

CLIFF BEND CHAPEL

HORSESHOE BEND, PAGE, AZ, UNITED STATES | UNDERGRADUATE SUBMISSION – STUDIO PROJECT

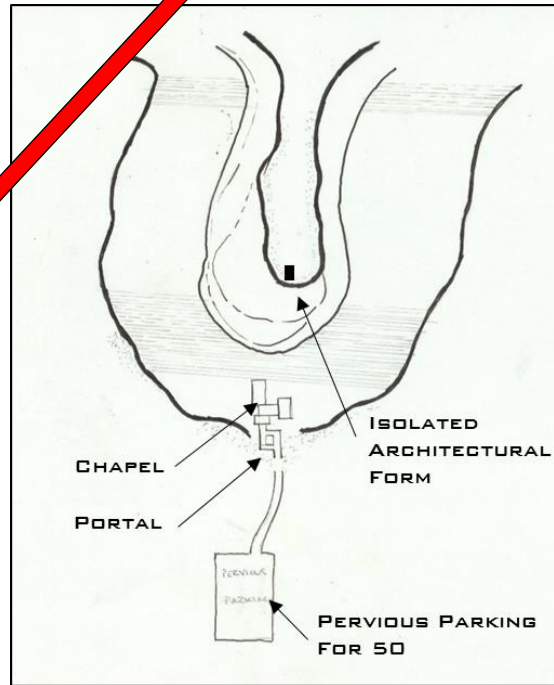
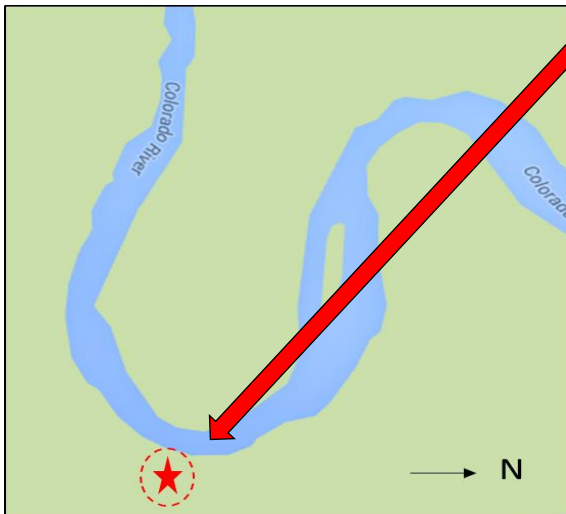
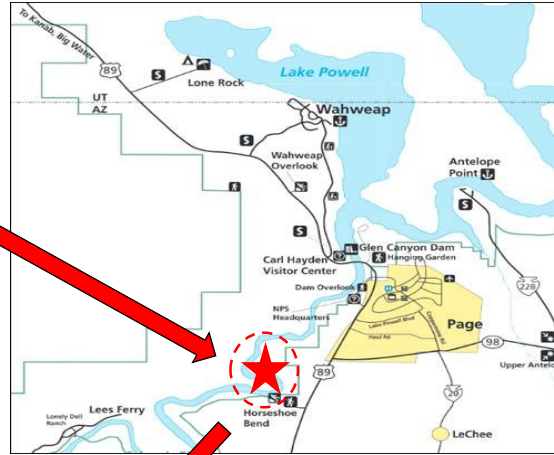
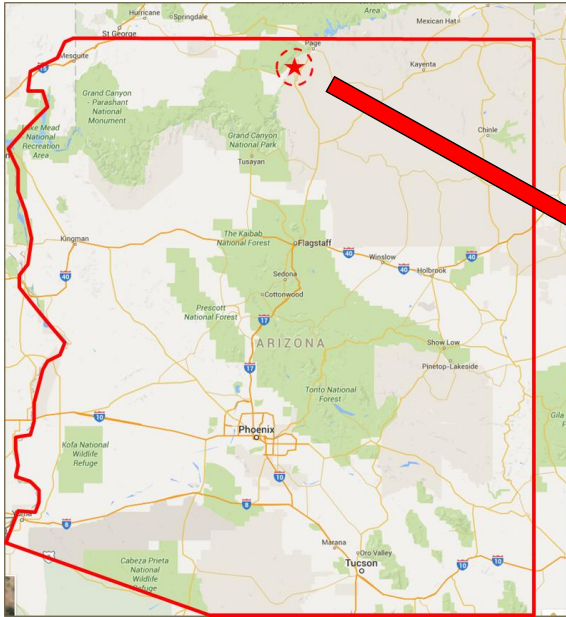
THE PROJECT WAS TO DESIGN A NON-DENOMINATIONAL CHAPEL, WHILE STRIVING TO CREATE A SENSE OF SPIRITUALITY AND REFLECTION THROUGH LOCATION, FORM AND SCALE. EXPLORING THE RELATIONSHIP BETWEEN ENTRY THROUGH A PORTAL, PATH AND ARRIVAL POINT TO THE CHAPEL ALLOWED FOR THE BEGINNING OF A SPIRITUAL NAVIGATION THROUGH THE SITE AND STRUCTURE.

FINAL DESIGN SOLUTION WAS DEVELOPED FROM PARTI DIAGRAM/MODEL, STUDIES. IT SYMBOLIZES ISOLATION THROUGH THE USE OF RECTILINEAR ARCHITECTURAL FORMS THAT ARE IN CONTRAST TO THE NATURAL CURVILINEAR SITE FEATURES. THE SITE ALLOWS FOR A SPIRITUAL AND HUMBLE CONNECTION TO THE VAST NATURAL SURROUNDINGS. ICONIC VIEWS OF THE BEND EVOKE ISOLATION BY PLACING THEM INSIDE THE VIEW, 'SHRINKING' THEM WITH ITS SIZE.

