

LINCOLN LACE AND BRAID REMEDICATION PROJECT

PROVIDENCE, RHODE ISLAND

PREPARED FOR:

THE CITY OF PROVIDENCE PARKS DEPARTMENT

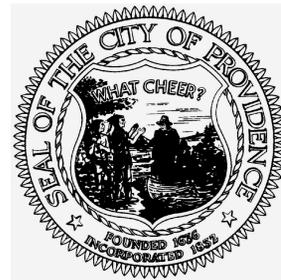
NO.	DATE	BY	DESCRIPTION
1	8/25/10	RCM	RESPONSE TO RIDEA COMMENTS

SEAL
 CITY OF PROVIDENCE PARKS DEPARTMENT
 LINCOLN LACE AND BRAID REMEDIATION PROJECT
 PROVIDENCE, RHODE ISLAND
 TITLE SHEET



GRAPHIC SCALE IN FEET
2000 1000 0 2000 4000

VICINITY MAP



1000 Elmwood Avenue
Providence, Rhode Island 02905
(401) 785-9450

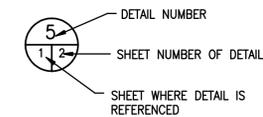
ABBREVIATIONS	
G	CENTERLINE
CD	COFFERDAM
CONC	CONCRETE
E	EASTING
EL	ELEVATION
EX	EXISTING
FL	FLOOD LEVEL
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
LOW	LIMIT OF WORK
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
P.E.	PROFESSIONAL ENGINEER
REQ'D	REQUIRED
RET	RETAINING
RI	RHODE ISLAND
SF	SILT FENCE
SRW	STONE RETAINING WALL
TYP	TYPICAL
VERT	VERTICAL
WL	WETLAND
WF	WETLAND FLAG

PREPARED BY



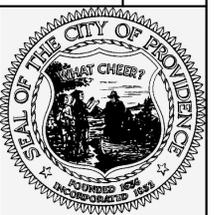
2350 Post Road
Warwick, Rhode Island 02886
(401) 736-3440

REFERENCE SYMBOLS



LEGEND	
— — — — —	EXISTING MAJOR CONTOUR LINES
— — — — —	EXISTING MINOR CONTOUR LINES
— — — — —	PROPOSED CONTOUR LINES
- - - - -	PROPERTY BOUNDARY
— — — — —	TAILRACE EXTENT
— — — — —	EDGE OF WATER
— — — — —	LIMIT OF WORK
— — — — —	LIMIT OF DISTURBANCE
— — — — —	EROSION CONTROLS
— — — — —	200 FOOT RIVERBANK OFFSET
— — — — —	100-YEAR FLOOD PLAIN LINE
— — — — —	EXTENT OF VEGETATION
— — — — —	EXISTING TREES

DRAWING NUMBER	SHEET NUMBER	DRAWING TITLE
T-1	1 OF 7	TITLE SHEET
C-1	2 OF 7	EXISTING CONDITIONS PLAN
C-2	3 OF 7	PROPOSED CONDITIONS PLAN
C-3	4 OF 7	PROPOSED FILL AREA
C-4	5 OF 7	PROPOSED SLUICeway
C-5	6 OF 7	CONSTRUCTION MANAGEMENT PLAN
C-6	7 OF 7	PLANTING PLAN



DATE	MAY 2010
DESIGNED BY	RCM
DRAWN BY	DPA
CHECKED BY	SCM
PROJECT MANAGER	FBP
PROJECT NUMBER	61891.05
SCALE	NONE
FILE NAME	TITLE SHEET
DRAWING NUMBER	T-1
SHEET NUMBER	1 OF 7



NOTES

1. TOPOGRAPHY BASED ON ADDITIONAL FIELD WORK AND DATA COMPILATION PERFORMED BY DIPRETE ENGINEERING ASSOCIATES, INC. (DEA) ON SITE IN APRIL OF 2007. NO PROPERTY LINE SURVEY WAS PERFORMED BY DEA. SURVEY OF THE FORMER RACEWAY WAS PERFORMED BY DEA IN DECEMBER, 2004 AND MAY, 2005.
2. ADDITIONAL INFORMATION & BASEMAPPING PROVIDED TO DEA BY EA ENGINEERING, SCIENCE & TECHNOLOGY IN THE FORM OF THE FOLLOWING PLAN: "THE TRUST FOR PUBLIC LAND PONAGANSETT AVENUE REMEDIATION PROJECT, 67 MELISSA STREET, PROVIDENCE, RHODE ISLAND, FIGURE 2, EXISTING CONDITIONS PLAN, DATE: September 2005, PROJECT NO: 6184601"
3. BENCHMARKS PROVIDED BY EA ENGINEERING VIA PLAN REFERENCE IN NOTE #2. VERTICAL DATUM CONFIRMED BY DIPRETE ENGINEERING ASSOCIATES, INC. VIA GPS OBSERVATIONS IN APRIL 2007. THE VERTICAL DATUM IS NGVD'29. HORIZONTAL DATUM IS R.I. STATE PLANE, NAD-83.
4. WATER ELEVATIONS OBTAINED BY DIPRETE ENGINEERING ASSOCIATES, INC. ON MARCH 30 AND APRIL 3, 2007.
5. THERE IS A 100 YEAR FLOOD PLAIN LOCATED ON SITE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 445406 0004 F, MAP REVISED JUNE 6, 2000. THE FLOOD ELEVATION RANGES BETWEEN ELEVATION 43 AND 41.7. OBSERVED ELEVATIONS ON SITE INDICATE MINIMAL FLOODING ON SITE (LESS THAN 1 FOOT ON AVERAGE).
6. THIS SURVEY AND PLAN CONFORM TO A CLASS III STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS (VERTICAL). THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND IS SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE. (BOUNDARY)
7. EXISTING CONCRETE PAD IS 6" THICK AND WITH ONE FOOT THICK FOOTINGS.

