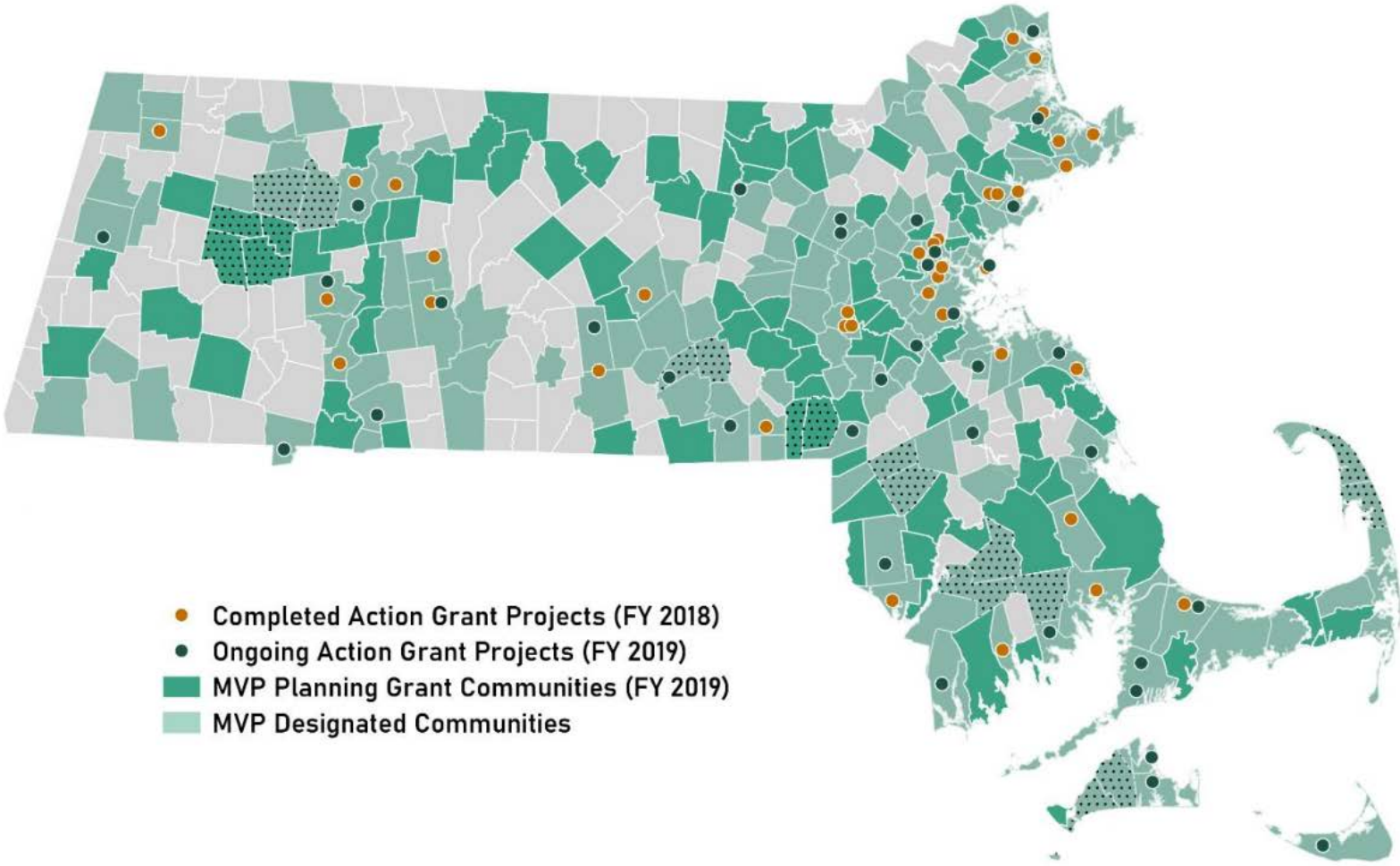
MVP Action Grant Opportunity

What is the MVP program?

