

Station Street

emmalyn bugaliski & courtney mccracken
ARCH 4505 Assignment 2C

1886¹



1905¹



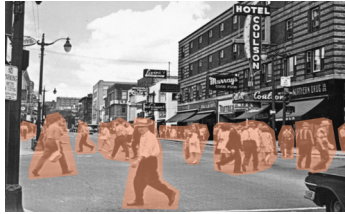
1950¹



1973¹



Durham and Larch²



c. 1960s



Present

Borgia Street²

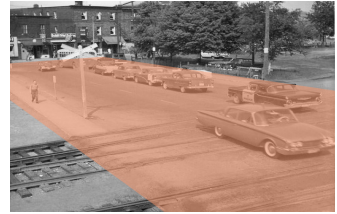


1962



Present

Riverside Drive²



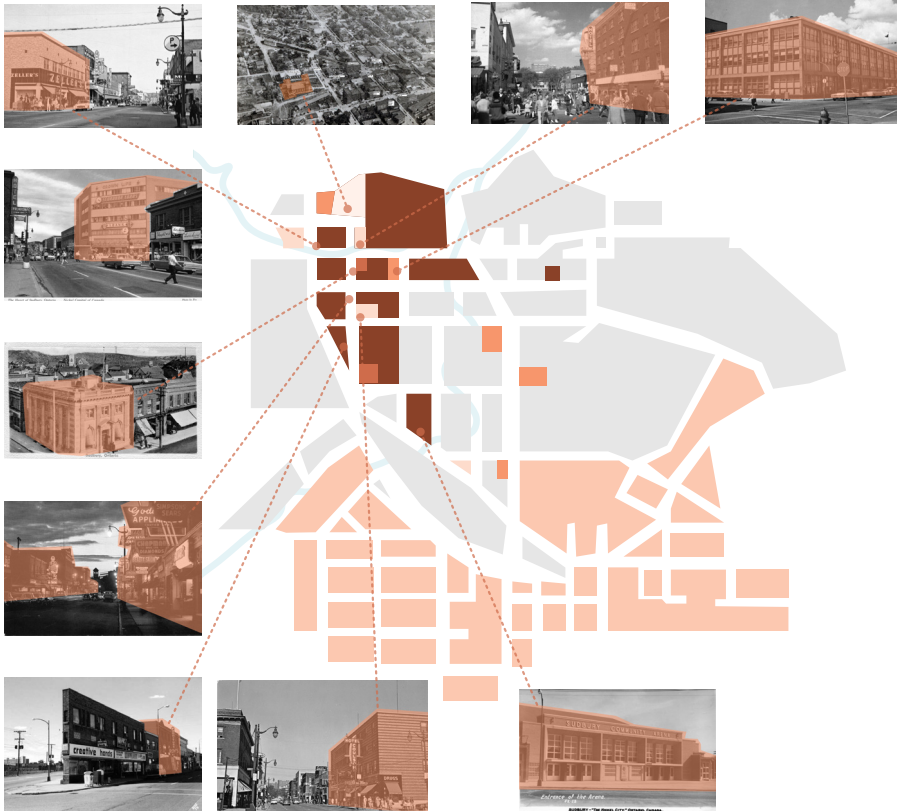
1955



Present

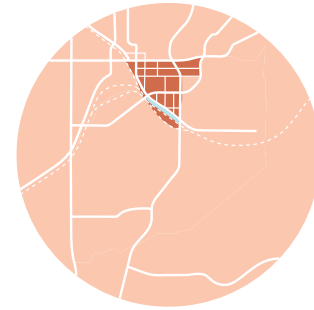
1. Diagram by authors, map from: Historic Maps 1913, received from the Greater Sudbury Public Library, accessed October 3, 2019.
 2. "Bruno," Flickr, Yahoo!, accessed October 8, 2019, <https://www.flickr.com/photos/64062788@N05/>.

Historic Programming³



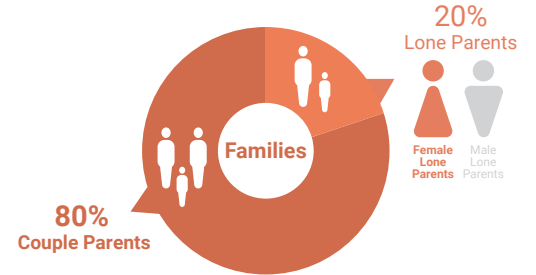
4

Demographic Data Collection Zone: Immediate Site

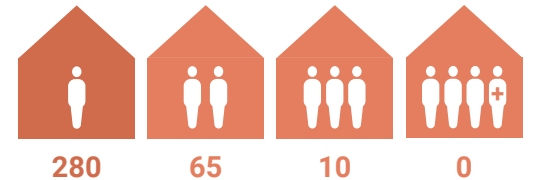


Population
558

50.5%
of the population
living in low income



Number of
House Hold
Occupants



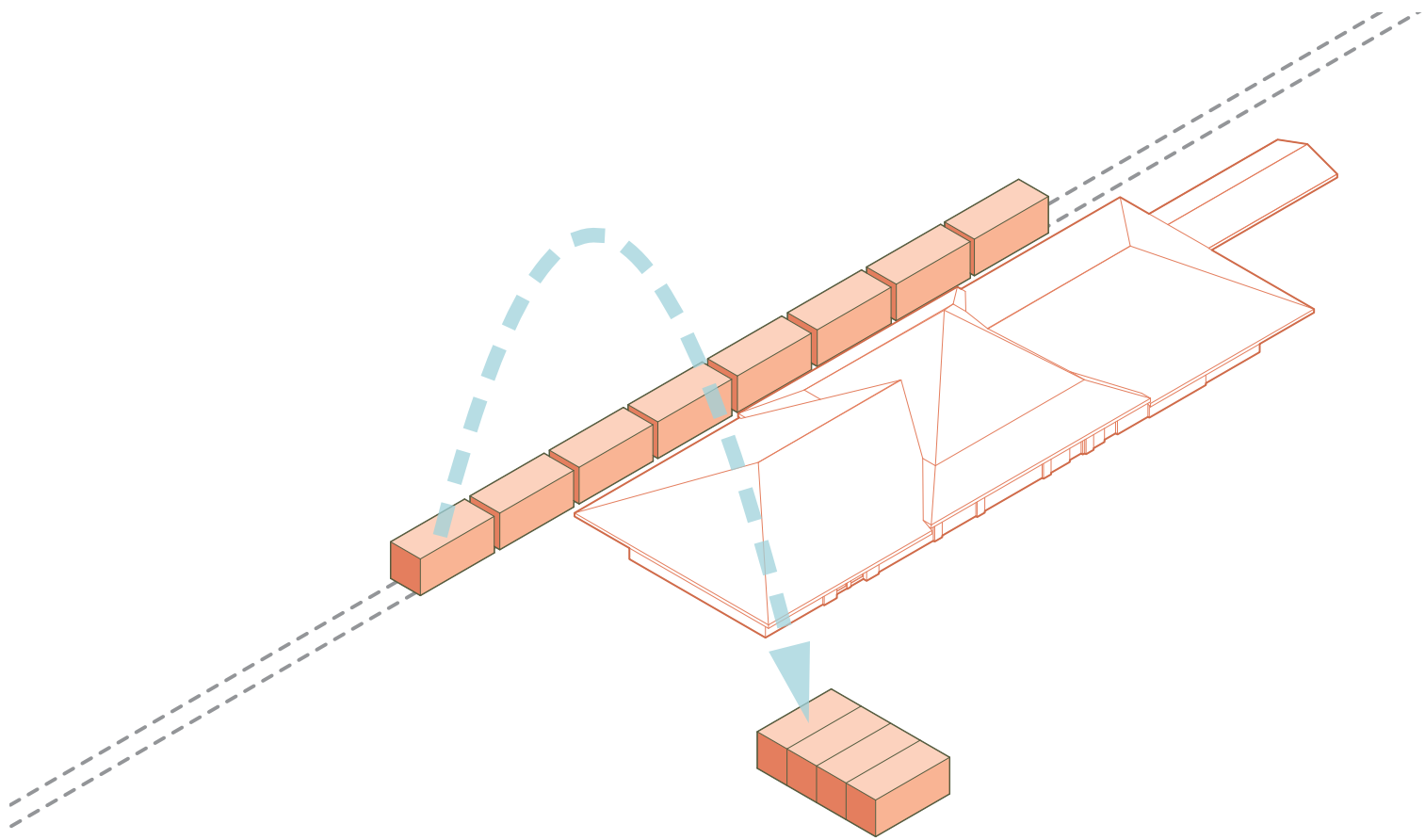
3. Diagram by authors, map from: Historic Maps 1973, received from the Greater Sudbury Public Library, accessed October 3, 2019, and images from: "Bruno", Flickr, Yahoo!, accessed October 8, 2019, <https://www.flickr.com/photos/64062788@N05/>.

4. Diagram by authors, data from: "Story Map Series", sudbury.maps.arcgis.com, accessed October 3, 2019 <https://sudbury.maps.arcgis.com/apps/MapSeries/index.html?appid=2624e8e80fccc435d993f446d66920f51>.

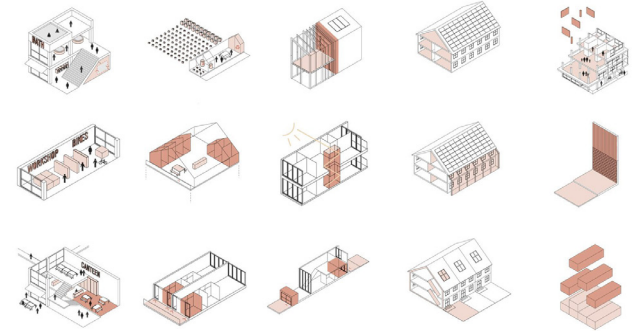
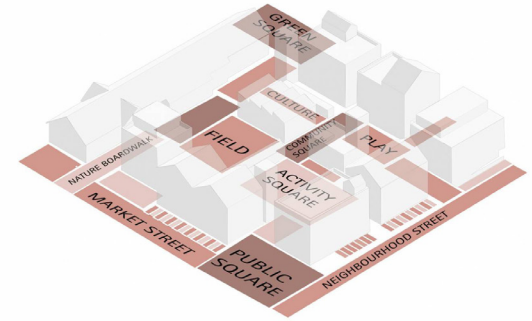
Through observation of the current urban context in comparison with research of Sudbury's historic downtown, we have gathered the notable decline in community interaction and activity within Downtown Sudbury. Our project works to reawaken the street culture in downtown through reuniting the site with Elgin Street through makers and live work spaces.

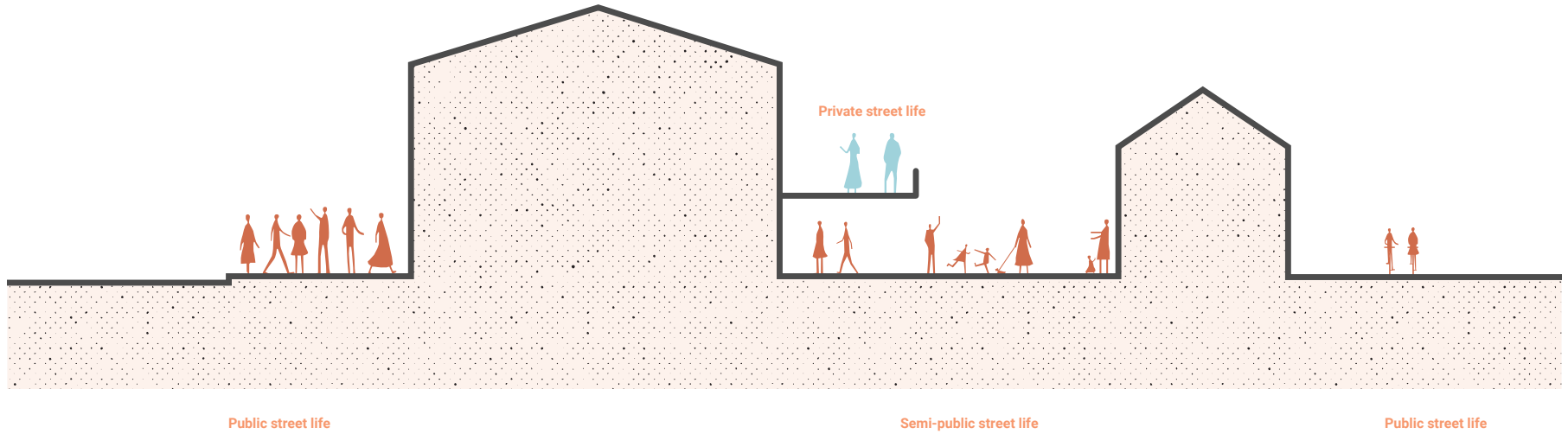


Concept Vignette



Shippable Units

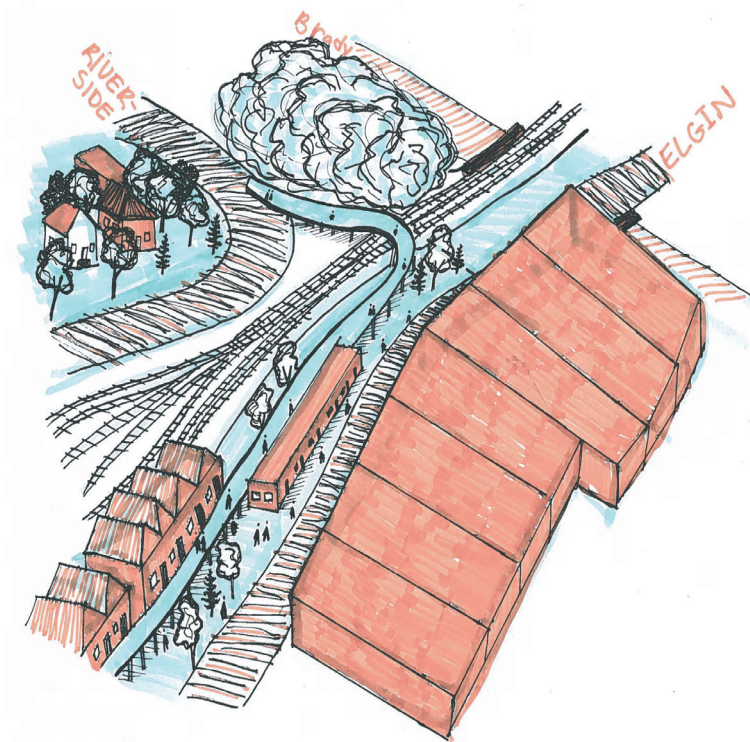


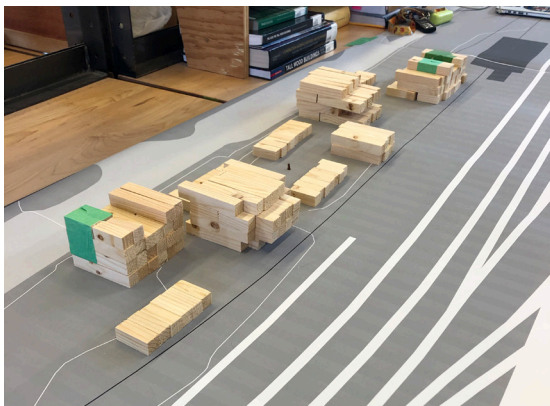
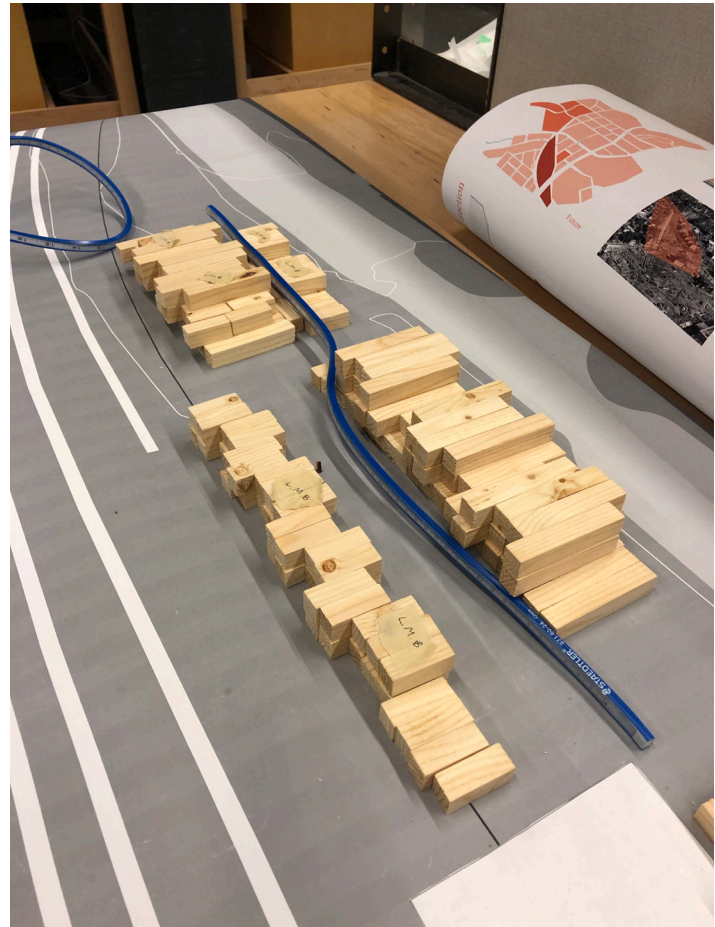