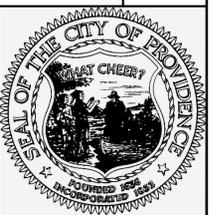


NO.	DATE	BY	DESCRIPTION
1	8/25/10	RCM	RESPONSE TO RIDEA COMMENTS

SEAL

CITY OF PROVIDENCE PARKS DEPARTMENT
LINCOLN LACE AND BRAID REMEDIATION PROJECT
PROVIDENCE, RHODE ISLAND

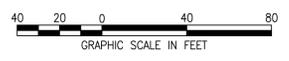
EXISTING CONDITIONS PLAN

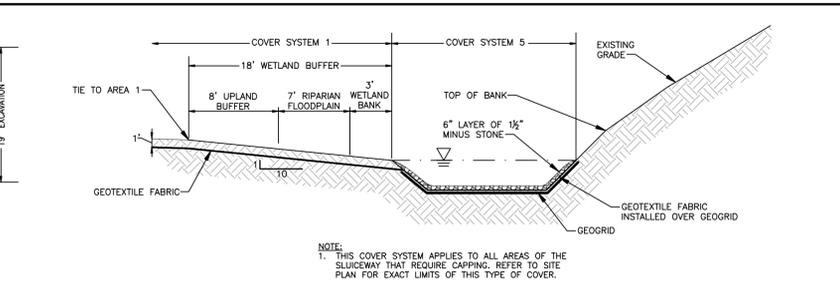
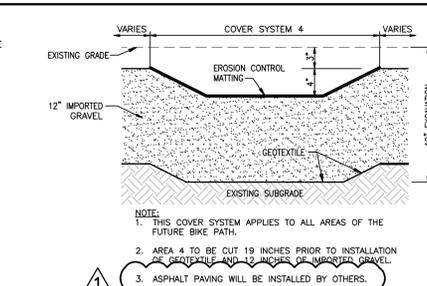
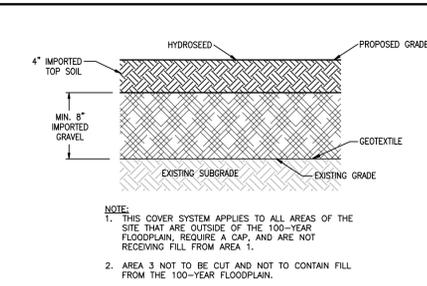
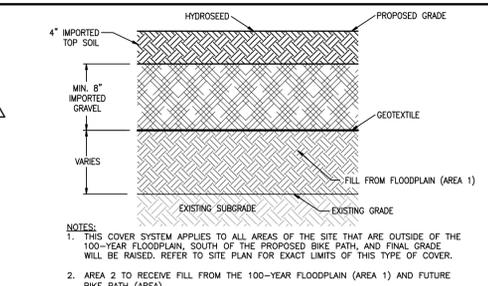
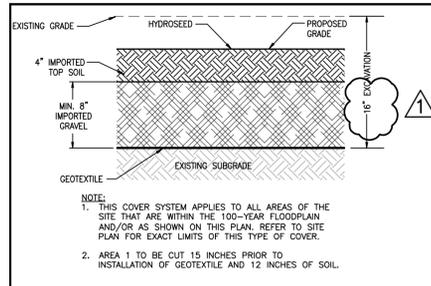
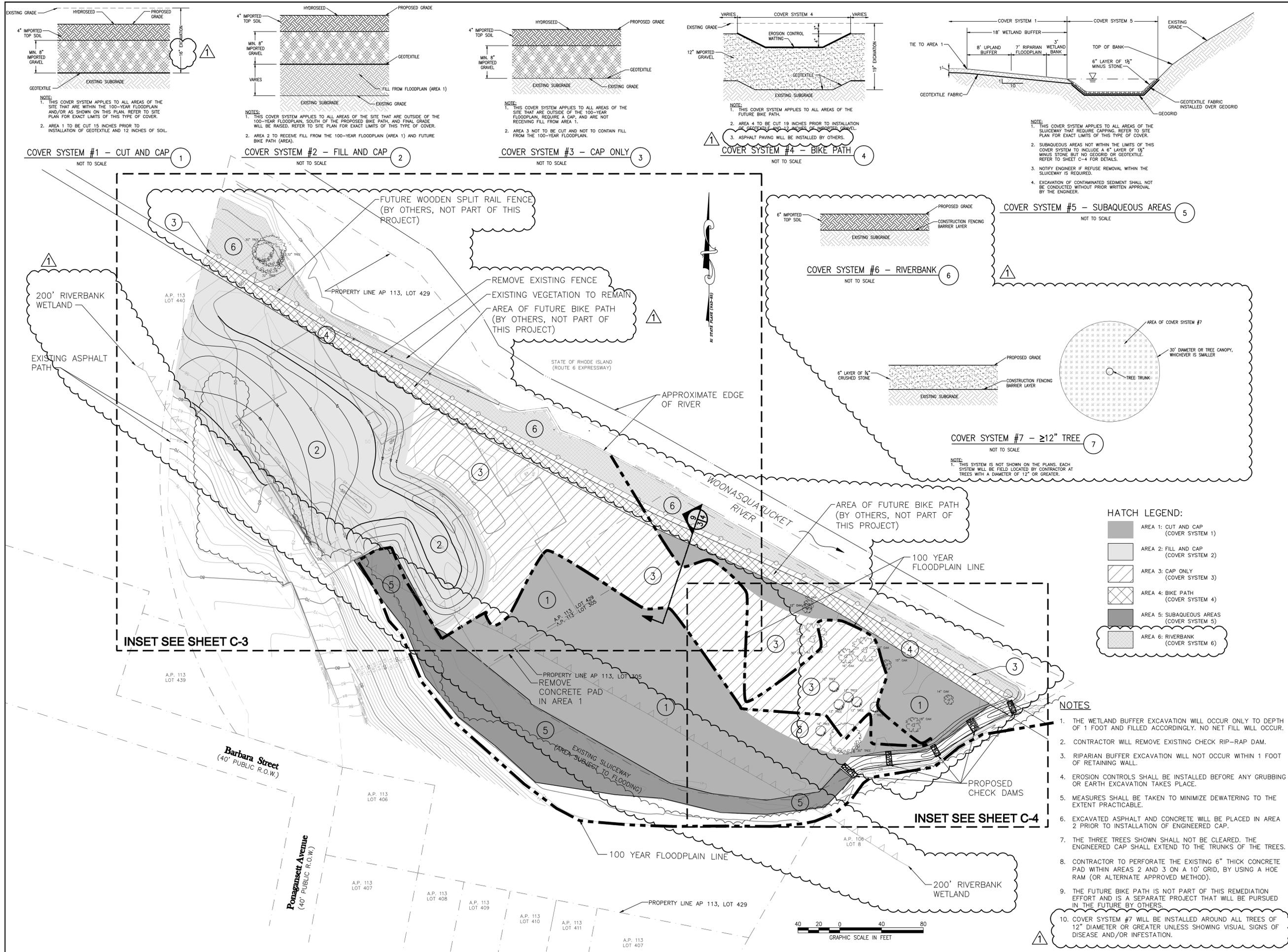


