



RiverRenew

Council-Board Workgroup Meeting No. 8

December 3, 2019



RiverRenew is a program owned and implemented by Alexandria Renew Enterprises, with support from the City of Alexandria.



1800 Limerick Street | Alexandria, VA 22314



Presentation Outline

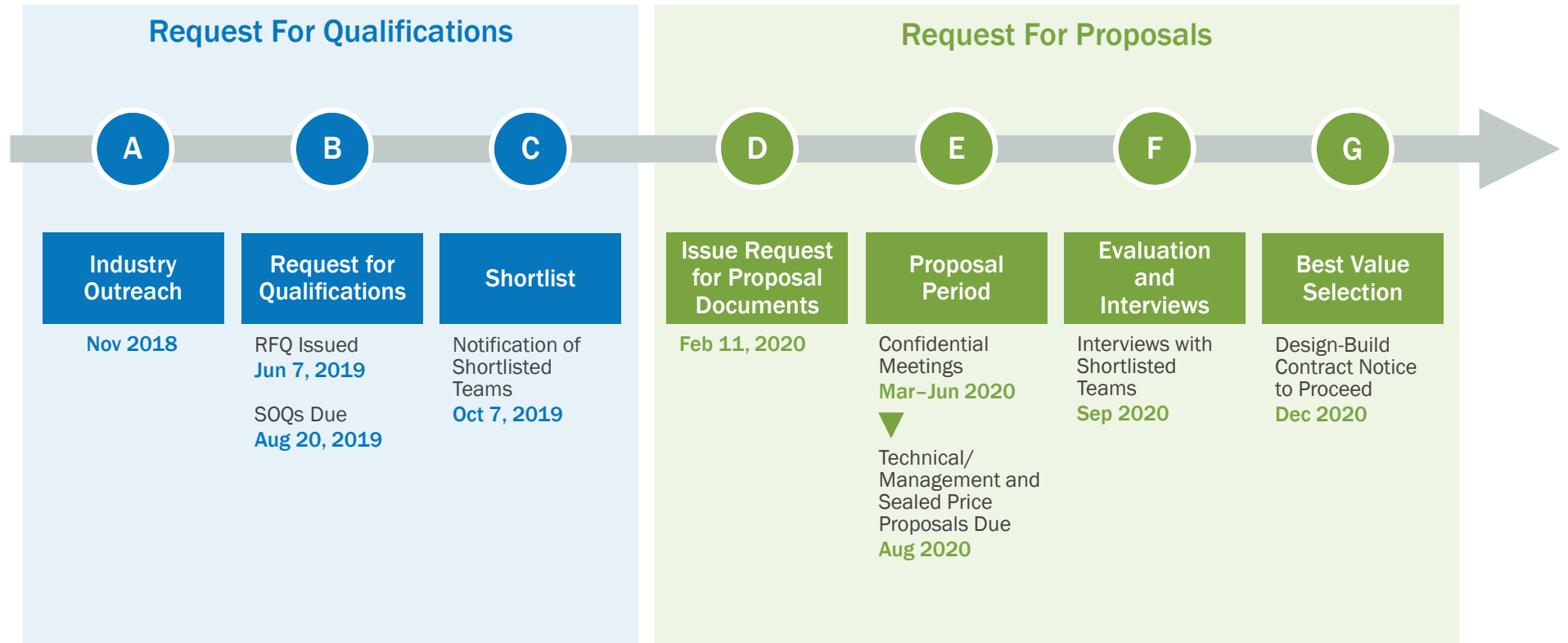
- Tunnel System Project Procurement Update
- Permitting and Third Party Coordination Update
- RiverRenew Technical Update
- Program Cost Update
- Stakeholder Outreach Update
- Next Steps



Tunnel System Project Procurement Update

Justin Carl

Design-Build Process for the Tunnel System Project



AlexRenew Shortlisted Three Design-Build Teams on October 7, 2019



Clark/Atkinson/Michels LLC
Designers: COWI, Arcadis

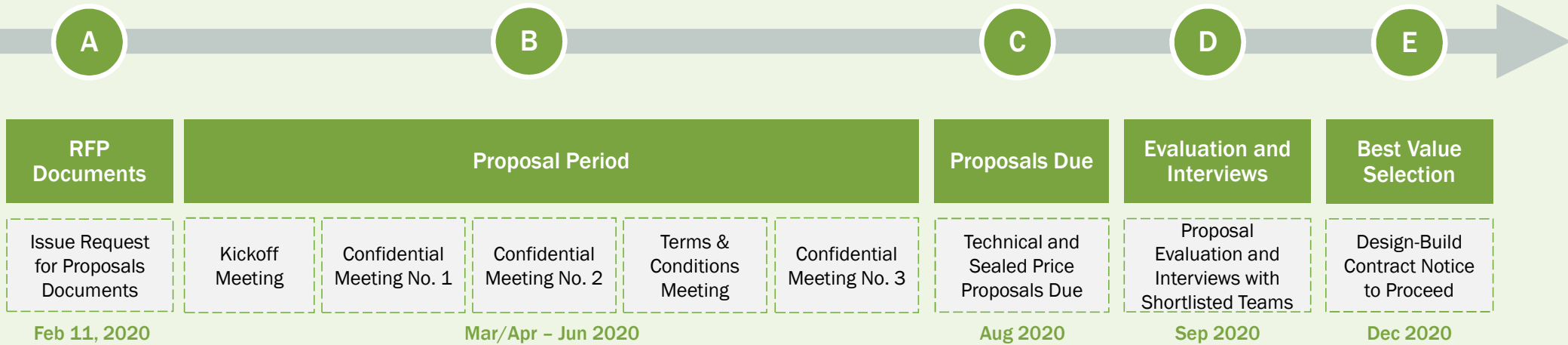


Kiewit/McNally JV
Designers: McMillen Jacobs, Wade Trim



Traylor/Shea JV
Designer: Jacobs
Subcontractor: Corman

Tunnel System Project Design-Build Procurement Schedule





Permitting and Third Party Coordination Update

Justin Carl

Major RiverRenew Permits and Easements Update

Permit	Issuant	Status
DSUP for Tunnel System	City of Alexandria	<ul style="list-style-type: none"> Approved on July 9, 2019
DSUP for TDPS	City of Alexandria	<ul style="list-style-type: none"> Approved on September 14, 2019; proposed conditions under review
Floodplain Analysis/No-Rise Certification	City of Alexandria	<ul style="list-style-type: none"> Approved on July 3, 2019
Environmental Assessment	NPS	<ul style="list-style-type: none"> Virginia Department of Historic Resources reviewing Programmatic Agreement – Comments expected November 30, 2019 FONSI anticipated January 2020
Construction ROW Permits	NPS	<ul style="list-style-type: none"> Open, approval expected February 2020
Clean Water Act Permits	USACE, VDEQ, VMRC	<ul style="list-style-type: none"> Open, approval expected December 2019
Land Use Permit (tunnel crossing)	VDOT	<ul style="list-style-type: none"> Open, approval expected December 2019

Project Component	Owners	Status
Waterfront Tunnel	<ul style="list-style-type: none"> Boulevard Condominiums Private Homes (2 total) St. Mary's Cemetery RTN East LLC 	<ul style="list-style-type: none"> Negotiations ongoing⁽¹⁾ Negotiations ongoing⁽¹⁾ Negotiations ongoing⁽¹⁾ Agreement executed
Hooffs Run Interceptor	<ul style="list-style-type: none"> AVR Alexandria (Marriott) Duke St. Square Association Presbyterian Cemetery 	<ul style="list-style-type: none"> Negotiations ongoing Negotiations ongoing⁽¹⁾ Negotiations ongoing⁽¹⁾
WRRF Staging	<ul style="list-style-type: none"> Alder Branch 	<ul style="list-style-type: none"> Negotiations ongoing

(1) AlexRenew Board authorized acquisition of easements and authorized condemnation, if necessary, on November 19, 2019.



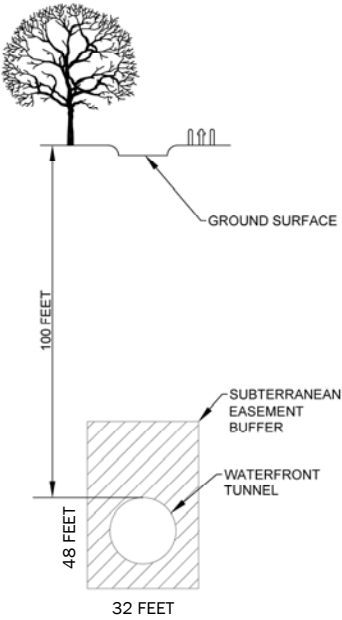
Waterfront Tunnel Subterranean Easements

