

# Home Road Water Plant and Transmission Mains

Public Meeting | June 18, 2024



Water Plant  
Transmission Mains



Home Road  
Water Plant

THE CITY OF  
**COLUMBUS**  
ANDREW J. GINTHER, MAYOR  
DEPARTMENT OF  
PUBLIC UTILITIES

# Meeting Overview and Format

- Welcome and introductions
- The need for a new water plant and transmission mains
- Home Road Water Plant overview
- Transmission Mains overview and corridors
- Facilitated question and answer session
- Adjourn to information stations

# Discussion Ground Rules

- When we open it to questions, please raise your hand so we can address each question or comment in order
- Be succinct so we get to everyone
- Save questions specific to your property or areas in front of your property for one-on-one conversations with the project team
- It's okay to disagree; please be respectful, polite and kind

# The Need for a New Water Plant and Transmission Mains



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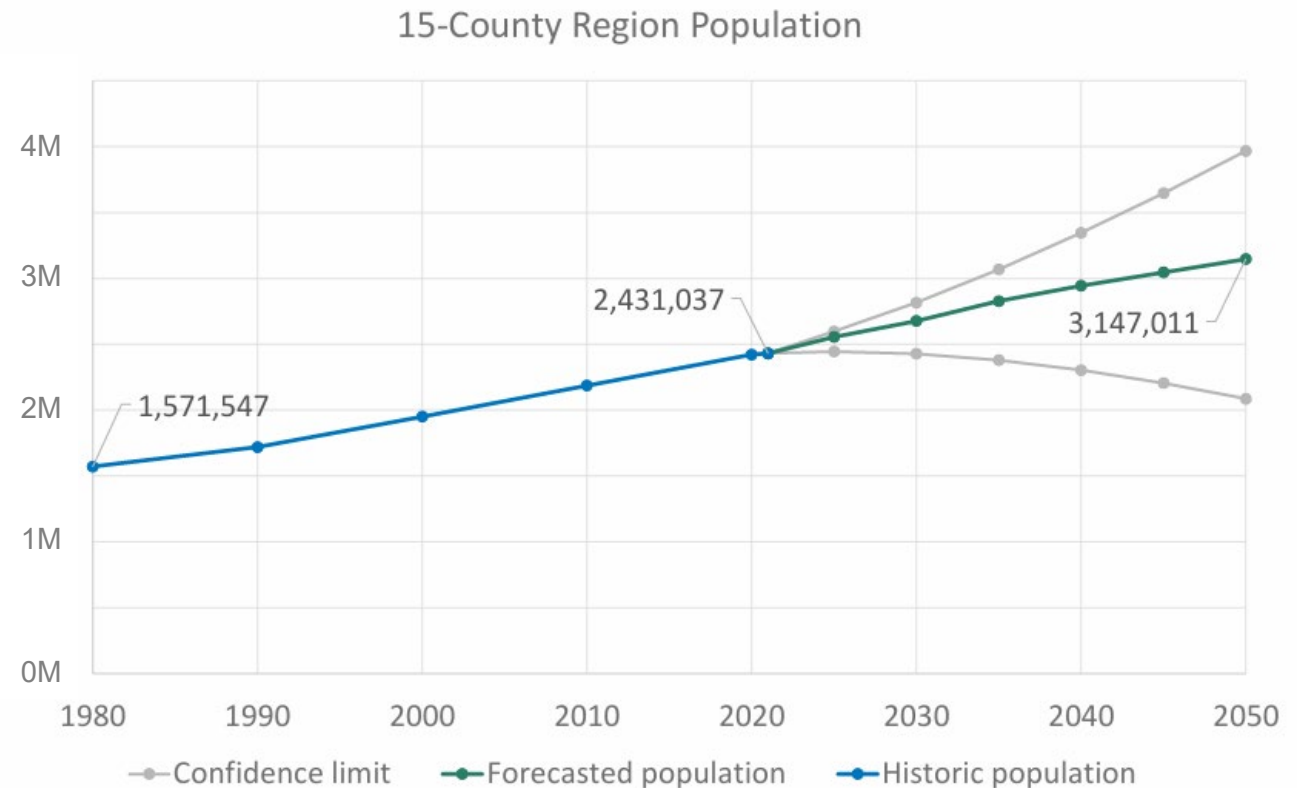
## Regional Growth Support

Cities with a population gain of 100,000+ between 2010 to 2020



# Regional Growth Forecast Data Points

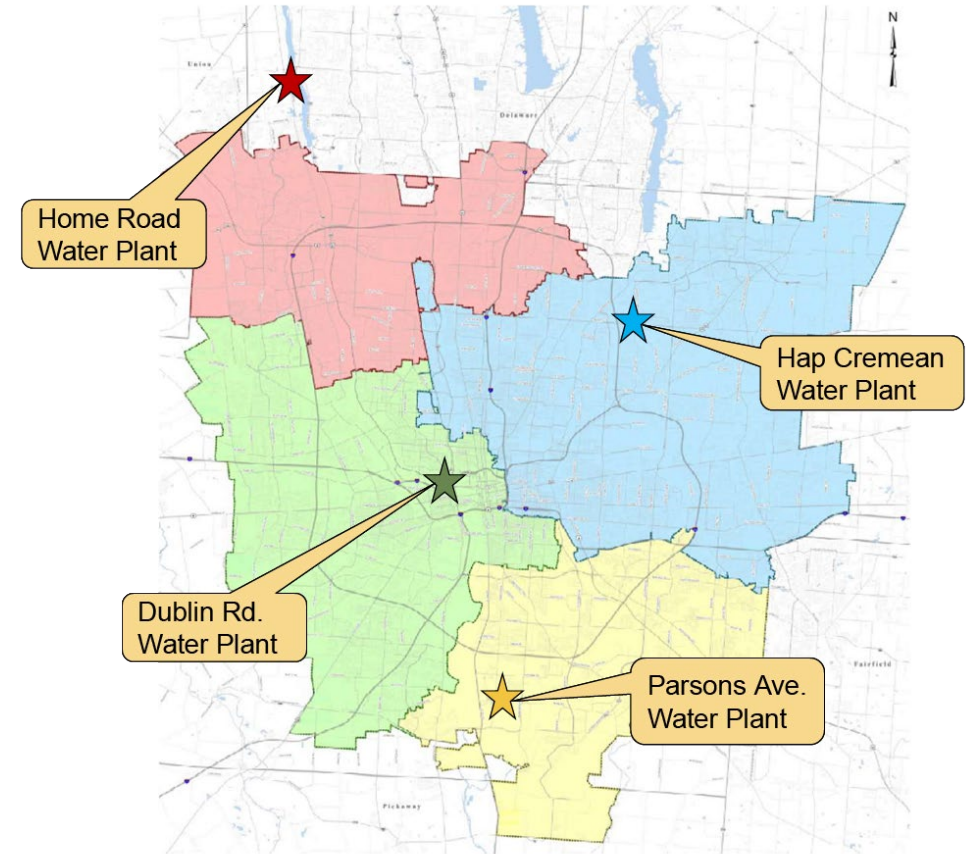
- The 15-county Central Ohio region is on track to reach nearly 3.15 million residents by 2050, a small uptick from previous projections



