# Finance Committee Agenda

## City of Newton
## In City Council

**Monday, September 27, 2021**

**The Finance Committee will hold this meeting as a virtual meeting on Monday, September 27, 2021 at 7:00 pm. To view this meeting using Zoom use this link: https://us02web.zoom.us/j/89555949423 or call 1-646-558-8656 and use the following Meeting ID: 895 5594 9423**

**Item scheduled for discussions:**

**#318-21** **Appointment of David Micley to the Other Post-Employment Benefits Trust Fund**
HER HONOR THE MAYOR appointing David Micley, 90 Mill Street, Newton as a trustee of the Other Post-Employment Benefits Trust for a term of office to expire September 20, 2024. (60 days: 10/08/21)

### Referred to Public Facilities and Finance Committees

**#321-21** **Appropriate $138,620 for the rehabilitation of the Bullough's Pond Dam**
HER HONOR THE MAYOR requesting authorization to appropriate and expend one hundred thirty-eight thousand six hundred and twenty dollars ($138,620) for the purpose of funding engineering design services for the rehabilitation of the Bullough's Pond Dam
**Public Facilities Approved 7-0 (Councilor Laredo not voting)**

### Referred to Programs & Services and Finance Committees

**#281-21** **CPC Recommendation to appropriate $1,440,344 in CPA funding**
COMMUNITY PRESERVATION COMMITTEE recommending appropriation of one million four hundred forty thousand three hundred and forty-four dollars ($1,440,344) in Community Preservation Act funds, with $288,068.80 to come from the Open Space Prior Year Reserve (Act# 5840-3599) and $1,152,275.20 to come from the Prior Year Undesignated Fund (Acct# 5800-3599), to the control of the Planning & Development Department for the implementation of the approved and permitted designs for Levingston Cove including the construction of new erosion controls, plantings, accessibility improvements and the installation of new public amenities including new pathways, benches and decks.
**Programs & Services Approved 6-0-1 (Councilor Wright abstaining) on 09/22/2021**

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The location of this meeting is accessible and reasonable accommodations will be provided to persons with disabilities who require assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA Coordinator, Jini Fairley, at least two business days in advance of the meeting: jfairley@newtonma.gov or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.

## Referred to Programs & Services and Finance Committees

**#347-21 CPC Recommendation to appropriate $420,000 in CPA funding**

COMMUNITY PRESERVATION COMMITTEE recommending appropriation of four hundred twenty thousand dollars ($420,000) in Community Preservation Act funds from the FY22 Budget Reserve (Account# 58R10498-579000) to the control of the Planning & Development Department for the completion of the Athletic Fields Capital Improvements Plan Design FY2022-2025 Project which includes the hiring of on-call consultants to complete the studies, plans, and design work necessary to construct new fields and restore four to six existing sites.

**Programs & Services Approved 7-0 on 09/22/2021**

**Chair's Note:** *It is the Chair's intent to entertain a motion of no action necessary on the following four items.*

## Referred to Programs & Services and Finance Committees

**#99-21 Discussion regarding resources needed for a safe return to in-person learning**

COUNCILORS KRINTZMAN, GROSSMAN, LAREDO, WRIGHT, KALIS, MALAKIE, GREENBERG, LEARY, RYAN, BAKER, ALBRIGHT, MARKIEWICZ AND NOEL Requesting a discussion about the resources necessary for a speedy and safe return to in person learning, in compliance with the March 9, 2021 guidance from the Massachusetts Department of Elementary and Secondary Education and in anticipation of more than $48 million in Federal Aid from the American Rescue Plan

**Finance Held on 03/29/21**

**Programs & Services Held on 03/29/21**

**Programs & Services voted No Action Necessary 7-0 on 09/22/2021**

## Referred to Programs & Services and Finance Committees

**#156-20 Request for comparison of dog license fines**

COUNCILOR ALBRIGHT requesting a comparison of Newton's fine for failure to license a dog to other communities. In addition, requesting an increase in the fine for failure to license a dog.

**Programs & Services Held 8-0 on 04/21/2021**

**Programs & Services voted No Action Necessary 7-0 on 09/22/2021**

## Referred to Programs & Services and Finance Committees

**#157-20 Request for review and changes to off-leash dog ordinance**

COUNCILOR ALBRIGHT requesting a review and possible changes to the off-leash dog ordinance to include:

a) raising fees required by dog walking companies in order to better maintain sites heavily used by dog walkers; and

b) requiring background checks on dog walkers to assure safety of dog owners and dogs; and

c) requesting the development of regulations for dog walking and dog daycare companies to assure appropriate care for dogs.

**Programs & Services Held 8-0 on 04/21/2021**
**Programs & Services voted No Action Necessary 7-0 on 09/22/2021**

## Referred to Public Facilities and Finance Committees

**#366-20 Appropriate $150,000 for the rehabilitation of the Bullough's Pond Dam**
HER HONOR THE MAYOR requesting authorization to appropriate and expend one hundred and fifty thousand ($150,000) from Acct # 6200-3240 Stormwater Management Fund Surplus for the purpose of funding engineering design services and permitting fees for the rehabilitation of the Bullough's Pond Dam.
**Public Facilities Approved 8-0 on 09/09/2020**
**Finance Approved 4-0-2 (Councilors Kalis and Malakie abstaining)**
**City Council recommitted on 10/05/2020**

**#358-21 Authorizing funds to settle claims against the City**
HER HONOR THE MAYOR requesting authorization to transfer funds from several different departments to the Law Department Judgements and Settlements Account in full and final settlement of *Carresi et al v. City of Newton,* 20-cv-11538-DJC and associated grievances.
**Note: A motion for Executive Session may be entertained**

**Respectfully submitted,**

**Rebecca Walker Grossman, Chair**

Ruthanne Fuller
Mayor

# City of Newton, Massachusetts

Office of the Mayor

**318-21**

Telephone
(617) 796-1100
Fax
(617) 796-1113
TDD/TTY
(617) 796-1089
Email
rfuller@newtonma.gov

July 30, 2021

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton, MA 02459

RECEIVED
2021 AUG -2 PM 2:28
CITY CLERK
NEWTON, MA. 02459

To the Honorable City Councilors:

I am pleased to appoint David Micley of 90 Mill Street, Newton as a trustee of the Other Post-Employment Benefits Trust Fund. His term of office shall expire on September 20, 2024 and his appointment is subject to your confirmation.

Thank you for your attention to this matter.

Warmly,

Ruthanne Fuller

Ruthanne Fuller
Mayor

Newton, MA Boards & Commissions

Submit Date: Jul 19, 2021

## Application Form

### Profile

David
First Name

Middle Initial

Micley
Last Name

[redacted]
Email Address

90 Mill Street
Home Address

Suite or Apt

Newton
City

MA
State

02459
Postal Code

### What Ward do you live in?

☑ Ward 2

Primary Phone

Alternate Phone

Floating Point Group
Employer

Director of Sales and Partnerships
Job Title

### Which Boards would you like to apply for?

Other Post-Employment Benefits Trust Fund Trustees: Submitted

### Interests & Experiences

Please tell us about yourself and why you want to serve.

### Why are you interested in serving on a board or commission?

To help Newton fulfill its commitment on its OPEB liabilities in a fiscally responsible way.

David_Micley_Resume_-_2021.pdf
Upload a Resume

**DAVID MICLEY**
90 Mill Street, Newton, MA 02459 | [redacted]

## EDUCATION

**MIT SLOAN SCHOOL OF MANAGEMENT** — Cambridge, MA
*MBA, Finance Track* — 2017 - 2019
- Thesis: Co-authored business plan on streamlining the mortgage lifecycle through blockchain
- 2018 Israel Trek leader; Investment Management Club; GMAT: 740 (97th Percentile)

**EMORY UNIVERSITY** — Atlanta, GA
*BA in Interdisciplinary Studies in Society and Culture, summa cum laude* — 2007 - 2011
- Cumulative GPA: 3.89/4.00, Phi Beta Kappa; Emory Humanitarian Award - awarded to six students by Emory President
- Honors thesis: produced anthropological documentary comparing the daily life of a religious Muslim and a religious Jew

## EXPERIENCE

**Floating Point Group** — Cambridge, MA
***Director of Sales and Partnerships*** — 2020 - Present

*Sales and Business Development*
- Lead company wide sales efforts, directing and implementing sales strategy from lead generation through close
- Initiate and sustain strategic partnerships with ecosystem stakeholders with a focus on top line revenue generation
- Establish and grow company brand through spearheading event, conference, and sponsorship strategy

*Product Management*
- Work with engineering team to synthesize client pain points and integrate iterations in product development plan
- Launch all beta products, managing client onboarding and systematically collecting and responding to client feedback

**BRIDGEWATER ASSOCIATES** — Westport, CT
***Associate Client Advisor*** — 2018 - 2020

*Advisory Services*
- Managed advisory relationships with sovereign wealth and pension funds, representing $15 billion in invested capital
- Partnered with research team, including Co-CIOS and Portfolio Strategists, in conducting and delivering strategic projects for clients - assessing risks, opportunities and operational considerations to help clients achieve their investment goals

*Investor Relations and Marketing*
- Oversaw day to day operations of client book, project managing and communicating with clients on all requests
- Developed and maintained business plans to ensure the team's near-term tactics were aligned with the long-term strategies
- Qualified and cultivated prospective clients, focused on building partnerships with world's largest institutional investors

**TAMID GROUP** — Tel Aviv, Israel
Nonprofit developing U.S. college students through project based engagements with Israeli companies — 2015 - 2017
***Fellowship (Summer Internship Program) Director***

*Leadership and Organizational Development*
- Founded TAMID's Israel office and built team from one to eighteen employees, hired and managed all staff
- Grew Fellowship by three-fold and applicant pool by over 200%, generating working engagements with over 250 startups
- Partnered with Executive Director to grow annual fundraising campaign from $1.7M to $2.7M

**COMBINED JEWISH PHILANTHROPIES** — Boston, MA
***Senior Development Officer*** — 2012 - 2015

*Fundraising and Donor Engagement*
- Managed relationships with 300+ donors from Boston business community through personalized engagement strategies, raising over half a million dollars annually and growing gifts 7% per year with department high 92% donor retention rate

**PROZDOR - THE HIGH SCHOOL OF HEBREW COLLEGE** — Newton, MA
***Director of Recruitment and Admissions*** — 2011 – 2012

- Achieved 82% year-over-year increase in 9th grade new student enrollment, recruiting 143 students from 30 communities

## ADDITIONAL INFORMATION

- 2014 Brookline Town Meeting Member - elected member of town legislature representing Precinct 10
- 2005-2009: Holder of Guinness World Records longest skateboard
- Fluent in Hebrew; former improv comedy troupe member, experienced beginner surfer

**321-21**

Ruthanne Fuller
Mayor

**City of Newton, Massachusetts**
Office of the Mayor

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(617) 796-1100
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(617) 796-1089
Email
rfuller@newtonma.gov

August 2, 2021

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton, MA 02459

Honorable City Councilors:

I respectfully submit this docket item to this Honorable Council requesting an appropriation of $138,620 for engineering design services for the rehabilitation of the Bullough's Pond Dam, Newton, MA.



Bullough's Pond Dam is an approximately 170-foot long earthen embankment. The top of embankment is asphalt-paved Dexter Road. The water level in Bullough's Pond is maintained via an uncontrolled 35-foot-long spillway located toward the middle of the embankment and a gated twin 24-inch diameter low-level outlet, located on the left or west side of the embankment. The upstream and downstream slopes are grassed and heavily vegetated with woody brush and trees. The dam was last rehabilitated 95 years ago in 1926. There is a large area downstream in Newtonville that would receive significant and threatening flooding in the event of an overtopping or dam failure event. This area includes Newton North High School, over 450 homes, commercial areas, Cabot Park and the Mass Turnpike.

In 2017, the State's Office of Dam Safety (ODS) inspected the dam and found it to be in a "Poor Condition" category. The State required the City to do a Phase 2 inspection and to create a plan to bring the dam into compliance.

The Phase 2 dam inspection and report was completed in May 2020. The report recommends rehabilitation of the dam structure. The rehabilitation plan will address reported deficiencies in the follow-up inspections which include:

- Unwanted vegetation in areas of the dam;
- Scarping along the upstream slope and bare soils prone to erosion along the downstream slope;
- Areas of displaced stones from the low-level outlet downstream headwall;
- Area of scour along the downstream channel including at the low-level outlet and along the left and right banks. If erosion of the left bank continues, it could encroach on the toe of the downstream slope;
- Mortar missing from some joints of the spillway training walls;
- Additional unspecified maintenance deficiencies and potential dam safety concerns.

On January 15, 2021, the Department of Public Works issued a one-step Request for Qualifications/ Proposal (RFQ/P) for investigation of alternatives and design of a solution to satisfy ODS requirements while minimizing the impact to the historic site and the landscape of

the dam area and Laundry Brook Forest below. Three highly qualified consulting engineering firms were invited to respond. The three firms were GEI Consultants, GZA Geo-Environmental, and Weston & Sampson Engineers. The selection committee recommended the selection of GEI Consultants as the consulting engineer for the design of the state-mandated rehabilitation of Bullough's Pond Dam. Attached are the selection committee's memo and GEI Consultants' proposal for engineering design services.

Through the selection process Bullough's Pond residents/stakeholders and City Councilors have been engaged and shared input with the City.

Design funds are requested at this time to do the design of the repair work. Construction funds will be requested once design is completed. All project funding is derived from the Stormwater account.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller

Mayor Ruthanne Fuller

City of Newton

DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE COMMISSIONER
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Ruthanne Fuller
Mayor

Date: July 13, 2021

To: Jonathan Yeo, Chief Operating Officer
Maureen Lemieux, Chief Financial Officer

From: James McGonagle, Commissioner

Subject: Request for Docket Item and Funding
Bullough's Pond Dam Rehabilitation Engineering Design Services

I respectfully request an appropriation of $138,620.00 for engineering design services for the rehabilitation of the Bullough's Pond Dam, Newton, MA. See scope and fee attached.

Bullough's Pond Dam is an approximately 170-foot long earthen embankment. The top of embankment is asphalt-paved Dexter Road. The water level in Bullough's Pond is maintained via an uncontrolled 35-foot-long spillway located toward the middle of the embankment and a gated twin 24-inch diameter low-level outlet, located on the left or west side of the embankment. The upstream and downstream slopes are grassed and heavily vegetated with woody brush and trees. The Massachusetts Office of Dam Safety (OSD) database indicates that Bullough's Pond Dam is a Small size structure with a Significant Hazard Potential.

The Phase 2 dam inspection and report has been completed. The report recommends rehabilitation of the dam structure. Numerous inspections since 2017 found the dam to be in poor condition. Reported deficiencies in the follow-up inspections include:

- Unwanted vegetation in areas of the dam;
- Scarping along the upstream slope and bare soils prone to erosion along the downstream slope;
- Areas of displaced stones from the low-level outlet downstream headwall;
- Area of scour along the downstream channel including at the low-level outlet and along the left and right banks. If erosion of the left bank continues, it could encroach on the toe of the downstream slope;
- Mortar missing from some joints of the spillway training walls;
- Additional unspecified maintenance deficiencies and potential dam safety concerns.

On January 15, 2021, the Department of Public Works issued a one-step Request for Qualifications/ Proposal (RFQ/P), and three consulting engineering firms were invited to respond. The three firms were GEI Consultants, GZA Geo-Environmental, and Weston & Sampson Engineers. The selection committee recommends the selection of GEI Consultants as the consulting engineer for the design of the state-mandated rehabilitation of Bullough's Pond Dam. See selection committee memo attached.

Telephone: 617-796-1009 • Fax: 617-796-1050 • Jmcgonagle@newtonma.gov

Design funds are requested at this time to begin and complete the design of the repair work. Construction funds will be requested once design is completed. Please docket this item with the honorable City Council for consideration.

Sincerely,

James McGonagle
Commissioner Public Works

Attachments:

Selection Committee Memo dated June 21, 2021
GEI Consultants Scope of Work and Fee Proposal

Telephone: 617-796-1009 • Fax: 617-796-1050 • Jmcgonagle@newtonma.gov

City of Newton

Ruthanne Fuller
Mayor

**DEPARTMENT OF PUBLIC WORKS**
**ENGINEERING DIVISION**
OFFICE OF THE CITY ENGINEER
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Date: June 21, 2021

To: James McGonagle, Commissioner DPW
Shawna Sullivan, Chief of Staff DPW

From: Louis M. Taverna, P.E., City Engineer

Subject: Bullough's Pond Dam Rehabilitation RFQ/P
Design Consultant Proposal Scoring and Selection

**Recommendation**

The Selection Committee recommends the selection of GEI Consultants as the consulting engineer for the design of the state-mandated rehabilitation of Bullough's Pond Dam.

**Procurement Process**

On January 15, 2021, the Department of Public Works issued a one-step Request for Qualifications/Proposal (RFQ/P), and three consulting engineering firms were invited to respond. The three firms were GEI Consultants, GZA Geo-Environmental, and Weston & Sampson Engineers.

The proposals were originally due on February 12, 2021. The due date was extended via an amendment to the RFQ/P until February 26, 2021. All three firms submitted their proposals on the due date.

The following criteria were used to evaluate the proposals: Relevant Experience/Past Performance (25 points), Cost (25 points), Qualifications and Key Personnel (20 points), Technical Approach (20 points), and Capacity/Organization and Management Approach (10 points).

**Selection Committee**

The Selection Committee was appointed based on the qualifications and skills of the appointees. Most of the Selection Committee members will inherit the responsibility of managing, operating and maintaining the dam once the rehabilitation is completed. The Selection Committee consists of the following city employees:

Jennifer Steel, Chief Environmental Planner and Conservation Agent, Planning and Development Department, 7.5 years city, 30 years total.
Carol Stapleton, Program Manager, Parks, Recreation & Culture, 46 years city, 46 years total.
Ted Jerdee, Director of Utilities, Department of Public Works, 29 years city, 32 years total.
Frank Nichols, P.E., Engineering Project Manager, Department of Public Works, 11 years city, 25 years total.
Louis M. Taverna, P.E., City Engineer, Department of Public Works, 19 years city, 42 years total.
Jonathan Yeo, Chief Operating Officer, Mayor's Office, former MWRA Watershed Manager, 3 years city, 33 years total.

**Proposal Review and Ranking**

The Selection Committee members individually reviewed each proposal. Virtual interviews with each of the three firms were held on May 3, 2021 via Zoom; ninety minutes were allocated for each firm to present their proposal and for questions and answers. The Selection Committee members then scored each firm individually based on the criteria. The scores were combined (averaged) and the results are shown below. The Selection Committee then met as a group to discuss the proposals and the results of the scoring.

| | TOTAL POINTS | RANK | BASE PRICE | OPTIONS | TOTAL PRICE |
|---|---|---|---|---|---|
| GEI Consultants | 464.6 | 1 | $118,620 | $20,000 | $138,620 |
| Weston & Sampson Eng. | 410.8 | 2 | $162,630 | $77,750 | $240,380 |
| GZA Geo-Environmental | 366.3 | 3 | $110,800 | $30,500 | $141,300 |

Based on a detailed review of the proposals, and after interviews were conducted, the Selection Committee unanimously selected the top ranked firm, GEI Consultants, for this design contract.

GEI has worked on thousands of projects across the country for dam engineering work, including engineering designs, emergency action plans, and dam safety compliance. GEI Consultants has been awarded numerous contracts with the Massachusetts Water Resources Authority and has substantial experience performing Phase 1 and Phase 2 regulatory dam inspections for the Massachusetts Department of Conservation and Recreation and several other Massachusetts municipalities.

The Selection Committee was impressed by GEI Consultants' skills, ability, and integrity, all necessary qualities to perform the rehabilitation design work for this contract. GEI Consultants is well qualified, and they offered a very competitive budget and schedule to accomplish the work. They proposed a project completion, barring any unforeseen permitting issues, one year ahead of the other two firms. GEI Consultants' project team includes four senior dam geotechnical engineers, one of whom is a nationally recognized expert in dam rehabilitations; an expert in hydraulics and hydrology; and an expert in environmental permitting. The Selection

Committee was particularly impressed by GEI Consultants approval of presenting several possible innovative dam rehabilitation techniques, including the possibility of a sheet pile wall or I-wall, keyed into the bedrock, as a means to minimize site disturbance and save as many of the existing trees on the upstream and downstream slopes as possible. (Note: The other two firms did not include the exploration of the option of a sheet pile wall deeming it as infeasible for this site). GEI Consultants will meet with and discuss creative rehabilitation options with the Office of Dam Safety, and they have had success in the past gaining approval for innovative dam rehabilitation techniques that emphasis environmental conservation. Very importantly, GEI Consultants is prepared to meet with City staff, City Council, the Conservation Commission, Bullough's Pond Association, and other concerned residents, and organizations for interactive discussions about options and concerns. GEI Consultants recognize that community engagement is a critical aspect of design development. Reference checks from MWRA were favorable.

Weston & Sampson Engineers also scored highly across the spectrum of evaluation criteria, and the Selection Committee ranked them very highly in terms of capability. Their cost proposal was the highest of the three firms by a significant margin. Weston & Sampson Engineers proposed a variety of possible rehabilitation techniques, including core wall enhancement. They noted that the sheet pile wall technique used for the Arlington Reservoir Dam rehabilitation may not work for the Bullough's Pond Dam and that if applied in Newton, would result in large-scale tree loss.

GZA scored third. They had a competitive cost proposal but an approach that focused on over-topping and slope stability and they presented no new innovative dam rehabilitation techniques, other than those presented in their Phase 2 dam inspection report. GZA eliminated the sheet pile wall option as infeasible for the Bullough's Pond Dam site.

**Conclusion**

The Selection Committee unanimously recommends the selection of GEI Consultants as the consulting engineer for the design of the rehabilitation of Bullough's Pond Dam.

cc: Jonathan Yeo, Chief Operating Officer
Ted Jerdee, Director of Utilities
Frank Nichols, P.E., Engineering Project Manager
Jennifer Steel, Chief Environmental Planner
Carol Stapleton, Program Manager, PRC

Telephone: 617-796-1020 Fax: 617-796-1051 Ltaverna@newtonma.gov

February 25, 2021

GEI Consultants

Louis M. Taverna, P.E.
City Engineer
City of Newton
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Consulting Engineers and Scientists

Dear Mr. Taverna:

**Subject: Engineering Design Services for Bullough's Pond Dam Rehabilitation Preliminary and Final Design**

GEI Consultants, Inc. (GEI) is pleased to submit our proposal for Engineering Design Services for the Bullough's Pond Dam Rehabilitation project. We are uniquely experienced and qualified to undertake these services due to our past and current work on thousands of dam and flood control projects in Massachusetts and nationwide. Our relevant experience is demonstrated by our long-time clients such as Massachusetts Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS), Massachusetts Water Resources Authority, the U.S. Army Corps of Engineers (USACE), and numerous other local, state, and federal agencies.

As outlined in our Technical Approach, we believe that improvements can be made to the Phase II stability evaluation that may reduce the extent of the recommended improvements. We have recently helped the ODS develop updates to the state's requirements for seismic evaluations of dams, and we have worked with ODS providing spillway design flood evaluations on many of their own dams.

We understand that the City is looking for alternatives that include the least intrusive, most natural-looking ways of addressing the dam deficiency. Our team members have recent experience with a similar design challenge and used steel-sheet-pile floodwalls to modify a levee in the City of Kent, Washington, that allowed the woody vegetation to remain on the bank of the river.

We have reviewed and understand the scope of work outlined in the Request for Qualifications Statements/Proposals (RFQ/P) issued by the City of Newton. We have prepared our response in accordance with the requirements outlined therein. With this submittal, we make the following certifications and declarations:

- 4.1.1 GEI will meet the deliverables schedule due dates as proposed herein.
- 4.1.2 All cost information, salaries, rates, policies, etc. are current, complete, and accurate.
- 4.1.3 All individuals listed in this submittal are committed to perform on the project and are available to start on the date services are required in the contract.
- 4.1.4 If selected, GEI will sign the City's Professional Engineering Services Agreement. We request a minor text edit included in the attached documents.
- 4.1.5 GEI will meet the insurance requirements for the project, as described in the "City's Professional Engineering Services Agreement."
- 4.1.6 Neither GEI nor any members of the proposed team are currently debarred from doing business with any governmental entity. GEI has no pending or current litigation that might adversely affect performance on this project.
- 4.1.7 GEI will comply with all local, state, and federal requirements concerning the rights of an access for disabled persons.
- 4.1.8 In the last seven years, no petition has been filed by or against GEI, with or without consent, under any federal or state law concerning bankruptcy, reorganization, insolvency or relief from creditors, including, without limitation, a petition for protection of a Bankruptcy Court.



GEI Consultants, Inc.
400 Unicorn Park Drive, Woburn, MA 01801
781.721.4000

- 4.1.9 GEI acknowledges and agrees to treat this RFQ/P and all documents related to it in accordance with the City's directions in "Section 1.2 – Notice," of the RFQ/P.
- 4.1.10 GEI has supplied the information necessary to meet the minimum Threshold Requirements found in Section 4.2 of the RFQ/P, including evidence of financial stability.
- 4.1.11 If selected for award, the "City's Professional Engineering Services Agreement" will be executed by GEI Consultants, Inc. at address provided on this letterhead.
- 4.1.12 We have received the questions and City's responses on 2/3/2021 and Addendum 1 dated 2/11/2021 and have considered this information in preparation of this proposal.

GEI understands that are no minimum required percentages of participation by Minority Business Enterprises and by Women Business Enterprises have been established for this project. While GEI strives to use these businesses as appropriate to achieve our clients' goals, we do not anticipate a need for subcontracted services, having the in-house expertise required to complete this project efficiently and cost-effectively. We look forward to the opportunity to provide engineering services to provide evaluation and alternative designs that would bring the dam into compliance with dam safety regulations.

If you have any questions, please feel free to contact me at 339-221-1527, jnickerson@geiconsultants.com, or Lee Wooten at 781-424-9923, lwooten@geiconsultants.com.

**GEI Consultants, Inc.**

James Nickerson, P.E.
Senior Project Manager/Vice President

R. Lee Wooten, P.E.
Vice President

# 1 Cost

GEI will perform the scope of work presented in this proposal on a time and materials basis. Billings will be based on actual accrued time and material basis in accordance with our Schedule of Fees.

Our not-to-exceed budget to complete the work is $118,620. Our estimated budget by task for the scope of services described in this proposal is included in the table below. As requested, we have included a $20,000 contingency for additional permit applications. The costs presented below include compensation for all direct labor costs, associated indirect costs, profit, and allowable other direct costs for the deliverable. We will not exceed the budget without prior written authorization from the City of Newton.

| Task No. | Description | Not-to-Exceed Cost |
|---|---|---|
| 1 | Project Kickoff Meeting | $1,960 |
| 2 | Additional Field Investigations and Laboratory Testing | $8,490 |
| 3 | Additional Engineering Analyses, Design Computations, and Alternative Recommendations Evaluation Report and Design Report | $32,845 |
| 4 | Preliminary and Final Design and Development of Plans and Specifications | $35,370 |
| 5 | Operations and Maintenance (O&M) Plan | $2,985 |
| 6 | Environmental Permitting Assistance | $17,805 |
| 7 | Construction Bid Phase Assistance | $4,295 |
| 8 | Project Management | $8,750 |
| 9 | Additional Follow-Up Inspections | $6,120 |
| | **Total** | $118,620 |
| | City requested contingency budget for additional permit applications | $20,000 |
| | **Total with Requested Contingency** | $138,620 |

# 4 Technical Approach

## PROJECT UNDERSTANDING

We understand that Bullough's Pond Dam is a 225-foot-long, 14.5-foot-high earthen embankment that was originally constructed in 1664. The dam presently at the site is believed to have been constructed in 1926. The upstream and downstream slopes are inclined at 2H:1V and are covered with grass and heavily vegetated with woody brush and trees. According to historic drawings and investigations in 2019, a concrete core wall is present along the length of the dam embankment. The top of the dam is asphalt-paved Dexter Road with a bridge over the spillway.

The water level in Bullough's Pond is maintained by an uncontrolled 35-foot-long spillway located upstream of the Dexter Road Bridge. An additional downstream weir is located below the bridge. Low flows can be passed via two gated 24-inch-diameter cast iron low-level outlet pipes located toward the left (west) end of the embankment. The gates valves are in a vault in the upstream slope and are exercised by City personnel on a yearly basis. There is a roadway drainpipe outlet on the downstream embankment and another drain outlet along the right abutment downstream of the spillway.

Based on prior inspections by others, the dam was judged to be in poor condition. In response to the poor condition rating, the Massachusetts Department of Conservation and Recreation, Office of Dam Safety (DCR-ODS) issued a Certificate of Non-Compliance and Dam Safety Order dated July 16, 2018. The DCR Order required the City to complete follow-up inspections, a Phase II evaluation, and rehabilitate the dam to bring it into compliance with current dam safety regulations. The Phase II evaluation was performed in 2020 and confirmed the condition of the dam and identified the following specific deficiencies:

- Inadequate minimum freeboard during the SDF and the potential for embankment overtopping.
- Inadequate calculated factors of safety for embankment seepage stability and slope stability.
- Unwanted vegetation in areas of the dam including large trees along the downstream slope.
- Scarping along the upstream slope and bare soils prone to erosion along the downstream slope.
- Deterioration/potentially unstable headwall at the downstream end of the low-level outlet.
- Areas of scour along the downstream channel including at the low-level outlet headwall and along the left and right banks.
- Mortar missing from some of the spillway training wall joints.

The Phase II evaluation provided several alternatives to address the noted deficiencies. Each include alternatives for overtopping protection and improving embankment stability. The preferred alternative included:

- Removal of trees and vegetation on the upstream and downstream slopes. Removal of all roots/root balls associated with trees and vegetation and backfilling resulting voids with compacted sand/gravel.
- Regrading and armoring of the upstream slope with riprap to increase slope stability and reduce erosion (scarping) along the normal water elevation.
- Flattening and armoring of the downstream slope to increase slope stability and provide erosion protection during an overtopping event.

Because of the historic and environmental importance of the dam and the adjacent forest, the City is seeking alternatives that will satisfy ODS dam safety requirements, while protecting the historic site and landscape of the Bullough's Pond Dam and adjacent Laundry Brook Forest. The City's goal is to seek alternative repair measures that include the least intrusive, most natural-looking ways of addressing the dam deficiency.

## PROJECT APPROACH

Our approach to this project will be to focus our alternatives evaluation on the three deficiencies that will have the highest costs and environmental disruption to remediate:

- Overtopping during the SDF
- Trees on the dam
- Slope Stability Safety Factors

We believe that the alternatives that GZA presented in their Phase II evaluation are reasonable, conservative, and will accomplish the goals of remediating these three primary deficiencies. However, we believe there are other alternatives that could be evaluated that may address the City's concerns with historical and environmental impacts. In our alternatives evaluation we will consider these following options:

- **Overtopping Prevention** – We will evaluate the following options to allow the dam to pass the SDF without overtopping.
    - Modifying operational criteria to drawdown the pond in advance of pending storms.
    - Dredging the pond to create more reservoir storage.
    - Modifying the spillway to pass additional flows. The Phase II report included an alternative to modify the spillway that required reconstructing a longer span bridge. We will evaluate two options to modify the spillway crest without modifying the bridge. These include:
        - Constructing a new, longer spillway with a semi-circular or three-sided footprint extending into the pond, allowing the crest to pass more flow at lower flood levels.
        - Adding flashboards that can trip at higher flows allowing more flow at peak pond levels.
- **Overtopping Protection** – We will evaluate options to protect the dam if it is overtopped during the SDF. We will evaluate these options:
    - Leaving the dam in its current condition. The shallow depth and short duration of overtopping, the protection provided by the paved crest, and the width of the dam make it highly unlikely that the dam will wash out during the SDF. We will review the hydrology and hydraulics (H&H) conditions, the mitigating factors, and engage ODS in a discussion about the viability of their support of this option.
    - Installing a sheet pile wall between the concrete core wall at the upstream slope, similar to a recent project our key personnel designed for the City of Kent, Washington (see image below). This option will protect a part of the dam crest even if the downstream slope is washed out.
        - This will allow the sheet pile and core wall to serve as the dam and the downstream slope could be considered unnecessary.
        - With this option, the existing trees on the dam could safely remain in place.

- To accomplish this, we would need to demonstrate and get concurrence from ODS that the steel sheet pile floodwall will provide suitable protection against breaching of the dam and that loss of part of the downstream slope is acceptable.

- Regrading the downstream slope and covering it with grass-covered articulated-concrete-block erosion protection (similar to the alternative recommended in the Phase II report). We designed the first use of this type of dam remediation in the United States. The obvious drawback to this option is the need to remove the existing trees.

*GEI will evaluate overtopping protection options, including installation of a sheet pile wall, similar to a recent project (shown above) designed by our key project personnel.*

- **Slope Stability Measures** – We will evaluate the slope stability of the dam to see if remediation is needed, and, if so, what type of remediation is required. As described below, we expect that the slope stability is more favorable than described in the Phase II report and that it is highly unlikely that any instability would result in a breach of the dam.
  - We believe there is a potential for refinement of the Phase II analyses that would likely demonstrate improved safety factors of the current dam geometry.
    - Steady-State Seepage at Flood Pool: We believe the previous evaluation is overly conservative and could be improved in the following ways:
      - The selected drained friction angles (31 degrees for the embankment fill and 29 degrees for the fine sand) are conservative. We believe higher shear strengths could be justified and would improve safety factors.
      - The identified critical failure surface includes most of the downstream slope but leaves most of the relativity wide asphalt-covered dam crest intact. If the reported critical surface was to fail, the remaining portion of the dam would be enough to retain the reservoir. Failure surfaces that include the downstream slope and most of the embankment crest will demonstrate higher safety factors, and these would be more appropriate to demonstrate

the dam's stability during the flood condition if the overtopping issue is eliminated.

- The analysis assumes a steady-state seepage condition caused by the flood event. However, the H&H study includes a hydrograph demonstrating that the flood peak has a very short duration. A transient seepage evaluation would likely demonstrate that pore water pressures inside the embankment during the flood are lower than what was used in the stability evaluation, which would show improved safety factors.

- Earthquake Loading: In our opinion, the current earthquake assessment in the Phase II report is overly conservative. The analysis was performed with a 0.218g horizontal acceleration in their pseudo-static analysis, which, in our experience, is significantly higher than required for this dam. We have recently worked with the ODS to develop an update to the State Dam Safety Regulations, providing clearer guidance on the appropriate seismic loading for embankment dams in Massachusetts. We are confident our seismic evaluation will result in higher safety factors for the earthquake loading case.

## SCOPE OF WORK

We propose to perform the scope of work described below as requested in the RFQ/P.

### TASK 1 – PROJECT KICKOFF MEETING

We will meet with City personnel at a kick-off meeting. The purpose of the kickoff meeting will be to:

- Introduce key project management and subject matter technical expert personnel and establish connections between GEI and the City personnel.
- Review the scope in detail and confirm or refine the overall project schedule and deliverable expectations.
- Review the history of the project and key challenges and confirm path forward to resolution.
- Review list of available information. Identify any data gaps and develop a plan to collect the information.
- Review site access, locations of laydown areas, and other logistical site constraints.
- Review health and safety requirements and site-specific considerations.

We will make a site visit prior to the kick-off meeting to observe the current conditions and discuss the various deficiencies, associated rehabilitation design concepts, and site access and staging areas for construction. We will also incorporate this site visit as one of the additional inspections required in Task 9.

### TASK 2 – ADDITIONAL FIELD INVESTIGATIONS AND LABORATORY TESTING

We will conduct site visits and field investigations to support the evaluation and design efforts. This will include:

**Developing Health and Safety Plan:** Prior to any on-site activities, a site-specific Health and Safety Plan (HASP) will be developed that will incorporate specific activities for the planned work. The HASP will

include procedures per the Commonwealth of Massachusetts COVID-19 guidelines and procedures for all construction sites and workers at public work facilities.

