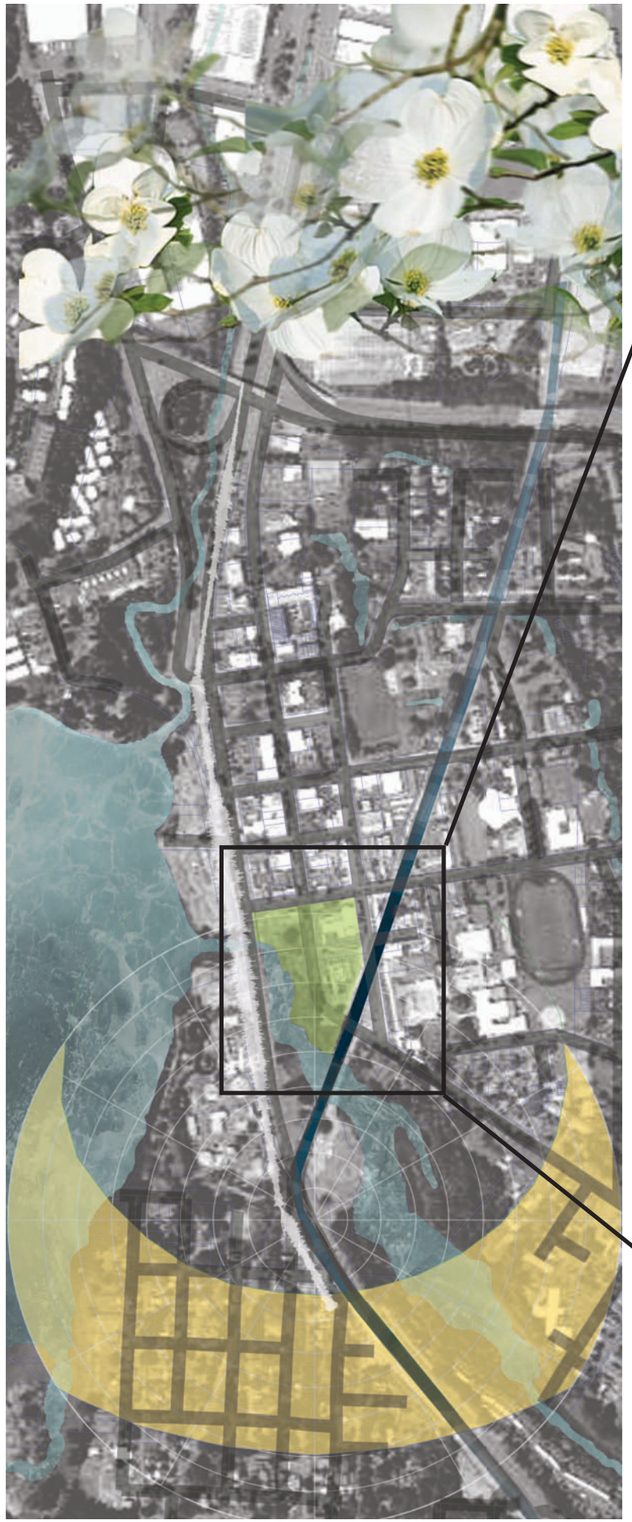
MILWAUKIE, OREGON

Designing the downtown light rail adjacencies with nature: sun, water, and wind

Dianna Montzka | Winter 2015



DESIGN INTENTIONS

- Hold a strong urban edge

- Respect and foster the environment and site resources: sun, water, and wind

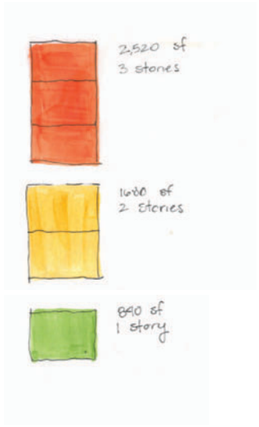
- Create an engaging node to the downtown

