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Environmental Preview Report

Addendum 1

**Colinet-Rocky River
Zip Line and Adventure Park**

Registration 1752

To:

**Honorable Graham Letto
Minister
Department of Municipal Affairs and Environment
Government of Newfoundland and Labrador
P.O. Box 8700
St. John's, NL A1B 4J6, Canada**

From:

**Trevor Linehan
Rocky River Zip Line and Adventure Park
PO BOX 101 Colinet, NL A0B 1M0**

13 November 2018

Colinet-Rocky River Zip Line and Adventure Park

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1 Name of Undertaking

The undertaking has been assigned the name:

“Colinet-Rocky River Zip Line and Adventure Park”

2 Proponent

2.1 Name of the Proponent

Rocky River Zip Line and Adventure Park

PO BOX 101 Colinet, NL A0B 1M0

Tel: 709 588 2452

2.2 Chief Executive Officer

Trevor Linehan

Owner/Manager

Cell: 709 770 0024; Email: omegacontracting@hotmail.ca

2.3 Principal Contact Person for Purposes of Environmental Assessment

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3 Introduction

This addendum document is to address the additional information required by Environmental Assessment Division, as outlined in the Minister's letter of October 9, 2018. The letter is publicly available on

https://www.mae.gov.nl.ca/env_assessment/projects/Y2014/1752/2018%20EPR%20Decision%20-%201752_Oct%209.pdf

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Additional details are required about the construction of the hiking trail, the construction of the zipline towers, roadway and their access points, and septic systems designs.

4 Construction of the hiking trail

The north and west side of the walking trail route has drier, higher grounds with good soil load bearing and drainage characteristics. The east and south east side of the route will be along the old highway and on higher grounds. The south side of the trail will cross a bog along a distance of only 60 meters. Therefore the 1.95 km walking trail will only cross a very small wetland area.



4.1 Locations and Design of Stream Crossings

Exact mapping of the proposed walking trail, including a detailed count of stream crossings, as well as detailed walking trail design will be done after Environmental Assessment is released and before actual construction. However, thoroughfares such as walking trails crossing streams, or draining ditches or other waterways are built using a variety of culvert design such as shown in Figure 13.22 below. The most practical and commonly used method is the pipe culvert because of its simplicity, ease of construction and long service life, and consequently its cost of construction. The proponent will use these stream crossing systems in the construction of the walking trail. The proponent does not intent to divert small streams. The walking trail will be built as necessary to maintain the existing natural environment and conditions of the site.

