

# 2014 Exhibition of School Planning and Architecture

## Mapleton Early Childhood Center

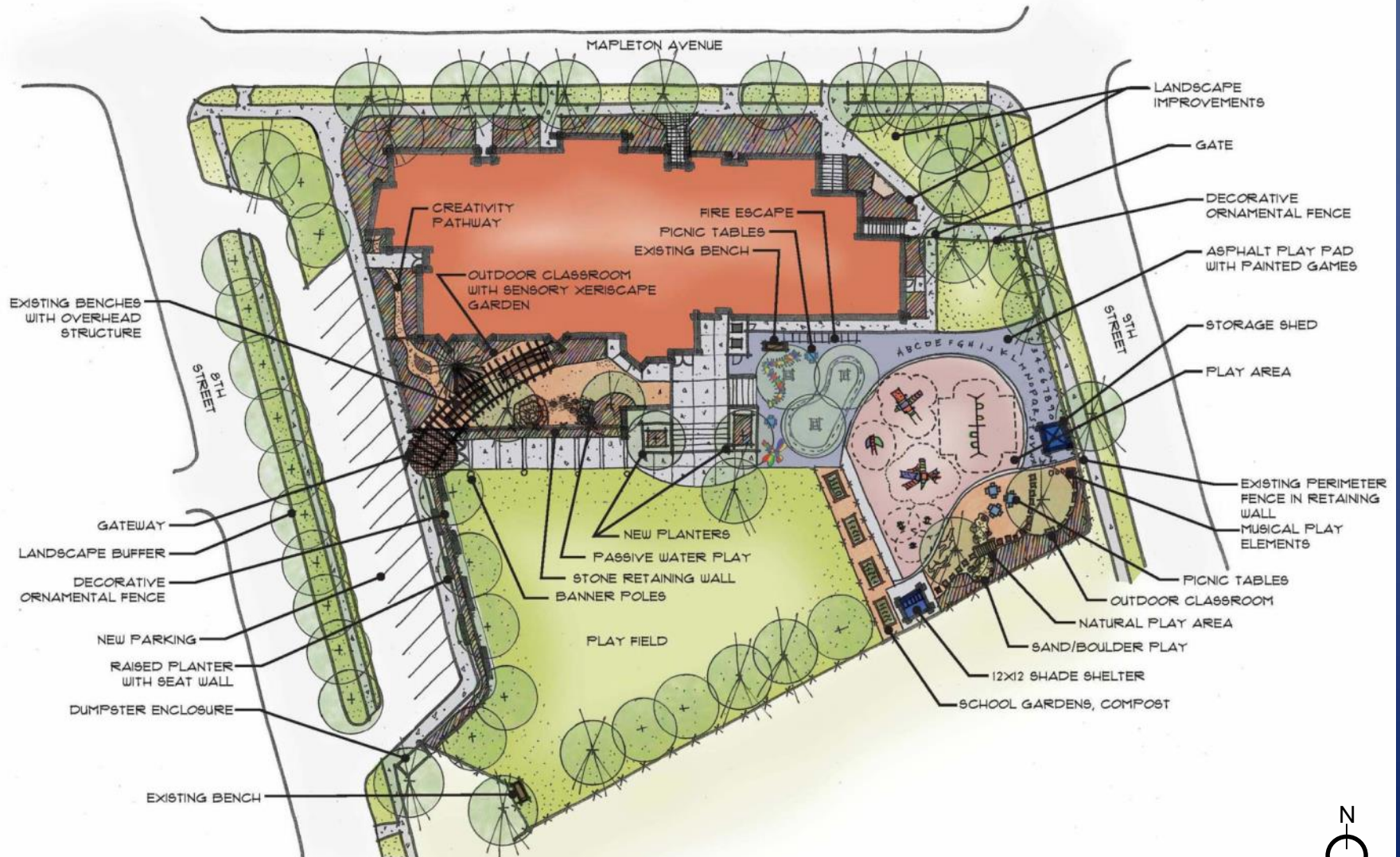
Boulder Valley School District  
Boulder, Colorado

# Mapleton Early Childhood Center





# Mapleton Early Childhood Center



# View From the Park

## Planning Process:

Mapleton School is one of the oldest schools in Boulder. It consists of the original structure, built in 1889; and 1951, 1975, and 1989 additions. Mapleton closed as an elementary school in 2003 after 114 years of continuous use. The original 1889 structure is a contributing building within the Mapleton Historic District.

