



West Goshen Township Stormwater Plans Public Meeting

July 26, 2017

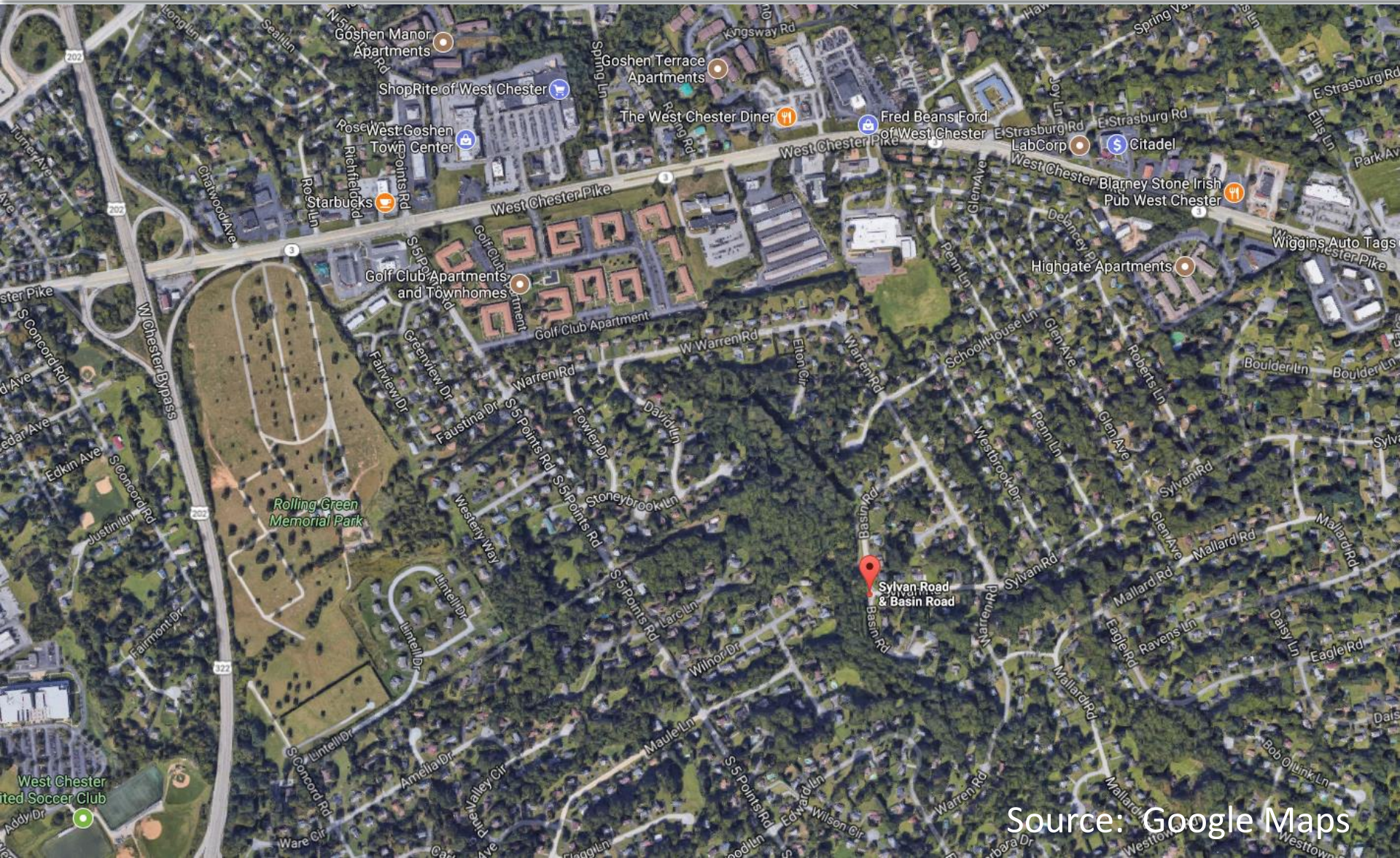
Basin Road Stormwater Basin Retrofit Project

Art Wawiernia, P.E., AKRF, Inc.
Tracey Cohen, P.L.A., AKRF, Inc.

Outline

- Project Location
- Existing Site Conditions
- Project Goals
- Project Funding
- Key Stakeholders
- Design Elements
- Design Examples
- Project Schedule

Project Location



Source: Google Maps

Existing Site Conditions

Stormwater Basin

- 2-acre basin on Township open space
- Built 1974 to control runoff from 74-acre development
- Outdated design by current standards
- Widespread invasive plant growth
- Retains permanent pool



Existing Site Conditions

Stream Channel Network

- First order tributary to East Branch Chester Creek
- Chapter 93 designation: TSF, MF
- Severely eroded bank segments upstream of basin



Project Goals

- Enhance stormwater detention performance of the basin
- Trap and treat pollutants such as sediment and nutrients
- Repair and stabilize damaged/eroded streambanks
- Enhance wetland, riparian, and upland habitats
- Provide opportunities for passive recreation and education

