

# community center project

Board Presentation

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# Oregon Country Fair

## COMMUNITY CENTER PROJECT

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“The Oregon Country Fair is an annual gathering in its 43rd year of “creating events and experiences that nourish the spirit, explore living artfully and authentically on Earth, and transform culture in magical, joyous and healthy ways.”

## *The History Behind the Project*

Annual attendance at the Fair has been around 45,000 people, making it one of the largest gatherings in the Northwest. A multitude of volunteers prepare the site each spring and restore it after the event each summer. The Fair kitchen provides food for up to 1000 people per meal; to support this activity the Fair Board has identified the goal of construction a permanent Kitchen to support volunteers. In addition, the Oregon Country Fair (OCF) would like to construct a Community Center, of which the kitchen is a part. The Community Center would accommodate year round activities such as fair related gatherings, retreats, and other events.

In February of 2011 the Fair Board of Director heard a report from the OCF Community Center Committee (CCC) The following description was given: The Board affirmed support of the OCF CCC's current concept with the understanding that it will likely be modified and refined as additional research is conducted and design issues are addressed. The report envisioned a kitchen of 4,000 square feet with the total building size at 10,000 square feet including a seating area able to accommodate 500 people. This option was estimated to be approximately \$200 per square foot. The OCF CCC recommendation passed by unanimous vote (10 to 0).

### **Process**

This project is a big step for the Fair Family, one that has been under consideration for many years. Given all that history, and the consensus based decision making, a more process driven plan was created to move the group from where we are now to the end goal of a great community center and kitchen. That plan had three major components:

#### **Phase 1 | Feasibility Study**

The goal of this first step is to fully understand the size, location and nature of the Community Center. The process is intended to allow the Fair Family to reach consensus on key decisions about the scope and character of the buildings and their place on the land. This step has been established to remain within the funds allocated by the Board for initial design work. The feasibility report consists primarily of a Program document, which is described in more detail

#### **Phase 2 | Design and Conditional Use Permit**

In general, there is a considerable amount of work needed to prepare designs suitable for submission of a Conditional Use Permit. Once Phase 1 is complete, a detailed scope of work and proposed fees would be de-

veloped for the consideration of the board. An additional goal of Phase 2 would include development of images of the new center and a complete understanding of its cost. This will allow Fair leaders to make key decisions about moving forward, generating excitement in the community, and raising funds for construction.

#### **Phase 3 | Final Drawings and Construction**

Once a conditional use permit is granted, final design is needed for building permits and for construction. Detailed drawings and specifications would be prepared. A decision would be needed on how to select a contractor. Options would include competitive bidding or hiring based on qualifications and negotiating a price for construction.

## What is a Program?

A Program is a research and decision making process that helps the design team identify the project goals, requirements, and attributes of the proposed building and site improvements. The steps we used to discover, refine, and document this process (shown below) were also the framework for our research, meetings and record-keeping.



## The Three Main Goals

### Organizational Goals

Volunteers make the Country Fair what it is. The Kitchen and dining hall are in many ways the heart of the fair family space, and this project should respect that and attempt to make the Country Fair experience even more unique and amazing for the hard working folks. This new facility is one of the most important ways the organization can say “Thank you so much” to all the great people who give their time to this fantastic event.

### Functional Goals

Create a kitchen and community center that will replace the existing Main Camp kitchen and enhance the experience of the fair family participants by providing a sheltered gathering space for dining, along with a safe and efficient commercial kitchen equal to the task of feeding up to 1,000 people at a time. The Community Hall should shelter the fair family volunteers during the fair event, and support the many Fair events that occur through the year. The facility should be configured such that it could be used by the community at large for events such as weddings, celebrations of life, and other activities.

The building should be highly energy efficient, using passive systems and natural light as much as possible. The project will have the lightest touch on the land possible, and should integrate into the surrounding ecosystems; preserving water flows, habitat continuity, and enhancing the ecotone where the upland oak biome meets the lowland flood plains.

The materials used by the project should be procured locally whenever possible; if any tree removal for habitat restoration or solar access takes place that timber should be used to build the project. No toxic or inequivalently extracted materials will be used for the project.

The project will respect the storied past of the area; taking care to use proper protocols for dealing with the many valuable Native American archeological sites nearby.

### Design Goals

This facility should reflect both the ideals and the realities of the Country Fair operation. It should be open, equitable, beautiful, mutable, and robust. The kitchen should be a place that is bright, open, sanitary, safe and fun. The community hall should be spacious, rugged and useful. The outdoor spaces should bring together the building and the woodland making a seamless place that feels like it was always meant to be right where it is.

The building should be like a living organism, pulling in and closing in the cold seasons, and opening to the sun and wind during the warm weather. The outdoor spaces will open up and spread overhead to provide shelter from sun and rain, like the canopy of the forest protects the delicate ecosystems below.

Recognizing that the Country Fair has an amazing pool of artistic talent to draw on, the bones of the building should allow for great opportunities to integrate art into the project. We envision the structure as the trunk of the tree, with all the great layers of creative “artistic bark” laid on to create a unique and memorable experience for everyone who interacts with th

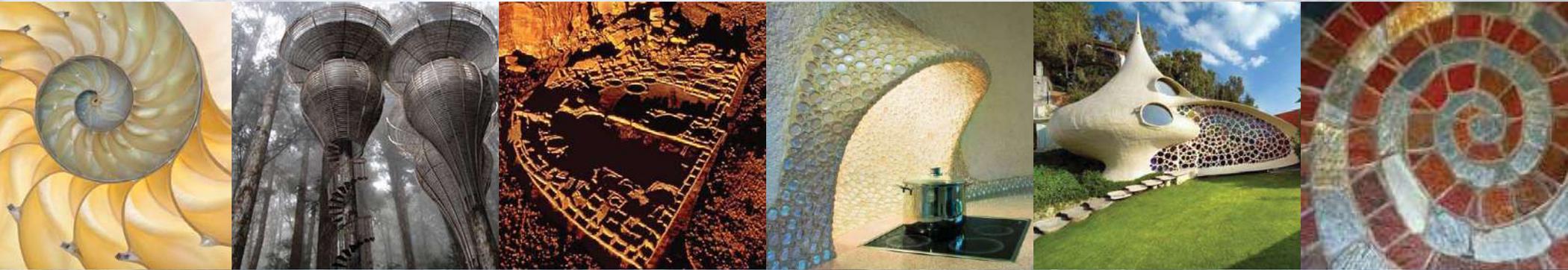


Each Goal Category supports each other.

## *A Gathering of Ideas*

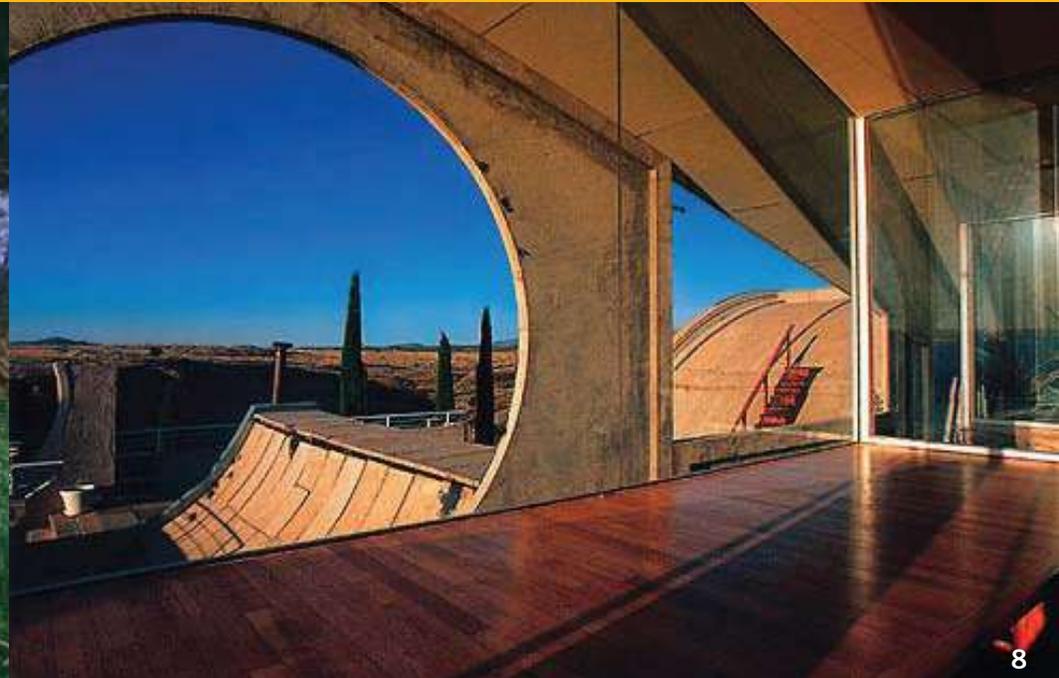
In preparing to engage the project, it is often a good idea to research other similar projects and to find images and concepts that may help inspire the creative process.

We looked at some examples of natural patterns that could be translated into architectural forms. Further, we looked at an idea called “biomimicry”, where a made object is designed to work with and like a natural system.





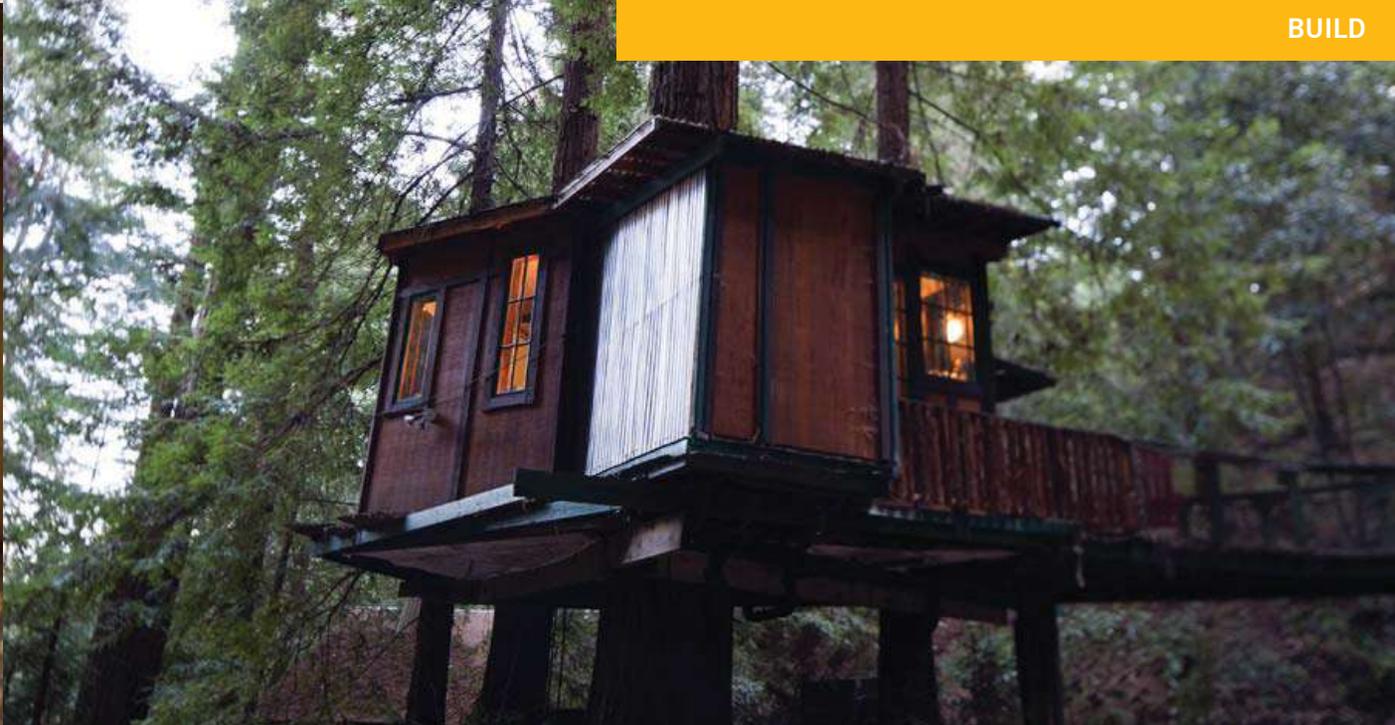
We looked at buildings that were inspired by natural forms.





We looked at interesting examples of integrated art and architecture.





We looked at buildings that fit nicely into their environments



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# The Project Kick-off

## Program Workshop

The OCF CCC, consultants, and a group of stakeholders gathered to start the process of imagining what kinds of activities the Fair might like their new facility to support. The starting point was the larger goal of the project: to create a new kitchen and community hall. We hoped to discover how this project could be configured for the best and highest use. Additionally, the stakeholders were asked to think about how this project would integrate into the current Fair operations. The project was divided into six topics.

The larger group divided out into six working groups, each tasked with thinking about one of the following subjects:

- / Site Improvements
- / Meetings—Indoor & Out
- / Events
- / Dining—Indoor & Out
- / Kitchen
- / Storage, recycling, and waste



Workshop Images of the six groups creating Mind Maps.

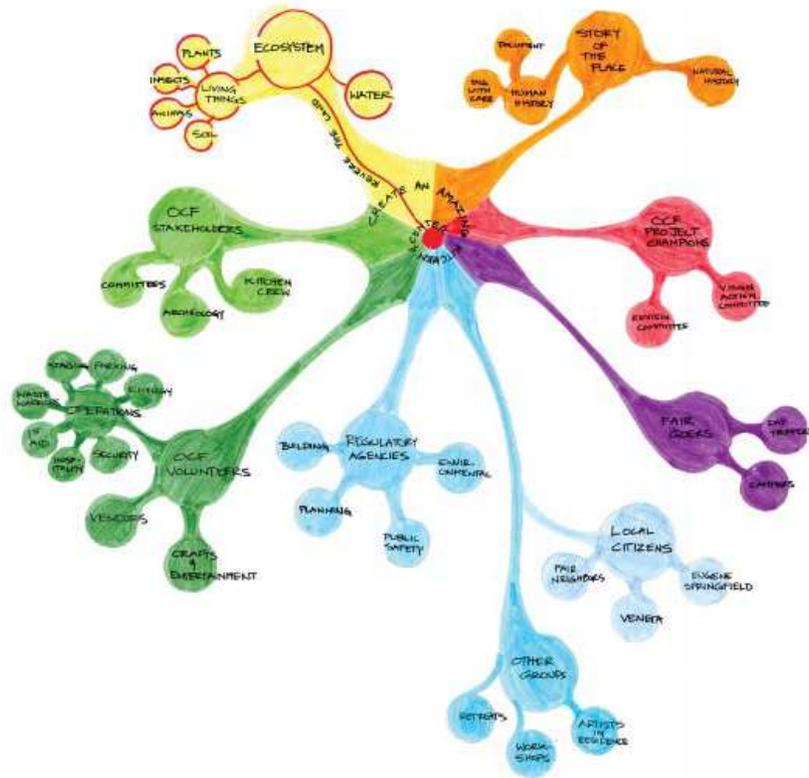
The OCF work groups were asked to use a tool called a “Mind Map” that was developed specifically for doing creative planning exercises.

# Using Mind Maps

## What's a Mind Map?

**A mind map is a diagram that helps visually organize related information.**

The central idea or concept is stated in the center, and the related information is connected to that central node. This allows for the free flow of thinking, while keeping the group on-topic. The information should be colorful, and the relationships defined by graphics or text as the process proceeds. The image below is an example of a mind map created by PIVOT to demonstrate the look and purpose of the tool.



The image above depicts a *Mind Map*, created by the PIVOT team.



**KEY POINTS**

This facility has the potential to host many events all year round, both internal and external. This could be a boost to volunteer participation and a potential revenue source.

There should be one large, flexible indoor space suitable for small concerts, lectures, and presentations.

There should be an outdoor venue, partially covered, for larger concerts. This should include outdoor seating.

The facility should be such that the OCF could rent it out for weddings, benefits, and other ceremonies

**Events**

The goal of the Events group was to identify the kinds of events that should be supported by the facility, with the focus being on the year-round operation. The Fair event would be addressed in the Dining section.



Above is a Mind Map created to conceptualize what events that would be held in the new community hall.



**KEY POINTS**

One large, flexible area for big groups.

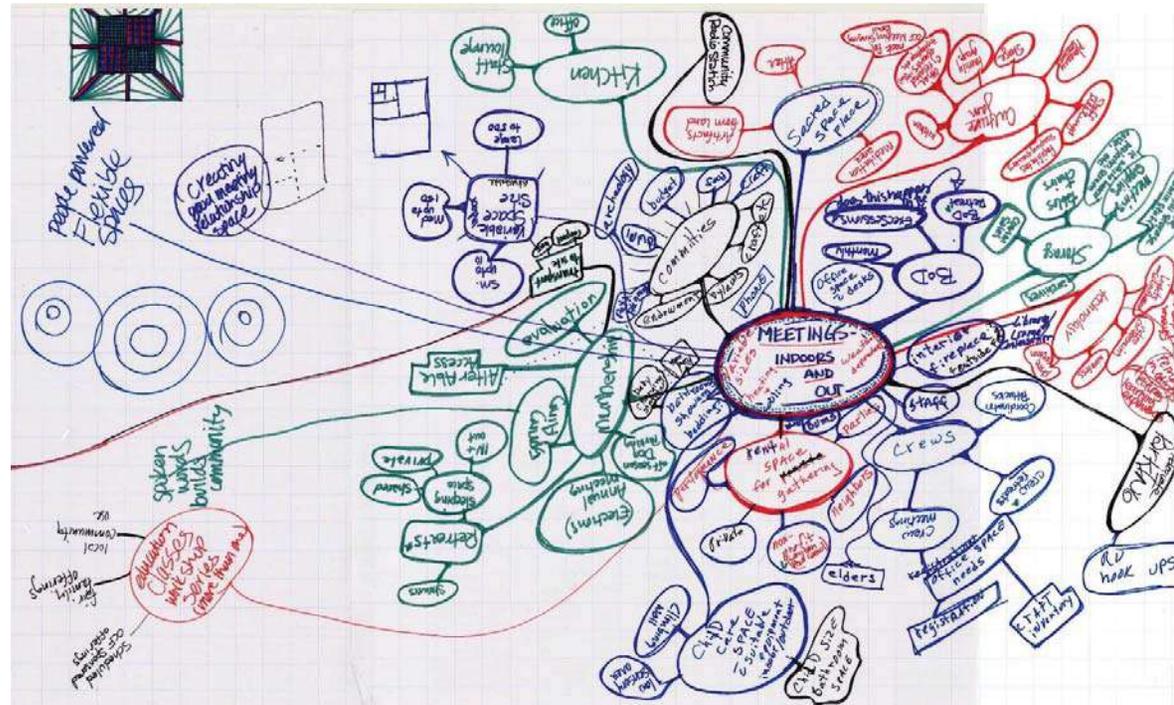
Several smaller meeting rooms are needed, possibly attached to the larger room

Outdoor covered space would be highly desirable for handling overflow

Parking for year round events will need to be addressed.