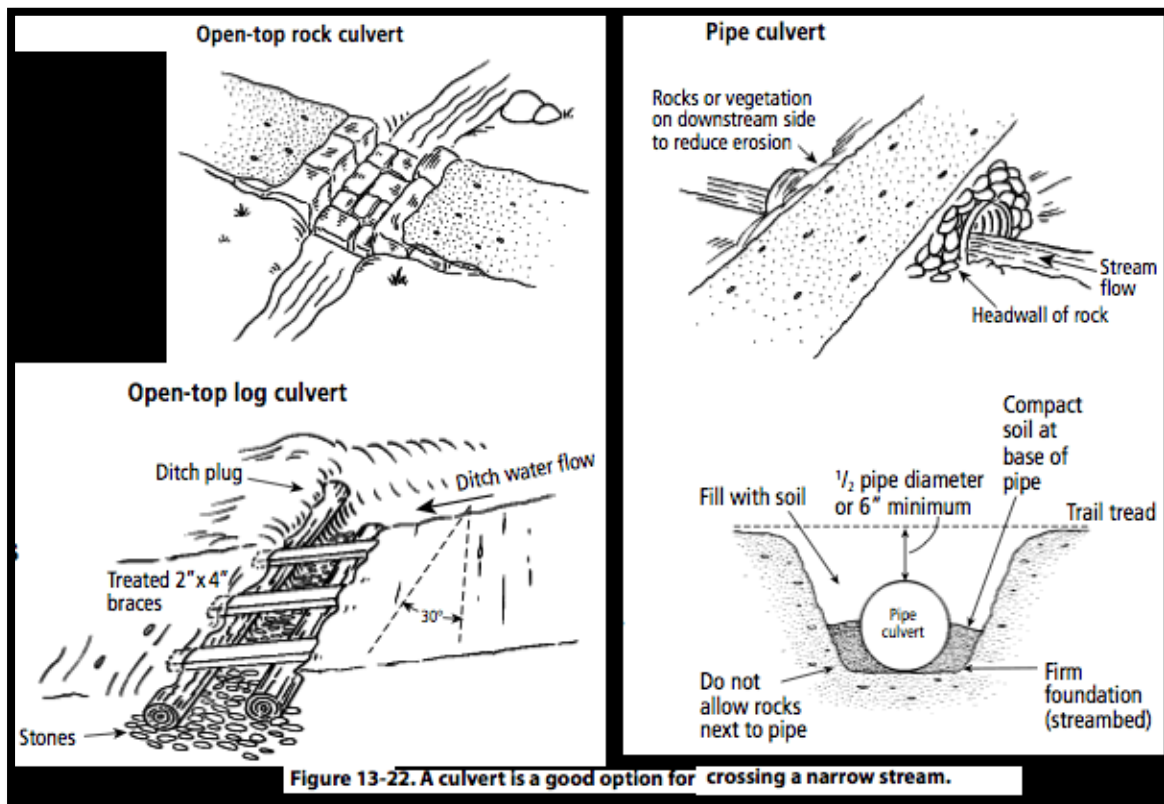
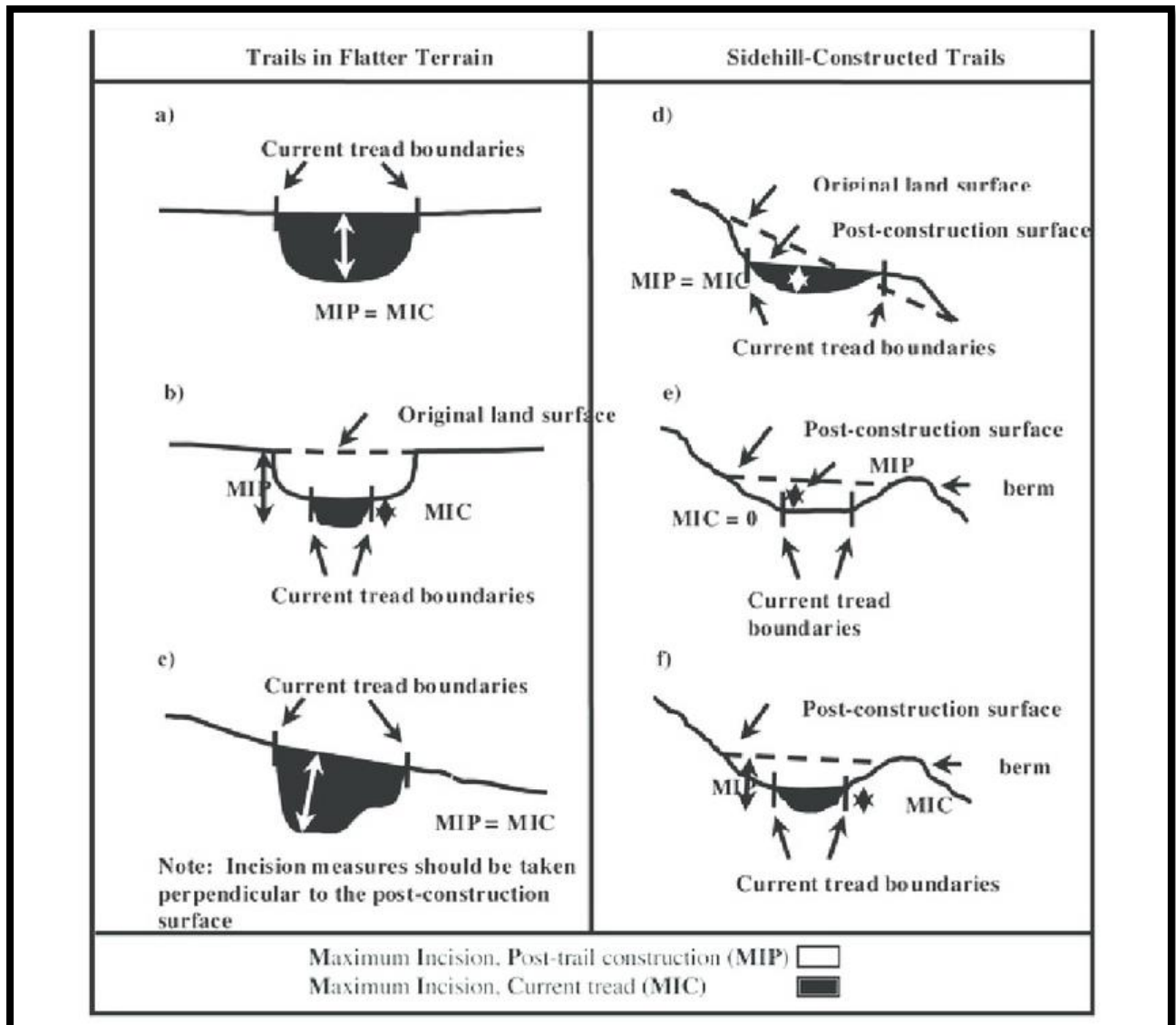


