St. Anne's Episcopal School

Middletown, Delaware

Architect: Anderson Brown Higley Associates

Instructing pre-kindergarten through eighth grade students, St. Anne's Episcopal School embodies the educational goals of its founders. Its teachers prepare students for secondary education and develop their potential for good members of local and world communities.

The school stands on a knoll overlooking Silver Lake near the small farming community of Middletown, Delaware. It is placed so that existing trees screen it from the main thoroughfare, half a mile away, which preserves this setting for the school and for the community. Crops still grow on the site, a former soybean field, and can be seen from the school, reinforcing lessons in ecology and stewardship of the environment. The school's academic wings gather views of the countryside and combine with the central structure to form a courtyard for outdoor classes and special events.

Reflecting on the rural setting, the school's dominant central structure is based on the style and proportions of a traditional Delaware Victorian manor house. It houses administrative offices as well as the library, dining room, and classrooms for art and music. A central two-story lobby connects all of these spaces and is partially illuminated by borrowed light from each.

Connected to this central structure are the gymnasium and academic wings with building forms reminiscent of a barn and a series of outbuildings. Serving as a multifunctional assembly space for sporting events, meetings and performances, the gymnasium houses basketball courts, a stage and bleacher seating for the student body.

Photo Courtesy of Image Source

The two academic wings reach out toward the lake view. One houses the lower school, grades pre-kindergarten through fourth; the other houses the middle school, grades fifth through eighth. The wings are divided into pods, each of which supports two grades. Central common spaces within these groupings provide opportunities for students to work together in cooperation learning teams. Each wing has its own entrance lobby to relive congestion at times of arrival and departure.

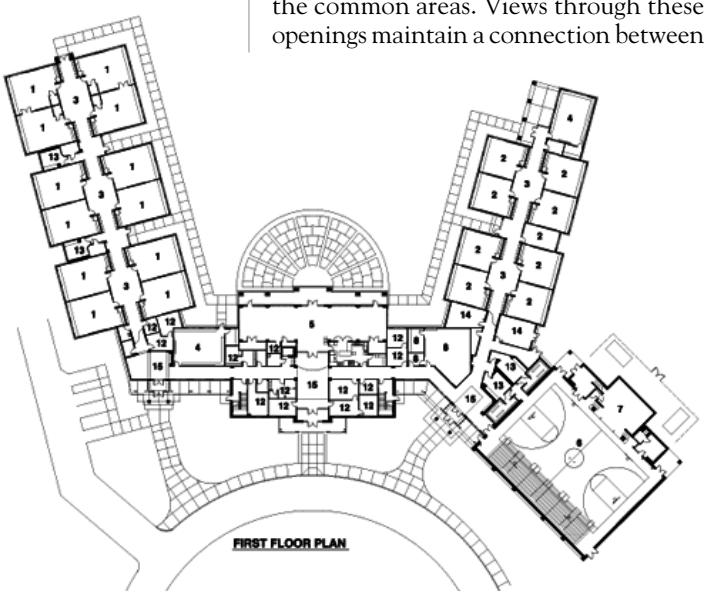
The desire for an abundance of natural light and fresh air is accommodated through large operable windows in classrooms and at key locations throughout the common areas. Views through these openings maintain a connection between the student's studies and the outdoor environment. Academic common spaces borrow light from classrooms via clerestory windows, and throughout the building, indirect lighting supplements natural light.

Most windows are semi-custom wood insulated units with true divided lights. Glazed entrances are a custom color aluminum storefront system. Structural steel costs were minimized by the use of steel stud bearing walls and cold-formed metal roof trusses on the single story portions of the building. Exterior walls are of brick and cement fiber siding.

Helping to reinforce connections to the surrounding environment, natural materials used inside are oak, cork, linoleum, rubber and ceramic tile. High-grade residential oak cabinets, substantially less expensive than custom units, were installed in all of the classrooms and science rooms.

St. Anne's Episcopal School building supplements the work of its teachers. Through natural materials and natural daylight, plus numerous framed views of its surroundings, it helps students see the connections among what they learn, how they live, and the world outside.

SECOND FLOOR PLAN



FIRST FLOOR PLAN

MANUFACTURERS/SUPPLIERS

DIV 06:	*Cement Plank Siding:* HardiPlank®.
DIV 07:	*Shingles:* Elk.
DIV 08:	*Entrance Doors:* Adams Rite; *Windows:* Pella.
DIV 09:	*Carpet:* Mannington; *VCT:* **Armstrong**; *Cork:* Expanko; *Drywall:* Georgia Pacific.

