HOLLER GROUNDS



VIENNA KING | B.F.A. ARCHITECTURE | SCAD 2026

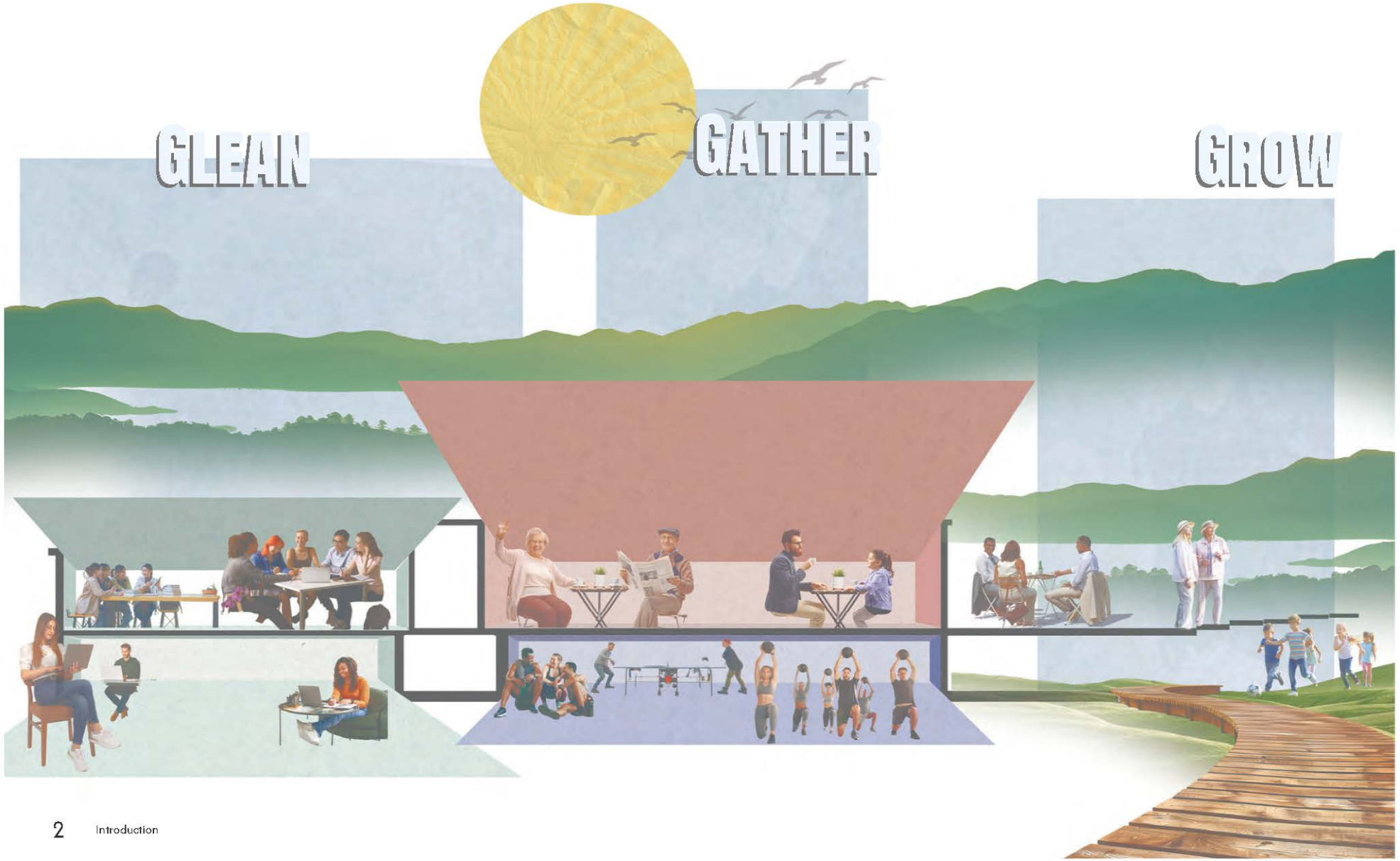

GLEAN
GATHER
GROW

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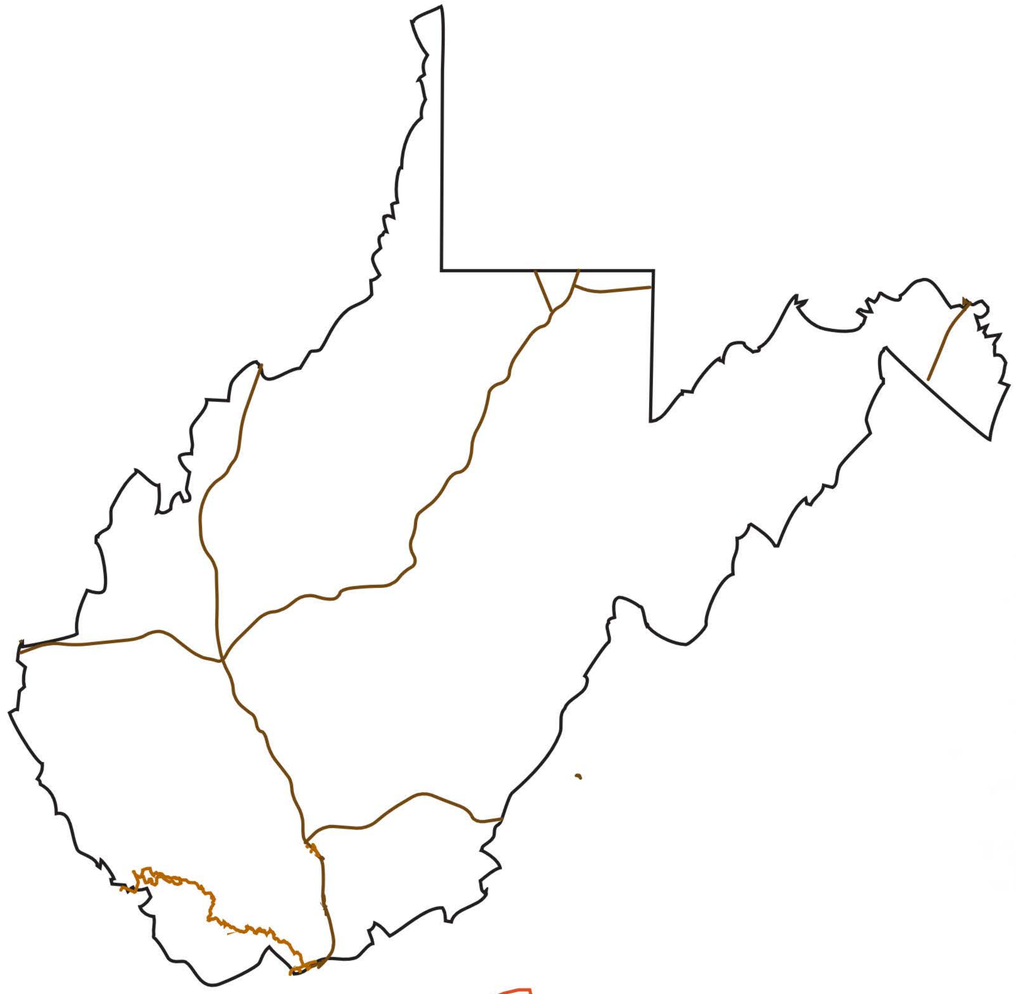
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West Virginia

A vital historical core to the United States' energy supply. Thriving off of coal booms to supply economic growth for many of the coal towns and the coal companies that owned them. Which left the coal dependent region forgotten in the past when the country had moved on from coal to run the country.

Route- 52

A continuous corridor of the remote and rural countryside cuts through the heart of coal country, connecting to the outlying communities.

Gilbert

Along SR-52 , 67 miles from the larger city of Bluefield, sits Gilbert, West Virginia. Right on the Guyandotte River, the town holds a long history of coal extraction tied to the Harless family empire.



Drug Abuse

Through the many illnesses that wrecked the miners, big pharma pushed a multitude of pills down their throats instilling a dependency that transcends generations.

Environmental Collapse

Due the dwindling trees and many strip mined mountain tops, the region has become prolific with flooding that can wipe out dependent communities.

Coal Extraction

Ignited the torrential and capitalistic abuse towards the land, strip mining mountaintops and leaving hundreds of toxic metals into the water supply.

Black Lung

The miners who were sent into the mines everyday developed a disease called black lung. At most times a fatal illness, it develops from the coal dust filling the air mountain mines until it clung to not only their skin, but their lungs as well.



Site Plan

N

0' 8' 24'
4' 12' 60'

