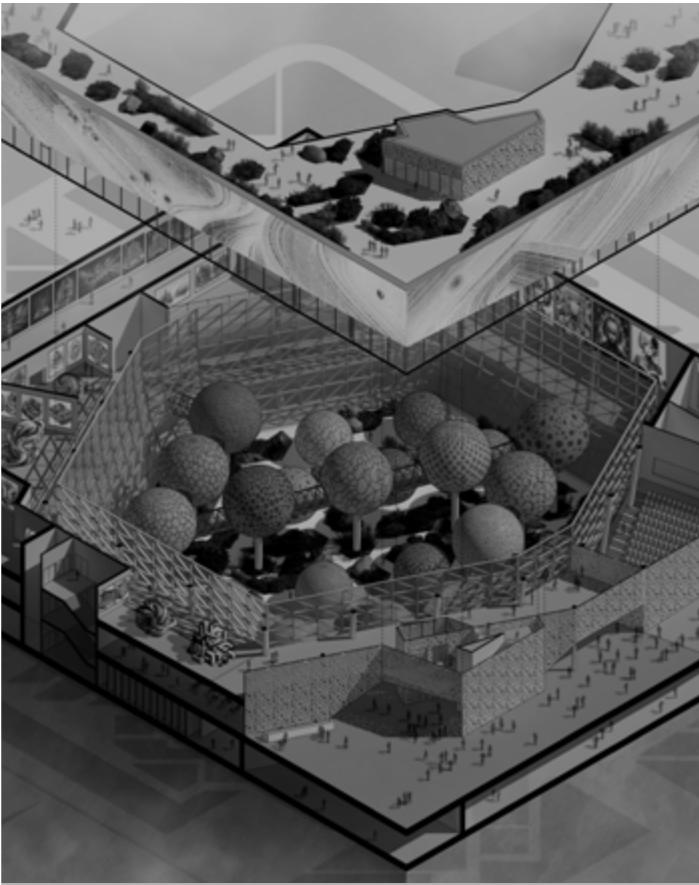
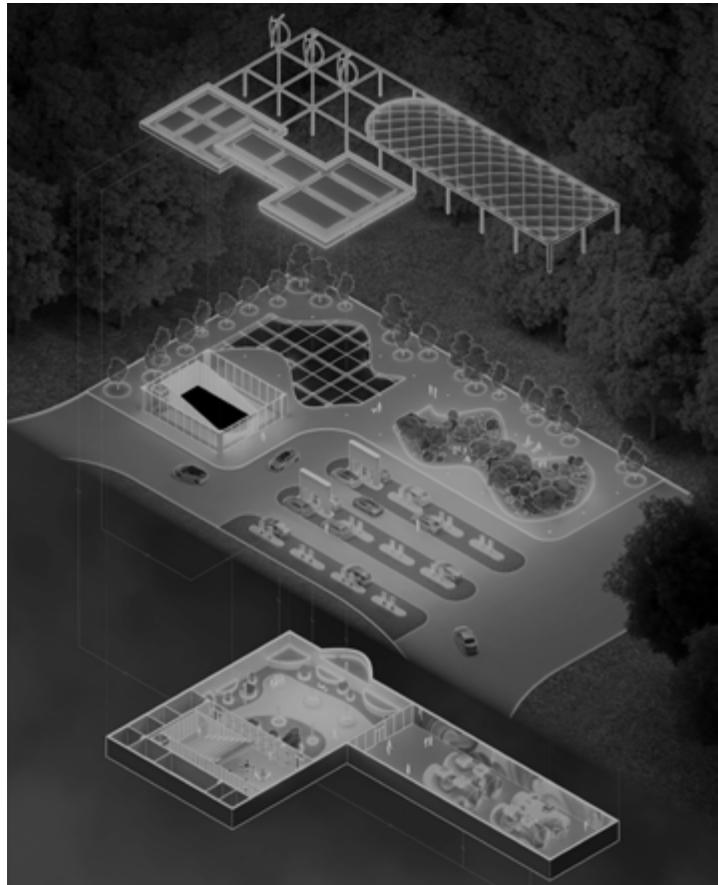


