

WILKES

ELEMENTARY
SCHOOL

BAINBRIDGE ISLAND, WASHINGTON





01

OVERVIEW

strong MINDS,
strong HEARTS,
strong COMMUNITY

Captain Charles Wilkes
Elementary School
Mission Statement



WILKES ELEMENTARY SCHOOL is embedded on Bainbridge Island, a 65 square mile island located in the Puget Sound of Washington state. The facility replaces an existing school on a 9.33 acre site in a neighborhood surrounded by low density residential, agricultural land, parks and open space. The existing school remained operational throughout the construction of the new facility and was demolished to make space for outdoor play areas and fields for both the students and the community at large.

Wilkes Elementary School is a 64,000 square foot single story structure built

primarily on the upper western terrace of the site with the gym, commons, music, and food service stepping down the slope to stitch together a previously divided site; doubling the school's usable site area. The facility addresses the need for the projected enrollment of 450 students and has 16 core classrooms, 3 kindergarten classrooms, 1 pre-kindergarten classroom and special education spaces, specialized learning classrooms for art and music, administration, a media center, commons, and gymnasium. Site area has been identified and preserved for a future addition; allowing a land-locked

community appropriate flexibility to accommodate grade realignment for a K-5, 550 student facility.

DISTRICT MISSION

The mission of the Bainbridge Island School District is to help all students become successful learners, caring individuals, and responsible citizens.

DISTRICT BELIEFS

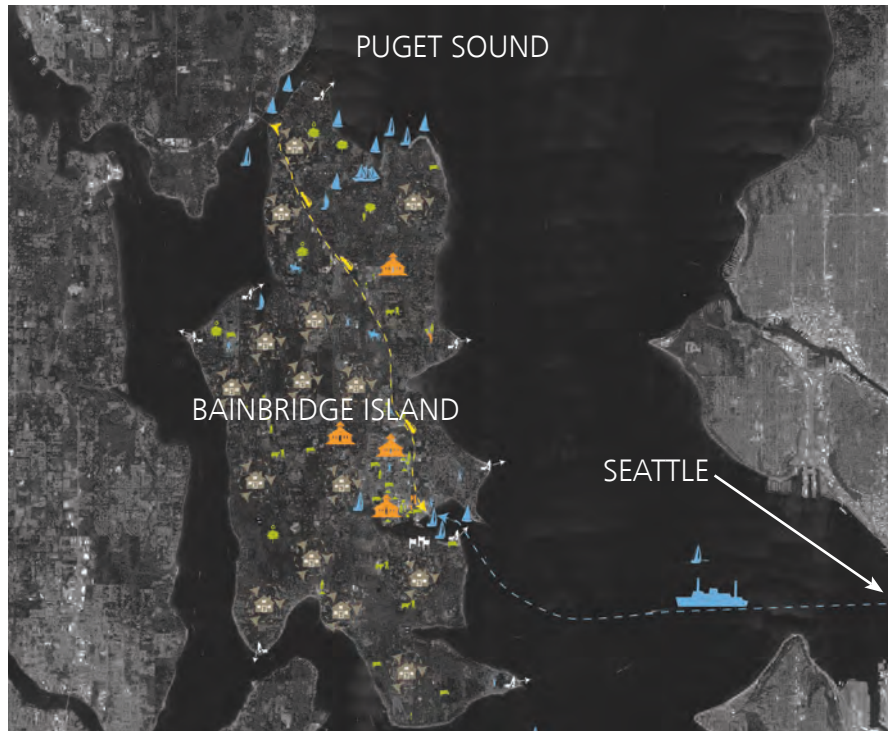
- :: Every student can learn
- :: Learning is the key to a better world
- :: An educated and informed society empowers responsible citizens
- :: Students must share responsibility

for their learning and success, and should acquire the skills and interest necessary to successfully benefit from the rewards of lifelong learning

:: It is essential for students to respect personal differences, value social diversity, and appreciate the multi-cultural heritage of our democratic society

:: The family and larger community play an invaluable role in the educational process. Schools must involve parents as partners in learning and engage the community in students' educational experience

:: Accountability is necessary for achieving our District's mission and is shared by students, staff, school board, and parents



SITE CHALLENGES AND OPPORTUNITIES

The building design is informed by specific opportunities and challenges that existed on the site. Challenges included: a steep slope that bifurcated the campus, dividing the buildable site into two terraces with as much as 22' of grade change between them; dangerous sight lines that prevented vehicular access to the upper site, requiring collaboration between the School District and the Fire Department that resulted in a municipal land exchange; a class III wetland and required buffer; no municipal sewer; and a dominant north/south buildable area resulting in a predominantly east/west building orientation which is opposite of ideal for successful daylighting. Important opportunities included: territorial views from the top of the hill; significant stands of evergreen trees along the south and west boundary lines; a strong established connection with the community; programmatic relationship with a nearby working farm; abundant access to the natural environment; and strong community involvement.

KEY

- | | | | |
|--|--------------------|--|---------------------|
| | Café | | Points along Island |
| | Winery | | Trails |
| | Body of Water | | Horseback riding |
| | Park | | Fields |
| | Preserve | | Performance |
| | Ferry to Island | | Golf courses |
| | Boating culture | | Arts |
| | Elementary Schools | | Markets |
| | Main route | | Farms |
| | Neighborhood | | |

ADJACENT FIRE DEPARTMENT PROPERTY

EXISTING SCHOOL

UPPER TERRACE

LOWER TERRACE

WETLANDS





02

EXECUTIVE
SUMMARY



DESIGN STATEMENT

Emerging from the hillside on a steeply sloped site, Wilkes Elementary School visually knits the structure with the natural environment. The building is both carved into the hillside and nestled at the base of the forested backdrop.

