

CASE STUDY

Facility Renovation/Modernization

MDHA Vine Hill Towers Renovation

Nashville, TN

Puckett Engineering provided electrical design and construction administration services for the renovation and upgrade of a 10-story, 147-unit high-rise apartment building. The renovation included remodeling and modernization of residential units and public and administrative areas for improved appearance, safety, and efficiency. The project incorporated sustainable elements such as energy-efficient lighting and variable refrigerant volume (VRV) HVAC systems.

MDHA received funding for the renovation from the U.S. Department of Housing and Urban Development as part of the American Recovery and Reinvestment Act of 2009.

Puckett Engineering's design included lighting, power, and fire alarm systems in addition to power and controls for a new central variable refrigerant volume (VRV) HVAC system for the residential units. For aesthetics and reduced construction costs, emphasis was placed on utilizing existing concealed conduits and outlet boxes, concealing new conduits where possible, and minimizing exposed raceways. Light fixtures were selected based on aesthetics, coordination with the architectural design, efficiency, maintenance, and effective illumination for the application. Additional criteria for the outdoor light fixtures included being sealed against insects.

To minimize disruption of power, telephone, and cable services to occupied apartments, the design incorporated phasing of construction to minimize disruptions.

<i>Prime A/E:</i>	Barge Cauthen & Associates, Inc.
<i>Agency:</i>	Metropolitan Development and Housing Agency
<i>Type of Project:</i>	Design/Bid/Build
<i>Construction Value:</i>	\$6,306,820 (Entire Project)
<i>Owner's Contact:</i>	Brent Grubb, Project Manager, 615-252-8423, bgrubb@Nashville-MDHA.org

PROBLEM OR NEED

10-story high-rise apartment building needed modernization

PUCKETT SOLUTIONS

Electrical design and construction administration to modernize units and public and administrative areas

Upgraded lighting, power, and fire alarm systems

Sustainable features included energy-efficient lighting

Construction phased to minimize disruptions



Year Completed: 2013