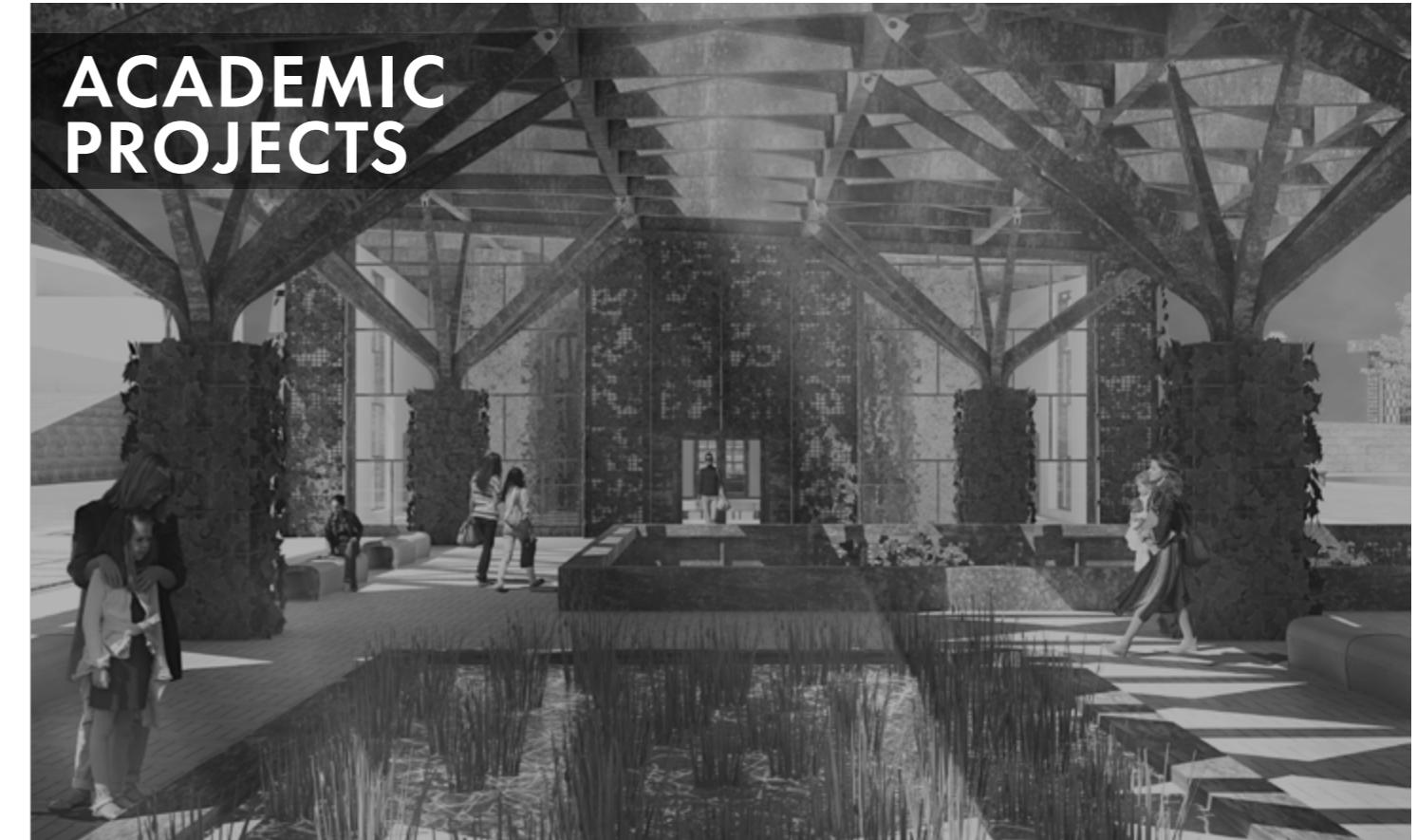


MSTISLAV KOCHKIN'S
SAMPLE PORTFOLIO
2021/25 SELECTED WORKS

CONTENTS



3 Competition, 3 Academic and some more...



COMPETITION
ENTRIES



TRI_ARCHY

Competition Entry / Finalist

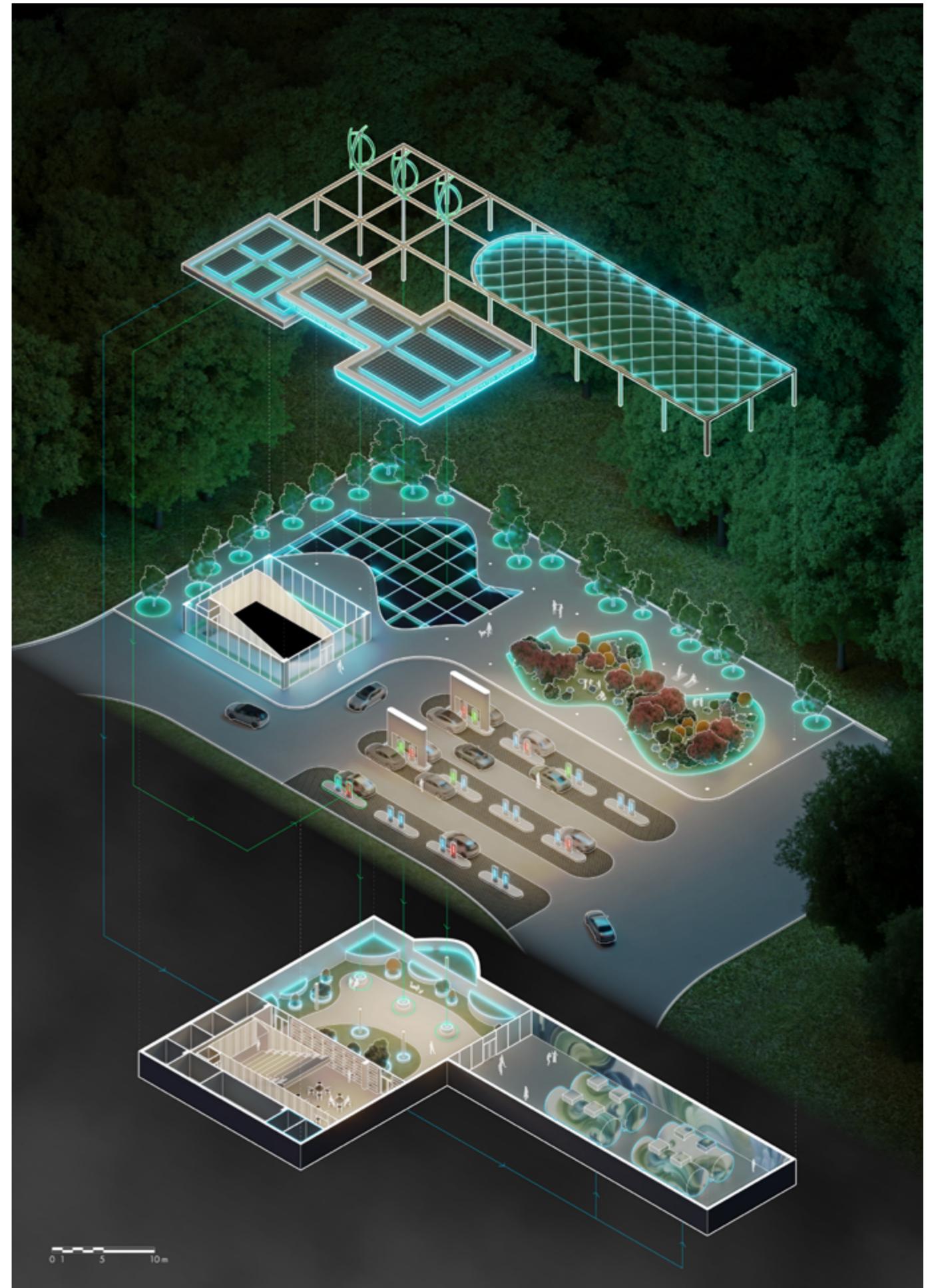
Site Unspecified / 2025

#Three #AdaptiveReuse #Renewable #Green #Developing

With the emergence of petroleum-powered vehicles, the gas station became a vital typology and will not perish with the emergence of electric cars, but its program may change. While petroleum cars are fuelled in minutes, electric vehicles take longer to reach sufficient cruise range. This entry proposes converting the abandoned rural gas station into a charging bay with spaces for resting, education, physical development, and socialising during the charging hours. The TRI_ARCHY describes three components in each design aspect. The architectural design adaptively reuses the store building, canopy and underground cisterns. The green vertical hierarchy includes a wetland roof, an outdoor winter garden with an ETFE canopy, and an indoor winter garden. The spatial organisation is formed around a development hub, indoor vertical farming, and a digital & media art gallery. The sustainability strategy includes wind power, sunlight and harvested water.



PHOTO REFERENCE

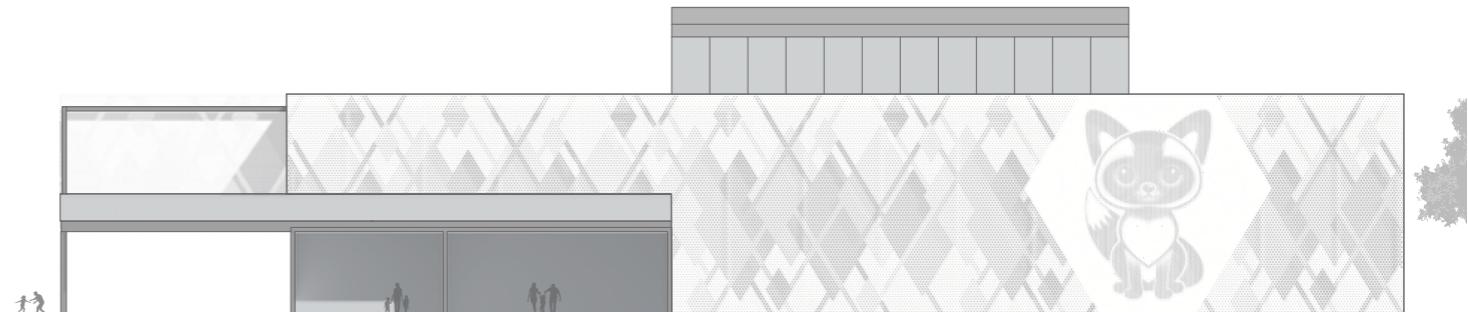
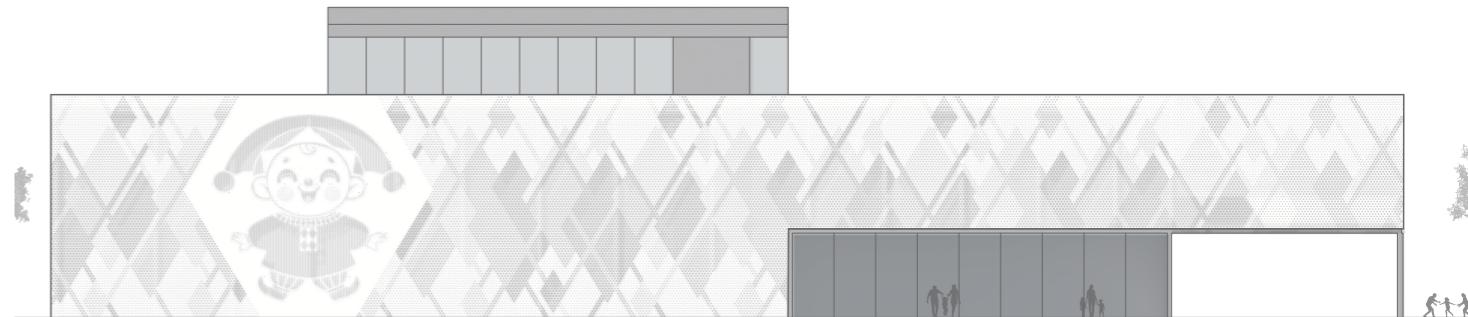


SUBMISSION ISOMETRIC DRAWING

PETRUSHKA PUPPET THEATRE

Competition Entry
Surgut, Russia / 2024

Russian Avant-garde inspires the main pattern of the façade entry, composed of deconstructed rhombuses, which is historically one of the main geometric shapes in theatrical and circus art. The shape of the pattern was achieved through geometric transformations of rhombuses, followed by breaking them down into a more dynamic composition using a diagonal grid. The different perforation sizes of the panels add shades to the plain façade. Medallions with stylised images of Petrushka and Silver Fox will be placed on the northern and southern facades of the theatre. Petrushka is one of the classic characters of the Russian puppet theatre, and the theatre will be named after him. The silver fox is considered one of the symbols of Surgut, for which it was awarded placement on the city's coat of arms and flag. The cartoonish style of the image contrasts with the strict geometry of the main pattern to emphasise that this theatre is for children



KEY ELEVATIONS (NTS)



