Taylor Run Infrastructure Stabilization Community Meeting 60% Design

July 20, 2026

This meeting is being recorded.

We want to hear from you!

- Use the Q&A box to submit during tonight's meeting
- Submit a comment using the Smartsheet Link:
- Public feedback and comments will be collected through Monday, July 27, 2026

Tonight's Agenda

- Project Review
- Proposed Approach
- Tree Preservation
- Erosion Control
- Landscape Plan
- Project Schedule
- Open Discussion and Q&A

Project Team

Transportation & Environmental Services
City of Alexandria

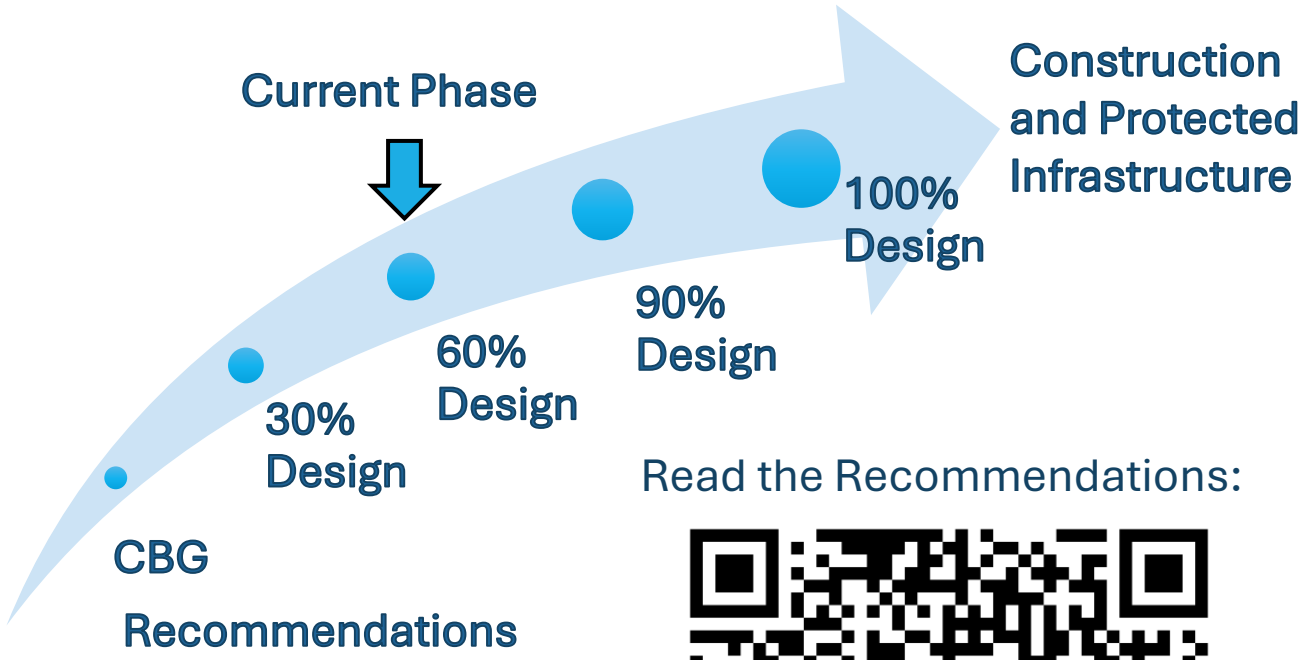
Camille Liebnitzky, PE, ENVSP
Alex Haptemariam, PE, CFM
Daniel E. Medina, PhD, PE
Jesse E. Maines, MPA

Lead Design Consultant

Brandon Alderman, CERP
Sean Bernheisel, PE

Project Review

- **Summer 2023, a set of recommendations from the Consensus Building Group (CBG) for Taylor Run was approved by City Council.**
  - City Council approved all recommendations that met full consensus.
  - Recommendations: **Appendix E Taylor Run Recommendations from CBG with City Council Note**



Read the Recommendations:

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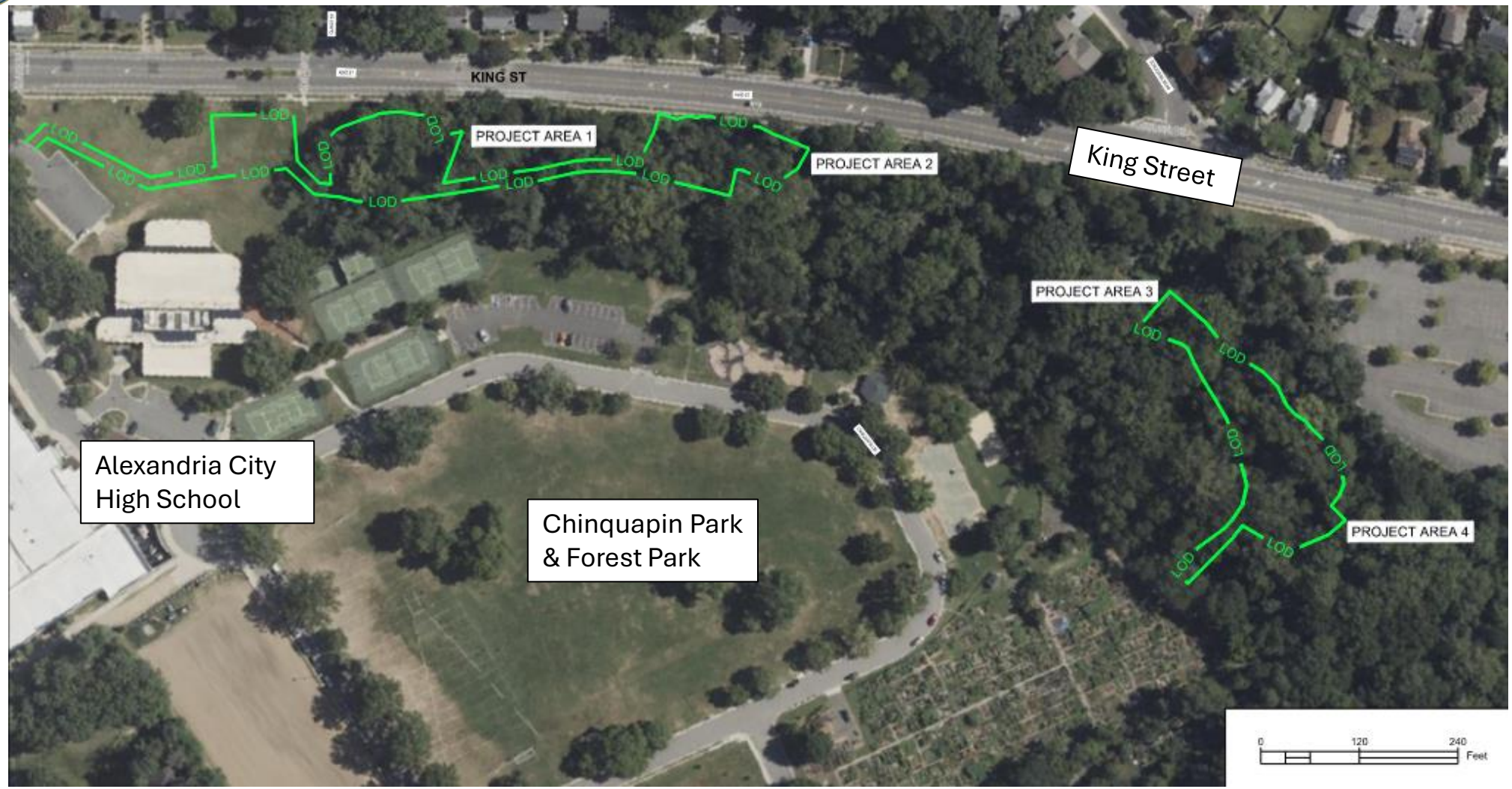
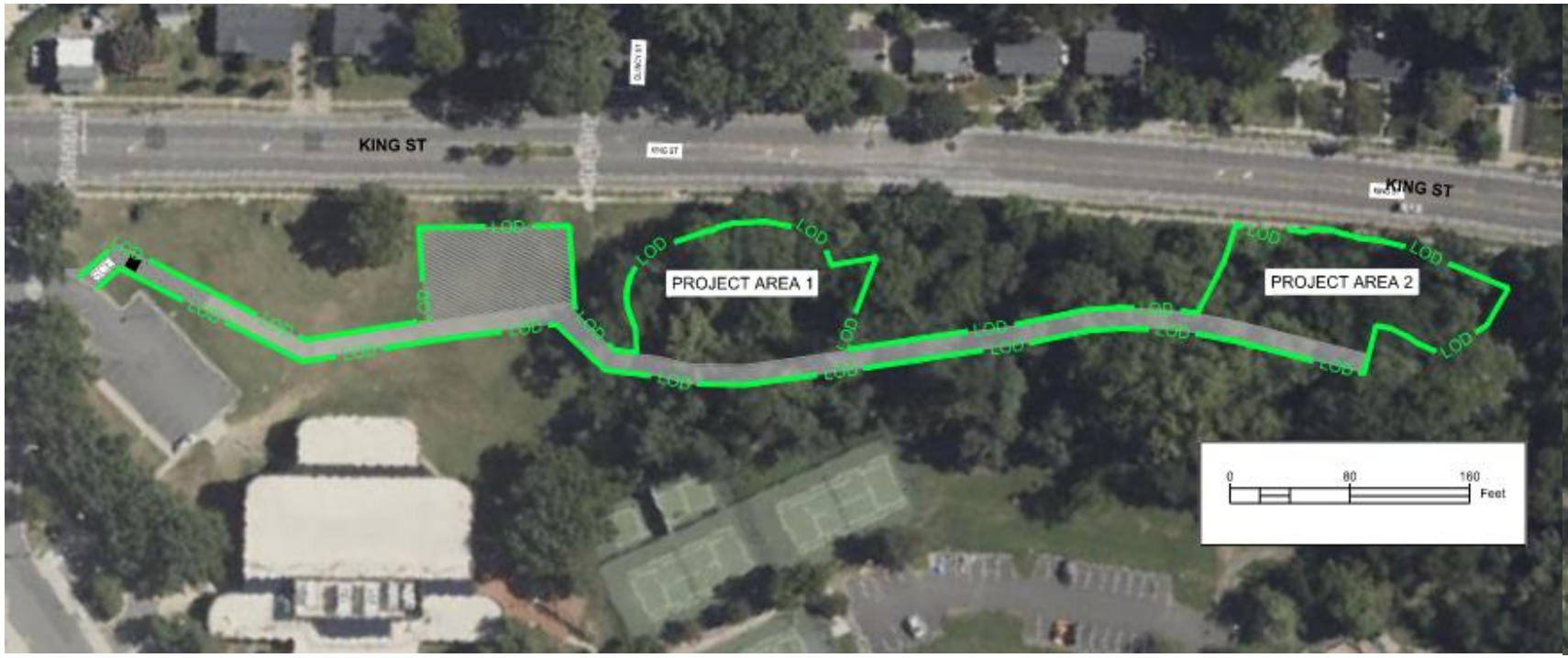
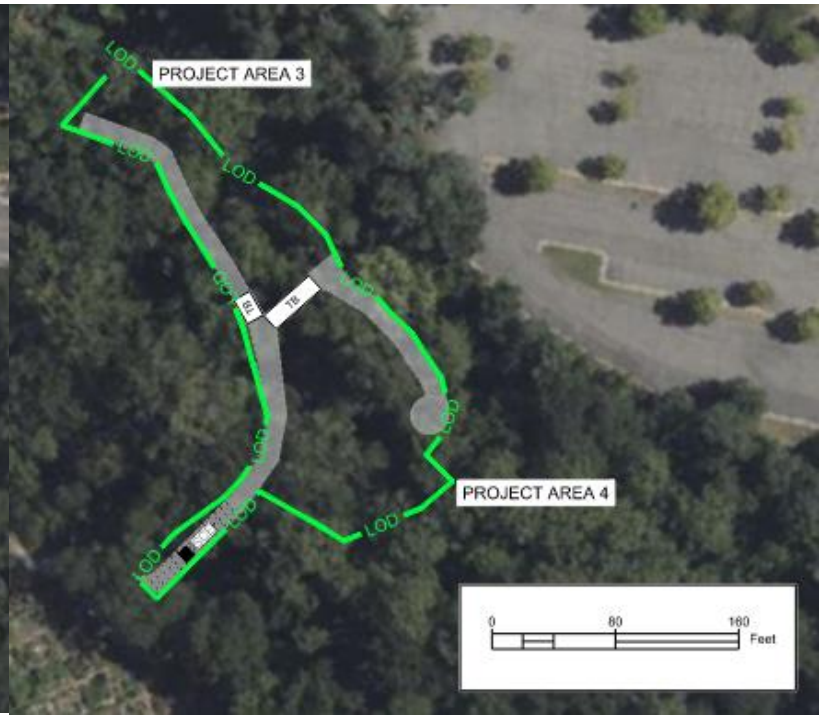
Project Location



