

December 2017

PORT OF SEATTLE MARITIME INNOVATION CENTER DESIGN CHARRETTE REPORT

prepared by: The Miller Hull Partnership



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contributions from: The Maritime Alliance and the Port of Seattle



SEATTLE SHIP SUPPLY



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PROJECT VISION

prepared by: Port of Seattle & The Maritime Alliance

The Port of Seattle is interested in developing a business incubator at Fishermen's Terminal that can support and drive innovation within the maritime sector. As the Port redevelops Fishermen's Terminal it wants to restore its Seattle Ship Supply building and turn it into a facility that can support entrepreneurs and established companies.

The innovation center would support next generation inventions that drive the competitiveness of Washington State's **Blue Economy**. The facility would bring together leaders from education, industry, and government to address both challenges and opportunities within the cluster. The facility would support classes, technical assistance, and research and development that ultimately helps the industry innovate and sustain its competitive advantage.

The Port is now completing a feasibility study and strategic planning effort that will underpin the start-up and ongoing operations of the maritime innovation center. The Port plans to renovate the Ship Supply building in 2018 so the facility will be ready for operations by Q2 2019.

OCEANS OF OPPORTUNITY

The ocean will increasingly play a major role in our daily lives. When we think about the “Big 5” issues for life – water, food, medicine, energy and “real estate” – we are really thinking about the ocean. The global “Ocean Economy” is valued on a conservative basis by the Organization for Economic Cooperation and Development (OECD) at \$1.5 trillion (2010) and growing to \$3.0 trillion by 2030, with much of the growth coming from innovative maritime technologies and services.



MARITIME CLUSTER DEVELOPMENT GROWING INTERNATIONALLY

Cities and Ports around the world are working to stimulate maritime innovation. The Port of Los Angeles is developing AltaSea, a 35 acre innovation campus designed to incubate and sustain ocean-related business and create jobs. RDM Rotterdam is a former shipyard that is now home to a range of exciting private-sector, education and research initiatives. Iceland's Ocean House is working with its fishing industry to utilize 100% of the by-products of traditional codfish processing. These initiatives and others like the Brooklyn Navy Yard and the SEA-Lab in Toulon are facilitating industry modernization, attracting new energy and encouraging investment.

STAKEHOLDER INPUT + COMMUNITY ENGAGEMENT

The Port has retained the Maritime Alliance to complete a feasibility study and strategic plan for the Ship Supply Innovation Center. Getting broad input and developing an effective support network are essential towards starting and successfully operating this incubator. The Port has introduced the consulting team to a variety of industry, education, and government leaders already with additional outreach planned over the next few months.

WHAT THE PORT HAS HEARD SO FAR

The Port and the WA Dept. of Commerce hosted a workshop on October 17th with a variety of stakeholders to identify the major strengths, weaknesses, and trends of Puget Sound's maritime sector, as well as gather input to form a vision for the center.

STRENGTHS

- Strong culture of innovation and sustainability; an “innovation ecosystem”
- Vibrant maritime industry with strong legacy and history
- Developed/diverse supply chain
- Access to diverse end customers in maritime: Fishing/farming, Port, Alaska, Navy/NOAA

WEAKNESSES

- Lack of investment sources for maritime
- Lack of broad public awareness of maritime
- Long established industry; slow pace of maritime innovation; resistance to change
- Workforce development: lack of workers to fill maritime jobs; lack of coordinated training programs
- Lack of coordinated access to testing facilities, linkages, and partners; needs are diverse
- Distance from DC; lack of awareness among policymakers

TRENDS

- Electrification of vessels
- Autonomous systems development
- Big data and how may it be turned into useful information
- Climate change
- Dealing with an increasing regulatory environment with application of technology
- Changes in consumer behavior (particularly in purchasing seafood)
- Alternative uses of the ocean



AN EMERGING VISION

By the end of the multi-hour workshop which brought together individuals and representatives from the Applied Physics Lab at University of Washington, NOAA, fish processing industry associations, state and local economic development, entrepreneurs, and venture capital, a vision began to emerge from statements like:

“A fisherman walks into the Center with a problem; this leads to a new innovation/solution” “A place where problems are voiced; a forum and a connection point between research, industry, capital, and government”

“Attracting businesses and people from outside Puget Sound”

Sustainable funding model; membership/sponsorship system”

“Involvement with education across the spectrum (K-12 and Postsecondary)”

“Global center of expertise”

“A center which offers: Apprenticeship and mentoring opportunities; Special events connecting maritime interests; and Resources for maritime businesses (ex: 3-D printer, machinist’s shop)”

NEXT STEPS + QUESTIONS

Over the next two months the Maritime Alliance will continue its outreach efforts to ensure the Port gets broad input surrounding its Maritime innovation center

What are key areas of focus and opportunity for a Port sponsored Maritime Innovation Center?

Which partners or stakeholders are particularly important to the success and sustainability of the Innovation Center?

How can the Center support maritime innovation across Washington state, especially in our rural maritime communities?

What types of training or workforce development are particularly important to emerging maritime companies?

How can the Port spur innovation in the maritime sectors and increase Puget Sound’s comparative advantages as a leader in the Blue Economy?

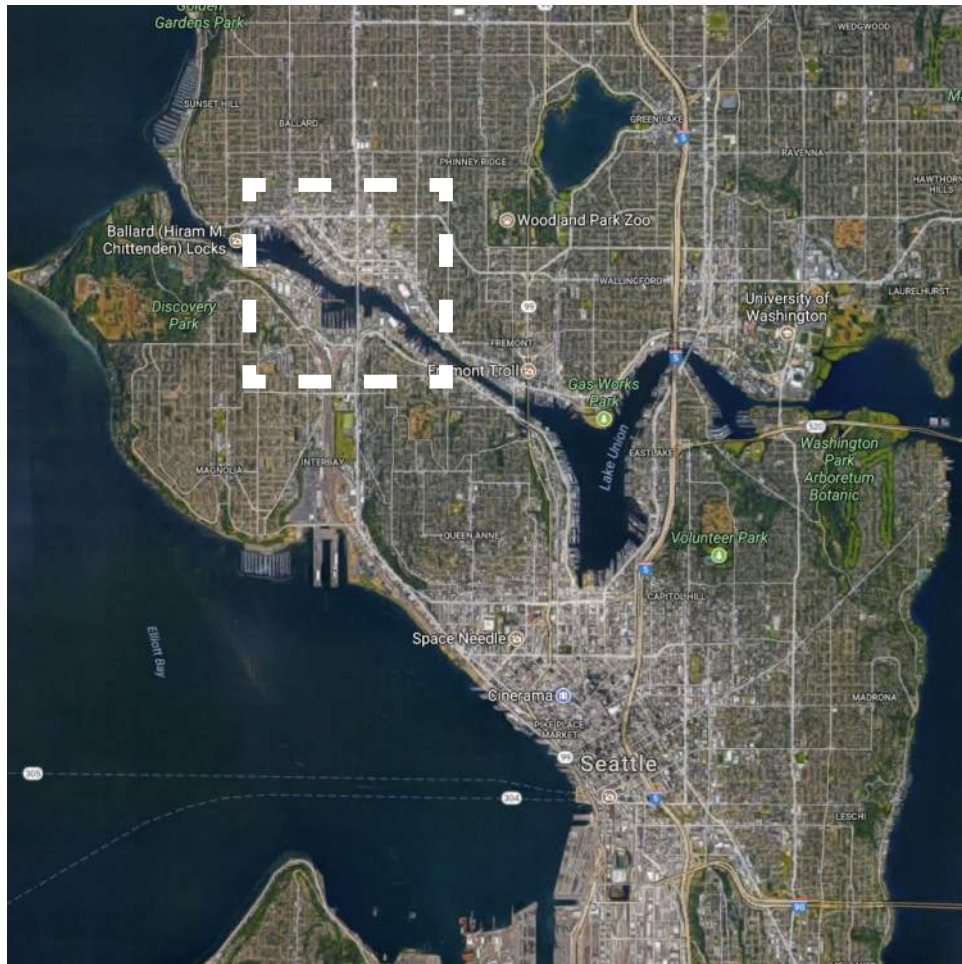
EXISTING CONDITIONS

Built in 1918, the Seattle Ship Supply building (C-9) is one of the oldest structures on the Fishermen's Terminal site. The original building structure is a classical basilica form with a central two story nave and gable roof, flanked by two side shed structures. At over 45' at the top of the gable, Seattle Ship Supply is the tallest existing building on the Fishermen's Terminal site, and is prominently visible from the Ballard Bridge when approaching the site from the North.

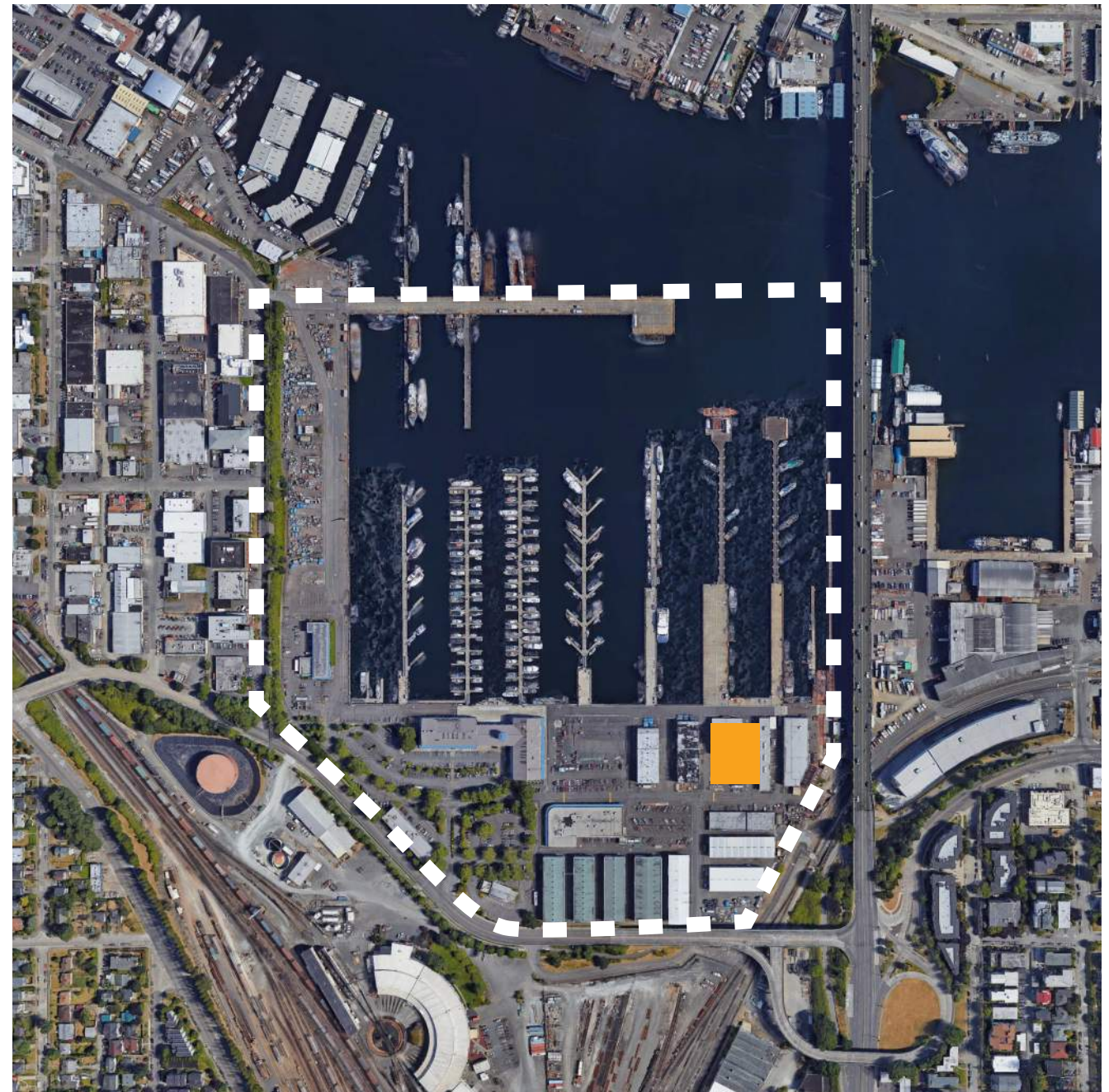
The building was remodeled in 1953 by the Seattle architecture firm Carlson-Evey-Grevstad. The architects were known as modernists and did projects for the University of Washington and the Seattle Public Schools. Their remodel greatly reduced the integrity of the original structure. There are no extant drawings of the original construction, and only suppositions can be made about the foundation, the original window placement and other aspects of the original building.

In 2003, it was determined Seattle Ship Supply was ineligible for listing in the NRHP due to extensive alterations and a lack of historical significance. However, the building is significant on a local level and is potentially eligible as a Seattle Landmark.

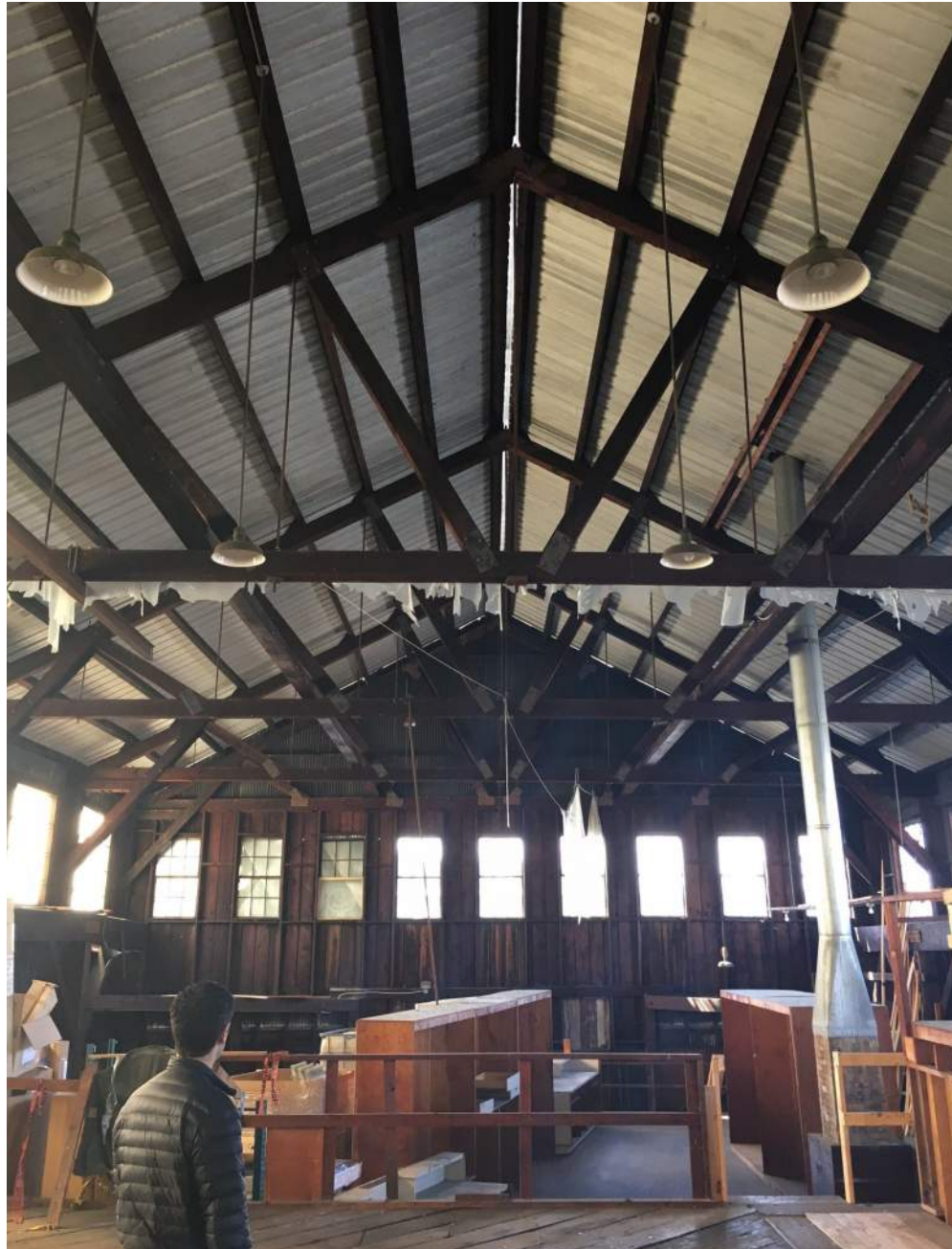
The existing building is located approximately 60 feet south of Salmon Bay and is in the Urban Maritime Shoreline Environment. The proposal would require work within this area. The building is located with a liquefaction prone area, and any new construction will require extensive foundation work. It is assumed that the original timber structure will remain, while interior partition walls added in the 1953 will be demolished in order to accept new work. The entire exterior envelope, including the existing windows and corrugated metal siding, will be replaced with a new high performance envelope to comply with current Seattle Energy Code requirements.



