Pow Wow Site Development

Project objectives:

- To provide a site plan that includes flood protection for the arbour
- To design an arbour structure for hosting Pow Wows and other events
- To design a foundation for the arbour structure
- To provide a grass field that has proper drainage for the Pow Wow area
- To increase the accessibility to the site for vehicles and pedestrians
- To design a parking area to accommodate the increased use of the site

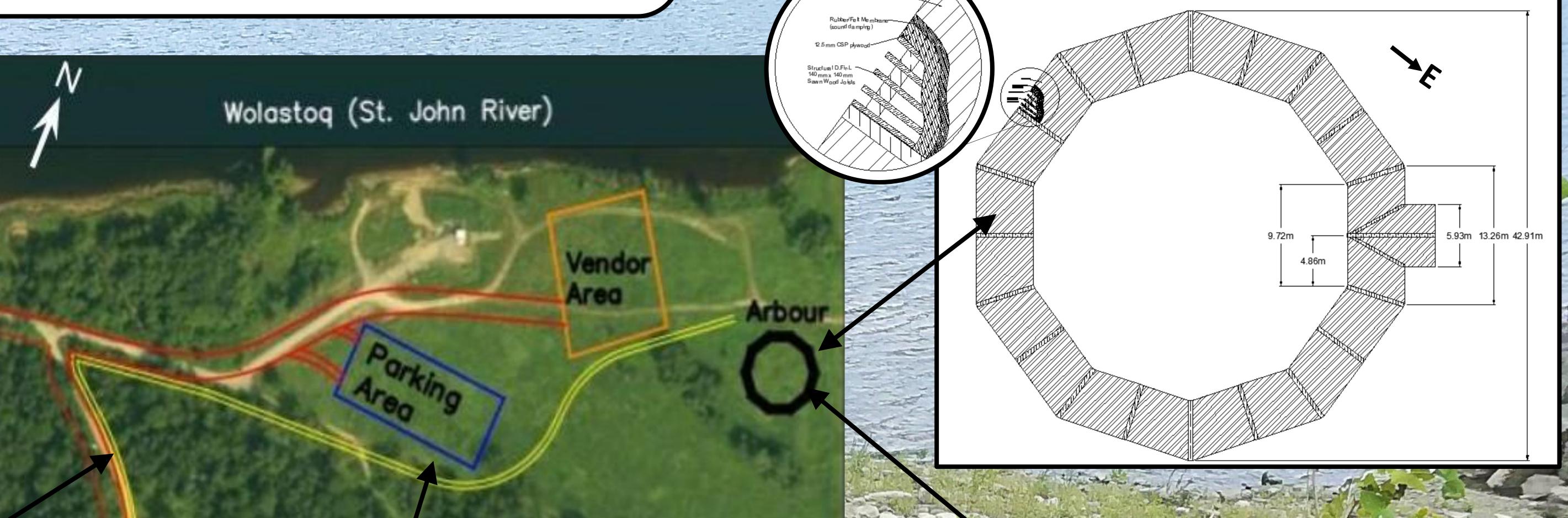
Project Cost Estimate \$1.7 - 2.6 M

Site Plan

- The arbour is located such that it is protected from the annual flooding of the Wolastog
- The overall layout emphasizes the natural beauty of the site
- The arbour overlooks the Wolastoq situated on top of an elevated pad
- The vendor area blocks the view of the existing pumphouse from the arbour
- A drainage trench is located under the arbour to discourage water from pooling during a rain event
- Estimated cost: \$695 000 \$1.1 M

