Existing users – Notably, the activity would provide an additionally means for existing users to enjoy this Reserve which is already very popular – are there any other benefits or disadvantages to current users? Will the proposed activity limit access to parts of the reserve which are currently available? If so, which parts?

Okere Adventures trading as Rotorua Ziplines primary focus is on enhancing the scenic reserve and local community through developing an industry leading tourism venture that doesn't solely benefit the operator and directly employed staff. The goal is to create a model that is beneficial to the broader community ecologically, financially and socially. The business goal is that this is used as a model venture that can be deployed in other areas of the world to help connect people to their environment in a sustainable manner that educates and enhances while building a better community for all.

Benefits within Reserve	
Riparian Restoration	Riparian restoration of the river right boundary will perhaps be the most significant benefit. We expect to be planting 1400 native trees per annum. Each tour will have a hand in the growth of the forest.
Weed management	Weed Management is a significant issue, especially on the real river right side. There is currently many months of weed management required to clear the land of weeds. There are also weeds that are inside the main section of the reserve, and the venture will create the necessary resources to illuminate these.
Caretaker	The venture will enable us to employ a full-time caretaker for the general upkeep and maintenance for the reserve and its facilities.
Predator Free Okere	Additional funding and human resources to assist in the current community project Predator Free Okere Falls.
Additional resources for Scenic reserve	Through the development of the unique structure of the Okere Falls Scenic Reserve, it enables the money raised from concessions to be spent directly within the reserve. This extra boost in financial income will assist in maintaining and enhancing the area that is already seeing an increase in FIT visitor numbers.

Community benefits	
Free Public Transport	Currently Okere Falls has no public transport back to Rotorua. As part of the venture Okere Falls residents will have free transfers to Rotorua available every morning and evening return using a zero-emissions electric shuttle vehicle. This is to help reduce the carbon footprint of the wider community.

Community benefits	
Additional Employment	At present there are only two employment options within the service industry in the area. The addition of having another employment path that is well paid with a fast training curve will enable access to the community for steady employment that is within walking/ biking range.

Negative side effects within the reserve.

Noise	Traditionally, Ziplines have an irritating wirrr as the steel pulley has friction on the galvanised cable. We have sourced a specialised zipline cable from Germany that is swaged. This reduces the noise by 66%. The wire is smooth with an even texture. Additionally, we have sourced Urethane wheeled trolleys that will eliminate the steel on steel friction that is the cause of the noise. The goal is for a silent experience which we are confident in achieving through the combination of the above alongside developing a sound dampening housing to encompass the trolley. We don't want to be acceptable in this field we want to be exceptional and innovative. Due to the nature of the activity being an eco-tour screaming isn't an issue that will impact on other user's experience.
Visual Impact from land	We are aware that many people come to take in the natural marvel of the water cascading down the waterfalls. We have designed the tour to keep all ziplines at elevations that won't impact on the serenity of the experience public seek. This includes securing lines out of the frame for photographers/ spectators viewing platforms. They will be above the canopy and out of line-of-sight elevations from viewing platforms.
Visual Impact from river	We are aware the Okere river is a place where rafters and kayakers from around the world experience a seemingly wilderness experience. We have placed the lines above the canopy to ensure that this remains the case. They will only be noticeable in 3 locations where the river opens up, and there is a large pool. Which is where they are subject to seeing other reserve users.
Vegetation Removal	The focus of the venture is to be a climate positive operator through electric vehicles, staff incentives, planting, among other initiatives. Through all aspects from construction to the operation, we have looked at how we can eliminate any impact on the current state. We have chosen methods that allow moderate flexibility to ensure no significant vegetation removal. We will be transplanting any vegetation that is affected in the platform areas and proposed tracks. There will be some pruning required to create a 1.5m wide corridor but this will not affect any significant limbs or vegetation that is considered of high ecological value.
Visitor # increase	Due to the nature of the tours, we will be operating in small groups of 10 pax + 2 guides, and the group will quickly disappear once they are dropped off into the reserve. There will be times where there will be a group in transit on the main track from the lower area of the track for approximately 500m as they use the existing tracks to gain elevation for the final two lines.

Visual – could you describe the visual effects of the proposed infrastructure on the landscape values of the Reserve from the paths and places where the existing visitor experience is undertaken?

Unlike traditional ziplines, we have created a zipline that uses the natural topography of the land. This will enable us to have a small footprint and be minimalistic in the infrastructure required. At each platform would be a permanent surface that will either be constructed from cobblestones or low wooden deck. Site dependent. The cable will run through a wooden post that will sit between 500mm and 1.8m above the ground depending on location.

On the side of each platform, we will construct a 1.8m high fence out of timber with a cultural theme to aid in restricting unsupervised use of the zipline. This results in loss of access to the public by 1.2 m2 per platform.

There are only two platforms that are constructed near the current tracks, and that will be noticeable. However they will look like the file attached which will blend in with the existing infrastructure that is in place for public safety.

The Zipline Cable will be visible in two places from current tracks but will be above the line of sight to the waterfalls from viewing platforms.

