Washington D.C.



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> Dan Hammill **Technical Support** Specialist, EPRO, Inc.



Project Size: 47,000SF Application: Vapor Intrusion, Waterproofing

Owner: Aria Development Group **Environmental Consutlant:**

Comstock Environmental, Enveco Environmental Solutions, LLC General Contractor: HITT

Construction

Installer: Osprey Contracting Company, LLC

Architect: Cunningham Quill Architects PLLC



Complex Washington D.C. Site Conditions Solved by Top EPRO Technical Support

Washington D.C. is experiencing an incredible amount of development; the city has truly transformed over recent years and continues to blossom. EPRO was recently involved in a critical project set to enhance a bourgeoning area of the city.

"This project was an adventure for me," explains Daniel Hammill, EPRO Technical Support Specialist. "From setting up a new EPRO spray pump on location, exposing and handling unexpected underground streams, and on-the-spot project design changes, EPRO's technical team and Approved Applicator, Osprey Contracting Company, stepped up to the challenge presented to us and provided successful solutions for the project."

Florida Ave NE is an area with multiple land uses and several critical public transit connections: This corridor is also experiencing a high level of new development.

The 1 Florida Ave NE condo project by Aria Development Group is currently under construction. Plans call for 388 apartments which will be situated on the site of a former Exxon gas station at the corner of North Capitol St and Florida Ave NE.

Gas stations can often cause contamination issues to the surrounding soil. Here, it transpired that one of the underground storage tanks had leaked into the soil, causing a complete exposure pathway from the groundwater to the indoor air. Testing revealed that Ethylbenzene, Xylenes, Naphthalene, and TPH-GRO's (Total Petroleum Hydrocarbons - Gasoline Range Organics) were all present. This meant that the groundwater and soil were both impacted, so the new below-grade construction had to have a solid waterproofing system that was also effective at vapor intrusion mitigation.

"As the project began to unfold," says Hammill, "we discovered that the substrate conditions were different than originally expected in the low areas of the site. There was flowing water coming in from an unanticipated underground stream that was



running directly across the bottom of the elevator pit, flooding the area where the under slab and pile caps had to be detailed water and vapor tight. Through a collaboration between EPRO's technical team, Osprey's experienced application team, and the GC, HITT Construction, we were able to determine how to safely and efficiently redirect the stream's flow to allow for a warrantable waterproofing installation."

With such a complicated project, the selected systems had to be versatile enough to cover several different site elements: An under slab vapor intrusion barrier, waterproofing for elevator pits and pre-applied/post-applied waterproofing wall systems.

"This site location was difficult," explains Kevin Leasure, Osprey Contracting Co. "It's right in downtown D.C. and on a corner. Logistical challenges drove the design of the building, and it needed multiple levels, plus there was lagging involved. In addition, the job was going to require both a robust under slab and vapor intrusion system and complicated waterproofing details; it felt like every system possible would be used."

EPRO stepped in with the right products and expertise to advise the team on the best way to protect the site. A total of 47,000 square feet of product was applied: Geo-Seal EV40s with passive low-profile venting for vapor mitigation; e.base, e.spray, Geo-Seal Bond B at the elevator pits; 12,500 square feet of E.Proformance Slip Sheet at shoring for the blindside walls, and 7,500 square feet of the post-applied E.Proformance Wall system for the double-formed walls.

"The variety of systems that EPRO could offer that could fit each unique condition made our job much easier," says Leasure. "It was also helpful that EPRO made project specific details available, as well as helped plan a lot of complicated transitions."

Dan acknowledged, "While we understand that waterproofing and vapor barriers aren't the most exciting aspect of a project, we and our Approved Applicators know that we are the most critical piece of the puzzle in keeping the building dry and safe for everyone living and working in there in the future."

EPRO is a family-owned company willing to go the extra mile for its customers and partners. Typical services start with project details developed by EPRO's in-house CAD expert, Robert Taylor, that are the easiest to understand and most indepth in the industry. EPRO extends its service outreach through sending out the technical team to work directly with customers during training events, such as setting up new sprayer pumps and systems training, and assisting General Contractors and EPRO Approved Applicators on establishing proper substrate conditions for a successful application.

"Our success only comes from the success of our Approved Applicators and their projects," explains Dan. "Our technical team's goal is to provide a foundation of confidence in our applicators, and our overall goal is to work directly with our customers every step of the way, covering all aspects of building envelope protection to the utmost quality. My goal with every project that our technical team works on is to never be thought of again throughout the life of the building."