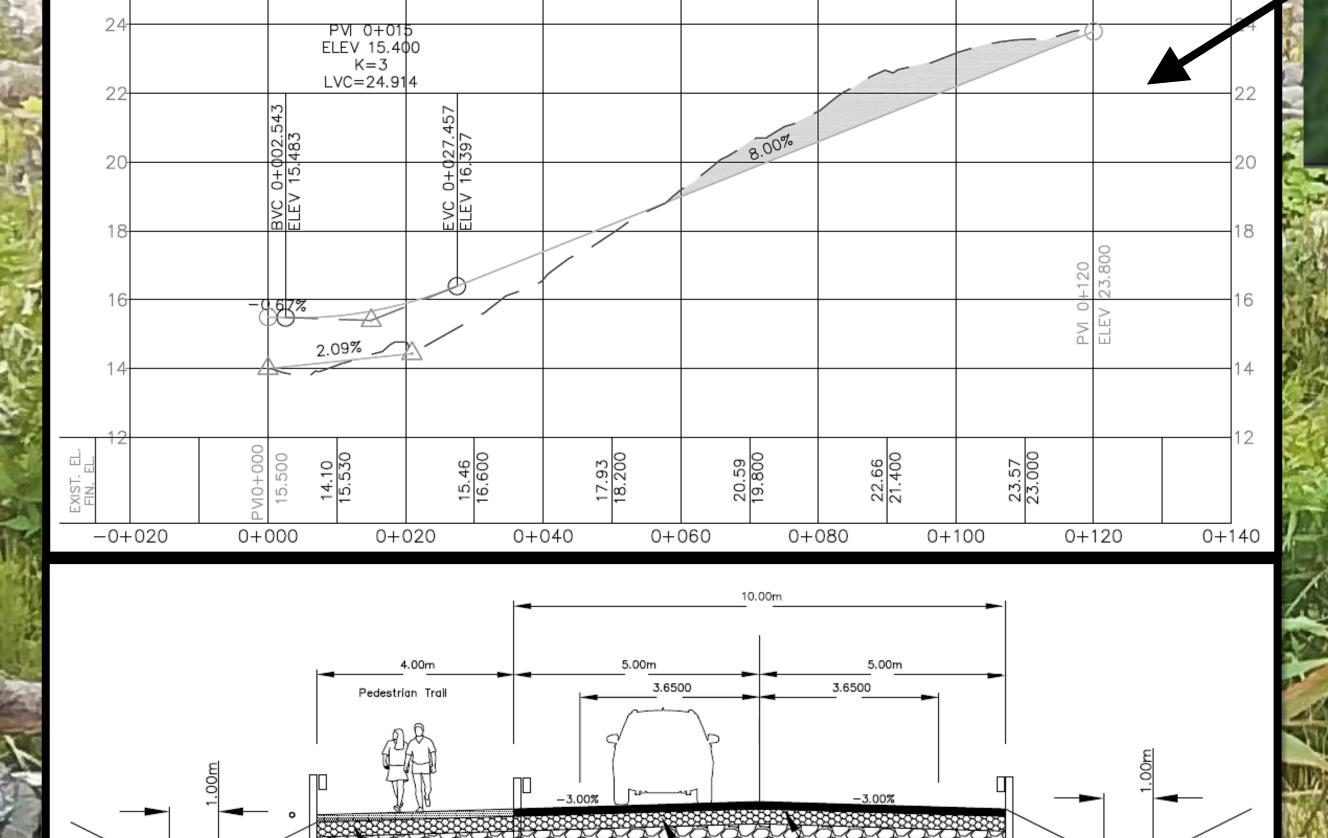
Arbou

- Decagon shape with a main entrance opening to the East
- Douglas fir-larch timber beams and columns
- Single slope roof to force snow and rain to outside edge
- 2015 NBCC and 2017 CWC Wood Design Manual compliant
- Estimated cost: \$93 000 \$110 000



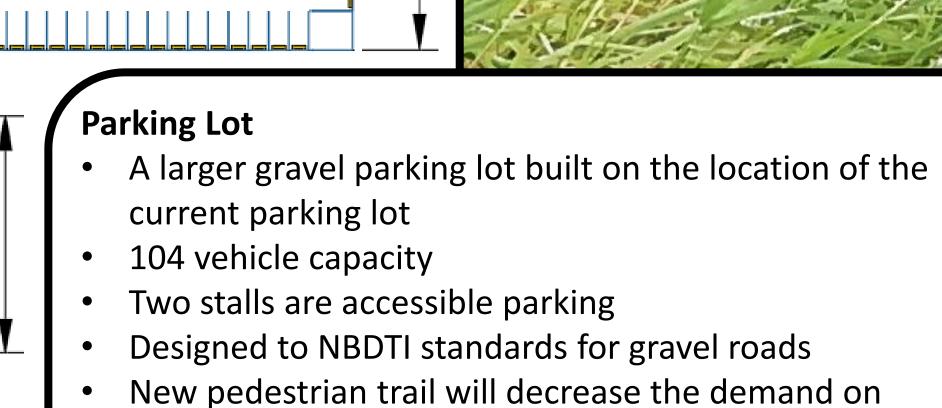
Improved Site Access

- Upgraded road extends from Kingsclear Ave to the Pow Wow field.
- NBDTI specifications: 2-lane cross section with a gravel surface
- 4 m wide pedestrian trail extends to the arbour site
- Estimated cost: \$795 000 \$1.2 M



Foundation

- Designed to sustain the applied loads and moments, without exceeding the bearing capacity of the soil.
- 20 MPa concrete and 400Mpa rebar with 325mm c/c spacing.
- 218mm effective depth and a concrete cover of 76 mm.
- Estimated cost: \$34 000 \$41 000



Estimated cost: \$127 000 - \$164 000

0.50m 3 - 25M bars each way (As = 1500mm²) 0.90m 0.90m 0.90m





Highlander Design Group

2.75 m

74 m

Brandon Cliff, Jonathan Fullarton, Godfrey Kayizzi, Callie MacPherson, Ryan Thibodeau

parking facility

