Margaret Mead Elementary

Lake Washington School District
Samammish, WA

Executive Summary

"We are now at a point where we must educate our children in what no one knew yesterday, and prepare our schools for what no one knows yet." Margaret Mead

Margaret Mead Elementary is nestled into the Pacific Northwest Woodlands. The verticality of the brick facades is designed to emulate and compliment the beauty of the natural environment bringing forward the idea of the Space Between the Trees. Combining this Biophilic design with Margaret Mead's philosophy of Nature vs. Nurture brings forth the idea that the exterior of the building is the nature and the interior is the Nurture. The interior is where the students are safe and are able to learn in a welcoming secure environment. Exploration is encouraged through compelling spatial relationships throughout the building. Colors are derived from the Natural environment in bold and playful ways. The interior is dramatic and welcoming in the community zone and more quiet and nurturing in the private zones of the building. The idea of the space between the trees is played out through the playful placement of windows and how light is directed through the space... views into and through as well as out to the surrounding trees bring this concept together with the verticality of the two toned masonry façade complimented by the bright green "moss" elements found in the metal trim and siding – a color that will be inspiring on the darkest of PNW rainy days.

Schools are landmark facilities within any community. Margaret Mead Elementary serves as a community resource, a place for community events, meetings, sporting events and playgrounds. Most importantly it is a place for the communities youth – where their futures are nurtured for generations to come. This building is a contemporary landmark that will continually inspire greatness and bring joy to the community.

Lake Washington School district is the third largest district in the state of Washington adding 600 new kids a year. The client's vision for a successful project translates to a school that can be equitable for not only the students but the community at large.

Scope of work and Budget

The Lake Washington School District experiences unprecidented growth and overcrouded schools as a result. Margaret Mead Elementary is a 78,000 Square foot replacement school built on an occupied site resulting in a compact 3 story floor plan. Safety and planing were of the highest concern during construction. The new building found itself sandwiched between the existing school building to the East, a wetland to the North, a City Park on the West and Neighboring houses to the South. Once the school year ended, the original building was demolished and the site was redeveloped with new Playgrounds, a playfield and parking.

- 550 students k-5
- 30 Classrooms, Gym, Library, Admin
- Divided into public and private zones
- Construction Cost $32,106,325
- 16 acre site
- Occupancy September 2019

.

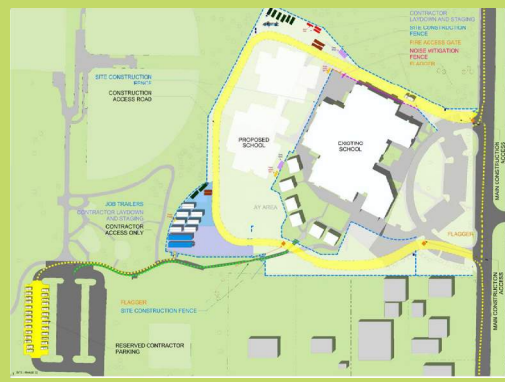
Sustainable Design Strategies

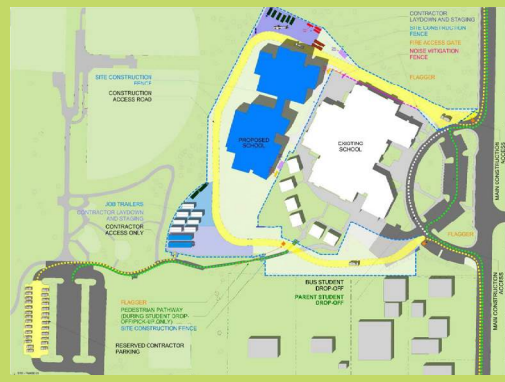
- Ground source heat pumps
- PV ready roof
- Low water landscaping for sustainable maintenance
- Landmark trees preserved on site that bring a sense of permanence and history to the building
- The building and its compact footprint are set into the landscape.
- Enhanced insulation in the walls and roof
- LED lighting throughout.
- Meets or exceeds district wide standards for sustainable solutions