Wilkes is a network of education and a spatial continuum. As a result of the visual and physical connectivity, Wilkes is able to address the needs of the whole child, so that powerful learning happens everywhere.

Small learning communities break down the scale for primary learners. Classrooms are located at the heart and linked on each end, providing an “in-the-round” circulation pattern that prevents both the feeling and effect of isolation that occurs when communities of learning are formed by strips that extend from a single spine.

Shared amenities surround the classroom core for equal access for all learners. Specialized learning support is designed along the western, more private edge; while spaces

that encourage community use are aggregated along the eastern edge. This creates a clear public-private division and security, without barrier or exclusion.

Bars of classrooms alternate with sloped exterior courtyards to provide natural north daylight to all learning spaces and to eliminate any physical division between play and learning. Students experience a seamless transition from classrooms to interior and exterior learning and play spaces.

Wilkes eliminates the physical division between play and learning; addressing the needs of the whole child, so that ***powerful learning happens everywhere***

NE DAY RD

MADISON AVE NE

SITE PLAN

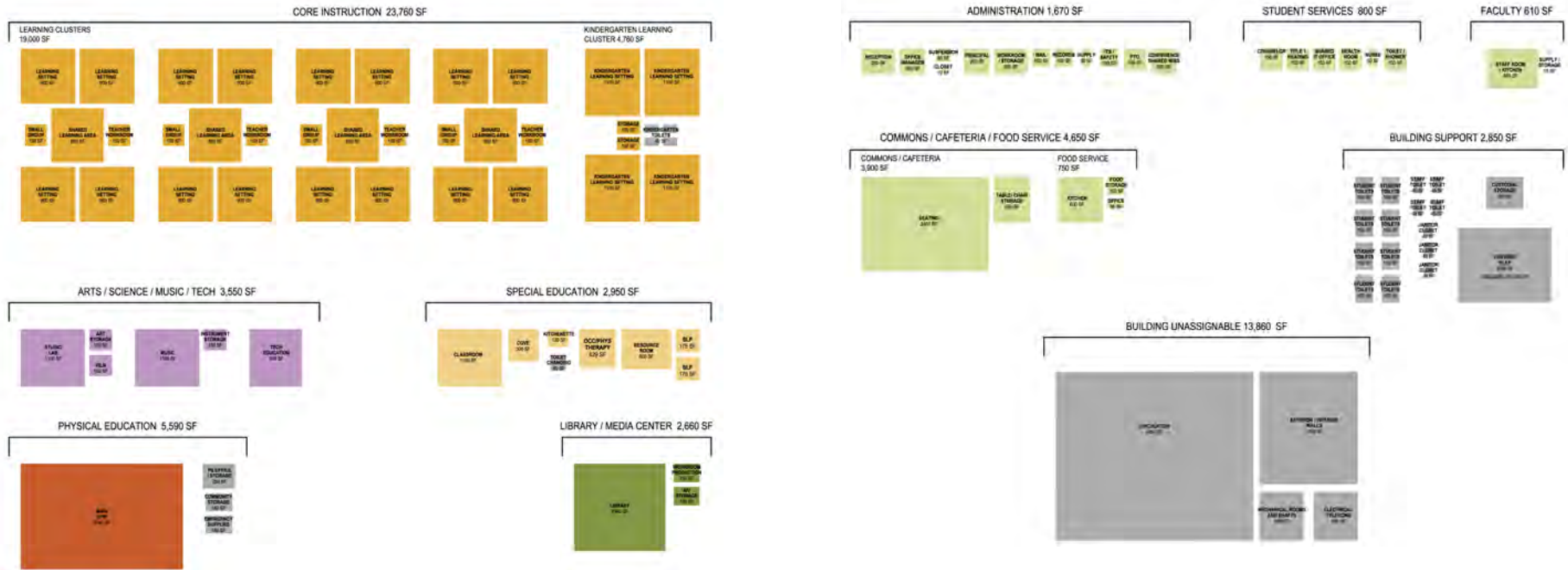
- 1. Bus Loop
- 2. Parking
- 3. Entry Plaza
- 4. Field
- 5. Garden
- 6. Service Road
- 7. Wetland Buffer
- 8. Service Area
- 9. Fire Lane
- 10. Pre-K - K Play Area
- 11. Play Area
- 12. Administration
- 13. Pre-K - Kindergarten Classrooms
- 14. Classrooms
- 15. Special Education
- 16. Art
- 17. Library
- 18. Music
- 19. Commons
- 20. Gym





03

SCOPE +
BUDGET



SCOPE + BUDGET

Wilkes Elementary School was replaced with a new facility to meet the demands of growth and to provide a facility that responds to the interdisciplinary needs of today’s learners.

The new Wilkes Elementary School replaces an existing facility that dated from 1954. The scope of work for the new facility included the development of Educational Specifications, programming, master planning, environmental design and design services from conceptual design

through construction administration and post occupancy evaluation.

Additionally, the existing school had to remain occupied and in-use during the construction of the new facility, so a comprehensive phasing plan for building, parking and playfields was also developed for the site.

The construction cost for the facility was \$21 million. The scope included education specifications, 18 months of design and 18 months of phased construction.

The school is located on a 9.3 acre site that is surrounded by single family residential development and wetlands on the adjacent properties to the north and south of the site.

The 63,000 square foot facility will address need for the projected enrollment of 450 students and contain core classrooms spaces arranged around shared learning facilities in addition to preschool, kindergartens and standard administration and shared program spaces.

