



WELCOME A4LE

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





Meet The Presenters

A4LE 2018 Outdoor Learning Environments



**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.



ARCHITECT, FOUNDER

BILL GOULD

Founder of ARTiK Art & Architecture, has worked in the field of K-14 facility design for 28 years. Bill strives to create out-of-the-ordinary places to learn and play using an “Art in Architecture” approach to emphasize user participation and team collaboration, contributing to the realization of imaginative learning spaces.

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



MENTAL & PHYSICAL HEALTH

Mental Health plays a critical role in the cognitive, emotional, and social development of children and youth.

GREEN SCHOOLYARDS PROMOTE SOCIAL-EMOTIONAL SKILLS

PRACTICE

RELATIONSHIP SKILLS²☆☆☆☆☆☆

Children demonstrated more cooperative play, civil behavior and positive social relationships in green schoolyards.^{6,7}

DEVELOP

SELF-AWARENESS & SELF-MANAGEMENT

Green schoolyards can reduce aggression and discipline problems.^{6,7}

Gardening at school helped students feel proud, responsible & confident.²

GREEN SCHOOLYARDS HELP KIDS FEEL:

CALMER & LESS STRESSED^{2,3}

Views of green landscapes from classroom windows helped high school students recover more quickly from stressful events.⁴

POSITIVE & RESTORED³

Forest schools enhanced positive and decreased negative emotions.⁵

RESILIENT²

Natural areas enhanced feelings of competence and increased supportive social relationships that help build resilience.²



MENTAL & PHYSICAL HEALTH: Green Schoolyards can increase physical activity

Green schoolyards can promote physical activity by offering a variety of active play options that engage children of varying fitness levels, ages, and genders



MENTAL & PHYSICAL HEALTH:

Regular physical activity enhances well-being and attentiveness in the classroom



MEETING DIVERSE & CHANGING NEEDS

GREEN SCHOOLYARDS COMPLEMENT CONVENTIONAL PLAYGROUNDS WITH OPPORTUNITIES FOR **LIGHT & MODERATE PHYSICAL ACTIVITY** that are more appealing to some children.^{3,4}

GREEN SCHOOLYARDS CAN CONTRIBUTE TO **GIRLS' PHYSICAL FITNESS** ☆☆☆☆

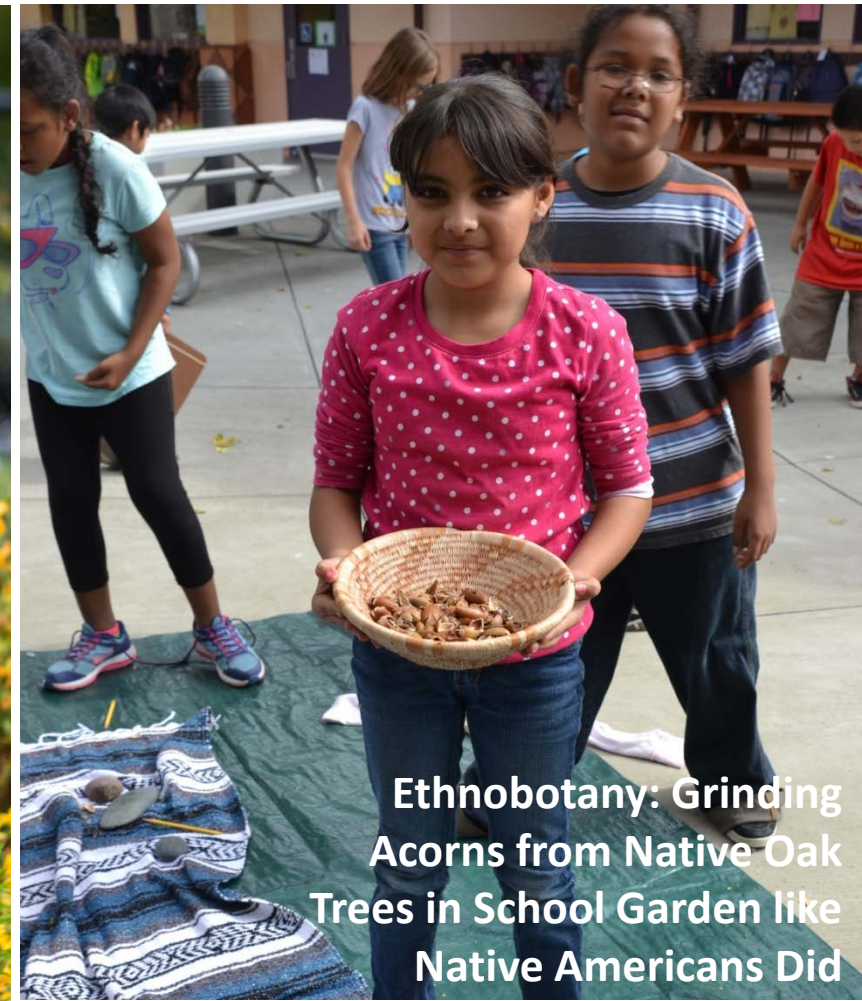
Physical activity decreases as children grow, especially for girls. Green schoolyards sustain activity as children age and preferences change.^{5,6,7}



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

ENVIRONMENTAL LITERACY

We are a part of nature, not apart from nature!