Above: Fishermen's Terminal is located in the Ballard-Interbay Industrial Area, directly west of the Ballard Bridge and east of the Hiram M. Chittenden Locks along the Lake Washington Ship Canal. The North Pacific commercial fishing fleet operates out of the fresh water terminal.



Right: The Seattle Ship Supply Building sits along the South Wall across from Dock 4 on the west side of the Fishermen's Terminal property. It is situated in a more industrial portion of the site, some distance away from the main public area at the main terminal building.



Above: The northwest corner of the building shows the changes to the exterior glazing from the 1953 model. The upper clerestory windows remain in their original position.

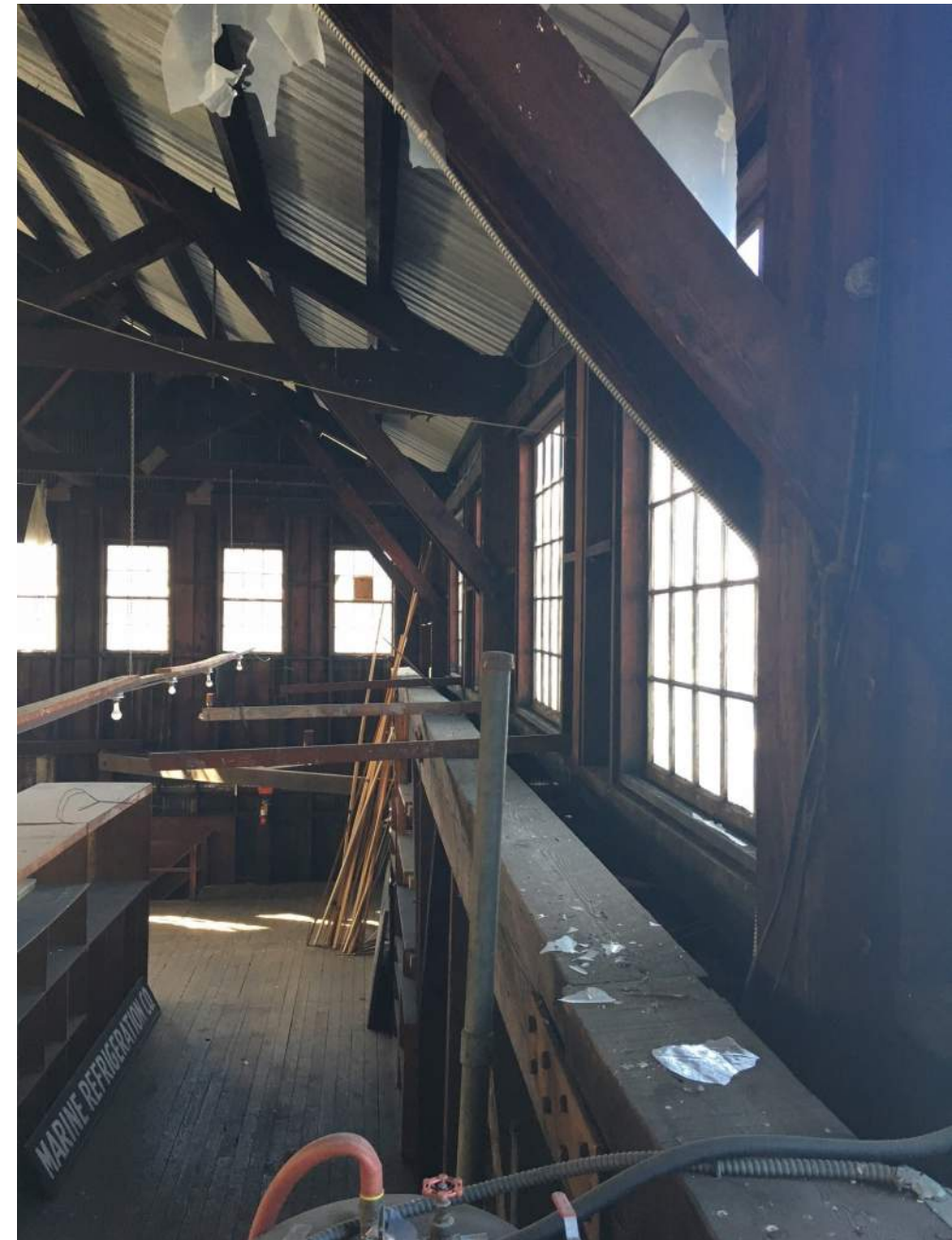
Right: The upper portion of the existing building is clad in the original corrugated metal siding while the lower wall has been covered in stucco. The entire exterior envelope will be replaced in the renovation.

Left: The central “nave”: a high bay interior space with heavy timber roof trusses surrounded by clerestory windows.



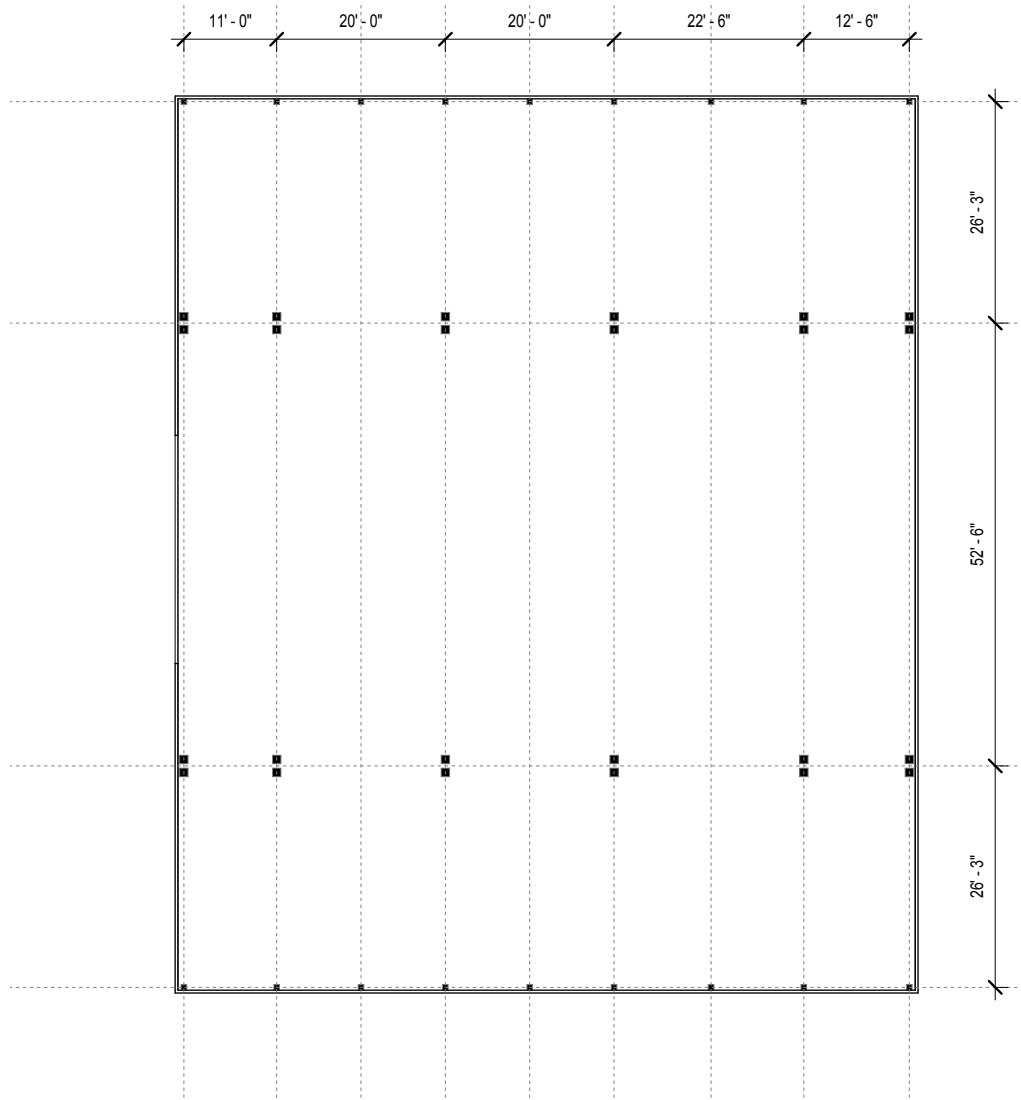
Right: The upper level has large clerestory windows that offer views out to the docks to the north.

Far Right: A deep gantry beam runs along the length of the building in the East-West direction, directly below the clerestory windows.





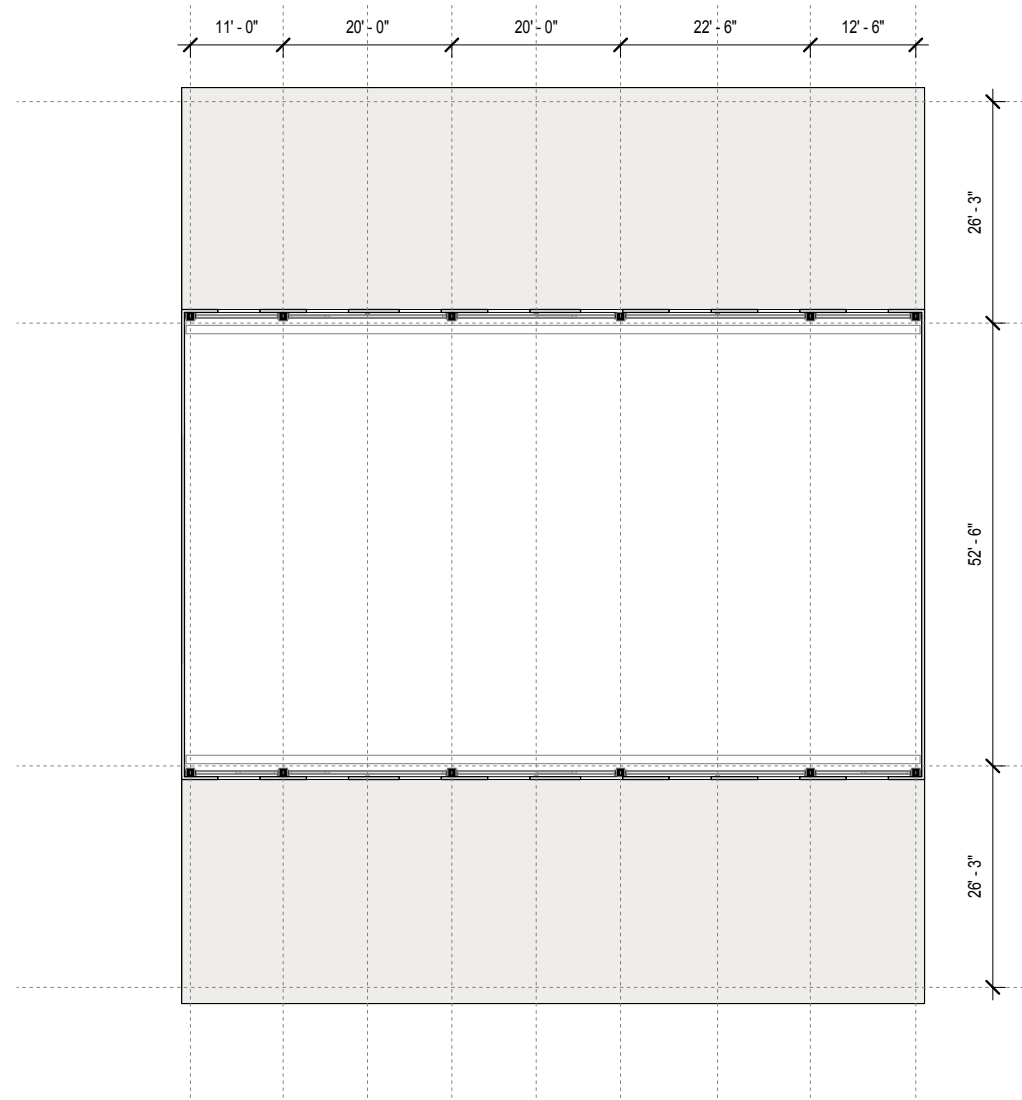
Elevation and section drawings from the 1953 remodel show the changes to the exterior window locations and the addition of interior partition walls to the central high bay space.



Level 1 Floor Plan

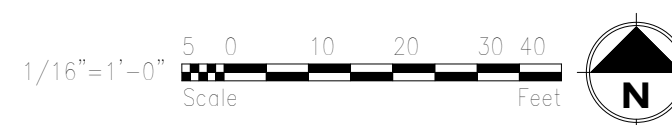
1/16" = 1'-0"

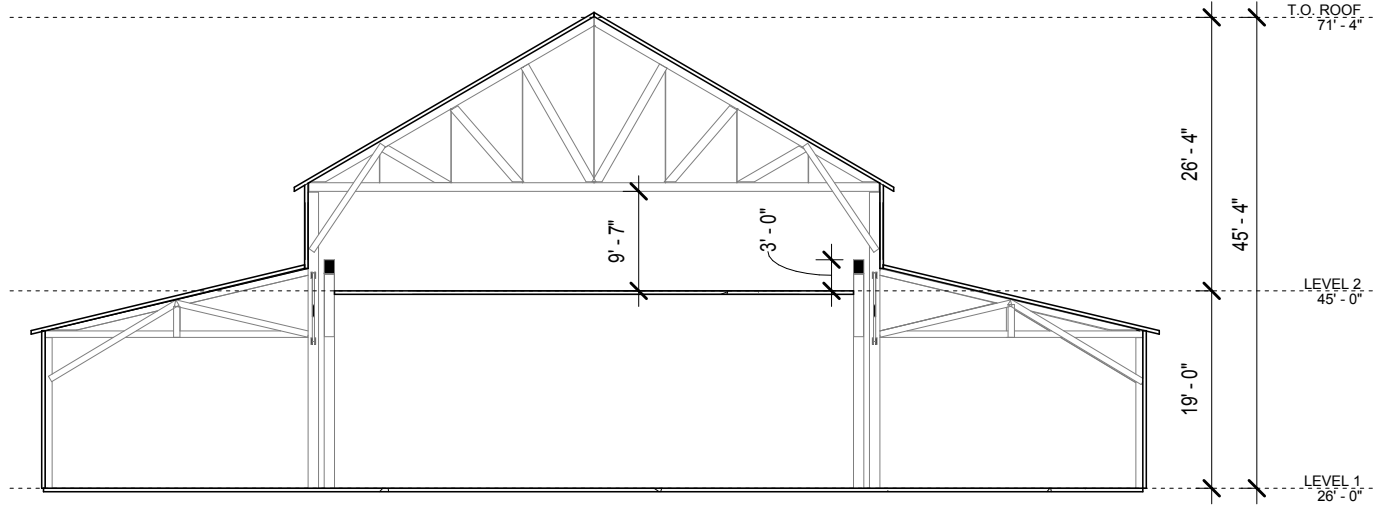
The 4,500sf central bay can support two levels, while the two 2,200sf side wings are limited to a single level due to the density of structure. The primary structure runs North-South, offering the opportunity to divide the wing spaces into smaller bays.



