

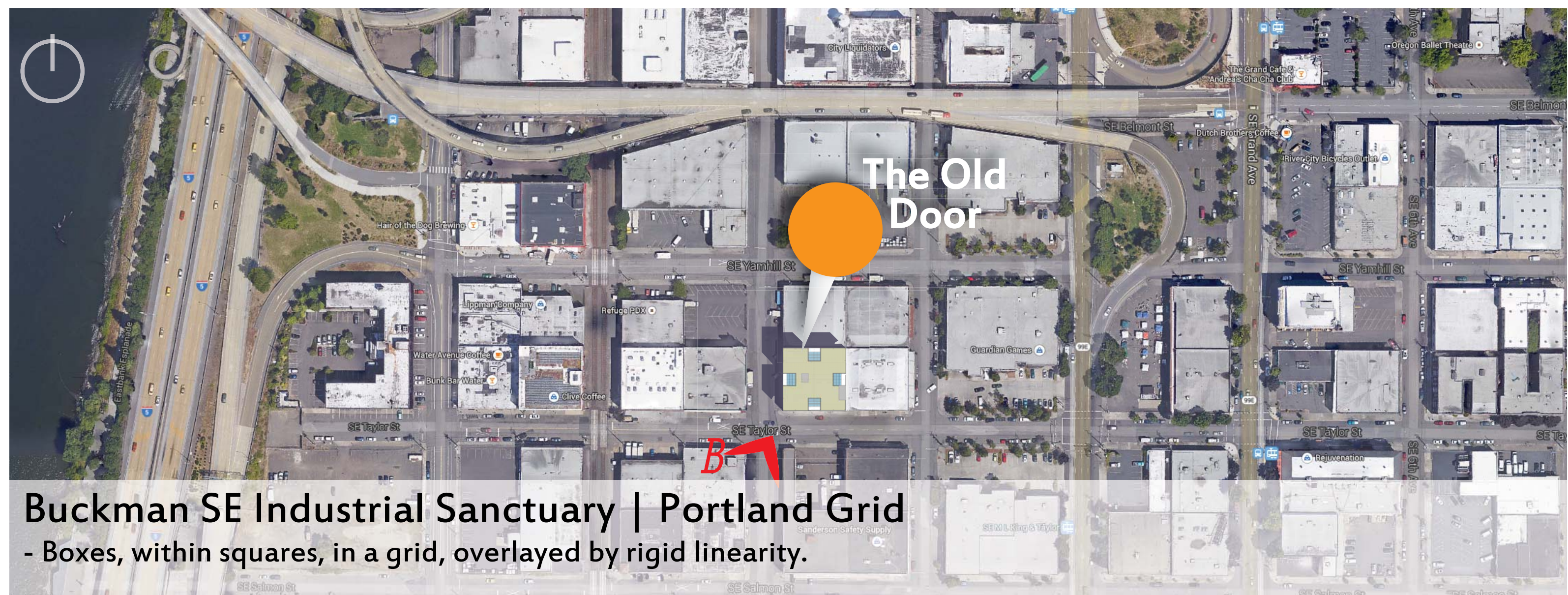
Fifth Floor Plan - 1/16" | Challenges
 - Equalization of employee interaction.
 - Window wedges compensate for future daylight issues from adjacent building development.

5

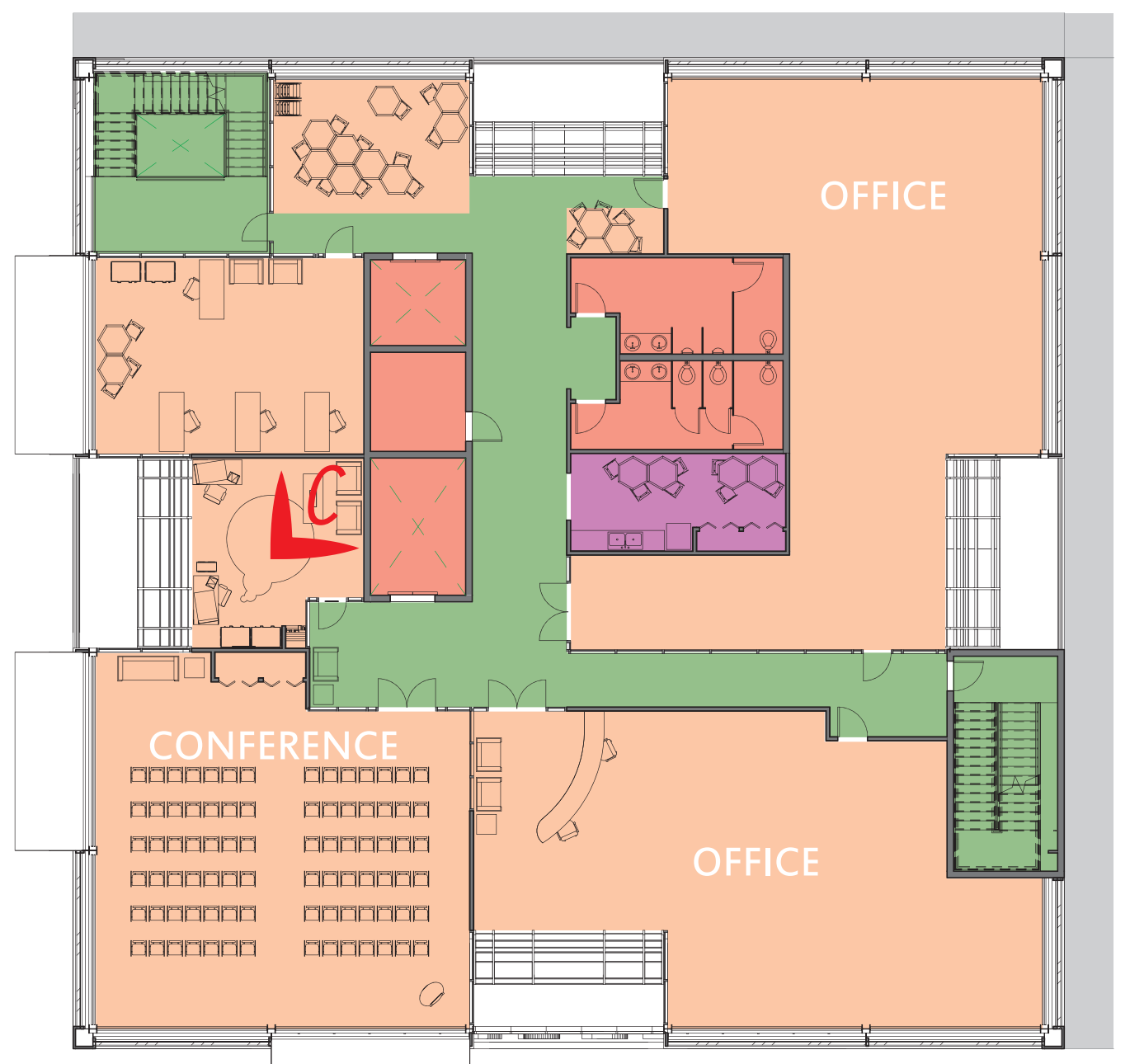


Exterior Perspective | Southeast Second Street
 - Adaptively re-used base, with new light frame structure above and fully user-operable metal panels for air.

