

Submission

 	No.: 2015-P56e
	To: Board of Directors
	Date: 2015-04-22
For: DECISION	

1. TITLE

Federal Design Approval – Chaudière Falls Hydroelectric Development and Public Access to Chaudière Falls – Chaudière Hydro Limited Partnership

2. PURPOSE OF THE SUBMISSION

To obtain the approval of the National Capital Commission (NCC) Board of Directors for the design of the new generating station (GS) and the public access to the Chaudière Falls and delegation of authority for the Executive Director of Capital Planning to sign the Federal Land Use and Design Approval.

To obtain approval of the NCC Board of Directors to delegate authority to the CEO to sign a Memorandum of Understanding (MOU) between the Chaudière Hydro Limited Partnership (CHLP) and the NCC.

On December 8, 2006, the NCC granted Federal Land Use Approval for a New Hydroelectric Facility on Chaudière Island Site Adjacent to the Ottawa River pursuant to section 12 of the *National Capital Act* to Domtar Inc. The Ottawa No.1 and 2 GSs, associated lands and facilities were purchased by Hydro Ottawa in 2012. Since then, CHLP, which is fully owned by Energy Ottawa has continued to operate the GSs and now intends to proceed with the redevelopment project.

3. AUTHORITY

- *National Capital Act*, subsection 10 (2) and section 12
- Federal Land Use Approval New Hydroelectric Facility on Chaudière Island Site Adjacent to the Ottawa River (CP2125-365-07)

4. RECOMMENDATIONS

THAT the design for the CHLP GS and design of the public access to Chaudière Falls, including the entry plaza, viewing platform and outlooks, pedestrian crossings, and safety features BE APPROVED subject to the prior completion of the Environmental Assessment Decision as required by the *Canadian Environmental Assessment Act* (CEAA) of 2012, and the completion of the aboriginal consultation process required under the Constitution Act.

THAT the signature for the Federal Design Approval document for the design of the Chaudière Falls Hydroelectric Development and Public Access to Chaudière Falls, and of subsequent approvals for minor design modifications arising during the implementation process, be delegated to the Executive Director, Capital Planning Branch, provided they do not substantially alter the original design intent.

THAT the Federal Land Use Approval New Hydroelectric Facility on Chaudière Island Site Adjacent to the Ottawa River (CP2125-365-07) be amended to reflect the widening of the intake and tailrace channels, and the realigned and enlarged public access to the Chaudière Falls.

THAT the Board approve the delegation of authority to the NCC CEO to sign an MOU between CHLP and the NCC.

5. BACKGROUND

The project is situated on a portion of Chaudière Island within the National Capital Region and consists of redeveloping the existing hydroelectric generating facilities by constructing an enlarged and realigned intake channel and a new 29 megawatt GS and retiring the existing Ottawa No.1 and 2 GSs.

The project area is approximately 2.7 hectares in size and includes a dewatering structure (Ottawa Bulkhead), intake and discharging channels, and covered and open flumes. Other features on Chaudière Island include several buildings associated with Domtar's former paper mill that once operated on the island (see Maps on Drawing 0001 in Appendix 2). The western tip of Chaudière Island is referred to as Pickard's Point and is an extension to the original island as a result of the placement of fill by Domtar in the 1960s. Booth Street serves to connect the Cities of Ottawa and Gatineau and crosses the eastern part of Chaudière Island in a north-south direction.

Land ownership of Chaudière Island is comprised of provincial Crown lands on the western tip of the island, CHLP lands associated with the Ottawa No.1 and No.2 GSs, federal Crown lands under the jurisdiction of Public Works and Government Services Canada (PWGSC); a portion of which are leased to Hydro Ottawa, and lands owned by Domtar, which are currently part of the Windmill transaction.

The Chaudière Hydro Redevelopment Project was formally announced on March 7, 2014. A 40-year Power Purchase Agreement has been established under the Ontario Power Authority's Hydro Electric Standard Offer Program Municipal Stream. Once operating, the GS will provide electricity to power 20,000 homes for a year. Following receipt of all applicable permits and approvals, construction is planned to occur between April 2015 and September 2016. Testing and commissioning will then occur from October 2016 to February 2017. The GS will be fully operational in February 2017.

The project will include the following components:

- A 200 m long, 45 to 60 m wide and 9 m deep intake channel to convey water from the Ottawa River to the new powerhouse.
- A new 29 MW close-coupled powerhouse containing four 7.3 MW turbines, an enclosed control room and electrical room.
- A 40 m long by 45 m wide discharge tailrace channel from the powerhouse to the Ottawa River.
- Demolition and removal of the Ottawa Bulkhead intake structure.
- An entrance plaza at the eastern end of the GS.
- Provision of pedestrian access across the powerhouse to allow for public access through the Project area to Booth Street.
- Construction of a new pedestrian access bridge across the intake channel. This will lead to a viewing platform or plaza to better observe the Chaudière Falls. Additional smaller viewing platforms will be located around the site, providing multiple perspectives of the Falls.
- A 'Life Stream'; a series of pools connected by migration streams which will allow the American Eel to move both up and downstream and serve as an attractive water feature.

The majority of the powerhouse and associated electrical facilities (e.g. substation transformers) will be situated below grade to reduce visual impacts to the surroundings. The powerhouse will be connected to the Ontario grid by routing the 13.2 kV interconnection cable underground from the transformers to and through the Canadian War Museum and NCC lands via the existing Buchanan, Power Canal and Bronson Bulkheads to connect to Hydro Ottawa's transmission facilities.

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A new pedestrian access bridge with a single centre support pier will be constructed across the intake channel to enable public access from Chaudière Island (Pickard's Point) to a viewing area along the south side of the Chaudière Falls Ring Dam. This bridge feature is an initiative proposed by the NCC as part of the long term objective to enable public access to Chaudière Falls. In addition, pedestrian access will be provided across the top of the powerhouse to allow for public access through the project area to Booth Street.

This will be an improved and value-added public access to the Chaudière Falls, which was initially protected for by the NCC through an easement described in the December 8, 2006 Federal Land Use Approval New Hydroelectric Facility on Chaudière Island Site Adjacent to the Ottawa River. The initial easement consisted of a narrow bike path and two modest outlooks and included two crossings of the power generation channel and tailrace.

The project was presented to the Advisory Committee on Planning, Design and Realty (ACPDR) in December of 2014 and they strongly supported the project in principle including the basic design moves, the integration of the industrial heritage and the consultation with the First Nations. They felt that the project will be an important Capital Destination and offered the following recommendations.

The design should achieve a balance between First Nations and industrial heritage influences. The parts of the design that relate to the First Nation's themes should be refined and pedestrian circulation should be improved. A way should be found to make the central flame an important feature even when it is unlit. The history of the industrial past should be brought out more and could include interpretation of the working past and power generation. The historic buildings are an asset, should include washrooms and could be programmed by a third party.

They also suggested that the site should work in winter and be accessible year-round and that the NCC should collaborate for maintenance and programming. Further study of paving materials should be done and wooden walkways, although interesting may prove problematic from a maintenance perspective. Planting should consist of native shrubs and vines while flower pots are to be avoided. They also suggested that the design of the protective fencing be refined to make them less apparent.

