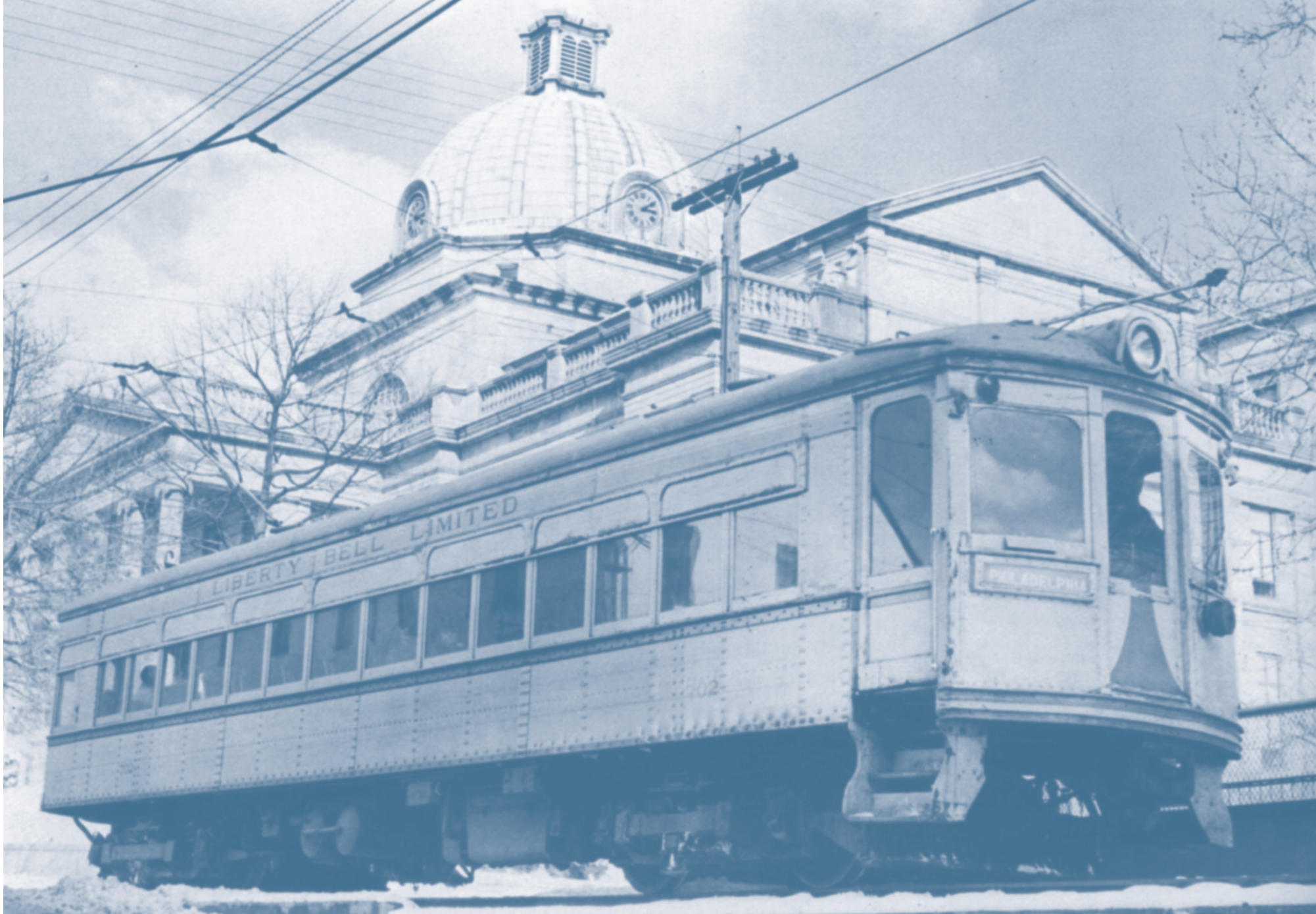
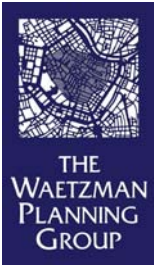


LIBERTY BELL TRAIL FEASIBILITY STUDY



Liberty Bell Trail Feasibility Study

PREPARED BY:



The Waetzman Planning Group
1230 County Line Road
Bryn Mawr, PA 19010

IN ASSOCIATION WITH:

Land Concepts Group
Orth-Rodgers & Assoc., Inc.
EDM Consultants, Inc.
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LIBERTY BELL TRAIL FEASIBILITY STUDY

This project was financed in part by a grant from the Keystone Recreation, Park and Conservation Fund, under the administration of the PA Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.

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STUDY PARTICIPANTS

STUDY PARTICIPANTS

CORE STUDY GROUP

| | |
|--------------------------|---------------------------------------|
| Curtis Bish, AICP* | Montgomery County Planning Commission |
| David Clifford | Montgomery County Planning Commission |
| John Wood | Montgomery County Planning Commission |
| Richard Brahler | Bucks County Planning Commission |
| Pamela Learned | Regional Improvement Consortium |
| Ken Edmonds | East Coast Greenway Alliance |
| Charles Gутtenplan, AICP | The Waetzman Planning Group |
| Richard Collier, AICP | LandConcepts Group |

STUDY COMMITTEE

The following municipalities actively participated throughout the Study. Individuals representing some municipalities changed during the course of the Study; to avoid inadvertently omitting a participant, only the municipal names are being listed. We wish to thank all of the municipal representatives who worked diligently over the course of the Study.

- East Norriton Twp. (Montgomery Co.)
- East Rockhill Twp. (Bucks Co.)
- Franconia Twp. (Montgomery Co.)
- Hatfield Borough (Montgomery Co.)
- Hatfield Township (Montgomery Co.)
- Lansdale Borough (Montgomery Co.)
- North Wales Borough (Montgomery Co.)
- Perkasie Borough (Bucks Co.)
- Quakertown Borough (Bucks Co.)
- Richland Township (Bucks Co.)
- Sellersville Borough (Bucks Co.)
- Souderton Borough (Montgomery Co.)

- Telford Borough (Montgomery Co.)
- Upper Gwynedd Twp. (Montgomery Co.)
- West Rockhill Twp. (Bucks Co.)
- Whitpain Twp. (Montgomery Co.)

CONSULTANT TEAM

| | |
|--------------------------|---------------------------------|
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| Robert Wise | Robert Wise Consulting |

* Resigned during course of the Study



PURPOSE OF THE STUDY

This study is an inter-governmental planning project to evaluate the feasibility of developing a trail along the former Liberty Bell Trolley route. During its years of operation from 1900 to 1951, this historic trolley line linked Norristown in Montgomery County to Quakertown in Bucks County. The new trail, when completed, will link 16 municipalities, plus one by spur trails in both Counties and will cover a distance of over 25 continuous miles. The 17 municipalities included in this study are listed in Section 4 (Study Area Definition and Inventory) of this report.

The proposed Liberty Bell Trail has been identified and supported in many prior planning documents and plans including:

- County Open Space Plan, Montgomery County (1996) - 1 of 13 recommended trails
- County Comprehensive Plan, Shaping Our Future, Montgomery County (draft 2004)
- Southeast Pennsylvania Bicycle Mobility Study, Delaware Valley Regional Planning Commission
- Open Space and Environmental Resources Protections Plan (ongoing plan updates in accordance with the Montgomery County Green Fields/Green Towns initiative)
- Municipal Open Space and Recreation Plans, Bucks and Montgomery Counties

Mission Statement (Adopted by Study Committee October 24, 2002)

The Liberty Bell Trail Feasibility Study is being undertaken to evaluate the feasibility of creating a continuous trail from East Norriton to Quakertown, following the former trolley alignment wherever possible, and linking all 16 municipalities through which it will run to provide a safe, interesting, and pleasant corridor for non-motorized vehicle users and pedestrians.

(It is noted that during the study the number of municipalities was expanded from 16 to 17, permitting a neighboring borough to be linked by the use of spur trails.)

Scope of Study and Process

The analysis developed in this feasibility study and described in this document has primarily addressed these tasks:

- Inventory of existing conditions along the former trolley route
- Determination of how conducive the corridor is to trail development
- Delineation of an area (corridor) for further trail analysis
- Assessment of alignment alternatives that address problem areas
- Examination of obstacles to the continuous trail

- Recommendation of the most practical alignment
- Preparation of a trail concept plan with a recommended alignment

The Plan developed for this feasibility study is the result of focused leadership and extensive collaboration among the 17 participating municipalities. Leadership was provided by the Montgomery County Planning Commission and Bucks County Planning Commission professionals, Rails-To-Trails Conservancy (RTC) members, and the Regional Improvement Consortium (RIC - former North Penn Regional Improvement Authority or NRPA) Executive Director. This group, together with the two planning consultants on the team, The Waetzman Planning Group and LandConcepts, constituted the Core Study Group that met routinely throughout the planning process.

Guidance and coordination among the various stakeholder communities was provided by designated representatives (one or two) for each municipality. Together they formed a Study Committee that met on multiple occasions with the consultant team over the course of this two-year study. They assumed a critical role of reviewing, supplementing, and correcting data, critiquing the study corridor and various alignment options, and reporting findings and options to their individual communities and elected officials. Given the many diverse conditions, physical and political obstacles, and length of this corridor, this regional planning task could not have been achieved without a dedicated and collaborative commitment.