In 2008, a coalition of the City of Boulder, other interested groups and citizens, and the Boulder Valley School District (BVSD) hired the team to evaluate the feasibility of converting the unused building to an Early Childhood Education Facility. When projected operational costs proved to be a stumbling block and not sustainable, the project was tabled. In 2010 BVSD passed a mill levy override to fund early childhood education, and in early 2011 the City of Boulder and BVSD arranged to pool funding, with BVSD providing operational and some capital costs and the City, through the Education Excised Tax, providing the balance of funds to support repurposing Mapleton for early childhood education.





## Planning Process, Continued:

A design advisory group (DAG) was formed consisting of community members, teachers, City personnel, and BVSD representatives. The challenges of renovating a 100 year old building within a historic neighborhood and the change of the building's function were significant and required an open and investigative process. The District and design team facilitated seven DAG meetings and three neighborhood-specific community meetings, which included neighbors, potential parents of students, the District early childhood education program director, the DAG, and the design team. The District's goals for the educational program were presented and discussed along with the concerns of the neighborhood. These open and interactive discussions explored multiple design solutions, which were discussed and evaluated by all participants.



# Grand Opening

## Community Environment:

The challenges of the existing small site and neighborhood request to keep the school site accessible during off hours as a neighborhood open space, motivated the design team to create a flexible site that can be secured during school hours and open to the public before and after school. Onsite parking was minimized to focus on drop off and pick up requirements with longer term parking located offsite. This solution allowed for significantly more playfield area for school and community use.

The final design solution honored the neighborhood's request by creating an open, vibrant school in the historic Mapleton neighborhood along with a neighborhood park, which is a hub of community activity after hours.





## Ground Floor Pre-K Classroom

### Learning Environment:

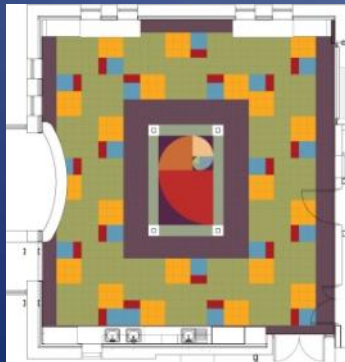
The Mapleton early childhood education program is based on the “Creative Curriculum Gold” system, which is specifically designed for children between the ages of 3 and 5. The District’s director of early childhood education provided an overview of the District’s goals related to the fourth addition of The Creative Curriculum during the early evaluation of design solutions. The design team used this book along with the input of parents, teachers, and administrators to filter all design decisions.



## Creativity Center

### Learning Environment, Continued:

Additionally, the design team specifically reached out to the University of Colorado Department of Environmental Design and engaged Professor Meredith Banasiak's Praxis Studio to explore design guidelines to foster creativity for early learners. The students exploration inspired the design team to view the cafeteria / multi-purpose room as a "creativity center" capable of accommodating art activities, motor skill development, large group activities, connection to the exterior, and community use.



Floor Patterns Based on the Fibonacci Series



# Variable Spaces for Learning

## Learning Environment, Continued:

The impacts of The Creative Curriculum on the design included: ample classroom size in the 1950s portion of the building with a variety of flooring and ceiling heights to generate “interest areas” for different learning activities, family / community spaces, student-specific amenities to foster ownership of the school, shared teacher work areas for collaboration and observation, and ample joint storage space to house a variety of teacher resources. Additionally, day lighting and appropriate classroom acoustics enhance the spaces in support of the educational mission. Adaptive reuse strategies included converting the former elementary school gymnasium into Pre-K classrooms (shown here)



## Historical Pre-K Classroom

### Physical Environment :

The wide variety of spaces within the existing building allowed the design team to create unique environments for students, teachers, and parents. In 100 year old classrooms with high ceilings, double hung windows, original refinished wood floors and new in-kind pressed tin ceilings, students experience a historic classroom updated with modern lighting controls and mechanical systems.





