

# RALPH WALDO EMERSON ELEMENTARY SCHOOL NEW CONSTRUCTION

Bristol Township School District  
Levittown, Pennsylvania

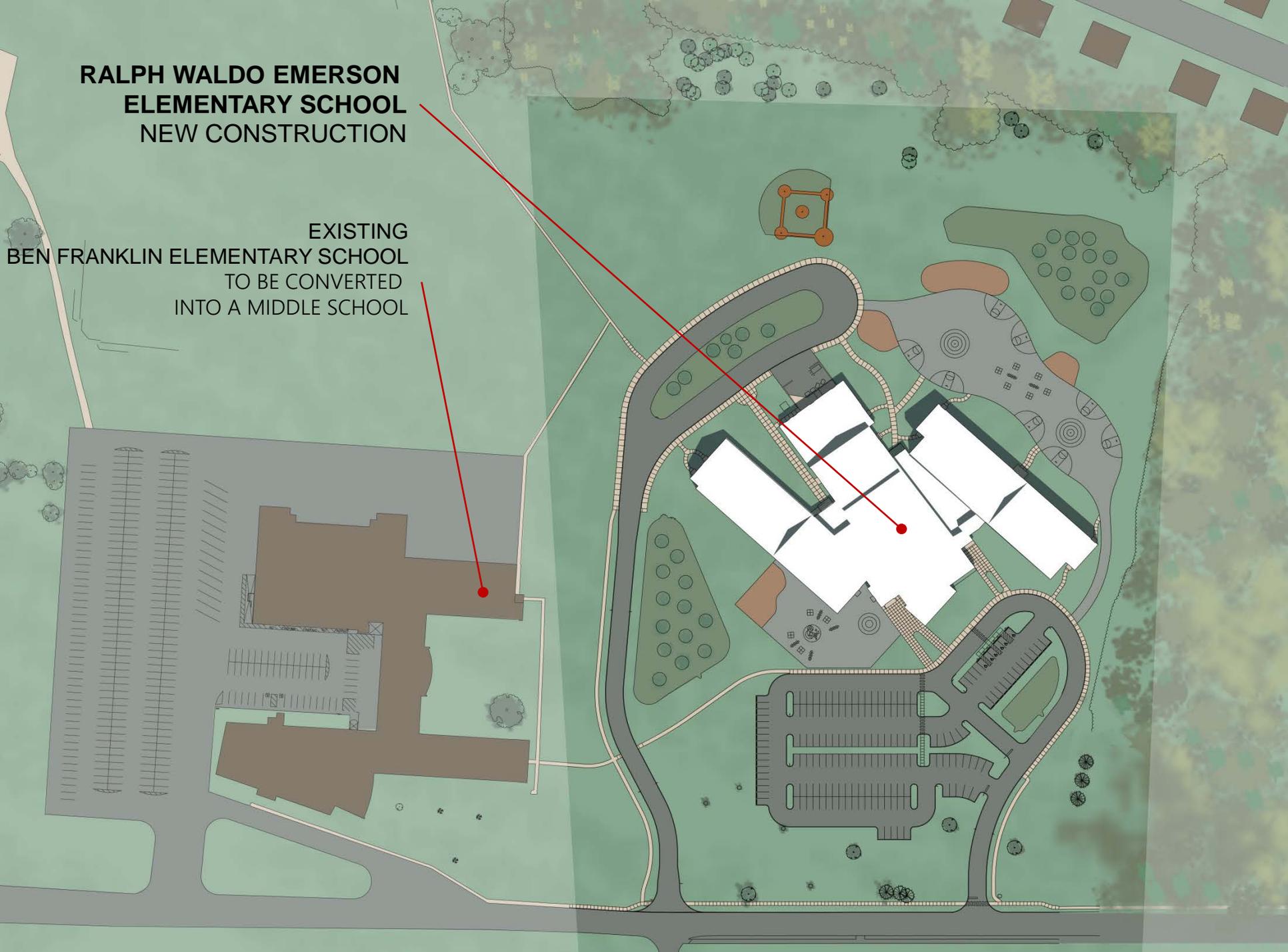


# RALPH WALDO EMERSON ELEMENTARY SCHOOL NEW CONSTRUCTION



**RALPH WALDO EMERSON  
ELEMENTARY SCHOOL  
NEW CONSTRUCTION**

**EXISTING  
BEN FRANKLIN ELEMENTARY SCHOOL  
TO BE CONVERTED  
INTO A MIDDLE SCHOOL**



## community-based planning



**COMMUNITY ENVIRONMENT** Located in Levittown, Pennsylvania, a planned community designed and built in the 1950s by founder William J. Levitt, the existing Ralph Waldo Emerson Elementary School was one of nine neighborhood elementary schools, some of which also were built by Levitt to serve the local population. In 2012, a comprehensive master planning study was conducted by the design team and concluded that the best course of action for the District was to close the nine existing outdated and aging neighborhood elementary schools and consolidate their populations into three brand new elementary facilities distributed evenly throughout the District. In response, a concerted effort was made to involve the community in the decision-making and planning process to facilitate acceptance and garner support.

Using a community-based planning process, the design team was able to successfully integrate a large group of community and district stakeholders in the planning process for what resulted in a prototype design for the three new elementary schools to be simultaneously constructed. The new Ralph Waldo Emerson Elementary School is a product of the prototype design and is sited on the same site as the original facility constructed in the 1950s.



## history wall

**COMMUNITY ENVIRONMENT** To best serve the community, the design for the new elementary school allows the academic spaces of the building to be closed to the public while other centralized functions are made available for community use, including the Media Center and gymnasium. Playing fields and playgrounds are available for community use as well.

Because a large percentage of the local population is involved in the construction industry, the District developed a labor agreement that included criteria supporting the use of local labor for the three elementary school construction projects. As a result, a substantial number of jobs were made available for local residents throughout the construction process.

Given the historical significance of Levittown and its schools, the Pennsylvania Historical and Museum Commission (PHMC) required the original elementary school building be commemorated. This was accomplished through a 'history wall' that references the original building and early life in Levittown.

**LEARNING ENVIRONMENT** The school is designed to support two specific grade-grouping structures, K-2 and 3-5, in a “school within a school” format. The building design accommodates both by creating an environment in which every space in the facility essentially serves as a learning space. Learning studios, small group instruction areas and large group instruction areas provide spaces for individual, small-, medium- and large-group learning. Spaces traditionally used as vertical transition areas are designed to function as additional dynamic, large group instructions spaces in the form of “learning stairs”.