Source: MORPC (2024)

# A New Fourth Water Plant

- Columbus' three water plants supply an average of 145 million gallons per day of drinking water to Columbus and surrounding central Ohio communities.
- Continued growth along with the need to increase reliability and resiliency across the water supply system, has driven the need for additional water capacity



# Why We're Building Another Water Plant

- We need additional water capacity to serve the continued growth of population and industry in central Ohio and to increase reliability and resiliency across the water supply system
  - 1998-Water Beyond 2000 Report
  - Water Master Plans updated every 10 years
  - Three existing water plants supply an average of 145 MGD (million gallons per day)





# Home Road Water Plant



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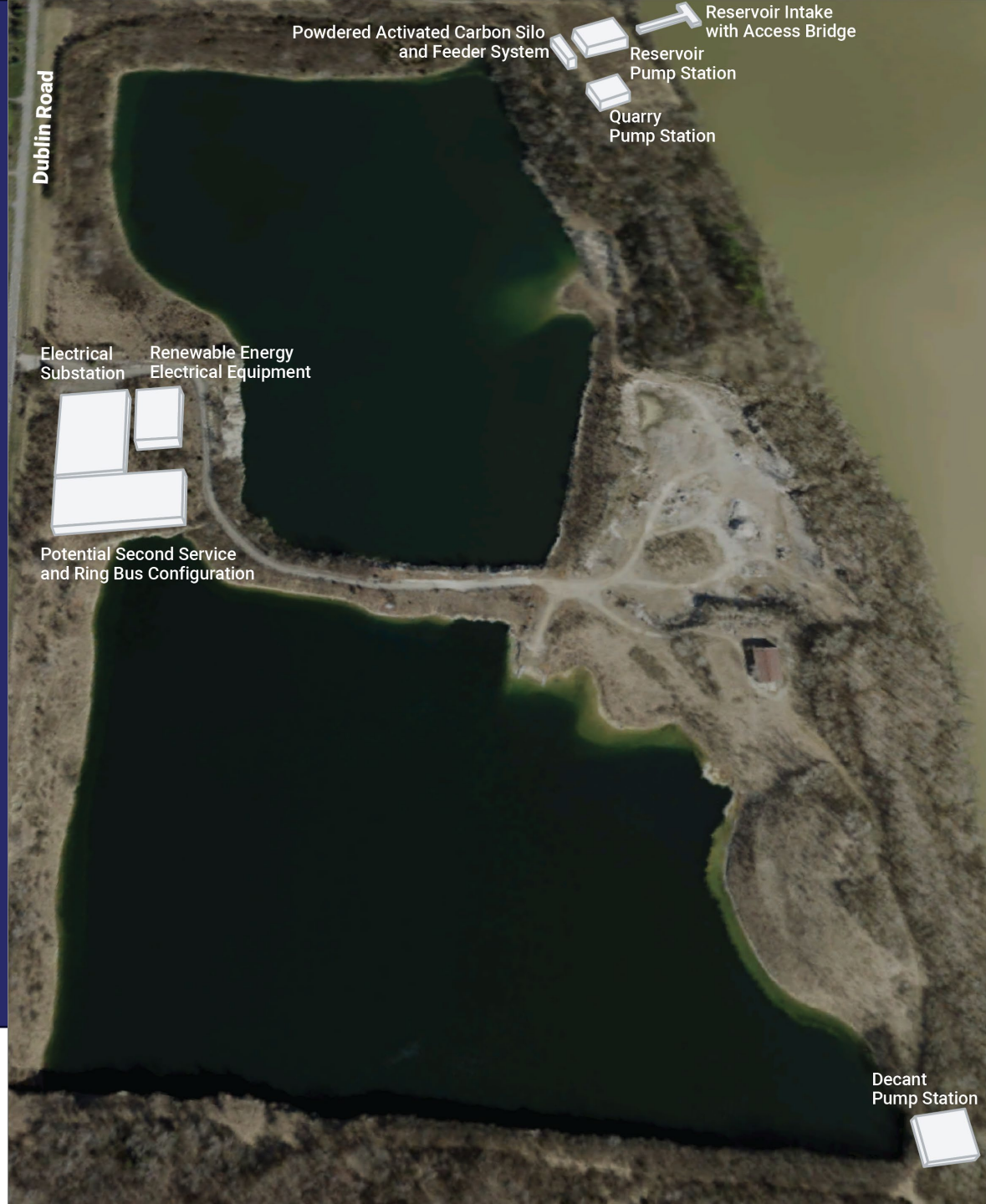
Key	
BST	Backwash Supply Tank
BWP	Backwash Pumps
BWT	Backwash Equalization Tank
GAC	Granular Activated Carbon
HSPS	High Service Pump Station
IPS	Intermediate Pump Station
IX	Ion Exchange
LOX	Liquid Oxygen
POC	Post Treatment Chemical Building
PRC	Pretreatment Chemical Building
REP	Residuals Pump Station
SEB	Flocculation/Sedimentation Basins
UV	Ultraviolet
- - -	Future

# Home Road Water Plant

## 48 MGD Capacity

Subject to Design Changes





# Home Road Water Plant Quarry Site Layout

Subject to Design Changes



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# Site Preservation Efforts



- Gazebo and cemetery historically preserved and protected



- Dedicated access to the cemetery will be provided post-construction

# Sustainability Efforts

- Support Sustainable Columbus:
  - Stream restoration and wetland preservation
  - Solar energy and electric vehicle charging stations
  - Stormwater management
  - Pursuing:
    - LEED and LEED Zero for the Admin Building
    - Envision certification for the entire site