**Performing Test Pits:** GEI will perform one (1) half-day site visit to complete three (3) hand-excavated test pits to verify the thickness of topsoil in areas that may be stripped during construction and to obtain three (3) samples to support the downstream slope filter design. Before excavating, GEI will submit a Chapter 253, Part A permit to DCR for approval, and perform utility clearances with Dig Safe and pertinent local authorities.

The test pits will be excavated using hand tools and backfilled with onsite material. No surface restorations or plantings at the test pit locations are planned. We will perform up to three (3) geotechnical grain size analyses [ASTM D6913] on the samples collected below the topsoil.

**Performing Sediment Probes:** We will perform sediment probes to evaluate the extent of the soft sediment thickness along the upstream slope and toe to support the design of upstream slope improvements and evaluation of dewatering options. GEI will conduct a depth of refusal (DOR) survey in Bullough's Pond, which will consist of pushing metal rods through impounded soft sediment to the top of the stiffer underlying material. The probe penetration will be measured to document the thickness of the sediment. The DOR survey will be performed from a boat provided by the City of Newton and field staff will use a GPS to log the location of each of the DOR probes performed. GPS location data will be used to update the existing conditions of the upstream slope of the dam. The probing will be performed in one day of field work. The probes will be limited to the area within 30 feet of the upstream toe of the dam.

**Collecting Sediment Samples:** We proposed to collect three (3) sediment samples from locations upstream of the dam during the sediment probing program. The samples will provide information to assess the impacts of sediment management on the potential repair alternatives.

The samples will be composited across the thickness of the soft sediments encountered at each sample location. Based on the anticipated total water depth, we assume that we will collect the samples manually using hand tools from the boat provided by the City of Newton during our probing effort.

The samples will be delivered to a state-licensed laboratory to be analyzed for the following parameters required in 314 CMR 9.00 and on Massachusetts Department of Environmental Protection (DEP) form BRP WW 07, 08 (Dredging):

- Volatile organic compounds (VOCs)
- Polycyclic aromatic hydrocarbons (PAHs)
- Extractable petroleum hydrocarbons (EPH)
- Polychlorinated biphenyls (PCBs) by NOAA summation on congeners
- Total metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc)
- Percent moisture
- Total organic carbon
- Grain size analysis
- Volatile solids
- Toxicity Characteristic Leaching Procedure (TCLP), if necessary

**Observing Low-Level Outlet Inspection:** We will make one (1) site visit to observe the existing condition and configuration of the existing Low-Level Outlet (LLO) gate valves while the City of Newtown Department of Public Works performs a CCTV inspection of the LLO discharge pipes downstream of the gates. We assume the City will pump excess water from the existing gate chamber so we can make observations by video or camera inspection. No GEI staff will enter the confined space.

## TASK 3 – ADDITIONAL ENGINEERING ANALYSES, DESIGN COMPUTATIONS, AND ALTERNATIVE RECOMMENDATIONS EVALUATION REPORT AND DESIGN REPORT

We will perform the following engineering analyses to support the alternative evaluation and final design:

**Alternative Evaluation:** We will evaluate the alternatives outlined in our Project Approach, including:

- Modifying operational criteria to drawdown the pond in advance of pending storms.
- Dredging the pond to create more reservoir storage.
- Constructing a new, longer spillway extending into the pond to pass more flow at lower flood levels.
- Adding flashboards that can trip at higher flows allowing more flow at peak pond levels.
- Installing a sheet pile wall between the concrete core wall at the upstream slope to address stability and trees.
- Installing articulated-concrete-block overtopping protection.
- Leaving the dam in its current condition.
- Updating Earthquake and Flood Pool slope stability analyses of the existing dam.

Each alternative will be evaluated for its technical feasibility by engineering calculation and will include a description, approximate dimensions or area of improvement, and an opinion of probable cost.

We recognize that the City has already invested in developing a hydrologic and hydraulic model of the existing dam. We request that the City provide the previously developed model so that we can review, check, and modify it as necessary to evaluate our alternatives. However, we understand that the City may not be able to provide this model, and, if so, we will develop our own model for option evaluation.

We will prepare an Alternative Evaluation report to summarize our assessment to help the City select a technically feasible, and historically, aesthetically, and financially appropriate repair alternative.

**Design Report:** We will prepare final engineering calculations and to support the design of the alternative selected. We assume that the final engineering calculations will include the items listed below. Our scope and budget do not include the design of a new spillway or bridge, if an option is selected that involve those features.

- Updating our slope stability and seepage model for the final design geometry.
- Design of graded downstream filter/drain.
- Design of an overtopping protection alternative (e.g., sheet pile wall or articulated concrete blocks), if selected.
- Designing civil improvements to scarps and footpaths on the dam.

We will prepare a Preliminary and Final Design Report to present the project overview, design criteria, assumptions, updated H&H, updated stability evaluation, updated alternatives, and basis for the final design. Our design calculations will be included as attachments.

## TASK 4 – PRELIMINARY AND FINAL DESIGN AND DEVELOPMENT OF PLANS AND SPECIFICATIONS

We will prepare Preliminary and Final Designs for repairs to the dam to address the following deficiencies:

- Embankment improvements, including slope regrading and armoring (if selected),
- Seepage filter materials and configuration,
- LLO improvements, including gate replacement or rehabilitation and pipe lining, and
- Repairs to the concrete and stone masonry components of the dam.

We will prepare preliminary design plans, technical specifications, and an updated opinion of probable construction costs for the proposed dam rehabilitation for review by the City. The City will prepare up-front boilerplate documents (e.g., bid instructions, agreement, insurance, and bonding requirements) and the consultant will provide technical specification sections.

We expect that our Preliminary and Final Design packages will include:

- **Drawings:** We will provide up to 9 design drawings. Our assumed list of drawings is:
  - G-1: Cover Sheet/Drawing List
  - G-2: General Notes
  - G-3: Erosion Control Plan
  - C-1: Existing Conditions Plan
  - C-2: Plan of Improvements/Grading Plan
  - C-3: Overtopping Protection Details
  - C-4: Earthwork/Filter Details
  - S-1: Concrete and Masonry Repair Plan/Details
  - S-2: Low-Level Outlet Repairs
- **Technical Specifications:** We will prepare the following technical specifications
  - Summary of Work
  - Measurement and Payment
  - Project Management and Coordination
  - Submittal Procedures
  - Construction Facilities and Temporary Controls
  - Erosion and Sediment Control
  - Contract Closeout
  - Site Clearing
  - Earthwork
  - Riprap and Riprap Bedding
  - Drainage Structures
  - Concrete Rehabilitation
  - Masonry Rehabilitation
  - Site Restoration and Seeding
- **Bidder Qualifications:** We will prepare bidder qualification requirements that the City can include in their up-front bid instructions. The bidder qualification requirements will be to solicit bids from

Contractors that are experienced, qualified, and have successfully completed similar dam rehabilitation projects.

- **Engineers Opinion of Probable Construction Costs:** We will prepare an engineer's opinion of estimates for probable construction costs. The cost estimates will be based on quantity take-offs and on unit prices based on recent experience with other dam rehabilitation projects, published MassDOT Bid tabulations, and general cost estimating guidance.
- **Estimate for On-site Resident Engineer Representation:** We will prepare a preliminary construction schedule and outline the requirements for on-site resident engineer representation, including an estimate of costs.

**Design Submittals:** As requested by the City, our Preliminary Design will be a 25% submittal that will be intended to define the scope and extent of the repairs. We assume the City will provide consolidated review comments. Upon receipt of comments, we will begin our Final Design. Final Design documents will be provided to the City for final review. We will incorporate the City's comments into a final 100% Design submittal that the City can include in their preparation of the bid package. The final design will include two (2) hard copies of the final contract plans and technical specifications, which will be stamped and signed by a Professional Engineer licensed in the Commonwealth of Massachusetts. All other submittals will be in PDF format.

## TASK 5 – OPERATIONS AND MAINTENANCE (O&M) PLAN

We will prepare an Operations and Maintenance plan for future dam operations that will meet the requirements of the Chapter 253 Dam Safety Permit. The O&M plan will include the following:

- Routine Maintenance Measures including measures to control and unwanted vegetation on the dam.
- Recommended observations for seepage, erosion, and other indicators of stability problems with the embankments of the dam.
- Recommended instrumentation (if applicable).
- LLO operation and maintenance.

The draft O&M plan will be submitted to the City for review. We have assumed we will receive a consolidated set of review comments from the City and will prepare a final O&M plan. The plan will be submitted in PDF format (no hardcopy).

## TASK 6 – ENVIRONMENTAL PERMITTING ASSISTANCE

We will prepare documentation for the filing of applications for the above-referenced permits and approvals, including all application forms, plans, project descriptions, and abutter notifications. We will prepare and have published all public notices required under these permit programs. Drafts of all applications will be submitted to the City for review and approval prior to submission to the regulatory agencies. We anticipate that the following permits and approvals will be required for the proposed rehabilitation of the Bullough's Pond Dam.

- Order of Conditions from the Newton Conservation Commission, pursuant to the provisions of the Massachusetts Wetlands Protection Act (M.G.L.c. 131, s. 40) and City of Newton Floodplain/Watershed Protection District ordinance.

- Water Quality Certification from the DEP, pursuant to the provisions of Section 401 of the Federal Clean Water Act of 1972.
- Dam Safety Repair Permit from the Massachusetts Department of Conservation and Recreation, ODS, pursuant to the provisions of M.G.L.c.253.
- Department of the Army General Permit for Massachusetts (GP1) from the USACE, pursuant to the provisions of Section 404 of the Federal Clean Water Act of 1972. Concurrent with the filing of documentation with the USACE, GEI will submit a complete Historic Property Notification Form with the Massachusetts Historical Commission. This filing will serve the dual role of achieving compliance with both State and Federal historic preservation statutes.
- A Project Notification Form will be filed with the Massachusetts Historic Commission in accordance with 950 CMR 71.00.

GEI will attend one (1) meeting in Newton and two (2) virtual public hearing meetings during the review of the project by the Newton Conservation Commission in support of the filing and will coordinate the agency reviews of all filed applications, including preparing and submitting responses to agency comments/questions.

GEI will prepare a summary informational package with preliminary designs to the City for distribution. The City will distribute the package to the City council, the Conservation Commission, the Parks, Recreation and Culture Commission, Abutters, and the Bullough's Pond Association (BPA) to solicit public feedback. GEI will participate in up to three (3) remote public informational meetings to present the project.

Although the Scope of Services provided as Attachment A to the RFQ/P identifies several additional permits/approvals as possibly being required, it is not clear at this time that they will, in fact, be necessary. Accordingly, GEI will complete the following subtasks to ascertain applicability. If found to be applicable to the project, as designed, appropriate applications and documentation will be prepared and filed as an additional service using the City's established contingency budget.

- Waterways License from the DEP pursuant to the provisions of M.G.L.c. 91 – GEI will consult with the DEP to determine if a Waterways License will be required for the proposed reconstruction of the dam. Bullough's Pond is not a Great Pond, and it does not appear that reconstruction work will occur within a non-tidal river or stream on which public funds have been expended for stream clearance, channel improvement, or any form of flood control or prevention work; therefore DEP's jurisdiction pursuant to the Waterways Act is questionable. If such jurisdiction is established, a Waterways License application will be required.
- Massachusetts Environmental Policy Act (MEPA) project review pursuant to the provisions of M.G.L.c. 30, s. 61-62 – GEI will assess the applicability of MEPA as the design of the dam rehabilitation is advanced. Specific project impacts will be assessed against the MEPA review thresholds specified at 301 CMR 11.03(1, 2, 3, and 10) to determine if a filing will be required. If required, GEI will prepare the appropriate forms (i.e., Environmental Notification Form) and documentation to secure a Final Certificate from the Secretary of Energy and Environmental Affairs.

## TASK 7 – CONSTRUCTION BID PHASE ASSISTANCE

We will assist the City in the bidding process by:

1. Attending one (1) pre-bid meeting at the site.
2. Considering bid-phase questions and issuing up to two (2) Clarifications or Addenda.
3. Tabulating the bids.
4. Checking references of the selected bidder.
5. Issuing an opinion memorandum regarding the responsiveness of the bidders and a recommendation regarding the acceptance of the apparent low bidder.

### TASK 8 – PROJECT MANAGEMENT

We will perform the project management tasks described below throughout the work to coordinate with the City staff and report on progress to City Management. For budgeting purposes, we assume that we will perform these activities for 10 months.

1. Project Management – We will review the project schedule, progress, and budget throughout the project.
2. Project Meetings – We will attend up to three (3) meetings with the City to discuss progress and design plans. We expect these will occur:
    a. At the conclusion of the field investigations (Task 2)
    b. Completion of the alternative evaluations (Task 3)
    c. Following submittal of the preliminary (25%) design (Task 4)

    The RFQ/P requested the consultant meet with members of the Department of Public Works with the Bullough's Pond Association, the Department of Parks and Recreation (including the Tree Warden), the City Council, the Conservation Commission Agent, and the Conservation Commission. We assume the City will invite these stakeholders to one of the above meetings as they see fit.
3. Budget Management & Reporting – We will provide the City with regular updates on the project. This will include a monthly progress reports, which will be prepared and submitted with our invoices. The report will include work completed and an update on the project budget.

### TASK 9 – ADDITIONAL FOLLOW-UP INSPECTIONS

It is understood that the July 2018 DCR Certificate of Non-Compliance and Dam Safety Order requires follow-up inspections every 6 months until the repairs are complete. The most recent follow-up inspection was performed in April 2020. We will perform up to four (4) additional follow-up inspections at 6-month intervals during design and construction. A registered professional engineer experienced in dam engineering will perform the follow-up inspections.

## ASSUMPTIONS

Our proposal is based on the following key assumptions:

1. The City will provide all topographic survey and city right of way property boundary survey, in AutoCAD format.
2. A copy of the previous HEC-HMS model and HY-8 hydraulic analysis developed for the dam will be provided to GEI along with associated study reports.
3. The City will provide the location of above and below-ground utilities, City-owned property boundaries (and easements) at and adjacent to the site to support the final design effort in AutoCAD format.

4. The City will delineate and flag wetland and include the flagged locations on the topographic survey in AutoCAD format.
5. The City will perform a CCTV inspection of low-level outlet drainpipes, vault structure, and downstream discharge area.
6. The City will pump excess water from the existing gate chamber so observations can be made by video or camera inspection. No GEI staff will enter the confined space.
7. The City will operate the existing gate valves to lower the water level in the pond.
8. The City will provide a flat bottom boat (by Newton Fire Department) for additional probes in the pond (if necessary).
9. The City will provide bid document up front provisions, including prevailing wage rates.
10. The inflow design flows, reservoir stage area curve, and outflow hydraulics of the current condition as developed in the Phase II hydrological and hydrologic assessment will be used as the basis of our evaluations.
11. Permitting Assumptions:
    a. No Department of the Army Individual Permit will be required for the proposed project.
    b. No Environmental Impact Report (Draft or Final Environmental Impact Report) will be required for the project pursuant to the provisions of MEPA.
    c. No Chapter 91 Waterways license or permit is required for the proposed project.
    d. All wetland boundary delineation flagging will be conducted and mapped by the City and all boundary delineation documentation required by the USACE will be provided to GEI by the City. We assume no wetland replication will be required in the final design documents.
    e. Field surveys for nature resources or habitat will not be required or will be performed by the City and provided to GEI.
    f. Not traffic impact studies will be required for permitting.
    g. All application and advertising fees associated with permitting will be paid directly by the City. These fees are not included our proposed budget.
    h. Agency coordination services are limited to a total of 16 hours of labor. Coordination services, in excess of these 16 hours, will be provided when requested by the City, as an additional service.

## PROJECT PLAN AND SCHEDULE

We have developed a schedule in MS Project based on the milestone dates given in the RFQ/P and our proposed task durations and sequence. Our Project Schedule outlines our project work plan and includes our proposed work activities, sequent of events, milestones, and starting and completion dates for the work elements included in our scope of work. As requested, we have included twenty-one (21) workdays for the City to review of each submission of deliverables.

We will provide periodic project schedule updates to demonstrate how the project is tracking relative to the planned schedule to apprise the City and other stakeholders of our activities. We believe that attention to communications and coordination is the key to keeping the project running smoothly, on time, and on budget.

DRAFT #321-21

CITY OF NEWTON

IN CITY COUNCIL

DRAFT

ORDERED:

That, in accordance with the recommendation of the Public Facilities Committee through its Chair Alison Leary and the Finance Committee through its Chair Rebecca Walker Grossman, appropriate and expend one hundred thirty-eight thousand six hundred and twenty dollars ($138,620) for the purpose of funding engineering design services for the rehabilitation of the Bullough's Pond Dam be and is hereby approved as follows:

| | | |
|---|---|---|
| FROM: | Stormwater Current Year Reserve (62A10498-579000) | $138,620 |
| TO: | Bullough's Pond Dam Rehab- Undistributed (7213D401-579500) | $138,620 |

Under Suspension of Rules
Readings Waived and Approved
DRAFT

(SGD) NADIA H KHAN
Acting City Clerk

(SGD) RUTHANNE FULLER
Mayor

Date: _____

281-21

CITY COUNCIL # _____

CITY OF NEWTON

RECEIVED

2021 JUN 22 AM 11:54

CITY CLERK
NEWTON, MA. 02459

DOCKET REQUEST FORM

**DEADLINE NOTICE: Council Rules require items to be docketed with the Clerk of the Council NO LATER THAN 7:45 P.M. ON THE MONDAY PRIOR TO A FULL COUNCIL MEETING.**

**To: Clerk of the City Council** **Date: June 17, 2021**

**From (Docketer): Lara Kritzer, Community Preservation Program Manager**

**Address: Planning Department, Newton City Hall, 1000 Commonwealth Avenue, Newton MA 02459**

**Phone: 617-796-1144** **E-mail: lkritzer@newtonma.gov**

**Additional sponsors: Community Preservation Committee**

1. **Please docket the following item (it will be edited for length if necessary):**

Recommendation from the Community Preservation Committee for the allocation of $1,440,344 in Community Preservation Act funds, with $288,068.80 to come from the Open Space Prior Year Reserve (Account#5840-3599) and $1,152,275.20 to come from the Prior Year Undesignated Fund (Account #5800-3599), to the control of the Planning & Development Department for the implementation of the approved and permitted designs for Levingston Cove including the construction of new erosion controls, plantings, and accessibility improvements, and the installation of new public amenities including new pathways, benches, and decks.

2. **The purpose and intended outcome of this item is:**

- ☒ Fact-finding & discussion
- ☒ Appropriation, transfer,
- ☒ Expenditure, or bond authorization
- ☐ Special permit, site plan approval,
- ☐ Zone change (public hearing required)
- ☐ Ordinance change
- ☐ Resolution
- ☐ License or renewal
- ☐ Appointment confirmation
- ☐ Other: _____

3. **I recommend that this item be assigned to the following committees:**

- ☐ Programs & Services
- ☐ Zoning & Planning
- ☒ Public Facilities
- ☒ Finance
- ☐ Public Safety
- ☐ Land Use
- ☐ Real Property
- ☐ Special Committee
- ☐ No Opinion

4. **This item should be taken up in committee:**

- ☐ Immediately (Emergency only, please). Please state nature of emergency:

- ☒ As soon as possible, preferably within a month
- ☐ In due course, at discretion of Committee Chair
- ☐ When certain materials are made available, as noted in 7 & 8 on reverse
- ☐ Following public hearing

**PLEASE FILL OUT BOTH SIDES**

5. **I estimate that consideration of this item will require approximately:**

| | |
|---|---|
| ☐ One half hour or less | ☒ Up to one hour |
| ☐ More than one hour | ☐ An entire meeting |
| ☐ More than one meeting | ☐ Extended deliberation by subcommittee |

6. **The following people should be notified and asked to attend deliberations on this item. (Please check those with whom you have already discussed the issue, *especially relevant Department Heads*):**

| City personnel | Citizens (include telephone numbers/*email please*) |
|---|---|
| ☒ Lara Kritzer | ☐ |
| ☒ Luis Perez Demorizi | ☐ |
| ☒ Nicole Banks | ☐ |
| ☐ | ☐ |
| ☐ | ☐ |

7. **The following background materials and/or drafts should be obtained or prepared by the Clerk's office prior to scheduling this item for discussion:**

8. **I ☒ have or ☐ intend to provide additional materials and/or undertake the following research independently prior to scheduling the item for discussion. ***

CPC Funding Recommendation, the City's Proposal for the Levingston Cove Improvements Project, and the Project Presentation made at the CPC's public hearing on June 8, 2021.

***(*Note to docketer: Please provide any additional materials beyond the foregoing to the Clerk's office by 2 p.m. on Friday before the upcoming Committee meeting when the item is scheduled to be discussed so that Councilors have a chance to review all relevant materials before a scheduled discussion.)***

**Please check the following:**

9. ☐ **I would like to discuss this item with the Chairman before any decision is made on how and when to proceed.**

10. ☒ **I would like the Clerk's office to contact me to confirm that this item has been docketed. My daytime phone number is:**

11. ☒ **I would like the Clerk's office to notify me when the Chairman has scheduled the item for discussion.**

**Thank you.**

Lara Kritzer
**Signature of person docketing the item**

**[Please retain a copy for your own records]**

City of Newton

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Ruthanne Fuller
Mayor

Barney S. Heath
Director

# Community Preservation Committee
# Funding Recommendation for
# Levingston Cove Improvements Project

**Date:** June 17, 2021
**From:** Community Preservation Committee
**To:** The Honorable City Council
**CC:** Her Honor Mayor Ruthanne Fuller

## PROJECT GOALS & ELIGIBILITY

This proposal requests CPA funding to construct new accessibility, erosion, and passive recreation improvements at Levingston Cove. Levingston Cove is one of four public open space parcels set along the shore of Crystal Lake, a 33-acre glacial kettle pond and Newton's only Great Pond. The crescent shaped cove is bordered by a grassy slope which over time has become severely eroded. Its shoreline pathways are considered to be inaccessible and must serve a combination of needs in several locations to meet the walking, fishing, active and passive recreation demands of the community. The City has actively studied the area for several years now and held public meetings in 2018 and 2019 to gather input which has led to the creation of the current 60% design plan. This is an important site to many in Newton, and the proposed plans attempt to balance the environmental needs of the site with the recreational goals of the community. The recommended CPA funding will allow the City to correct erosion damage, provide accessible walkways and seating areas, install new features such as rain gardens to better deal with water runoff, and establish new passive recreational elements in the landscape.

The project is eligible for CPA funding for the preservation, rehabilitation, and restoration of both a city-wide Recreation resource and a unique Open Space natural resource.

## RECOMMENDED FUNDING

At its regular monthly meeting on Tuesday, June 8, the Community Preservation Committee unanimously recommended, with a vote of 8 to 0, the appropriation of $1,440,344 in Community Preservation Act funding to the control of the Planning & Development Department for the implementation of the approved and permitted designs for Levingston Cove including the construction of new erosion controls, plantings, and accessibility improvements, and the installation of new public amenities including new pathways, benches and decks.

The CPC recommends that the funding of the project be divided between Open Space (20%) and Recreation (80%). The Open Space funding is proposed to be taken out of the Open Space Prior Year

Reserve Account, while the Recreation category funding would come from the Prior Year Undesigned Funds as proposed below:

| Proposed CPA Funding Accounts for the Levingston Cove Improvements Project | | | |
|---|---|---|---|
| **Account Name** | **Account Number** | **Amount Currently Available** | **Proposed Amount for Levingston Cove Project** |
| **Open Space Prior Year Reserve Account** | **#5840-3599** | **$409,689** | **$288,068.80** |
| **Prior Year Undesignated Funds** | **#5800-3599** | **$5,651,255.95** | **$1,152,275.20** |
| | | **Total Project Funds** | **$1,440,344.00** |

**SPECIAL ISSUES CONSIDERED BY THE CPC**

**Community Needs:** Crystal Lake is an important recreational resource not only for the surrounding neighborhood but for the City as a whole. Levingston Cove provides opportunities for fishing and direct water access as well as walking paths and park space. The park has been badly damaged by water erosion and suffers from many of the same over-use and environmental stresses which affect the Crystal Lake area as a whole. The City has been working with Weston and Sampson for several years now to study the existing conditions of the site and develop restoration plans which address the community's needs and goals. Initial public meetings were held on the project in 2018 and a preliminary plan for the site was reviewed by the Parks and Recreation Commission in 2019.

This project is #26 in the City's Capital Improvement Plan (CIP) with a score of 53.8 out of 100 and a stated benefit of improving the area's accessibility, drainage, and water quality and preventing further erosion. Improving the existing shoreline at Levingston Cove meets the City's CIP goal (page 11) to protect existing woods and open spaces and care for the City's Parks and Recreational Spaces. Additionally, the project will meet several goals of the Open Space and Recreation Plan including Goal 3, Objective 3A (Increased accessibility in the City's park land) of Section 8, and Goal 2, Objective 2B #26 (Implement recommendations from the…Restoration of Levingston Cove, Crystal Lake, Weston & Sampson (2019)) of Section 9.

**Funding Uses and Sources:** The recommended CPA funding will be used to cover the construction and material costs associated with implementing the approved Weston and Sampson plans for the Levingston Cove Improvements. As previously noted, the City has already spent several years working on the design documents, which are now at 60%. The City, with some State assistance, has already funded the design costs for the project and City staff will complete the survey work needed for the plans and their permitting. The City will continue to provide staff support throughout the final design, requisition, and bidding processes and will oversee the construction through completion.

**Project Finances:** The funding requested will cover the final construction phase of the project, allowing the City to install accessible features and trails, drainage improvements, erosion controls, and site amenities including benches, a viewing and fishing platform, at-grade access to the pond, and seating areas. The City has provided the funding and staff time to complete the public review and design process and will continue to provide support for the permitting of this project. State funding has been requested to cover the construction oversight for the project, with the City overseeing the work if this funding does not become available. This is the first request to use CPA funding at Levingston Cove.

**Accessibility:** The pathways currently running through Levingston Cove have been degraded by erosion and are not accessible. A major component of this project is the creation of fully accessible walkways and viewing areas for use by all of the City's residents. The City also plans to make accessibility improvements to the pathway connecting Levingston Cove to the Crystal Lake Beach as part of a separate project.

**ADDITIONAL RECOMMENDATIONS** *(funding conditions)*

1. CPA funding will be used for the construction of the Levingston Cove Improvements and the purchase of any materials necessary to complete the approved plans.
2. The CPC shall receive a copy of the 100% construction documents as soon as they are available.
3. Any periodic reports or interim deliverables prepared as part of this project, and any City or State reviews of those deliverables, must be shared with the CPC for online posting.
4. The CPC or its staff may conduct periodic site visits to the project and request photos or updates from time to time for the Committee and public's information.
5. All recommended CPA funds should be appropriated by the City Council within 6 months and expended within two years of the date of any CPC recommendation. If either deadline cannot be met, the applicant should request a written extension from the CPC, which the CPC may grant at its discretion.
6. Any CPA funds appropriated but not used for the purposes stated herein shall be returned to the Newton Community Preservation Fund.

**KEY OUTCOMES**
The Community Preservation Committee will evaluate this project based on its success in completing the finalized and permitted designs for the Levingston Cove Improvements and their ability to address both the environmental needs of the site by controlling erosion and rainwater, and the recreational needs of the site by providing improved views and access to Crystal Lake and its amenities.

**ATTACHMENTS**

- May 21, 2021 Proposal and selected attachments submitted to the CPC for the June 8, 2021 public hearing
- Project Presentation given at the June 8 CPC meeting.

Additional information not attached to this recommendation, including petitions and letters of support, are available on the CPC's website at: https://www.newtonma.gov/government/planning/community-preservation-program/proposals-projects/levingston-cove-improvements-project

281-21

City of Newton

Ruthanne Fuller
Mayor

# Newton, Massachusetts Community Preservation Program
# FUNDING REQUEST

(For staff use)
date rec'd:

☐ PRE-PROPOSAL ☒ PROPOSAL

Last updated October 2020.

Please submit this completed file directly – do not convert to PDF or other formats.
For full instructions, see **www.newtonma.gov/cpa** or contact:

Lara Kritzer, Community Preservation Program Manager
City of Newton Planning & Development Department, 1000 Commonwealth Ave., Newton, MA 02459
lkritzer@newtonma.gov 617.796.1144

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.

| | | | | |
|---|---|---|---|---|
| **Project TITLE** | **Louise Levingston Cove Improvements Project** | | | |
| **Project LOCATION** | Lake Avenue, Newton Highlands, MA 02459. Lakefront Land across from 183,193 and 203 Lake Avenue | | | |
| **Project CONTACTS** | Name & title or organization | Email | Phone | Mailing address |
| **Project Manager** | Luis Perez Demorizi, Open Space Coordinator Parks, Recreation & Culture | lpdemorizi@newtonma.gov | 617-796-1507 | 246 Dudley Road, Newton MA, 02459 |
| **Other Contacts** | Nicole Banks, Commissioner Parks, Recreation & Culture | nbanks@newtonma.gov | 617-796-1502 | 246 Dudley Road, Newton MA, 02459 |
| **Project FUNDING** | **A. CPA funds requested:** $ 1,440,344 | **B. Other funds to be used:** $189,428 | **C. Total project cost (A+B):** $1,629,772 | |
| **Project SUMMARY** | Explain how the project will use the requested CPA funds. You may provide more detail in attachments, but your PROJECT SUMMARY MUST FIT IN THE SPACE BELOW. Use a cover letter for general information about the sponsoring organization's accomplishments. | | | |

Levingston Cove is one of the 4 public open space parcels set along the shore of Crystal Lake in Newton. Crystal Lake is designated as one of the state's Great Ponds; it is a 33-acre glacial kettle pond (actual pond area is 27.5 acres), roughly 10 miles west of Boston. The crescent-shaped Levingston Cove is roughly one-half of an acre; it sits on the shore of Crystal Lake at the intersections of Lake Avenue and Lakewood and Berwick Roads in the Newton Highlands neighborhood. The existing grassy slope and its mostly inaccessible shoreline pathway have eroded severely. There are mature trees and a sparse shrub buffer on the shoreline. The park provides opportunities for sitting and viewing, fishing, nature study, sunbathing, picnicking, and walking. The park also serves as habitat for land- and water-based wildlife. Located further south along the shore is Newton's only supervised, natural area for public swimming known as Crystal Lake Park and Bath house. Crystal Lake currently suffers from extreme stress and overuse within its watershed. Expanded use of the lake for swimming, demand for fishing and boating, increased on-street parking, the encroachment of invasive plants on the natural habitat, and cyanobacteria algal blooms in the water are the primary stressors on the health of the great pond.

Given the parks location within an ecologically sensitive area, this small, well-used area will be receiving improvements that are packed with environmental performance innovation. The current improvements plan will enhance accessibility, slow and redirect stormwater surface run-off, protect and enhance wildlife habitat, overall recreational value and ensure public safety. The conceptual design and current plan has been conducted and produced by Weston & Sampson Inc. and approved by the Newton Parks and Recreation Commission along with many other stake holders, including members of the public. Public meetings were held to request input from the public. Public comment has been considered and incorporated into the preferred plan where feasible within the park's current program.

The plan is in the construction documentation phase and moving toward a shovel-ready project. With CPC funding, the city will be able to move forward with construction. The PRC department has and will continue commitment expend staff time and other resources to manage the project through construction completion.

Luis Perez Demorizi, Open Space Coordinator, has 7 years of experience as a landscape designer 5 of which were spent designing parks, playground, streetscape and inspecting post-construction contractor work in the private sector. He helped manage an 11-million-dollar contract with the City of New York's Department of Environmental Protection's green infrastructure program retrofitting sidewalks, schools, and parks to manage stormwater. For PRC, Luis has managed and supervised the construction of Heartbreak Hill Park at Waban Hill Reservoir (368K value), the design and construction of the athletic field lights at Newton South High School (~450K value), structural field and court lighting assessment at Albemarle Park, Forte Park and Newton South High School tennis courts, retaining wall assessment at Burr Park, Life course trail renovation at Cold Spring Park, and landscape improvements at the Newton Corner traffic islands. He is currently overseeing the design and engineering of the Improvements to Levingston Cove. He is also in the process of developing trail improvements plan at the Marty Sender greenway. Under his oversight, Luis has been able to deliver quality open space projects to the city of Newton. He puts extra focus on minimizing project unknowns when possible. He is also able to connect effectively with other departments, various city commissions and the public.

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.

| **Project TITLE** | **Louise Levingston Cove Improvements Project** | |
|---|---|---|
| **USE of CPA FUNDS** | | **RECREATION** |
| | **Preservation** | x |
| | **Rehabilitate/ Restore** | x |
| **COMMUNITY NEEDS** | From each of at least 2 plans linked to the *Guidelines & Forms* page of **www.newtonma.gov/cpa**, provide a brief quote with plan title, year, and page number, showing how this project meets previously recognized community needs. You may also list other community benefits not mentioned in any plan. | |

Open Space and Recreation Plan Update 2020-2027

- Section 8, Page 141 Goal 2 Objective 2B: Improved City parks, playgrounds, and other recreational facilities.
- Section 8, Page 141 Goal 3 Objective 3A: Increased accessibility in the City's park land.
- Section 9, Pages 152 Goal 2 Objective 2B #26: Crystal Lake: Implement recommendations from the Crystal Lake Management Plan by Woodard & Currant (2020), Crystal Lake Task Force Bath House Study (2010), and **Restoration of Levingston Cove, Crystal Lake, Weston & Sampson (2019)**. Consider an overall Crystal Lake Master Plan for improvements on all the publicly owned parcels:
  - Water quality improvement efforts in the lake and watershed (underway).
  - Crystal Lake Bath House, Beach and Park: Upgrade/replace the existing bath house building, curtail erosion, increase accessibility, expand utility of existing amenities and parking improvements.
  - **Levingston Cove: Implement site improvements to improve erosion, increase accessibility, and utility.**
  - Cronin's Cove: Consider implementing an improvement and restoration plan to curtail erosion, increase accessibility and utility of existing amenities while preserving some of the site's historic character.

Capital Improvement Plan FY2022-2026

- Page 11, *Protecting Woods and Open Spaces & Caring for our Parks and Recreational Spaces* – "…Over the next several years, the FY2022 – FY2026 CIP includes a number of important parks and recreation projects. These include shoreline improvements at Crystal Lake's Levingston Cove…"
- CIP by Priority FY 2022-2026, Priority 26:
  "Renovation of entire lakefront park to include improvements to accessibility, drainage, erosion and water q uality."

