

# RiverRenew Tunnel System Project

**Owner:**

Alexandria Renew Enterprises  
(AlexRenew) Alexandria, VA

**Client:**

Brown and Caldwell

**Role:**

Program Management  
Construction Management

**Key Characteristics:**

- 2-miles of 12-ft dia. Conveyance and Storage Wastewater Sewer Tunnel 110 to 160-ft deep
- 0.5-miles of 6-ft dia. Diversion Sewer 10 to 30-ft deep
- Four Shafts, 35- to 65-ft dia.
- Ancillary Diversion Structures
- Pumping Station (40 mgd Tunnel Dewatering & 130 mgd Wet Weather)
- Design-Build Project Delivery

**Professional Services:**

From: Nov 2018  
To: Present

RiverRenew is a program being executed by AlexRenew to augment controls that reduce the discharge of combined sewage to Alexandria, Virginia’s waterways. To comply with a State Law passed in 2017, RiverRenew needs to be completed by July 1, 2025 and program costs are anticipated to be in the range of \$370m to \$555m. The centerpiece of the program is a storage and conveyance tunnel system linking the existing Combined Sewer Outfalls to a new pumping station located at AlexRenew’s Water Resource Recovery Facility.



Bird’s-eye view of Alexandria, Virginia along the Potomac River waterfront

Since the program’s inception, JCK Underground has assisted AlexRenew with critical decision-making as part of its Owner Advisor team. From 2018 to 2020, program concepts and alignments were devised, stakeholder support was garnered and regulatory permission to proceed was obtained. In parallel, Design-Build contracting was selected to fast-track tunnel procurement, bridging documents were developed and a construction start date scheduled for late 2020.

JCK Underground’s full-spectrum of services have included: concept planning; alternatives analysis; alignment selection; planning and overseeing geotechnical investigations; developing program management processes; generating RFQ/P documents; preliminary engineering and design management; constructability reviews; scheduling and estimating; mentoring and training; organizing and supervising construction management services.



Link: <https://riverrenew.com/>

***“...JCK Underground’s understanding and expertise of the complexities of tunneling/underground work is an incredible asset to our team and has been instrumental in AlexRenew’s ability to swiftly launch our program ...”*** Caitlin Feehan, AlexRenew Program Manager