

Huerta del Valle Educational Center

schematic design
design development
construction documents

An aerial night photograph of the Huerta del Valle educational center in Ontario, California. The scene is illuminated by warm string lights and building lights, creating a vibrant atmosphere. In the foreground, a person in a traditional blue and white costume is visible. The background shows a residential neighborhood under a starry night sky with a crescent moon. The text "the dream of a community garden" is overlaid in a large, white, cursive font.

*the dream
of a
community
garden*

HdV Community

Mission

Our vision is to grow organic food locally, create strong relationships within our community and most importantly be self-sufficient. The end goal of our vision is to create community gardens every mile in our cities.

Huerta del Valle, an energetic community garden in Ontario, is already feeding 60 families by providing any person willing to maintain a garden with a 20ft by 10ft plot of land, for only 30 dollars a year. There is also a section of the 3-acre garden devoted to producing vegetables the community sells to near-by restaurants and farmers markets, paying for the operational costs of the garden. They have grown over 6000 lbs of produce in the last season alone. Before this, the site has been barren for as long as we can see, but in the past three years, the community garden has been developing rapidly.

Programs

Abejas, is a weekend community, youth literacy program offered through Huerta del Valle's Hands-On Education Center. Abejas aims to enrich the lives of children in the area by increasing their literacy skills. By engaging participating children in individual and group activities centered around the Hands-On Education Center's curriculum (of sustainable communities, Healthy Eating, Active Living guidelines, and global local impacts) we hope to increase children's vocabulary, communication/ comprehension skills, and overall self-esteem to ensure their success in the classroom as well as pique their interest in bettering the community surrounding them. The program includes classes on art, music, and nutrition, and is mainly focused on kids from ages four through fourteen.



Programs

Nutrition classes are a program where the focus is on educating the community about our own nutritional consumption. Our goal is to educate each other on living a healthy live-style, consuming our own homegrown organic produce. The program strives on the moto “from plant to plate”.





Programs

Leadership is an empowering program for the community that focuses on bringing knowledge and education to our community. Our goal is to teach about leading and developing our communities. This allows members of our communities to advance themselves in education and social standing.

Programs

CSA, or community supported agriculture, is a program of agriculture supported by the community. Each member of the program enrolls to receive a box of vegetables every Saturday at low prices. Such a program supports an array of farms to manage and distribute their produce, making the growth and distribution to be as sustainable and self-sufficient as possible.



Programs

Workshops are offered by the Huerta del Valle community on a weekly basis. Topics include a wide range of subjects. Workshops revolving around legal advice, cooking and nutrition workshops, to farming practices such as making compost tea have been offered in the past.





Programs

Employment is offered by Huerta del Valle to several employees. Part-time positions are offered to members of our community. In this way, Huerta creates jobs for the local community, strengthening the local economy by creating jobs.

Programs

Composting is a big component of Huerta del Valle's daily operations. 40% of American produce and edible food is wasted each year and normally ends up in landfills where it contributes to greenhouse gasses and global warming. Since 2013 Huerta del Valle has composted 500,000 lbs of organic materials from wood-chips, to lawn cuttings, beer mash, to food waste. This material is not only diverted from the landfill, but is also turned into rich organic soil mixtures to grow high density nutritional foods. Good soil = good food.





Programs

Ceremonies take place at Huerta del Valle and are an essential part of the community. Once a year, an all-day event is put on by the garden for the anniversary celebration, involving a thousand attendees, food, music, and dances. Day to day, the garden also hosts events for common celebrations such as dia de los muertos. Marriage vows have also been exchanged at the garden in the past.

