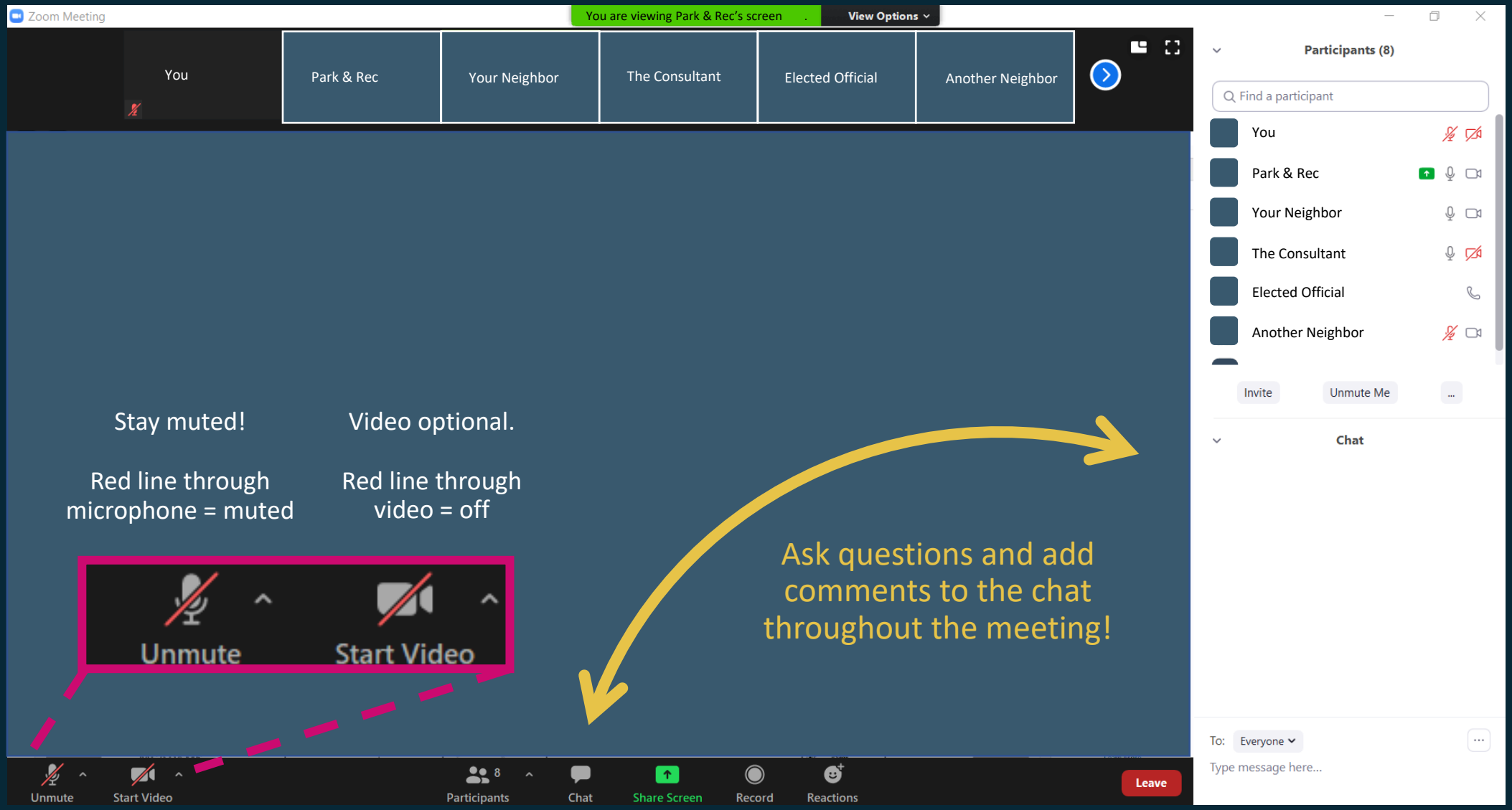
Park Road Park Dredging Project

Community Information Meeting

July 11, 2024
Virtual Meeting

Getting to know Zoom

Mecklenburg County
Park and Recreation



Introductions

Mecklenburg County
Park and Recreation

- Project Owner: Mecklenburg County
  - Asset & Facility Management
  - Parks & Recreation