A



Buckman SE Industrial Sanctuary | Portland Grid
 - Boxes, within squares, in a grid, overlaid by rigid linearity.



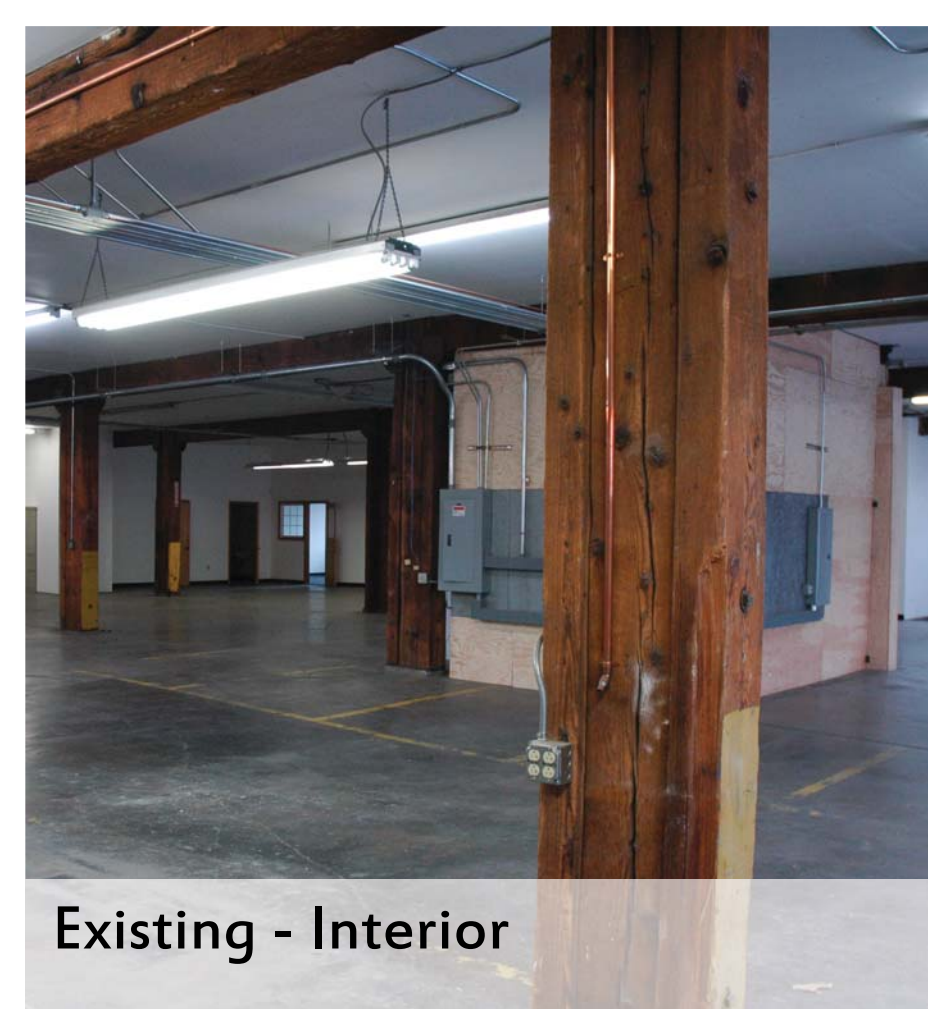
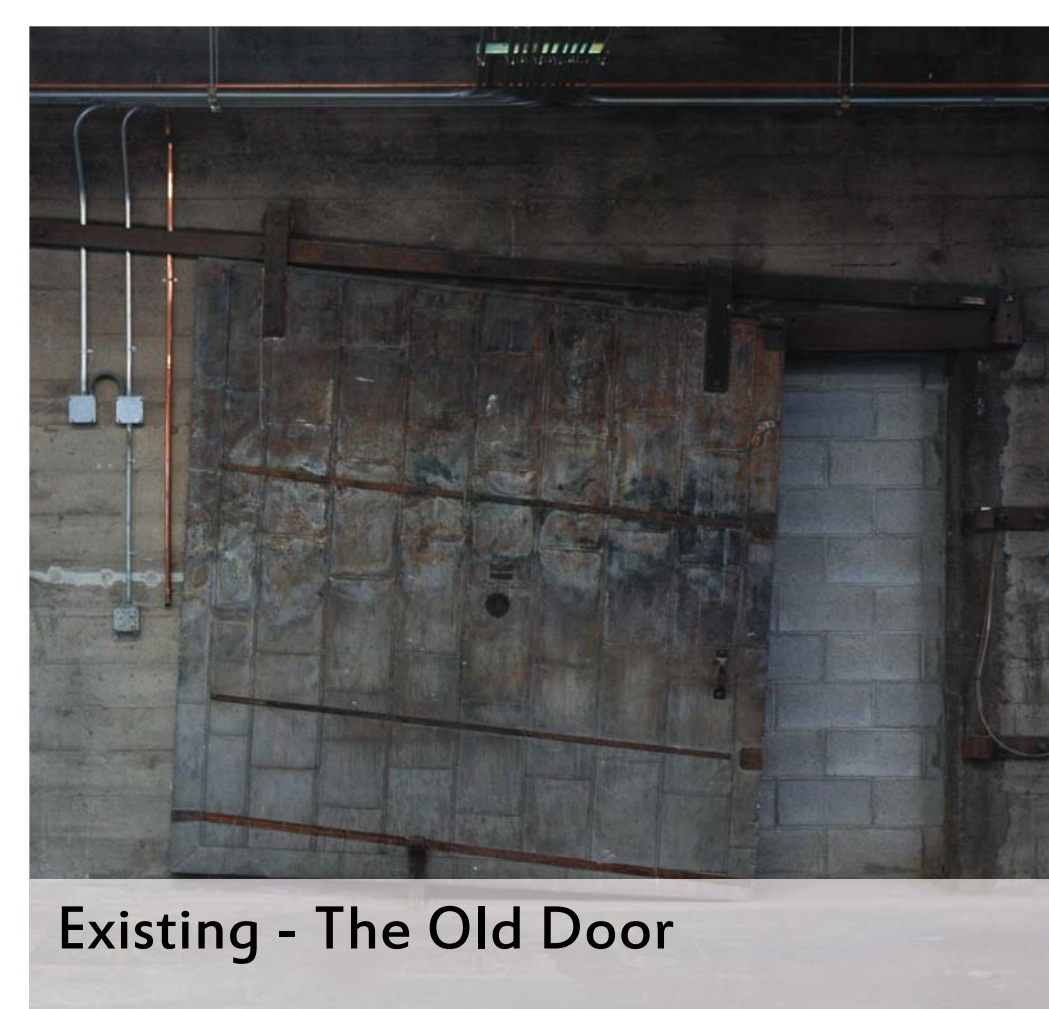
Fourth Floor Plan - 1/16" | Challenges
 - Drawing in daylight.
 - "MeetSPACE" at NW corners: Shared meeting and collaboration space free for public use - draws in patrons.