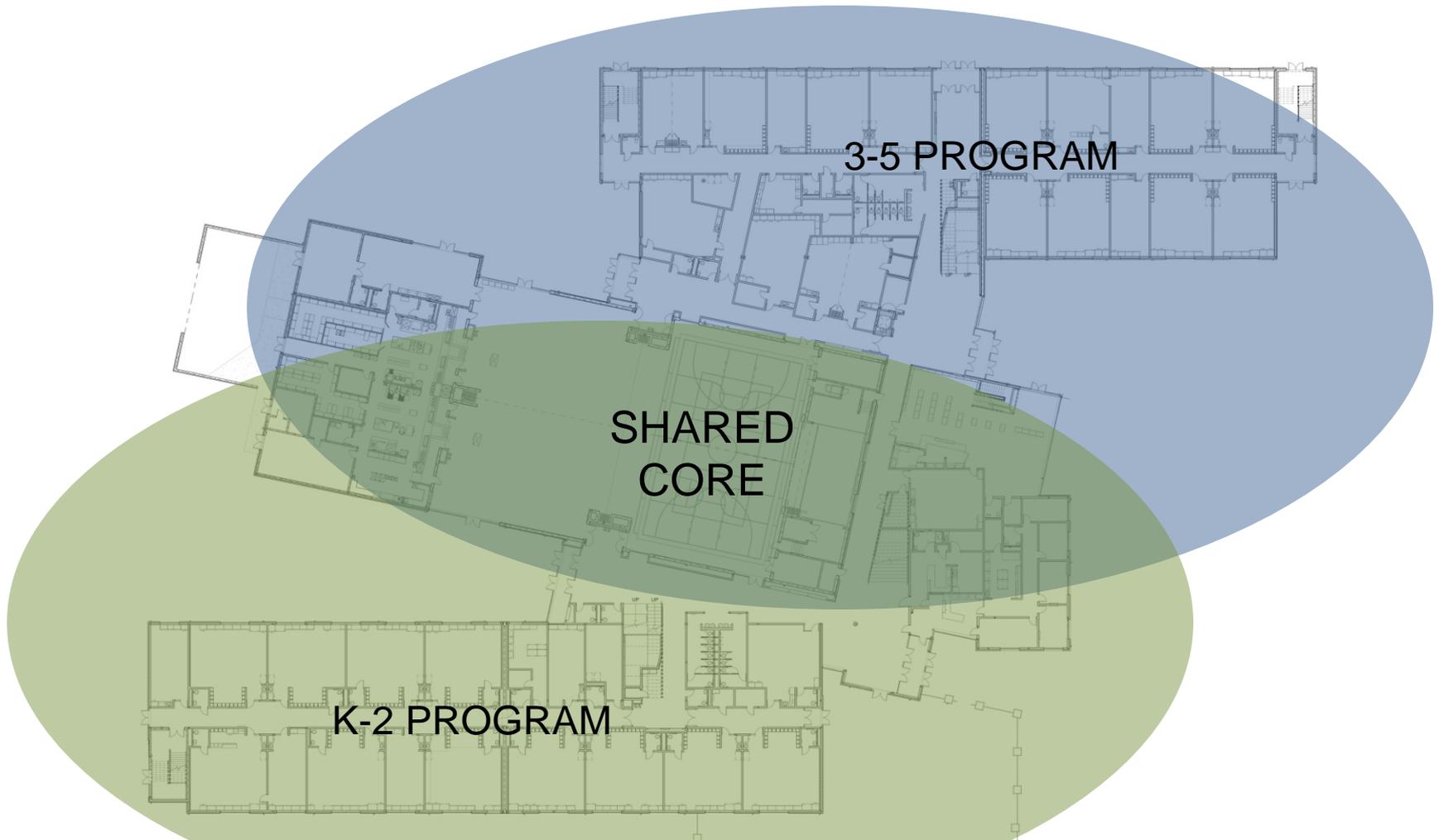


"The more that you read, the more things you will know. The more that you learn, the more places you'll go."  
-Dr. Seuss

"Alone we can do so little; together we can do so much."  
-Hellen Keller

"What lies behind us and what lies before us are small matters compared to what lies within us."  
-Ralph Waldo Emerson

learning stair



**LEARNING ENVIRONMENT** The Media Center, gymnasium, administrative and dining facilities serve as the core of the facility and serve both the K-2 and the 3-5 schools. The dining space is split for the K-2 and 3-5 programs with two dedicated serving areas. The gym is split to serve each building community separately. All of these spaces can be opened to create one large assembly space for the student body or the community. The Media Center is a 2-story space at the core of the building that serves both building communities as well as the public in the evening. Music and art spaces also are located at the core and additionally support the two building communities via separate, dedicated spaces.