Site

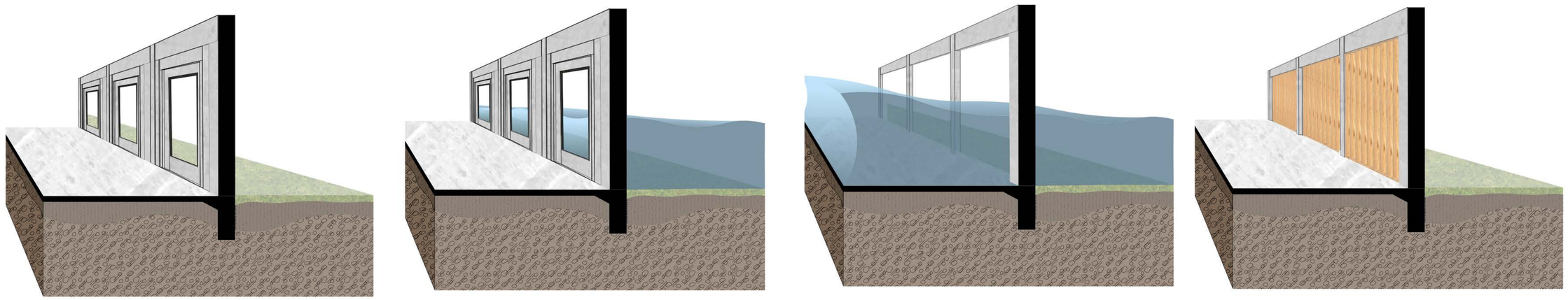
Flood Plains

River

100 Year Floodplain

500 Year Floodplain

Flood Plain Risk Axonometric

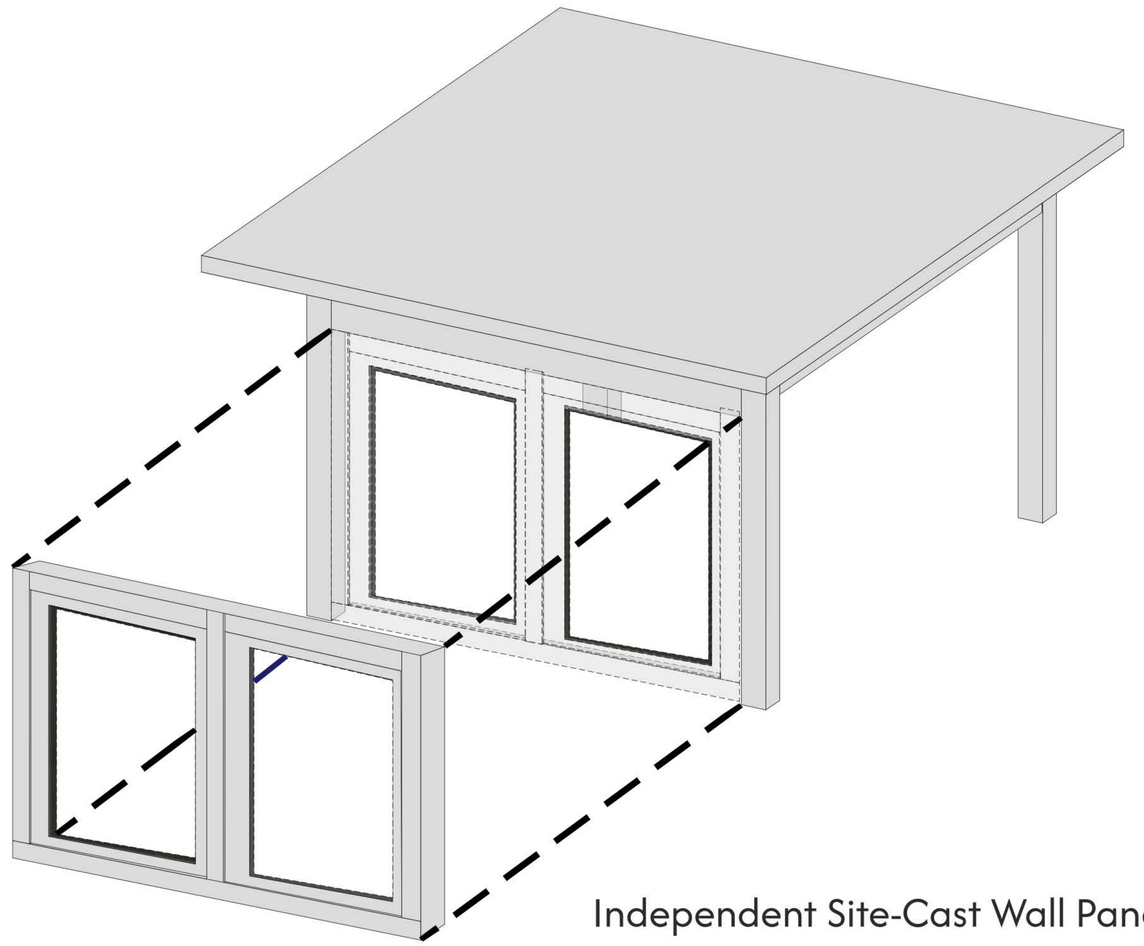


BEFORE FLOOD EVENT

DURING

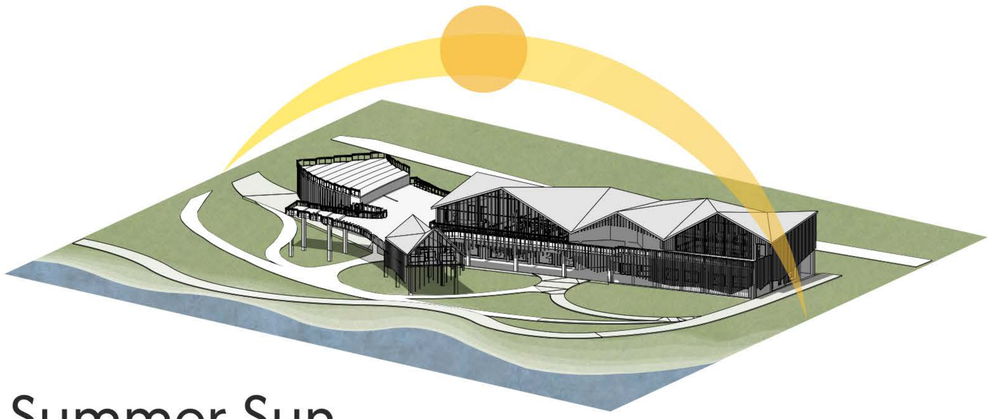
RECONSTRUCTION

Two-Way Site-Cast Concrete System

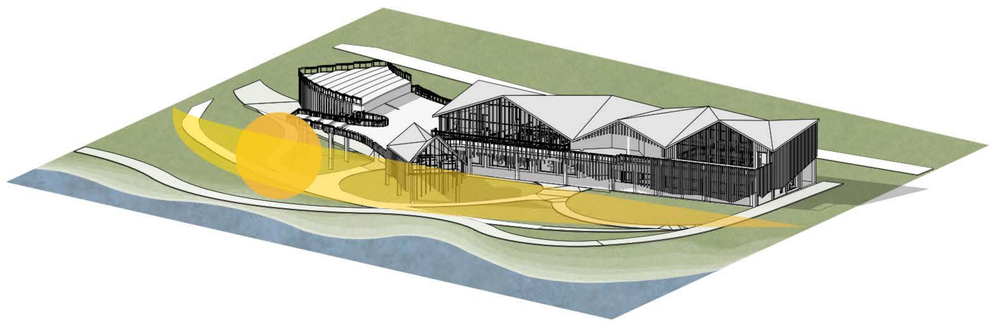


Independent Site-Cast Wall Panel

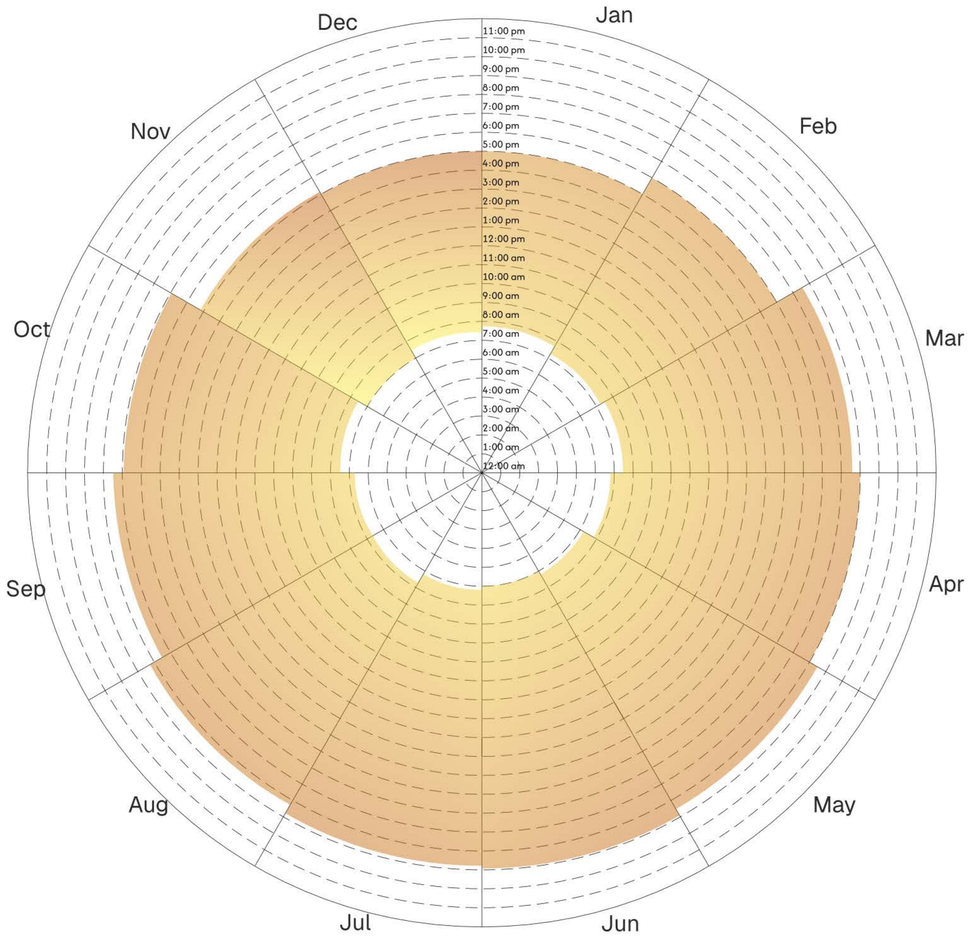
The structural system is designed in a way that is similar to coastal breakaway walls. In the case of a record flood event rising over the 500-year floodplain, the wall panel system will give way. Once the wall panels have fallen. The structure is left protected and allows for the community to have complete control over what is to be reconstructed.



Summer Sun

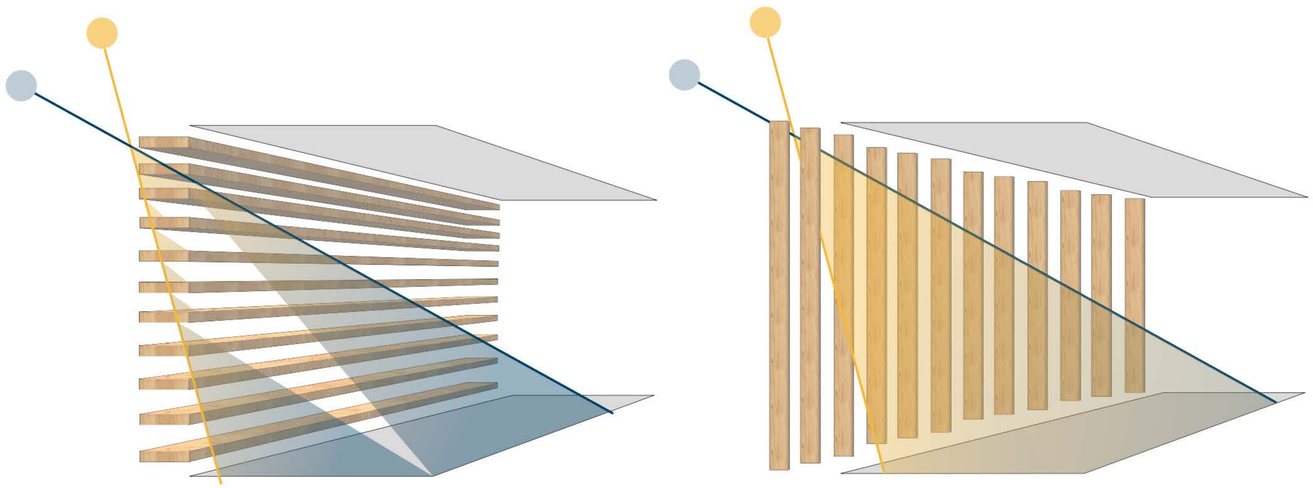


Winter Sun



Hours of Sunlight

Based on average daylight per month



Vertical louvers were chosen to ensure maximum sunlight could filter in through the space and naturally heat during the cold winter months. All while diffusing the light in the intense summer months.

