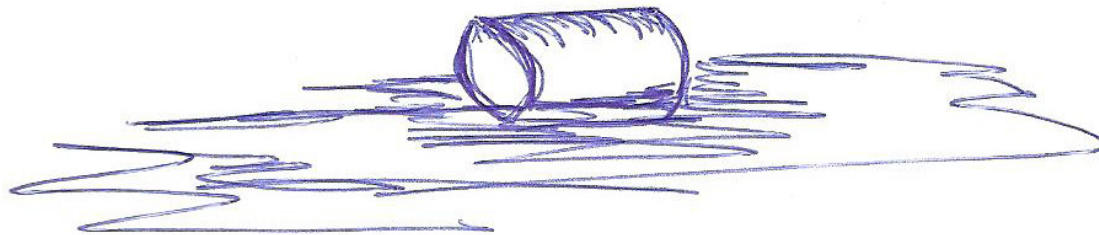


# WATER RESOURCE PROJECT

PHASE ONE:

KELLY SAGER



FRESH WATER QUALITY  
PROCESS

# FRAGILITY IN OUR NATIONS QUALITY OF WATER

BEST WORST  
VERMONT WEST VIRGINIA



Architecture 771 Advanced Architectural Design, Fall Semester 2011  
Kelly Sager  
Mark Barnhouse  
"Fragility"  
source of info:  
Forbes.com  
3ds Max Design, Indesign

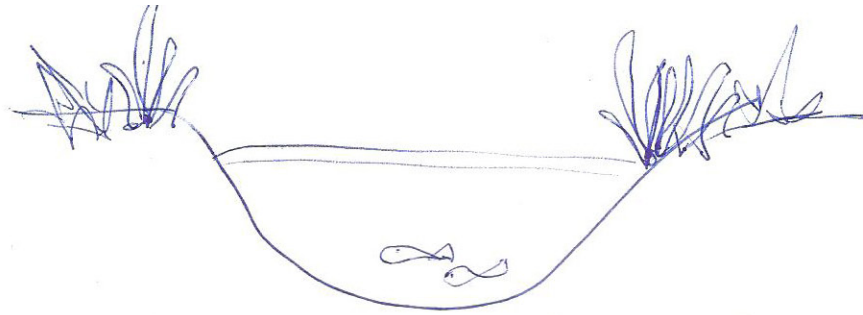
# PHASE TWO:

## SUN STUDY



SOUTH/ SOUTHWEST

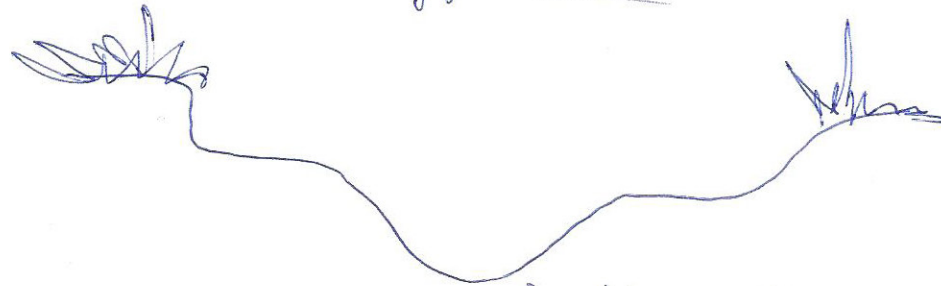




vary the species to make homogenous

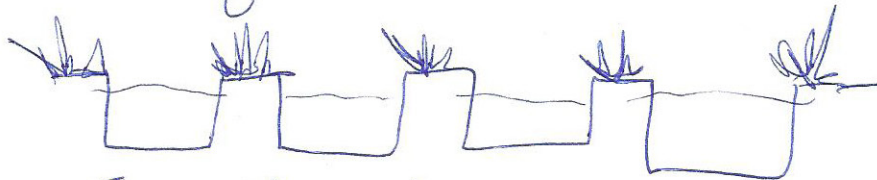
WATER

high oxygen environ  
low oxygen "

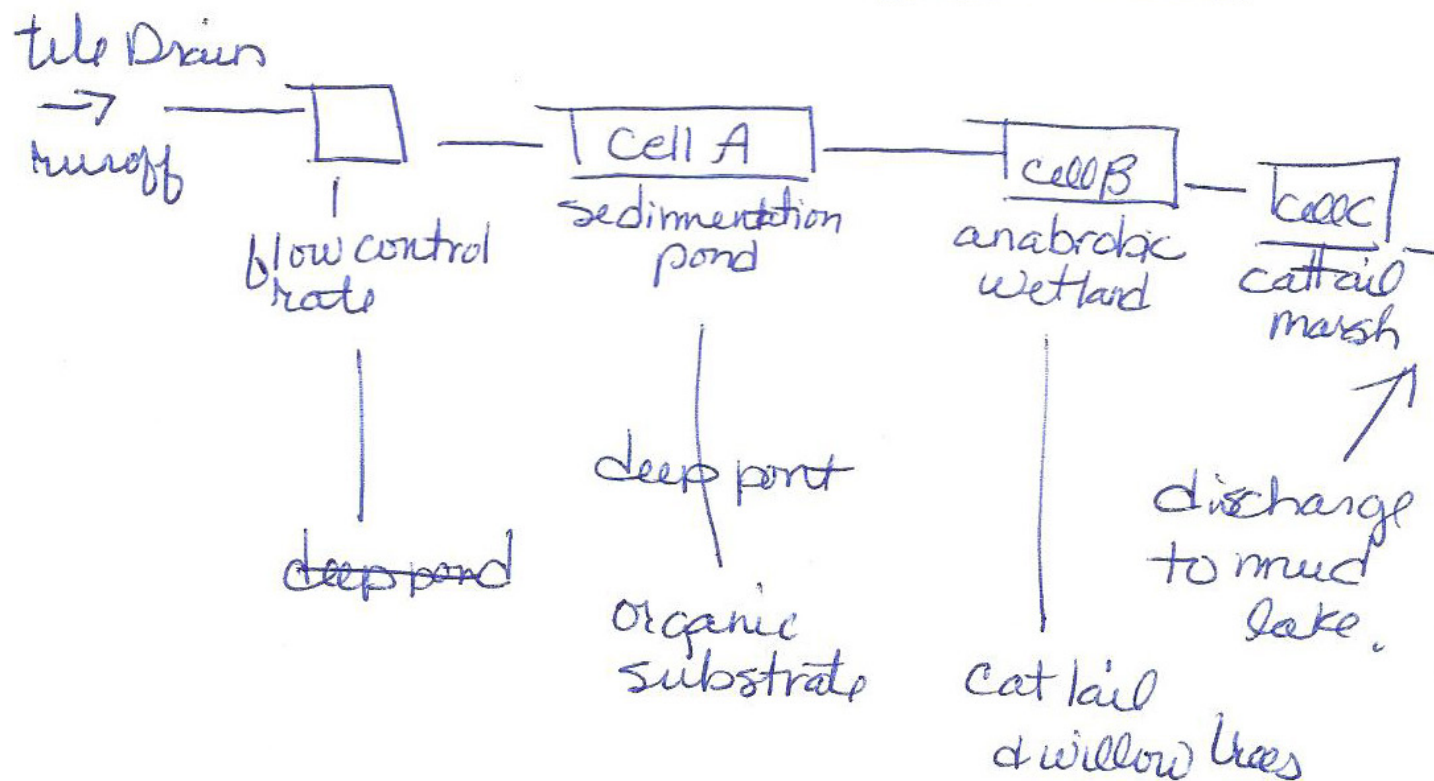
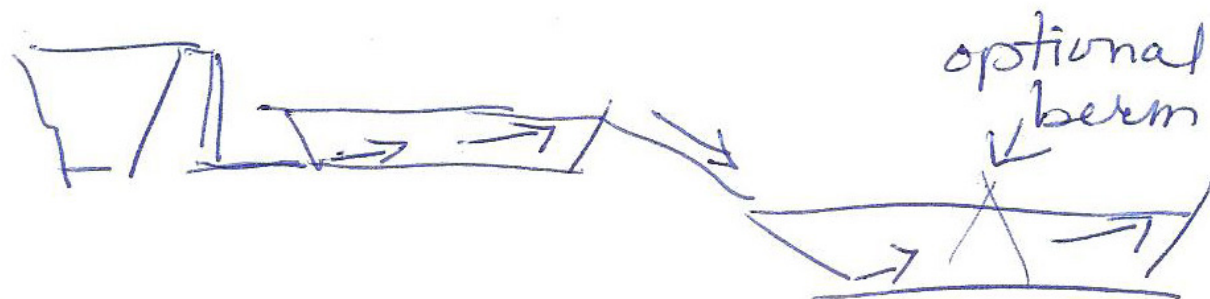


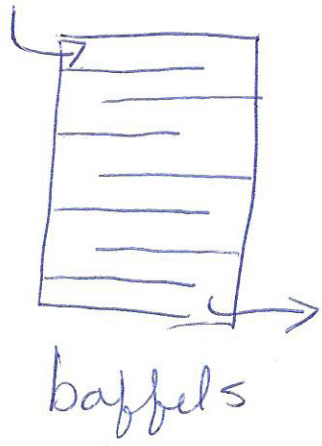
- pre treatment  
bio filtration

in the system  
20 days.