## Historical Circulation Area

### Physical Environment, Continued:

Key to the design solution was providing appropriate design features to support teachers, including windows in the office areas and corridor. Additional cabinets in the classrooms allow for easy access to teaching materials, provides organized access to student work for families, and provides adequate space for student belongings. An elevator inserted into the historic structure provides an accessible path throughout the entire facility.



# Historical Renovation

## Physical Environment, Continued:

Due to the pervasive presence of lead paint, dislodged plaster, layers of applied conduit and unit ventilators, the interior was taken back to its original lath and stone. The exterior wall was insulated with a soy based spray-on foam, and interior materials/details were put back “in-kind”. A low temperature hydronic heating system was embedded in the wall, and mechanical ventilation was added to improve indoor air quality. A “night flush” system, included in the mechanical system, cools the building during the summer months. The restored windows, now operable again, provide natural ventilation.



Abated Historic Structure



*New Hydronic Heating and Soy Insulation*





# Link Space

## Physical Environment, Continued:

A new glass enclosed link replaces the 1970's opaque stucco entry and white painted block lobby, (which concealed the west stone wall of the historic structure). This transparent space becomes an integral part of the educational experience by not only showing of the rich character of the historic building, but providing a family gathering space, an indoor gross motor skills area, and a conference space open to Mapleton Avenue. It also serves as a multi-purpose area for a variety of educational purposes and visually connects the lobby area to Mapleton Avenue and to views of the Flatirons and playfields to the south.

2012 Construction  
Photograph Showing  
Demolished 1976  
"Opaque" Link and Lobby  
space Prior to Construction  
of New "Transparent" Link



## Site Amenities

### Physical Environment, Continued:

The playgrounds were designed to specifically accommodate ECE students with age appropriate play areas, outdoor chalkboards, and a mix of multiple surfaces for creative play. The final site solution created an efficient drive-through parking solution that minimized the reduction in open space and provides a safe parking lot for students, parents, and teachers.

Parent amenities include: a new off street parking area for parent/student access to the building, relocation of the entry away from the public street, a secure entry vestibule for the safety of both students and staff, parent gathering areas in the entry to the building, and a creativity center that can be used for neighborhood and community meetings.

