

BUILDING A WORLD OF DIFFERENCE

COUNTRY CREEK STORMWATER BASIN RETROFITS

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15 August 2013



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Building a world of difference.®

AGENDA

Project Background

Water Quality Improvement

Typical Improvement Features

Proposed North Basin Improvements

Proposed South Basin Improvements

Questions

PROJECT BACKGROUND

PROJECT BACKGROUND

2012 Stormwater Masterplan

- Basins Identified for Water Quality Retrofits
- Black & Veatch team selected for improvement design

Meeting with trustees on May 20th

Hydrologic and Hydraulic Investigations



WATER QUALITY IN DETENTION BASINS

WATER QUALITY

Methods of WQ Improvement

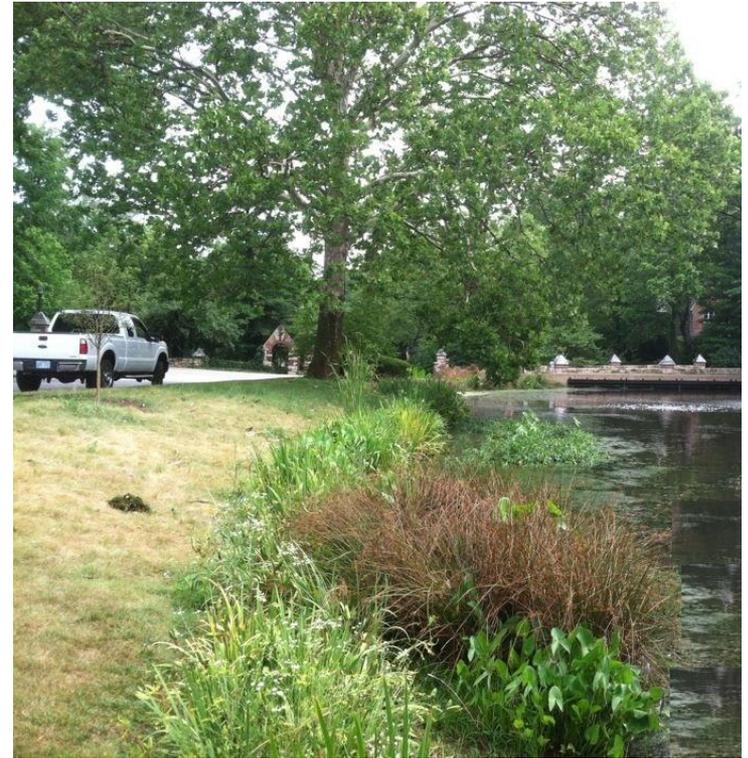
- Removal of Sediment
- Nutrient Uptake
- Detention of Small Events
- Filtering Overland Flow



TYPICAL IMPROVEMENT FEATURES

SHORELINE TREATMENT

- **Native Plantings**
 - Provides Water Quality Improvement
 - Habitat for Fish and Aquatic Species