Where will we be working?

- Four distinct areas, totaling 540 linear, non-continuous feet
- One construction project
- Total work area: 1.7 acres





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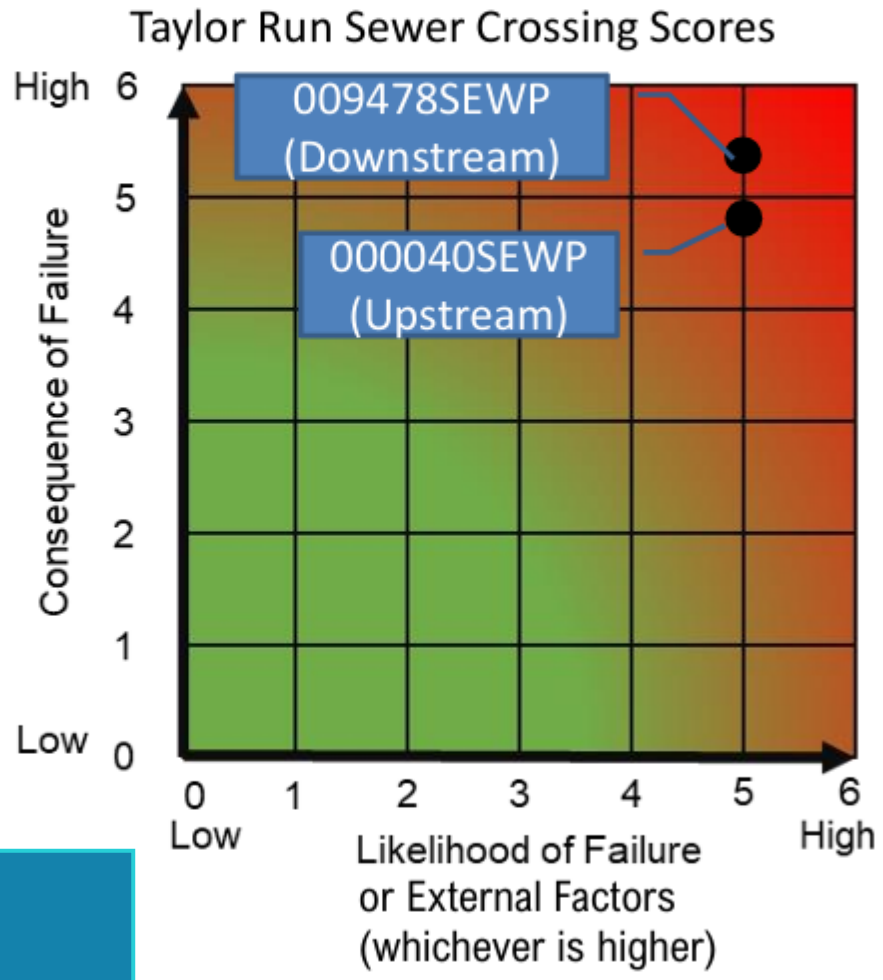
- Temporary impacts for construction access shown in gray

Investigation of Sewer Pipelines in Stream Areas 2020-2021

- Consequence of Failure (CoF) based on:
  - Size of the pipe
  - Location of the pipe relative to other infrastructure
  - Proximity to waterbodies or resource protection areas
  - Proximity to significant upstream service
  - Accessibility of the pipe
- Likelihood of Failure (LoF) based on:
  - Condition of the pipe internal and external
  - Material and date installed
  - Has the pipe been rehabilitated recently?
- External Factors based on:
  - Stream bank erosion
  - Pipe encasement
  - Internal CIPP lining



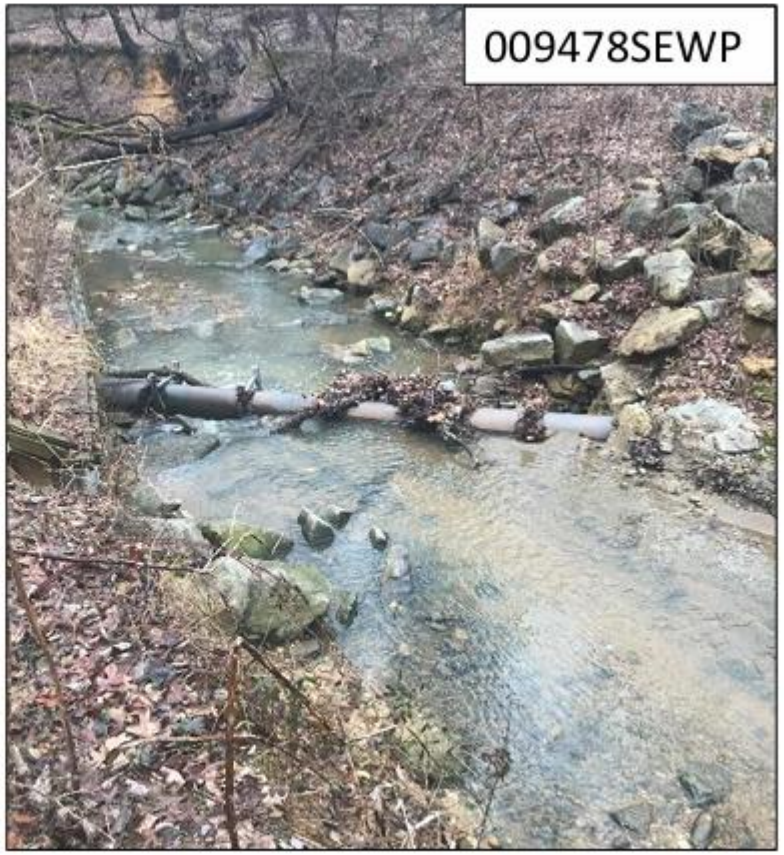
Previously Seen
By CBG
November 2022, Tylin

GREELEY AND HANSEN

Taylor Run Stream Crossings

Previously Seen
By CBG
November 2022, Tylin

Sewer ID	Pipe Material	Diameter (Inch)	External Risk Factor	Likelihood of Failure (LoF)	Consequence of Failure (CoF)	Overall Risk Score
000040SEWP (Upstream)	CIPP	10	**5**	2.1	**4.80**	**24.0**
009478SEWP (Downstream)	DIP	15	**5**	1	**5.32**	**26.6**



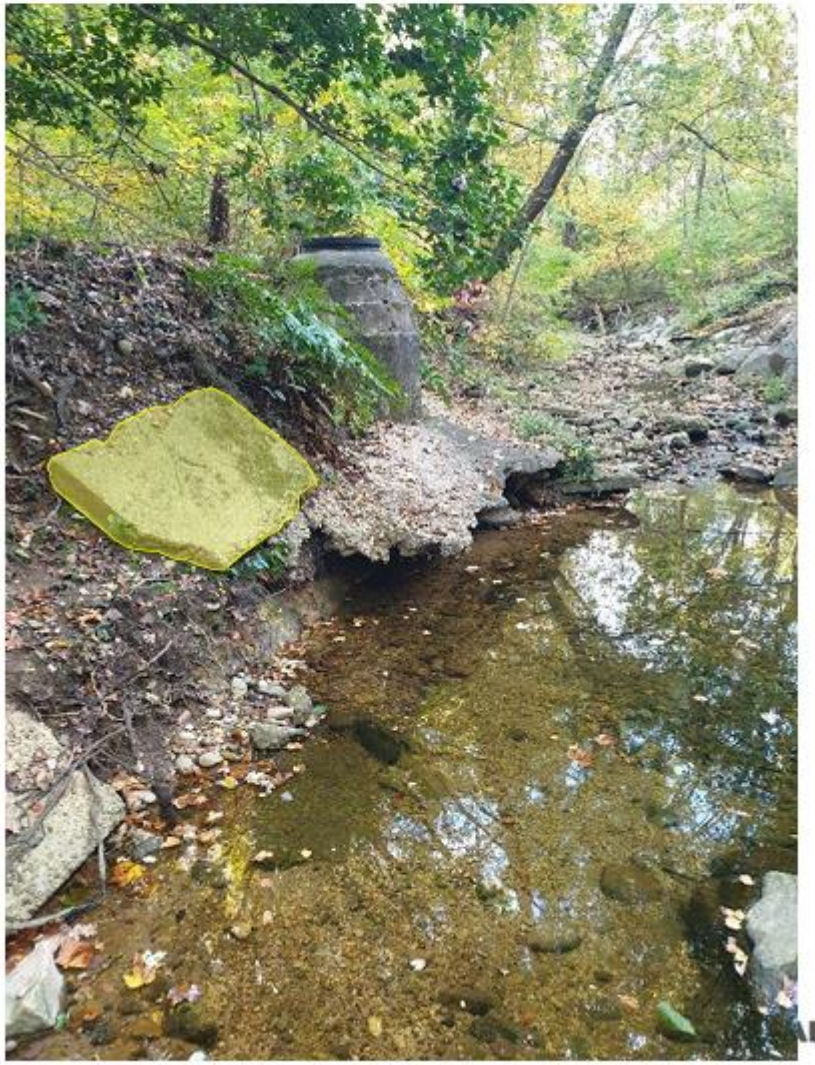
2014 Taylor Run Sanitary Sewer Crossing Failure

Concrete pipe broken and Cured-In-Place Pipe (CIPP) lining exposed

Previously Seen
By CBG
November 2022, Tylin

007529SSMH - Manhole

Previously Seen
By CBG
November 2022, Tylin



Project Goals

- Protect critical, at-risk infrastructure (e.g., sewer pipes, manholes, outfalls, and trails)
- Stabilize streambanks and reduce erosion near infrastructure assets
- Preserve and protect mature trees and wetlands
- Minimize limits of disturbance, vegetation removal, and construction impacts