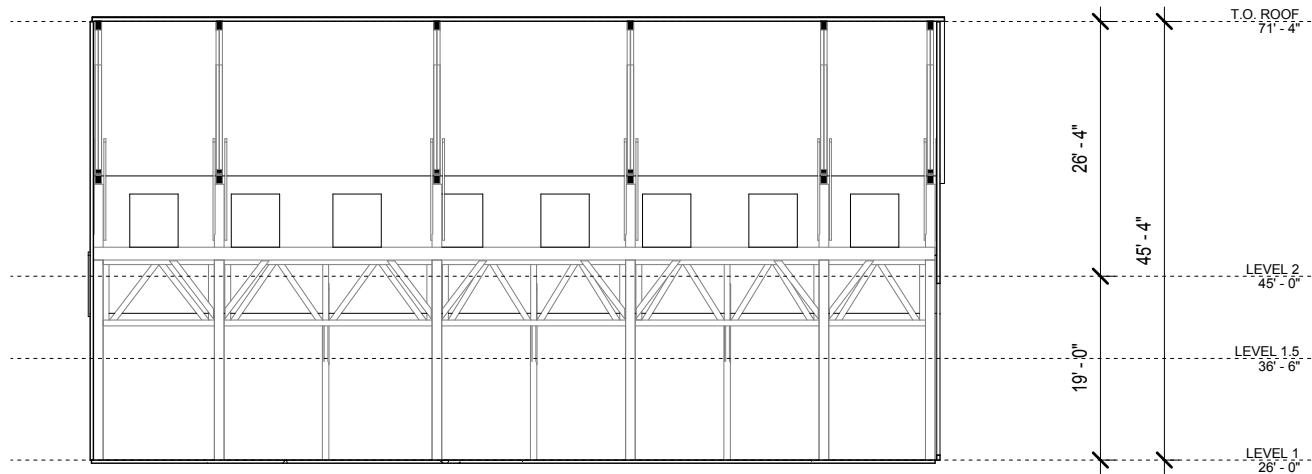
Level 2 Floor Plan

1/16" = 1'-0"





The North-South building section shows the simple building form of a central nave-like high bay space with two lower side wings. In order to take advantage of the views from the upper clerestory windows, the assumed 2nd floor level will be 19' above the lower level, 3' below the top of the gantry beam. This allows a 9'-7" clear height between the 2nd floor and the bottom of the roof trusses and a 26'-4" height to the top of the roof ridge.



The East-West building section shows main structural bays running North-South that will allow the wing spaces to be easily sub-divided into smaller spaces. The large truss running North South at the primary column line prevents access to the upper portions of the wing spaces, limiting the wings to a single story. The upper area of the wings can likely be utilized for distribution of building services.

PRECEDENT RESEARCH

The Maritime Alliance provided a number of examples of industrial incubators spaces from around the world, including several with maritime functions. These precedents, explored in detail on the following pages, range in scale from expansive campuses at international ports to small self-contained buildings in urban settings- more at the scale of the Seattle Ship Supply Building. Each of these precedents offer different examples of business models, space types, and strategies for the renovation of historic industrial buildings that are applicable to the development of the Seattle Ship Supply Building into a globally-reaching Maritime Industrial Incubator.

Olive 942, Eugene, OR

Alta Sea, Port of Los Angeles, CA

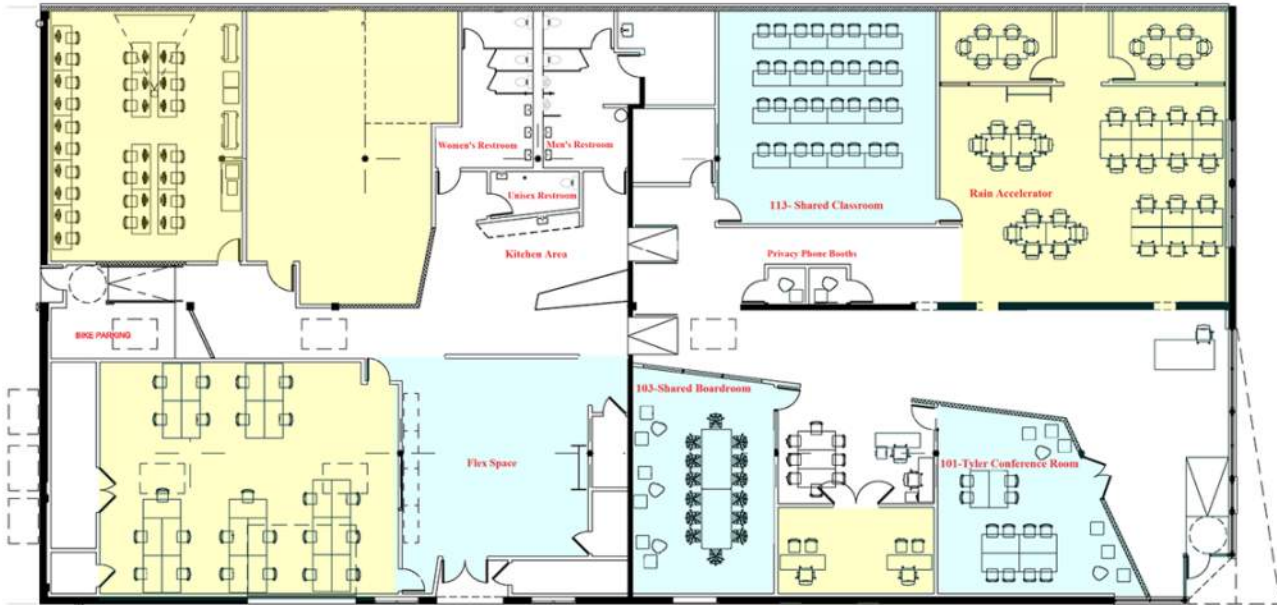
Centre for Ocean Ventures and Entrepreneurship (COVE), Halifax, Nova Scotia

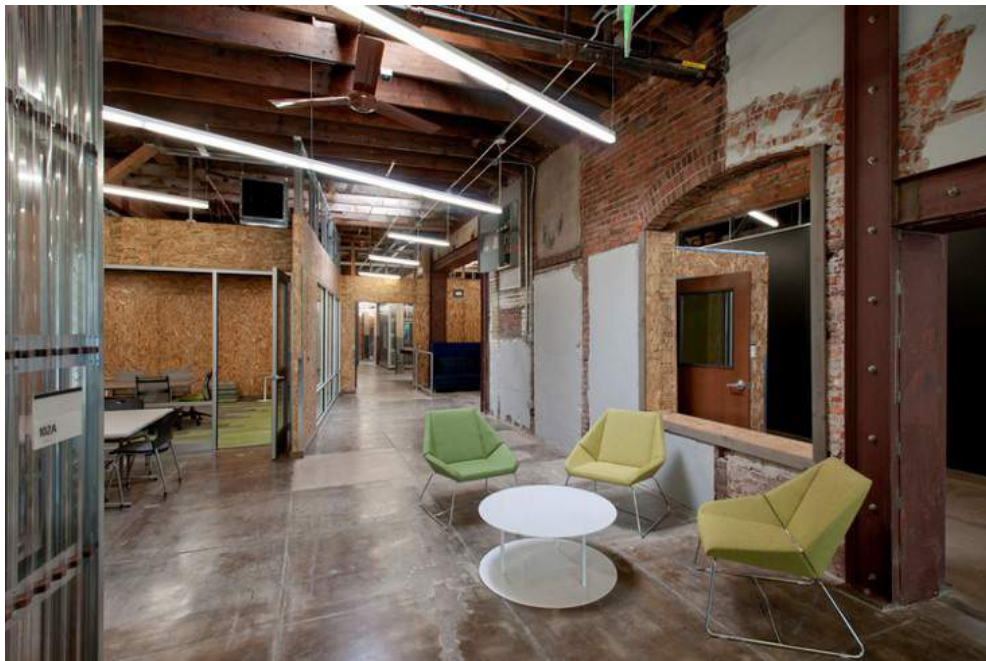
New Lab, Brooklyn Navy Yard, NY

RDM Rotterdam, Port of Rotterdam, The Netherlands

In addition to these precedents, a number of images of various space types, including maker spaces/workshops, incubator spaces, event spaces, and conference/classroom spaces were gathered in order to provide inspiration for developing the program for the Seattle Ship Supply building. These images are included with the discussion of programmatic spaces in a following chapter.

RAIN - EUGENE





COVE

The Centre for Ocean Ventures & Entrepreneurship (COVE) is located on an 8 acre site in Halifax, with 16,000 square feet of office space, 10,000 square feet of incubation space, and 16,500 square feet of shop and lab space to support ocean technology companies.





ALTA SEA

Located at the Port of Los Angeles, this phased project brings together research and business, science and education centers and community spaces. This project contains multiple building renovations, site improvements, and some new construction on a site with historic importance to the Port of Los Angeles.





NEW LAB - BROOKLYN NAVY YARD

Brooklyn, NY | Marvel Architects

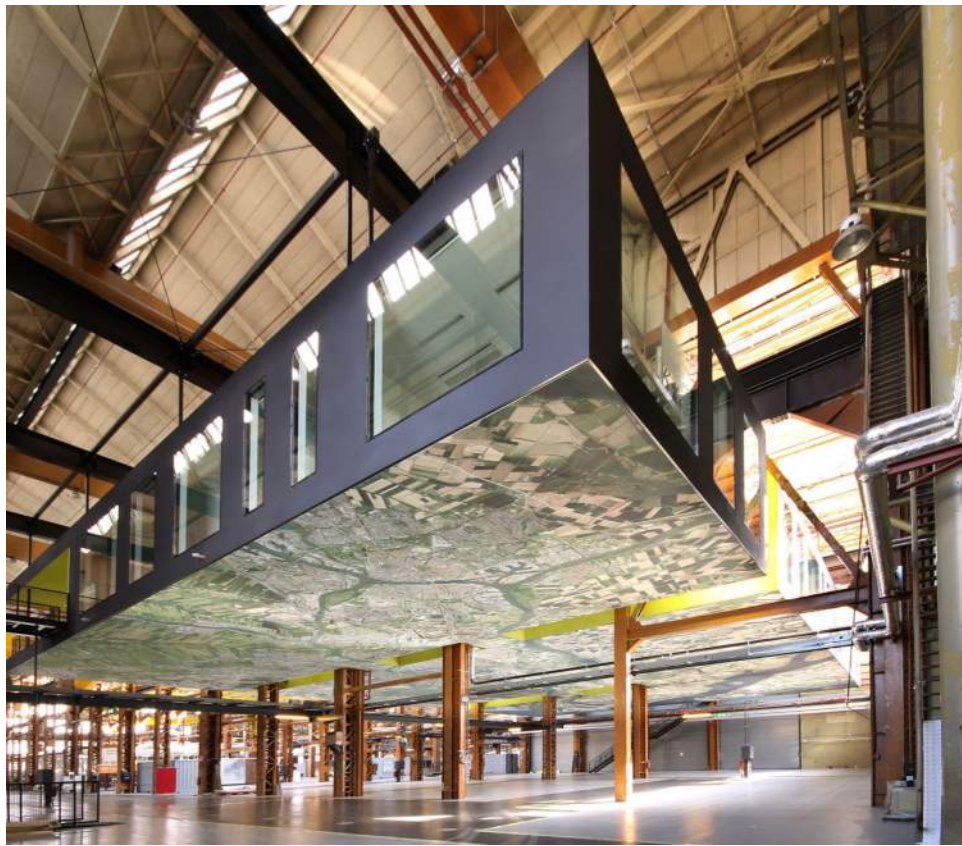
Located inside of Brooklyn Navy Yard Building 128, a 161,000sf former shipbuilding hangar, the New Lab at the Brooklyn Navy Yard creates a collaborative design, prototyping, and manufacturing center for a diverse range of emerging and established entrepreneurs working in advanced technologies, including robotics, life sciences, energy, nanotechnology, and the building environment among other disciplines.





RDM ROTTERDAM

Education and innovation of maritime technologies within the historic urban port structures in the city of Rotterdam. Business, education, and events are all showcased within Europe's largest sea port.





DESIGN CHARRETTE

On December 11, 2017, The Miller Hull Partnership hosted a design charrette to envision the future of the Seattle Ship Supply Building as a maritime incubation center. The session was intended to identify - at a conceptual level - attributes and goals for the Innovation Center and the types of spaces the Ship Supply building could provide to best support the future of Washington State's maritime industry. A diverse range of stakeholders representing various interest groups gathered for a half-day workshop to identify programmatic needs for the Maritime Innovation Center.

In order to gather information and inspiration for the development of design scenarios, the key goals for the workshop were:

1. To prioritize goals for the Maritime Innovation Center
2. To understand spatial constraints of the existing Seattle Ship Supply Building
3. To develop key programmatic elements and adjacencies
4. To understand overlaps for multi-use spaces
5. To identify accommodations required for specialized equipment.

The team participated in several exercises to help draw out these qualities and preferences. Resultant outcomes were then collated and summarized to help guide the development of scenarios and concepts to pursue.

