

The background features a dark gray map with white lines representing streets. On the right side, there is a 3D graphic of a rectangular prism composed of a grid of white squares, creating a perspective effect.

SOL ACADEMY

Sustainable Open Learning Academy

Hillside High School: Scarlett Bermudez,
Micah Hemingway, Mikal Ali

Early College High School: Emily Mejia, Eva Perez , Ariel Green,
Yasmin Sanchez, Michelle Guerrero, Amya Ingram, Jamil Ali

OUR TEAM



Emily Mejia

Early College
Junior



Eva Perez

Early College
Junior



Ariel Green

Early College
Junior

OUR TEAM



Yasmin Sanchez

Early College
Junior



Michelle Guerrero

Early College
Junior



Amya Ingram

Early College
Sophomore

OUR TEAM



Jamil Ali

Early College
Sophomore



Scarlett Bermudez

Hillside High School
Junior



Micah Hemingway

Hillside High School
Sophomore

OUR TEAM



Mikal Ali

Hillside High School
Senior

DESIGN PROCESS



DEFINE THE PROBLEM

Rigorous Research
Looked at OOH &
District Data



EXPLORE IDEAS

Sketching
Brainstorming



APPLY A SOLUTION

3D Modeling



LOOK BACK AND LEARN

Present & Make
Improvements

TIMELINE

STAGE 2

Ideation

Brainstorming Sessions
Sketching

STAGE 4

3D Lego Modeling

STAGE 1

Research

Interviews & Review of
Data

STAGE 3

3D CAD Modeling

STAGE 5

Make Improvement &
Present Ideas

Priority 2: Provide a Safe School Environment that Supports the Whole Child

Goal 2A: By 2023, 100 percent of Durham Public Schools will implement research-based cultural frameworks to support the social-emotional health and safety of students and staff.

Baseline Data

2017-18 baseline data indicate that 25 percent of schools (13 of 52) have identified and implemented a research-based cultural framework with fidelity.

Benchmarks

- **2018-19:** 35 percent of schools (18 of 52) will identify and implement a research-based cultural framework with fidelity.
- **2019-20:** 50 percent of schools (26 of 52) will identify and implement a research-based cultural framework with fidelity.
- **2020-21:** 64 percent of schools (33 of 52) will identify and implement a research-based cultural framework with fidelity.



OUR MAIN GOALS

At SOL Academy we aim to:

- Sustain the culture of students
- Sustain the social-emotional health and safety of students



WE WILL DO THIS BY:

A mind, body, soul approach to
education

- Creating an ecosystem within our school environment.
- Centering the healing of our students within our pedagogy and built environment
- Using Hip Hop as a framework

#HipHopEd: The Compilation on Hip-hop Education

**Volume 1: Hip-hop as Education,
Philosophy, and Practice**

**Christopher Emdin and
Edmund Adjapong (Eds.)**



BRILL | SENSE

HIP HOP EDUCATION

An education that is based in freely expressing yourself when learning content. The main focus is creative expression in learning. Hip Hop education is how you can take a rigorous concept and learn it in an enjoyable way.

HIP HOP ARCHITECTURE

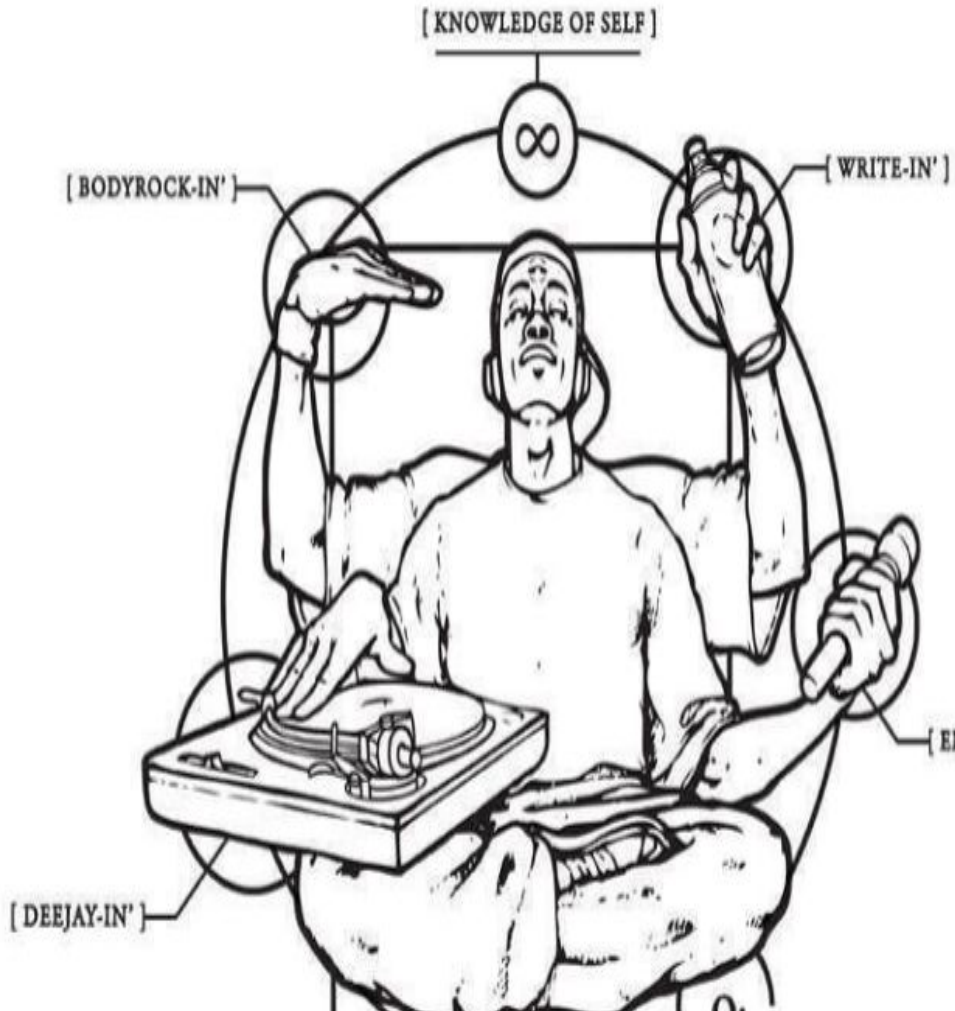
Hip Hop architecture is a critique of the everyday environment that we spend time in. Hip Hop architecture allows Black and Latinx culture to drive architectural styles.

The background of the right side of the image is a dense, black and white collage of graffiti. The graffiti is written in various styles, including bubble letters and block letters, and includes phrases like 'WRONG WAY, CAUSE', 'THEY AINT KNOWIN', 'THEIR GOALS THE', 'AINT SAID', 'AND', 'LEAD', 'CHEET', 'GAZE', 'THE CORNER: GET CHASE', 'COMMON', 'ZERRA, THE', 'CHEERA-CH', 'TO THE CRIB', and 'AND DOMI'. Overlaid on this background is a black rectangular box containing the book's title and author information.

**HIP-HOP
ARCHITECTURE.**
SEKOU COOKE
FOREWORD BY MICHAEL ERIC DYSON

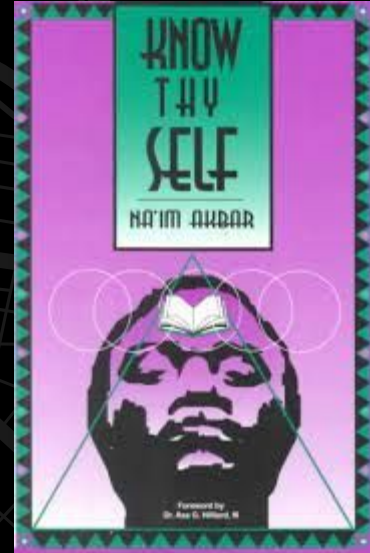
The Five Pillars of Hip Hop

1. MCing (oral)
2. DJing (auditory)
3. Breakdancing (physical)
4. Graffiti (Visual)
5. Knowledge of Self (Mental)



Knowledge of Self

Knowledge of self emphasizes being well informed about the past, particularly the hidden histories of marginalized peoples, and being well aware of contemporary forms of oppression.



LOCATION

Our Campus is located in Research Triangle Park

- Between the Apple and Cisco Campus
- Next to Lake Betz and Holts Pond
- Surrounded by a natural reserve
- Close to walking trails
- About 10 minutes from our current schools





Safety

What is safety to US?

- Safety is more than just getting to and from school unharmed, safety is looking out for the well being of our students, teachers, and staff whether that is emotionally, spiritually and mentally.