Gina Straga, PE

Bert Lynn, PLA, ASLA, LEED AP

Kevin Brickman, PLA, ASLA

- Consultant Team: LJB Engineering

Neal Banerjee, PE, CFM

Amy Black, PE

Agenda

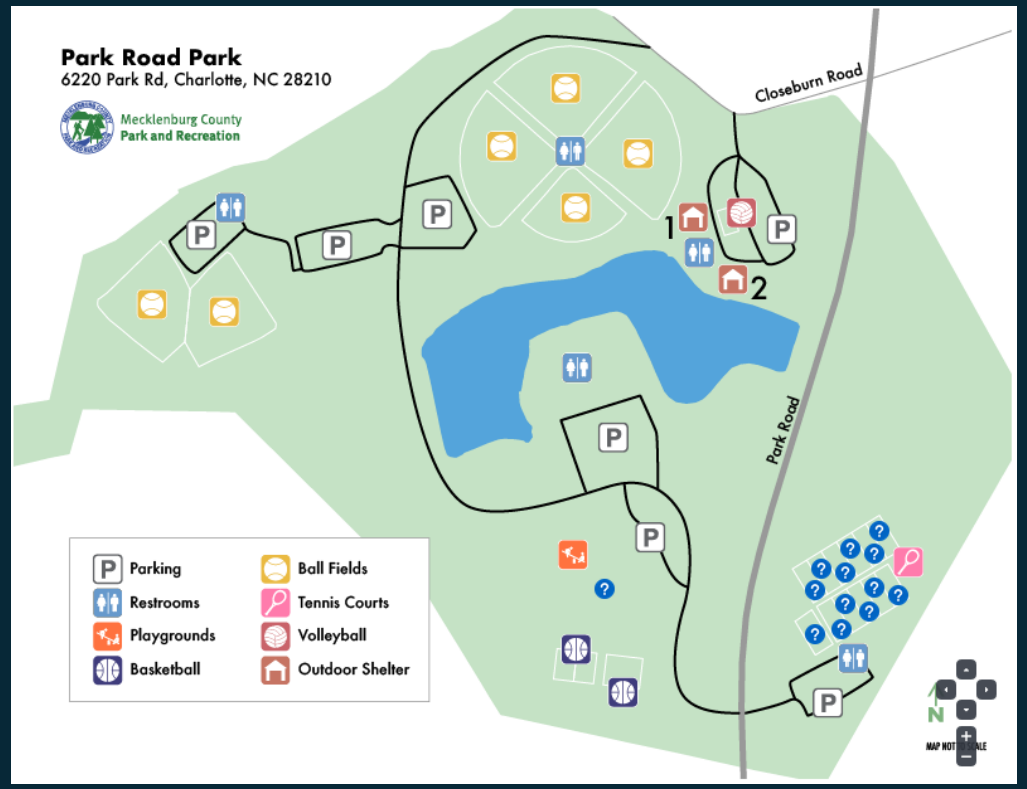
Mecklenburg County
Park and Recreation

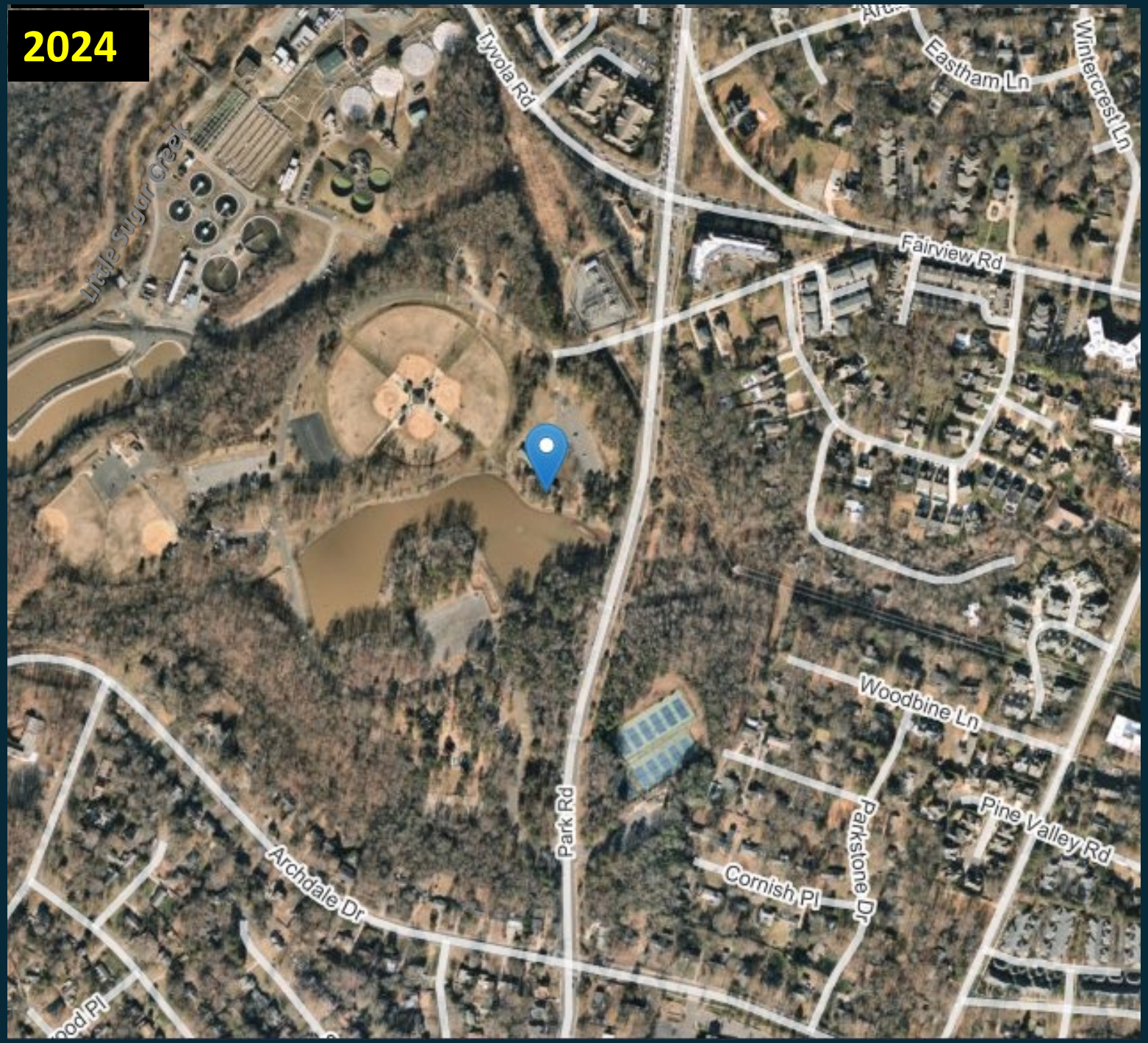
- Welcome and Introductions
- Background
- Why We're Here
- Project Overview
- Proposed Schedule
- What You Can Expect
- Questions

