

Benning Park Stormwater Retrofit Project

Public Stakeholder Kickoff Meeting
December 4, 2018

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District Department of Energy and Environment



Agenda

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

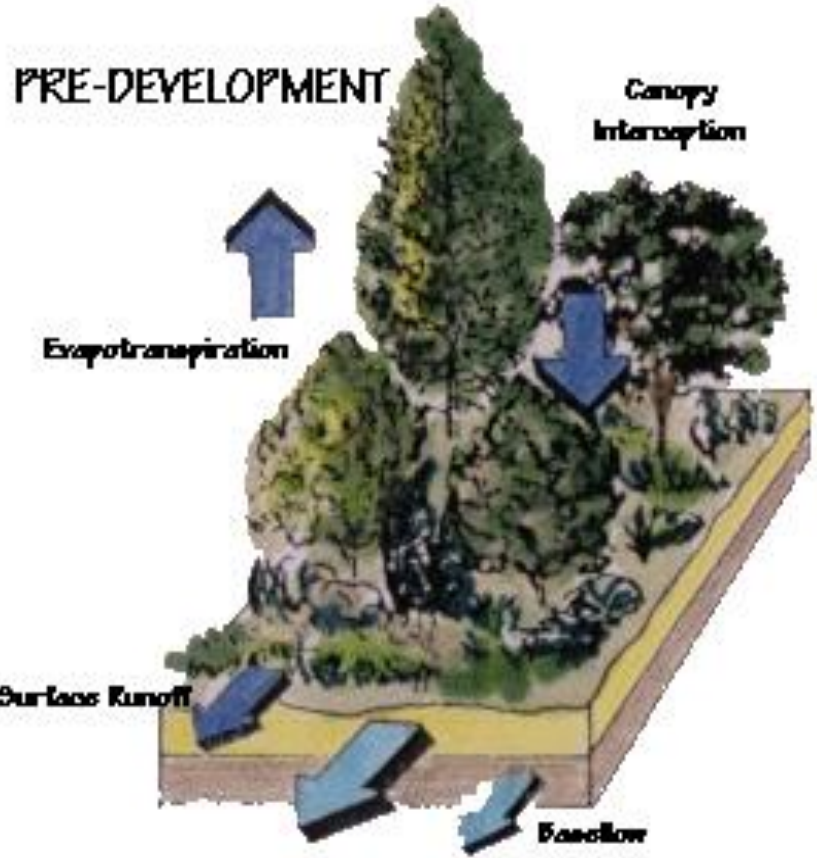
Project Location



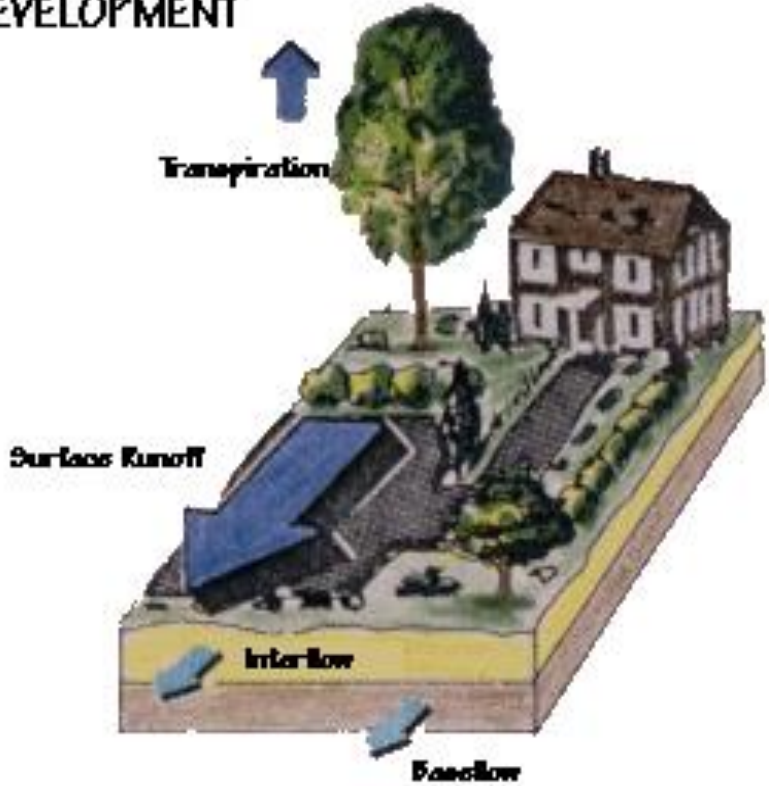
BACKGROUND

WATER BALANCE

PRE-DEVELOPMENT



POST-DEVELOPMENT

