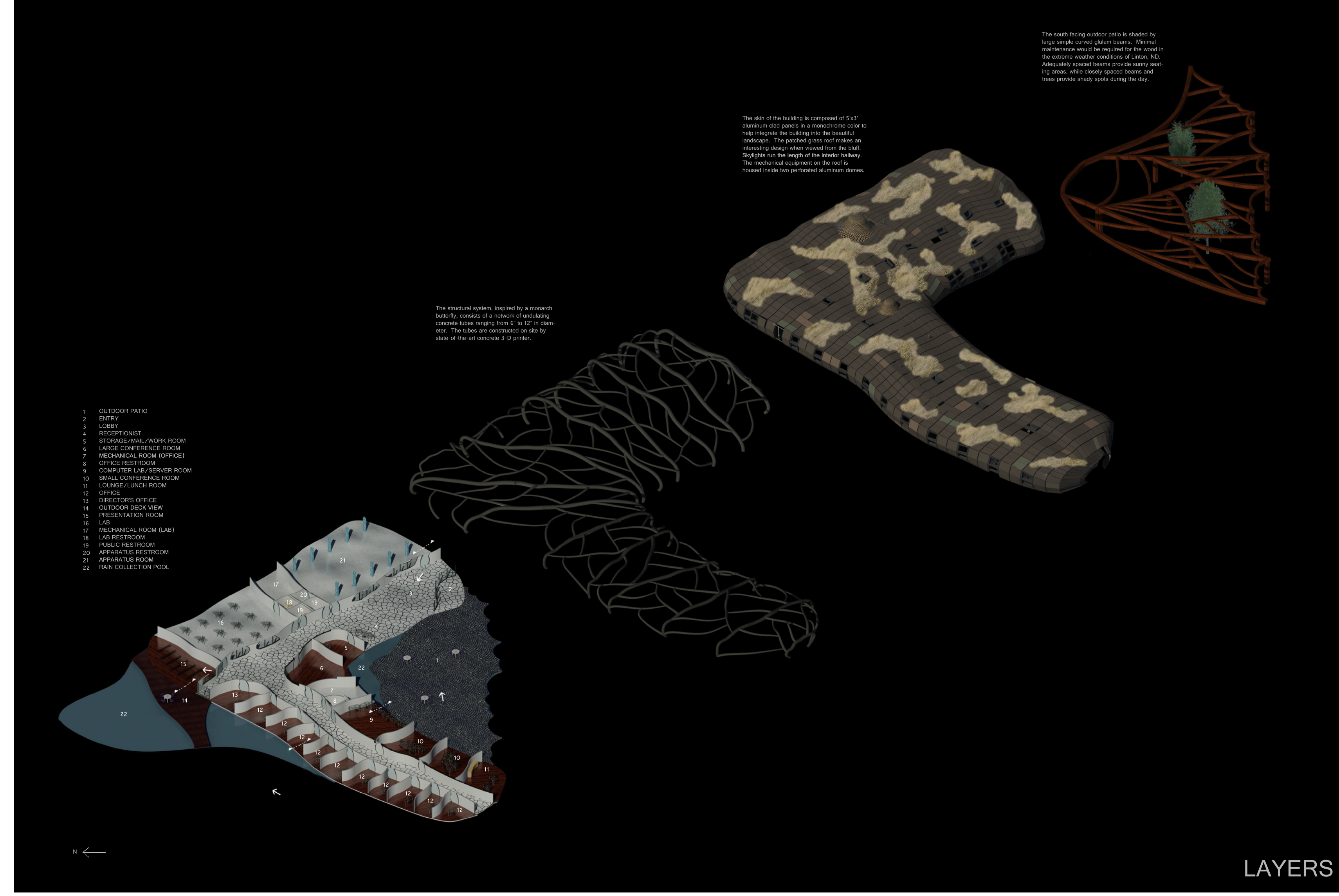


HEATHER BREDESON
ARCH 771 FALL 2011
INSTRUCTOR MARK BARNHOUSE

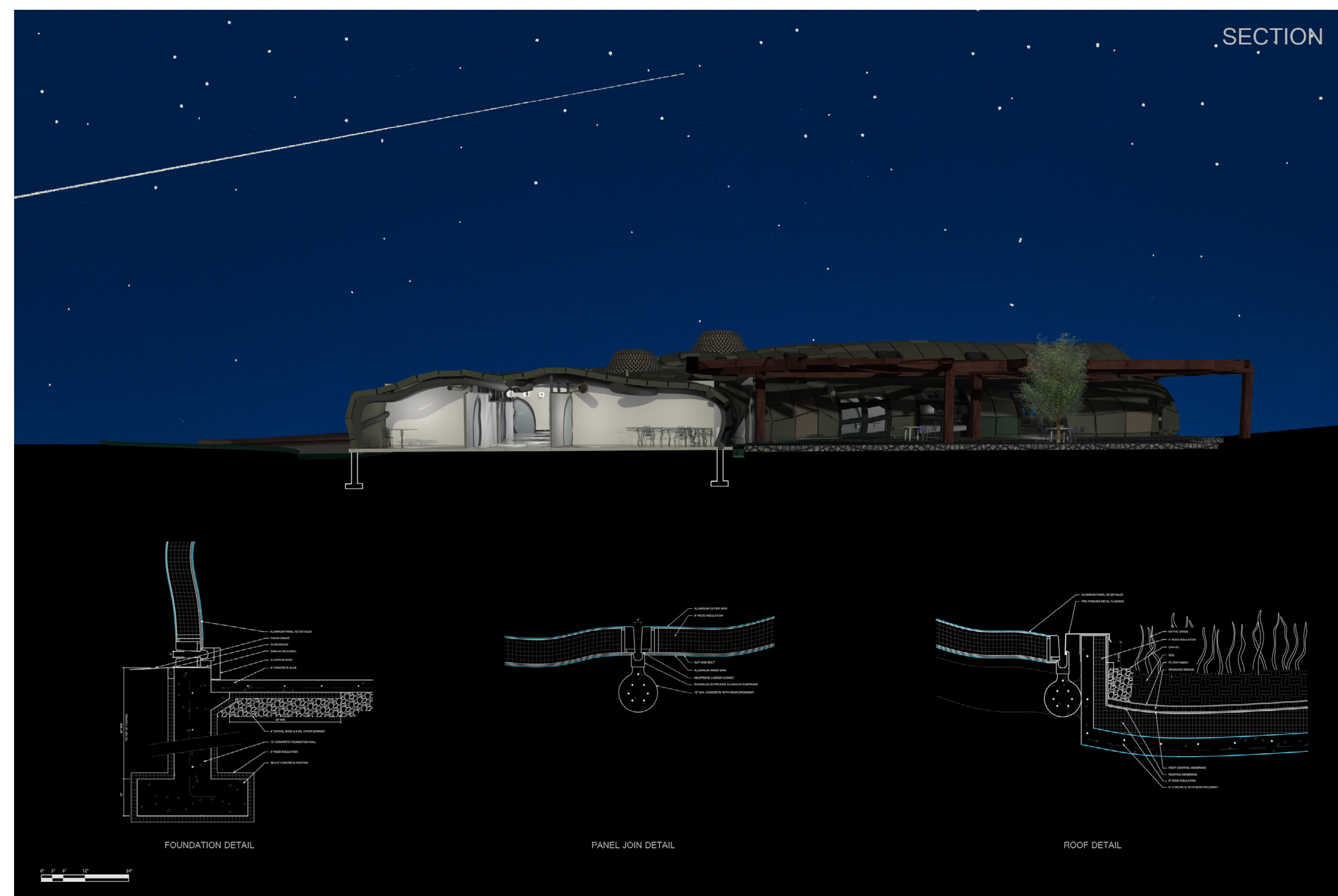


LAYERS

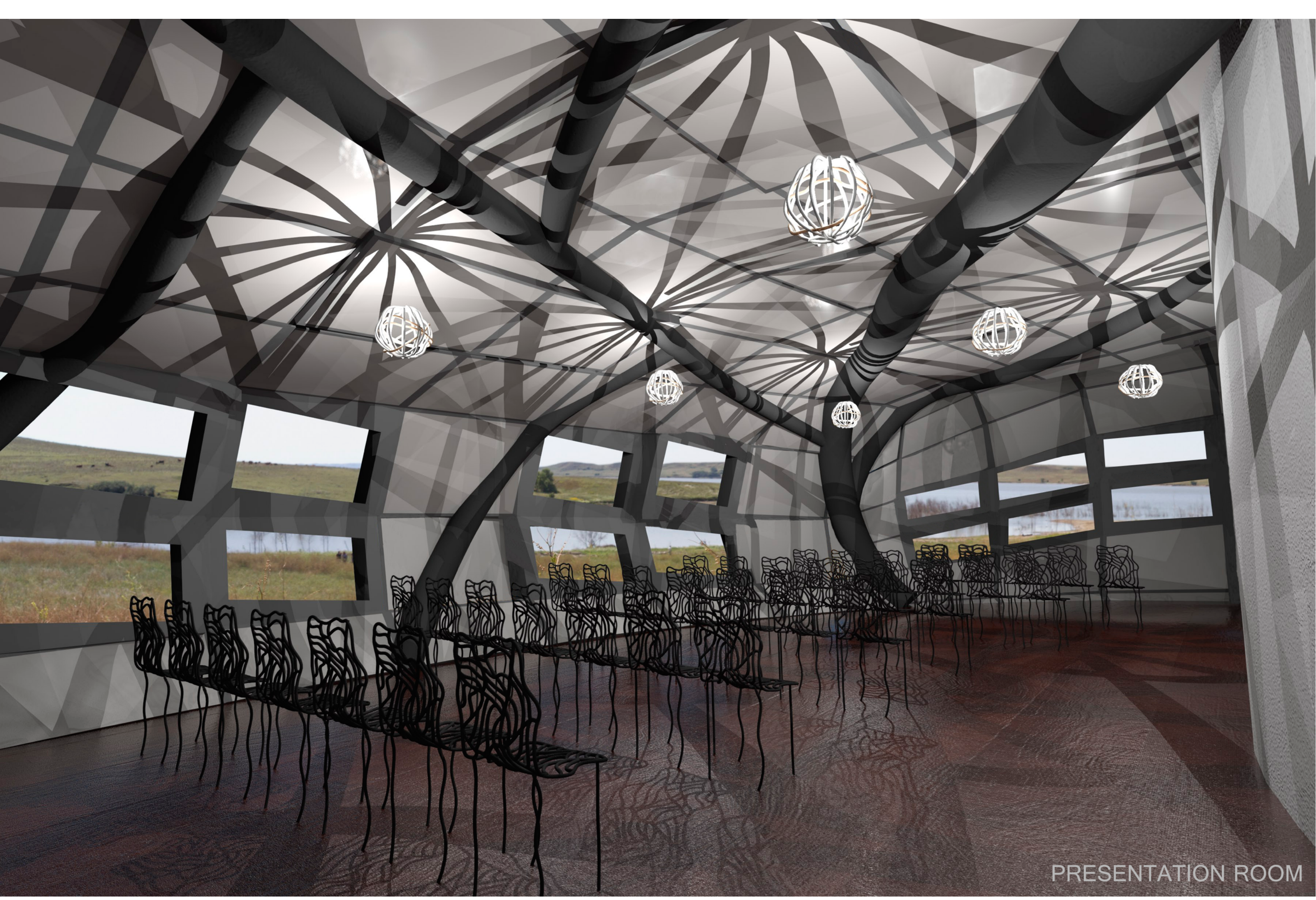


SECTION

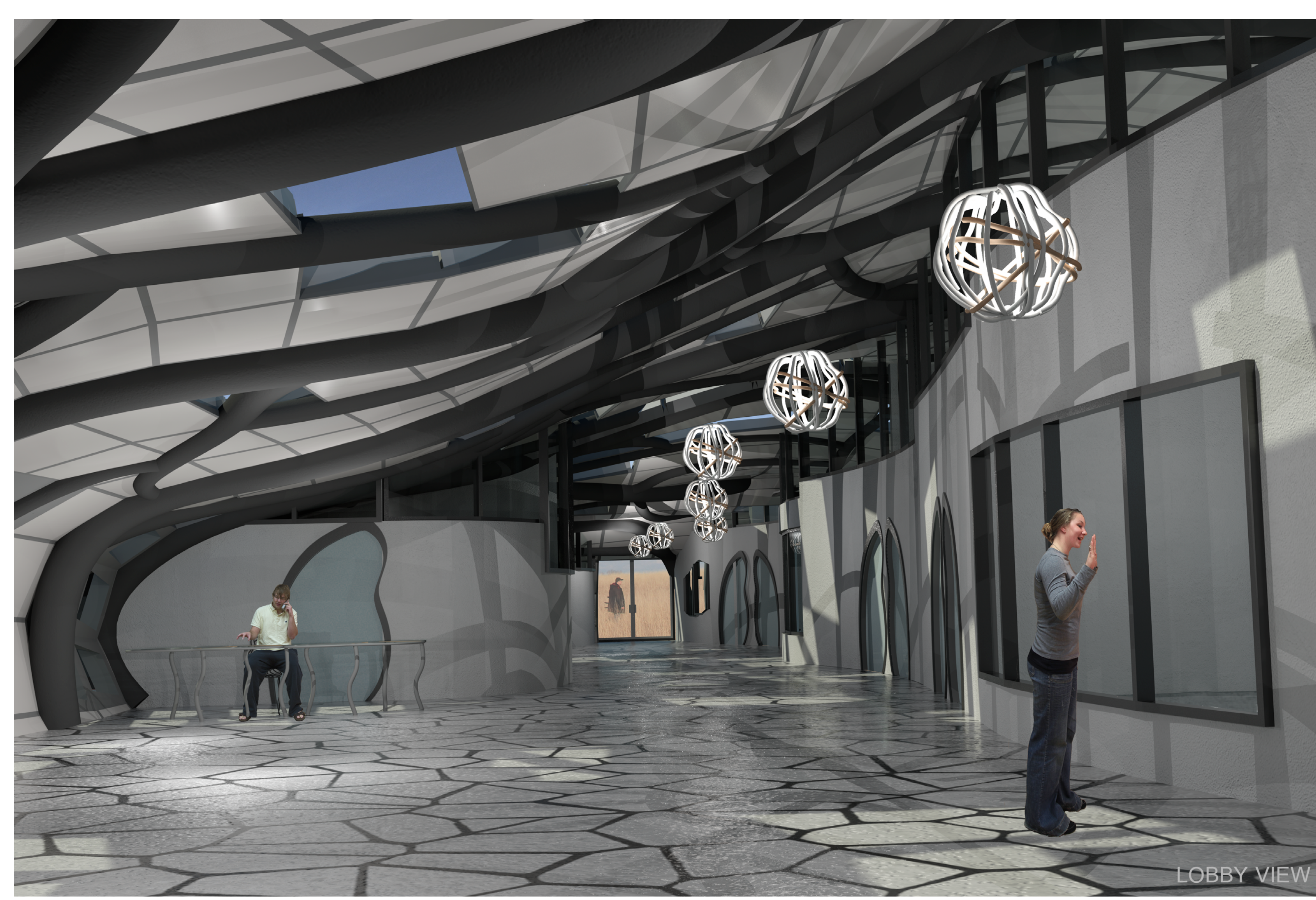
PONDS NOT TO SCALE



SECTION



PRESENTATION ROOM



LOBBY VIEW

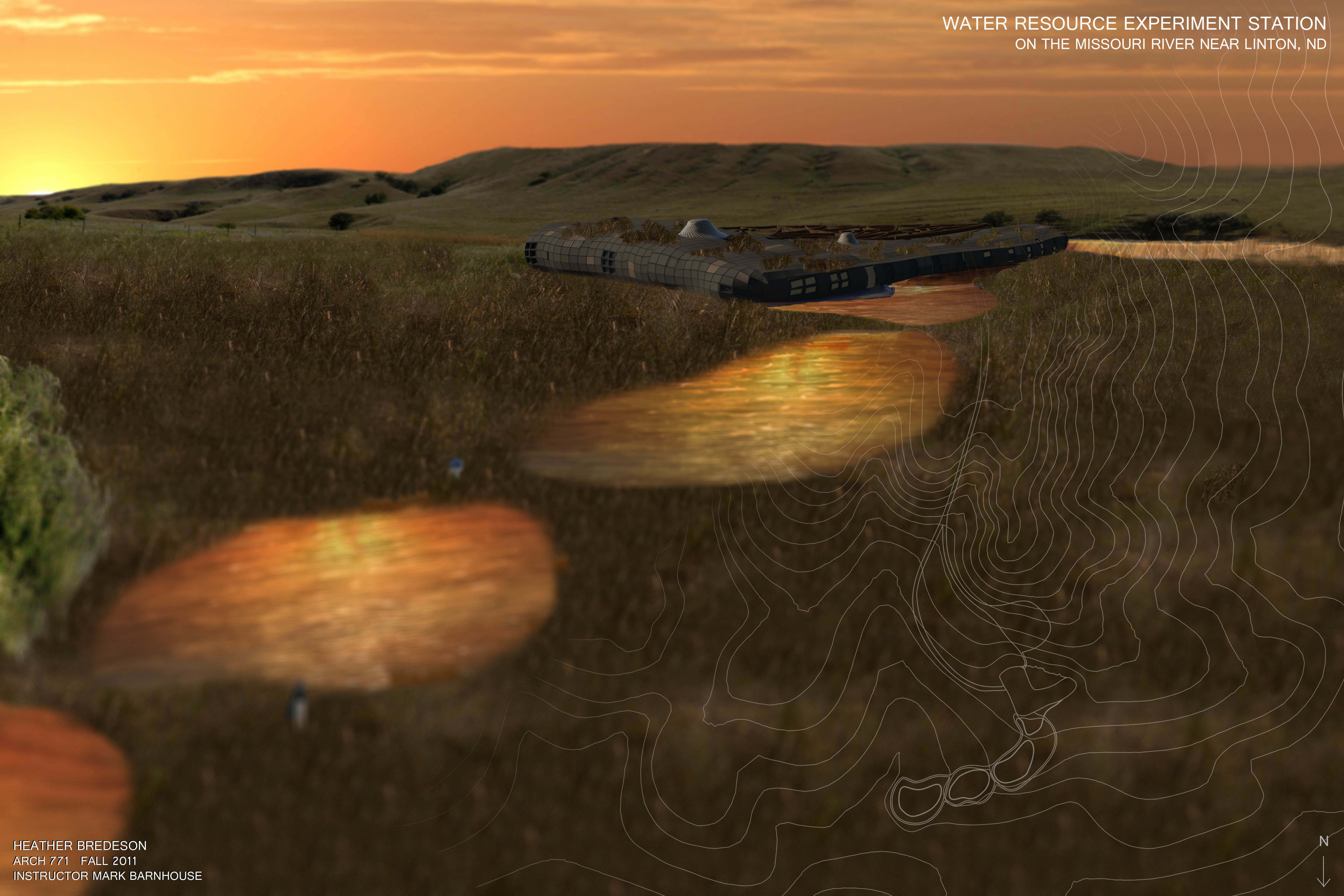


OUTDOOR PATIO



SITE VIEW

WATER RESOURCE EXPERIMENT STATION
