

2015 Exhibition of School Planning and Architecture

Conservatory Green ECE-8 School

Category: New Construction

Denver Public Schools
Denver, Colorado

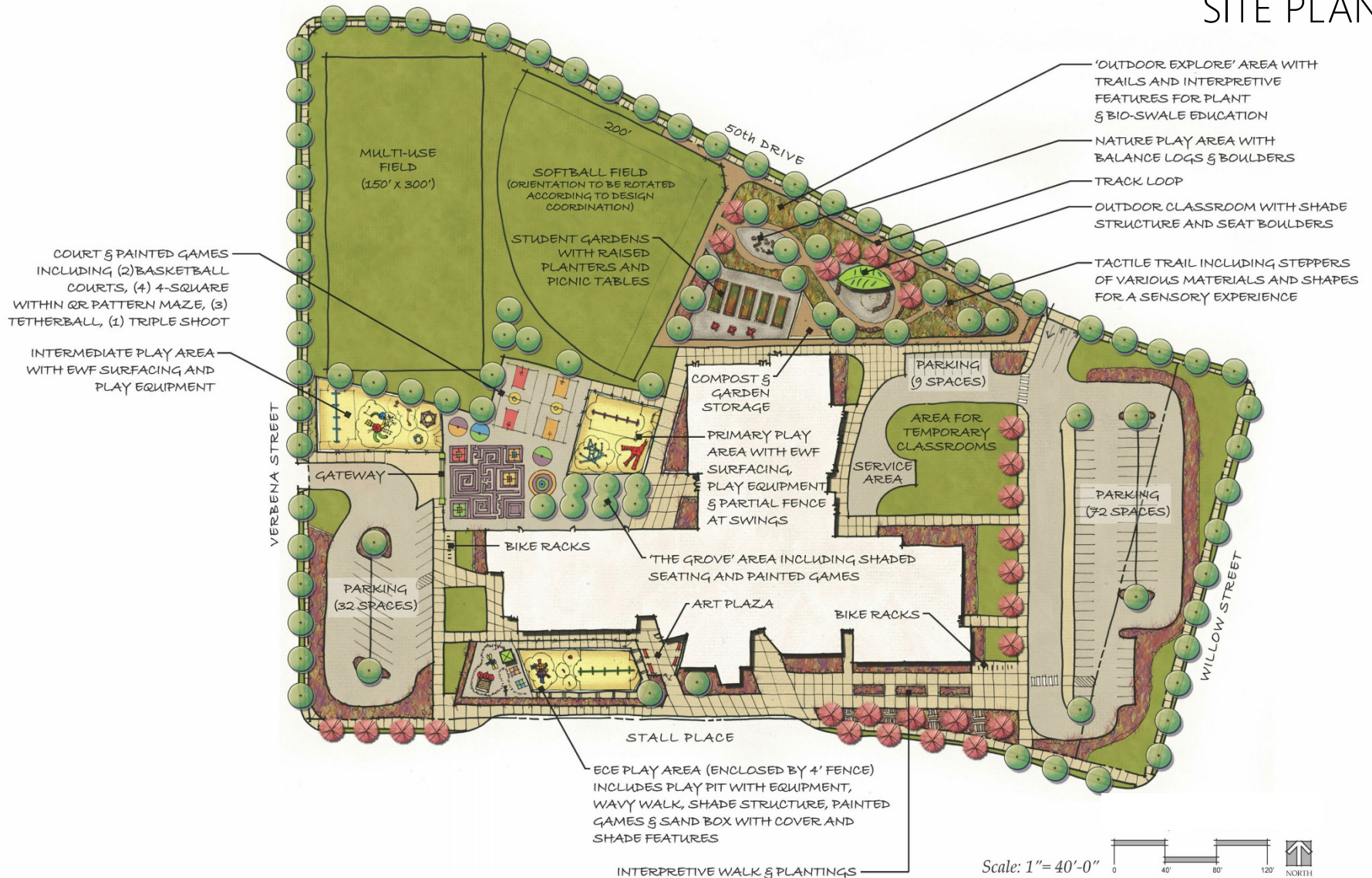
Conservatory Green ECE-8 School

MAIN EXTERIOR IMAGE



Conservatory Green ECE-8 School

SITE PLAN



SITE PLAN

Common Space



Planning Process:

The planning process for Conservatory Green was based around the District's *Early Childhood through 8th Grade Educational Specification*. In order to meet district needs, the building is designed to operate as two autonomous schools that share only the gymnasium, cafeteria, and other support spaces. The current tenants are High Tech Elementary School (early childhood education through fifth grades) and the Denver School of Science and Technology (sixth through eighth grades).



