/building is located, ie no one else can use the land during your use of it? **YES / NO**
(Exclusive occupation requires a lease which requires public notification of the application)

If **yes**, please answer the following 3 questions, if no please go to the next section:

Is exclusive possession necessary to protect public safety? **YES / NO**

Is exclusive possession necessary to protect physical security of the activity? **YES / NO**

Is exclusive possession necessary for the competent operation of the activity? **YES / NO**

If the answer to any of the above is yes, please provide details and attach supporting evidence if necessary and label Attachment 3b:D.

It is necessary to prevent unauthorised members of the public accessing the structures for safety purposes. This will be achieved by constructing a barrier on the cable(s) to prevent physical access rather than fencing around the structures.

E. Technical Specifications **(for telecommunications sites only)**

Frequencies on which the equipment is to operate

hours of operation 8am - 5pm, 7pm -9pm; half an hour intervals between groups; 10 pax + guides; 364 days weather permitting (including wind conditions)

Power to be used (transmitter output)

Polarisation of the signal

Type of antennae

The likely portion of a 24 hour period that transmitting will occur

Heaviest period of use

F. Term

Please detail the length of the term sought (i.e. number of years or months) and why.

Note: An application for a concession for a period over 10 years must be publicly notified, an application for a concession up to 10 years will not be publicly notified unless the adverse effects of the activity are such that it is required, or if an exclusive interest in the land is required.

10 years with right of renewal

G. Bulk fuel storage

Under the Hazardous Substances and New Organisms Act 1996 (HSNO Act) 'Bulk fuel storage' is considered to be any single container, stationary or mobile, used or unused, that has a capacity in excess of 250 litres of Class 3 fuel types. This includes petrol, diesel, aviation gasoline, kerosene and Jet A1. For more information on Hazardous Substances, go to: http:/www.business.govt.nz/worksafe/information-guidance/legal-framework/hsno-act-1996

Do you intend to store fuel in bulk on the land as part of the activity? **YES / NO**

If you have answered yes, then please provide full details of how and where you intend to store the fuel, and label any attachments including plans, maps and/or photographs as Attachment 3b:G. If your concession application is approved you will be required to provide a copy of your HSNO compliance certification to the Department before you begin the activity.

H. Environmental Impact Assessment

This section is one of the most important factors that will determine the Department's decision on the application. Please answer in detail.

In column 1 please list all the locations of your proposal, please use NZTM GPS coordinates where possible. In column 2 list any special features of the environment or the recreation values of that area. Then in column 3 list any effects (positive or adverse) that your activity may have on the values or features in column 2. In column 4 list the ways you intend to mitigate, remedy or avoid any adverse effects noted in column 3. Please add extra information or supporting evidence as necessary and label Attachment 3b:H.

Refer to Steps 1 and 2 in your Guide to Environmental Impact Assessment to help you fill in this section.

Location on public conservation land	**Special feature or value**	**Potential effects of your activity on the feature or value (positive or adverse)**	**Methods to remedy, mitigate or avoid any adverse effects identified**
EG: Tararua Forest Park	*Northern rata - threatened species*	*Damage to the plants by construction*	*Brief construction and maintenance staff of the location and importance of the species; clearly tape off areas with the species to avoid damage*
Refer to attached reports			

I. Other

Is there any further information you wish to supply in support of your application? Please attach if necessary and label Attachment 3a:I.

Department of Conservation
Te Papa Atawhai

Concession Application Form 4a – Guiding/Tourism/Recreation: Walking, Hiking, Tramping, Hunting, Fishing, Horses, 4WD Activities etc

The Department recommends that you contact the Department of Conservation Office closest to where the activity is proposed to discuss the application prior to completing the application forms. Please provide all information requested in as much detail as possible. Applicants will be advised if further information is required before this application can be processed by the Department.

This form is to be used when the proposed activity involves landbased guiding of clients on public conservation land. Examples may include hiking, walking, hunting, fishing, horse treks, or 4WD activities. This form is to be completed in conjunction with either Applicant Information Form 1a (longer term concession) or Applicant Information Form 1b (one-off concession) as appropriate.

- If your application involves transportation on public conservation land eg kayaking, boat transfers, aircraft landings, please also fill in Form 4b and/or Form 4c as applicable.
- If your application includes building, extending or adding to any permanent or temporary structures or facilities on public conservation land, please also fill in Form 3b,
- If your application includes tenancy of any DOC managed buildings (other than overnight usage of huts) please also fill in Form 3a.

Please complete this application form, attach either Form 1a or Form 1b (as appropriate) and any other applicable forms and information and send to permissions@doc.govt.nz. The Department will process the application and issue a concession if it is satisfied that the application meets all the requirements for granting a concession under the Conservation Act 1987.

If you require extra space for answering please attach and label according to the relevant section.

A. Location(s) and Activity(ies)

List the areas of your operation, please use NZTM GPS coordinates where possible, and attach a map and label Attachment 4a:A. If you are unable to identify the areas or you do not know them, please seek the assistance of Departmental staff.

Name of Conservation Area and track	Activity	DOC Facilities (eg huts) or informal campsites	Proposed months/season	Max. Party Size (incl. guides)	Frequency of Use (trips)	Duration of Visit: less than 1 hour; 1 – 4 hours; 4 – 24 hours
EG: Matiu/Somes Scientific Reserve: Matiu Circuit Track	*Guided walk and nature interpretation*	*n/a*	*October - April*	*6 pax*	*6 trips per week Saturdays and Sundays*	*1 – 4 hours*
Okere Falls Scenic Reserve - refer to attached reports and plans						

B. Environmental Impact Assessment

This section is one of the most important factors that will determine the Department's decision on the application. Please answer in detail.

In column 1 please list all the locations of your proposal, please use NZTM GPS coordinates where possible. In column 2 list any special features of the environment or the recreation values of that area. Then in column 3 list any effects (positive or adverse) that your activity may have on the values or features in column 2. In column 4 list the ways you intend to mitigate, remedy or avoid any adverse effects noted in column 3. Please add extra information or supporting evidence as necessary and label Attachment 4a:B.

Refer to Steps 1 and 2 in your Guide to Environmental Impact Assessment to help you fill in this section.

Location on public conservation land	**Special feature or value**	**Potential effects of your activity on the feature or value (positive or adverse)**	**Methods to remedy, mitigate or avoid any adverse effects identified**
EG: Matiu/Somes Island Matiu Circuit Track	*Endemic geckos, skinks, tuatara*	*Damage to habitat when walking (adverse)* *Increase knowledge of native species through guiding interpretation (positive)*	*Ensure all clients stay on paths*
Refer to attached reports			

C. Term

Please detail the length of the term sought (i.e. number of years or months) and why. If you are applying for a one-off permit please state the specific dates and/or times sought.

Note: An application for a concession for a period over 10 years must be publicly notified, an application for a concession up to 10 years will not be publicly notified unless the adverse effects of the activity are such that it is required, or if an exclusive interest in the land is required.

10 years with right of renewal

D. Bulk fuel storage

Under the Hazardous Substances and New Organisms Act 1996 (HSNO Act) 'Bulk fuel storage' is considered to be any single container, stationary or mobile, used or unused, that has a capacity in excess of 250 litres of Class 3 fuel types. This includes petrol, diesel, aviation gasoline, kerosene and Jet A1. For more information on Hazardous Substances, go to: http:/www.business.govt.nz/worksafe/information-guidance/legal-framework/hsno-act-1996

Do you intend to store fuel in bulk on the land as part of the activity? **YES / NO**

If you have answered yes, then please provide full details of how and where you intend to store the fuel, and label any attachments including plans, maps and/or photographs as Attachment 4a:D. If your concession application is approved you will be required to provide a copy of your HSNO compliance certification to the Department before you begin the activity.