**COMMUNITY CONTACTS**

List at least 3 Newton residents or organizations willing and able to comment on the project and its manager's qualifications. No more than 1 should be a supervisor, employee or current work colleague of the project manager or sponsor. Consult staff on the community contacts required for your specific proposal.

| Name & title or organization | Email | Phone | Mailing address |
|---|---|---|---|
| Arthur Magni, Chairman Parks & Recreation Commission | magni@rcn.com | 617-821-8351 | 107 Mt. Vernon Street Newton, MA 02465 |
| Janice Bourque, Co-President Crystal ake Conservancy | jbourque@htgc.com | 617-967-0797 | |
| Schuyler Larrabee, Co-President Crystal ake Conservancy | schuyler.larrabee@verizon.net | 617-864-3870 | |
| Sonya Kurzweil, President Friends of Crystal Lake | sonya@skdc.org | | 203 Lake Ave. Newton, MA 02461 |
| | | | |

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.
Full proposals must include separate, detailed budgets in addition to this page.

| Project TITLE | Louise Levingston Cove Improvements Project |
|---|---|

| SUMMARY CAPITAL/DEVELOPMENT BUDGET | |
|---|---|
| **Uses of Funds** | |
| Planning, design, construction oversight and city staff time (16% of total estimated project cost) | 189,428 |
| Site Preparation / Demolition | 120,532 |
| Earthwork / Drainage and Utilities | $142,994 |
| Paving / Curbing | $36,220 |
| Decking – Cantilevered and On-Grade | $533,325 |
| Retaining Walls and Stairs | $124,598 |
| Site Amenities and Improvements | $63,929 |
| Planting | $86,358 |
| Construction year 2022 escalation (3%) | $33,239 |
| Mobilization, Overhead and Profit (12%) | $132,955 |
| Contingency (20%) | $166,194 |
| **D. TOTAL USES** (should equal **C.** on page 1 and **E.** below) | **$1,629,772** |

| **Sources of Funds** | **Status** (requested, expected, confirmed) | |
|---|---|---|
| CPA funding | Requested | $1,440,344 |
| Approximate staff time for the duration of project @ 10 Hrs. a week for Duration of project (approx. 1.5 yrs) | Expected | $24,255 |
| Conceptual Plan development | Confirmed | $42,878 |
| Topographic Survey Conducted by City of Newton DPW | Confirmed | $8,295 |
| Design Development through Bidding | Confirmed | $89,000 |
| Construction Oversight - | Expected | $25,000 |
| **E. TOTAL SOURCES** (should equal **C.** on page 1 and **D.** above) | | **$1,629,772** |

| **SUMMARY ANNUAL OPERATIONS & MAINTENANCE BUDGET** (cannot use CPA funds) | |
|---|---|
| **Uses of Funds** | |
| Tree Pruning | $50 |
| Site Mowing and String Trimming | $780 |
| Leaf Litter and Branch Removal | $1000 |
| Vegetation Maintenance (Shoreline) | $75 |
| Vegetation Maintenance (landscape plants) | $112 |
| Rain Garden Maintenance & Cleanup (2.3% of Total Capital Cost) | $906 |
| **F. TOTAL ANNUAL COST** (should equal **G.** below) | **$2,923** |
| **Sources of Funds** | |
| Operating Budget | $2,923 |
| | ${amount} |
| **G. TOTAL ANNUAL FUNDING** (should equal **F.** above) | **$2,923** |

| Project TIMELINE | Phase or Task | Season & Year |
|---|---|---|
| Conceptual Design | | 2018-2019 |
| Construction Documents through Bidding | | Winter 2021 thru Fall 2022 |
| Expected Construction Duration | | Fall 2022- Late Spring 2023 |
| | | |
| | | |
| | | |

| Project TITLE | Levingston Cove Preservation/Rehabilitation Project | | |
|---|---|---|---|
| | ↓ Check off submitted attachments here. | | |
| REQUIRED. | | **PHOTOS** | of existing site or resource conditions (2-3 photos may be enough) |
| | | **MAP** | of site in relation to nearest major roads (omit if project has no site) |
| Pre-proposals: separate attachments not required, just use page 3 of form.<br><br>**Full proposals: separate, detailed budget attachments REQUIRED.** | **PROJECT FINANCES** printed and as computer spreadsheets, with both uses & sources of funds | | |
| | | **Development budget:** include total cost, hard vs. soft costs and contingencies, and project management – amount and cost of time from contractors or staff (in-kind contributions by existing staff must also be costed)<br>**Operating/maintenance budget, projected separately for each of the next 10 years** (CPA funds may not be used for operations or maintenance) | |
| | | **Non-CPA funding:** commitment letters, letters of inquiry to other funders, fundraising plans, etc., including both cash and est. dollar value of in-kind contributions | |
| | | **Purchasing of goods & services:** briefly summarize sponsor's understanding of applicable state statutes and City policies | |
| **REQUIRED for all full proposals.** | **SPONSOR FINANCES & QUALIFICATIONS, INSTITUTIONAL SUPPORT** | | |
| | | **For sponsoring department or organization, most recent annual operating budget** (revenue & expenses) **& financial statement** (assets & liabilities); each must include both public (City) and private resources ("friends" organizations, fundraising, etc.) | |
| | | **For project manager: relevant training & track record** of managing similar projects | |
| **REQUIRED for all full proposals involving City govt., incl. land acquisition.** | | **CAPITAL IMPROVEMENT PLAN** | current listing/ranking & risk factors for this project |
| | | **COVER LETTER** | from head of City department, board or commission confirming: current custody, or willingness to accept custody, of the resource and commitment of staff time for project management |
| | **ZONING & PERMITTING** | | |
| | | **Permits required:** including building permits, environmental permitting, parking waivers, demolition, comprehensive permit or special permits (if applicable) | |
| | | **Other approvals required**: Newton Conservation Commission, Newton Historical Commission, Newton Commission on Disabilities, Parks and Recreation Commission, Massachusetts Historical Commission, Massachusetts Architectural Access Board, etc. | |
| | **DESIGN & CONSTRUCTION** | | |
| | | **Professional design & cost estimates**: include site plans, landscape plans, etc. | |
| | | **Materials & finishes**; highlight "green" or sustainable features & materials | |
| **OPTIONAL for all proposals.** | | **LETTERS of SUPPORT** | from Newton residents, organizations, or businesses |

Parks Recreation & Culture Department

Levingston Cove Estimated Annual Operating & Maintenance Costs (2021 Dollars)

| Operation Item | Unit of Measurement per Ye | Quantity | Annual Unit Co | Total Annual Cost |
|---|---|---|---|---|
| Tree Pruning | Annual | 1 | $ 250 | $ 50 |
| Site Mowing and String Trimming | Annual | 1 | $ 780 | $ 780 |
| Leaf Litter and Branch Removal | Season | 2 | $ 500 | $ 1,000 |
| Vegetation Maintenance (Shoreline) | Acre | 0.12 | $ 625 | $ 75 |
| Vegetation Maintenance (landscape plants) | Acre | 0.08 | $ 1,400 | $ 112 |
| Rain Garden Maintenance & Cleanup (2.3% of Total Capital Cost)<br>***Estimated Rain Garden Construction Cost @ 39,413* | Annual | 1 | $ 906 | $ 906 |
| | **Grand Total Annual Operations & Management Cost:** | | | **$ 2,923** |

**City of Newton, Massachusetts**
**Improvements to Levingston Cove at Crystal Lake**
**5/7/2021**

**DRAFT**

60% Progress Cost Estimate

| | Quantity | Unit | | Unit Price | | Total | Notes |
|---|---|---|---|---|---|---|---|
| **SITE PREPARATION/ DEMOLITION** | | | | | | | |
| Temporary Construction Fence | 670 | LF | $ | 10 | $ | 6,700 | |
| Erosion Controls | 1,060 | LF | $ | 8 | $ | 8,480 | |
| Shoreline Protection (Turbidity Curtain) | 480 | LF | $ | 35 | $ | 16,800 | |
| Construction Entrance | 1 | LS | $ | 5,000 | $ | 5,000 | |
| Tree Pruning | 20 | EA | $ | 500 | $ | 10,000 | |
| Tree Protection | 31 | EA | $ | 200 | $ | 6,200 | |
| R&S Flat and Rounded Granite Boulders | 27 | EA | $ | 250 | $ | 6,750 | For reinstallation |
| R&D Handrails | 310 | LF | $ | 12 | $ | 3,720 | |
| Arborvitae Removal | 11 | EA | $ | 200 | $ | 2,200 | |
| Tree Removal | 1 | EA | $ | 1,500 | $ | 1,500 | 10" cal. multistem |
| R&D Walls | 265 | LF | $ | 15 | $ | 3,975 | |
| R&D Concrete Paving | 2,134 | SF | $ | 10 | $ | 21,340 | |
| Strip & Stockpile Topsoil (6" depth) | 1,076 | SY | $ | 12 | $ | 12,907 | |
| R&D Utility Pole | 2 | EA | $ | 1,500 | $ | 3,000 | |
| Removal of Invasive Plant Species along shoreline (+/-600 sf) | 24 | HOUR | $ | 290 | $ | 6,960 | Assumes 25% of the square footage of shoreline zone has invasives present; 2 laborers, a foreman and a PWS for 1 day |
| Misc. Salvage and Demolition | 1 | LS | | $5,000 | $ | 5,000 | |
| | | | **Subtotal** | | **$** | **120,532** | |
| **EARTHWORK / DRAINAGE AND UTILITIES** | | | | | | | |
| Boulder Excavation | 106 | CY | $ | 350 | $ | 36,944 | Assumes no removal of ledge |
| Cut/Fill Excavation | 1,646 | CY | $ | 35 | $ | 57,601 | |
| Rough/Fine Grading | 1,646 | SY | $ | 5 | $ | 8,229 | |
| 6" Perforated Pipe | 30 | LF | $ | 20 | $ | 600 | |
| 6" HDPE Solide Pipe | 76 | LF | $ | 20 | $ | 1,520 | |
| 12" HDPE Solid Pipe | 20 | LF | $ | 30 | $ | 600 | |
| Overflow Drain with Beehive Dome | 5 | EA | $ | 1,500 | $ | 7,500 | |
| Communication Line Undergrounding by Comcast | 1 | LS | $ | 30,000 | $ | 30,000 | |
| | | | **Subtotal** | | **$** | **142,994** | |
| **PAVING / CURBING** | | | | | | | |
| Vertcal Granite Curb | 75 | LF | $ | 35 | $ | 2,625 | |
| Flush Granite Curb | 515 | LF | $ | 35 | $ | 18,025 | At stonedust paving |
| Steel Edger | 515 | LF | $ | 7 | $ | 3,821 | |
| Cast-In-Place Concrete Paving (4" depth) | 88 | SY | $ | 65 | $ | 5,722 | |
| Gravel Base (8" depth) | 60 | CY | $ | 35 | $ | 2,085 | |
| Detectable Warning Mat at Curb Cut | 2 | EA | $ | 300 | $ | 600 | ADA Solutions |
| Accessible Stone Dust Surfacing (stabilized) | 24 | TONS | $ | 225 | $ | 5,400 | Quote from Read Custom Soils |
| Stone Dust Delivery | 1 | LS | $ | 536 | $ | 536 | |
| Gravel Base (8" depth under stone dust.) | 35 | CY | $ | 35 | $ | 1,226 | |
| | | | **Subtotal** | | **$** | **36,220** | |
| **DECKING - CANTILEVERED AND ON-GRADE** | | | | | | | |
| Guardrail at Cantilevered Decking | 223 | LF | $ | 225 | $ | 50,175 | Steel post and rail with mesh insert |
| Steel Structure | 705 | SF | $ | 250 | $ | 176,250 | Estimated between $150k - $200k |
| Concrete Pile Cap (2' depth) | 147 | CY | $ | 1,000 | $ | 146,667 | |
| Gravel Fill (4" depth) | 24 | CY | $ | 65 | $ | 1,587 | |
| Micropiles | 40 | EA | $ | 2,500 | $ | 100,000 | |
| Cantilevered Decking (Composite) | 405 | SF | $ | 88 | $ | 35,640 | Trex or equal |
| On-Grade Deck at Shoreline (Composite) | 240 | SF | $ | 88 | $ | 21,120 | Trex or equal; Note that helical piers will NOT be required |
| Granite Curb surrounding On-Grade Deck | 45 | LF | $ | 35 | $ | 1,575 | |
| Crushed Stone under On-Grade Deck (4" depth) | 9 | CY | $ | 35 | $ | 311 | |
| | | | **Subtotal** | | **$** | **533,325** | |
| **RETAINING WALLS AND STAIRS** | | | | | | | |
| Cheek Wall | 32 | CY | $ | 700 | $ | 22,463 | On top of ex. retaining wall |
| Cast-In-Place Concrete Stairs | 6 | CY | $ | 700 | $ | 3,928 | |
| Granite Block Stair Treads | 15 | EA | $ | 675 | $ | 10,125 | Quote from Swenson Granite |
| Concrete for Granite Block Stairs | 4 | CY | $ | 700 | $ | 3,098 | |
| Handrail at Stairs and Ramps | 241 | LF | $ | 175 | $ | 42,175 | |
| CIP Concrete Foundation for Stone Veneer Walls | 7 | CY | $ | 700 | $ | 4,896 | |
| Granite Cap for Retaining Walls | 333 | LF | $ | 89 | $ | 29,471 | Quote from Swenson Granite |
| Stone Veneer for Ex. Retaining Wall | 880 | SF | $ | 17 | $ | 14,758 | Phone quote from Stoneyard |
| Stone Veneer for CMU Block Wall | 412 | SF | $ | 17 | $ | 6,909 | Phone quote from Stoneyard |
| CMU Block Wall | 1,015 | EA | $ | 2 | $ | 2,223 | Phone quote from Linden and Malden Cement Block Co. |
| Unit Block Retaining Wall | 412 | FF | $ | 55 | $ | 22,660 | Redirock precedent |
| | | | **Subtotal** | | **$** | **124,599** | |
| **SITE AMENITIES AND IMPROVEMENTS** | | | | | | | |
| Wood Guardrail | 515 | LF | $ | 30 | $ | 15,450 | |
| Backed Bench with 2 Armrests | 3 | EA | $ | 1,833 | $ | 5,499 | Dumor Bench 160 |
| Back Bench mounted on Seat Walls | 3 | EA | $ | 3,000 | $ | 9,000 | Bench TBD |
| Relocated Memorial Plaque | 1 | EA | $ | 1,000 | $ | 1,000 | |
| Reinstalled Granite Blocks and Boulders | 27 | EA | $ | 500 | $ | 13,500 | |
| Stabilizing Riverstone at Lake Edge (6" depth) | 15 | TON | $ | 250 | $ | 3,733 | |
| Granite Blocks for Sign Wall (6' length) | 4 | EA | $ | 450 | $ | 1,800 | Quote from Swenson Granite |
| Sign Wall Etching | 2 | EA | $ | 3,000 | $ | 6,000 | Quote from Newton Memorial Art |
| Bike Racks | 3 | EA | $ | 267 | $ | 801 | Bike Rack 290 |
| Dog Waste Receptacle | 1 | EA | $ | 2,382 | $ | 2,382 | Model #TBD |
| Trash Receptacles | 2 | EA | $ | 2,382 | $ | 4,764 | VS Model SD-42 with Domed Lid and Black Plastic Liner and Plaque Decal |
| | | | **Subtotal** | | **$** | **63,929** | |
| **PLANTING** | | | | | | | |
| Loam and Seed (6" loam borrow) | 995 | SY | $ | 6 | $ | 5,969 | |
| Erosion Control Matting | 15,951 | SF | $ | 0.20 | $ | 3,190 | |
| Tree Planting | 7 | EA | $ | 1,200 | $ | 8,400 | |
| **Bank Restoration Planting Area** | | | | | | | |
| Shrub Planting | 40 | EA | $ | 65 | $ | 2,600 | |
| Groundcover/Herbaceous Perennial Plugs | 526 | EA | $ | 4 | $ | 2,104 | 4" plug |
| Bank Stabiliation Area TBD | 269 | EA | $ | 35 | $ | 9,293 | Assumes 18" o.c. avg; assumes 25% coverage of area shown on the plans; mix of shrubs and groundcovers |
| **Slope Planting Area** | | | | | | | |
| Shrub Planting | 80 | EA | $ | 65 | $ | 5,200 | |
| Slope Stabilization Seeding | 361 | SY | $ | 8 | $ | 2,889 | |
| Groundcover/Herbaceous Perennial Planting | 380 | EA | $ | 35 | $ | 13,300 | |
| **Rain Garden / Infiltration Planting Area** | | | | | | | |
| Shrub Planting | 28 | EA | $ | 65 | $ | 1,820 | |
| Groundcover/Herbaceous Perennial Planting | 633 | EA | $ | 35 | $ | 22,155 | |
| Bioretention Soils (12" Depth) | 107 | SY | $ | 60 | $ | 6,393 | |
| Aquatic Edge Planting | 60 | EA | $ | 4 | $ | 239 | Assumes 18" o.c. avg; assumes 25% coverage of area shown on the plans; 4" plug |
| Pine Bark Mulch (3" depth) | 37 | CY | $ | 75 | $ | 2,806 | In slope planting and rain garden areas |
| | | | **Subtotal** | | **$** | **86,358** | |
| **SUBTOTAL** | | | | | **$** | **1,107,957** | |
| Construction year 2022 escalation 3% | | | | | $ | 33,239 | |
| Mobilization, Overhead & Profit (12%) | | | | | $ | 132,955 | |
| Contingency (15%) | | | | | $ | 166,194 | |
| **TOTAL BASE BID** | | | | | **$** | **1,440,344** | |
| | | | CPC Estimate 4/21/2021 | | $ | 1,125,900 | |

Weston & Sampson has assembled a collection of professionals with the qualifications and experience needed to provide planning and design services for Levingston Cove at Crystal Lake. To provide comprehensive services, our team includes highly qualified landscape architects, engineers, and environmental professionals licensed in Massachusetts, as well as technical and support specialists, who have successfully worked on similar projects in Massachusetts and throughout New England over the past several years. **The multi-disciplinary nature of our firm allows us to address important project issues efficiently and seamlessly using in-house staff familiar with the unique aspects of open space/recreational requirements.** Our project team allows us to bring expert credentials to every aspect of this project.

Weston & Sampson has the depth of resources to respond to your project needs and can assure the assignment of highly qualified personnel for all your project tasks and deliverables.

Our project management team of **Eugene Bolinger, RLA** as principal-in-charge and **Cassandra Bethoney, RLA** as project manager will have overall responsibility and accountability for project execution. They will manage the performance of our team members, ensure technical quality at each stage of the project, and monitor personnel assignments and allocations to meet project deliverable and schedule milestones.

Members of our team recently performing site reconnaissance work at a park and open space property on Boston Harbor.

Upon authorization to proceed, our proposed key team members will be immediately available for work. Weston & Sampson is committed to providing quality services and will perform the scope of work using the appropriate staff levels to meet your required schedule and remain within budget. With more than 650 multi-disciplinary professionals, we are confident that we have the depth of staff and resources to successfully complete all obligations associated with your project. We are committed to fully attending to this project and exceeding your expectations at every turn. We will manage your project from our design studio in Boston, with support from our other offices in Foxboro, Reading, and Worcester, as needed.

On the following page, we provide our project team organization chart that details the lines of communication among all our team members, their respective roles and responsibilities, as well as the estimated commitment of time for each member of the team. All team members on the chart will be made available, as needed, to participate in this planning and design effort. At certain points (a given week for instance) 100% of a team member's time may be allocated to the project. We have included summary biographies of our proposed team following our team chart and professional resumes for our team members at the end of this section.

Weston & Sampson

**PROJECT MANAGEMENT**

**Eugene Bolinger, RLA**
PRINCIPAL-IN-CHARGE

**Cassandra Bethoney, RLA**
PROJECT MANAGER

**TECHNICAL REVIEW**

**Brandon Kunkel, RLA**

**ENVIROMENTAL RESOURCES & PERMITTING**

**Blake Martin**

**Anthony Zerilli**

**Melvin Higgins, PWS**

**LANDSCAPE ARCHITECTURE**

**Cassidy Chroust, RLA**

**Michael Easler, ELA, CPSI**

**Rachelle McKnight, RLA, ISA**

**PUBLIC ENGAGEMENT**

**Eugene Bolinger, RLA**

**Cassandra Bethoney, RLA**

**ENGINEERING SUPPORT**

**Thomas Strike, PE**
GEOTECHNICAL

**Nathan Seifert, PE, LEED®AP**
STRUCTURAL

**James Pearson, PE**
CIVL/SITE

## PROJECT MANAGEMENT

**Eugene Bolinger, RLA** will serve as principal-in-charge of your project and will ensure that your project remains a priority of the firm. Gene is a **Massachusetts Registered Landscape Architect** with 30 years of experience in the planning, design, and implementation of open space and recreational facilities. During his accomplished career, he has successfully managed master planning, final design, and construction administration efforts for multi-disciplinary design/streetscape corridors, park, recreation, and open space projects. Gene has led many of our firm's efforts on programs with significant community input and outreach components, helping multiple stakeholders work together to develop long-term solutions to community planning needs, and brings to this project a successful track record of assisting clients in procuring funding for recreational open space projects through the PARC grant funding program.

In addition, Gene has led efforts related to recreational facilities and neighborhood playground amenities at properties in Boston, Danvers, Falmouth, Framingham, Natick, Newton, Somerville, Waltham, Wilbraham, and Worcester. Gene's recent project experience also includes his work on the highly successful redevelopment of Parcel 5 into Mayor Thomas M. Menino Park in Charlestown, Massachusetts (Received 2016 BSA Accessible Design Award). This project required an accelerated schedule and included ADA accessibility/compliance as well as an extensive public engagement component.

**Cassandra Bethoney, RLA** is a **Massachusetts Registered Landscape Architect** with experience that spans a broad range of projects from planning to built work, with a focus on public parks and open spaces, streetscape design, and urban improvement projects. Cassie brings to each project strong critical thinking, pragmatism, and a commitment to quality. Cassie worked on the design and development of landscape architecture improvements to John Harvard Mall in Charlestown; a range of improvements to Boston Common and the Public Garden; master planning and conceptual designs for the Kendall Block of Commonwealth Avenue Mall; and planning and design for improvements to Children's Park, Fallon Field Playground, Harambee Park, LoPresti Park, and Menino Park. She also provided support for Weston & Sampson's efforts on the revitalization of Town Hall Plaza in Arlington; development of a strategic plan for Peddocks Island; and improvements to Lincoln Park, Conway Park, and the North Street Veterans Playground in Somerville.

## LANDSCAPE ARCHITECTURE

**Cassidy Chroust, RLA** is a landscape designer with a background that includes master planning, schematic design, design development, construction documentation, and project management. A newly licensed **Registered Landscape Architect**, Cass has successfully managed numerous park/recreation projects, including the Wayland Parks and Open Space Plan, Harambee Park Master Plan (Dorchester), a comprehensive Master Plan for Crompton Park in Worcester, and the Boston Common Master Plan. His Massachusetts experience also includes multiple urban design projects for the Boston Parks and Recreation Department, including our work at the John Harvard Mall and LoPresti Park; for Foss Park master plan and at Lincoln Park in Somerville; for the redevelopment of Riverfront Park in Springfield; for a high school athletic facility design project in Danvers; for Phases 4 and 5 of the Cushing Memorial Park open space improvement project in Framingham; and for the improvements to Institute Park in Worcester.

**Michael Easler, RLA, CPSI** is a landscape architect with specialized skills in 3D modeling and visual representation. He will support the landscape architecture tasks for this project. A **Massachusetts Registered Landscape Architect**, Mike is also experienced in native landscape planting, environmental research, construction detail development, and playground safety systems. His experience includes his current work at Riverfront Park in Springfield, as well as his efforts on the JJ Lane Park improvement project in Natick, and Mayor Thomas M. Menino Park, for which he developed paving designs and colors for the universally accessible playground area, detailed the historic reuse of industrial keel blocks as seating elements, and developed a low-cost construction system and native sedum/grass planting mixes for the proposed bulkhead meadow. Mike's other Massachusetts project experience includes his work for LoPresti Park in Boston with its synthetic turf field; the athletic complex at Danvers Hill School in Danvers; Albion Park, Lincoln Park, the North Street Playground, and at the Quincy Street open space property in Somerville; for Newton Highlands Park in Newton; and for the Warren and Waldstein neighborhood parks in Brookline.

**Rachelle McKnight, RLA, ISA** is a landscape architect and arborist whose background includes landscape and site design services for a variety of municipal, park, religious institutions, and higher education projects. Her experience includes: parks and recreation master planning, planting design, plaza and public space design, site grading, botanical inventories, trail layout, as well as digital rendering and modeling. Rachelle is proficient in the Adobe Creative Suite, a variety of fine arts, SketchUp, and AutoCAD software. She recently served as Landscape architect/designer responsible for the revitalization of Mill Brook corridor and Wellington Park in Arlington, which included site improvements, vegetation management planning, invasive species removal/control, and bank restoration.

## ENVIRONMENTAL RESOURCES & PERMITTING

**Blake Martin**, Weston & Sampson's environmental resources manager, has over 30 years of specialized experience in water resources and watershed studies. He currently chairs the New England Water Works Association committee on sustainability, focusing on water resource protection and watershed improvements. Recently, Blake's efforts have led to the development of three Water Congresses (2010, 2011, 2012), which brought watershed associations and municipal utility members together to discuss, evaluate, and plan a proactive approach to watershed health. Blake has created innovative GIS approaches to mapping watershed impacts from point/non-point sources. He has managed all our projects for community-wide resource planning and zoning by-law development, including surface water protection plans. His experience includes his watershed and stormwater management work with the Cambridge Water District and close coordination with the Charles River Watershed Association on various water resource protection endeavors.

**Anthony Zerilli** will lead the environmental permitting services required for your project. Tony is an environmental scientist with more than 10 years of professional experience in the environmental and natural resource management field. He has provided permitting and wetland delineation services at various locations and monitored wetlands and construction sites for impacts caused during project construction for numerous communities throughout Massachusetts. His experience includes park/recreation-related permitting for Massasoit State Park in East Taunton for DCR, Mayor Thomas M. Menino Park, LoPresti Park in East Boston, the Whispering Hill Woods project in Woburn, and various park/recreation improvements in Framingham and Worcester. In addition, Tony is certified in the US Army Corps of Engineers methods of wetlands delineation.

**Melvin Higgins, PWS** will provide permitting and environmental resource assistance. A **Professional Wetland Scientist** in our Environmental Resources group, Mel has nearly 20 years of environmental permitting, environmental analysis, and water quality experience, including numerous environmental permitting projects for submittal to local conservation commissions and state/federal agencies. His extensive project experience includes his work on Mayor Thomas M. Menino Park in Charlestown, Massachusetts; various park/recreation improvements in Somerville, Waltham, and Worcester; and for the Whispering Hill Woods project in Woburn; and current work providing permitting and environmental resource services at Massasoit State Park in Taunton and at Draw Seven Park in Somerville on behalf of the Massachusetts DCR.

## PUBLIC ENGAGEMENT

Our professional staff has extensive experience in conducting public participation and communication programs through our work on numerous projects throughout New England. **Gene Bolinger** and **Cassandra Bethoney** have extensive community outreach and public participation experience. In addition to their other assignments, they will support our community engagement efforts for your design project. We have detailed their qualifications elsewhere within this section.

Public participation and engagement is a core component of our expertise and something we take great pride in. Our past design and improvement work at parks, fields, and playgrounds throughout Massachusetts and New England has included many projects with a range of challenges and varying opinions related to specific aspects of a design or improvement. Through careful leadership, everyone can be heard and enrolled into a successful outcome that provides the greatest benefit to the community, its visitors, and the city. No project can be successful without a comprehensive and meaningful public outreach process. To achieve success in this endeavor, an effective design for a revitalized signature park must be authentic in its service to users, visitors, and the surrounding community while honoring its history and its prime location. Our team seeks to establish and maintain valuable communication and cooperation among all those with a vested interest in the project. **To this end, we pledge to work closely with the City of Newton, all project stakeholders, and, of course, residents in an honest, open, and truly productive dialogue that builds trust and promotes the redevelopment of Levingston Cove into a multi-generational recreation amenity that offers spectacular views, access to nature and wildlife, passive recreation, and community gathering spaces.**

## ENGINEERING SUPPORT

**Thomas Strike, PE** is a senior project manager in the firm's environmental and geotechnical program. He has over 20 years of experience with geotechnical engineering design and has been responsible for managing multiple ongoing construction projects. **A Massachusetts registered Professional Engineer,** his specific areas of expertise include foundation design, retaining wall and slope stability analyses, and dam safety engineering.

**Nathan Seifert, PE, LEED®AP,** a team leader in Weston & Sampson's structural engineering department, has more than 25 years of engineering and construction experience. His areas of expertise include reinforced concrete, masonry, structural steel, and timber design, and he is well versed in the International Building Code. **A Massachusetts registered Professional Engineer,** his project experience includes design for new construction and renovation of commercial, multi-unit residential institutional and pharmaceutical/industrial buildings; water/wastewater treatment facilities; and bridges. Nathan also has construction management experience and is a LEED® Accredited Professional.

**James Pearson, PE** will also contribute to our environmental resources/permitting efforts. James is a **Massachusetts registered Professional Engineer** with more than 12 years of experience in design, analysis, and construction for a diverse range of projects, including work involving storm drainage conveyance and treatment systems, site planning and design, water distribution systems, sewer pipelines, and structural and roadway design. His skills include computer-aided site/infrastructure design and modeling, hydrology and hydraulic analysis, floodplain modeling, structural modeling, and surveying. James offers specialized expertise in the design of sustainable stormwater management systems. He has designed new and replacement utilities for both urban and suburban settings, and is experienced in the management of design, bidding, and construction administration project phases.

## TECHNICAL REVIEW

Weston & Sampson is committed to quality assurance and control. To assure that our firm's high standards are maintained, we routinely assign senior staff members to review the project team's work at regular intervals. This quality review is an important element of our approach to provide clear, biddable documents and avoid change orders during construction.

**Brandon Kunkel, RLA** is a **Massachusetts Registered Landscape Architect** with more than 10 years of experience in innovative design and master planning, Brandon's areas of expertise include parks, high-density mixed-use developments, academic and corporate campuses, and natural resource conservation and rehabilitation. Brandon's is currently responsible for the construction administration phase of the new high school athletic facility in the Town of Danvers. Brandon's experience also includes work on the design services for the development of Weir Riverfront Park in the City of Taunton; the design of improvements to LoPresti Park in East Boston, including the artificial turf soccer field; an athletic fields project at the University of Massachusetts Lowell; redevelopment of Riverfront Park in Springfield; Lincoln Park in Somerville; development of a master plan for the 80-acre Merrymount Park in Quincy; and planning/design for the Charles River parklands restoration in Boston.

# EUGENE BOLINGER, RLA

## BACKGROUND

2004-Present
Vice President
Weston & Sampson

2000-2004
Landscape Architect
Weston & Sampson

1988-2000
Landscape Architect
Levy, Eldredge & Wagner Associates, Inc

1986-1988
Landscape Architect
Johannes H. Wagner Associates

1984-1986
Landscape Architect
Storch Associates

## EDUCATION

1983
Master of Landscape Architecture
North Carolina State University

1981
Bachelor of Science
Environmental Design
University of Massachusetts

## PROFESSIONAL REGISTRATION

Registered Landscape Architect
Massachusetts No. 906
New York No. 002213-1
Rhode Island No. 174
North Carolina No. 2153

## PROFESSIONAL SOCIETIES

American Society of Landscape Architects

National Trust for Historic Preservation

Friends of the Boston Public Garden

As a vice president of Weston & Sampson, Gene currently manages more than two dozen municipal projects involving the reconstruction or restoration of city and town commons, parks, playgrounds, athletic facilities, open space properties, and urban design/streetscape corridors. During his more than 30-year career, he has successfully led master planning, final design, and construction administration efforts for multi-disciplinary park, recreation, and open space projects requiring expertise in landscape architecture, civil, structural, geotechnical and electrical engineering, architecture, metals and stone conservation, hazardous waste remediation, and environmental permitting.

For many of his projects, Gene has worked closely with the client to prepare the content for and execute the community outreach/public participation effort. This component of a project can be instrumental in generating constituent goodwill and fostering consensus among the various stakeholders.

## SPECIFIC PROJECT EXPERIENCE

**Master Plan for Two Playgrounds, Newton, Massachusetts.** Principal-in-charge for a master plan for playgrounds serving Newton Upper Falls and Newton Highlands to provide a site improvements plan that would reflect the needs of these diverse communities, guide future park development, and serve as a tool to secure funding from multiple sources. Collaborated with the city's Parks and Recreation Department to develop conceptual and final "preferred" master plans for both properties in response to the needs expressed by various community representatives at public hearings and through a comprehensive park user survey.

**Cheesecake Brook Master Plan, Newton, Massachusetts.** Project manager for a master plan for a section of Cheesecake Brook between Eddy Street and Watertown Street. Worked closely with the city's Planning and Development Department, and held a series of community meetings regarding the potential passive recreational use of the site. Addressed divergent opinions to develop an enhancement program that would satisfy all interested parties. Finalized the master plan and prepared documents for the construction of a Phase 1 program for the site.

**Coes Reservoir Park Master Plan & Design, Worcester, Massachusetts.** Project principal/project manager for the development of a master plan and multiple phases of park improvements for public open space lands surrounding Coes Reservoir. Worked collaboratively with our environmental team on this project that involves cleanup of the former Coes Knife property and dam in conjunction with the park design.

**Warren and Waldstein Parks, Brookline, Massachusetts.** Principal-in-charge for extensive public outreach efforts to craft renovation solutions for these two neighborhood parks to respond to the recreation and open space needs of the community. The designs incorporated a comprehensive restoration approach, including construction of a reoriented and reconfigured baseball field, tennis and

basketball courts, park support building, playground, splash pad, stormwater management systems, and sports lighting, among other features.

LoPresti Park Improvements, East Boston, Massachusetts. Principal-in-charge for the design, permitting, and construction administration work for this waterfront park project, which involved constructing a state-of-the-art synthetic turf field (funded in large part by the United States Soccer Association), realigning pedestrian connections, rotating fields for game play and practice to allow for a more efficient use of the site, and positioning the most-used play elements for improved safety and access. Considerations included sea level rise and site resiliency throughout the design process and exploring iterations of sea wall protection to balance defense against the rising sea and day-to-day access. Ultimately, the design includes granite sea wall blocks installed in a staggered pattern to diffuse wave action during extreme high tide conditions.

Langone Park & Puopolo Playground, Boston, Massachusetts. Principal-in-charge of design services and landscape architecture for the complete refurbishment of this signature waterfront park in Boston's historic North End. The recreational lifeline for Boston's most densely developed community, the park also provides a critical link within Boston's HarborWalk network. Design efforts include lighting, benches, interpretive signage conveying the unique historical and environmental heritage of this site, and coastal resilient strategies.

Improvements to Lincoln Park, Somerville, Massachusetts. Principal-in-charge for design services and landscape architecture improvements to the existing park, including open space improvements, active and passive play recreational features, athletic fields, educational opportunities, and a unique stormwater collection and management system. Designs include interactive education-based elements including an outdoor classroom, rainwater harvesting, and teaching gardens in collaboration with the Dr. Albert F. Argenziano Middle School, which is located adjacent to the park.

Fallon Field Playground, Roslindale, Massachusetts. Principal for this playground improvement project. Responsibilities included planning, design, community outreach, and construction administration. Community input was a huge driver to create this unique and innovative playground space built into a hillside. This playground includes many non-traditional play elements, features universal accessibility throughout and is home to the tallest slide structure in Boston.

North Union Spray Park and Hibbert Playground, Arlington, Massachusetts. Project principal for the development and presentation of separate park designs as part of a commission to re-imagine two public open spaces to meet the varied needs of the community and the distinct site conditions at each location. Also responsible for construction documents and construction administration.

Albion and Grimmons Parks Improvements, Somerville, Massachusetts. Principal-in-charge for the master planning, construction document design, and community outreach process for two parks in different city neighborhoods, including multi-use courts, community gardens, splash pad areas, shaded seating plazas, and new play equipment.

# CASSANDRA BETHONEY, RLA

## BACKGROUND

2020-Present
Senior Project Landscape Architect
Weston & Sampson

2017-2020
Project Landscape Architect
Weston & Sampson

2016-2017
Associate Landscape Architect
Sasaki

2013-2016
Landscape Architect
Weston & Sampson

2012-2013
Design Intern
Landscape Architecture
Weston & Sampson

2012
Community Service
Fellow/Brownfields Program Intern
US Environmental Protection Agency

2010
Landscape Architect Intern
Olmsted Center for Landscape Preservation

2007-2010
Contract Landscape Designer
The S/L/A/M Collaborative
Architects and Engineers

2009
Landscape Intern
The Fells Historic Estate and Gardens

## EDUCATION

2013
Master in Landscape Architecture
Harvard University

2009
Bachelor of Science
Landscape Architecture
Ecological Design Concentration
Cornell University

2008
Art History Study Abroad
Florence University of the Arts, Italy

Cassie is a registered landscape architect with experience that spans a broad range of projects from planning to built work, with a focus on public parks and open spaces, streetscape design, and urban improvement projects. She has specialized skills in ecological restoration along waterways and stormwater detention basins, and she is interested in the role that an engaged public process plays in making vibrant landscape spaces. Cassie brings to each project strong critical thinking, pragmatism, and a commitment to quality.

