

Jack Havel
Architecture Portfolio
University of Waterloo -2022

Education

Graduate, Carleton Place High School, Carleton Place, ON
Graduated with honors (80%+ average)

2A Term, Bachelor of Architecture, University of Waterloo, Cambridge, ON
Presidents scholarship of distinction (entry grade of 90% or higher)
Excellent academic standing (finished first year with an average of 80% or higher)

Skills

Digital

Adobe Suite:
Photoshop, Illustrator, InDesign
Rhinceros 7
Enscape
Grasshopper
Microsoft Suite

Physical

Model Making
CNC
3D Printing
Laser Cutting
Small and Large Woodshop Tools
General arts:
Acrylic, Watercolor, Sketching, ect,

Other

Public Speaking
French Language 12th Grade
Group Work

Experiences

Carleton Place Info Center September 2019 – January 2020
At the info center I helped answer people’s questions about the town of Carleton Place, act as a guide for the Roy Brown museum, and performed general office work for the chamber of commerce.

Carleton Place Environmental Advisory Committee – Voting member 2018 - 2021
The CPEAC is a town committee that advises the town on environmental issues and proposes solutions to those issues.

- In my time with the CPEAC I have helped increase public awareness of the committee through motions such as joining the 200th anniversary parade
- I presented the award cheques to the recipients of the CPEAC bursary at the CPHS and Notre Dame Graduation ceremonies in 2019

School Theater
CPHS Drama is an after-school program where students produce plays for the community and competition.

- In my time with drama I have managed the lighting team
- I have acted in three plays including one major role
- In 2018 CPHS reached the provincial drama competition

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1

Wonderground Bridge

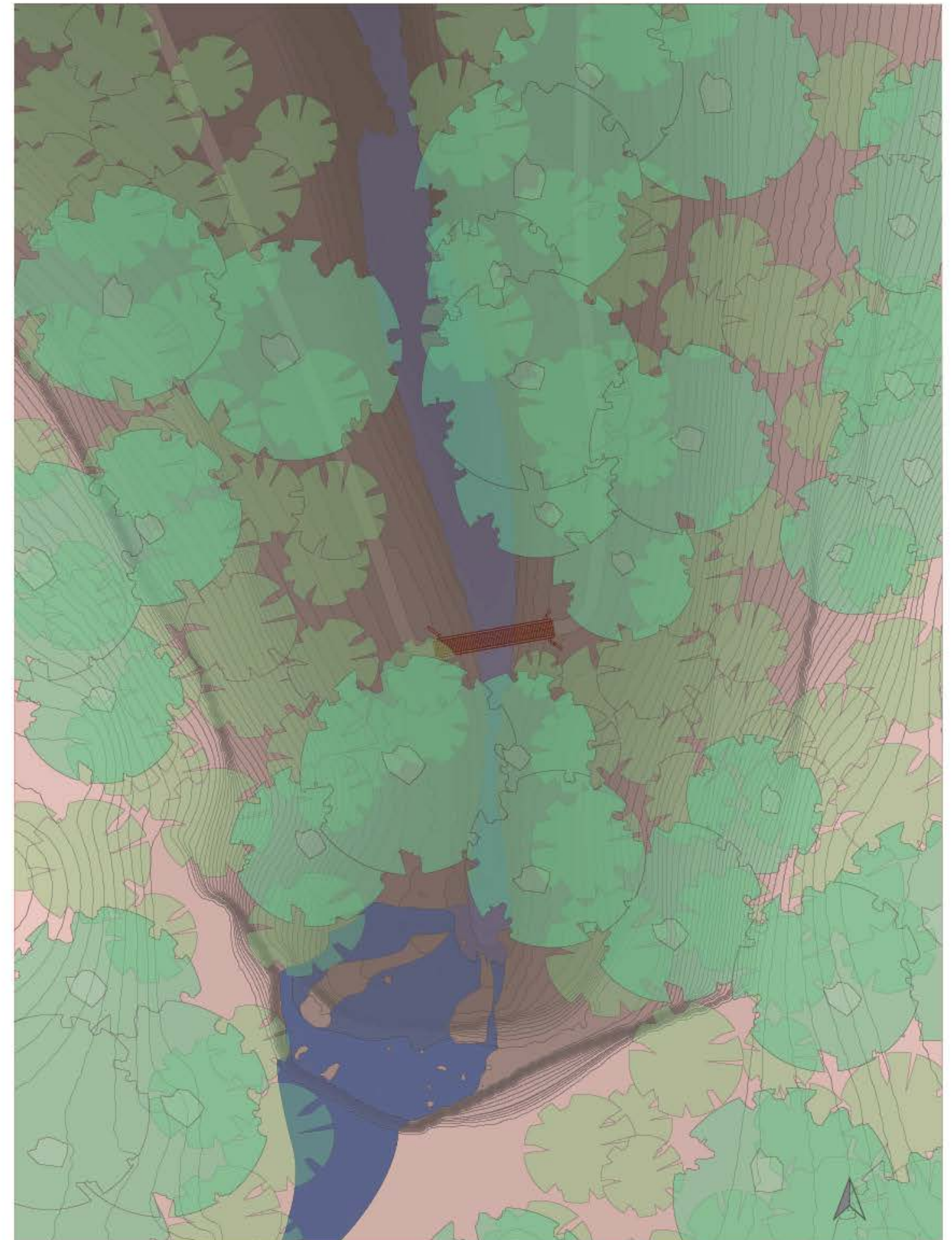
Unearth a New Perspective

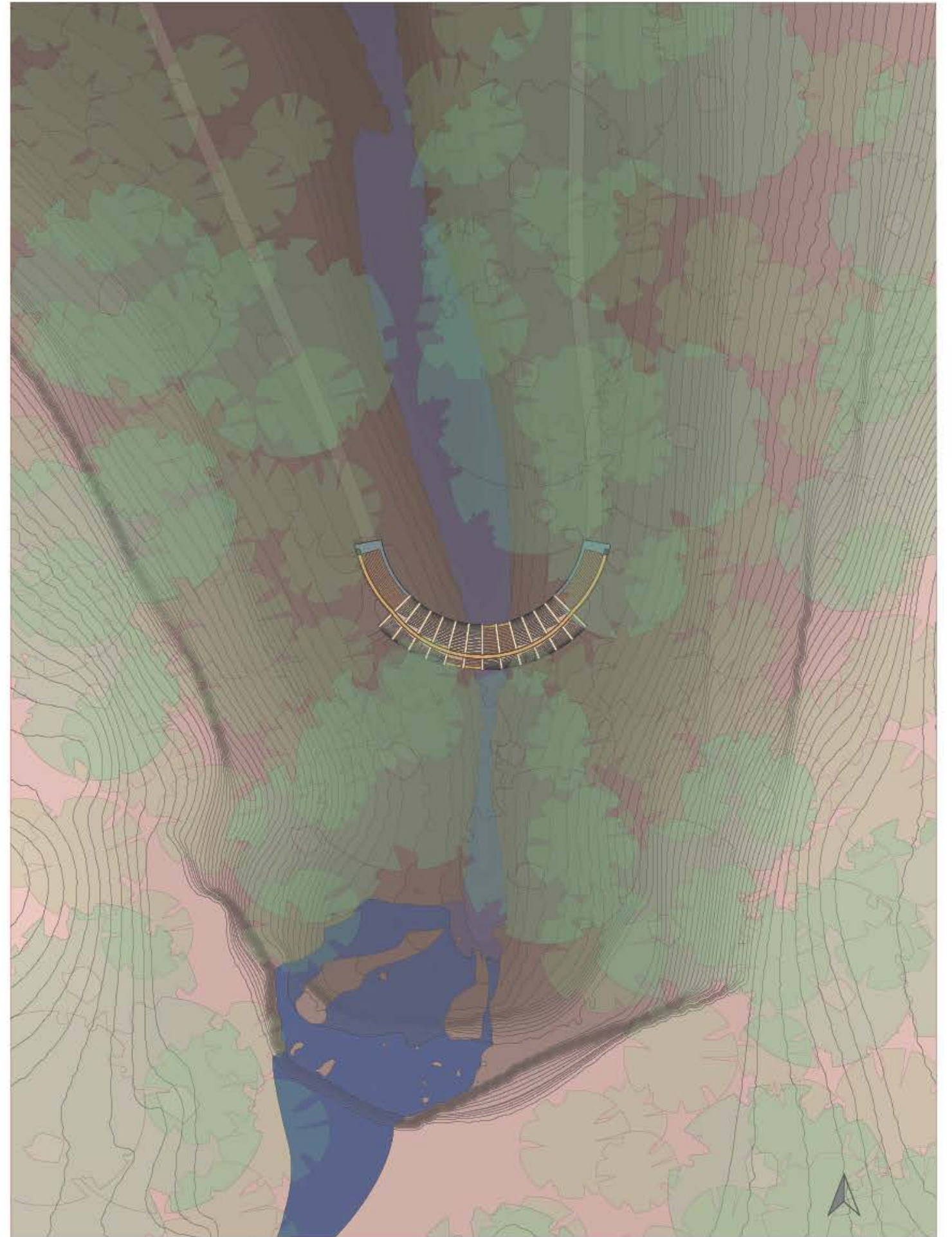
1B Studio (2022)