EMPOWERED AND CONNECTED SCHOOL COMMUNITIES





Green Schoolyards Action Agenda

VISION: All U.S. communities offer access to green schoolyards by 2050 to enhance children's healthy development, community well being and positive environmental impacts.

www.childrenandnature.org



GREEN SCHOOLYARDS ACTION AGENDA GOALS

- Cross-sector leaders and partners support green schoolyards for the benefit of children, families and communities
- Communities value and promote green schoolyards as essential assets and infrastructure.
- A robust evidence base demonstrates the many benefits of green schoolyards.
- Sustainable funding supports development, stewardship and maintenance of green schoolyards
- Federal, state, local and school district policies support the equitable distribution, implementation, and use of green schoolyards

RESTORING OUR NATIVE ECOLOGY ONE SCHOOLYARD AT A TIME



RESTORING OUR NATIVE ECOLOGY

Paradigm Shift: Nature is Everywhere. Students Are a Part of Bringing Nature to the Schoolyard





RESTORING OUR NATIVE ECOLOGY

Native Habitat Gardens
bring back native wildlife



Western Bluebird
made a nest!

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





THEUERKAUF ELEMENTARY SCHOOL – DRY CREEK BED & NATIVE GARDEN



THEUERKAUF ELEMENTARY SCHOOL – WALK BY THE BAY





THEUERKAUF ELEMENTARY SCHOOL – MASK MANDALA





ABOUT LIVING CLASSROOM

Full Service, garden-based education program provides curriculum and instruction, materials, garden design, installation and maintenance

Serve 29 schools in 4 school districts, grades T/K-8 in Santa Clara County

12 paid staff including professional credentialed teachers and other highly qualified staff.

Current budget: \$650,000

Docent training program to augment instructional staff

2018-19 school year: Serving 11,000 students, 1,600 lessons taught, average of 5 lessons per classroom. Students receive lessons for 6-9 years in a row.

THEUERKAUF ELEMENTARY OUTDOOR CLASSROOMS CREATED AND IN FULL USE





THEUERKAUF ELEMENTARY OUTDOOR LEARNING TODAY



Kindergartners observing Monarch caterpillars on native milkweed





THEUERKAUF ELEMENTARY OUTDOOR LEARNING TODAY



Edible Garden Thriving with Year Round Harvests for Farm to Lunch Program



THEUERKAUF NATIVE HABITAT GARDEN - WELL USED AND WELL LOVED!





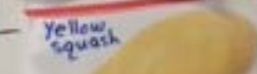


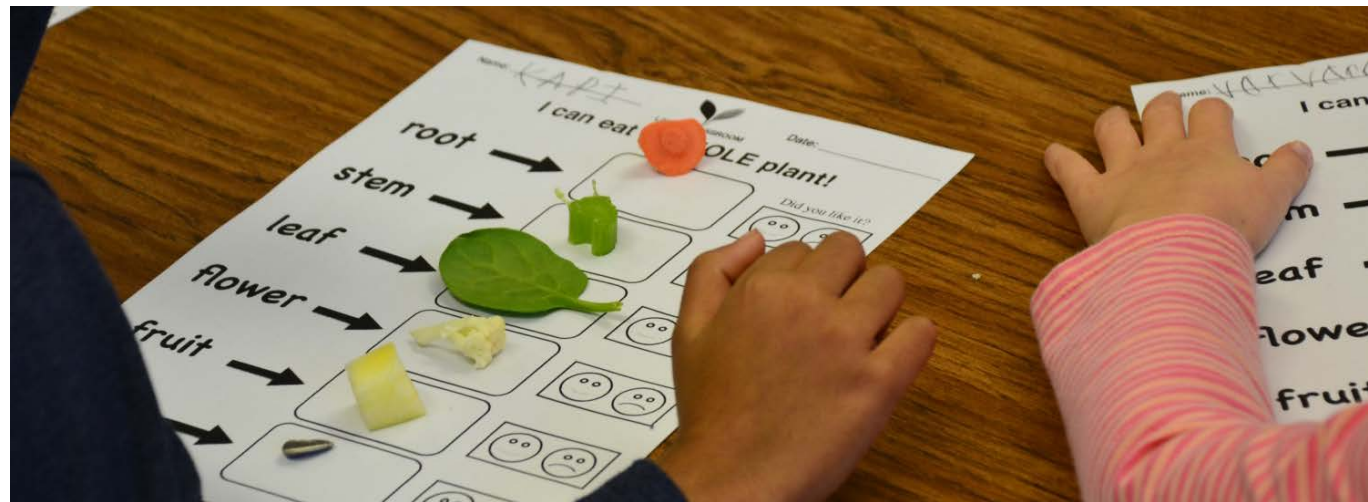
LIVING CLASSROOM: PARTNERSHIP WITH A SUCCESSFUL, COMMUNITY-BASED NON-PROFIT



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  | | | |



FARM TO LUNCH

Students Grow Organic Produce for School Lunch taste testings—
Kids try new fruits and veggies



