



Synergy

Integrating Performance and the Fine Arts




Abstract



Music has proven to be beneficial to students, both academically and socially, as has general arts education. Over the years, the arts have proven to take giant strides when the artists are a part of an environment that encourages collaboration within and between artistic disciplines and social backgrounds. This design strives to create a contemporary and sustainable environment that encourages an enjoyable, collaborative, and educational experience for performance and fine arts students of various backgrounds and nationalities. This includes designing a performance and fine arts educational facility as well as revamping current lodging for campers and staff at the International Music Camp along the United States-Canada border.



Project Emphasis



Year-round use and expansion of what is a traditionally a summer camp (used three months out of the year)

Education of all ages in both performing and fine arts

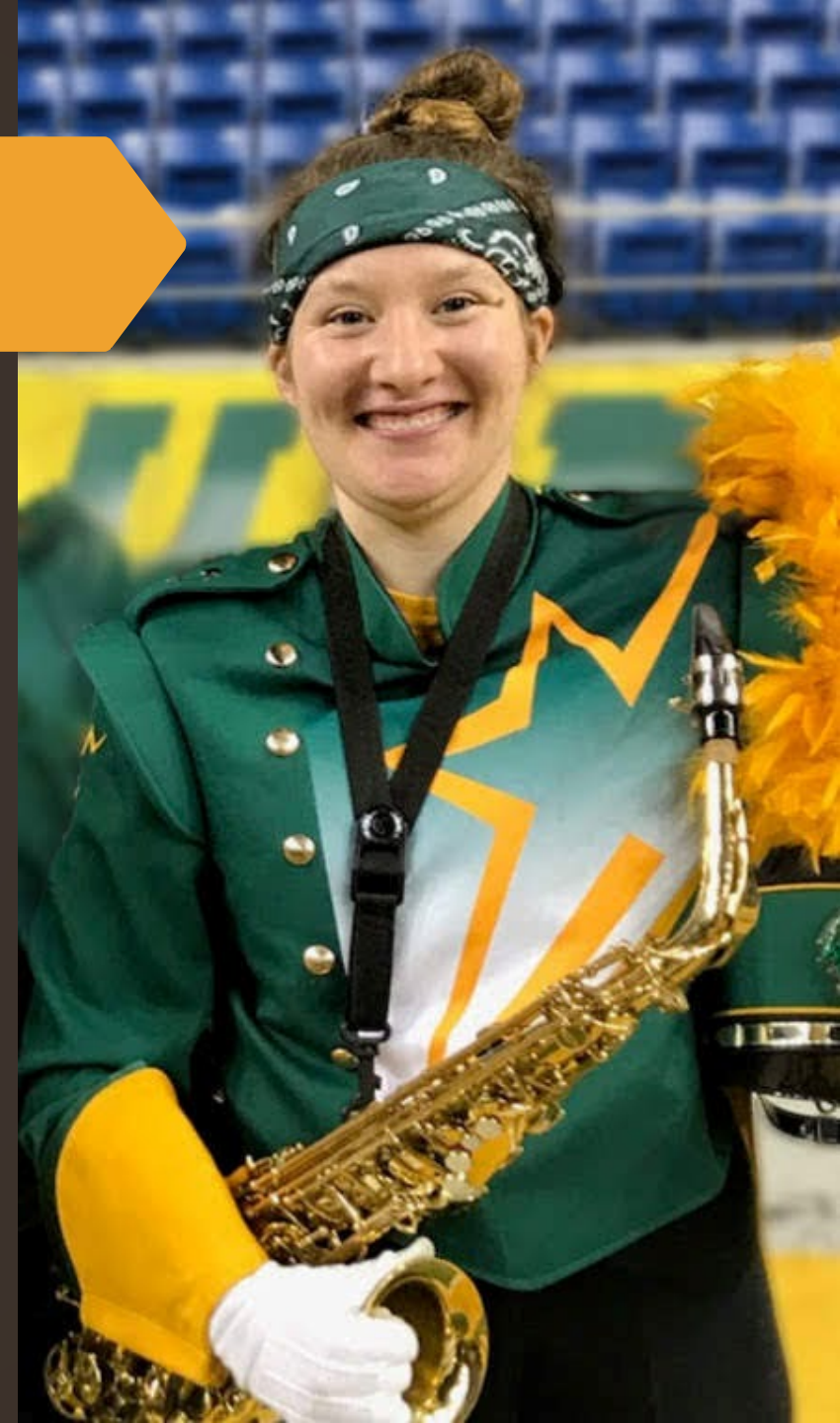
Forge future connections between nations and interests in the arts

Quick things about me

- ▶ Minor in Music

- ▶ Ensembles:

- ▶ Marching Band
 - ▶ Pep Band
 - ▶ University Band
 - ▶ Saxophone quartet/quintet
 - ▶ Saxophone Choir
 - ▶ Lab Jazz
 - ▶ Jazz Ensemble
 - ▶ Wind Symphony



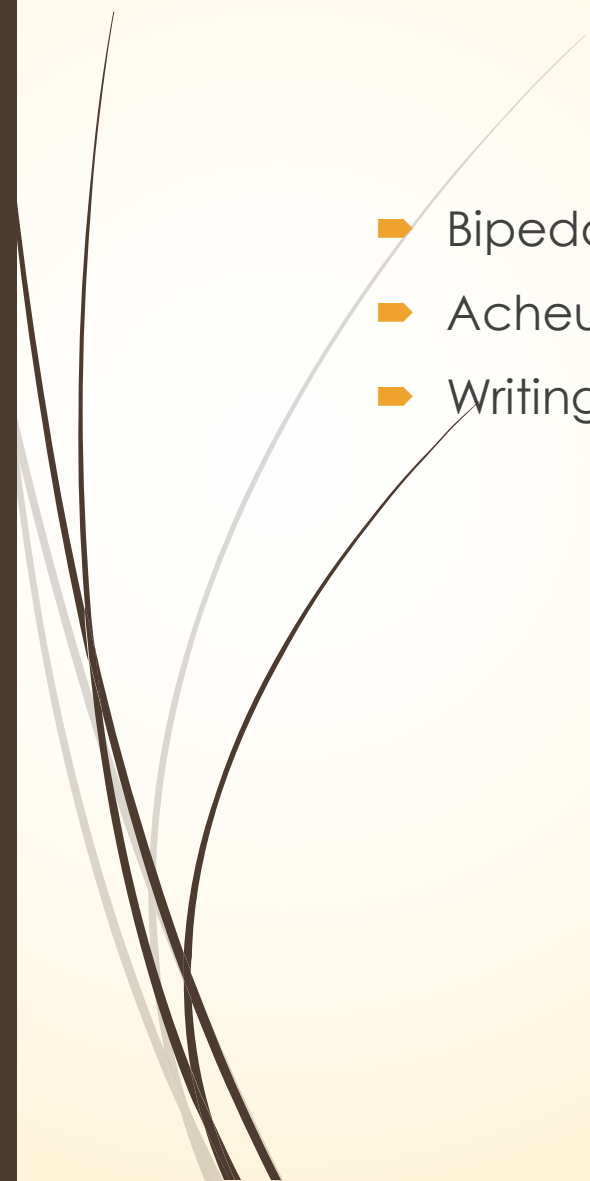


Background of the Arts



History

- ▶ Bipedalism
- ▶ Acheulean Biface
- ▶ Writing

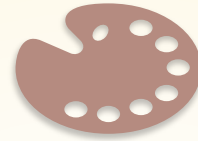




Music

Long-term

Improves problem-solving abilities



Visual Arts

Short-term

Improves cultural understanding and memory



Kinesthetic Arts

Short and Long-term

Improves emotional awareness and overall performance in other fields

Effects of the Arts

Synesthesia - Arts and the Brain



Color



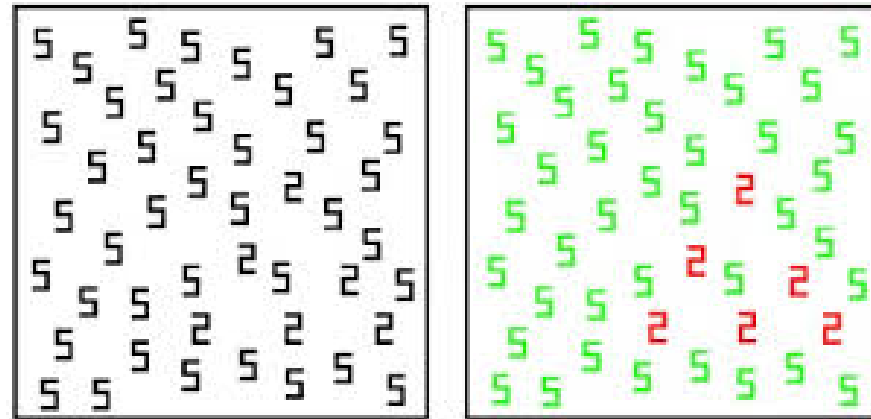
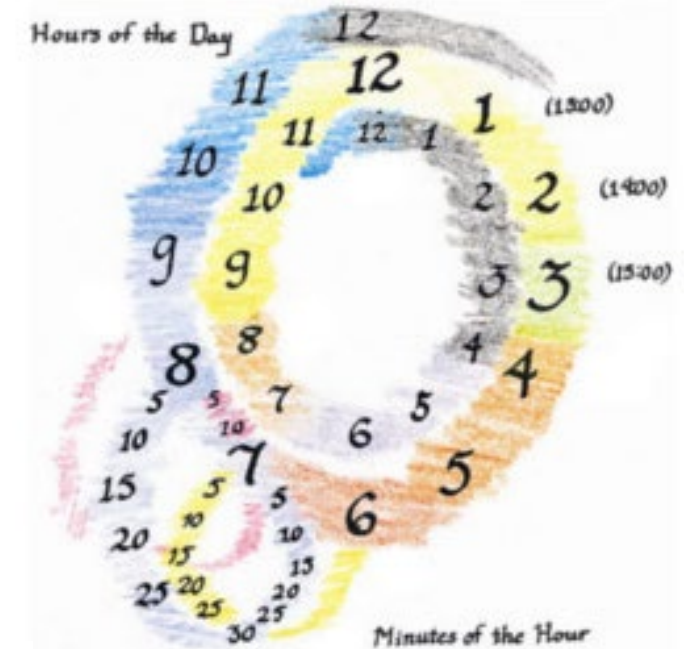
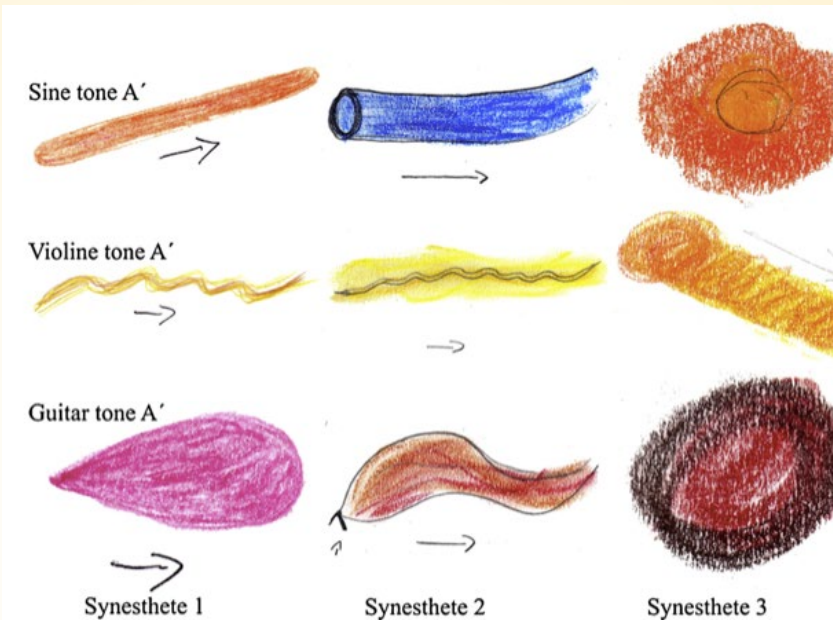
Language