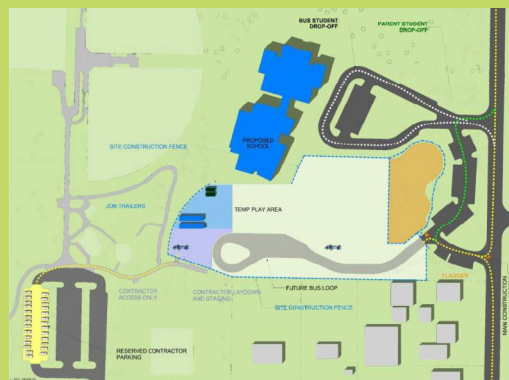
"space between the trees" - an architectural concept that derives from site and the desire to honor the natural landscape of the Pacific Northwest. We must use our natural resources as a teaching tool to teach children how important the natural world is. The inspiration for Mead comes from our initial visits to the site and the adjacent wetlands. An architectural concept was born. The project is inspired by the sense of intimacy and expansion of the PNW rainforest and sprawling coastline. Fueled by a sense of childlike adventure and curiosity this project presents itself as a community center prepared to inspire and educate children through active and adaptable learning modalities.

Project Phasing

Construction of Margaret Mead Elementary required a detailed set of phasing and safety plans. The existing school remained open through one year of construction -- an exciting learning opportunity for the students of the school, but a logistical puzzle for the contractor who had very tight site restraints. The GC/CM process allowed this plan to go into place long before construction began and be refined with the district and school throughout the design process.







Community

Margaret Mead Elementary is in the Sahalee/Inglewood neighborhood in Sammamish, Washington, suburb of Seattle. It is a neighborhood with a strong sense of community, low crime rate, and low poverty.

31% of the population is Asian (Chinese or Indian), 59% white, and 10% other.

The median home price is $1,175,000

Stakeholders

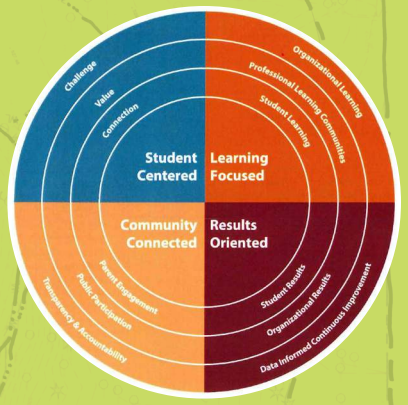
A SCIT team was formed in early design that included the principal and other key staff to plan engage with the architects providing valuable input to the development of the design as it moved forward.

Other team members included the District planning, City of Sammamish, community members, neighbors and students.

Engagement

Throughout the design process, the SCIT team was brought back in for review and comment, the District Oversight committee would review the project for cost effective design, Community meetings were held to inform the community and receive comments and concerns.

As well, the design team with the GC/CM continually worked to align value and cost.



A particular influence in our collaboration was the LWSD's "Values" chart and the core beliefs it expresses. During the process, we worked to keep these four values – Student Centered, Learning Focused, Community Connected and Results Oriented – at the forefront of our design, continuing to ask ourselves throughout design questions that challenge our commitment to these values:

1. Classroom
2. Shared Learning
3. Small Group
4. Teacher planning
5. Resource
6. Staff lounge
7. library
8. Art Classroom
9. Secure Vestibule
10. Admin
11. Commons
12. Gymnasium
13. Music / Stage
14. Kitchen

The building is comprised of a singular circulation datum linking larger gathering spaces (commons, gym, admin, and library) with a classroom tower. One traverses this path to discover spatial experiences inspired by nature. The building uses the outdoor environment as a classroom by providing outdoor terraces off the art room as well as the commons. These outdoor learning opportunities are used for STEAM learning.

The facade of the building is inspired by the organic and repetitive nature of the forest with early spring moss on the trees.

The concept for interiors can be described as a dichotomy of nature vs nurture. Nature being an abstraction of the natural world and the types of spaces found throughout the PNW forest and coastline. The forest, the canyon, or a suspension bridge over a creek. These types of spaces create a sense of adventure and curiosity and inspire children to learn. They challenge our emotional connection with our environment by stimulating a sense of wonderment and curiosity.

Nurture being the intimacy of your family, or the vivid colors of a family quilt. The public realm of the building is conceived of as a canyon -- a tall space with lots of upward expansion. Hiking down the path of circulation you experience a sense of compression as you approach the classroom wing. These spaces are characterized by intimacy with a sense of enclosure and protection. In this way Margaret Mead Elementary provides a variety of spaces to fuel a child's curiosity of the environment. Mead stands to inspire and educate the next generation on how essential the organic/natural environment is. Nurturing children to live a more symbiotic relationship with nature.