4



Interior Perspective | Main Floor 3rd Space
 - Re-used interior timber columns and dock-level concrete slab with some saw-cut slab work.

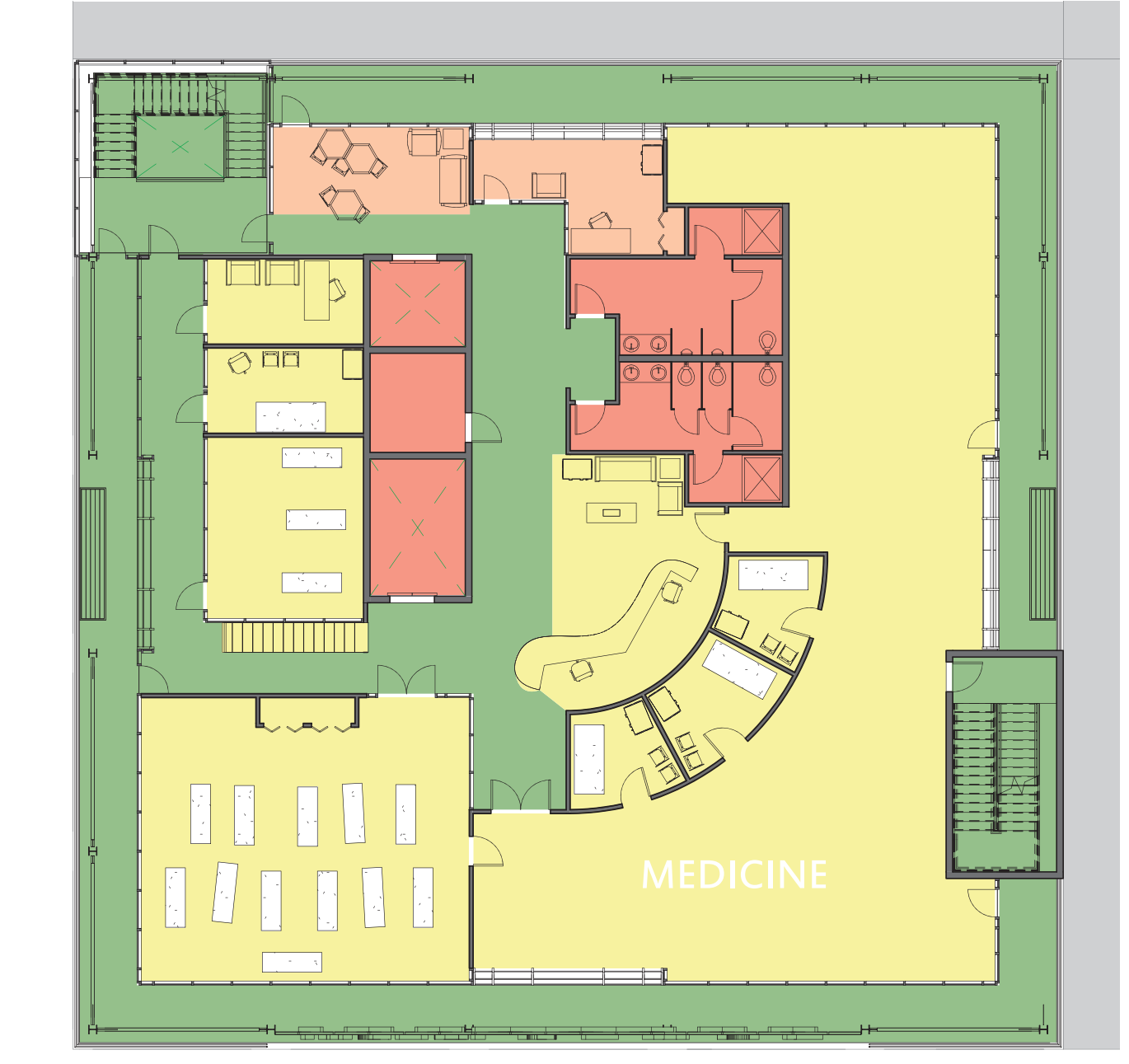
B



Existing - 217 SE Taylor St, Portland

Existing - The Old Door

Existing - Interior



Third Floor Plan - 1/16" | Challenges
 - Building above existing building, and interface.
 - Spacial arrangement for medical healing tenant.
 - Fresh-air balcony on third floor only.