Taste



Music





Cultural Correlations



Pitch

- Greeks – sharp/heavy
- Bali & Java – small/large
- Kisedje of Brazil – young/old

Contour

- Kaluli of Papua New Guinea - waterfalls
- Aboriginals –topography

Time

- West - arrow
- Greece & India - cycle
- Asia – fractured continuum

Cultural Diversions



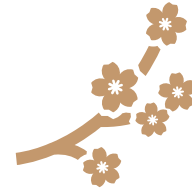
Middle East

Ornamentation



India

Emotion



China

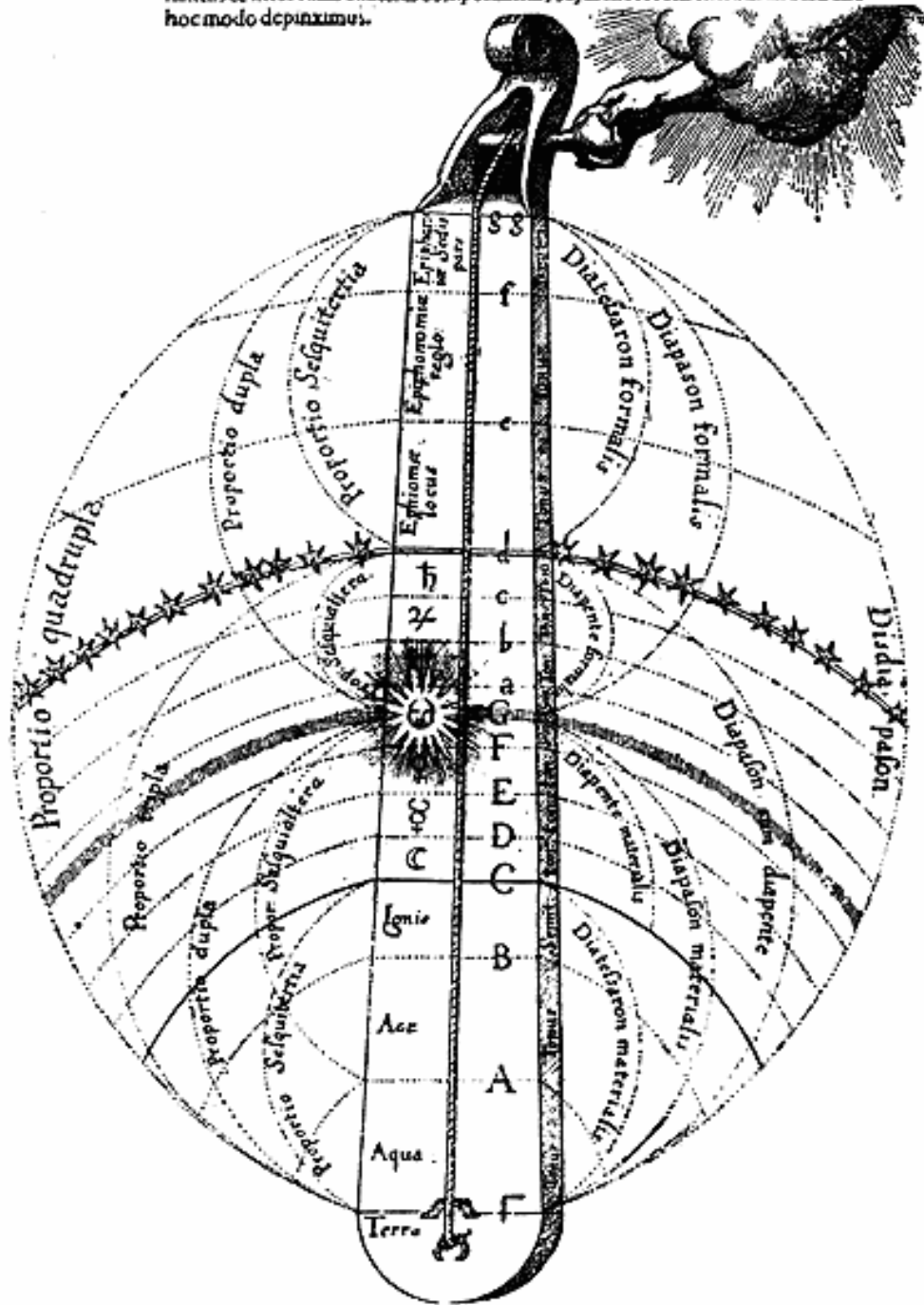
Timbre



West

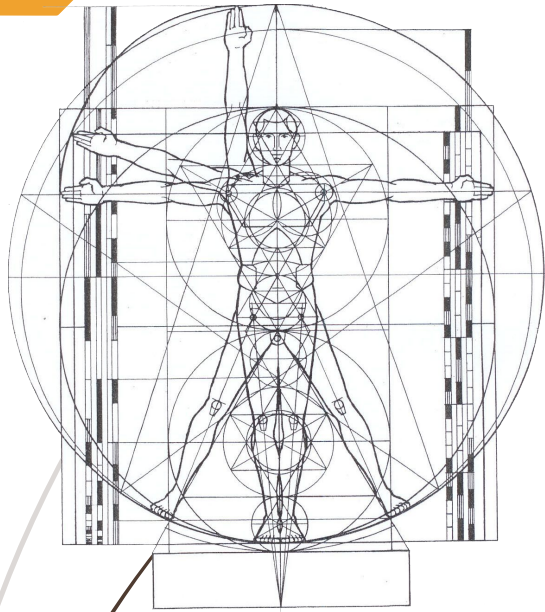
Structure

Hic autem monochordum mundanum cum suis proportionibus, confectum & intervallis exactius composuimus, cujus motorem extra mundum esse hoc modo depinximus.

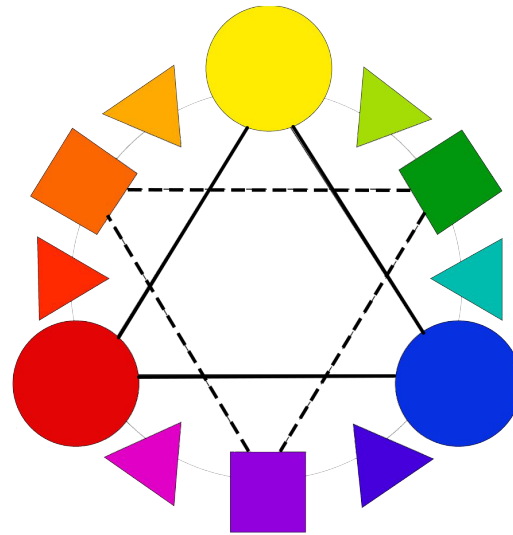


Ratios

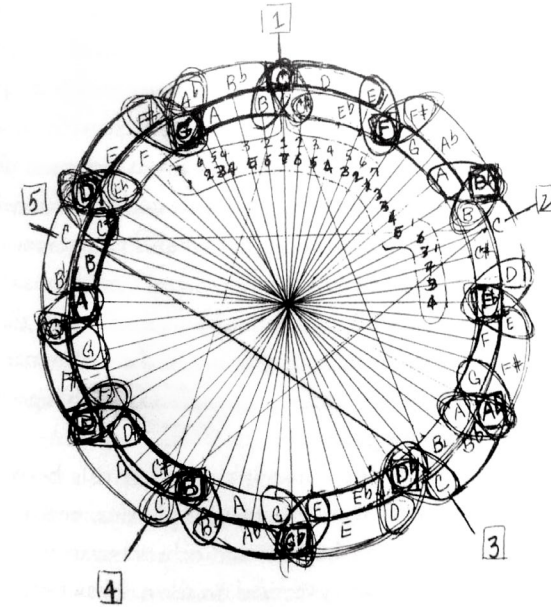
- ▶ Octave 2:1
- ▶ Fifth 3:2
- ▶ Fourth 4:3
- ▶ Major third 5:4
- ▶ Minor third 5:6
- ▶ Minor seventh 5:9
- ▶ Major second 8:9
- ▶ Major seventh 8:15
- ▶ Minor second 15:16
- ▶ Unison 1:1
- ▶ Tritone 32:45
- ▶ 7 notes to a scale
- ▶ 12