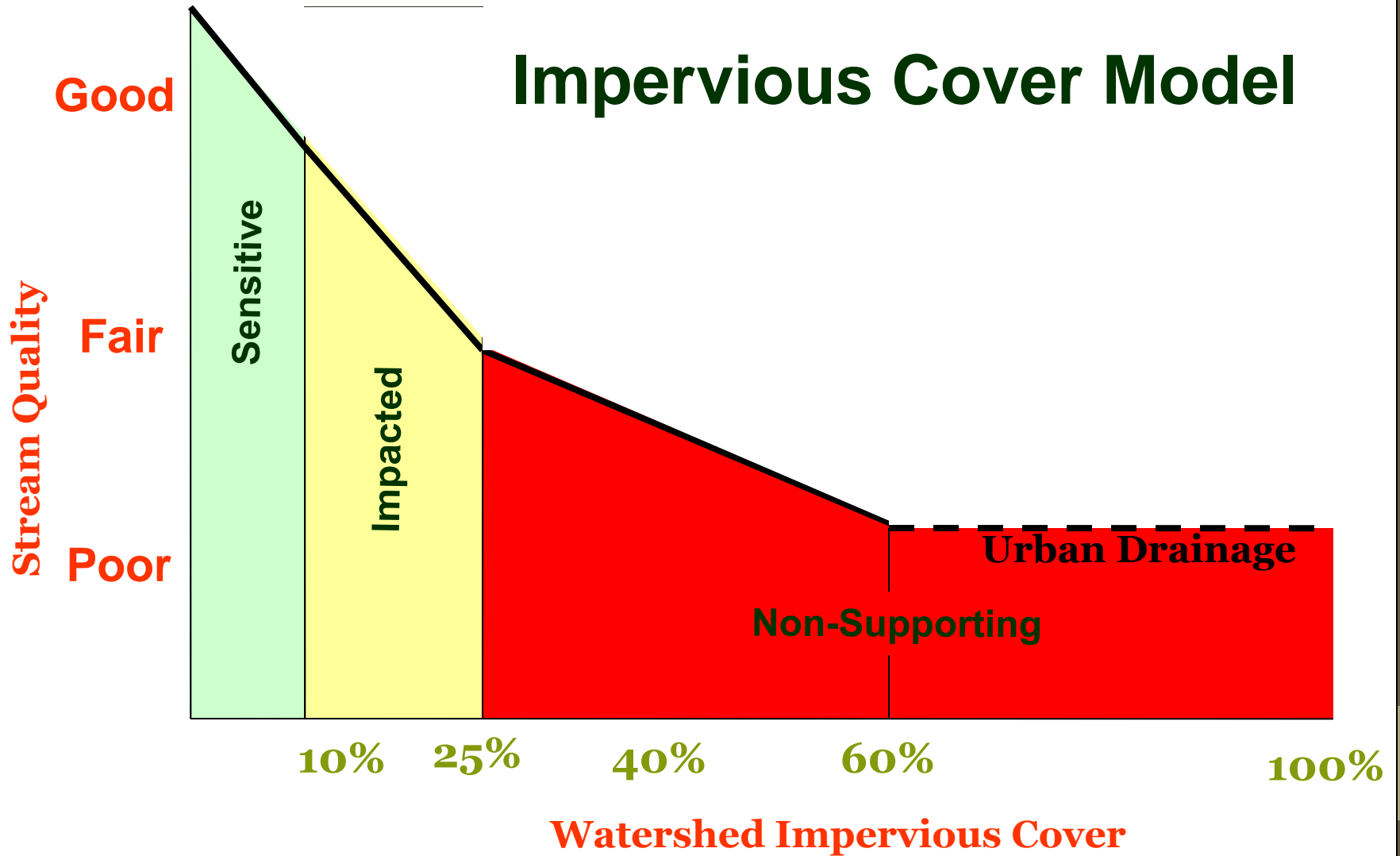


Problem of Stormwater Pollution



The Original Model

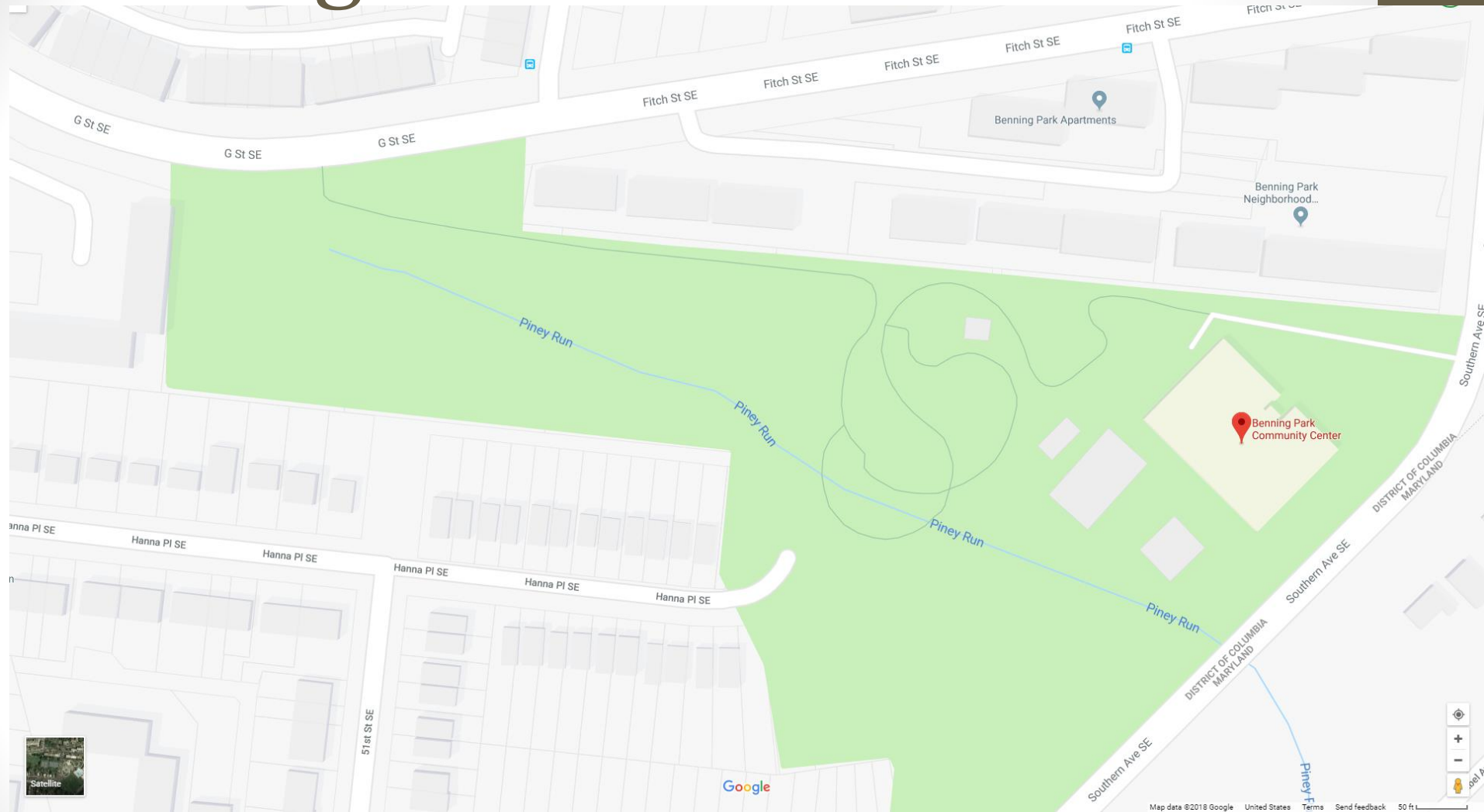
Impervious Cover Model

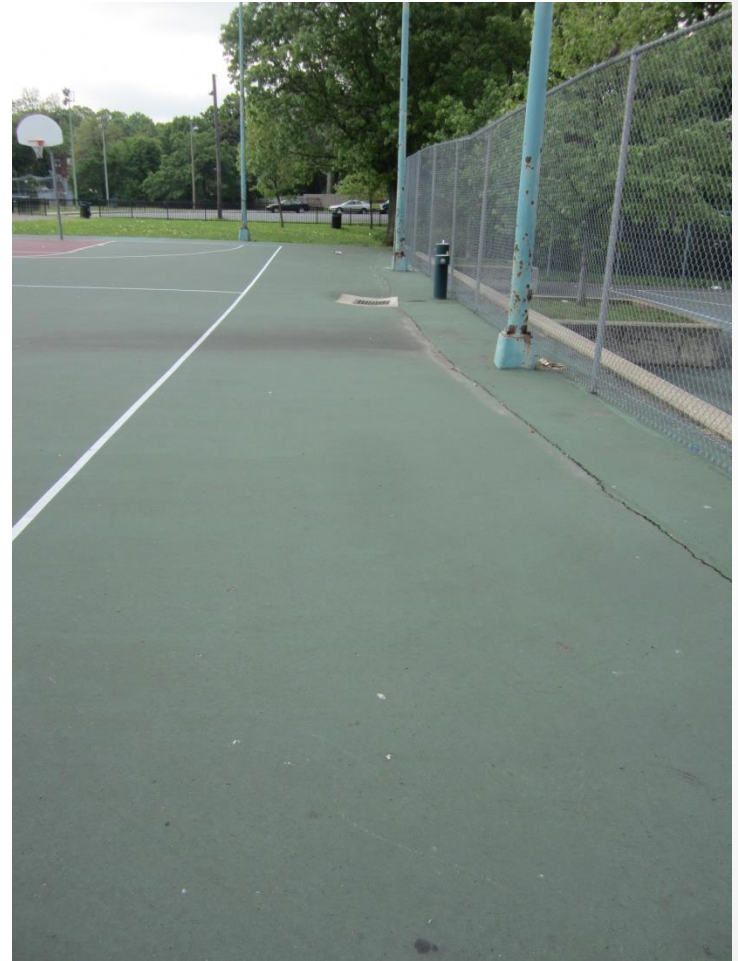


