

Pearland Pediatrics

Pearland, Texas

Architect: Browne Penland McGregor Stephens Architects, Inc.

The owner and lead physician, Dr. Deborah Gant, of Pearland Pediatrics wanted to provide an environmentally friendly workplace for her staff and a healing environment for her young patients, and to make a statement about the kind of future her patients will inherit.

To meet the owner's goal of an environmentally responsible building, Browne Penland McGregor Stephens Architects and the design team used the United States Green Building Council's (USGBC) sustainable design criteria to create a holistic environment. The result is the first privately owned LEED® certified healthcare facility in Texas.

The single-story, limestone clad, tilt wall, concrete building is 10,388 square feet with a 6,000 square foot pediatric clinic space. With the original plan of utilizing natural daylight and preserving the oak trees on the property, the design team incorporated energy efficiency and indoor air quality to their design. The design team chose a white reflective roof, daylight monitors and an exterior canopy/light shelf to illuminate the interior, while glazing transoms and high performance insulated glazing were used to reject heat, yet let in daylight. Indoor air quality was maintained by using low-emitting materials such as adhesives, paints, sealers, and flooring. A mechanical ventilation system and CO2 monitoring system were installed to minimize the exposure of young patients and staff to hazardous indoor particulates and chemical pollutants. Also, to help reduce waste, water saving fixtures and a dual flush plumbing system was installed.

The owners operate the building on wind generated power and have a storm water detention pond behind the building. Rapidly renewable resources were used



Photos Courtesy of Jud Haggard Photography

such as linoleum flooring. The split faced limestone, masonry perimeter wall, fly ash concrete tilt wall structure, and ceiling tile are all local Texas building materials found within 500 miles of the site. With the first energy bills the owners noticed half the energy consumption and cost in the new clinic, which is double the size of the previous building.

The design team utilized a coastal theme, with two aquarium eco-systems and a special educational area that includes nature-oriented books and games that makes the waiting area special for the patients. The waiting areas, exam rooms, corridors, and work stations are illuminated by natural daylight and have views to the outdoors.

Jim McGregor, AIA, LEED AP of Browne Penland McGregor Stephens Architects was project manager for Pearland Pediatrics.



LEED® CERTIFIED

MANUFACTURERS/SUPPLIERS

DIV 07: *White Reflective Membrane:* Firestone.

DIV 08: *Entrances & Storefronts, Windows:* Vistawall; *High Performance Insulated Glazing:* Arch Aluminum & Glass Co.; *Doors, Frames & Interior Window Frames:* Versatrac.

DIV 09: *Linoleum:* Forbo; *Low Emitting Paint:* Harmony™ by Sherwin Williams.

EXTENDED PRODUCT INFORMATION

High Performance Insulated Glazing:
Arch Aluminum & Glass Co.
See advertisement on page 52.

ARCHITECT

BROWNE PENLAND MCGREGOR STEPHENS ARCHITECTS, INC.
 520 Post Oak Boulevard, #880
 Houston, TX 77027
 www.bpmsa.com

FILE UNDER

MEDICAL
 MD061130
 Pearland, Texas

CONSTRUCTION TEAM

STRUCTURAL ENGINEER: ASA Consulting Engineers, Inc.

1155 Dairy Ashford, #111, Houston, TX 77079

GENERAL CONTRACTOR:

Farnsworth & Lott Construction Services

3103 Nottingham, Pearland, TX 77581

MECHANICAL & ELECTRICAL ENGINEER:

DBR Engineering Consultants, Inc.

9990 Richmond Avenue, South Bldg., #300,

Houston, TX 77042

COST ESTIMATOR:

Farnsworth & Lott Construction Services

3103 Nottingham, Pearland, TX 77581

GENERAL DESCRIPTION

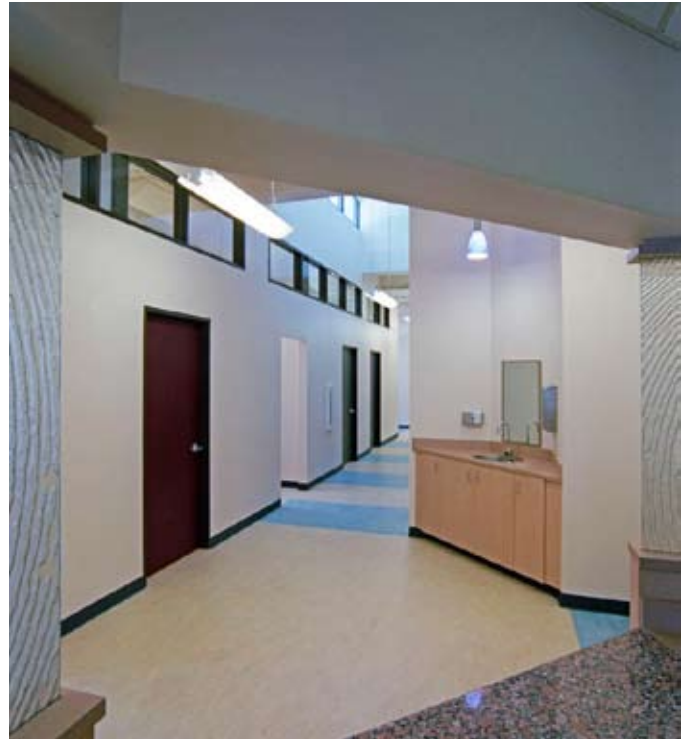
SITE: 1.9 acres. **NUMBER OF BUILDINGS:** One.

BUILDING SIZE: First floor, 10,388; total, 10,388 square feet.

BUILDING HEIGHT: First floor, 18'7"; total, 18'7".

BASIC CONSTRUCTION TYPE: New/Type II-B.

FOUNDATION: Cast-in-place. **EXTERIOR WALLS:** Limestone CMU, tilt-up. **ROOF:** Membrane. **FLOORS:** Concrete, inoleum. **INTERIOR WALLS:** Metal stud drywall.



PEARLAND PEDIATRICS

Date Bid: Feb 2004 • Construction Period: Jan 2005 to Oct 2005 • Total Square Feet: 10,388

C.S.I. Divisions	COST	% OF COST	SQ.FT. COST	SPECIFICATIONS
1. 1. PROCUREMENT & CONT. REQ.	—	—	—	—
1. 1. GENERAL REQUIREMENTS	124,423	11.05	11.98	—
3. 3. CONCRETE	148,643	13.20	14.31	Forming & accessories, reinforcing, cast-in-place, precast.
4. 4. MASONRY	14,600	1.30	1.41	Unit.
5. 5. METALS	104,811	9.31	10.09	Structural metal framing, joists, decking, cold formed metal framing, fabrications.
6. 6. WOOD/PLASTICS/COMPOSITE	70,879	6.30	6.82	Finish carpentry, composite fabrications.
7. 7. THERMAL & MOIST. PROTECT	63,335	5.63	6.10	Dampproofing & waterproofing, thermal protection, membrane roofing.
8. 8. OPENINGS	85,505	7.59	8.23	Doors & frames, entrances, storefronts, & curtainwalls, windows.
9. 9. FINISHES	176,800	15.70	17.02	Plaster & gypsum, ceilings, flooring, wall finishes, painting & coating.
10. 10. SPECIALTIES	64,553	5.73	6.21	Information, safety, exterior, other.
11. 11. EQUIPMENT	2,257	0.20	0.22	Residential.
12. 12. FURNISHING	2,386	0.21	0.23	—
13. 13. SPECIAL CONSTRUCTIONS	—	—	—	—
14. 14. CONVEYING SYSTEMS	—	—	—	—
15. 15. MECHANICAL	—	—	—	—
15. 21. FIRE SUPPRESSION	—	—	—	—
15. 22. PLUMBING	66,056	5.87	6.36	Piping & pumps, equipment, fixtures.
15. 23. HVAC	71,640	6.36	6.89	Air distribution, central HVAC.
16. 26. ELECTRICAL	130,000	11.55	12.51	Medium-voltage distribution, lighting.
16. 27. COMMUNICATIONS	—	—	—	—
TOTAL BUILDING COST	1,125,888	100%	\$108.38	
2. 2. EXISTING CONDITIONING	—	—	—	—
2. 31. EARTHWORK	74,474	—	—	Site clearing, earth moving.
2. 32. EXTERIOR IMPROVEMENTS	135,469	—	—	Bases, ballasts, & paving, planting.
2. 33. UTILITIES	47,096	—	—	Water, sanitary sewerage, storm drainage.
LANDSCAPING & OFFSITE WORK	—	—	—	—
TOTAL PROJECT COST	1,386,927			<i>(Excluding architectural and engineering fees)</i>

UPDATED ESTIMATE TO DECEMBER 2006: \$130.92 PER SQUARE FOOT

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