

# STEAMing Down River

## A Fresh K-8 Model



ARCHITECTURE FOR EDUCATION INCORPORATED

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SCHOOL  
DISTRICT

EDUCATING LEARNERS FOR THE 21ST CENTURY

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What is **STEAM** and why is it important?

Adding the **arts** to STEM

AAE

# Why Add the **arts** ?

- Emphasize cross-curricular learning:
  - critical thinking skills,
  - cooperative learning
  - technological fluency
- Integrating the arts in math 3X = student proficiency in math increased by 23%
- Nobel laureates in the sciences were 22 times more likely involved in the performing arts



Science is looking for **Answers**

+

Art is looking for **Questions**

=

Maker Spaces



so **S.T.E.A.M.** it is...

it's **interdisciplinary** - rather than  
compartmentalized

its **connecting** - rather than disconnected

its **problem solving** - rather than regurgitated

its **thinking-based** - rather than mindless  
conformity

its about **INQUIRY**- making up problems and  
trying to solve them...leading to new  
problems...



Rio SD is focusing it's efforts on a new learning design and curriculum that works towards:

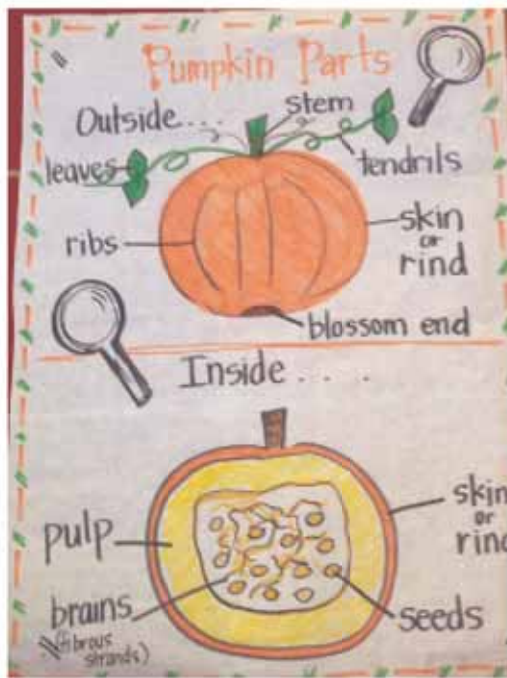
Literacies,  
21<sup>st</sup> Century Learning Practices,  
through  
Inquiry-Based Learning.





# Spiders: Good Guys or Bad?





Pumpkin S.T.E.A.M.



# Rio K-8 STEAM School

Concept

Design Development

Integrating Landscape

Integrating Interiors

A4E

# Funding/Designing K-8 STEAM School

Rio's Measure "G" School Bond was approved by the voters by more than 70%

Rio has established a STEAM School Design Committee that engages staff, parents, experts, and community partners

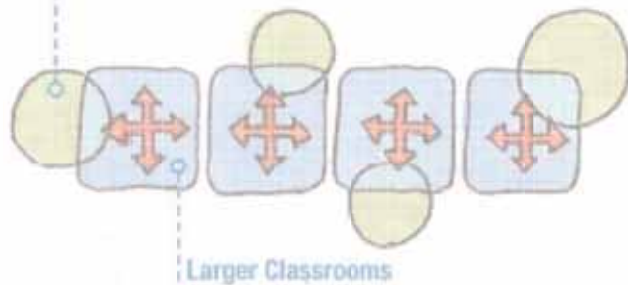




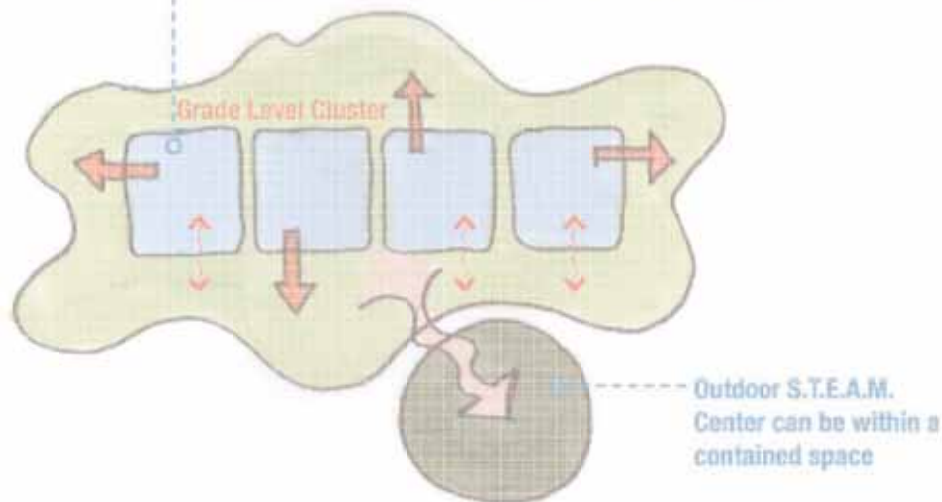


## Learning Environment Configurations and Connections

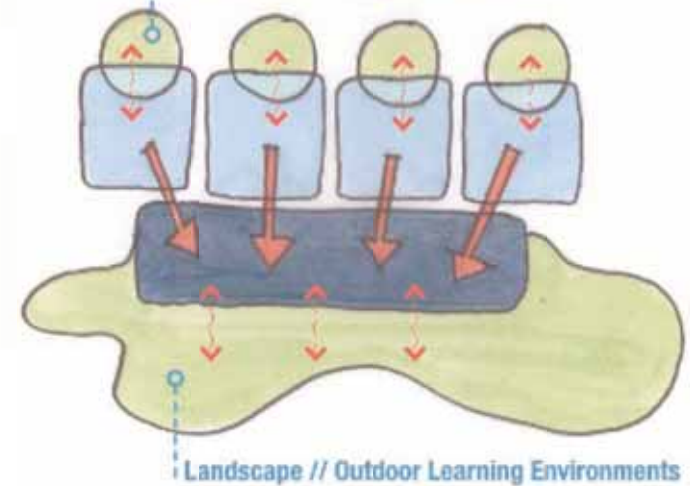
Direct connection to the outdoors // Private Patio