**shared resource :  
two-story media center  
serving K-2 and 3-5 building  
communities**

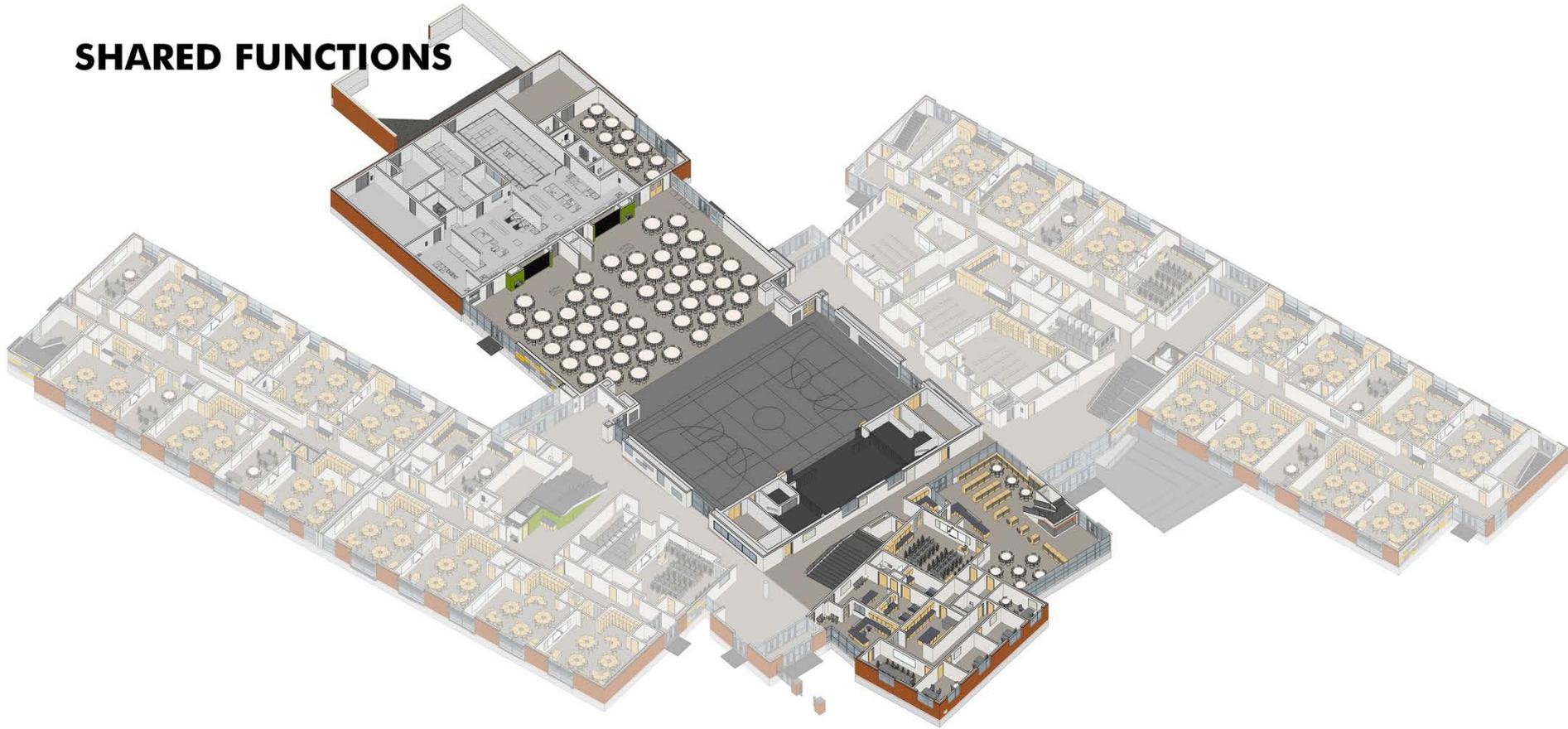


**PHYSICAL ENVIRONMENT** The design of the facility minimizes disruption to the site and allows the existing elementary school to remain operational during construction. The new facility is sited away from the adjacent road to allow for green space between the building and the roadway. A variety of materials is used on the exterior in an effort to break up the facade and reduce the perceived scale of the facility.