FARM TO LUNCH



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



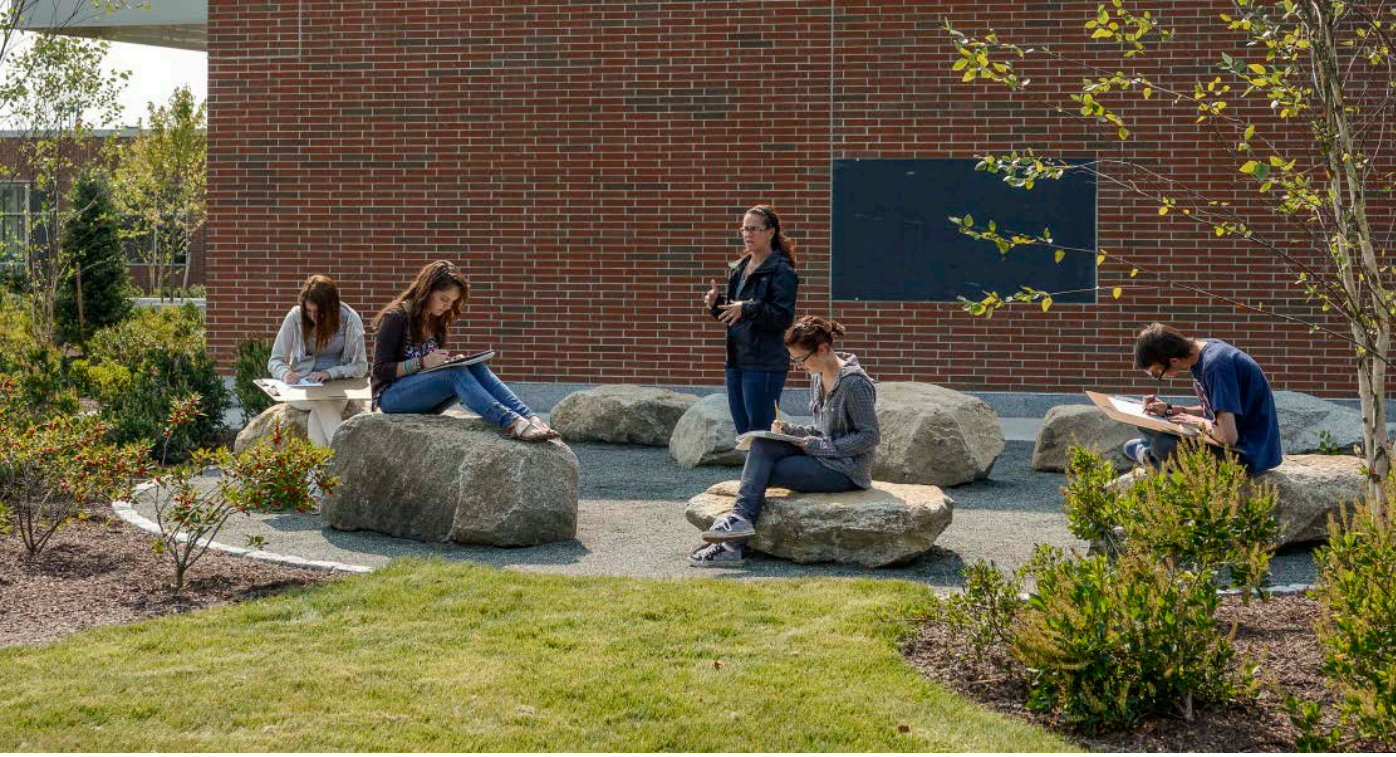
DEFINING AN OUTDOOR LEARNING ENVIRONMENT



NATURAL CONNECTIONS



CULTURAL CONTEXT



HISTORICAL CONNECTIONS



MATERIALS



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



HACIENDA ELEMENTARY SCIENCE & ENVIRONMENTAL MAGNET – OUTDOOR CLASSROOM