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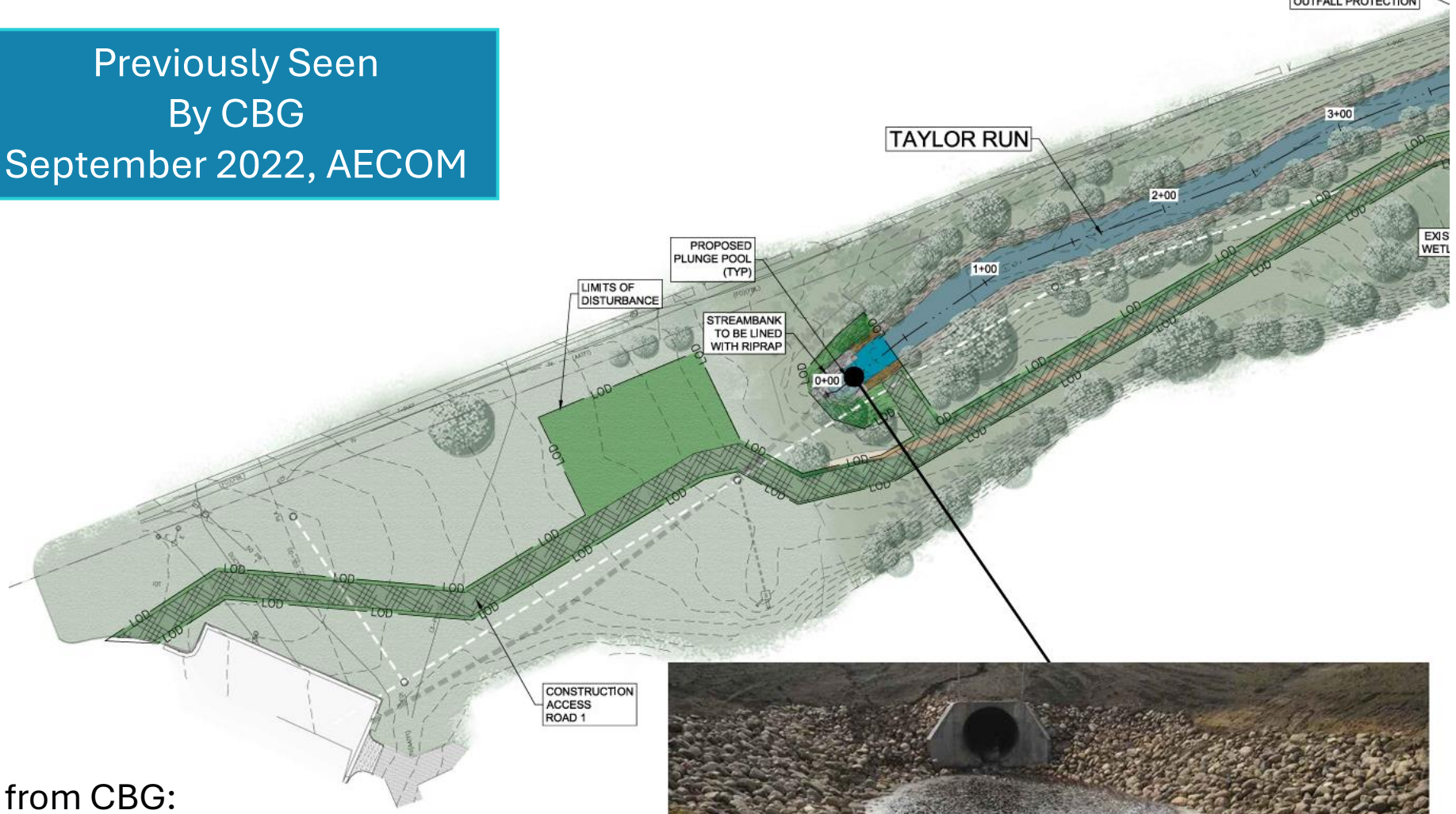
What have we done so far?

- ✓ Existing condition assessment
- ✓ Topographic and Tree Survey
- ✓ Geotechnical Investigation
- ✓ Hydrologic and Hydraulic Modeling
- ✓ Sewer inspections using CCTV
- ✓ Wetland Delineation
- ✓ Pre-JPA Meeting completed with USACE
- ✓ JPA Application Drafted
- ✓ 60% Design Submission (Available Online)

Previously Seen
By CBG
September 2022, AECOM



Recommendation from CBG:

Upper Culvert protection:

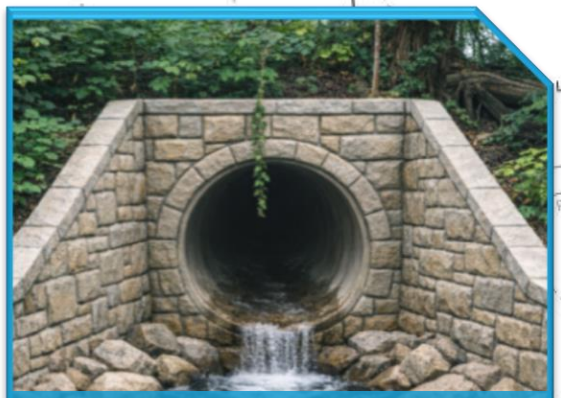
A stone covering of the culvert walls facing the stream should be put in place and concrete rubble removed as appropriate.

RIPRAP PLUNGE POOL

Proposed Approach – Project Area 1

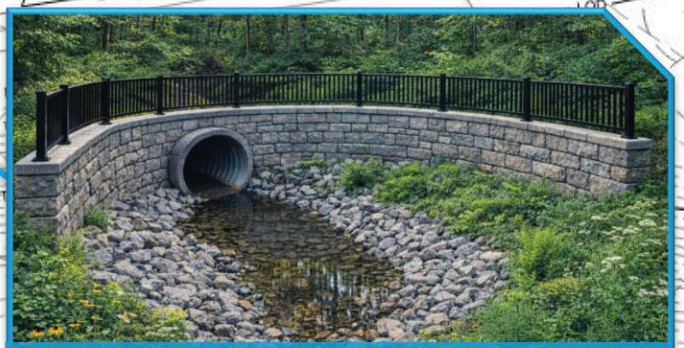
Boulder Weir and Pool

Gravity Wall with Safety Railing



Rock Façade Finish

Existing Condition



NRCS Plunge Pool

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Upstream Crossing Before & After

Before

After

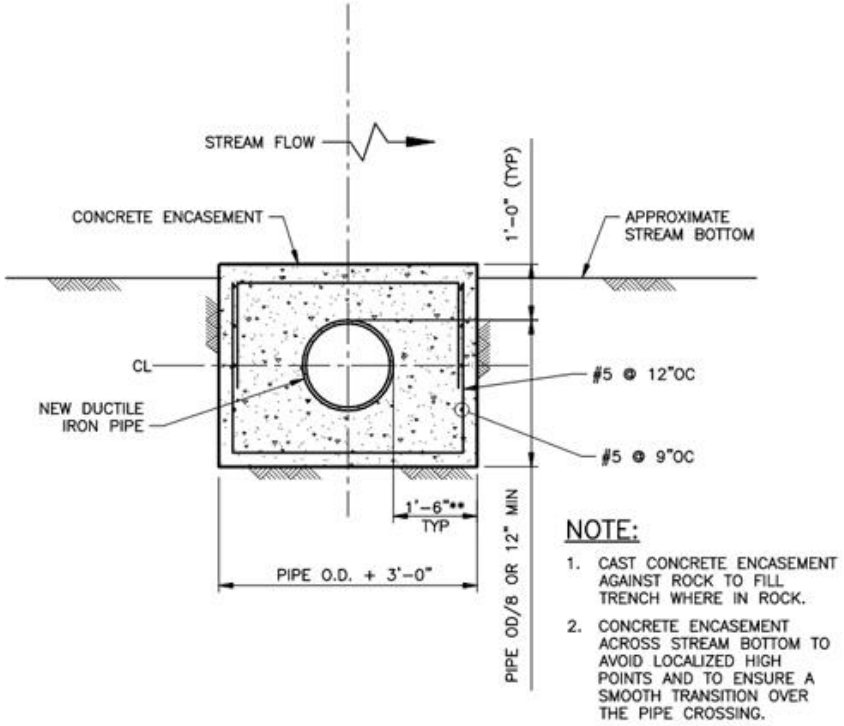
Previously Seen
By CBG
February 2023, Tylin