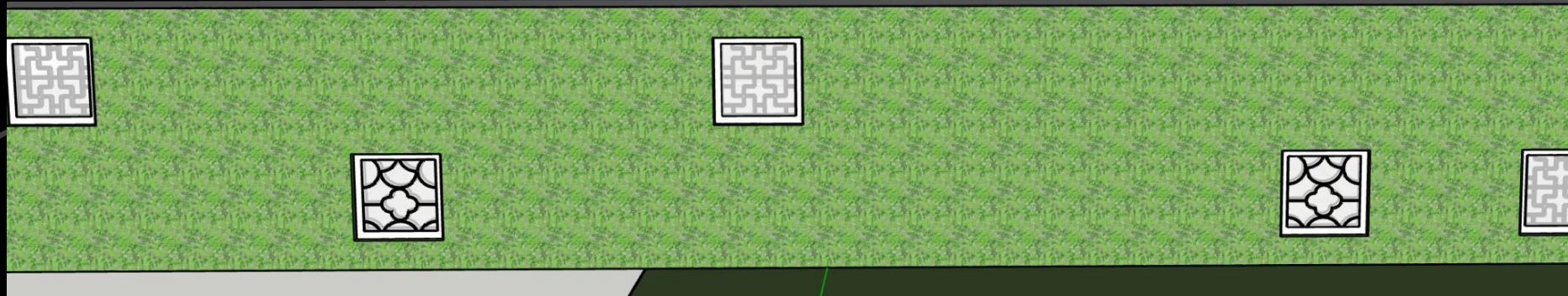
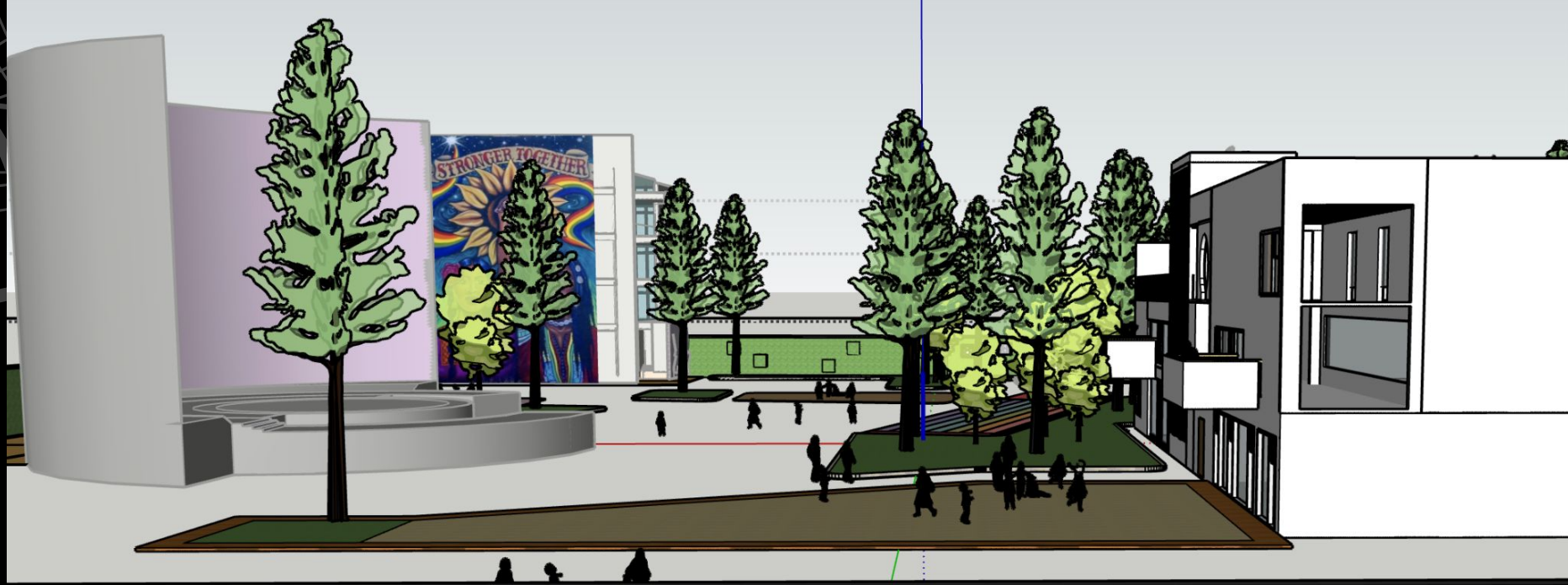
Why is this important?

- While school is for learning, school should also be a place where everyone can be themselves and be protected and encouraged to do so. We will do that by keeping them safe without them feeling like they are restricted or in prison.

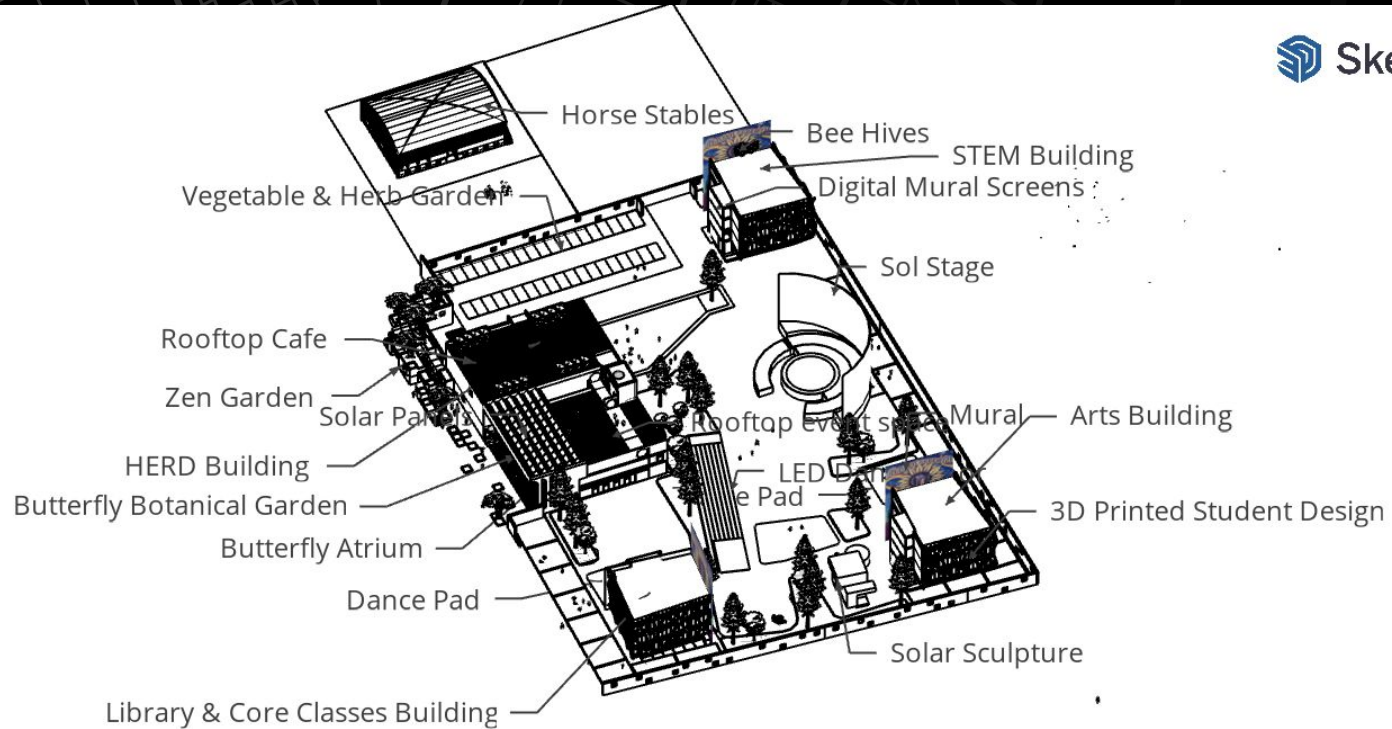
How we incorporated this into our design:

- Facial recognition
- Public access to main building only
- Gate: secure but not prison looking
- Greenery: creates a clean, calm environment