E. Safety Plan

The Department requires that all concessionaires holding concessions for recreation or tourism activities have a safety plan which has been audited by an external expert.

If your activity is covered by the Health and Safety in Employment (Adventure Activity) Regulations 2011 proof of that audit is sufficient. If your activity is **not** covered by the Adventure Activity Regulations, please read the *Guidelines on the Requirements for Concessionaire Safety Plans* on the Department's website. If you are unsure please go to the WorkSafe website and read their guidance.

If your concession application is approved, you will be required to provide a copy of an independent auditor's approval of your safety plan to the Department before you begin the activity.

F. Other

Is there any further information you wish to supply in support of your application? Please attach if necessary and label Attachment 4a:F.

Appendix 9

Okere Business Plan

OKERE

Adventures

Business Plan

Aotearoa's Leader in Sustainable Cultural Tourism

Leading together through whenua, whanau and initiative

Okere Adventures Mission

Establish a Tourism destination that showcases the Kaitikaitanga, aroha, and importance of the area through a variety of activities centred around the awa. With a strong focus on the development of employment for Ngati Pikiao descendants through all levels of the company leaving behind a rich sense of identity and belonging whilst enjoying the wonder and enhanced knowledge of their natural assets alongside creating avenues for the youth to travel the world using the skills they have acquired within their backyard.

The Opportunity

Okere Adventures vision in detail

Tourism currently is the largest industry in NZ. Current expenditure in Rotorua is $827 million with a 2030 target of $1.5 billion.

Okere Falls has been a place of interest since the conception of tourism in Rotorua but has only scratched the tip of it's potential.

A collaboration between adjoining land blocks and an already established tourism venture provides a perfect opportunity for the creation of a company owned by Okere Inc, Te Karaka and Sam Sutton of Rotorua Rafting to capitalise on alternative low impact land use with no significant impact to current revenue streams.

Phase 1. Development of a 700m multistage Zipline/ bush walk through the Okere Scenic reserve. The guided tour kaupapa is a focus on the significance of the Okere awa, the history and the importance on the area and how together we're bettering the area for the future generations. It will be a tour that engages our guests and leaves them with a feeling of pride and investment in bettering the world.

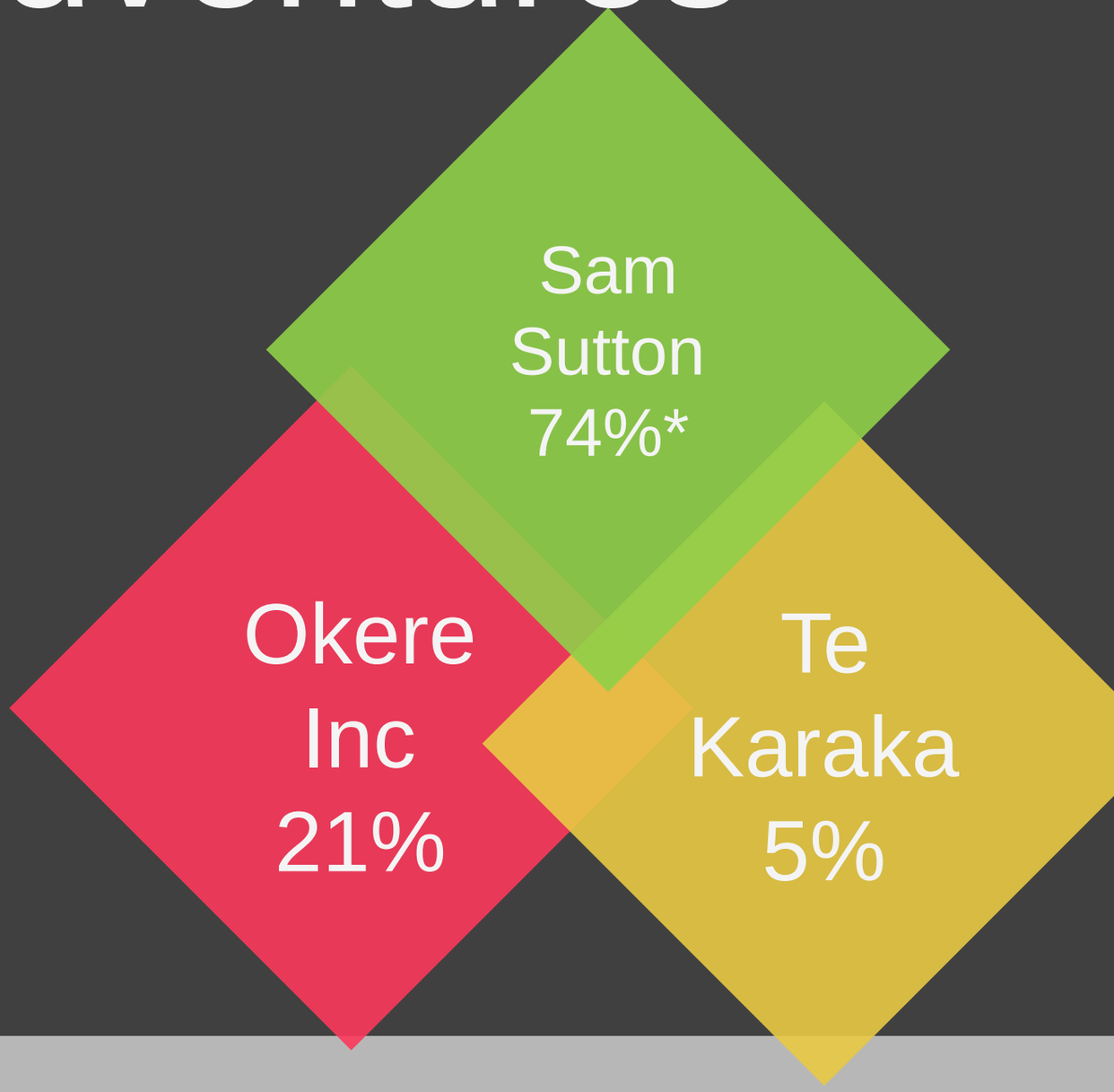
Capitalising on Rotorua Rafting's established infrastructure and customer base we can catapult into the market. The operation would be based out of the already established rafting base in Okere, targeting of 30 new jobs in the first 12 months of which primary choice is Ngāti Pikiao descendents.

As revenue increases further phases of operation would take place to evolve from being an activity centre into becoming a destination that focuses on the Kaitiakitanga, creating experiences that not only are fun and exciting but also are a positive contribution to generations to come.