The culmination of the Plan process was a public Open House held in November, 2004. It was well-publicized through websites, the press, and through announcements posted in the municipal offices of the participating municipalities. The comments that were received were subsequently considered by the Core Study Group and some minor adjustments to the Plan resulted.

The Liberty Bell Trail is envisioned as a contemporary interpretation of the historic trolley route. The intent from the outset of the study was to follow the historic alignment as closely as possible and to connect and interpret historic remnants and other current points of interest. See Liberty Bell Trolley Proposed Alignment Map (hereafter referred to as the 'Composite Map') in Section 4 of this report.

The analysis of alternative alignments was extensive and essential to the feasibility determination and the process leading to identifying a workable alignment for the trail. Alternatives were considered to weave the trail through each community but also to connect at each municipal border. By design, all of the alternatives considered: physical conditions; access to special features; obstacles and conflicts; previous plans and planning; land ownership; land uses; existing and proposed trails; and anticipated user experiences. Each iteration of alternative alignments was reviewed by the Study Committee in a public forum and brought back to the "home" community for further review and support. As the preferred alignment emerged, each community was asked from their governing body for a written endorsement in the form of letter of support or formal resolution. The goal was to receive support from each participating community to ensure that the trail could become a regional asset and would be supported by local plans and actions.



It was assumed that this trail will supplement the regional transportation network. The overall goal is that it will serve as a transportation alternative for pedestrian and bicyclists, in addition to it being a recreation resource. The trail will link all land uses including residential areas, employment centers, offices, shopping districts, historic sites and cultural features, public open spaces (parks, natural areas), schools, and many local existing and proposed trails. The system will serve individual communities and by the continuous connections create a greater community with diminished dependence on motorized vehicles.

The type of trail and use experience will vary greatly among the many segments. It will range from share-the-road in congested areas and sidewalks systems in urban and suburban areas to farmland and woodland trails with nearly every experience in between. It will require use of a variety of land ownership options such as remaining trolley rights-of-way, public lands, utility easements, private land easements, road rights-of-way, and potential land acquisitions. Diversity of user experience and continuity are among the most important initiatives of the trail. Improvements will be needed throughout the corridor to make it safe and continuous. Such improvements will be done over many years and in phases as detailed design work is completed and funds are available. It is anticipated that individual segments will be implemented by the municipalities through which the trail passes, and through the land development process.

Financial resources for this feasibility study, the first phase towards completion, were provided through a combination of a Keystone Recreation, Park and Conservation Fund grant from the Pennsylvania Department of Conservation and Natural Resources, Bucks and Montgomery Counties, and contributions from each of the participating municipalities.



HISTORIC CONTEXT

The Liberty Bell Route was an inter-urban public transportation system that operated on street trackage and on segments on independent rights-of-way from the turn of the 20th Century until 1951. During its peak, the trolley ran between Philadelphia and Allentown. Built in stages and serving several communities, the Liberty Bell Trolley was perhaps the longest track of all trolley companies in Eastern Pennsylvania. The name was derived from the fact that a branch of the trolley trackage followed Bethlehem Pike, which was generally the route used to transport the Liberty Bell to Allentown in 1777 during the American Revolution when the British occupied Philadelphia. In addition, this line was one of the most popular and successful systems during the era of electric streetcar operations. Vestiges of the trolley alignment such as linear open spaces and greenways are visible today, as well as support facilities such as generator houses, substations, bridges and abutments, train stations that are, in some cases, being reused. In Perkasia, Sellersville, and Hatfield Boroughs, a portion of the former rail bed has been converted to a municipal trail, which has been shown as a portion of the more extensive 25-mile regional trail.



Images of Historic Trolleys that once traversed the Route.

The brainchild of the line was Albert L. Johnson, an entrepreneur from Cleveland, Ohio, who proposed a trolley line from Philadelphia to New York City. He organized the Lehigh Valley Traction Company in 1899, which laid track from Allentown to Quakertown. In 1900, Johnson was instrumental in starting the Inland Traction Company, which laid track from Perkasia to Chestnut Hill (Philadelphia). In 1905, after Johnson's death, the Lehigh Valley and Inland Traction Companies were merged into the Lehigh Valley Transit Company. The company then acquired the Quakertown Traction Company and offered service from Allentown to Philadelphia. Communities served included Quakertown, Sellersville, Lansdale, and, for a time, Chestnut Hill.

R.P. Stevens became the President of the Lehigh Valley Transit Company in 1907. Under his leadership, the line received the nickname Liberty Bell Trolley. Tourist leaflets were printed with information and historical snippets about villages along the line. Service was quickened by straightening the line by reducing several sharp turns. These changes enabled the company to offer freight service, dramatically increasing revenue. In 1912, Stevens negotiated the purchase of the Montgomery Traction Company, bringing the Lansdale to Norristown route into the Liberty Bell Trolley line.

As early as the 1920s, increased use of automobiles began siphoning business from the line and reducing profitability. This situation forced the closure of several spur lines, including the Wales Junction to Chestnut Hill line in 1926 and the Quakertown to Richlandtown line in 1929. Although activity increased during World War II, the Trolley's client base continued to dwindle. On September 6, 1951, the Public Utilities Commission gave the Lehigh Valley Transit Company permission to cease operations. The last Liberty Bell Trolley ended its route the next morning at 2:46 a.m. The rails were taken up immediately and scrapped for the Korean War effort. Most of the trolleys were unceremoniously burned and the metal scrapped for the same purpose at a Bethlehem Steel plant.

A more complete Historic Preservation Element can be found in Appendix A of this report.



STUDY GOALS, OBJECTIVES, AND PLANNING PRINCIPLES

The following goals, objectives and planning principles were adopted by the Study Committee to guide the study process:

A. Public Participation

- 1. Public Awareness** – Ensure that the potential users and stakeholders of the Liberty Bell Trail are aware of the process to determine the feasibility (location, financial, etc.) of the trail.
 - Initiate contact between Study Committees and landowners and operators of potential adjacent land uses.
 - Publish meeting notices and findings/information frequently from previous meetings.
- 2. Public Involvement** – Involve stakeholders, potential trail users, municipalities, county governments, state agencies, non-government organizations, and property owners in the process of determining the feasibility of the Trail.
 - Provide numerous and varied methods of public involvement, including both large and small-scale direct contact (i.e., public meetings, stakeholder interviews, etc.) and indirect contact (i.e., press releases, website, website feedback forms, etc.).
 - Provide geographically dispersed opportunities for public interaction with the Study Committee and consultants throughout the study process.
- 3. Stakeholder Coordination** – Consider the needs of all potential stakeholders and trail users in determining trail feasibility.
 - Review previously prepared planning documents germane to the development of the trail (i.e., County Open Space/Bike Mobility Plans, Municipal Comprehensive/Open Space Plans, Route 202 widening plans, etc.)
 - Coordinate the existing goals of property owners, municipalities, potential users, and government and non-government organizations to arrive at the best possible compromise for a potential trail alignment.
 - Consider present and long-term plans of large landowners and institutions within and surrounding the study area.
 - Solicit the cooperation of utility companies operating in the general area to be considered in the Study.

B. Feasibility Assessment

- 4. Study Area Definition** – Develop an area that maintains historic integrity, accessibility, aesthetically pleasing environmental conditions, and connections to neighboring municipalities, while narrowing the study focus to a manageable level.
 - Balance existing land uses with the historic integrity of the Liberty Bell Route.
 - Identify those areas, with or without historic significance, that will attract and detract from future trail use.
 - Delineate a study area that is both fiscally and physically manageable.
 - Develop a consensus as to potential alignments to be studied, with the input of the Study Committee and County Sub-committees.
 - Seek linkages to other uses such as residential neighborhoods, commercial zones, parks, schools, and centers of employment.
- 5. Potential Trail Users** – Ensure that all potential users are identified and needs of those users are clarified.
 - Identify potential user groups through state, county and municipal organizations.
 - Provide outreach through a variety of media and methods to identify potential users/user groups.
 - Review user characteristics from similar trail facilities in the region (e.g., Valley Forge Bikeway, The Perkiomen Trail, The Schuylkill River Trail).
 - Provide signage that is consistent and distinctive in image, informative, and highlights the trail's presence and value as an alternative means of travel.
 - Initiate efforts such as special events and programs to encourage regular use and new users.
 - Seek the alignment that maximizes positive user experiences.
- 6. Alternative Alignment Evaluation** – Assure that all potential segments are thoroughly investigated for practicability in developing the final trail alignment.
 - Identify existing site-specific manmade and natural features, and areas of environmental concern (vegetation, soil, wetland, wildlife, etc.) that will impact the development of the trail.
 - Review public safety concerns of each potential segment (including topographic issues, vehicular conflict points, dangerous adjacent land uses).
 - Review opportunities for potential connections to other existing and planned trails.
 - Consider the locations of user generators and points of interest, which may be accesses by the various alternatives (including recreation sites, schools, commercial nodes, transit stops, employment centers, etc.).



- Determine the importance of historic connections that are germane to the context of the Liberty Bell Trail, and the extent of portions of the former right-of-way that are suitable/unsuitable for trail use.
- Consider any legal constraints in implementing the trail on the various segments to be considered.
- Consider the extent to which the integrity of the former trolley route would be maintained in assessing the various alternatives.
- Develop a full understanding of the potential impacts of each proposed alternative alignment.

7. **Accessibility** – Ensure that any potential trail alignment allows users of any physical ability a chance to experience the trail and associated points of interest.