Background

- Built in 1971 as central amenity in Park Road Park – one of the most heavily utilized parks in the County

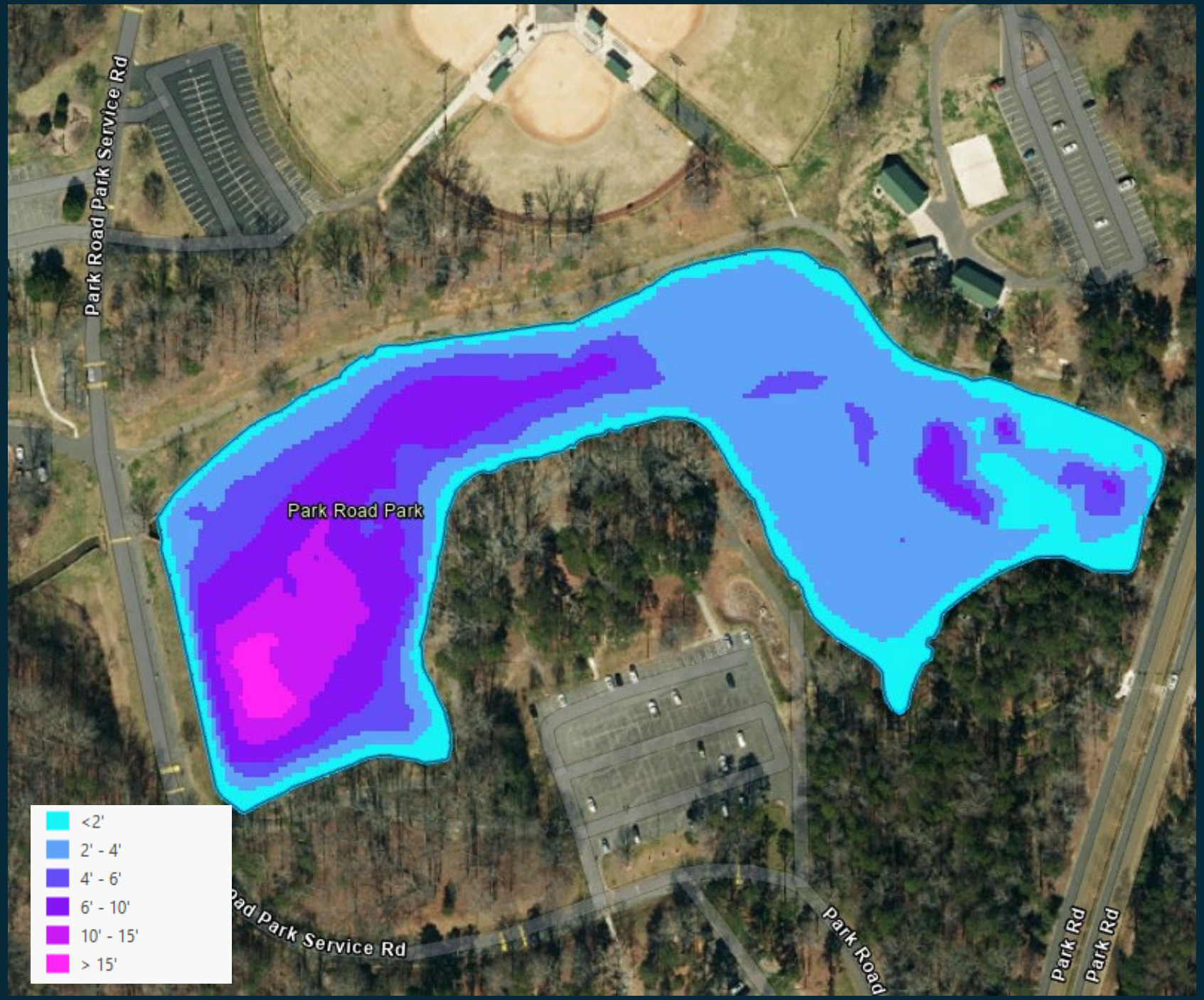
- Pond physical Characteristics
  - 6.7-acre surface area
  - Depths:
    - 2 -4’ upper (eastern) portion
    - 7 – 17’ lower (western) portion
  - Dam:
    - 370’ long, 25’ high earthen dam
    - Classified “low” hazard by Dam Safety
    - Combination riser/barrel and spillway outlet structure with drain





Park Road Park Through The Years (Animation)

Park Road Park Existing Water Depth



Notes:

- Depth based on 2024 bathymetric survey and normal pool elevation of 622’