**Meetings Indoor & Out**

Meeting space for volunteer coordination, committee meetings, and Board gatherings is needed. The goal of this group is to identify the nature, size, and requirements for each user group.



Above is a Mind Map created to conceptualize what meetings that would be held in the new community hall.





## *Kitchen Programming Workshop*

**November 24, 2012**

The kitchen is the most complex and resource intensive part of the project, so it was decided that an additional work session was warranted to look at kitchen requirements in depth. The goal of this session was to bring together the kitchen crew and the OCF CCC to develop a comprehensive list of spaces, activities, and equipment that are required to make the operation function efficiently.

While the existing kitchen has many drawbacks, the crew felt that it had a great spirit of bringing hard work and fun together in a way that made everyone feel like their time was spent meaningfully, and for the most part, joyfully. These qualities, along with the way the kitchen is connected to the outside, were listed as “must have” features that should be brought from the old facility.

The functionality of the new kitchen was discussed in depth. This kitchen is much different than a typical commercial or institutional facility, mostly because of the large number of volunteers that work in the space. These folks need a safe and sanitary place to do their work, with plenty of flexibility to move projects around, accommodating the complex nature of the operation.

The general idea was that the hot line would be center of the kitchen, with preparation, baking, storage and support areas arrayed around the periphery. The Crew also felt strongly that some kind of outdoor cooking area would be a great benefit. All of these elements would need to be scalable – from the Fair peak of 2,200 meals per day (at seatings of up to 1,250) to smaller groups of just a few people.

The service part of the kitchen follows an institutional model, which means that most of the food can be prepared ahead of time, with the servers delivering the pre-planned meal to the customers from large platters or chafing pans. This arrangement allows for a smaller, more efficient hot line, and a more flexible use of the kitchen throughout the work day.

Once the general layout and relationships of the kitchen were determined, a detailed equipment list was created to support the operations. The design team was tasked with distilling the information and generating a more detailed program diagram.



## Site Planning Workshop

### Site Selection Criteria

December 16, 2012

Once the general size of the building was determined, along with the estimated parking requirements, a group was convened to find the optimal location for the major project elements on the site. A set of site selection criteria and a narrative were developed to help the group understand the issues and make informed decisions.

#### The top location criteria were listed as follows:

1. **Locate on Uplands.** Must be out of the flood plain and wetlands. Identify and avoid “pocket wetlands” located in uplands south of Chickadee Rd.
2. **Locate in non-native fir forest** for ability to clear trees for building and solar access. Need about 100 ft. clear area south. Do no harm to native plant and animal communities.
3. Vehicle access to building for delivery using large trucks and emergency vehicle access. Where possible minimize road and parking footprint. Connect to Chickadee lane and Aero Road. Need road with loop turn around.
4. Reasonable walk and bike distance along pathway to main camp.
5. Community Center is an opportunity to restore natural systems and a portion of site which is currently in need of rejuvenation. Build where it's ugly to make it beautiful.
6. Do not disturb artifacts; work with Archeology Group to evaluate selected location. Be prepared to adjust location if significant artifacts are found. Building and site design to minimize disruption to ground.
7. Must provide accessible parking adjacent to building (or alternative means). Estimate 4% of required parking spaces. Required parking spaces to be dispersed and constructed on pervious ground (not paved).

8. Building not visible from Suttle Road or from Public areas of the fair. Current Fair building groups are each isolated to reduce size of largest developed areas.

9. Provide space for water treatment using natural biology to cleanse water. Discharge only clean water to natural drainage ways.

10. Provide for as many activities as possible outdoors or under covering (but not fully enclosed).

11. Create joyful entrances and exits; build anticipation along the route of arrival.

12. Orient buildings with long dimension east to west. Maximum north and south elevations for solar exposure and orientation to summer breezes.

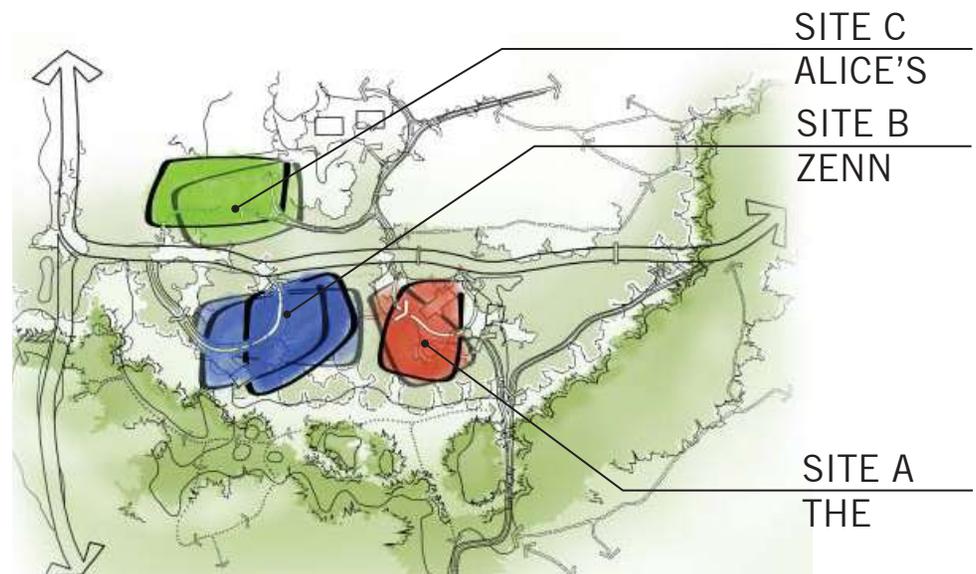


Diagram depicting the three proposed sites.

## Site A | THE HUB

## Location Scouting

Located in the existing Hub area, overlooking the lowlands.

### POSITIVE ATTRIBUTES

- / Good connection to main Camp
- / Above the high water marks
- / Already developed—building here would reduce the footprint on the green spaces
- / This would be the center of camp
- / Parking is already partially developed
- / Great view of the Indian Creek lowlands

### NEGATIVE ATTRIBUTES

- / Adjacent to a high use operational area “back of house” that would be hard to screen
- / Less sheltered
- / Current operations would need to be re-located—where would they go?
- / Dust, noise and heat would be problematic



Yurt at the Hub site



View from HUB to the south

**Site B | ZENN ACRES****Location Scouting**

Located in the Zenn Acres area, near the existing mobile home.

**POSITIVE ATTRIBUTES**

- / Separate from the Hub noise & dust
- / Good solar access with some limited tree thinning
- / Connects nicely to the lowland pathways
- / Could become a gateway piece to the Fair, both during the event and for the year round operation.
- / Kirk likes it
- / The entry drive is already developed
- / Terrain offers some great design opportunities
- / Anna foot meter almost in the positive

**NEGATIVE ATTRIBUTES**

- / Displaces Zenn Acres camping
- / Developing here will cover some green space
- / Not the highest part of the upland
- / More tree removal required



View of site from Chickadee Lane looking south east.



View from site looking south.

## Site C | CHICKADEE LANE AREA

## Location Scouting

Located north of Chickadee Lane in a partially forested area.

### POSITIVE ATTRIBUTES

- / Close to Alice's for shared uses
- / Level site except for sale
- / Good access to roadways

### NEGATIVE ATTRIBUTES

- / Close to neighboring properties
- / Development would require significant tree removal
- / Conflicts with current camping uses
- / Drainage is difficult
- / Poor pedestrian connections to the rest of the Fair site



View of Site from south side of Chickadee Lane.



View of site from the south-west.

### Site Selection Conclusions

Site area C was discarded due to the various negative issues. The sites near the Hub and Zenn Acres were both considered highly desirable. The group determined that these two sites could be joined with the new community center, creating a configuration that had most of the positives of both sites.

The kitchen would back up to the Hub, thus utilizing all the heavy operational pieces already in place there – the semi-trailer storage, paved truck access areas, and existing connections to the Fair operations. The other face of the kitchen would orient towards the outdoor dining areas and the community center, both providing the needed services and screening those functions from the Hub operations.

The community center piece would face onto the Zenn Acres area, creating a great opportunity for a “gateway” entrance to the Fair. It would also connect to the kitchen and dining areas, helping define the space where the Fair Family comes together to eat and share.

The dining and outdoor space would be placed between the kitchen and community center, connecting to the pathways that link together the Fair property. This sloping site lends itself well to the uses envisioned for the space – gathering for a meal overlooking the Indian Creek lowlands, serving as a natural amphitheater for presentations and concerts.

The parking and service areas would be discretely scattered through the trees to lessen the impact and preserve green space.



The image above shows the site selection diagram used in the initial meeting with the OCF CCC members.

## The Green Forum

November 19, 2012

The purpose of the Green Forum was to bring together the group to discuss the following questions:

- / What does sustainability mean to the Oregon Country Fair?
- / What types of sustainably building certifications are available?
- / What are the sustainability goals of this project?
- / How should those goals be implemented?

We began with the stated goals of the Country Fair, as found in the **Lump Manual**, the **Vision Action Report**, and the **Vision Quest Goals** documents.

Some of these goals included:

### OREGON COUNTRY FAIR VISION GOALS

- / On an ongoing basis, the Fair will work with the Peach Power Committee and Energy Park participants to improve internal use of green and appropriate technology.
- / The Fair will build an upland Community Center that includes a kitchen and meeting space and qualifies for a high LEED building certification.
- / The Fair will triple its solar electricity generation capacity.
- / The Fair will amend OCF construction guidelines in order to give priority to reused and recycled building materials.

### STATE OF THE VISION REPORT

- / Process our own waste rather than send it offsite.  
(From Goal 3)

### LUMP MANUAL MARCH 2010

- / Reverence for the land
  - No brush cutting
  - Plant native species
  - Designate, enhance, and protect green zones
  - Maintain wildlife habitat
  - Preserve and restore forest understory
- / Protect and research archaeological sites.
- / Minimize road footprint; develop roads to barest minimum necessary.
- / Restore neglected and abused habitats. Enhance some habitats, e.g. Indian Creek. Identify and protect existing habitat.
- / Protect natural water quality.
- / Plant and promote native species, especially rare endemic plants.
- / Electrical Power Plan Goals
  - Maximized use of renewables, minimized use of commercial power.
  - Ambience of the Fair maintained.
  - Maximized energy efficiency.
  - Solar access maintained where appropriate.
  - Annual net electrical production exceeding consumption.
  - Alternative energy production visible to the public.
- / Recycling/Land Use Plan
  - Garbage-free Fair
  - Reuse as best use
  - Maximized recycling
  - More education
  - Increased efficiency

## Presentation on Sustainable Measures

Next there was a presentation and discussion of some sustainable measures. These measures were grouped in the following manner:

SITE	Limits to Growth, Habitat Exchange, Car Free Living
WATER	Net Zero Water, Ecological Water Flow
ENERGY	Renewable Forms of Energy, Net Zero Energy
HEALTH	Civilized Environment, Healthy Air, Biophilia
MATERIALS	Embodied Carbon Footprint, Cradle to Cradle
EQUITY	Human Scale + Human Places, Rights to Nature
BEAUTY	Inspiration + Education, Spirit

## Sustainable Project Certification Systems

The group then listed the sustainable strategies that were important to this project. Those ideas were posted to large boards for group consideration. Once this was complete, there was a presentation of several of the more widely used sustainable project certification methods, which included:

- / **Earth Advantage**
- / **Energy Star**
- / **Green Globes**
- / **Leadership in Energy and Environmental Design (LEED)**
- / **Living Building Challenge**

All of these systems fall into two basic categories: **modeled behavior**, or **benchmarked results**. Those that use modeled behavior require the project to adhere to a set of rules during design and construction (essentially a series of checklists); while the benchmark certifications are based on measured results.

## Green Building Rating and Certification Systems

### Prescriptive Path Systems

#### Earth Advantage

The Earth Advantage certification was originally developed as a utility-run program to determine allocations of energy efficiency incentives. This program was expanded to national use, and now covers residential and small (up to 100,000 square feet) commercial projects. It is a prescriptive path process, meaning that the project must follow certain guidelines to achieve one of 3 certificates – silver, gold, or platinum—in five categories called Energy, Water, Health, Materials, and Land.

#### Green Globes

Green Globes US was adapted from the Green Globes Canada rating system in 2004. Green Globes Canada was developed as a web-based version of the combination of BREEAM Canada and Green Leaf, two industry sponsored green initiatives. The development of Green Globes US is funded by The Green Building Initiative. The Green Globes US system is an on-line tool designed for use by architects and builders for any size commercial building. The Green Globes system allows the user to accumulate points in five areas— Energy, Water, Resources, Emissions, Indoor Environment, Project Management & Site. If a third party assessment is successfully completed, the project will be assigned from one to four Green Globes by the Green Building Initiative.

#### LEED

LEED (Leadership in Energy and Environmental Design) was developed and piloted in the U.S. in 1998 as a consensus-based building rating system based on the use of existing building technology. The development of LEED® has been through the U.S. Green Building Council member committees. The rating system addresses specific environmental building related impacts using a whole building environmental performance approach. Users must satisfy both prerequisite and optional requirements in seven categories – sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation, and regional priority credits - to achieve a point score. Once these requirements are verified by a third party, a silver, gold or

platinum certificate is issued by the US Green Building Council.

**Prescriptive Path Systems Advantages:** These programs offer more flexible options for building owners to reach specific sustainable outcomes for capital projects. The systems offer many options for reaching certification, and offer several levels of certification. All of these programs are widely recognized by the public and can demonstrate an organization's commitment to sustainability.

**Prescriptive Path Systems Disadvantages:** These systems rely on modeled building behavior and the certification is based on that criteria. Actual building performance does not affect a building's certification chances. In addition, since there are many "checklisted" attributes to be tracked and documented, administrative costs are incurred that might be applied to the sustainable measures themselves.

Costs for these systems are similar; ranging from 2.5% to 9% of the building costs for certification, depending on the level of the certificate. Earth Advantage and Green Globes are less complex and slightly less expensive to administrate.

More detailed analysis and comparison between these systems can be found in a March 2012 Department of Energy report titled the Green Building Certification System Review.

## **Benchmark Measurement Systems**

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### **Energy Star Portfolio Manager**

In 1992 the US Environmental Protection Agency (EPA) introduced ENERGY STAR as a voluntary labeling program designed to identify and promote energy-efficient products to reduce greenhouse gas emissions. The ENERGY STAR label is now on major appliances, office equipment, lighting, home electronics, new homes and commercial and industrial buildings. Using the EPA's Portfolio Manager tool, the user scores a project for energy efficiency. If the score is verified by a third party as 75 or higher, the Energy Star rating is awarded by the EPA. This system is used by the GSA in conjunction with the LEED standard to improve and

monitor the performance of US Government buildings.

### **Living Building Challenge**

Developed initially as an experimental standard for self-sustained development in the 1990's, the Living Building Institute has since codified those original concepts into the Living Building Challenge. This system is based on demonstrated performance in a third party audit made after at least 12 months of occupied use. The project can achieve partial or full certification in seven categories – Site, Water, Energy, Health, Material, Equity, and Beauty.

**Benchmark Systems Advantages:** Both of these certificates have the advantage of using actual benchmarked performance as the standard for recognition. This means that the Owner has a great deal of freedom achieving the goal; this means the most creative and cost effective strategies can be used as long as they succeed. This lowers administrative costs, since the emphasis is directing the resources toward the measures & strategies themselves. The Living Building Challenge is widely recognized as the most progressive green standard in use today.

**Benchmark Systems Disadvantages:** The Energy Star rating is for energy efficiency only, and does not address project environmental impacts in a comprehensive way. It is typically used more as an operational management tool to monitor building performance over time. The Living Building Challenge is more comprehensive; however it is an "all or nothing" approach that does not allow for the pursuit of a policy goal, only the result. This means there is less flexibility when it comes to achieving the certification, with the possibility of the project not meeting the standard after it is constructed. In contrast, the "checklist" systems allow for the certificate to be issued based on modeled behavior thus there is more certainty of meeting the requirements prior to the construction phase.

Administrative costs for the benchmark certifications themselves are much less; for example the Living Building Challenge full certificate for a 15,000 SF building is listed at \$7,500. However, the standard for the Living Building is much higher, and will require more design effort and higher first costs. According to a 2009 report commissioned by the Living Building Institute, the cost premium for a school (which is similar to the OCF project) to achieve the Living Building Challenge was 11-16%.

## Prioritized Sustainability Measures & Strategies

The following list of sustainable strategies were developed through group discussion. They were prioritized by the workshop group and are listed below in order from highest to lowest.

HEALTH		SITE		ENERGY		WATER		MATERIALS	
Sanitation—hand wash stations	4	Minimal ground disturbance	6	Net Zero Energy—Adopted goal of OCF	11	Treat water on site, obtain water on site	6	Durable materials	6
Daylight available to all	2	Minimize impacts to neighbors	2	Ground water heat exchange	4	Net Zero water use for project—Not for Fair event	5	Use healthy building materials	5
Kitchen permeable—air and light	1	Use lumber from site—Douglas Fir	2	PV, solar hot water, wind, passive solar	4	Manage wastewater sustainably	3	Reuse materials—existing materials, shop at BRING	4
First Aid—Design for safety	1	Protect habitat and access	2	Natural light	3	Reclaim water	2	Simplicity	4
Openable walls	1	Treat sewage on site—completely clean all waste before release	1	Wood heat = bio fuels - renewable	2	Discharge only clean water	1	Seek materials that are Pre-recycled	3
Natural Materials	1	Preserve wet lands	1	Building as educational tool	2	Stored water as thermal mass—heat sink	1	No carpet	2
		Bicycle connections—bike route (Long Tom bridge)	1	Consider all realms—heat, light, transportation, etc.	1	Conserve Water	1	Reuse trees on site and reuse lumber	1
		Solar access	1	Easy to use and understand measurement system	1	Collect rainwater	1	Source locally	1
		Off-site parking	1	Need to manage energy (manage behavior)	1				
		Use light touch—fit into landscape	1						
		Protect habitat and access	1						
		Pervious Surfaces	1						

Items with 3 or more votes

## Conclusion

The OCF CCC reviewed the results of the Green Forum, and the various certification systems. The majority opinion was to organize the adopted goals of the Oregon Country Fair, combine those with the workshop goals, then compare those to the two most prominent types of certification systems (LEED and Living Building) to determine which system might best align with the OCF.