To achieve the vision and goals for the project, a prototype design was developed for three new elementary schools distributed evenly throughout the District to replace nine outdated and inadequate facilities. After the nine populations are consolidated into the three new schools, the original elementary schools will close. In the case of Ralph Waldo Emerson Elementary School, the new facility is being constructed on the site of the original school, which will stay open until the new project is complete, and will house two schools of 600 students within a school to serve both K-2 and 3-5 programs. This will form a campus with an adjacent District building that will be converted to a middle school.

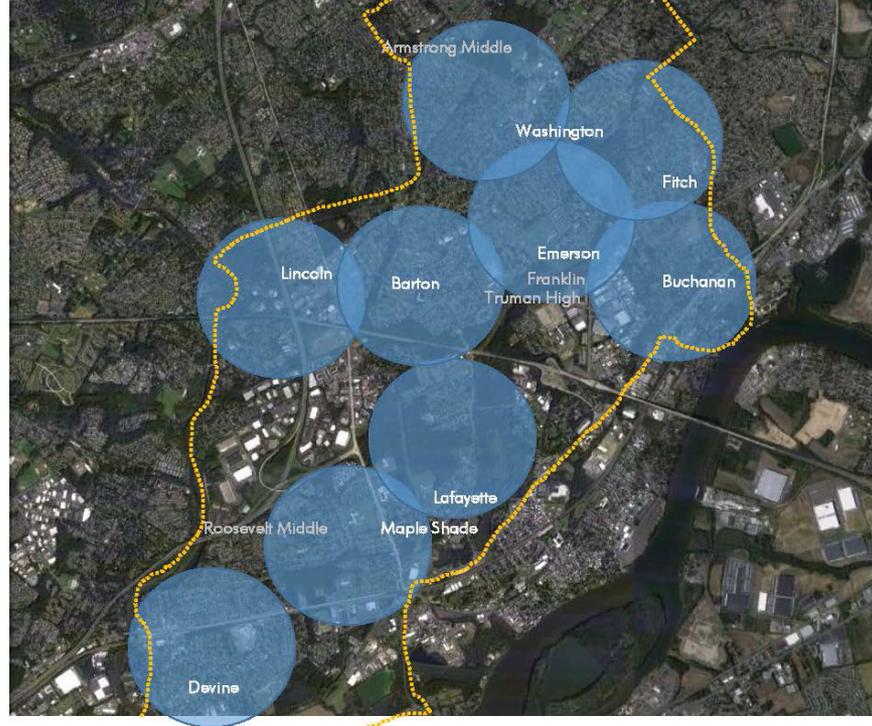


## SHARED FUNCTIONS



**PHYSICAL ENVIRONMENT** The facility design places functions shared by both the K-2 and the 3-5 programs, which include the Media Center, dining, gymnasium, administration, and art and music instruction, at the center of the building with other academic spaces flanking the shared core.

In addition to incorporating sustainable measures that include but are not limited to a ground source heat pump system, recycled and renewable materials, rain gardens, high-efficiency building envelope, and dimmable and daylight controlled lighting systems, the District is able to greatly reduce overall energy usage by consolidating three very inefficient buildings into one highly-efficient facility.

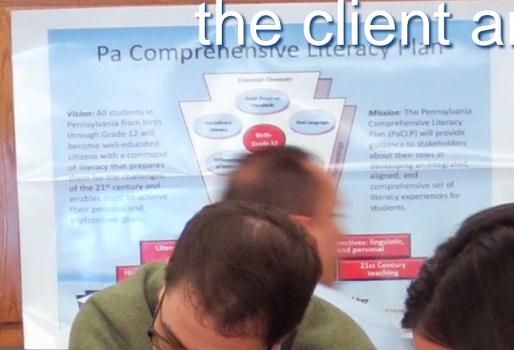
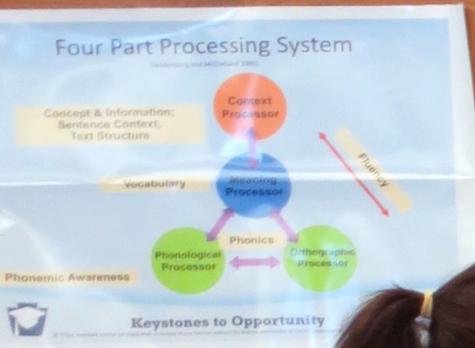


