

# Doan Brook Restoration at Horseshoe Park

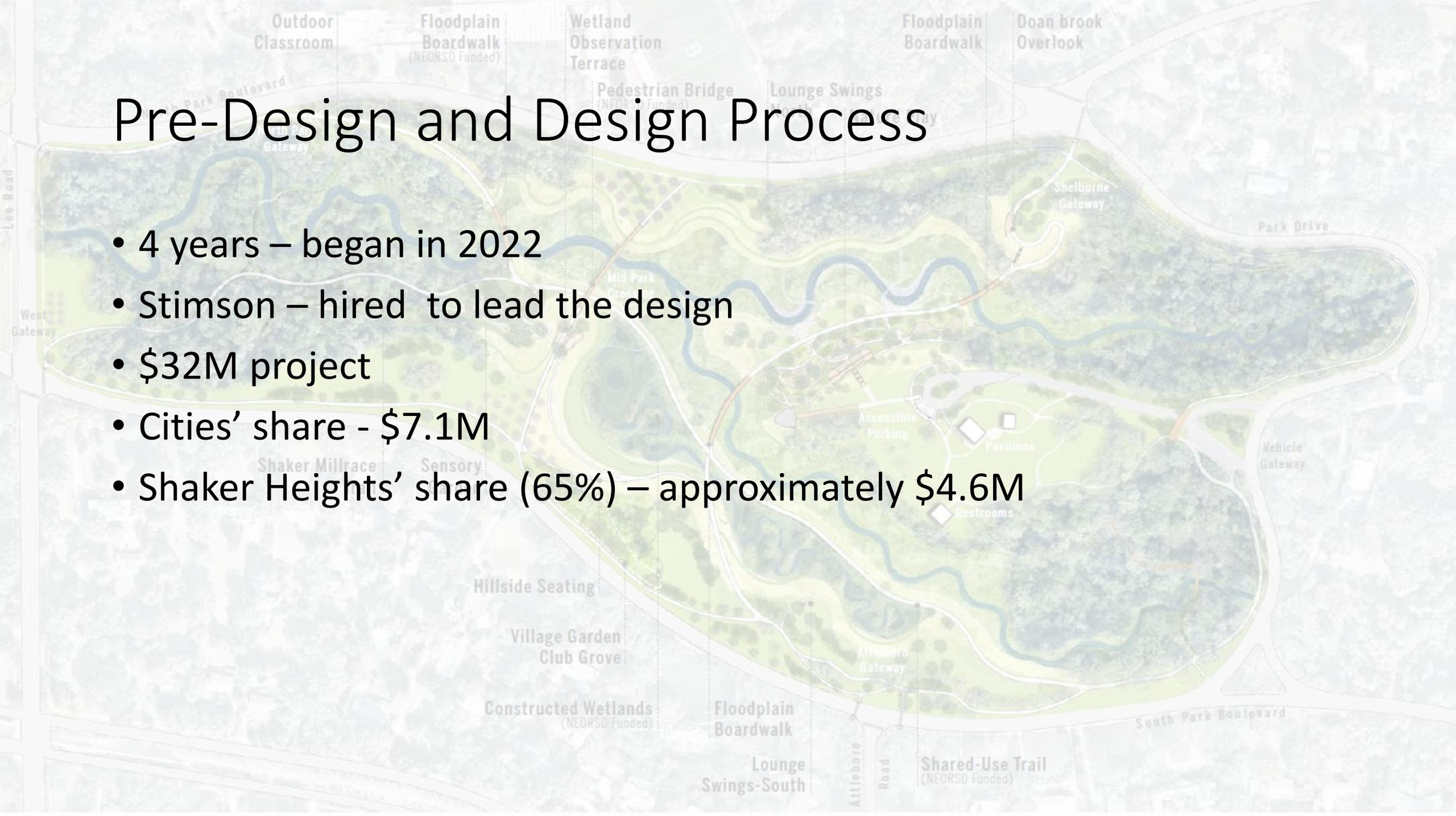
Section 106 Permitting Process

Shaker Heights Council

February 9, 2026

# Pre-Design and Design Process

- 4 years – began in 2022
- Stimson – hired to lead the design
- \$32M project
- Cities' share - \$7.1M
- Shaker Heights' share (65%) – approximately \$4.6M



# Public Engagement

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- Over 14 engagements
- 5 Public Forum Events
- Over 2,000 participants