Figure 13-22. A culvert is a good option for crossing a narrow stream.

Basic walking trail construction design is shown in the figure below. The proponent intends to build a walking trail properly to avoid excessive maintenance and repairs due to seasonal washouts, poor drainage, and other such issues.



4.2 Avoidance of wetlands

The proponent intends to avoid wetlands by routing the trail on dry grounds as much as possible. However, wetland crossings when required will be achieved with boardwalks such as shown below. Such board walks are encountered on most walking trails in Newfoundland and the rest of Canada, and their construction is completely adequate in terms of wetland avoidance, durability and cost effectiveness.

The Grand Concourse Authority in St. John's has a full array of designs that have been successfully implement, and that the proponent can get guidance from.

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When the wetland is not too deep, infill with thread boundaries are used, such as below.



As shown below, surface water can be diverted away from the walking using techniques shown in Figure 13.11.

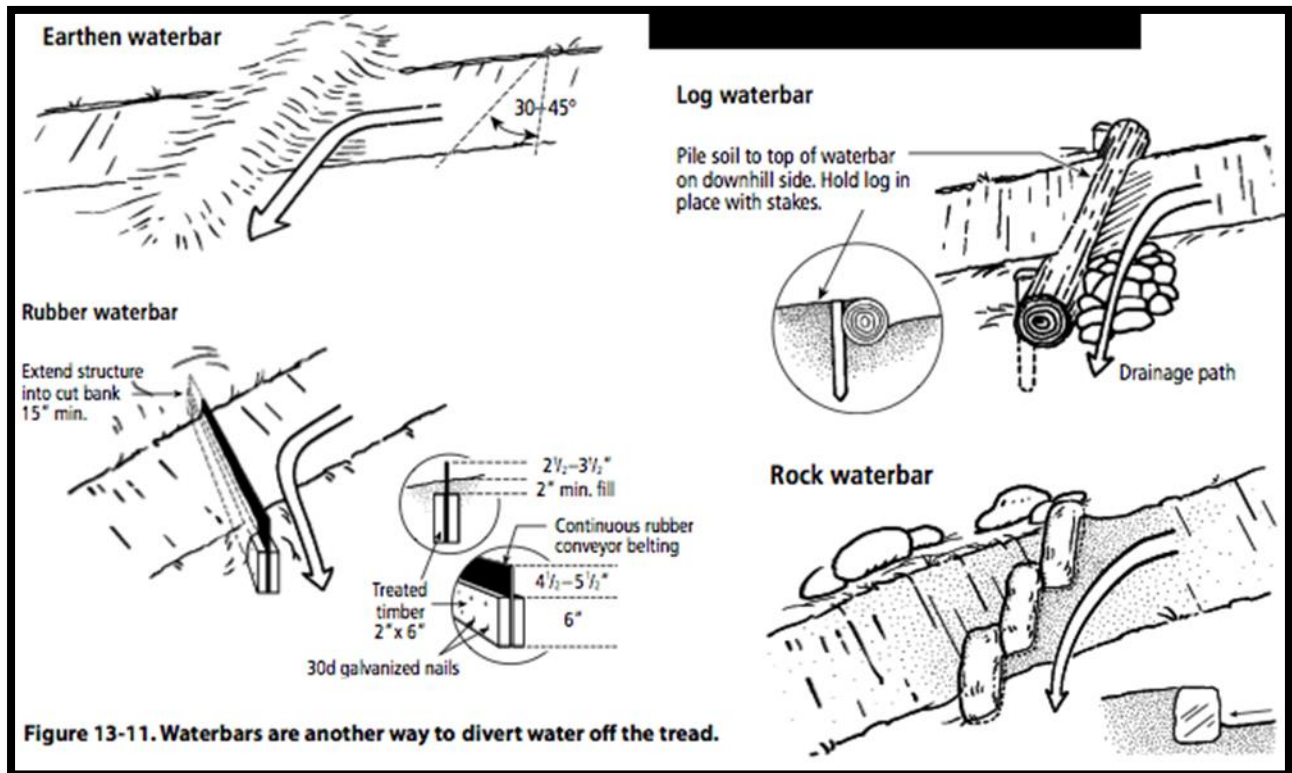


Figure 13-11. Waterbars are another way to divert water off the tread.

5 Construction of Zipline Towers

5.1 Access Routes for Zipline Tower Construction

All zipline towers will be built near the Rocky River estuary where the grounds are dry, rocky and offer good soil load bearing capacity and constructability.

The access route to the zipline tower sites, on the east side of the estuary, will be the walking trail route. That section of the walking trail route has good dry rocky soils to support construction heavy equipment used for construction and site development. Even, the biggest heavy construction machines only have a width of 8 feet. In the end, a width of 8 to 10 feet for the hiking trail bordering the east side of the estuary will be desirable to accommodate walking traffic, rest areas, garbage bins, signage, etc. The proponent will seek to use smaller machines, as possible to reduce extent of site work required to access and work the zipline tower sites and construction.

On the west side of the estuary, the zipline tower site locations will be accessed from the existing right-of-way dirt road following the estuary shore in a north-south direction. The towers will only be a short distance from the road. This will minimise any construction disturbance.

