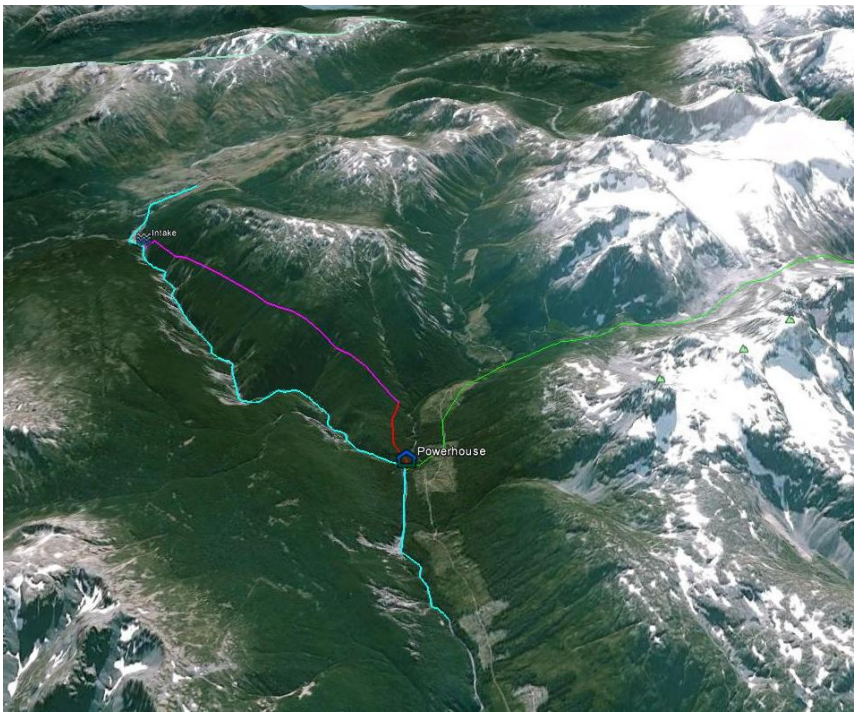
CLORE RIVER HYDROELECTRIC PROJECT SCOPE REPORT



Prepared for:

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AUTHENTICATION

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EXECUTIVE SUMMARY

Canadian Projects Limited (CPL) was retained by 8056587 Canada Inc. to prepare a Project Scope Report for the Clore River Hydroelectric Project. This document provides a project scope description meeting B.C. Waterpower Project Application requirements.

The proposed 120 MW Clore River Hydroelectric Project, located approximately 60 km southeast of the town of Terrace, BC, will be a run-of-river type development. A headworks structure consisting of a weir and intake will divert a portion of flow from the Clore River first through a 6400 m tunnel and then through a penstock (water pipeline) for the remaining 1160m to a powerhouse. All water diverted will be returned to the Clore River immediately downstream of the powerhouse. The Project is situated entirely on Crown Land and will make use of existing access corridors.

Lower Clore River, near the powerhouse site, can be accessed by existing logging roads. The penstock, tunnel, and headworks sites are currently accessed by helicopter. Upgrading of existing logging roads and the construction of new access roads from the powerhouse to the intake site will be required for construction and long term access for plant operation.

A new 47 km long 230 kV transmission line will be required to connect the Project to the existing BC Hydro integrated transmission line south of Terrace, BC. The exact point of interconnection has yet to be determined.

Based on available fisheries information it is believed that there are Chinook Salmon, Dolly Varden, Rainbow Trout, and Mountain Whitefish in the Clore River.

The Project will be submitted in a future Call for Power or other BC Hydro procurement process as applicable.

The general timeline for the Project involves environmental and technical field studies being conducted in parallel with First Nations consultation through mid-2013, at which time a Development Plan will be submitted. It is expected that project approvals will be received by mid-2014, with construction starting at that time, and the Project becoming operational in 2016.

