TALKING DIRTY

Massachusetts Land Conservation Conference

Brad Buschur, Project Director

GROUNDWORK®
CHANGING PLACES
CHANGING LIVES

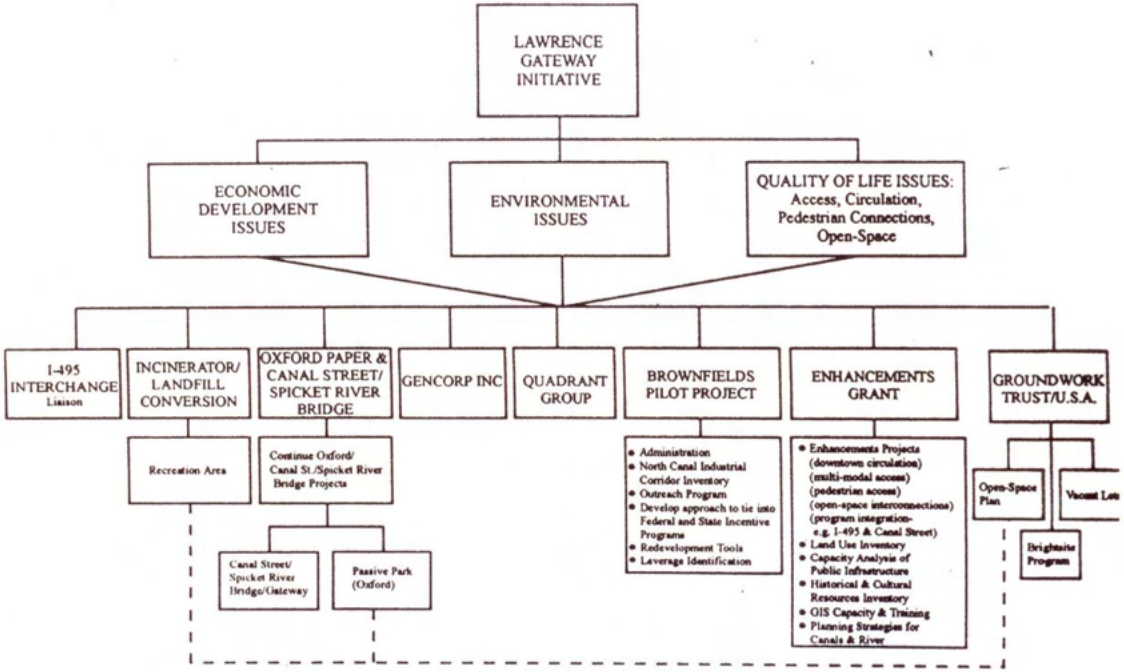
Groundwork USA Network

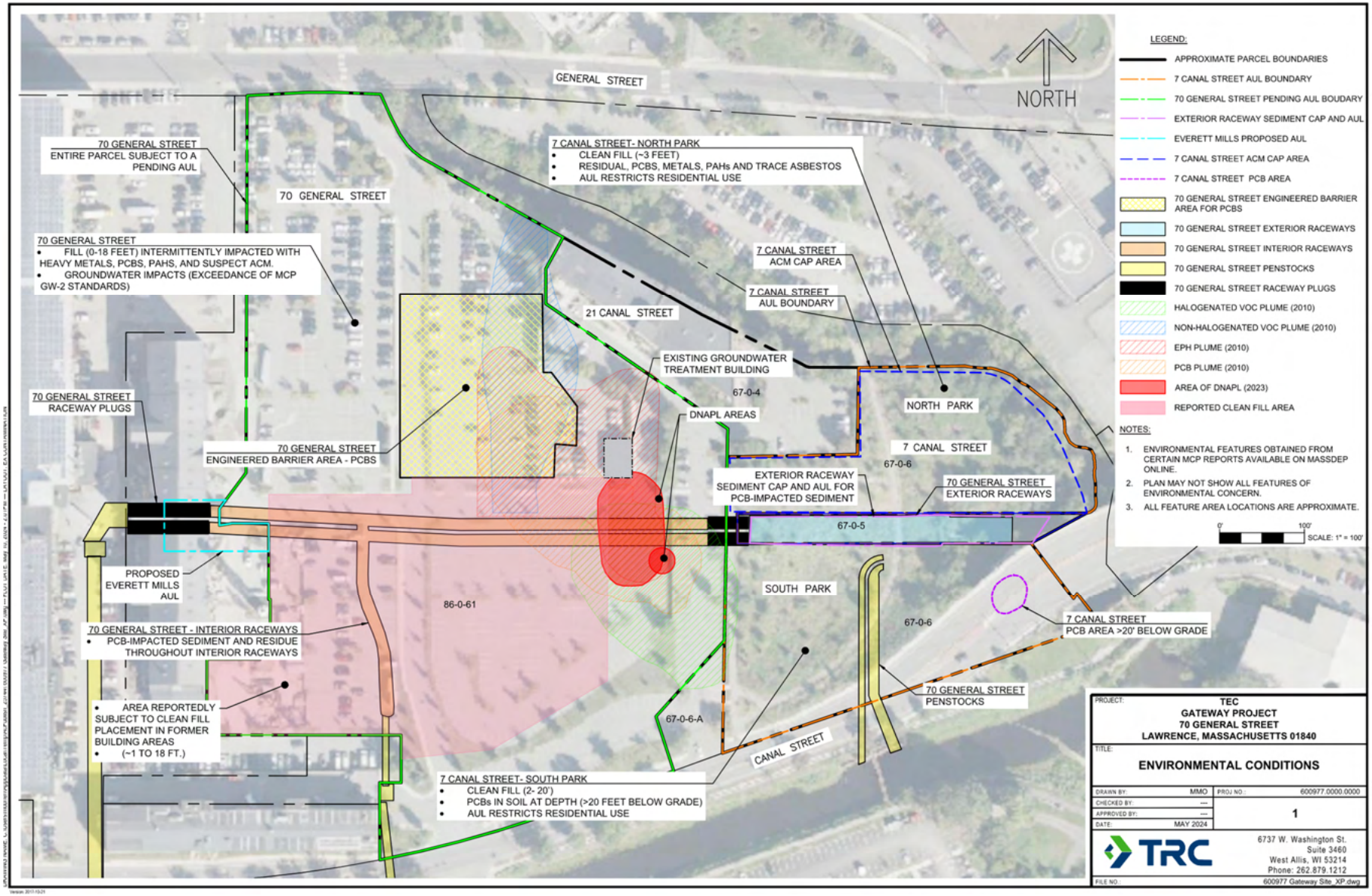
A national network of 21 place-based environmental justice organizations, Groundwork Trusts, working hand-in-hand with their community to restore the urban environment and create healthier, more just, places to live, work, and play. While we share a mission and vision, the work in each local Groundwork community is shaped by local needs and community voices.

- Groundwork Atlanta, GA
- Groundwork Bridgeport, CT
- Groundwork Buffalo, NY
- Groundwork Denver, CO
- Groundwork Elizabeth, NJ
- Groundwork Erie, PA
- Groundwork Hudson Valley, NY
- Groundwork Indianapolis, IN
- Groundwork Jacksonville,FL
- Groundwork Lawrence, MA
- Groundwork Milwaukee, WI
- Groundwork Mobile County, AL
- Groundwork New Orleans, LA
- Groundwork Northeast Revitalization Group, KS
- Groundwork Ohio River Valley
- Groundwork Rhode Island
- Groundwork Richmond, CA
- Groundwork Richmond, VA
- Groundwork San Diego-Chollas Creek, CA
- Groundwork Somerville, MA
- Groundwork Southcoast, MA