Classroom is surrounded by Outdoor S.T.E.A.M. Center

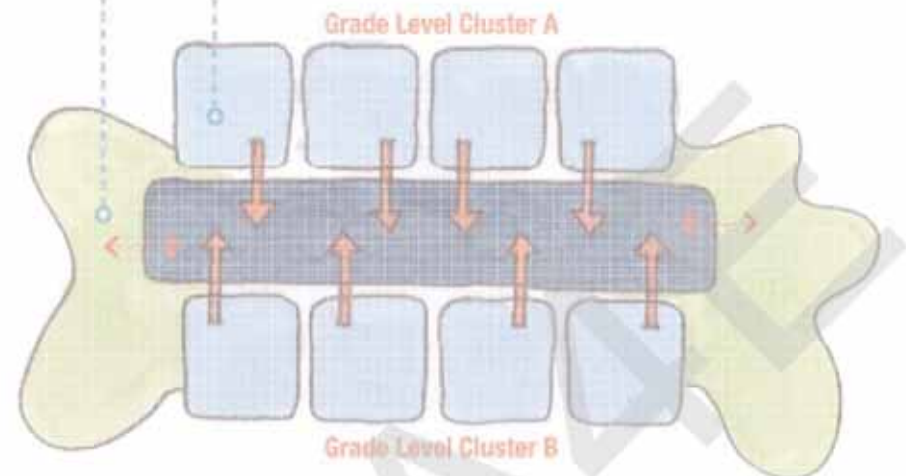


Private Patio for each Classroom



S.T.E.A.M. Center Connects to Outdoors only at the ends

Direct connection to 1 large Enclosed S.T.E.A.M. Center









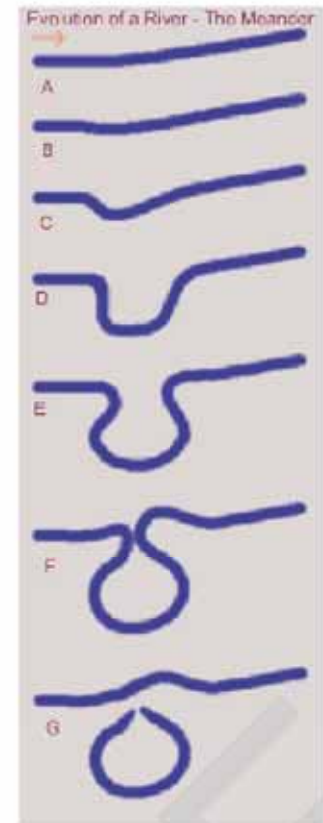
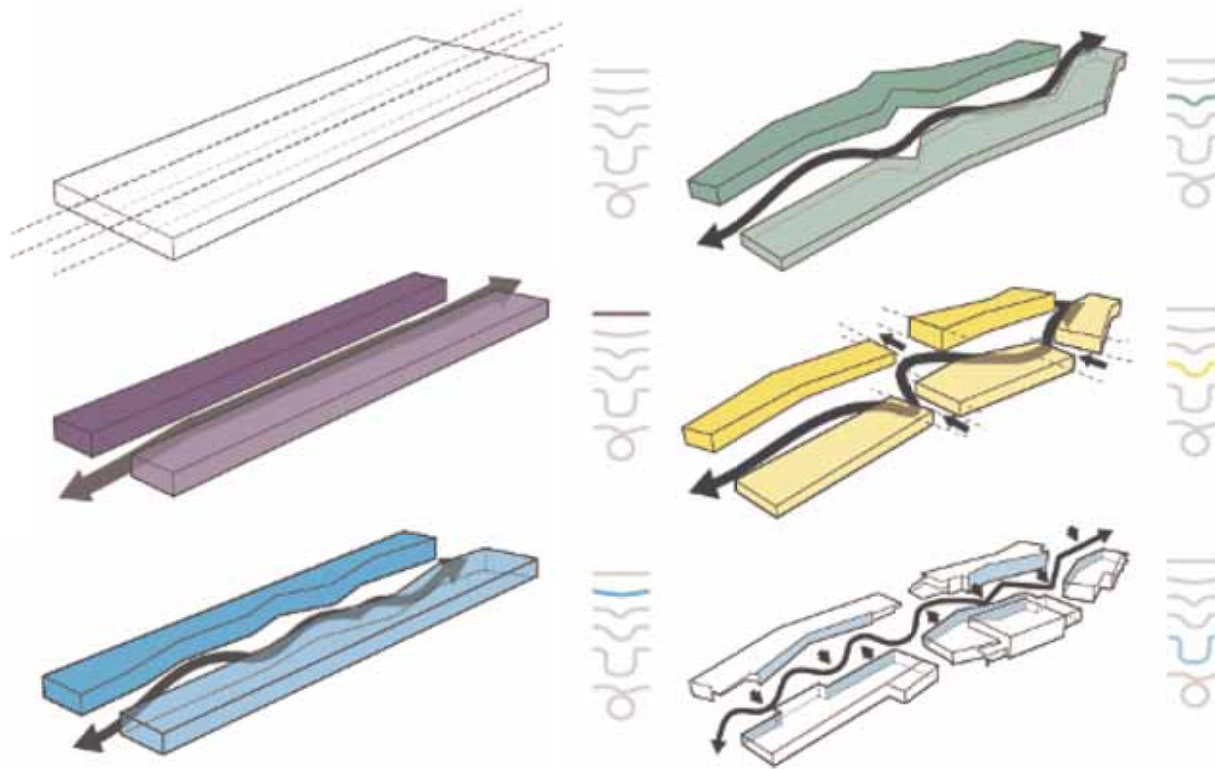
putting the S.T.E.A.M. in the river