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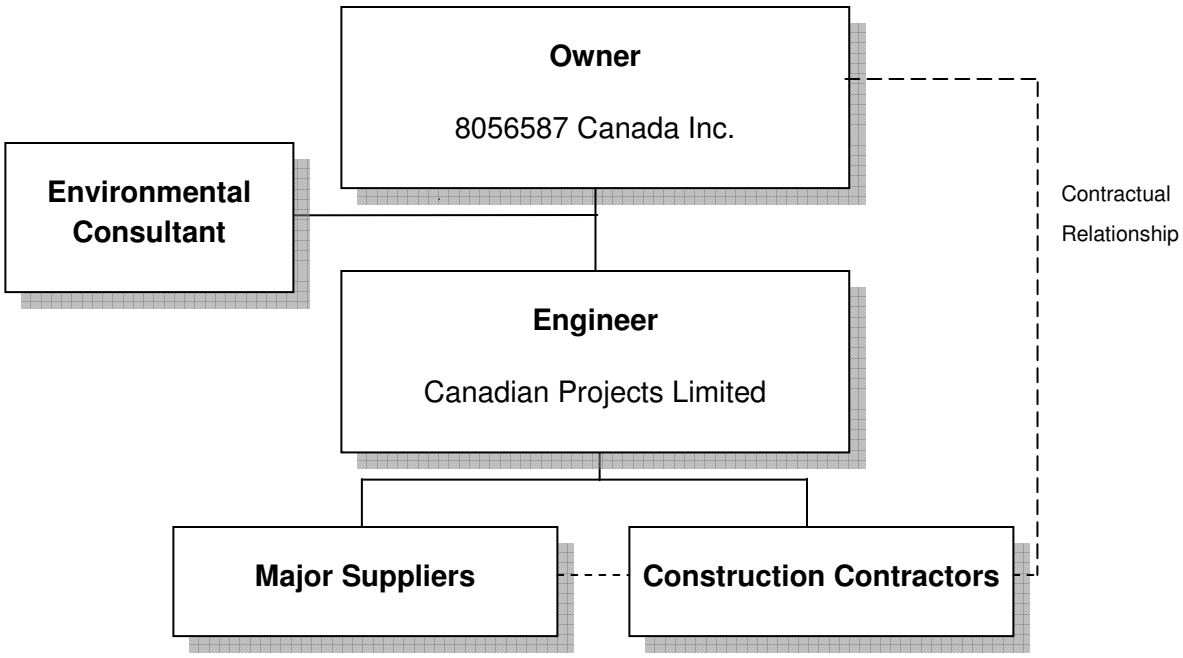
1 PROPONENT IDENTIFICATION

Project Team



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2 PROJECT CONCEPT

2.1 Project Location and Capacity

8056587 Canada Inc. is proposing to construct and operate a commercial run-of-river hydroelectric power facility on Clore River. The installed capacity of the Clore River Project will be 120 MW, consisting of a headworks structure, penstock, and powerhouse.

The proposed Project location is approximately 60 km southeast of the town of Terrace, BC.

The approximate intake and powerhouse structures locations and elevations are as follows:

	UTM NAD83 Zone 9		
Structure	UTM Northing	UTM Easting	Elevation, m
Intake	6 002 865	575 768	765m
Powerhouse	6 007 075	569 853	525m

2.2 Access

Lower Clore River, near the powerhouse site, can be accessed by existing logging roads. The penstock, tunnel, and headworks sites are currently accessed by either ATV or helicopter. The construction of new access roads from the powerhouse to the intake site will be required. A temporary access road will also be constructed which will access the intake from the East side of the Project. A road exists off of Hwy 16 and runs west towards the Project but terminates approximately 9 km from the intake site. The temporary road will be constructed starting at the end of the existing road to the intake site, with a distance of approximately 11 km.

New access roads will be constructed in accordance with the recommended practices and guidelines of the Ministry of Forests.

2.3 Land Use

The Project will occupy unsurveyed Crown Land. Forest harvesters, guiding, and outfitting are known to be active in the region. Detailed land use information will be provided in the Development Plan.

2.4 Water Use

There are no other water licences or water licence applications on Clore River at this time.

2.5 Headworks, Penstock and Powerhouse

The Project will be a run-of-river type development, which will divert a portion of flow from the Clore River through a tunnel and penstock (water pipeline) to a powerhouse. All water diverted will be returned to the Clore River immediately downstream of the powerhouse. The Project is situated entirely on Crown Land and will make use of existing access corridors.