ENVISION



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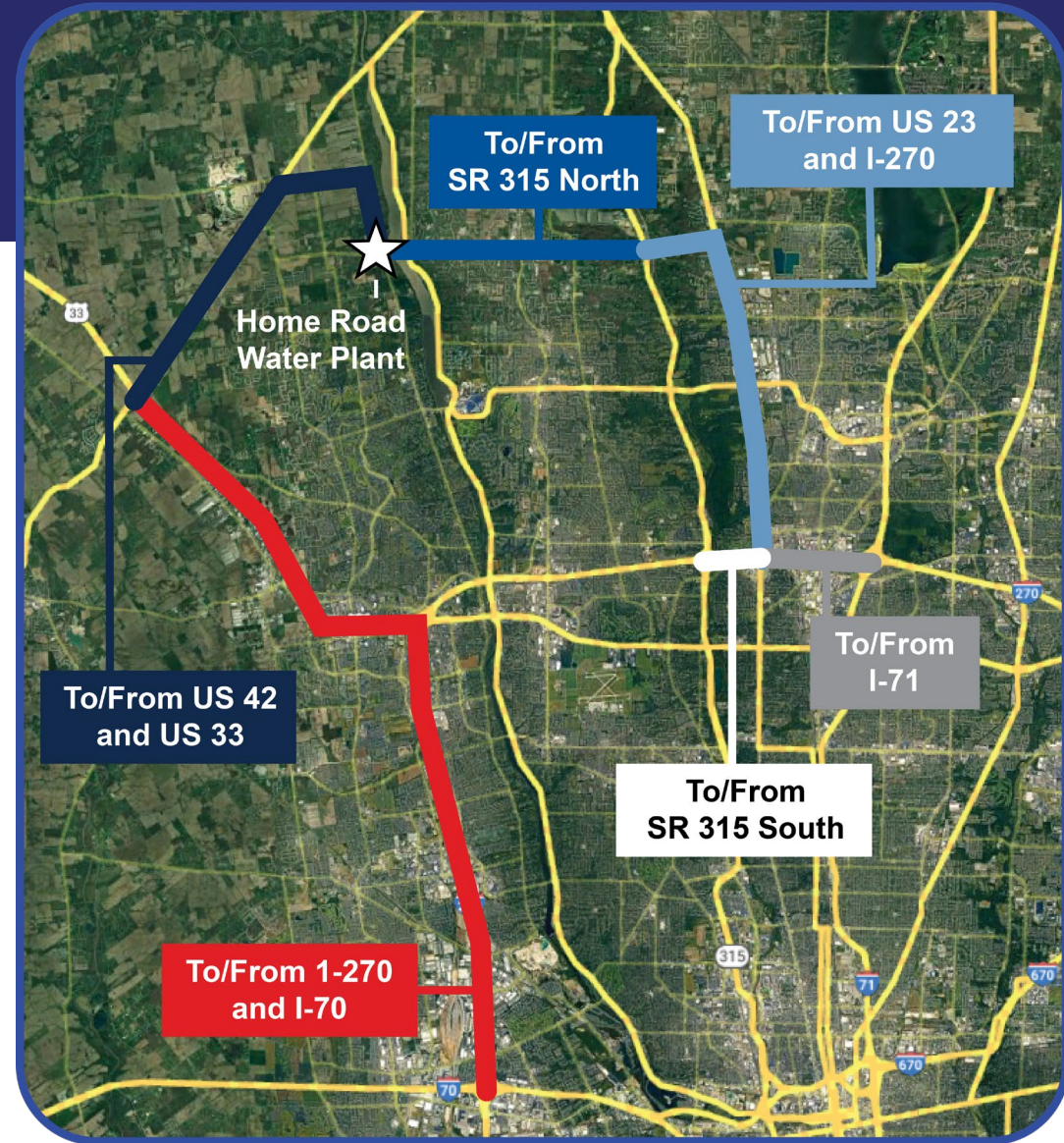


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# Suggested Traffic Routes

- Route Home Road Water Plant construction traffic through less developed areas
- Minimize the use of local roadways



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# Water Plant Site Preparation

## ■ Tree Removal

- Live non-invasive trees removed will be replaced
- On-site, along O'Shaughnessy or other locations per Columbus tree policy

## ■ Rock Excavation

- Engineered, controlled blasting
- An informational meeting will be held before excavation work

## ■ Power Supply

- First Energy transmission line to the quarry site
- Route and timeline TBD

# Likely Traffic Routes: Rock Hauling

- US 42
- State Route 745 (Dublin Road)
- County roads
  - Home Road
  - Moore Road
  - S. Section Line Road



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# Construction Site Characteristics

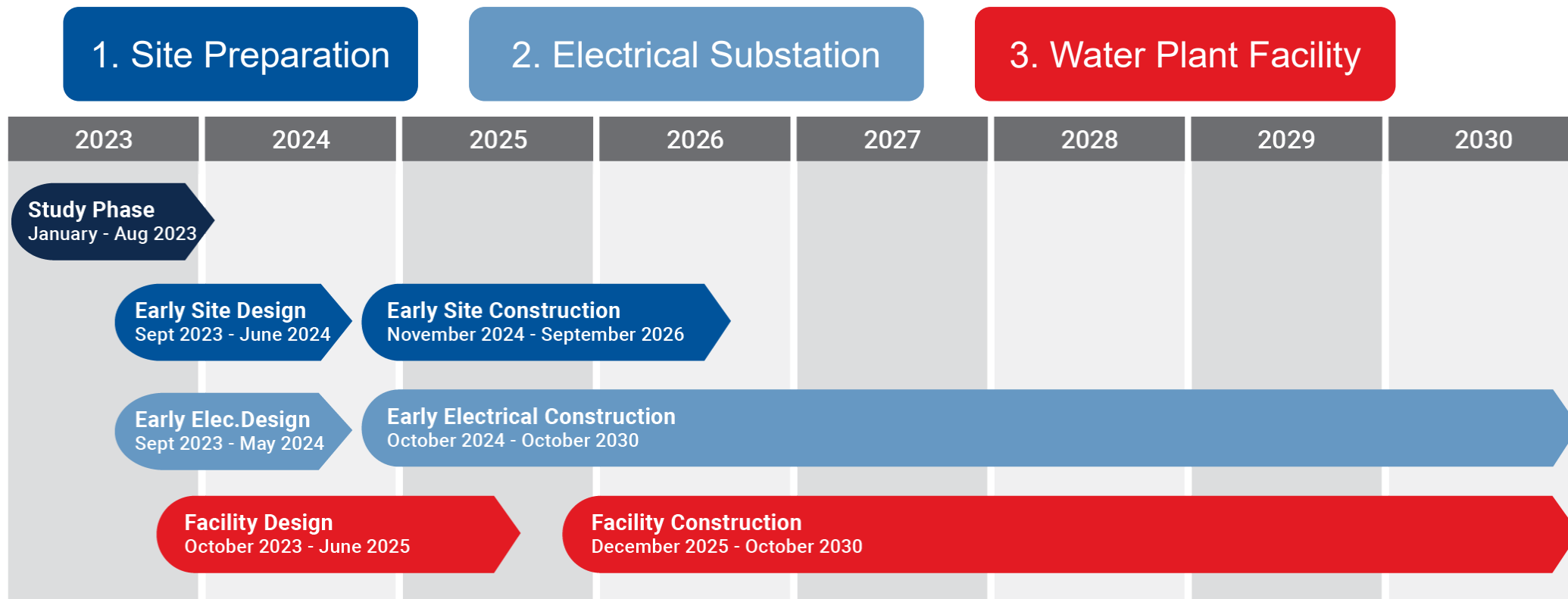
## ■ Construction

- **Estimated Work Hours:** 7:00 AM to 7:00 PM, Monday to Saturday
- **Light & Noise:** Utilizing the City of Columbus ordinances
- **Dust Control:** Required during construction