- $17M in funding for Action and Planning Grants To-Date
- New RFR released on 10/3
- $8M in Action Grant funding
- Up to $2M per community
- Requires a 25% match

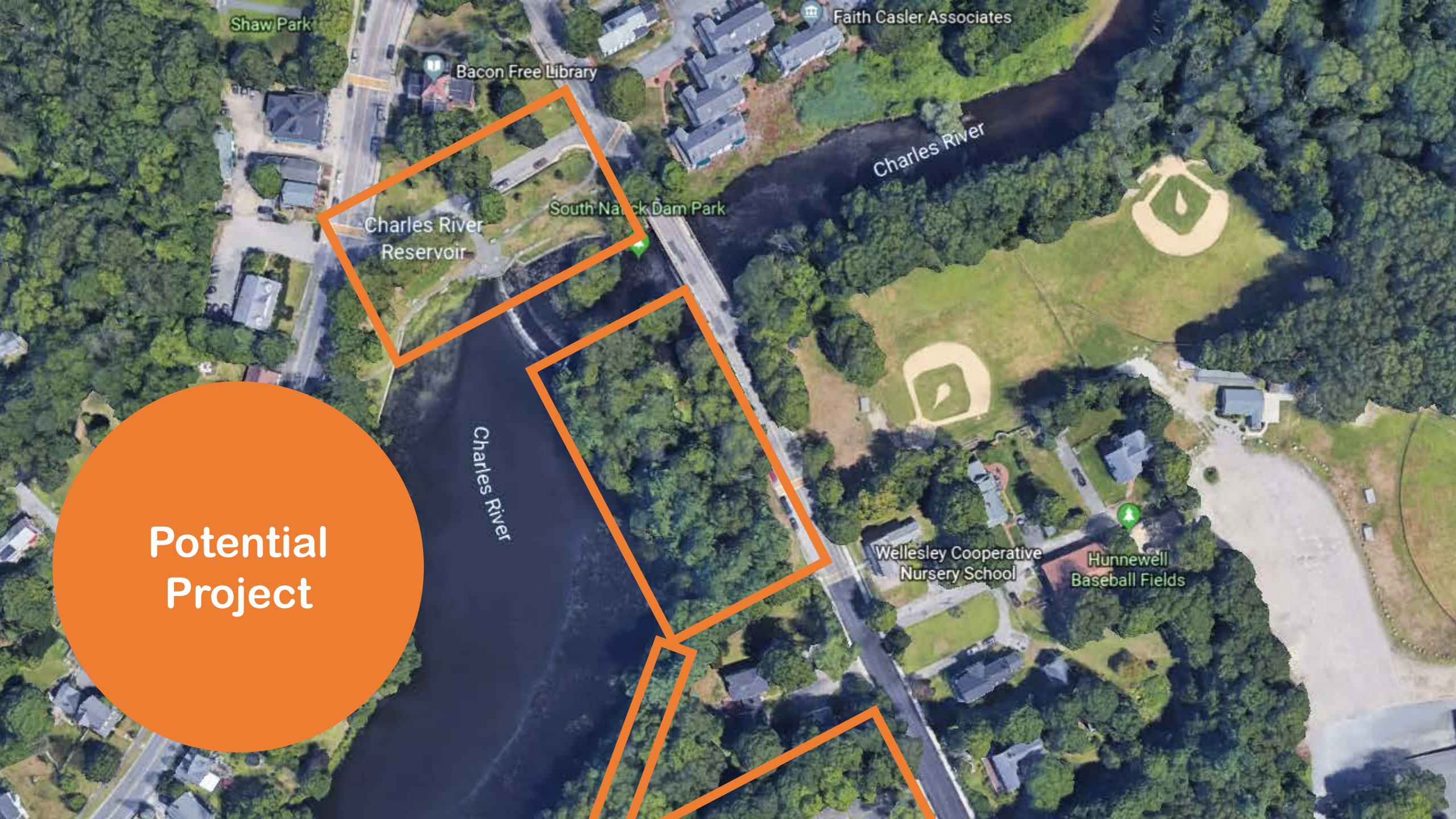


Assessing Opportunities

- Alignment with priority actions identified in MVP report
- Extend impact of existing capital funds
- Supports multiple community goals
- Alignment with MVP grant criteria, including nature-based solutions
- Project timeline