SUMMER VISUALISATION



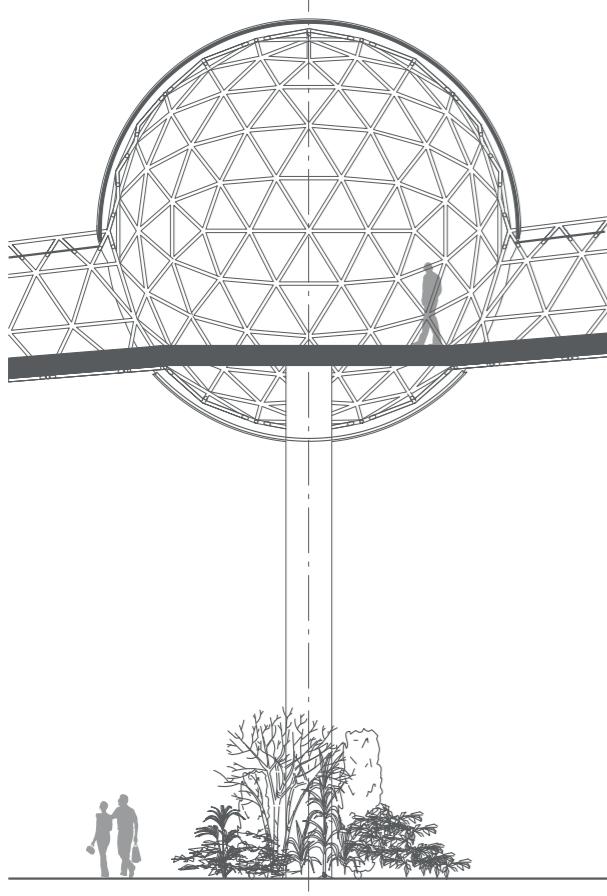
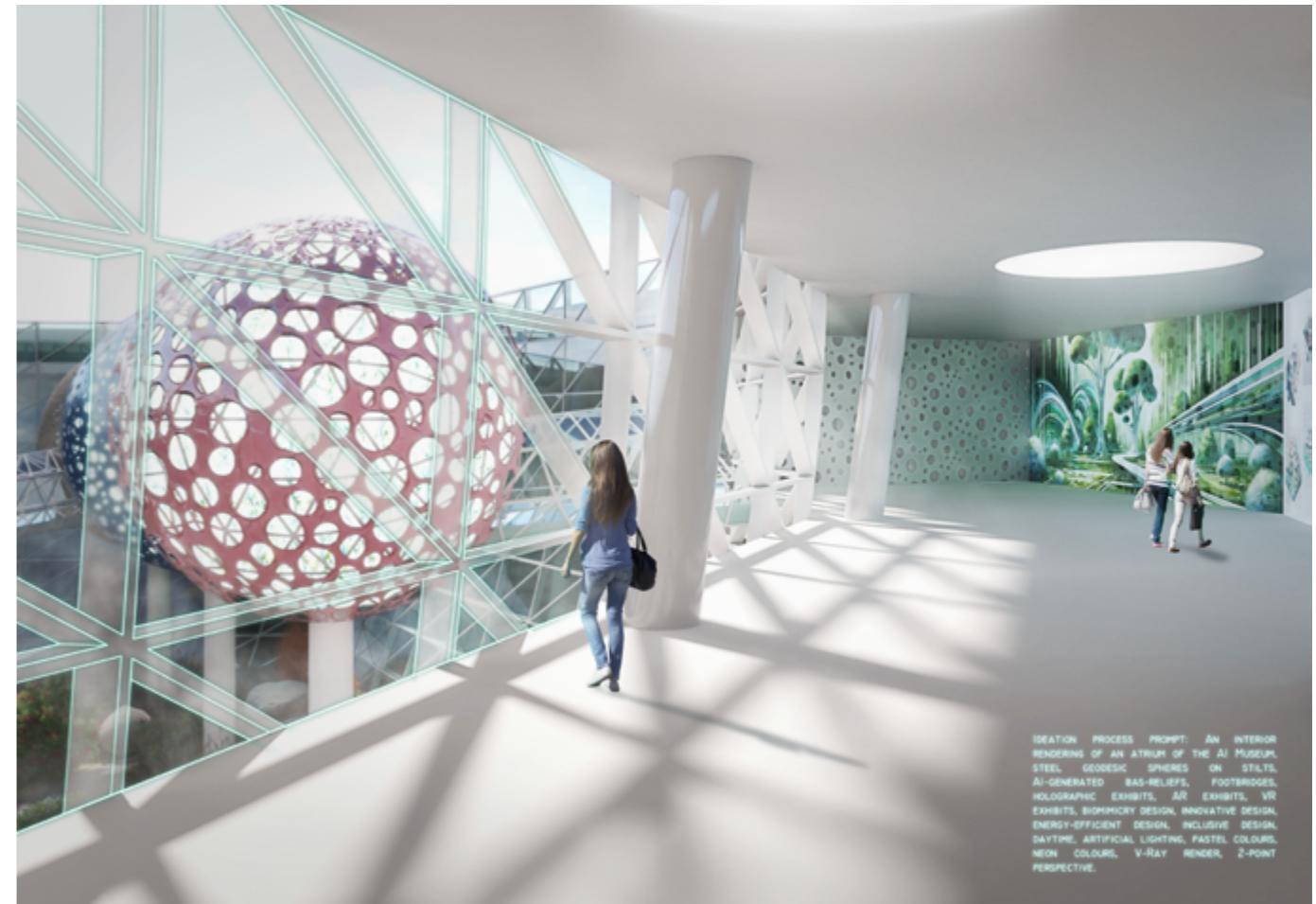
WINTER VISUALISATION

BACKPROPAGATION MUSEUM

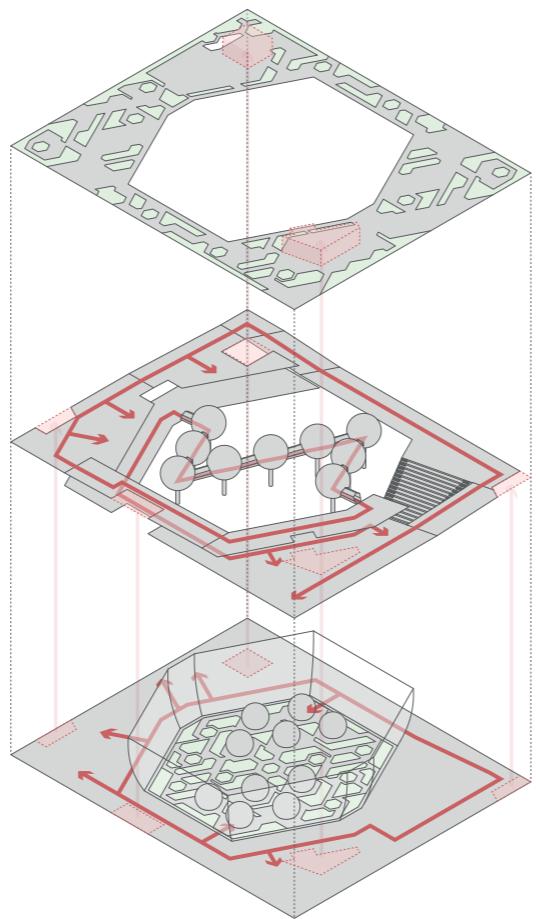
Competition Entry / Honourable Mention
Site Unspecified / 2024

#ArtificialNeuralNetwork #Backpropagation #Biomimicry #SpatialDynamics #Innovation

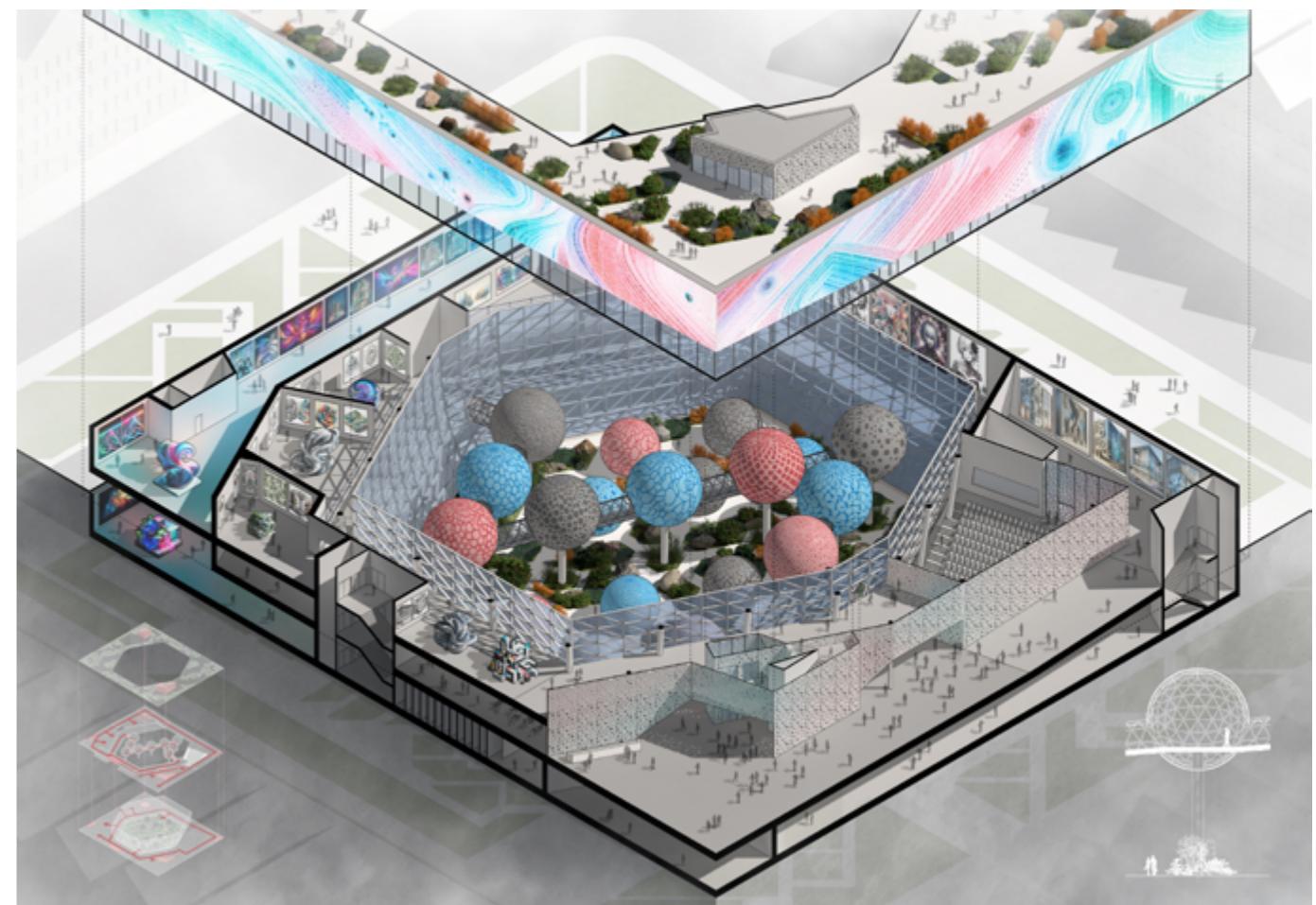
The design proposal explores a museum's spatial dynamics inspired by the Artificial Neural Network's (ANN) structure and functioning. The museum includes spaces for physical, digital, AR and VR AI-generated artworks and educational spaces to teach about AI. The display galleries and the courtyard with spherical pavilions create a looped spiral circulation pattern, in which the visitors initially ascend through the galleries (feedforward) and eventually descend through 9 raised spheres (backpropagation). TextToImage AI models were used to develop architectural design elements such as biology-based sphere finishes and interior wall bas-reliefs, LED façade, and futuristic greenery at the atrium and roof terrace. The referencing and design ideation were completed with AI using the semantic method of prompt formulation. All artworks exhibited in the concept image were generated with AI at different stages of my academic and extracurricular work.