**Meander:**  
is a bend in  
a **sinuous**  
watercourse  
or river.

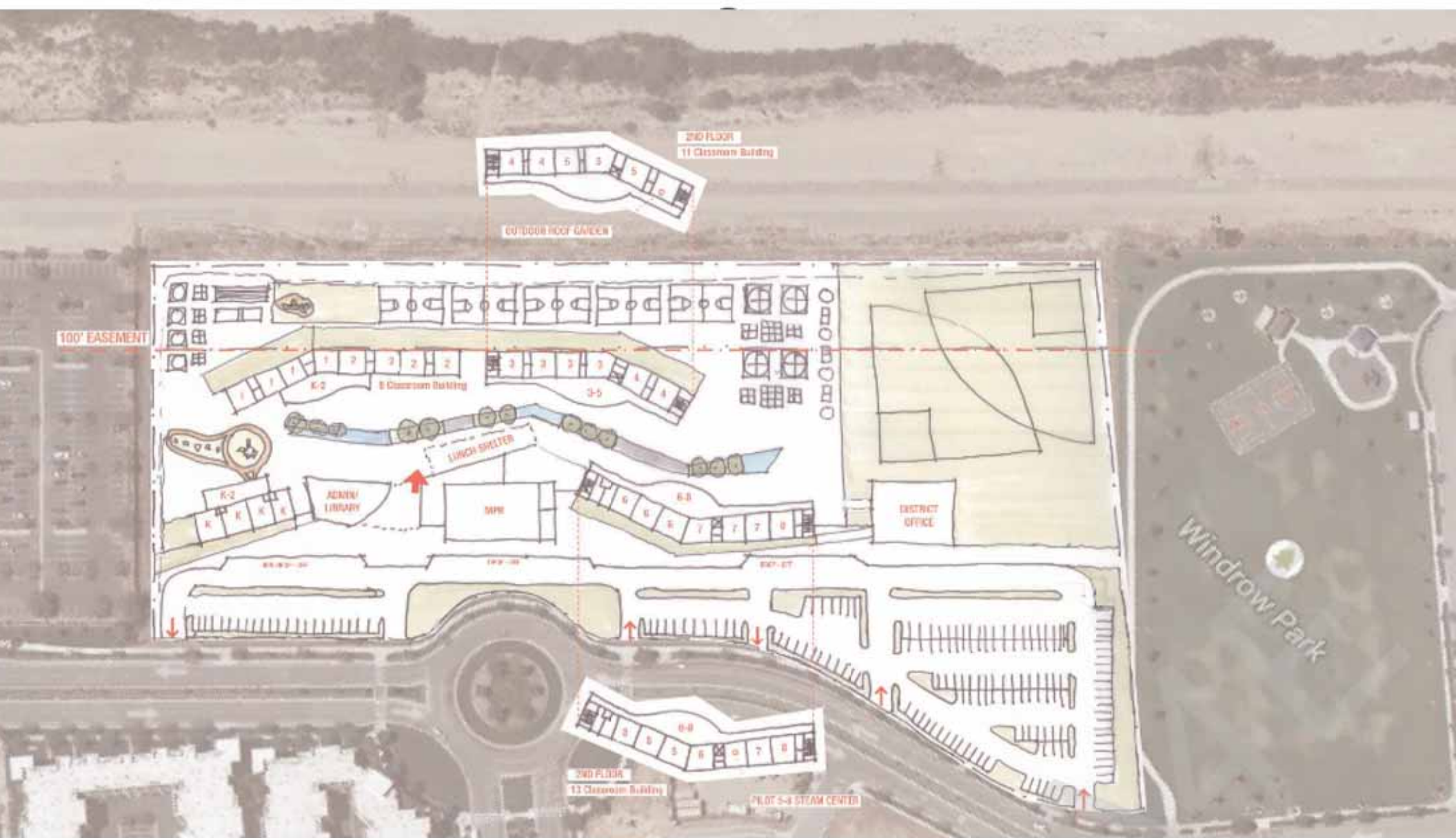


# The Educational Meander



A **Meander** forms when water **erodes** the outer banks and widens its valley.

The **Meander** takes different paths **evolving** into various shapes and creating **STEAM** centers.



