Vashon Island High School
2014 James D. MacConnell Award Submission
“Lots of communities look to their high school to help define their identity. Vashon already knows itself. We just need a school that reflects the values we hold so closely.”

—Susan Hanson, Principal, Vashon Island High School
Vashon Island is a place like no other. Physically beautiful, geographically isolated, and culturally vibrant, Vashon is home to a thriving community that includes a highly educated, socially progressive population of urban professionals, current and retired academics and scholars, environmental activists, locavore farmers, aging hippies, and long-time island families firmly anchored in blue-collar traditions of fishing, logging, and farming.

Vashon has a distinct sense of its unique community and its culture, although any Islander would challenge a visitor to define it. The Vashon ethic embodies a prideful commitment to living a thoughtful life, and that commitment extends to the island’s education system.
vashon island

Situated in the Puget Sound of Washington State, Vashon Island is geographically isolated, yet still proximal to the greater Seattle area. There are no bridges to the island; the roughly 10,000 year around residents are completely dependent on the state ferry system as their lifeline to the larger world. Vashonites are a hardy stock who choose to live on the island (or just “on Island”, as the locals say) in spite of its challenges because they cherish a self-reliant lifestyle and a deep sense of community value.

Island History

Vashon’s history is rich in Native American tradition, as several northwest Native American tribes used the island as fishing and shellfish harvesting lands. Captain George Vancouver named the island “Vashon” after his friend James Vashon of the Royal navy in 1792. In the late 1800s, the northwest timber industry clear-cut most of the island; 120 years later it is only now beginning to show signs of fully developed forested ecosystems again. Through the early and mid 20th century, island population was small and stable, and the economy was agrarian based. The 1970s saw the first major industry develop on Island with both K2 skis and Stuart Brothers Coffee (later renamed Seattle’s Best Coffee, then SBC) starting their businesses. Manufacturing proved tough to accomplish on Island. Most industries have since moved to more profitable locations off island. In the late 1980s, Washington State began servicing the island with a passenger-only ferry during commute hours. The ferry provided a direct and convenient link to downtown Seattle during the workday, which contributed to dramatic population growth as well as a cultural shift on island, with many more highly educated professionals who choose to live on Vashon and still work in the City. Recently, the island has seen a resurgence of its agrarian roots, with several residents surrendering their professional lifestyle pursuits and taking up local, small production bio-organic farming.

Island People, Island Values

Vashon residents are proudly a self-sufficient lot; there are almost as many hardware stores on the island (four) as there are restaurants (six). Islanders value tolerance and support of different lifestyle choices. Above all else, a “live, let live, and support” vibe runs through all facets of community life. Support of arts, both visual and performance arts, is fundamental to daily life; more than 15 performing arts troupes exist on Island, and an active visual arts community is led by Vashon Allied Arts. Gardening is often considered a competitive sport on Vashon, and the annual garden tour of island residences draws large regional
crowds to the island. The community also shares a deep sense of commitment to protecting and enhancing its natural environment. While many specific environmental experts choose to live on Vashon (energy audit experts, wetlands biologists, solar power engineers, etc), most all of the island share a common value and expectation that they are socially obligated to practice good resource stewardship and that they must leave the Island, and the world, in better shape for future generations.

Unquestionably, the Island’s eccentricities form the foundation for Vashon Island High School’s greatest strengths: its community support; its commitment to the arts; its culture of tolerance, respect, and support; and its respect for the beautiful natural environment in which it resides. But they also contribute to the unique challenges that Vashon Island School District faces everyday; as a one-high school district, it must strive to be all things for all people, while managing the oftentimes zealous single-interest goals of a highly educated, informed, and activist community.

To move forward effectively in such a climate, the District asked for a deeply engaging, community based exploration process that would unearth the meaning of the Island’s sense of place, commitment to education, and community values, and would set in place project guidelines, goals, and touchstones for a successful project.
Island Education

Situated in a beautiful rural setting in the center of the island and surrounded by typical northwest forests, the existing high school was a small school of 500 students in grades 9-12, inhabiting an aging 1970’s campus of concrete bunker-like buildings with small, crowded, nearly windowless classrooms; mold problems; a large enclosed cafetorium; outdoor circulation; and a small ill-equipped performing arts space inadequate for the vibrant performing arts community on the island. Over the years, the campus has grown along with its student population, adding buildings and extending the service life of older buildings through renovations.