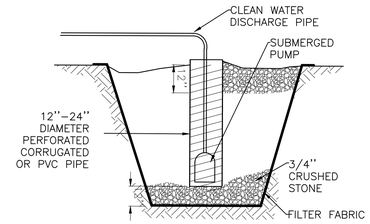
HIGH PRIORITY ACTIONS, PART I

CATEGORY	ACTION	LEAD DEPT.	SUPPORT
LOW IMPACT DEVELOPMENT	Integrate cost-effective green and resilient infrastructure in upcoming public projects, including the construction of new public buildings, roadway improvement projects and the downtown parking garage.	Selectmen	Community & Economic Dev. KMS Building Committee W. Natick Fire Building Comm. DPW/Engineering Planning Board Conservation Commission Sustainability Committee
	Introduce infiltration regulations for new construction.	Health	Building Dept. Conservation Commission DPW/Engineering
	Encourage Low Impact Development (LID) in regulations for new construction and major renovations.	Community & Economic Dev.	Planning Board Conservation Commission DPW/Engineering
	Incorporate updated climate data into permitting processes (i.e. use NOAA Atlas 14 rainfall data for stormwater design, identify heat islands, etc).	Community & Economic Dev.	DPW/Engineering Conservation Commission Planning Board
EMERGENCY RESPONSE	Educate residents on hazards that threaten the community, the steps they can to mitigate damages to their property, and details on emergency shelters and cooling stations.**	Emergency Management	Community & Economic Dev. Board of Selectmen Police Health Fire LEP Committee
	Prepare an "After the Storm Recovery" Plan for the Community.*	Emergency Management	LEP Committee Police Health Fire Selectmen DPW IT
	Increase generator capacity at existing and new Town facilities. Utilize Wilson Middle School and planned Kennedy Middle School (construction scheduled for 2020) as shelters.	Facilities DPW/EMD	Natick Public Schools Health Police Fire LEP Committee KMS Building Committee


Shaw Park
Bacon Free Library
Faith Casler Associates
Charles River
Charles River Reservoir
South Natick Dam Park
Charles River
Wellesley Cooperative Nursery School
Hunnewell Baseball Fields
Potential Project

LEGEND

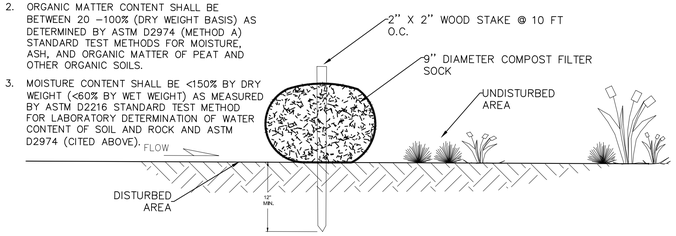
- EXISTING CONTOUR
- WETLAND FLAG/ BANK FLAK
- APPROXIMATE LOCATION OF OBSERVATION WELL
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- BORDERING VEGETATED WETLANDS (BVW)
- BANK/ ORDINARY HIGH WATER (OHW)
- 100-FOOT BORDERING VEGETATED WETLANDS BUFFER
- FEMA 100-YEAR POOL
- LIMIT OF WORK
- TEMPORARY COFFERDAM
- LIMIT OF REQUIRED VEGETATION REMOVAL
- ESTIMATED LIMITS OF 1934 DAM



DEWATERING SUMP DETAIL
NOT TO SCALE

NOTES:

1. FILTER SOCK SHALL BE MADE OF 100% ORGANIC HESSIAN FABRIC (BURLAP) OR BIO–DEGRADABLE 5 MIL HDPE (NO LONGER THAN 6 MONTHS). REPLACEMENT NEEDED AFTER 6 MONTHS.
2. ORGANIC MATTER CONTENT SHALL BE BETWEEN 20 –100% (DRY WEIGHT BASIS) AS DETERMINED BY ASTM D2974 (METHOD A) STANDARD TEST METHODS FOR MOISTURE, ASH, AND ORGANIC MATTER OF PEAT AND OTHER ORGANIC SOILS.
3. MOISTURE CONTENT SHALL BE <150% BY DRY WEIGHT (<60% BY WET WEIGHT) AS MEASURED BY ASTM D2216 STANDARD TEST METHOD FOR LABORATORY DETERMINATION OF WATER CONTENT OF SOIL AND ROCK AND ASTM D2974 (CITED ABOVE).