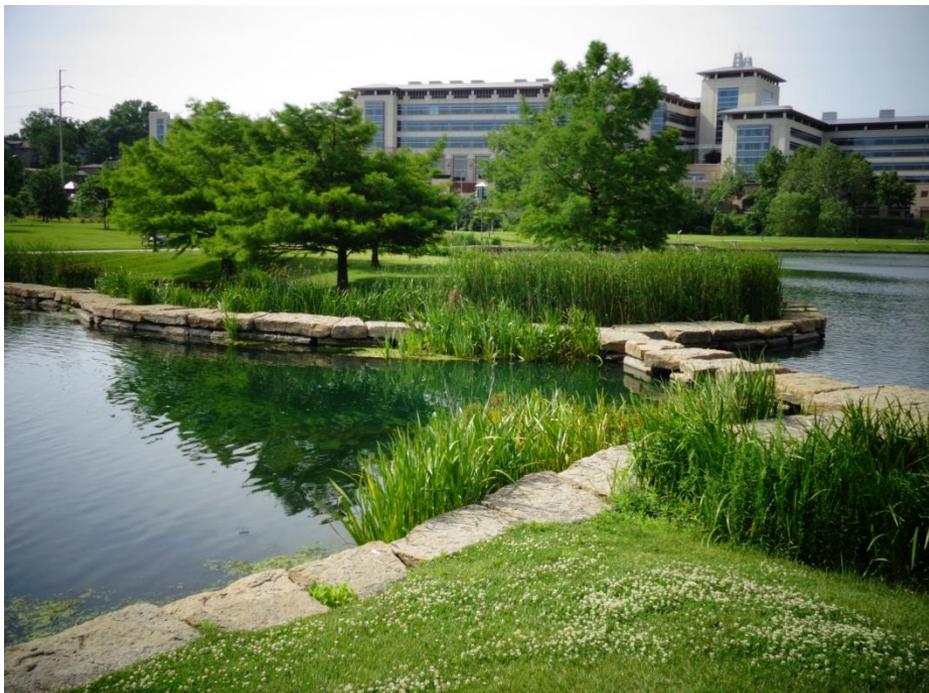
MODIFIED OUTLET

- Outlet will provide Water Quality Improvement
 - Debris Screen
 - Plate with holes drains small events
 - Overflow outlet for larger storms



STONE WALKWAYS

TYPICAL IMPROVEMENT FEATURES



PROPOSED NORTH BASIN IMPROVEMENTS

NORTH BASIN IMPROVEMENTS

- **Modified Outlet**
 - Permanent Pool maintained at current level
 - Provides WQ Storage
 - Reduces downstream flows
- **Shoreline Treatments**
- **Re-routed Storm Drainage**
- **Sediment Forebays**