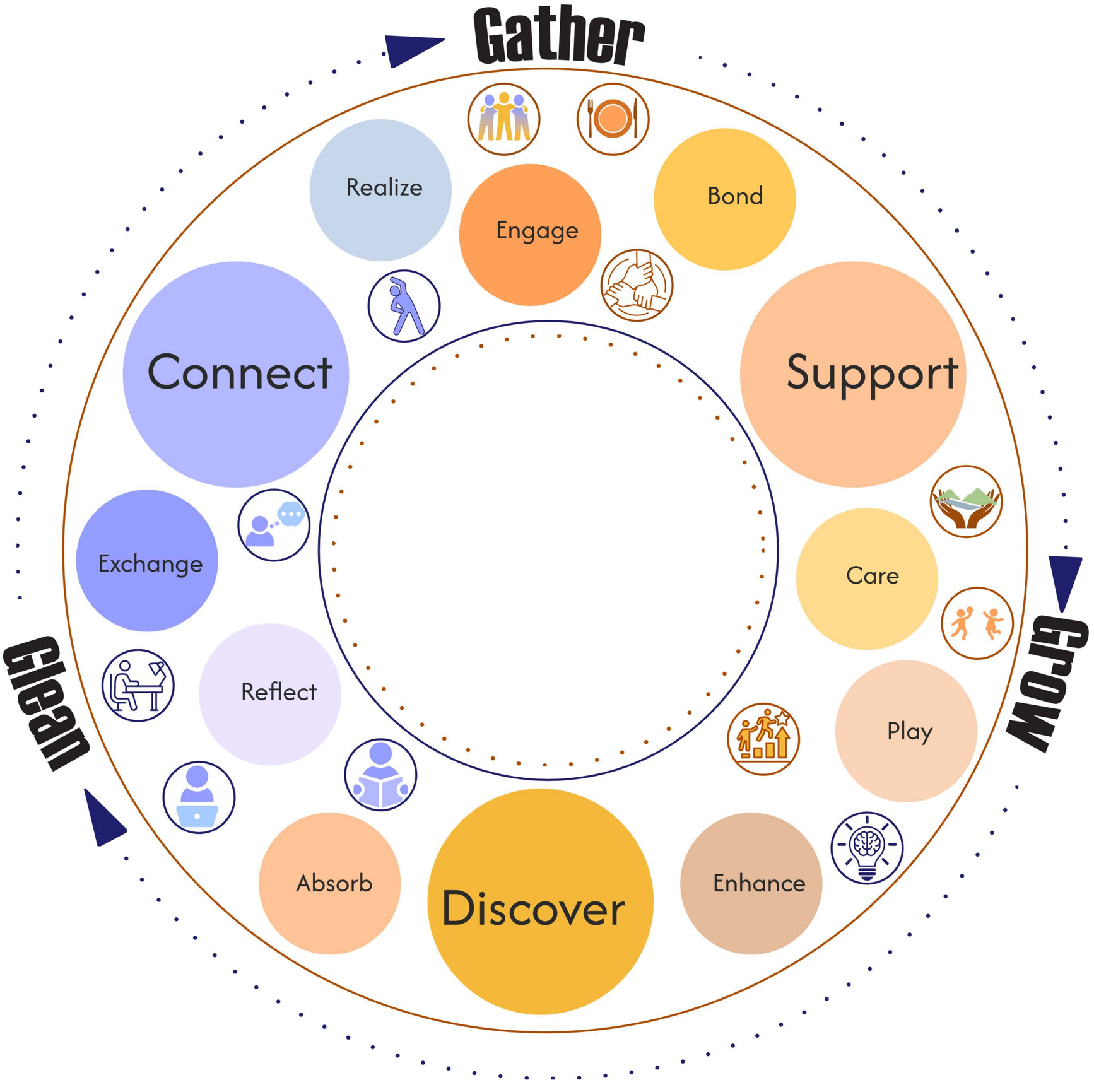
West Virginia is classified as a humid temperate climate, experiencing all four seasons. While summers can get hot and humid, winters can be cold and last longer than summers. This means throughout a majority of the year, heating the spaces would be necessary to ensure comfortability within the spaces. So, the design uses daylight to illuminate and naturally heat the space in the colder months. However, in the warmer summer months, when the sun can get intense, a louver system is applied to the buildings facade.



Mountain View Terrace

The Core

The concept of Holler Grounds is directly tied to the action of gathering. To come together and rebuild this region together. From the ruins of industry and corporate greed rises the people of the Hollers who fueled the country. However, only together. With the proper resources from Holler Grounds, West Virginians have a chance to learn, develop, and connect. Reigniting the region, culture, and the people.



Give Land Back to the People

Throughout much of West Virginia's history, miner families and residents had no claim to the land in which they lived. Most of the land was owned by the same coal companies that were destroying the land they owned. Giving land pack to the people through public greenspace, grounded paths and an elevated riverwalk path.

Dismantle Isolation in Rural Communities

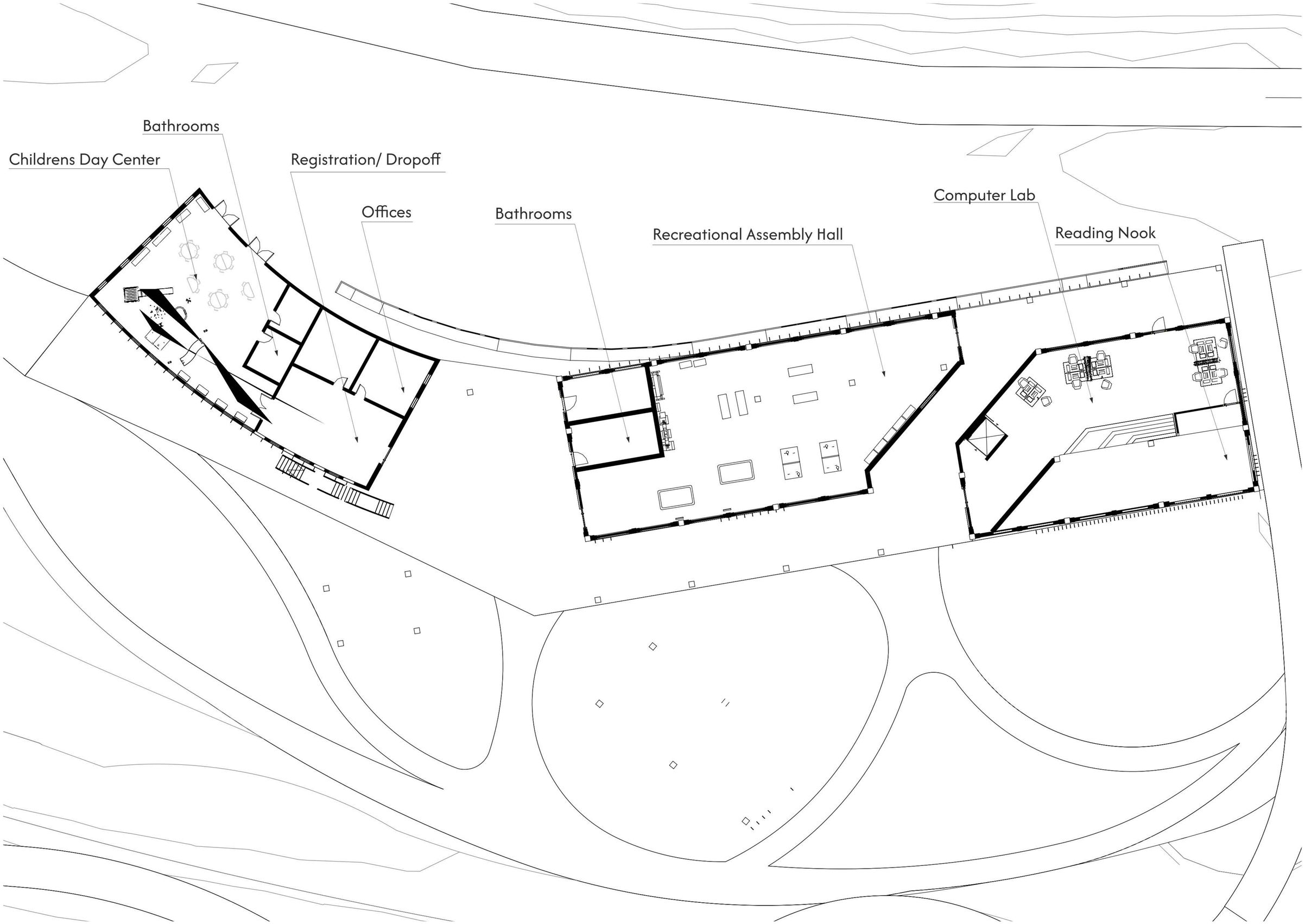
Community has been a strong cultural anchor in the region, and through the decline of industry in the region has left many feeling abandoned while many move away. Which only begins to add to the feeling of isolation in these remote communities.

Invest in the Infrastructure

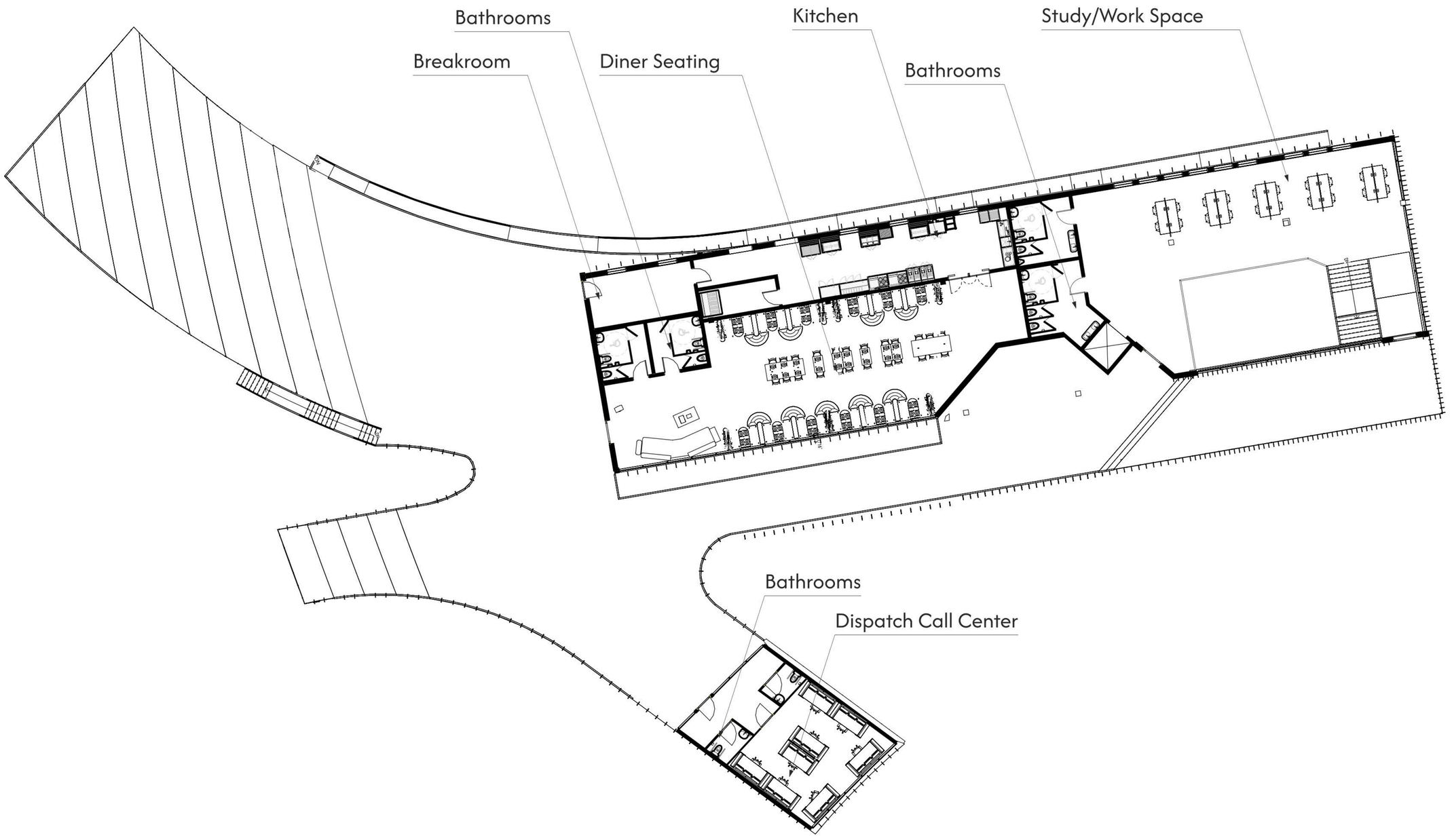
Incorporating third spaces outside of school, home, and work for residents/students to access modern technology is a core intent behind the design. Along with modern resources, Holler Grounds acts as a beacon in the integral network of emergency services by adding a 911 dispatch - call center.