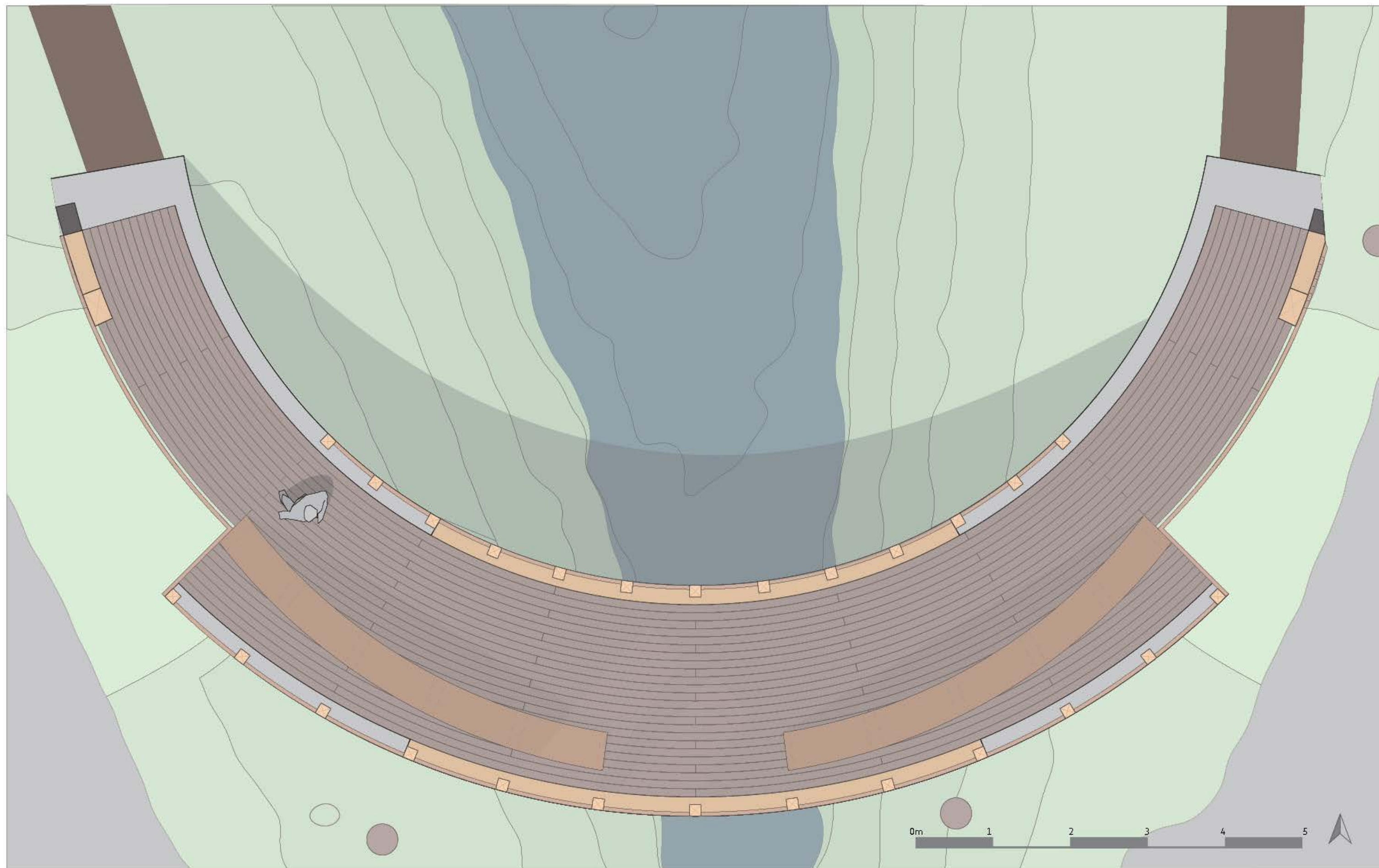
Supervisor: Rick Andrighetti

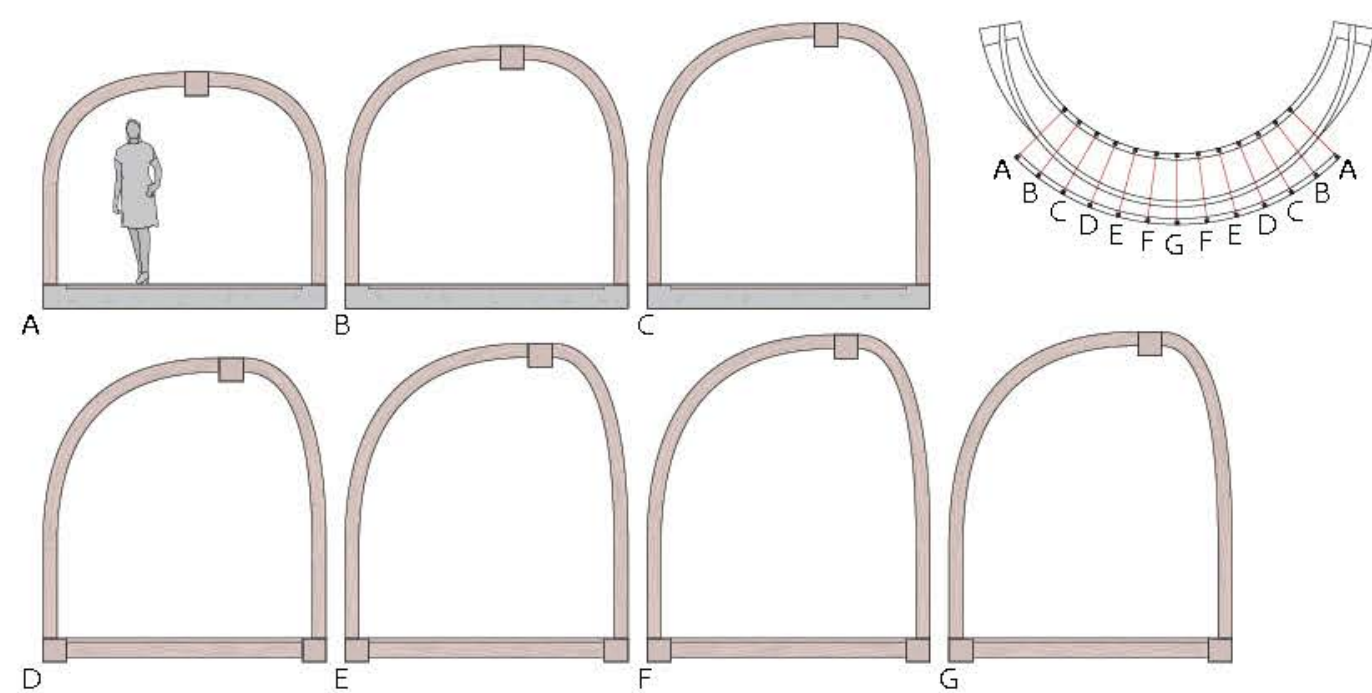
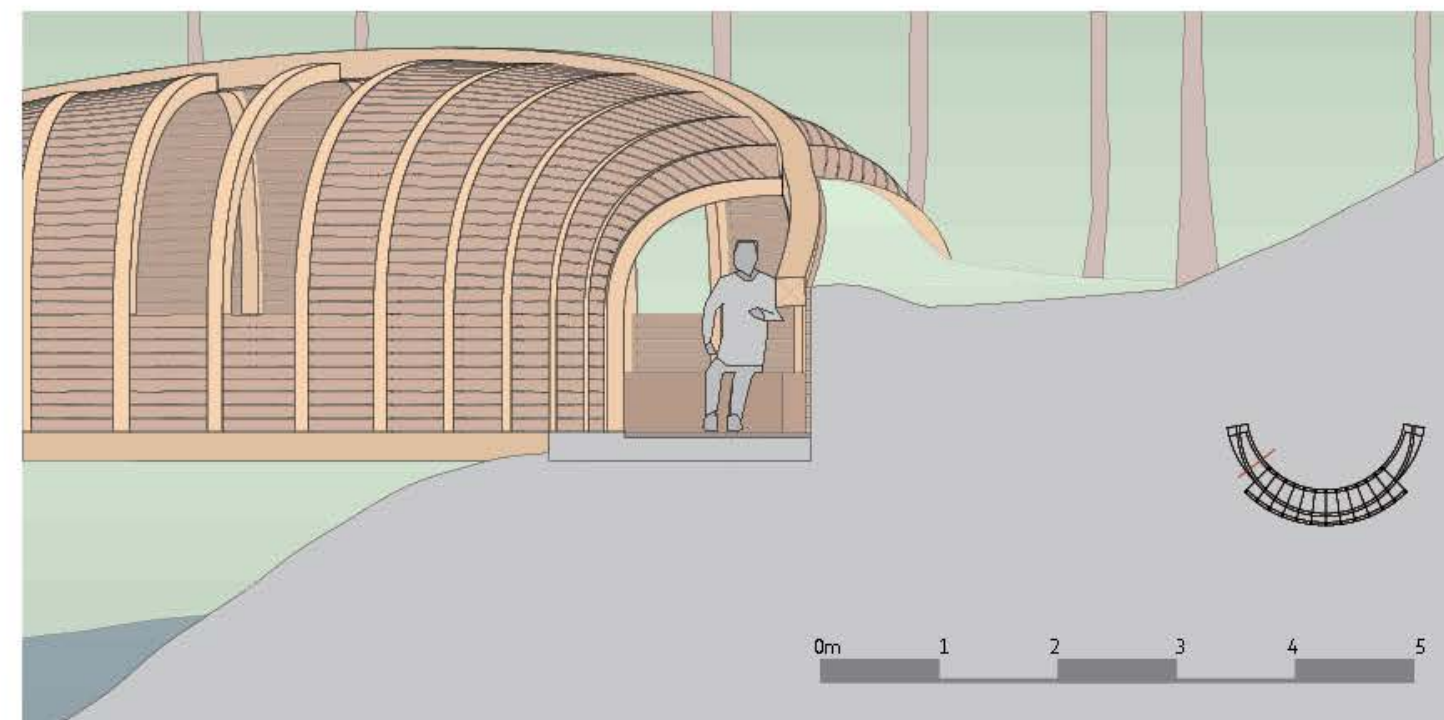
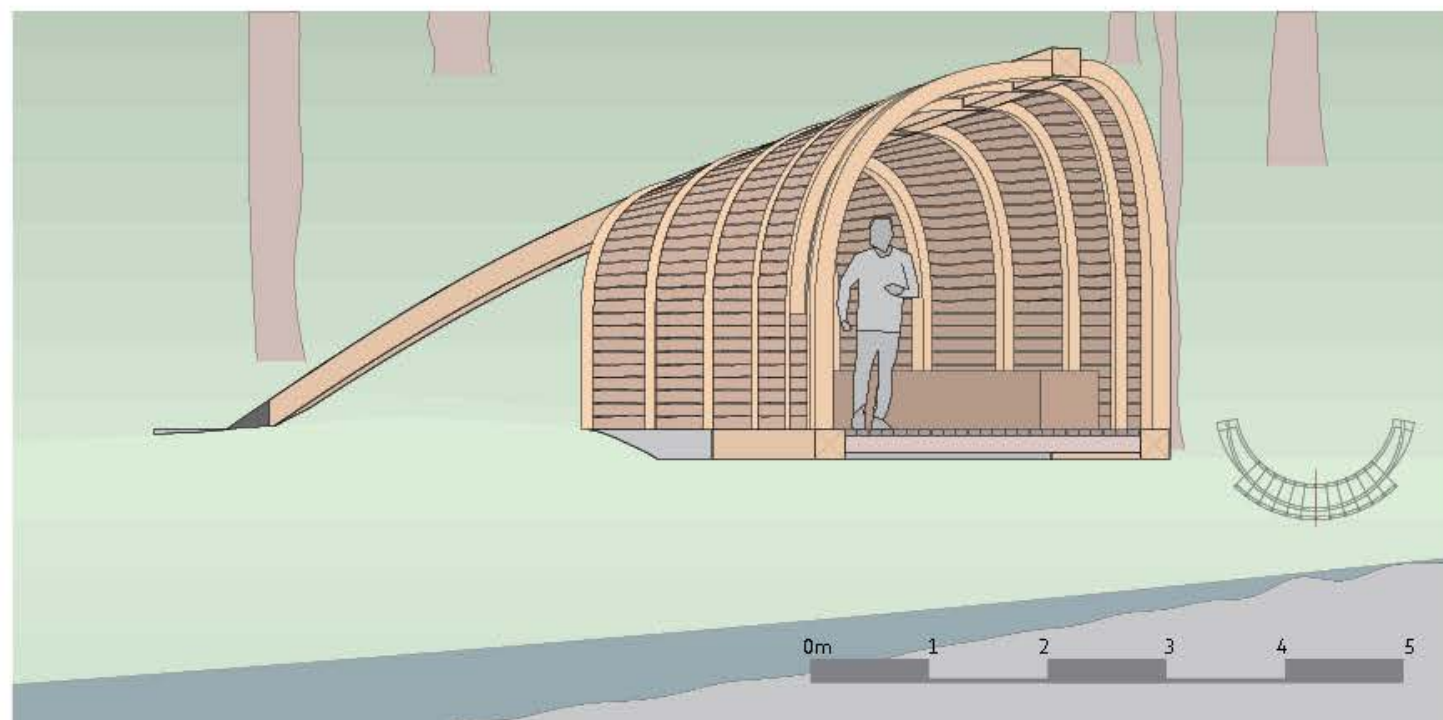
Just outside of Hamilton ON, on the Bruce trail is Sherman Falls, the site of an old wooden pedestrian bridge in need