CHANGING PLACES CHANGING LIVES

Lawrence Gateway Initiative




GENERAL STREET
NORTH
70 GENERAL STREET
ENTIRE PARCEL SUBJECT TO A PENDING AUL
70 GENERAL STREET
7 CANAL STREET- NORTH PARK
• CLEAN FILL (~3 FEET)
• RESIDUAL, PCBS, METALS, PAHs AND TRACE ASBESTOS
• AUL RESTRICTS RESIDENTIAL USE
70 GENERAL STREET
• FILL (0-18 FEET) INTERMITTENTLY IMPACTED WITH HEAVY METALS, PCBS, PAHS, AND SUSPECT ACM.
• GROUNDWATER IMPACTS (EXCEEDANCE OF MCP GW-2 STANDARDS)
7 CANAL STREET ACM CAP AREA
7 CANAL STREET AUL BOUNDARY
21 CANAL STREET
EXISTING GROUNDWATER TREATMENT BUILDING
67-0-4
DNAPL AREAS
NORTH PARK
70 GENERAL STREET RACEWAY PLUGS
70 GENERAL STREET ENGINEERED BARRIER AREA - PCBS
7 CANAL STREET
67-0-6
EXTERIOR RACEWAY SEDIMENT CAP AND AUL FOR PCB-IMPACTED SEDIMENT
70 GENERAL STREET EXTERIOR RACEWAYS
67-0-5
PROPOSED EVERETT MILLS AUL
SOUTH PARK
86-0-61
67-0-6
7 CANAL STREET PCB AREA >20' BELOW GRADE
70 GENERAL STREET - INTERIOR RACEWAYS
• PCB-IMPACTED SEDIMENT AND RESIDUE THROUGHOUT INTERIOR RACEWAYS
70 GENERAL STREET PENSTOCKS
• AREA REPORTEDLY SUBJECT TO CLEAN FILL PLACEMENT IN FORMER BUILDING AREAS
• (~1 TO 18 FT.)
67-0-6-A
CANAL STREET
7 CANAL STREET- SOUTH PARK
• CLEAN FILL (2- 20')
• PCBs IN SOIL AT DEPTH (>20 FEET BELOW GRADE)
• AUL RESTRICTS RESIDENTIAL USE
LEGEND:
APPROXIMATE PARCEL BOUNDARIES
7 CANAL STREET AUL BOUNDARY
70 GENERAL STREET PENDING AUL BOUDARY
EXTERIOR RACEWAY SEDIMENT CAP AND AUL
EVERETT MILLS PROPOSED AUL
7 CANAL STREET ACM CAP AREA
7 CANAL STREET PCB AREA
70 GENERAL STREET ENGINEERED BARRIER AREA FOR PCBS
70 GENERAL STREET EXTERIOR RACEWAYS
70 GENERAL STREET INTERIOR RACEWAYS
70 GENERAL STREET PENSTOCKS
70 GENERAL STREET RACEWAY PLUGS
HALOGENATED VOC PLUME (2010)
NON-HALOGENATED VOC PLUME (2010)
EPH PLUME (2010)
PCB PLUME (2010)
AREA OF DNAPL (2023)
REPORTED CLEAN FILL AREA
NOTES:
1. ENVIRONMENTAL FEATURES OBTAINED FROM CERTAIN MCP REPORTS AVAILABLE ON MASSDEP ONLINE.
2. PLAN MAY NOT SHOW ALL FEATURES OF ENVIRONMENTAL CONCERN.
3. ALL FEATURE AREA LOCATIONS ARE APPROXIMATE.
0'
100'
SCALE: 1" = 100'
PROJECT:
TEC
GATEWAY PROJECT
70 GENERAL STREET
LAWRENCE, MASSACHUSETTS 01840
TITLE:
ENVIRONMENTAL CONDITIONS
DRAWN BY: MMO
CHECKED BY: ---
APPROVED BY: ---
DATE: MAY 2024
PROJ NO.: 600977.0000.0000
1
TRC
6737 W. Washington St.
Suite 3460
West Allis, WI 53214
Phone: 262.879.1212
FILE NO.: 600977 Gateway Site_XP.dwg

Public-Private Partnership

- City provides overall strategic guidance, project oversight and fiscal management

- Groundwork as Owner's Representative
  - Project management
  - Community engagement
  - Contract with consultants
    - (Surveyors, Civil Engineers, Structural Engineers, Geotechnical Engineers, Environmental Engineers, Landscape Architects, Architects, General Contractors)