3

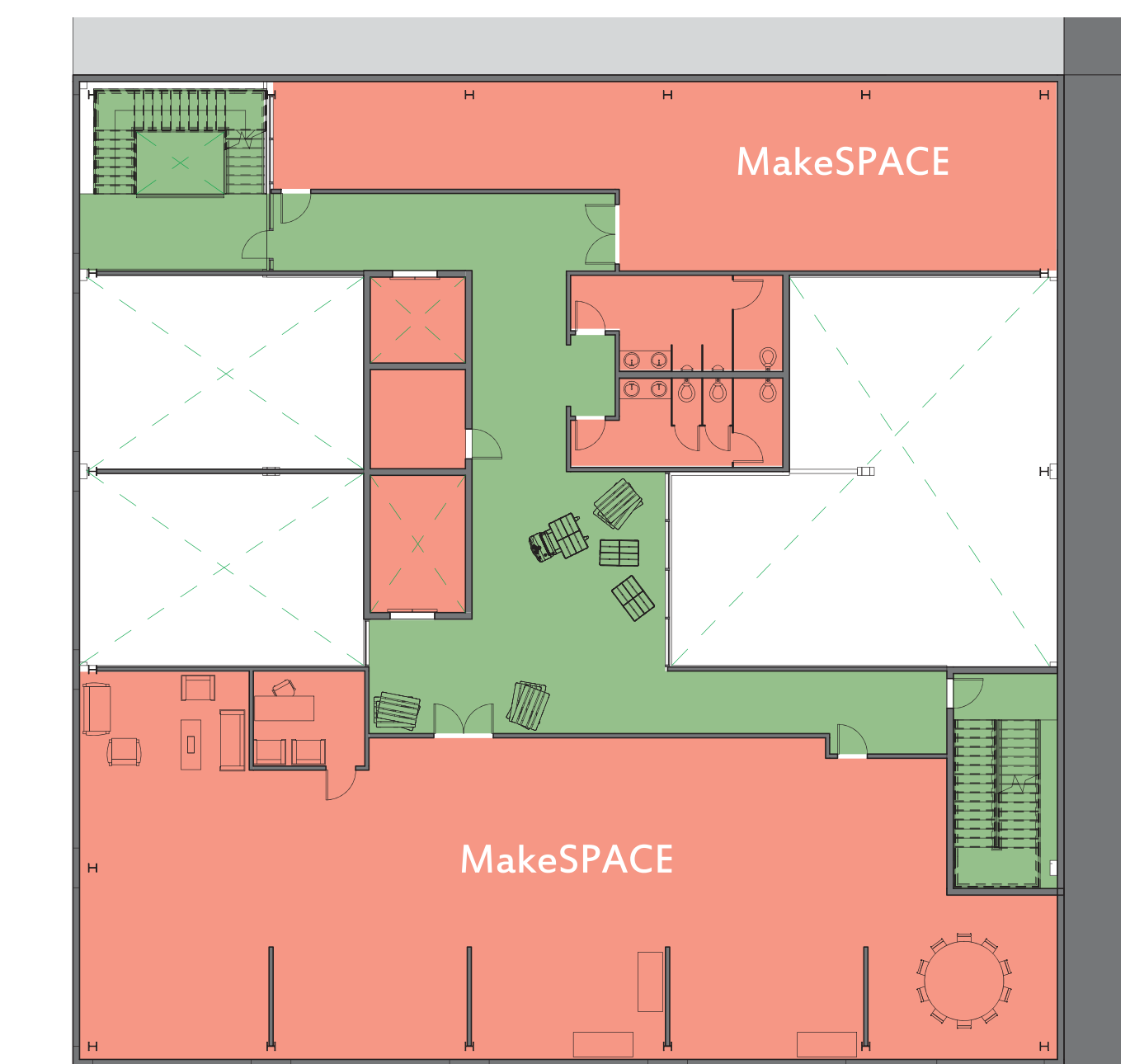


Interior Perspective | Fourth Floor West Wedge Office
 - New upper floors are light and airy. Window wedges allow daylight to penetrate deep into building.

C

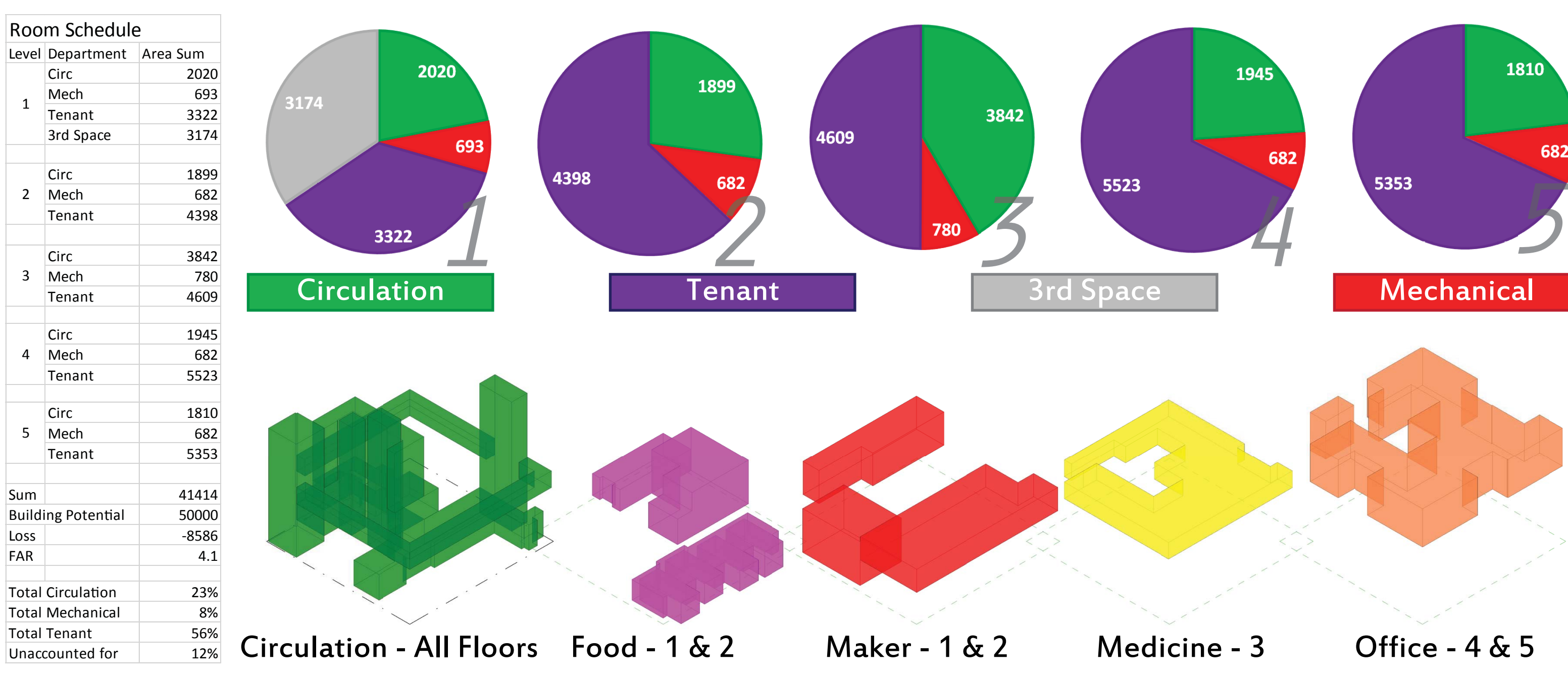


Ground Floor Plan - 1/8" | Challenges
 - New interior wall partitions within the existing timber grid structure.
 - New stair and elevator cores added for seismic strength and upper floor support.
 - New entry ADA access.



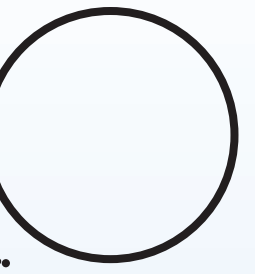
Second Floor Plan - 1/16" | Challenges
 - New durable concrete flooring for industrial use.
 - Heavy duty machinery, high ceilings, and flexibility.

2



Diagrammatic Program Spaces
 - Masses above share similar spaces to mitigate noise, smells, and the industrial processes so close to work places that require quiet.

Circulation - All Floors | Food - 1 & 2 | Maker - 1 & 2 | Medicine - 3 | Office - 4 & 5



60 Warren St, New York, New York

- 'Piggy-back' construction, built atop existing.
- Perfect for a city where space is limited.
- This particular property may not resolve housing issues.