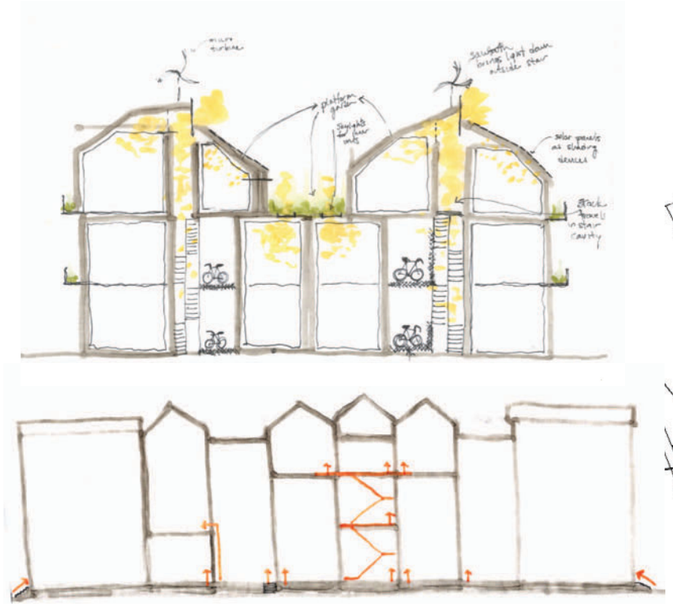
- Provide diverse and convenient housing

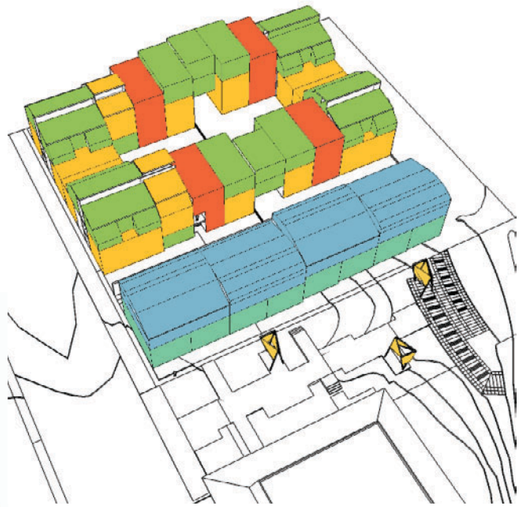
- Educate through natural resources

EAST SITE PROGRAM

- 2/3 mixed residential units at a minimum of 30 units/acre
- 1/3 retail and offices on the Adams street connector to the light rail
- Residential:
  - light on both sides
  - transparency between in and out
  - solar and wind energy
  - unit diversity
  - stack ventilation
  - bike and public transit focused
  - eyes on the street
  - inner courtyard oasis
- Retail
  - small boutique shops
  - close access amenities for residential
  - activated and supported by traffic from light rail
- Offices
  - incubator offices

