

Deliverable 3 Group A01-1

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1. The function of the building is to house the guardianship program and represent its core values. This includes the physical plant processing and data management that will happen in the lab, as well as the community involvement. This space needs to have a large lab area that can dry, process plants and store the respective data. The space also has to have an area where the community can gather and see their culture being represented throughout the entire building. See the table below for a list of prioritized design criteria based on the team's list of interpreted needs including functional and non-functional requirements, as well as constraints.
2. For technical benchmarking see table two where we discuss different ideas for the different spaces in the building.
3. See Design Criteria column in the first table for target specifications (numerical values or a range of values which represent reasonable product attributes).
4. The client meeting helped narrow down many of the questions about the function of the building. Before the meeting we thought that the plant processing would be on a much larger scale than was actually needed, the client only wanted a small portable table to process plants. The meeting allowed us to understand the values of the guardianship program, and how important cultural representation in the building is. For example, the outdoor space for community gatherings. The meeting gave us specifics on how many offices, computers, and many other criteria for the building.

Needs list:




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Need	Design criteria
Building needs to represent culture. Incorporate cultural values.	Exposed timber, greenery, dome-shaped
Have a space for a large group of people to have a meeting at a circular space.	402 sq-ft space (https://www.meetings.com/Meeting-Room-Capacity-Calculator)
Outdoor space for cultural	20ft covered outdoor space
Security cameras are good	Security cameras indoors/ outdoors
Accessibility for elders	Wheel chair accessible building, elevator if more than one floor
Small Kitchenette for employees to have lunch/small meals.	A room containing a dishwasher, stove, fridge and table.
Space for 4-5 people in offices	4-5 150-350 sq-ft offices https://www.yarooms.com/blog/average-office-size-how-much-office-space-do-you-need#:~:text=While%20there%20is%20no%20e,100%20square%20feet%20per%20person
Have 1-2 washrooms	Have 1-2 washrooms
Need space for one freezer.	83 1/8" X 31 1/2" area of free space (https://www.homedepot.ca/product/frigidaire-8-cu-ft-chest-freezer-in-white/1001700934)
Have 2 parking spaces for employees.	Two 10' X 20' spaces next to the building (https://www.parkingindustry.ca/construction-maintenance/the-average-size-of-parking-spaces-in-canada#:~:text=Parking%20space%20dimensions%20can%20range,wide%20and%2020%20%20long.)
Easy access for people to load equipment and materials.	Loading dock
Storage for handheld equipment.	Closet with shelving units
Space to clean fish/outdoor space	Large paved area with water access

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Have communal work space for harvesting and drying plants	Have a large open room with a high square footage, with workspace
Communal computer lab to log data.	Power outlets for 5-7 computers and a table/counter with space for computer work
Mobile work space for processing and medicinal purposes	Workspace with wheels and space for processing equipment. Sterile space (can not be made of wood)
Keep dry plants dry	Room with favorable conditions to preserve plants: 15-21 degrees celsius 55-62% humidity level https://2fast4buds.com/news/best-conditions-for-your-drying-room-and-how-to-dry-cannabis

Benchmarking Table:

Picture	Link	Description
	https://www.cbc.ca/news/canada/ottawa/federal-government-smudging-ottawa-1.6609661	Inspiration for a circular meeting room.
	https://iredale.ca/wp-content/uploads/2022/08/First-Nation-TFN-Elders-Centre-1.jpg	Good inspiration for building architecture.
	https://www.freepik.com/premium-photo/conference-room-meetings-with-dome-round-shape-with-large-table_4649140.htm	As the client was looking for a circular board room, this is a good idea of how we can design the room itself. Having a ceiling with a nice sky window will add a lot of natural light and brightens up the room.

	<p>https://www.labtechsupplyco.com/lab-furniture/custom-lab-benches/</p>	<p>This room is not big enough for ten people, however there are lab benches on the side of the room, a good idea for our workspace. We would upscale the room while designing for our client. We can place the 5-7 computers on these wall benches.</p>
	<p>https://cdnassets.hw.net/e7/2c/7e81eb8b42dea7706dbab8f353c0/formosana-aboriginal-gallery-lucas-k-doolan-0422-hero.jpg</p>	<p>Cool, innovative architecture, can be used for building shape ideas, rather than a regular industrial building.</p>
	<p>https://worldarchitecture.org/architecture-news/epvef/vtn-architects-vinata-bamboo-pavilion-creates-a-natural-pathway-in-a-garden-of-highrise-buildings.html</p>	<p>This as well gives a sustainable architecture. Though this structure in the picture is made of bamboo, instead we can use timber as it is used a lot in Algonquin culture. Using this at an entrance can be welcoming for the building users as they see a part of their culture as soon as they enter.</p>
	<p>https://dzinetrip.com/structure-inspired-by-first-nations-architecture/</p>	<p>The wooded architecture incorporates cultural aspects to the building design as it follows the Algonquin values of being sustainable.</p>
	<p>https://brookmcilroy.com/wp-content/uploads/2020/11/BM_Algonquin_College_Indigenous_Comm ons_1.jpg</p>	<p>We like the outdoor area so we included the image for inspiration. However, we do not like the industrial looking building.</p>