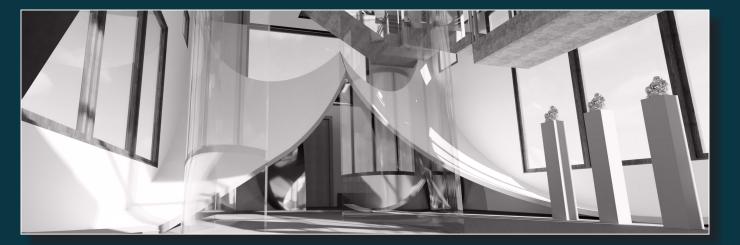
COMPUTATIONAL ENGINEERING CHRISTIAN HINZE



Art Gallery Autodesk Revit & Rhinoceros 6.0

Rhinoceros 6.0 was used for general abstract shape finding in this exercise.

The resulting forms were imported to Revit and applied inside the mandatory default structure.

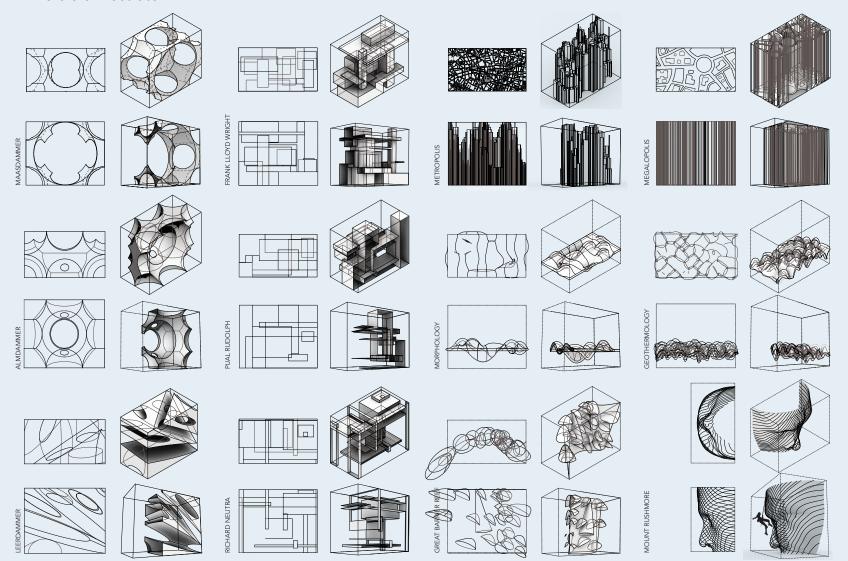
The cube structure was refined with windows, doors, skylight openings as well as floor levels which were determined by the imported 3D shapes.

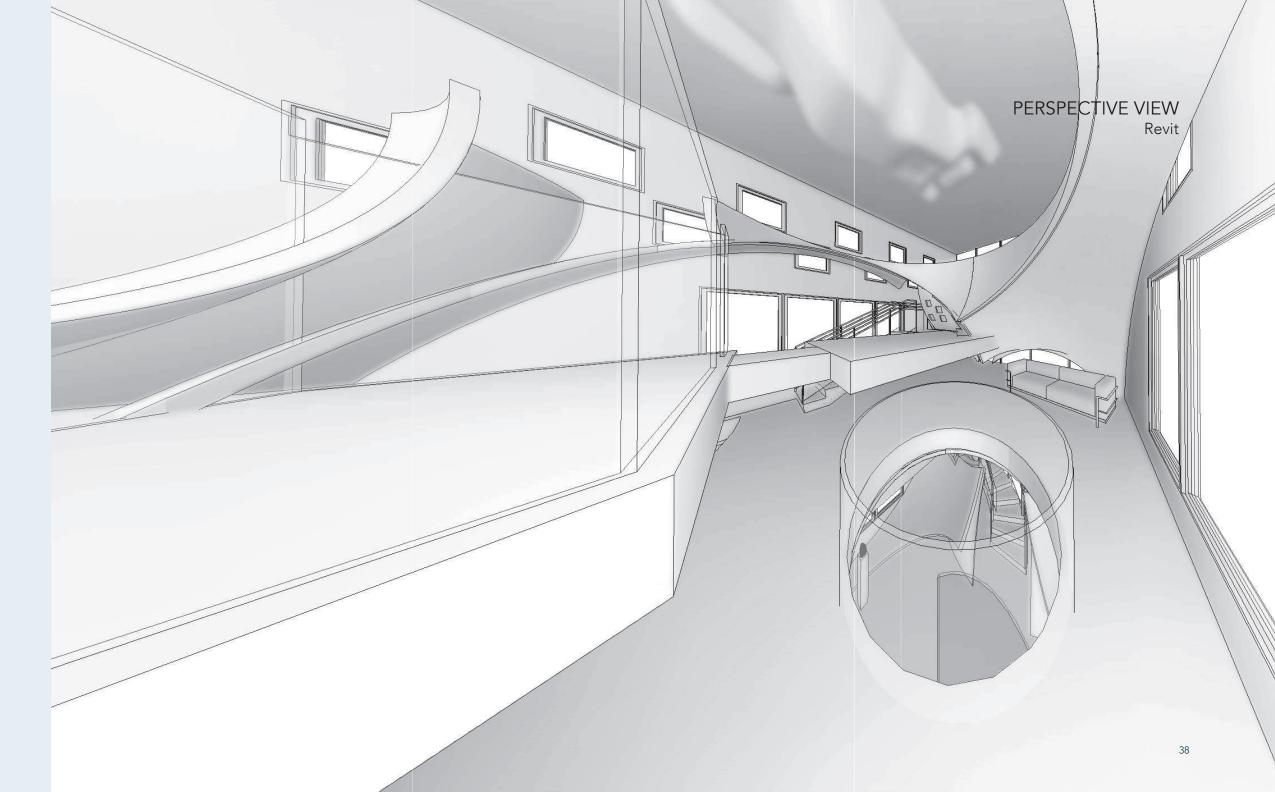
Material application, light and prespective view finding were achieved with Revit's internal rendering engine.



