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.

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.

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.

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

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

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

Room Schedule
<table>
<thead>
<tr>
<th>Level</th>
<th>Department</th>
<th>Area</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Circ</td>
<td>1945</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Mech</td>
<td>682</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Tenant</td>
<td>5523</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Circ</td>
<td>1810</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mech</td>
<td>682</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tenant</td>
<td>5353</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Circ</td>
<td>3842</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Mech</td>
<td>780</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Tenant</td>
<td>4609</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Circ</td>
<td>1899</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mech</td>
<td>682</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tenant</td>
<td>4398</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Circ</td>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mech</td>
<td>693</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tenant</td>
<td>3322</td>
<td></td>
</tr>
</tbody>
</table>

Sum 41414
Building Potential 50000
Loss -8586
FAR 4.1
Total Circulation 23%
Total Mechanical 8%
Total Tenant 56%
Unaccounted for 12%

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

The Old Door

Existing - 217 SE Taylor St, Portland
Existing - The Old Door
Existing - Interior
3 Precedents

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

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 (size 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.

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 (1300fc) is sufficient for working conditions. But brick only reflects 35%.

Artificial assist lighting is inefficient.

Tall spaces can be highly reverberant.

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.
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 106 gallons 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.

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.


Sources:

BIPV - Exchanging the Brick Brutalist facade for Colored Photovoltaic Glazing

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

BIPV - Exchange the Brick Brutalist facade for Colored Photovoltaic Glazing

Cistern = 10,000gal

Potential Collection = 100kga

1.5gal/flush

~ 6 Toilets on each floor (30)

~ 4 Sinks each floor (20)

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)

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)

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)

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)

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)

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)

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