Okere Adventures

Formation

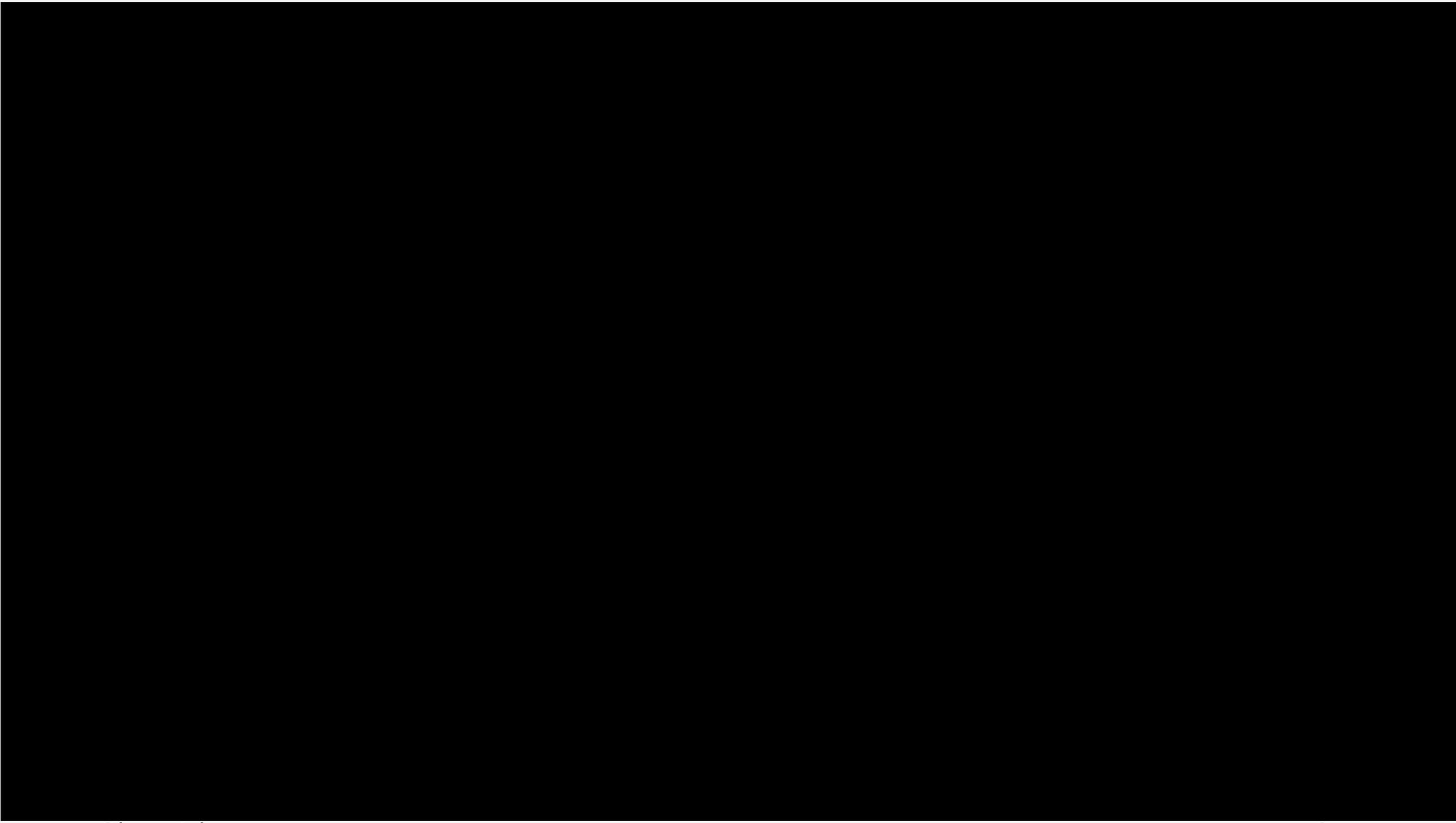
- Sam Sutton would own 75% until operation commences to assist in efficiency in spending. Once Operation commences Okere would gain an additional 1%.
- Lease Agreement made for client price per head for Okere.