## PUBLIC ENGAGEMENT | BY THE NUMBERS

Public Forum #1 Virtual Meeting Attendees (08/25/22):	283	
Public Forum #1 Open House Attendees (08/27/22):	275	(est.)
Pop-up Engagement event participants:	60	(est.)
Walking Tour event participants:	98	
Online Survey participants:	846	
Public Forum #2 Virtual Meeting Attendees (11/30/22):	200	(est.)
Public Forum #2 Open House Attendees (12/02/22): (80 Park Design Activity Participants & 46 completed park designs)	125	(est.)
Public Forum #3 Virtual Meeting Attendees (5/15/23):	180	(est.)
Public Forum #3 Open House Attendees (5/18/23):	30	(est.)
Public Forum #4 Virtual Meeting Attendees (7/15/24):	100	(est.)
Public Forum #4 Open House Attendees (7/16/24):	50	(est.)

**Public Forum #5 Virtual Meeting Attendees (3/31/25):** -----

**Public Forum #5 Open House Attendees (4/02/25):** -----

**Total public engagement to date:** **2,247** **COMMUNITY VOICES**

# Section 106 Historic Resource Permitting Process

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- Evaluate impacts to historic and cultural resources
- Enter into an Agreement with: US Army Corps of Engineers for Permit
- State Historic Preservation Office



# Historic and Cultural Resources Review

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- Lawhon and Associates – 2024 Phase 1 Cultural Review
- Located within the Shaker Village Historic District and the North Union Shaker Site
- Documents archaeological sites and above grade cultural resources

# Section 106 Process

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- Part of US Army Corps of Engineers Permit – Nationwide Permit
- To consider effects of projects on historic properties
- Must consider public views and concerns about historic preservation issues

# Section 106 Process Steps

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- Identifying Historic Properties
- Assessing Adverse Effects
- Initiating Section 106
- Preparing Documentation
- Achieving Resolution
  - Consulting parties
  - Mitigation
  - Memorandum of Agreement (MOA)

# MOA Mitigation Activities

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- Virtual Exhibit – online education exhibit
- Educational Signage on site
- Historic American Engineering Record - documentaion
- Preservation of Stilling Barn walls

# Preserve and Protect

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- Avoidance of Woolen Mill archaeological site
- Avoidance of preserved contributing resources
  - Grave of Jacob Russell
  - Windowbox Garden Club Monument
  - Village Garden Club Monument and Cherry Grove
  - Liberty Oaks
  - WPA stone features

An aerial site plan of a park area, overlaid with a semi-transparent green and white text box. The map shows a winding river or stream through a green landscape. Various features are labeled with text, including 'Outdoor Classroom', 'Floodplain Boardwalk (NEORSF Funded)', 'Wetland Observation Terrace', 'Pedestrian Bridge (NEORSF Funded)', 'Lounge Swings North', 'Nature Play', 'Doan brook Overlook', 'Shelburne Gateway', 'Park Drive', 'Vehicle Gateway', 'Accessible Parking', 'Pavilions', 'Restrooms', 'Hillside Seating', 'Village Garden Club Grove', 'Constructed Wetlands (NEORSF Funded)', 'Floodplain Boardwalk', 'South Park Boulevard', 'Atleboro Gateway', 'Sensory Garden', 'Shaker Millrace', 'West Gateway', 'North Park Boulevard', 'North Park Gateway', 'Mid Park Crossing', and 'Lee Street'.

# Next Steps

- 100% design complete
- MOA and Nationwide Permit pending
- Bidding – Spring 2026
- Construction – approximately 2 years

# U.S. Army Corps of Engineers Nationwide Permit 3 (NWP3)

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U.S. Army Corps of Engineers Nationwide Permit 3 (NWP3) authorizes maintenance of structures to include dams.

As part of the review, the U.S. Army Corps of Engineers evaluates environmental impacts, adverse effects to historical resources and endangered species habitat.

The NWP3 permit issued for Lower Lake Maintenance on January 22, 2018 under DA No. 2016-01373.

The NWP3 permit allows for follow-up maintenance after the initial project is completed.