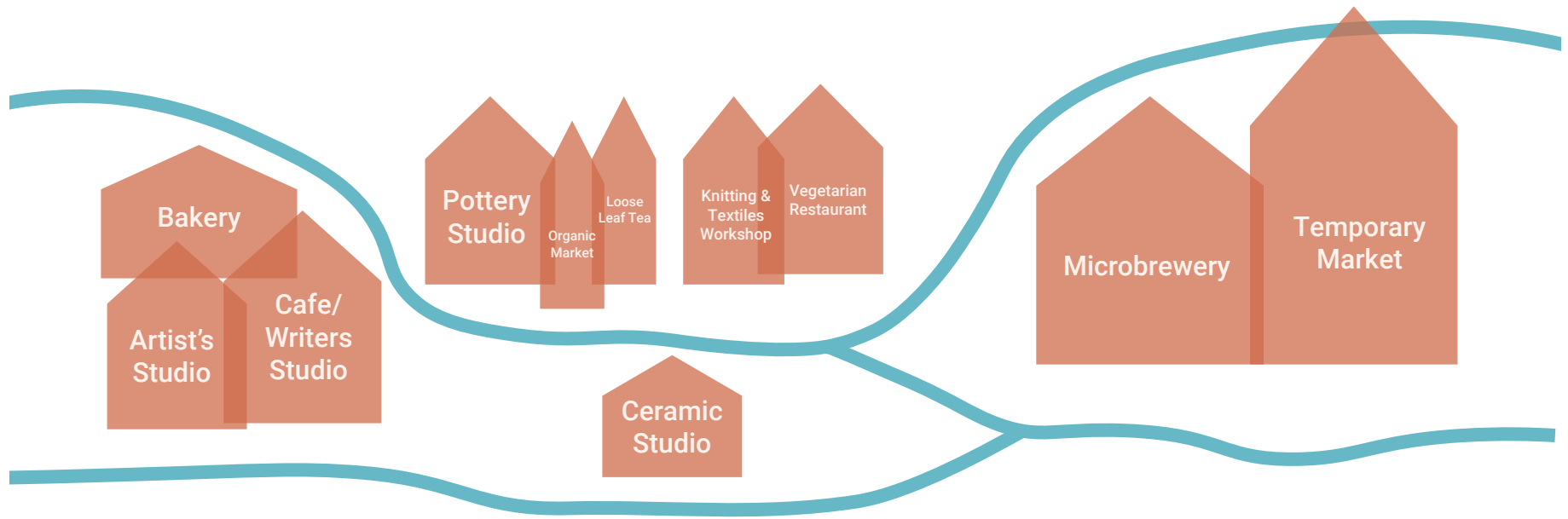
Sunken Courtyard



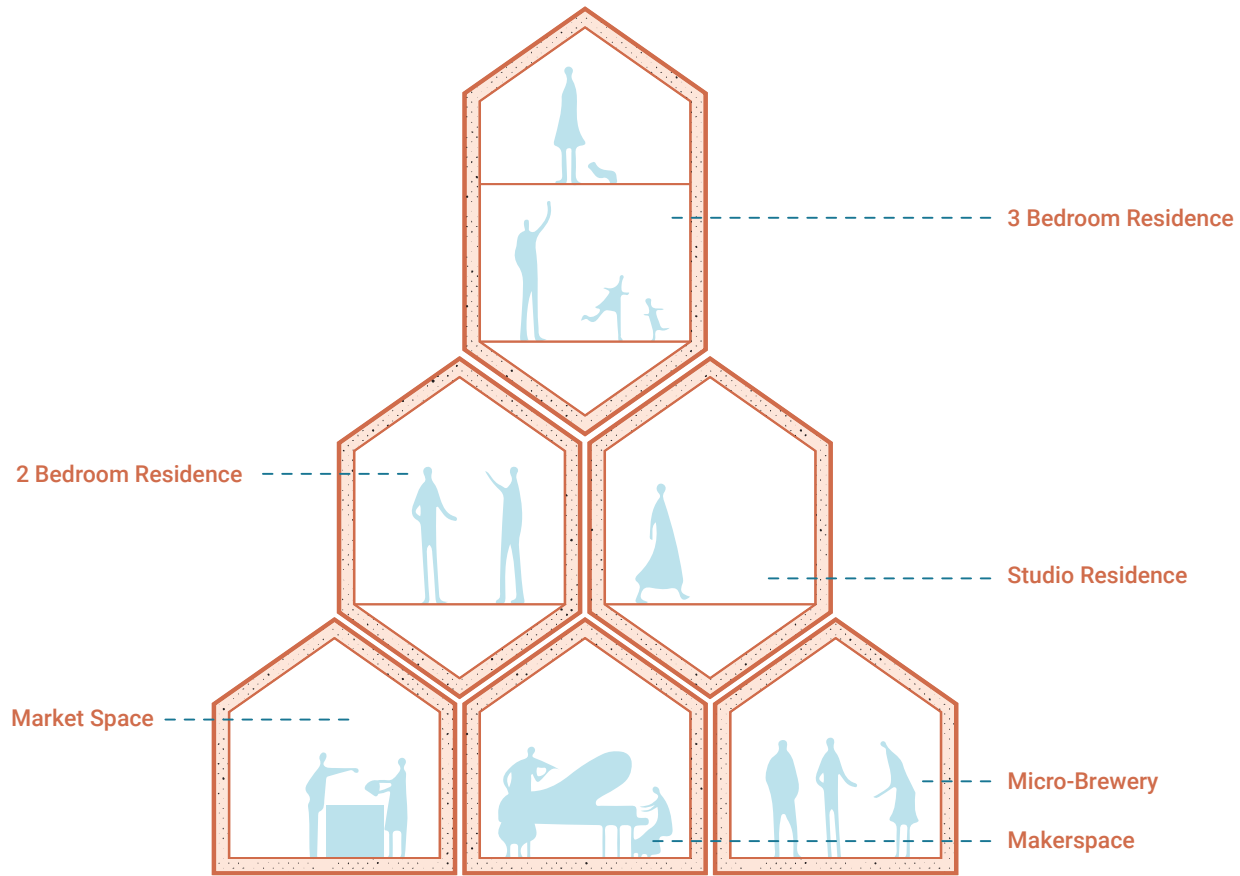
Intersecting Street Levels



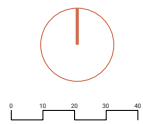
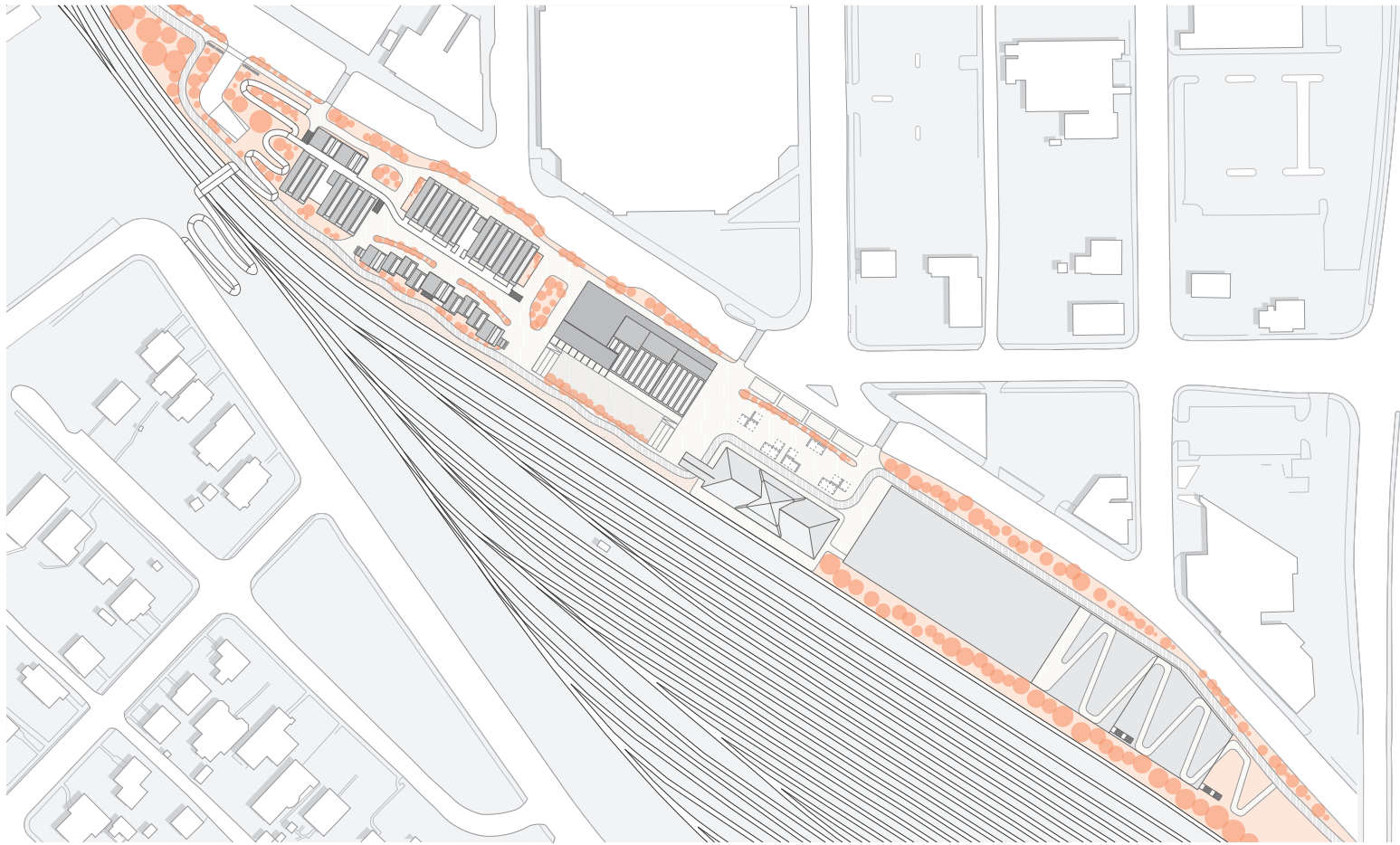




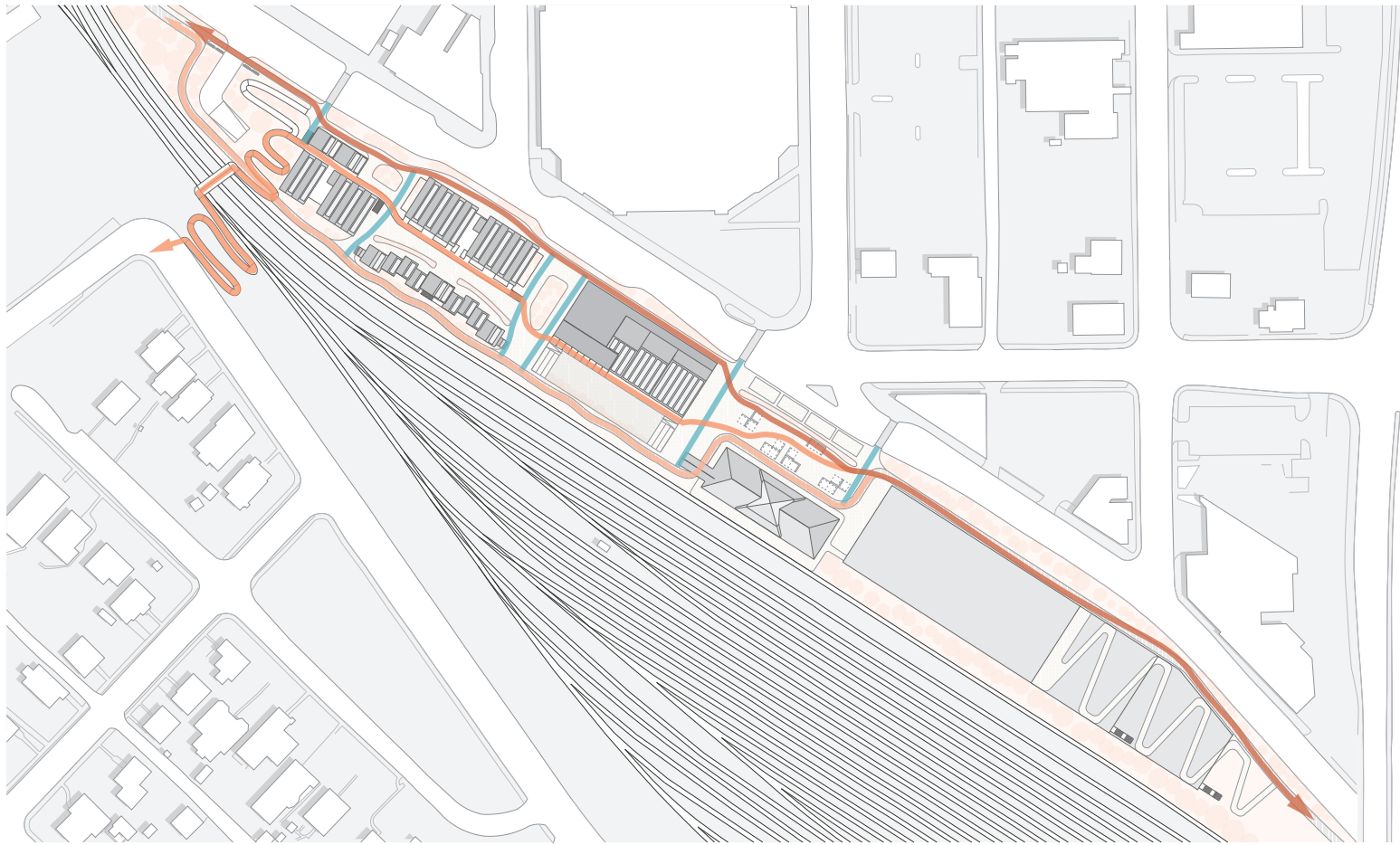
Spatial Relationship Diagram



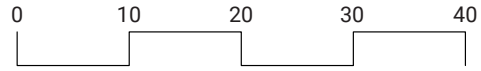
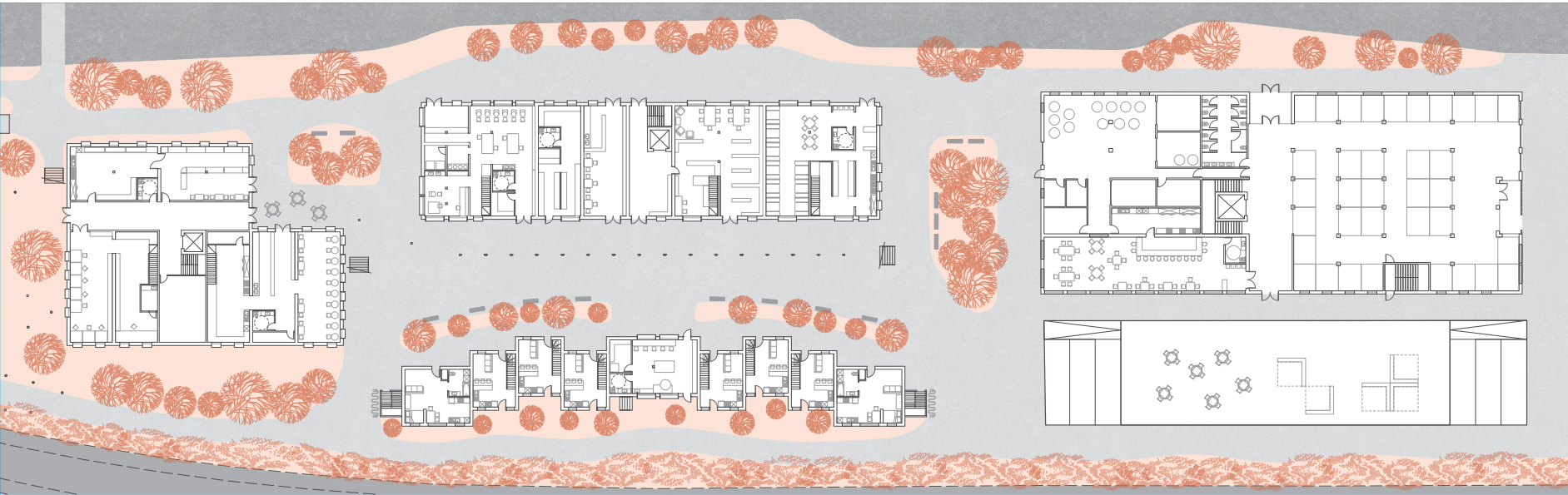
Sectional Relationship Diagram