ON THE MISSOURI RIVER NEAR LINTON, ND



The south facing outdoor patio is shaded by large simple curved glulam beams. Minimal maintenance would be required for the wood in the extreme weather conditions of Linton, ND. Adequately spaced beams provide sunny seating areas, while closely spaced beams and trees provide shady spots during the day.



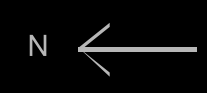
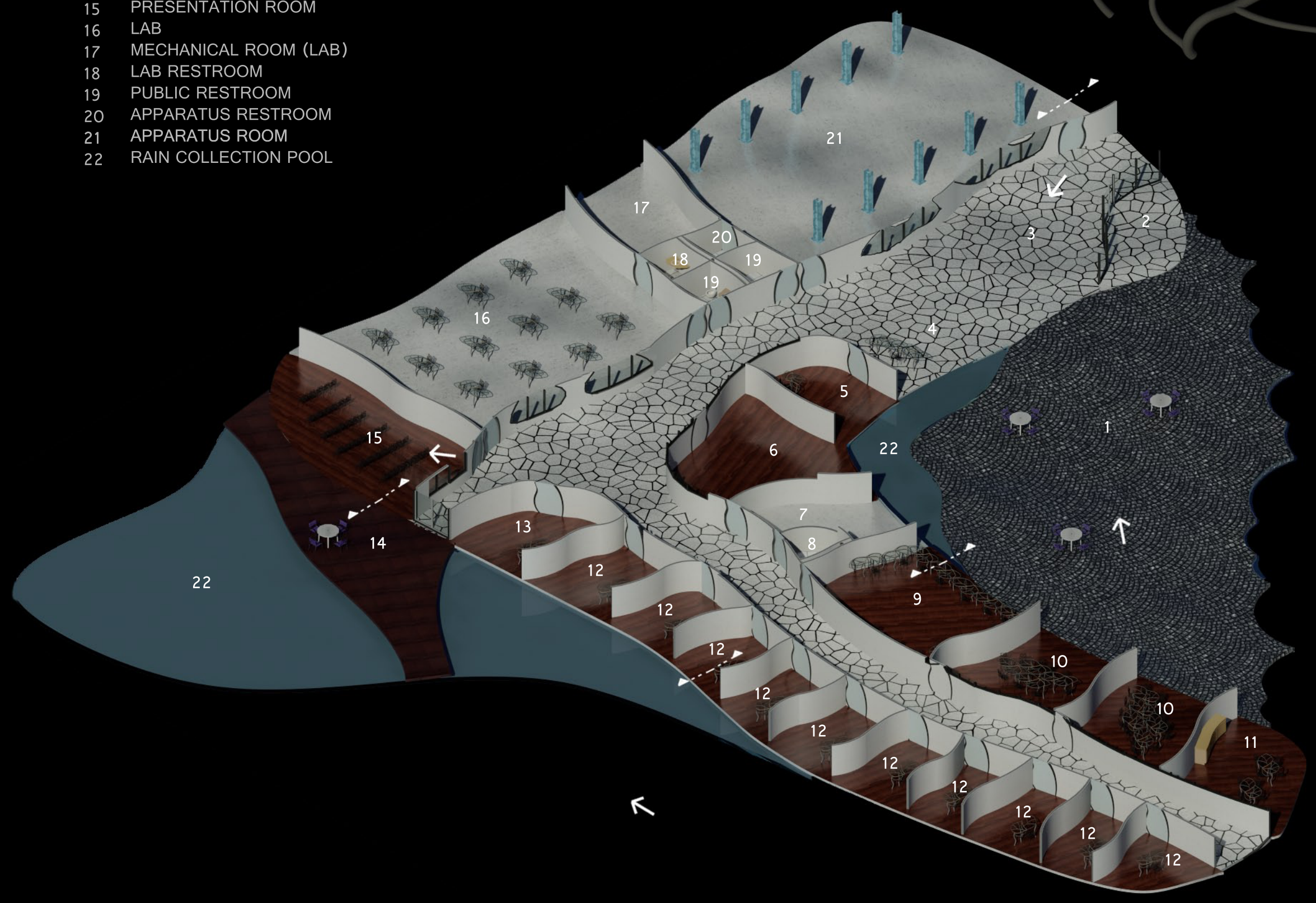
The skin of the building is composed of 5'x3' aluminum clad panels in a monochrome color to help integrate the building into the beautiful landscape. The patched grass roof makes an interesting design when viewed from the bluff. Skylights run the length of the interior hallway. The mechanical equipment on the roof is housed inside two perforated aluminum domes.