Background

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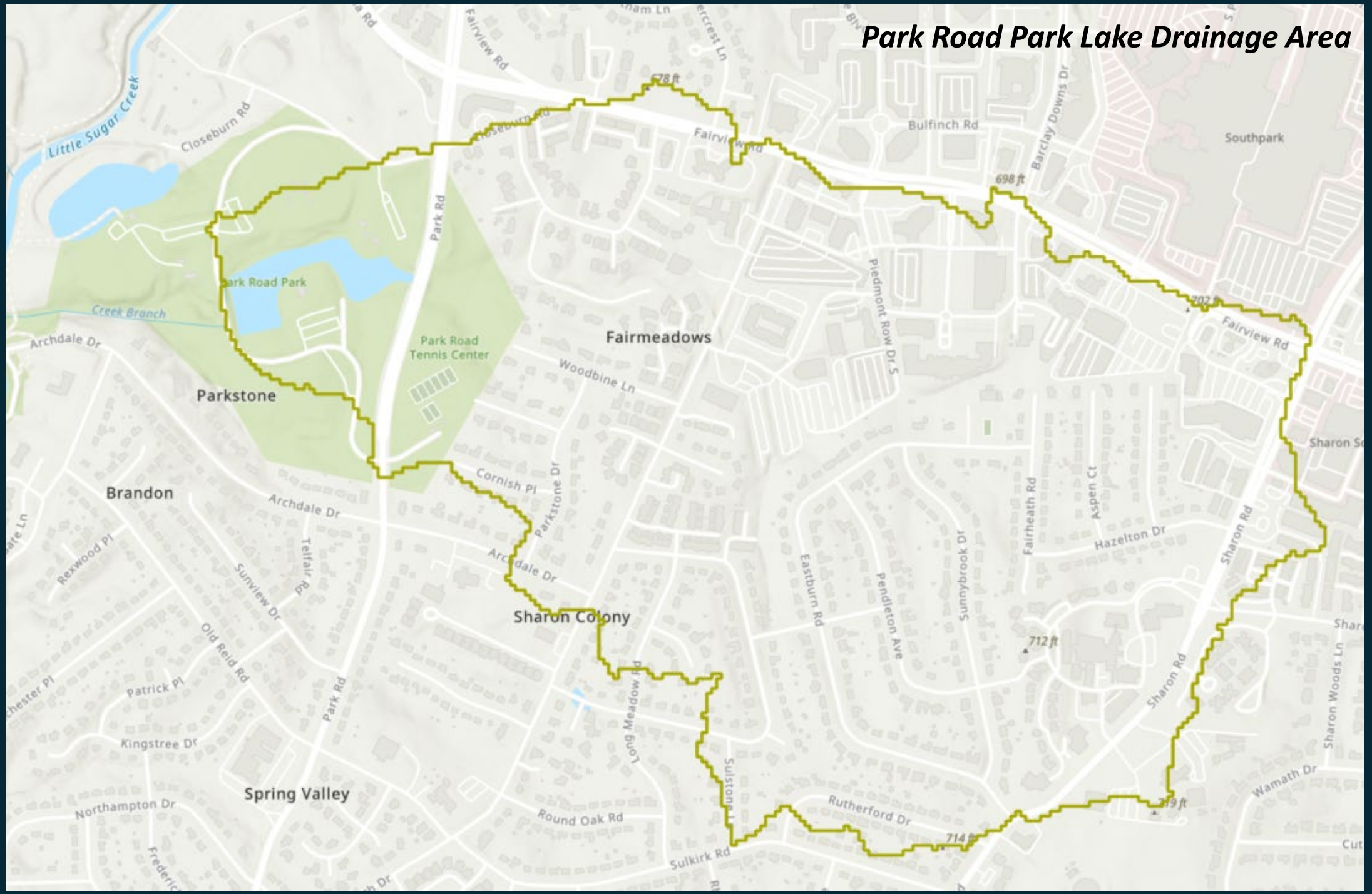
- Drainage area characteristics
  - 470-ac mature urbanized area east to Fairview and Sharon Rd
  - Largely residential and office/commercial

- Large majority of water enters from stream passing through culvert under Park Rd

- Pond discharges to small receiving stream that outlets into Little Sugar Creek above Archdale Dr.


Park Road Park Lake Drainage Area
Little Sugar Creek
Closeburn Rd
Fairview Rd
Park Rd
Bulfinch Rd
Barclay Downs Dr
Southpark
678 ft
698 ft
702 ft
Park Road Park
Creek Branch
Park Road
Tennis Center
Fairmeadows
Piedmont Row Dr S
Woodbine Ln
Archdale Dr
Parkstone
Brandon
Cornish Pl
Parkstone Dr
Rexwood Pl
Telfair Rd
Sunview Dr
Old Reid Rd
Patrick Pl
Kingstree Dr
Spring Valley
Northampton Dr
Round Oak Rd
Sharon Colony
Long Meadow Rd
Sulstone Ln
Sulkirk Rd
Eastburn Rd
Pendleton Ave
Sunnybrook Ct
Fairheath Rd
Aspen Ct
Hazelton Dr
Sharon Rd
712 ft
Rutherford Dr
714 ft
719 ft
Wamath Dr
Sharon Woods Ln

Background

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- Park has had history of sedimentation and "shallowness" particularly in upper section