Charrette Attendees

Port of Seattle

Jeffrey Utterback, Real Estate & Economic Development
Kenny Lyles, Commercial Fishing Operations
Bill Ellis, Economic Development Coordinator
Joseph Gellings, Senior Planner
Tim Leonard, Project Manager
Dave McFadden, Economic Development Division

Washington State Department of Commerce

Joshua Berger, Maritime Sector Lead

Industry Stakeholders

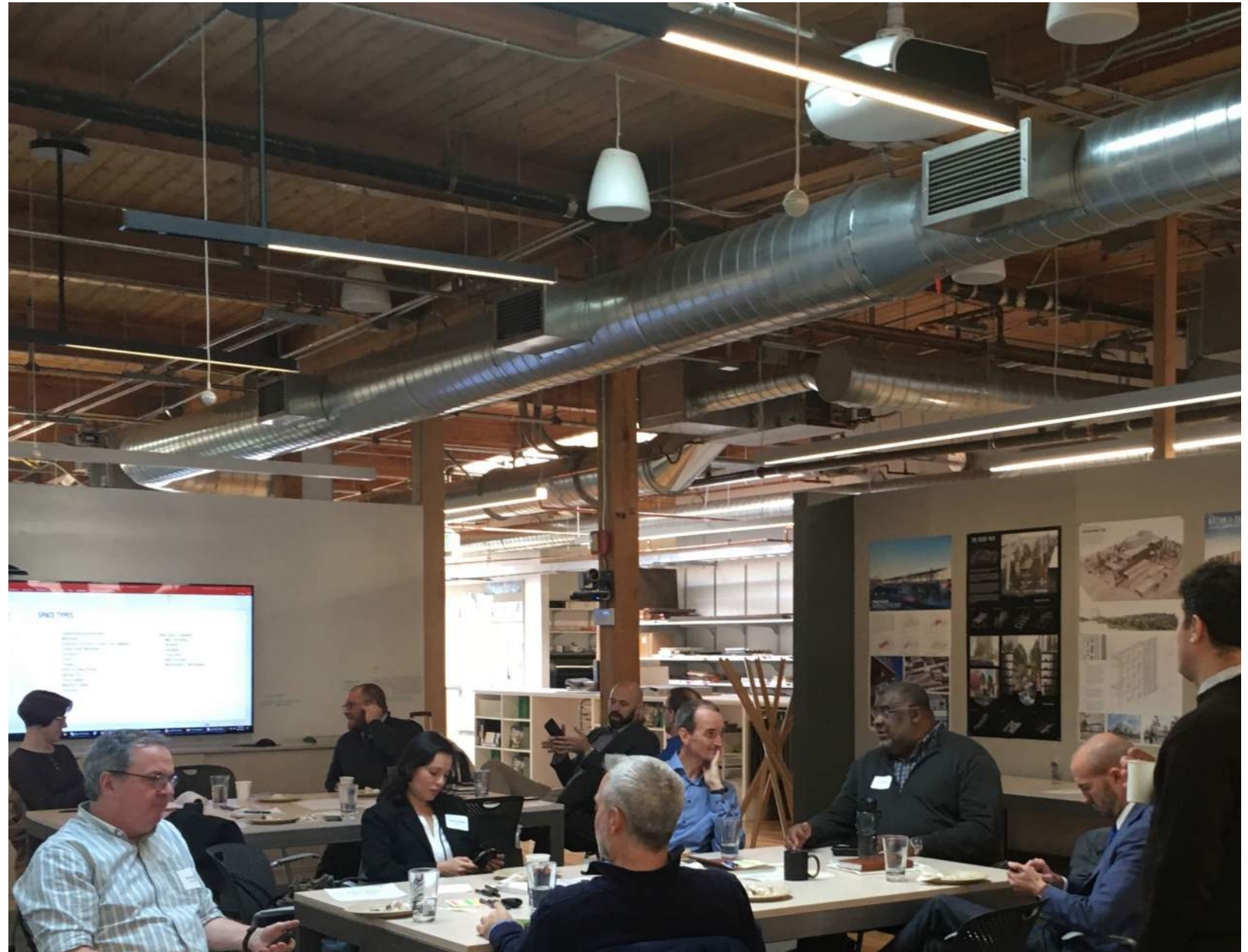
Peter Knutson, Loki Fish
Chris Meinig, NOAA
Tyler Allen, MER Equipment
Elizabeth Scallon, UW-CoMotion Labs
Kristian Alcaide, Pingle Co.
Jennifer States, DNV-GL
Simon Mockler, DNV-GL
Dave Dyer, UW-Applied Physics Labs
Benjamin Mauer, UW-Applied Physics Lab

The Maritime Alliance

Greg Murphy, Executive Director
Chris Ward
Morgan Shook

The Miller Hull Partnership

Ron Rochon, Managing Partner
Margaret Sprug, Project Manager
Mike Jobes, Design Lead
Catharine Killien, Project Architect





Charrette Agenda

- | | |
|----------|---|
| 9:00 AM | Welcome/Introduction
<i>Miller Hull</i> |
| 9:15 AM | Updates on Project
<i>The Maritime Alliance</i> |
| 9:25 AM | Building Background + Feasibility Bounds
<i>Miller Hull</i> |
| 9:35 AM | Precedent Research: Innovation Centers
+ Space Types
<i>The Maritime Alliance + Miller Hull</i> |
| 9:45 AM | Programming + Design Charrette

Part 1: Develop Comprehensive List of
Uses/Goals
<i>All groups together</i>

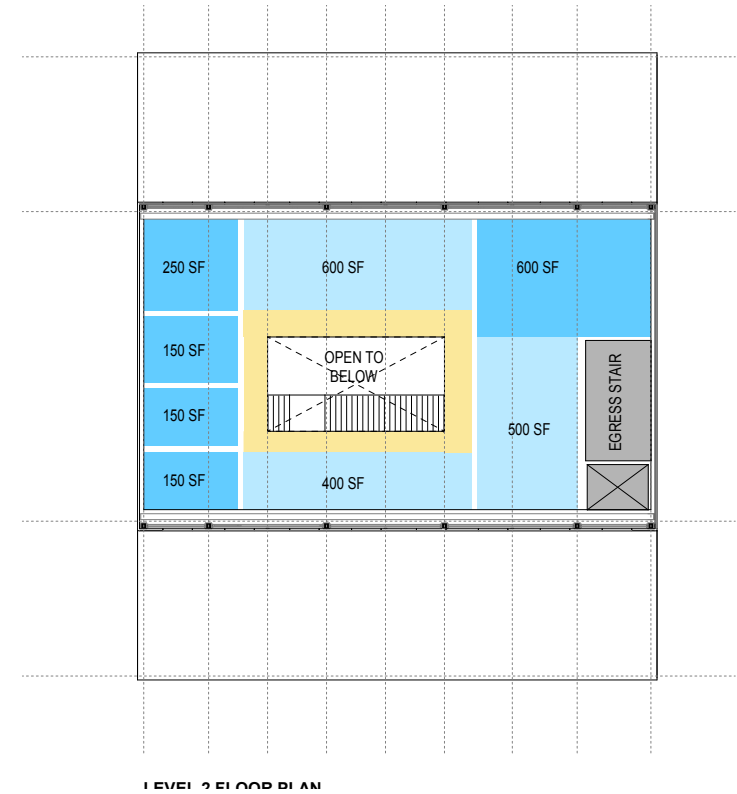
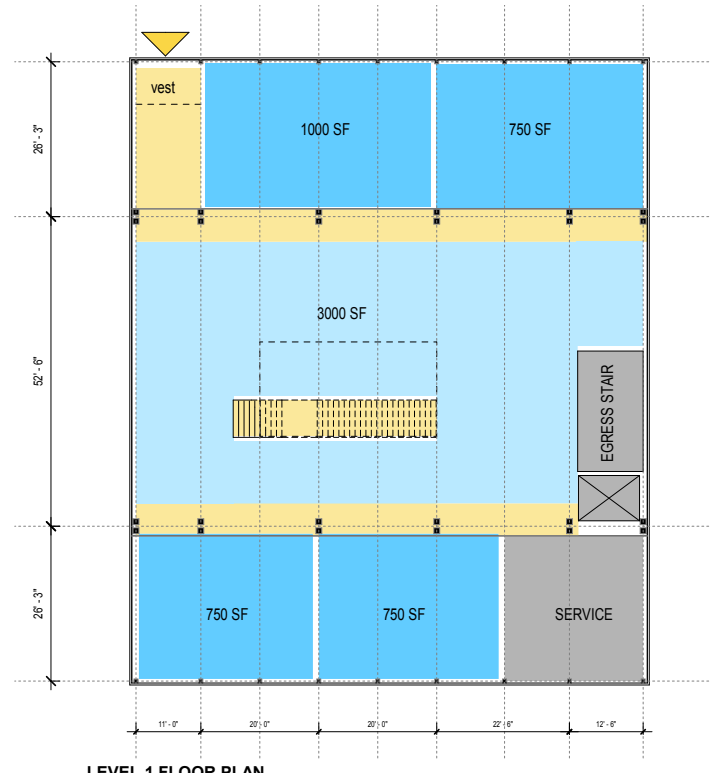
Part 2: Discover Overlaps + Solutions
<i>Break into (3) mixed groups</i>

Part 3: Report Back
<i>All groups together</i> |
| 12:00 PM | Refreshments + Networked Conversation |
| 1:00 PM | Summary + Discussion of Initial Concept
Scenarios
<i>Miller Hull</i> |

INTRODUCTION + PROJECT UPDATES

After an initial introduction and overview of the day's agenda from Miller Hull, Chris Ward from The Maritime Alliance provided an update on the project and a summary of their work so far. The Maritime Alliance was engaged by the Port of Seattle to help develop a business plan and feasibility study for the project, and was brought on board at the end of summer 2017. Throughout the fall, The Maritime Alliance held numerous meetings and workshops with key stakeholders to identify the strengths, weaknesses, and trends within local maritime industry and how these might be incorporated into a new Maritime Innovation Center. Surveys and meetings with specific stakeholders (including several people in attendance at the design charrette) are ongoing. The Maritime Alliance's final deliverable to the Port of Seattle is a business plan for the Maritime Innovation Center, to be completed in 2018.

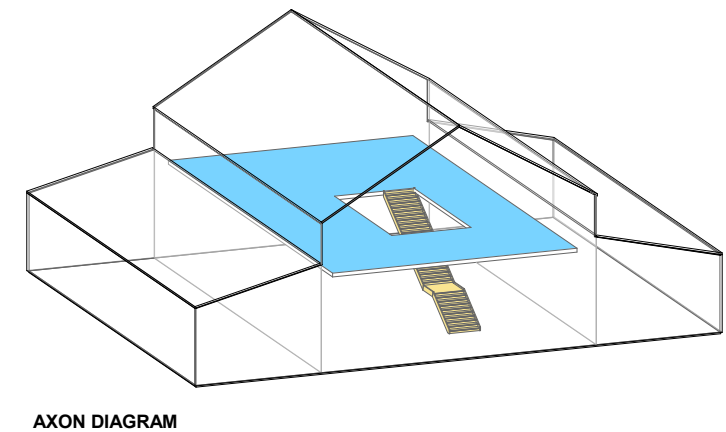
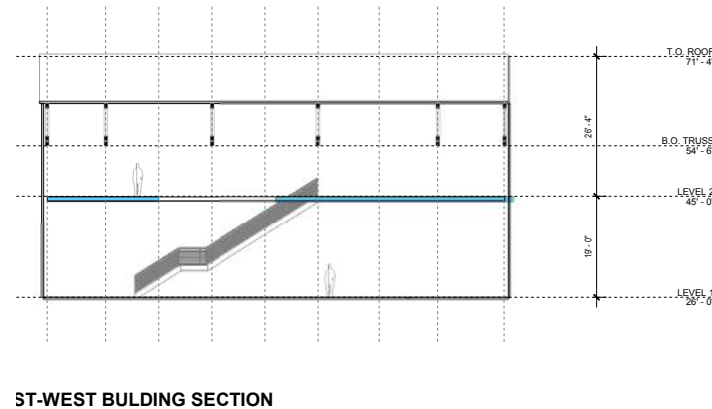
Chris discussed the importance of this innovation center at Fishermen's Terminal to the growth of the Blue Economy, noting that the Maritime Industry in Seattle is strong but fragmented. With the abundant presence of both maritime and tech industries in Seattle, the intention with the Maritime Innovation Center is not to duplicate something that is already happening locally, but rather to elevate the position of the maritime industry in the local community and economy.

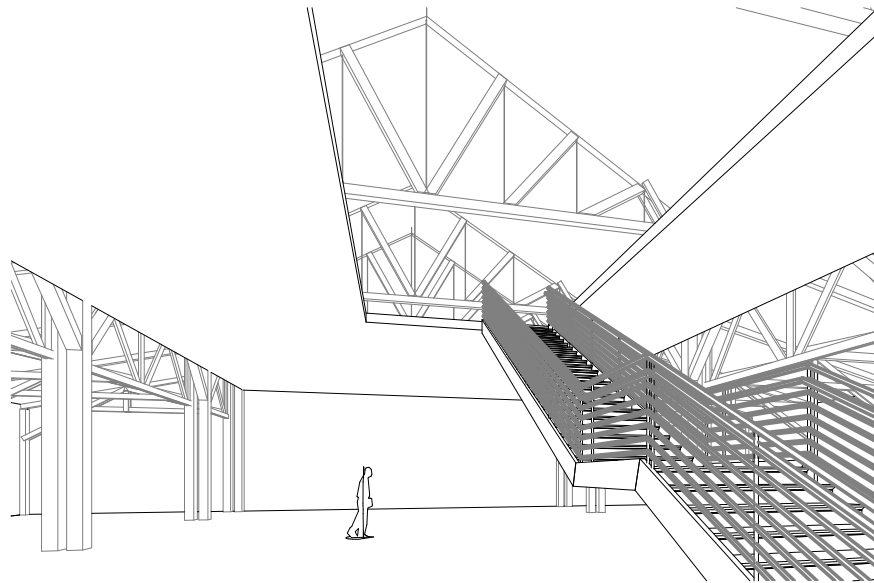


BUILDING BACKGROUND + FEASIBILITY BOUNDS

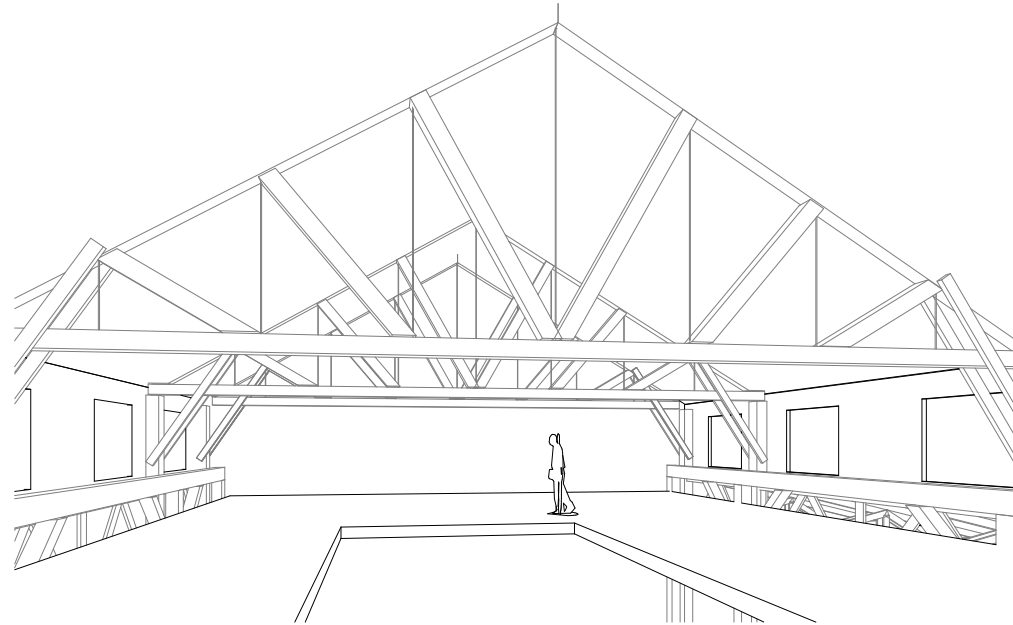
Mike Jobes from Miller Hull provided a brief summary of the existing Seattle Ship Supply Building, showing floor plans, building sections, and interior and exterior photographs of the existing building. Mike noted that the Ship Supply building has a great basilica-like form and incredible visibility from the Ballard Bridge and the Lake Washington Ship Canal.

In describing the constraints and opportunities of the existing building, he indicated that the existing timber structure would remain, but the exterior envelope would need to be replaced, with a new skin becoming the iconic mark of a new era. The two wing spaces are likely limited to one story, as the existing timber trusses running East-West prevent





VIEW: LEVEL 1 LOOKING WEST



VIEW: LEVEL 2 LOOKING WEST

access to the upper areas of the wings. The North-South trusses in the central bay are a key architectural feature, and maintaining a sense of the high bay space and character of the original structure is a critical design consideration and will have to be balanced against desires to maximize floor area.