## ■ Site Safety & Security

- Controlled access at all entrances
- Cemetery access by appointment only

# Three-Phase Construction Schedule



# Home Road Water Plant Cost

- 30% design estimate - \$1.379B
  - Cost does not include construction contingency
- Cost estimate includes the following:
  - Design contingency
  - Escalation to midpoint of construction
  - Contingency for market conditions (e.g., major competing projects concurrent with water plant construction schedule)



# Water Plant Transmission Mains



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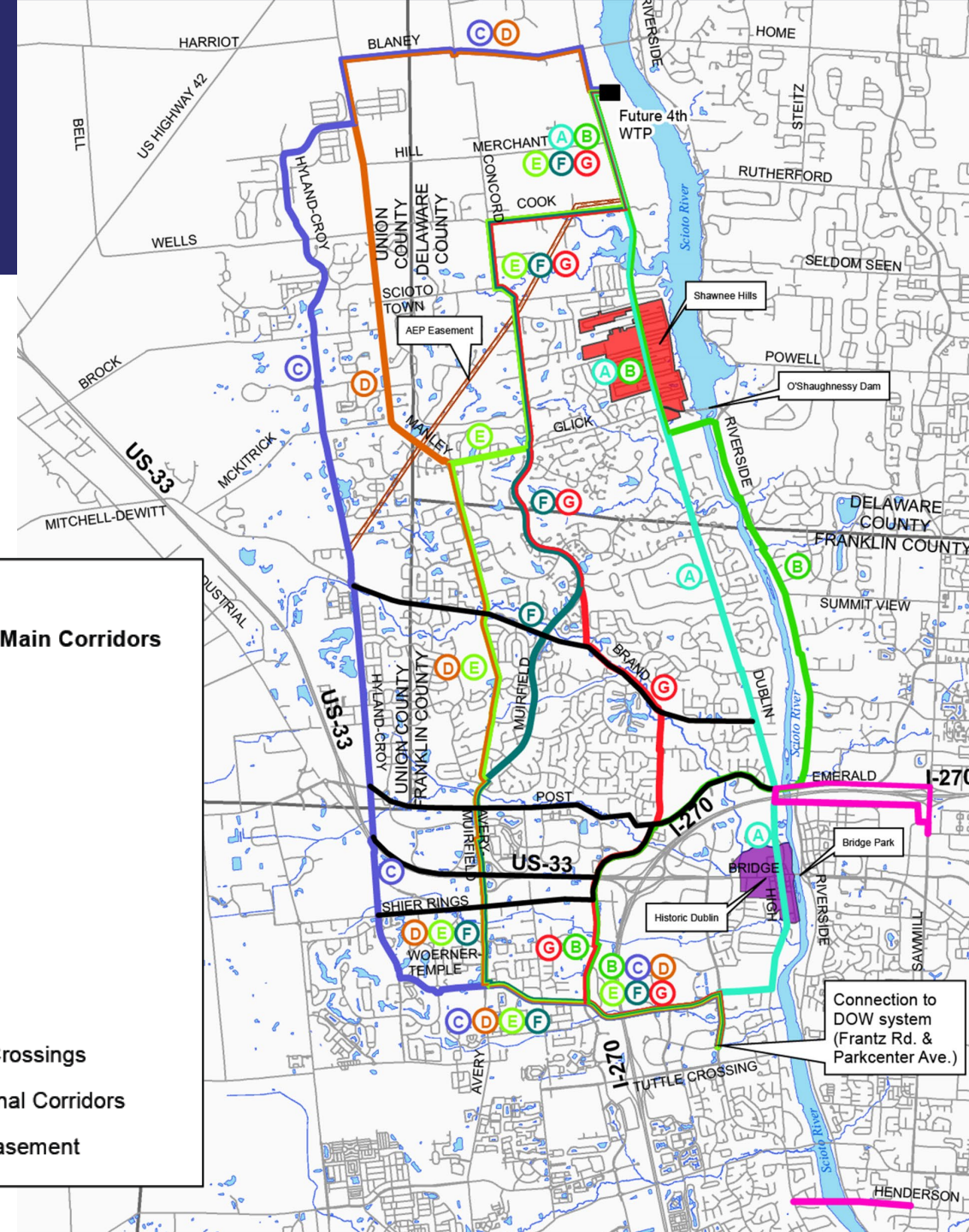
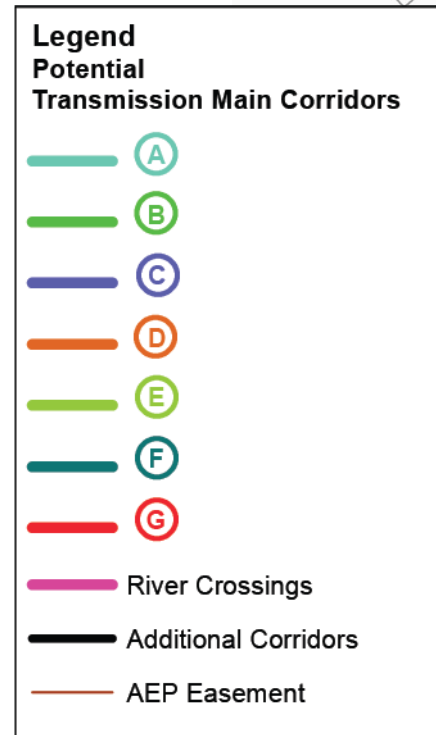
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# Goals for the Transmission Mains

- Select the most technically feasible, reliable, resilient and constructible routes
- Collaborate with stakeholders to coordinate potential capital investments
- Be transparent with the public
- Minimize disruptions to the extent possible
- Communicate, communicate, communicate!

# Project Scope

- Two transmission mains (for resiliency and reliability)
- Evaluated 14 corridors
- One river crossing
- First main is scheduled to be completed by December 31, 2028



