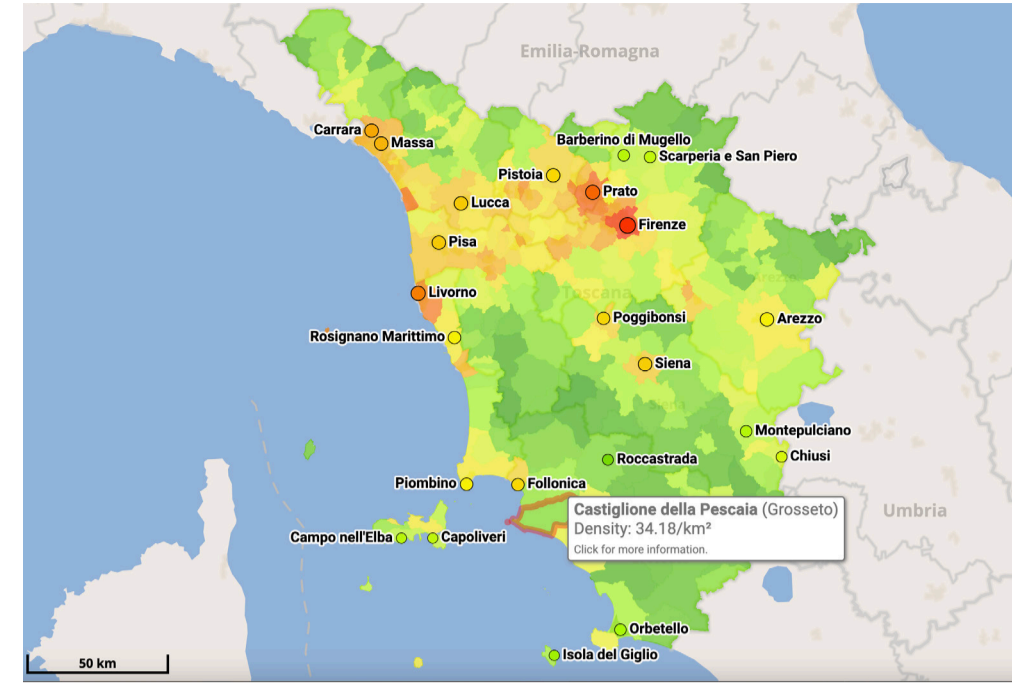


Site Location



Population Density in Italy



Population Density in Tuscany

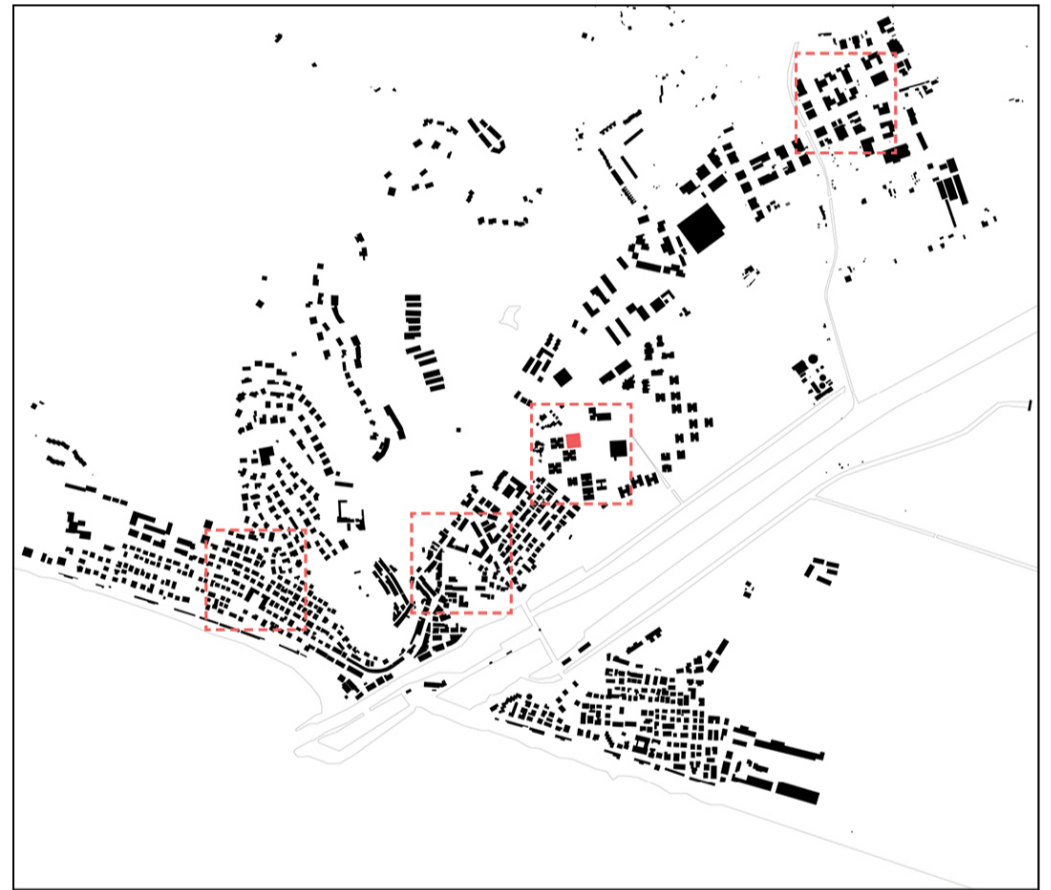


Urban Context

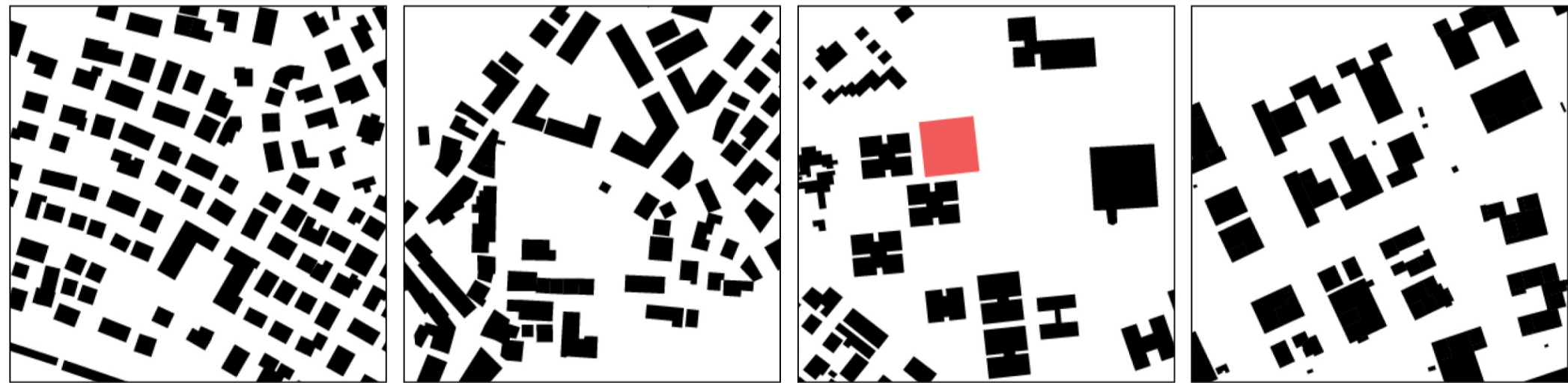


Site Context

Urban scale-Morphology



Urban tissues



Context scale-Typology



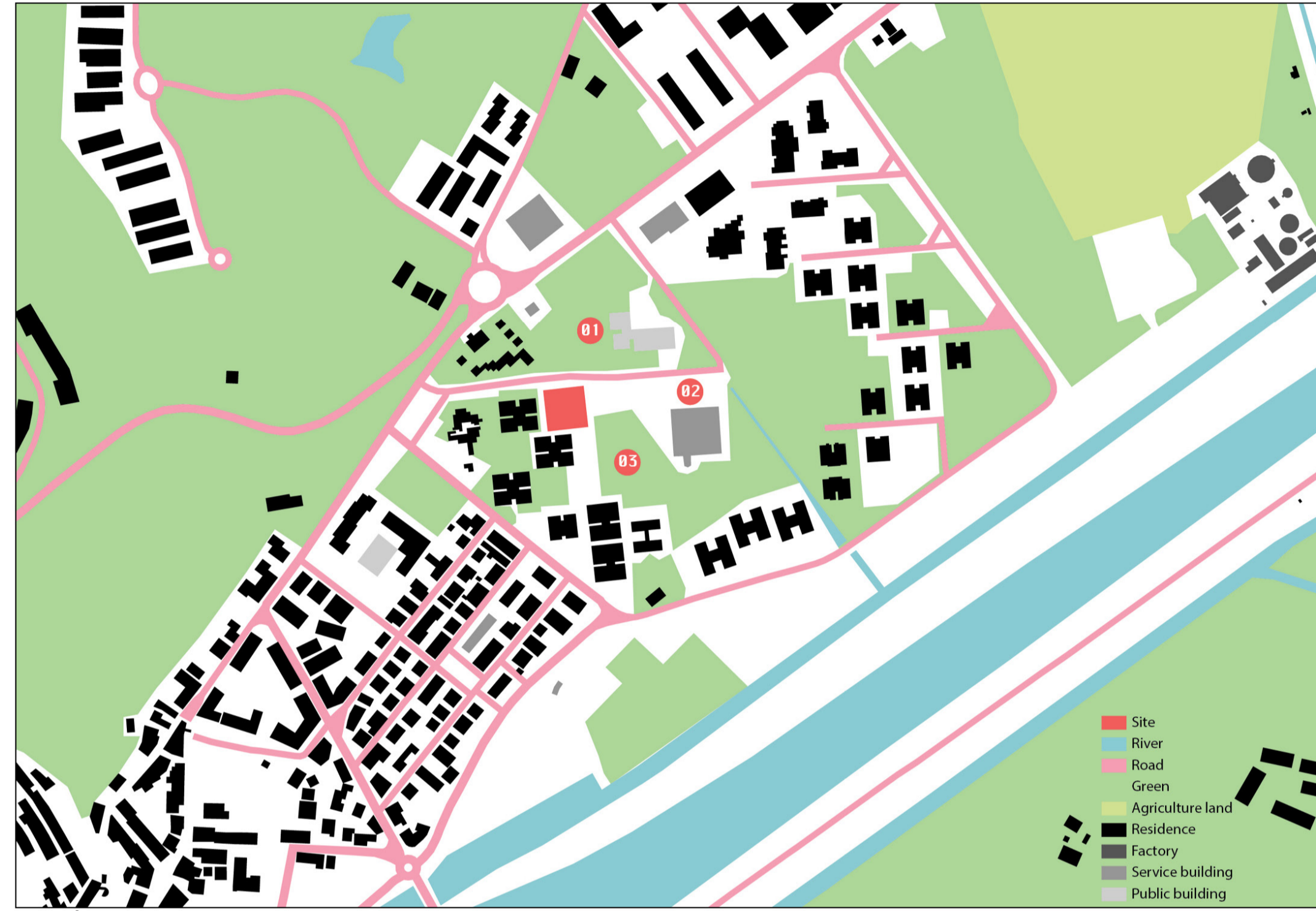
01-School



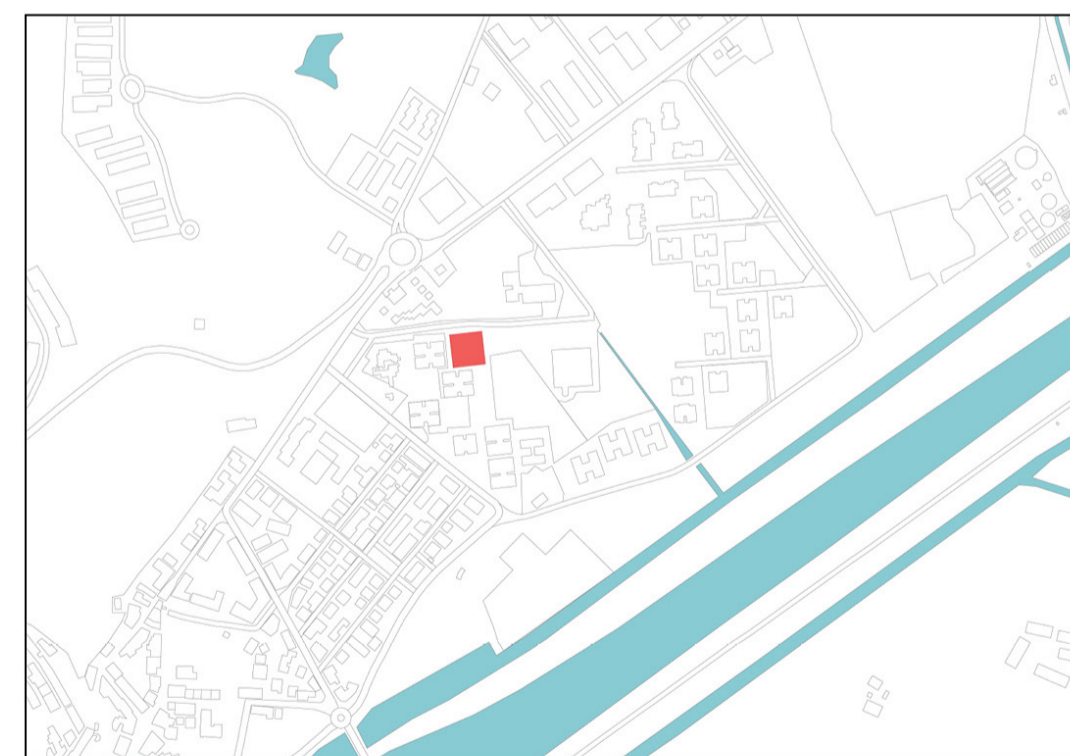
02-Supermarket



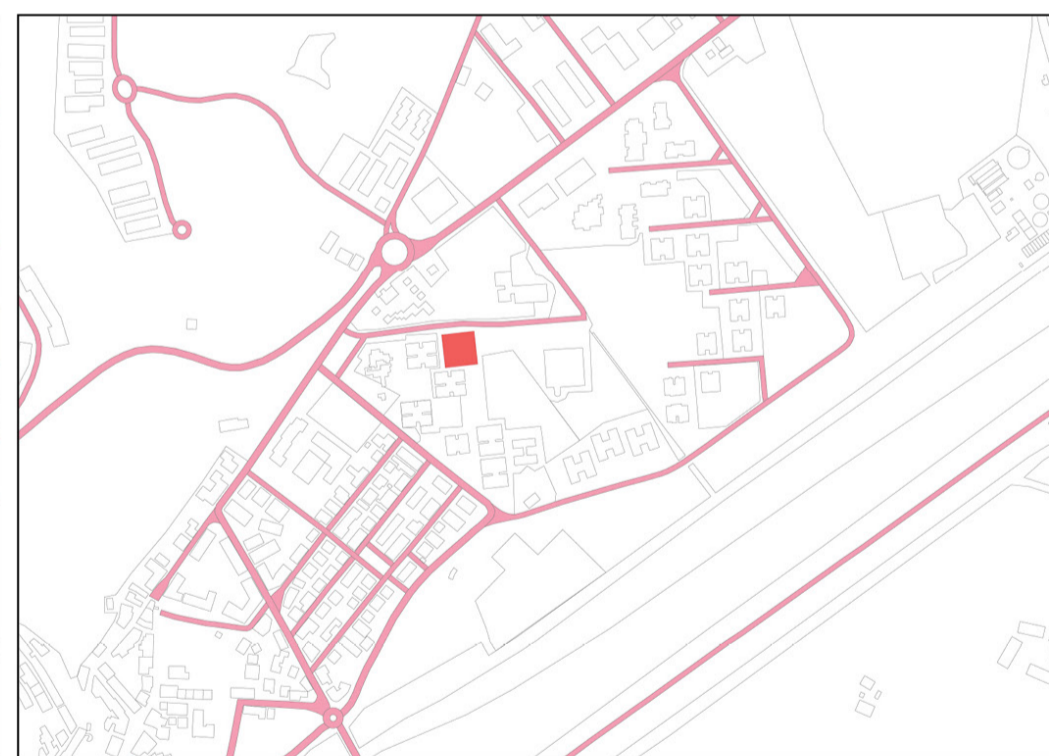
03-Greenness



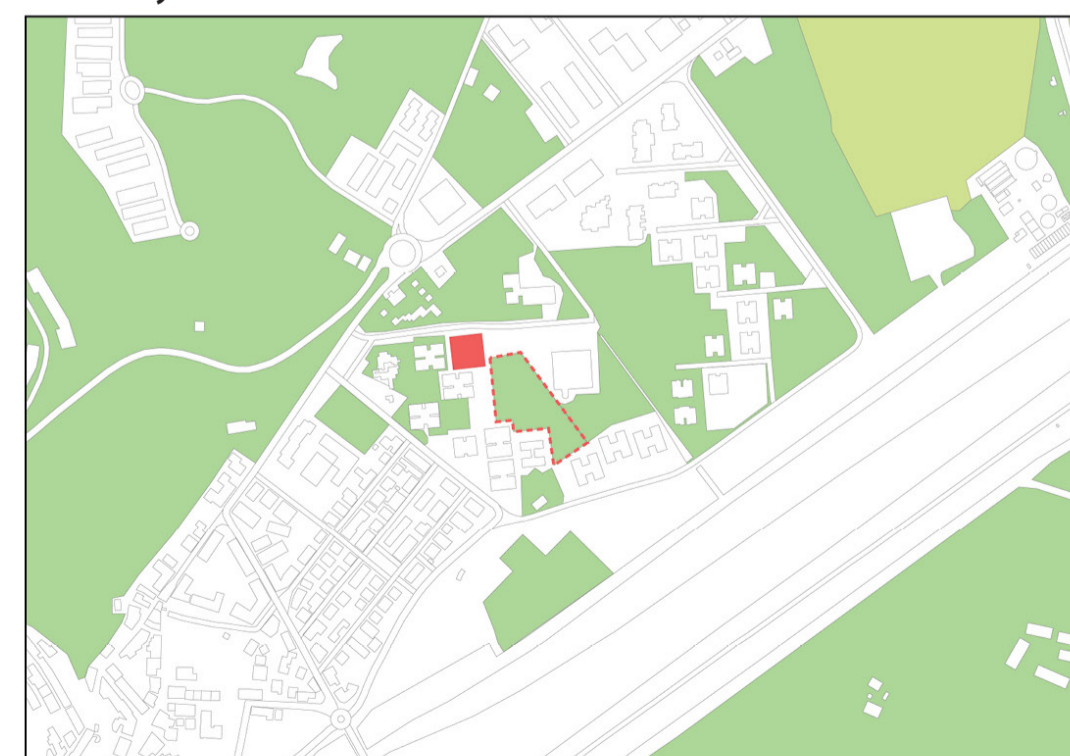
Combination Map



River system



Road system

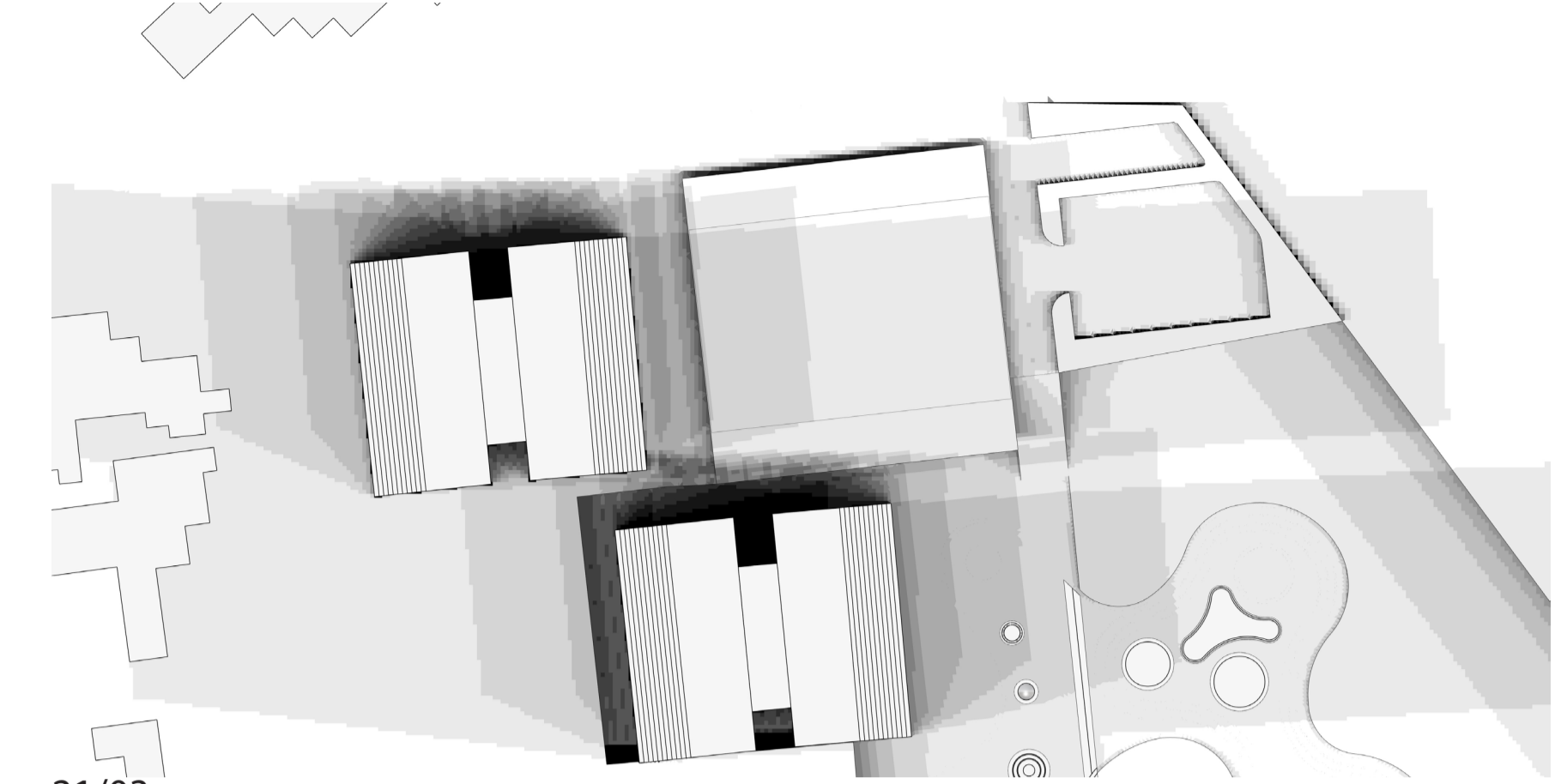


Green&agriculture system

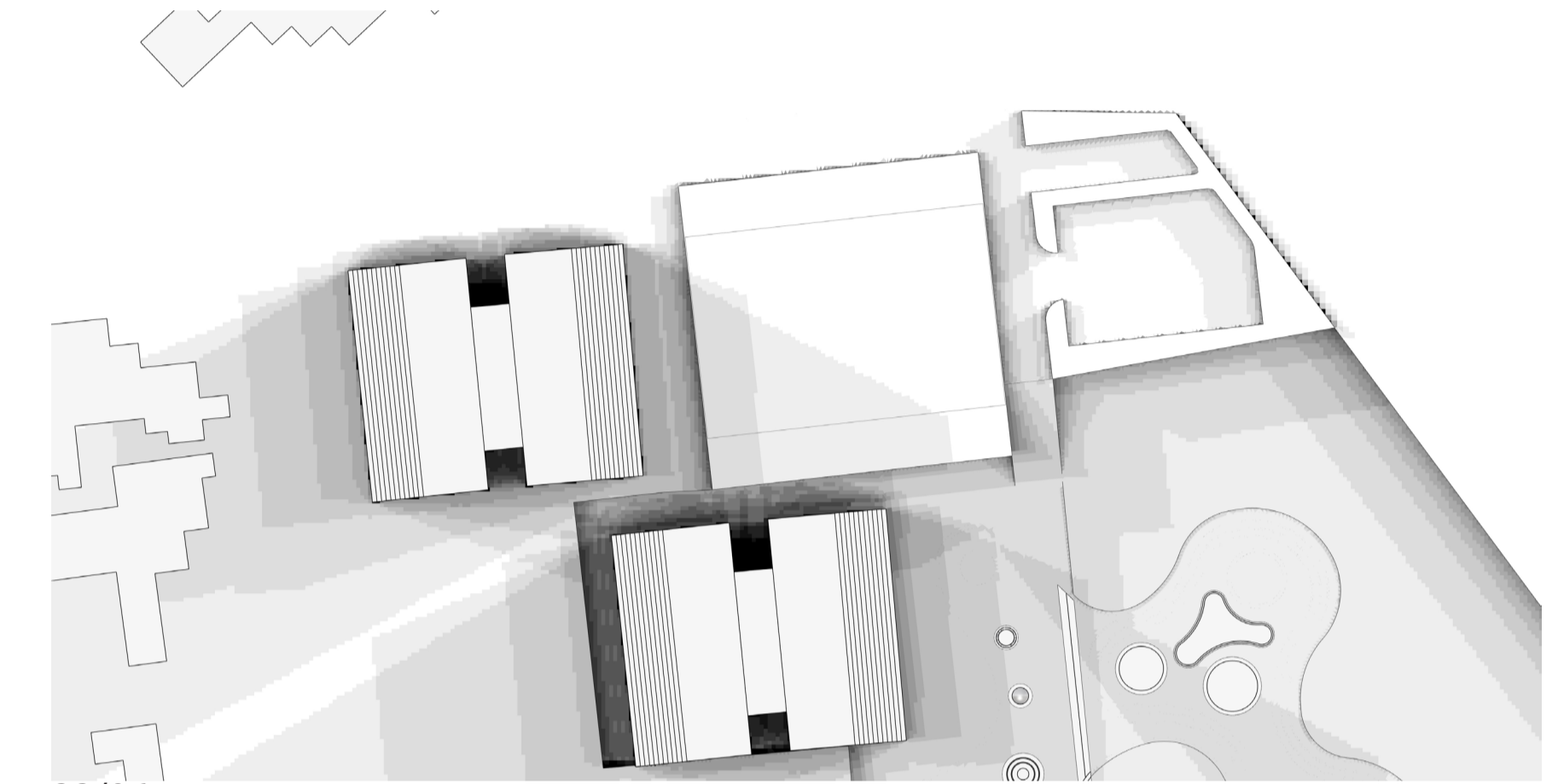


Building system

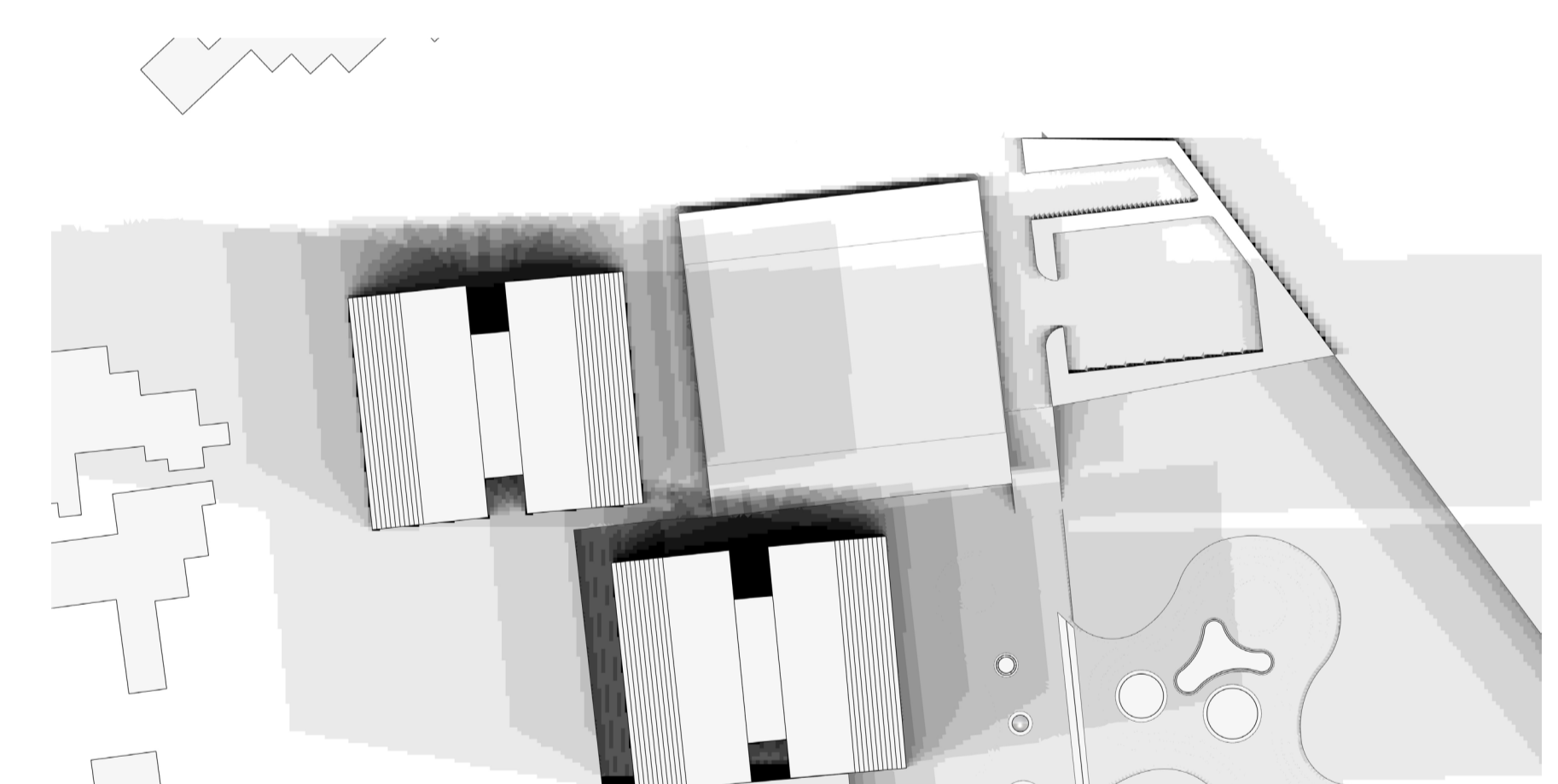
Shadow in site



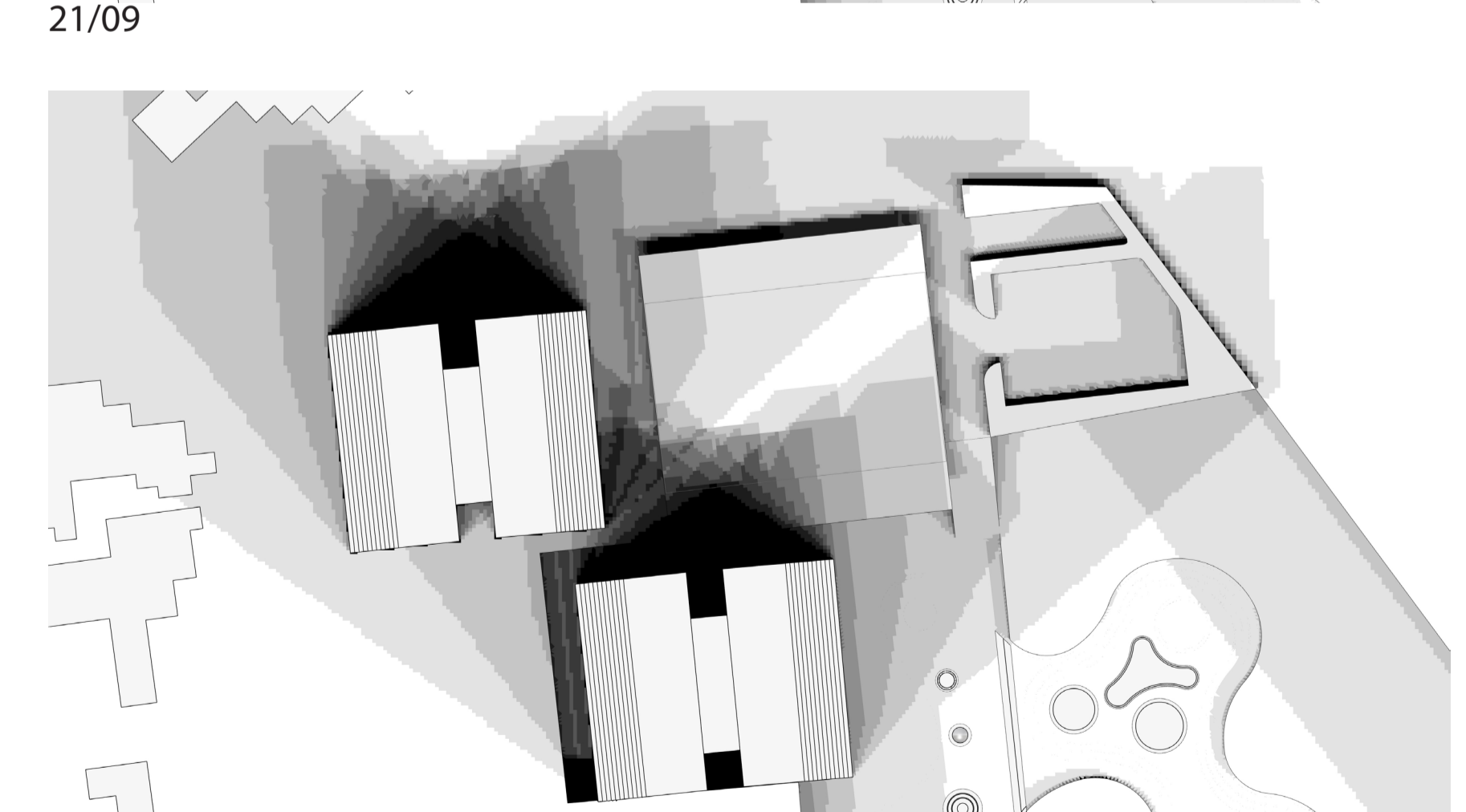
21/03



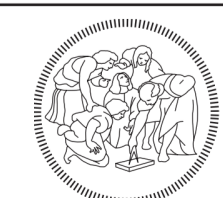
22/06



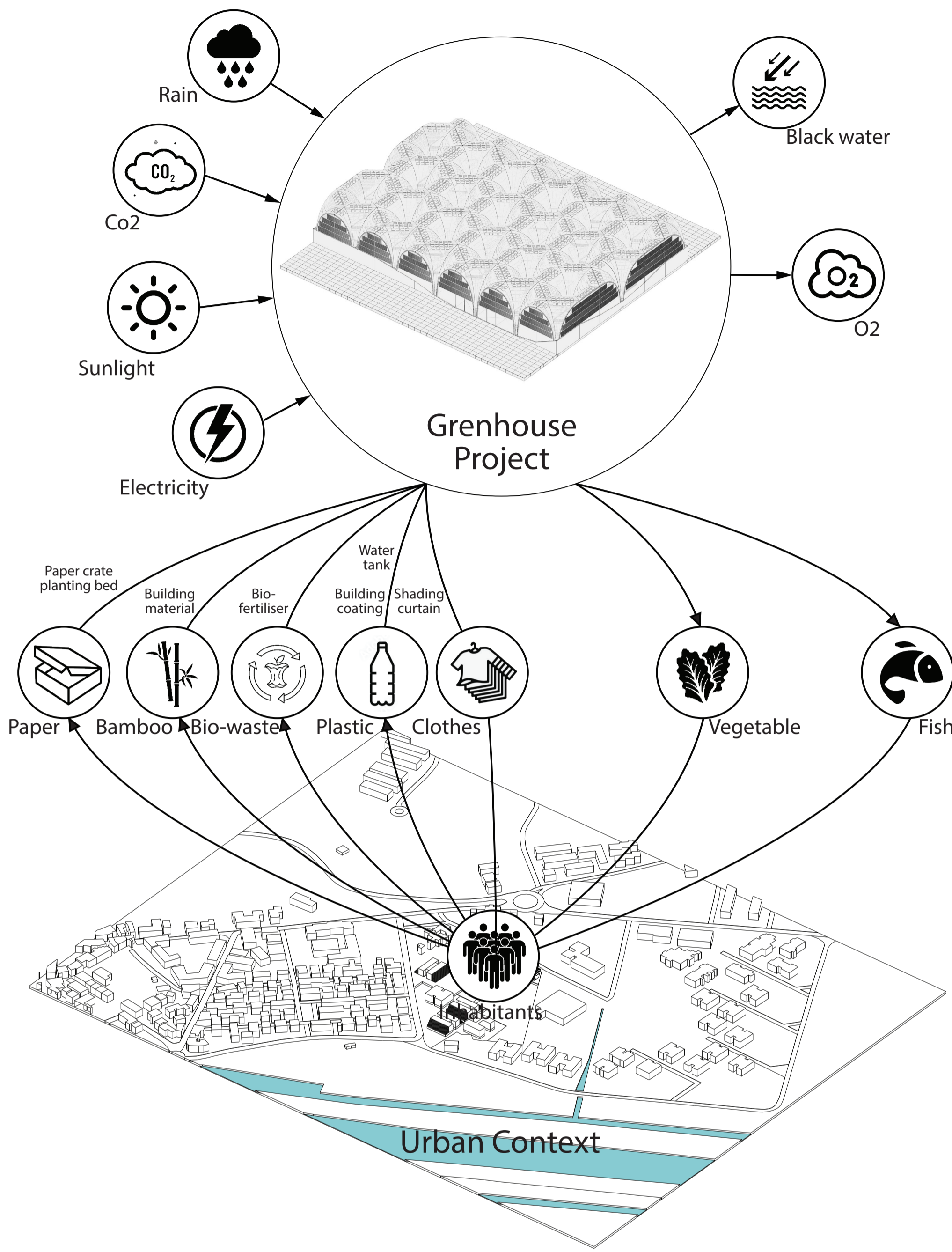