Mike presented an early test-fit layout done by Miller Hull that showed one scenario for laying out the space, noting that this was just one way of laying out the space, and the intention for the design charrette was to come up with a number of alternate scenarios depending on the programmatic needs voiced by the diverse group of stakeholders.

PRECEDENT RESEARCH: INNOVATION CENTERS

Miller Hull and The Maritime Alliance presented several examples of other existing innovation centers from around the world, providing background context of how these buildings might provide inspiration for the Fishermen's Terminal Maritime Innovation Center from both a business and architectural standpoint.

Precedent examples Olive 942 in Eugene, OR, the Centre for Ocean Ventures and Entrepreneurship (COVE) in Halifax Nova Scotia, AltaSea in Los Angeles, CA, New Lab at the Brooklyn Navy Yard, and RDM Rotterdam in the Netherlands.

Refer to the section on Precedent Research for further information on these innovation centers.

Following the presentation on precedent research, Miller Hull invited charrette attendees to look at the images of various space types pinned up around the room, and to put a dot on any images that resonated with them. Images included examples of maker spaces, event spaces, incubator/open office areas, and conference rooms.

PART I: DEVELOP COMPREHENSIVE LIST OF USES / GOALS

To begin the charrette session, the stakeholders engaged in a large group discussion to brainstorm possible programmatic elements that could be housed in the Seattle Ship Supply building. Below are the key themes that emerged from the group's discussion.



MAKERSPACES

How would you utilize? What type of equipment?

Workshops have a range of heavy/dirty to clean areas what is the appropriate range for this building?

Is it more important for the makerspace to be focused on maritime uses or high-tech uses? Workshop could mean anything from seafood processing to IT to energy storage, and software and "hardware" companies have very different needs.

Where will the focus be, or what is the breadth of spaces that this building needs to accommodate?



CULTURE OF INNOVATION

Highlight the maritime industry and the culture of innovation

Innovation happens when you create an environment in which it can happen

Innovation happens when all sorts of people come together

Some public interface is good, but engaging business community is more important- give the existing community a sense of ownership



FISHING INDUSTRY

From the fishermen's standpoint, need to develop value added techniques for existing fishing industry.

Could have areas for food prep, study other marine food sources (sea vegetables, kelp). Mini freezer/smoker, fish processing area.

Create a central hub for online fish for sale and a place for all the fishermen to come together for meetings.

Building could act as a fish market/community center. What about fishing workforce training? A couple different tenants doing that at Fishermen's Terminal already - providing safety training, certifications, training on working with gear.



HERITAGE CENTER

This site is a heritage area to a lot of fishermen, right in the guts of the work area

This site is part of a long history - need to celebrate that heritage authentically - don't want it to turn into Fishermen's Wharf in San Francisco. Astoria Maritime Center does this well.

Good to have some indication of heritage, but keep the museum at MOHAI.



RESOURCE HUB

There are so many maritime industries in the area already - consider the existing companies as part of an innovation collection and leverage their business

Go to innovation center to find people to talk to, direct you to other resources within the community

Need to get buy in from local businesses in order to leverage huge amount of area outside of port

Could have a shop foreman to talk to about new manufacturing techniques, laser cutter

Not enough room to do a lot of workshop space – focus on using existing resources at local businesses



TOOLS

Vessel owners need workshop space on a temporary basis to fix parts of vessel -- need a hand tool shop/ small workshop space.

Fishermen are already inventing every day, but one thing they don't always have are tools

Tool rental: fisherman goes in, rents a tools, talks to someone = instant collaboration; need tools right before and right after going out

What are tools that would be useful to have here? MIG + TIG welder, aluminum welding station, drill press, 3D printer, laser cutter, workstations with CAD software



MAGNET

What is the magnet: is there unique equipment, or is it just a meeting space?

Need a community manager: someone to curate for maritime industry, find flashpoints of innovation and bring those groups together here

Host workshops to actively bring people together

Center Incubator acts as formal organizing of cluster. This could be the home for a blue tech cluster organization, a place to build relationships, bring people together, put problem statements on wall, and bring trade organizations together



PUBLIC VS INDUSTRIAL

This site is a super active industrial area - a lot of traffic from non-fishing folks in the work areas and already at a premium for storage and parking.

Some people want to keep industrial sector and public sector separate, while others want to make the industrial character more visible to the public.

Fishermen's Terminal is a public, open facility, but want to keep industrial area apart from office/retail component. Want most visitors to stay in the court area by the main terminal building.

Consider public/industrial interface of building if used as event space - consider timing of events.



GATHERING

Need a collective space for fishermen's meetings. Currently use the 30-person Nordby conference room, but need space for 100 people with a projector.

Flexible gathering space

The biggest advantage of this site is a place where people can gather.

Seattle Ship should be a community space and an information resource rather than a workshop

Community space where people can come collaborate - might not be occupied 100% of the time.



WHO IS THIS SPACE FOR?

Who are the customers for this space? That will determine how big/small, loud/quiet, public/private these spaces are?

Who are we really trying to support and energize in this space?

This building is about the people - create a light enough touch with maker space to attract people but keep enough space open for collaboration.

Tenants at Fishermen's Terminal already feel put upon, important to create a space for them.



YARD SPACE

What area around the building is available to be utilized? Is there water access or a small exterior work space?

Right in front of building on Dock 4 is a loading dock, without permanent moorage - can use that area when fleet is not in port.

Parking area to south could be used as lay down area.

West wall already has dock and crane area.

Could use net yard for training (when not in used by fleet)



COLLABORATION

Coffee cart - collaborate with tenants that are already there

Hold workshop with investment capital between tech startups and fishermen

Community space = knowledge transfer, coffee and tools: where knowledge transfer happens

Lots of glass - need to see people doing things, see people repeatedly in order to build trust

Bring in groups that are complementary (students/fishermen)



INCUBATOR

Don't treat as permanent home - transient space instead with no definitive tenant. Will be more adaptable to the problem statements of the ecosystem.

Need space for young startups, hot desks open to members, event space/conference space, workshop/makerspace

Invention by itself is not innovation. Bring people together to solve civic problem that creates economic growth; attract more people into looking at these problems



TRAINING

Is there a place for workforce development and training out of this innovation center?

UW CoMotion Lab does startup training (how to run a business, fundraise, etc.)

Develop interaction between students, engineers, fishermen, building confidence in each other

Maritime Center at Community college - make connection with fishing industry



HARDWARE VS SOFTWARE

Where does maritime workshop space overlap with tech startup culture?

How can tech companies co-exist with light industrial workshop spaces? RDM Rotterdam didn't solve this issue - separated the hardware and software spaces.

You lose the collaborative effort if you separate the two - they might as well not even be in the same building.

The maritime industry is less tech, more analog.

How does the design of the building make tech and analog/making communities want to come together?



BEST USE OF THE SPACE

How do you make the best use of the space when confined to 12,000sf?

What can this building do to relieve the pressure points at Fishermen's Terminal?

Why are we preserving this building to begin with? The upstairs space is important demonstrates the impact, experience, and character of Fishermen's Terminal. The value in the space is it's exposure and views so need public groups to utilize the upstairs.

PART 2: DISCOVER OVERLAPS

Following the large group discussion, stakeholders broke into three mixed groups with representatives from each sector (Port, design team, industry stakeholders) in each group. The groups were encouraged to follow their discussion wherever it lead, with an attempt to define key programmatic spaces and adjacencies critical to the functioning of the maritime innovation center. At the end of the group breakout sessions, a representative from each small group reported back to the larger group, presenting their test fit layouts and important themes that emerged from the conversations.

While each group had slightly different layout proposals, the types of spaces that each group considered critical to the building were common throughout. All groups noted a need for startup/incubator spaces, a light workshop space, a large gathering/event space, and a conference room large enough to accommodate the fishermen's meetings.

The discussions focused around how to bring together diverse groups of people in a common space in a manner that would best encourage collaboration and innovation.

GROUP 1

Community liaison / product prototyping liaison. Don't need to accommodate all the equipment in this building, but need someone to help direct person to a local shop that might have that equipment

Create a preferred vendor list - resources/wiki

Resource for fishermen at FT, not necessarily about bringing in other people

Keep it salty

What are struggles that lots of these groups all share? How can Port (this center) provide these resources? Help desk? Permitting process, RFP clearing house.

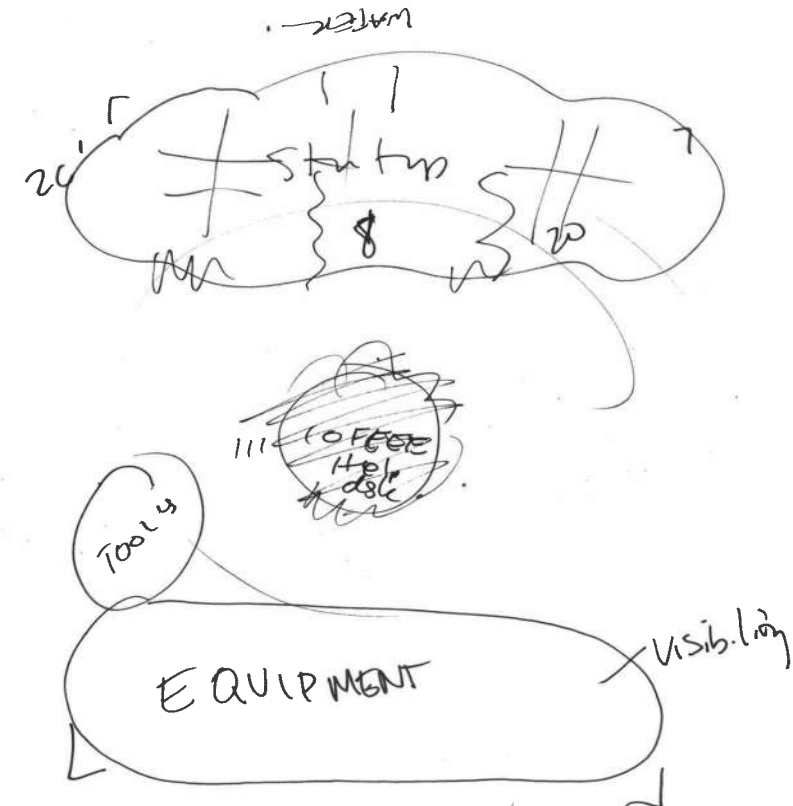
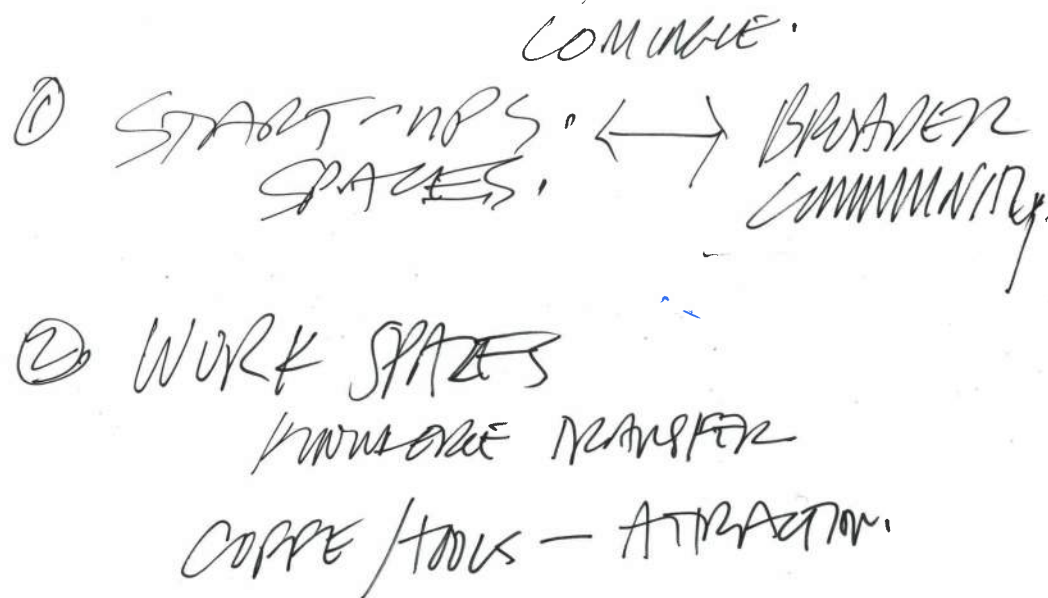
Create a tight lobby, at Pixar they created forced functioning spaces where people interacted (ie bathroom, cafeteria)

Could host industry events here: PNW Maritime Tech Summit, SNAME, VC workshops, showcases, pitch competitions

Accommodate tenants vs resources. Use upstairs as event space and keep transients downstairs - move from startup to accelerator as you move upstairs through the building

Group level central bay = mixing area

CAD station - don't actually have to fabricate product here, but need someone to drive the software, then send to local shop for instant quote. Tie into local shops so don't have to accommodate heavy equipment here.



GROUP 2

Need room big enough for 40 people

Industry magnets - what has to be located here?

This site has 20 minute access to deep Puget Sound - this is a huge selling point

Don't focus solely on people currently at FT - engage the entire maritime community

Permanently stationed research vessel

Software and hardware can't be teased apart anymore

Ecosystem of innovation - focus on industry surrounding this site

Heavy/messy workshop in central bay, clean areas (assembly, light workshop, startups, etc) on side wings

Mixing chamber in central space between hardware/software

GROUP 3

How can you extend the wing spaces - how do they engage the central high bay space? Interior garage doors?

South end: working space

North side: tech startups

Middle: MIXER

How do you make sure it's embraced by the fishermen? Coffee and beer.