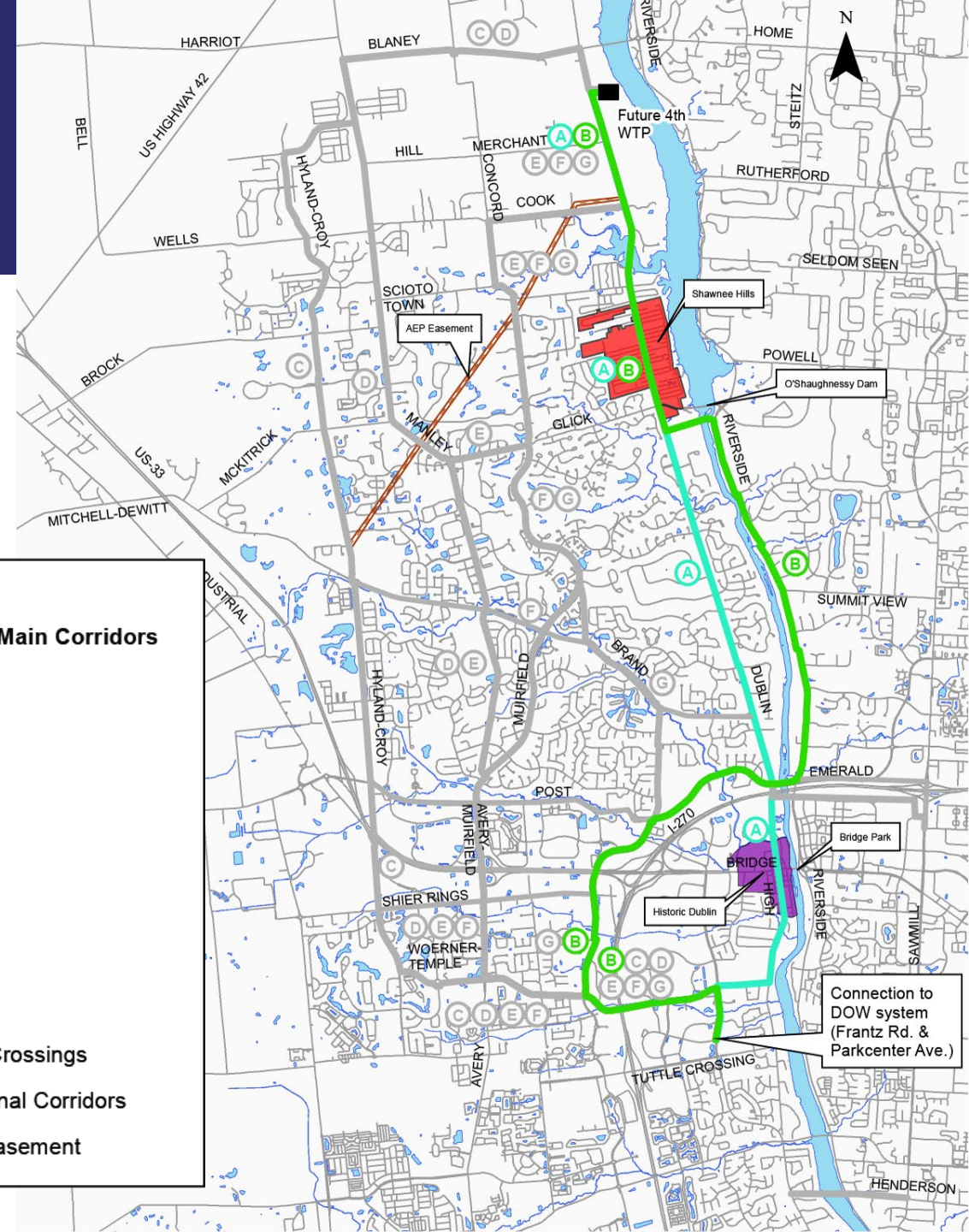
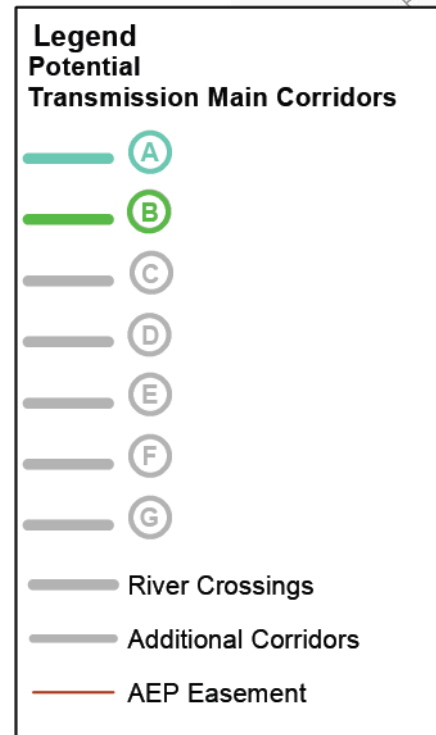
# Corridor Evaluation Process

- Aerial mapping
- OUPS calls
- Preliminary base mapping
- Alignment layout to compare corridors
  - Over 100 miles were evaluated
- Site visits
- Pairwise comparison
- Risk analysis
- Cost estimates

# Corridors A & B

## Selection Process

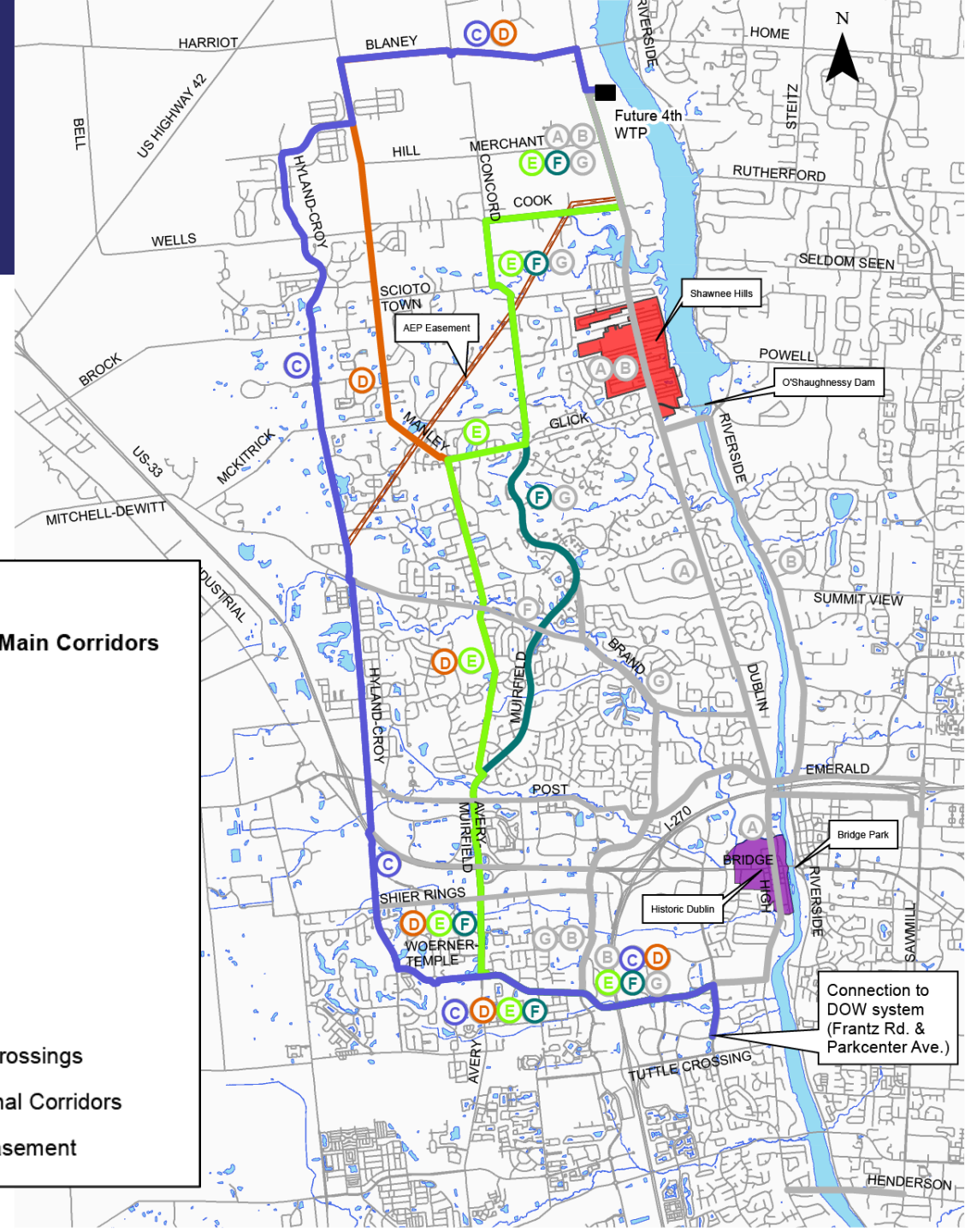
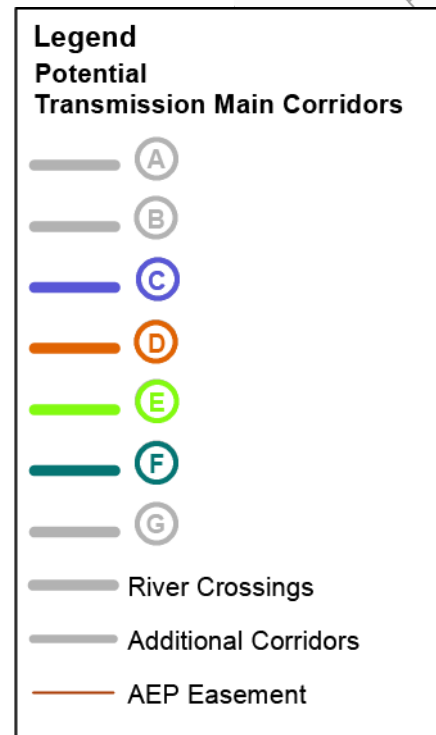
- Corridor A
  - Rock
  - Narrow corridor & numerous utilities
  - Significant road closures
  - Highest ranked risk and pairwise corridor
- Corridor B
  - Rock, cost
  - Significant road closures
  - Second highest risk corridor