THE CONNECTION BETWEEN PARKING, PATH AND BUILDING STARTS THE VISITOR ON A JOURNEY TOWARD ISOLATION; INITIALLY HEADING TOWARD THE CLIFF EDGE TO THE PORTAL. THE PORTAL IS WHERE THE STRUCTURE STARTS TO FLOAT AND ISOLATES ITSELF FROM THE GROUND. UPON ENTERING THE CHAPEL, THE VESTIBULE LEADS ONE TO THE LOBBY, WHERE ONE CAN VIEW ISOLATED SCULPTURAL FORM ON OPPOSITE SIDE OF THE BEND. THE LOBBY LEADS ONE TO THE SACRED SPACE WHERE THE TALL CEILING AND LARGE GLAZING FACING WEST FOCUSES A VIEW OF THE ISOLATED FORM.

THE LARGE SUPPORTING STRUCTURE IS FSC LAMINATED LUMBER CONNECTED WITH DIAGONAL BRACING TOPPED WITH A BEAM THAT ANCHORS THE STRUCTURE BACK TO THE LAND. TYPE IV CONSTRUCTION LENT ITSELF TO SOME CONNECTION DETAILS THAT ALLOWED FOR EXPRESSIVE TECTONIC DETAILS WHERE THE DESIGN EMPHASIZED THE CONNECTIONS OF THE SUPPORTING STRUCTURE. THIS PROJECT WAS DESIGN TO UTILIZE SUSTAINABLE STRATEGIES SUCH AS PHOTOVOLTAIC PANELS, RAINWATER COLLECTION AND NATURAL DAYLIGHTING.

LOCATION AND SITE



- ▶ **PAGE, ARIZONA, UNITED STATES**
- ▶ **ALONG THE COLORADO RIVER DOWNSTREAM OF GLEN CANYON NATIONAL RECREATION AREA.**
- ▶ **HORSESHOE BEND FEATURES SOME BREATHTAKING VIEWS THAT EVOKES A SPIRITUAL CONNECTION TO NATURE. THE 'EARTH IS BIGGER THAN ONESELF' FEELING IS ACHIEVED WITH THE ENORMOUS ERODED CLIFFS. THEN FROM THAT FEELING ISOLATION IS ACHIEVED.**
- ▶ **PLACING THE RECTILINEAR CHAPEL STRUCTURE ALONG THE RIM OF THE BEND ALLOWS FOR THE BEST SINGLE POINT VIEW OF THE ENTIRE BEND. THE STARK CONTRAST OF THE FORM ISOLATES THE ARCHITECTURE FROM ITS SURROUNDINGS.**

NATURAL INSPIRATION

HORSESHOE BEND, ARIZONA



THE COLORADO RIVER ERODED AWAY WHAT ONCE WAS A LEVEL PLANE AND **ISOLATED** THIS PIECE OF LAND SHOWING A NATURAL REPRESENTATION OF ISOLATION.



THESE IMAGES SHOW HOW **ISOLATED** PEOPLE CAN BE WITHIN SUCH A VAST LANDSCAPE AND HOW FEELING ISOLATED CAN PROVIDE A PLACE FOR MEDITATION AND REFLECTION.



ARCHITECTURAL INSPIRATION

SHELL BY ARTECHNIC, JAPAN



THE DESIGN BY ARTECHNIC, ARCHITECTS WAS A PLEASANT FIND WHILE RESEARCHING IDEAS FOR THIS DESIGN. THE ORGANIZATION OF THE SITE WITH HOW THE TREE, TO HOW THE DESIGN, WHILE SURROUNDED BY TREES IS ISOLATED FROM ITS ENVIRONMENT. THE PROJECT EVOKES AN EMOTION OF ISOLATION AND A SERENE PLACE FOR REFLECTION