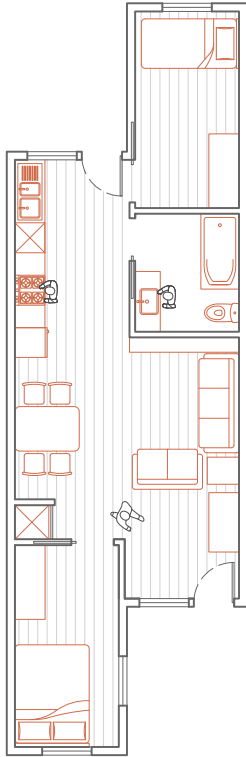
Urban Design 1:600



Street Frontage

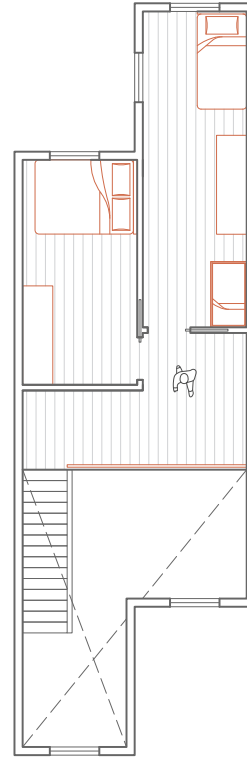
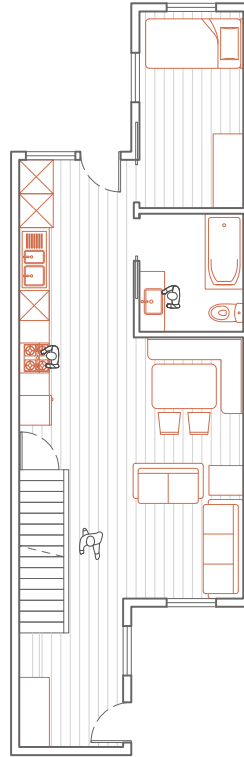
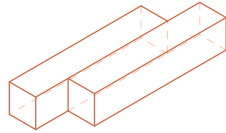


Urban Design 1:300



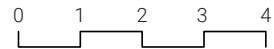
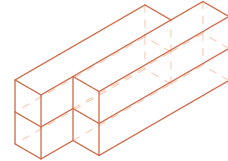
FLAT

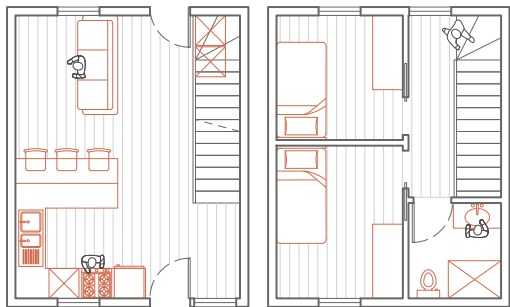
BEDS: 2
OCCUPANCY: 3
ACCESS FROM: Greenway
OF UNITS: 3
OF CONTAINERS: 4
AREA: 53 m²



LOFT

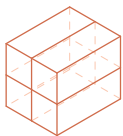
BEDS: 3
OCCUPANCY: 5
ACCESS FROM: Greenway
OF UNITS: 10
OF CONTAINERS: 8
AREA: 88 m²





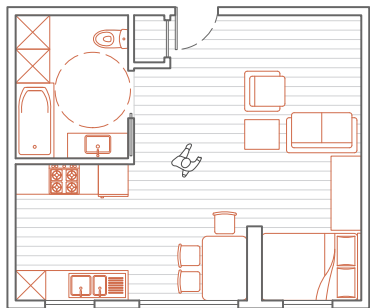
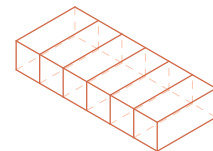
TOWNHOUSE

BEDS: 2
 OCCUPANCY: 3
 ACCESS FROM: Street level
 # OF UNITS: 6
 # OF CONTAINERS: 4
 AREA: 57 m²



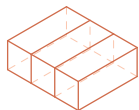
BARRIER FREE HOME

BEDS: 3
 OCCUPANCY: 4
 ACCESS FROM: Complex
 # OF UNITS: 4
 # OF CONTAINERS: 6
 AREA: 83 m²



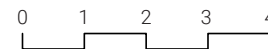
BARRIER FREE STUDIO

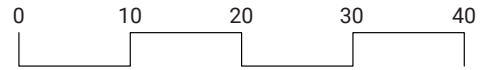
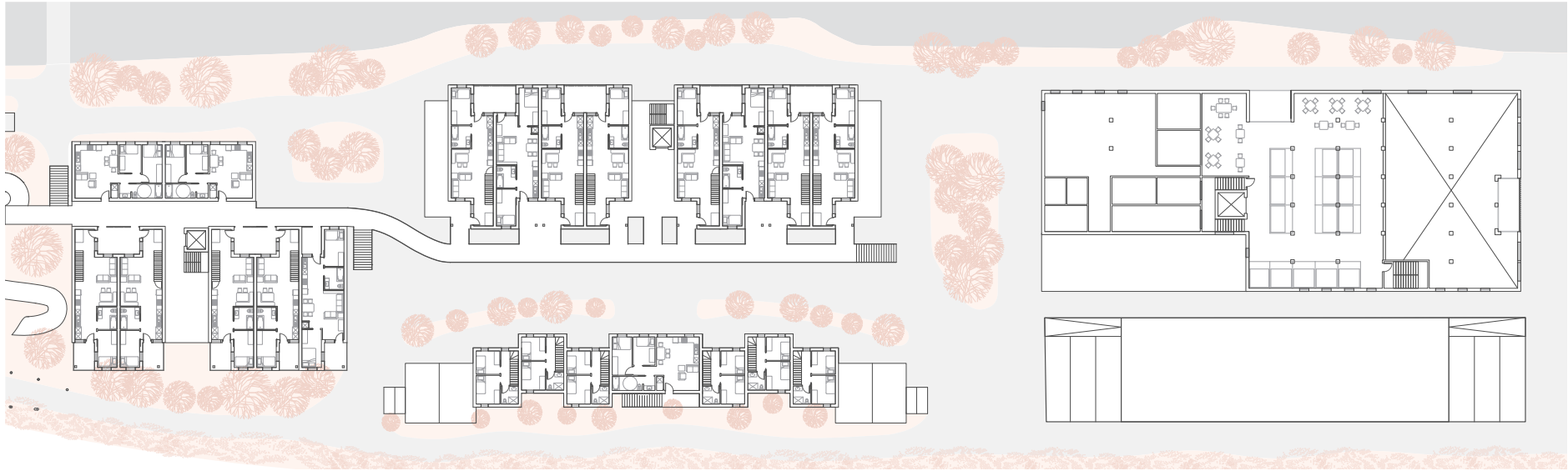
BEDS: 1
 OCCUPANCY: 2
 ACCESS FROM: Street level, and complex
 # OF UNITS: 4
 # OF CONTAINERS: 3
 AREA: 41 m²



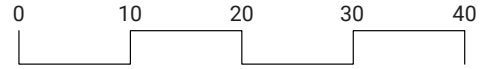
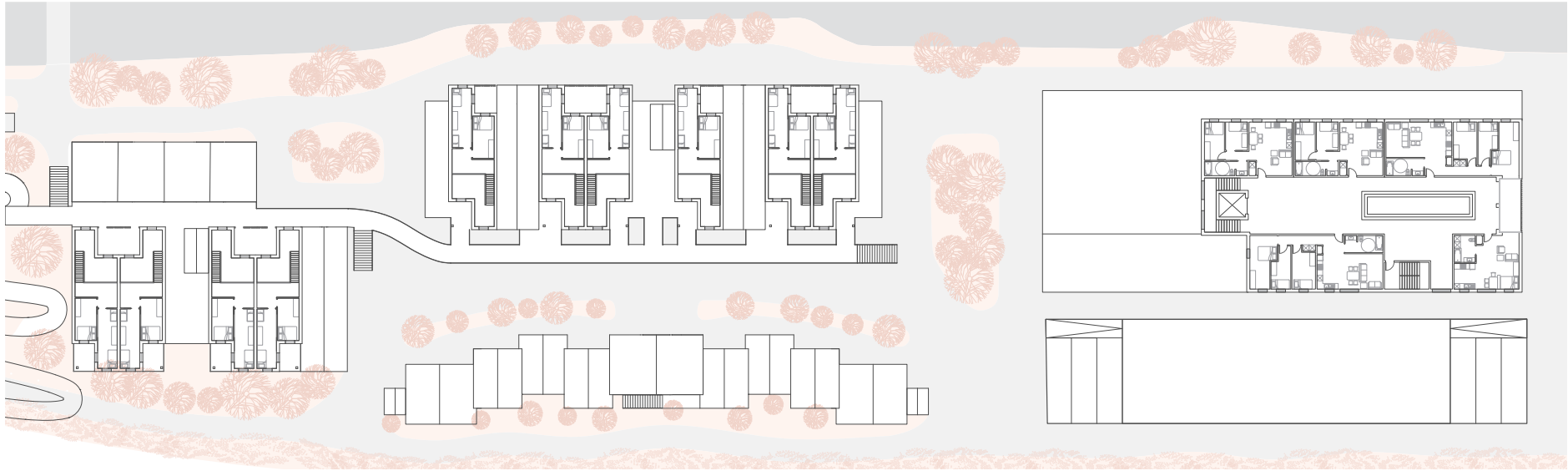
BARRIER FREE FLAT

BEDS: 2
 OCCUPANCY: 3
 ACCESS FROM: Greenway, and complex
 # OF UNITS: 7
 # OF CONTAINERS: 4
 AREA: 55 m²

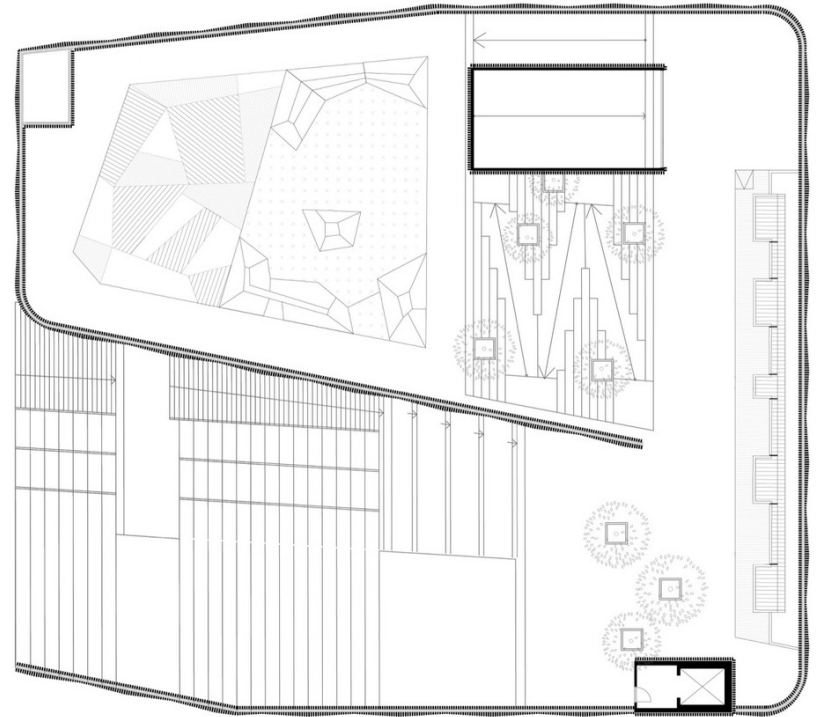




Second Floor Plan

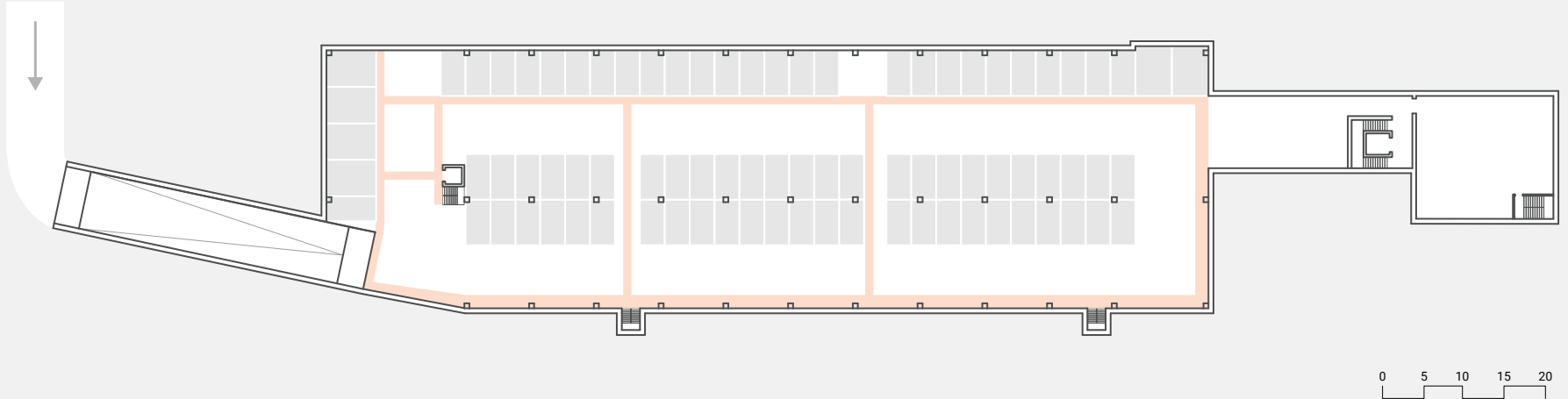


Third Floor Plan

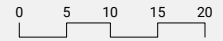
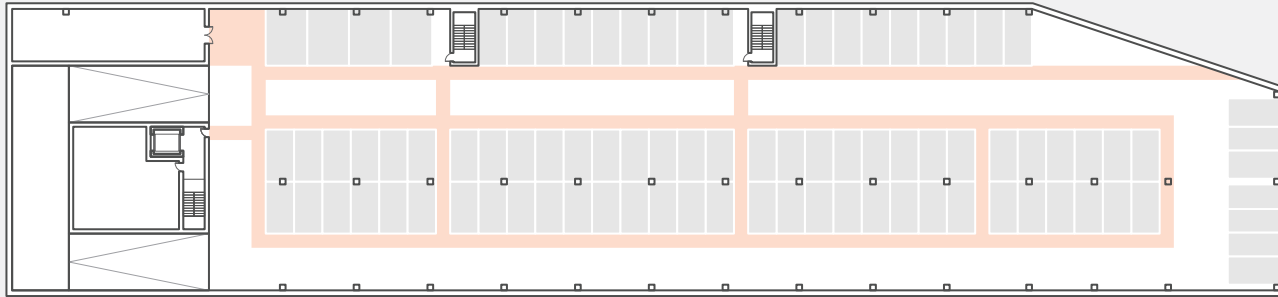


6. Valentina Villa, "The Parking Garage That Moonlights as a Sledding Slope / White Arkitekter Henning Larsen Architects," ArchDaily (ArchDaily, November 21, 2016), https://www.archdaily.com/799662/the-parking-garage-that-moonlights-as-a-sledding-slope-white-arkitekter-plus-henning-larsen-architects?ad_source=search&ad_medium=search_result_projects

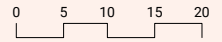
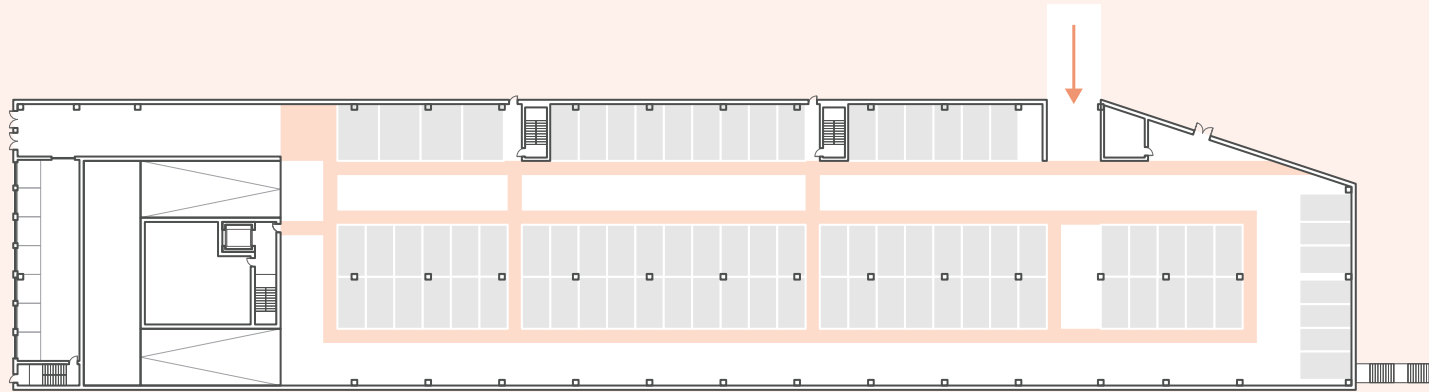
Stadsberget // Piteå, Sweden // White Arkitekter + Henning Larsen Architects⁶