of replacement. To achieve this a curved wood laminate is integrated into the landscape to create a covered bridge without overly disrupting the existing ecosystem.

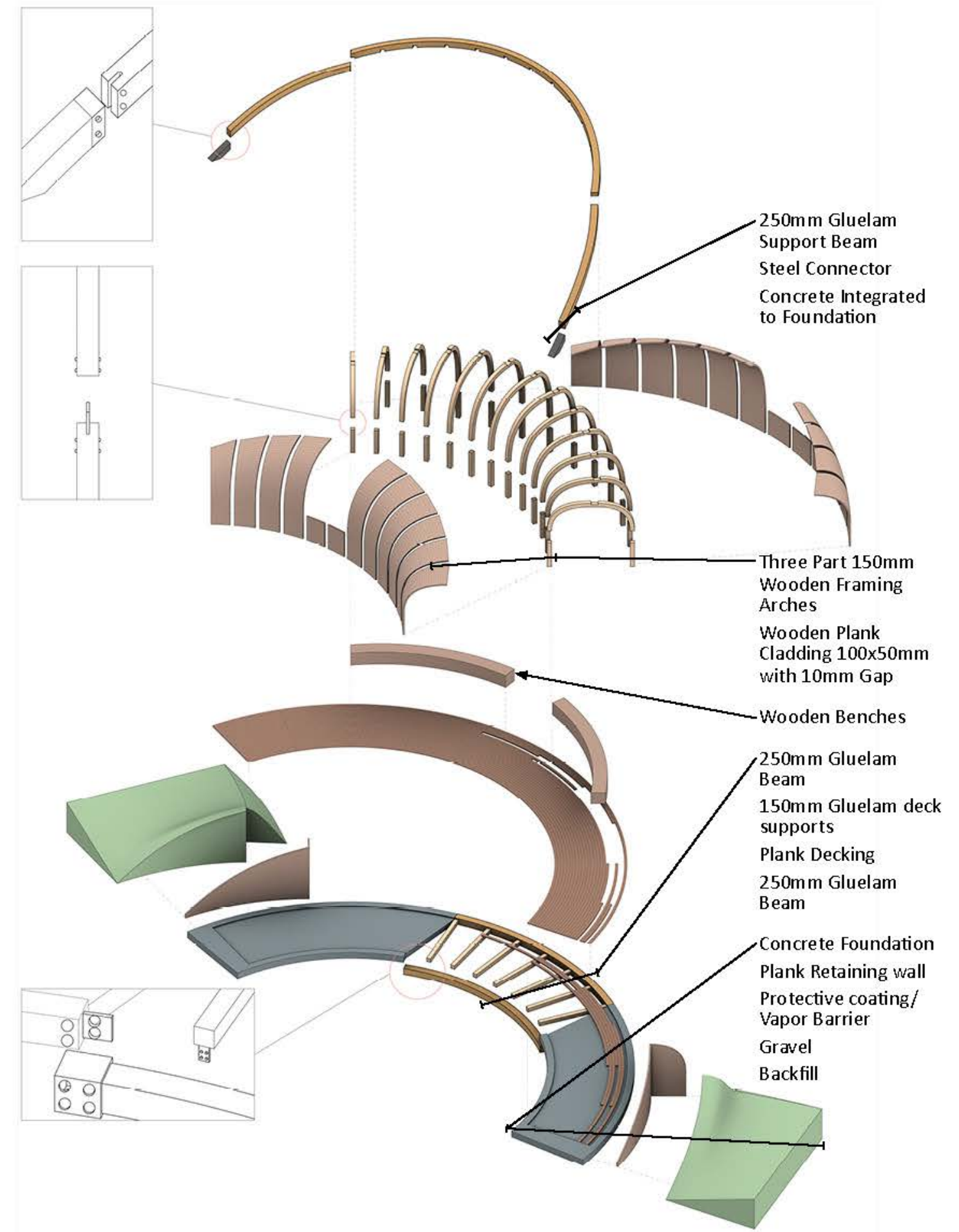
Programs: Rhino, Illustrator, Photoshop











2

Makers Place

Making: Community, Potential, Future.

