

2014 Exhibition of School Planning and Architecture

Benjamin Rush Elementary School

Redmond, Washington

Benjamin Rush Elementary School



Benjamin Rush Elementary School





Rush Elementary in its Neighborhood Context

Community Environment:

The building is organized to locate quieter classroom areas near the neighbors to the north, delivery and service access to the south, and active play areas to the west. Wetlands to the south and a wooded slope to the west buffer school activities from the

surrounding neighbors.

The roof line, building massing and building materials compliment and integrate with the existing residential character of the neighborhood.



Restored Wetlands

Community Environment:

The natural features of the site include a protected grove of trees, wetlands, and a large wooded slope. The site was also constrained with a requirement to retain the students onsite during construction while building a new facility that retains and enhances natural features.

The new building is incorporated into the north end of the existing slope and mediates the grade level changes – providing at-grade access from both the first and second floors. The play area has also been designed to incorporate the slope, rocks, and trees into the physical activity of the children's days.



Daylit Circulation Connects Community Spaces

Community Environment:

The building was zoned to allow after-hour use by the community of the building's common areas by the community without opening the entire school. The commons, gym, art and STEM classrooms are all

grouped near the entry – each with direct access to the exterior. The library is located at the heart of the school at the top of the entry lobby stairway.



Shared Instructional Area with Connections to Outdoors

Learning Environment:

The District's elementary education model embraces group collaboration and team teaching by incorporating Shared Instructional Areas into grouped Learning Settings.

Each of these shared areas has multiple sources of daylight, connections to the outdoors, full-height operable glass partitions connecting to classrooms, storage, conference room, restrooms and a teaching wall with smart board, white boards and tackable surfaces.



Shared Instructional Area connection from corridor

Learning Environment:

The orientation of the Learning Clusters allows a minimal distance between the Shared Instructional Areas and the main circulation corridors.

Several key features make the Shared Instruction Areas and Learning Clusters successful: equal classroom frontage, high levels of transparency, visual & physical connections, and a variety of furnishings.



Classroom with Connections to Outdoors

Learning Environment:

Fully operable glass partitions connect classrooms to shared areas and to adjacent classrooms. All

classrooms have sources of daylight from two directions.



Library

Learning Environment:

The library is designed to be adaptable and inviting: it opens to the main, central circulation path with a wide folding-glass partition. Screened by wood slats (milled from the site), it is referred to as the “tree house.”

The library is the true hub of resource activity for the school, enhancing connections with students throughout the day.



Outdoor Learning at restored wetlands

Learning Environment:

The learning spaces and their connections to the outdoor natural areas and interpretive trails reinforce

the connections between learning, environment, site, and neighborhood.



L-Shaped Building

Physical Environment:

Unique physical characteristics of the site afforded a highly tailored response. Working closely with the staff, teachers, parents, and school district, the design team developed an L-shaped plan integrating the new school into the wooded, sloping site.

Nearly all of the classrooms are located in the north bar of the “L,” which steps into the hillside, allowing second-floor access directly to grade on the west end of the building. The building footprint also allowed school operation to continue unimpeded during construction and minimized the need for excavation.



Indoor/Outdoor Use

Physical Environment:

The protected area created by the “L” shaped building allows students to regularly circulate across

the site, travelling from classrooms to other activities.



Wood Paneling at Main Stair

Physical Environment:

Materials both on the interior and exterior were selected to be compatible with the surrounding neighborhood and invoke the much-loved character of the old school.

On the interior, all-natural wood finishes were milled from selected trees removed from the site during construction, and include a mix of cedar, fir, and maple.