Educational Center

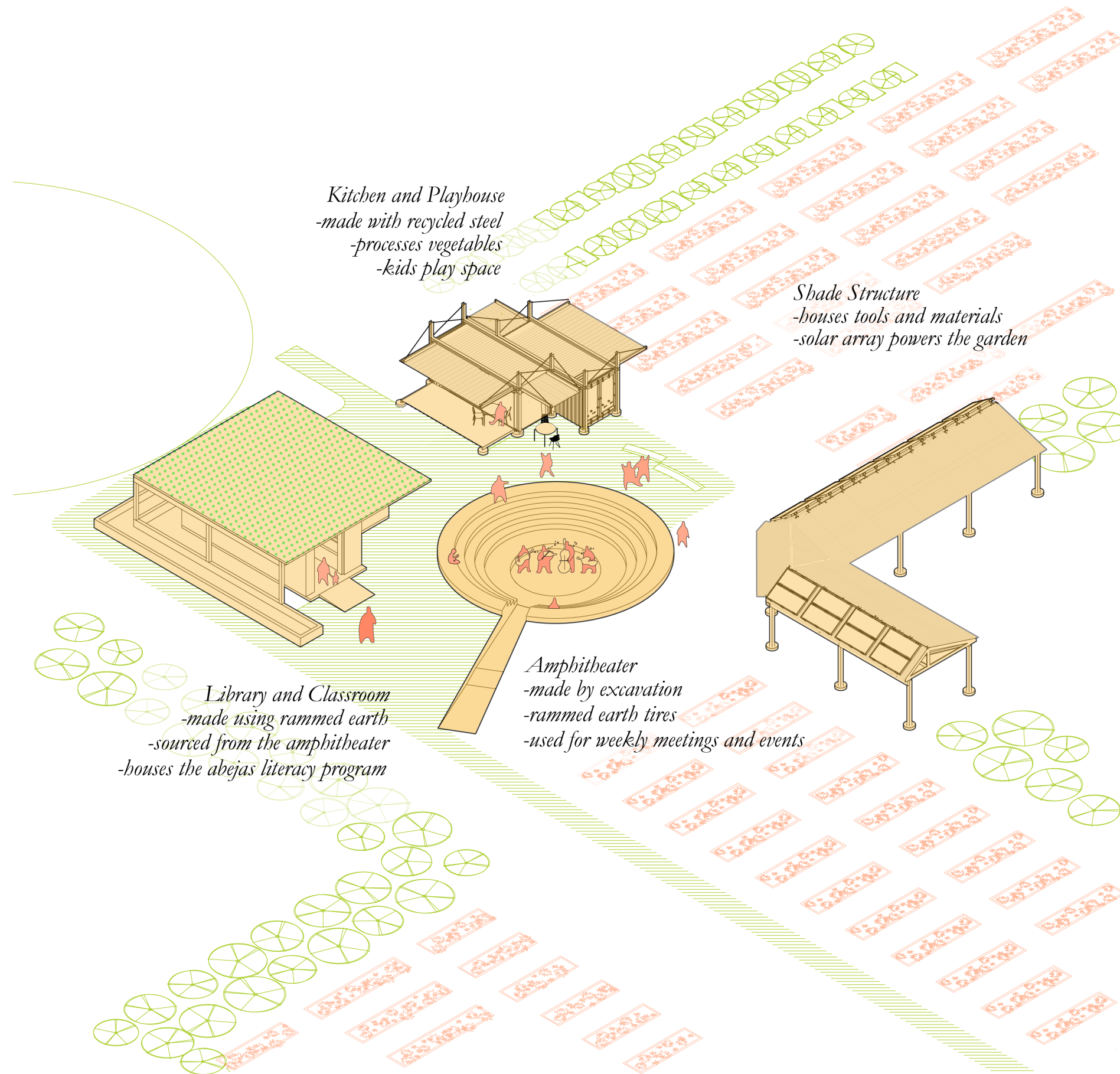
To aid the development of the garden and the strengthening of the community, an educational and communal center has been designed. Each structure is aimed at exhibiting a different sustainable building strategy.

The amphitheater is the central space in the garden which will be used for community meetings and events. The amphitheater is a structure made out of stabilized soil retained using recycled car tires. The amphitheater has already been submitted to the city and we are awaiting the construction permit.

The earth excavated in the construction of the amphitheater is going to be used to create the rammed earth walls of the kids' library/classroom.

The kitchen/playhouse structure is built using the steel of two shipping containers, repurposing them. There is a huge surplus of containers on the west coast due to largely one-way trade with China. This structure generates more than twice the area of two shipping containers by utilizing rotating shading panels-- these shield the structure from heavy rains while creating plenty of cool and ventilated space both for cooking and processing vegetables and providing a playhouse for kids.