- Analyze access to historic sites and existing sections of right-of-way to determine the most accessible connections.
- Ensure compliance of all potential trail alignments with the Americans With Disabilities Act (ADA).

8. **Determination of Feasibility** – Determine overall project feasibility based upon an evaluation of all factors studied and consensus of public input.

- Assess the potential user demand for various alignments.
- Inventory the positive and negative implications of each alternative alignment or segment.
- Develop an objective system for ranking the alternatives studied.

C. Concept Planning

9. **Trail Concept Plan** – Develop a conceptual plan that seeks compatibility with the surrounding land uses, while maximizing the experience for the user, provides ample opportunity for recreation and allows for understanding of the historic context the trail symbolizes.

- Follow the alignment of the former trolley wherever possible.
- Where it is not possible to follow the original alignment, utilize alternative segments that result in an uninterrupted trail primarily on or within public property, easements, and road rights-of-way.
- Limit recommendations to acquire land and easements.
- Select alternative segments beyond the original trolley alignment according to criteria established and accepted Study Committee (e.g., *distance, safety, ownership, length*).
- Select a preferred alignment for the trail based on the most practical options and a consensus of stakeholders, trail users, and community members.

- Seek a route that has safety as a primary criterion with the least number of interfaces between heavily traveled road segments/intersections and the trail.
 - Connect important points of interest, including natural and cultural features.
 - Foster connections with other existing/planned trails and trail networks.
10. **Financial Feasibility** – Develop concise and defensible method for determining the financial feasibility for the final trail concept plan.



STUDY AREA DEFINITION AND INVENTORY

Maps and Study Area

The study corridor was defined by compiling an inventory of physical and cultural characteristics for a large enough area in which the trail could potentially be located. The initial step required preparation of an electronic base map for each municipality covering the land area in the general vicinity of the historic Liberty Bell Trolley line. This area included a portion of 17 townships and boroughs and some 25 miles. Using map resources of both Montgomery and Bucks County Planning Commissions, the study base map depicts local and regional roads, major road names, streams, creeks and water bodies, railroad lines, bridges, utility corridors, property lines, and municipal borders.

Inventory information was added to these maps based on published sources, field observations, consultant research, and Study Committee members' local knowledge. The initial step required adding the alignment of the historic trolley route to the base map, a complicated task given the loss of much of the original right-of-way, a very different pattern of land use and ownership than existed in 1951 when the trolley ceased operation, and old maps indicating different alignments through some sections. Based on an historic alignment, a corridor was selected to map other information for use in defining a modern day trail that followed as closely as possible the historic route. Initially defined as approximately one-half mile either side of the route, the study corridor was subsequently revised to allow for greater divergence from the historic line to accommodate current conditions and obstacles. The study corridor ranged in width from one-half mile to just over two miles.

The maps developed for the study were prepared in two formats and scales – Composite Map and Segment Maps.

Composite Map

The Composite Map (on the following page) shows the entire study corridor with the historic trolley line and the proposed trail alignment. Though the map on the following page is a reduced version for inclusion in this report, a full-sized one is available, at an approximate scale of 1"= 0.60 mile. Its primary use is to view the regional context of the line.

Segment Maps

The Segment Maps (1 of 12 through 12 of 12) were developed to present detailed information for each of the communities through which the trail will pass. Twelve Segment Maps in report format (11" x 17", not to scale) cover 17 municipalities as listed below.

Segment 1: East Norriton Township

Segment 2: Whitpain Township

Segment 3: Upper Gwynedd Township & North Wales Borough (North Wales was added during the planning process through the extension of Points of Interest Spur Trails)

Segment 4: Lansdale Borough

Segment 5: Hatfield Township & Hatfield Borough

Segment 6: Franconia Township

Segment 7: Souderton Borough

Segment 8: Telford Borough

Segment 9: Hilltown Township & West Rockhill Township (south)

Segment 10: Sellersville Borough & Perkasie Borough

Segment 11: East Rockhill Township & West Rockhill Township (north)

Segment 12: Quakertown Borough & Richland Township

(Note: Segments 1 through 7 are located in Montgomery County; Segment 8, Telford, is located partially in both Montgomery and Bucks Counties, and the remaining segments are located in Bucks County.)

Segment Maps are used in the study to present detailed information for the study corridor and to depict both the historic route and proposed Liberty Bell Trail. Information is recorded in color on three sets of Segment Maps according to the following three categories: Physical Inventory, Ownership, and Land Use. These sets of Segment Maps are the basis for describing the proposed trail concept in subsequent sections of this report. Physical Inventory maps and trails are included in Section 5 of this report; and Ownership and Land Use maps are part of the report Appendix.

Physical Inventory

Maps show features along the length of the corridor and engineering concerns related to implementation. The historic route and proposed trail are shown on each.

Physical Features (e.g., trolley substation, bridge abutments, parks, municipal complexes, libraries)

Environmental Features (e.g., floodplain, wetlands)

Historic Features (e.g., historic homes, districts, sites)

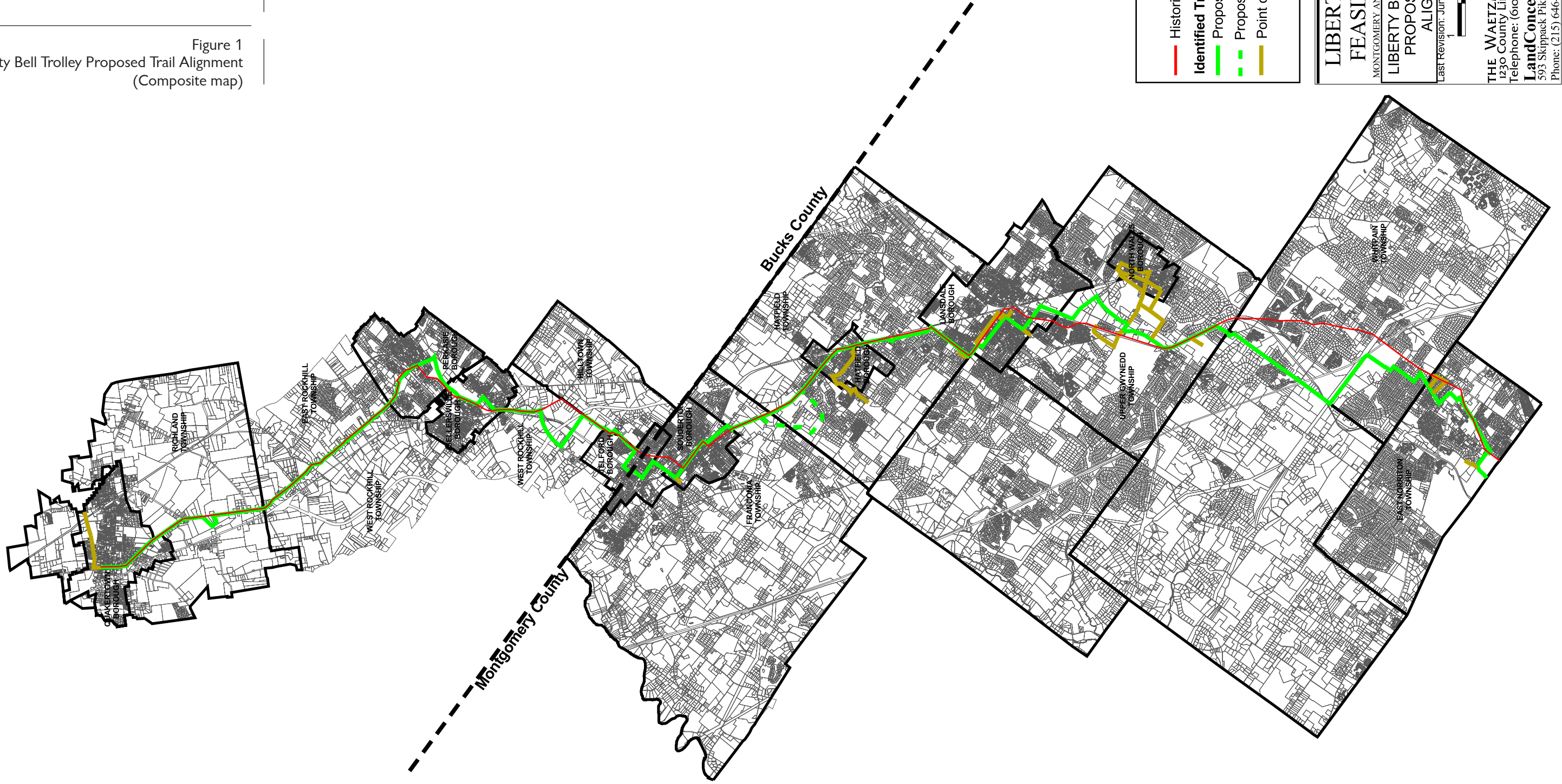
Engineering Concerns (e.g., high volume street crossing, stream crossing)

Ownership

Maps show ownership based on tax assessment records and in the following categories. The historic route and proposed trail are shown on each.