## SPECIFIC PROJECT EXPERIENCE

**Comprehensive Design for Centennial Beach Refurbishment, Hudson, Massachusetts.** Landscape architect for design and permitting services for the renovation of a popular town-managed swimming beach. Project includes a new bathhouse, renovated old bathhouse for storage, open air pavilion space, beach and landscape restoration, a new accessible path system, extensive stormwater management upgrades, and parking area improvements.

**Eastman Conservation Area Improvements, Needham, Massachusetts.** Landscape architect for design of upgrades for the Eastman Conservation Area, an outdoor learning laboratory with a varied landscape that includes wetlands, meadows and streams, open bodies of water, uplands, and rock outcroppings. Project included design of boardwalks, at-grade trails, overlooks, piers, and a wide range of other site amenities that help to support the storytelling about wildlife and other environmental features that are unique to this rich and varied conservation landscape.

**Arlington Reservoir Master Plan, Arlington, Massachusetts.** Landscape architect for the development of a master plan for the Arlington Reservoir property, including an environmental assessment and a land survey. Responsibilities include a comprehensive public engagement program and collaboration with project stakeholders to establish a strategy for the implementation of compelling, appropriate, and sustainable site improvements.

**Hedges Pond Recreation Area and Preserve Master Plan, Plymouth, Massachusetts.** Involved in the development of the master plan for this area (former Camp Dennen property). Project involved identifying realistic opportunities for uses that considered environmental protection and enhancement; potential reuse of former camp infrastructure; implementation of improvements to meet important recreational needs of residents and the larger community; and potential for revenue generation to offset future maintenance and operations costs.

**Percy Rideout Playground, Concord, Massachusetts.** Landscape architect responsible for the design of the park expansion and improvements, including tennis and basketball courts, sidewalks/pathways, increased/redesigned parking, a baseball field, and ADA accessible restrooms. Other improvements included the design of a biorentention pond and rain garden for stormwater management, as well as the use of biodegradeable mulch under the playground structure, and fencing.

# CASSANDRA BETHONEY, RLA

## PROFESSIONAL REGISTRATION

Registered Landscape Architect
Massachusetts, No. 4209

## HONORS & AWARDS

2009
American Society of Landscape Architects Award of Merit

**Public Outreach Facilitation | Redevelopment of the McIntyre Building, Portsmouth, New Hampshire.** Facilitated a comprehensive public outreach process to give all citizens a voice in identifying the elements essential to a successful redevelopment of the Thomas J. McIntyre Building site in downtown Portsmouth. Worked with the city to develop and refine the information and graphic content presented and discussed at each public engagement session. Prepared written meeting summaries for posting to the city's website and use as the 'essential framework' for the city and the development team to follow for the design development phase of the project.

**Restoration of John Harvard Mall, Charlestown, Massachusetts.** Landscape architect for the development of a master plan and design for the restoration of this historic park/plaza in the Charlestown neighborhood. The project included a robust community involvement program, new pavement treatments, an inclusive playground, accessible routes through the site, a redesigned park entrance, and sustainable design solutions.

**Town Hall Plaza Improvements, Arlington, Massachusetts.** Landscape architect for the design and construction administration services for improvements to historic Town Hall Plaza. Responsible for establishing an important town gateway, safe and accessible pedestrian connections, carefully selected landscaping, and a vibrant public space for community events, including a wide range of other aesthetic enhancements that are accessible, multi-generational, historically and culturally appropriate. Efforts also include a comprehensive public engagement process.

**Peddocks Island Management & Conceptual Development Plan, Boston Harbor Now.** Landscape architect for the development of a master plan for improvements at this historic Boston Harbor Island. Working together with our multi-disciplinary team, subconsultants, BHN, DCR, and the National Park Service, project efforts include extensive site research, public engagement, and a sustainable model for redevelopment. The island is open to the public as a natural, recreational park accessed via ferries.

**Fallon Field Playground, Roslindale, Massachusetts.** Led the design effort for this playground improvement project and was pivotal to the community outreach process with Roslindale residents. Cassie also completed construction documentation for bidding. Community input was a huge driver to create a unique and innovative playground space, which was built into a hillside. This playground includes many non-traditional play elements, features universal accessibility throughout, and is home to the tallest slide structure in Boston (now an iconic park feature).

**Riverfront Park, Watertown, Massachusetts.** Landscape architect responsible for developing schematic and design development drawings for the second phase of improvements to this linear park, a Department of Conservation property located along the Charles River. The main component to this second phase of work is to renovate an existing playground that explores adventure/sensory play and serves students at the neighboring Perkins School for the Blind. Improvements also include walking trails, slope stabilization, habitat restoration, and fishing piers along the park's ½-mile-long riverfront edge. *(With previous employer)*

# BRANDON KUNKEL, RLA

## BACKGROUND

2018-Present
Team Leader
Weston & Sampson

2017-2018
Project Manager
Weston & Sampson

2014-2017
Landscape Architect
Weston & Sampson

2012-2014
Landscape Architect
Copley-Wolff Design Group

2012
Landscape Architect
The Cecil Group

2011-2012
Landscape Architect
Independent Consulting

2007-2011
Landscape Architect/Associate
DLR Group

2005-2007
Landscape Designer
Geller Devellis Inc.

2003-2005
Assistant Landscape Designer
Mia Lehrer and Associates

2001-2003
Assistant Landscape Designer
Geller Associates

## EDUCATION

2001
Bachelor of Landscape Architecture
University of Rhode Island

## PROFESSIONAL REGISTRATION

Registered Landscape Architect:
Massachusetts No. 4040

## PROFESSIONAL SOCIETIES

American Society of Landscape Architects (ASLA, BSLA)

Council of Landscape Architecture Registration Board (CLARB)

Brandon is a landscape architect with more than 15 years of experience in innovative design and master planning. His areas of expertise include urban parks, natural resource conservation and rehabilitation, academic and corporate campuses, and high-density mixed-use urban developments. He has managed projects associated with planning land use area development, including work with sensitive and complex issues related to environmental concerns, sustainability, and historic preservation. Brandon routinely collaborates with public officials, state agencies, and external consultants on multiple projects concurrently.

## SPECIFIC PROJECT EXPERIENCE

**Redevelopment of Riverfront Park, Springfield, Massachusetts.** Landscape architect for the development of renovation/restoration strategies as part of a master plan for this riverfront property, including park upgrades and infrastructure improvements. Plans for redevelopment of the park include universal accessibility; site/pedestrian access and connectivity; horticultural and landscaping; an interactive water feature; and improvements to signage, performance spaces, lighting, and utility connections.

**Boston Common Master Plan Update, BPRD, Boston, Massachusetts.** Provided landscape architecture/project management services for recently completed updates to the "Boston Common Management Plan," which was first adopted by the Boston Parks Commission in 1996.

**Pathway and Entrance Improvements at Boston Common and Public Garden, Boston Massachusetts.** Provided landscape architecture/project management services for pathway enhancements, including landscape site design/improvements and historic preservation/restoration. improve the pathways and entrances to the Boston Common, the Public Garden, and Commonwealth Avenue Mall. Responsible for completing a thorough assessment of existing entrance and pathway conditions and a prioritized improvement program. Efforts involved working closely with multiple stakeholders and the Boston Landmarks Commission.

**Langone Park and Puopolo Playground, Boston, Massachusetts.** Project manager responsible for working with the Boston Parks and Recreation Department to develop final designs and obtaining permits for the complete refurbishment of this signature waterfront park in Boston's historic North End. The recreational lifeline for Boston's most densely developed community, the park also provides a critical link within Boston's HarborWalk network. Design efforts include lighting, benches, interpretive signage conveying the unique historical and environmental heritage of this site, and coastal resilient strategies.

**Improvements to Buzzards Bay Park, Bourne, Massachusetts.** Project manager responsible for improvements to Buzzards Bay Park, a signature waterfront park located on the Cape Cod Canal. Led the planning, design, and construction of park improvements including a splash pad, pathways/connections, landscaping/plantings, seating areas, and a picnic/gathering pavilion, among other amenities

and enhancements.

Weir Riverfront Park (former FB Rogers site), Taunton, Massachusetts. Worked with Weston & Sampson's in-house licensed site professionals, engineers, and permitting specialists to fully integrate the design of Weir Riverfront Park with the site cleanup strategy for the former FB Rogers site. Created the new park on the edge of the Taunton River, adding to the city's open space system.

Improvements to John Harvard Mall, Boston Parks and Recreation Department, Charlestown, Massachusetts. Provided landscape architecture and design services related to the historic restoration and improvements to this urban park and plaza, including entry areas, pathways, sitting areas, and a playground. This project involved a rigorous public engagement process, ADA compliance/accessibility accommodations, tree preservation, and sustainable design solutions.

Improvements to Lincoln Park, Somerville, Massachusetts. Landscape architect for design/landscape architecture services for the existing park, including open space improvements, active and passive play recreational features, athletic fields, educational opportunities, carefully curated planting selection, and a unique stormwater collection and management system. Project work also included a comprehensive public participation program, including a detailed visual representation effort, and construction administration services.

Harambee Park Master Plan, Boston Parks and Recreation Department, Dorchester, Massachusetts. Landscape architect for the master planning of Harambee Park, one of the city's largest open space assets. Efforts included inventory and analysis of all park features, identification of deficiencies and safety hazards, soil and survey analysis, circulation analysis, athletic facilities assessment and recommendations, vegetation enhancement and management recommendations, a public participation/communication program, and a detailed construction cost estimate for the final recommended improvements.

Children's Park Improvements, Boston Parks and Recreation Department, Roxbury, Massachusetts. Landscape architect for the renovation of and updates to the current Children's Park, which involved acquisition of two vacant properties, expansion of the site, inclusion of multi-generational park amenities, and a significant community participation component. Design efforts included park layout/design, equipment selection, site-specific vegetation/plantings, and development of before/after site imagery for use in community outreach/involvement efforts.

Improvements to LoPresti Park, East Boston, Massachusetts. Provided design, permitting, and construction administration work for this Boston Parks and Recreation Department project, which involved construction of a state-of-the-art synthetic turf field (funded in large part by the United States Soccer Association), realigning pedestrian connections, rotating fields for game play and practice to allow for a more efficient use of the site, and positioning the most-used elements of play for improved park safety and access.

Kennedy Senior Center Park, Quincy, Massachusetts. Developed park plans that included a universally accessible walking trail, open air pavilions, a greenhouse, formal gardens, open lawns, fitness amenities, and bocce and horseshoe courts for a new $1.6 million, 4.25-acre park with activities to promote successful aging and provide senior residents with opportunities for staying engaged in the community.

# CASSIDY CHROUST, RLA

## BACKGROUND

2020-Present
Senior Project Landscape Architect
Weston & Sampson

2017-2020
Project Landscape Architect
Weston & Sampson

2014-2017
Landscape Architect II
Weston & Sampson

2012-2014
Landscape Designer
Landworks Studio

2012
Landscape Design Intern
Hargreaves Associates

2011-2012
Landscape Design Intern
Boston Parks/Urban Wilds/Student Conservation Association

2011
Design+Build Intern
Sol LeWitt Summer House

2010
Landscape Design Intern
Weston & Sampson

## EDUCATION

2012
Master of Landscape Architecture
Rhode Island School of Design

2001
Bachelor of Arts
Economics
Denison University

## PROFESSIONAL REGISTRATION

Registered Landscape Architect
Massachusetts No. 4236

Cassidy is a landscape architect in the firm's design program. His background includes schematic design plans, design development, construction documentation, and project management. He has developed designs through a variety of mediums, including hand sketches, AutoCAD, digital graphics, and model making.

## SPECIFIC PROJECT EXPERIENCE

**Mill Brook Corridor and Wellington Park, Arlington, Massachusetts.** Provided landscape design services for the revitalization of Mill Brook corridor and Wellington Park. Project includes site improvements, vegetation management planning, invasive species removal/control, and bank restoration.

**First & Railroad Street Park/Playground, Fitchburg, Massachusetts.** Landscape designer for renovations to this important community park. Upgrades included benches, picnic areas, pathways, plantings, informational signage, and a basketball court. Coordinated our efforts in partnership with the Montachusett Opportunity Council, a local community group.

**Improvements to Parkhill Park, Fitchburg, Massachusetts.** Landscape designer for the development of state-of-the-art play facilities and the restoration of passive wetland resource areas within this dramatic 50-acre Works Progress Administration (WPA)-era park. The playground and water spray park improvements added to the range of existing facilities at this regional park. Improvements also included storm drainage and a renovated bathhouse.

**Coes Reservoir Park, Worcester, Massachusetts.** Provided landscape architecture services for the development of a master plan and multiple phases of park improvements for public open space lands surrounding Coes Reservoir. Worked collaboratively with our environmental team on this project that involves cleanup of the former Coes Knife property and dam in conjunction with the park design. Improvements to date include a pedestrian bridge, relocation of historic structures, parking facilities, design and construction of the city's premier universally accessible children's playground, and establishment of a continuous greenway corridor along the western, southern, and eastern edges of the reservoir.

**Children's Park Improvements, Boston Parks and Recreation Department, Roxbury, Massachusetts.** Provided landscape design services to renovate and update the current Children's Park, which involved acquisition of two vacant properties, expansion of the site, inclusion of multi-generational park amenities, and a significant community participation component.

**Improvements to Lincoln Park, Somerville, Massachusetts.** Landscape designer for design services and landscape architecture improvements to the existing park, including open space improvements, active and passive play recreational features, athletic fields, educational opportunities, and a unique stormwater collection and management system.

Improvements to LoPresti Park, Boston Parks and Recreation Department, East Boston, Massachusetts. Design, permitting, and construction administration work for this project, which included realigning pedestrian connections, rotating fields for game play and practice to allow for a more efficient use of the site, and positioning the most-used elements of play for improved park safety and access. Also worked on the initial conceptual design for a fountain plaza in the park.

Worcester Common Restoration, Worcester, Massachusetts. Landscape architect for the $5 million restoration of historic Worcester Common, located downtown adjacent to the historic high-empire style Worcester City Hall. Provided landscape architect support for the reestablishment of historic pedestrian linkages and entrances; enhancement of the site's monuments, memorials, and burial grounds; expansion of green space; and new amenities for civic and cultural events and activities.

Improvements to Byram Park, Greenwich, Connecticut. Provided landscape architecture assistance as part of the design and engineering of a new park and public outdoor pool facility with a large zero-depth entry pool with lap lanes, splash pad, and kiddie pool to replace an outdated facility on the site.

Institute Park Comprehensive Master Plan, Worcester, Massachusetts. Provided landscape architecture assistance for the construction administration phase resulting from the comprehensive master plan for this important property adjacent to Worcester Polytechnic Institute (WPI), including significant public participation. The project included improved performance facilities; improved park aesthetics; active and passive recreation options; edge improvements; utility system upgrades; a cleaner, safer, and "greener" park; improved access and circulation; and ADA compliance.

Universal Playground Design, Cambridge, Massachusetts. Landscape architect for the design and construction of a new universal playground within the existing Danehy Park located in North Cambridge. The new accessible playground will include accommodations for physical, sensory, and social needs. Park design efforts also involve a water play area, site access/circulation, parking, and stormwater management.

Robbins Farm Field Renovations, Arlington, Massachusetts. Project manager responsible for providing schematic design, design development, construction documents, bid phase services, and construction administration for upgrades and improvements to Robbins Farm Park. Project included a comprehensive community outreach and engagement component.

Nipper Maher Playground Improvements, Waltham, Massachusetts. Provided landscape architecture assistance for Phase 6 of a multi-phase improvement project at this important park and open space facility. Site improvements included concession building renovations, major baseball and Little League field improvements, installation of bleacher systems with shade shelters, pathway systems, park landscaping, and the placement of a variety of site furnishings and amenities throughout the property.

# MICHAEL EASLER, RLA, CPSI

## BACKGROUND

2020-Present
Senior Project Landscape Architect
Weston & Sampson

2018-2020
Project Landscape Architect
Weston & Sampson

2013-2018
Landscape Architect
Weston & Sampson

2012-2013
Interpretive Ranger and Historic Researcher
National Park Service

2011
Modeling Consultant for Local Office Landscape Architecture, as well as Harvard Professor Jane Hutton

2011
Intern
Michael Van Valkenburgh and Associates

2011
Labor and Prairie Restoration Foreman
Willow Lake Farm

2006
Environmental Research Assistant
California Institute of Technology

## EDUCATION

2013
Master in Landscape Architecture
Harvard University

2010
Bachelor of Environmental Design
Sustainable Studies Concentration
University of Minnesota

## PROFESSIONAL CERTIFICATION

Registered Landscape Architect
Massachusetts, No. 4221

Certified Playground Safety Inspector (CPSI) No. 33340-1218

Michael is a landscape architect with specialized skills in 3-D modeling and visual representation. He is also experienced in native landscape planting, environmental research, construction detail development, and playground safety systems.

## SPECIFIC PROJECT EXPERIENCE

**Field and Playground Master Plan, Highlands Park, Newton, Massachusetts.** Provided landscape design services for a preferred site improvements plan that serves as a guide for future development of this park, as well as a tool to secure funding from various private, city, state, and federal sources. Responsibilities included helping to develop a conceptual and final "Preferred" master plans in response to the needs of the city, as expressed by various community representatives at a series of public hearings and through the issuance of a comprehensive Park User Survey.

**Revitalization of Draw Seven Park, Massachusetts Department of Conservation & Recreation.** Landscape architect for the revitalization of signature park along the banks of the Mystic River in Somerville, Massachusetts. Work includes providing urban design/landscape architecture, sustainability/resiliency, utility infrastructure, waterfront engineering, environmental permitting, architecture, facilities planning, public participation, and cultural resource planning services to redesign and revitalize this high-visibility waterfront space.

**First and Railroad Street Park/Playground, Fitchburg, Massachusetts.** Landscape designer for renovations to this important community park. Upgrades included benches, picnic areas, pathways, plantings, informational signage, and a basketball court. Coordinated our efforts in partnership with the Montachusett Opportunity Council, a local community group.

**JJ Lane Park, Natick, Massachusetts.** Landscape design services for the development of a new neighborhood park and playground that involved the creation of a children's play area with seating/shelter, loop pathways, a small park support structure, new parking areas, innovative stormwater management techniques, a pedestrian bridge, and a variety of other passive and active recreational elements.

**Conservation Area, Outdoor Classroom, Boardwalk, and Sports Field Upgrades and Improvements, Needham, Massachusetts.** Landscape designer for the athletic fields (youth baseball and multi-purpose rectangular fields) and accessible trail, boardwalk, and outdoor classroom for the Eastman Conservation Area at Newman Elementary School in Needham.

**Improvements to LoPresti Park, Boston Parks and Recreation Department, East Boston, Massachusetts.** Provided design, permitting, and construction administration work for this waterfront project, which included realigning pedestrian connections, rotating fields for game play and practice to allow for a more efficient use of the site, and positioning the most-used elements of play for improved park safety and access. Sea level rise and site resiliency were researched and considered throughout the design process. Iterations of sea wall protection were explored to find balance between defense against the rising sea and day to day

HONORS & AWARDS

2008
Engineering Design for the Developing World Contest Winner

access. Ultimately, granite sea wall blocks in a staggered pattern were installed to diffuse wave action during extreme high tide conditions.

Mayor Thomas M Menino Park, Charlestown, Massachusetts. Landscape designer for the development of this waterfront site into a new, highly successful and universally accessible park and playground that incorporates adaptations for anticipated sea level rise. Developed paving designs and colors for the universally accessible playground area, detailed the historic reuse of industrial keel blocks as seating elements, and developed a low-cost construction system and native sedum/grass planting mixes for the proposed bulkhead meadow. The park also includes an accessible harborwalk with informational signage and spectacular views of the city and the water.

Warren and Waldstein Parks, Brookline, Massachusetts. Supported the design team in leading extensive public outreach for these two neighborhood parks to craft renovation solutions that would respond to the recreation and open space needs of the community. Assisted with initial design conceptions, construction document production, and presentation graphics for public meetings.

Lincoln Park, Somerville, Massachusetts. Provided design and construction services for the development and refinement of the Lincoln Park design throughout the public participation and construction documentation phases. Also assisted with the on-site layout of materials and patterns for the school yard and playground areas. Work at the park included open space improvements, active and passive play recreational features, athletic fields, educational opportunities, and a unique stormwater collection and management system.

North Street Veterans Playground, Somerville, Massachusetts. Assisted with improvements to this neighborhood park, including updated playground equipment, accessible rubber safety surfacing, a half-basketball/soccer court, tennis bounce board, splash pad, a café seating area, much-needed green space and plantings, and sustainable design features.

Improvements at Crocker Playground, Fitchburg, Massachusetts. Landscape architect for this important park that supports the neighborhood and larger surrounding community. Work included the addition of a new interactive water play facility to the existing park that includes the playground, a basketball court, and two open play fields. Improvements included the construction of the splash pad, installation of new utilities improvements, as well as a shade shelter, park benches, pathway systems, and related site amenities.

Powers Farm Conservation Area, Randolph, Massachusetts. Landscape designer for the planning and design of this former working farm acquired by the town for use as a passive recreation resource that connects directly to downtown. Project work involved incorporating a pavilion, parking facility, play area, and perimeter pathway to allow for universal access and community use.

# RACHELLE MCKNIGHT, RLA, ISA

## BACKGROUND

2020-Present
Project Landscape Architect
Weston & Sampson

2019-2020
Landscape Architect II
Weston & Sampson

2016-2019
Landscape Designer
Weston & Sampson

2015
Researcher
Rewilding Europe

2014
Research Assistant
US Forest Service

2008-2013
Scenic Artist/Production Assistant
Hudson Scenic/Warner Bros.

2001-2007
Landscape Designer/Gardener
Western Kentucky University

2004-2005
Habitat Restoration Associate
Mammoth Cave National Park

## EDUCATION

2016
Master of Landscape Architecture
State University of New York
College of Environmental Science
and Forestry

2013
Graphic & Web Design Certificate
Hunter College

2007
Bachelor of Arts
Anthropology
Western Kentucky University

## CERTIFICATIONS

Registered Landscape Architect:
Connecticut No. LAR.0001519

ISA Certified Arborist

Erosion & Sediment Control
Training
Trainee SWT#0020-T

OSHA 10-hour Construction
Safety Training

Rachelle is a landscape architect and arborist whose background includes landscape and site design services for a variety of municipal, park, religious institutions, and higher education projects. Her experience includes: parks and recreation master planning, planting design, plaza and public space design, site grading, botanical inventories, trail layout, as well as digital rendering and modeling. Rachelle is proficient in the Adobe Creative Suite, a variety of fine arts, SketchUp, and AutoCAD software.

## SPECIFIC PROJECT EXPERIENCE

**Mill Brook Corridor and Wellington Park, Arlington, Massachusetts.** Landscape architect/designer responsible for the revitalization of Mill Brook corridor and Wellington Park, including site improvements, vegetation management planning, invasive species removal/control, and bank restoration.

**Bridge Street Pocket Park, Waitsfield, Vermont.** Prepared design documents for the construction of a pocket park adjacent to the "Big Eddy" covered bridge in Waitsfield. The park was designed to provide visitors and residents with access to a popular swimming spot on the Mad River, while commemorating the historic footprint of a building destroyed by flooding during Hurricane Irene.

**Halfmoon Dog Park Feasibility Study, Halfmoon, New York.** Conducted a feasibility study for the development of a dog park with two areas (one for large dogs and one for small dogs). Conceptual design included parking, utility considerations, and site amenities to provide a safe environment for dogs and people.

**Portland Park and Fields Complex, Portland, Connecticut.** Provided planning and site design services for the development of a multi-field athletic complex and park facility for the town. The complex includes two soccer fields, two baseball fields, an outdoor splash pad, a playground, a recreation building, concessions building, and a multi-use trail network with outdoor fitness stations. Also provided site grading services for this project.

**Simsbury Parks & Open Space Master Plan, Simsbury, Connecticut.** Landscape architect responsible for the development of the Simsbury Parks & Open Space Master Plan. Conducted extensive field investigations of town owned parks and open spaces to develop recommendations for improvements to facilities and the restoration of degraded natural systems. Developed mapping and recommendations to guide future acquisition of open space to facilitate wildlife passage and to preserve intact landscape corridors.

**Development of a Riverbank Vegetation Management Plan, Massachusetts Department of Conservation and Recreation (DCR).** Landscape architect responsible for the for development of a Riverbank Vegetation Management Plan for the Charles River Basin within the municipalities of Boston, Cambridge, Newton, and Watertown. The plan included extensive inventory and mapping of 17 miles of existing vegetation, riverbank typologies, and declining trees. Recommendations included phased installations of native vegetation restoration pilot projects

PROFESSIONAL AFFILIATIONS

American Society of Landscape Architects

International Society of Arboriculture

Society for Ecological Restoration

representing a wide array of shoreline stabilization and biodiversity objectives, as well as guidelines for the removal and management of invasive and noxious vegetation along the shore.

Resilient Massachusetts Action Team (RMAT): Technical Support, Executive Office of Energy and Environmental Affairs (EOEEA), Massachusetts. Landscape architect/arborist for the RMAT Technical Support project for the Massachusetts EOEEA, which will advance priority actions from the State Hazard Mitigation and Climate Adaptation Plan for climate resilient projects throughout the Commonwealth. Work includes developing consistent standards for using climate projection data, guidelines and best practices for implementing the climate resilient standards, and a resilient benefit evaluation web-based tool for use in capital planning.

Vegetative Management Plan for the Head of the Charles Regatta® Reunion Village Hospitality Area, Cambridge, Massachusetts. Landscape designer for the preparation of a vegetation management plan (VMP) on behalf of the HOCR and in cooperation with the Massachusetts Department of Conservation and Recreation (DCR). Developed this plan on an accelerated schedule to address the need for vegetation/species management by targeting selective invasive and noxious plants along the riverbank at the location of the Reunion Village.

Rondout Riverport Shoreline Restoration and Public Access, Kingston, New York. Site designer for the restoration and stabilization of the shoreline of the Rondout Historic Waterfront area. Conducted extensive desktop and site analysis to understand existing river edge and adjacent property conditions. Design elements include site-specific living shoreline installations to provide riverine and land-based habitat and flood protection, as well as engineered shore stabilization techniques to protect important infrastructure and historic properties.

County of Rensselaer Hudson River Access Plan (with Planning4Places), Rensselaer, New York. Site designer for the preparation of a river access study for the County of Rensselaer. Analyzed potential sites along the river, engaging stakeholders through public meetings, developing and prioritizing recommendations, and creating preliminary concept plans. Sites were evaluated to determine whether improvements would accomplish the goal of providing paddleboat access and which sites would most likely benefit from local stewardship.

Watervliet Reservoir Water Chestnut Project, Guilderland, New York. Conducted extensive field analysis to map the extent invasive water chestnut in the Watervliet Reservoir and developed recommendations for the effective removal and maintenance of the species over the long-term. Water chestnut outcompetes a variety of other aquatic vegetation and creates nearly impenetrable mats across wide areas of water. These mats can be as much as a foot thick and reduce passage of light into the water, which, in turn, reduces dissolved oxygen levels and influences nutrient cycling. The study assessed the current infestation of water chestnut and analyzed the influx of sediment at the inlet of the reservoir at the Normanskill Creek. Costs and recommended removal of water chestnut and wetland restoration in the northern portion of the reservoir were included in the study.

# BLAKE MARTIN

## BACKGROUND

2013-Present
Vice President | Practice Leader
Weston & Sampson

2003-2013
Associate
Weston & Sampson

2001-2003
Project Manager/Team Leader
Weston & Sampson

2000-2001
Senior Hydrogeologist
Geosphere Environmental Management, Inc.

1999-2000
Senior Hydrogeologist
Talkington Edson Environmental Management, LLC

1998-1999
Eastern Regional Coordinator
Layne New England

1996-1998
Regional Manager
HydroGroup, Inc./
Ground Water Associates, Inc.

1991-1996
District Manager
Ground Water Associates, Inc.

## EDUCATION

1984
Bachelor of Arts
Geology, Economics, Environmental Studies
Williams College

## PROFESSIONAL CERTIFICATIONS

40-Hour Training Course for Hazardous Materials Site Training, OSHA 29CFR1910.120

## PROFESSIONAL SOCIETIES

American Water Works Association

Association of Ground Water Scientists and Engineers

National Ground Water Association

New England Water Works Association 2000 Annual Conference

Blake is Weston & Sampson's Environmental Resources Manager and has over 30 years of experience evaluating groundwater systems, designing permanent systems for extraction and supply, and supervising rehabilitation efforts at municipal groundwater supplies. He has managed over 900 projects involving well rehabilitation, well design, safe yield analysis, hydraulic modeling, and water quality sampling. He has evaluated groundwater supply sources for contamination migration, water quality impacts, emerging contaminants, efficiency, and yield improvements throughout New England, New York, and Pennsylvania for a variety of municipal clients.

## SPECIFIC PROJECT EXPERIENCE

**WASM 3 to Shaft 7 Connecting Mains, MWRA, Greater Boston, Massachusetts.** Provided environmental, permitting, and regulatory support to MWRA's WASM 3 to Shaft 7 connecting mains for planning and design of construction of new 48-inch water pipeline and rehabilitation of Section 59 and 60 of the existing 20-inch water pipeline that traverses through the communities of Arlington, Belmont, Boston, Newton, and Watertown.

**Various Water Services, Mixed-Use Housing Development, Plymouth, Massachusetts.** Developed stormwater management, water conservation, and water reuse strategies for a 1,500-home mixed-use development in Plymouth. Work included permitting under local state and federal agencies, designing infiltration systems for recharge of treated effluent, capital costs, and design of a wastewater reuse system for landscape irrigation, and stormwater management designs for over 600,000 square feet of impervious surfaces.

**Geothermal Systems for Municipal Buildings, Various Locations, Massachusetts.** Evaluated operational and capital costs, system designs, and permitting requirements for geothermal systems for municipal building projects in Newburyport, Westford, Nashoba, and Stoughton, Massachusetts. These feasibility level assessments ranged from individual municipal facilities (e.g., small fire stations) to large municipal compounds (e.g., wastewater treatment facilities).

**Taunton River Watershed Management Plan, Massachusetts.** Project coordinator for a portion of the Taunton River watershed management plan. Evaluated infrastructure impacts on water and wastewater distribution within 40+ towns. This GIS-based analysis included groundwater supply extraction, and domestic and municipal wastewater discharge.

**Comprehensive Water Resources Management Plan, Norton, Massachusetts.** Responsible for evaluating water resource issues related to the development of a comprehensive water resources management plan. Work involved scheduled meetings with Citizens Advisory Council to discuss data results, public education methods, and institutional modifications for Norton's future.

## PAPERS & PRESENTATIONS

February 2017
Martin, B.A., "Emerging Contaminants: PFAs," MWUA

September 2016
Martin, B.A., "Emerging Contaminants: A Tale of Two Cities," NEWWA

June 2016
Martin, B.A., "Emerging Contaminants: Update on an Evolving Landscape,"MCWRS

September 2016
Martin, B.A., "Emerging Contaminants: How Low is Low Enough?," GSWRA

May 2016
Martin, B.A., "Water System Responds to Perfluorochemicals: A Case Study," EBC Site Remediation and Redevelopment Program

March 2015
Martin, B.A., "How to Save an Aquifer-The Pease AFB Story," NEWWA

October 2015
Martin, B.A., "2015 Water Resources and Sustainability Symposium," NEWWA

October 2015
Martin, B.A., "The Water Management Act and I/I," MWWA

September 2015
Martin, B.A., "The Outer Cape Future Water Resource Strategies" 134th NEWWA Conference

September 2002
Martin, B.A. presented "The Use of Low-Cost Micro-Measurement Techniques for Aquifer Monitoring and Safe yield Analysis: A Case Study, Portsmouth, New Hampshire"

October 1990
Martin, B.A. and R.A. Francis, "Long-term VOC treatment effectiveness using pump and recovery methods in a multi-layered aquifer setting," Plainville, CT. Water Pollution Control Federation, 63rd Annual Conference, Washington, DC

Environmental Evaluations for Water Supply, Salem, New Hampshire. Evaluated watershed protection bylaws, landfill impacts, and water quality monitoring programs for town's water supply. Developed a watershed protection initiative consisting of education programs and a water protection committee.

Source Water Asset Program, DEP, Massachusetts. Identified land use patterns, resource protection areas, watershed yields, and potential contamination sources for 27 municipal systems. The grant program included review of protection by laws and the recommendation of necessary changes and implementation plans. The project required coordination of GIS mapping for input in the Massachusetts GIS program.

Comprehensive Water Resource Management Plans, Various Locations, Massachusetts. Managed hydrogeologic investigations for wastewater discharge and nutrient load modeling for comprehensive water resource management plans in Concord, East Bridgewater, Norton, North Reading, and Sudbury, Massachusetts.

Water Supply Services, Various Locations. Evaluated watershed yield and zones of contribution for water supplies in Berwick, East Boothbay, Houlton, and Sunday River, Maine; Derby Center, Jericho, and Ludlow, Vermont; Lee and Troy, New Hampshire; and Frankfurt, Middleville, Newburgh, and Poughkeepsie, New York.

Watershed Evaluations, Various Locations, Massachusetts. Developed and implemented watershed evaluations for point and non-point pollution sources under the State Lakes and Ponds Grant Program. Completed studies in Tyngsborough, Leominster, and Seekonk.

Hobbs Brook Reservoir Evaluations, Cambridge, Massachusetts. Project manager for evaluations for Hobbs Brook Reservoir, a drinking water source for the city. Evaluated limnologic conditions, characterized nutrient inputs from stormwater systems, and developed recommendations for cost-effective stormwater BMPs and an in-lake management program. The characterization included an evaluation of nuisance aquatic vegetation, water quality profiling and an evaluation of historic water quality sampling efforts, both within the reservoirs embayments as well as from stormwater systems.

Watershed Recharge Plan, Sharon, Massachusetts. Developed an integrated GIS-based watershed recharge plan for the town. The plan identified water balance issues from current water withdrawals and return flows from wastewater and stormwater. Using GIS systems, areas were prioritized for recharge and infiltration providing a foundation for future projects and town-based regulation.

# ANTHONY ZERILLI

## BACKGROUND

2012-Present
Permitting Manager
Weston & Sampson

2002-2012
Environmental Scientist
Weston & Sampson

2002
Laboratory Technician
Biomarine Laboratories

1998-2002
Environmental Science Student
Bates College

1998 and 1999
Department of Public Works
Gloucester, Massachusetts

## EDUCATION

2002
Bachelor of Science
Environmental Science
Bates College

## PROFESSIONAL CERTIFICATION

OSHA HAZWOPPER 40 Hour
Regulations 29 CFR
1910.120 and 1926.65

Army Corps Certified
Wetlands Delineation
June 2003

Tony is an environmental scientist with nearly 20 years of professional experience in the environmental and natural resource management field. He coordinates all aspects of environmental permitting for Weston & Sampson. Working within the fields of hydrogeology, engineering, water resource development, wetlands sciences, renewable energy and construction oversight, Tony has specialized experience with developing permitting strategies that follow stringent permitting requirements for a variety of environmental engineering projects including municipal infrastructure and construction projects, renewable energy siting and development, lake management and dredging, and wetland creation/ restoration.

## SPECIFIC PROJECT EXPERIENCE

Charles River Riverbank Vegetation Management Plan, Massachusetts Department of Conservation and Recreation. Permitting manager for development of the Charles Riverbank Vegetation Management Plan (RVMP), which utilizes an ecological-functions approach and incorporates parts of four communities (Boston, Cambridge, Newton, and Watertown) that play a role in permitting the plan.