NCC staff will work with CHLP to refine the design to incorporate the ACPDR recommendations. The NCC also proposes to enter into an agreement with CHLP for the operation and maintenance of the public access to the Chaudière Falls. The agreement will identify roles and responsibilities of each participant with regard to the publicly accessible portions of the project and will include any required easements.

6. ISSUES, IMPACTS AND RISKS

- This project responds to and supports key strategies identified in the NCC's 2013-2017 Corporate Plan, notably:
 - Build the Capital by ensuring federal lands are used to their greatest potential in a way that contributes to the significance and heritage of the Capital.
- The project responds to and supports key policies identified in the NCC's 2005 Core Area Sector Plan, notably:
 - Improve pedestrian access to Chaudière Falls to showcase the grandeur and significance of this natural feature.
 - Establish pedestrian linkages from the Canadian War Museum to the Chaudière Falls Ring Dam, via Albert and Chaudière, in collaboration with Domtar and Energy Ottawa.
 - Enhance interpretation, access to facilities, trails and lookouts to improve the image of the sector and expand the public domain over time.
 - Celebrate and interpret the area's industrial and aboriginal heritage through interpretation,

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programming, commemorations, tours of industrial and power generation installations, viewing platforms, and events.

- The link from the War Museum to the Chaudière Falls via the bulkheads and Pickard's Point will require coordination with the Windmill development in order to be completed as the GS is being constructed. Windmills' conceptual plan has been coordinated with Energy Ottawa's proposed design and includes the new intake channel configuration.
- Public access to the Chaudière Falls may be restricted at times in order to allow for the ongoing maintenance and operation of the GS.
- Interpretation component of the project is not yet developed.
- Design of the public access and viewing area must conform to the safety standards of power generating facilities.
- The CEAA 2012 determination of environmental effects for the project is ongoing. This determination includes three federal departments in addition to the NCC, namely PWGSC, Transport Canada (TC) and Department of Fisheries and Oceans (DFO). Delays in obtaining the CEAA 2012 determination pose a significant risk to the project. The proponent is also in the process of obtaining the required provincial environmental permits.
- A fast-tracked schedule offers no forgiveness with regard to meeting key deadlines, approval turnaround times and dealing with the unexpected. On-going consultations and approvals from all parties will have to be managed very carefully to minimize the impact on delivery.

7. ANALYSIS OF OPTIONS

Not applicable.

8. STRATEGIC LINKS

NCC Corporate Plan 2013-2017

Canada's Capital Core Area Sector Plan, 2005

Canada's Capital Views Protection, 2007

9. CONSULTATIONS AND COMMUNICATIONS

- | | |
|---|----------------|
| • NCC Board – Federal Land Use Approval | December 2006 |
| • Consultations with members of the Algonquin Nation | September 2014 |
| • Presented to Executive Management Committee (EMC) for information | September 2014 |
| • NCC ACPDR – comments on design development | October 2014 |
| • NCC ACPDR – comments on design development | December 2014 |
| • NCC Board – Federal Design Approval | April 2015 |

10. NEXT STEPS

- | | |
|--|----------------------|
| • ACPDR – Comments on design development | December 11/12, 2014 |
| • Board Federal Design Approval | April 2015 |
| • Contract Documents/Tendering | Oct to Mar 2014-15 |
| • Implementation/Construction/Substantial completion | Apr 2015 to Sep 2016 |
| • Final site work and Commissioning/Testing | Oct 2016 to Feb 2017 |

11. LIST OF APPENDICES

- Appendix 1 – FLUA New Hydro Facility on Chaudière Island
- Appendix 2 – Chaudière Hydro Limited Partnership – Project Drawings and Renderings

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12. SUBMISSION AUTHORS

Stephen Willis, Executive Director, Capital Planning Branch

Fred Gaspar, Director, Federal Approvals and Environmental Management Division

Jason Hutchison, Landscape Architect, Design and Land Use

December 8, 2006

File No.: CP2115-365-07

Attention : Mr. François Jetté
Director, Energy and Chemical Recovery Boilers and Ancillaries
Domtar Inc.
395, de Maisonneuve Blvd. West, Montréal (Québec) H3A 1L6

**FEDERAL LAND USE APPROVAL
NEW HYDROELECTRIC FACILITY ON CHAUDIÈRES ISLAND SITE
ADJACENT TO THE OTTAWA RIVER**

BACKGROUND

The National Capital Commission (the “NCC”) has reviewed and analyzed the proposal, by Domtar Inc., including the drawings and documents set out in Schedule A, for the construction of a new hydroelectric facility on a Chaudières Island site adjacent to the Ottawa River.

Part of Domtar’s proposed project is expected to be located on the northernmost portion of the Government Reserve Land on the west and south sides of the Island. These lands have been leased by Her Majesty the Queen in Right of Canada to Domtar Inc. since 1881 and 1889. All terms and conditions have remained the same and both leases have been renewed consequently since those dates. Public Works and Government Services Canada (“PWGSC”) is the legal successor to the Minister of Public Works identified in both Leases and, therefore, has the administration of the hydraulic lots within the meaning of the *Federal Real Property and Federal Immovables Act* (FRFIA).

The existing Ottawa #1 and #2 generating stations and the transmission infrastructures, located at 6 Booth Street in Ottawa, Ontario, are more than 90 years old and are at the end of their useful life. Domtar Inc. has decided to shut down these assets and build a new hydroelectric project (the “Project”) adjacent to the Ottawa #2 generating station. The new project will increase the installed site capacity from 9 MW to approximately 28 MW of hydroelectric power to better utilize the economic value of Domtar’s hydraulic rights. This will also better utilize the “green” power potential of the Domtar site and make it available to the regional grid network. A new electrical substation and a new interconnection transmission line to the Hydro-Québec grid via the Chaudières Bridge will be installed. The Project will not involve any modifications to the existing Chaudières Ring Dam or to the river.

The project consists of the following components:

Upstream Water Intake

The Project does not involve any modifications to the existing upstream water intake structure. The structure will be used to dewater the intake canal by placing stop logs in the intake for inspection and maintenance activities. The top of the water intake structure will allow for bicycle and pedestrian traffic. However all responsibility and liability for their presence will be assumed by the NCC or Public Authority Having Jurisdiction.

The Project site will be completely enclosed in by a 1.8m high architectural fence, which will include several gates. The fence will encircle the upstream water intake, the intake channel, and powerhouse including the substation, and the tailrace section as well as the footbridge that spans it.

Intake Channel

The widened intake channel will incorporate the existing intake channels for the Ottawa #1 and Ottawa #2 generating stations and will take the shape of a funnel that will be approximately 75 metres wide at the current upstream water intake then narrowing down to approximately 40 metres wide in front of the proposed powerhouse. This will require the removal of the fill material that was used in the 1960's, bringing the intake channel almost back to its original width. As well, demolition of some of the existing concrete walls separating the existing channels and the above water concrete decks covering them will be required. Two concrete angled walls serving as water deflectors will be built in the intake channel. These piers could be used in the future to support a pedestrian bridge should the NCC or Public Authority Having Jurisdiction decide to install such a structure.