21/09



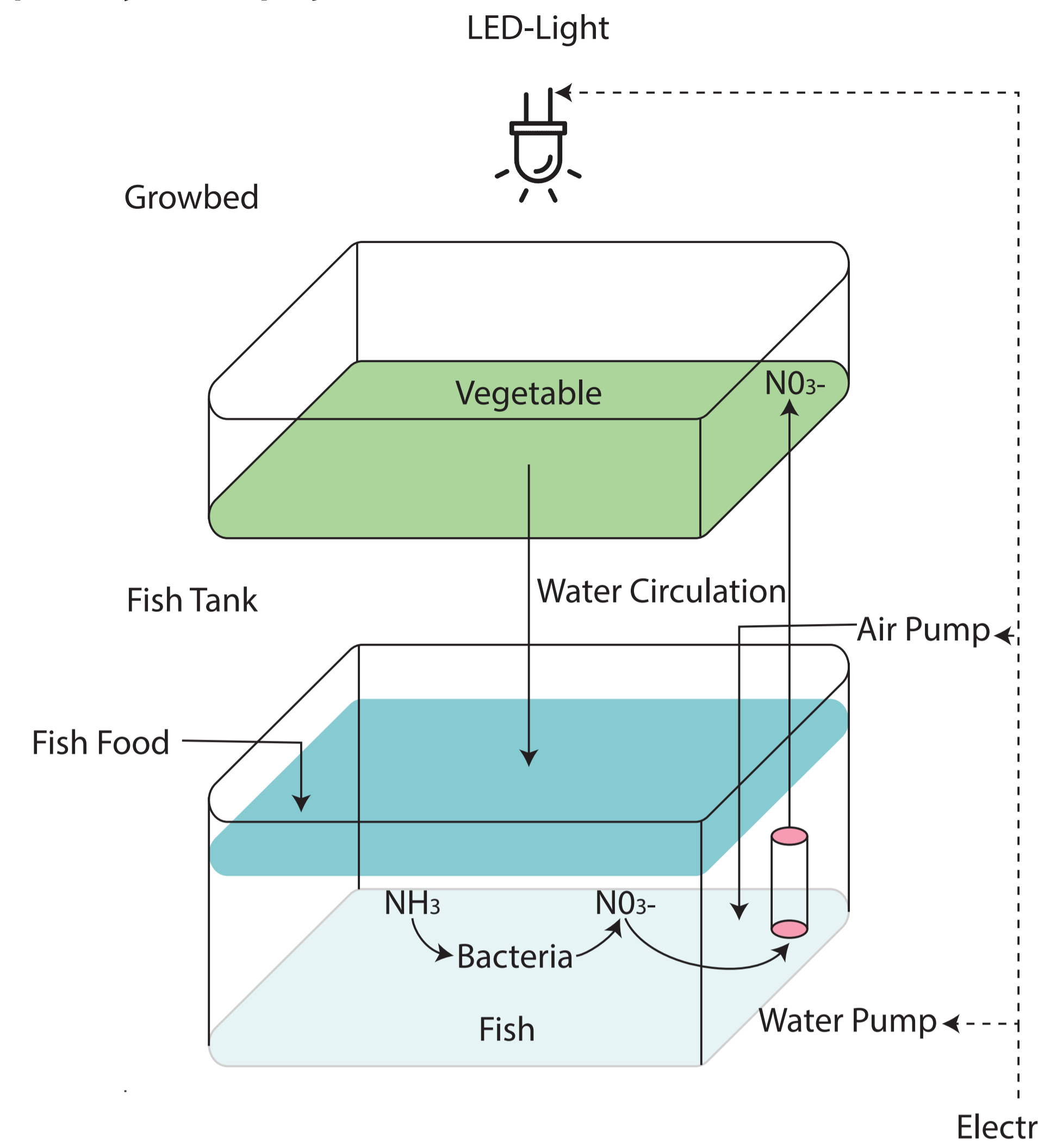
22/12



Urban metabolism

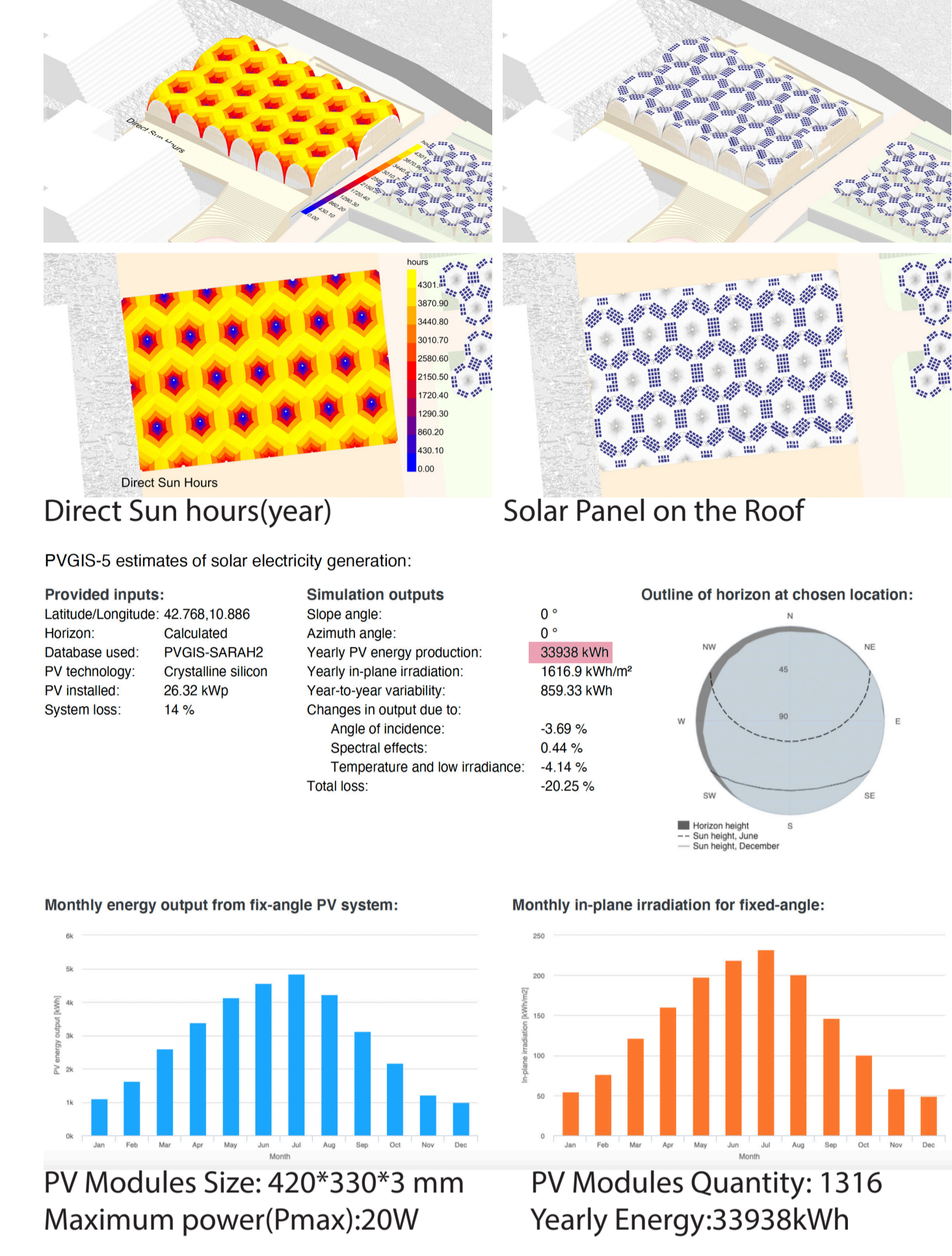


Aquaponic system in project

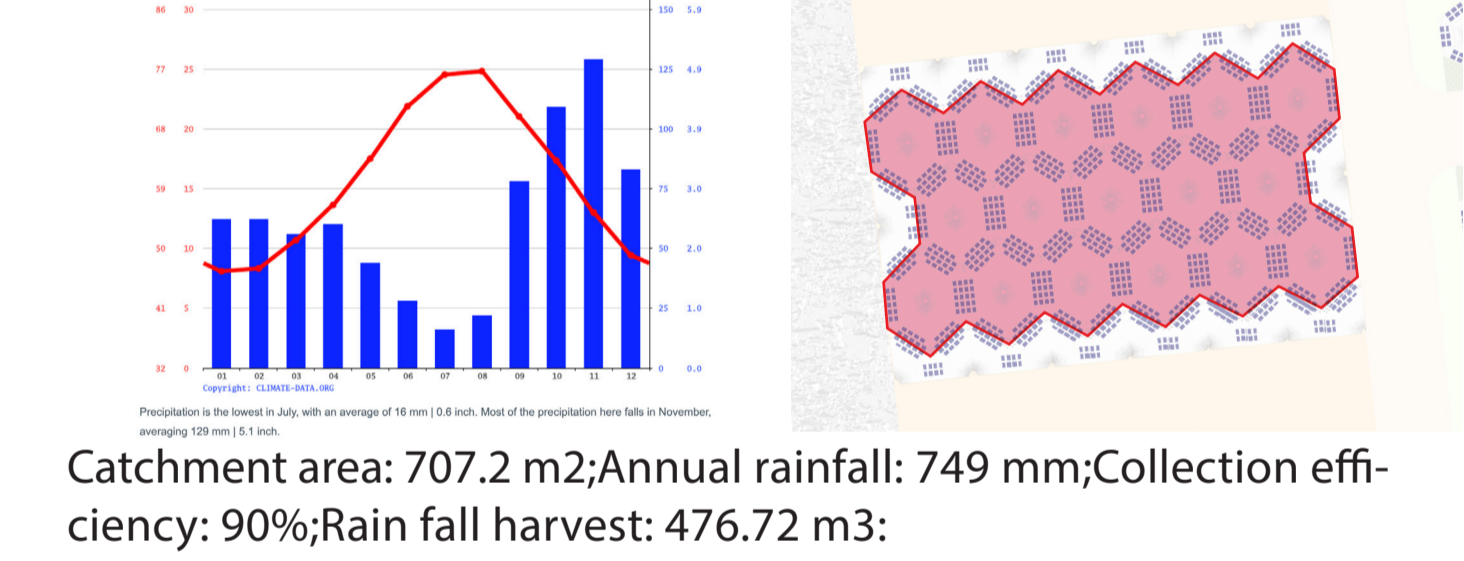


Element	Feature	Detail
Growbed	46 units Bamboo-reinforced paper crates(0.798 m³/unit)	36.708 m³
Fish Tank	23 units x Recycled Plastic Tanks(1.596 m³/unit)	36.708 m³
Vegetable	Tomato, Mint, Chilly, Lettuce, Basil(15-30 kg/ m²/ year)	550.62-1101.24 kg/ year
Fish	Monosex Tilapia (Oreochromis niloticus) and Pangasius (Pangasiandon hypophthalmus)50/m³ x 0.75kg x 90% x 2 circles	2477.79 kg/ year
Fish Food	Bio-fertiliser	-
LED-Light	46 units x 2 x 15w red/blue LED x 6 hours/ day	3022.2 KW/ year
Water Pump	23 units x 10.4W x 12 hours operation time	1047.7 KW/ year
Air Pump	23 units x 45W x 24 hours operation time	9066.6 KW/ year
Electricity	LED-Light+Water Pump+Air Pump	13136.5 KW/ year