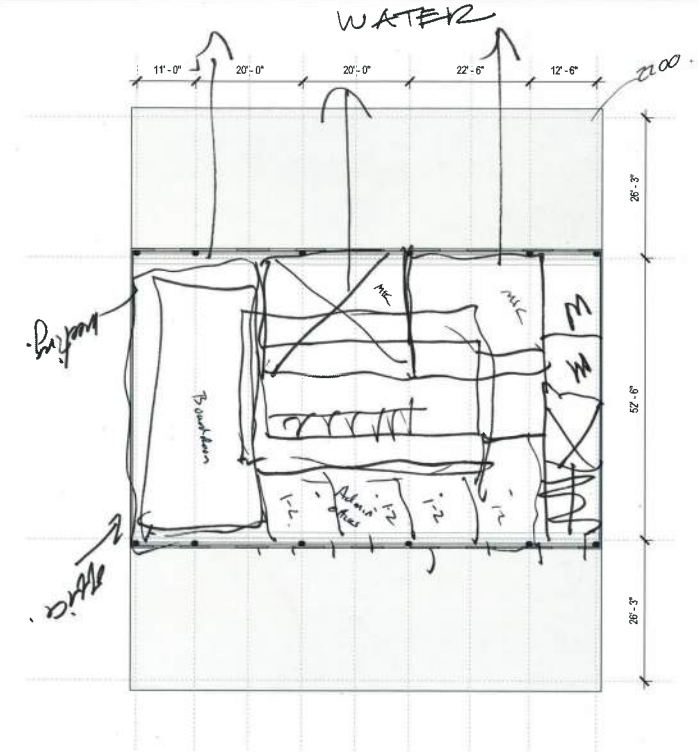
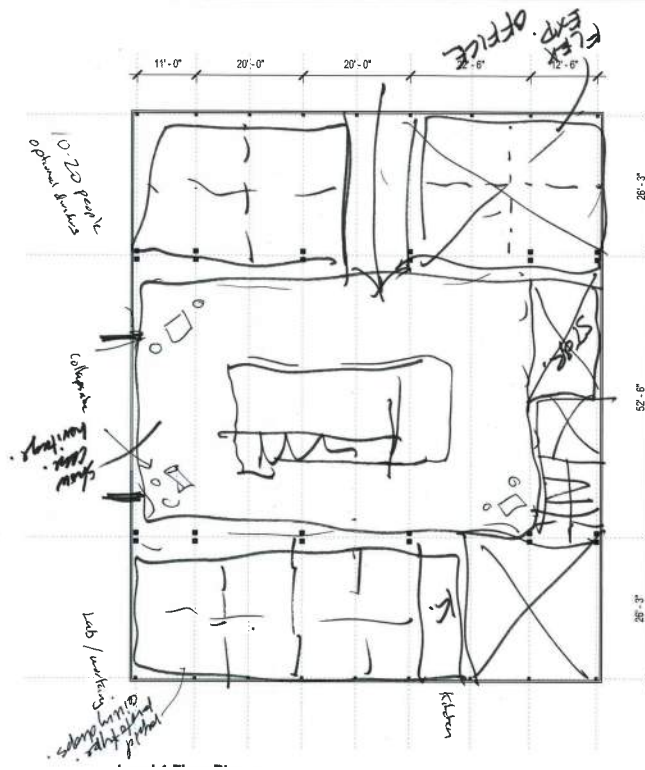
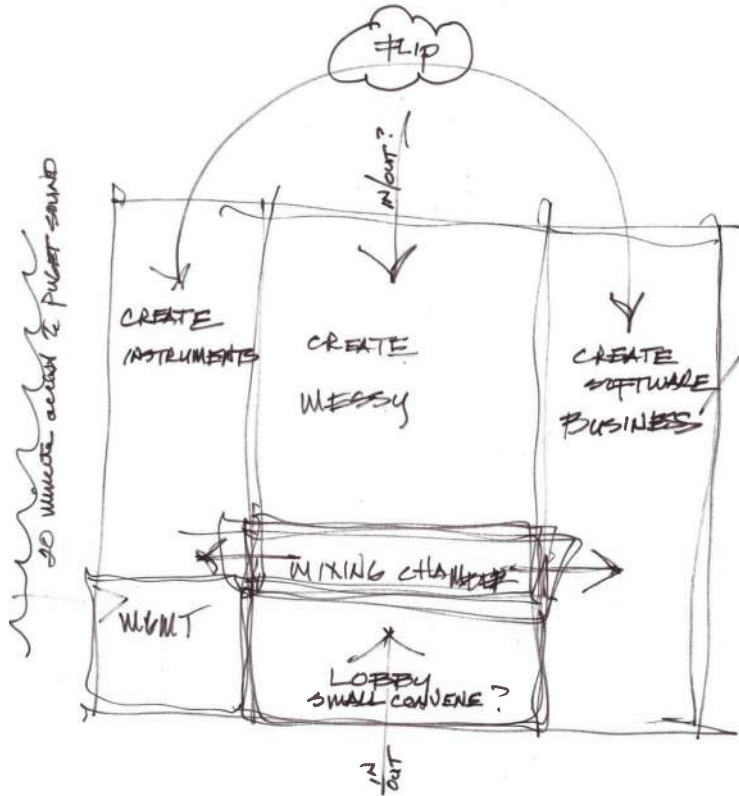
Workshop offers connection back to fishermen.

Need an on-site shop manager / resource manager (and IT person)

Use tool storage as display

Build flexibility: incubators will be there 5x/week, big events maybe 1x/month - keep it active at all times

Important to right size the program





SEATTLE SHIP VS WEST WALL
USERS:

- MESSAL GUARANTEEATION HUBS
- OFFICE: BUSINESS (MARTINE)
HARVIC ELECTRIC, ETC.
COULD BE PART OF MESSAL
CONTEXT.
- OTHER: NON-INDUSTRIAL
BUSINESS: COLLABORATION W/
NEIGHBORS, BUS MESSAGES
FOR NUDE SPACES

SEATTLE SHIP:

- COMMUNICATIVE HUBS
- TEMPORARY SPECIALTY USE SPACES

SOFTWARE/HARDWARE CONFLICTS:

- FOUND PARTNERS FOR MESSAL EQUIPMENT
TESTING

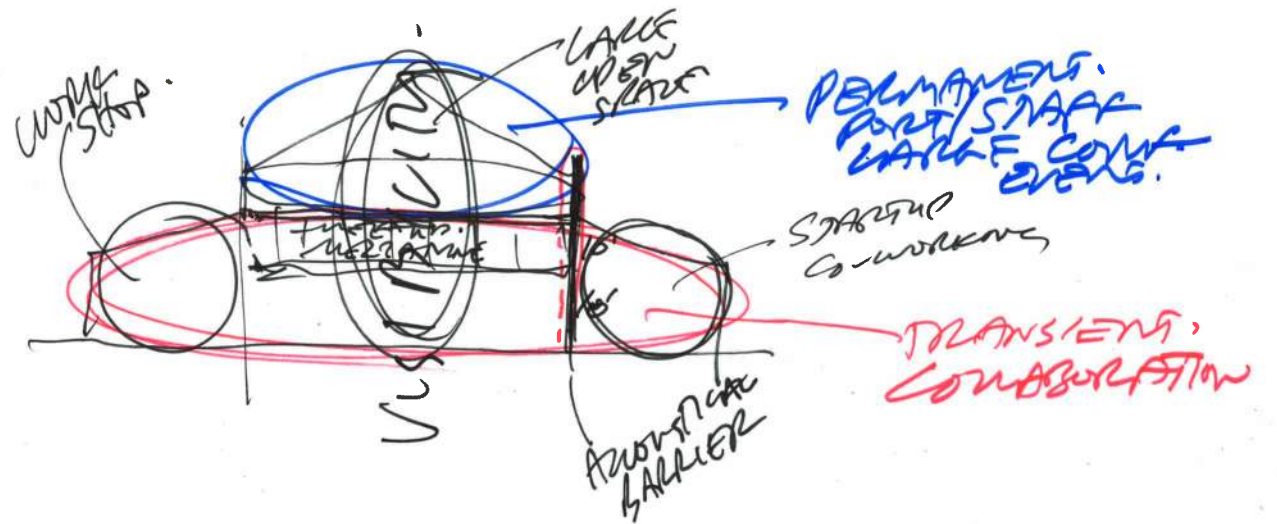
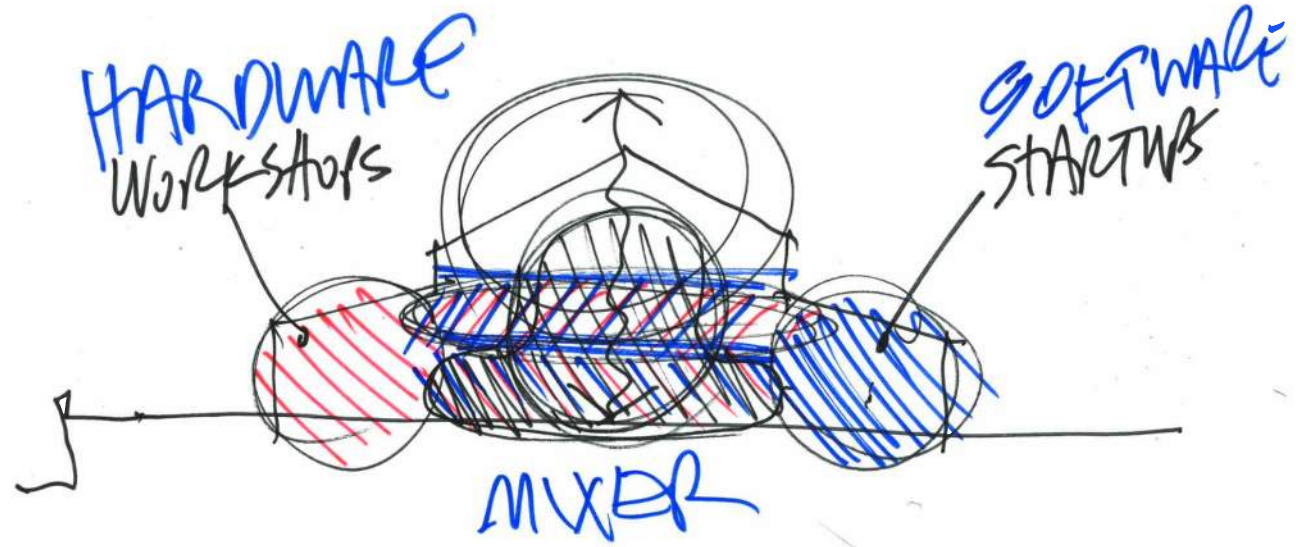
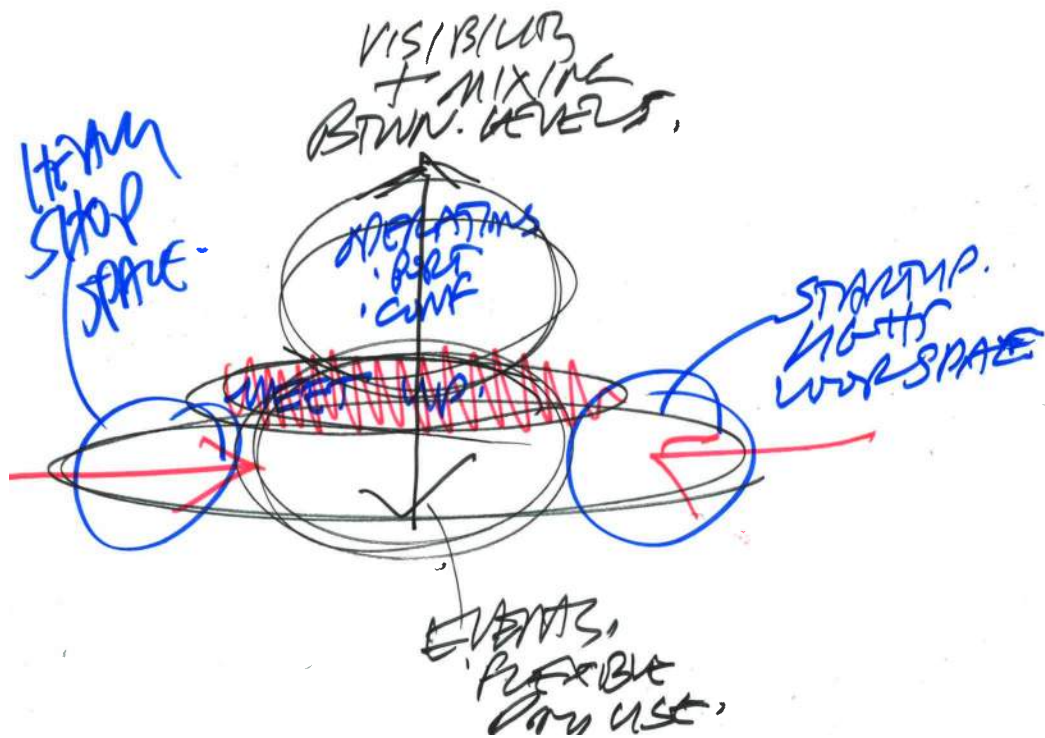
NOT PERMANENT HUBS FOR DEVELOPMENT
IN CHARACTERISTICS

MESSAL: PLACE TO MEET IN FOCUSED
ON HUBS

- NEEDS: FOSTER COMMUNITY AFFAIRS
WORK IN FILE INDUSTRIES
THAT NEED TO COLLABORATE

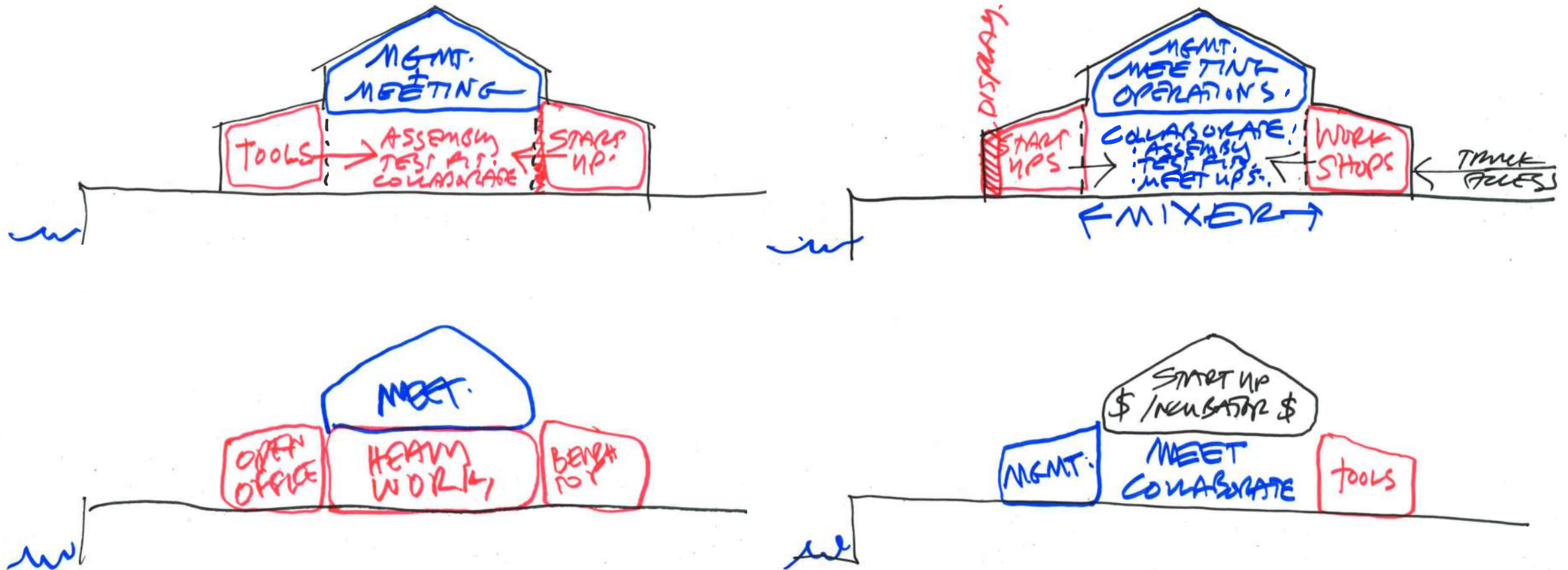
NEEDS:

- COLLABORATION/INNOVATION SPACE
- ORGANIZING LOCAL POINT TO
CONSTRUCT THE COMMUNITY
• FUEL: BLUE, S HAWK, HAWK STAIRS
- TOOL RENTAL: BUILDING UP SINGLE USE
• COFFEE: FROM AN EXISTING COFFEE SHOP
- TRAINING:
- INTERMEDIATE ENTREPRENEURS -
FISHMEN - TRUST
ED MESSAL CAMP FILM
INDUSTRIES
• WATER - PIPES
- SPACE FOR YOUNG STARTUPS:
• BY SHARING
• BY EXISTING COMMUNITY
• BY EVENT
• BY SHIP SPACE
- HERITAGE SITE
- REBEL/SMOKE
- WORKSPACE TRAINING:
• DIGITAL - MESSAL: BEST IN CLASS VESSELS
• MAINTAIN INDUSTRIAL CHARACTER
- EVENT SPACE
• OFFICIAL PUBLIC MESSAGE



PART 3: SUMMARY + DISCUSSION OF INITIAL CONCEPT SCENARIOS

At the end of the charrette session, the design team from Miller Hull gathered each group's test fit layouts and attempted to synthesize the themes that were echoed throughout the day into distinct organizational concepts that varied in location of large meeting space, workshop space, open office areas for start-ups and accelerators, and open collaborative space/event space. Following the charrette, Miller Hull clarified these ideas into three basic organizational concepts, described in more detail on the following pages.