There is a shade structure geared at providing storage for equipment used at the garden. Atop the roof of the shade structure will be a well-sized solar array which will both provide for the electrical needs of the garden while putting surplus electricity produced back into the grid, offsetting some of the peak load of LA's air-conditioning during the day.



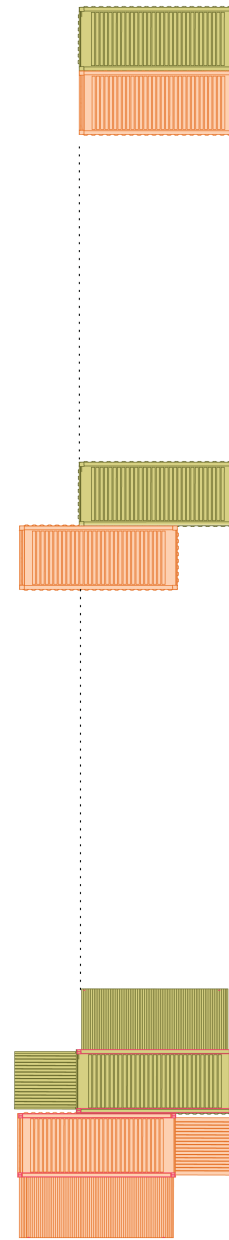
Kitchen and Playhouse
-made with recycled steel
-processes vegetables
-kids play space

Shade Structure
-houses tools and materials
-solar array powers the garden

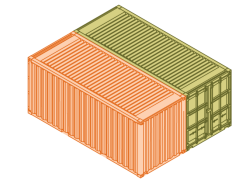
Library and Classroom
-made using rammed earth
-sourced from the amphitheater
-houses the abejas literacy program

Amphitheater
-made by excavation
-rammed earth tiers
-used for weekly meetings and events