Build Community from a Young Age

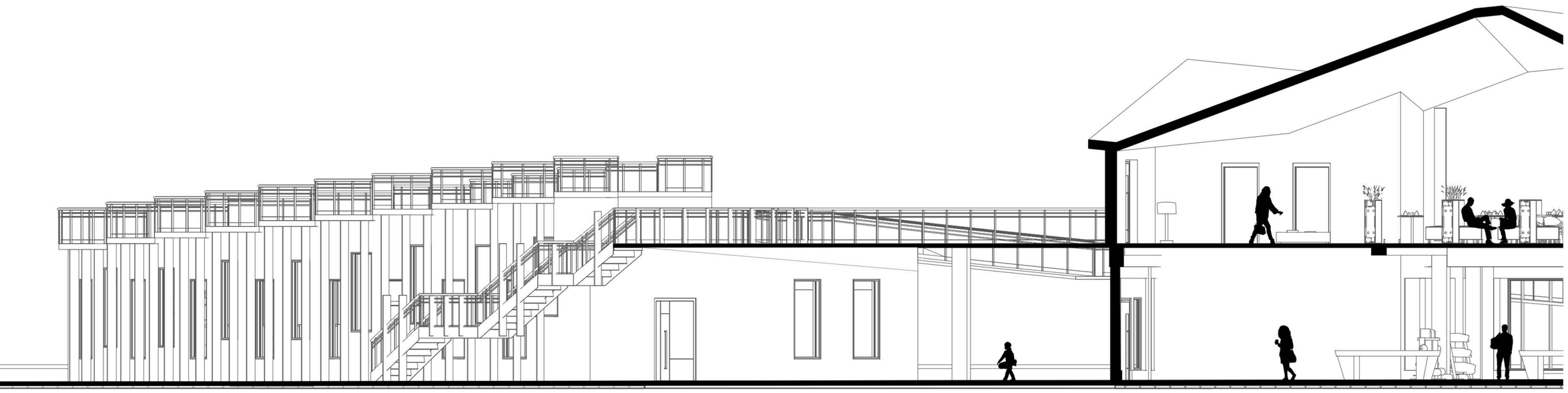
Within the design there is a daycenter for children within the region to grow and play, all while being surrounded by community. Reinvigorating the culture of community in the youth to rebuild the region together.



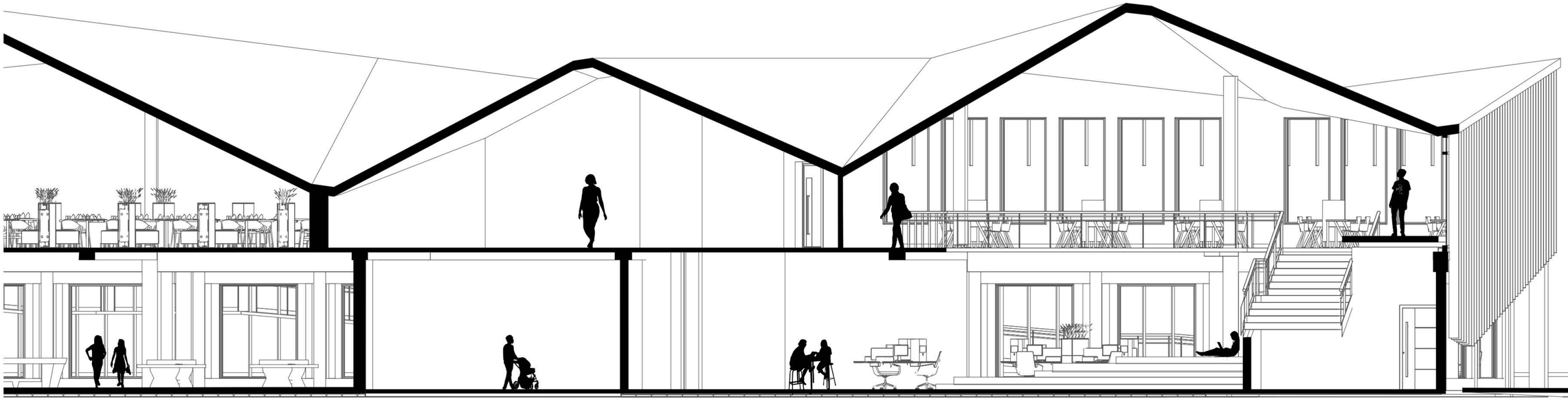
Level 1 Floorplan



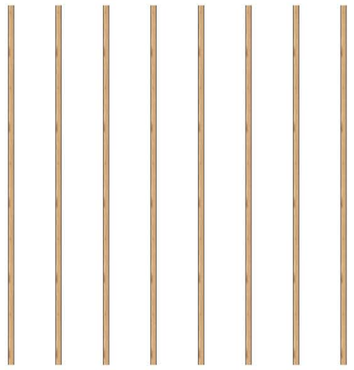
Level 2 Floorplan



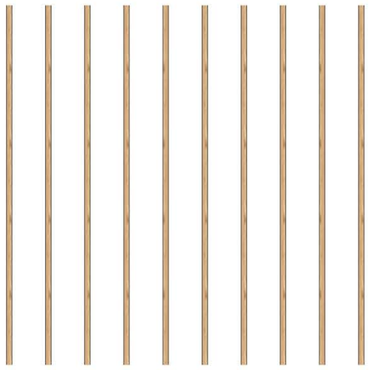
Section Facing North



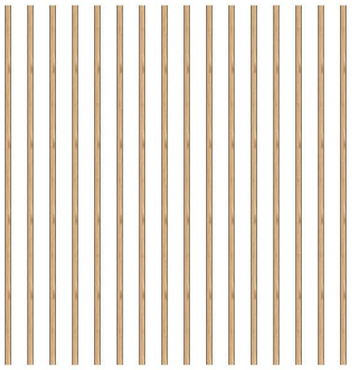

0'
8'
24'
4'
12'
60'



3' 0" Spacing



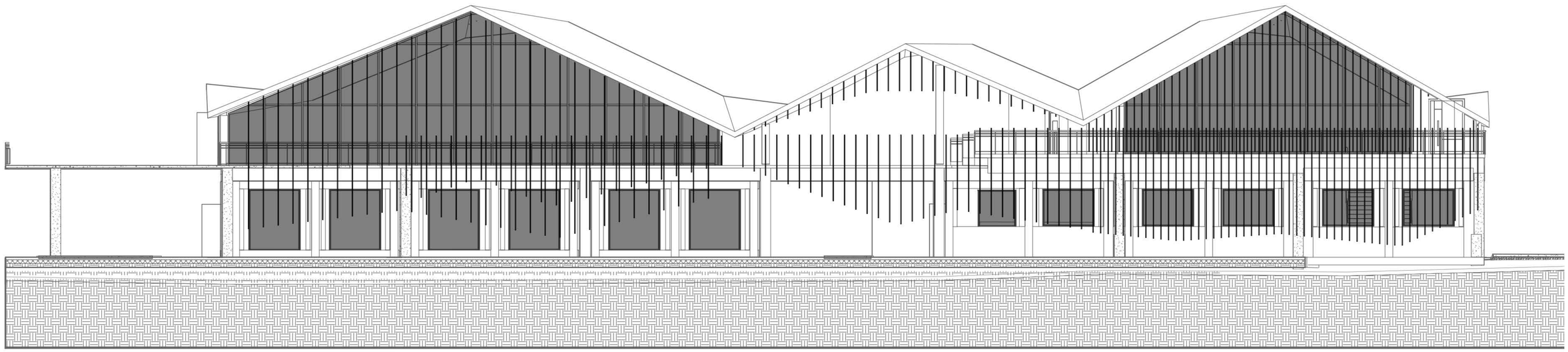
2' 0" Spacing



1' 0" Spacing

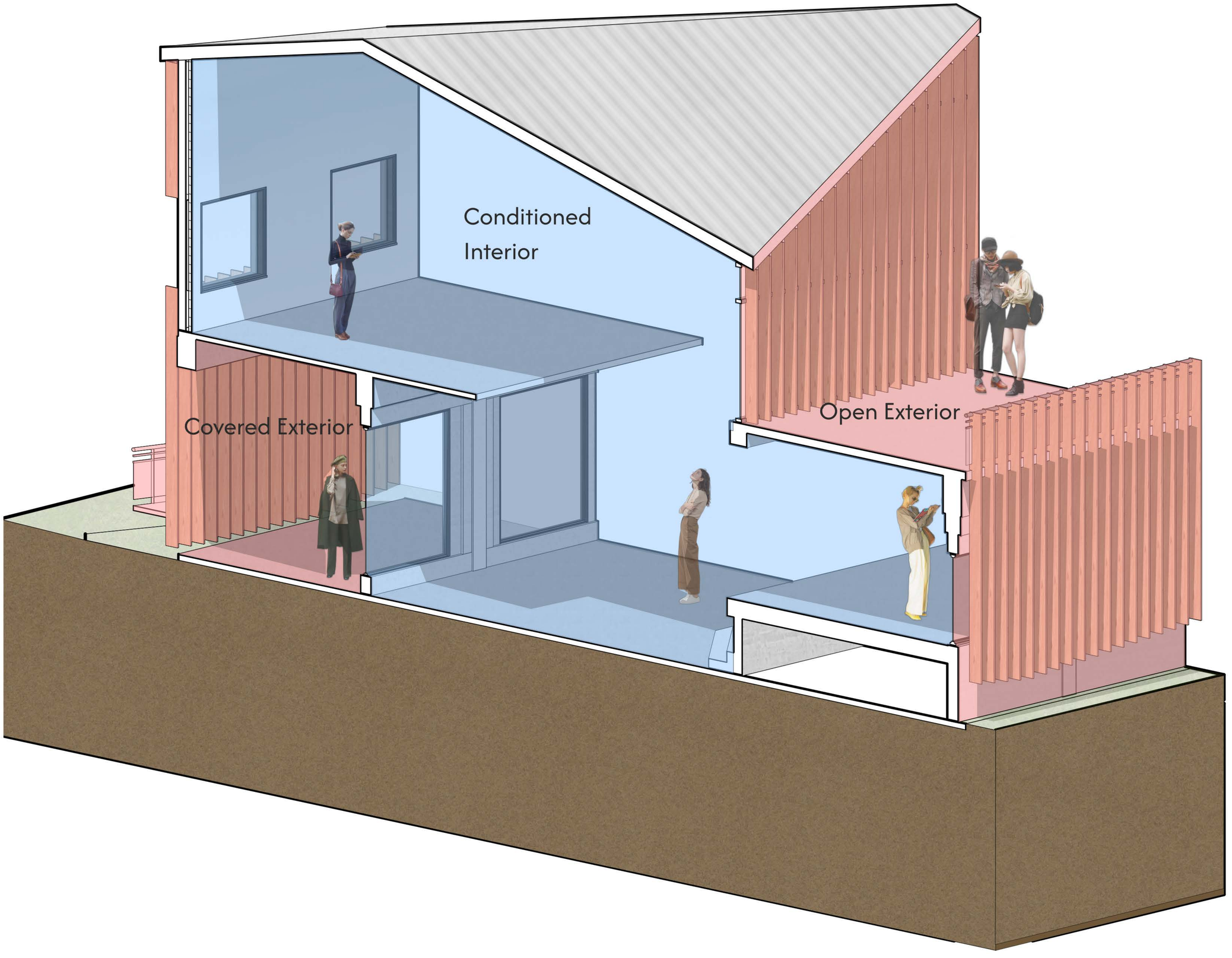
Envelope for Experience

Through the facade, the building comes alive with the regions warm white oak adorning the facades. Pushing to expand the contrast of more individual vs collective experiences. In the independent work hall the louvers are spaced 1' 0" off center, "closing" off the spaces from the busy outside and allowing for a more personal atmosphere that adheres the the user. While spaces like the diner and the recreational/ assembly hall are spaced 3' 0" off center. Opening up the space to interaction from the outside and within.



