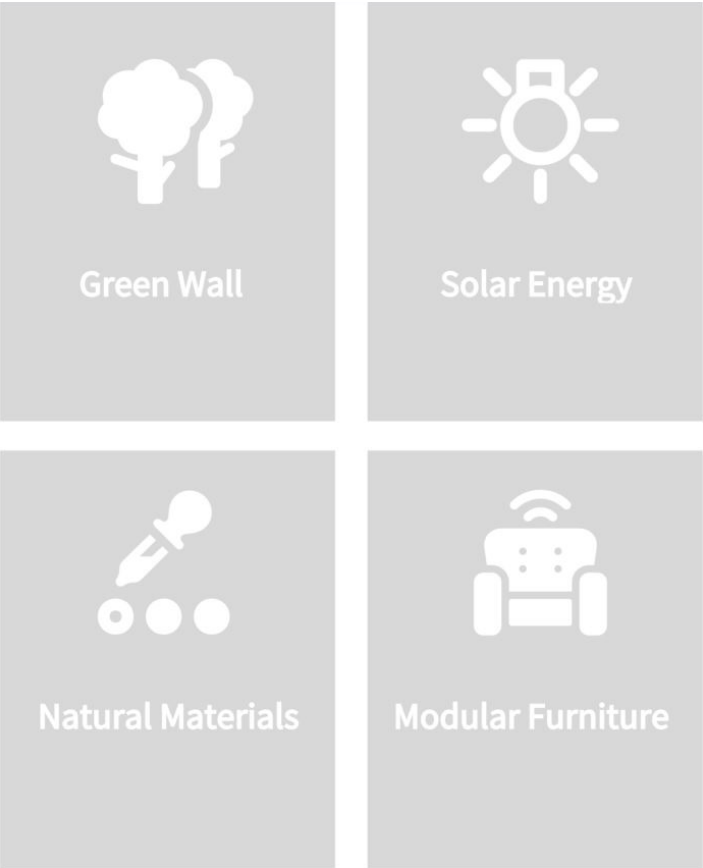


The Path Towards Zero Waste



Maker Lab

To create awareness about the environment.

Maker labs have redefined how individuals acquire new skills in the 21st century. Unlike the traditional classroom, a maker lab allows the users to acquire specific competencies using a hands-on approach. Educators can use maker labs to empower their students and train them to actively address various issues that impact society. The project's exploration revolves around how designers can revolutionize maker labs to curb environmental pollution and promote urban renewal.

The proposed study will examine how designers can use maker labs to achieve this goal.

