

Home Road Water Plant

Site Preparation Project

Controlled, Engineered Blasting Informational Meeting

June 4, 2025







- Introductions
- Recap: The need for a fourth water plant
- Current focus: Site preparation/controlled engineered blasting
- Why and how we're doing controlled, engineered blasting
- Pre-blasting inspections and notification process
- Contact information
- **Q&A**

This presentation will be posted on cbuswater.com



Discussion Ground Rules

- Please hold questions until the end
- When we open for questions, please raise your hand so we can address each question or comment in order
- Be succinct so we get to everyone
- Please be respectful, polite and kind

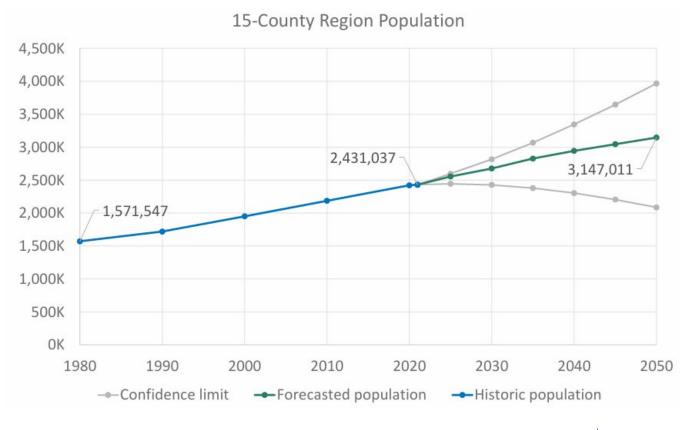


Recap: The Need for a Fourth Water Plant



Regional Growth Forecast

The 15-county Central Ohio region is on track to reach nearly 3.15 million residents by 2050





We've Planned This Since 1998



We need additional water capacity to serve this continued growth and to increase reliability and resiliency across the water system supply

- Three existing water plants supply an average of 145 million gallons daily
- The Water Beyond 2000 Report issued in 1998 called for a fourth plant
- The Master Plan, updated every 10 years, continued to call for the new plant



Water Plant Details

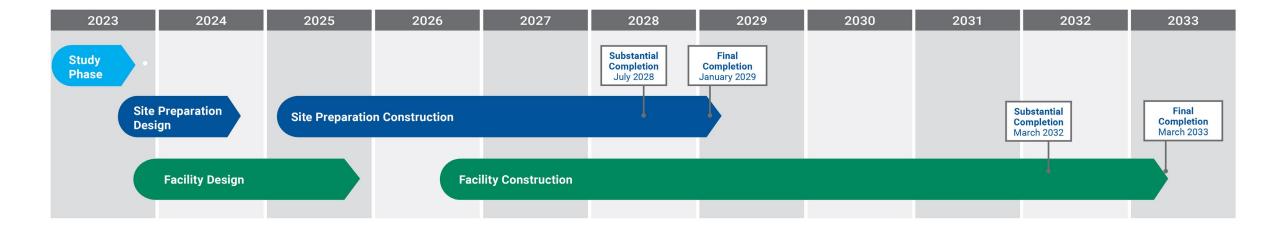
- Capacity: 48 million gallons of water per day, with the ability to produce 80 million gallons per day in the future
- The treatment process: Similar to two other Columbus surface water plants
 - Granular Activated Carbon (GAC) treatment removes PFAS and other emerging contaminants
- The north quarry cell will store an additional raw water supply





Schedule







Current Focus: Site Preparation/Controlled Engineered Blasting

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Why We Need to Blast

- Controlled, engineered blasting of existing rock prepares and levels the ground to construct the proposed building foundations
- This is more efficient than other/ mechanical means of rock removal







The Site Preparation Team







Jacobs









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How We Do Controlled, Engineered Blasting



Expert Qualifications

Vibration Consultant: Sauls Seismic

- Consulting and remote monitoring for over 45 years
- Local office in Ohio
- Service 1,500+ seismographs daily (150 in Ohio)
- Vibration consultants on 100+ projects in Ohio

Blasting Contractor: Wampum Hardware Company

- In the blasting business since 1904
- Licensed in Ohio
- Blasters-in-charge have 35 and 37 years of blasting experience, respectively







Expert Qualifications

Independent Blasting Consultant: R.A. McClure Inc.