A subsequent series of Committee meetings were convened for further study and clarification of the project's sustainability goals. The result of that work was the adoption of the Living Building Challenge as a "green guideline", with the Energy Star measurement tools put in place to help the Fair operate the building more efficiently. Additional information about this can be found in the Sustainable Goals section of this report. While there was majority support for achieving a high level of sustainability, there was also concern that goals were being considered without knowing the impact on cost (for example, Net Zero Energy).

## Cost of Sustainable Design Measures

Sustainable designs like all other parts of the program are subject to evaluation. Each must be tested in terms of budget, long term benefit, and adopted values of the fair. The goals can be adopted with the understanding that the strategies proposed to reach these goals will be vetted for cost and operational feasibility. Sustainable measures could also be phased in over time if the initial capital expense is too high.

In order to determine cost and benefits, specific sustainable measures need to be developed to a point where they can be evaluated. For example, the goal of net zero energy requires comparing the cost of a building that simply meets energy code to one which is highly energy efficient and which is able to generate renewable power equal to the amount of power consumed. Enough engineering would be required to add up all the power used by the building in a year. We could then determine the quantity of PV cells able to generate equivalent power over the year.

## Site Information

### Site Considerations

The following goals have been set by the Oregon Country Fair pertaining to the land and stewardship.

“The Oregon Country Fair creates events and experiences that nourish the spirit, explore living artfully and authentically on Earth and transform culture in magical, joyous and healthy ways.”

“The Oregon Country Fair shall maintain and improve our land and facilities. The Oregon Country Fair shall steward our lands in accordance with ecological standards.”

In recognition of those goals and others, the OCF CCC held a Site Selection workshop, and the consensus of that group was recorded (see Site Selection Workshop section). The next step was to set forth some questions and considerations to guide the site selection investigation.

### Natural Systems

- a. Solar Access: Maintain exposure of the building to the sun especially during winter. Winter sun angle in Eugene at winter solstice is an altitude of 21 degrees above horizontal.
- b. Wildlife Habitat, Plants and Animals
- c. Restorative: Where building site requires clearing for solar access and construction restore site to natural (non-invasive) state.
- d. Seasons: Imagine building use in all seasons.
- e. Potable water: Collect and store rainwater.
- f. Storm water: Sculpt site to receive water from building roof and hard surfaces if any. Contribute to natural drainage systems. See site guidelines for issues of erosion at stream banks.
- g. Water treatment system
- h. Wind patterns, weather and ventilation: Summer winds in evening from north to south. Allows night flush of buildings.
- i. Design to keep mosquitoes out.

### Aesthetic Considerations

- a. Visibility: Community Center should not be visible from Suttle Road.
- b. Gateway: For Fair Family, the community center is the “face of the Fair”.
- c. Views: There is not a goal for distant views from the Community Center. It has been noted that the many “tree house” like structures at the fair allow views through the tree tops. Distant views allow orientation to the fair property.
- d. Integration: Integrate building with landscape.
- e. Sustainable: At the site level, plan for water and energy to be self-sustaining. Need full solar access for solar thermal heating and rooftop PV. Reuse wood from trees cleared at building site. Collect and store water, process grey water using natural systems.

### Connectivity

- a. Traffic: Provide road access. Minimize new roads. Reuse Chickadee Lane. Need turn around at community center for emergency vehicles and deliveries. Plan for access by large trucks.
- b. Multimodal: Plan for all manner of vehicles, bikes, peds and other inventions.
- c. Ped - Bike routes
- d. Vendors: Delivery space for unloading at kitchen.
- e. Visitors: How do you arrive?
- f. Mass Transit: Mass transit bus service is available from Veneta to Eugene as part of regular service. During the fair, public and private charter coaches provide transit service to the fair.
- g. Main Camp: Need pedestrian access to main camp. Used by 1000's daily in the spring.
- h. The Fair: Access to public parts of fair can be indirect. Consider off season use of main stage and fair parking areas.

### Topography

- a. Slope: Building must be accessible. Locate on slopes with care.
- b. Floodway: Do not build in areas designated within the seasonal flood boundary. Will need official flood boundary for final design.
- c. Geotechnical: Will need geotech study for solid bearing conditions of building.

### Human Communities

- a. Archeology: See report from archeology group. Carefully test explorations and other means of checking for buried artifacts.
- b. Neighbors: Community center will bring more activity to the Fair property. Consider noise, sight lines, traffic, and other impacts on neighbors.
- c. Present Community: How to engage neighbors?
- d. Veneta Elmira: Some gatherings may include sharing the community center with nearby cities and with community groups.

### Infrastructure

- a. Power: Primary power transformer is located at the Warehouse. See Land Use Management plan for power distribution.
- b. Water. OCF is served by some piped water from City of Veneta and from a series of wells. A large concrete reservoir is located near the Warehouse (filled by water truck). The need for added water storage has been identified.

### Safety & Security

- a. Building may be unoccupied for periods of time in off season. Make easy to secure.
- b. Review designs with OCF Security Group.

### Fire Safety

- a. Fire Control & Public Safety: Work with local, county, and state fire officials. The serving fire district is Lane County Fire District No. 1, located at 88050 Territorial Hwy, Veneta OR, and Phone 541 935 2226. See <https://lcf1orfd.samariteam.com/Default.aspx>
- b. Fire Access: Verify requirements for roadways required for fire access to structures. See local fire jurisdiction. Fire truck access may be required around the building.
- c. Water for fire protection: Need direction from OCF and Fire Marshall. Access for pump trucks at the river and from potable water reservoirs could provide water for firefighting. A piped system of non-potable water is also available in parts of the fair property. Requires emergency generator and pumps able to supply fire protection in buildings.
- g. Fire breaks: Fire breaks are provided within the Fair. Need input from Fire Marshall regarding fire breaks and areas of refuge that may be required as part of the Community Center.

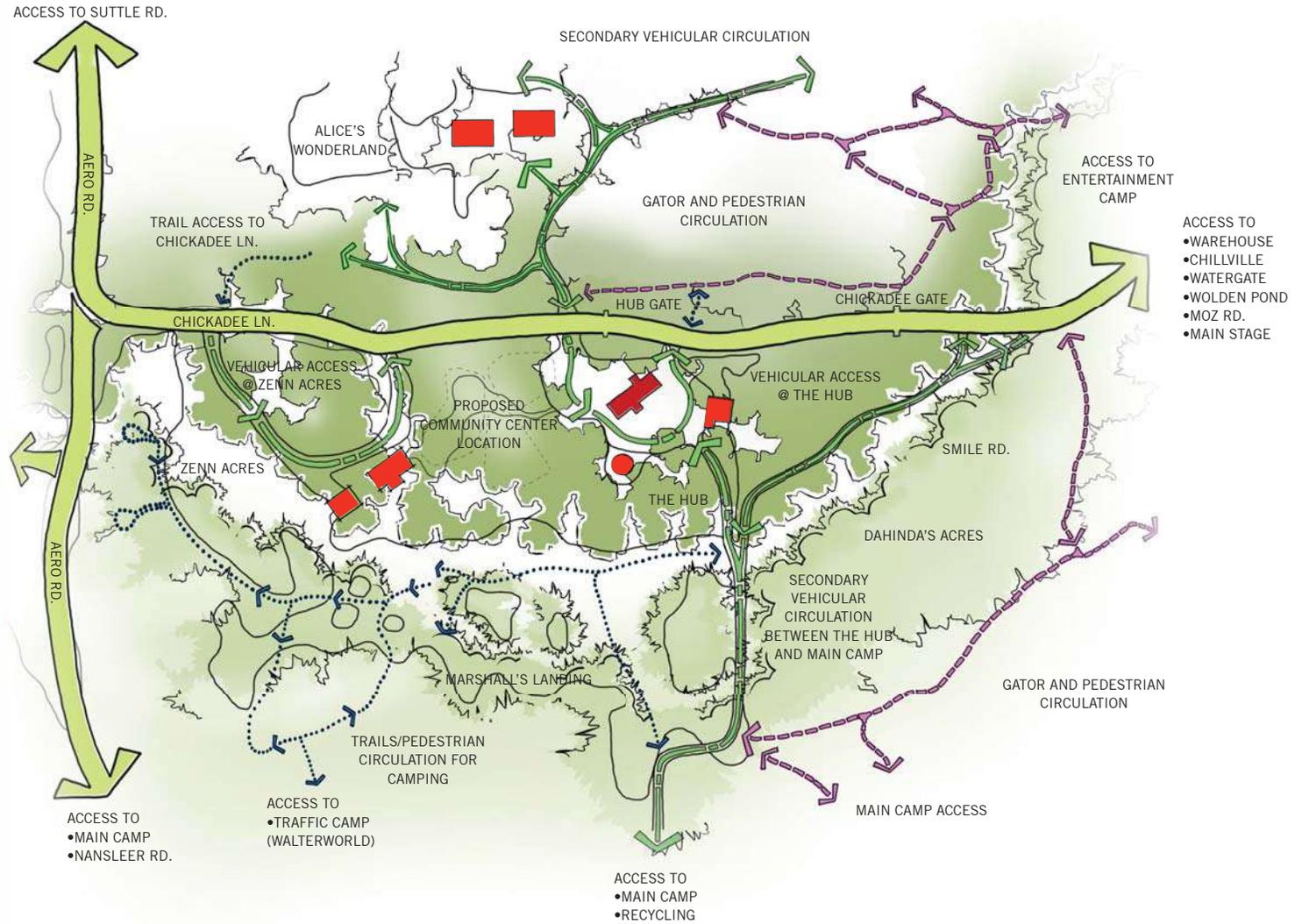
### Existing Conditions

This diagram documents some of the existing conditions at the site; focusing on the site circulation, vegetation, and existing structures.

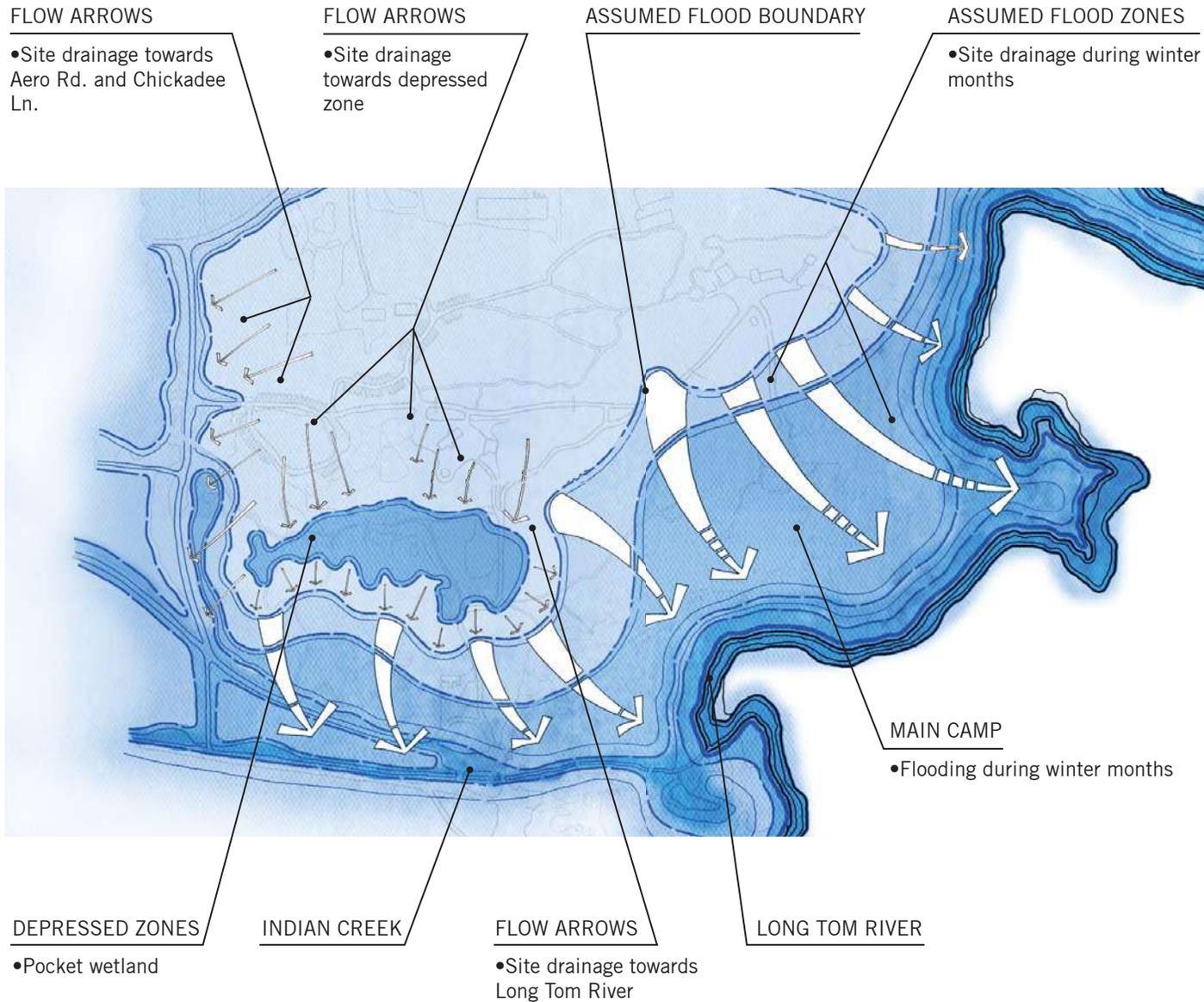
This area primarily serves as the operational access for the Fair event via Chickadee Lane and Aero Road. There are several activity centers; the Hub, Zenn Acres, and Alice's Reunion. These areas are all heavily used during the Fair. Alice's is also used quite extensively year-round for crew meetings, retreats, and Fair gatherings.

The project needs to be sited somewhere in the upland region, shown here as dark green.

- Key
- Existing Buildings
  - ▬ Main Vehicular Circulation
  - ▬ Secondary Vehicular Circulation
  - ▬ Pedestrian Circulation
  - ▬ Trails/Footpaths
  - Upland Conifer Forest
  - Lowland Deciduous Forest
  - Grassland/Open Space



Existing Conditions Diagram



Site Hydrology Diagram

**Hydrology**

The site area lies across the hydrologic flow lines which move from the uplands south to the Indian Creek basin. At a finer scale, the proposed buildings cross an area of more concentrated flow (a gentle draw between the Hub area and Zenn acres). The new development will need to be mindful of this condition, allowing ways for the pre-development water flows to pass through the site unimpeded.

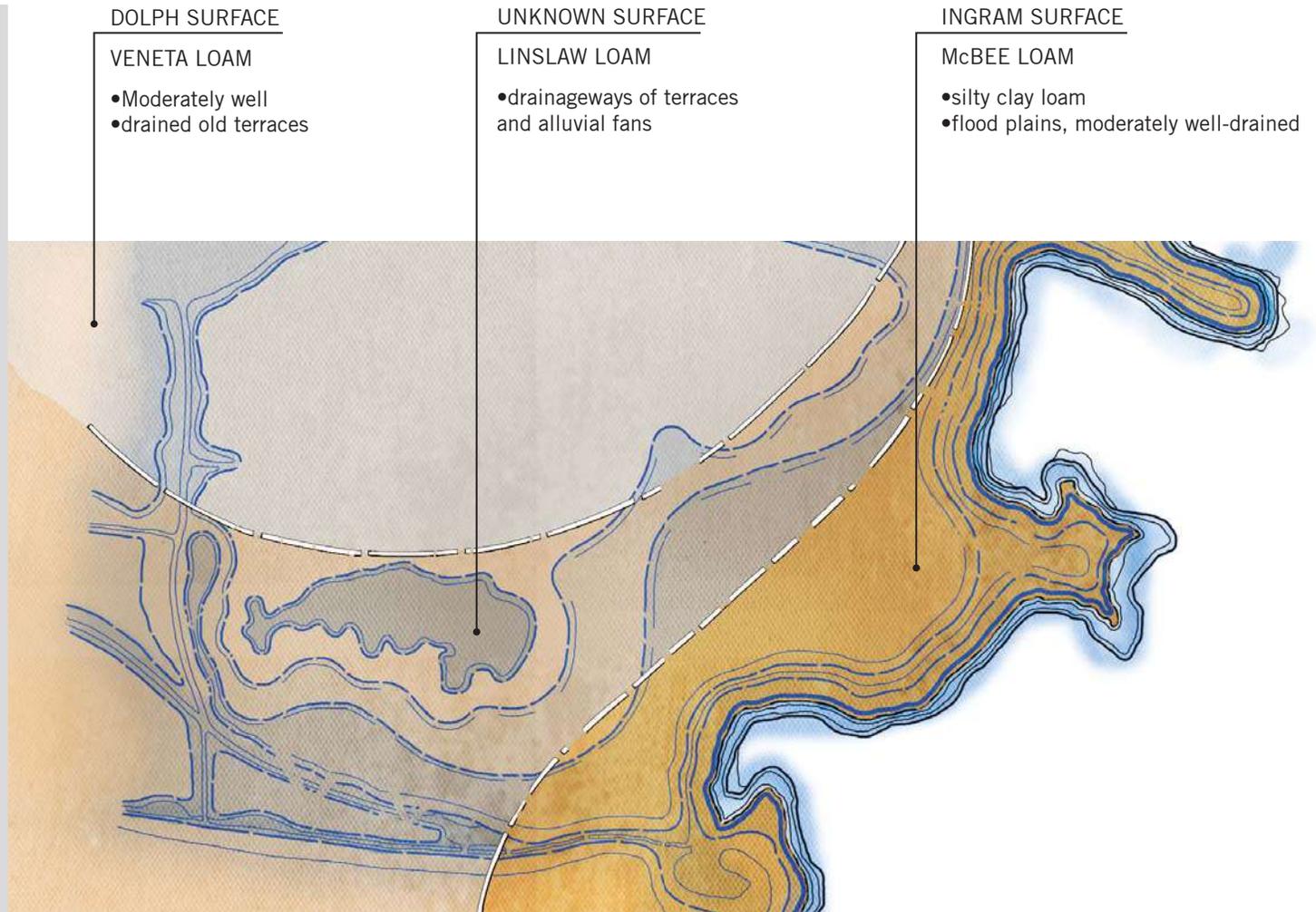
Just to the south of the proposed project site is Marshall's Landing, which contains a depressed area that is part of the seasonal flood zone. As such, it is a sensitive riparian ecosystem containing spagnum bogs, grasslands, and is rich in vegetation and wildlife.

Drainage from the project site will flow into the depressed zone to the south of the building site, so care must be taken to completely treat all effluents and other potentially damaging materials within the project boundaries.