FULL BUILD OUT

February 12, 2015







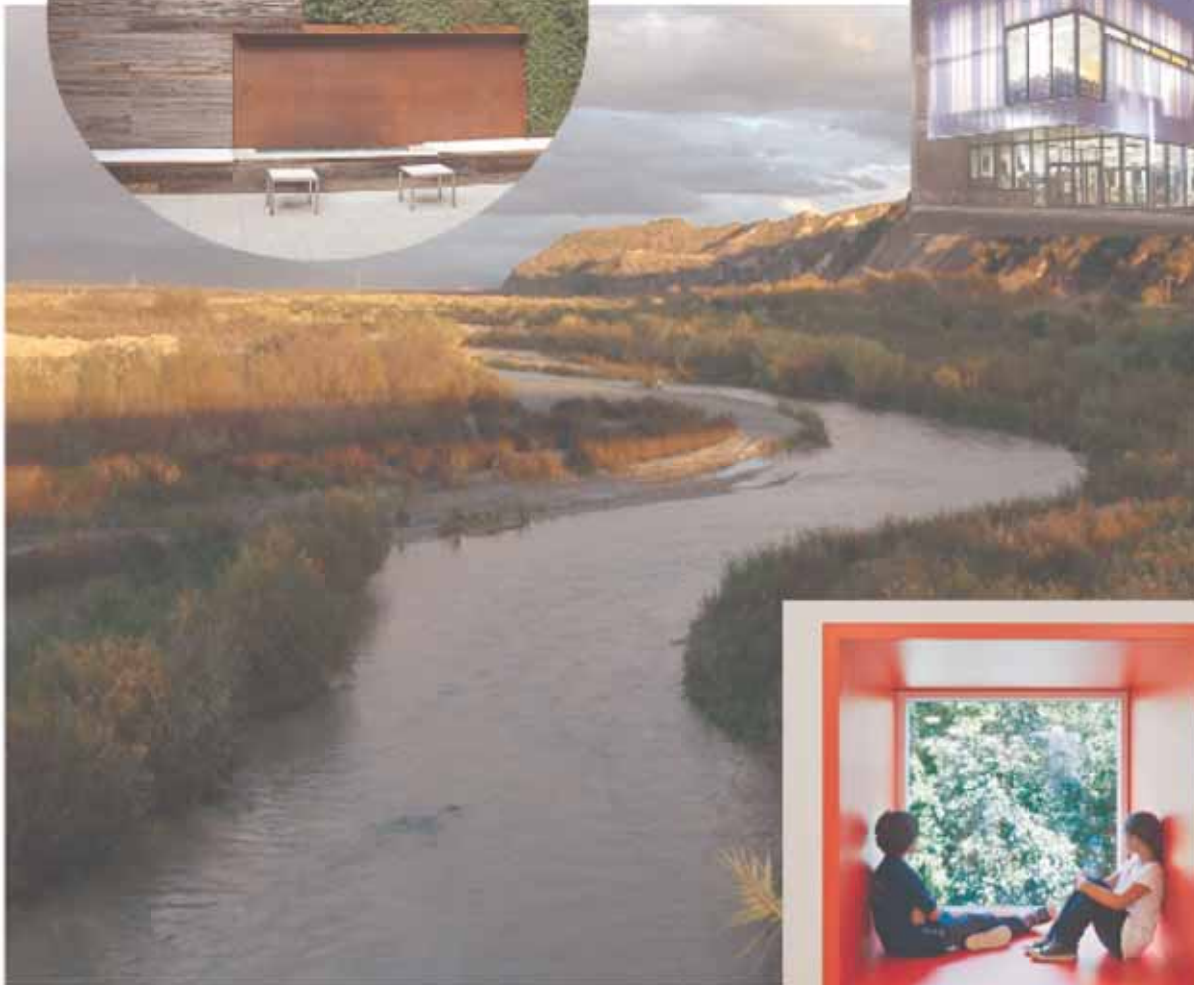








Inspired by the colors of the sea and sky



Inspired by the Colors of the Santa Clara River



Inspired by art and playful spaces

AESTHETIC + BUILDING MATERIAL INSPIRATION





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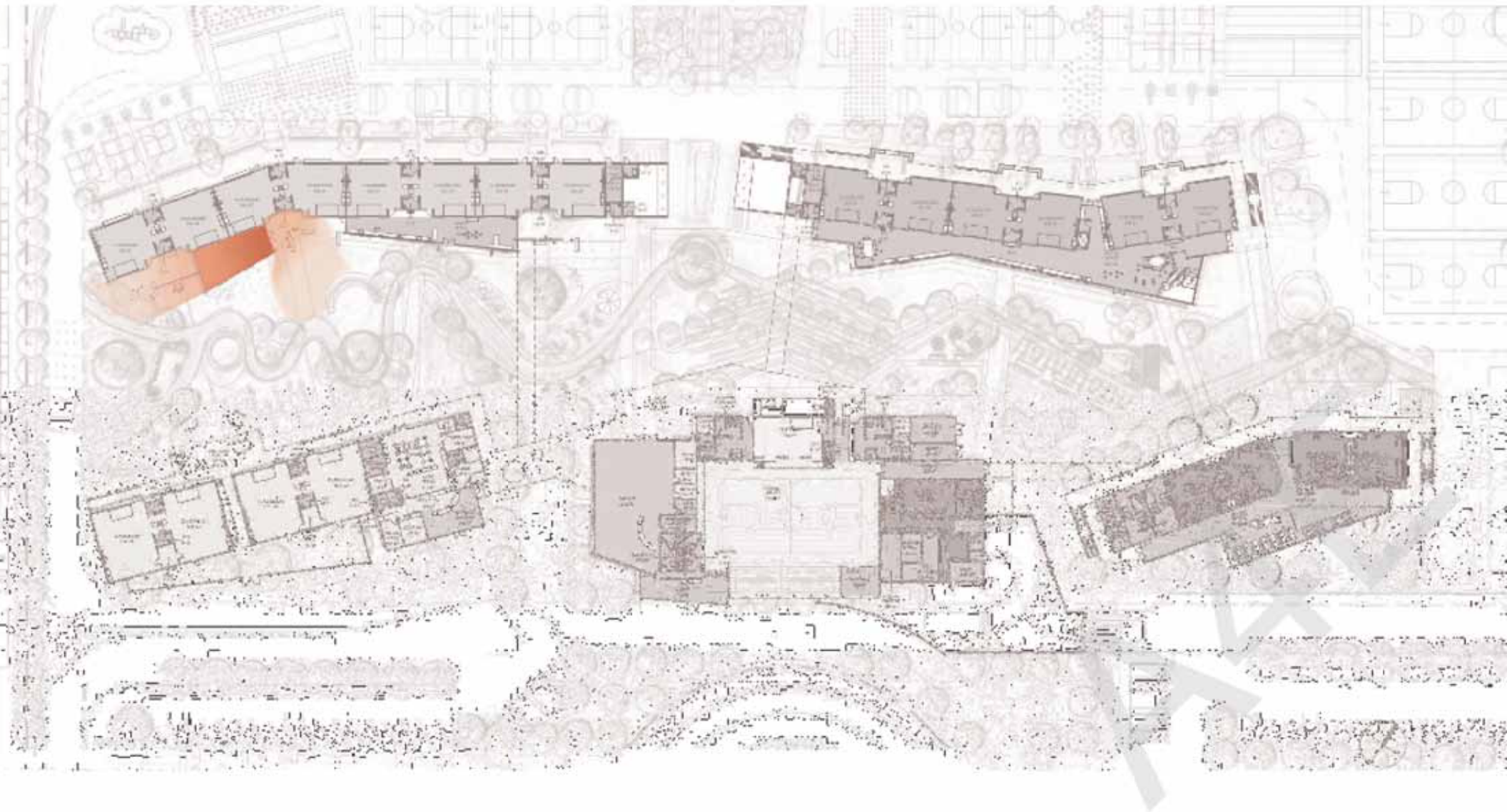
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# Nature