Figure 1
Liberty Bell Trolley Proposed Trail Alignment
(Composite map)



Legend

- Historic Liberty Bell Trail Route
- Identified Trail Alternatives**
- Proposed Trail Alignment
- - - Proposed Interim Trail Alignment
- Point of Interest Spur Trail

**LIBERTY BELL TRAIL
FEASIBILITY STUDY**
MONTGOMERY AND BUCKS COUNTIES, PENNSYLVANIA

**LIBERTY BELL TROLLEY
PROPOSED TRAIL
ALIGNMENT**

Last Revision: June 30, 2005

0 1 Miles

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SECTION 4

- Private
- Public
- Quasi Public/Private
- SEPTA
- Utility (e.g., PECO, PP&L)

Land Use

Maps indicate general land use based on tax assessment data. Fourteen categories have been consolidated from the assessment records and include the following. The historic route and proposed trail are shown on each.

- Single-Family Detached Residential
- Multi-Family & Single-Family Attached Residential
- Mobile Home Park
- Retail
- Office
- Industrial
- Institutional
- Mixed Use
- Utilities
- Undeveloped
- Public Open Space
- Private Open Space
- Agriculture
- Water

Proposed Trails

For each of the three sets of Segment Maps, the historic Liberty Bell Trolley route is shown by a solid red line. The proposed Liberty Bell Trail is shown as a solid green line. In Hatfield and Franconia Townships, there is an interim trail alignment, shown as a dotted green line; its purpose will be described in Section 5. Numerous points of interest exist along or in the general vicinity of the proposed line. In a number of segments, they are shown linked to the proposed trail by a Point of Interest Spur Trail shown as a solid gold line. Points of interest include historic or culturally significant buildings or sites, historic districts, park areas, schools, other

public buildings and sites, and similar facilities. Local trails and trail networks, proposed and existing, are also shown on the Segment Maps, connecting to the proposed Liberty Bell Trail by solid or dashed purple lines.

The proposed trail alignment or trail concept is described in Section 5.



TRAIL CONCEPT

The explicit intent of this feasibility study was to follow the historic route of the Liberty Bell Trolley as closely as possible. The proposed Trail Concept achieves this goal wherever possible recognizing that obstacles exist that prevent this goal from being completely realized. Land ownership and land uses have changed dramatically in more than 50 years since the trolley line ceased use. Consequently, the proposed alignment deviates somewhat from the historic route, but achieves the overall intent as stated at the outset of this study. In some areas, greater consistency with the historic alignment would have been possible, relying heavily upon SEPTA rights-of-way (in which no service or very limited service, currently exists). However, both Bucks and Montgomery Counties' policies support possible future passenger service in some of these rights-of-way and alternatives were found for any trail segments that might otherwise have been located within them (with very minor exception; see Segment #5 description).

In summary, the proposed Liberty Bell Trail seeks compatibility with the surrounding land uses, maximizes the trail user's experience, provides opportunities for recreation and non-motorized transportation, and offers an understanding of the historic aspects and context of the former trolley line. An extensive alternatives analysis (Section 1) was completed to select a preferred alignment as presented in this plan. Essential factors in the route selection were diverse and positive user experiences both on-road and off-road, and a critical and realistic assessment of the potential to complete the trail.

The proposed Liberty Bell Trail is described in this section of the report by segment progressing from south to north - East Norriton (Segment 1 of 12) to Quakertown (Segment 12 of 12). A description of the alignment for each of the segments is organized utilizing a similar format and topic headings, thereby providing consistent information for each segment. Additional details are available from the three sets of Segment Maps - Physical Features (incorporated with the text of this section), Ownership, and Land Use (in report appendix). Where applicable, the last heading (Bicycle Compatibility) in the descriptions of the segments was developed from site observations and evaluations based on the Pennsylvania Department of Transportation's Statewide Bicycle & Pedestrian Master Plan: Bicycle and Pedestrian Guidelines (April 1996).

In general terms, the proposed segment alignments are conceptual and have been shown in approximate locations given the conditions at the time of the study and much community input. Some change is to be expected as each municipality moves from the concept to detailed design and implementation. Important goals for the trail are achieving, wherever possible, a level of design consistency with certain elements (e.g., signage, construction standards, street furnishings) among the segments and striving for inter-municipal coordination recognizing different implementation timetables. In addition to the proposed trail alignment shown on the Physical Inventory maps in this section, are potential parking lots for trailhead parking. These are existing public parking lots which could be made available for this use once sections of the trail are implemented; decisions about individual lots will be up to the jurisdiction which owns or maintains them.

Minimum Trail Design Standards

Municipalities in Montgomery County should conform to the County's minimum standards found in the resource document entitled, 'Guidelines for Trail Development within Montgomery County'. This will be a requirement for all municipalities utilizing County Open Space funds to design and construct trail projects.

Bucks County municipalities may choose to reference and apply Montgomery County trail standards if local and regional standards do not exist within Bucks County.

Overview of Trail Concept

Figure 2
Main Trail Lengths by Municipality

| Municipality | Feet | Miles | Shared Municipal Borders | | |
|-----------------------|----------------|--------------|--------------------------|---------------|-------------|
| | | | Municipality | Feet | Miles |
| East Norriton | 12,225 | 2.32 | | | |
| Whitpain* | 21,375 | 4.05 | Worcester | 9,582 | 1.81 |
| Upper Gwynedd | 17,458 | 3.31 | | | |
| Lansdale | 14,367 | 2.72 | Hatfield | 3,846 | 0.73 |
| Hatfield Twp** | 11,004 | 2.08 | | | |
| Hatfield Boro | 4,433 | 0.84 | | | |
| Franconia | 3,879 | 0.73 | Souderton | 430 | 0.08 |
| Souderton | 8,313 | 1.57 | Telford | 1,351 | 0.26 |
| Telford*** | 8,484 | 1.61 | | | |
| West Rockhill (south) | 11,647 | 2.21 | | | |
| Sellersville | 5,634 | 1.07 | | | |
| Perkasie | 8,185 | 1.55 | | | |
| East Rockhill | 13,203 | 2.50 | West Rockhill | 11,000 | 2.08 |
| Richland | 10,719 | 2.03 | Quakertown | 712 | 0.13 |
| Quakertown | 5,161 | 0.98 | | | |
| Total | 156,087 | 29.56 | | 26,921 | 5.10 |

* Whitpain's total includes a 670 foot section that goes through Worcester.

** 2 Segments (5,228 north, 5,756 south)

*** Telford's total includes a 687 foot section that goes through Hilltown Twp

Note: Shared borders are not double counted.



Figure 3
Length of Main Trail by Trail Types

| Segment Type | Feet | Miles | Approximate Percent |
|--------------|-----------------|--------------|---------------------|
| On-Road | 80,224 | 15.19 | 51% of Main Trail |
| Sidewalk | 20,277 | 3.84 | 13% of Main Trail |
| Off-Road | 56,040 | 10.61 | 36% of Main Trail |
| Total | 156,541* | 29.65 | 100% |

* Trail segments lengths are approximate. Total trail length differs between two tables by 454 feet (0.3%) due to computation methodology.

Segment Descriptions

Segment 1 - East Norriton Township

Trail Alignment - The southern terminus of the proposed trail will be at the East Norriton Township/Norristown Borough line immediately west of the PA Department of Transportation facility and the Norris City Cemetery. It will follow Norris City Avenue east to 4th Street where will turn northeast and follow a PECO utility corridor behind the homes on Fourth Street and Coles Boulevard. This utility corridor is currently maintained and has a well-used gravel/ dirt pathway leading to the Mercy (Suburban General) Hospital property. The trail will traverse the rear of the hospital property (on the historic alignment) and a parcel occupied by an auto body shop to Germantown Pike. The trail will proceed west on Germantown Pike a short distance to the shopping center traffic light. It will cross through the retail center and onto a new private road, out to Swede Road. The trail will follow Swede Road north to the Whitpain Township line. The trail will pass through a variety of land uses, including public land, utility corridors, institutional, retail and single and multi-family residential.

Point of Interest Spur Trail - Two spur trails are proposed. One begins at Norris City Avenue and follows New Stanbridge Road to link with the East Norriton Township Building and Stanbridge Street Park. The second will connect an historic neighborhood (Washington Heights) between Swede Road and DeKalb Pike near the historic trolley substation (corner Rt. 202 and Township Line Road).

Area Features - Features in this segment include the trolley substation noted above (now used as a hair salon), Washington Heights, Grandview Heights, Meredith Hill House, and Supplee House.