1. Bearing South Condominium
2. Fiske, Diane P.
3. Schlacter, Christine B. and Michael N.
4. St. Mary's Cemetery



Bearings South Subterranean Easement

PARCEL ID: 080.04-08-00
 OWNER: THE BOULEVARD CONDOMINIUMS
 ADDRESS: 906 S WASHINGTON ST
 ALEXANDRIA, VA 22314

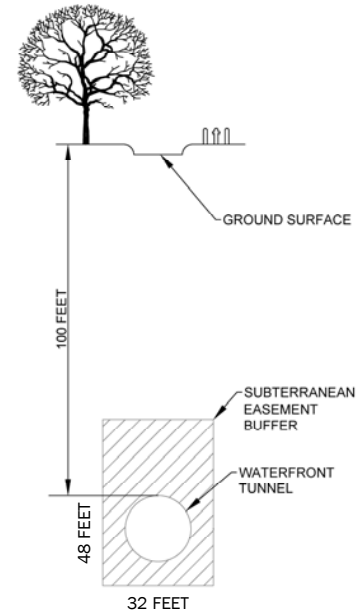


- LEGEND**
- PROPERTY LINE
 - PROPERTY LINE OF ADDRESSEE
 - WATERFRONT TUNNEL
 - PERMANENT SUBTERRANEAN EASEMENT BUFFER

Fiske Subterranean Easement



PARCEL ID: 080.04-07-04
 OWNER: DIANE P FISKE
 ADDRESS: 931 S ST ASAPH ST
 ALEXANDRIA, VA 22314

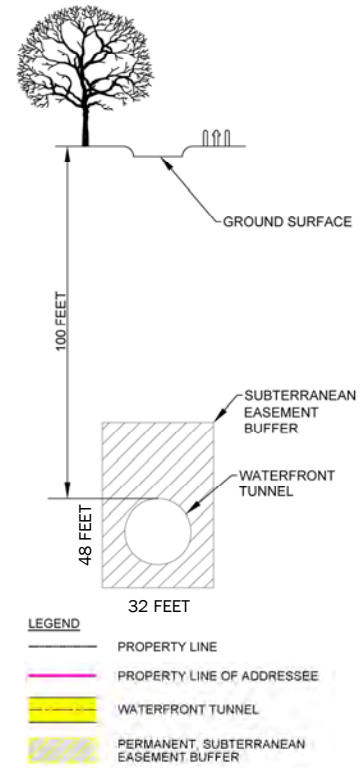


- LEGEND**
- PROPERTY LINE
 - PROPERTY LINE OF ADDRESSEE
 - WATERFRONT TUNNEL
 - PERMANENT SUBTERRANEAN EASEMENT BUFFER

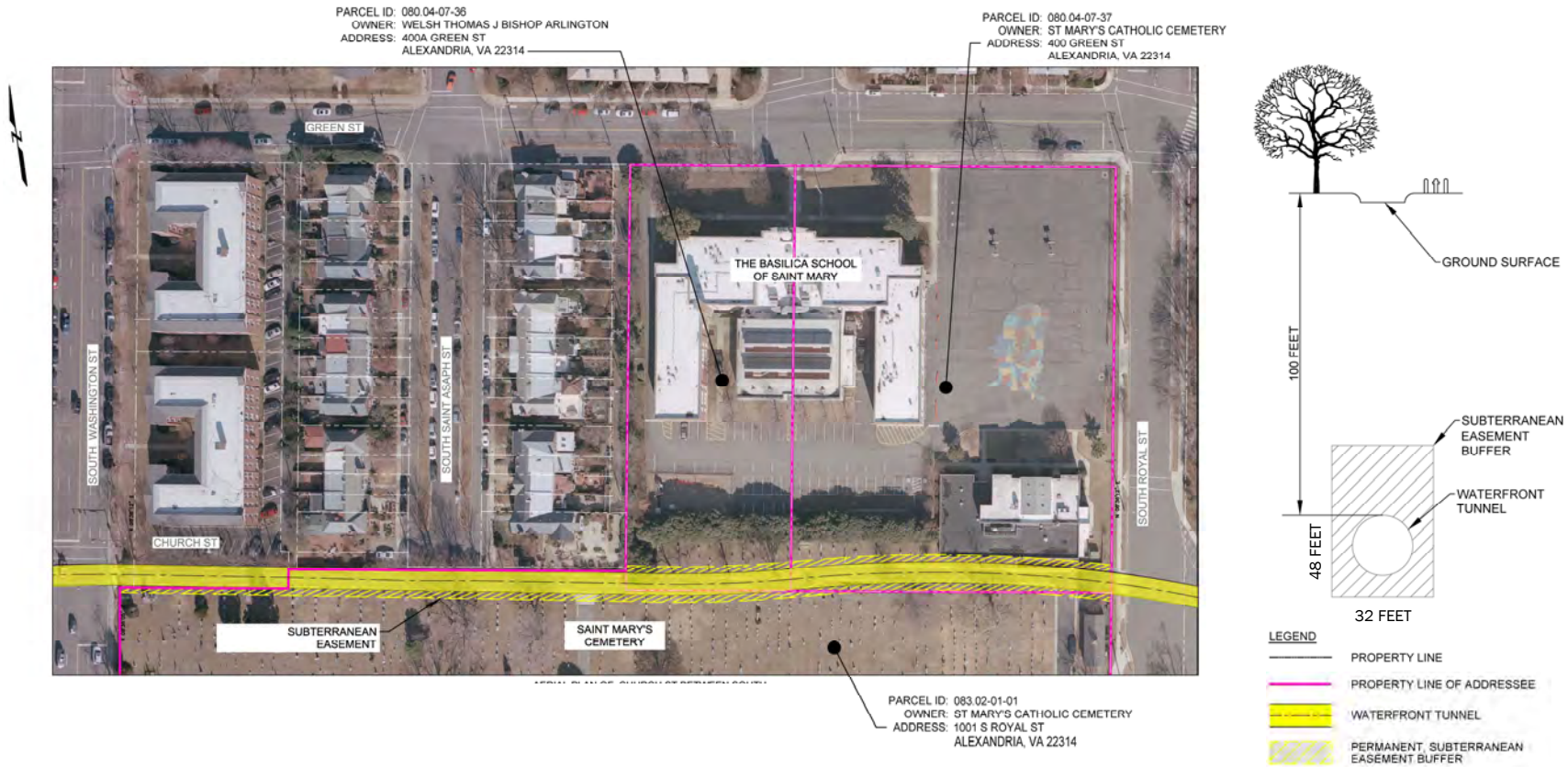
Schlacter Subterranean Easement



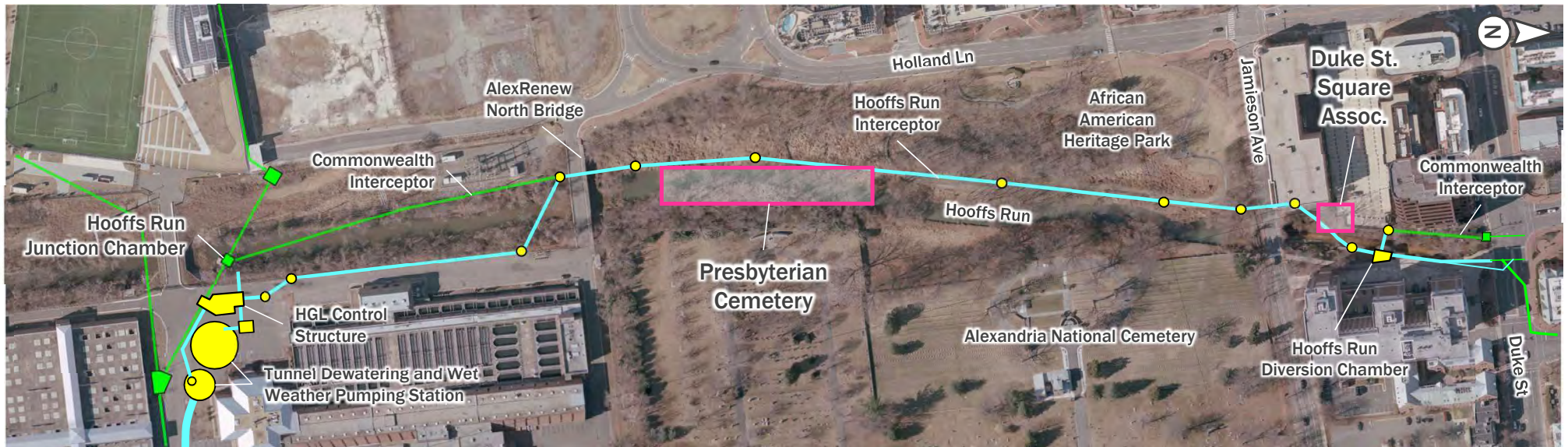
PARCEL ID: 080.04-07-35
 OWNER: CHRISTINE B &
 MICHAEL N SCHLACTER
 ADDRESS: 930 S ST ASAPH ST
 ALEXANDRIA, VA 22314