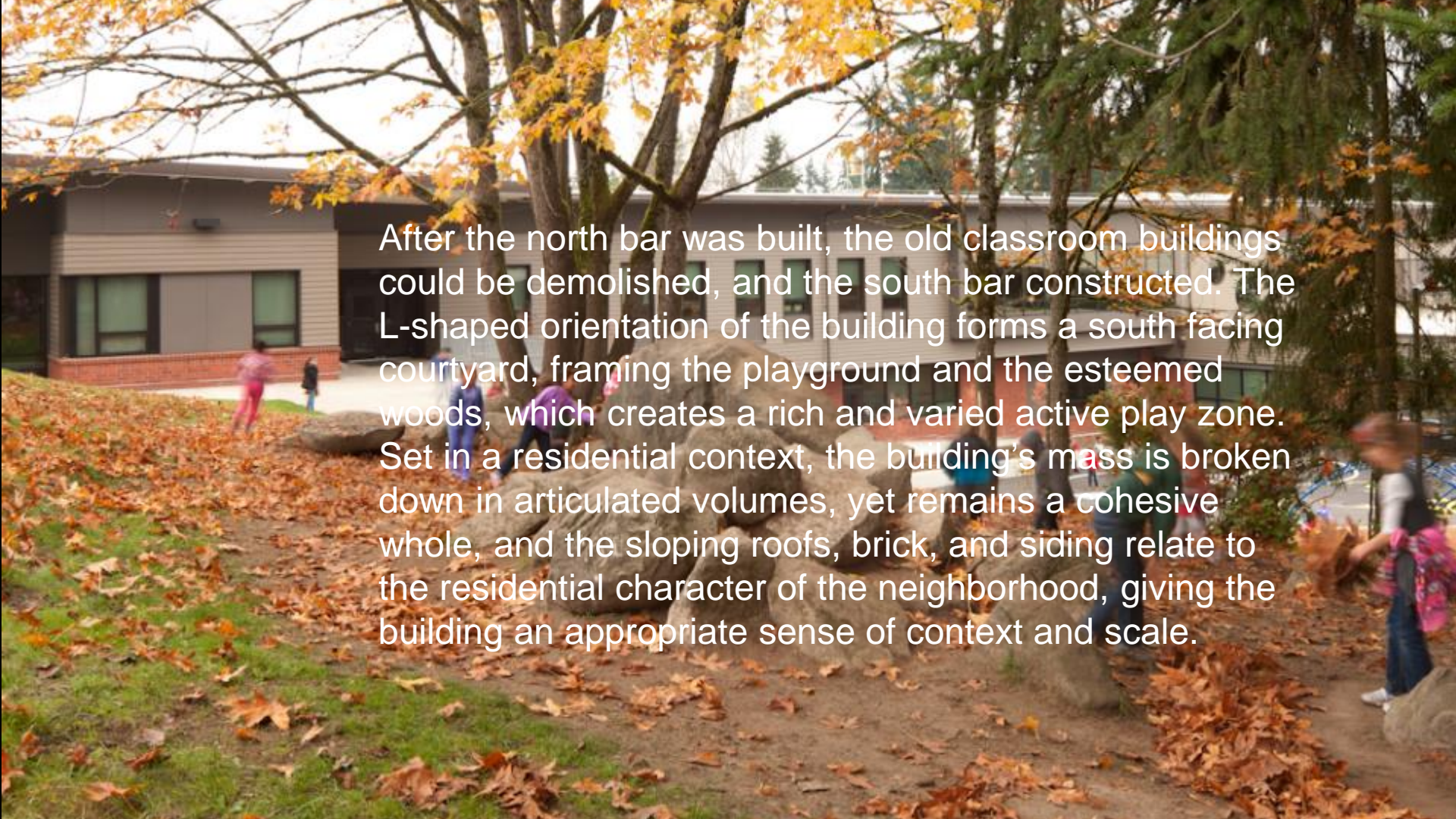


Lost-and-Found

Physical Environment:

Attention to the small details of everyday school life

includes such things as this lost-and-found area, tucked beneath the main stair.



After the north bar was built, the old classroom buildings could be demolished, and the south bar constructed. The L-shaped orientation of the building forms a south facing courtyard, framing the playground and the esteemed woods, which creates a rich and varied active play zone. Set in a residential context, the building's mass is broken down in articulated volumes, yet remains a cohesive whole, and the sloping roofs, brick, and siding relate to the residential character of the neighborhood, giving the building an appropriate sense of context and scale.

Outdoor Play Area incorporated into the natural slope of the site

Physical Environment:

Sustainable strategies include integrating reclaimed wood into wall paneling throughout the building. Large underground vaults manage storm water and were coordinated with the building footprint to

protect the existing landscape. Timbers from the existing building were repurposed for risers and benches in the common areas. Natural surroundings were carefully integration with minimal disruption.

Planning Process:

Rush Elementary is one of several elementary schools being modernized under the LWSD educational specifications. The project design team along with members of the Lake Washington School District conducted an all day project kick-off meeting with a large representative group of teachers, staff and parents from the school. The kick-off meeting was used to better understand the existing site, neighborhood, and school community; and arrive at project goals and visions collectively. A core design advisory committee (comprised of teachers, staff and parents from the school) then met weekly with the project design team through schematic design. At key milestones, the design team hosted public community meetings at the school to keep the neighbors aware of the project's development and solicit input.