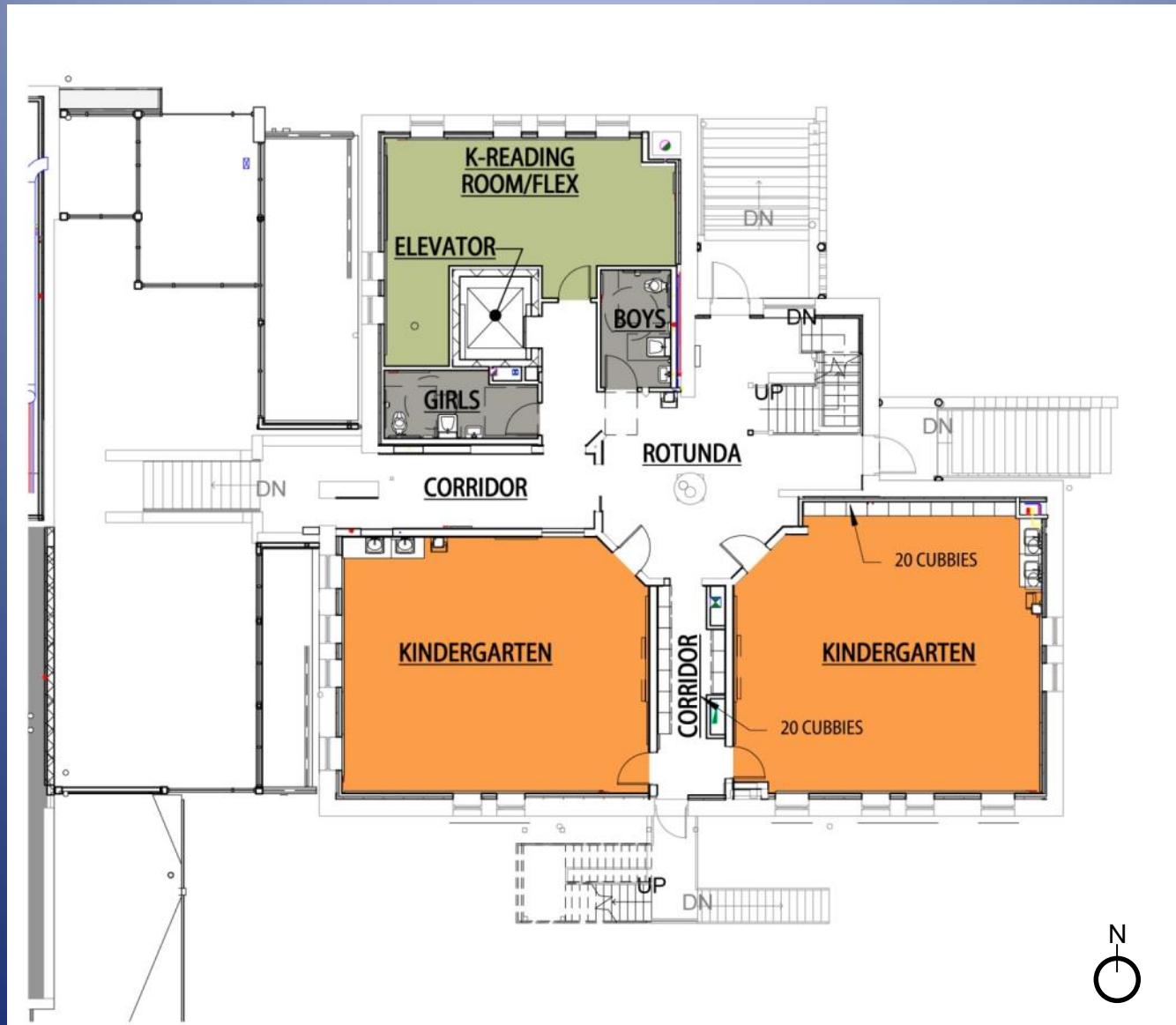




# Ground Floor Plan

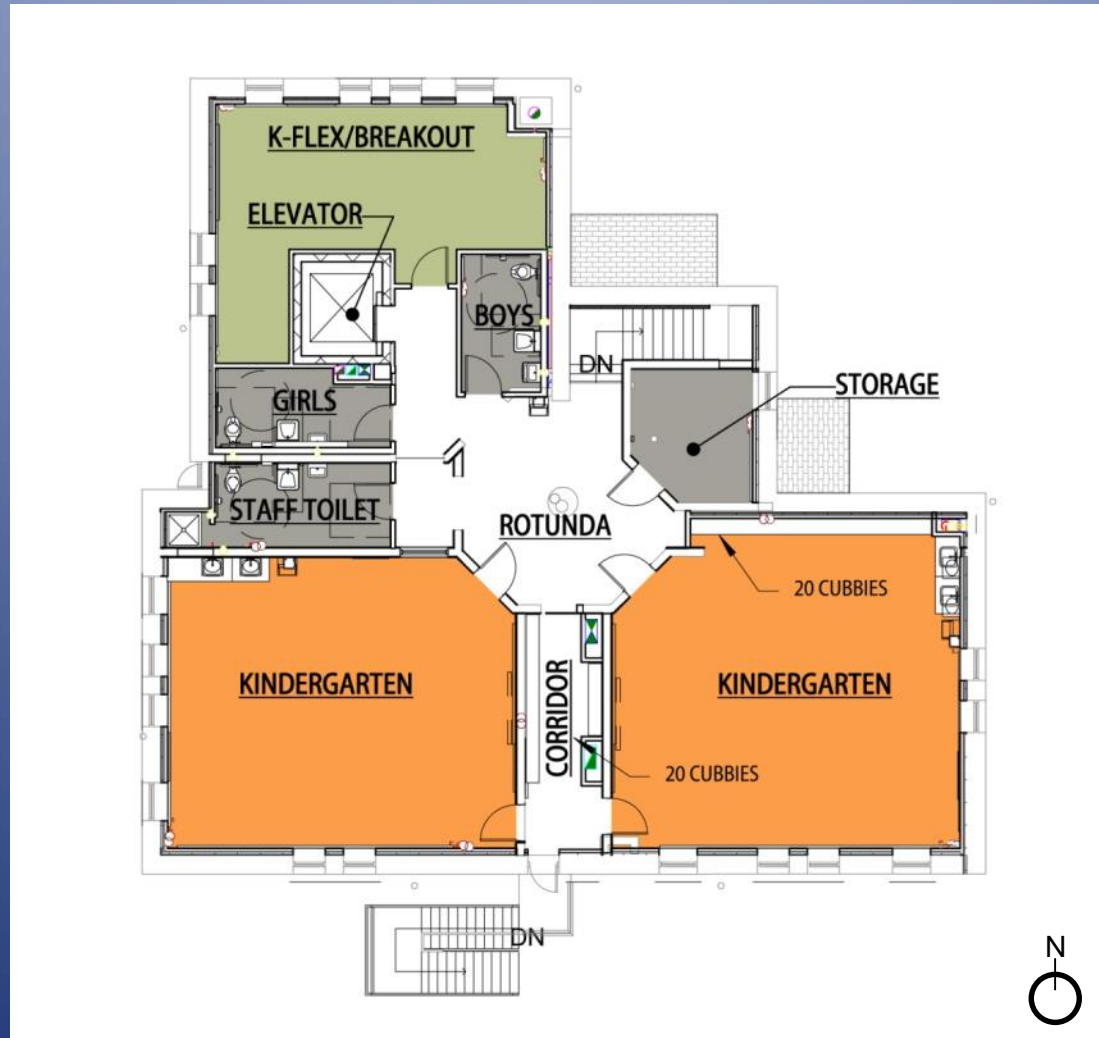


# Main Floor Plan Historic Building





# Second Floor Plan Historic Building



# Exhibition of School Planning and Architecture

## Project Data

Submitting Firm :	Alan Ford Architects
Project Role	Principal in Charge of Design
Project Contact	Alan Ford
Title	Principal
Address	3457 Ringsby Court, Unit 217
City, State or Province, Country	Denver, Colorado, USA
Phone	303-383-1111

Joint Partner Firm:	RTA Architects