St. Mary's Subterranean Easement

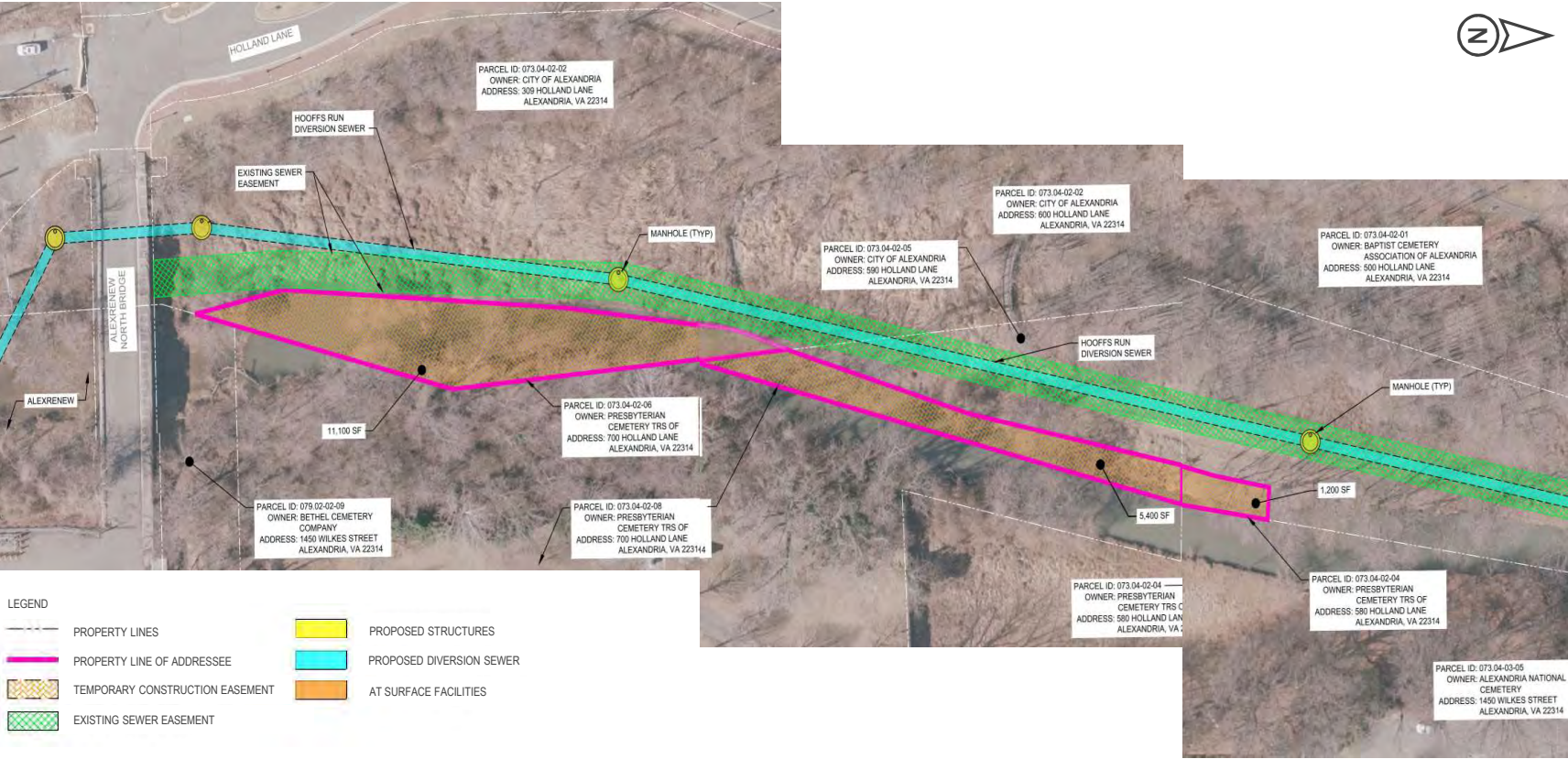


Hooffs Run Interceptor Temporary Construction Easements

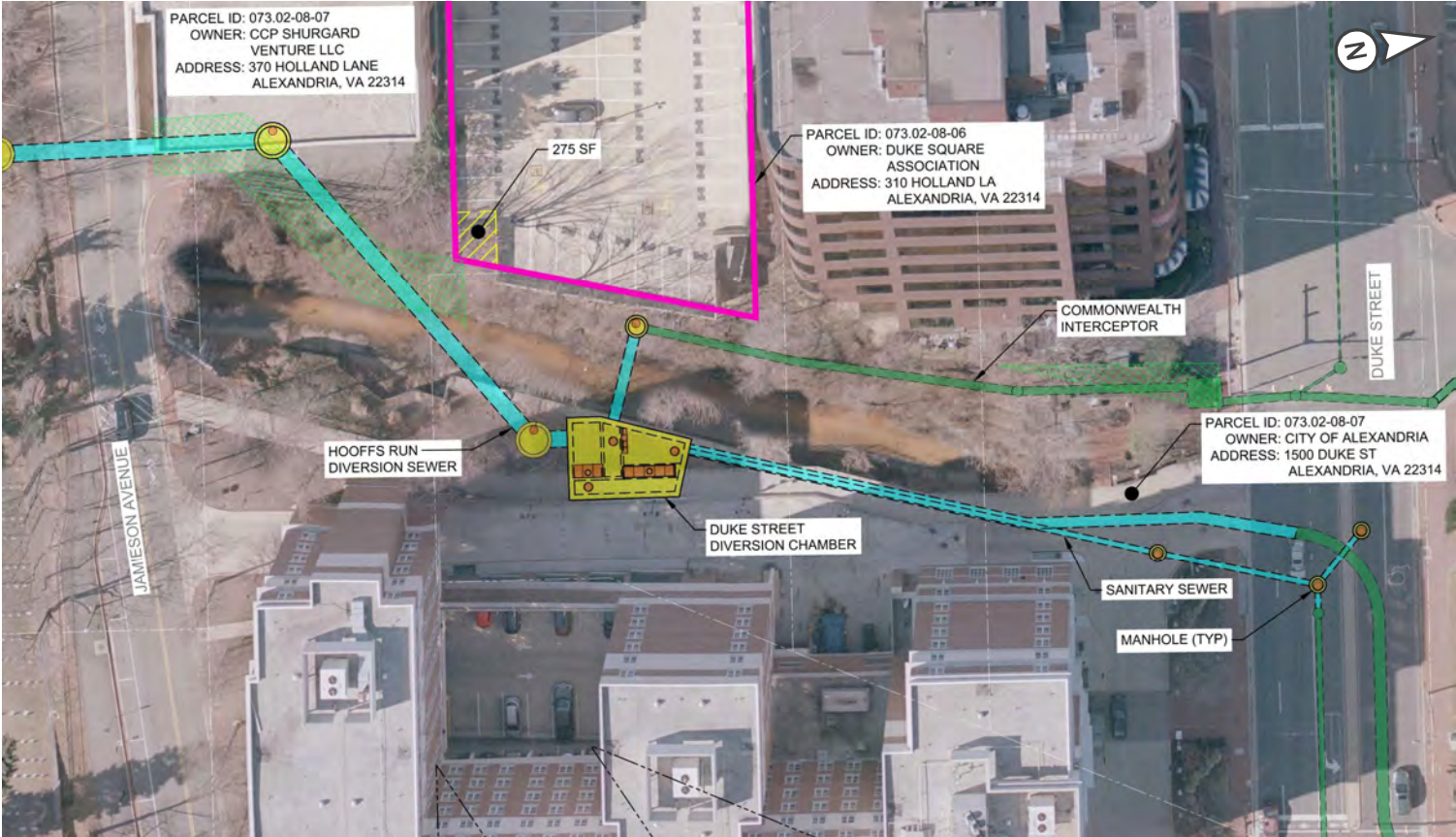


1. Presbyterian Cemetery
2. Duke Street Square Association

Presbyterian Cemetery Temporary Construction Easement



Duke Street Square Association Temporary Construction Easement



- LEGEND
- PROPERTY LINES
 - PROPERTY LINE OF ADDRESSEE
 - TEMPORARY CONSTRUCTION EASEMENT
 - EXISTING SEWER EASEMENT
 - PROPOSED STRUCTURES
 - PROPOSED DIVERSION SEWER
 - AT SURFACE FACILITIES



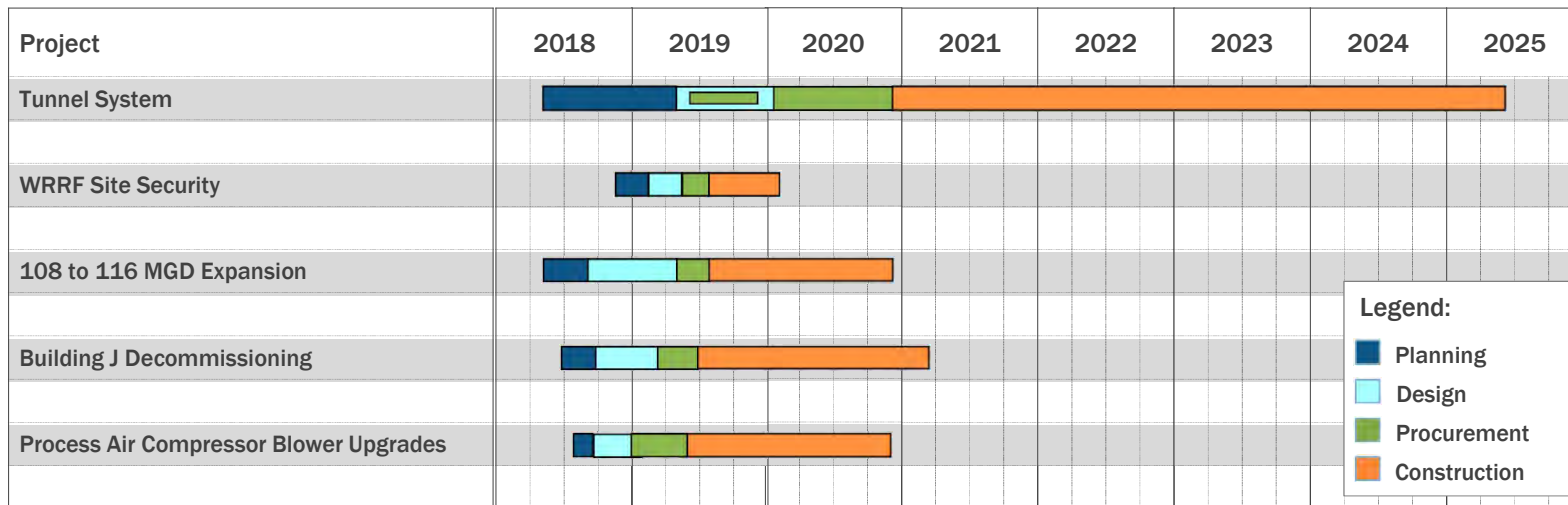
RiverRenew Technical Update

Justin Carl

AlexRenew WRRF Construction Update



AlexRenew's WRRF Upgrades Began in August 2019 to Pave the Way for RiverRenew's Tunnel System Project



Video of Ongoing RiverRenew Construction Activities at AlexRenew's WRRF

ADD VIDEO

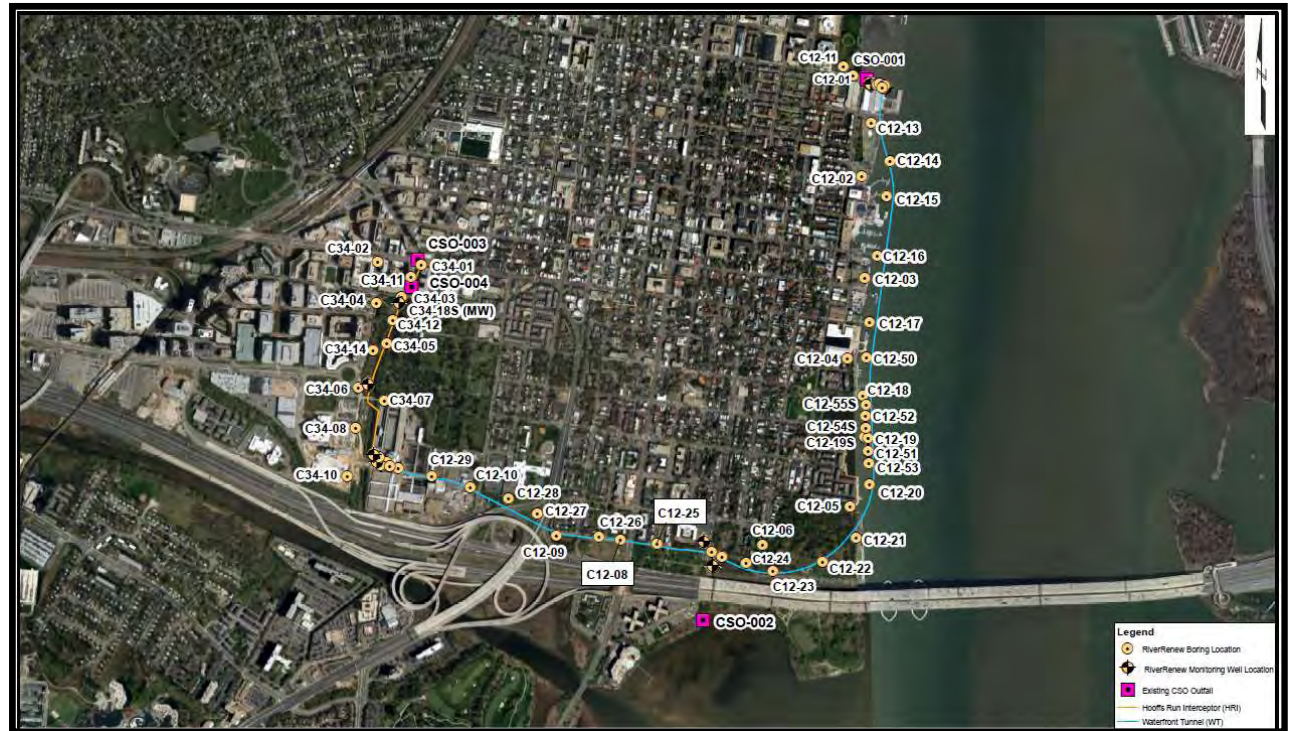
Status Update on Geotechnical and Environmental Explorations



