

MUNCIE MADE MATERIALS

The vision for this proposal is to foster waste reduction and viable management practices for the collection of raw materials, post-consumer materials, and hazardous waste in Muncie, which will lead towards a more environmentally sustainable economy.

The completed center would allow the city of Muncie to be a leader in promoting sustainable practices while creating a beautiful, multi-use, public facility.

The complex will include a material collection facility, education center, and a makerspace studio.



LONGITUDINAL SECTION CUT
SCALE: 1" = 25'-0"

TRANSVERSAL SECTION CUT
SCALE: 1" = 25'-0"

WEST ELEVATION
SCALE: 1" = 25'-0"

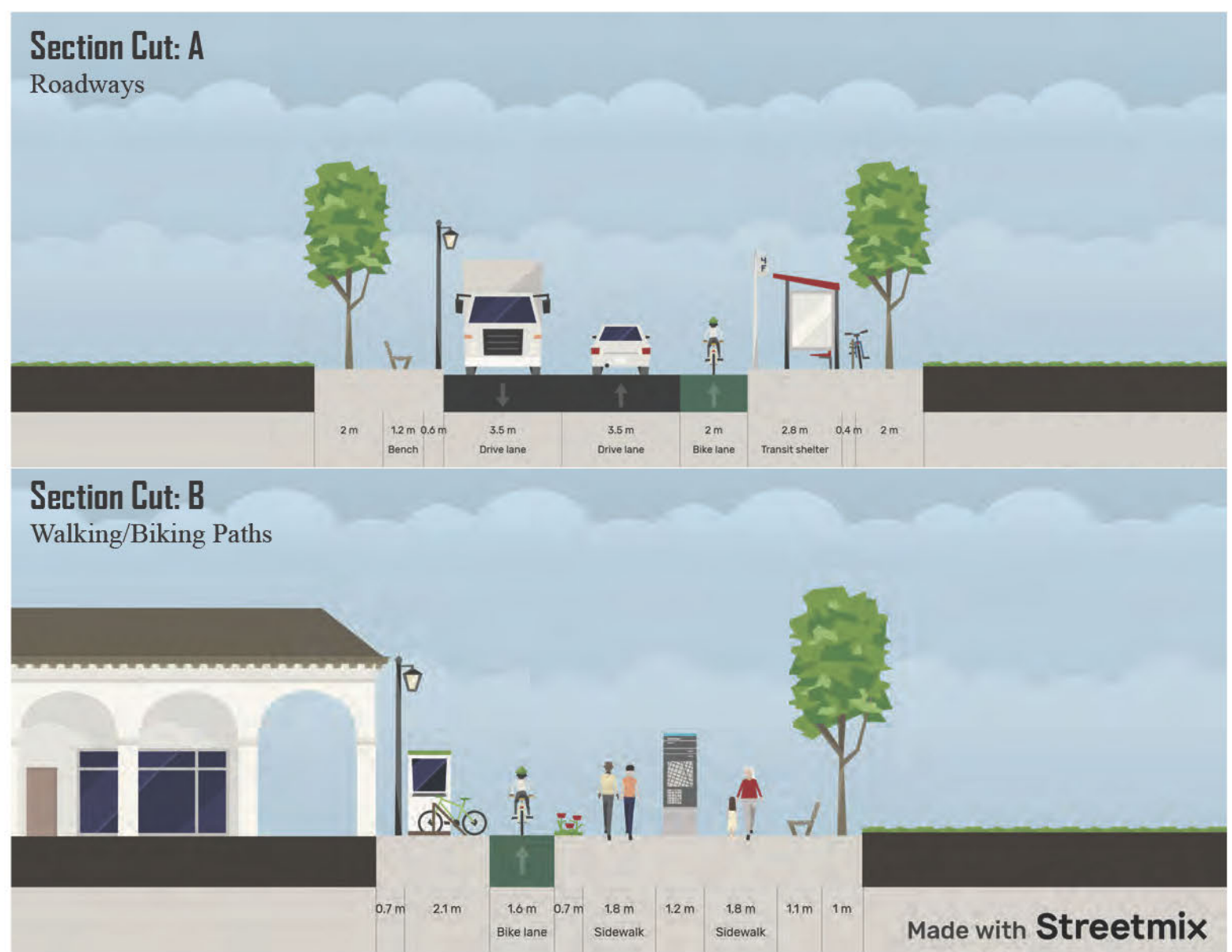
NORTH ELEVATION
SCALE: 1" = 25'-0"

