



WELCOME A4LE

Outdoor Learning Environments: An Opportunity to Incorporate Authentic Local Elements and to Enhance their Potential with Community –School Collaboration



Santa Clara University

Meet The Presenters

A4LE 2017 Annual Conference



**FOUNDER &
BOARD MEMBER**

VICKI MOORE

Vicki Moore is the Founder, former Executive Director, and now Board Member of Living Classroom, a garden-based education non-profit serving public schools in the South San Francisco Bay area.



PRINCIPAL

VINCE LATTANZIO

Vince Lattanzio is a landscape architect with a thriving firm in San Francisco. A Harvard graduate and Fulbright Scholar, he brings 35 years of experience in Green approaches to campus design.



**LEARNING ENVIRONMENT
SPECIALIST**

LINDA STEVENIN

Linda Stevenin is a senior architect and educator at Artik. Her previous positions include Director of Facilities, Intersessions & experimental learning for Summit Public Schools.



**FULBRIGHT FELLOW &
SENIOR LECTURER EMERITA**

JILL GOODMAN

Jill Goodman is Senior Lecturer in English, Emerita, at Santa Clara University. She is currently working with Artik as a school liaison, reaching out to teachers and students, seeking to create stronger partnerships with clients and a better understanding of how well educational facilities support student learning.

Our Agenda

A4LE 2017 Annual Conference

01

**WHY ARE GREEN
SCHOOLYARDS
SO IMPORTANT?**

02

**OUTDOOR
LEARNING &
COMMUNITY
PARTNERSHIPS**

03

**DESIGN
PRINCIPLES &
ELEMENTS**

04

ACTIVITY

01

WHY ARE GREEN SCHOOLYARDS SO IMPORTANT?

- COMMUNITY RESOURCES FOR SAFE OUTDOOR PLAY
- HIGHER ACADEMIC OUTCOMES
- IMPROVED MENTAL & PHYSICAL HEALTH
- CONNECTION TO NATURE
- EMPOWERED AND CONNECTED SCHOOL COMMUNITIES



VALUE AND BENEFITS: PLACE-BASED EDUCATION



HIGHER ACADEMIC OUTCOMES



MENTAL & PHYSICAL HEALTH



RESTORING OUR NATIVE ECOLOGY

Native Habitat Gardens
bring back native wildlife



Western Bluebird
made a nest!

EMPOWERED AND CONNECTED SCHOOL COMMUNITIES



02

OUTDOOR LEARNING & COMMUNITY PARTNERSHIPS

- **CASE STUDY:** Theuerkauf Elementary
- **LIVING CLASSROOM:** Partnership with a successful, community-based non-profit
- **OUTDOOR LEARNING**
- **ENVIRONMENTAL LITERACY**
- **CITIZEN SCIENCE IN HABITAT GARDENS AND LANDSCAPING**



THEUERKAUF ELEMENTARY SCHOOL – SITE PLAN



THEUERKAUF ELEMENTARY SCHOOL – DRY CREEK BED & NATIVE GARDEN



THEUERKAUF ELEMENTARY SCHOOL – WALK BY THE BAY



THEUERKAUF ELEMENTARY SCHOOL – MASK MANDALA



THEUERKAUF ELEMENTARY OUTDOOR CLASSROOMS CREATED AND IN FULL USE



THEUERKAUF ELEMENTARY OUTDOOR LEARNING TODAY



Kindergartners observing Monarch caterpillars on native milkweed



THEUERKAUF NATIVE HABITAT GARDEN - WELL USED AND WELL LOVED!