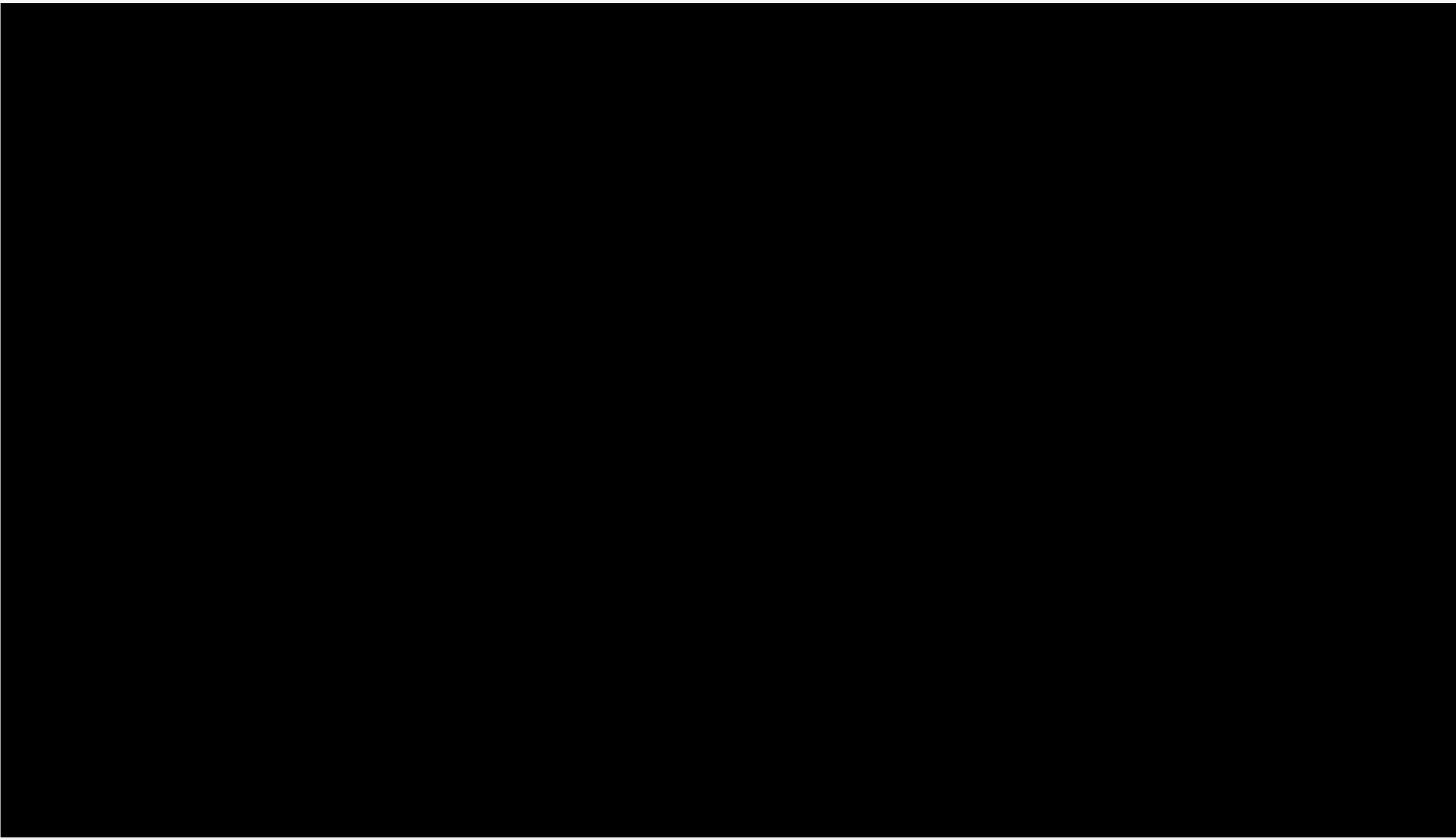
How will it be Funded

Costing

Business Road Map

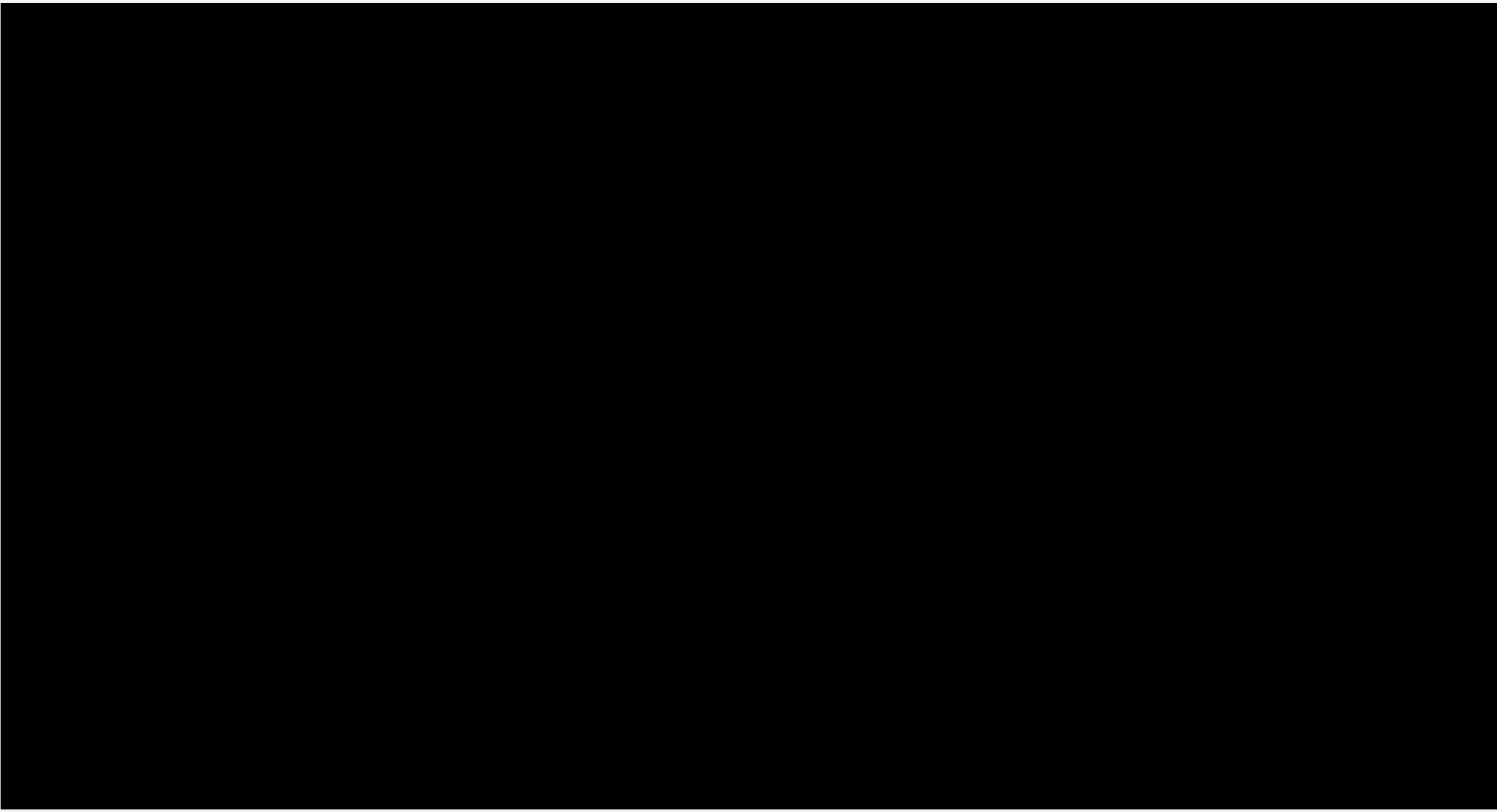


Our Competition



Target Market

Pricing Breakdown

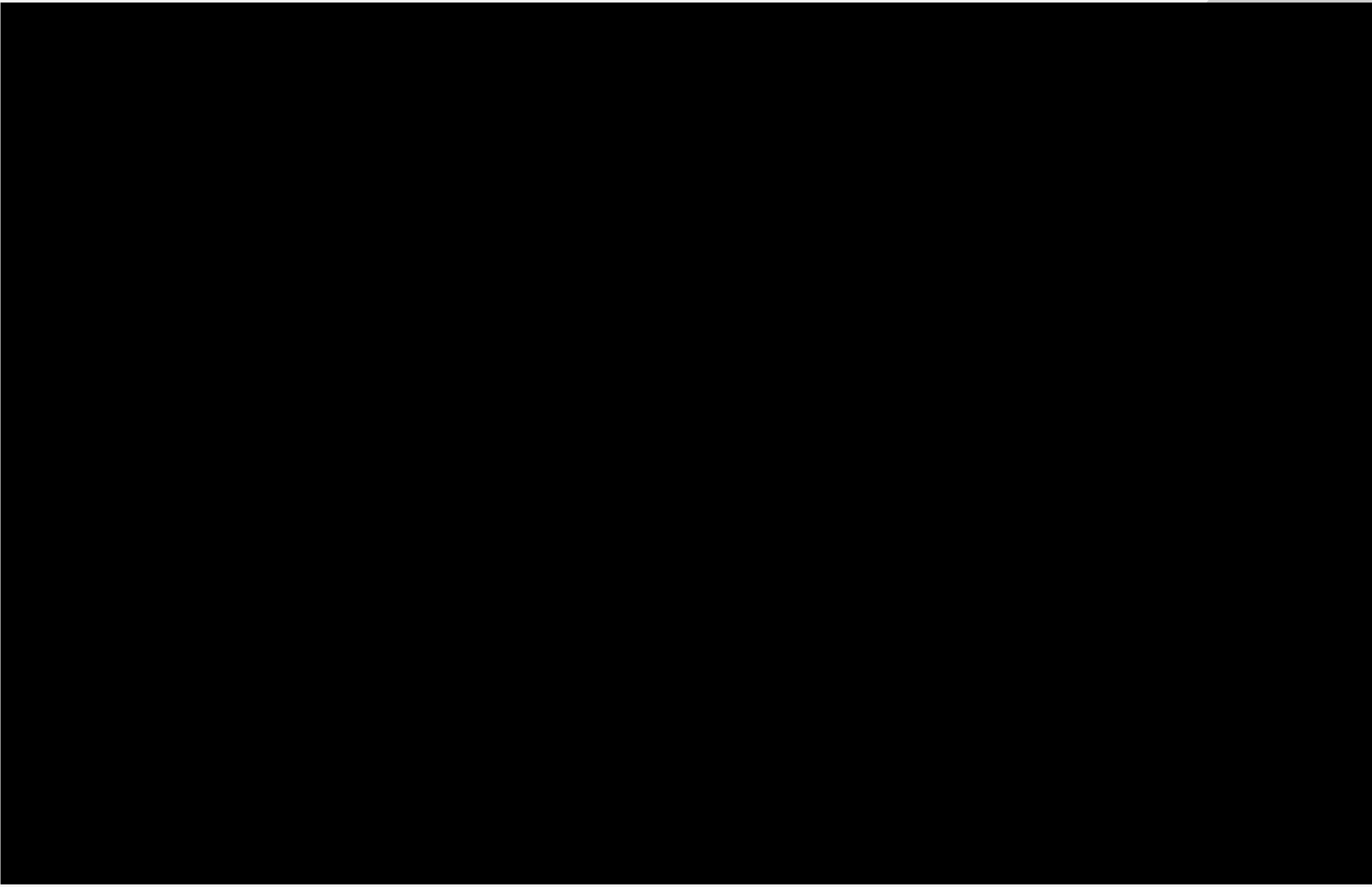


Current Progress

Short term timeline

Liability

From here.