5.2 Disturbance from Zipline Tower Construction

Clearly, the Proponent will seek to minimize any disturbance caused by the zipline tower and system construction. The extent of grubbing and site work necessary to build the tower foundations and execute their erections will reduce itself to a small area that will be used for the system operation and access by the public. Consequently, the disturbance cause by the zipline tower construction will be minimal. Each tower will need a cleared footprint of 8 to 10 meters by 8 to 10 meters, with an access path of 3 to 4 meter wide.

Construction of such zipline towers would not involve any activities or equipment that are particularly noisy, dusting, polluting or disturbing. Equipment used will be medium size excavator, tandem dump trucks, boom trucks or relatively small cranes. All these heavy equipment machines are standard, normal construction equipment that are commonly used in most small-scale construction projects. Typical precautions and normal good construction practices will be used to avoid fuel spills, silting of streams and waterways, work scheduling to avoid traffic or night time activities, etc...

5.3 Locations and Number of Zipline Towers

The current proposal is as per EPR-June 2018, starting with Phase 1 (3 towers) and Phase 2 (3 towers <should read Tower 4,5 & 6>, and Phase 3 (3 more towers <should read 7, 8 & 9>). Potential further addition of Towers 10 – 14 along southern end of estuary in future depending on business activity as per EPR-January 2017. Current land grants and lease applications reflect 14 tower bases. The Proponent has processed the associated Crown Land applications for that purpose. The number of towers proposed is less than that of the Crown Land Applications because Crown Land needs to include any potential land use from the proponent.

6 Roadway, Access Points and Mapping

All roadways, and roadway access points are shown in Appendix 1, with detailed scaled mapping and aerial pictures.

7 Septic Design

Septic systems required to service the facilities are already well planned and identified. Facilities to be serviced will include the chalet, the rental cottages, the festival grounds and concession buildings.