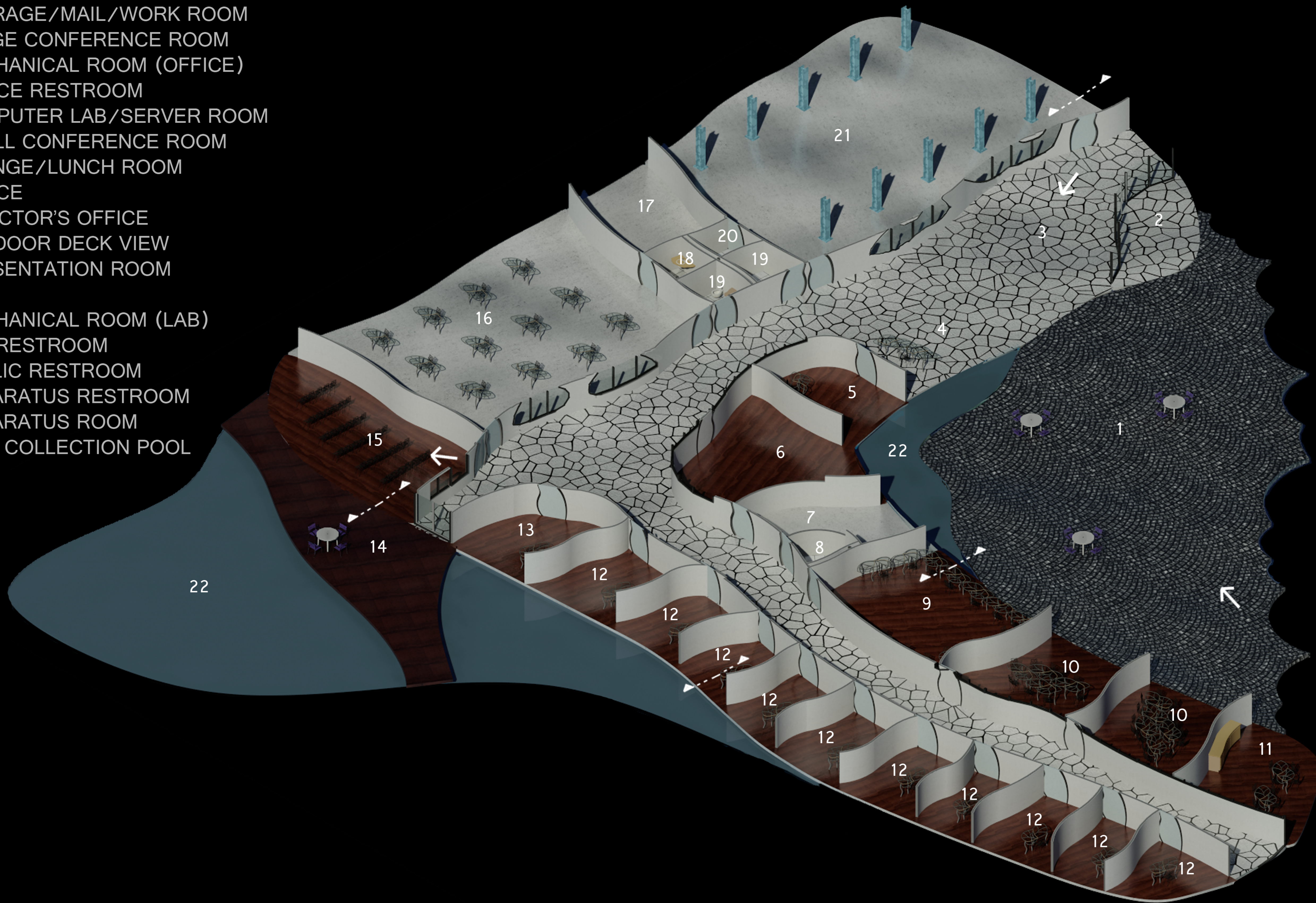
The structural system, inspired by a monarch butterfly, consists of a network of undulating concrete tubes ranging from 6" to 12" in diameter. The tubes are constructed on site by state-of-the-art concrete 3-D printer.



- 1 OUTDOOR PATIO
- 2 ENTRY
- 3 LOBBY
- 4 RECEPTIONIST
- 5 STORAGE/MAIL/WORK ROOM
- 6 LARGE CONFERENCE ROOM
- 7 MECHANICAL ROOM (OFFICE)
- 8 OFFICE RESTROOM
- 9 COMPUTER LAB/SERVER ROOM
- 10 SMALL CONFERENCE ROOM
- 11 LOUNGE/LUNCH ROOM
- 12 OFFICE
- 13 DIRECTOR'S OFFICE
- 14 OUTDOOR DECK VIEW
- 15 PRESENTATION ROOM
- 16 LAB
- 17 MECHANICAL ROOM (LAB)
- 18 LAB RESTROOM
- 19 PUBLIC RESTROOM
- 20 APPARATUS RESTROOM
- 21 APPARATUS ROOM
- 22 RAIN COLLECTION POOL



- 1 OUTDOOR PATIO
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FLOOR PLAN

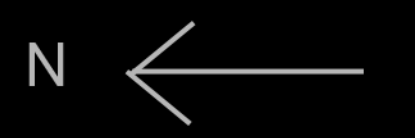
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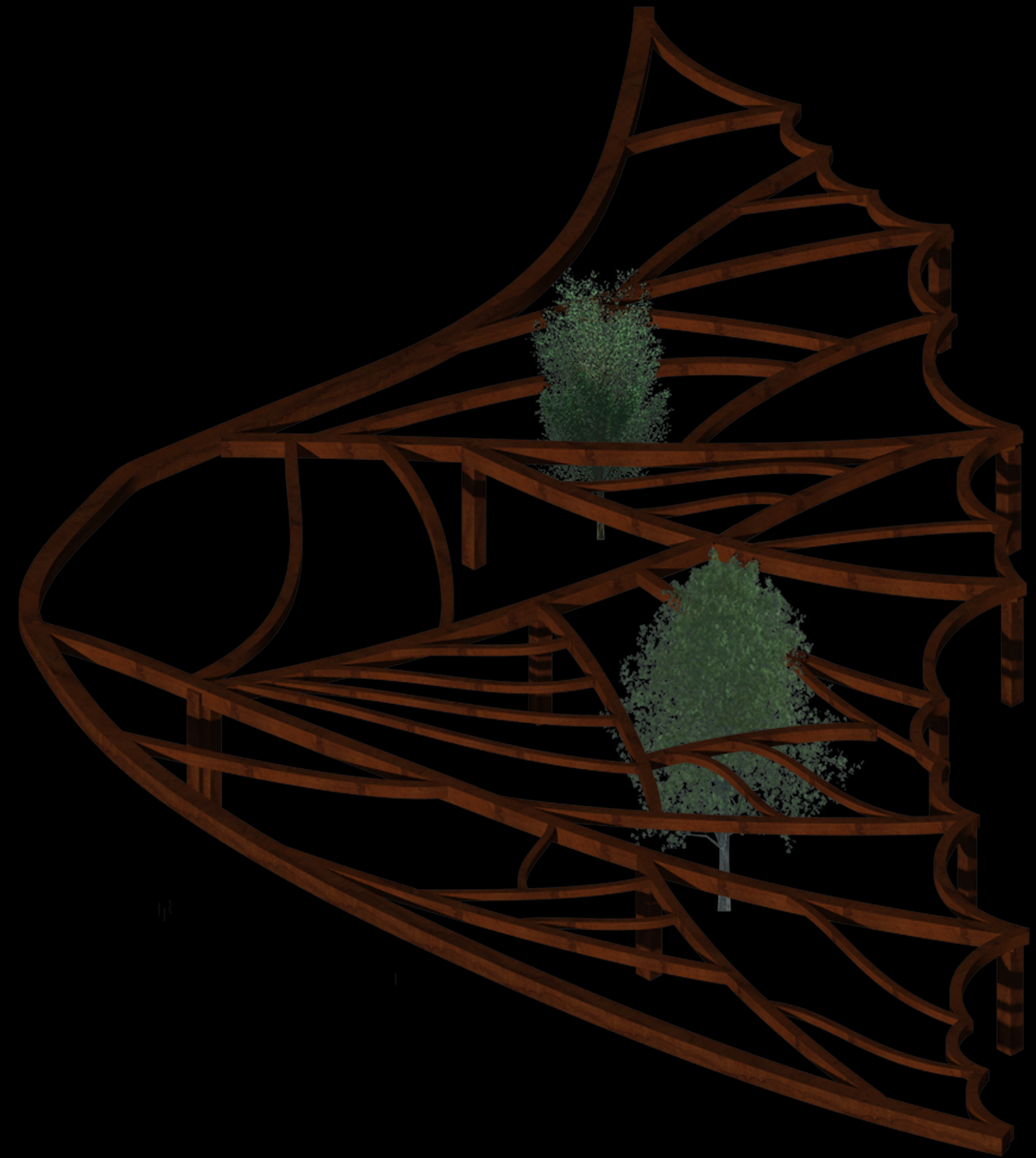
STRUCTURE

