

Re-
fining
PDX

The Portland Experimental District

A RotoLab Partnership Solution

PD(X) PORTLAND EXPERIMENTAL DISTRICT

PORTLAND, OREGON

A new city district devoted to innovation in the creative arts, PD(X) was designed to be a modular, interim use program, occupying the urban interstitial spaces prior to redevelopment.

This design was shortlisted in a competition to redesign the area of downtown Portland immediately adjacent to the Keller Music Hall and containing the Halprin Sequence, a series of parks that connect different areas of this city.

Our design repurposed parking garages, rooftops, and unused urban space to create a district for innovation specifically focused on the creative arts and media.

RELEVANCE/ ROLE OF FIRM	Entertainment destination, multi-media & immersive experiences, performing arts, community building, concert area. Urban Design, Masterplanning, Architectural Design, Technological Design, Market Analysis, Narrative Development, Worldbuilding
STATUS	Concept
SIZE	Urban Scheme
CLIENT	Keller Music Hall Competition



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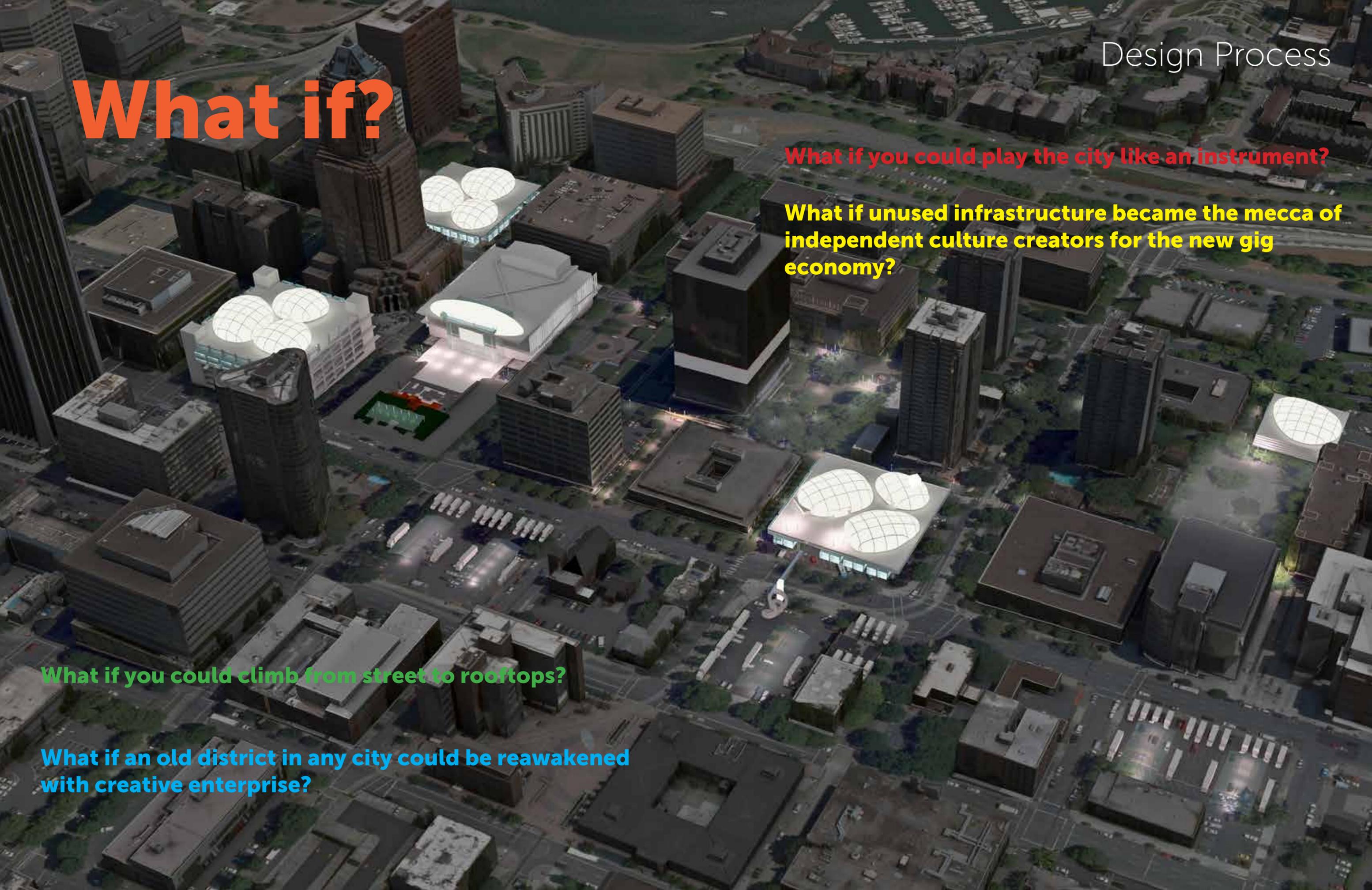
What if?

What if you could play the city like an instrument?

What if unused infrastructure became the mecca of independent culture creators for the new gig economy?

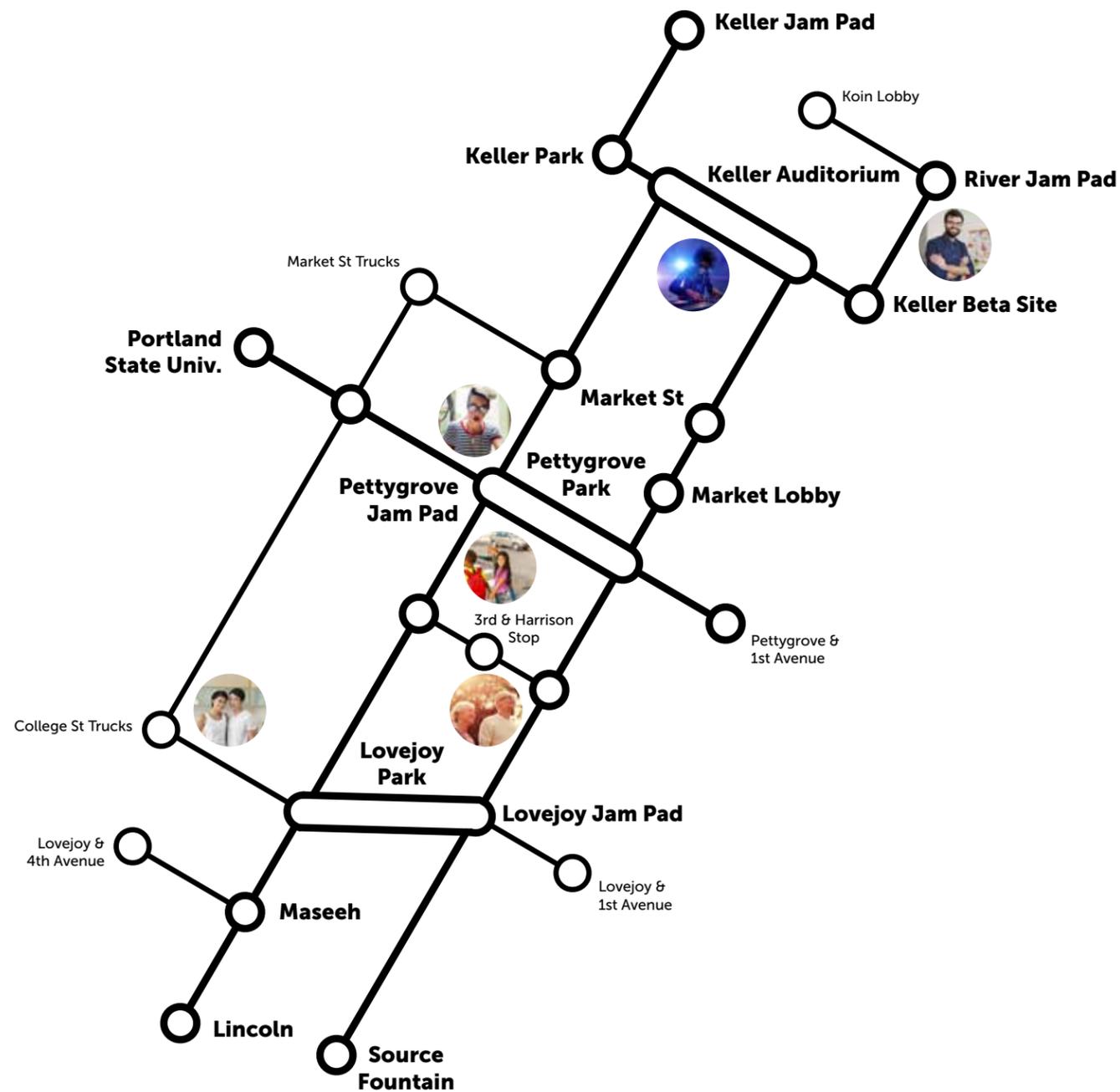
What if you could climb from street to rooftops?

What if an old district in any city could be reawakened with creative enterprise?



Characters

In order to best approximate all the different ways the new Keller District could be used, we chose to explore the project from the perspectives of six inhabitants.



Design Process



Max & Francine
Married 40 Years

Max and Francine enjoy having a place to walk that is clean and safe. They enjoy the music and comedy performances along their path.

Their favorite is when they catch the group with dueling harmonicas. When this happens they'll often stay - dancing softly and digging their toes into the damp earth beneath their feet.



THIXO
Virtuoso Performer

THIXO, world renowned DJ, Electronic producer and light artist becomes the first performer to link the entire sequence together in a concert celebrating life and the common bond that binds all humans.



Coco
Entrepreneur

Coco is a Portland State University senior where she is studying performance art and technology. A budding entrepreneur she is starting a new company that develops wearable technology to respond to emotion.

She is looking for a coworking space and is introduced to the Jam Pads by a professor who mentors there.



Aiyanna
District Resident

Aiyanna is the daughter of the Joe, the coffee cart man. Her Dad brings his java cart to all Keller Performances and agrees to add sensors to his cart to capture human coffee cart chatter.

She spends her childhood playing at the "Sequence" with her friends and goes on to be the areas most revered artist.



Derek
Engineer

Derek is mechanical engineering professor at portland state and the director of the Sound Lab - a makerspace for performers interested in prepared and custom built instruments.



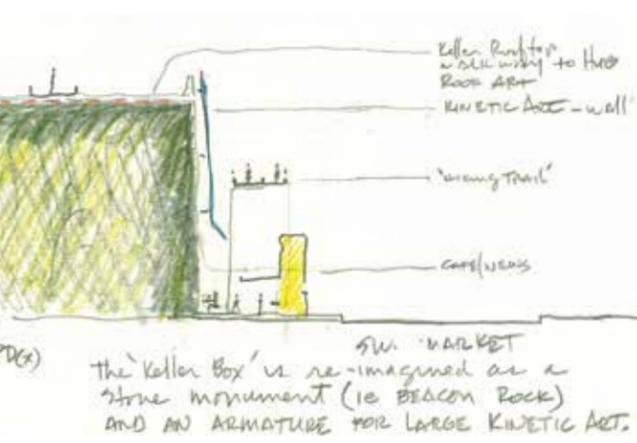
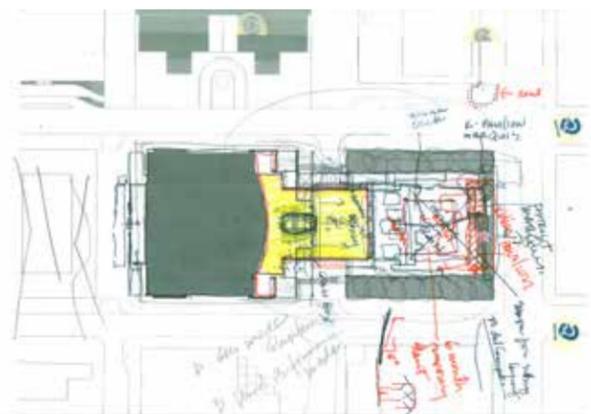
Soo & Sonny
Restauranteurs

Soo and Sonny are chefs who met when they were young exchange students visiting Portland and discovered Keller performing as a culinary jam festival.

They now operate their new restaurant *Fleur* out of the district. They are excited about organizing a cultural jam for edible flowers in Keller's enchanted urban rooftop.

Jumpstart PD(x)

The Portland Experimental District



"How do we turn the district into a Jam Space that jumpstarts culture and the arts?"

Connectivity - Inside to Outside

Promotion, realtime presentations, and integrating outside activity with inside activity are key aspects of our approach. Concerts and theatrical events are accessible through realtime transmission to the exterior enlivening the plaza and integrating the parks along Halperin's Sequence.

This expands the size of the audience to any other public urban space where locals already gather in large numbers, along the river, at Portland State University, or in the other parks in the Sequence. Keller Park, Plaza, and lobby will be connected and the lobby space will be enlarged.

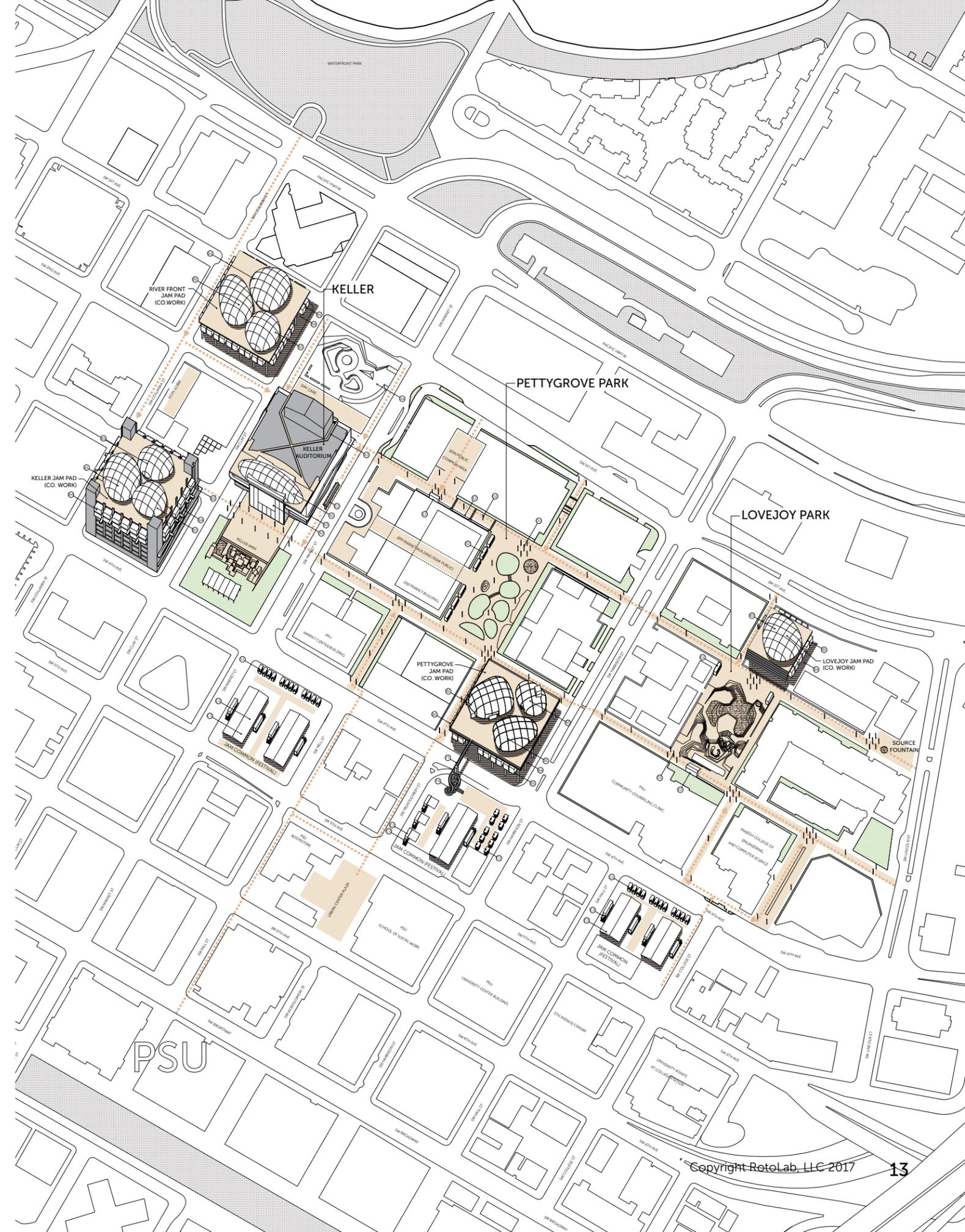
A New Economy

PD(x) will operate as a two-tiered economy, sustaining both traditional not-for-profit arts and for-profit creative industries. The aspirational goal? Grow a long term Creative Culture with resilience. We address what now seems to be the unstoppable trend in the labor force, namely the self-employed creative workers and independent contractors hired on a project basis by local and global corporations. Conventional office towers and outmoded buildings in general are being converted into coworking spaces for independent contractors.

