

# Goddard School Addition & Renovation

Anderson Township, Ohio

## General Contractor & Cost Estimator

DER Development Company, LLC

In the minds of the owners, Mark and Wendy Reinhart, the expansion and renovation of the Goddard School in Anderson Township, Ohio, was several years in the making. Initial design costs exceeded their established budget, making a new location and a new building unfeasible, as did the need to provide continuous operation of the daycare school during construction.

After some careful thought back at the drawing board, the owners solicited bids from a select few contractors, ultimately settling on DER Development Company.

It was eventually determined that creating a hybrid project delivery system would work best. Using Tony Ravagnani Architects (TRA) for the architectural, structural, and civil designs, combined with DER's MEP design-build platform, made the most sense and worked within their budget. The existing 6,208-square-foot building would receive a significant renovation and a 6,236-square-foot addition.

It became clear to DER that the school's belief in continually pushing for excellence was vital to their mission. This meant that a design that provided more and better options to the students and parents was paramount to success.

A before/after-school classroom that could serve multiple purposes (including an indoor play area, theatre, meeting room, classroom, etc.) was central to their vision. They also needed space and options for age groups they were already serving, in the form of more and larger classrooms.

Along with these requirements came the need for a larger and more practical kitchen area, more creature comforts for the staff, and improvements to the outdoor play area. It was important to the school that improvements not only add space, but improve the educational experience for the students. This meant implementing changes to the existing floor plan to improve flow and operational efficiency.

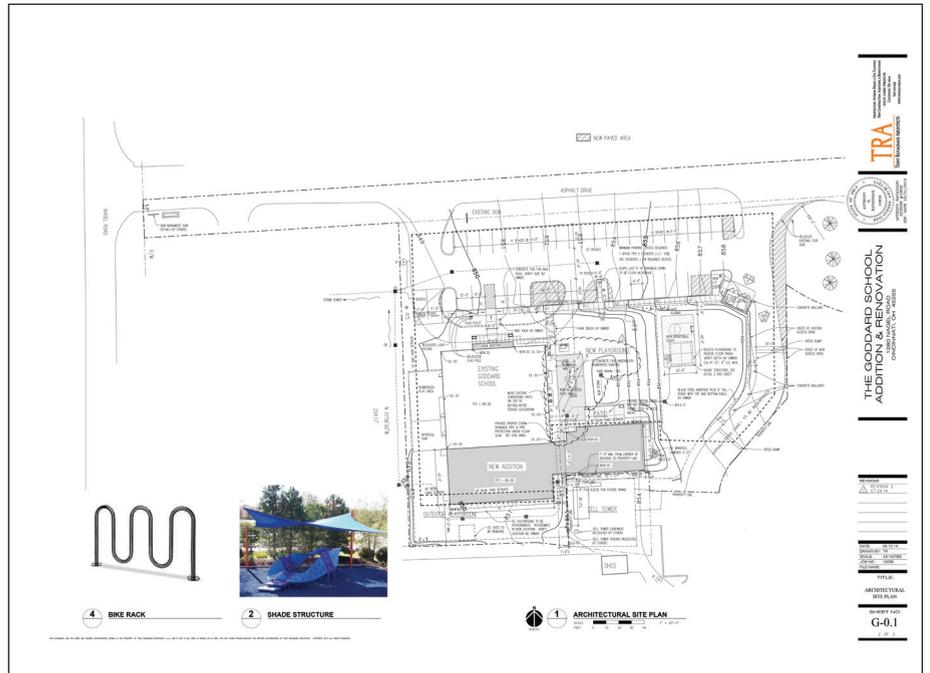
Leveraging natural daylight with frequent use of windows and skylights, and using other practical green construction features such as R-26 spray foam insulation in the walls, R-38 batts in the roof, high-reflexivity membrane roof, and low-E glazing were some of the important energy features added to the design.

The construction process required some creative sequencing in order to work within the confines of an occupied and relatively tight site, and a lot of help and patience from the staff and students.

The major addition was completed first, along with a substantial amount of the site work. Upon completion of that first phase, the classes moved into the new work, leaving the



Photos Courtesy of DER Development Company, LLC & Tony Ravagnani Architects



original building still occupied, but to a much lesser extent. The renovation phase had its own mini-phases to accommodate the ongoing classes, and that presented some challenges, but none that could not be overcome with teamwork from DER, TRA, and the school.

The process and the end results were both an exciting time for the staff and students and was part of the daily educational experience for a year.