Moakley Park Master Plan, Boston Parks and Recreation Department (BPRD), Boston, Massachusetts. Providing support for project management, climate resilience, and interdisciplinary engineering services for the advancement of the Moakley Park Vision Plan. Moakley Park is the largest waterfront park in Boston and is increasingly vulnerable to flooding due to climate change. The project scope includes baseline technical assessments, community engagement, and schematic flood barrier design. Responsibilities for this project include evaluation of permitting requirements for implementation of the Master Plan.

Parks and Recreation Projects, Boston, Massachusetts. Permitting manager for all aspects of the permitting tasks for various parks and recreational projects involving environmental due diligence support, engineering evaluation, and wetlands permitting. Working with landscape architects to provide delineation of resource areas, identification of altered wetlands areas, development of permitting strategies and schedules, permitting of final designs (including playgrounds, turf fields, and water access), and expert testimony at public hearings. Projects included two waterfront parks: LoPresti Park and Mayor Menino Park.

High School Athletic Complex, Danvers, Massachusetts. Provided permitting services for the development of a sports complex at Danvers High School. Work included the development of new synthetic turf field, relocation of practice fields, and the baseball field, all located near a perennial stream and within the 200-foot riverfront area. Worked with the project team to develop a permitting strategy based on several alternatives and permitted the preferred alternative. Provided expert testimony and construction oversight.

Newman School Fields, Needham, Massachusetts. Provided permitting services for the redevelopment of athletic fields behind Newman School, located adjacent

to a conservation area and wetland resource areas. Worked with the project team to develop a permitting strategy for the fields as well as a passive recreational trail through the conservation land. Successfully permitted the project through the local wetland process. Provided expert testimony and construction oversight.

Atlantic Sports Center, Amesbury, Massachusetts. Provided permitting services for the private development of a sports complex, including hockey rinks, office building, and ancillary structures. Worked with the project team to develop a permitting strategy based on several alternatives. Worked to reduce or eliminate the permitting needs by developing a working alternative for development and taking the project through design.

Environmental Permitting Assistance, Various Locations, New England. Provided environmental permitting assistance associated with wetlands impacts and restoration in several communities. Permits included MEPA certification, ACOE General Permit, MassDEP 401 Water Quality Certification, Chapter 91 Licensing, NHESP Notification, and wetlands permitting. Permitting projects have included remediation within Mill Creek and Ashuelot River in Keene; Medfield State Hospital Remediation for the DCAMM; Miller's River restoration and monitoring for MassDOT; Willow Pond Dredging for Look Park in Northampton; Weymouth Sewer Main Replacement and wetland restoration; Salisbury Industrial Park for Salisbury; Kingman Pond Dam for Mansfield; and the Arlington Reservoir Dam, Mill Brook Corridor & Wellington Park, and Robbins Farm Field Renovations and Upgrade project in Arlington.

On-Call Environmental Services, Massachusetts Port Authority Sites, Various Locations, Massachusetts. Provided environmental permitting support for multiple task orders for on-call environmental services, including the dredging of PCB-impacted sediment at Hanscom Field in Bedford, Massachusetts. Supervised wetland monitoring and stormwater compliance of construction impacts associated with the runway improvements at Logan Airport, Boston Massachusetts. Work included filling/dredging of coastal resource areas and associated construction impacts, including stormwater management.

Sailor's Home Pond Dredging, Quincy, Massachusetts. Assisting with the wetlands component of this project which involves the completion of in-pond sediment removal and modification of the local stormwater infrastructure through retrofit stormwater BMPs.

Water Quality and Sediment Sampling, Various Locations, Massachusetts. Designed and ran water quality and sediment sampling and analysis on lakes and ponds throughout Massachusetts. Work was coordinated through grants received by various town agencies, including conservation committees and parks and recreation departments, and consisted of installing piezometers and running tests for bacteria, metals, waste effluent, etc. Projects included the Runnins River in Seekonk, Rockwell Pond in Leominster, Lake Mascuppic in Tyngsboro, and Lake Pearl in Wrentham, Massachusetts.

# MELVIN HIGGINS, PWS

## BACKGROUND

2002-Present
Senior Environmental Scientist
Weston & Sampson

1995-1999
Hydrologist
ENSR
Acton, Massachusetts

1995
Consultant
The Nature Conservancy
Durham, North Carolina

1994
Environmental Specialist
Water Quality Management Division
U.S. Environmental
Protection Agency
Philadelphia, Pennsylvania

1990-1992
Environmental Education/Forestry
Extensionist
United States Peace Corps Benin,
West Africa

## EDUCATION

2009
Post-baccalaureate Certificate
Geographic Information Systems
Pennsylvania State University
(Masters level courses in problem
solving with GIS, GIS Database
Development and Environmental/
Water Related GIS Applications

1995
Master of Environmental
Management
Duke University

1987
Bachelor of Arts
Economics/French

## PROFESSIONAL REGISTRATION

Professional Wetland Scientist
(PWS #2520)

## PROFESSIONAL SOCIETIES

Society of Wetlands Scientists

Association of Massachusetts
Wetland Scientists

Melvin is a senior environmental scientist in the firm's Environmental Resources group. He has over 20 years of water quality, environmental analysis, and environmental permitting experience.

## SPECIFIC PROJECT EXPERIENCE

**Sailor's Home Pond Environmental Assessment and Management Plan, Quincy, Massachusetts.** Conducted an evaluation of Sailor's Home Pond, located at the intersection of Rice Road and Wendell Avenue in Quincy, to address concerns regarding pond water quality due to land use practices, increased fill and sediment, impacts from phosphorus and nitrogen, algal blooms, and reduced vegetation. Collected and reviewed available documents to understand general pond and watershed characteristics and to identify what data gaps needed to be filled. Proposed management options included dredging, increased street sweeping and catch basin cleaning, stormwater pollutant removal (retrofit stormwater BMP), chemical and aeration treatment, modified stormwater infrastructure, and long-term annual monitoring.

**Maskwonicut Street Bridge, MassDOT, Sharon, Massachusetts.** Identified protected environmental resources within project limits for the replacement of an existing single-span bridge, currently out of service, which carries Maskwonicut Street over the AMTRAK/MBTA railroad tracks in the Town of Sharon. Guided the project through the environmental and historic permitting process for state regulations.

**Intersection Improvements Design, Colrain, Massachusetts.** Provided services in conjunction with the complete design of intersection improvements at Main Road, Jacksonville Road (Route 112), and Greenfield Road to facilitate traffic movements through the area. Conducted field efforts to identify protected environmental resources and help design the project to minimize environmental impacts.

**Charles River Riverbank Vegetation Management Plan, Massachusetts Department of Conservation and Recreation (DCR).** Provided permitting services for the development of the Charles Riverbank Vegetation Management Plan (RVMP), which utilizes an ecological-functions approach and incorporates parts of four communities (Boston, Cambridge, Newton, and Watertown) that play a role in permitting the plan.

**Vegetative Management Plan for the Head of the Charles Regatta® Reunion Village Hospitality Area, Cambridge, Massachusetts.** Senior environmental scientist for the preparation of a vegetation management plan (VMP) on behalf of the HOCR and in cooperation with the Massachusetts Department of Conservation and Recreation (DCR). Provided permitting guidance for VMP development on an accelerated schedule to address the need for vegetation/species management by targeting selective invasive and noxious plants along the riverbank at the location of the Reunion Village.

North American Lake Management Society

New England Water Works Association

## PAPERS & PRESENTATIONS

Gong, Gavin; Hickey, Ken; and Higgins, Mel, "Hydrodynamic Flow and Water Quality Simulation of a Narrow River System Influenced by Wide Tidal Marshes," Presented August 1998.

Sung, Windsor and Higgins, Mel, "Trace Metal Levels in the Municipal Wastewater of Greater Boston, " Water Environment Research, July 1998.

Sung, Windsor and Higgins, Mel, "Boston Harbor as a Continuous-Flow Stirred Tank Reactor, Use of Mussel Biomonitoring and Effluent Discharge," Boston Society of Civil Engineers, February 1998.

**Permitting for the Nantucket Harbor Shimmo and PLUS Parcels Sewer Extension Project, Nantucket, Massachusetts.** Providing permitting and wetlands consulting services related to the comprehensive sewer extension project on the island. Responsible for ensuring that all project work meets the stringent environmental permitting requirements. Compiled and submitted permits to the Nantucket Conservation Commission (Notice of Intent), Nantucket Historic Commission (Certificate of Appropriateness) and Massachusetts Endangered Species Act (MESA) office (Project Review).

**Phase II Remediation of Former Manufactured Gas Plant, Keene, New Hampshire.** Assisting with the wetlands and permitting component of this impacted sediment dredging project. Assisted with preparation of ACOE, NHDES, and local permit applications, including Programmatic General permit, Dredge and Fill permit, and Alteration of Terrain permit.

**Furnace Pond Dredging, Pembroke, Massachusetts.** Assisting with the wetlands and permitting component of this project which involves improving the ecological and recreational value within Furnace Pond by deepening the pond through the dredging process.

**Sailor's Home Pond Dredging, Quincy, Massachusetts.** Assisting with the wetlands and permitting component of this project which involves the completion of in-pond sediment removal and modification of the local stormwater infrastructure through retrofit stormwater BMP's.

**Stormwater Recharge Siting Study, Pembroke, Massachusetts (SWMI Grant # BRP-2012-06).** Worked with the town to create a watershed-based planning tool for enhancing the effectiveness of the Water Management Act permitting process, and to clarify ways to measure and implement mitigation concepts under the SWMI framework. Used advanced GIS technology to select recharge sites through the development and analysis of overlay maps, including soil permeability, saturated thickness, depth to groundwater. LiDAR topography, wetland resources, Water Resource Protection districts, land ownership, impervious cover, and stormwater infrastructure.

# NATHAN SEIFERT, PE, LEED®AP

## BACKGROUND

2018-Present
Team Leader
Weston & Sampson

2014-2018
Project Manager
Weston & Sampson

2008-2014
Structural Engineer
Hart Design Group, LLC

2007-2008
Project Manager
The Torrey Company

2005-2007
Project Manager
Churchill & Banks, LLC

1999-2005
Structural Engineer
Lin Associates, Inc.

1994-1999
Field Engineer
Bechtel Corporation

## EDUCATION

1994
Bachelor of Science
Civil Engineering
Worcester Polytechnic Institute

## PROFESSIONAL REGISTRATION

Massachusetts (No. 41693)
Rhode Island (No. 7663)
Connecticut (No. 29660)
Kentucky (No. 29965)
Florida (No. 79595)
South Carolina (No. 35047)
Vermont (No. 018.0134531)
North Carolina (No. 048585)

LEED® Accredited Professional

## PROFESSIONAL SOCIETIES

American Society of Civil Engineers

Nathan, a team leader in Weston & Sampson's structural engineering department, has more than 25 years of engineering and construction experience. His areas of expertise include reinforced concrete, masonry, structural steel, and timber design, and he is well versed in the International Building Code. His project experience includes design for new construction and renovation of commercial, multi-unit residential institutional and pharmaceutical/industrial buildings; water/wastewater treatment facilities; and bridges. Nathan also has construction management experience and is a LEED® Accredited Professional.

## SPECIFIC PROJECT EXPERIENCE

**Municipal Services Facility, Andover, Massachusetts.** Responsible for structural design and construction administration for a new 60,000-square-foot public works facility with vehicle storage, vehicle maintenance, and administration areas. Structure was a one- and two-story pre-engineered metal building.

**Department of Public Works and Natural Resources Facility, Orleans, Massachusetts.** Responsible for structural design and construction administration for a new 42,000-square-foot public works facility with vehicle storage, vehicle maintenance, and administration areas. Structure was a one-story pre-engineered metal building.

**New Public Works Facility, Hopkinton, Massachusetts.** Responsible for structural design and construction administration for a new 40,000-square-foot public works facility with vehicle storage, vehicle maintenance, and administration areas. Structure was a one- and two-story pre-engineered metal building.

**Consolidated Public Works Department Facility, Waterbury, Connecticut.** Responsible for structural design and construction administration for a new 120,000-square-foot facility designed to house all public works operations (administration, shops, highway, parks, refuse) plus a central DPW vehicle maintenance shop, and separate shops for maintenance of fire department vehicles, and police department vehicles. Structure was a combination of new pre-engineered and conventional steel additions on an existing steel structure. Substantial structural modifications were performed on the existing building.

**Bridge Reconstruction Services for the Mountain Road over Mill Brook C-05-06 Bridge, MassDOT, Charlemont, Massachusetts.** Engineer responsible for providing services as part of the complete reconstruction and relocation of the roadway and the Mountain Road Bridge over Mill Brook. The 16-meter single-span bridge included pre-stressed, pre-cast concrete butted box beams and integral abutments. In accordance with MassDOT requirements, work included survey, final roadway design, design of sidewalks to ADA standards, utility/drainage improvements, geotechnical engineering, detour route selection, and contract documents preparation.

Ireland Street over West Branch Bronson Brook, MassDOT, Chesterfield, Massachusetts. Provided structural engineering services for the replacement of an existing 56-foot single span, steel thru-girder bridge. Responsibilities included performing a bridge type study; developing conceptual bridge plans, evaluating bridge superstructure replacement options of prestressed concrete NEXT beams, steel girders with precast concrete deck panels, and steel girders with shop fabricated concrete decks; and analyzing existing abutments.

Water Street over Blackstone River Bridge, Millbury, Massachusetts. Responsible for structural design and construction administration for the bridge substructure and superstructure design for Mass Highway Department. The superstructure was constructed with prestressed concrete box beams.

Central Artery/Tunnel Project, Boston, Massachusetts. Worked on project to depress a major artery through the city and adding a third harbor tunnel. Responsible for field construction inspection and other construction management duties on portions of the project.

Ayer Commuter Rail Parking Facility for Montachusett Regional Transit Authority (MART), Ayer, Massachusetts. Structural Engineer of Record for the design of a one-level, 79-space elevated parking deck servicing the local commuter rail station. The elevated parking deck was constructed in precast concrete supported on cast-in-place concrete foundations.

Repairs to Existing Marine Industrial Park Central Parking Garage for Boston Planning and Development Agency (BPDA), Boston, Massachusetts. Responsible for managing the repairs to an existing five-level precast parking garage. Scope of work includes structural repairs, waterproofing repairs, joint replacement, drainage replacement, fire protection replacement, and fire alarm renovation. The parking garage remains in service during the repairs.

Brunswick Gardens Middle School (currently Lilla G. Frederick Pilot Middle School), Boston, Massachusetts. Structural engineering for a new 144,000-square-foot composite steel framed structure.

Copeland Building, Mass Maritime Academy, Buzzard's Bay, Massachusetts. Responsible for analyzing the existing structure, developing structural details, and construction administration for the structural renovation of a historic building that included jacking and underpinning the foundation, and seismic and wind bracing.

# THOMAS STRIKE, PE

## BACKGROUND

2018-Present
Senior Project Manager
Weston & Sampson

2015-2018
Project Manager
Weston & Sampson

2013-2015
Project Engineer
Weston & Sampson

2005-2013
& 1999-2004
Staff Engineer
Miller Engineering & Testing, Inc.

2004-2005
Geotechnical Engineer
PSI, Inc.

1998-1999
Field Engineer
SMW Seiko, Inc.

## EDUCATION

2005
Master of Science
Geotechnical Engineering
University of Massachusetts, Lowell

1998
Bachelor of Science
Civil & Environmental Engineering
University of Massachusetts, Amherst

## PROFESSIONAL REGISTRATION

Professional Engineer:
Massachusetts No. 50328
New Hampshire No. 13858

Tom is a senior project manager in the firm's environmental and geotechnical program. He has over 20 years of experience with geotechnical engineering design and has been responsible for managing multiple ongoing construction projects. His specific areas of expertise include foundation design, retaining wall and slope stability analyses, and dam safety engineering.

## SPECIFIC PROJECT EXPERIENCE

Massasoit State Park Dam Rehabilitations, Taunton, Massachusetts. Project manager and dam safety engineer for rehabilitation of five earthen embankment dams in Massasoit State Park ranging from 180 to 365 feet long and 10.5 to 18.5 feet tall. The dams are Intermediate Size, High Hazard Structures. The project includes coordination with Massachusetts DCR Office of Dam Safety, environmental permitting, repair of concrete outlet structures, raising the crest of one of the dams, and embankment improvements including slope armoring, and mineral filter construction. Coordinated and completed engineering analyses; prepared drawings and specifications; coordinated environmental permit preparation and presentations; and provided bidding assistance.

East Park and Navy Yard Park, Natick, Massachusetts. Geotechnical engineer for the project which involved renovations to these two parks, including underground utilities, ADA compliant pathways, play equipment, park and drive improvements, restrooms, lighting, sports fields, court replacement, stormwater management systems, and signage.

South Mill Pond Courts and Leary Field Lighting Improvement Project, Portsmouth, New Hampshire. Geotechnical engineer for the project which involved the complete refurbishment of six tennis courts and two basketball courts and the addition of court lighting.

Beach Revetment, Manchester-by-the-Sea, Massachusetts. Geotechnical engineer for the revetment efforts at Singing Beach in the coastal town. The goal of improving the existing revetment structure is to preserve and protect the shoreline at Singing Beach against erosion and sea level rise. Responsible for coordination with the Conservation Agent and the contractor.

East Park and Navy Yard Park, Natick, Massachusetts. Geotechnical engineer for the project which involved renovations to these two parks, including underground utilities, ADA compliant pathways, play equipment, park and drive improvements, restrooms, lighting, sports fields, court replacement, stormwater management systems, and signage.

White Memorial Pool, Rutland, Vermont. Senior geotechnical engineer assisted with constructability issues and a dewatering plan for the contractor to successfully implement in a deep excavation adjacent to Moon Brook with a high-water table and soft soils.

Arbor Way Retaining Wall Assessment, Fitchburg, Massachusetts. Project manager for the Arbor Way retaining wall assessment, which included a condition

assessment of the failing wall and recommendations for design repairs.

Newman School Athletic Fields & Eastman Conservation Area Improvements, Needham, Massachusetts. Geotechnical engineer for this project to design boardwalks/trail improvements and sports field upgrades to the Eastman Conservation Area, which serves as an outdoor learning laboratory for the elementary school.

Emery Field Multi-Use Fields and Pathways Project, Kittery, Maine. Geotechnical engineer for the project which included the construction of a multi-use athletic field with subsurface drainage system and irrigation system and an ADA-compliant walking path that links all facilities, to be shared by service vehicles and emergency vehicles.

Clesson Brook Road State Bridge #B-28-010 Replacement, Buckland, Massachusetts. Geotechnical engineer for replacement of the existing bridge over Clesson Brook. The project included removal of the existing single span bridge (33-foot-long span) with a new concrete arch bridge with a 51-foot-long span. Coordinated geotechnical fieldwork and laboratory testing, completed engineering analyses, and prepared a technical report including geotechnical earthwork and design recommendations. It was recommended that the abutments and wing-walls were supported by conventional shallow spread footings bearing on the native glacial till.

Shady Hill School Repair, Cambridge, Massachusetts. Geotechnical project manager for the 6th and 8th grade building repair and modification project at the Shady Hill School. Prepared project scope and budget, coordinated geotechnical fieldwork, completed engineering analysis, and prepared a technical report. Conducted a geotechnical evaluation of the perimeter foundations of the 6th grade building that had exhibited structural distress, and the 8th grade building where water had infiltrated the basement level and the non-structural basement slab had partially collapsed. Recommended underpinning the 6th grade building foundation with helical piers to correct the structural deficiencies. Recommended replacement of the 8th grade basement slab with a slab structurally connected to existing pressure-injected-footing deep foundations. Also recommended a perimeter cut-off wall and drainage system to prevent water infiltration into the basement area.

Alewife Brook Shopping Center, Cambridge, Massachusetts. Geotechnical engineer for the approximately 50,000-square-foot building. Coordinated geotechnical fieldwork and laboratory testing and completed engineering analyses and a technical report including recommendations the proposed site development. Addressed geotechnical considerations including up to 15 feet of urban fill and organic materials and relatively shallow groundwater below the building area. Recommended compacted stone columns for improvement of the existing fill and organic soils to support a conventional shallow foundation and slab-on-grade and reduce excavation and disposal of potentially contaminated soils. Provided the design and construction teams with geotechnical engineering support and managed observation of geotechnical-related aspects of earthwork, ground improvement, and foundation construction.

# JAMES PEARSON, PE

## BACKGROUND

2019-Present
Senior Project Manager
Weston & Sampson

2015-2019
Project Manager
Weston & Sampson

2013-2015
Project Engineer
Weston & Sampson

2011-2013
Project Engineer
RH2 Engineering

2002-2011
Engineering Technician
Thornton Engineering

2001-2002
Engineering Technician
Precision Structural Engineering

## EDUCATION

2002
Bachelor of Science
Civil Engineering
Oregon Institute of Technology
Magna Cum Laude

## PROFESSIONAL REGISTRATION

Professional Civil Engineer:
Massachusetts No. 50675
Maine No. 13334
New Hampshire No. 14212
Oregon No. 69365
California No. 80272

## PROFESSIONAL AFFILIATIONS

Boston Society of Civil Engineers Section of the American Society of Engineers (BSCES)

American Water Works Association (AWWA)

New England Water Works Association (NEWWA)

Professional Engineers of Oregon

James, a project manager at Weston & Sampson, has more than 15 years of experience in design, analysis, and construction for a diverse range of projects, including water distribution systems, sewer pipelines, storm drainage conveyance and treatment systems, site planning and design, and structural and roadway design. His skills include computer-aided site/infrastructure design and modeling, hydrology and hydraulic analysis, floodplain modeling, structural modeling, and surveying.

## SPECIFIC PROJECT EXPERIENCE

**Newton Highlands Playground, Newton, Massachusetts.** Site/civil engineer for park/playground improvements generated in response to the needs of the city as expressed by various community representatives at a series of public hearings and through the issuance of a comprehensive Park User Survey.

**Langone Park and Puopolo Playground, Boston, Massachusetts.** Site/civil engineer responsible for reviewing on-site grading and drainage to ensure project compliance with Massachusetts DEP stormwater policy and BWSC criteria and ensure proper site drainage. Design efforts include sizing, design, and specifications of on-site drainage facilities and coordination with landscape design to ensure a seamless design.

**Harambee Park, Boston Parks and Recreation Department, Dorchester, Massachusetts.** Site/civil engineer for Phase 1 Improvements to Harambee Park, one of the city's largest open space assets. Efforts included record research of existing utilities, field investigation of on-site drainage, sewer and water infrastructure, and coordination with proposed design to mitigate utility conflicts. Design effort also included sizing of on-site storm drainage systems to meet BWSC criteria.

**Fallon Field Playground, Boston Parks and Recreation Department, Roslindale, Massachusetts.** Site/civil engineer for improvements to Fallon Field Playground in Roslindale. The project involved the installation of new playground equipment, surfacing, and pedestrian walks. Efforts included review of landscape grading and drainage design and recommendations and design direction to the design team to ensure compliance with BWSC stormwater policy.

**Hobart Park Improvements, Boston Parks and Recreation Department, Brighton, Massachusetts.** Site/civil engineer for improvements to Hobart Park in Brighton. The project involved the re-design of recreational space and the addition of a water play feature. Efforts included review of landscape grading and drainage design and recommendations and design direction to the design team to ensure regulatory compliance and technical feasibility for proposed stormwater improvements and water service connections.

**Improvements to Buzzards Bay Park, Bourne, Massachusetts.** Site/civil engineer responsible for improvements to this signature waterfront park located on the Cape Cod Canal. Park improvements include a splash pad, pathways/connections, landscaping/plantings, seating areas, and a picnic/gathering pavilion, among

other amenities and enhancements.

Comprehensive Design for Centennial Beach Refurbishment, Hudson, Massachusetts. Site/civil engineer for renovation of a popular town-managed swimming beach. Project includes a new bathhouse, renovated old bathhouse for storage, open air pavilion space, beach and landscape restoration, a new accessible path system, extensive stormwater management upgrades, and parking area improvements.

Distribution Center Site Work, Taunton, Massachusetts. Developed site design plans, drainage plans and calculations, and wetland replication design and grading for the expansion of a private developer's distribution center.

Site Plan Peer Review, Tewksbury, Massachusetts. Performed peer review services for site development plans in conformance with the town's subdivision rules and regulations.

Water Treatment Plant Site Work, Chatham, Massachusetts. Designed yard piping, site grading, and infiltration system for a 1-mgd water treatment plant.

Water Treatment Plant Site Work, Norton, Massachusetts. Designed yard piping, site grading, and residuals lagoons for a new treatment plant.

DPW Facility Roadway Plans, Wayland, Massachusetts. Developed roadway design plans for an access route to the new Wayland DPW facility. Design included roadway grading, culvert replacement, critter passages, drainage design/calculations, and habitat/wetland mitigation measures.

Mill Brook Corridor and Wellington Park, Arlington, Massachusetts. Provided site/civil engineering support for the revitalization of the Mill Brook corridor and Wellington Park. Project work includes site improvements, vegetation management planning, and bank restoration.

Atlantic Sports Center, Amesbury, Massachusetts. Worked with a private developer to develop site plans for a 400,000-square-foot ice hockey facility on a 40-acre parcel of land. Work included development of existing conditions mapping, conceptual design, planning board and conservation commission permitting, and development of construction plans. Design included 800 parking spaces, utilities, stormwater management features, an access road network and large retaining walls to make a challenging hilltop site suitable for development of a large facility.

281-21

# LOUISE LEVINGSTON COVE

Community Preservation Committee Hearing
June 8, 2021

NEWTON Parks & Recreation

Weston & Sampson SM
DESIGN STUDIO

# Agenda

1. PROJECT GOALS AND SCHEDULE
2. NEIGHBORHOOD CONTEXT/ EXISTING CONDITIONS
3. PLANNED IMPROVEMENTS
4. NEXT STEPS

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# Project Goals

1. ENSURE THROUGH PEDESTRIAN MOVEMENT
2. PRESERVE AND ENHANCE OPPORTUNITIES FOR PASSIVE RECREATION AND FISHING
3. ENSURE ACCESSIBILITY ACROSS THE SITE
4. IMPROVE HOW STORMWATER MOVES AND IS CAPTURED ON SITE
5. CREATE A LANDSCAPE THAT IS STABLE AND SUSTAINABLE
6. ENHANCE AND PROTECT VIEWS
7. IMPROVE WATER QUALITY

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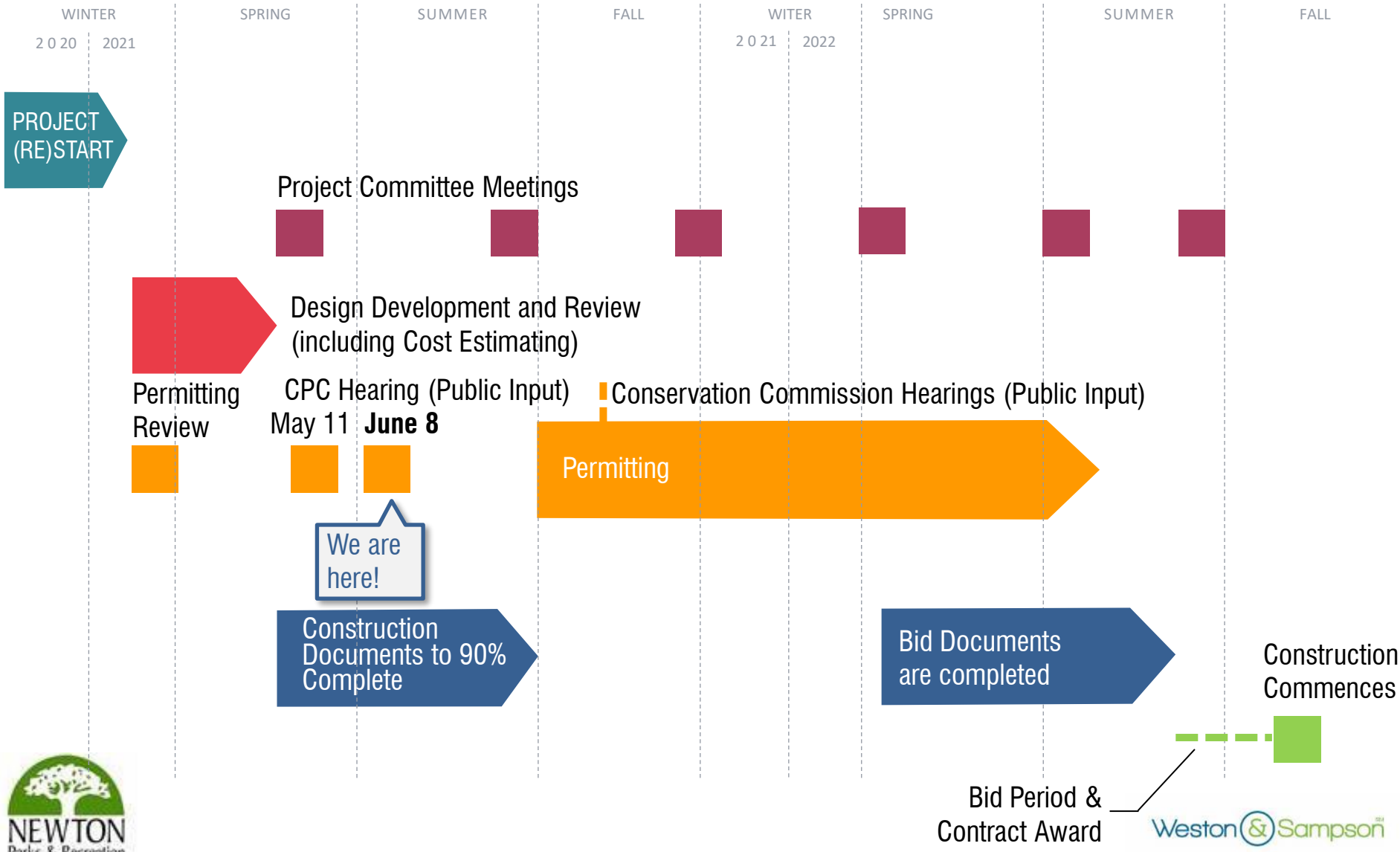
# Project Schedule

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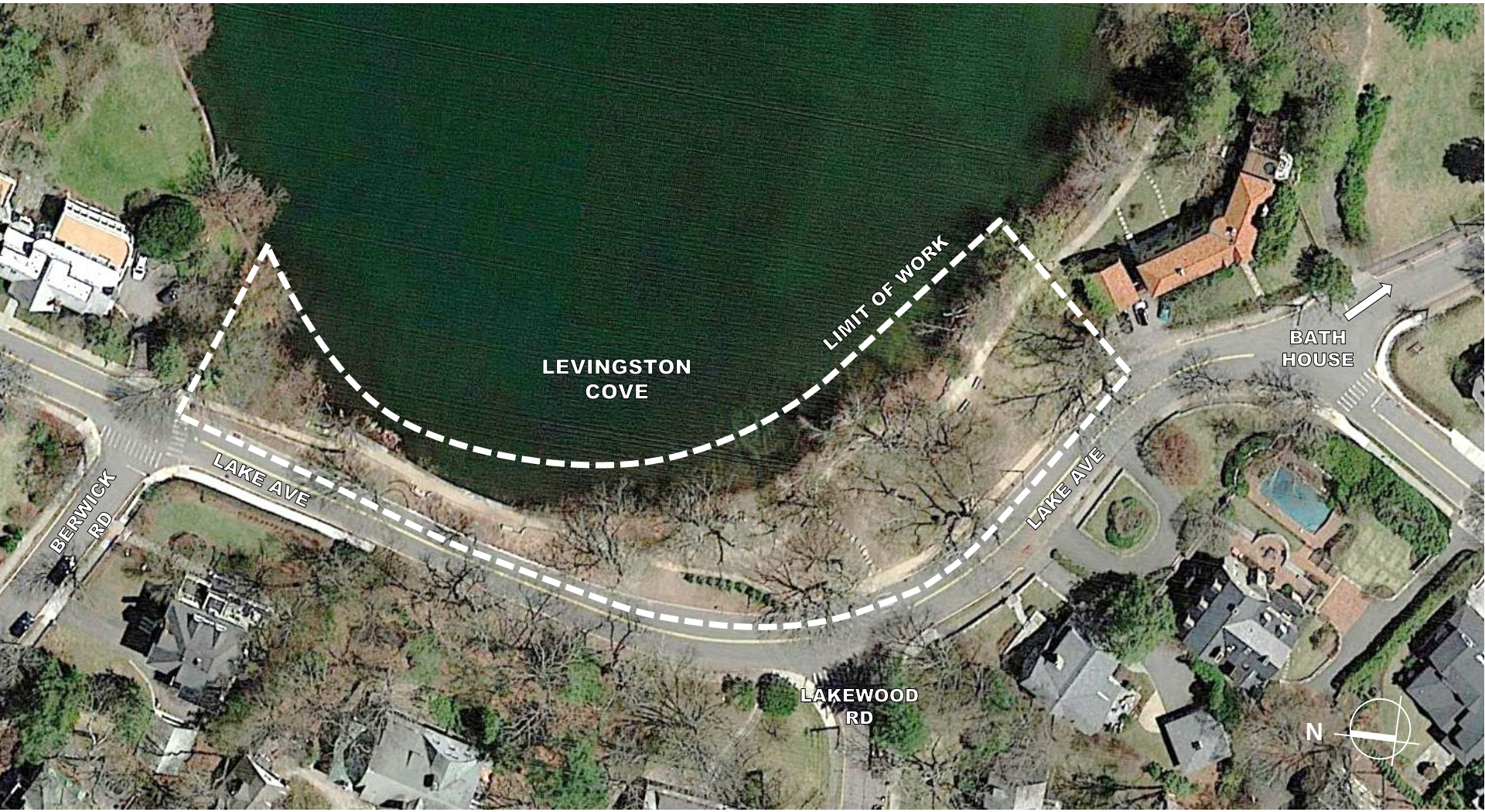
# Neighborhood Context