3D MODELLING STUDIES

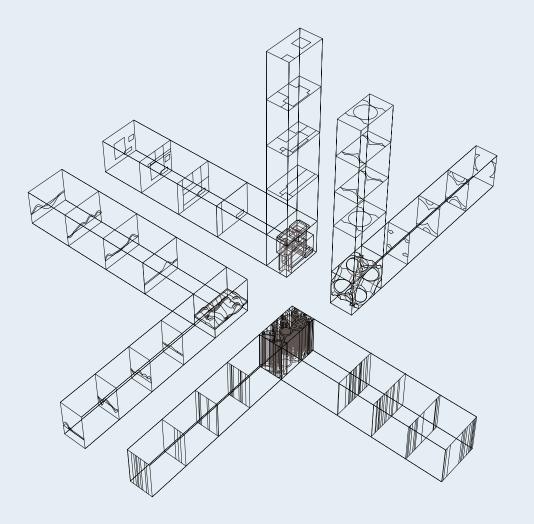
Rhino 6.0 & Illustrator

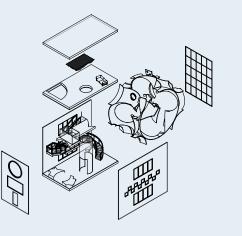


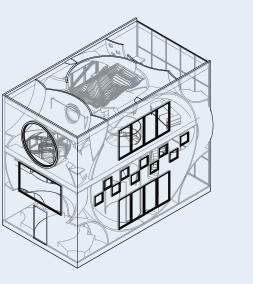


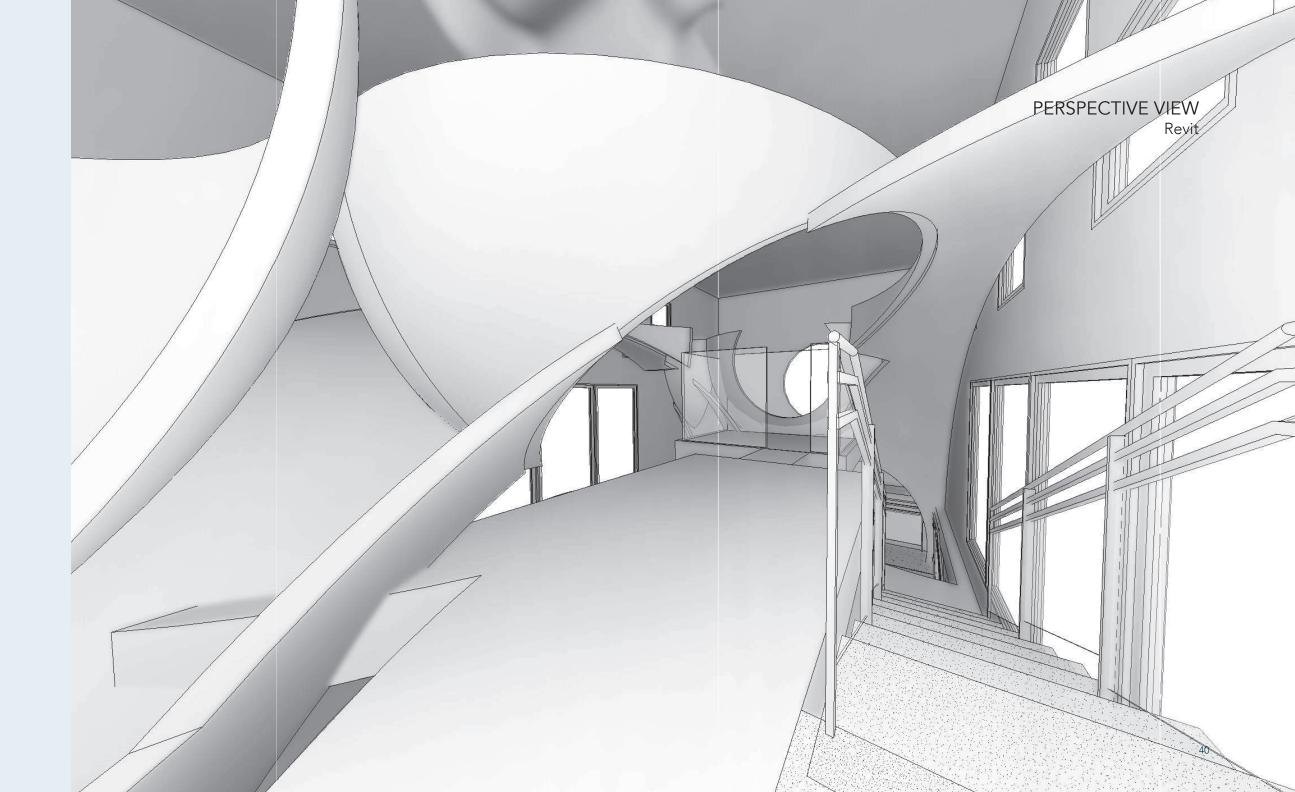
SHAPE FINDING AND APPLICATION

Rhino 6.0, Revit & Illustrator

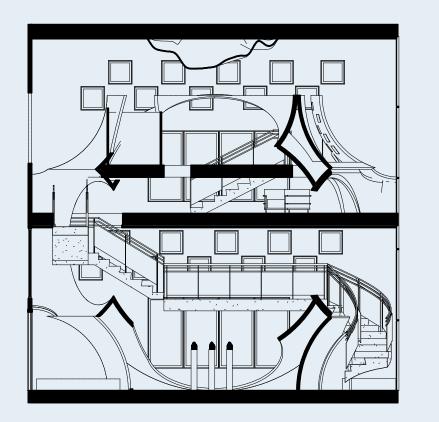


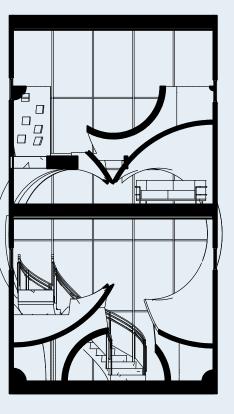


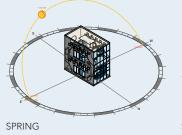


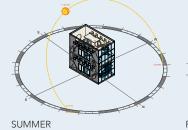