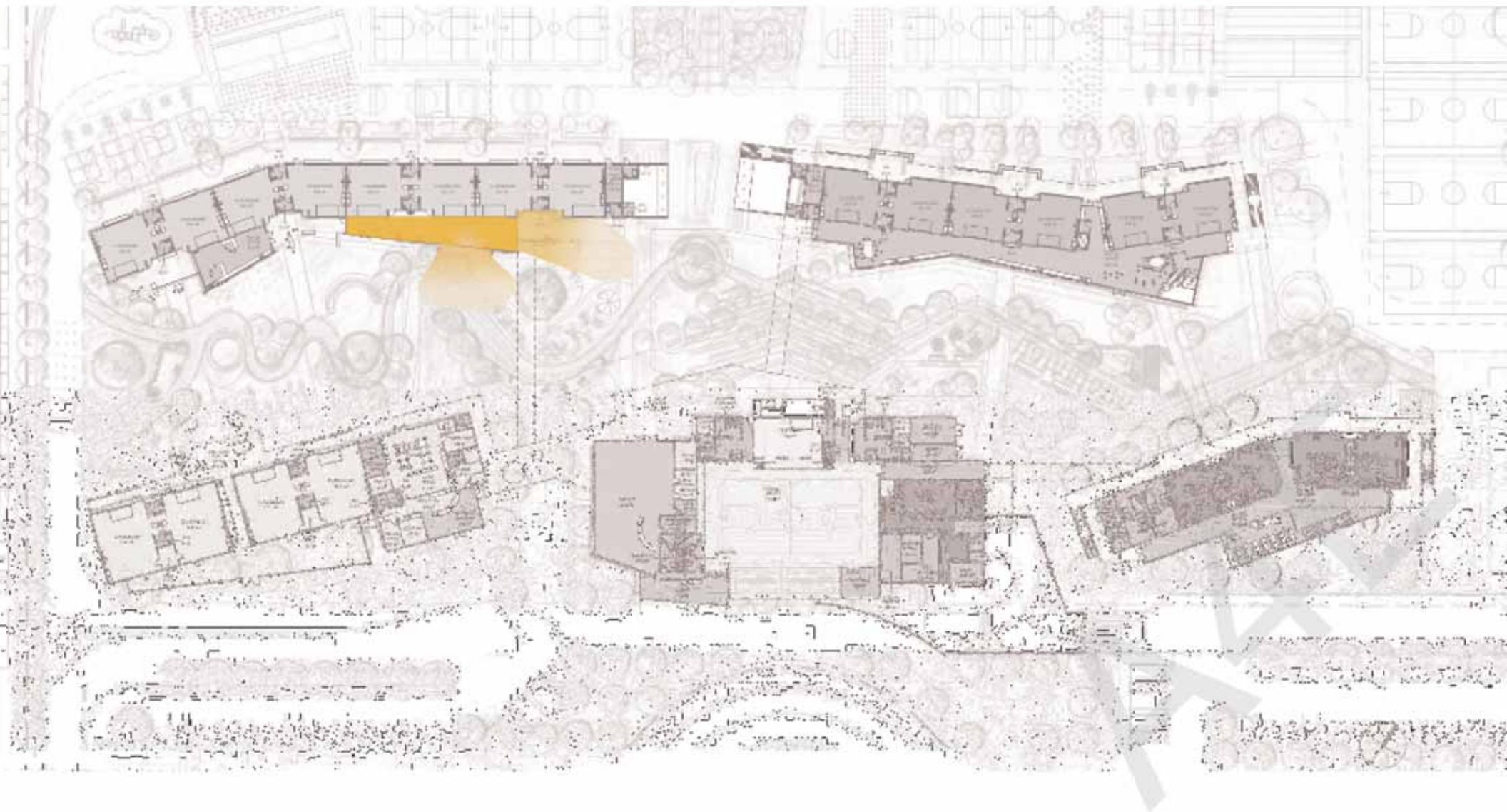


# Building/ The Workshop

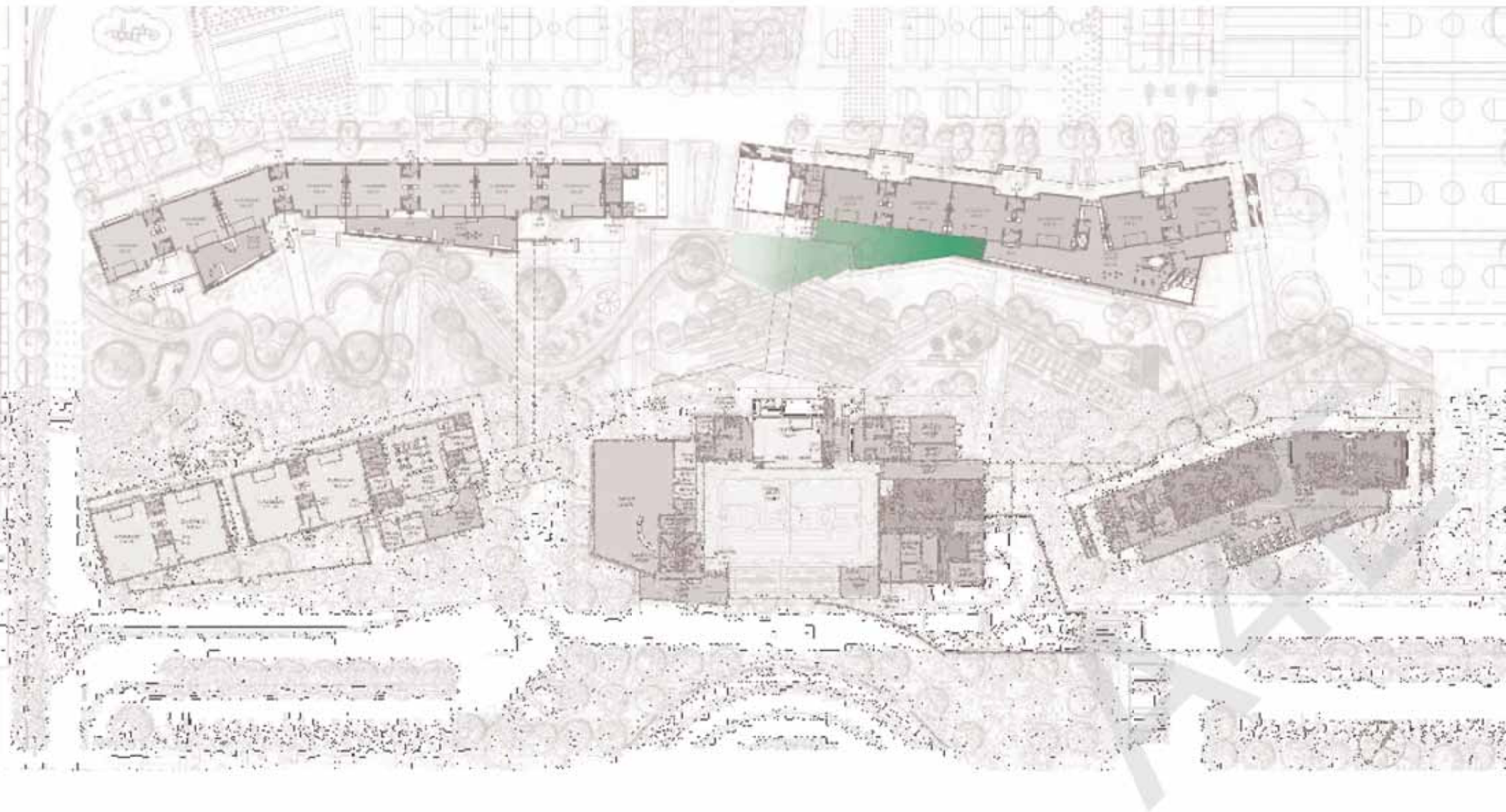




# Reading

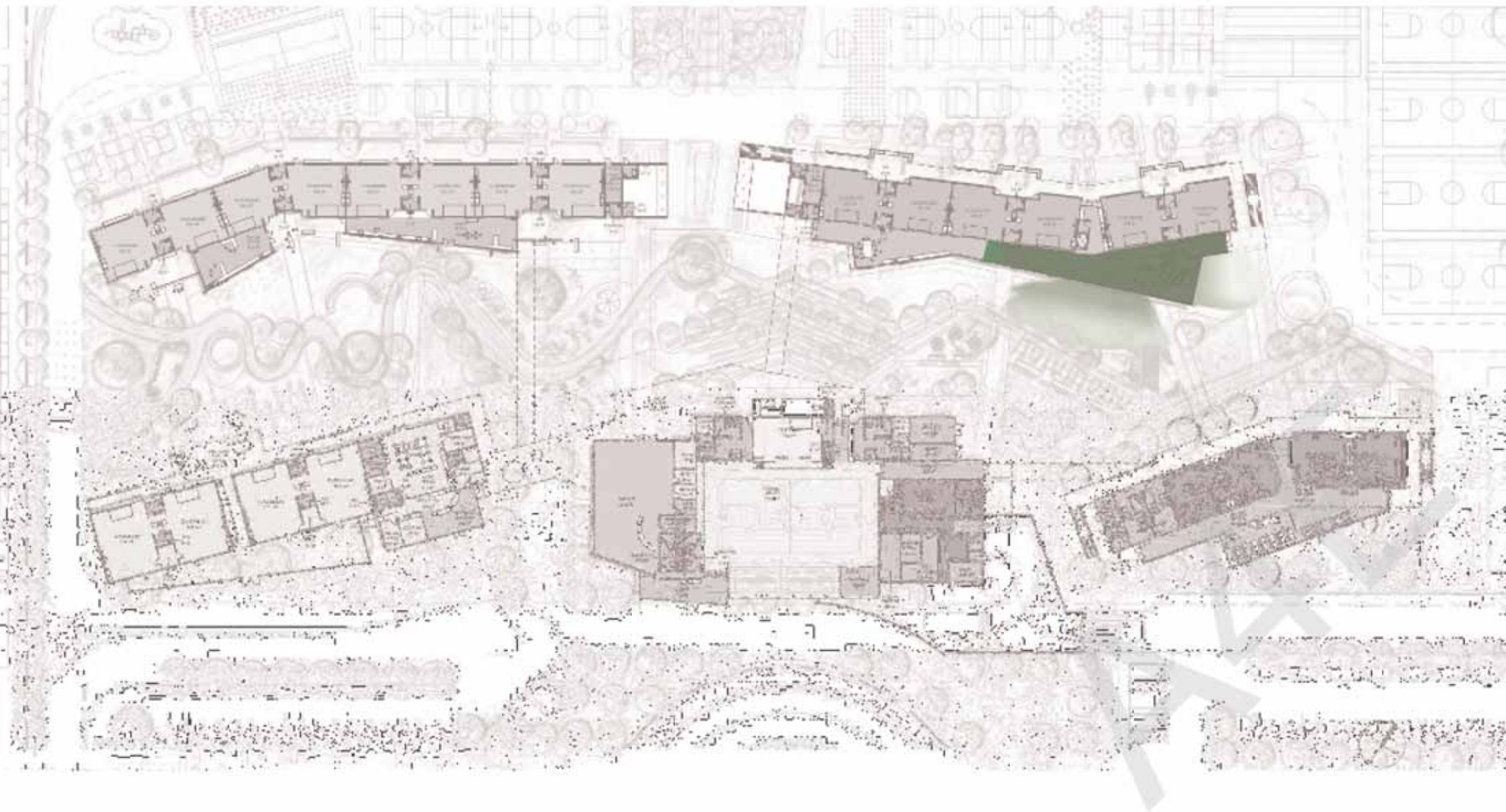


# Ceramics + Sculpture





# Performing + Fine Arts



# Digital Arts





# Science

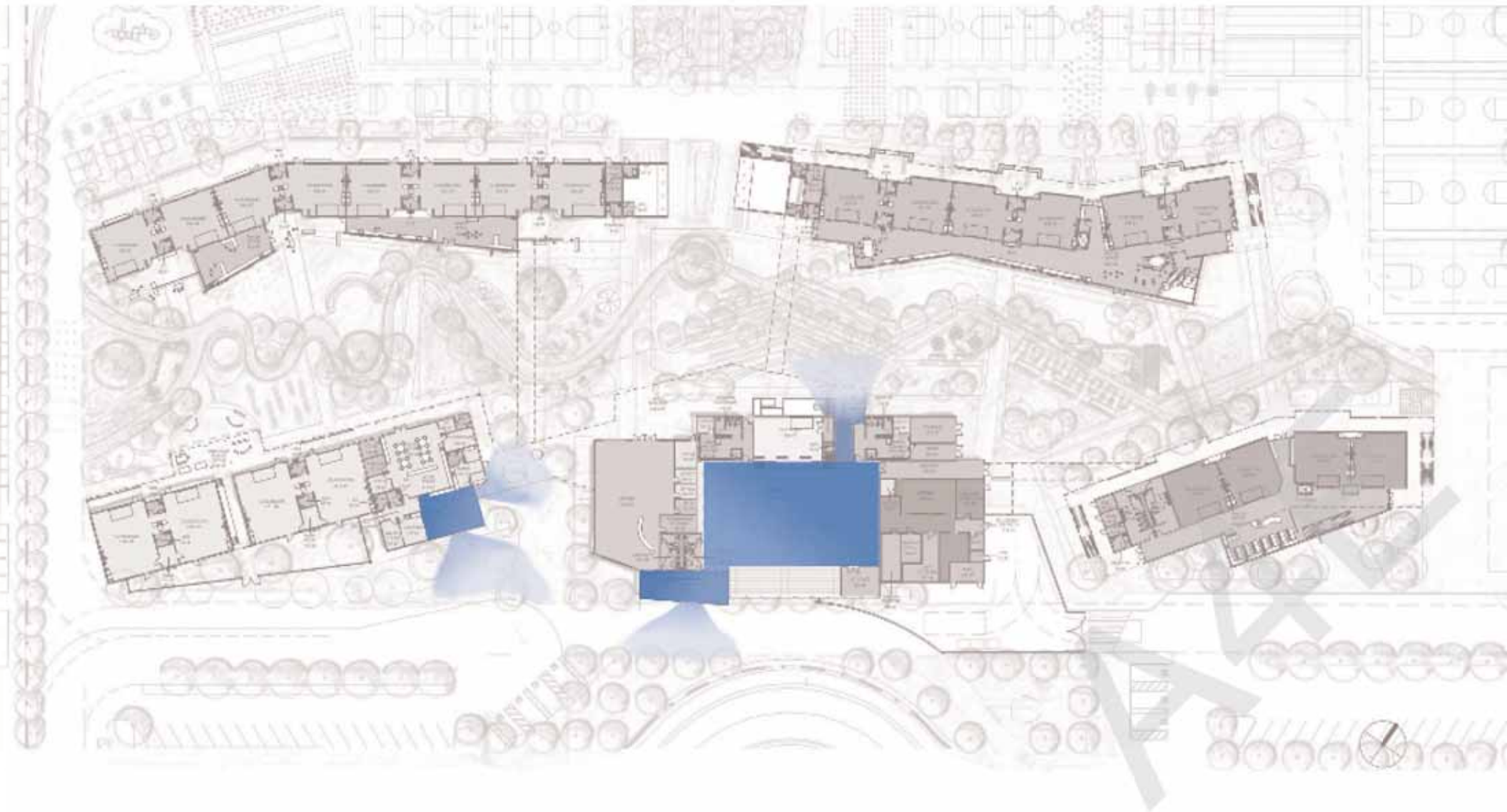


