Barthman Parsons
Integrated Solutions

A Blueprint for Reuse of Distressed Parcels

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Presentation Agenda

• Introduction & Background

• Utilizing Distressed Parcels

• Generalized Application

• Specific Project Plan Elements
Background – Why do I&I and GI?

**IF WE JUST BUILD BIGGER SEWERS...**

Increased capacity here...  
...may make room for more I&I here
Blueprint Columbus

**Clean Streams**
- Reduction of CSO and SSO volume
- Separate treatment for San and Storm
- Improved stream and river quality for recreational use

**Strong Neighborhoods**
- Reduction of local flooding
- Removal of vacant and abandoned homes
- Construction of neighborhood amenities
Grounded in our I&I Program

• I&I in Columbus
• Blueprint Columbus
• Barthman Parsons IS
Blueprint Columbus Areas

- I&I in Columbus
- Blueprint Columbus
- Barthman Parsons IS
Introduction - Barthman Parsons I/I Study

- South Side Columbus Neighborhood
- Numerous Water-in-Basement (WIB) occurrences
- High I/I
- Significant Localized street and yard flooding
Introduction - Barthman Parsons IS Areas

Reeb-Hosack

Southern Orchards

Separate sanitary and storm sewers

Combined sewers with some separated areas
Introduction

Barthman/Parsons Integrated Solutions

Areas

- Separate sewers
- Narrow Strip
- Coveted Land
- 8 DSRs Tributary
- A Focus for MANY
- A Good Place to “Test”
Introduction
Barthman/Parsons Integrated Solutions Areas

- Combined Sewer area
- Broad area
- No CSOs near
- Land Not Highly Sought
- A Good “Test” for us
Utilizing Distressed Parcels
(Living w/LandBank)
Re-Utilizing Parcels

- Origins of the Land
  Redevelopment Office (LRO)
- LRO’s Re-utilization Process
- LRO’s Programs
Integrating with Landbank

• The Design Process
• Coordinating with…**ALL** the Stakeholders???
Project Coordination with Landbank

- Groundwater Monitoring
- Approval Process
- Parcel Acquisition
Generalized Application
Site Selection Process

• Evaluated all the parcels provided in the Land Bank datasets

• Removed all sites except those that are currently owned by the City or the Land Bank or are in the expedited foreclosure process (to be owned by the Land Bank within twelve months)

• Requested Land Bank guidance on parcel availability for DoSD use

• Removed additional sites based on directions from Land Bank
Site Selection Process

• Based on parcels removed, twenty-six sites across the two pilot areas were identified as potential GI installation locations including:

• Attempted to maximize overland gravity flow, street, and alley drainage to each of the sites

• Selected five top priority sites based on tributary area and potential stormwater benefit (two Reeb Hosack, three Southern Orchards)
Project Goals and Objectives

• Vacant land stormwater management
• Use GI/LID to create positive impact on CSO, DSR, WIB, and stormwater
• Template for future IS approaches
• Community beautification
Green Infrastructure Sizing

• Separate Area Sizing – TSS Reduction
  – Project target WQv, 77% reduction
  – If possible 1.89”, 83% reduction
  – Benefits

• Combined Area Sizing – CSO Reduction
  – Sized for 1.89 inches of rain
  – Goal is to manage CSO
  – Benefit
Project Challenges

• Distressed Parcels
• City Stakeholders
• Community Stakeholders
• Land Issues
Specific Project Plan Elements
Reeb Hosack Area Example
Reeb Hosack – Area Example

$1.3M NPV, 4.0 MG Treated Annually, $0.35/G Treated
Reeb Hosack – Area Example

$1.3M NPV, 4.0 MG Treated Annually, $0.35/G Treated
# Project Summary

<table>
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<th>Installation</th>
<th>Adjusted NPV Concept Cost (Concept Cost - TBL Benefit)</th>
<th>Annual Benefit (runoff volume treated)</th>
<th>$/gal treated annually</th>
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Takeaways

• Location, location, location
• Communication
• Sharing is caring
• How many and how much $
• O&M
• The (triple) Bottom Line