Power House

The new powerhouse will be built adjacent to Ottawa #2 and will house four 7 MW horizontal Kaplan turbines. The powerhouse will incorporate a separate water intake structure in the front of the building that will allow for each individual turbine to be isolated, as well as serving as an access road to the Ring Dam. The footprint of the powerhouse will be approximately 1,280 m² with an elevation of approximately 4.5 m above existing grade. The new powerhouse will be built with exterior materials consisting of architectural brick and block, and windows allowing for some natural lighting of the interior of the powerhouse, in particular the north side, and also for public viewing of part of the interior of the powerhouse, should public access to the north side of the power house occur. Architectural relief of the brick will be incorporated to help articulate the otherwise plain façade. The roof will be a built up flat roof construction with roof ventilators.

Tailrace

The tailrace section will be approximately 55m long by 35m wide and will cut through the existing north wall at an angle of approximately 45° to the river flow. A footbridge, capable of supporting pedestrian traffic, will be constructed over the tailrace connecting the two sides of the north wall. This would then connect to the NCC or Public Authority Having Jurisdiction administered pedestrian path alongside the western edge of the Chaudières Dam.

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All responsibility and liability for the operation of the bike path and for any and all pedestrian traffic will be assumed by the NCC or Public Authority Having Jurisdiction. In addition, the permitting of such paths, etc. shall also be the responsibility of the NCC or Public Authority Having Jurisdiction.

Transformer Station and Interconnection Line

The main transformer and disconnect switch will be located at the south end of the new powerhouse and will be fenced in but not hidden from view. The interconnection cables to Hydro Quebec will be via underground protected cables passing under the existing bridge.

Access, Parking and Landscaping

Access for maintenance of the new powerhouse will be via a ramp along the southeast edge of the structure, connecting to the open yard of Domtar's site and eastward to Booth Street. This 10% slope ramp will lead to the main powerhouse door through which all of the powerhouse equipment (turbines, generators and electrical equipment) can be brought in and/or removed for maintenance. The existing access road to the Ring Dam will be somewhat modified to also allow for public pedestrian use of part of the road, should the NCC or Public Authority Having Jurisdiction have the right to build and operate a bike path on Chaudières Island in the near future. The road currently passes through Domtar's yard and parking lot, and then passes over the concrete deck of the flume in front of the Ottawa # 2 Powerhouse and finally along the Ottawa River beside the upstream water intake towards the Ring Dam. A new access across the channel in front of the Ottawa # 2 Generating Station will span the intake channel and give access to the Ring Dam. This structure will also serve as the trash racks for the new Powerhouse. Parking on-site will be modified. No additional landscaping is contemplated other than the replacement of whatever is affected by the construction, retaining the present status as a parking lot.

ANALYSIS

In its analysis, the NCC has taken into account that:

- The subject lands are within the National Interest Land Mass;
- Chaudières Island forms part of a group of 5 islands in the middle of the Ottawa River, strategically located in the core of the National Capital Region;
- Chaudières Island is designated a "Special Study Area" in the 1999 *Plan for Canada's Capital* ("1999 Plan") and the 2005 *Canada's Capital Core Area Sector Plan* ("2005 Plan");
- The proposal is compatible with the policies of the 2005 *Plan* for the Islands to preserve and enrich character, to improve connectivity and to enhance use, enjoyment, animation and safety of the Islands and the LeBreton North Area, as it provides for:
 - public pedestrian access to Chaudières Falls to showcase the grandeur and significance of this natural feature;
 - a first step in the establishment of eventual pedestrian linkages from the Canadian War Museum to the Chaudières Falls Ring Dam, in collaboration with Domtar Inc.;
 - the enhancement of interpretation, access to facilities, trails and lookouts to improve the image of the sector and expand the public domain over time.
- The project improves public access to and experience of the Ottawa River;
- The proposal will be visible from the Chaudières Bridge;

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- Differentiation will be needed at the Domtar site entrance and on the site to indicate public pedestrian and bicycle access to the bridge should the NCC or Public Authority Having Jurisdiction have the right to operate a bike path on the Chaudières Island in the near future . The responsibility for this signage will be assumed by the NCC or Public Authority Having Jurisdiction.
- Ottawa # 2 Generating Station and the Carpenter Shop will be protected with vibration and visual monitoring programs during the blasting required to remove the rock in the location of the new power house and tailrace;
- PWGSC will be assessing the likely adverse impacts, if any, that Domtar's project may have on the potential existence of Aboriginal rights or title through a risk analysis;
- An Environmental Screening Report has been prepared by GENIVAR and signed by PWGSC, the Responsible Authority ("RA") under CEAA, on September 25th, 2006, which concludes that the project is not likely to cause significant adverse environmental effects. The project may proceed provided that the RA ensures the implementation of appropriate mitigation measures identified in this report.

In consequence:

FEDERAL LAND USE APPROVAL FOR THE CONSTRUCTION OF A NEW HYDROELECTRIC FACILITY ON THE CHAUDIÈRES ISLAND SITE ADJACENT TO THE OTTAWA RIVER BY DOMTAR INC., ON PUBLIC WORKS AND GOVERNMENT SERVICES CANADA LANDS ("PWGSC LANDS"), IS HEREBY GRANTED, PURSUANT TO THE NATIONAL CAPITAL ACT (SECTION 12), SUBJECT TO THE FOLLOWING CONDITIONS:

1. LAND USE CONDITIONS

I: Not conditional on the NCC or Public Authority Having Jurisdiction having the right to operate a bike path on the Chaudières Island in the near future:

- a) This approval is for the construction of a new hydroelectric facility on Chaudières Island Site adjacent to the Ottawa River in Ottawa by Domtar Inc., on Public Works and Government Services Canada lands ("PWGSC lands"), as shown on the plans set out in Schedule A;
- b) A traffic management plan for the Chaudières Crossing shall be prepared by Domtar Inc. in consultation with PWGSC prior to the beginning of construction;
- c) Any additions or amendments to the work associated with the proposal, must be submitted to the NCC for review and, if satisfactory, approval.

II Conditional on the NCC or Public Authority Having Jurisdiction having the right to operate a bike path on the Chaudières Island in the near future:

- d) Public access to the Chaudières Falls and Ottawa River, identified as bike path on plans 2/10 and 2A/10, shall be unrestricted except at the time required by Domtar Inc or Chaudières Water Power Inc. ("CWPI") for vehicular access movement between the Ring Dam and the generating station for repair and/or maintenance of the any and all facilities. Such operation of the bike path shall be the responsibility of the NCC or Public Authority Having Jurisdiction;

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- e) Domtar Inc., or its successors or assigns, grants the rights for the NCC or Public Authority Having Jurisdiction, or its successors or assigns, to build a pedestrian bridge in the future at the location identified as “future bridge (by others)” on plan 2A/10, including the right to use the water deflectors in the intake channel as bridge supports or piers, as shown on plan 2A/10. The building of such bridge shall be done in a manner so as not to interrupt the operations of the Hydro facilities subject to the design condition 2. I d);
- f) Domtar Inc., or its successors or assigns, grants the rights for the NCC or Public Authority Having Jurisdiction, or its successors or assigns, to build a viewing platform in the future, at a location to be determined and agreed by both parties;
- g) Domtar Inc., or its successors or assigns, and the NCC or Public Authority Having Jurisdiction, or its successors or assigns, agree to enter into discussions to explore ways to implement the policy of the 2005 *Canada’s Capital Core Area Sector Plan* to “establish pedestrian linkages from the Canadian War Museum to the Chaudières Falls Ring Dam, via Albert and Chaudières Island, in collaboration with Domtar and Energy Ottawa”.