A heightened awareness of this coworking economic trend and the exemplary power of arts culture to invigorate downtown sectors got us thinking: Starting with our seed concept "creativity" we germinated and iterated fresh ideas and drawings through creative dialogues and case study research, leading us to two themes:

City as Symphony

City as Incubator



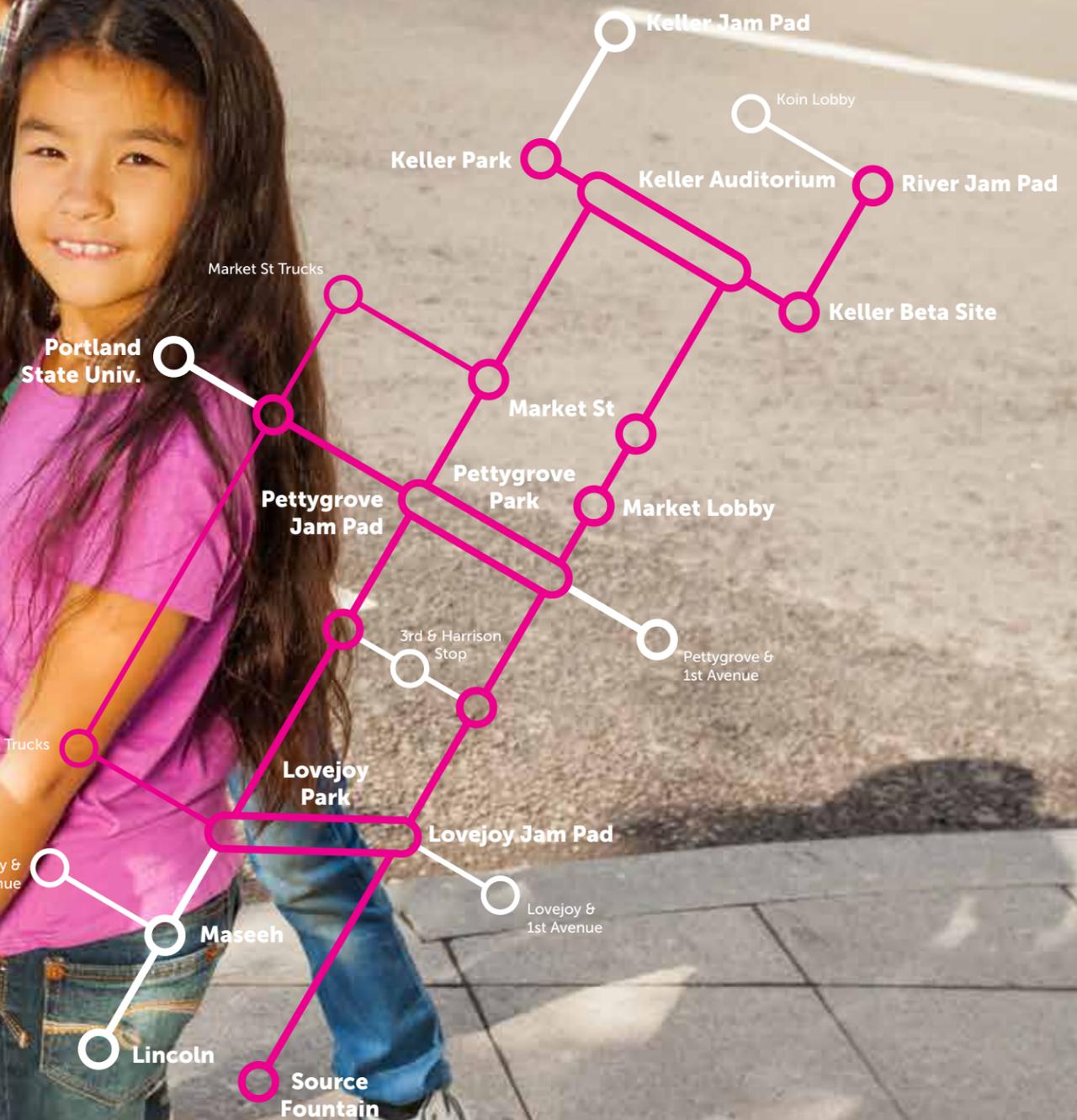
Aiyanna

Year 2025 Aiyanna, age 10, is the daughter of the Joe, the coffee cart man. Her Dad brings his java cart to all Keller Performances and agrees to add sensors to his cart to capture anonymous big data about foot traffic throughout PD(x). This data helps local businesses to plan marketing events and campaigns and provides a unique data-perspective from the POV of the Coffee Cart.

Aiyanna spends her childhood playing at the "Sequence" with her friends who eventually discover a way to hack into Keller's Hub "I love going with my dad to the PD(x) -- I never get bored. My friends and I are making musical scores with the Reeds for our competitive science project -- we're going to prove how sound waves can grow plant cells. Inspired by the her Reed project and talented in math and gaming Aiyanna spends days in the Halprin garden teaching herself programming and goes on to become a world renown augmented reality designer.

When she's in high school, Aiyanna is awarded a residency at PD(x) through Portland State University. The residency supports budding entrepreneurs in the areas of art, media and engineering. During this time Aiyanna works with Derek and Coco to build My Little Drony, a personalizable drone that is controlled with biofeedback.

Aiyanna won first place at a PD(x) Rain Jam with My Little Drony carrying her umbrella for her!



City as Symphony

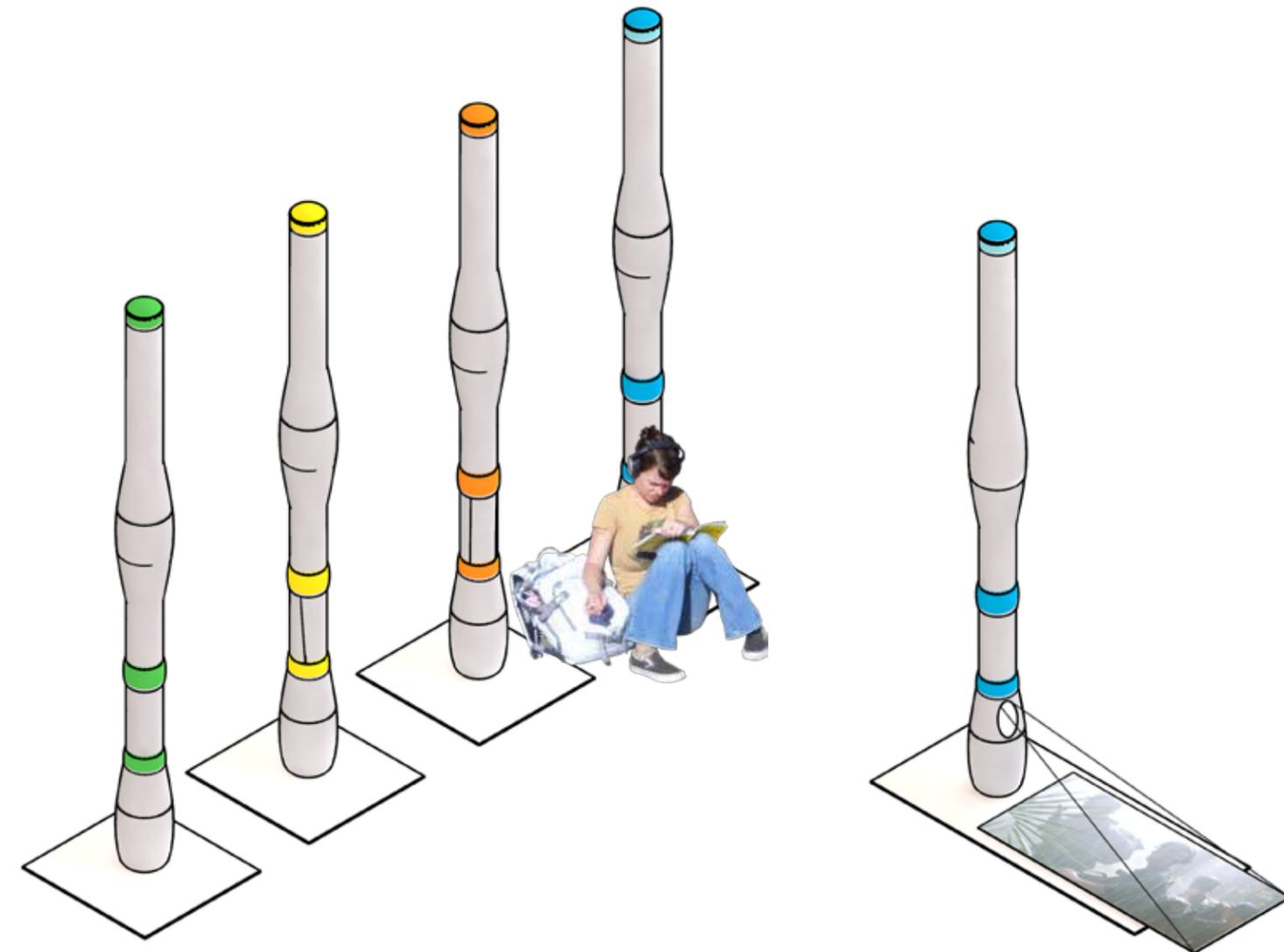
Enchanted Reeds

"What if you could play the city like an instrument?"

Reeds are installed along walking paths in similar configurations like **sonic lamp posts**. They also form arrays to surround larger, more open spaces where people may convene.

Users can interact with Reeds through their built-in 'interface rings' as well as wirelessly through an app. Multiple Reeds can be 'played' by multiple users simultaneously to perform an ensemble of public music. Likewise Reeds can communicate with each other, sending musical and control data across their networks. This allows for **gamified musical experiences** for public users of all ages. Reeds are also re-mappable and re-programmable, allowing artists, musicians, and composers to continually develop content for the Reed infrastructure.

A central Hub can also control and coordinate all Reeds to perform **choreographed public symphonies** of musical sounds moving through public spaces. From its perch atop the Keller Auditorium, the Hub provides both the visual and technical oversight to allow for interactive performances at an urban scale. With experience any user may achieve the mastery level necessary to enter the Hub and design his or her own sonic experiences.

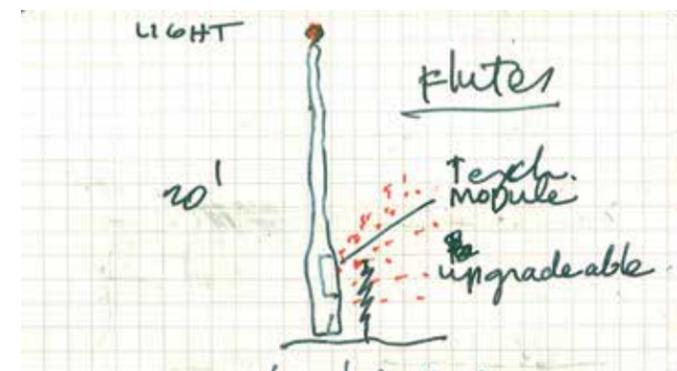
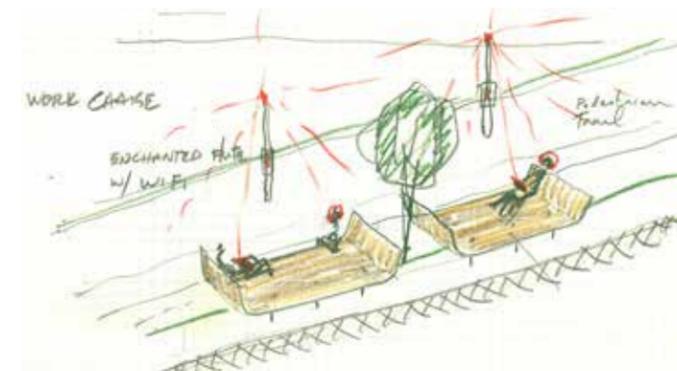


Inputs

- Data from Haptic Interface
- Data from Hub
- Data from Smartphones
- Data from Wifi
- Audio from Direct Input
- Audio from Hub
- Audio from Wireless Device
- Video from Onboard Camera
- Haptics from Physical Interface

Outputs

- Data from Haptic Interface
- Data from Hub
- Data from Smartphones
- Data from Wifi
- Audio from Direct Output
- Audio from Onboard Speakers
- Video from Onboard Projector
- Lighting from Onboard LEDs
- Haptics from Physical Interface



Urban Light by Chris Burden provides an iconic center for meeting and performance space at LACMA.

THIXO

Year 2024. London based electronic producer and light artist Thixo is flying into PDX international to take top billing in Portland's Winter Light Festival. In the distance, he sees the downtown PD(x) rooftops glowing through the rainy evening mist. "Hmm I wonder if aliens landed in downtown Portland," he thinks to himself. Later that night, she joins the informal jam with those gathered on Keller's Pebble rooftop.

Handed a mic, she shares "There I am resting back when I hear streaks of rain hitting my seat window - PitPitPitPit - PitPitPit. Suddenly, I realize I'm getting a feel of the backbone beat - my mix for this weekend. Let it rain let it rain, hallelujah! By the way, I hear this PD(x) is so plugged in that just thinking about a tune mix will set the analytics. When can I speak to your tech?" Thixo becomes the first performer to link the entire sequence together in a concert celebrating life and the common bond that binds all humans.

During the light festival, participants from THIXO's public DJ workshop take over control of the PD(x) lighting and sound system to coordinate with their series of prepared DJ sets. Simultaneously, collaborating dancers interact with Enchanted Reeds, combining their movement with the sonic controls of the Reeds. PD(x) fills with people of all ages and backgrounds and for part of the festivities they can download an app that temporarily interacts with the Enchanted Reeds to affect the overall result. Selected Reeds project bird's eye views of all the lighting events taking place.



The Hub



The District's center of gravity
The refined Keller Auditorium and Park is conceived as the new social center and creative hub for the district. This will be accomplished in several ways.

Urban Social Space
This new semi-public space will connect the fountain, to the lobby, to the new rooftop Hub and lounge. At the ground level, the interior lobby will extend out into Keller Park on one level. A continuous plaza-lobby space serviced by a gastro pub at ground level will continue to the upper 2 lobby levels and end at the bar-lounge on the rooftop. It serves the Auditorium events but it's operating hours are also independent of the Auditorium. The lobby will be secured from the rest of the auditorium.