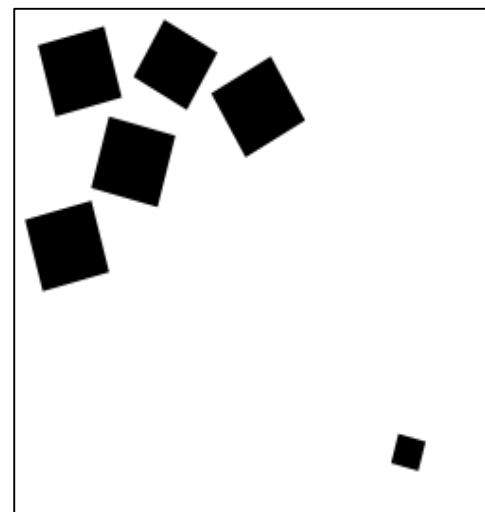
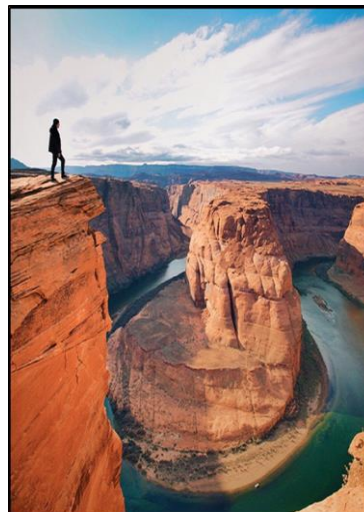
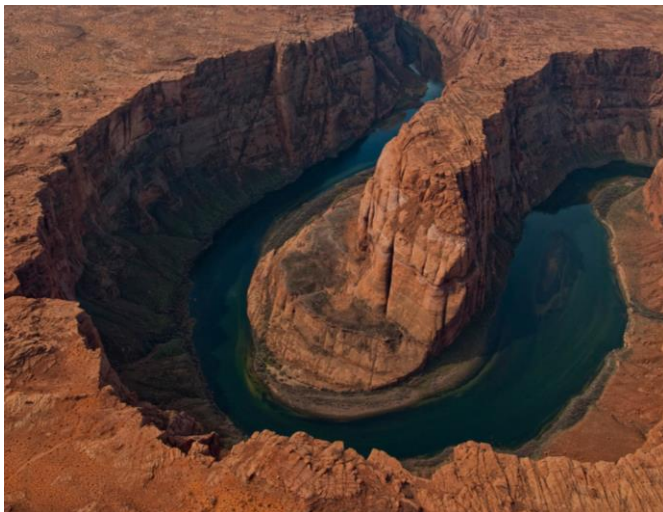
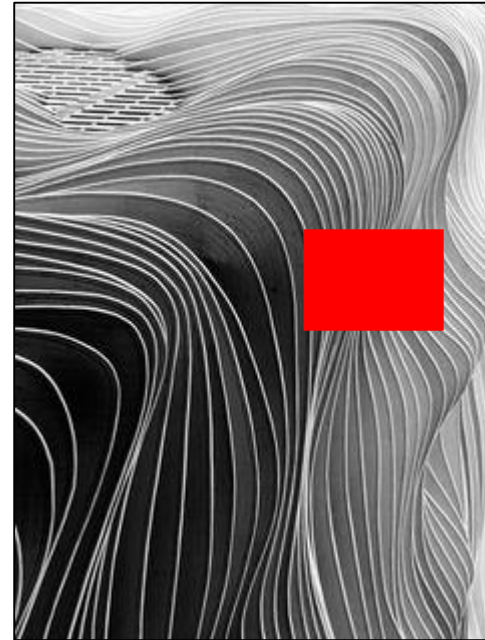


THIS PROJECT EVOKES AN EMOTION OF ISOLATION, AND ALLOWS FOR A SERENE PLACE FOR REFLECTION

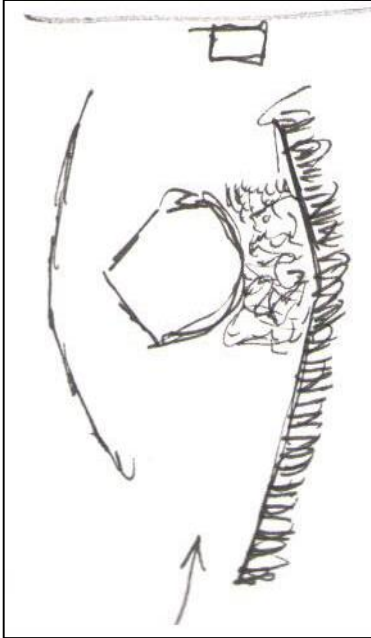


DESIGN CONCEPT

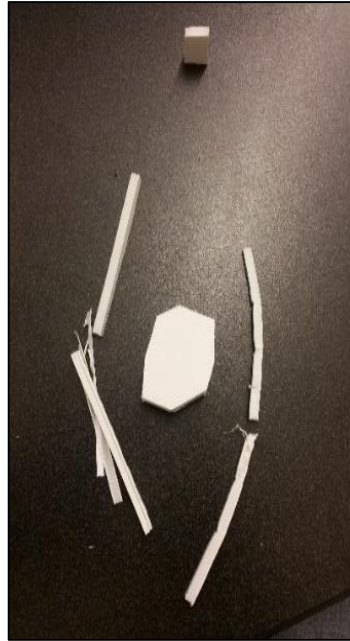
- THE EXPLORATION OF HOW EROSION CREATES ISOLATION
- INSPIRATION WILL COME FROM HOW NATURE ERODES SOLID MASSES TO CREATE ISOLATED FORMS.
- THE GOAL WILL BE EXAMINING HOW ARCHITECTURE CAN CREATE THE SAME FEELING OF ISOLATION BY CONTRASTING THESE NATURAL LINES WITH PURE RECTILINEAR FORMS.



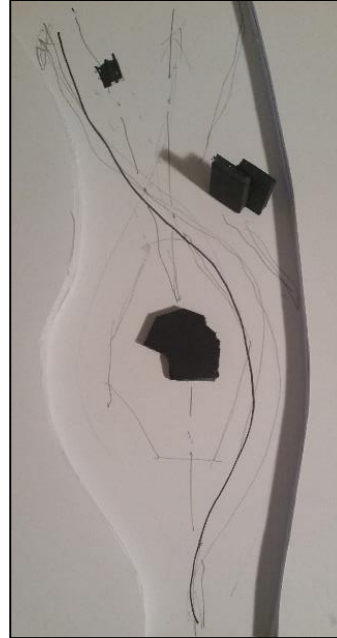
PARTI DEVELOPMENT



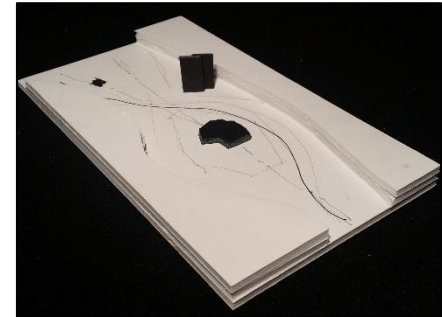
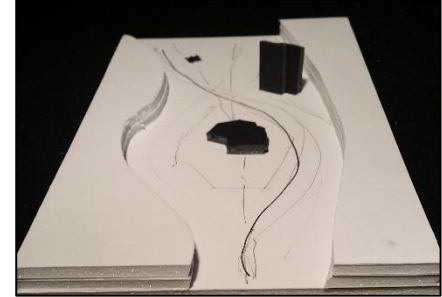
DIAGRAM