The new Wilkes Elementary School was designed to support dynamic styles of teaching and learning. The strong connection to place, adaptability and connectivity of space and the choice of timeless and durable materials assure that this facility will remain as a strong civic symbol in the community for

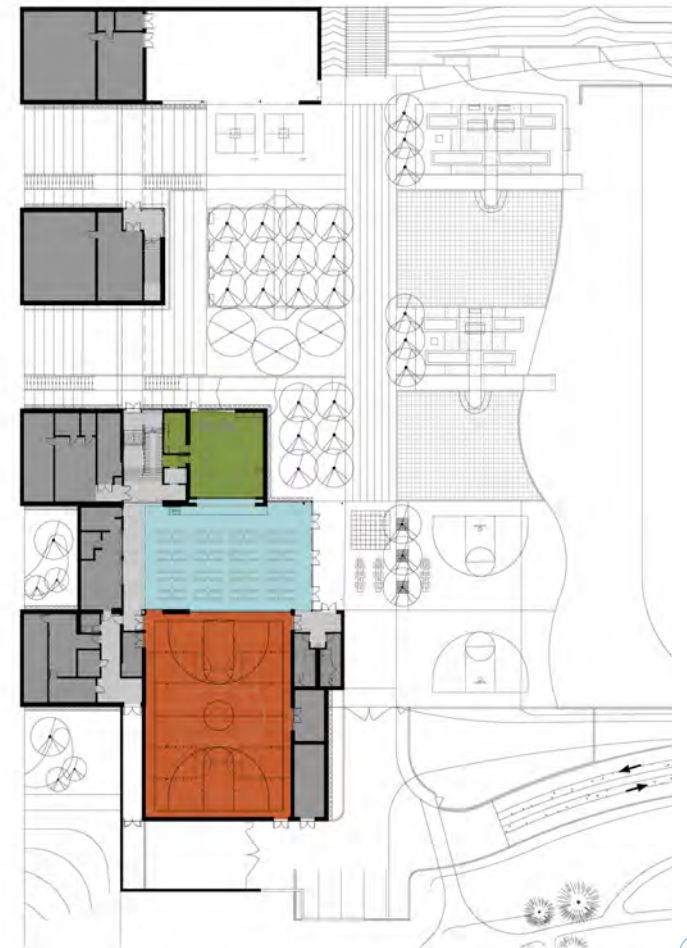
evolving generations

of Bainbridge Island young people.

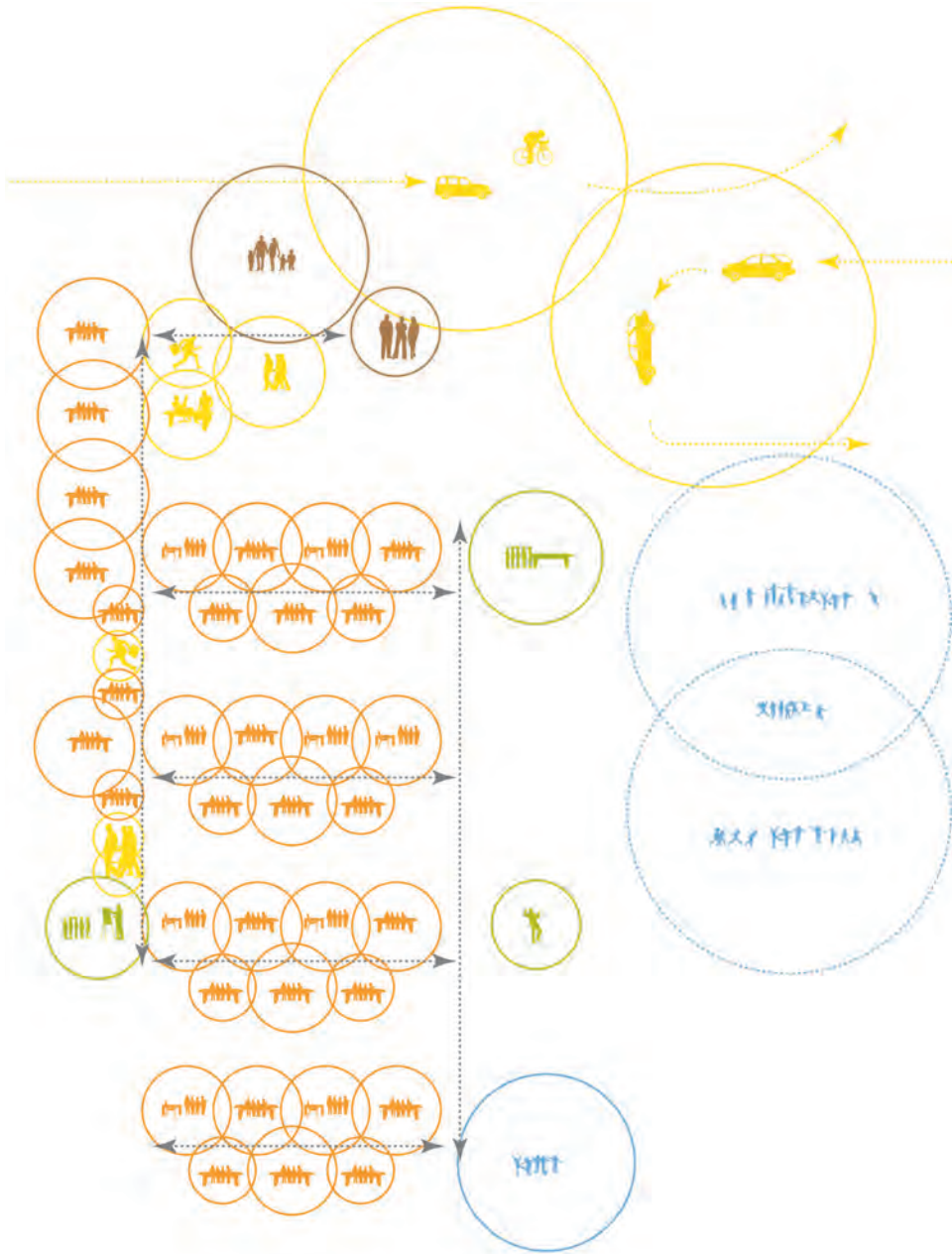


UPPER LEVEL FLOOR PLAN

- | | |
|--|--|
| Administration | Gym |
| Classroom | Cafeteria / Commons |
| Special Education | Circulation |
| Library + Music/Art | Support |