HACIENDA ELEMENTARY SCIENCE & ENVIRONMENTAL MAGNET – OUTDOOR CLASSROOM



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











WALDORF EDUCATION





OREGON WALDORF EDUCATION





ECOLOGICAL

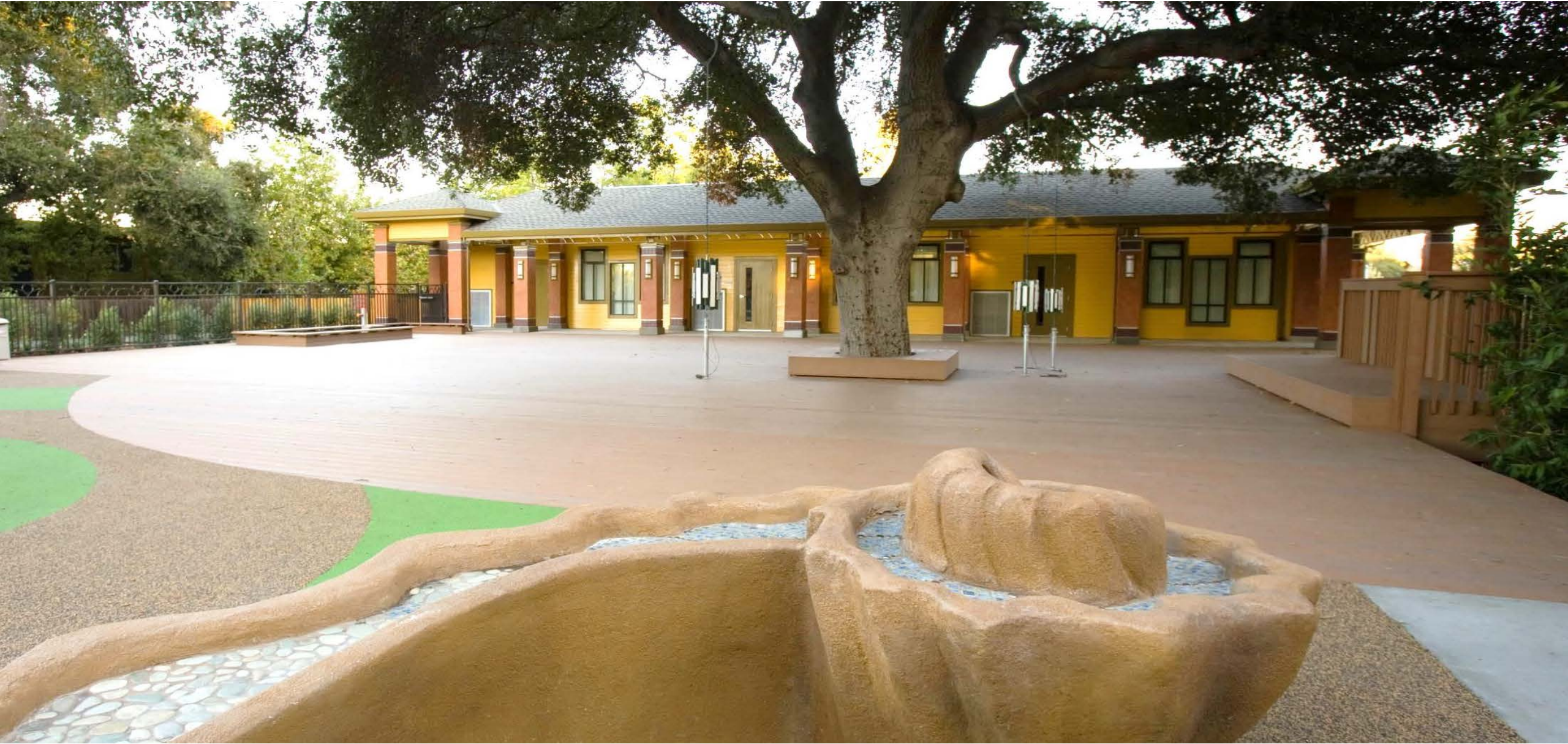
- PHYSICAL + VISUAL CONNECTIONS
- ORGANIC FORMS
- CASE STUDIES: Ernesto Galarza Elementary School, Family Early Learning Center