**PLANNING PROCESS** Prior to beginning work on the design of the facility, our firm conducted a master planning study that included significant enrollment projection and demographic work. The study revealed that the District would face a substantial increase in enrollment beginning in 2016, and the District recognized that action would be required to properly accommodate the increase.

After a lengthy process that involved both District personnel as well as the community, it was determined that three new elementary schools would be designed and built simultaneously to replace nine existing but outdated elementary facilities. The new Ralph Waldo Emerson Elementary stemmed from a design developed as a resulting of the planning process and intended to serve as a prototype for the three new elementary schools.

A general design concept was developed early in the planned process and then vetted with District teachers, administrators, and students. From that point, the design team met monthly with teachers, administrators, student representatives and select community members. To fine-tune the design of the facility, the process initially viewed the big picture and worked toward focusing on details.

our job is not to convince people of a solution, rather to  
**REACH CONSENSUS ON A SHARED VISION**  
developed with and through interaction with  
the client and community





## PLANNING PROCESS

Workshop sessions included:

- General building and site design
- Large scale planning
- Detailed space use
- Space fit-out
- Furniture design

Project planning included the design team and representatives from the client group and community, and the project was conducted following the timeline shown below.

Master planning

June 2012 – November 2012

Facility planning and design process

May 2013 – March 2014

Bidding

April – May 2014

Construction

June 2014 – October 2015

Demolition of existing facility

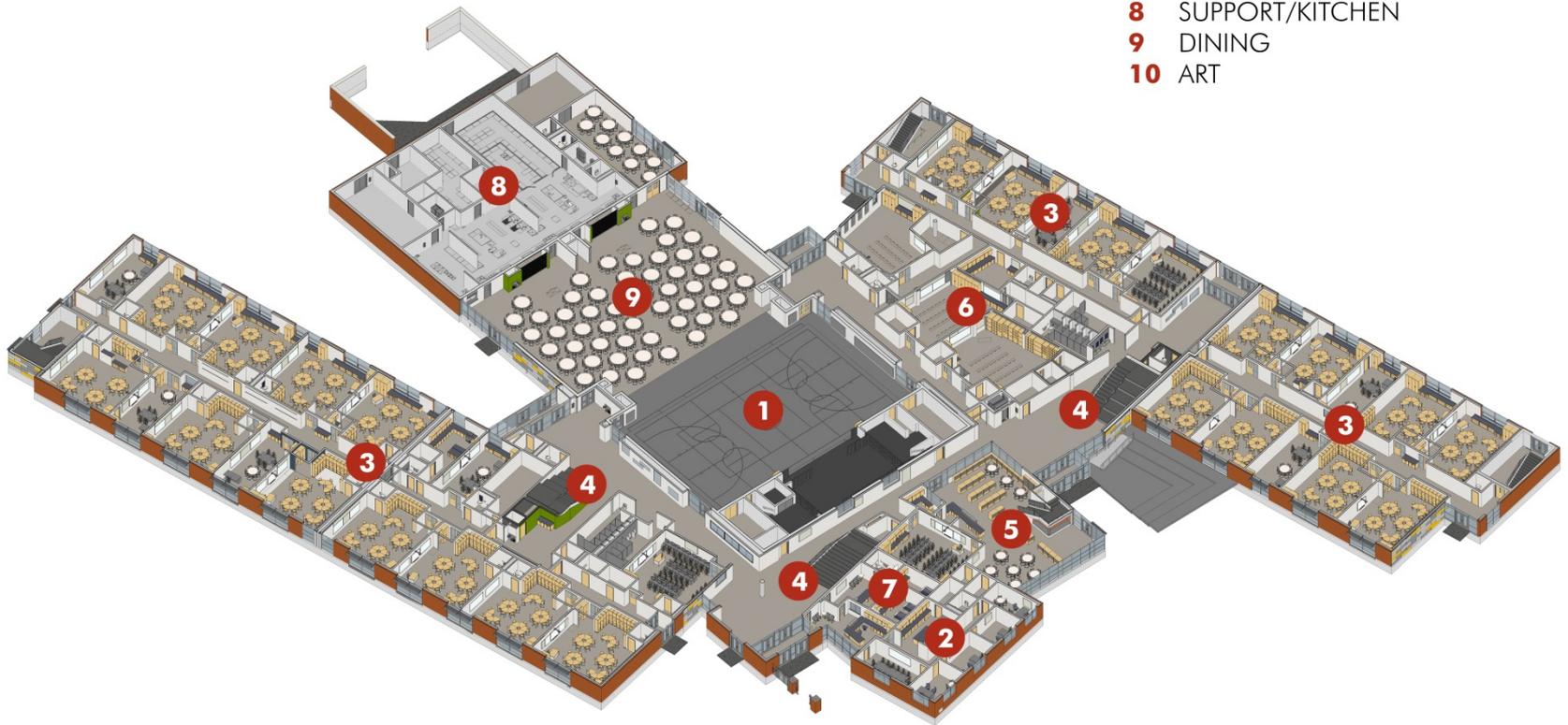
November 2015

Occupancy of new facility

December 2015

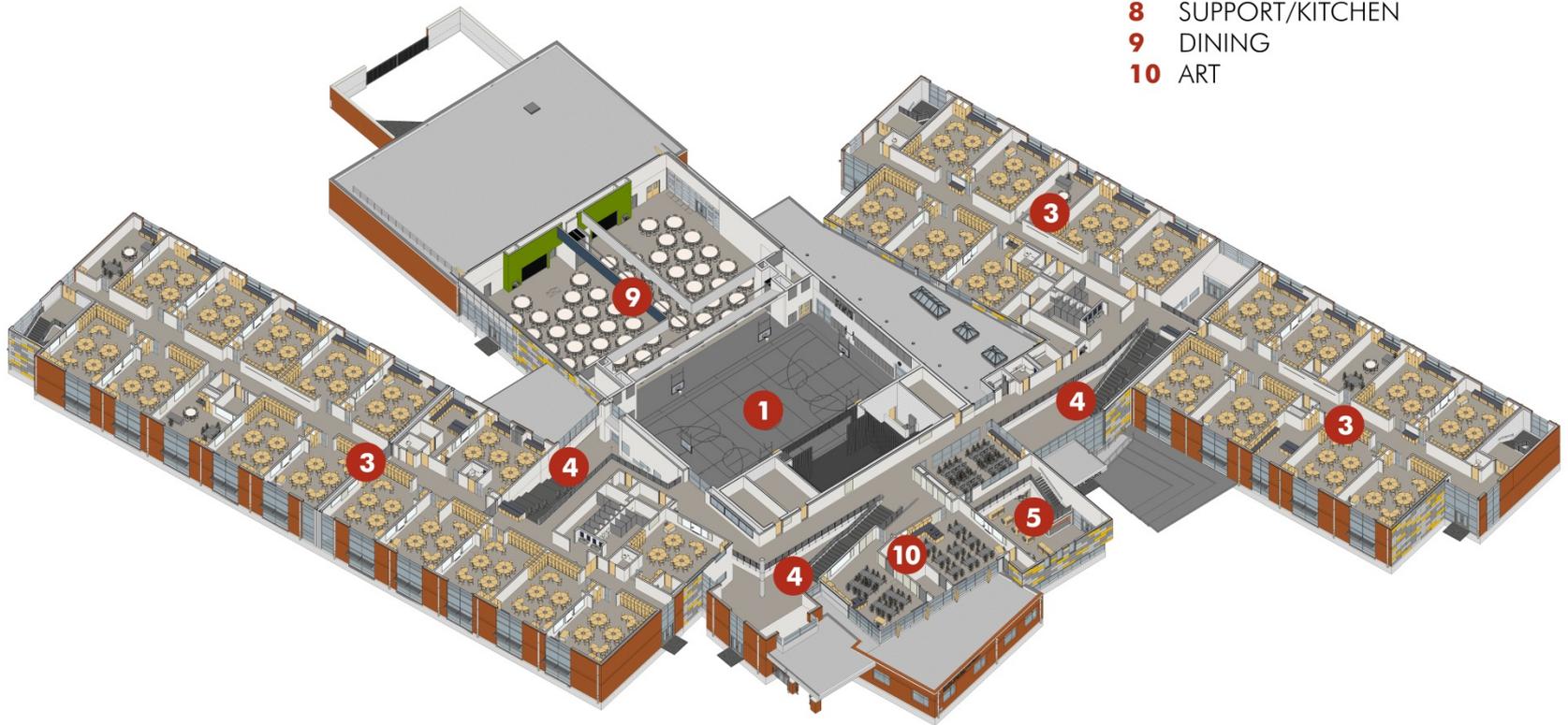
# first floor plan

- 1** GYMNASIUM
- 2** ADMINISTRATION
- 3** LEARNING SPACES
- 4** LARGE GROUP INSTRUCTION
- 5** MEDIA CENTER
- 6** MUSIC
- 7** NURSE
- 8** SUPPORT/KITCHEN
- 9** DINING
- 10** ART



# second floor plan

- 1 GYMNASIUM
- 2 ADMINISTRATION
- 3 LEARNING SPACES
- 4 LARGE GROUP INSTRUCTION
- 5 MEDIA CENTER
- 6 MUSIC
- 7 NURSE
- 8 SUPPORT/KITCHEN
- 9 DINING
- 10 ART





# Exhibition of School Planning and Architecture

## PROJECT DATA

### submitting firm

SCHRADERGROUP architecture

### project role

Architectural design

### project contact

David L. Schrader, AIA, LEED AP