Small systems work  
better than big system





gravity flow system  
design for minimum  
retention time.

\* could get Too Dry  
on our site !

In the winter... yes.

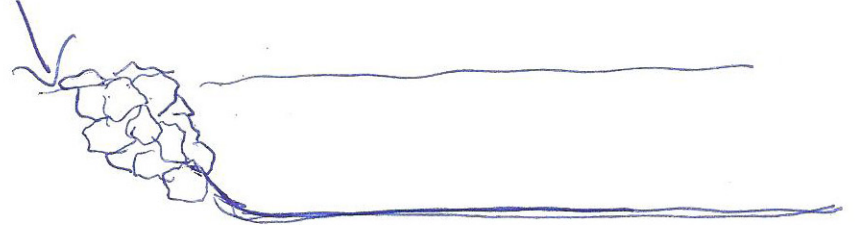
be able to stop the  
outflow so the water  
level doesn't get too low.

well head ~~on~~ use as backup.

currently 80,000 gal. per pond,  
per year.

Roof Water Harvesting System

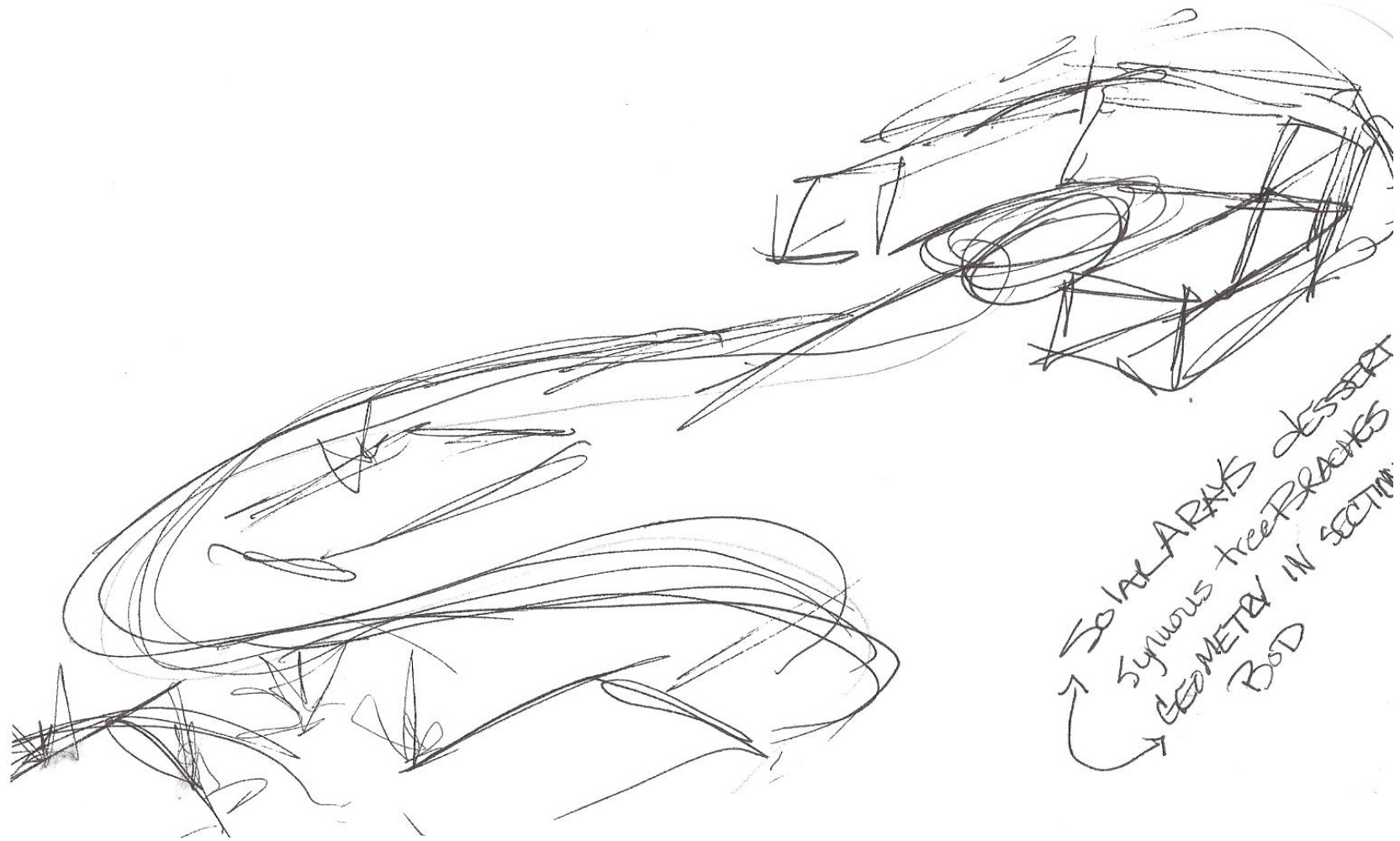
Field  
Rock sides







PARTI



SOLAR ARAYS  
DESERT  
SYNCHRONOUS TREE PRACHES  
GEOMETRY IN SECTION  
BOD



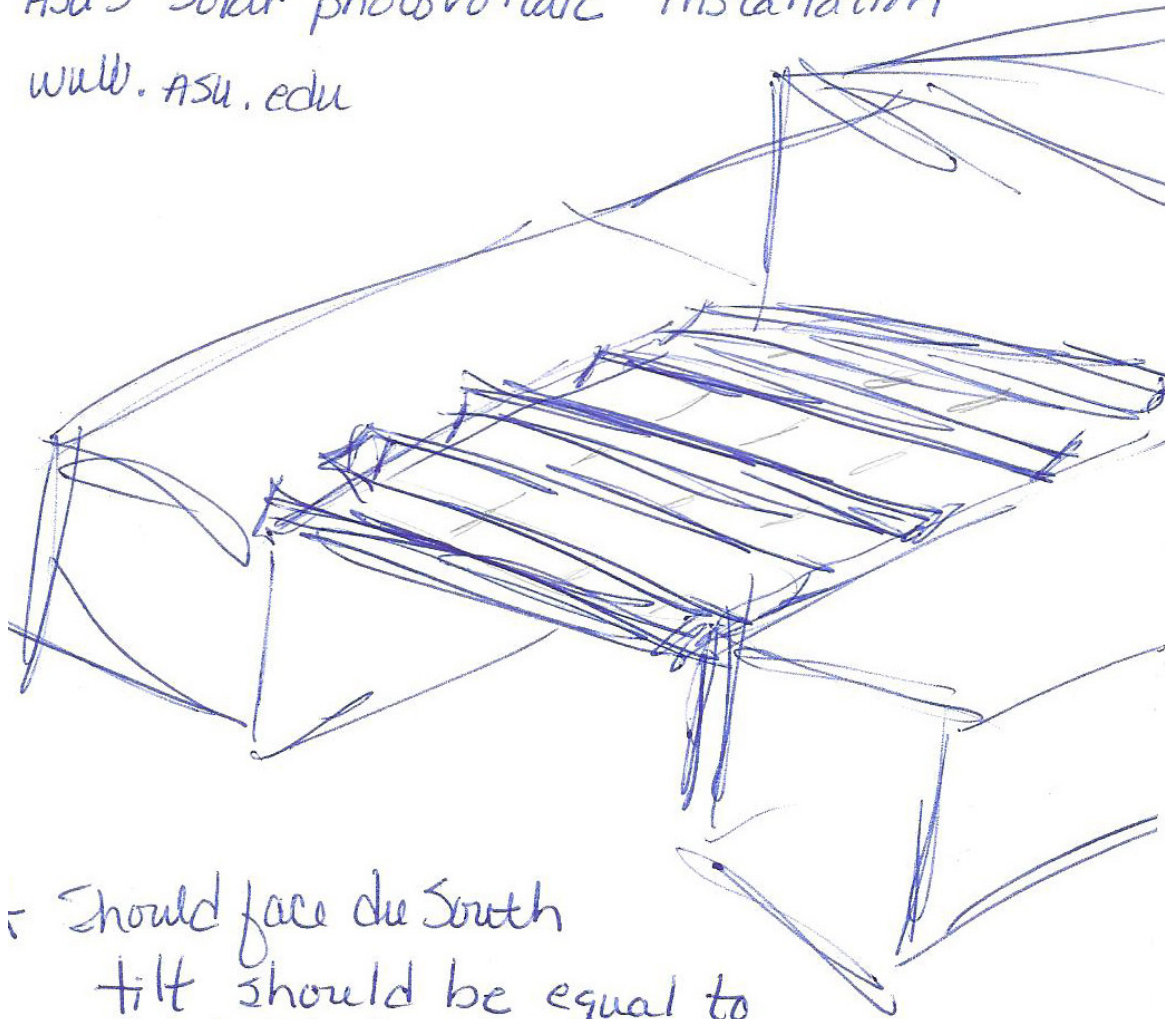
## Solar Arrays

2 things needed to operate efficiently:

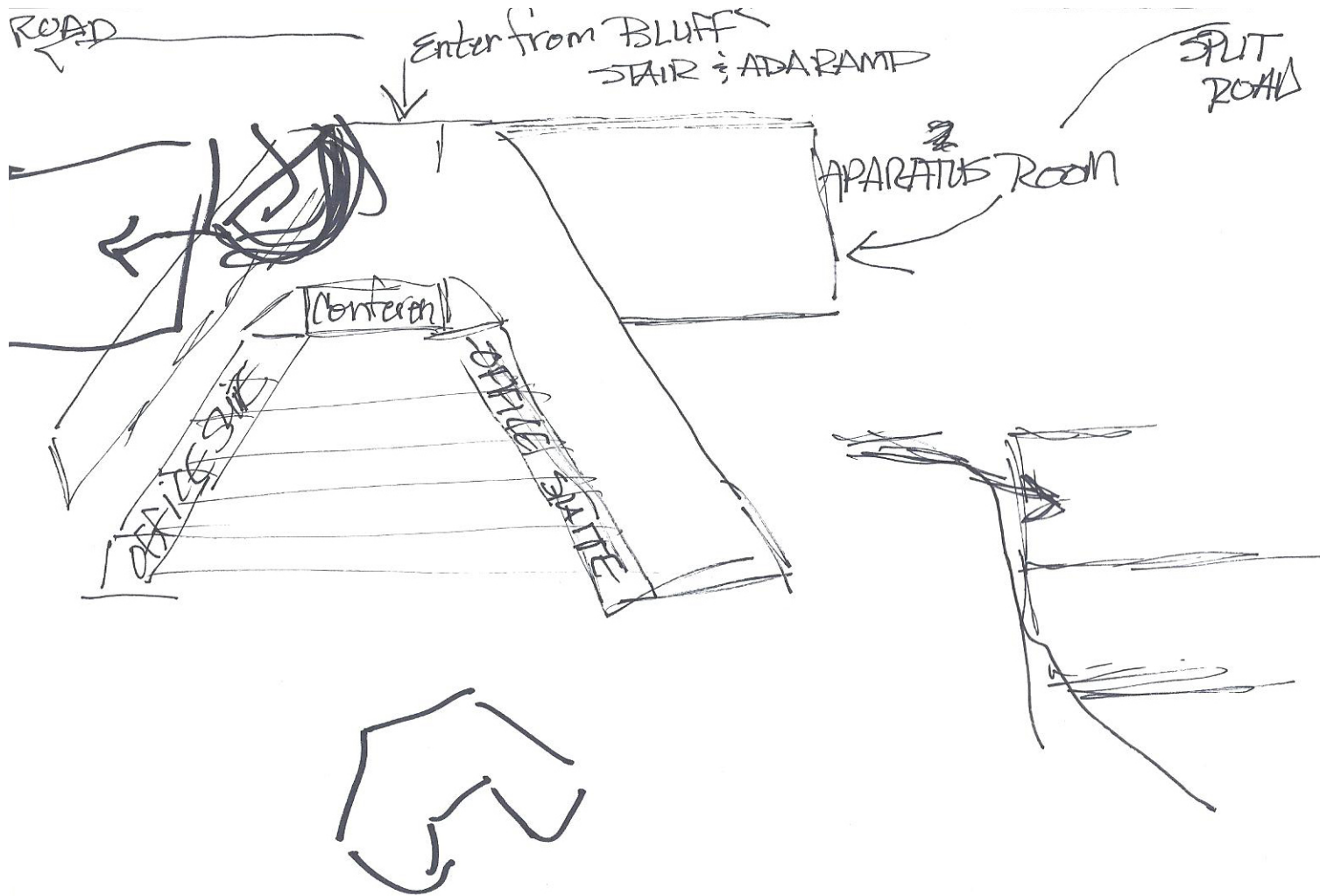
1. unobstructed exposure
2. sunlight

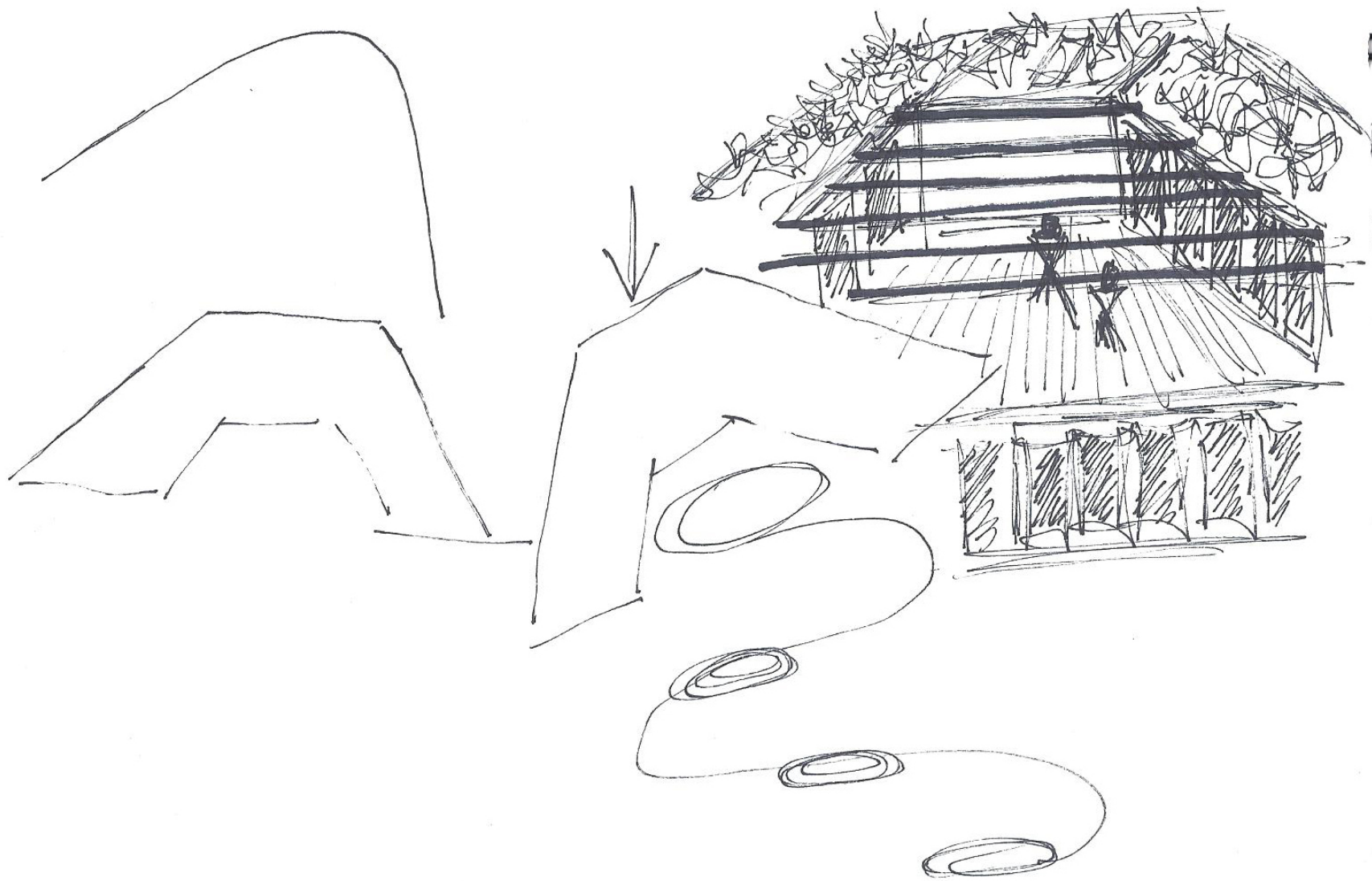
ASU's solar photovoltaic installation

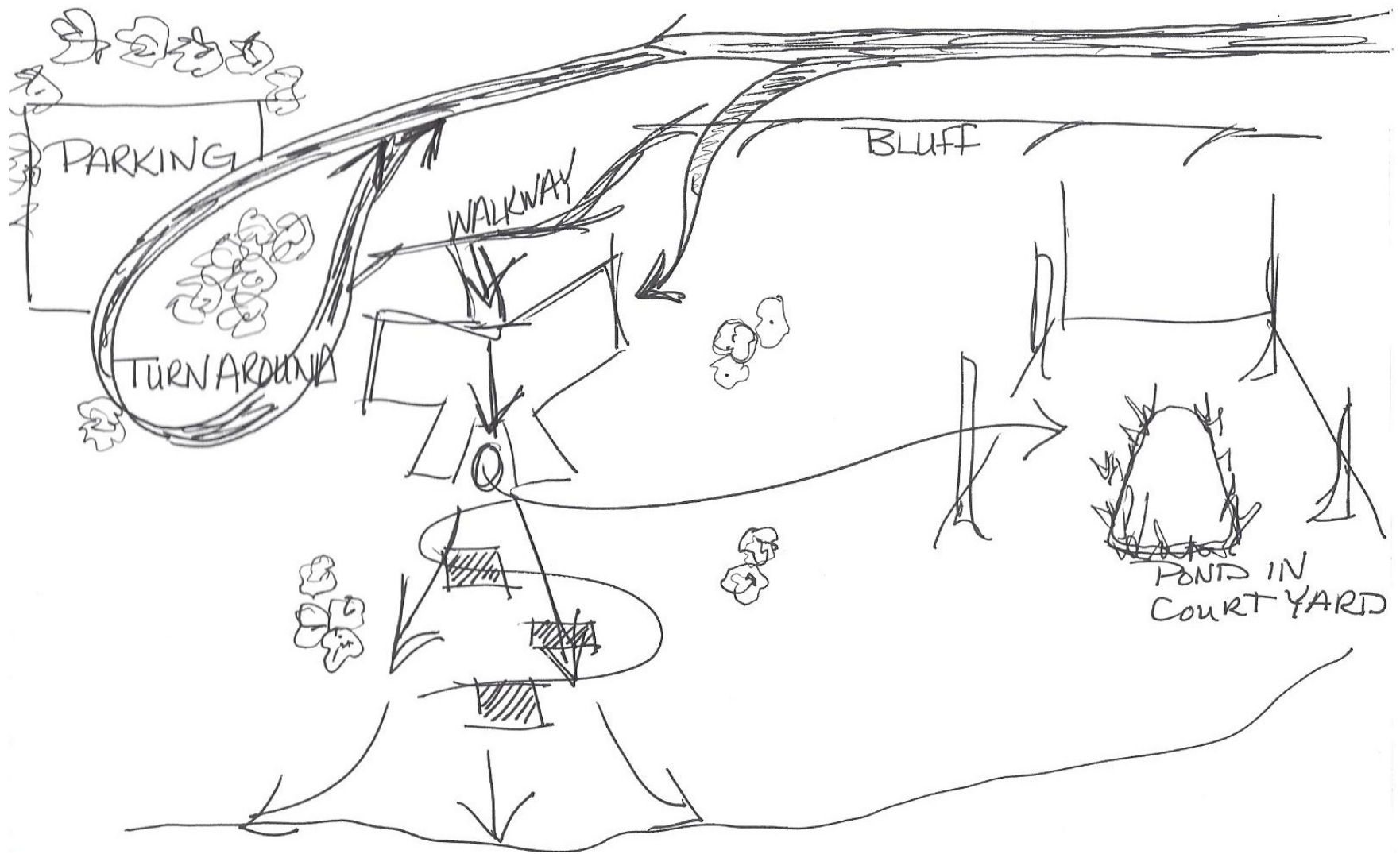
[www.asu.edu](http://www.asu.edu)