Eastern Facade

1850 SQFT OF GLAZING / 4080 SQFT OF FACADE
45% OF FACADE IS GLAZING

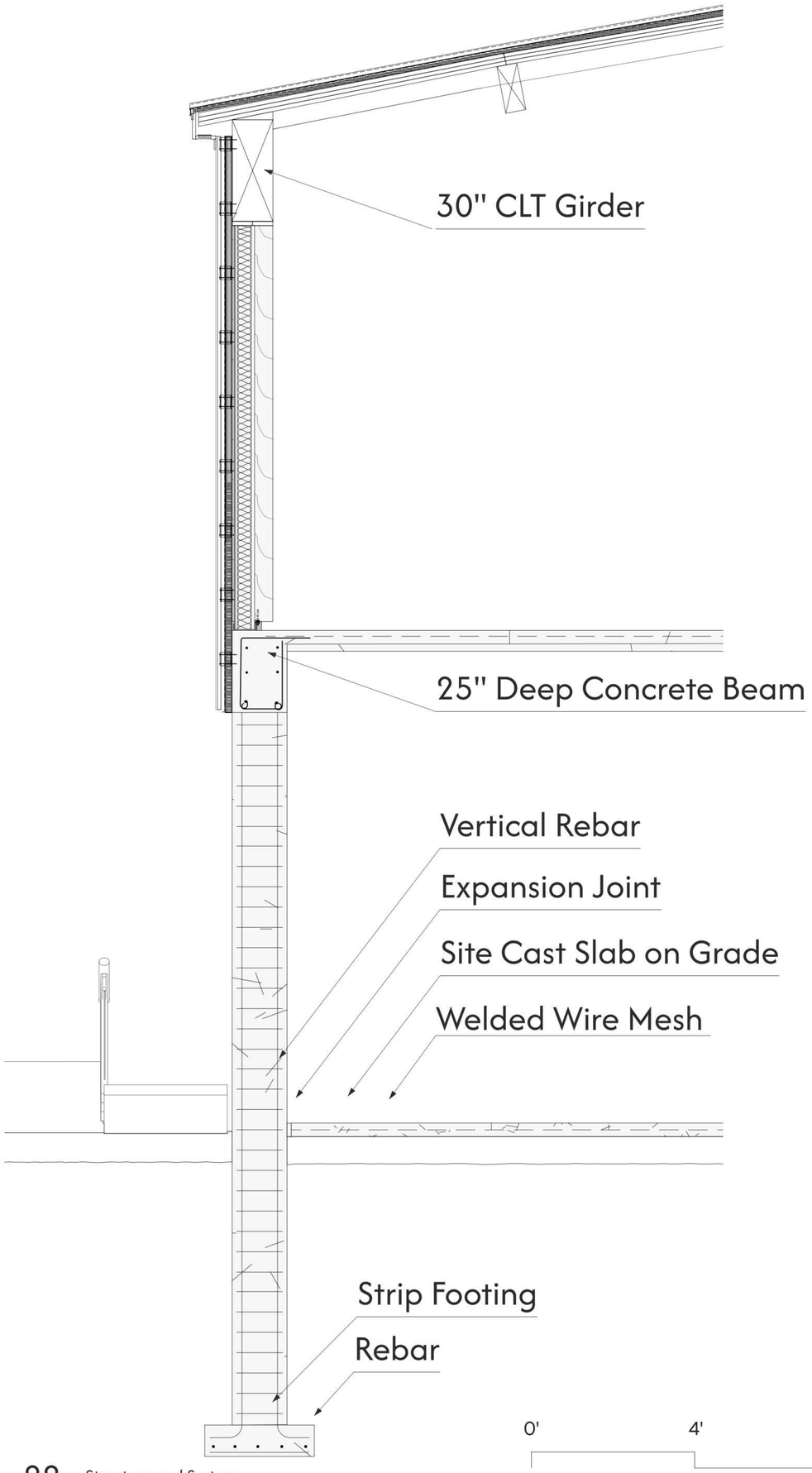

Conditioned
Interior
Covered Exterior
Open Exterior

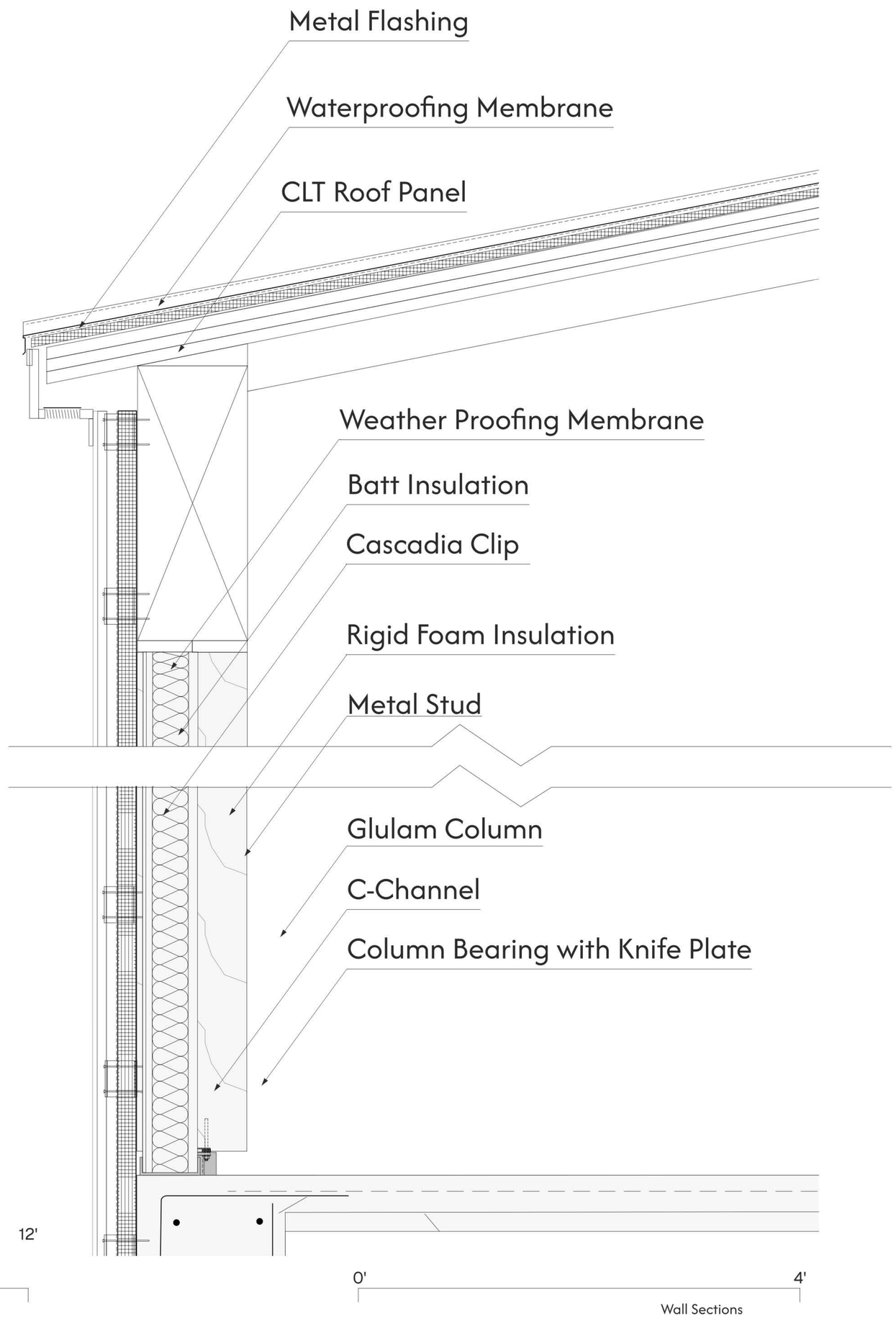


Computer Lab and Reading Nook
Resource Center

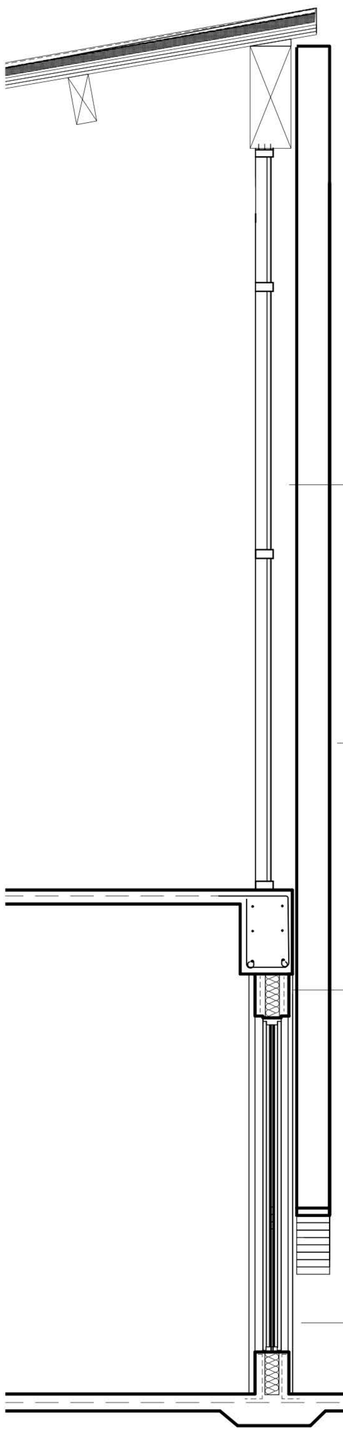


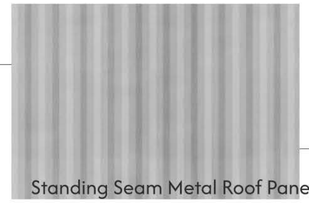