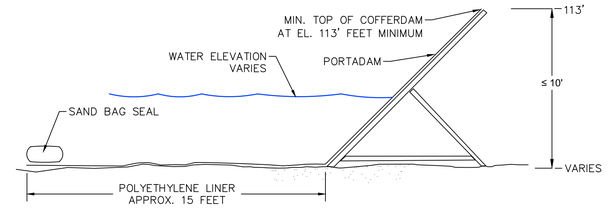
4. PARTICLE SIZE IS MEASURED BY SIEVING SHALL BE AS FOLLOWS:

SIEVE SIZE	% PASSING
75MM	100%
19MM	70–100%
#4	30– 75%
#20	20–40%

NO PARTICLE MAY BE LONGER THAN 150MM

5. SOLUBLE SALTS SHALL BE <5.0 MMHOS/CM (DS/M).
6. THE PH SHALL BE BETWEEN 5.5 AND 8.0.
7. FILTER SOCKS MUST BE PLACED PARALLEL TO CONTOUR WITH BOTH ENDS OF THE SOCK EXTENDED UPSLOPE AT A 45 DEGREE ANGLE TO THE REST OF THE SOCK TO PREVENT END–AROUNDS.
8. THE CONTRACTOR SHALL MAINTAIN THE FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES, INCLUDING INSPECTIONS AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
9. FOR REMOVAL, THE CONTRACTOR SHALL RAKE OUT SO THAT FILTER MATERIAL IS NO GREATER THAN 3" IN DEPTH ON SOIL SUBSTRATE.