- Pond improvement projected completed 2011
  - Pond focus was to address failing riser/barrel and flume on backside of dam
  - Included water quality enhancements
  - Walking trail and other park amenity improvements

2001 Drought Conditions

Previous Park Road Park Pond Improvement Project
(2009 – 2011)

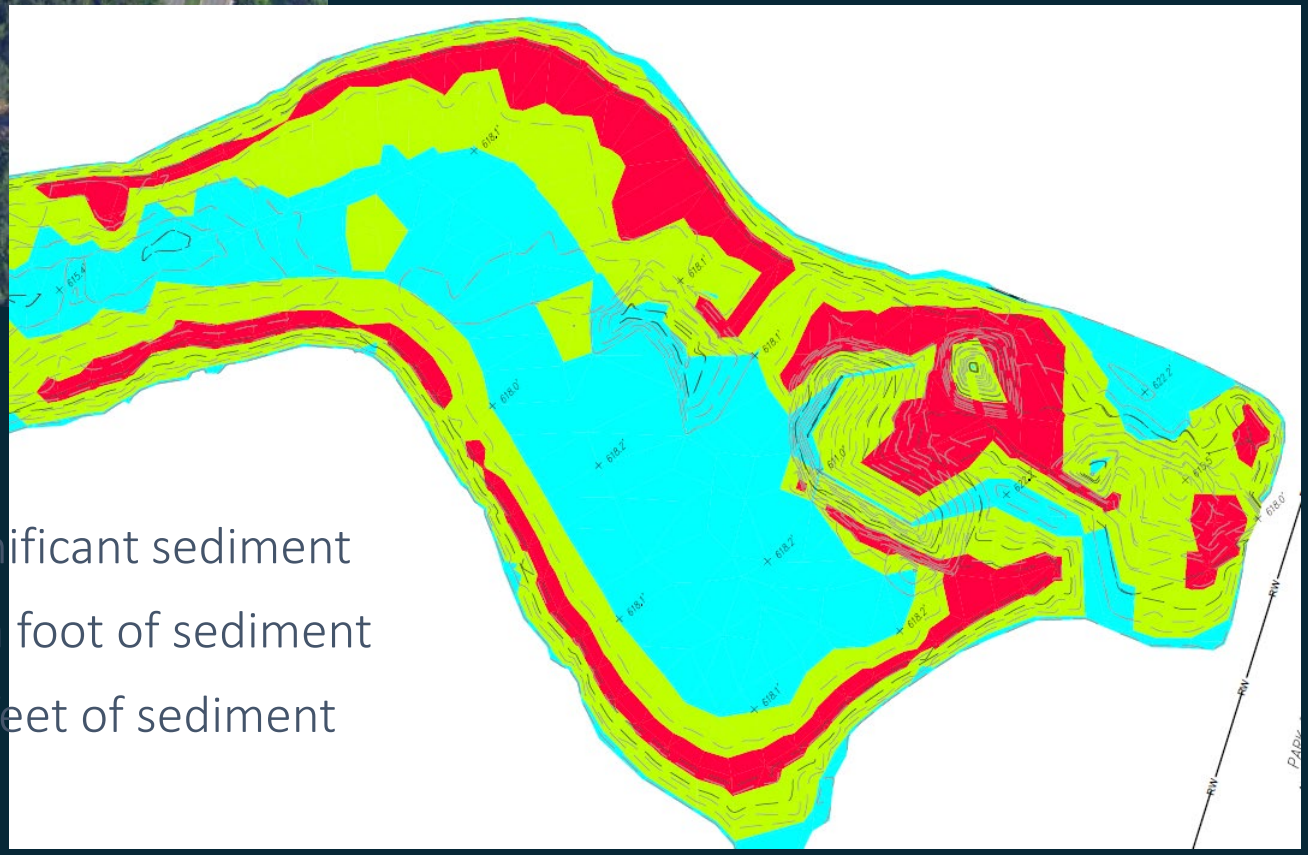
Why We're Here

Mecklenburg County
Park and Recreation

- Pond continues to experience sedimentation and "filling in" in upper section (visible "islands")
  - Sub-optimal pond depth/volumes
  - Exacerbates blue-green algae growth
  - Results in reduced pond function and healthy aquatic ecosystem

- 2022 study quantified sedimentation and water quality metrics
  - "Hyper-eutrophic" (excessive nutrients)
  - 14,500 cy (9 ac-ft) of sediment

Park Road Park Pond Aerial and Sedimentation Estimate (2024)