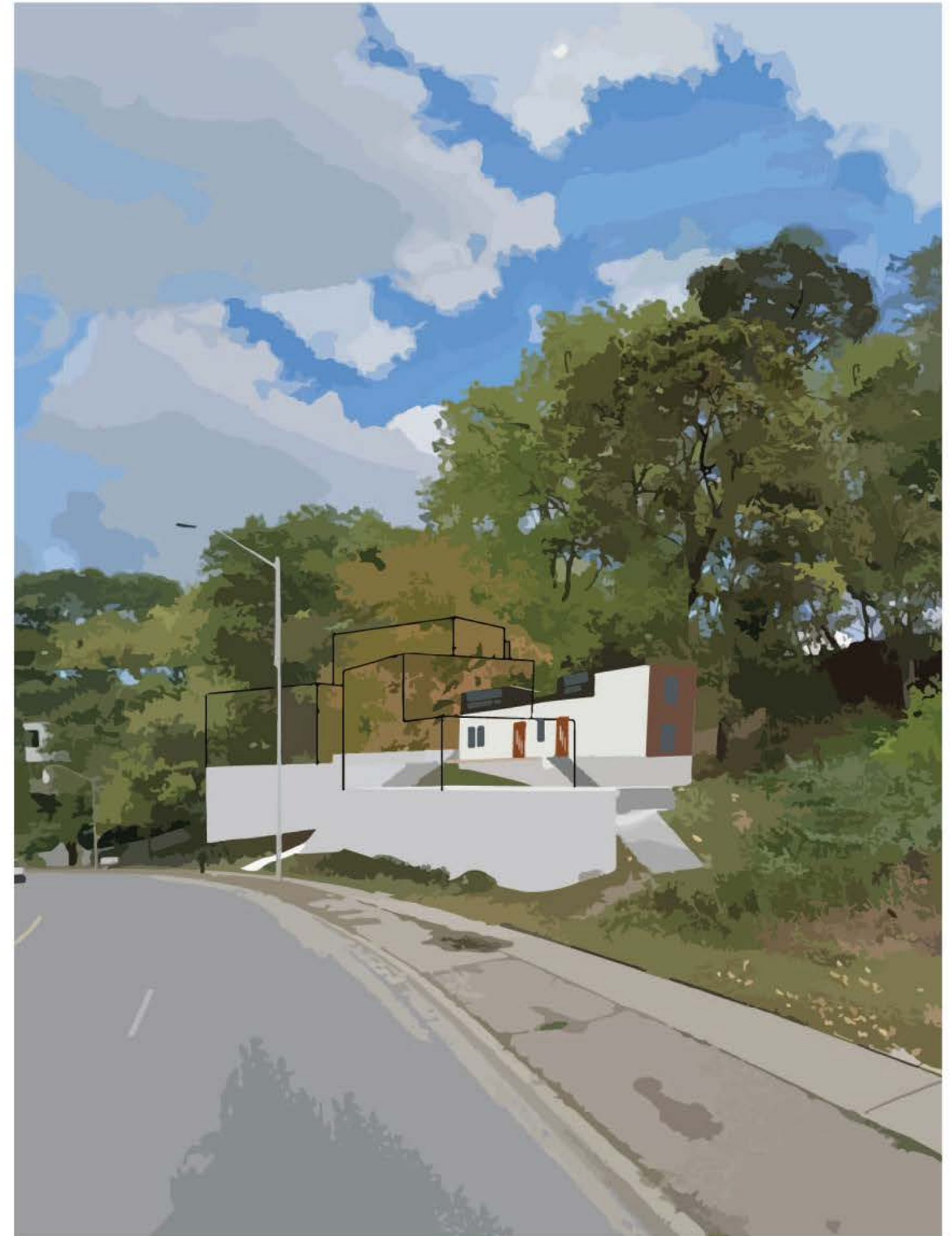
1A Studio (2021)

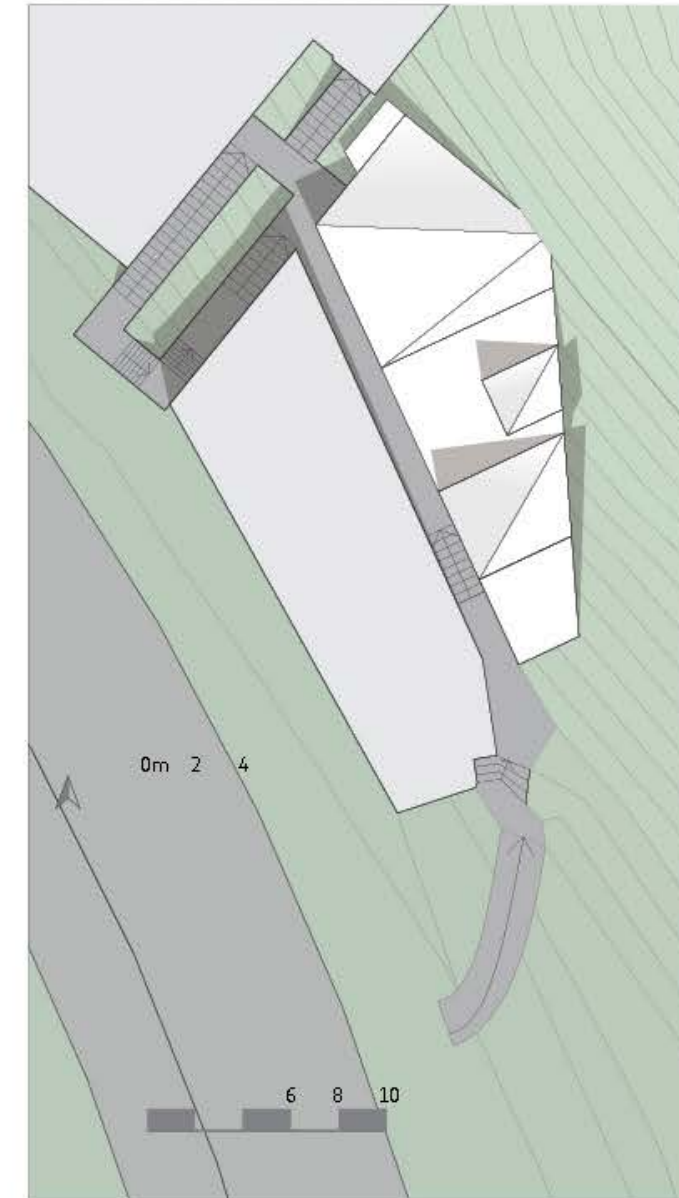
Supervisor: Fiona Lim Tung

Site Shared by: Dakatoa Bacchus,
Kristian Tolovski, Jackson Adams

In Cambridge ON, next to a shelter there is an empty plot of sloped land. It has been proposed that a youth shelter could be located on this property and so we were tasked with designing four buildings that could work as a campus, each with two pieces of programming, a residence, and a communal program. My contribution was a makerspace/ woodshop.

Programs: Rhino, Illustrator, Photoshop





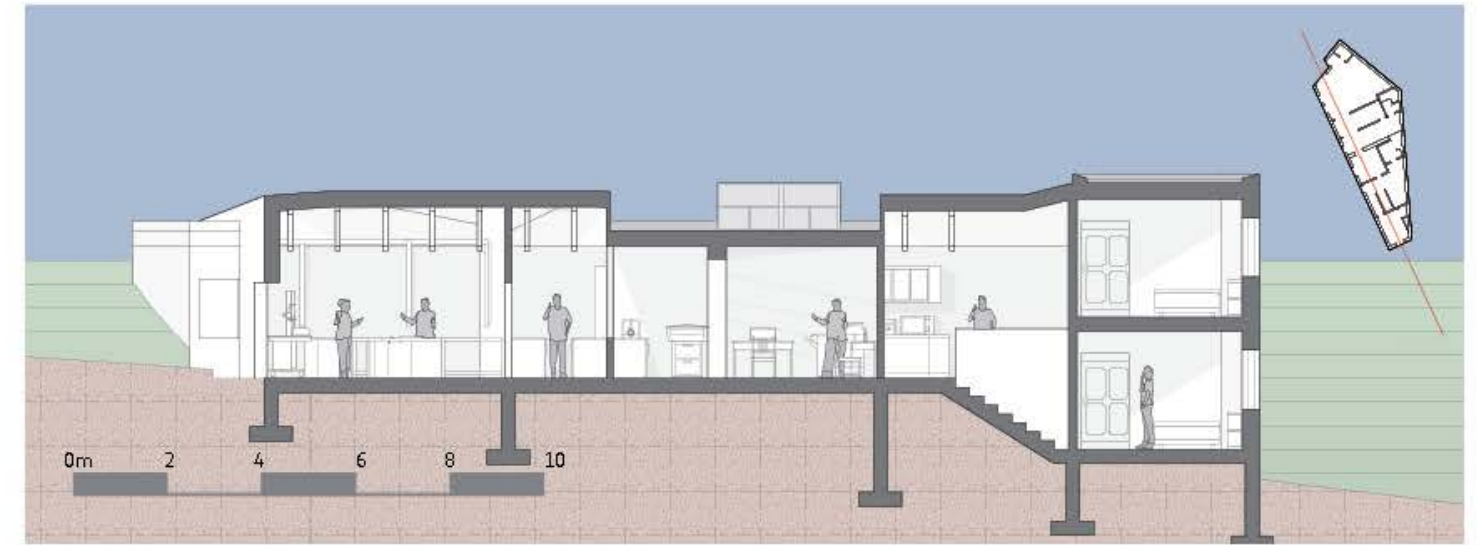
The master site plan: Kristian's Gym (Furthest north), Jackson's community theater (North West), Dakota's Community Kitchen (South West), and my Makers Place (South East), with the Cambridge shelter to the South East of the site.