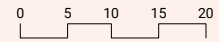
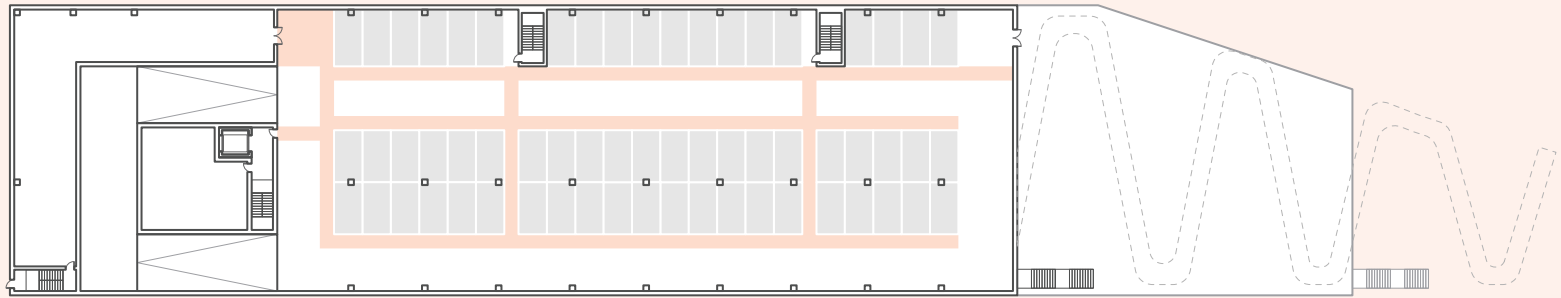
Underground Parking Plan



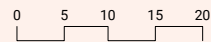
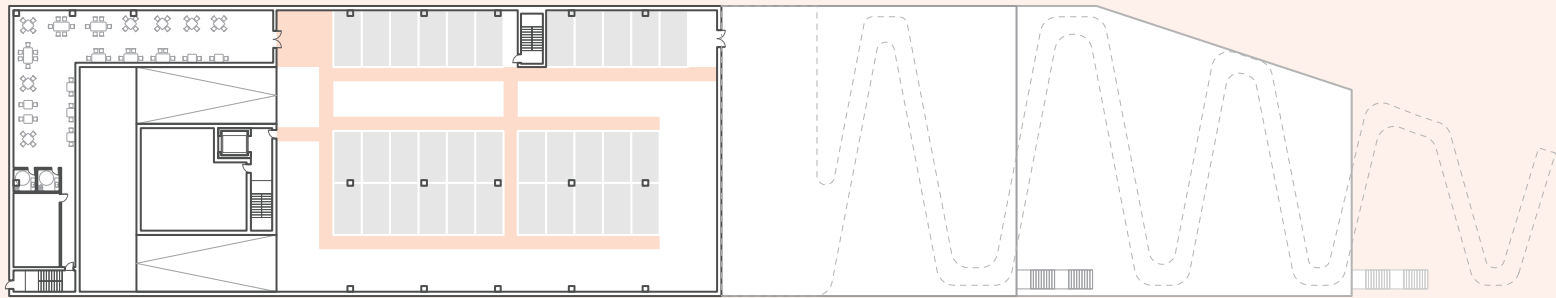
Underground Parking Hill Plan



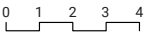
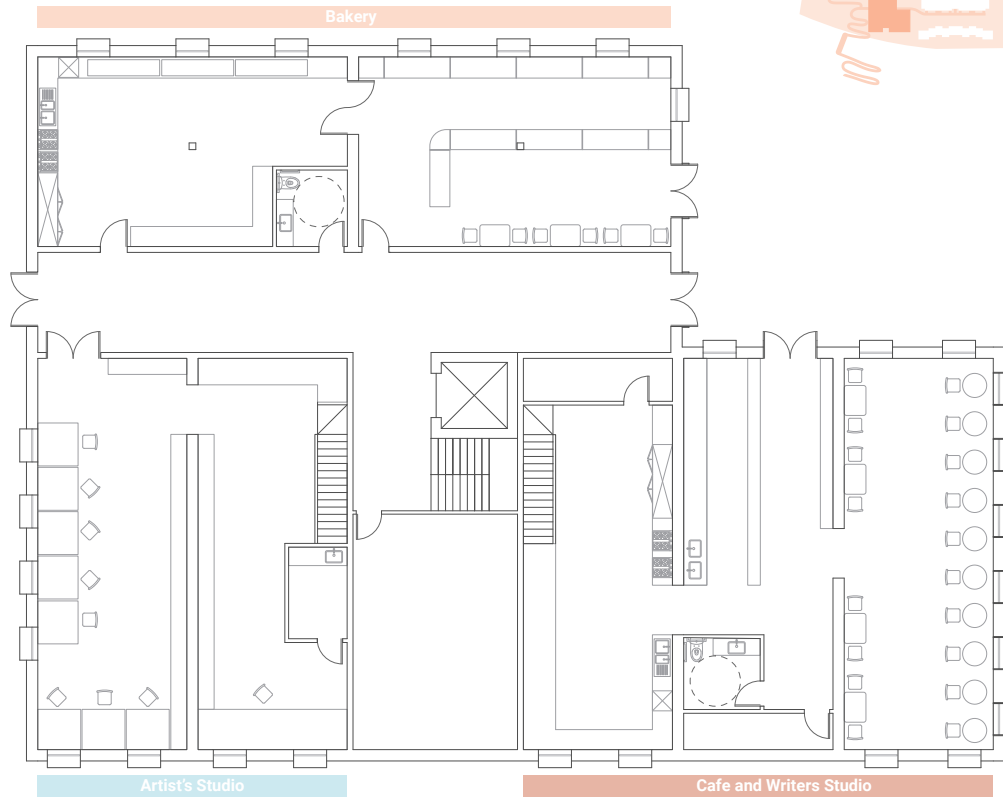
Ground Floor Parking Hill Plan



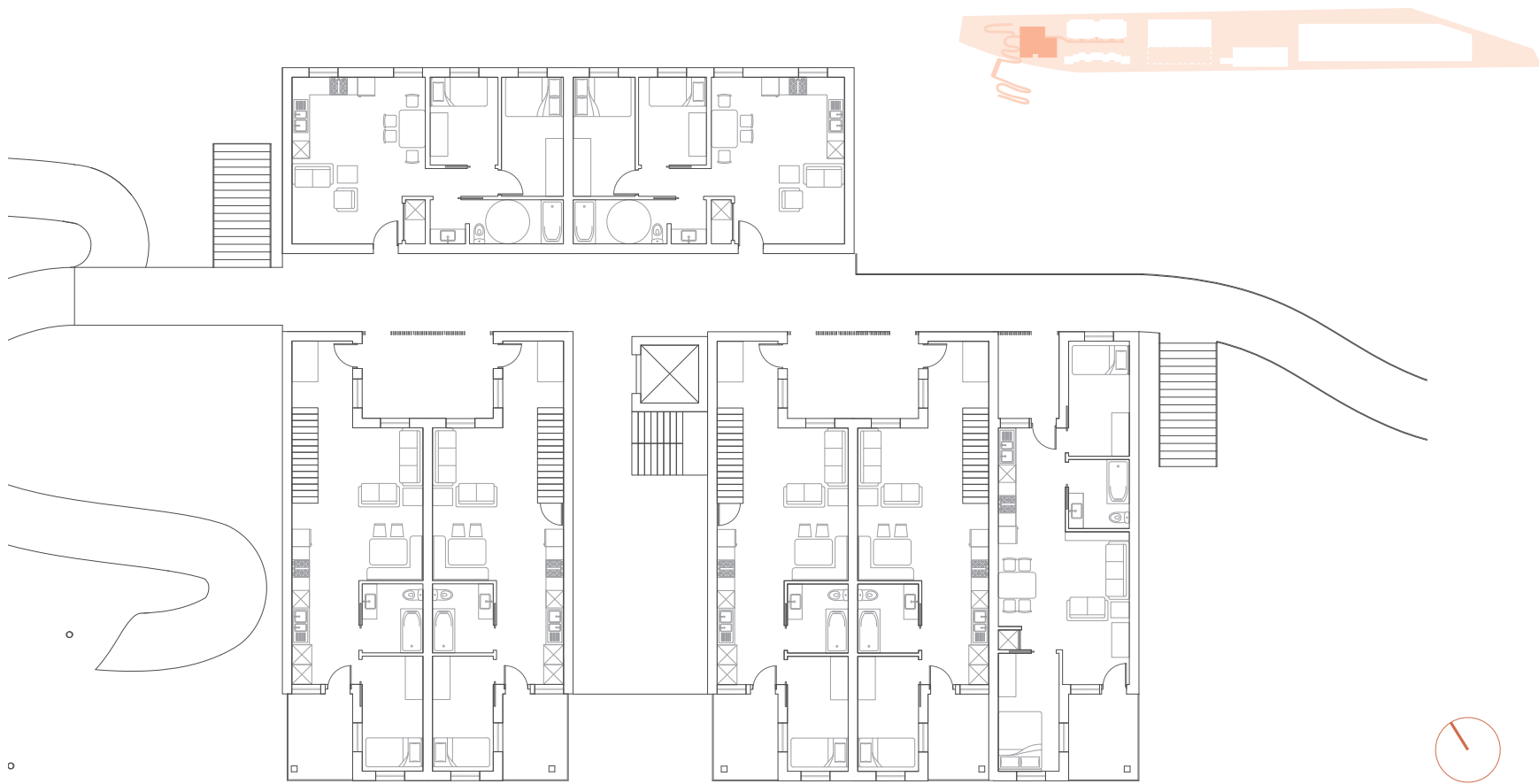
Second Floor Parking Hill Plan



Third Floor Parking Hill Plan

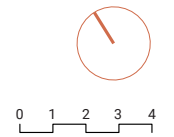


Slytherin Building Ground Floor

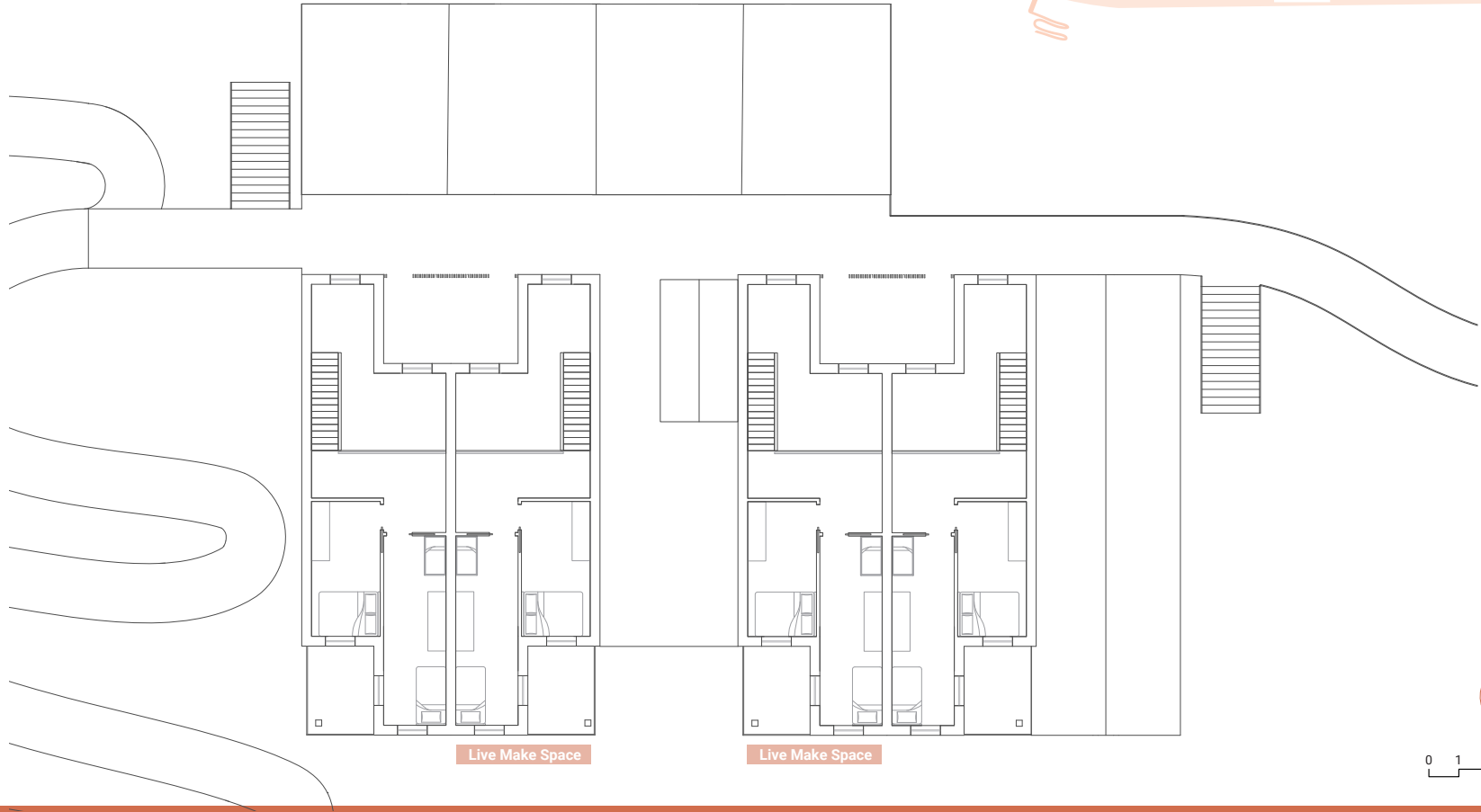


Live Make Space

Live Make Space

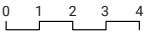


Slytherin Building Second Floor

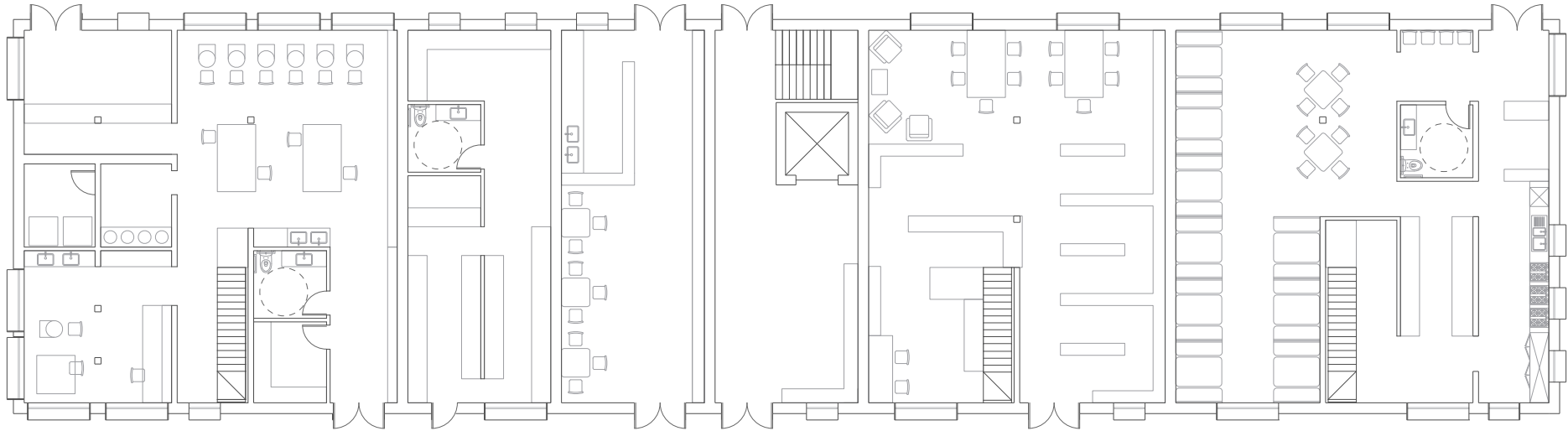


Live Make Space

Live Make Space



Slytherin Building Third Floor



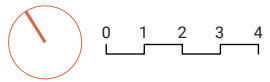
Pottery

Organic Market

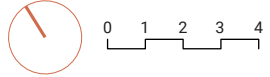
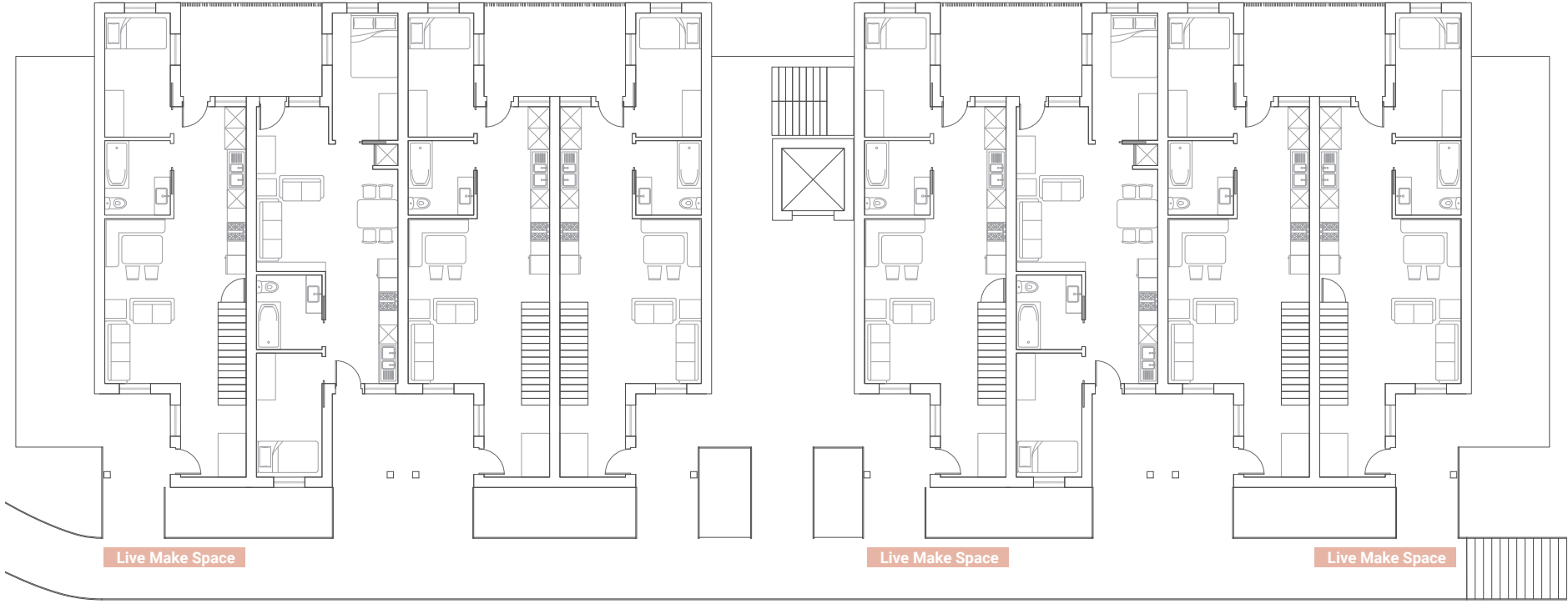
Loose Leaf Tea