01-Electricity system



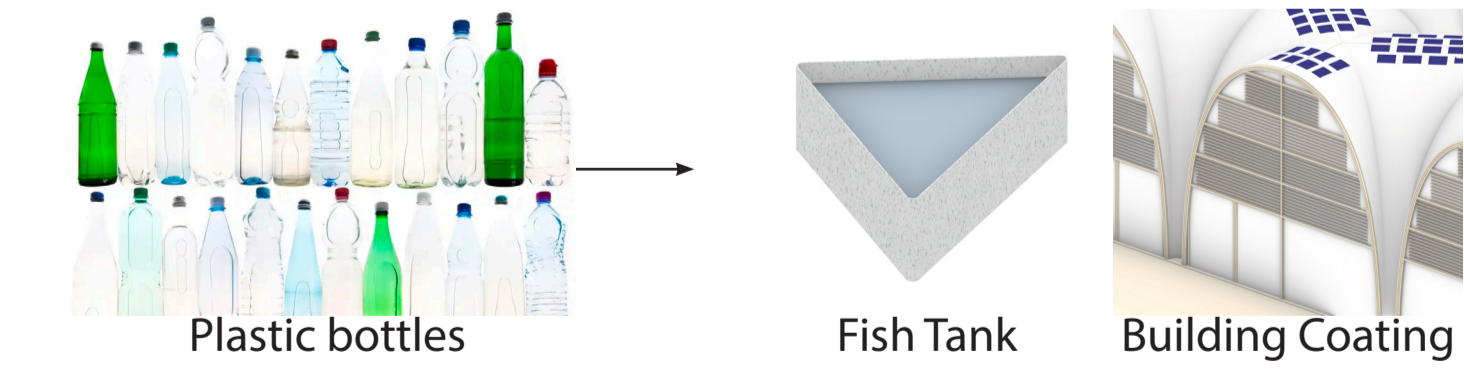
02-Rain recycling system



03-Paper



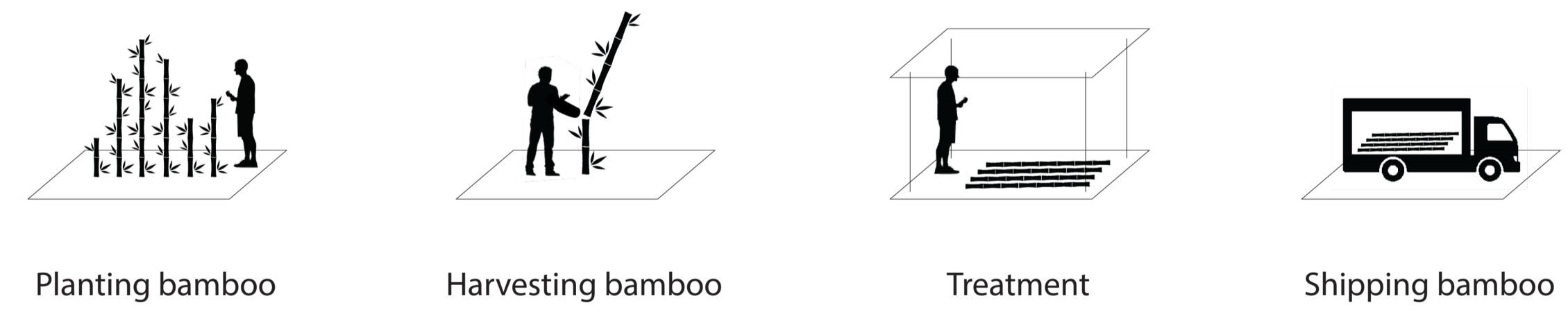
04-Plastic



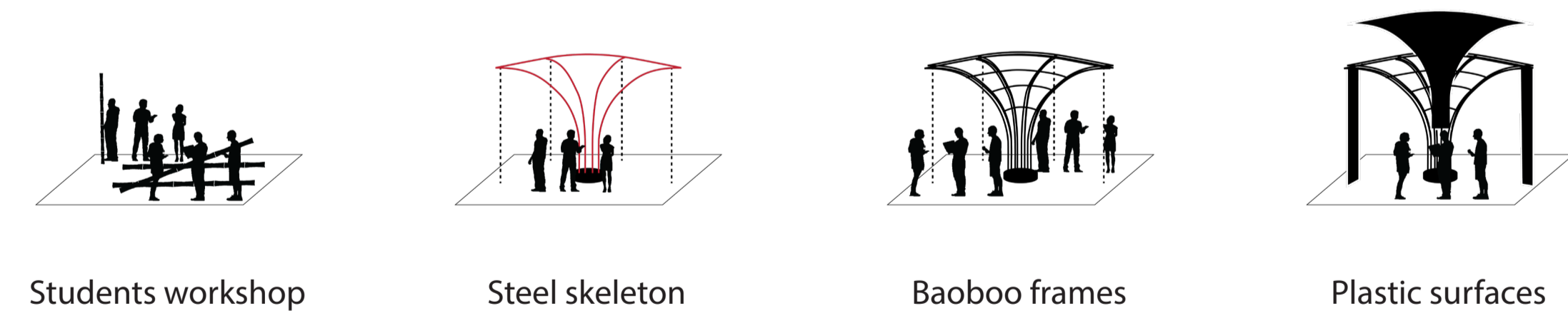
05-Bio-waste



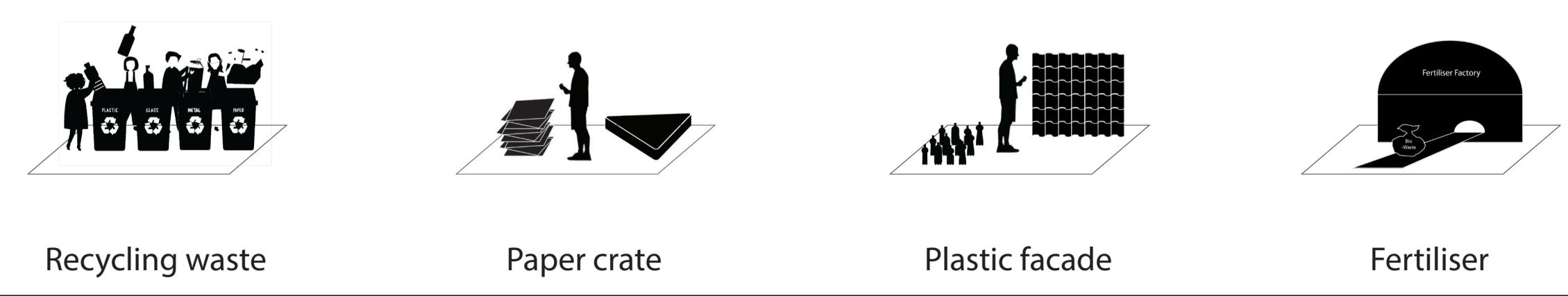
Construction process Phase 01: Preparing Bamboo



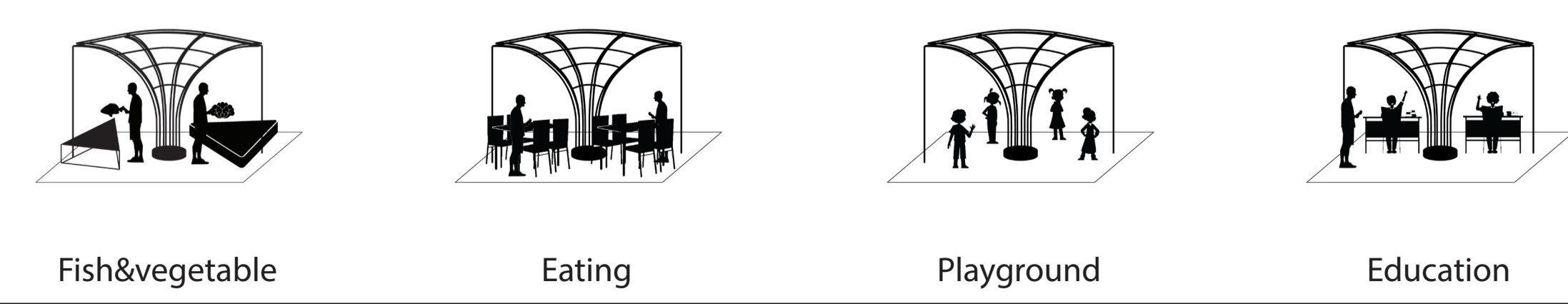
Phase 03: Constructing Building

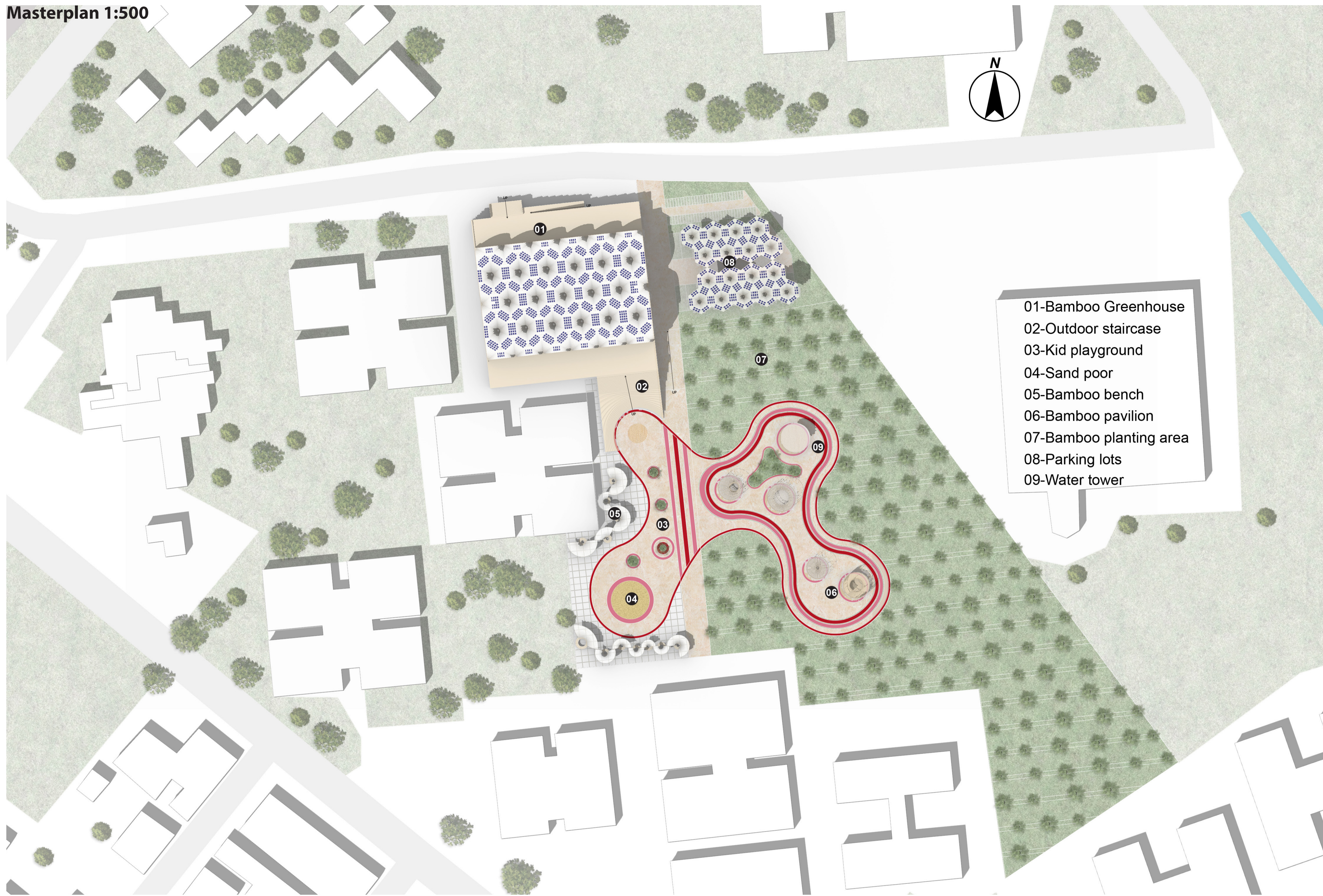


Phase 02: Collecting Urban Waste

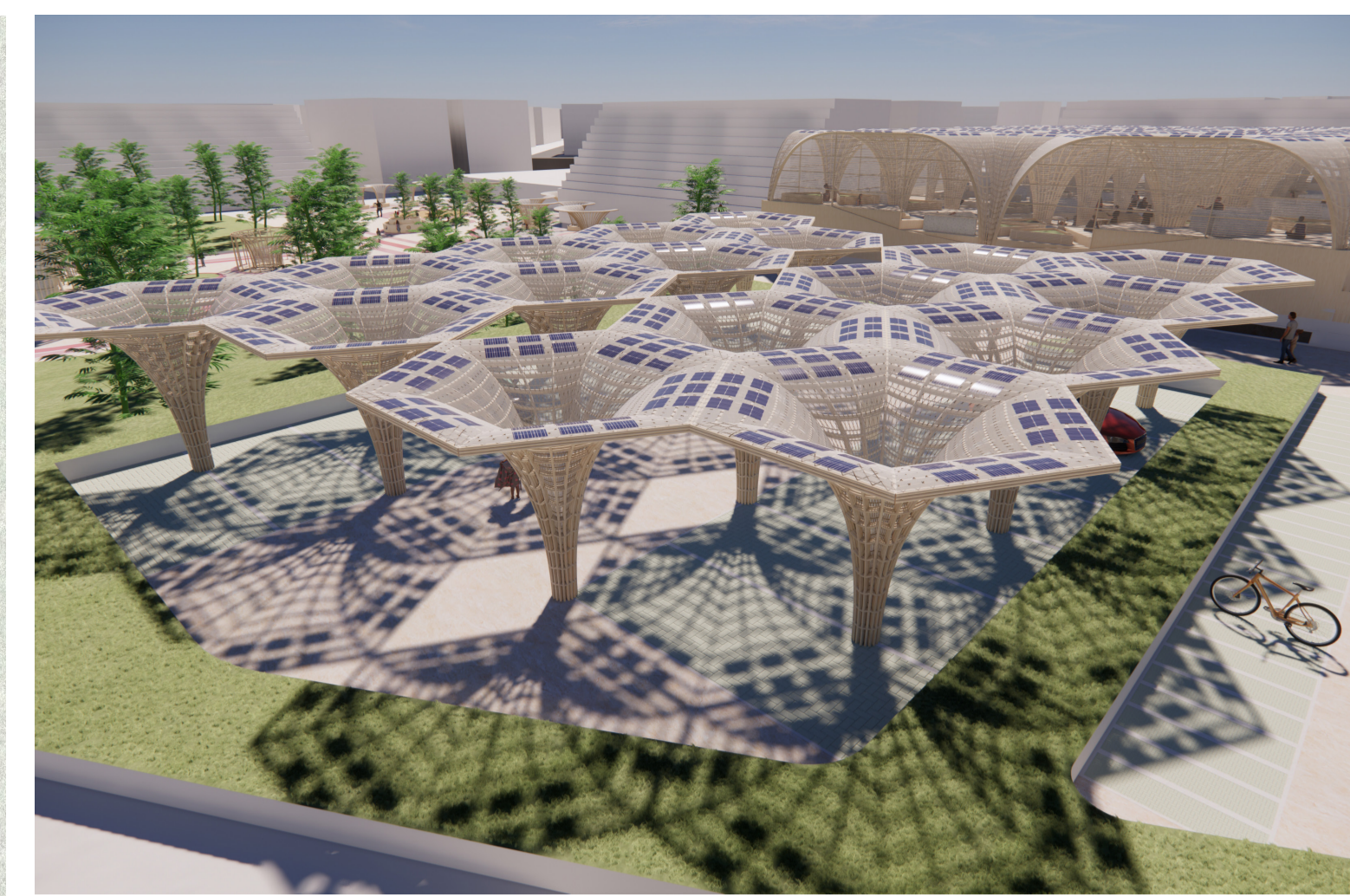


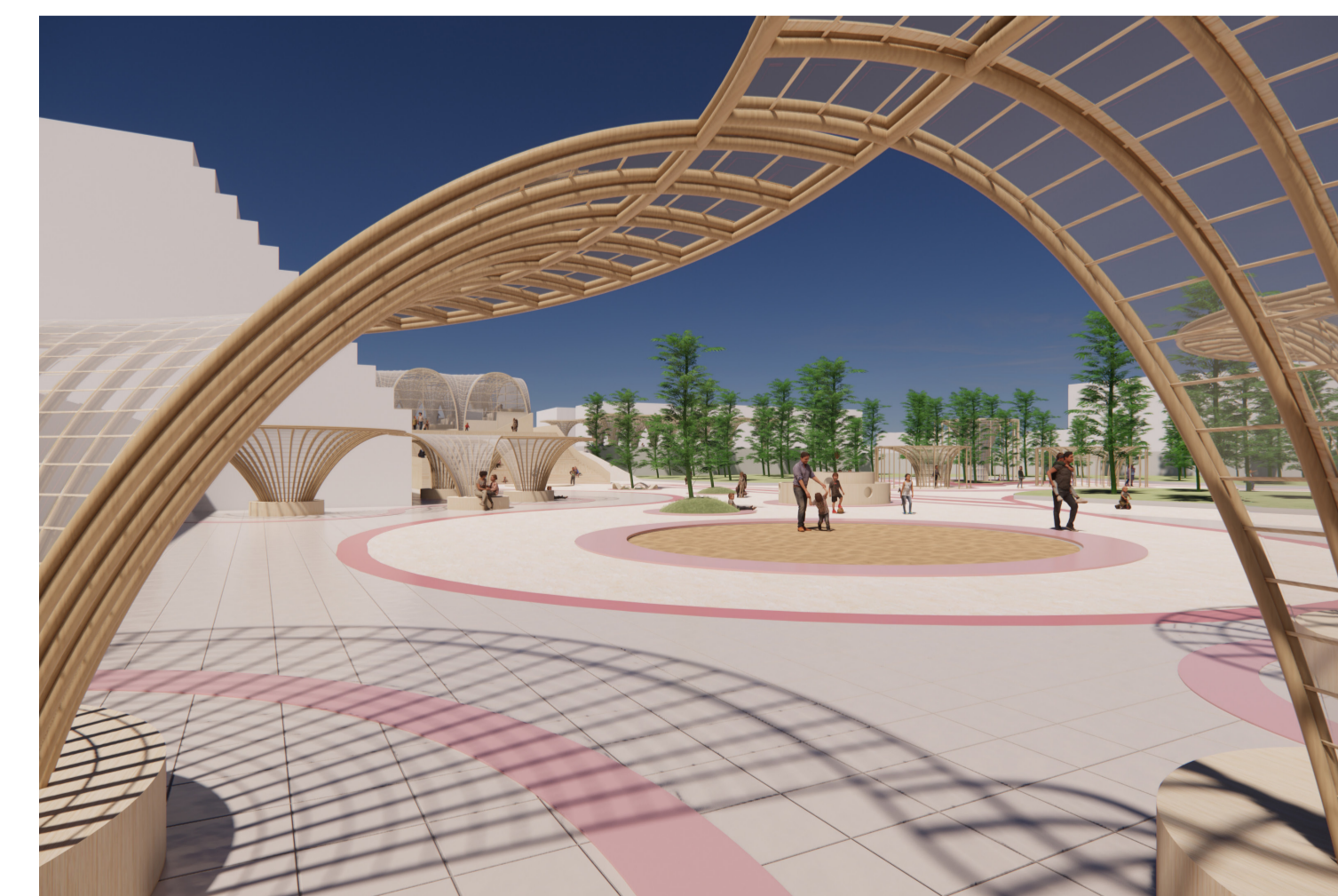
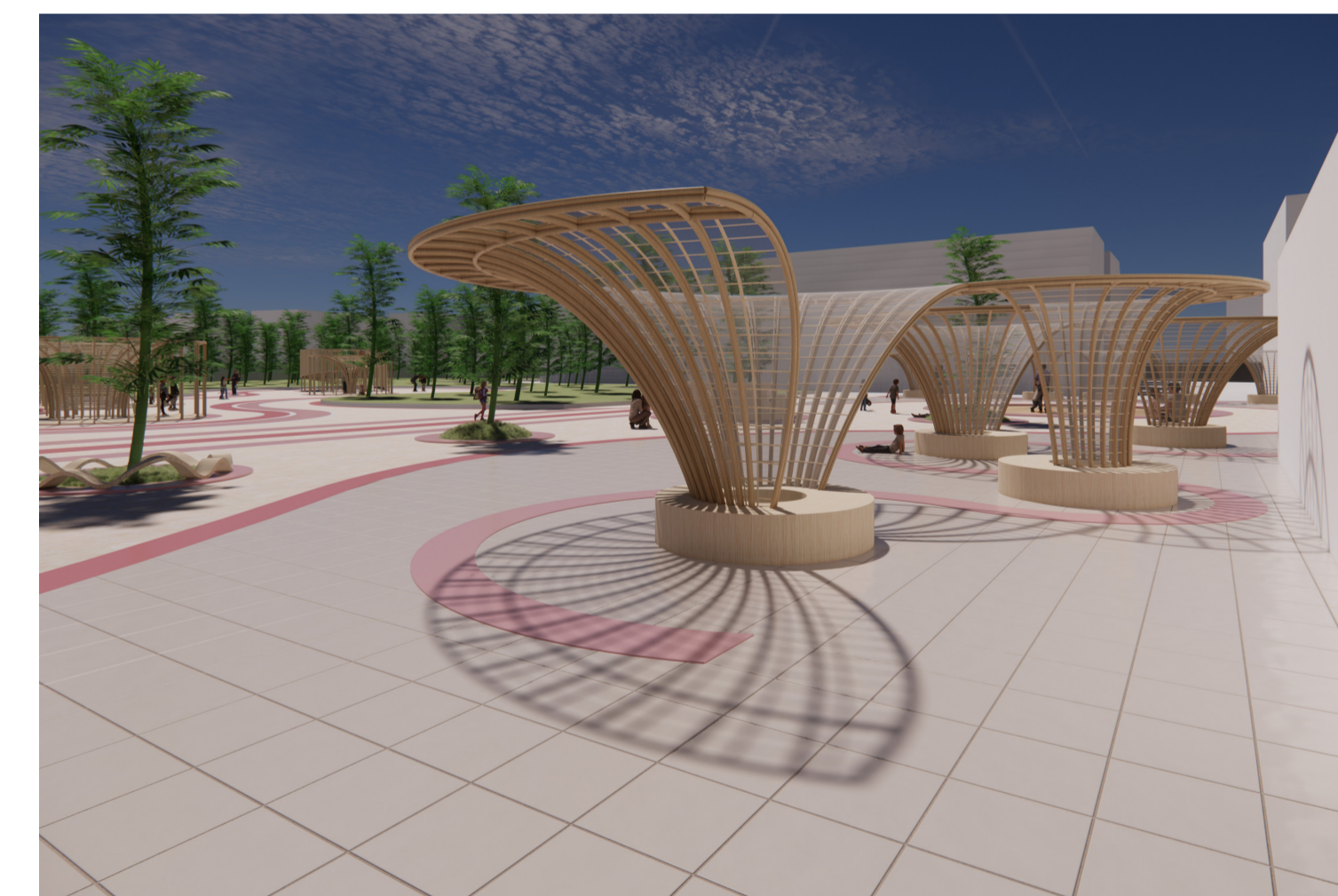
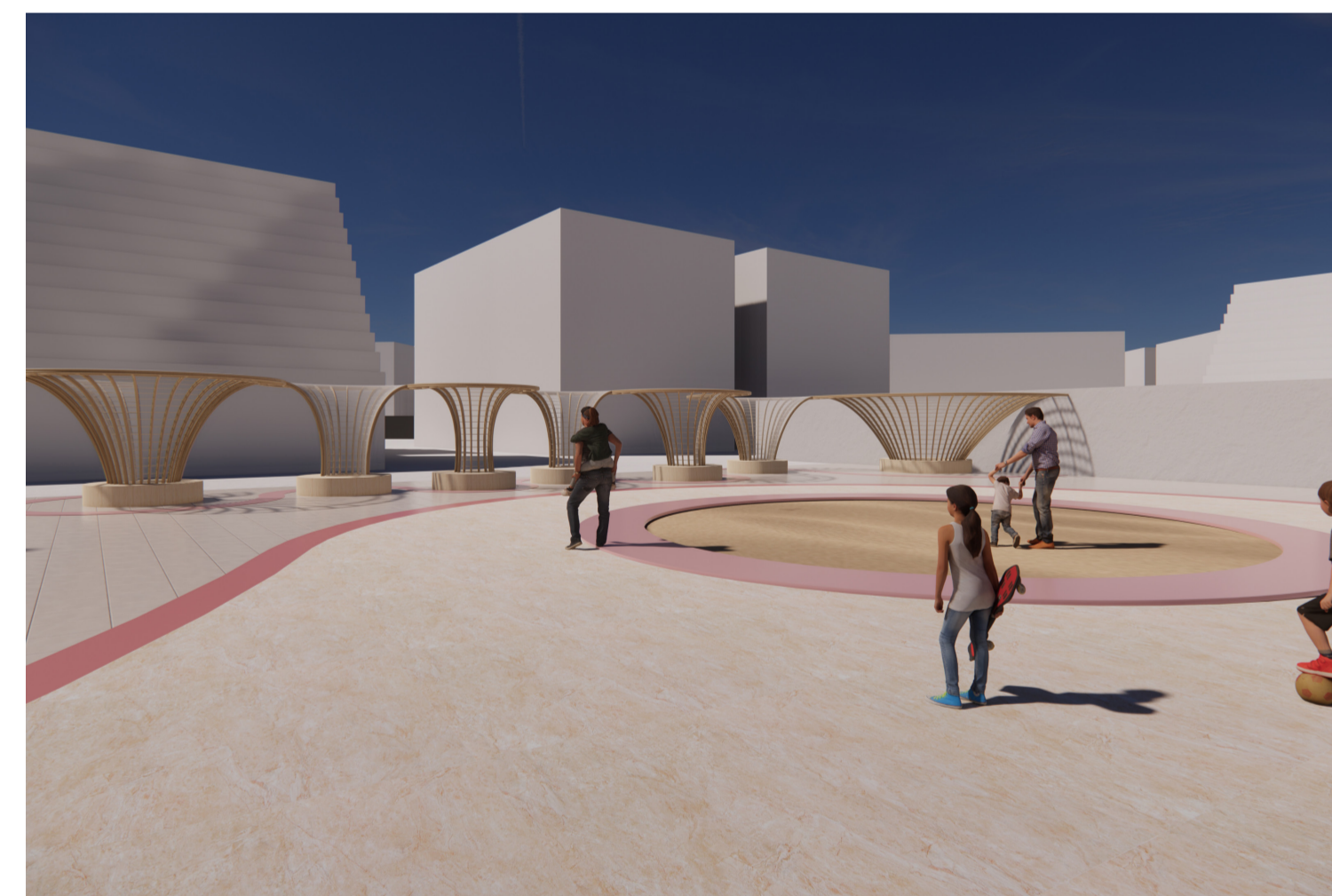
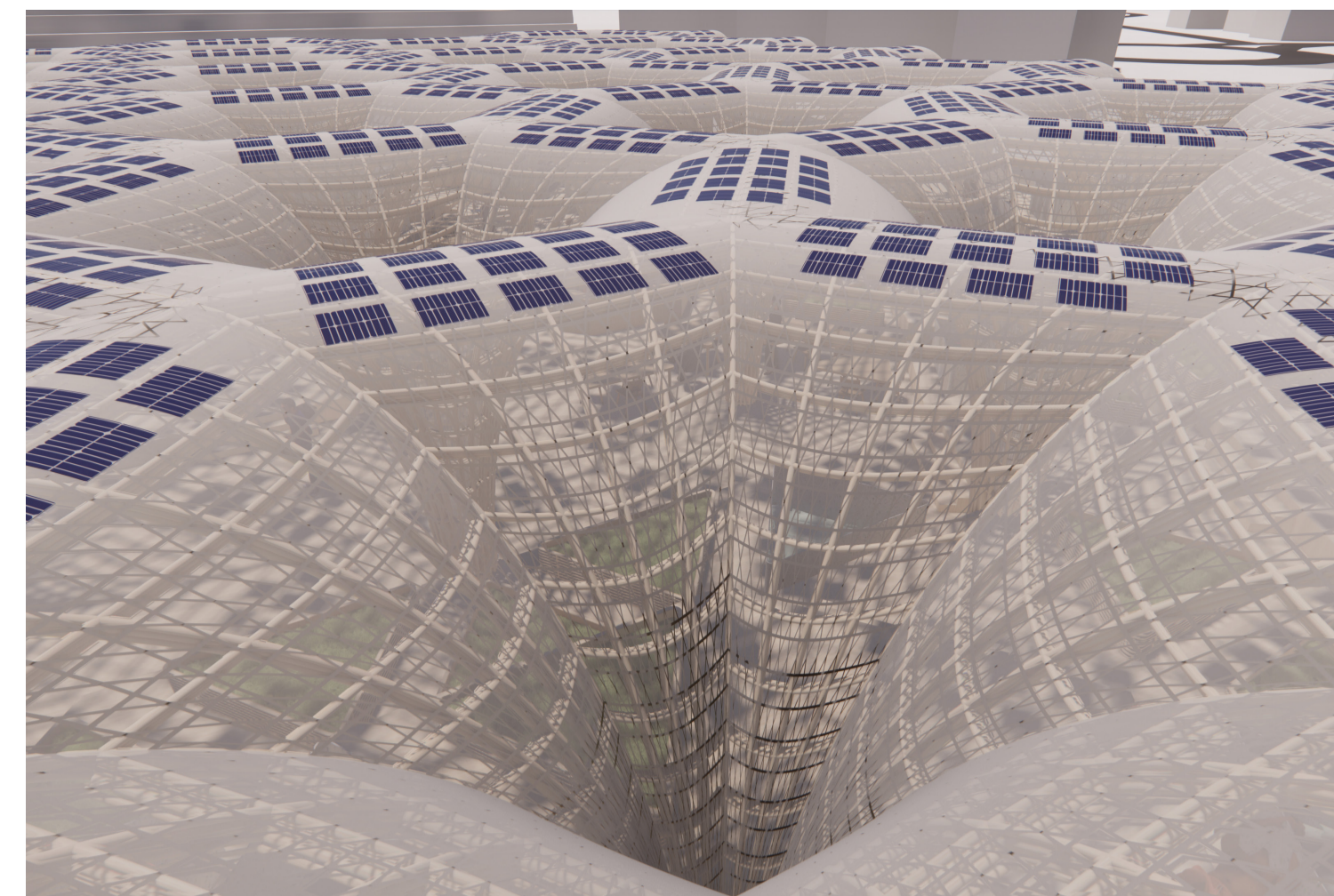
Phase 04: Operating for community