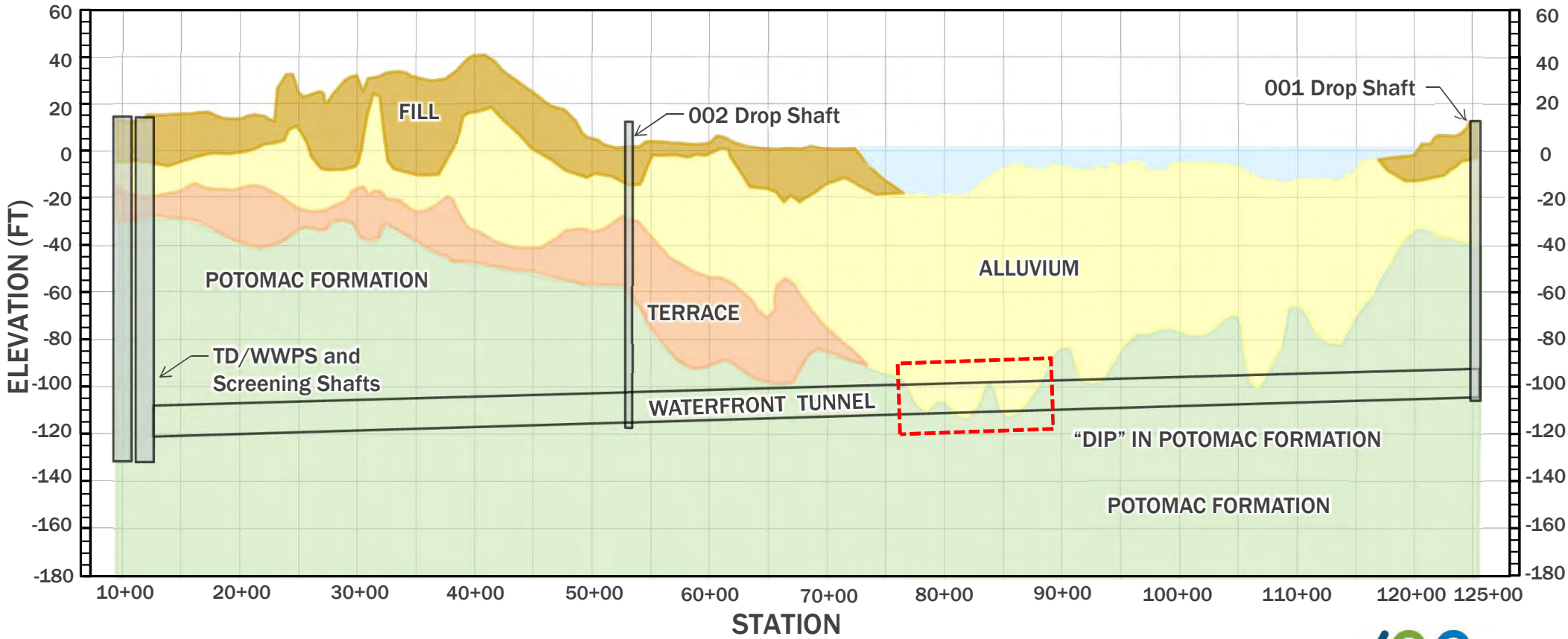
Status Update on Geotechnical and Environmental Explorations

77 Soil Borings Completed

- **1,150** Geotechnical Soil Samples Collected
- **100** Environmental Soil Samples Collected
- **34** Groundwater Monitoring Wells Installed
- **11** Environmental Groundwater Samples Collected



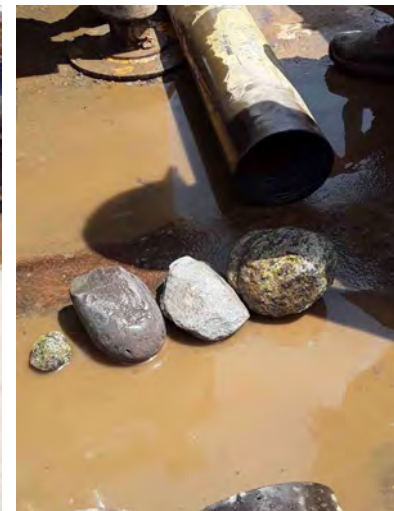
Waterfront Tunnel Geologic Profile



Additional Borings Completed in September to Further Define the Top of the Potomac Clay



- Original Borings near Ford's Landing
- Additional Sonic Borings Completed in September 2019



Traditional borings could not be advanced through the Alluvium/Terrace due to the presence of cobbles. Sonic borings were completed to collect soil samples in this area.

Outcomes from Environmental Assessment and DSUP for Excavation and Hauling of Excavated Material

- City Council approved hauling of all excavated material in June 2019
- Testing showed that all soil could be hauled to a landfill
- Groundwater discharged to sewer system needs to be pretreated (if necessary)
- Robust approach for hauling includes:

Wheel Wash



Tarping



Street Sweeping



Hauling Inspector



Mitigation Practices to be Implemented at Outfall Sites

Excavation Best Management Practices



Excavate Soil in Saturated Conditions



NO Stockpiling of Excavated Materials

Site Security and Safety Measures



Site Fencing, Cameras, and Security

Standard PPE



Continuous Air Monitoring

Engineering Controls

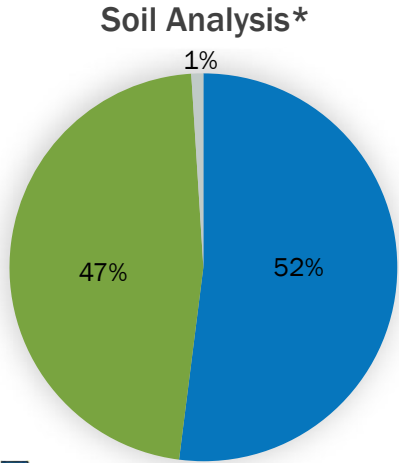
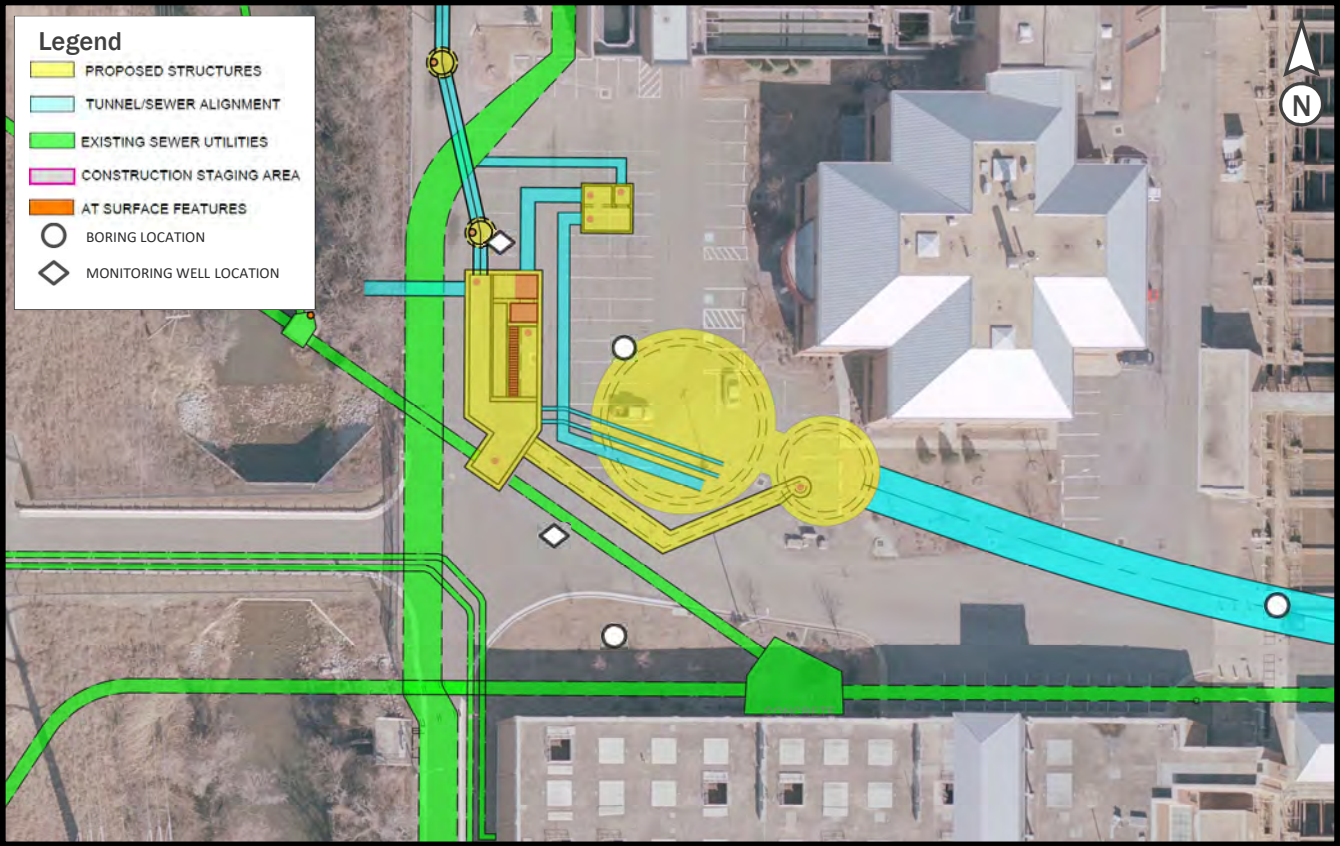


Dust Suppression



Erosion & Sediment Control

100% of Soil Proposed to be Excavated at AlexRenew WRRF can be Hauled to a Landfill for Daily Cover



- Impacted
- Clean
 - Above VDEQ Residential Standards
 - Above VDEQ Industrial Standards
 - Hazardous

Contaminants Encountered

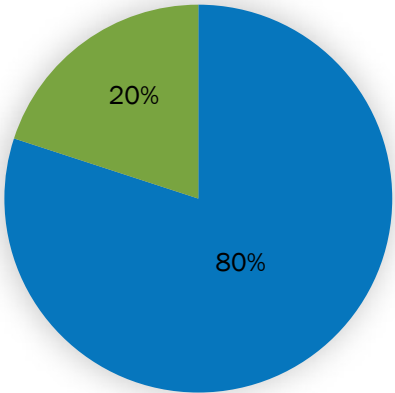
- Diesel Range Organics
- Volatile Organic Compounds
- Arsenic
- Chromium
- Polycyclic Aromatic Hydrocarbons

*Note: Analysis based on in-situ soil volumes.