  - Direct purchase of equipment

GROUNDWORK
CHANGING PLACES
CHANGING LIVES

Public-Private Partnership

PARC

MVP
Municipal Vulnerability Preparedness

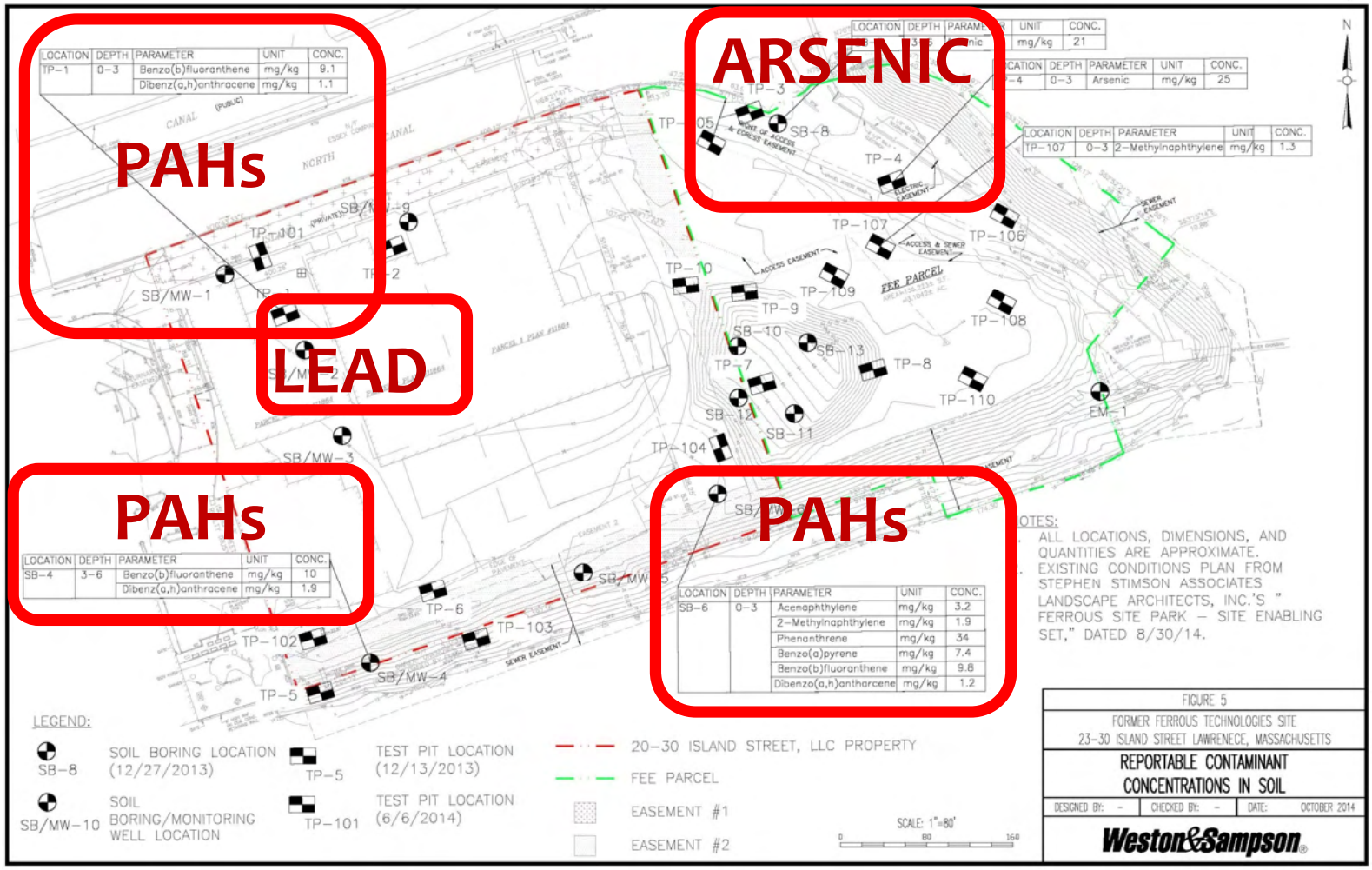
The Ferrous Site (5.4 acres)

Environmental Education

Environmental Education

Waterfall Yo!