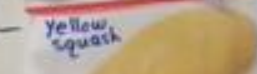


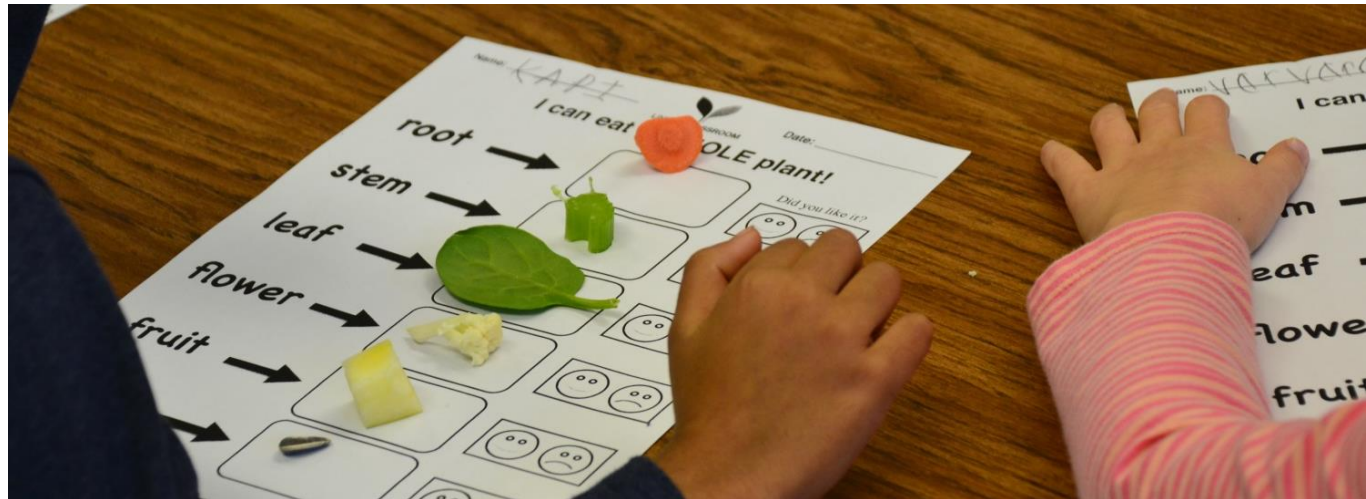
LIVING CLASSROOM: PARTNERSHIP WITH A SUCCESSFUL, COMMUNITY-BASED NON-PROFIT



LEARNING IN OUTDOOR LEARNING ENVIRONMENTS

I can describe Winter squash using adjectives.

	Shape	texture	color
acorn squash 	ovalish like an acorn	bumpy smooth with lines	green orange
butternut squash 	oval peanut	smooth	tan
Spaghetti squash 	oval	smooth some bumps	yellow
Sugar pumpkin 	round	smooth	orange
Yellow squash 			





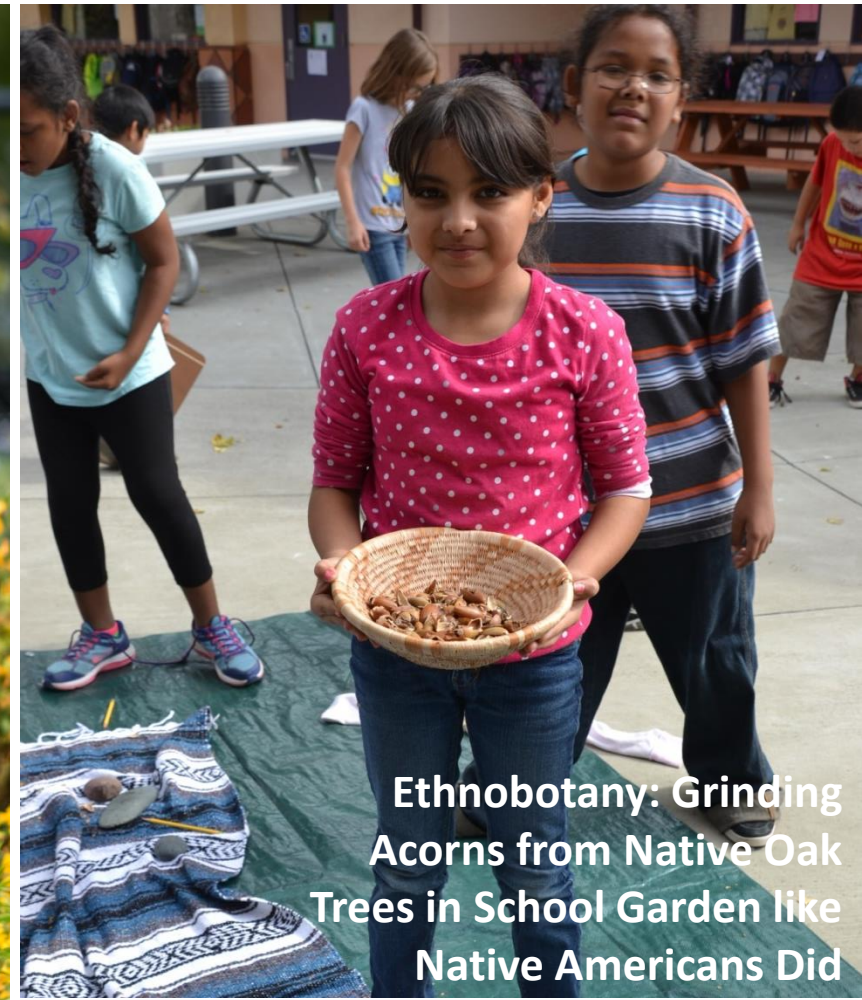
ENVIRONMENTAL LITERACY



Learning where food comes from



Matching the native plant with the wildlife it attracts



Ethnobotany: Grinding Acorns from Native Oak Trees in School Garden like Native Americans Did