100% of Soil Proposed to be Excavated at Outfall 002 can be Hauled to a Landfill for Daily Cover



Soil Analysis*

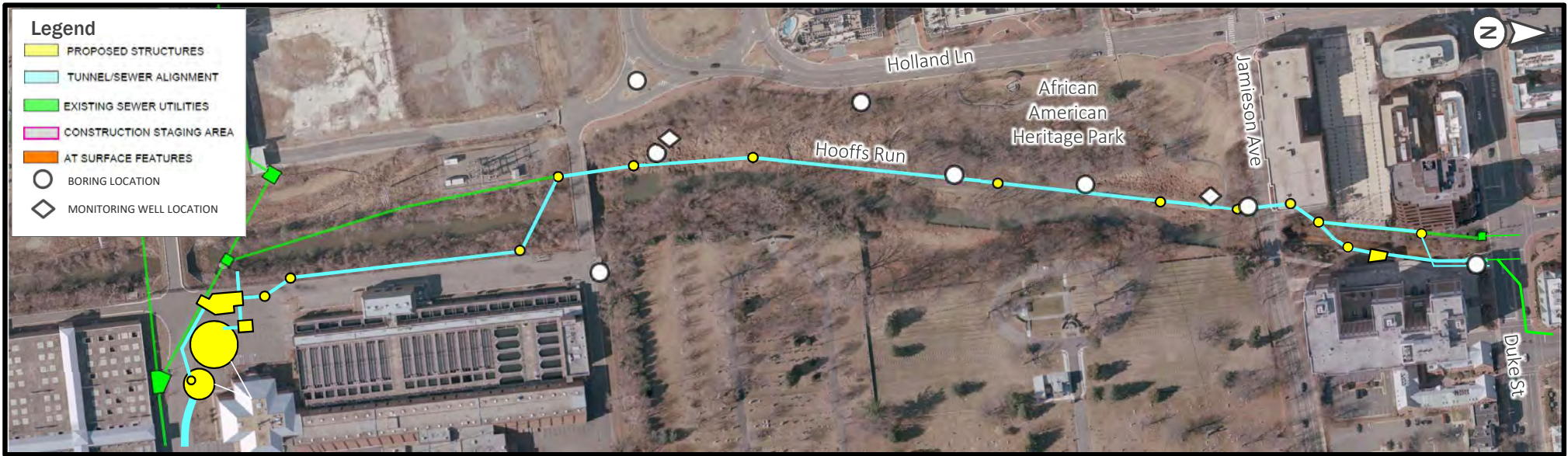


Clean	Above VDEQ Residential Standards
Impacted	Above VDEQ Industrial Standards
	Hazardous

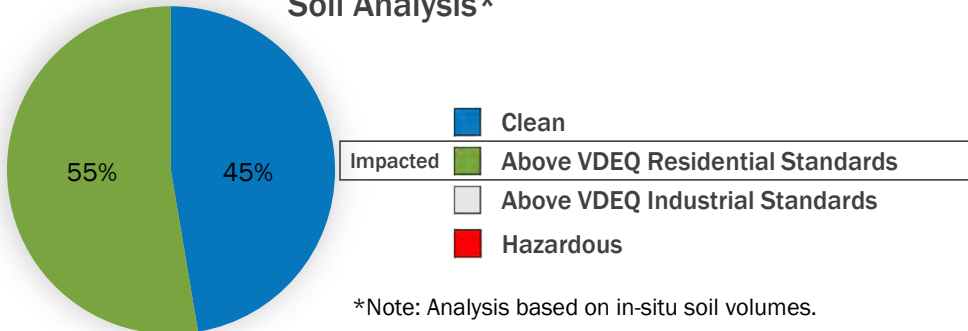
- Contaminants Encountered**
- Diesel Range Organics
 - Volatile Organic Compounds
 - Arsenic

*Note: Analysis based on in-situ soil volumes.

100% of Soil Proposed to be Excavated for Hooffs Run Interceptor can be Hauled to a Landfill for Daily Cover



Soil Analysis*

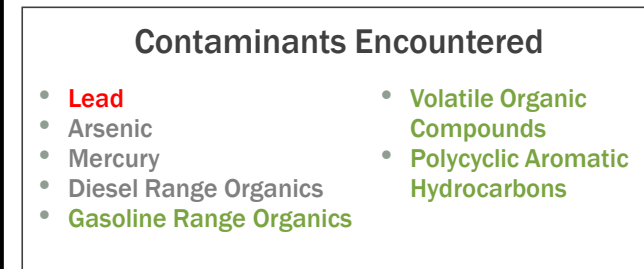
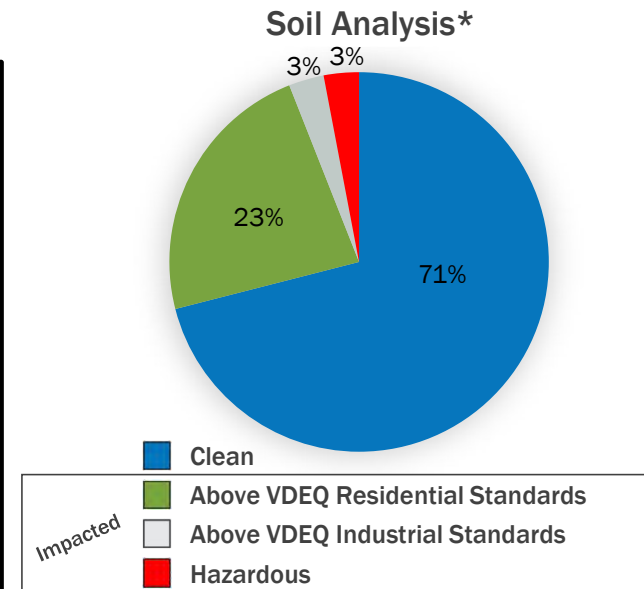
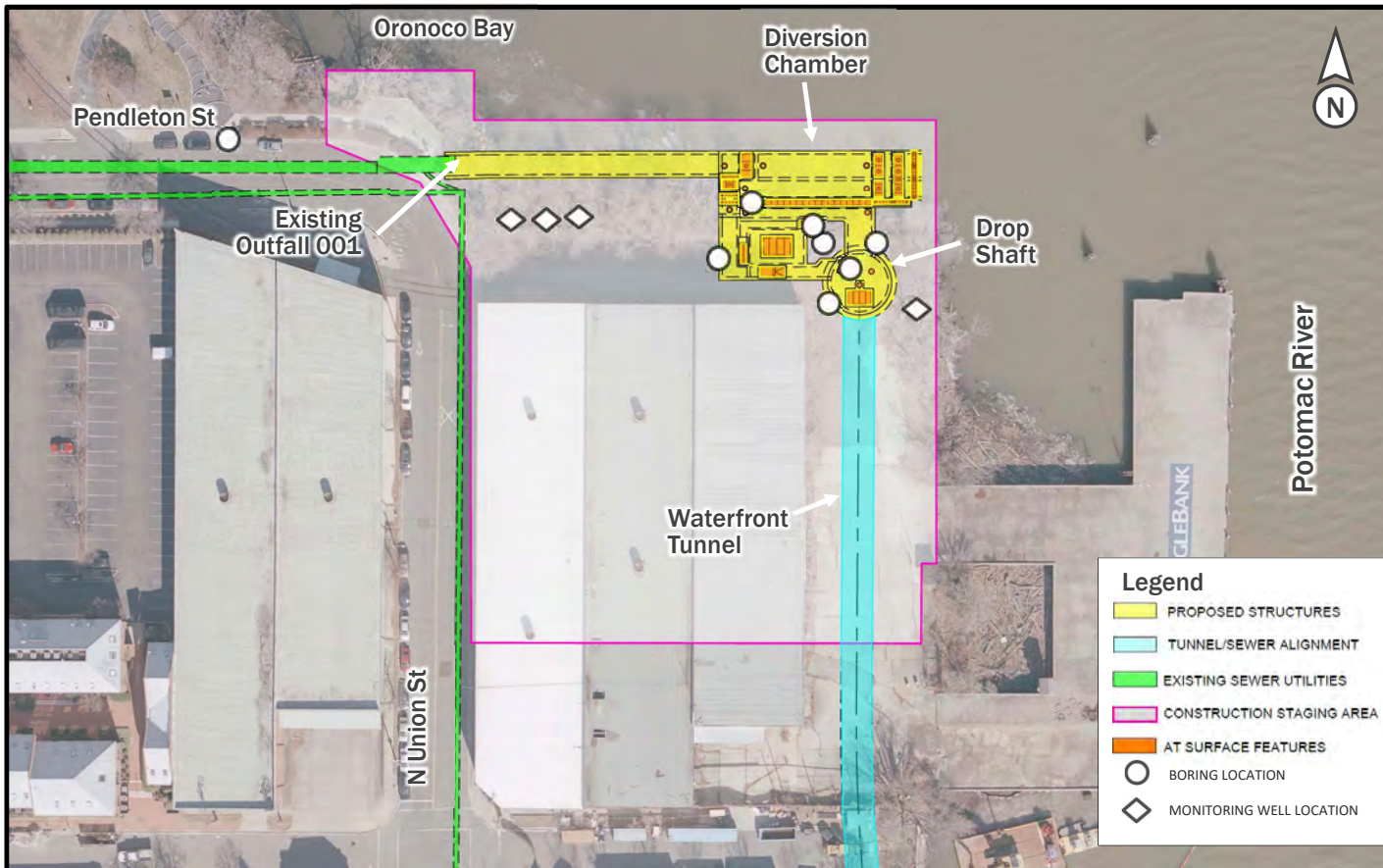


*Note: Analysis based on in-situ soil volumes.