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PANELS

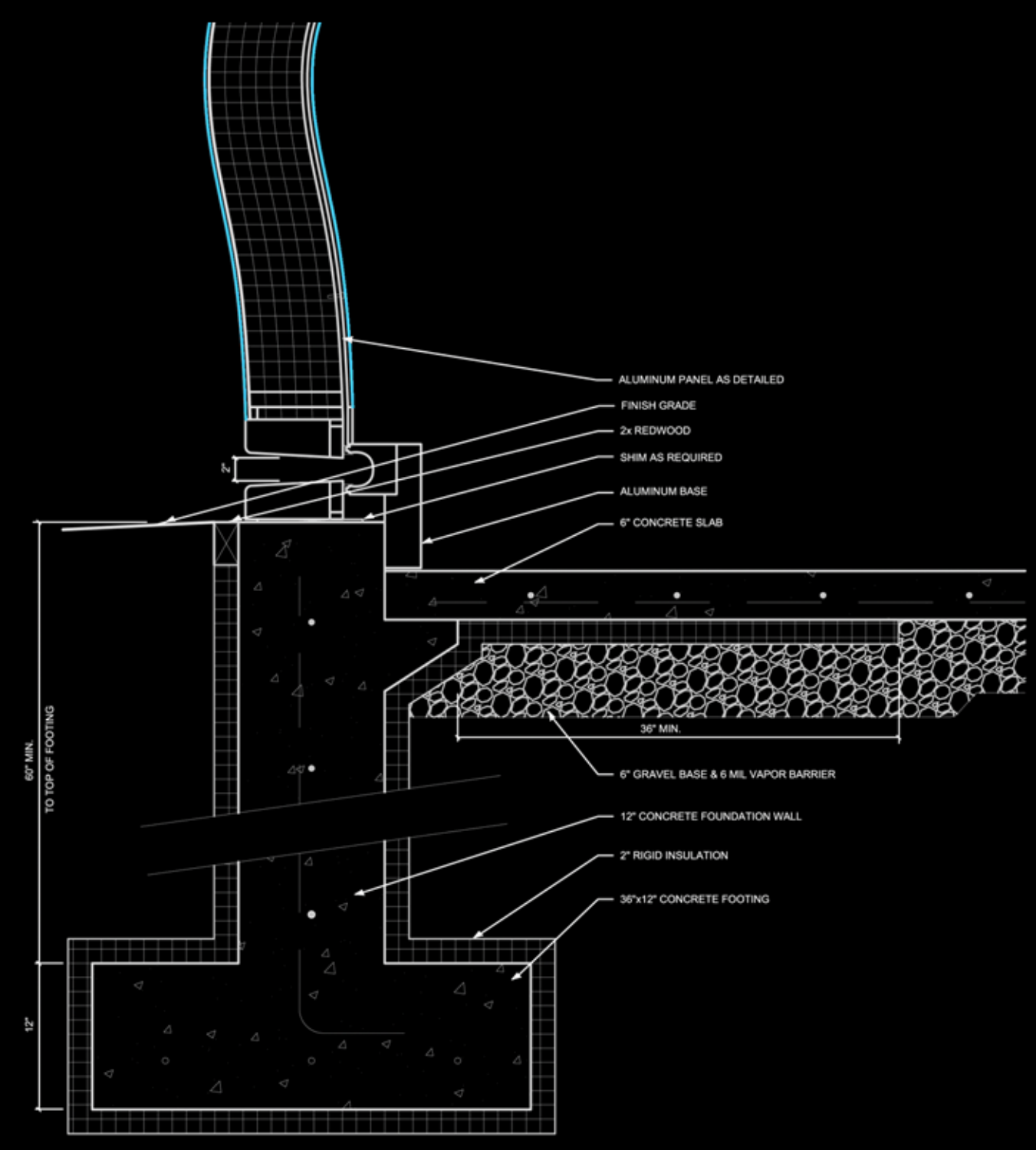
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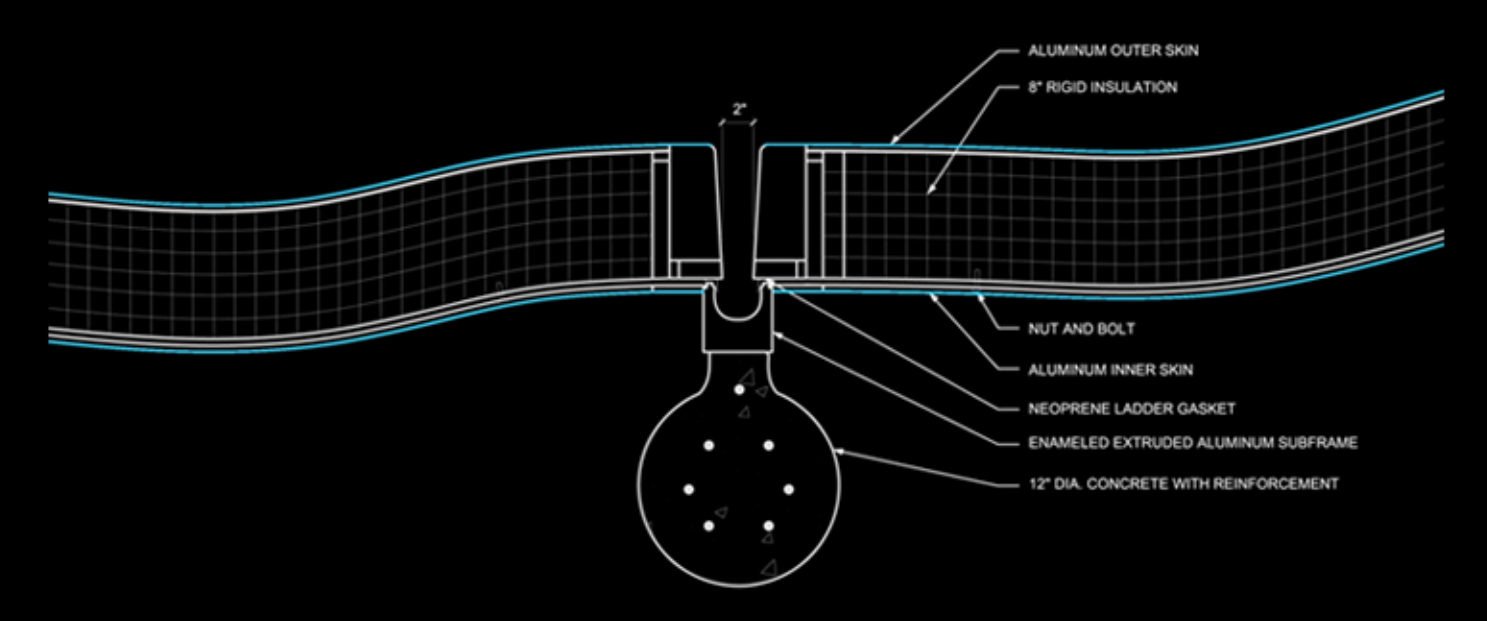
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CANOPY