### title

Managing Partner / Lead Designer

### address

161 Leverington Avenue, Suite 105

### city, state or province, country

Philadelphia, Pennsylvania, USA

### Phone

215.482.7440

### joint partner firm

n/a

### other firm

n/a

### construction management firm

Reynolds Construction

### project role

Construction manager

### project contact

Bill MacLaughlin

### title

Project Executive

### address

1265 Drummers Lane, Suite 104

### city, state or province, country

Wayne, Pennsylvania, USA

### phone

610.688.6010



## Exhibition of School Planning and Architecture

### PROJECT DETAILS

<b>Project Name</b>	Ralph Waldo Emerson Elementary School
<b>City</b>	Levittown
<b>State</b>	Pennsylvania
<b>District Name</b>	Bristol Township School District
<b>Supt/President</b>	Dr. Samuel Lee
<b>Occupancy Date</b>	October 2015 anticipated
<b>Grades Housed</b>	K-5
<b>Capacity(Students)</b>	1250 students
<b>Site Size (acres)</b>	15 acres
<b>Gross Area (sq. ft.)</b>	140, 455 SF
<b>Per Occupant(pupil)</b>	113 SF per occupant
<b>gross/net please indicate</b>	gross
<b>Design and Build?</b>	yes
<b>If yes, Total Cost:</b>	\$33,437,437
<b>Includes:</b>	building, site
<b>If no,</b>	
<b>Site Development:</b>	
<b>Building Construction:</b>	
<b>Fixed Equipment:</b>	
<b>Other:</b>	
<b>Total:</b>	\$33,437,437