Vitruvian Man



Color Wheel



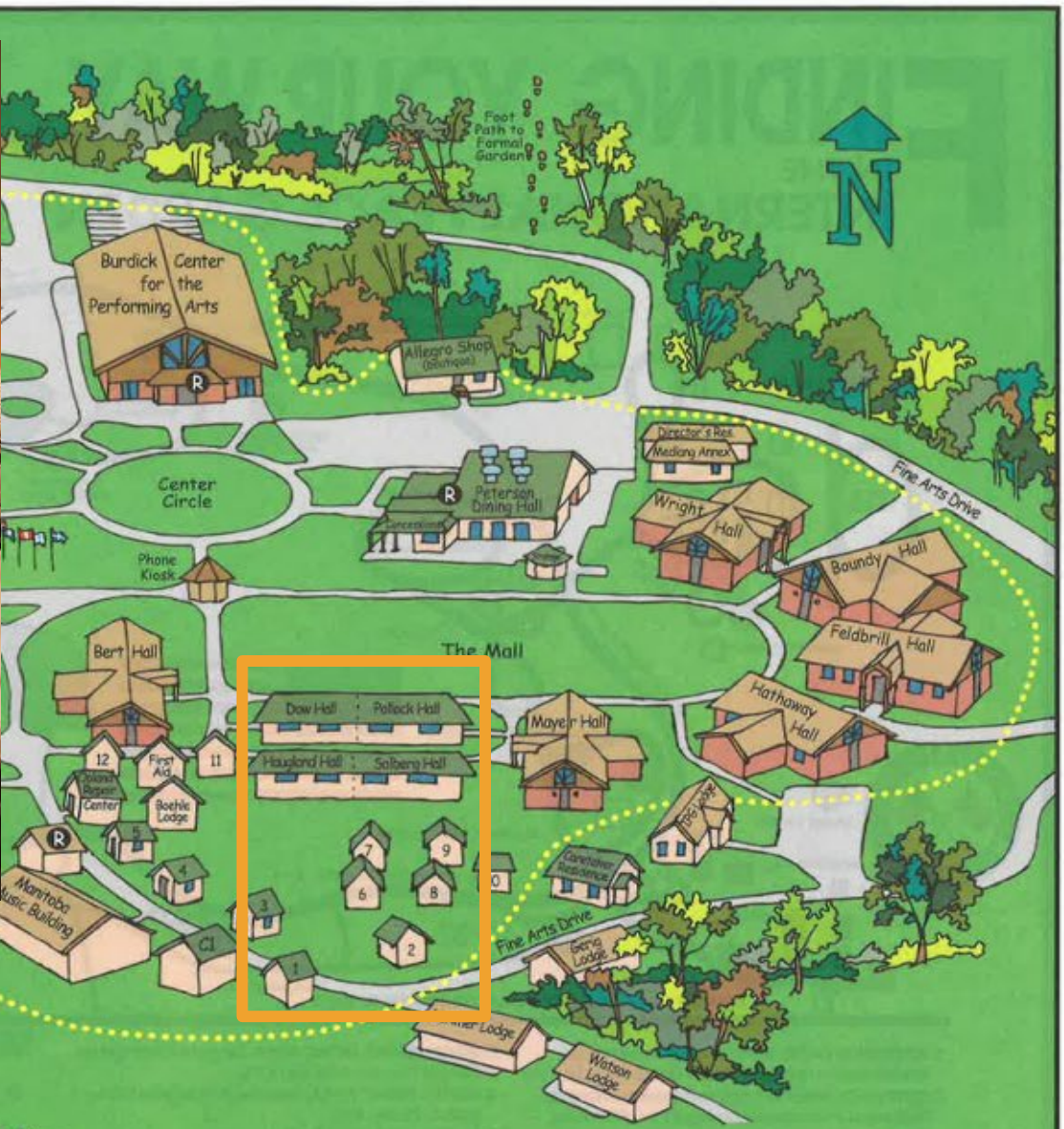
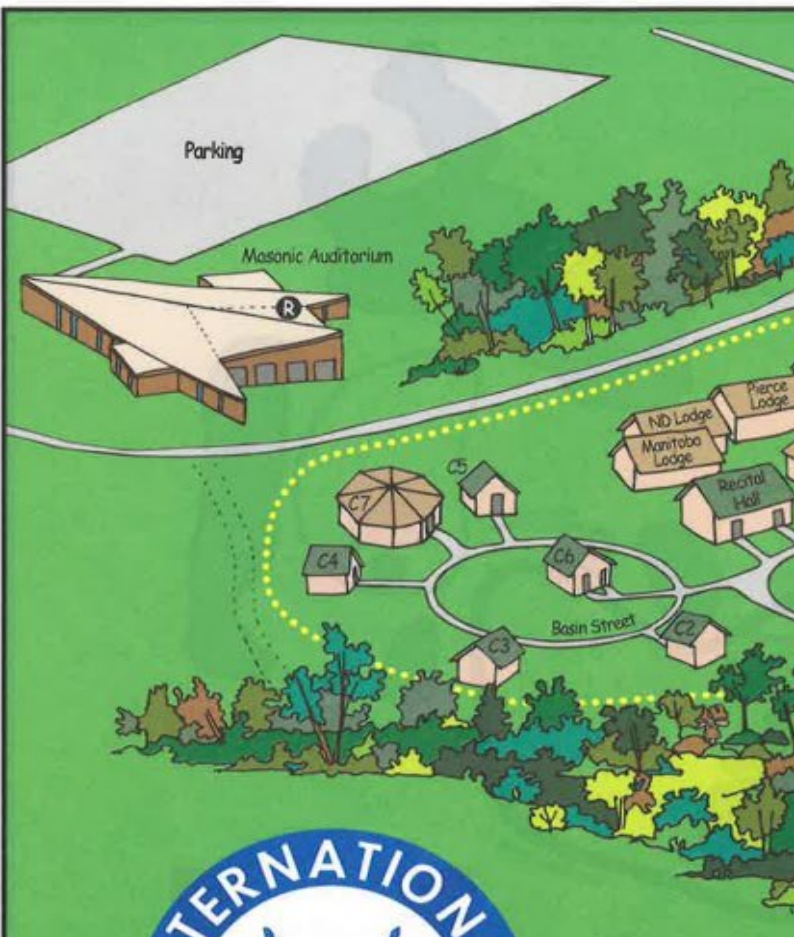
John Coltrane's Circle of Fifths



Site

- ▶ Location: International Music Camp Summer School of Fine Arts, International Peace Garden, U.S.-Canada Border
- ▶ Nearest Town
 - ▶ Dunseith, ND
- ▶ Population
 - ▶ 692
- ▶ Region
 - ▶ Turtle Mountains of North Dakota and Manitoba
- ▶ Description
 - ▶ The International Music Camp (IMC) was chosen as a site due to the programs already in place. It incorporates all ages, all nationalities, and many forms of art, making it an ideal environment for interdisciplinary artistic collaboration. The Peace Garden promotes similar thoughts, encouraging the intermingling of people and ideas. Having the site embodying all these ideas was the main basis for the selection, .





"Enriching lives through artistic expression and personal growth"

- Ⓡ PUBLIC RESTROOMS are located in:
 - Howard Hall
 - Dining Hall
 - Burdick Center for the Performing Arts
 - Masonic Auditorium
 - Between Rindt Hall and the Manitoba Music Building.
 - Alme International Arts Centre/Frances Leach Library

..... The area outside the dotted line is off limits to students.



Bert Hall



Fine Arts Center



Rehearsal Hall



Burdick Center

Current Structures

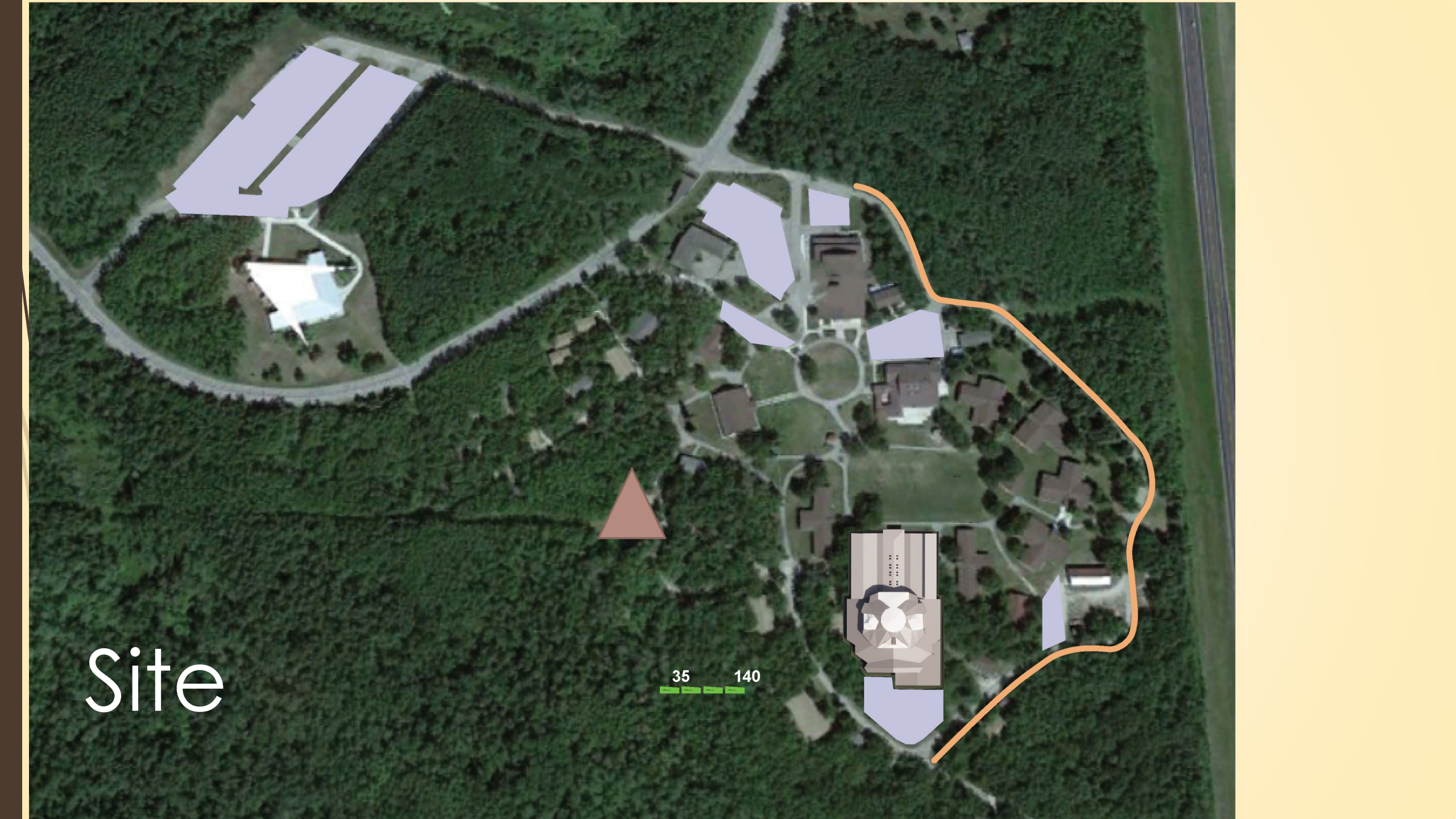
A decorative graphic on the left side of the slide. It features a solid orange arrow pointing to the right, positioned horizontally. Behind the arrow and extending upwards and to the right are several thin, curved black lines that create a sense of movement and depth. The background is a light beige color with a subtle gradient.