PARTI MODEL V1



PARTI MODEL V2

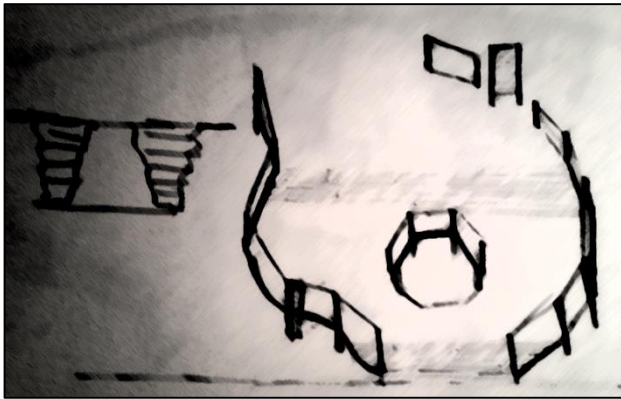


FINAL PARTI MODEL

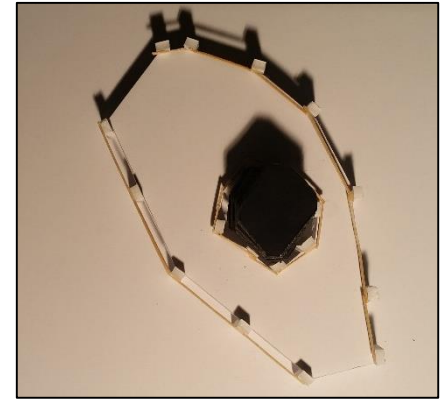
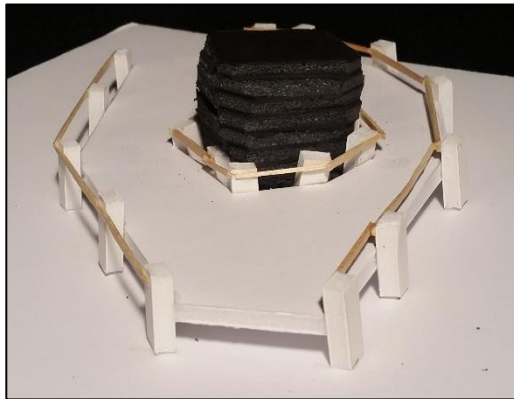
STUDYING V1, ALLOWED FOR A FOCUS ON THE SCALE OF OBJECTS
WITHIN THE PARTI THAT WOULD TRANSITION INTO A PORTAL

PORTAL DEVELOPMENT

STUDY MODEL



DIAGRAM



STUDY MODEL

AFTER STUDYING THE VARIOUS PARTI MODELS, THOSE
DEVELOPED INTO THE INITIAL PORTAL SKETCH & DESIGN

PORTAL DEVELOPMENT

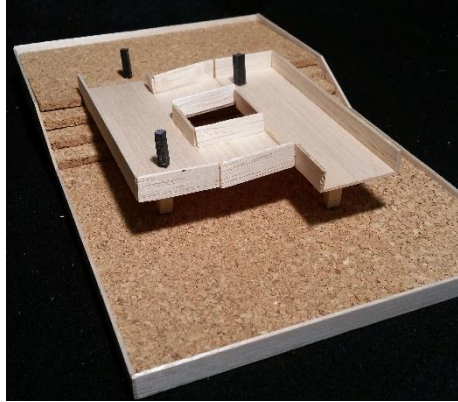


PORTAL MODEL V1

AFTER STUDY OF THE FIRST
ITERATION, THE REALIZATION WAS
THAT IT SHOULD BE MORE
ASYMMETRICAL AND HAVE INCREASED
REPRESENTATION OF ISOLATION

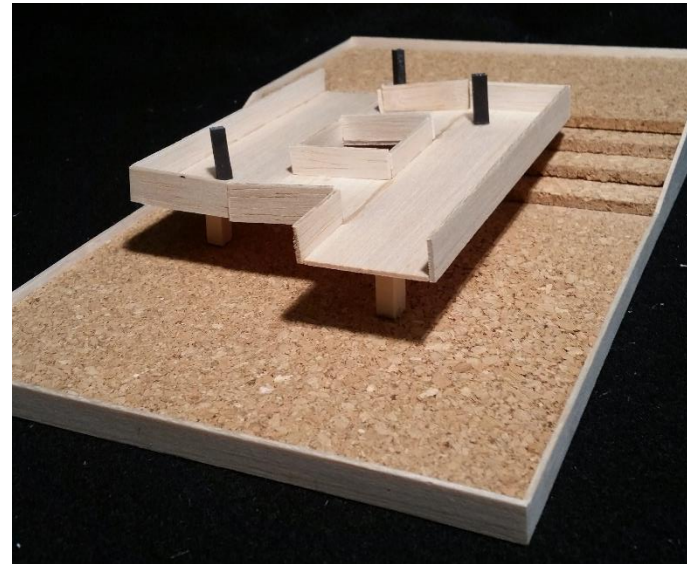


PORTAL DEVELOPMENT



FINAL PORTAL MODEL V2

AFTER STUDY OF THE V1 MODEL, IT FELT THAT IN ORDER TO ACHIEVE A STRONGER CONCEPT OF ISOLATION, THAT THE PORTAL NEEDED TO BE MORE RECTILINEAR TO CONTRAST THE NATURAL CURVILINEAR LINES OF HORSESHOE BEND AND HEIGHTEN THE ISOLATED FEELING THAT THIS DESIGN EVOKES.