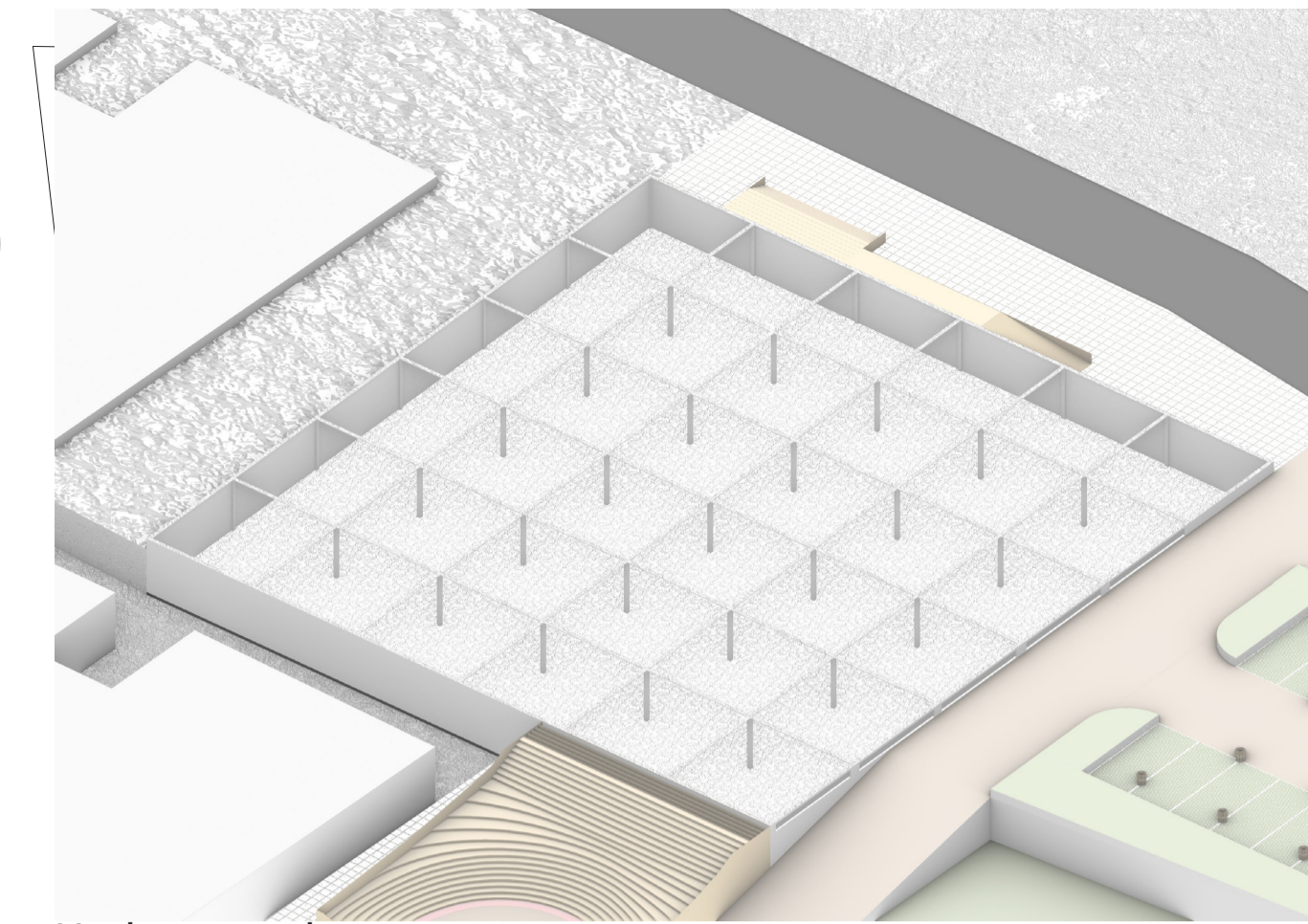
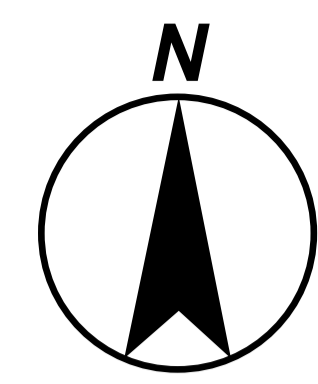
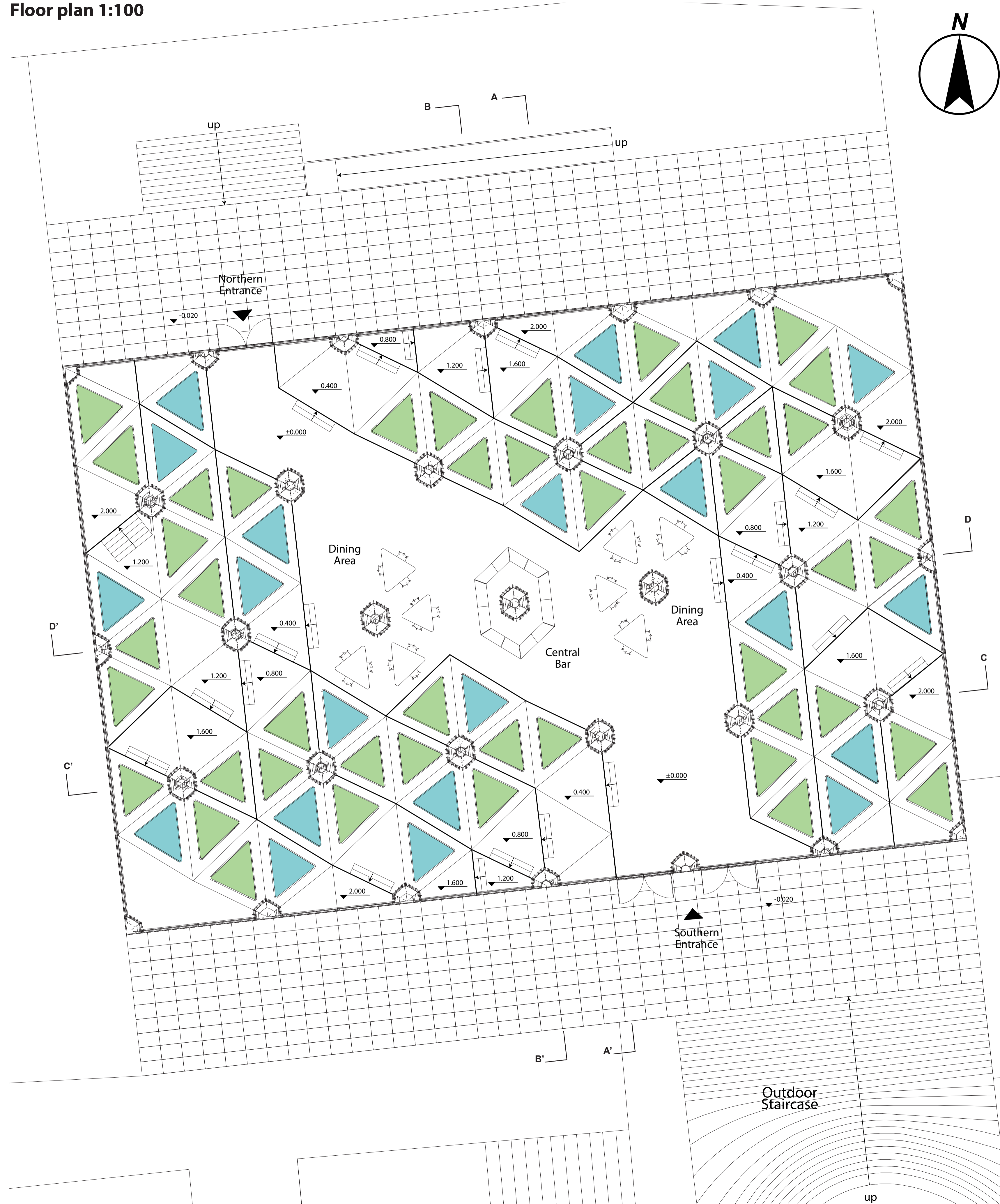




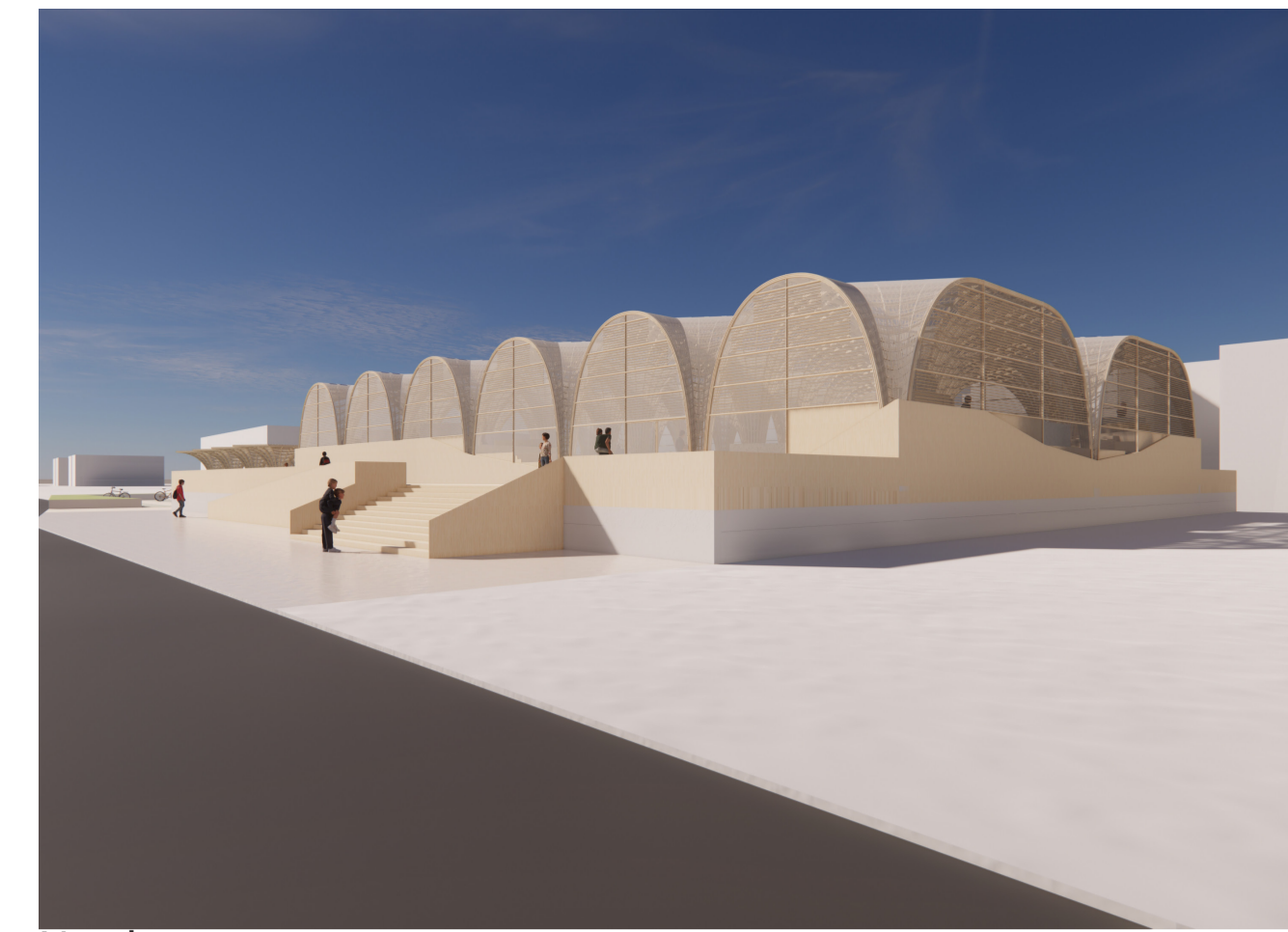
- 01-Bamboo Greenhouse
- 02-Outdoor staircase
- 03-Kid playground
- 04-Sand pool
- 05-Bamboo bench
- 06-Bamboo pavilion
- 07-Bamboo planting area
- 08-Parking lots
- 09-Water tower