Science Classroom



Planning Process (Continued):

As desired by Denver Public Schools and the local community, the architecture of the new school is both innovative and sustainable. The facility engages the urban fabric and its strong architectural presence conveys a welcoming image to the community. The colorful daylit spaces serve the needs of staff, students, and visitors while meeting the operational requirements of the School District and their Guiding Principles for 21st Century Learning.

A unique feature of the project was the compressed design and construction schedule. Due to Owner Schedule/Needs the design was compressed into six months and construction was completed in 11 months. This accelerated schedule allowed the district to move into the new facility on time and on budget for the 2014 school year.

Character/Context



Community Environment:

Located north of I-70 on the former Stapleton Airport site in Denver, CO, the new 113,616-square-foot early childhood through eighth grade school houses 1,053 students and serves the Conservatory Green neighborhood.

The architectural context is 'New Urbanism' and was developed by the community's developer, with green belts that weave throughout the neighborhood, fostering community through places for sports, gardening and gathering. The orientation of the school is driven by the desire to properly daylight as many spaces as possible and orient the main façade of the building towards an urban greenbelt created between Stoll Place and 50th Avenue. The character of the school fits within the context of the neighborhood.



Community Use Spaces



Community Environment (Continued):

Because the school is a community facility, the client wanted to project that image to the public. The administration area is located in such a way that administration staff have visual access to the front door and entry walk at all times. The bus drop-off area and most of the parking lots are located for good supervision. The building can be zoned and locked off so that the public can utilize portions of the facility without having access to areas that are not needed.



There is also a community room that can be used specifically by the PTA and community groups after hours. The gymnasium is also available for community use.

Breakout Spaces



Learning Environment:

The school layout promotes 21st Century Learning opportunities throughout. The cafeteria is the center of the school, with library, gymnasium, playground, music, community, and academic spaces directly adjacent. Breakout spaces at a variety of scales – from individual students to large classes – optimize student's experiences, and bright colors and durable finishes contribute to a welcoming atmosphere.

Interior Patterns and Design



Learning Environment (Continued):

21st Century Learning Environments:

Learner Centered Environments

Partnerships

- Creative and Collaborative Experiences
Spaces are grouped to promote interaction between learning groups.
Fun colors and design elements create unique spaces.
Materials and concepts inspire student imagination.
- Flexibility and Adaptability
Plan for future expansion or co-location.
Classroom layout to allow numerous arrangements or learning styles.
- Sustainability
Daylight.
Learning environments that teach.
Textures and Patterns around Us.



Exterior Patterns



Physical Environment:

The two-story building utilizes concrete, structural steel, and masonry with brick and other veneers. Forms and textures from the natural and built world are used throughout the design to inspire students to be more aware of the patterns that surround them every day. Patterns include the former airport runways on the gym wall, mathematical concepts highlighted in the stair railings, and natural science features in the playground. The non-verbal language of our environment has a lot to teach us about ourselves, the health of our planet, and new ideas for the future.

Sustainable characteristics of the project include proper building orientation that maximizes natural daylighting and occupancy sensors with automatic dimming systems. A high efficiency building envelope combined with triple-pane windows with integral blinds minimize energy costs. Cost effective energy conserving features are incorporated and enhanced HVAC/MEP systems commissioning was included.