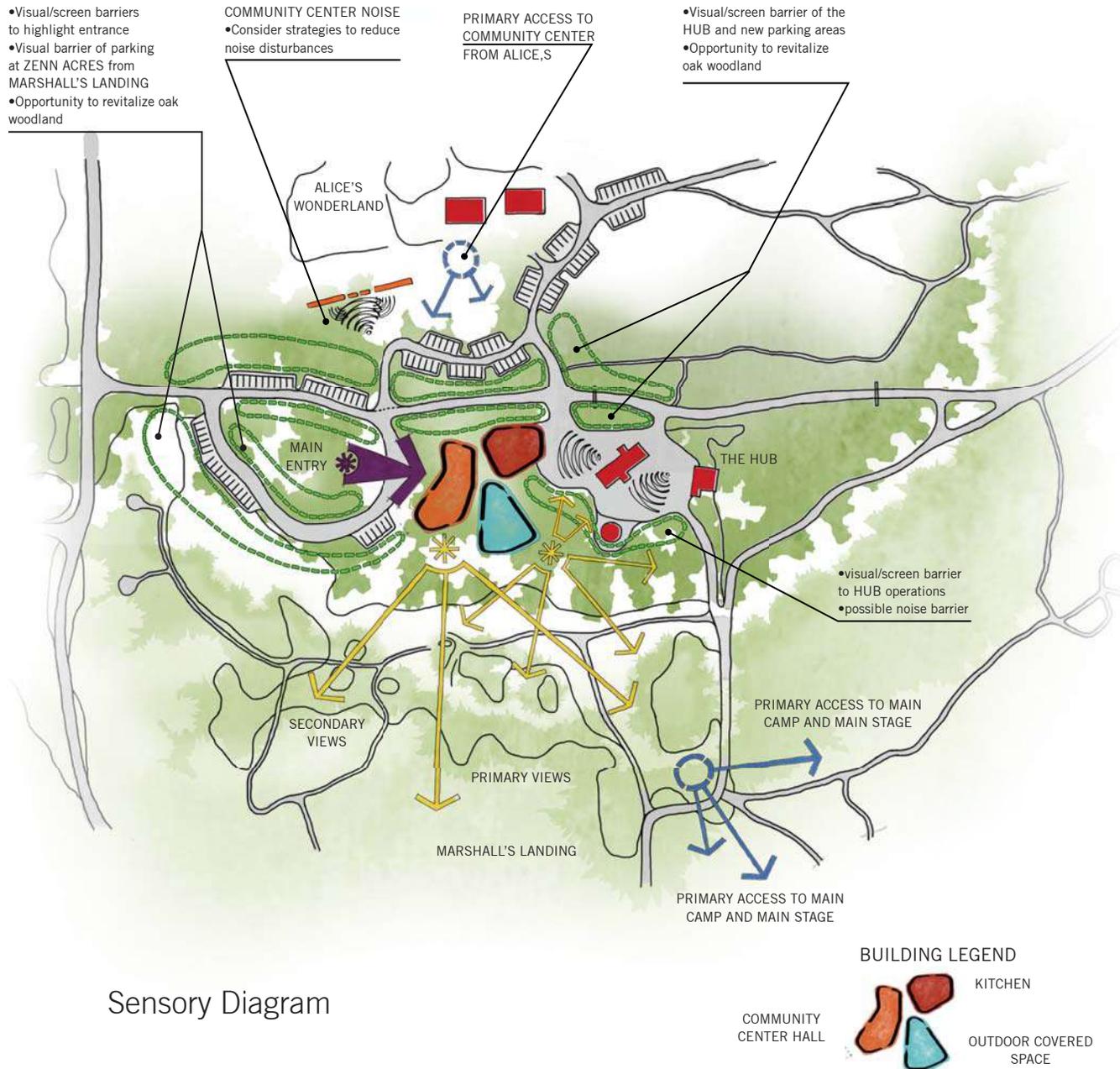
**Soils**

The soil of the site is predominately Veneta loam, with low slopes, which is rated as “somewhat limited” by the US Department of Agriculture for small commercial development due to excessive clays and saturated soils. These soils are sufficient for this project with some limitations on the types of foundations. Deep excavations are discouraged.

Since the project lies at the edge of two different soil types, sub-soil investigation will be needed to insure that the structures can be properly founded.



Soils Diagram



Sensory Diagram

### Sensory Diagram

This diagram records some of the factors that effect the user's experience of the site.

As the site is developed for the Community Center there is an opportunity to shape the experience by opening views to some elements while screening others.

In general, all parking and vehicular storage should be nested into the landscape such that it will not mar the rural nature of the existing environment.

The areas around the building site that will be impacted by the project offer a great opportunity to re-introduce pre European ecosystems and undertake restorative habitat projects, such as returning the oak savannah ecosystem.

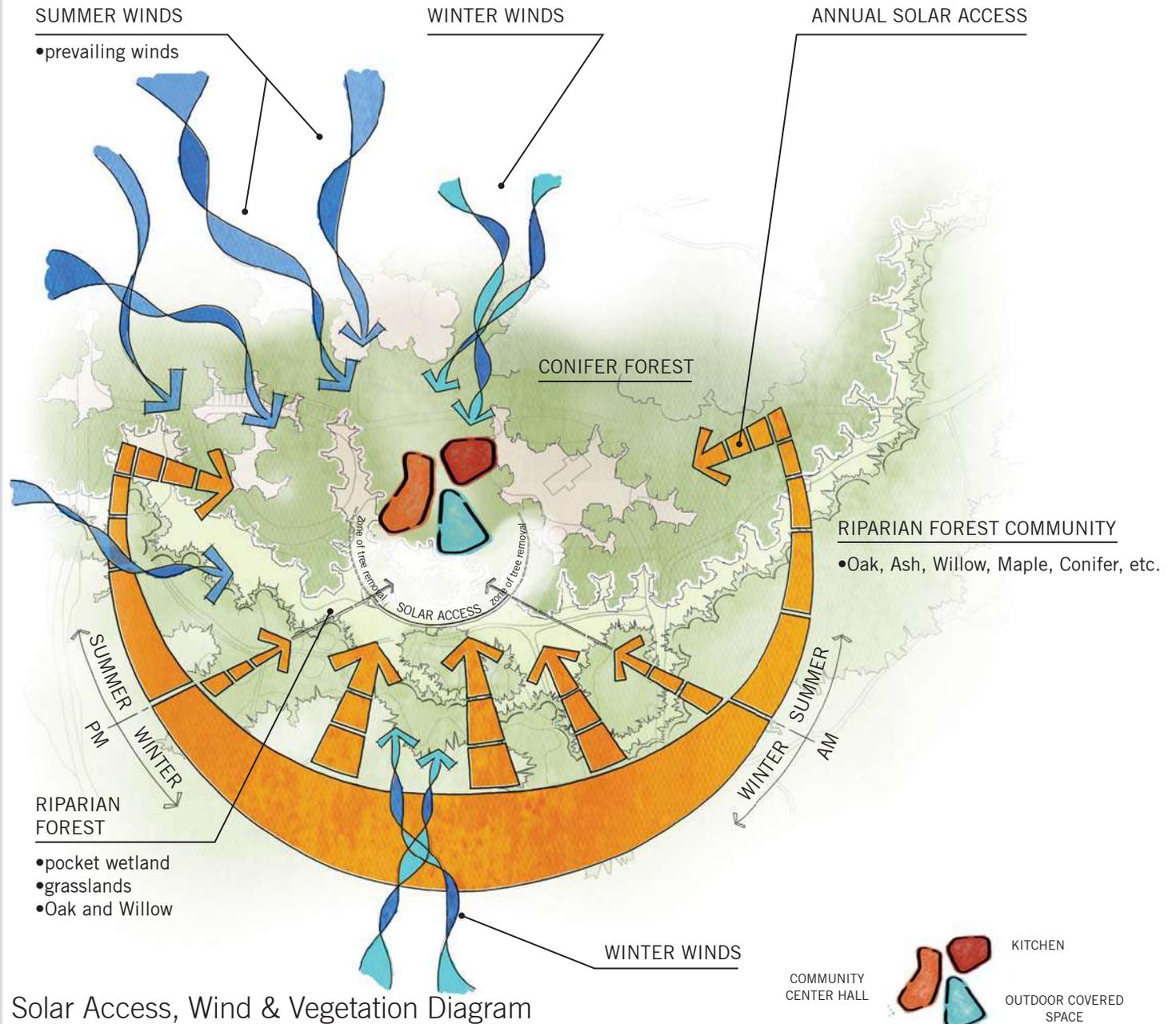
-  LANDSCAPE IMPROVEMENT ZONE
- 
-  CONNECTION
-  EXISTING BUILDINGS
-  VIEW

**Solar Access, Wind & Vegetation**

This diagram records some of the environmental factors that should be considered when developing the site. Shown are the solar access, summer winds, and winter winds.

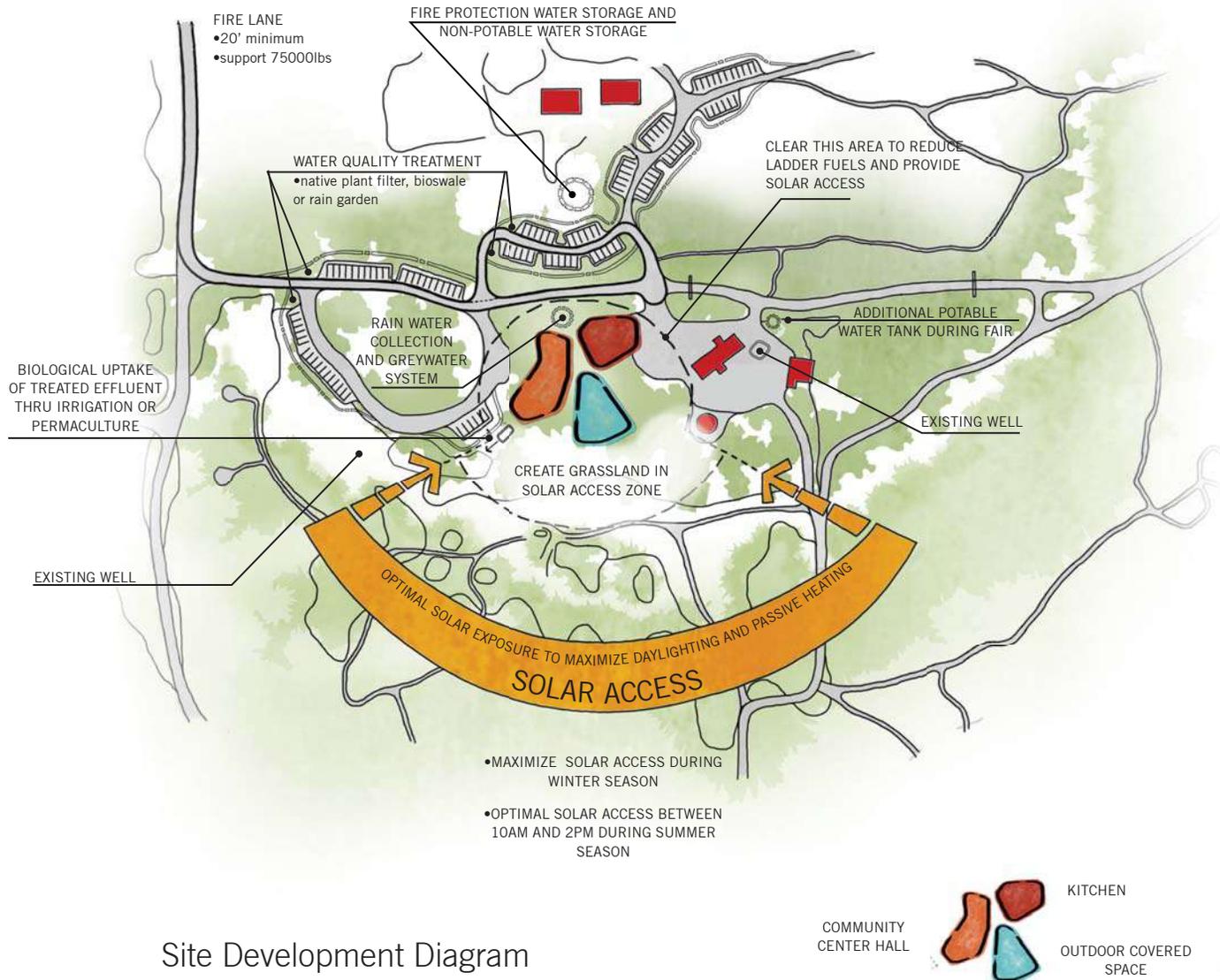
The winter winds generally come from the north and south, and the summer winds from the west. This information will be used to optimize the passive heating and cooling of the building by screening the winter winds and allowing a pathway for the summer breezes.

Solar access can be enhanced by selectively removing some of the overstory to the south of the buildings (these trees could become wood for the project) and replacing them with deciduous native oaks.



Solar Access, Wind & Vegetation Diagram

These diagrams are meant to convey conceptual information about the general relationships of the elements on the site and their environment. The actual design of the buildings will take place in a later phase.



Site Development Diagram

**Site Development Diagram**

This diagram shows the proposed improvements to the site.

The new Community Center building will be located in the area between the Hub and Zenn Acres. This will allow the kitchen to use the already developed Hub vehicle areas for loading dock and waste removal operations. The Community Center Hall will face toward Zenn Acres and Main Camp, acting both as a dining hall during the Fair event and as a gateway for the people coming to participate in other events. The outdoor dining and event area will face down the hill towards the lowlands, creating a natural amphitheater.

The parking and new roadways will be threaded into the forest such that their visual impact will be reduced as much as possible. The areas around the building that need to be thinned for fuel reductions will become part of the habitat restoration process.

## Site Utilities and Infrastructure Narrative

The information presented in this narrative regarding the existing utilities is based on information provided by the Oregon Country Fair (OCF) board members and volunteers, and the OCF Land Use Management Plan.

Water:

Existing Domestic Water:

The Oregon Country Fair (OCF) site has an existing on-site water system that includes a mix of potable and non-potable water distribution facilities. A potable water system, approximately 10,000 feet in length, runs from Wolden Pond to the Warehouse pump/well house to Main Stage plaza, then tees in both directions to span the Figure Eight and Left Bank paths. Wolden Pond is a 16,000-gallon cast concrete reservoir. A separate potable water system that is fed by well at the Hub supplies Main Camp. The potable water distribution lines vary in size from 1.5 to 2.5 inches in diameter.

A separate 2-inch water line for non-potable water distribution extends approximately 2,500 feet from the Warehouse pump/well house, down Smile Road and Snivel Lane to the Recycling Dock and Nansleez Road.

During the Fair, the water system additionally includes water trucks, hand powered hose carts, water lines throughout the site, drinking fountains, hand wash stations, staff showers, a separate 1,500-gallon plastic reservoir that serves Main Camp, a 1,200-gallon plastic reservoir that serves Energy Park showers, as well as a separate reservoir, water lines, showers, and tubs that serve the Sauna. During the Fair, Wolden Pond is supplied with EWEB water delivered in tanker trucks. At other times, it is supplied from the well at the Warehouse and used for irrigation.

The OCF water system includes four wells at the Warehouse, Zenn Acres, Alice's Wonderland and The Hub. The Warehouse well is approximately 125 feet deep and delivers 50 gallons per minute. The water contains nitrates that exceed drinking water standards. The well is used for non-potable use and potable uses. The potable portion of the system is filtered through a reverse osmosis filter. The well at Zenn Acres is 160 feet deep, delivers 8 gallons per minute, and contains sulfur and iron but no nitrates. The water is filtered through activated carbon, softened, and chlorinated. The well at Alice's is 60 feet deep, delivers 20 gallons per minute, and contains little iron but no sulfur or nitrates. The Hub well is 80 feet deep, delivers 20 gallons per minute, and is moderately hard with iron content.

Domestic water from a municipal water system is not currently available to the Fair site. It is possible that municipal water from the City of Veneta will be available in the future. However, for the purposes of this study municipal water is assumed to be unavailable.

Proposed Potable Domestic Water:

The existing well at the HUB is the closest available water source to the proposed community center and kitchen site. A well at Alice's Wonderland, to the north of the proposed community center site, may also be available. The water from the existing wells requires treatment in order to be used for potable water.

The existing site water lines are small and existing wells may not meet the demand when the kitchen is in full operation during the Fair. An additional reservoir and increased well/pump capacity may be required. An analysis will be completed during the Schematic Design phase of the project to determine the water demand for the project.

The State of Oregon health codes do not allow rainwater or graywater to be used for potable domestic water. However, systems should be designed so that in the future when codes allow on-site processing of rainwater for use as potable water it will be straightforward to add the necessary equipment.

Non-Potable Domestic Water:

Collected rainwater and (with more restricted usage options) treated sanitary sewer systems can be used for non-potable domestic water. Non-potable domestic water uses for the community center could include water used for cleaning, toilet flushing, and watering of plants in the immediate vicinity of the building(s). For the community center, rainwater harvesting for non-potable domestic water will make sense. These systems will be integrated with the design of the building's plumbing and roof areas. We envision a processing system as simple as possible for the intended uses, all of which will be determined in the Schematic Design phase of the project.

The graywater system will include processing equipment such as filtration, disinfection, and pumping, and a small storage tank at the community center building(s). In addition, we anticipate the system will include a larger storage tank that could be constructed up-slope from the center, possibly in Alice's Wonderland. In wet weather, excess rainwater would be pumped from a tank at the building to a larger storage tank across Chickadee Lane.

Within the building(s), nonpotable water piping will be installed together with potable water piping, and delineated as required by code. At the present time, we anticipate having nonpotable hose bibs in outdoor areas for cleaning and watering, and indoor piping to toilets for flushing. We would also like to consider fixtures designated for cleaning purposes to be placed within the building, possibly also at the kitchen.

Fire Protection Water and Access:

#### Existing Fire Protection:

The OCF site has an established plan for emergency response and fire control and suppression, which includes the site water system, fire access roads, two Fire Crew campsites, tanker trucks, a foam retardant unit, temporary pickup truck tanks, established fire breaks, and means for pulling water out of the Long Tom River during an emergency. However, the OCF site does not have an existing water system with sufficient capacity to provide the minimum fire protection water demands typically required by the fire code.

#### Proposed Fire Protection:

A meeting with the State Fire Marshall will be required in order to determine the fire protection requirements for the project. Available water with sufficient capacity for fire suppression will most likely be required for the proposed community center and kitchen. The proposed center could be required to have a tank, reservoir, pond, or other water source capable of supplying fire protection water at 1,500 gallons-per-minute. Based on the preliminary size of the proposed center, we estimate that approximately 30,000 gallons of water storage will be required for fire protection.