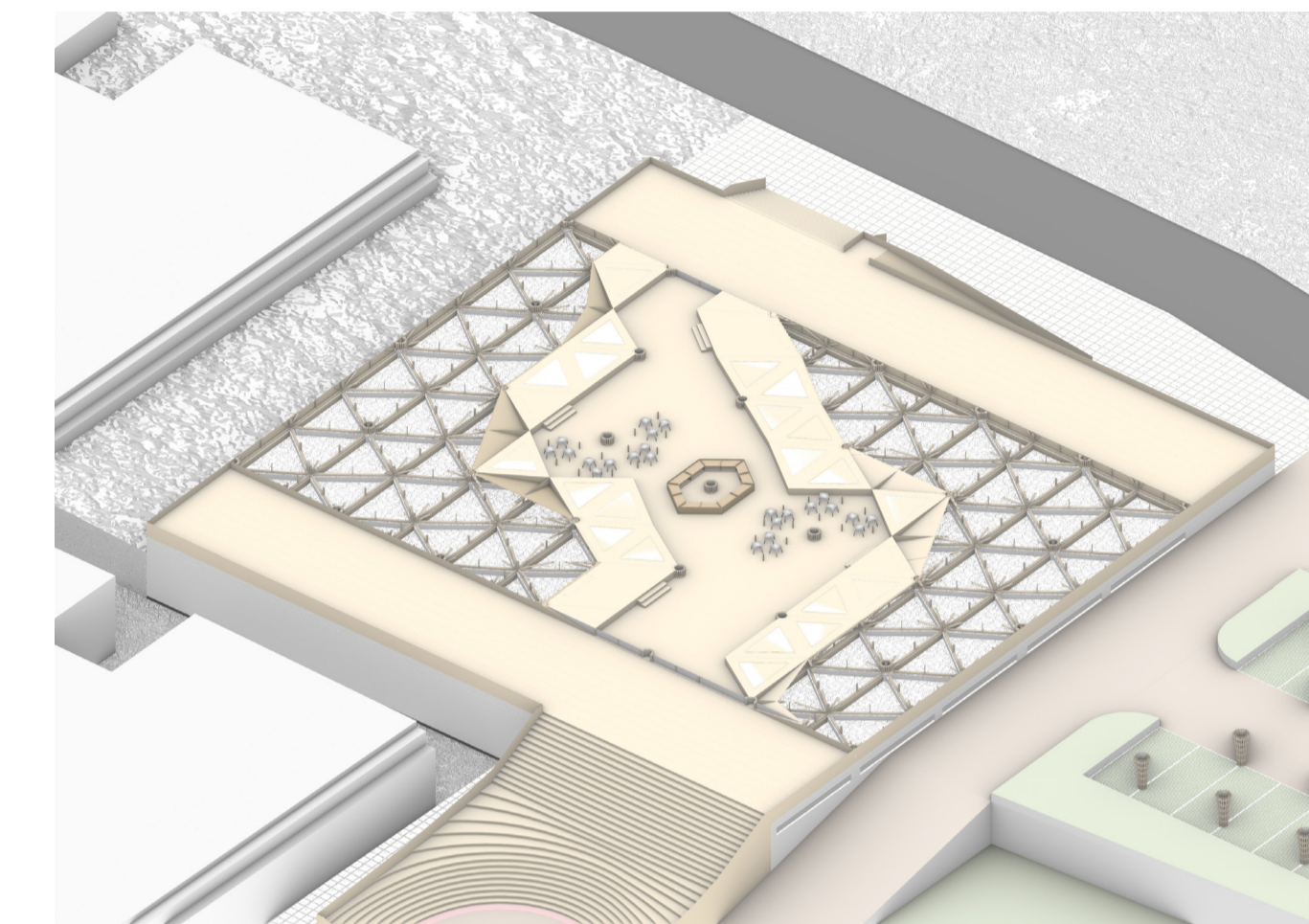




Underground



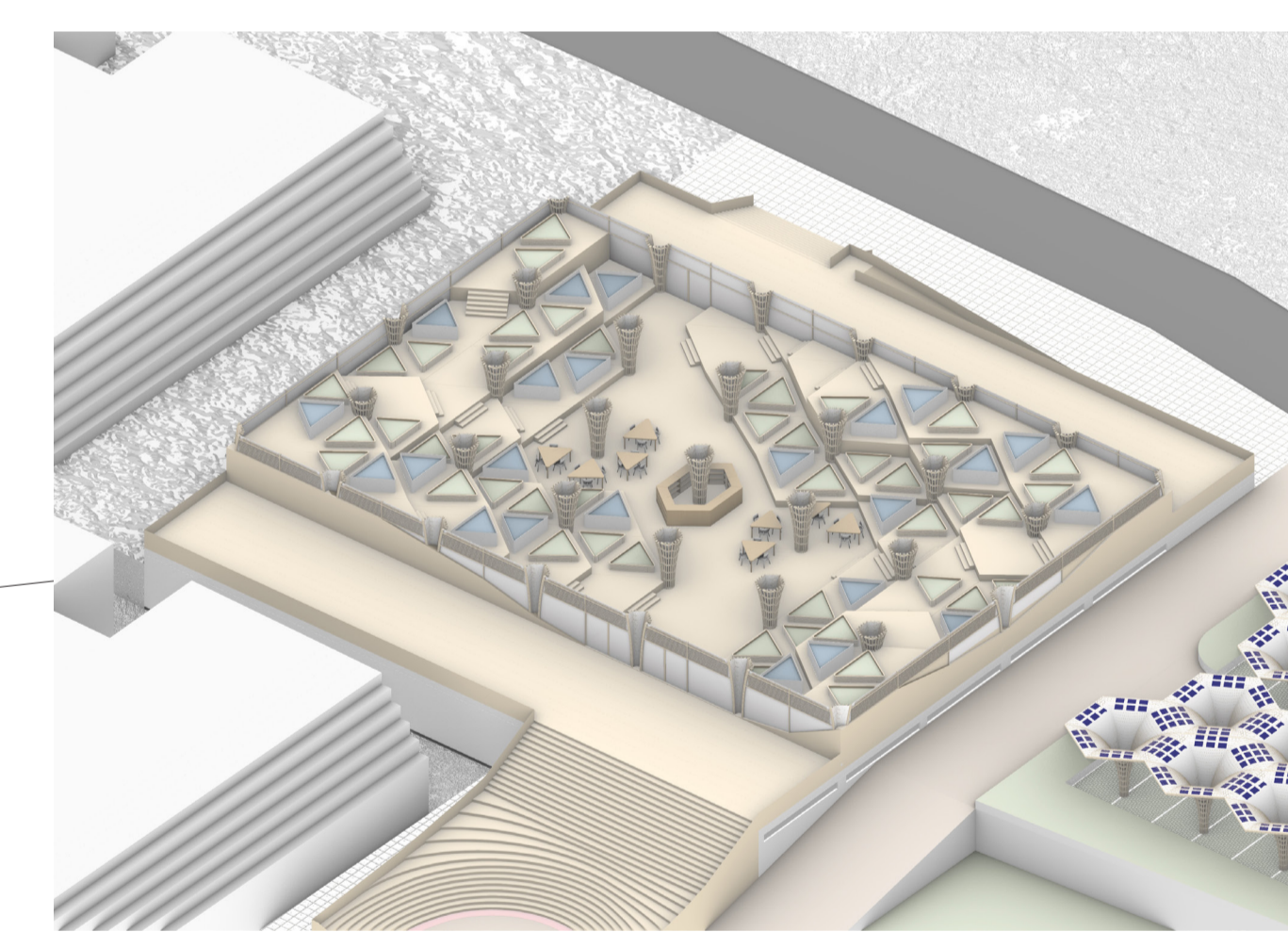
Northern entrance



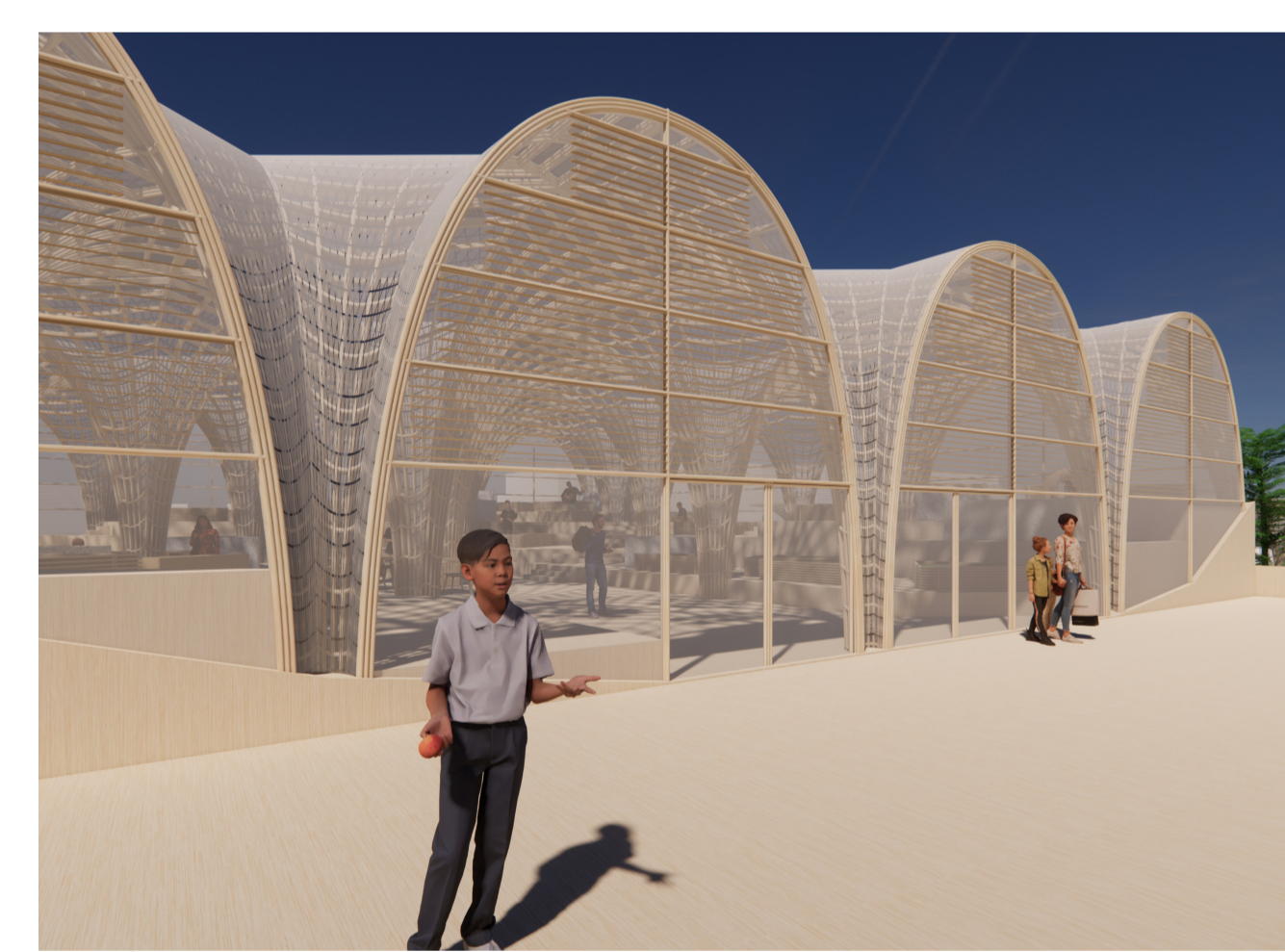
+0.400



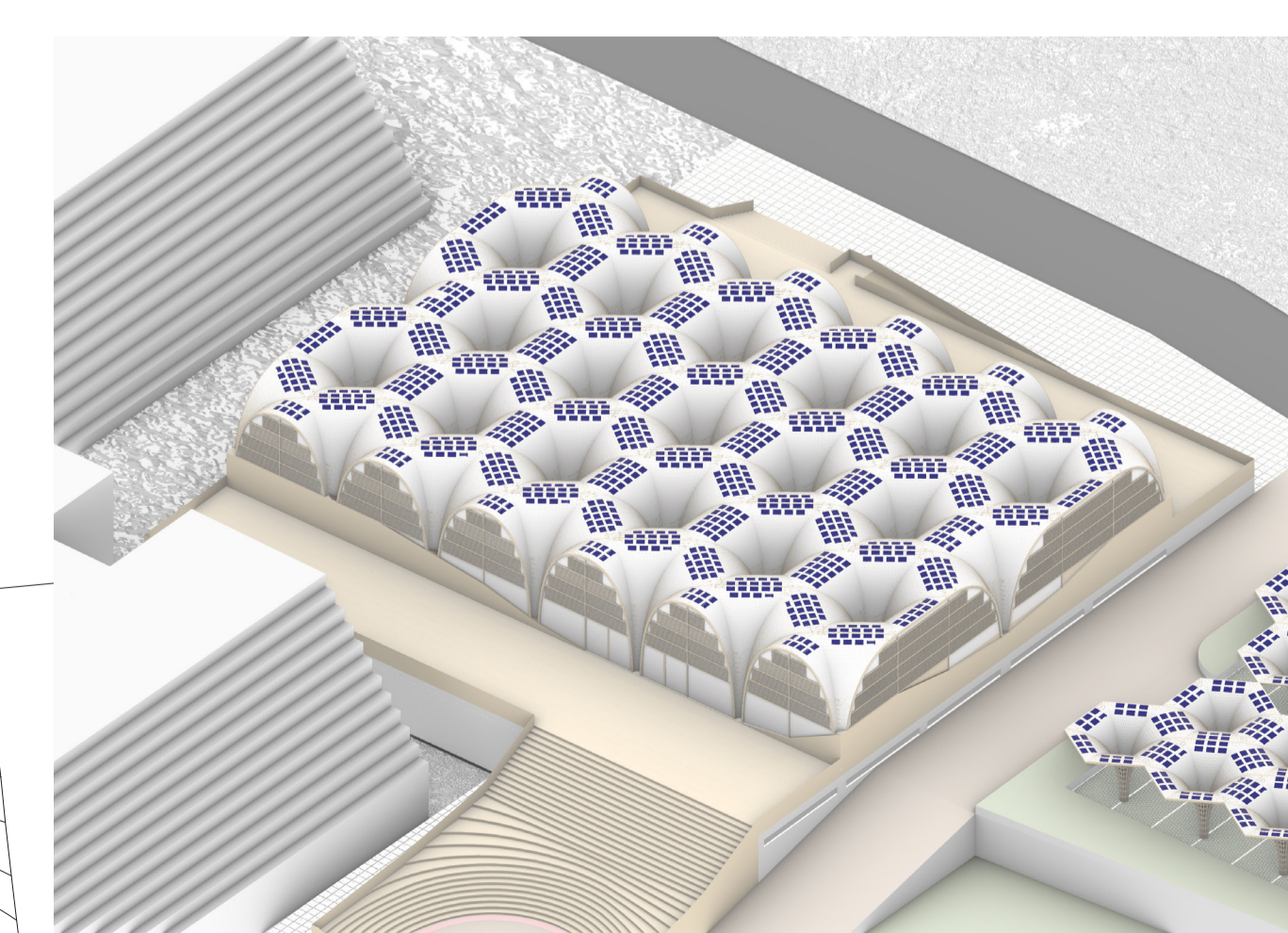
Northern entrance



+3.000



Southern entrance

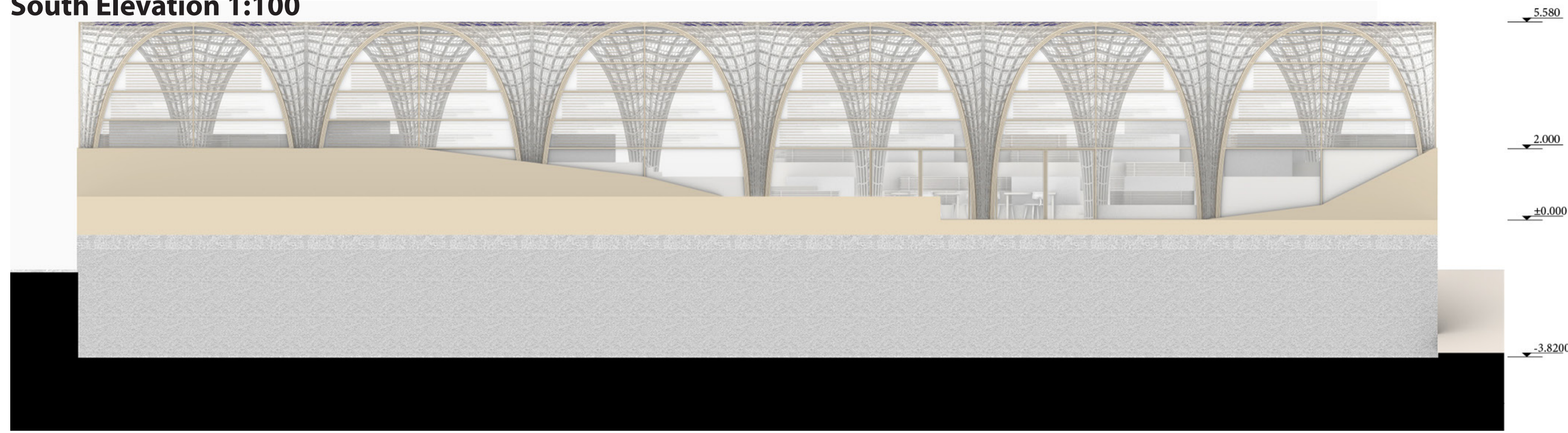


Full

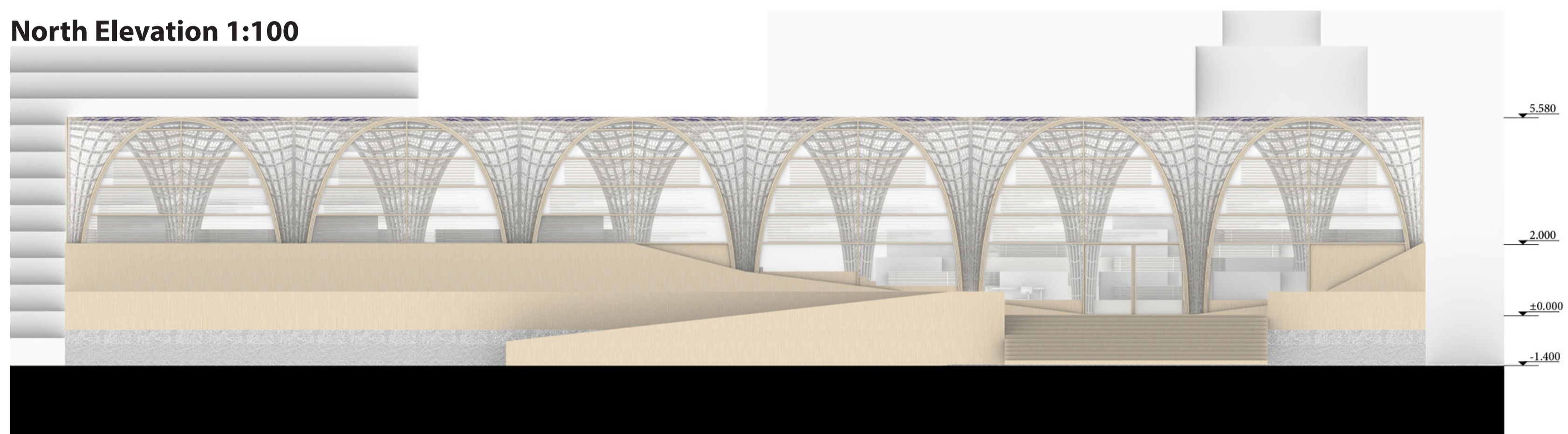


Southern entrance

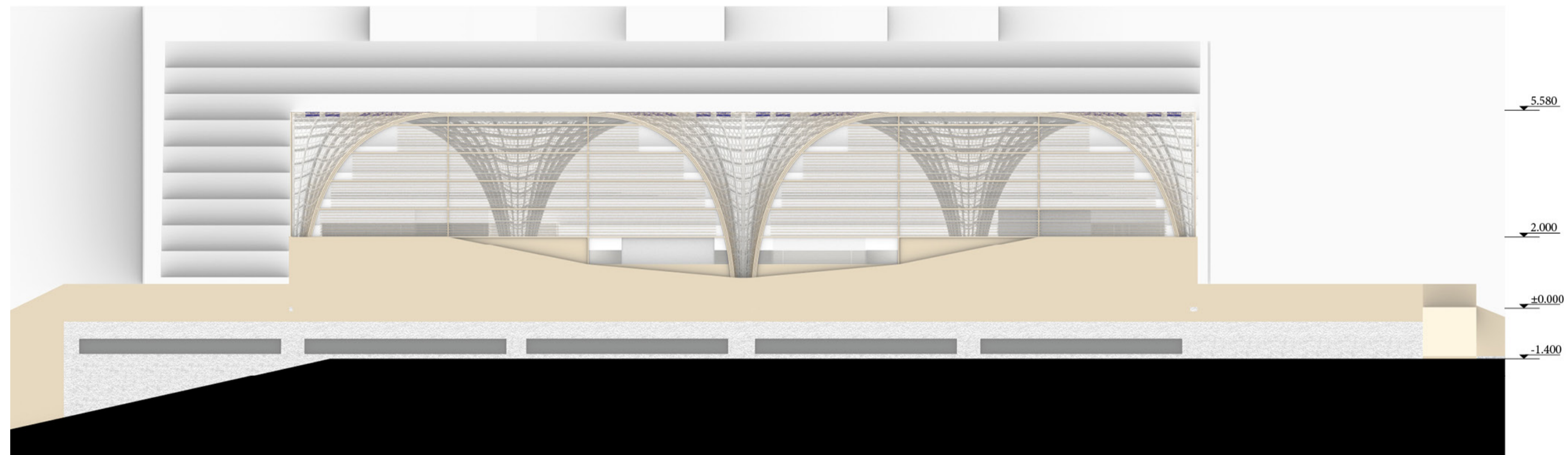
South Elevation 1:100



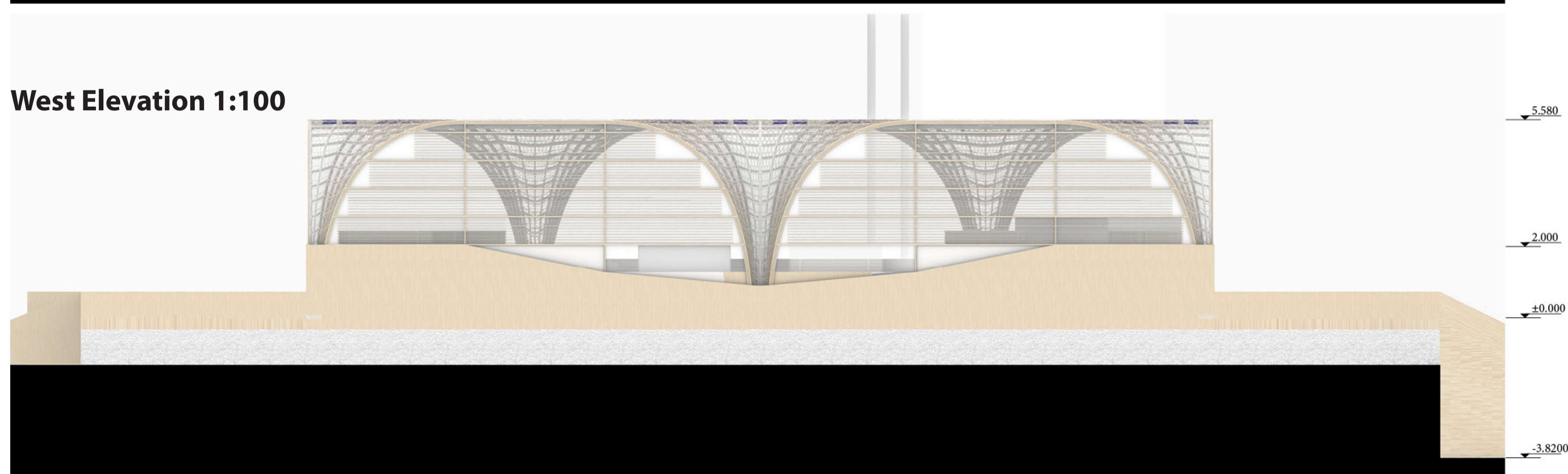
North Elevation 1:100



East Elevation 1:100



West Elevation 1:100



Explore diagram

Plastic and Waterproof Surface&Solar Panel

Bamboo Strips

Bamboo Roof as Collector of Rain-fall&Steel Skeleton

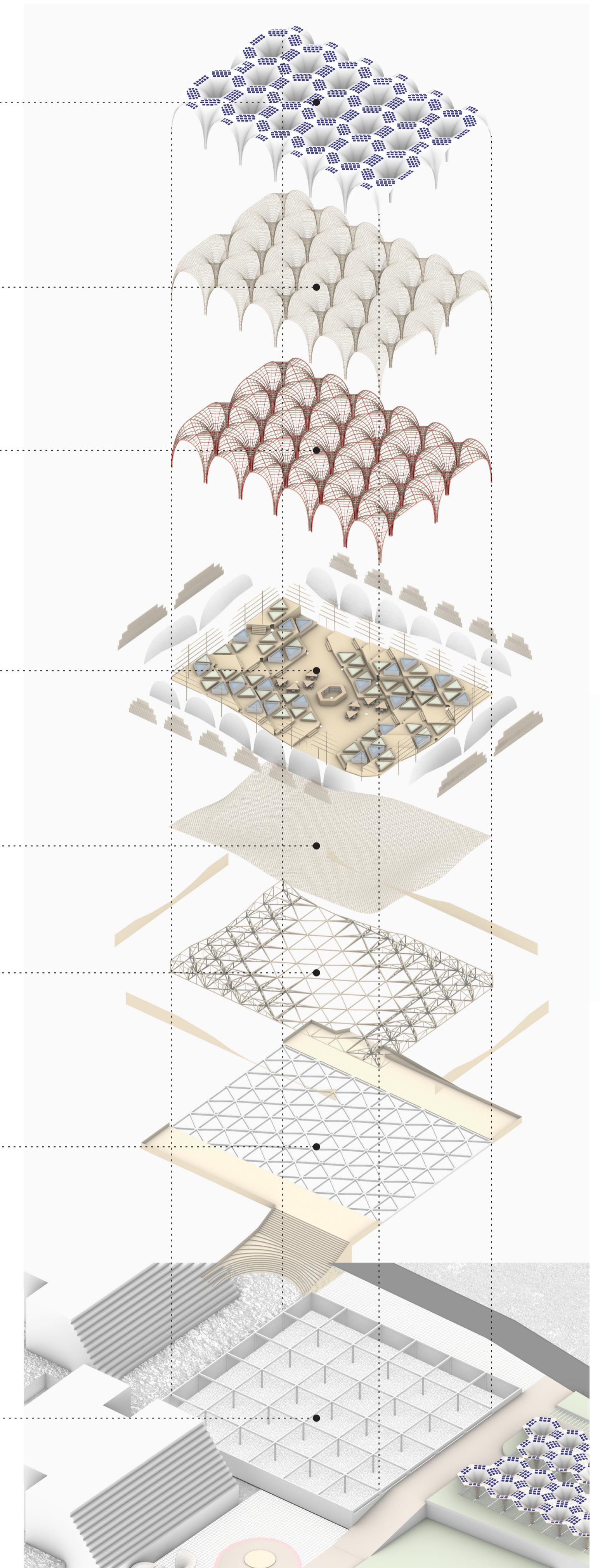
Bamboo Panels&Planting Bed&Fish Tank&Interior Furniture&Plastic Facade&Bamboo Shading

Bamboo Strips

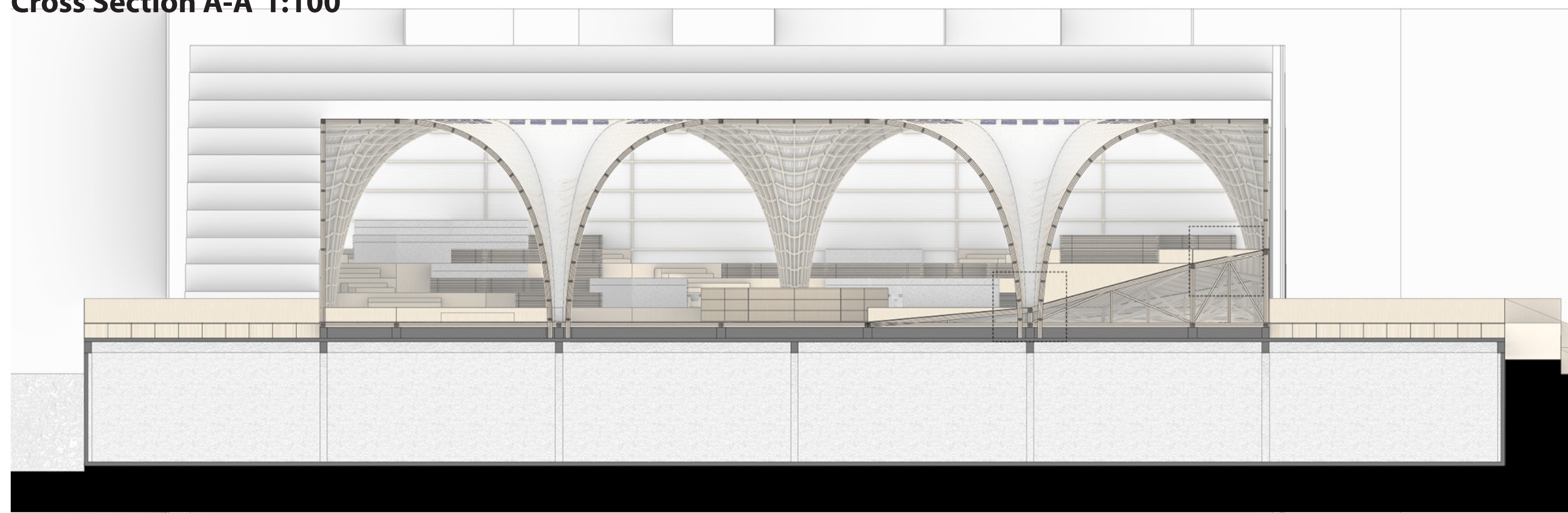
Bamboo Triangle Grid Frames

Concrete Foundation&Bamboo Pavement

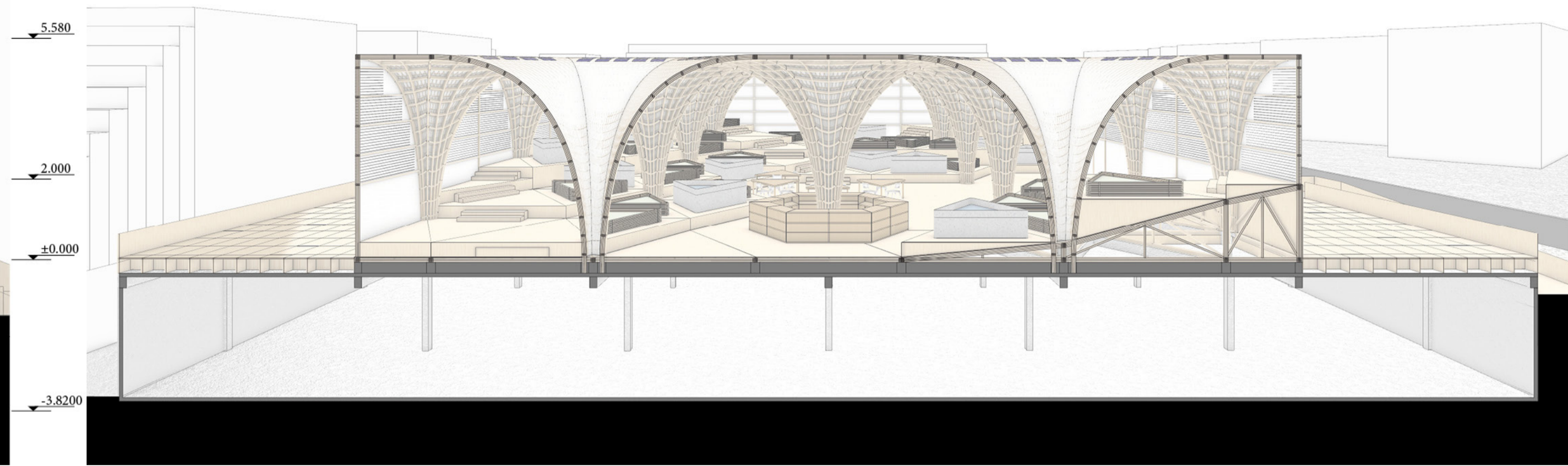
Existing Parking Lots with Concrete Structure



