
DAVIDSON & ASSOCIATES

CONSTRUCTION ANALYSTS, INC.

The Oronoco

Technical Construction Document Review & Construction Quality Assurance



This project consists of a complete rehabilitation of an existing multi-story office structure into luxury condominiums with elevated plaza decks, containing a landscaping and swimming pool, along with indoor amenity spaces and below grade parking garage. The property was gutted to the existing structure and a new building envelope installed. The building incorporates a fluid-applied air barrier system behind brick cavity wall construction and metal panel cladding, along with hot fluid-applied waterproofing and roofing systems. Additional envelope components include glazed curtain wall systems, window wall systems, and both sliding and side hinged terrace doors. D&A provided supplemental building envelope consulting with a focus on moisture migration analysis and sound attenuating construction. The project is located in Old Town Alexandria, VA.

Challenge: Review the construction documents to identify air and water infiltration issues, vapor and thermal transmission through the exterior envelope.

Value Added: D&A's technical review of the construction documents included evaluation of the air/vapor barrier system design and through hygrothermal analysis was able to substantiate typical construction mitigated potential for moisture entrapment. In addition, D&A evaluated the sound-attenuating construction of the unit demising walls and unique floor-ceiling assemblies (due to nature of existing structural frame) to verify "safe harbor" compliance with building codes/industry standards. During construction D&A provided on-site quality assurance for the building envelope installation.

Service performed: Technical construction document review of plans; quality assurance during construction

Architect: Shalom Baranes

Contractor: Davis Construction Corp.

Duration: 2013-2014

Client/Developer: EYA