Onsite sewage treatment for all the facilities will be achieved with an Advanced Enviro-Septic system properly designed, sized and approved by Service NL. Advanced Enviro-Septic uses a conventional septic tank for primary sewage treatment and the NSF/BNQ Certified Advanced Enviro-Septic disposal field system for secondary treatment and infiltration into the ground. Advanced Enviro-Septic (www.envirosepticnl.com) is very cost effective and requires only a

very small land footprint as compared to conventional septic disposal field. Advanced Enviro-Septic are 12” diameter pipes of proprietary corrugation and geotextiles assembly that are placed 6” apart in a bed of sand with specific granulometry.

As per NL Sanitation Regulations, any onsite sewage treatment system of less than 4,560 liters per day capacity must infiltrate in the ground. Consequently, the rental cottages will only require the typically small systems for 2 and 3 bedroom houses, 1,200 to 2,200 liters per day of sewage treatment. With the Advanced Enviro-Septic system, the land footprint required for such small systems is only 20 to 30 square meters (200 to 350 square feet). Certainly, at the sites selected for building construction, the grounds will be tested for their infiltration capacities and the onsite sewage treatment systems will fit and will meet all the design standards and regulations in force through the Service NL Environmental Health Division.

The capacity of onsite sewage treatment systems for the chalet and the festival grounds will exceed the 4,560 liters per day benchmark such that these systems can be designed to either infiltrate in the ground or be discharged to a water course (so long as the effluent treatment meets the water pollution regulations). Advance Enviro-Septic systems meet and exceed the water pollution regulations. This is demonstrated and proven with the product’s NSF 40 Class 1, BNQ and CE certifications. Initial estimates of sewage water treatment capacities are in the order of 10,000 to 15,000 liters per day for the chalet, and up to 20,000 or 25,000 liters per day for the festival ground depending on final design capacity of the festival grounds. Portable toilets are also typically used in public fair events, when normal existing site servicing capacities are exceeded. The proponent will supplement as required the sewage servicing capacity of a given event with portable toilets.

For such larger systems, Advanced Enviro-Septic can be configured with 2 levels of secondary sewage treatment pipes (Advanced Enviro-Septic pipes), such that the land footprint required is very small, typically 20% of the land footprint required for a traditional septic disposal field. If site conditions are not conducive to ground infiltration, the Advanced Enviro-Septic system can be placed in an impervious basin (with geomembrane), with treated effluent draining to a watercourse (it can be run through a UV disinfection system to reduce coliforms as required).

Already, several Advanced Enviro-Septic systems of capacities larger than 4,560 liters per day have been approved and installed in Newfoundland.

8 Conclusion

This EPR addendum addressed all the information points that in the opinion of the Minister required clarification and further details. This proposed project consists of only 3 subprojects that individually would not require necessarily such extensive assessment from government.

9 Appendix I – Roadway and Roadway Access Points

Government of Newfoundland & Labrador Department of Fisheries & Land Resources



NOTE TO USERS

The information on this map was compiled from land surveys registered in the Crown Lands Registry.

Since the Registry does not contain information on all land ownership within the Province, the information depicted cannot be considered complete.