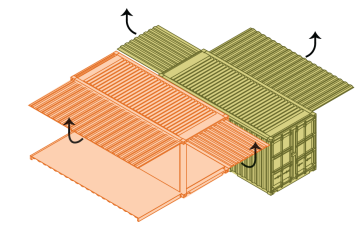




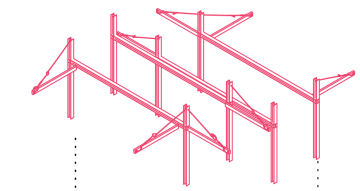
*2 containers
little usable area*



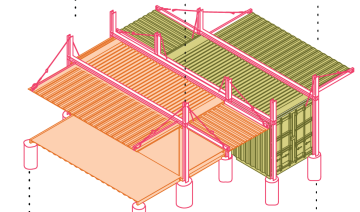
unfold & join



*moment frame
tension members*

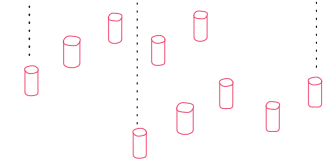


*open space inside
structure outside*

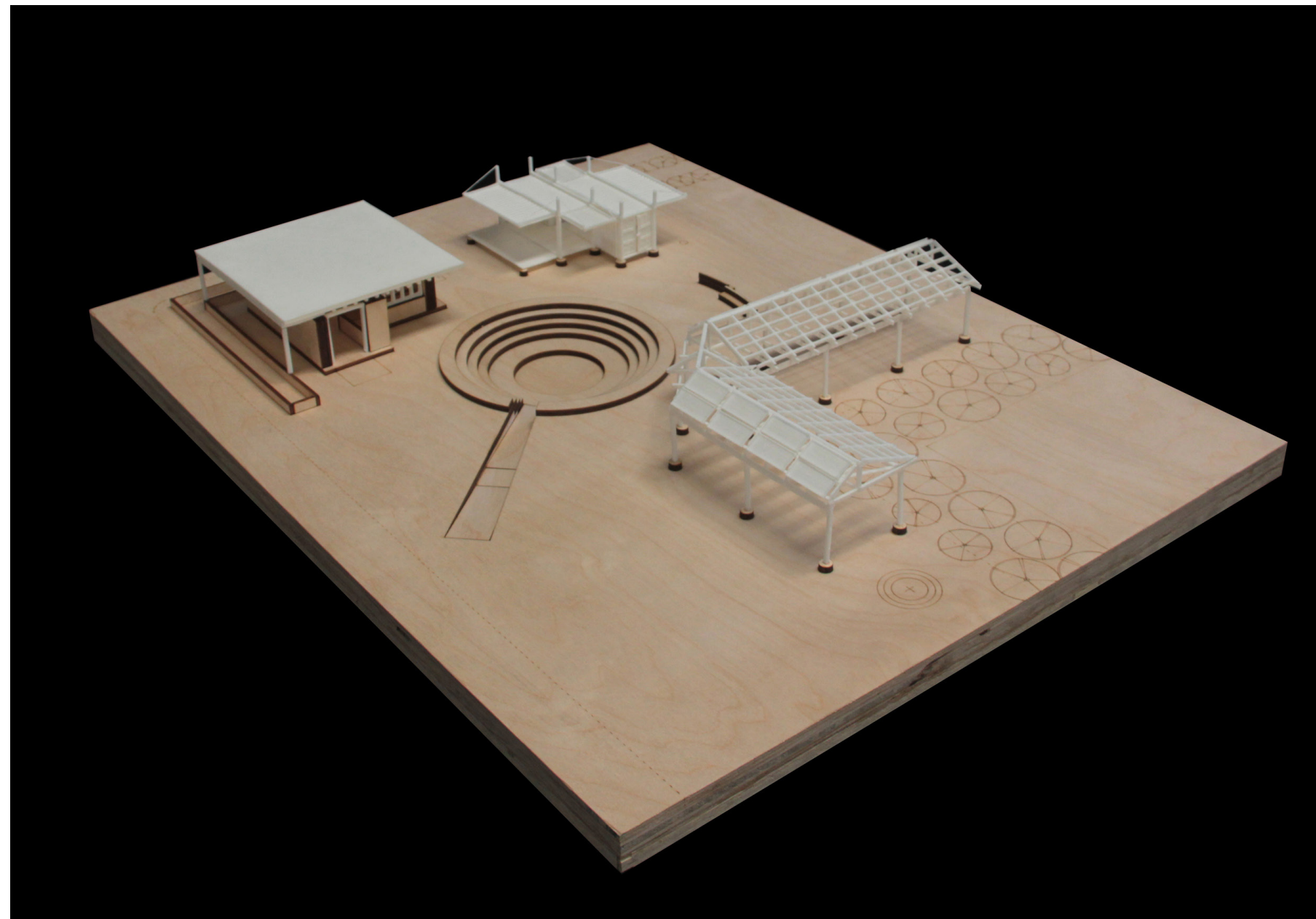
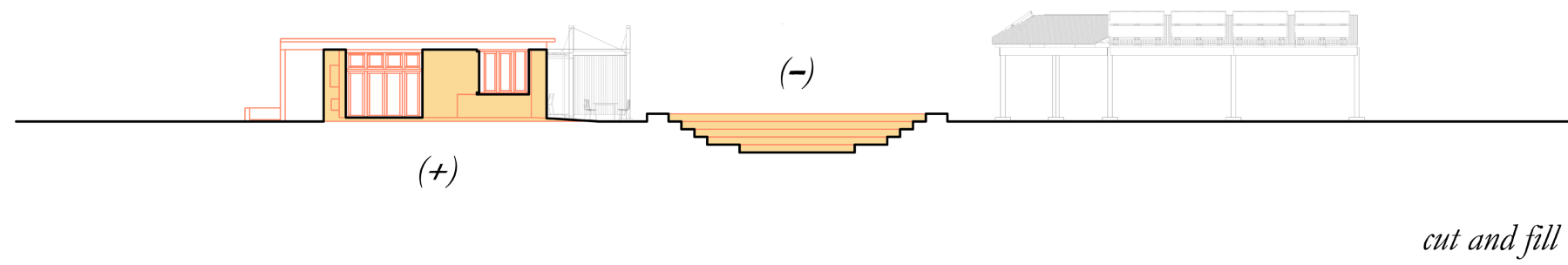