Knitting & Textiles

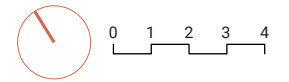
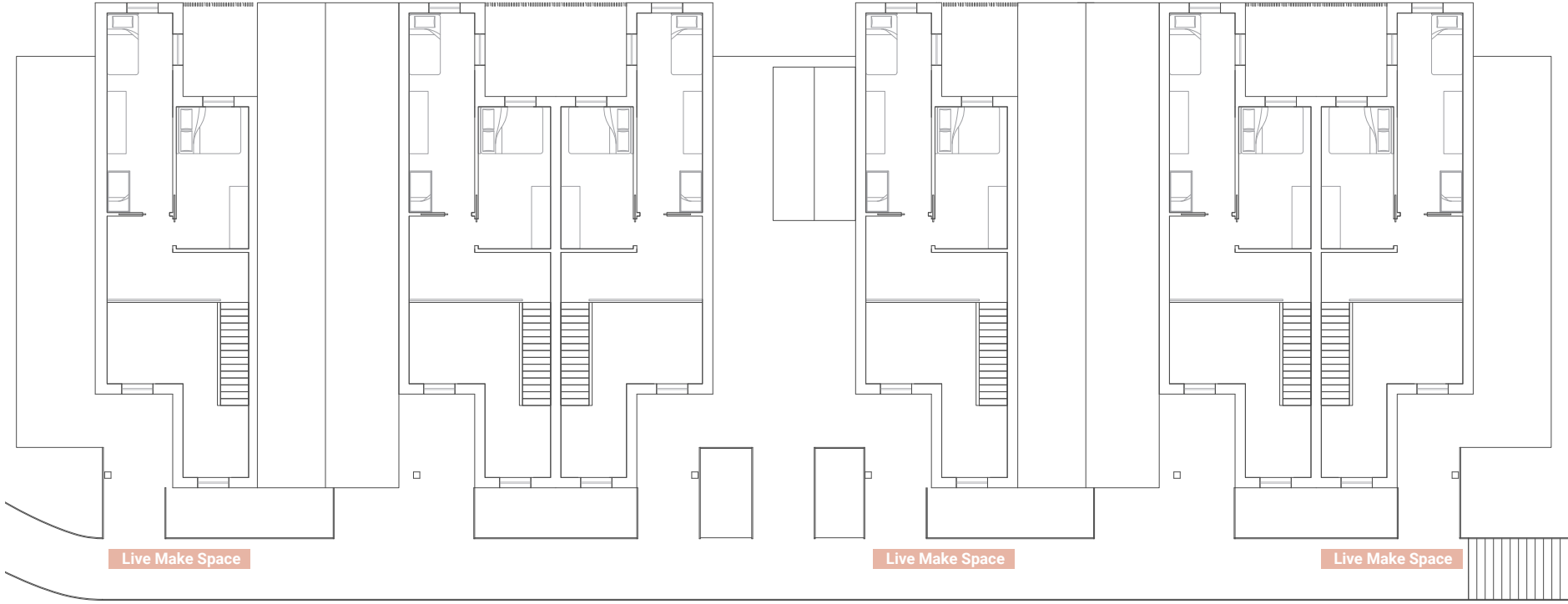
Vegetarian Restaurant



Ravenclaw Building Ground Floor



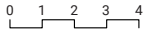
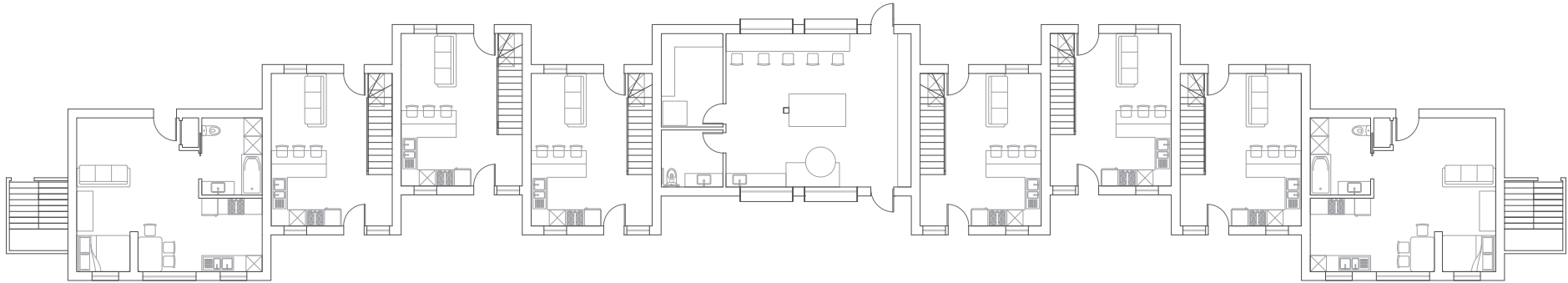
Ravenclaw Building Second Floor



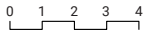
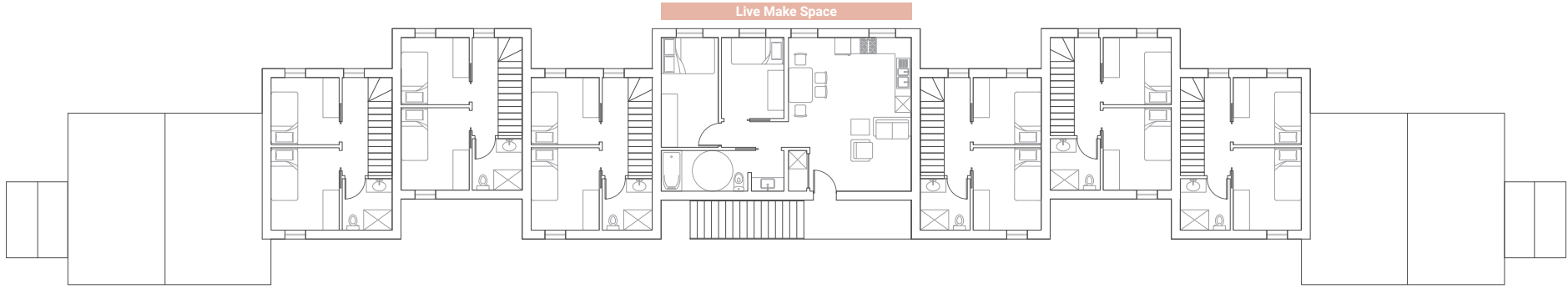
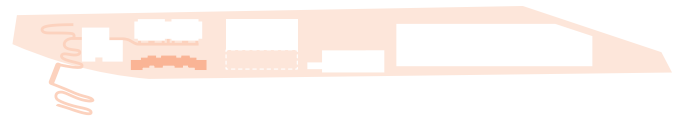
Ravenclaw Building Third Floor



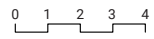
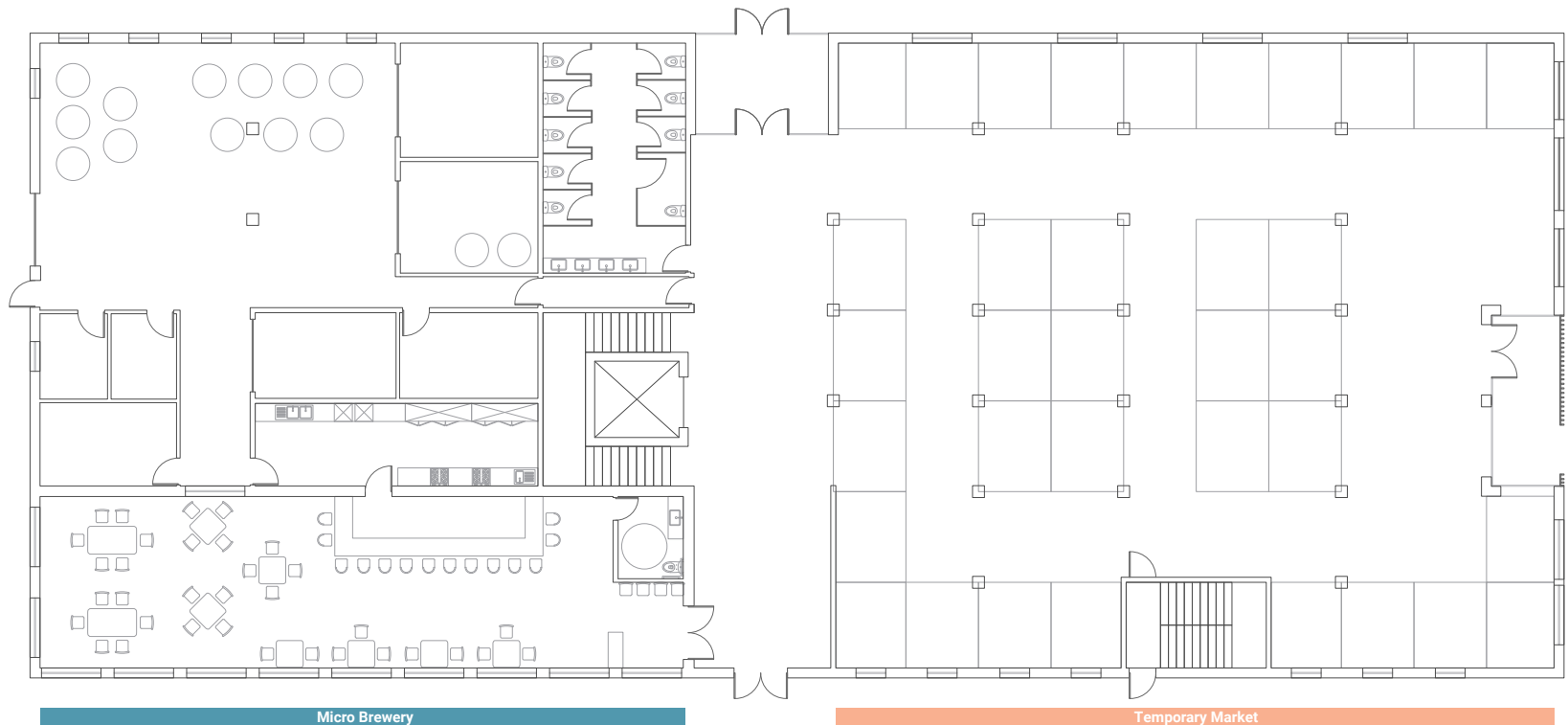
Knitting & Textiles



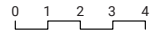
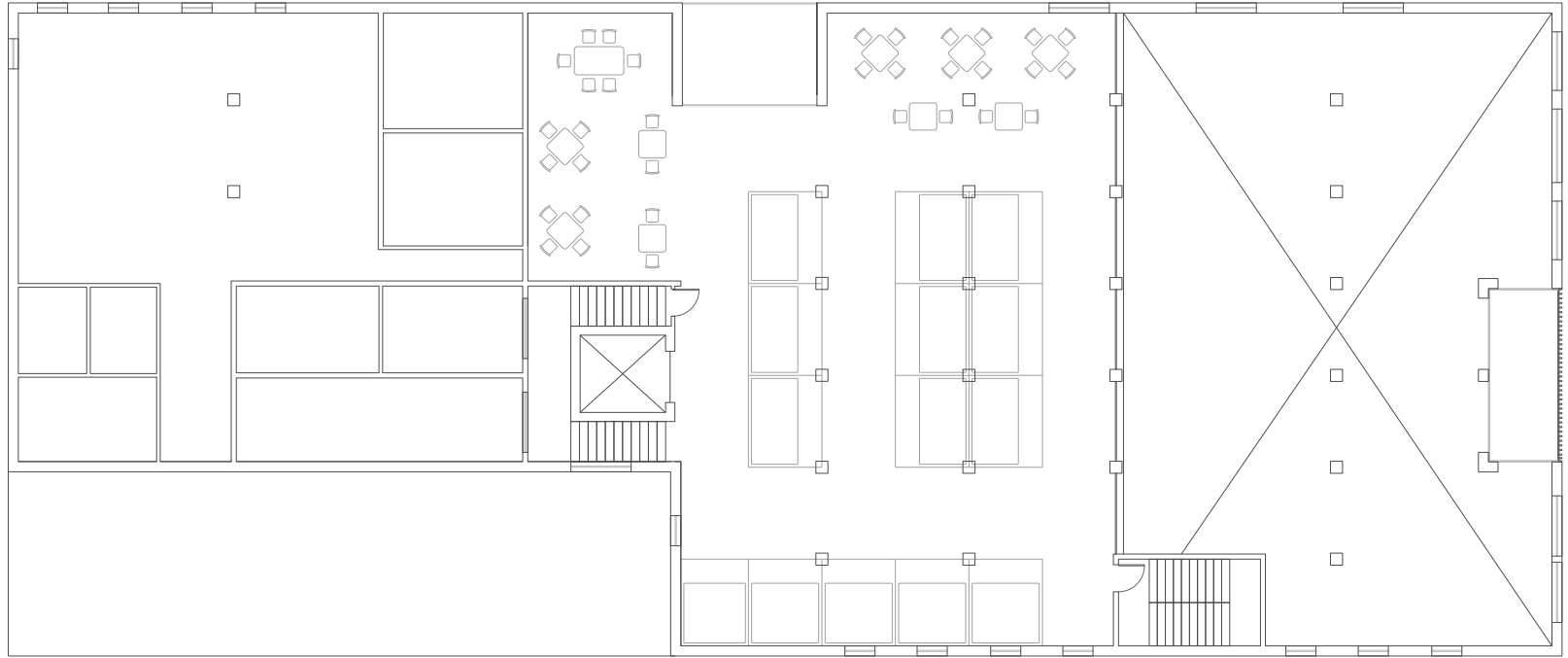
Hufflepuff Building Ground Floor



