

# 2013 Exhibition of School Planning and Architecture

## Aurora Hills Middle School

Aurora, Colorado

# Aurora Hills Middle School







Former School Location

# Aurora Hills Middle School Site Plan



## Community Involvement:

The existing facility was in such poor shape that the entire community was very supportive of a new facility. Parents, community members and current staff were invited to be part of the Design Advisory Group and to a Visioning Workshop on the future of middle schools. During the workshop, smaller groups met to consider options and ideas, which were then presented to the larger group. Some important goals that came from the workshop included:

- Provide good night time / community use for the gym and cafeteria
- Create smaller learning communities for each grade level
- Distribute the library square footage to the learning communities and make the library a large meeting / community room.
- Incorporate sustainability into every aspect of building and site design.

By constructing the new building to the north of the existing facility, it pulled it closer to the neighborhoods. Careful consideration was given to neighbors that would now have a building behind their homes, and the scale and feel of the building was adjusted accordingly. Although brick is not used on all of Aurora Public Schools' facilities, the district felt it was an important feature to integrate with the existing neighborhoods.

The building is also organized to allow frequent community use. The cafetorium or gym can be rented for church or community use afterhours and on weekends while the rest of the school is locked off. The cafetorium can also be used by the local orchestra for concerts, providing music students with the opportunity to interact with professionals in their field.

## Visioning Workshop



### Community Involvement: *Continued*

The school design also promotes a facility that is energy efficient and straightforward to maintain. By building healthy spaces with durable materials, and flexibility for the future, the new Aurora Hills Middle School has provided the community with an asset that will serve their student far in to the future without being a burden to maintain. The delight was evident during the Open House commemoration, as hundreds of people gathered to celebrate the hard work of students, staff, community members, designers and contractors in making their dreams a reality.





## Learning Environment:

Originally constructed in 1972, Aurora Hills Middle School has a long tradition of providing quality education to the Aurora community. Unfortunately, the building itself was not serving the educational needs of the teachers and staff. A disorienting circular floor plan with poor visibility, pie-shaped classrooms with walls on only 3 sides, and no exterior window made teaching energetic middle school students very challenging.

Everyone was in agreement that the new school be organized for better supervision of students, contain more clear wayfinding for visitors, be constructed for better sound isolation, and update to more modern teaching standards. Pods were organized to create smaller learning communities for the more than 1000 students, and allow teachers to minimize unsupervised interactions between older and younger students. Each pod contains several room sizes for flexibility and common area for small group break out. This also allows the school to operate portions of the building during the summer at reduced energy cost.