Project Role	Principal in Charge of Production and Co-Designer
Project Contact	Doug Abernathy
Title	Principal
Address	19 S Tejon Street, Suite 300
City, State or Province, Country	Colorado Springs, Colorado, USA
Phone	719-471-7566

Construction Firm:	Adolfson & Peterson Construction
Project Role	Project Manager
Project Contact	Mario Cappella
Title	Project Manager
Address	797 Ventura Street
City, State or Province, Country	Aurora, Colorado, USA
Phone	303-363-7101

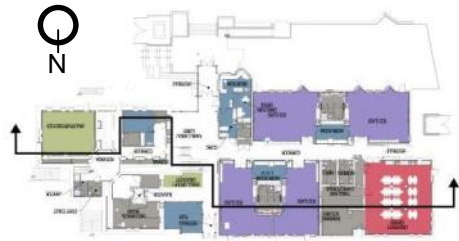
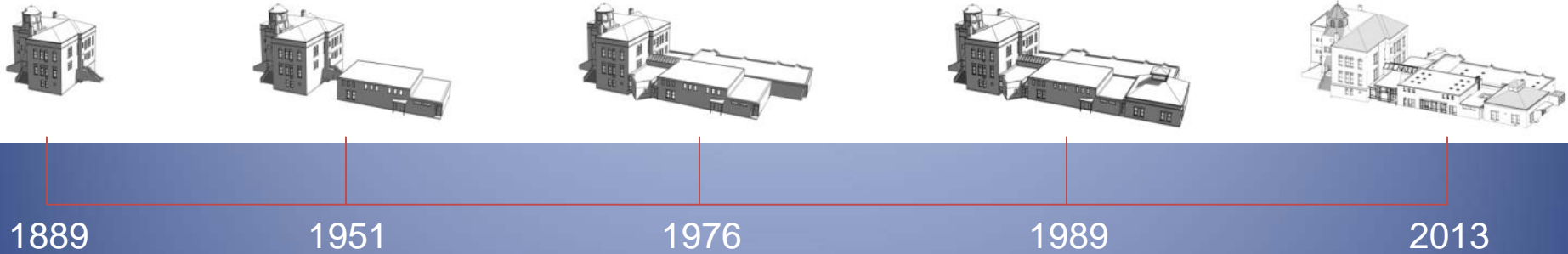