Gilbert Diner





Wall Sections





Standing Seam Metal Roof Panel



Glu-Lam Columns



High Performance Low-E Glass



White Oak Vertical louvers

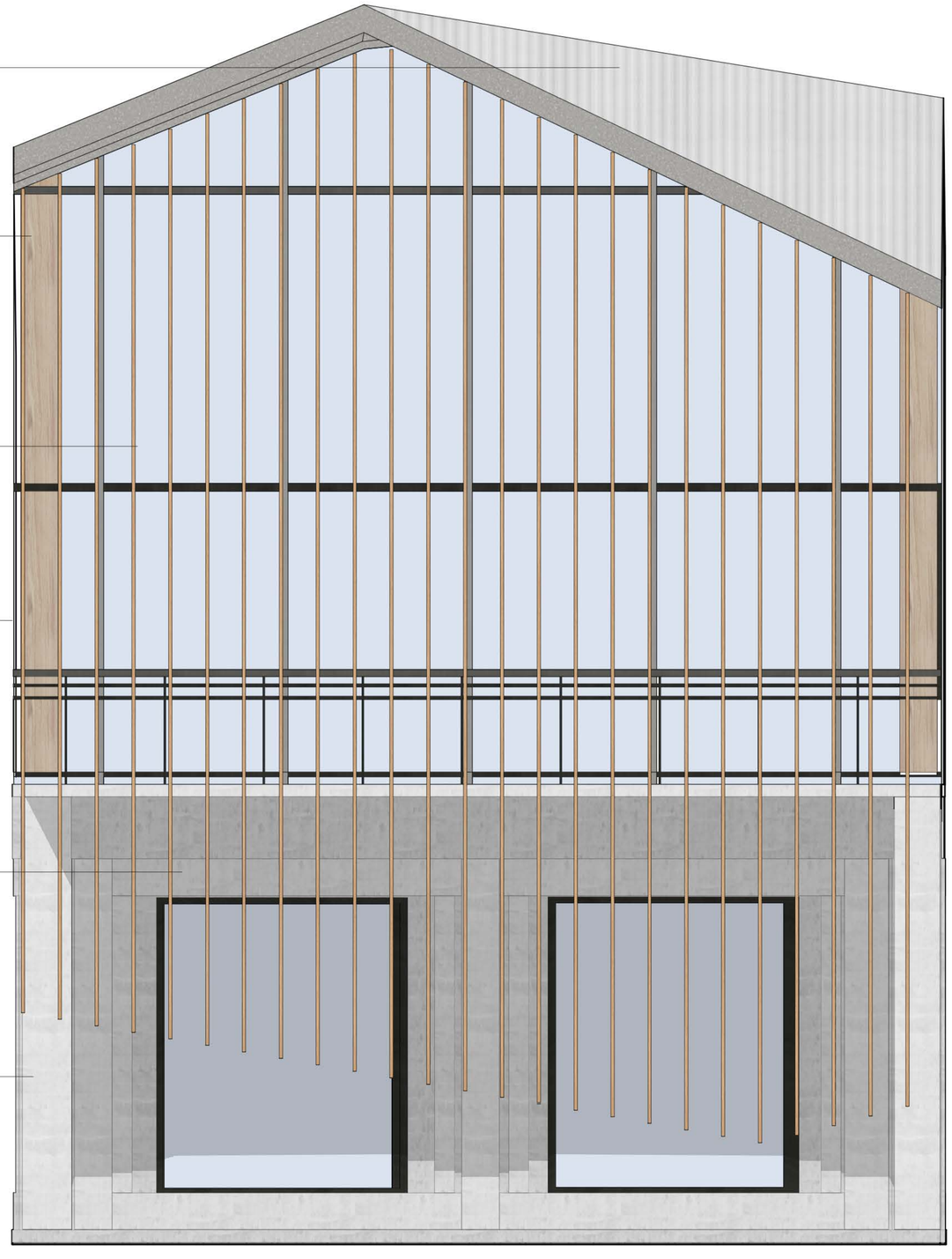


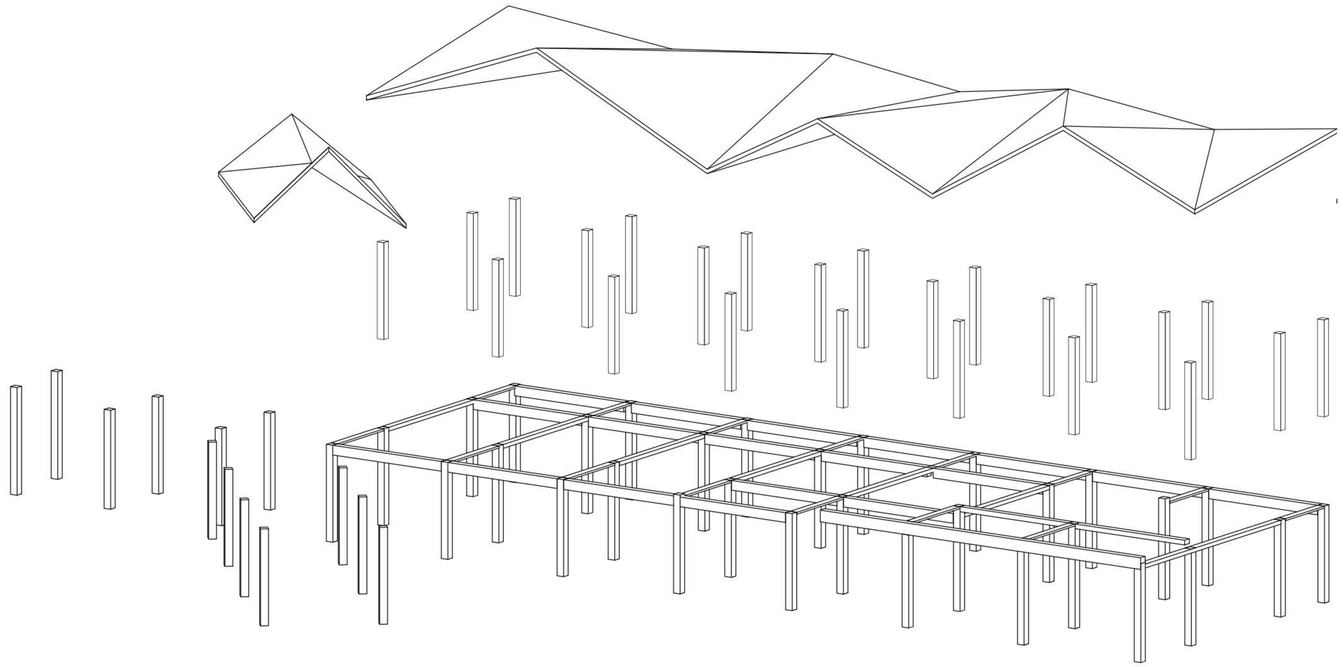
Aluminum Mullions

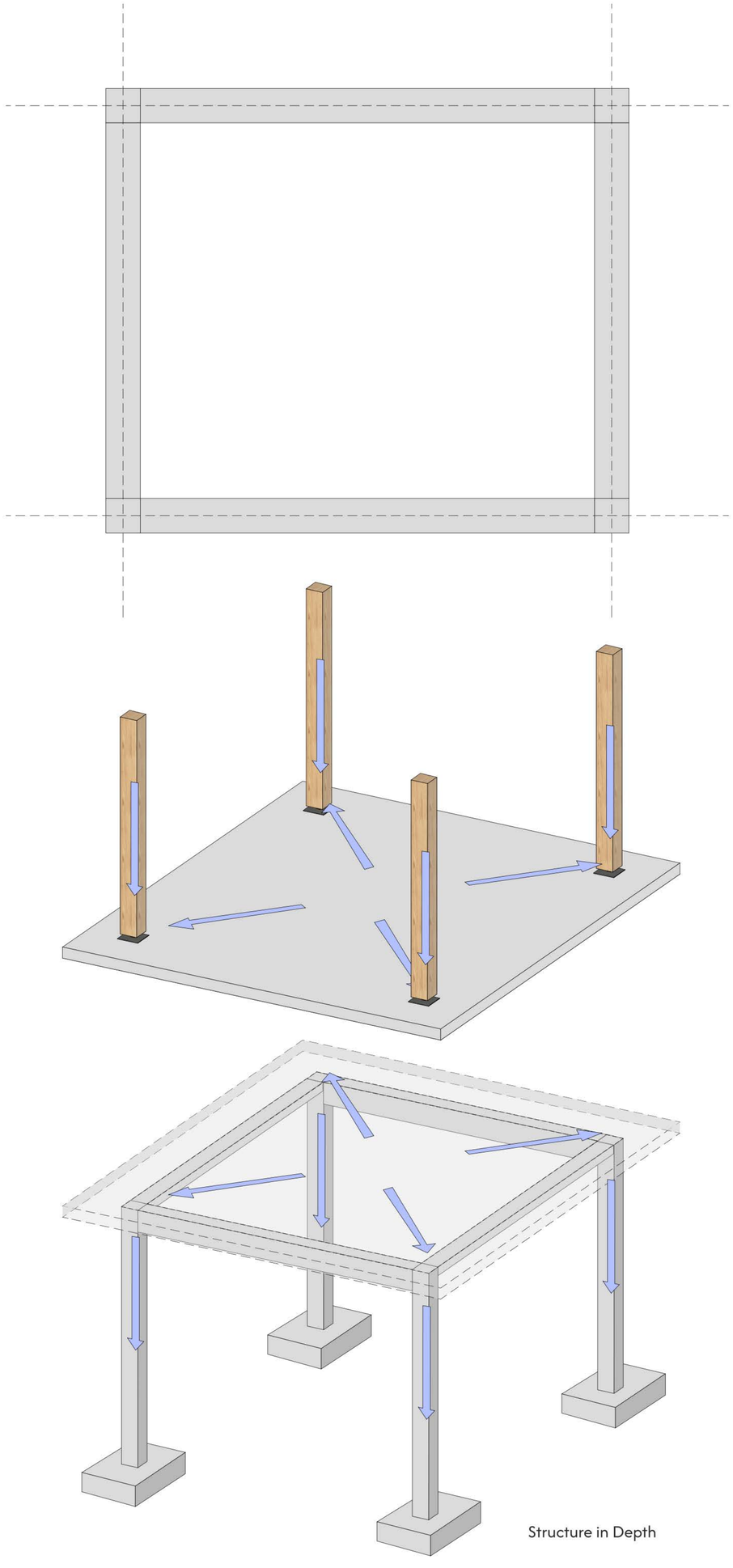


Site Cast Concrete

0' 4' 8' 12'