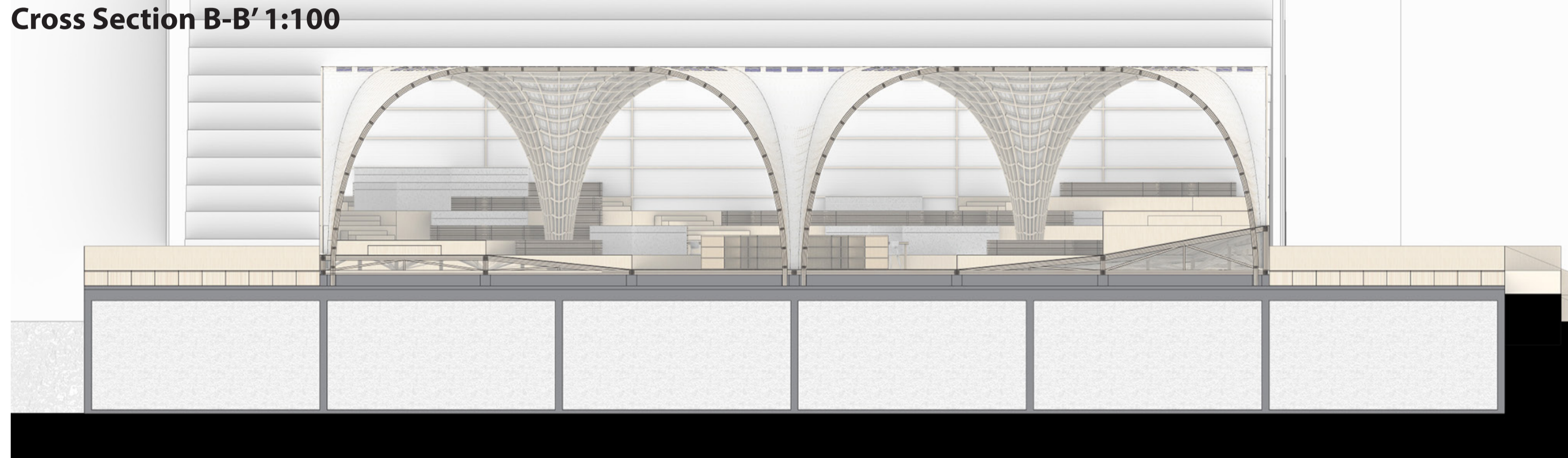
Cross Section A-A' 1:100



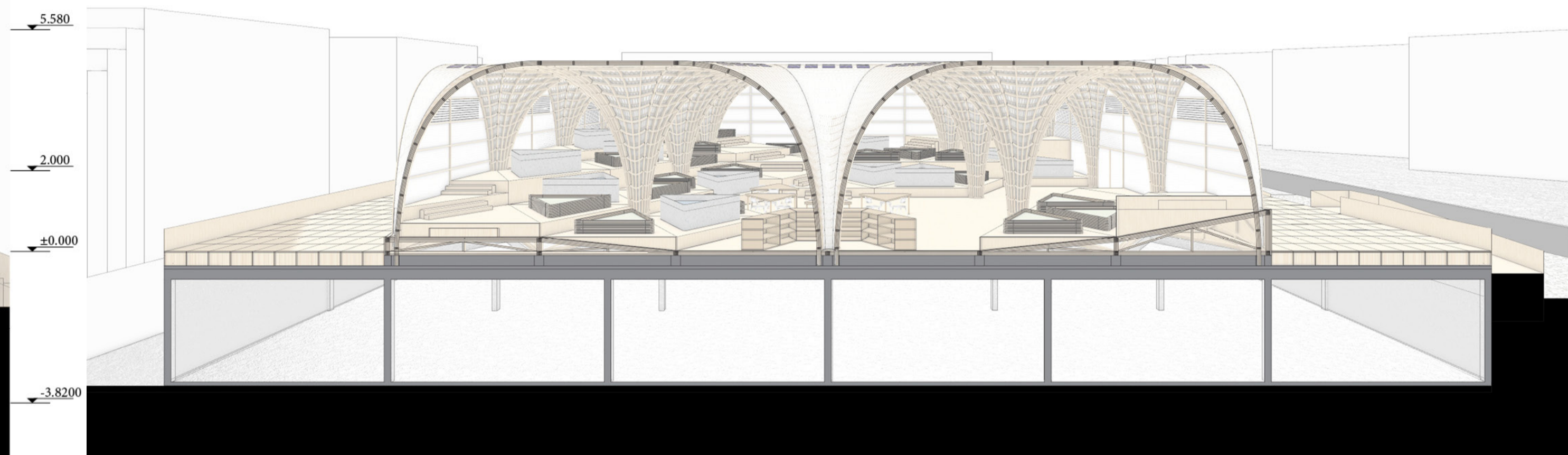
Cross Section A-A' View



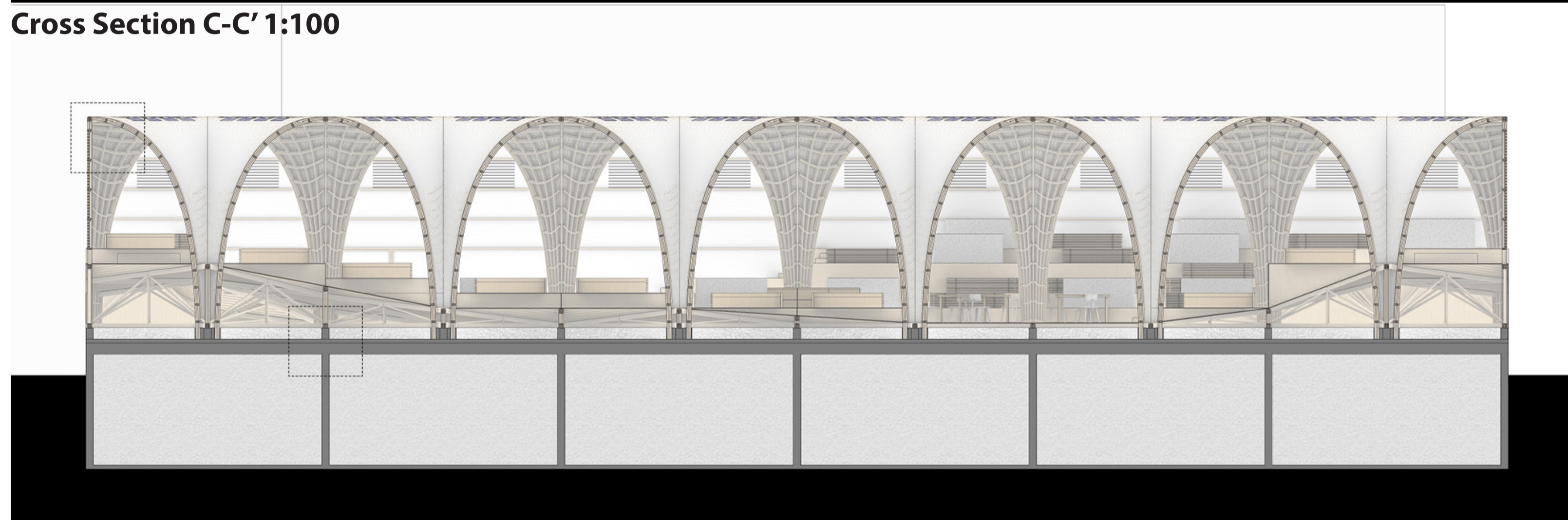
Cross Section B-B' 1:100



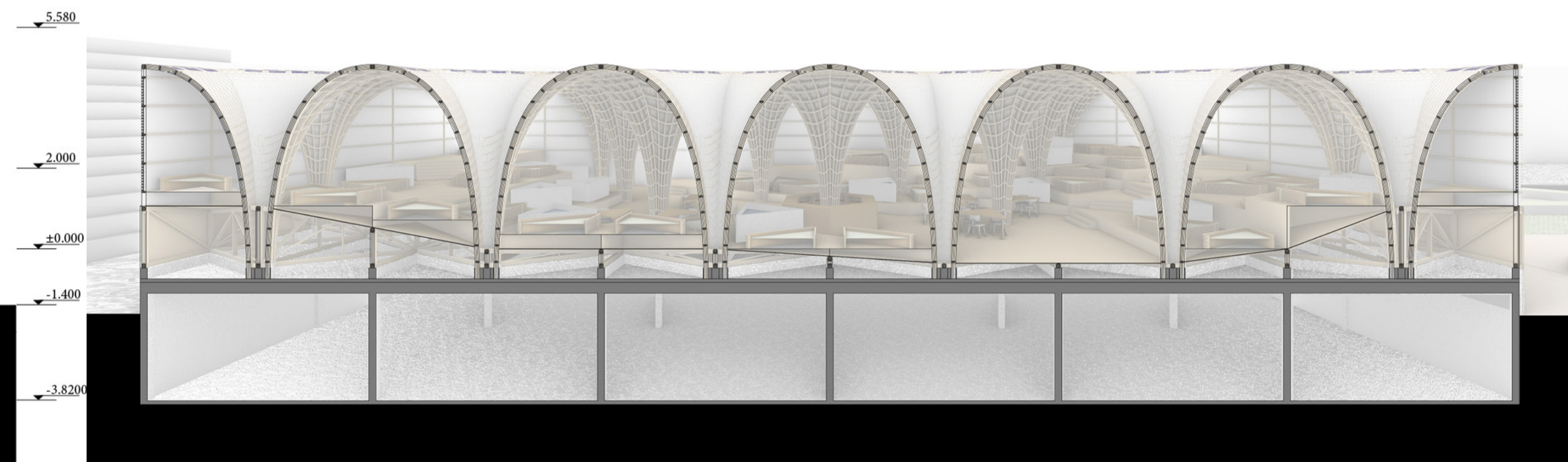
Cross Section B-B' View



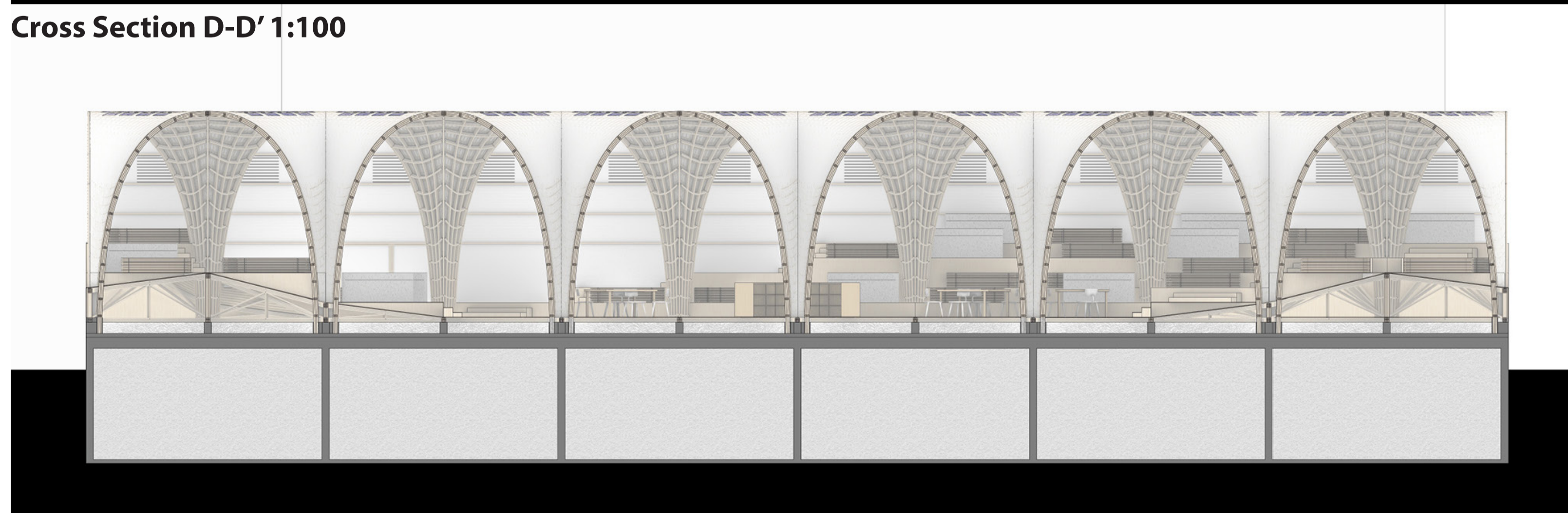
Cross Section C-C' 1:100



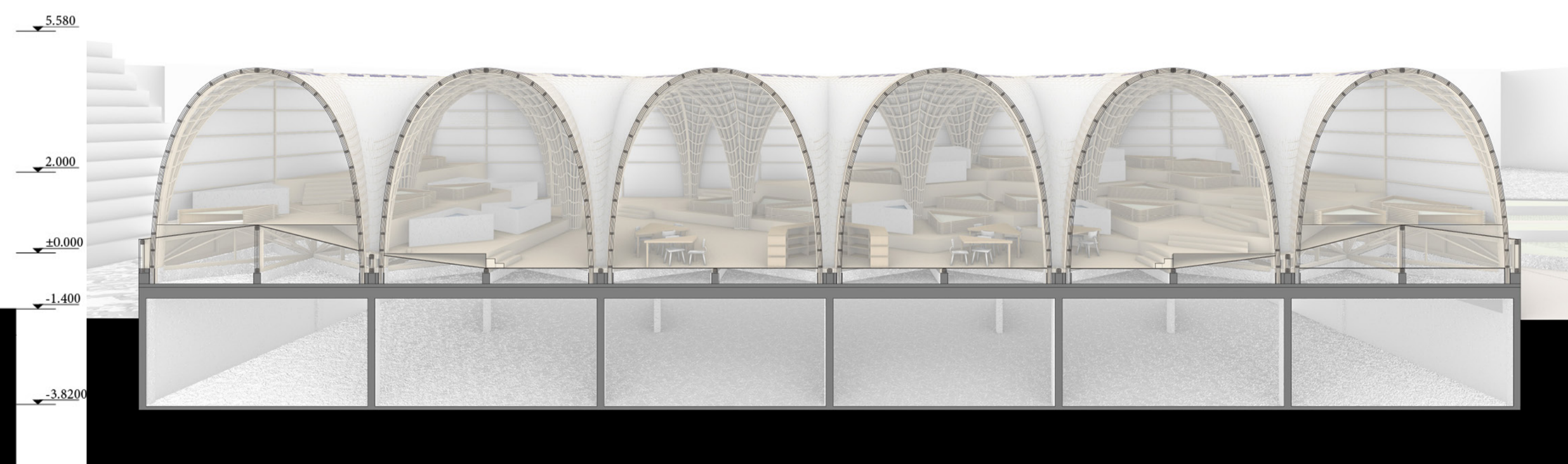
Cross Section C-C' View

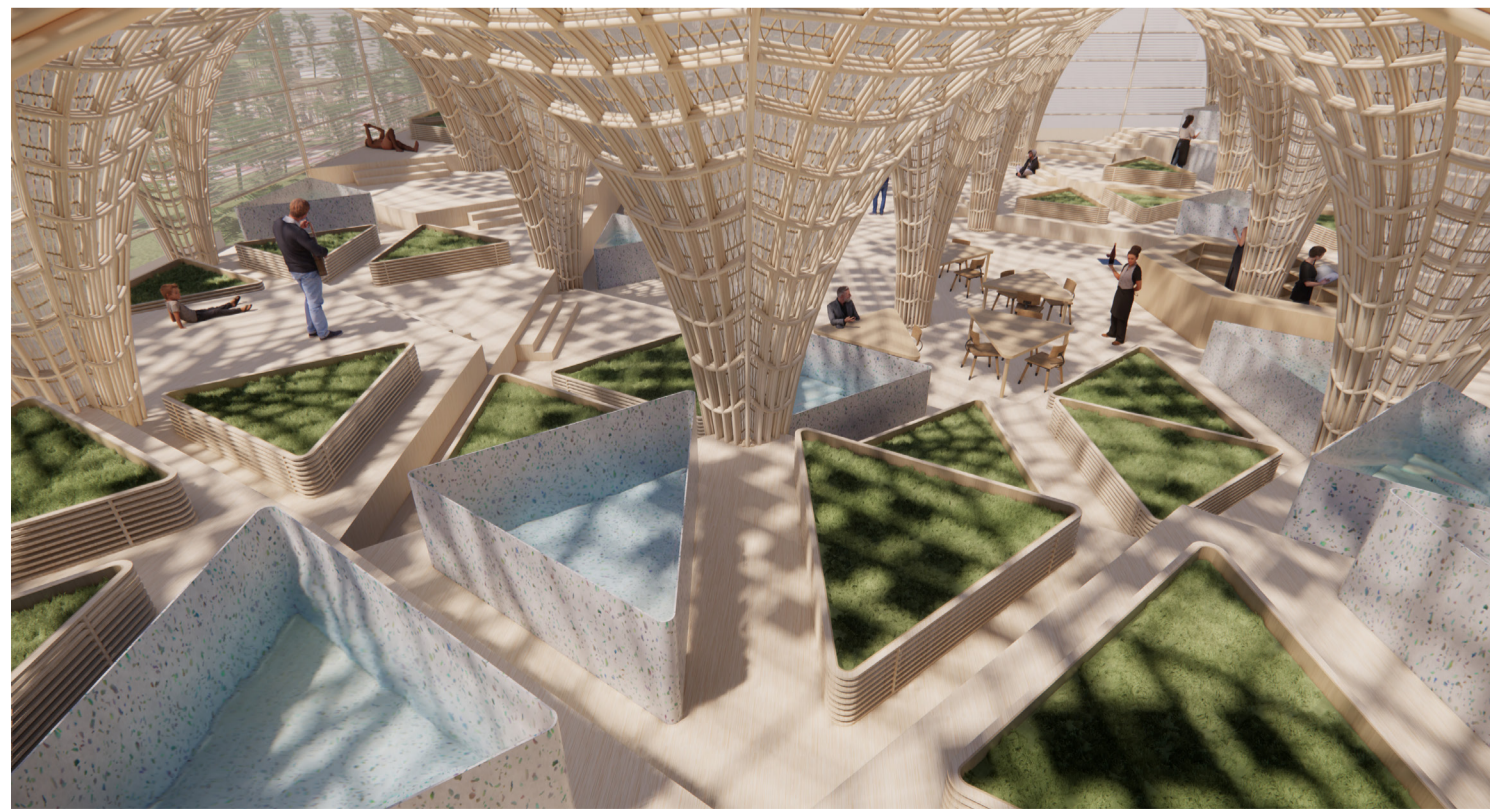
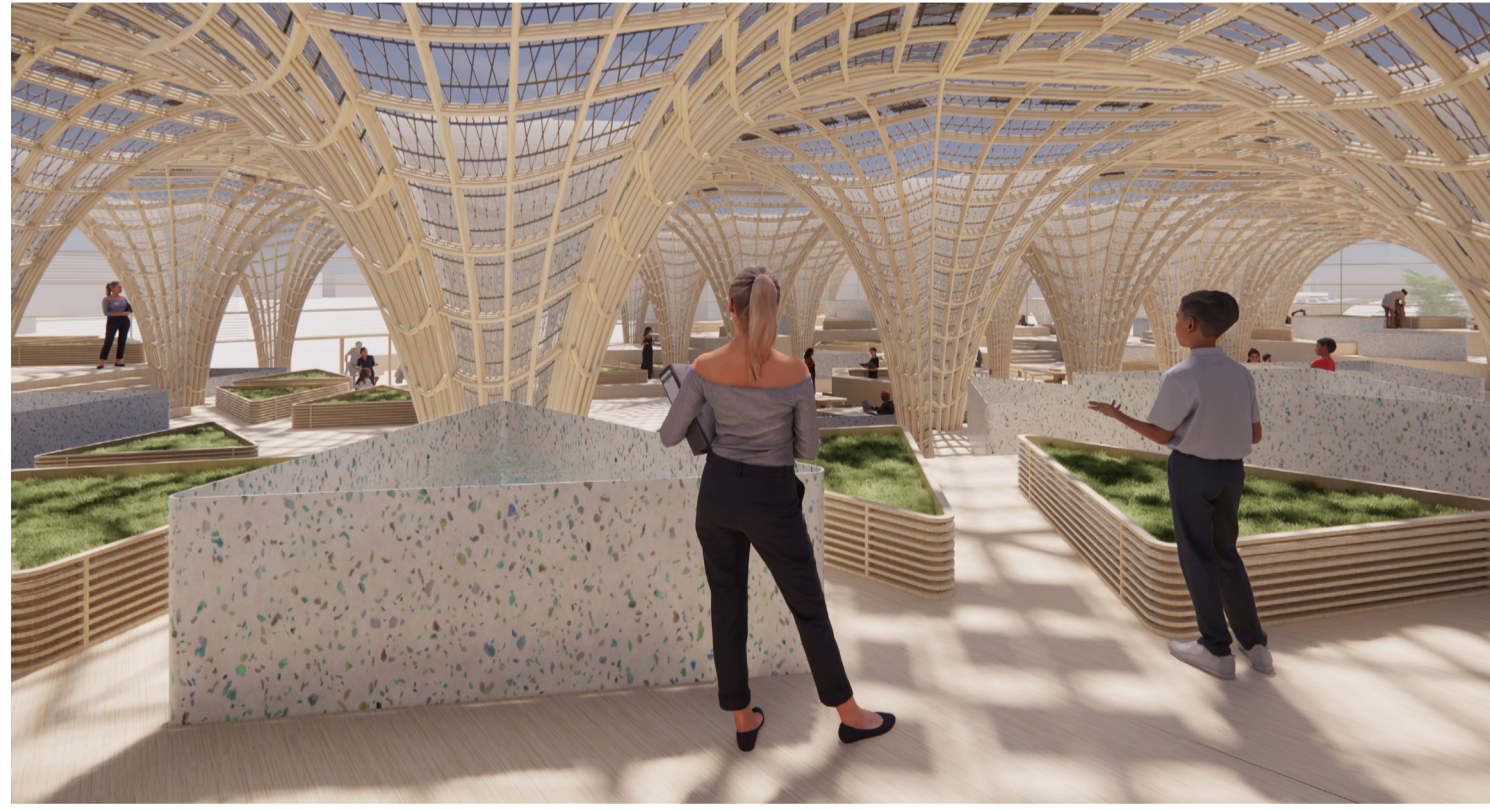
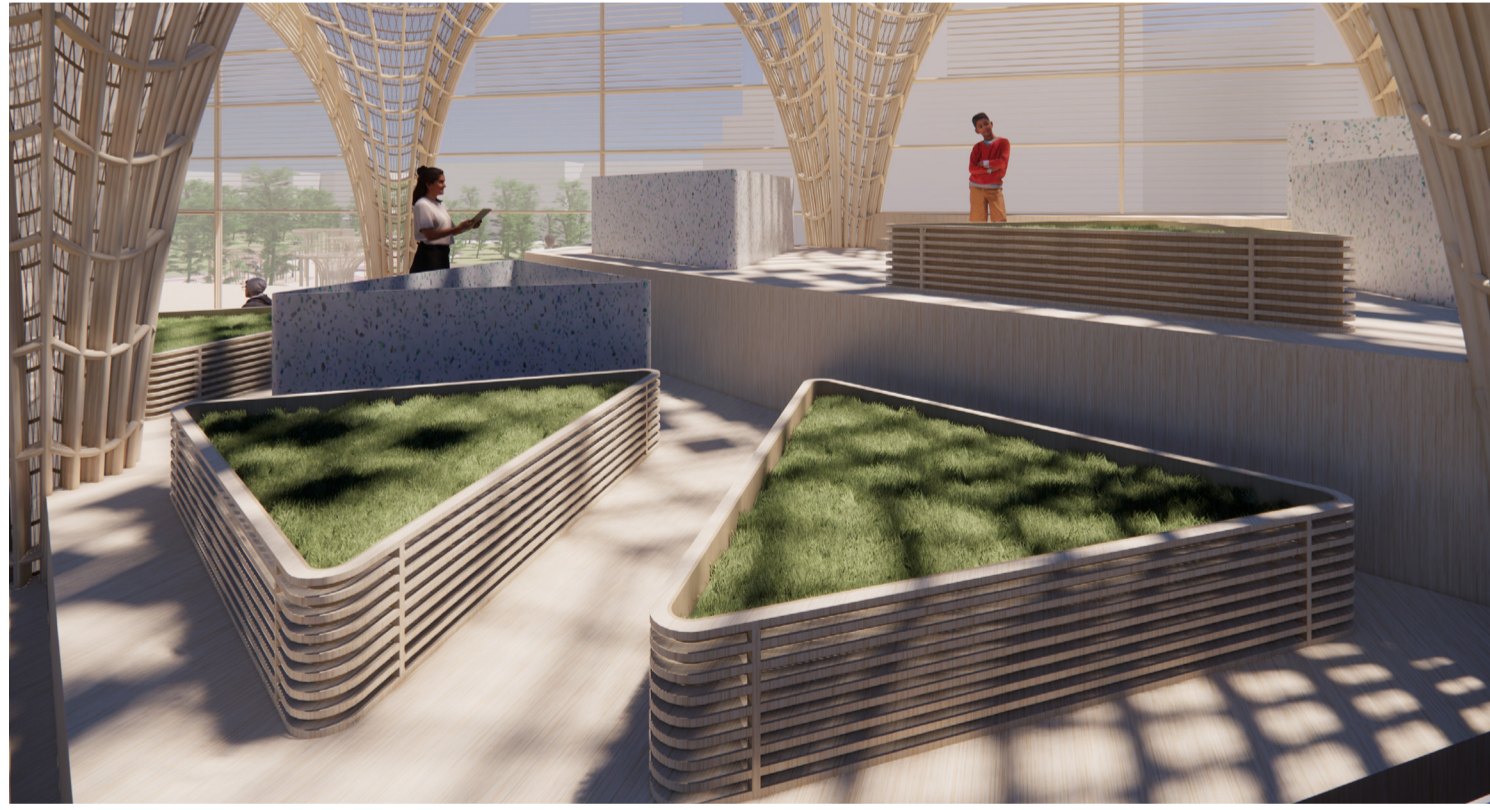
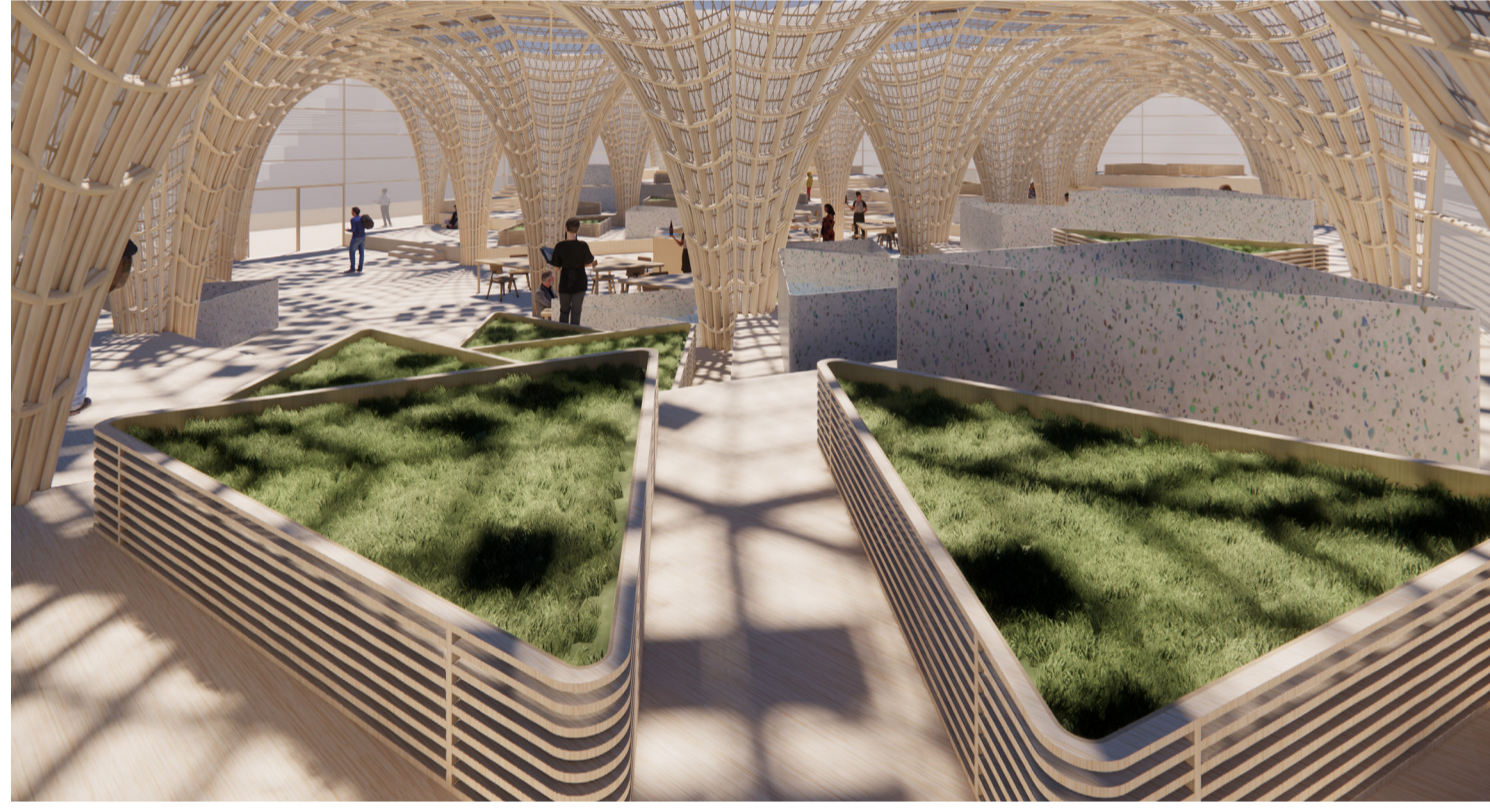
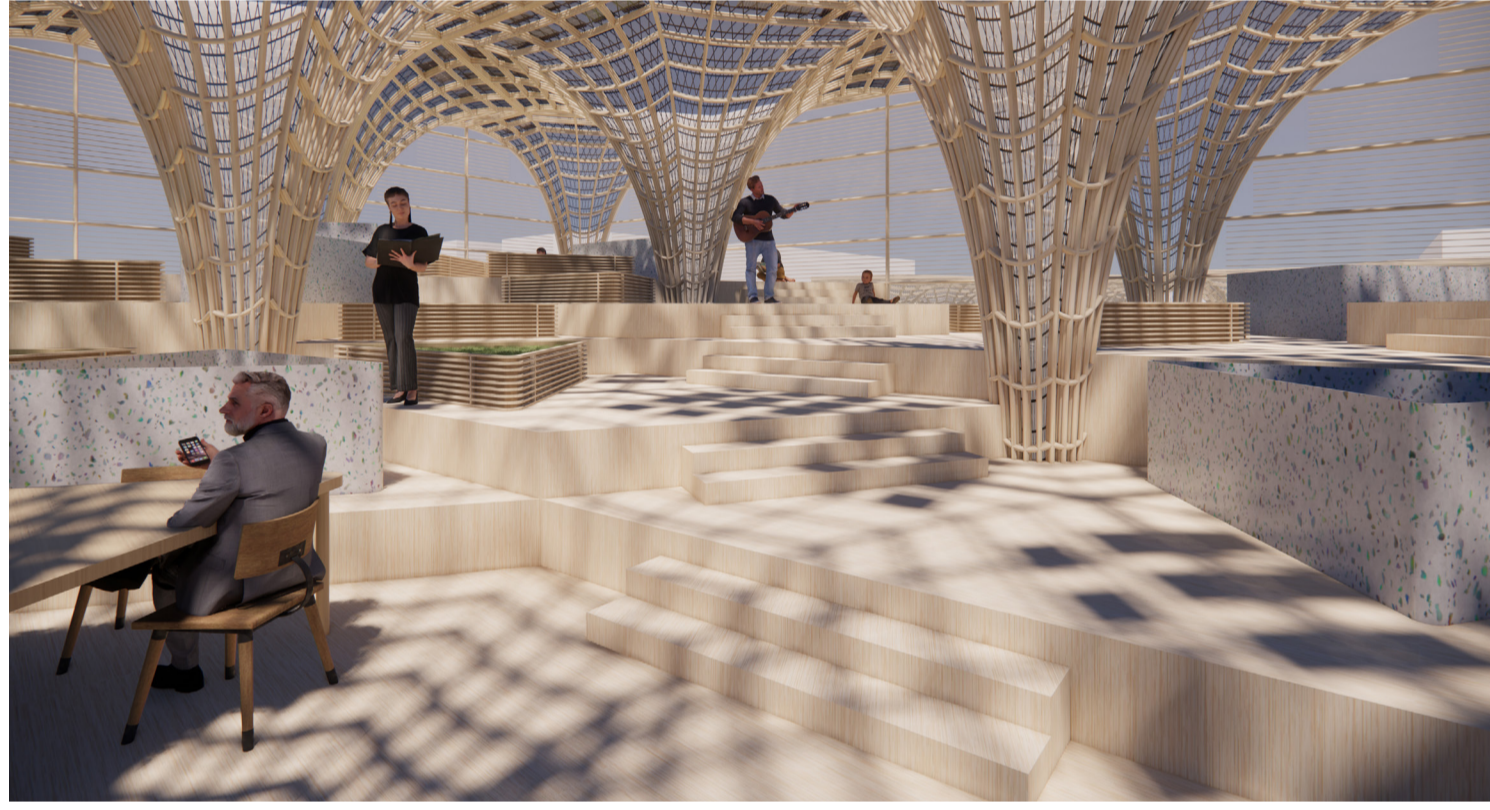
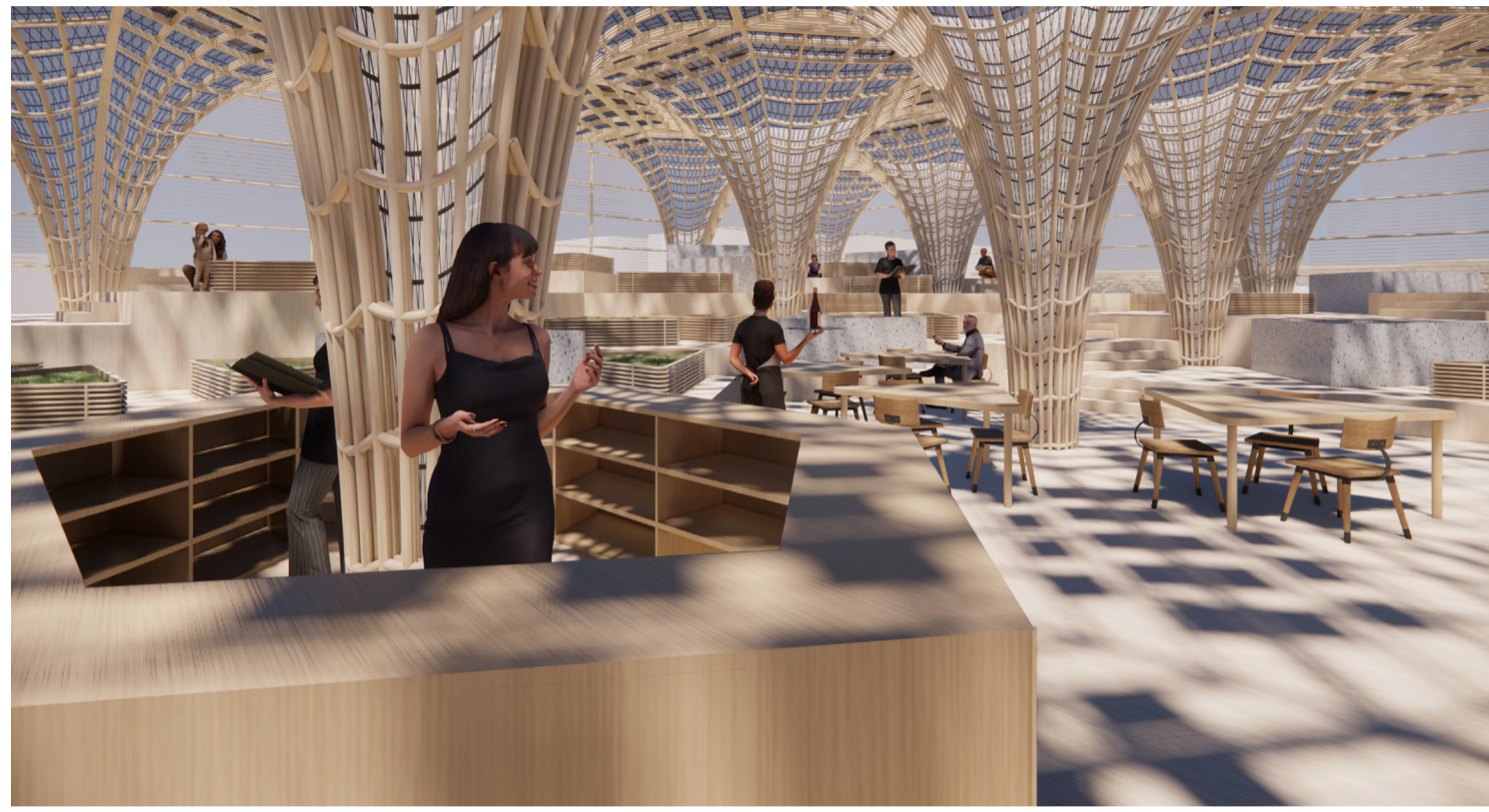