School Layout

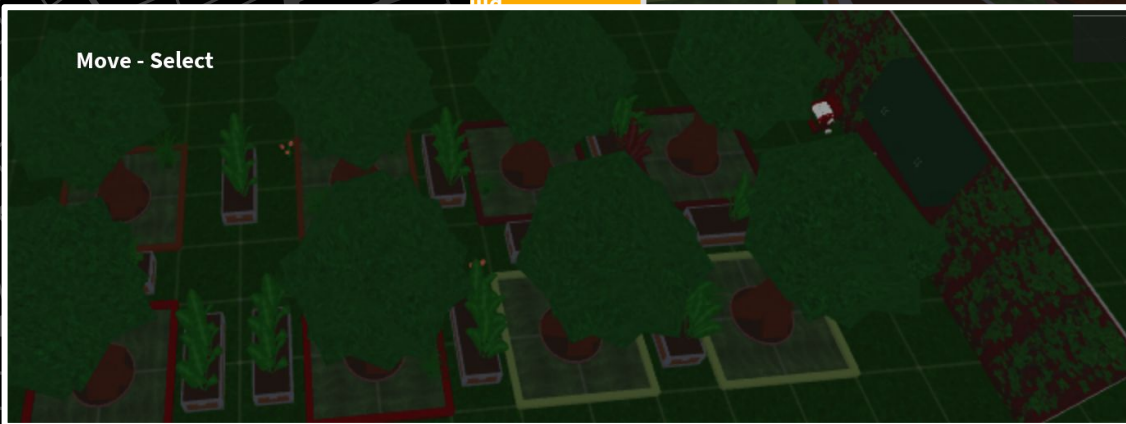






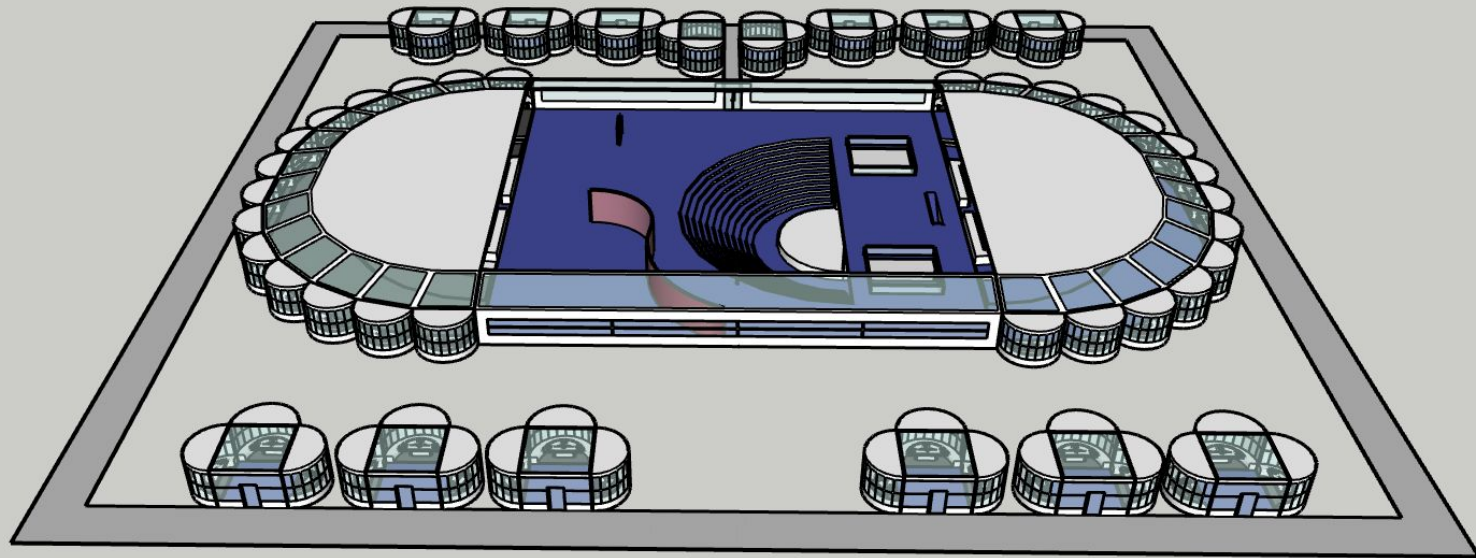
Avahorrorquee
Baby
Cintu511
Gabby
Gabriela
Jojo
LubitaRemachi
Move - Select