CITIZEN SCIENCE IN HABITAT GARDENS AND LANDSCAPING



- iNaturalist (Flora and Fauna diversity observations)
- Western Bluebird Recovery Project (Audubon Society)
- The Great Sunflower Project (Pollinator observations)
- Nature's Notebook (Phenology observations and Climate Change)
- Western Monarch Milkweed Mapper (Xerces Society)



DESIGN PRINCIPLES & ELEMENTS

- **PLACE BASED:** Learning that is rooted in what is local—the unique history, environment, culture, economy, literature, and art of a particular place.
- **PEDAGOGICAL/CURRICULAR:** Academic content and the art and science of teaching.
- **ECOLOGICAL:** The study of the relationships between living organisms and their environment.



PLACE BASED

- NATURAL CONNECTIONS
- CULTURAL CONTEXT
- HISTORICAL CONNECTIONS
- MATERIALS
- CASE STUDIES: Andrew P. Hill High School Courtyard Improvements, Hacienda Elementary Science & Environmental Magnet, Mountain View Child Care Center



DEFINING AN OUTDOOR LEARNING ENVIRONMENT



NATURAL CONNECTIONS



CULTURAL CONTEXT



HISTORICAL CONNECTIONS



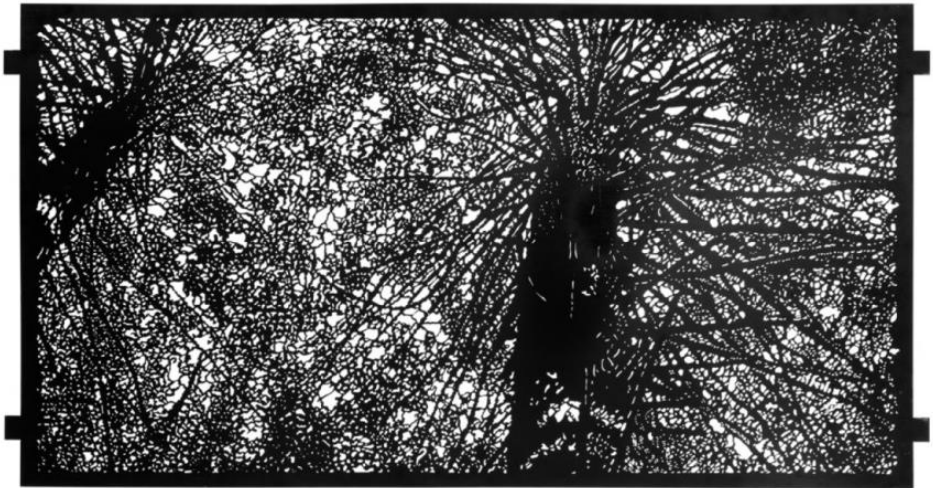
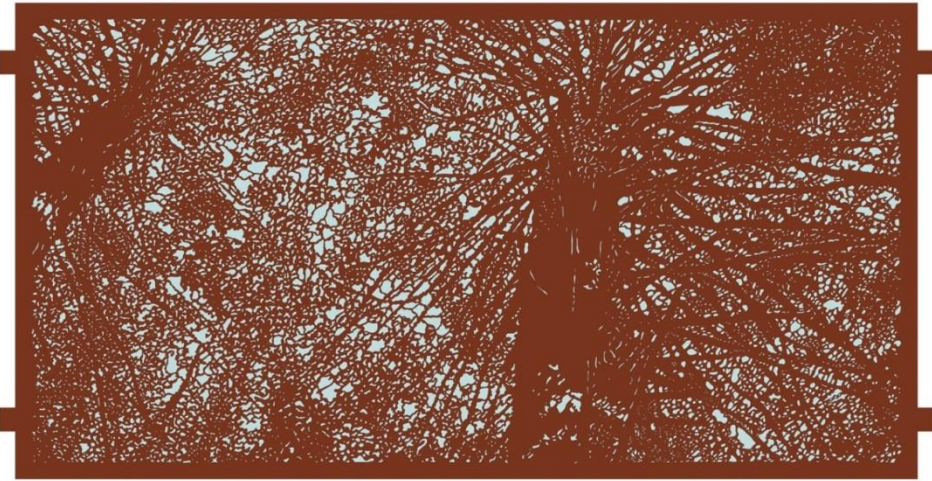
MATERIALS