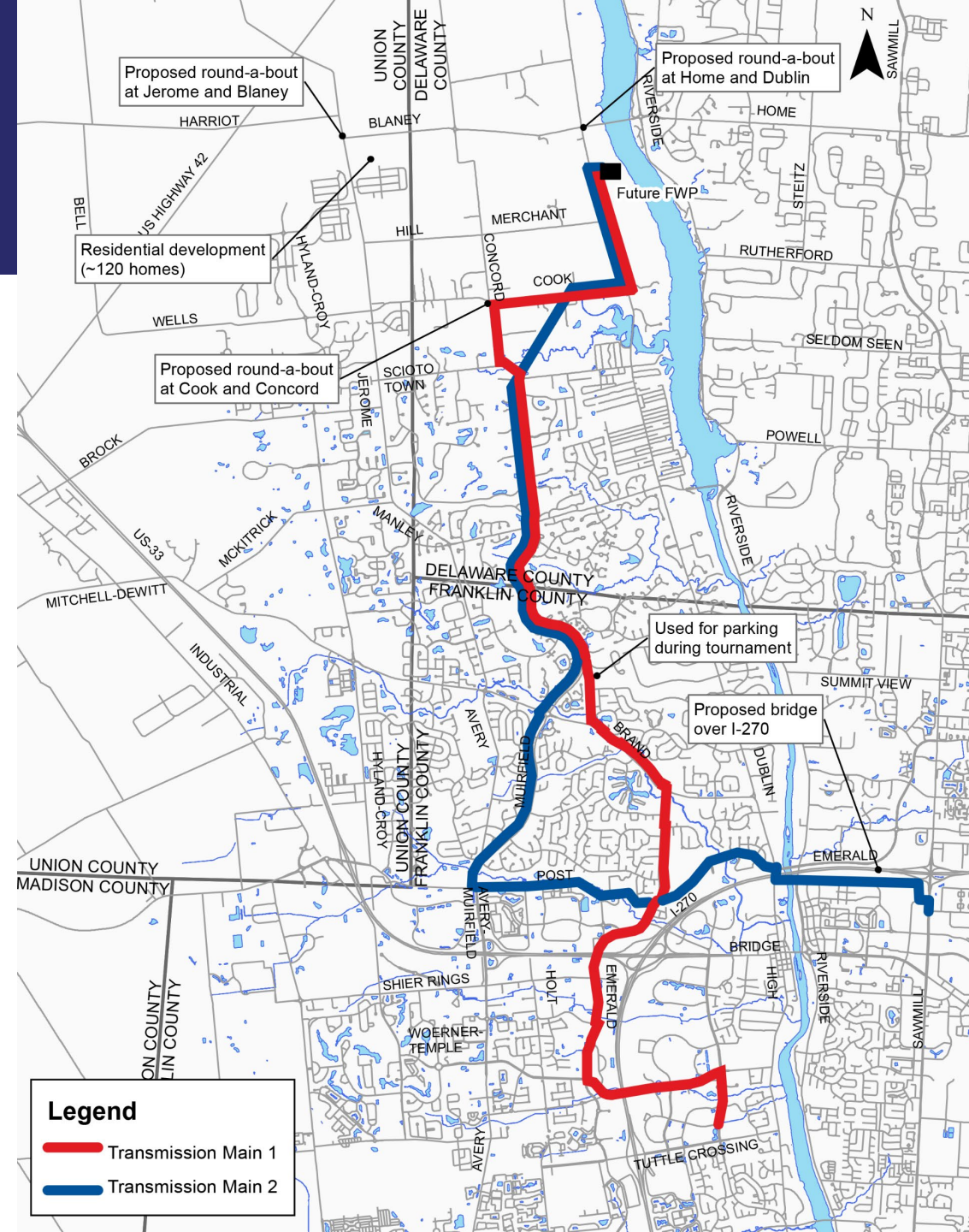
# Corridors C, D, E & F Selection Process

- Corridor C
  - EPA water pressure requirements
- Corridor D & E
  - EPA water pressure requirements
  - SR 33/Avery/Muirfield Interchange
- Corridor F
  - Portion of F is recommended



# Corridor Recommendations

- Pipe size: 48-inch mains
- Geotech and survey fieldwork is occurring along these corridors
- Public input will further inform the final design for the two alignments within the corridors (goal is to avoid, minimize and mitigate property impacts)