DESIGN PRINCIPLES

RECTILINEAR FORM – USE OF HEAVY TIMBER CONSTRUCTION TO ISOLATE CHAPEL FROM NATURAL CURVILINEAR FEATURES OF THE SITE.

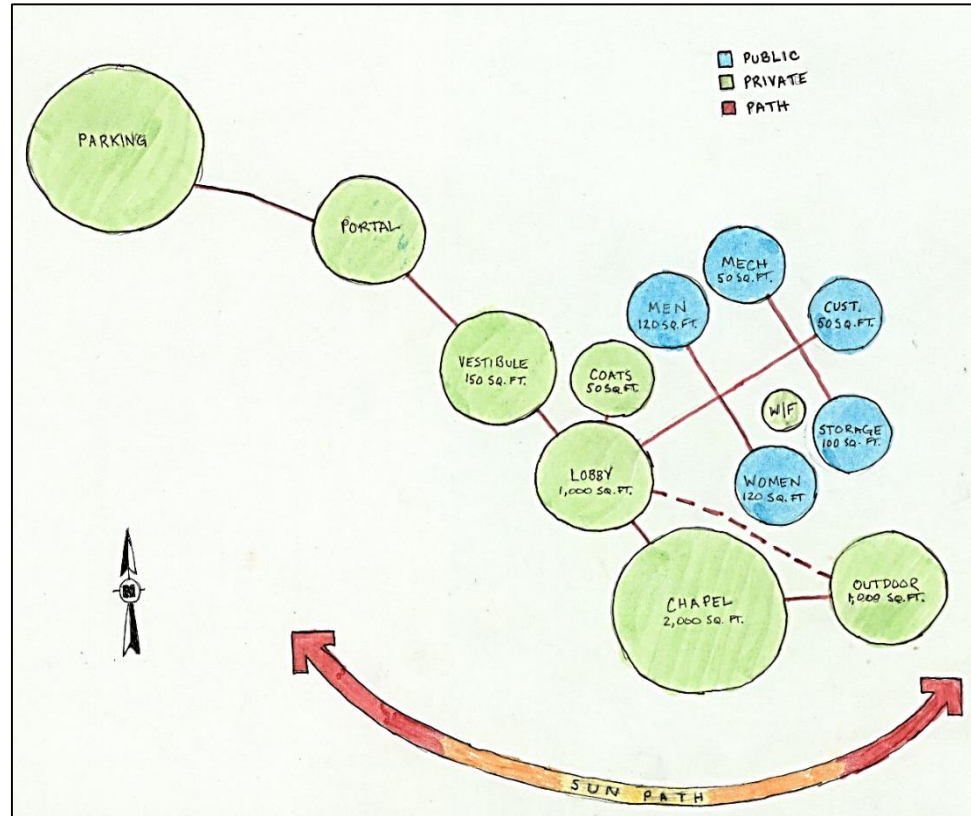
GRID ORGANIZATION – TO ACCENTUATE THE RECTILINEAR FORM FOR THE STRUCTURE.

SOUTHERN VERTICAL GLAZING – TAKE ADVANTAGE OF VIEWS, BUT ALSO TO PROMOTE ENLIGHTENMENT AND REFLECTION WITH VAST VIEWS OF THE LOCATION.

HEIGHT – SOUTHERN SIDE OF CHAPEL TALLER THAN THE NORTHERN SIDE TO GIVE THE OCCUPANT A SECLUDED FEELING AND PROVIDE A FRAME OF THE VAST NATURAL SURROUNDINGS AND ALLOW ONE TO CONNECT SPIRITUALLY WITH THEMSELVES

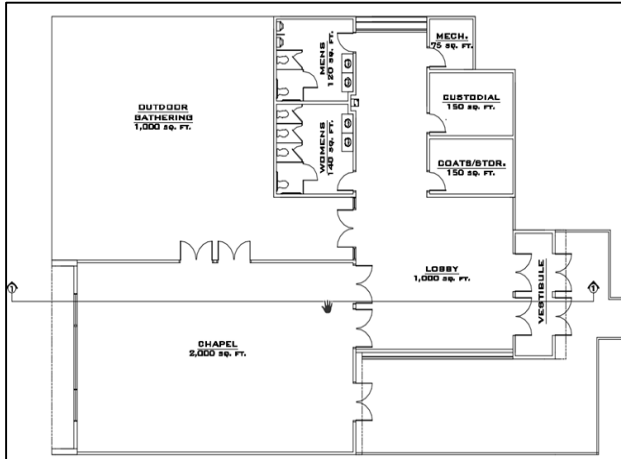
DIFFUSED LIGHTING - IN CHAPEL SPACE USING NATURAL DAYLIGHTING AS WELL AS ESTABLISHING A CONNECTION TO THE SITE FROM WITHIN THE CHAPEL SPACE.