Photo Credit: Greeley and Hansen

Sewer Crossing Protection

Previously Seen
By CBG
February 2023, Tylin

Sanitary sewer in concrete encasement protected by boulders



Concrete Encasement

Photo credits: Fairfax County South Van Dorn Street Project

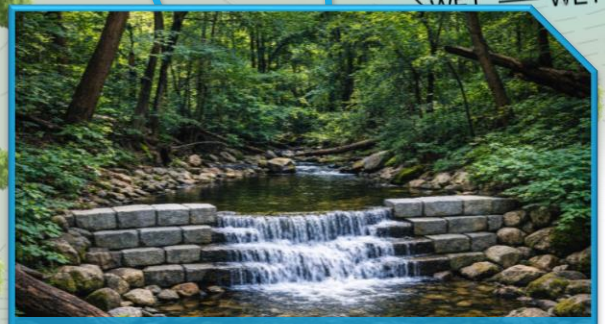
Proposed Approach: Project Area 2

Existing condition of at-risk sanitary sewer line

Gravity Wall with Safety Railing

Rock Façade Finish

Concrete Encasement



Boulder Weir and Pool

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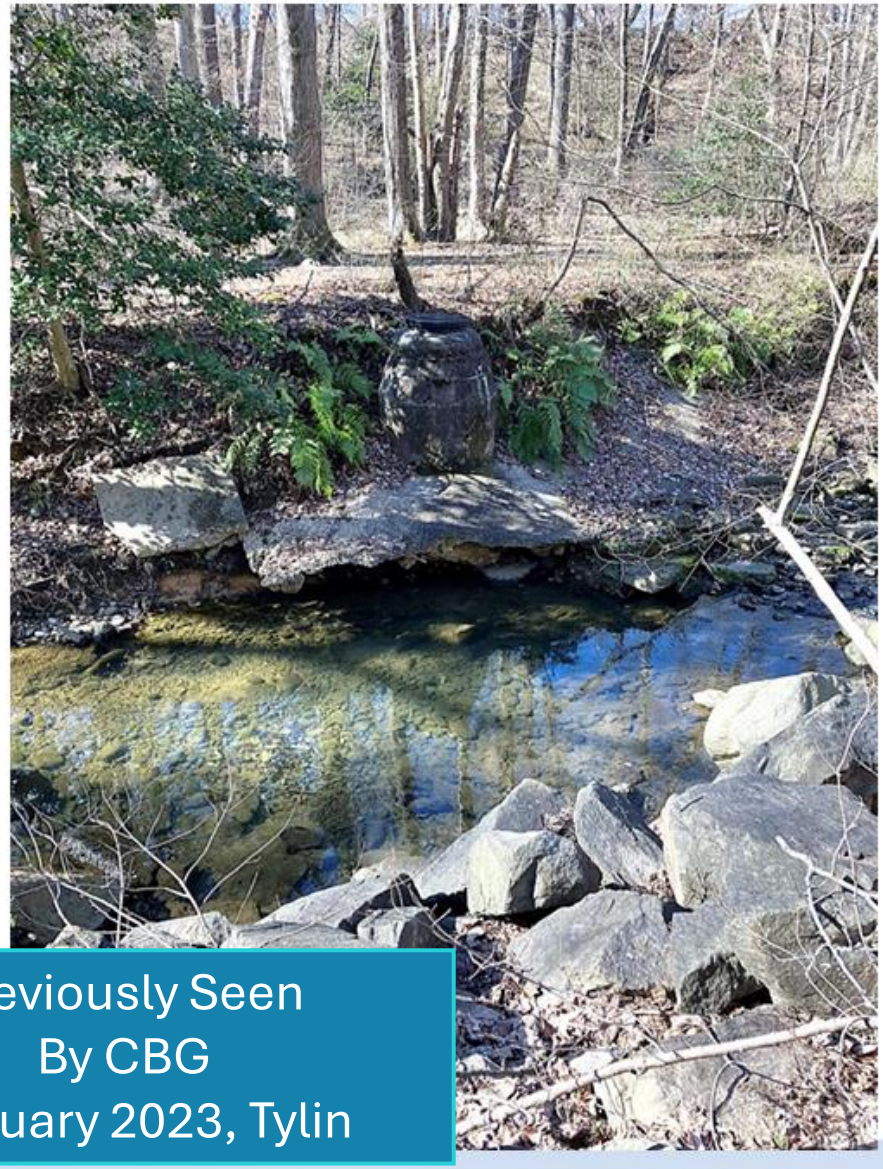
Manhole Before & After



Previously Seen
By CBG
February 2023, Tylin

Photo Credit: Greeley and Hansen

Proposed Approach: Project Area 3

Gravity Wall with Safety Railing

Existing Condition

Grading and Seeding

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Previously Seen
By CBG
February 2023, Tylin