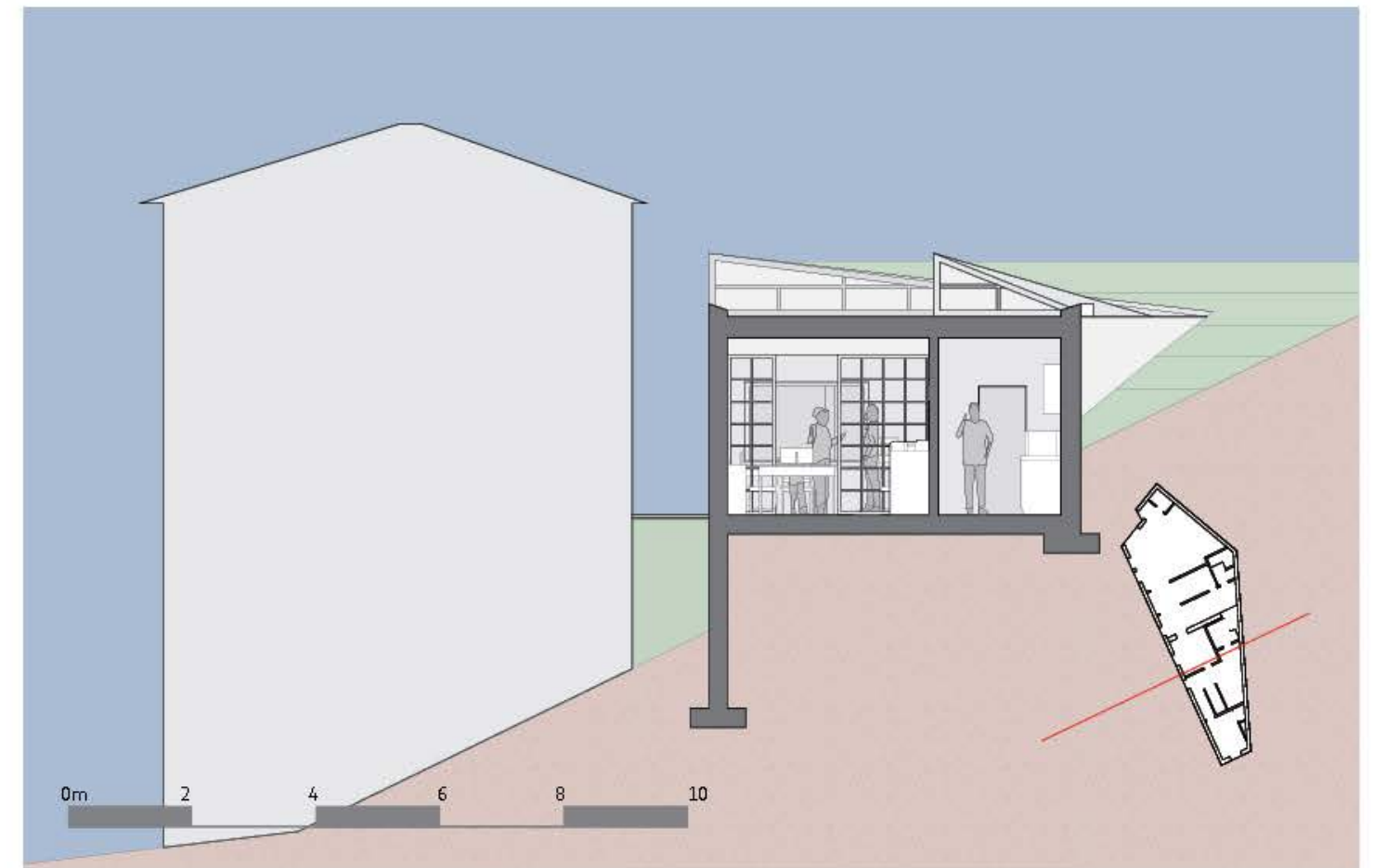
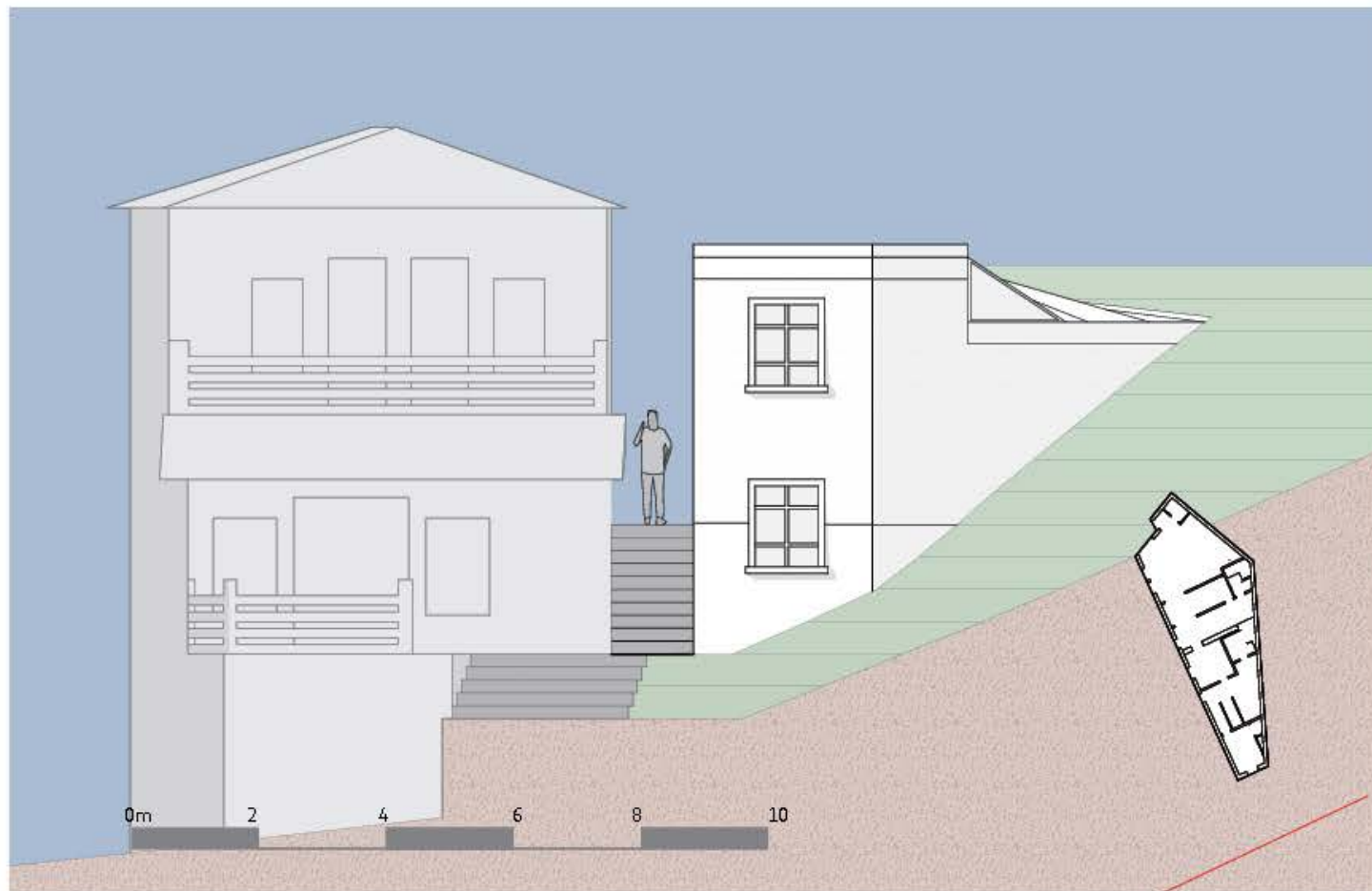
The woodshop and makerspace tools from top to bottom, The self contained dust collector for air quality and fire safety, the drill press, handsaw, miter saw, table saw, router, sander, tool and wood storage room, laser cutter, 3D Printer table, washer dryer stack, computer desks, and copy machine.

