



Planning for the Future:
Reuse Assessment for the BoRit Asbestos Site
Ambler, Pennsylvania
DRAFT

April 2009

prepared for the
BoRit Future Plans Group by E² Inc.

funded by
United States Environmental Protection Agency (EPA)
Technical Assistance to Communities (TASC)

Forward

The Environmental Protection Agency (EPA) Technical Assistance for Communities (TASC) program provides communities near potentially hazardous waste sites with independent technical assistance to help them understand the technical issues related to hazardous substance contamination and cleanup so that they can substantively participate in the decision-making process. Understanding the reasonably anticipated future land use of a site is an important consideration in the remedy selection and design process. A community-based reuse assessment identifies reasonable anticipated future land use options that can inform local planning efforts and the remedy process.

Acknowledgements

This report was developed for the BoRit Future Plans Group. E² Inc. would like to thank the following participants for their valuable contributions to this assessment.

Future Plans Group Participants

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Table of Contents

I. Introduction	Page 2
II. Site Ownership and Jurisdiction	Page 2
III. Reuse Goals	Page 4
IV. Site Context	Page 6
V. Future Use Scenarios	Page 16
VI. Future Use Recommendations	Page 16
<i>List of Figures</i>	
Figure 1 - Ownership and Jurisdiction	Page 3
Figure 2 - Ambler Zoning Map	Page 5
Figure 3 - Ambler Transportation Revitalization Investment District	Page 5
Figure 4 - Site Context	Page 7
Figure 5 - Local Watershed Context	Page 9
Figure 6 - Open Space Context	Page 11
Figure 7 - Land Use Context - Residential	Page 13
Figure 8 - Access Considerations	Page 14
Figure 9 - Land Use Context - Commercial and Industrial	Page 15
Figure 10 - Potential Reuse Scenarios	Page 17

Appendix

Figure A-1 - Regional Green Space Network
Figure A-2 - Regional Conservation Focus Areas
Figure A-3 - Open Space Context: Trails



View of the former Wissahickon Park

I. INTRODUCTION

57

The BoRit Asbestos Tailing Pile Site (BoRit Site) is a 38-acre site located in Montgomery County, Pennsylvania, about thirty miles northwest of Philadelphia. During the 1930s to the 1970s, asbestos waste and asbestos contaminated material was disposed at the BoRit Site. The BoRit Site is currently undergoing a removal action by EPA Region 3 which primarily includes bank stabilization along the Wissahickon Creek and its tributaries, the Rose Valley Creek and Tannery Run. The removal action is expected to be completed in the winter of 2009. The BoRit Site has also just been approved for the National Priorities List. EPA will soon begin a Remedial Investigation/Feasibility Study to select a clean up remedy for the site.

The BoRit Future Plans Group requested TASC assistance to develop a reuse assessment for the BoRit Site. The purpose of the reuse assessment is to clarify reuse goals, understand the site's constraints and opportunities, and identify reuse considerations to inform clean up activities and local planning efforts. This report summarizes the findings of the reuse assessment including the future use goals, the local planning goals, the site context and potential future use scenarios.

II. SITE OWNERSHIP AND JURISDICTION

The site contains three parcels each under separate ownership and municipal jurisdiction as shown in Figure 1. The parcel characteristics are summarized in the adjacent table.

The 17-acre Wissahickon Park property owned by Whitpain Township was once a community park serving Whitpain's West Ambler and Mercer neighborhoods. In the mid-1980s the park was closed due to potential risks and liability from the asbestos materials on the property. Whitpain Township is interested in reopening the park to serve the adjacent neighborhoods once the contamination is addressed.

Property	Acres	Character	Owner	Jurisdiction
Wissahickon Park	17 acres	Vacant, flat, site mostly un-vegetated with steep side slopes	Whitpain Township	Whitpain Township
Ambler Reservoir	18 acres	Primarily reservoir with surrounding vegetated berm	Wissahickon Waterfowl Preserve	Primarily Upper Dublin Township
Kane Core Pile	6 acres	Extremely steep, elevated topography with trees and other vegetation	Kane Core, Inc.	Ambler Borough

The 18-acre Ambler Reservoir, located primarily in Upper Dublin, is owned by the Wissahickon Waterfowl Preserve (WWP) and managed as a waterfowl preserve. Recently the National Audubon Society designated the preserve an Important Bird Area (IBA) due to the waterfowl that use the site for breeding and resting during migration.

The WWP would like to continue the site's use as a habitat preserve and plans to install a pedestrian viewing platform along Maple Avenue in the near future. However, the WWP would like to limit pedestrian access on the property to protect the habitat functions of the reservoir.

The 6-acre Kane Core property, located in Ambler Borough, is defined by steep topography, vegetation and the surface water surrounding three sides of the site – the Ambler Reservoir to the North, Tannery Run to the South and the Wissahickon Creek to the West. In 2005, Kane Corp's proposal to cap the property and build a 17-story condominium raised community concerns and prompted EPA involvement. Despite recent attempts to contact Kane Core, Inc., there has been no response. Therefore, the site owner's future use goals for the site are unknown at this time.

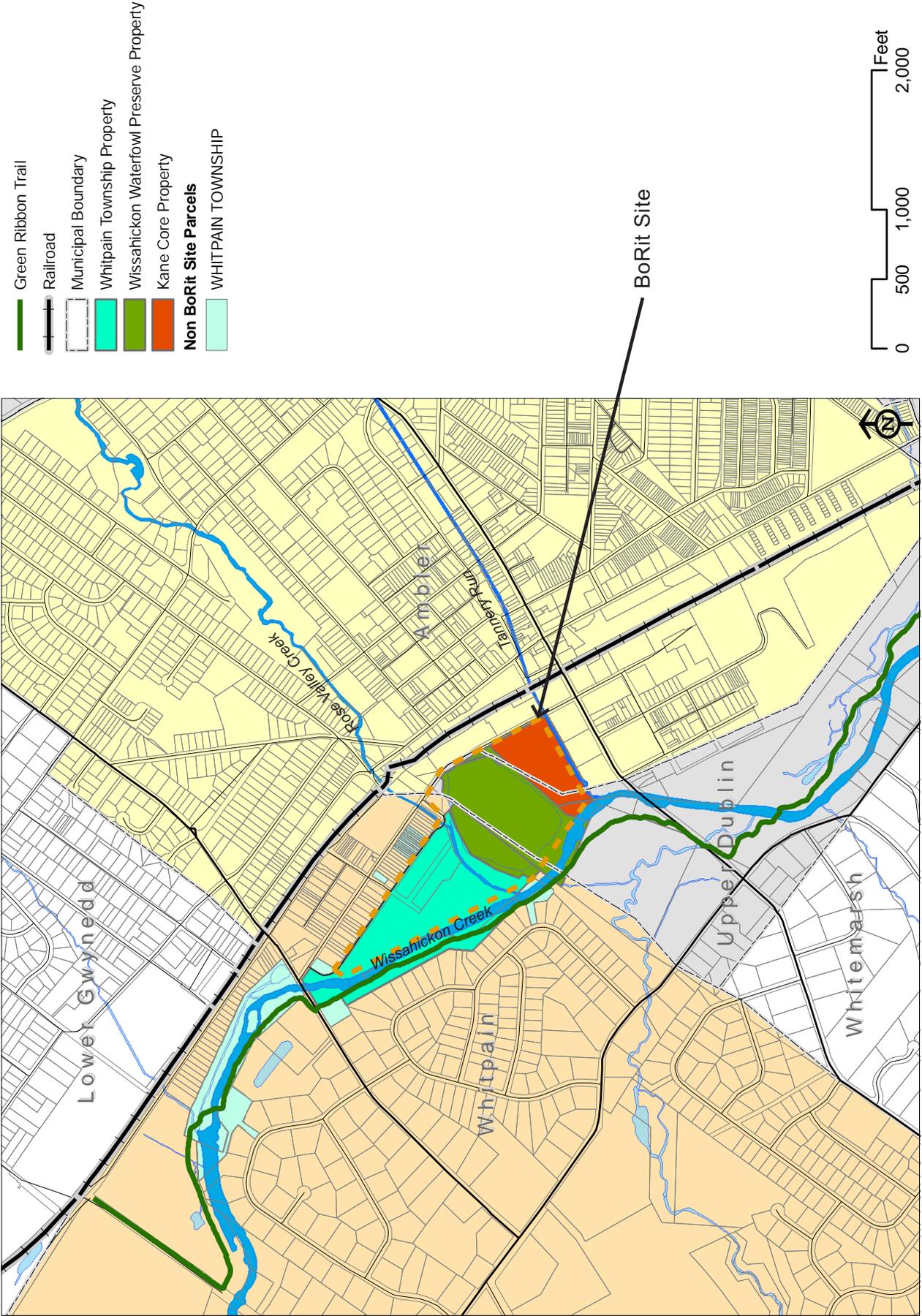


Figure 1: Ownership and Jurisdiction

III. REUSE GOALS

50

E² Inc. met with the Future Plans Group on December 3rd to identify the committee's future use goals for the site, as well as future use options and considerations. The participants identified and agreed upon the following future use goals:

Future Use Goals

- Develop unified plan for the parcels as one unit
- Support a mix of uses
- Support regional greenway network
- Support recreational reuse such as youth activities/facilities and performance space
- Support compatibility with habitat preserve and riparian buffers
- Support economic development and compatibility with adjacent TRID¹ zone
- Support compatibility with adjacent neighborhoods

Site Owner Goals

- Whitpain Township expressed an interest to preserve the former Wissahickon Park property as recreational open space and, once the contamination is addressed, would like to re-open the Wissahickon Park to serve the West Ambler neighborhood and surrounding community.
- The Wissahickon Waterfowl Preserve (WWP) representative confirmed that they plan to retain the property as a habitat preserve. The WWPP intends to build a pedestrian overlook from Maple Street to view the preserve, but does not plan to allow regular public access to the site due to potential conflicts with the habitat preservation goals.
- Despite attempts to contact Kane Corp. Inc., the owner of the Southern property, there has been no response. The site owner goals for this property are not known at this time.

Community Planning Goals

E² Inc. reviewed the Open Space plans for the three jurisdictions to identify community planning goals relevant to the BoRit Site's future use. The Whitpain Open Space Plan (2005 Update) outlines goals to reopen Wissahickon Park, preserve large interconnected open space along Wissahickon Creek, and designate Wissahickon Creek as a High Value Conservation Area.

The Upper Dublin Open Space Plan (2005) outlines similar goals including: create loop trails within and between the parks and open spaces and establish additional pedestrian links from the Wissahickon Watershed Green Ribbon Trail to Ambler Borough.

The Ambler Borough Open Space Plan (2006) identifies the site as both a natural resource and a potential asset to the adjacent growth area. General goals include: preserve selected remaining open space and sensitive natural features including land along Rose Valley Creek and Tannery Run, and establish trails or greenways to link existing borough parks and open space. The site is also specifically identified as a vulnerable natural resource (p. 49), sensitive to flooding (p.31) and a potential acquisition target as a conservation focus area (p. 67).

Given the uncertain site owner goals for the Kane Corp. property, E² Inc. reviewed the Ambler Borough Zoning Map (October 2008), which identifies the Kane Corp property as zoned "Retail and Service Commercial" within a Redevelopment Overlay District. In addition, Ambler Borough is currently conducting a Transportation Revitalization Investment District (TRID) Study for the areas along Butler and the SEPTA rail line. The TRID study boundary does not include the Kane Corp property, but does run adjacent to the property along Maple and Butler as shown in Figure 3. The purpose of the TRID Study is to evaluate opportunities to increase mixed-use, pedestrian friendly and transit-oriented development around the new SEPTA train station at Butler.

¹Transit Revitalization Investment District

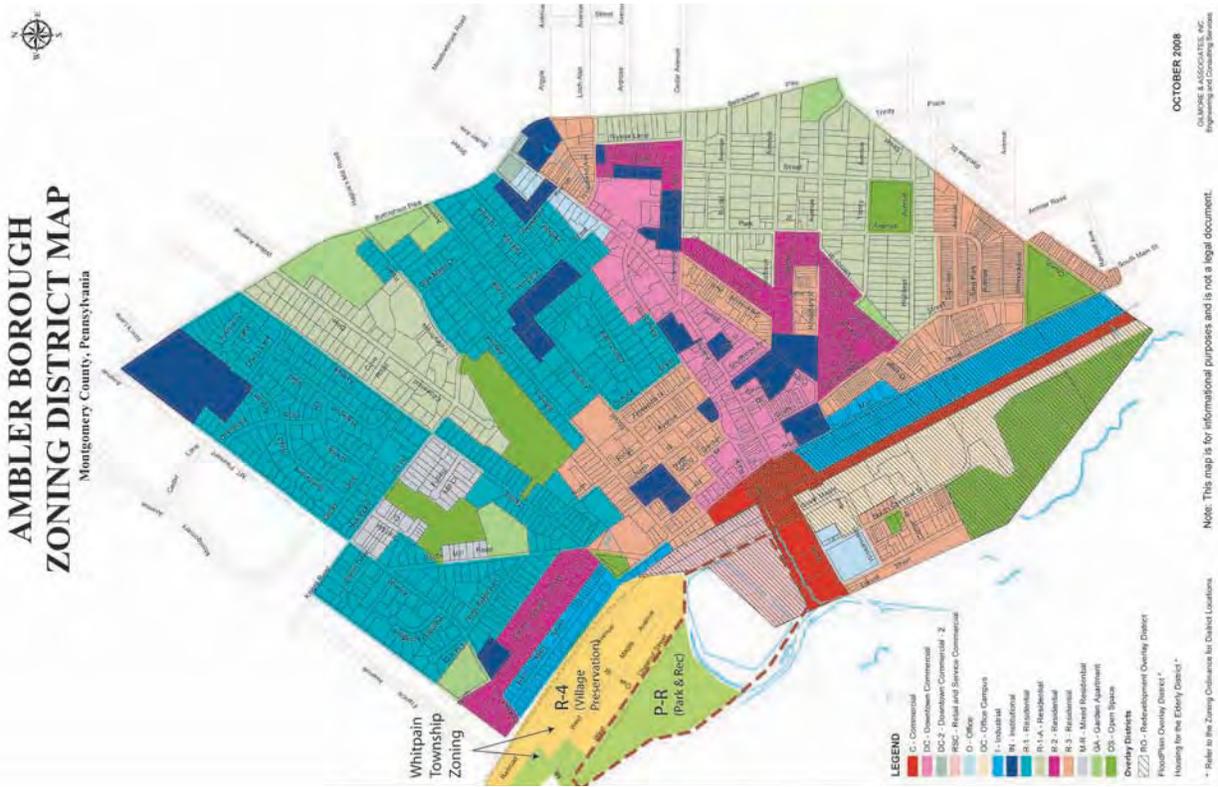


Figure 2: Ambler Zoning Map



Figure 3: Ambler Transportation Revitalization Investment District

IV. SITE CONTEXT

61

The BoRit Site context is defined by two corridors as shown in Figure 4. The Green Ribbon Trail to the west is characterized by riparian habitat and open space. The SEPTA commuter rail to the east is bordered by the Ambler Central Business District, the industrial spine and the Redevelopment Overlay District. The BoRit Site's context within these two corridors is explored further in the following sections.

Regional Context

The site is characterized by significant regional habitat, water, and open space resources. The Delaware Valley Regional Planning Commission identifies Wissahickon Creek as a key connection within Pennsylvania's open space network, as well as a conservation focus area within the regional green infrastructure priorities. Montgomery County has identified the Wissahickon Green Ribbon trail as a key connection in the County's Primary Trail Network. The Appendix includes several maps illustrating the BoRit Site's regional importance as an open space corridor.



Ambler Central Business District



Green Ribbon Trail

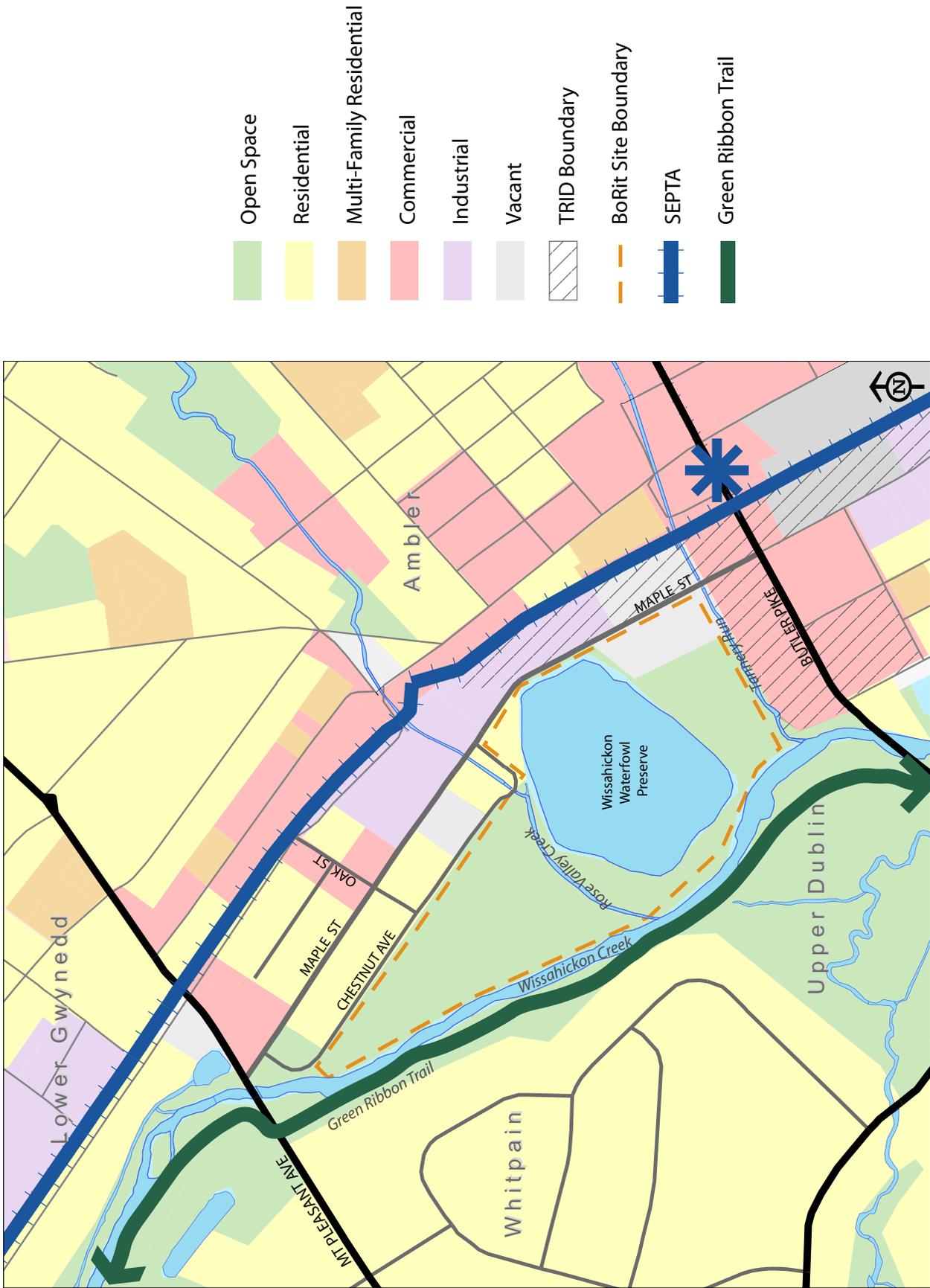


Figure 4: Site Context Diagram

Watershed Context

6 Located adjacent to the Wissahickon Creek, the BoRit Site also includes the Wissahickon Waterfowl Preserve and the confluences of Rose Valley Creek and Tannery Run as they enter Wissahickon Creek. As shown in Figure 5, the site is centrally located within the Wissahickon watershed offering opportunities to connect the surrounding communities with a riparian open space network. Due to this watershed context, much of the site is characterized by riparian corridors, steep slopes and floodplains that may pose constraints for development.



Confluence with Rose Valley Creek



Confluence with Tannery Run



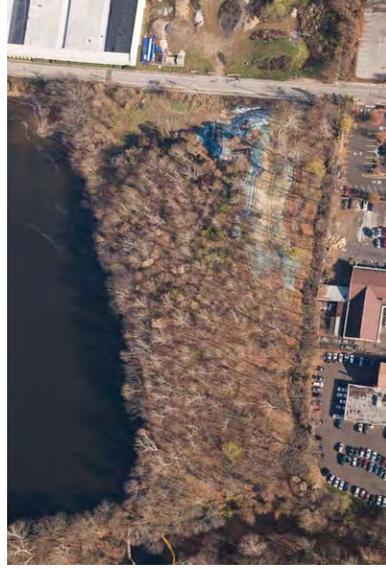
Tannery Run flowing West from Maple



Former dam on Wissahickon Creek West of the site



Rose Creek looking East from Maple



*Riparian borders on Kane Corp property
Photo Credit: Sal Boccuti*

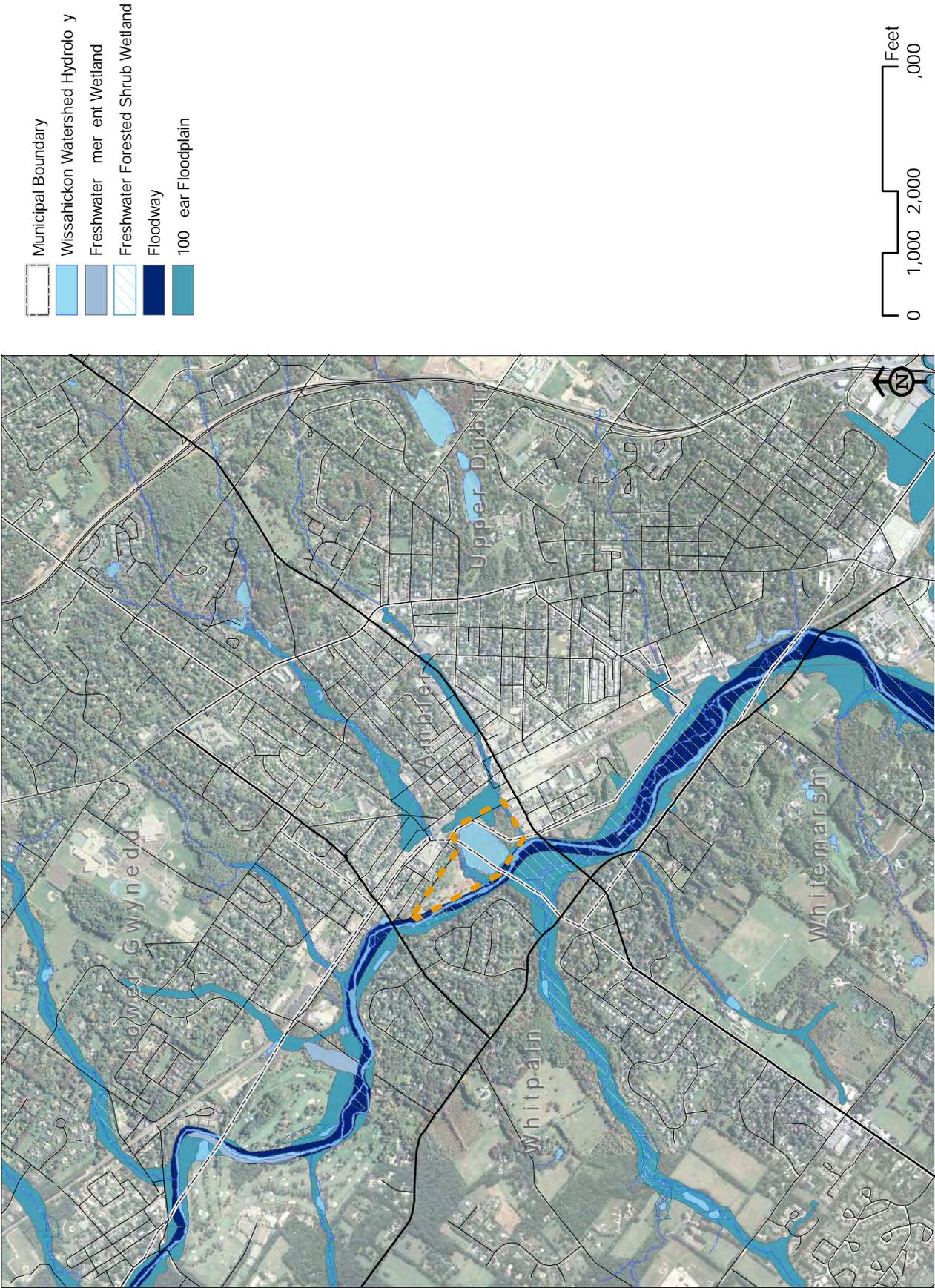


Figure 5: Local Watershed Context

Open Space Network

⁶⁵ The BoRit Site is located along the Green Ribbon Trail within a growing regional open space network. The site is adjacent to several large conservation areas including properties owned by the Wissahickon Valley Watershed Association, PennDOT and Montgomery County. As shown in Figure 6, this growing conservation area represents an opportunity to create a regional greenway network connecting the communities in Montgomery County. Once the contamination is addressed, this regional open space network could provide a valuable recreational amenity for the adjacent Redevelopment Overlay District as it transforms to a vital mixed-use transit-hub.



Photo courtesy of Wissahickon Valley Watershed Association



Green Ribbon Trail sign



Green Ribbon Trail near Butler Pike access



Green Ribbon Trail with residences in the background

-  Municipal Boundary
-  Green Ribbon Trail
-  Wissahickon Watershed Hydrology
-  Open Space Network
-  Wooded

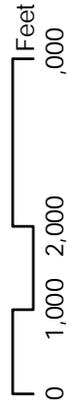


Figure 6: Open Space Context

Surrounding Land Use

67 The BoRit Site is located at the transition between high and low intensity land use. As shown in Figure 10, much of the BoRit Site is surrounded on the East, North and West by residential land use and open space. The Future Plans Group has expressed a desire for the future use of the BoRit Site to maintain compatibility with the adjacent open space and residential neighborhoods.

The BoRit Site is also adjacent to the Ambler Central Business District, the SEPTA commuter line and the industrial spine running along the rail. As highlighted in Figures 2 and 3, this area has been identified as a Redevelopment Overlay District, as well as a TRID study area for potential mixed-use transit-oriented development. Photos of the Redevelopment Overlay District are shown on page 14. The Future Plans Group has expressed a goal of supporting this adjacent revitalization zone.

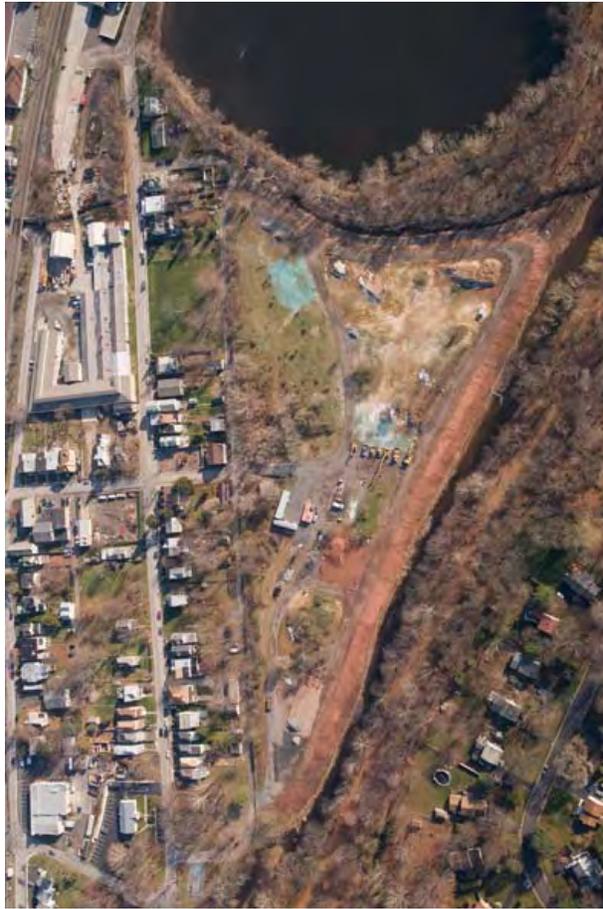
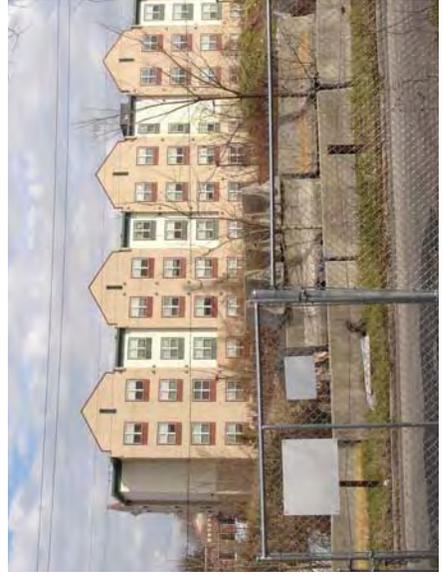


Photo Credit: Sai Boccuti



Adjacent Residential Neighborhoods

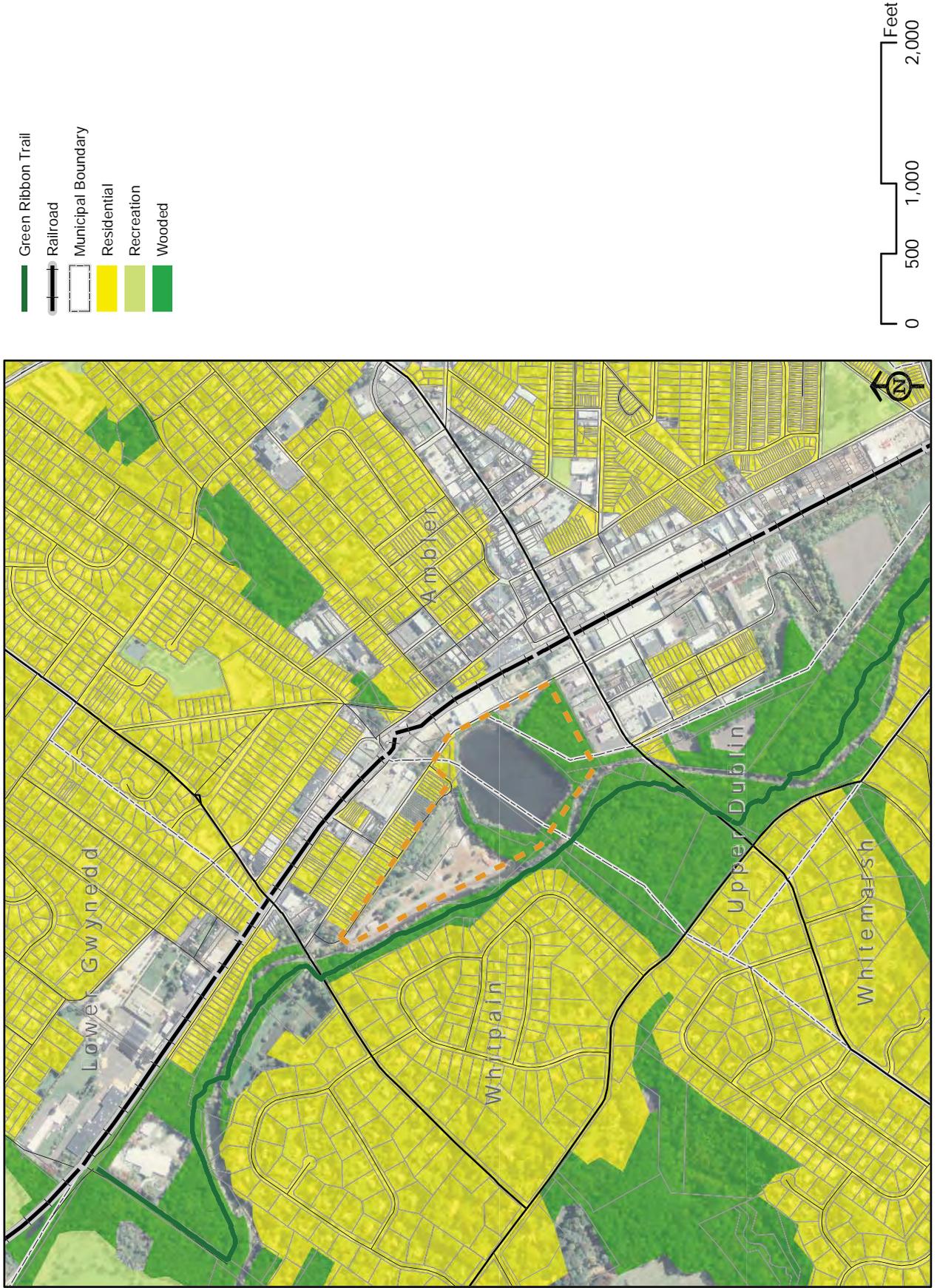


Figure 10: Land Use Context: Residential

Access Considerations

Despite the BoRit Site's proximity to the SEPTA station and the Ambler Central Business District, the creek and rail corridors isolate the BoRit Site from the major circulation routes. The BoRit Site is only accessible from Maple, a single local access street, via Butler Pike or Mount Pleasant. This limited access and visibility could be a constraint for potential commercial and industrial uses.