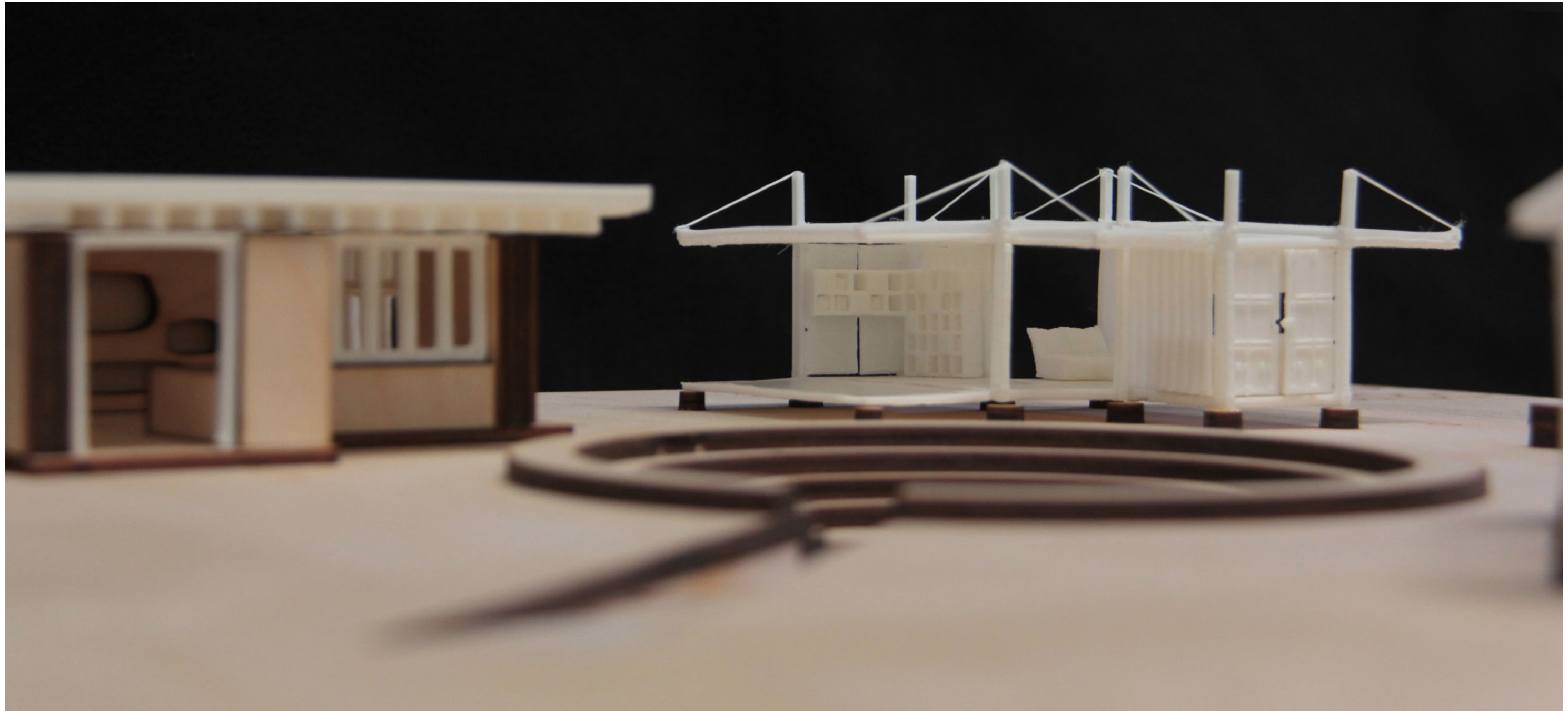
*naturally ventilated structure
2.5 times as much usable
shaded space as that of
the 2 containers*

minimal site impact



library is made of rammed earth from amphitheater







June 23rd 2014. First meeting with the Huerta del Valle community. First priority was set to the layout and drawing a masterplan with which to go to the city with. Participatory design was used to establish the layout, program, and materials of the spaces.