Site Research

**CIVIC ADDRESS**  
9711 BRIDGEPORT ROAD,  
RICHMOND, BC, V6X 1V9

**LEGAL DESCRIPTION**  
PARCEL B, BLOCK 5N, PLAN  
LMP48631, SECTION 22,  
RANGE 6W, NEW WESTMIN-  
STER LAND DISTRICT

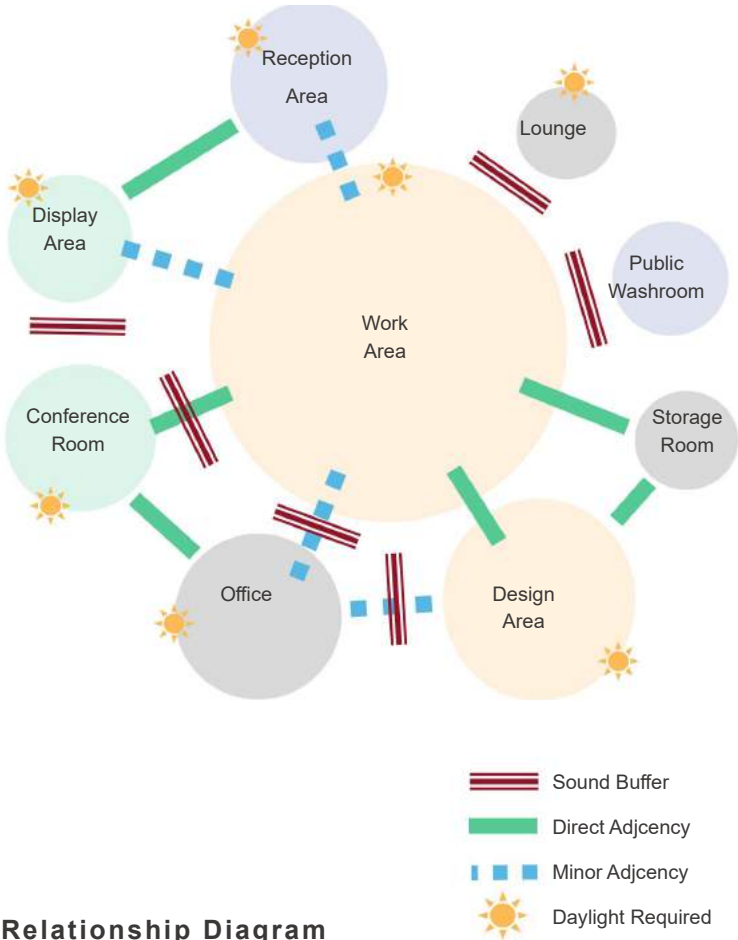
**PID**  
024-942-553

**ROLL NUMBER**  
78763001

**PROJECT DESCRIPTION**  
TENANT IMPROVEMENT  
TO A STANDALONE SINGLE  
STOREY EXISTING BUILD-  
ING TO ACCOMMODATE THE  
PROPOSED NEW GROCERY  
STORE OPERATION . NO  
CHANGE TO MAJOR OC-  
CUPANCY, BUILDING AREA,  
BUILDING HEIGHT, BUILDING  
ENVELOPE AND BUILDING  
STRUCTURAL SYSTEM.



Site Plan



Relationship Diagram

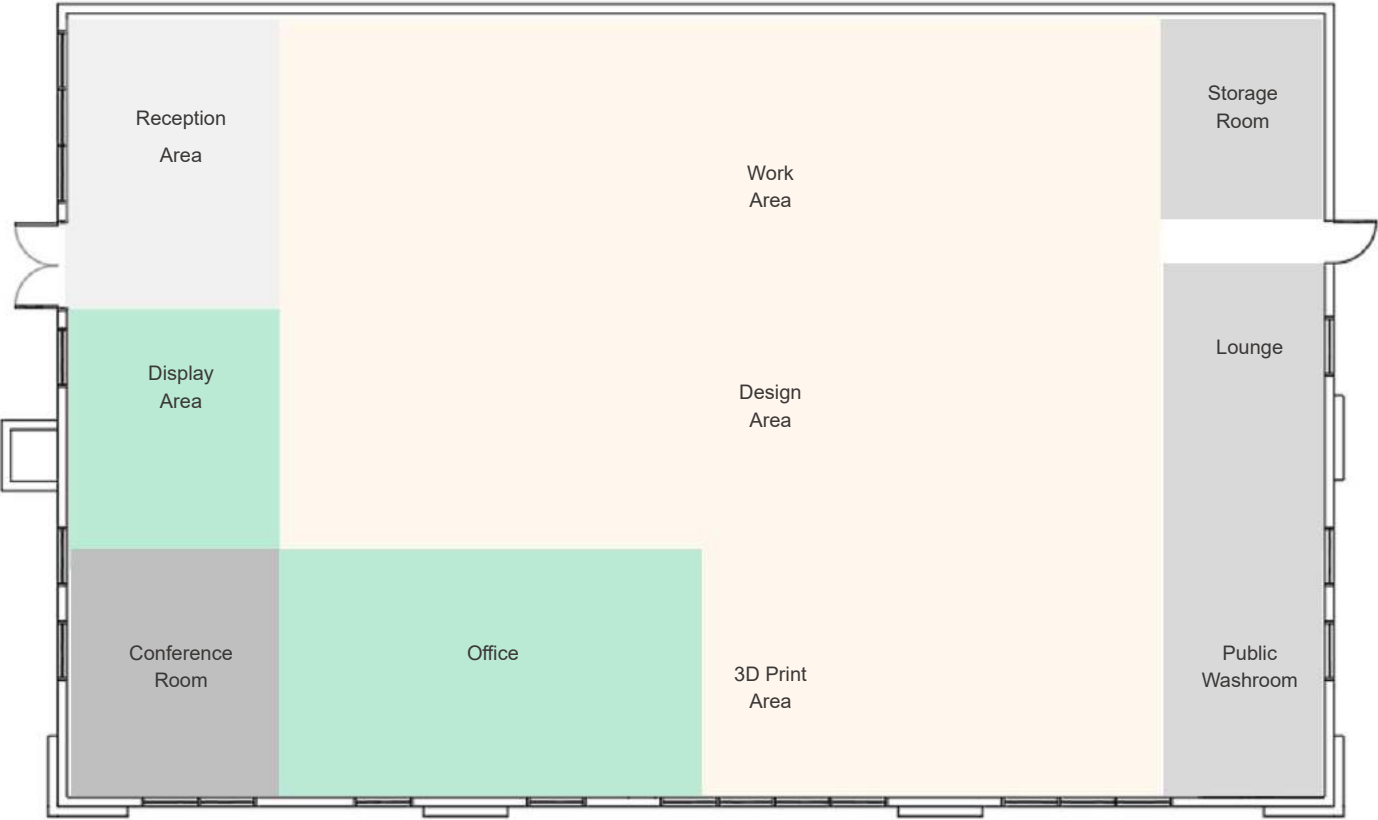
Criteria Matrix	Size sqft.	Public Access	Day light/ Views	Privacy	Equip.	Plumbing	Required Furnitures
Reception Area	220	Y	Y	N	Y	N	1 Sofa Group for 4 ppl, 1 Reception Desk, 1 Task Chair, 1 Coffee Table,1 Filing Cabinets
Display Area	200	Y	N	N	N	N	3 Display Cabinets
Conference Room	240	Y	Y	N	Y	N	1 Large Meeting Table for 8 ppl,1 Build-in Millwork,8 Task Chairs,1 White board,1 Projector & Screen
Office	290	N	Y	Y	Y	N	2 L shape Desk,6 Office Chairs, 2 Bookcases,2 Filing Cabinet,2 Office Storage
Work Area	2060	Y	Y	N	Y	N	Wood cutting Equirements, 3 Storage Cabinet,1 Display Cabinet,10 Working Tables
Design&Craft Area	850	Y	Y	N	N	N	2 Sofa Groups for 8 ppl, 2 Coffee Table, 1 White Board, 2 Layout Table,2 Storage Cabinet,1 Small Meeting Table, 4 Chairs
Lounge	131	Y	N	N	Y	Y	Build-in Cabinet,1 Table Island ,4 Chairs
Public Washroom	130	Y	N	Y	N	Y	Build-in Vanity
Storage Room	130	N	N	Y	N	N	Storage Shelves