Media Center

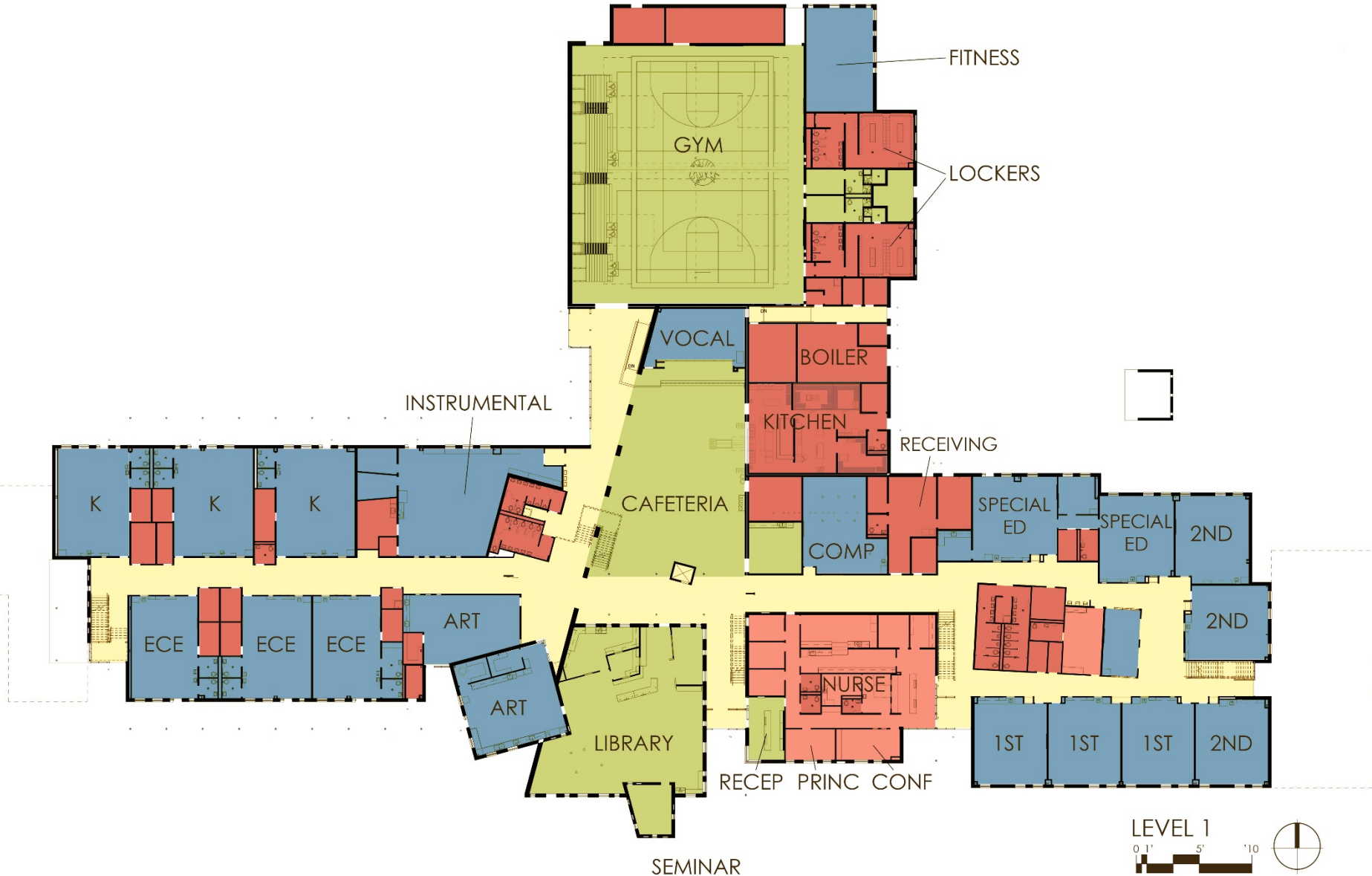


Physical Environment (Continued):