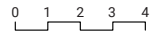
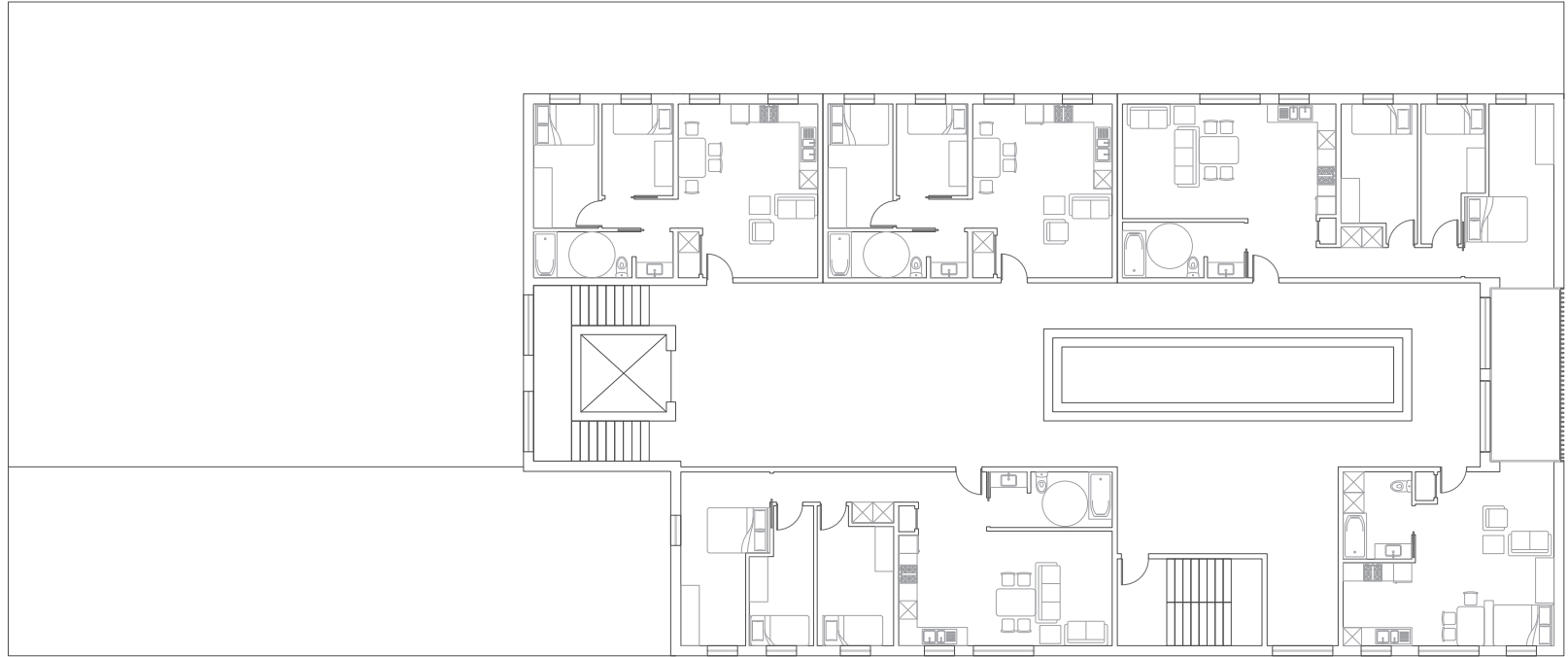
Hufflepuff Building Second Floor



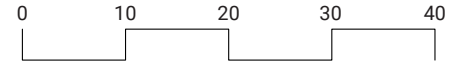
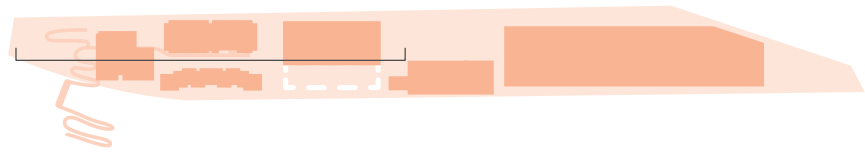
Gryffindor Building Ground Floor



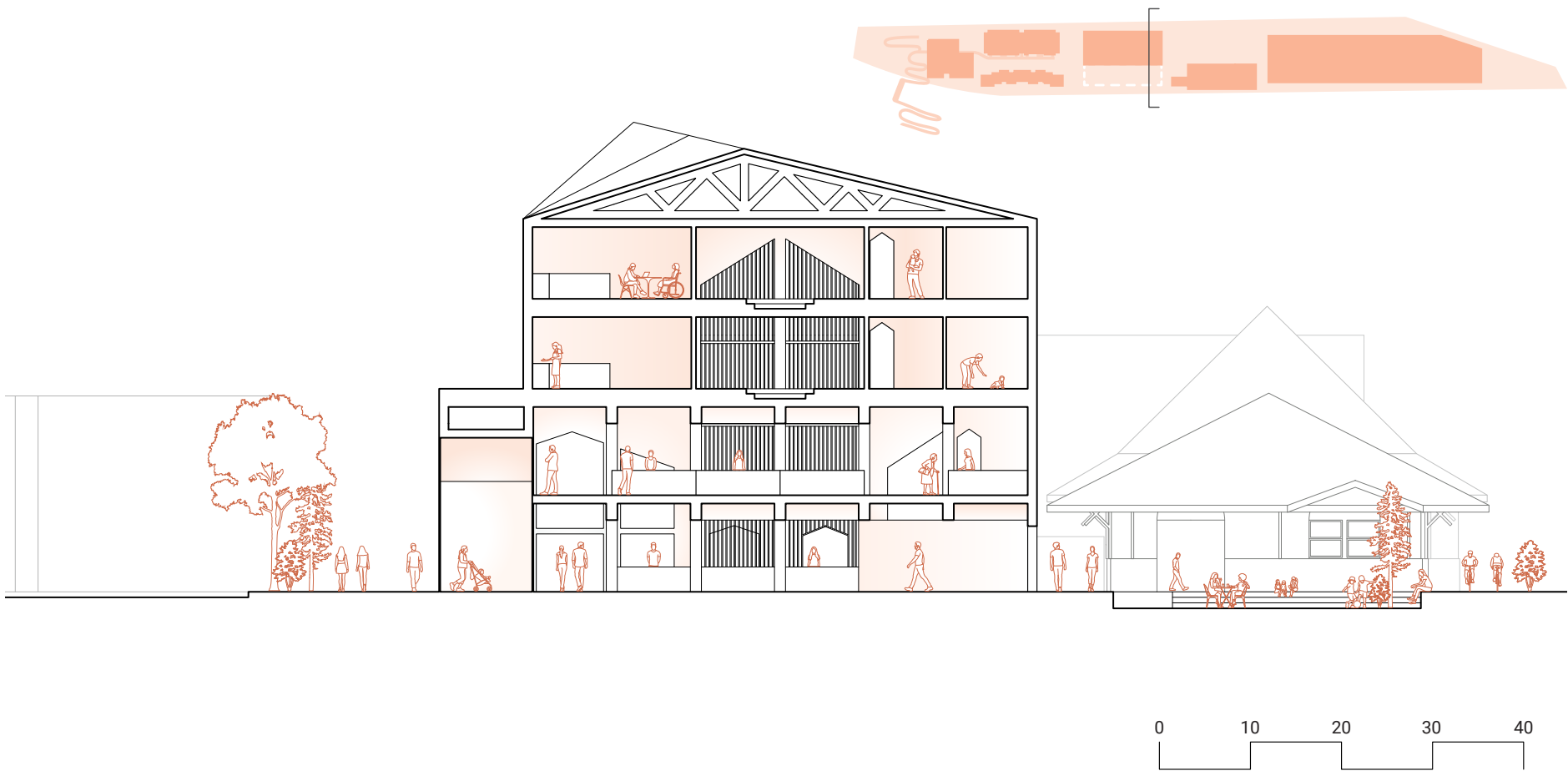
Gryffindor Building Second Floor



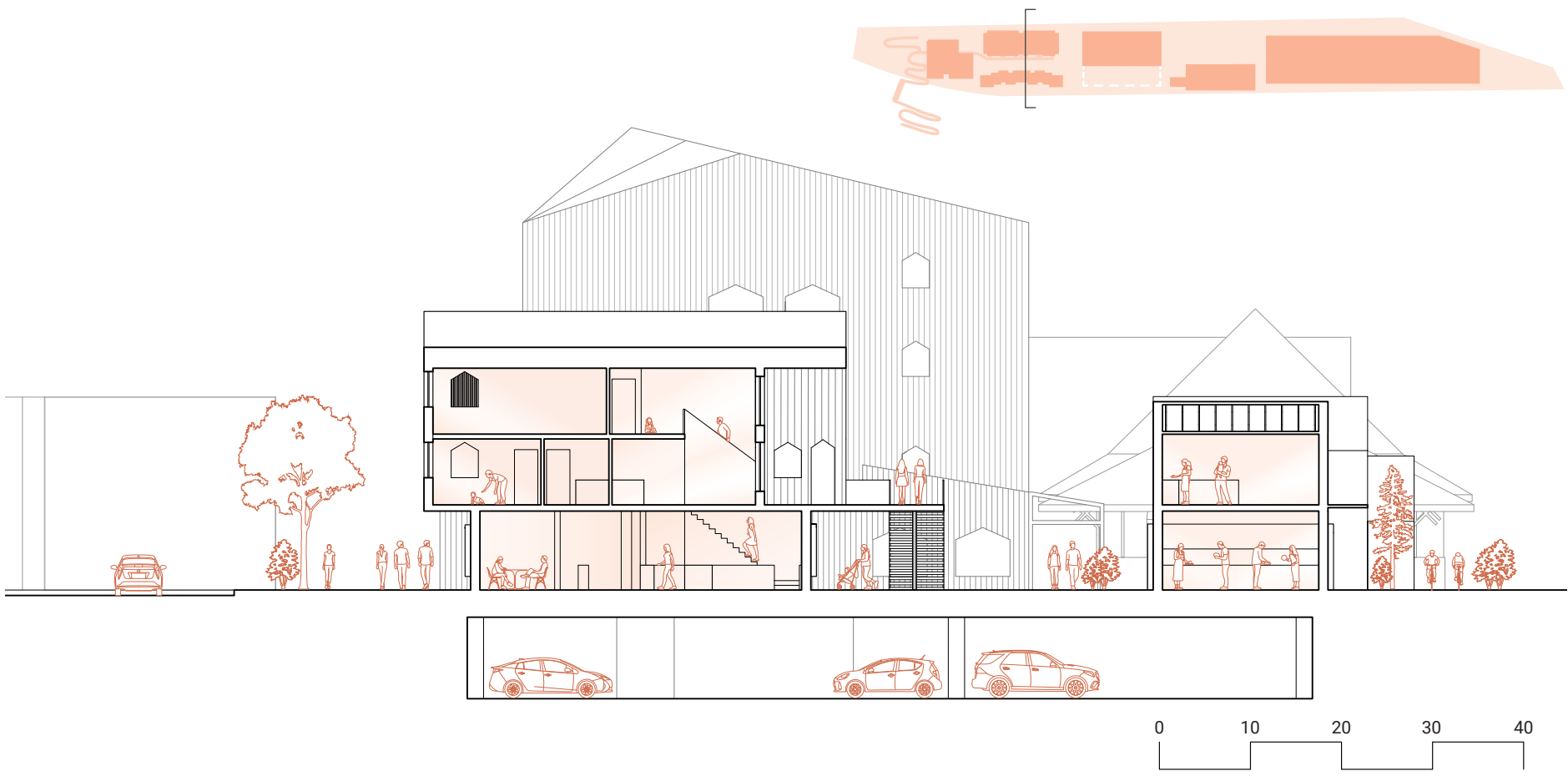
Gryffindor Building Third and Fourth Floor



South Elevation Interior Street



Section Looking East through Market Building



Section Looking East through Makers Spaces and Loft



Interior Street Perspective

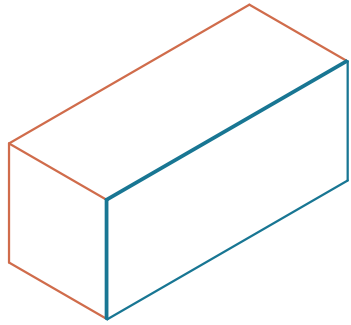


West Courtyard Perspective

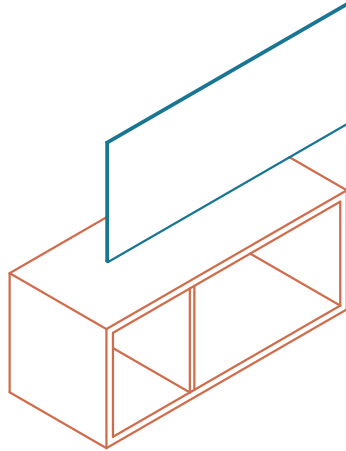


Temporary Market Perspective

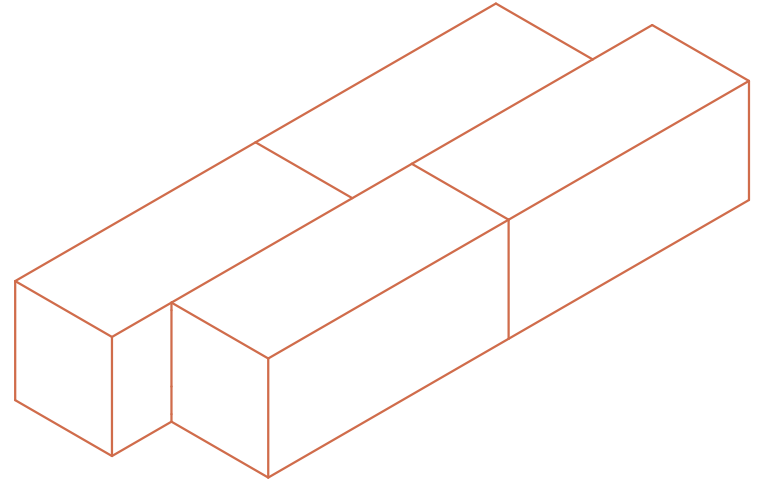




CLT module with plywood stability



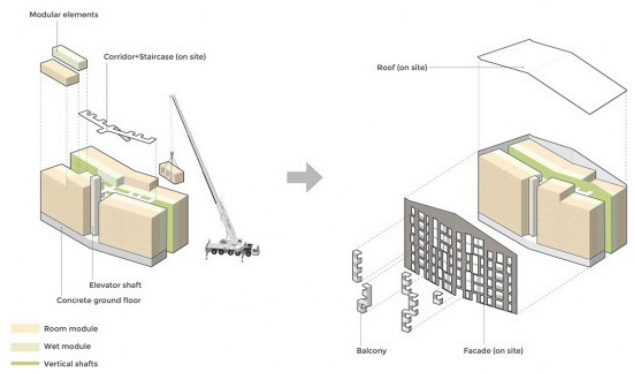
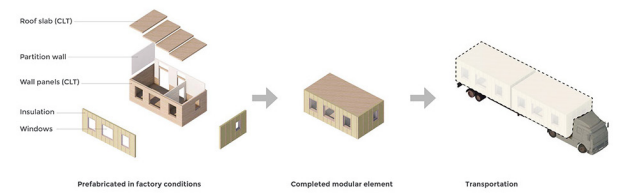
Removal of plywood

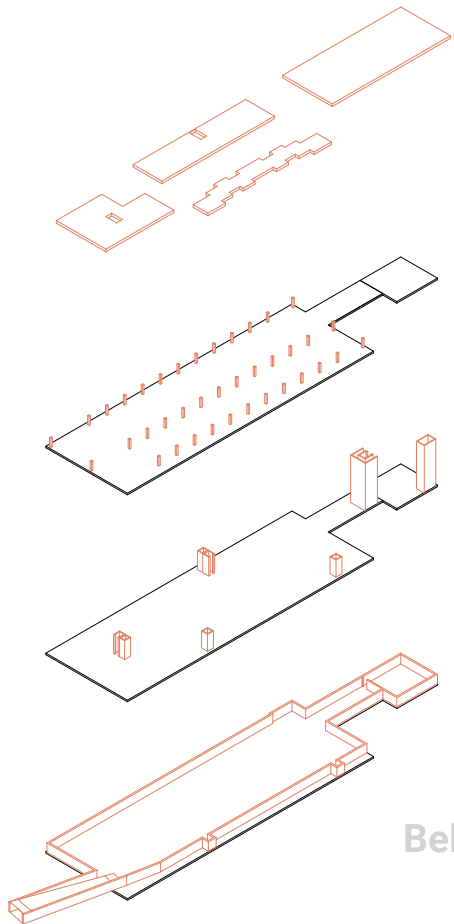


Combination of modules



Flexibly customizable modular system





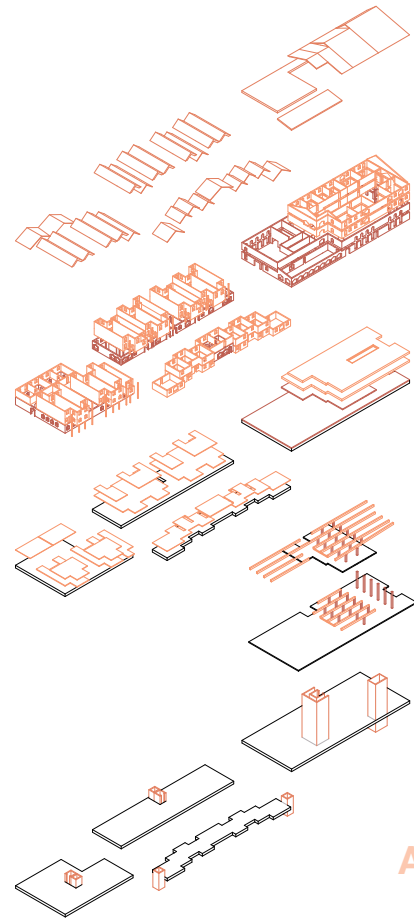
4. Concrete Transfer Slab

3. Concrete Columns

2. Concrete Core

1. Concrete Walls

Below Grade



9. Timber Roof Trusses

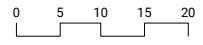
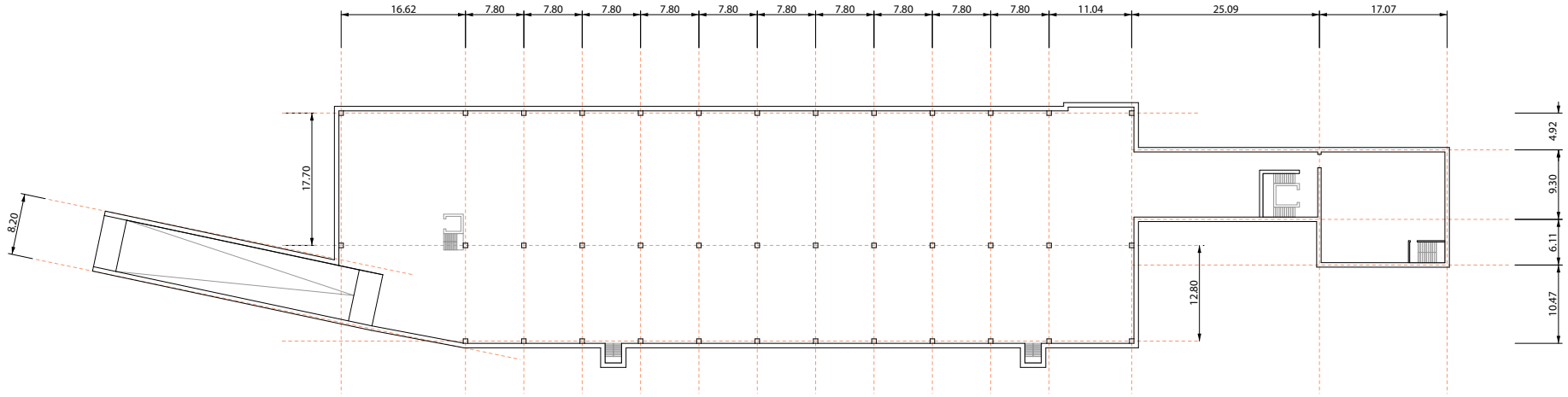
8. CLT Wall Panels
Acting as Lateral Stability and Load Bearing