NAKU TE ROUROU NAU TE ROUROU KA ORA AI TE IWI

Appendix 10

Safety Operation Plan
(draft)

OKERE

Adventures

Safety Operation Plan

Table of Contents

Chapter 1 - Operator Details

Legal Company Name:	Okere Adventures
Legal Owner Name:	Samuel Mark Sutton
Legal Owner Address:	5 Goulding Road, Okere Falls, 3074
Legal Owner Email:	raft@rotorua-rafting.co.nz
Legal Owner Phone:	+6421020607441
Operator Trading Name:	Okere Zipline*
Person responsible for SOP:	Samuel Mark Sutton

Chapter 2 - Operation Overview

2.1. What is Okere Zipline?

Okere Zipline is a 6 stage zipline tour in the Okere Falls Scenic reserve and adjoining māori land block Taheke Papakainginga 30. Ziplines range from 47m to 380m and range in gradient from 3% to 12%. The tour also has sections of walking trails and includes additional activities like replanting riparian boundaries and educates clients on the history of the area and importance in the ecosystem of the surrounding area.

2.2. Okere Zipline Mission

Okere Zipline strives to be the industry leader in both safety procedures, practices and customer satisfaction. By developing a positive staff culture and comprehensive yet straightforward systems outlined in the SOP, Okere Ziplines can lead the industry and ensure an impeccable safety record.

2.3. Scopes and Limitation of this SOP

This SOP is a living document and will evolve continuously throughout operation as hazards are identified and procedures modified to maintain industry leading practices. The SOP is designed to be simplistic to ensure that all staff members can retain all information and always operate within the guidelines outlined by the SOP.

2.4. Location of SOP

A hard copy of both the Safety Operation Plan and Safety Management System will be readily available in the office of Okere Zipline located at 761 State Highway 33, Okere Falls, Rotorua. The master copy is stored on the companies Google Drive to be readily modified, and procedures adapt.

2.5. Legal Obligations

2.5.1 Legal duties

Okere Ziplines will abide by all legal operations and industry standards; this is achieved by keeping unto date with industry modifications alongside monthly safety reviews during staff meetings and post-incident reviews alongside external, annual internal audits.

2.5.2. Health and Safety Act

It is Okere Ziplines Operations responsibility ensure we are in line with the industry standards (WORKSAFE/HSW 2015). This will be achieved through monitoring Support Adventure (www.suportadventure.co.nz) websites and staff/ management development through associated courses.

2.5.3.Other Legislation

To be updated.

Chapter 3 - Staff

3.1. Introduction

The director and management are responsible for ensuring that employees and contractors have adequate knowledge, experience and training to carry out the tasks they are hired to do. Outlined in this SOP are procedures and requirements to ensure all staff exceeds requirements to operate at industry leading levels.

Management will establish training programmes and evaluate the levels of supervision required for each staff member. All employees/contractors will undergo a trial/training Period.
Management will facilitate regular meetings and involve staff in identifying hazards and formulating procedures for reducing and eliminating these hazards. Managers are responsible for ensuring the safety plan has complied with constant updates. Trip forms and incidents forms are filed out daily and if an incident occurs.

3.2. Roles

Incompetent staff is the single most significant hazard when operating a commercial zipline. Through a comprehensive induction, training, systems and amazing staff culture we can eliminate incompetence as a hazard.

3.2.1. General Manager

The General Manager is the person in charge of overseeing all areas of the operation. They must hold a current first aid course and be highly competent with all operational procedures including equipment use, guide ratios, weather limitations, evacuation procedures, and reporting procedures. They must have completed a minimum of 50 tours and practiced customer retrieval and evacuations on all lines. They must be demand competent by the “owner” or “operations manager’ with in house systems checks on anchors, lines, harnesses, trolleys, lanyards, brake systems, and platforms.

They will be required to undertake quarterly rescue/evacuation practice which will be recorded in the staff training log.

They are responsible for handling any media questions and overseeing that the operations manager is meeting all Health and Safety requirements.

3.2.2. Operations manager

The operations manager is in charge of the day to day operations from guide rostering, vehicle maintenance, equipment upkeep, and Health and Safety requirements are being adhered. They are the voice between staff and owner/management. They are highly competent in all areas around equipment use, safety procedures, equipment inspections including anchors, lines, braking devices, and public restriction equipment.

They must hold a current First aid with US424 wilderness first aid equivalent. They must do monthly retrieval practice which will be recorded in the staff training log.

They will be primarily in charge of guide inductions and training, once they are comfortable with the level of skill in the guide they will make a joint decision with the Owner or Manager as to the guides competence.

3.2.3. Trip Leaders

Trip leaders are the senior guide on a tour they have the responsibility of ensuring the smooth operation of tours they must be highly competent with;

- Technical skills, including equipment knowledge and equipment checks
- Risk management, group management, and leadership skills
- Ability to operate following the standard operating procedures
- Familiarity with and understanding the working environment
- Ability to communicate safety requirements/directions to clients.
- Rescues and emergency management skills.
- Must have a current first aid with US424 or above.

They can decline guides and customers if safety is a concern to theirs or others safety.

3.2.4. Junior Guides

Junior guides must be highly competent with all aspects of the tour. They must have completed at least 30 tours and have a comprehensive understanding of all procedures and systems. They will be approved the Operations Manager & Owner/ Management once deemed fit for work.
They must also have;

- Technical skills, including equipment knowledge
- Risk management, group management and leadership skills
- Ability to operate in accordance to the standard operating procedures
- Familiarity with and understanding the working environment
- Ability to communicate safety requirements/directions to clients.
- Rescues and emergency management skills.
- Must have a current first aid

3.3. Staff Development

3.3.1. Monthly Staff Meeting

Okere Zipline will do it's utmost to grow and strengthen its staff. This will include but not be limited to Monthly meetings which will be documented and recorded in the Meeting log and a copy of the notes sent out through group chat.

3.3.2. Staff training

The Operations Manager will be in charge of organising and documenting staff training related to Zipline procedures and rescue techniques to ensure all staff keeps currency. This will be done every quarter at the least.

3.3.3. Incompetent Staff

If any staff member is seen or deemed as incompetent by either another guide, management, Ops manager, or a client, they will be taken off all commercial trips and require additional training from the operations manager and trip leaders until they are seen as competent by the operations manager. The complaint and training will be recorded in the guide training log.

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3.3.4 Guide Refusal

If a guide feels at any time that he or she is unable to work due to personal reasons, client reason or any work-related reasons. Okere Zipline with accepts their decision.
Then it can be discussed with management when necessary.

We will not let any staff member guide or instruct, or undertake other safety-related tasks if staff believe they are in a state of impairment that they may be hazardous to themselves or any person on the activity. Impairment could be due to factors drugs, alcohol or fatigue. This staff member will be removed from there role and management will undergo assessment of what caused this staff member to be impaired. If the guide was under the influence of alcohol still in their system or fatigued, they will have an unwritten warning and continue employment. If a staff member were under the control of drugs, they would be required to pass a drug test before they resume work.

When another staff member believes a guide is unfit for work, they will let the Trip Leader know immediately.

Chapter 4. Equipment

4.1 Customer Equipment

4.1.1. Harness

Full Body Harnesses will be given to every client.
Harnesses must be compliant with NZ)990288 standard.
Harnesses must be fitted correctly before embarking on the tour.
Each harness will be checked by both guides on the trip to ensure it is of the standard.

Both the trip leader and junior guide will check each harness in the pre-trip from before each tour.

Harnesses that are not to the standard will be tagged and put in the broken gearbox inside the base.

Harnesses will be replaced according to manufactures guidelines or when signs of wear are present.

Harnesses will be kept in a way that they can stay dry and out of direct sunlight for prolonged times.

The Operations Manager will make monthly thorough equipment checks and recorded in the gear log.

4.1.2. Lanyards

Lanyards will be attached two different mounting points on the harness in precaution for harness breakage.
They must be compliant with NZ990288.
Lanyards will be inspected before each trip by the trip leader and documented on the pre-trip form.