SPHERE CROSS SECTION



CIRCULATION



SUBMISSION DRAWINGS

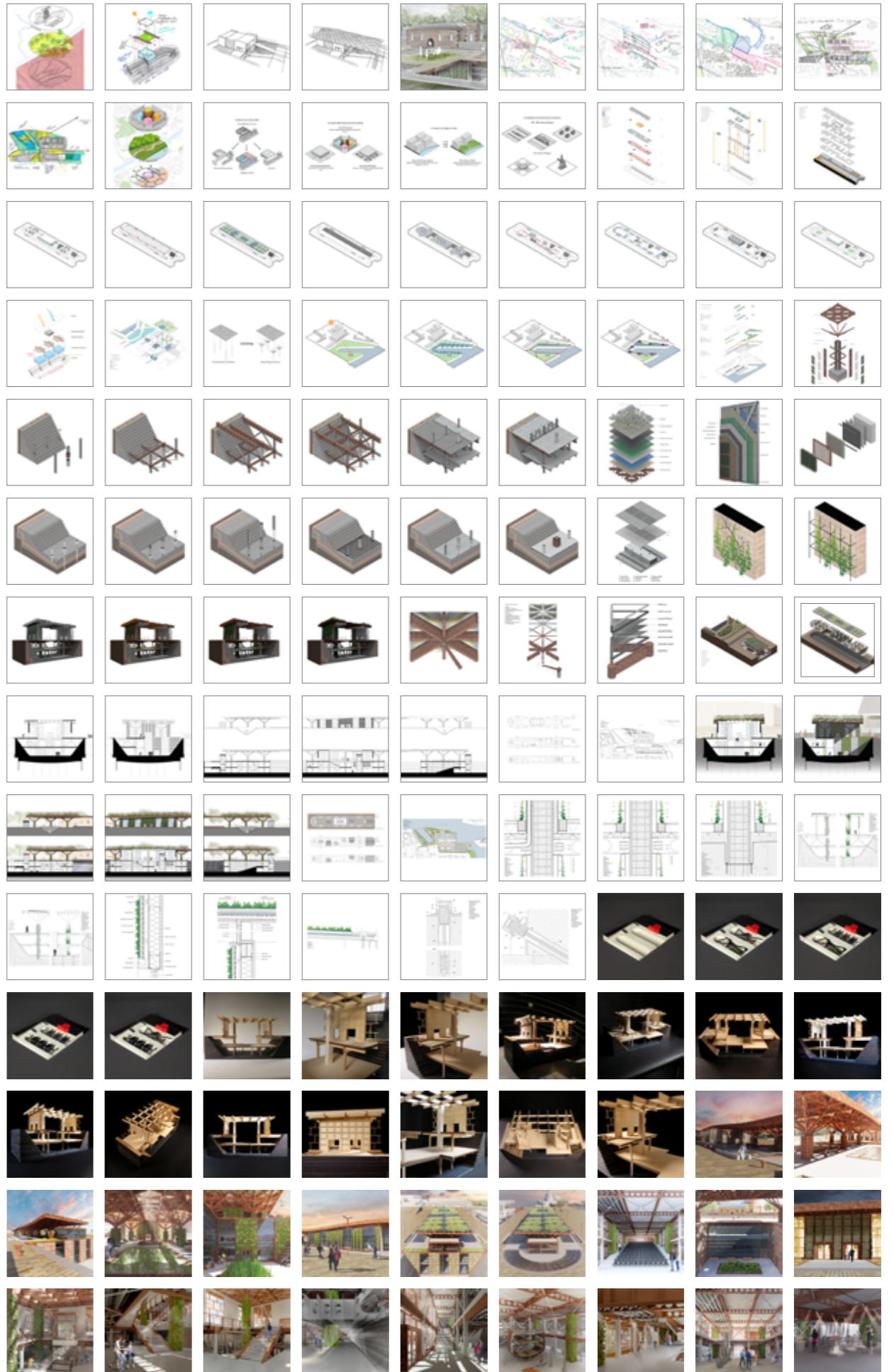
AI POWERED DESIGN IDEATION

Academic MArch (by Conversion) Thesis
Based on Final Design Thesis / 2023-24

My Master Thesis explores the potential of different forms of Artificial Intelligence in becoming a valuable assistant in architectural practice. Using Govan Reclamation Dock as the subject of study and training dataset, I investigated the potential incorporation of AI in the architectural design ideation process. In the first investigation stage, the existing architectural representation mediums were “recreated” with “black box” and “grey box” TextToImage models based on prompts created with the semantic method. In the second stage, the AI was tested in the design development from day one, which included research with AI chatbots, feasibility studies and massing development with AI-powered CAD software and generation of design iterations using TextToImage models. This chapter demonstrates the critical AI design methods derived from the completed research and tests.