EA
EA ENGINEERING,
SCIENCE, AND
TECHNOLOGY

2350 Post Road
Warwick, Rhode Island 02886
(401) 736-3440

DATE	MAY 2010
DESIGNED BY	RCM
DRAWN BY	DPA
CHECKED BY	SCM
PROJECT MANAGER	FBP
PROJECT NUMBER	61891.05
SCALE	1" = 40'
FILE NAME	EXISTING CONDITIONS
DRAWING NUMBER	C-1
SHEET NUMBER	2 OF 7





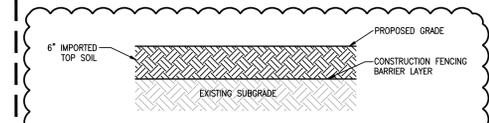
COVER SYSTEM #1 - CUT AND CAP
NOT TO SCALE

COVER SYSTEM #2 - FILL AND CAP
NOT TO SCALE

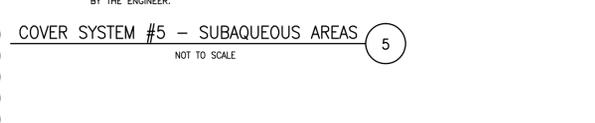
COVER SYSTEM #3 - CAP ONLY
NOT TO SCALE

COVER SYSTEM #4 - BIKE PATH
NOT TO SCALE

COVER SYSTEM #5 - SUBAQUEOUS AREAS
NOT TO SCALE



COVER SYSTEM #6 - RIVERBANK
NOT TO SCALE



COVER SYSTEM #7 - ≥12\"/>

HATCH LEGEND:

[Solid Grey]	AREA 1: CUT AND CAP (COVER SYSTEM 1)
[Diagonal Lines]	AREA 2: FILL AND CAP (COVER SYSTEM 2)
[Cross-Hatch]	AREA 3: CAP ONLY (COVER SYSTEM 3)
[Grid]	AREA 4: BIKE PATH (COVER SYSTEM 4)
[Stippled]	AREA 5: SUBAQUEOUS AREAS (COVER SYSTEM 5)
[Horizontal Lines]	AREA 6: RIVERBANK (COVER SYSTEM 6)

- NOTES**
1. THE WETLAND BUFFER EXCAVATION WILL OCCUR ONLY TO DEPTH OF 1 FOOT AND FILLED ACCORDINGLY. NO NET FILL WILL OCCUR.
 2. CONTRACTOR WILL REMOVE EXISTING CHECK RIP-RAP DAM.
 3. RIPARIAN BUFFER EXCAVATION WILL NOT OCCUR WITHIN 1 FOOT OF RETAINING WALL.
 4. EROSION CONTROLS SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.
 5. MEASURES SHALL BE TAKEN TO MINIMIZE DEWATERING TO THE EXTENT PRACTICABLE.
 6. EXCAVATED ASPHALT AND CONCRETE WILL BE PLACED IN AREA 2 PRIOR TO INSTALLATION OF ENGINEERED CAP.
 7. THE THREE TREES SHOWN SHALL NOT BE CLEARED. THE ENGINEERED CAP SHALL EXTEND TO THE TRUNKS OF THE TREES.
 8. CONTRACTOR TO PERFORATE THE EXISTING 6\"/>