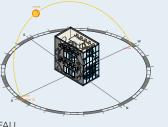
MODEL SECTION AND SOLAR INFLUENCE Revit

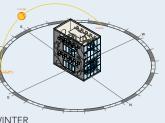


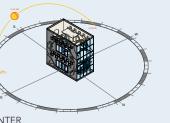


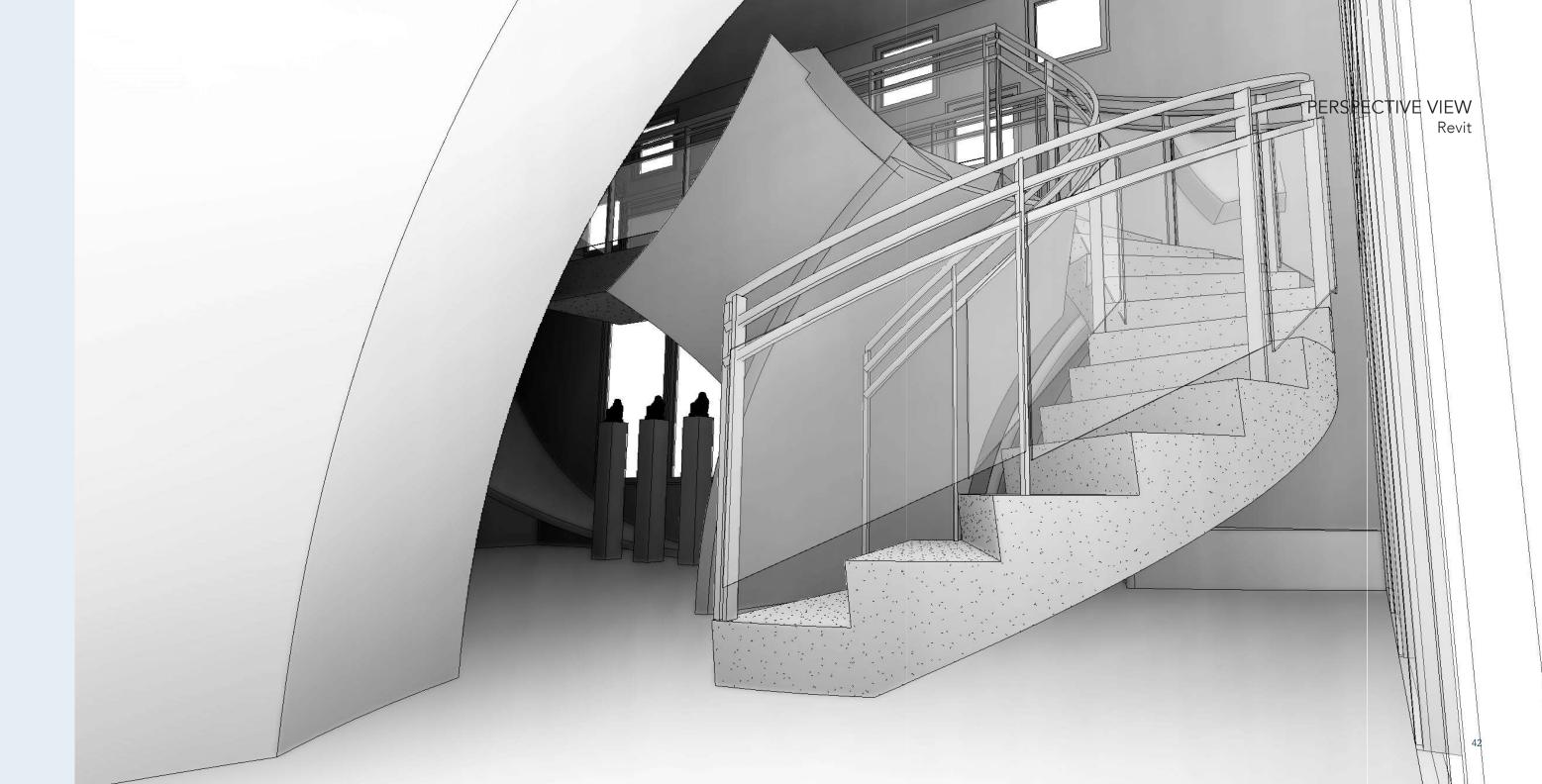












COMPUTATIONAL ENGINEERING SOFTWARE SKILLS SELECTION



FORT BATTERY WEED Environmental Defense Fund Headquarters

A Retreat Facility on Staten Island

This headquarter for the Environmental Defense Fund (EDF) cares about the preservation of water in all of its forms.

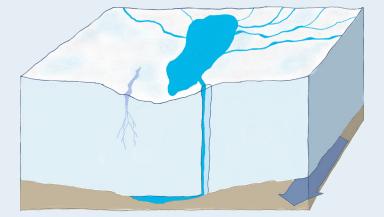
This project focuses on the impacts of global warming in regards to water level rising, ice shelf calving and the creation of rapidly growing glacial voids.

This concept explores and elucidates natural occurrences on a micro-scale level through its sculped structures, inspired by the shapes of frozen water within the setting of Fort Battery Weed.