MOUNTAIN VIEW CHILD CARE CENTER – SITE PLAN



MOUNTAIN VIEW CHILD CARE CENTER – OUTDOOR LEARNING & PLAY AREA



MOUNTAIN VIEW CHILD CARE CENTER – INTERACTIVE PLAY



PHYSICAL + VISUAL CONNECTIONS



ERNESTO GALARZA ELEMENTARY SCHOOL – SITE PLAN



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



ORGANIC FORMS



ANDREW HILL HIGH SCHOOL – BEFORE



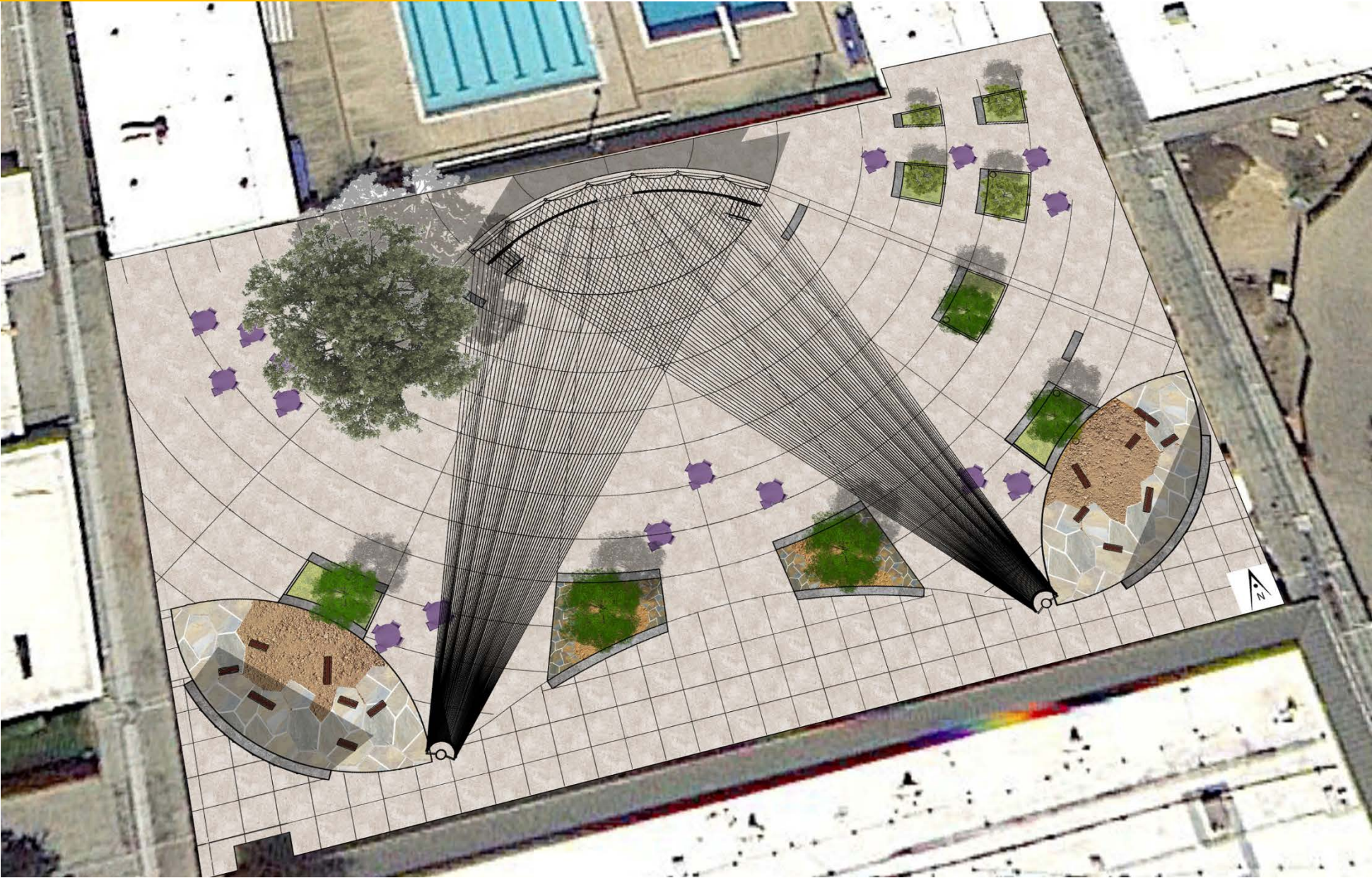
ANDREW HILL HIGH SCHOOL – BEFORE



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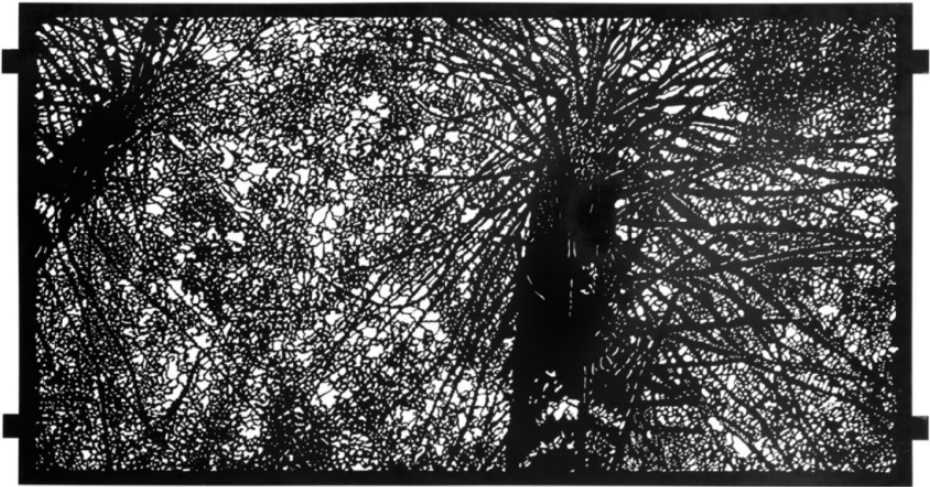
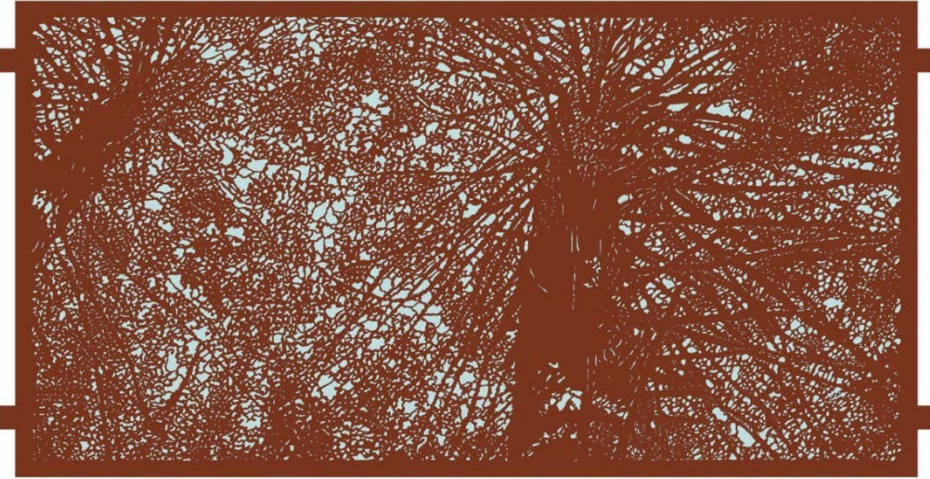
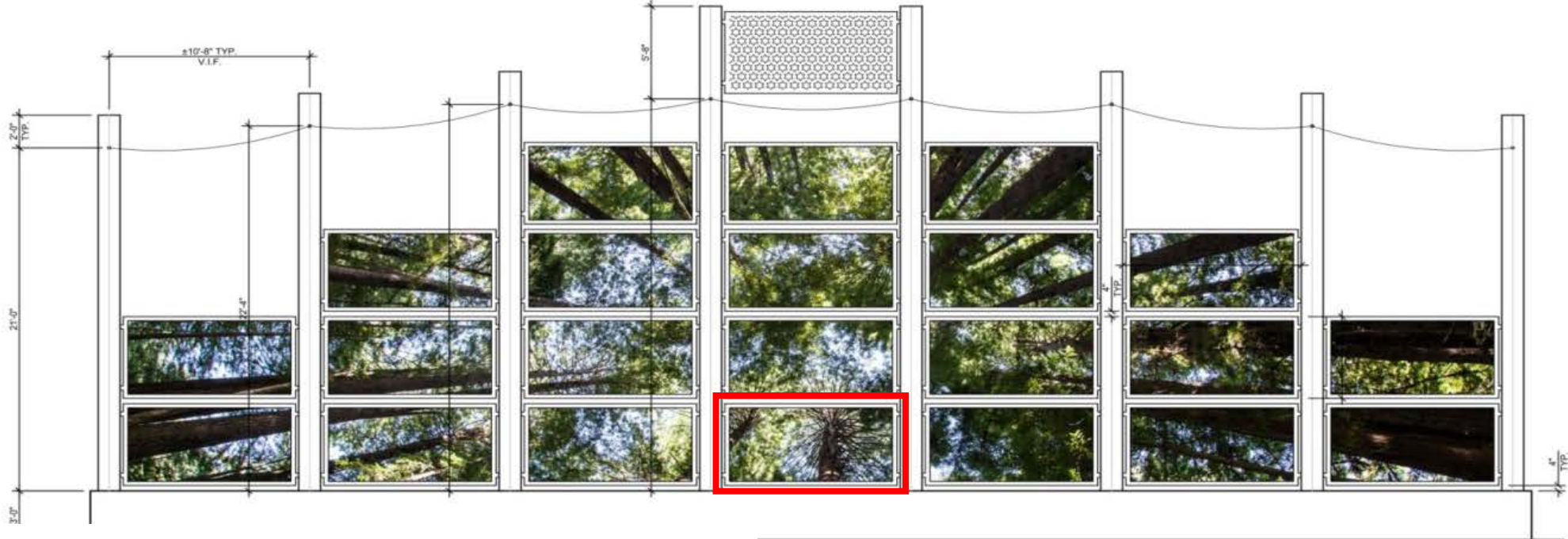
ANDREW HILL HIGH SCHOOL – CONCEPT