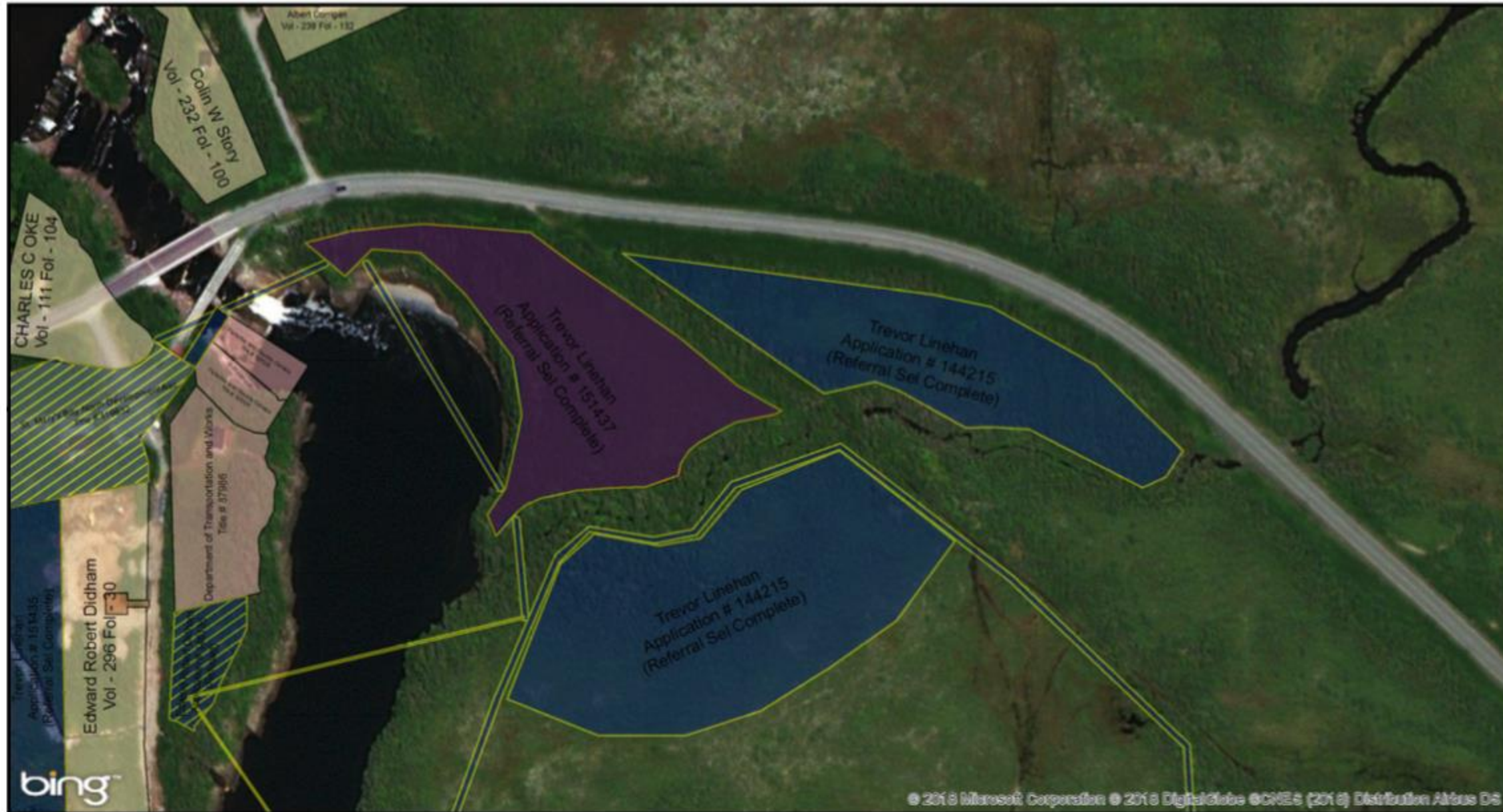
The boundary lines shown are intended to be used as an index to land titles issued by the Crown. The accuracy of the plot is not sufficient for measurement purposes and does not guarantee title.

Users finding any errors or omissions on this map sheet are asked to contact the Crown Titles Mapping Section, Howley Building Higgins Line, St. John's Newfoundland.

Users finding error or omissions can contact the Crown Titles Mapping Section by telephone at 729-0061. Some titles may not be plotted due to Crown Lands volumes missing from the Crown Lands registry or not plotted due to insufficient survey information.

The User hereby indemnifies and saves harmless the Minister, his officers, employees and agents from and against all claims, demands, liabilities, actions or cause of actions alleging any loss, injury, damages and matter (including claims or demands for any violation of copyright or intellectual property) arising out of any missing or incomplete Crown Land titles, and the Minister, his or her officers, employees and agents shall not be liable for any loss of profits or contracts or any other loss of any kind as a result.