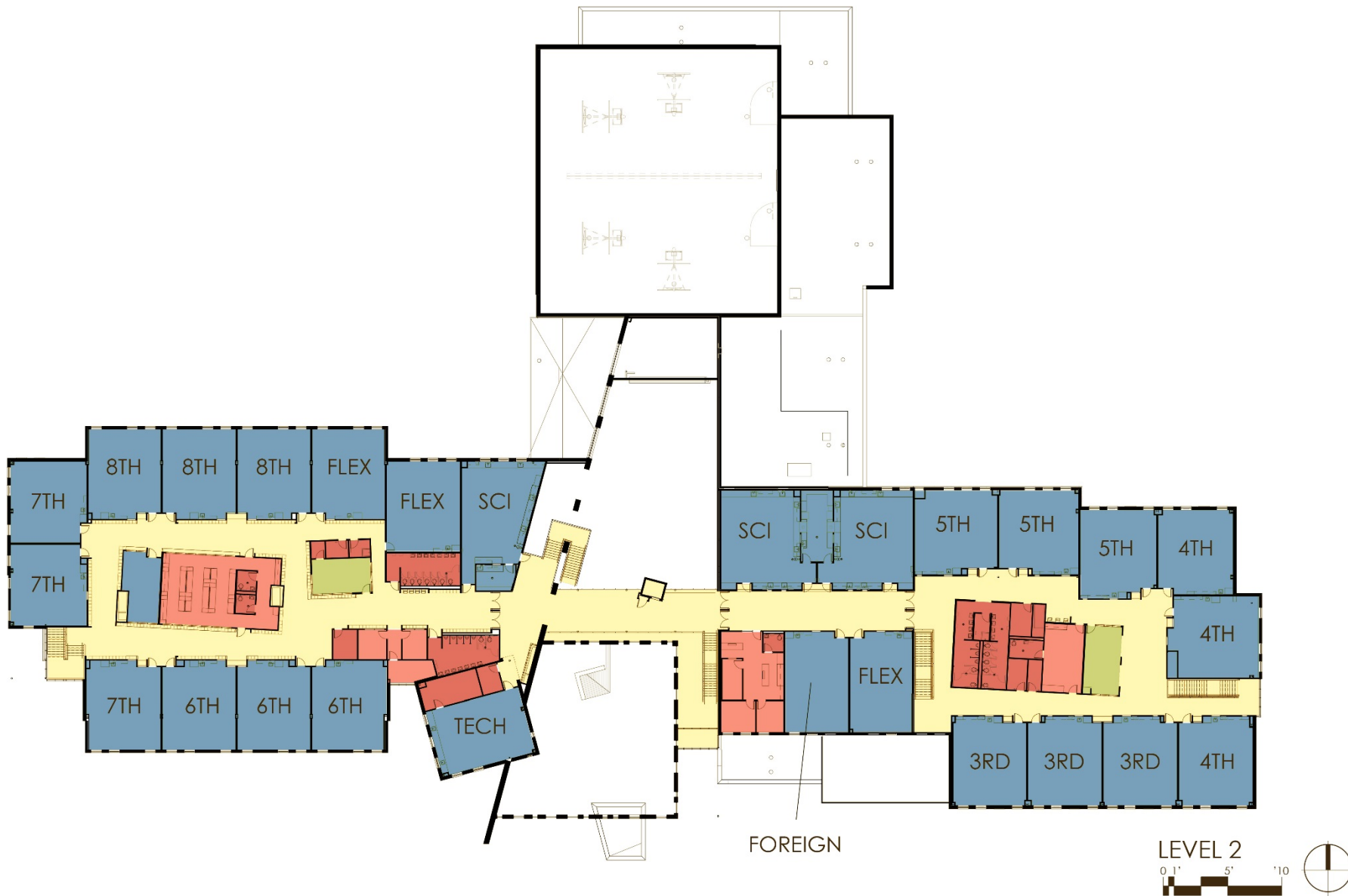
Spatial Organization: The functional arrangement of spaces within the building is derived from the District's Educational Specification and support the various groupings of grade levels. The floor plan is zoned to permit public access to portions of the building (Cafeteria, Gym, Media Center) while maintaining security within the remainder when the facility is utilized for public functions. The potential for future building expansion was considered; classrooms can be added to the east and west ends, should the need arise.

Materials and Finishes: Interior finish materials support changing learning cultures, programs, student populations and instructional delivery methods while providing a warm and welcoming sense of place. Materials spark the imagination and foster learning. An interesting palette of natural, modern and high performing selections are used throughout to create a nurturing and easy to maintain environment.

FLOOR PLAN: Level One



FLOOR PLAN: Level Two



Exhibition of School Planning and Architecture

Project Data

Submitting Firm :	RB+B Architects, Inc.
Project Role	Architect
Project Contact	Lacey Reckelhoff
Title	Director of Marketing
Address	315 E. Mountain Ave., Suite 100
City, State or Province, Country	Fort Collins, CO, USA
Phone	970-484-0117

Joint Partner Firm:	n/a
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	n/a
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Construction Firm:	Roche Constructors, Inc.
Project Role	General Contractor
Project Contact	Greg Lockwood
Title	Senior Project Manager
Address	361 71 st Ave.
City, State or Province, Country	Greeley, CO, USA
Phone	970-356-3611

Exhibition of School Planning and Architecture

Project Details

Project Name	Conservatory Green ECE-8 School
City	Stapleton
State	Colorado
District Name	Denver Public Schools
Supt/President	Tom Boasberg, Superintendent
Occupancy Date	August 2014
Grades Housed	ECE-8
Capacity(Students)	1,053
Site Size (acres)	10.38 acres
Gross Area (sq. ft.)	113,616 sf
Per Occupant(pupil)	108 sf/pupil
gross/net please indicate	gross
Design and Build?	
If yes, Total Cost:	
Includes:	
If no,	
Site Development:	\$2,504,504
Building Construction:	\$16,556,190
Fixed Equipment:	\$1,200,000
Other:	
Total:	\$20,260,694

Supplemental Information: Exterior Playscapes



Exterior Environments:

Theming for the building and playground stem from textures and patterns found in the natural world around us. One can find patterns for education and play within various parts of the site plan:

- The outdoor classroom shade structure is shaped like a leaf and the roof detail offers opportunity for shade and light.
- Various ground materials throughout the "Outdoor Explore" area activate the senses of touch and hearing while one walks through the area's paths.
- OQ Code Maze provides a pattern of modern times and allows children to play and explore.
- Other opportunities for displaying patterns include painted games, gateway detailing, sandblasted features and interpretive features.

Supplemental Information: Early Childhood



Supplemental Information: Daylit Classroom



Supplemental Information: Cafeteria