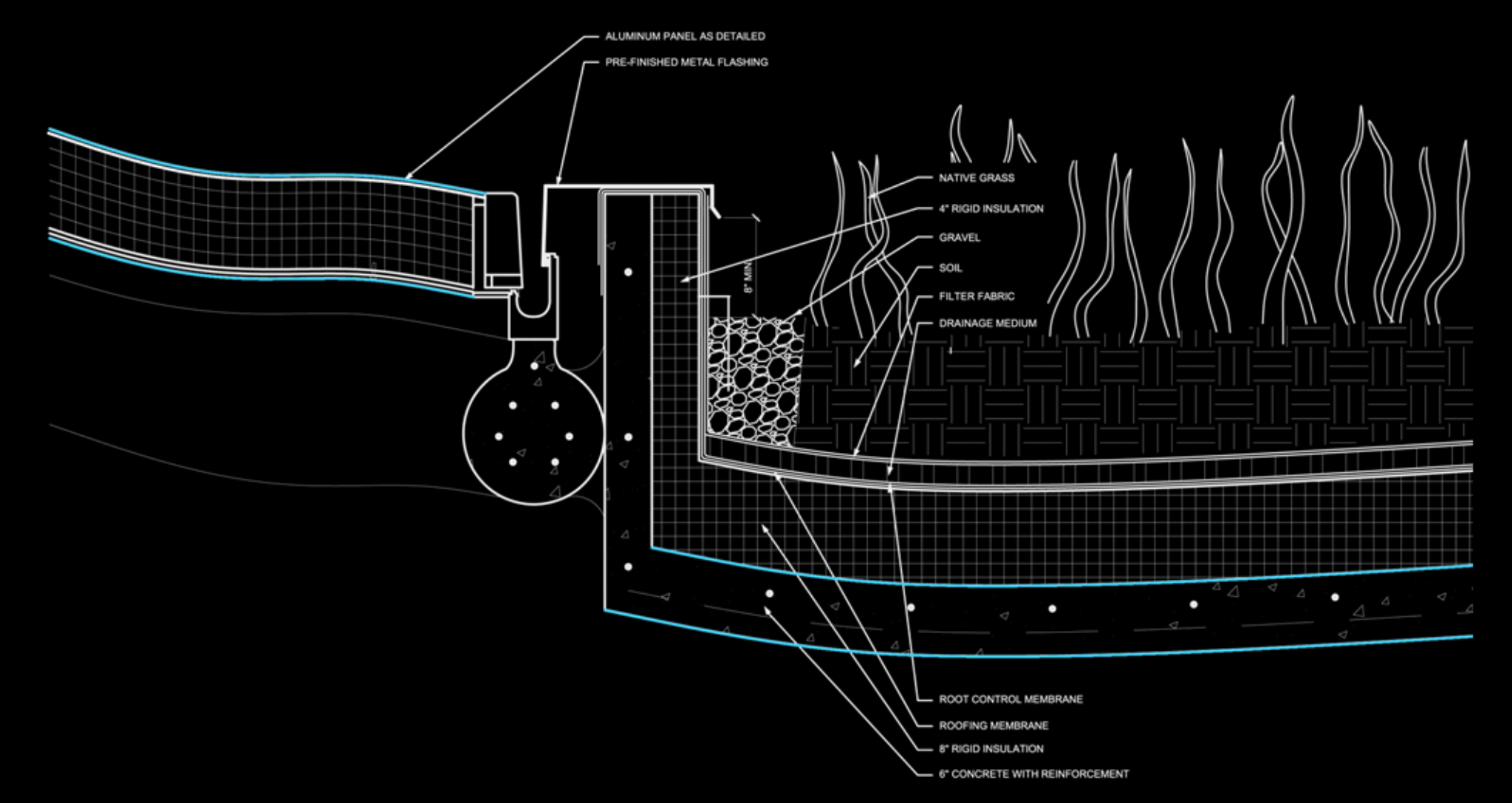




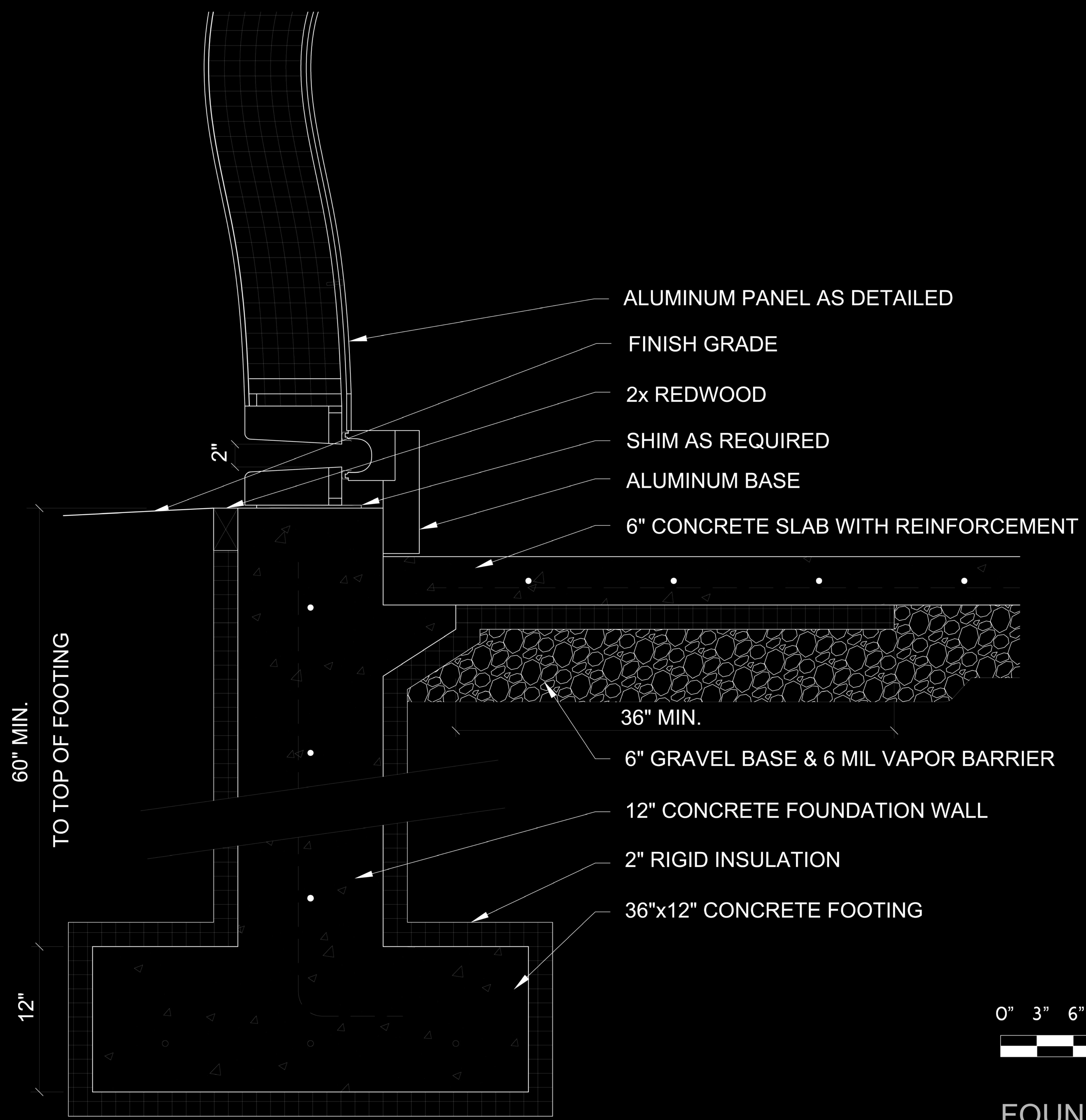
FOUNDATION DETAIL



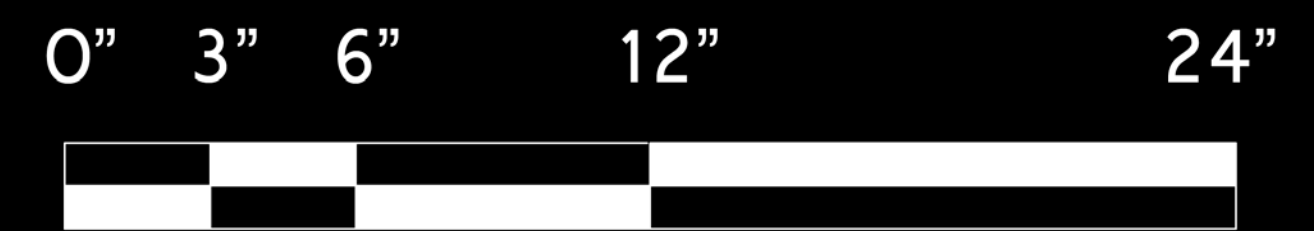
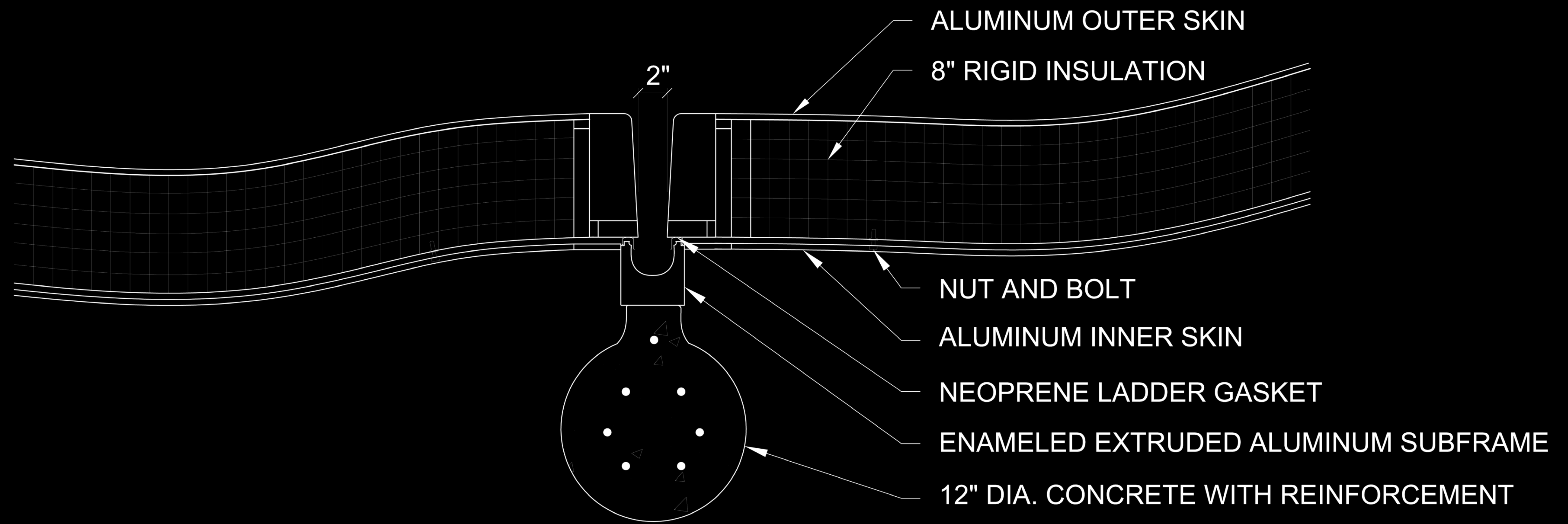
PANEL JOIN DETAIL