The challenge for the design team was to create a modern school facility to serve as a vital hub for the community; a school in alignment with their current high-performance educational programs that also responds in a meaningful way to the island’s unique culture and traditions.

The District leadership wanted the design team to challenge their own vision and lead a dialogue with staff and community members to examine current trends and best practices internationally and ensure that the new school is forward thinking - not only capable of supporting their current curriculum, but leading them onward as they migrate toward 21st century learning strategies.

Leadership at the Vashon Island School District viewed the approach to their new project from a lens that highlighted several key community attributes:

- Building a replacement high school would be the largest construction project in the history of the island and would be very impactful to the economy, to traffic and ferry capacity, and to the lives of students, staff, and everyone utilizing the existing school campus.
- A new high school facility offered the chance not only to replace aging existing facilities that were beyond their useful life, but also to enhance the district’s commitment to 21st century learning ideals by providing more spaces for STEM integrated programs, inquiry based assignments, and meaningful collaboration between students and staff.
- The new facility needed to be as much a community facility as a school, being the only on-Island public building with capacity for performing arts, large community meetings, inclement weather farmers markets, community clubs and athletics, community disaster shelter, and other social gatherings.
Recognizing that they had enough money from passage of the capital bond proposition to do anything, but not to do everything they would like, the District embraced an intensive community engagement process. The process was intended both to explore the wants, needs and desires of all of the school’s user groups, and to tap into the deep and varied expertises that Island residents had to offer.
focusing aspirations for the future
The design team worked intensely with the district early on to develop a process of discovery unique to the island’s culture of engagement—a process designed to engage the many diverse groups on the island as together we formed a consensus and shared vision for the new high school.

A core Design Committee included the superintendent, former school board members, school district and high school staff, teachers, students, and community members. This committee acted as the primary touchstone for information and ideas, while also providing a valuable resource to represent and communicate to the entire island.

Other critical stakeholder groups were identified, including island businesses, environmental stewardship groups, drama and arts troupes, the senior citizen representatives, community disaster preparedness teams, counseling leaders from Vashon Family Services, and Vashon organic farmers. A series of workshops were then scheduled with each group, or with strategic combinations of these groups to uncover the values and priorities of all those invested in the new project. In addition, several community-wide meetings and open houses were scheduled to allow all individuals the freedom and opportunity to have significant input into the discussions surrounding the new school. These meetings took place in a variety of venues and locations, and often built on the opportunities provided by the island’s already busy calendar of events to dovetail into pre-existing community dinners, festivals, and other events.
Meetings and workshops were scheduled within a network of island groups and events in an order designed to ensure a logical and progressive development of the project. This section is organized to follow the outline of this process, beginning with a series of visioning workshops incorporating current trends and best practices. This was followed by goal setting which included an extensive series of sustainability workshops.

The starting point for the conversation was to share and discuss the current curriculum and the School District’s vision for providing excellence in education. The Vashon Island High School program has a legacy of excellence, distinguished as a model for other schools throughout the country, providing a rigorous college preparatory program rich in elective opportunities for such a small school. It was clear that any new facilities, above all, would need to build on this history of excellence and continue to provide the variety of opportunities often hard to maintain within a small school district.

The Vashon Island High School (VHS) campus houses three distinct academic programs, all administered by Principal Susan Hanson:

- Vashon Island High School
- Family Link - an alternative education program that supports the educational goals of Island home school students in grades K-12 and their families.
- Student Link - an independent study based program serving high school students.

All courses, except those labeled as “Basic” in the high school course guide, are taught at the college preparatory level. The school maintains a diverse offering of elective courses to meet the needs and interests of the entire student population. Focus on college preparatory opportunities is a critical compliment of the VHS curriculum. The school maintains four years of foreign language opportunities, AP courses in Math, Science and English, and a wide diversity of CTE and STEM offerings. A number of students also leave campus (and the island) regularly to engage in a “Running Start” program at area colleges.