LOWER LEVEL FLOOR PLAN





04

COMMUNITY
ENGAGEMENT

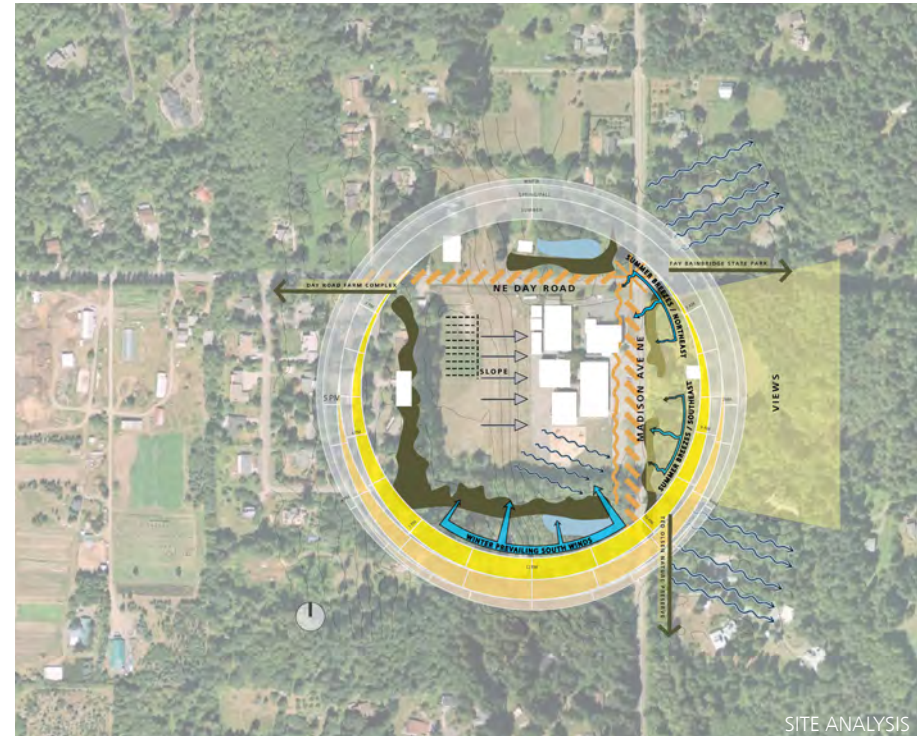
The strongest design driver was the community and their dream to create a school that

belongs to this place;

that literally opens itself to the outside and invites the whole island in.



DESIGN MEETINGS HELD ON SITE



SITE ANALYSIS

We have developed a long standing relationship with the Bainbridge Island School District since 2006, which benefitted the development of a unique and interactive planning process. Our built work for the District includes renovation projects and planning exercises, as well as two new buildings.

What we have learned through this process is that community involvement is critical for success on the Island. As a result, we strategized a planning process between the design team and “project stakeholders.” In defining

“stakeholders,” we went well beyond District and school staff, students and families to cast as wide a net as possible. This allowed us to tap into the passion and talent of the Island, created mutual ownership and responsibility for project outcomes and strategically aligned the District and design team with a highly educated, outspoken community that places equal value on nature, art, education, sustainable development and fiscal responsibility.

Direct project stakeholders included school and district administrators,

staff, parents, community members, school board members and students. Design process participants also included neighbors, community agency leaders, island design professionals, artists and representatives from the District’s other elementary schools.

Community engagement can be best described as a barn-raising based on a dream. To create a school that belongs to this place; that literally opens itself to the outside and invites the whole island in. Engagement process highlights include: all design meetings held on site; selecting designers and consultants

who live on-island and have kids who attend Wilkes; meeting with the school board bi-weekly throughout; partnering with the PTA to solicit and select local artists for commissioned work for the new school (installation pending); visiting children’s museums, heritage farms and public gardens with the committee; working with the students to develop the color palette through an art project to make building tiles; and organizing volunteers to salvage art, plants and bricks from the existing school for distribution to Wilkes alumni.



COMMUNITY GROUNDBREAKING CELEBRATION



CHILDREN'S MUSEUM TOUR

COMMUNITY VISION

To encourage broad thinking, the design team held an open invitation community meeting before schematic design began. Hundreds attended. The responsibility of this undertaking was underscored by presenting a timeline that illustrated 1954 and 2010 global events with regard to leadership, headlines, economy, culture, and science. As a fifty year building, the participants were then asked to imagine the future (2060) and how an educational facility designed and built for today's needs can also meet the needs of the island tomorrow.

With that perspective, visioning

participants were asked to choose and describe pictures that represented their aspirations for a new facility when asked:

WHAT DOES SUCCESS LOOK LIKE?

- :: Creative curiosity
- :: Joy
- :: Inspiration
- :: Diligence

WHAT IS AN IDEAL LEARNING ENVIRONMENT?