Brownfield Assessment



Brownfield Assessment

SAMPLE LOCATION	DATE	MERCURY	ARSENIC	LEAD	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	DIBENZ(A,H)ANTHRACENE
TP-101 (0-3)	6/6/2014	**12**	**3.8**	**33**	**0.76**	**0.86**	**1.6**	0.09
TP-101 (5-8)	6/6/2014	**11**	**3.3**	**9.6**	0.1	0.1	0.1	0.1
TP-102 (0-3)	6/6/2014	**14**	**4.7**	**100**	**1.4**	**1.9**	**3.4**	**0.31**
TP-102 (5-8)	6/6/2014	**22**	**15**	**150**	0.09	0.09	**0.23**	0.09
TP-103 (0-3)	6/6/2014	**13**	**6.6**	**24**	**1.1**	**1.1**	**1.7**	0.095
TP-103 (5-8)	6/6/2014	**43**	**5.8**	**36**	**2.1**	**1.8**	**2.2**	**0.43**
TP-104 (0-3)	6/6/2014	**2.9**	1.4	**4.8**	0.1	0.1	0.1	0.1
TP-104 (5-8)	6/6/2014	**21**	1.35	**3.4**	0.09	0.09	0.09	0.09
TP-105 (0-3)	6/6/2014	**17**	**17**	**7.6**	0.095	0.095	0.095	0.095
TP-105 (5-8)	6/6/2014	**5.7**	1.3	**2.6**	0.095	0.095	0.095	0.095
TP-106 (0-3)	6/6/2014	**16**	**3.4**	**26**	**0.39**	**0.41**	**0.64**	0.09
TP-106 (5-8)	6/6/2014	**13**	1.3	**20**	**0.38**	**0.37**	**0.65**	0.095
TP-107 (0-3)	6/6/2014	**6.3**	1.25	**4**	0.09	0.09	0.09	0.09
TP-107 (5-8)	6/6/2014	**5.3**	1.2	**46**	**0.21**	**0.2**	**0.41**	0.09
TP-108 (0-3)	6/6/2014	**8.6**	1.35	**8.6**	0.095	0.095	0.095	0.095
TP-108 (5-8)	6/6/2014	**14**	**5**	**22**	0.105	0.105	0.105	0.105
TP-109 (0-3)	6/6/2014	**23**	**4.4**	**4.4**	0.09	0.09	0.09	0.09
TP-109 (5-8)	6/6/2014	**15**	**5.9**	**100**	**0.82**	**0.73**	**0.91**	0.095
DUP-1 [TP-109 (5-8)]	6/6/2014	**15**	**5.8**	**98**	**0.68**	**0.58**	**0.76**	0.095
TP-110 (0-3)	6/6/2014	**6.2**	1.3	**7.3**	0.095	0.095	0.095	0.095
TP-110 (5-8)	6/6/2014	**5.4**	1.3	**6.4**	0.095	0.095	0.095	0.095
DUP-1 [TP-1 (0-3)]	12/13/2013	0.013	1.3	**9.6**	**0.51**	**0.49**	**0.77**	0.055
TP-1 (0-3)	12/13/2013	0.013	1.3	**11**	**7**	**6.2**	**9.1**	**1.1**
TP-2 (0-3)	12/13/2013	0.013	**11**	**14**	0.055	0.055	**0.11**	0.055
TP-3 (0-3)	12/13/2013	**0.12**	**19**	**120**	**0.29**	**0.31**	**0.53**	0.06
TP-4 (0-3)	12/13/2013	**0.11**	**25**	**120**	**0.46**	**0.51**	**0.85**	0.055
TP-5 (0-3)	12/13/2013	**0.1**	**4.5**	**260**	**4.1**	**4.5**	**6.3**	**0.89**
TP-6 (0-3)	12/13/2013	**0.07**	**6.8**	**60**	**1.2**	**1.5**	**2.6**	**0.36**
TP-7 (0-3)	12/13/2013	0.0135	1.3	**4.0**	0.055	0.055	0.055	0.055
TP-8 (0-3)	12/13/2013	0.0125	1.25	**6.7**	0.05	0.05	0.05	0.05
TP-9 (0-3)	12/13/2013	0.013	1.25	**7.6**	0.055	0.055	0.055	0.055
SB-1 (0-3)	12/26/2013	**0.049**	**3.9**	**13**	**0.49**	**0.4**	**0.53**	0.055
SB-10 (3-6)	12/27/2013	**0.013**	1.3	**3.8**	0.055	0.055	0.055	0.055
SB-11 (3-6)	12/27/2013	0.013	1.2	**5.7**	0.05	0.05	0.05	0.05
SB-12 (3-6)	12/27/2013	0.0125	1.25	**7.7**	0.1	0.1	0.1	0.1
SB-13 (3-6)	12/27/2013	0.0125	1.25	**5.7**	0.0495	0.0495	0.0495	0.0495
SB-2 (0-6)	12/27/2013	**0.048**	**4.1**	**180**	0.055	0.055	0.055	0.055
SB-3 (0-3)	12/27/2013	**0.69**	**16**	**570**	**0.82**	**0.72**	**1.2**	**0.15**
SB-4 (3-6)	12/26/2013	**0.03**	**5.4**	**24**	**5**	**6.8**	**10**	**1.9**
SB-5 (0-3)	12/26/2013	**0.16**	**7.4**	**46**	**1**	**0.99**	**1.4**	**0.19**
SB-6 (0-3)	12/26/2013	**1.8**	**8.7**	**110**	**8.4**	**7.4**	**9.8**	**1.2**
SB-8 (3-6)	12/27/2013	**0.19**	**21**	**87**	**0.32**	**0.33**	**0.49**	0.055
SB-9 (0-3)	12/27/2013	**0.055**	**12**	**19**	0.06	0.06	0.06	0.06
DUP-1 [SB-9 (0-3)]	12/27/2013	**0.46**	**7.9**	**16**	0.055	0.055	0.055	0.055
	Max	**43**	**25**	**570**	**8.4**	**7.4**	**10**	**1.9**
	Mean	**6.67**	**5.83**	**54.88**	**0.89**	**0.91**	**1.31**	**0.21**
	S-1/GW-2	20	20	200	7	2	7	0.7
	S-1/GW-3	20	20	200	7	2	7	0.7
	S-2/GW-3	30	20	600	40	4	40	4
	S-3/GW-3	30	50	600	40	4	40	4