Currently, Vashon Island High School is organized utilizing a departmental model, with several teachers engaging in cross-discipline collaboration to pursue theme or project based learning opportunities. The school uses a trimester, 70 minute class schedule in which students can earn .5 credit for each trimester class. Students attend a class for two trimesters to receive a full credit.
toward a common vision

The first series of meetings were organized around visioning presentations, discussions and exercises all designed to bring the design committee to a point of a common shared vision.

To stimulate discussion with the Design Committee, these meetings engaged them individually and collectively in a series of exercises and discussions including examining current school facility trends and best practices as well as analyzing individual hopes and fears. The design team also conducted school tours, both virtually and actually, of facilities exhibiting current design thinking.

challenging current vision

The District asked the design team to challenge its current vision and goals and lead a thorough examination of school facility trends and best practices to ensure that their new high school would accommodate the implementation of 21st century learning.

This examination included exploring the ways in which technology is transforming our schools and the ways students and staff communicate, teach and learn.

The physical environment of specific program spaces were considered, including public spaces like entries, hallways and courtyards, libraries, and cafeteria/commons, as well as career and technology education spaces (CTE). Part of this exercise presented various program space options in a way that allowed committee members to quantify their views. This information was tallied and presented back to the group for further discussion and refinement.
Many of the recent trends in educational facility design have been driven by an evolution in thinking about the kinds of functions and activities needed when we consider planning a new school. This approach results in a more holistic approach that thinks of the culture of the school as a learning community.

The design team presented a virtual tour of facilities around the world, targeting programmatic areas that are changing the most in contemporary school programming and design. Questions posed to the Vashon Design Team challenged them to expand their vision, constantly going back to design goals as a basis for relevance.
Public Spaces / Outdoor Connection

Porosity: Create interconnected interior and exterior public spaces that weave the school into the Island’s beautiful natural setting.

Develop habitable outdoor places for student socialization and recreation

Library Media Center

The role of libraries is in transition for school districts looking at current trends. - Projecting the utility of the library space over the 50 year life of the building, certainly libraries will continue to retain a vital role in schools. Beyond warehousing media, they can still fill an essential role of guiding students, teaching them the necessary skills to flourish in a life where information is immediately available at their fingertips. Areas the committee considered:

- The need to sustain a large collection of books will diminish over time with the sharing of digital resources and subscription to online resources.
- What kind of settings do we create for our students to access information?
- Frame the mixture of individual and group settings within a larger social context.
- How connected or separate is the library? Can the Library study areas flow out into the public spaces?
- Collaboration: Create spaces that support both academic work and active collaboration
Public Spaces / School Community

- Craft habitable public spaces that support the idea of a cohesive community
- Provide informal spaces for students to collaborate and work together as a learning community; for socialization, eating, studying, performance, presentations, and large group gatherings.
- What does it take to make a space that is great for students to eat in?
- Integrating socialization, academics, presentation, and performances

Career and Technology Education (CTE) and STEM

Provide for the needs of the full variety of students - basic skills for students that will proceed immediately into the workforce after high school, as well as providing solid foundations for students going on to higher education- be it Voc-Ed skills centers, community Associate degrees, or more traditional four year university programs and beyond.

Need to address the continuum of CTE possibilities: the traditional vocational, hands-on oriented programs, high tech programs like digital design, as well as programs that are geared more towards developing basic skills that will allow some of the VHS students to become the creators of emerging technologies.

- Consider spaces for digital learning and collaboration
- Tendency for CTE classrooms to be non-directional, decentralized learning spaces
- Integrate the CTE spaces to allow a blended curriculum evolve, such as a STEM focus (Science, Technology, Engineering, Math)
- What kind of spaces can accommodate the widest range of directions of CTE?
- Need space to work in teams and on projects
- Loose fit / Long life: Provide flexible industrial spaces, easy to reconfigure as the curriculum evolves i.e. evolve over the life of the school from a wood shop to CAD CAM manufacturing facility
student facebook exercise

Students are our experts on the experience of learning and provide the ultimate test when creating effective and engaging school environments. The design team created a group page on Facebook called “(Re)Imagine Vashon High School” and asked students to explore their existing high school environment and imagine what changes of environment the new school would need to better their day-to-day life in school.

