

BILL & MELINDA GATES FOUNDATION 2023

The main goal of this project is to manifest the foundation's intellectual mindset in the interior forms and lighting design.

OFFICE LIGHTING DESIGN

New York City, USA

Introduction: Bill and Melinda Gates Foundation was established based on this mission: "To create a world where every person has the opportunity to live a healthy, productive life." We tried to identify the foundation's core principles to manifest them physically in the interior lighting design and forms of their NYC office. The design signifies their global approach to expanding equitable values for everyone.

Lighting Studio / Final Design Academic Teamwork
Project: Bill & Melinda Gates Foundation, Christine Scialli, Coliana
Lighting Design: Mohammad Valizadeh Alvan, Team Members: Soyeon Kim, Fienl Shih

Portfolio
Mohammad Valizadeh Alvan

Render Done by Teammate: Soyeon Kim



- ① Multifunctional Hall
- ② Elevators Corridor
- ③ Staircase - Lightbox
- ④ Culture Room
- ⑤ Gallery
- ⑥ Reception
- ⑦ Computer Lounge
- ⑧ Meeting Room

01 Bill and Melinda Gates Foundation

Problem & Strategy

Through analysing the foundation's primary goals, Inclusion, Equity, and Diversity, we tried to use light as an asset to represent the type and the vastness of activities they do worldwide. We also identified the user groups and functions of the space to design the lighting according to appropriate scenarios.

Multifunctional Hall Scenes Definition

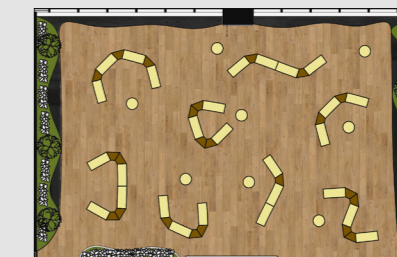


Step 01 Custom Furniture

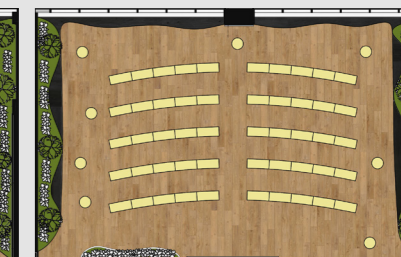
We designed a set of movable custom furniture for the multifunctional hall to meet the needs of different scenarios' furniture configurations. It includes slightly curved rectangular and circular seats and trapezium tables made of recyclable materials to comply with the circular economy.

Step 02 Furniture Plans

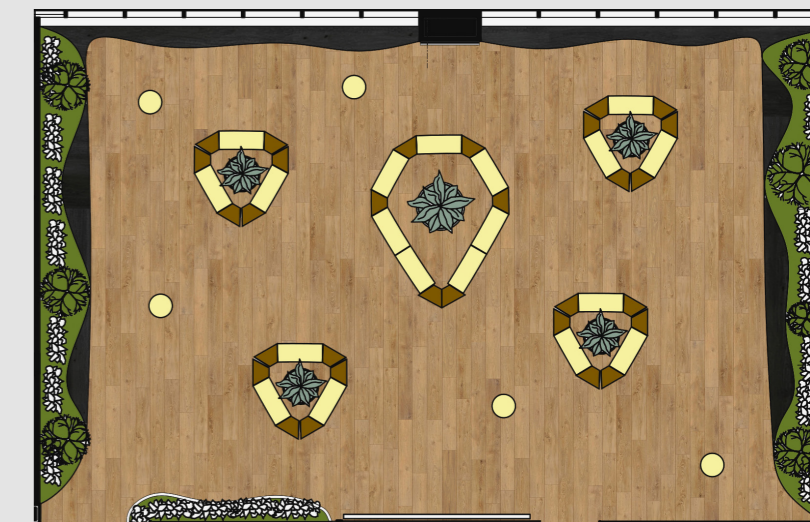
In order to design a lighting scene for each function of the hall, we needed to know where every piece would be placed to set the focal points and accent lighting so that we could design the lighting scenes accordingly. Although the custom furniture is modular and can be configured in dozens of ways, we considered three main ones: Event, Waiting Room, and Lecture Hall, each with their required luminosity.