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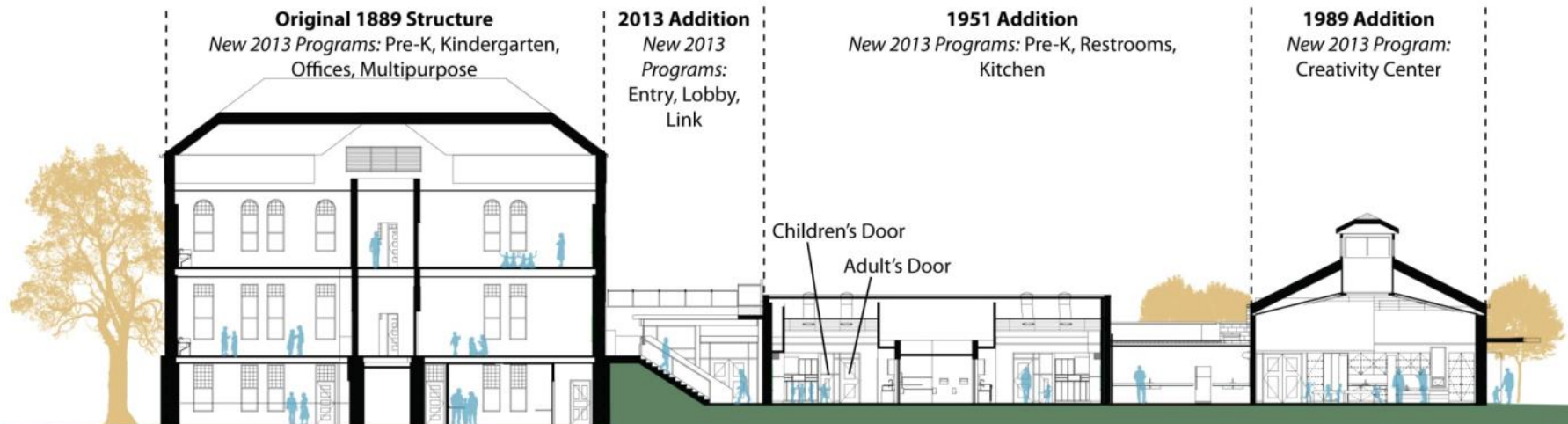
## Project Details

<b>Project Name</b>	Mapleton Early Childhood Center
<b>City</b>	Boulder
<b>State</b>	Colorado
<b>District Name</b>	Boulder Valley School District
<b>Supt/President</b>	Bruce K. Messinger, Ph.D.
<b>Occupancy Date</b>	August 2013
<b>Grades Housed</b>	ECE - Kindergarten
<b>Capacity(Students)</b>	180
<b>Site Size (acres)</b>	1.7 Acres
<b>Gross Area (sq. ft.)</b>	22,000 Gross SF
<b>Per Occupant(pupil)</b>	122 Gross SF/Student
<b>gross/net please indicate</b>	
<b>Design and Build?</b>	Yes
<b>If yes, Total Cost:</b>	\$5,000,000
<b>Includes:</b>	
<b>If no,</b>	Project delivery was performed under CM/GC
<b>Site Development:</b>	Included in Above
<b>Building Construction:</b>	Included in Above
<b>Fixed Equipment:</b>	Included in Above
<b>Other:</b>	
<b>Total:</b>	\$5,000,000

# Historical Timeline



## Section Through Final 2013 Design





# Main Entry Before and After



# Historic Classroom Before and After





# Link/Main Stairs Before and After



# Student Entry Before and After