If a large storage reservoir or tank for fire protection is required, we will evaluate opportunities to locate and construct this storage facility so it has the greatest overall benefit to the Fair. We believe there is a potential for the fire protection storage to be provided by a new non-potable water tank or reservoir located near and integrated with the existing potable water storage at Wolden Pond. The tank could be filled by collected rainwater or non-treated well water. Such an integration of new and existing facilities could save on construction cost and make fire protection water available to other parts of the Fair site, in addition to the proposed community center.

#### Proposed Fire Access

A 20-foot unobstructed roadway will be required for fire apparatus access. The fire access will need to support a 75,000 pound fire truck. Gravel roads are often sufficient to support the fire truck, but verification by a geotechnical engineer will be required. Fire access will be from Suttle Road, to Aero Road and Chickadee Lane. A fire truck hammerhead or turn-around will be required near the proposed community center and kitchen building.

#### Sanitary Sewer:

#### Existing Sewer:

The OCF site is not served by a municipal sanitary sewer system. All waste water generated at the OCF site is either disposed of on-site through septic drain fields, pit toilets, or is trucked off-site by sanitation companies.

#### Proposed Sewer:

The new community center will require a modern sewage processing system, and while this could be accomplished using conventional septic system design concepts, such a system would require a very large area for leach-field disposal of liquid effluent. We are anticipating that an advanced technology such as Orenco Systems "AdvanTex" product will be a far better fit for the new community center, in terms of performance, system size and area requirements. For example, together with a traditional sand filter, such a system may provide effluent that can be used for irrigation, or even "higher-grade" non-potable uses such as toilet flushing. We are also anticipating that effluent uses on-site might be further developed over time by Fair staff, and that this system could then become one which is designed to provide for the immediate functional needs of the new community center facility, but can be "taken further" by Fair staff and volunteers over time.

As with conventional septic tank systems, the tanks associated with an Orenco system will need periodic pump-out of digested solids, and so need to be located on the site with that access requirement in mind.

#### Storm Drainage:

#### Existing Storm Drainage:

Stormwater runoff within the OCF site is generally infiltrated in wooded areas and wetlands, or runs overland to established roadside ditches, seasonal creeks, Indian Creek, and the Long Tom River. Stormwater runoff is currently treated naturally by vegetation and soil, which filtrates and infiltrates pollutants that are suspended in the stormwater.

The OFC site has large areas sensitive wetlands, ecosystems and habitats that require protection and stewardship. During the wet season, much of the site is saturated or covered with ponded water. Upland areas of the site most likely have saturated soils during the wet season with low permeability.

#### Proposed Storm Drainage:

Minimizing the negative impact of rainwater runoff from the proposed building and surrounding site is critical to any design that intends to support the Oregon Country Fair's commitment to the protection and stewardship of the Fair land. The proposed community center will include a variety of simple yet innovative systems to protect and preserve the natural and historic drainage. We recommend rain water from new roof areas be collected and used for graywater, fire protection and irrigation. Runoff from roads and parking areas should be filtered for pollutants and stormwater flows controlled to prevent erosion. Simple systems, such as vegetated bio-swales and rain gardens with native plants can be used to filter pollutants. Erosion due to runoff from large storm events will be controlled using rocks and plantings.

# Building Information

## Program Summaries and Space Diagrams

The activities identified in the mind mapping exercise were organized into three major categories. These spaces and activities are summarized in the following pages.

The first space type is called “enclosed building”. This describes spaces that are fully weather protected and climate controlled. These include the kitchen, community hall, and accessory spaces.

The second space type is “covered space”. This is an area that is protected from rain and sun by a permanent roof structure, like a porch or canopy. This element will be the shelter for outdoor dining and events.

The last type of space category is “outdoor/site improvement” spaces. This will include all of the site improvements not covered in the other categories, like roadways, parking, open landscaped areas, and paths.



There are three primary spaces in the program, as seen in the diagram on the facing page. These include:

### The Kitchen

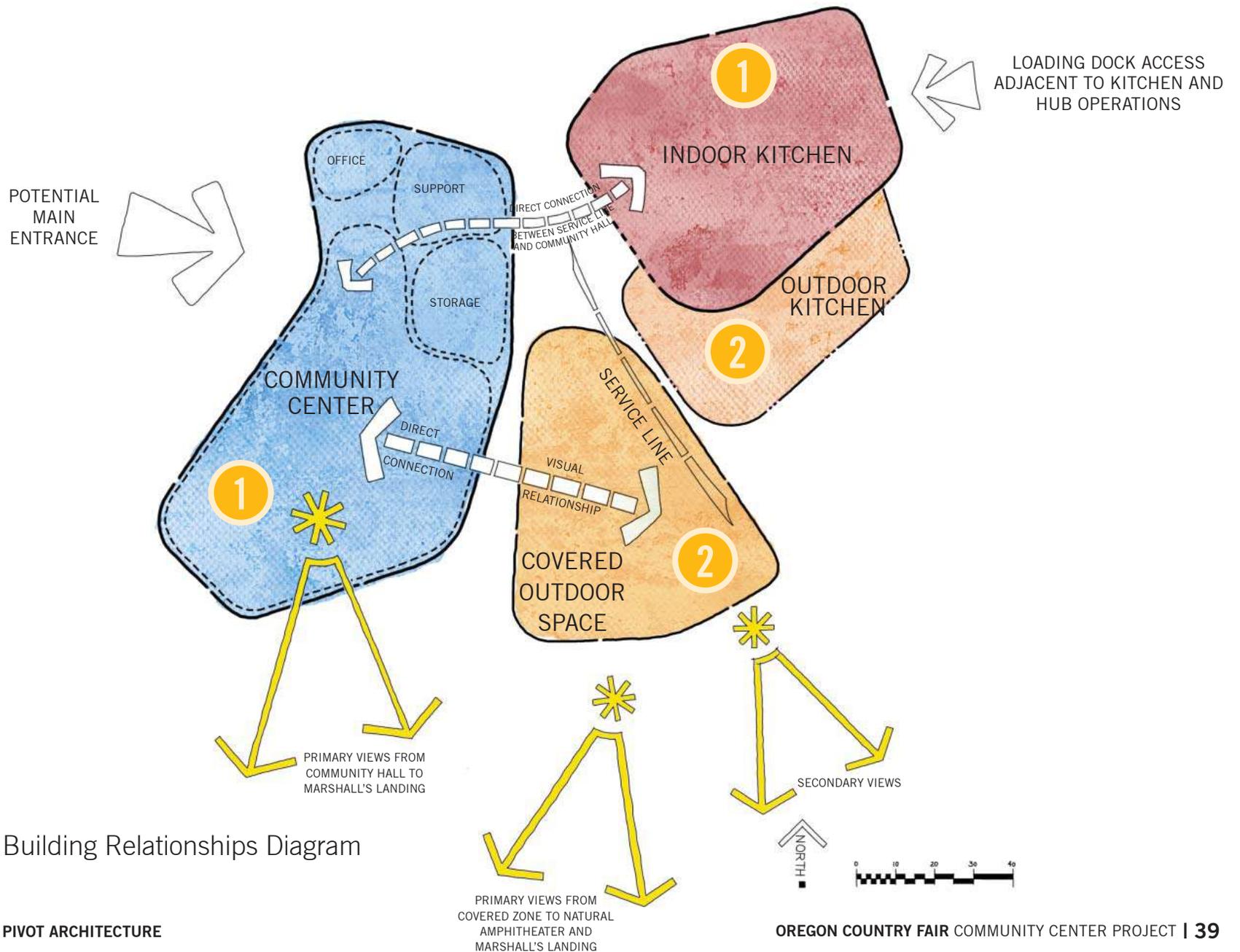
This space is meant to house all of the food preparation and storage operations. This space should be open, bright, safe, and joyful. Wherever possible, it should retain the qualities of the current Main Camp kitchen - improvisational, connected, and filled with laughter and music. This place is the heart of the community center, and should connect to the outdoors, the community hall, and the outdoor dining. It will need access to a heavy traffic “back of house” area where the truck traffic and waste management activities occur. This space will need to be flexible, with the support activities arranged around the central hot food preparation area.

### The Community Hall

This is the large, multi-purpose space that will house many of the activities of the community center; dining, concerts, meetings, educational sessions, and community gatherings. It should be large, but not cavernous, with smaller break out spaces at some of the edges. This space will connect to the “gateway” entrance located off of Zenn Acres, and to the service line of the Kitchen, and to the outdoor covered spaces. There are some support spaces in this program element, including storage space (that can be converted to event space), mechanical rooms, administrative offices, and restroom. The people using this hall should feel invigorated and inspired by the space; many opportunities can be created in the architecture for artistic creations. Overall, this should be a unique expression of the Country Fair experience, with delight and inclusivity at every turn.

### The Covered Outdoor Space

In good weather, especially during the Fair and at large Fair Family events, more space is needed to handle the addition numbers of people dining and gathering. This outdoor space will create shelter from sun and rain while keeping a close connection to the beautiful natural landscape around the Community Center. The sloping areas of the site where this element is located will create a natural amphitheater for events, presentations, and concerts.



Building Relationships Diagram

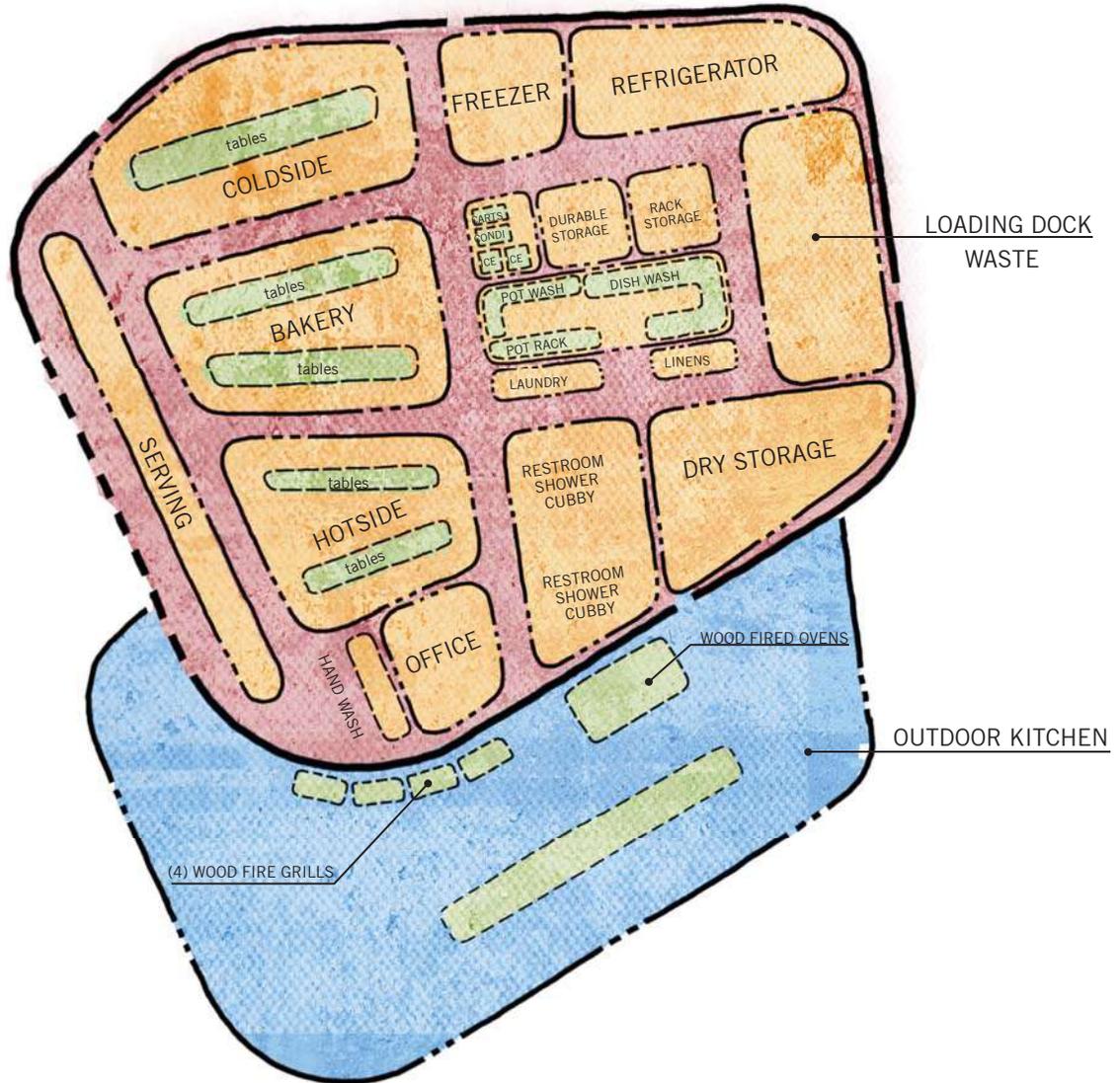
**Kitchen**

The vision is to design and build a community center with the kitchen forming the heart of the community center. Serving over 3000 people in the three days and operated by a cadre of staff and volunteers, that is the main event of the Oregon Country Fair, the kitchen is a hub of activity requiring large amounts of high quality food to be received, stored, processed, prepared and served to people eating in the out-of-doors. This high activity time includes not only the time during the fair itself, but also the pre-fair weeks leading up to the fair. Juxtaposed to the high energy, intense event of the fair and pre-fair, is the need for the kitchen to also serve the community center and smaller fair functions throughout the remainder of the year. This means the kitchen needs to respond appropriately and be well designed to support the smaller and indoor events as well as the larger event of the fair.

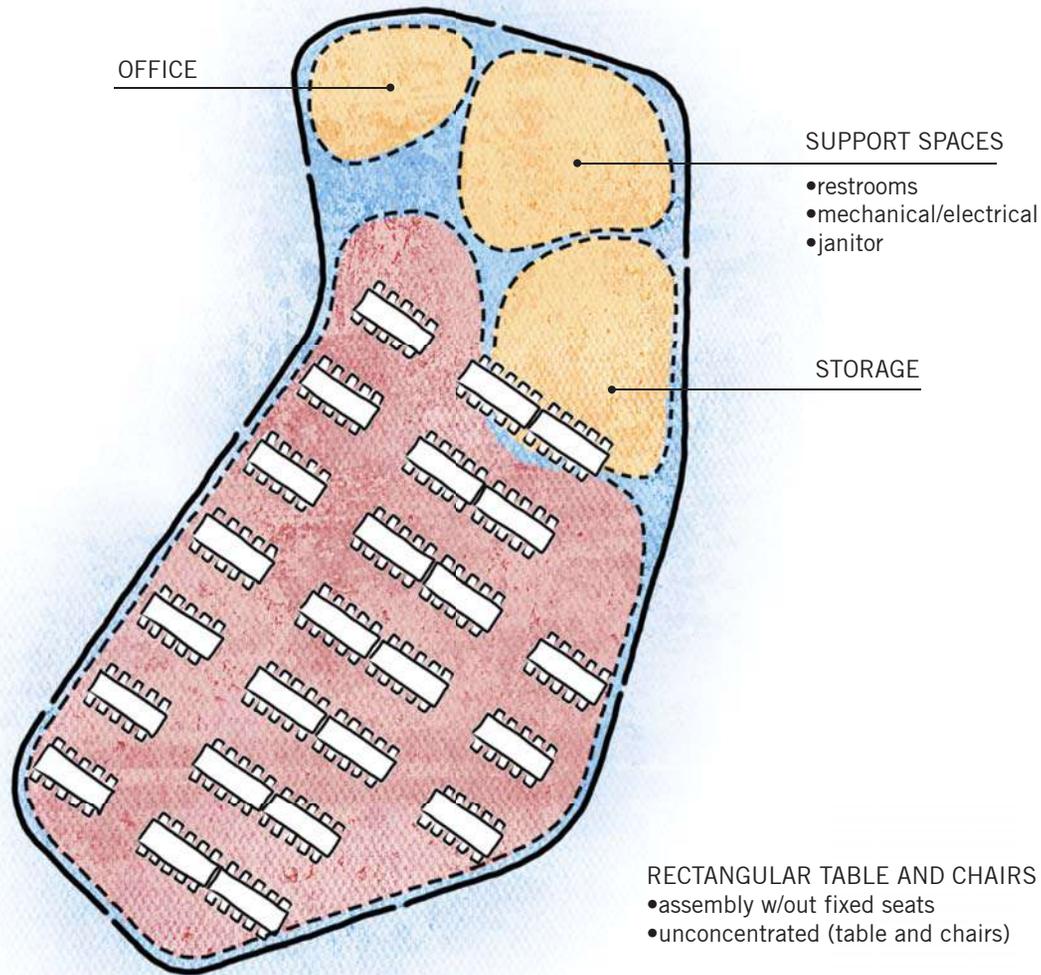
One of the main goals of the project is to strive toward the living building challenge. Because of the kitchen's high resource use, including water, energy and air, as well as waste generation, a key component of the kitchen's design will be consideration and integration with the systems design in support of the sustainability goals.

**Kitchen**

The Kitchen includes 3000 SF of interior spaces serving the functions shown in the diagram below and 1500 SF of covered outdoor food preparation space.



Community Hall | Dining



**Community Hall - Dining**

One of the primary functions of the Community Hall is to provide a sheltered, inviting space for folks to gather for meals.

This space should be warm and dry in winter, cool and shady in the summer. The main hall will accommodate about 250 diners, seated at cafeteria style tables. These tables can be folded up and placed out of the way in a storage room during the off season or for events.

The Dining Hall function needs to connect with the Kitchen serving line, and be able to open up to the Covered Outdoor space to create one large indoor-outdoor space for bigger events.