Move - Select

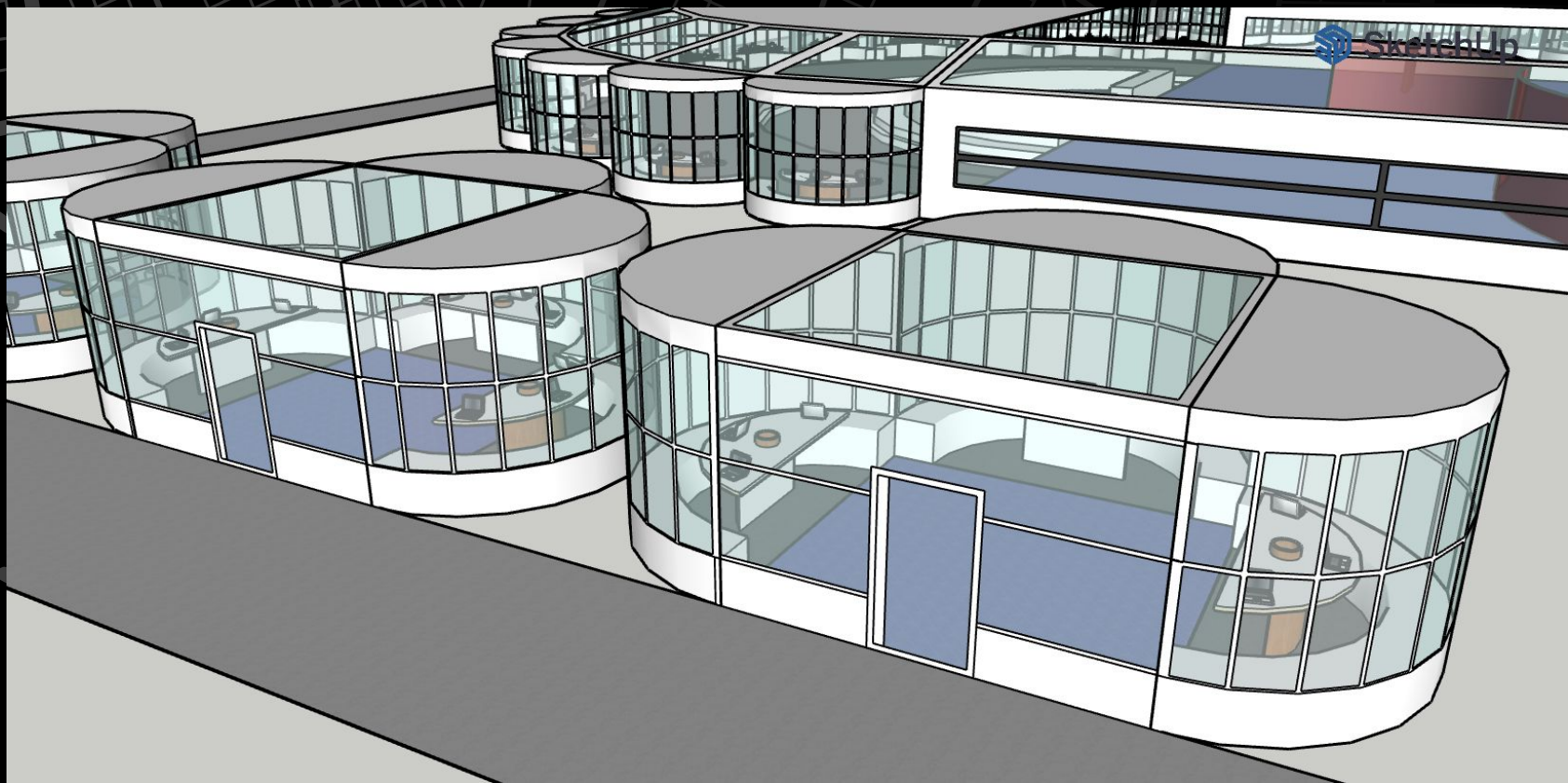


Open floor layout with surrounding pods

SketchUp

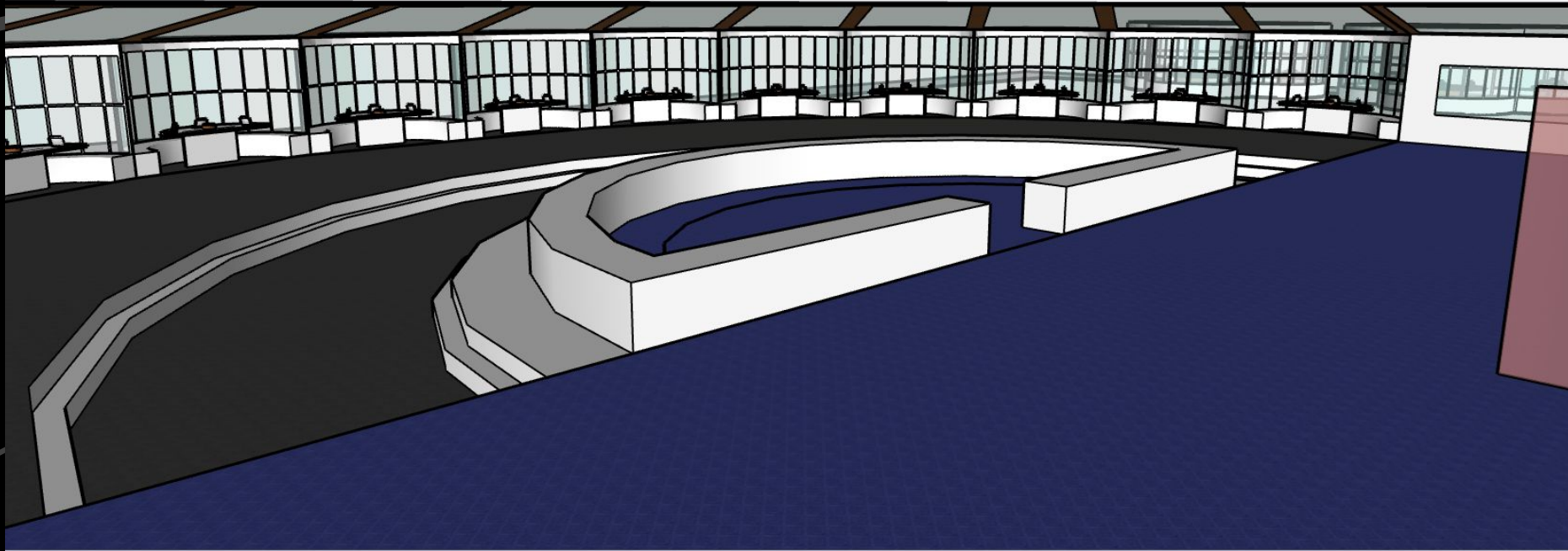


Core Building Pods



Open floor layout with surrounding pods

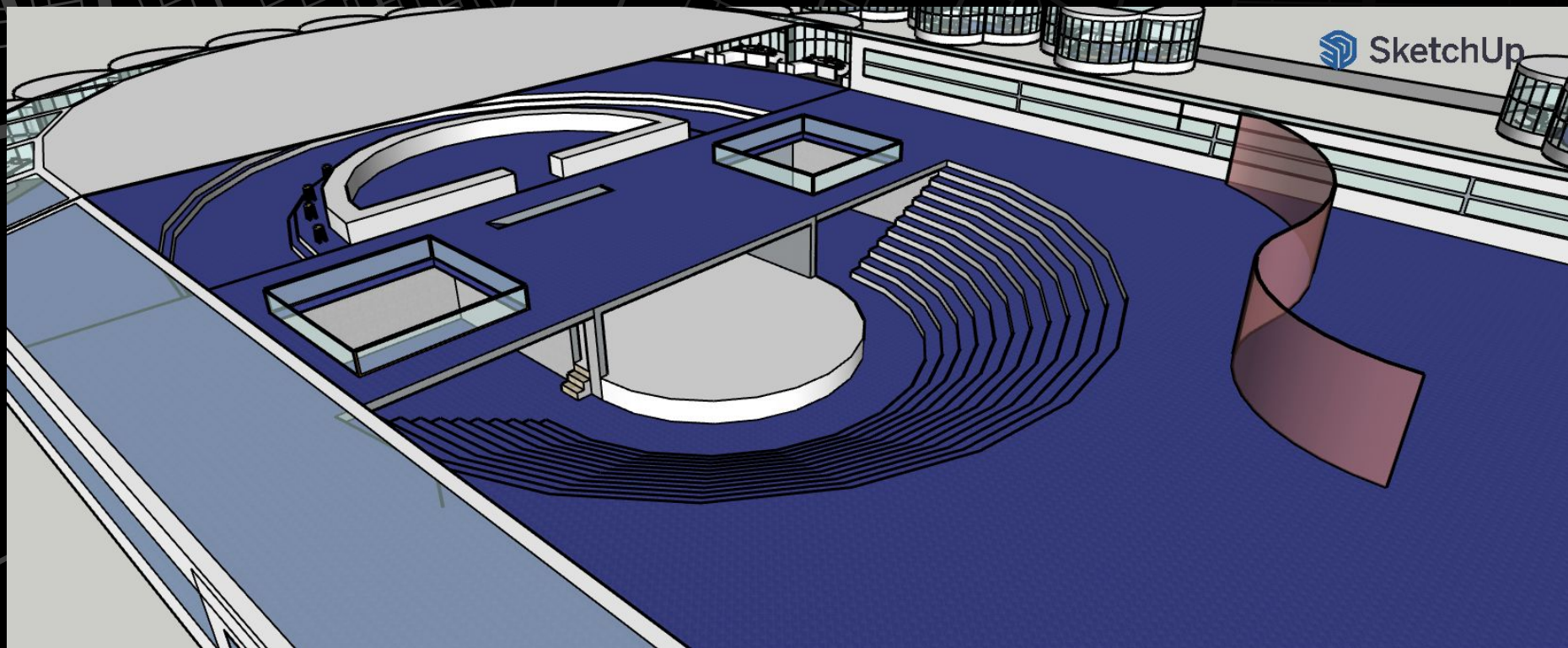
 SketchUp



SMART GLASS



Theater



OUR LEARNING SPACES

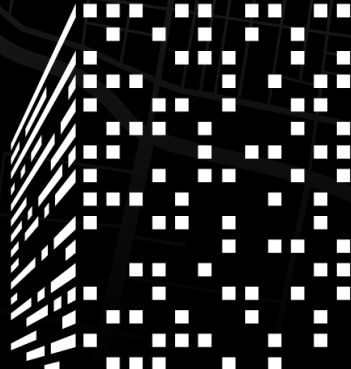
STEM BUILDING

Open floor concept
with learning pods
& Greenhouse
located on the first
floor.



ARTS BUILDING

Open floor concept
that includes dance
studios, music
studios and
makerspaces.
Theater located on
the 1st floor.