Summary of Site Context

The future use of the BoRit Site is challenged by a number of factors: multiple owners, multiple jurisdictions, limited access, steep slopes, riparian borders and a mix of surrounding land use. However, the BoRit Site also offers significant opportunities provide a recreational greenway that links the surrounding communities and supports the future transit hub with high quality open space.

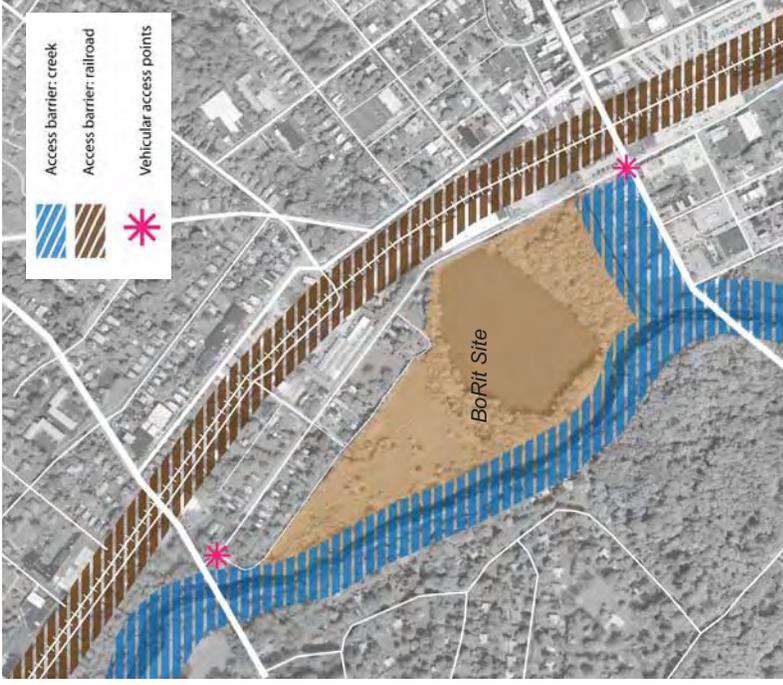


Figure 8: Access Diagram



Photos of the Redevelopment Overlay District to the south and east of the site.

-  Green Ribbon Trail
-  Railroad
-  Municipal Boundary
-  Commercial
-  Community Services
-  Manufacturing Light Industrial
-  Transportation
-  Utility
-  TRID Boundary

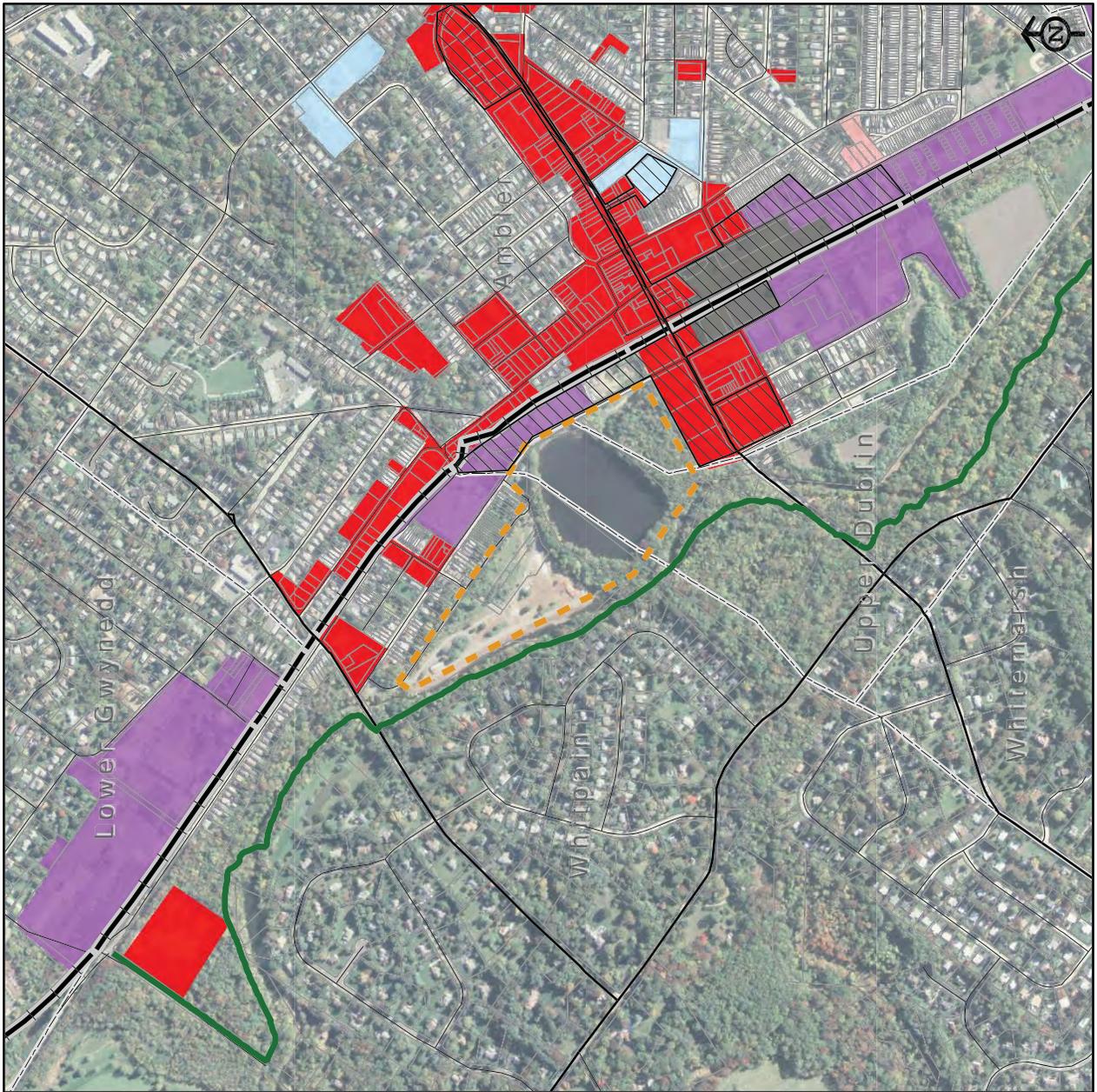
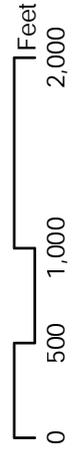


Figure 9: Land Use Context: Commercial and Industrial

V. FUTURE USE SCENARIOS

71

As presented in the previous section, the BoRit Site is defined by two corridors – the Green Ribbon Trail to the West and the SEPTA commuter rail, Central Business District and potential transit oriented development to the East. Located between these two corridors, the future use of the BoRit Site could support the regional greenway, the growing revitalization district, or a combination of uses. Based on this context, the Future Plans Group evaluated the following potential future use scenarios as illustrated in Figure 10:

- Regional Greenway – including habitat, recreation and open space
- Mixed Use Greenway – including a greenway with mixed-use
- Transit Hub – including commercial and higher density residential

VI. FUTURE USE RECOMMENDATIONS

During the reuse assessment discussion on March 4th, the BoRit Future Plans Group noted the following important reuse considerations regarding the BoRit Site and surrounding context:

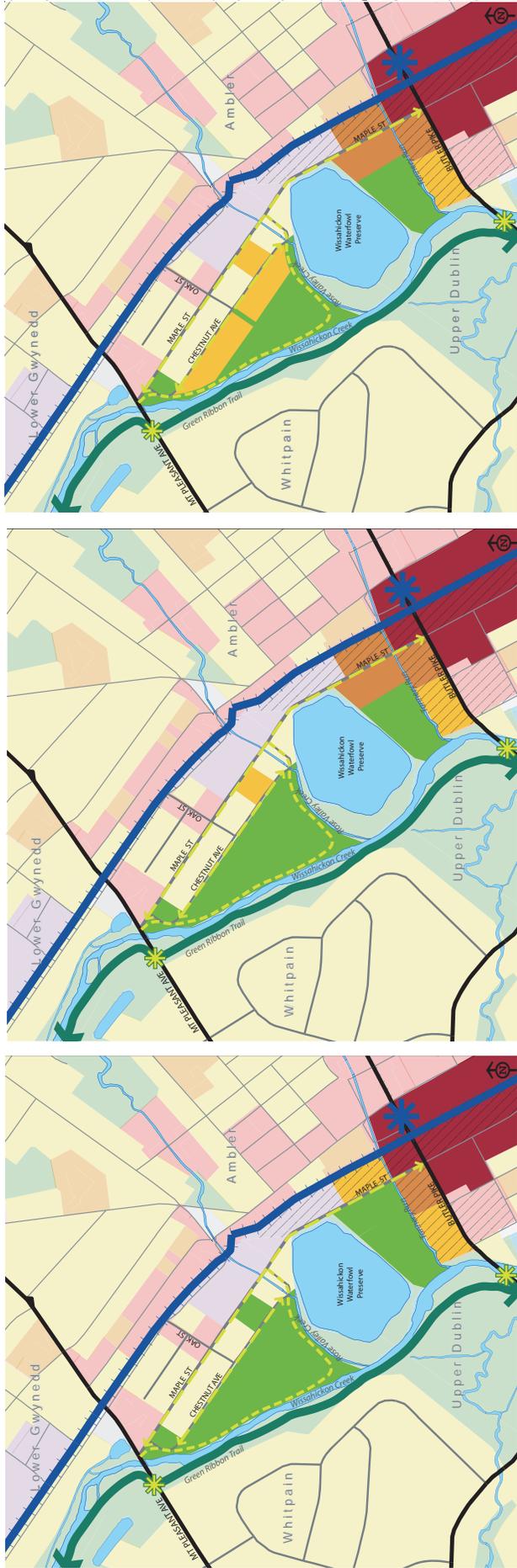
- The Whitpain property should be preserved as recreational open space and re-opened as Wissahickon Park to serve the West Ambler neighborhood and surrounding community.
- A buffer should be included around the Wissahickon Waterfowl Preserve to protect the wildlife habitat from noise, building height and other disturbances related to human activity. Pedestrian access to the Green Ribbon Trail should be directed outside this buffer zone.

- Pedestrian access to the Green Ribbon Trail could use the existing vehicular bridges on Butler Pike and Mount Pleasant; a pedestrian bridge across Wissahickon Creek was considered unnecessary and unsuitable at this location.
- Future land uses for the BoRit Site and surrounding properties should consider minimizing vehicular traffic and enhancing pedestrian amenities on Maple and Chestnut Streets.
- More intensive land uses should be concentrated within the TRID district. With proper guidance, future uses in this revitalization district could enhance the gateway to Ambler Borough.
- The BoRit Site properties could best contribute to the revitalization goals by providing nearby high-quality open space that could enhance quality of life and property values.

In summary, the BoRit Future Plans Group has identified the following two potential future use scenarios that favor open space and recreational land uses:

- Regional Greenway Scenario
- Mixed Use Greenway Scenario

The Future Plans Group agreed that the Transit Hub Scenario is not appropriate for the BoRit site. The two recommended scenarios may be used in discussions with EPA to ensure the selected remedy and design will be protective of human health and the environment under these potential future land uses. These scenarios may also be used in local planning discussions to support growing regional greenway and revitalization efforts. Finally, the scenarios may be used to facilitate cooperation among the site property owners to ensure uses are compatible with the future Wissahickon Park and existing Wissahickon Waterfowl Preserve.



Not Recommended: Transit Hub

Recommended: Mixed Use Greenway

Recommended: Regional Greenway

Legend

- Existing Open Space
- Potential Recreation / Habitat
- Potential Multi-Family Residential
- Potential Mixed Use / Commercial
- Revitalization District
- TRID Study Area
- Potential Pedestrian Loop
- Potential Enhanced Sidewalks
- Existing Green Ribbon Trail
- Existing Trail Access

Figure 10: Potential Reuse Scenarios

Appendix

2030 Greenspace Network Southeastern Pennsylvania

Legend

- | | |
|---------------------------------|------------------------------|
| 1. Octovaro Creek | 29. Skippack Creek-Ewansburg |
| 2. Big Elk Creek | 30. Towamencin Creek |
| 3. White Clay-Ways Run | 31. Stony Creek |
| 4. White Clay-Doer Run | 32. Wissahickon Creek |
| 5. Buck Run | 33. Plymouth Creek |
| 6. West Branch Brandywine Cr. | 34. Cross County Corridor |
| 7. Delaware Arc | 35. Tacony-Cresheim Creek |
| 8. Brandywine Creek | 36. Pennypack Creek |
| 9. Great Valley Ridges/lines | 37. Poquessing Creek |
| 10. Big Woods Corridor | 38. Neshaminy Creek |
| 11. Warwick-Everson Corridor | 39. Mill-Queen Anne Creek |
| 12. Marsh Creek-Beaver Run | 40. Little Neshaminy Creek |
| 13. French Creek | 41. Mill Creek |
| 14. Pickering Creek | 42. New Hope-Wyland |
| 15. Valley Creek-Pigeon Run | 43. W Branch Neshaminy Cr. |
| 16. Naamans Creek-Harvey Run | 44. Paunamussing-Pine Run |
| 17. West Branch Chester Creek | 45. Peace Valley-Deep Run |
| 18. Chester Creek | 46. Tobickon Creek |
| 19. Ridley Creek | 47. North Woods (Highlands) |
| 20. Crum Creek | 48. Quakertown-Cooks Creek |
| 21. Darby Creek | 49. Delaware River |
| 22. Cobbs-Mill Creek | 50. Serpentine Barrens |
| 23. Schuylkill River | |
| 24. Manataway Creek | |
| 25. Middle Creek | |
| 26. Swamp-Deep Creek | |
| 27. East Branch Perkiomen Creek | |
| 28. Perkiomen Creek | |

Minor Connecting Greenways

Note: Greenway colors are only meant to show where individual greenways start and stop



Source: DVRPC, Natural Lands Trust, Brandywine Conservancy Heritage Conservancy, Greenstate Alliance, Bucks County Planning Commission, Chester County Planning Commission, Delaware County Planning Department, Montgomery County Planning Commission, Philadelphia City Planning Commission, PAUCOR

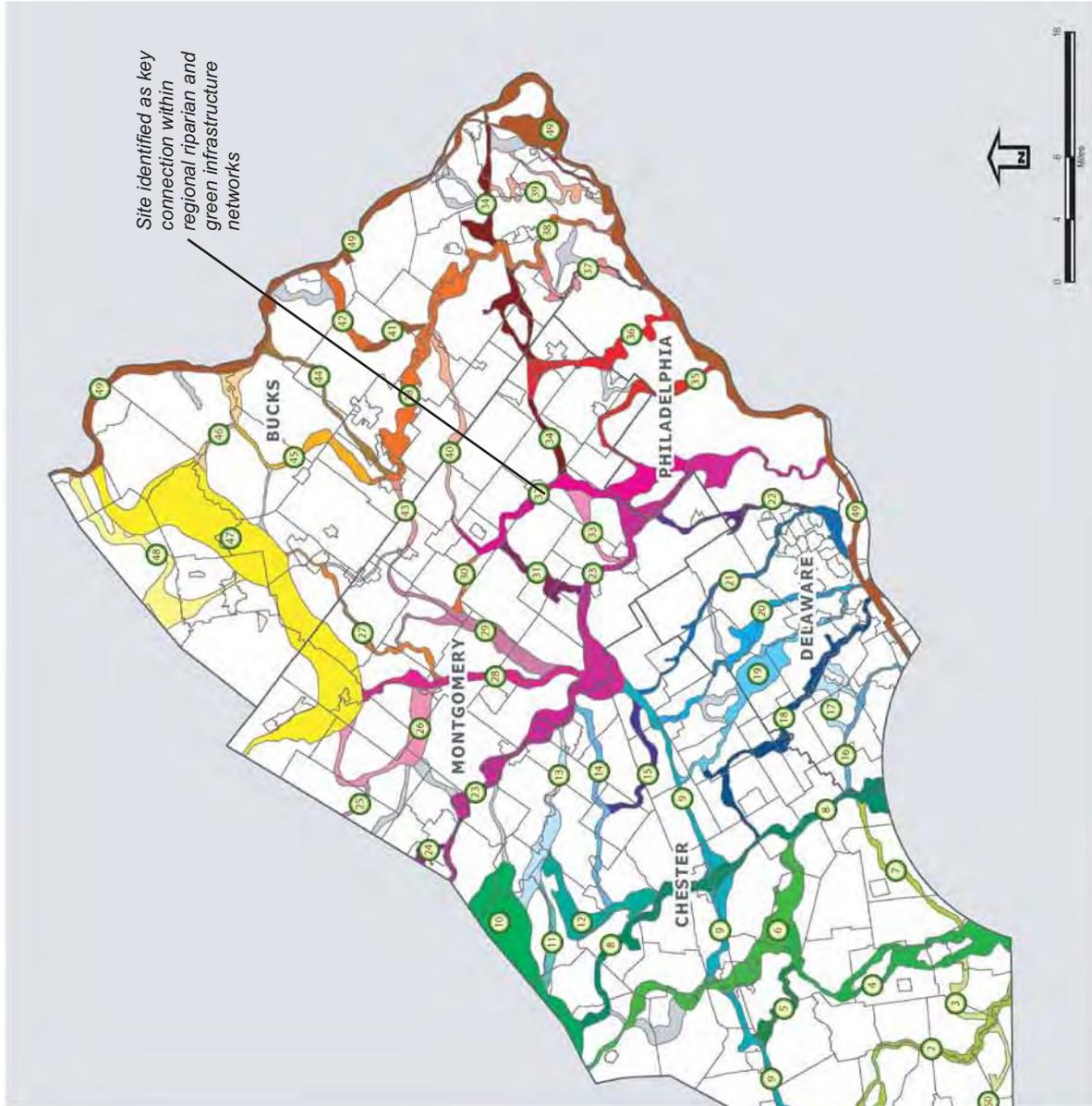


Figure A-1: Regional Greenspace Network

For more information:

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434-975-6700



**BoRit Community Advisory Group
Future Uses Group**

Draft Vision Plan Presentation

June 4, 2010

<p>BoRit CAG Future Uses Group June 2, 2010</p>	<h1>Preliminary Vision Plan</h1> <p><i>Background</i></p>
<p>●2008: Future Plans Group assisted by TASC identified initial goals</p> <ul style="list-style-type: none"> ▣ Develop unified plan for parcels as a whole ▣ Support a mix of uses ▣ Support the regional greenway network ▣ Support recreational reuse ▣ Support compatibility with adjacent land uses <p>●Scenarios Evaluated: Regional Greenway; Mixed-Use Greenway; Transit Hub</p> <p>●Preferred Scenario: Regional Greenway</p> <p>●Appropriate Uses: Parkland and Recreation Preservation; Conservation; Environmental Education Community Gathering Spaces</p>	

<p>BoRit CAG Future Uses Group June 2, 2010</p>	<h1>Preliminary Vision Plan</h1> <p><i>Background</i></p>
<p>●2010 Focused Brainstorming Sessions - Objectives:</p> <ul style="list-style-type: none"> ▣ Explore and clarify open space interests, objectives, opportunities in BoRit area ▣ Define BoRit role in Wissahickon, neighboring community, regional open space ▣ Identify examples of complementary open space uses ▣ Recommend a “vision” of uses, activities, linkages, implementation strategies ▣ Finalize recommended “program” - inform remedial solutions / complement planning <p>●Core Future Uses Discussion Group</p> <ul style="list-style-type: none"> ▣ Discussion Leader: Beth Pilling ▣ Discussion Group: Bob Adams; Sal Boccuti; Bernadette Dougherty; David Froehlich Sharon McCormick; Observer: Carole DiPietro ▣ Municipal Input: Mary Aversa, Ambler Borough Roman Pronzcak, Whitpain Township 	

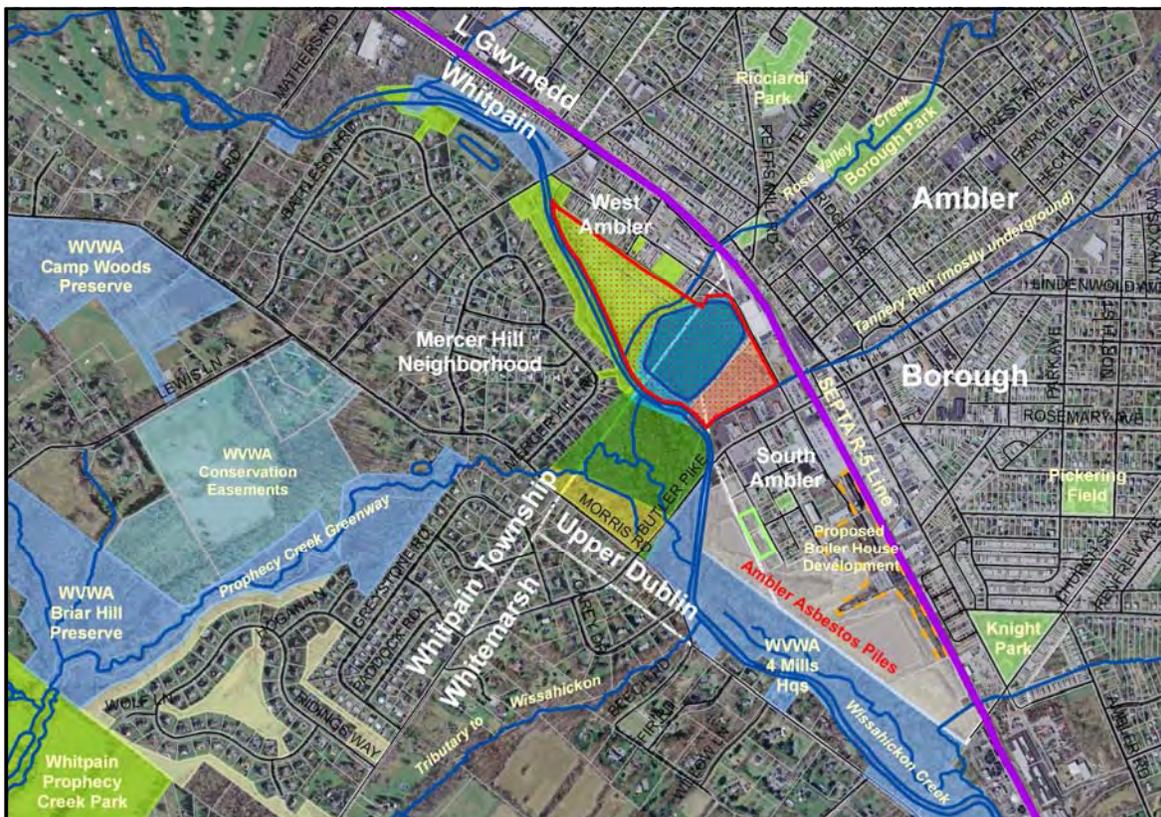
BoRit CAG
Future Uses Group
June 2, 2010

Preliminary Vision Plan

Preliminary Vision

A **Greenway Park** along the regional Wissahickon Greenway and Green Ribbon Trail that

- (1) provides mix of *recreation, conservation, and community park* uses,
- (2) evokes the area's *history and heritage*,
- (3) *connects* to neighborhoods and nearby open space attractions,
- (4) *complements* Ambler's revitalization and redevelopment initiatives.



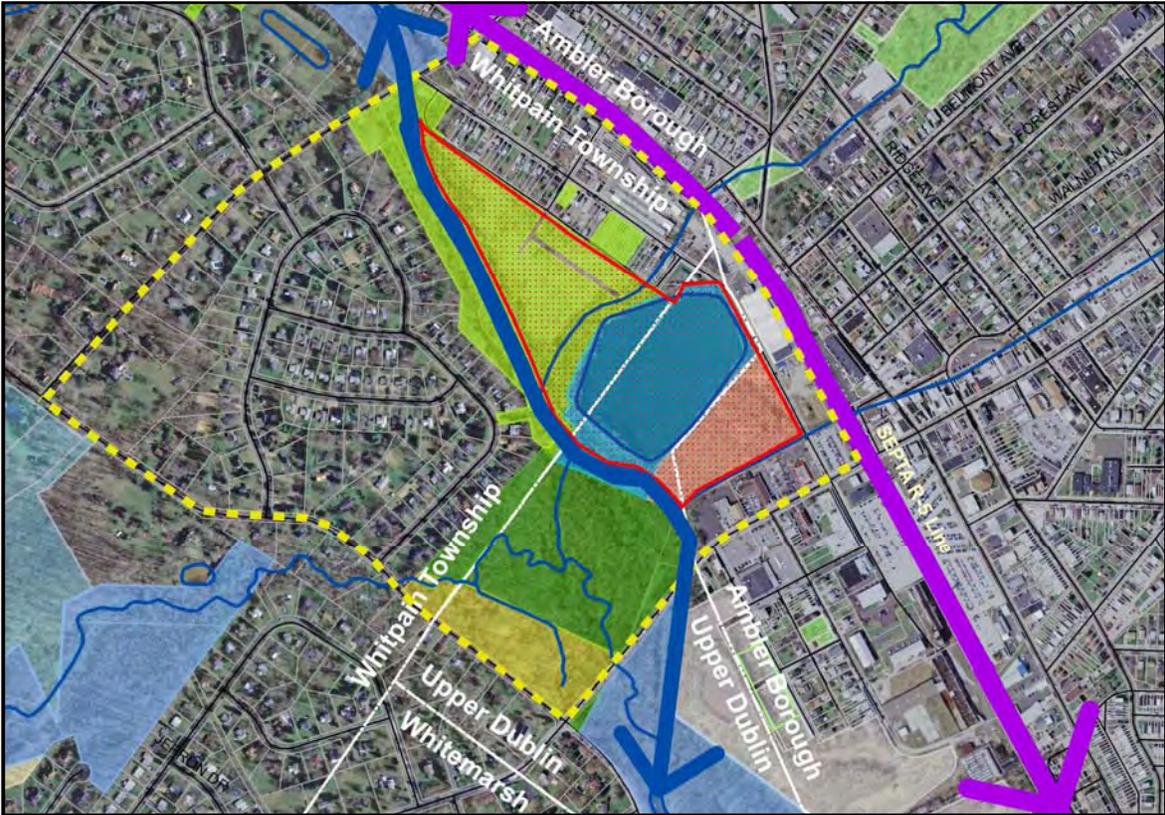
Regional Context



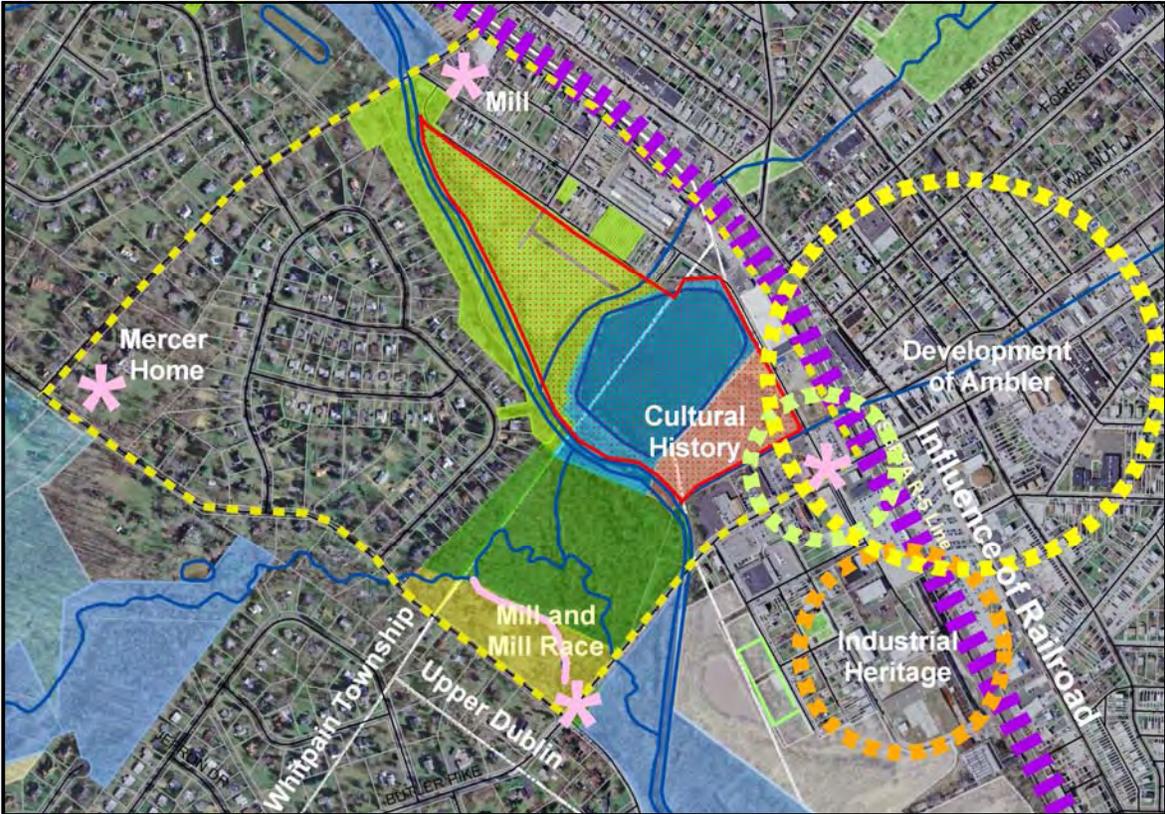
Core Study Area



Natural Systems



Governmental and Regional



Themes and Influences



Current Issues and Opportunities

<p>BoRit CAG Future Uses Group June 2, 2010</p>	<h2 style="margin: 0;">Preliminary Vision Plan</h2> <p style="margin: 0;"><i>General Recommendations</i></p>
<ul style="list-style-type: none"> ● Communication with EPA and Property Owners <ul style="list-style-type: none"> ■ Provide EPA with report of Guiding Principles, Vision, Scope, and Recommendations. ■ Clarify with EPA time schedule, regulatory obstacles, ongoing communication. ■ Work with property owners to explain recommendations and establish collaboration. ■ Establish process for updating Report Recommendations. 	

