Ryan Blatz - Structural

Architecture
- Pod construction, leaving voids for future additions
- Patient rooms comparable to hotel rooms
- Brick façade with removable full glass windows

General Information
- Owner: Orange Regional Medical Center
- Building Type: Hospital
- Size: 600,000 SF
- Floors: 6 above grade and 1 partially below
- Total Cost: $320 million
- Design/Construction Team: HBE

Mechanical / Plumbing
- Several VAV and Constant Volume systems heat and cool with supply capacities between 34,500 and 80,400 cfm
- Emergency exhaust in all surgical departments
- Snow melt system for helipad and sidewalk

Lighting / Electrical
- Main Switchgear is 13.2 kV (1200A)
- 480/277V 3PH - 4W Main Power
- Primarily indirect fluorescent lighting with warm incandescent lighted patient rooms

Structure
- Composite deck with 3 1/4” of light weight concrete
- Steel frame with composite beams and girders
- Lateral load resisted by concrete shear walls on ground floor and by eccentrically braced steel frames first floor and above
- Spread footing foundation

http://www.engr.psu.edu/ae/thesis/portfolios/2012/RTB5037/index.html