CHAPEL PROGRAM DEVELOPMENT



THE CHAPEL HAD SPECIFIC PROGRAM REQUIREMENTS,
THE DIAGRAM ORGANIZED PROGRAM PIECES AND
PROVIDED AN INITIAL VISUAL AID FOR THE LAYOUT.
WHICH THEN CAN BE APPLIED TO MORE PLAN ORIENTED
DRAWING

CHAPEL DIAGRAMS

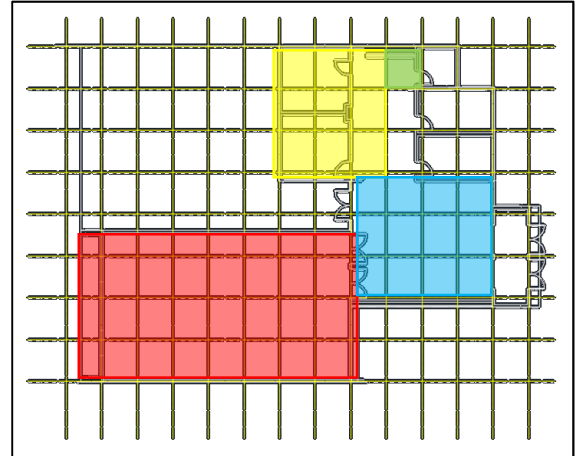


Floor Plan

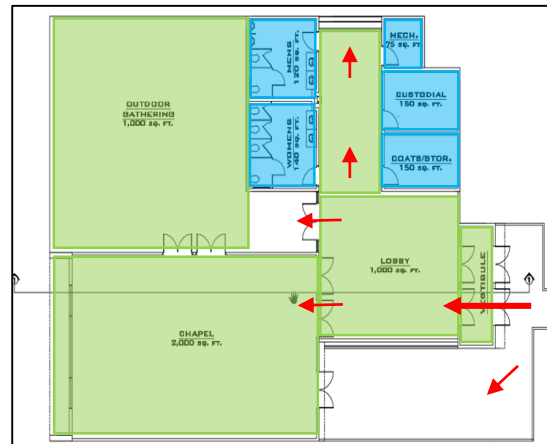
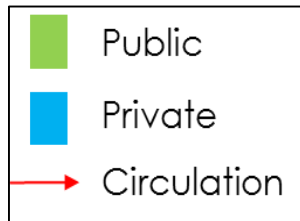
← CHAPEL FLOOR PLAN
BASED FROM THE BUBBLE
DIAGRAM. ASSIGNING ROOM
DIMENSIONS AND SQUARE
FOOTAGE TO SPACES.

THE RECTILINEAR FORM →
WORKS WELL WITH A GRID
ORGANIZATION, CONTRASTING
THE CURVILINEAR LANDSCAPE
THAT IT OCCUPIES.