- Should face due South
- tilt should be equal to latitude + 15°

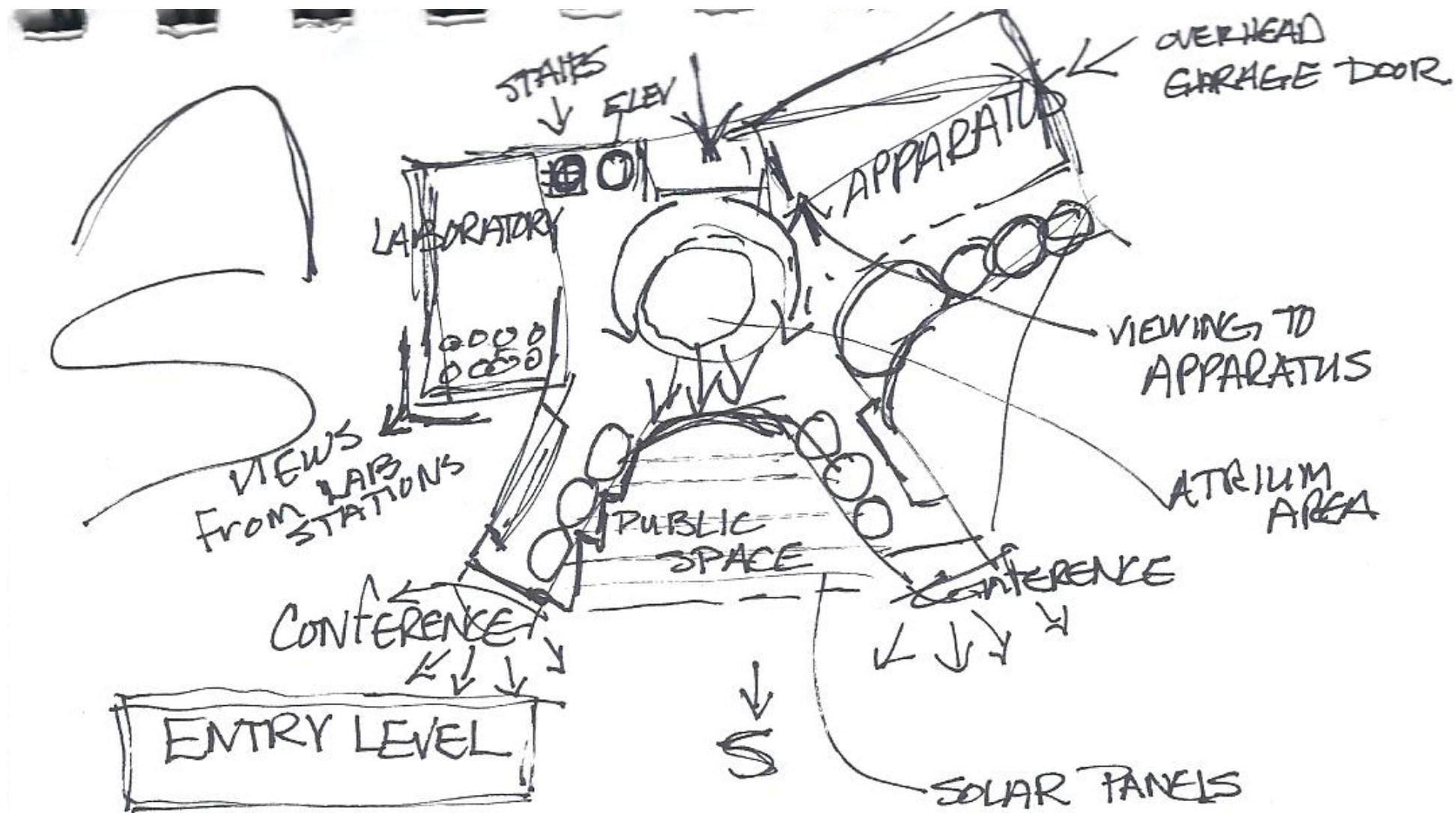




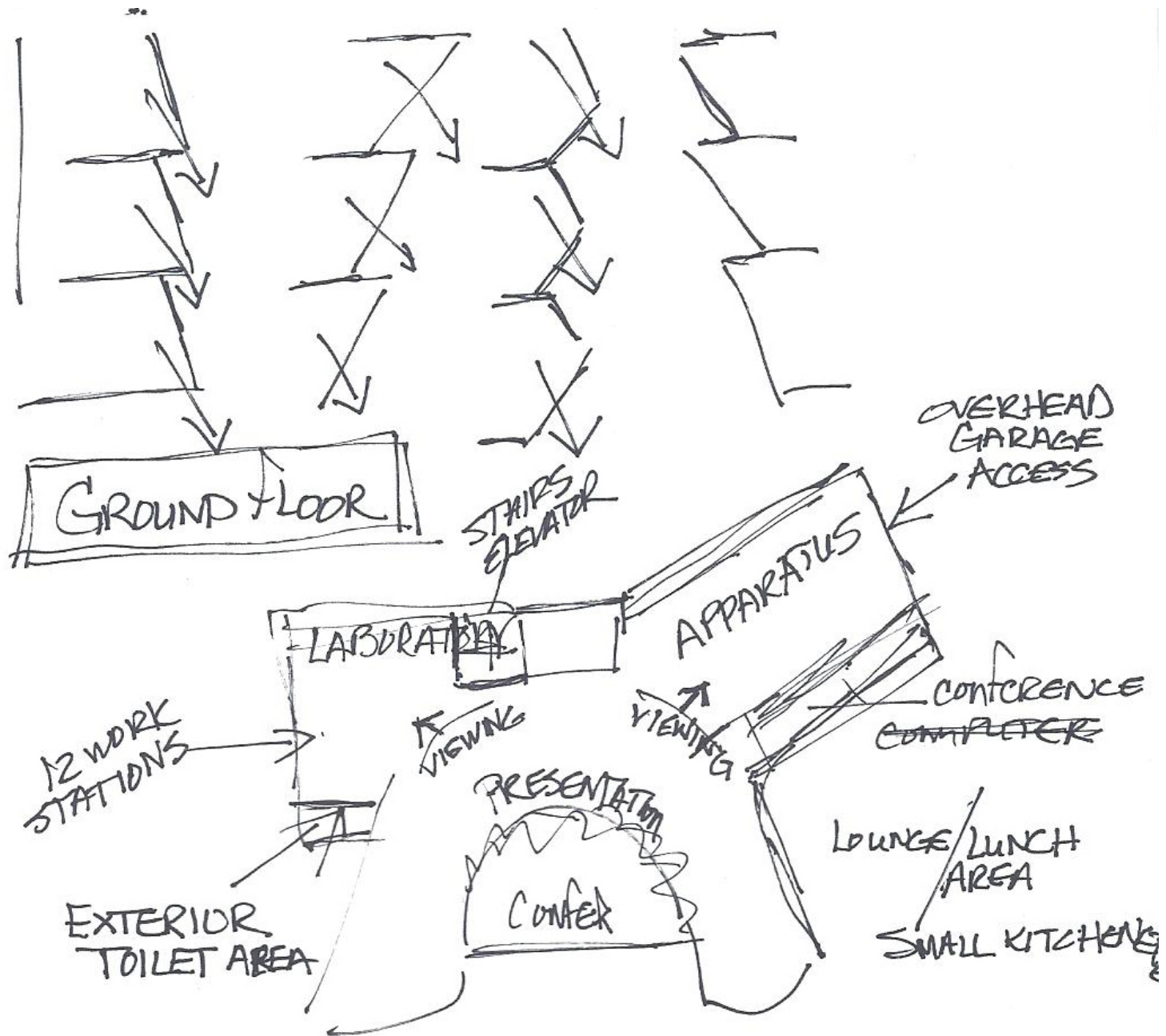