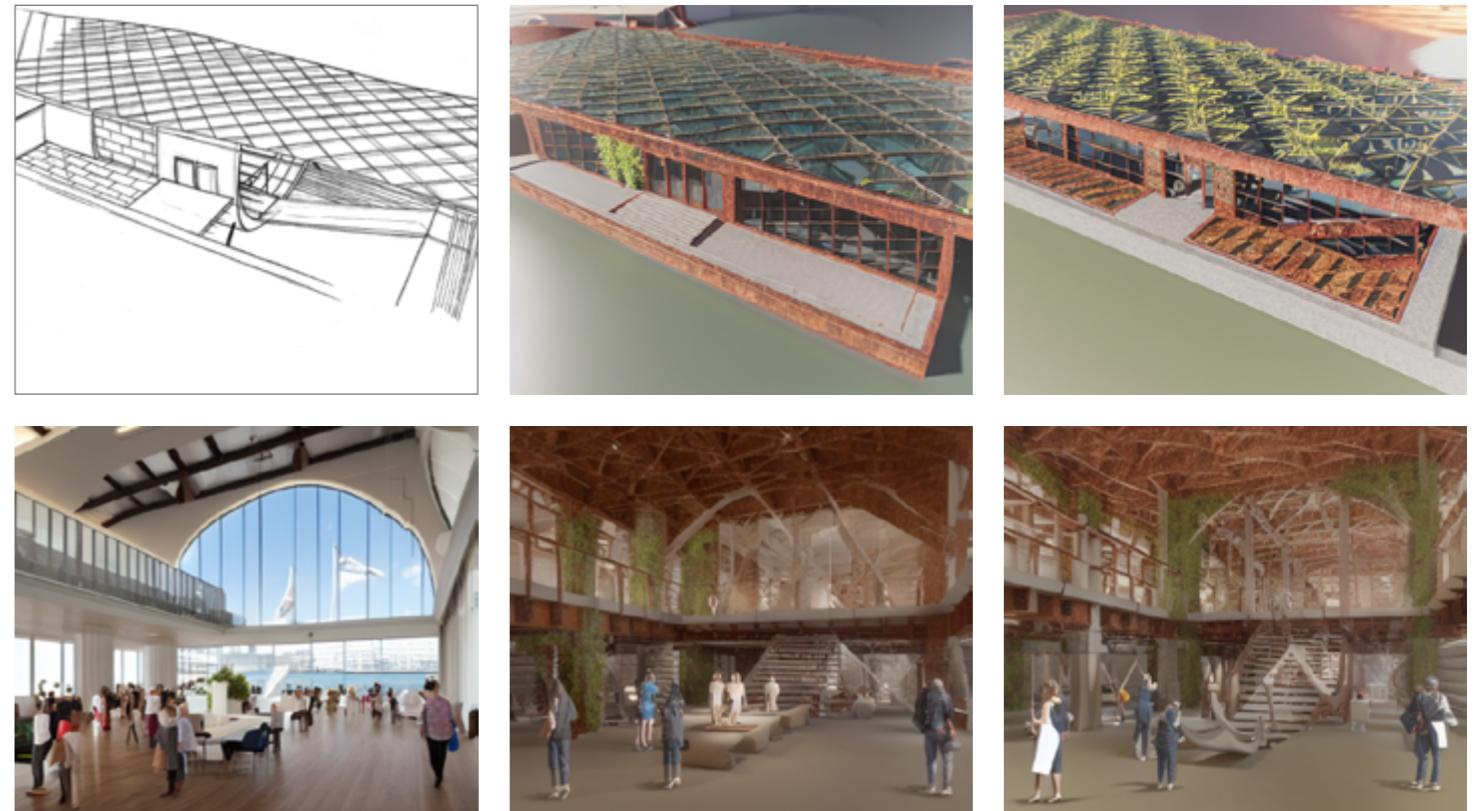
AI-GENERATED CAFE BUILDING PLACED IN GOVAN RECLAMATION DOCK SITE



DATASET BASED ON THE FINAL DESIGN THESIS

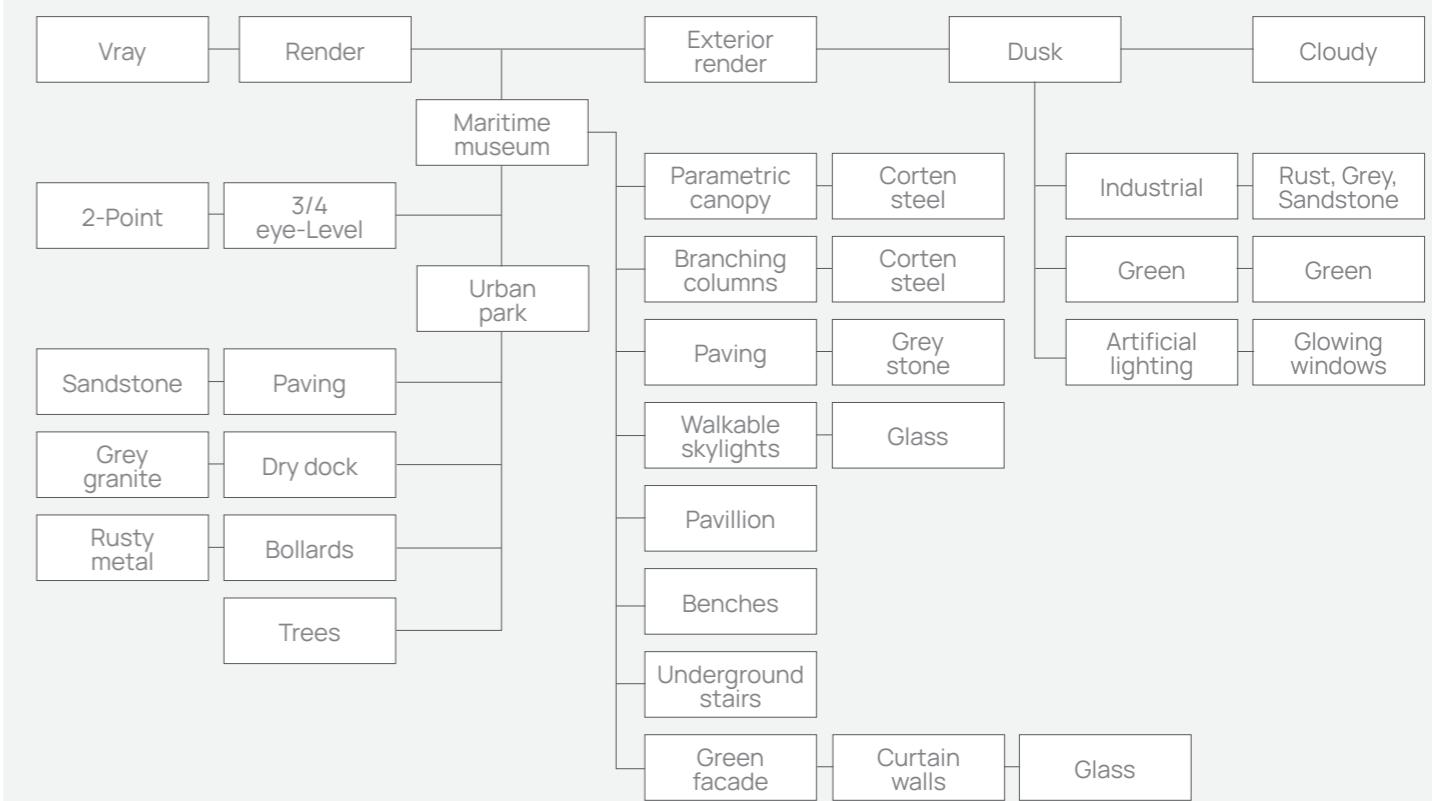


EXTERIOR RENDER GENERATION / UNTRAINED (TOP) & TRAINED (BOTTOM) AI MODELS



STYLE TRANSFER / TRAINED STABLE DIFFUSION

Prompt: A 3/4 eye-level view of the architectural exterior render of a dry dock maritime museum in an urban park in the dusk. Pavilion, green facade with glass curtain walls, corten steel parametric canopy, corten steel branching green columns, grey stone paving, glass walkable skylights, benches, and underground stairs. Grey granite dry docks, rusty bollards, sandstone paving and trees in the background and foreground. Industrial atmosphere, green atmosphere, artificial lighting, glowing windows, dark cloudy sky, rust colour, grey colour, sandstone colour, green colour, 2-point perspective, VRay render.



GOVAN RECLAMATION DOCK CAFE BUILDING GENERATION WITH AI TOOLS

PROMPT ENGINEERING WITH SEMANTIC MAPPING

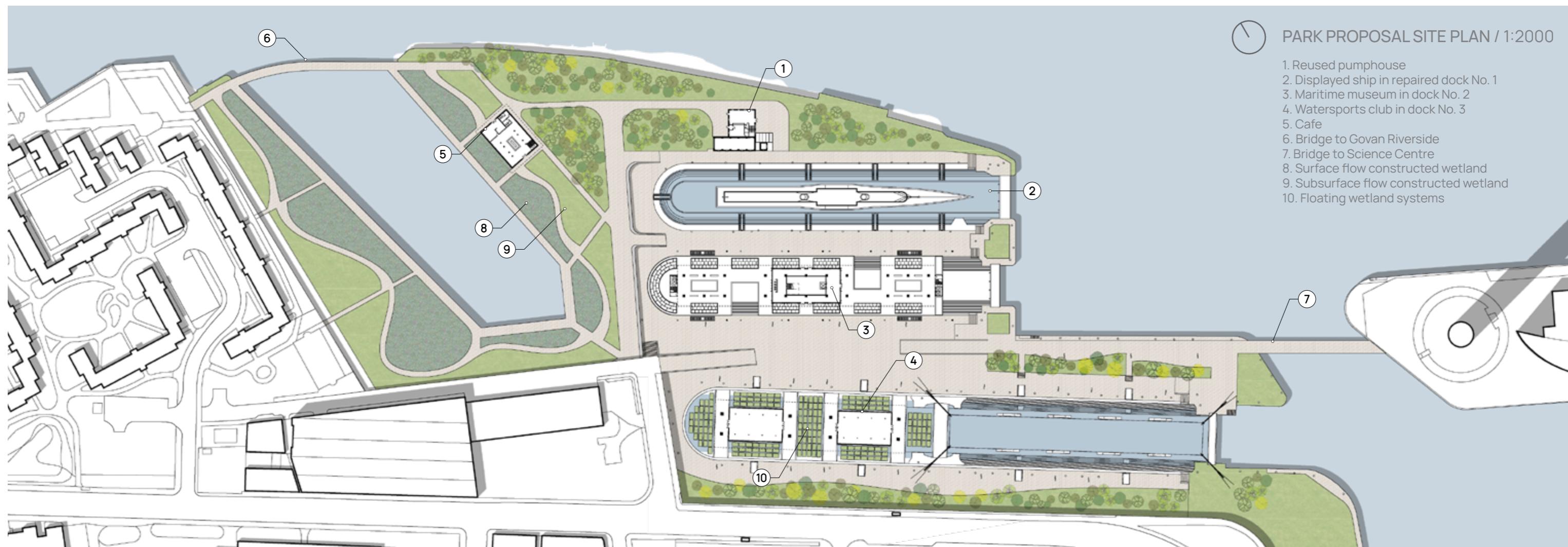
GOVAN RECLAMATION DOCK

Academic Final Design Thesis
Glasgow, UK / 2021-22

The DipArch Final Thesis project explores the ability of the urban park to solve social deprivation. Inspired by Henri Lefebvre's "Right to the City" Govan Reclamation dock attempts to resurrect Govan, a shipbuilding district of Glasgow, that became deprived after deindustrialisation. The park accommodates versatile typologies and design solutions to celebrate the local industrial heritage and offer job opportunities, and physical and intellectual development. The constructed wetlands would contribute to the decontamination of the site and adjacent areas from remainders of industry and contribute to circular economy. Evocative architectural design should turn Govan into a destination and attract visitors and new investments. Such provision of these social benefits to local people would encourage them to contribute to city development.