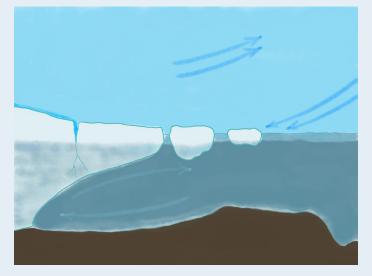


GLOBAL WATER WARMING - DIAGRAMMATIC ANALYSIS

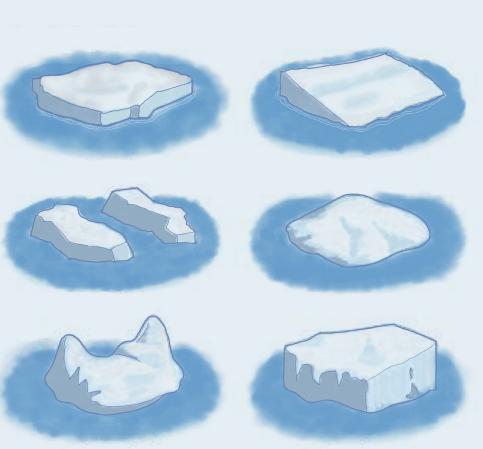
Hand Drawn Sketches enhanced with Adobe Creative Suite



formation of glacial lakes / voids



iceberg calving

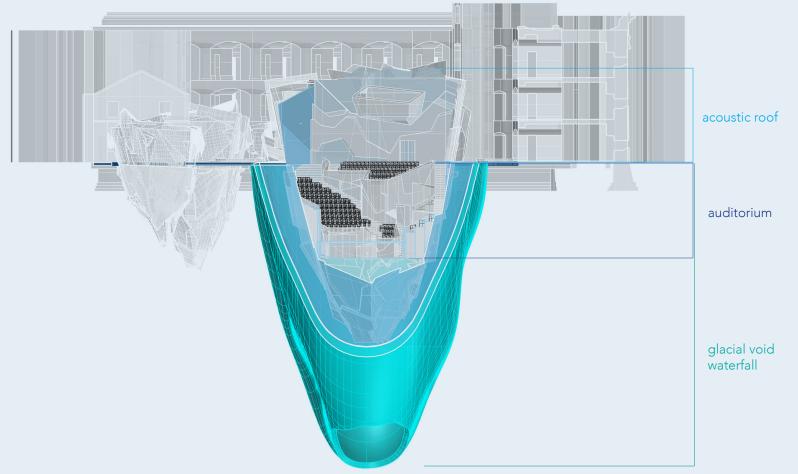


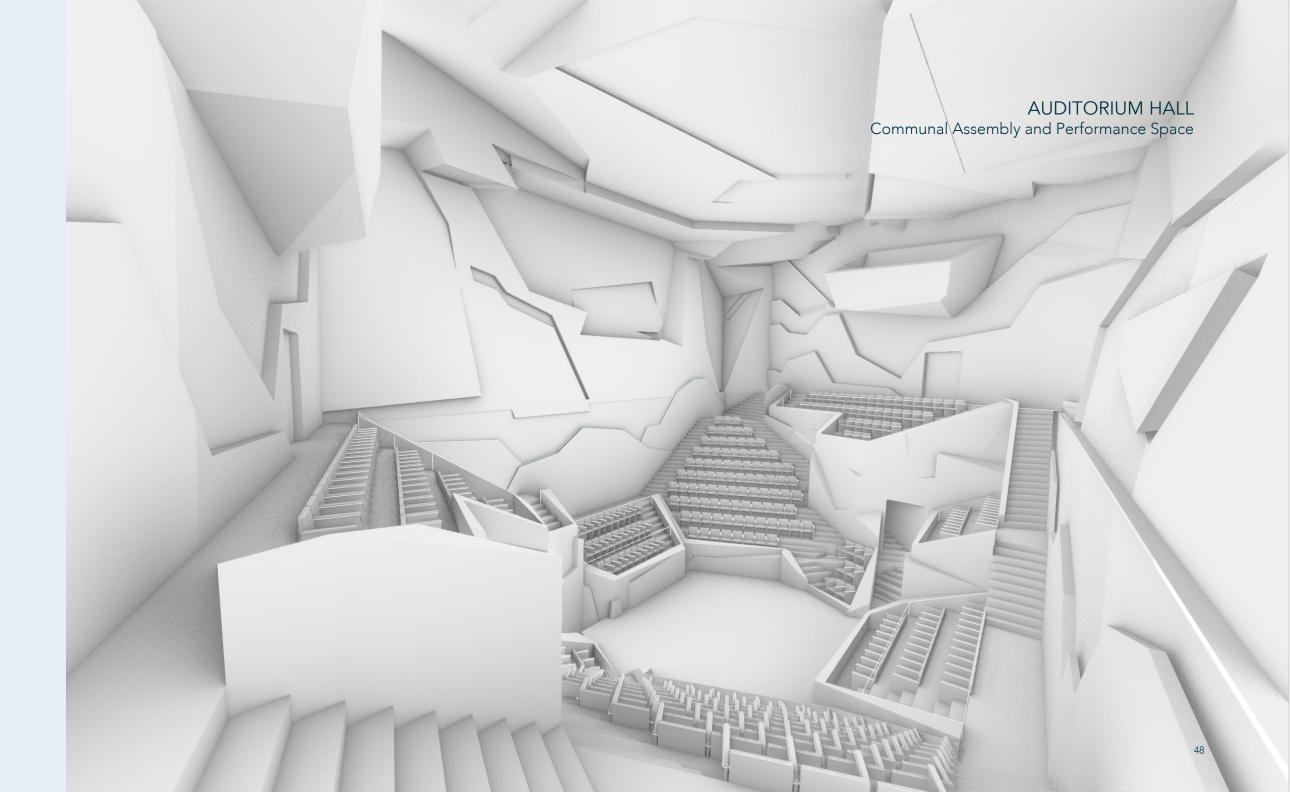
study of common shapes and iceberg formations