C:\Users\Jim\Desktop\[Method 1 June 2014.xlsx]Sheet2

Notes:

BOLD Parameter detected above laboratory detection limi

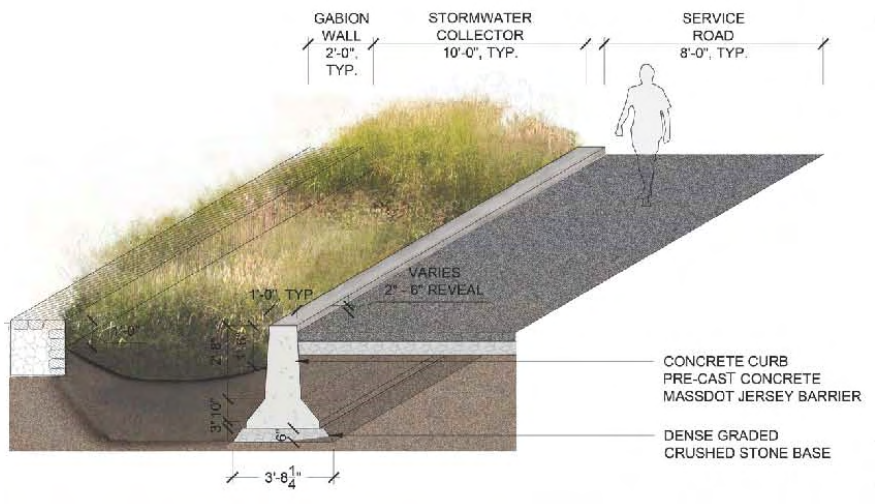
BOLD Parameter exceeds the applicable MCP Method 1, S-1 standarc

All concentrations in milligrams per kilogram

Ferrous Site Park Plan

Community Engagement

Green Infrastructure




UP LEONARD

THE WILD MEADOW

The meadow hill was planted with the intention of growing wild, creating an occupiable landform that changes with the seasons.

THE SCULPTED LANDFORM

The landform's definition is best articulated in winter, when the snow cover makes legible the 2:1 sloping sides and 7:1 sloped shallow face.

THE STONE ARMORING

Salvaged stone armoring, inspired by the existing rip rap found along the banks of the Merrimack, reinforces the base of the hill.

THE MERRIMACK PROMENADE

Site entry along the edge of the Merrimack, where a stone dust promenade path separates a 430-foot sediment forebay from the existing forested riverbank.

THE SITE CONFLUENCE

A custom galvanized steel bridge spans the sediment forebay and bioretention basin, completing a site-long path connection from the North Canal to the Merrimack.

THE SPONTANEOUS WOODLANDS

Areas of existing spontaneous woodland were preserved and cleared of dead material. Looping paths weave visitors through the woodlands and out to newly formed clearings.

THE OUTDOOR CLASSROOM

At the end of the Canal overlooking a spillway, a stone dust terrace and roofed structure offer flexible gathering space for the community.