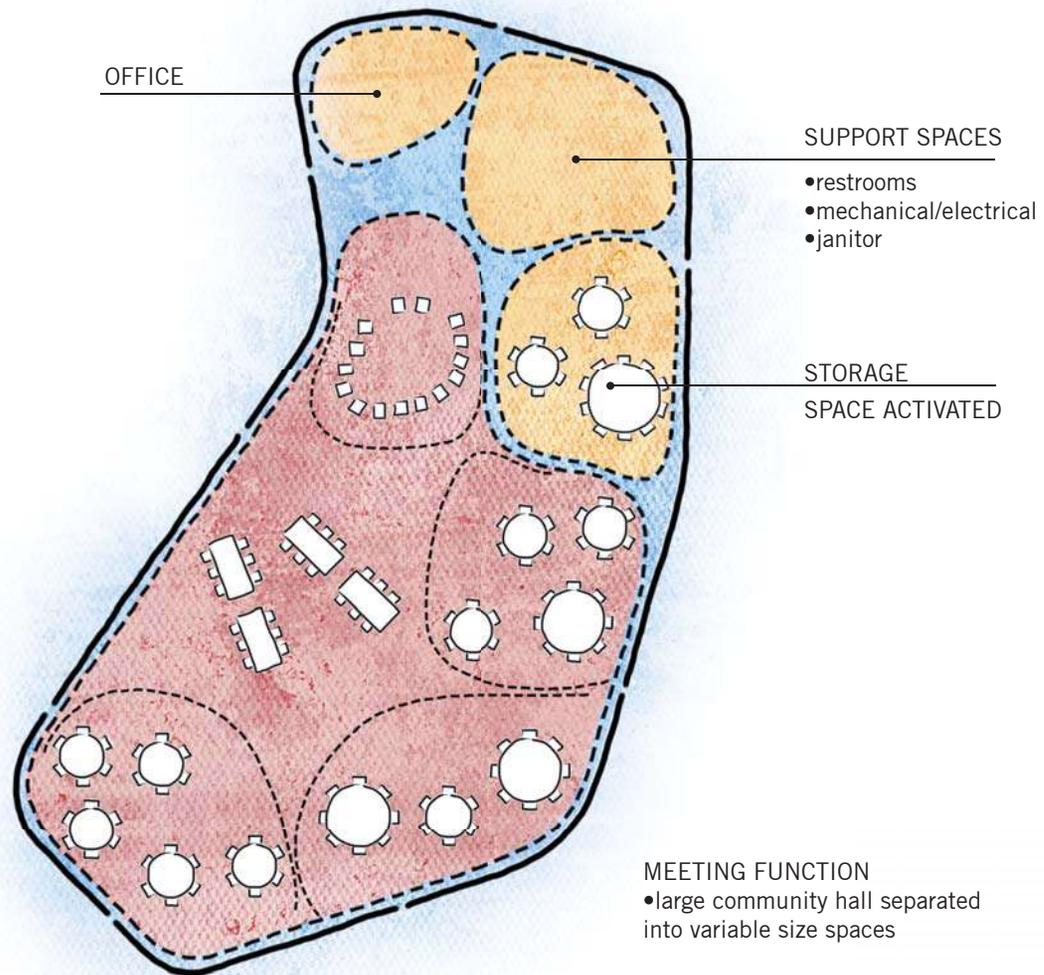
### Community Hall - Meetings

Flexibility is the key for the Meeting function of the community hall. The meeting sizes and configurations vary greatly depending on the group that is using the facility. The hall should have the capability of being divided up into smaller rooms.

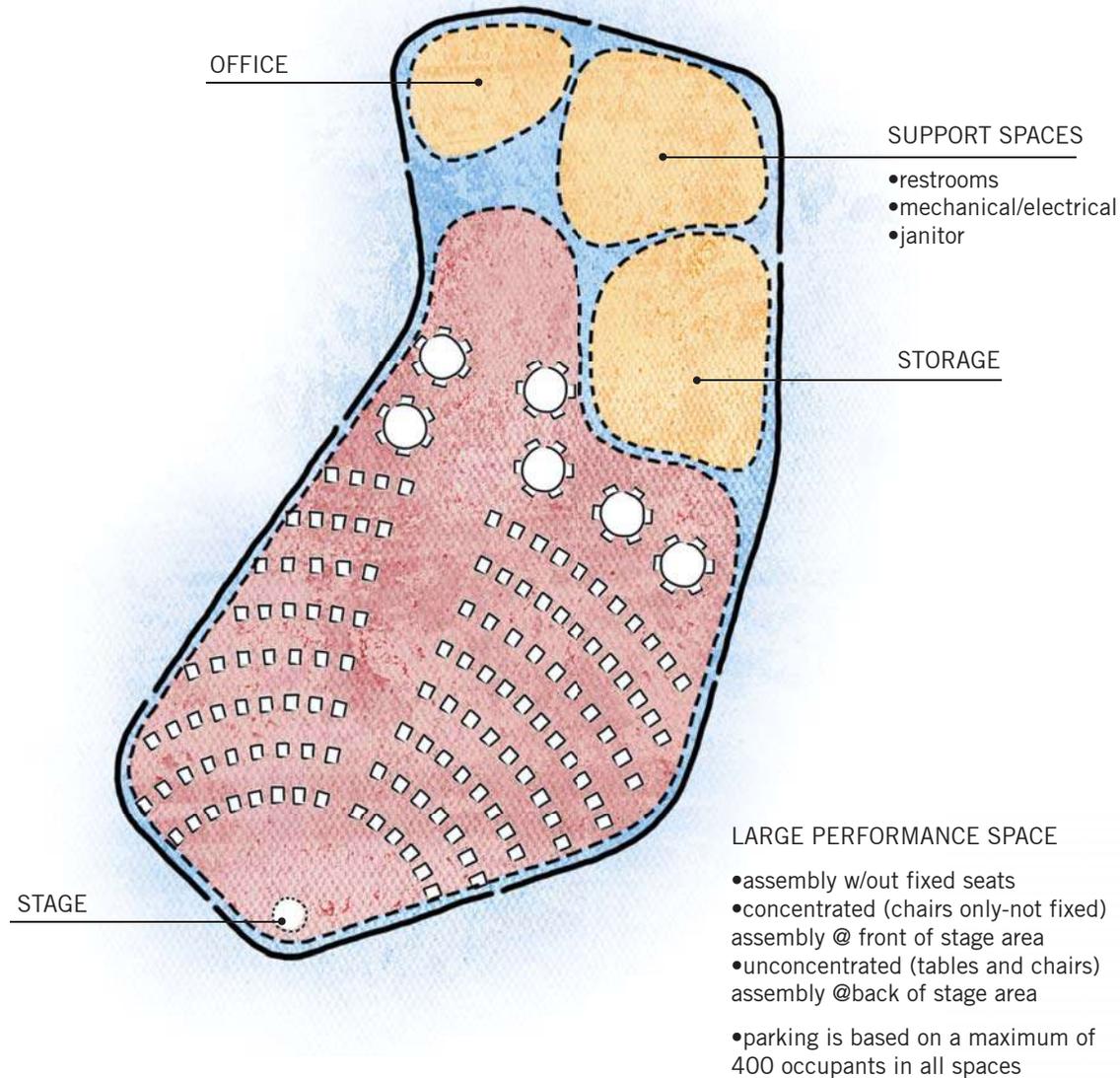
These spaces should all have a connection to the outside, and to the support service spaces like the restrooms and admin offices.

Meeting areas should have some area able to acoustically separate from the larger volume.

### Community Hall | Meeting



Community Hall | Concert



Community Hall - Events

The multi purpose space should have the capability of supporting larger concert events or presentations. There should be a removable stage area, and the infrastructure in place for the temporary installation of leased sound and light equipment.

The configuration on the space should take into consideration the acoustic requirements of this activity, shaping and placing materials to maximize the acoustic potential of the room.

The layout of the acoustic elements should also attempt to minimize the transmission of sound to the north, where neighbors are closer.

This space should be able to open to the Kitchen serving line and the Outdoor Covered Space.

Support Spaces | Administrative Offices, Restrooms, and Storage

**Administrative Office**

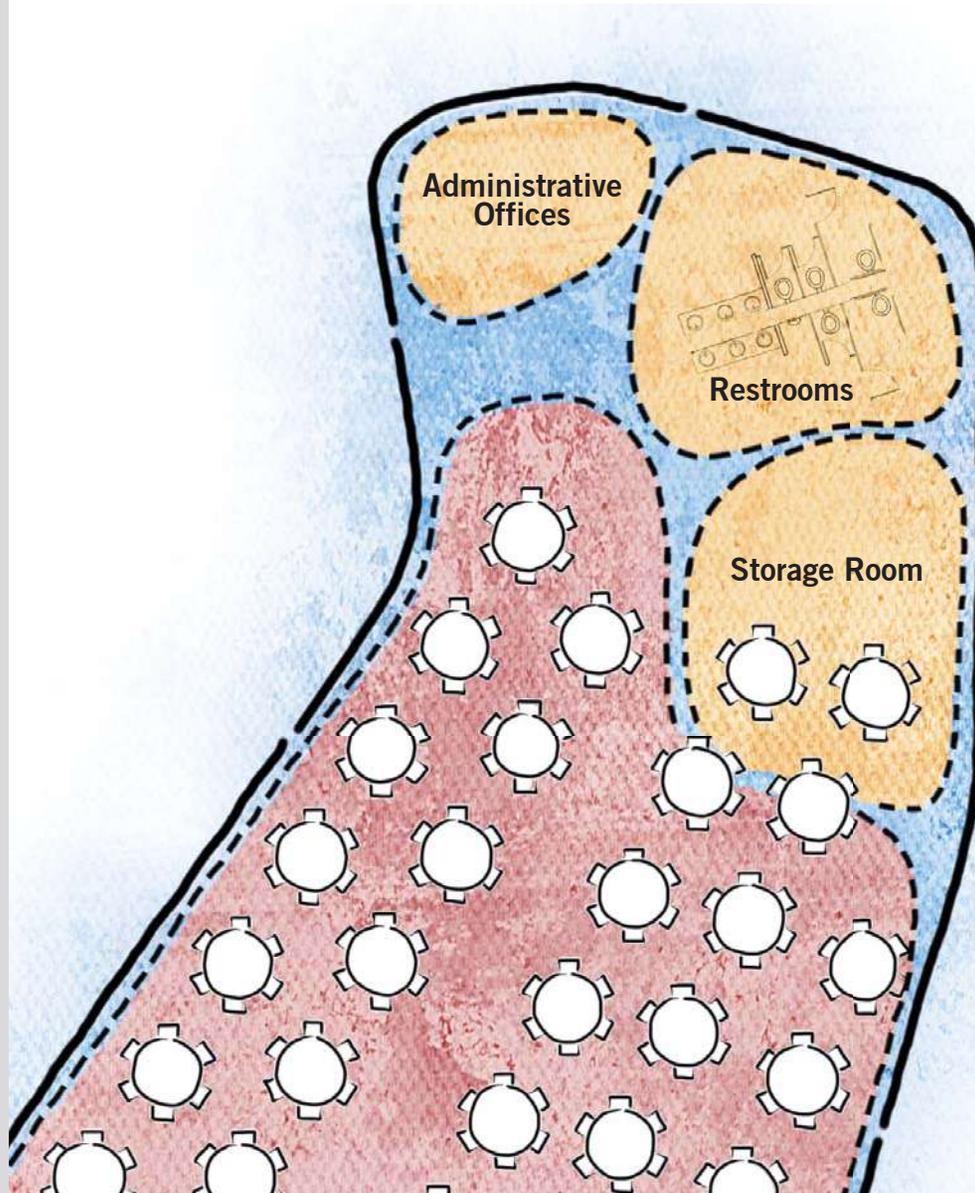
This space is meant to be a simple no-frills office to house the administrative functions of the community center.

**Restrooms**

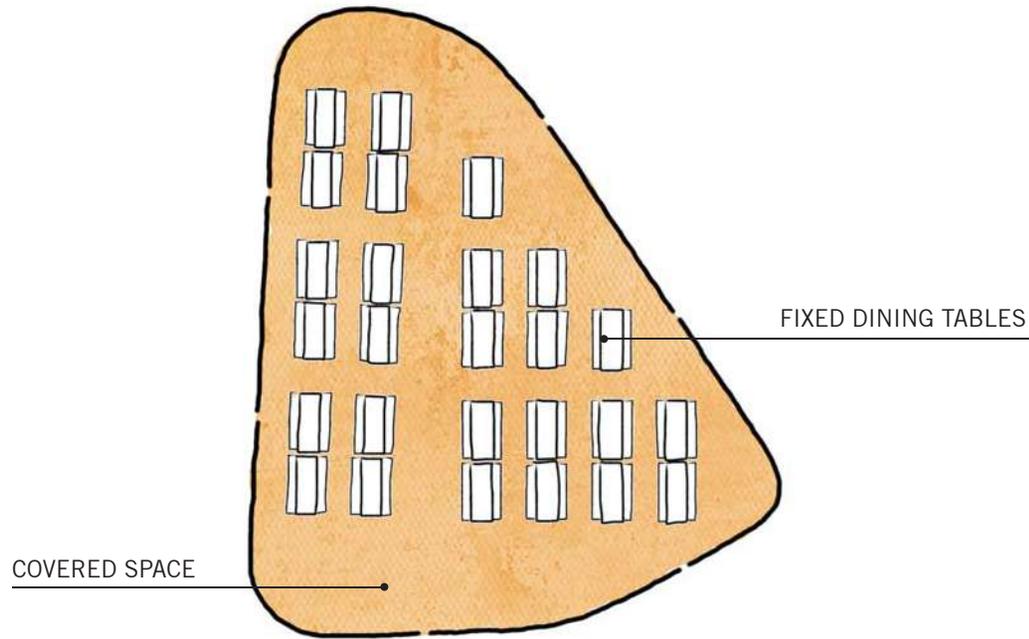
Restrooms capacity is designed for Code required minimums. The rest rooms should be highly durable, easily cleaned, and well ventilated. Showers might be desirable.

**Storage Room**

The facility will have one large storage room where the dining tables can be stored during other activities. This space could be used for other activities when tables are out. There will also be a small janitorial closet and an IT/AV equipment space.



**Outdoor Covered Space | Dining Function**



**Outdoor Space - Dining**

This area is meant both as an expansion of the indoor Dining Hall and as a multi-use space in its own right.

The dining function will provide covered outdoor space for about 200 people, and will provide space for some ancillary activities, such as handwashing, ticket-taking, and beverage services.

Outdoor Space - Events

This area is meant both as an expansion of the indoor Event Hall and as a multi-use space in its own right.

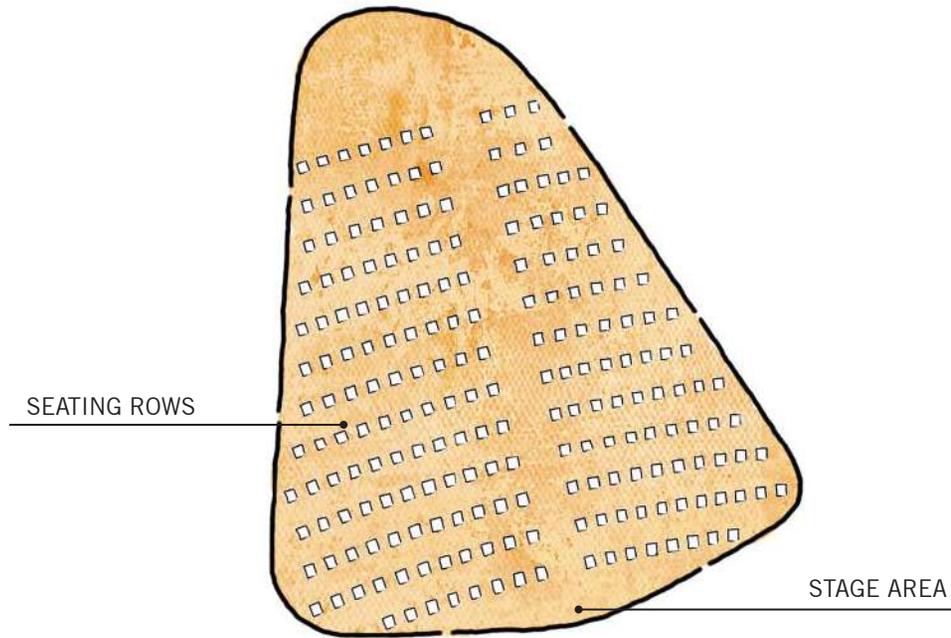
The Outdoor Event space will take advantage of the sloping site to lift up the back rows of the seating to create a natural amphitheater.

This space is meant to serve up to 200 people, seated in movable row seating. The stage area can be located under the covered area for smaller events, or can be a separate temporary covered structure leased for larger events.

This space will connect to the Community Hall, the Kitchen serving line, and the meadow lowlands to the south of the building.

The structure will be capable of supporting the sound and lighting systems that will be brought in for the events.

Outdoor Covered Space | Event Function



## Sustainability Goals

In keeping with the traditions of the Oregon Country Fair, and the goals of the Vision and Land Use Manuals, the majority of the OCF CCC determined that the best option was to adopt the Living Building Challenge Standard as a “guidance standard”, with the addition of the Environmental Protection Agency’s Energy Star Building Portfolio Manager. The Living Building Standard will help guide the design effort in pursuit of a highly sustainable building; the Portfolio Manager will give the operators of the building the tools they need to monitor the performance of the project after construction is complete.

The Living Building Challenge consists of meeting the intent of seven criteria called the Seven Petals. These are summarized as follows:



**SITE PETAL:** Restoring a healthy coexistence with nature.

This petal is meant to guide the process of selecting a building site, and enhancing the positive impacts of the development on the ecosystems. The requirements include limiting impacts on sensitive areas, encouraging local food production, enhancing habitat, and reducing the use of cars.



**WATER PETAL :** Use the water you have available locally.

The intent of this petal is to encourage responsible water use. This is expressed in two ways; one, operating the project with Net Zero imported water; and two, insuring that the project does not compromise the local pre-developmental hydrological water flows.



**ENERGY PETAL:** Use the energy you have available locally.

This petal has the ambitious goal of requiring that the project be a net zero energy user. This means that all of the energy requirements for the project must be met with on-site renewable generation. This can be achieved with a variety of approaches, preferably solar.



**HEALTH PETAL:** Create healthy, nourishing, robust spaces.

The Health petal addresses the need for healthy buildings by requiring sunlight, fresh air, and natural forms that invigorate the spirit.



**MATERIALS PETAL:** Use non-toxic, local, sustainable materials.

This petal calls for the use of “products and processes that are safe for all species through time”. This is achieved through the use of non toxic, low carbon footprint, local materials. There is a strong emphasis on the re-use of materials.



**EQUITY PETAL:** Create and encourage community spaces.

The focus of this petal is to make human scaled spaces, celebrate equal accessibility, and connect all the community members to nature.



**BEAUTY PETAL :** Celebrate transformative design.

The project should have places that are “solely intended for human delight and the celebration of culture, spirit and place.” There should also be many opportunities for education of those inhabiting the spaces about the history and unique character of the place.

### Energy Star Portfolio Manager

The Portfolio Manager is an energy management tool that helps building managers track and assess energy and water consumption, set priorities, identify under-performing elements, verify efficiency improvements, and receive EPA recognition, if desired.

This process starts by benchmarking the building once construction is complete (this process also dovetails into the Verification phase of the Living Building Challenge). This will establish a the baseline energy and water consumption metric, which will be used to track performance into the future. The building can then be monitored in real time, enabling building owners to make realistic assessments and maximize operational efficiency.