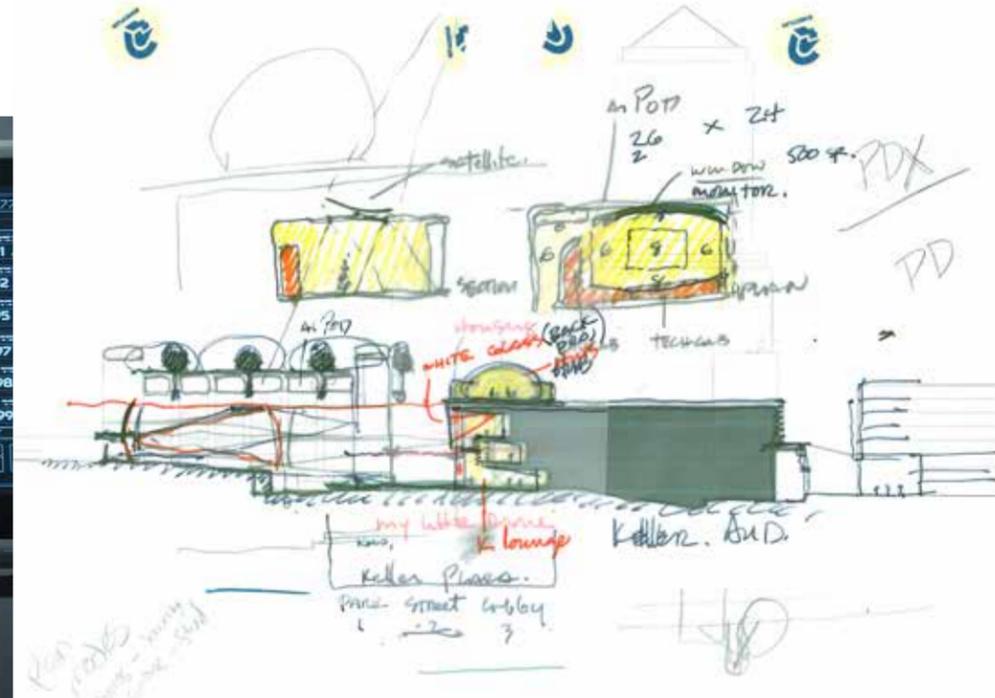
The Hub
The rooftop Hub is the creative control center and the social center of the district. It incorporates a large DJ booth and a bar-lounge and a rooftop. The rooftop is accessible to the public in 2 ways, interior elevators and stairs and the Keller wall Transverse.



Control Room



Oblivion. Universal Pictures, 2013.



The Hub is the primary Pebble, located on the rooftop of Keller Auditorium. It will house a restaurant bar / DJ jam space for pre and post performance audiences as well as Millennials looking for a cool place to hang out. It serves as a central control of all information that flows from the Hub through to all Pebbles and the Grove of Reeds. Operating like an ant colony, the Hub operates as the central electronic distribution (output) and reception (input) source for all PD (x) activities.

Max & Francine

Year 2020. Max & Francine: Max and Francine met at the Oregon College of Arts and Crafts in the 1960's and fell in love with each other and Portland's laid back urban feel. As urban hippies, they settled near Portland State, staying close to youth and arts culture. Building on their art of the book, talents discovered as a young OCAC undergrads, they started a small book binding and graphics print shop which flourished until the dot.com boom.

Today their small business has transformed into a full service digital print shop, now run by their children -- a web designer and marketing consultant -- giving Max and Francine time to relax and enjoy spending time in the urban beauty of the PD(x). Max devotes a day a week mentoring young entrepreneurs in the PD(x) cowork space. Francine runs an outdoor "Senior Chi" group with warm ups circling the PD(x) reeds as seniors plug in to add groove to their moves.

Max and Francine love to walk through the PD(x) regularly and so perhaps know it's regular inhabitants best. They enjoy getting to know the young artists who seemingly always enchant the area with their music, poetry, comedy, crafts and other arts. They have their favorite singer-songwriters and enjoy being able to check their PD(x) app to see if Aiyanna is organizing another impromptu performance.

They also love the Sonic Scavenger Hunt, and are experts at uncovering the Enchanted Reeds that hold secret instructions and sonic artifacts. One year, they even won the main prize and two tickets to an upcoming Opera performance in the main hall. They usually watch the performance projected onto the grass while picnicking underneath one of the Reeds on the Pettygrove Park Knolls. They are excited to be in the auditorium for the next one.



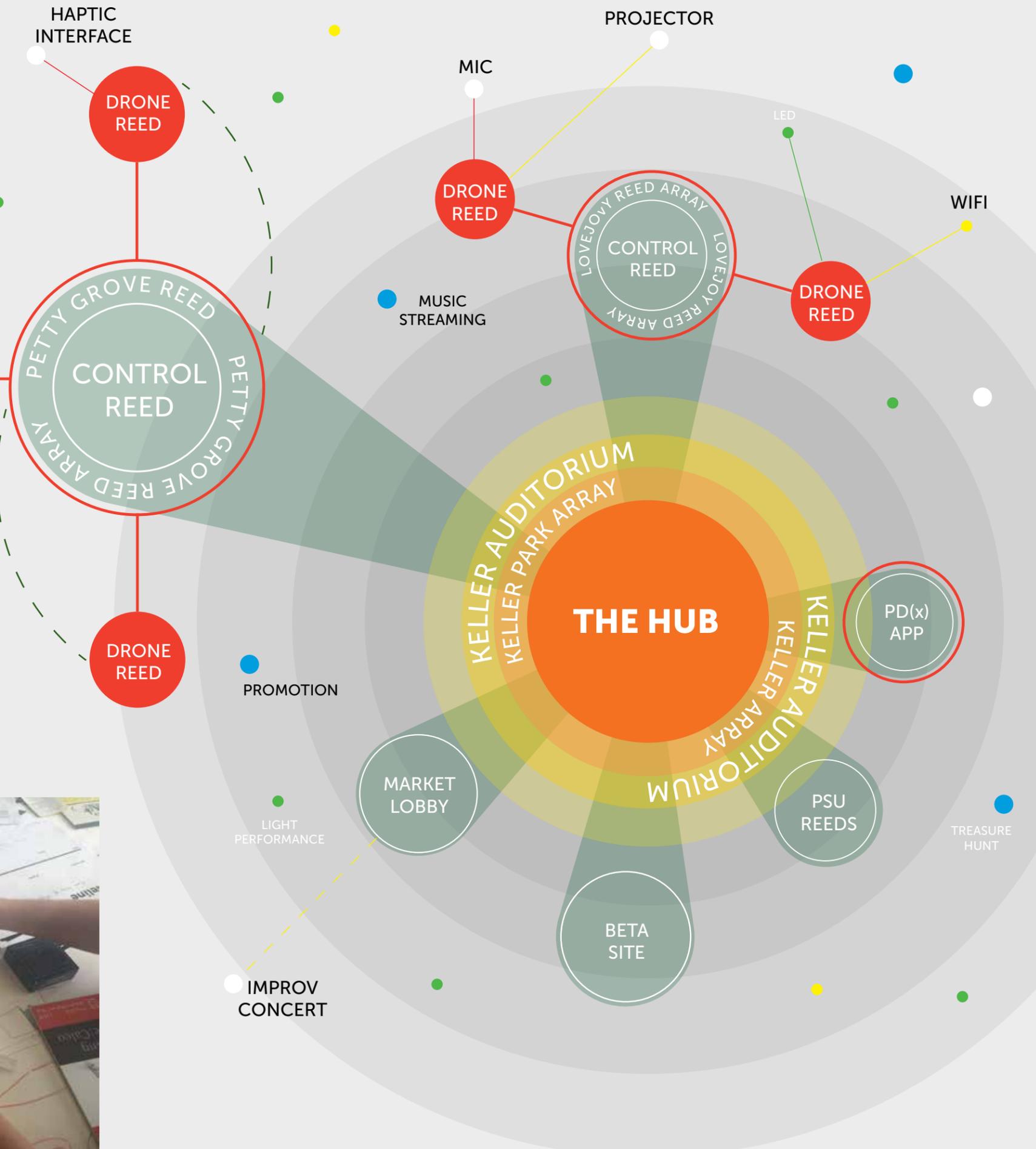
The Grove

PORTLAND STATE

Each Reed works both as a stand-alone interface as well as in coordination with other Reeds to form a Grove. This allows for sounds to move through space in ways that engage and immerse people throughout their installation environment. They may also be employed much like traditional speakers and coordinated with DJ sets and live musical performances that make use of sound reinforcement.

With their built-in projectors, they can display graphical user interfaces, images, videos, stories and instructions for gamified experiences. The Reeds can all be coordinated to tell stories, usher users through a gamified musical scavenger hunt, or teach them about the history of what they are hearing or the space they are in. Built-in LEDs and video projection make for many possible audio-visual shows between coordinated Reeds. They can be programmed to celebrate important events, seasons, times of day, and even to respond to the rain or other weather patterns.

SKATEPARK SYMPHONY



One Plaza-Lobby

The Keller Auditorium lobby on 3 levels and Keller Fountain is conceived as one space. The ground level of the auditorium lobby will be extended outward across 3rd street connecting it to the fountain. The street and the front part of the park will be lowered to create a large plaza, used for events, and for outdoor service for the lobby bar-cafe.

A new full height glass wall will enclose the existing colonnade to make a grander lobby and a new glass façade. It will incorporate a large transparent plane that can be made opaque with the flip of an electric switch for front or rear projections.

Keller Traverse

Traversing the walls is analogous to hiking trails on Beacon Rock in the Gorge. The trails let people see the kinetic art up close, and 'hike' to the rooftop 'plateau' where another experience unfolds. The hike begins in the Auditorium lobby and continues to wrap around three sides, and ending on the rooftop at the hub and pub-lounge. We hope this type of activity will encourage some to periodically spend the day in the 'urban wilderness'

Keller Roof

The rooftop is the newest addition to Portland nightlife. The rooftop, seen from a few surrounding towers will be the beta test site of large, temporary flat art by local artists and members of the creative workforce in the in the district

Everyday Use

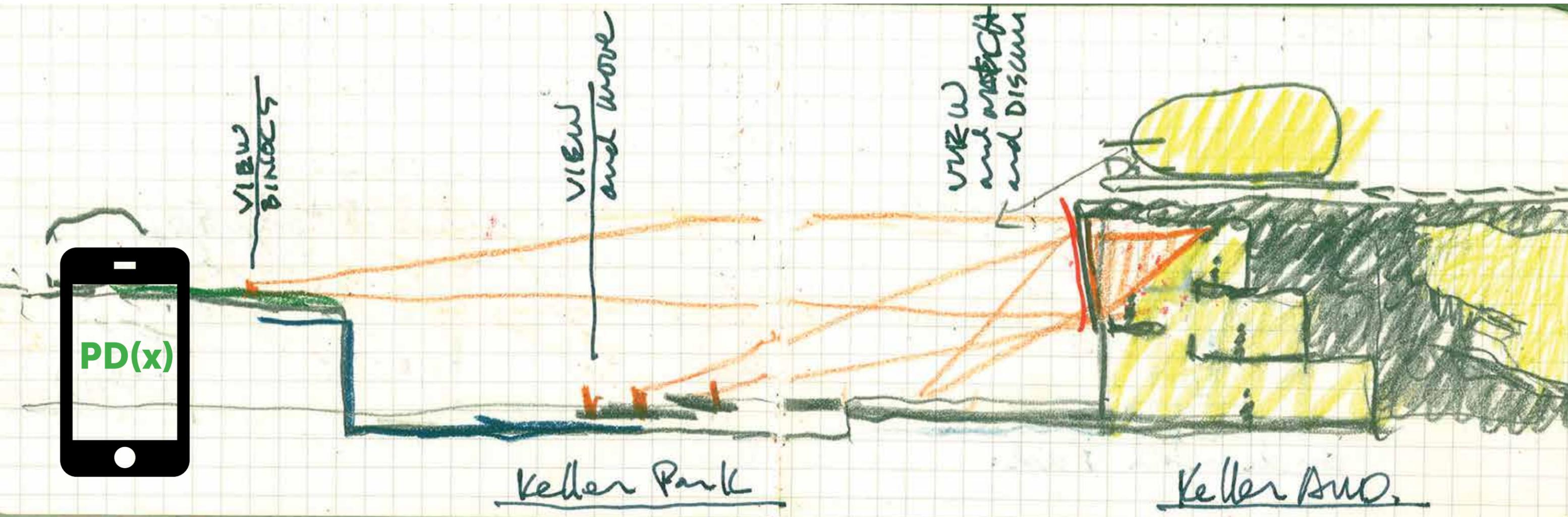
- Running amongst the Reeds toddlers giggle as they play Hide and Seek. Parents and caregivers select the sounds (chimes, bird songs, etc) on the Hide and Seek App.
- Collecting the geocaches of secret sounds and whisper messages in the Reed Sound Scavenger Hunt becomes a favorite after school activity for teens.
- Local comedians try out new material on Friday nights as PSU students gather to eat dinner with friends and laugh.

Special Use (Uncoordinated)

- The Third Friday of every month is Jazz Night at Lovejoy.
- The Ballroom Dance Club practices the samba at Keller Plaza
- The sound of long tones from the Reeds prepares the Meditation Group for their morning session at Pettygrove.

Special Use (Coordinated)

- Local group LoveBomb Go-Go creates their glam-performance-art sound incorporating the Reeds in a performance to mark the Summer Solstice.
- Yo-Yo Ma and Li'l Buck perform Swan Lake among the Reeds celebrating the start of the fall theater season.



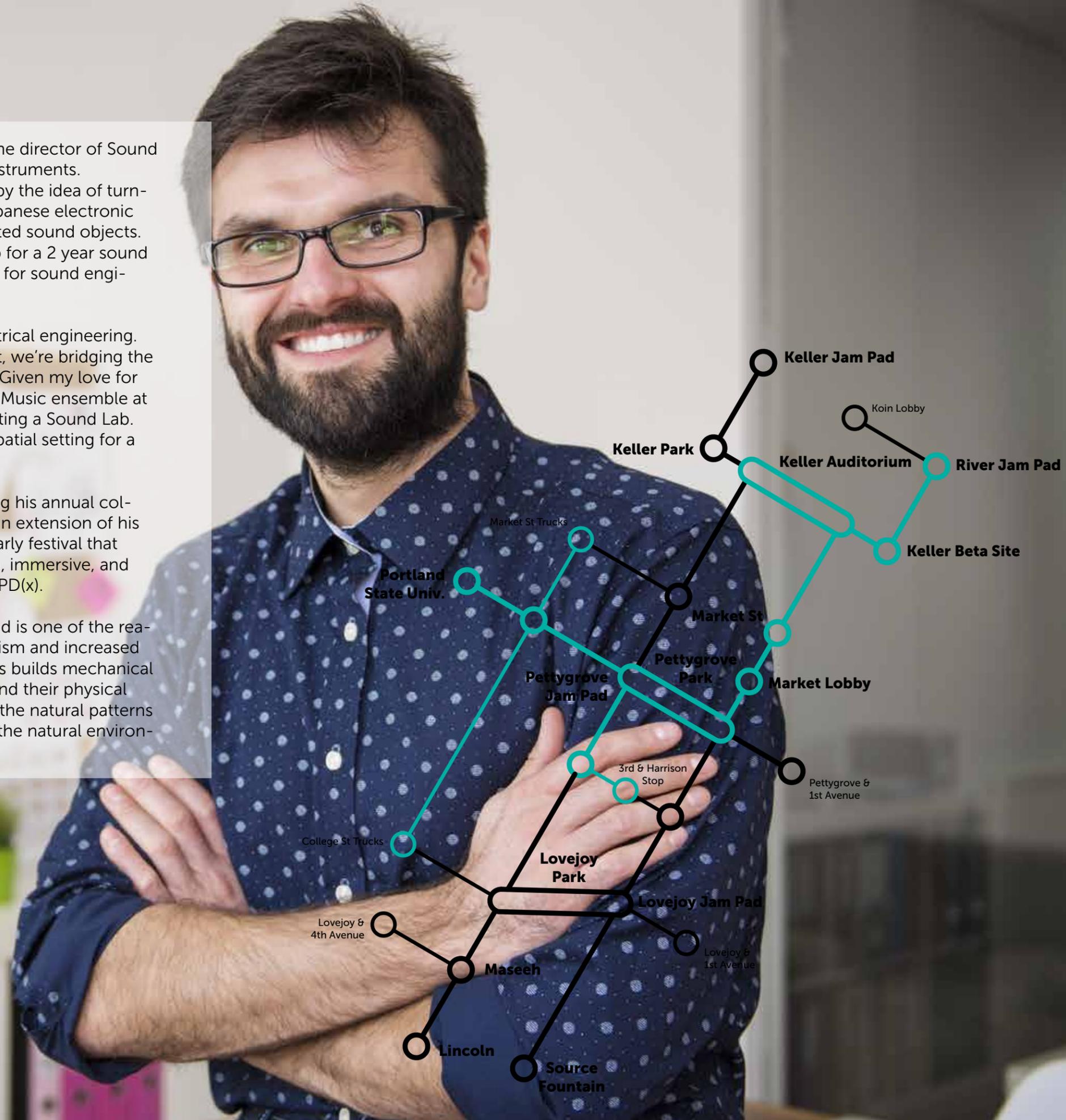
Derek

Year 2020. Derek is an electrical engineering professor at Portland State and the director of Sound Lab -- a makerspace for performers interested in prepared and custom built instruments. Derek is one of the community members that voted for PD(x) project, excited by the idea of turning downtown Portland into a Jam Space. A classical violinist turned on by Japanese electronic music in the 1980's, Derek envisioned Sound Lab as a maker space for enchanted sound objects. On the heels of a consulting trip to Japan, Derek scored Japanese sponsorship for a 2 year sound engineering project to begin in Sound Lab at PD(x), incubating new prototypes for sound engineering patents.