- :: Beauty
- :: Nature
- :: Tools for learning
- :: Growth

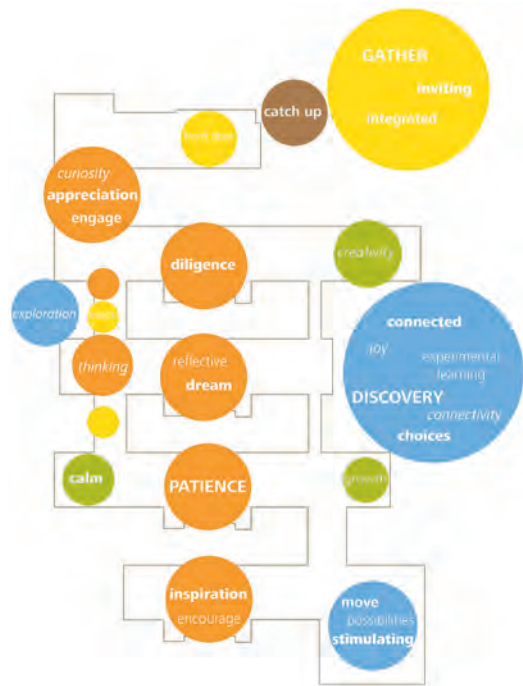
WHAT IS MOST IMPORTANT ABOUT WILKES | THE COMMUNITY | THE ISLAND THAT SHOULD BE REFLECTED IN THIS FACILITY?

- :: Give the community a building that represents our commitment to education and that will be able to be used by all
- :: Take care of the island for future generations
- :: Reflecting community diversities
- :: Celebrating the history and people of the island
- :: Be beholden to ecological and environmental principles
- :: Incorporate the history of Wilkes
- :: Reflect our deepest values
- :: Heal the site

COMMUNITY GOALS

The community engagement process established the following goals:

- :: Educate the whole child; integrate play and learning
- :: Facilitate collaboration
- :: Cohesive flow throughout the building with places to come together
- :: Connect to community and the environment
- :: Celebrate history of place
- :: Honor responsibility; be caretakers of the land and integrate the farm
- :: Ease of maintenance and economy of means



COMMUNITY VISION & BUILDING ORGANIZATION
 Reflecting the community belief that Wilkes should be built to embody their deepest values, spatial qualities within the school are embodied with the values expressed during the community engagement process that are appropriately relevant to the educational process occurring within each space.



Creative, Thinking



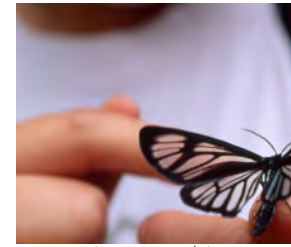
Hands-on experience



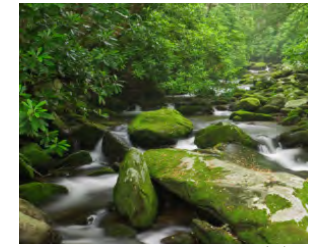
Experimental Learning



Inspirational Space



Patience, Achievement



Connectivity



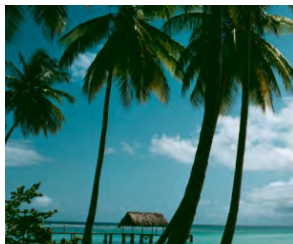
Diligence



Resourceful



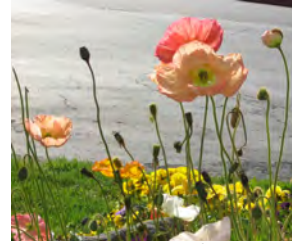
Calm, Beautiful, Natural



Open and connected



Calm, Reflective



Serene, Natural, Inviting



Integrated with nature



Beauty, Possibilities, Light



Encouraging



Engaged, Connected



Tool for learning



Appreciation



Challenging



Bright Colors



Growth

PRIDE IN SCHOOL AND COMMUNITY

Public entries, learning courtyards, gardens and outdoor play areas convey the message that this is a place of learning and civic engagement. The covered entry encourages casual interaction between staff and parents.



BEACON OF LEARNING

Public gathering spaces are aggregated along the east side of the building and are interconnected by the main hallway which runs the length of the building from the entry plaza to the commons, bridging over the courtyards. Prominently located at the front door, the media center emerges from the hill as a beacon of learning that shelters covered play below.







MUSIC, THE COMMONS, AND THE GYM are located on a lower level, on grade with the open play areas and field. These three core elements are co-located and designed to be an expanding venue for performance; now the largest on the island.



A young girl with long dark hair is sitting on a windowsill, reading a book. She is wearing a dark top and dark pants. The room is brightly lit with natural light from large windows behind her. The windows have a grid pattern. The overall color scheme is warm and yellowish-orange.

05

EDUCATIONAL
ENVIRONMENT

The project blurs the line between social and educational spaces; there is *no division between learning & play*