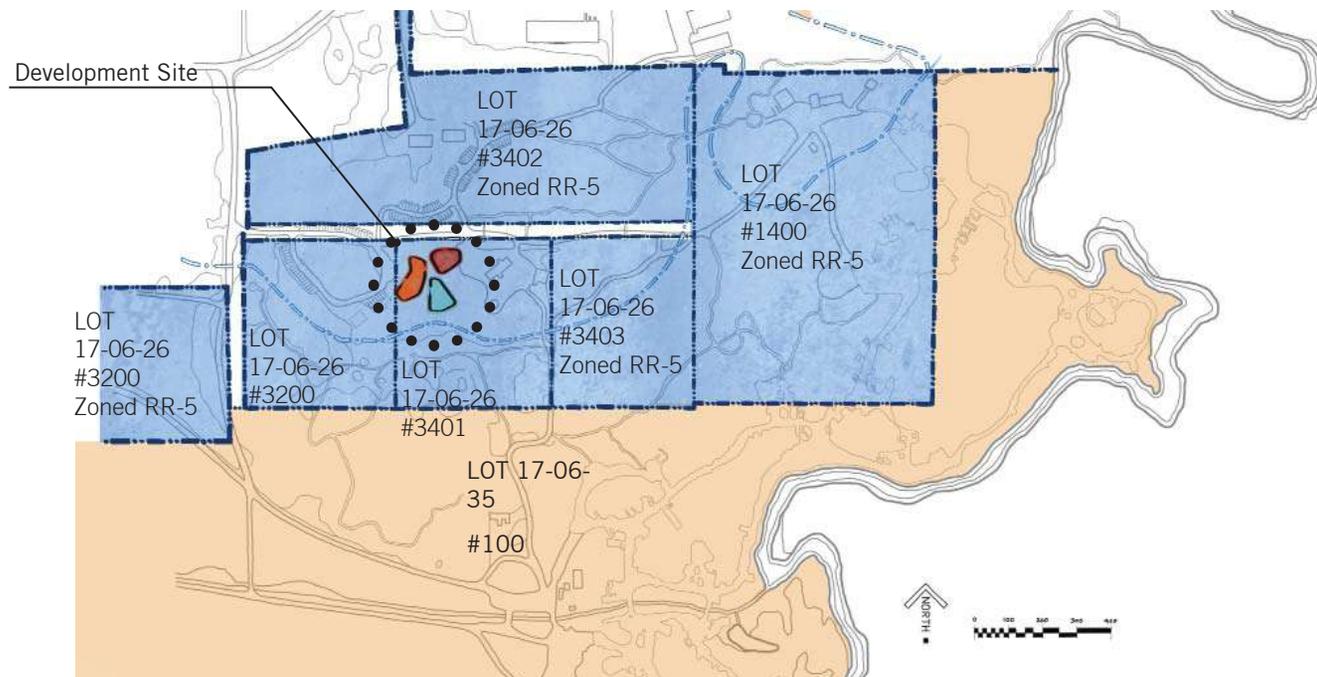
The strategy for achieving these goals is two-fold. As the design proceeds to the next phase, the project team will evaluate each goal to determine if it can be implemented with this project within the project budget. If so, that goal will proceed. If a goal is currently deemed out of the current project budget scope, then those measures will be moved to a later

# Understanding the Code

## Planning Code

Planning and Land Use is governed by the Lane County Land Management Division, as provided in the Lane County Rural Comprehensive Plan, dated June 2009, and the Lane Code.

The development site will extend across three existing legal lots (see figure below), all zoned Rural Residential (RR). The development will impact a dedicated County roadway, Chickadee Lane.



Tax map lot Diagram

### Lane County Code As Applied to This Project

Per Lane Code section 16.290, subsection 4 (p); a community center with an attached kitchen is allowed in the RR Zone as “Uses and Development Subject to Approval by the Director”. A kitchen alone is not allowed. This approval is contingent upon meeting the following requirements pursuant to Section 16.290, subsection (5), Approval Criteria:

- / Shall not create significant adverse impacts on existing uses on adjacent and nearby lands or on uses permitted by the zoning of adjacent or nearby undeveloped lands;
- / Where necessary, measures are taken to minimize potential negative impacts on adjacent and nearby lands;
- / The proposed use and development shall not exceed the carrying capacity of the soil or of the existing water supply resources and sewer service. To address this requirement, factual information shall be provided about any existing or proposed sewer or water systems for the site and the site’s ability to provide on-site sewage disposal and water supply if a community water or sewer system is not available; and
- / The proposed use and development shall not result in public health hazards or adverse environmental impacts that violate state or federal water quality regulations.

Additionally, the development will need to meet the Property Development Standards as set out in Section 16.290, subsection (7):

- / Property Line Setbacks. Structures other than a fence or sign shall be located:
  - At least 20 feet from the right-of-way of a State road, County road or a local access public road specified in LC Chapter 15;
  - At least 10 feet from all other property lines; and
  - Notwithstanding LC 16.290(7)(a)(ii) above, a structure that contains less than 120 square feet of floor area and that is located more than 10 feet from other structures may be located in the 10 foot setback otherwise required by LC 16.290(7)(a)(ii) above provided it complies with LC 16.290(7)(d) below.
- / The setback for property lines other than front-yard shall be five feet, except as provided below, for any lot or parcel containing less than 1 acre and created prior to March 30, 1984.

- / Riparian Setback Area. Except for property located between the Eugene-Springfield Metropolitan Area General Plan Boundary and the Eugene and Springfield Urban Growth Boundaries, where setbacks are provided for in LC 16.253(6), the riparian setback area shall be the area between a line 50 feet above and parallel to the ordinary high water of a Class I stream designated for riparian vegetation protection in the Rural Comprehensive Plan. No structure other than a fence shall be located closer than 50 feet from the ordinary high water of a Class I stream designated for riparian vegetation protection by the Rural Comprehensive Plan. A modification to the riparian setback standard for a structure may be allowed provided the requirements of LC 16.253(3) or LC 16.253(6), as applicable, are met.
- / Maintenance, Removal and Replacement of Indigenous Vegetation within the Riparian Setback Area. Maintenance, removal and replacement of indigenous vegetation within the riparian setback area designated for riparian vegetation protection by the comprehensive plan must comply with the provisions of LC 16.253(2) or LC 16.253(6), as applicable.
- / Height. None.
- / Signs.
  - Signs shall not extend over a public right-of-way or project beyond the property line.
  - Signs shall not be illuminated or capable of movement
  - Signs shall be limited to 200 square feet in area.
- / Parking. Off street parking shall be provided in accordance with LC 16.250.

Since the development will take place across at least three separate properties, property lines may need to be moved, or properties combined in order to allow the proposed building and site configuration.

Parking will be governed by Lane Code Section 16.250, subsection (2) Nonresidential Private Parking, and must meet the following requirements:

- / Automobile parking space allowing 300 square feet per automobile (parking, plus driving space) shall be provided and maintained for any new or enlarged building.
- / The project buildings are projected to serve approximately 400 people, so 100 parking spaces are shown on the site development plans.

# Program and Cost Summaries

## The Program Summary

This table is meant to summarize each of the required spaces, organized into the three categories - Enclosed Building, Covered Building, and Outdoor Space/Site Improvements. These space are then broken down into sub categories explaining what elements go into each area.

Building - Enclosed (Conditioned)		
Program Element	Total Area NSF	Supported Activities
<b>Kitchen</b>		
Space Description		
Service Line	300	
Prep Area	700	Main Camp Kitchen, Culture Jam kitchen, community kitchen, revenue event kitchen, staff events kitchen.
Hot Line	500	
Bakery	500	
Admin Office	150	
Storage/Washing	300	
Support/Recycling/Compost/Waste	550	
<b>Total Square footage</b>	<b>3000</b>	
<b>Community Center Common Room</b>		
Space Description		
Multipurpose Room	3500	Dining for 250 people, large meetings and presentations, classrooms, performances
<b>Total Square footage</b>	<b>3500</b>	
<b>Support Spaces</b>		
Space Description		
Office Area	150	Administrative use to support the facility.
Men's Restroom	250	OSSC 2010 Code requires (3) water closets & (3) lavatories
Women's Restroom	250	OSSC 2010 Code requires (3) water closets & (3) lavatories
Table & chair storage	450	Space for 24 folding tables w/ integral benches
Janitor/Maintenance Closet	100	
IT/AV Closet	60	
Mechanical/Electrical Rooms	300	
<b>Total Square footage</b>	<b>1560</b>	
<b>Total Enclosed Building Space</b>	<b>8500</b>	Includes 10% increase for circulation and structure

## Building - Covered (Unconditioned)

Program Element	Total Area NSF	Supported Activities
<b>Kitchen</b>		
Space Description		
Outdoor Kitchen	1500	Cooking and smoking food, prep areas
<b>Total Square Footage</b>	<b>1500</b>	
<b>Community Space</b>		
Space Description		
Covered area for 200 occupants	3000	Dining for 200 people, large meetings and presentations, outdoor classes, performances
<b>Total Square Footage</b>	<b>3000</b>	
<b>Total Covered Building Space</b>	<b>4500</b>	

## Outdoor Spaces - Uncovered / Site Improvements

Program Element	Total Area NSF	
<b>Infrastructure</b>		
Description		
Utilities	19000	Utility connections to on and off site utilities
Water Storage System	5500	Water storage for building fire suppression systems
Waste Handling System	5500	Septic and storm water on site treatment facilities
<b>Total Square Footage</b>	<b>30000</b>	
<b>Parking &amp; Roadways</b>		
Description		
Parking and access roadway for 100 parking spaces	30000	Parking for 100, service vehicle circulation
<b>Total Square Footage</b>	<b>30000</b>	
<b>Landscaping</b>		
Description		
Repairative and Code required landscaping	15000	Light overflow usage, repair/restoration of indigenous plants
<b>Total Square Footage</b>	<b>15000</b>	
<b>Total Site Development Space</b>	<b>75000</b>	

## Construction Cost Estimate

At the direction of the OCF CCC, PIVOT Architecture prepared a preliminary budget intended to reflect the probable costs of the project as described by the Program document. This estimate is meant to be used as a planning tool; much of the detailed information is yet to be discovered. The budget indicates that the project is feasible in the price range shown, given the assumptions stated in the documents. The costs are broken in to two categories: one, the direct building cost (this is the cost the Owner will pay to the Contractor to construct the project) and the non-direct (soft) costs.

Cost are based on typical commercial construction. Some materials and labor may be donated or performed "in kind".

### Oregon Country Fair Community Center- Cost Estimate

Date of Construction Start: 8/1/2013

Date of Estimate 3/14/2013

Item	Construction Cost Estimate	Area SF	Cost/SF	Cost	Remarks
1	Site Clearing	15,000	\$1.50	\$23,000	Clearing for fire fuel reduction and solar access
2	Building Demolition - Total Removal	3,000	\$3.50	\$11,000	Existing mobile home, storage shed
3	New building construction - kitchen	3,000	\$250.00	\$750,000	
4	New building construction - outdoor kitchen	1,500	\$100.00	\$150,000	Screened, not conditioned
5	New building construction - community center	5,500	\$175.00	\$963,000	
6	Roadways and Parking, gravel	30,000	\$1.50	\$45,000	Assumes 100 parking spaces
7	New site pavement, hardscape	4,000	\$6.00	\$24,000	Includes handicapped and delivery paving
8	New site natural scape	15,000	\$2.00	\$30,000	Includes all improved site areas that are "green"
9	New canopies, outdoor covering - permanent	3,000	\$55.00	\$165,000	
10	Utilities	19,000	\$4.00	\$76,000	
11	Water Storage System	5,500	\$5.00	\$28,000	
12	Waste Handling System	5,500	\$4.00	\$22,000	
13	Sustainable building premium	10.00%	\$2,214,000.00	\$221,000	Allowance - Scope will be refined
14	Subtotal (Total SF of conditioned space)	8,500	\$295.06	\$2,508,000	
15	Markups (7% Contractor Markup)			\$175,560	
16	Construction Contingency	5.00%	\$2,508,000	\$125,000	
17	Escalation to Construction Mid-Point	4.00%	\$2,633,000	\$105,320	Assume 4% 2014. Assume construction start in 2013
18	<b>Total Construction Cost</b>	<b>8,500</b>	<b>\$342.81</b>	<b>\$2,913,880</b>	

**Oregon Country Fair Community Center- Cost Estimate**

Date of Construction Start: 8/1/2013

Date of Estimate 3/14/2013

Item	Non Direct Cost Estimate	% of Construction	Cost	Remarks
19	<b>Construction Cost Amount:</b>		\$2,913,880.00	From prior work sheet
20	<b>Design Services</b>			
21	AE Team			
22	Architectural	5.75%	\$168,000	AE Team
23	Mechanical, Electrical, Kitchen, Engineer	3.15%	\$92,000	AE Team
24	Structural Engineer	1.50%	\$44,000	AE Team
25	Civil Engineer	1.50%	\$44,000	AE Team
26	Landscape Architect	1.00%	\$29,000	AE Team
27	Other Consultants - Cost Estimator	0.50%	\$15,000	AE Team
28	Traffic Engineer	0.50%	\$15,000	By Owner
29	Environmental Consultant	0.50%	\$15,000	By Owner
30	Archaeologist	1.00%	\$29,000	Fair family
31	Geotechnical Engineer	0.50%	\$15,000	By Owner
32	Surveyor	0.50%	\$15,000	By Owner
33	Sustainable Design premium	4.00%	\$117,000	Allowance - Scope will be refined.
34	<b>Regulatory Agencies</b>			
35	Building Permit	1.30%	\$37,880	
36	Conditional Use Permit Fees	Allow	5,000	
37	Septic/Waste fees	Allow	10,000	
38	SDC Charges		\$0	
39	<b>Msc Expenses</b>			
40	Printing of Bid and Construction Documents	0.10%	\$2,914	
41	Owner moving costs	0.00%	\$0	by owner
42	<b>Quality Control</b>			
43	Materials testing & Special Inspection	1.00%	\$29,139	
44	<b>Project Management</b>			
45	Management	2.00%	\$58,278	Provided by Owner
46	Legal & Insurance	0.00%	\$0	Fair family
47	<b>Furniture Fixtures &amp; Equipment</b>			
48	Computers and IT	1.00%	\$29,139	Server rack, wireless set up
49	AV Equipment	1.00%	\$29,139	Projectors, screens, PA
50	Security	0.00%	\$0	Included in construction
51	Phone	0.00%	\$0	Included in construction
52	Furniture	1.00%	\$29,139	Allowance
53	Signage	0.00%	\$0	Included in construction
54	Food Service Equipment	8.58%	\$250,000	Per OCF equipment list
55	<b>Contingencies</b>			
56	Change order allowance	5.00%	\$145,694	Should be 5% min for new construction, 10% for renovation
57	Overall project contingency	7.50%	\$218,541	
58	<b>Total Soft Costs</b>	<b>48.88%</b>	<b>\$1,442,862</b>	
59	<b>Total Construction Cost and Non Direct Cost</b>		<b>\$4,356,742</b>	

Next Steps - Design Costs for Phases 2 and 3

At the request of the OCF CCC, the Architectural/Engineering team provided an estimate of the fees required to take the project through to completion. These fees are broken up in to two Phases; phase one will bring the project through the end of schematic design and the Conditional Use Permit process; phase two will extend through construction.

Oregon Country Fair  
Kitchen & Community Center

PHASE 2 - SD & CUP PERMIT - ESTIMATED

Task	Firm						
	PIVOT Architecture	Solarc MEP + K Engineering	Hohbach-Lewin Structural Engineering	KPFF Civil Engineering	GreenWorks Landscape Architect	Construction Focus Cost Estimating	
Schematic Design (SD)	\$ 35,000.00	\$ 25,000.00	\$ 3,000.00	\$ 10,000.00	\$ 6,000.00	\$ 4,000.00	
Permit Application (Pe)	\$ 6,000.00	\$ 3,000.00	\$ 1,000.00	\$ 2,000.00	\$ 2,000.00		
Subtotal	\$ 41,000.00	\$ 28,000.00	\$ 4,000.00	\$ 12,000.00	\$ 8,000.00	\$ 5,000.00	
Non-profit discount - 10%	\$ 4,100.00	\$ 2,800.00					
Total by Firm	\$ 36,900.00	\$ 25,200.00	\$ 4,000.00	\$ 12,000.00	\$ 8,000.00	\$ 5,000.00	
Total Fee for Phase 2							\$ 91,100.00

PHASE 3 - DD through CA - ESTIMATED. TO BE REVISED FOLLOWING PHASE 2

Task	Firm						
	PIVOT Architecture	Solarc MEP + K Engineering	Hohbach-Lewin Structural Engineering	KPFF Civil Engineering	GreenWorks Landscape Architect	Construction Focus Cost Estimating	
Design Development (DD)	\$ 50,000.00	\$ 25,000.00	\$ 15,000.00	\$ 10,000.00	\$ 8,000.00	\$ 5,000.00	
Construction Documents (CD)	\$ 60,000.00	\$ 30,000.00	\$ 15,000.00	\$ 14,000.00	\$ 10,000.00	\$ 5,000.00	
Bidding (B/P)	\$ 7,500.00	\$ 6,000.00	\$ 4,000.00	\$ 3,000.00	\$ 1,000.00		
Construction Admin (CA, PCA)	\$ 28,000.00	\$ 13,000.00	\$ 6,000.00	\$ 5,000.00	\$ 2,000.00		
Subtotal	\$ 145,500.00	\$ 74,000.00	\$ 40,000.00	\$ 32,000.00	\$ 21,000.00	\$ 10,000.00	
Non-profit discount - 10%	\$ 14,550.00	\$ 7,400.00					
Total by Firm	\$ 130,950.00	\$ 66,600.00	\$ 40,000.00	\$ 32,000.00	\$ 21,000.00	\$ 10,000.00	
Total Fee For Phase 3							\$ 300,550.00

Total fees both phases before discount	\$ 167,850.00	\$ 91,800.00	\$ 44,000.00	\$ 44,000.00	\$ 29,000.00	\$ 15,000.00
	\$ 186,500.00	\$ 102,000.00	\$ 44,000.00	\$ 44,000.00	\$ 29,000.00	\$ 15,000.00
					Before discount	\$ 420,500.00
					Grand Total both phases w/discount	\$ 391,650.00

NOTE: DESIGN FEES FOR SUSTAINABLE MEASURES NOT INCLUDED IN THIS ESTIMATE.  
SEE COST ESTIMATE FOR SUMMARY OF NON-DIRECT COSTS INCLUDING SUSTAINABLE DESIGN MEASURES

## Design Scope for Phases 2 & 3

The purpose of this document is to estimate the cost of the design effort moving the project from the current phase (Feasibility Study) through the next two phases:

Phase 2. Complete Schematic Design level drawings, and supporting documents for the Lane County Planning process.