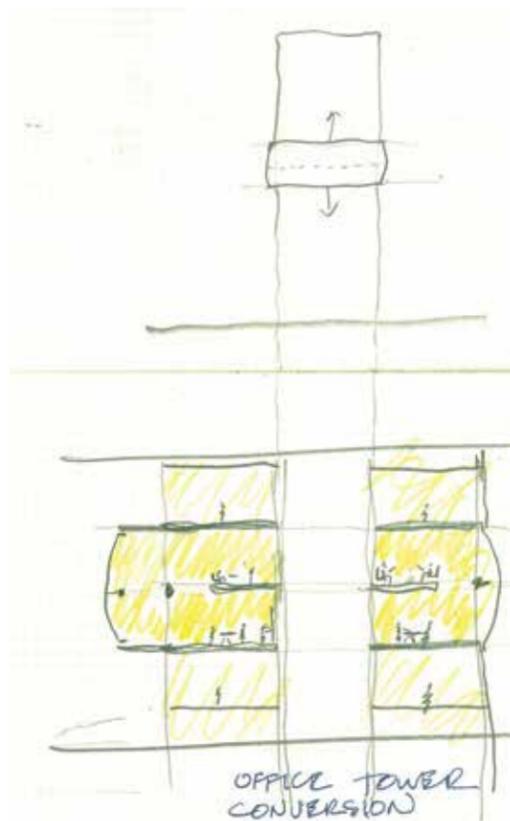
"I knew as a grad student, programming was going to change the face of electrical engineering. Today as Portland U professor, my prediction has paid out and as a department, we're bridging the gap between engineering and technology in all over our classes and research. Given my love for musical composition, we've had some successful collaborations with the New Music ensemble at Portland U music department. The experiences kickstarted my thinking of starting a Sound Lab. PD(x) with its grove of Reeds and incubator Pebbles offers the right tech and spatial setting for a university Incubator."

Derek enjoys PD(x) movie night with his family as much as he enjoys developing his annual collaborative composition for PD(x) Reed infrastructure. He sees PD(x) district as an extension of his Sound Lab and as an incubator for his students' guided work. Derek hosts a yearly festival that attracts local, national, and international artists and makers to build multimedia, immersive, and interactive installations tailored to the unique capabilities and infrastructure of PD(x).

This festival attracts participants and audiences from across many industries and is one of the reasons that PD(x) has become a model for people interested in enchanted urbanism and increased public access to emerging technologies. One of his favorite Sound Lab projects builds mechanical add-ons and interface accessories for the Enchanted Reeds that alter and extend their physical forms and infrastructural capabilities. His "Reed Resonators" take advantage of the natural patterns of rain and water unique to the area, musicifying rain patterns and celebrating the natural environment.



City as Incubator



Commerce and Culture are in a long term symbiotic relationship.

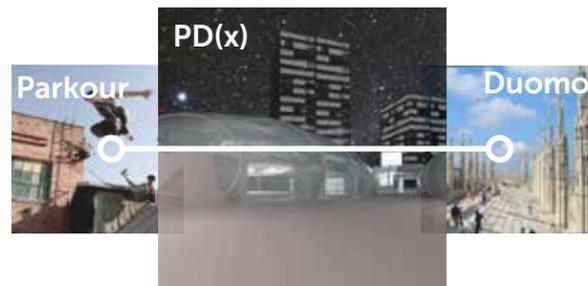
Historically, there have been two competing approaches to regenerating a City's urban core, commerce to culture or culture to commerce. A third approach is now present inevitable and unstoppable, a hybrid of these two extremes. Both are **nested**.

A new approach needs to be conceptualized to serve the fastest growing sectors of the American economy, the **creative industries** sector, and the largest population entering cities and the workforce. The third approach is nesting Commerce and culture. As one, they leverage contemporary life. Research supports the claim that creativity has never been more important considering the global economy is stuttering and **disruptive technologies** challenge established business models, supply chains, and workflows.

Portland

The concentration of local performing arts companies and a growth in creative businesses are enhanced by this city's independent spirit. It is consistently listed as one of the most livable cities in the U.S., cited for its' communal life, as one of the top metro areas for bicycle riders and one of the **best food and drink** scenes in the country. This gives shape to its inspiring identity.

How can this be augmented and leveraged? We propose to leverage these trajectories by re-imagining the Keller District as the new creative sector of Portland conceived equally, as a social, environmental, and economic model to be emulated by other cities. We propose to name it, **PD(x) The Portland Experimental Zone**.



Coco

Year 2020. Coco is a senior studying performance art and technology. “I came to Portland State as an engineering major with an arts minor. After learning about the arts, performance and technology works of Laurie Anderson, STELARC and Neri Oxman, I started experimenting in plugged in performance designing and orchestrating fashion robot interventions in local rave spaces.

Now with all the advancements in sensor and material science, I am excited to carve out an entrepreneurial future in wearable technology. I recently learned about the PD(x) cowork space and DIY jam space from my engineering professor Derek who has brought his SoundLab to the PD(x).”

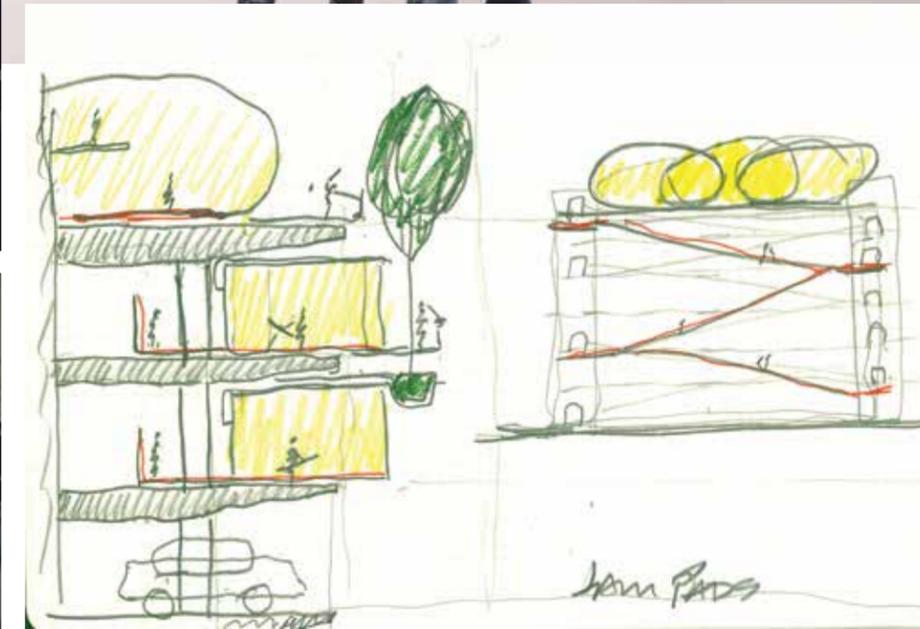
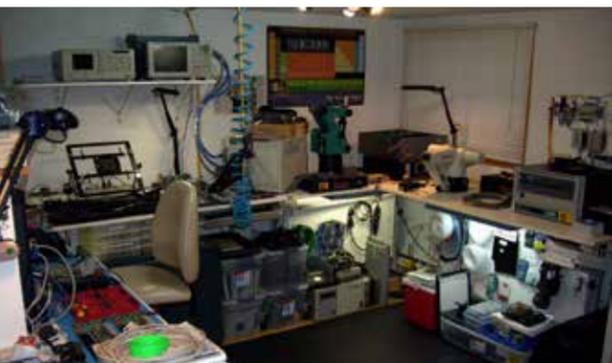
Inspired by sound sculpture, Coco realizes she needs to work near other art and tech geeks as she is looking for a Gig programmer to help her finish her prototype of wearable tech that is mood sensitive to the sound of human voice and emotion.

Having discovered the unique infrastructure in place in the PD(x), Coco develops an app and wearable interface for interacting with the Enchanted Reeds. Her project uses the Reeds to develop a public biofeedback system that takes in user biometrics and provides feedback via musical cues and visual projections.

She works with Derek and other researchers at PSU to develop a study on public access to bio-feedback in public spaces. Over time they are able to gather anonymous big data on users’ outcomes and improvements that shows efficacy in intervening in anxiety, high blood pressure, and PTSD.



The Pebbles



“The roof becomes the moment at which the entirety of the network makes sense.”

The Pods

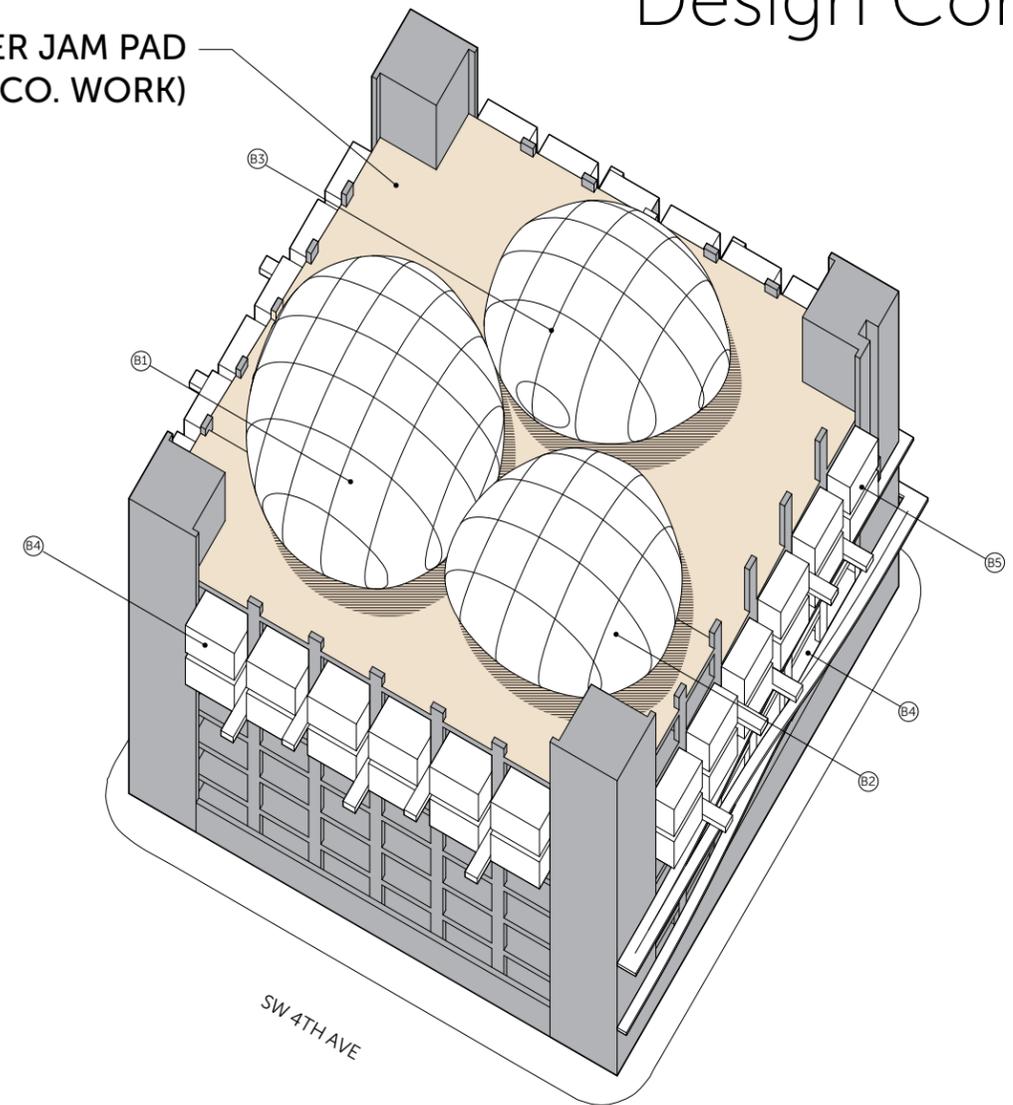
Design Concept

JAM PADS

This is where we propose co-working spaces for the growing **Creative Workforce** and Independent Contractors. These relatively inexpensive, inflatable structures, situated on underutilized rooftops, will have the techno-social infrastructure to support emerging inventors. These **Enchanted Pebbles**, are located on top of 2 existing parking structures and 3 newly constructed platforms situated adjacent to the Halprin Parks. There will be places for pure and applied research focused on the arts, engineering, and media. The covered existing parking lots double as maker workshops and performance venues.

Suspended below the Jam Pads the **Enchanted Pods** are small (500sf) living Pods for creative workers. They will provide creature comforts and advanced technology to research immersive environments. We imagine opportunities for private-public partnerships with PSU.

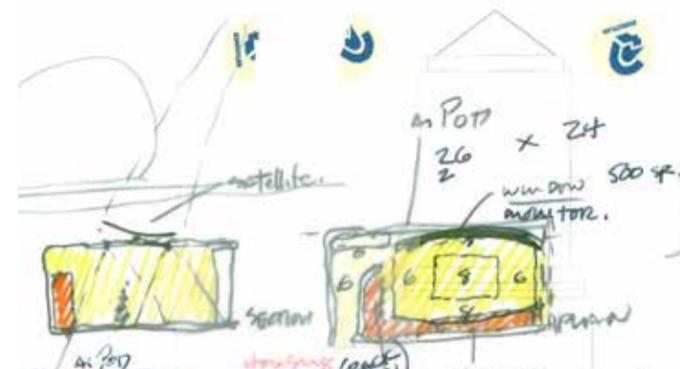
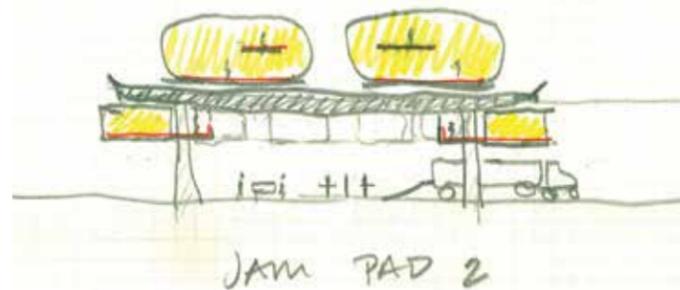
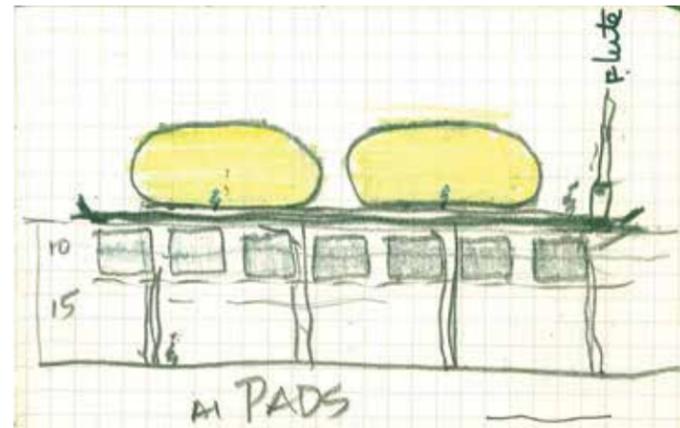
KELLER JAM PAD
(CO. WORK)



B. Jam Pad Co-Work Space

- Co-Work Space
- Enchanted Pebbles

- B1. Art Pebble - Pure Research
- B2. Engineering Pebble - Applied Research
- B3. Media Pebble - Social Space
- B4. Ai Pods (Living)
- B5. Parking Lot / Weekend Workshops



Immersive Space

Enchanted Residence



Sunshine. 20th Century Fox, 2007.