Tracks	Location	Length
Track 1	From Troutpool Road to platform 1. This will keep entrance more discrete.	50m
Track 2	From Platform 2- 3. Not visible from current tracks.	80m
Track 3	From Platform 4-5 It is short and in cleared area already from original track	4m
Track 4	From Platform 8 it will be a short track back onto main track	3m
Track 5	A short track using old fencing line on ridge from new track that was built Jan 2019.	5m
Track 6	A short track again using the old fencing line back into the new track built Jan 2019	10m

Fencing – which parts are you applying to be held under lease and which parts under an easement? How will be public access be restricted?

After a site meeting with DOC staff, we have developed a method which would only restrict public access to the platform.

We propose building a fence around the exact platform using pailings that are culturally themed to blend into the environment. The wall would be 1.8m tall and due to the detail on the top would make it difficult to climb over.

Public Access - Will the public be encouraged to access new parts of the reserve if they see zipline users accessing land outside of the existing barriers? How will safety be managed?

The entrance of the tracks are out sight from the general public. Once the guests have started the first track, the only other area where a Zipline path could be accessed from current routes is at the start for Zipline 5. If the public follows the path, they will be restricted from the platform by the fences. They will also be restricted from accessing the lines from the swivelling buoy on the line. We will install motion-detecting cameras that use 4G sim cards and enable two-way communication to stop unsupervised access to the course.

Existing tracks - how high above the tracks will the ziplines be? Will they be visible?

The lowest elevation for the zipline to the track is 4m, and the only place where it is visible from a tack is on the staircase descending to Tutea Falls. The other areas where the zipline crosses the tracks will not be visible due to the elevation which will be 8-10m above the existing tracks.

Carparking facilities/ Family Viewing - please clarify on how you see the proposed activity working alongside other car park users including existing concessionaires.

There will be no extra strain on the carpark as the guests will be dropped off to the public carpark and the electric van will then return to base. The guests will be collected once the tour is finished.

Guests will use the facilities at the base when they are being equipped in their harness and other safety equipment.

Family and friends may wish to watch the participants, but they can only do this in two areas which are from the upper viewing platform at the “Powerhouse” waterfall and Tutea Falls top viewing platform. It is unlikely that more than one additional vehicle from family/ friends wishing to view would enter the scenic reserve per tour.

Wires – what type of wires will you be using?

The most significant effect we would like to mitigate is the sound of the zipline. Because of this, we have chosen Pfeiffer galvanised 16mm cable as it is the best on the market acoustically and ecologically (due to the swaged cable structure and resulting extended life span of this wire).

You can see photos attached of the Pfieffer cable compared to standard cable operators are using in New Zealand and most the world.

Poles – the maximum height of the proposed poles of the zipline will be connected is not specified, is 500mm the maximum height?

Each site will vary depending on the exact final location of the line, which is determined when the lead ropes are set to reduce the vegetation pruning. There may be places where the best height is 1.8m for the total pole height to minimise pruning. It would be safe to say the rope will be connected within 150mm of the top of the pole and the overall pole height won't exceed 2m.

Noise – could you describe the current soundscape and what impact the activity will have on it ie: you mentioned the rafting guys using a whistle but your activity wouldn't make this much noise? Will natural quiet values be eroded by the noise of the cables and/or the noise of people enjoying themselves using the ziplines.

Currently, the soundscape in the scenic reserve is above average due to the sound of the water cascading. It is also within proximity to State Highway 33 which has heavy vehicles engine braking as they descend into Okere Falls which is heard in the upper elevation areas of the reserve. Rafting is also playing a significant part with high levels of adrenaline resulting in cheering, screaming and safety whistles of which in peak season would result in 100 whistles per day combined that can be heard from close-by neighbouring properties.

As mentioned earlier, the zipline isn't an adrenaline activity, and we don't anticipate clients screaming as it is more of a scenic flight. The concern we have is in eliminating the sounds from the mechanics of the zipline, which is why we have sourced specialised cable and, pulleys and are developing sound dampening cases intending to create a silent experience that is beneficial to our participants and the other users of the reserve. This will enable us to be the global leader on this front. Currently, we are working on a formal acoustic report; however, due to the fact, there is no operator in the country using our cable and or pulley it is taking time to gather the data.

Night-time activity – how will this be run? Will customers and guides use torches or will there be fixed lights at any places? We need to consider lighting effects.

At this stage, we would like to restrict the operating time from 8 am - 5 pm daily and assess the feasibility after the initial operation has commenced.

This Batten profile would be fixed directly to the platform. It would restrict public access to the platform and not a greater area.

The detail on the top will be a cultural feature alongside increasing the difficulty to scale the fence.

This is the style wire that we have chosen. You can see the difference in the texture. The smooth swaged surface means that not only is it more durable but also reduces the sound by 66% in comparison to a standard zipline cable.

The lifetime of the wire is increased by 5 to 8 times due to the individual galvanised treatment of each strand and the swaged texture reduces water being able to penetrate the core.

This is a photo of what 99% of zipline operators in NZ are currently using. It is cheaper but the sound is 50% greater and the lifetime is 1/8th of German-made Pfieiffer cable.