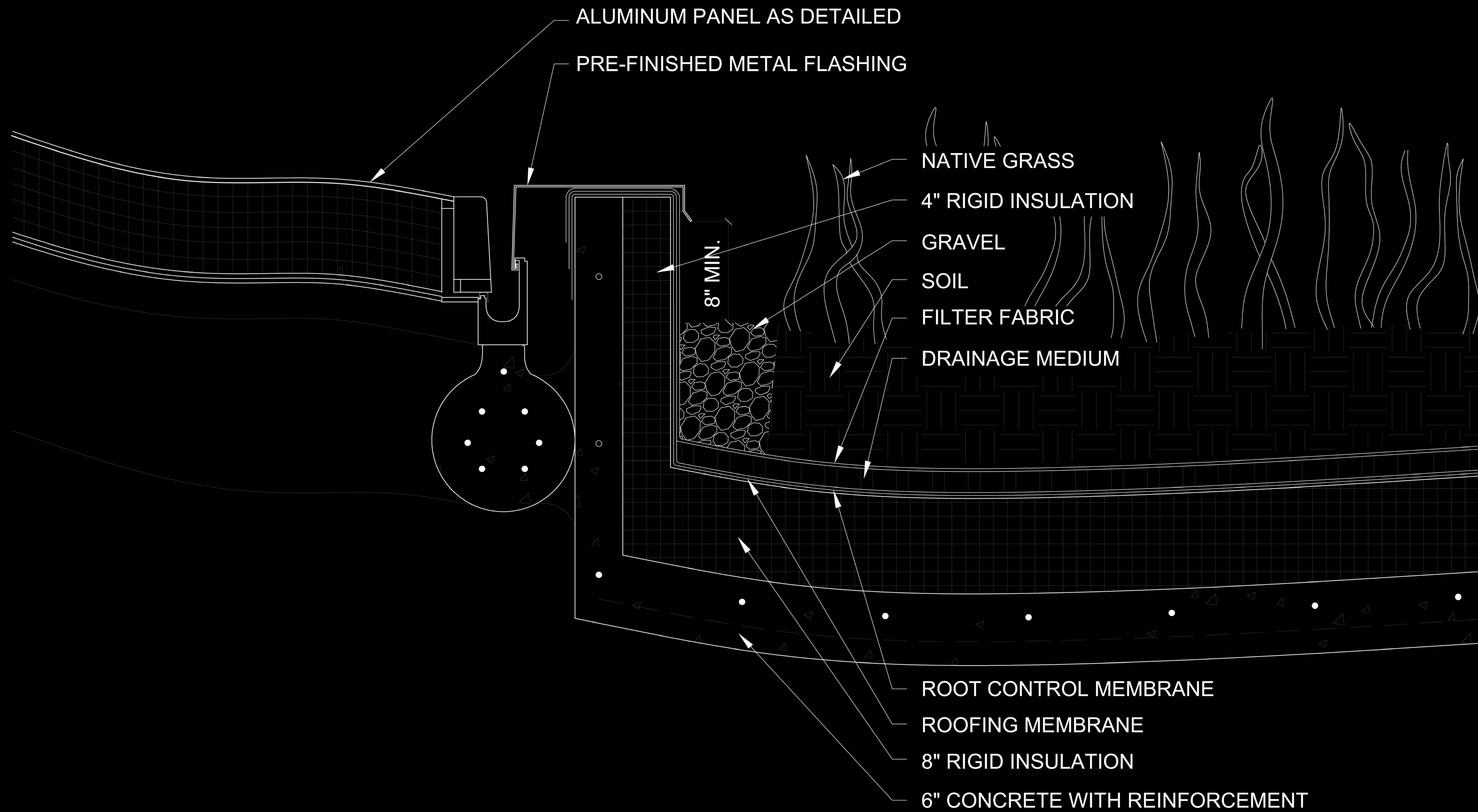
ROOF DETAIL



FOUNDATION DETAIL



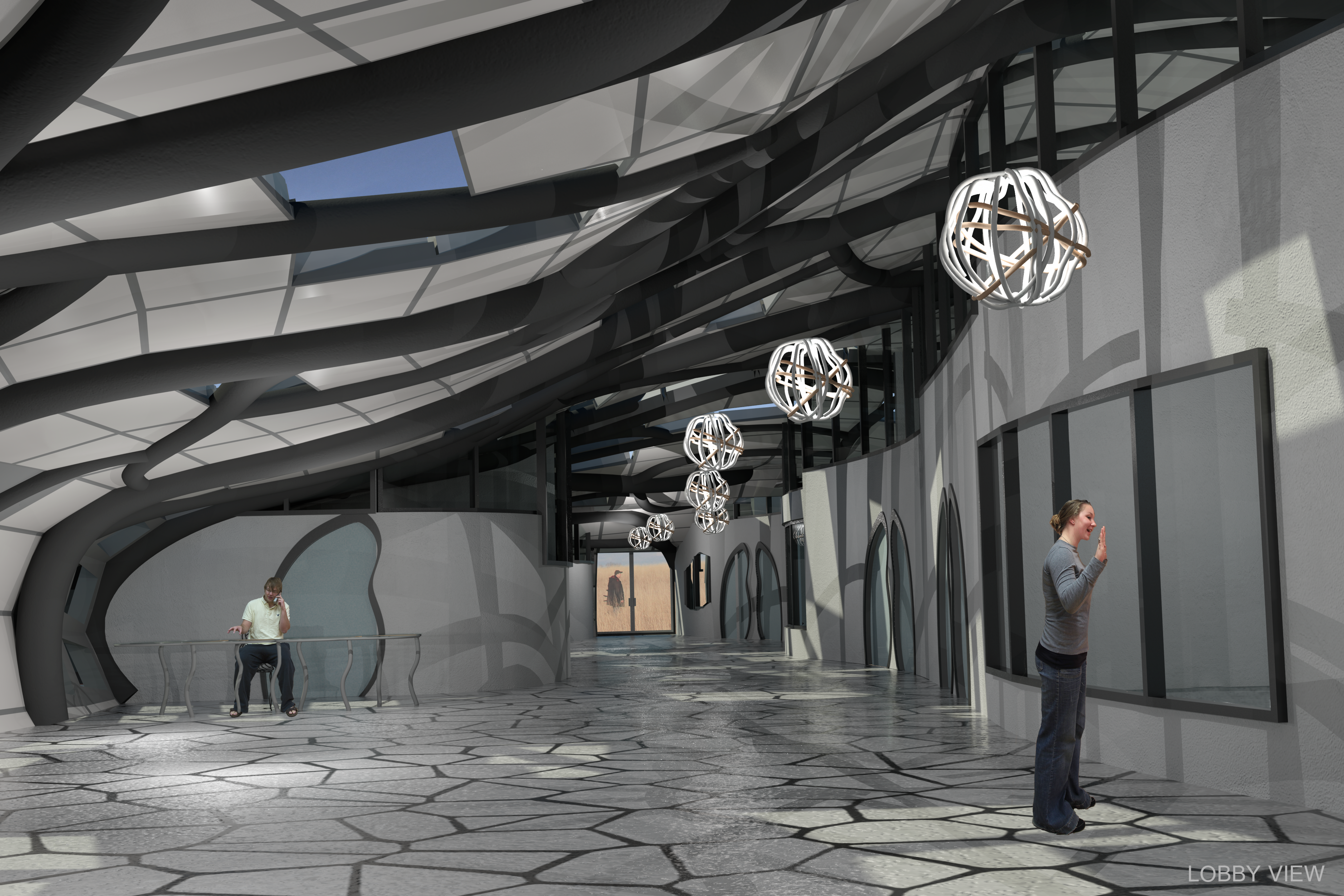
PANEL JOINT DETAIL