CORE BUILDING

Open floor concept
with learning pods.
Library Located on
1st floor





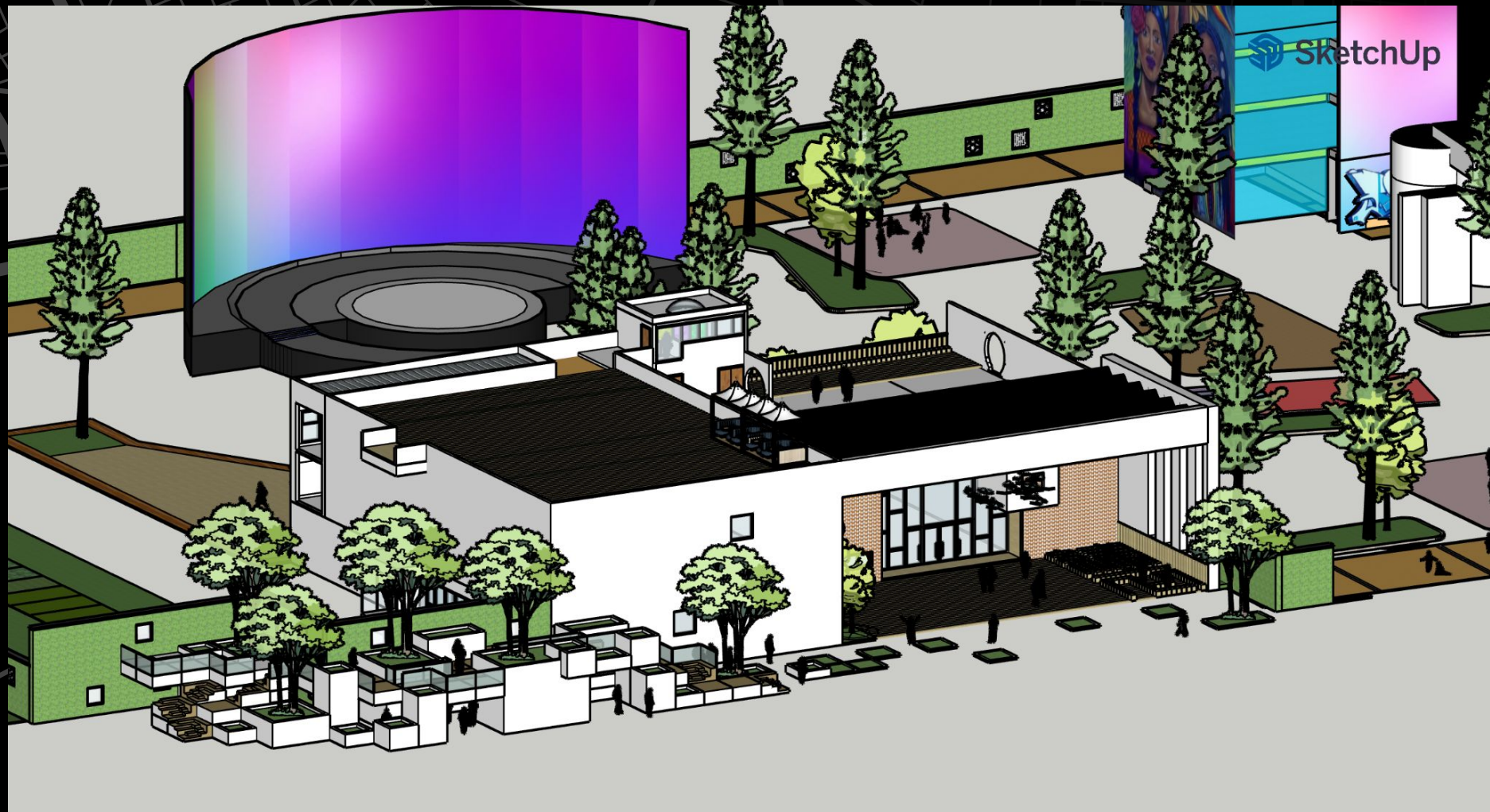
H.E.R.D BUILDING

HEALING ELEVATING REVITALIZING DOMAIN

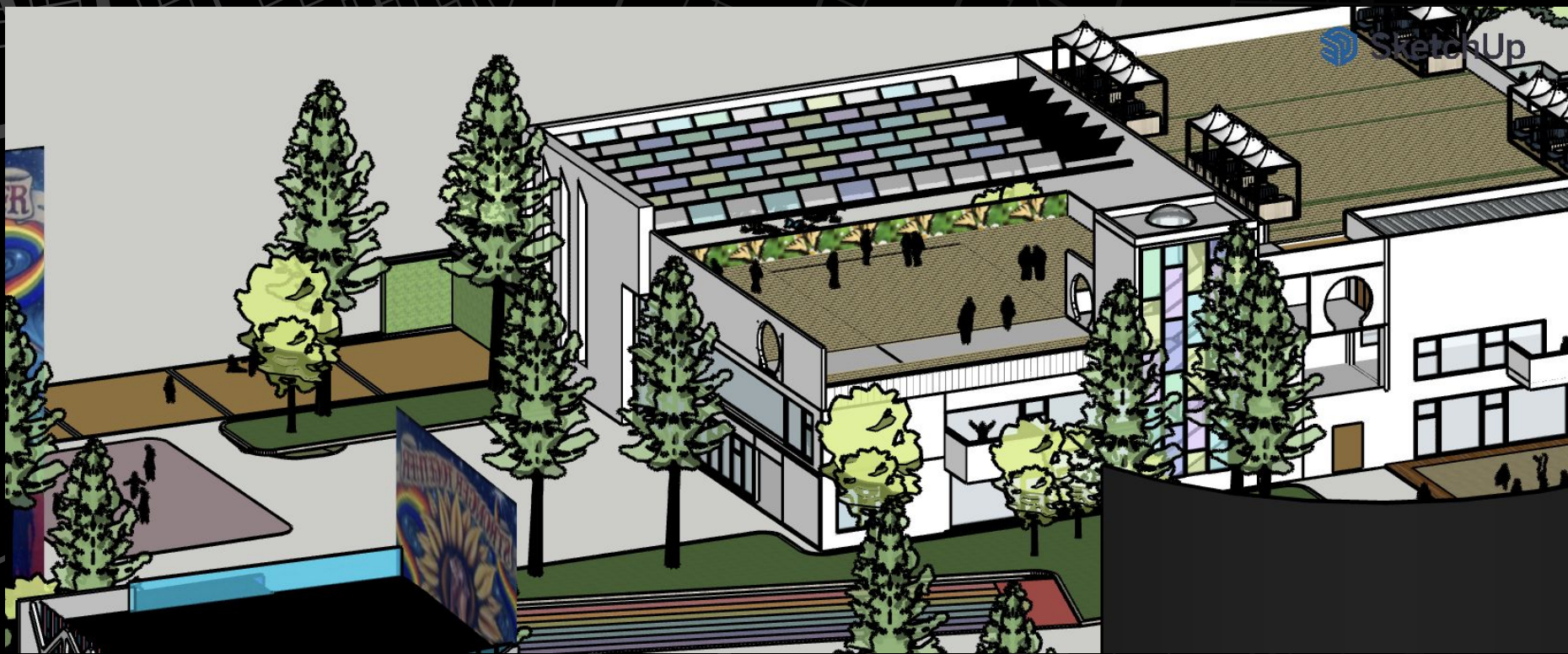
- Therapy Rooms
- Virtual Therapy Pods
- Yoga & Meditation Studio
- Basketball Court
- Student Lounge
- Community Event Space
- Butterfly Botanical Gardens
- Virtual Rooftop Cafe