Event Hall Plan Layout



Waiting Room Plan Layout



Lecture Hall Plan Layout

Lighting Design Concept GLOBAL INCLUSION



Step 01
 We chose the world map as a metaphor for the foundation's global attitude that includes everyone, regardless of age, gender, race, and nationality. It is also an allusion to historical trends that have not been equitable, and a big part of the planet has been neglected in sociopolitical decisions and events.



Step 02
 We simplified the continental coastlines and extracted and connected lines to form the ceiling coves all around the office; seemingly, we created a new world map, a more inclusive one! This dynamic continuous form changes with every step the user of the space takes.

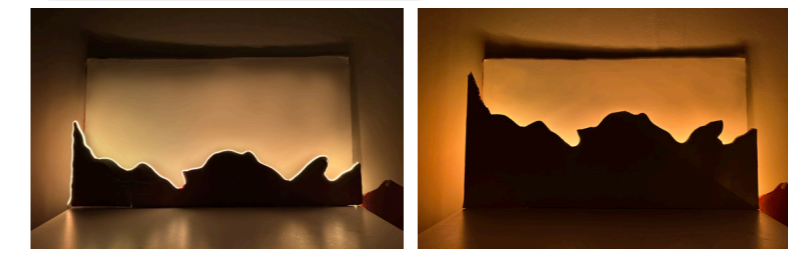


Step 03
 Considering each scenario's lighting scheme, furniture configuration, and focal points, we placed the recessed downlights. Accumulatively, they form a starry night as one of the most equitable natural phenomena.



RCP Diagram

Ceiling Cove Detail Mockup



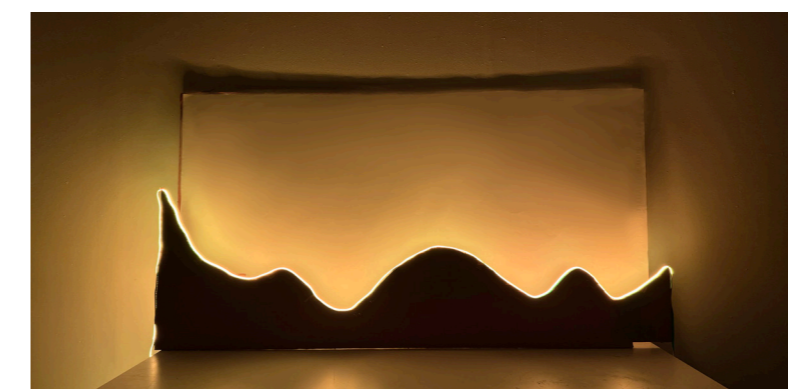
Prototype 1

The ceiling cove lights exactly follow the path of the continental lines. This method takes too much tape light and tremendously scatters the light.



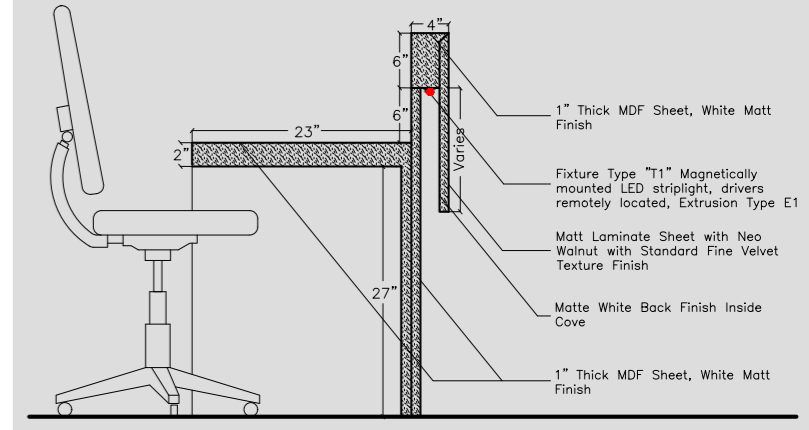
Prototype 2

The ceiling cove lights are formed based on a straight line. This method takes less tape light, but the light is distributed unevenly when the shape fluctuates.