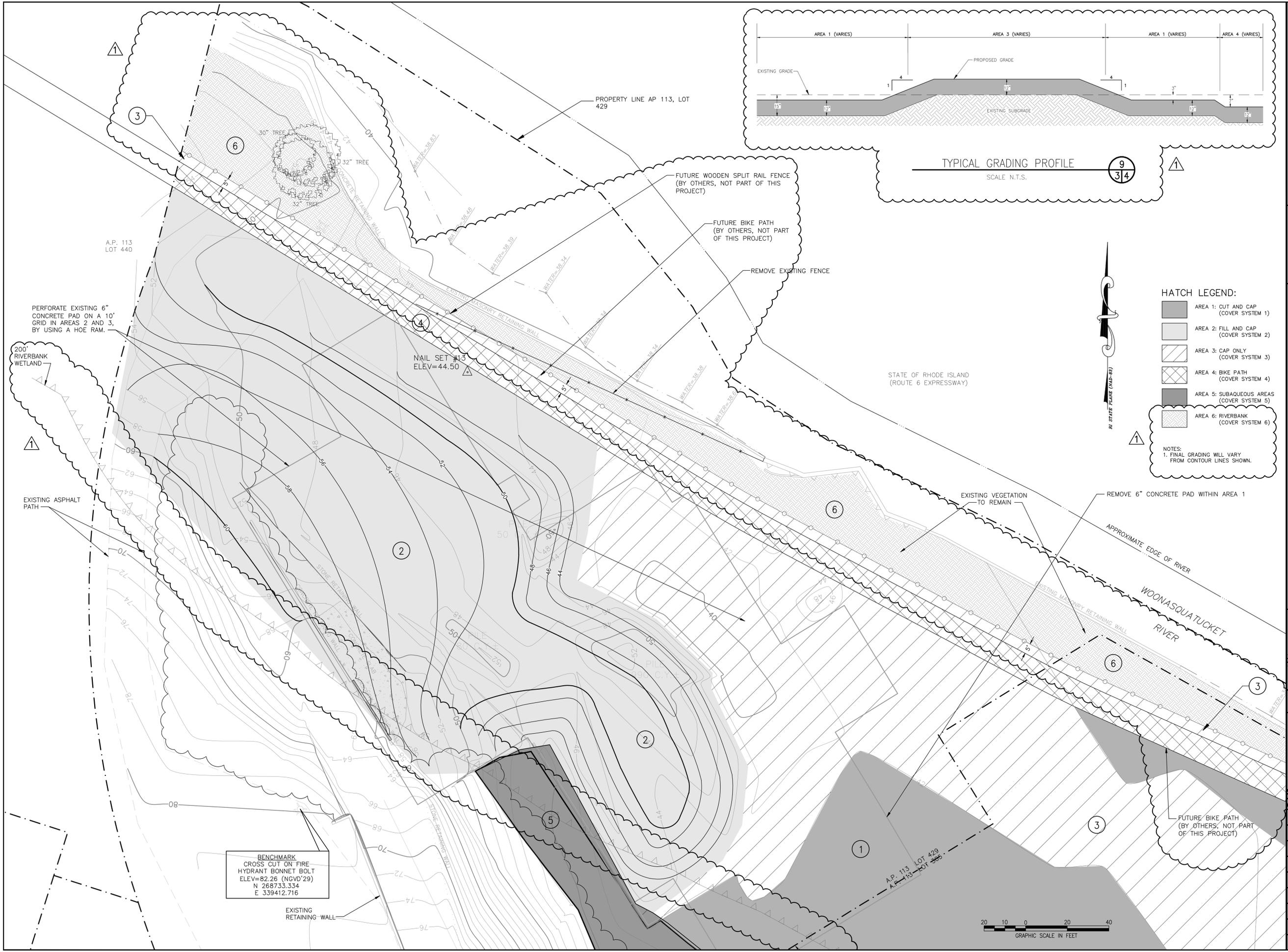
REVISIONS	DESCRIPTION
NO.	DATE
1	8/25/10
BY	ROOM
DATE	ROOM
NO.	DESCRIPTION
1	RESPONSE TO OWNER COMMENTS

CITY OF PROVIDENCE PARKS DEPARTMENT
LINCOLN LACE AND BRAID REMEDIATION PROJECT
PROVIDENCE, RHODE ISLAND

PROPOSED CONDITIONS PLAN

EA
EA ENGINEERING, SCIENCE, AND TECHNOLOGY
2350 Post Road
Warwick, Rhode Island 02886
(401) 736-3440

DATE: MAY 2010
DESIGNED BY: RGM
DRAWN BY: DPA
CHECKED BY: SCM
PROJECT MANAGER: FBP
PROJECT NUMBER: 61891.05
SCALE: 1" = 40'
FILE NAME: PROPOSED CONDITIONS
DRAWING NUMBER: C-2
SHEET NUMBER: 3 OF 7