SCHEME I

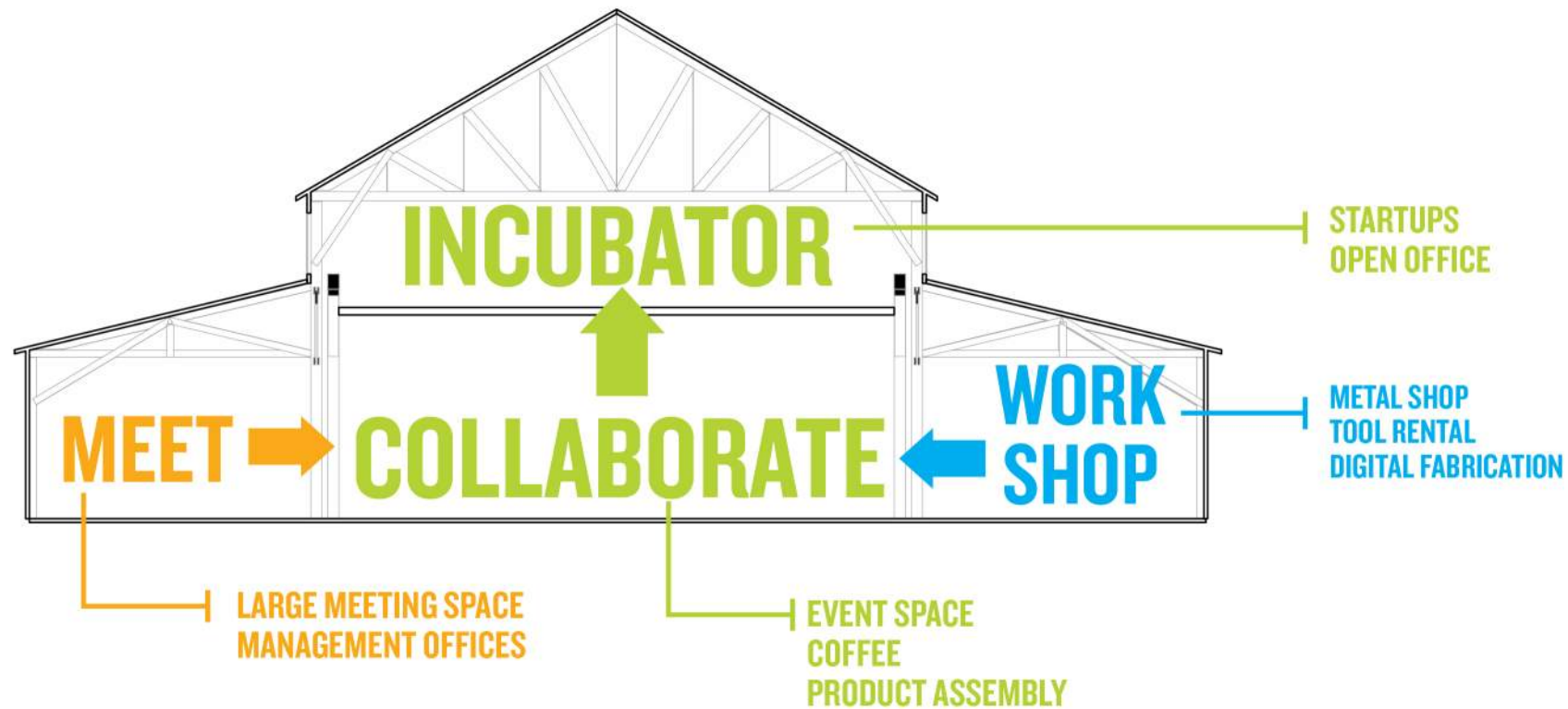
The first organizational concept keeps the first floor of the central bay open as a gathering space for different groups to come together and collaborate throughout the day. Large tables could be used for working and meeting and could be cleared out for large events that required clear floor space. The north bay at the water side would hold the large meeting space (800-100sf). This wing could also hold management offices or smaller conference rooms and classrooms as required. The south wing was considered the most logical location for a workshop space, as it provides easy truck loading access from the existing parking lot to the south and the ability to provide isolated ventilation and segregate the space acoustically from the rest of the building. In this scheme, the 2nd floor would be used for startups and accelerators with open workstations. This would eliminate the need for walls and ceilings that might otherwise interrupt the dramatic high bay space.

PROS:

- Side wing spaces (with lower utilized most effectively for enclosed rooms)
- No ceilings or walls required on upper floor
- Workshop space visible from central bay, but able to be acoustically and spatially separated from the rest of the space.
- Central bay kept clear for collaboration space and event space

CONS:

- Large meeting room not on upper floor where it could take advantage of the view, and upper floor would not be utilized for the larger clientele of Fishermen's Terminal.
- Limited space for enclosed offices and small meeting rooms most of North wing is taken up by large conference room.



SCHEME 2

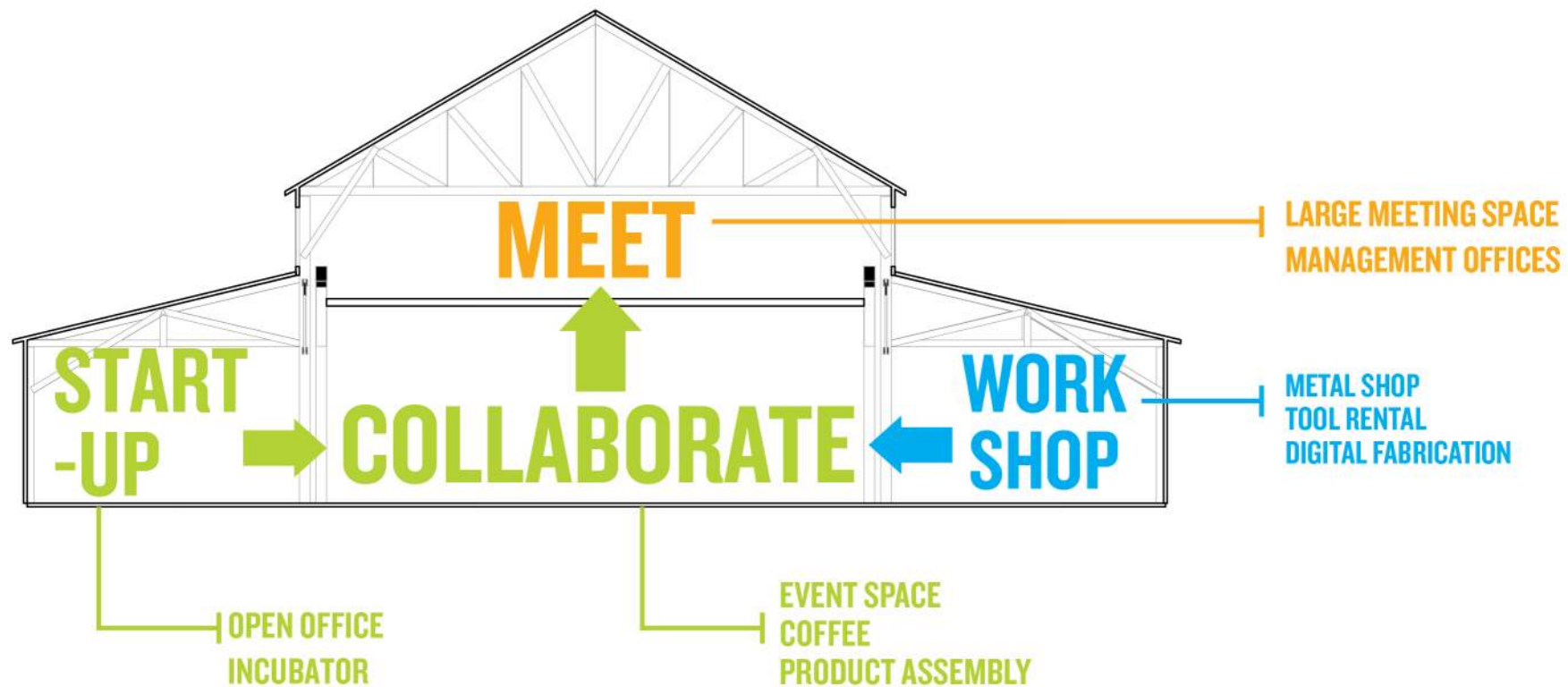
Like scheme 1, the second organizational concept keeps the first floor of the central bay clear for gathering and event space. Likewise the south wing is utilized as a workshop space to provide truck access and visibility of the maker space program from the central collaboration space. The north wing is used for startup space, providing visibility of that program from the entry at the north and activating the collaboration space in the central bay, allowing for interactions between the “hardware” and “software” programs of the startup and workshop spaces. The large meeting space is placed on the 2nd floor, taking advantage of the views out to Salmon Bay and the dramatic roof structure of the upper level.

PROS:

- Large meeting room located on upper floor where it can take advantage of the view out to Salmon Bay
- Workshop space visible from central bay, but able to be acoustically and spatially separated from the rest of the space.
- Central bay kept clear for collaboration space and event space
- Startup workspace visible from main entry, location on North wing activates central collaborative space, allows for interaction with workshop space

CONS:

- Locating enclosed meeting rooms and offices on the upper floor requires placing walls and ceilings that will diminish the visibility and impact of the roof structure.



SCHEME 3

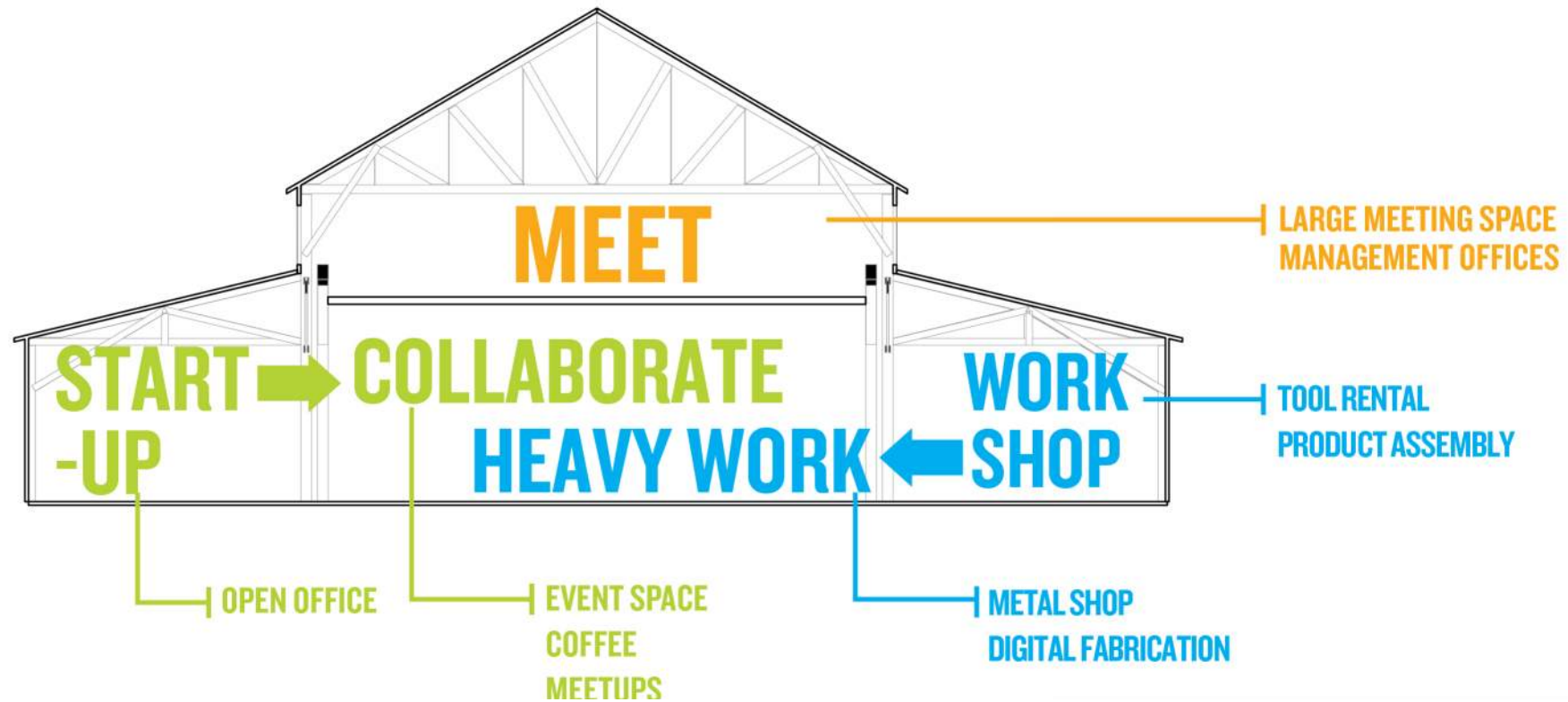
The final scheme discussed at the design charrette places a portion of the workshop in the central bay, with “heavy work” including much of the fabrication equipment occupying the high bay space on the ground floor, while “light work” including assembly and tool rental occur in the South wing space. The main workshop space faces out to an open collaborative space that can be cleared out for large events. Open office space for startups and accelerators are located in the North wing and spill out to the central work/collaboration space, while the large meeting room is on the upper floor.

PROS:

- Placing workshop in visible
- Startup workspace visible from main entry, location on North wing activates central collaborative space, allows for interaction with workshop space
- More workshop space - will help to activate central bay and facilitate collaboration between “hardware” and “software.”

CONS:

- Locating enclosed meeting rooms and offices on the upper floor requires placing walls and ceilings that will diminish the visibility and impact of the roof structure.
- Locating workshop in central bay on first level cuts down on floor area available for open collaborative/event space.
- “Heavy” workspace will be difficult to keep acoustically separated from rest of space, ventilation of that central space will be more difficult.



