# BENNING STODDERT RECREATION CENTER AND NORTH MICHIGAN PARK STORMWATER RETROFIT PROJECTS

#### PUBLIC STAKEHOLDER MEETING

January 31st, 2024

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Planning and Design
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## AGENDA

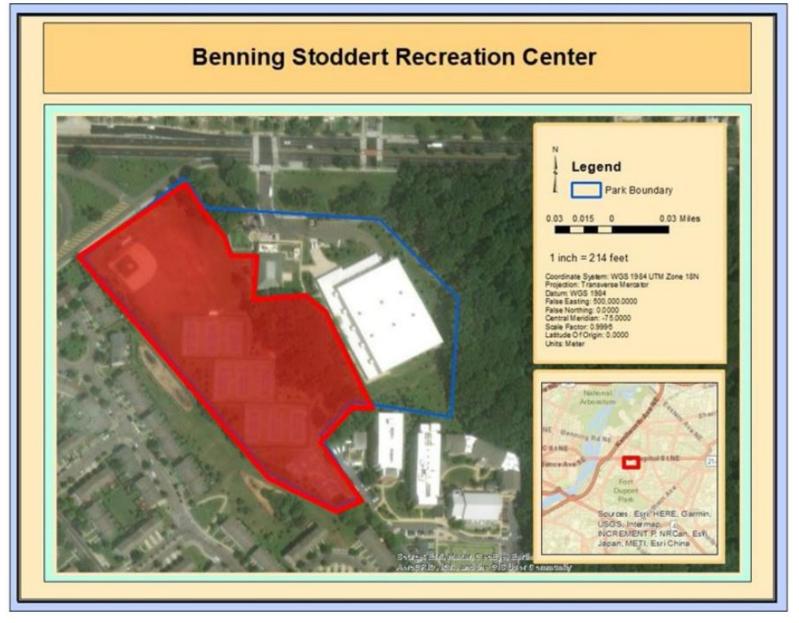
- Project Background and Objectives
- Benning Stoddert:
  - Existing Conditions
  - Concept Designs
  - Community Feeback
- North Michigan Park:
  - Existing Conditions
  - Concept Designs
  - Community Feedback
- Project Timeline
- Additional Questions/Discussion

# Background

 DOEE oversees the design and construction of low impact development (LID) stormwater retrofits at various locations around the District including: federal parkland, District parkland and in the public right of way

# Objectives

- To improve water quality in the Anacostia and Potomac Rivers for the benefit of District residents, visitors, wildlife and the environment, while providing high quality outdoor recreational space and facilities for children and adults to learn, play, and connect with nature
- To reduce the stormwater pollutants that enter the local waters (i.e., rivers, streams, estuaries) of the District, as required under the current applicable <u>EPA National Pollutant Discharge</u> <u>Elimination System (NPDES) permit for the District's municipal</u> <u>separate storm sewer system (MS4)</u>



PROJECT LOCATIONS: 100 Stoddert Place, SE



Address: 1333 Emerson Street NE

## BACKGROUND

1) WHAT IS STORMWATER AND WHY DO WE TREAT IT?

2) WHAT ARE SOME SOLUTIONS?

## PROBLEM OF STORMWATER POLLUTION





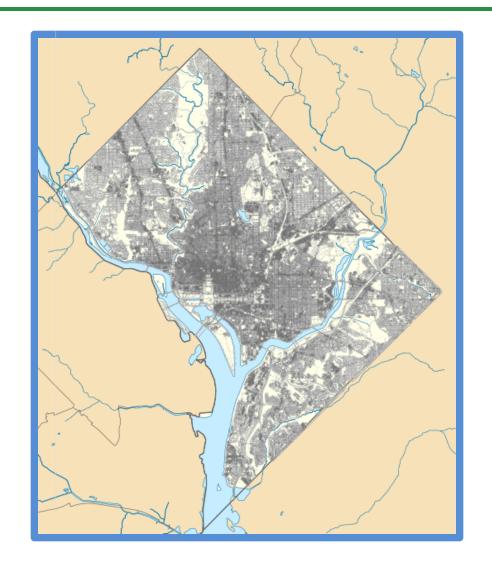








#### DISTRICT OF COLUMBIA LAND USE



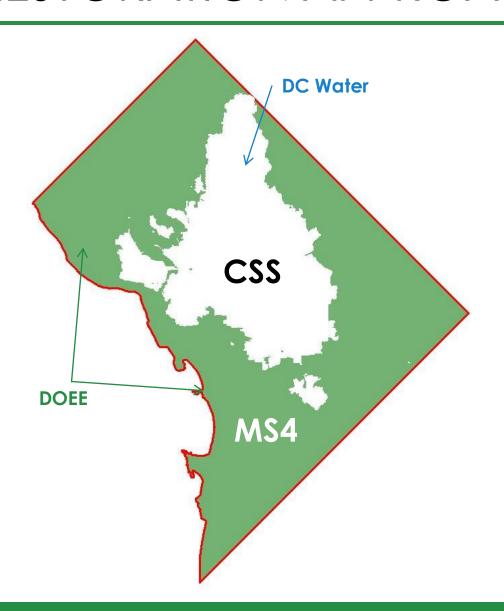
Total Area 68.3 mi<sup>2</sup>

Land Area 61.3 mi<sup>2</sup>

Impervious Area
26.6 mi<sup>2</sup>
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