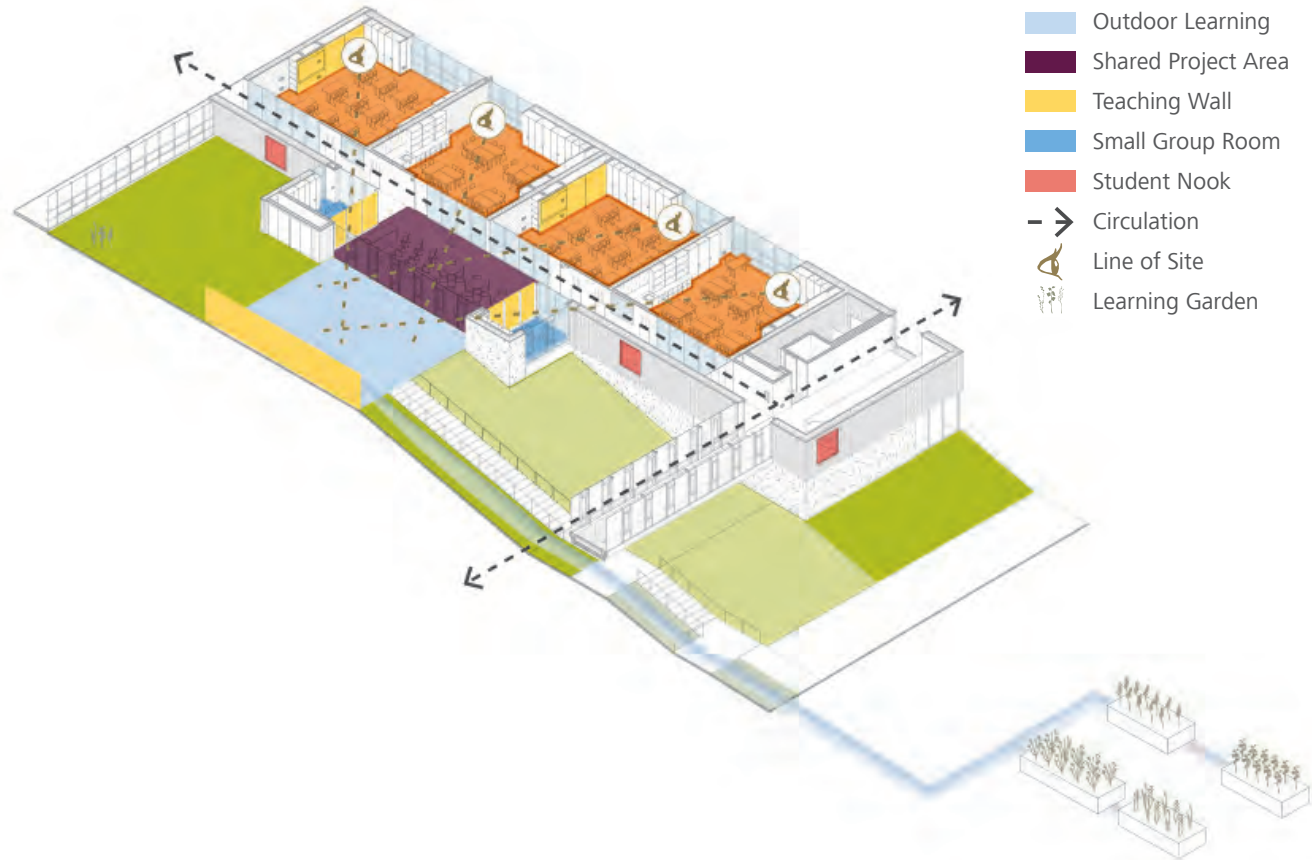
Creating clusters of four classrooms intentionally breaks down the scale and creates four intimate communities of 100 students; allowing strong relationships with their teachers and peers within the larger school culture. The arrangement also fosters collaboration and connectivity, and creates opportunities for variation

in scales of learning - from multi-classroom gatherings, to intimate individual experiences.

Flexible learning spaces are designed to be spaces for students to explore science or art, develop and exhibit project work, break-out into small groups for personalized learning or come together with multiple classes.

FLEXIBLE LEARNING

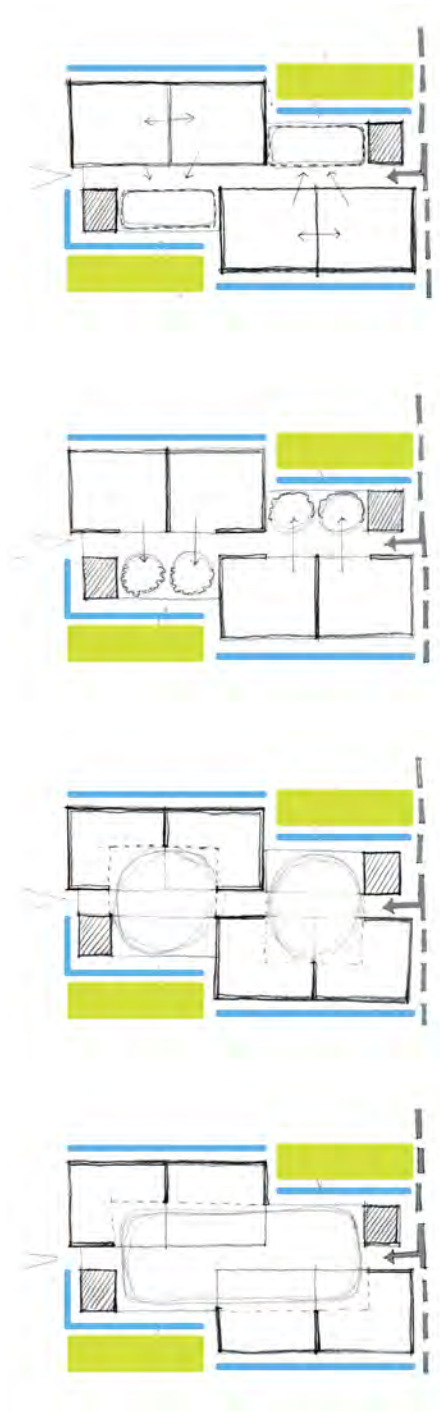
- Classrooms
- Amphitheater
- Outdoor Learning
- Shared Project Area
- Teaching Wall
- Small Group Room
- Student Nook
- Circulation
- Line of Site
- Learning Garden



To support project based learning, the project creates and connects spaces with transparency to allow educational opportunities to occur everywhere, support a range of learning styles, and blur the line between social and educational spaces.