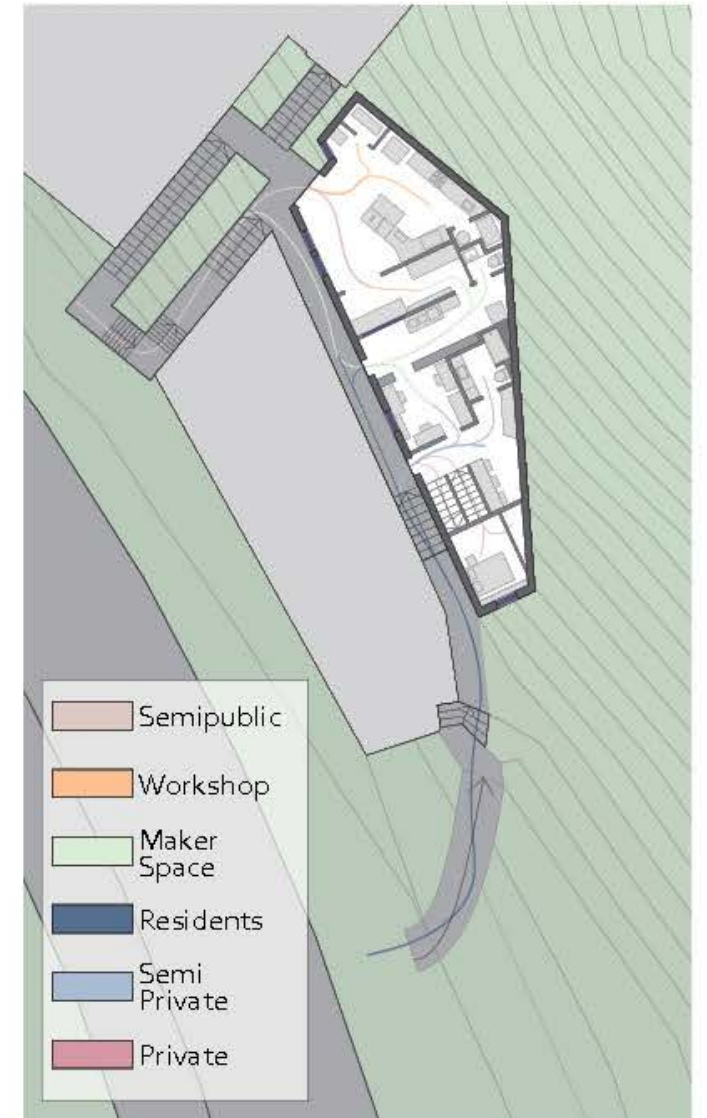
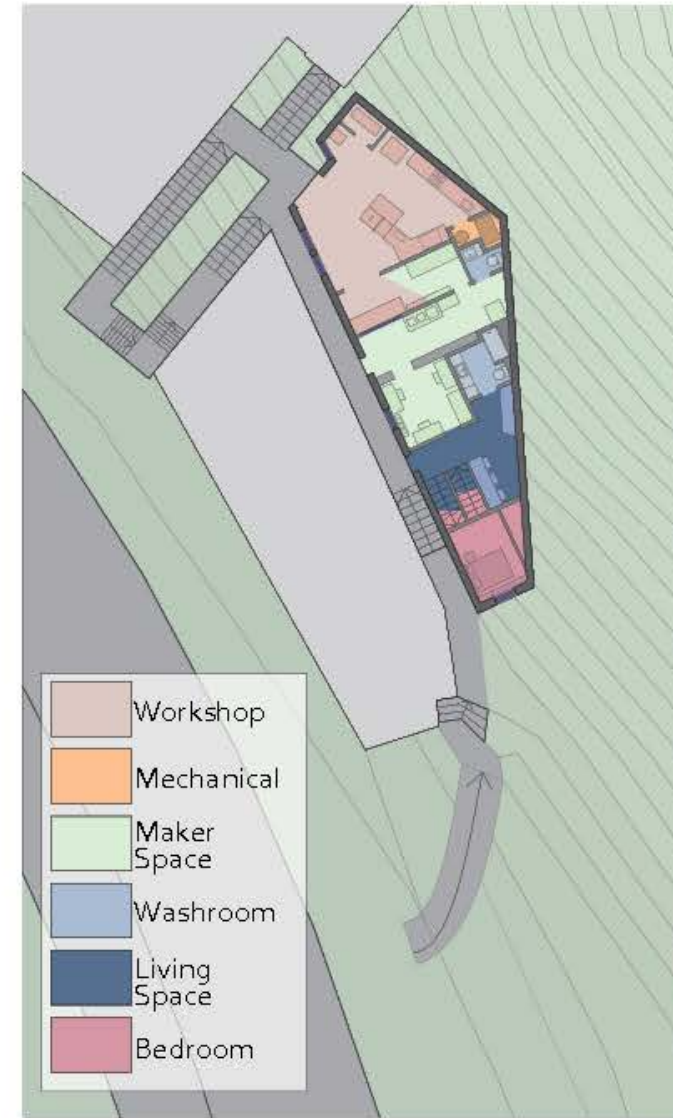


The west elevation shows the three entrances to the building, the left most entrance is for the woodshop and connects to the communal stair/gathering space, the next door, in the walkway, is a semipublic shortcut to the digital makerspace, and the final entrance is a private entrance to the living space allowing the residence to operate separately from the workshop.



The longitudinal section shows the relationships of the spaces, the continuity from the woodshop to makerspace is done using windows in the doors and wall of the storage area, as well as the semipermeable shelf wall seen in the section below. This separates the sound and dust of the woodshop while connecting the workspaces. The residential space is then fully separate and the bedrooms are furthest from the loud machinery.