ANDREW HILL HIGH SCHOOL – REDWOOD FOREST



ANDREW HILL HIGH SCHOOL – CUT STEEL STAGE BACKDROP



ANDREW HILL HIGH SCHOOL – CUT STEEL STAGE BACKDROP



ANDREW HILL HIGH SCHOOL – CUT STEEL STAGE BACKDROP



ANDREW HILL HIGH SCHOOL – CUT STEEL STAGE BACKDROP



ANDREW HILL HIGH SCHOOL – CABLE WEAVE



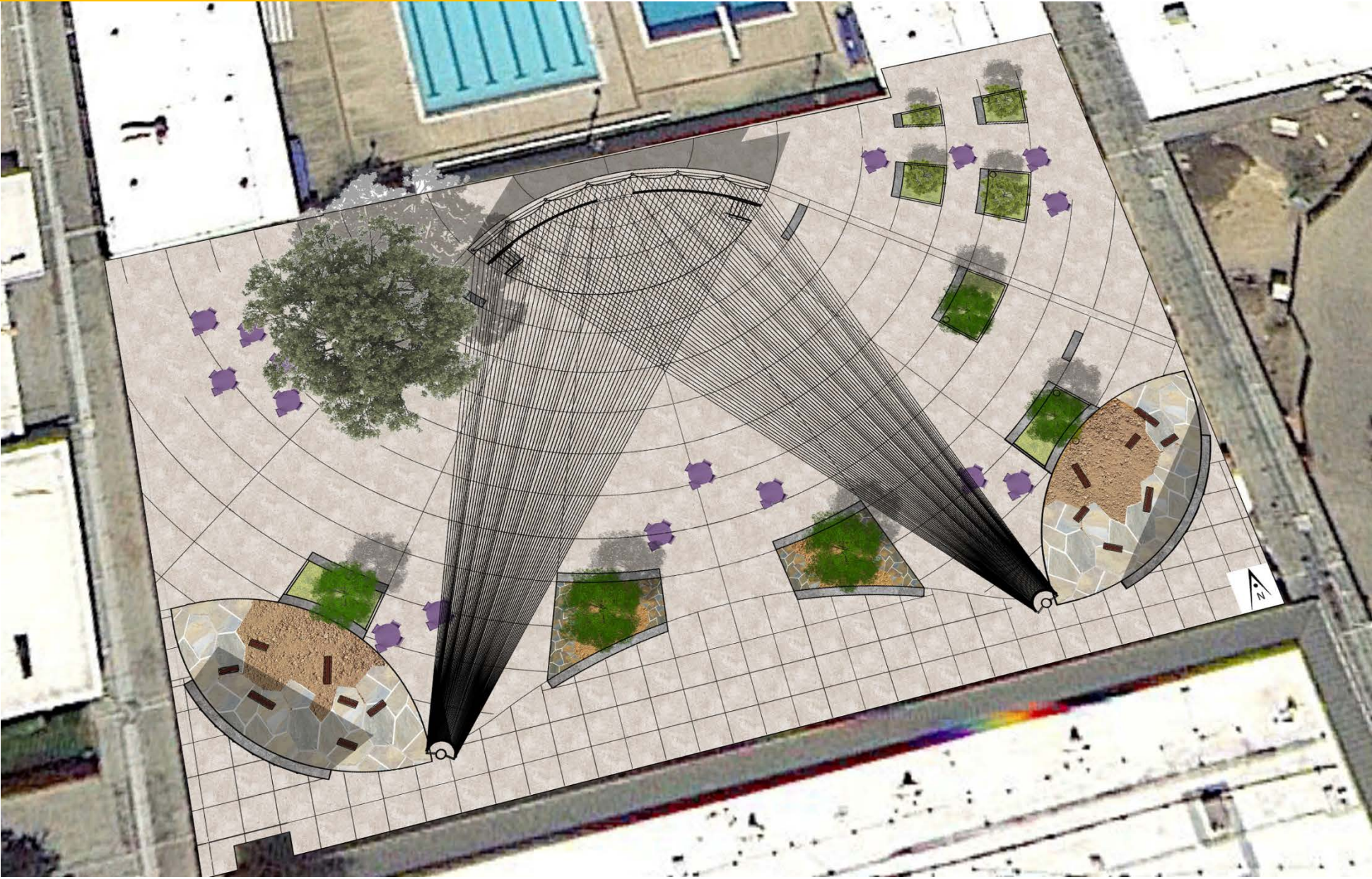
ANDREW HILL HIGH SCHOOL – CABLE WEAVE



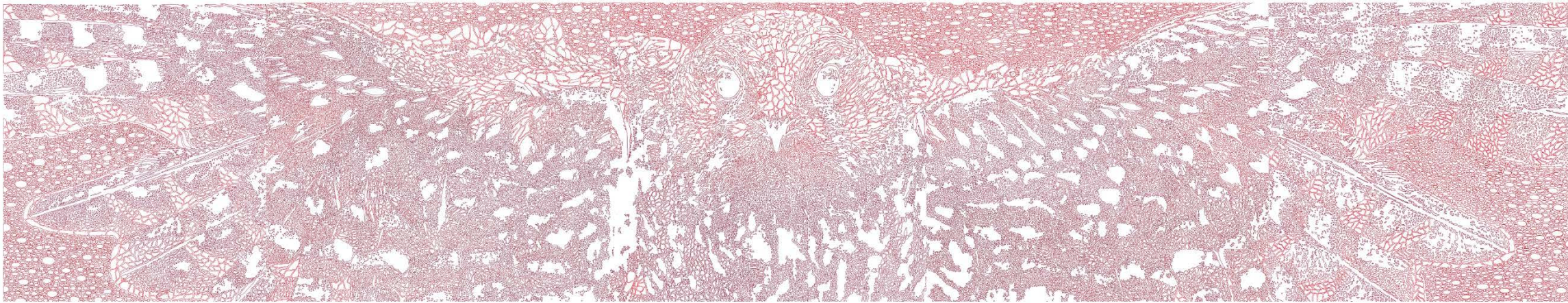
ANDREW HILL HIGH SCHOOL – CABLE WEAVE



ANDREW HILL HIGH SCHOOL – CONCEPT



ANDREW HILL HIGH SCHOOL – OUTDOOR LEARNING PRIVACY PANELS



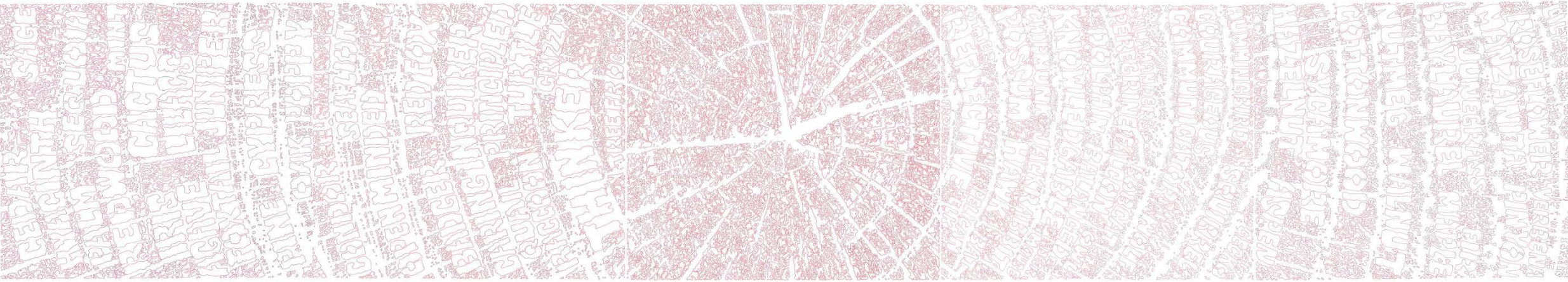