SITE CONSIDERATION





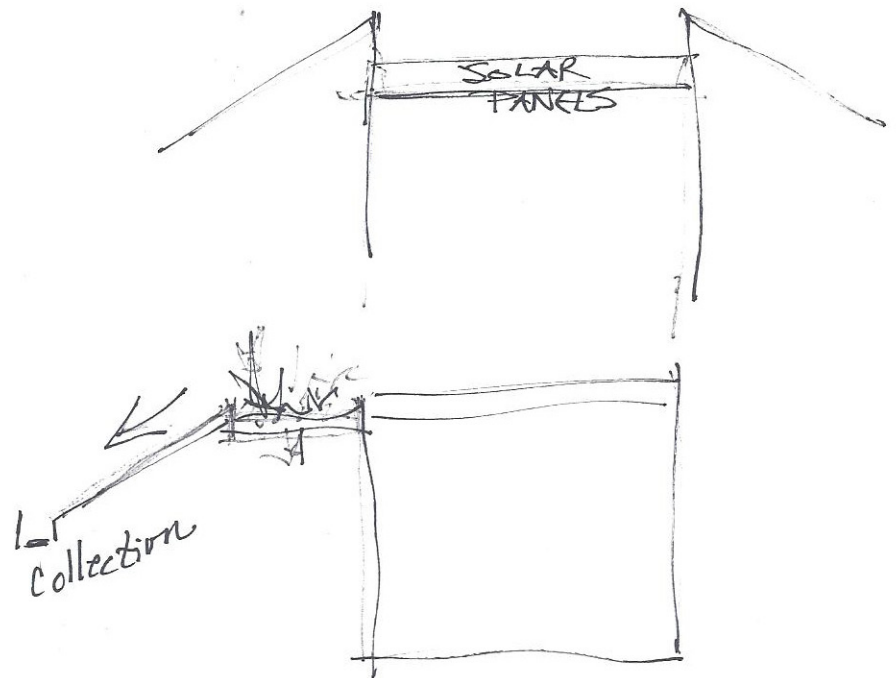
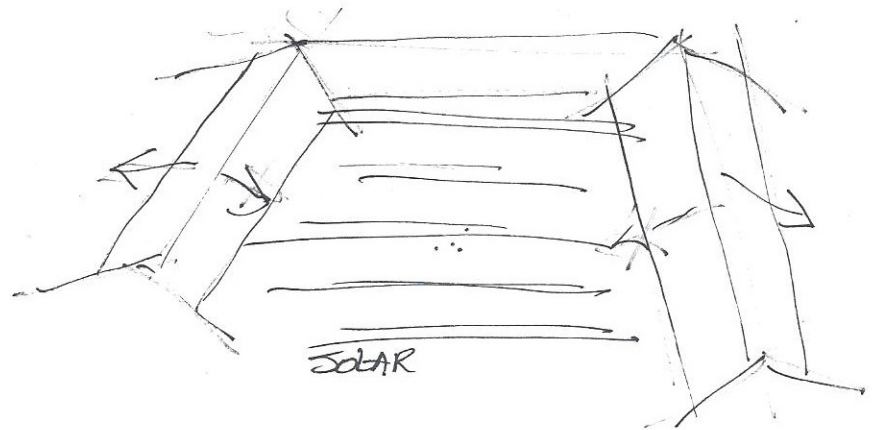
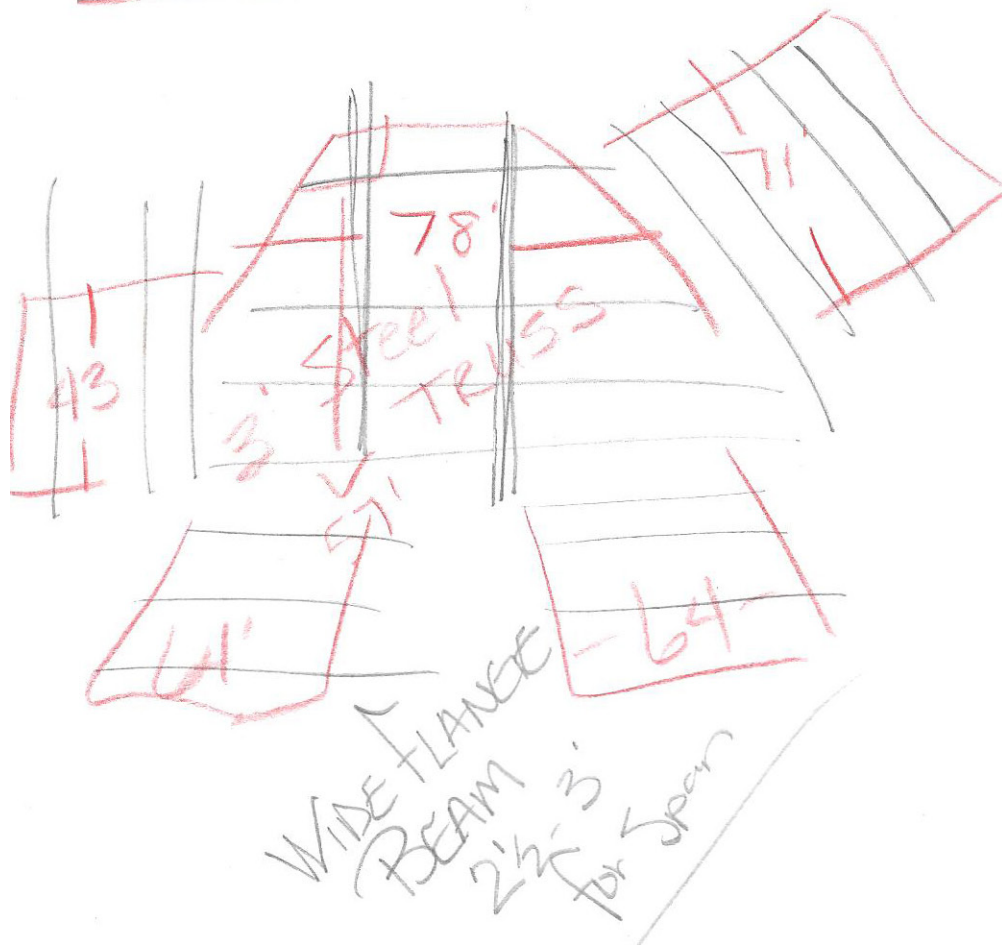