Downstream Crossing Before & After

Before

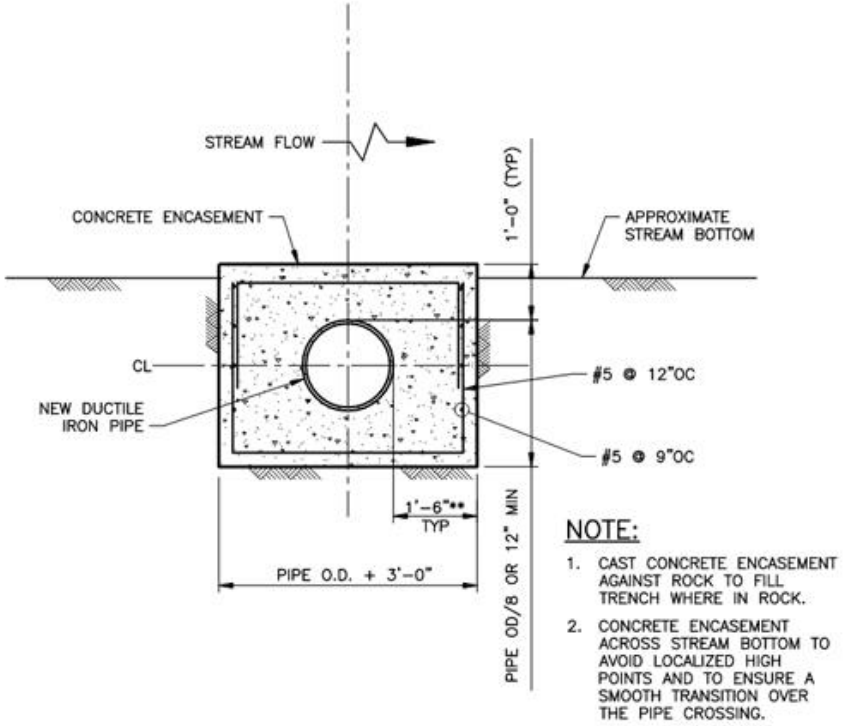
After

Photo Credit: Greeley and Hansen

Sewer Crossing Protection

Previously Seen
By CBG
February 2023, Tylin

Sanitary sewer in concrete encasement protected by boulders



Concrete Encasement

Photo credits: Fairfax County South Van Dorn Street Project

Proposed Approach: Project Area 4

Rock Packing

Concrete Encasement

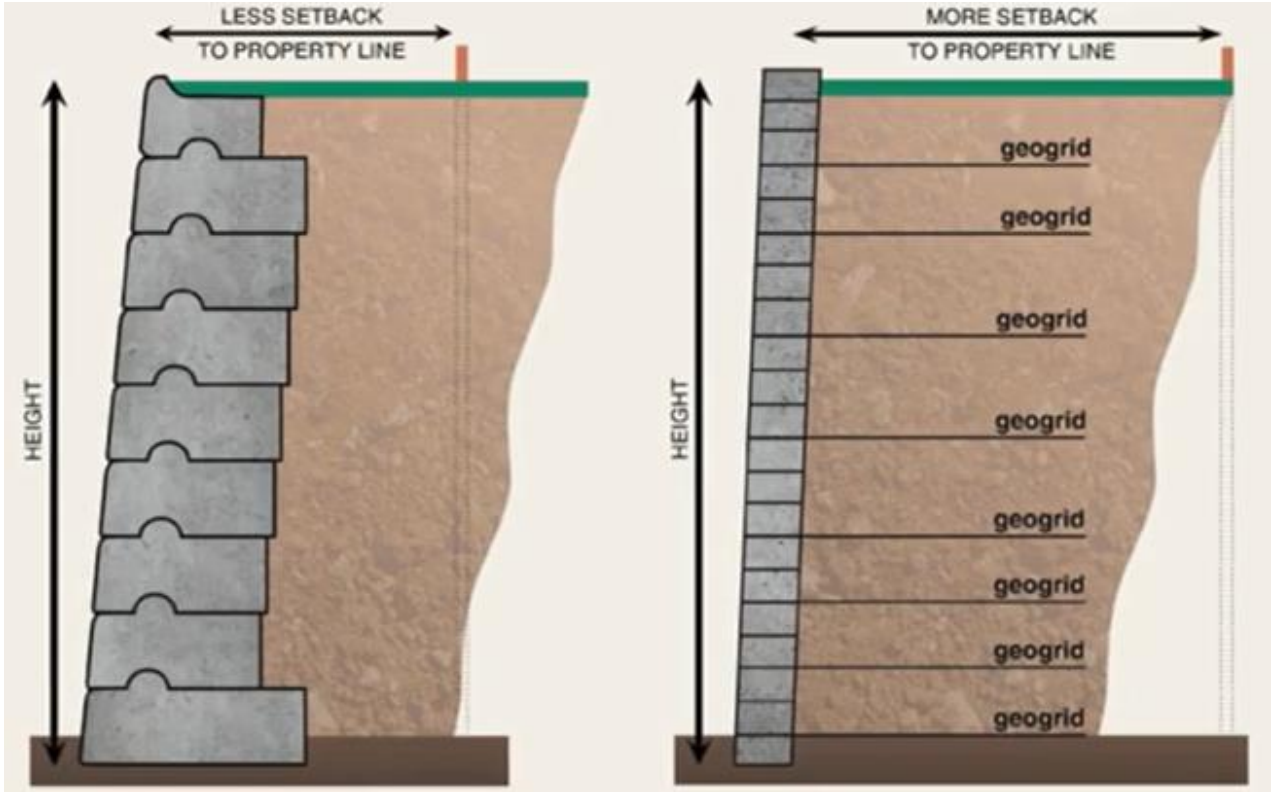
Gravity Wall with Safety Railing

Boulder Weir and Pool

Existing Condition

Innovative Design Approach

- Gravity wall vs. standard retaining wall

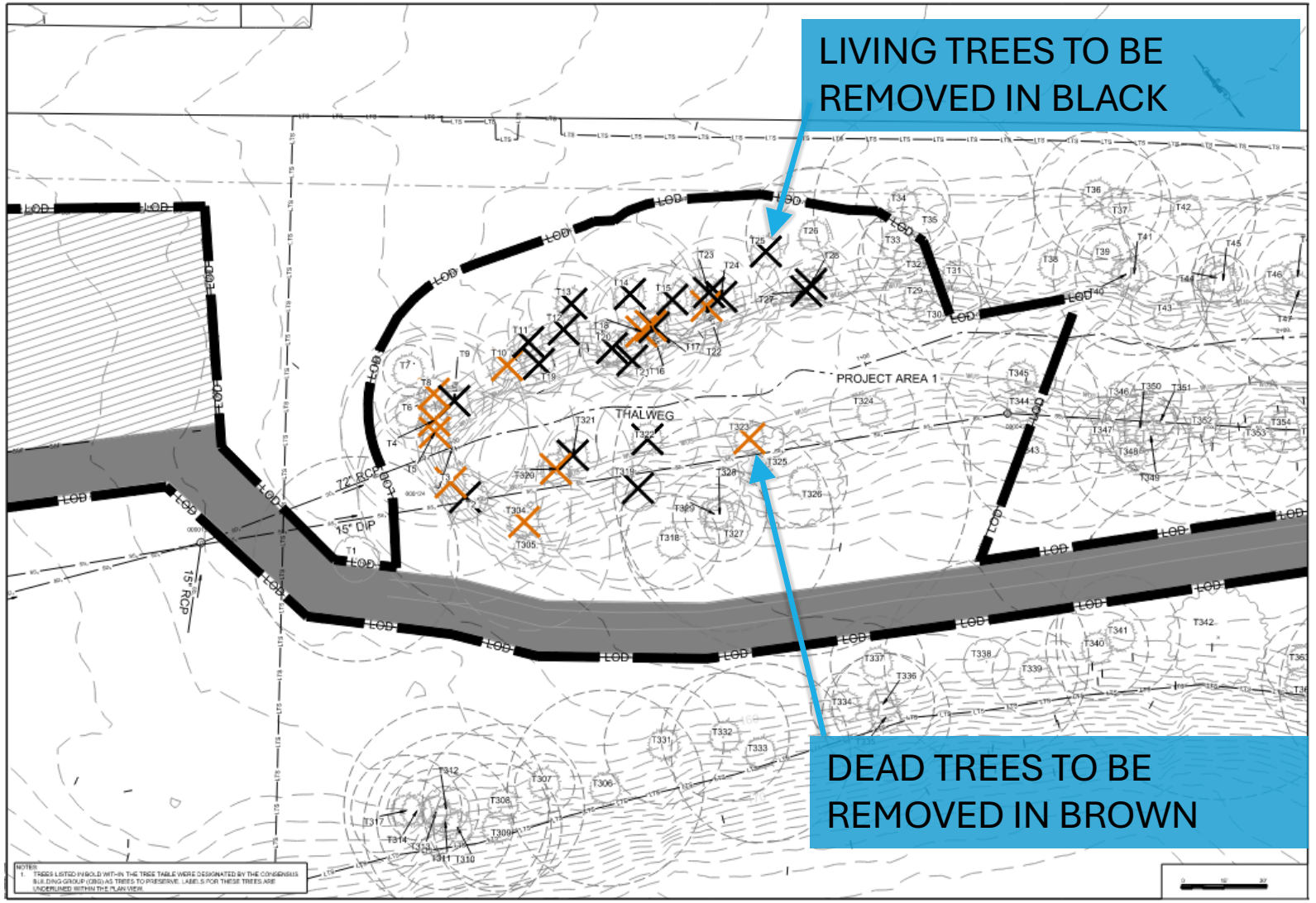


Gravity Wall

Standard Reinforced Retaining Wall

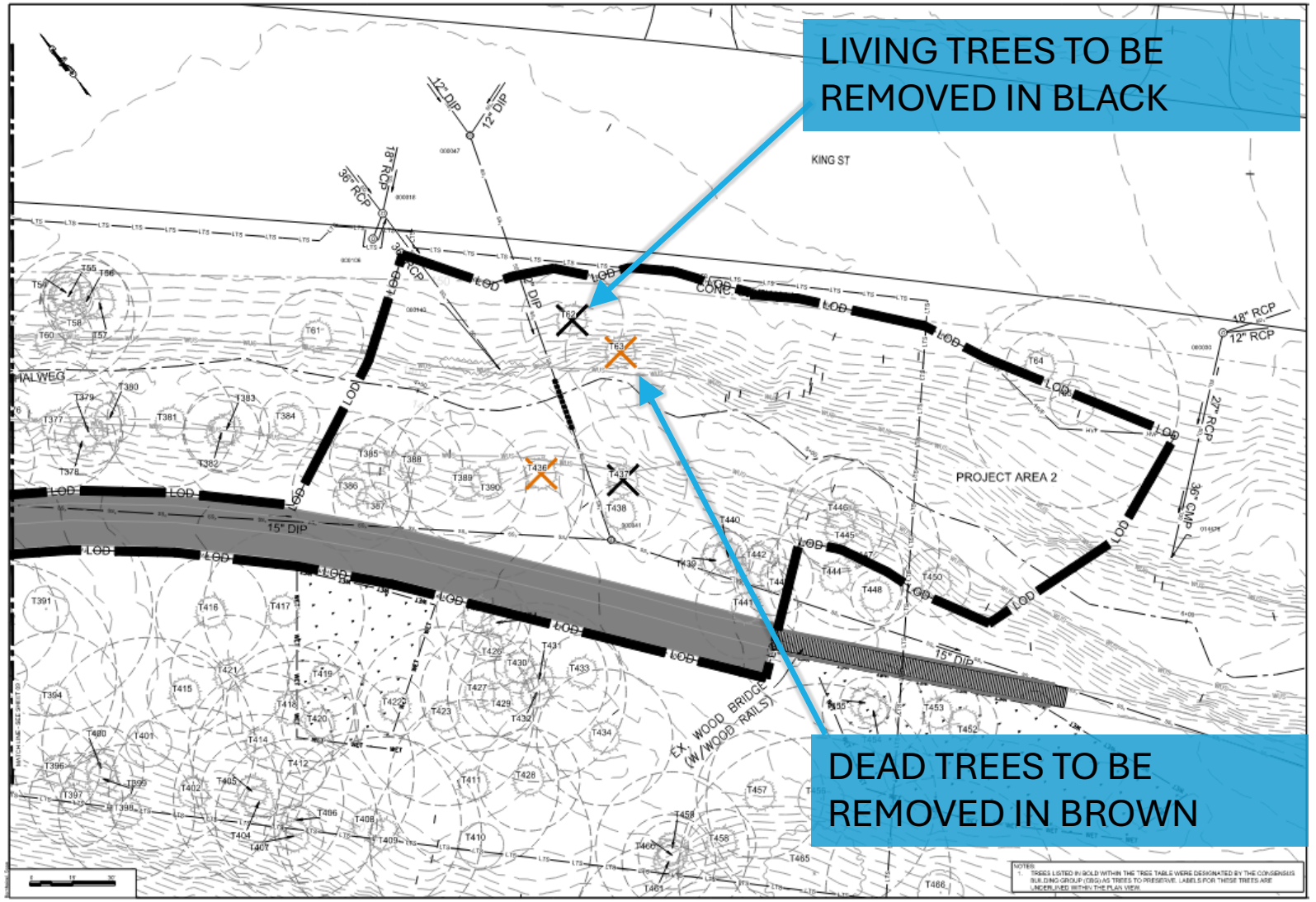
Tree Preservation: Project Area 1

Living trees proposed for removal	18
Dead trees proposed for removal	11
Total trees proposed for removal	29



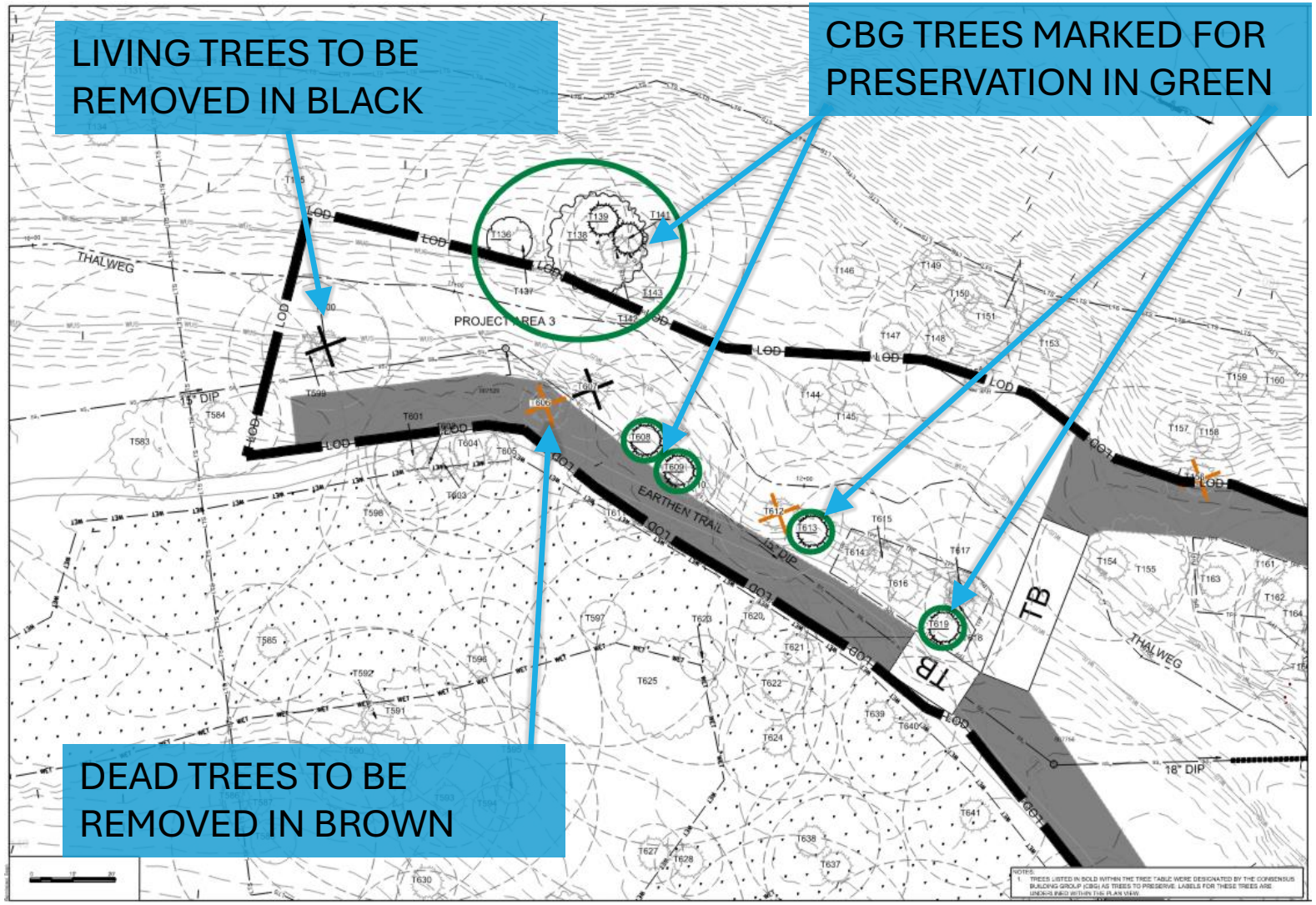
Tree Preservation: Project Area 2

Living trees proposed for removal	2
Dead trees proposed for removal	2
Total trees proposed for removal	4



Tree Preservation: Project Area 3

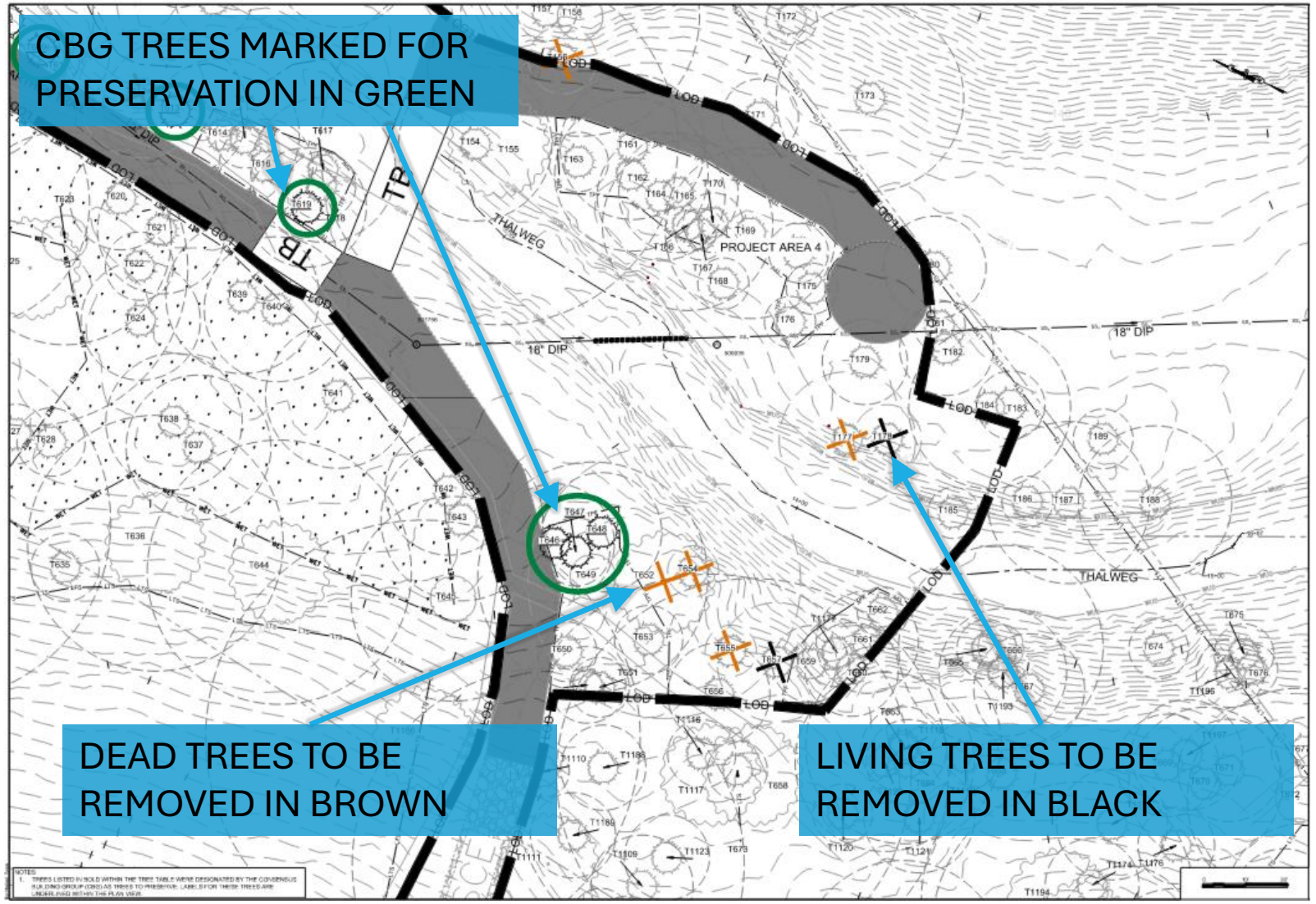
Living trees proposed for removal	2
Dead trees proposed for removal	2
Total trees proposed for removal	4