7. CLT Floor Plates

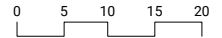
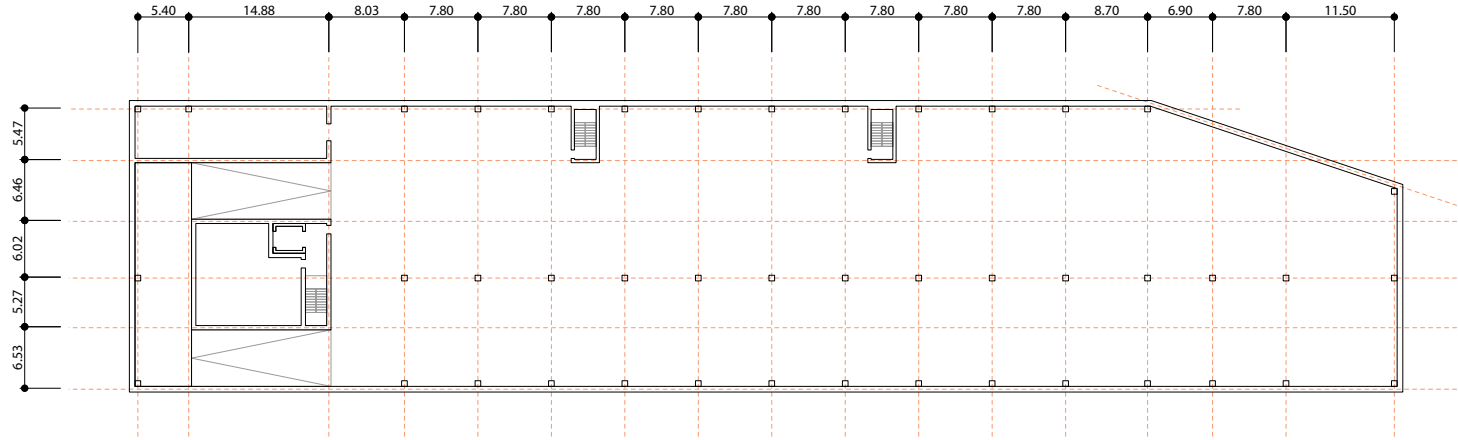
6. Glulam Beams and Columns

5. Concrete Core

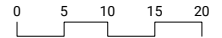
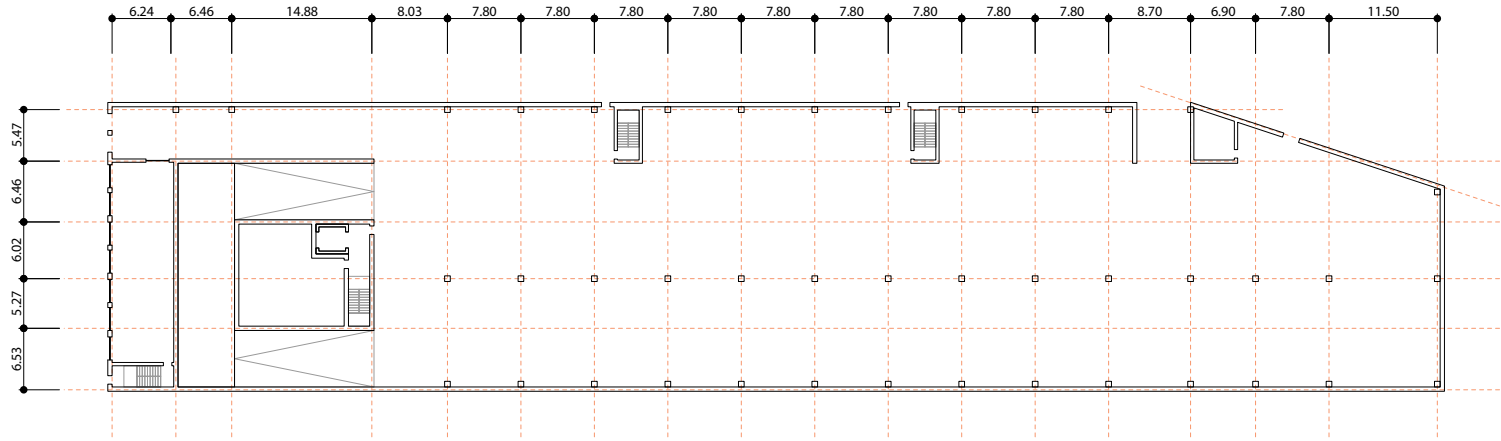
Above Grade



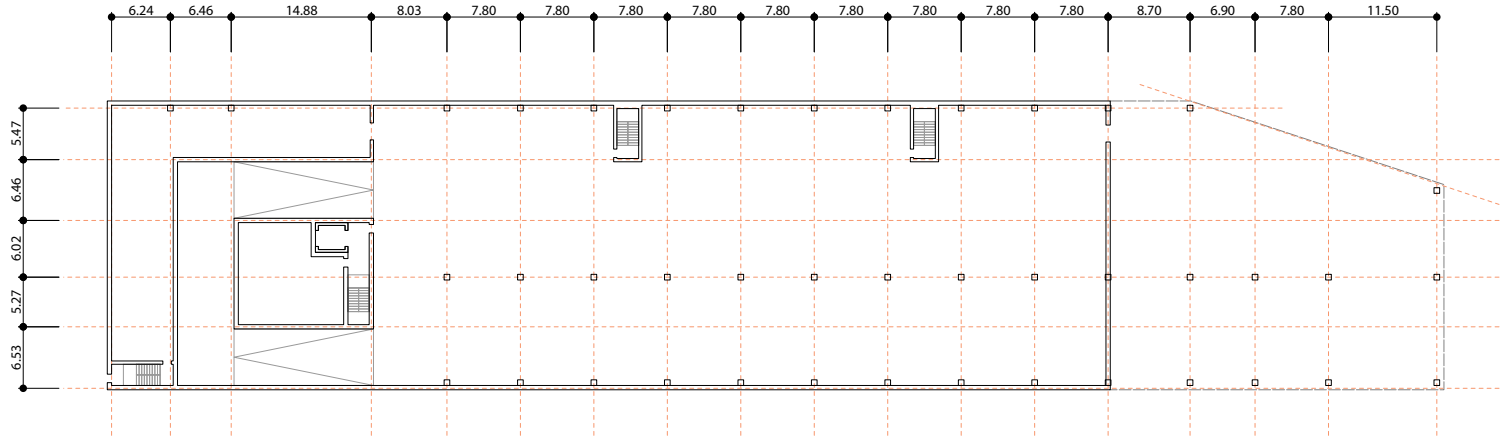
Under Ground Parking Structure



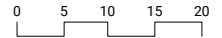
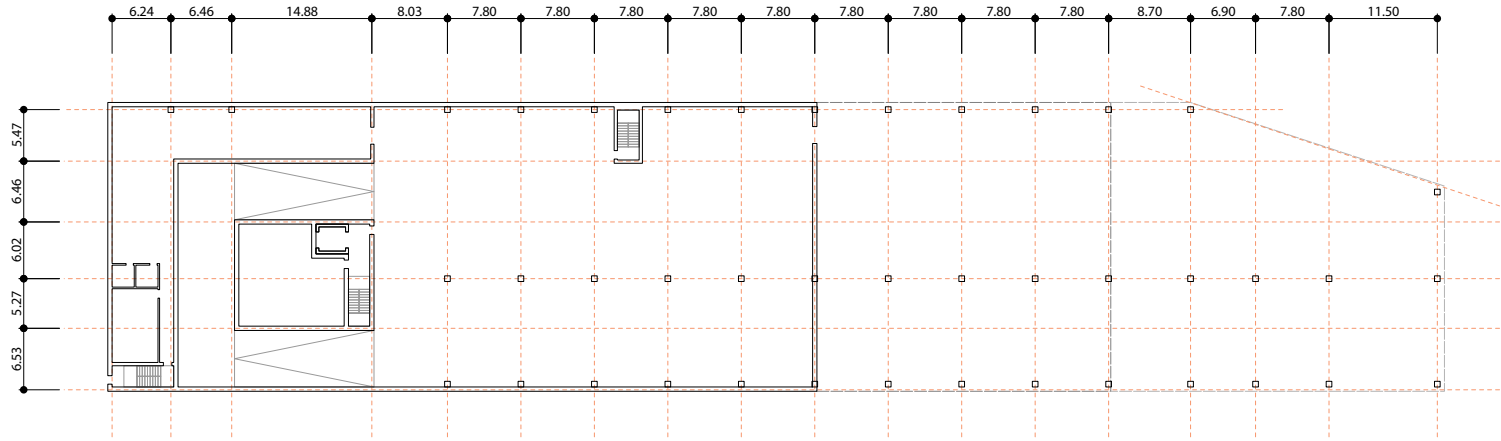
Under Ground Parking Hill Structure



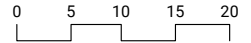
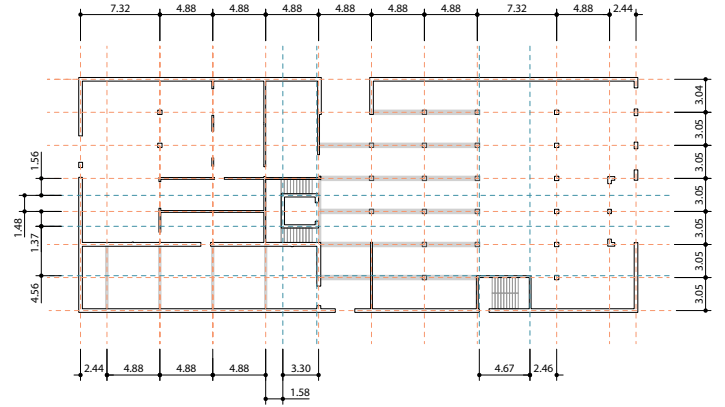
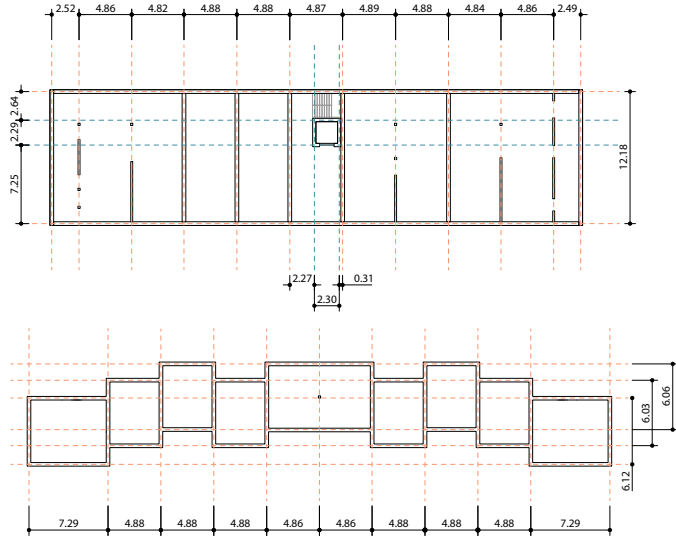
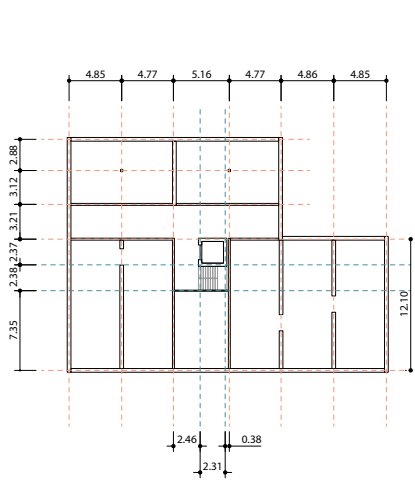
Ground Floor Parking Hill Structure



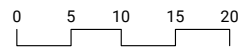
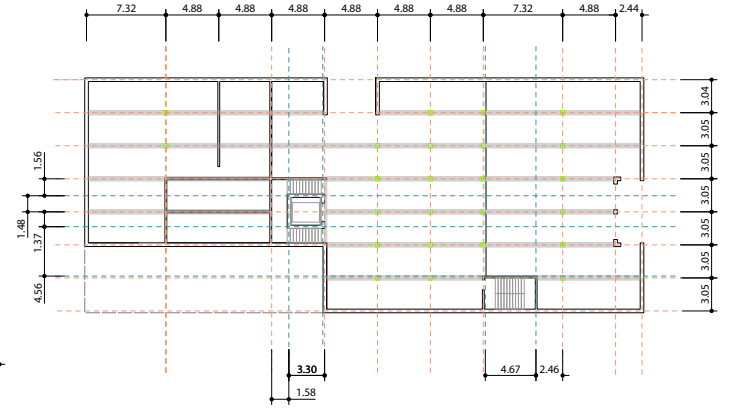
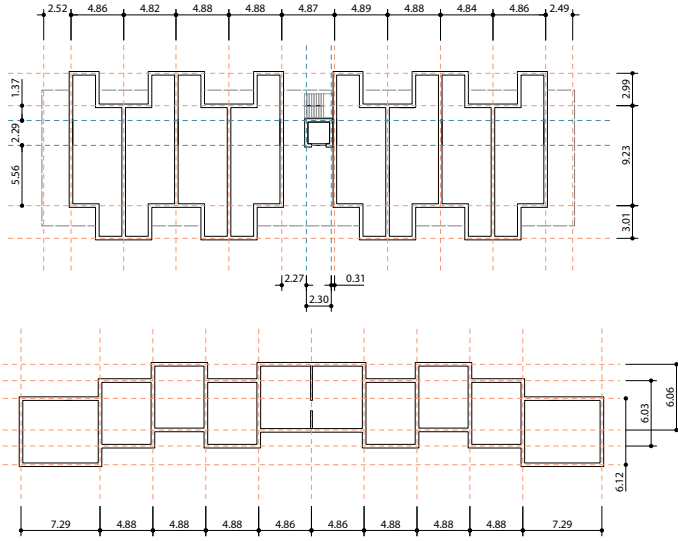
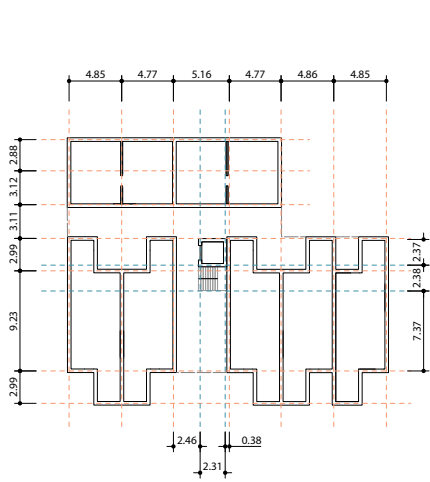
Second Floor Parking Hill Structure