Lanyards that are not to the standard will be removed immediately from service and tagged and put in the broken gearbox inside the base.

Lanyards will be replaced according to manufactures recommendations or when signs of wear are present.

Lanyards will be kept in a way that they can stay dry and out of direct sunlight for prolonged times.

The Operations Manager will make monthly thorough equipment checks and recorded in the gear log.

4.1.3. Trollies

Trollies will be compliant to NZ990288 standard and be made using ABEC standard bearings.
Both guides will ensure that the trollies are fixed correctly to the lanyards when equipping clients.

The trip leader will inspect trollies and bearings before every trip and recorded in the pre-trip from.

Trollies that are not to the standard will be removed from service immediately and tagged and placed in the broken gearbox inside the base.

Trollies will be replaced following the manufacturing guidelines or when signs of wear are present.

Trollies will be kept in a way that they can stay dry and out of direct sunlight for prolonged times.

The Operations Manager will make monthly thorough equipment checks and recorded in the gear log.

4.1.4. Carabiners

Carabiners will be compliant with NZ990288 standard.
Carabiners will be checked by both guides when equipping clients.
Carabiners will be checked before every tour by the trip leader and recorded them in the pre-trip form.

Carabiners that are not to the standard will be removed from service immediately and tagged and placed in the broken gearbox inside the base.
Carabiners will be replaced following the manufacturing guidelines or when signs of wear are present.

The Operations Manager will make monthly thorough equipment checks and recorded in the gear log.

4.1.5. Helmets

Helmets will be compliant with NZ990288 standard.
Helmets will be checked by both guides when equipping clients.
Helmets will be checked before every tour by the trip leader and recorded the in the pre-trip form.

Helmets that are not to the standard will be removed from service immediately and tagged and placed in the broken gearbox inside the base.
Helmets will be replaced following the manufacturing guidelines or when signs of wear are present.
The Operations Manager will make monthly thorough equipment checks and recorded in the gear log.

4.1.6 Apparel

Shoes;
Clients will be instructed to wear suitable walking shoes within the booking notes. If a client doesn't have appropriate footwear, Okere Zipline will supply a fitting pair of shoes in their size.

Clothing;
Okere Ziplines will ask clients to remove any clothing that is seen as hazardous to them self or others that may be entangled in the trolly, I.e., scarfs. Okere Zipline will also supply sufficient clothing to ensure clients are kept dry. Due to the proximity of the lines to evacuation points, there is a low risk of hypothermia

4.2. Guides Equipment

4.2.1. Harnesses

Guides harnesses must be compliant to NZS
The trip leader will check guides equipment before all tours and recorded in the preterit form.
Guides equipment will be subject to monthly comprehensive inspection from the Operations manager and recorded in the equipment log
Guides will buddy check each other to ensure correct fitting.
Any guides equipment that is not to the standard will be tagged and placed in the broken gearbox inside the base.
Harnesses will be replaced according to manufacturing guidelines or when harnesses are showing signs of wear.

4.2.2. Lanyards

Guides lanyards must be compliant to NZS
The trip leader will check guides equipment before all tours and recorded in the preterit form.
Guides equipment will be subject to monthly comprehensive inspection from the Operations manager and recorded in the equipment log
Guides will buddy check each other to ensure correct fitting.
Any guides equipment that is not to the standard will be tagged and placed in the broken gearbox inside the base.
Lanyards will be replaced according to manufacturing guidelines or when harnesses are showing signs of wear.

4.2.3. Trollies

Guides trollies must be compliant to NZS
The trip leader will check guides equipment before all tours and recorded in the preterit form.
Guides equipment will be subject to monthly comprehensive inspection from the Operations manager and recorded in the equipment log
Guides will buddy check each other to ensure correct fitting.
Any guides equipment that is not to the standard will be tagged and placed in the broken gearbox inside the base. Trollies will be replaced according to manufacturing guidelines or when harnesses are showing signs of wear.

4.2.4. Carabiners

Guides carabiners must be compliant to NZS
The trip leader will check guides equipment before all tours and recorded in the preterit form.
Guides equipment will be subject to monthly comprehensive inspection from the Operations manager and recorded in the equipment log
Guides will buddy check each other to ensure correct fitting.
Any guides equipment that is not to the standard will be tagged and placed in the broken gearbox inside the base. Carabiners will be replaced according to manufacturing guidelines or when harnesses are showing signs of wear.

4.2.4. Helmets

Guides helmets must be compliant to NZS
The trip leader will check guides equipment before all tours and recorded in the preterit form.
Guides equipment will be subject to monthly comprehensive inspection from the Operations manager and recorded in the equipment log
Guides will buddy check each other to ensure correct fitting.
Any guides equipment that is not to the standard will be tagged and placed in the broken gearbox inside the base. Helmets will be replaced according to manufacturing guidelines or when harnesses are showing signs of wear.

4.2.5. Other Equipment

1. Guides will be required to have the following additional equipment.
2.
3. Whistle - as a backup communication method.
4. Radio - for communication
5. Knife for cutting rescue rope if required
6. Bag on lead guide to carry first aid and additional equipment needed for clients safety, i.e. insulin.
7. Cell phone with Spark connection for communications to base and emergency services.

4.2.6. First Aid

First Aid kits will be checked and packed for the trip by the trip leader and noted on the trip form.
If first aid is given the trip leader is responsible for replacing all equipment used from the spare first aid box with a date with and what was taken on it.
If equipment is low or not of reasonable condition, a note should be made on the whiteboard at the reception.

First aid should be equipped with:
1x Sam Splint
1x Triangle bandage
2x Large Crepe Bandage
2x Small Crepe Bandage
1x box plasters
3x alcohol swabs
1x sterile strips
1x scissors
1x Tweezers
Antihistamine

Chapter 5 - Clients

5.1. Pre Booking

Before passengers booking, Okere Zipline will inform the passenger/s about the activity, the degree of risk and suitableness for their state of fitness. If Okere Zipline or the passenger/s think that they are unsuitable, Okere Zipline will suggest another tour or offer a full refund.

5.2. Client Screening

Okere Zipline will hold the right to decline any passengers that have been seen as a danger to the safety of other passengers and guides, whether it is due to physical or mental health or language issues.

Reasons could be;
-Recent Surgery
-Prone to dislocation in joints
-Pregnant
-Seizures
-Exceed weight limit
-Extreme anorexia
-Broken bones
-Intoxication
-Drugged
-Angina/ Heart problems

Okere Zipline will ensure that each passenger receives and understands the information they need in order to participate safely in the rafting trip due to safety briefings using visual demonstrations and standard safety cards.

5.3 Client Communication

5.3.1.Waiver -

Okere Zipline will communicate to each client

"Ziplining is an adventure activity with a degree of risk. Participants should be aware that Okere Zipline cannot guarantee their safety".

Okere Zipline will make it compulsory to each passenger to sign and fill in correctly the Waiver of Liability and Release and medical disclosure form.

5.3.2. Safety Briefing -

Prior to the commencement of each zipline trip Okere Zipline, passengers are to be adequately instructed/ demonstrated in Zipline safety, hazards and equipment use which will include but not limited to:

1. Familiarisation and warning concerning the hazards surrounding the course area

2. procedures for routine zipline use.

3. procedures for emergencies, early stopping on line including self assist techniques

4. general safety precautions when on steep terrain.

5.3.3.