The students were first presented a virtual tour of exemplary contemporary school environments on Facebook, and asked to consider the following:

- What kind of place does a person need to learn?
- Are the activities related to learning changing?
- What else is a school besides a learning environment?

The next session students were sent off to explore their own school with their cellphone cameras, reflecting on their favorite spaces to socialize, study, and eat, and post any inspirations on Facebook that might help the design team in the design of their new facility. An interactive session with the students included the facebook page projected “live” on the wall as students posted and responded to each other’s thoughts and comments.
student facebook exercise

HM: Desk-chairs take up too much space and they’re really uncomfortable.
June 2 at 1:02pm

MW: suuuper crowded
June 2 at 1:04pm

KFB: Disconnected chairs are what’s up.
June 2 at 1:07pm
NK: due to a lack of seating in the lunchroom? or because they want to be out there? who knows. but girl on the right has no where to sit anyway!
April 28 at 6:06pm

MW: We could have more picnic tables to eat outside when the weather is warmer
April 28 at 1:00pm

NK: you dont have to sit around our schools garbage concealed by a cement wall.
April 28 at 6:01pm

KM: sports bag area would be awesome
April 28 at 1:01pm

NK: yeah! like with racks where people could put their bags.
April 28 at 5:59pm
defining environmental stewardship

The new VHS facility seeks to be an embodied reflection of the island values towards sustainability, and their desire to promote good stewardship of limited natural resources. These include:

- Ensuring that we protect the two adjoining watersheds
- Minimizing VIHS’s carbon footprint
- Reducing both embodied and spent energy in both construction and operation

VISD chose to spend additional capital during construction on several major systems in order to reduce operating costs in the future. The building itself serves as a living textbook by highlighting sustainable features, helping to teach our students to be good stewards of the environment they are inheriting.

sustainable workshop

Concerned members of the community were invited to attend a sustainability workshop to establish sustainable goals for the high school project. The purpose of the workshop was to achieve three primary goals:

- Introduce the Design Team to the Vashon “Sustainable Community”
- Discuss and enrich the sustainable goals of the project
- Brainstorm sustainable systems ideas

sustainable features

Site and Water

Preserving existing significant trees.
Raingardens for natural stormwater treatment and management
Pervious concrete to minimize impervious surfaces
Site light pollution control
Native plants to reduce water consumption and fertilizing
Rainwater harvesting cistern for irrigation and toilet flushing
Water efficient plumbing fixtures

Materials

Regional, local materials
Certified wood harvested from District land & milled on island
Recycled content containing materials
Rapidly renewable materials
Recycle existing building materials on-site during construction
Low emitting finishes
Energy Star labeled cool roof materials
Electric car charging station powered by photovoltaic panels

Energy
10% energy use reduction beyond code
Natural cooling
High performance building envelope
High Efficiency Lighting and Systems Control
Daylight-responsive lighting controls
Automated energy management monitoring lighting, HVAC and hot water energy use
Infrastructure for future photovoltaic panels
Building Commissioning

Indoor Environment
Natural daylight and access to views from in every teaching area
Direct / indirect lighting
Adjustable lighting levels at teaching walls
Low velocity displacement ventilation with radiant floor heating provides a comfortable and healthy interior environment
Fresh air through operable windows
High efficiency ventilation filters

Planning and Operations
Green building learning opportunities
Performance monitoring
Energy and life cycle cost analysis
On-site composting with compostable lunch trays and utensils
establishing design goals

The first meetings in school visioning can involve feelings of both excitement and apprehension. To address these feelings, both the Design Committee and the entire high school staff engaged in a group exercise called “Hopes and Fears.”

Five topics common in school design were posted on the library walls: space needs, school culture, changing trends in education, community use and maintenance. All five topics were posted twice, to capture both “hopes” and “fears.” Using post-its, the committee and staff were able to express their thoughts anonymously. Each person was given five green dots and five red dots which they could use to either agree (green) or disagree (red) with any comments made by their peers.

The outcome of this exercise created a common ground between those involved, serving as a launching point to establish project design goals.