THE WILD ARBORETUM ALLEE

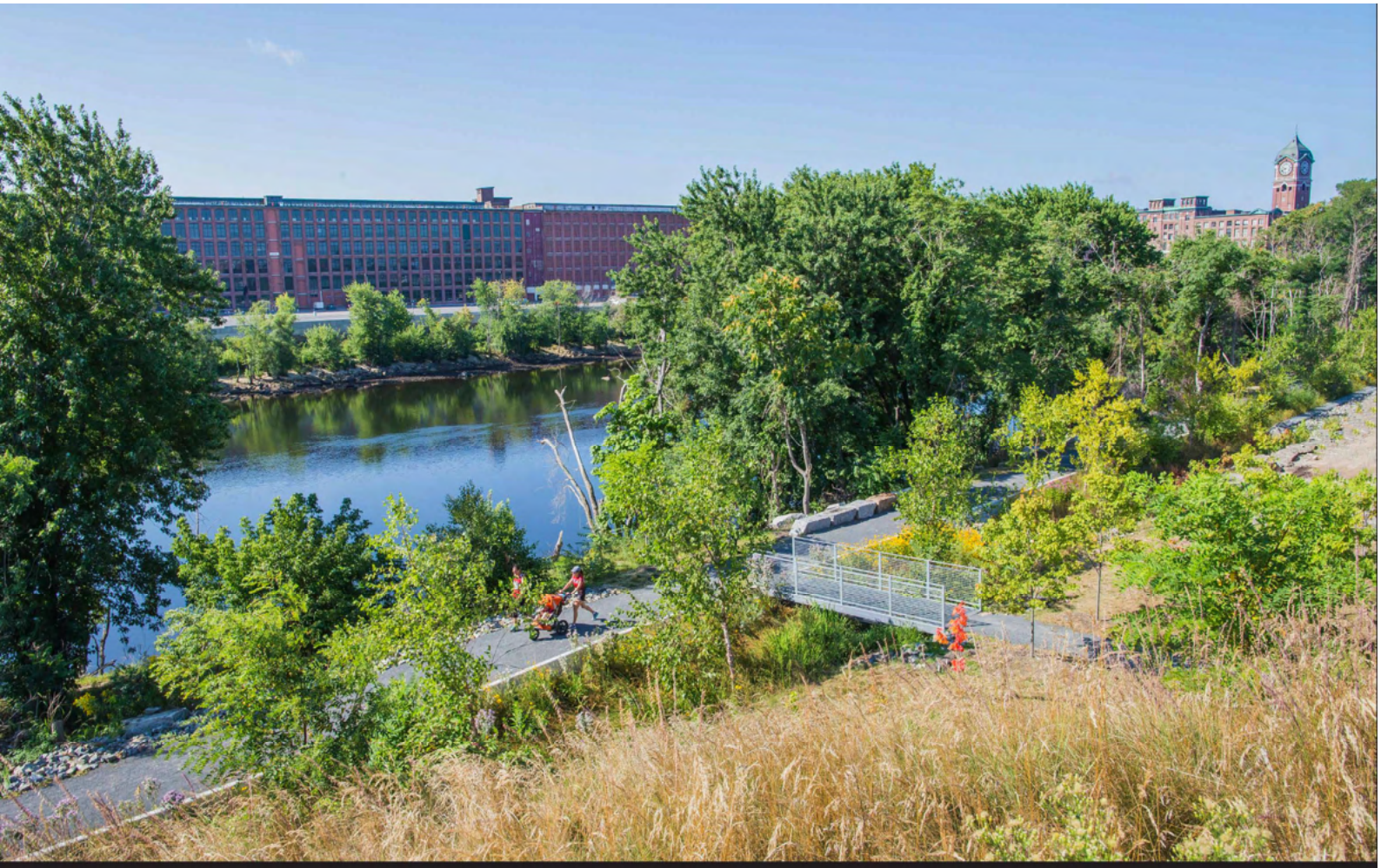
A planted allee of assorted native tree species found on site frames the north-south connection between the park's North Canal and Merrimack River edges.

THE LAYERED SITE CIRCULATION

The site-wide stone dust path system creates an ADA-accessible circulation loop from the park's low lying areas to the top of the hill.