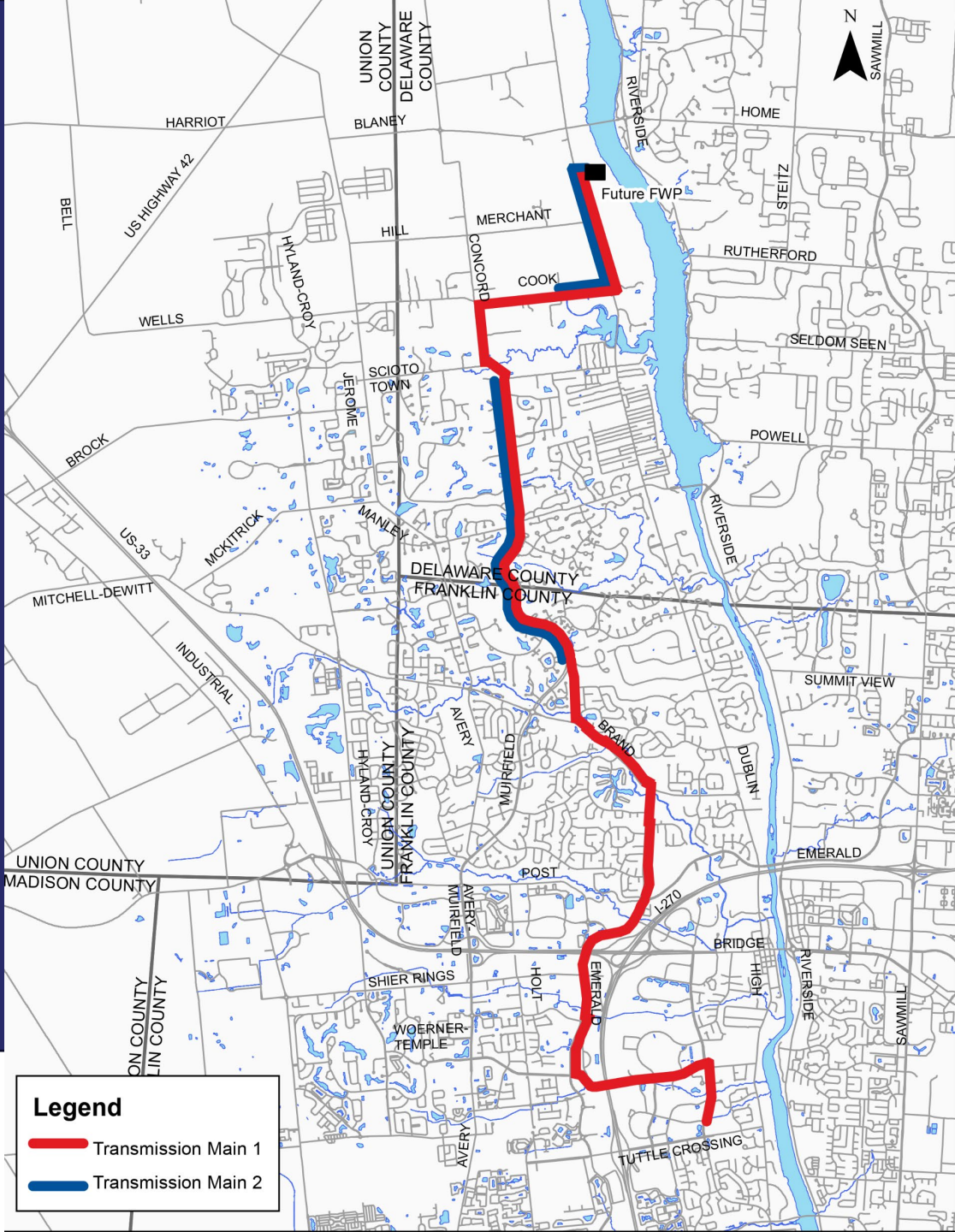


# Water Plant Transmission Mains Cost

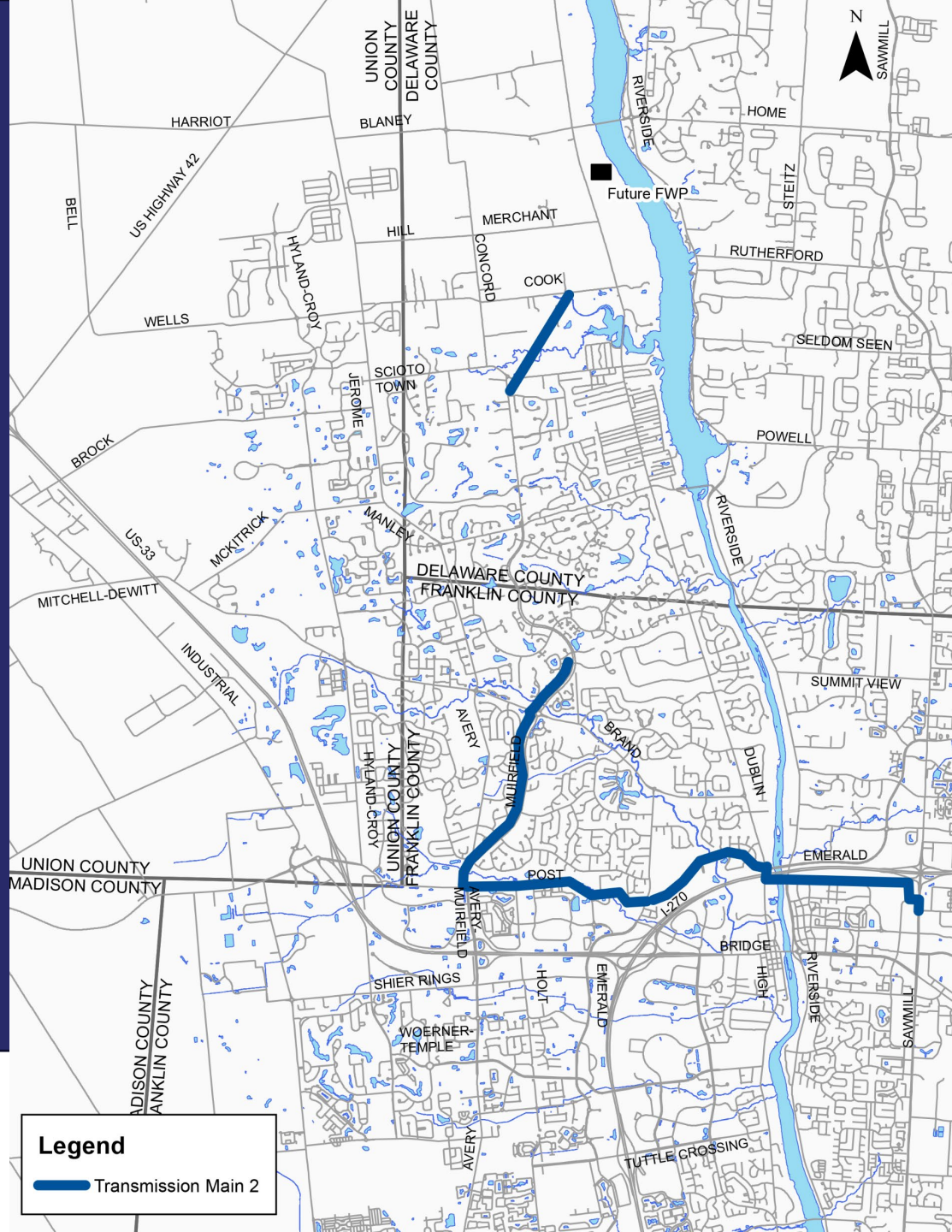
- Preliminary design estimate - \$511M
- Cost estimate includes the following:
  - Design & construction contingency
  - Escalation to midpoint of construction
  - General conditions/bonds/insurances



