



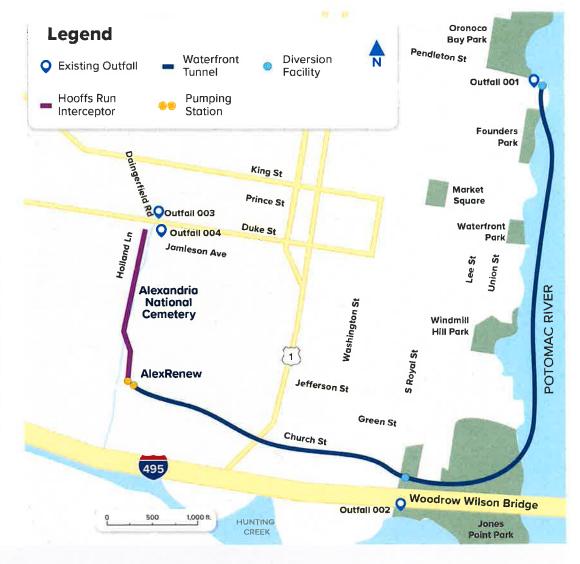
# RiverRenew Tunnel Project overview

### **Components:**

- 11,500-linear-foot, 12-foot-diameter Waterfront Tunnel, 100- to 140-feet deep
- Soft ground: Potomac Formation (clay), alluvium
- 35- and 37-foot-diameter Drop Shafts
- 2,500-foot-long, 6-foot-diameter Hooffs Run Interceptor
- 20-mgd Tunnel Dewatering Pumping Station and 180-mgd Wet Weather Pumping Station housed in a 65-foot-diameter shaft
- 35-foot-diameter Screening Shaft
- 4-story Pumping Station Superstructure

Construction Cost: \$454.4 million

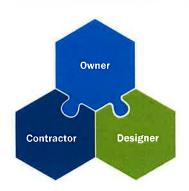
Construction Schedule: December 2020 - July 2025





## Delivery methods considered for the RiverRenew Tunnel Project

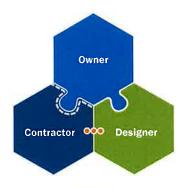
### Traditional



### **Design-Bid-Build**

- Proven method
- Most competitive pricing
- Longest schedule
- No interaction with proposers
- Low-price based selection
- Contractual Relationship
  Contractual Amendment
- Embedded Relationship

#### **Collaborative**



#### **CMAR**

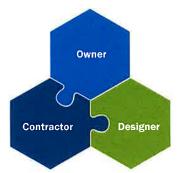
- Shortlist based on qualifications
- Early coordination with Contractor
- Negotiated price could lead to offramp and delays
- Lack of precedent for underground
- Price negotiated with a single entity
- Multiple points of responsibility

### **Design-Build**



#### **Progressive Design-Build**

- Shortlist based on qualifications
- Early coordination with Design-Builder
- Single point of responsibility
- Negotiated price could lead to offramp and delays
- Lack of precedent for underground work
- Pricing negotiated with a single entity

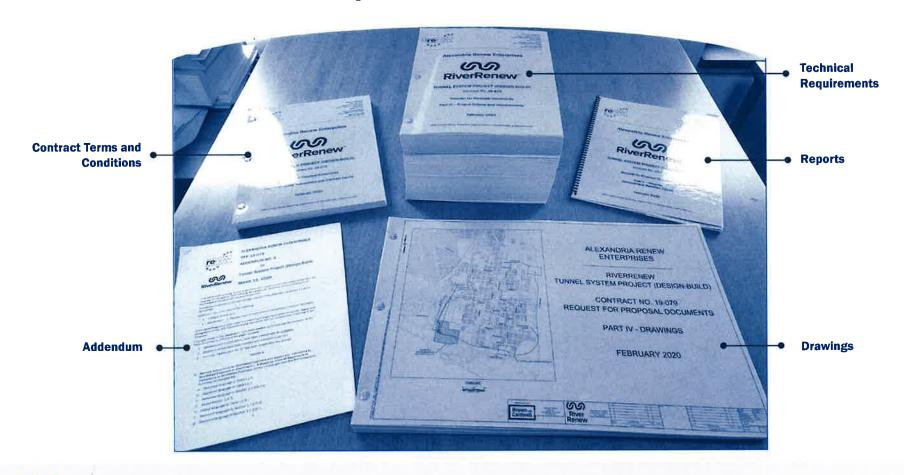


#### **Fixed-Price Design-Build**

- ✓ Least schedule risk
- Proven precedent for underground
- Competitive pricing
- Shortlist based on qualifications
- Balance of technical and price
- ✓ Interaction with proposers
- Single point of responsibility
- Stipends for proposal development
- Longer procurement period



