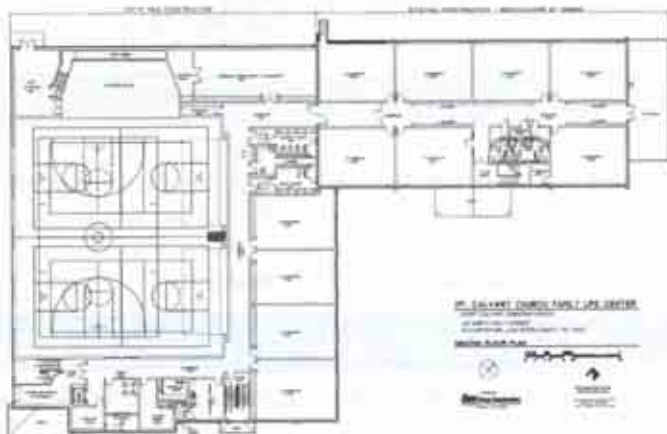
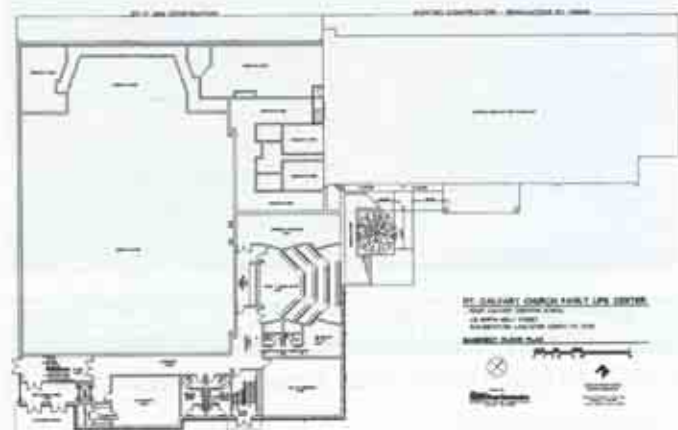
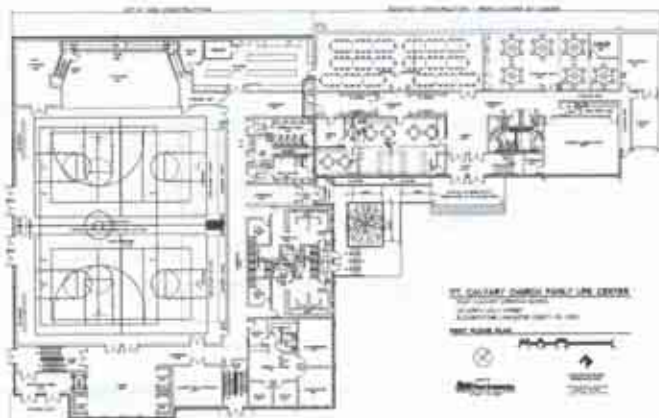


# Mt. Calvary Church Family Life Center & Christian School

Elizabethtown, Pennsylvania

Architect: Cornerstone Design-Architects

Photo Courtesy of Nathan Cox



Several years ago, Mt. Calvary Church in Elizabethtown, Pa. began a process to evaluate the facilities needs for their growing church and their expanding church school. They not only identified that they needed additional Christian education space, but could also enhance their ministry with a recreational space. Alongside the needs of the church was the need for additional school classrooms and a new gymnasium/auditorium space. In recent years, they had expanded their program to include high school grades, yet did not have the facilities to support that programming. They developed a committee to evaluate their needs and to layout plans for addressing those needs.

After establishing the preliminary design, they solicited proposals from architectural and construction firms to complete the design and documentation, and commit to a guaranteed maximum construction cost.

To participate in turning their planning into reality, they selected the design/build team of Cornerstone Design-Architects and Horst Construction. Cornerstone Design-Architects had been involved at an earlier date

to produce a computer generated three-dimensional model that enabled the production of perspective rendering views for the church's use in the capital campaign.

During the modeling, the architect had made some design suggestions, but generally worked with their design. After the selection of the architect, the architect began meeting with their committee. Cornerstone Design-Architects reviewed the history of their planning decisions, heard their goals and objectives and questioned them about future development.

One of the first changes discussed was to have the exterior appearance reflect the style of the more attractive adjacent church building rather than the existing school building. The view from the street would include both the church and the new building.

One of the design challenges was to break down the scale of the high volume gymnasium and incorporate some pitched roof areas and gable ends for compatibility with the existing fabric. The gymnasium was positioned closest to the street and would be an important facade to the surrounding commu-

nity. Massing concerns and the public face issue was addressed by articulating that facade with glass block and brick patterning.

The project was completed in March 1998 and has been well received by the church and school community.



## MANUFACTURERS/SUPPLIERS

**Exterior Walls** — Brick: Glen-Gery; Vinyl Clad Windows: Malta; Aluminum Doors & Windows: YKK.  
**Roof** — EPDM: Carlisle; Fiberglass Dimensional Shingles: Tamko.  
**Floors** — Carpet: J & J; VCT: Armstrong; Maple Gym: Roppe.