# Lower Lake - 2018 Maintenance

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## **Scope of Work**

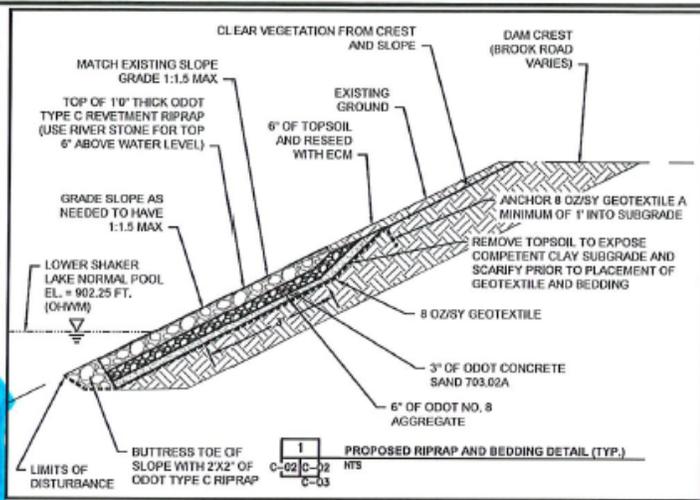
- Add Staff Gauge
- Exercise Existing Gate Valve
- Minor Regrading
- Replacement of Stop Logs
- Vegetation Removal
- Installation of Rip Rap

## **Historical and Environmental Mitigation**

- Point Discharge BMP Installed to Prevent Sedimentation Transport
- Archeological Areas Fenced for Protection
- Wetland Areas were Disturbed
- The project was reviewed and approved by the US Army Corps of Engineers Nationwide Permit 3 on January 22, 2018

**PROJECT DATA - LOWER SHAKER LAKE**

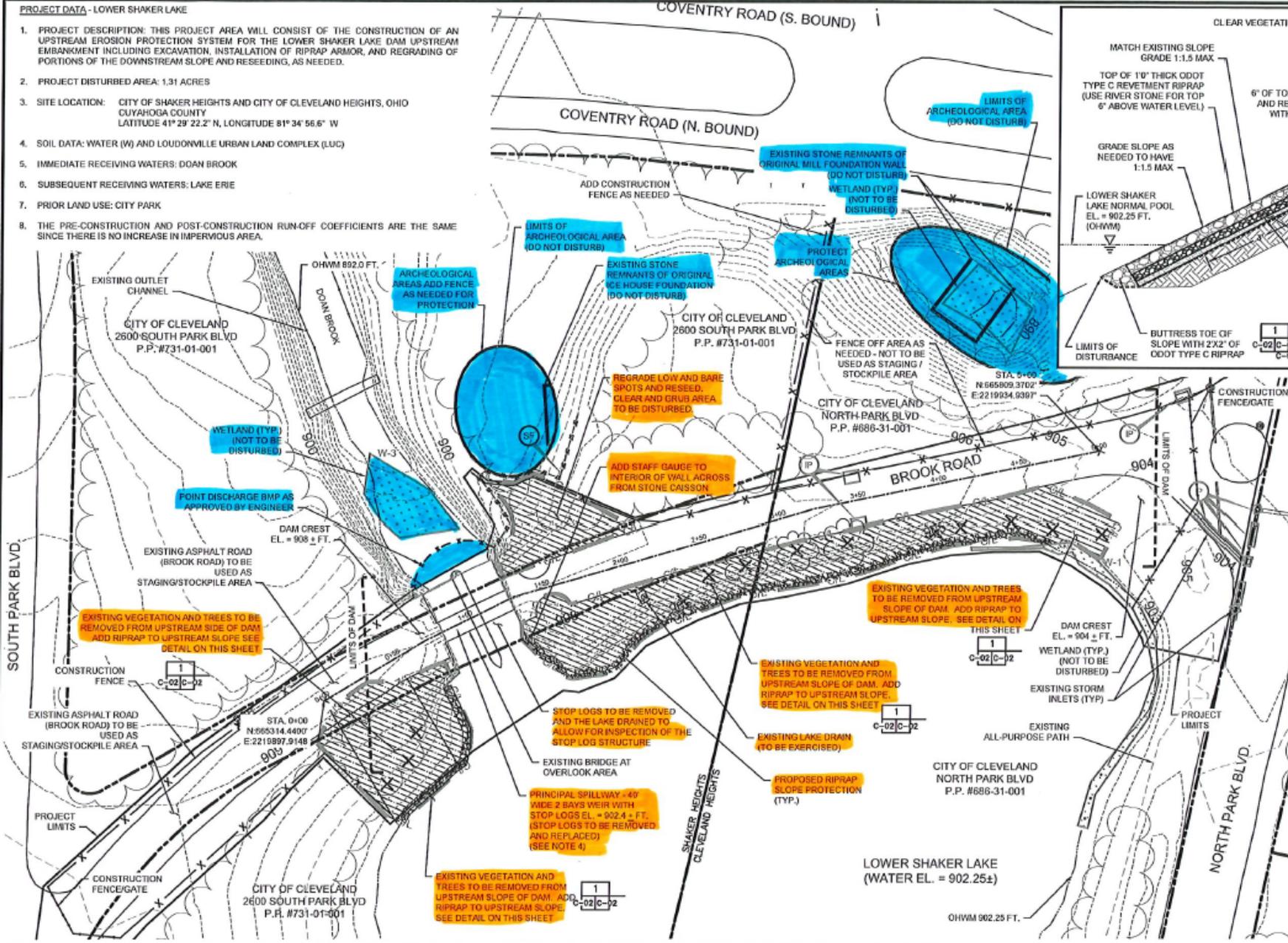
1. PROJECT DESCRIPTION: THIS PROJECT AREA WILL CONSIST OF THE CONSTRUCTION OF AN UPSTREAM EROSION PROTECTION SYSTEM FOR THE LOWER SHAKER LAKE DAM UPSTREAM EMBANKMENT INCLUDING EXCAVATION, INSTALLATION OF RIPRAP ARMOR, AND REGRADING OF PORTIONS OF THE DOWNSTREAM SLOPE AND RESEEDING, AS NEEDED.
2. PROJECT DISTURBED AREA: 1.31 ACRES
3. SITE LOCATION: CITY OF SHAKER HEIGHTS AND CITY OF CLEVELAND HEIGHTS, OHIO CUYAHOGA COUNTY  
LATITUDE 41° 29' 22.2" N, LONGITUDE 81° 34' 56.6" W
4. SOIL DATA: WATER (W) AND LOUDONVILLE URBAN LAND COMPLEX (LUC)
5. IMMEDIATE RECEIVING WATERS: DOAN BROOK
6. SUBSEQUENT RECEIVING WATERS: LAKE ERIE
7. PRIOR LAND USE: CITY PARK
8. THE PRE-CONSTRUCTION AND POST-CONSTRUCTION RUN-OFF COEFFICIENTS ARE THE SAME SINCE THERE IS NO INCREASE IN IMPERVIOUS AREA.