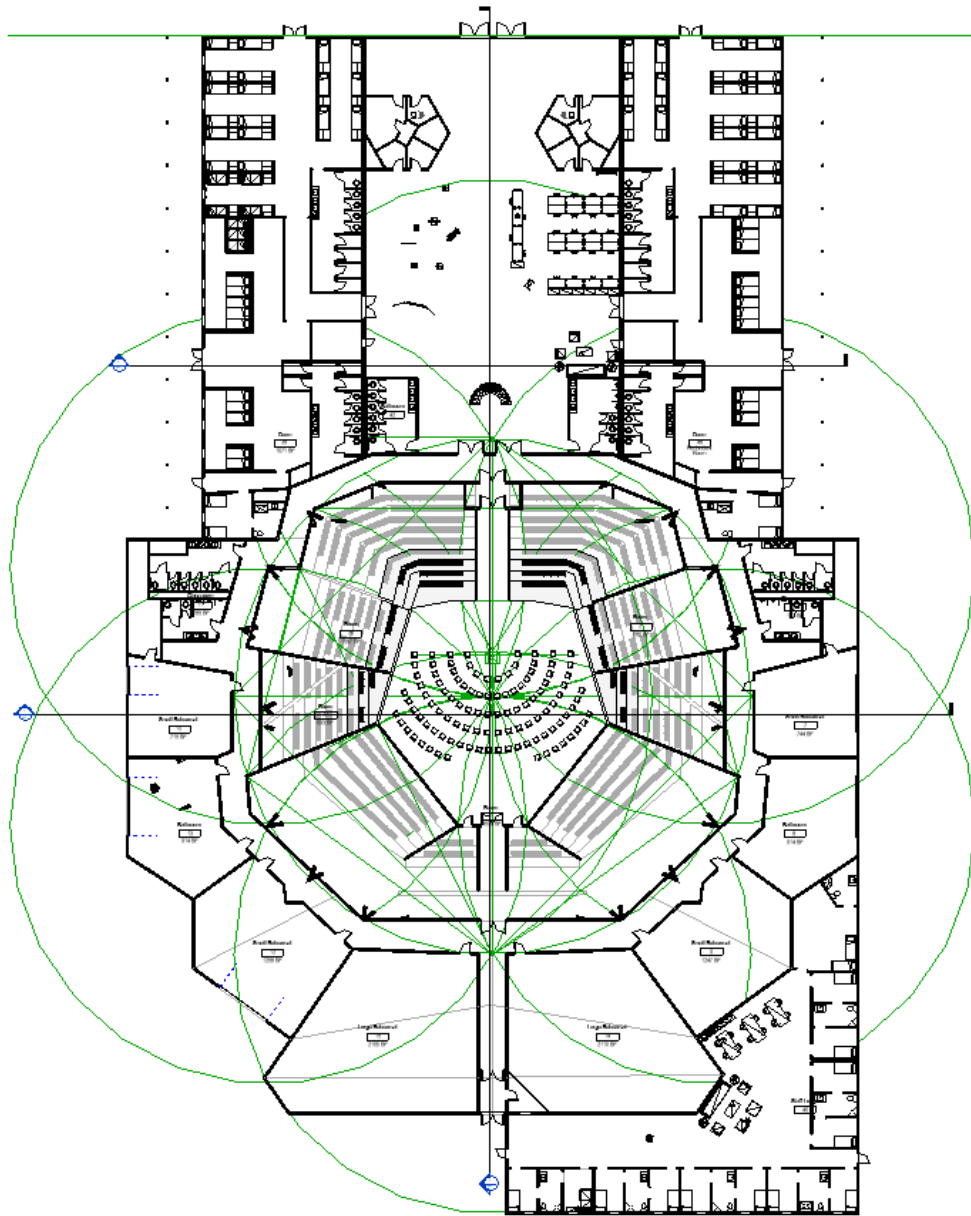
Design Solution

Site

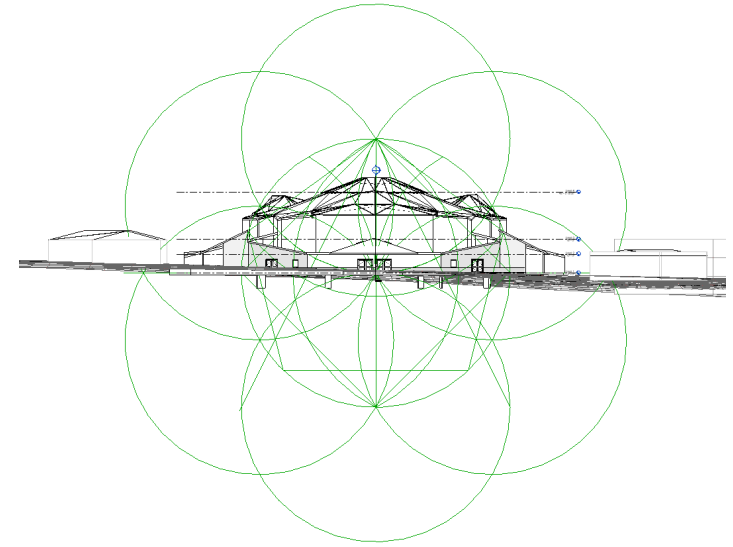


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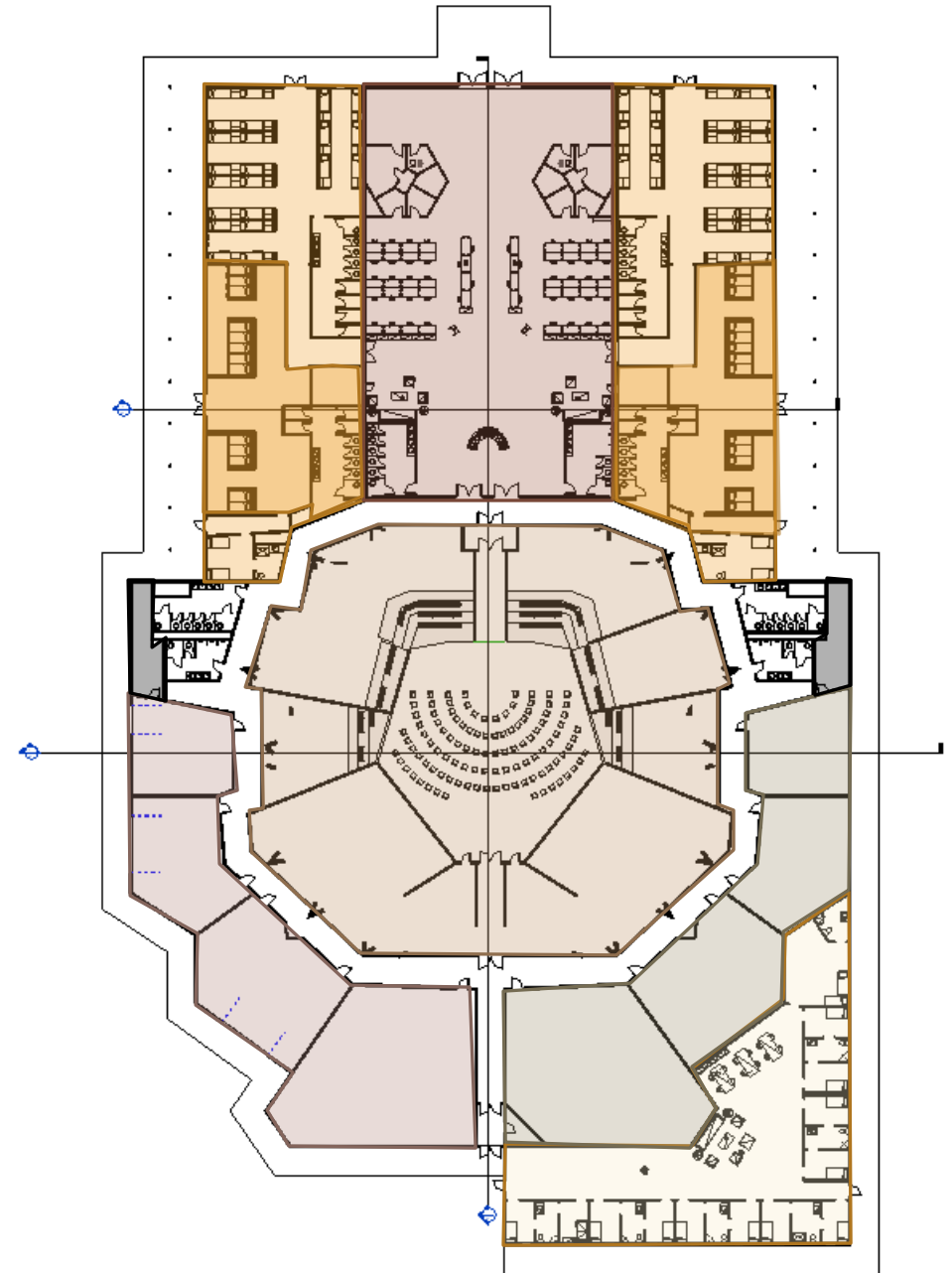