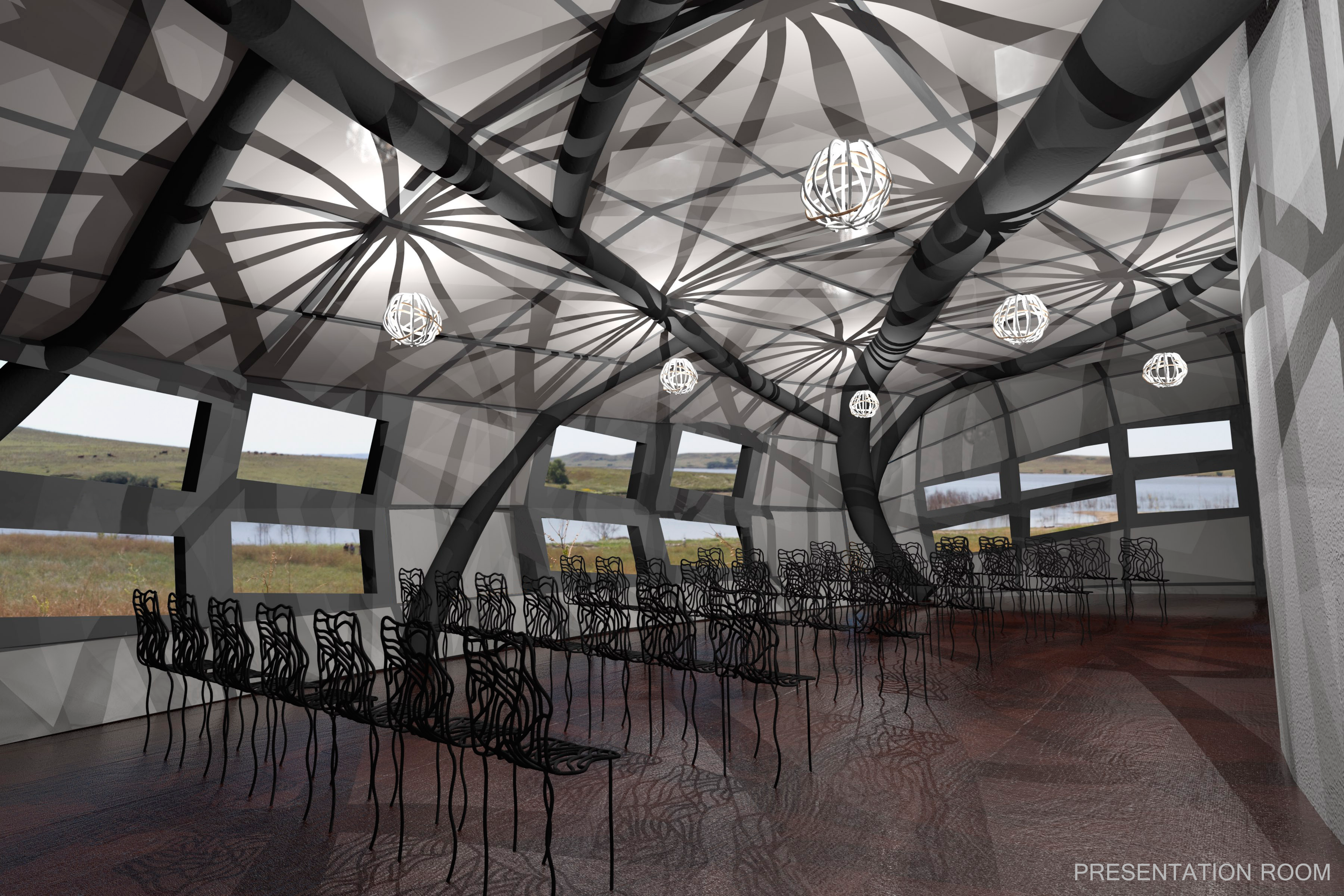
ROOF DETAIL



OUTDOOR PATIO



LOBBY VIEW



PRESENTATION ROOM



SITE VIEW