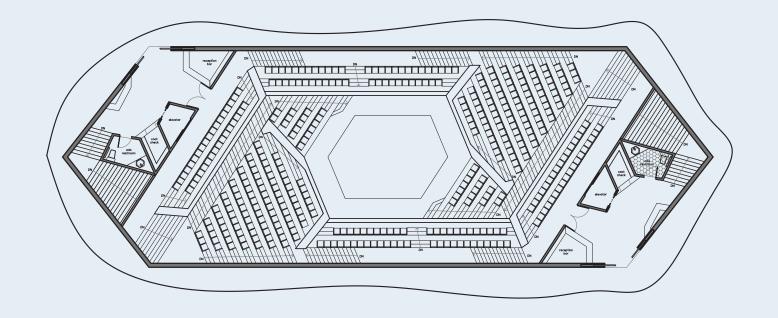
DIAGRAMMATIC SECTION

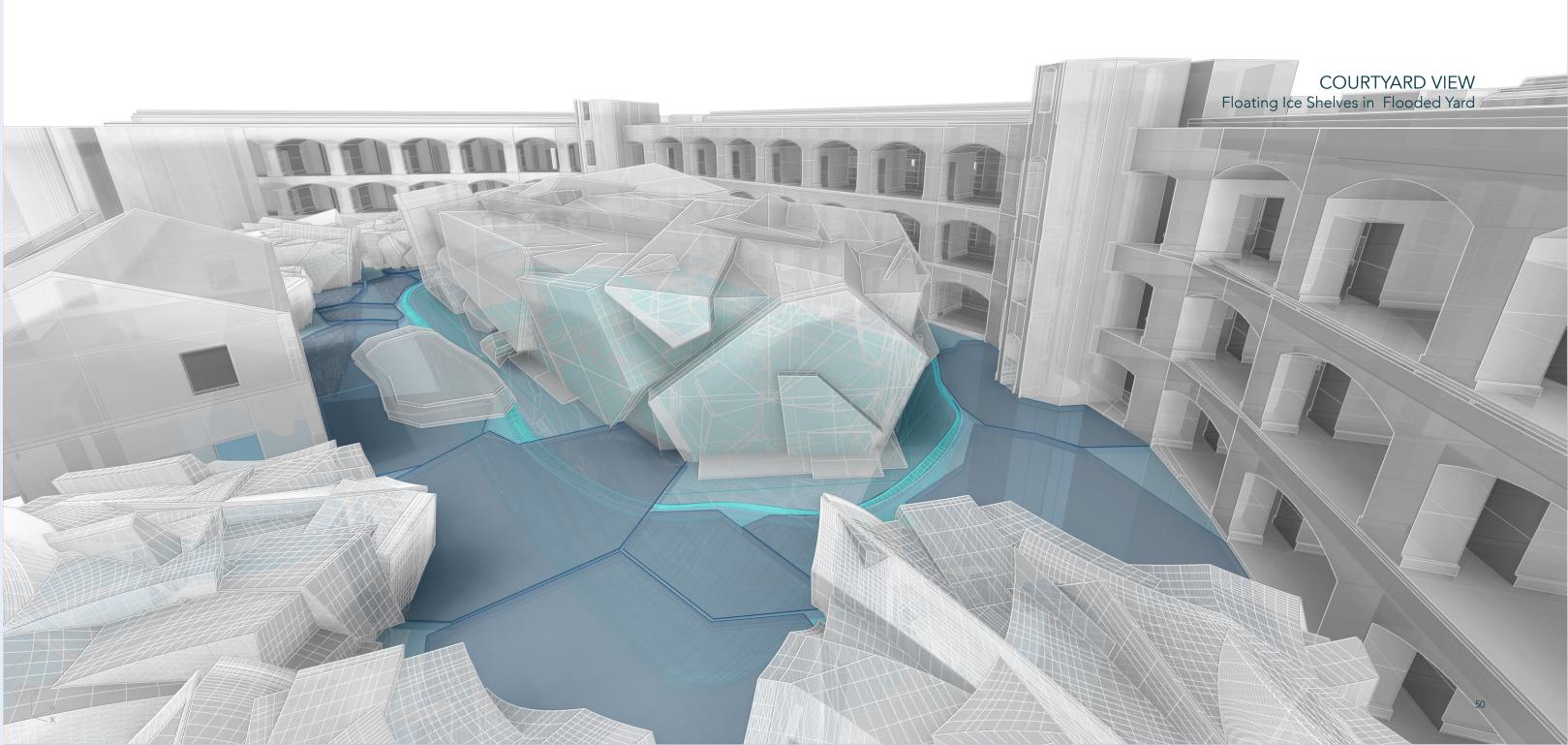
Auditorium Iceberg hovering over Glacial Void Waterfall





ARCHITECTURAL DRAWING Auditorium Ground Floor Plan





COMPUTATIONAL ENGINEERING SOFTWARE SKILLS SELECTION



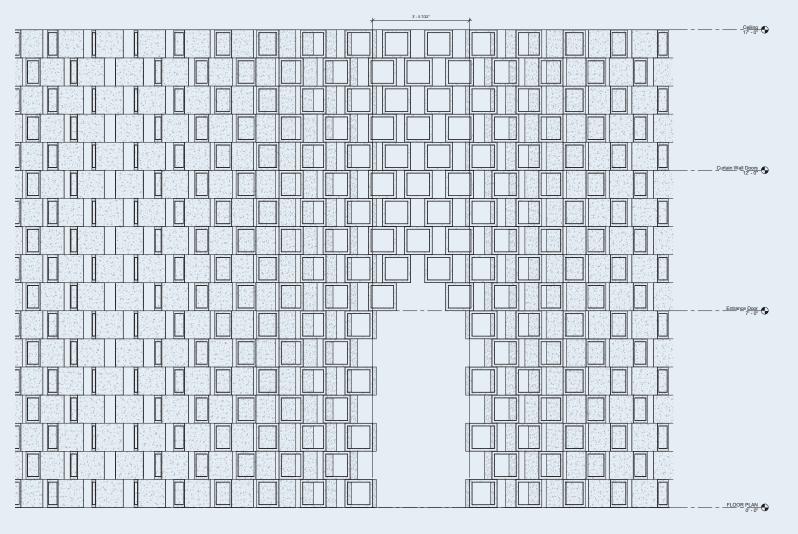
Desert Breeze Parametric Design - Semi-Private Wall

A semi-private wall was designed by utilizing metric parameters to control air and light flow. The lounge like setting is intended to serve as a public meeting place to protect from heat and direct desert sun.



PARAMETRIC WALL

East Elevation

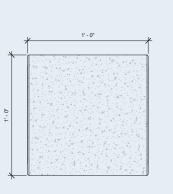


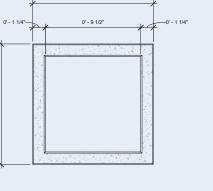
② Elevation Entrance CloseUp
11 = 1-0"



ARCHITECTURAL DETAIL DRAWING Revit







5 Brick Block Detail Profile

4) Brick Block Detail Front