Structural regularity and clear spanned wings provides future flexibility.











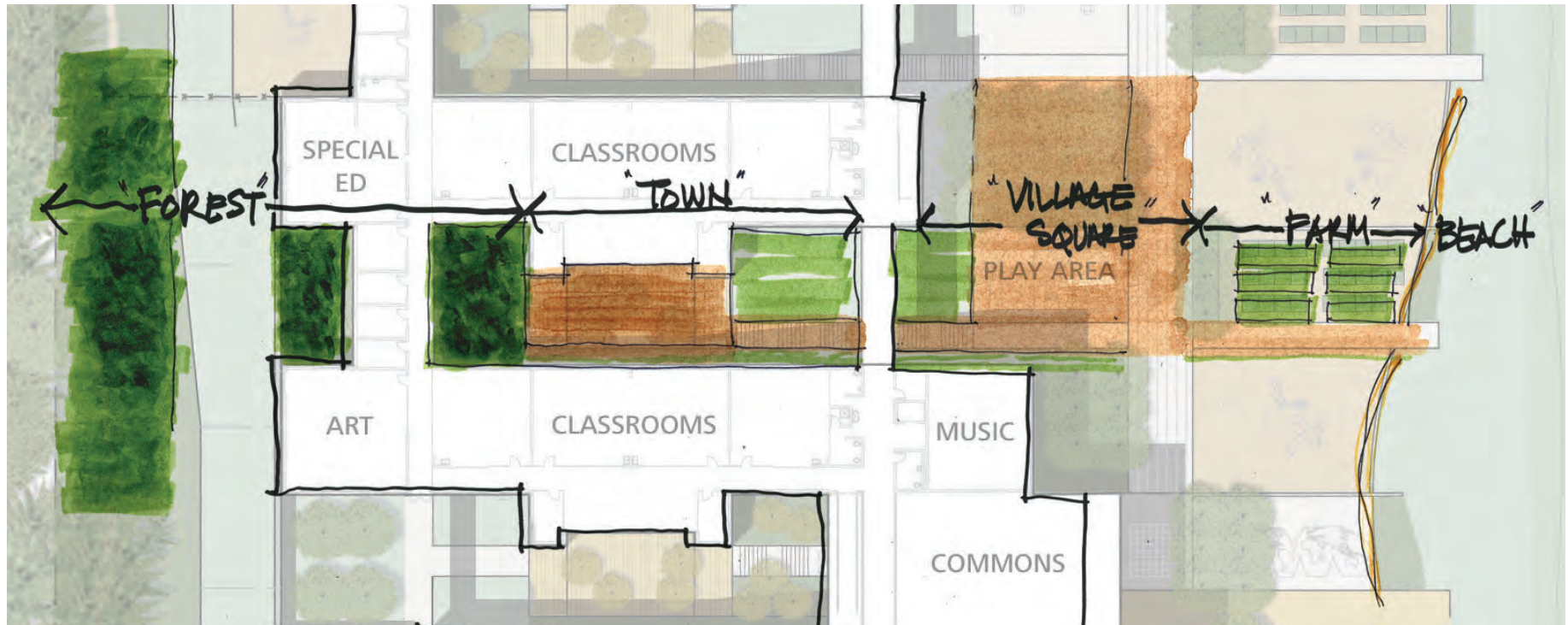




06

PHYSICAL

ENVIRONMENT



The whole site delivers the message that

this is a place of learning and civic engagement;

reinforcing the connection between learning, community and the remarkable island setting.

SITE ZONING

ENTRY PLAZA

Civic pride begins at the public entry and the public image of the site – how one enters the site and finds their way to the main office is the first impression.

THE COURTYARDS

The courtyards provide access to light from all interior spaces, views of nature from inside and tie the interior learning spaces to the exterior learning spaces.

THE SLOPE

The slope between the school building and the lower field is an integrated part of the learning environment for Wilkes. Pedestrian movement connects from the courtyards down to the paved play space, traversing the slope while providing access to an exterior amphitheater.

PLAY AND GARDENS

Immediately outside the Commons is a large porous pavement area with a variety of play opportunities and integrated planters for

vegetable gardening that are open to the schools use and community involvement. Proximity to the parking lot and good visual access from the public way makes this area easier to supervise and convenient for community access after school hours.

RECREATION/PHYSICAL EDUCATION ZONE

The lower portion of the site is devoted to active play and a large open field. The field is easily accessible to the community and is extensively used after-hours.





EMBRACE THE SITE

The overall character fits into the surrounding rural character, while providing an up-to-date place for learning and community.

The site has zones of use: active learning, passive learning, play learning, circulation, social spaces, community places, work/creating places or gardens.

The design communicates the importance and value of the school in the community. Attention was given to key site areas: public entries, student learning courtyards, the gardens, and the outdoor play areas. Each of these areas is part of the character of the site that, as a whole, delivers the message that this is a place of learning and civic engagement.

Public entries are designed to be civic spaces: with ample space for bus and parent drop-off; with enough area, edges and detail to communicate that this is a space for gathering; chatting informally with the principal, a teacher or another parent; or mingling after an event. In short, it is a plaza entry that matches the quality of the architecture and encourages civic engagement and positive social interaction. Students, parents, visitors and teachers entering through this space feel proud of their school and community.

The design of outdoor spaces for the students communicates a similar message with focus on play, learning, interaction and exploration equally.

