

FORT GREBLE PARK STORMWATER RETROFIT PROJECT

PUBLIC STAKEHOLDER CONSTRUCTION KICKOFF MEETING

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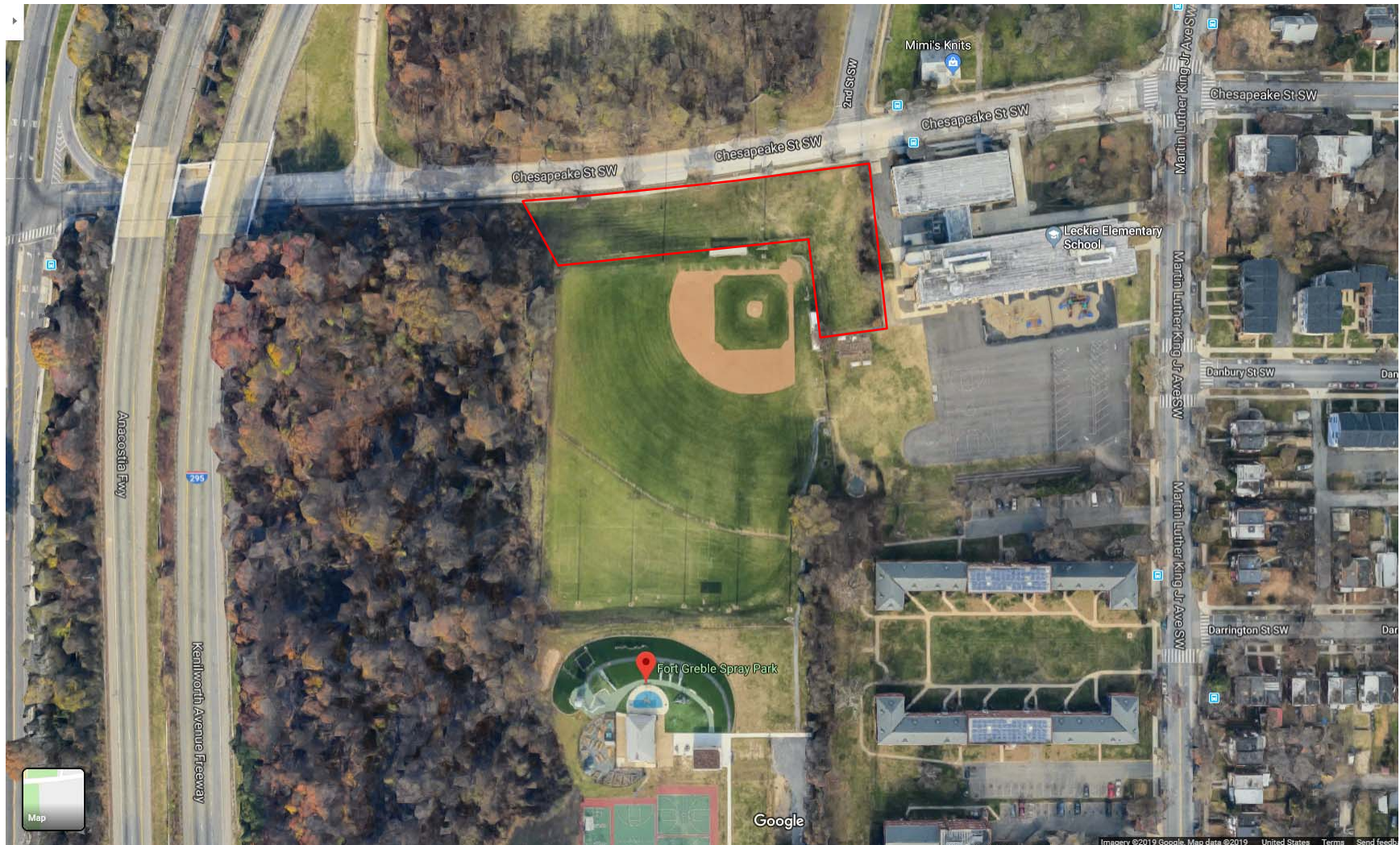


GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

AGENDA

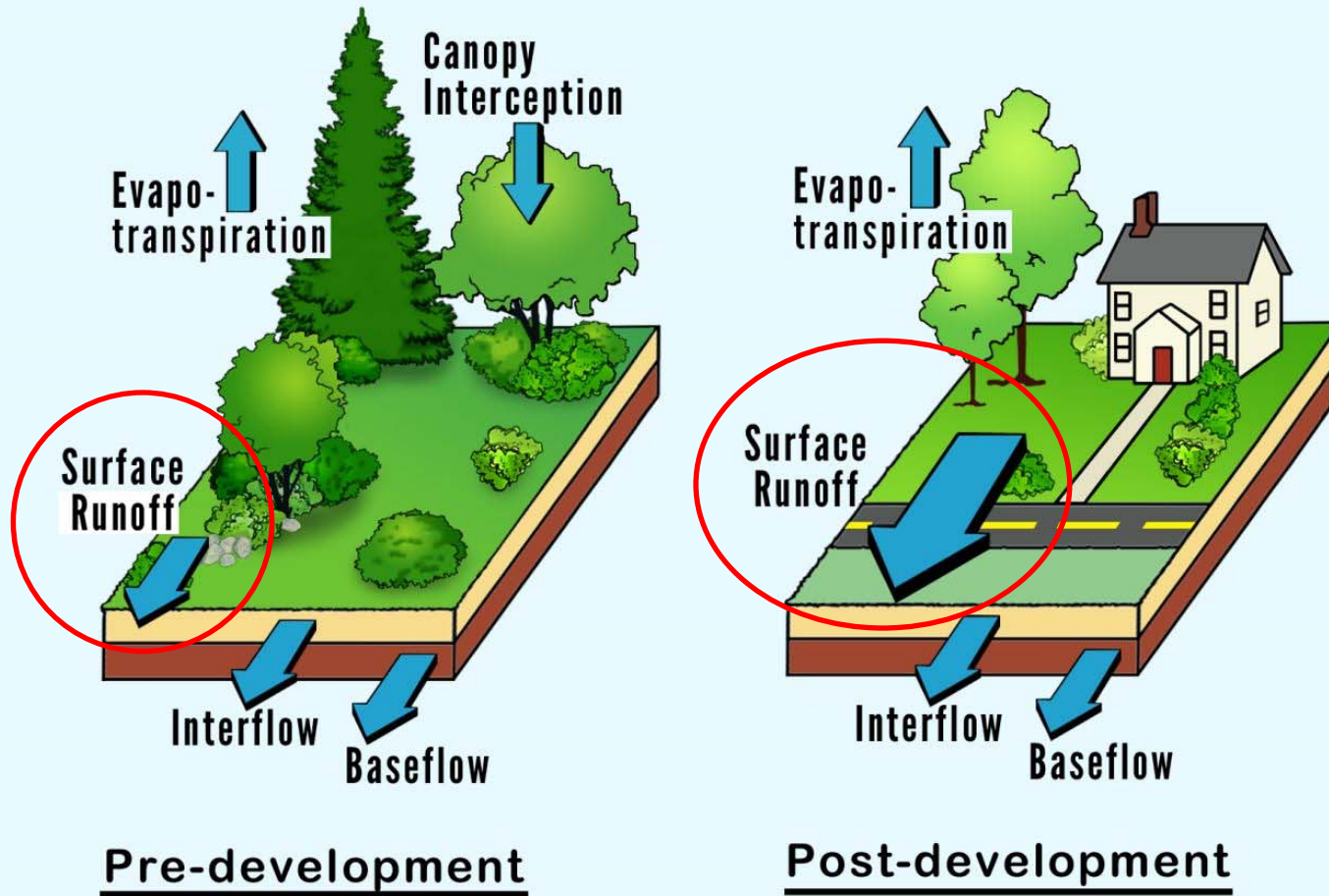
- Project Area & Background
- Existing Conditions
- Project Objectives
- Restoration Approach
- Construction Details
- Timeline
- FAQs
- Q&A

PROJECT LOCATION



BACKGROUND

Figure 1.1 Water Balance at a Developed and Underdeveloped Site
(Source: Schueler, 1987)