Cross Section D-D' 1:100

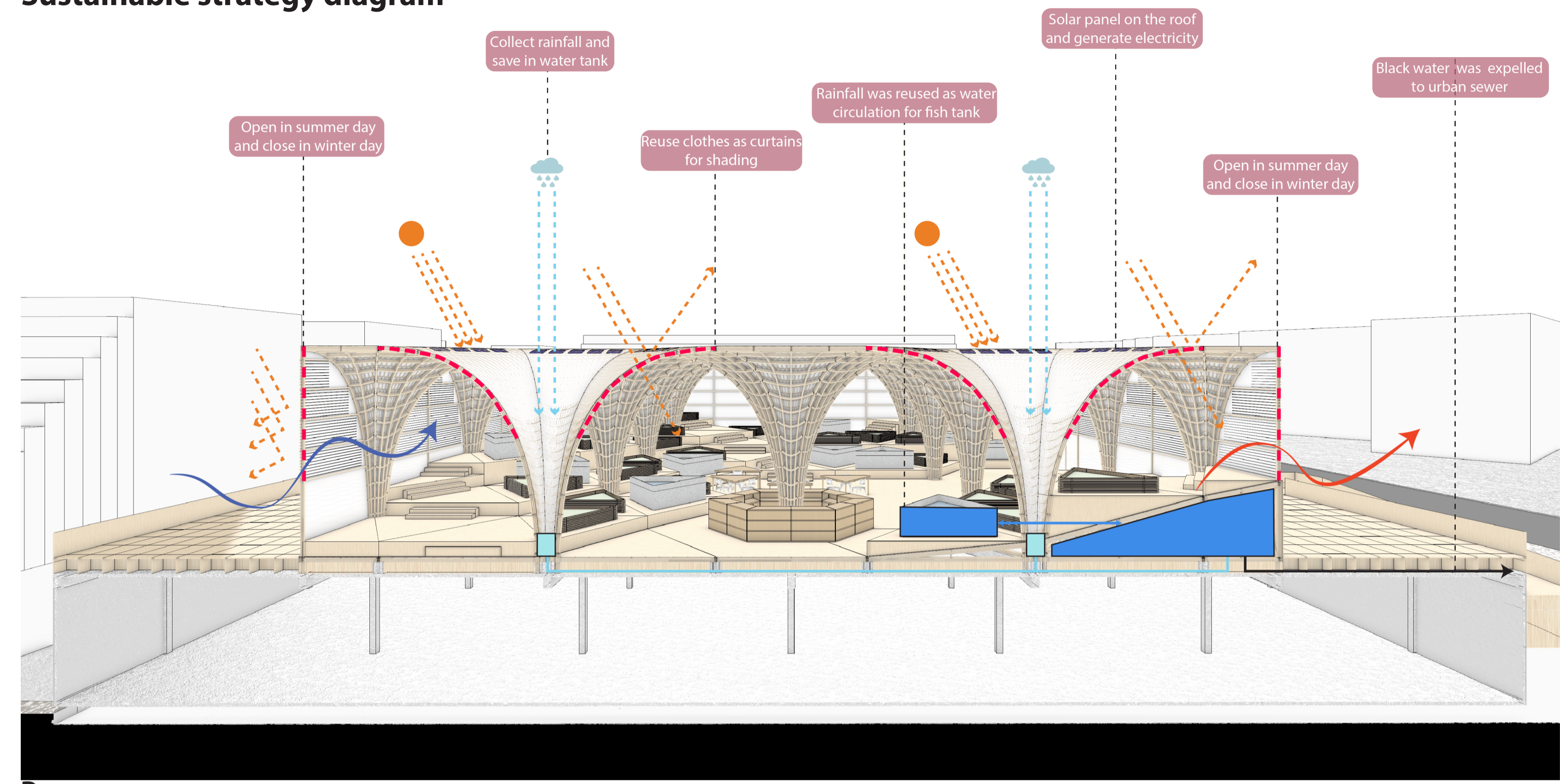


Cross Section D-D' View

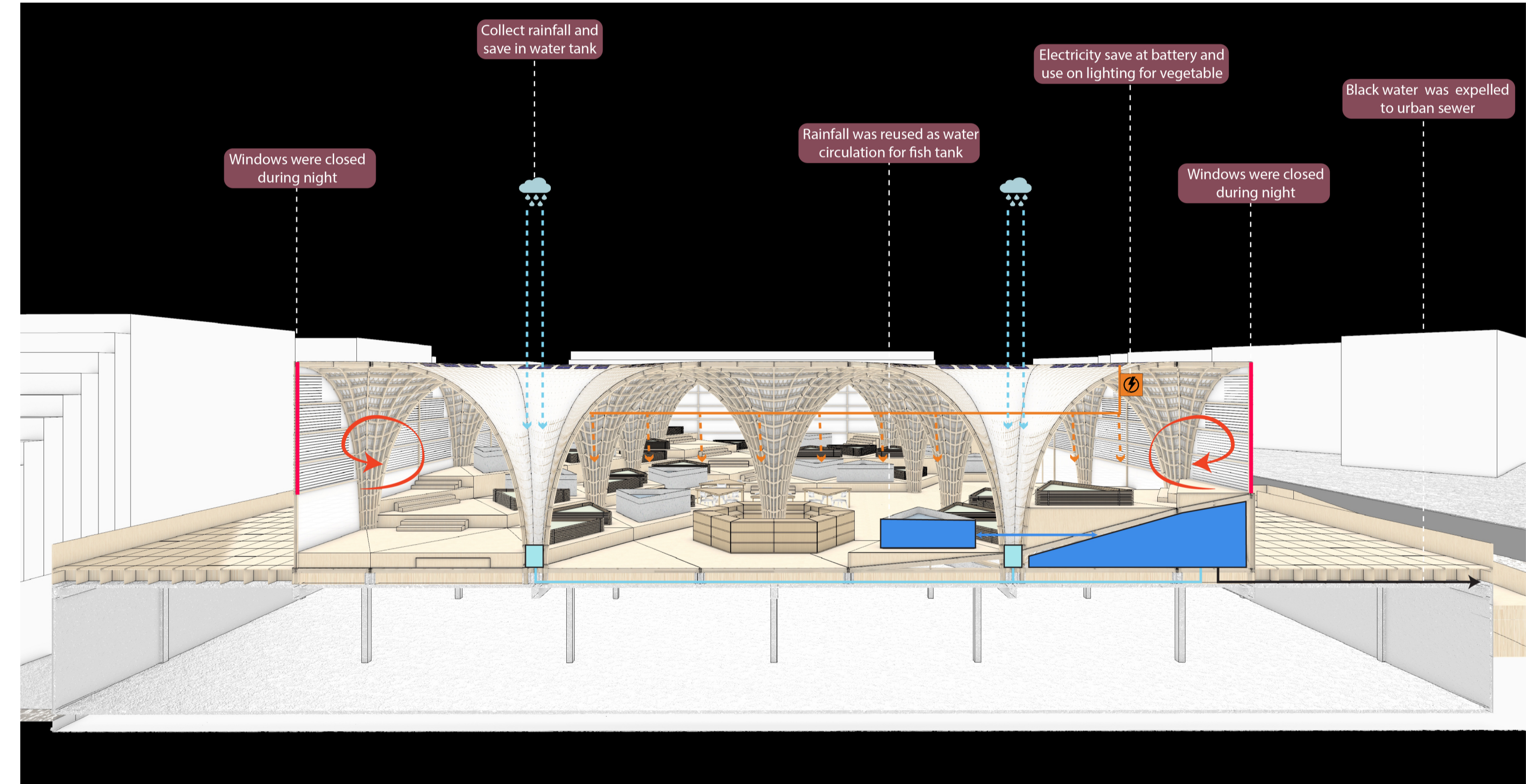




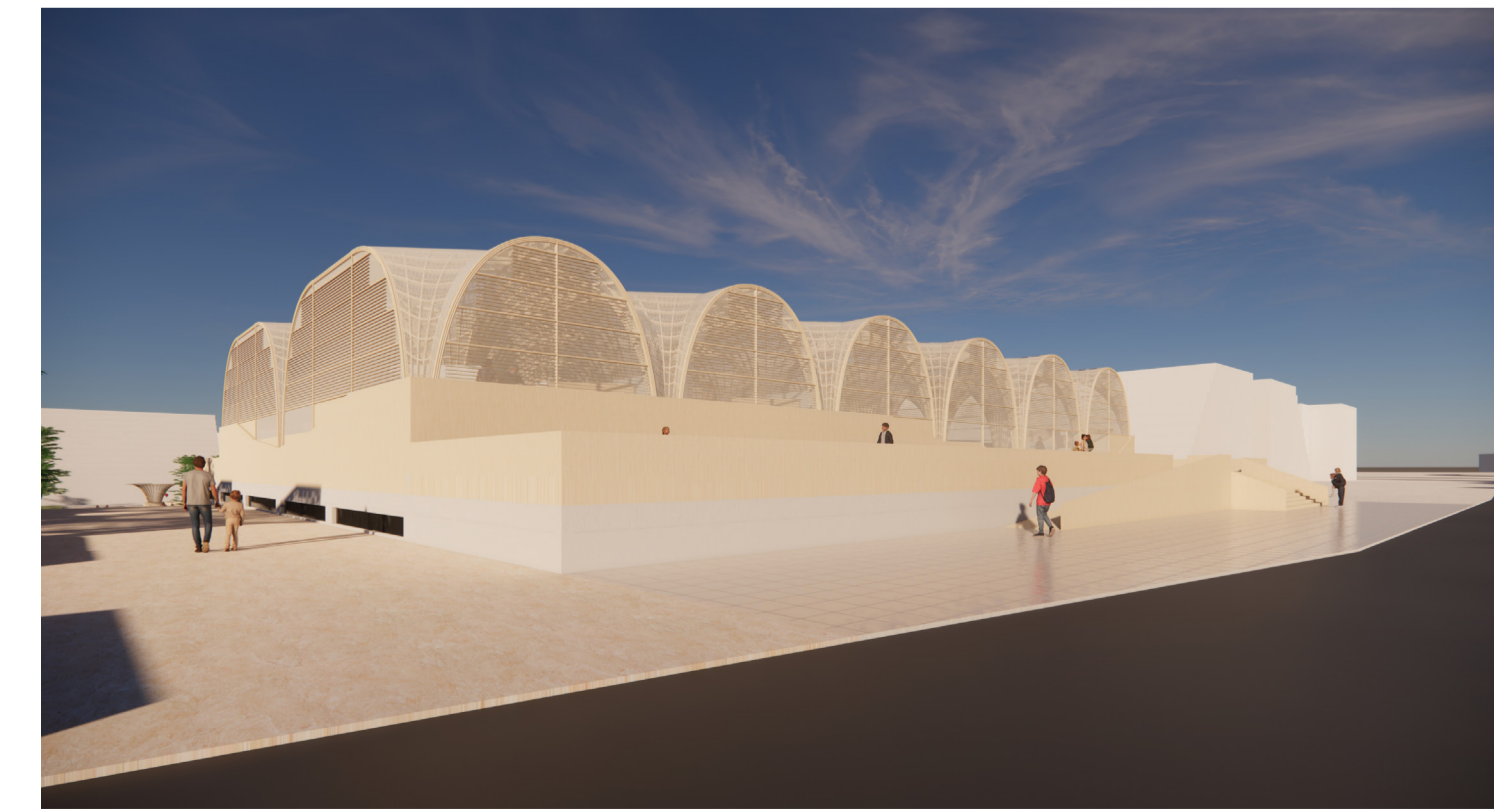
Sustainable strategy diagram



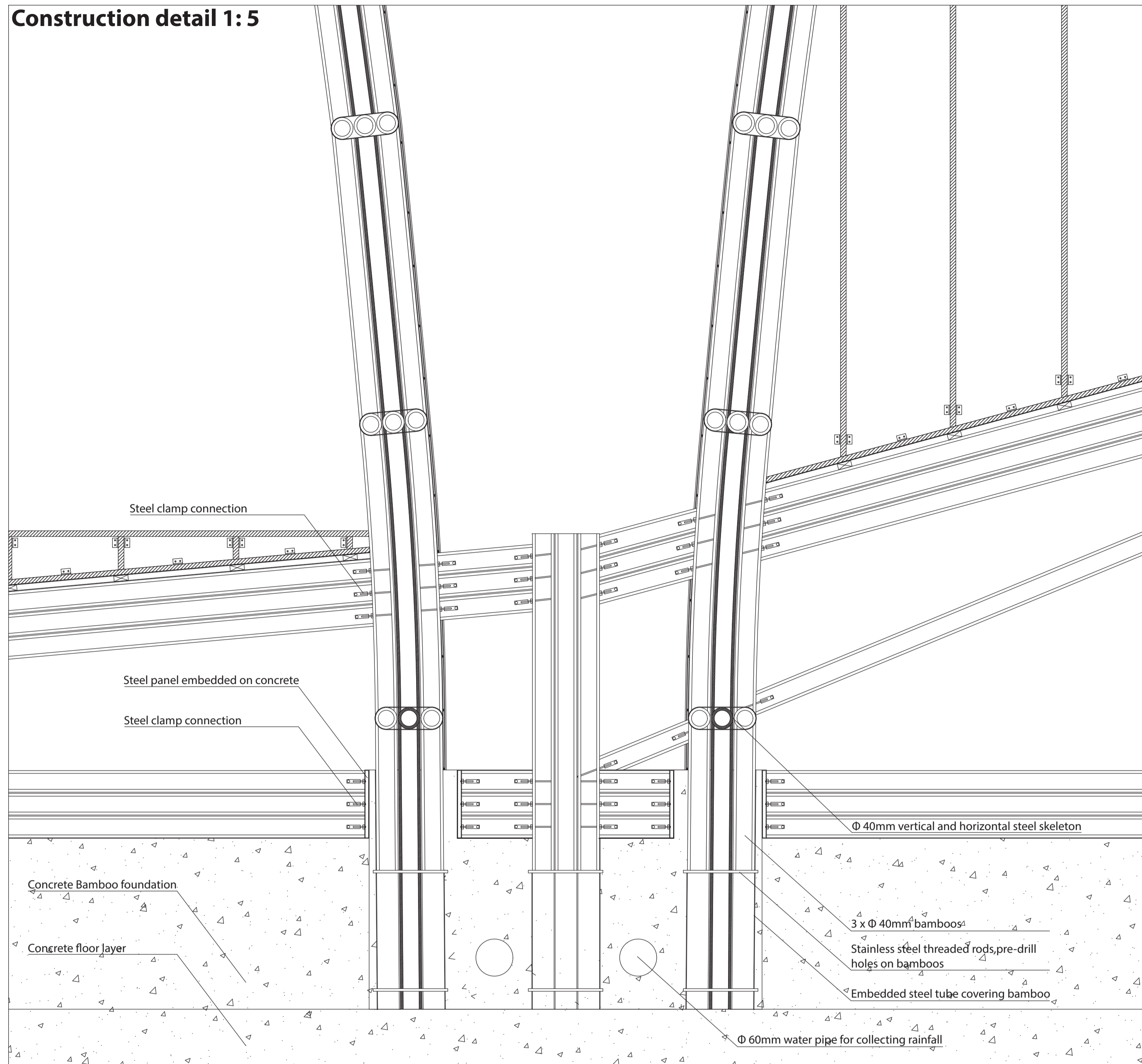
Day



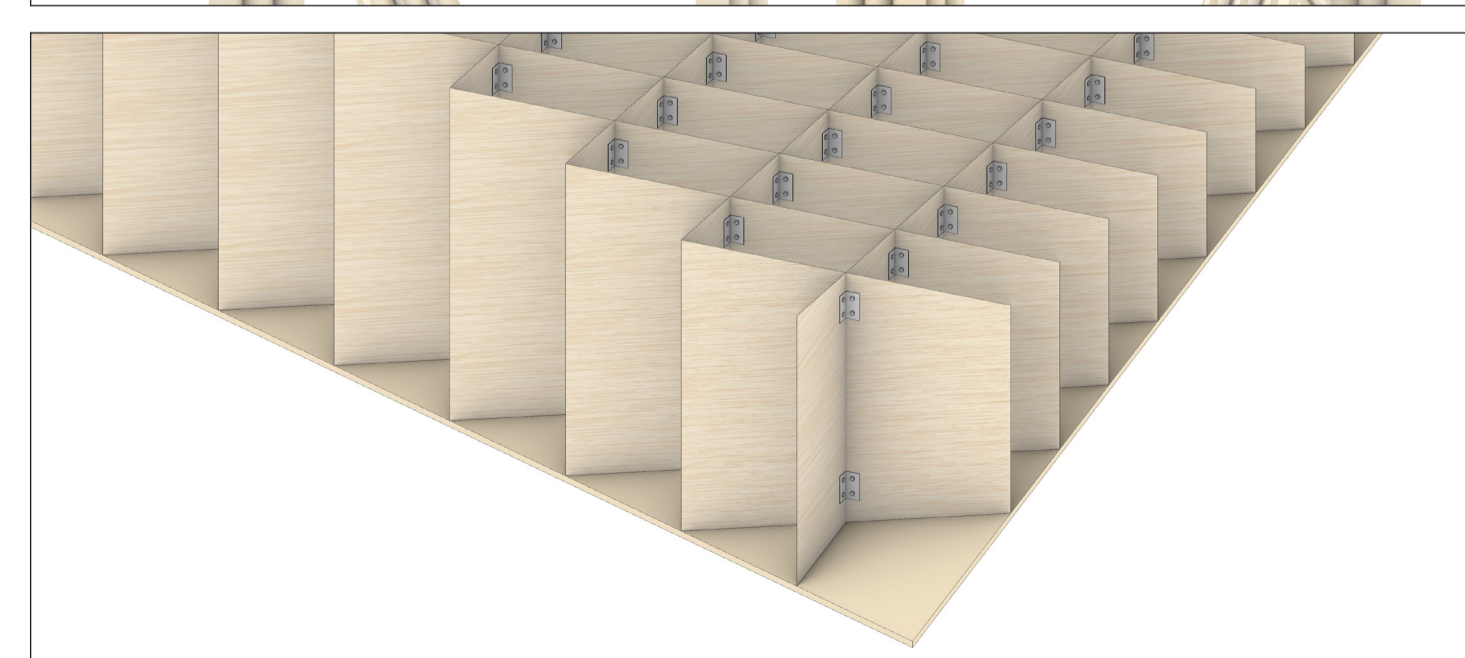
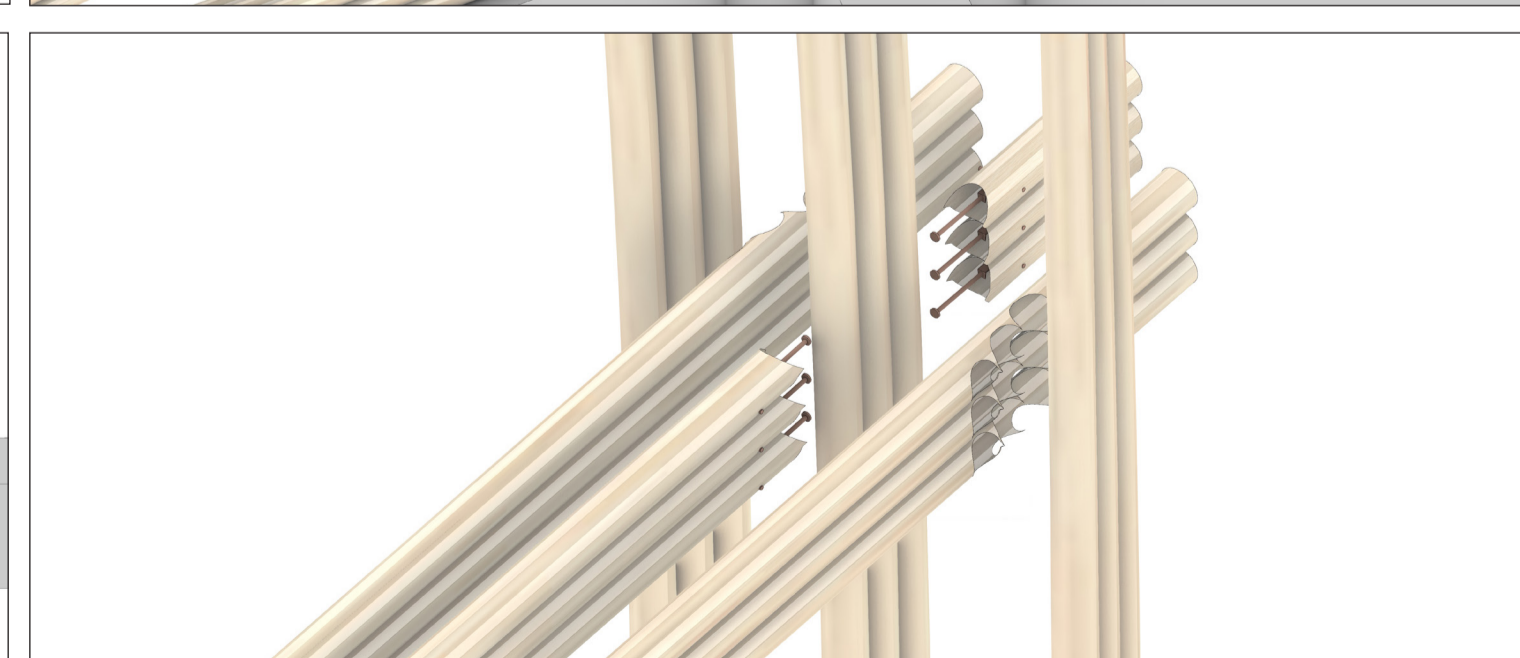
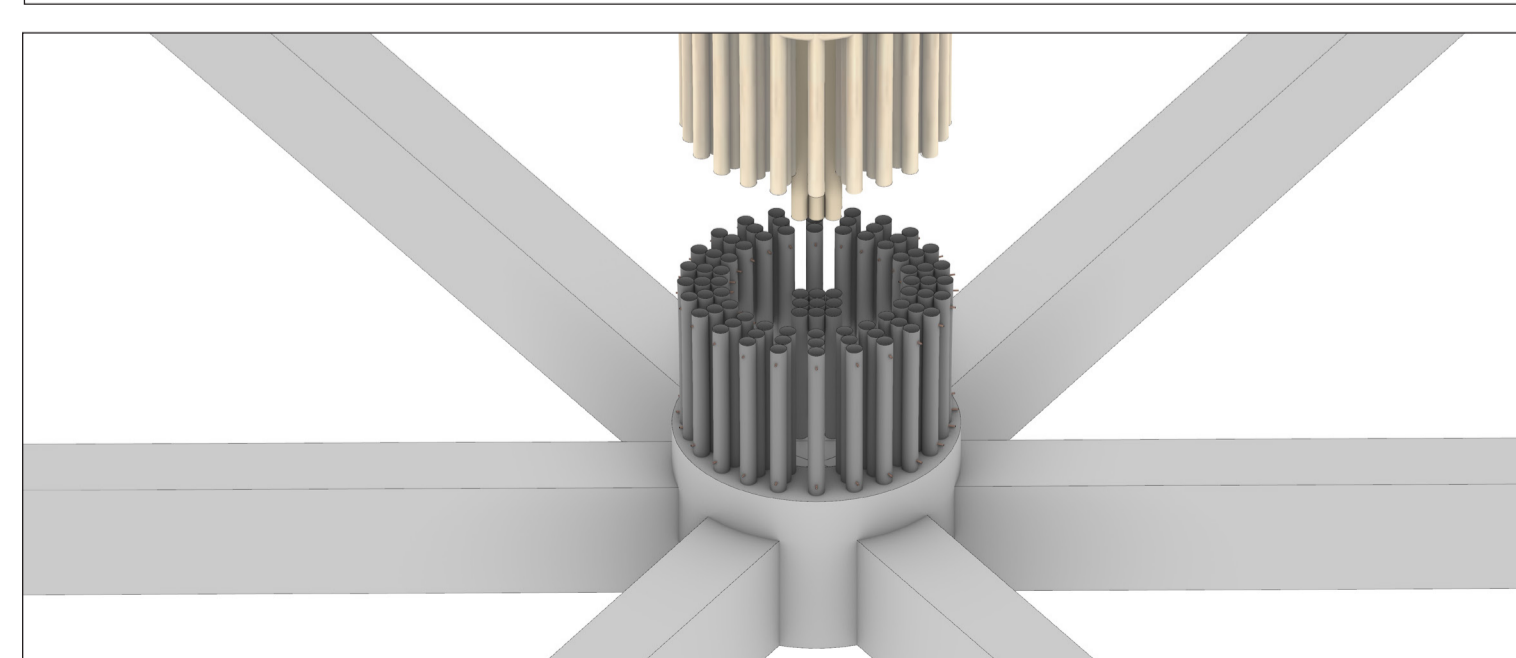