EAST ELEVATION
SCALE: 1" = 25'-0"

SOUTH ELEVATION
SCALE: 1" = 25'-0"



- Labels/Legend**
- North Entrance
 - Parking Lots (200 spaces)
 - Pond/Siting Spaces
 - Public Facilities
 - Water Features
 - Potentially Artwork Display Location
 - South Entrance
 - Gray Lines: Roadways
 - Brown Lines: V&B path



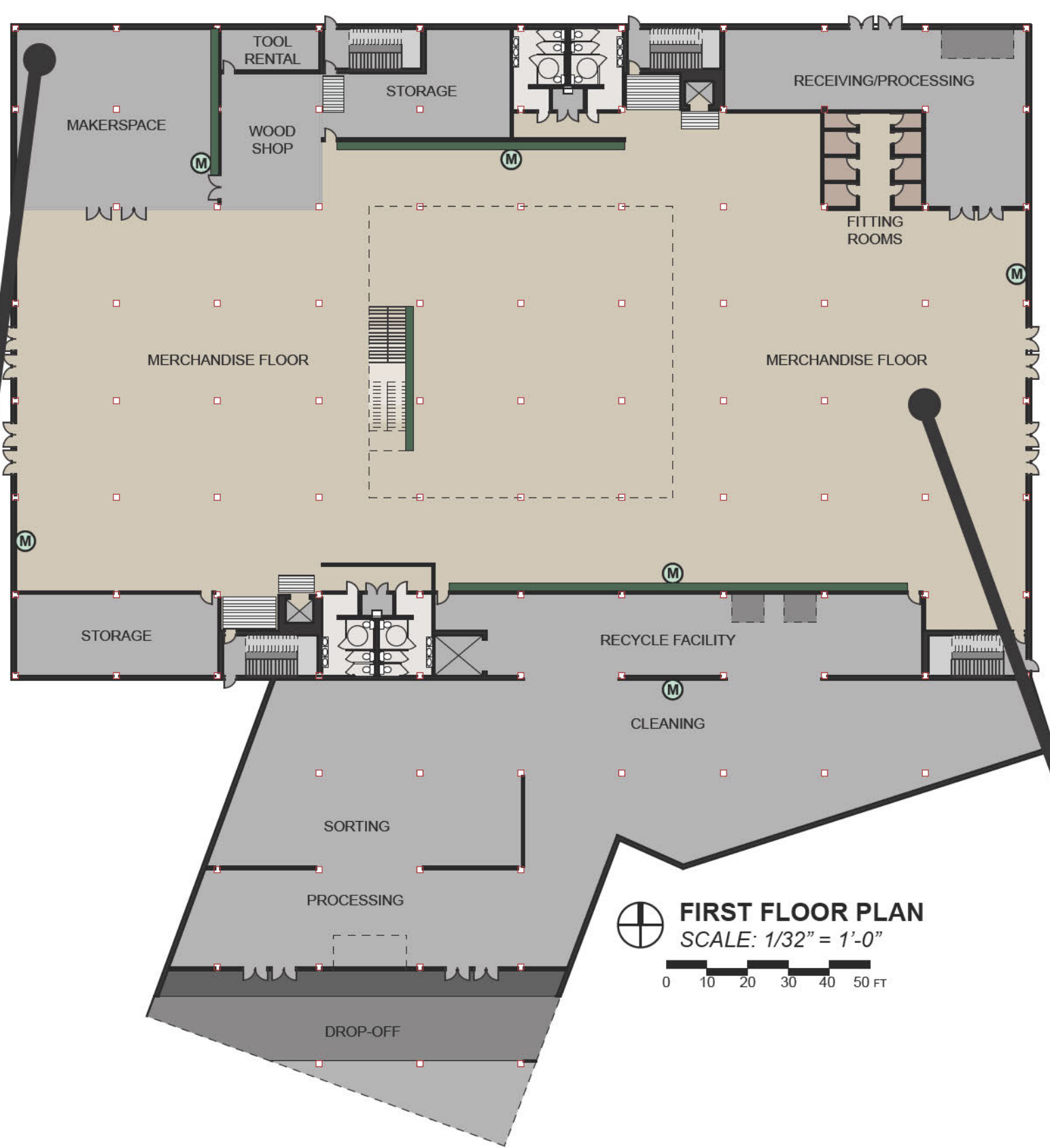
Made with Streetmix



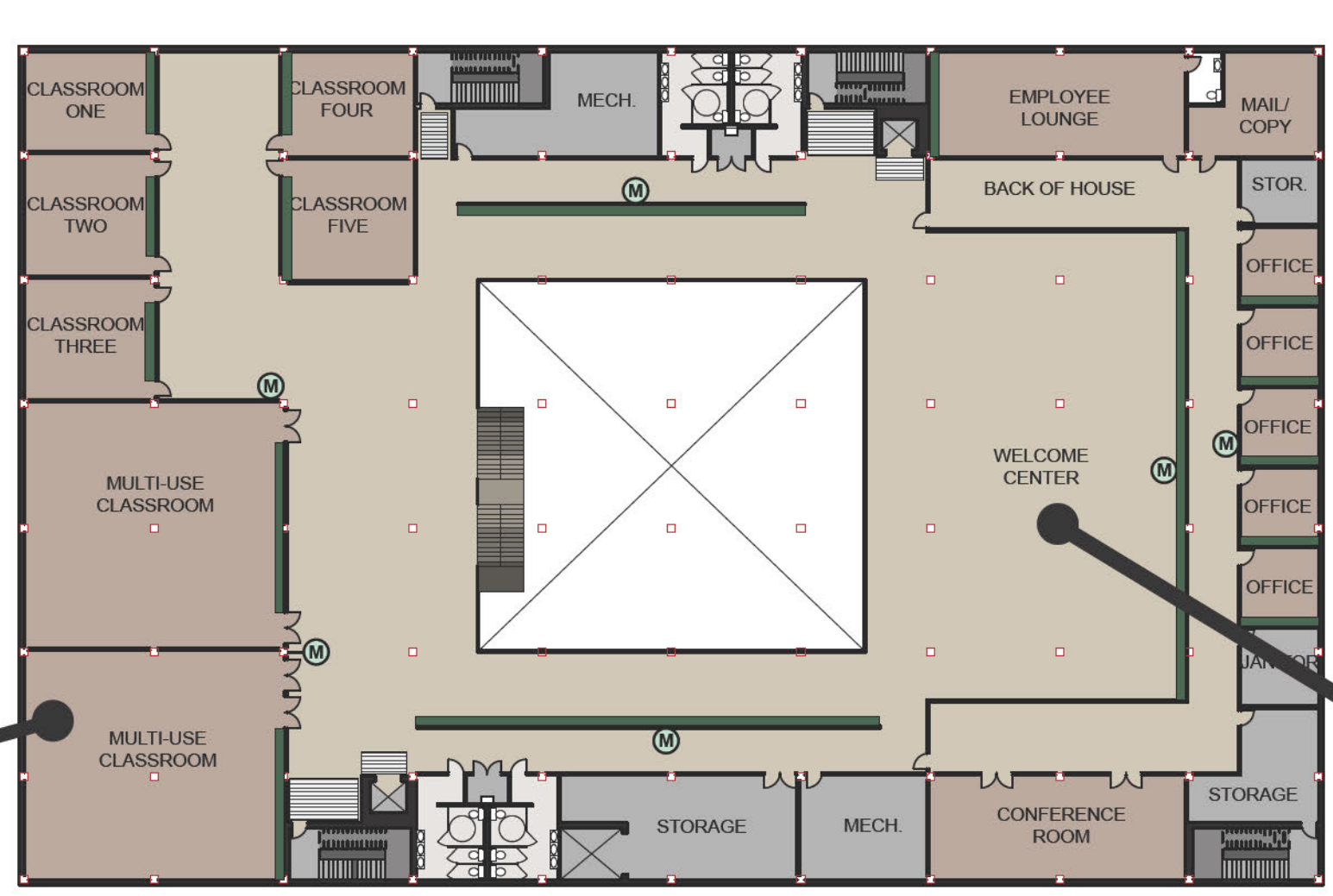
The makerspace is designed with floor to ceiling windows for natural lighting, and provides a space for allocated for students and community members who are interested in utilizing the tools and workspace provided for material reuse. The space will provide an opportunity for upcycling and reuse through modification.



The multi-use classrooms will provide an opportunity for hands-on and visual learning experiences, within a space that highlights sustainable features such as the saw-tooth roof with skylights that allow for north lighting for an optimal work environment.



FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

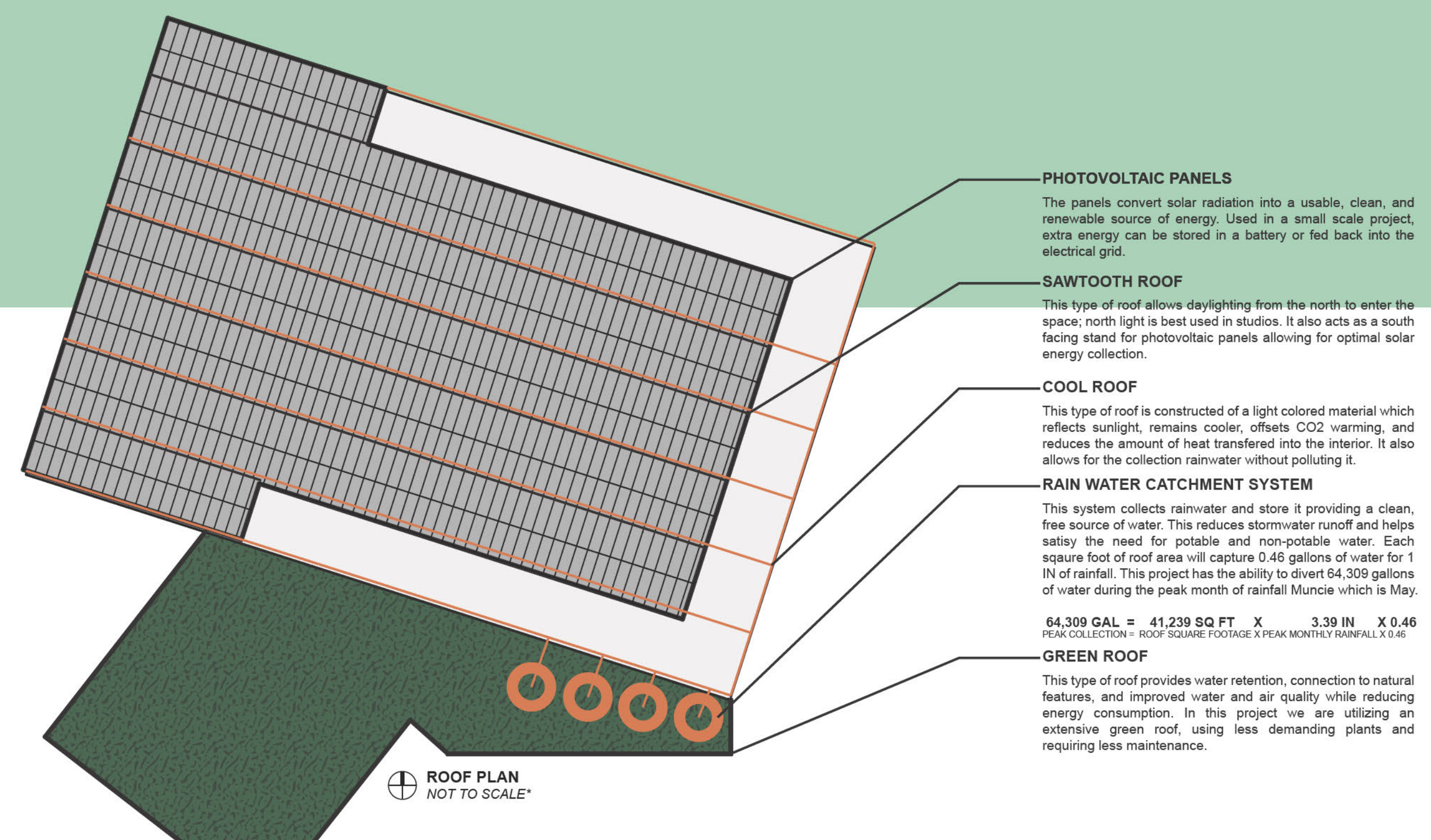
- LEGEND**
- RECYCLED TILE
 - CORK
 - RECLAIMED WOOD
 - CONCRETE (FLYASH)
 - NAAVA GREEN WALL
 - GRATED FLOOR SYSTEM
 - AIR QUALITY MONITOR



