

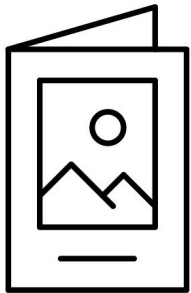
**Kadia Miller**

**Arch 565 Journal**

# Typical Work Flow

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Journal 01  
01.17.2025



Journal



Conceptual  
Physical  
Models for  
Iterations



Digital  
Modeling



Editing

# Form and Forces

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John Ochsendorf

Building a bridge - based in Peru  
Day 3 - the bridge is complete and  
resembles a basket

Tile Vaulting  
(Catalan vaults)

Catalan architecture  
Gaudi

origins near Valencia, Spain

Fray Domingo de Petres

1" layer of tile thick - double  
curvature + amazing load capacity

Guastavino spiral stairs - tile stairs  
dome spanning 190 ft. - each day  
add rings and cantilever and held the  
worker's weight

this reminds me of Brunelleschi's  
duomo in Florence.

1961-65 Cuban Art School - long  
form vaults and domes + sagrada  
familia being built with this same  
technology

Colonia Guell Hanging Model, near  
Barcelona

Alex Jordan developed a program  
to bring gravity into the design  
environment - gravity free isn't real.

we have lots of analysis tools - not  
many design tools.

compressive forces in a spiral stair -  
thrust network analysis as a design  
tool.

constructability is part of the design  
process !!

# Initial Design

Journal 02  
01.23.2025

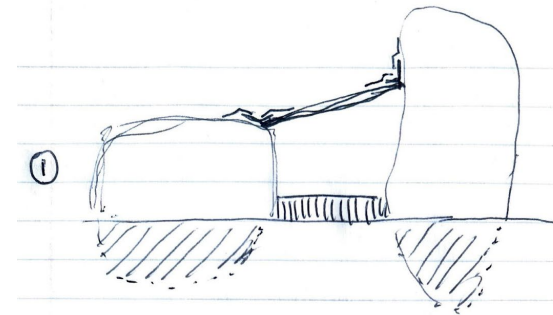
**Location of Project:** Rock field driving out to Natural Bridge Climbing Area.  
**Topology of Project:** Bouldering microhotel for chilling and winter use.



Inspiration



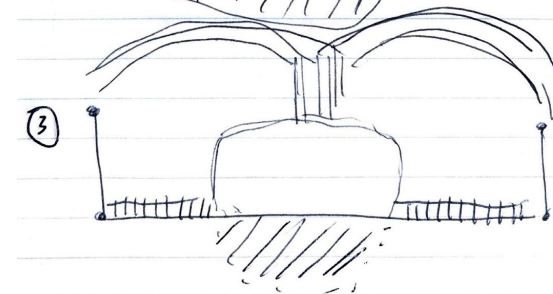
Actual Site from Google Maps



balancing in between  
2 rocks - old foam for  
the floor - some sort  
of flashing to keep the  
water out.



shell shape to cover  
the rock + climbing  
area.



use the rock as the  
structural element and  
form some parametric  
shape out.

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