2. DESIGN CONDITIONS

I. Not conditional on the NCC or Public Authority Having Jurisdiction having the right to operate a bike path on the Chaudières Island in the near future:

- a) Conceptual and developed designs including architectural plans, sections and elevations, samples of materials and colours, details of the bridge, fence, path and access road, site development plan and the design of any signage and lighting, must be submitted to the NCC Director Design and Land Use for review and, if satisfactory acting reasonably, approval, prior to construction;
- b) The fence type will be the “Omega Architectural Fence medium security” or equivalent by Omega II fence Systems and the final selection and detailed design must be submitted to the NCC Director Design and Land Use for review and, if satisfactory, approval, prior to construction;
- c) The pedestrian bridge over the tailrace will be the “Connector Pratt Truss” or equivalent type by Steadfast Bridges and the final selection and detailed design must be submitted to the NCC Director Design and Land Use for review and, if satisfactory, approval, prior to construction;
- d) The middle water deflector will be enlarged and increased in height in order to provide the necessary support for the “future bridge (by others)”, and the intake channel walls will be modified to accommodate the point of support for the “future bridge (by others)”. These will be incorporated in the conceptual and developed designs.

II. Conditional on the NCC or Public Authority Having Jurisdiction having the right to operate a bike path on the Chaudières Island in the near future:

- e) Signage, marking, use of different material for the pavement or another differentiation device shall be provided to indicate both the access from Booth Street and to show direction for pedestrian and bicycle circulation in the Domtar yard, to ensure public safety from the west of Booth Street to the 2 public access point, one located west of building 511 and the other located south of the open channel, and must be submitted to the NCC Director Design and Land Use for review and, if satisfactory, approval prior to construction. This will be the responsibility of the NCC or Public Authority Having Jurisdiction, as the operator of the bike path;

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- f) The slope of the access ramp to the future NCC or Public Authority Having Jurisdiction bike path over the existing intake must be lowered to achieve a 6% slope instead of a 8% slope as per NCC standards;
- g) The proponent will look at the feasibility to increase the width allowable for the bike path over the existing intake up to 3.5m as per NCC standards;
- h) The proponent will look at the feasibility of moving the fence located east of the bike path and west of the open channel away from the edge of the bike path and closer to the western edge of the open channel.

3. Environmental Conditions

- a) All mitigation measures identified in the *Development of the Hydroelectric potential of the Domtar Inc. Chaudière Island Site on the Ottawa River in Ottawa - Canadian Environmental Assessment Act Screening Report* prepared by GENIVAR and signed by PWGSC on September 25th, must be implemented to the satisfaction of PWGSC.

4. Heritage and Archeological Conditions

- a) If any vestiges of early human occupancy of the land are uncovered during construction, all construction activity must be suspended and the project manager be advised accordingly. A registered archaeologist should be called on site to complete an evaluation and make recommendations. A copy of these recommendations should immediately be forwarded to Johanne Fortier, Manager, NCC Heritage Program.

5. Land Use / Design / Environmental Monitoring

- a) Monitoring of these conditions will be the responsibility of PWGSC and Domtar Inc.;
- b) All works on PWGSC lands must be completed to the satisfaction of PWGSC, acting reasonably.

6. Real Estate Transactions / Land Access Permit


- a) PWSGC and Domtar Inc. will negotiate and conclude a license of occupation for the interconnection line on the Chaudières Crossing in accordance with the contents of this approval;
- b) Domtar Inc., or its successors or assigns, will grant to the NCC or Public Authority Having Jurisdiction, or its successors or assigns, at nominal cost, a surface easement for the bike path including the pedestrian footbridge and the pathway over the existing intake structure and access ramp where Domtar Inc. is owner of the lands.
- c) PWSGC and to the NCC or Public Authority Having Jurisdiction, or its successors or assigns, will negotiate and conclude a Land Access Permit for the bike path where PWGSC is owner of the lands.
- d) The NCC or Public Authority Having Jurisdiction, or its successors or assigns, shall maintain and operate the bike path and be liable for the public's use of the bike path;

ACCESS TO INFORMATION ACT

The Proponent acknowledges and understands that the NCC is subject to the provisions of the *Access to Information Act* and may, as a result of a request under that Act, be required to release this Approval, or any other documents arising out of, or related to, this Approval.

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AUTHORIZED SIGNATURE



JOHN N. ABEL
DIRECTOR
DESIGN AND LAND USE

8 Dec. 2006

DATE

CONCURRENCE WITH APPROVAL

If you are in agreement with the conditions of this approval, the duplicate original of this letter must be signed by the authorized signing officer in the space provided below and returned as soon as possible. The approval is not considered final until the signed original has been returned.

Domtar Inc. hb
On behalf of the Domtar Inc., I agree to comply with the terms and conditions of the Federal Land Use Approval for the construction of a new hydroelectric facility on a Chaudières Island Site adjacent to the Ottawa River by Domtar Inc., on Public Works and Government Services Canada lands.

AUTHORIZED SIGNING OFFICER – PLEASE PRINT NAME



SIGNATURE

Executive VP operations

TITLE

24/12/06

DATE

attachment

- cc. Sylvie Leclerc, Real Property Advisor, PWSGC
- François Cyr, NCC
- Johanne Fortier, NCC
- Gérald Lajeunesse, NCC
- Peter McCourt, NCC

- Marta McDermott, NCC
- Bernard Reid, NCC
- Benoit Séguin, NCC
- Lori Thornton, NCC

SCHEDULE A

List of drawings

Domtar Ottawa Hydro Project – project no. Q101794, prepared by GENIVAR, September 2005:

- 1/10: Figure A1, General plan view, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 2/10: Figure A2, Plan view, general arrangement, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 2A/10: Figure A2-A, Plan view, general arrangement, bike path & open water (4-S-Type),
revision dated 06-03-27, revised for environmental report
- 3/10: Figure A3, Plan view, general arrangement, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 4/10: Figure A4, Cross section, powerhouse, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 5/10: Figure A5, Cross section, powerhouse, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 6/10: Figure A6, Upstream water intake, Cross sections, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 7/10: Figure A7, Upstream water intake, Cross sections, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 8/10: Figure A8, Plan view, general arrangement and lots location, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 9/10: Figure A9, Building elevation view, 4-S-Type,
revision dated 06-01-27, issued for environmental report
- 10/10: Figure A10, Building elevation view, 4-S-Type,
revision dated 06-01-27, issued for environmental report