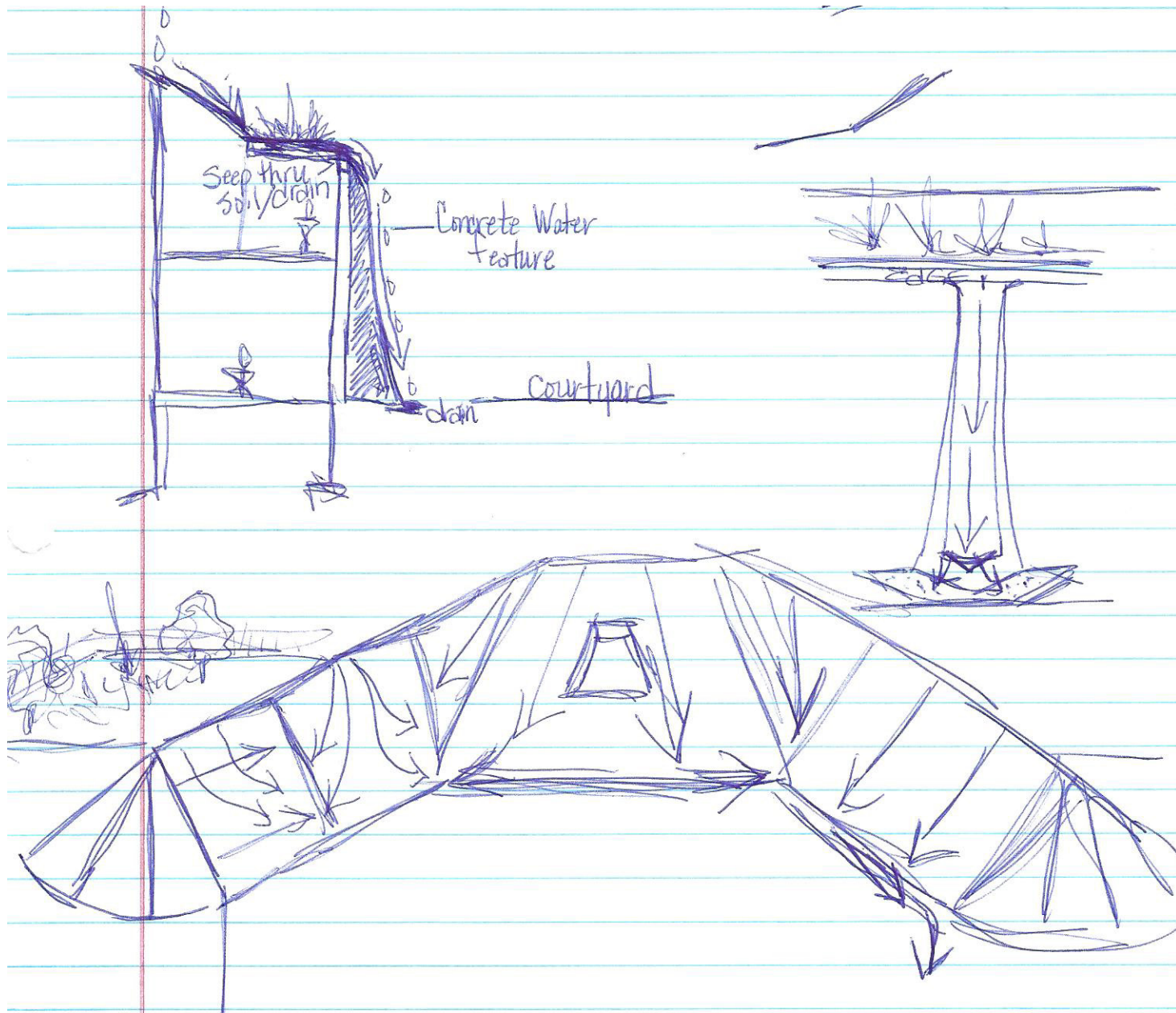


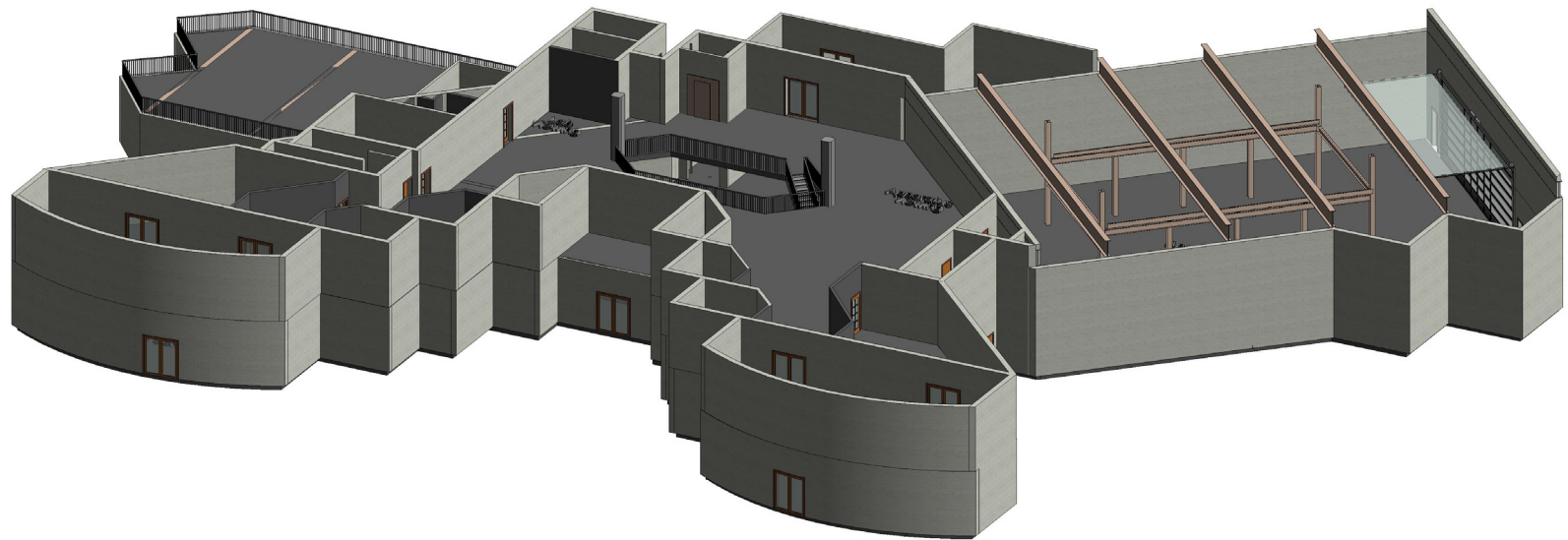
Green Roof  
lighter than  
planted!