4

The Learning Library

Community Oriented Ideas

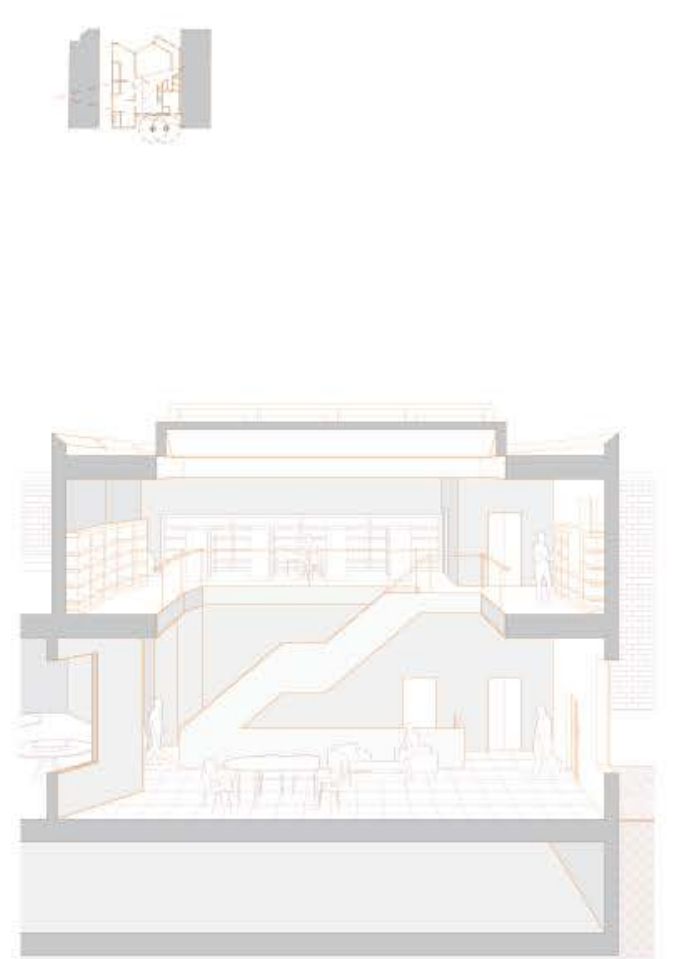
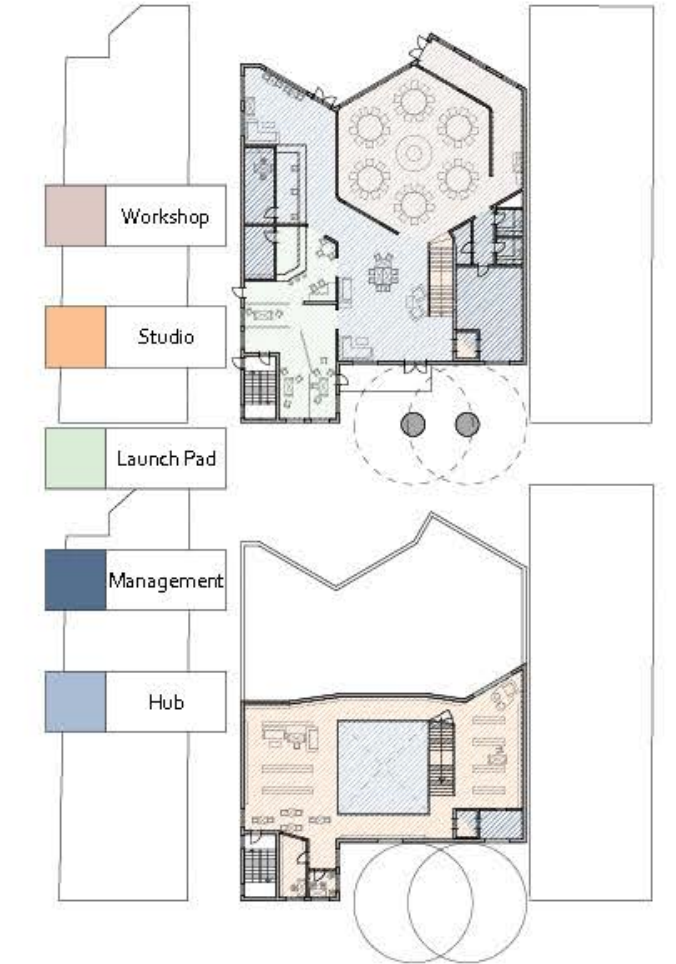
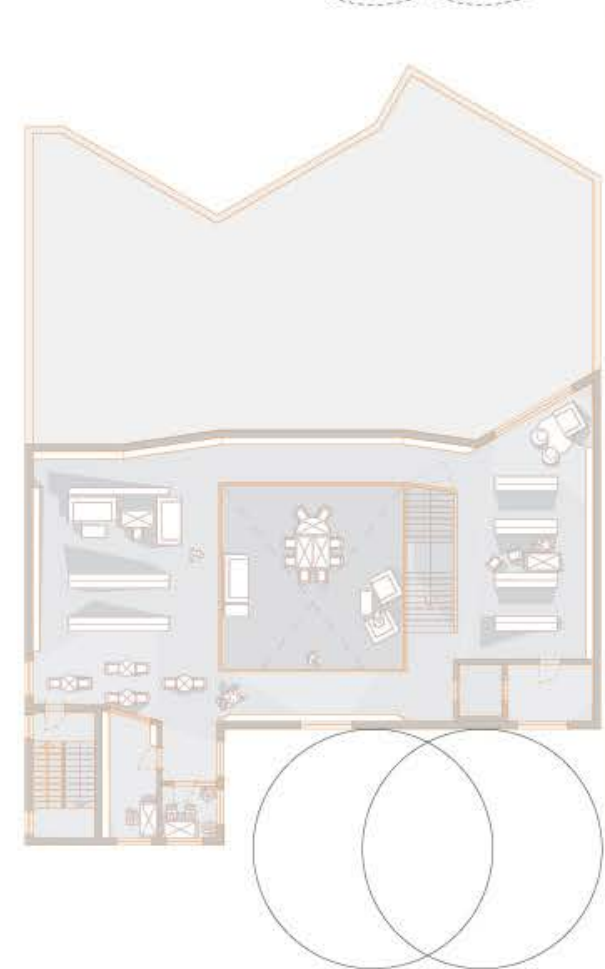
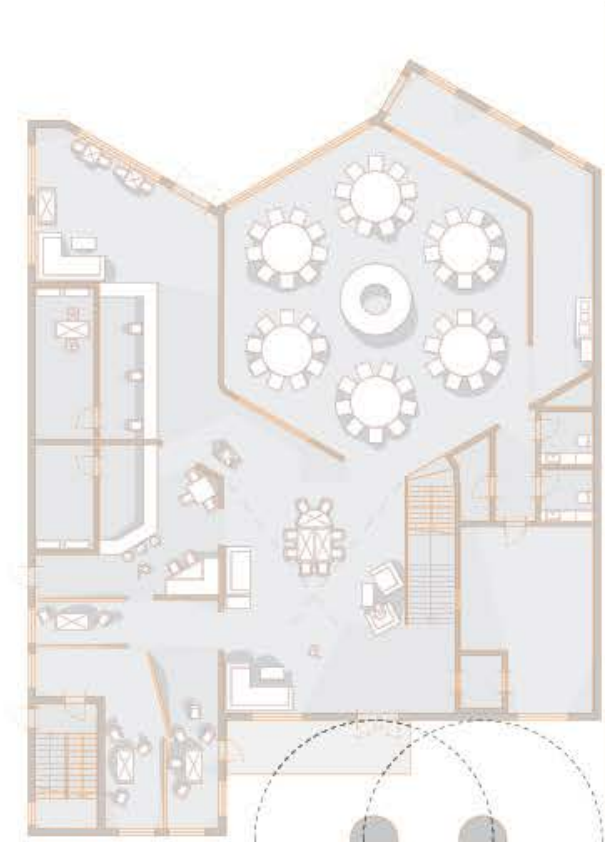
1B Studio (2022)

Supervisor: Rick Andrighetti

Along the Don River next to Joel Weeks Park, the Learning Library seeks to address community needs, specifically the self identified need for career oriented education in the community, as outlined in the 2015 Rivertowne Needs Assessment Survey. To meet the communities needs as an additional program to the library, research from MIT and the University of Australia were integral to the design.

Programs: Rhino, Enscape, Illustrator, Photoshop









3

Bifocal

Two Arches, Two Lenses, Two Views

1B Building Construction (2022) CISC Competition

Supervisor: Terri Meyer Boake

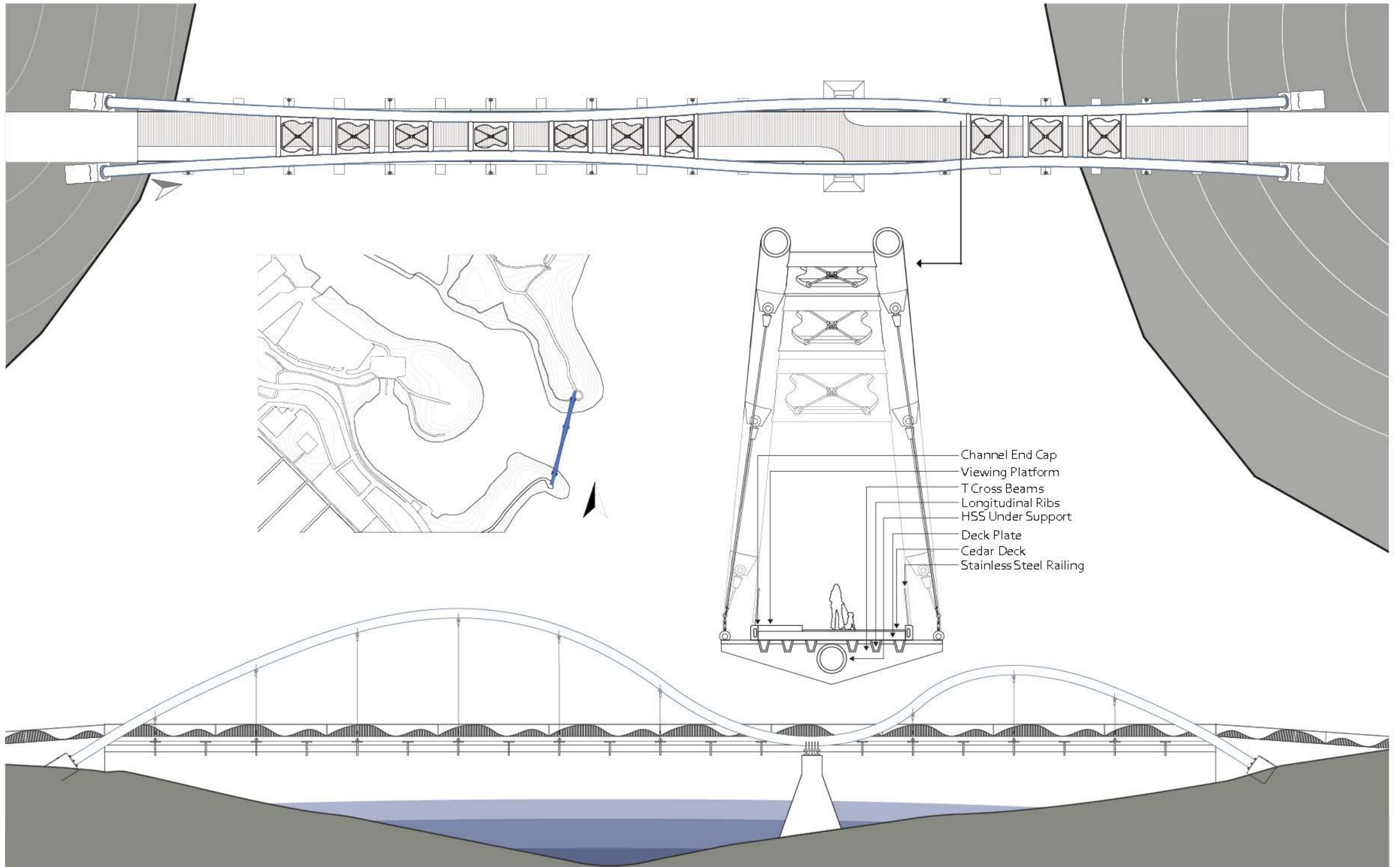
Partner: Jackson Adams

Located between the peninsulas of Humber Bay in Toronto, Ontario, Bifocal is a tied-arch bridge designed to show off Toronto's landscape through two contrasting views; the iconic Toronto skyline, and Humber Bay Park. Inspired by the vernacular of local footbridges. Travelers are encouraged to peer through this bifocal lens to experience both sides of what Toronto has to offer.