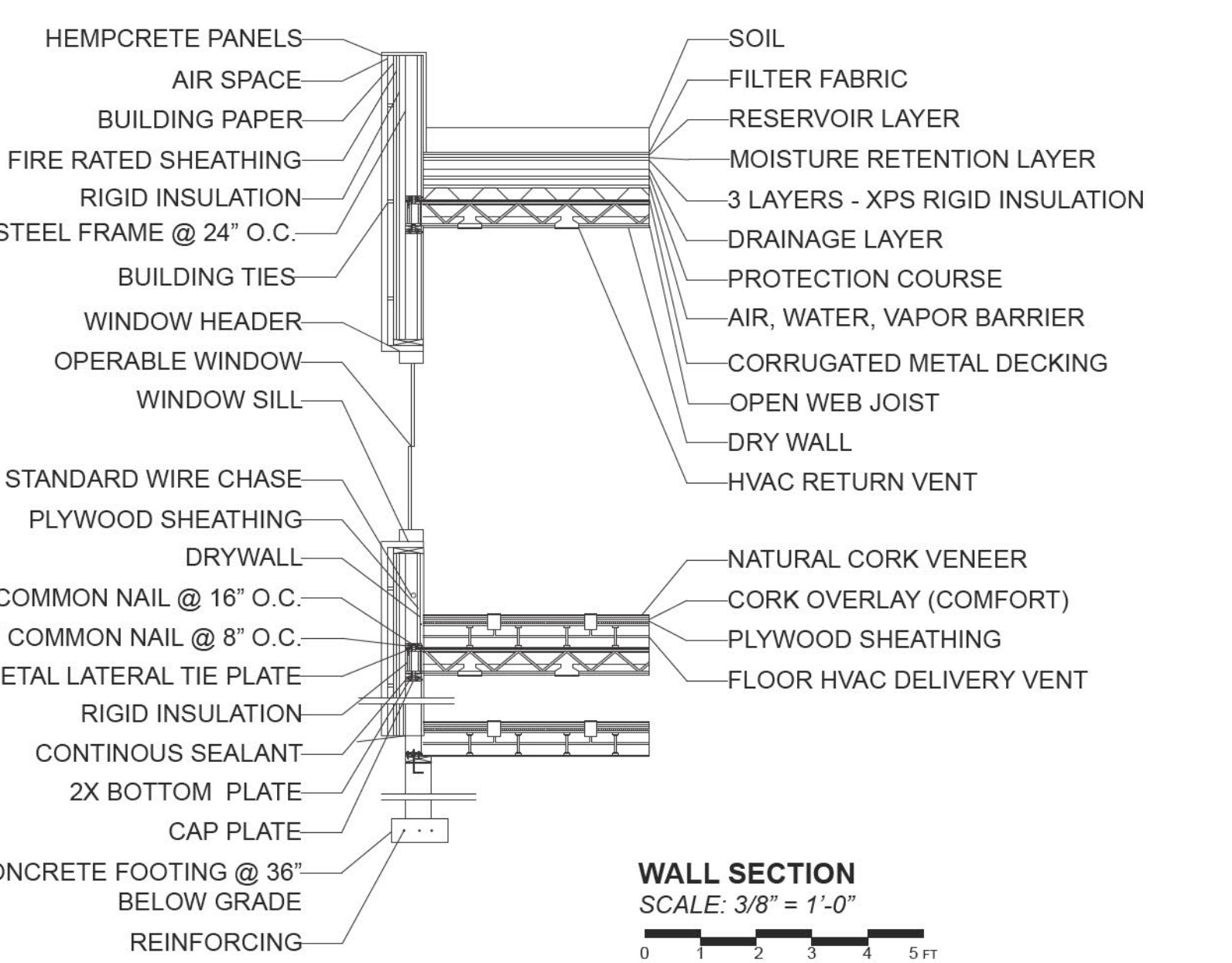
The merchandise floor is located on the first floor of the center, and will be what guests see when they first enter the facility. The open floorplan will house donated items such as clothing, furniture, household items, appliances, and any other items that are in acceptable condition to be resold.



The Welcome Center is located on the second floor, where guests are able to overlook the rest of the center below them, or access the multi-use classrooms and offices. This space is also where guest can wait for upcoming tours, and view the centers directory.