There will be three main components to the Project:

2.5.1 Headworks

The headworks will consist of an intake, weir, and small headpond. In order to provide adequate intake submergence and to divert flows, a spillway control weir will be constructed across the stream. This will increase the water level behind the weir and provide adequate intake submergence. The depth and extent of the headpond is expected to provide sufficient time for larger sediment to settle out of the flow. A sluiceway and gate adjacent to the intake will allow sediment to be flush downstream. Further engineering and detailed surveys are required to determine the extent of the headpond. However, the headpond will be designed to comply with TerraChoice EcoLogo^{TM} Criteria, as well as BC Hydro's Green Energy Criteria.

2.5.2 Tunnel & Penstock

The intake will feed a 6400m long tunnel with an estimated diameter of 3.7 m that will convey the diverted flow into an 1160m long penstock which will carry the flow from the downstream side of the tunnel to the powerhouse. A temporary access road to and from the east side of the project to the intake will allow for mobilization of equipment and material to begin tunnel construction prior to having an access road from the powerhouse to the intake constructed.

2.5.3 Powerhouse

A low-profile powerhouse will be located on Clore River and will contain the turbine-generator units, ancillary protection and control equipment, shut-off valves, hydraulic power units, and cooling systems. Station service electrical power will be supplied by a battery system and by the generating unit itself. A short tailrace channel will be excavated in order to discharge flows back into the river. All water withdrawn at the intake will be returned to the river at the powerhouse tailrace.

2.6 Substation and Transmission

The substation will be constructed near the powerhouse. The substation will contain a step-up transformer, disconnect switches, and circuit breakers constructed to BC Hydro requirements complete with adequate fencing.

A new 47 km long 230 kV transmission line will run east of the Project site and will be required to connect the Project to the BC Hydro integrated transmission south of Terrace, BC at an exact point of interconnection yet to be determined. Additional alternative transmission routes will be investigated and discussed with BC Hydro as project planning continues.

2.7 Construction Staging Areas

Construction staging areas are required for material storage, pre-assembly, and site offices. Post-construction reclamation of these areas will include blend grading, seeding, and tree planting as required to restore to the pre-construction condition. The following construction staging areas are envisaged:

- Intake and tunnel construction areas,
- Powerhouse and penstock construction areas.

Although these areas have not been finalized at this time, it is expected that they will be contained within the land tenure area applied for.

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3 PROJECT CAPACITY AND WATER DIVERSIONS

3.1 Watershed Characteristics and Availability of Water

The catchment area for the Clore River intake is approximately 556 km^2 and has an average elevation of about 1320 m MSL. The basin is approximately 55 km long and about 10 km wide and has two main tributaries draining the north (Burnie River) and south (Clore River) ends of the basin to the confluence just upstream of the intake. The north end of the basin forms part of the Burnie-Shea Provincial Park and Protected Area. The basin is estimated to produce 1350 mm of annual runoff per year based on comparisons between the nearby gauged Morice River, Telkwa River, and Zymoetz River, of which the Clore River is a major tributary. For the 533 km^2 basin area, this equates to a mean annual discharge of about 22.8 m^3/s. Data from the Zymoetz River, Telkwa River and Morice River regional hydrometric stations operated by the Water Survey of Canada was used when reviewing the Clore River watershed.

3.2 Energy Production

The maximum design plant flow is proposed to be 70 m^3/s. This is expected to result in an average annual energy generation of 260,785 MWh. Final diversion rates and expected energy generation may change pending the results of additional flow gauging, fisheries investigation, and instream flow needs assessments.

3.3 Parameters for Operation of the Project

The Project will be designed as a run-of-river type facility. In late spring and early summer months, there is usually more flow than required and therefore the plant is operated at capacity, with the surplus flow continuing downstream past the intake. In other months, or any time when flow is less than that required for maximum output, production is derived from the total stream flow less the minimum release.

3.4 Linkages with Other Projects

The Project is not expected to connect to or interact with any other facilities or infrastructure not proposed by 8056587 Canada Inc. other than connection to the BC Hydro grid at the Point of Interconnection. All works will be solely dedicated to the Project. Sharing of infrastructure or facilities with other parties is not contemplated at this time.