Black Mirror. Zeppotron, 2012.

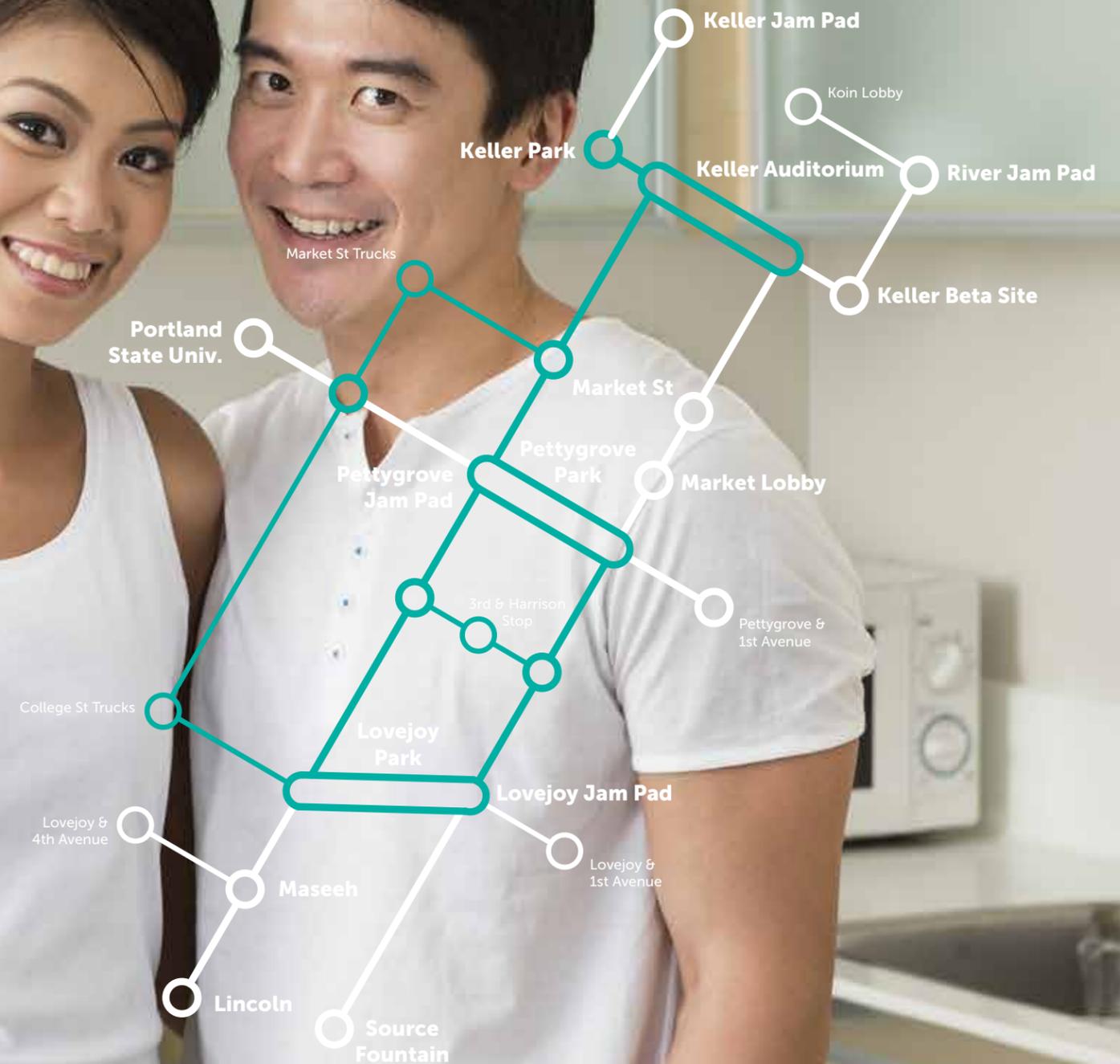
Soo & Sonny

Year 2025. Soo and Sonny are chefs who met when they were young Chinese exchange students visiting Portland and discovered Keller performing as a culinary jam festival. They now operate a food truck, Fleur out of the district while they work to open their first restaurant. They are excited about organizing a cultural jam for edible flowers in Keller's enchanted urban rooftop.

Sonny: "We love Portland, its nature, its music and its food scene. We decided to come back and add our distinctive Chinese feel to the Portland art of eating. Our families come from two different areas of China -- Soo's family is from Taipei and I am from Shanghai -- so we have a rich spice and vegetable vocabulary for food experimentation and have a penchant for bringing edible flowers to our recipes."

Soo: Being from Taipei, we love the art of making and drinking tea made from fragrant fruits and flowers. We thought why not extend that into all of our cooking? Our restaurant Fleur is inspired by our passion for using flowers as the basis of creating beauty and flavor. And now with the chance to serve Portland inside Keller's famous rooftop Pebble -- well that's more than we could have wished for!"

During their flower festival Soo and Sonny work with a visual artist to program lighting shows and Reed projections that celebrate their culinary perspective and freshness and vibrancy of local produce. They use the Reeds' projectors to reveal elements of their personal stories and culinary perspectives and recipes highlighting flowers and other local products. The PD(x) is filled with people walking through the space, tasting and learning from the curated walk through the Reeded paths.



The Commons



Enchanted Jam Commons

PD(x) Jams will bring the world to Portland to perform and be witness to those working creatively in what we now know to be the Second Industrial Age. These Jams will be the venue for cross sector collaborations producing works of hybrid technology and aesthetic. This is an incomplete list of projected Jams, Storytelling, Theater, Performance, DJ, Toys and tech, Cooperative Tech, Digital culture, and Skate Jam, to name some.

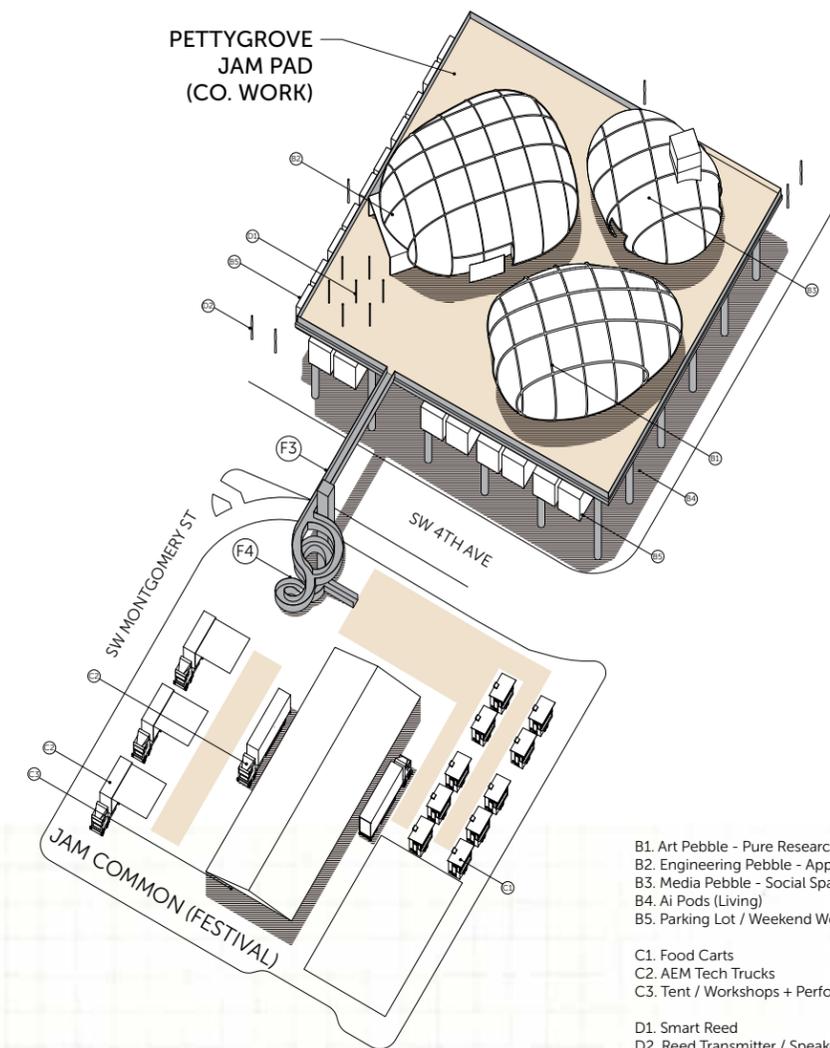
Pop-Up

Everyday parking lots in will be transformed by Tech Trucks, pop up Tents and food Carts, during festival times, into venues for a growing number of Jams.

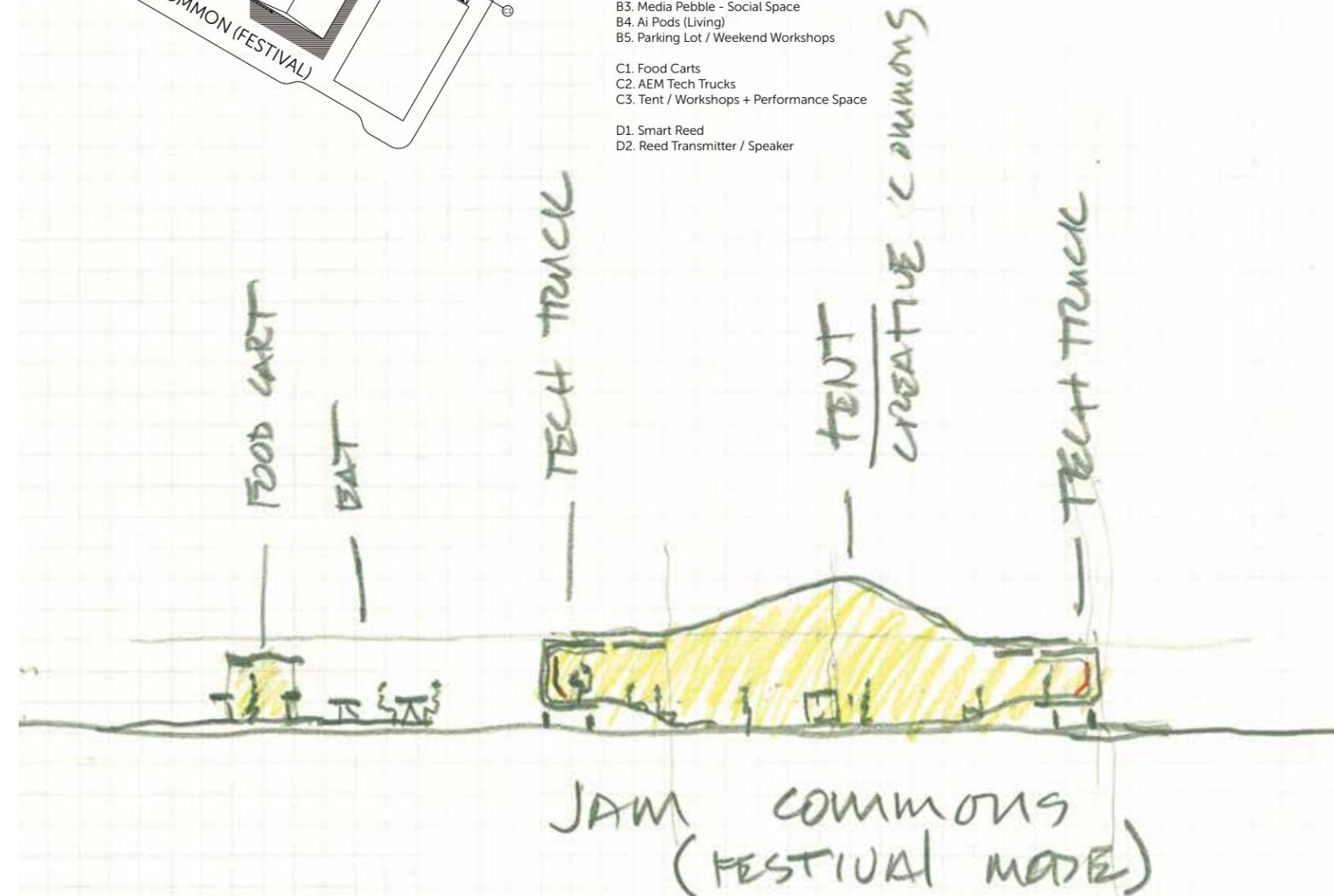
Enchanted Rings

We propose to begin the conversion of conventional office tower work space to co-working space, 2 floors at a time and it can begin with the Market St Tower. The growth of co-working spaces driven by the exponential growth of the contingent workforce will continue for the foreseeable future. To reduce vacancy rates and increase profitability conventional office towers can retain their corporate tenants and provide space to accommodate the growing percentages freelance labor. How does this differ from its regular offices? It will feature "interdepartmental sharing of common space, multifunctional spaces, less individual space and more collective space," allowing for greater collaboration across the company. Not only that, the new space figures to "reduce cost per seat by 35 percent, from \$8,500 to \$5,500" for the company.

Design Concept



- B1. Art Pebble - Pure Research
- B2. Engineering Pebble - Applied Research
- B3. Media Pebble - Social Space
- B4. Ai Pods (Living)
- B5. Parking Lot / Weekend Workshops
- C1. Food Carts
- C2. AEM Tech Trucks
- C3. Tent / Workshops + Performance Space
- D1. Smart Reed
- D2. Reed Transmitter / Speaker



Water



The rushing water at Keller Fountain creates experiences uniquely specific to Portland. With the expansion of the Open Space Sequence we propose to build upon these water adventures.

Imagine walking along a partially covered path in the rain running your fingers through a wall made of lines of raindrops.

Imagine the sound of rain drops falling on a collection of tiny cymbals embedded into the city around you.

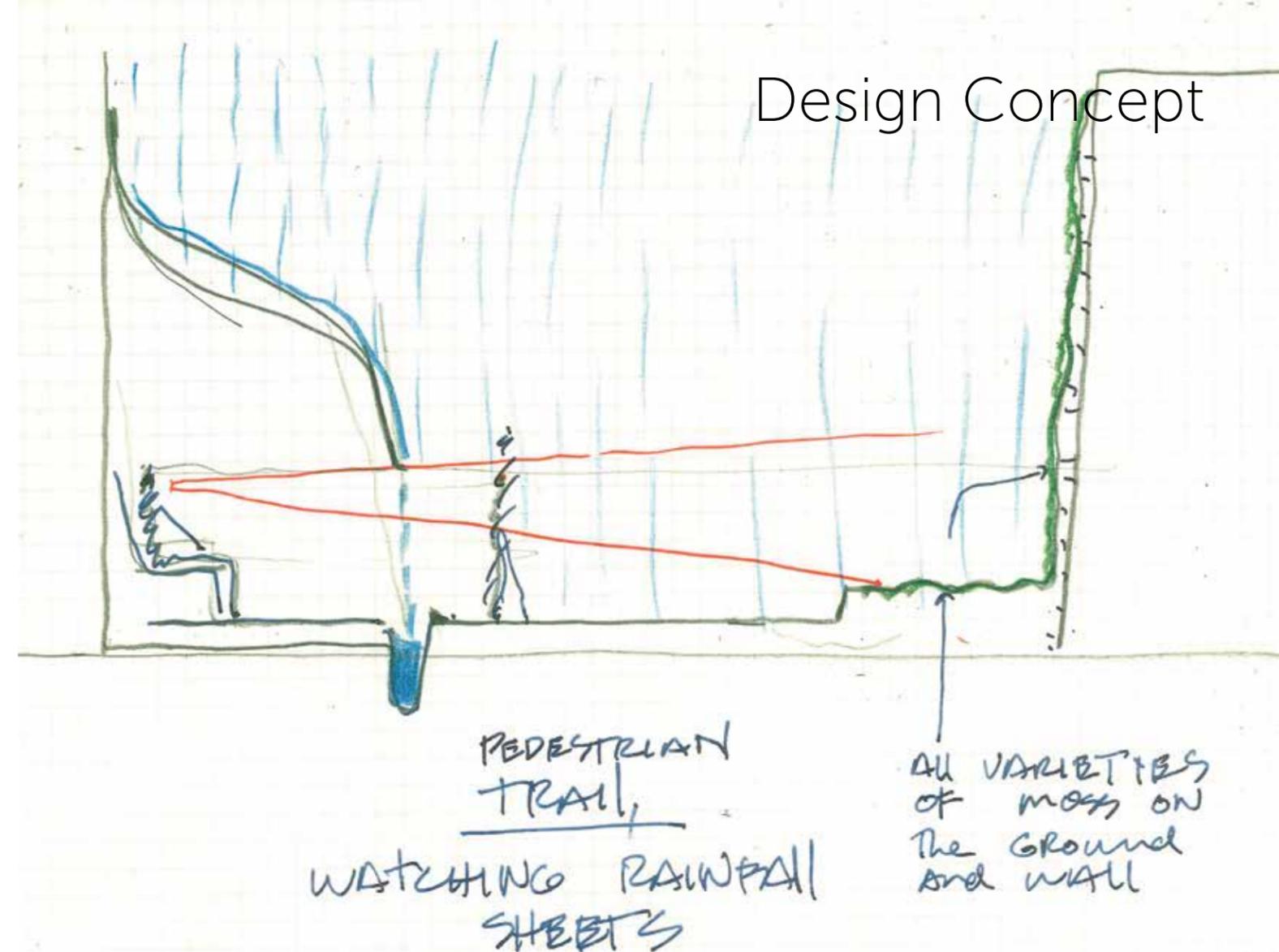
Creating these spatial ephemeral water events set the stage for dancing, singing, and playing in water, much like the Halprin performances of decades past.