- The Consensus Building Group (CBG) in 2023 recommended the trees in bold for continued preservation

Tree Preservation: Project Area 4

Living trees proposed for removal	2
Dead trees proposed for removal	5
Total trees proposed for removal	7



- The Consensus Building Group (CBG) in 2023 recommended the trees in bold for continued preservation

Minimal Disturbance and Replanting

- **Minimal disturbance**
  - Following “minimal intervention” set by CBG and approved by Council
- **Critical Root Zone Protection**
  - Mulch and deck matting proposed to protect tree roots
- **Native Plantings**
  - Replanting anticipates approximately 70 new canopy trees, 350 new understory trees/shrubs

Deck Mat/Construction Access Road

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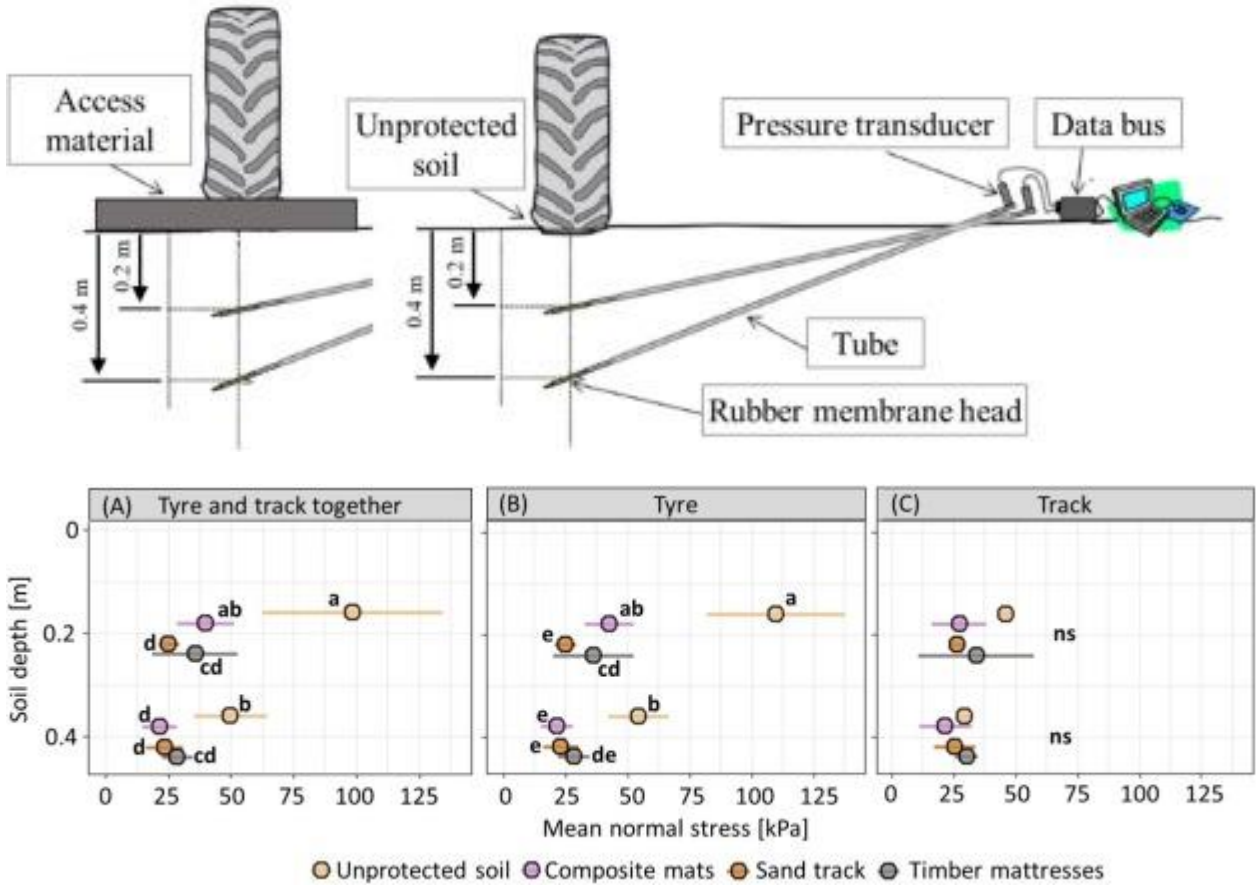
Tree Root Protection During Construction

- **Timber mats**
  - Reduce soil stress up to 77% at 0.65 feet
  - Reduce soil stress up to 60% at 1.30 feet



Loraine ten Damme, Matthias Stettler, Renato P. de Lima, Thomas Keller,
The benefit of using access materials for soil stress reduction depends on the material's properties and vehicle mean ground pressure,
Journal of Terramechanics,
Volume 121,
2026,
101097,
ISSN 0022-4898,
https://doi.org/10.1016/j.jterra.2025.101097.

Construction Equipment

Excavator

- Approximately 30,000 lbs

Haul Truck

- Approximately 25,000 lbs

Erosion Control: Project Area 1

High Visibility/Tree Protection Fence

Pump Around Practice

Construction Access/Timber Matting

Tree Planking

Filter Bag

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Erosion Control: Project Area 2

Pump Around Practice

High Visibility/Tree Protection Fence

Construction Access/Timber Matting

Super Silt Fence

Tree Planking

Filter Bag

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Erosion Control: Project Area 3

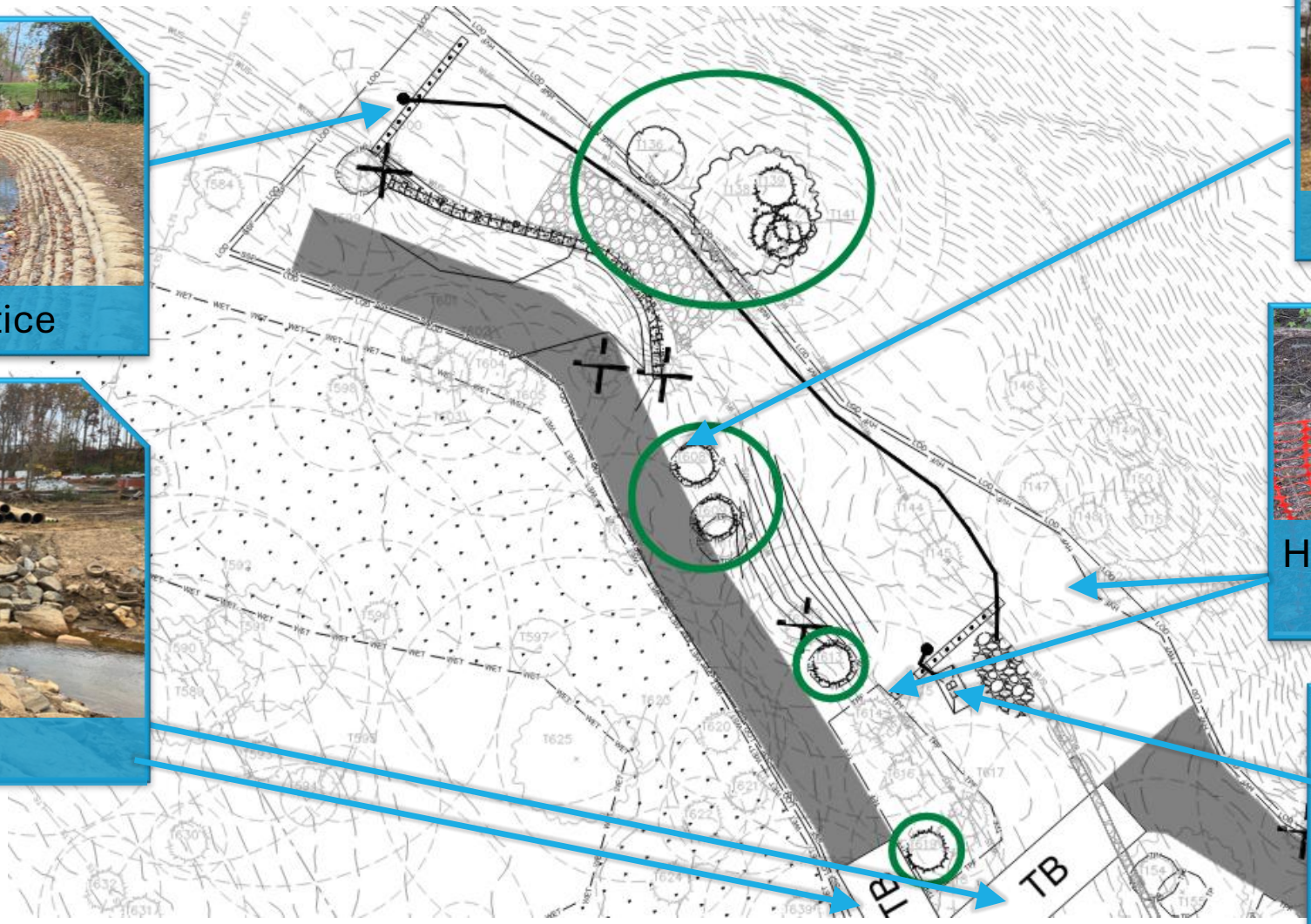
Pump Around Practice

Temporary Bridge

Tree Planking

High Visibility/Tree Protection Fence

Filter Bag



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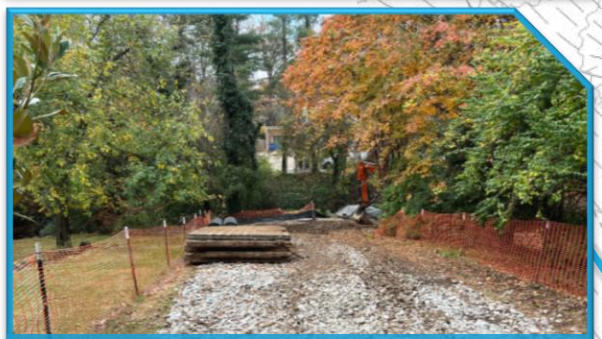
Erosion Control: Project Area 4

Pump Around Practice



Stabilized Construction Entrance

Silt Fence

High Visibility/Tree Protection Fence

Tree Planking

Construction Access/Timber Matting

Filter Bag

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FAQ: Can the project not use the stream for site access? Why does it need to use the trail?