ANDREW HILL HIGH SCHOOL – REDWOOD FOREST



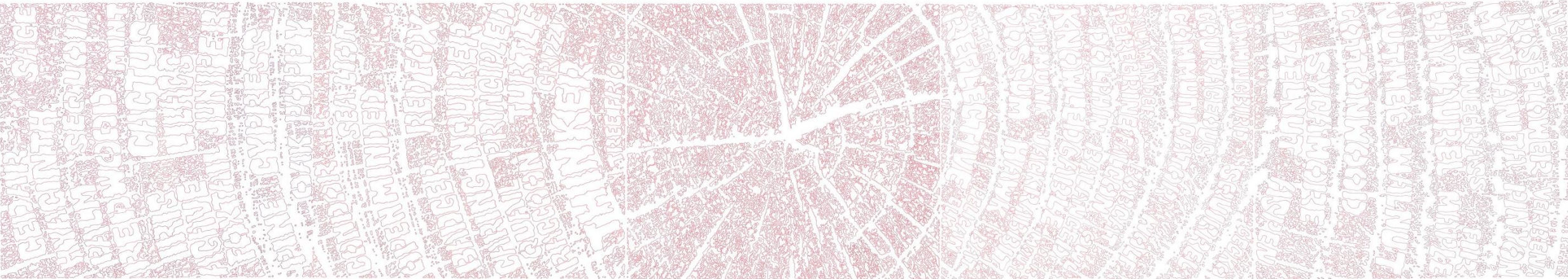
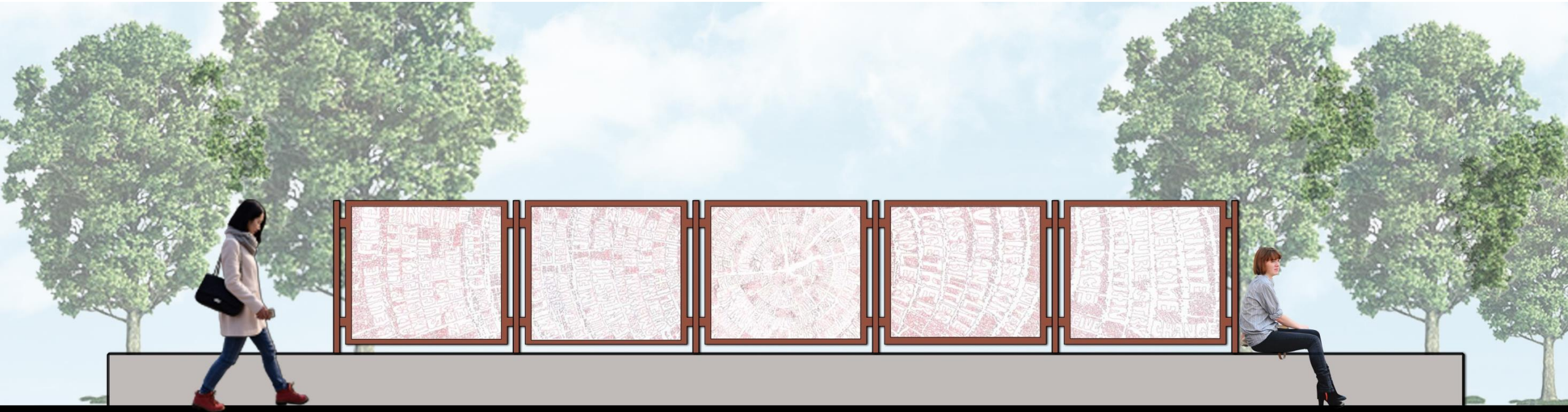
ANDREW HILL HIGH SCHOOL – CUT STEEL STAGE BACKDROP