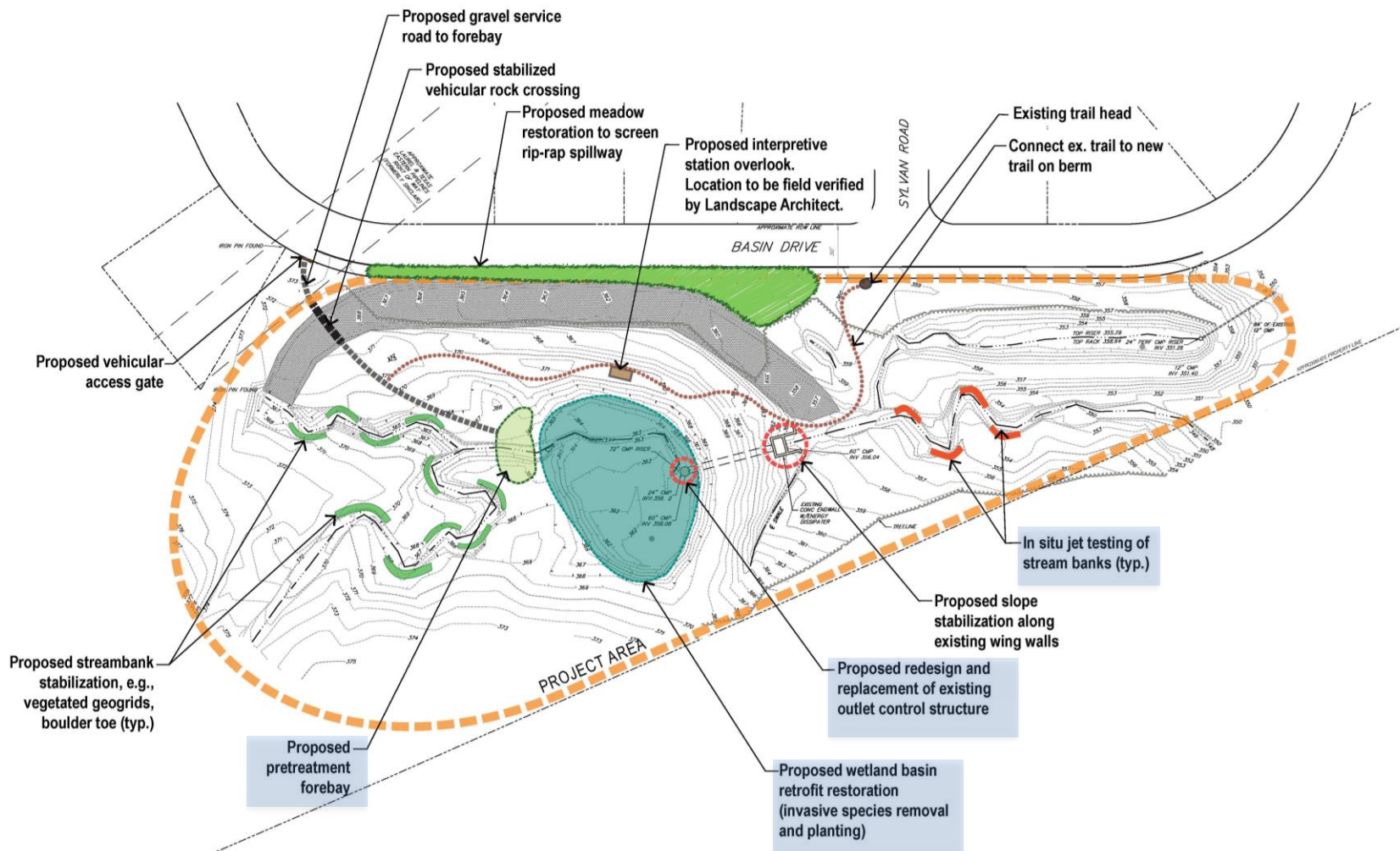
Project Funding

Growing Greener Grant	\$296,400
<u>Township Match</u>	<u>\$448,800</u>
Total Project Cost	\$745,200

Key Stakeholders

- Villanova Urban Stormwater Partnership (VUSP)
- Chester Ridley Crum Watershed Association (CRC)
- Chester County Conservation District (CCCD)
- All have written letters of endorsement for the GGG and pledge support
 - *Design review input*
 - *Monitoring plan input*
 - *Create educational materials/signage*

Design Elements: Upgraded Structures & Enhanced Natural System Components



PROPOSED CONCEPT PLAN

July 2017

PROPOSED CONCEPT PLAN

July 2017

Design Example: Streambank Repair & Stabilization



Design Example: Upgraded Structures & Natural System Components



Design Example: Wetland Habitat



Project Schedule

- **Data Collection** Fall 2016 – Spring 2017
- **Design and Permitting** Summer 2017 – Winter 2018
- **Bidding** Spring 2018
- **Construction** Summer 2018 – Fall 2018
- **Water Quality Monitoring** Summer 2017, 2018 and 2019
- **Post-Construction**
 - As-Built Survey Fall 2016 – Spring 2017
 - Adaptive Management Plan Winter 2018
 - Educational Support Spring 2019
 - Post-Construction Inspections 2019 – 2020

Q&A

Contact Information

Art Wawiernia, P.E.

Senior Water Resources Engineer, AKRF, Inc.

awawiernia@akrf.com

267.841.7609

Tracey Cohen, P.L.A.

Senior Landscape Architect, AKRF, Inc.

tcohen@akrf.com

267.585.4846