### Product Information

*Building Envelope:* Glen Gery  
*Roofing:* Carlisle  
*Windows:* Marvin Integrity  
*Entrances & Storefronts:* OldCastle BuildingEnvelope®  
*Interior:* U.S. Gypsum  
*Flooring:* Earthworks Montana Plank  
*Daylighting/Skylights:* Velux Sun Tunnels  
*Lighting:* LSI, Lithonia, Hubbell, Juno

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DER Development Company, LLC  
 750 U.S. Highway 50  
 Milford, OH 45150  
[www.derdevelopment.com](http://www.derdevelopment.com)

**Project Team**

**Architect & Structural Engineer**

Tony Ravagnani Architects  
 4345 Mount Carmel Tobasco Road, Cincinnati, OH 45244

**Mechanical Engineer**

Fischer Engineering Services  
 3672 Nottingham Court, Cleves, OH 45002

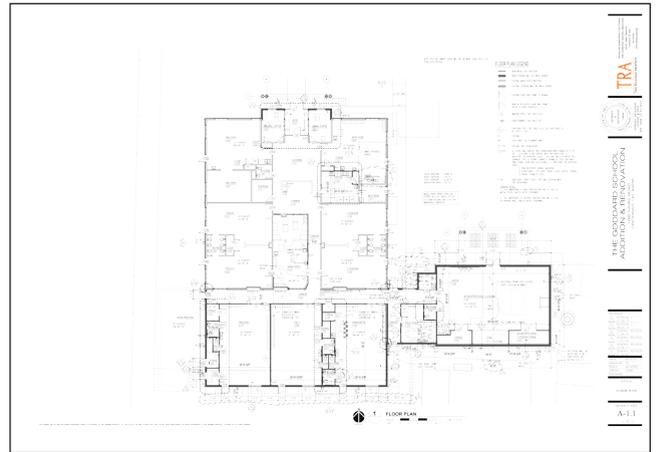
**Electrical Engineer/Design-Build**

PE Services  
 9 N. Broadway Street, Lebanon, OH 45036



**Project General Description**

**Location:** Anderson Township, Ohio  
**Date Bid:** Jun 2014  
**Construction Period:** Sep 2014 to Aug 2015  
**Total Square Feet:** 12,489 **Site:** 1.4 acres.  
**Number of Buildings:** One; 12 classrooms, seating 259.  
**Building Sizes:** First floor, 12,489; total, 12,489 square feet.  
**Building Height:** First floor, 20'4"; total, 20'4".  
**Basic Construction Type:** Addition/Renovation.  
**Foundation:** Cast-in-place, reinforced concrete, slab-on-grade.  
**Exterior Walls:** CMU, brick, wood frame.  
**Roof:** Asphalt shingles, membrane.  
**Floors:** Concrete. **Interior Walls:** Wood stud drywall.



DIVISION	COST	% OF COST	SQ.FT. COST	SPECIFICATIONS
GENERAL REQUIREMENTS	81,000	9.21	6.49	—
CONCRETE	89,196	10.14	7.14	Forming & accessories, reinforcing, cast-in-place (concrete breakdown: cubic yards foundation, 50; cubic yards floors, 110; cubic yards walls, 25). Unit, stone assemblies.
MASONRY	124,760	14.18	9.99	Structural metal framing, fabrications.
METALS	16,220	1.84	1.30	Rough carpentry, finish carpentry.
WOOD, PLASTICS & COMPOSITES	138,451	15.74	11.09	Thermal protection, joint protection, EIFS.
THERMAL & MOISTURE PROTECTION	44,959	5.11	3.60	Doors & frames, entrances & storefronts, windows, roof windows & skylights, hardware, glazing.
OPENINGS	44,872	5.10	3.59	Plaster & gypsum board, ceilings, painting & coating.
FINISHES	64,243	7.30	5.14	Information, interior, safety.
SPECIALTIES	4,959	0.56	0.40	Casework, other.
FURNISHINGS	22,260	2.53	1.78	Water-based fire-suppression systems.
FIRE SUPPRESSION	23,912	2.72	1.91	Piping & pumps, equipment, fixtures.
PLUMBING	85,984	9.78	6.88	Facility fuel systems, piping & pumps, air distribution, central heating equipment, central cooling equipment, central HVAC equipment.
HVAC	50,375	5.73	4.03	Medium-voltage distribution, lighting. Detection & alarm.
ELECTRICAL	75,415	8.57	6.04	Demolition, structure moving.
ELECTRONIC SAFETY & SECURITY	13,000	1.48	1.04	Site clearing, earth moving.
<b>TOTAL BUILDING COSTS</b>	<b>879,603</b>	<b>100%</b>	<b>\$70.43</b>	Bases, bollards & paving, planting, playground equipment. Sanitary sewerage, storm drainage.
EXISTING CONDITIONS	16,800			
EARTHWORK	47,419			
EXTERIOR IMPROVEMENTS	93,582			
UTILITIES	25,578			
<b>TOTAL PROJECT COST</b>	<b>1,062,982</b>			

**UPDATED ESTIMATE TO AUGUST 2016: \$76.72 PER SQUARE FOOT**

**Regional Cost Trends**  
 This project, updated to August 2016 in the selected cities of the United States.

EASTERN U.S.	Sq.Ft. Cost	Total Cost	CENTRAL U.S.	Sq.Ft. Cost	Total Cost	WESTERN U.S.	Sq.Ft. Cost	Total Cost
Atlanta GA	\$63.02	\$787,043	Dallas TX	\$60.96	\$761,378	Los Angeles CA	\$81.51	\$1,018,023
Pittsburgh PA	\$79.46	\$992,358	Kansas City KS	\$82.20	\$1,026,577	Las Vegas NV	\$74.66	\$932,475
New York NY	\$101.38	\$1,266,112	Chicago IL	\$85.62	\$1,069,352	Seattle WA	\$81.51	\$1,018,023

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