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INTRODUCTION:

The objective of the deliverable C is to evaluate the needs of the clients and make design criteria. The design criteria are used to break down the needs into requirements and constraints.

1. FUNCTIONAL, NON-FUNCTIONAL REQUIREMENTS AND CONSTRAINTS.

1.1. Functional requirements:

Design Specifications	**Relation**	**Value**	**Units**	**Verification method**
A workstation that can be transported throughout the building	=	Yes	N/A	Test
Building has security footage	=	Yes	N/A	Test
Lab to store and process plant medicines	=	Yes	N/A	Test
Workstations	>	5	N/A	Test
Outdoor space for cultural activities with the community	=	Yes	N/A	Test
Storage for equipment	=	Yes	N/A	Test
Loading dock	=	1	N/A	Test
Washroom	>	2	N/A	Test
Kitchenette	=	1	N/A	Test

1.2. Non-Functional requirements

Design Specifications	**Relation**	**Value**	**Units**	**Verification Method**
Design that reflects the Algonquin culture using sustainable materials	=	Yes	N/A	Test
Accessibility Features	=	Yes	N/A	Test

Safety and compliance with local building codes	=	Yes	N/A	Inspection

1.3. Constraints:

Design Specifications	**Relation**	**Value**	**Units**	**Verification Method**
Budget	<	TBD	Dollars (CDN$)	Accounting
Space Limitations	<	TBD	M^2	Test
Time to complete the project	<	2	Years	Gnatt Chart

2. BENCHMARKING

2.1. User Benchmarking:

The Office Environment People Prefer (p. 54-56):

This survey done by K. E. Johnson says workers in offices tend to prefer:

- Private floor plans over open floor plans
- Floor plans in which interaction with other workers is easy
- Hard floor in high-traffic areas
- Subdued colours in their office environment
- Plenty of storage to sort and organize materials
- Storage for materials in the proximity of where they will be used
- Comfortable and relaxed areas for eating
- Comfortable chairs throughout the office

Link : https://innovativeprofessionaloffices.com

Users Liked:

- Clean
- Accessible

Disliked:

- Unclean

L'atelier Vancouver

Link: https://ateliervancouver.com
Feedback/Reviews:

Likes:

1. Beautiful and co-ordinated spaces
2. Dog- friendly
3. Natural lighting around work areas and stations
4. Multifunctional building with many options for meetings such as telephone rooms, meeting rooms etc.
5. Organized events
6. Clean environment.
7. Has a relaxed setting which radiates coziness

2.2. Technical Benchmarking:

https://www.ecohome.net/prefab-kit-homes/

OFFICE BUILDINGS:

https://www.archdaily.com/968735/roche-multifunctional-workspace-building-christ-and-gantenbein

https://www.archdaily.com/1006813/icp-brunton-central-mathew-and-ghosh-architects?ad_source=search&ad_medium=projects_tab

Sustainable Buildings			
	THE CHARLEVOIX	Le Refuge	M Series
Area (sq ft)	2,310	747	1,600 - 4,800
Floors	3	1	1-3
LEED Rating	Gold	Platinum	Platinum
Passive Solar Heating	No	Yes	No
Materials	Wood	Steel and wood	Variable
Easily expandable	No	No	Yes

office buildings		
Name	ICP Brunton Central	Roche Multifunctional Workspace Building
AREA	20846 ft²	10000 m^2 = 107639.1ft^2
Floors	Basement (PARKING) + Ground + 3 Floors + Open Terrace	5 floors
Multifunctional Workspaces	Office spaces on all 3 floors. Number not disclosed.	Yes 550 seat auditorium, 300 flexible workspaces (with mobile desks and chairs), 100 workspaces, exhibition spaces. https://www.azuremagazine.com/wp-content/uploads/2022/04/Azure-ChristGantenbein-Roche-FlexibleOfficeDesign-2.jpg
Outdoor space	No	No

3. TARGET SPECIFICATION

Target Specification Table		
Target	**Amount**	**Cost**
Office Computers	10	(600$ + 101$)*10 = 7010$
Small Office Spaces	4-5	$50 to $200 per square foot
Common workspace Area	1	Idk lol
Kitchenette	1	$16311 (13049+19574)
Washroom	1	$25106

Commented [CU1]: thoughts on the table idk exactly what it wants

4. REFLECTION

The client meeting massively impacted our design criteria and specifications, as well as deciding the relative importance of each specific part of the project. When selecting the ideal components from each example in our user benchmarking, the needs and requests from the client were a major factor in picking one over another when preference became the deciding factor. Of course, not every factor was decided solely on the client's wishes, as some were just objectively better from an engineering design standpoint. Unsurprisingly, our table for customer needs was majorly impacted by the customer. Even our importance ratings for each need were impacted by how adamant the client was about the idea during the meeting. For example, the point of culture-inspired design was listed as very important, as the client made it very clear that it was a critical factor of the building. While doing user benchmarking for the building, no buildings with the same concept in the same context existed. Instead, we found various similar buildings, and when comparing their key components, graded them based on client preference to compile the most fitting parts of each building together.

Paying attention to the client's shifts in attitude and body language during the meeting also greatly helped our team decide the relative importance of each factor of the project. For example, when the idea of adding security measures was brought up, the client did not seem worried or interested in that added aspect. Her tone of voice and overall reaction to the suggested idea led our team to infer that security measures would be lower down on the priority list. As mentioned before, culture-inspired design should be a major design factor of the building. During the client meeting, it was repeated multiple times that there is a want for timber and/or other wood materials for the building and our team has carried that important design factor throughout deliverable B, and continuing into deliverable C.