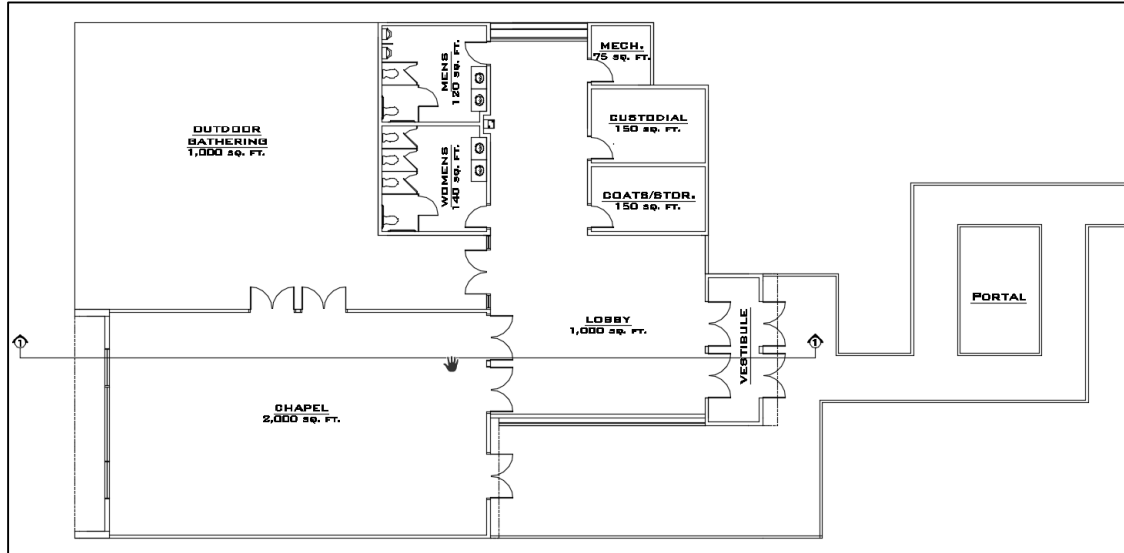
Space & Circulation



Grid Organization

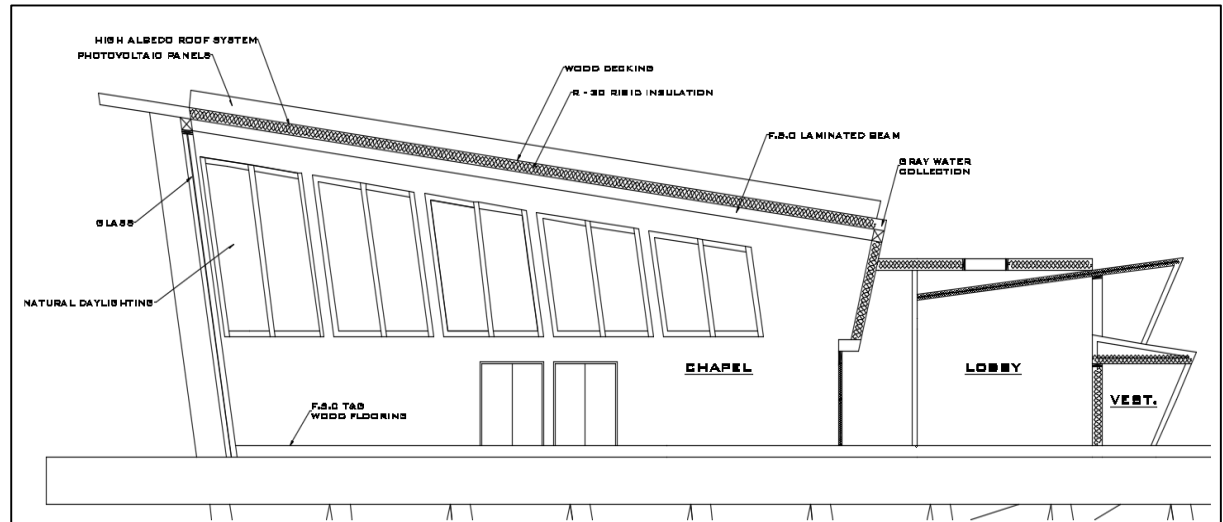


CHAPEL PLANS

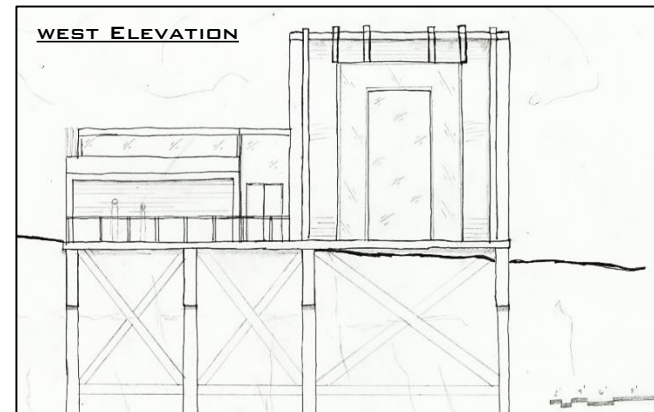
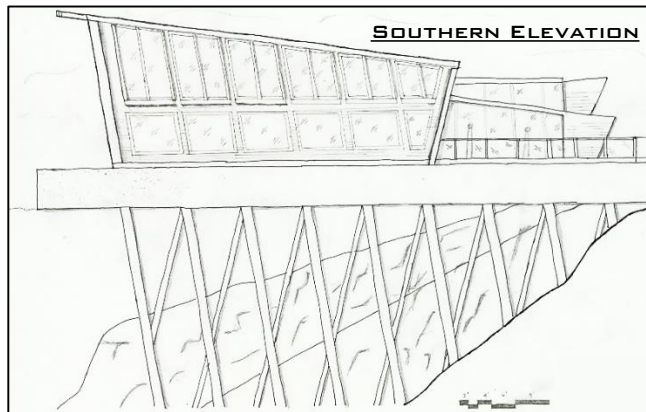
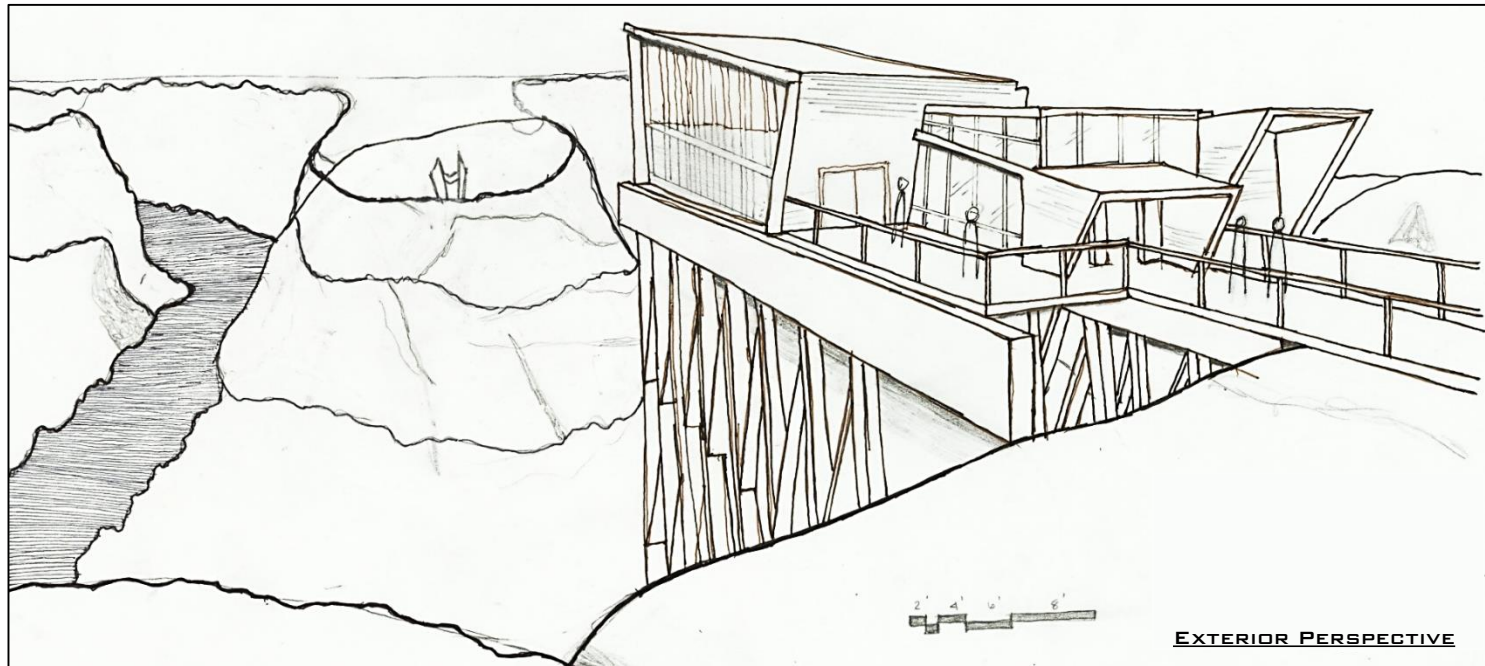


← FLOOR PLAN
GOING WITH A
RECTILINEAR FORM LENT
ITSELF TO A GRID
ORGANIZATION.