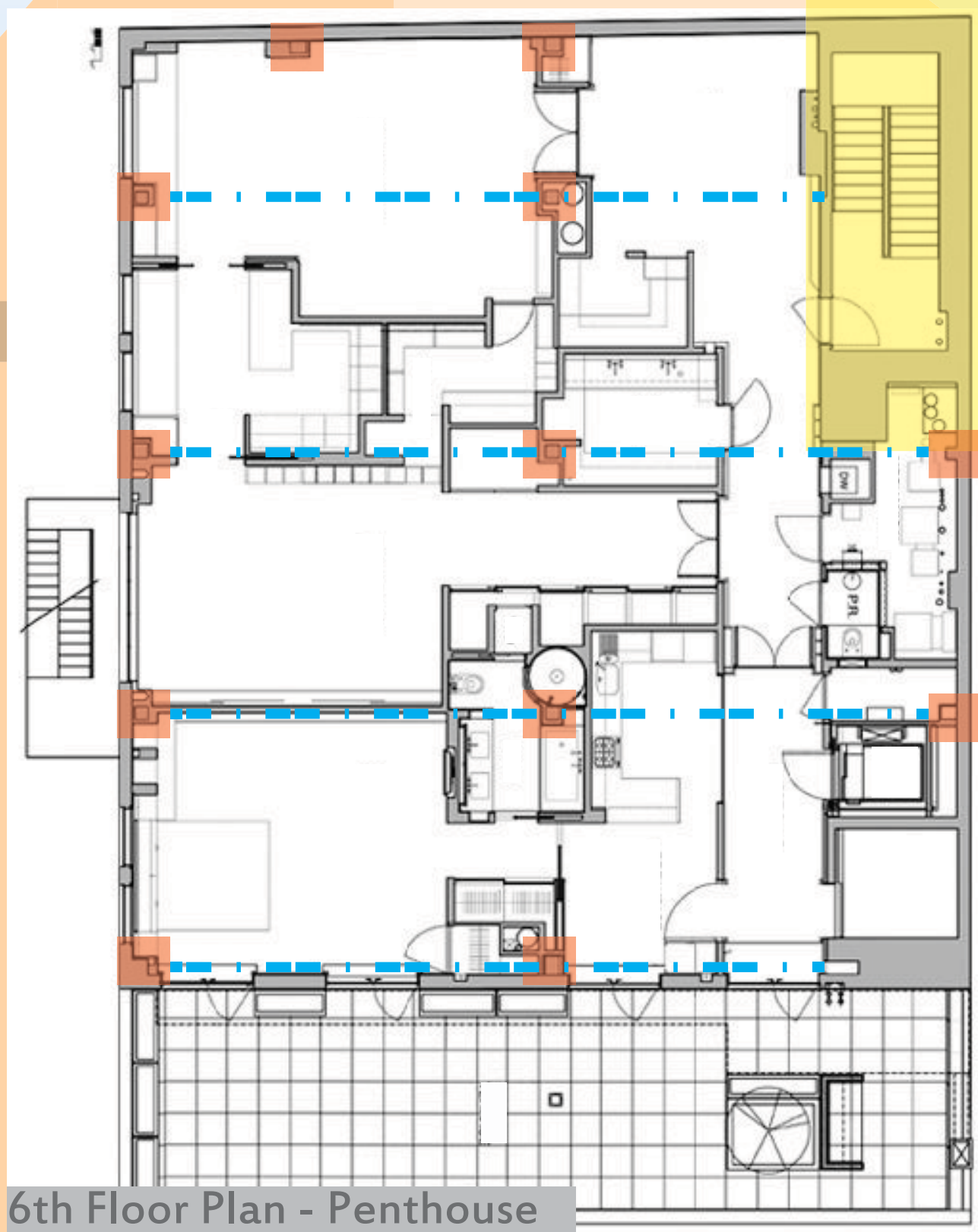
Concrete Stair Support.

Exterior steel support spaced at 16.25' around exterior.

26' Floor spanning members.

19 Rooms
 10,900sf
 \$24,500,000
 (\$11,057/mo)

Typ. 2bed 2bath
 1,350sf
 \$2,500,000



6th Floor Plan - Penthouse



Aerial Plan



Bird's Perspective



Street View

The Chai Cart: Wholesome Goodness in a Cup San Francisco, California

- Limited product, space, client reception and working area.
- Highly mobile, and can fit into a typical parking space.
- Customer may make intimate connection with cart owner.

192sf ground area (more for carts that are closer to "food truck" size).

Owner has a hard time taking vacation due to high customer demand.

Tires go flat.

Ingredients may be acquired from local businesses.



Products



Customer Perspective



Bird's Perspective



Street View

Five Story Atrium, White Stag

70 NW Couch St, Portland, Oregon

- Conceptually a perfect way to penetrate daylight into darker, lower, window-less spaces.
- Can be utilized as water collection for cistern device.

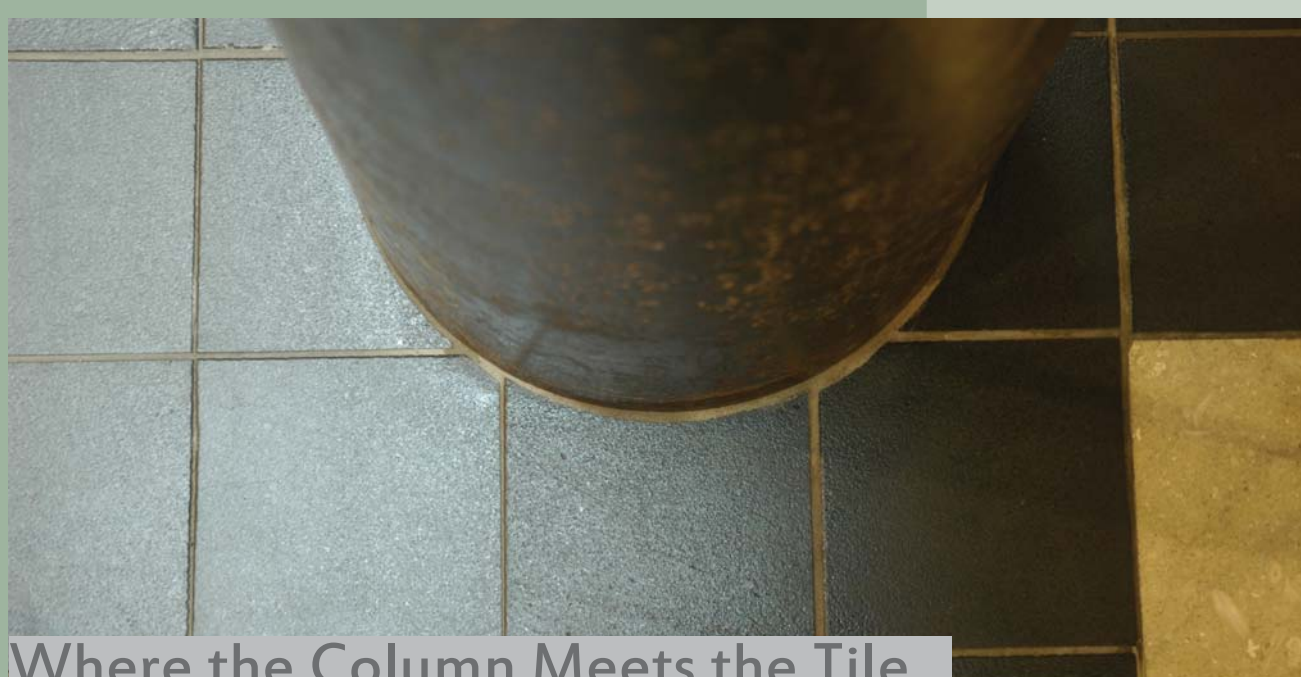
Daylight from blue sky (8,000 footcandles) and overcast clouds (1,300fc) is sufficient for working conditions. But brick only reflects 35%.