Phase 3. Complete the Construction Documents and Construction Administration portions of the project.

### Design Team

Architecture (A): PIVOT Architecture & Interiors

Eric Gunderson

Electrical, Mechanical, Plumbing and Kitchen. (MEPK): SOLARC Engineering

Galen Ohmart

Civil (C): KPFF Engineer

Matt Keenan

Landscape (LA): Green Works

Mike Faha

Structural (S): Hohbach-Lewin

Vikki Bourcier

Cost Estimator (CE): Construction Focus

Steve Gunn

### Phase 2: SD – Schematic Design

The purpose of this phase is to synthesize the information developed in the Pre-Design phase into conceptual designs, and to refine the preferred conceptual design.

SD.1a Tour Reference Facilities with Owner (Additional Services)

Tour related examples of project type to identify design solutions, building systems, and materials to consider (and to not consider). Collaborate with Owner to identify candidates for tours. This activity is limited to 8 hours for

travel time and tours. Conduct a web search to find similar facilities also referred to as “precedents or typology” studies. Create a file of images with applicable ideas and features. Share images with Owner.

Suggestions for tours include: Pilchuck Glass School, Breitenbush Hot Springs

Assignment: A, K

Deliverable: Notes and photos of site visit. Shared file of precedents.

Meetings: Site tours 8 hours max.

SD.1 Site & Building Design

Based on the program and site information from previous tasks, the design team will develop schematic designs for the Owner’s review. Achieving the design and sustainability goals will require that design be conducted in an integrated and highly collaborative manner.

Site design: Examine in depth site issues, carrying forward from work completed in Phase 1. Determine the smaller scale site & building integration issues, and discuss possible solutions.

Building design: Determine building orientation on site for environmental issues. Develop diagrams to understand relationship and fit of parts. Explore concepts of “unfolding” building, bio-mimicry, building as “canvas”, matching Fair culture, and other concepts. Integrated Infrastructure: Integrate conservation and production of energy, water, resources, and materials into building design to meet sustainability goals. Create diagram explain the operation of integrated systems and site.

Hold a Design workshop to examine building design integrated with site. Include selected members of OCF CCC. Include time to prepare for workshop.

Renderings for fund raising: Once a general direction is met with consensus, prepare 3-d images of the proposed building design. Images will facilitate Board understanding and serve as a basis for fund raising.

Scope by discipline:

Mechanical and Electrical: Collaborate informally with architect for buildings design and sustainable design goals. No drawings. See narrative.

Kitchen: Collaborate with architect for functional design of kitchen, integrate kitchen with building architecture. Prepare informal drawings suitable for integration in overall building.

Civil: No drawings. Collaborate informally with architect for site design. See

narrative. Provide civil services needed to obtain CUP.

Landscape: Collaborate informally with architect for site design. See narrative.

Assignment: Lead A. Assistance M, K, C, LA

Deliverable: Drawings & Narratives

Meetings: One 6 hour workshop.

#### SD.2 Fair Family Design Workshop (Additional Services)

Assist Oregon Country staff in organizing and facilitating a large group design workshop. The goal of the effort is to engage up to 100 members of the fair family in the Community Center design in a workshop setting. Activities would include orientation to the project, small group work sessions, small group presentations of ideas, and large group discussion. Media would include hand drawing tools, tracing paper, chart paper, base maps, and other items. Completed materials could be displayed at a venue accessible to the fair and public such as the 2013 Fair, or Fair Family Picnic. In addition, digitized images could be posted on the web.

Assignment: Lead A. Assistance M&E

Deliverable: Scanned images of workshop mind maps, drawings and written materials.

Meetings: One 4 hour workshop.

#### SD.3 Sustainable Design Workshop

Host a workshop to identify and develop specific measures to address the sustainability goals.

Assignment: Lead A. Assistance MEK, C & L

Deliverable: List of specific measures with costs

Meetings: None

#### SD.4 Systems Description Narratives

Identify major systems and materials of building. Prepare an outline describing building systems and materials. Respective consultants will include narratives for mechanical, electrical, civil, and landscape. PIVOT to provide architectural and structural narrative.

Assignment: Lead A. Assistance MEK, C & L

Deliverable: Materials and systems narrative

Meetings: None

#### SD.5 Code Compliance

Comply with applicable codes. Conduct code review including building codes and land use code. Refine draft code analysis of building code and land use requirements applicable to the project. Coordinate meeting with local jurisdiction staff, if necessary.

Assignment: Lead A. C

Deliverable: Code review notes

Meetings: Pre-application meeting with Lane County Planning and Fire Marshall (or Fire Fighting District Representative).

#### SD.6 Cost Estimate

Based on Schematic Design documents, prepare a cost estimate indicating construction costs for the initial build portions of the project. With consultant team members, identify candidates for bid alternates equal to 10% of the construction budget for consideration by Owner. Provide Soft Costs estimating assistance to Owner. Help identify costs to be part of fund raising. Assist in evaluating optimal construction contract method (low bid, CMGC, etc.)

Responsibilities for quantities and cost estimates are as follows:

Architectural: CE

Structural: CE

M&E: SOLARC

Kitchen Equipment: SOLARC

Civil: CE

Landscape: CE

Furnishings: PIVOT/Owner

Assignment: Lead CE. Assistance A, M&E, C, LA

Deliverable: Construction Cost Estimate Assistance with soft costs

Meetings: One meeting with committee to review cost estimate.

**SD.7 Owner Review Meetings**

Prepare for the upcoming meetings, to coordinate project activities, to review and evaluate design activities, and to provide direction to the design team.

Assignment: Lead A.

Deliverable: None

Meetings:

Meetings with OCF project manager: suggest 8 to 10 meetings at 2 hours. Verify who is included in meetings.

Two meetings with building committee: 3 hours.

One meeting with board 2 hours board approval include prep time for board meeting, prepare an SD report, slides

Additional meetig to be charged hourly.

**SD8 Fund Raising Assistance**

Assist OCF staff and board in making presentations to possible donors.

Assignment: Lead A.

Deliverable: None, use materials completed as part of prior tasks.

Meetings: 2 meetings

**SD.9 Project Administration**

Coordinate with Owner, coordinate with design consultants, and prepare monthly invoices. Manage meetings, deliverables, quality control, and assignments, and maintain communication.

Assignment: Lead A. Assistance M&E, C, LA, CE

Deliverable: Invoices and updated schedules

Meetings: none

**Phase Pe – Permit Application**

The purpose of this phase is to obtain a Conditional Use Permit from Lane County

Pe.1 Prepare and Submit Permit

Prepare permit application, and submit along with required sets of drawings

and supporting information.

Assignment: Lead A. Assistance E, C, LA,

Deliverable: Application.

Meetings: None

Pe.2 Coordinate with Plan Review

Review and respond to plan review comments including completeness review and staff findings. Attend one meeting with planning staff.

Assignment: Lead A. Assistance M&E, C, LA, CE

Deliverable: Memos and notes responding to review.

Meetings: Attend one meeting with planning.

Pe.3 Project Administration

Coordinate with Owner, coordinate with design consultants, and prepare monthly invoices. Manage meetings, deliverables, quality control, and assignments, and maintain communication.

Assignment: Lead A. Assistance M&E, C, LA, CE

Deliverable: Invoices, schedule updates

Meetings: None

**Phase 3 – Final Design and Construction**

DD.1 Design Development

Based on the Owner approved schematic designs, prepare drawings to fully define the materials, systems, and layout of the project. Complete work to 30% complete construction documents. Prepare engineering calculations. Comply with applicable codes. Communicate with other members of the design team to maintain quality control, coordination, and comply with instructions from the Owner and with prior approvals. Submit check sets to Architect for review and coordination. Make corrections requested by architect consistent with scope of work.

Deliverables: DD Review Set including in-progress drafts of all plans, sections, and elevations that will be incorporated into the final set.

Assignment: PIVOT, MEP, C, L

Meetings: 2 meetings, attendance by all

### DD.2 Specifications

Prepare initial draft of specifications, focusing on materials and products.

Deliverables: DD Review Set of 3-part technical specifications based on CSI 2004 format.

Assignment: PIVOT, MEPK, C, L

Meetings: none

### DD.3 Code Compliance

Comply with applicable codes. Conduct code review including building code and land use code. Refine draft code analysis of building code and land use requirements applicable to the project. Coordinate meeting with local jurisdiction, if necessary.

Deliverables: Written code review from each discipline.

Assignment: PIVOT, MEP, C, L

Meetings: none

### DD.4 Cost Estimate

Based on Design Development documents, prepare a cost estimate indicating construction costs for the initial build portions of the project. Cost Estimator to provide complete architectural and structural estimate. Other consultants will provide estimates for their scope of work to Cost Estimator. Consultant team will carefully review a draft of the estimate and provide a written list of corrections. With consultant team members, identify candidates for bid alternates equally 10% of the construction budget for consideration by Owner.

The cost estimate prepared by the design team will include construction “hard” costs. The estimate and budget for the project “soft” costs will be prepared and managed by the Owner.

Responsibilities for quantities and cost estimates are as follows:

Architectural: CE

Structural: CE

MEP: SOLARC

Kitchen Equipment: SOLARC

Civil: CE

Landscape: CE

Furnishings: PIVOT/Owner

Assignment: Lead CE. Assistance A, M&E, C, LA

Deliverable: Construction Cost Estimate Assistance with soft costs

Meetings: One meeting with committee to review cost estimate.

### DD.5 Owner Review Meetings

Prepare for the upcoming meetings, to coordinate project activities, to review and evaluate design activities, and to provide direction to the design team.

Owner will provide information on building standards, including building systems, products, and procedures.

Deliverables: Meeting minutes

Assignment: PIVOT

Meetings: 4 meetings at milestones

### DD.6 Project Administration

Coordinate with Owner, coordinate with design consultants, and prepare monthly invoices. Manage meetings, deliverables, quality control, and assignments, and maintain communication.

Deliverables: Monthly invoices and informal communications.

Assignment: PIVOT

Meetings: none

## Construction Documents

The purpose of this phase is to refine the DD work, and to prepare documents suitable for obtaining building permits, and for construction, including competitive bids for construction contracts.

### CD.1 Construction Documents – Design and Drawings

Based on approved Design Development documents and budget, along with review comments, prepare construction documents suitable for bids and permit. Comply with applicable codes. Communicate with other members of the design team to maintain quality control, coordination, and comply with

instructions from the Owner and with prior approvals.

Consultants will submit reproducible check sets to Architect for review and coordination at 60% and 90% completion. Provide reproducible copies at 100% completion. Make corrections requested by architect consistent with scope of work. Prepare engineering calculations.

Prepare a list of submittals and inspections based on specifications sections prepared by the respective consultant(s).

Owner's geotechnical consultant will review earthwork, paving, and foundation specifications and drawings for consistency with report, and notify the architect of any discrepancies.

Deliverables: CD Review Set including in-progress drafts of all plans, sections, elevations, details, and schedules that will be incorporated into the final set.

Assignment: PIVOT, MEP, K, L, C, S

Meetings: 3 meetings at milestones, attended by all

#### CD.2 Construction Documents – Specifications

Project specifications will be based on Owner's master Divisions 0 and 1, and PIVOT master specification format for Divisions 2 through 14. Owner will provide PIVOT with an electronic copy of Divisions 0 and 1 for editing.

Deliverables: CD Review Sets of 3-part technical specifications based on CSI 2004 format for each of the document submittals outlined above.

Assignment: PIVOT, MEP, K, L, C, S

Meetings: none

#### CD.3 Code Compliance

Comply with applicable codes. Conduct code review including building code, and land use code. Refine draft code analysis of building code and land use requirements applicable to the project.

Deliverables: Updated code sheets.

Assignment: PIVOT, K, L, C, S

Meetings: none

#### CD.4 Cost Estimate

Based on 60% complete construction documents, prepare a detailed cost estimate indicating construction costs for the initial build portions of the project. Cost Estimator to provide complete architectural and structural estimate. Other consultants will provide estimates for their scope of work to Cost Estimator. Consultant team will carefully review a draft of the estimate and provide a written list of corrections. With consultant team members, identify bid alternates equal to 10% of the construction budget for approval by the Owner.

The cost estimate prepared by the design team will include construction "hard" costs. The estimate and budget for the project "soft" costs will be prepared and managed by the Owner.

Responsibilities for quantities and cost estimates are as follows:

Architectural: CE

Structural: CE

MEP: SOLARC

Kitchen Equipment: SOLARC

Civil: CE

Landscape: CE

Furnishings: PIVOT/Owner

Assignment: Lead CE. Assistance A, M&E, C, LA

Deliverable: Construction Cost Estimate Assistance with soft costs

Meetings: One meeting with committee to review cost estimate.

#### CD.5 Owner Review Meetings

Prepare for the upcoming meetings, to coordinate project activities, to review and evaluate design activities, and to provide direction to the design team.

Deliverables: Meeting minutes.

Assignment: PIVOT

Meetings: 4 meetings at milestones

OCF board approval of DD level work, meeting and prep

### CD.6 Project Administration

Coordinate with Owner, coordinate with design consultants, and prepare monthly invoices. Manage meetings, deliverables, quality control, and assignments, and maintain communication.

Deliverables: Monthly invoices and informal communications.

Assignment: PIVOT

Meetings: none

### CD.7 Printing Documents

Assemble documents and coordinate reproduction.

Deliverables: Documents ready for printing

Assignment: PIVOT

Meetings: none

### Phase B/P – Bidding/Procurement

#### B/P.1 Distribution of Bid Documents

PIVOT will prepare the Ad for Bid and forward to Owner. Owner will send the Ad for Bid for distribution. Assumes OCF will work with PIVOT to determine a selected list of approved contractors.

Deliverables: Ad for Bid to Owner. Distribute Bid documents to Bidders.

Assignment: PIVOT

Meetings: none

#### B/P.2 Bid Period Activities

Coordinate the preparation and distribution of addenda, respond to bidders questions, tabulate bid results, and review bid results.

Deliverables: Addenda, Pre-Bid Meeting agenda, Bid Tabulation form.

Assignment: PIVOT

Meetings: none

#### B/P.3 Post Bid Activities

Review apparent low bidders qualifications, review post-bid submittals, and

prepare construction contract based on Owner's standard.

Deliverables: Coordinate design bid activities, including tasks listed above.

Assignment: PIVOT

Meetings: 1 meeting with Owner to review Bid results

### B/P.4 Project Administration

Coordinate with Owner, coordinate with design consultants, and prepare monthly invoices. Manage meetings, deliverables, quality control, and assignments, and maintain communication.

Deliverables:

Assignment: PIVOT

Meetings: 2 meetings, attendance by all

### Phase CA – Construction Administration

#### CA.1 Pre Construction Meeting

Attend Preconstruction meeting with Owner and Contractor. Review project requirements, project records, communications, schedule, submittal log, and other construction procedures.

Deliverables: Pre-Construction Meeting agenda and summary.

Assignment: PIVOT

Meetings: 1 meeting

#### CA.2 Job Meetings

Attend weekly meetings at the job site, also attended by the Owner, General Contractor, and sub-contractors as needed. A maximum of 32 weekly meetings, assuming an 8-month construction period.

The purpose of the meeting is to communicate with contractor to anticipate work, review the progress of the work, identify deficient work, and generally endeavor to see that the project is built in conformance with the contract documents.

Deliverables: Summary of each meeting.

Assignment: PIVOT

Meetings:

A: Attend and facilitate 32 meetings, prepare and distribute summaries.

MEP: Attend up to 4 meetings.

K: Attend up to 2 meetings.

L: Attend up to 2 meetings.

S: Attend up to 2 meetings.

C: Attend up to 4 meetings

#### CA.3 Site Visits

Visit job site and observe construction, and generally endeavor to see that the project is built in conformance with the contract documents. Such observation is limited to the time allocated and the visibility of work. Prepare report of significant observations and direction to contractor. Maximum number of visits as listed below.

Deliverables: Site Observation reports

Assignment: PIVOT

Meetings: 16 site observation visits

#### CA.4 Clarifications and Change Orders

Respond to reasonable requests for information from the contractor. Prepare clarifications and change orders consistent with original project scope and previous approvals or as needed to correct errors or omissions in the construction documents. All other changes to the project scope to be addressed as additional services.

Deliverables: As needed.

Assignment: PIVOT, MEPK, LA, S, C

Meetings: none

#### CA.5 Submittals

Review shop drawings, samples, test reports, product data, Payment Applications, and other required submittals. Provide review comments and approval. Maintain submittal log. Deliverables:

Assignment: PIVOT, MEPK, LA, S, C

Meetings: none

#### CA.6 Review Pay Application

Review monthly pay application from general contractor, review progress of the work, request general contractor to revise application as appropriate, and send signed copy to Owner along with PIVOT review letter. Deliverables:

Assignment: PIVOT

Meetings: none

#### CA.7 Closeout

Receive and review closeout submittals. Conduct one on site review to develop a punch list of deficiencies and work remaining. Prepare a punch list and distribute to Contractor and Owner. Conduct a second review upon written notice from the contractor of completion of all items. Deliverables:

Assignment: PIVOT, MEPK, LA, S, C

Meetings: none

#### CA.8 Project Administration

Coordinate with Owner, coordinate with design consultants, and prepare monthly invoices. Manage meetings, deliverables, quality control, and assignments, and maintain communication.

Deliverables: Monthly invoices

Assignment: PIVOT

Meetings: none

#### Phase PCA – Post CA Services

##### PCA.1 Electronic Record Documents

Prepare electronic project record documents based on bid set, change orders, and Contractor's Project Record Documents.

Deliverables: Electronic record set of construction documents

Assignment: PIVOT

Meetings: none

##### PCA.2 Warranty Review

Review project 11 months after Substantial Completion, and prepare a list of outstanding warranty items.

Deliverables: Warranty review report

Assignment: PIVOT

### Information Provided by the Owner

This proposal assumes the Owner will (or has) provide the following information in a format to be utilized by the design team with minimal modifications. While the items listed below have not been included in PIVOT's scope of work, we are available to provide additional services if needed

1. Survey including boundary, control, topography, existing utility information, tree locations and identification.
2. Boundaries of Flood Plain or Flood Way if applicable.
3. Clean up permits for past work is not included.
4. Geotechnical report including building foundation, unimproved roadway and pavement recommendations.
5. Environmental conditions of the site, including presence of wetlands.
6. Cost of CUP application and other permits.
7. Archeological investigation.
8. Kitchen equipment other than major appliances and built-ins.
9. Land use changes other than those related to community center and kitchen
10. Traffic analysis or studies

*Thank You!*



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