6" 8" insulation

concrete 6"

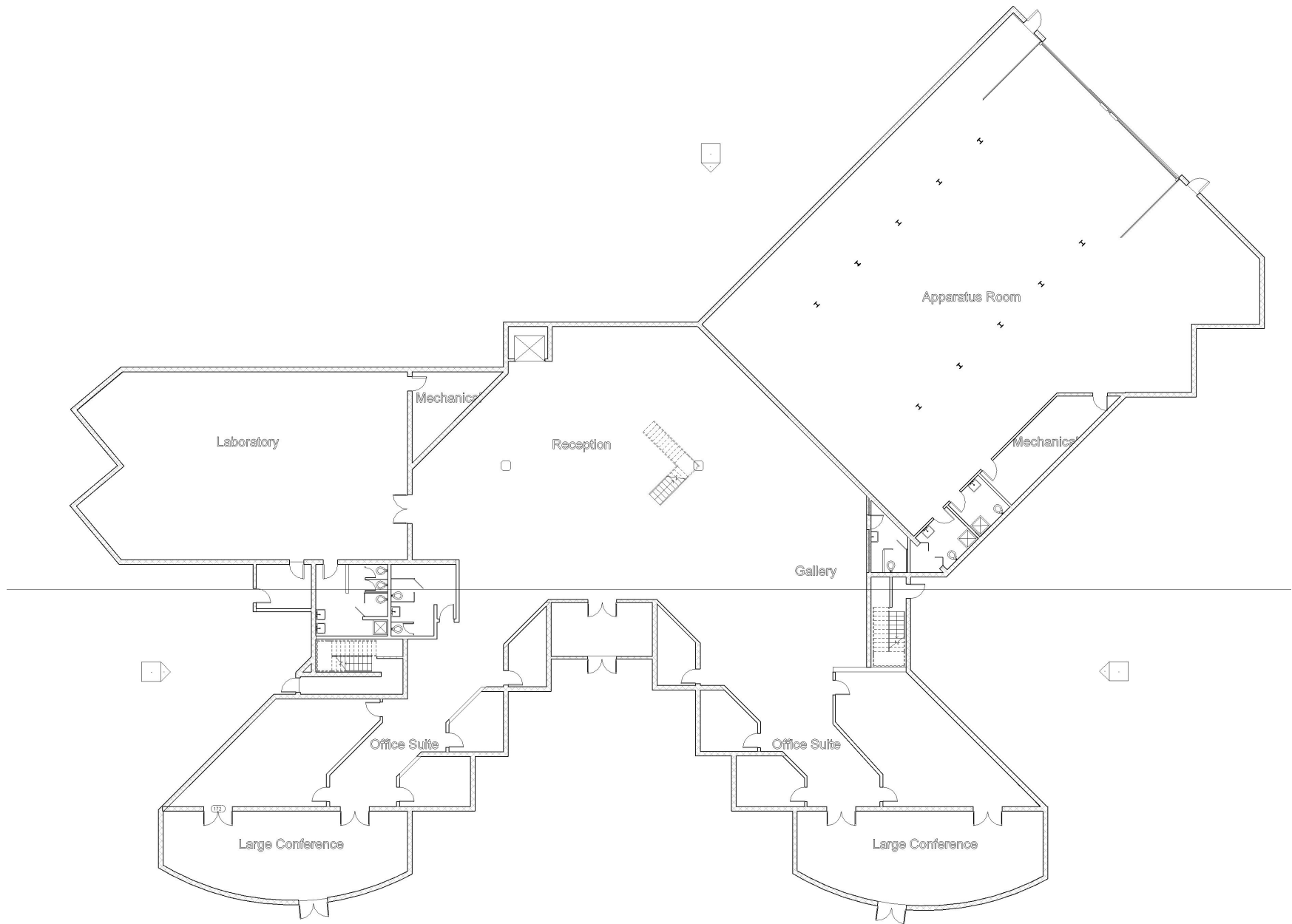






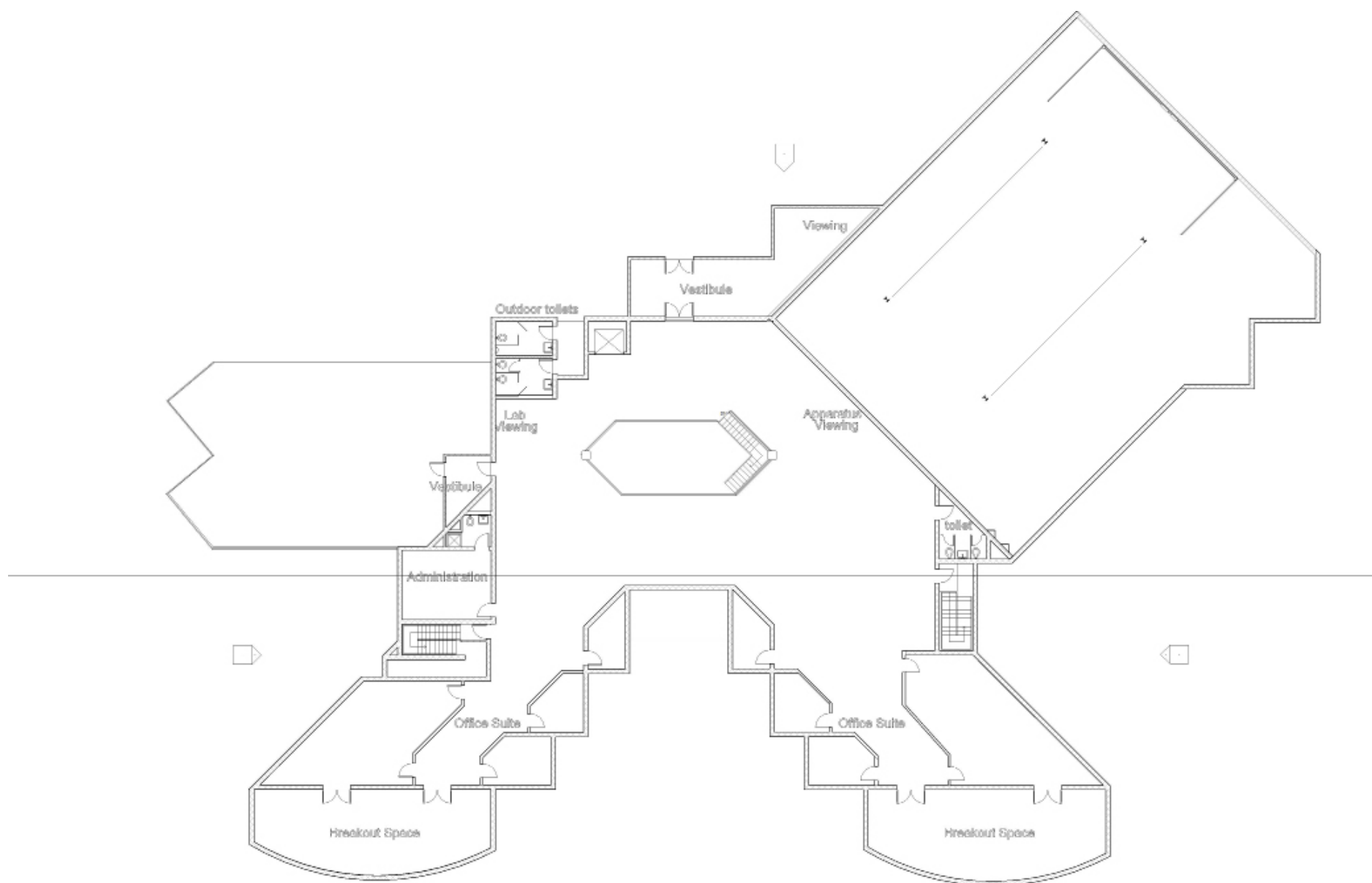
BIRDSEYE PERSPECTIVE/ STRUCTURE



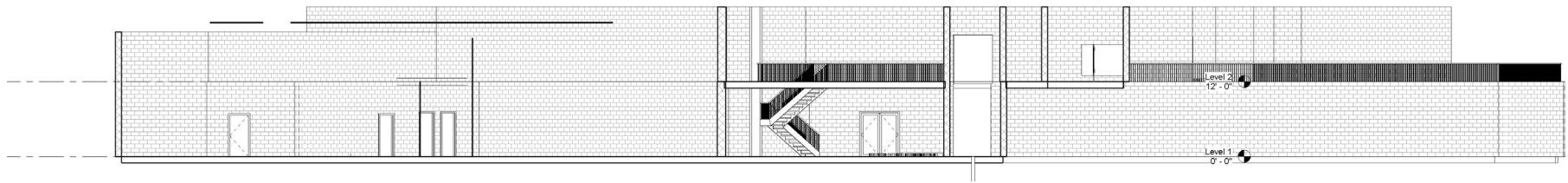


FIRST FLOOR

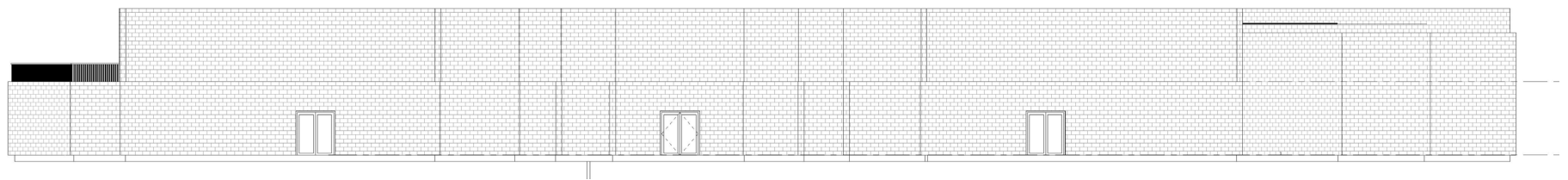




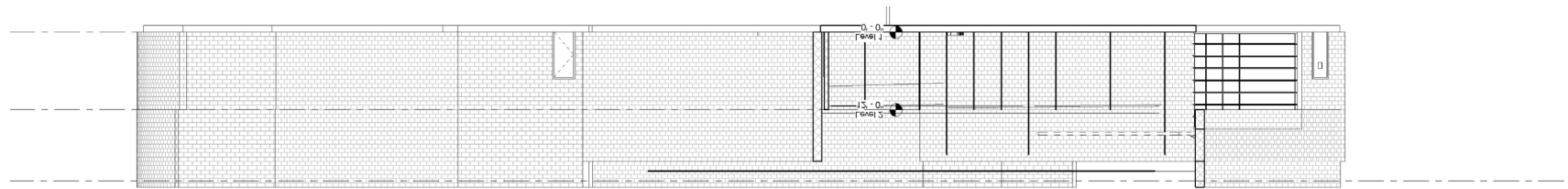
SECOND FLOOR



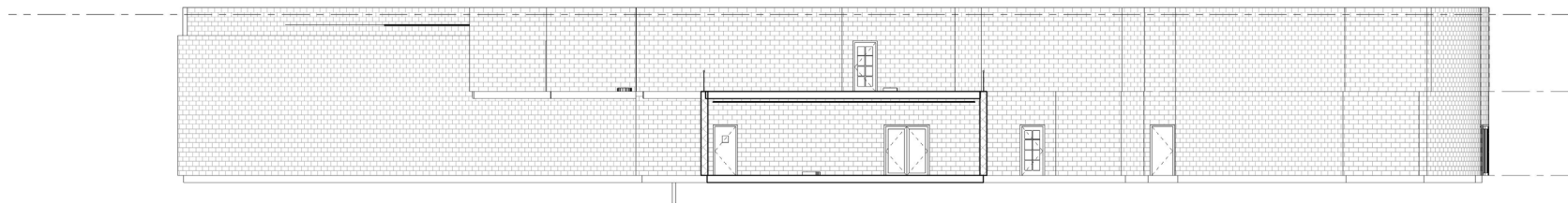
