

BENJAMIN DOUGLASS STRUCTURAL OPTION

PROJECT OVERVIEW

- Towers Crescent Building F
- Chantilly, VA
- Office tower and parking
- 13 stories above grade
- 339,063 sq. ft.
- Under construction January 2007 to June 2009

PROJECT TEAM

Owner: Quadrangle Development Corp.

Architect: SmithGroup

Structural Engineer: SK&A

MEP Engineer: GHT Ltd.

Civil Engineer: VIKA

Landscape: Sasaki

Specifications: Heller and Metzger

Construction Management: Hensel Phelps

TOWERS CRESCENT F

CHANTILLY, VA

ARCHITECTURAL FEATURES

Semicircular tower on top of subterranean parking

Open plan except for core and structural columns

Mixture of glass, aluminum, and brick veneer

Large glass face above front entrance

Steel architectural ornament and spire at roof



STRUCTURAL SYSTEMS

30" to 60" diameter caissons

30' x 30' grid of concrete columns

Radial series of concrete columns along semicircular face

8" flat structural concrete slab

Concrete shear walls to resist lateral load

LIGHTING/ELECTRICAL SYSTEMS

(2) 4000A busways, 460 V, 3-phase, 4-wire

(2) 400A fusible taps per floor

120V and 265V emergency lights

120V and 277V architectural lights, fluorescent and HID



MECHANICAL SYSTEMS

Two rooftop mechanical units, 26,300 CFM each

Air supplied through ducts and 150-900 CFM VAV boxes

Separate air handling unit for elevators