HAMLIN STREET STORMWATER RETROFIT PROJECT

PUBLIC STAKEHOLDER CONSTRUCTION KICKOFF PUBLIC MEETING

February 23, 2022

PETER NOHRDEN
Landscape Architect
Capital Projects, Planning and Design
Department of Parks and Recreation
peter.nohrden@dc.gov

CECILIA LANE
Environmental Protection Specialist
Watershed Protection Division
Department of Energy & Environment
cecilia.lane@dc.gov
AGENDA

• Project Area & Background
• Existing Conditions
• Project Objectives
• Restoration Approaches
• Final Design
• 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
A single 1.2 inch storm falling on this area produces about 525 million gallons of stormwater runoff.
DC’S RESTORATION APPROACHES
EXISTING CONDITIONS

LANGDON PARK

Catch Basins

Stormwater Flows

LANGDON PARK

Hamlin St NE

King PI NE

Irving St NE

5 Ave NE
EXISTING CONDITIONS
EXISTING CONDITIONS - UPPER
PROJECT OBJECTIVES

• Treat maximum amount of stormwater from the site in the most cost effective way
• Create and enhance habitat within Langdon Park
• 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!
BIO RETENTION
BIO RETENTION: HOW IT WORKS

[Image of a bio-retention system diagram with labels for mulch layer, surface elevation, and depth variations.]
PROJECT DESIGN
### SUMMARY TABLE

<table>
<thead>
<tr>
<th>BMP</th>
<th>Bioretention Version</th>
<th>SW/h</th>
<th>Areas</th>
<th>Depths</th>
<th>Retention Volume Provided</th>
<th>Retention Volume Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CF</td>
<td>CF</td>
<td>CF</td>
<td>CF</td>
<td>CF</td>
</tr>
<tr>
<td>1</td>
<td>Standard</td>
<td>5,042</td>
<td>7,147</td>
<td>1,262</td>
<td>3,404</td>
<td>1,406</td>
</tr>
<tr>
<td>2</td>
<td>Standard</td>
<td>2,190</td>
<td>3,102</td>
<td>1,071</td>
<td>1,542</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,231</td>
<td>4,219</td>
<td>657</td>
<td>925</td>
<td></td>
</tr>
</tbody>
</table>

**Legend**
- **SD** — Existing Storm Drain
- **SS** — Existing Sanitary Sewer
- **LD2** — Proposed Limit of Disturbance
- **LID** — Proposed Limit of Work
- **TP** — Proposed Tree Planting
- **CB** — Curved Bollard
- **BI** — Bioretention
- **LD3** — Proposed Limit of Work

---

**DOEE**

**HAMLIN STREET NE LID RETROFIT**

**FINAL DESIGN**

February 2022

---

@DOEE_DC

---
Goal to intercept water before entering storm sewer system
FINAL DESIGN - EASTERN

Legend:
- Existing Drainage Area
- Existing Storm Drain
- Existing Sanitary Sewer
- Proposed Bioretention
- Proposed Granite Boulders
- Proposed Tree Planting
- Proposed Limit of Disturbance
- Proposed Limit of Work

HAMLIN STREET NE LID RETROFIT
FINAL DESIGN
February 2022

DOEE
Washington, D.C.

Biohabitats
WESTERN

Goal to intercept water before it enters the storm sewer system.
CONSTRUCTION DETAILS
GENERAL INFORMATION

• All work to occur on weekdays (M-F)*
• Work hours are 7:30AM–3:30PM
• Construction vehicles on site:
  – 1 track truck
  – Up to 2 excavators
  – Up to 2 company trucks parked in construction zone
  – 2-3 personal vehicles parked along Hamlin St.
• DOEE Community Point of Contact:
  Cecilia Lane
  Cecilia.lane@dc.gov
  202-535-1961
CONSTRUCTION – SITE ACCESS

STAGING AND STOCKPILE AREA, NO PUBLIC ACCESS

CONSTRUCTION ZONE, NO PUBLIC ACCESS

ONE LANE OF TRAFFIC OPEN WITH FLAGGERS

CONSTRUCTION ZONE, NO PUBLIC ACCESS
CONSTRUCTION – SITE ACCESS

- Two lanes of traffic open, no parking.
- Staging and stockpile area, no public access.
- Construction area, no public access.
PROJECT TIMELINE

• March 2020: contract awarded
• April – December 2020: field assessment (topographic survey, geotechnical investigations etc.), interagency coordination
• January – Fall 2021: design development
• 3 public meetings:
  – Concept designs on 3/9/2021
  – Semi-final designs (~65%): 9/20/2021
  – Construction kickoff meeting (timeline): 2/23/2022
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