Primary Adjacency

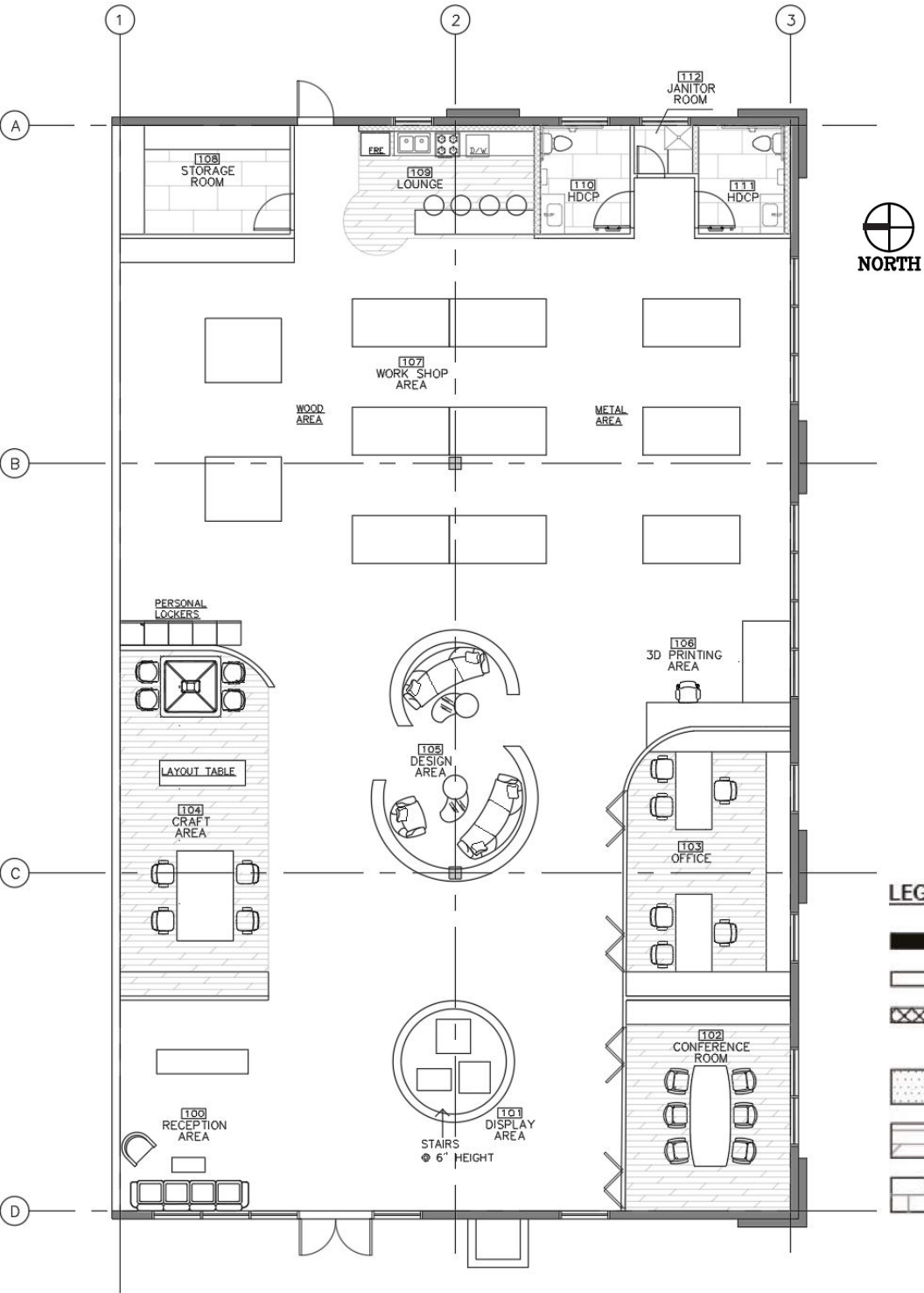
Sencondary Adjacency

Undesired Adjacency

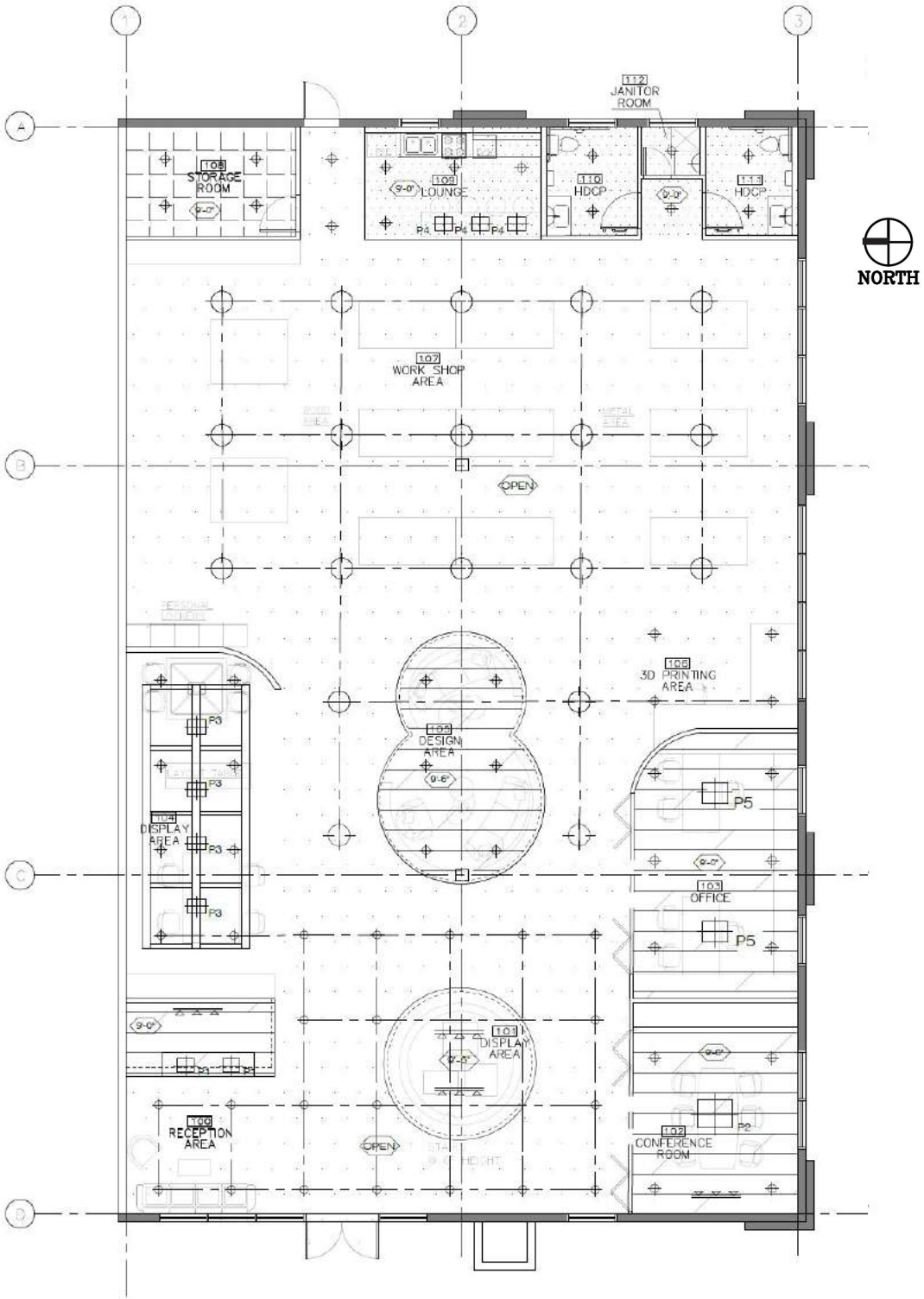
Expanded Criteria Matrix



Block Plan



Floor Plan



Reflected Ceiling & Lighting Plan

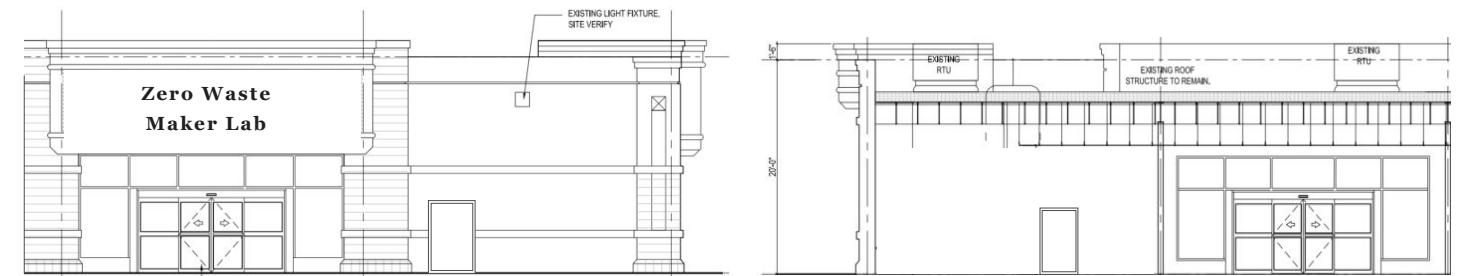




&lt; 12

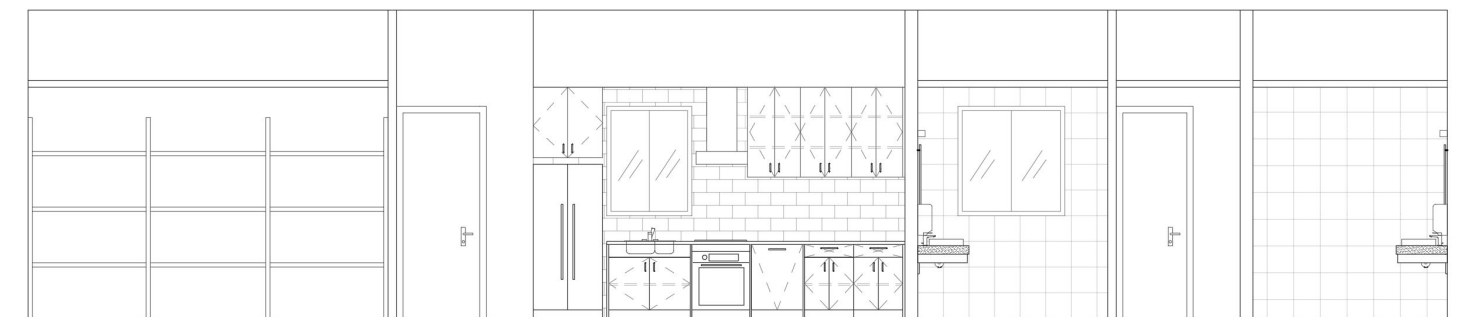
### Concept

The design will create a open, tranquil atmosphere where the patrons can truly relax. The color palette of the Maker Lab consists of light and neutral colors. This invokes a sense of a peaceful, beautiful, unpolluted country fields. Less partitions enable the patron to have a big open view like standing in the field, and lead them to wonderland where they can brainstorm and getting all the ideas, explore and discover. Natural light creates a relaxing ambiance. Repeated organic patterns help create continued rhythm. Natural materials enable people to forget about their busy city life. Plants are an important element; green can heal and helps to relieve stress, and relax people's eyes. Even in busy urban environments, people still have a place to wander.



