

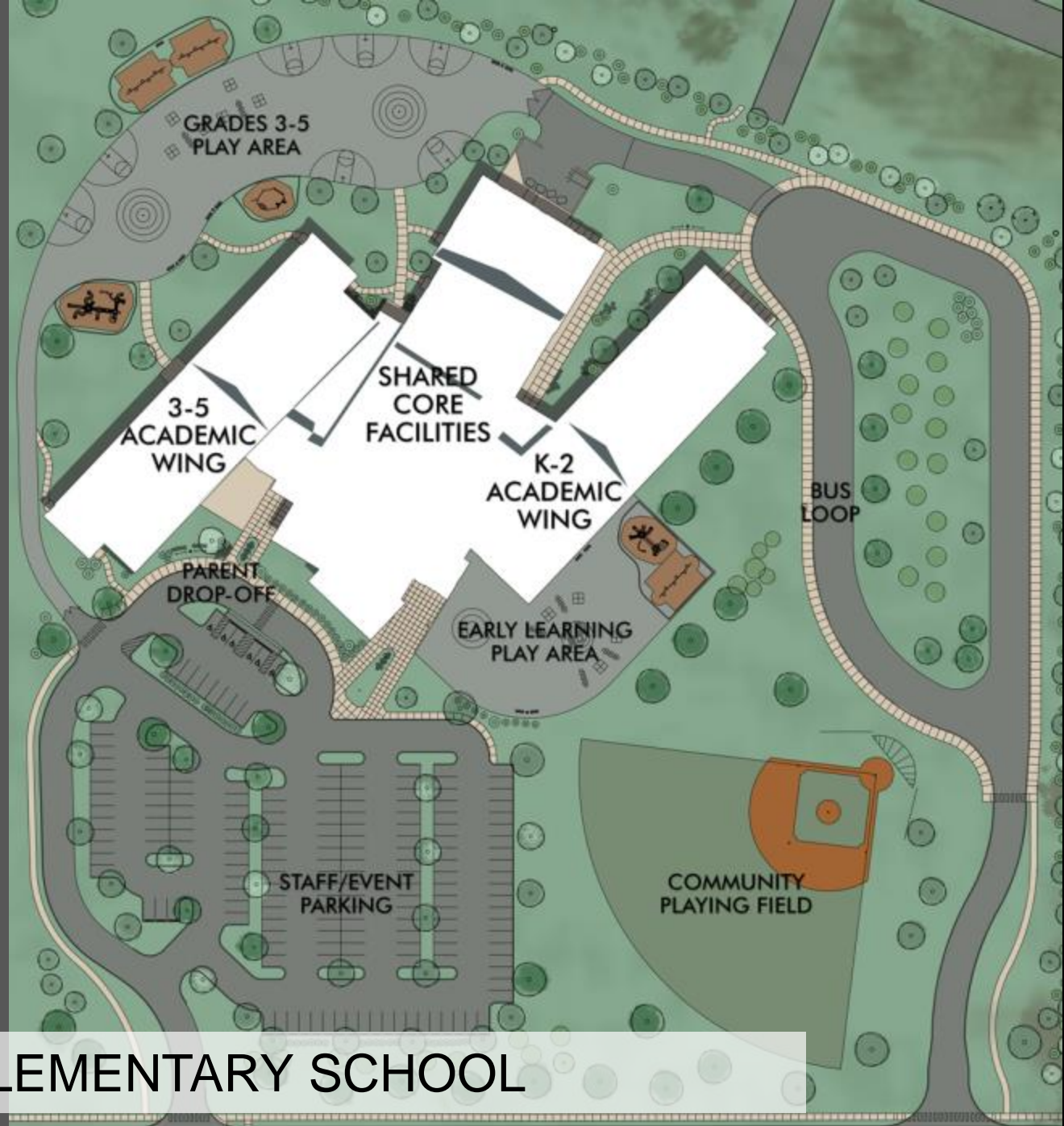
BROOKWOOD ELEMENTARY SCHOOL NEW CONSTRUCTION

Bristol Township School District
Levittown, Pennsylvania



BROOKWOOD ELEMENTARY SCHOOL NEW CONSTRUCTION





BROOKWOOD ELEMENTARY SCHOOL



COMMUNITY ENVIRONMENT Located in Levittown, Pennsylvania, a planned community designed and built in the 1950s by founder William J. Levitt, the existing James Buchanan 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by the design team and concluded that the best course of action for the District was to close the nine existing outdated and aging neighborhood elementary schools and consolidate their populations into three brand new elementary facilities distributed evenly throughout the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 Brookwood Elementary School is a product of the prototype design and is sited on the same site as the original facility constructed in the 1950s.

