Deliverable E Prototype I and Customer Feedback

Alex Cherkassky Kavinraj Navinaraj Ludvik Tholen Matthew Chan-Barcellos

> GNG1103 - A04 09/11/2023

Client Feedback

Due to time constraints with the meeting with the client where our design was presented, feedback was not received in any capacity. As a result, we are unable to make any significant changes or utilize the critique our Prototype Test Plan relied on. As such, much of what was produced in the last deliverable remains as our main plan. Please keep this in mind as this document reflects the lack of feedback provided for our ideas.



Prototype 1 - 3D Blender Model

Prototype Analysis

Without feedback from the client, this model relies on previously understood requirements. Why did we choose a layout that fits within a scaled up canoe? The design was chosen to reflect the desire for natural light. With a more narrow build, there would be greater surface area to place windows into each room. The boat was a design choice made to reflect the historical significance similar boats had in the past for Indigenous communities. It also functions as an effective way to quickly move rain-water into storage units, however that is to be tested in subsequent models.

Updates and Changes

As mentioned prior, we have not yet received feedback from the client regarding our current work and as such, we've found no significant issues in need of alteration at the moment.

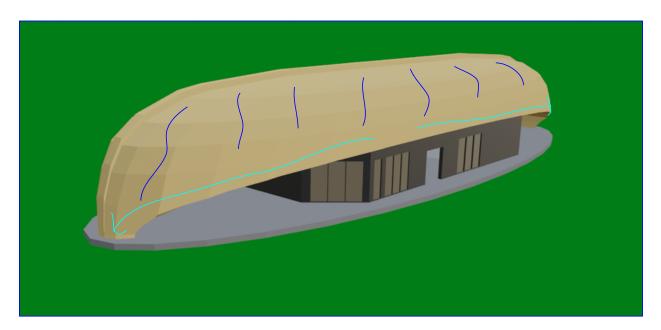
Prototyping Test Plan

Without the feedback that made up the backbone of our first Prototyping Test Plan, we lack the means to test a valid physical design that has been approved of. That being the case, an analysis

of the test plan was done on the 3D model that can later be applied to a physical model that we've been given the go ahead for.

Test ID	Test Objective (Why)	Description of Prototype used and of Basic Test Method (What)	Description of Results to be Recorded and how these results will be used (How)	Estimated Test duration and planned start date (When)
1	Learning; Focusing on the water collection system to improve efficiency as we cannot fully predict where the precipitation will fall off the roof currently.	Focused and Physical; Find the effects of rain & snowfall on drainage by folding paper into a rough shape of roof with plastic wrap over it. Run water over the top to simulate rainfall and find where most water falls.	Measure where water flows. Higher levels should be noted so the water collection system can be focused on that area for greater efficiency.	Testing should only take an hour or two. Testing begins November 10th following additional feedback from clients.
2	Learning; The space is looking cramped as we tried to have little wasted space, but it might be too cramped.	Comprehensive and Physical; Look under the roof for indoor space and flow by observing how easy it is to move from room to room.	Observe how moving from office to office or from storages to the loading dock feels, space inside feeling cluttered or need more space	Testing should happen after client feedback and design will not be finalized until confirmed.
3	Verifying; Making sure the roof is stable even under pressure that might be unexpected is required to meet building codes.	Focused and Analytical; Look specifically at the roof and measure out the load that it could withstand in worst case scenarios or look at how much it flexes in the wind as we are using wood for the roof.	Record different loads or find out how much the columns and roof can support a load. Will need a safety factor.	Testing begins November 10th following additional feedback from clients. Modifications might have to be made to the roof to accommodate.
4	Verifying; As an important criteria was an abundance of natural light, we must test to ensure	Focused and Analytical; Look how much light gets into the building and every room at	Observe how natural light would enter the building at different times of	Before finalizing the design, test every prototype to ensure that

5	that there is a lot of natural light Verifying; We don't want the temperature to change too much in plant processing, especially outside of the freezer and on display.	different times of the day and year. Focused and Analytical; Look at temperature in plant processing and the insulation to see how easy it is to lose or gain heat and control the inside of the room.	day and year to make sure that the space is well-lit. Observe how much insulation we have and how much heat would also move to other rooms.	this design criteria is met. After the design and size of the room is confirmed, testing can begin.
6	Verifying; While state of the art security is not necessary, it is important that there are some safety measures around the building.	Focused and Physical; Run different scenarios when transporting valuable items or fragile items and ensure safety and ease of access to specific areas where security cameras are such as the loading dock.	Observe how safe each area is and ensure that most areas are covered by CCTV to deter crime.	Testing begins November 10th following additional feedback from clients. Modifications might have to be made to keep each area safe.



As depicted, it is predicted water will traverse along the dark blue lines, where it can be collected and stored at the endpoints of the canoe. However, future prototypes may be made that can test the feasibility of such an idea.

Wrike Snapshot

https://www.wrike.com/frontend/ganttchart/index.html?snapshotId=Y11Ru0gdduYm4Y6yx23R 0230TUAjpN8T%7CIE2DSNZVHA2DELSTGIYA