



CATES ENGINEERING
STRUCTURAL CONSULTING

BUILDING DESIGN



Arrowbrook Centre



PROJECT LOCATION
Herndon, VA

PROJECT TYPE
Mixed Use

ARCHITECT
Davis Carter Scott

**OWNER /
DEVELOPER**
Carbon Thompson



PROJECT DESCRIPTION

Arrowbrooke Centre – This project is a massive 9 Building complex occupying a key piece of real estate adjacent to the Dulles Toll Road, which contains a variety of building types and construction types.

Block A – Building A4 is a 10-story, 184,000 square foot office building, constructed with post-tensioned concrete slabs. Building A5 is a 2-story, 35,000 square foot steel framed retail building. Building A6 is a 10-story, 238,000 square foot office building, constructed with post-tensioned concrete slabs. All three are constructed over Building PSA, which is a 558,000 square foot below-grade parking structure of up to 6 levels, constructed of conventionally reinforced concrete slabs.

Block D – Building D1 is a 4-story, 136,000 square foot, residential building, constructed of prefabricated wood trusses, supported by wood walls. The units are supported by a conventionally reinforced concrete transfer slab over a 1 story retail space. Building D2 is a 10-story, 190,000 square foot residential tower, constructed with post-tensioned concrete slabs. Connected to these is an 8-story, 427,000 square foot post-tensioned parking garage, with long (64 foot) spans.

Building D3 is a 2-story, 17,000 square foot, stand-alone retail structure. Building D4 is a 4-story, 143,000 square foot, residential building, constructed of prefabricated wood trusses, supported by wood walls. The units are supported by a conventionally reinforced concrete transfer slab over a 1 story retail space.

Structural Consulting Services to Architects,
Developers, Contractors and Owners

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