BoRit CAG
Future Uses Group
June 2, 2010

Preliminary Vision Plan

General Recommendations

●Future Planning

- Promote concept of a comprehensive Greenway Park.
- Encourage landowners to prepare a collaborative comprehensive park master plan for core Study Area.
- Encourage establishment of collaborative inter-governmental / conservation forum to focus on the Wissahickon Green Ribbon and connective opportunities.
- Evaluate land use regulations to create consistency and sustainability for the Greenway Park concept.
- Develop a unified interpretive theme based upon Wissahickon heritage, unique Ambler architectural character, and local industrial history.
- Work with Ambler to implement community uses for portions of the former Keasbey and Mattison industrial complex.
- Create civic, community, educational, business, volunteer, and health and wellness partnerships to implement and sustain Greenway Park.

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June 2, 2010

Preliminary Vision Plan

General Recommendations

●Connections and Linkages

- Create a unified Maple Street pedestrian edge.
- Create a unified pedestrian greenway edge along rear of the BoRit properties with new pedestrian bridge to other side of Wissahickon.
- Create physical and programmatic relationships with adjoining conservation areas, neighborhoods, business district, and regional destinations.

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June 2, 2010

Preliminary Vision Plan

General Recommendations

● **Natural Resources**

- Establish a 75-foot riparian buffer along streams, 100 feet along reservoir.
- Define locations for potential riparian corridor restoration and created wetlands.
- Manage all site work, improvements, and land maintenance techniques to prevent adverse impacts on Wissahickon and tributaries.
- Institute an interpretive program to educate and understand the Wissahickon's nature history; foster ethic of stewardship for creek and greenway.
- Evaluate and implement opportunities for daylighting and restoring upstream sections of Rose Valley and Tannery Run Creeks.

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June 2, 2010

Preliminary Vision Plan

Parcel-Specific Recommendations

● **Wissahickon Park**

- Encourage Whitpain Township to reopen the park for combination of active and passive recreational facilities.
- Create access and connections between park and West Ambler neighborhood that make park facilities available to residents while respecting privacy and minimizing effects of traffic, noise, and other park impacts.

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June 2, 2010

Preliminary Vision Plan

Parcel-Specific Recommendations

● **Waterfowl Preserve / Reservoir**

- Protect and enhance reservoir and surrounding buffers to sustain natural habitat and role in Important Bird Area network.
- Create opportunities for visual, interpretive, and education access for the general public.

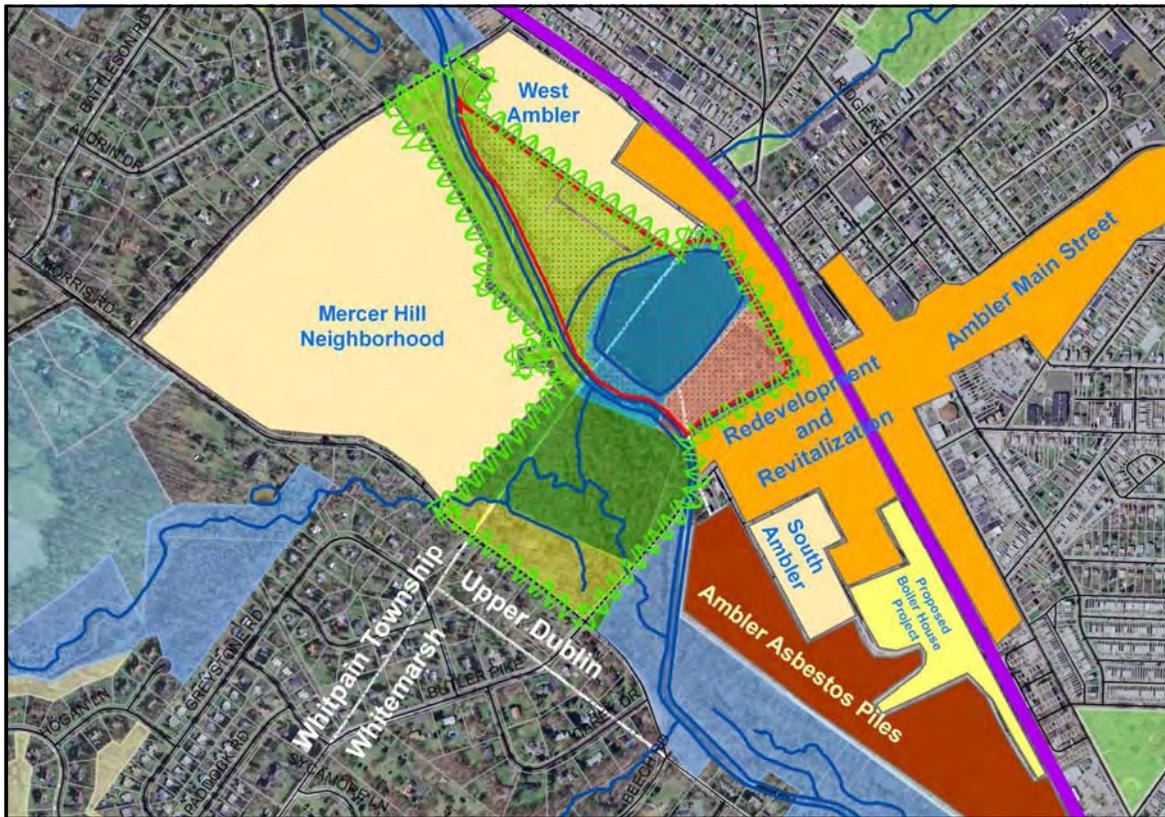
BoRit CAG
Future Uses Group
June 2, 2010

Preliminary Vision Plan

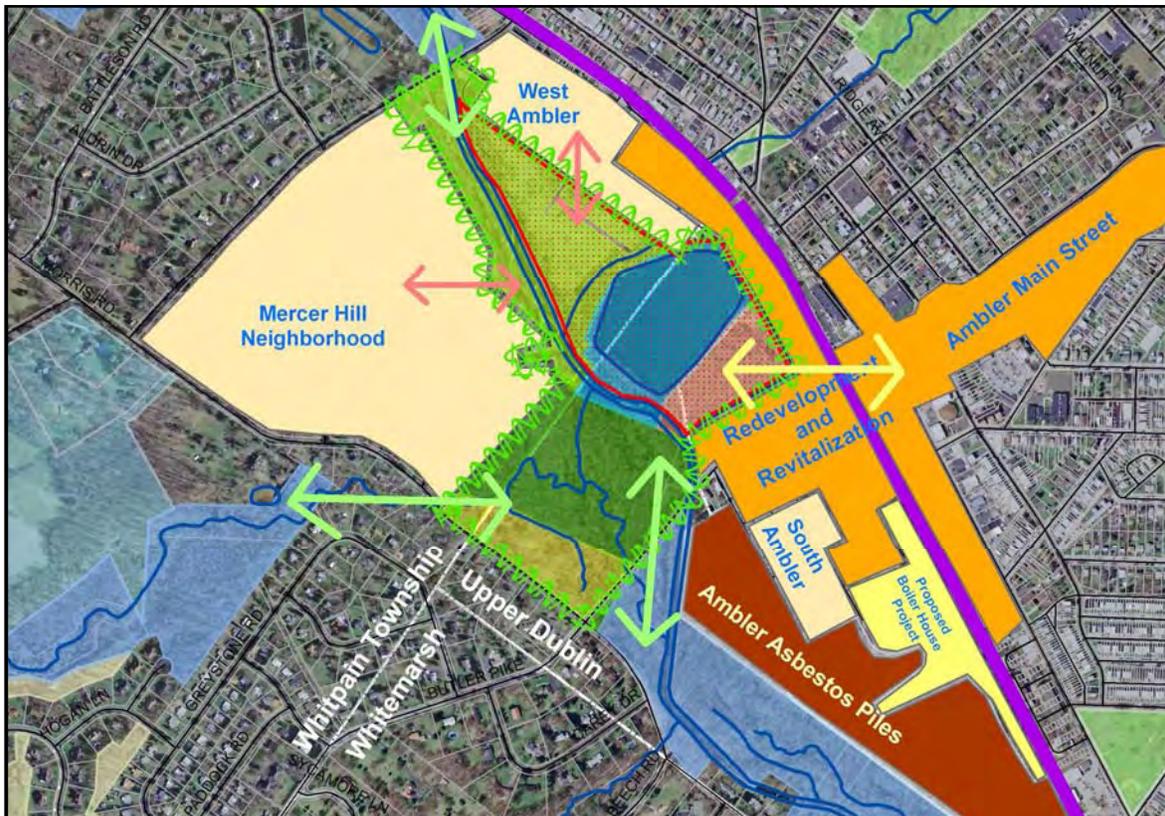
Parcel-Specific Recommendations

● **KaneCore Parcel**

- Fully integrate parcel into the vision of a Greenway Park.
- Implement uses and improvements that are complementary to those on other BoRit site parcels and on adjoining open space, conservation, and recreation areas.
- Identify and implement opportunities to improve parcel as gateway to the Wissahickon Greenway Park, including interpretive amenities and appropriately sized facilities for park-related demonstrations, programs, and performances.
- Coordinate gateway improvements on parcel with a future Butler Avenue Borough gateway, implementation of Ambler TRID district, and opportunities for community facilities and amenities in the Ambler Asbestos/K&M Boiler House area.



Greenway Park in Community Context



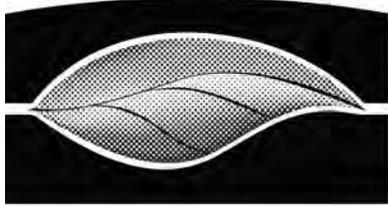
Greenway Park in Regional Context

BoRit CAG
Future Uses Group
June 2, 2010

Preliminary Vision Plan

Next Steps

- **CAG discussion and consensus on Vision and Recommendations – June meeting and as needed**
- **Revision and update of draft report for distribution to CAG – summer 2010**
- **Preparation of draft final report for October CAG meeting**
- **Preparation of draft executive summary for website; gathering of public input – October 2010**
- **Presentation of draft final report to EPA for comment at November meeting – November 2010**
- **Finalization of interim report based upon EPA input – winter 2010**
- **Revision of interim report as appropriate as specific information is provided by EPA – 2011 and ongoing**



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MEETING NOTES

Project:	West Ambler Revitalization	Project No.:	12013.10
Location:	BoRit Site - EPA Trailer	Meeting Date/Time:	05.30.12 9:30 AM
Topic:	Bo-Rit Superfund Site	Issue Date:	2/8/2013

ATTENDEES:

Kristine Matzko (US EPA)
 Lucinda Pype (CDM Smith)
 Peter Simone (Simone Collins)
 Sarah Leeper (Simone Collins)
 Dan Claycomb (Environmental Standards)
 Stephen Brower (Environmental Standards)

NOTES:**1. Status of the Project**

- a. **Remedial Action at Asbestos Pile:** The cap at the asbestos pile (the emergency/interim remedial measure) is complete. The cap for the pile was designed by EPA's contractors and complied with National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements. The US EPA On-Scene Coordinator (Eduardo Rovira) will prepare an operations and maintenance plan, which will probably include maintaining a fence and vegetation control. There was discussion regarding how a property transfer of the pile property would occur. The current owner is Kane Core, Inc., which is now insolvent and out of business. The US EPA indicated that this was not under their purview and would probably be handled under the local government. The US EPA has a long term site access agreement with Kane Core.
- b. **Park and Reservoir:** The emergency/interim actions (At EPA we refer to the current actions at BoRit as emergency response, or response action or removal. We do not use the term

“remediation” since it is associated with the ROD.) for the park will include grading and capping. It is anticipated that the US EPA will begin work on the park in the fall after they address Rose Valley Creek. There were discussions on installing a utility corridor for the park. The US EPA indicated that this may increase risk for the Township, depending on how the corridor is installed.

- c. **Access to Record of Decision (ROD):** A ROD will be prepared by the US EPA that describes the remedy selected. The timeline for the ROD is not in place but it is anticipated to be issued in 2015. The ROD will have institutional controls (if applicable) and will include US EPA’s formal statement on the recommended cleanup. It has not been decided who will implement the ROD (US EPA or responsible party). It is likely that the property owners could be involved in long term maintenance.
- d. **Any plans to address the reservoir?** Some work around the reservoir has been completed along the banks. The Remedial Investigation/Feasibility Study will evaluate the reservoir and the ROD will include a formal recommendation for the reservoir. There was also a discussion regarding the dam *(We refer to the body of water at the site as a reservoir and not a dam. To avoid confusion there is a nonfunctioning dam in the Wissahickon near Tannery Run.)* and if it should be regulated under Pennsylvania Dam regulations. Additionally, there is a slow leak at the base of the reservoir and the Army Corps of Engineers may make some recommendations for the reservoir.
- e. **Does Township qualify for innocent landowner defense?** The US EPA recommended that the Township consult with their attorney. There are certain requirements to qualify for the innocent landowner defense.

2. Project Studies/Reports

- a. **Phase I Data Evaluation Report:** The general findings of the Phase 1 report were discussed (*i.e.* distribution of constituents of potential concern (COPCs), thickness of asbestos waste). There are also cross-sections included in the report that depict the thickness of the asbestos.
- b. **Preliminary Phase 2 Groundwater Report – February 2011:** There was a discussion of what COPCs were encountered in the groundwater. The US EPA anticipates at least one more groundwater sampling event. Activity-based sampling was also conducted during Phase 2 activities.
- c. **Phase 2 Data Evaluation Report:** This report has not been placed on line yet. The US EPA indicated that they are making some final modifications to the report and we are welcome to stop by their offices to look at the report.
- d. **Additional COCs other than asbestos (dioxin, metals, PAHs?). Current activity appears to be driven by asbestos alone. Concern over dioxins at the fire training area?** The additional COCs will be addressed in the RI/FS. According to US EPA

project manager, the in-house US EPA toxicologist did not seem to be overly concerned with the dioxins. According to the US EPA, the dioxin results are above regional screening levels (RSLs) but below preliminary remediation goals (PRGs). Kristine indicated she needed to look into that a little further.

- e. **Status of Forthcoming reports:** The Phase 2 Data Report is undergoing some final revisions and will be posted on the internet soon. The RI (*The Remedial Investigation Report contains a summary of the environmental sampling and a summary of the 2 risk assessments (human health and ecological). The Feasibility Study will be a separate report from the RI. The FS Report will evaluate cleanup options based on the findings from the RI report i.e., the risks at the Site.*) and Human Health Risk Assessment (HHRA) are anticipated to be completed in the fall of 2013. The HHRA is part of the RI and a draft is anticipated in late 2012 or early 2013. The project team asked for an opportunity to review the HHRA when it is available. The Screening Level Ecological Risk Assessment (SLERA) is also part of the RI/ and is expected in the fall of 2013.

3. Future Reuse of the Site

- a. **What may be possible:** The US EPA will not provide recommendations on specific options for future site reuse. The US EPA will identify levels of risk and provide institutional controls for the site. The Township will need to comply with the framework developed by the US EPA.
- b. **How is the “end” of the project defined?** The major milestone is the completion of the RI/FS and the ROD. These documents do not define the “end” of the project, but define a clear path forward. The RI/FS may identify a different remedy than is the emergency/interim remedial measure currently being applied. Once a remedy is identified by the US EPA, there may be additional remedial action required if it is not the same as the current remedial measure. Regardless of the final recommendation, on-going maintenance of the final remedy is required and the US EPA will perform five-year reviews of the project.
- c. **Mechanism for “approval” or agency concurrence related to future use:** The US EPA does not have an “approval” process for future use. They will provide a risk evaluation and institutional controls for the site. It is up to Whitpain Township to identify a future use that complies with the US EPA’s RI/FS and ROD. Additionally, the US EPA indicated that it would entertain questions from the Township on proposed future use options for the site. The US EPA also indicated they would like to review any proposed changes to the O&M plan. (*This seems to indicate that there is an existing O&M Plan and there is not. If the Township developed a plan such as a maintenance plan in conjunction with a future use EPA could consult with the Township.*)
- d. **Covenants, deed restrictions, O&M plans, etc:** Institutional controls will be included in the ROD for the site. An operations and maintenance (O&M) plan will be issued upon the completion of the current removal actions (capping). The

RI/FS will also include an O&M plan. *(The RI/FS does not contain an O&M Plan. The RI/FS Reports describe site conditions; risks posed from the site; and cleanup options to address these conditions. The ROD is EPA's formal selection of a cleanup. Part of a cleanup are institutional controls. Then the cleanup is designed (Remedial Design) and then the cleanup is constructed (Remedial Action). After a cleanup is in place there is an O&M Plan that describes how the cleanup is to be maintained, monitored, and operated.)* The US EPA also indicated that an Environmental Covenant may be applied through the Pennsylvania Department of Environmental Protection (PA DEP), which would include institutional controls for future use of the property by issuing an Administrative Order pursuant to Section 512 of the Pennsylvania Hazardous Site Cleanup Act (HSCA). *(EPA will set institutional controls in the ROD. Institutional controls are generally legal restrictions on a property to protect a remedy and protect people. EPA relies on legal requirements from state and local jurisdictions as institutional controls. Pennsylvania has 2 means to establish ICs either through an environmental covenant under a law called UECA or through an order under 512 of HSCA)*

4. Additional Topics of Discussion

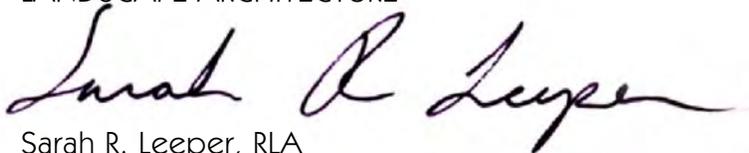
- a. **Ambient Air Monitoring:** Ambient air monitoring was performed by the US EPA for a period of one year. The results of the monitoring indicated there was no unacceptable inhalation risk based on current site activities.
- b. **Cleanup goals/criteria:** *The screening value for asbestos in soil is less than 1 %.* *(EPA has been using a 1% value in soil as a screening value to identify areas for additional asbestos work particularly activity based sampling (ABS). At this point we have not selected a cleanup up goal – this would be selected in the ROD.)* For other COCs in soil, the cleanup goals will be EPA Risk-Based Concentrations (RBCs). For groundwater, federal Maximum Contaminant Levels (MCLs) will be used. For surface water, EPA will use National Recommended Water Quality Criteria.
- c. **Environmental Justice Area:** There was a question if West Ambler was an Environmental Justice Area. *West Ambler is an Environmental Justice Area due to the minority population. (There is a distinction between West Ambler and Ambler. West Ambler is the neighborhood next to the closed Whitpain park that is part of the BoRit site. West Ambler is in Whitpain Township. The West Ambler neighborhood was identified as an Environmental Justice area due to the minority population and not because of the results of the cancer evaluation. Ambler is not designated as an EJ area and is the Borough of Ambler. The pile part of BoRit is in Ambler Borough.)* Additionally, the US EPA indicated that a study was performed in the area and identified a statistically significant increase in the rate of cancer in the Ambler zip code.
- d. **Sequence of Reporting and the Project:** The US EPA provided a sequence of events as the project proceeds. The sequence is as follows: RI/FS, Proposed Plan, Remedial Selection/Record of Decision, Remedial Design, Remedial Action, Post Construction/Operations and Maintenance. When the US EPA issues a plan

for remediation (called a Proposed Plan) there will be a public comment period. After consideration of the comments EPA issues a ROD and then prepares for a Remedial Design that reflects the remedy in the ROD. Upon completion of the RD EPA implements the cleanup. The Remedial Design and Remedial Action may not be required if the current remedy is selected as the remedial selection. If a different approach is selected, additional work may be required. *(At this point it is premature to say to what will be required in the RD and RA. For now it would be best to describe them as next steps after selection of the remedy in the ROD)*

- e. **Communications from Groups with US EPA:** The US EPA indicated that the town of Ambler has had fairly consistent communication with the US EPA on the pile. Upper Dublin (reservoir area) has had minimal communication with the US EPA. Whitpain Township has had lots of contact with the US EPA on the Park area.
- f. **Feedback from Public:** There is a small, vocal group of local residents who attend the Citizen Advisory Group (CAG) meetings are pushing for removal. This group contends they are not engaged in the decision making process. *(This is difficult to summarize since there is a spectrum of feedback from the different community groups. In general, the CAG members have a range of perspectives on EPA's work. A group called Citizens for a Better Ambler (CBA) advocates the complete removal of the asbestos from BoRit. Residents living in West Ambler seem to accept the current EPA work (stabilizing, covering) ; seem to not support asbestos removal, and are interested in re-use of the site or part of the site for their community.)*
- g. **Cost to Date:** The cost to date for the project is public information. To date, the US EPA estimates it has spent 13 million dollars for the removal work.

This report represents the Professional's summation of the proceedings and is not a transcript. Unless written notice of any correction or clarification is received by the Professional within ten days of issue, the report shall be considered factually correct and shall become part of the official project record.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE



Sarah R. Leeper, RLA
Project Manger

8 August 2012

STATEMENT OF WORK

FOR

Rose Valley Creek Flood Hazard Analysis

Prepared by

US ARMY CORPS OF ENGINEERS

Philadelphia District

STATEMENT of WORK

**For Professional Support Services to the
Rose Valley Creek Flood Hazard Analysis**

Date: August 8, 2012

Final Date: September 21, 2012

1. REFERENCES

- ❖ *Guidelines and Specifications for Flood Hazard Mapping Partners*
- ❖ "Safety and Health Requirements Manual," EM 385-1-1
- ❖ Section 22 of the Water Resources Development Act of 1974, as amended

2. GENERAL INFORMATION:

2.1. Contract Number: TBD

2.2. Contract Action: TBD

2.3. Name and Location of Project:

This statement of work is to provide Professional Services for the Rose Valley Creek Flood Hazard Analysis. The project is located in Montgomery County, Pennsylvania and involves the Townships of Whitpain and Upper Dublin and the Borough of Ambler.

2.4. Project Purpose:

2.4.1. Existing Conditions

Rose Valley Creek is one of three tributaries to the Wissahickon Creek that begin in Upper Dublin Township and flow through Ambler Borough to its confluence with the Wissahickon Creek in Whitpain Township. The drainage area of Rose Valley Creek is the largest of the three tributary watersheds, spanning about 2 square miles, and includes portions of Lower Gwynedd, Upper Dublin, and Whitpain Townships and Ambler Borough. Flooding problems have seriously hampered housing, economic development and public safety in the Borough of Ambler and the northeastern section of Whitpain Township. In these areas, the creek is channelized and buried in sections, with undersized culverts that create flooding conditions in even modest storms. The effective Flood Insurance Rate Maps (FIRM) do not depict a major section of the lower reach of the stream as special flood hazard areas (SFHA) under the National Flood Insurance Program (NFIP) and many homeowners lack insurance. This section also contains an asbestos remediation site, damaged by Tropical Storm Lee along with several homes and businesses in 2011.

2.4.2. Project Goals

This Scope of Work (SOW) outlines an effort to complete a detailed flood hazard study for the Rose Valley Creek Watershed that will include updating

new Flood Insurance Rate Maps (FIRM) and the development of a flood mitigation plan. The project will include ten work tasks, implemented over approximately fifteen months. The Planning Assistance to States program authorized by Section 22 of the Water Resources Development Act of 1974, as amended, provides the Federal funding for this project. Section 22 provides authority for the U.S. Army Corps of Engineers (USACE) to assist states, local governments, and other non-Federal entities in the preparation of comprehensive plans for the development, use, and conservation of water and related land resources. The authority allows the Corps of Engineers to provide technical assistance in the form of studies and plans, but does not allow for actual design or construction assistance.

2.5. Firm Name & Address:

Temple University
Center for Sustainable Communities (CSC)
580 Meetinghouse Road
Ambler, Pennsylvania 19002
Dr. Jeffrey Featherston

2.6. Point of Contact:

USACE Project Manager
Wanamaker Building
100 Penn Square East
Philadelphia, Pennsylvania 19107
Mr. Erik Rourke
215-656-6616
erik.j.rourke@usace.army.mil

3. TECHNICAL SCOPE OF WORK

3.1. Community Coordination and Involvement

3.1.1. The Contractor shall participate in a minimum of six (6) community coordination meeting involving the public officials from the study area including the Townships of Whitpain and Upper Dublin and the Borough of Amber. These meetings shall provide an arena where community officials can provide information and details pertaining to the types of problems, possible solutions and other information relevant to the watershed conditions within the project area. Assume duration of two (2) hours per meeting plus any preparatory time required. If the actual time varies from this assumption, the Corps will modify this agreement and an equitable adjustment will be determined.

3.2. Hydrologic Modeling

3.2.1. The Contractor shall develop apportion sub-basins within the Rose Valley Creek Watershed using available information as part of the Act 167 Study

process to refine the peak flows within stream reaches within each sub-basin;

3.3. Obtain Improved Orthophotography and Bridge Elevations

3.3.1. The Contractor shall obtain updated Orthophotography throughout the study area necessary to improve the existing contour and bridge elevation data within the project area. When possible, the Contractor will use the Pennsylvania Department of Conservation and Natural Resources (DNRC) digital geospatial map (PAMAP).

3.4. Assess Bridges and Culverts

3.4.1. The Contractor shall field measure all stream crossing (bridges and culverts) and gather critical physical information necessary for hydraulic modeling. When possible, constriction data available through the Philadelphia Water Department shall be used unless determined inadequate for future modeling. Data collection shall include, but is not limited to:

- Diameter
- Length
- Construction Material
- Photograph (upstream and downstream)

3.5. Hydraulic Modeling for Rose Valley Creek

3.5.1. Using the refined hydrologic model (Section 2.2) and accurate bridge and contour information (Sections 2.3 and 2.4), the Contractor will develop a hydraulic model of the Rose Valley Creek watershed using the HEC-RAS modeling system (latest version). The Contractor will develop the model consistent with the *Guidelines and Specifications for Flood Hazard Mapping Partners* available through FEMA.gov;

3.6. Hydraulic Modeling for Main Stem Wissahickon Creek

3.6.1. The Contractor will develop a hydraulic model for the main stem Wissahickon Creek near the Rose Valley Creek Watershed, to determine the effects of backwater on the project area. The Contractor will obtain additional obstruction data as necessary through field measurements along a four-mile long reach of the main stem beginning downstream of the gage located near the Route 73 Bridge (Fort Washington). The Contractor will use the gauge data to calibrate the results of the hydraulic simulation for this stream segment.

3.7. Floodplain Mapping for Rose Valley Creek Watershed

3.7.1. The Contractor will delineate new 100-year and 500-year floodplain and floodway boundaries to support revisions to the existing Flood Insurance Rate Maps. The mapping shall be consistent with the *Guidelines and Specifications for Flood Hazard Mapping Partners*. The floodplains will be overlain on the new 2012 orthophotography for the watershed.

3.8. Identify and Model Flood Reduction Improvements and Mitigation Options

3.8.1. The Contractor will evaluate the condition and performance of existing flood control and stormwater facilities and outline strategies to improve their performance, including retrofits and stormwater best management practices (BMPs) and other improvements. The Contractor will also identify sites for potential new facilities. Using the hydrologic and hydraulic models and cost-effectiveness methodology, the Contractor will evaluate the available storage from potential BMP's to demonstrate expected impacts on downstream flows and runoff volume. The Contractor will use the results to develop potential cost-effective combinations of improvements for consideration of implementation by the impacted communities.

3.8.2. The Contractor will evaluate flood-prone structures, with and without the recommended improvements, and develop recommendations on candidates for additional mitigation opportunities such as acquisition and floodproofing. The Contractor also will evaluate options for implementing a flood warning system to alert residents of impending flood conditions and enable first responders to reach flood victims.