- The project requires reliable access for construction equipment, materials, and personnel. The existing trail provides the most practical access while minimizing the need to create new disturbance elsewhere in the park. Using the stream channel as the primary access route is not feasible because large rocks, fallen trees, and other natural debris would make it difficult and unsafe for construction equipment to travel through the stream. Traveling within the stream could also increase impacts to the stream bed, banks, and aquatic habitat. The existing trail will be restored following construction.

Downstream Sewer Crossing & Exposed MH Construction Access

Fill Needed for Similar Construction Access as 2015 Taylor Run Crossing Interim Solution Project

2015

Photo Credit: Rod Simmons

Previously Seen
By CBG
February 2023, Tylin

Current

Photo Credit: Greeley and Hansen

Chinquapin Park Acidic Seepage Swamp Protection

- 69 recorded species
- Mainly located south of Alexandria Heritage Trail
- Wetland areas excluded from LOD
- Use combination of chain link fence and silt fence to protect wetlands from being disturbed

Photo Credits: Rod Simmons

Photo Credit: Greeley and Hansen

Utilize Similar Protection as 2015 Taylor Run Crossing Interim Solution Project

Previously Seen
By CBG
February 2023, Tylin

Wetland Delineation: 04/06/2026

- Wetland boundaries consistent with previously completed wetland delineation (August 2019)

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Landscape Site Visit: 02/12/2026