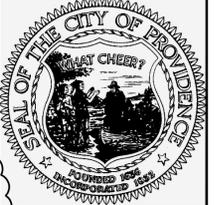


NO.	DATE	BY	DESCRIPTION
1	8/25/10	RCM	RESPONSE TO RISK COMMENTS

SEAL

CITY OF PROVIDENCE PARKS DEPARTMENT
 LINCOLN LACE AND BRAID REMEDIATION PROJECT
 PROVIDENCE, RHODE ISLAND

PROPOSED FILL AREA

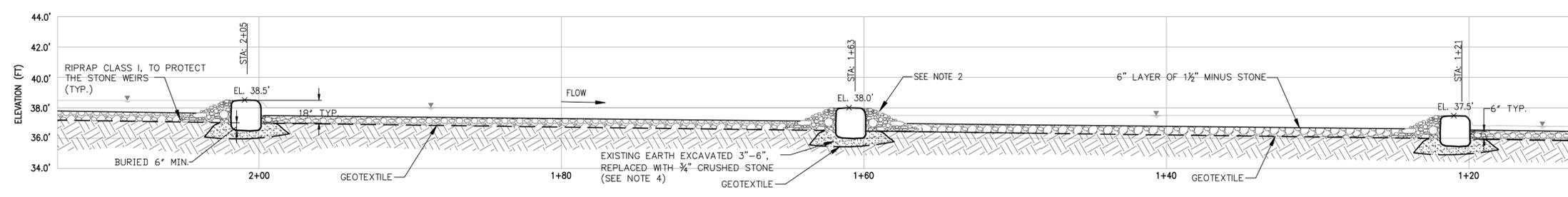
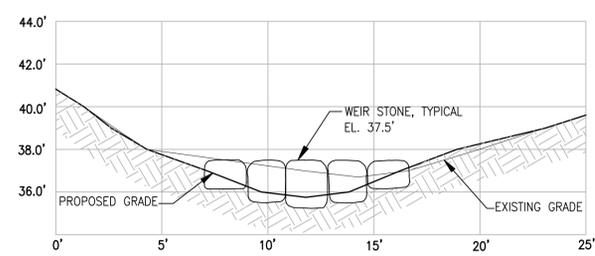
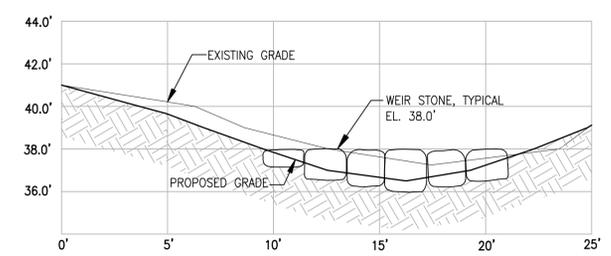
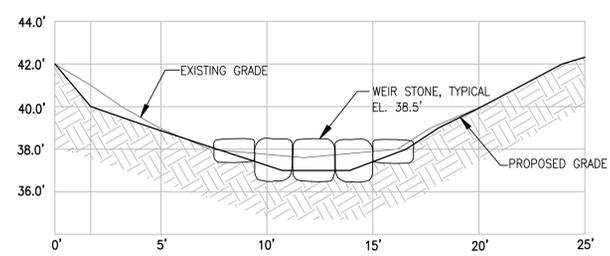
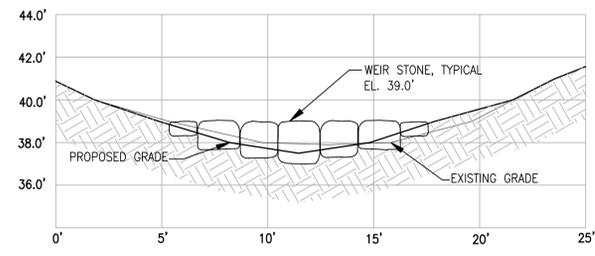
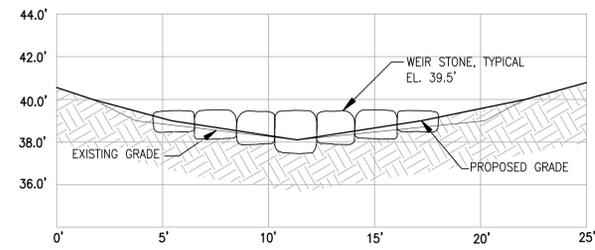
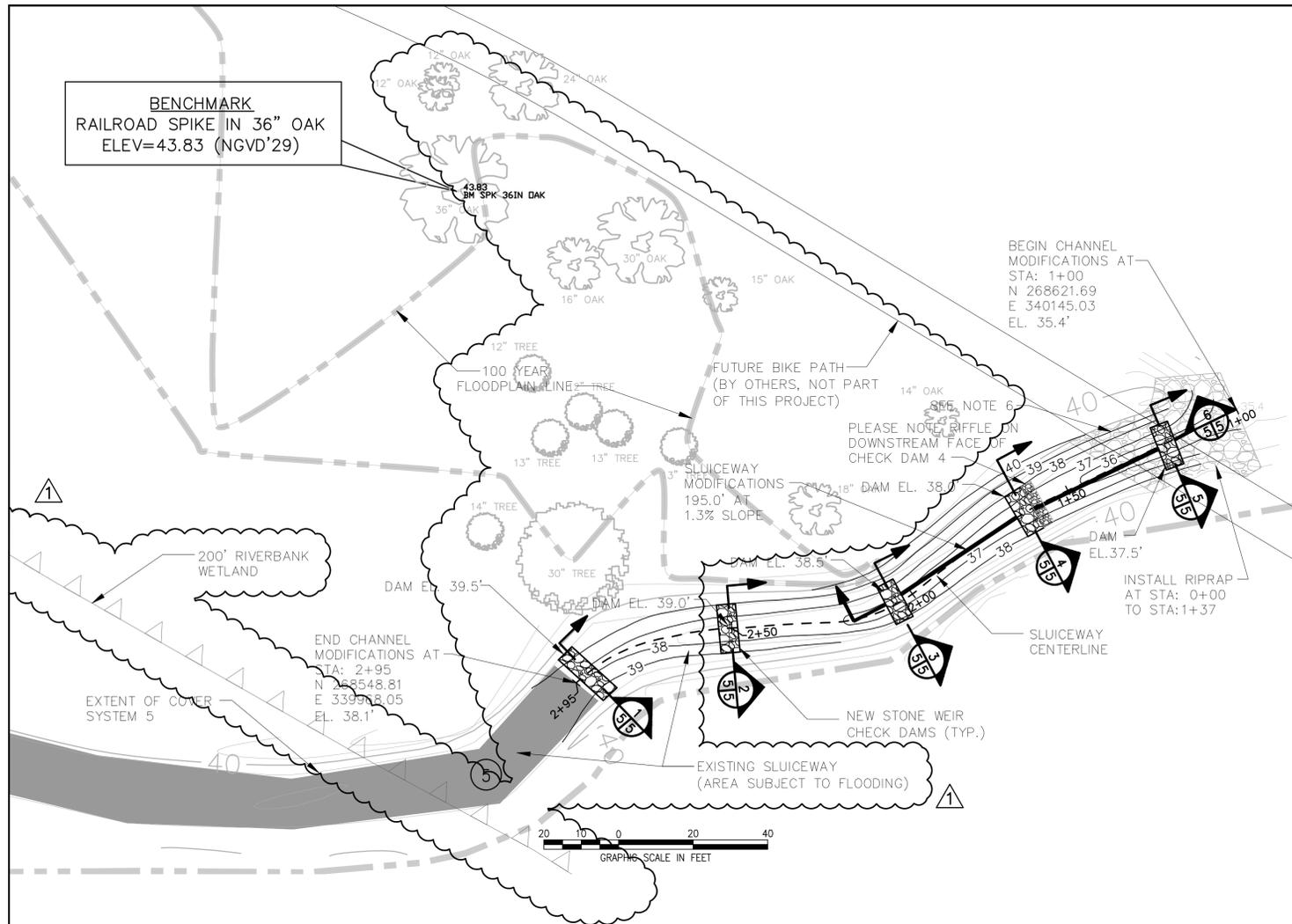