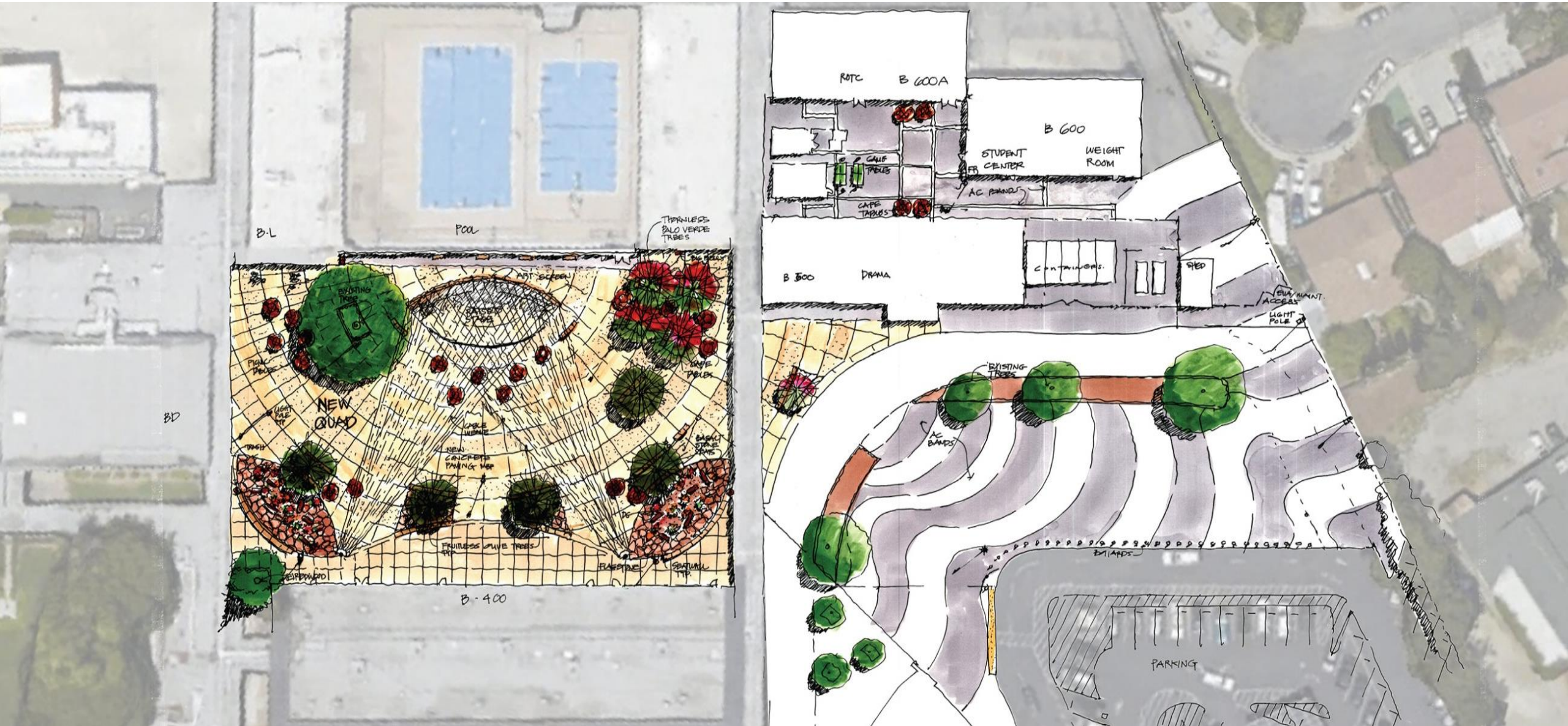
ANDREW HILL HIGH SCHOOL – REDWOOD TREE RING



ANDREW HILL HIGH SCHOOL – CUT STEEL BARRIER & SEAT WALL



ANDREW HILL HIGH SCHOOL – SITE PLAN



ANDREW HILL HIGH SCHOOL – STEEL CABLE WEAVE & STAGE BACKDROP



ANDREW HILL HIGH SCHOOL – STEEL SEATWALL BARRIERS & ROCK CIRCLE



HACIENDA ELEMENTARY SCIENCE & ENVIRONMENTAL MAGNET – OUTDOOR CLASSROOM



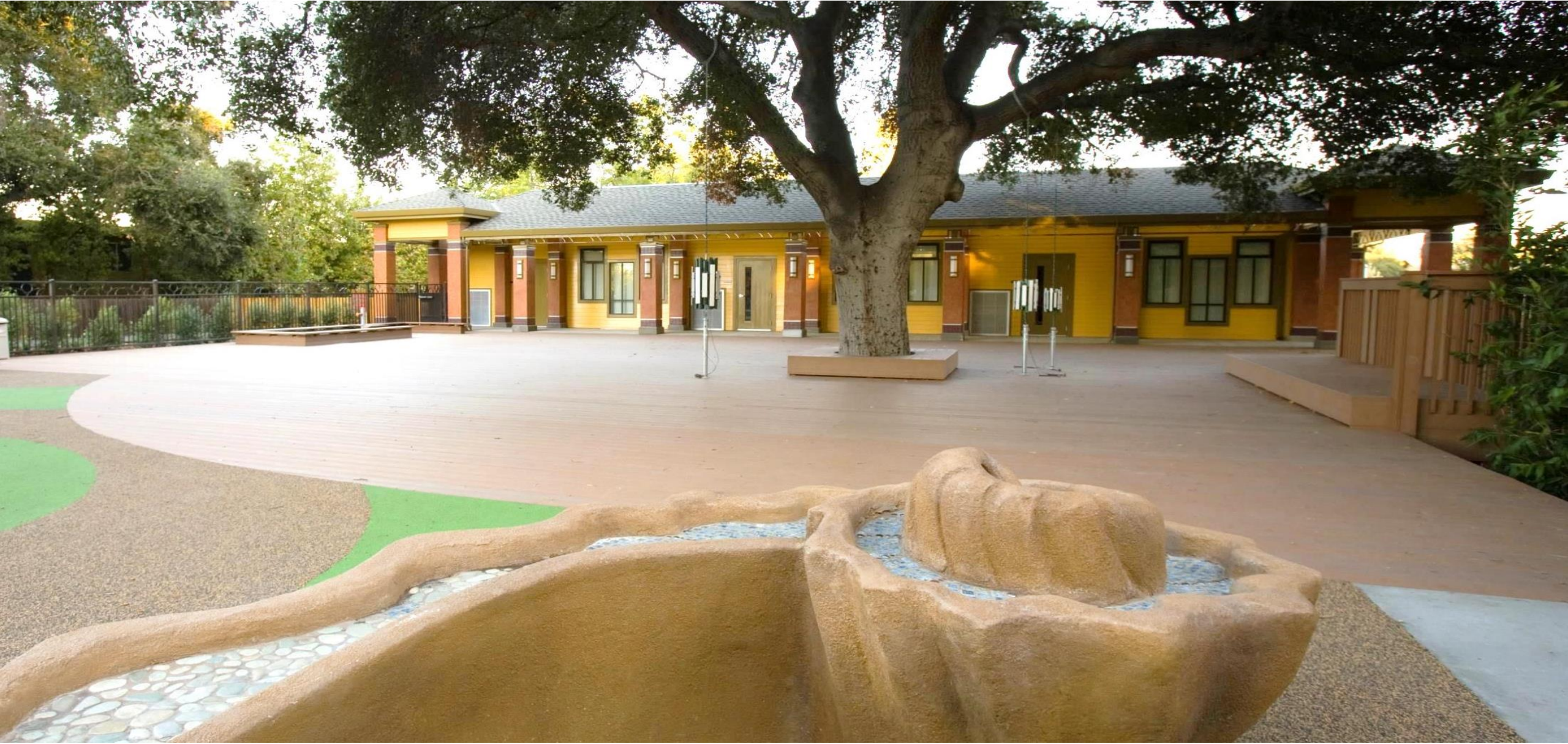
HACIENDA ELEMENTARY SCIENCE & ENVIRONMENTAL MAGNET – OUTDOOR CLASSROOM



MOUNTAIN VIEW CHILD CARE CENTER – SITE PLAN



MOUNTAIN VIEW CHILD CARE CENTER – OUTDOOR LEARNING & PLAY AREA



MOUNTAIN VIEW CHILD CARE CENTER – INTERACTIVE PLAY



PEDAGOGICAL/ CURRICULAR

- **INTEGRATING & SUPPORTING CURRICULUM**
- **OUTDOOR LEARNING ENVIRONMENTS**
- **SOCIAL/ACADEMIC INTERACTION**
- **FLEXIBILITY**
- **CASE STUDIES:** Waldorf School of the Peninsula - Los Altos, Capuchino High School Fine & Digital Arts Classroom Building