3.9. Prepare Flood Mitigation Report

3.9.1. The Contractor will produce a final report outlining a series of recommendations to mitigate flooding in the Rose Valley Creek Watershed. The report will contain the results of the above detailed tasks, produced in both digital and hardcopy format.

4. QUALITY CONTROL

4.1. The Contractor shall be held responsible for the quality of their work and for all damages caused as a result of negligence in the performance of any services furnished under contract. Although the Government reviews submissions required by this contract, it is emphasized that this work must be executed by the Contractor using proper internal controls and review procedures. The letter of transmittal for each submission shall include a certification that the submission has been subjected to the Contractors' review and coordination;

4.2. All submissions by the Contractor are subject to an independent review performed by the Corps. The Contractor is responsible for responding to and addressing all comments resulting from an independent technical review.

4.3. All work conducted under this effort shall be in strict compliance with all applicable regulations.

5. SAFETY

- 5.1. The Contractor shall conduct all operations in strict compliance with all applicable standards and regulations;
- 5.2. The Contractor shall comply with the US Army Corps of Engineers "Safety and Health Requirements Manual," EM 385-1-1.

6. COORDINATION

- 6.1. In order to prevent misunderstandings leading to later changes and Contractor lost effort, the Contractor shall coordinate his efforts with the Philadelphia District POC. The Contractor shall notify the Philadelphia District POC of project status periodically during the Contractor's performance period, especially at major decision points. All questions, submissions, and other correspondence shall be directed to the Philadelphia District POC for necessary action;
- 6.2. Reports and data generated under this contract shall become property of the Government and distribution to any other source unless authorized by the USACE is prohibited;
- 6.3. The Contractor shall not publicly disclose or make available to any news media or regulatory agencies, any data generated or reviewed under this contract without prior approval of the Philadelphia District POC. When approached by the above parties, the Contractor shall defer to the Philadelphia District POC for response.

7. DELIVERABLES

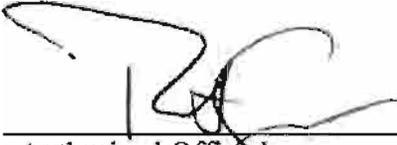
- 7.1. The Contractor shall submit to the Corps digital copies of all models developed under the TECHNICAL SCOPE OF WORK. This shall include any hydrologic and hydraulic modeling, elevation data and mapping products;
- 7.2. The Contractor shall submit to the Corps all information required to coordinate a map revision with FEMA. Information requirements are found in *Guidelines and Specifications for Flood Hazard Mapping Partners* available at www.fema.gov;
- 7.3. The Contractor shall submit a digital version of the Flood Mitigation Report in PDF format.

8. PERIOD OF PERFORMANCE

- 8.1. The Contractor shall be completed all work specified in this Statement of Work, within 15 months after notice to proceed is given. This schedule is subject to adjustment by the Contracting Officer, in writing, for conditions beyond the control of the parties hereto.

9. COMPENSATION TO THE CONTRACTOR

9.1. In consideration for the performance of work under this Contract, the Contractor shall be paid the amount of \$117,196.00 for the work as described in the preceding paragraphs. This shall constitute complete payment for all services required and expenses incurred in the performance of this task order.

 Authorized Official Temple University - OF The Commonwealth System of Higher Education	10-3-2012 Date	Erik Rourke Project Manager	Date
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Paul Bacani A/E Contract Negotiator	Date
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WEST AMBLER NEIGHBORHOOD

REVITALIZATION AND ACTION PLAN

Residential Market Analysis

DRAFT

Prepared for:
WHITPAIN TOWNSHIP

Prepared by:
Urban Partners

October 2012

BACKGROUND

The Study Area's housing market was analyzed to identify trends in residential real estate and to determine the potential for new development and its associated pricing. For the purpose of this analysis, the primary housing market area is comprised of the following six census tracts: Tract 2032.05 (portions of Whitpain Township); Tract 2012.04 (portions of Lower Gwynedd Township); Tract 2013.01/Tract 2013.02 (Ambler Borough); and Tract 2014.10/Tract 2014.11 (portions of Upper Dublin Township).

The most reliable data for the age of housing stock comes from the 2006-2010 American Community Survey, which reports that 83% of the primary market area's homes were built prior to 1960 and only three percent were added since 2000. In comparison, the 69% of the county's housing stock was built prior to 1960 and eight percent was built after 2000 (see **Table 1**).

Table 1: Year Structure Built

	Built 2000 or later	Built 1980 to 1999	Built 1960 to 1979	Built 1940 to 1959	Built 1939 or earlier
2032.05	5%	18%	27%	39%	11%
2012.04	6%	10%	47%	28%	9%
2013.01	1%	5%	33%	26%	36%
2013.02	4%	5%	4%	39%	47%
2014.10	1%	25%	32%	19%	22%
2014.11	4%	33%	13%	20%	30%
Primary Market Area Total	3%	15%	25%	29%	29%
Montgomery County	8%	23%	26%	24%	19%

Source: U.S. Census Bureau

The six census tracts added 309 housing units between 2000 and 2010, which is equivalent to a 4.8% increase. In comparison, the total number of units in the county as a whole increased by 9.5% (see **Table 2**).

Table 2: Number of Housing Units, 2000 and 2010

	2000	2010	Change in Units 2000-2010	% Change in Units 2000-2010
Tract 2032.05	828	823	-5	-0.6%
Tract 2012.04	928	1,008	80	8.6%
Tract 2013.01	1,351	1,457	106	7.8%
Tract 2013.02	1,254	1,310	56	4.5%
Tract 2014.10	1,034	1,053	19	1.8%
Tract 2014.11	1,063	1,086	23	2.2%
Primary Market Area Total	6,458	6,767	309	4.8%
Montgomery County	297,434	325,735	28,301	9.5%

Source: U.S. Census Bureau

The rates of vacancy and homeownership for the primary market area in 2010 were 5% and 72%, respectively, which were both comparable to the county as a whole (see **Table 3**). The two tracts that comprise the Borough of Ambler, Tract 2013.01 and Tract 2013.02, had significantly lower homeownership rates (54%) than the rest of the primary market area.

Table 3: Vacancy and Housing Tenure, 2010

	Vacant Units	% Vacant	Owner Occupied	% Owner Occupied
Tract 2032.05	33	4.0%	703	89%
Tract 2012.04	62	6.2%	813	86%
Tract 2013.01	61	4.2%	750	54%
Tract 2013.02	102	7.8%	652	54%
Tract 2014.10	38	3.6%	843	83%
Tract 2014.11	39	4.0%	827	79%
Primary Market Area Total	335	5.0%	4,588	72%
Montgomery County	17,985	5.5%	225,001	73%

Source: U.S. Census Bureau

FOR SALE HOUSING MARKET

The Consultant Team analyzed the home sales records in the primary market area between August 2010 and July 2012. According to Win2Data, which is a real estate database service that was utilized for this study, there were a total of 301 residential sales during that period. Of these, 256 were recorded as single family residential sales and 45 were recorded as condominiums (see **Table 4**).

Table 4: Recent Home Sales by Census Tract, August 2010 – July 2012

	All Residential Sales	Single Family Residential	Condominiums
Tract 2032.05	40	40	-
Tract 2012.04	66	31	35
Tract 2013.01	34	34	-
Tract 2013.02	53	53	-
Tract 2014.10	58	49	9
Tract 2014.11	50	49	1
Primary Market Area Total	301	256	45

Source: Win2Data, Urban Partners

These sales ranged from \$37,000 to \$970,000, with a median price of \$245,000. The average size of the homes being sold was 1,815 SF and the average sale price per SF was \$159 (see **Table 5**).

Table 5: Recent Home Sale Prices by Census Tract, August 2010 – July 2012

	# of Sales	Median Sales Price	Average \$/SF	Average Size of Home Being Sold
Tract 2032.05	40	\$271,500	\$168/SF	2,238 SF
Tract 2012.04	66	\$241,500	\$152/SF	1,561 SF
Tract 2013.01	34	\$250,000	\$145/SF	1,700 SF
Tract 2013.02	53	\$260,000	\$143/SF	1,568 SF
Tract 2014.10	58	\$253,000	\$156/SF	1,964 SF
Tract 2014.11	50	\$297,750	\$180/SF	1,978 SF
Primary Market Area Total/Average	301	\$245,000	\$159/SF	1,815 SF

Source: Win2Data, Urban Partners

The primary market area is a predominantly single family residential zone, as evidenced by the large percentage of SFR sales (256 of 301, or 85%) within the last two years. The average size of the condominium units being sold was 1,165 SF, and the median sale price was \$170,000. In comparison, the SFR units averaged 1,928 SF in size and the median sale price was \$245,000 (see **Table 6**).

Table 6: Recent Home Sale Prices by Home Type, August 2010 – July 2012

	# of Sales	Median Sales Price	Average \$/SF	Average Size of Home Being Sold
Condominiums	45	\$170,000	\$138/SF	1,165 SF
Single Family Residential	256	\$245,000	\$161/SF	1,928 SF

Source: Win2Data, Urban Partners

Condominium Sales

There are four notable condominium communities that are located within the primary market area – the Georgetown of Philadelphia and the Meadows in Lower Gwynedd, and the Butler Park Condos and the Somerset House in Upper Dublin. On the average, recent sales of 3-bedroom units have average \$180,000 or \$125/SF; 2-bedroom units \$159,000 or \$140/SF; and 1-bedroom units \$122,000 or \$148/SF. **Figure 1** shown below contains descriptions of each of the condominium communities and five most recent sales according to Win2Data.

Figure 1: Condominium Communities in the Primary Market Area

<p><u>The Georgetown of Philadelphia</u></p> 	<ul style="list-style-type: none"> Location: Rappahanock Dr. & Old Penllyn Pike, Lower Gwynedd Originally Built: 1980 Total Units in Complex: 270 Five Most Recent Sales: <table border="1"> <thead> <tr> <th>Type</th> <th>SF</th> <th>Date</th> <th>Price</th> <th>Price/SF</th> </tr> </thead> <tbody> <tr> <td>3Bed/2Bath</td> <td>1,468</td> <td>2/24/12</td> <td>\$235,000</td> <td>\$160</td> </tr> <tr> <td>3Bed/2Bath</td> <td>1,455</td> <td>4/12/12</td> <td>\$160,000</td> <td>\$110</td> </tr> <tr> <td>2Bed/1.5Bath</td> <td>1,088</td> <td>5/18/12</td> <td>\$175,000</td> <td>\$161</td> </tr> <tr> <td>1Bed/1.5Bath</td> <td>780</td> <td>5/31/12</td> <td>\$130,000</td> <td>\$167</td> </tr> <tr> <td>2Bed/1.5Bath</td> <td>1,088</td> <td>7/31/12</td> <td>\$175,000</td> <td>\$161</td> </tr> </tbody> </table> <p><small>Source: Win2Data, Urban Partners</small></p>	Type	SF	Date	Price	Price/SF	3Bed/2Bath	1,468	2/24/12	\$235,000	\$160	3Bed/2Bath	1,455	4/12/12	\$160,000	\$110	2Bed/1.5Bath	1,088	5/18/12	\$175,000	\$161	1Bed/1.5Bath	780	5/31/12	\$130,000	\$167	2Bed/1.5Bath	1,088	7/31/12	\$175,000	\$161
Type	SF	Date	Price	Price/SF																											
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<p><u>The Meadows at Lower Gwynedd</u></p> 	<ul style="list-style-type: none"> Location: 501 N. Bethlehem Pike, Lower Gwynedd Originally Built: 1971 Total Units in Complex: 104 Five Most Recent Sales: <table border="1"> <thead> <tr> <th>Type</th> <th>SF</th> <th>Date</th> <th>Price</th> <th>Price/SF</th> </tr> </thead> <tbody> <tr> <td>3Bed/2Bath</td> <td>1,335</td> <td>4/28/12</td> <td>\$178,000</td> <td>\$133</td> </tr> <tr> <td>2Bed/1Bath</td> <td>1,122</td> <td>5/04/12</td> <td>\$157,000</td> <td>\$140</td> </tr> <tr> <td>2Bed/1Bath</td> <td>1,122</td> <td>5/15/12</td> <td>\$152,500</td> <td>\$136</td> </tr> <tr> <td>2Bed/1Bath</td> <td>1,071</td> <td>6/14/12</td> <td>\$155,000</td> <td>\$145</td> </tr> <tr> <td>1Bed/1Bath</td> <td>880</td> <td>7/25/12</td> <td>\$140,000</td> <td>\$159</td> </tr> </tbody> </table> <p><small>Source: Win2Data, Urban Partners</small></p>	Type	SF	Date	Price	Price/SF	3Bed/2Bath	1,335	4/28/12	\$178,000	\$133	2Bed/1Bath	1,122	5/04/12	\$157,000	\$140	2Bed/1Bath	1,122	5/15/12	\$152,500	\$136	2Bed/1Bath	1,071	6/14/12	\$155,000	\$145	1Bed/1Bath	880	7/25/12	\$140,000	\$159
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<p><u>Butler Park Condos</u></p> 	<ul style="list-style-type: none"> Location: Cavendish Dr. @ Belle Aire Rd., Upper Dublin Originally Built: 1982 Total Units in Complex: 124 Five Most Recent Sales: <table border="1"> <thead> <tr> <th>Type</th> <th>SF</th> <th>Date</th> <th>Price</th> <th>Price/SF</th> </tr> </thead> <tbody> <tr> <td>1Bed/1Bath</td> <td>920</td> <td>7/11/11</td> <td>\$120,000</td> <td>\$130</td> </tr> <tr> <td>1Bed/1Bath</td> <td>890</td> <td>7/13/11</td> <td>\$132,000</td> <td>\$148</td> </tr> <tr> <td>3Bed/2.5Bath</td> <td>1,520</td> <td>8/23/11</td> <td>\$148,000</td> <td>\$97</td> </tr> <tr> <td>2Bed/2.5Bath</td> <td>1,296</td> <td>3/9/12</td> <td>\$164,000</td> <td>\$127</td> </tr> <tr> <td>2Bed/2Bath</td> <td>1,350</td> <td>6/5/12</td> <td>\$150,000</td> <td>\$111</td> </tr> </tbody> </table> <p><small>Source: Win2Data, Urban Partners</small></p>	Type	SF	Date	Price	Price/SF	1Bed/1Bath	920	7/11/11	\$120,000	\$130	1Bed/1Bath	890	7/13/11	\$132,000	\$148	3Bed/2.5Bath	1,520	8/23/11	\$148,000	\$97	2Bed/2.5Bath	1,296	3/9/12	\$164,000	\$127	2Bed/2Bath	1,350	6/5/12	\$150,000	\$111
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<p><u>Somerset House</u></p> 	<ul style="list-style-type: none"> Location: 120 Bethlehem Pike, Upper Dublin Originally Built: 1976 Total Units in Complex: 73 Five Most Recent Sales: <table border="1"> <thead> <tr> <th>Type</th> <th>SF</th> <th>Date</th> <th>Price</th> <th>Price/SF</th> </tr> </thead> <tbody> <tr> <td>1Bed/1Bath</td> <td>759</td> <td>4/28/12</td> <td>\$123,900</td> <td>\$163</td> </tr> <tr> <td>1Bed/1Bath</td> <td>759</td> <td>5/04/12</td> <td>\$120,000</td> <td>\$158</td> </tr> <tr> <td>2Bed/1Bath</td> <td>943</td> <td>5/15/12</td> <td>\$137,500</td> <td>\$146</td> </tr> <tr> <td>1Bed/1Bath</td> <td>759</td> <td>6/14/12</td> <td>\$117,500</td> <td>\$155</td> </tr> <tr> <td>1Bed/1Bath</td> <td>759</td> <td>7/25/12</td> <td>\$90,000</td> <td>\$119</td> </tr> </tbody> </table> <p><small>Source: Win2Data, Urban Partners</small></p>	Type	SF	Date	Price	Price/SF	1Bed/1Bath	759	4/28/12	\$123,900	\$163	1Bed/1Bath	759	5/04/12	\$120,000	\$158	2Bed/1Bath	943	5/15/12	\$137,500	\$146	1Bed/1Bath	759	6/14/12	\$117,500	\$155	1Bed/1Bath	759	7/25/12	\$90,000	\$119
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New Construction

The area near the Ambler Train Station is showing signs of reinvestment in the housing market, as evidenced by the success of the Station Square development which was completed by W.B. Homes in 2010. This project, built just south of the Ambler Station on SEPTA’s Regional Rail Line, consisted of 58 3-story townhomes arranged along a series of new roads that intersect with Main Street. Unit sizes ranged from 2,150 to 2,596 SF, and the sale prices averaged \$346,000 (or \$150/SF). Each home features a two-car garage.

Figure 2: The Station Square



Site plan as illustrated in W.B. Homes’ marketing brochure



Corner property being temporarily utilized as model home

It is also noteworthy to mention that Westrum Development Co. was planning to build a 288-unit village style community named The Crossings at Ambler on a 9.4 acre brownfield site located immediately west of the train tracks. As the project progressed, the housing market experienced a major downturn and Westrum adjusted the unit size and pricing accordingly. As of 2008, the projected sale price for the large units was reduced to upper \$300,000’s (or approximately \$260/SF) and \$250,000 for the smaller units (or \$330/SF). Ultimately, Westrum has pulled out of the deal and the site remains undeveloped as of this report.

Other new homes for sale in Whitman Township and nearby municipalities are shown below (see **Table 7**):

Table 7: New For-Sale Developments in Whitpain Township and Nearby Municipalities

Community Name (Builder)	Location	Total Units	Type	Size	Listing Price	Listing Price (per SF)
Newbury (Philomeno & Salamone)	Upper Gwynedd	24	Townhomes (3-5 Bed)	2,700 - 3,850 SF	From \$399,000	From \$148/SF
Enclave (Philomeno & Salamone)	E. Norriton	66	Townhomes (2-3 Bed)	1,525 - 2,140 SF	From \$249,000	From \$163/SF
Horsham Valley Estates I (Toll Brothers)	Horsham	52	SFR (4 Bed)	2914 - 3,890 SF	\$580,000 to \$630,000	\$162-\$199/SF
Cold Point Village (Sal Paone Builder)	Plymouth Meeting	48	Townhouse (3 Bed)	2219 SF	From \$424,900	From \$191/SF
Addison Reserve (Sal Paone Builder)	Blue Bell	25	Twins (3 Bed)	1,762 - 2,114 SF	\$369,900 to \$444,900	\$210/SF
Highview at Montgomery (Ryan Homes)	North Wales	95	Townhouse (3 Bed)	2,000 - 2,200 SF	\$259,900 to \$294,990	\$130-\$134/SF
Montgomery Knoll (David Cutler Group)	North Wales	26	SFR (4-5 Bed)	2,986 - 3,129 SF	\$487,950 to \$522,950	\$163-\$167/SF
Providence Reserve (N. Paone Construction)	North Wales	52	Townhomes (2-3 Bed)	1,824 - 2,184 SF	\$304,900 to \$349,900	\$160-\$167/SF
Montgomery Pointe (Pulte Homes)	North Wales	109	Townhouse (3 Bed)	1,997 SF	From \$319,900	From \$160/SF

Active Adult Communities

Currently, there are no new active adult communities for sale (restricted to 55+ residents) in Whitpain Township in Whitpain Township or in the primary market area, but several developments are currently being marketed in nearby municipalities: They include:

Legacy at Stony Creek Farms in Worcester

- Developed by Ryan Homes
- Prices range from \$299,900 - \$379,900 (or \$174 - \$184/SF)

Jefferson Crossing in E. Norriton

- Developed by Philomeno & Salamone
- Prices range from \$249,000 - \$269,000 (or \$143 - \$158/SF)

Terraces at Montgomery Walk in North Wales

- Developed by David Cutler Group
- Prices range from \$329,950 - \$429,950 (or \$159 - \$226/SF)

The Reserve at Gwynedd Garden in North Wales

- Developed by Del Webb Corporation
- Prices range from \$201,990 - \$264,990 (or \$135 - \$137/SF)

Potential for New For-Sale Housing

As the housing market continues to recover, pent up demand for new homes will likely rekindle developer interest in the Ambler Station area. As was the case for the Station Square development, close proximity to public transit and main street retail/entertainment amenities along Butler Avenue will be desirable selling points for future residential projects.

The types of for-sale housing that would work the best in West Ambler neighborhood in the next 3-5 years are townhomes and condominiums. The size of these units may range from 1,100 SF to 1,800 SF and sale prices may start at \$155 per SF and reach \$190 per SF for smaller units. Judging from the pace at which Station Square was sold even in a down economy, the absorption rate for a townhouse product may be in the range of 3 to 5 units per month. As for age-restricted housing, developer may demonstrate reluctance to designate a product as senior housing for the fear of shrinking the potential pool of homebuyers during the recovery period.

RENTAL HOUSING MARKET

According to the 2006-2010 American Community Survey, rental housing represented 27 percent of the housing market in the primary market area in 2010. This housing stock is relatively old, with 84% of the units being built prior to 1979 (see **Table 8**).

Table 8: Year Renter Occupied Structure Built

Year Built	Primary Market Area	Primary Market Area (%)	Montgomery County	Montgomery County (%)
Built 2005 or later	44	2.5%	44	2.5%
Built 2000 to 2004	44	2.5%	44	2.5%
Built 1980 to 1999	193	11.0%	193	11.0%
Built 1960 to 1979	480	27.4%	480	27.4%
Built 1940 to 1959	394	22.5%	394	22.5%
Built 1939 or earlier	599	34.2%	599	34.2%

Source: U.S. Census Bureau

Furthermore, renter occupied structures are relatively small. A majority of the renter occupied units (77%) are located in structures that have less than 10 units, with only 15% of the units being in structures larger than 20 units (see **Table 9**).

Table 9: Number of Units in Renter Occupied Structures

Number of Units	Primary Market Area	Primary Market Area (%)	Montgomery County	Montgomery County (%)
Less than 10	1,351	77%	46,487	59%
10 to 19	133	8%	10,250	13%
20 to 49	110	6%	6,703	8%
50 or more	160	9%	15,251	19%
Other (i.e. Mobile Homes)	0	0%	343	0%
TOTAL	1,754		79,034	100%

Source: U.S. Census Bureau

Within the primary market area, there are five major apartment complexes:

- *The Woods Apartments* is a two-story, garden-style apartment complex. The complex has 321 units with amenities such as tennis and basketball courts, pool, and clubhouse. One-bedroom units range from \$999 to \$1,207 per month (\$1.48 to \$1.78 per SF) and two-bedroom units rent from \$1,249 to \$1,499 (\$1.51 to \$1.76 per SF). Air conditioning and heating is included in these rents. At the time this report was written, there were both types of units available.
- *Edgewood Apartments* is a three-story complex that has 116 units with amenities such as pool and FiOS Internet access. One-bedroom units rent for \$800 per month (\$0.96 per SF); two-bedroom units rent for \$1,025 (\$1.08 per SF); and three-bedroom units rent for \$1,350 (\$1.30 per SF). Heating and hot water is included in these rents. At the time this report was written, only a single one-bedroom unit was available.
- *Mattison House* is a three-story complex that has 43 units with amenities such as cable and Internet access. One-bedroom units rent for \$845 per month (\$1.21 per SF); and two-bedroom units rent for \$925 (\$1.13 per SF). Air conditioning is included in these rents. At the time this report was written, there were no vacancies.
- *Longford Apartments* is a two-story complex that has 36 units with amenities such as cable access. One-bedroom units rent from \$890 to \$945 per month (\$1.24 to \$1.32 per SF); and two-bedroom units rent from \$1,020 to \$1,130 per month (\$1.13 to \$1.26 per SF). Air conditioning is included in these rents. At the time this report was written, only a single one-bedroom unit was available.

- *Valley Brooke* is two-story garden style apartment complex that has 31 units with amenities such as individual climate control, private balcony, washer/dryer hookup, and granite countertops in select units. Two-bedroom units rent for \$1,180 per month (\$1.18 per month). Water and sewer are included in these rents. At the time this report was written, there were no vacancies.

There are several other large apartment complexes located within five miles of the West Ambler neighborhood, including:

- *English Village Apartments* in North Wales is a large complex that has 596 units with amenities such as clubhouse, fitness center, pool, and tennis courts. One-bedroom units rent for \$920 per month (\$1.15 per SF) and two-bedroom units rent from \$1,145 to \$1,350 (\$1.27 to \$1.35 per SF). Cold water is included in these rents. At the time this report was written, all three types of units were available.
- *Madison Hunt Club* in North Wales is another large complex that has 320 units with amenities such as washer and dryer in each unit, clubhouse, fitness center, playground, pool, and tennis courts. One-bedroom units rent from \$1,249 to \$1,489 per month (\$1.84 to \$1.87 per SF); two-bedroom units rent from \$1,677 to \$1,967 per month (\$1.85 to \$2.00 per SF); and three-bedroom units rent for \$2,150 per month (\$1.94 per SF). Cold water is included in these rents. At the time this report was written, all three types of units were available.

Potential for New Rental Housing

The community amenities that are attractive to Ambler Station area home buyers (e.g. proximity to transit, retail services, and entertainment venues) are equally attractive to renters. Given the relative strength of the rental housing market compared to that of homeownership, we estimate that current market demand can support new rental housing.

As indicated in our research, there is a strong market for higher quality apartment complexes that feature amenities such as a swimming pool, air conditioning, a fitness center, a clubhouse, a tennis/basketball court, and parking. We estimate that newly built apartment complexes with one and two-bedroom units (750 SF to 1,050 SF) can be rented at \$1.55 to \$1.90 per SF per month.

AFFORDABLE HOUSING DEVELOPMENT

In the interest of preserving affordability for low-to-moderate income residents in the West Ambler neighborhood, the Steering Committee and Township officials have expressed interest in producing a roadmap for affordable housing development in the Study Area. Described in previous sections of this report, the potential for new housing development is based on a premise that the private market is capable of absorbing all project costs. In other words, government subsidies in the form of homebuyer grants and developer incentives are not expected to be required.

In the current market, the types of for-sale housing that would work the best in West Ambler neighborhood are townhomes and condominiums. The larger of these homes will be the 3-bedroom models that are approximately 1,800 SF in living space, with the projected sale price of \$280,000 (or \$155/SF). As indicated in **Figure 2**, the minimum household income required to purchase a home at that price is \$64,433, which is just under the income limit for the low-to-moderate income designation¹.

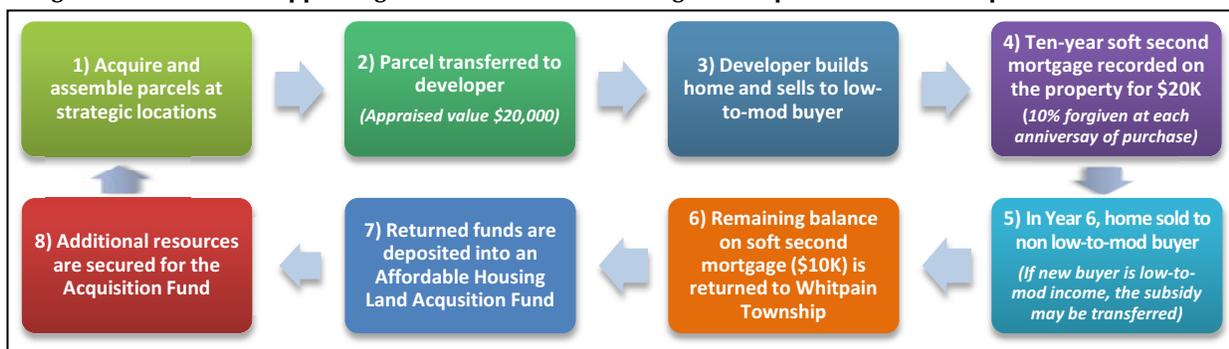
Figure 2: Minimal Salary Required for \$280,000 Home

Sale Price	\$280,000	3-bed townhome (1,800 SF)
Down Payment	\$9,800	3.5% per FHA requirement
Loan Amount	\$270,200	
Monthly Payments		
Principal/Interest	\$1,176	FHA 30 Year fixed at 3.25%
RE Taxes	\$298	
Property Insurance	\$117	
Mortgage Insurance Premium	\$270	Per FHA requirement
Total Mortgage Payment	\$1,859	
Other Debt	\$450	Car payment, student loans, etc.
Total Month Debt	\$2,309	
Minimum Annual Salary	\$64,433	Household debt not to exceed 43% of salary (based on FHA guidelines)

Efforts to further discount the sale price, and thereby expanding the pool of households that can purchase new homes in the West Ambler neighborhood, will require public intervention in the form of buyer subsidies and/or developer incentives. For parcels that are already owned or will be acquired by Whitpain Township, one of the most efficient ways to incentivize the development of affordable housing is to transfer those parcels for free or at a deep discount to private developers. In exchange, the home builder will be required to sign a covenant that mandates the newly built homes be sold exclusively to low-to-moderate income buyers. To preserve long-term affordability and to guard against opportunistic purchasers who may flip the home for a quick profit, deed restrictions

or soft second (forgivable) mortgages equivalent to the original value of the parcel can be recorded on the homes. **Figure 3** below illustrates an example of this model:

Figure 3: Model for Supporting Affordable Sales Housing Development on Township Owned Parcels



¹ This scenario assumes that such a household will be able to pay \$9,800 (3.5%) in down payment, and be able to qualify for a 30-year FHA mortgage at a fixed rate of 3.25%. For the Philadelphia Metropolitan Statistical Area, which includes all of Montgomery County, the median annual household income for a family of four is \$81,500. In order to qualify as low-to-moderate income for most federal/state affordable housing programs, a household must earn less than 80% of the Area Median Income, or \$65,200 for a household of four.

We estimate that by simply eliminating acquisition costs from the development budget, it may be possible to reduce the sale price of the home by 4% (i.e. to \$268,800 for the aforementioned home type). The minimal household income required to purchase a townhome at that price is \$62,358, which is 76.5% of the AMI.

Figure 4: Minimal Salary Required for \$240,000 Home

Sale Price	\$240,000	3-bed townhome (1,500 SF)
Down Payment	\$8,400	3.5% per FHA requirement
Loan Amount	\$231,600	
Monthly Payments		
Principal/Interest	\$1,008	FHA 30 Year fixed at 3.25%
RE Taxes	\$254	
Property Insurance	\$100	
Mortgage Insurance Premium	\$232	Per FHA requirement
Total Mortgage Payment	\$1,593	
Other Debt	\$450	Car payment, student loans, etc.
Total Month Debt	\$2,043	
Minimum Annual Salary	\$57,022	Household debt not to exceed 43% of salary (based on FHA guidelines)

A strategy to further discount the home prices so that they're within reach of households earning less than 70% of the AMI may involve reducing the living space of the townhomes to 1,500 SF. Although some of the luxury selling features such as large walk-in closets and multiple living spaces may no longer be viable, the 1,500 SF of living space is large enough to accommodate a family of four that require three bedrooms and two bathrooms.