- Is an international blast consulting, training, and technical services company
- Based in Delaware, Ohio
- Over 40 years' experience in the explosives industry
- Has worked on multiple projects in Ohio and throughout the world
- Member of the International Society of Explosive Engineers, Institute of Explosive Engineers





Why Controlled, Engineered Blasting?

- Most efficient way to remove rock
- Follows regulations and is proven to be safe
- Allows for schedule efficiency
- Cost-efficient
- Makes use of natural resources for use in roads, bridges, buildings, etc.

Property Inspections are Conducted Before Blasting Begins

- Inspections are performed in coordination with property owners to document existing conditions prior to the start of blasting
- 66 properties within 1,500 feet of the blasting area have been contacted and offered pre-blast property inspections





Property Inspections to Date

Of those 66 properties:

- 43 properties have been inspected as of May 19, 2025
- 23 owners have opted out of inspections or not responded (certified letters sent May 19)

Inspections are still available through June 9, 2025, for those who have not responded or opted out so far (contact us ASAP)



Seismograph Monitoring of Blasts

- Blasting creates vibrations in the ground that quickly dissipate with distance
- Seismographs are located close to blasting operations and on the site perimeter to monitor and ensure vibrations are within established industry standards
- When a blast detonates, some of the explosive energy not utilized in breaking the rock travels through the ground in all directions as wave motions



How Seismographs Work

Seismographs measure vibrations caused by:

- Particle Velocity: The speed at which the ground is moving at the sensor location in three directions:
 - Longitudinal wave directly from the blast
 - Vertical transverse wave that moves the ground up and down
 - Horizontal transverse wave that moves the ground from side to side
- Air Overpressure: The longitudinal pressure wave in the air, commonly measured in pounds per square inch (psi) and decibels (dB). Gases (air) do not carry transverse waves.









Controlled, Engineered Blasting Schedule



- The window for pre-blasting inspections closes June 9 (contact us ASAP)
- Blasting is scheduled to start mid-June 2025
- Operations will generally occur between 9 a.m. and 4 p.m., subject to safety, weather, working conditions and other factors
- Blasting is expected to be completed spring, 2026



Notifications



Signage

- Blasting Zone signs are erected along Dublin and Home roads
- Blast Warning Signal signs are at project site entrances
- Construction-area fencing has been installed







Door Hanger Notifications

Door hangers will be distributed to all properties within the 1,500-foot perimeter approximately one week before blasting operations begin



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Additional E-mail Notifications

- Concord Township Board of Trustees
- Concord Township Fire Department
- Delaware County Engineer & Township Office
 Liaison ODNR
- Delaware County Sheriff
- Columbia Gas, First Energy, Spectrum (utilities)
- Del-Co
- City of Columbus Recreation and Parks
- City of Columbus Watershed

- Ohio Wildlife Center
- ODOT District 6 Public Information Office







Contact Information

- Visit cbuswater.com for additional information and to submit questions or comments
- Email: <u>cbuswater@columbus.gov</u>
- Phone: (614) 645-2675



CONNECT WITH US	CONTACT INFO
Do you have questions about our projects? You've come to the right place! See below to find out how you can get in touch with us.	City of Columbus 311 Customer Ser
Your Name *	Phone (hotline) (614) 645-2675
Name	Address
Address *	ATTN: Water Division Engineer 910 Dublin Road
Street Address, City, State, Zipcode	Columbus, OH 43215
Phone Number *	Get Social
Phone number	
Email *	
Email Address	
Subject	
Home Road Water Plant 🗸	
Message	
*	
SEND MESSAGE	

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Questions



Discussion Ground Rules



- 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 for one-on-one conversations with the project team
- It's okay to disagree; please be respectful, polite and kind



Thank you!

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For Questions, If Needed



Access to the Home Road Water Plant

- Major access routes to Home Road Water Plant
- Minimize the use of local roadways





Traffic Routes to Existing Quarries

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