List of documents

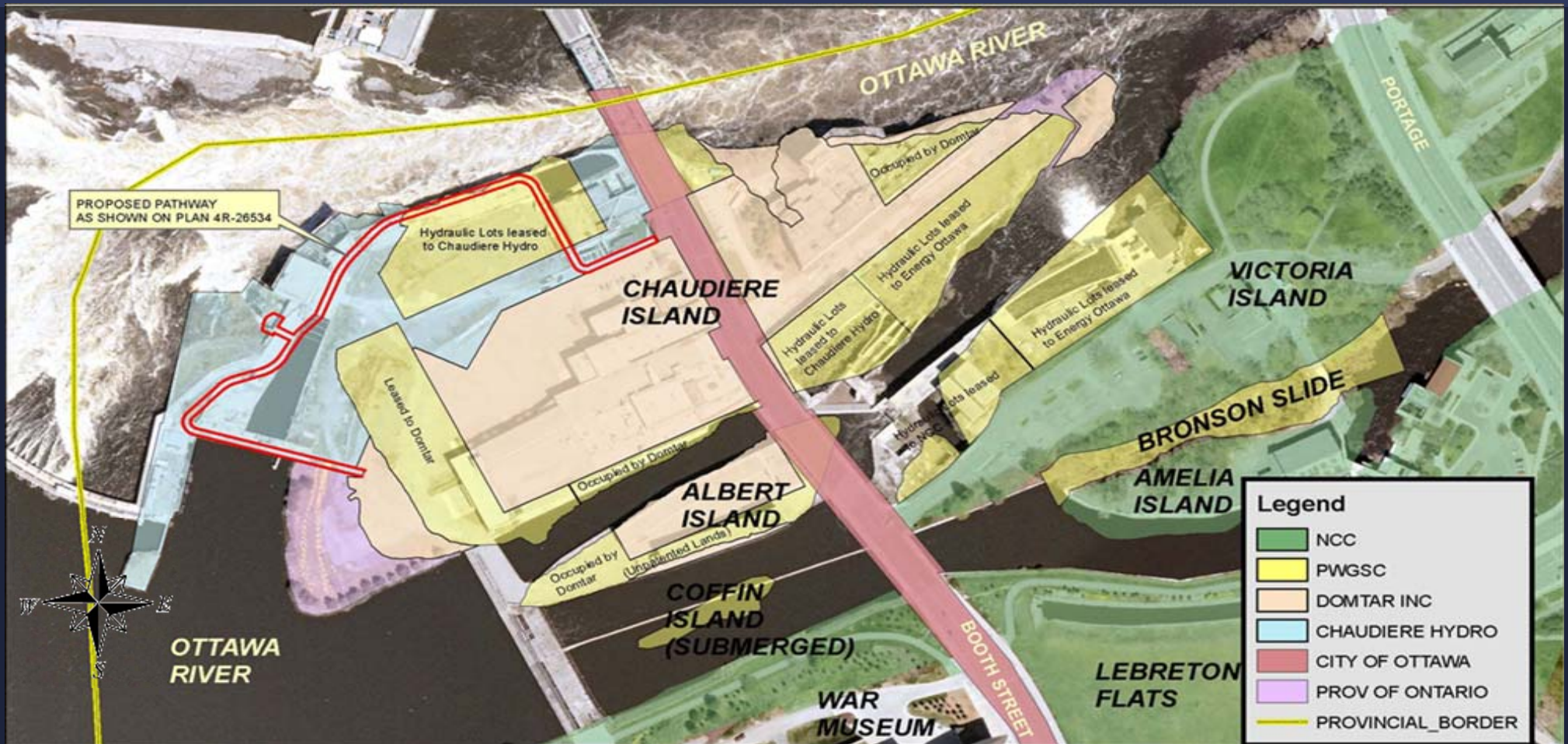
Development of the hydroelectric potential of the Domtar Inc. Chaudière Island site on the Ottawa River in Ottawa – Canadian Environmental Assessment Act Screening Report, presented to Domtar Inc., prepared by GENIVAR, September 2006, Q101794



CHAUDIÈRE FALLS HYDRO ELECTRIC DEVELOPMENT

Chaudière Hydro Limited Partnership

PROJECT BACKGROUND- LOCATION AND LANDS



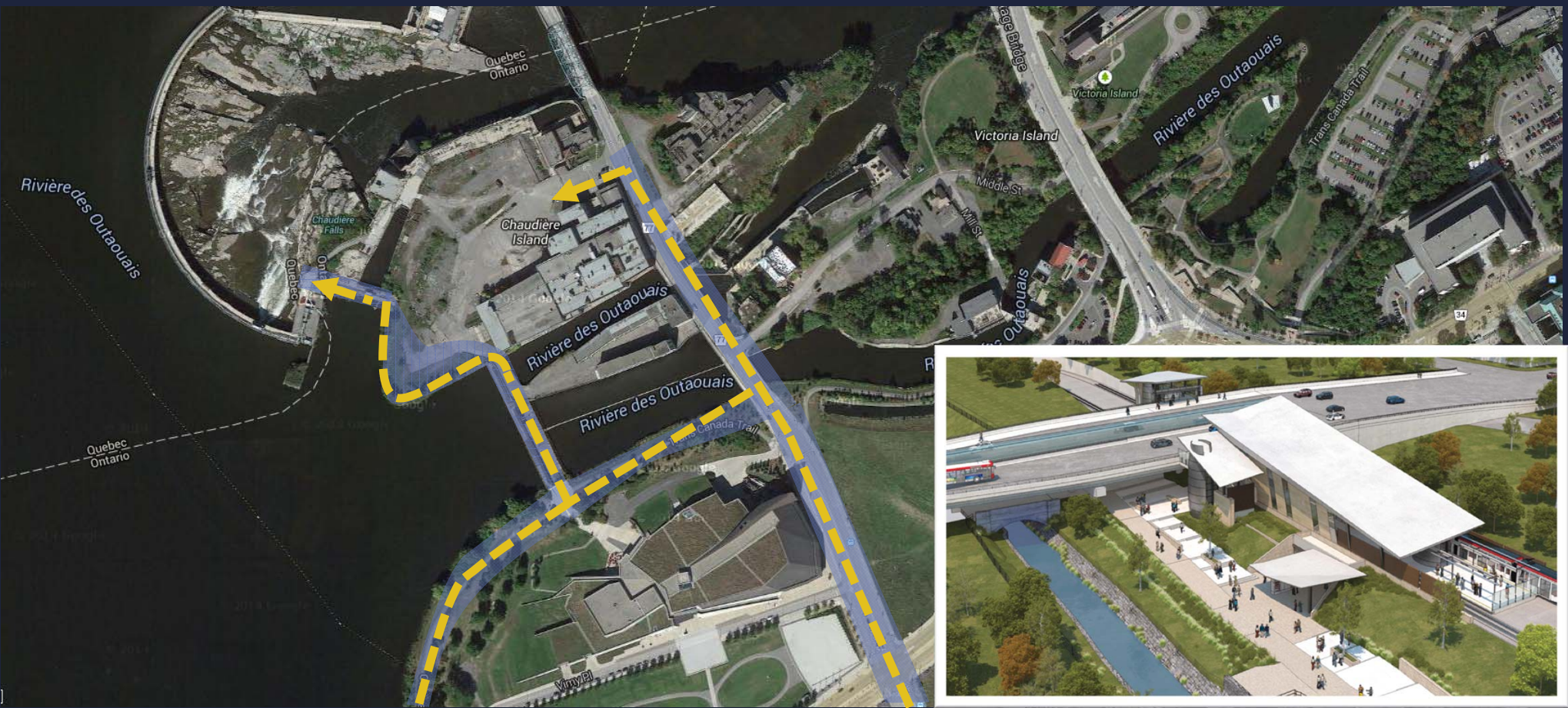
DESIGN OBJECTIVES

DESIGN OBJECTIVES



- Open access to the falls for all people
- Recognize and promote the importance of the area for First Nations by including and integrating First Nation cultural elements within the development
- Integrate a restorative philosophy for the redevelopment of the site to a natural state while maintaining some elements of its industrial past and history