West Exterior Wall Elevation

West Interior Wall Section

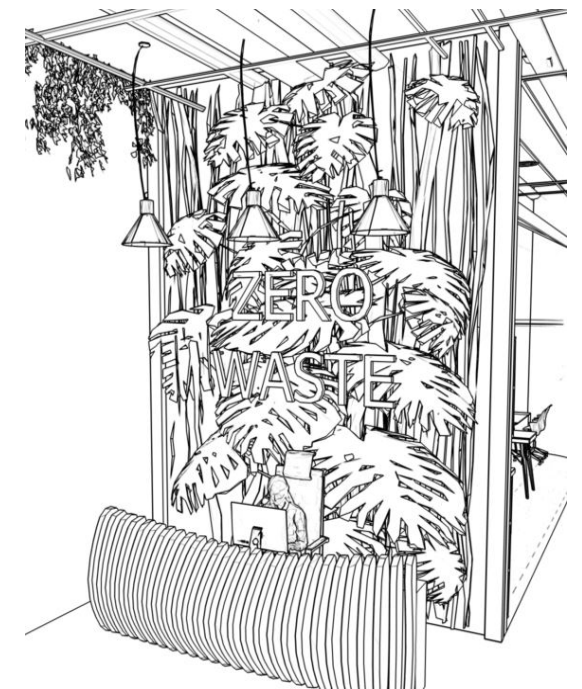


East Interior Wall Section

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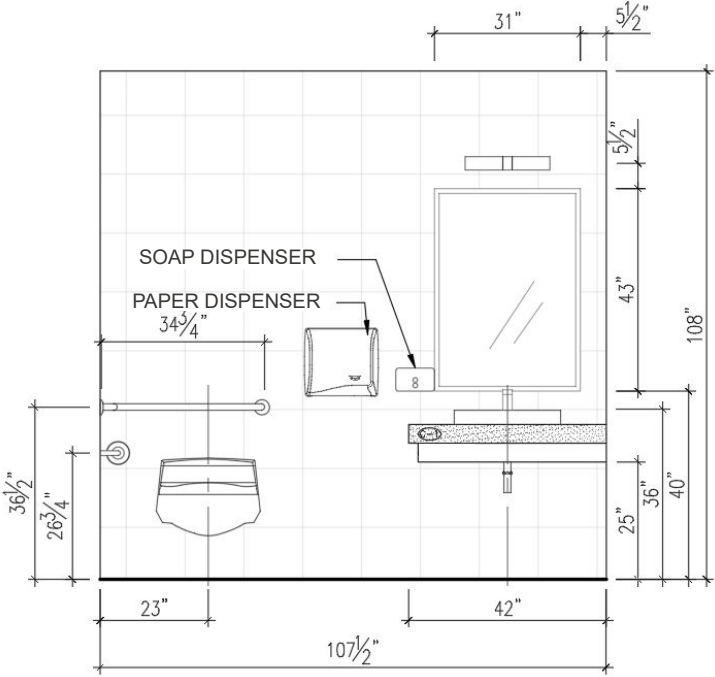