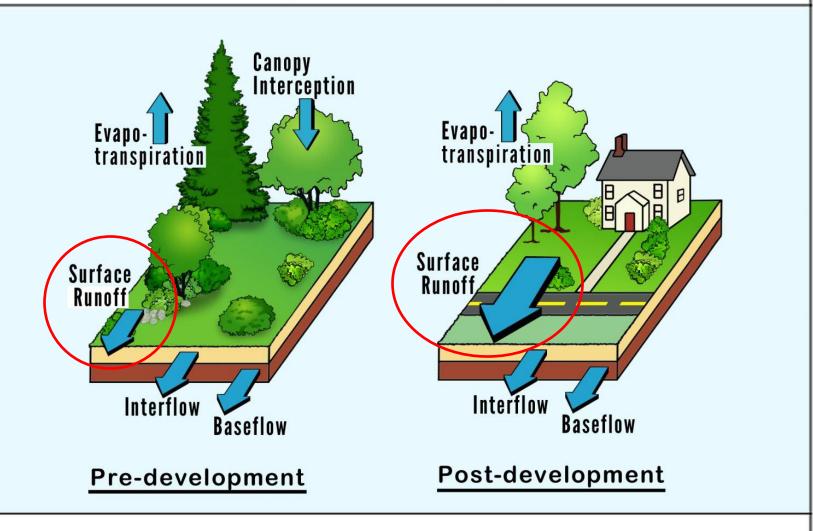
#### RESTORATION APPROACHES

## GREEN STORMWATER INFRASTRUCTURE

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!

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



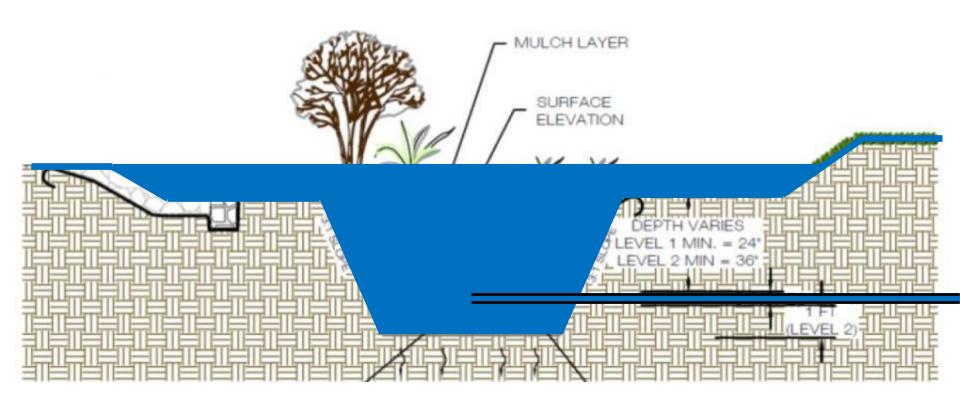
Surface runoff is minimal in an undeveloped site, but dominates the water balance at a highly impervious site.