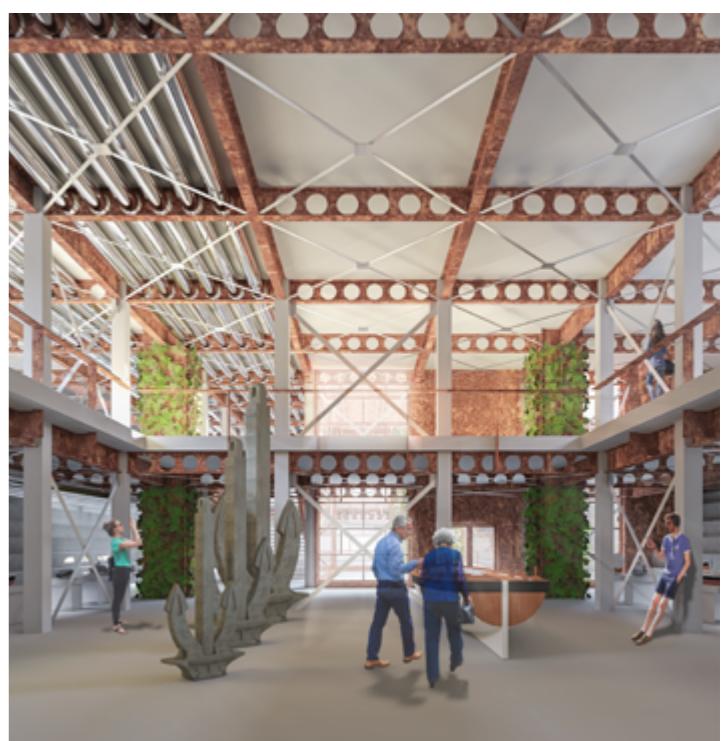
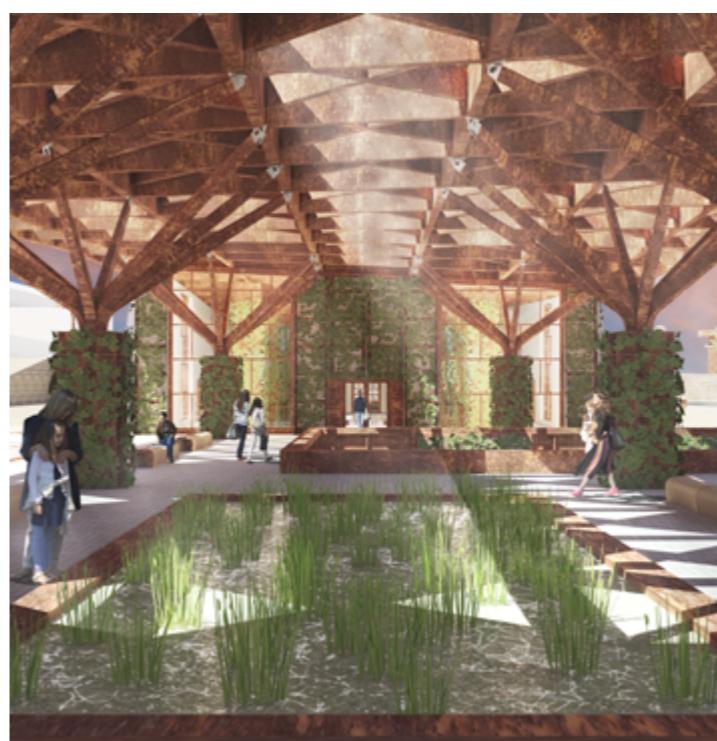
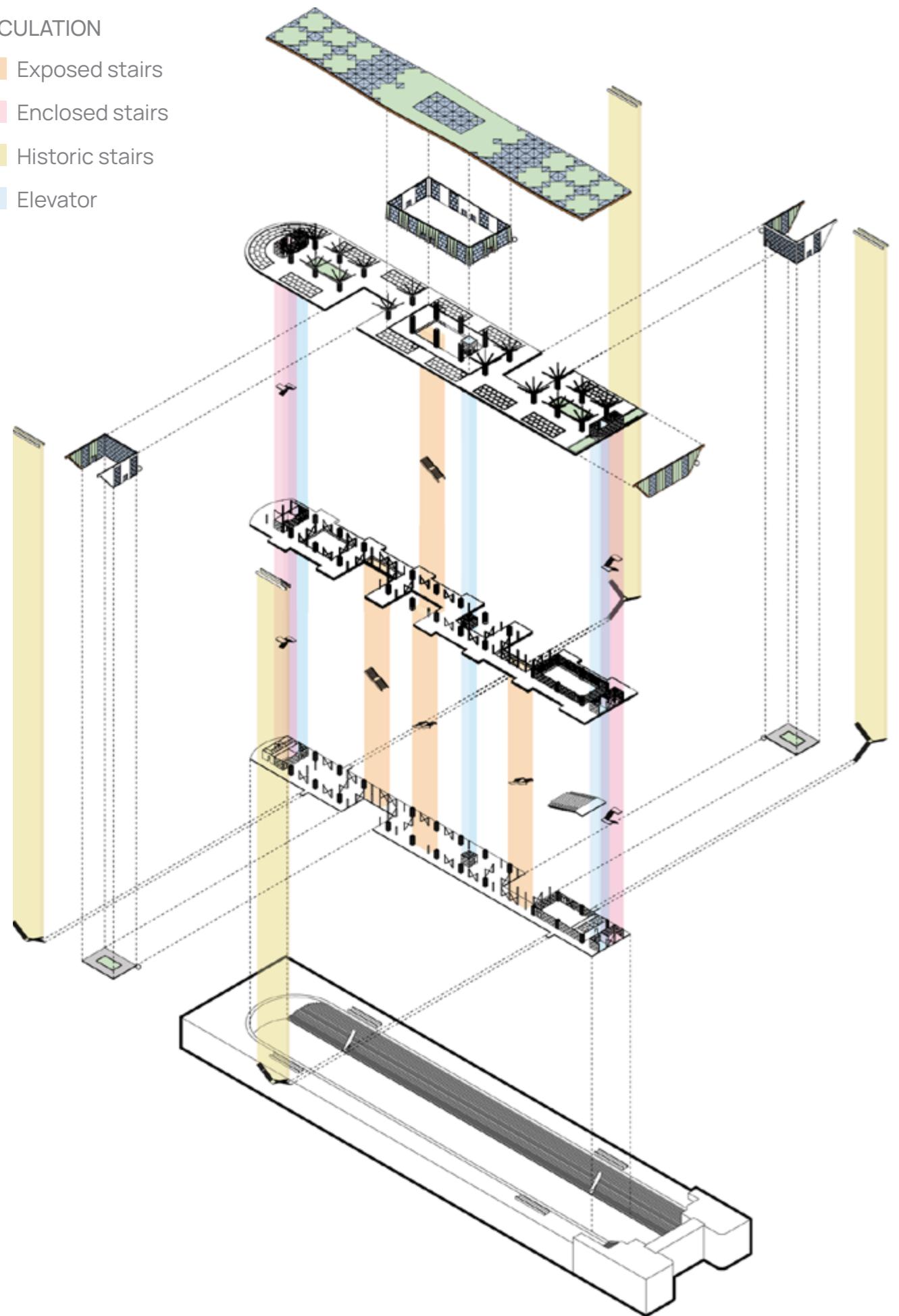