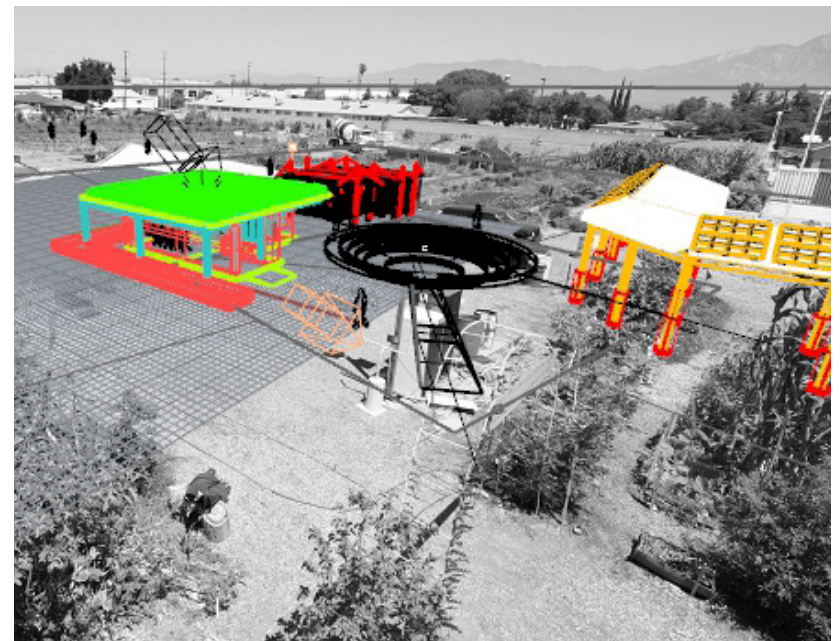
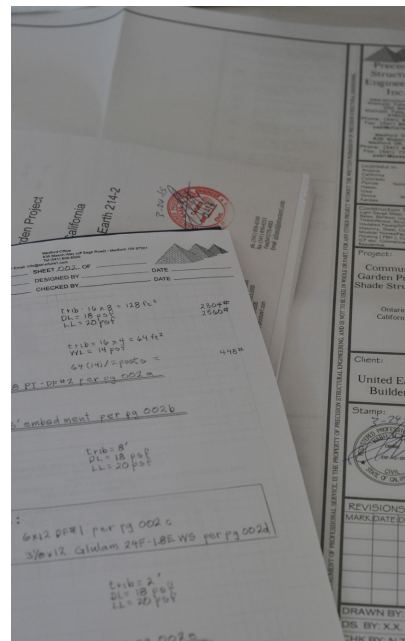


July 14th 2014. Discussing the drawn masterplan and iterations of the design with Maria after showing the first masterplan to the city.

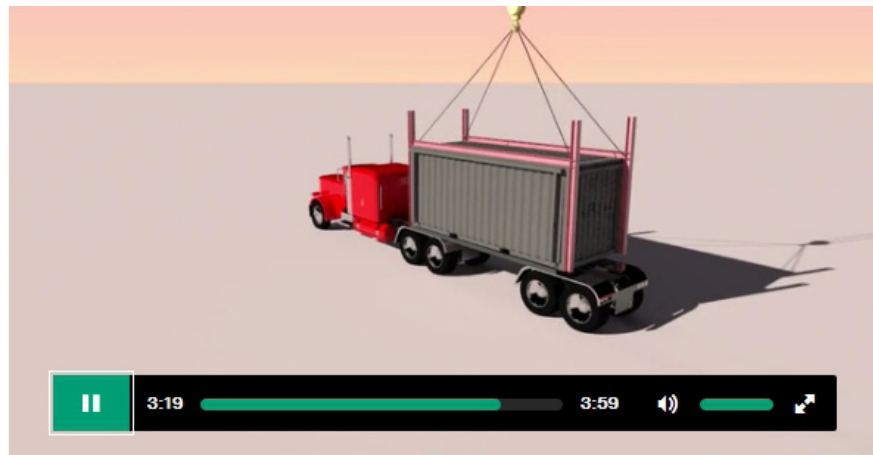


August 11th, 2014. Utilizing weekly meeting to discuss the progress with the community, the design for the educational center takes shape.