**ARCHITECT**  
**CORNERSTONE DESIGN-ARCHITECTS**  
 320 Granite Run Drive  
 Lancaster, PA 17604-3310

**FILE UNDER**  
**EDUCATIONAL**  
 Elizabethtown, Pennsylvania

**CONSTRUCTION TEAM**

**GENERAL CONTRACTOR: Horst Construction**  
 320 Granite Run Drive, Lancaster, PA 17604

**STRUCTURAL ENGINEER:**  
**Wilbur N. Marsh, Cornerstone Design**  
 320 Granite Run Drive, Lancaster, PA 17604

**ELECTRICAL SUBCONTRACTOR (DESIGN/BUILD):**  
**John E. Fullerton, Inc.**  
 1380 Mt. Gretna Road, Elizabethtown, PA 17022

**MECHANICAL SUBCONTRACTOR (DESIGN/BUILD):**  
**Kirchoff, Inc.**  
 2653 Lintz Pike, Lancaster, PA 17601

**LANDSCAPE ARCHITECT: Light-Heigel & Associates**  
 845 Silver Spring Plaza, Lancaster, PA 17601

**COST ESTIMATOR: Horst Construction**  
 320 Granite Run Drive, Lancaster, PA 17604

**BUILDING SIZES:** Basement, 6,461; first floor, 21,230; second floor, 10,963; total, 38,654 square feet.

**BUILDING HEIGHT:** Basement, 12'; first floor, 11'10"; second floor, 9'8"; floor to floor, 12'; total, 34'.

**BASIC CONSTRUCTION TYPE:** New.

**FOUNDATION:** Reinforced concrete footings; CMU foundation walls.

**EXTERIOR WALLS:** Concrete block, brick veneer.

**ROOF:** EPDM, fiberglass dimensional shingles.

**FLOORS:** Carpet, VCT, wood.

**INTERIOR WALLS:** Concrete block.

**GENERAL DESCRIPTION**

**SITE:**

**NUMBER OF BUILDINGS:** One; Two-story with partial daylight basement area; gymnasium, 432 bleacher seats, platform, & adjacent commercial kitchen; seven classrooms with one being a science lab, and administrative offices.



**MT. CALVARY CHURCH FAMILY LIFE CENTER/MT. CALVARY CHRISTIAN SCHOOL**

**Date Neg.: June 1997 • Construction Period: July 1997 to Mar 1998 • Total Square Feet: 38,654**

C.S.I. Divisions (1 through 16)	COST	% OF COST	SQ.FT. COST	SPECIFICATIONS
1. BIDDING REQUIREMENTS	—	—	—	—
1. GENERAL REQUIREMENTS	268,019	11.69	6.93	1 Coordination, field engineering, regulatory requirements, project meetings, submittals, quality control, constr. facilities & temp. controls, material & equipment, contract closeout.
3. CONCRETE	124,059	5.41	3.21	3 Formwork, reinforcement, accessories, cast-in-place, curing, cementitious decks & toppings.
4. MASONRY	407,349	17.76	10.54	4 Masonry & grout, accessories, unit.
5. METALS	226,969	9.90	5.87	5 Materials, structural framing, joists, decking, cold formed metal framing, fabrications, ornamental.
6. WOOD & PLASTICS	104,514	4.56	2.70	6 Fasteners & adhesives, rough carpentry, prefabricated structural wood, finish carpentry, architectural woodwork.
7. THERMAL & MOIST. PROTECT	144,582	6.30	3.74	7 Waterproofing, vapor retarders, air barriers, insulation, fireproofing, firestopping, shingles & roof tiles, membrane roofing, flashing & sheet metal, roof specialties & accessories, joint sealers.
8. DOORS & WINDOWS	107,031	4.67	2.77	8 Metal doors & frames, wood & plastic doors, entrances & store-fronts, metal windows, wood & plastic windows, hardware, glazing.
9. FINISHES	241,955	10.55	6.26	9 Gypsum board, tile, acoustical treatment, wood flooring, resilient flooring, carpet, special coatings, painting.
10. SPECIALTIES	36,193	1.58	0.94	10 Louvers & vents, identifying devices, lockers, toilet & bath accessories.
11. EQUIPMENT	21,237	0.93	0.55	11 Athletic, recreational & therapeutic.
12. FURNISHING	—	—	—	12 —
13. SPECIAL CONSTRUCTIONS	—	—	—	13 —
14. CONVEYING SYSTEMS	39,109	1.70	1.01	14 Elevators.
15. MECHANICAL	433,464	18.90	11.21	15 Basic materials & methods, insulation, fire protection, plumbing, HVAC, controls, testing, adjusting & balancing.
16. ELECTRICAL	138,958	6.05	3.60	16 Basic materials & methods, service & distribution, lighting.
<b>TOTAL BUILDING COST</b>	<b>2,293,439</b>	<b>100%</b>	<b>\$59.33</b>	
2. SITE WORK	—	—	—	2 Not in contract.
LANDSCAPING & OFFSITE WORK	—	—	—	—
<b>TOTAL PROJECT COST</b>	<b>2,293,439</b>			<i>(Excluding architectural and engineering fees)</i>

**UPDATED ESTIMATE TO APRIL 1999: \$62.84 PER SQUARE FOOT**