# Existing Conditions

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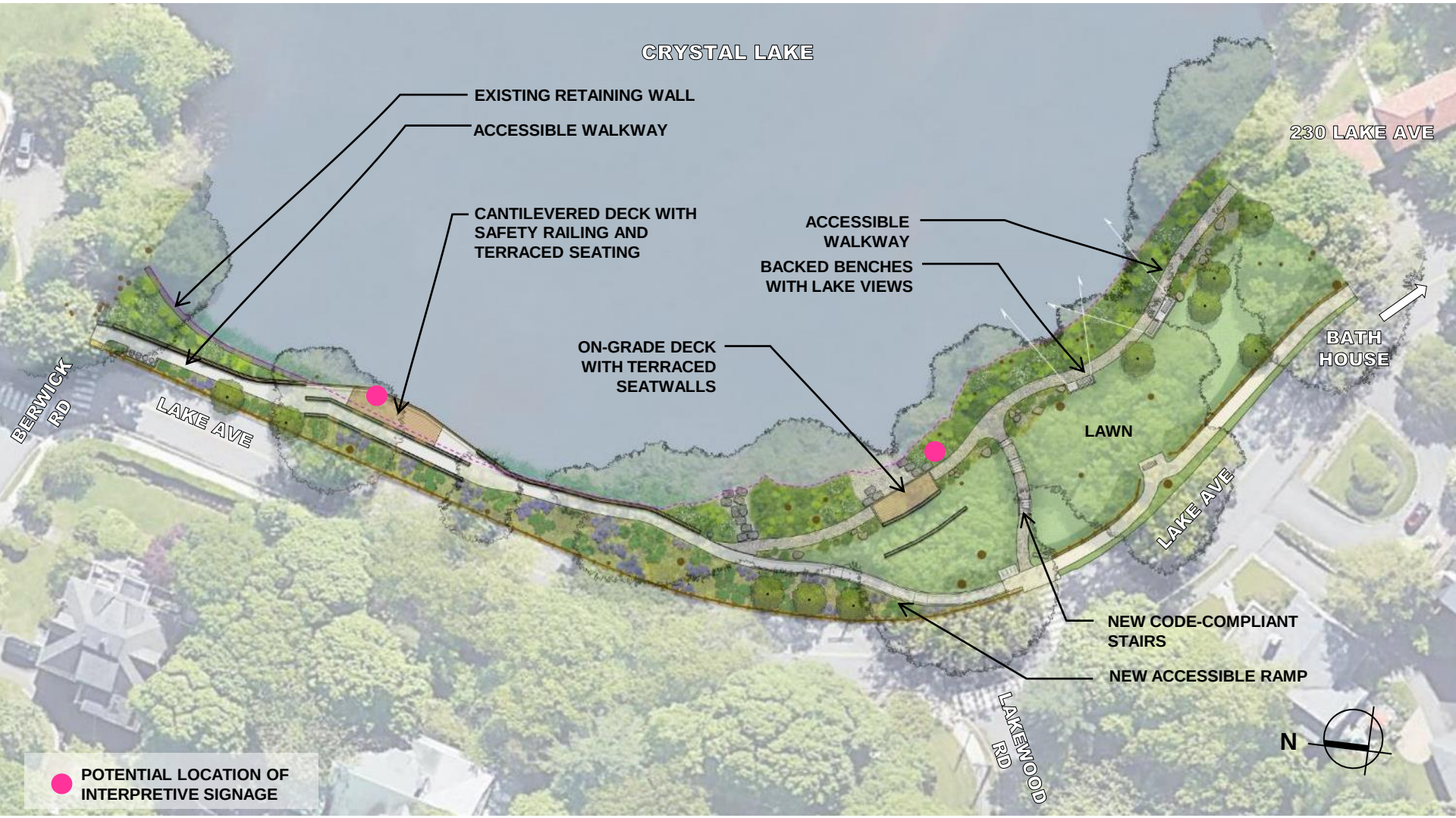
# Planned Improvements to Levingston Cove

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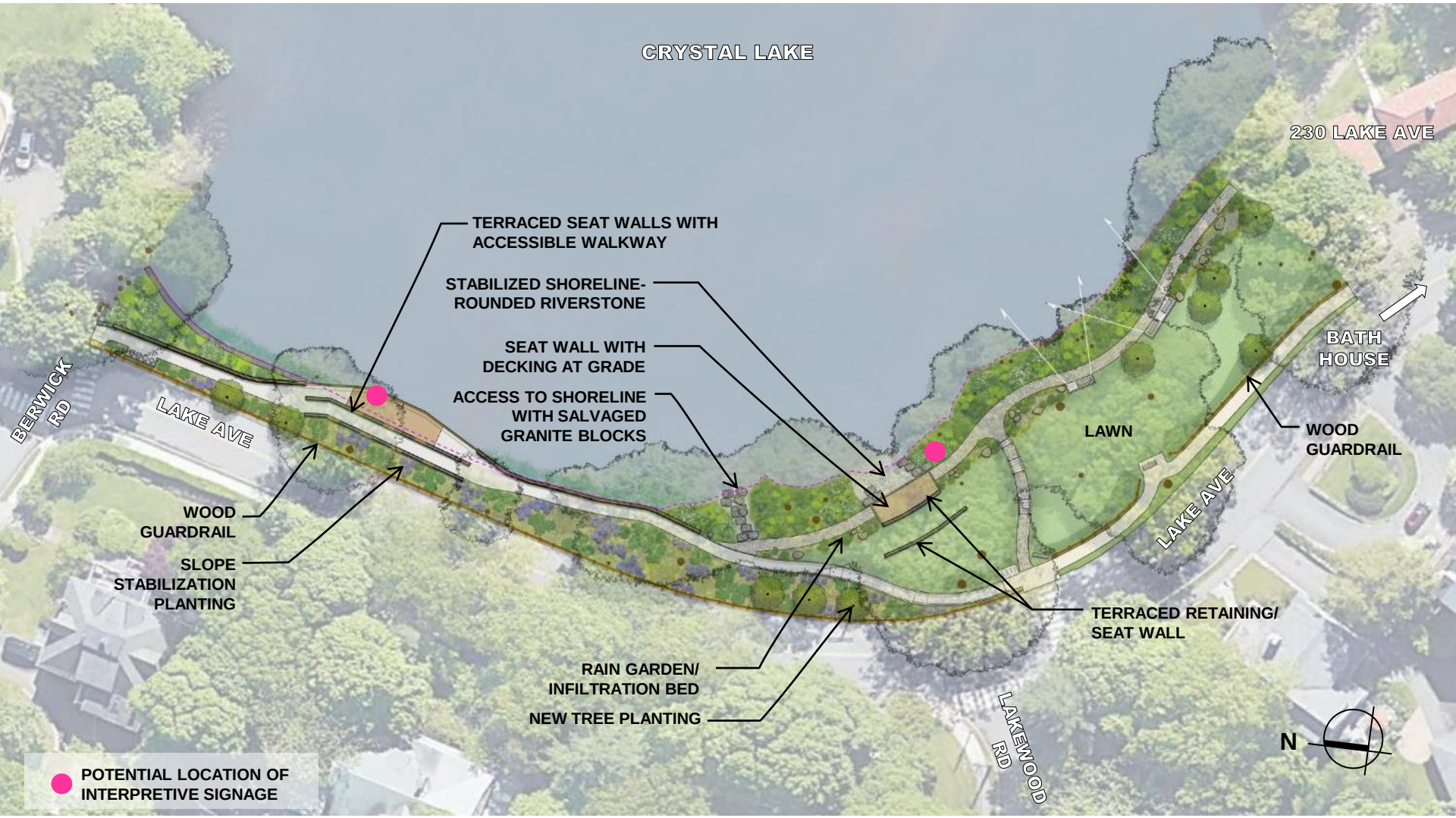
# Planned Improvements to Levingston Cove

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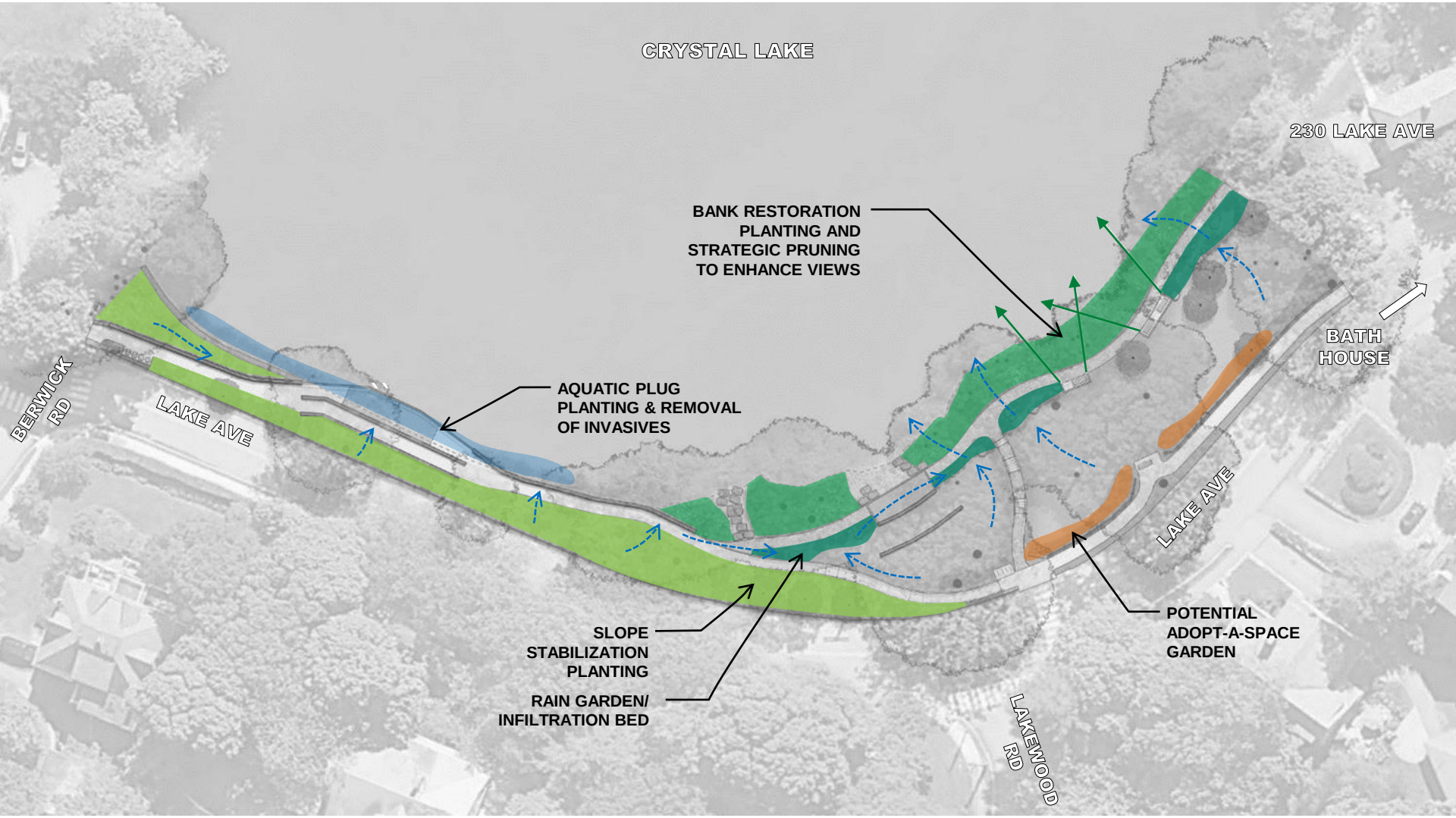
# Proposed Planting Areas & Stormwater Flow

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# Existing Concrete Wall

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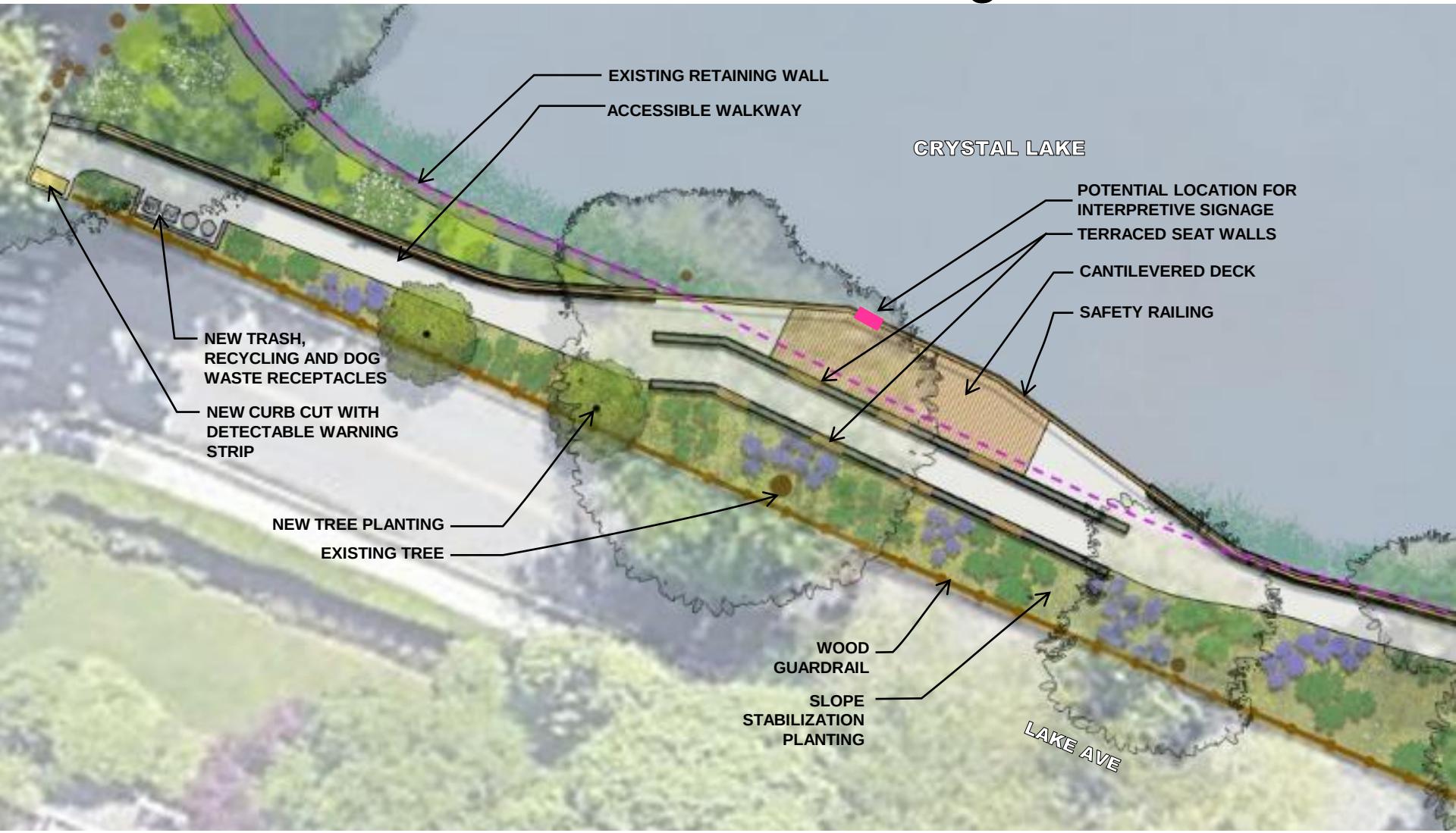
# Cantilevered Deck and Terraced Seating

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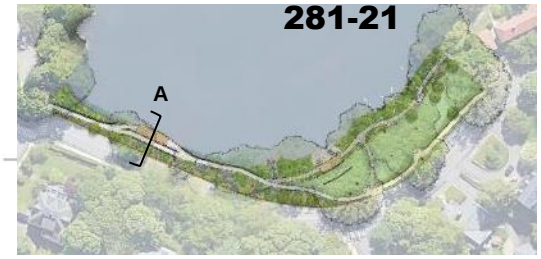
# Cantilevered Deck Section A




30" WOOD GUARDRAIL
SLOPE STABILIZATION PLANTING
FIELDSTONE VENEER RETAINING SEAT WALL
ACCESSIBLE WALKWAY
CANTILEVERED DECK
42" SAFETY RAILING WITH MESH INSERT
EL. 157.5
EL. 152.5
EL. 147.5
EXISTING CONDITIONS LINE
MICRO-PILE FOOTING
EXISTING RETAINING WALL AT LAKE EDGE
EL. 142.5
9'
10'
1.5'
5'
1.5'
10'

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# Existing Shoreline Area

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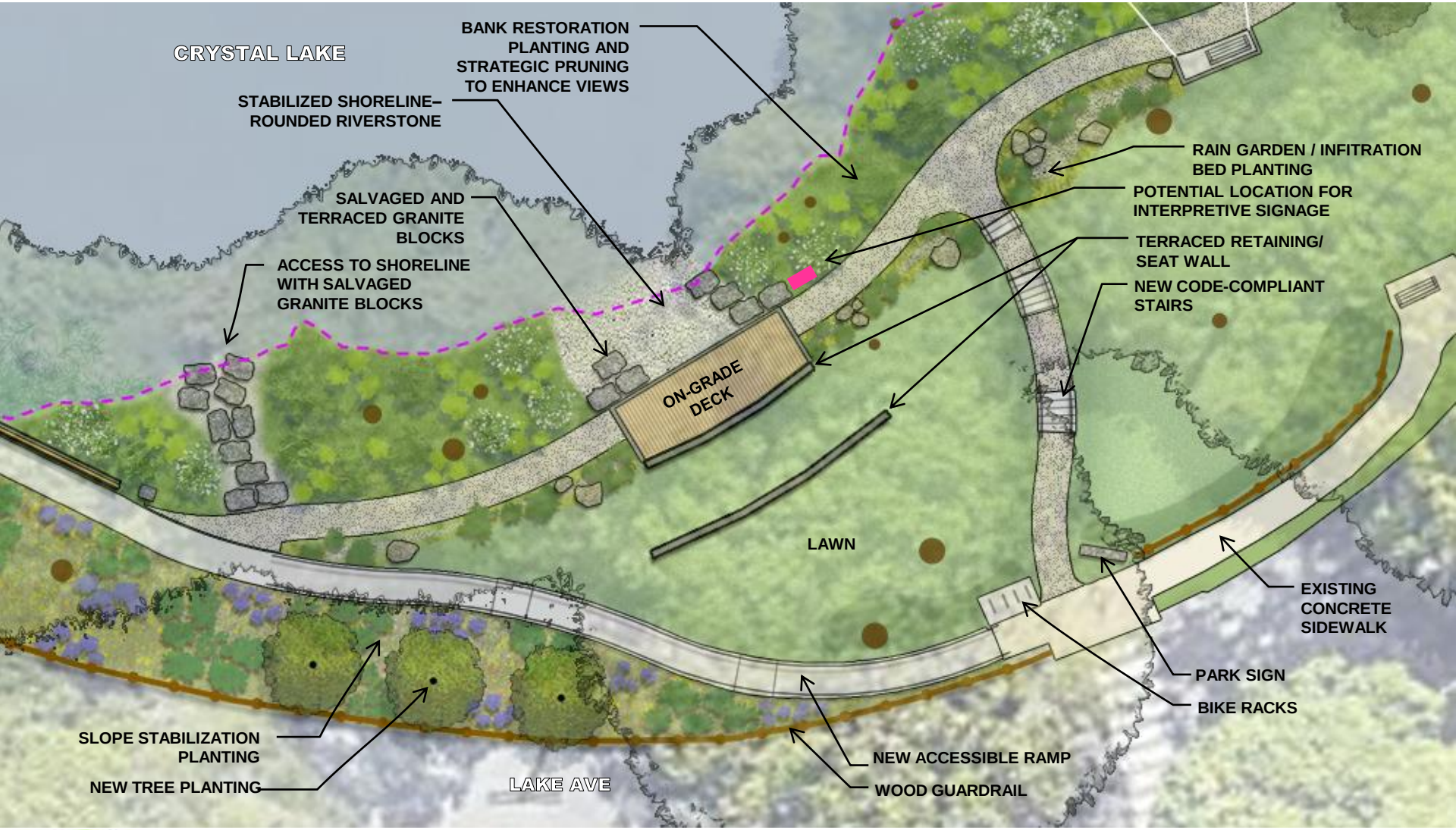
# On-Grade Deck and Terraced Seating

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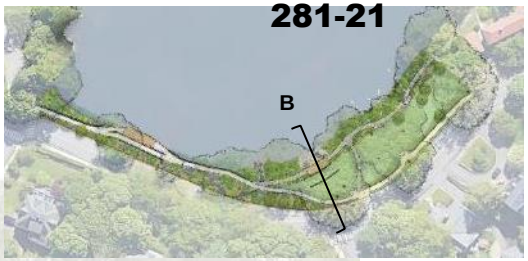
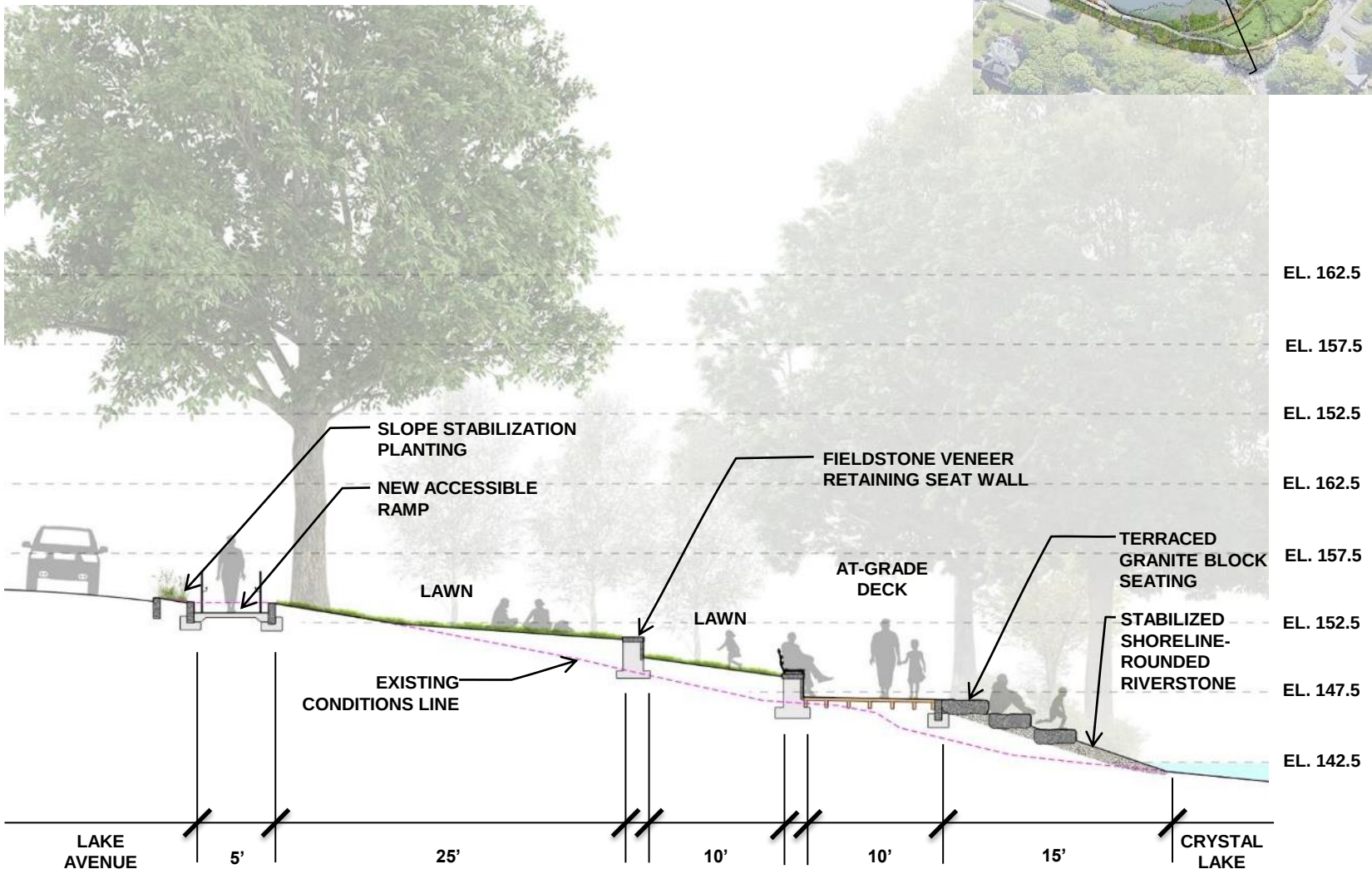
# Shoreline Access Area Section B

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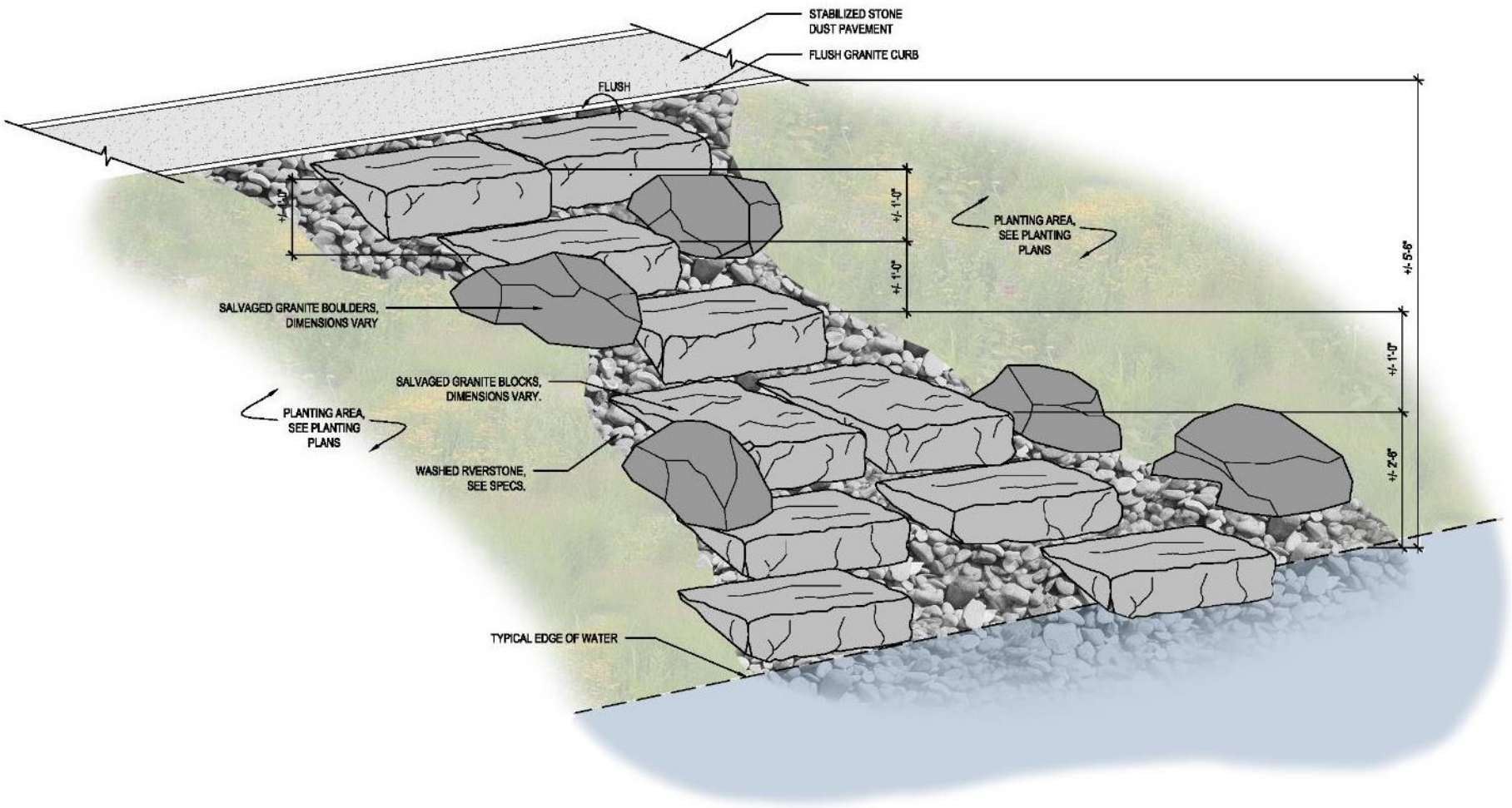
# Water Access

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# Existing Sloped Lawn

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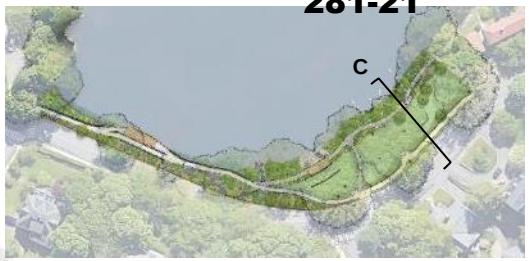
281-21

# Sloped Lawn Section C




EL. 162.5
EL. 157.5
EL. 152.5
EL. 162.5
EL. 157.5
EL. 152.5
EL. 147.5
EL. 142.5

STORMAWATER RETENTION SWALE
NEW TREE PLANTING
BENCH ON CONCRETE PAD WITH LAKE VIEW
ACCESSIBLE WALKWAY
30" WOOD GUARDRAIL
EXISTING SIDEWALK
EXISTING LAWN
EXISTING CONDITIONS LINE

LAKE AVENUE
30'
10'
5'
BANK RESTORATION PLANTING
CRYSTAL LAKE

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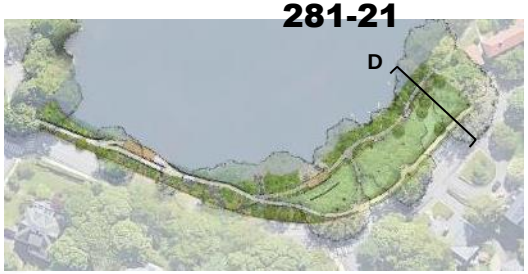
# Sloped Lawn Section D




EL. 162.5
EL. 157.5
EL. 152.5
EL. 162.5
EL. 157.5
EL. 152.5
EL. 147.5
EL. 142.5

EXISTING SIDEWALK
30" WOOD GUARDRAIL
NEW TREE PLANTING
STORMWATER INFILTRATION GARDEN WITH OVERFLOW
ACCESSIBLE WALKWAY
LAWN
EXISTING CONDITIONS LINE

LAKE AVENUE
40'
10'
5'
BANK RESTORATION PLANTING
CRYSTAL LAKE

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# Furnishing and Amenity Considerations

DUMOR BENCH 180
(INSTALLED AT WABAN HILL)

CANTILEVERED DECK SAFETY RAILING

TERRACED SEAT WALL

WOOD GUARDRAIL

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# Surface Material Considerations

STABILIZED SHORELINE
ROUNDED RIVERSTONE

CAST-IN-PLACE CONCRETE PAVEMENT

STABILIZED STONE DUST

COMPOSITE DECK SURFACE

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# Trees

RIVER BIRCH

SERVICEBERRY

IRONWOOD

NORTHERN RED OAK

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# Bank Stabilization Shrub Planting Considerations

ARROWWOOD VIBURNUM

BLACK CHOKEBERRY

GRAY DOGWOOD

BAYBERRY

WINTERBERRY HOLLY

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Weston & Sampson

# Bank Stabilization Groundcover Planting Considerations


SALLOW SEDGE


LOWBUSH BLUEBERRY


BLUE-EYED GRASS


PENNSYLVANIA SEDGE


SWITCHGRASS


FRINGED SEDGE


TUSSOCK SEDGE


TUFTED HAIR GRASS


SENSITIVE FERN

NEWTON
Parks & Recreation

Weston & Sampson

# Slope Stabilization Planting Considerations

## Shrubs


AROMATIC SUMAC


GRAY DOGWOOD


WINTERBERRY HOLLY


SWEET PEPPERBUSH

## Grasses and Perennials


TUFTED HAIR GRASS


PENNSYLVANIA SEDGE


BLUE-EYED GRASS


WILD GERANIUM


COLUMBINE


WHITE WOOD ASTER

NEWTON Parks & Recreation

Weston & Sampson

# Rain Garden / Infiltration Bed Planting Considerations

## Shrubs


BLACK CHOKEBERRY


AROMATIC SUMAC


GRAY DOGWOOD


SWEET PEPPERBUSH

## Grasses and Perennials


PENNSYLVANIA SEDGE


CARDINAL FLOWER


WILD GERANIUM


WHITE WOOD ASTER


BLUE FLAG IRIS


TUSSOCK SEDGE


COLUMBINE


SENSITIVE FERN


CINNAMON FERN

NEWTON Parks & Recreation

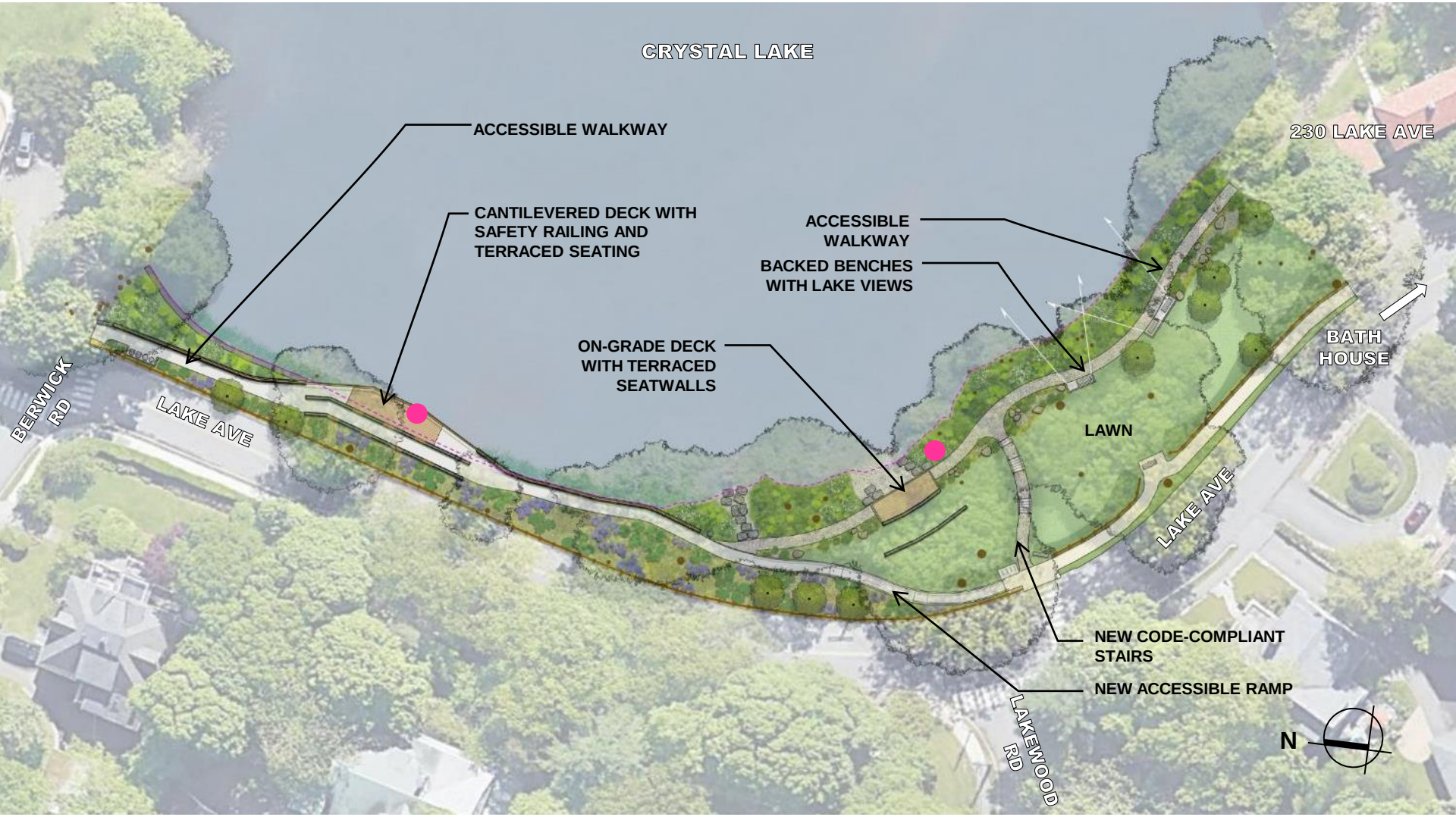
Weston & Sampson

# Near Term Next Steps

1. 90% Construction Documents, Technical Specifications and Cost Estimate — Mid to Late July

2. Environmental Permitting Applications submitted — Late July
   - Notice of Intent / Conservation Commission
   - Planning Board
   - Mass Historic Commission
   - Chapter 91 Waterways Application

# Thank you! Questions and Discussion




NEWTON Parks & Recreation

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DRAFT #281-21

CITY OF NEWTON

IN CITY COUNCIL

DRAFT

ORDERED:

That, in accordance with the recommendation of the Community Preservation Committee through its Chair, Mark Armstrong, the Programs & Services Committee through its Chair Joshua Krintzman and the Finance Committee through its Chair Rebecca Walker Grossman, appropriation of one million four hundred forty thousand three hundred and forty-four dollars ($1,440,344) in Community Preservation Act funds, with $288,068.80 to come from the Open Space Prior Year Reserve (Act# 5840-3599) and $1,152,275.20 to come from the Prior Year Undesignated Fund (Acct# 5800-3599), to the control of the Planning & Development Department for the implementation of the approved and permitted designs for Levingston Cove including the construction of new erosion controls, plantings, accessibility improvements and the installation of new public amenities including new pathways, benches and decks be and is hereby approved as follows:

| | | |
|---|---|---|
| FROM: | Open Space Prior Year Reserve-Undesignated (5840-3599) | $288,068.80 |
| | Prior Year Undesignated Fund Balance (5800-3599) | $1,152,275.20 |
| TO: | Levingston Cove Construction-Undistributed (58D11410-579500) | $1,440,344 |

Under Suspension of Rules
Readings Waived and Approved
DRAFT

(SGD) NADIA H KHAN

Acting City Clerk

(SGD) RUTHANNE FULLER

Mayor

Date: _____

347-21

**CITY COUNCIL** #_____

**CITY OF NEWTON**

**DOCKET REQUEST FORM**

**DEADLINE NOTICE: Council Rules require items to be docketed with the Clerk of the Council NO LATER THAN 7:45 P.M. ON THE MONDAY PRIOR TO A FULL COUNCIL MEETING.**

**To: Clerk of the City Council** **Date: August 19, 2021**

**From (Docketer): Lara Kritzer, Community Preservation Program Manager**

**Address: Planning Department, Newton City Hall, 1000 Commonwealth Avenue Newton MA 02459**

**Phone: 617-796-1144** **E-mail: lkritzer@newtonma.gov**

**Additional sponsors: Community Preservation Committee**

RECEIVED
2021 AUG 23 AM 8:4
CITY CLERK
NEWTON, MA. 02459

1. **Please docket the following item (it will be edited for length if necessary):**

Recommendation from the Community Preservation Committee for the allocation of $420,000 in Community Preservation Act funds from the FY22 Budget Reserve (Account#58R10498-579000) to the control of the Planning & Development Department for the completion of the Athletic Fields Capital ImprovementsPlan Design FY2022-2025 Project which includes the hiring of on-call consultants to complete the studies, plans, and design work necessary to construct new fields and restore four to six existing sites.