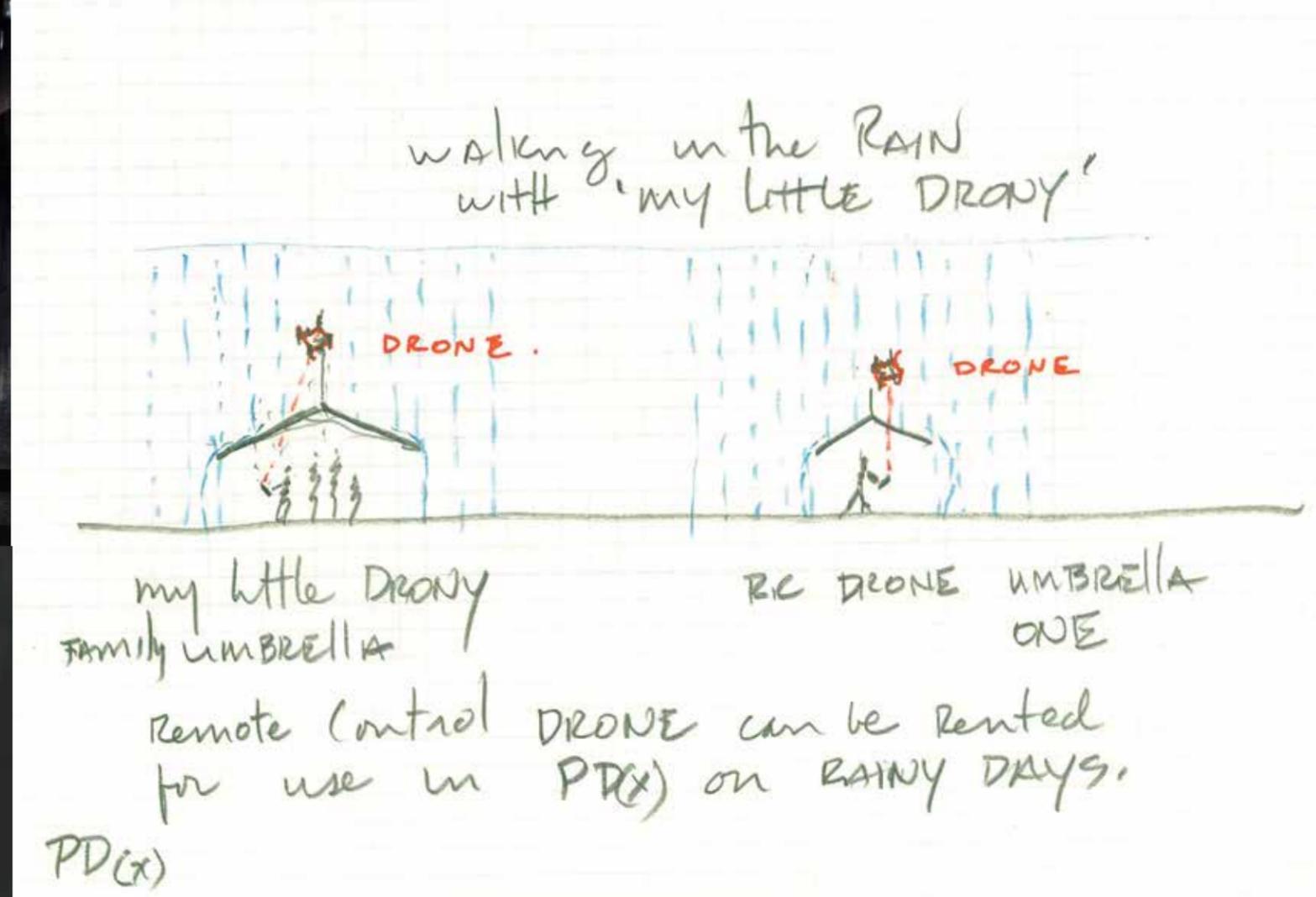
We will enchant one's experience with nature in urban space through sound, touch and smell - providing places for expression through nature as well as places for mindfulness with nature. The water and the rain are the entry point to this experience.

We will celebrate the expansion of Halprin's sequence with the joy of children splashing in puddles, and the moments in an adult's life where they find pause to explore the pattern of water droplets as they fall on dry earth.

Through contrast brought on by wetness we will explore color and saturation in ways impossible when dry - bringing renewed vibrancy to pedestrian paths.

We will propose interventions - both static and dynamic through architectural form and disruptive technology simultaneously.





PD(x) Enchanting the portland experimental district

The objective of improving the overall economy of any city in the short term is to project what will make it resilient in the long term. With this in mind, we asked, "how do we regenerate a district by leveraging its existing social and physical assets and how do we attract the next generation of urban dwellers, who are inheriting cities everywhere?" The more immediate challenge was how to make the Keller the center of social and creative life for downtown Portland.

Commerce and Culture are in a long-term symbiotic relationship.

Historically, there have been two competing approaches to urban renewal, commerce to culture and culture to commerce. A third approach is now present, a hybrid of these two extremes. When we start with capital investment into physical infrastructure, buildings and urban beautification, more people and eventually cultural investment follows. The other model begins with investment in cultural infrastructures, museums and symphony halls, in turn attracting people and commerce. Both are valid approaches but need to be re-conceptualized to serve the fastest growing sectors of the American economy, the creative industries sector, and the largest population entering cities and the workforce. The new model is not radical, it is common sense - commerce and culture nested into one. Creativity has never been more important considering the global economy is stuttering and disruptive technologies challenge established business models, supply chains, and workflows.

We propose to leverage these trajectories by re-imagining the Fountain District as the new creative sector of Portland conceived equally, as a social, environmental, and economic model.

Creative Sectors, arguably, provide the City with its greatest competitive advantage.

Creative Industries, Science, Technology, Engineering, Arts, and Media (STEMEAM) have been the fastest growing segments of the 21st Century economy over the last decade, outpacing traditional economic drivers. The creative workforce and the culture they create, are what attracts others to the city. A thriving creative workforce is a key feature of nearly every successful modern city. To grow a long term Creative Culture with resilience, we addressed the unstoppable trend in the labor force, self-employed creative workers and independent contractors choosing to be inventors rather than employees.

Welcome to PD(x) The Portland Experimental Zone.

1. What if an old district in any city could be reawakened with creative enterprise?
2. What if unused infrastructure became the mecca of independent culture creators for the new gig economy?
3. What if you could climb from street to rooftops?
4. What if you could play the city like an instrument?

These provocations drove our creative process and lead us to the proposal you see here. This presentation can be seen as an illustrated story told by six characters, serving as our Avatars guiding us along multiple paths leading us to what we have named Enchanted Urbanism, inspired by fairytales and the agency they allow through the magical power of enchanted objects. Our objective is to regenerate urban public spaces facilitating creative and maker cultures, amateur and virtuosos performance, dissolving the boundaries of static architecture and active participant.

Characters

Derek is mechanical engineering professor at portland state and the director of the Sound Lab - a maker-space for performers interested in prepared and custom built instruments.



Derek

Max and Francine enjoy having a place to walk that is clean and safe. They enjoy the music and comedy performances along their path.



Max & Francine

Their favorite is when they catch the group with dueling harmonicas. When this happens they'll often stay - dancing softly and digging their toes into the damp earth beneath their feet.



THIXO

THIXO, world renowned DJ, Electronic producer and light artist becomes the first performer to link the entire sequence together in a concert celebrating life and the common bond that binds all humans.



Aiyanna

Aiyanna is the daughter of the Joe, the coffee cart man. Her Dad brings his java cart to all Keller Performances and agrees to add sensors to his cart to capture human coffee cart chatter. She spends her childhood playing at the 'Sequences' with her friends and goes on to be the areas most revered artist.



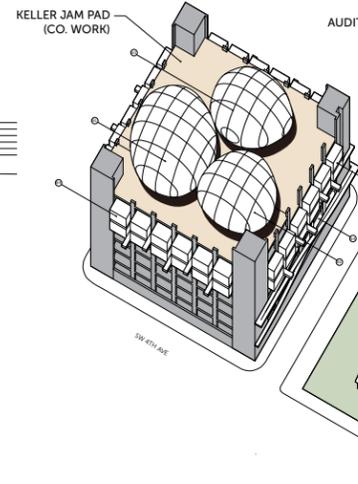
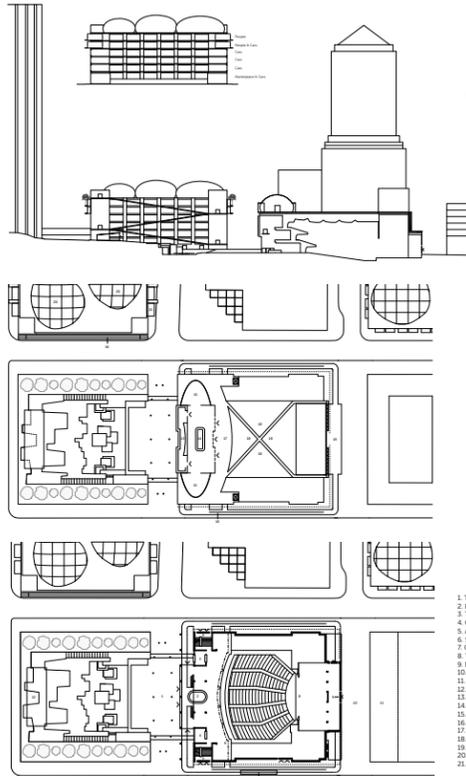
Coco

Coco is a Portland State University senior where she is studying performance art and technology. A budding entrepreneur she is starting a new company that develops wearable technology to respond to emotion. She is looking for a coworking space and is introduced to the Jam Pads by a professor who mentors there.

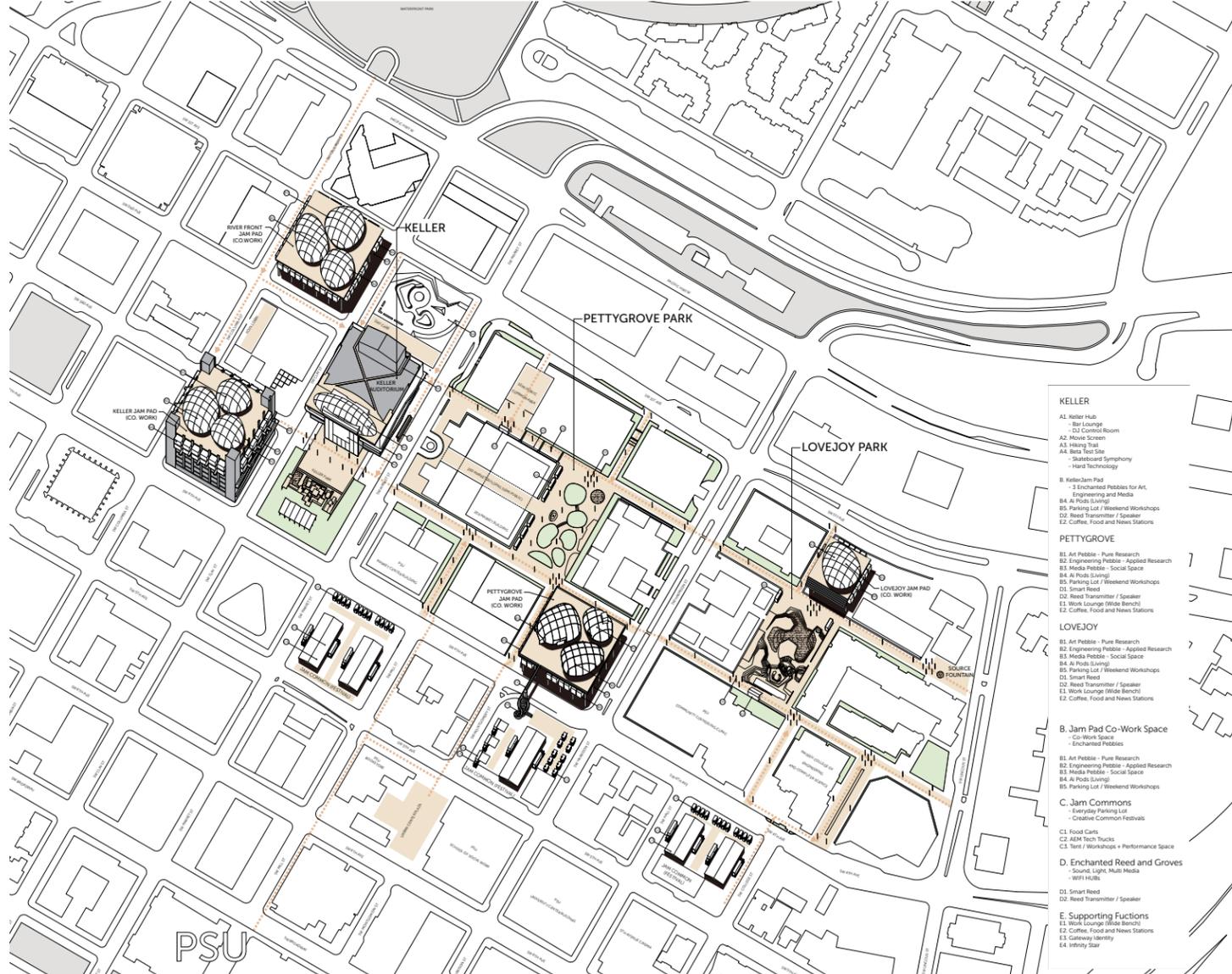
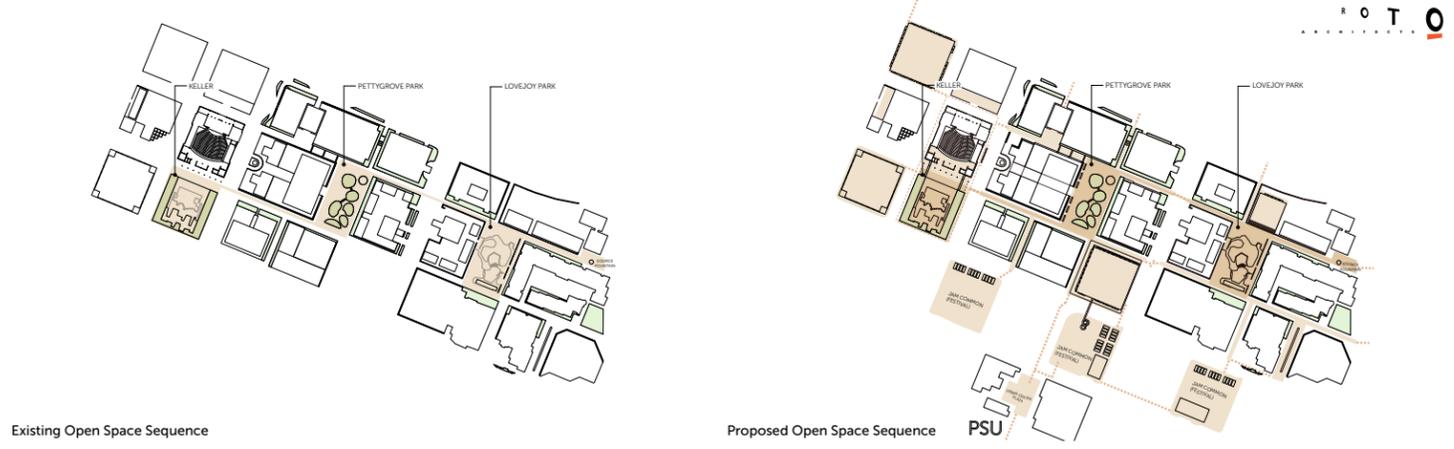
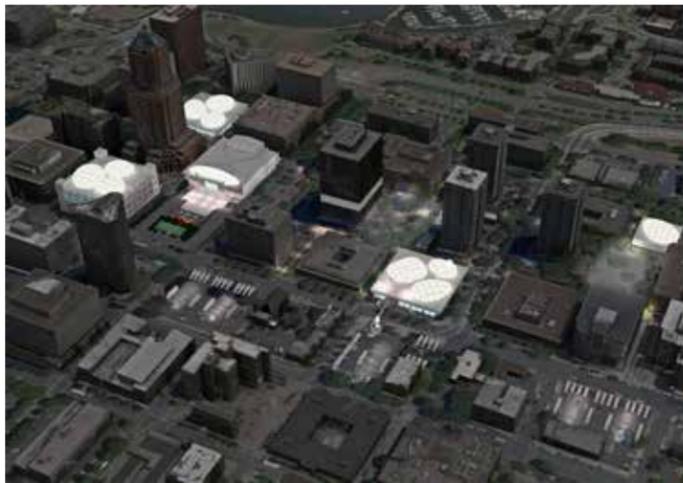