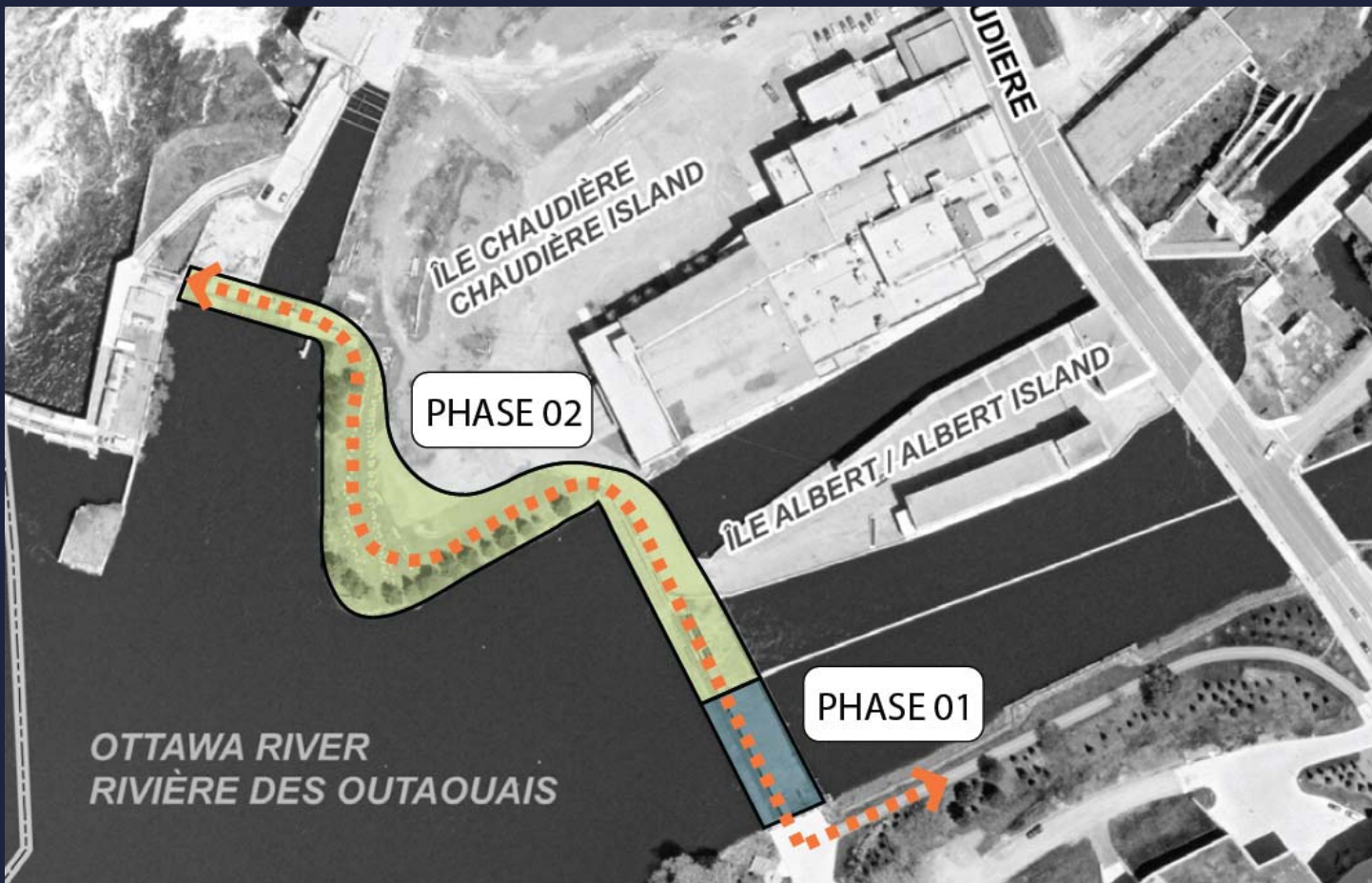
SITE ENTRANCES AND ACCESS



ENTRANCES

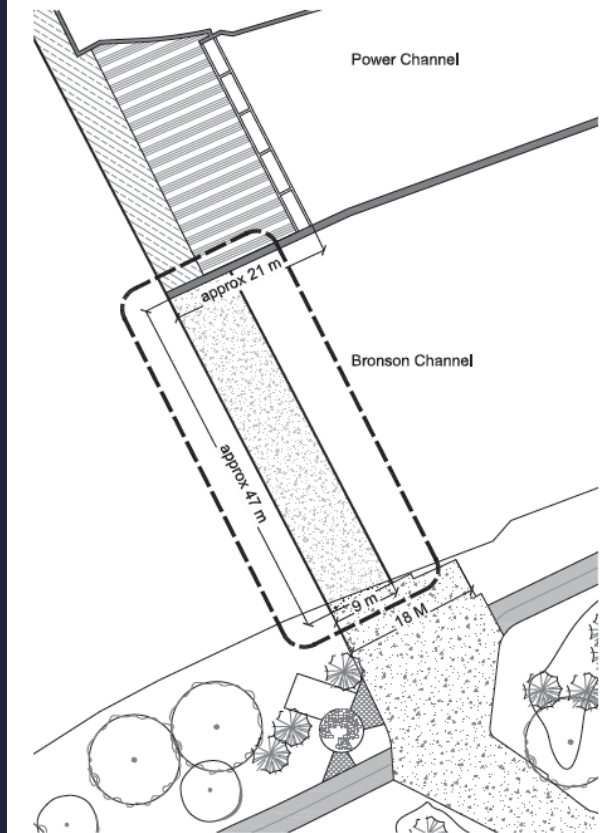
- Entrances provide a starting point for access to the falls. It would contain interpretative nodes reflecting the histories of the site.
- Access will be in the form of a defined corridor on the roof of the new hydro facility as well as new bridge across intake canal.
- It will be open to pedestrian and cyclist traffic but closed to vehicular traffic through the use of removable bollards.
- During some operational and maintenance activities access through this area will need to be restricted to maintenance staff and vehicles only.