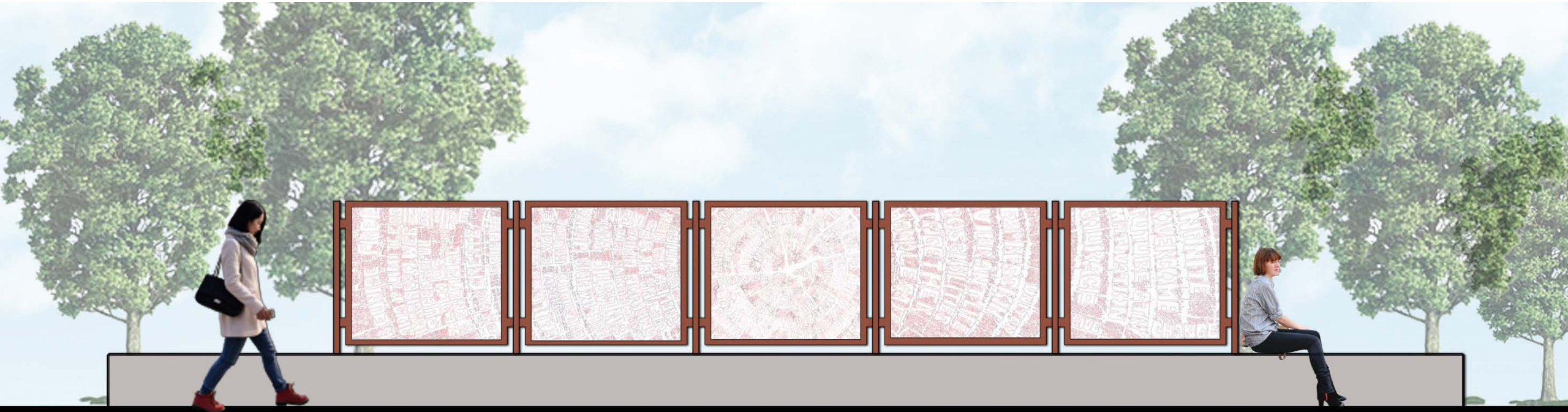
ANDREW HILL HIGH SCHOOL – OUTDOOR LEARNING PRIVACY PANELS



ANDREW HILL HIGH SCHOOL – REDWOOD TREE RING



ANDREW HILL HIGH SCHOOL – CUT STEEL BARRIER & SEAT WALL



ANDREW HILL HIGH SCHOOL – OUTDOOR LEARNING PRIVACY PANELS



ANDREW HILL HIGH SCHOOL – OUTDOOR CLASSROOMS



ANDREW HILL HIGH SCHOOL



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ANDREW HILL HIGH SCHOOL – CABLE WEAVE



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>)

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THANKS A4LE!

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