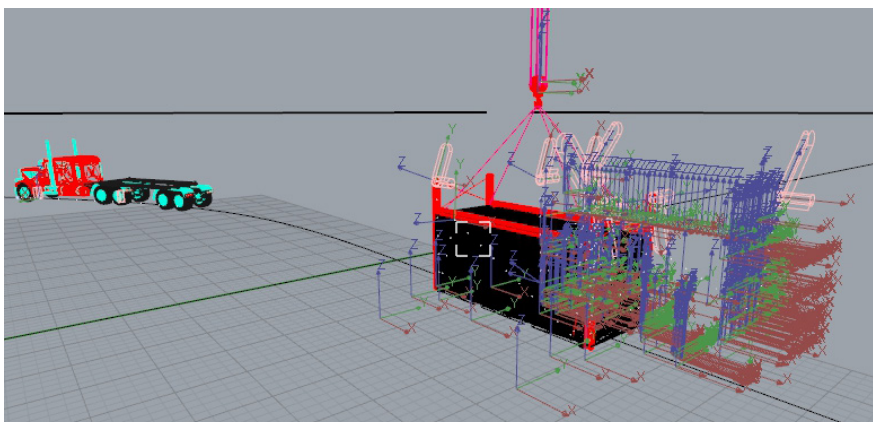


March 31, 2015. Preparation of model and drawings. Meeting with Karen Thompson and Scott Murphy of Ontario planning, approval to submit construction documents.



educational space for flourishing community garden

\$18,000



January 24, 2016. Kickstarter goal is reached, fundraising portions of engineering consultants' work as well as the materials budget for the kitchen-playhouse structure. Coverage by Univision and NPR.

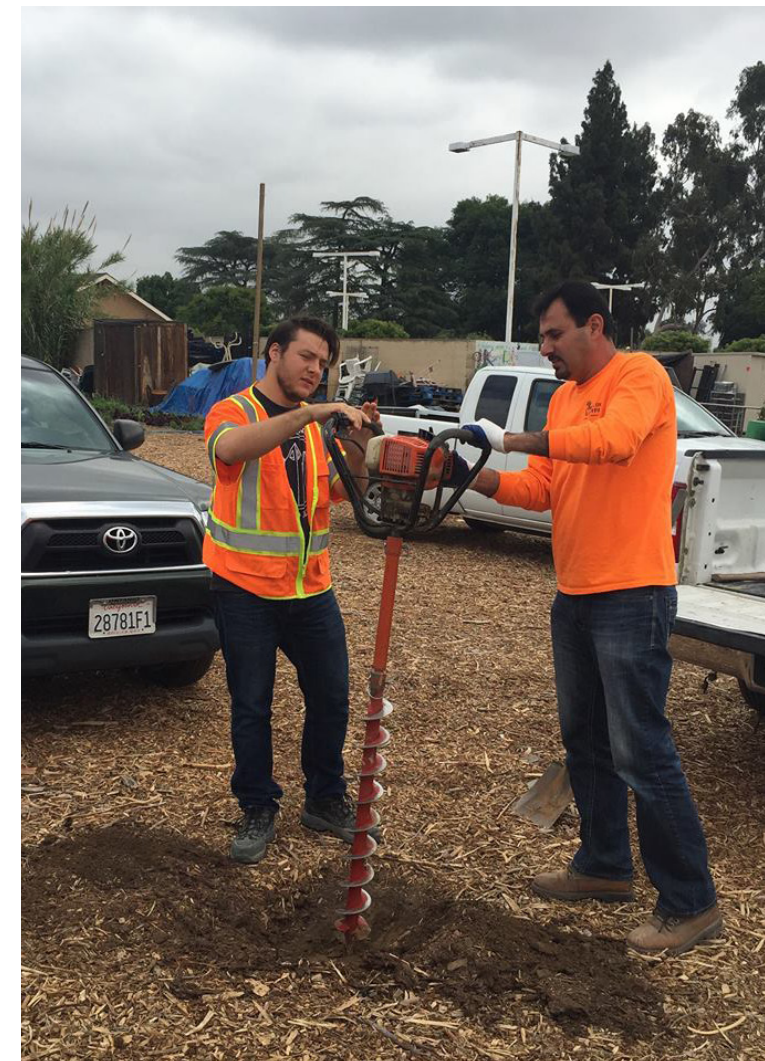
the dream of a community garden

educational space for flourishing community garden
Kirill Volchinsky

We need your help to construct a community and educational center for our beloved garden in Ontario, California

Ontario, CA

100% \$17,033 8 funded pledged days to go



April 29, 2016. Soils percolation test and survey made to proceed with grading plan.