NORTH BASIN IMPROVEMENTS

PROPOSED NORTH BASIN IMPROVEMENTS



Existing



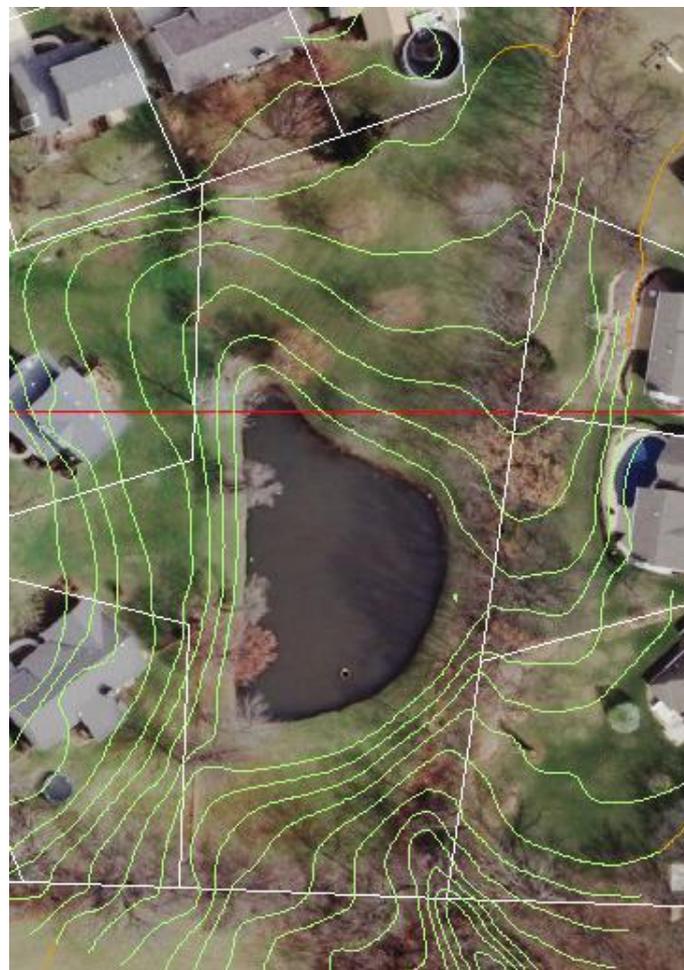
Proposed

PROPOSED SOUTH BASIN IMPROVEMENTS



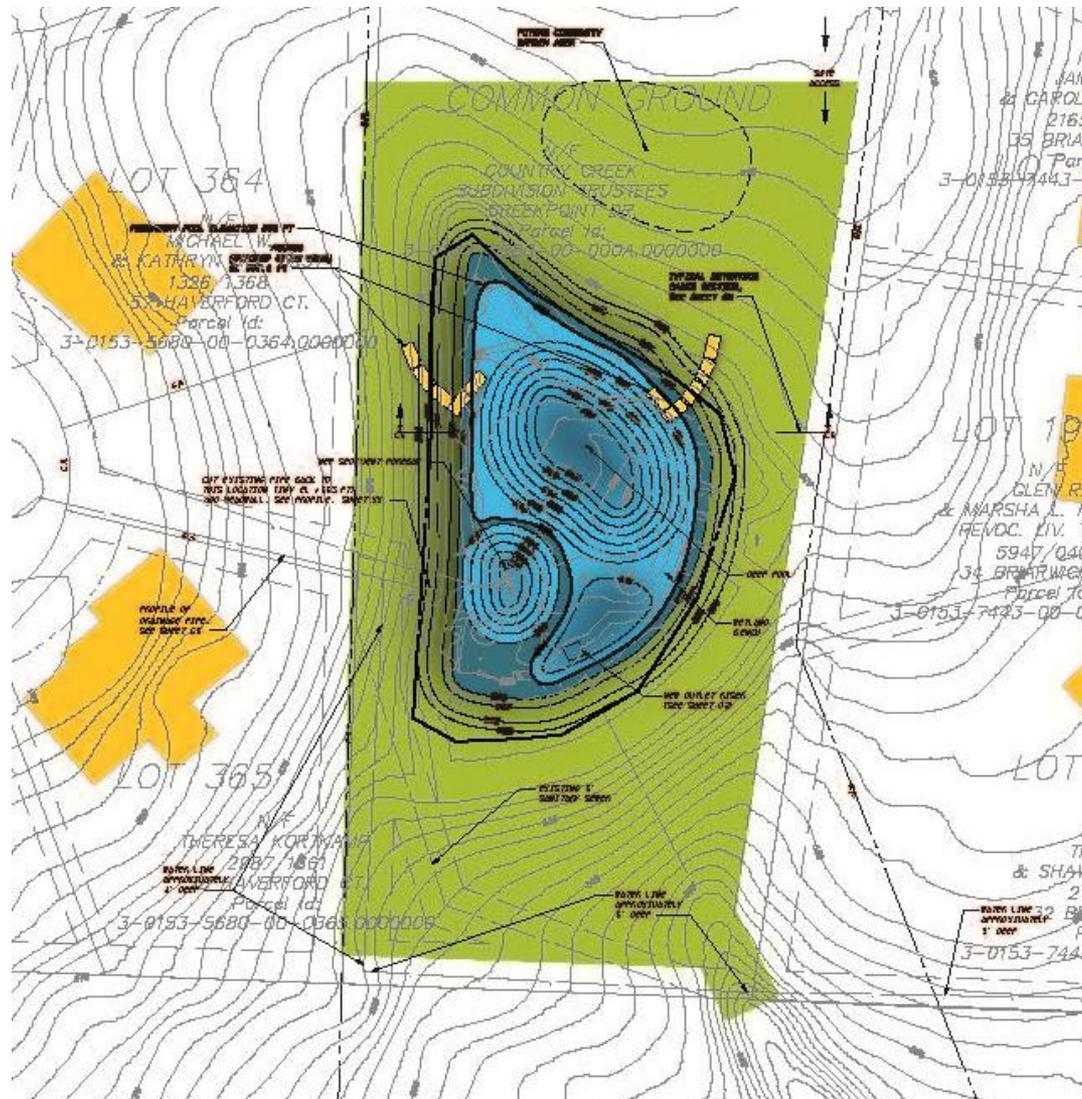
SOUTH BASIN IMPROVEMENTS

- **Modified Outlet**
 - Permanent Pool lowered 0.5 feet from 566.5 to 566
 - Provides WQ Storage
 - Reduces downstream flows
- **Shoreline Treatments**
- **Improved Pipe Discharge**
- **Sediment Forebays**