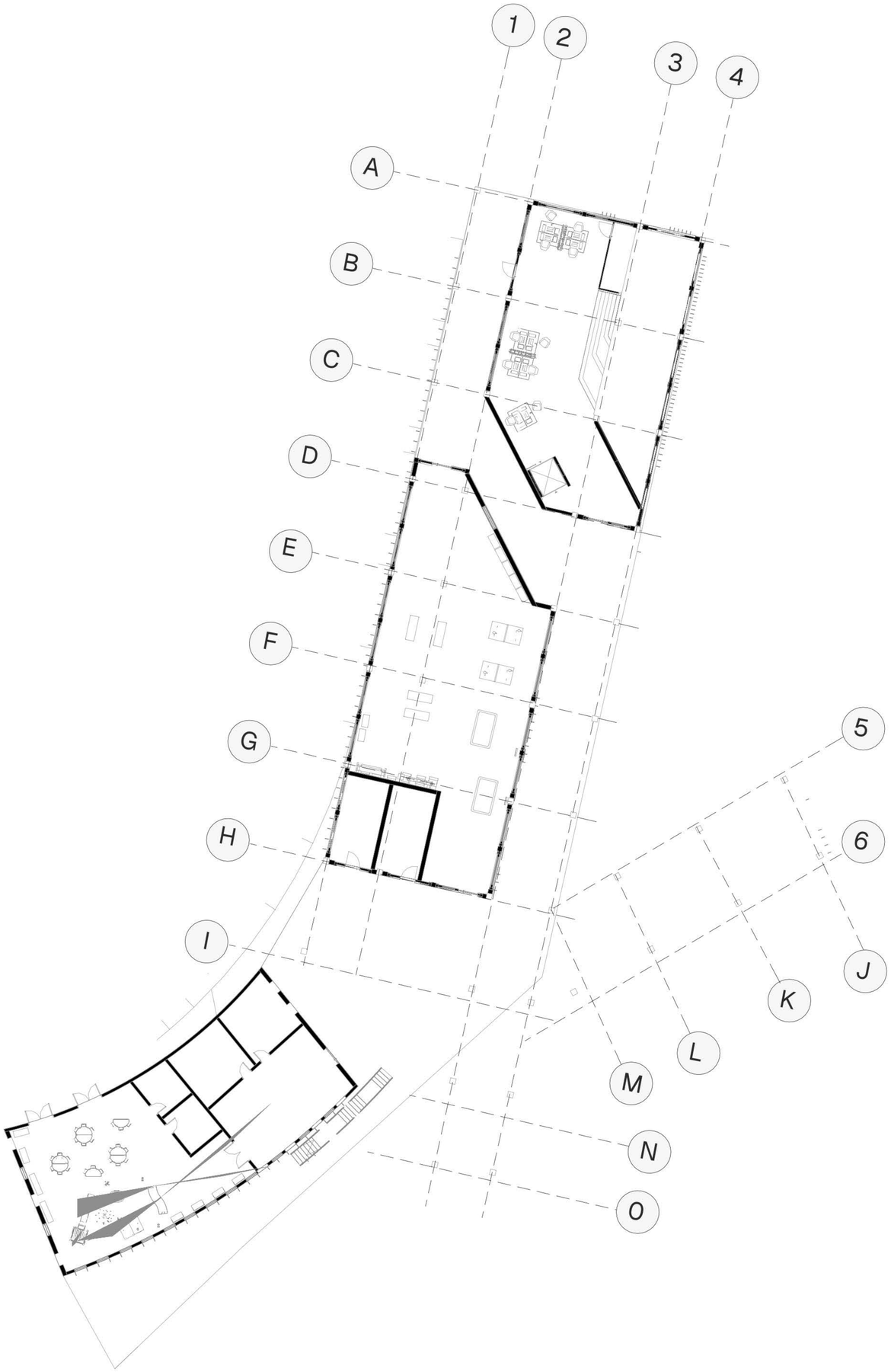


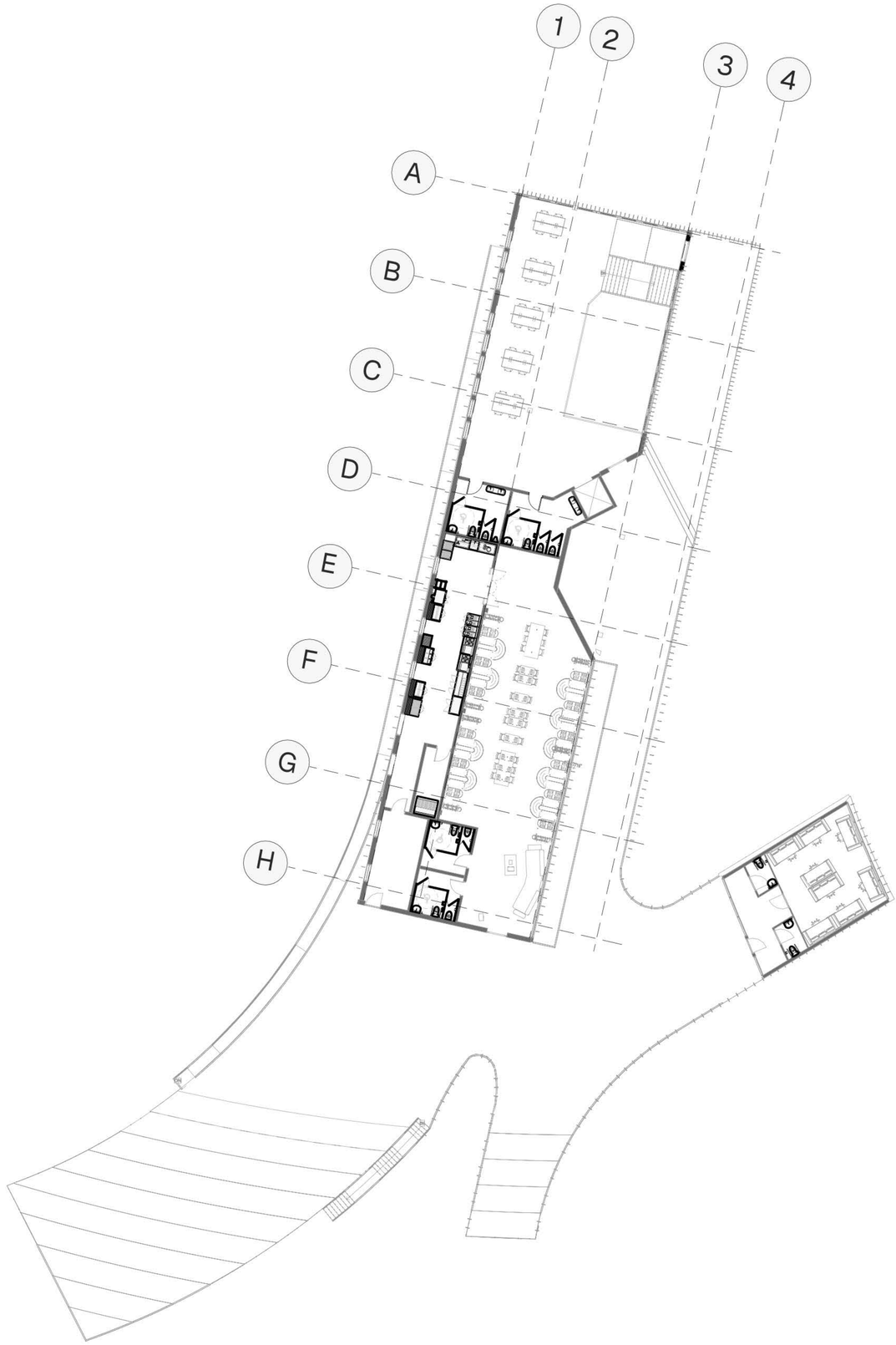


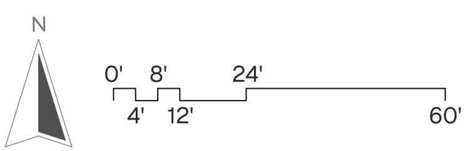
Stability in Structure

The structural system for Holler Grounds is an adaptive and versatile organization of parts. The first floor and second floor act almost juxtapose to each other if they didn't work together. The first floor structural columns and slabs are site cast with the beams, girders, and slab which hold up the second floor. Acting as a piers for the second floor in rigidity and endurance, which carries the load of the roof through CLT panels. Connecting to the CLT beams and girders which drop the load to the Glulam columns. The columns then use a columns bearing with a knife plate to connect the load to the concrete slab of the second floor. All the load transfers through the beams, columns, and slabs to finally transfer the load to the ground through footers.

Structure in Depth







Structural Plan

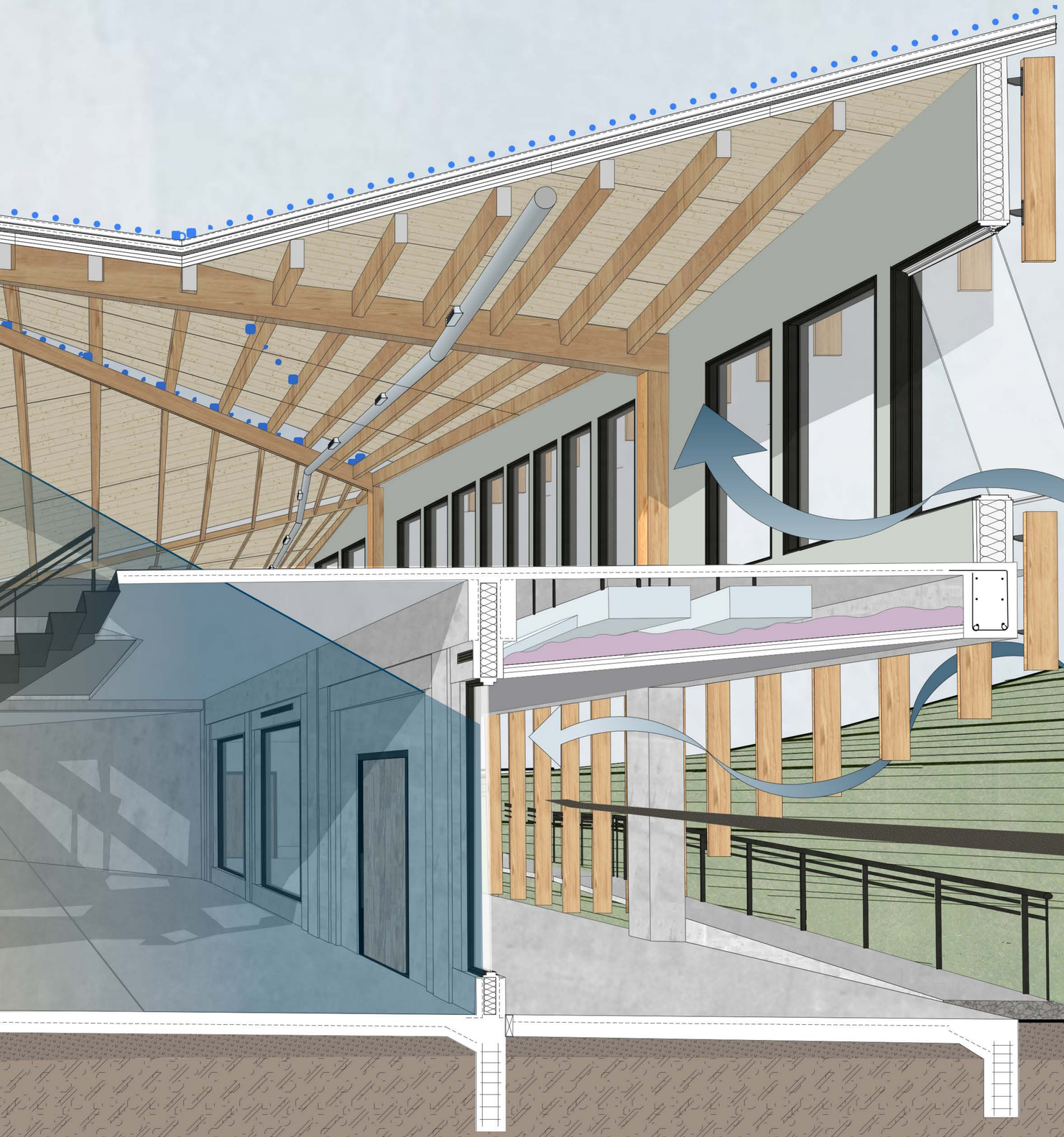
VERTICAL LOUVERS

Vertical louvers diffuse harsh southern light while expressing the materiality of wood. Spacing varies across the façade, tightening at private spaces and opening at more communal areas.

BIOSWALES

Bioswales cut through the topography of the site to increase resilience against floodwaters and increase biodiversity.

Living Section



RAINWATER DRAINAGE

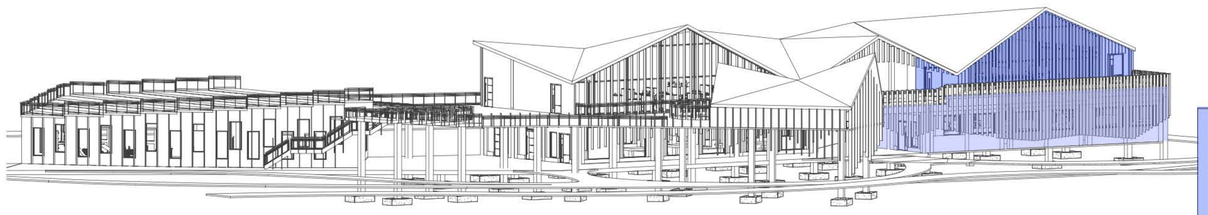
The roof's geometry directs water to low points, where it is channeled along the path of least resistance into a cistern for collection.

OPERABLE WINDOWS

Operable windows on the southern façade capture prevailing breezes and support cross-ventilation, opening the interior environment to the Guyandotte river valley.

HVAC SYSTEM

The HVAC system serves both floors, distributing conditioned air to optimize occupant comfort. Ground floor ducts are concealed within a thermally protected ceiling above the exterior corridor or routed through a crawl space, delivering air via slot diffusers. on the second floor, ductwork is exposed and integrated with the clt panel and beam roof structure, reinforcing the open character of the space.