Lobby in HERD building





Rooftop Spaces



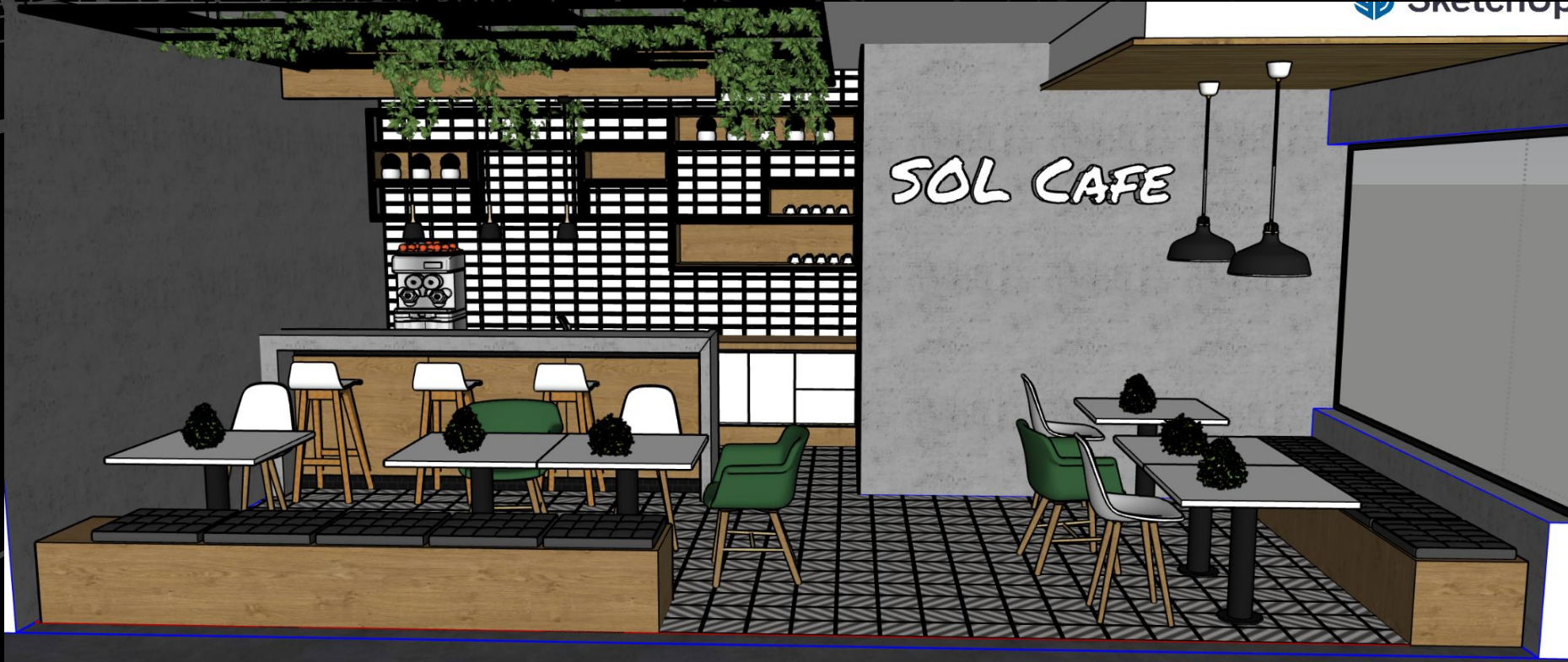
Rooftop Cafe



SOL Cafe

SketchUp

SOL CAFE



Music Studios

SketchUp



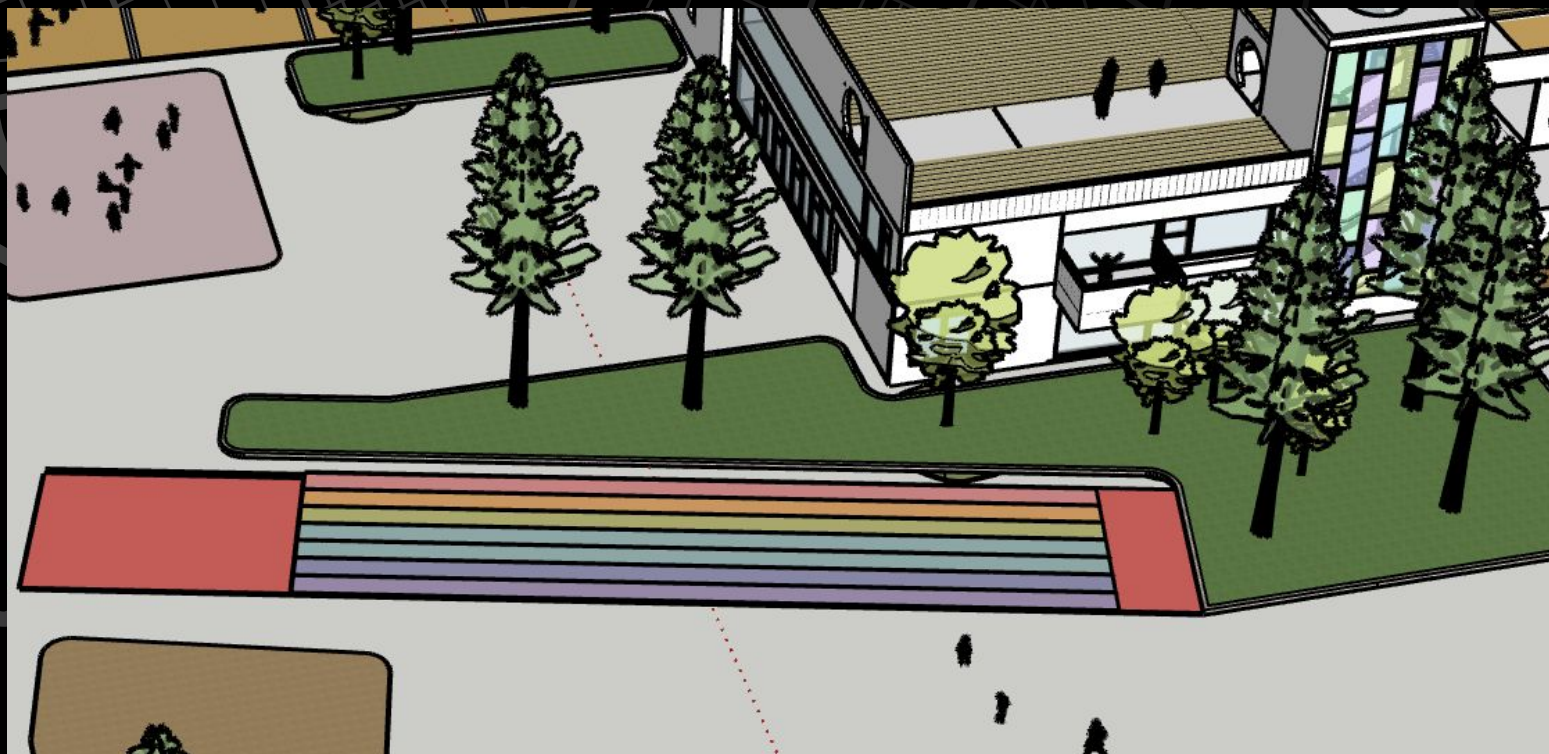
DJ Booths



Dance Pads



LED Outdoor Dance Floor

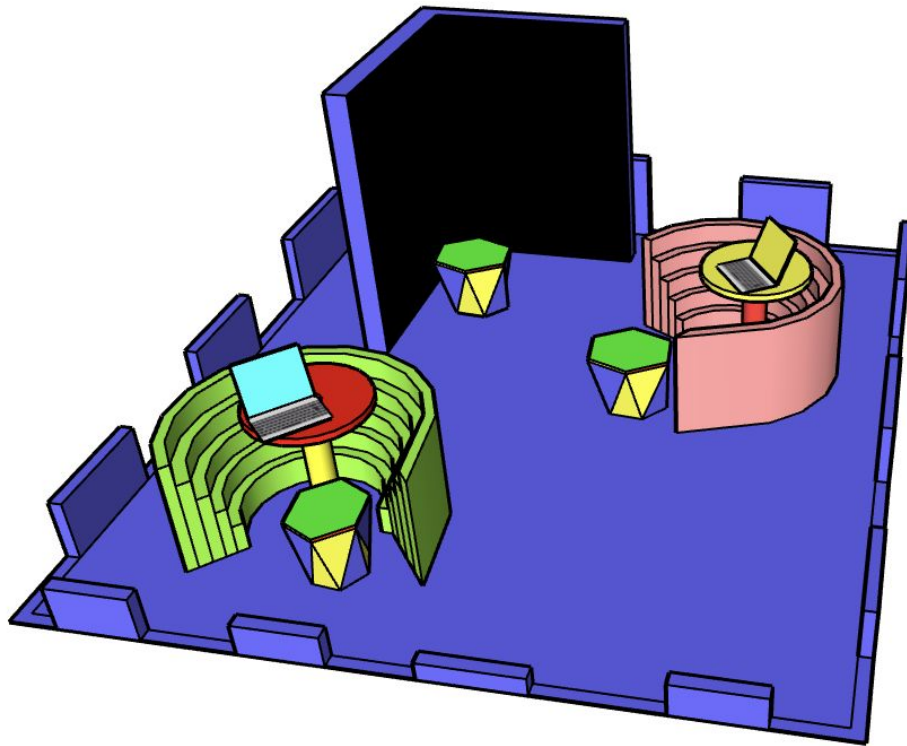


Dance Studio



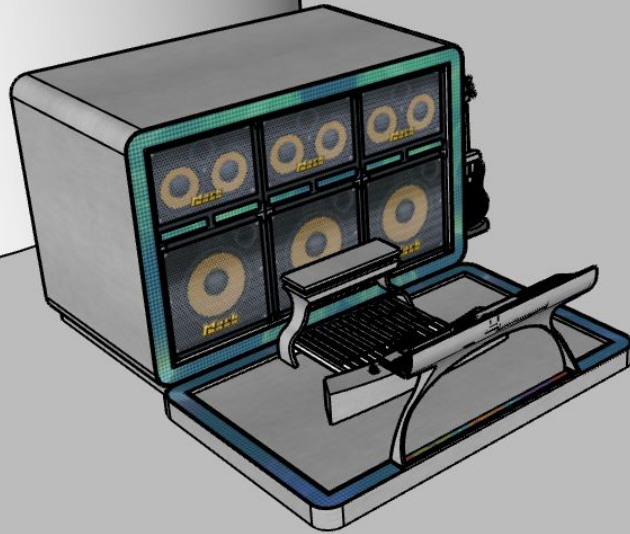
Art Pods

 SketchUp



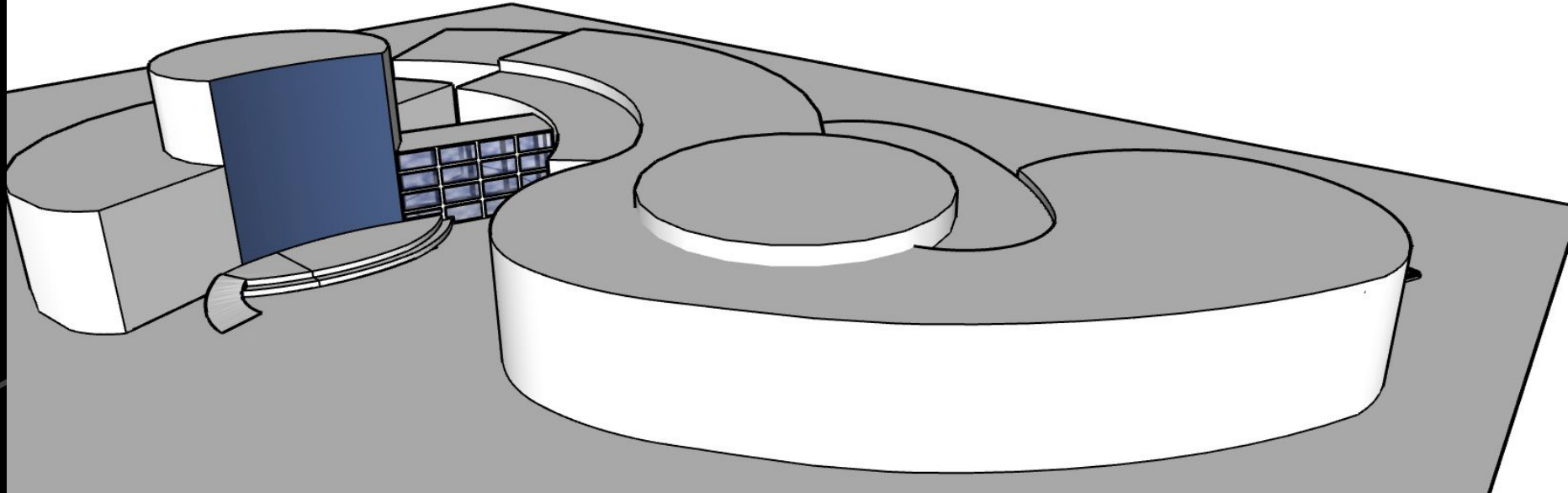
Music Stations in the Arts Building

SketchUp



Library