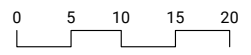
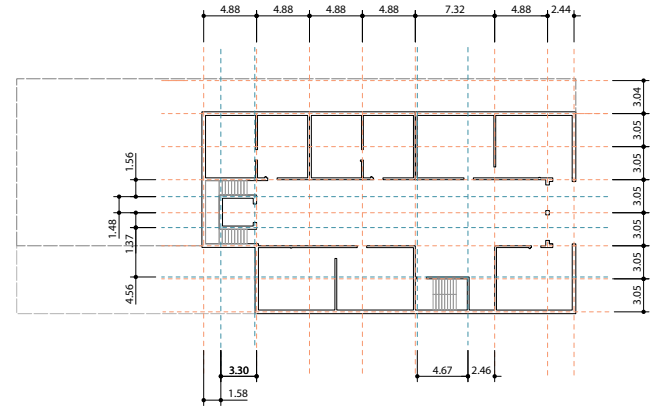
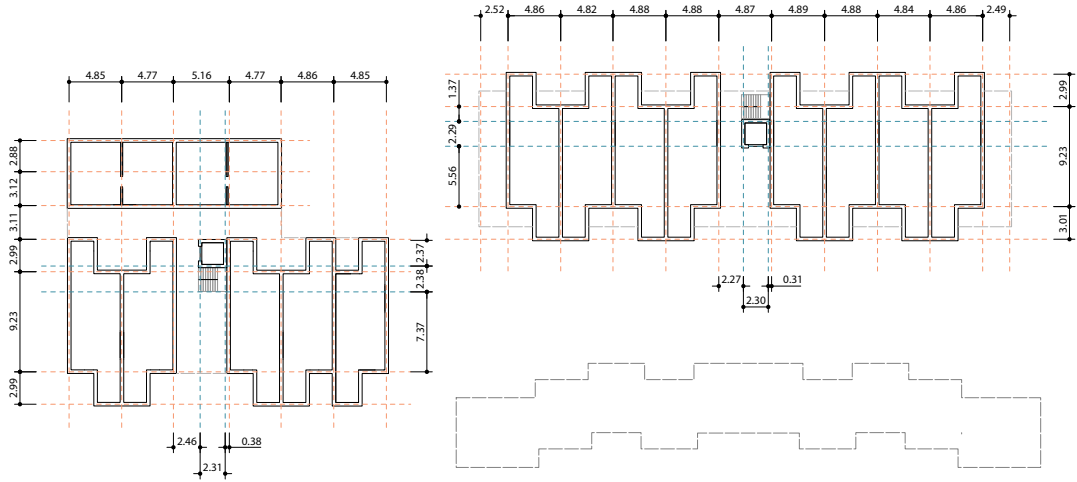
Third Floor Parking Hill Structure



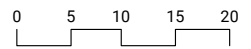
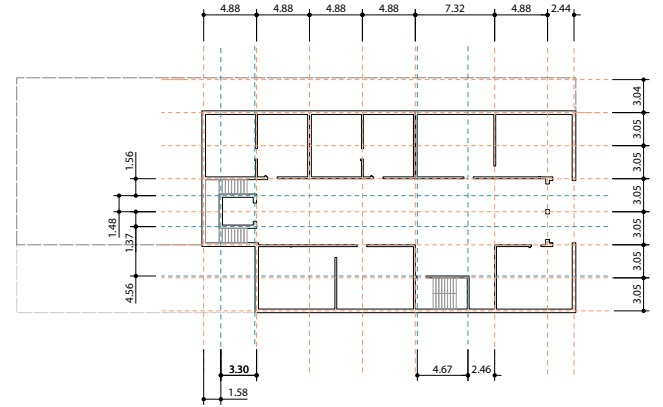
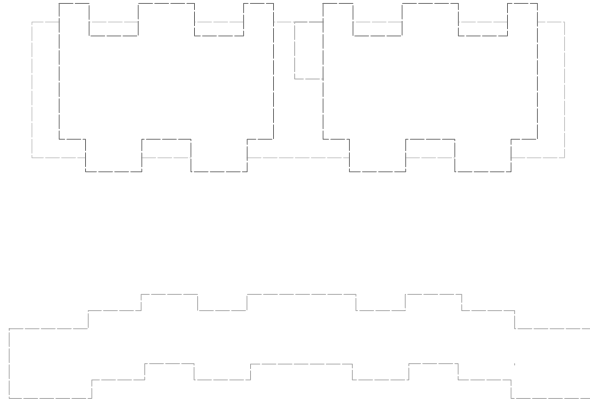
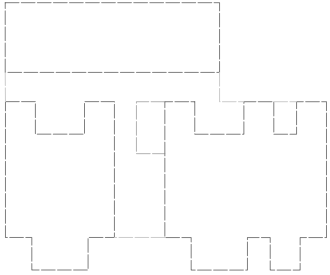
Ground Floor Structure



Second Floor Structure



Third Floor Structure

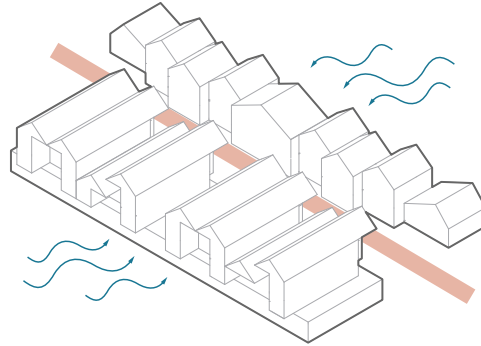


Fourth Floor Structure

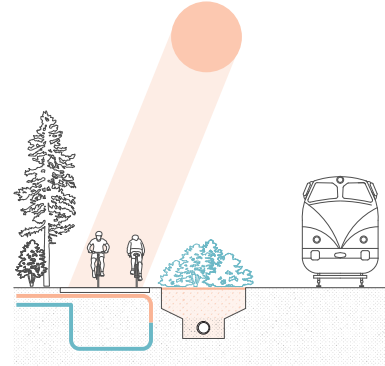
Bioswales collecting and filtering rain water



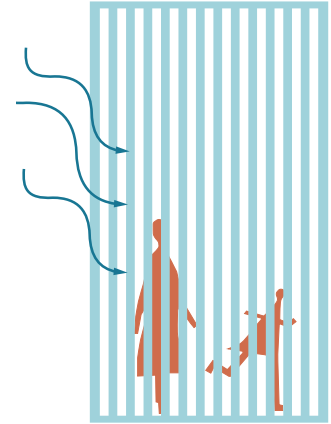
Form blocking harsh winter prevailing winds



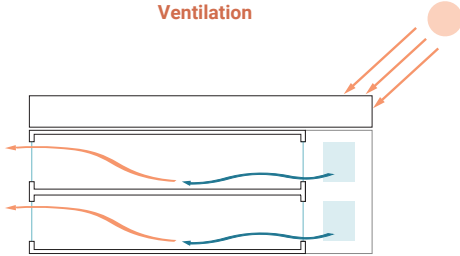
Geothermal heated bike path for winter travel



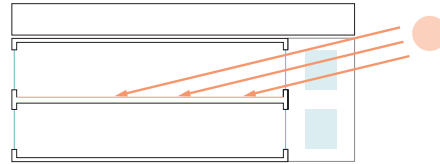
Vertical screens blocking winter winds on north side of units



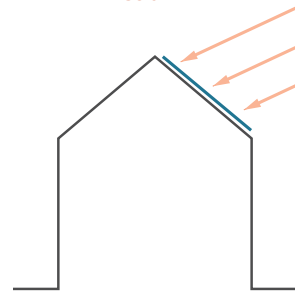
Summer Solar Shading and Cross Ventilation



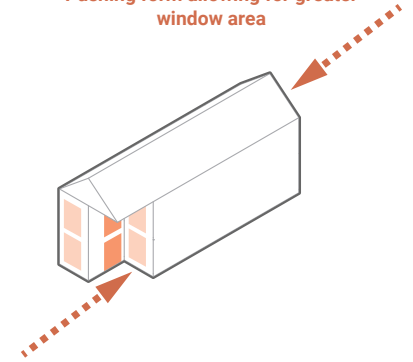
Winter Solar Access



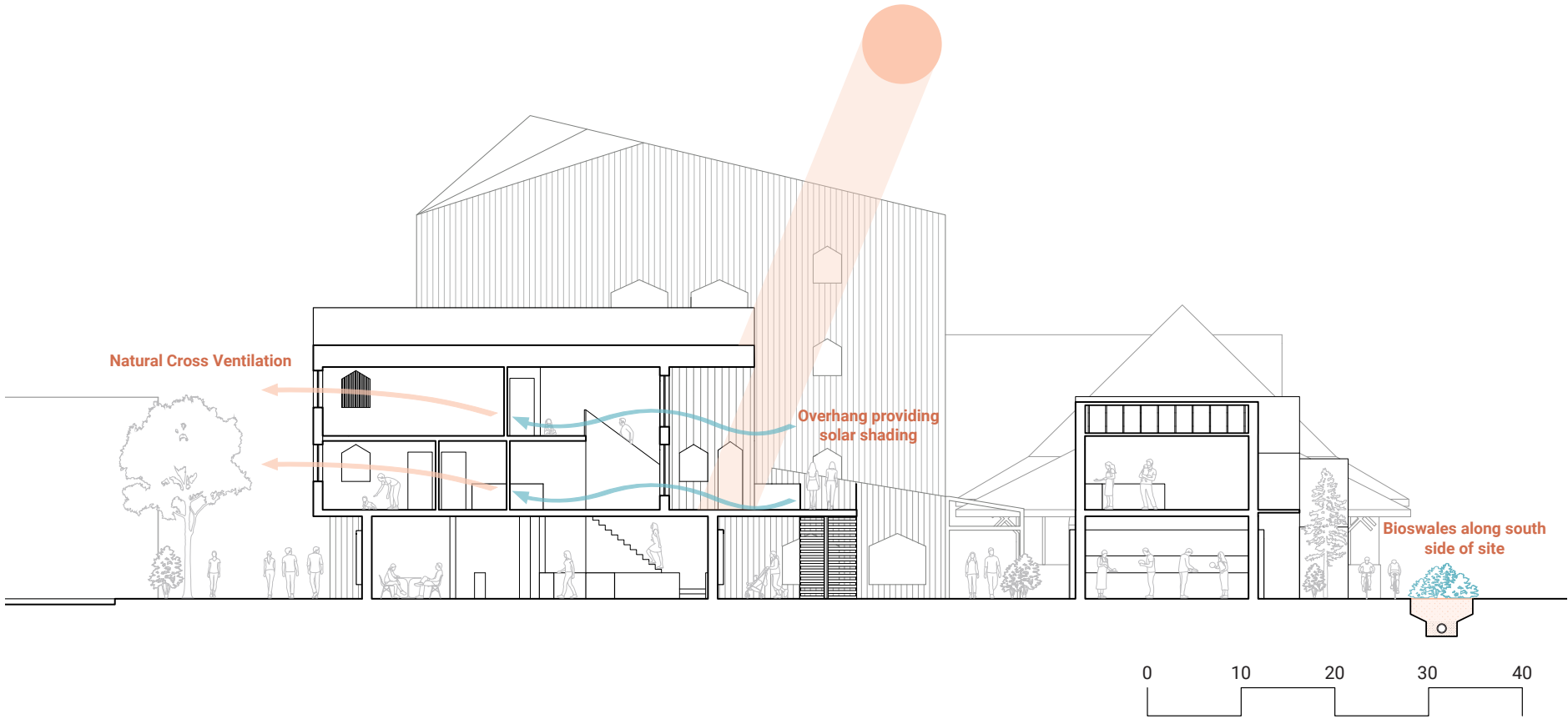
Solar PV



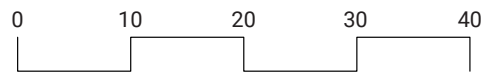
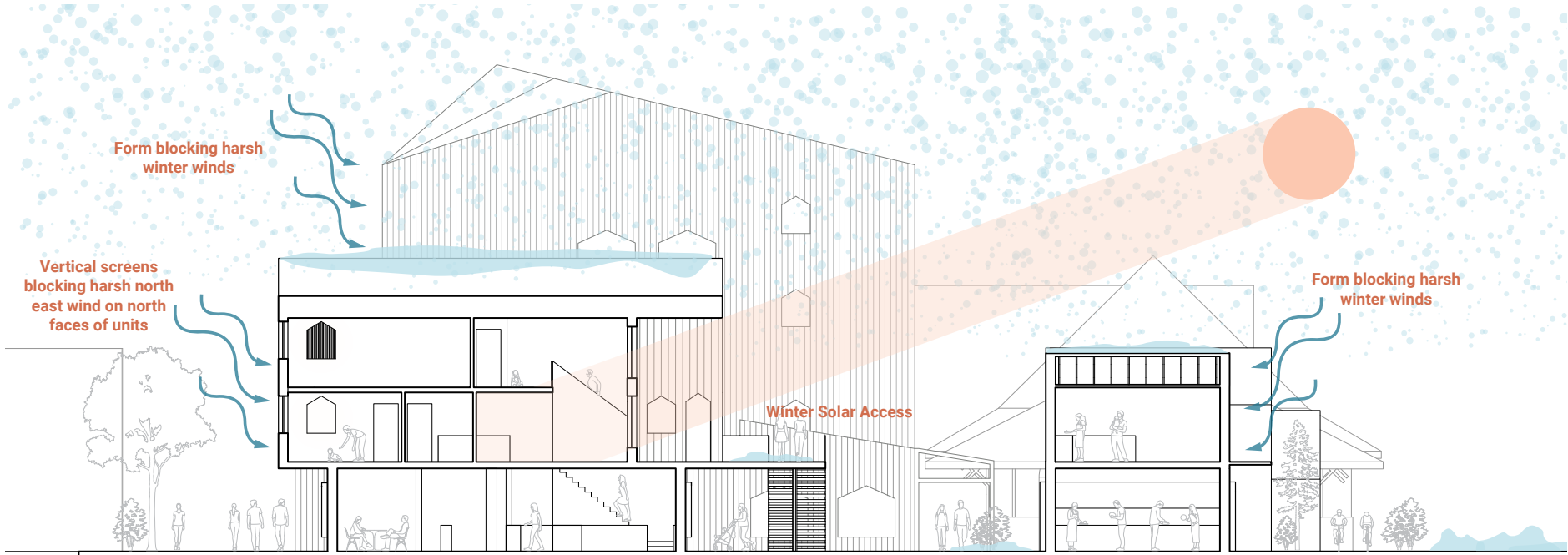
Pushing form allowing for greater window area



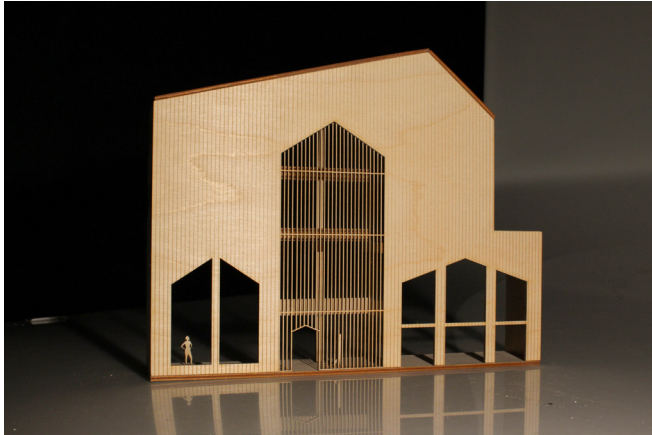
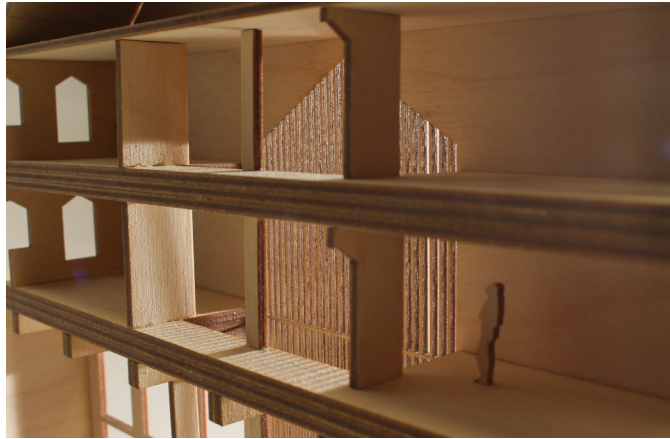
Passive Design Strategy Diagrams



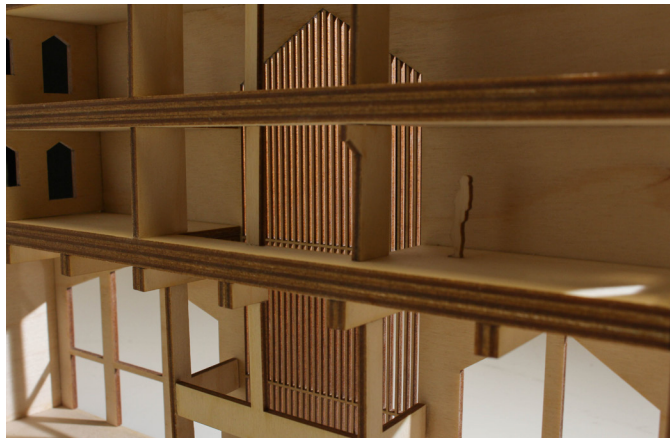
Summer Passive Section



Winter Passive Section



Daylighting Model Spring/Fall Equinox 7am



Daylighting Model Summer Solstice Noon

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