OUTDOOR CLASSROOMS – INTEGRATE CURRICULUM



OUTDOOR CLASSROOMS



SOCIAL INTERACTION



FLEXIBILITY



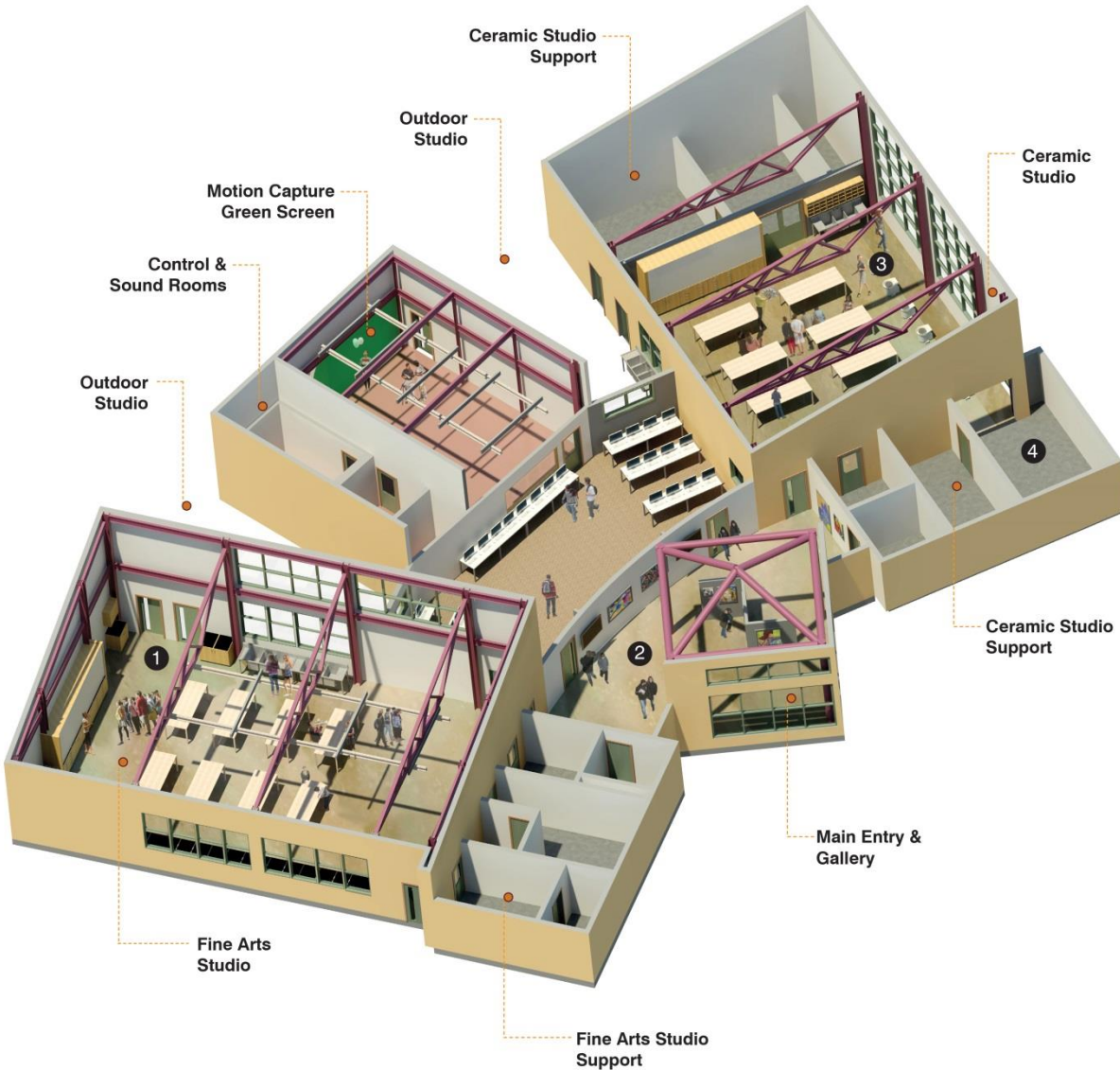
WALDORF SCHOOL OF THE PENINSULA, LOS ALTOS – BACKYARD/OUTDOOR CLASSROOM



CAPUCHINO HIGH SCHOOL, FINE & DIGITAL ARTS CLASSROOM BUILDING – SITE PLAN



CAPUCHINO HIGH SCHOOL, FINE & DIGITAL ARTS CLASSROOM BUILDING



CAPUCHINO HIGH SCHOOL, FINE & DIGITAL ARTS CLASSROOM BUILDING – ARTS COURTYARD



ECOLOGICAL

- PHYSICAL + VISUAL CONNECTIONS
- ORGANIC FORMS
- CASE STUDIES: Ernesto Galarza Elementary School, Family Early Learning Center



PHYSICAL + VISUAL CONNECTIONS



ORGANIC FORMS



ERNESTO GALARZA ELEMENTARY SCHOOL – SITE PLAN



ERNESTO GALARZA ELEMENTARY SCHOOL – ROCK GARDEN



ERNESTO GALARZA ELEMENTARY SCHOOL – EVENT COURTYARD & KINDER PLAY AREA



FAMILY EARLY LEARNING CENTER – SITE PLAN



FAMILY EARLY LEARNING CENTER – PRESCHOOL/KINDER PLAY AREA & WATER FEATURE



FAMILY EARLY LEARNING CENTER – ROCK CIRCLE & EVENT COURTYARD WITH TRELLIS



ACTIVITY

- BREAK UP INTO GROUPS
- TURN OVER PLANS & CHECKLISTS ON TABLE
- WORK TOGETHER TO ANALYZE SITE PLANS
- IDENTIFY SOMEONE IN YOUR GROUP TO SHARE YOUR FINDINGS



OUTDOOR LEARNING DESIGN CHECKLIST

DONE	DESIGN CONSIDERATION	NOTES
	<p>1. PHYSICAL + VISUAL CONNECTIONS Provide indoor and outdoor connections through views and materials.</p> 	
	<p>2. NATURE CONNECTIONS Provide connections to natural environment, landscape, ecology, geology, open space.</p> 	
	<p>3. CULTURAL CONNECTIONS Provide connections to local and regional culture- celebrate!</p> 	
	<p>4. HISTORICAL CONNECTIONS Provide positive connections to local and regional history and events.</p> 	
	<p>5. MATERIAL CONNECTIONS Provide connections to local and regional materials (stone, wood, plants).</p> 	
	<p>6. CURRICULUM CONNECTIONS Provide curriculum that connects and supports outdoor learning through science, gardens, aquaculture, agriculture.</p> 	
	<p>7. STUDENT CONNECTIONS Provide opportunity for students to connect with each other in outdoor learning environments.</p> 	