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 Learning Resource 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.





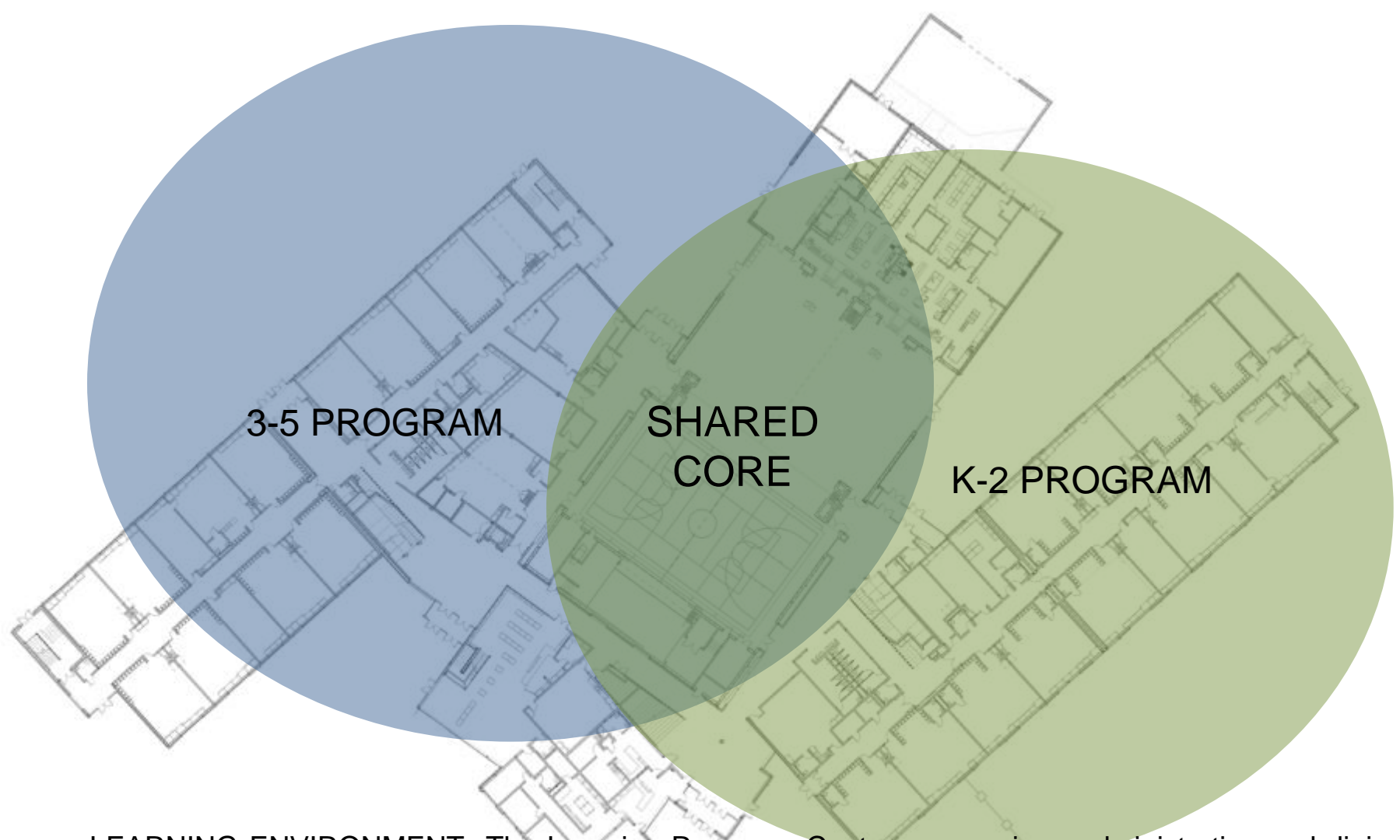
MAIN LOBBY
CONNECTING TO PUBLIC AREAS





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 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”.