Contaminants Encountered

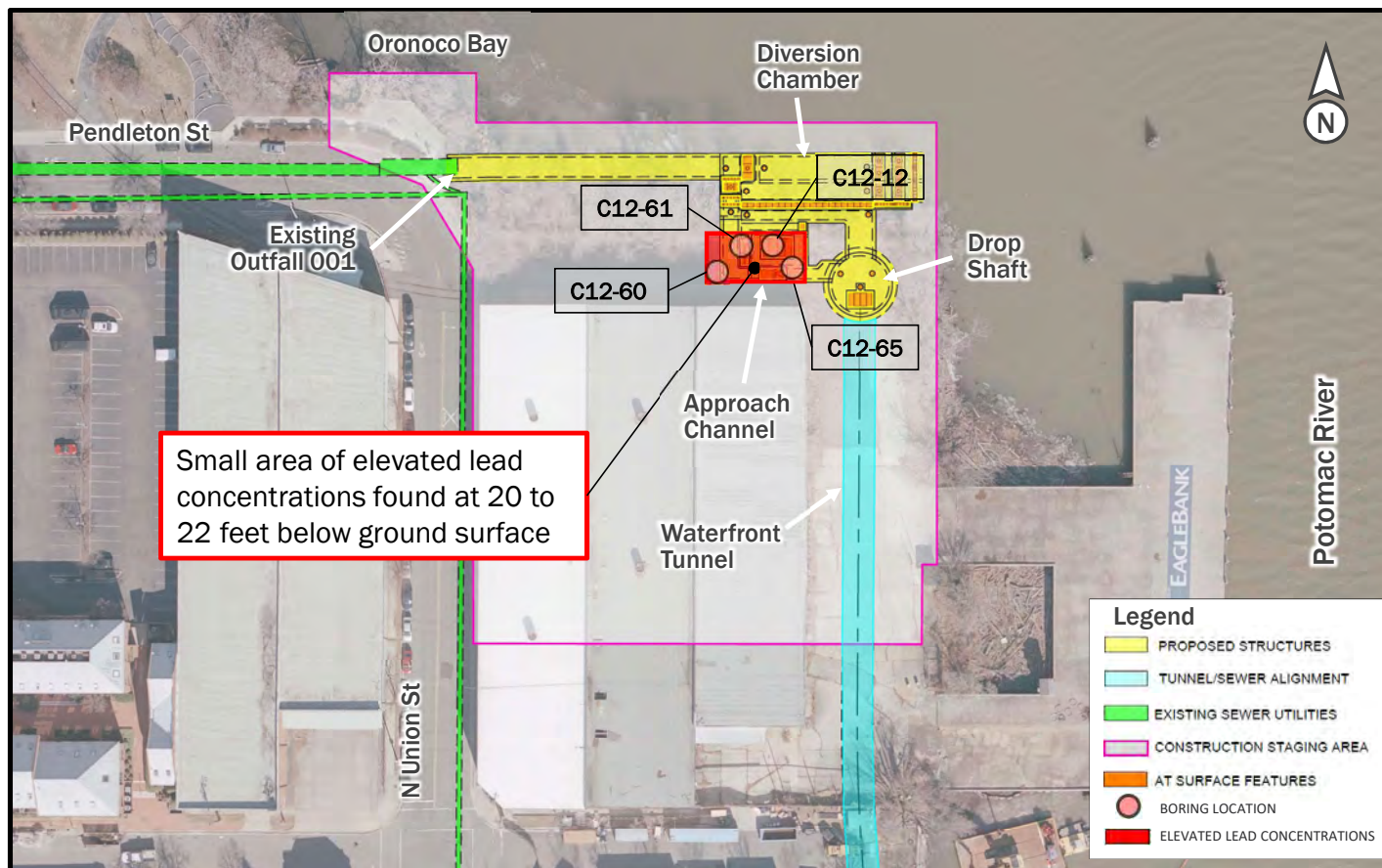
- Diesel Range Organics
- Volatile Organic Compounds
- Arsenic

97% of Soil Proposed to be Excavated at Outfall 001 can be Hauled to a Landfill for Daily Cover



*Note: Analysis based on in-situ soil volumes.

3% of Soil Proposed to be Excavated at Outfall 001 is Considered Hazardous for Disposal due to Elevated Lead Concentrations



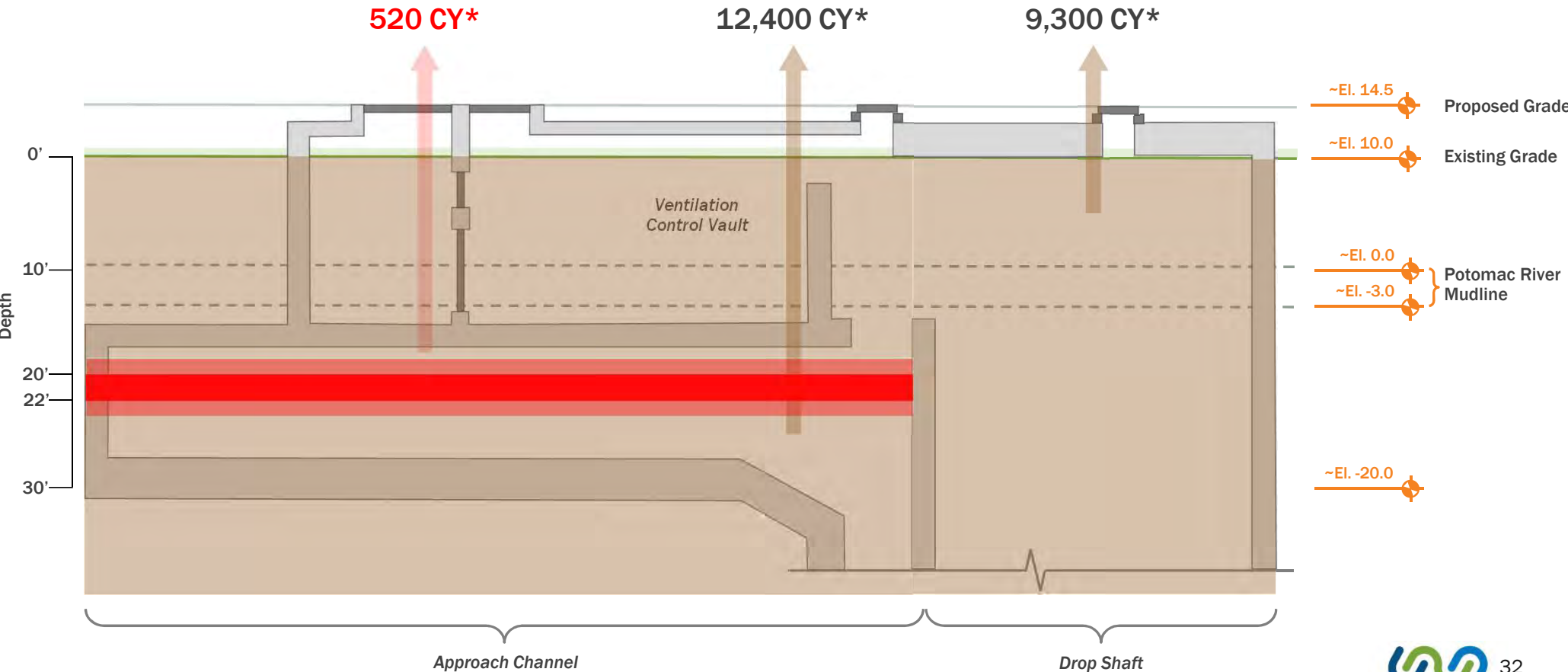
Soil contaminated with lead at Outfall 001 is considered hazardous due to its **potential to leach**

- Dispose at a permitted hazardous landfill or treated

Benzene is NOT a contaminant of concern

- Found in 3 of 26 soil samples at concentrations below residential levels

Excavation Process for Outfall 001 Diversion Facility



Soil Handling and Loading Plan for Lead-Contaminated Soil



Excavate



Live-load Excavated Soil into Watertight Bags



Line Truck Bed



Load Watertight Bags onto Truck



Cover Truck and Tie Down Tarp



Wheel Wash



Inspect

Estimated:

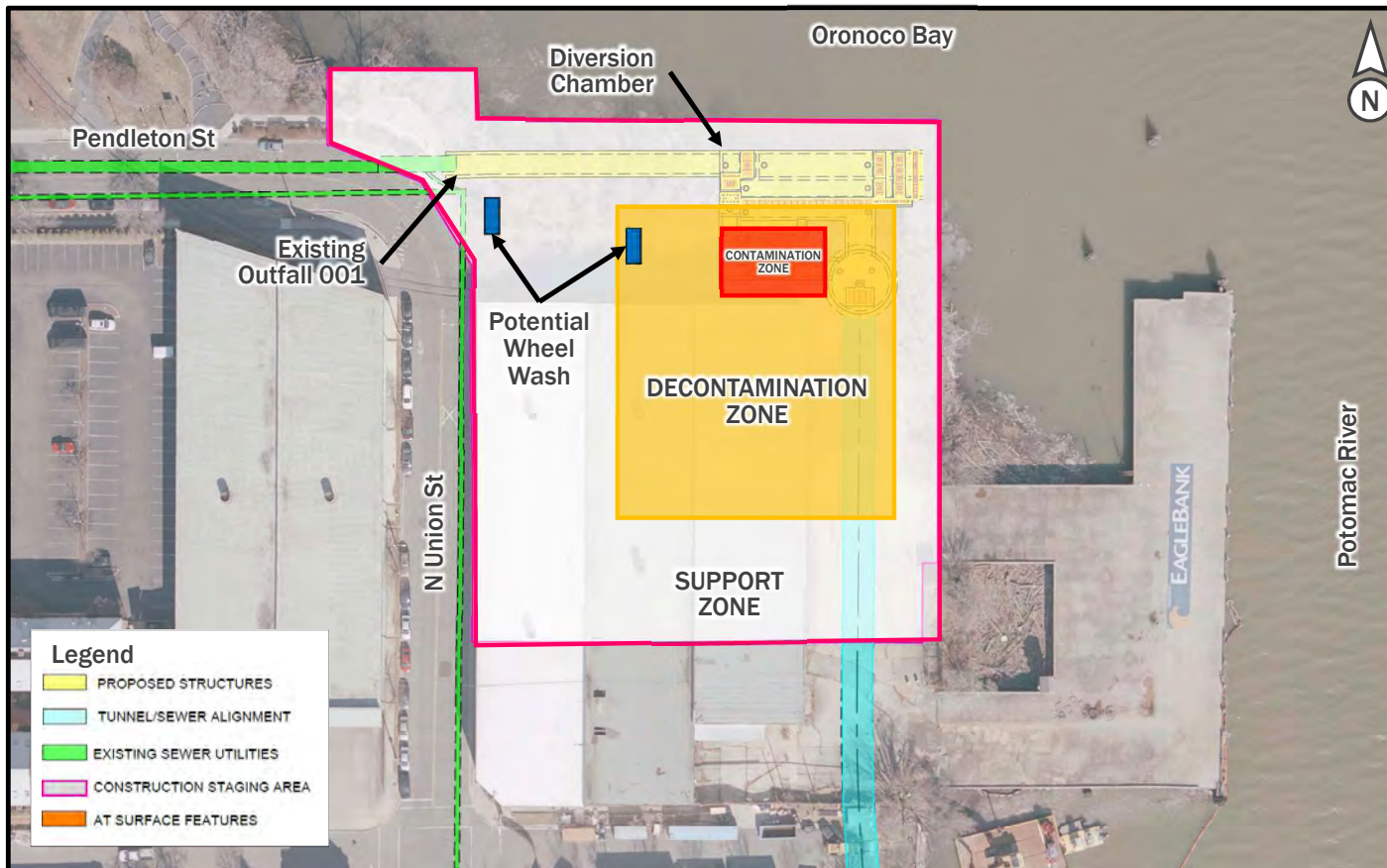
325 Watertight Soil Bags*

70 Trucks*

1 Month Duration

*Note: Hauling analysis based on bulk soil volumes

Potential Construction Work Zones at Outfall 001 Site



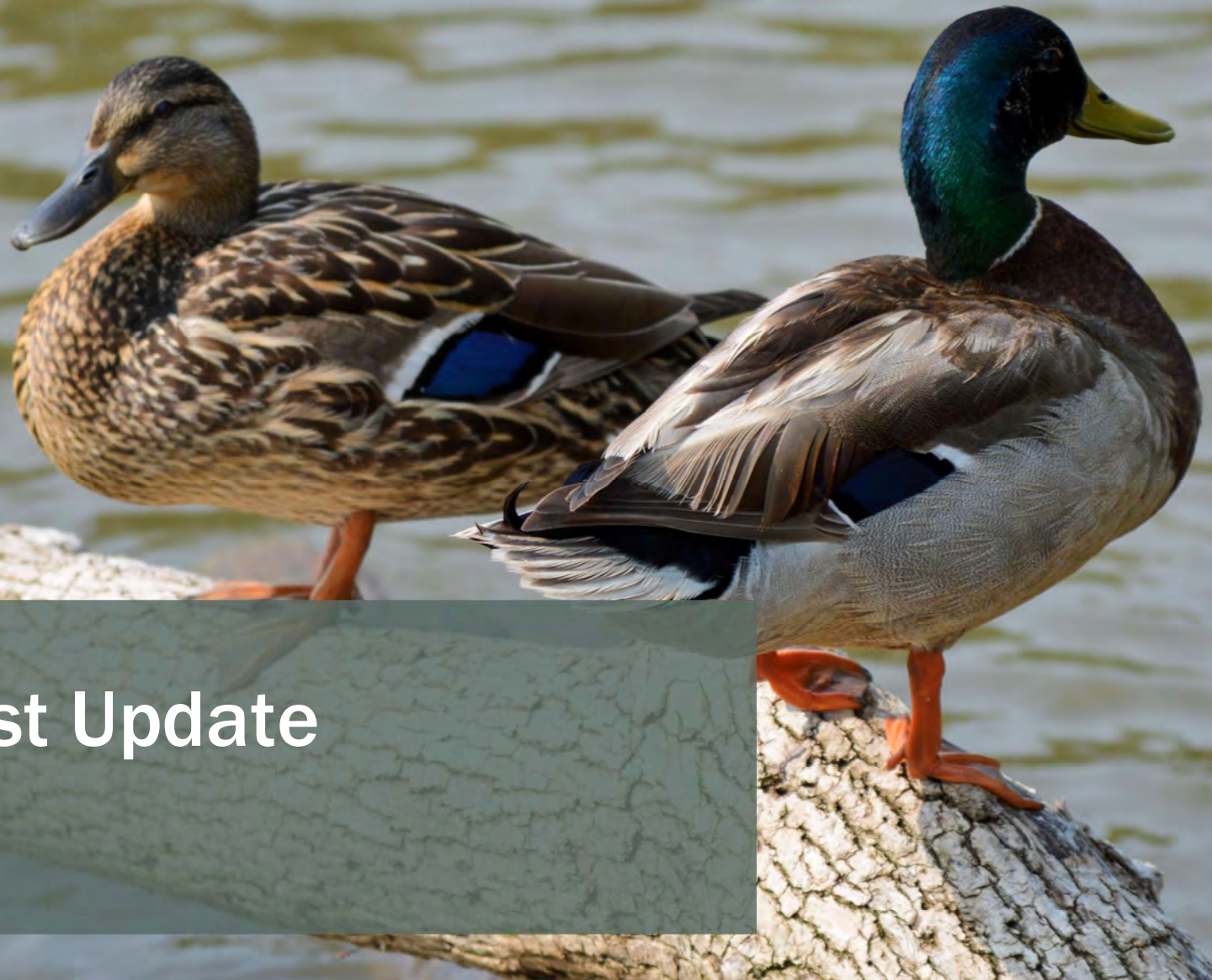
- **Contamination Zone:** Hazardous soil (lead) found in this area
- **Decontamination Zone:** Removal of hazardous material from trucks and equipment
- **Support Zone:** Area where all remaining construction takes place

Construction Approaches and Mitigation Practices Prevent Exposure Pathways to Residents

The presence of contamination in soil does not, by itself, create a risk of exposure.

- A risk of exposure requires:
 - Contaminants of concern in exposed soil, dust, or ambient air; and
 - A point of human exposure or contact.
- Exposure risks to residents will be prevented by **site specific soil handling plan** and **mitigation practices**.
- There is no pathway for residents to come into contact with contaminants of concern in soil during construction.



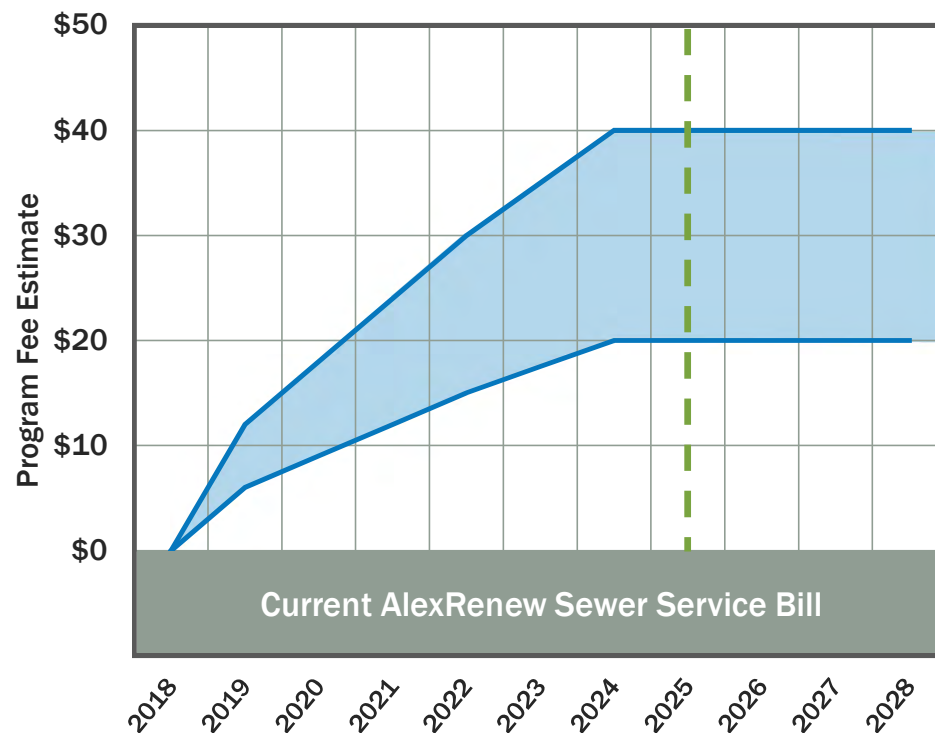


Program Cost Update

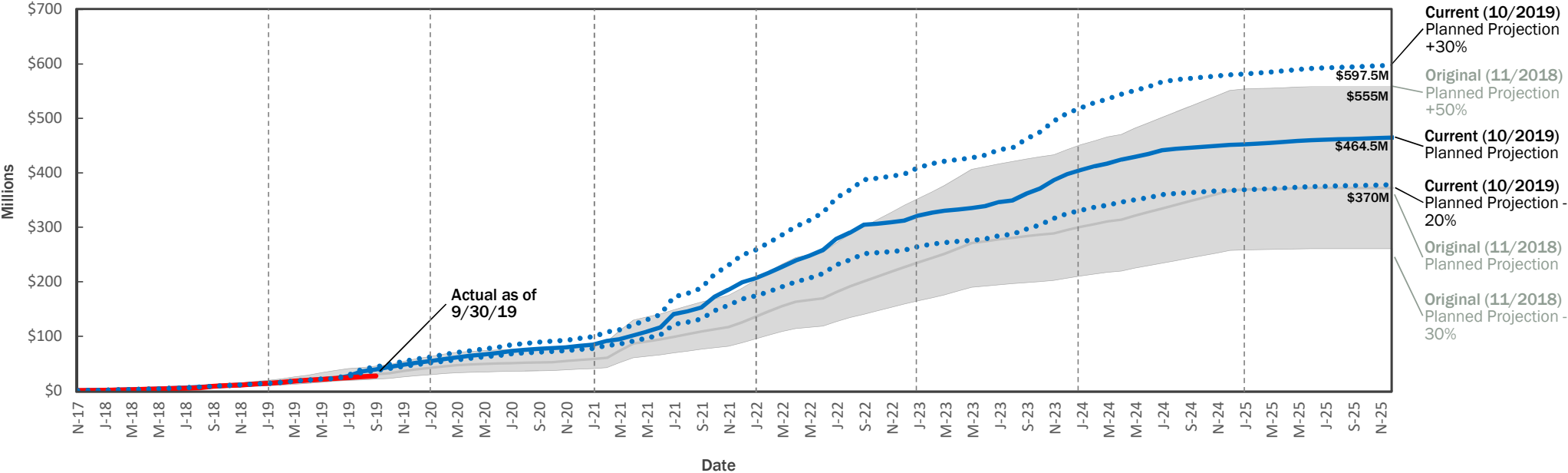
Karen Pallansch

AlexRenew is Soliciting Funds from a Variety of Sources to Minimize Rate Impacts

- **\$25 million** in grant funding approved by Commonwealth for FY20
- Additional funding requests for up to \$75M part of FY21 Legislative Package
- **Virginia Clean Water Revolving Loan Fund:** Proposed loan would fund **51%** of eligible project costs with a proposed interest rate of **1.85%**
- **Water Infrastructure Finance and Innovation Act:** Proposed loan would fund **49%** of eligible project costs with a proposed interest rate of **2.89%**