# Student Lounge





# Community Maker Spaces



# STEAM for All!

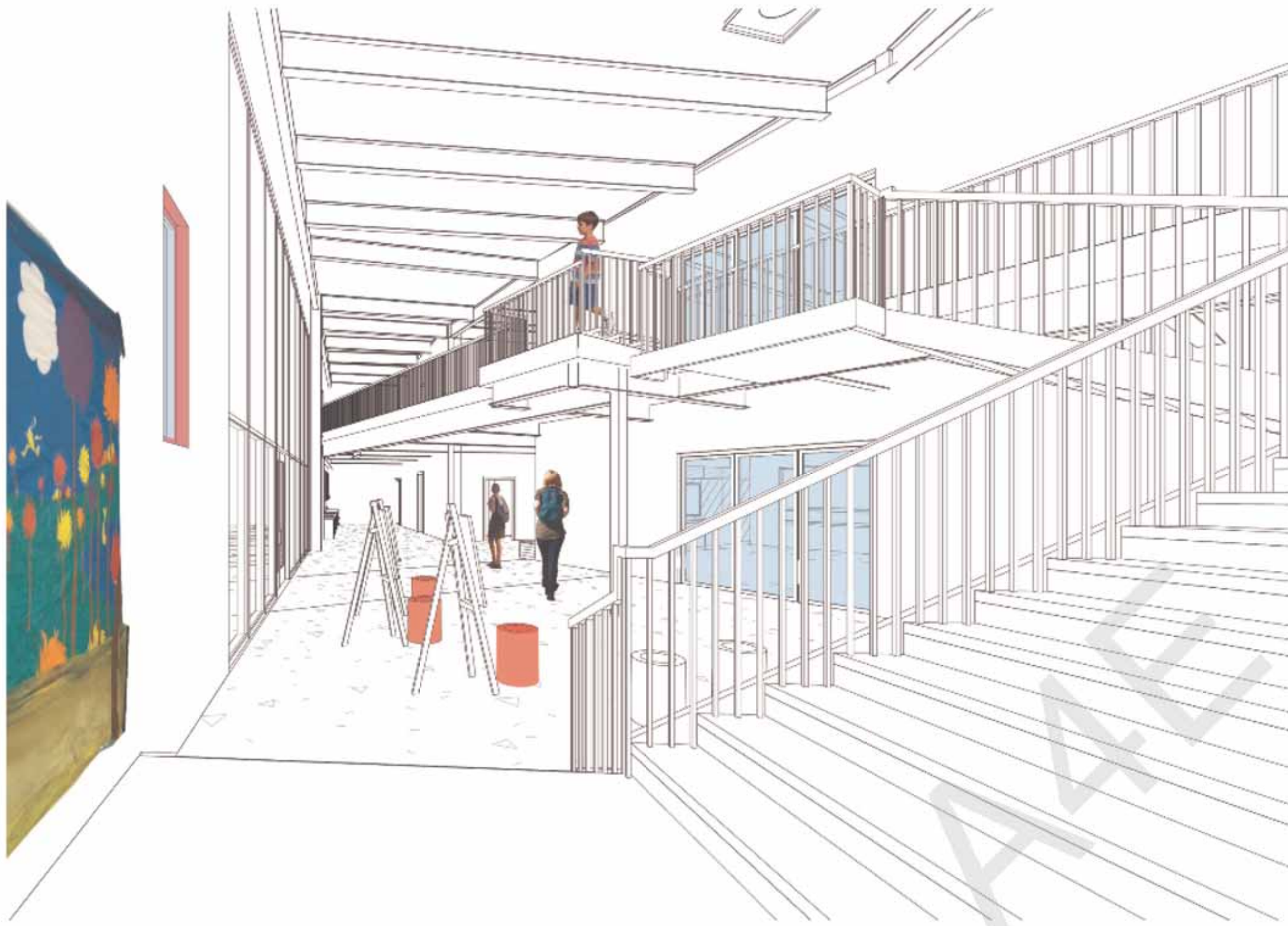






















# Possibilities in your community

Cultural Themes

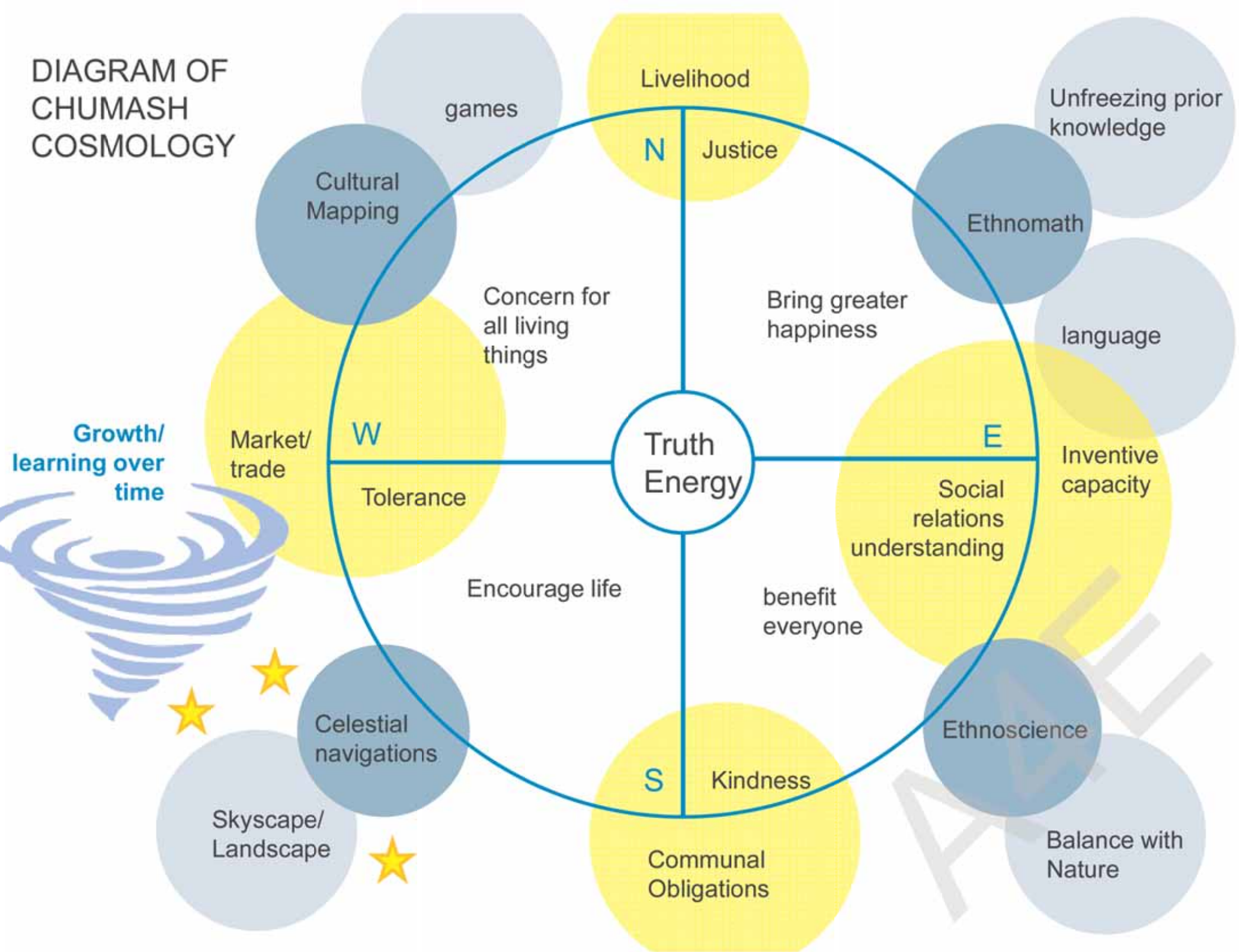
Community Engagement

Inspiration

The Building as a Teacher

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DIAGRAM OF  
CHUMASH  
