

ONE CHRISTINA CRESCENT

Wilmington, Delaware

Building Information

Building Name: One Christina Crescent

Building Location: 125 S. West Street, Wilmington,

Delaware

Building Occupant: Barclays Bank Delaware **Occupancy Type:** Corporate Offices/Retail

Size: 279,376 SF

Height: 6 stories, 88'-0" above grade

Dates of Construction: Winter 2006 to Summer 2007

Cost: \$40 million

Project Delivery Method: Design -Build

Historical

One Christina Crescent is located on a redeveloped brownfield site. Part of 'Riverfront Wilmington', an area which was once industrial wasteland and has been revitalized by the Riverfront Development Corporation of Delaware since the mid 1990s.

Electrical

- 500 KCMIL, Cu 15KV primary service feeder enters unit substation w/ 5000 amp main bus, 65,000 A.I.C. system
- 3750 KVA 3Ph transformer w/ 12KW 3Ph Pri. & 480/277V 3Ph, 4W Sec.
- (2) natural gas driven 500 KW/625 KVA emergency generators
- 75 KVA transformers 480V/3Ph pri., 208Y/120V 3Ph sec. typical step down to some circuits
- Large data center on UPS system

Lighting

- 2X4 & 2X2 recessed fluorescent indirect fixtures typical in open office areas
- Recessed fluorescent downlights typical in core and gathering spaces
- Decorative low voltage pendants in break areas
- Pendant mounted fluorescent direct fixtures in conference rooms
- (9) fluorescent pendant mounted fixtures w/ (2) 54W T-5 lamps each are hung together for spectacular main lobby fixture

Project Team

Owner: Boulevard Park Enterprises L.P.

General Contractor: Pettinaro Construction Co., Inc.

CM: Pettinaro Construction Company, Inc.

Architect: Pettinaro Construction Company, Inc.

Interior Design: Mitchell Associates

Structural Engineer: O'Donnell Naccarato Macintosh

Civil Engineer: Rummel, Klepper, Kahl LLP **Environmental Engineer:** Brightfields Inc. **Geotechnical Engineer:** Duffields Associates, Inc.

Architecture

- Modern office building with aluminum/glass curtain wall
- Some architectural attributes are cue d from the historical industrial architecture of the area
- Red brick veneer on non-load bearing metal studs
- Unique steel tripod supporting upper four floors at one end of building
- Green roof

Mechanical

- (2) 850 ton cooling towers on roof
- (2) natural gas driven emergency generators on roof
- (2) heat recovery units with 25,000 CFM maximum
- (2) 425 ton water chillers and (1) 55 ton water chiller
- (10) air handling units on 2nd through 6th floors

Structural

- Reinforced concrete grade beams and floor slab on steel/concrete filled piles
- Steel frame with galvanized 3" 18 gage Lok-floor composite deck
- Roof deck is ½" 22 gage type B
- Steel tripod is W14X211 inside HSS



Kevin Michael Danna

Lighting/Electrical Option

http://www.engr.psu.edu/ae/thesis/portfolios/2008/kmd294