RiverRenew Spending Plan based on 60% RFP Documents



RiverRenew Program Capital Costs by Project

Project	Long Term Control Plan Update Capital Costs in \$ Millions ⁽¹⁾	Preliminary Engineering Report Capital Costs in \$ Millions ⁽³⁾	Current Capital Costs in \$ Millions	Percent Change from Preliminary Engineering Report
108 to 116 MGD Expansion	2.7	2.9	4.7 ⁽⁴⁾	+62%
Building J Facilities Relocation and Decommissioning	-- ⁽²⁾	21.6	25.7 ⁽⁴⁾	+19%
WRRF Site Security and Access	-- ⁽²⁾	-- ⁽²⁾	2.1 ⁽⁴⁾	-- ⁽²⁾
Tunnel System	353.0	345.7	432.0 ⁽⁵⁾	+25%
Total Estimates	356.0	370.2	464.5	+25%
Upper Range of Total Estimates	535.0 (+50%)	555.3 (+50%)	597.5 (+30%)	+8%

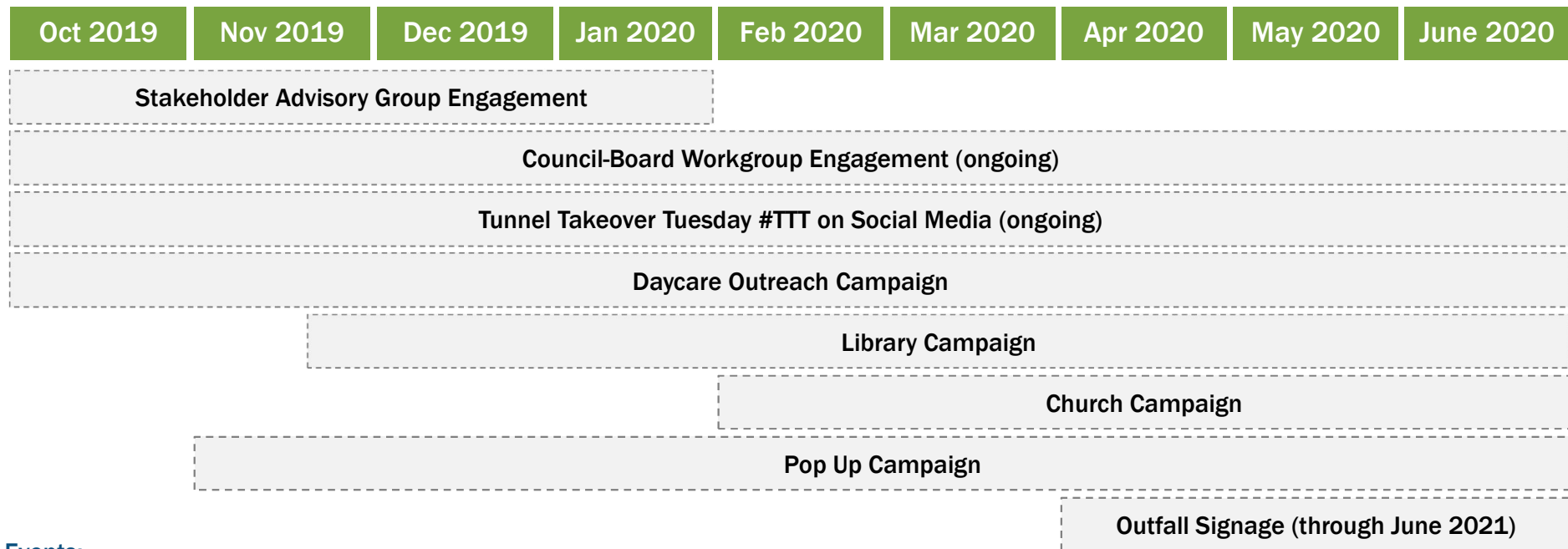
- (1) Estimate at 0 to 2 percent level of project definition.
- (2) Project not defined.
- (3) Estimate at 10 percent level of project definition.
- (4) Construction award.
- (5) Estimate at 30 percent level of project definition; used for budgeting.



Stakeholder Outreach Update

Karen Pallansch

Overview of RiverRenew Community Outreach Campaigns through June 2020



Events:

10/02 African American Heritage Park Pop-Up	10/12 Portside in Old Town Festival	11/25 Potomac Yard Park Pop-Up	12/7 Scottish Christmas Walk Parade
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Comments and Feedback from Workgroup?

RiverRenew Stakeholder Advisory Group Next Steps

Past Meeting Topics	Next Meeting	Continued Engagement
<ol style="list-style-type: none">1. Introduction to RiverRenew2. Rate Adjustments Discussion3. Community Listening Sessions Overview4. Environmental Assessment Preferred Alternative Review5. Tunnel System Procurement Process	<ol style="list-style-type: none">1. December 12, 20192. Topic: Info from today's meeting3. Final meeting for this SAG	<ol style="list-style-type: none">1. Monthly email recapping program progress to keep SAG members and their networks engaged

Comments and Feedback from Workgroup?

Artist in Residency Update

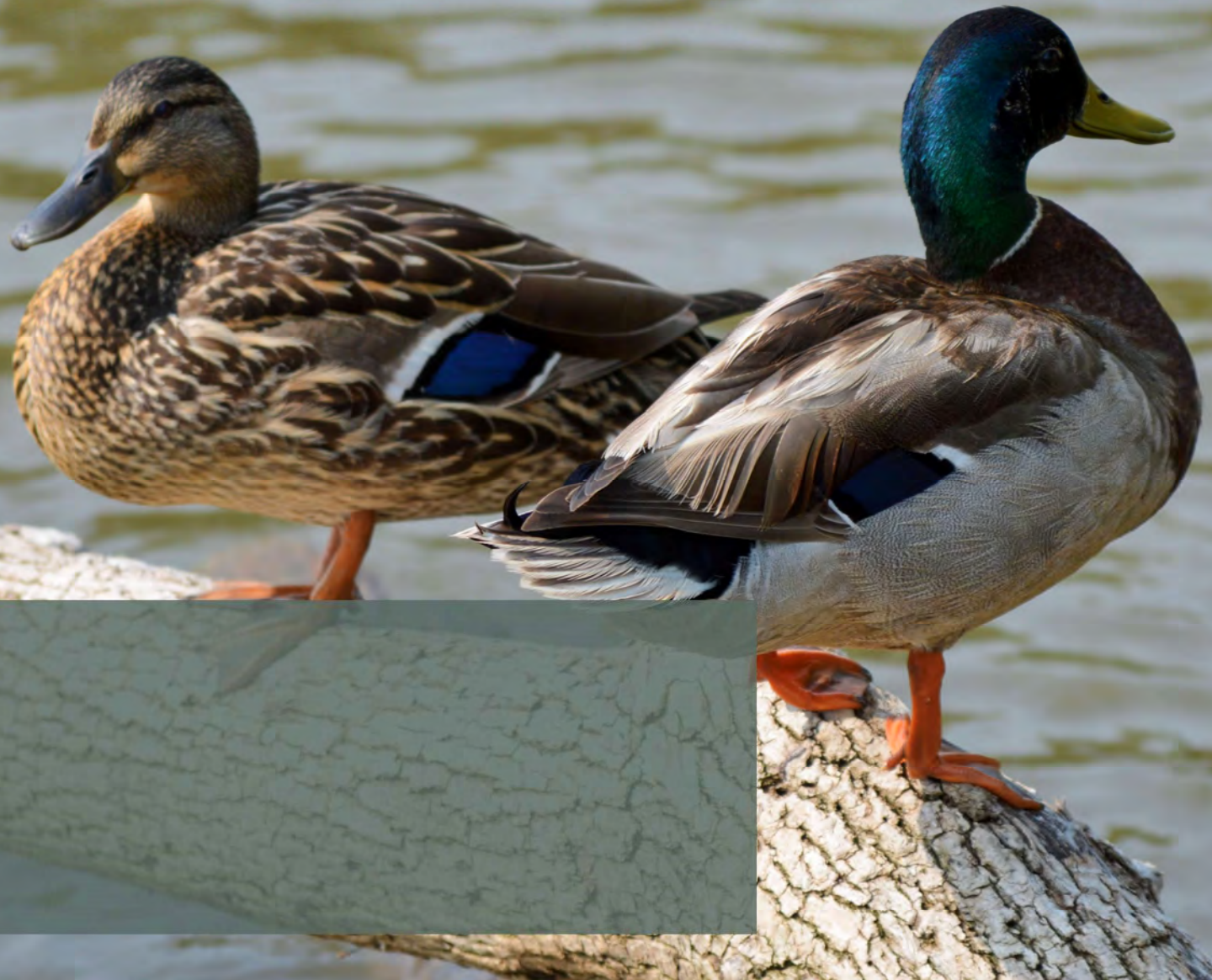
Connect Alexandrians with clean water through art

Phase 1 (May 2019-Fall 2020): Focus on AlexRenew/wastewater

Sto Len is a printmaker, painter, installation and performance artist and AlexRenew's Artist in Residence.

- stoishere.com and stoishere on Instagram
- Specialty in water-based art – makes prints off surfaces of waterways
- Grew up in Alexandria
- Selected by public art stakeholder group convened by City of Alexandria Office of the Arts out of 42 entries
- Currently in research and discovery phase





Next Steps

Karen Pallansch

Upcoming Workgroup Meetings

Scheduling

- Convene quarterly
- Potential next dates:
 - January – March 2020
 - April – June 2020
 - October – December 2020

Design-Build
Contract Notice to
Proceed

Potential Topics

- Ongoing WRRF Work
 - Construction Updates
 - Construction Tour of WRRF
- Tunnel System Project
 - Cost and Schedule
 - Permits and Easements
 - Stakeholder Outreach
 - Procurement

Comments and Feedback from
Workgroup?

Questions