COSMOLOGY

















RIO STEAAM SCHOOL

LANDSCAPE CONCEPT DESIGN

Katherine Spitz Associates, Inc.  
Landscape Architecture

May 21, 2011



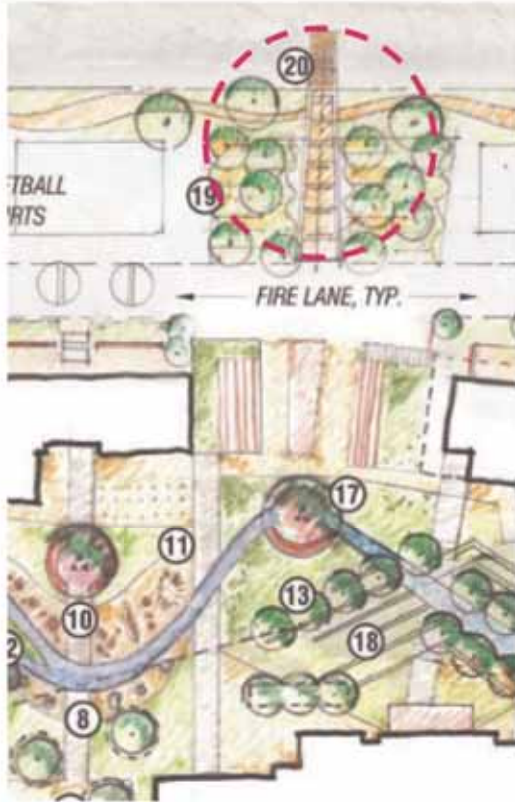








# River Study



LANDSCAPE ELEMENTS:  
DETENTION BASIN

SCIENCE

MATH

ART

STEAM

TECHNOLOGY

ENGINEERING



STORY TREE

MEANDERING  
RIVER

MUD WALK

AMPHITHEATRE

SUSTAINABLE  
IRRIGATION

STEAM

AGRICULTURE

TOMOL

ECOLOGY

TRIKE PATH

ETHNOBIOLOGY

# Next Steps

Set **Goals/Vision**

Give **Permission**

Provide **Resources**

Support **Professionals Developing  
Network & Partnerships** with the Broader  
Community







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