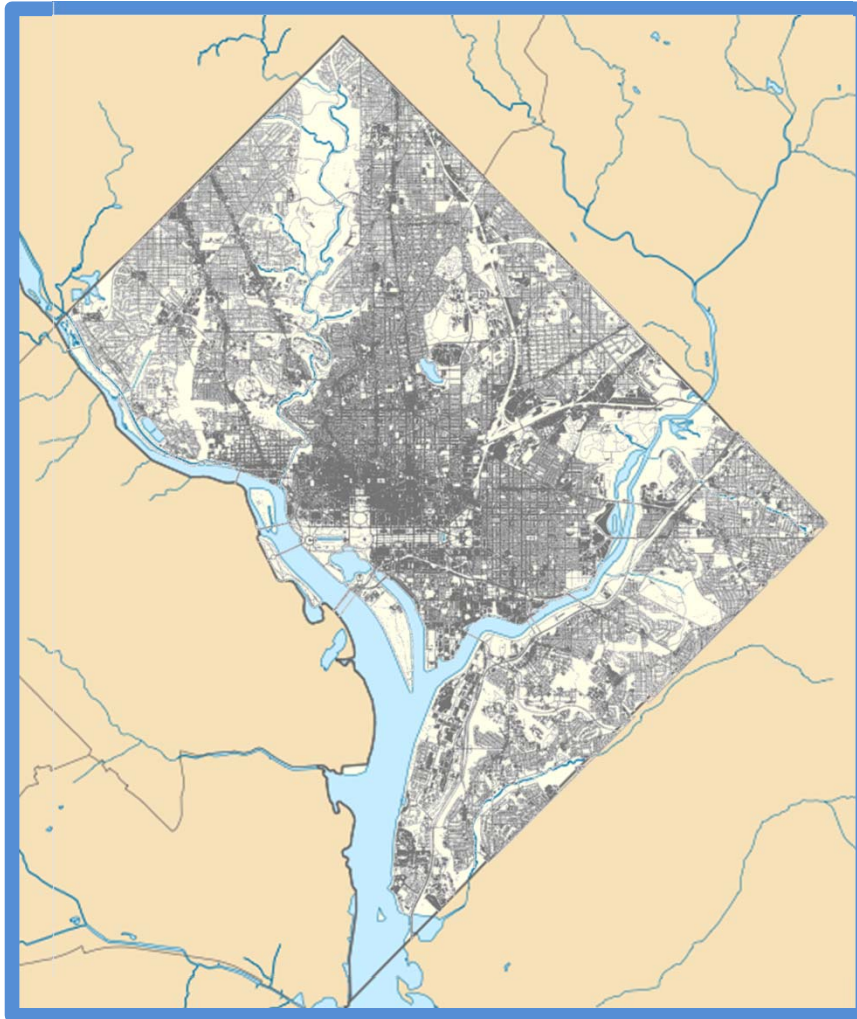


Surface runoff is minimal in an undeveloped site, but dominates the water balance at a highly impervious site.