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 SCIENCE, AND
 TECHNOLOGY

2350 Post Road
 Warwick, Rhode Island 02886
 (401) 736-3440

DATE	MAY 2010
DESIGNED BY	RCM
DRAWN BY	DPA
CHECKED BY	SCM
PROJECT MANAGER	FBP
PROJECT NUMBER	61891.05
SCALE	1" = 20'
FILE NAME	PROPOSED FILL AREA
DRAWING NUMBER	C-3
SHEET NUMBER	4 OF 7





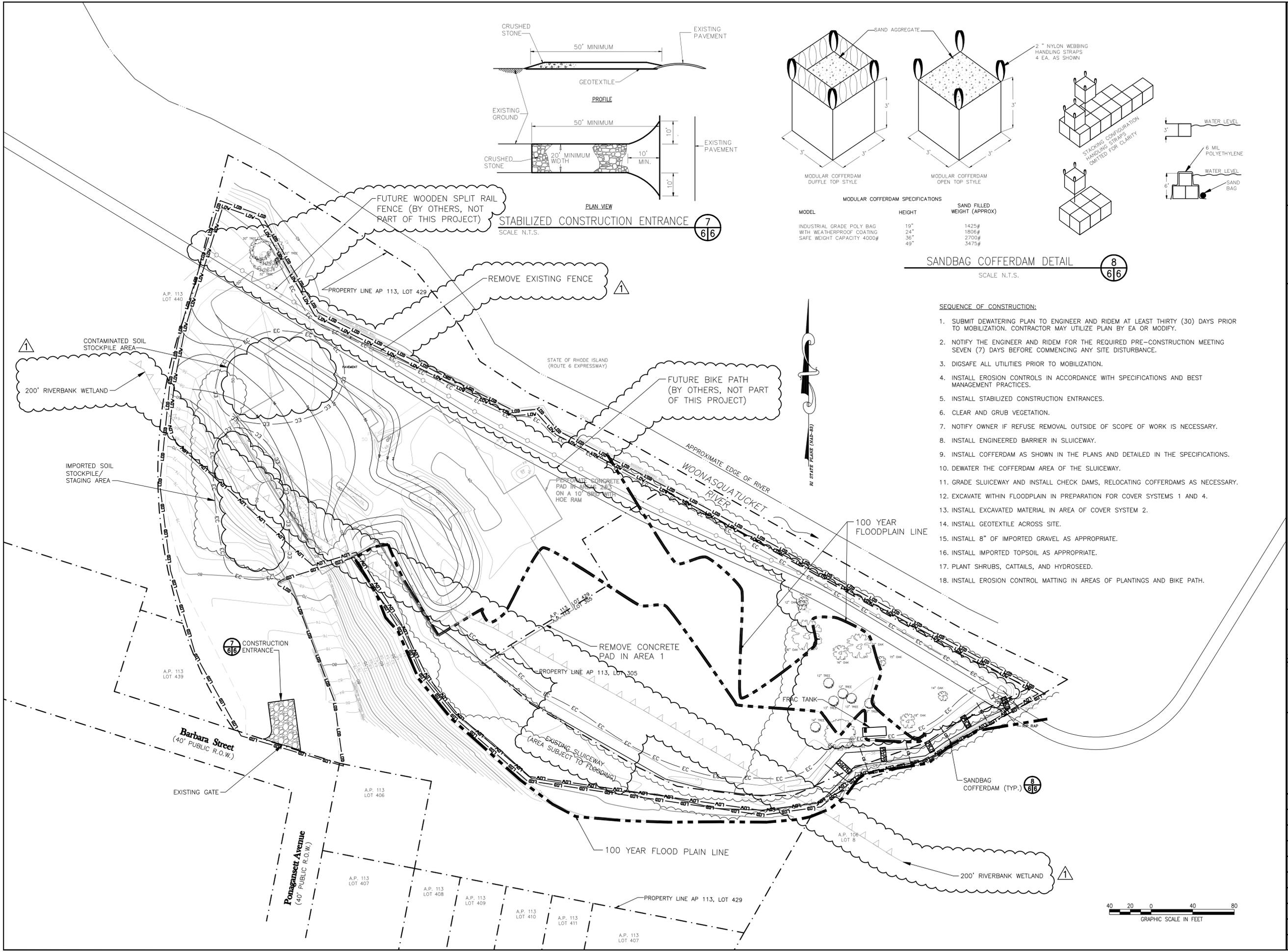
TYPICAL STONE WEIR PROFILE

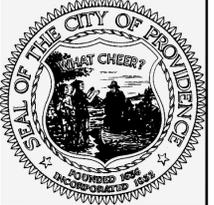
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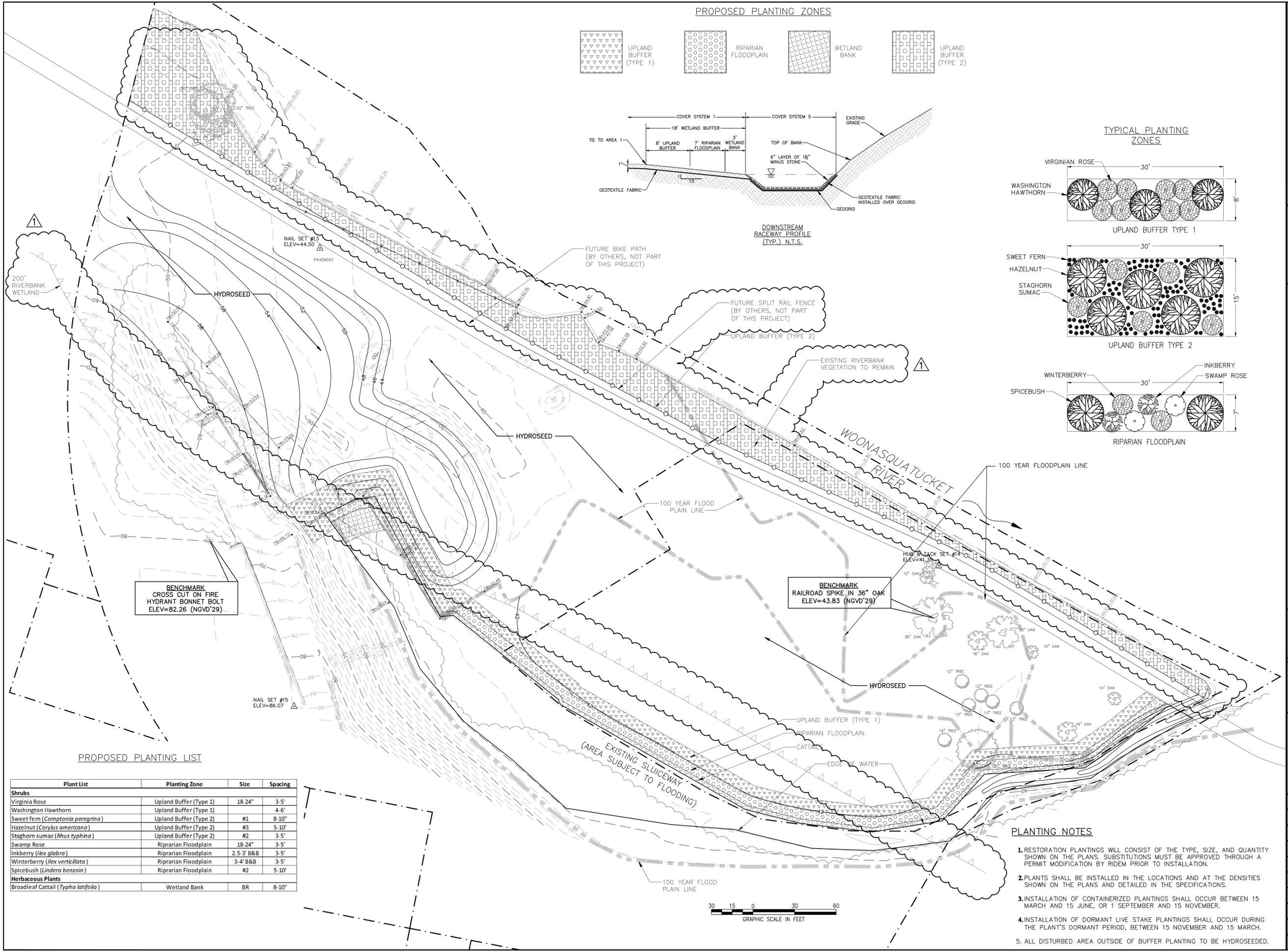
NOTES

- EXCESS SEDIMENT GENERATED SHALL BE PLACED IN AREA 2 PRIOR TO CAP CONSTRUCTION.
- INSTALL 18" OF RIPRAP ON THE DOWNSTREAM FACE OF THE CHECK DAM 4 LOCATED UPSTREAM FROM THE PROPOSED BIKE PATH BRIDGE (EL. 38.0').
- TWO UPSTREAM CHECK DAMS NOT SHOWN ON PROFILE SHALL BE CONSTRUCTED WITH A DROP ON THE DOWNSTREAM FACE, SIMILAR TO CHECK DAMS 3 AND 5.
- A MINIMUM 3" BED OF 3/4" CRUSHED STONE SHALL BE PREPARED FOR EACH CHECK DAM.
- A MINIMUM 6" BED OF 1/2" CRUSHED STONE SHALL BE INSTALLED IN ALL DISTURBED AREAS OF SLUICWAY.
- A MINIMUM 1' LAYER OF CLASS I RIPRAP SHALL BE INSTALLED ALONG SLUICWAY BANKS IN AREA BENEATH THE PROPOSED BIKE PATH BRIDGE.
- GEOTEXTILE FABRIC SHALL BE INSTALLED BENEATH ALL INSTALLED SUBSTRATE.

