

# 2012 Exhibition of School Planning and Architecture

## Federal Way Elementary School Archetype

Federal Way, Washington  
New Construction  
Project of Distinction  
DLR Group

# Federal Way Elementary School Archetype



# IDENTITY

The client's goal was to provide programmatic flexibility, community connections, learning relationships, and a recognizable identity across all four of their new elementary schools, yet a unique identity for each school. The solution the design team developed was to create a recognizable archetype reflecting the District's goal that could be applied to multiple sites and adapted to be site specific based on influencing factors, elaborated on under "Connections." The archetype is readily recognizable by its consistent use of an architectural language of lower volumes ("bars") and higher volumes ("lanterns"); and the application of appealing colors.



Valhalla Elementary School



Panther Lake Elementary School



Sunnycrest Elementary School



Lakeland Elementary School

## RELATIONSHIPS

Just as every school has activities that define daily use, each school site includes a program of activity in the network of parks and lakes that characterize the School District. The design team utilized this understanding of multiple scales and relationships among those scales, to take a bold new perspective on grounds and their interactions with community.



Outdoor learning space at Lakeland Elementary School

## RELATIONSHIPS, cont'd

Each building responds to neighborhood scale relationships including existing walking routes, topography and space constraints, and interacts with the site through a series of small outdoor learning areas—natural extensions from the building—and extensive glazing which provides experiential connection to the site from within. Through each school's local-scale connections to the site, they act as network nodes catalyzing connection to each other on the scale of the Federal Way community.



Extensive daylighting and windows creating connection to the site and beyond at Panther Lake Elementary School

## FLEXIBILITY

Turning to the educational program, the team reorganized traditional specific program requirements into groupings defined by spatial similarities (general size, functions, and features). From these groupings, they were further able to distill the program down to six fundamental types of spaces—the basic building blocks of a flexible spatial program. Uniform systems (electrical, data) in each space further enable users to adapt spaces among a variety of purposes.



Project learning configuration of furnishings at Valhalla Elementary School

## FLEXIBILITY, cont'd

The design employs a shell-and-core system comprising walls designated for daily, 5-year, and 20 year change and 50 year permanence. Building systems (mechanical, electrical, plumbing) only run through 50 year permanent walls, leaving the school free to adapt to future needs with minimal expense or waste. Through intentional temporariness, this school will align with curriculum needs for many decades to come.



Group learning space at Lakeland Elementary School

# LEARNING

Each school starts with the same flexible programmatic bars. Program components are assembled around a uniting spatial network space: a uniquely stylized connector with a literacy commons (media) and a social commons (dining) as its two anchors. In this way learning is not confined in the cell of a classroom, but occurs throughout the school. In a reflection of the District's goals and education philosophy, surrounding community access and site patterns of use are a significant influence in shaping the uniting commons element and the orientation and arrangement of the bars and the final form of each school. For example, existing community routes through the site are embraced and enhanced. Thus, the extension of learning throughout the school extends beyond the building, into the site and out into the community.



The “connector” and literacy commons at Panther Lake Elementary School

## SUSTAINABILITY

Extensive daylighting, coupled with radiant floor heating, a high performance building envelope, opportunity for natural ventilation (through operable classroom windows and provision for vents in the lanterns) and minimized ductwork and air-handling units contribute to responsible energy savings, as well as to a vibrant and healthy interior environment. The bars are more solid and protective, and the lanterns bring daylight into the classrooms and common spaces alike. By making the buildings more compact, the design reduced material usage and energy costs. Minimal finishes—favoring bare concrete flooring, bold painted walls, and recycled cotton ceiling treatments— conserved resources over more conventional material-intensive approaches.



Windows bring light into every part of Valhalla Elementary School

## SUSTAINABILITY, cont'd

The schools have been recognized by AIA Seattle's Committee on the Environment. The shell and core system mentioned previously ensures that any future renovations will generate as little waste as possible.

## COST

The School District challenged the design team to accomplish all of these goals in an economical fashion. The average bid for each school was \$208 per square foot, over a time when the average elementary school cost in western Washington was over \$225-\$280 per square foot *(source RLB Quarterly Construction Cost Report.)*



This small-group learning space at Panther Lake Elementary School enriches education by allowing light in.

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## Project Data

Submitting Firm :	DLR Group
Project Role	Architect
Project Contact	Craig Mason
Title	Principal
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Joint Partner Firm:	None
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Other Firm:	None
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Construction Firm:	Babbitt Neuman Construction Co.
Project Role	General Contractor
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## Project Details

<b>Project Name</b>	Valhalla Elementary School	Panther Lake Elementary School	Sunnycrest Elementary School	Lakeland Elementary School
<b>City</b>	Auburn	Federal Way	Kent	Auburn
<b>State</b>	Washington	Washington	Washington	Washington
<b>District Name</b>	Federal Way School District	Federal Way School District	Federal Way School District	Federal Way School District
<b>Supt/President</b>	Robert Neu	Robert Neu	Robert Neu	Robert Neu
<b>Occupancy Date</b>	August 15, 2009	August 28, 2009	August 11, 2011	August 16, 2011
<b>Grades Housed</b>	K-5	K-5	K-5	K-5
<b>Capacity(Students)</b>	520	450	458	550
<b>Site Size (acres)</b>	8.22	8.9	6.31	9.91
<b>Gross Area (sq. ft.)</b>	54,000	45,000	47,490	44,703
<b>Per Occupant(pupil)</b>	103.8	100	103.7	81.3
<b>gross/net please indicate</b>	gross	gross	gross	gross
<b>Design and Build?</b>	No	No	No	No
<b>If yes, Total Cost:</b>				
<b>Includes:</b>				
<b>If no,</b>				
<b>Site Development:</b>	\$1,040,333	\$2,084,168	\$1,274,598	\$1,911,018
<b>Building Construction:</b>	\$9,921,148	\$10,293,729	\$9,896,665	\$9,233,331
<b>Fixed Equipment:</b>	(included in Building Cost)	(included in Building Cost)	(included in Building Cost)	(included in Building Cost)
<b>Other:</b>				
<b>Total:</b>	\$10,961,481	\$12,377,897	\$11,171,263	\$11,144,349