Sunny & Soo

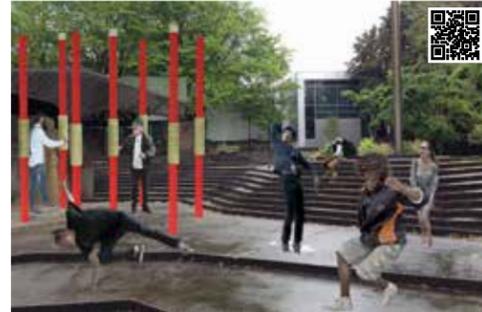
Soo and Sunny are chefs who met when they were young performing as a culinary jam festival. They now operate their new restaurant flour out of the district. They are excited about organizing a cultural jam for edible flowers in Keller's enchanted urban rooftop.



1. The Grove / Enchanted Reeds
2. Bar
3. Ticketing
4. Classroom
5. Access to roof and hiking trail
6. Security line
7. Cafe and news stand
8. Theater
9. New loading bay
10. Playground for child care
11. Current child care facility
12. Canopy
13. DJ / Control room
14. Rooftop bar
15. Lounge
16. Hiking trail
17. Observation deck
18. Art surface
19. Deck
20. Cooking space
21. Pods



- KELLER**
- A1. Keller Hub
 - A2. Bar Lounge
 - A3. Control Room
 - A4. Movie Screen
 - A5. Hiking Trail
 - A6. Beta Test Site
 - A7. Standard Symphony
 - A8. Hard Technology
- B. KellerJam Pad**
- B1. Enchanted Pebbles for Art, Engineering and Media
 - B2. Parking Lot / Weekend Workshops
 - B3. Smart Reed
 - B4. Need Transmitter / Speaker
 - B5. Work Lounge (Wide Bench)
 - B6. Coffee, Food and News Stations
- PETTYGROVE**
- P1. Art Pebble - Pure Research
 - P2. Engineering Pebble - Applied Research
 - P3. Media Pebble - Social Space
 - P4. A. Pods (Living)
 - P5. Parking Lot / Weekend Workshops
 - P6. Smart Reed
 - P7. Need Transmitter / Speaker
 - P8. Work Lounge (Wide Bench)
 - P9. Coffee, Food and News Stations
- LOVEJOY**
- L1. Art Pebble - Pure Research
 - L2. Engineering Pebble - Applied Research
 - L3. Media Pebble - Social Space
 - L4. A. Pods (Living)
 - L5. Parking Lot / Weekend Workshops
 - L6. Smart Reed
 - L7. Need Transmitter / Speaker
 - L8. Work Lounge (Wide Bench)
 - L9. Coffee, Food and News Stations
- B. Jam Pad Co-Work Space**
- B1. Co-Work Space
 - B2. Enchanted Pebbles
- C. Jam Commons**
- C1. Overlaying Parking Lot
 - C2. Creative Commons Festivals
- D. Enchanted Reed and Groves**
- D1. Food Carts
 - D2. JAM Tech Trucks
 - D3. Tent / Workshops + Performance Space
- E. Supporting Functions**
- E1. Work Lounge (Wide Bench)
 - E2. Coffee, Food and News Stations
 - E3. Gateway Identity
 - E4. Intimacy Gear



IN SUMMARY:

The Design Challenges

1. As part of an integral comprehensive design of the Keller, create a dramatic information system promoting venues and events within the Keller Auditorium.

Connectivity - Inside to Outside

Promotion, real time presentations, and integrating the space inside Keller and life in the streets and are key aspects of our approach. Concerts and theatrical events can be promoted and presented on the outside, on a large transparent glass plane that converts electrically into a projection screen. Also, live performances can be projected in real time, to enliven the plaza, the park and to expand the size of the audience via transmission to any other public urban space where locals already gather in large numbers, along the river, at PSU, or in the other Parks in the sequence.

2. Address the blank walls of the building on the north (SW Clay Street), the east (SW 2nd Avenue) and the south (SW Market Street) as contributing design elements to the public realm.

Each time the Auditorium is remodeled, it is frozen in 'aesthetic time'. In reaction, we are thinking of the Keller in terms of how people can play on it and not only in it. Can it spark creative street life, and not merely be a backdrop? Using storytelling techniques we imagined it as a 'monumental rock' that can be hiked around, on trails, up to the top. We addressed the blank walls in two ways:

Hiking the Keller Trail

The Keller building mass is metaphorically the cousin of Beacon Rock in the Gorge. Locals and tourists can 'hike the trail' along the walls on moving continuously on all 4 sides, easily accessible from the lobby, ending on the rooftop 'plateau' to enter the Hub and Pub, to view the city and Keller Fountain.

Kinetic Art

We are proposing the 3 blank walls on Market, 2nd, and Clay, be the sites for commissioning large kinetic art installations. The rooftop, seen from a few surrounding towers will be the beta test site of large, flat temporary artworks by local artists and engineers working in the district.

3. Explore the relationship between the west elevation of Keller Auditorium and the Ira Keller Fountain to create a complimentary and cohesive "designed" experience including the design of SW 3rd Avenue fronting the Keller Auditorium.

One Plaza-Lobby

The Keller Auditorium lobby on 3 levels and Keller Fountain is conceived as one space. The ground level of the auditorium lobby will be lowered to make a big plaza, extending outward across 3rd street connecting it to the fountain. The new Keller Plaza will be used for events, and expanded sidewalk café by day and an outdoor café-bar-lounge by night.

New Glass Wall

A new full height glass wall will enclose the existing colonnade to make a grander lobby and a new glass façade that will incorporate a large transparent plane that can be made opaque with the flip of an electric switch for front or rear projections.

4. Determine how Keller Auditorium, as a vibrant entertainment venue and center of activity, can contribute to the evolution and identity of The Fountain District.

The District's Center of Gravity

The refined Keller Auditorium and Park is conceived as the new social center and creative hub for the district. This will be accomplished in several ways.

Urban Social Space

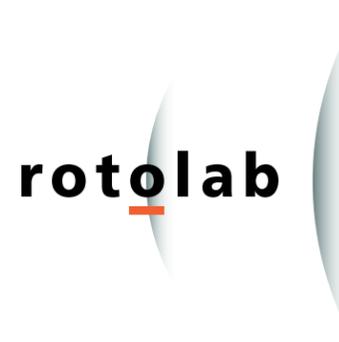
The new Keller Plaza (public) will connect the fountain, to the expanded lobby (semi-public). The multi-level lobby will be connected to the new rooftop Hub, and Lounge (semi-public), with elevators, stairs, and a 'hiking trail'. The interior lobby will be extended out to the existing colonnade, and when big pivot doors are open to the new plaza, into the Keller Park, all on one level. Lobby and plaza will be serviced by a café-bar-lounge, open everyday. The lobby will be secured from the rest of the auditorium.

The Hub

The rooftop Hub is the creative control center and the social center of the district. It incorporates a large bar-lounge, outside decks, and a large control room for DJ, MC, Chief Curator, all of who can visually monitor the creative happenings of the district from their rooftop perch.

Partnerships

Together they are a 'Dream Team' from the top tier of their respective disciplines. Each has a synthetic mind supplied by a trans-disciplinary intelligence and an open-minded approach solving problems.



rotolab

RotoLab is a solution engine from the world of architecture and design. We are dedicated to solving epic challenges in how we work, play, learn and care.

RotoLab has interests in real world projects situated at the nexus of architecture, neuroscience, games, and cooperative technologies.

We imagine scalable spaces and design systems-based platforms through the formation of companies that generate ROI and contribute to the social good. We work with hardware and software, large and small scales, matter and light.

rotolab.la



RoTo
ARCHITECTS

RoTo Architects has envisioned, designed, and built a wide range of project types of varying type, scope, and complexity, locally, nationally, and internationally. We are involved in all phases of a project's life, visioning, land use protocols and policy, program development, design, and project delivery.

The depth of our knowledge and experience comes from two sources, 35 years of both professional and education based practice. In teaching we invent and explore the potential of projects and in the professional studio we execute and deliver projects.

rotoark.com



EXPERIMENTAL

Experimental Design is a multi-platform, cross-discipline narrative design studio at the forefront of World Building. A design and storytelling practice, World Building combines rigorous research with a deeply human lens to create the entire holistic context—the world—that surrounds a problem or question, and unearths solutions that can be tested and realized.

Experimental Design applies World Building with a range of clients, helping them to not only imagine how technology and trends could manifest in a future world, but in the world today.

experimental.design



engardearts.org

Founded by visionary producer Anne Hamburger, En Garde Arts is a New York-based 501(c)3 not-for-profit that builds upon a globally-recognized history of creative excellence alongside such luminaries as Reza Abdoh, Anne Bogart, María Irene Fornés, Charles L. Mee, Jr., Tina Landau, Jonathan Larson, Bill Rauch, Fiona Shaw, and Mac Wellman.

From 1985 until 1999, En Garde Arts was the first exclusively site-specific theatre in New York, re-envisioning the city as a stage with experiential events that interwove story with location in Central Park, Penn Yards, East River Park, the Chelsea Hotel, a Meatpacking District before gentrification, and beyond. Using original and adapted texts, productions tackled such timely subjects as the AIDS epidemic and the city's growing economic disparities and were collectively honored with six OBIEs, two Drama Desk Awards, and an Outer Critics Circle Special Award — with The New York Times proclaiming the organization to be "an invigorating urban presence."



madeinspace.la

April Greiman is a thinker and artist, whose transmedia projects, innovative ideas and projects, and hybrid-based approach, have been influential worldwide over the last 30 years. Her explorations of image, word and color as objects in time and space are grounded in her singular fusion of art and technology. Greiman has been instrumental in the acceptance and use of advanced technology in the arts and the design process since the early 1980s.

She moved to Los Angeles in 1976, establishing her multi-disciplinary practice, currently called Made in Space

"Championing an immersive process of understanding and discovery for artists and audiences alike."

- En Garde Arts

Team Members



Michael Rotondi FAIA
RotoLab
RoTo Architects



Alex McDowell
Experimental
World Building Institute



M.A. Greenstein
RotoLab



April Grieman
Made In Space



Nels Long
RotoLab
RoTo Architects



Colin Jacobs
RoTo Architects



Ronni Kimm
Experimental



Jason Heath
RotoLab
Composer/Inventor



Yixiong Peng
RoTo Architects



Elizabeth Gibb
RoTo Architects



John Osborne
RoTo Architects



Anne Hamburger
En Garde Arts



Kevin Benham
South Dakota State University
Landscape Designer

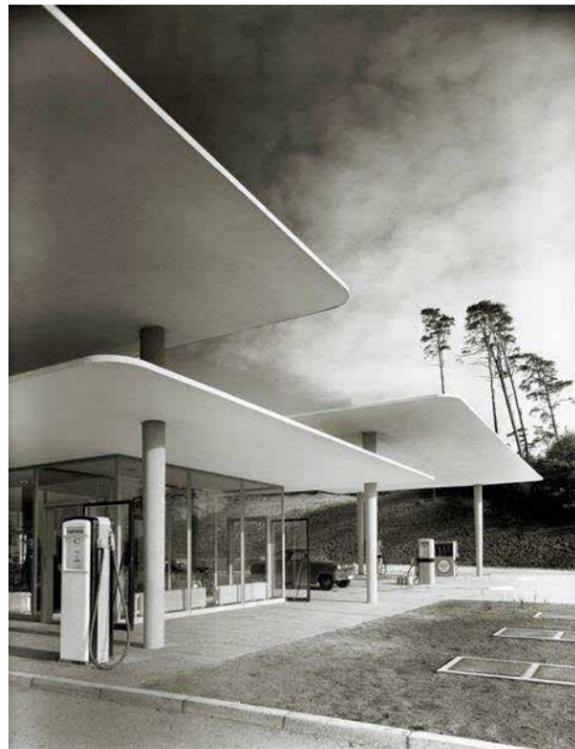


Aron Kallay
RotoLab
Musician/Performer



David Bergman
MR + E
Urban Economist

References



Research

CoWorking

By 2020, There Will Be 26,000 Coworking Locations with 3.8 Million Members | 2016
— smallbusiness.com

Ratio to commercial office space: CoWorking spots represent only 1 percent of commercial office space across the country, according to Steve King, an analyst with Emergent Research—but it's poised for exponential growth.

Ratio to Gig / Contingent Labor: Research from Princeton University suggests that all the net employment growth between 2005 and 2015 can be attributed to the contingent workforce, while the Intuit 2020 Report suggests that 80 percent of global corporations plan to significantly increase their use of contingent labor.

Ratio to human / social need: smallbusiness.com research revealed people in coworking spaces are looking for more than just a place to work. They're also looking for enhanced social experience, networking, community support and opportunities to learn new skills Coworking is conceived as a 'movement' or a 'philosophy' characterised by four common values: collaboration, openness, community and sustainability (Network World, 2007).

GIG Economy

From taxis to hotels, from academics to banking, the economics of "gig" defines labor of the independent contract worker as "contingent labor" by corporations as measured through the Business of Labor Statistics. Contingent workers are those who don't have an implicit or explicit contract for long-term employment. Alternative employment arrangements include independent contractors also called freelancers or independent consultants.

Gig economics is shaping present and future gig employment in a corporate / post industrial economy disrupted by globalization, venture investment and a plenitude of competing lean tech start ups. (Bloomberg 2016)

Urban Renewal Models

Commerce and Culture are in a long term symbiotic relationship.

Historically, there have been two competing approaches to regenerating a City's urban core, commerce to culture or culture to commerce. A third approach is now present inevitable and unstoppable, a hybrid of these two extremes. Both are nested.