2. **The purpose and intended outcome of this item is:**

- ☒ Fact-finding & discussion
- ☒ Appropriation, transfer,
- ☒ Expenditure, or bond authorization
- ☐ Special permit, site plan approval,
- ☐ Zone change (public hearing required)
- ☐ Ordinance change
- ☐ Resolution
- ☐ License or renewal
- ☐ Appointment confirmation
- ☐ Other:_____

3. **I recommend that this item be assigned to the following committees:**

- ☐ Programs & Services
- ☐ Zoning & Planning
- ☒ Public Facilities
- ☒ Finance
- ☐ Public Safety
- ☐ Land Use
- ☐ Real Property
- ☐ Special Committee
- ☐ No Opinion

4. **This item should be taken up in committee:**

- ☐ Immediately (Emergency only, please). Please state nature of emergency:

- ☒ As soon as possible, preferably within a month
- ☐ In due course, at discretion of Committee Chair
- ☐ When certain materials are made available, as noted in 7 & 8 on reverse
- ☐ Following public hearing

**PLEASE FILL OUT BOTH SIDES**

**5. I estimate that consideration of this item will require approximately:**

- ☐ One half hour or less
- ☐ More than one hour
- ☐ More than one meeting
- ☒ Up to one hour
- ☐ An entire meeting
- ☐ Extended deliberation by subcommittee

**6. The following people should be notified and asked to attend deliberations on this item. (Please check those with whom you have already discussed the issue, *especially relevant Department Heads*):**

| City personnel | Citizens (include telephone numbers/*email please*) |
|---|---|
| ☒ Lara Kritzer | ☐ |
| ☒ Luis Perez Demorizi | ☐ |
| ☒ Nicole Banks | ☐ |
| ☐ | ☐ |
| ☐ | ☐ |

**7. The following background materials and/or drafts should be obtained or prepared by the Clerk's office prior to scheduling this item for discussion:**

**8. I ☒ have or ☐ intend to provide additional materials and/or undertake the following research independently prior to scheduling the item for discussion. ***

CPC Funding Recommendation, the City's Proposal for the Athletic Fields Improvements Project, and the Project Presentation made at the CPC's public hearing on August 10, 2021.

***(*Note to docketer: Please provide any additional materials beyond the foregoing to the Clerk's office by 2 p.m. on Friday before the upcoming Committee meeting when the item is scheduled to be discussed so that Councilors have a chance to review all relevant materials before a scheduled discussion.)***

**Please check the following:**

**9. ☐ I would like to discuss this item with the Chairman before any decision is made on how and when to proceed.**

**10. ☒ I would like the Clerk's office to contact me to confirm that this item has been docketed. My daytime phone number is:**

**11. ☒ I would like the Clerk's office to notify me when the Chairman has scheduled the item for discussion.**

**Thank you.**

Lara Kritzer

**Signature of person docketing the item**

**[Please retain a copy for your own records]**

City of Newton

**City of Newton, Massachusetts**
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

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(617) 796-1120
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(617) 796-1142
TDD/TTY
(617) 796-1089
www.newtonma.gov

Ruthanne Fuller
Mayor

Barney S. Heath
Director

# Community Preservation Committee Funding Recommendation for Athletic Fields Capital Improvements Plan Design FY2022-2025 Project

**Date:** August 19, 2021
**From:** Community Preservation Committee
**To:** The Honorable City Council
**CC:** Her Honor Mayor Ruthanne Fuller

## PROJECT GOALS & ELIGIBILITY

This proposal requests CPA funding to hire an on-call design consultant to complete the work necessary to take the project from initial design development through construction and project completion. The project proposes to complete this work at four sites (Russ Halloran Sports and Recreation Complex at Albemarle Park, McGrath Park, Burr School Fields, and the Brown/Oak Hill Middle School Fields) within the next three years, with two additional sites, Braceland Park in Upper Falls and Forte Park in Nonantum, to be worked on if there are program funds remaining in the account at the completion of the three year period. For each site, the consultants will be asked to complete any site analyses, feasibility studies, design development plans, landscape plans, construction documents, and cost estimates. The consultants would also continue to monitor the project during construction and complete construction observation work. The goal of this project is to complete all of the work necessary to make projects at each of these sites construction ready and successfully completed.

The project is eligible for CPA funding for the preservation, rehabilitation, and restoration of city-wide Recreation resources. The project may also be eligible under creation of new recreational resources if the projects produce new fields or other recreational amenities.

## RECOMMENDED FUNDING

At its regular monthly meeting on Tuesday, August 10, the Community Preservation Committee unanimously recommended, with a vote of 6 to 0, the appropriation of $420,000 in Community Preservation Act funding to the control of the Planning & Development to complete the design phase of the Athletic Fields Improvement Project which includes hiring of on-call consultants to complete the studies, plans and design work necessary to construct new fields and restore existing sites.

The CPC recommends that the funding for this project be taken from the FY22 Undesignated Funds Account as stated below.

| Proposed CPA Funding Accounts for the Athletic Fields Improvements Project | | | |
|---|---|---|---|
| **Account Name** | **Account Number** | **Amount Currently Available** | **Proposed Amount for Athletic Fields Project** |
| **FY22 Budget Reserve (Undesignated Funds)** | **# 58R10498 579000** | **$2,957,003** | **$420,000** |
| | | **Total Project Funds** | **$420,000** |

**SPECIAL ISSUES CONSIDERED BY THE CPC**

**Community Needs:** The proposal and presentation clearly illustrate Newton's critical need to improve the condition and quality of its existing fields and to increase the number of available fields where possible. Many of Newton's teams and athletic organizations submitted letters of support for the proposal expressing their full support for the project and explaining the challenges they face with the current conditions at Newton facilities. The proposal addresses Newton's limited number of existing fields by both redesigning those fields to better utilize space, improving conditions, and considering where additional fields might be created. The City's Parks and Recreation Committee has established an Athletic Fields Subcommittee which is working with City staff, local teams, and athletics organizations to address this situation. In addition to the above, the City's goals for this project also include improving the accessibility of multiuse fields, standardizing Newton's park design, ensuring equitable investment throughout the City, and developing the projects to shovel ready status. The proposal will initially focus this funding on the redevelopment of four existing sites over the next three years, with the requested option to include two additional locations over the next five years if there are unused CPA funds available.

This project would accomplish multiple goals listed in the City's Capital Improvement Plan (CIP). Specifically, #48 (Halloran Field Lights) and #107 (Halloran Sport Complex) would be directly addressed by the proposed use of CPA funding to redesign and complete construction documents for the Halloran Sports Complex at Albemarle Park. In addition, the CIP specifically recognizes the need to "enhance field space to house more rectangular field space to accommodate lacrosse and soccer" at McGrath Park(Page 152) and notes the need to rehabilitate and improve the City's athletic fields in the May 2021 Supplemental CIP (Page 4). The proposal also meets multiple goals and objectives listed in the 2020-2027 Open Space and Recreation Plan including "to optimize playability, expand utility, and ensure public safety to meet the changing needs of Newton residents and the year-round character of athletics in Newton." (Section 8, Goal 2, Objective 2B) The project would also meet other Open Space and Recreation Plan goals including improving accessibility, open space resources, and facilities in Newton's parks and playgrounds.

**Funding Uses and Sources:** The recommended CPA funding will be used to hire an on-call consultant to complete all of the reviews, studies, and plans necessary to improve and redesign the four to six locations included in the proposal. The City will cover the remaining expenses of the project, including staff time to oversee the project for the next three to five years. Also included in the project budget are several site specific funding sources including Athletic League funds for the Forte Park Artificial Turf Feasibility work, CDBG funding for a new accessible path at McGrath Park, and developer funds to cover new lighting at Forte Park.

**Project Finances:** CPA funding would cover all of the consulting work involved at the four to six sites listed in the application, which are estimated to be 42% of the overall project costs. As noted above, other funding sources will be used to complete site specific projects, while the City will provide project oversight from initial design through construction oversight. Construction funding for this project is not included at this time, and it is anticipated that CPA funding may be requested in the future to complete the onsite work.

**Accessibility:** A significant goal noted in this project is to increase the accessibility of the four to six sites noted in the application, many of which do not provide any accessible access to the fields at this time. CDBG funding is already included in the project budget to complete construction of an accessible pathway at McGrath Park.

**ADDITIONAL RECOMMENDATIONS** *(funding conditions)*

1. CPA funding is intended to hire an on-call consultant to complete the work necessary to redesign and reconfigure four parks (Russ Halloran Sports & Recreation Complex @Albemarle, McGrath Park, Burr School Fields, and Brown/Oak Hill Middle School Fields) with work to include site analysis, feasibility studies, design development plans, landscape plans, construction documents, cost estimates, construction observation and/or any other studies or documents needed to complete the project.
2. Any CPA funding left over after the completion of work at the four sites listed above may be used to complete the same scope of work at Forte Park and/or the Upper Falls Playground/Braceland Park.
3. The CPC shall receive a copy of all of the design documents, including both preliminary plans and the final construction documents as soon as they are available.
4. Any periodic reports or interim deliverables prepared as part of this project, and any City or State reviews of those deliverables, must be shared with the CPC for online posting.
5. The CPC or its staff may periodically request updates on the status of the project and/or schedule site visits and request photos of any site work underway for the Committee and public's information.
6. All recommended CPA funds should be appropriated by the City Council within 6 months and expended within three years of the date of any CPC recommendation. If either deadline cannot be met, the applicant should request an extension from the CPC, which the CPC may grant at its discretion.
7. Any CPA funds appropriated but not used for the purposes stated herein shall be returned to the Newton Community Preservation Fund.

**KEY OUTCOMES**

The Community Preservation Committee will evaluate this project based on its success in completing plans for the redesign and improvement of the four to six sites listed in the proposal which create both better playing conditions at existing sites and establish new fields where possible.

**ATTACHMENTS**

- July 23, 2021 Proposal and selected attachments submitted to the CPC for the August 10, 2021 public hearing
- Project Presentation given at the August 10 CPC meeting.

Additional information not attached to this recommendation, including petitions and letters of support, are available on the CPC's website at: https://www.newtonma.gov/government/planning/community-preservation-program/proposals-projects/athletic-fields-improvements

City of Newton

Ruthanne Fuller
Mayor

# Newton, Massachusetts Community Preservation Program
# FUNDING REQUEST

*(For staff use)*
*date rec'd:*

☐ **PRE-PROPOSAL** ☒ **PROPOSAL**

Last updated October 2020.

Please submit this completed file directly – do not convert to PDF or other formats.

For full instructions, see **www.newtonma.gov/cpa** or contact:

Lara Kritzer, Community Preservation Program Manager
City of Newton Planning & Development Department, 1000 Commonwealth Ave., Newton, MA 02459
lkritzer@newtonma.gov 617.796.1144

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.

| | | | | |
|---|---|---|---|---|
| **Project TITLE** | **Athletic Fields Capital Improvement Plan Design Phase FY 2022-2025** | | | |
| **Project LOCATION** | 1. Russ Halloran Sports & Recreation Complex @ Albemarle – 256 Albemarle Road, Newtonville<br>2. McGrath Park – 1600 Washington Street, West Newton<br>3. Burr School Fields - 171 Pine Street, Auburndale<br>4. Brown/Oak Hill Middle School Fields – 130 Wheeler Road, Oak Hill<br>5. Forte Park - 235 California St, Nonantum<br>6. Upper Falls Playground 'Braceland'- 1146 Chestnut St, Newton Upper Falls | | | |
| **Project CONTACTS** | Name & title or organization | Email | Phone | Mailing address |
| **Project Manager** | Luis Perez Demorizi, Director of Parks and Open Space Parks, Recreation & Culture | lpdemorizi@newtonma.gov | 617-769-1500 | 246 Dudley Road, Newton MA, 02459 |
| **Other Contacts** | Nicole Banks, Commissioner Parks, Recreation & Culture | nbanks@newtonma.gov | 617-796-1500 | 246 Dudley Road, Newton MA, 02459 |
| **Project FUNDING** | **A. CPA funds requested:** $ 420,000 – Design for various field Improvements | **B. Other funds to be used:** $567,545– approximate match | **C. Total project cost (A+B):** $987,545 | |
| **Project SUMMARY** | Explain how the project will use the requested CPA funds. You may provide more detail in attachments, but your PROJECT SUMMARY MUST FIT IN THE SPACE BELOW. Use a cover letter for general information about the sponsoring organization's accomplishments. | | | |

**NEWTON ATHLETIC FIELDS**

Newton has robust and growing athletics programs with thousands of athletes participating in a wide range of sports including football, baseball, lacrosse, soccer, softball and field hockey. Over the past decades: youth athletic organizations have grown, and youth athletics have shifted to "field intensive" sports; playing seasons are both longer and "multi-season"; and adult interest in recreational sports is increasing. As a result, the City's existing playing fields are more heavily used than ever. Given the limited number of fields that the City has and the limited budget that it has to regularly renovate fields, Newton, like many cities, has been unable to keep up with growing needs and is not currently aligned with the amount of use. Thus, larger capital projects to increase field capacity, reconfiguration for efficiency in use is required.

Challenges for grass fields include lack of irrigation and lack of rest time (harder to accomplish with fields in constant use all spring and fall), which has led to bare patches, uneven surfaces, and hazardous playing conditions. In addition, many fields are sited on former wetlands and lie in or near floodplains, and so have drainage problems, especially in the spring and fall, leading to canceled games and degraded field conditions.

Residents would like to see improvements in drainage for these facilities, and improvements in field amenities such as lights to increase field utilization.

Because of the high demand and continued maintenance issues with grass fields, the "multi-purpose field" athletic community (soccer, lacrosse, football, etc.) has unanimously identified the construction of synthetic fields as its highest priority. Synthetic turf fields allow for notably higher utilization (more hours by more athletes) at a more consistent level of quality than grass fields, thus providing a critical part of a balanced portfolio of athletic facilities. Given the number of synthetic turf field candidates already identified, a program-based approach will enable Newton to successfully manage multiple projects in a more efficient (resources, budget, public input, and effort/duration) manner.

Some of the key items the city has been doing to keep up with athletic trends include: Establishing multiyear, multi-phased project priority (based on usage, demand by program, current inventory, budget, and stakeholder input); understanding renovation costs; Assessing and developing an estimated project delivery timeline. Additionally, to better maintain fields, the City has significantly increased maintenance funding for grass fields.

As a result of the aforementioned assessment by the Parks, Recreation & Culture Department (PRC), the city has determined that the need to enlist a professional landscape architecture and engineering team with appropriate qualifications will be required to assist the City in completing one of the largest investment in athletic fields improvement programs in Newton's history. Additionally, the city has established the following project goals and criteria for prioritizing projects for a 5-year timeframe, with the goal of continuing to develop a 10-year plan.

**PROJECT GOALS AND PRIORITIZATION:**

Field Improvement Goals

- Improve quality and quantity of usable multiuse/multipurpose fields
- Improve accessibility in parks
- Establish standardized park design details to better manage operation & maintenance
- Invest equitably in Newton's Athletic Fields + Parks across the city
- Develop shovel-ready projects

Field Prioritization Criteria

- Potential for greatest city-wide project benefit
- Project sequencing: prioritize new fields being brought online first
- Bandwidth: Balancing concurrent projects against staff time
- Potential for expansion of multiuse fields
- Expanding evening play (light improvements/ additions)
- Safety (Albemarle lights)
- Integrated with other projects in a park area (e.g., path at McGrath)

The Athletic Fields Capital Improvements Plan FY22-25 Design Funding requests $420,000 in CPA funds to allow the City to hire design consultants to complete the work necessary, including site analysis, feasibility studies, design development plans, landscape plans, construction documents, cost estimates, and construction observation, to take the field improvement projects at the Russ Halloran Sports & Recreation Complex, McGrath Park, Burr School Fields, Brown/Oak Hill Middle School Fields, Forte Park, and Upper Falls Playground (Braceland Park) from the design development phase through project completion.

Project Management

Luis Perez Demorizi, Open Space Coordinator, has 7 years of experience as a landscape designer 5 of which were spent designing parks, playground, streetscape and inspecting post-construction contractor work in both municipal work, as well as private sector projects. He helped manage an 11-million-dollar contract with the City of New York's Department of Environmental Protection's green infrastructure program retrofitting sidewalks, schools and parks to manage and capture stormwater. For PRC, Luis has managed and supervised the construction of Heartbreak Hill Park at Waban Hill Reservoir(368K value), the design and construction of the athletic field lights at Newton South High School (~450K value), structural field and court lighting assessment at Albemarle Park, Forte Park and Newton South High School tennis courts, retaining wall assessment at Burr Park, Life course trail renovation at Cold Spring Park, and landscape improvements at the Newton Corner traffic islands. He is currently overseeing the design and engineering of the Improvements to Levingston Cove at Crystal Lake. He is also in the process of finalizing trail bid documents for the Phase 1 of the Marty Sender greenway improvements. Under his oversight, Luis has been able to deliver quality open space projects to the city of Newton. He puts extra focus on minimizing project unknowns when possible. He is also able to connect effectively with other departments, various city commissions and the public.

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.

| Project TITLE | Athletic Fields Capital Improvement Plan Design Phase FY 2022-2025 |
|---|---|
| USE of CPA FUNDS | RECREATION |
| Preservation | |
| Rehabilitate/ Restore | x |

**COMMUNITY NEEDS**

From each of at least 2 plans linked to the *Guidelines & Forms* page of **www.newtonma.gov/cpa**, provide a brief quote with plan title, year, and page number, showing how this project meets previously recognized community needs. You may also list other community benefits not mentioned in any plan.

**Open Space and Recreation Plan Update 2020-2027**

- Section 8, Page 141 Goal 2 Objective 2B: A comprehensive City-wide plan to develop an assessment for existing and future active recreational facilities (i.e. sports fields, hard courts, aquatics and other athletic facilities) to optimize playability, expand utility, and ensure public safety to meet the changing needs of Newton residents and the year-round character of athletics in Newton..
- Section 8, Page 141 Goal 2 Objective 2B: Improved City parks, playgrounds, and other recreational facilities.
- Section 8, Page 141 Goal 3 Objective 3A: Increased accessibility in the City's Park land.
- Section 8, Page 142 Goal 4 Objective 4A: Improved existing open space resources where need is greatest.
- Section 9, Pages 145-146 Goal 2 Objective 2B: Improved City parks, playgrounds, and other recreational facilities.
    - Possible Synthetic Turf Projects: # 15 - Brown/Oak Hill Middle Schools: Upgrade existing natural turf fields to synthetic and improve; accessibility throughout; #16 - Albemarle Field/ Russell J. Halloran Athletic Complex: Upgrade existing natural turf to synthetic at football, soccer and baseball fields.
    - Possible Sports Lighting Project: #17 - Modernize, expand sports lighting at Cole and Murphy Fields; repair poles based on public safety assessment and structural assessment of existing lighting equipment.
    - Possible Natural Turf Projects: #24 - Burr School Fields - Consider renovation of existing fields.
- Section 9, Pages 146-146 Goal 2 Objective 2C Improved trails, paths, and infrastructure (e.g., bridges and boardwalks).
    - Possible Trail Improvement Projects: #39 Richard McGrath Park – Plan an accessible pathway project for the fields.
- Section 9, Pages 146-146 Goal3 Objective 3A Maximized accessibility of as many of Newton's Outdoor Recreation Facilities and Natural Open Spaces as feasible. #62 Implement priority accessibility improvements throughout the City's park system, including: accessible paths at Cold Spring Park, Plan for paths at Auburndale Playground/Lyons Field (Marty Sender Path) and Richard McGrath Park.

**Capital Improvement Plan FY2022-2026**

- CIP by Priority FY 2022-2026:
    - Priority #48 - Halloran Field Lights at Albemarle
      "Replace sports lighting structures and fixtures at Halloran (Albermarle)"
    - Priority #107 – Halloran Sports Complex
      "Synthetic Turf field to include baseball and football/soccer/lacrosse field"
- CIP by Priority FY 2022-2026 Page 152:
    - "At Richard McGrath Park (a.k.a., Warren House) Field Complex in West Newton on Washington Street, the Department is looking to enhance field space to house more rectangular field space to accommodate for lacrosse and soccer for both children and adults. This would include constructing a Lacrosse Wall on site to help enhance players' skills. The wall would be approximately 15' tall and 30' wide"
- Supplemental CIP FY 2022-2026:
    - "Rehabilitation of Athletic Field – The city's athletic field infrastructure at both parks and schools need significant improvement. The Parks, Recreation & Culture Department is developing a long-term plan of field improvement projects for the next five years, with several projects going to the

Community Preservation Committee for funding approval to in 2021. The goal is to improve field quality and increase field use hours by rearranging fields, adding, or improving lighting and rehabilitating the fields themselves. The total cost estimate for the five-year period is 3.75 million, using a combination of CPA and ARPA funds."

**COMMUNITY CONTACTS**

List at least 3 Newton residents or organizations willing and able to comment on the project and its manager's qualifications. No more than 1 should be a supervisor, employee or current work colleague of the project manager or sponsor. Consult staff on the community contacts required for your specific proposal.

| Name & title or organization | Email | Phone | Mailing address |
|---|---|---|---|
| Arthur Magni, Chairman Parks & Recreation Commission | | 617-821-8351 | 107 Mount Vernon Street<br>Newton, 02465 |
| Midge Connolly, Athletic Field Sub-Committee Member | | 617-527-6988 | 289 Cherry Street<br>West Newton 02465 |
| Justin Traxler, President, Newton Girls Soccer, Newton Athletic Field Foundation | | 617-549-8126 | 36 Metacomet Rd<br>Newton 02468 |
| Josh Krintzman, Councilor | jkrintzman@newtonma.gov | 617-558-0699 | 77 Crehore Drive,<br>Newton, 02462 |
| John Oliver, Councilor | joliver@newtonma.gov | 248-219-3858 | 14 Wyoming Street<br>Newton, 02460 |

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.
Full proposals must include separate, detailed budgets in addition to this page.

| **Project TITLE** | **Athletic Fields Capital Improvement Plan Design Phase FY 2022-2025** |
|---|---|

| **SUMMARY CAPITAL/DEVELOPMENT BUDGET** | |
|---|---|
| **Uses of Funds** | |
| Estimated Designer fee for various field projects | $420,000 |
| Approximate staff time for the duration of multi-year plan (Design & Construction Phases) | $236,670 |
| Forte Park Artificial Turf Feasibility | $17,000 |
| McGrath Park Accessible Path CDBG funding | $92,000 |
| Forte Park lighting upgrades – Developer mitigation funds | $200,000 |
| Athletic Lighting Structural Assessment @ various sites (Forte Park, Albemarle, & Newton South Tennis Courts) | $21,875 |
| **D. TOTAL USES** (should equal **C.** on page 1 and **E.** below) | **$987,545** |

| **Sources of Funds** | **Status** (requested, expected, confirmed) | |
|---|---|---|
| CPA funding | Requested | $420,000.00 |
| Approximate staff time for the duration for the duration of multi-year plan | Expected | $236,670.00 |
| Forte Park Artificial Turf Feasibility – Athletic League | Expected | $17,000.00 |
| McGrath Park Accessible path – Community Development Block Grant | Confirmed | $92,000.00 |
| Forte Park lighting upgrades – Developer mitigation funds | Confirmed | $200,000.00 |
| Athletic Lighting Structural Assessment @ various sites (Forte Park, Albemarle, & Newton South Tennis Courts) | Confirmed | $21,875.00 |
| **E. TOTAL SOURCES** (should equal **C.** on page 1 and **D.** above) | | **$987,545.00** |

| **SUMMARY ANNUAL OPERATIONS & MAINTENANCE BUDGET** (cannot use CPA funds) | |
|---|---|
| **Uses of Funds** | |
| Turf Management – See detailed breakdown of scope in attachment | $250,000 |
| Turf Mowing – See detailed breakdown of scope in attachment | $700,000 |
| | ${amount} |
| | ${amount} |
| **F. TOTAL ANNUAL COST** (should equal **G.** below) | **$950,000** |
| **Sources of Funds** | |
| Public Grounds Maintenance Operation Budget | $950,000 |
| | ${amount} |
| **G. TOTAL ANNUAL FUNDING** (should equal **F.** above) | **$950,000** |

| **Project TIMELINE** | **Phase or Task** | **Season & Year** |
|---|---|---|
| | Phase 1 Task 1 – Survey + Preliminary Design (Includes public meetings and supporting materials, master planning, site analysis, feasibility studies, test pits as needed, wetland delineation, and Preliminary cost estimates) | Fall 2021 thru Winter 2022 |
| | Phase 1 Task 2 – Design Development (Includes 30% design, refined cost estimates, and preliminary construction details) | Spring 2022 thru Summer 2022 |

| | |
|---|---|
| Phase 1 Task 3 – Final Design + Bid Documents (60% plans thru construction bid documents, refined construction cost estimates, technical specifications, construction details, structural soil borings at lighted fields, and required permitting) | Summer 2022 thru Fall 2022 |
| Phase 1 Task 4 – Construction Administration (includes administrative review of contractor material submittals, shop drawings, onsite inspection of work, punch list review) | Fall 2022 thru TBD (based on construction prioritization and limiting number of fields being off line) |
| Phase 2 – Construction of various field improvement projects | Time is TBD |

| | | | |
|---|---|---|---|
| **Project TITLE** | **Athletic Fields Capital Improvement Plan Design Funding FY 2022-2025** | | |
| | **↓ Check off submitted attachments here.** | | |
| **REQUIRED.** | X | **PHOTOS** | of existing site or resource conditions (2-3 photos may be enough) |
| | X | **MAP** | of site in relation to nearest major roads (omit if project has no site) |
| Pre-proposals: separate attachments not required, just use page 3 of form.<br><br>**Full proposals: separate, detailed budget attachments REQUIRED.** | **PROJECT FINANCES** printed and as computer spreadsheets, with both uses & sources of funds | | |
| | X | **Development budget:** include total cost, hard vs. soft costs and contingencies, and project management – amount and cost of time from contractors or staff (in-kind contributions by existing staff must also be costed)<br>**Operating/maintenance budget, projected separately for each of the next 10 years** (CPA funds may not be used for operations or maintenance) | |
| | NA | **Non-CPA funding:** commitment letters, letters of inquiry to other funders, fundraising plans, etc., including both cash and est. dollar value of in-kind contributions | |
| | NA | **Purchasing of goods & services:** briefly summarize sponsor's understanding of applicable state statutes and City policies | |
| **REQUIRED for all full proposals.** | **SPONSOR FINANCES & QUALIFICATIONS, INSTITUTIONAL SUPPORT** | | |
| | | **For sponsoring department or organization, most recent annual operating budget** (revenue & expenses) **& financial statement** (assets & liabilities); each must include both public (City) and private resources ("friends" organizations, fundraising, etc.) | |
| | X | **For project manager: relevant training & track record** of managing similar projects | |
| **REQUIRED for all full proposals involving City govt., incl. land acquisition.** | X | **CAPITAL IMPROVEMENT PLAN** | current listing/ranking & risk factors for this project |
| | | **COVER LETTER** | from head of City department, board or commission confirming: current custody, or willingness to accept custody, of the resource and commitment of staff time for project management |
| | **ZONING & PERMITTING** | | |
| | | **Permits required:** including building permits, environmental permitting, parking waivers, demolition, comprehensive permit, or special permits (if applicable) | |
| | | **Other approvals required**: Newton Conservation Commission, Newton Historical Commission, Newton Commission on Disabilities, Parks and Recreation Commission, Massachusetts Historical Commission, Massachusetts Architectural Access Board, etc. | |
| | **DESIGN & CONSTRUCTION** | | |
| | | **Professional design & cost estimates**: include site plans, landscape plans, etc. | |
| | | **Materials & finishes**; highlight "green" or sustainable features & materials | |
| **OPTIONAL for all proposals.** | X | **LETTERS of SUPPORT** | from Newton residents, organizations, or businesses |

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

## Community Preservation Committee
## Design Funding Request
## August 10th, 2021

athleticfields@newtonma.gov

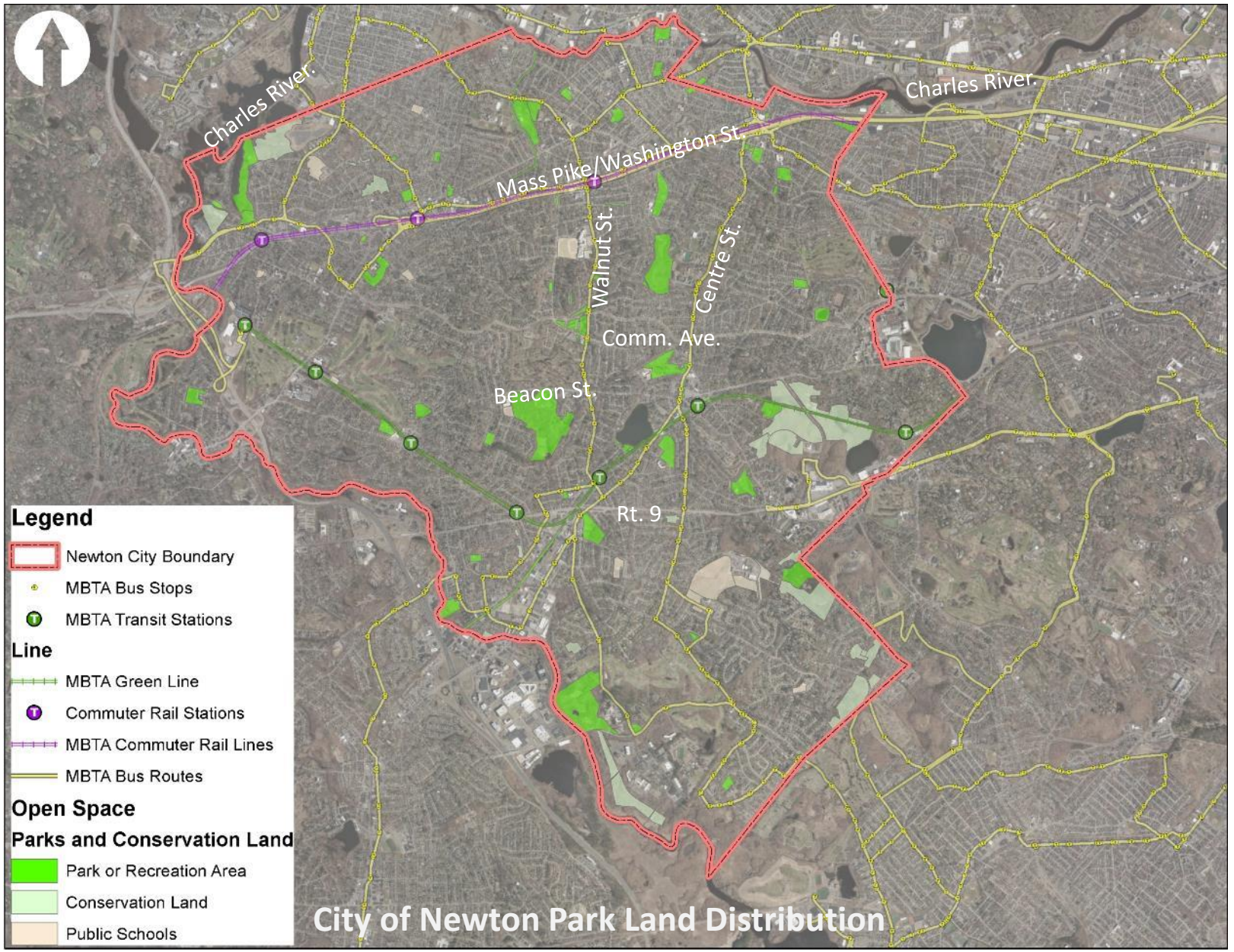
*Merchant Road Fields, Framingham – Example of quality grass turf fields*

# Agenda

1. Parks, Recreation & Culture Department Jurisdiction Overview + Community Survey
2. Field Improvement Goals & Prioritization Criteria
3. 5-Year Athletic Field Capital Project Geographic Distribution
4. 3-Year Site Specific Preliminary Improvement Goals
5. Parks, Recreation & Culture Department – Key Athletic Stakeholder Data, Departmental Budget and Staffing Improvements
6. DRAFT Designer RFQ (Request for Qualifications) Requirements
7. DRAFT Project Schedule, Phasing & Next Steps

Newton Parks, Recreation and Culture Department

**Athletic Fields Capital Improvement Plan**




Parks, Recreation & Culture Overview:

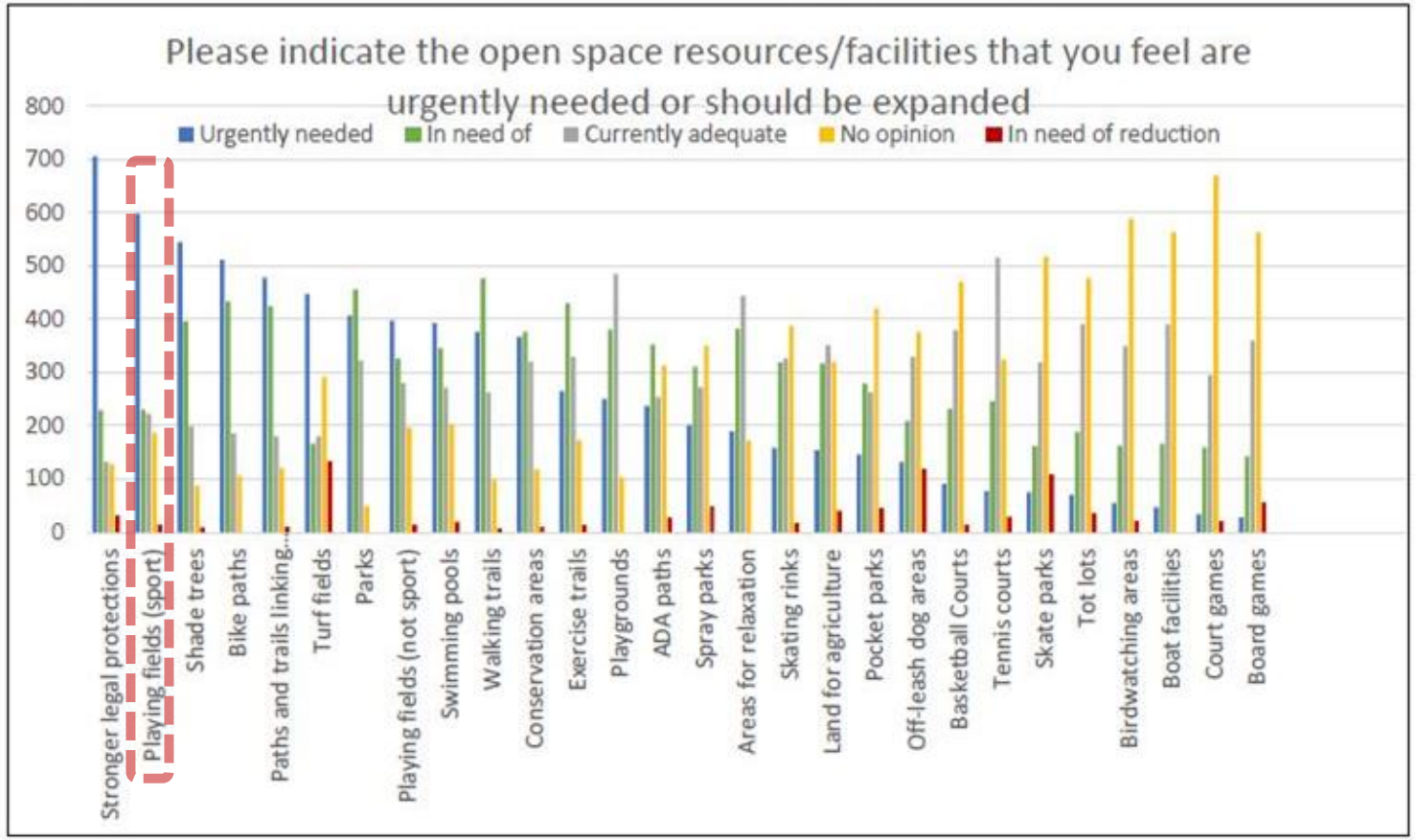
- Manage and oversee nearly 600 Acres of park land with varying recreational interests including:
  - Aquatic facilities
  - Tracks + fields
  - Trails, pathways + safe routes to schools
  - Playgrounds + tot Lots
  - Field houses + community centers
  - Hard courts
  - Passive areas
  - Outdoor exercise equipment
  - Wooded areas
  - Outdoor challenge courses
  - Dog parks
  - Splash pads
  - Historic significance
  - Wetlands and waterways
- Spread across all Villages, Wards + School zones

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# Community Survey (Open Space + Recreation Plan)

**Figure 42. Community Survey: Open Space Resources in Greatest Demand**

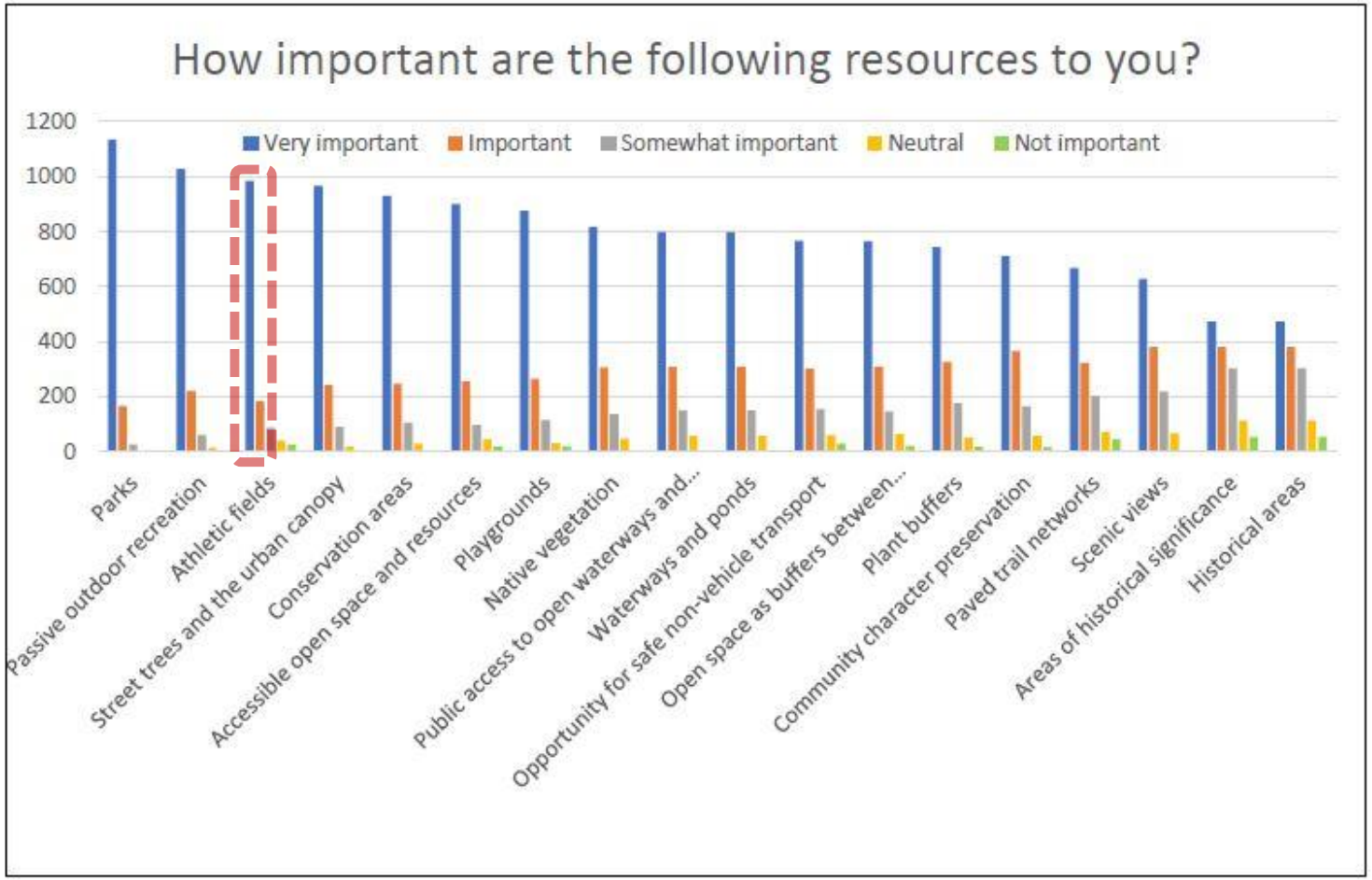



Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# Community Survey (Open Space + Recreation Plan)

**Figure 43. Community Survey: Open Space Resources in Greatest Demand**




Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# Parks, Recreation & Culture Department
# Field + Park Improvement Goals

- IMPROVE QUALITY AND QUANTITY OF USABLE MULTIUSE/MULTIPURPOSE FIELDS
- IMPROVE ACCESSIBILITY IN PARKS
- ESTABLISH STANDARDIZED PARK CONSTRUCTION DETAILS TO BETTER MANAGE OPERATION & MAINTENANCE POST CONSTRUCTION
- INVEST EQUITABLY IN NEWTON'S ATHLETIC FIELDS + PARKS ACROSS THE CITY

Newton Parks, Recreation and Culture Department

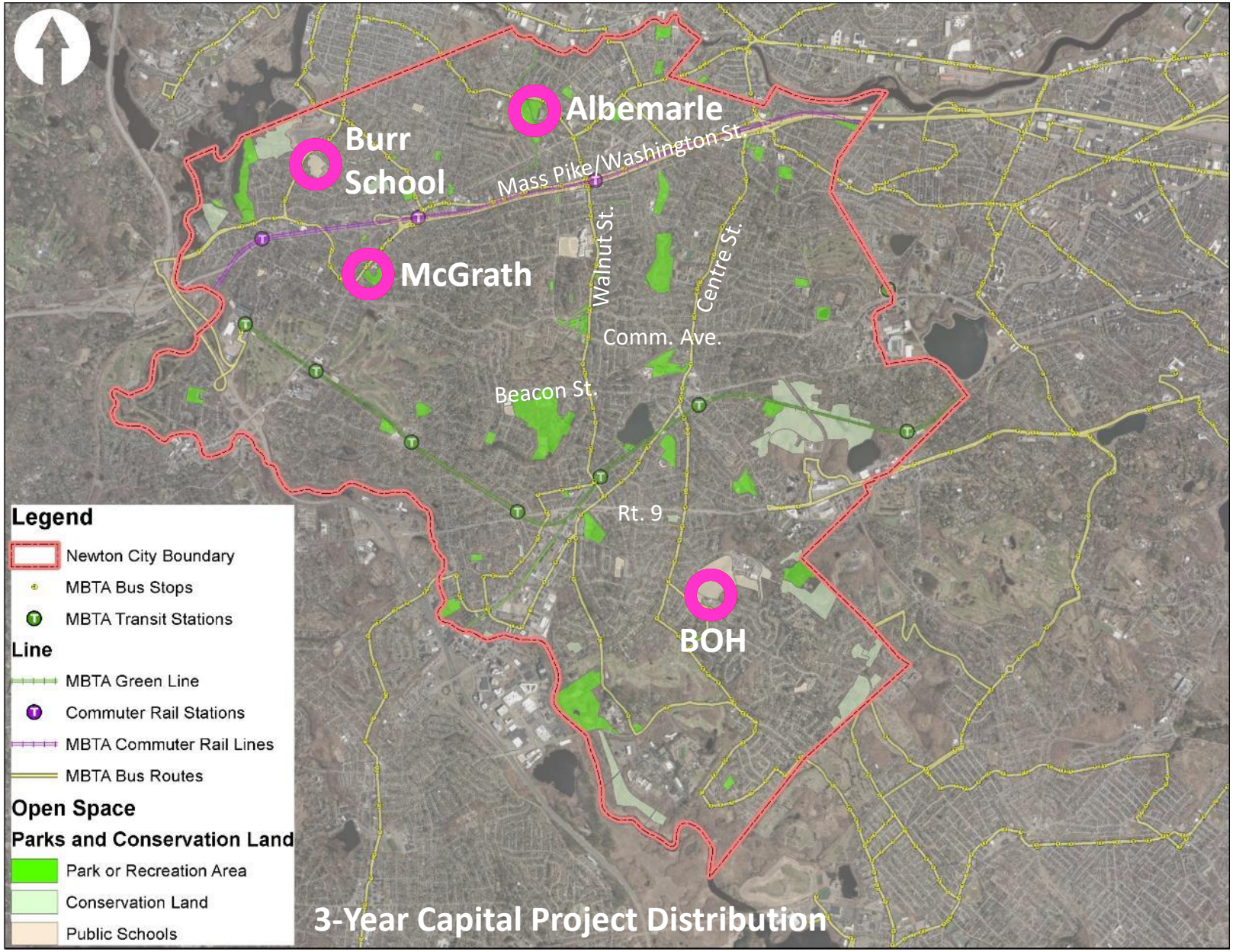
**Athletic Fields Capital Improvement Plan**

# Parks, Recreation & Culture Department
# Field Project Prioritization Criteria

- *Potential for greatest city-wide benefit*
- *Project sequencing: prioritize new fields being brought online first*
- *Bandwidth: Balancing concurrent projects against staff time*
- *Potential for expansion of multiuse fields*
- *Expanding evening play (light improvements/ additions)*
- *Player safety*
- *Integrated with other projects in a park area (e.g., path at McGrath, Gath Pool renovation)*

## Additional Projects:

- Other athletic improvement projects that are in the works
  - *Forte: Soccer Leagues conducting a feasibility study for artificial turf conversion; developer-funded relighting*
  - *NNHS: Tiger Stadium Lighting project is under consideration*
  - *Replace 3 turf carpets at both High Schools (on CIP over next 5 years)*
  - *Increased Maintenance: additional seeding, fertilizing, and aeration, etc.*



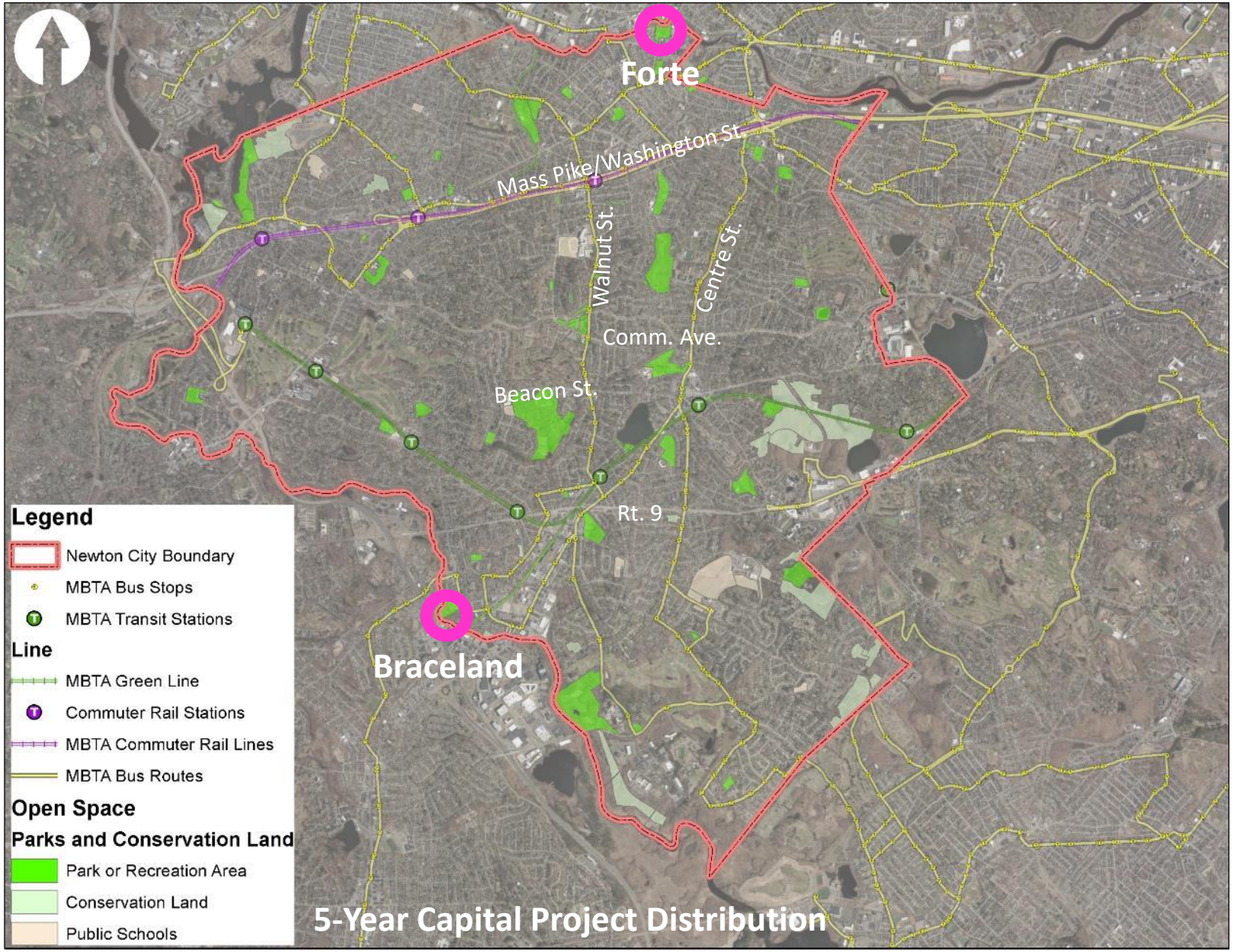

**3-Year Capital Project Distribution**:

- Albemarle Park/ Russ Halloran Sports and Recreation Complex
- Burr School
- Brown/Oak Hill Fields
- McGrath Park

TOTAL: 4 Sites

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan




**5-Year Capital Project Distribution**:

- Bobby Braceland 'Upper Falls' Playground
- Forte Park

TOTAL: 2 Sites

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan


**Russ Halloran Sports & Recreation Complex at Albemarle**
**24.9 ACRES**
**Ward: 2**
**Village: Newtonville/ West Newton**

Improvement Goals

- Develop 25% schematic design for entire site ensuring:
  - *Maximized field & site layout for efficiency in use*
  - *Improved accessibility*
  - *Developed a phased plan for improvements*
  - *Phase 1 – relighting, field reconfiguration & accessibility improvements*
  - *Additional phases – To be determined during design process*

- Develop construction bid-ready documents for **PHASE 1** to include:
  - *Installation of new sports lighting and infrastructure for future system expansion*
  - *Some reconfiguration of fields*
  - *Improved accessibility*
  - *Additional scope identified during public process*

**Approximate Construction Budget: 3.2M**

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan


**Richard J. McGrath Park**
**10.1 ACRES**
**Ward: 3**
**Village: West Newton**

Improvement Goals

•Develop construction bid-ready documents for Improvements to include:

- •New accessible perimeter path (CDBG Funded)
- •Reconfigured courts to maximize field efficiency
- •Removed underutilized backstops and infield
- •Expanded irrigation system to areas where ballfield have been removed
- •Properly located and designed lacrosse practice wall (Wall construction cost to be funded by LAX league)
- •Caliper tree replacement for any tree removals required

**Approximate Construction Budget: $500,000**

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan


**Burr School**
**10.1 ACRES**
**Ward: 4**
**Village: Auburndale**

Improvement Goals

•Develop feasibility study and 25% schematic design for field area to include:
- •Maximized field and site layout for increased permitted field space
- •Improved accessibility
- •Assessed potential environmental concerns

•If feasible, develop construction bid-ready documents to include:
- Regraded and properly developed multipurpose field area
- Installed Irrigation
- Reconfigured safe routes to school path and 4c tree planting
- Reconfigured ball diamonds and other amenities within field area
- Improved drainage

**Approximate Construction Budget: $500,000**

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan


**Brown/Oak Hill Fields**
**11.3 ACRES**
**Ward: 8**
**Village: Oak Hill**

Improvement Goals

•Develop feasibility study and 25% schematic design for field area to include:
  - •Maximized field and site layout for increased permitted field space
  - •Improved accessibility
  - •Assessed potential environmental concerns
- •If feasible, develop construction bid-ready documents to include:
  - Regraded field area
  - Expanded Irrigation
  - Reconfigured ball diamonds and other amenities within field area
  - Improved accessibility
  - Improved drainage

**Approximate Construction Budget: $500,000**

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# Key Athletic and Facility Stake Holder City-Wide Data

Total # of Athletes is still being finalized and continues to develop. This table reflects approximate numbers and are subject to further refinement

| LEAGUE | TOTAL PLAYERS | SPORT | FACILITY |
|---|---|---|---|
| Newton Youth and Girls Soccer | 4,775 | soccer | Nahanton, Brown/Oak Hill, Countryside School Fields, NSHS, Newton Highlands, Mason-Rice, Albemarle, Cabot Park, Burr School, Burr Park, Forte Park, McGrath Park, Warren E. Lincoln Playground, Lower Falls Playground, Cold Spring Park, Upper Falls Playground (Braceland), Weeks Park |
| Newton Little League | 997 | baseball | Cabot Park, Carr School Playground, Albemarle, Boyd Park, Lower Falls Playground, Lyons Park, Pierce School Playground, Stearns Park, Ward Park, Franklin School Playground |
| Newton South East Little League | 622 | baseball | Hyde Playground, Newton Centre Playground, Richardson Playground, Newton Highlands Playground, Angier School Playground, Bowen School Fields (Thompsonville Playground), Brown/Oak Hill Fields, Memorial Spaulding School Fields, Countryside School Fields |
| Newton Girls Softball | 343 | softball | NNHS, NSHS,Albemarle, Davis Playground, Emerson Playground, Upper Falls Playground (Braceland), Memorial Spaulding School Fields, Ward Park, Burr Park, Burr School, Hyde Playground |
| Newton Area Flag Football league | 325 | football | Newton Highlands Playground |
| Newton Boys Lacrosse League | 300 | lacrosse | Newton Highlands Playground, McGrath Park, NNHS |
| Newton Girls Lacrosse League | 180 | lacrosse | Weeks Park, NSHS, Cold Spring Park |
| Babe Ruth League | 120 | baseball | Albemarle, NSHS, Warren E. Lincoln Playground, Upper Falls Playground (Braceland), Cabot Park, West Newton Common |
| Newton Youth Football | 75 | football | NNHS, Albemarle |
| Girls Lacrosse Newton | 61 | lacrosse | Pellegrini Park, Highlands, NSHS |
| Senior Youth Baseball | 50 | baseball | Newton Centre Playground, Albemarle |
| American Legion Juniors | 36 | baseball | NNHS, NSHS, Albemarle |
| Newton 50/70 Summer Baseball | TBD | baseball | Cold Spring Park |
| Newton LL Senior Division | TBD | baseball | NNHS, Cabot Park, Albemarle |
| Zervas Kindergarten Soccer | 500 | soccer | Brown/ Oak Hill Fields |
| Gorilla Boys Lacrosse | 125 | lacrosse | Pellegrini Park, Newton Highlands Playground |
| BUDA Youth Frisbee | 115 | frisbee | Cabot Park, West Newton Common, McGrath Park, Albemarle |
| Triple Crown Baseball | 106 | baseball | NSHS, Cabot Park, Albemarle, Auburndale Park, Warren E. Lincoln Playground |
| Newton Youth Field Hockey | 80 | field hockey | NNHS |
| Minuteman Baseball | TBD | baseball | West Newton Common, Cabot Park, NSHS |
| TOTALS: | 8,810 | | |

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# Key Athletic and Facility Stake Holder Data: 3-Year Projects

| Facility Name | Non-permitted stake holders | Key Permitted Stake Holders | | | | | |
|---|---|---|---|---|---|---|---|
| | | Spring Users (April-June) | Total Spring Permitted Hours | Summer Users (July-August) | Total Summer Permitted Hours | Fall Users (Sept. - November) | Total Fall Permitted Hours |
| **Albemarle Park 'Russell J. Halloran Sports and Recreation Complex'** | F.A. Day Middle School students, playground users, passive users, tennis players, basketball players, general park users, pool users, safe route to school | **Newton Little League**; **Newton LL Seniors**; Senior Youth Baseball; **Newton Girls Softball**; Newton Youth Soccer; Newton Girls Soccer; BUDA Youth Frisbee; F.A. Day Middle School Athletics; Prime Baseball League; Babe Ruth Baseball Tryouts; Adult Cricket; Extra Innings Baseball Clinic | 2905 hours | Newton Little League; **Babe Ruth Baseball**; Adult Cricket; **Newton Girls Softball**; Newton Community Ed - baseball; **Boys and Girls Club**; Extra Innings Baseball Clinic; Mustang Youth Football; American Legion Baseball; Prime Baseball; BUDA Youth Frisbee; Juventas Youth Soccer | 1588 hours | Newton Little League; **Newton LL Seniors**; Adult Cricket; Newton Girls Softball; Mustang Youth Football; F.A. Day Middle School Athletics; **Newton Youth Soccer**; **Newton Girls Soccer**; Extra Innings Baseball Clinic; Lasell Baseball; NNHS Baseball captain's practice; BUDA Youth Frisbee; BUDA Adult Frisbee | 2115.50 hours |
| **Brown/Oak Hill Fields** | Brown/Oak Hill middle school students, passive users, dog owners, runners, general field users | **Brown/Oak Hill Athletics**; NSHS Track- discus, javelin; Kindergarten Soccer; **Newton Youth Soccer**; **Newton Girls Soccer**; Newton Community Education | 1838.50 hours | SMASH Volleyball Clinics; Newton Youth Soccer Clinics; **Newton Girls Soccer Clinics**; **NSHS Fall preseason sports**; Newton Community Education; **UVC Volleyball** | 159 hours | **Brown/Oak Hill Athletics**; Kindergarten Soccer; **Newton youth Soccer**; **Newton Girls Soccer**; Newton Community Education; BC Grad Flag Football; Brute Rugby Club | 1952 hours |
| **Burr School** | Burr school students, playground users, passive users, potentially dog owners, runners and general field users, safe route to school | Newton Public Schools; **Newton Girls Softball**; **Newton Youth Soccer**; **Newton Girls Soccer**; Burr PTO; NNHS Ultimate Frisbee | 657 hours | | 0 hours | Newton Public Schools; **Newton Youth Soccer**; **Newton Girls Soccer** | 253 hours |
| **Richard J. McGrath Park** | walkers, runners, dog owners | **NNHS Boys LAX**; **Newton Boys lacrosse league**; **Newton Youth Soccer**; **Newton Girls Soccer**; NCDS tennis; Maimonides tennis; Over 55 Pickleball; Over 55 Tennis; N.E. Surf Soccer; Newton Tennis; Learning Center After School PE; Belge-Friends soccer group | 1092 hours | **Boston Ski and Sports Club**; Newton Tennis; Over 55 Pickleball; Over 55 Tennis | 128 hours | Over 55 Pickleball; Over 55 Tennis; **NNHS Boys Soccer**; **Newton Youth Soccer**; **Newton Girls Soccer**; Learning Center After School PE; Belge-Friends soccer group | 1003 hours |

Athletic Stake Holder Groups highlighted in Bold hold the most field permit hours and sorted by the 4 sites prioritized within the next 3 years.

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# CITY OF NEWTON ATHLETIC FIELDS MAINTENANCE BUDGET IMPROVEMENTS

- **Increase athletic field maintenance capabilities**
- **Increase scope of contractual maintenance work**
- **Significantly increase turf management capabilities**

| Public Grounds Maintenance Budget | | | | | |
|---|---|---|---|---|---|
| Maint. Budget Expense Item | General Description | Fiscal Year 2021 | Fiscal Year 2022 | Budget Increase in Dollars | Budget Increase Percentage |
| Turf Mowing | Mowing<br>Leaf removal<br>Mulching<br>Pruning | $ 575,000 | $ 700,000 | **$ 125,000** | **22%** |
| Turf Management | Aerification<br>Fertilization<br>Slice seeding<br>Top dressing<br>Integrated Pest Management (IPM) | $ 75,000 | $ 250,000 | **$ 175,000** | **233%** |

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# PARKS, RECREATION & CULTURE DEPARTMENTAL IMPROVEMENTS

- To support the plan, PRC has taken/will take the following measures:
  - **Create a new division dedicated to Parks + Open Space projects**
    - *Create a Director of Parks + Open Space Position*
    - *Convert current Open Space Coordinator Position into Assistant Director of Parks + Open Space (vacant)*
  - **Allocate in-house maintenance and turf specialists toward project review:**
    - *Assist in reviewing athletic field-specific specifications*
    - *Assist in providing additional staff support during planning and construction*
  - **Increase staff time contribution to provide a greater City funding match:**

| Staff Time Allocation | | | | |
|---|---|---|---|---|
| Staff Description | Hourly rate | Projected staff time allocation for duration of plan and implementation | Sub Total Staff Time Cost | Notes |
| Dir of Parks + Open Space | $ 49.00 | 2450 | $ 120,050.00 | 10 hrs a week 5 yrs (49 weeks per yr) |
| Asst Dir of Parks + Open Space | $ 31.00 | 2450 | $ 75,950.00 | 10 hrs a week 5 yrs (49 weeks per yr) |
| Superintendent of Public Grounds | $ 47.00 | 490 | $ 23,030.00 | 2 hrs a week 5 yrs (49 weeks per yr) |
| Asst Sup. Of Public Grounds | $ 36.00 | 490 | $ 17,640.00 | 2 hrs a week 5 yrs (49 weeks per yr) |
| | | **Total Staff Time in Hours** | | **5880** |
| | | ***Total Staff Time Costs** | **$** | **236,670.00** |
| *** Staff Time costs are based on FY 2022 moneys and does not account for inflation, salary increases, cost of living adjustments, and benefits | | | | |

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

## DRAFT Park & Athletic Field Engineering and Landscape Architecture Services Requirements for Design RFQ:

**Basic Scope and requirement:**

- Basic consultant requirements:
  - *Must be registered Landscape Architects or Engineers in the Commonwealth of Massachusetts*
  - *Must demonstrate expertise in:*
    - *Athletic field and park development*
    - *Accessible and inclusive design*
    - *Electrical engineering*
    - *Site engineering, drainage, and landscaping*
    - *Quality products – successfully designed and managed parks, playgrounds, and fields*
    - *Minimizing unknowns whenever possible*
    - *Project fast tracking*
- Basic Design Services:
  - *Site analysis, Feasibility studies, Design development plans, Landscape plans, Construction documents, Engineer's Cost estimates, Construction observation, and punch list review*

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# Athletic Fields Capital Improvement Plan Phasing

## PHASE 1 – PLANNING + DESIGN

### Task 1:

- Multi-site Topographic Surveys:
  - *Conduct topographic surveys at all 4 prioritized sites*
- Feasibility Study/Preliminary Design:
  - *Conduct Site analysis + Drone imagery*
  - *Consensus Building (public input and hearings)*
  - *Feasibility studies for each site; Long-range, phasing plan at Albemarle*
  - *Preliminary cost estimates to help guide decision-making*
  - *Test Pits at Burr School and Albemarle*

### Task 2:

- Design Development:
  - *Develop preliminary plans to 30% Design*
  - *Continue developing cost estimates*
  - *CPC Check-in & Update*

### Task 3:

- Final Design + Bid Documents:
  - *60% Plans to Shovel-ready, buildable project*
  - *Continue developing cost estimates*
  - *Develop standardized Technical Specifications & Construction Details*
  - *Conduct structural soil borings (for lighted fields ONLY)*
  - *Request construction funding at substantial design completion (60% design)*
  - *Prepare construction bid documents*

### Task 4:

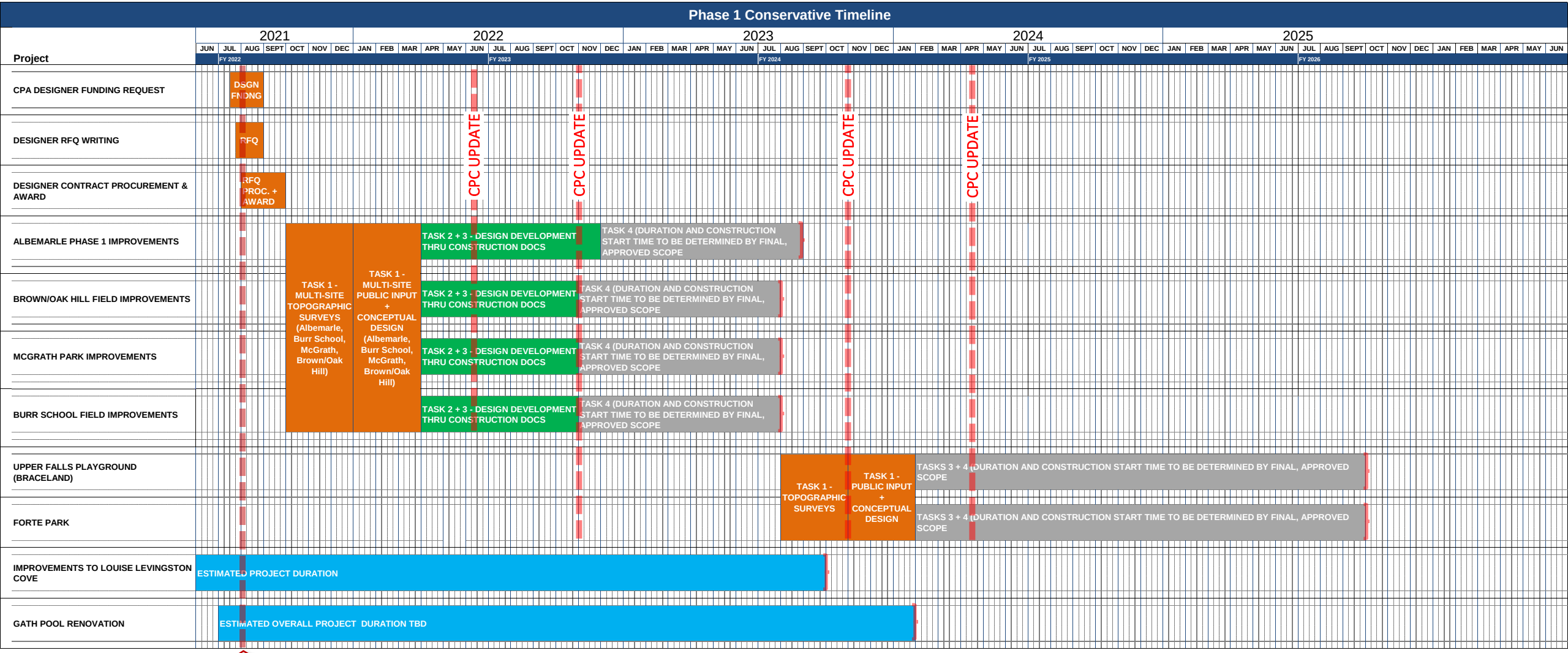
- Construction Observation:
  - *Designer to assist the city in ensuring contractor adheres to contract documents (bid specifications, contract drawings, required material samples and submittals)*
  - *Punchlist review & Closeout*
  - *Assist with developing turf establishment*

| Preliminary Design Task Funding Allocation | | | |
|---|---|---|---|
| Task Description | Percentage of design costs | Estimated Sub Total Task Costs | Notes |
| **Task 1 - Survey + Preliminary Design | 20% | $ 84,000 | Percentage allocated toward design phases established based on previous projects. This percentage is subject to change based on project complexity and additional community needs resulting from consensus-building efforts. |
| **Task 2 - Design Development | 25% | $ 105,000 | |
| **Task 3 - Final Design + Bid Documents | 35% | $ 147,000 | |
| Task 4 - Construction Administration | 20% | $ 84,000 | |
| | | **Total Design Budget Requested** | **$ 420,000.00** |
| ** Includes Permitting, Wetlands delineation, Soil borings and test pits, Part-time site observation, and Utility back charges | | | |

Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# Projects




We are here!

Please note that timeframes and durations are estimated and are subject to change as designs are refined. Constructions Cycles are also estimated and are dependent on weather, field space allocation during closures during construction etc.

Legend

- Current Capital Proj.
- Planning + Prelim. Dsgn
- Const. Documents
- Construction - Phase 2

## Newton Parks, Recreation and Culture Department

# Athletic Fields Capital Improvement Plan

# Next Steps

- ~~Present to Parks and Recreation Commission and Athletic Field Sub-Committee~~
- Present to CPC/ Request Funds for 1st 3 to 5 years of project design/engineering
- Hire design/engineering consultant
- Public hearings and meetings as necessary to reach consensus
- Provide project updates to CPC at various stages of the design process
- Continue to build out the project list beyond year 5
- Continue to engage with sport groups and other stake holders on supplemental projects & funding

# Questions and Discussion

For additional questions and input please contact: **athleticfields@newtonma.gov**

*Newton Highlands Playground, Newton*

DRAFT #347-21

CITY OF NEWTON

IN CITY COUNCIL

DRAFT

ORDERED:

That, in accordance with the recommendation of the Community Preservation Committee through its Chair, Mark Armstrong, the Programs & Services Committee through its Chair Joshua Krintzman and the Finance Committee through its Chair Rebecca Walker Grossman, appropriation of four hundred twenty thousand dollars ($420,000) in Community Preservation Act funds from the FY22 Budget Reserve (Account# 58R10498-579000) to the control of the Planning & Development Department for the completion of the Athletic Fields Capital Improvements Plan Design FY2022-2025 Project which includes the hiring of on-call consultants to complete the studies, plans, and design work necessary to construct new fields be and is hereby approved as follows:

| | | |
|---|---|---|
| FROM: | Budget Reserves Current Year (58R10498-579000) | $420,000 |
| TO: | Athletic Fields CIP Design-Undistributed (58D11411-579500) | $420,000 |

Under Suspension of Rules
Readings Waived and Approved
DRAFT

(SGD) NADIA H KHAN
Acting City Clerk

(SGD) RUTHANNE FULLER
Mayor

Date: _____