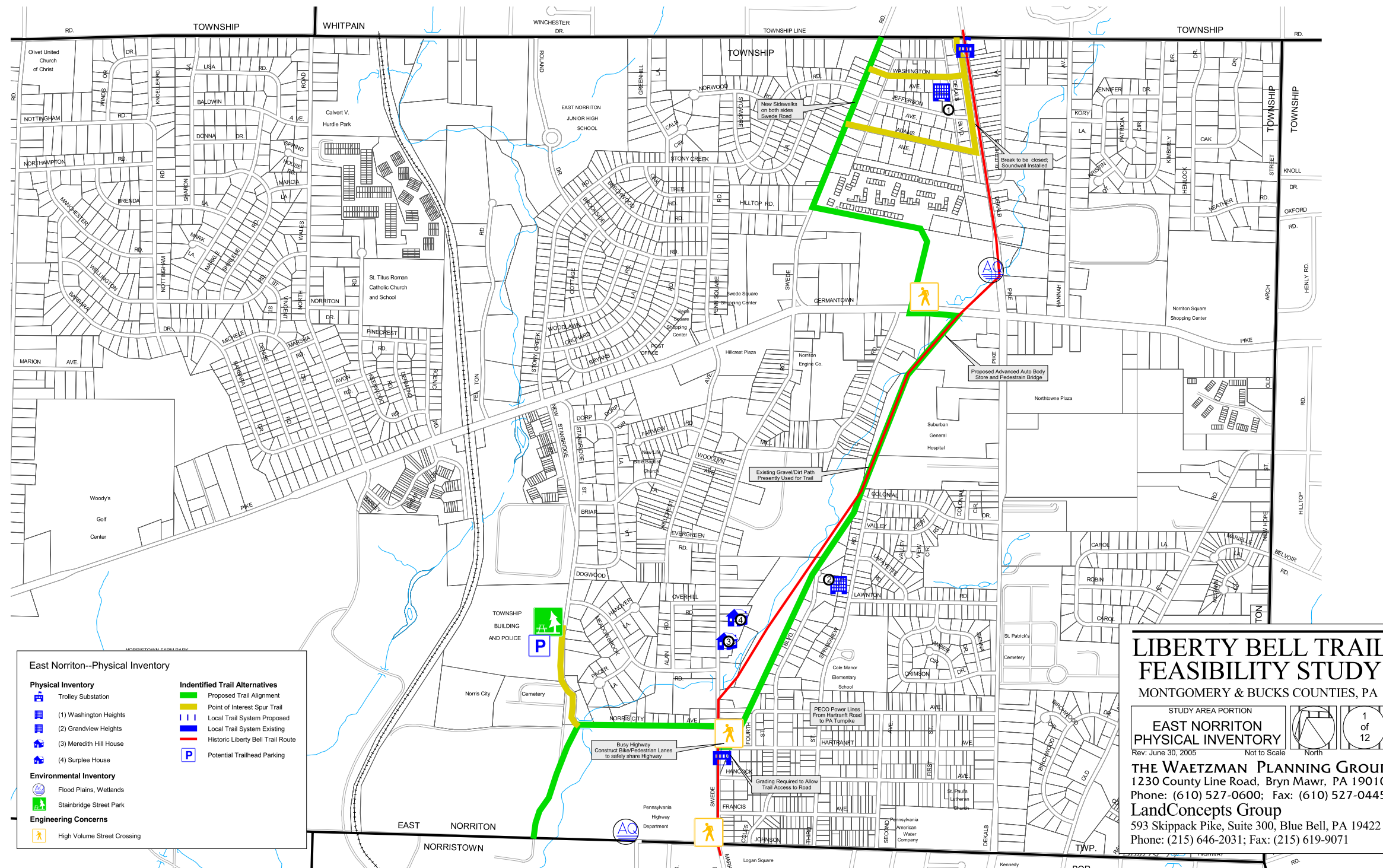
Environmental Features - The trail must cross floodplain and wetlands associated with the East branch of the Stony Creek between Mercy (Suburban General) Hospital and Germantown Pike requiring a pedestrian bridge being installed as part of a land development project. An existing bridge will cross the same creek on Norris City Avenue.

Engineering Concerns - There is a high volume street crossing at the Swede Road/Norris City Road intersection requiring the addition of a pedestrian/bike lane for safe crossing. At Germantown Pike, safe crossing of the high volume street will be facilitated by an existing traffic light.



SECTION 5

Figure 4
East Norriton Physical Inventory





Segment 2 – Whitpain Township

Trail Alignment – The proposed trail will continue on-road along Swede Road and enter the adjacent residential neighborhood. The route will turn west on Erbs Road to Lafayette Road where it will turn north to Yost Road just west of St. Helena Church. The trail will continue north through the Whitpain Township parkland via an alignment to be determined based on future park development. Near the Pennsylvania Turnpike right-of way, the trail will turn west through public utility land that runs north of Stony Creek Elementary School to North Wales Road. The trail will turn north and follow North Wales Road to the Upper Gwynedd Township line with on-road and off-road options depending on road shoulder conditions and sidewalks. Most of this alignment for this section of trail crosses through areas that are residential and dedicated public open space.

It is noted that a portion of the trail along North Wales Road may be located on the west side and in Worcester Township. Much of this stretch of North Wales Road (west side) has sidewalks and footpaths along the street or within the front portion of the residential developments. The traffic light at Morris Road will make the crossing safe with additional bike/pedestrian lanes, crosswalks, and signage. It is further noted that the trail deviates from the historic trail in this segment because of the need to cross the Pennsylvania Turnpike with few crossing options, regional roads that are heavily traveled and intensely developed, and a major gated community (Blue Bell Country Club). A longer range alternative to North Wales Road to be explored further, is the future use of the Stony Creek rail line corridor; this would require an easement or other permission to pass through the Blue Bell Country Club property.

Area Features – The features along the preferred route include St. Helena’s Church and School, Whitpain Park (to be developed), Stony Creek Elementary School, and the Stony Creek Sports Park. The section of trail in the south part of the township will have the Washington Square Historic District, McGlathery House, and Gormly House reachable by short on-road side trips on residential streets.

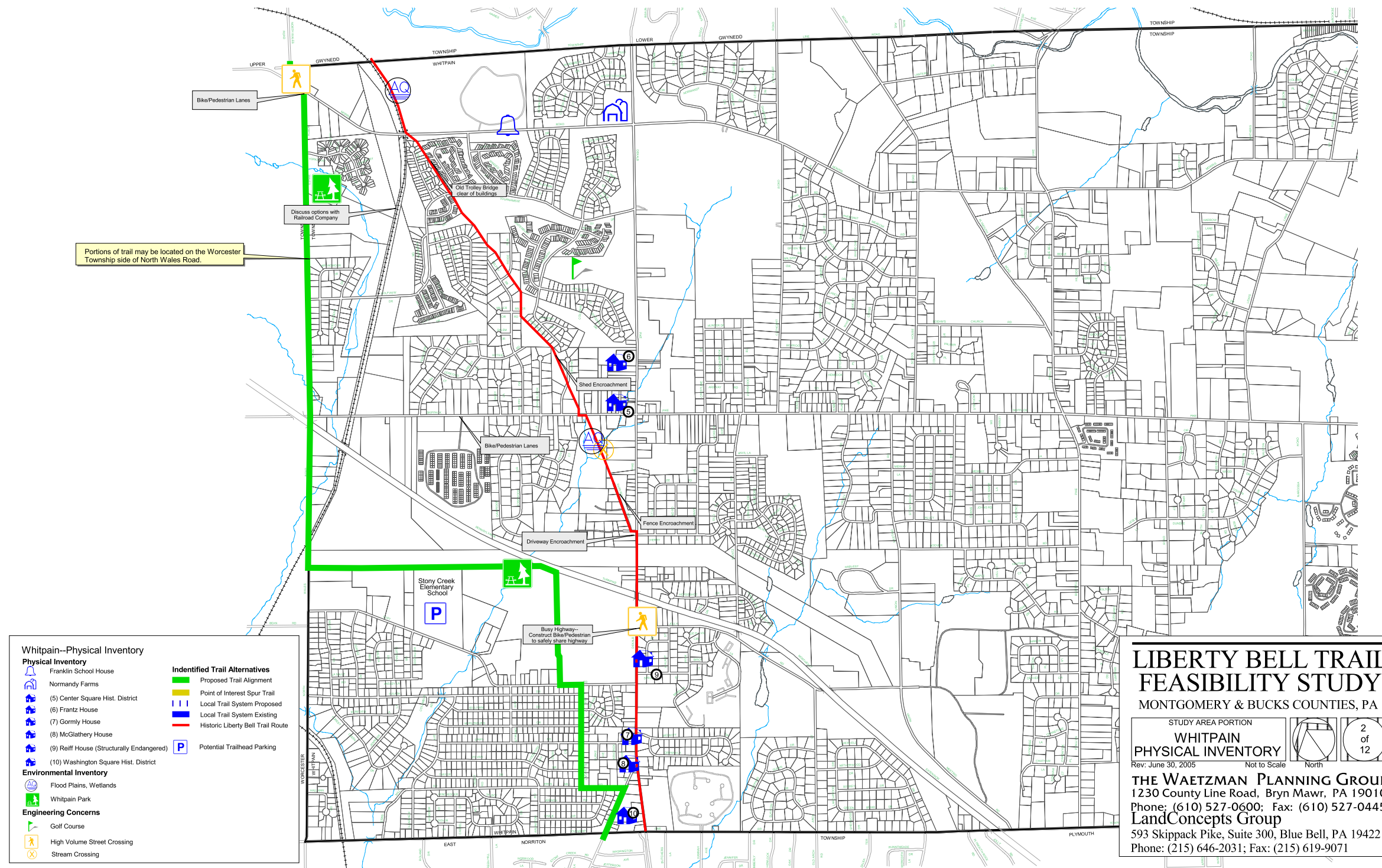
Environmental Features – The only identified environmental features are the crossing of two small tributaries to the Stony Creek. Existing crossings along North Wales Road will be used, except in the undeveloped Whitpain Park where a new bridge will be required.

Engineering Concerns – The Morris Road/North Wales Road is a high volume street crossing and will require improvements as noted above.



SECTION 5

Figure 5
Whitpain Physical Inventory



Portions of trail may be located on the Worcester Township side of North Wales Road.