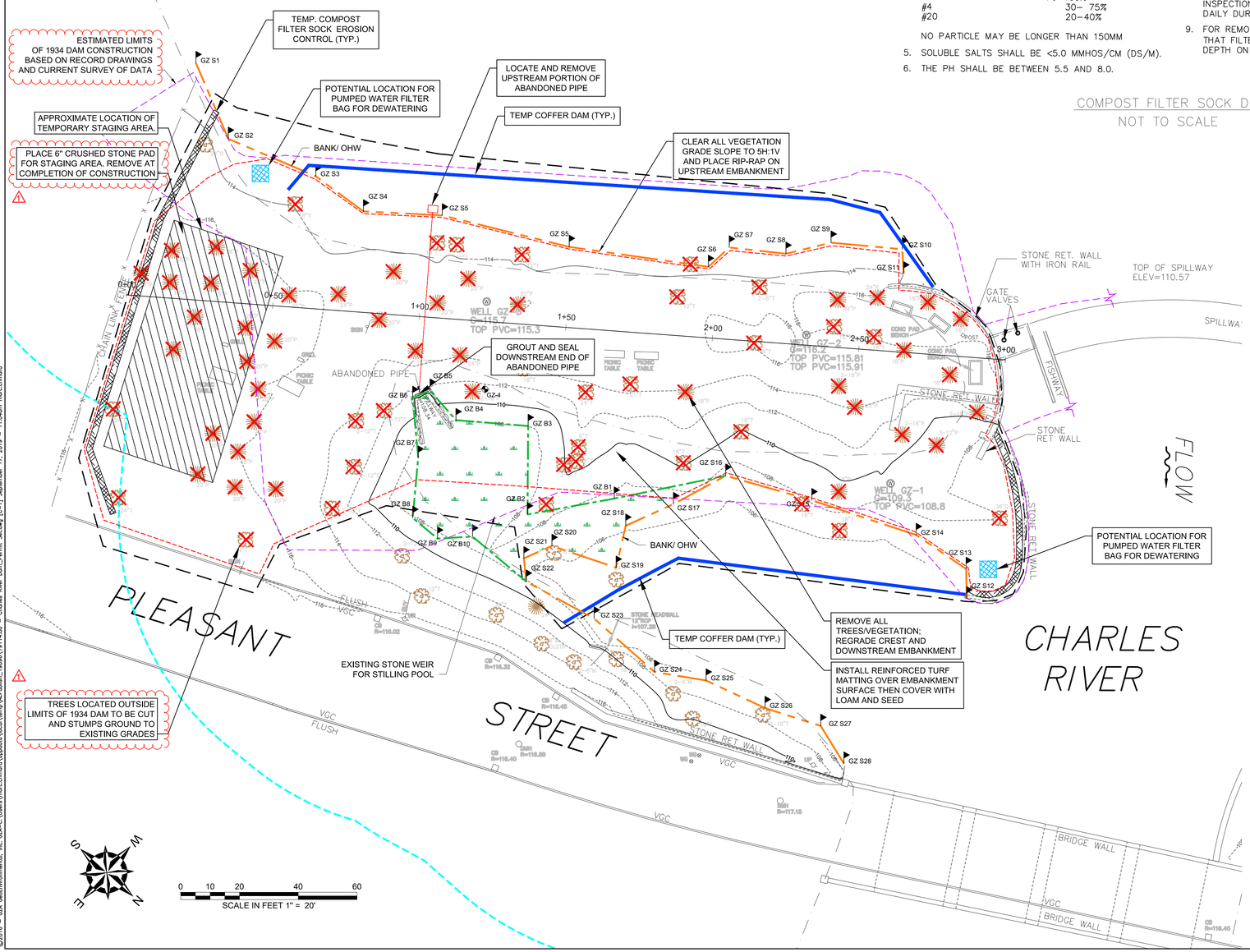
COMPOST FILTER SOCK DETAIL
NOT TO SCALE

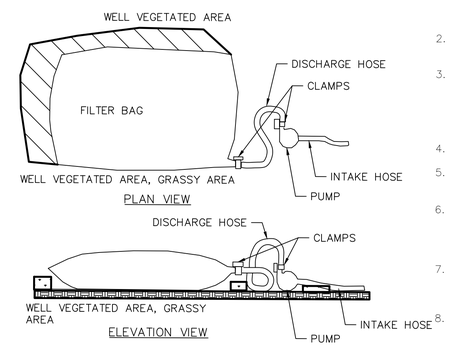


OPTIONAL ATTACHMENTS:
- BACK BRACE POLE
- HORIZONTAL, ADDITIONAL BRACING
- SINGLE FRAME ATTACHMENTS FOR IRREGULAR CONTOURS

NOTES:
1. TOTAL HEIGHT OF TEMPORARY COFFERDAM CONTEMPLATED FOR THE WORK OF THIS PROJECT IS EXPECTED TO BE 9 FEET.
2. SHOULD THE CONTRACTOR DESIRE TO EMPLOY A NON–PROPRIETARY TEMPORARY COFFERDAM WITH HEIGHTS GREATER THAN 5 FEET THEY SHALL (AT NO ADDITIONAL COST TO THE OWNER) ENGAGE A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MASSACHUSETTS TO DESIGN (AND STAMP) SAID TEMPORARY COFFERDAM AND SUBMIT TO ENGINEER FOR REVIEW.

TEMPORARY COFFERDAM DETAIL
NOT TO SCALE





PUMPED WATER FILTER BAG DETAIL
NOT TO SCALE

PUMPED WATER FILTER BAG NOTES:

1. CONTRACTOR SHALL LOCATE FILTER BAG TO COMPLY WITH REQUIREMENTS BELOW. LOCATION IS SUBJECT TO APPROVAL BY THE ENGINEER.
2. FILTER BAGS SHALL BE USED TO FILTER WATER PUMPED FROM DISTURBED AREAS PRIOR TO DISCHARGING.
3. FILTER BAGS SHALL BE MADE FROM NON–WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. CONTRACTOR SHALL PROVIDE A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY (FOR DISPOSAL PURPOSES).
4. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME ½ FULL.
5. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
6. BAGS SHALL BE LOCATED IN WELL–VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.
7. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED.
8. THE PUMPING RATE SHALL BE NO GREATER THAN 100 GPM OR ½ THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.
9. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