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

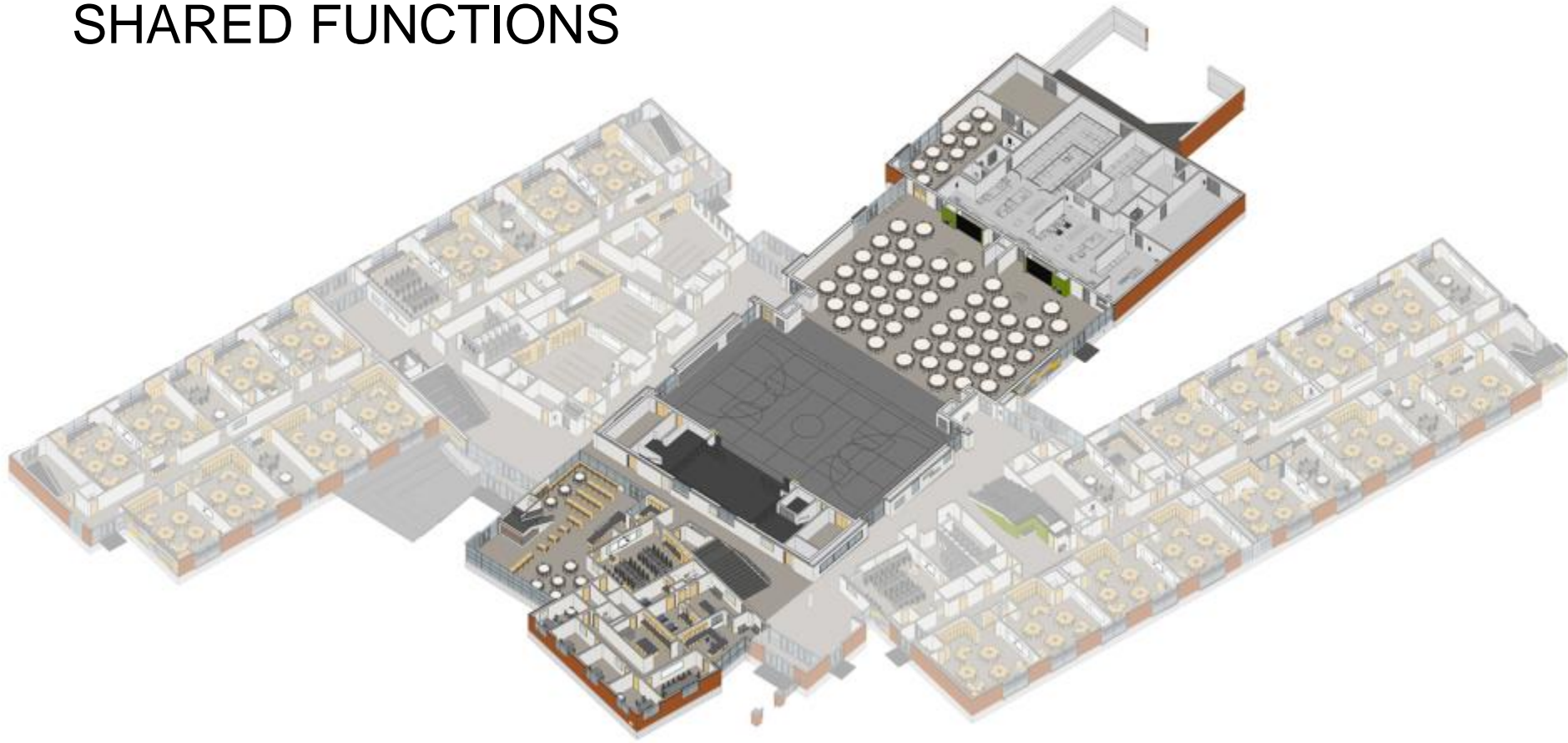


SHARED RESOURCE : TWO-STORY LEARNING RESOURCE
CENTER
SERVING K-2 AND 3-5 BUILDING COMMUNITIES

PHYSICAL ENVIRONMENT The design of the facility minimized disruption to the site and allowed 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.



SHARED FUNCTIONS



PHYSICAL ENVIRONMENT The facility design places functions shared by both the K-2 and the 3-5 programs, which include the Learning Resource 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 was able to greatly reduce overall energy usage by consolidating three very inefficient buildings into one highly-efficient facility.



EXISTING



SOLUTION

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 Brookwood 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.