Design Proposal Sketch - Work Space

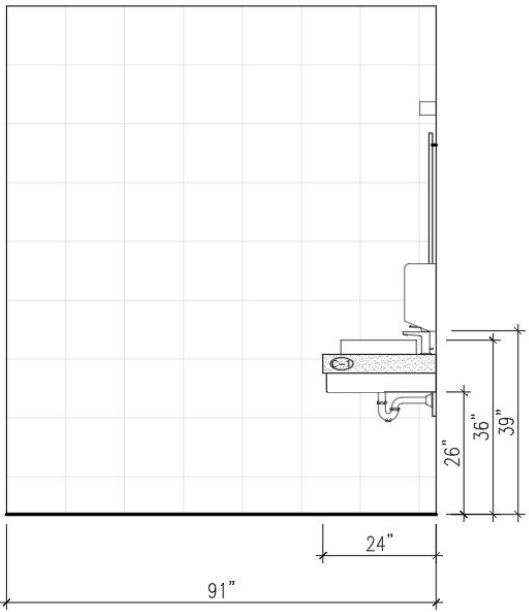


Reception Area

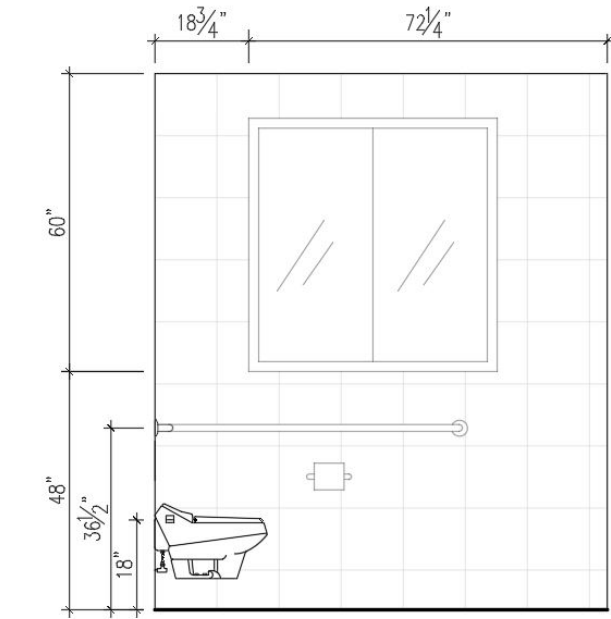




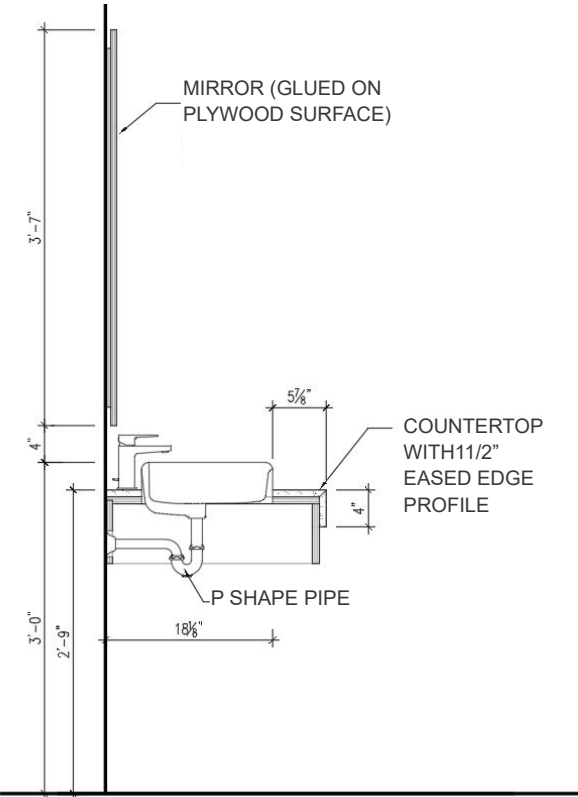
Washroom Elevation - North Wall



Washroom Elevation - West Wall



Washroom Elevation - East Wall



Washroom Vanity Section

Floor Plan

The proposal is towards the design of open space.



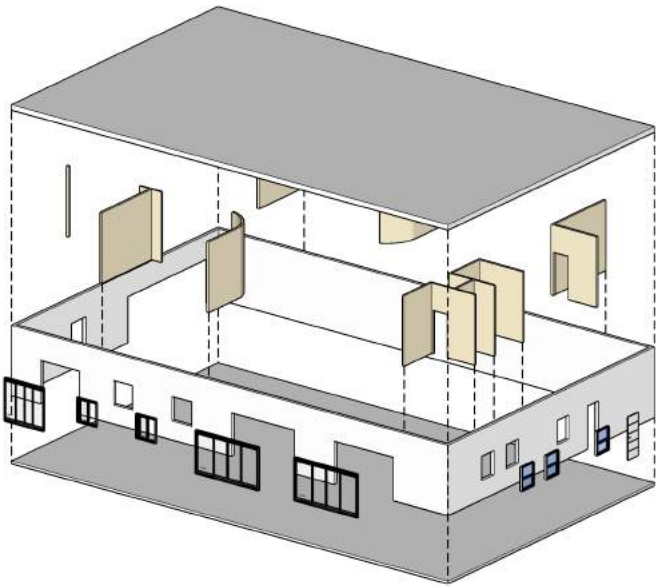
The backspace in the workshop area could take the function of a party location for the relaxation of the designers who utilize the space. The consideration in the design was the concept of sustainability and function in the outcome of the maker lab design.

The design was aiming to meet the creative and design needs of the users, in addition to fulfilling the aspect of sustainability as it relates to future outcomes and expectations from the space. It was to ensure that the makers found the space use in their creative process.