Auditorium Grid System

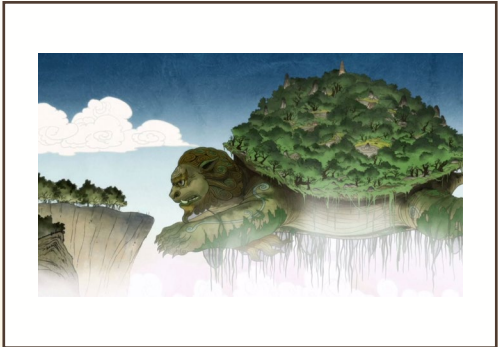


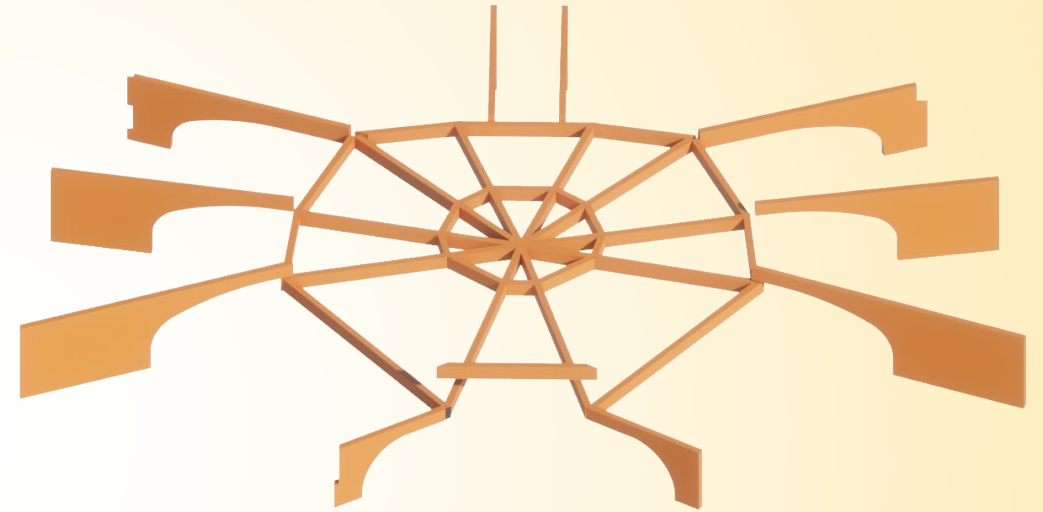
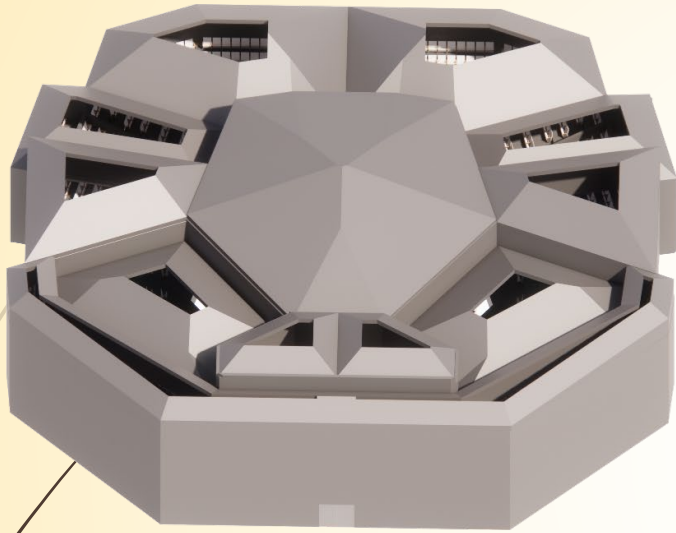
Floor Plan

- ▶ Student Dorms
- ▶ Studio/Gallery & Practice Rooms
- ▶ Mikinaak Hall
- ▶ Rehearsal/Classroom
- ▶ Indoor/Outdoor Rehearsal/Classroom
- ▶ Staff Lodging



Turtle Mountain



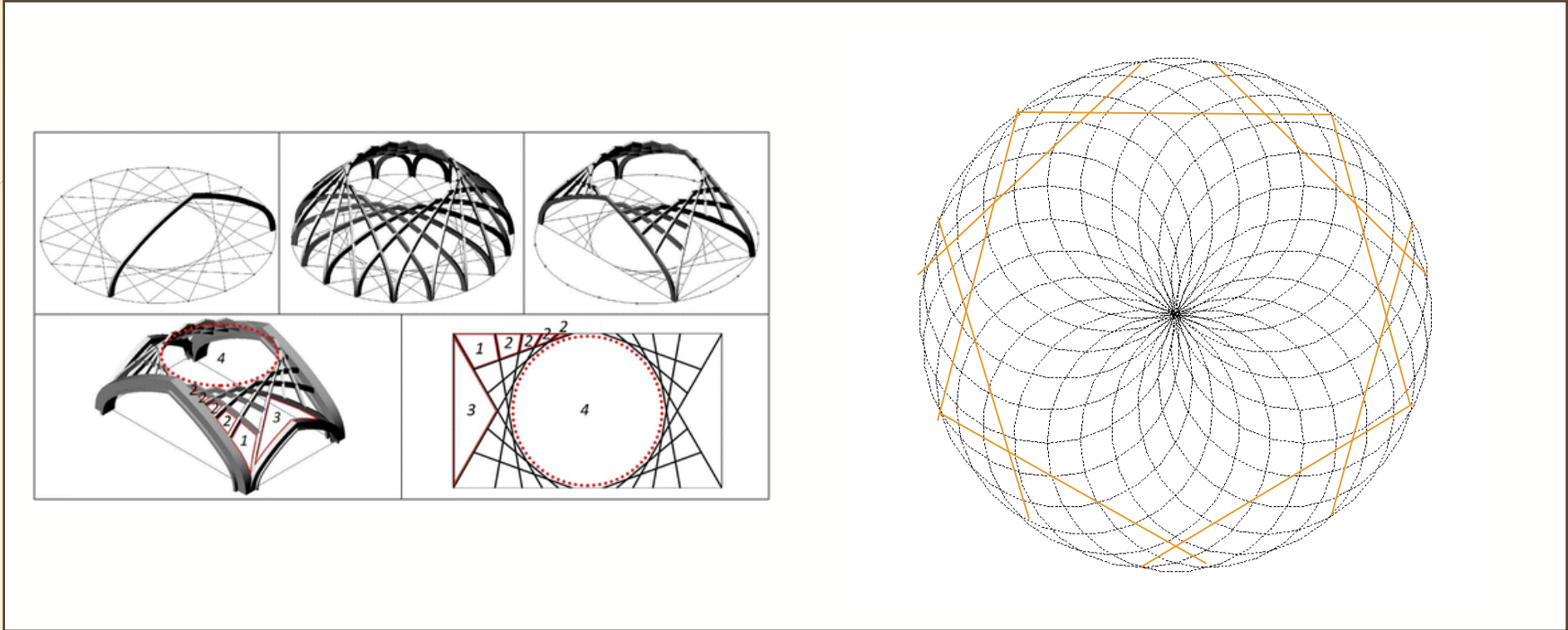


Structure Ideation

Keystone/Compression Ring

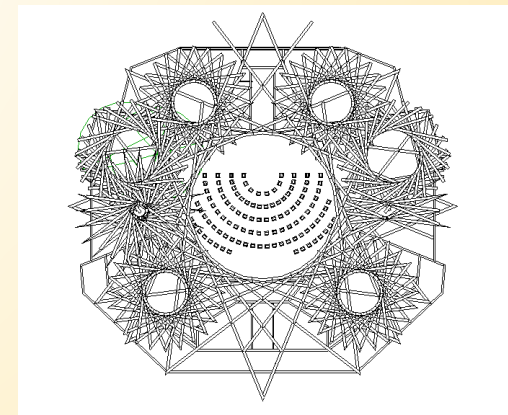
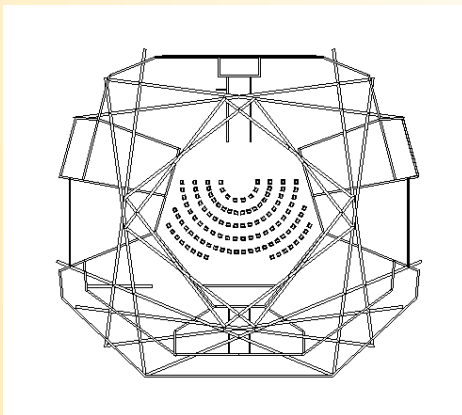
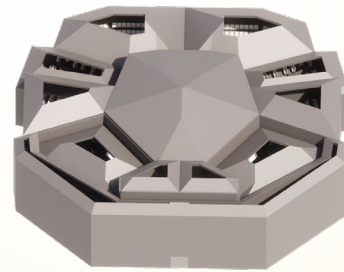