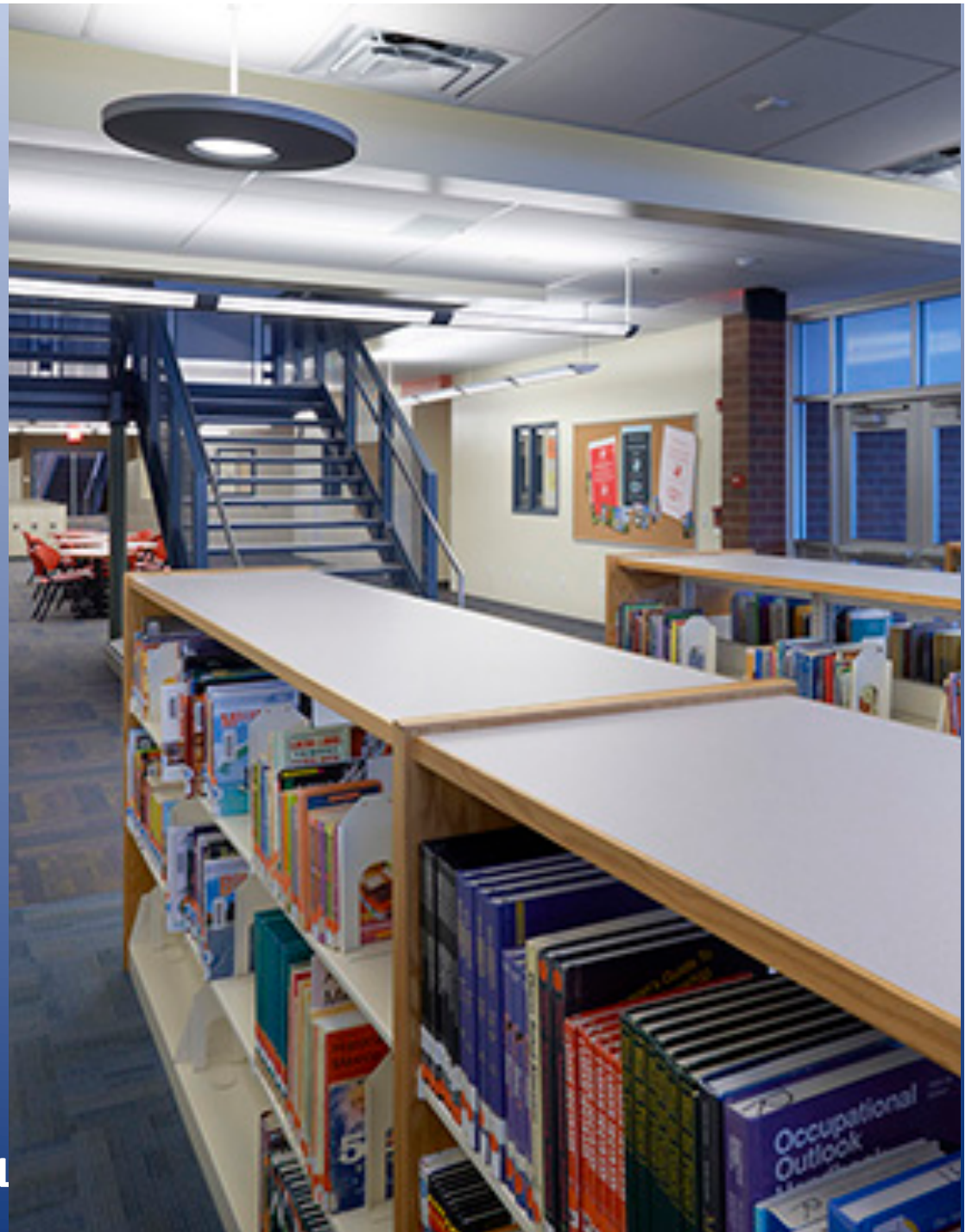
## Learning Community Pod



## Learning Environment: *(continued)*

From the beginning of design, an organizing element was the media center – or at least, the fact that there isn't one! While the central library has been a mainstay of school design for decades, the Design Advisory Group wanted to bring the books to the students. Therefore, each learning community has its own smaller media center with books selected specifically for the age of the students and the topics they will study throughout the year. Teachers hope this will make accessing new books a daily occurrence and encourage exploring new material as a more relevant part of the education experience.

A benefit of having a construction site on campus is the unique learning experience it offers kids, especially those that might be interested in careers in the building trade or design service industries. Aurora Hills Middle School took advantage of this situation and created a new class for students – and the curriculum included guest visits from the project architects and contractor and a construction site tour. The kids loved the site tour: as their teachers Mark Elliot and Mike Potoczak confirmed afterward, "I know they enjoyed and will remember this as a special adventure for a long time! The non-stop conversation that took place as we walked back to get their things before they headed home was certainly testament to that!"





## Physical Environment:

Site circulation was an important issue for district and school staff. The new building physically separates bus drop-off and staff parking from parent drop-off and visitor parking, significantly reducing vehicular and pedestrian conflicts during high traffic periods. Once the bell has rung, students are able to access their pods directly from the bus loop. Ball fields and fenced berms to the south of the site buffer the school from the busy arterial road to the south and allow for outdoor seating and play yards near the cafeteria for lunch-time use. Outdoor classrooms take the student outside to enjoy the Rocky Mountain sunshine. Located near the pod entries for easy access, vertical walls are decorated with potential study material – etchings of DNA, eons of time, or insects.