Segment 3 - Upper Gwynedd Township & North Wales Borough

Trail Alignment - From the Whitpain Township border, the proposed trail will continue northeast on North Wales Road to the Stony Creek rail corridor just north of Acorn Lane. It will proceed north to the intersection of Moyer Boulevard and West Point Pike. The route will follow West Point Pike on-road to its intersection with Sumneytown Pike. The trail will jog southeast on Sumneytown Pike and northeast to a PECO right-of-way that follows the Wissahickon Creek through the Pennbrooke Industrial Center to Wissahickon Avenue. The utility right-of-way will provide an off-road experience for the trail users. At Wissahickon Avenue, the trail will turn west (along a portion of the road already scheduled for improvement), cross Church Road, and proceed through the new Transportation Oriented Development (TOD) between Church Road and the rail line. The trail will continue north and cross into Lansdale Borough. This section of the proposed trail will cross through a variety of land uses, including residential, utility corridors (rail and electric), office complex, industrial, and undeveloped land.

Point of Interest Spur Trail - Spur trails are numerous in this segment connecting many municipal facilities and retail areas, especially in North Wales Borough. The spur trail in the southern part of this segment will connect the main trail to a new age-restricted community under construction along Morris Road. In the center of the map is depicted a network of spur trails serving the Upper Gwynedd Township Building, police station, Parkside Place Park, and eight parks in North Wales Borough (4th, 8th, 9th Streets Parks, Hess Park, Walnut Square Park, Weingarten Park, Montgomery Avenue Park, Wee Walers Park), tennis courts, Borough Hall, police station, post office, and SEPTA train station; those spurs also take the trail user through the North Wales Historic District. The proposed trail will provide direct access to Merck & Company, a major employer in the region whose employees will be able to easily access the trail.

Area Features - In addition to the features noted above, the trail will also link directly to the Wissahickon Valley Watershed Association Green Ribbon Trail adjacent to the Upper Gwynedd Township Building that follows the creek north and south for many miles. It is principally for pedestrian use.

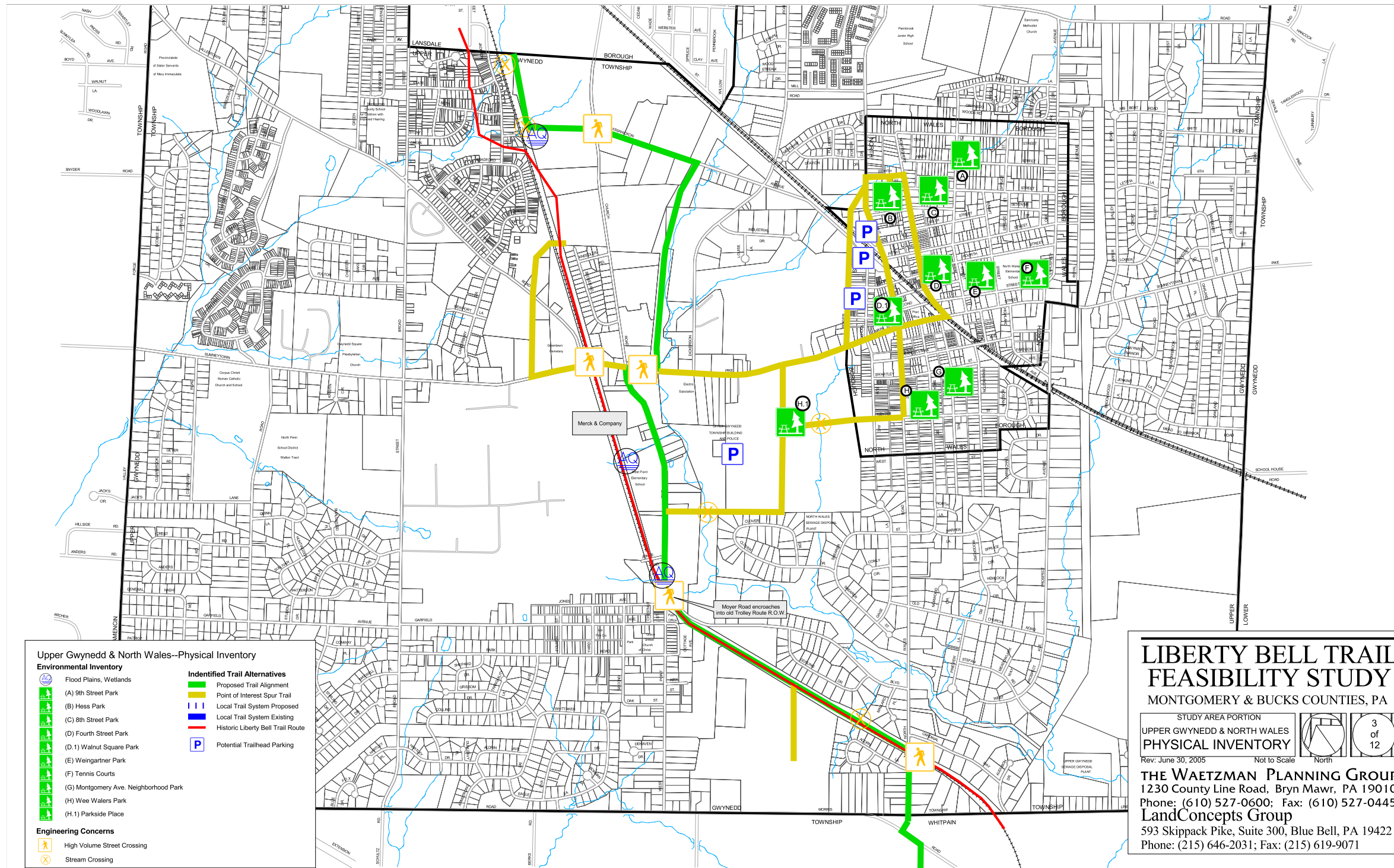
Environmental Features - The trail will need to cross the Wissahickon Creek and tributaries to the Towamencin Creek and associated wetlands with pedestrian bridges.

Engineering Concerns - There are several high volume street crossings at North Wales Road/Stony Creek railroad line, West Point Road/Moyer Boulevard, West Point Pike/Sumneytown Pike (traffic light), Sumneytown Pike/PECO Right-of-Way, Church Road/Wissahickon Avenue.



SECTION 5

Figure 6
Upper Gwynedd & North Wales Physical Inventory





Segment 4 - Lansdale Borough

Trail Alignment - This section of the trail will traverse the established urban community of Lansdale Borough. From the border with Upper Gwynedd, the proposed trail will enter Stony Creek Park following an existing trail. It will turn west and follow Hancock Road, crossing highly traveled Broad Street at a signalized intersection, and continue to Susquehanna Avenue where it will turn northwest. At Derstine Avenue (two blocks from Main Street, the major commercial street), it will turn northwest to Valley Forge Road (Rt. 363). Signage will be used to direct trail users to the nearby commercial areas using any of the crossing side streets. The trail will proceed north one block on Valley Forge Road to Main Street and will turn west to Squirrel Lane. At this traffic-signalized intersection, the proposed trail will turn northeast and follow Squirrel Lane along the Hatfield Township border to the SEPTA rail line at Koffel Road.

Point of Interest Spur Trail - Several spur trails are indicated that will connect the primary trail to: Lansdale Park (at the boundary in Upper Gwynedd) via Susquehanna Avenue; Borough Hall, police station, and post office via Vine Street; the SEPTA Station and parking lot via Susquehanna Avenue/Courtland Street/Wood Street. A spur trail proposed for Mill Street, a 20-foot alleyway, will provide an alternate means of access to the retail uses along Main Street. The spur trail at Squirrel Lane that will follow Oak Boulevard is significant, as it will provide access to Oak Park, a documented trolley-era residential neighborhood with historic and architectural interest.

Area Features - In addition to those mentioned under spur trails, the primary features near or on the route are the many retail establishments, churches, an historic trolley bridge over Hancock Road where the historic Liberty Bell Trolley line crossed, and Stony Creek Park.

Environmental Features - Given the developed nature of the Borough, there are few environmental features, and all of the proposed trail will share the roads and sidewalks.