Existing
Structure

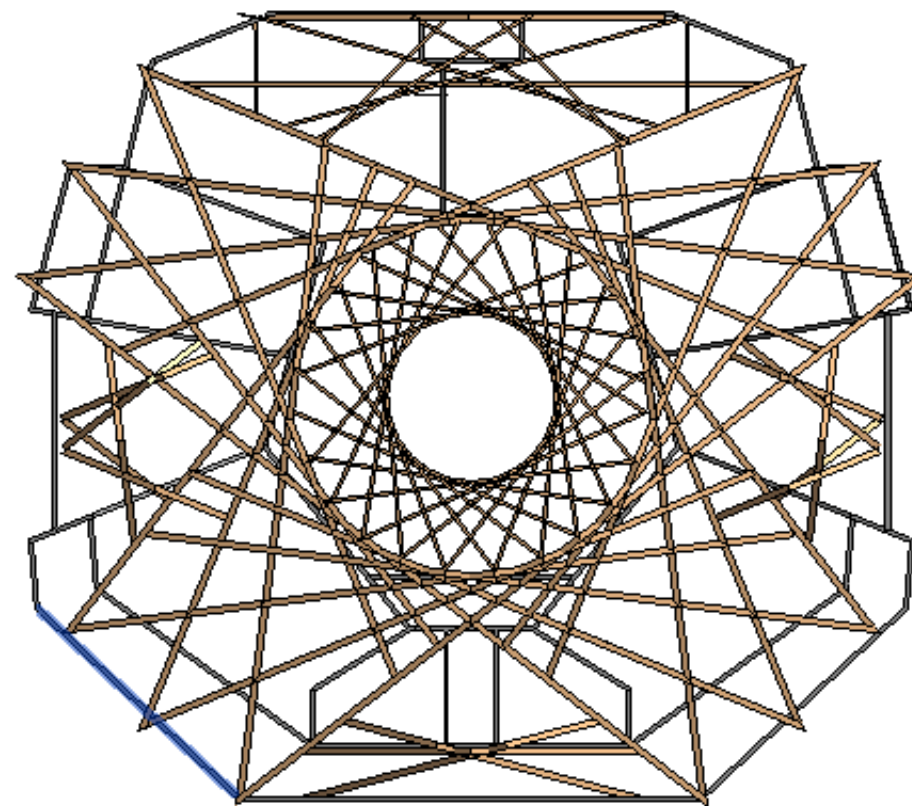
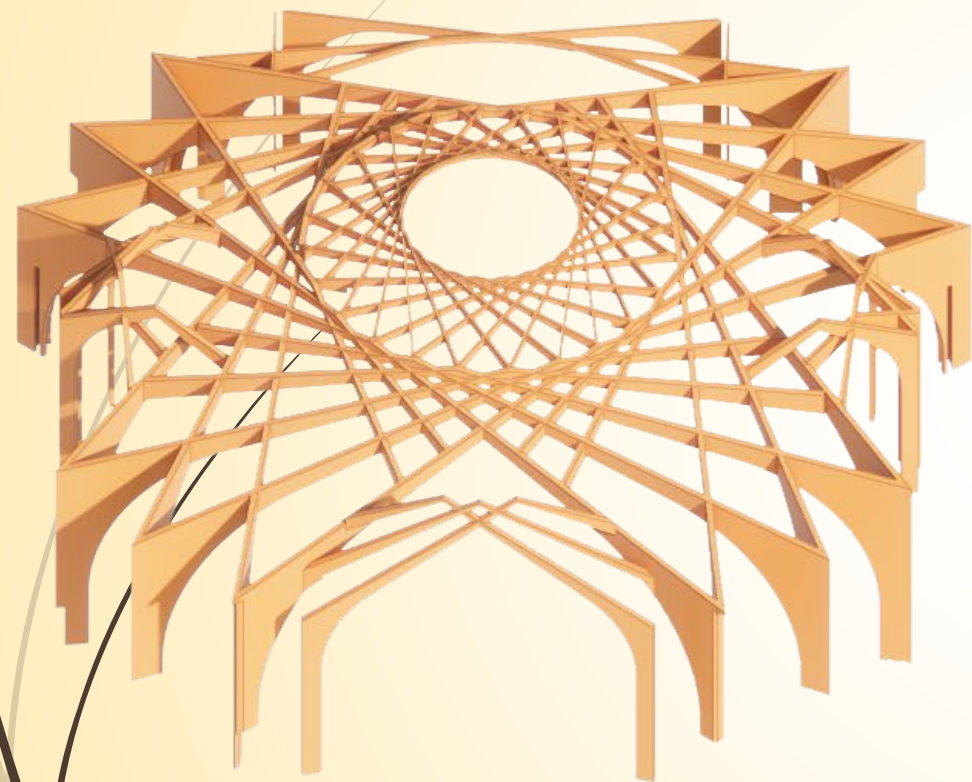


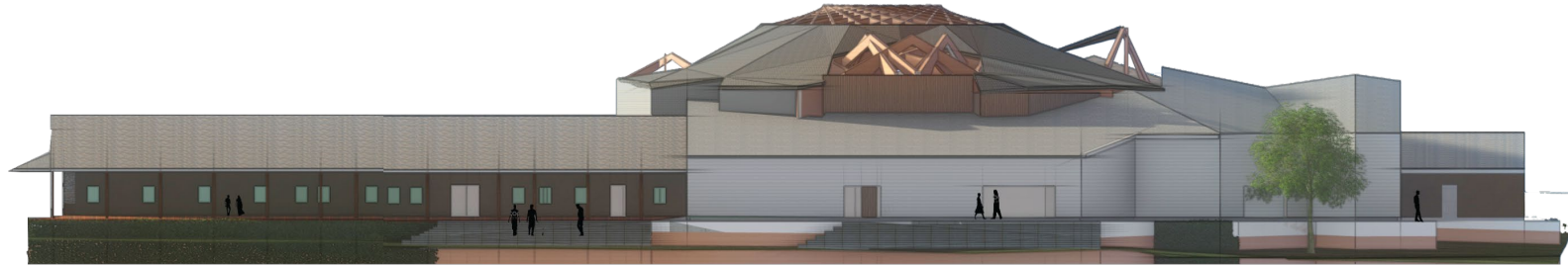
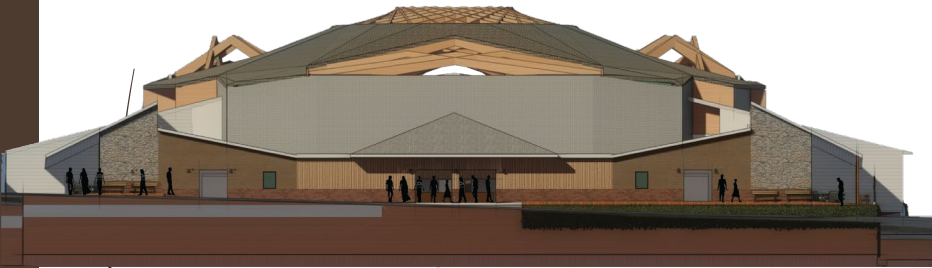
Karbandi