PROBLEM OF STORMWATER POLLUTION



DISTRICT OF COLUMBIA LAND USE



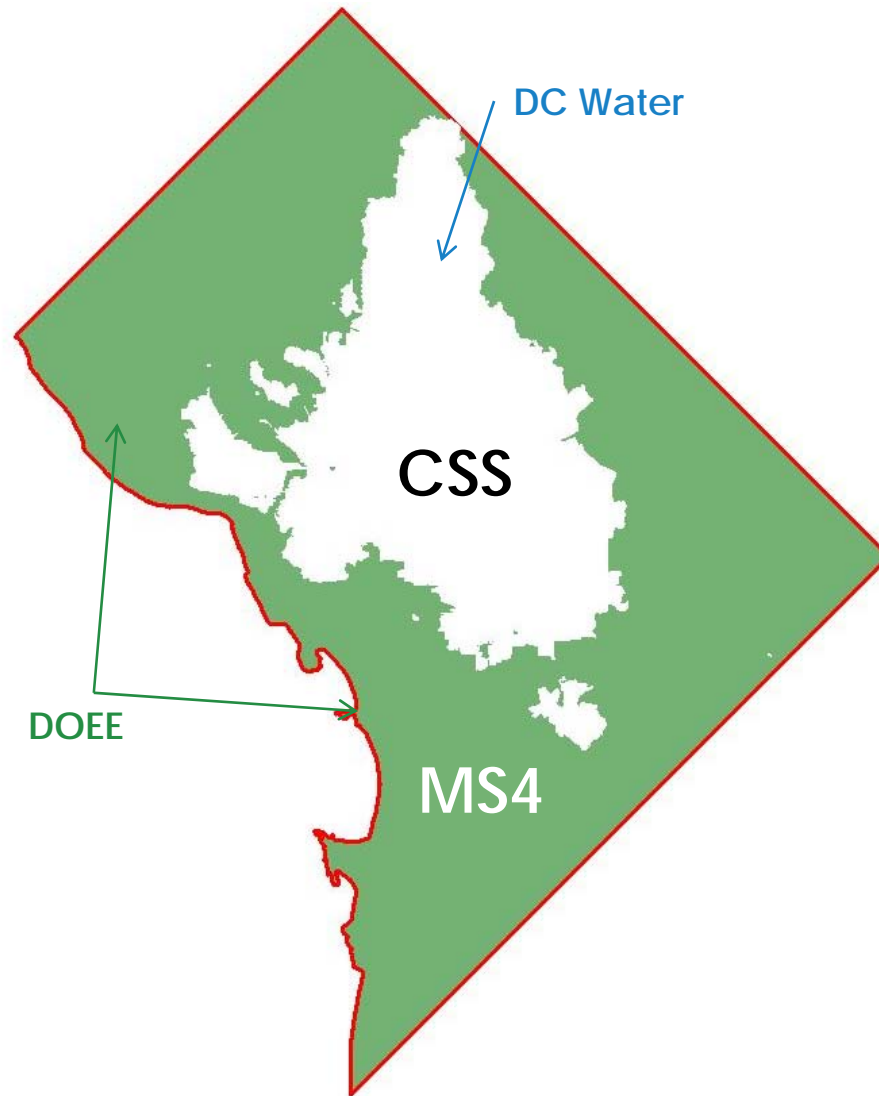
Total Area
68.3 mi²

Land Area
61.3 mi²

Impervious Area
26.6 mi²
*Approx 43%
of Land Area*

A single 1.2 inch storm falling on this area produces about 525 million gallons of stormwater runoff.

DC'S RESTORATION APPROACHES



EXISTING CONDITIONS



EXISTING CONDITIONS



EXISTING CONDITIONS

- Water is drained from athletic field toward Chesapeake St. SW
- Existing, unused open space between the athletic field and the Leckie Elementary School
- Drainage issues at adjacent school property
- Good opportunity for stormwater management and ecological restoration while addressing existing problems

PROJECT OBJECTIVES

- Treat maximum amount of stormwater from the site in the most cost effective way
- Work only on District land
- Minimal impacts to the community
- Development of a community amenity
- Educational opportunities



RESTORATION APPROACHES

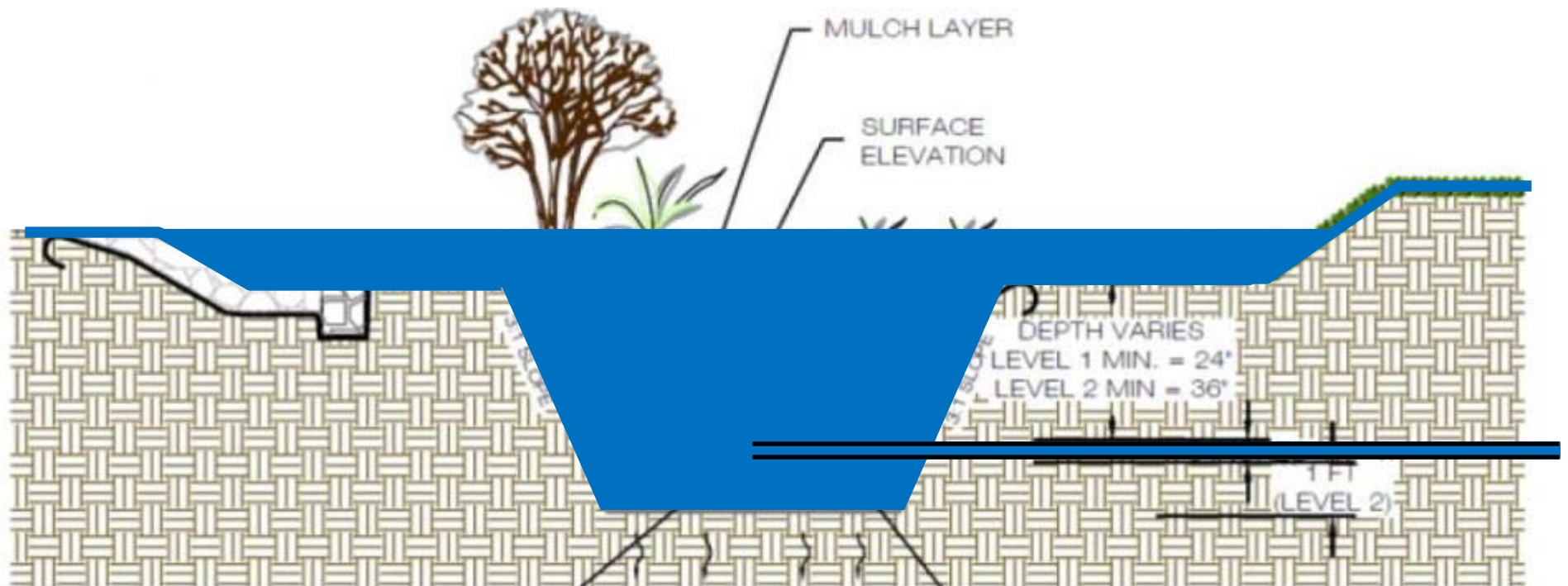
Most stormwater practices all work the same way: “they collect stormwater runoff and use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat” (EPA).