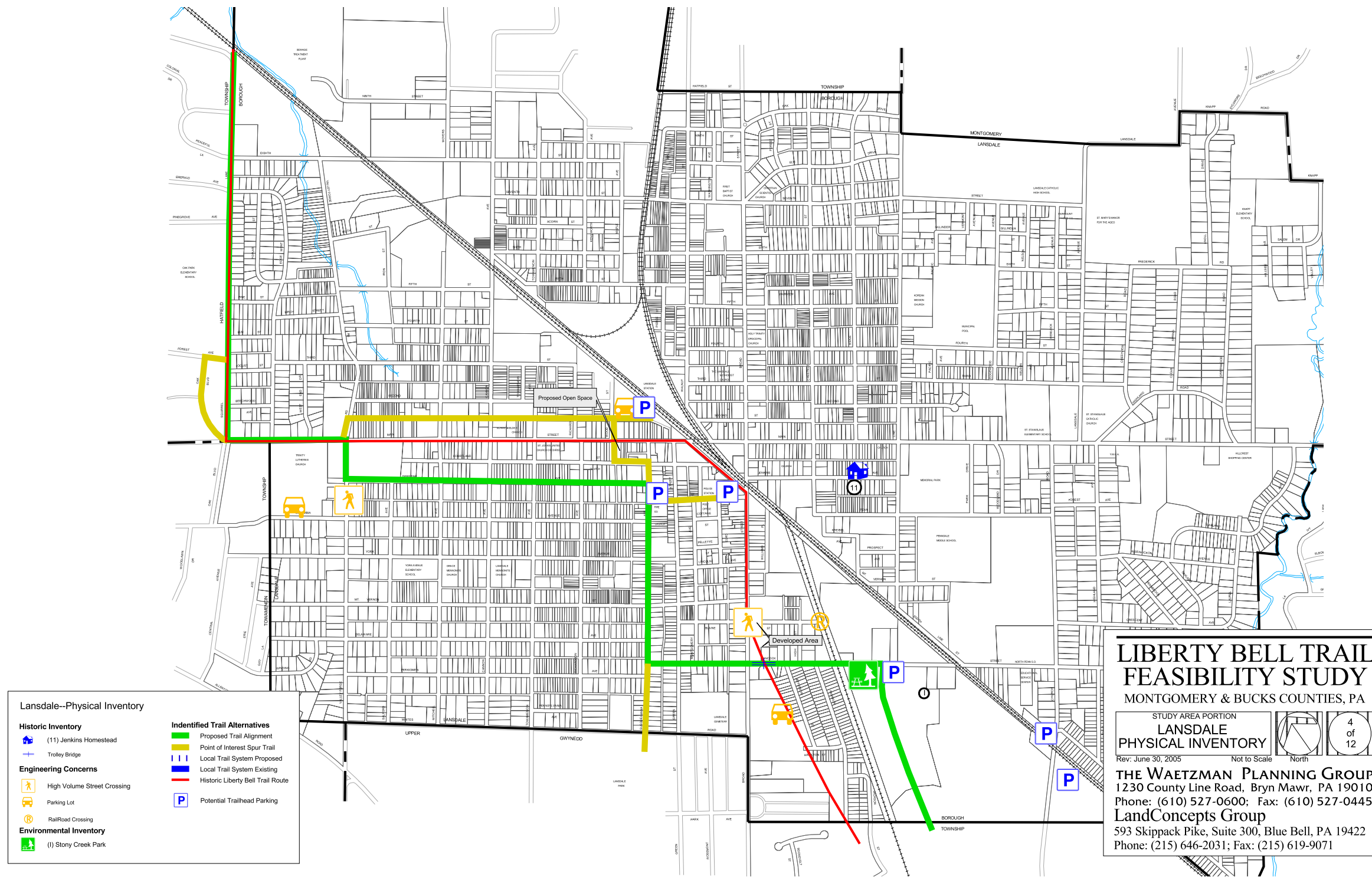
Engineering Concerns - A high volume street crossings at Valley Forge Road is a concern for pedestrian and bicycle crossing.

Bicycle Compatibility - Squirrel Lane is not sufficiently wide to meet the bicycle compatibility guidelines, but the roadway was evaluated as safe for bicyclists. The Valley Forge Road/West Main Street intersection is not considered unusually unsafe, but some adjustments in lanes and parking will likely improve the safety. The width and condition of Mill Street limit its use as a secondary route or spur trail only.



SECTION 5

Figure 7
Lansdale Physical Inventory





Segment 5 - Hatfield Township & Hatfield Borough

Trail Alignment - This section of the proposed trail will pass into Hatfield Township at the Lansdale Borough boundary at Koffel Road and proceeds within the rail right-of-way into Hatfield Borough, except one short deviation north of Werner Road to avoid an electric substation. [This one area in which the SEPTA right-of-way is used, is the exception to the policy discussed in the introduction to this section. This was done at the directive of the Township and recognizes that a short portion of existing trail has been constructed and opened in the right-of-way within the Borough.] The route will continue in Hatfield Borough within the rail right-of-way and will include a segment of trail already constructed and used. Just east of Lincoln Avenue, the trail will leave the right-of-way, turn west to near Cherry Street, and proceed within the former trolley corridor behind the homes on Diamond Street. The trail will leave the Borough and re-enter Hatfield Township within the former trolley right-of-way, cross Bergey Road and proceed to the Franconia Township border just northwest and parallel to Souderton Pike. The route through these municipalities will cross through a variety of land use, including industrial, single-family and multi-family residential, mobile home park, retail, and farmland.

Due to current conflicts, this section of trail includes a proposed interim alignment that follows Bergey Road southwest to Derstine Road and then off-road through agricultural land and a utility corridor to Cowpath Road. In the future, the intent is to utilize the primary trail alternative outlined above.

Point of Interest Spur Trail - A major spur trail is indicated through Hatfield Borough connecting the Hatfield Elementary School, Pennfield Middle School, Heritage Park, Hatfield Township Arboretum, and other points of interest (e.g., churches).

Area Features - The proposed trail will follow the former trolley line entirely through these municipalities (except the interim trail alignment). In addition to the features linked by the spur trail, other features near the trail will include the existing Borough trail, former trolley station, downtown Hatfield, greenhouse, Electrical Plant Park, Hatfield Township Nature Area, and Jacob Reed House.

Environmental Features - The proposed trail will require crossing of several tributaries and floodplains of the West Branch of Neshaminy Creek.

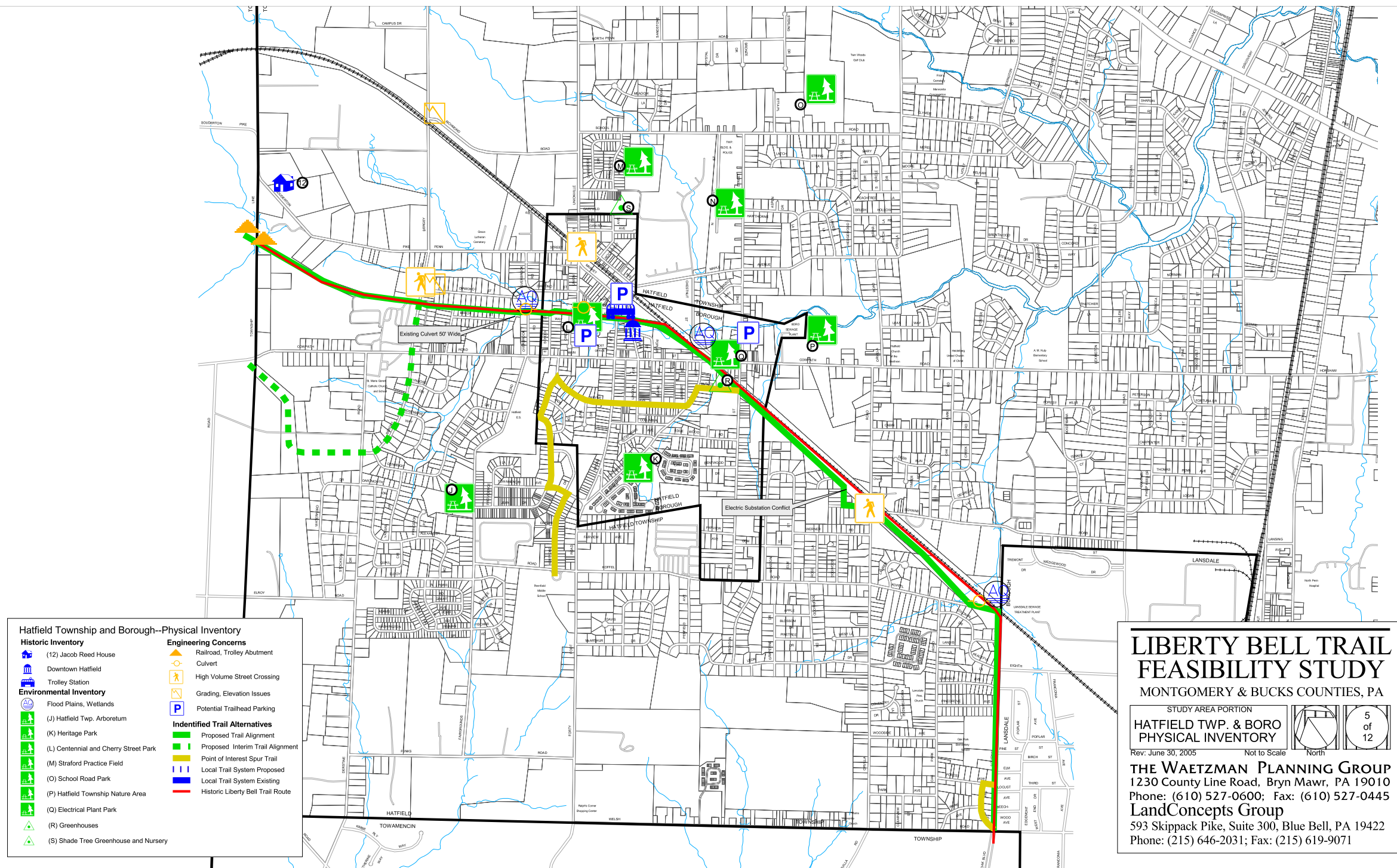
Engineering Concerns - The proposed route will encounter high volume street crossings at Orvilla Road and Schwab Road and at Bergey Roads near Diamond Street. There are also grading issues where the trail crosses Bergey Road, a culvert at Overbrook Road, and railroad/trolley abutments at the Franconia Township border (also a trolley line feature). It should be noted that the proposed Route 309 Connector is proposed to follow Township Line Road in this area; a non-grade crossing is being explored with PennDOT.

Bicycle Compatibility - Some improvements may be warranted at the high volume intersection of Orvilla Road and Schwab Road.



SECTION 5

Figure 8
Hatfield Township & Borough Physical Inventory





Segment 6 - Franconia Township

Trail Alignment - The proposed trail crosses through a short section of Franconia Township before entering Souderton Borough. It will follow the historic trolley line from Hatfield Township and traverse farmland, utility corridor, and single-family residential uses. The trail is proposed to be off-road through this section. (A small portion of the interim trail from Hatfield Township will extend into Franconia as well, where it will be off of the historic alignment.)