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4 POTENTIAL MARKETS

The Project will be submitted in a future Call for Power or other BC Hydro procurement process as applicable.

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5 FIRST NATIONS AND ENVIRONMENTAL

5.1 First Nations

The Project area lies within the traditional territory of the Haisla, Skin Tyee and Kitselas First Nation.

8056587 Canada Inc. will work with the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO), and other Crown agencies to ensure all First Nations and Aboriginal communities with an interest in these lands have been identified and are included in consultation activities.

5.2 Terrestrial Environment

The Project is located in the Eastern Hazelton Mountains which is a narrow mountain area located on the eastern side of the Kitimat Ranges. Moist Pacific air spills over into this area, or enters via low mountain passes. The area is greatly influenced by dry descending air creating rainshadow on the eastern portion. Arctic Air invades the region from the northeast, bringing periods of intense cold temperatures. Forest vegetation is transitional between wet rain forests to the west and sub-boreal to the east.

Logging is the most extensive industry based on renewable resources; an extensive road network has been built to harvest almost all non-park commercial timber. There are also many mines in the area.

Cougars, black bears, coyotes, and wolves are common throughout the area. Wild ungulate in the area include moose, mule deer, and California big horn sheep. Widespread small mammals include the western jumping mouse, muskrat, and long-tailed weasel. Two species of bat, the big brown bat and Townsends's big-eared bat, hibernate in the ecoprovince.

5.3 Aquatic Environment

Preliminary review of available fisheries information indicates that there are Chinook Salmon, Rainbow Trout, Dolly Varden and Mountain Whitefish in the Clore River. Additional studies will be carried out to confirm this. Fish screens or other design considerations may be required in order to avoid entrainment or other impacts to fish should they exist. A series of falls have been noted to exist downstream and upstream of the powerhouse structure on Clore River and may act as a fish barrier.

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6 SCHEDULE

A general Project timeline is as follows:

Stage	Start	Finish
First Nations Engagement		
First Phase	April 2012	July 2013
Second Phase	August 2013	January 2017
Field Studies and Site Investigations	August 2012	January 2013
Engineering	April 2012	July 2013
Development Plan	February 2013	July 2013
Environmental Approvals	August 2013	May 2014
Construction	June 2014	May 2015
Commissioning and Commercial Operation	May 2015	June 2016

First Nations Engagement is shown in two phases – the first phase will focus on sharing information, understanding and assessing potential effects on First Nations interests and rights, and refining consultation and accommodation agreements. The second phase will consist of the implementation and execution of agreements, and ongoing communications and relationship building with the communities.

6.1 Field Studies and Investigative Schedule

Environmental and field work is shown to occur in 2012 and will start when site is accessible. Environmental monitoring to collect the hydrologic, fisheries, wildlife and habitat data, and water quality information necessary to characterize the resources of the study area and to identify potential project impacts will also be required. Upon receipt of a temporary land and water licence the planning and execution of these investigations will be developed. It is expected that access to these sites will be by pickup truck if existing roads are near the Project site. If there are no existing roads, the site will be accessed either by ATV, boat, or helicopter depending on specific site conditions.

Additional field investigations such as test pitting, seismic work and/or drilling of bore holes may be required as project design develops. These activities will most likely occur in the late spring through to the fall when access is easier and low disturbance to the ground can be achieved. It is anticipated that test pits will be required at the headworks, powerhouse, along the penstock ROW, and any proposed borrow pit and waste site locations within the land tenure area. Bore holes and seismic investigative work may be required throughout these areas after information from test pits is obtained. If roads/access trails exist in the Project area, small excavators and truck mount drills will be used to complete the work. Some slashing of brush may be required to access desired test locations. Exploration type drill rigs will be moved to the project site using a helicopter if there are no existing access roads/trails to required drill locations. Investigative work will be completed at times when potential impacts to the area are low and methods to avoid disturbance to the area will be used. Although the locations of investigations have not been finalized at this time, it is expected that they will be contained within the land tenure area applied for.

7 REFERENCES

The British Columbia Ecoregion Classification, Third Edition March 2011. Dennis A. Demarchi. Ministry of Environment, Victoria, BC.

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