Structure Ideation



Final Structure

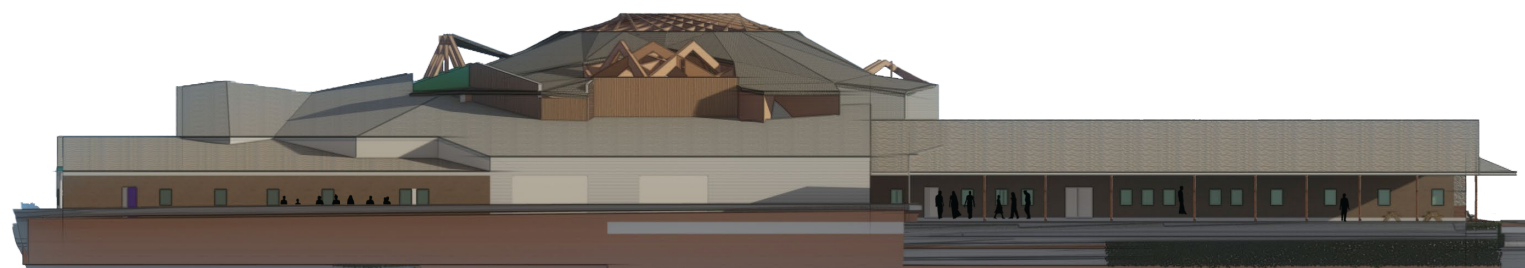




North

East

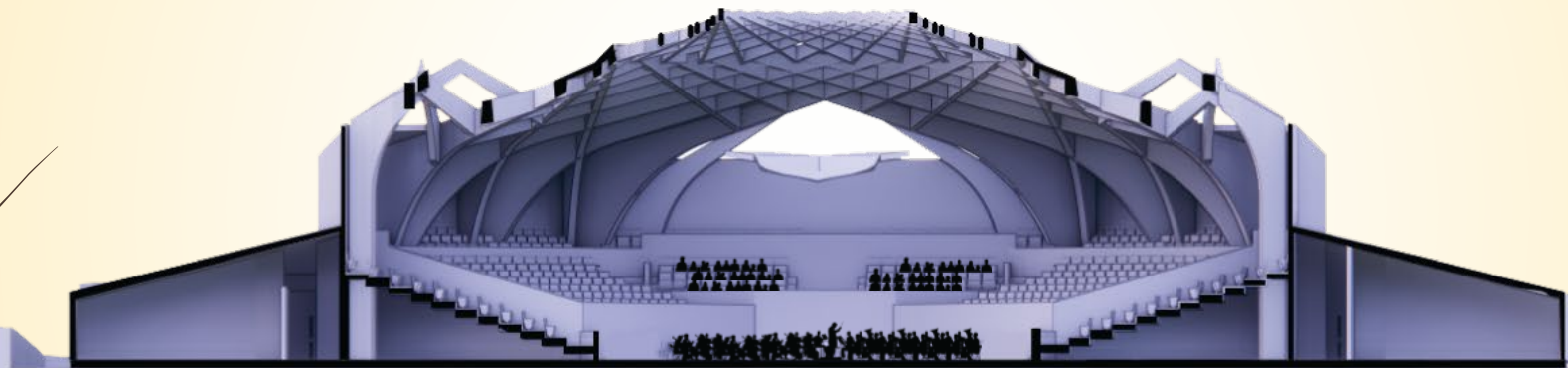
Elevations



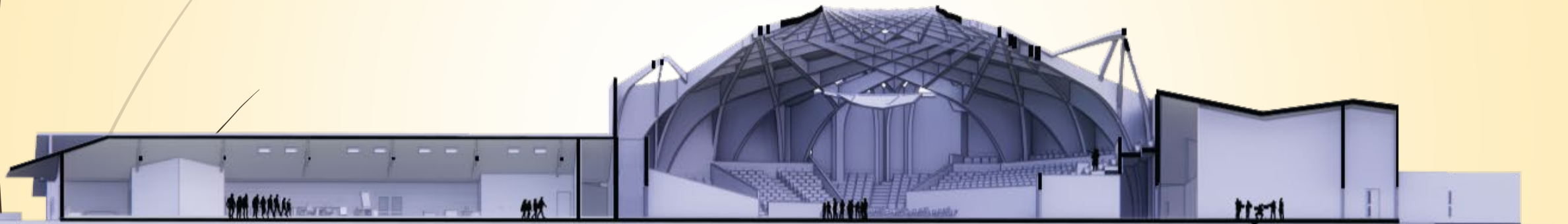
South

West

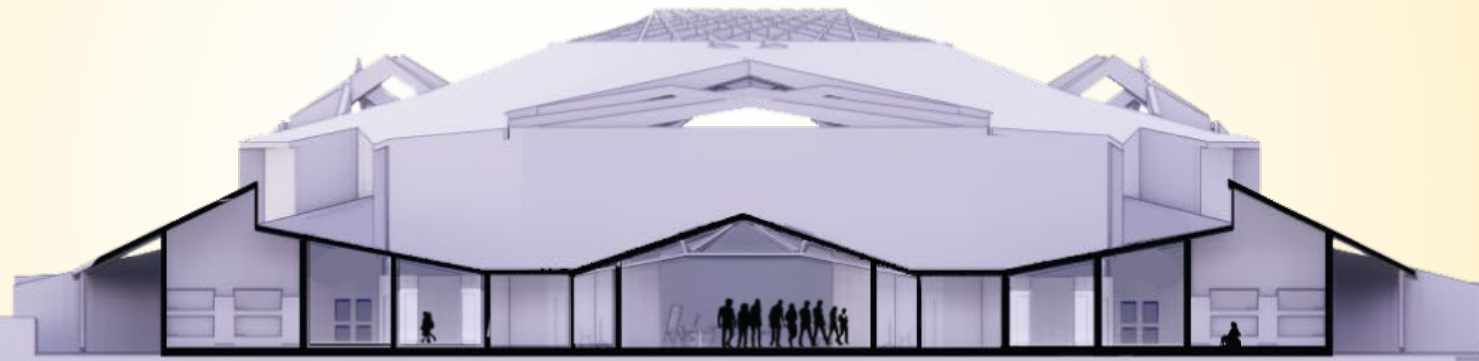
Auditorium Section



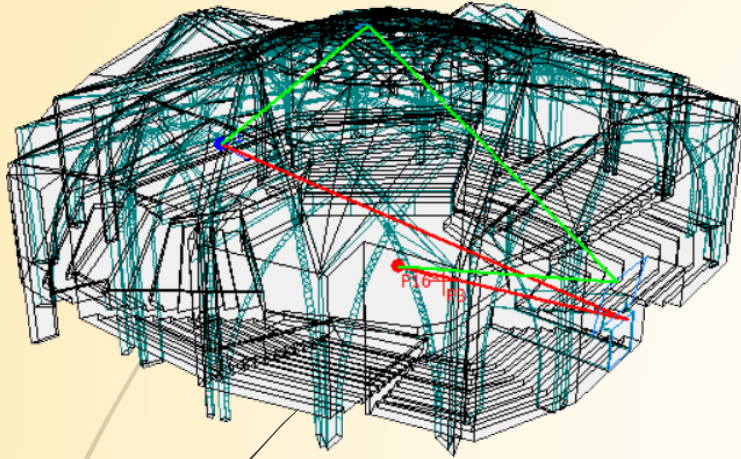
North-South Section



East-West Section



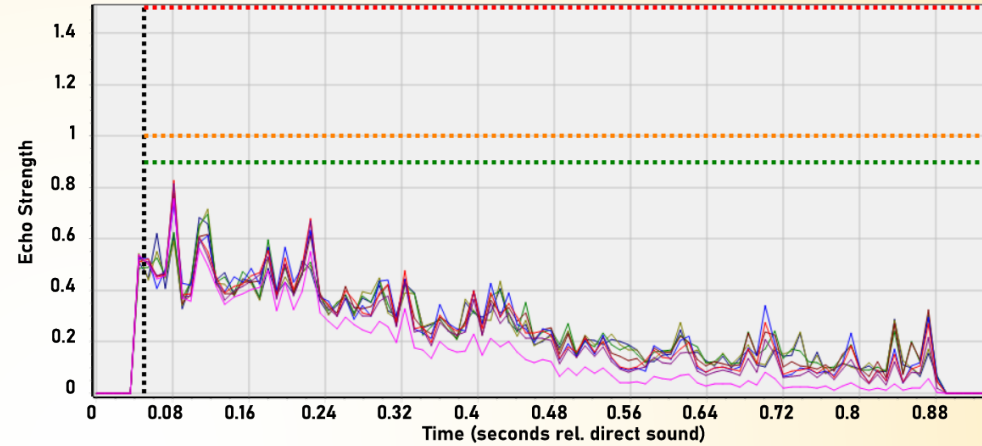
Reflectogram



Scale: Music
Time Rel. Direct

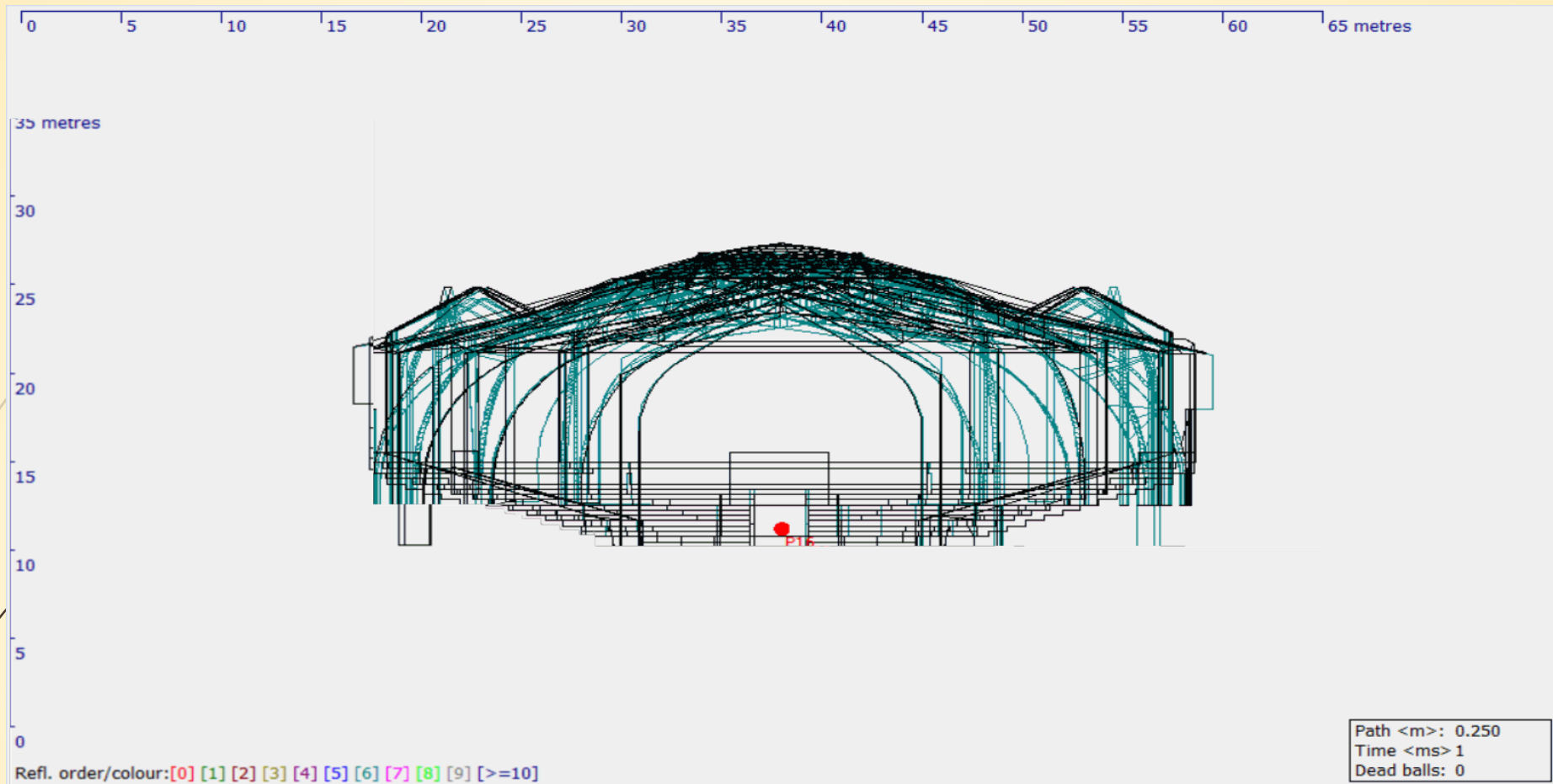
200+	Light Blue
80-200 ms	Blue
20-80 ms	Green
2-20 ms	Orange
0-2 ms	Red

Deitch Echo Curves



—	Echo = 0.58 at 63 Hz
—	Echo = 0.58 at 125 Hz
—	Echo = 0.61 at 250 Hz
—	Echo = 0.75 at 500 Hz
—	Echo = 0.80 at 1000 Hz
—	Echo = 0.74 at 2000 Hz
—	Echo = 0.75 at 4000 Hz
—	Echo = 0.71 at 8000 Hz
- -	Echo time limit
••	10% annoyed
••	50% annoyed
••	90% annoyed