Colors were selected from the natural environment to use as highlights throughout the building and for floor level identification

Classrooms open to Shared Learning and adjacent classrooms through sliding wall systems creating a true flexible learning experience

Classrooms are arranged around shared learning areas. The openness and clear visibility from inside the classrooms nurtures the students and helps build a strong sense of community enabling the educator to maintain control from inside the classroom even with students working on team projects or individual learning out in the shared area. Sliding doors open from the classrooms into the space for improved connection and ownership.

Non-generic furnishings are flexible allowing for multiple learning styles or arrangements within every classroom. An added benefit to the flexibility of space has been the useable area outside the classroom for unexpected flexibility in Covid class spacing.

The library space continues the theme of flexibility and can be reconfigured into any arrangement necessary to deliver advanced education. This 2nd floor library opens directly to the community zone allowing for ease of use throughout the school day or for after hours meetings.

Visual comfort is achieved through clear wayfinding through the school, Dynamic colors inspired by nature and visual connection to nature and natural daylighting.

Additional shared space is available outside the Library where small groups or full classes can take advantage of unprogrammed area enhancing the learning environment. This can also be used as a calm down area for social emotional personal space when needed by individual students because of the flexibility of furnishings.

The openness of the space allows for all school assemblies and events

Consideration of the public realm was a huge driver in programmatic arrangement. This was realized by creating a welcoming and inviting entrance that directly connects you into the commons/gym. These spaces are thought of as public event space that can be used for education and more. The concept of flexibility seriously influenced the thinking of all spaces including the mundane as potential breakout space for active learning.

Natural daylight is considered first as a primary means to light the building. The high windows in the gymnasium face south and are glazed with transluscent white glass allowing diffuse light to fill the space increasing visual comfort and impacting the circadian rhythm throughout the day.

The Gym and Commons open to each other for large events - a true community zone connecting the Commons to entry. An operable wall closes off the gym.