## The RiverRenew Tunnel Project contract was executed in November 2020





## Key RiverRenew Tunnel Project contract administration terms





# The RiverRenew Tunnel Project utilizes a risk management process from planning through construction



- ✓ Encourage a risk management culture
- Mitigate or reduce probability and impact of risk events
- ✓ Develop and manage budget contingencies
- ✓ Inclusive, collaborative process
- ✓ Continuously monitor and update



## Quarterly partnering meetings are held to foster collaboration

### Partnering Meetings:

- Key members of the Owner, Owner Advisor, Resident Engineer, and Design-Builder team
- Hosted by a third-party facilitator
- Provides a space for communication, improved strategy, and functionality

### Partnering Success Factors



Third Party Coordination



Don't Break the Plant



Minimize Schedule Risk



Collaboration



Safety



Quality



# Quarterly Dispute Resolution Board Meetings are held to resolve potential contractual conflicts

### **Dispute Resolution Board Meetings:**

- Key members of the Owner, Owner Advisor,
   Resident Engineer, and Design-Builder team
- Board members consist of industry experts jointly selected by the Owner and Design-Builder
- Board facilitates timely resolution of disputes

### **Dispute Resolution Board Members**



**Andrew Ness** 

Legal



**Fred Kelly** 

Construction Management

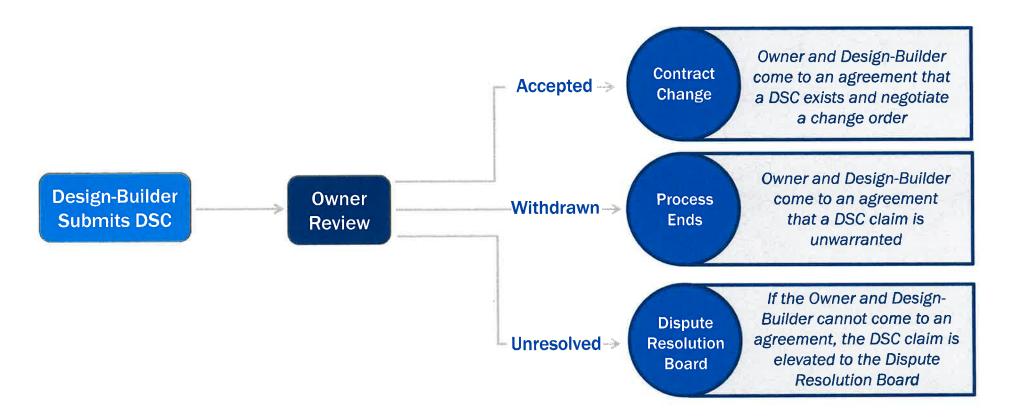


**Gabriel Fernandez** 

Geotechnical



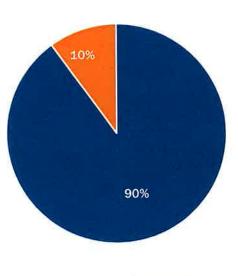
# A differing site condition (DSC) is a physical site condition that differs materially from those indicated in the Contract Documents

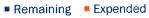




# Summary of RiverRenew Tunnel Project Price Proposal Form (fixed-price)

Payment Item	Unit	Extended Price*	Payment Processing
Lump Sum Work	Lump Sum	384.9	Pay App process
TBM Mobilization	Lump Sum	24.0	Pay App process
Tunnel Work Stoppages	Each	0.4	Pay App process
TBM Intervention Time	Hour	0.04	Pay App process
Project Contingency	Allowance	17.0	Work Change Directive
Escalation/COVID	Allowance	20.0	Pay App process
Permitting & Third Party Coordination	Allowance	2.3	Pay App process
Partnering & Dispute Resolution Board	Allowance	0.3	Pay App process
Pumping Station Equipment	Allowance	1.0	Pay App process
Other	Allowance	4.5	Work Change Directive
Total Contract Price		454.4	







## Approximately \$300 million has been expended on RiverRenew