The Design Committee broke into small groups, each tasked with a specific subject area. Using different colored pens to represent the viewpoints of different stakeholders, each group then created goals from each stakeholder’s perspective. These goals were then reviewed and refined by the committee as a group and became the final design goals.

**design goal #1: quality learning environments**
Provide a variety of spaces that have the capacity and configuration to take advantage of increasingly transparent technology in education

Create a Library/Media Center that reflects the changing nature of information technology while still providing a literacy-rich environment

Provide functional specialized lab spaces that are adaptable to changing technology and teaching methods

Create a variety of spaces for small, medium and large group learning and interaction

Provide inclusive spaces that encourage student/staff interaction and staff collaboration

**design goal #2: school identity/center of community**
Provide open and transparent spaces that honor students and staff through their quality and connection to the environment

Create a campus that invites connections among people, inspiring teamwork and creativity
Provide places throughout the campus to display student work and celebrate achievement

Create an inviting and identifiable entrance into the campus that honors and welcomes the community

Provide meeting, performance, and recreation spaces that promote shared use and partnerships with the community.

**design goal #3: flexible environment**
Provide flexible spaces that can accommodate many types of users and uses

Create spaces that can easily adapt to changing teaching and learning styles

Provide buildings with a technological infrastructure that can both accommodate growth and adapt to changes in technology

Create public spaces that can adapt to a variety of students and staff needs

Utilize building systems that support flexible and adaptable spaces by their long life capabilities and easy serviceability

**design goal #4: durability/long life**
Develop a facility that can be fully maintained to its maximum usable life

Use high-quality, easy to maintain finishes

Consider how systems are serviced as a critical design and construction parameter

Develop a building aesthetic that is appropriate for a place of learning and reflective of the Vashon Island community

Consider the total cost of ownership, including first costs and operating and maintenance costs, as the starting point for all design decisions

**design goal #5: safety and security**
Create clear and identifiable wayfinding for students, staff and visitors

Provide a well-lit, safe and easy to navigate campus at night

Create clear zones in the facility, differentiating public spaces shared with the community from private spaces for student learning

Zone the campus so it is easy to supervise

Create spaces that promote a sense of community and safety through pride of ownership and shared responsibility

**design goal #6: environmentally responsible campus**
Provide a healthy environment with fresh air and abundant daylight

Use simple products and systems that work well together

Create a facility that teaches students, staff and the community how to be good stewards of the environment

Support ethically produced and locally/regionally produced products whenever possible

Assume a practical approach that balances sustainable features with budget constraints
“it feels like you can be so productive here!”

honoring the island, looking to the future
learning spaces for students

supporting a culture of learning

Learning occurs anywhere - and everywhere - with a wide variety of learning spaces distributed throughout the entire school and campus. Shared areas, (dubbed “The Dens” by students) are located adjacent to more formal teaching spaces, a Learning Commons extends the Library into the life of the student body, and a small group presentation room is perched within the Learning Commons. A central courtyard provides sheltered outdoor learning areas, and found spaces throughout the building - including areas outside of counseling offices, at the base of stairs, in widened corridors, and across the commons bridge - are all used for individual and small group work.

Together, this collection of student-centered spaces projects the optimism of the island community towards its students by honoring them with features that facilitate their learning activities, including technology access, whiteboards and projectors for presentations, sinks, and soft seating.
Learning Commons

The in-depth explorations of the relationship between library resources and socialization spaces resulted in the creation of a Learning Commons. Program space from both the Library and Dining Commons were re-assigned to provide a space that still functions as a dining area during lunch periods, but provides expanded opportunities for learning and study during the remainder of the day.

The Learning Commons opens to the Student Courtyard with overhead doors. Built-in workbars incorporate displacement air diffusers.

Transparency between classrooms and shared learning “dens” provides visual and physical connections to a variety of learning spaces.

The Learning Commons from above during lunch time.

An operable wall opens the library to the Learning Commons (Presentation room beyond).
learning spaces for the future

General subject classroom spaces are designed to meet the evolving needs of 21st century learning environment. Every classroom includes generous natural daylight and views to outdoors, operable windows, advanced daylight harvesting controls, and individually zoned displacement ventilation. Classrooms have interactive display technology and writing boards to accommodate direct instruction because that teaching modality continues to play a role in learning activities, but the rooms also facilitate group activities and Socratic sessions with display and writing surfaces on all walls, and moveable furnishings. All student chairs are on wheels, and all classrooms benefit from a robust wireless network that allows students omnipresent access to a universal knowledge database.