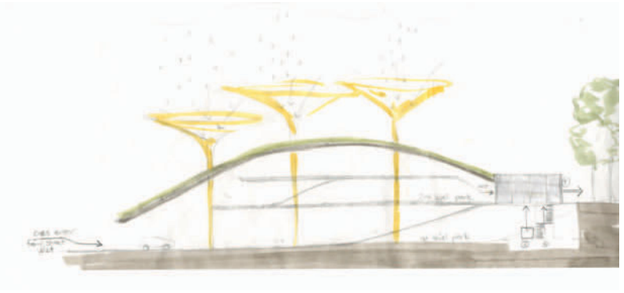




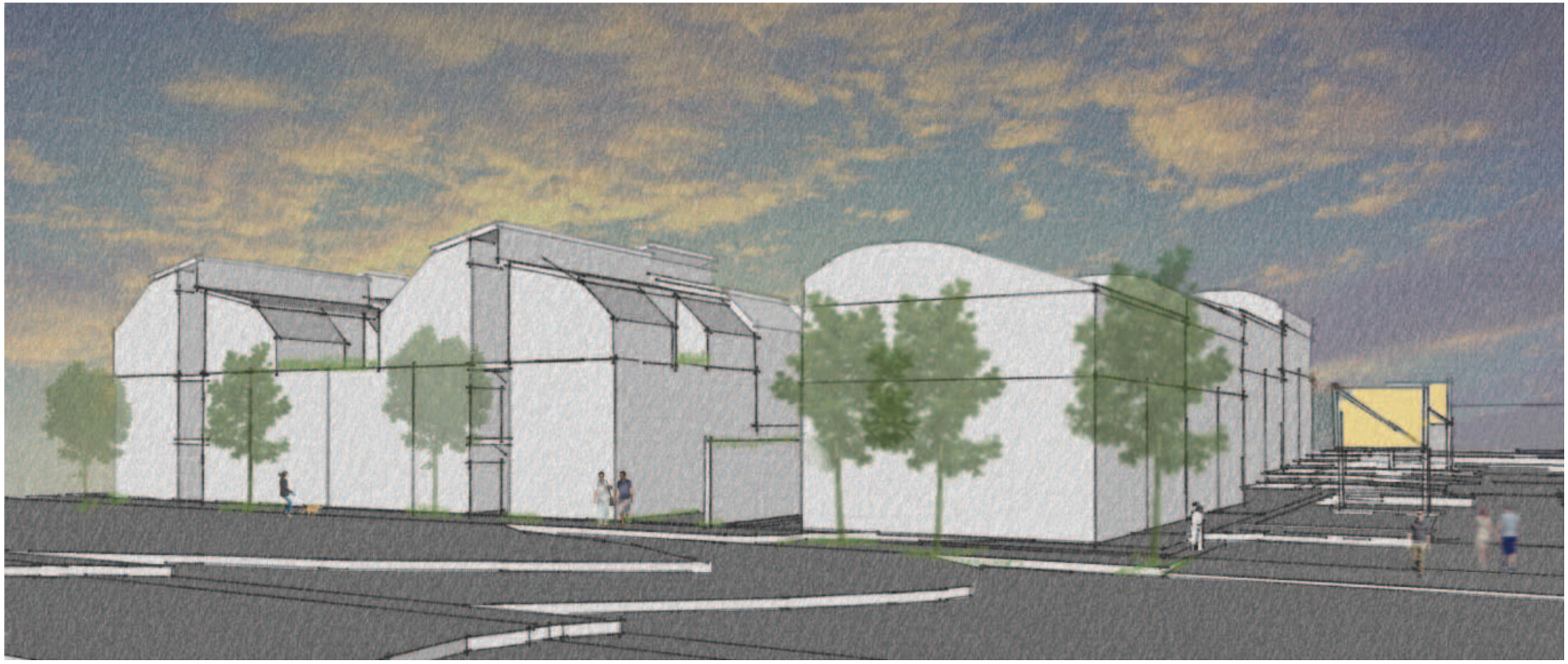


WEST RIVERSIDE SITE PROGRAM

- Destination node at the terminus of Adams Street
- Community gardens
- Native plant ecosystem boardwalk
- Water sculpture park
- Underground parking garage for residential with green roof blending into
- natural topography
- Education of water catchment systems-- sustainable water use and reuse
- Education on sustainable living through food geography education
- Education on native plants, ecosystems, and wetlands
- Education on sustainable transportation
- Elevate human footprint



EAST SITE PERSPECTIVE



South Downtown Plan: Mixed-Use (Retail, Office, Parking)

School: University of Oregon
Student: Jeff Toreson
Instructor: Nancy Cheng

What:

"A design proposal for the site adjacent to the future TRI-met Rail Stop and existing Main street in the South Downtown Milwaukie area."