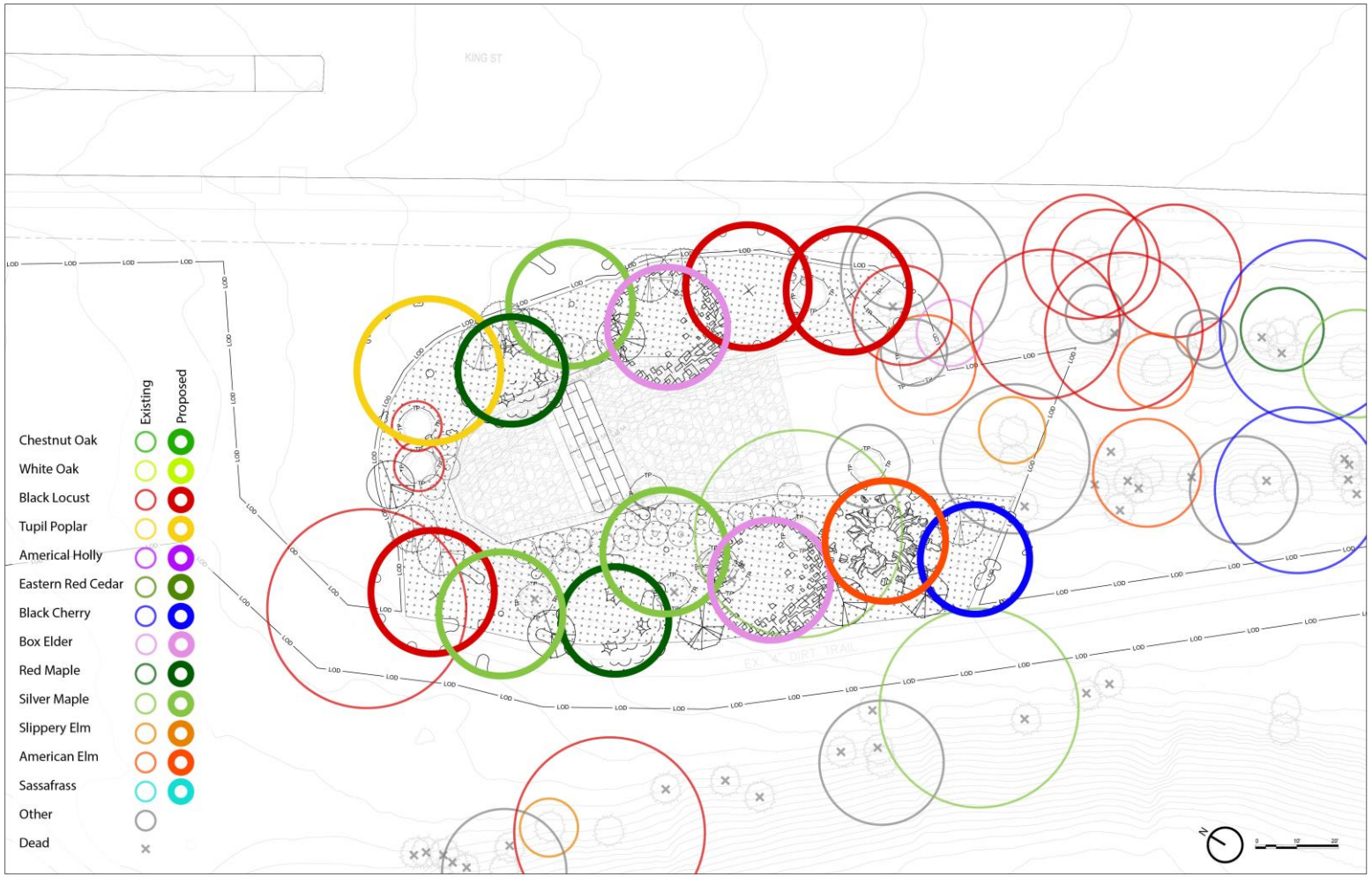




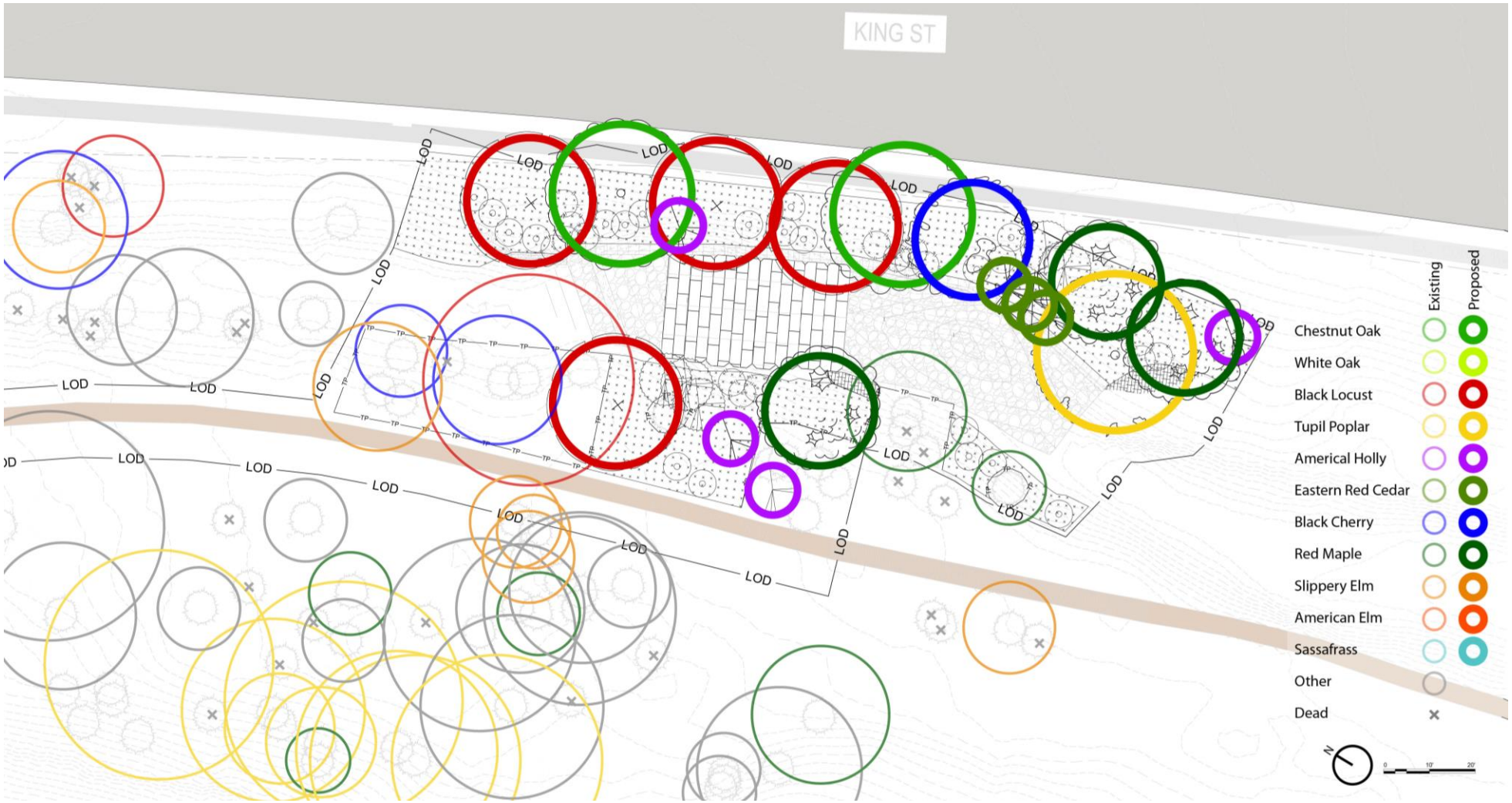




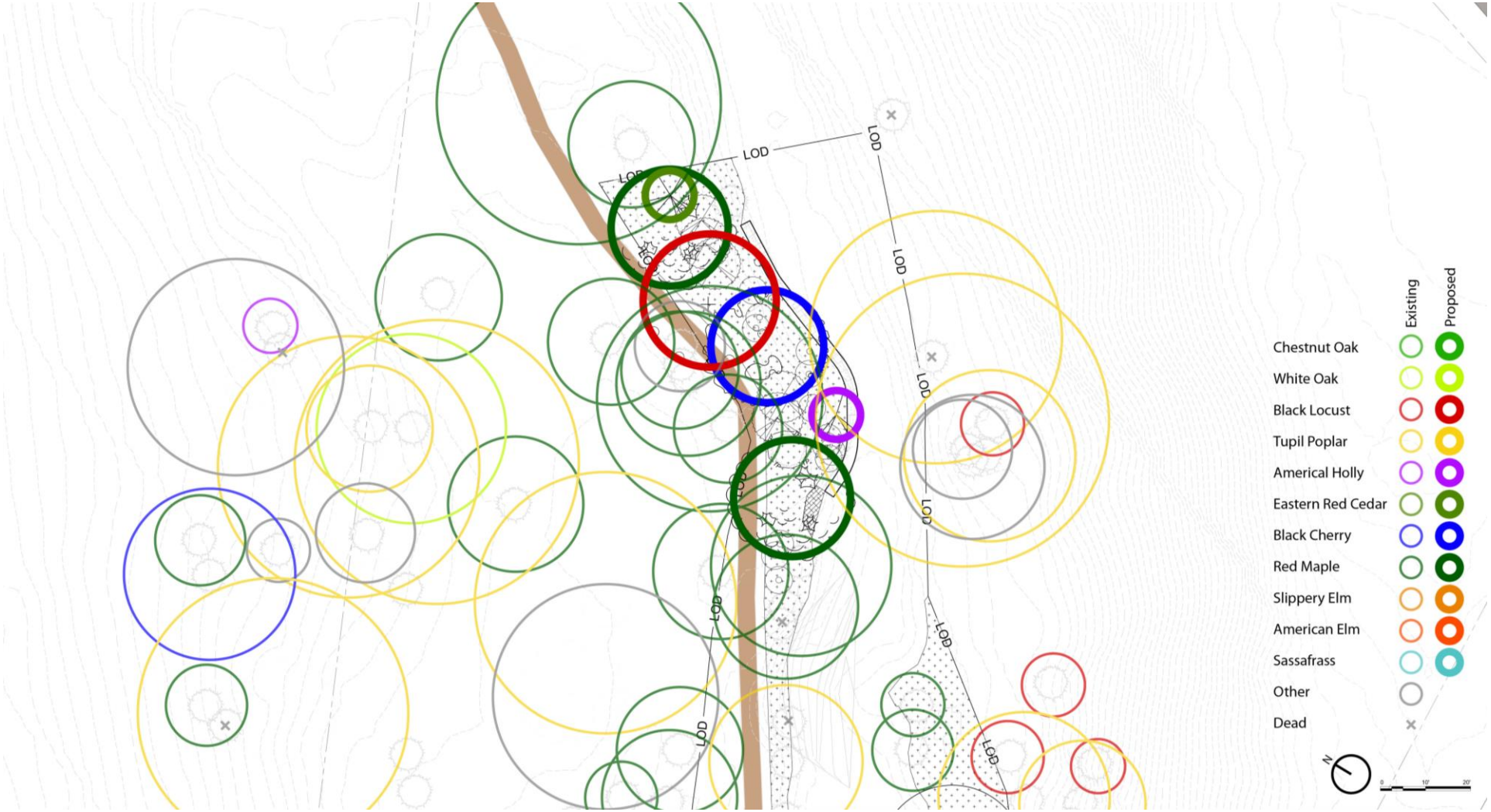
Landscape Plan: Project Area 1



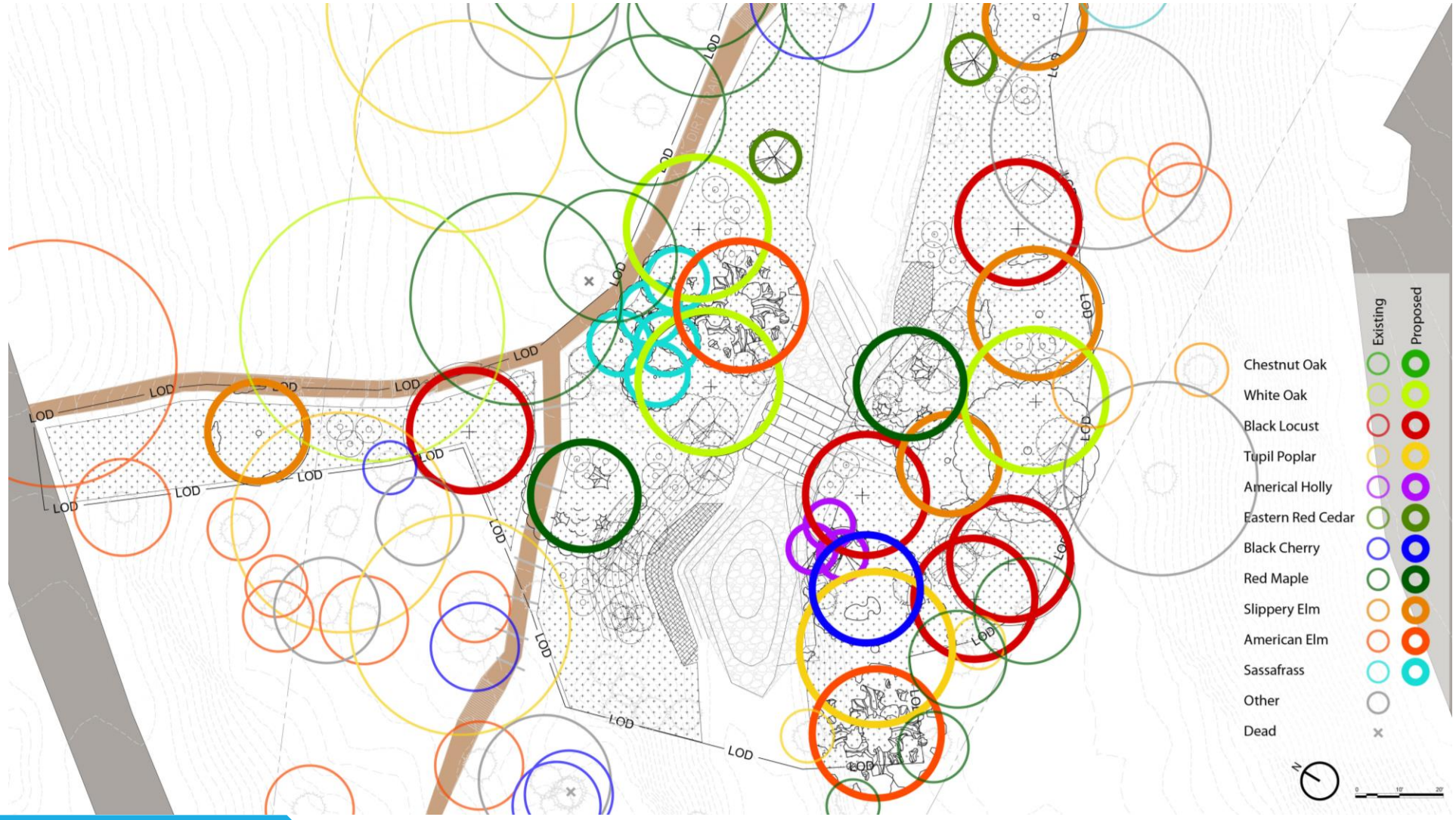
Landscape Plan: Project Area 2



Landscape Plan: Project Area 3



Landscape Plan: Project Area 4



Landscape Details: Tree Palette

Black Locust
Robinia pseudoacacia

Chestnut Oak
Quercus Montana

White Oak
Quercus alba

Tulip Poplar
Liriodendron Tulipifera

American Elm
Ulmus americana

Slippery Elm
Robinia pseudoacacia

Black Cherry
Prunus serotina

Red Maple
Acer rubrum

Sassafras
Sassafras albidum

American Holly
Ilex opaca

Eastern Red Cedar
Juniperus virginiana

Landscape Details: Understory Palette

Spicebush
Lindera benzoin

Witchhazel
Hamamelis virginiana

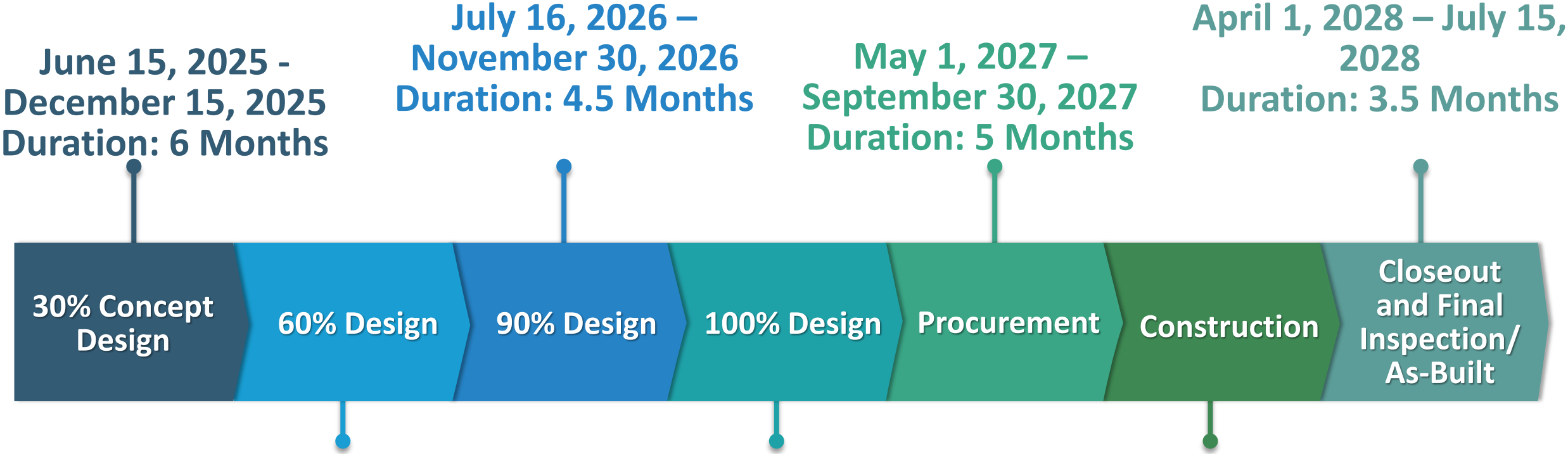
Mountain Laurel
Kalmia latifolia

Marginal Wood Fern
Dryopteris marginalis

FAQ: Can the project work outside of nesting season?

- There is no single nesting season that applies to all bird species. To minimize potential impacts, the City has shifted the anticipated construction start to Fall 2027, which is outside the nesting period for most bird species. The project will also comply with all applicable environmental requirements prior to construction.

Project Schedule



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We want to hear from you!

- Submit a comment using the Smartsheet Link:

- Community feedback and comments will be collected through Monday, July 27, 2026

Thank you for attending!

- Contact Information:

  Camille Liebnitzky, PE, ENV SP (City Sponsor Project Manager):
  camille.liebnitzky@alexandriava.gov

  Alex Haptemariam, PE, CFM (City Managing Project Manager):
  alex.haptemariam@alexandriava.gov

- Project Website:

  https://www.alexandriava.gov/capital-projects/project/taylor-run-infrastructure-stabilization-project

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Resources

- *September 2022, Taylor Run Alternative Design, Minimal Impact – Brandon Alderman, CERP, AECOM*
- November 2022, Taylor Run Sanitary Sewer Crossings, Presentation (Part 1) *-Erin Bevis-Carver, PE, Division Chief, T&ES/Sanitary Infrastructure Division, City of Alexandria and Dustin Dvorak, PE, Greeley-Hansen (Tylin)*
- February 2023, Taylor Run Sanitary Sewer Crossings, Presentation (Part 2) *- Erin Bevis-Carver, PE, Division Chief, T&ES/Sanitary Infrastructure Division, City of Alexandria and Dustin Dvorak, PE, Greeley-Hansen (Tylin)*
- February 2023, Taylor Run BMPs in the Watershed, Presentation *– Brian Rahal, PE, T&ES/Stormwater Management and Ehsanullah Hayat, T&ES/Stormwater Management*
- February 2023, Taylor Run Watershed Analysis: The Effects of Implementing Stormwater Facility Best Management Practices (BMPs) in the Watershed on the Stream Channel *– Brian Rahal, PE, T&ES/Stormwater Management, Ehsanullah Hayat, T&ES/Stormwater Management, Camille Liebnitzky, PE, T&ES/Stormwater Management, and Jesse Maines, Division Chief, T&ES/Stormwater Management*
- *March 2023, Appendix E: Taylor Run Worksheet – Institute of Engagement & Negotiation and the Taylor Run Consensus Building Group*