

Hilton Hotel at BWI Airport

Linthicum Heights, MD

Project Information

Estimated Project Cost: \$27 million

Size: 277,000 sq ft (gross)

Project Delivery Method: Design-Build **Construction:** June 2005–October 2006 **Stories:** 11 above grade and a penthouse,

1 below grade parking garage level

Function: Full-service hotel

Occupancy: Guest rooms, restaurant, bar, meeting rooms, offices, pool, exercise room

Project Team

Owner: Buccini/Pollin Group, Inc

GC: Hitt Contracting, Inc

Architect: Brennan Beer Gorman Monk PLLC

Interior Designer: PGAL

Civil Engineer: Century Engineering, Inc **Structural Engineer**: Holbert Apple Assoc, Inc

MEP Engineer: RG Vanderweil Engineers

Architecture

- Modern exterior design w/ curtain walls, metal panels, and pre-cast concrete panels
- Modern interior feel w/ wood paneling walls and metal detailing throughout
- Ornamental sun shades above south-facing windows
- Covered porte cochere valet parking area and entrance

Structural System

- Cast-in-place concrete framed slabs 9 in thick on ground, second, and third floors
- Post-tensioned concrete beams, columns, and 7-1/2 in slabs on fourth through eleventh floors
- Various W-shaped structural steel members and open-web joists in porte cochere, lobby, meeting rooms, and pool areas

Lighting/Electrical System

- 480Y/277V, 3Φ, 4W service from (1) 1500kVA
 and (1) 2500kVA transformer, (14) 30–500kVA
 transformers to 208Y/120V, 3Φ, 4W service
- (1) 600kW diesel standby generator
- 120V and 277V fixtures: wall washers, recessed fluorescent troffers, and various downlights

Mechanical System

- VAV system w/ hot water reheat coils in public spaces on ground and second floors
- Individual guest room 11 or 13.6 btuh water source heat pumps w/ master thermostats
- (3) 3350 MBH fossil-fuel boilers
- (1) 2-cell, 2540 gpm, 848 ton, 247,100 cfm cooling tower for condenser water system
- **(**4) 7500-25,000 cfm, 364-1754 MBH AHUs
- (6) 3400-11,100 cfm, 115-833 MBH RTUs

Nathan Patrick

Mechanical Option

http://www.arche.psu.edu/thesis/eportfolio/current/portfolios/ntp111/

The Pennsylvania State University

Architectural Engineering