SITE ENTRANCES – BRONSON BULKHEAD

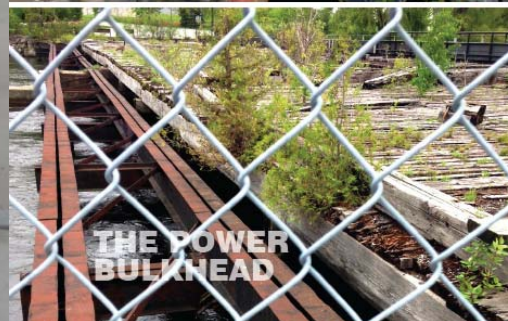


THE BRONSON BULKHEADS

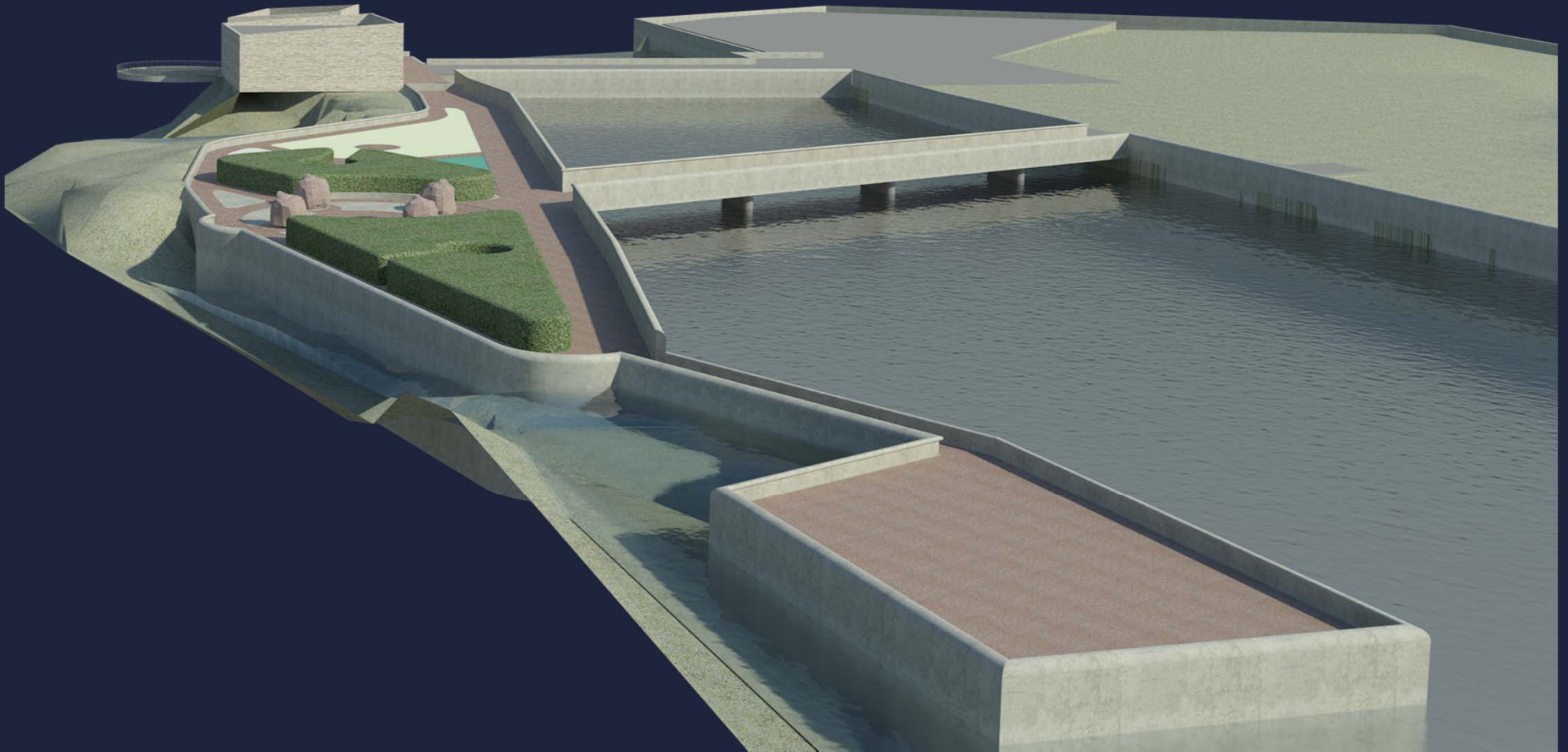
Phase 01



SITE ENTRANCES – BRONSON BULKHEAD



CHAUDIÈRE FALLS PUBLIC VIEWING AREA - CONCEPT

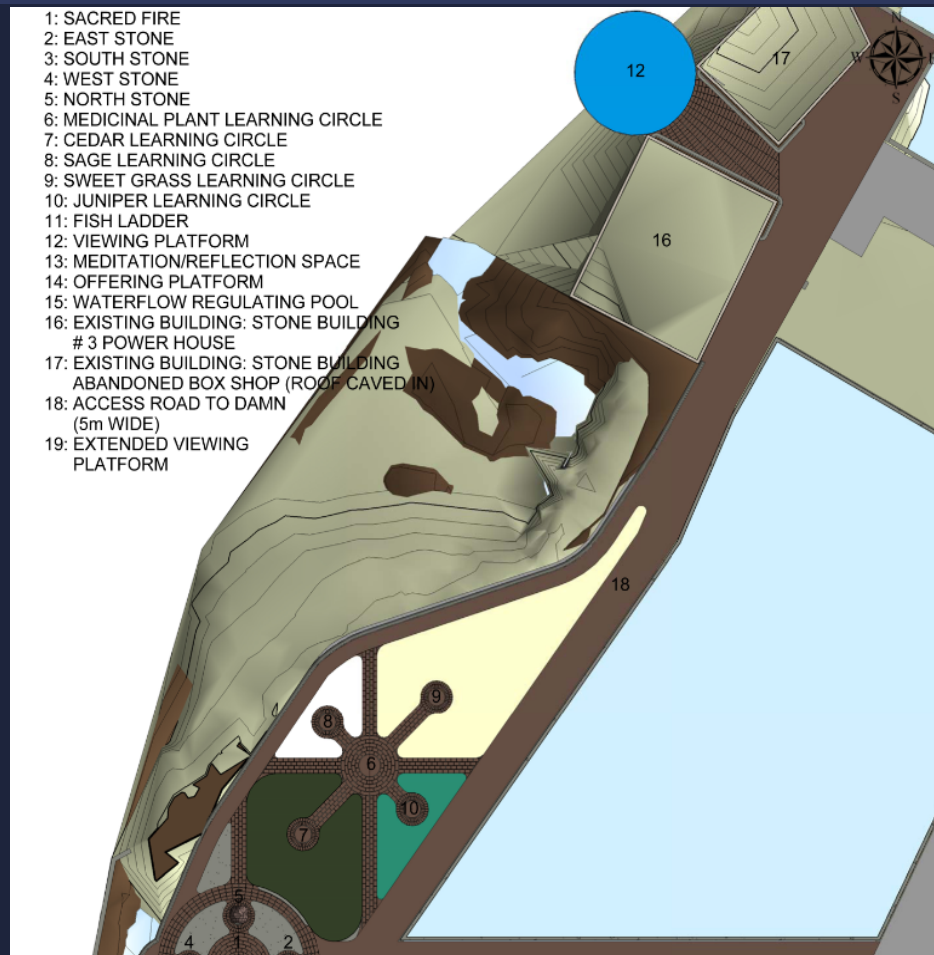
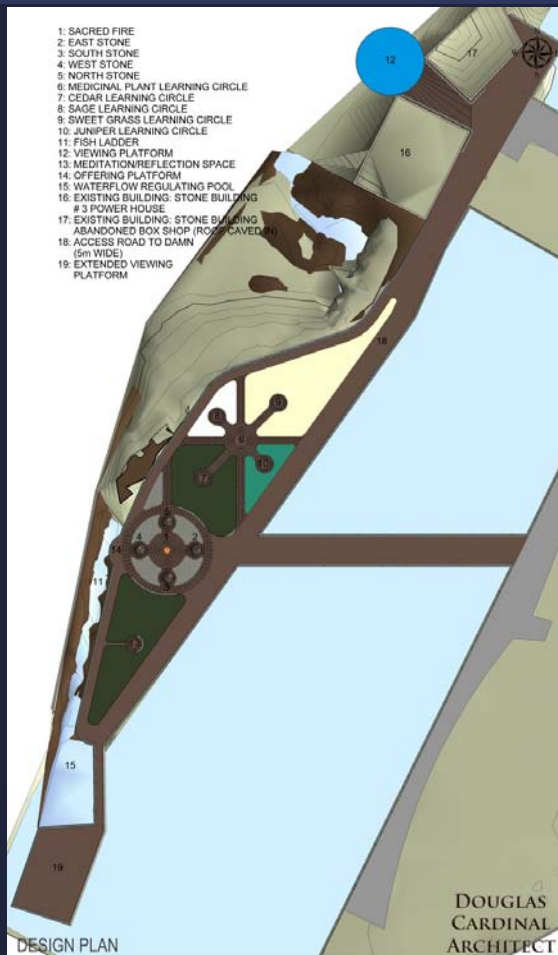