In the current market, a 1,500 SF townhome in West Ambler would sell for approximately \$240,000, or \$160/SF. As indicated in **Figure 4**, the minimum household income required to purchase a 1,500 SF townhome at \$240,000 townhome is \$57,022, which is just under 70% of the AMI. Furthermore, if Whitpain

Township is able to offer the land for free to the developer, the sale price of this home may be further reduced to \$230,400. The household income required to purchase a townhome at this price is \$55,244, or 68% of the AMI.

Lastly, for-sale developments that are targeting households under 60% of the AMI will most likely require additional government subsidies, including federal CDBG/HOME funding and state funding such as Pennsylvania Housing Finance Agency's *Homeownership Construction Initiative*. Similarly, affordable rental developments, including low-income senior housing, will require substantial government subsidies in order to make such projects financially feasible. Commonly used rental subsidy programs are Low Income Housing Tax Credits (administered by the Pennsylvania Housing Finance Agency) and the Section 202 Supportive Housing for the Elderly Program, which is administered by the U.S. Department of Housing and Urban Development.

Appendix 1: Rental Market Inventory

Name	Total Units	Type	Price	Size (SF)	\$/SF	Utilities	Avail?	Amenities
The Woods 1410 East Butler Pike Ambler, PA	321	1 Bedroom 2 Bedroom	\$999-\$1,207 \$1,249-\$1,499	677-677 SF 828-850 SF	\$1.48 to \$1.78 \$1.51 to \$1.76	AC and Heating	Yes	Tennis, Basketball, Clubhouse, Pool
Edgewood 150 N. Bethlehem Pike Ambler, PA	116	1 Bedroom 2 Bedroom 3 Bedroom	\$800 \$1,025 \$1,350	835 SF 950 SF 1,040 SF	\$0.96 \$1.08 \$1.30	Heat, hot water	Yes (1 unit)	Pool, FiOS ready,
Mattison House 174 S. Bethlehem Pike Ambler, PA	43	1 Bedroom 2 Bedroom	\$845 \$925	700 SF 820 SF	\$1.21 \$1.13	AC	No	Cable and Internet ready
Longford 352 Valley Brook Road Ambler, PA	36	1 Bedroom 2 Bedroom	\$890-\$945 \$1,020-\$1,130	715 SF 900 SF	\$1.24 to \$1.32 \$1.13 to \$1.26	AC	Yes (1 unit)	Cable ready
Valley Brooke 355 Forest Ave. Ambler, PA	31	2 Bedroom	\$1,180	1,000 SF	\$1.18	Water/Sewer	No	AC, Laundry On-Site
English Village 700 Lower State Road North Wales, PA	596	1 Bedroom 2 Bedroom	\$920 \$1,145-\$1,350	800 SF 900-1,000 SF	\$1.15 \$1.27 to \$1.35	Water/Sewer	Yes	Clubhouse, Fitness Center, Pool, Tennis, Controlled Access.
Madison Hunt Club 10 Hunt Club Trail North Wales, PA	320	1 Bedroom 2 Bedroom 3 Bedroom	\$1,249-\$1,489 \$1,677-\$1,937 \$2,150	680-798 SF 837-1,048 SF 1,107 SF	\$1.84 to \$1.87 \$1.85 to \$2.00 \$1.94	Water/Sewer	Yes	Washer/Dryer in Unit, Clubhouse, Fitness Center, Playground, Pool, Tennis

Source: Rent.com, Urban Partner

MEMORANDUM

Date: October 10, 2012

To: Sarah Leeper – RLA; Simone Collins, Inc.

From: Joe Kraycik – Environmental Standards, Inc.

Copy to: Peter Simone – Simone Collins, Inc.
Dan Claycomb – Environmental Standards, Inc.

Subject: West Ambler Redevelopment – Research for October 17, 2012, Committee Meeting

In preparation for an upcoming West Ambler redevelopment committee meeting on October 17, 2012, you requested Environmental Standards, Inc. (Environmental Standards) to conduct research and provide information related to the following topics:

- Tree planting on contaminated sites
- Concept Specifications for Park Pavilion and Community Building Utilities
- Funding Opportunities
- Redevelopment Guidelines for West Ambler Neighborhood

The remainder of this memorandum provides our response to your request.

Tree Planting on Contaminated Sites

Capping is a common remedial strategy employed at superfund sites, former landfills, abandoned waste dumps, and other contaminated sites. By properly capping these sites and eliminating the exposure pathway to the substances beneath the cap, these sites can be used for a variety of useful purposes. The use of former landfills and waste sites for recreational uses (parks, hiking trails, sports fields, *etc.*) is increasingly common. Redevelopment of the Bo-Rit Asbestos site in West Ambler as a park and recreational area following the completion of remedial actions is a potential scenario. Interim remedial actions in the park area by US EPA will consist of covering and stabilizing the waste materials. Additional remedial actions may be necessary based on US EPA study results. If the park redevelopment scenario moves forward after remediation, it is likely that the site will be revegetated with native grasses, plants, and trees. There have been questions raised about planting trees at the site and if doing so would present a future threat to the remedy (cap).

- It is possible to plant trees, shrubs, and other types of vegetation above containment systems (caps) at many sites without affecting its integrity and protectiveness.

- Primary concern is roots penetrating and damaging the cap system. If properly designed, the cap can be maintained and can support a variety of trees, shrubs, and plants.
- Roots are normally contained within the top 2 feet of soil cover, which is where nutrients and moisture are contained.
- Recent research has shown that roots, including taproots, grow laterally once they reach a clay cap or geomembrane.
- When selecting tree species, root depths, size, irrigation requirements, competition, and presence of debris must be considered.
- Windthrow or blowdown is a major concern because uprooted trees can damage the cap and bring impacted material to the surface. There are several ways to minimize windthrow.
 - Provide an adequate depth of rootable soil – 14 to 18 inches minimum.
 - Harvest trees before they reach a susceptible height.
 - Select shorter species.
 - Plant shorter species around taller species to act as a windbreak.
 - Trim the taproot prior to planting – encourages lateral root growth.
- When planting trees, it is recommended that additional soil cover (safety zone) be placed between the root zone and cap if possible. The more soil that can be placed between the top of the cap/liner and the root zone of the trees, the better.
- Although trees, shrubs, and other deeper rooted vegetation have not been commonly used in the past, it is possible for a superfund site to support a wide variety of vegetation and landscaping features and still protect the integrity of the remedy; this approach allows for improved aesthetics and functionality.
- Shallow rooted tree species include elm, maple, birch, poplar, and evergreen.
- Local Act 2 site is using a clean soil cap as part of the remedy - PA DEP-approved cleanup plan allowed trees and required that root balls of trees and bushes be surrounded by a minimum of 2 feet of clean fill.

References

US EPA Fact Sheet: Revegetating Landfills and Waste Containment Areas.

http://www.epa.gov/tio/download/remed/revegetating_fact_sheet.pdf.

Reusing Cleaned Up Superfund Sites : Recreational Use of Land Above Hazardous Waste Containment Areas. <http://www.cluin.org/download/toolkit/thirdednew/reuseclean.pdf>.

A Guide for Selecting Shade and Flowering Trees for Pennsylvania Landscapes. Penn State College of Agricultural Sciences. <http://pubs.cas.psu.edu/FreePubs/pdfs/sc215.pdf>.

Concept Specifications for Park Pavilion and Community Building Utilities

As part of the conceptual redevelopment plan for the park area, a pavilion and community building are being considered for construction. In order to service these facilities with electric, water, sewer, and communications, utility lines will need to be installed and run to the facilities. Once the remedial actions are complete and the site is capped, disturbance of the cap and, more importantly, the waste material beneath the cap should be minimized to the extent possible. Special precautions will need to be taken to protect construction/utility workers in the event the waste material must be disturbed to install utilities or construct the facilities.

As described in the US EPA document *Reusing Superfund Sites: Commercial Use Where Waste Is Left on Site*, the effectiveness of a remedy can be compromised if the remedy is not consistent with the eventual use of a redeveloped site. As such, US EPA selects and implements remedies with the anticipated future use in mind. As a part of a remedy, US EPA may provide clean corridors for future utility access when anticipated use makes it likely that they will be needed.

In order to minimize the disturbance to the cap and waste material in the future at the Bo-Rit Site, the idea of installing a “clean utility corridor” has been suggested. Several conceptual utility corridor designs have been discussed by the project team including:

- Reinforced Concrete Pipe or HDPE Pipe

This approach would involve placing a concrete or HDPE pipe in the future utility run location. Potential issues associated with this approach include maintaining township-required separation distances between the individual utilities, sealing the pipes until they are ready for use, and difficulty working inside a confined area when the utilities are installed.

- Excavate and Install a Lined Utility Trench

This approach is likely more cost-effective and more user-friendly than the piping option. This approach involves excavating a trench to an adequate depth for future utility installation. Following excavation, the trench is lined with a highly visible, geotextile fabric and then backfilled with easily removable clean fill (soil, gravel, rip-rap, etc.). The trench can be designed to easily meet local utility separation distance requirements and made wide enough for utility installation work. The utility trench location should be surveyed or otherwise carefully noted so that it can be easily located in the future.

- Over-Cap

A third utility corridor installation approach involves placing a thicker layer of clean fill in areas where future utility runs will be located. For example, if the site remedy involves placement of a 2-foot thick clean fill layer above the waste material, a 6-foot thick layer could be placed where utilities will be located. This thicker clean fill layer will then allow for excavation and installation of utilities without penetrating the waste material.

Regardless of the option chosen, the future location of the buildings must be identified, to some degree, prior to installing the utility corridor.

Reference

US EPA Reusing Superfund Sites: Commercial Use Where Waste Is Left on Site.
http://www.epa.gov/superfund/programs/recycle/pdf/c_reuse.pdf.

Funding Opportunities

A variety of funding opportunities are potentially available for use in redeveloping the park area of the Bo-Rit Site as well as the West Ambler neighborhood.

- US EPA Brownfield Grants: Montgomery County RDA is applying for a US EPA revolving loan fund (RLF) for FY2013. Check with US EPA on eligibility of the site to utilize these funds if RLF is awarded.
- Other US EPA grants such as Area-Wide Planning grants, Building Blocks for Sustainable Communities Technical Assistance grants, *etc.*
- Pennsylvania Block Grants - Block grants are federal grants that provide money to state and local governments for a variety of regionally specific issues.
- PennVEST (Pennsylvania Infrastructure Investment Authority) – low interest loans.
- PennVEST green initiatives including Growing Greener Grants and Green Reserve.
- Natural Lands Trust <http://www.natlands.org/>
- PA Department of Conservation and Natural Resources (DCNR) – Community Conservation Partnerships Program.
- Corporate Foundations.
- Community/Family Foundations.

Redevelopment Guidelines for West Ambler Neighborhood

In order to redevelop industrial and commercial properties in the West Ambler neighborhood, the performance of real estate due diligence will be necessary. Conducting Phase I environmental site assessments (Phase I ESAs) prior to property acquisition is a critical first step. Phase I ESAs must be conducted in accordance with ASTM 1527-05 and US EPA *Standards and Practices for All Appropriate Inquiries* (40 CFR Part 312, *Federal Register* Vol. 70, No. 210, Pgs 6607-66113; AAI) standards and protocols. The AAI Final Rule established federal standards and practices for conducting all appropriate inquiries as required under Sections 101(35)(B)(ii) and (iii) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The regulation establishes specific regulatory requirements and standards for conducting AAs into the previous ownership and uses of a property for the purposes of meeting the all appropriate inquiries provisions necessary to partially qualify for certain landowner liability protections under CERCLA.

If a Phase I ESA indicates the potential presence of environmental impacts at a property and acquisition of the property remains an option, focused Phase II investigations should be conducted to determine the nature and extent of contamination at the property. If regulated substances are identified in soil or groundwater at a property above a regulatory limit, we recommend enrolling the property in the Pennsylvania Land Recycling Program. Often referred to as Act 2, the Land Recycling Program encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites. The Land Recycling Program allows an owner or purchaser of a brownfield site to choose any one or combination of cleanup standards to guide the remediation. By meeting one or a combination of the background standard, the statewide health standard, or the site-specific standard, the remediator will receive liability relief for the property from PA DEP.

The following phased investigation approach is suggested when considering a property for redevelopment in the West Ambler neighborhood:

- Conduct a Phase I ESA prior to acquiring a property.
- The results of the Phase I ESA should be used to evaluate if acquisition of the property is a reasonable option, particularly if recognized environmental conditions (RECs) are identified.
- Conduct Phase II investigations to determine nature and extent of contamination and determine if acquisition is still a reasonable option.
- Follow Act 2 process (Pennsylvania's Land Recycling Program). If impacts are identified, remediate, demonstrate attainment of a remediation standard, and obtain an Act 2 relief of liability.
- Remedial actions and standards are based on current and future land use.
- Remember – Act 2 treats recreational areas (parks, trails) as residential properties.

Reference

PA DEP - Pennsylvania's Land Recycling Program

http://www.portal.state.pa.us/portal/server.pt/community/land_recycling_program/20541.

I hope you have found the information contained in this memorandum helpful. Please contact me with any questions or comments. As always, we are here to help.

End of Memorandum.





Memorandum

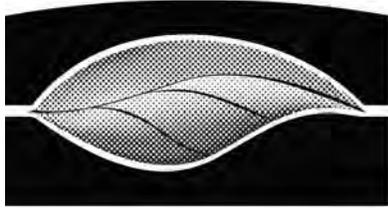
To: Peter M. Simone, RLA, FASLA
From: Thomas F. Hanna, P.E.
Date: January 15, 2013
Cc: Jeffrey Featherstone, Ph.D.
Subject: Summary of November 20, 2012 Meeting at 10:00 am
at the Temple University Ambler Campus Learning Center

Attendees:

Jeffrey Featherstone, Ph.D. (JF) – Temple University
Rick Fromuth (RF) – Temple University
Thomas Hanna, P.E. (TH) – Hunt Engineering
Pete Myers, P.E. (PM) – Hunt Engineering

1. The meeting began with TH reviewing the conceptual drainage sketch for the West Ambler neighborhood which includes new inlets and pipe to convey runoff to the Wissahickon Creek or Rose Valley Creek. The conceptual sketch also includes day-lighting the Rose Valley Creek from Railroad Avenue to the current outfall location South of West Maple Street.
 - a. JF and RF were in agreement with the idea of day-lighting the Rose Valley Creek and noted that during larger storm events, significant flooding has been experienced in the area North of Railroad Avenue, in addition to the area in the 200 Block of West Maple Street.
 - i. RF stated that currently, there is an approximate 7-foot diameter stormwater bypass pipe near the Philly Phamous Steak Shop (36 Tennis Avenue, North of Railroad Avenue), which conveys runoff to the South towards the Rose Valley Creek and it splits somewhere near West Maple Street into (2) 60-inch diameter pipes, which then outfall into the Rose Valley Creek south of West Maple Street.
2. The West Ambler neighborhood never had a flood map, as the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (map no. 42091C0286 E, effective date December 19, 1996) notes that the limit of detailed study is North of Railroad Avenue.
 - a. The study that is being done by the team at Temple University includes updating the FEMA flood maps to include the West Ambler Neighborhood. The study also includes looking at all types of volume capture opportunities of stormwater runoff within the Wissahickon Watershed for larger storm events, including infiltration trenches, galleries, and basins as well as detention facilities. Buyouts would be a major part of any flood mitigation strategy.
 - i. It is likely that the new flood maps will have a floodplain that includes the area in the 200 block of West Maple Street that has experienced flooding during large storm events in the past.
 - ii. The letter of map revision applications will come from each of the Townships in the Wissahickon Watershed and then Temple will send the updated flood maps to FEMA for sign-off.
 - b. A possible area for a volume capture opportunity of stormwater runoff in the West Ambler Neighborhood would be the open lots on the South side of the 200 block of Maple Street.
 - c. The study being done by Temple found that the Wissahickon Creek gauge in Fort Washington have recorded flows in the large storm events that are larger than the base flows used in the latest FEMA flood maps for the Wissahickon Watershed. The calculations by Temple have determined that the 100-year runoff volume that reaches Rose Valley Creek is approximately 2,300 cubic feet per second (CFS).

OVER **30 YEARS** OF ENGINEERING EXCELLENCE



SIMONE COLLINS
LANDSCAPE ARCHITECTURE
 119 EAST LAFAYETTE STREET NORRISTOWN, PA 19401
 PHONE: 610.239.7601 FAX: 610.239.7606
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MEETING NOTES

Project:	West Ambler Revitalization	Project No.:	12013.10
Location:	EPA Trailer – park site	Meeting Date/Time:	11.15.12 noon
Topic:	EPA work in park area	Issue Date:	11/16/2012

ATTENDEES:

Eduardo Rovira, EPA
 Roman Pronczak, Whitpain Township
 Ron Cione, Whitpain Township, Dir. Of Public Works
 Jim Blanch, Whitpain Township, Twp. Engineer
 Peter Simone, Simone Collins

NOTES:

The purpose of the meeting was to discuss the work EPA will be doing in the Township Park area. They are moving into this area right after Thanksgiving for about the next 6 months to finish the emergency removals phase of the project.

1. Eduardo presented a jersey barrier option and a curb option for the edge of the alley and the park. After much discussion all agreed that the curb option was preferred with a slope up to the park. There should be a level bench on the park side of the curb for a short distance (3 feet) before the slope begins. **(After meeting question from SC – can this flat area be excavated so that there is only clean material beneath so that trees can be planted here?).**
2. The slope from the curb / bench should be ideally planted with a native shrub so that this slope does not have to be continually maintained.
3. The curb reveal was discussed and it was recommend (after the meeting) by Ron Cione and Jim Blanch that the curb reveal should be 9 inches (with 9 inches below grade).
4. Roman requested that EPA prepare a clean trench for future water and sanitary sewer lines. These lines need to be separated by 10 feet, so the trench will be approx. 15 feet wide. Jim Blanch will coordinate these details with Eduardo / EPA. (After Meeting

Question / Suggestion – should the limits of this trench be survey so that the Township has a very accurate location of it? Note – both water and sewer will connect to Oak Street. Ron Cione to verify condition of sanitary line in Oak.

5. The question of whether or not the permanent fence around the Township park can be removed. This question is still pending. If a fence must remain, Eduardo stated that probably a temporary chain link construction fence can be place at the top of the slope (parallel to the alley).
6. Gates were discussed. The Gate at the Rose Valley Creek will remain. The Gate at Oak Street will remain. The gate at the west end of the site (towards Mt. Pleasant) will be removed.
7. The fence around the pile site and the north perimeter of the reservoir will remain.
8. The fence along the western end of the Township Park will/ may remain in parts. The details need to be worked out by the Township and EPA.
9. The concept plan for the park shows Ambler Alley wrapping back into the park. Eduardo will adjust the grade in this area to make this connection work. It may require the removal of additional contaminated material in this area.
10. The idea of a fence between the park and the Reservoir was discussed. EPA will not pay for a fence between these parcels. The Township and the Wissahickon Waterfowl Association will need to discuss this to determine if a fence is needed and if so, show pays for it.
11. The one alternate concept plan that shows a possible boys & girls club was discussed. It was agreed that the building will be located up close to the alley on the east side of the park. Parking behind. This will make it easier for EPA work grade the back of the site (toward the creek).
12. The group inspected the Rose Valley Creek work. The rip rap above the concrete “mat” will remain as placed. It was discussed that over time, this rip rap may gather silt and volunteer plants. It was agreed that this was preferable (rather than adding topsoil over the rip rap and seeding). Long term maintenance by the Township will include removal of woody tree species that might find their way to the embankment.
13. Pete mentioned the idea of adding area for small tree planting parallel to the creek. All were ok with that idea.
14. Eduardo commented that EPA can build the perimeter trail parallel to the Wissahickon Creek as a part of this phase. (Question – can EPA also build the trail shown parallel to the Rose Valley Creek?). Our understanding is that EPA will construct this trail of 6 inches of compacted 2a modified. (Note – This will need to be topped by 4” of stone screenings at a later date by the Township to make this trail handicapped accessible).
15. Eduardo asked that the Township / SC provide him with more details / layout information for 1. The trails; 2 the planting berms 3. Tree species and shrub species for the tree berms and alley plantings.

16. The group looked at the “ramp” (it is at a 4:1 gradient) down from the park across Rose Valley Creek. Pete suggested that as an alternative to a pedestrian bridge across the creek, perhaps stepping stones across the creek bottom would be adequate. This assumes access behind the reservoir to the pile site becomes possible in the future.
17. Eduardo provided the Township with recent as-built survey information of the township park area. He will also provide electronic copies of same.
18. Eduardo mentioned that the EPA office trailer will remain in its present location for the duration of EPA’s presence on the site.

This report represents the Professional’s summation of the proceedings and is not a transcript. Unless written notice of any correction or clarification is received by the Professional within ten days of issue, the report shall be considered factually correct and shall become part of the official project record.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE

Peter M. Simone, RLA, FASLA
President

Streetscape Improvements
 Whitpain Twp.
 Conceptual Costs

Date: 11/15/2012
 Prepared By: TH

Site / Street	Description	Quantity	Unit	Unit	Amount
* Does not include Maple Street from Mt. Pleasant Avenue to Oak Street					
Entire Project Area	Mobilize	1	LS	\$	5,000.00
	Traffic Control	1	LS	\$	20,000.00
Railroad Avenue (West of Mt. Pleasant Avenue) Total Length Approx. 1,380 L.F.	Demo Ex. Conc./Sidewalk	230	SY	\$	2,530.00
	Demo Ex. Curb	460	LF	\$	2,300.00
	Demo Ex. Asphalt	77	SY	\$	690.00
	New Sidewalks/Concrete Paving	2,070	SF	\$	12,006.00
	New Concrete Curb	460	LF	\$	10,120.00
	New Asphalt Paving	690	SF	\$	1,697.40
	New Grading (if required)	1	LS	\$	10,000.00
	New ADA Ramp	3	EA	\$	3,000.00
	New Signage & Striping	1	LS	\$	5,000.00
	Temporary Erosion Control	1	LS	\$	5,000.00
	New Shade Trees	28	EA	\$	9,800.00
	New Pre-Cast Conc. Sound Barriers	1,380	LF	\$	298,080.00
	Mill 1.5" Asphalt Pavement & Overlay	3,987	SY	\$	79,733.33
	Pedestrian Lights (50' Spacing)	28	EA	\$	126,000.00
				Subtotal	\$ 565,956.73
Alternate:	New Transparent Sound Barriers	1,380	LF	\$	331,200.00
				Subtotal	\$ 599,076.73

Assumptions:

- 1) Approx. 2/3 of the existing curbs and sidewalks on the South side are in good condition and will remain. No curb or sidewalk exists on the North side.
- 2) Only the South side will get new curbs and sidewalk to replace the approx. 1/3 existing in poor condition, and new lights. The North side will have new sound barriers.
- 3) Sound Barriers assumed height of 12 feet.

Streetscape Improvements Whitpain Twp. Conceptual Costs		Date: 11/15/2012	Prepared By: TH			
Site / Street	Description	Quantity	Unit	Unit	Amount	
Railroad Avenue (East of Mt. Pleasant Avenue) Total Length Approx. 1,330 L.F.	Demo Ex. Conc./Sidewalk	665	SY	\$ 11.00	\$ 7,315.00	
	Demo Ex. Curb	1,330	LF	\$ 5.00	\$ 6,650.00	
	Demo Ex. Asphalt	222	SY	\$ 9.00	\$ 1,995.00	
	New Sidewalks/Concrete Paving	5,985	SF	\$ 5.80	\$ 34,713.00	
	New Concrete Curb	1,330	LF	\$ 22.00	\$ 29,260.00	
	New Asphalt Paving	1,995	SF	\$ 2.46	\$ 4,907.70	
	New Grading (if required)	1	LS	\$ 10,000.00	\$ 10,000.00	
	New ADA Ramp	8	EA	\$ 1,000.00	\$ 8,000.00	
	New Signage & Striping	1	LS	\$ 5,000.00	\$ 5,000.00	
	Temporary Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00	
	New Shade Trees	24	EA	\$ 350.00	\$ 8,400.00	
	New Pre-Cast Conc. Sound Barriers	1,330	LF	\$ 216.00	\$ 287,280.00	
	Mill 1.5" Asphalt Pavement & Overlay	3,547	SY	\$ 20.00	\$ 70,933.33	
	Pedestrian Lights (50' Spacing)	26	EA	\$ 4,500.00	\$ 117,000.00	
Subtotal				\$	596,454.03	
Alternate:		New Transparent Sound Barriers	1,330	LF	\$ 240.00	\$ 319,200.00
Subtotal				\$	628,374.03	

Assumptions:

- Existing curbs and sidewalks are only found on the South side are in poor condition and will be demolished. No curb or sidewalk exists on the North side.
- Only the South side will get new curbs and sidewalk to replace the existing in poor condition, and new lights. The North side will have new sound barriers.
- Sound Barriers assumed height of 12 feet.

Streetscape Improvements Whitpain Twp. Conceptual Costs		Date: 11/15/2012	Prepared By: TH		
Site / Street	Description	Quantity	Unit	Unit	Amount
123 Oak Street (Railroad Ave. to Maple Street) Total Length Approx. 305 L.F.	Demo Ex. Conc./Sidewalk	153	SY	\$ 11.00	\$ 1,677.50
	Demo Ex. Curb	305	LF	\$ 5.00	\$ 1,525.00
	Demo Ex. Asphalt	51	SY	\$ 9.00	\$ 457.50
	New Sidewalks/Concrete Paving	2,745	SF	\$ 5.80	\$ 15,921.00
	New Concrete Curb	610	LF	\$ 22.00	\$ 13,420.00
	New Asphalt Paving	915	SF	\$ 2.46	\$ 2,250.90
	New Grading (if required)	1	LS	\$ 10,000.00	\$ 10,000.00
	New ADA Ramp	1	EA	\$ 1,000.00	\$ 1,000.00
	New Signage & Striping	1	LS	\$ 5,000.00	\$ 5,000.00
	Temporary Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
	New Shade Trees	12	EA	\$ 350.00	\$ 4,200.00
	Mill 1.5" Asphalt Pavement & Overlay	746	SY	\$ 20.00	\$ 14,911.11
	Pedestrian Lights (50' Spacing)	12	EA	\$ 4,500.00	\$ 54,000.00
			Subtotal	\$	129,363.01
Assumptions:					
1) Existing curbs and sidewalks are only found on the East side are in poor condition and will be demolished. No curb or sidewalk exists on the West side.					
2) Both the East side and West side will get new curbs, sidewalk, and lights.					

Site / Street	Description	Quantity	Unit	Unit	Amount
Oak Street (Maple Street to Park Site) Total Length Approx. 175 L.F.	Demo Ex. Conc./Sidewalk	115	SY	\$ 11.00	\$ 1,265.00
	Demo Ex. Curb	230	LF	\$ 5.00	\$ 1,150.00
	Demo Ex. Asphalt	38	SY	\$ 9.00	\$ 345.00
	New Sidewalks/Concrete Paving	1,575	SF	\$ 5.80	\$ 9,135.00
	New Concrete Curb	350	LF	\$ 22.00	\$ 7,700.00
	New Asphalt Paving	525	SF	\$ 2.46	\$ 1,291.50
	New Grading (if required)	1	LS	\$ 10,000.00	\$ 10,000.00
	New ADA Ramp	2	EA	\$ 1,000.00	\$ 2,000.00
	New Signage & Striping	1	LS	\$ 5,000.00	\$ 5,000.00
	Temporary Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
	New Shade Trees	0	EA	\$ 350.00	\$ -
	Mill 1.5" Asphalt Pavement & Overlay	428	SY	\$ 20.00	\$ 8,555.56
	Pedestrian Lights (50' Spacing)	6	EA	\$ 4,500.00	\$ 27,000.00
			Subtotal	\$	78,442.06
Assumptions:					
1) Existing curbs and sidewalks are found on the East & West sides within approx. 115-feet of Maple Street and are in poor condition and will be demolished.					
2) Both the East side and West side will get new curbs, sidewalk, and lights.					

Streetscape Improvements
Whitpain Twp.
Conceptual Costs

Date: 11/15/2012
 Prepared By: TH

Site / Street	Description	Quantity	Unit	Unit	Amount
Maple Street (Oak Street to Rose Valley Creek Area) Total Length Approx. 675 L.F.	Demo Ex. Conc./Sidewalk	100	SY	\$ 11.00	\$ 1,100.00
	Demo Ex. Curb	540	LF	\$ 5.00	\$ 2,700.00
	Demo Ex. Asphalt	90	SY	\$ 9.00	\$ 810.00
	New Sidewalks/Concrete Paving	2,430	SF	\$ 5.80	\$ 14,094.00
	New Concrete Curb	540	LF	\$ 22.00	\$ 11,880.00
	New Asphalt Paving	810	SF	\$ 2.46	\$ 1,992.60
	New Grading (if required)	1	LS	\$ 10,000.00	\$ 10,000.00
	New ADA Ramp	4	EA	\$ 1,000.00	\$ 4,000.00
	New Signage & Striping	1	LS	\$ 5,000.00	\$ 5,000.00
	Temporary Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
New Shade Trees	22	EA	\$ 350.00	\$ 7,700.00	
Mill 1.5" Asphalt Pavement & Overlay	1,950	SY	\$ 20.00	\$ 39,000.00	
Pedestrian Lights (50' Spacing)	26	EA	\$ 4,500.00	\$ 117,000.00	
	Subtotal			\$	\$ 220,276.60

Assumptions:
 1) Existing curbs and sidewalks are found on approx. 60% of the Street and are in good condition and will remain.
 2) Both the East side and West side will get new curbs and sidewalk for approx. 40% of the Street, and lights for the entire length.