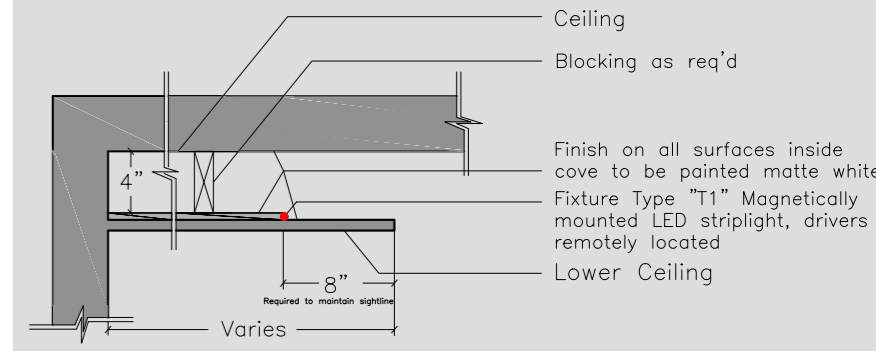


Prototype 3

This method is the middle ground between the last two; the cove shape slightly follows the coastal lines. Now, we have less scattered and better-distributed light, and the average use of tape light, is economically and visually more optimum. Also, the installation and assembly are easier than P. 1.



2/T1 Lighting Detail at Reception Counter Cove
 Similar with Culture Room (Bar) Counter



1/T1 Lighting Detail at Ceiling Cove

Lighting Studio 1 Final Design | Academic Teamwork

Parsons School of Design | Professors: Glenn Shrum, Christine Scullio, Golsana Heshmati, Katrina Matejick | Team Members: Soyeon Kim, Freni Shah



Based on the coastline form of the interior surfaces, we designed a custom light fixture mainly for task lighting above the main office and meeting room desks. It consists of side glowing tape lights and LED downlights. All the materials are recyclable. The black part is acoustic fabric.



Render Done by Teammate: Soyeon Kim

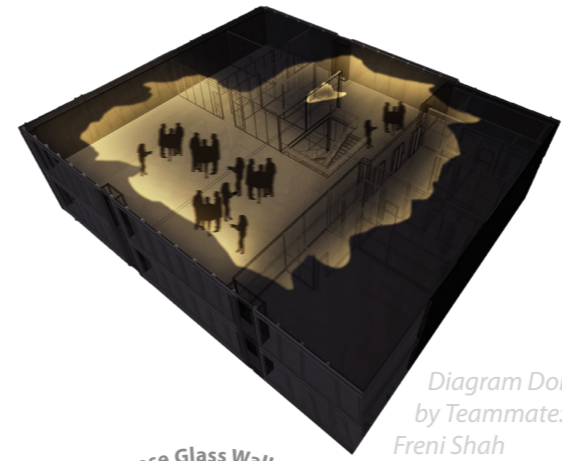
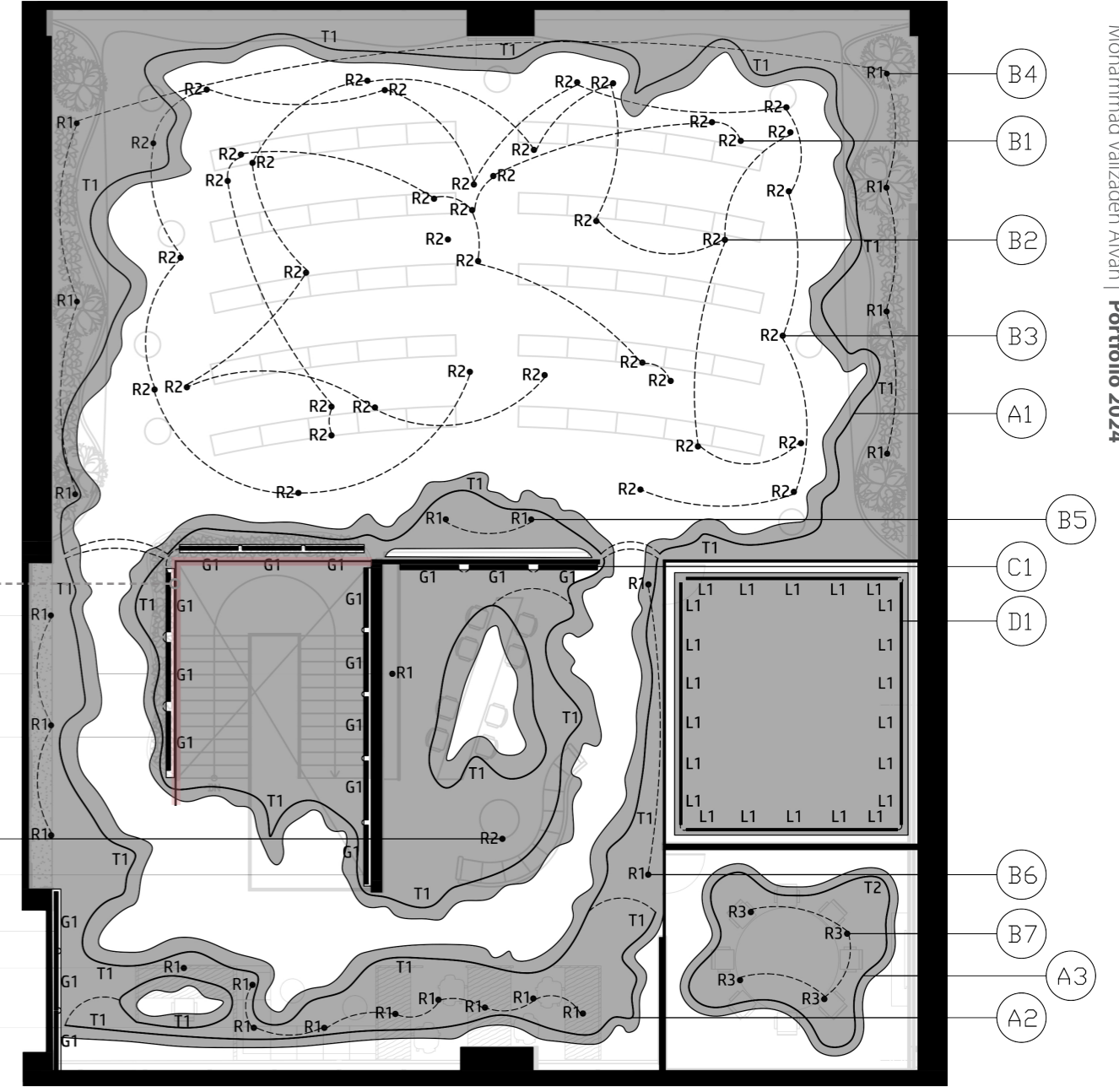