# First Corridor Construction Phase 1



# Second Corridor Construction Phase 2



**Legend**

 Transmission Main 2

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# Schedule at a Glance



# Public Outreach to Date

- Website <https://cbuswater.com>
- Letters
- Door hangers
- Jurisdictional field work updates
- Meeting postcards
- Business cards

**More Water!**  
Learn about plans for the new Home Road Water Plant and Water Plant Transmission Mains.

**Public Meeting  
June 18**

THE CITY OF COLUMBUS  
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Water Plant Transmission Mains

Home Road Water Plant

**Public Meeting**  
Tuesday, June 18, 2024  
6:00-8:00 PM

Dublin Community Recreation Center (Talia Rooms)  
5600 Post Rd, Dublin, OH 43017

Reserve your space and learn more at [cbuswater.com](https://cbuswater.com)

Registration is encouraged but not required.

The City of Columbus Department of Public Utilities is building the Home Road Water Plant and transmission mains to prepare for the growing need for clean, safe drinking water in central Ohio.

To learn more about these improvements, visit the project webpage at [cbuswater.com](https://cbuswater.com).

**Water Plant Transmission Mains**

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The City of Columbus Department of Public Utilities (DPU) is building a new water plant and transmission mains to prepare for the growing need for clean, safe drinking water in central Ohio.

To learn more about these improvements, visit [cbuswater.com](https://cbuswater.com)

If you have questions or concerns, email Mike Nuhfer, P.E. at [mnuhfer@aldservices.com](mailto:mnuhfer@aldservices.com) or call 740.372.6333

**Water Plant Transmission Mains**

**Home Road Water Plant**

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[cbuswater@columbus.gov](mailto:cbuswater@columbus.gov)  
(614) 645-2675

**Water Plant Transmission Mains**

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**Field crews will be in your area to conduct geotechnical investigations and topographical surveys now through the end of summer 2024. All work will be within the road right-of-way.**

- While your property is located near the vicinity of this fieldwork, we do not anticipate any disruptions or inconvenience to you or your property.
- If access to your property is required, the project team will notify and coordinate with you directly prior to initiating any work.
- Field crews will carry identification and all vehicles will display their company logo. Participating companies include Aldea Services, CTL Engineering, DMC, Eagon Associates, ms consultants, Resource International, and 7NT.
- Field personnel will not be able to answer questions about the project, they will simply be collecting information for further evaluation.

KRISTIN ATHA  
Director of Public Utilities

**Water Plant Transmission Mains**  
Home Road to Blazer Parkway Area

THE CITY OF COLUMBUS  
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February 28, 2024

Re: Geotechnical Field Investigations and Topographical Surveys: Water Plant Transmission Mains

Dear resident/property owner,

The City of Columbus Department of Public Utilities (DPU) is building a new water plant and transmission mains to prepare for the growing need for clean, safe drinking water in central Ohio. The new plant will be built along the Scioto River near the corner of Home and Dublin roads in Delaware County. Water transmission mains will connect the new plant to the Columbus water distribution system near the Blazer Parkway area and other strategic areas in northwest Columbus.

Field crews will be in your area to conduct geotechnical investigations and topographical surveys from now through the end of May 2024. All work will be within the road right of way.

While your property is located near the vicinity of this fieldwork, we do not anticipate any disruptions or inconvenience to you or your property.

Our field crews have received strict instructions concerning preserving private property and public lands. If access to your property is required, the project team will notify and coordinate with you directly before initiating any work. Field crews will carry identification and all vehicles will display their company logo. Participating companies include Aldea Services, Eagon Associates, ms consultants and 7NT.

Field personnel will not be able to answer questions about the project, they will simply be collecting information for further evaluation.

You should also receive a door hanger near the front of your home with similar information. If you have questions or concerns, or feel that our representatives have not given proper attention to your property, please contact Mike Nuhfer, P.E., Geotechnical Team Lead, at [mnuhfer@aldservices.com](mailto:mnuhfer@aldservices.com) or call 740.372.6333. For additional information about the Water Plant Transmission Mains improvements, visit <https://cbuswater.com>.

Respectfully,

*Kristin Atha*

Tim Huffman, P.E.  
Distribution Engineering Section Manager  
City of Columbus, Division of Water

CC: Kristin Atha, Director; Megan O'Callaghan, City of Dublin City Manager; Paul Hammersmith, City of Dublin Director of Engineering; Michael Havelberich, City of Dublin Deputy Director of Engineering - Utilities; Chris Bauserman, Delaware County Engineer; Doug Riedel, Delaware County Engineer's Office, Concord Township Trustees

Director of Public Utilities | 310 Dublin Road | Columbus, OH 43215 | (614) 645-6141 | [pu@cbuswater.com](mailto:pu@cbuswater.com)  
Division of Public Utilities | 1200 Delaware Avenue | Columbus, OH 43215 | (614) 645-6271 | [pu@cbuswater.com](mailto:pu@cbuswater.com)  
Division of Engineering and Design | 1200 Parkwood Avenue | Columbus, OH 43260 | (614) 645-7110 | [pu@cbuswater.com](mailto:pu@cbuswater.com)  
Division of Water | 1510 Dublin Road | Columbus, OH 43215 | (614) 645-3200 | [pu@cbuswater.com](mailto:pu@cbuswater.com)  
Customer Service | (614) 645-6271 | [columbus.gov](http://columbus.gov)



# Meeting Materials Available Online Soon

- Presentation online by June 20
- Virtual recording
  - <https://cbuswater.com/>
  - Week of June 24
- More public meetings will be held before construction begins
- Frequently asked questions online will be updated continually



# Next Steps



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# Next Steps

- Digest the input we receive tonight
- Continue survey, geotech borings, sub-surface evaluations and field walks
- Convene jurisdictional design review meetings
- Meet with property owners, if necessary
- Coordinate construction with local capital improvement programs
- Finalize the alignments within each corridor

# Your Questions (High-Level)



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# Discussion Guidelines

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- It's okay to disagree; please be respectful, polite and kind



# Before Information Stations



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# How You Can Help Us Finalize Alignments

- Identify your property at the information station maps or on a comment form (team members will help you)
- Let us know where you have:
  - A septic tank, wells
  - Underground utilities such as dog fences, lighting or sprinklers
  - Mature trees and landscaping

# Adjourn to Information Stations



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# Thank You



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