## Outdoor Classrooms & Access to Pods



## Physical Environment – Continued

An important design element for everyone on the project was abundant daylight for staff and students. After working in a building with no windows, the AHMS community was acutely aware of how important views and natural light are for people. Classrooms are oriented to allow north or south light, which is the most easily controlled to allow light but prevent glare and unnecessary heat gain. Tubular skylights on the second floor serve to reduce the need for electric lights even further. Second floor pods are terminated with framed views of the mountains. Translucent windows in the gym and high windows in the cafeteria and stairwells and two-story glass in the main corridor mean the entire school is awash in natural light throughout the day.



Daylit Gymnasium with Lights Off



## Planning Process:

When a construction bond was passed in 2008, Aurora Hills Middle School was included as a major renovation project. As the economy declined, however, a bright spot emerged – lowered construction costs meant the district could afford to build an all new school of the same size and better quality than a remodel would allow. A key factor would be keeping kids in school in the existing facility while the new facility was being constructed on site. Thorough discussions with staff, district personnel, and community members vetted multiple solutions and identified potential issues. This developed the staff buy-in needed as teaching methods during the year of construction would be altered by reduced playfields and building access. The final building layout was strategically located on the existing play fields to maximize natural light in classrooms, improve parent/staff/ bus circulation, AND minimize the disruption to kids while both buildings were on site simultaneously.

## Replacement School



## Original School





## Planning Process: *Continued*

The new facility (of equal size but with a more proportionate distribution of space) also had to meet the current educational specification for the district. For an existing staff, this was both good and bad. For many teachers, it meant larger classrooms with better acoustics. For some, however, it meant condensing their teaching spaces to meet district standards. Weekly meetings with the Design Advisory Group allowed every to see the positive and negative aspects of each option, and how small sacrifices for some meant a holistically better outcome for the school.