RESOURCE IMPACT AREA

	U/S	D/S	TOTAL
BVW (SF)	0	960	960
BANK (LF)	220	220	440
LUWB (SF)	3,500	3,100	6,600

PLANNING SET
NOT FOR CONSTRUCTION

NO.	ISSUE/DESCRIPTION	BY	DATE
1	MHC COMMENT UPDATES	MEC	SEP 2019

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REHABILITATION OF CHARLES RIVER DAM
NATICK, MASSACHUSETTS

SEDIMENT, EROSION, AND WATER CONTROL PLAN

COMMONWEALTH OF MASSACHUSETTS
JAMES P. GUARENTE
CIVIL
No. 40104
REGISTERED PROFESSIONAL ENGINEER

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
TOWN OF NATICK
13 E. CENTRAL STREET
NATICK, MA 01760

PROJ MGR: CBN	REVIEWED BY: PHB	CHECKED BY: CWC	FIGURE
DESIGNED BY: CBN	DRAWN BY: MEC	SCALE: AS NOTED	C-1
DATE: SEPTEMBER, 2019	PROJECT NO. 01.19114.80	REVISION NO.	SHEET NO. 6 OF 9

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LEGEND

SECTION NO. 2 / C-7 SHEET NO.	SECTION MARKER
194	EXISTING CONTOUR
106.6' TOP OF SED. EL. / 105.1' HARD BOTTOM EL.	EXISTING SPOT ELEVATION
GZ B1 / GZ S1	WETLAND FLAG/ BANK FLAK
	APPROXIMATE LOCATION OF OBSERVATION WELL
	TREE
	BORDERING VEGETATED WETLANDS (BVW)
	BANK/ ORDINARY HIGH WATER (OHW)
	100-FOOT BORDERING VEGETATED WETLANDS BUFFER
	FEMA 100-YEAR POOL
	LIMIT OF WORK
	ESTIMATED LIMITS OF 1934 DAM

PLANNING SET
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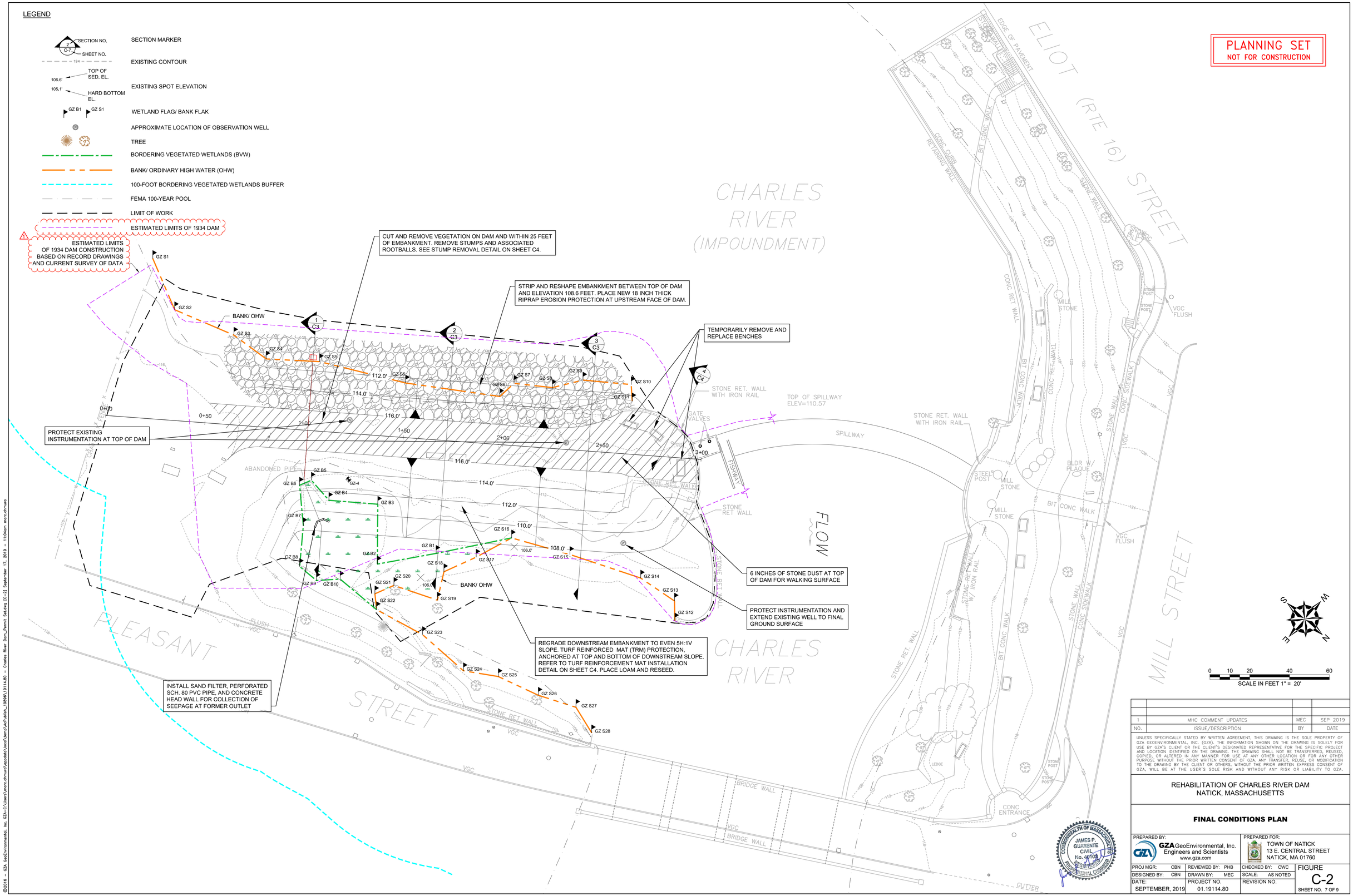