SOUTH BASIN IMPROVEMENTS

PROPOSED SOUTH BASIN IMPROVEMENTS

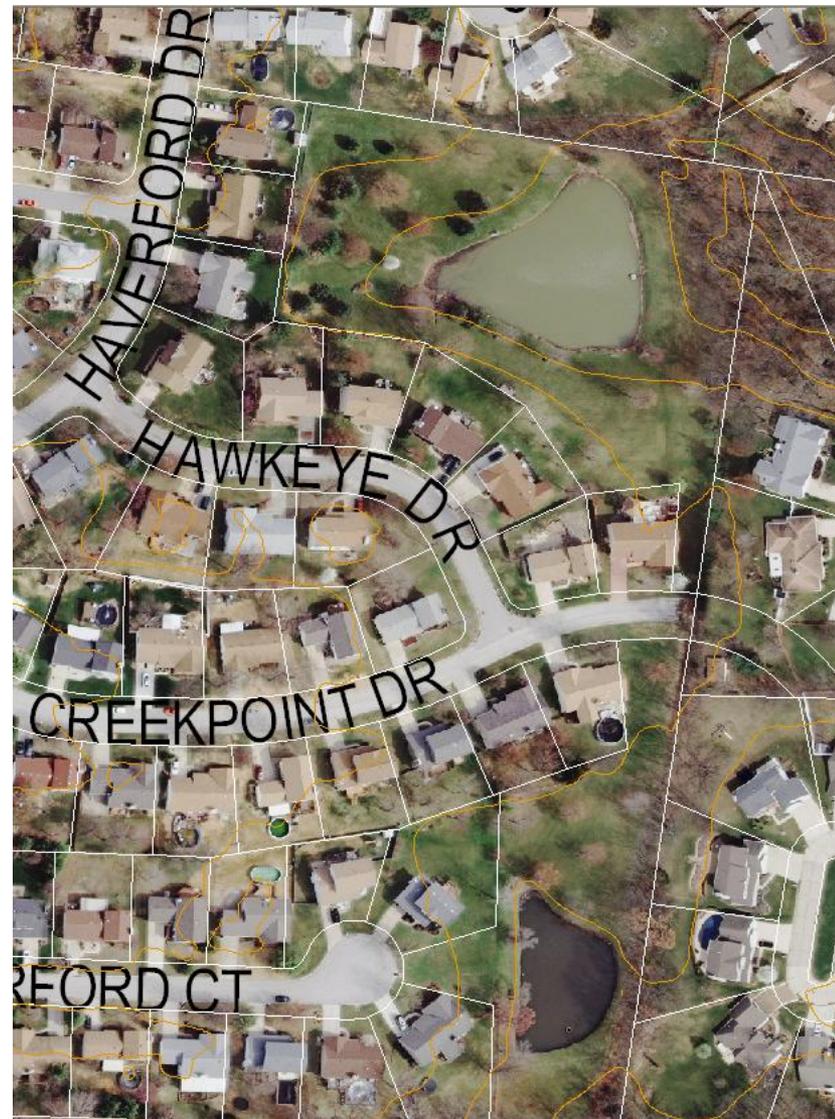
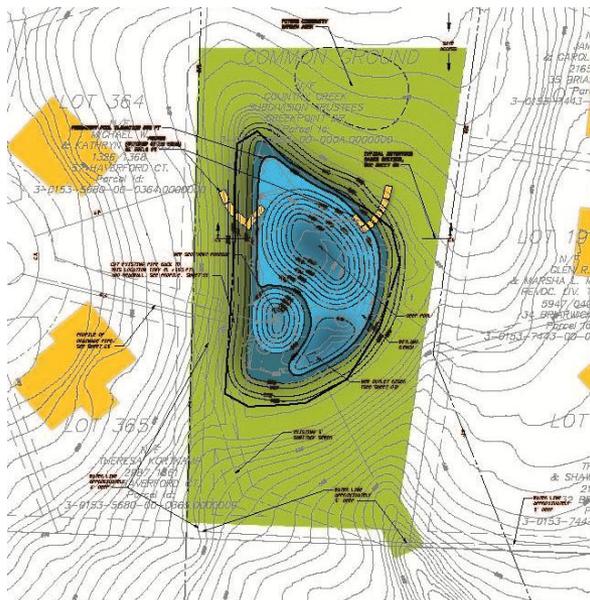
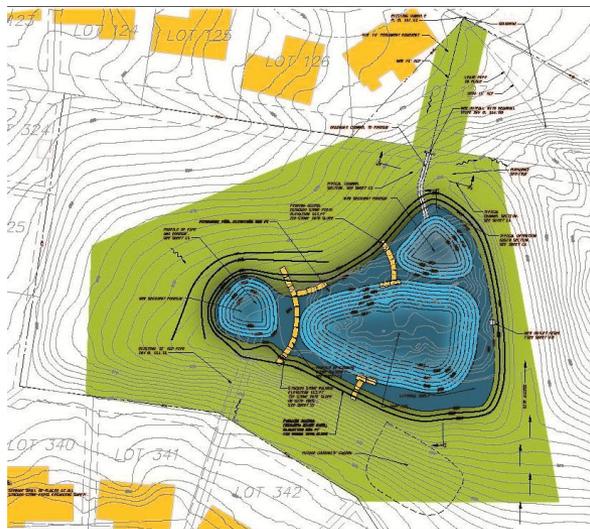


SOUTH BASIN IMPROVEMENTS

PROPOSED SOUTH BASIN IMPROVEMENTS



QUESTIONS



QUESTIONS



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Together



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