Artificial assist lighting is inefficient.

Tall spaces can be highly reverberant.



Pigeon and Leaf Netting



Where the Column Meets the Tile



Interior Street Perspective



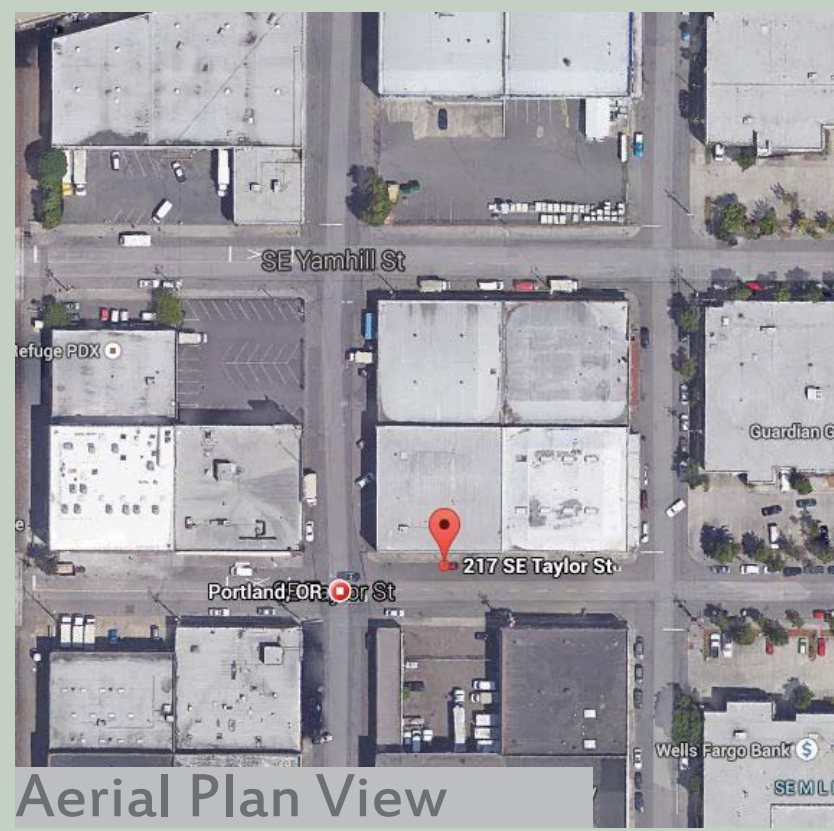
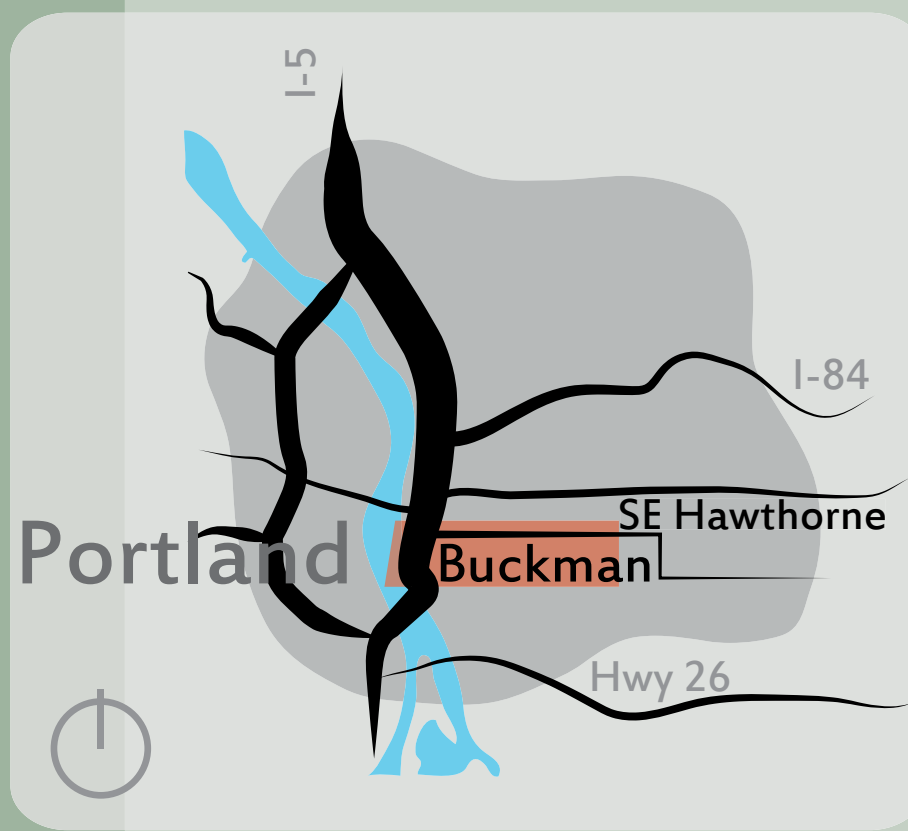
Fire Safety Requirement



Interior Approach on Overcast Day

Project Location: 217 SE Taylor St Portland, Oregon

- Industrial site and context.
- NE Second Ave as freight truck access.
- NE Taylor St as pedestrian and car access.
- View of Portland Downtown city 6° South of West.
- Two-three story predominant surrounding building height.



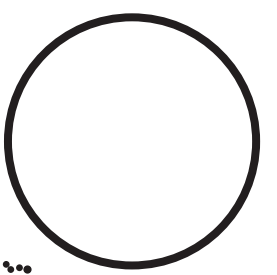
Aerial Plan View



Street View

Sources:

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- Hevel, D. (1999). Adding New Floors Atop Old Buildings. The New York Times, 1-3. Retrieved Oct 28, 2014, from http://www.nytimes.com/1999/10/24/realestate/adding-new-floors-atop-old-buildings.html
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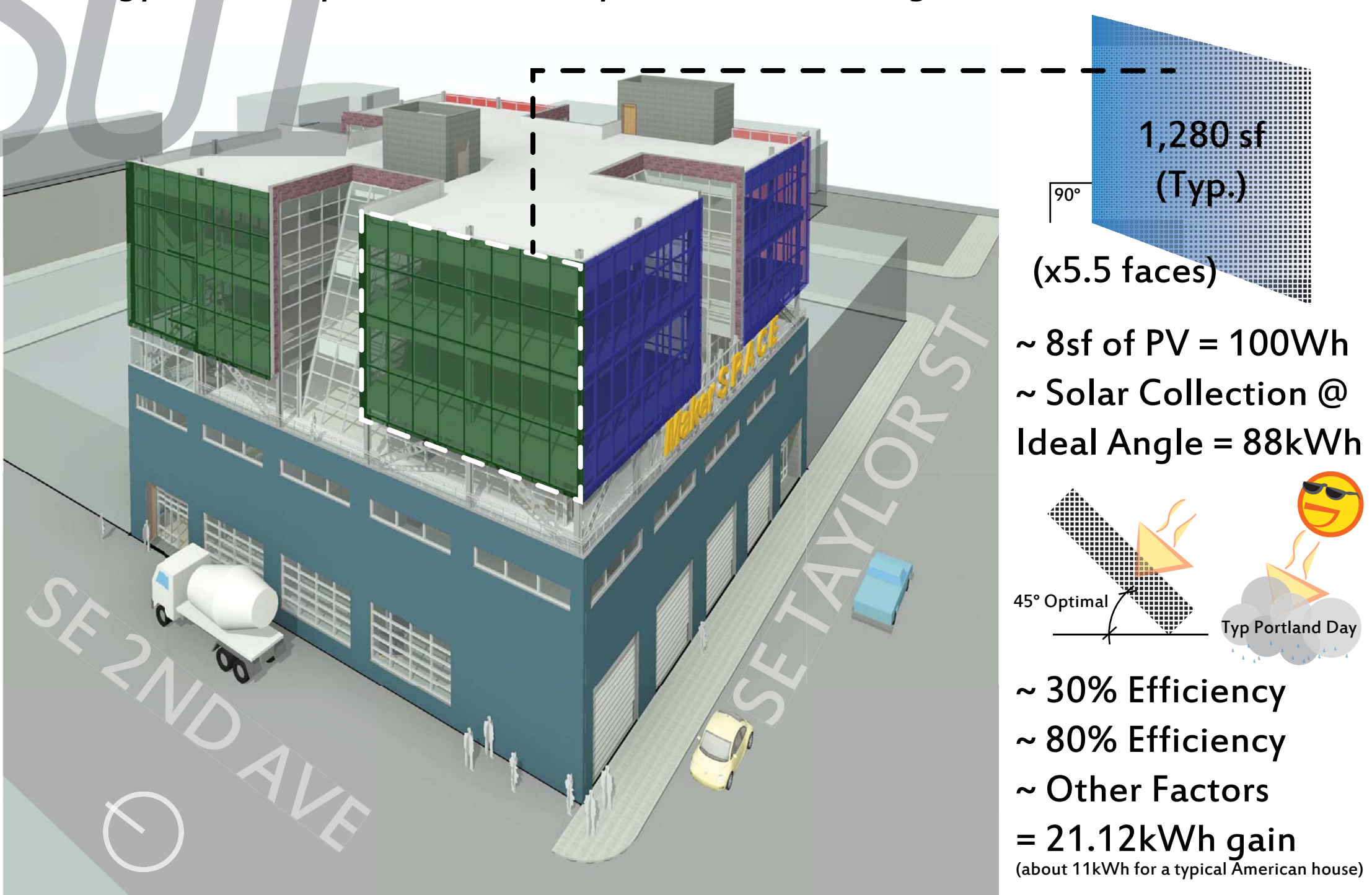
Sustainability

As little material as possible was used in the making of this poster. This poster has an embodied energy value of 0.18MJ (megajoules). Every object in the universe is composed of a set amount of energy, which may be measured, and given a value. With this logic in mind, we may realize that small shifts in consumption may have a tremendous effect on energy use.

- Su1 (Sustainability Unit 1): Photovoltaic | Buildings are pounded with solar energy throughout the day - let us use it!
- Su2 : Water Resourcing | Portland receives between 20 and 70 inches of precipitation per year. Like... a trillion-trillion rain drops.
- Su3: Waste Resourcing | Americans use 106gal of water per day on average. A large percentage of that goes right down the toilet.
- Su4: Embodied Material Energy | Demolition & building new = existing building energy value + new construction.

BIPV - Exchange the Brick Brutalist facade for Colored Photovoltaic Glazing

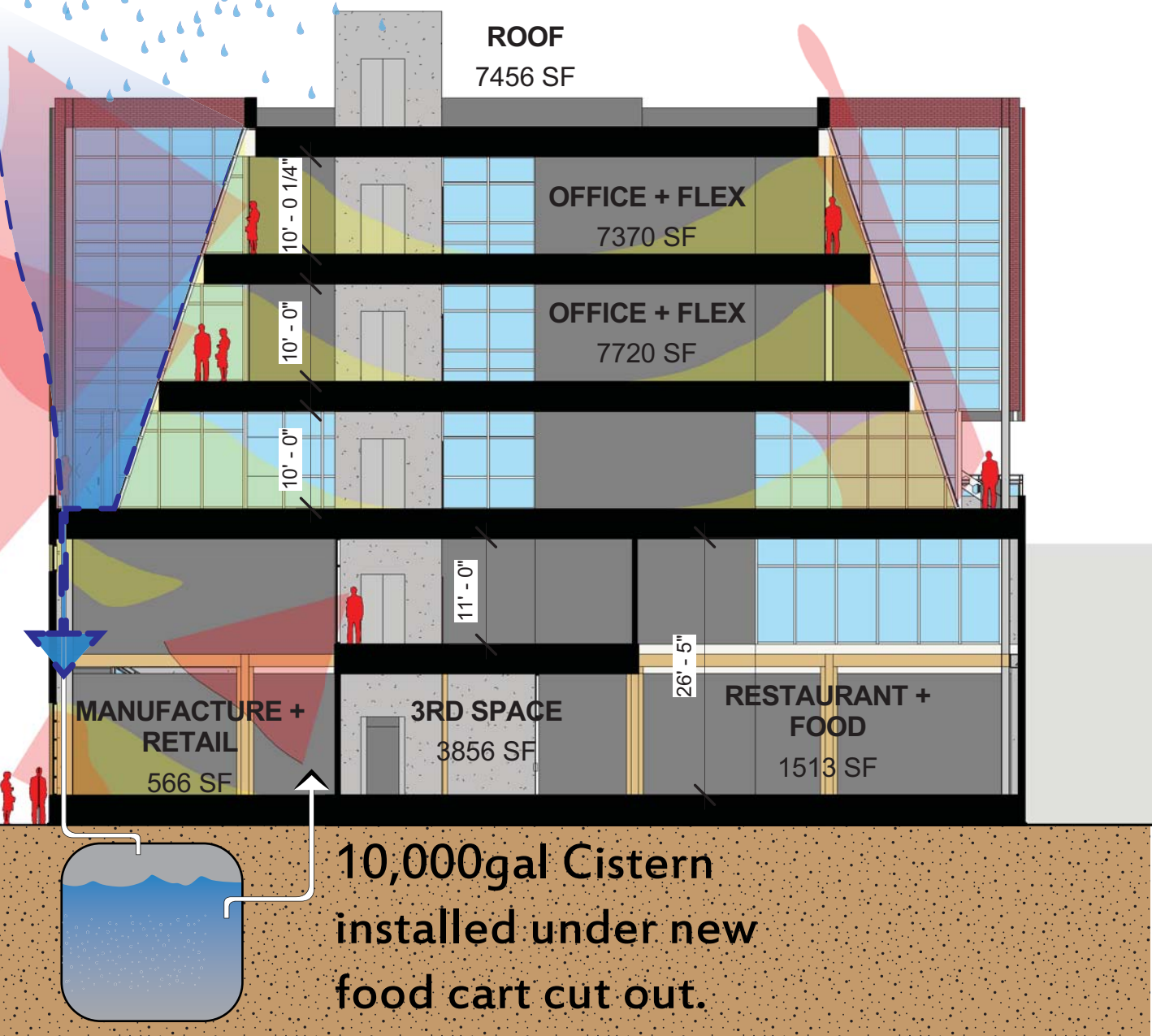
- Energy offset may be unreasonably low, due to 90 degree orientation.