PUBLIC ACCESS TO FALLS

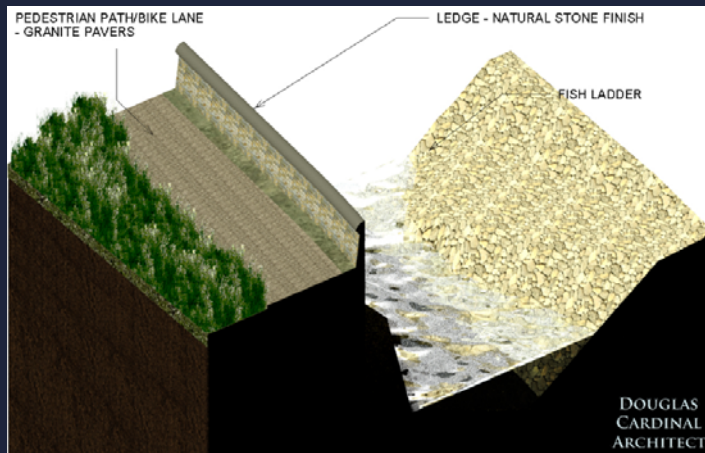


- The Chaudière Falls is a historically significant site for all Anishnabe people.
- A concept to construct a National Centre for Indigenous Peoples on neighboring Victoria Island has existed for many years.
- A plan for the Centre was developed by Douglas Cardinal in 2006 and had been protected in the long range plan by the NCC.
- In keeping with the work that has been previously envisioned Douglas Cardinal has been retained to provide the overall design of the public access environment.

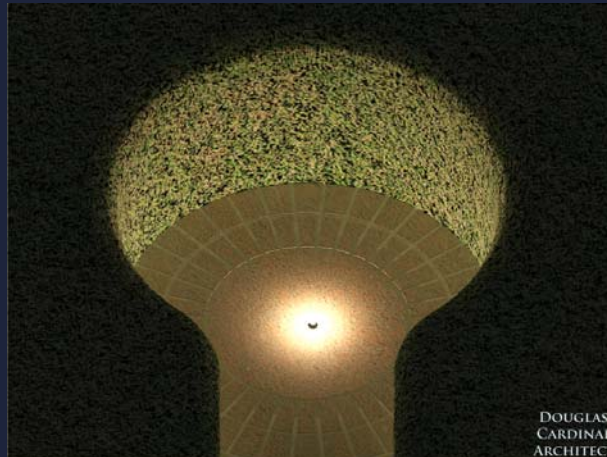
CHAUDIÈRE FALLS PUBLIC VIEWING AREA



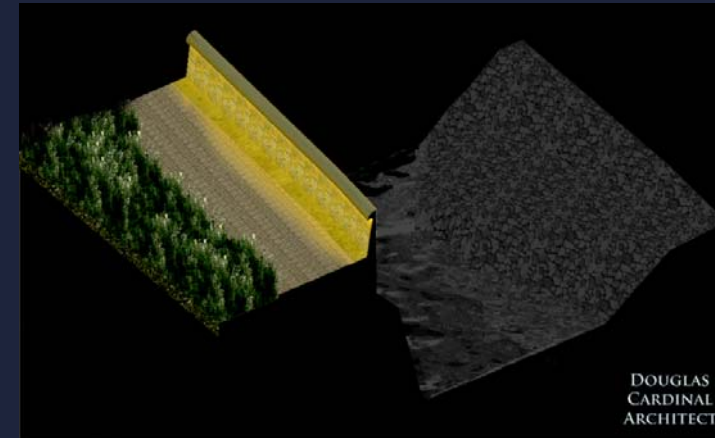
CHAUDIÈRE FALLS PUBLIC VIEWING AREA - LIGHTING



SECTION THROUGH PEDESTRIAN PATH



LEARNING CIRCLES LIGHTING CONCEPT



PEDESTRIAN PATH LIGHTING CONCEPT

RECOMMENDED CONCEPT

RECOMMENDED CONCEPT- SITE OVERVIEW



RECOMMENDED CONCEPT – EAST PLAZA



RECOMMENDED CONCEPT – EAST PLAZA (NIGHT)



RECOMMENDED CONCEPT – EAST PLAZA



RECOMMENDED CONCEPT – LOOKING EAST AT NIGHT



RECOMMENDED CONCEPT – POWERHOUSE ROOF (CLOSED)



RECOMMENDED CONCEPT – POWERHOUSE ROOF (OPEN)



RECOMMENDED CONCEPT – POWERHOUSE ROOF (OPEN)



RECOMMENDED CONCEPT – WEST APPROACH TO FALLS



RECOMMENDED CONCEPT – WEST PLAZA



RECOMMENDED CONCEPT – FALLS VIEWING PLATFORM



RECOMMENDED CONCEPT- SACRED FIRE



RECOMMENDED CONCEPT- SACRED FIRE (NIGHT)



SACRED FIRE AND OFFERING PLATFORM - EVENING

DOUGLAS
CARDINAL
ARCHITECT

RECOMMENDED CONCEPT – TEACHING CIRCLES



RECOMMENDED CONCEPT – TEACHING CIRCLES (NIGHT)



LEARNING CIRCLES - EVENING

DOUGLAS
CARDINAL
ARCHITECT

RECOMMENDED CONCEPT- SITE OVERVIEW