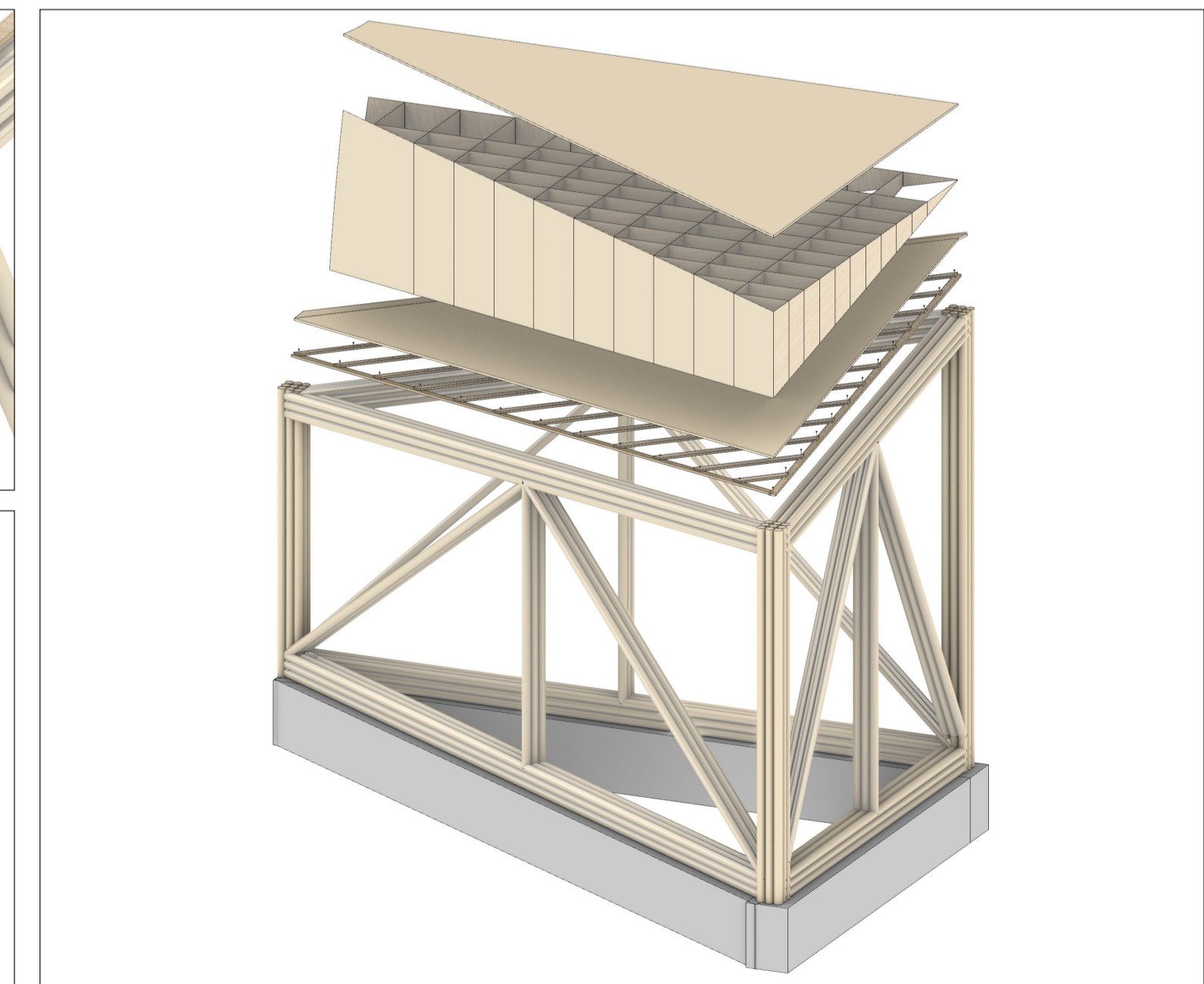
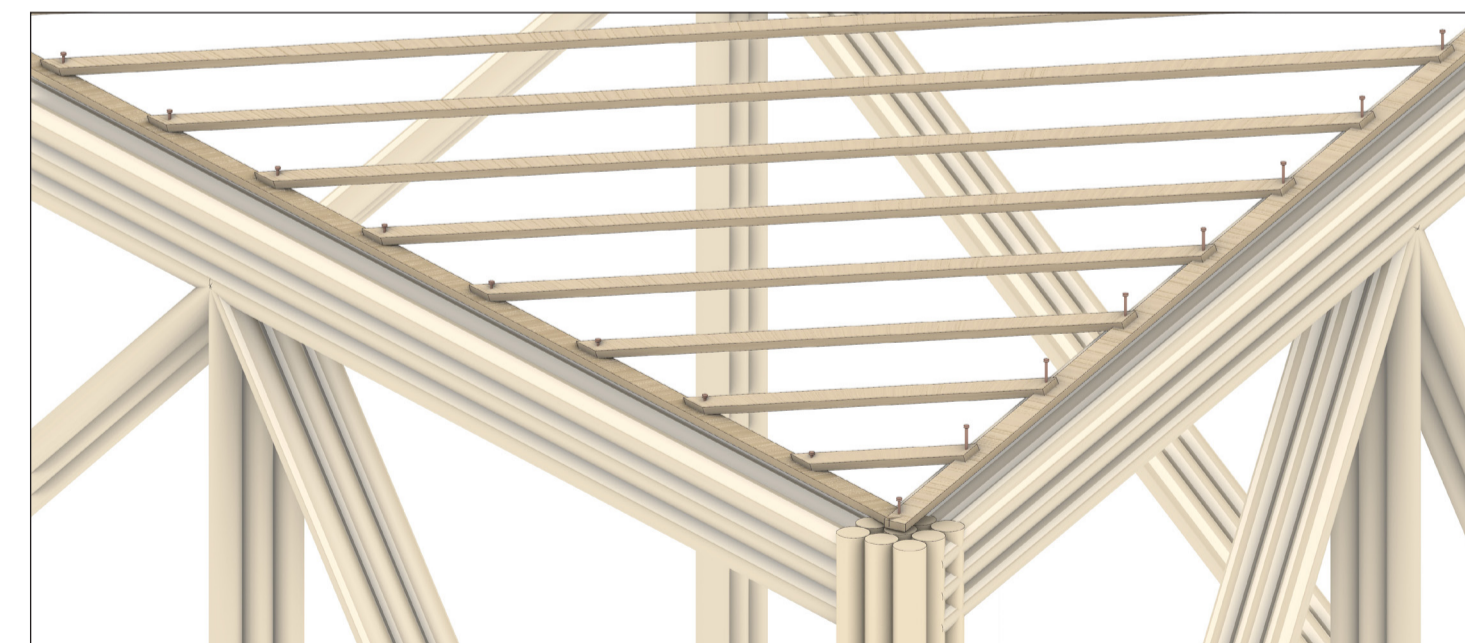
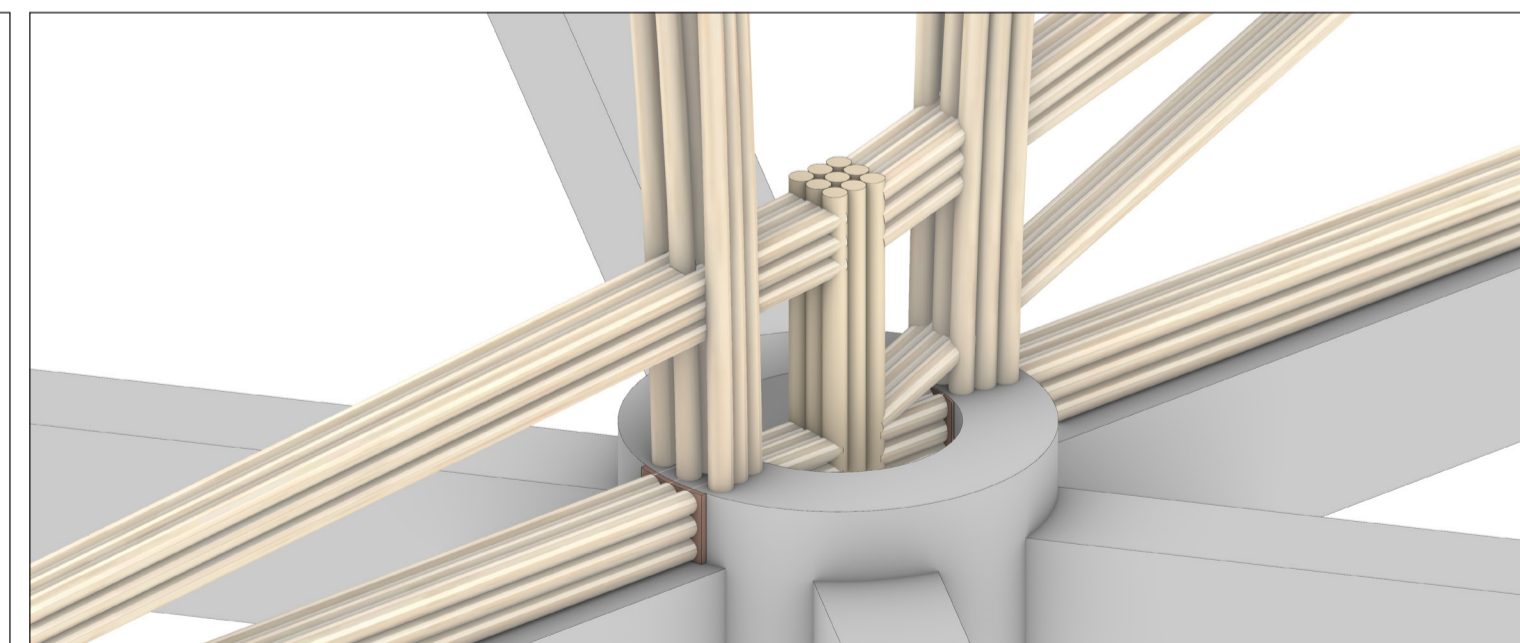
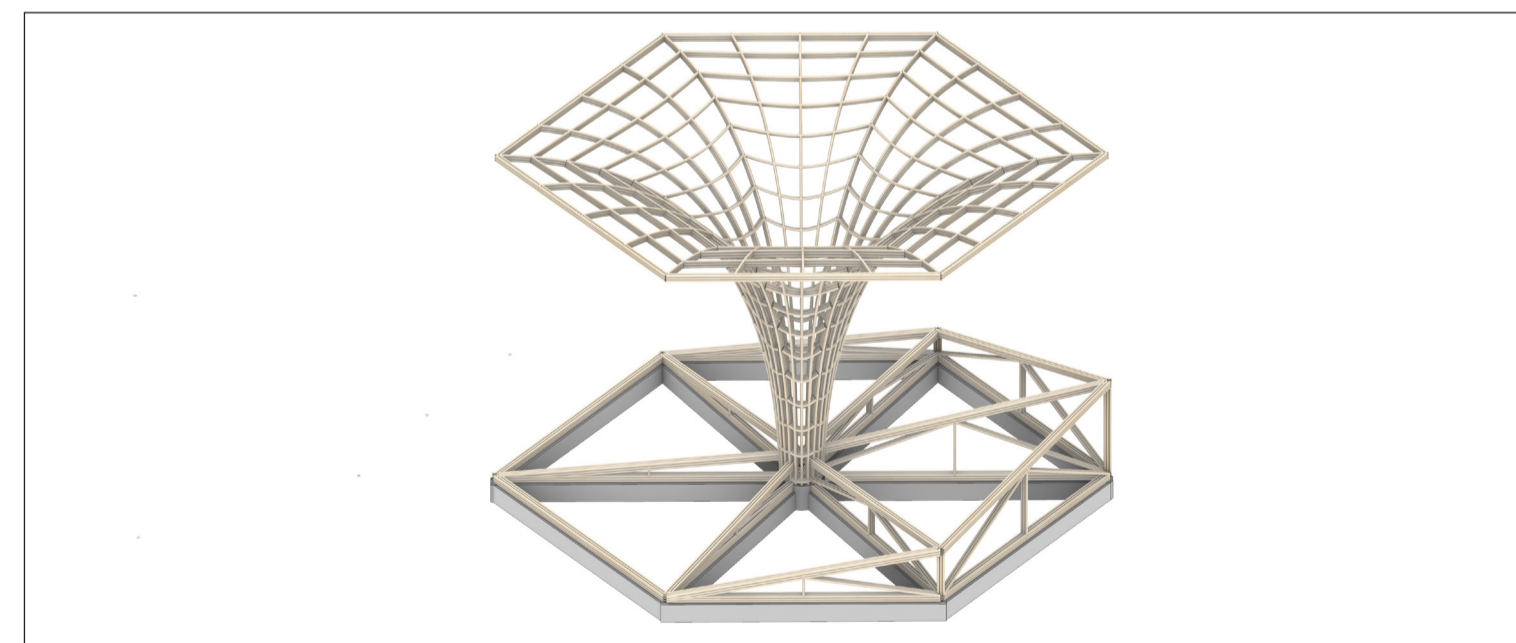
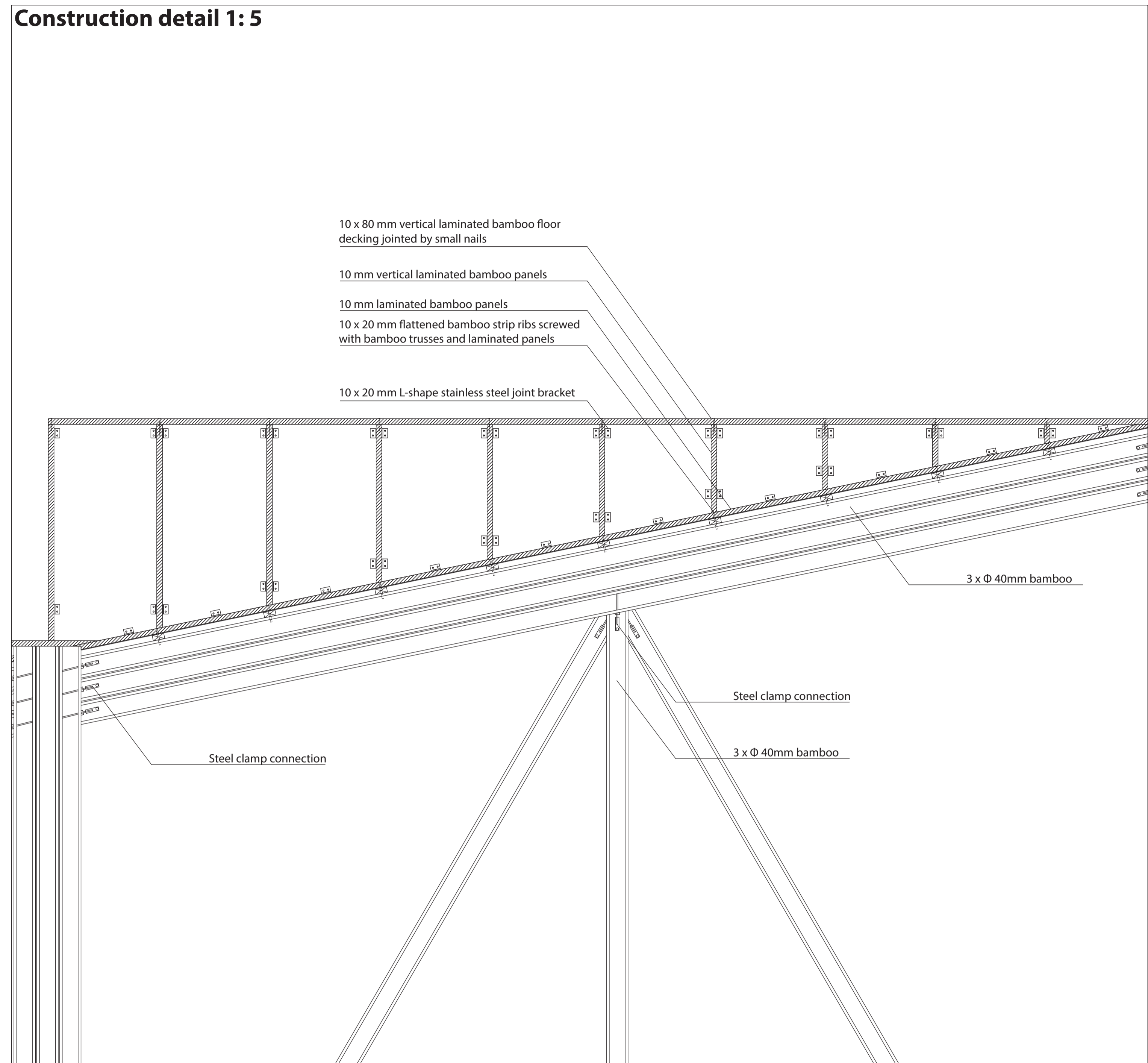
Night



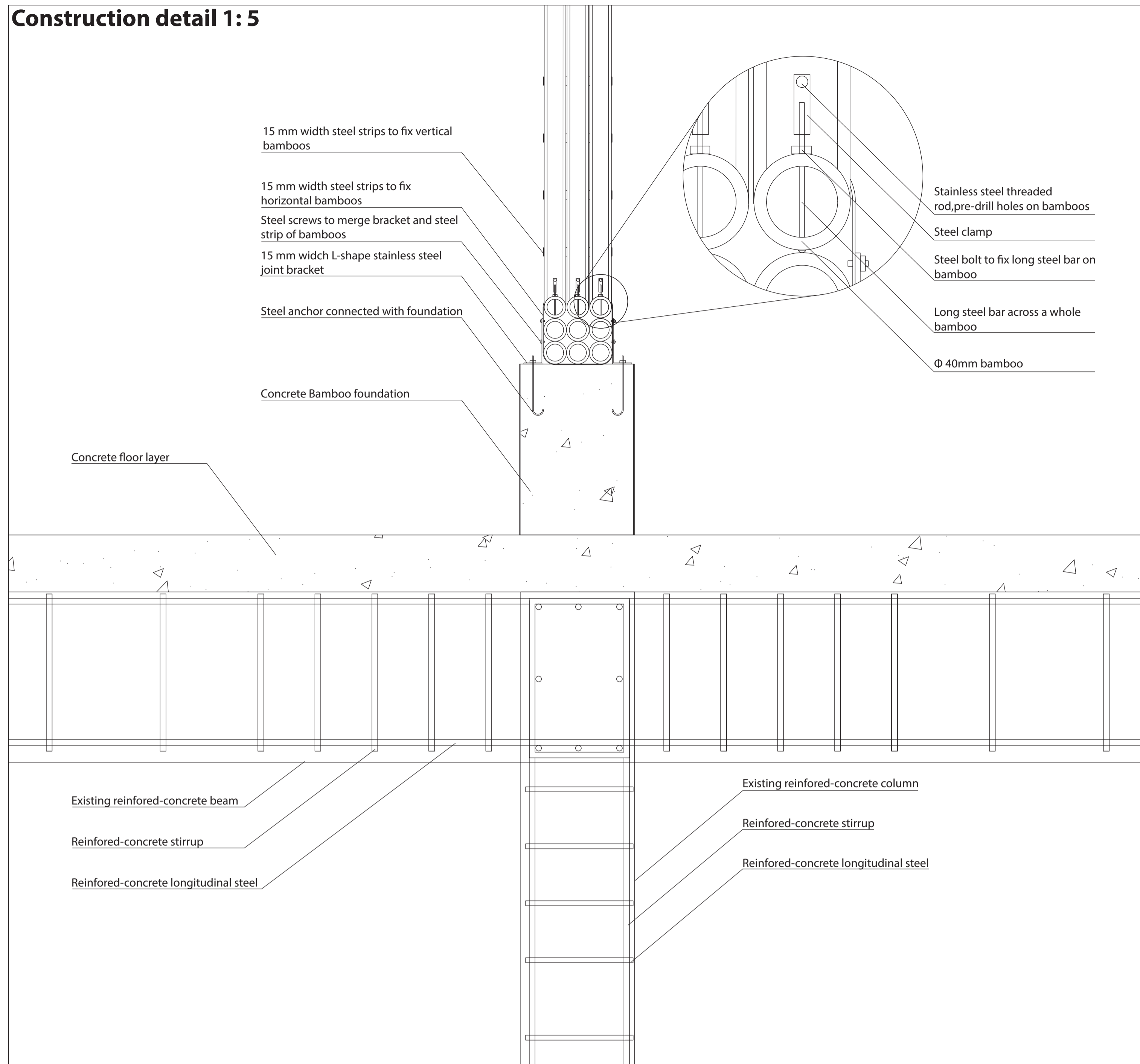
Construction detail 1: 5



Construction detail 1: 5



Construction detail 1: 5



Construction detail 1: 5