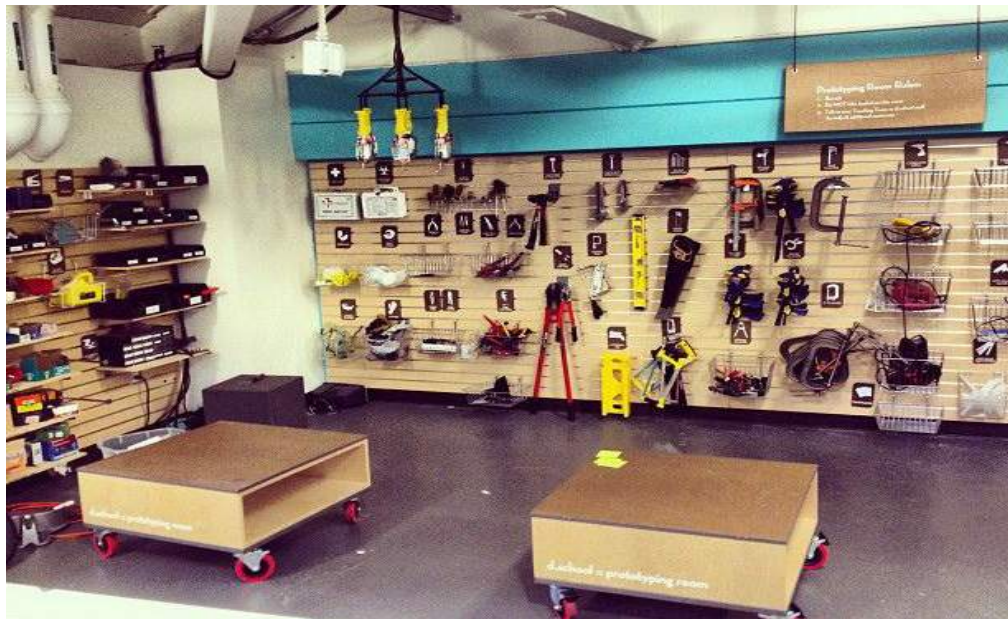
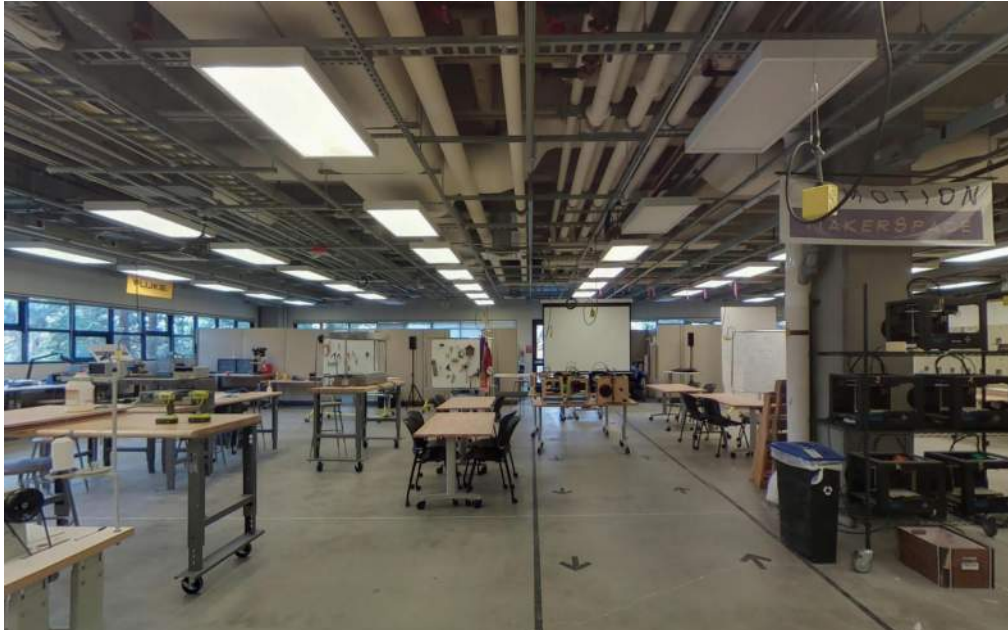
PROGRAM SPACE TYPES

A diverse range of program spaces were proposed for the building in order to create a collaborative environment that would most stimulation innovation through overlaps of various user groups. A workshop/makerspace was deemed a critical programmatic element that would draw in the local fishing community and foster a culture of making and exploration. Also considered an essential component was a large meeting room capable of accommodating 50-60 people for the regular fishermen's meetings that now occur in the Nordby Conference Center. Many stakeholders discussed the possibility of the building being used as a large event space, both for Fishermen's Terminal specific uses and for private events. Stakeholders also felt that a large portion of building should be dedicated to workspaces for accelerators and start-ups, with some combination of open and enclosed office space, hotelling stations, and small meeting/phone rooms.

During the charrette, images of these space types were posted around the room, and attendees had the opportunity to mark the images that resonated with them the most as being appropriate for the Seattle Ship Supply building. These highlighted images are included on the following pages along with the various ideas proposed during the charrette session for how each of the spaces would function within the new Maritime Innovation Center.

WORK SHOP





EVENT SPACE





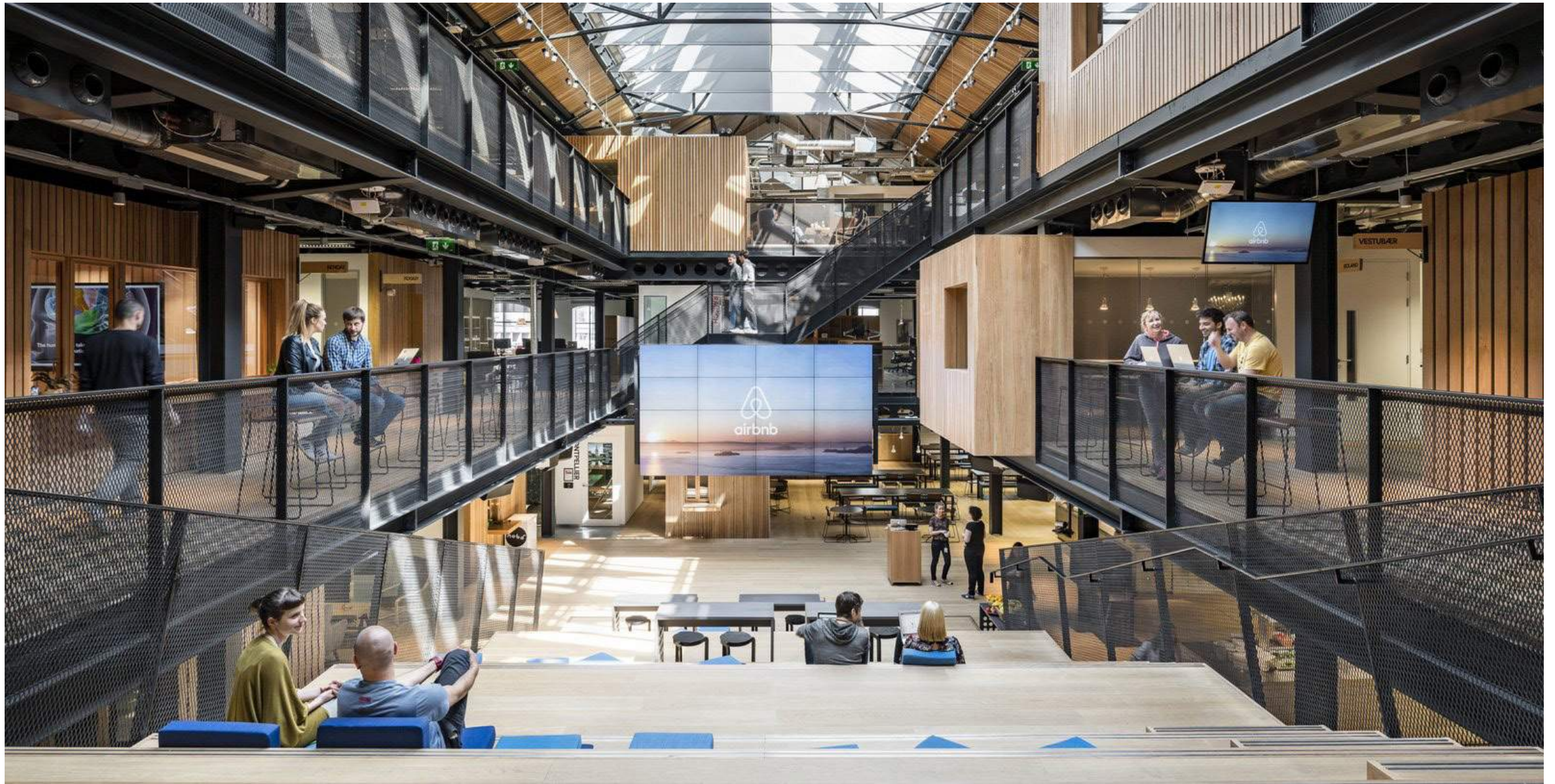
MEETING ROOMS





INCUBATOR



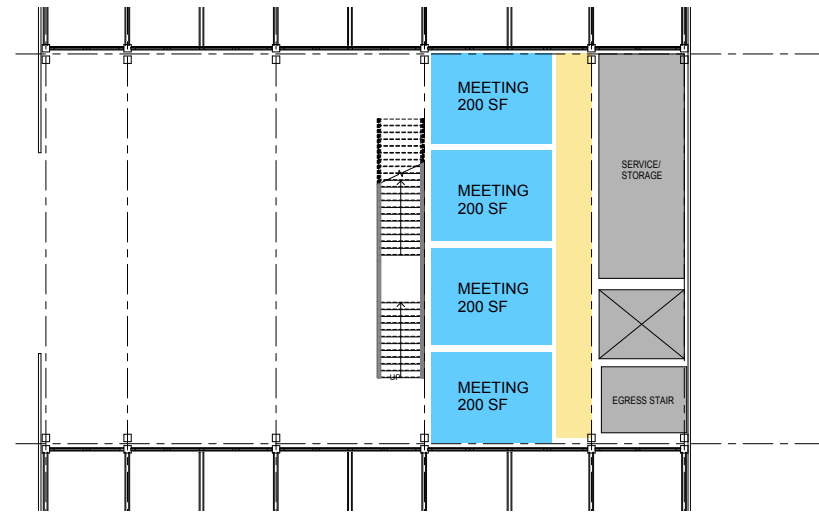
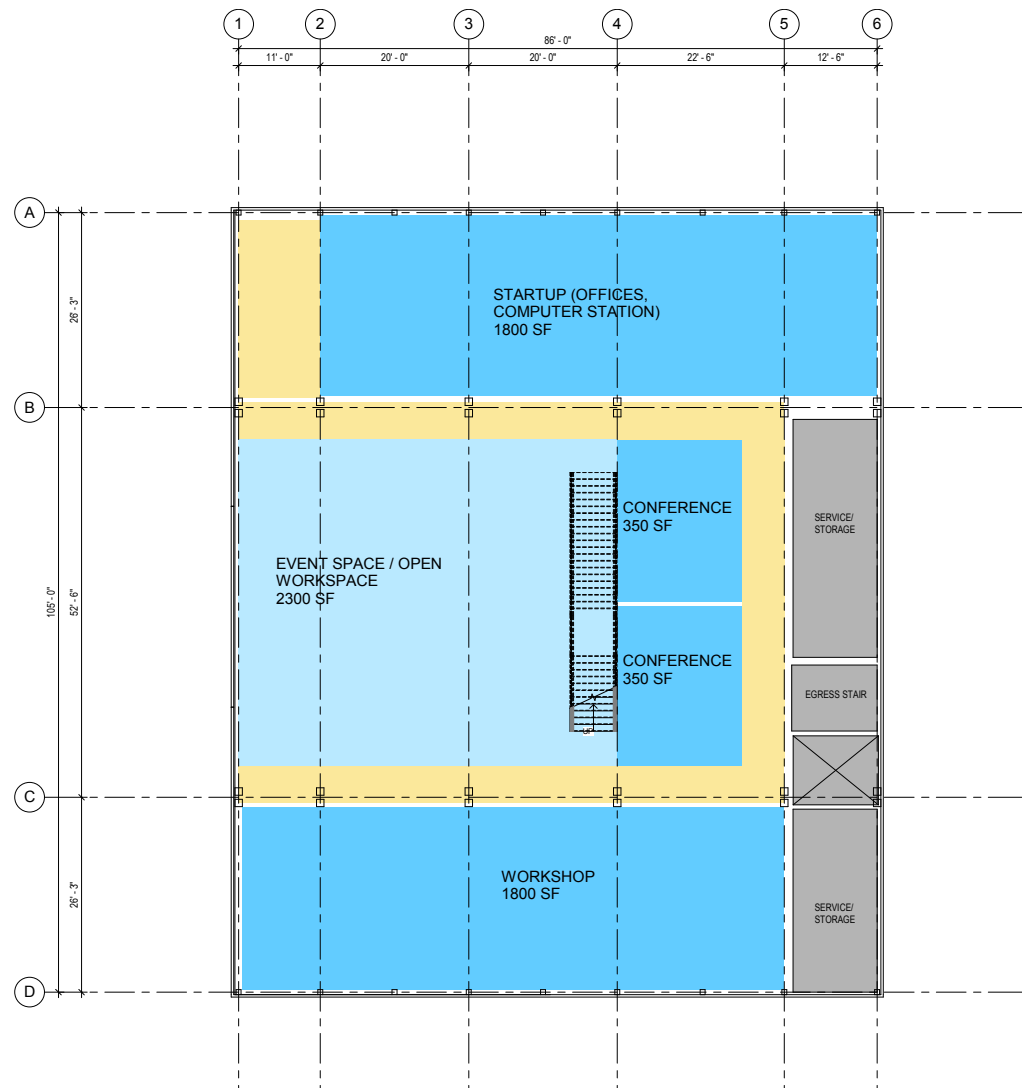


CONCEPTUAL DESIGN SCENARIOS

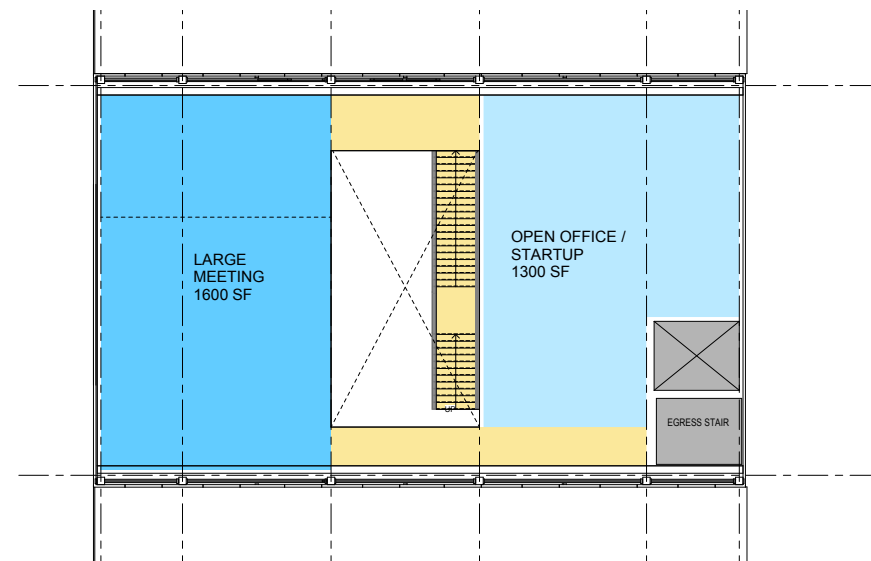
The preferred scheme developed by Miller Hull in the week following the design charrette combines aspects of many of the design and organizational concepts discussed by the stakeholder group.

The large meeting room is placed on the upper floor to take advantage of the impressive views out to the docks and Salmon Bay, and is located in a manner that will not require a hard lid ceiling below the roof trusses. The remainder of the upper floor is used for open workspace and hotelling stations which would not require walls or ceilings that would breakup the expansive upper floor space. The workshop is placed in the south wing on the lower level where it is most able to be acoustically and mechanically separated from the rest of the building and can take advantage of easy loading access from the existing parking lot to the south. The north wing has approximately 1,800sf that can be kept open for start-ups in open workstations, or can be subdivided at the structural grids to make smaller enclosed offices or meeting rooms.

After hearing a desire for small breakout and meeting spaces that could be used the start-up businesses, the design team worked to fit a mezzanine level between the first and second floor that could hold 200 sf phone/breakout rooms. Beneath the mezzanine level on the 1st floor are two 400sf meeting rooms. The central bay on the first level is kept mostly open for large events or open collaborative workspace. A large feature stair connects the levels and acts as speaking platform for events or large gatherings.



MEZZANINE FLOOR PLAN



LEVEL 2 FLOOR PLAN