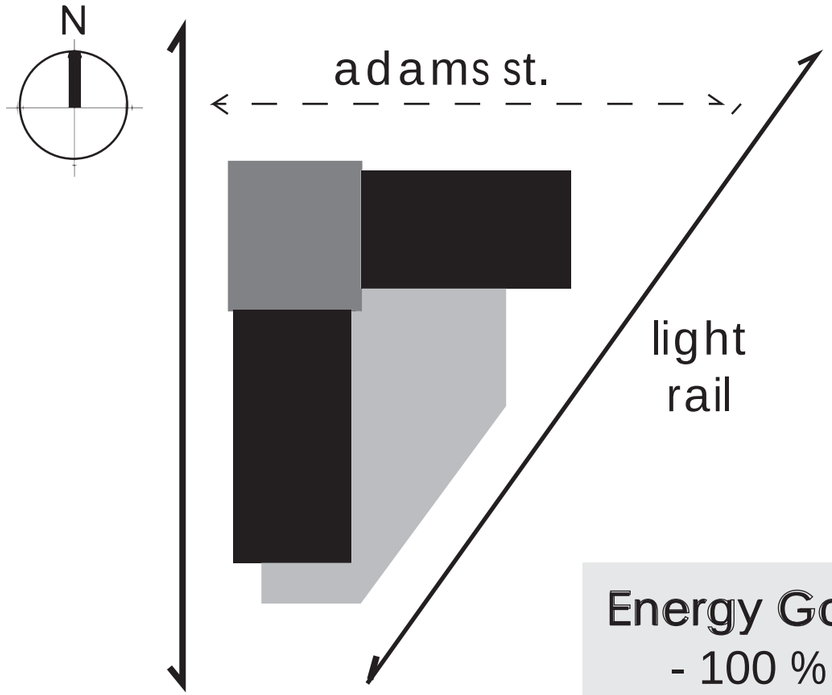
main street facade

Why:

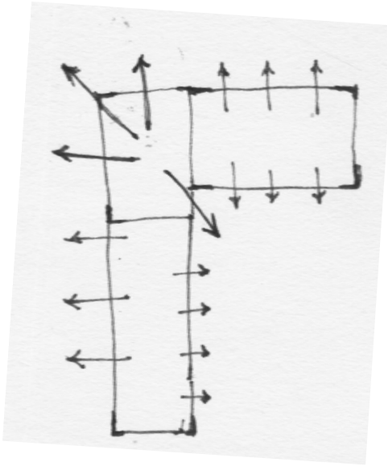
+ Attractive building at South Downtown edge
+ Revitalize area with **shops**, public spaces
+ Provide more **office spaces**
+ Tall building allowing for **river views**
+ Showcase **green design** at Light-Rail entry point

Project Goals:

- Sustainable structure
- Urban faces
- Busy corner zone
- Interactive core spaces

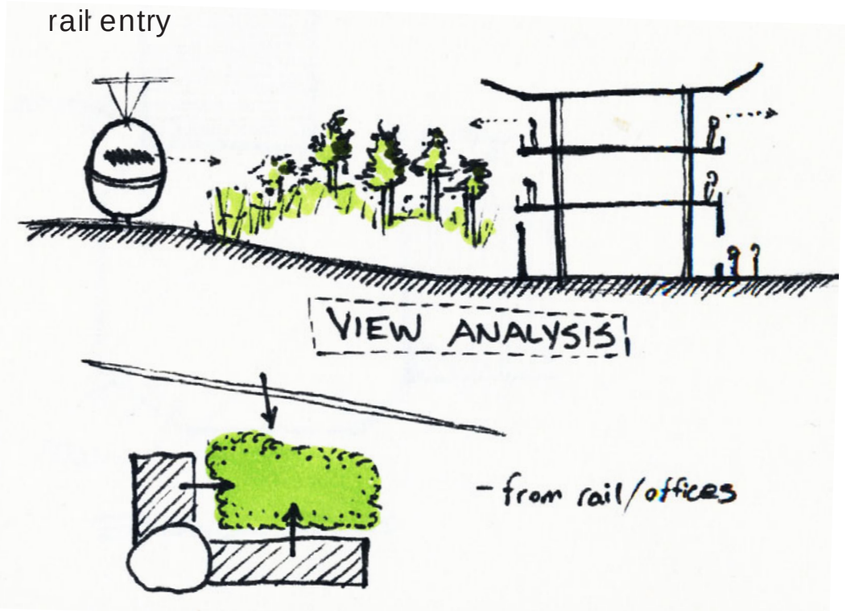


views:

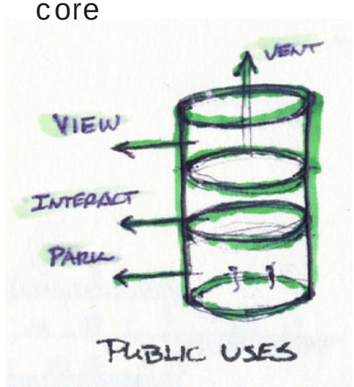


Design Concepts:

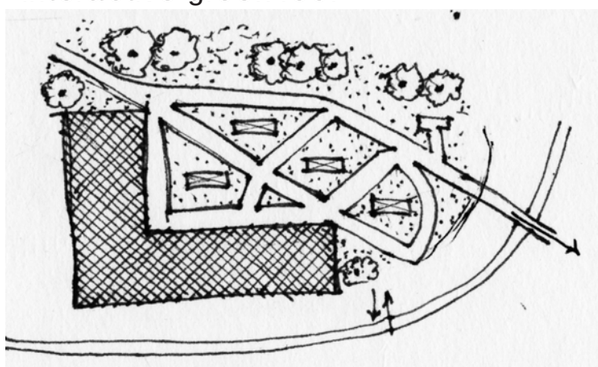
rail entry



core



interactive green roof



Energy Goals:

- 100 % Natural Daylighting
- Passive Cooling
- Stack Ventilation

Environmental Features:

+ Green Roofs
+ Living & Fixed Shading
+ Operable Windows
+ Rainwater Collection

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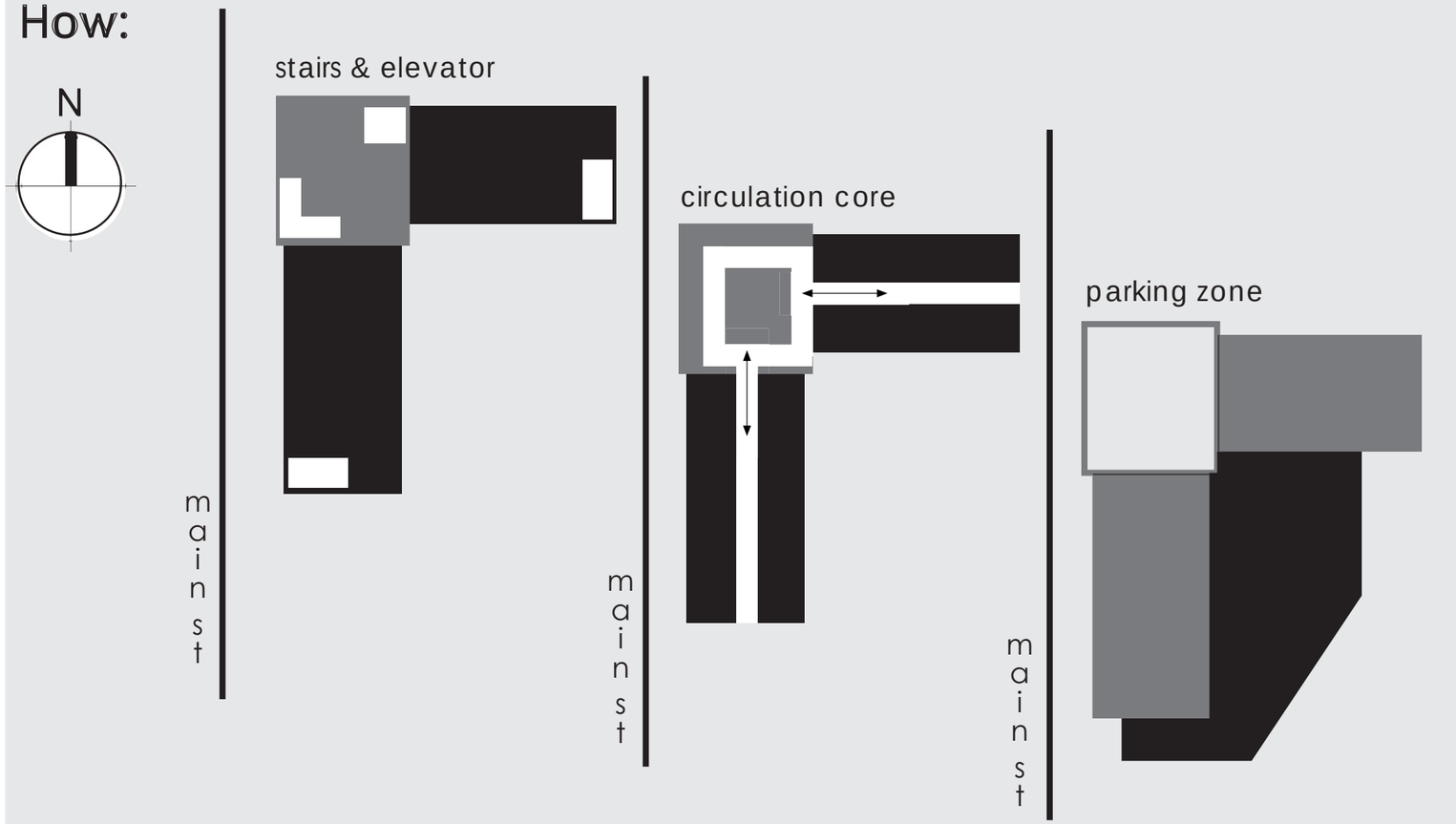
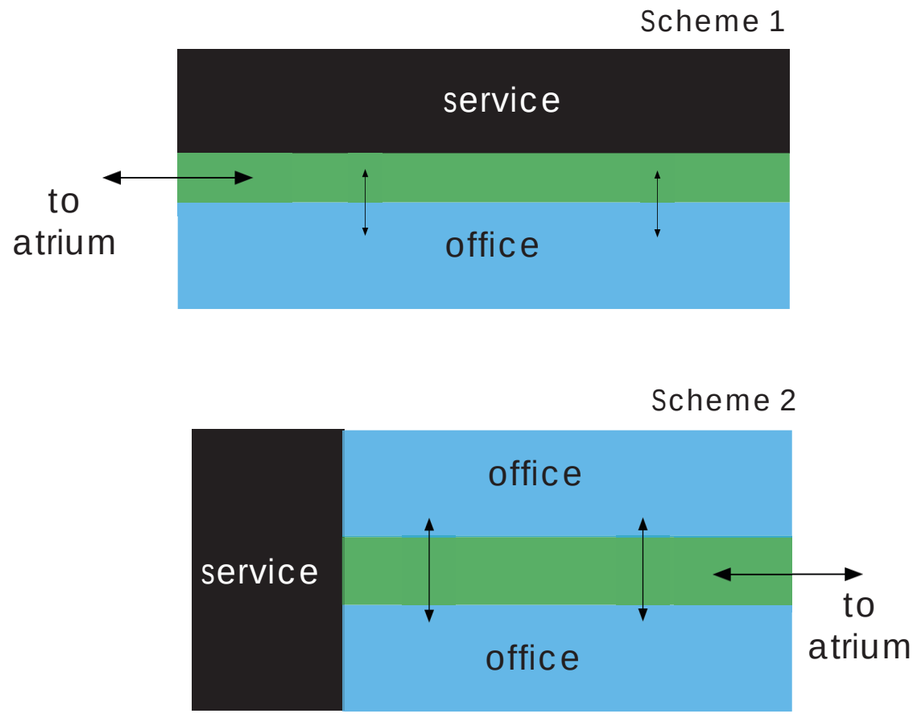
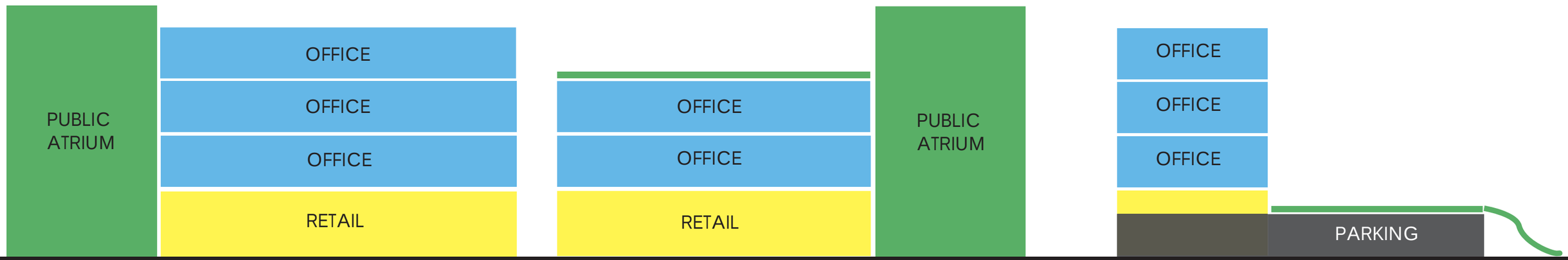
How:



Office Space:



Sectional Views: Mixed-Use



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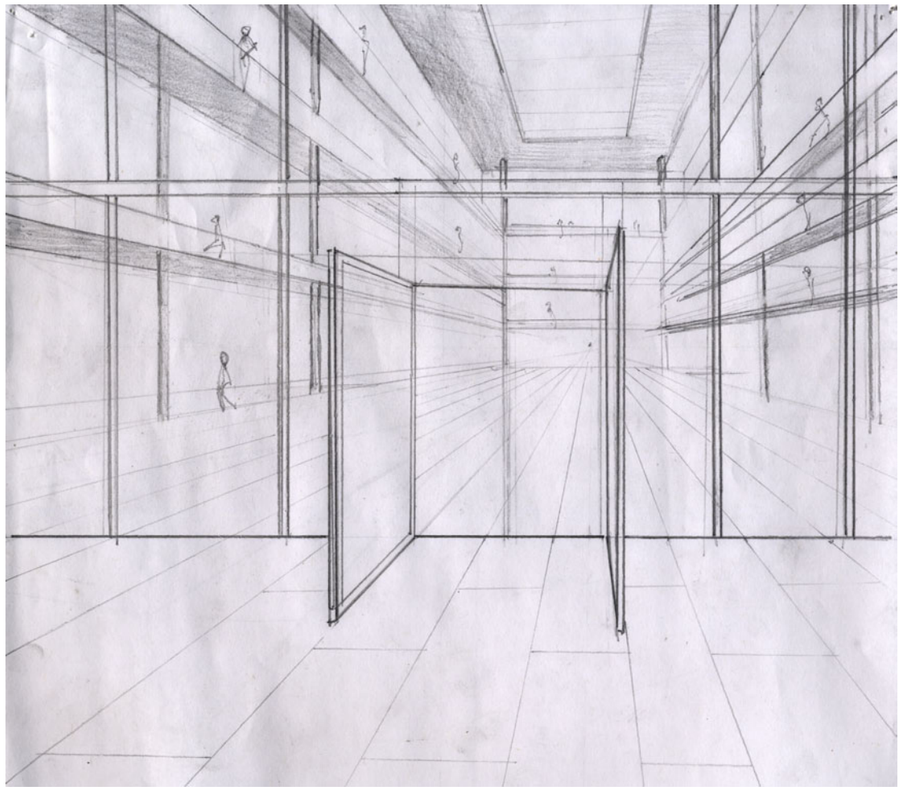
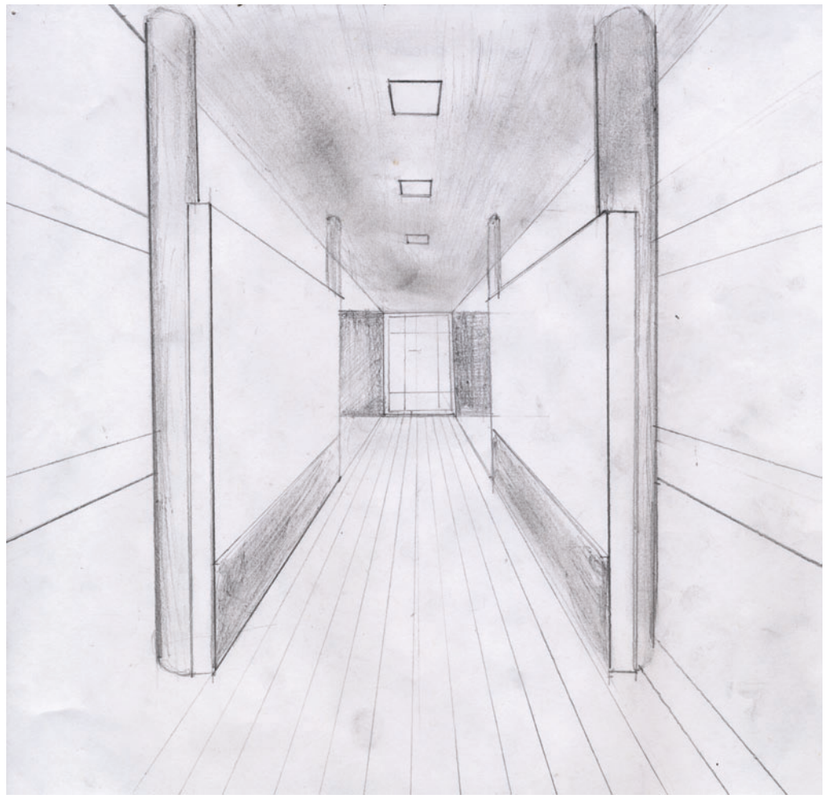
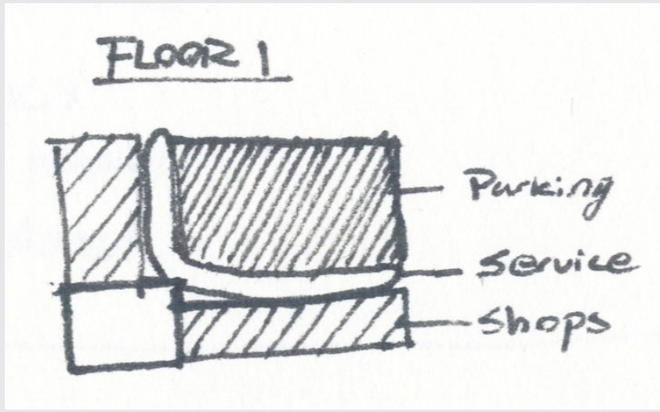
Perspective Vignette's:

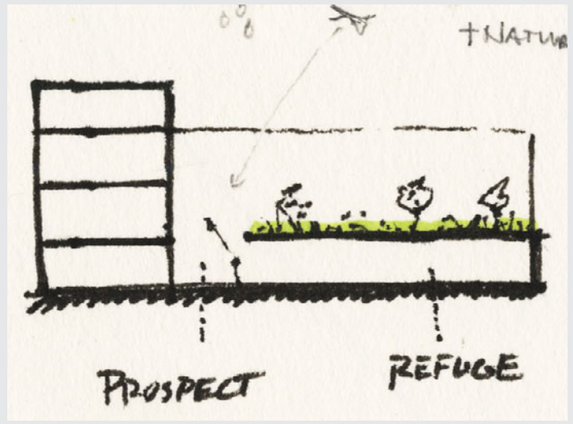


atrium entry



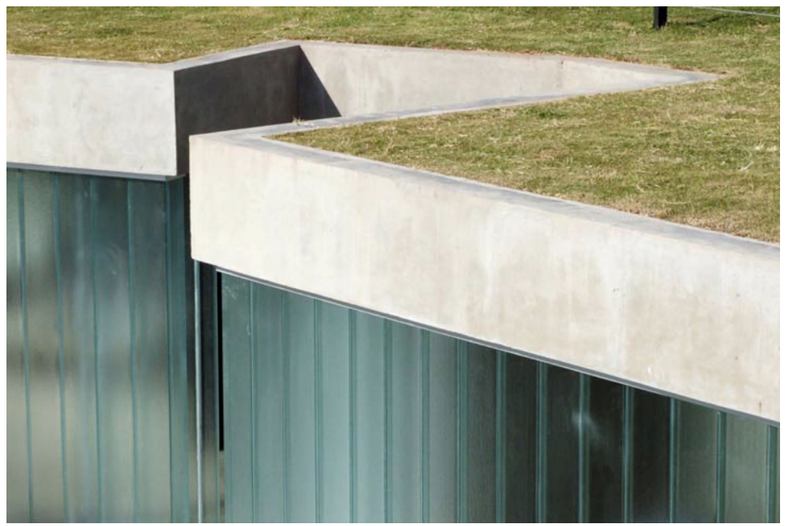
double-loaded corridor





Precedent Images:

"A lively green roof to showcase sustainability Milwaukie, OR"



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