Cistern = 10,000gal Considerations

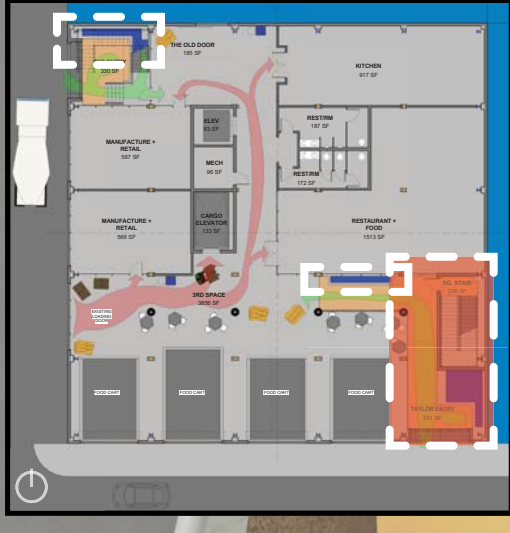
- Potential Collection = 100kga
- ~ 6 Toilets on each floor (30) 1.5gal/flush
- ~ 4 Sinks each floor (20) 1gal/min
- ~ Kitchenettes
- ~ Industrial Water Use
- ~ Food Cart Industrial Kitchen

Estimated number of daily occupants and demand to be determined in subsequent design.



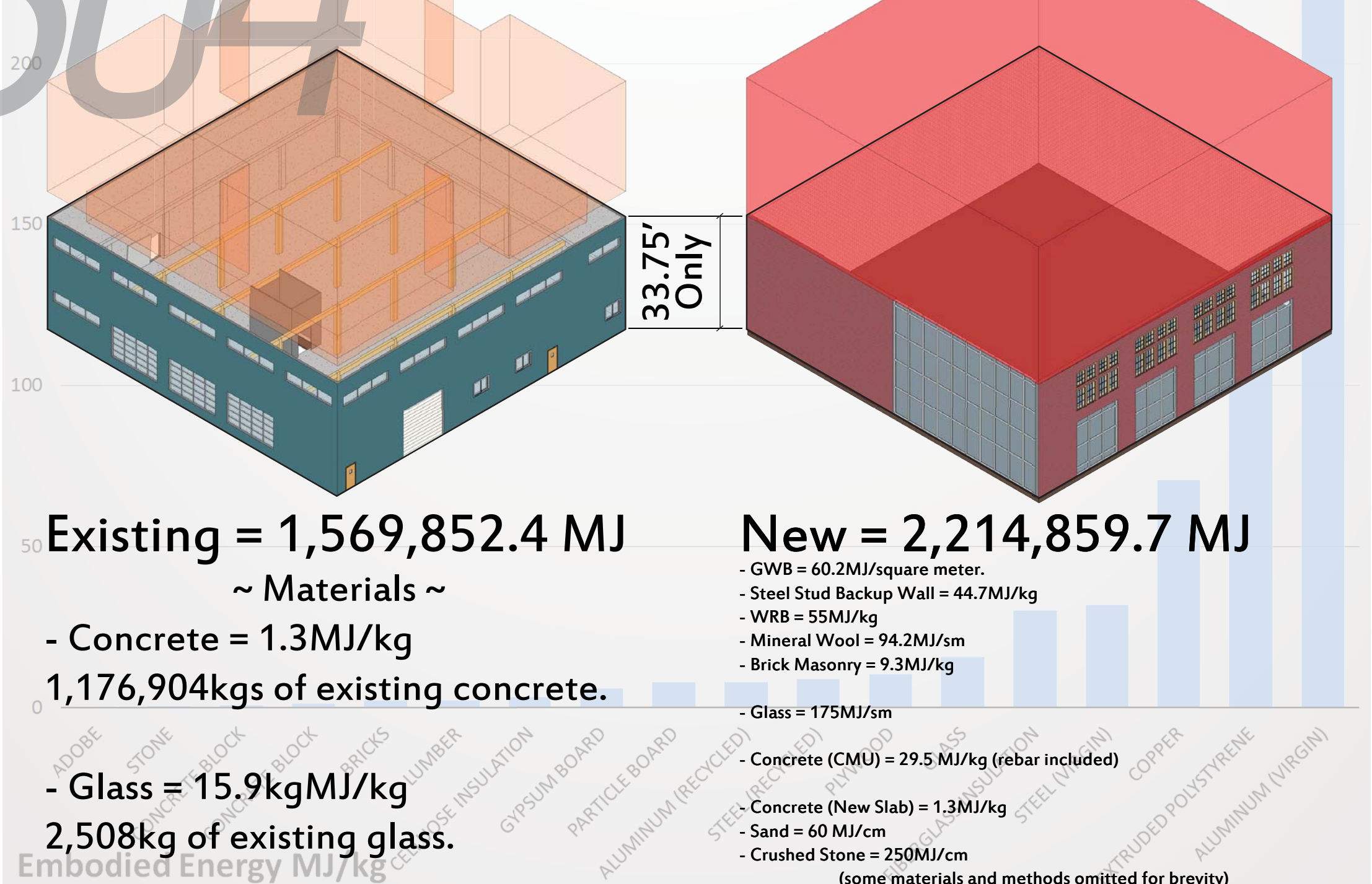
Living Machine

- ~ Located at Entries
- ~ Serve as Welcome
- ~ Seating
- ~ Refuge from the Eastside Industrial Sanctuary.
- ~ Partial Building Capacity: 2500gpd (gallon/day)



Embodied Energy Comparison - Existing vs. New Construction

If a new building occupies the same site, of matching height, it will equal both the existing building's embodied energy + new construction = 3,784,712.1 Megajoules



Sources:
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