Safety Briefing must include but not limited to the following:

Procedure for being attached to the line - Once the lead guide has made it to the landing platform, the Trip Leader will connect every customer onto the wire. They will check that both lanyards are attached to trolly and back up lanyard is attached to the secondary device. Once the radio communication has confirmed that the line is clear, they will send the client one down the line. Once Client one is off the line client two will be attached.

Client on line - The most significant risk of ziplining is a collision between clients on the line. It is paramount that a client is removed from the line and radio confirmation between both guides has been made before the next client is attached to the line.

Never Put your hands in front of the trolly - This could lead to fingers being caught in the trolly or even losing a finger. If you must grab the line, you should only do it when you are entirely stopped to avoid loosing skin and potentially a finger.

How to be rescued if you stop early - Listen to the guides instruction but lying on your back facing backwards head towards the landing platform and hand over hand.

How to get rescued if you are unable to self rescue - Guides have access to safety retrieval lines on each platform. They will simply slide out to client and then clip a line before pulling client back to platform.

What to do if you overshoot platform and have impact with EBD(emergency breaking device) -If for some anomaly the client has to much speed and overshoots the platform they will hit a braking block which will bring them to a quick stop. They must hold tight to the lanyard and keep their feet together and brace for impact.

Chapter 6 - Managing Hazards

6.1. Identifying hazards to a person

Identifying hazards to a person will be done during the induction of staff using the “hazards registrar”. This can be located at the base and is accessible via google drive. When an updated version is created, it is then emailed out to all related staff on group messenger. If it is a significant hazard, then management will call a meeting to ensure that all persons are aware.

6.2. Hazard management and awareness.

If a new hazard is found in a section of the zipline, the hazard registrar will be updated and emailed to affected staff and written on the guides board in the base.

6.3. Hazard management staff participation

Monthly meetings will be had between the management and guides to address all new hazards, discuss monthly incidents or accidents to discuss the best way to mitigate any risk, alongside general business and equipment checks. This will be recorded in a company meeting log which will be stored on the “drive” to be accessible by all staff.

6.4. Reporting accidents/ incidents

Trip Leaders will be responsible for reporting and logging any accidents/ incidents and notifying management. This will be recorded in the incidents folder. The actions following will be determined by the seriousness of the accident/ incident. However monthly summaries and solutions will be made available to staff to gain awareness of all issues so risk can be reduced.

6.5. SOP compliance

SOP adherence will be monitored through the management of quarterly meetings and the adherence of daily trip forms/ systems. If the SOP is adjusted, the updated section will be printed and handed to staff to read and sign.

Chapter 7 - Emergency Plan

7.1. Preparation and procedure for emergency

All staff will be briefed on how to handle every evacuation during their induction. Trip Leaders will be responsible for making the correct judgment to determine the procedures taken in any incident or accident regardless if they are minor or severe.

Trip Leaders will take full responsibility to ensure that the correct procedures are made in regards to the treatment of the passenger from the time the incident/ accident happens to when the care is handed over to another party, i.e. ambulance staff/ Hospital. However, it is strongly recommended that the Trip Leader and Guide involved continuing to hold a strong relationship with the passenger to ensure that their comfort comes first and to keep them updated as to what Okere Zipline is doing to ensure that the incident/ accident doesn't happen again.

Trip Leaders will have the decision as to the evacuation procedure taken (if required) to best benefit the passenger and the situation.

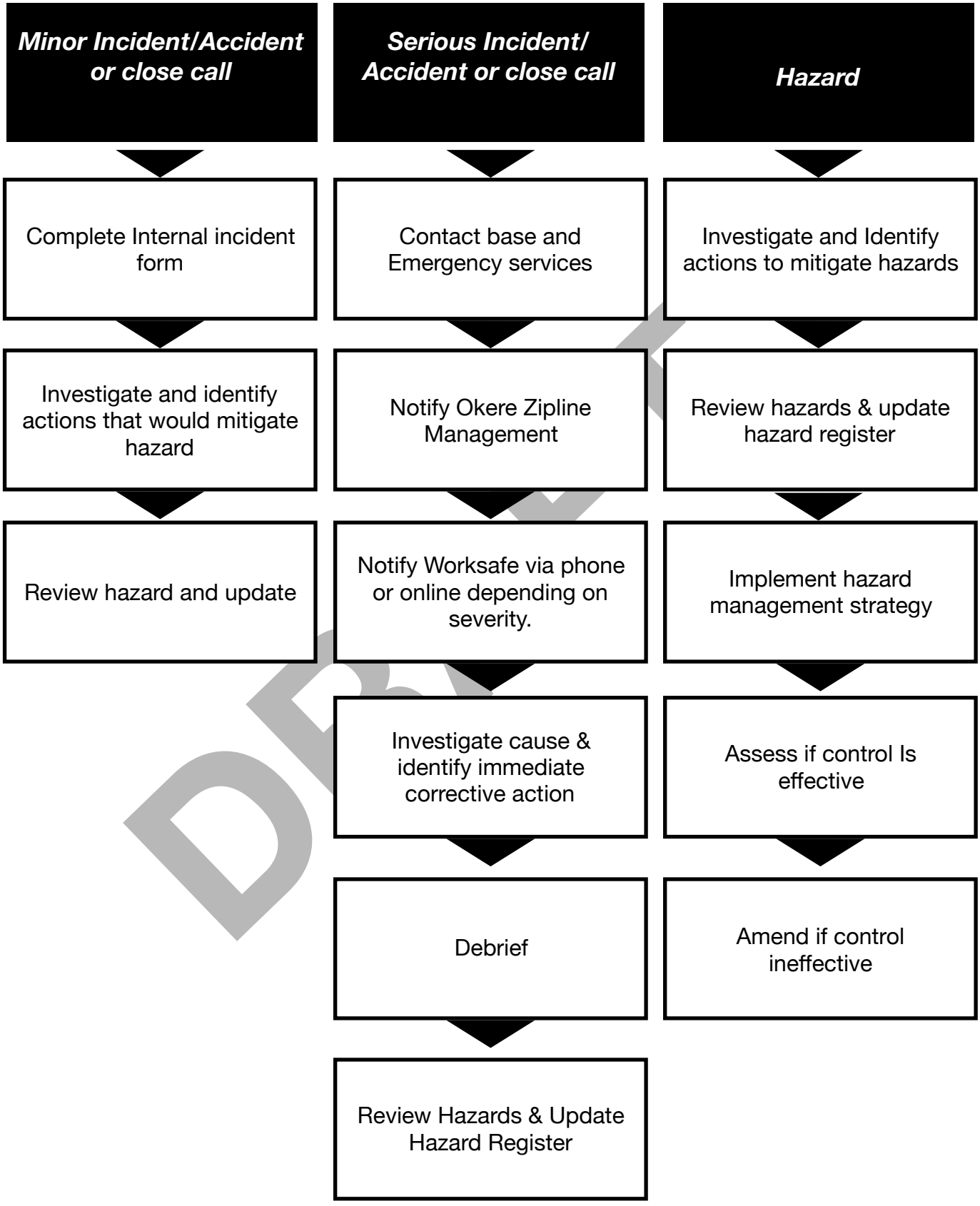
Post-trip, the Trip Leader will be required to fill out the required Trip Report Form in detail along with the incident/ accident form which depending on the degree of the incident/ accident will be filed in the correct folder.

If a serious incident/ accident, where treatment from an outside source was required a Worksafe incident form will be filed, and the Adventures Mark liaison will be contacted.

Post Incident, an in-house investigation will take place and be recorded in the Zipline meeting Meetings log.

All findings will be discussed, and solutions will be noted in the SOP notes page as well as adjustments to the SOP as required.