BLDG. SECTION →
A SECTION THROUGH
THE SACRED SPACE
AND LOBBY SHOWS
THE FORM OF THE
CHAPEL.

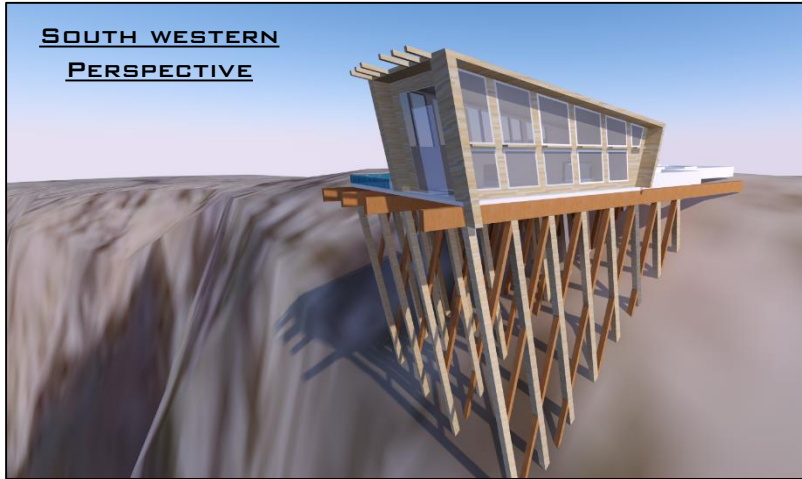


CHAPEL HAND DELINEATION

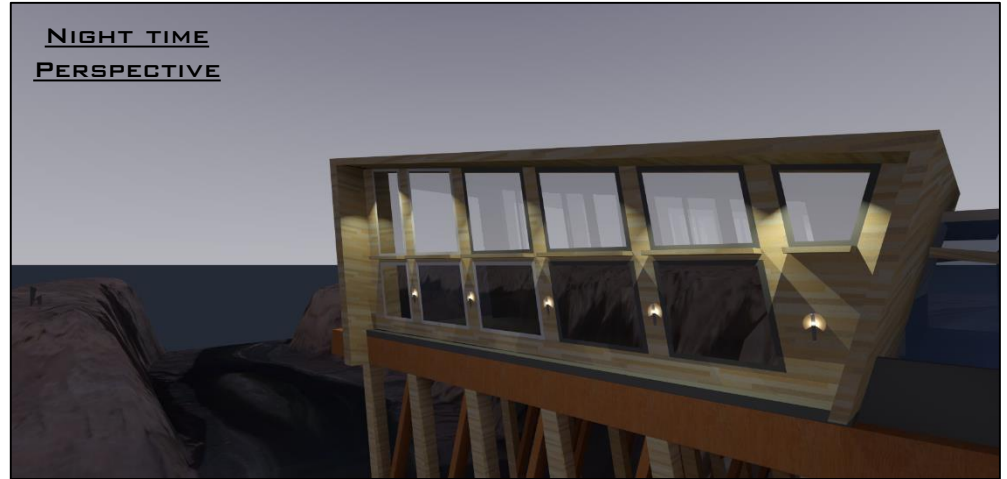


CHAPEL RENDERINGS

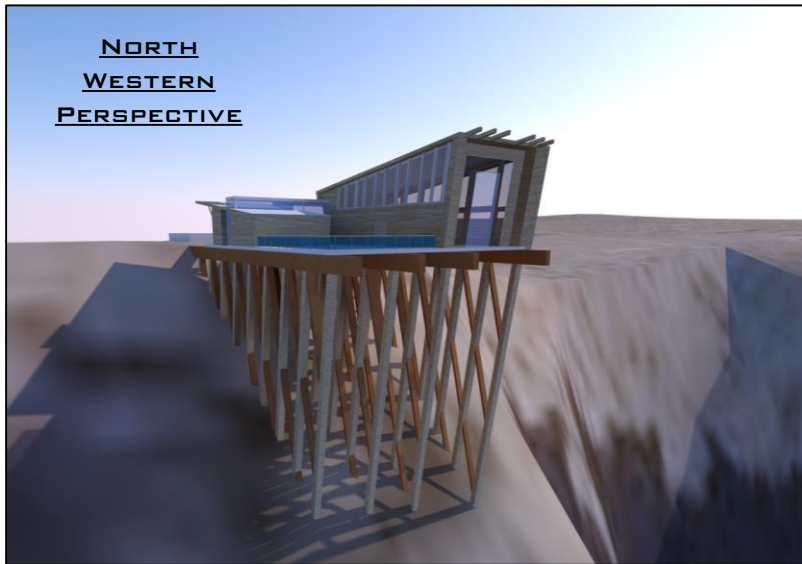
SOUTH WESTERN
PERSPECTIVE



NIGHT TIME
PERSPECTIVE



NORTH
WESTERN
PERSPECTIVE



OUTDOOR
GATHERING