**SWP3 LEGEND**

	RIPRAP EROSION PROTECTION
	INLET PROTECTION, VARIOUS AS APPROVED
	SILT BARRIERS INCLUDING SILT FENCE, FILTER SOCKS, OR APPROVED EQUAL
	REGRADED AREA
	DISTURBED AREA / CONSTRUCTION LIMITS
	TREES TO BE REMOVED FROM DAM CREST
	WETLANDS AND DELINEATION

- NOTES:**
1. CONTRACTOR MUST SUBMIT A FENCE & SECURITY PLAN TO THE DISTRICT. FENCE SHOULD BE CHAIN LINKED AND ORANGE SAFETY CONSTRUCTION ON BOTH SIDES OF BROOK ROAD.
  2. CONTRACTOR WILL DEWATER AND ISOLATE CONSTRUCTION AREAS.
  3. WATER IN LOWER SHAKER LAKE SHALL BE LOWERED AT LEAST 2 FEET BELOW THE LOWEST ELEVATION REQUIRED TO INSTALL THE UPSTREAM EROSION PROTECTION. WATER IN LOWER SHAKER LAKE WILL HAVE TO BE CONTROLLED FOR THE DURATION OF CONSTRUCTION. CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO ANY WORK ON THE DAM.
  4. CONTRACTOR SHALL COORDINATE STOP LOG REMOVAL WITH CITY OF SHAKER HEIGHTS AND CITY OF CLEVELAND HEIGHTS. STOP LOGS SHALL BE REPLACED IN KIND.



# Lower Lake – 2026 Maintenance

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Installation of 100 tons of Rip Rap along 226-feet of the upstream embankment.

Restoration of disturbed grass area.

Work is expected to last five days.

This work is permitted under the NWP 3 issued in 2018.



Post-Construction 2020



2025