AERIAL VIEW

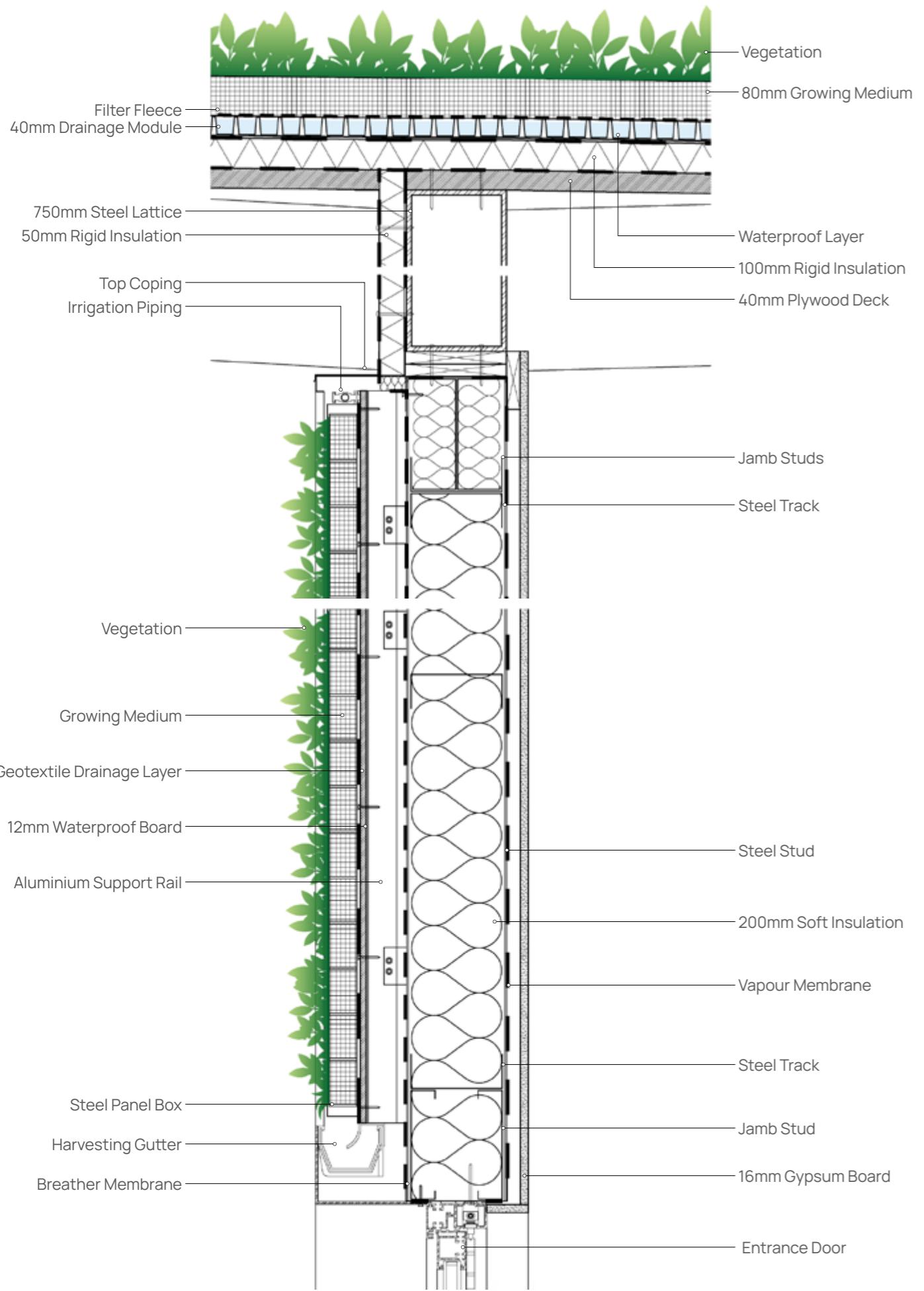


CIRCULATION

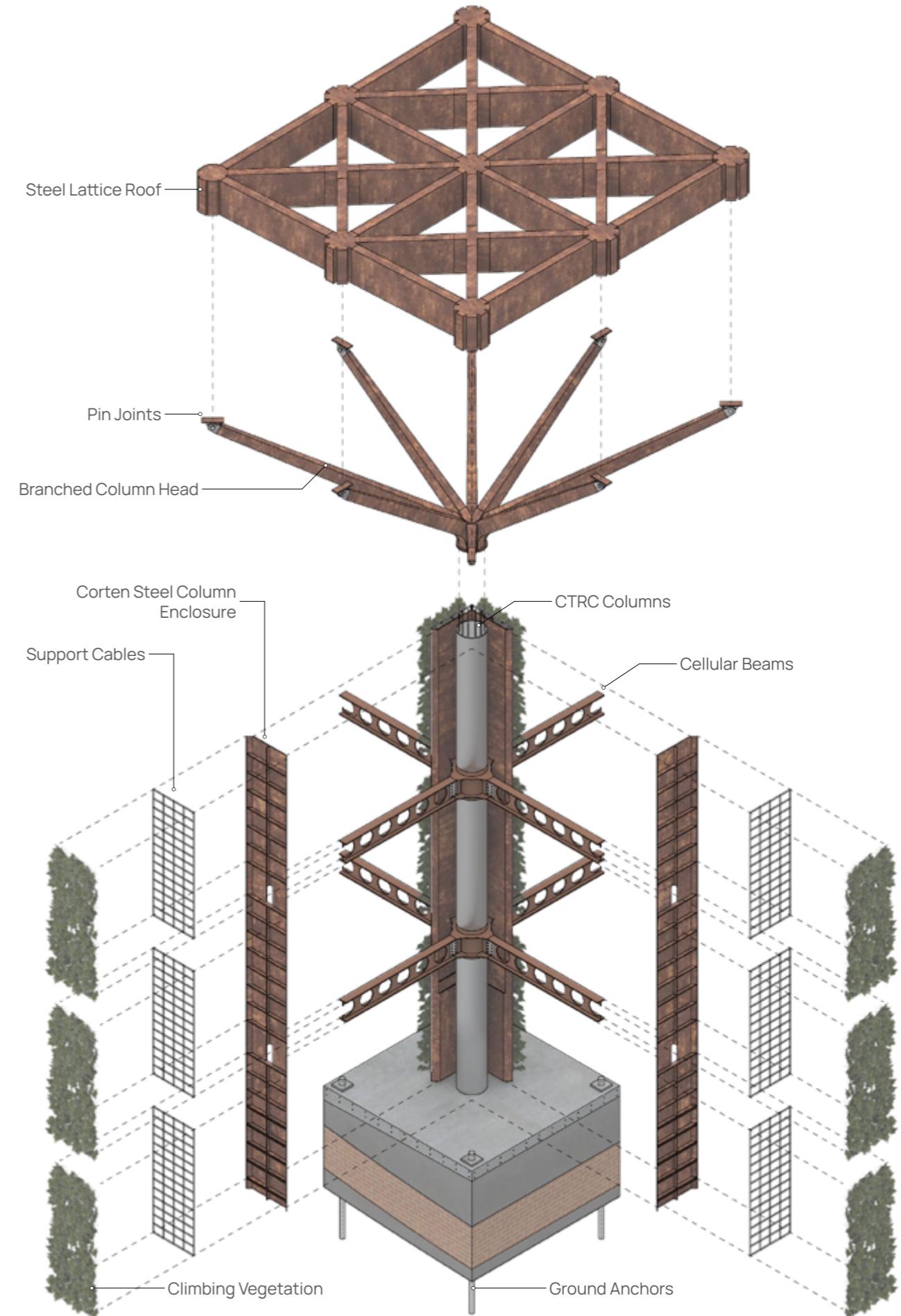
- Exposed stairs
- Enclosed stairs
- Historic stairs
- Elevator



MARITIME MUSEUM VISUALISATIONS



ROOF & WALL DETAIL



CANOPY COLUMN STRUCTURE

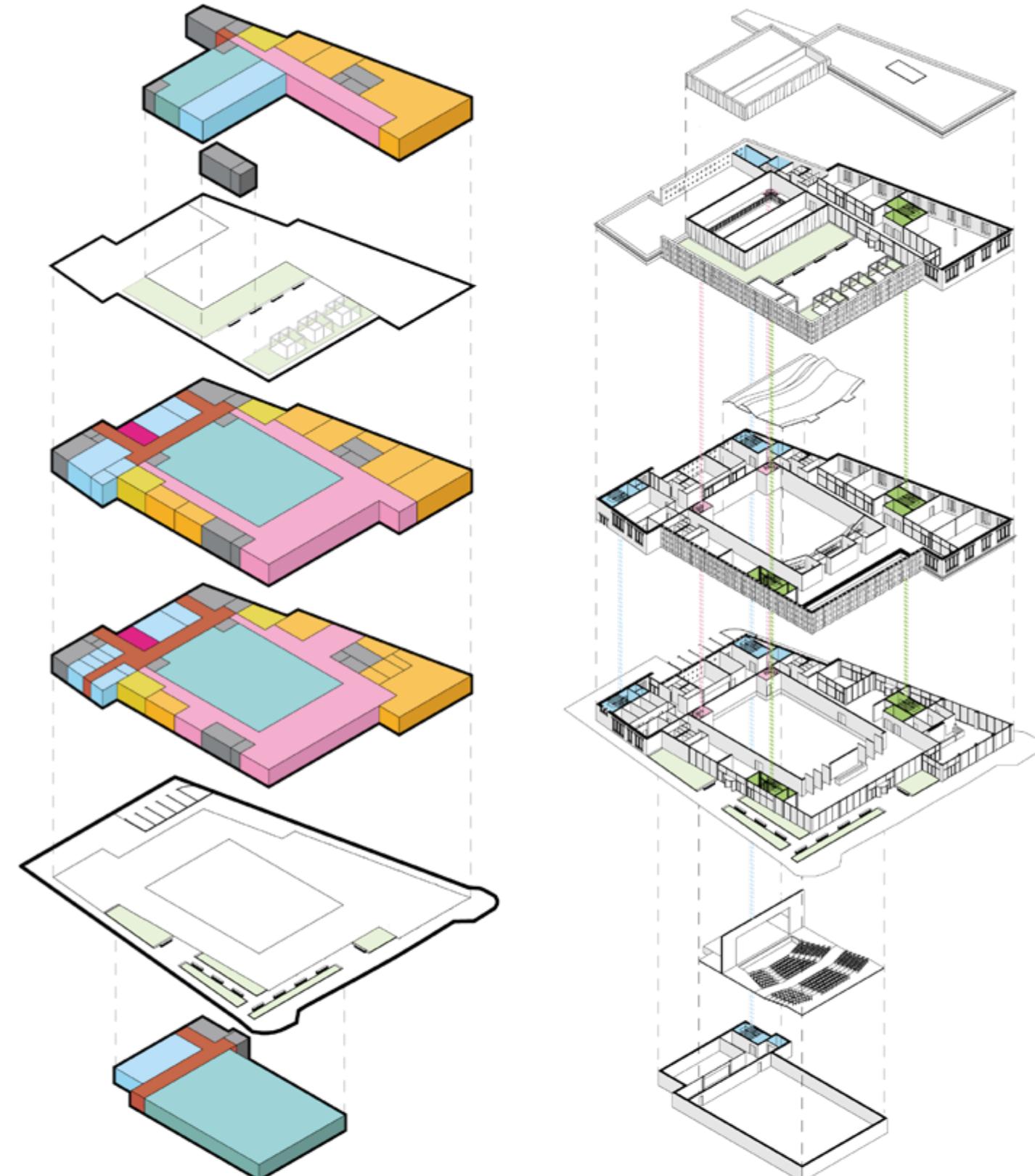
THE BARRAS ARTS CENTRE

Academic Project
Glasgow, UK / 2021

The project proposes the introduction of a multipurpose venue as the solution for society's recovery from the consequences of COVID-19. The site is located in Bridgeton & Calton neighbourhoods, which are characterised by limited access to educational, recreational and physical development opportunities, which were deteriorated by stress from self-isolation during pandemics. The building design seeks to solve this by using an automated auditorium, which transforms depending on the event. The mixture of different programs must maximise the opportunities for local deprived people to socialise and entertain after pandemics. The architectural design combines adaptive reuse of historic buildings, located on site, and introduces a new parametric façade. The façade design is inspired by the penicillin colony, discovered by Alexander Fleming, which celebrates Scottish people's contribution to overcoming global pandemics.



FACADE NIGHTTIME VIEW

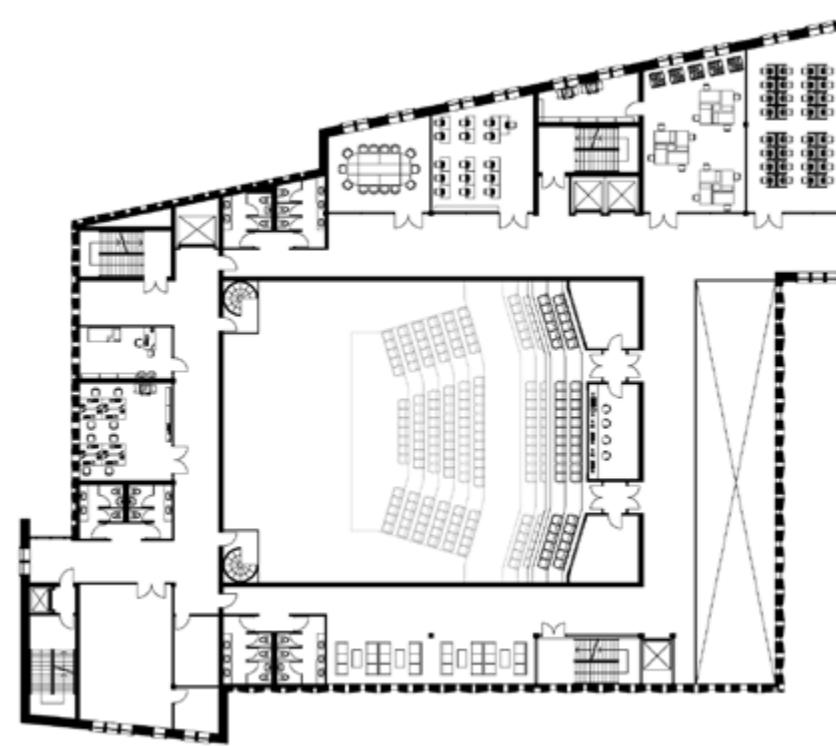
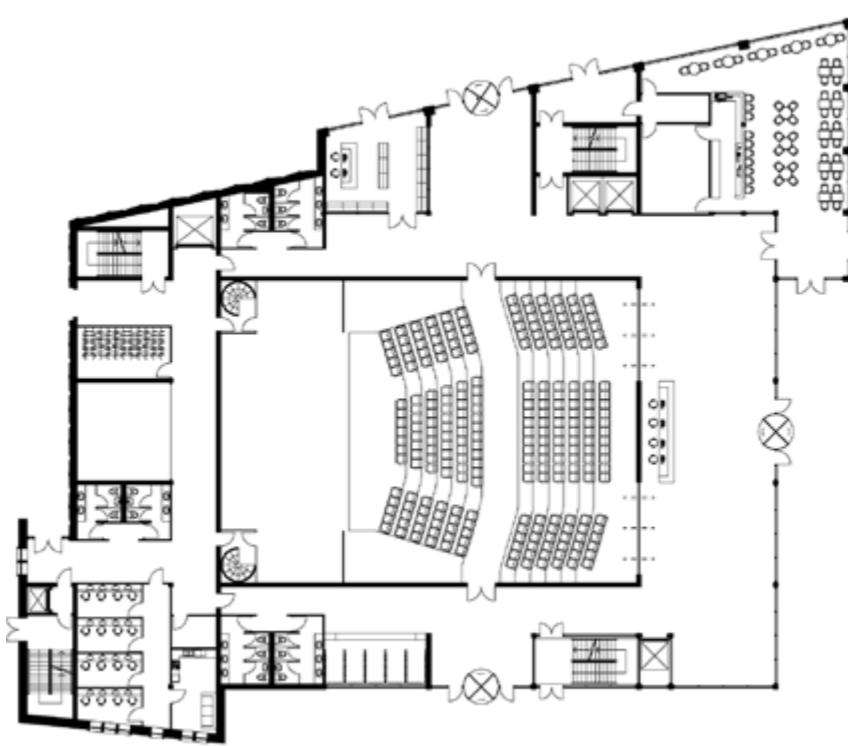