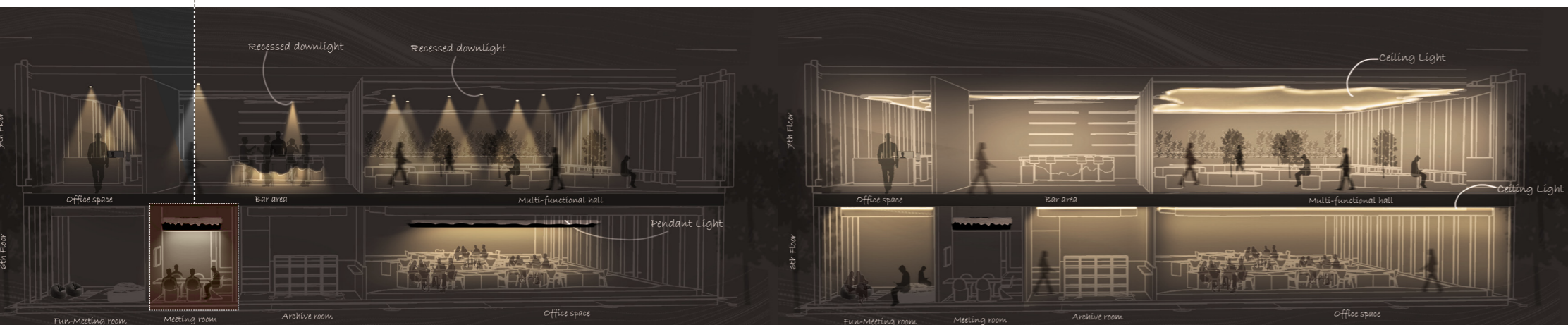
Diagram Done by Teammate: Freni Shah



Zoning Plan

Light Fixtures

- T1**
Tape Light and Extrusion
- G1**
Wall Grazer
- R1,R2,R3**
Recessed Downlight (Different Wattage / Flooding Lens)



Section Done by Teammate: Freni Shah