No significant sediment

Up to a foot of sediment

1 to 3 feet of sediment

Project Overview

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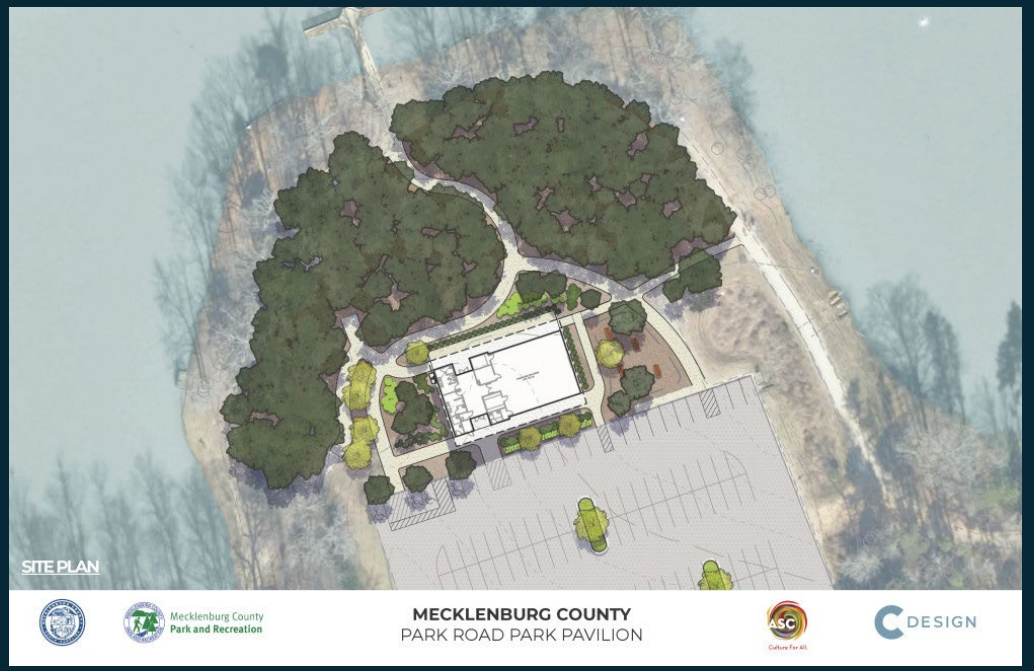
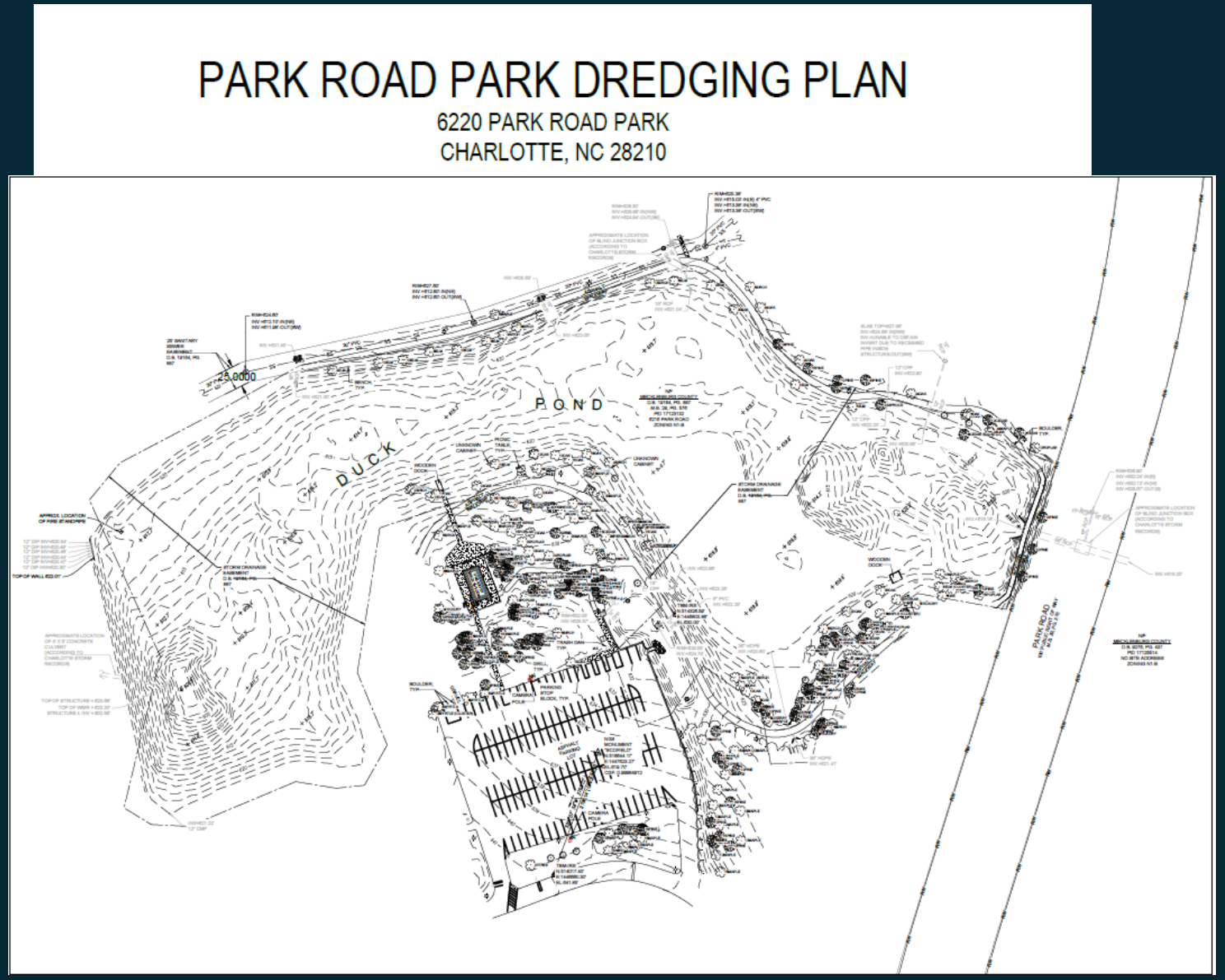
- Design, permitting, and construction for pond dredging and enhancements