Workshop

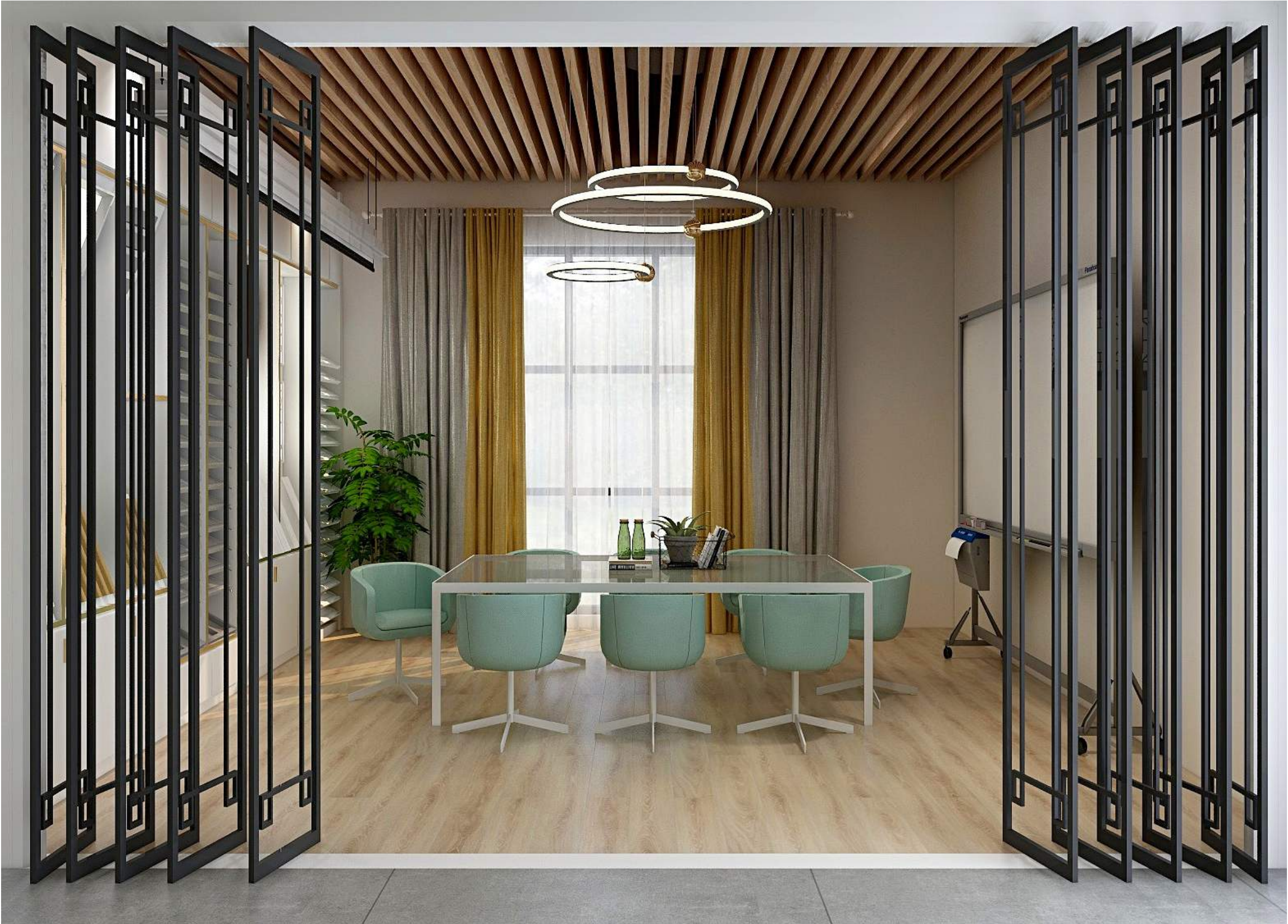


Isometric View

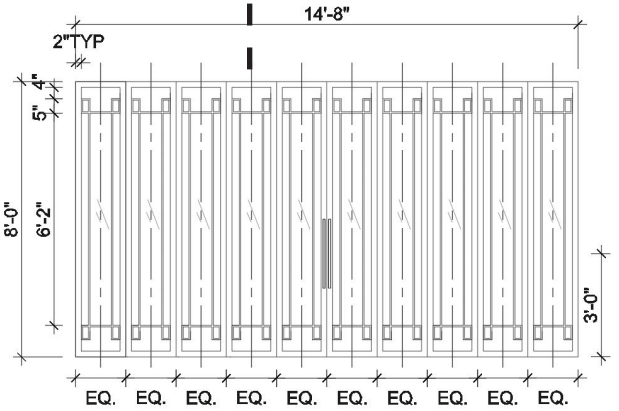
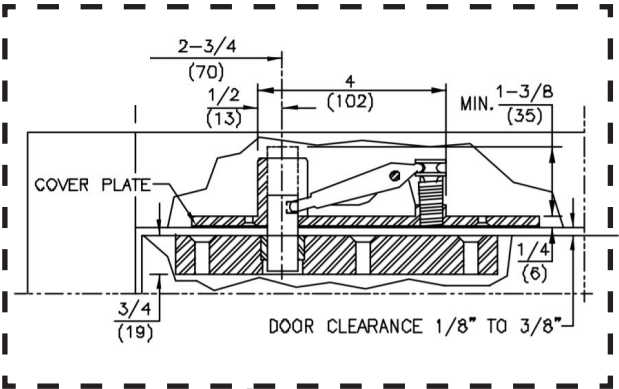
**MATERIALS  
AND RESOURCES**

- A. Reclaimed detroit clay brick.
- B. Linoleum-concrete Look.  
Environmentally friendly and non-toxic.
- C. Countertop -Granite
- D. Hardwood oak. 100% biodegradable.
- E. Washroom wall tile
- F. Acoustic Panel-Solid wooden slats.  
100% recyclable.
- G.. Chalkboard Paint, 0 VOC





Center Hung Pivot Set Detail



Center Hung Pivot Door Elevation

Conference Room

The meeting room constitutes a large table with seating for up to eight individuals, which allows a number of individuals to have a discussion over design ideas and brainstorming. The large window offers better lighting in the room, and the ceiling was made of an acoustic panel, which provides quietness in the room.





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### Office Room

The open space office create an atmosphere which makes people feel easy and welcoming. Since it is a workspace office, it was not designed the same as the typical office where mainly for privacy. The bi-fold glazing door provides a great open view into the maker lab, so that it's helpful for managers to manage the space.



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### Craft Area

It is designed for the input of different items to create unique innovations. The space contains a separate meeting section with a meeting table. The tool rack shelf also works into the functionality by allowing ease of access to material and tools. The hut's wood roof makes people feel relaxed, and the geometric pattern wallpaper inspires people to have a creative mind. The cabinet can store different tools and materials for them to pick.





Sofa



Coffee Table



Single Sofa

Design Area

The area contains a picturesque feature with an addition of plants and other green elements that contribute to stress reduction during the design process for the users. The design area also has different artistic features that contribute to the inspirational outcomes in the room as it creates the environment for creativity and thinking in design. Green can not only relax people's eyes, but can also purify air.