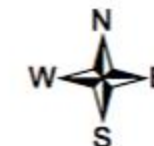
For inquiries please contact a Regional Lands Office.
Corner Brook - 637-2390
Gander - 256-1400
Clareville - 466-4074
St. John's - 729-2654
Goose Bay - 896-2488

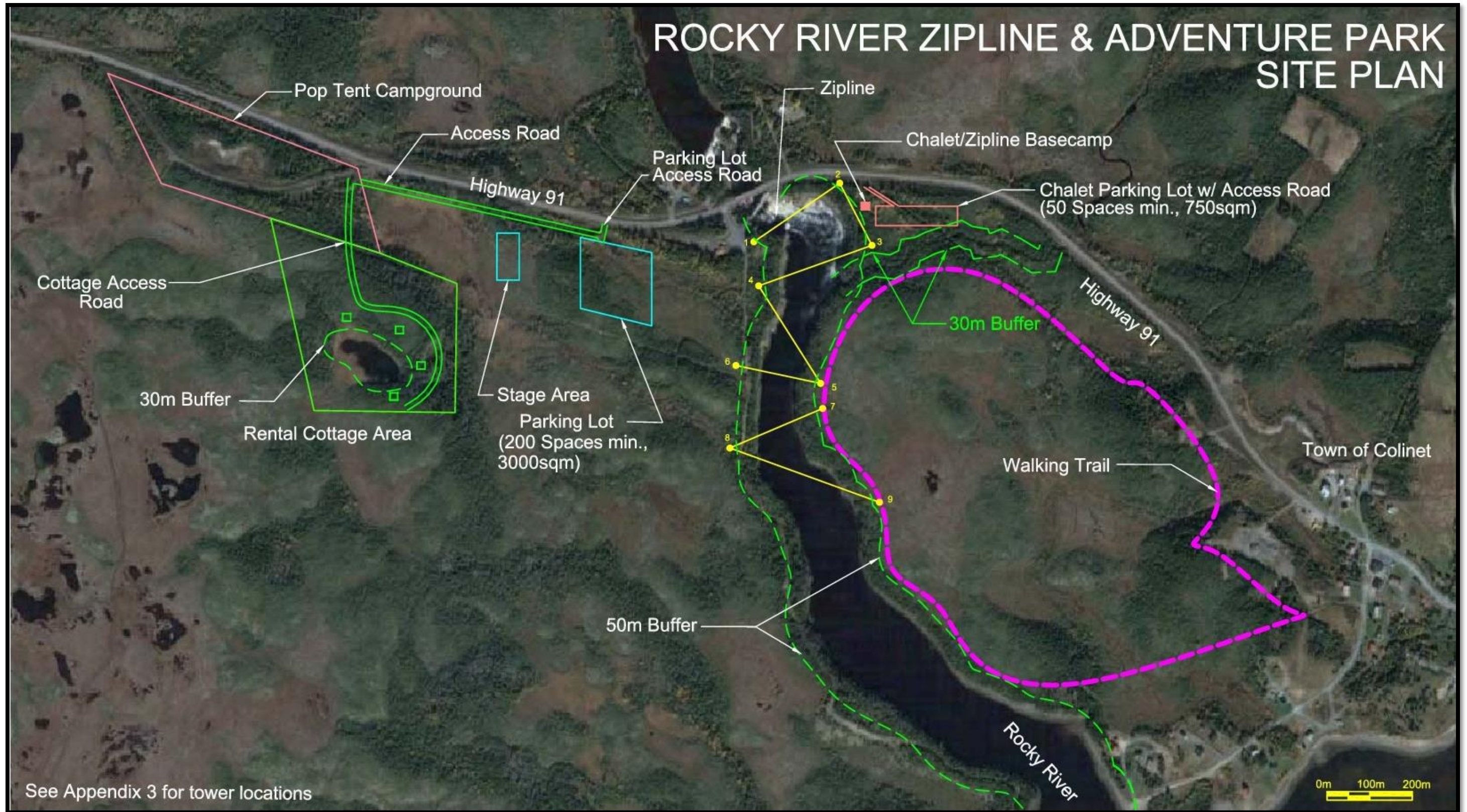


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Compiled on January 18, 2018

Crown Lands Administration Division





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