Entire Area Drainage Improvements	Description	Quantity	Unit	Unit	Amount
Entire Area Drainage Improvements	18" HDPE Storm Sewer	1350	LF	\$ 50.00	\$ 67,500.00
	24" HDPE Storm Sewer	660	LF	\$ 60.00	\$ 39,600.00
	36" HDPE Storm Sewer	190	LF	\$ 75.00	\$ 14,250.00
	Inlet	28	EA	\$ 2,500.00	\$ 70,000.00
	Manhole	2	EA	\$ 2,700.00	\$ 5,400.00
	Endwall	3	EA	\$ 1,500.00	\$ 4,500.00
	Rip Rap at Endwall	3	EA	\$ 1,500.00	\$ 4,500.00
	Subtotal			\$	\$ 205,750.00

Assumptions:
 1) All pavement, curb, sidewalk restoration is covered by the Streetscape costs.

Streetscape Improvements Whitpain Twp. Conceptual Costs					Date: 11/15/2012
					Prepared By: TH
Site / Street	Description	Quantity	Unit	Unit	Amount
125				Entire Project Subtotal	\$ 1,821,242
				Contingency %	20%
				Contingency \$	\$ 364,248
				Total	\$ 2,185,491
* Alternate Soundwall					
				Entire Project Subtotal	\$ 1,886,282
				Contingency %	20%
				Contingency \$	\$ 377,256
				Total	\$ 2,263,539



APPENDIX

McMAHON ASSOCIATES, INC.
425 Commerce Drive | Suite 200 | Fort Washington, PA 19034
p 215-283-9444 | f 215-283-9445
www.mcmahonassociates.com

January 23, 2013

Mr. Roman Pronczak, P.E.
Township Manager
Whitpain Township
960 Wentz Road
Blue Bell, PA 19422

PRINCIPALS
Joseph W. McMahon, P.E.
Joseph J. DeSantis, P.E., PTOE
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Casey A. Moore, P.E.
Gary R. McNaughton, P.E., PTOE

ASSOCIATES
John J. Mitchell, P.E.
Christopher J. Williams, P.E.
John F. Yacapsin, P.E.
R. Trent Ebersole, P.E.

Attention: Mr. James Blanch, P.E.

RE: Multi-Way Stop Analysis for Mt. Pleasant Avenue/Maple Avenue
Whitpain Township, Montgomery County, Pennsylvania
McMahon Project No. 812717.11

Dear Roman:

As requested, McMahon Associates, Inc. (McMahon) has completed an engineering study to evaluate the existing and potential traffic control for the intersection of Mt. Pleasant Avenue/Maple Avenue located in Whitpain Township, Montgomery County. This letter report is being provided to address the concerns of various residents that were discussed during the public meetings held for the *West Ambler Neighborhood Revitalization Study*. The primary concern of area residents was the overall safety of the intersection given that there is limited sight distance for vehicles pulling out of Maple Avenue onto Mt. Pleasant Avenue. This study provides an evaluation of the current intersection operations, as well as an evaluation of the potential alternatives to address existing deficiencies.

Based upon the results of this analysis, we offer the following recommendations to improve the operations of the Mt. Pleasant Avenue/Maple Avenue intersection:

- Install a "STOP" (R1-1) sign, a white stop bar (24" wide), and "STOP" pavement marking along both approaches of Mt. Pleasant Avenue at Maple Avenue;
- If traffic conditions are monitored, and the Township prefers to eliminate the southbound stop sign to eliminate queuing through Railroad Avenue, then the following additional signage should be provided at a future date to the other approaches:
 - "ONCOMING TRAFFIC DOES NOT STOP" plaque (W4-4bP) for the northbound approach of Mt. Pleasant Avenue, and
 - "TRAFFIC FROM RIGHT DOES NOT STOP" plaque (W4-4aP) for the westbound approach of Maple Avenue.
- Install a "STOP AHEAD" (W3-1) sign approximately 250 to 300 feet in advance of the new stop bars for each approach;
- Install a "DO NOT STOP ON TRACKS" (R8-8) sign at the southbound approach to the railroad crossing; and
- Install a modified "INTERSECTION AHEAD" (R2-7R) sign with a roadway name plaque (W16-8aP) approximately 75 feet in advance of the railroad crossing along the southbound approach.

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Mr. Roman Pronczak, P.E.

January 23, 2013

Page 2

The installation of a stop sign along the northbound approach of Mt. Pleasant Avenue or both approaches of Mt. Pleasant Avenue should improve the safety of all turning movements from Maple Avenue to Mt. Pleasant Avenue given the sight distance restriction caused by the adjacent bridge structure over the Wissahickon Creek. If one of the alternatives was implemented and post-installation observations were to indicate any operational issues, then the intersection configuration could easily be modified to comply with the other (two-way) stop-control alternative, although non-traditional.

Existing Conditions

This section provides an overview of the existing operations of the intersection of Mt. Pleasant Avenue/Maple Avenue. For purposes of this letter, Mt. Pleasant Avenue will be labeled as a north/south roadway, and Maple Avenue will be referred to as east/west routes.

Mt. Pleasant Avenue is a two-lane highway with a posted speed limit of 35 miles per hour, while Maple Avenue has a posted speed limit of 25 miles per hour and permits on-street parking on the south side of the roadway. The cartway width of Mt. Pleasant Avenue is 24 feet to the north and 30 feet to the south, while the cartway width of Maple Avenue varies from 22 feet to 26 feet. Under current conditions, stop-control is provided along the Maple Avenue approach to Mt. Pleasant Avenue.

To the north along Mt. Pleasant Avenue, there is an active SEPTA railroad crossing that is utilized by SEPTA's Regional R5 Line that provides service between Doylestown/Lansdale and Center City Philadelphia. The railroad crossing is located approximately 400 feet to the north. Located approximately 100 feet to the south along Mt. Pleasant Avenue is the bridge structure over the Wissahickon Creek. There is a concrete parapet wall provided on both sides of the bridge above the roadway grade. The bridge wall along with the vertical alignment along the northbound approach of Mt. Pleasant Avenue restricts the sight distance for drivers egressing from Maple Avenue onto Mt. Pleasant Avenue. Thus, this evaluation was conducted to determine if warrants and the operation of the subject intersection would be improved with additional intersection controls.

Traffic Counts

Daily traffic counts were conducted along Mt. Pleasant Avenue in December 2012 to determine the volumes, types of vehicles, and speeds. According to the daily traffic counts, which are provided in **Attachment A**, Mt. Pleasant Avenue carries approximately 11,075 vehicles per day (total both directions), of which approximately 8% are classified as heavy vehicles. The 85th percentile travel speeds along Mt. Pleasant Avenue are 37 and 35 miles per hour in the northbound and southbound directions of travel, respectively. These travel speeds are close to the posted speed limit of 35 miles per hour along Mt. Pleasant Avenue.

In addition to the daily traffic counts, 12-hour manual turning movement counts were also conducted from 6:00 AM to 6:00 PM at the intersection. The typical weekday morning (7:00 AM to 9:00 AM) and weekday afternoon (4:00 PM to 6:00 PM) commuter peak hours have also been summarized for the four highest, consecutive 15-minute peak intervals during the traffic count periods. The results of the traffic counts are

Mr. Roman Pronczak, P.E.
January 23, 2013
Page 3

tabulated by 15-minute intervals in **Attachment B**. Also included in Attachment B is a summary table that documents the conservative balancing that was applied to these counts to balance them with the adjacent intersection of Mt. Pleasant Avenue/Railroad Avenue. **Figure 1** provides a summary of the weekday morning and weekday afternoon peak hour traffic volumes.

Capacity/Level-of-Service Analysis

An analysis of the existing weekday commuter peak hour traffic operational conditions was completed for the intersection of Mt. Pleasant Avenue with Maple Avenue. Under current conditions, the stop-controlled approach of Maple Avenue operates at acceptable conditions (LOS C or better) during both peak hours. Copies of the existing capacity/level-of-service analysis worksheets for the weekday morning and weekday afternoon peak hours are provided in **Attachment C**, while the level-of-service results are illustrated on **Figure 2**.

In addition, a simulation of the intersection was also conducted that included the typical peak hour operations of the adjacent SEPTA regional rail crossing using SYNCHRO Software's SimTraffic program. This was done to provide a base-case for comparing the various alternatives for the intersection, as well as to confirm that the simulation results were consistent with field observations. A summary of the anticipated maximum observed queues and the spacing between Maple Avenue and the railroad crossing is illustrated in Figure 2. The maximum observed queues from the simulation are generally consistent with the peak hour field observations under current conditions.

Crash Analysis

Crash data supplied by the Whitpain Township Police Department was also reviewed for the intersection of Mt. Pleasant Avenue/Maple Avenue. During the seven year period from 2005 to 2012, there were a total of 14 crashes reported to the Township in the vicinity of the intersection of Mt. Pleasant Avenue/Maple Avenue. There were four rear-end accidents along the southbound approach of Mt. Pleasant Avenue approaching Maple Avenue and two angle crashes: one involving a vehicle turning left-into Maple Avenue and one involving a vehicle turning left-out of Maple Avenue. In addition, there was also one crash along Maple Avenue at the stop sign where the vehicle in front backed into another vehicle waiting behind. There were also four crashes along Maple Avenue involving parked vehicles.

In general, the number of rear-end crashes along the southbound approach of Mt. Pleasant Avenue to Maple Avenue indicate that vehicles may not anticipate stopping along Mt. Pleasant Avenue to pause for traffic turning left into Maple Avenue. As the sight distance meets PennDOT's desirable distance for a vehicle approaching a left-turning vehicle from behind (see Table 2), some type of advance warning signage may be necessary to alert drivers to the potential need to stop along this approach.

A review of the cartway width along Maple Avenue was also completed, since there were multiple crashes involving parked vehicles. The current cartway width along Maple Avenue varies from 22 feet to 26 feet. For a two-way street to have on-street parallel parking on one side only, a minimum cartway width of 32-foot should be provided; however, given the spacing to adjacent buildings/residences, it may not be feasible to widen the roadway. In order to reduce these types of crashes along Maple Avenue, it is recommended

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 4

that a white shoulder line (W-4") be striped along the south side of the road to delineate a 6-foot wide area for on-street parking. A double yellow (DY-4") line should also be provided to delineate the travel lanes along Maple Avenue, which should both be approximately 10 feet wide. Additional "NO PARKING" signs (R7-1) may also need to be installed along the north side of the roadway.

Sight Distance

Sight distance field measurements were performed for vehicles exiting from the stop-controlled approach of Maple Avenue looking to the left and right, as well as for vehicles turning left into Maple Avenue from Mt. Pleasant Avenue. Generally, the posted speed limit or 85th percentile speed, roadway grades and profiles, and the number of travel lanes play a role in determining the required safe sight distances. As the Township does not have specific requirements for intersection sight distance, the existing available sight distances were measured in the field for each location and compared to PennDOT's desirable and minimum safe stopping sight distance (SSSD) requirements for two-lane roads, which are contained in *Tables 1 and 5 of the Pennsylvania Code (Title 67), Chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads and Pub 282, Highway Occupancy Permit Handbook*.

According to *Section 441.8(h)(2)(ii) of Chapter 441*, the posted speed limit is utilized to determine the desirable sight distance unless, the 85th percentile speed does not vary from the posted speed by more than 10 miles per hour. The 85th percentile speeds along Mt. Pleasant Avenue are within 2 miles per hour of the posted speed limit. As a result, the posted speed limit will be utilized to determine the desirable and minimum sight distance requirements, which are summarized in **Table 1** along with the existing available sight distance.

The concrete parapet wall for the bridge located to the south along Mt. Pleasant Avenue along with the vertical alignment of Mt. Pleasant Avenue combine to restrict the ability of vehicles exiting Maple Avenue to safely see approaching vehicles from the left (south). Adequate sight distance is needed for vehicles turning both left and right out of Maple Avenue, so only providing a turn restriction will not resolve this issue. Furthermore, since the wall is part of the bridge structure, it cannot be removed and modifying the vertical alignment of Mt. Pleasant Avenue would also require modifying the elevation of the existing bridge structure, which would be cost prohibitive.

**Table 1 – Sight Distance Evaluation:
Mt. Pleasant Avenue and Maple Avenue**

Description	Direction	Posted Speed (mph)	Approach Grade	Sight Distance (feet)			Satisfied
				Desirable	Minimum	Available	
Exiting Maple Avenue	Looking Left	35	-2%	440	256	107 ⁽¹⁾	No
	Looking Right	35	-4%	350	265	379	Yes
Left-Turns entering Maple Avenue	From the Rear	35	-4%	300	265	371	Yes
	Looking Ahead	35	-2%	300	256	≥ 700	Yes

(1) Sight distance is restricted due to the wall for the bridge across Mt. Pleasant Avenue.

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 5

In order to meet the minimum sight distance requirements, the intersection of Maple Avenue with Mt. Pleasant Avenue would need to be relocated approximately 150 feet to the north. This would require the intersection to be located through the parking lot for the American Legion. The intersection would then be 250 feet south of the railroad tracks. Since relocating Maple Avenue less than 150 feet to the north will not satisfy the minimum safe sight distance guidelines, a minor relocation would not be considered a viable alternative to address this issue. Therefore, it can be concluded that the only other viable alternatives to address the sight distance deficiency is to provide some type of stop-control along one or both of the Mt. Pleasant Avenue approaches, make Maple Avenue one-way inbound (eastbound) only, or install a traffic control signal, if warrants are satisfied. These alternatives are discussed and were considered below, also with the fact that the SEPTA railroad tracks are located about 400 feet to the north.

Adjacent Railroad Crossing

Along with any alternatives consideration, McMahon sought to quantify the impacts that the SEPTA regional railroad crossing has on Mt. Pleasant Avenue, which may influence the subject intersection operations. Field observations were conducted to determine the average time that traffic is stopped along Mt. Pleasant Avenue along with the number of vehicles queued on each approach to the railroad during each of the commuter peak periods. In addition, the regional rail schedule was also reviewed to determine the number of times the trains would stop traffic.

Field observations of the railroad crossing indicate that when a train is crossing the roadway, traffic is stopped along Mt. Pleasant Avenue for approximately 45 seconds. During the weekday morning peak hour, there were approximately five vehicles queued in both the northbound and southbound directions of travel approaching the railroad crossing. During the weekday afternoon peak hour, there were approximately eight vehicles queued in the northbound direction of travel approaching the railroad and approximately five vehicles queued in the southbound direction of travel.

A review of the SEPTA Regional R5 train schedule was also performed to determine how often Mt. Pleasant Avenue may be impacted by train crossings under the present schedule. Table 2 provides a summary of the inbound and outbound trains during the commuter peak periods to/from the Ambler Station. The station is located approximately 3,000 feet to the east from this crossing. As can be seen from the table, on average, there are approximately 5 trains per hour during the weekday morning peak period and approximately 6 trains per hour during the weekday afternoon peak period.

Table 2 – SEPTA R5 Regional Rail Schedule ⁽¹⁾

Weekday Morning		Weekday Afternoon	
Time of Day	Train	Time of Day	Train
7:03	Inbound	4:02	Inbound
7:18	Outbound	4:30	Outbound
7:21	Inbound	4:31	Inbound
7:28	Inbound	4:47	Outbound
7:46	Inbound	5:00	Outbound
7:53	Outbound	5:01	Inbound
8:02	Inbound	5:18	Outbound
8:23	Outbound	5:30	Outbound
8:33	Inbound	5:34	Inbound
8:41	Outbound	5:51	Outbound
		5:57	Outbound

(1) Arrival times for inbound trains to Center City and outbound trains from Center City to/from the Ambler Station during a typical weekday.

Evaluation of Traffic-Control Alternatives

In order to address the safety issues associated with the lack of sight distance to the left for vehicles exiting Maple Avenue, this section provides an evaluation of the four potential traffic-control alternatives. A review of the multi-way stop-control warrants is provided, followed by an evaluation of the two alternatives to provide stop control along Mt. Pleasant Avenue in addition to the stop-control provided along Maple Avenue. The first alternative evaluates the provision of stop signs on both approaches of Mt. Pleasant Avenue so that the intersection will operate as a conventional multi-way, stop-controlled intersection. The second alternative evaluates the provision of providing stop-control along the northbound approach of Mt. Pleasant Avenue only, which although is not conventional, does address the safety issues associated with the intersection. The third alternative to address the sight distance issue is to restrict Maple Avenue to one-way entering (eastbound) traffic only, while the fourth alternative evaluates the warrants and provision of installing a traffic control signal at the intersection.

Multi-Way Stop-Control Warrants

According to the *Manual of Uniform Traffic Control Devices (MUTCD)*, the decision to provide multi-way stop-control should be based upon the following criteria:

- Where traffic control signals are justified, the multi-way stop can be used as an interim measure;
- Five or more reportable crashes in a 12-month period that are susceptible to correction with the multi-way stop-control;

Mr. Roman Pronczak, P.E.
 January 23, 2013
 Page 7

- Minimum volumes where the volume entering the intersection from both major street approaches averages at least 300 vehicles per hour for any 8 hours on an average day and the combined vehicular, pedestrian, and bicycle volumes entering the intersection from the minor street approaches averages at least 200 vehicles per hour during the same 8 hours, with the average delay to minor-street vehicles at least 30 seconds per vehicle during the highest hour. However, if the 85th percentile approach speeds of the major-street exceeds 40 miles per hour, the minimum volumes can be reduced by 30-percent;
- There is a need to control left-turn conflicts;
- There is a need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross-traffic is also required to stop; or
- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

A review of the minimum volumes at the intersection was conducted based upon the 12-hours of count data, which indicates that although Mt. Pleasant Avenue satisfies the minimum volume criteria (over 300 vehicles per hour), the minimum volumes are not satisfied along Maple Avenue (less than 35 vehicles per hour). In addition, the minimum delay during either peak hour does not exceed 30 seconds per vehicle along the Maple Avenue approach under current conditions. A review of the 85th percentile travel speeds along Mt. Pleasant Avenue, indicate that the approach speeds are less than 40 miles per hour, and as a result, a reduction in the minimum volumes cannot be applied. A copy of the volume warrant criteria is provided in **Attachment D**.

A review of the crash data also indicates that there have not been five or more reportable crashes at the intersection over a 12-month period that would warrant the installation of multi-way stop control. However, **the intersection does satisfy the criteria to provide some type of multi-way stop-control based upon the sight distance restriction for vehicles exiting Maple Avenue looking to the left that cannot be fixed by relocating the roadway or providing some other type of geometric improvement.** Therefore, the provision of stop-control on one or both of the Mt. Pleasant Avenue approaches to the intersection is recommended to allow a vehicle exiting Maple Avenue to more safely negotiate through the intersection.

Alternative 1: Multi-Way Stop-Control

The first alternative to improve the ability of vehicles exiting Maple Avenue to safely exit onto Mt. Pleasant Avenue is to provide stop-control on both approaches of Mt. Pleasant Avenue. **Figure 3** provides a summary of the anticipated peak hour capacity/level-of-service analyses results along with the anticipated maximum vehicular queues from the simulation of the intersection. A copy of the capacity/level-of-service analysis and the anticipated queues from the simulation are provided in **Attachment E**.

As indicated in the analyses, although the intersection will continue to operate at acceptable conditions overall (LOS C or better), the overall levels of service will drop compared to current conditions (LOS A). This is a result of stopping traffic along the Mt. Pleasant Avenue approaches. Additionally, the analysis indicates that both of the stop-controlled approaches of Mt. Pleasant Avenue have the potential to queue up

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 8

to approximately 200 feet (half-way toward the railroad tracks). In the southbound direction of travel, this should not result in vehicles stopping along the railroad crossing. However, to prevent this situation from occurring, if this alternative is selected, additional signage should be provided at the tracks stating "DO NOT STOP ON TRACKS" (R8-8).

In both directions of travel, "STOP" (R1-1) signs, a stop bar, and pavement markings stating "STOP" should be provided along Mt. Pleasant Avenue. In addition, "STOP AHEAD" (W3-1) signs should also be provided approximately 250 to 300 feet in advance of the new "STOP" (R1-1) signs at the intersection to alert drivers to the stop.

Alternative 2: Two-Way Stop-Control

For this alternative, stop-control is only provided along the northbound approach of Mt. Pleasant Avenue, as stopping traffic along this approach will address the sight distance restriction. **Figure 4** provides a summary of the anticipated peak hour capacity/level-of-service results and the anticipated maximum vehicular queues, which are both based upon the simulation of the intersection. A copy of the capacity/level-of-service analysis and the anticipated queues from the simulation are provided in **Attachment F**.

As can be seen, the intersection would continue to operate at LOS A conditions overall during both peak hours with the two stop-controlled approaches also operating acceptably (LOS B or better). Since the southbound approach of Mt. Pleasant Avenue is not stop-controlled, there is no queue anticipated along this approach. The queue along the northbound approach of Mt. Pleasant Avenue will be similar to the anticipated queues in the first alternative.

As with the first alternative, a "STOP AHEAD" (W3-1) sign should be installed along the northbound approach prior to the "STOP" (R1-1) sign. In the southbound direction of travel, it may be beneficial to install a modified "INTERSECTION AHEAD" (R2-7R) sign to alert motorists to the Railroad Avenue and Maple Avenue intersections. Since the southbound approach of Mt. Pleasant Avenue will not be stop-controlled, additional signage plaques will need to be installed along the other two approaches. For the northbound approach of Mt. Pleasant Avenue, an "ONCOMING TRAFFIC DOES NOT STOP" plaque (W4-4bP) should be provided, while for the westbound approach of Maple Avenue a "TRAFFIC FROM RIGHT DOES NOT STOP" plaque (W4-4aP) should be provided.

Alternative 3: One-Way Eastbound (Ingress Only) Maple Avenue

For this alternative, traffic along Maple Avenue between Mt. Pleasant Avenue and Oak Street will be restricted to one-way eastbound (ingress only) movements. As a result, traffic that currently exits from this location to Mt. Pleasant Avenue will need to be rerouted to Railroad Avenue. For this alternative to work, additional stop-control will need to be provided along the Mt. Pleasant Avenue approaches to Railroad Avenue, since there is a sight distance restriction that impacts the ability of traffic turning left-out of Railroad Avenue to safely see approaching vehicles from the right. However, while the intersection would have adequate capacity, there may be some confusion for drivers caused by the spacing of the intersection. The northbound and southbound stop bars would be located over 100 feet apart as a result of the offset

Mr. Roman Pronczak, P.E.
 January 23, 2013
 Page 9

between the two Railroad Avenue approaches and the adjacent railroad crossing. This will also create additional confusion as to which approach has the right-of-way following a train crossing on the tracks. For these reasons, this alternative is not recommended.

Alternative 4: Traffic Control Signal Installation

In order to install a traffic control signal at the intersection of Mt. Pleasant Avenue/Maple Avenue, the minimum volume criteria would need to be met for either the Eight-Hour or Four-Hour Signal Warrant. A copy of the warrant criteria based upon the *Manual of Uniform Traffic Control Devices (MUTCD)* for these two warrants has been provided in **Attachment G** for review.

As the 85th percentile travel speeds along Mt. Pleasant Avenue are less than 40 miles per hour, the major street volumes (total of both approaches) would need to be at least 500 vehicles per hour, while the minor street volume would need to exceed 150 vehicles per hour. A review of the 12-hour count data indicates that this condition would only be met for five hours from 7:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM. However, the minor street volume is less than 35 vehicles per hour. As a result, the Eight-Hour Signal Warrant criteria would not be met.

A review of the warrant chart for the Four-Hour Signal Warrant indicates that the traffic volumes exiting Maple Avenue would need to be at least 150 vehicles per hour based upon the current volumes along Mt. Pleasant Avenue. This would require traffic volumes along Maple Avenue to be four times their current values, which is not realistic. As a result, it can be concluded that the installation of a traffic control signal at this intersection would not be warranted.

Recommendations

Based on the above discussions, following recommendations are made regarding the traffic control for the intersection of Mt. Pleasant Avenue with Maple Avenue:

- Install a "STOP" (R1-1) sign, a white stop bar (24" wide), and "STOP" pavement marking along both approaches of Mt. Pleasant Avenue at Maple Avenue;
- If traffic conditions are monitored, and the Township prefers to eliminate the southbound stop sign to eliminate queuing through Railroad Avenue, then the following additional signage should be provided at a future date to the other approaches:
 - "ONCOMING TRAFFIC DOES NOT STOP" plaque (W4-4bP) for the northbound approach of Mt. Pleasant Avenue, and
 - "TRAFFIC FROM RIGHT DOES NOT STOP" plaque (W4-4aP) for the westbound approach of Maple Avenue.
- Install a "STOP AHEAD" (W3-1) sign approximately 250 to 300 feet in advance of the new stop bars for each approach;
- Install a "DO NOT STOP ON TRACKS" (R8-8) sign at the southbound approach to the railroad crossing; and

APPENDIX

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 10

- Install a modified "INTERSECTION AHEAD" (R2-7R) sign with a roadway name plaque (W16-8aP) approximately 75 feet in advance of the railroad crossing along the southbound approach.

With the implementation of the additional stop signs along Mt. Pleasant Avenue, along with the additional signage recommendations, the safety of this intersection will be improved for vehicles exiting Maple Avenue and drivers along Mt. Pleasant Avenue will be more aware of the presence of this intersection. If upon monitoring the traffic conditions after installation of the additional stop signs along Mt. Pleasant Avenue, it is determined that there is a queuing issue along the southbound approach of Mt. Pleasant Avenue that would extend to the railroad tracks to the north, the stop sign along the southbound approach could be removed and the additional signage plaques installed for the other approaches to instead have a two-way stop-controlled intersection.

We trust that this evaluation responds to your requests as related to the operation and safety of the intersection. If you have any questions, or require further clarification, please feel free to contact me or Casey A. Moore, P.E.

Sincerely,


Sandy A. Koza, P.E., PTOE
Project Manager

Attachments

SAK\

F:\eng\812717\Correspondence\Municipal\Letter Report (Maple Avenue Only).docx



APPENDIX

McMAHON ASSOCIATES, INC.
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January 23, 2013

Mr. Roman Pronczak, P.E.
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Attention: Mr. James Blanch, P.E.

RE: Circulation and Traffic Control Study for West Ambler
Maple Avenue, Mt. Pleasant Avenue, Railroad Avenue and Oak Street
Whitpain Township, Montgomery County, Pennsylvania
McMahon Project No. 812717.11

Dear Roman:

As requested, McMahon Associates, Inc. (McMahon) has completed an engineering study to evaluate the existing and potential circulation for the West Ambler neighborhood located within Whitpain Township, Montgomery County. The study area is bounded by Maple Avenue, Mt. Pleasant Avenue, Railroad Avenue, and Oak Street. A revitalization study is currently being conducted and led by Simone Collins for this neighborhood, which includes plans to provide a park to the south of Maple Avenue that would include options, such as a trail system and potentially an amphitheater.

This letter report is being provided to address the concerns raised at the public meetings for the Revitalization Study. The primary concern raised by some area residents was the safety and operations of the intersection of Mt. Pleasant Avenue/Maple Avenue given the limited sight distance at the intersection, and the appropriate traffic control that should be provided. The operations of this intersection have been included in a separate letter report where providing additional stop control along Mt. Pleasant Avenue, either along the northbound approach only or along both approaches to Maple Avenue, was recommended. Another topic of concern raised by the Township and others is the flow of traffic along Railroad Avenue, which could potentially be restricted to one-way operations in order to provide more adequate space for on-street parking, as well as improvements to the intersection operations and safety at Mt. Pleasant Avenue, especially after revitalization. Additionally, as improvements are also planned for Beech Alley, which connects Maple Avenue to Oak Street, the flow of traffic along this alley will also be discussed.

As both Maple Avenue and Railroad Avenue intersect Mt. Pleasant Avenue and are located approximately 375 feet apart, the overall circulation and operations of both intersections is included

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 2

in this letter report, as any restrictions along Railroad Avenue will impact traffic patterns entering and/or exiting Maple Avenue. An evaluation and discussion of the potential impacts to the SEPTA regional rail crossing located within 50 feet of the intersection of Mt. Pleasant Avenue/Railroad Avenue is also included herein that determines what impacts queues from the vehicles along Mt. Pleasant Avenue will have on and at the Railroad Avenue intersection.

Existing Conditions

This section provides an overview of the existing operations and circulation patterns within the West Ambler Neighborhood, as bounded by Maple Avenue, Mt. Pleasant Avenue, Railroad Avenue, and Oak Street (see **Figure 1**). Since a separate letter report has been prepared specific to the intersection control and operations of Mt. Pleasant Avenue/Maple Avenue, this section primarily focuses on the overall circulation patterns of the roadways, as well as the operations at the intersection of Mt. Pleasant Avenue/Railroad Avenue. For purposes of this letter, Mt. Pleasant Avenue will be labeled as a north/south roadway, and Maple Avenue and Railroad Avenue will be referred to as east/west routes.

Current Circulation Patterns

Mt. Pleasant Avenue is a two-lane highway with a posted speed limit of 35 miles per hour. The cartway width of Mt. Pleasant Avenue is 24 feet to the north of Maple Avenue and 30 feet to the south of Maple Avenue. At its intersection with Maple Avenue, stop-control is provided along the westbound approach of Maple Avenue to Mt. Pleasant Avenue. Maple Avenue has a posted speed limit of 25 miles per hour with parking permitted along the south side of the roadway. The cartway width along Maple Avenue varies from 22 feet to 26 feet. It has been recommended to improve the control and safety of the intersection of Mt. Pleasant Avenue/Maple Avenue by providing additional stop-control along both approaches of Mt. Pleasant Avenue or only the northbound approach of Mt. Pleasant Avenue in order to address the sight distance restrictions at the intersection.

The intersection of Mt. Pleasant Avenue/Railroad Avenue is located approximately 375 feet to the north of Maple Avenue. The intersection of Mt. Pleasant Avenue/Railroad Avenue is a four-legged intersection with stop-control provided along the Railroad Avenue approaches, which are slightly offset from one another. The western leg of Railroad Avenue has a cartway width of 24 feet, while the eastern leg has a cartway width of 20 feet to Oak Street with on-street parking, including dedicated handi-cap spaces provided on the south side of the roadway. To the east of Oak Street, the cartway width along Railroad Avenue is 28 feet. Railroad Avenue has a posted speed limit of 25 miles per hour.