OUTDOOR LEARNING DESIGN CHECKLIST

DONE	DESIGN CONSIDERATION	NOTES
	<p>8. STAFF/PARENT/NON-PROFIT + COMMUNITY CONNECTIONS Provide opportunities for stakeholders to connect with local and regional non-profits to enhance outdoor learning.</p> 	
	<p>9. NATURAL FORMS CONNECTIONS Provide natural forms to enhance connections with nature.</p> 	
	<p>10. SOCIAL CONNECTIONS Provide interactive forms for greater connections and collaboration (moveable furniture, boulders, amphitheater).</p> 	
	<p>11. BIOPHILIC CONNECTIONS Visual/non-visual, sensory, water, light, atmosphere, forms, patterns, mystery, risk.</p> 	
	<p>12. TECHNICAL + SCIENTIFIC CONNECTIONS Provide connections to natural systems that support technical and scientific learning (solar system, habitat, biofiltration gardens).</p> 	
	<p>13. ART CONNECTIONS Celebrate local art in the environment to begin a dialog about creative outdoor spaces.</p> 	
	<p>14. FLEXIBLE CONNECTIONS Provide spaces that support a variety of groups and educational uses (moveable furniture, lighting, planting, signage).</p> 	

RESOURCES

WEBSITES:

The Children and Nature Network

(<http://www.childrenandnature.org/initiatives/schoolyards>)

The Edible Schoolyard Network

(<http://edibleschoolyard.org>)

Green Schoolyards America

(<http://www.greenschoolyards.org>)

Green Teacher Magazine: Education for Planet Earth

(<https://greenteacher.com>)

International Green Schoolyards Alliance

(<http://www.internationalschoolgrounds.org>)

Natural Living Initiative

(<https://naturalearning.org/professor-robin-c-moore>)

BOOKS AND ARTICLES:

Danks, Sharon Gamson. *Asphalt to Ecosystems: Design Ideas for Schoolyard Transformation*. Oakland, CA: New Village Press, 2010.

- - -. "Ecological Schoolyards," *Landscape Architecture Magazine*. J. William Thompson, editor. American Society of Landscape Architects. Washington, DC: November 2000, 42-47.

- - -. "Green Mansions: Living Willow Structures Enhance Children's Play Environments," *Landscape Architecture Magazine*. J. William Thompson, editor. American Society of Landscape Architects. Washington, DC: June 2002, 38+.

Demarest, Amy B. *Place-Based Curriculum Design: Exceeding Standards through Local Investigation*. New York: Routledge, 2014.

Grandini, Lella, et al., Eds. *In the Spirit of the Studio: Learning from the Atelier of Reggio Emilia*. New York: Teachers College Press, 2015.

Kellet, Stephen R., Judith Heerwagen, Martin Mador. *Biofilic Design: The Theory, Science, and Practice of Bringing Buildings to Life*. Hoboken N.J.: Wiley, 2008.

Louv, Richard. *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*. New York: Algonquin, 2008.

Moore, Robin C. and Herb H. Wong. *Natural Learning: The Life History of an Environmental Schoolyard*. Berkeley, CA: MIG Communications, 1997.

Sobel, David T. *Childhood and Nature: Design Principles for Educators*. Portland, ME: Stenhouse, 2008.

- - -. *Place-Based Education: Connecting Classrooms and Communities*. Great Barrington, MA: 2004.

Tallamy, Douglas W. *Bringing Nature Home: How you can Sustain Wildlife with Native Plants, Updated and Expanded*. Portland, OR: Timber, 2009.

Waters, Alice. *Edible Schoolyard: A Universal Idea*. San Francisco: Chronicle Books, 2008.

Wilson, Edward O. *Biofilia*. Cambridge: Harvard UP, 1984.

THANKS A4LE!

Contact Us



408.224.9890



WWW.ARTIKA3.COM



JGOODMAN@SCU.EDU



Vicki Moore
Founder & Board Member
vickim@living-classroom.org



Linda Stevenin, M.Ed.
Learning Environment Specialist
Senior Architect
lstevenin@artika3.com



Vince Lattanzio
Principal | ASLA
Landscape Architect
vince@carducciassociates.com



Dr. Jill Goodman Gould
Senior Lecturer in English, Emerita &
Education Liaison at Artik
jgoodman@scu.edu