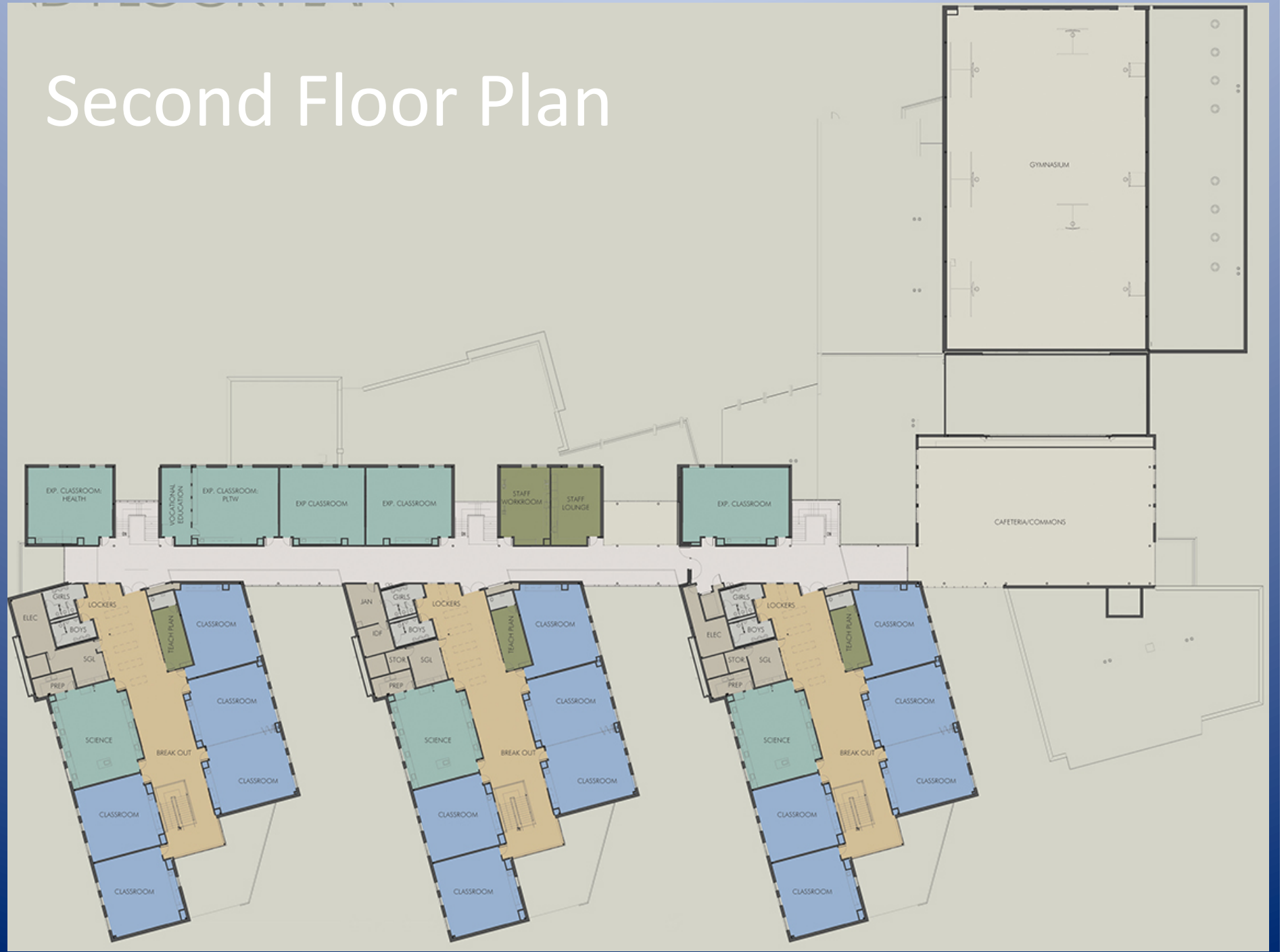
**Choir Room**

# First Floor Plan





# Second Floor Plan



# Exhibition of School Planning and Architecture

## Project Data

Submitting Firm :	SLATERPAULL Architects
Project Role	Joint Venture Architecture Firm
Project Contact	Adele Willson, AIA
Title	Principal in Charge
Address	1331 19 <sup>th</sup> Street
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Phone	303-607-0977

Joint Partner Firm:	RB+B Architects
Project Role	Joint Venture Architecture Firm
Project Contact	George Brelig, AIA
Title	Design Principal
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Other Firm:	
Project Role	
Project Contact	
Title	
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Phone	

Construction Firm:	JHL Constructors
Project Role	General Contractor
Project Contact	Brian Townsend
Title	Vice President
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City, State or Province, Country	Centennial, CO 80112
Phone	303-741-6116



# Exhibition of School Planning and Architecture

## Project Details

Project Name	Aurora Hills Middle School
City	Aurora
State	Colorado
District Name	Aurora Public Schools
Supt/President	John Berry
Occupancy Date	January 2012
Grades Housed	6 <sup>th</sup> , 7 <sup>th</sup> , 8 <sup>th</sup>
Capacity(Students)	990 (330 per grade)
Site Size (acres)	18 Acres
Gross Area (sq. ft.)	130,000 SF
Per Occupant(pupil)	131 SF / Pupil
gross/net please indicate	1.39
Design and Build?	No
If yes, Total Cost:	-
Includes:	-
If no,	
Site Development:	\$3.5 Million
Building Construction:	\$16 Million
Fixed Equipment:	\$2 Million
Other:	n/a
Total:	\$21.5 Million

## Supplemental Slide: Youth Architecture Education Project

### Planning Process:

Running concurrently with the design of the middle school, design team staff participated in a summer program working with district students. The program served to teach students about the process of architecture, as well as to learn about their considerations for an ideal school design.





Supplemental Slide:  
Learning Community Pod



Supplemental Slide:  
Welcoming the Neighborhood  
Community





Supplemental Slide:  
Commons Space