An active railroad crossing also currently exists within 50 feet of the intersection of Mt. Pleasant Avenue/Railroad Avenue that is utilized by SEPTA's Regional R5 Line that provides service between Doylestown/ Lansdale and Center City Philadelphia. Field observations of the railroad

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 3

crossing along with a review of the daily train schedule were also completed as part of the Mt. Pleasant Avenue/Maple Avenue intersection report. Field observations of the railroad crossing conducted in December 2012 indicate that when a train is crossing the roadway, traffic is stopped along Mt. Pleasant Avenue for approximately 45 seconds. During the weekday morning peak hour, there were approximately five vehicles queued in both the northbound and southbound directions of travel approaching the railroad crossing. During the weekday afternoon peak hour, there were approximately eight vehicles queued in the northbound direction of travel approaching the railroad and approximately five vehicles queued in the southbound direction of travel. The review of the inbound and outbound train schedule during the commuter peak periods indicates that on average, there are approximately 5 trains per hour during the weekday morning peak period and approximately 6 trains per hour during the weekday afternoon peak period of commuter travel.

Oak Street is an existing, one-way road with parking permitted along both sides. The flow of traffic along Oak Street is currently restricted to the northbound direction of travel. Beech Alley, which is not officially signed under current conditions, connects Maple Avenue to Oak Street. Improvements are proposed for Beech Alley as part of the neighborhood revitalization. **Figure 2** provides an overview of the current traffic control and circulation patterns within the study area.

Traffic Volumes

Daily traffic counts were conducted along Mt. Pleasant Avenue in December 2012 to determine the volumes, types of vehicles, and speeds. According to the daily traffic counts, which are provided in **Attachment A**, Mt. Pleasant Avenue carries approximately 11,075 vehicles per day (total both directions), of which approximately 8% are classified as heavy vehicles. The 85th percentile travel speeds along Mt. Pleasant Avenue are approximately 37 and 35 miles per hour in the northbound and southbound directions of travel, respectively. These travel speeds are close to the posted speed limit along Mt. Pleasant Avenue of 35 miles per hour.

In addition to the daily traffic counts, 12-hour manual turning movement counts were conducted from 6:00 AM to 6:00 PM at the two intersections of Mt. Pleasant Avenue with Maple Avenue and with Railroad Avenue. The typical weekday morning (7:00 AM to 9:00 AM) and weekday afternoon (4:00 PM to 6:00 PM) commuter peak hours have also been summarized for the four highest, consecutive 15-minute peak intervals during the traffic count periods. The results of the traffic counts are tabulated by 15-minute intervals in **Attachment B**, which also includes a table summarizing the balancing completed between the two intersections. **Figure 3** provides a summary of the weekday morning and weekday afternoon commuter peak hour traffic volumes.

Capacity/Level-of-Service Operations

An analysis of the existing weekday, commuter peak-hour traffic, operational conditions was completed for the unsignalized intersections of Mt. Pleasant Avenue with Maple Avenue and Railroad Avenue, which currently have stop signs on the Maple Avenue and Railroad Avenue

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 4

approaches. Under current conditions, the stop-controlled approach of Maple Avenue operates at acceptable conditions (LOS C or better) during both peak hours, as do the stop-controlled approaches of Railroad Avenue. Copies of the existing capacity/level-of-service analysis worksheets for the weekday morning and weekday afternoon peak hours are provided in **Attachment C**, while the capacity/level-of-service results are illustrated on Figure 3.

However, based on the existing field observations of the vehicle queues that form along the northbound approach of Mt. Pleasant Avenue during a train crossing, it can be concluded that access to/from Railroad Avenue is impacted during these specific time periods.

Sight Distance at Mt. Pleasant Avenue/Railroad Avenue

Sight distance field measurements were performed for vehicles exiting from the stop-controlled approach of Railroad Avenue looking to the left and right, as well as for vehicles turning left onto Railroad Avenue. Generally, the posted speed limit or 85th percentile speed, roadway grades and profiles, and the number of travel lanes play a role in determining the required safe sight distances. As the Township does not have specific requirements for intersection sight distance, the existing available sight distances were measured in the field for each location and compared to PennDOT's desirable and minimum safe stopping sight distance (SSSD) requirements for two-lane roads, which are contained in *Tables 1 and 5 of the Pennsylvania Code (Title 67), Chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads and Pub 282, Highway Occupancy Permit Handbook*.

According to *Section 441.8(h)(2)(ii) of Chapter 441*, the posted speed limit is utilized to determine the desirable sight distance unless, the 85th percentile speed does not vary from the posted speed by more than 10 miles per hour. The 85th percentile speeds along Mt. Pleasant Avenue are within 2 miles per hour of the posted speed limit of 35 miles per hour, which will be utilized for the sight distance. **Table 1** provides a summary of the available sight distance, as well as the minimum and desirable sight distance required for vehicles exiting from the stop-controlled approach or turning left into Railroad Avenue.

For the eastern leg of Railroad Avenue, the sight distance is restricted by an embankment located on the east side of Mt. Pleasant Avenue, immediately to the north of the railroad crossing. As a home is situated on this parcel, it does not appear possible to remove this obstruction. In order to address this deficiency, at a minimum, a stop sign would need to be provided on the southbound approach of Mt. Pleasant Avenue. However, due to the proximity of the adjacent railroad crossing, traffic traveling south along Mt. Pleasant Avenue would be required to stop on the far side of the tracks, if this approach were stop-controlled. As this would place the stop at least 75 feet away from the intersection, this could potentially create confusion for drivers given the spacing to Railroad Avenue. The only other viable alternatives to address the sight distance restriction would be to restrict traffic from turning left out of Railroad Avenue, or more preferably to restrict the flow of traffic along Railroad Avenue to eastbound, one-way entering movements only.

Mr. Roman Pronczak, P.E.
 January 23, 2013
 Page 5

**Table 1 – Sight Distance Evaluation:
 Mt. Pleasant Avenue and Railroad Avenue**

Description	Direction	Posted Speed (mph)	Approach Grade	Sight Distance (feet)			Satisfied
				Desirable	Minimum	Available	
Exiting the southern leg of Railroad Avenue	Looking Left	35	+2%	440	242	351	Yes
	Looking Right	35	-2%	350	256	89 ⁽¹⁾	No
Left-Turns entering the southern leg of Railroad Avenue	From the Rear	35	-2%	300	256	≥ 700	Yes
	Looking Ahead	35	+2%	300	242	341	Yes
Exiting the northern leg of Railroad Avenue	Looking Left	35	-2%	440	256	≤ 700	Yes
	Looking Right	35	+2%	350	242	338	Yes
Left-Turns entering the northern leg of Railroad Avenue	From the Rear	35	+2%	300	242	319	Yes
	Looking Ahead	35	-2%	300	256	≤ 700	Yes

(1) Sight distance is restricted due to embankment along the east side of Mt. Pleasant Avenue, to the north of the railroad crossing.

Crash Analysis at Mt. Pleasant Avenue/Railroad Avenue

Crash data supplied by the Whitpain Township Police Department was also reviewed for the intersection of Railroad Avenue. At the intersection of Mt. Pleasant Avenue/Railroad Avenue, there were a total of three crashes from 2005 to 2012. There was one crash involving a parked car, one rear-end accident along the eastern leg of Railroad Avenue that occurred when a vehicle was stopped for a school bus, and one angle crash where a vehicle pulled out of the western leg of Railroad Avenue and hit a car traveling north along Mt. Pleasant Avenue.

Railroad Avenue Cartway Width

A review of the cartway width along Railroad Avenue was also completed, as on-street parking is currently permitted along the south side of the road, which includes dedicated spaces for handicapped parking, and there was a crash involving a parked vehicle. The current cartway width along Railroad Avenue between Mt. Pleasant Avenue and Oak Street is approximately 20 feet. Ideally, for two-way travel, the street should be widened to provide a 32-foot wide cartway width. However, given the spacing to adjacent buildings along the roadway, the grade differential between the road and the railroad tracks, the proximity of the railroad tracks to the road, and the presence of utility poles along the north side of the road, the ability to widen Railroad Avenue is severely limited and would also be cost prohibitive.

Given that Railroad Avenue has a reduced cartway width, if on-street parking is to continue to be permitted and desired, then this is another justification for the the flow of traffic along Railroad

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 6

Avenue to be restricted to one-way, preferably eastbound (ingress) only. This would allow a 6-foot to 8-foot wide parking area to be delineated along the south side of the roadway, while still providing a 12-foot to 14-foot wide travel lane within the existing cartway.

2017 Future Conditions & Circulation Alternatives

This section provides a summary of the anticipated future operating conditions of the main study area intersections within the West Ambler neighborhood. A base scenario has been included to compare the capacity/level-of-service results to the current intersection and circulation within the neighborhood. In addition, a discussion of three potential circulation alternatives has also been included documenting the pros and cons associated with each option, as well as the potential impacts that the proposed park may have. It should also be noted that the intersection of Mt. Pleasant Avenue/Maple Avenue has been revised for all alternatives to provide all-way, stop-control on all three approaches, which is consistent with one of the preferred alternative recommendation contained within the separate letter report for this intersection.

Proposed Park

Based upon discussions with the Simone Collins, the landscape architects leading the West Ambler Neighborhood Revitalization Study, it has been determined that the proposed park would be passive in nature, i.e., there would not be organized sporting fields/facilities reserved on a regular basis for organizations and scheduled events. The park, which comprises approximately 36 acres of land, is bound by the Wissahickon Creek, the alley for the homes located on the south side of Maple Avenue, Mt. Pleasant Avenue, and the businesses located to the west of Butler Avenue in the Borough of Ambler. The park proposed to include a trail-head and a new trail along the Wissahickon Creek that would tie into the existing trail system. In addition, the park proposes to include a community building, a pavilion with restrooms, a basketball court, pickle ball courts, a volleyball court, as well as a potential amphitheater. A 30-space parking lot is also planned, and given the location of the park relative to the surrounding neighborhood, it is anticipated that patrons will also walk or bicycle to/from the park.

In addition to the amenities listed above, discussions are also on-going regarding the installation of a Boys and Girls Club. Discussions with Simone Collins indicate that this use would result in additional trips by buses to drop-off/pick-up children utilizing the facility, as well as children from the surrounding neighborhoods that may walk to the facility. As exact details on this potential use are not known, specific trip generation characteristics cannot be determined at this time. More than likely, these trips would not coincide with commuter peak hours of travel.

A review of trip generation characteristics for various parks was completed based upon data compiled by the Institute of Transportation Engineers (ITE) in their publication entitled *Trip Generation, Ninth Edition (2012)*. Trip generation data collected for ITE Land Use Codes 411 – City

Mr. Roman Pronczak, P.E.
January 23, 2013
Page 7

Parks and 412 – County Parks was reviewed. In terms of daily trip generation, a 36 acre park should generate on average 68 to 82 trips (total inbound and outbound). Both land uses include limited data regarding weekday morning and weekday afternoon commuter peak hour trip generation.

As a result, for the purpose of determining the potential future impacts to the surrounding roadway network bounded by Maple Avenue, Mt. Pleasant Avenue, Railroad Avenue, and Oak Street, only a discussion of the potential impacts associated with the park will be provided. There is only limited data regarding specific trip generation characteristics for this type of passive parks as currently proposed.

Future Base Case Scenario

This scenario will be utilized to compare with potential circulation alternatives and the recommended traffic control operations below. The existing 2012 traffic volumes were first projected to the anticipated design year of 2017. A regional background growth rate of 0.73% per year, which is recommended by PennDOT for non-interstate, urban highways within Montgomery County, was utilized. As a result, the existing volumes were increased by a total growth of 3.70% or 0.73% per year compounded for five years.

An evaluation of the future year 2017 weekday morning and weekday afternoon peak hour traffic volumes, which are illustrated on **Figure 4**, was then completed and are provided in **Attachment D**. As can be seen, the stop-controlled approaches at the intersection of Mt. Pleasant Avenue/Railroad Avenue would continue to operate acceptably (LOS C or better) during both peak hours. **Figure 5** provides a summary of the Base Case traffic control in the area that will be utilized in comparing various alternatives.

Alternative A

For this alternative evaluation, traffic flow along Railroad Avenue to the west of Oak Street has been restricted to westbound only and traffic along Oak Street will continue to be restricted to northbound only. In addition, the flow of traffic along Beech Alley, which connects Maple Avenue to Oak Street, will be restricted to counterclockwise so that traffic will enter via Maple Avenue and exit via Oak Street. An overview of this circulation pattern is illustrated in **Figure 6**.

Under this alternative, traffic that would have entered Railroad Avenue from Mt. Pleasant Avenue will be transferred to Maple Avenue or North Main Street. While the adjacent intersections can accommodate the additional traffic, restricting Railroad Avenue to only permit egress movements to Mt. Pleasant Avenue does not address the sight distance restriction that exists for left-turning traffic. As a result, traffic exiting Railroad Avenue to Mt. Pleasant Avenue would then be restricted to right-turns only, if this alternative is utilized. Without adding stop-control to the Mt. Pleasant Avenue approaches and a left-turn restriction, residents living along Railroad Avenue would be required to

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 8

use the local street system to the north to turn around if their ultimate destination is to the south along Mt. Pleasant Avenue. This does not appear to be a desirable option.

Alternative B

For this alternative evaluation, the flow of traffic along Oak Street, Railroad Avenue, and Beech Alley would remain the same as noted in Alternative A. However, traffic along Maple Avenue between Mt. Pleasant Avenue and Oak Street would be restricted to eastbound (ingress) only. **Figure 7** provides an overview of this circulation pattern.

Since traffic can only enter Maple Avenue at its intersection with Mt. Pleasant Avenue, stop signs would not be necessitated along the Mt. Pleasant Avenue approaches to this intersection. However, since there is a sight distance restriction at the intersection of Mt. Pleasant Avenue/Railroad Avenue that intersection would need to be converted to all-way stop-control, since a left-turn restriction would not be feasible given the transfer of traffic from Maple Avenue. In the southbound direction of travel, traffic would need to stop on the far side of the railroad crossing, while the stop for the eastbound direction of travel would need to be moved to the south of the western leg of Railroad Avenue. As a result, the Mt. Pleasant Avenue stops would be located approximately 115 feet apart and the existing white lines on the road for the railroad crossing would need to be removed. Given that Railroad Avenue would also need to accommodate the traffic exiting from Maple Avenue, combined with the wide intersection across the railroad tracks, this alternative for neighborhood circulation is not desirable.

Alternative C

For this alternative evaluation, traffic flow along Railroad Avenue to the west of Oak Street will be restricted to ingress (eastbound) only, while traffic along Oak Street will now be restricted to southbound only. The alley linking Maple Avenue to Oak Street will continue to have counterclockwise flow. **Figure 8** provides an overview of this circulation pattern, which will require the installation of a new stop sign along the Oak Street approach to Maple Avenue along with "DO NOT ENTER" signs (R5-1).

Under this alternative, the majority of traffic that currently exits Railroad Avenue to Mt. Pleasant Avenue will most likely transfer to the Maple Avenue intersection. With the recommended all-way stop-control provision at the intersection of Mt. Pleasant Avenue/Maple Avenue, there will be adequate capacity to accommodate these movements without compromising their safety. Along Railroad Avenue, both approaches to Oak Street should be stop-controlled, as the Railroad Avenue approaches are not directly aligned with one another under current conditions. The alignment of these two approaches are slightly offset under current conditions, and cannot be fixed due to the spacing of the buildings on the south side of the roads and the presence of utility poles located on the north side of the road.

Mr. Roman Pronczak, P.E.
January 23, 2013
Page 9

It is our recommendation that in addition to the new "STOP" sign (R1-1) for the westbound approach of Railroad Avenue, a left-turn "ONLY" arrow pavement marking be provided. In addition, "DO NOT ENTER" signs (R5-1) are recommended to be installed along the western leg that will face the westbound approach. These measures should ensure that all traffic along the westbound approach turns onto Oak Street.

For this alternative, traffic utilizing the proposed park would utilize the main entrance to the park, which will be located along Maple Avenue, directly opposite Oak Street. This alternative is preferred since it adequately addresses the sight distance restrictions at the intersection of Mt. Pleasant Avenue/Maple Avenue and Mt. Pleasant Avenue/Railroad Avenue.

Recommendations

Taking into account sight distances, safety, cartway widths, intersection design, and circulation alternatives, McMahon recommends the following be implemented at this time in conjunction with the revitalization plan for the West Ambler Neighborhood:

- Mt. Pleasant Avenue/Maple Avenue Intersection
 - Provide a three-way (multi-way) stop for all intersection approaches.
 - Provide appropriate signage and pavement markings as noted in the separate letter report, which includes additional signage between Railroad Avenue and the railroad tracks for southbound Mt. Pleasant Avenue traffic to prevent vehicles from stopping on the tracks.

- Mt. Pleasant Avenue/Railroad Avenue Intersection
 - Designate through appropriate signage and pavement markings that the eastern leg of Railroad Avenue is one-way eastbound (ingress) only from Mt. Pleasant Avenue to Oak Street.

- Maple Avenue
 - Provide a consistent 26-foot wide cartway that is striped to delineate a 6-foot wide shoulder/parking area along the south side of the road and stripe the travel lanes to provide two 10-foot wide lanes.

- Railroad Avenue
 - Designate a 6-foot to 8-foot wide parking/shoulder area along the south side of the roadway through appropriate striping and signage from Mt. Pleasant Avenue to Oak Street.

Mr. Roman Pronczak, P.E.

January 23, 2013

Page 10

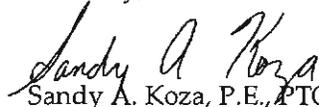
- Oak Street
 - Re-designate through appropriate new signage and pavement markings that the flow of traffic along Oak Street will be converted from the current one-way northbound only to one-way southbound only from Railroad Avenue to Maple Avenue. This will include a new stop sign along the Oak Street approach to Maple Avenue.
 - Resurface and/or improve the pavement along Oak Street.

- Beech Alley
 - Provide appropriate signage to designate the flow of traffic to be from Maple Avenue to Oak Street only. A stop sign should be installed at the alley intersection with Oak Street, along with signal indicating that the roadway is one-way and traffic cannot enter from Oak Street.
 - Resurface and/or improve the pavement along Oak Street.

Our study did not take into account the proposed roads and/or intersections illustrated within the Simone Collins study for the larger area at this time, which included the potential of extending Tennis Avenue among other things. As more details regarding the development of the park and its access points are determined, a separate study can be completed that would encompass a larger study area. However, the recommendations as noted above should be adequate to accommodate any traffic associated with the new park.

We trust that our evaluation and recommendations will be beneficial to the West Ambler Neighborhood Revitalization Committee consultants and Township representatives as you progress the West Ambler plan toward finalization. If you have any questions, or require additional assistance in expanding our scope or evaluating other possible alternatives, please feel free to contact me or Casey A. Moore, P.E. at McMahon.

Sincerely,


Sandy A. Koza, P.E., P.TOE
Project Manager

Attachments

SAK\



Memorandum

To: Peter M. Simone, RLA, FASLA
 From: Thomas F. Hanna, P.E.
 Date: February 6, 2013
 Subject: Federal Emergency Management Agency (FEMA)
 Hazard Mitigation Assistance (HMA)

The information in this memo is only applicable to properties / sites which have a Federal Emergency Management Agency (FEMA) delineated floodplain as shown on a Flood Insurance Rate Map (FIRM). The West Ambler neighborhood does not have a delineated floodplain, as the current FEMA FIRM (map no. 42091C0286 E, effective date December 19, 1996) notes that the limit of detailed study is North of Railroad Avenue. The information in this memo should be used by Whippain Township in order to make sure that they can make use of the available FEMA programs as soon as the Temple University (TU) flood study is done, and a FEMA floodplain is delineated.

FEMA National Flood Insurance Program (NFIP)

- Mitigates future flood losses nationwide through community-enforced building and zoning ordinances.
- Provides affordable, federally backed flood insurance protection for property owners.
- Participation in NFIP is based on an agreement between LOCAL COMMUNITIES and the FEDERAL GOVERNMENT (administered by FEMA) that says if a community will adopt and enforce a floodplain management ordinance to reduce future flood risks to new construction in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community.
- SFHA is a high-risk area defined as any land that would be inundated by a flood having a 1-percent chance of occurring in a given year (100 year storm/base flood).

Hazard Mitigation Assistance (HMA)

Five HMA Programs:

1. Hazard Mitigation Grant Program (HMGP)
 - Purpose: To ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster.
 - **Only available when authorized under a Presidential major disaster declaration.**
2. Pre-Disaster Mitigation (PDM)
 - Purpose: To implement a sustained pre-disaster natural hazard mitigation program to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding from future disasters.
3. Flood Mitigation Assistance (FMA)
 - Purpose: Reduce or eliminate claims under the National Flood Insurance Program (NFIP).

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APPENDIX

Memorandum to Peter M. Simone, RLA, FASLA

February 6, 2013

Page 2

4. Repetitive Flood Claims (RFC)
 - Purpose: Reduce flood damaged to individual properties for which one or more claim payments for losses have been made under flood insurance coverage that will result in savings to the National Flood Insurance Fund (NFIF).
5. Severe Repetitive Loss (SRL)
 - Purpose: Reduce flood damages to residential properties that have experienced severe repetitive losses under flood insurance coverage that will result in savings to the NFIF.

Allocation Order

FEMA → Pennsylvania Emergency Management Agency (PEMA) → Township (TWP).

Application Process

- Property Owner submits a letter of interest to the Township.
- Township either:
 - Contacts the County if the property is NOT listed as a repetitive loss/frequently flooded property. County will need to work with the Township to add the property to the HMA list.
 - Submits a letter of intent to PEMA if the property is listed as a repetitive loss/frequently flooded property.
- PEMA solicits applications from eligible communities or sub-applicants and reviews and prioritizes applications.
- PEMA forwards the applications to FEMA for review and award.

Table 3: Cost Share Requirements

Programs	Mitigation Activity (Percent of Federal/Non Federal Share)	Management Costs (Percent of Federal/Non Federal Share)	
		Grantee	Subgrantee
HMGP	75/25	100/0*	-/-**
PDM	75/25	75/25	75/25
PDM – subgrantee is small impoverished community	90/10	75/25	90/10
PDM – Tribal Grantee is small impoverished community	90/10	90/10	90/10
FMA	75/25	75/25	75/25
FMA – severe repetitive loss property with Repetitive Loss Strategy	90/10	90/10	90/10
RFC	100/0	100/0	100/0
SRL	75/25	75/25	75/25
SRL – with Repetitive Loss Strategy	90/10	90/10	90/10
<p>*Because available HMGP management costs are calculated as a percentage of the Federal funds provided, the non-Federal share is already accounted for.</p> <p>**Subapplicants should consult their State Hazard Mitigation Officer (SHMO) for the amount or percentage of HMGP subgrantee management cost funding their State has determined to be passed through to subgrantees.</p>			

Table 4: Eligible Activities by Program

Eligible Activities	HMGP	PDM	FMA	RFC	SRL
1. Mitigation Projects	√	√	√	√	√
Property Acquisition and Structure Demolition	√	√	√	√	√
Property Acquisition and Structure Relocation	√	√	√	√	√
Structure Elevation	√	√	√	√	√
Mitigation Reconstruction					√
Dry Floodproofing of Historic Residential Structures	√	√	√	√	√
Dry Floodproofing of Non-residential Structures	√	√	√	√	
Minor Localized Flood Reduction Projects	√	√	√	√	√
Structural Retrofitting of Existing Buildings	√	√			
Non-structural Retrofitting of Existing Buildings and Facilities	√	√			
Safe Room Construction	√	√			
Infrastructure Retrofit	√	√			
Soil Stabilization	√	√			
Wildfire Mitigation	√	√			
Post-Disaster Code Enforcement	√				
5% Initiative Projects	√				
2. Hazard Mitigation Planning	√	√	√		
3. Management Costs	√	√	√	√	√

Source: Hazard Mitigation Assistance Unified Guidance, FEMA

Pre-Disaster Mitigation Grant

- Qualifications: State must have disaster plan in affect and sub-applicants must have a local plan in affect.
- Federal funds will cover up to 75% of a project's cost.
- All local applicants must be participants in good standing in the National Flood Insurance Program (NFIP) if the project is sited within the Special Flood Hazard Area.
- Applicants must be able to provide a minimum of 25% of costs from non-federal sources.

Flood Mitigation Assistance

- Only NFIP-insured homes and businesses are eligible for mitigation in this program.
- Only NFIP-participating communities with approved Flood Mitigation Plans can apply for FMA Project grants.
- FMA Planning Grants are available to develop or update the flood portion of any mitigation plan.
- Funds are distributed based upon the number of NFIP policies and repetitive loss structures.
- Funding for FMA is very limited; individuals cannot apply directly for the program.
- FEMA may contribute up to 75% of the eligible cost of activities for grants approved for funding.
- FEMA may contribute up to 90% of the cost of the eligible activities for each severe repetitive loss property for which grant amounts are provided if the applicant has an approved Mitigation Plan meeting the repetitive loss requirements at the time the project is submitted.

Repetitive Flood Claims

- Only mitigation projects for acquisition of insured properties that have one or more NFIP claim payments for flood damages, and either demolition or relocation of structures, with conversion of property to deed-restricted open space uses are eligible.
- The federal cost share for an RFC project is 100 percent if local governments can certify that they do not have the management capacity needed to complete the project and that non-federal cost share funds are not available.

Severe Repetitive Loss Program

- Projects funded under this program are limited to those activities that specifically reduce or eliminate flood damages to severe repetitive loss properties.
- This program is open only to SRL properties, defined as: 4 claims of \$5,000 or more within the past 10 years, or 2 claims totaling 100% of the cost of the structure within the past 10 years.
- Properties must also be selected by the NFIP to be eligible and must appear on the SRL validated properties list to participate in the SRL program.
- The federal cost share for an SRL project is 90 percent.

Memorandum to Peter M. Simone, RLA, FASLA
February 6, 2013
Page 5

Links

Montgomery County Planning Commission Natural Hazards Mitigation Plan Appendices:

<http://planning.montcopa.org/planning/cwp/view,a,1545,q,55945.asp>

Resources for Digital Flood Insurance Rate Map Information in Montgomery County:

<https://www.rampp-team.com/pa.htm>

PEMA Summary of HMA Programs:

http://www.portal.state.pa.us/portal/server.pt?open=512&objID=4547&PageID=458202&mode=2&contentid=http://pubcontent.state.pa.us/publishedcontent/publish/cop_public_safety/pema/programs_services/mitigation_grant_programs/mitigation_grant_programs.html

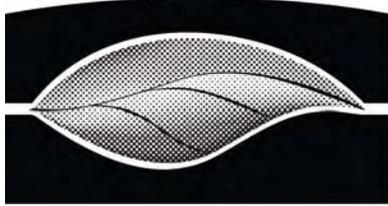
FEMA Hazard Mitigation Assistance Unified Guidance

<http://www.fema.gov/library/viewRecord.do?id=4225>

FEMA National Flood Insurance Program

Answers to Questions about the NFIP

<http://www.fema.gov/library/viewRecord.do?id=1404>



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MEETING NOTES

Project:	West Ambler Revitalization & Action Plan	Project No.:	12013.10
Location:	Whitpain Township Building	Meeting Date/Time:	4/30/2012 10:00 am -12:00 pm
Topic:	Project Kick-off Meeting	Issue Date:	5/7/2012

IN ATTENDANCE:

- Fred Conner, Vice-Chairman, Board of Supervisors
- Tony Greco, Secretary, Board of Supervisors
- Roman Pronczak, Township Manager
- E. Van Rieker, Township Planner
- Jim Blanch, Township Engineer
- Kurt Baker, Director - Parks & Recreation
- Bill H. McManus, Assistant Zoning Inspector
- Sarah Leeper, Project Manager - Simone Collins
- Pete Simone, Project Principal - Simone Collins

NOTES:

1. Fred conveyed his vision for the Action plan as a clear working tool that sets goals and benchmarks. Not just a report or master plan.
2. It was noted that the project should now be referred to as the West Ambler Revitalization & Action Plan. The term "redevelopment" should not be used in reference to the project.
3. It was reiterated that the three facets of the project to be address:
 1. Flooding:
 - The immediate safety concerns
 - Long-term solutions / remediation
 2. Brownfield redevelopment of former Wissahickon Park (Whitpain 17 Acre of Total 38 Acre site)
 3. Revitalization of West Ambler Neighborhood
4. The committee list was reviewed and the need to add public committee members was discussed.
 - a. The Township has contacted Otis Hightower regarding serving on the committee and is working to identify a second neighborhood resident and a neighborhood business owner to serve on the committee.

5. It was recommended that in addition to the core committee meetings the township should determine how it would like to reach out to wider stakeholders. This could include:
 - a. Adjoining municipalities of Ambler and Upper Dublin;
 - b. Wissahickon Valley Watershed Association / Waterfowl Preserve; and
 - c. Neighborhood groups such as the Bo-Rit CAG, WhitpainResidents.org, West Ambler Civic Association (WACA) and Citizens for a Better Ambler.