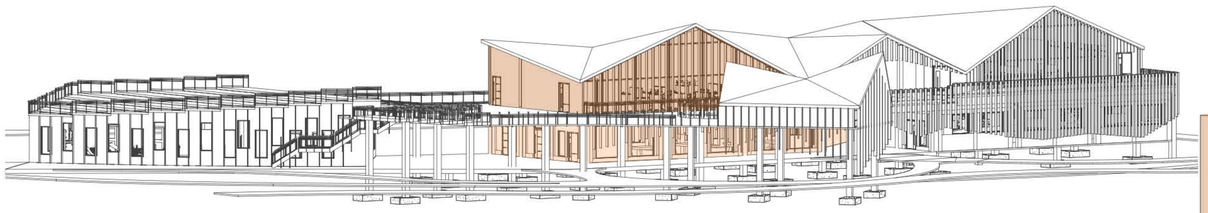
PROJECT CODE REVIEW - INDEPENDENT WORK HALL

	OCCUPANCY	FLOOR AREA GROSS/ NET		FLOOR AREA PER OCCUPANT PER TABLE 1004.5 IBC 2024	OCCUPANT LOAD	
1st	B - WORKTABLES	1802.49	SQFT	15	120.166	120
2nd	A3 - READING ROOM	816.47	SQFT	50	16.3294	16
3rd	B - COMPUTER LAB	2419.16	SQFT	15	161.2773	161
				TOTAL	297	

	FLOOR AREA (AS DESIGNED)		ALLOWABLE AREA PER TABLE 506.2 IBC 2024	BUILDING HEIGHT + NO. STORIES (AS DESIGNED)	BUILDING HEIGHT + NO. STORIES
1st	1802.49	SQFT	UL		
2nd	816.47		UL		
3rd	2419.16		36,000	33' , 3 STORY	65'' , 5 STORY PER TABLE 504.3 + 503.4 IBC 2024
4th					
5th					
TOTAL AREA 5038.12					

	FIRE RESISTANCE RATING PER TABLE 601 IBC 2024	CONSTRUCTION TYPE SECTION 602 IBC 2024
STRUCTURAL FRAME INCLUDES COLUMNS, GIRDERS, TRUSSES	2-HR	TYPE: IV SPRINKLERS: (Y) OR N EGRESS WIDTH OCCUPANT LOAD X WIDTH FACTOR SECTION 1005 IBC 2024 297 x 0.2 = 59.4 / 12 = 4.95 ≈ 5' TRAVEL DISTANCE SECTION 1017 IBC 2024 < 153'
EXTERIOR BEARING WALLS	2-HR	
INTERIOR BEARING WALLS	2-HR	
FLOOR CONSTRUCTION	2-HR	
ROOF CONSTRUCTION	1-HR	
PARTY WALLS/ FIRE WALLS	3-HR	
EXIT STAIR, EXIT PASSAGEWAYS, AND SHAFT ENCLOSURES	2-HR	

	FIRE RESISTANCE RATING PER TABLE 601 IBC 2024	CONSTRUCTION TYPE SECTION 602 IBC 2024
STRUCTURAL FRAME INCLUDES COLUMNS, GIRDERS, TRUSSES	2-HR	TYPE: I SPRINKLERS: (Y) OR N EGRESS WIDTH OCCUPANT LOAD X WIDTH FACTOR SECTION 1005 IBC 2024 297 x 0.2 = 59.4 / 12 = 4.95 ≈ 5' TRAVEL DISTANCE SECTION 1017 IBC 2024 < 153'
EXTERIOR BEARING WALLS	2-HR	
INTERIOR BEARING WALLS	2-HR	
FLOOR CONSTRUCTION	2-HR	
ROOF CONSTRUCTION	1-HR	
PARTY WALLS/ FIRE WALLS	3-HR	
EXIT STAIR, EXIT PASSAGEWAYS, AND SHAFT ENCLOSURES	2-HR	



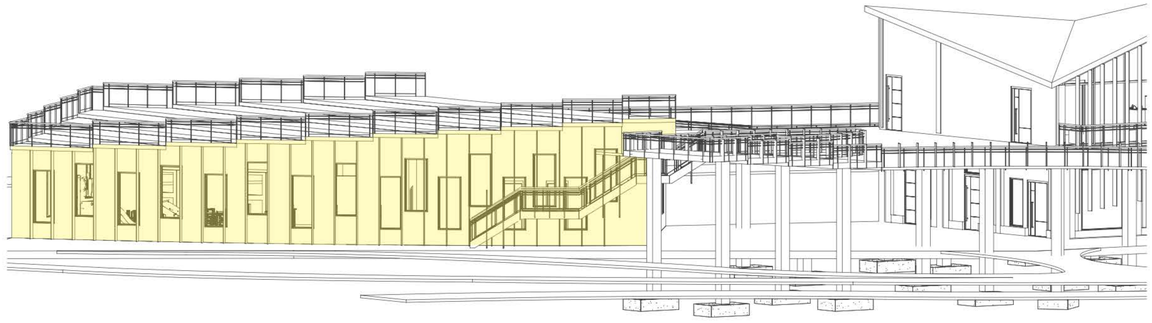
PROJECT CODE REVIEW - MULTIPURPOSE GATHERING

	OCCUPANCY	FLOOR AREA GROSS/ NET	FLOOR AREA PER OCCUPANT PER TABLE 1004.5 IBC 2024	OCCUPANT LOAD
1st	A3 - EXCERCISE/ACTIVITY ROOM	2814.54 SQFT	50	56.2908 56
2nd	A2 - UNCONCENTRATED SEATING	1877.19 SQFT	15	125.146 125
2nd	A2 - COMMERCIAL KITCHEN	800 SQFT	200	4 4
2nd	A2 - STANDING	214.55 SQFT	5	42.91 42
			TOTAL	227

	FLOOR AREA (AS DESIGNED)	ALLOWABLE AREA PER TABLE 506.2 IBC 2024	BUILDING HEIGHT + NO. STORIES (AS DESIGNED)	BUILDING HEIGHT + NO. STORIES
1st	1802.49 SQFT	UL	33' , 3 STORY	65'' , 5 STORY PER TABLE 504.3 + 503.4 IBC 2024
2nd	3045.08	36,000		
3rd				
4th				
5th				
TOTAL AREA 5038.12				

	FIRE RESISTANCE RATING PER TABLE 1004.5 IBC 2024	CONSTRUCTION TYPE SECTION 601 IBC 2024
STRUCTURAL FRAME INCLUDES COLUMNS, GIRDERS, TRUSSES	2-HR	TYPE: IV
EXTERIOR BEARING WALLS	2-HR	SPRINKLERS: (Y) OR N
INTERIOR BEARING WALLS	2-HR	EGRESS WIDTH OCCUPANT LOAD X WIDTH FACTOR SECTION 1005 IBC 2024 227 x 0.2 = 45.4/ 12 = 3.78 ≈ 4'
FLOOR CONSTRUCTION	2-HR	
ROOF CONSTRUCTION	1-HR	TRAVEL DISTANCE SECTION 1017 IBC 2024 < 168'
PARTY WALLS/ FIRE WALLS	3-HR	
EXIT STAIR, EXIT PASSAGEWAYS, AND SHAFT ENCLOSURES	2-HR	

	FIRE RESISTANCE RATING PER TABLE 601 IBC 2024	CONSTRUCTION TYPE SECTION 602 IBC 2024
STRUCTURAL FRAME INCLUDES COLUMNS, GIRDERS, TRUSSES	2-HR	TYPE: I
EXTERIOR BEARING WALLS	2-HR	SPRINKLERS: (Y) OR N
INTERIOR BEARING WALLS	2-HR	EGRESS WIDTH OCCUPANT LOAD X WIDTH FACTOR SECTION 1005 IBC 2024 227 x 0.2 = 45.4/ 12 = 3.78 ≈ 4'
FLOOR CONSTRUCTION	2-HR	
ROOF CONSTRUCTION	1-HR	TRAVEL DISTANCE SECTION 1017 IBC 2024 < 168'
PARTY WALLS/ FIRE WALLS	3-HR	
EXIT STAIR, EXIT PASSAGEWAYS, AND SHAFT ENCLOSURES	1-HR	

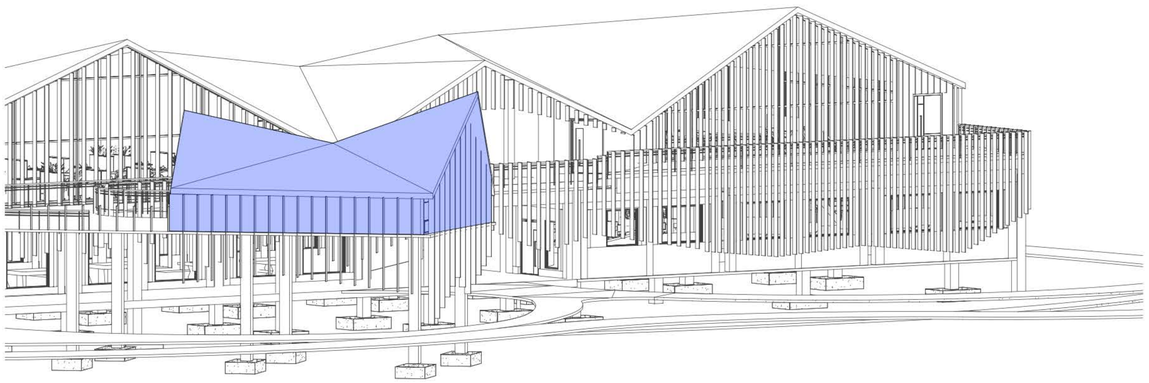


PROJECT CODE REVIEW - KIDS DAYCARE

	OCCUPANCY	FLOOR AREA GROSS/ NET	FLOOR AREA PER OCCUPANT PER TABLE 1004.5 IBC 2024	OCCUPANT LOAD
1st	E -DAYCARE	2592.81 SQFT	35	74.0802 74
			TOTAL	74

	FLOOR AREA (AS DESIGNED)	ALLOWABLE AREA PER TABLE 506.2 IBC 2024	BUILDING HEIGHT + NO. STORIES (AS DESIGNED)	BUILDING HEIGHT + NO. STORIES
1st	2592.81 SQFT	106,000	16' , 1 STORY	85' , 4 STORIES PER TABLE 504.3 + 504.4 IBC 2024
2nd				
3rd				
4th				
TOTAL AREA	5038.12			

	FIRE RESISTANCE RATING PER TABLE 601 IBC 2024	CONSTRUCTION TYPE SECTION 602 IBC 2024
STRUCTURAL FRAME INCLUDES COLUMNS, GIRDERS, TRUSSES	1-HR	TYPE: II B
EXTERIOR BEARING WALLS	1-HR	SPRINKLERS:ⓎOR N
INTERIOR BEARING WALLS	1-HR	EGRESS WIDTH OCCUPANT LOAD X WIDTH FACTOR SECTION 1005 IBC 2024 74 x 0.2 = 14.8 / 12 = 1.23 ≈ 2'—3'
FLOOR CONSTRUCTION	1-HR	
ROOF CONSTRUCTION	1-HR	TRAVEL DISTANCE SECTION 1017 IBC 2024 < 52'
PARTY WALLS/ FIRE WALLS	3-HR	
EXIT STAIR, EXIT PASSAGEWAYS, AND SHAFT ENCLOSURES	1-HR	



	FIRE RESISTANCE RATING PER TABLE 601 IBC 2024	CONSTRUCTION TYPE SECTION 602 IBC 2024
STRUCTURAL FRAME INCLUDES COLUMNS, GIRDERS, TRUSSES	2-HR	TYPE: IV SPRINKLERS: (Y) OR N EGRESS WIDTH OCCUPANT LOAD X WIDTH FACTOR SECTION 1005 IBC 2024 39 x 0.2 = 7.8/ 12 = 0.65 ≈ 1'—3' TRAVEL DISTANCE SECTION 1017 IBC 2024 < 45'
EXTERIOR BEARING WALLS	2-HR	
INTERIOR BEARING WALLS	2-HR	
FLOOR CONSTRUCTION	2-HR	
ROOF CONSTRUCTION	1-HR	
PARTY WALLS/ FIRE WALLS	3-HR	

PROJECT CODE REVIEW - 911 DISPATCH CALL CENTER

	OCCUPANCY	FLOOR AREA GROSS/ NET	FLOOR AREA PER OCCUPANT PER TABLE 1004.5 IBC 2024	OCCUPANT LOAD
2nd	B - TELEPHONE EXCHANGE	432.52 SQFT	15	28.834 28
2nd	A2 - UNCONCENTRATED SEATING	175.57 SQFT	15	11.705 11
			TOTAL	39

	FLOOR AREA (AS DESIGNED)	ALLOWABLE AREA PER TABLE 506.2 IBC 2024	BUILDING HEIGHT + NO. STORIES (AS DESIGNED)	BUILDING HEIGHT + NO. STORIES
1st	1802.49 SQFT	UL	33' , 3 STORY	65" , 5 STORY PER TABLE 504.3 + 503.4 IBC 2024
2nd	816.47	UL		
3rd		36,000		
4th				
5th				
TOTAL AREA 5038.12				