Slow it down, Spread it Out, Soak it In!

BIORETENTION



BIORETENTION: HOW IT WORKS



FINAL DESIGNS



SITE CONTEXT MAP



TREE IMAGES



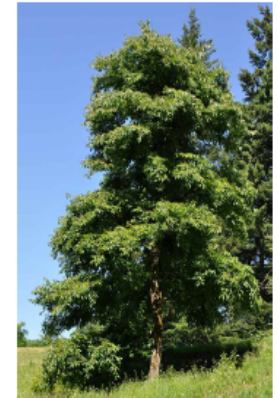
Pawpaw (ASI TRI)



Heritage River Birch (BET HER)



Shagbark Hickory (CAR OVA)



American Persimmon (DIO VIR)

SHRUB, PERENNIAL & GRASS IMAGES



Brilliant Chokeberry (ARO BRI)



Hummingbird Sweetspire (CLE HUM)



Buttonbush (CEP OCC)



Sparkleberry Winterberry (ILE SPA)



Little Henry Virginia Sweetspire (ITE LIT)



Gro-Low Fragrant Sumac (RHU GRO)



Elderberry (SAM CAN)



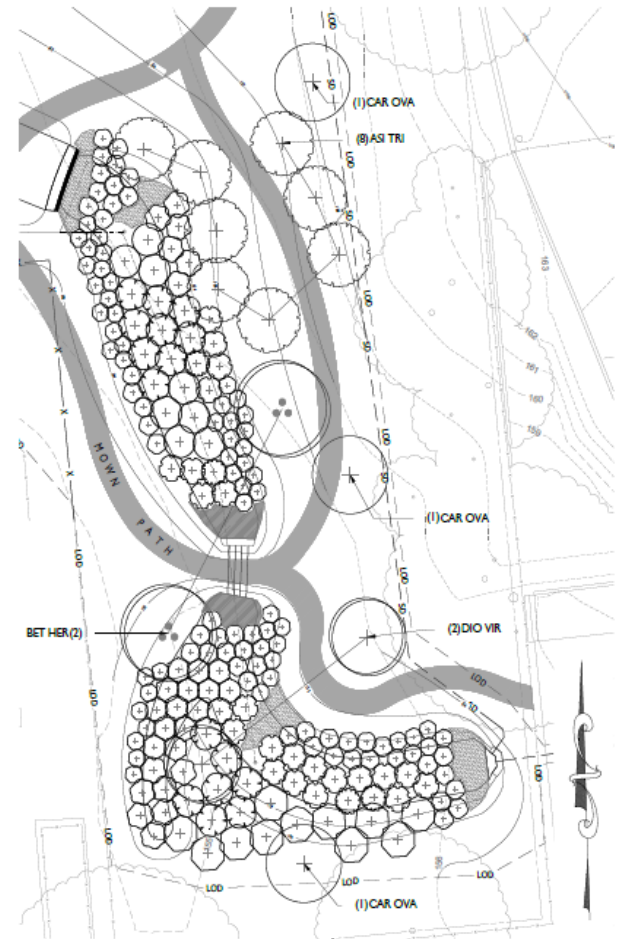
Winterthur Smooth Witherod (VIB WIN)