THE PROMONTORY TERRACE

Salvaged granite seating blocks edge the rim of the accessible paved promontory at the top of the hill.

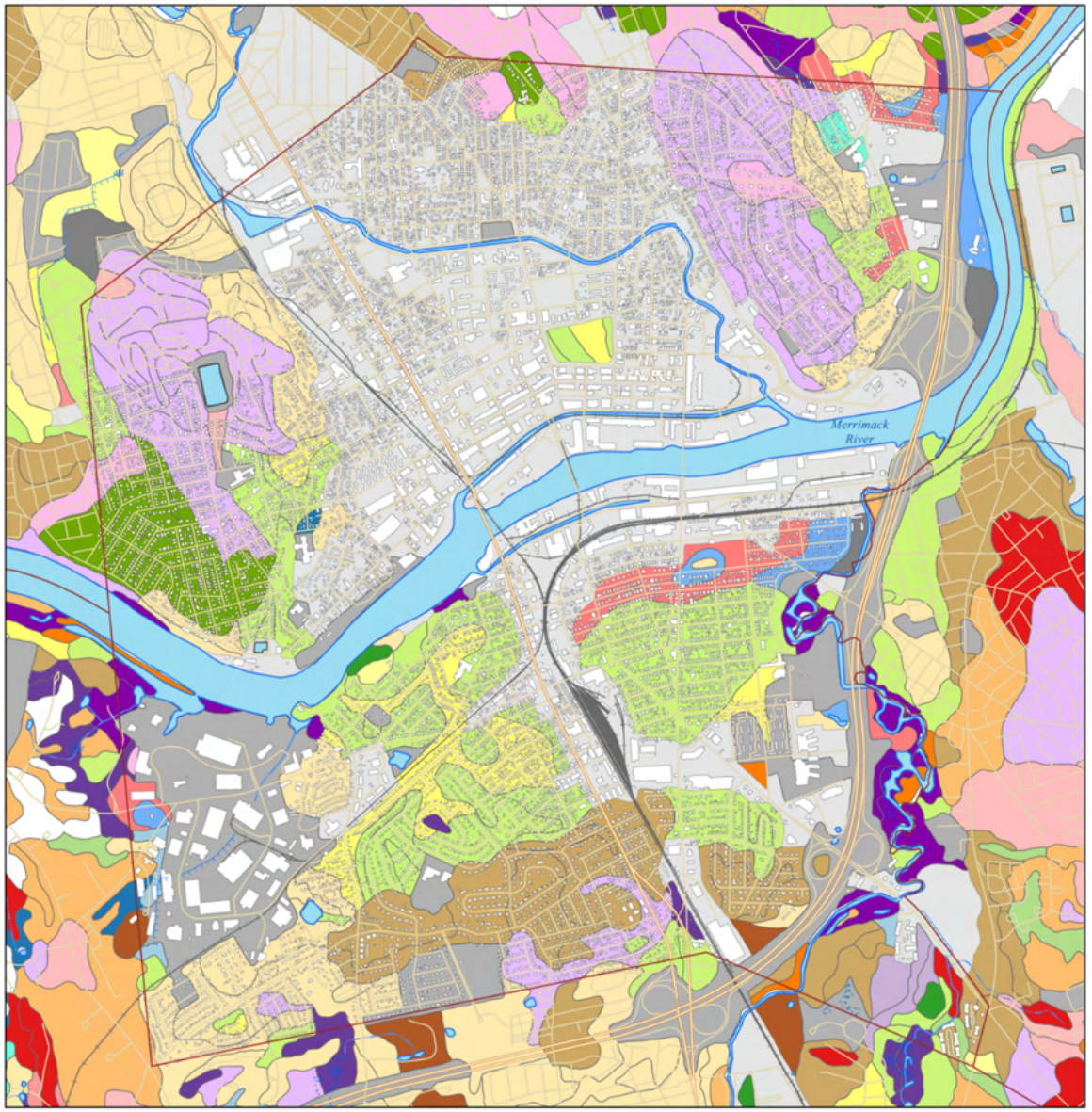


THE VIEW FROM THE TOP

Views of the Merrimack and historic Ayer Mill Clock Tower. A monumental landform and community symbol, the hill is visible from I-495 and surrounding waterways.

Island Parkside Housing
Infill Development

Lawrence Soils



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