- Dredging project is separate, but being performed in conjunction with Pavilion improvement project



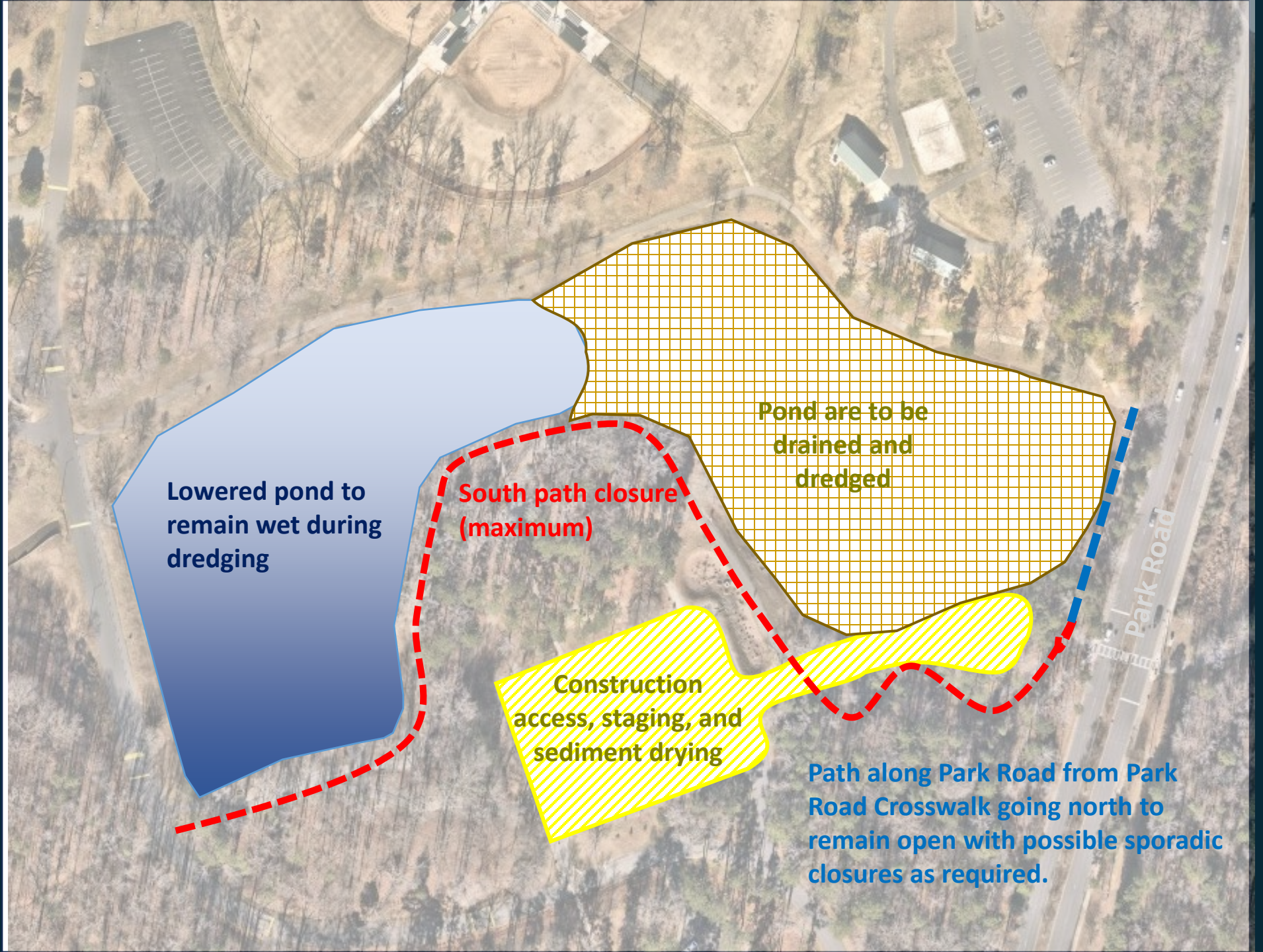
Pavilion Improvement Concept Plan



Project Phases

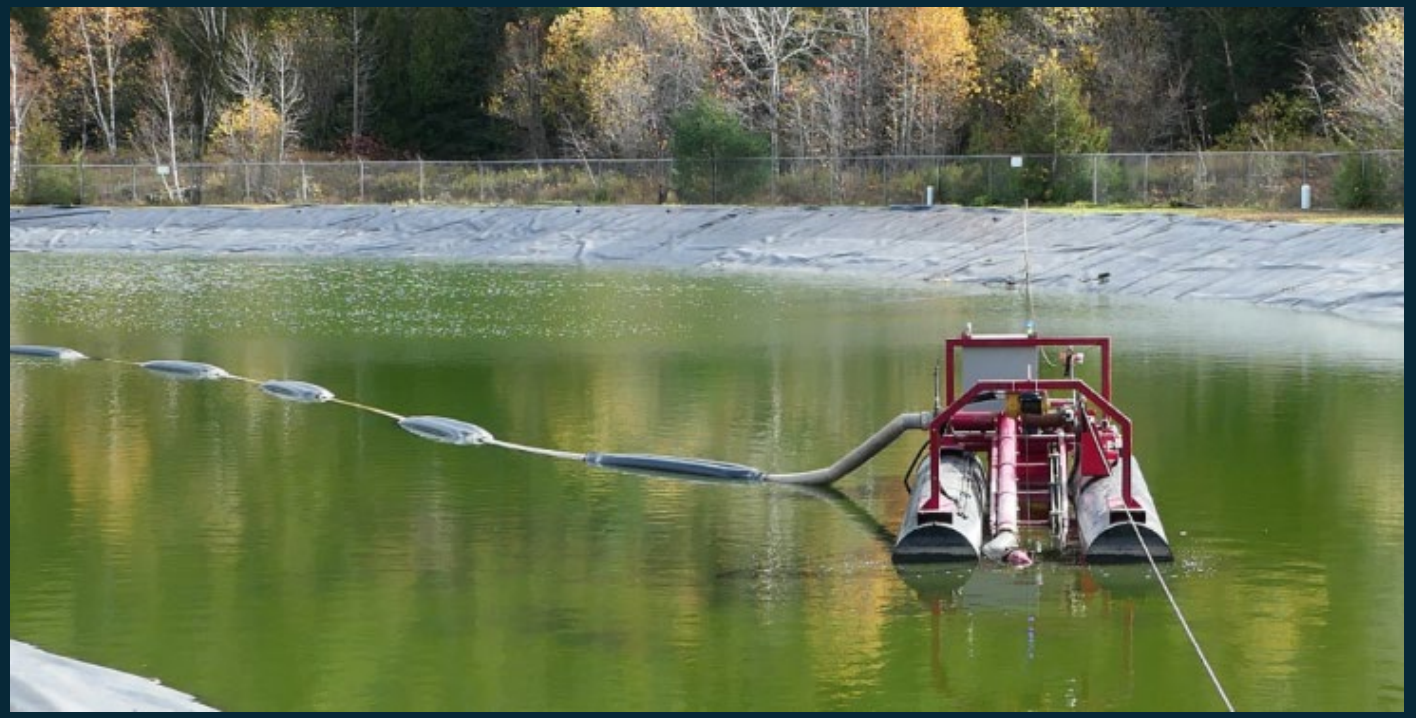
- Outreach/Coordination
- Data Collection
- Evaluation and Design
- Construction Documents
- Permitting and Agency Approvals
- Contractor Bidding
- Construction
- Clean-up and Close-Out

Pond During Construction



Mechanical Dredging Examples

Hydraulic Dredging Examples



Proposed Schedule

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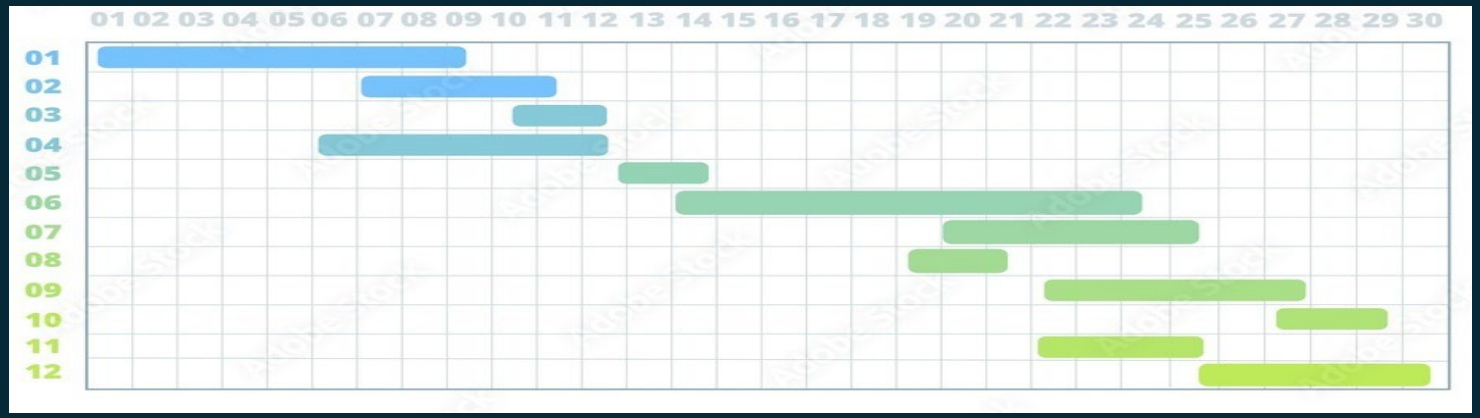
- March/April: Data Collection
- April – August 2024: Evaluation/Design
- August – September 2024: Construction Documents / Permitting
- September/October 2024: Bidding & Contract Award
- November 2024 to June 2025: Construction
  - Pavilion project expected completion in July



What you can expect

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During Construction

- Construction equipment in and out
- Partial trail and pond closure
- Periods of activity and periods of waiting
  - Material will need to dry out for hauling
- Potential odors

Following Construction

- Healthier and more functional pond

Thank You

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Park and Recreation

https://publicinput.com/ponddredging

Contacts:

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Public Input Website Link
www.publicinput.com/ponddredging