ENHANCING THE ABILITY OF THE PLANET TO SUPPORT ALL LIFE

Several sustainable priorities were established through collaboration with the school district. These include: outdoor education spaces; stormwater infiltration through bio-retention areas and wetland restoration; 100% porous paving; ample airflow; natural cooling; reducing the material impact of construction; and maximizing the benefits of natural daylighting.

Additional measures include: triple pane windows in rooms with high percentages of glazing; ultra low-flow fixtures; an innovative L.O.S.S (Large On-site Septic System) designed to treat all waste water on site; air handling units with heat recovery; a hybrid heating system consisting of fifty 300' deep geothermal wells; a water-to-water heat pump with

electric boiler assist to cover the peak heating loads and morning warm up; and radiant floors throughout.

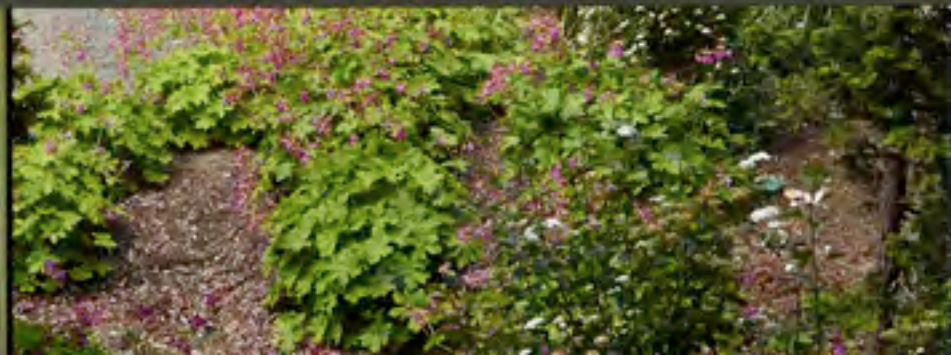
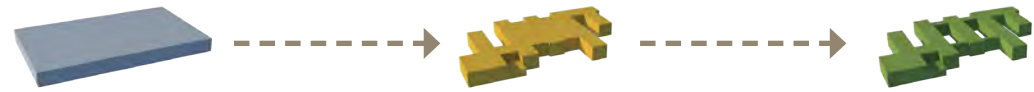
Occupants benefit from operable windows, ceiling fans and non-toxic finish materials that contribute to a high quality indoor environment with an increased comfort zone.

The classroom wings are joined by a circulation network that allows for several options for paths of travel, all of which open onto views of exterior learning areas.

Wilkes Elementary School benefits from a fully integrated approach to systems design that was essential to achieving light-filled spaces, opening up to views, and reinforcing the connection between learning, community and the remarkable island setting.

NATURE AS TEACHER

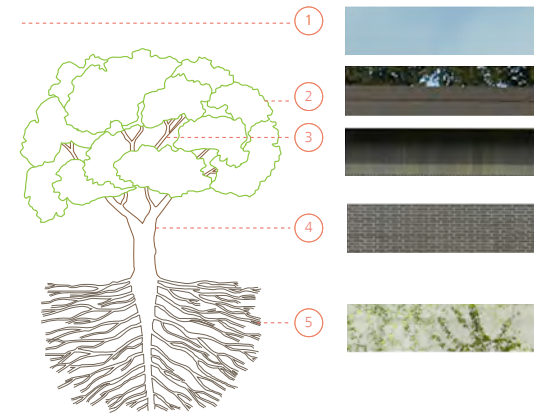
Allow nature to teach by creating self-sustaining restorative ecosystems and providing access to adjacent wetland.



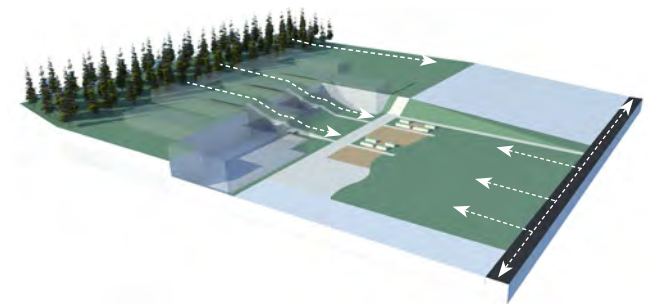


RESPECT NATURE

Provide spaces that communicate a respect of the natural environment and a sense of civic involvement and facilitate creative play, learning and teaching.



- ① Sky -----> Sky
- ② Leaves -----> Existing Trees
- ③ Branches -----> Wood Siding
- ④ Trunk -----> Masonry Base
- ⑤ Roots -----> Vines + Concrete



A HILL for rolling
and **AN AMPITHEATER**
for learning.





07

RESULTS

Wilkes has taught the design
team that SCHOOL starts
with STUDENTS and ends
in *community*

"I see how the building is evolving into an educational facility, and you know many of the thoughts that we had are certainly being embraced and enhanced, but I also see such a variety and I think when we provide something that is flexible, and then the individuality of the teacher is allowed to shine, and the individuality of the students."

Tamela Van Winkle
FACILITIES DIRECTOR

"In our old building, especially, it was not as conducive to having small learning groups or flexible grouping or being able to use the space in a different way. It was really narrowly focused on what we could do. Here there are so many opportunities to use it in a lot of different ways."

Amii Pratt TEACHER

"I love to come to school now because I can feel the sun on my back."

STUDENT

"I think when you have a traditional building with the one room it forces you to treat kids as if they are one group of students all doing the same thing because you don't have space to do much else. In this type of set up we are much more easily able to treat them as individuals and have them do individual types of things or have them work with small groups who are working on the same concept because there is the physical ability to do that."

Sheryl Belt PRINCIPAL