Existing Conditions



Existing Conditions









RESTORATION APPROACH

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).

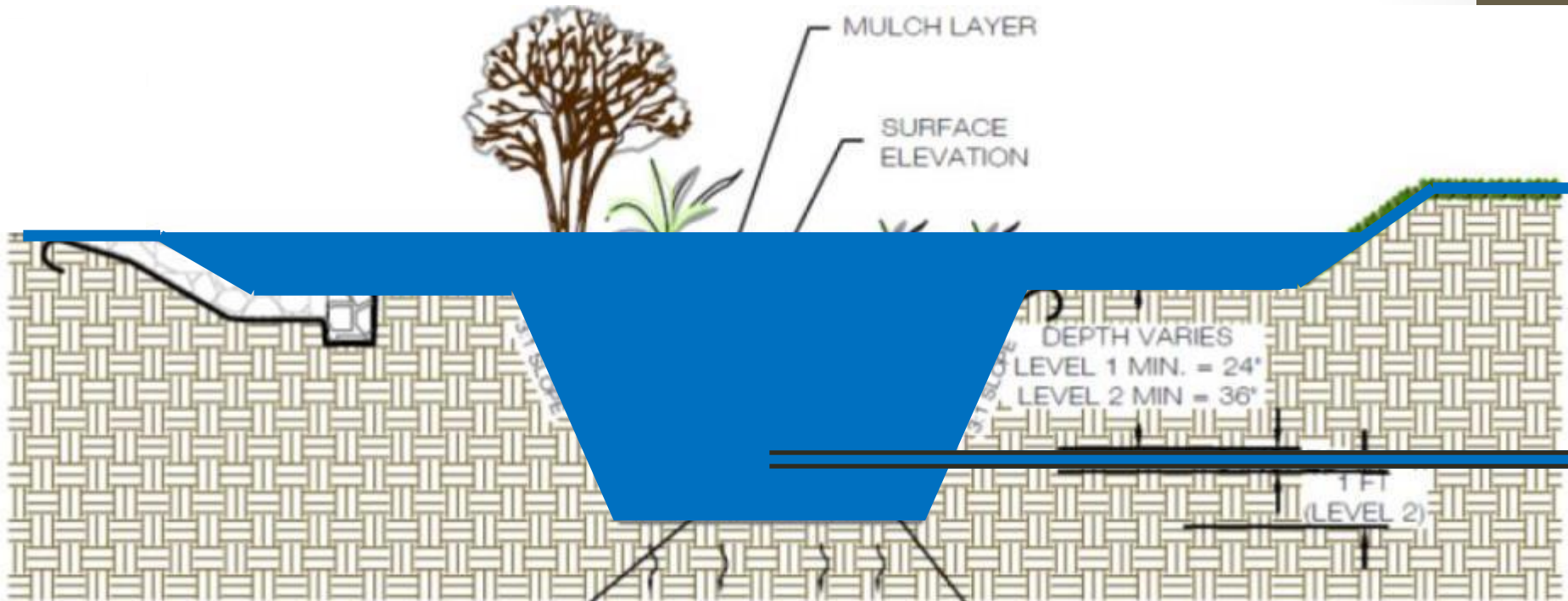
Slow it down, Spread it Out, Soak it In !