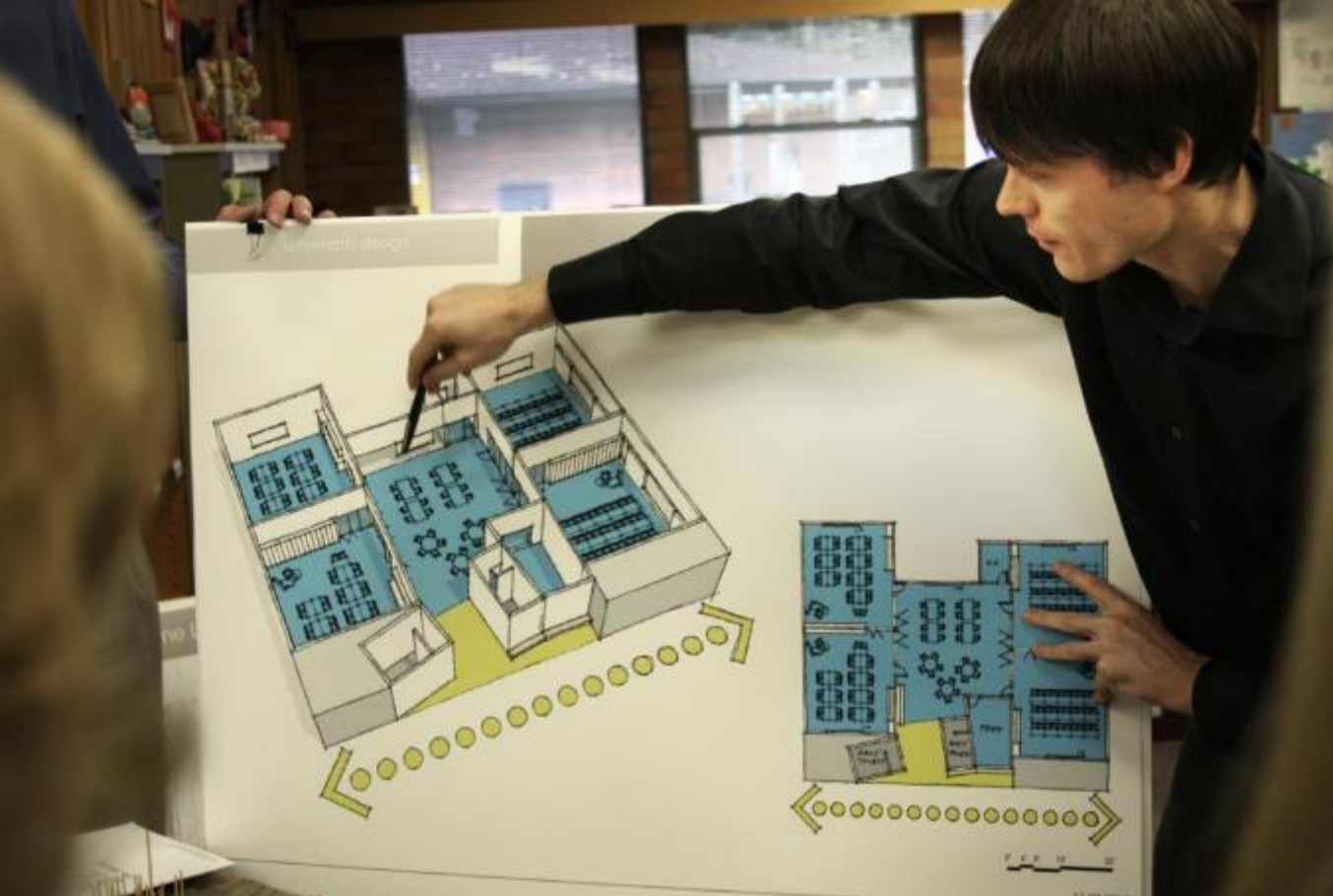


Planning Process:

Working with the design committee, the team verified project goals and objectives, identified the characteristics of successful shared learning spaces, explored a variety of site concepts, and established a building organizational scheme placing the library at the heart of the school and minimizing distances between clusters.

A subgroup of this team met on a regular basis with the district and design team throughout the duration of the project to assure follow-through on design intent.





Planning Process:

Innovative solutions include shared instructional areas that provide clear visibility to all areas – toilet rooms, learning settings, and shared areas alike. Transformative walls connect classrooms with common areas, and angled walls within classrooms create welcoming areas in and out of

the learning settings. The library is marked by a transformative wall that is typically open for free-flowing connections of books and students. The change in elevation throughout the second floor provides a raised area for more focused instruction within the library, while providing an opportunity to modify the library if needed in the future.

First floor plan



Second floor plan



SECOND LEVEL



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Project Data

Submitting Firm :	Integrus Architecture
Project Role	Architecture, Structural
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Title	Principal
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Other Firm:	Weisman Design Group
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Project Data

Other Firm :	CoffmanEngineers
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Project Details

Project Name	Benjamin Rush Elementary School
City	Redmond
State	Washington
District Name	Lake Washington School District
Supt/President	Dr. Traci Pierce
Occupancy Date	9/2013
Grades Housed	K-5
Capacity(Students)	550
Site Size (acres)	8.99
Gross Area (sq. ft.)	67,250
Per Occupant(pupil)	122
gross/net please indicate	Gross
Design and Build?	Yes, GCCM
If yes, Total Cost:	\$24,549,700
Includes:	
If no,	
Site Development:	N/A
Building Construction:	N/A
Fixed Equipment:	N/A
Other:	N/A
Total:	\$24,549,700