PLANNING PROCESS

Public 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 – May 2016

Partial occupancy of building

December 2015

Demolition of existing facility

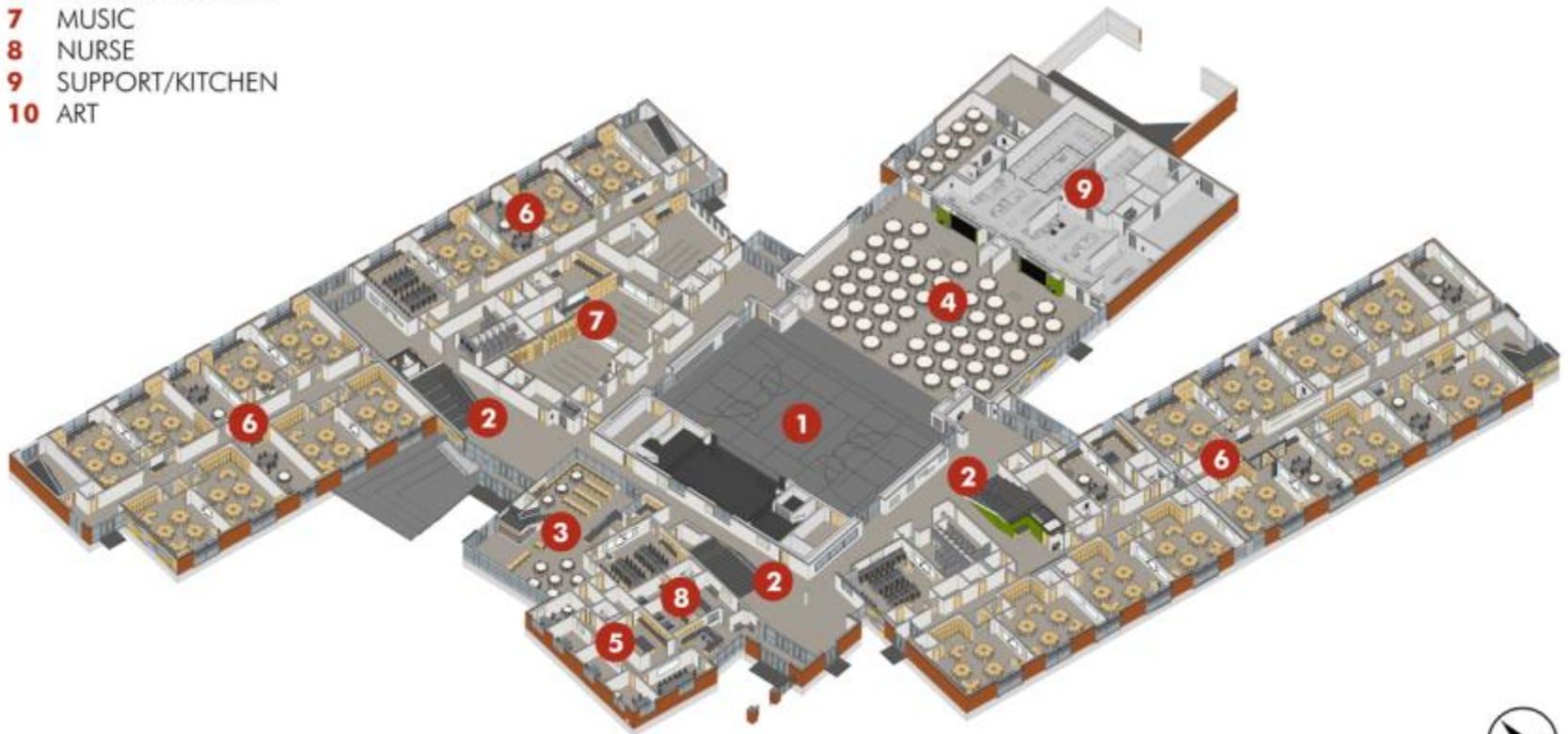
January – May 2016

Full occupancy of new facility

August 2016

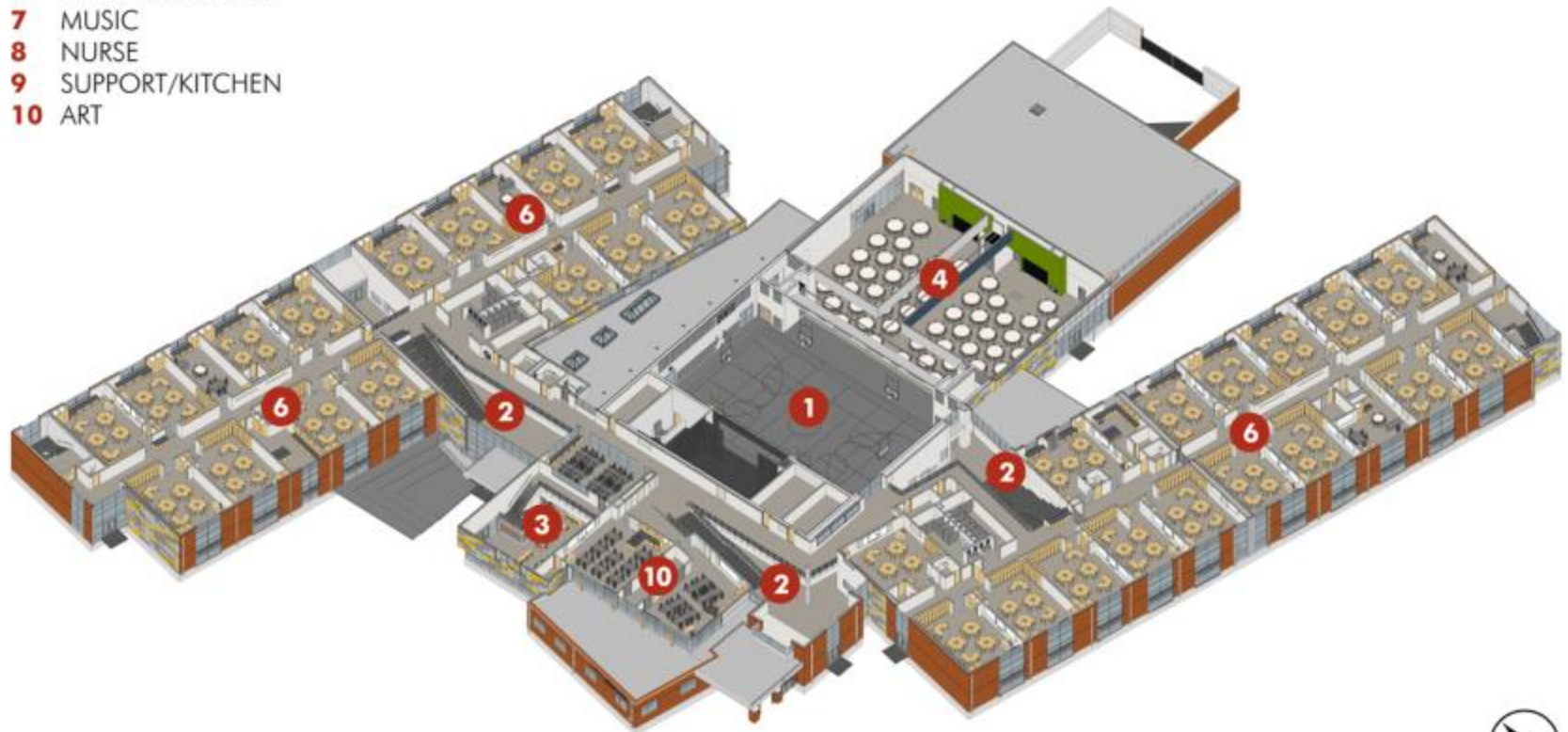
FIRST FLOOR PLAN

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



SECOND FLOOR PLAN

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





Exhibition of School Planning and Architecture

PROJECT DATA

submitting firm

SCHRADERGROUP architecture

project role

Architectural design

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Exhibition of School Planning and Architecture

PROJECT DETAILS

Project Name	Brookwood Elementary School
City	Levittown
State	Pennsylvania
District Name	Bristol Township School District
Supt/President	Dr. Melanie Gehrens
Occupancy Date	October 2015
Grades Housed	K-5
Capacity(Students)	1250 students
Site Size (acres)	15 acres
Gross Area (sq. ft.)	140, 455 SF
Per Occupant(pupil)	113 SF per occupant
gross/net please indicate	gross
Design and Build?	no
If yes, Total Cost:	
Includes:	
If no,	
Site Development:	\$5,600,000
Building Construction:	\$27,600,000
Fixed Equipment:	\$1,100,000
Other:	\$8,600,000
Total:	\$42,900,000