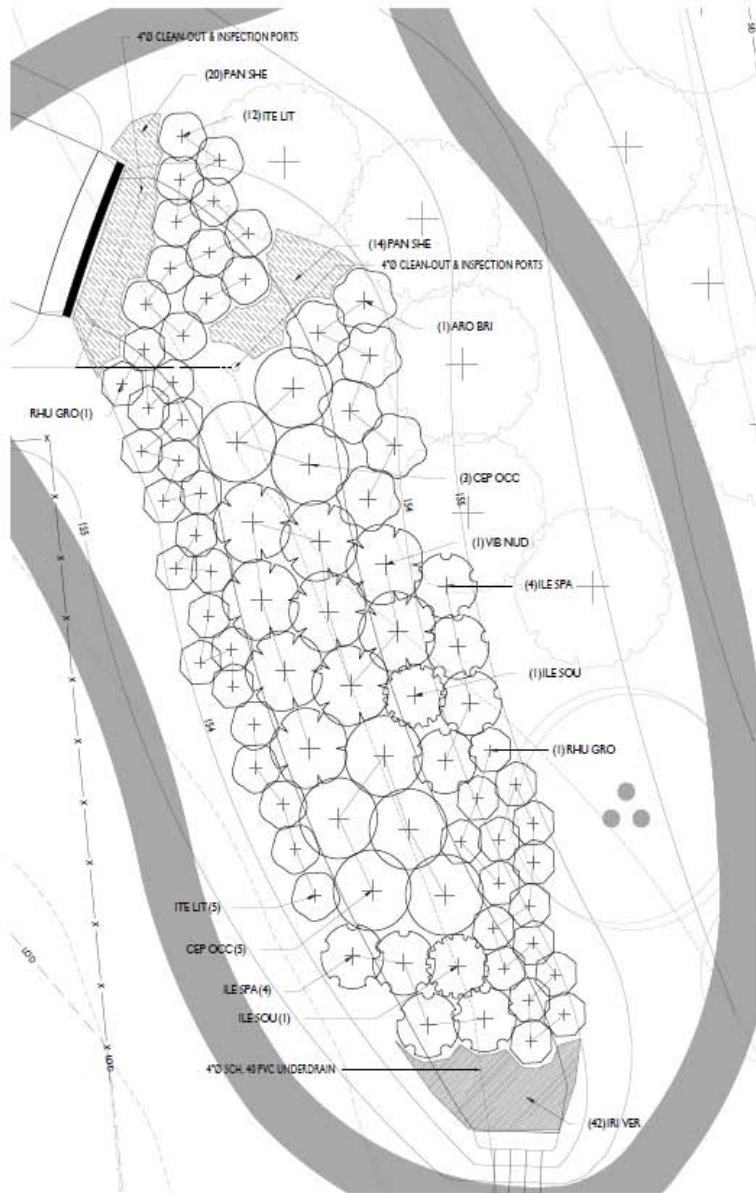
Shenandoah Switch Grass (PAN SHE)



Blue Flag Iris (IRI VER)



