# **KINGSTOWNE SECTION 36A**

# **5680 KING CENTER DRIVE KINGSTOWNE, VA 22315**

# JAMES CHAVANIC

# **STRUCTURAL**

Parking Garage

86'-11" From Average Grade

202,145 GSF

\$19 Million

**Design-Bid-Build** 

Office -

Retail •

8 Total

**Building Overview** 

**Occupancy:** 

**# Of Stories:** 

Size:

**Height:** 

**Delivery:** 

Cost:

# **Project Team**

#### **Owner**:

**Kingstowne Office 36 LP General Contractor:** 

L.F. Jennings Inc. Architect: Davis, Carter, Scott Ltd. **Civil Engineer: Tri-Tek Engineering** 

**Mechanical Engineer:** 

Jordan & Skala Engineers

**Structural Engineer:** 

**Cagley & Associates** 

# Structure

Foundation:

- Spread Footings and Mat Foundations bearing on Geopiers **Office Levels:**
- Wide-flange beams and columns supporting a composite floor
- Braced frames and moment frames transfer lateral loads

Parking Garage Levels: -

- Sloped, 8 inch thick, two-way flat slab with drop panels
- 12" thick concrete shear walls transfer lateral loads

# Architecture

When completed, Kingstowne Section 36A will be part of a master planned development for retail and office space. The appearance of this development can be characterized by a rectilinear footprint, pink velour brick, aluminum storefront with glass of blue/black appearance, and precast concrete bands around the circumference of the building.

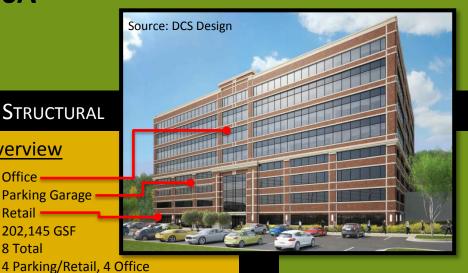


# Mechanical

- Four rooftop units with natural gas fired heating ranging in total CFM from 19,500 to 21,500 provide heating and cooling to the office levels -Two 5.0 kW electric unit heaters providing 350 CFM each in the retail space

-Four 5.0 kW electric unit heaters providing 350 CFM each at the highest level of parking -Three split system heat pumps ranging in total CFM from 600 to 1,800 provide cooling to the lobby and retail space

http://www.engr.psu.edu/ae/thesis/portfolios/2013/jmc5601





Source: James Chavanic 8-10-12

### Electrical

- 480/277V 3 phase for mechanical and lighting loads - 208/120V 3 phase for receptacle and other loads