# BIORETENTION





## BIORETENTION: HOW IT WORKS



## **BIOSWALES**



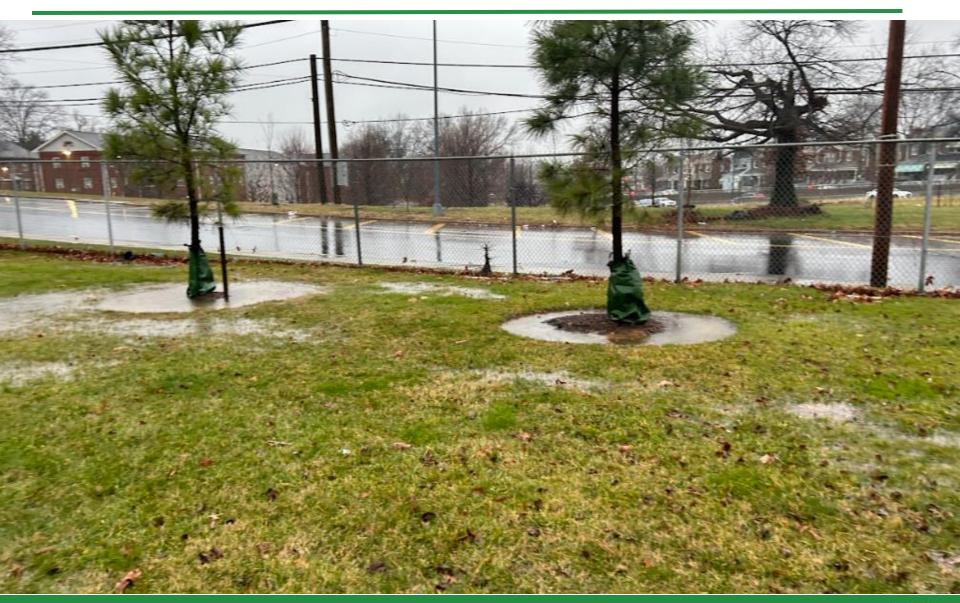


#### PROJECT OBJECTIVES

- Treat maximum amount of stormwater from the site in the most cost effective way
- Create and enhance wildlife habitat and biodiversity
- Development of a community amenity
- Educational opportunities