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REHABILITATION OF CHARLES RIVER DAM
NATICK, MASSACHUSETTS

FINAL CONDITIONS PLAN

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

COMMONWEALTH OF MASSACHUSETTS
JAMES P. GUARENTE
CIVIL
No. 49108
PROFESSIONAL ENGINEER

PREPARED FOR:
TOWN OF NATICK
13 E. CENTRAL STREET
NATICK, MA 01760

PROJ MGR: CBN	REVIEWED BY: PHB	CHECKED BY: CWC	FIGURE C-2
DESIGNED BY: CBN	DRAWN BY: MEC	SCALE: AS NOTED	SHEET NO. 7 OF 9
DATE: SEPTEMBER, 2019	PROJECT NO. 01.19114.80	REVISION NO.	

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Existing Capital

$1.85M

Appropriated for Charles River Dam Engineering & Repairs

Community Needs

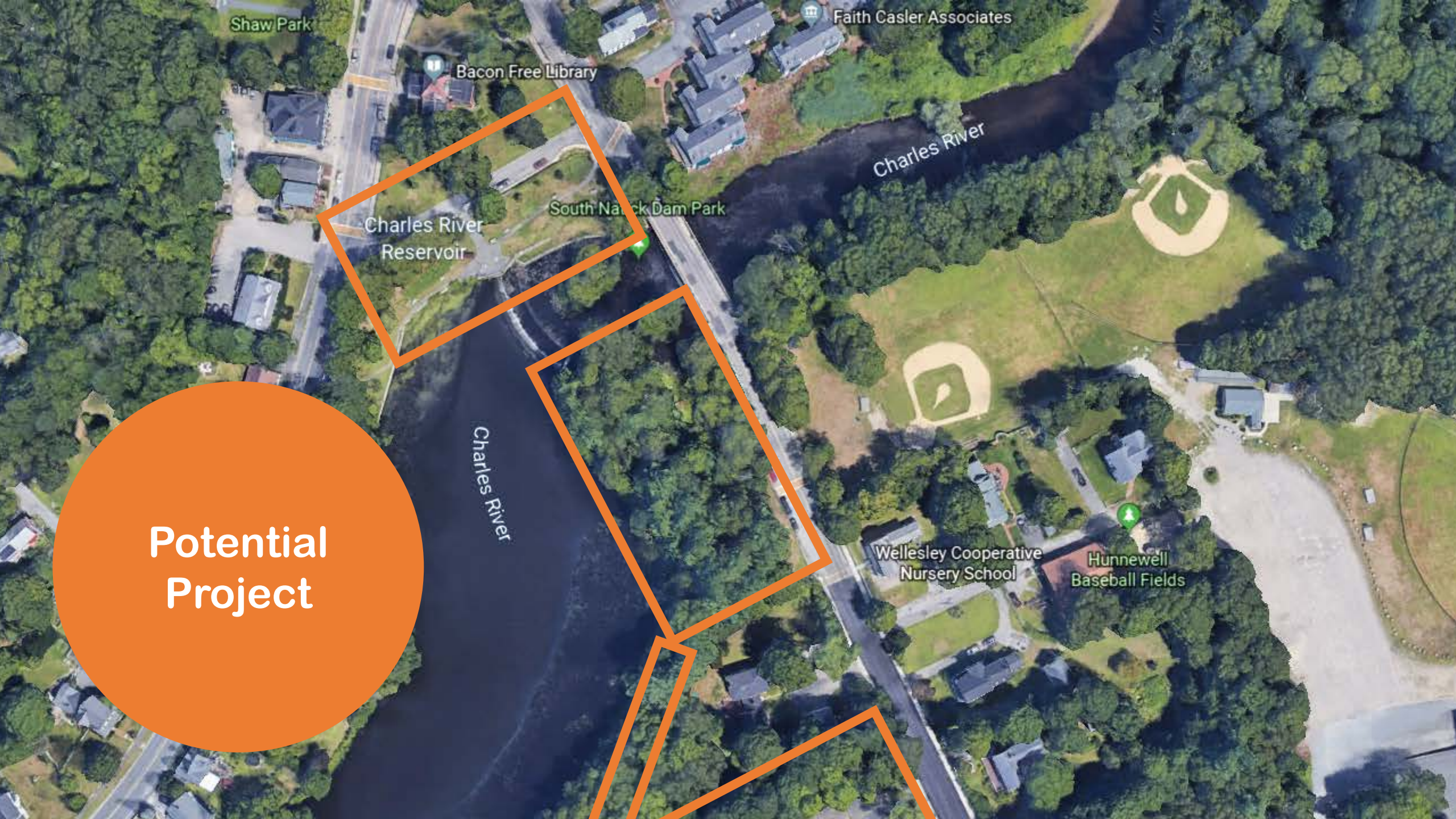
$1.33M

Identified as potential park improvements in this area (Master Plan for Parks & Fields)

MVP Goals & Timing

FY20/21

Aligns with MVP funding criteria and implementation timeline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Hunnewell Baseball Fields
Potential Project

Trees will be cleared to improve resilience of dam from high winds.

Options:

- Vista Lookout and interpretive signage (historic, stormwater, environmental)
- Rain gardens/Bioretention stormwater controls ($45K)*
- Kayak/canoe storage
- Public art
- Community Garden Plots

Pleasant Street Drainage

Opportunity for on-site stormwater management

Blue – MVP Request

Purple – Potential Phase II

Basketball court in need of repair.