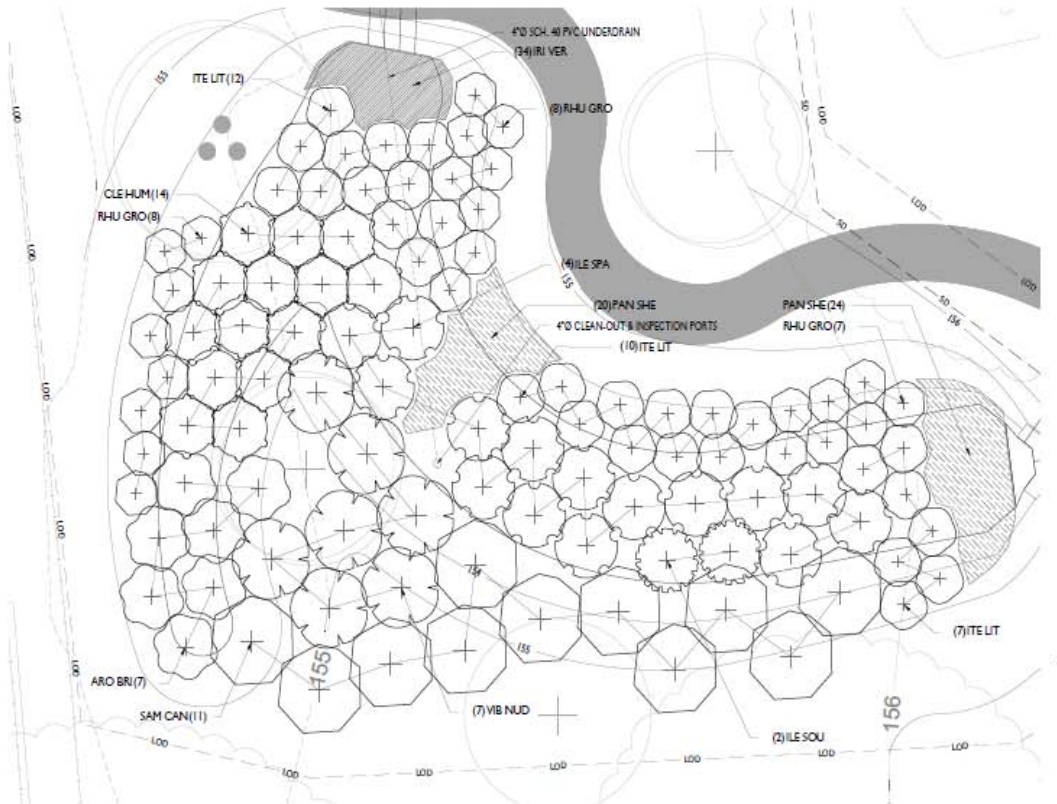
TREE PLANTING PLAN
SCALE: 1"=10'



PLANTING PLAN: BMP 2
SCALE: 1/4"=1'

PLANT SCHEDULE TREE PLAN

TREES	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	REMARKS	
ASI TRI	8	Asteria triloba / Pawpaw	5-6'	Cont. or B&B		
BET HER	2	Betula nigra 'Heritage' / Heritage River Birch	8'-10'	B&B	3-5 Stems	
CAR OVA	3	Carya ovata / Shagbark Hickory	2-2.5' cal.	B&B		
DIO VIR	2	Diospyros virginiana / Common Persimmon	6-8'	Cont. or B&B		
SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	REMARKS	
ARO BRI	13	Aronia arbutifolia 'Brilliantissima' / Brilliant Red Chokeberry	24"-30"	Cont.		
CEP OCC	8	Cephalanthus occidentalis / Buttonbush	24"-30"	Cont.		
CLE HUM	14	Cladonia alnifolia 'Hummingbird' / Hummingbird Swaetspire	24"-30"	Cont.		
ILE SOU	4	Ilex verticillata 'Southern Gentleman' / Southern Gentleman Winterberry Holly	24"-30"	Cont.	Alt Apollo	
ILE SPA	23	Ilex verticillata 'Sparkberry' / Sparkberry Winterberry	24"-30"	Cont.		
ITE LIT	46	Itea virginica 'Little Henry' TM / Little Henry Virginia Swaetspire	3 gal	Cont.		
RHU GRO	55	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	3 gal	Cont.		
SAM CAN	11	Sambucus canadensis / Elderberry	24"-30"	Cont.		
VIB NUD	16	Viburnum nudum 'Wintershur' / Wintershur Smooth Withered	24"-30"	Cont.		
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	SPACING	REMARKS
IRI VER	76	Iris versicolor / Blue Flag Iris	1 qt.	Pot	12' o.c.	
PAN-SHE	78	Panicum virgatum 'Shanandoah' / Switch Grass	1 qt.	Pot	18' o.c.	



PLANTING PLAN: BMP 1
SCALE: 1/4"=1'

PROJECT TIMELINE

- May 2019: contract awarded
- May – August 2019: field assessment (topographic survey, geotechnical investigations etc.)
- August – January 2020: design development
- 3 public meetings:
 - Concept designs on 9/5/19
 - Semi-final designs (~65%): 12/10/19
 - Construction kickoff meeting (timeline): 10/28/20
- Construction complete ~ 6 weeks
- Post-construction maintenance included in contract