Pete suggested that this could be handled by extending an invitation to these groups for the public meeting and/or involving the larger stakeholders in select committee meetings. SC does recommend involving the larger stakeholders early in the process to get all ideas and concerns on the table early in the process.
6. West Ambler Neighborhood
 - a. It was noted that at times the neighborhood does not feel part of the larger community
 - b. Ambler refers to the neighborhood as “East Whitpain”
 - c. There was a general discussion on how to reach out to the neighborhood to ensure that they are totally involved in the process:
 - i. Roman recommended that the first public meeting should be held at the Legion Post Club, located at 351 W Maple Street.
 - ii. SC recommended that an informal site walk through the neighborhood may be valuable in engaging neighborhood residents in giving their opinions.
 - iii. In addition to reaching out to local residents for public meeting the township should also work to notify absentee landowners.
 - d. West Ambler Civic Association (WACA)
 - i. Not as active as it once was, when their champion/president Flo Wise relocated to Baltimore, but still is involved in the neighborhood.
 - e. It appears that the relationship between residences and industrial owners is not great.
 - f. Ambler warehouse site should be considered a priority for a redevelopment site
7. Bo-Rit Site - 38 acre EPA Superfund Site
 - a. Eduardo Rovira, On-Scene Coordinator
 - b. Vance Evans, Community Involvement Coordinator
 - c. Joseph McDowel, Remedial Project Manager
 - d. Citizen Action Group (CAG) has a re-use committee to suggest site re-use ideas
 - e. “The Park” - Wissahickon Park
 - i. Whitpain Townships 17 Acre, eastern portion of site
 - ii. Once a heavily used recreation area
 - iii. Closed for over 15 years because of asbestos contamination
 - iv. The park was a former depression that was filled with debris

- f. “The Reservoir” – Is owned by Wissahickon Waterfowl Preserve, LLP. (WWP)
 - i. 15 Acre Site comprised of the reservoir and its banks
 - ii. Contact – Bob Adams, Director of Stewardship WVWA
 - iii. Dave Froehlich - President
 - iv. SC requested property line for WWP
 - v. EPA has report regarding water quality
 - vi. Depth of pond to be determined
- g. “The Pile” – Is the site of the former Kane-Core development plan
 - i. Approximately 6 acres, western portion of site
 - ii. Former location of asbestos debris pile
 - iii. To be auctioned in sheriff’s sale after cleanup is complete
 - iv. Kane-Core’s plans to construct a high-rise condominium on this site triggered the community’s concerns with the asbestos and led to the Superfund Site Cleanup process.
- h. Timetable
 - i. Removal of Risk to be completed in 2012.
 - 1. Some removal of material and construction of temporary cap on site.
 - ii. Interim Report on Containments in Spring 2012
 - iii. Remedial Investigation and Feasibility Study (RI/FS) report 18 months away
 - 1. Findings will dictate final remediation
 - 2. Temporary cap “may” become permanent
 - 3. Permanent cap may be constructed
 - 4. End use may play factor in final remediation
 - 5. **Design Team to ask EPA about the depth of the temporary cap and what level of use for which it qualifies.**
 - i. The option could arise to separate Township Park 17 acres due to a lower risk to fast track it’s remediation
 - j. Township needs to be cognizant of the final park remediation needs as they may affect the cost of the clean-up
 - k. Restoration includes remediation and bank restoration for the Wissahickon Creek, Tannery Run, and Rose Valley Creek.
- 8. Wissahickon Park
 - a. How does the Township capture the most value from 17 Ac?
 - b. The extent of contaminated material removal will be determined by EPA upon completion of their remedial investigation. Some community members feel that all materials must be removed before site can be used as a park again.
 - c. The Team recommendations may include “Bare minimum remediation goals”
 - i. No problems found land left as is - what are the potential uses?
 - ii. Park passive or active - what is the additional remediation?
 - iii. Active Public Facility - what is the additional remediation?

9. Citizens for a Better Ambler – Developed as a response to Kane-Core, Inc. proposal to develop a condominium / parking garage
 - a. Comprised of mostly Ambler Residents and some Whitpain residents
 - b. Sharon McCormick – most involved person
 - c. Some members believe that all materials must be removed
 - d. Some members concerned with planting of trees due to root disturbance of the final cap and contaminants
10. Ambler TRID Redevelopment zone –
 - a. SC was provided with a copy of this report
 - b. Does the West Ambler Neighborhood have the potential to be an extension of TRID area?
 - c. Steven Ware, Chairman Ambler Planning Commission
 - d. Charles "Bud" Wahl, Mayor of Ambler
11. Rose Valley Creek Study – Temple
 - a. Jeffrey Featherstone– Director and Professor, Center for Sustainable Communities, Dept. of Community and Regional Planning at Temple University
 - b. SC was provided with the Scope of Work
 - c. The Township has requested that Temple fast track the definition of the 100 year floodplain in the immediate project area so that the Township can address the flooding safety concerns in this area.
12. Maple Ave Streetscape
 - a. \$250,000 DCED funded
 - b. Must be used (constructed) by June 2013.
 - c. There is no possible extension.
 - d. There is flexibility on where in West Ambler the money is used but it needs to go towards streetscape improvements.
13. Former residential lots along Maple Ave
 - a. Located on south side of Maple Ave. between Oak St. and Ambler Ave
 - b. Owned by Whitpain Township
 - c. Acquired with Township funds, no restrictions on re-use.
14. Ambler Area North Penn Valley Boys & Girls Club
 - a. Looking for site within walking distance of Ambler Borough
 - b. 10 year development outlook
 - c. Approximately 30 stakeholders on committee
 - d. There are a number of sites under consideration (not public information)
 - e. Interim facility at Senior Adult Activities Center, 45 Forest Avenue (Former Ambler Elementary School)
 - f. Could this facility be located in the West Ambler neighborhood?
15. Wissahickon Valley Watershed Association (WVWA)
 - a. Contact - TBD
 - b. Maintain Green Ribbon Preserve Trail runs south of site

16. Biddle Property

- a. General Contractors
- b. Own the industrial building to the north of the site (240 Railroad Avenue) backing up to Maple Ave; and two stock yards located along east end of Maple Ave.
- c. The Township is in the process of reaching out to the Biddles. There may be building code violations that may need to be addressed on the Biddle properties as a result of last year's flooding.
- d. Pete asked if the site was viable for commercial use?
 - i. Roman provided SC with the Townships official documents; it was stated that the Township did have other lands zoned as industrial, but that these lands have become more valuable as office parks.

17. What are the Committees expectation for the final product:

- a. Roman Pronczak
 - i. "Mini" Comprehensive Plan
 - ii. Actions steps / milestones / Still flexible
- b. Bill McManus
 - i. Plan to address maintenance problems
 - ii. Code enforcement of buildings
- c. Kurt Baker
 - i. Solid identification of who will benefit
- d. Tony Greco
 - i. Create the opportunity for renters to become vested home owners within the West Ambler Neighborhood.
 - ii. Help to provide for affordable housing
- e. Jim Blanch
 - i. Clear deadlines and goals that puts the Temple study results into action
 - ii. Wise use of the DCED Streetscape Funding
 - iii. Clear direction of the Bo-Rit site use

18. The Township will work with the Design Team to insure that State elected officials are involved in the project

- a. Hon. Michael Gerber, PA distract 148
527 Fayette Street
Conshohocken, PA 19428
(610) 832-1679
Fax: (610) 832-1684
Contact: Dominic Folino, Chief of Staff
- b. Rep. Kate Harper (Project area outside of district)
61st District
(610) 277-3230
(717) 787-2801
Contact: Patricia A. Hippler

- 19. Items for Township to Address:
 - a. Invitees to Committee Meeting #1
 - i. Additional Committee Members
 - ii. Temple Study Representative
 - b. Set Streetscape Priority Area
- 20. SC to suggest dates to Roman for site visit for team
 - a. Include Dave Froehlich and Bob Adams
 - b. Coordinate with Site Access with Eduardo Rovira
 - c. Invite Otis Hightower
- 21. Revised Meeting Schedule

Assume all Committee meetings are 4 pm to 5:30 pm (flexible)

Comm Mtg #1	Tuesday, May 22
Comm Mtg #2	Weds June 27
Comm Mtg #3	Weds Sept 12
Comm Mtg #4	Weds Oct 17
Comm Mtg #5	Weds Jan 9

Assume all public meetings 7 pm to 9 pm

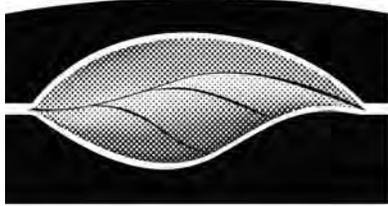
Public Mtg #1	Mon June 4
Public Mtg #2	Mon Sep 17
Public Mtg #3	Mon Nov 19
Public Mtg #4	Mon Feb 18

This report represents the Professional’s summation of the proceedings and is not a transcript. Unless written notice of any correction or clarification is received by the Professional within ten days of issue, the report shall be considered factually correct and shall become part of the official project record.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE



Sarah R. Leeper, RLA
Project Manger



SIMONE COLLINS
LANDSCAPE ARCHITECTURE
 119 EAST LAFAYETTE STREET NORRISTOWN, PA 19401
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 WWW: SIMONECOLLINS.COM

MEETING NOTES

Project:	West Ambler Revitalization & Action Plan	Project No.:	12013.10
Location:	Whitpain Township Building	Meeting Date/Time:	6/27/2012 4pm - 5:30pm
Topic:	Committee Meeting 2	Issue Date:	2/8/2013

IN ATTENDANCE:

- Frederick R. Conner, Jr., Vice-Chair Board of Supervisors
 - Anthony F. Greco, Secretary - Board of Supervisors
 - Roman M. Pronczak, Manager - Whitpain Township
 - Dave Mrochko, Assistant Township Manager - Whitpain Township
 - Kurt W. Baker, Park and Recreation Director - Whitpain Township
 - James E. Blanch, Engineer - Whitpain Township
 - William McManus, Zoning - Whitpain Township
 - E. Van Rieker, Planning Consultant - Whitpain Township
 - Anthony Biddle, Business Owner - West Ambler
 - Diane Burgess, Resident - West Ambler
 - Jerry Burgess, Resident - West Ambler
 - Athena Cummings, Resident - West Ambler
 - Otis Hightower, Resident - West Ambler
 - Alice Johnson, Resident - West Ambler
 - John Kennedy, Assistant Regional Director - DEP
 - Kristine Matzko, Remedial Project Manager - EPA
 - Joseph McDowell, Environmental Consultant - EPA
 - Eduardo Rovira, Jr., On-Scene Coordinator - EPA
 - Robert Adams, Director of Stewardship - Wissahickon Valley Watershed Assn.
 - David Froehlich, Environmental Consultant - Wissahickon Waterfowl Preserve, LLC.
 - Sarah Leeper, Project Manager - Simone Collins
 - Pete Simone, Project Principal - Simone Collins
-

NOTES:

1. Fred C. opened the meeting. He was pleased with the turnout of the meeting.
2. Otis H. asked that at future meetings, all of the agency staff, etc. introduce themselves at the meeting. Agreed.
3. Other also commented that the first public meeting was good and that we received a lot of opinions and suggestions.
4. Jerry B. asked about an update for the Biddle warehouse repair. Tony B. and Roman P. commented that the Township has a commitment from Tony B. to move forward on repairs.

5. The list of ideas (goals, facts, concepts) developed at the public meeting was handed out to the committee.
6. SC and the Bill M. will coordinate setting up the website page to include project information soon.
7. The SC team meeting notes from the meeting with EPA on May 30th were distributed to the committee. The purpose of the meeting was to ensure that the SC team has a clear understanding of the EPA process, etc.
8. Roman P. noted he has contact PECO about the power line / tree issue.
9. It was noted that the results of the Temple Univ. floodway study should be available by the end of the year. Until then, the SC team will make reasonable assumptions about a new floodway line.
10. The revised meeting dates were reviewed and they will be as per the meeting agenda. They are:

Comm Mtg #3	Weds Sept 19
Comm Mtg #4	Weds Oct 17
Comm Mtg #5	Weds Jan 16

All public meetings 7 pm to 9 pm (confirm location at American Legion)

Public Mtg #2	Mon Sep 24
Public Mtg #3	Mon Nov 19
Public Mtg #4	Mon Feb 25

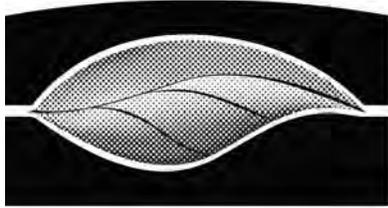
11. Kurt B. reported that they have inspected the conditions at West Side Park and are looking at costs for repairs include fixing the wall, restoring the mural, and surveillance cameras.
12. There was a discussion that the Township emergency management (Dave Camarda) should conduct a drill on procedures in case there is another flood. All agreed this is a good idea.
13. Tony B. suggest that when floods are expected, autos parked upstream (Tennis Ave, etc.) should be towed out of harm's way so they do not block culvert / sluiceway. Roman P. said the Township will work with Ambler in that regard.
14. As an additional note during our May site walk Eduardo R. stated that EPA replaced the northern sluiceway gate on Maple Ave, with a new gate that would swing open in the case that flood water builds up over the culvert, this will help to avoid the situation that happen during Tropical Storm Lee.
15. Pete S. went through the PowerPoint presentation. There was good discussion on all items. The presentation will be emailed to all committee members. Pete S. requested that comments be emailed to Simone Collins within 2 weeks. Committee members are also encouraged to call Pete S. or Sarah L. to ask questions and / or discuss.
16. Van R., Otis H. and Jerry B. stated that the ownership information for the project area appeared accurate.

17. As to why the proposed streetscape improvements started at Maple Street, it was really just a place to start. This planning process will recommend additional streetscape improvements.
18. There was a question as to the type of housing that might be built in the project area. This will be determined largely by market forces.
19. Roman P. suggested that a pedestrian bridge might be considered at Mathers Road.
20. Beech Alley was omitted on the SC site plan and from the list of possible improvements. This will be added.
21. There was discussion whether or not this planning process should suggest any improvements in Ambler Borough, it was agreed it was okay to do so. Roman P. will set up a meeting soon with the Borough to inform them of the project planning.
22. Tony B. mentioned that the superfund site has “asbestos containing materials” and is not all asbestos. This is an important distinction to keep in mind.
23. Fred C. stressed that the ideas in the presentation were conceptual only.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE

A handwritten signature in black ink, appearing to read 'Peter M. Simone', written over the printed name below.

Peter M. Simone, RLA, FASLA
President



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MEETING NOTES

Project:	West Ambler Revitalization & Action Plan	Project No.:	12013.10
Location:	Whitpain Township Building	Meeting Date/Time:	9.19.2012 4pm - 5:30pm
Topic:	Committee Meeting 3	Issue Date:	2/8/2013

IN ATTENDANCE:

- Frederick R. Conner, Jr., Vice-Chair Board of Supervisors
 - Anthony F. Greco, Secretary - Board of Supervisors
 - Roman M. Pronczak, Manager - Whitpain Township
 - Dave Mrochko, Assistant Township Manager - Whitpain Township
 - Kurt W. Baker, Park and Recreation Director - Whitpain Township
 - Mike Richino, Park and Recreation Director - Whitpain Township
 - James E. Blanch, Engineer - Whitpain Township
 - William McManus, Zoning - Whitpain Township
 - E. Van Rieker, Planning Consultant - Whitpain Township
 - Anthony Biddle, Business Owner - West Ambler
 - Diane Burgess, Resident - West Ambler
 - Jerry Burgess, Resident - West Ambler
 - Athena Cummings, Resident - West Ambler
 - Otis Hightower, Resident - West Ambler
 - Alice Johnson, Resident - West Ambler
 - John Kennedy, Assistant Regional Director - DEP
 - Kristine Matzko, Remedial Project Manager - EPA
 - Joseph McDowell, Environmental Consultant - EPA
 - Eduardo Rovira, Jr., On-Scene Coordinator - EPA
 - Robert Adams, Director of Stewardship - Wissahickon Valley Watershed Assn.
 - David Froehlich, Environmental Consultant - Wissahickon Waterfowl Preserve, LLC.
 - Steve Ware, Urban Planner - Ambler Borough, PA
 - Dave Toth, Chief of Staff at Office of State Representative Michael Gerber
 - Isaac Kwon, Urban Partners
 - Sarah Leeper, Project Manager - Simone Collins
 - Pete Simone, Project Principal - Simone Collins
-

NOTES:

1. Sarah L. reviewed the Township follow-up items from the public meeting 1 feedback. Roman P. stated that we should remove the mention of an addition of a surveillance camera to the neighborhood park from the PowerPoint presentation.

2. Isaac K. reviewed the preliminary market analysis.
3. Sarah L. reviewed the refined neighborhood and park concepts. Ottis H. asked what a pickle ball court was and requested that we explore options for a full tennis court.
4. Dave F. stated that the Wissahickon Waterfowl Preserve was open to the idea of filling in the reservoir banks to create new tree planting areas.
5. Pete stated that SC would look at a test fit showing a Boys & Girls Club on the park site.
6. Sarah reviewed the West Maple Street Improvement project status. It was stated that the public meeting for this project should be held separate from the West Ambler Public meetings.
7. The next committee meetings are:

Comm Mtg #4	Weds Oct 17
Comm Mtg #5	Weds Jan 16

The next public meetings are:	
Public Mtg #3	Mon Nov 19
Public Mtg #4	Mon Feb 25
8. Following the meeting a list of neighborhood requests was provided to SC by Florine W. on behalf of WACA.

Sincerely,
SIMONE COLLINS, INC.
LANDSCAPE ARCHITECTURE



Sarah R. Leeper, RLA
Project Manger



6/11/12

WEST AMBLER REVITALIZATION & ACTION PLAN

WHITPAIN TOWNSHIP

BLUEBELL, PA

SC#12013.10

PUBLIC MEETING #1 – 6/11/12 AT WHITPAIN TOWNSHIP BLDG: CARDS RECORD

GOALS

- GET THE PARK BACK
- FLOODING SOLUTIONS PRIORITY #1
- PRIORITY ON NEED NOT BEAUTY
- WEST AMBLER BOS PRIORITY
- NEED COMMUNITY BUY-IN FOR SUCCESS
- ADDRESS BIG ISSUES TO ATTRACT PRIVATE INVESTMENT
- INCREASE HOME OWNERSHIP
- FOCUS TOWNSHIP ON WEST AMBLER
- RACCOON PROBLEMS IN BIDDLE WAREHOUSE
- 327 W. MAPLE HOUSE DEMO ILL-ADVISED
- AREA OF VISIBLE ASBESTOS AT RESERVOIR EMBANKMENT
- OAK STREET FIRE JUST HAPPENED
- WAREHOUSE OWNER HAS OPTION TO REBUILD
- CRACKS IN WAREHOUSE WALLS (TO BE ADDRESSED IN "WEEKS")
- IMPROVEMENTS TO TOT-LOT NEEDED

FACTS

- HISTORY OF NEIGHBORHOOD FRUSTRATION
- \$250,000 FOR PHASE I STREETScape
- FEMA PRELIMINARY MAPS 1970 HYDROLOGY OUTDATED
- FLOOD FUNDING \$150,000
- MAPLE ROAD NO CROWN
- ROUTE ON TO MT. PLEASANT, VERY HARD TO CROSS RR
- TOO MUCH POLICE ADDRESS UNDER- LYING ISSUES
- 17 ACRE – WEST AMBLER PARK
- GROUND WATER RISES ON MAPLE (335)
- BARRIER OF TRACKS
- WAREHOUSE UNSIGHTLY & SAFETY CONCERNS
- DRAINAGE ON BACK ALLEY ISSUES (326)
- RAT & MICE PROBLEM
- RAT TRAP DONATION HAPPENED IN PAST
- WALL IN SMALL PARK CRUMBLING
- MULTI-CULTURAL COMMUNITY
- NO STREET STORM DRAINS
- TREE ON POWERLINE CORNER OF OAK & MAPLE NEEDS TRIMMING

X:\12013.00 West Ambler - Whitpain\Meetings\120611_Cards Public Meeting 1_REV.doc

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APPENDIX

- EPA DRIVING WRONG WAY ON ONE WAY STREET (OAK)
- VACANT LOTS VEGETATION IN SIDEWALK
- TOWNSHIP CODE REVIEW PROCEDURES FOR TENANT COMPLAINTS
- RESERVOIR SPRING FEED TERRA COTTA PIPE

CONCEPTS

- GET FUNDING FOR FLOODING REMEDIATION
- COMMUNITY BUY-IN ON FUTURE PHASES
- CREATE UPSTREAM IMPROVEMENTS TO HOLD WATER
- WAREHOUSE PRIVATE-TOWNSHIP MUST ACT TO CORRECT DAMAGE
- FOCUS ON 'COMMUNITY' FOR SAFETY 'COMMUNITY WATCH'
- ADDRESS ASBESTOS AROUND RESERVOIR (WHAT IS PLAN?)
- INCLUDE WACA IN COMMUNITY
- TRANSPORTATION FOR KIDS IN SUMMER TO YMCA
- FENCE OFF OPEN SPACE ON TOWNSHIP LAND TO CREATE TEMPORARY PARK
- NEED 4 WAY STOP SIGN AT OAK AND MAPLE
- SPEED HUMP SIGNS
- IDENTIFY GRANT \$ FOR W AMBLER
- MAPLE STREET DESIGN PROCESS
- TREES ALONG STREETS
- FORWARD THINKING WITH TODAY'S IMPROVEMENTS
- PERVIOUS PAVING – GREEN STREETS PROGRAM
- SIDEWALKS ON RAILROAD AVE
- EVERGREEN BUFFER ALONG TRACKS
- EARLY IDENTIFICATION OF BUY OUT PROPERTIES
- FEMA PURCHASE BUY OUT PROPERTIES
- PLAYGROUND SAFETY DISTANCE
- UPSTREAM WATER STORAGE
- REDEFINED 100 YR FLOOD PLAIN
- FEMA REVIEW 12-16 MONTHS
- STOP SIGNS/ BUS STOPS ON RAILROAD
- ADD STREET STORM DRAINS
- 2013 FLOOD HAZARD AREAS
- NEW PLAYGROUND SURFACE
- BOYS & GIRLS CLUB
- REPAIR AGEING INFRASTRUCTURE
- NEW EQUIPMENT FOR PLAYGROUND
- STREET LIGHTING
- SWINGS
- INDOOR/ OUTDOOR BASKETBALL ORGANIZATION LEAGUES
- WACA
- RECREATION BUILDING ON TOWNSHIP LOTS WITH SENIORS
- GET TOT LOT & BASKETBALL COURT INTO NEW PARK SITE
- SENIORS CITIZENS PROGRAMS
- STREET RESURFACING NEEDED
- COMMUNITY SERVICE PROJECTS
- DEDICATION PARK TO COMMUNITY "HERO"
- WALK ALL OF MAPLE STREET 200 BLOCK
- SPOT REPAIRS SUMMER
- STREET SWEEPING NEEDED

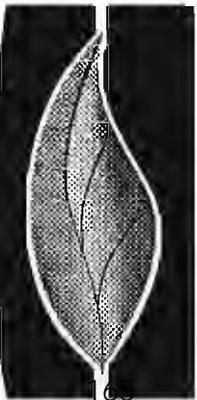


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MEETING SIGN IN SHEET

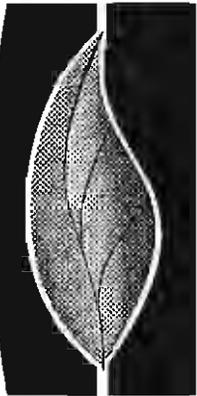
Project: West Ambler Revitalization & Action Plan Project: 12013.10
 Location: Daniel W Dowling Legion Post 351 West Maple Street, Ambler, PA Date: 06.04.2012
 Topic: Public Meeting #1 Time: 7:00-9:00 PM

NAME	ADDRESS	PHONE	EMAIL
1. Ann Wyden	227 Mark St		
2. Tom Hanna (HUNT)	22 E. King St. Malvern, PA	610-644-4600	thanna@huntengineering.com
3. Fabio Gamber	420 MAMO CR BB/PA	484-6861/016	fgamber@whyydin-tech.com
4. Kurt Baker	Twp.		
5. David Camarda	Whitpain Twp		
6. Dominic Folio	307 Fayette St. Conroy	610-870-1679	dfolio@peharsen.net
7. Keith Reind	120 R.O. 263 Jolly	215-579-8388	keithreind@msa.com
8. Tony Greco	1115 Rousey Dr	215-688-2410	
9. Paul Rodkey	216 Mt Pe #218	215-646-5923	peLA@verizon.net
10. E. Van Rieker	215 Old Church Pl	215-699-4670	
11. Chris Hightower	316 Railroad Ave	215-287-9464	
12. Tracy Kwak	829 Spore Milla 19107	215-289-1907	ikwak@cable4perthous.us
13. Wayne Greco	336 W Maple St	267-271-5520	Dizwater@qmail.com
14. Brian Hawks	326 W Maple St	267-664-5301	
15. Amanda Swank	324 W Maple St	267-278-1836	amanda.swank@gmail.com
16. Nick Lorenz	330 W Maple St	915-587-4565	
17. Joe Corzano	330 W Maple St	" " "	
18. Dan Fishman	310 Railroad	610-805-6525	
19. T. Burgess	314 7th Ave	215-241-5882	



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NAME	ADDRESS	PHONE	EMAIL
20. Shana V. Birdsong	335 West Hazel St. Amber	610-400-7875	Shana_96792@yahoo.com
21. Florine Wise	920 Bement Ct. Pen	413-997-6430	Flornise7@yahoo.com
22. Janna Midgrett	225 E Penn St	443-326-3759	ten81029@tengy6.edu
23. George Prince	228 Oak St Amber PA	267-602-9088	GeorgePrince@ymail.com
24. Vance Evans	1650 Arch St, Philadelphia (380) 52	215-814-5526	evans.vance@pa.gov
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	NAME	ADDRESS	PHONE	EMAIL
72.	Ron & Cindy Wilshire			
73.	Lewis & Sarah Brudson	344 W Maple St Ambler 19002	215 260 9604	Samx1975@yahoo.com
74.		335 W Maple St Ambler	484-744-4887x	Lewis Brudson@verizon.net *
75.	Dee Winger Bailey	PA DEP	484-850-5818	awright@pa.gov
76.	Dee Burgess	314 Railroad Ave.	215-641-5882	Burgess.D@verizon.net
77.	Jehua Johnson	2722 W. Maple St Ambler	215-643-6529	THEJEWEL24@aol
78.	Richard Sims	2722 W. Maple St Ambler	215-469-0764	
79.	Christen Weselco	216 Oak St Ambler	484-238-6506	
80.	Ruth E Weeks	145 W. Spencer St	215-839-0448	rweeks206@gmail.com
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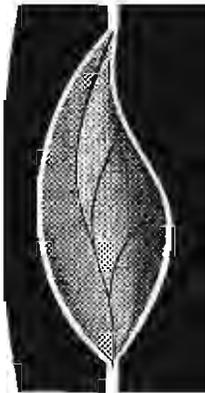


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MEETING SIGN IN SHEET

Project: West Ambler Revitalization & Action Plan Project: 12013.10
 Location: Daniel W Dowling Legion Post 351 West Maple Street, Ambler, PA Date: 06.04.2012
 Topic: Public Meeting #2 Time: 7:00-9:00 PM

NAME	ADDRESS	PHONE	EMAIL
1. Tony Greco	WHITPAIN TWP.	610-215-608-2010	GRACOTONG@VERIZON.NET
2. Krastok Matzko	EPA Resim 3	215-814-5719	Matzko.krastok@epa.gov
3. Britt Dahlberg	Univ. Pennsylvania	610-609-1588	brittd@sas.upenn.edu
4. FRESO COWDEN	WHITPAIN TWP	---	---
5. STEVE WAPP	AUGER BOYDWAY	---	---
6. PAUL KOPKEY	216-218 MAPLE	---	PLA@verizon.net
7. Muvi Milungwin	Rep. Kate Wagner's Office	610-277-7230	mmclungl@pahoosage.com
8. Roman Prończak	WHITPAIN TOWNSHIP	610-277-2400	RPRONCZAK@WHITPAIN.TOWNSHIP.PA.GOV
9. JERRY BURGESS	WHITPAIN TOWNSHIP	215-641-5092	BURGESSJBUR@AOL.COM
10. Otis K. Hightower	316 RAILROAD AVE		OTIS.HIGHTOWER@VERIZON.NET
11. Ron & Cindy Wiltshire	344 W Maple Ave	215-260-9604	ronw1975@yahoo.com
12. Army Wausch	327 200 Young Grayington	484-373-0444	Tigerhawk30@gmail.com
13. Donald E Swank	324 West Maple Street		SDornell1010@gmail.com
14. Brian Jackson	326 W Maple St	267-664-5301	bkjackson@verizon.net
15. PAVE TOTTA	REP. CERBER'S OFFICE	610-832-1079	470th@pahoosage.net
16. Faith Williams Hightow	316 R.A.V. ROAD		
17. Tynelette Aiken	228 W. Maple St.	215-654-1074	DSugart@hotmail.com
18. Gene Greyman	311 Maple St	215-643-6316	
19. JIM BRANCH	WHITPAIN TWP	610-277-2400	jbranch@whitpain township.org

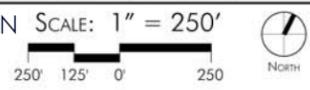


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25. David Mrosko	Whitpain Twp.		
26. Bill McManus	Whitpain Twp		
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| 1 MAIN PARK ENTRANCE | 6 OPEN LAWN | 11 MEADOW (TYP) | 16 AMPHITHEATER | 21 STORMWATER BMP |
| 2 DROP-OFF & PAVILION/RESTROOMS | 7 BASKETBALL COURT | 12 TREE PLANTING ON MOUNDED EARTH (TYP) | 17 OBSERVATION PAVILION | |
| 3 SECONDARY ENTRANCE / NEW PEDESTRIAN WALKWAY TO MAPLE | 8 PICKLE BALL COURTS | 13 ROSE CREEK PEDESTRIAN BRIDGE | 18 BOARDWALK / OBSERVATION DECKS | |
| 4 PARKING (30 SPACES) | 9 LAWN VOLLEYBALL COURT | 14 WISSAHICKON CREEK PEDESTRIAN BRIDGE | 19 RESERVOIR BANK HABITAT RESTORATION | |
| 5 COMMUNITY BUILDING | 10 PLAYGROUND | 15 12 FT. WIDE RUNNING LOOP (1/3 MI) | 20 ROSE CREEK RESTORATION AREA | |





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|--|-------------------------|---|---------------------------------------|-------------------|
| 1 MAIN PARK ENTRANCE | 6 BOYS & GIRLS CLUB | 11 MEADOW (TYP) | 16 AMPHITHEATER | 21 STORMWATER BMP |
| 2 DROP-OFF & PAVILION/RESTROOMS | 7 BASKETBALL COURT | 12 TREE PLANTING ON MOUNDED EARTH (TYP) | 17 OBSERVATION PAVILION | |
| 3 SECONDARY ENTRANCE / NEW PEDESTRIAN WALKWAY TO MAPLE | 8 PICKLE BALL COURTS | 13 ROSE CREEK PEDESTRIAN BRIDGE | 18 BOARDWALK / OBSERVATION DECKS | |
| 4 PARKING (10 SPACES) | 9 LAWN VOLLEYBALL COURT | 14 WISSAHICKON CREEK PEDESTRIAN BRIDGE | 19 RESERVOIR BANK HABITAT RESTORATION | |
| 5 PARKING (50 SPACES) | 10 PLAYGROUND | 15 12 FT. WIDE RUNNING LOOP (1/3 MI) | 20 ROSE CREEK RESTORATION AREA | |