Options:

- Pervious/sustainable parking ($130K)*
- Repurpose basketball court into multi-purpose stormwater detention ($300K)*
- Path/boardwalk along river connecting parcels with stormwater features ($30K)*
- Drainage improvements ($45K)*
- Small playground
- EV charging station
- Kayak launch at the back

Priority park in Park Master Plan

Options

- Add shade trees/improve lawn area ($20K)
- Add more community amenities
- Interpretive signage (historic, stormwater, environmental)
- Regrade and improve park layout ($150K)*
- Daylight stormwater outfall and incorporate phosphorus treatment
- Removal of invasive species like water chestnut and other aquatic invasives in the Charles.

Bacon Library and Mill Lane

Options

- Nature-based stormwater features to capture, manage, and treat stormwater from a portion of Eliot St and Mill Lane
- Interpretive signage (historic, stormwater, environmental)
- Continuity between the park and Bacon Library

Next Steps

- Work with W&S to develop grant application
- Reach out to other Boards, organizations and relevant groups for letters of support
- Return to BoS in late October with more detailed proposal

Conservation Commission (10/17)

Bacon Free Library BoT (10/16)

Natick Historic District Commission (TBD)

Recreation & Parks Commission (10/7)

Natick Praying Indians (TBD)

Charles River Watershed Assoc. (TBD)

Town of Wellesley NRC (TBD)

Board of Selectman (10/28)