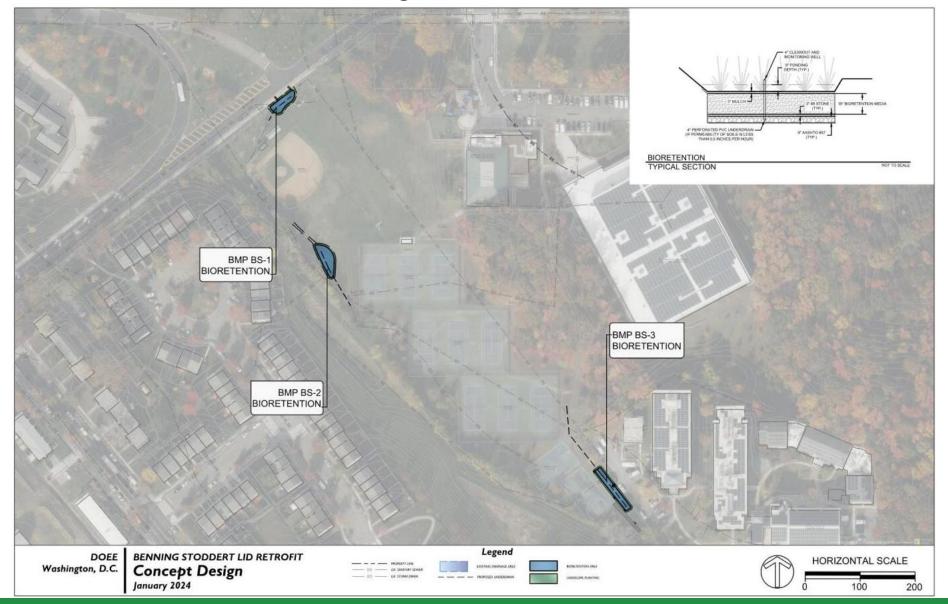




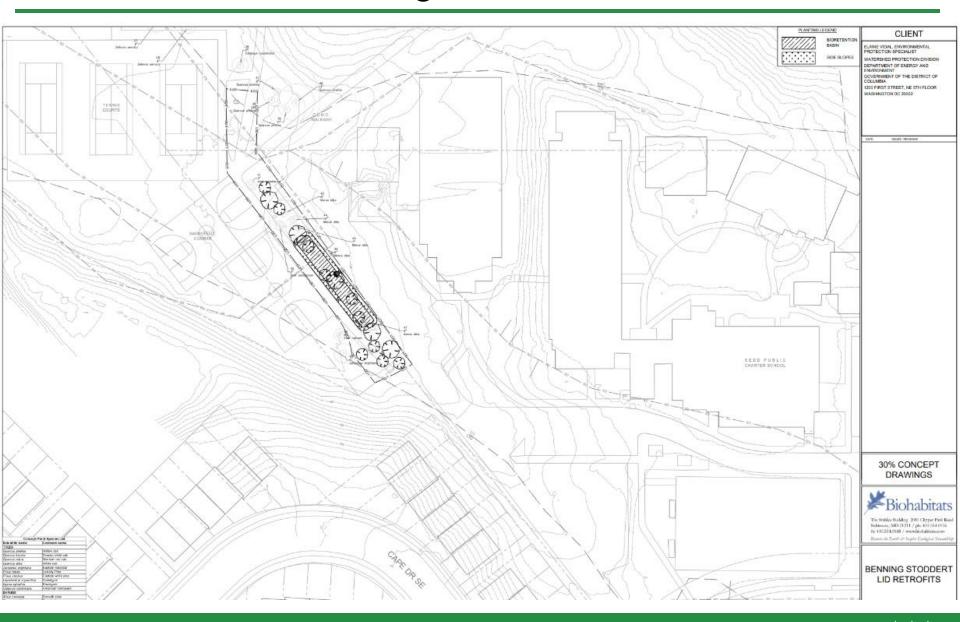
















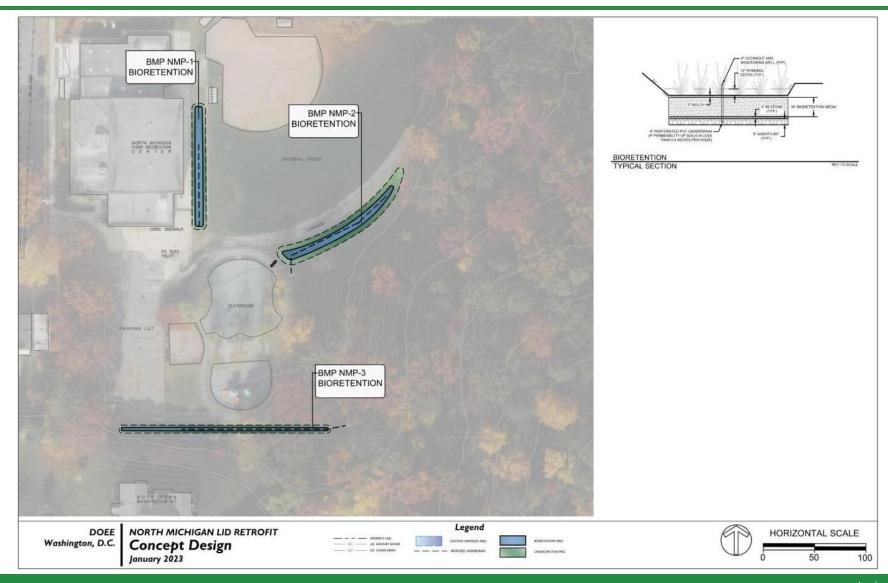


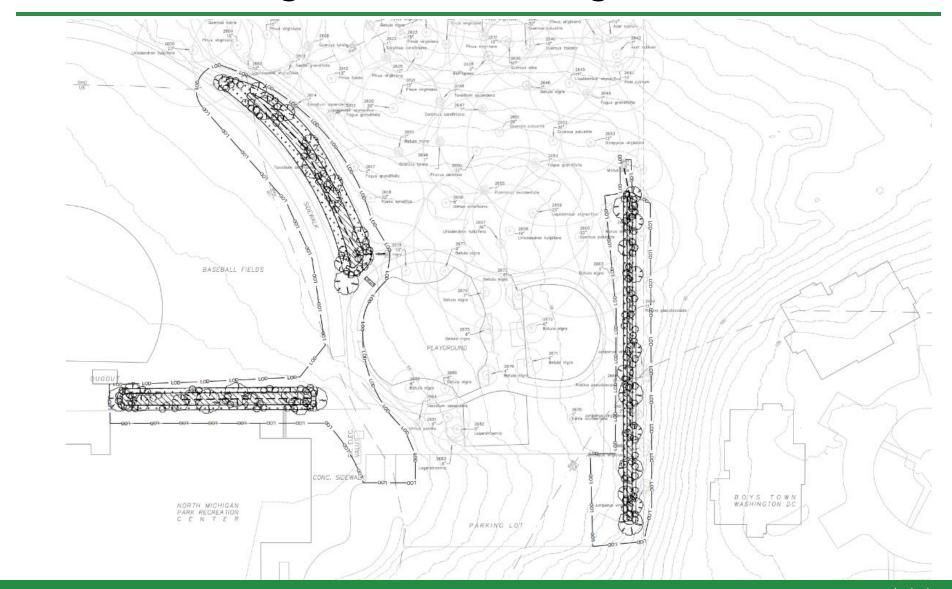


















## PROJECT TIMELINE

- September 2023: contract awarded
- October 2023 January 2024: field assessment (topographic survey, geotechnical investigations etc.), interagency coordination
- January 2024 June 2024: design development
- 3 public meetings:
  - Concept designs on 1/31/2024
  - Semi-final designs April 2024
  - Final designs: TBD
  - Construction kickoff meeting (timeline): TBD

### Contact and Additional Information

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#### **DPR**:

#### **Peter Nohrden**

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## **Project Websites:**

Benning Stoddert: <a href="https://doee.dc.gov/node/1699081">https://doee.dc.gov/node/1699081</a>

North Michigan Park: https://doee.dc.gov/node/1699066







# **FAQs**

- How do we find our project sites?
  - Enthusiastic
     landowners/partners/stakeholders!
  - Eligibility for 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