7.2.. Incident flow chart



Chapter 8 - Recording and Reporting procedures

8.1.Directions on how to record and notify

All accidents or incidents that require outside medical aid will be reported to WorkSafe as soon as practical online at www.worksafe.govt.nz/report-online

They will also be recorded in the Trip Report Form and on the accident incident form of Okere Zipline Guide IPAD.

8.2. Procedure for investigating accidents, incidents and mishaps

Depending on the severity of the incident, accident or mishap an internal investigation will be done between the Guide, Trip Leader and Management to ensure that guidelines were followed and to the cause.

The records will be written on the Accident/Incident Form, in some cases where the accident/incident was severe, a drug test will be done on the next available day.

If it was a severe incident, the management will discuss the situation with Outdoors Mark to see if further investigation is required.

8.3. Procedure for reviewing

After the investigation, all the findings will be discussed between the Management and Guides to ensure that the hazard is noted and the reason for the accident/ incident is understood and to ensure that all preventive options have been reviewed.

This will be recorded during the quarterly meeting by the management and staff. It will also be documented in the Hazards registrar if it is in the correct category.

If the SOP needs an amendment, it will be made, and changes handed out to the guides.

Chapter 9 - Drug and Alcohol Policy

9.1. Guide impairment

Okere Adventures is of medium risk for drug & alcohol impairment.

We are an owner operator small company and employ only staff that are known on a personal level; this enables us to have better judgment and overview of their behavior and out of social work life.

Okere Adventures guides will not take any illegal drugs or drugs that could or do affect the judgment of safe operation.

Okere Adventures will do a pre-employment drug test and continue to do random drug tests to a level that is thought to be sufficient testing. This will ensure that impairment from drugs and alcohol is a risk that is eliminated.

The Trip Leader will also take responsibility to ensure that any guide that shows any signs of impairment from both alcohol and/or drugs is stood down immediately, and action will be made between the Guide, Trip Leader, and Owner.

If a guide is tested positive, they will then be stood down immediately and given a second chance to pass. If the guide fails again, they will then have their employment terminated.

The recording will be kept in the guides profile folders on the Okere Zipline Drive.

9.2. Passenger impairment

Any Passengers that show signs of impairment will be turned away and fully refunded. It will be logged in the Trip Report Form and discussed within Trip Leaders and Management.

Chapter 10 - Transport Policy

10.1. Vehicles

Okere Adventures will keep all vehicles well maintained with a current COF and registration for operation.

10.2. Drivers

Drivers will be required to have a current “P” endorsement and an up to the date log book. It is the driver's responsibility to check the Oil, Water, Fuel at the start of every day.

If the Driver thinks a vehicle is not up to service, they should tell management and get the vehicle serviced at the next convenient date.

Chapter 11 - Zipline Specific Operating Plan

11.1. Overview

Description: Okere Zipline is a 6 Stage Zipline tour that provides adrenalin mixed with educating clients on the cultural and ecological importance of the Okere awa and Scenic Reserve. The goal is to motivate clients through the tour to live better, be better ultimately making the world better for all.

Duration: 3 Hours.

Number of Lines: 6 Ziplines

Overall Ziplne length: 1109m

Overall walking distance: 1km

Guide: Client ratio: 2 Guides per 12 clients

Minimum Age: 8 years/ 45kg.

Maximum Weight: 125kg

Earliest Departure: Sunrise

Latest Departure: 7pm

Communications: Each guide has a radio and cell phone with coverage on Spark.

Weather Restrictions: Trips will be postponed or cancelled if there is;

- Thunderstorms in area. If lightning has been in the area a certification must be done on the line in question.
- Wind exceeding 50km
- Rain exceeding 20mm per hour.

11.2. Okere Zipline Specific Hazards

Trees Falling on Line - One of the most significant risks to the safety of guides and clients is the potential of trees falling on the line. The Operations manager and or Trip leaders will do a sweep run after every significant weather event to ensure no signs of trees falling on a line. If there is evidence of trees hitting the line, the cable and anchors must be inspected again and re-certified.

Steep terrain - The course is situated in a steep environment with massive cliffs above the river present multiple times throughout the course. It is expected that clients will be tethered on any track that has slip potential. This will eliminate the risk to clients safety.

Public Safety - Due to the location of the zipline tour, additional design features will be made to block the general public from accessing lines anchors. Systems will be developed to ensure these are fail-safe and always in place.

11.3 Okere Zipline Safety Practices

- Maximum of 12 clients to two guides.
- The junior guide will descend the line first until they have a minimum of 100 hours and are deemed confident by the operations manager and guide to load clients onto the line.
- The Trip Leader will be in charge of ensuring the line is closed to the public before descending the line.
- First Aid will be kept with the guide descending the line first as the highest likelihood for injury is after each line.
- Guides will inform their clients onto the length of each line and estimated speed they will reach.
- The guide loading the customer on the zipline will do a verbal confirmation with the client to ensure they are happy with both carabiners being locked and secured to the trolly and back up point.
- Before a client is released from the start ramp guides will confirm that the line is clear through radio contact and then once the client is detached from the line the guide will confirm that the line is now clear.

11.4. Zipline Specific plan

Line 1: The Power Line - 141m 3.8% Gradient

Starting from the carpark the guides will lead clients to the first platform. Here they will begin on a low gradient line that passes over New Zealand's 3rd power station that was built in 1901 - 1930. The last guide must ensure the blocking buoys is slid down the line to restrict the public from accessing the line.

The Emergency exit from the landing platform is up the gully for 100m to the main trail.

Line 2: “Screaming Tutea” - 183m 7% Gradient

A short walk between landing from the “powerline” will take clients through to “Screaming Tutea.” This line descends over the Tutea Falls which is where the chief of Tuhoerangi was placed to rest as a sign of ultimate respect.

The speed reached on this line is km/h

The last guide must ensure to slide the blocking buoys down the line before descending and after descending the line to ensure the public is restricted at both ends.

If an emergency evacuation is required, then this can be done so from the track at the landing of the platform.

Line 3: “Kererū” 101m 6% gradient;

Gut drop starts directly at the end of “Screaming Tutea.” It is a short but fast line. The cliff drops away shortly after you start taking the clients to the riparian planting area of the tour.

The Last guide must ensure that the gate is closed on the zipline.

If an Emergency evacuation is required, then this can be done through the farm via access to SH33.

Line 4: “Kiwi” 46m 4% gradient;

This line starts from the finish of Kererū. It focuses on the predator-free Okere goal of a predator-free community and discusses the issues surrounding pests.

It is a short line with easy access to the bottom of Troutpool road if an evacuation is required.

The Last guide must ensure that the gate is closed and the block buoys are in place zipline.

Line 5: “Pouakai” 242m 12 % gradient;

This line starts from the along the ridge on the new loop track. Through the walk to this line, the focus is on pest control.

This line is the fastest line clients reach km/h

This line also has used a Zipstop arrest system to brake the customers as they reach the end of the line. It is vital that the Zipstop is checked by the guide between clients to ensure it has reloaded. Clients will be briefed on what to except on the line and what to do if the braking system was to fail and the Emergency brake block is hit.

If an emergency evacuation is required, this can be done using the farm track out to SH33 with 4x4 access.

The last guide will ensure the block buoys are in place before descending the line.

Line 6: Mana 386m 6% gradient;

Starting from the water tank on top of the farm it is the longest and highest of the ziplines.

With a low gradient, this line is more of a scenic flight above the surrounding area.

The junior guide will ascend the line first and then send confirmation to send the clients. They will then ensure that the line is clear before the following clients are sent.

If an emergency evacuation is required, this can be done through the track and then meeting in the emergency services in the main carpark.

The trip leader will then ensure that both line blocking buoys are set in place.