Block Functions

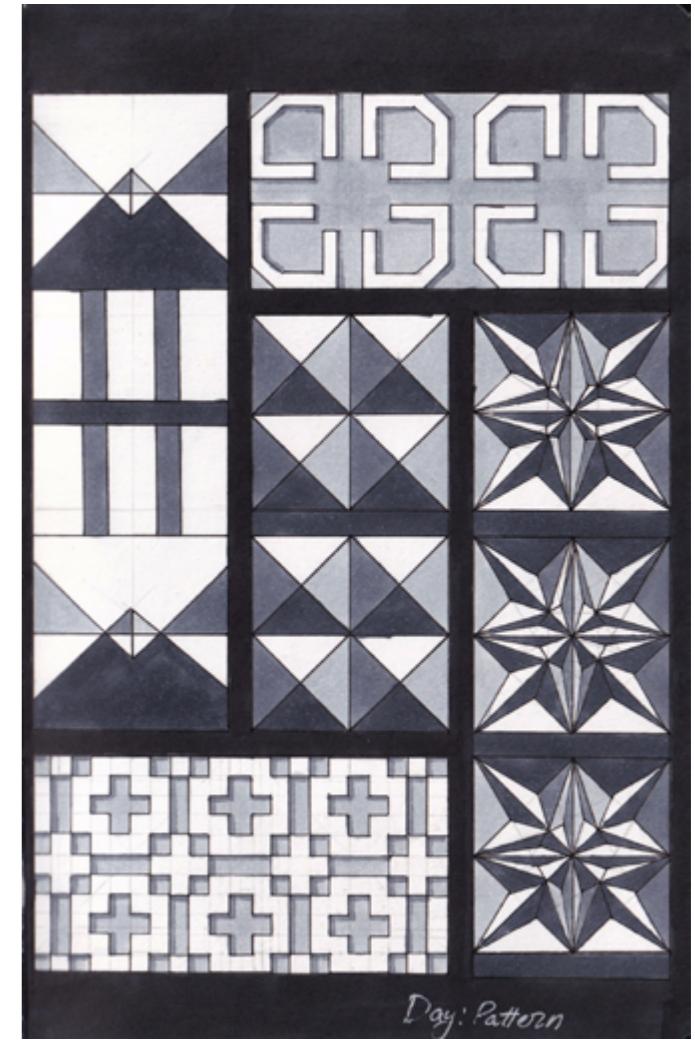
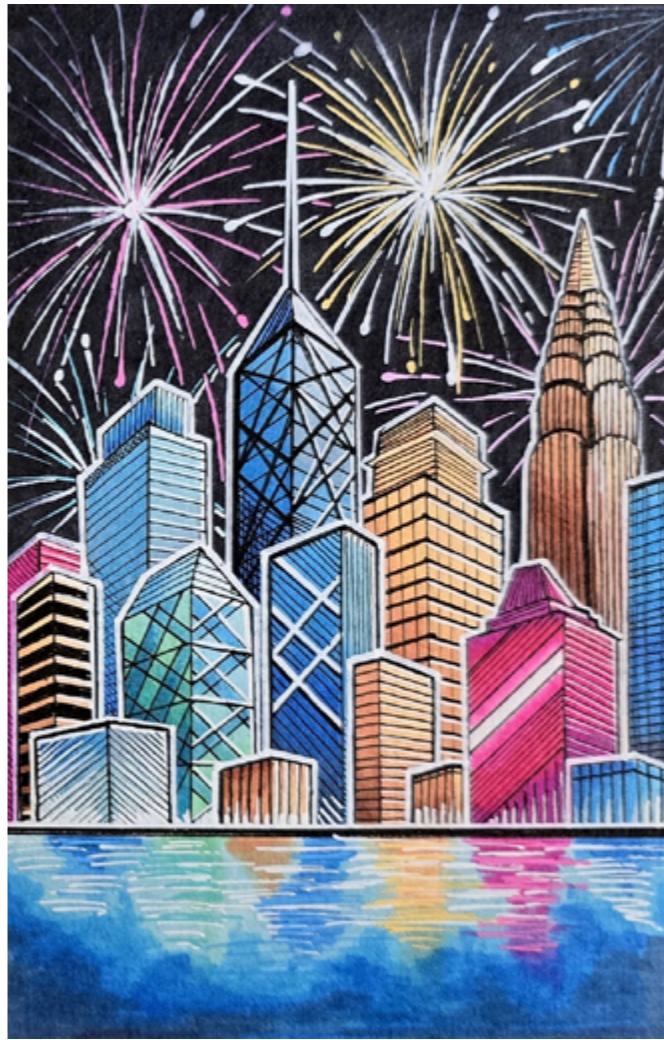
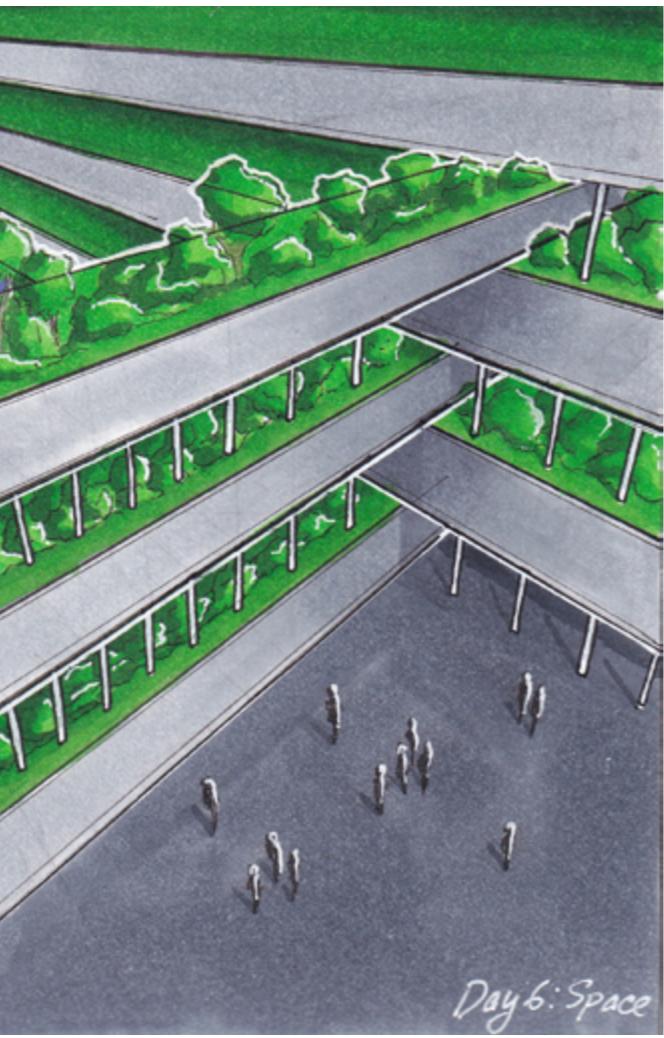
Yellow	FOH Spaces	Red	BOH Circulation
Pink	FOH Circulation	Magenta	BOH Toilets
Yellow	FOH Toilets	Teal	Multipurpose Auditorium
Blue	BOH Spaces	Grey	Vertical Transportation

Circulation

Green dashed lines	FOH Vertical Transportation
Blue dashed lines	BOH Vertical Transportation
Pink dashed lines	Auditorium Vertical Transportation



ARCHITECTURAL SKETCHES



ARCHITECTURAL SKETCHES

DIGITAL ART



QUIET AFTERNOON / PERSONAL PROJECT / 2025



NEON RIDER / PERSONAL PROJECT / 2025



FJORD / PERSONAL PROJECT / 2025

DIGITAL ART

SPORTS DESIGN



UTEP MINERS SPECIAL EDITION JERSEY / COMPETITION ENTRY / 2025



FEYENOORD FC 4TH JERSEY / COMPETITION ENTRY / 2025