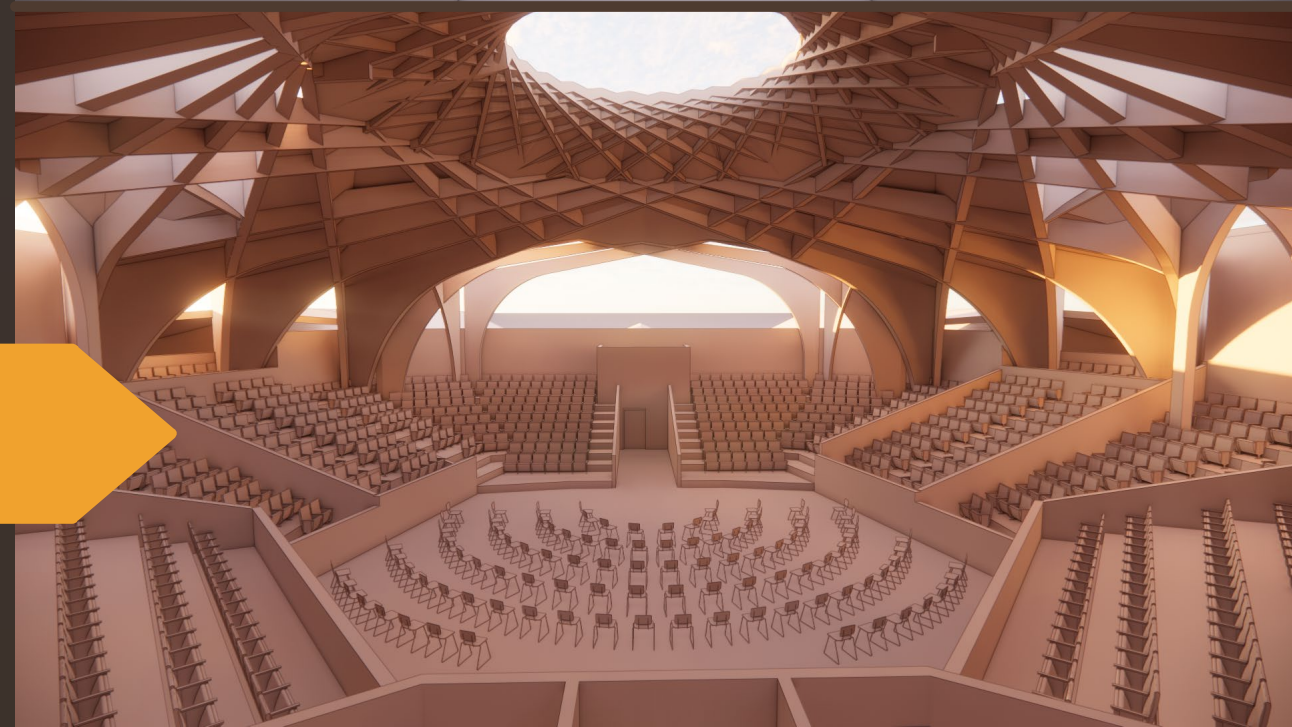
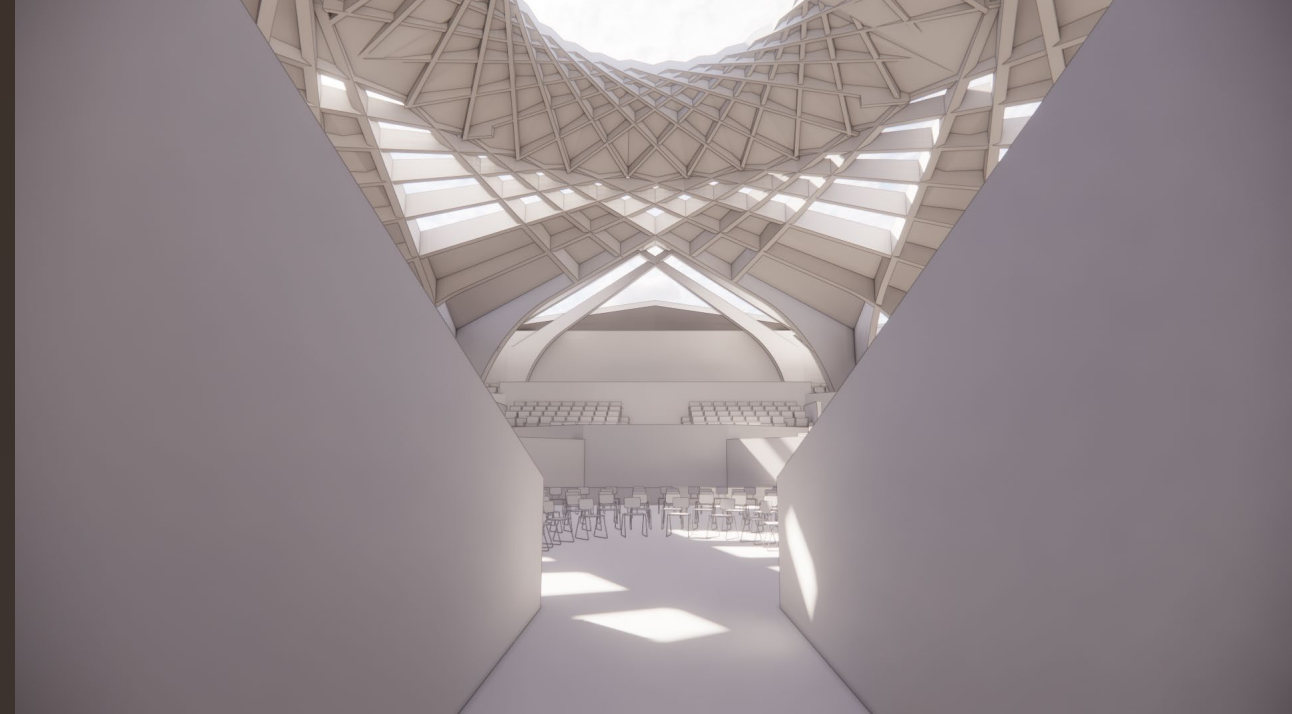
Acoustic Analysis



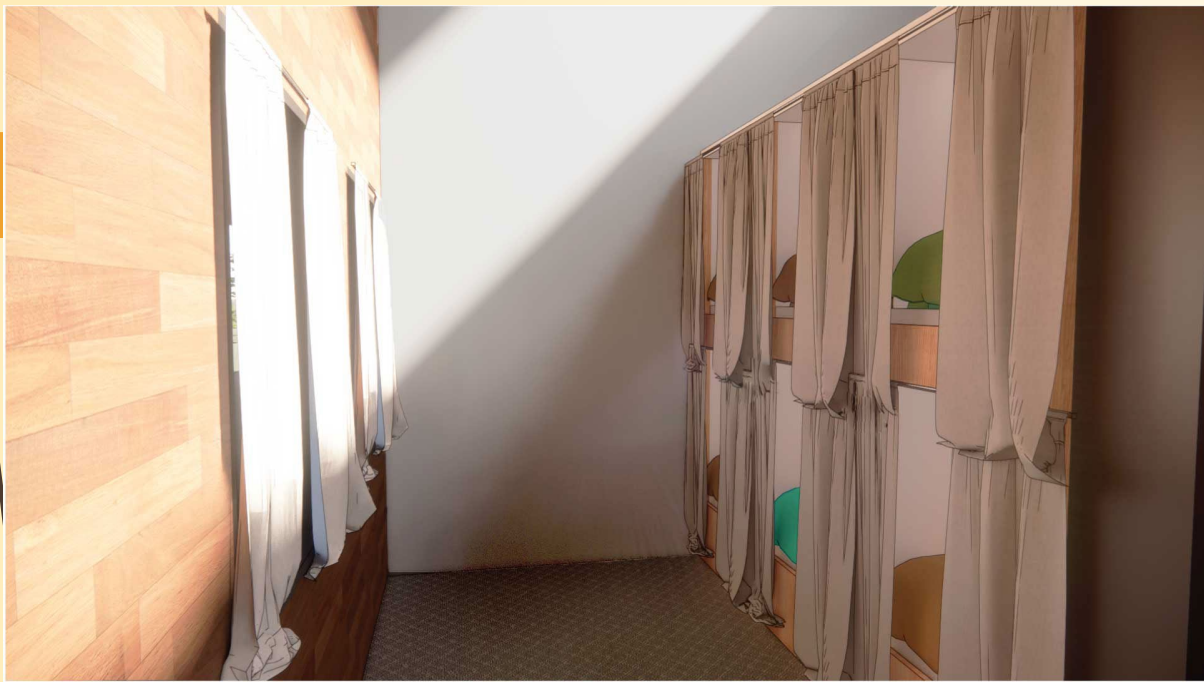
Acoustic Reflections

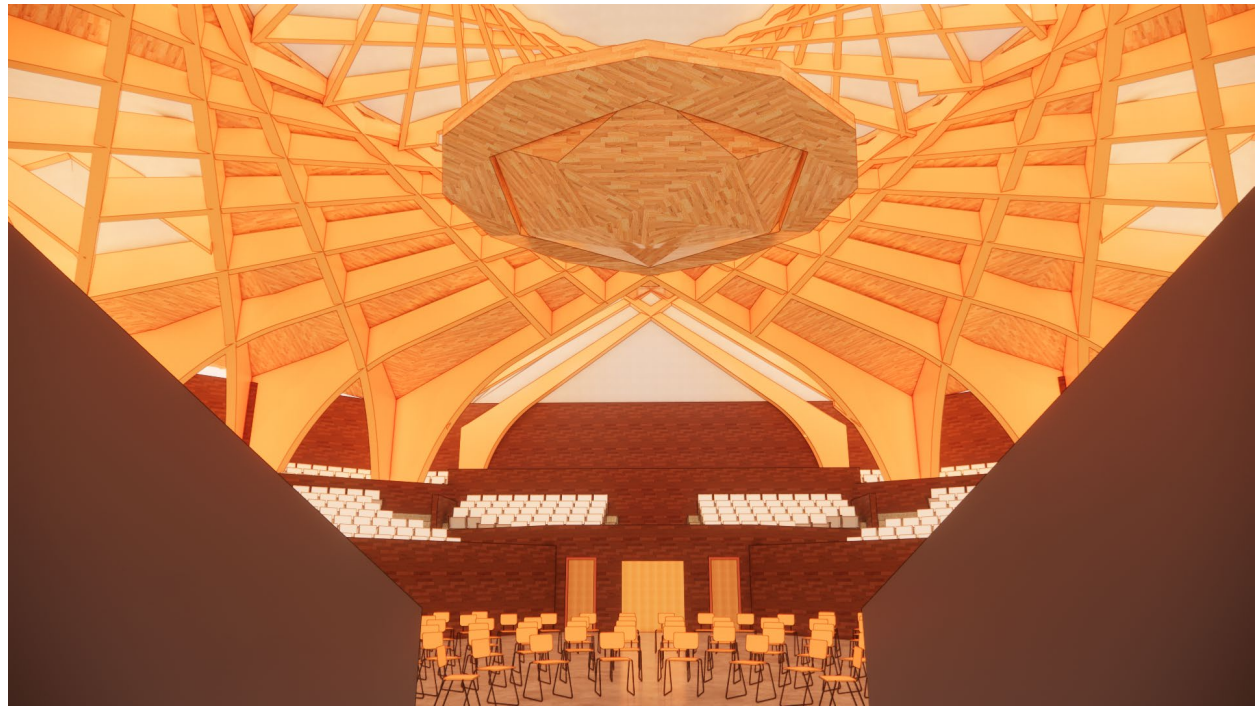


Renderings











Thank you