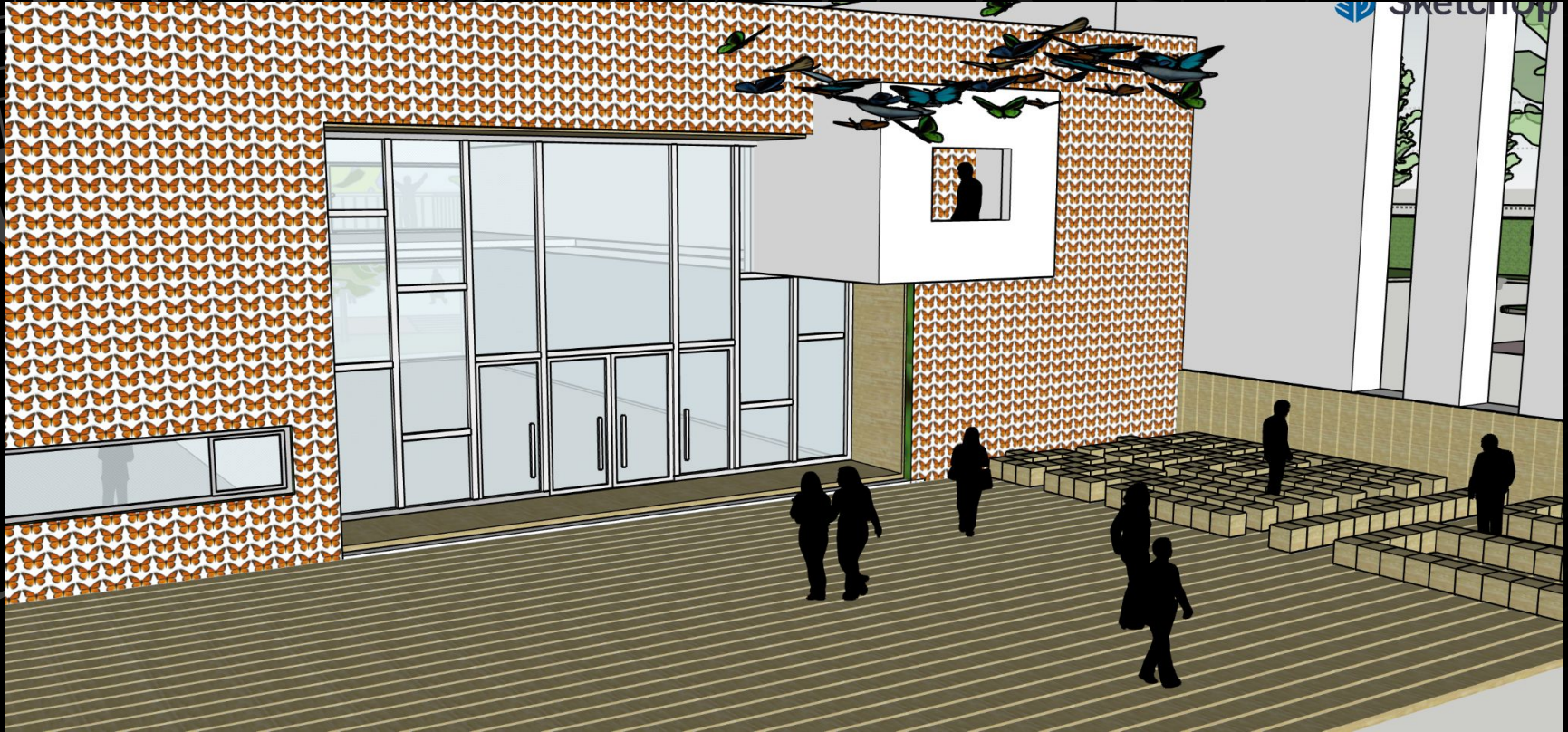
 SketchUp



Basketball Court



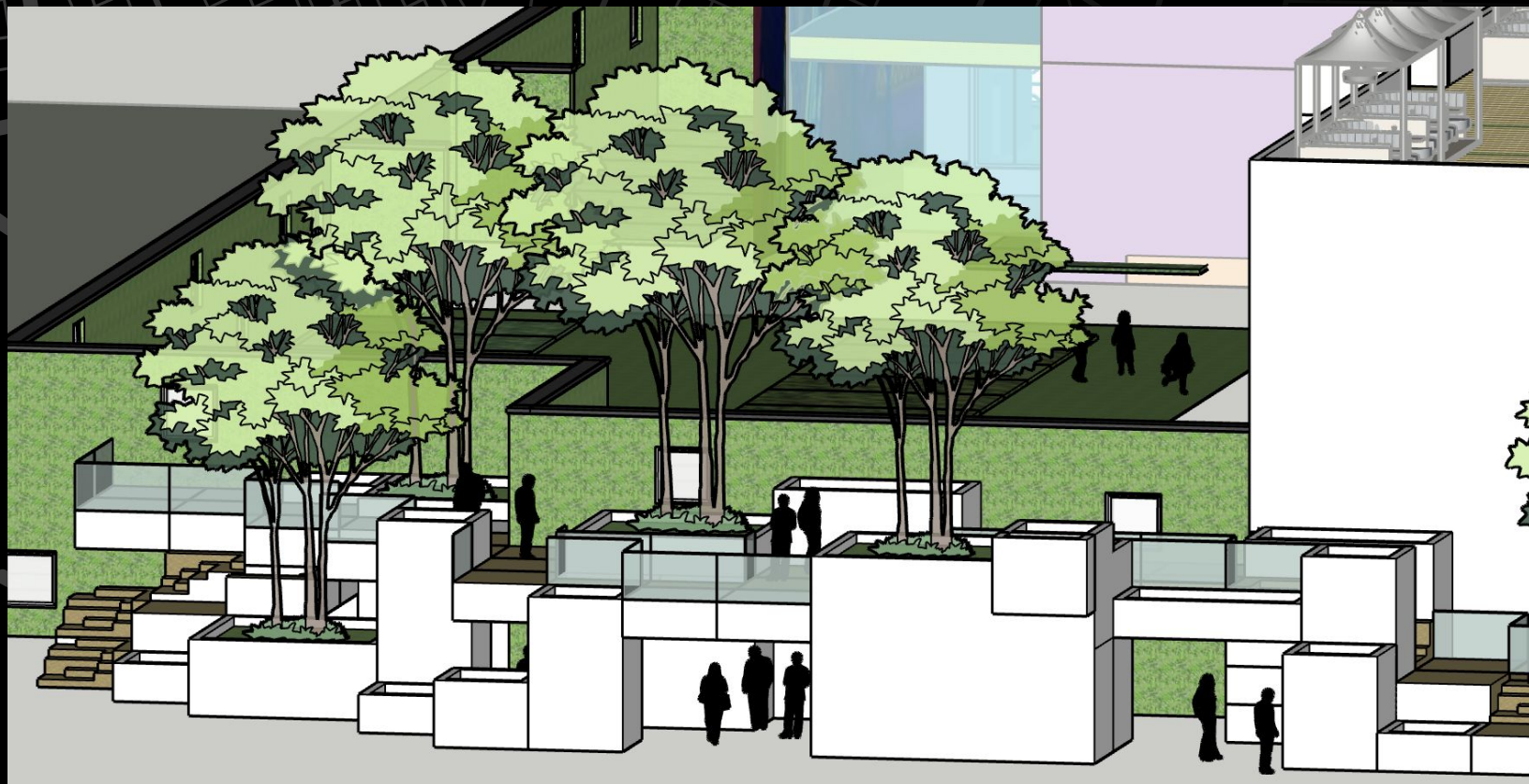
Butterfly Atrium



BUTTERFLY BOTANICAL GARDEN

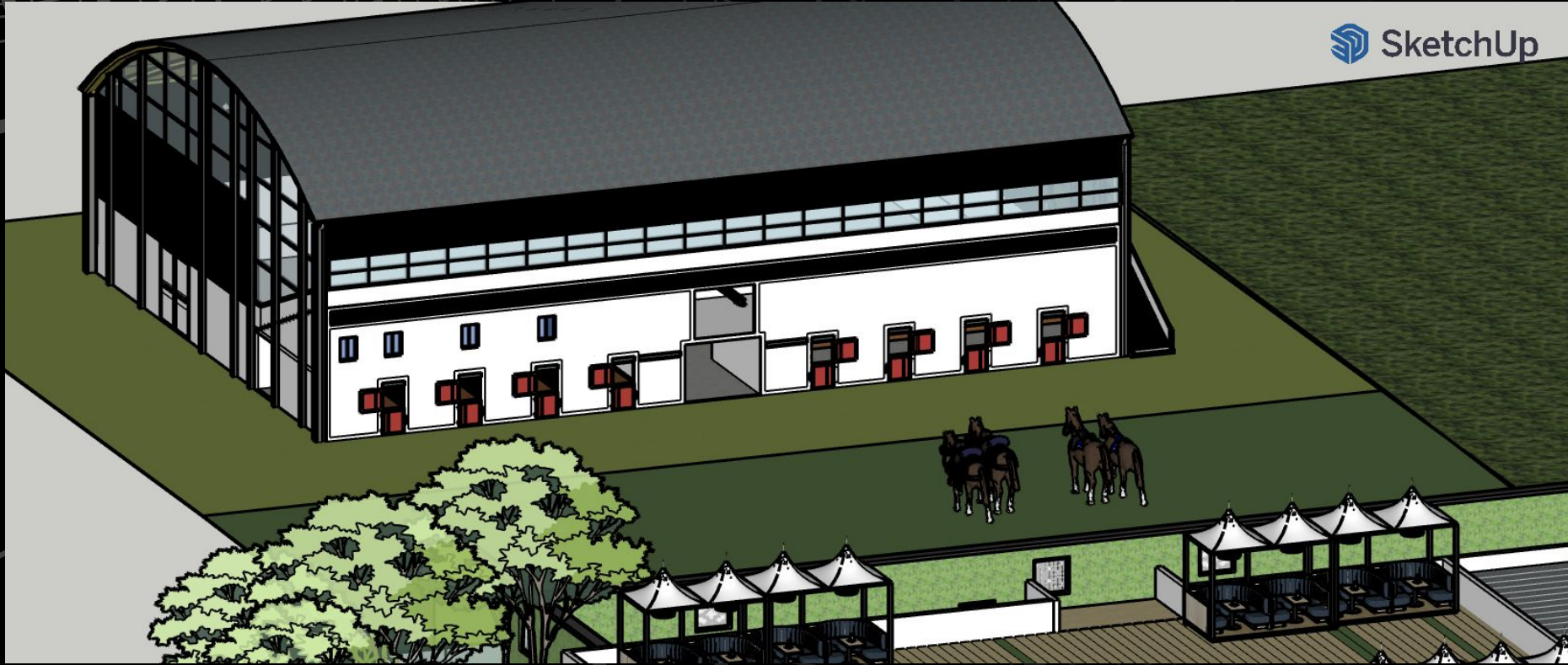


Zen Garden



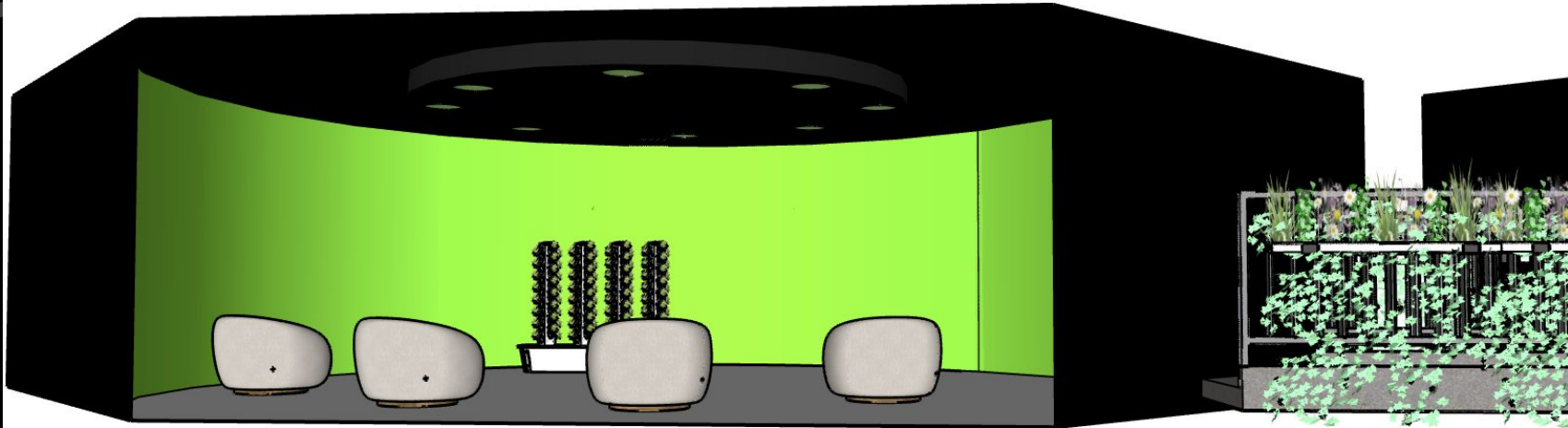
Horse Stables & Riding Arena

SketchUp



STEM Building & Hydroponics Labs/indoor Greenhouse

SketchUp



PODS



Here we see a prime example of a STEM pod. It consists of plants and tons of greenery. The goal of a pod is to make you feel comfortable and productive.