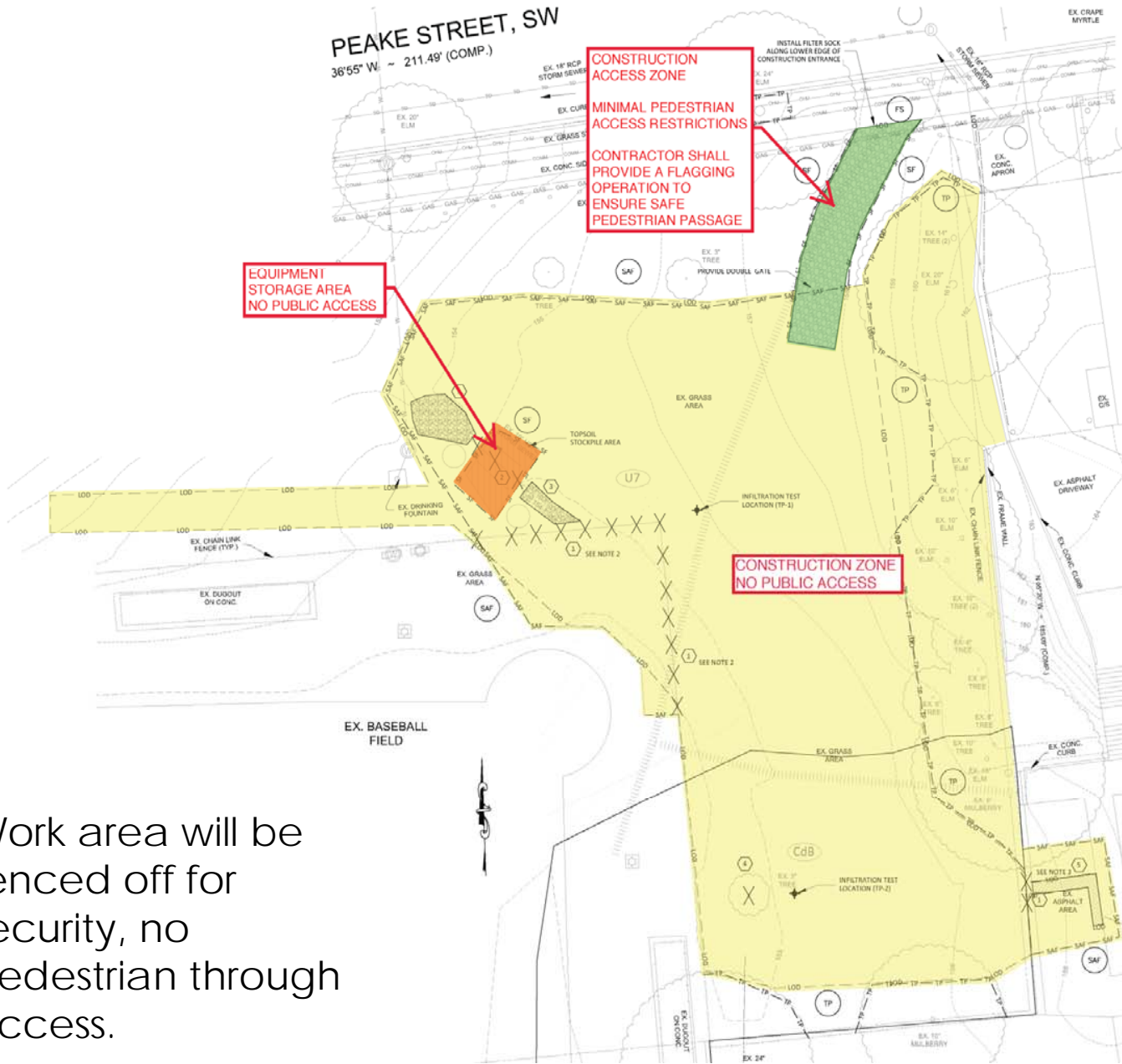
CONSTRUCTION DETAILS



GENERAL INFORMATION

- All work to occur on weekdays (M-F)
- Work hours are 8AM–5PM
- Construction vehicles on site:
 - 1 skid steer loader
 - 1 track excavator
 - 1 stake body truck
 - 1 crew pick-up truck
- DOEE Community Point of Contact:
Cecilia Lane
Cecilia.lane@dc.gov
202-535-1961





Work area will be fenced off for security, no pedestrian through access.

FAQs

- How do we find our project sites?
 - Enthusiastic landowners!
 - Funding sources
 - Large areas of untreated impervious cover
 - More impactful locations
- What can I do?
 - RiverSmart Homes
 - Rain Gardens
 - Permeable Pavers
 - Rain Barrels
 - Tree Planting
 - “BayScaping”



<https://www.riversmarthomes.org/>

QUESTIONS



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