Programs: Rhino, Enscape, Illustrator, Photoshop

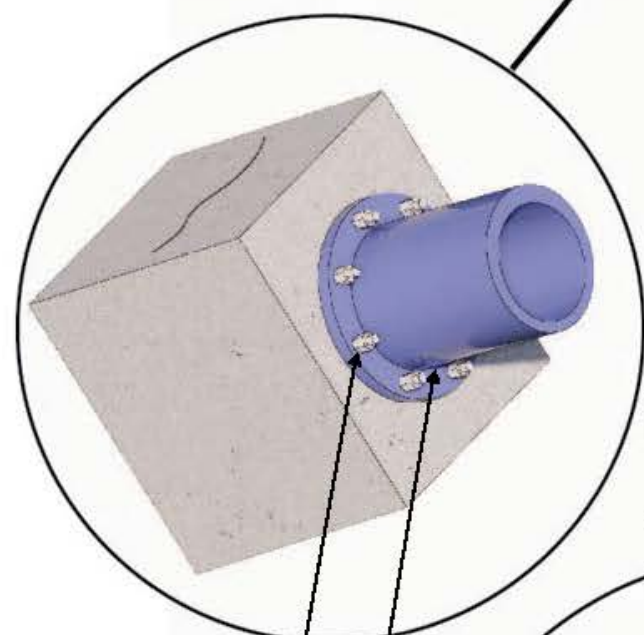




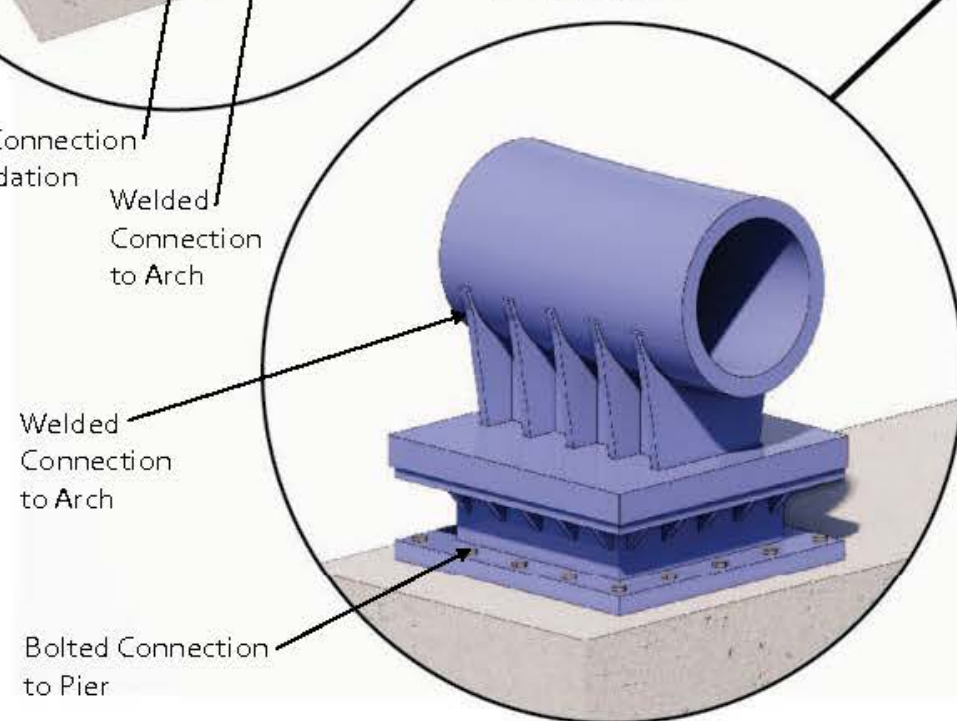


- A Blue Epoxy Coated Carbon Steel
- B Gray Epoxy Coated Carbon Steel
- C Galvanized Steel
- D Stainless Steel

Foundation Detail AECS 2



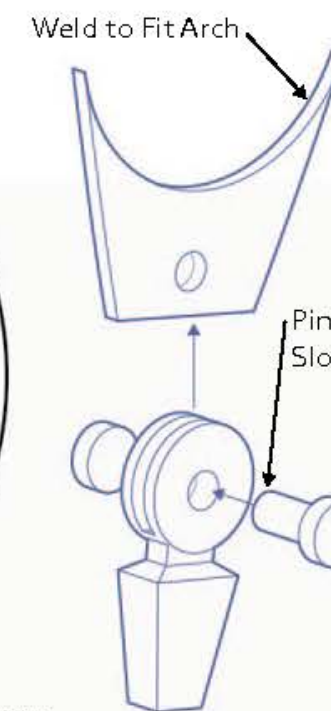
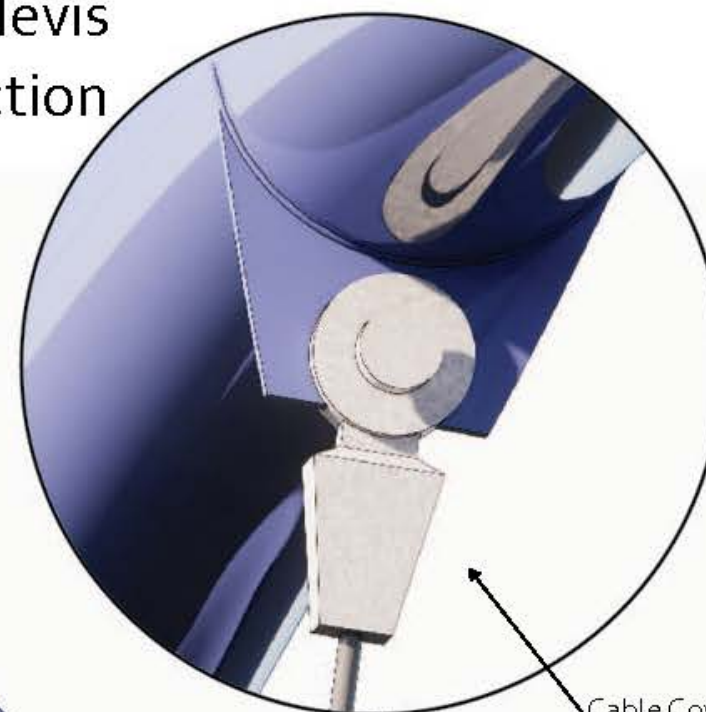
Pier Connection AECS 1



Pin & Clevis Connection

AECS 2

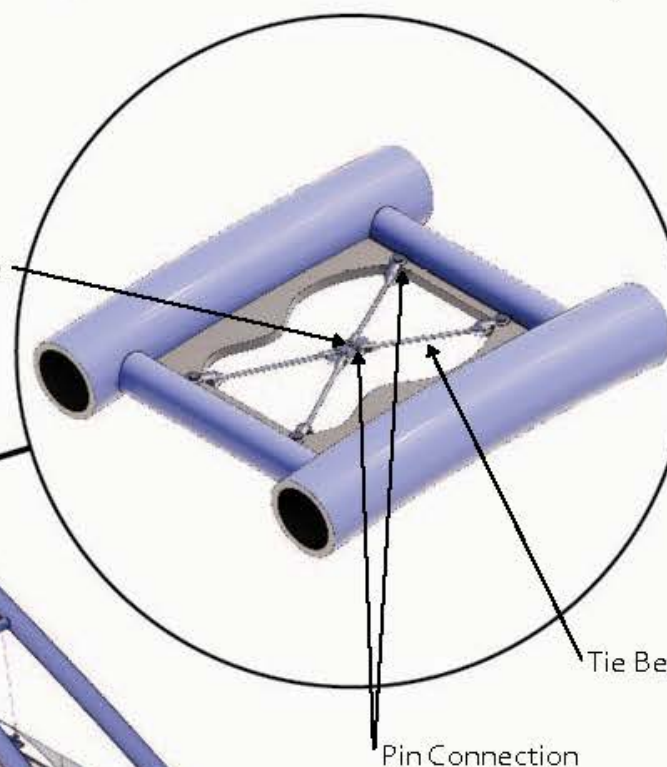
(Ranges From 3-1 based on distance)



Cross Brace Detail

AECS 2

(Ranges From 2-1 based on distance)



Turnbuckle Detail

AECS 4

Turnbuckle
Manges
Tension