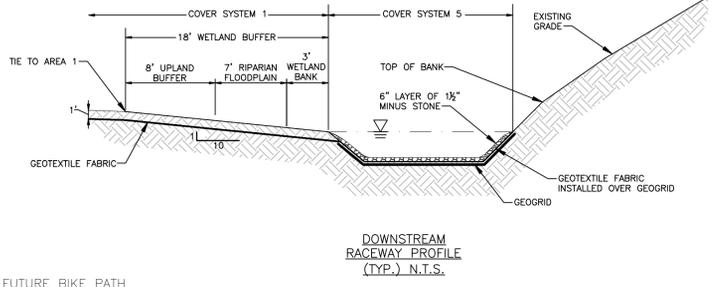
REVISIONS		DESCRIPTION	
NO.	DATE	BY	RESPONSE TO RISK COMMENTS
1	8/25/10	RGM	
SEAL			
CITY OF PROVIDENCE PARKS DEPARTMENT LINCOLN LACE AND BRAID REMEDIATION PROJECT PROVIDENCE, RHODE ISLAND			
PROPOSED SLUICWAY			
2350 Post Road Warwick, Rhode Island 02886 (401) 736-3440			
DATE	MAY 2010		
DESIGNED BY	RGM		
DRAWN BY	DPA		
CHECKED BY	SCM		
PROJECT MANAGER	FBP		
PROJECT NUMBER	61891.05		
SCALE	AS SHOWN		
FILE NAME	PROPOSED SLUICWAY		
DRAWING NUMBER	C-4		
SHEET NUMBER	5 OF 7		



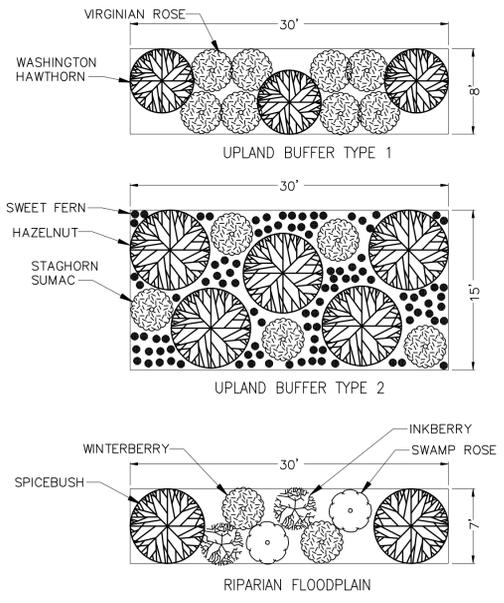
REVISIONS		DESCRIPTION
NO.	DATE	BY
1	8/25/10	RCM
		RESPONSE TO RIDEM COMMENTS
CITY OF PROVIDENCE PARKS DEPARTMENT LINCOLN LACE AND BRAID REMEDIATION PROJECT PROVIDENCE, RHODE ISLAND CONSTRUCTION MANAGEMENT PLAN		
 EA EA ENGINEERING, SCIENCE, AND TECHNOLOGY 2350 Post Road Warwick, Rhode Island 02886 (401) 736-3440		
DATE	MAY 2010	
DESIGNED BY	RCM	
DRAWN BY	DPA	
CHECKED BY	SCM	
PROJECT MANAGER	FBP	
PROJECT NUMBER	61891.05	
SCALE	1" = 40'	
FILE NAME	CONSTRUCTION MANAGEMENT	
DRAWING NUMBER	C-5	
SHEET NUMBER	6 OF 7	



PROPOSED PLANTING ZONES



TYPICAL PLANTING ZONES



PROPOSED PLANTING LIST

Plant List	Planting Zone	Size	Spacing
Shrubs			
Virginia Rose	Upland Buffer (Type 1)	18-24"	3-5'
Washington Hawthorn	Upland Buffer (Type 1)		4-6'
Sweet fern (<i>Comptonia peregrina</i>)	Upland Buffer (Type 2)	#1	8-10'
Hazelnut (<i>Corylus americana</i>)	Upland Buffer (Type 2)	#3	5-10'
Staghorn sumac (<i>Rhus typhina</i>)	Upland Buffer (Type 2)	#2	3-5'
Swamp Rose	Riparian Floodplain	18-24"	3-5'
Inkberry (<i>Ilex glabra</i>)	Riparian Floodplain	2.5-3' B&B	3-5'
Winterberry (<i>Ilex verticillata</i>)	Riparian Floodplain	3-4' B&B	3-5'
Spicebush (<i>Lindera benzoin</i>)	Riparian Floodplain	#2	5-10'
Herbaceous Plants			
Broadleaf Cattail (<i>Typha latifolia</i>)	Wetland Bank	BR	8-10"

PLANTING NOTES

- RESTORATION PLANTINGS WILL CONSIST OF THE TYPE, SIZE, AND QUANTITY SHOWN ON THE PLANS. SUBSTITUTIONS MUST BE APPROVED THROUGH A PERMIT MODIFICATION BY RIDEM PRIOR TO INSTALLATION.
- PLANTS SHALL BE INSTALLED IN THE LOCATIONS AND AT THE DENSITIES SHOWN ON THE PLANS AND DETAILED IN THE SPECIFICATIONS.
- INSTALLATION OF CONTAINERIZED PLANTINGS SHALL OCCUR BETWEEN 15 MARCH AND 15 JUNE, OR 1 SEPTEMBER AND 15 NOVEMBER.
- INSTALLATION OF DORMANT LIVE STAKE PLANTINGS SHALL OCCUR DURING THE PLANT'S DORMANT PERIOD, BETWEEN 15 NOVEMBER AND 15 MARCH.
- ALL DISTURBED AREA OUTSIDE OF BUFFER PLANTING TO BE HYDROSEED.

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	8/25/10	RCM	RESPONSE TO RIDEM COMMENTS

SEAL

CITY OF PROVIDENCE PARKS DEPARTMENT
LINCOLN LACE AND BRAID REMEDIATION PROJECT
PROVIDENCE, RHODE ISLAND

PLANTING PLAN

EA
EA ENGINEERING, SCIENCE, AND TECHNOLOGY

2350 Post Road
Warwick, Rhode Island 02886
(401) 736-3440

DATE: MAY 2010
DESIGNED BY: RGM
DRAWN BY: DPA
CHECKED BY: SCM
PROJECT MANAGER: FBP
PROJECT NUMBER: 61891.05
SCALE: 1" = 30'
FILE NAME: PLANTING PLAN
DRAWING NUMBER: C-6
SHEET NUMBER: 7 OF 7