October 4th, 2017. Meeting with Fausto A. Reyes, LRA of the planning commission and Ruben Valencia, City Council.





AB 1616, the California Homemade Food Act, was signed into law by Governor Brown on September 21, 2012 and will become effective on January 1, 2013. This new law will allow certain foods, known as Cottage Foods, to be made in private homes and sold to the public. Individuals who own and run these home-based businesses will be known as Cottage Food Operators (CFOs).

Shipping Containers - Root Down LA - Corinna Gebert - California Cottage Food Act



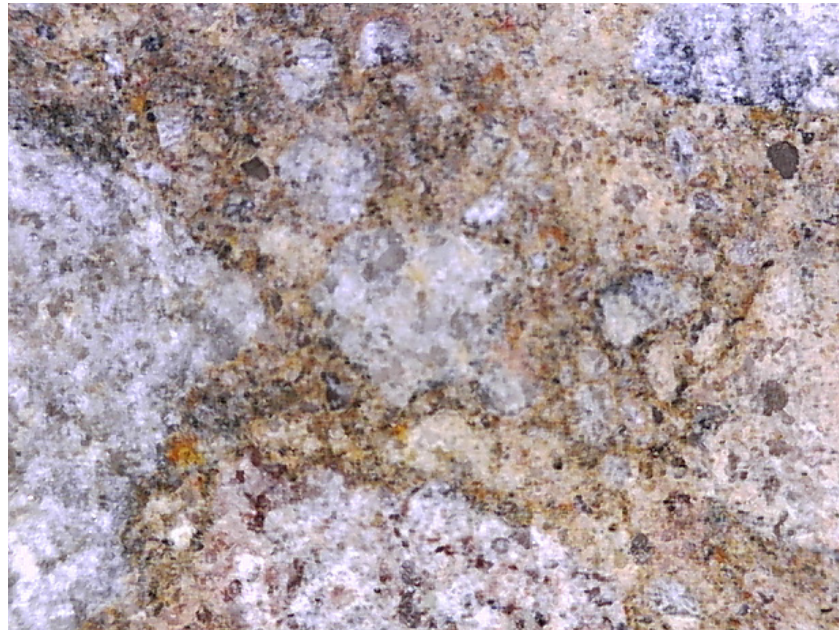
Huerta del Valle - educational center, Ontario California





Earth Wall Builders - Southeast Wyoming Welcome Center

Huerta del Valle - educational center, Ontario California



Lithic fragments (one or more minerals), quartz and feldspars (mostly orthoclase) aggregates as seen under a microscope in Brad Mimlitz's rammed earth test cylinder from the Laguna Arts Center Project.



7.1.6 Design of cement-stabilized rammed earth walls with steel reinforcing bars can make use of established structural design methods for reinforced concrete, except that minimum reinforcing steel requirements can, and usually must, be relaxed as needed to allow access for thorough and dense ramming of the material within the formwork. Material strengths and other key properties should be reliably established.



Earth Wall Builders - Festival of Arts of Laguna Beach, California - Signing Contract with Huerta Huerta Valle - educational center, Ontario California

Civil Engineering:

*Cordie Qualle and Kenny Reyes, Blair Church & Flynn
Russ Gulke (PE,PLS) and Rich Josenhans (PLS), WestLAND group
R. Sammy Salem, SALEM Engineering Group Inc.*

Engineering:

*Brad Mimitz, Earth Wall Builders LLC
Pete Jarratt, Jarratt Engineering Inc*

*Ashwin Kannan, Ali Ismail, Jackie First, Fariborz Tehrani, UCSD Engineers Without Borders
Kathy Rhee, PE (UCLA),
Chris Trautner (UCSD)*

Roger Ziegler and Nabil Taha, Precision Structural Engineering

Electrical Engineering:

*Mohammad Shaikhsaheb, PE
Cash Sutton III, PE*

Lighting Design:

Hessah Alzayed (CSU Colorado)

Architecture:

*Necils Lopez
Kirill Volchinskiy
Hana Lemseffer
Robert Thomas Evans*

*Fausto A. Reyes, RLA, LandArq
Larry Schlossberg AIA, AICP, LEED AP BD+C, Gruen Associates
Michael Dieden, Creative Housing Associates*