Significant effort is spent to connect individual classroom environments to each other, and to the larger school community. Substantial interior glazing helps the school celebrate activities that occur in individual settings, and the strong visual connection between each classroom and shared spaces invite frequent class time use of the student dens. All classrooms also contain at least one door to an adjacent classroom to promote collaboration, team teaching, and interdisciplinary curriculum planning.
STEM/CTE fostering teamwork and creativity

The Science/Technology/Engineering/Math (STEM) program focuses on project based learning opportunities in an interdisciplinary environment. The high school’s modern and evolving curriculum recognizes the relationship between learning and doing in the development of an inquiry based approach to problem solving. STEM teachers act as mentors, helping students identify and understand a given problem, then work to design, engineer, and ultimately fabricate a solution.

Lower level learning spaces are reserved mostly for maker spaces. The traditional vocational shop spaces in the old building are transformed into a series of fabrication spaces (Fab Labs) connected to each other and to the outdoors with large roll up doors. The large Fabrication Lab is a high-
bay space with clerestory daylighting and overhead power distribution, and shares the Clean Studio with a studio-sized Fab Lab, allowing students to flow between research/design activities and fabrication and testing.

Science labs are clustered downstairs to support current intra department collegiality, but also are clustered around a Student Den that is shared with 2D/3D Art, Information and Technology Sciences, and an Enterprise Lab. The Art and Science programs share outdoor Lab Patios.

A large conference room adjacent to the Student Den is equipped to transform quickly into an audio/video production studio, and is visually and physically connected to the Information and Technology Studio with its more intensive and data rich hardware and software, allowing, among other explorations, students learning video production to be immersed in the most current professional software.
The art space benefits from expansive, diffuse north light and a large roll up door to access an outdoor work space. Art space is located between science labs and fabrication studios, and directly across from a student den, both to encourage integration of the art program into other STEM based curriculum, and to represent art in a position of importance in the school culture that reflects the island community's similar values. The art room, like all maker spaces in the building, has a durable concrete floor that is used as a work surface.
library integrated resource

In the same way that information now is available throughout the modern school through wireless technology, the new VIHS library extends beyond the traditional container and flows out into the public areas of the school, distributing access and resources to be more readily available:

- Space typically allocated in the library for small group and independent research is located on the main level in the Study Commons, readily available for students throughout the day.
- The library functions are now a zone, with the spaces outside the library accessible all hours of the day—informal study areas, small group conference/seminar room, even the library itself can open up with a sliding glazed entrance wall.
- Support for student technology skills happen in the teaching spaces
- Some of the stacks spill out beyond the library space into the public area to make some of the collection more available

Adjacency to the counseling offices projectors for presentations, sinks, and soft seating.
The counseling area is conceived as a student resource location within the open areas surrounding the library.

An operable wall opens the library to the Learning Commons (Presentation room beyond).
island values

gathering and connecting

A new theater space, the only theater on the Island provides opportunities for hands on dramatic arts classes to aspiring students. Back of house features are as important as the stage itself, with a catwalk, sound and lighting booths to promote theater production education for students interested in dramatic arts but not desiring to be on stage.

As the only significant theater on Island, it also serves the multitude of dance, drama and music performance groups in the community. It’s location adjacent to the Student Learning Commons provides a lobby space for performances, gives the school’s front entry a greater real presence, and continues an important island tradition by making the high school a central gathering space for the whole community. Music teaching spaces are adjacent to the stage to promote performance, and to provide a community greenroom.
Community Spaces

Public spaces, both inside and outside, welcome community use. The large Commons space and its associated second floor bridge accommodate widely varying functions—including community lectures, student open mike sessions, differentiated seating for dining, and socialization. Access to the courtyard to the east, and the “Great Lawn” to the west, also encourages outdoor dining and socialization. The Commons serves as an indoor venue for the Vashon Island Farmers Market on Saturdays during the winter months.

