

# Redmond High School

## Lake Washington School District

### Redmond, Washington

#### **PROJECT NARRATIVE**

This \$37,795,405 modernization involved the construction of a new 202,800 s.f. building on a 39-acre site to replace the previous high school. The existing school remained in operation during construction and was then demolished. The new building incorporates a broader educational program and has a capacity for 1,500 students. The new Redmond High School offers improvements such as a new performing arts center, new science labs, high tech learning labs with video studio, and an expanded athletic complex. Classrooms and labs are arranged in learning clusters, each incorporating group activity areas for collaborative and demonstration activities.

#### **SITE ORGANIZATION**

The site arrangement accommodated the new building and field construction while the operations of the existing facilities were maintained. The positioning of the new building and fields facilitates the consolidation of athletic facilities and centralized parking to serve both. The new building's placement away from the street brought about a need to establish a new identity as well as create an approach and destination sequence that is easily understandable. The building placement also creates passive and active sides. This provides a natural monitoring and safety system by calling out atypical activity on the passive side that can be quickly identified and reduces activities along the sides shared by neighbors.

#### **ENTRY**

The administration building and main public entry has been strategically placed as a 'gatekeeper'. It resides closest to the parent/visitor parking able to monitor student activity within the courtyard and back and forth between parking, athletic and academic facilities. Access convenience is accomplished through multiple entry options based on the student's and staff's arrival points and accommodation of simultaneous events.

#### **ORGANIZATION, EXPRESSION AND EXPERIENCE**

The architectural structure utilizes two different grids of organization. An orthogonal grid defines the placement and relationships of the fundamental school areas. A second site organizational axis on a ten degree inflection organizes two volumes containing the library and entry buildings to the athletic facilities - symbolically 'the brain and the brawn'.

The school form itself creates an outdoor courtyard bounded by the administrative area, the library, classrooms and the great hall. The courtyard serves as the heart of the school and as an element that embraces the entrant and provides a 'place' and a sense of safety. Student and teacher interaction is encouraged with the incorporation of shared activity spaces, informal meeting zones at circulation junctions, courtyard activities, benches and the creation of interior and exterior edges for sitting. The interacting forms and amenities manifest and encourage the idea of interaction that is so critical to the High School environment.

#### **SUSTAINABLE DESIGN**

The project incorporates the use of ground - source heating and cooling. MDF is used as rapidly renewable accent material. Natural ventilation is combined with more traditional HVAC systems via operable windows at most areas. Clerestory windows are used extensively to maximize the benefits of daylight. Stringent stormwater management systems are employed to help protect neighboring streams and watersheds. The building reuses the existing site and employs a more compact footprint than the original building. These efforts have lessened the impact to the site.

#### **FORM AND MATERIALS**

The classroom wings form an edge along the north and east sides that breakdown to a more residential scale in response to the adjacent housing. On site trees and plant material are used to buffer parking, loading and detention ponds as well as provide directional access clarity and frame significant view corridors and building features. The forms are reflective of the functions that they house. The performing arts and great hall forms, for example, are more expressive, representing the more dynamic cultural and social activities that they house. The library form is layered to represent the idea of a 'reservoir of information bursting at the seams'. It also provides a direct path of light from the eastern morning sun to the courtyard where the students arrive allowing the library to serve as a symbol for the 'shedding of light'.