

Project Deliverable B: **Need Identification and Problem Statement**

GNG 1103 – Engineering Design Group A02-8

Group Members:

Maya Buduru, Abinad Nagatheeban , Jasmine Jean-Noel, Leena Hafez , Lucas Cho, Iniya Luckshman

Client's Needs

Cultural:

- Reflective of the environment (ie: sustainable, multifunctional, natural features, NOT a commercial/industrial-type building)
- Exposed timber/green spaces
- Space needed for the harvest/cleaning of fish for the community.
- Outdoor space for hide processing of deer/moose (traditional hide tanning)
- Open spaces for community involvement
- Large part of culture/work has to do with elders, so buildings need to be wheelchair accessible.

Storage?

- Small storage area for handheld equipment
- Lean-to parking space for 2 pickup trucks. When trucks are not present, it can be used as an extra workspace (dual space)
- (Deep?) Freezer space to store plant and animal samples
- Storage area for out of season vehicles? (ATV, snowmobiles)

Layout:

- Computer lab with 5-7 workspaces
- Have a moveable lab table/ workstation (on wheels)
- 4-5 small offices (separate from the open space)
- Common area

- Small washroom + kitchenette
- Harvesting space for medicines & field samples
- No constraints on size
- One access point needs to be a garage door (loading dock for equipment)
- Large capacity is not needed (max occupancy ~ 10 people??)

Special Constraints:

- Surfaces in harvesting space must be non-porous.
- Plant processing station must be mobile.
- Spaces designed with the future in mind (room for growth?)

Ranking of Needs:

5 (highest priority)	<ul style="list-style-type: none"> - Outdoor space for hide processing - Wheelchair accessible/accessibility for all -Small washroom + kitchenette -Freezer to store plants and animals - Computer lab and office spaces - Parking space for 2 pickup trucks
4	<ul style="list-style-type: none"> - Open spaces for community involvement - Workstation that's mobile - Harvesting space -
3	<ul style="list-style-type: none"> - Building reflect on the environment
2	<ul style="list-style-type: none"> - Green spaces/ exposed timber

1 (lowest priority)	- Storage area for out of season vehicles -extra space for the building to expand
---------------------	--

Problem Statement: The guardian program needs an office and lab space for their environmental and administrative work, as well as covered multipurpose office space.