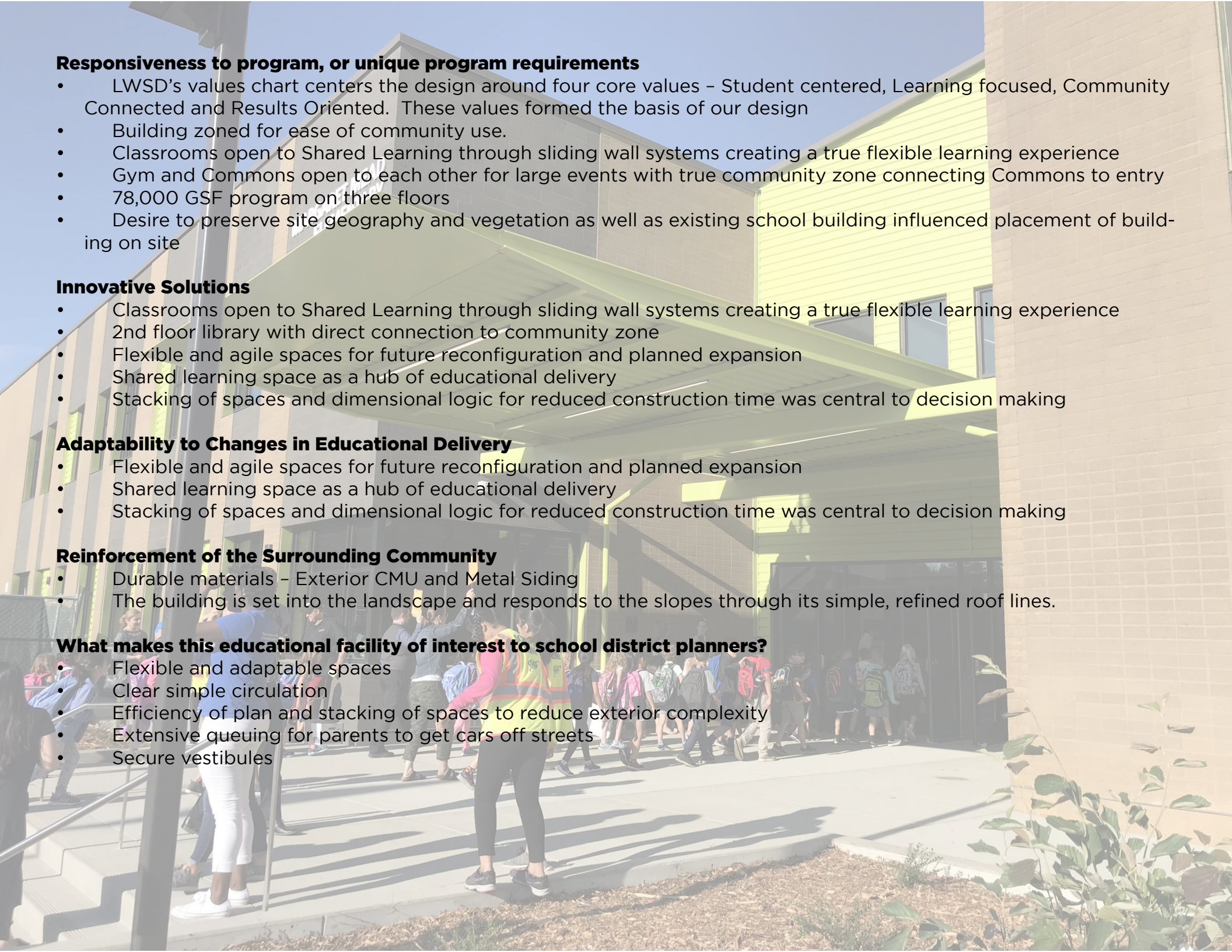
Results

- The project reflects the requirements of the building program and is organized in a compact arrangement to maximize utilization of the site. To that end, the classroom communities are 3-story and the core facilities include a second story.

- Site development includes play areas easily supervised from the administration areas. Parking and vehicular access blends existing driveways and parking areas with new additional parking. A new separate bus loop and fire lane around the building are also included.

- The site organization allows for future expansion of a five (5) classroom community, as well as an area for five (5) future portables. The building is located near the large tree and wetland buffer to the northwest corner of the site, maximizing views and environmental learning opportunities while minimizing impact to the natural buffer areas.

- The compact building organization and site utilization, as well as a balanced approach to grading and cost-effective storm drainage storage, are all attributes of an efficient and effective built solution for the reconstruction of Mead Elementary. These basic design strategies and overall approach reflect the input and direction provided by the SKIT, the Construction Advisory Committee during conceptual design, as well as the public input received during our community open house.



Responsiveness to program, or unique program requirements

- LWSD's values chart centers the design around four core values – Student centered, Learning focused, Community Connected and Results Oriented. These values formed the basis of our design
- Building zoned for ease of community use.
- Classrooms open to Shared Learning through sliding wall systems creating a true flexible learning experience
- Gym and Commons open to each other for large events with true community zone connecting Commons to entry
- 78,000 GSF program on three floors
- Desire to preserve site geography and vegetation as well as existing school building influenced placement of building on site

Innovative Solutions

- Classrooms open to Shared Learning through sliding wall systems creating a true flexible learning experience
- 2nd floor library with direct connection to community zone
- Flexible and agile spaces for future reconfiguration and planned expansion
- Shared learning space as a hub of educational delivery
- Stacking of spaces and dimensional logic for reduced construction time was central to decision making

Adaptability to Changes in Educational Delivery

- Flexible and agile spaces for future reconfiguration and planned expansion
- Shared learning space as a hub of educational delivery
- Stacking of spaces and dimensional logic for reduced construction time was central to decision making

Reinforcement of the Surrounding Community

- Durable materials – Exterior CMU and Metal Siding
- The building is set into the landscape and responds to the slopes through its simple, refined roof lines.

What makes this educational facility of interest to school district planners?

- Flexible and adaptable spaces
- Clear simple circulation
- Efficiency of plan and stacking of spaces to reduce exterior complexity
- Extensive queuing for parents to get cars off streets
- Secure vestibules


If we are to achieve a richer culture, rich in contrasting values, we must recognize the whole gamut of human potentialities, and so weave a less arbitrary social fabric, one in which each diverse human gift will find a fitting place.
Margaret Mead
211B
106B