Some examples follow...

Bioretention



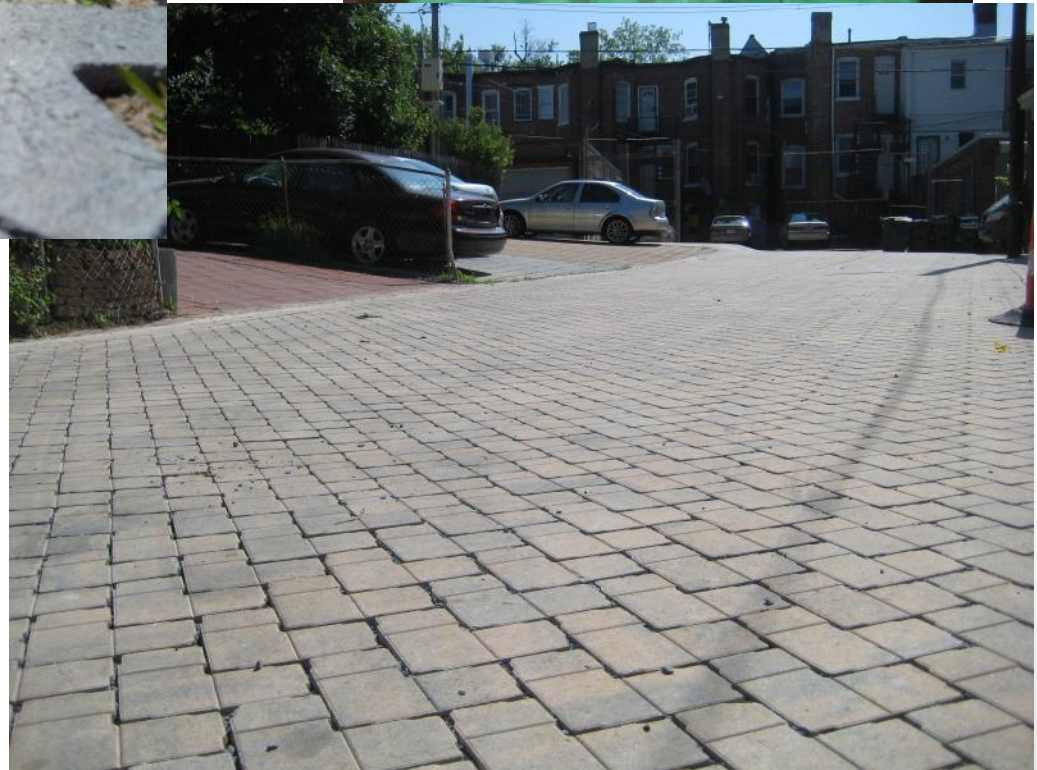
Bioretention: How it works



Bioswales

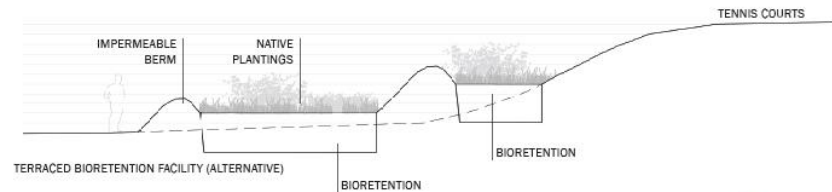
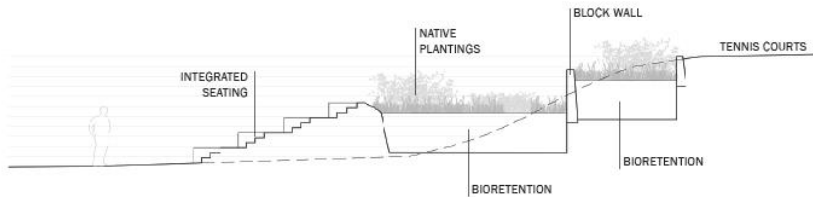
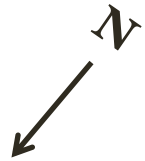
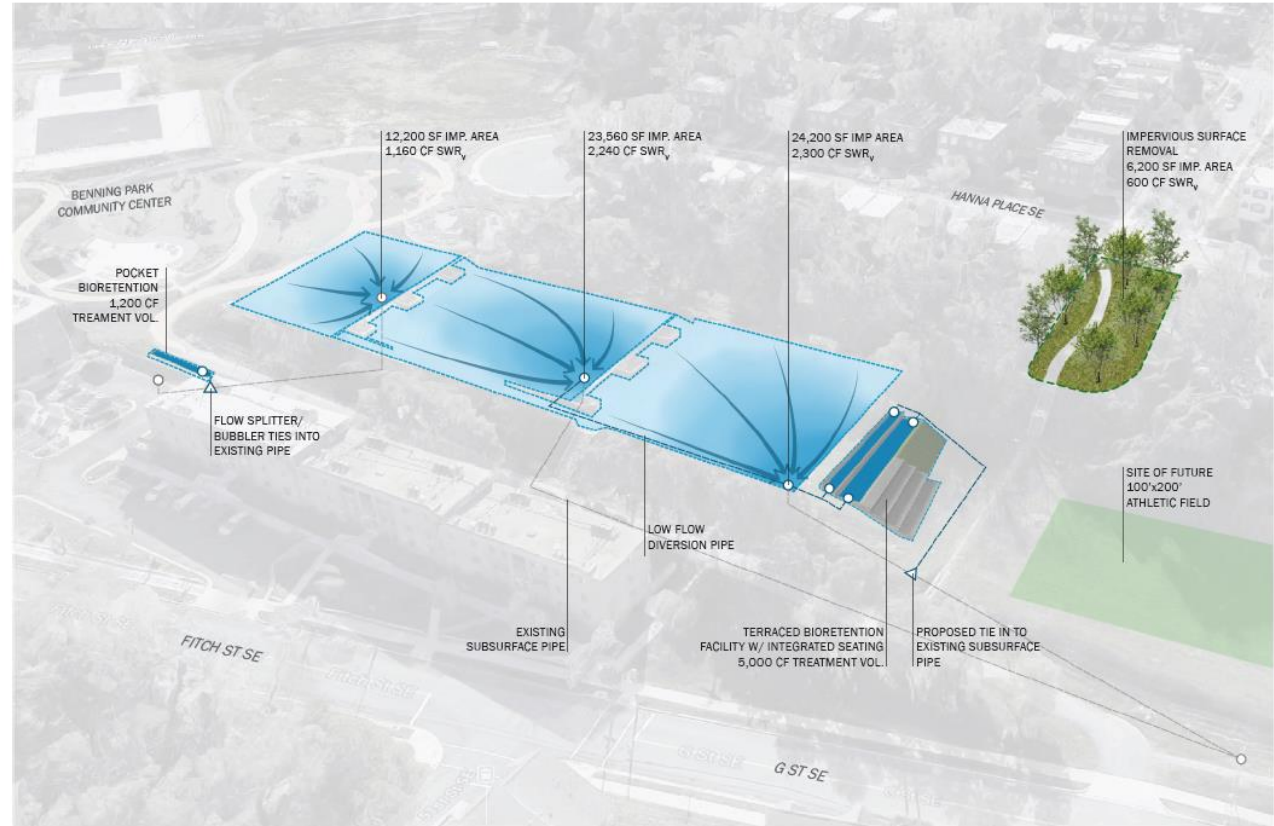


Permeable Pavement



Project Concept

CDA ID	Paved Drainage Area SF	Stormwater	Max Stormwater
		Retention Volume (SWRv) CF	Retention Volume - 1.7" (SWRv 1.7) CF
East Basketball Court	12,200	1,159	1,642
West Basketball Courts	23,500	2,233	3,163
Tennis Courts	24,200	2,299	3,257
Impervious Surface Removal	6,200	589	834



Project Objectives

- Manage and treat the stormwater from existing untreated impervious cover and compacted cover
- Reduce pollutants
- Improve water quality
- Enhance habitat
- Create a community amenity
- Provide an opportunity for the community to engage with the environment
- Educate the surrounding community about stormwater impacts
- Be cost-effective

Assumptions

- 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



Project Timeline

- November 2018: contract awarded
- November – January 2019: field assessment (topographic survey, geotechnical investigations etc.)
- January – June 2019: design development
- 3 public meetings:
 - Concept designs
 - Semi-final designs (~65%)
 - Construction kickoff meeting (timeline)
- September 30, 2019: construction complete

Questions