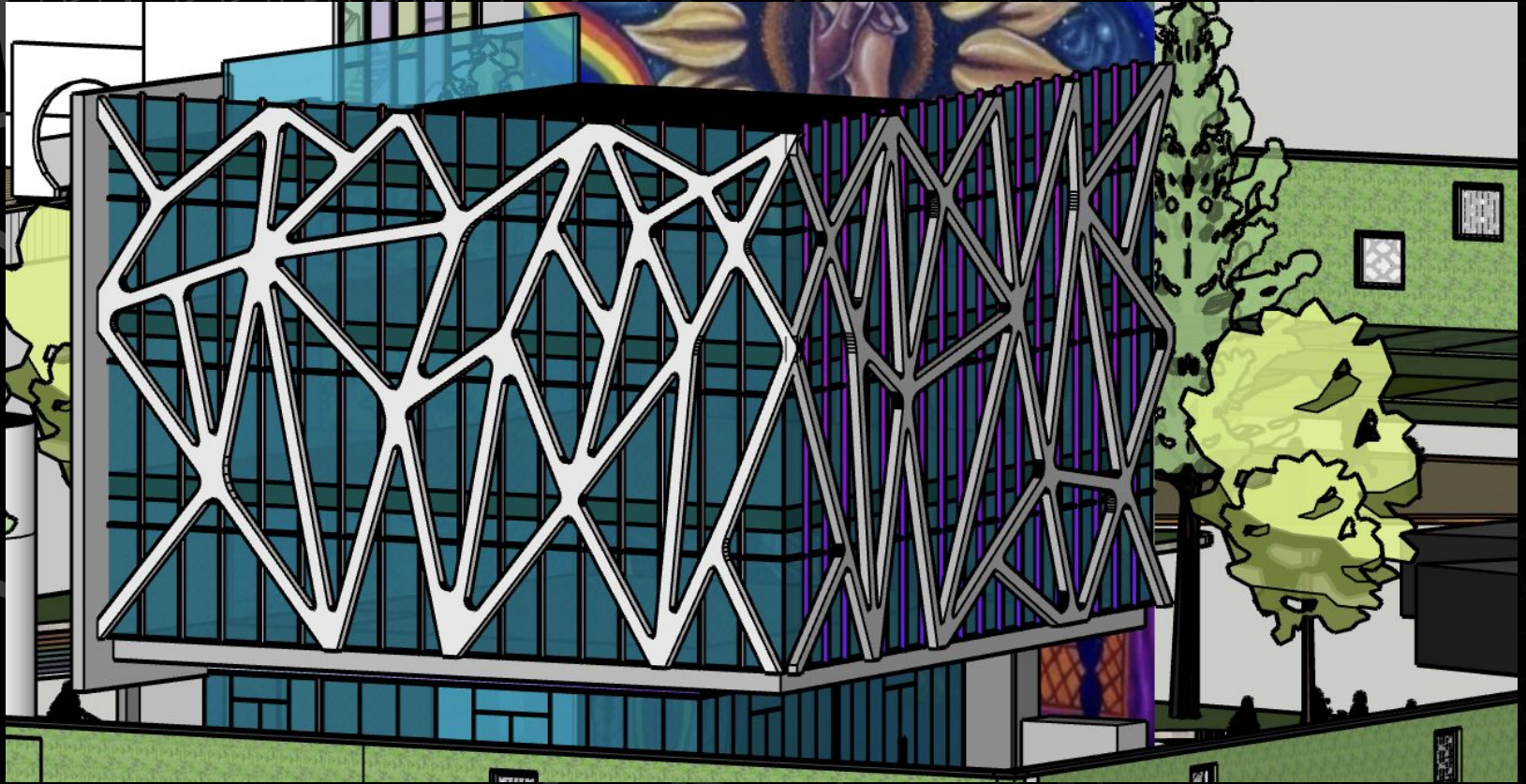


Murals

SketchUp



3D Printed Design & Coded LED Lights



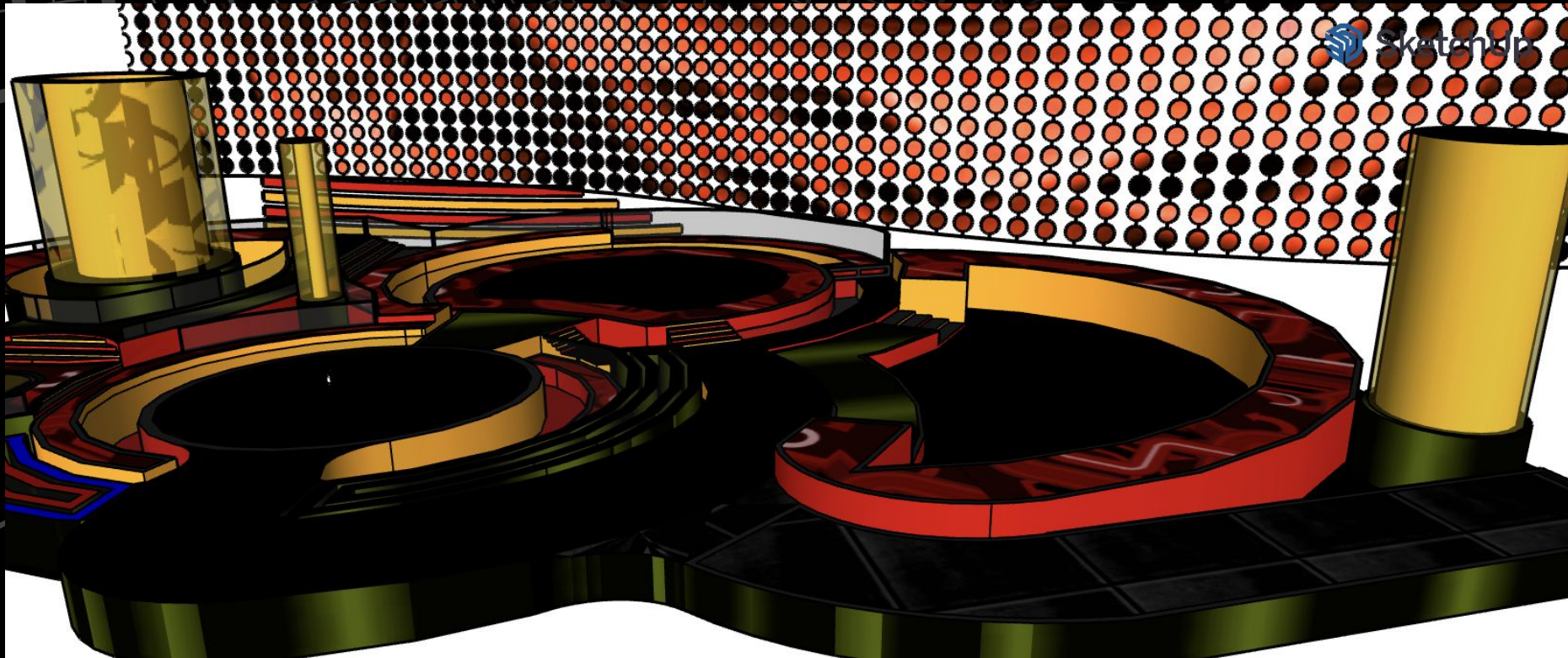
VR Stations



AR (Augmented Reality) Murals



Maker Spaces for Music & Art



BEE HIVES

We took an innovative approach in to the design of our apiary. Our apiary is designed to look like honeycomb and bees extracting resources from the comb.

Beekeeping has several benefits to the mental and psychical health of our students