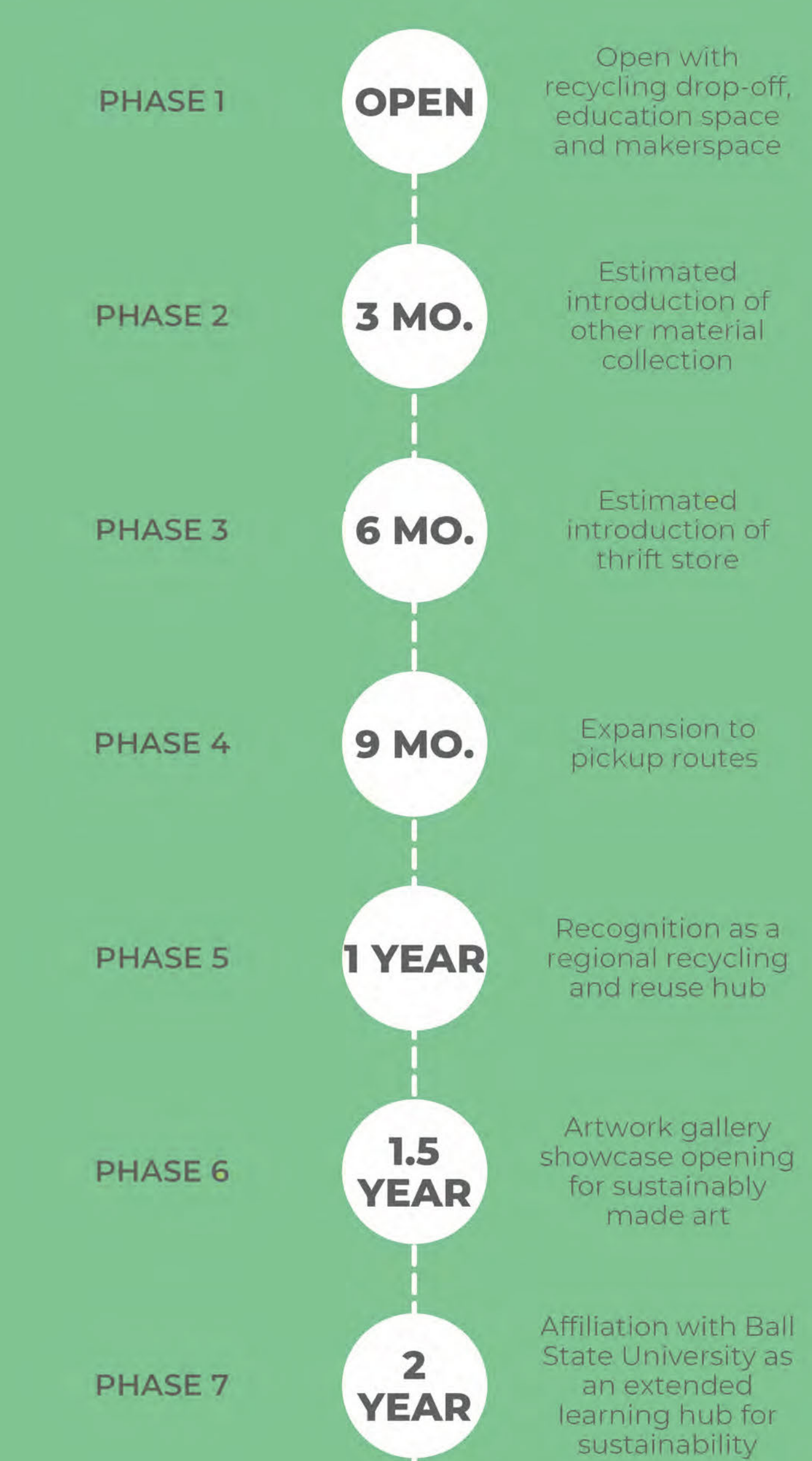


- PHOTOVOLTAIC PANELS**
The panels convert solar radiation into a usable, clean, and renewable source of energy. Used in a small scale project, solar energy can be stored in a battery or fed back into the electrical grid.
- SAWTOOTH ROOF**
This type of roof allows daylighting from the north to enter the space, north light is best used in studios. It also acts as a south facing slope for photovoltaic panels allowing for optimal solar energy collection.
- COOL ROOF**
This type of roof is constructed of a light colored material which reflects sunlight, reduces cooling needs, CO2 emissions, and reduces the amount of heat transferred into the interior. It also allows for the collection rain-water without parking lot.
- RAIN WATER CATCHMENT SYSTEM**
This system collects rain-water and store it providing a clean, free source of water. This reduces stormwater runoff and helps satisfy the need for potable and non-potable water. Each square foot of roof area will capture 4.64 gallons of water for 1" of rainfall. This project has the ability to divert 64,309 gallons of water during the peak month of rainfall Muncie which is May.
- GREEN ROOF**
This type of roof provides water retention, connection to natural features, and improved water and air quality while reducing energy consumption in this project we are utilizing an extensive green roof, using less demanding plants and requiring less maintenance.



WALL SECTION
SCALE: 3/8" = 1'-0"

MUNCIE MADE MATERIALS TIMELINE



This timeline is based off of theoretical projections of the Muncie Made Materials Proposal. This planning is subject to change based on certain limitations such as donation influx, value of materials collected, income, and space.