ARCHITECT
ANDERSON BROWN HIGLEY ASSOCIATES
1621 North Lincoln Street
Wilmington, DE 19806
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CONSTRUCTION MANAGER
EDIS COMPANY
110 S. Poplar Street, #400
Wilmington, DE 19801
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FILE UNDER
EDUCATIONAL
Middletown, Delaware

CONSTRUCTION TEAM

STRUCTURAL ENGINEER:
LZA Technology
105 S. 12th Street,
Philadelphia, PA 19107

ELECTRICAL & MECHANICAL ENGINEER:
Paul H. Yeomans, Inc.
718 Arch Street, #200S,
Philadelphia, PA 19106

COST ESTIMATOR:
EDiS Company
110 S. Poplar Street, #400,
Wilmington, DE 19801

Photo Courtesy of Gregory Benson Photography

GENERAL DESCRIPTION

SITE: 120 acres.

NUMBER OF BUILDINGS: Two; School and pre-fabricated storage building.

BUILDING SIZES: Garage, 2,000; first floor, 46,160; second floor, 7,840; total, 56,000 square feet.

BUILDING HEIGHT: First floor, 14'; second floor, 12'; total, 44'.

BASIC CONSTRUCTION TYPE: New.

FOUNDATION: Spread footings.

EXTERIOR WALLS: Brick, cement board siding.

ROOF: Shingle.

FLOORS: Carpet, ceramic tile, VCT, cork.

INTERIOR WALLS: Drywall.

ST. ANNE'S EPISCOPAL SCHOOL

Date Bid: June 2001 • Construction Period: June 2001 to Aug 2002 • Total Square Feet: 56,000

C.S.I. Divisions (1 through 16)	COST	% OF COST	SQ.FT. COST		SPECIFICATIONS
BIDDING REQUIREMENTS	340,000	3.40	6.07		—
1. GENERAL REQUIREMENTS	458,000	4.58	8.18	1	Summary of work, coordination, field engineering, project meetings, submittals, quality control, construction facilities & temporary controls, facility startup/commissioning, contract closeout.
3. CONCRETE	215,000	2.15	3.84	3	Formwork, reinforcement, accessories, cast-in-place, curing, grout, mass.
4. MASONRY	410,000	4.10	7.32	4	Masonry & grout, accessories, unit.
5. METALS	325,000	3.25	5.80	5	Structural metal framing, joists, decking, fabrications, ornamental.
6. WOOD & PLASTICS	1,800,000	18.01	32.14	6	Fasteners & adhesives, rough carpentry, wood & metal systems, finish carpentry, wood treatment, architectural woodwork.
7. THERMAL & MOIST. PROTECT	265,000	2.65	4.73	7	Insulation, shingles & roof tiles, manufactured roofing & siding, membrane roofing, flashing & sheet metal.
8. DOORS & WINDOWS	740,000	7.40	13.21	8	Metal doors & frames, wood & plastic doors, entrances & storefronts, hardware, glazing.
9. FINISHES	1,540,000	15.41	27.50	9	Metal support systems, gypsum, tile, acoustical treatment, resilient flooring, carpet, special flooring, special coatings, painting.
10. SPECIALTIES	259,000	2.59	4.63	10	Visual display board, wall & corner guards, flagpoles, lockers, storage shelving.
11. EQUIPMENT	1,300,000	13.01	23.21	11	Theatre & stage, water supply & treatment, food service, laboratory, office.
12. FURNISHING	450,000	4.50	8.04	12	—
13. SPECIAL CONSTRUCTIONS	45,000	0.45	0.80	13	Pre-engineered structure.
14. CONVEYING SYSTEMS	48,000	0.48	0.86	14	Elevators (1).
15. MECHANICAL	1,200,000	12.01	21.43	15	Basic materials & methods, insulation, fire protection, plumbing, HVAC, heat generation, refrigeration, controls, testing, adjusting & balancing.
16. ELECTRICAL	600,000	6.01	10.72	16	—
TOTAL BUILDING COST	**9,995,000**	**100%**	**$178.48**		
2. SITE WORK	1,005,000			2	Preparation, dewatering, excavation support systems, paving & surfacing, water distribution, sewerage & drainage, ponds & reservoirs, improvements, landscaping.
LANDSCAPING & OFFSITE WORK	—				Included in Site Work.
TOTAL PROJECT COST	**11,000,000**				*(Excluding architectural and engineering fees)*

UPDATED ESTIMATE TO JUNE 2003: $191.70 PER SQUARE FOOT