NORTH ELEVATION



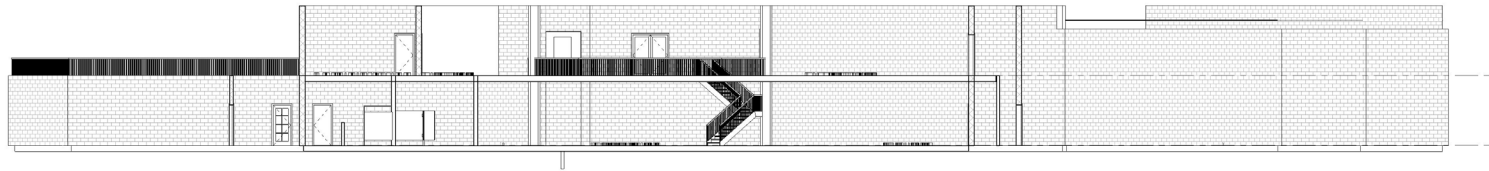
SOUTH ELEVATION



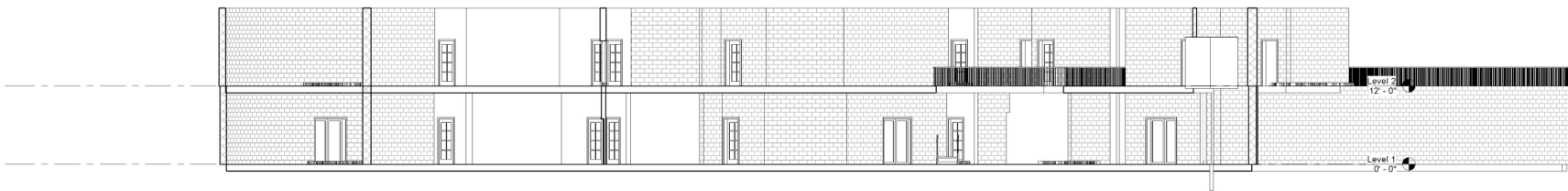
EAST ELEVATION



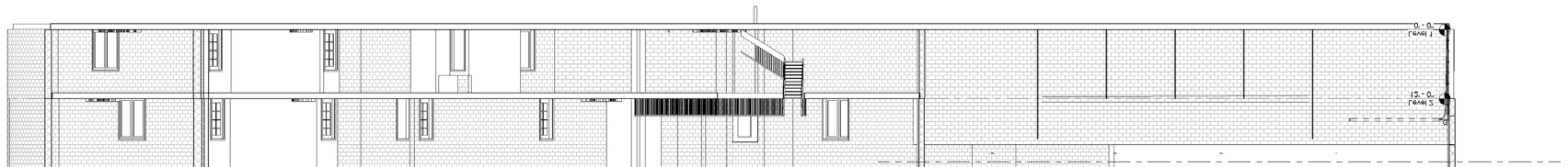
WEST ELEVATION



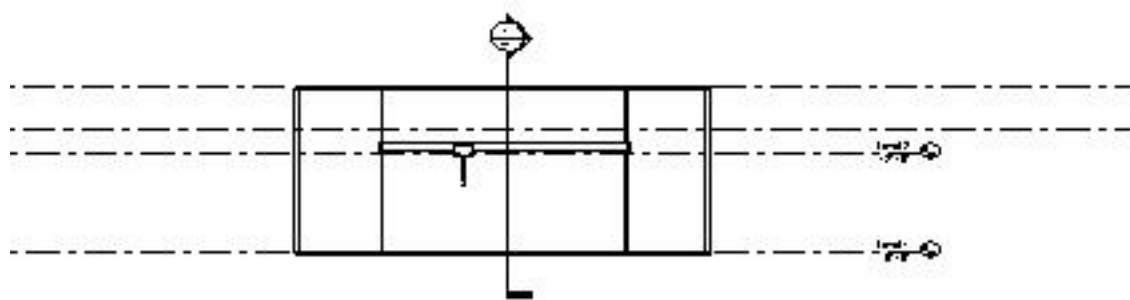
SECTION 1



SECTION 2



SECTION 3



EAST ELEVATION APPARATIS ROOM



RENDERED APPARATIS