The Study Commons serves as a lobby vestibule and community meeting space during after-hours theater performances. A library area and large conference area can be accessed after hours for use by community groups.
island and school identity

The community’s image and identity goals for the new building established the parameters of an aesthetic that represents the Island’s commitment to education and the importance of the high school as the major civic gathering place on the island.

Shed roofs and clapboard siding give a nod to the Island’s agrarian vernacular, while the exposed structure and expansive glazing ground the building in a modernist tradition appropriate for its place and time. The building is painted a deeply saturated red, providing an appropriate image of the little red schoolhouse in a close knit community, and complimenting the deep green hues of the surrounding forest. Students, staff and community are very proud of their “Pirate Green” school colors. The red aesthetic serves as an elegant backdrop to the green that animates spaces on student shirts, jackets, backpacks and banners.

The building itself maintains a “porosity”, inviting circulation patterns that move both within the building and across the courtyard. The building, while providing a single indoor environment for safety, security and environmental control, still has the ability to “inhale and exhale” with students; a characteristic of the old campus that was a critical component in VHS’ identity.

Forested land adjacent to the high school and owned by the school district is sustainably managed by the Island Forest Stewards Council and used as an outdoor laboratory by middle and high school students participating in forest management programs. Wood from the forest was sustainably harvested, and milled on island to provide economic benefit to island sawyers. The harvested douglas fir, madronna, maple and alder is omnipresent throughout the new school building; used as stair treads, wainscot, and finish trim.
Wood from adjacent sustainably harvested forests was milled on island and used extensively for finish materials throughout the building.

The building responds to the local climate with broad overhangs and attention to controlling low sun angles.

The District's commitment to sustainable practices is a direct expression of community values.
SUSTAINABLY HARVESTED WOOD & MATERIALS
RAINWATER AS GREYWATER
SOLAR ENERGY READY
DAYLIGHT CONTROL
LED EXTERIOR LIGHTING
OPERABLE WINDOWS
RAIN GARDENS
MINIMIZED PAVED SURFACES
RAINFALL CATCHMENT
DISPLACEMENT VENTILATION
HIGH-PERFORMANCE ENVELOPE
resource stewardship

The new VHS building reflects the island community’s values and desires to promote good stewardship of natural resources. Many community members helped define the sustainability goals for the project, including minimizing VHS’s carbon footprint, ensuring protection of the two adjoining watersheds, and reducing both embodied and spent energy during both construction and operation. The school district chose to spend additional capital during construction on several major systems in order to reduce operating costs in the future. Additionally, the building itself serves as a living textbook by highlighting sustainable features, helping to teach students to be good stewards of the environment they are inheriting.

Rainwater Harvesting
A rainwater feature empties into rain gardens that feed the watershed to Judd Creek and celebrates the northwest’s climate and environment. A cistern under the central courtyard captures rainwater from roofs for use in flushing toilets and urinals. This system provides virtually all of the greywater demand throughout the school year, significantly
reducing dependence on the island’s water district. The cistern also acts as a stormwater detention facility -releasing excess water at a natural flow rate, protecting the adjacent watersheds.

DAYLIGHT
An abundance of natural daylight and views are available in every learning space.

HIGH-EFFICIENCY LIGHTING
LED lighting in many locations reduces energy use and maintenance costs. High-efficiency fluorescent lighting with a warm color index promotes a healthy and comfortable

SUSTAINABLE FORESTS
Sustainably managed forests owned by the school district is used as an outdoor laboratory by middle and high school students. Wood from the forest was sustainably harvested and milled on island to provide economic benefit to island sawyers. The harvested douglas fir, madronna, maple and alder is omnipresent throughout the new school building; used as stair treads, wainscot, and finish trim.

SIPS PANELS
Structural Insulated Panels (SIPs) cover all long span roof areas and provide insulation values above code requirements while minimizing material usage.

DISPLACEMENT VENTILATION
Low-velocity displacement ventilation with radiant floor heating provides a comfortable and healthy interior environment.

AIR/WATER HEAT PUMP
High-efficiency air/water heat pumps provide hydronic heat and minimize use of fossil fuels.