Conventional wisdom for many years has approached this problem as primarily one of capital investment into physical infrastructure, buildings and urban beautification. This in turn would spark commerce, attracting more people and eventually social-cultural investment. It worked. The other model, emerging in the last 15+ years begins with investment in cultural

infrastructures, museums and symphony halls, in turn attracting people and commerce, retail and hospitality. It worked, also. Both are valid approaches but need to be re-conceptualized to serve the fastest growing sectors of the American economy, the creative industries sector, and the largest population entering cities and the workforce. The third approach is nesting Commerce and culture. As one, they leverage contemporary life. Research supports the claim that creativity has never been more important considering the global economy is stuttering and disruptive technologies challenge established business models, supply chains, and workflows.

Portland

The concentration of local performing arts companies and a growth in creative businesses are enhanced by this city's independent spirit. The National Center for Education Statistics (NCES) counts a total of 35 colleges and universities in Portland, and the total student population of the city falls just shy of the 100,000 mark. It is consistently listed as one of the most livable cities in the U.S., cited for its' communal life, as one of the top metro areas for bicycle riders and one of the best food and drink scenes in the country. This gives shape to its inspiring identity.

How can this be augmented and leveraged? We propose to leverage these trajectories by re-imagining the Fountain District as the new creative sector of Portland conceived equally, as a social, environmental, and economic model to be emulated by other cities. We propose to name it, **PD(x)** *The Portland Experimental Zone*.

Leveraging Disruptive Change

Creative Sectors, arguably, provide the City with its' greatest competitive advantage. Creative Industries, Science, Technology, Engineering, Arts, and Media (STEAM) have been the fastest growing segments of the 21st C economy over the last decade, outpacing traditional economic drivers. Research studies on urban futures, clearly indicate that a city's creative economy and their emerging creative districts, give them the greatest competitive advantage, today. Although tech sectors in some cities are growing faster and the retail and healthcare fields employ more overall workers, the creative workforce and the culture they create, are what attracts others to the city. A city's fastest job growth is in creative self-employed industries, workers in creative fields, and creative employees in non-creative fields.

A thriving creative workforce is a key feature of nearly every successful modern city. A vibrant culture is not only valuable in its own right, it also often serves to attract and inspire talented workers in non-creative fields, creating a rising tide that benefits the entire city.

Social and Economic Renewal

We imagine a two-tiered economy (short term and long term ROI), to sustain both the traditional nonprofit arts and for-profit creative industries. Both co-exist in a symbiotic creative relationship with similar objectives, to grow a long term Creative Culture with resilience. We addressed what now seems to be the unstoppable trend in the labor force, self-employed creative workers and independent contractors choosing to be inventors rather than employees, or choosing to be a part of the evolving 'Gig economy', hired on a project basis by local companies and global corporations.

Local Assets



adult soap box derby
(right)

burnside skatepark
(below)



**summer streetfair,
flicks on the bricks,
earthday festival**
(left; top to bottom)

glowing greens (below)





Winter Lights Festival



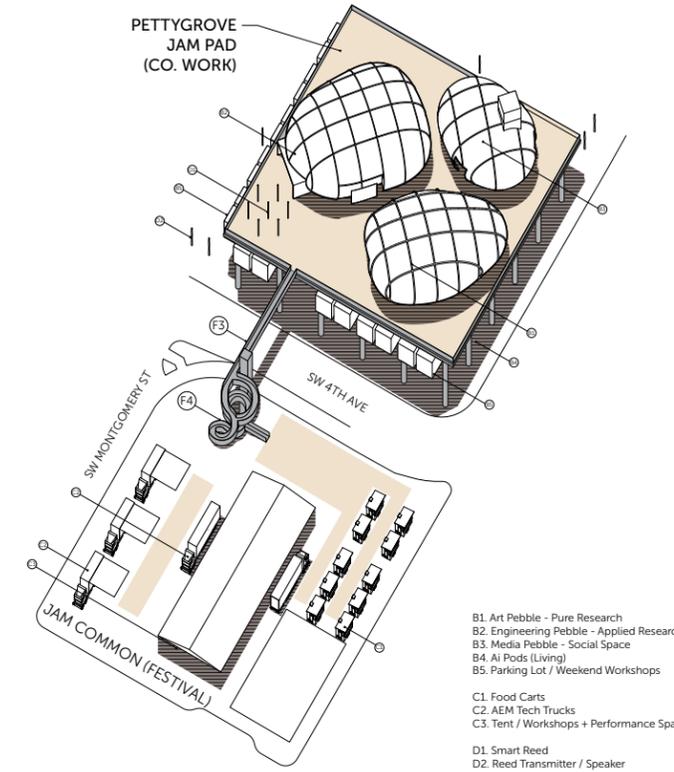
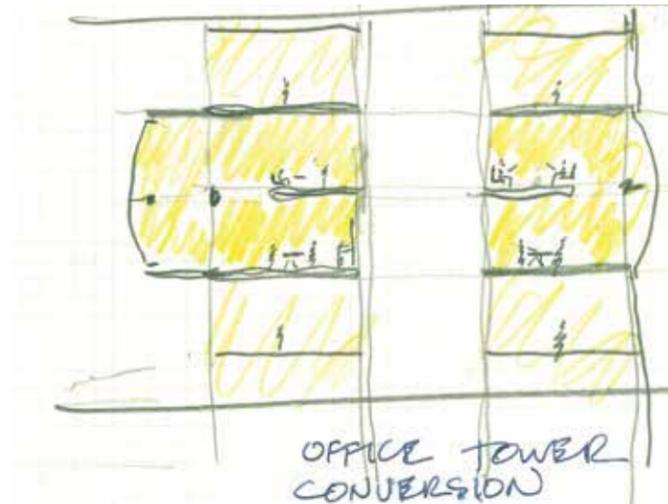
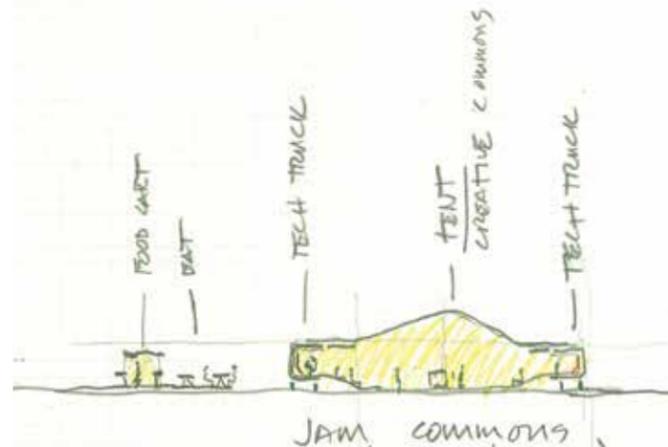
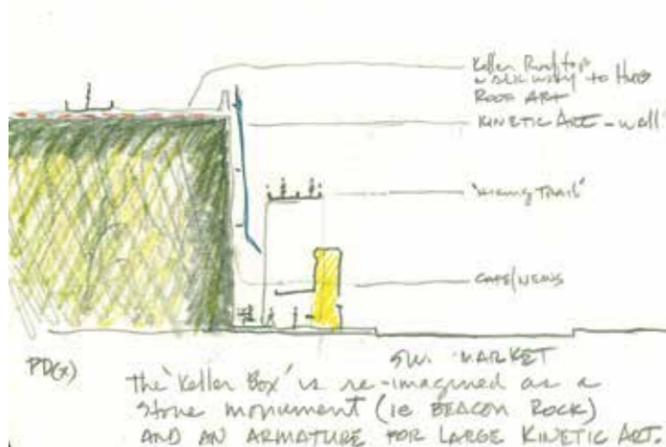
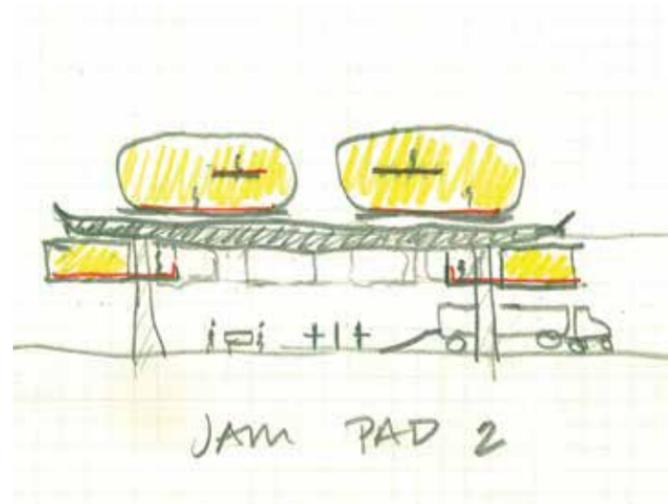
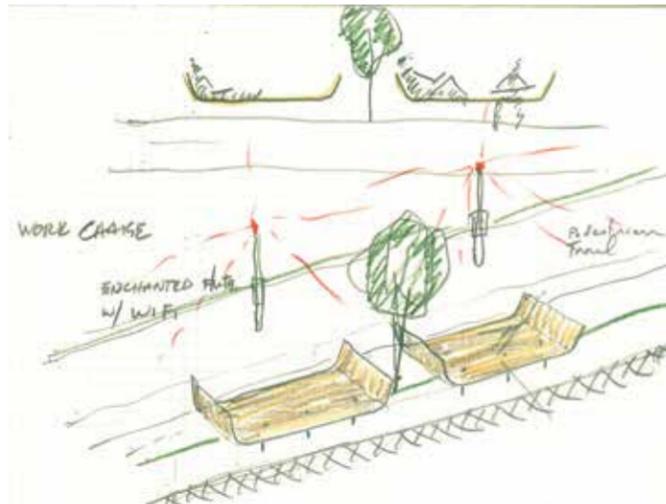
Photo by Steve Eberhardt 2015

Other Local Activities:

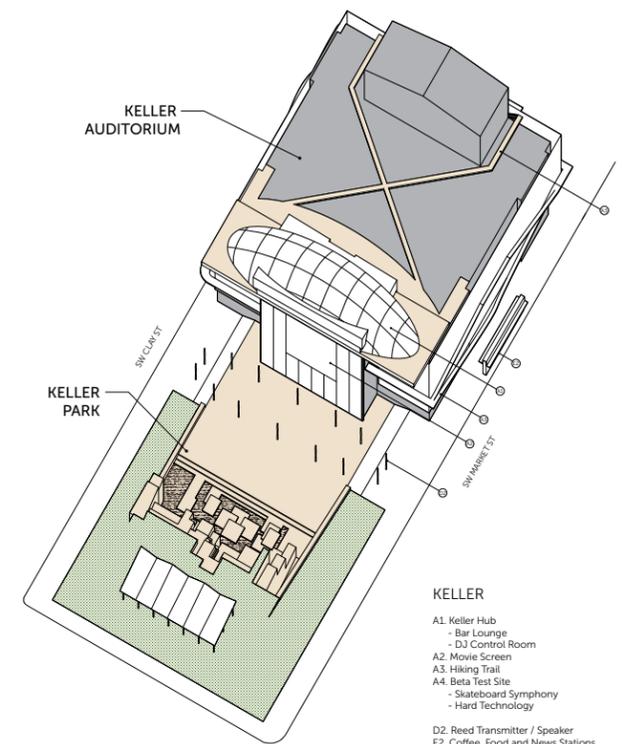
- Hash House Harriers run (h3)
- Bike Polo
- Roller Derby (Rose City Rollers)
- Underdog Sports League
- Ultimate Frisbee
- Bouldering/Climbing
- Hiking/Outdoorsmanship
- Geocaching
- Scavenger Hunts
- Mini golf (Glowing greens)
- Skateboarding and BMX

There is a sense of discovery that seems to be present in a lot of popular activities in portland, speakeasies where you require a password to get in, hidden free mini golf courses you have to be told about, hunting after a hash runner and the origins of burnside skatepark.

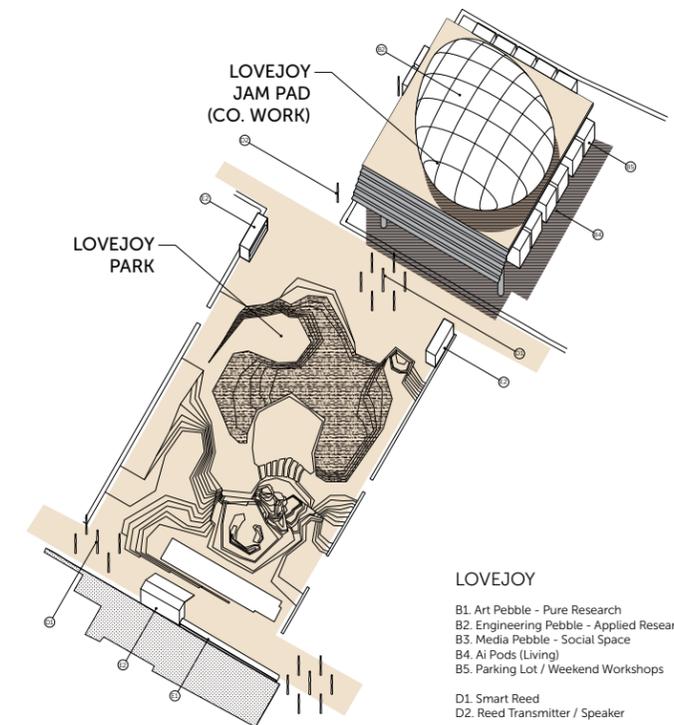
Components



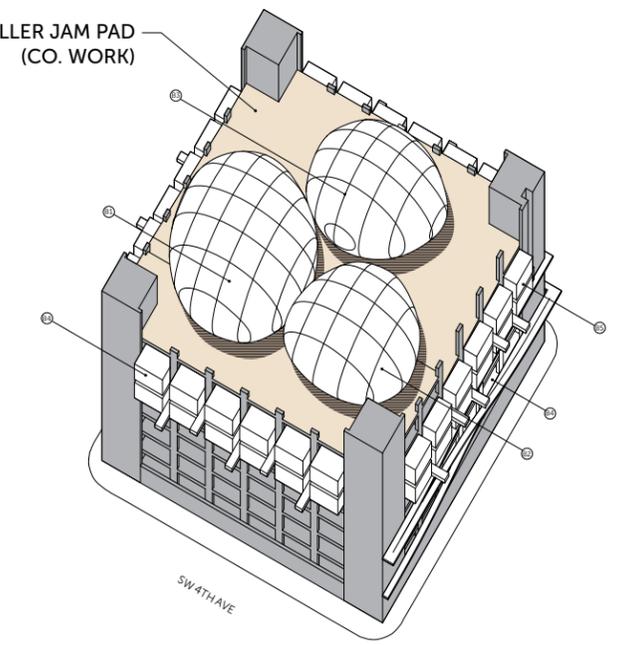
- B1. Art Pebble - Pure Research
- B2. Engineering Pebble - Applied Research
- B3. Media Pebble - Social Space
- B4. Ai Pods (Living)
- B5. Parking Lot / Weekend Workshops
- C1. Food Carts
- C2. AEM Tech Trucks
- C3. Tent / Workshops + Performance Space
- D1. Smart Reed
- D2. Reed Transmitter / Speaker



- KELLER
- A1. Keller Hub
 - Bar Lounge
 - DJ Control Room
- A2. Movie Screen
- A3. Hiking Trail
- A4. Beta Test Site
 - Skateboard Symphony
 - Hard Technology
- D2. Reed Transmitter / Speaker
- E2. Coffee, Food and News Stations



- LOVEJOY
- B1. Art Pebble - Pure Research
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- B3. Media Pebble - Social Space
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- B5. Parking Lot / Weekend Workshops
- D1. Smart Reed
- D2. Reed Transmitter / Speaker
- E1. Work Lounge (Wide Bench)
- E2. Coffee, Food and News Stations



- B. Jam Pad Co-Work Space
 - Co-Work Space
 - Enchanted Pebbles
- B1. Art Pebble - Pure Research
- B2. Engineering Pebble - Applied Research
- B3. Media Pebble - Social Space
- B4. Ai Pods (Living)
- B5. Parking Lot / Weekend Workshops