Area Features - The Immanuel Leidys United Church of Christ and cemetery are a short distance to the west.

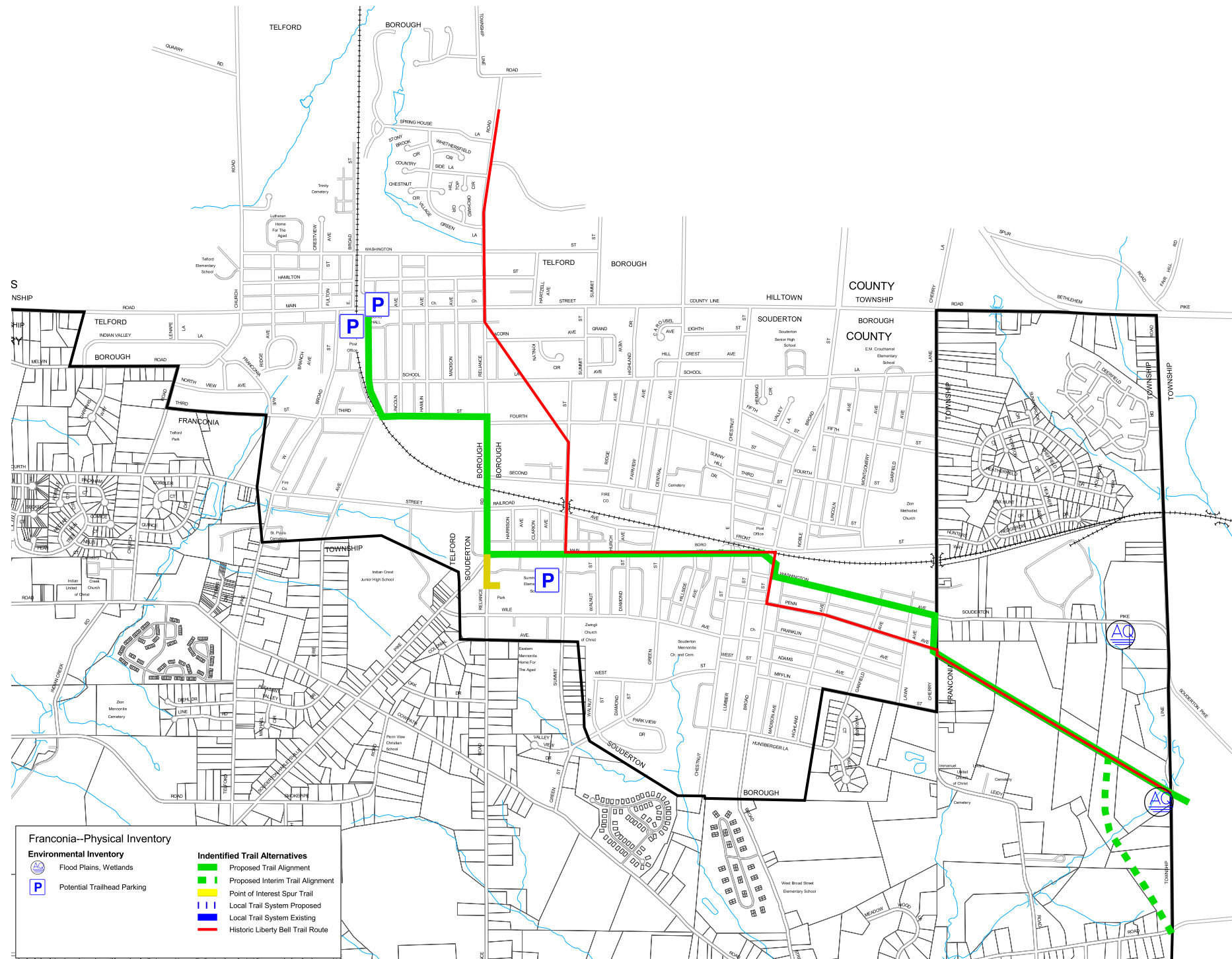
Environmental Features - The route will require crossing of a small tributary and floodplain of the Skippack Creek.

Engineering Concerns - None were noted.



SECTION 5

Figure 9
Franconia Physical Inventory





Segment 7 - Souderton Borough

Trail Alignment - At the Souderton Borough line, the proposed trail will turn northeast onto Cherry Lane for two blocks before turning north onto Washington Avenue to Broad Street. The alignment will follow West Broad Street two blocks to Main Street where it will turn north and continue to Reliance Road; West Broad and Main Streets represent most of the Borough's central business district. At the Main Street/Reliance Road intersection, it will turn north and proceed to the Telford Borough line at School Lane. The route is all on-road and through a well-developed urban area of single-family and multi-family residential, retail, mixed, office institutional and industrial uses. The alignment follows the historic trolley line along Main Street until East Summit Street where the trolley turned.

Point of Interest Spur Trail - A spur trail is proposed from the Reliance Road/Main Street intersection southwest to link Summit Street Elementary School, a Borough park, Borough Hall, and several churches.

Area Features - Area features include the former SEPTA train station (restaurant use), post office, downtown Souderton, and the J.M. Landid & Company.

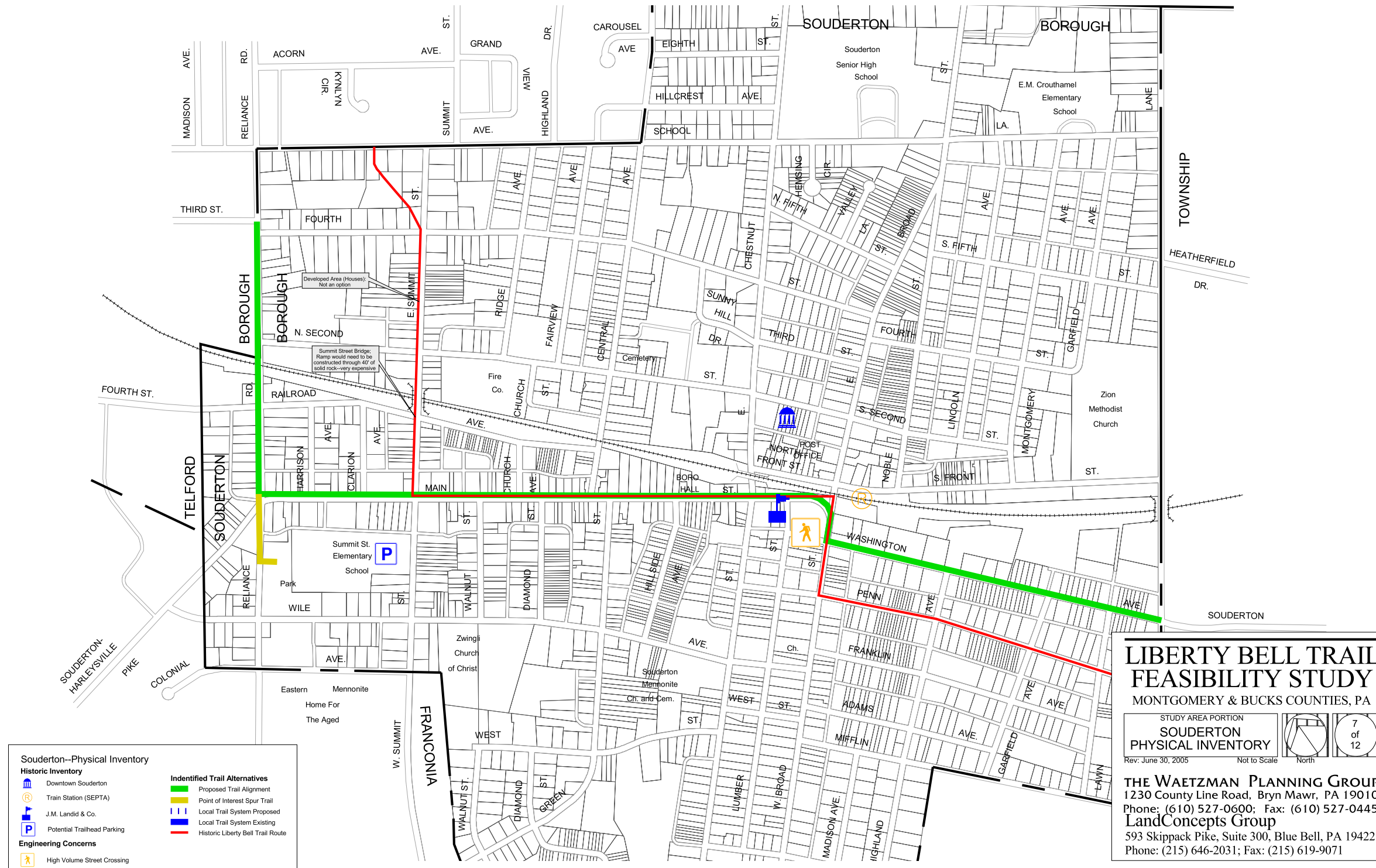
Environmental Features - Given the developed character of the Borough, there are no environmental features affected by the proposed on-road trail.

Engineering Concerns - The primary concern is a high volume street crossing at Main and West Broad Streets (signalized).



SECTION 5

Figure 10
Souderton Physical Inventory





Segment 8 - Telford Borough (Montgomery County and Bucks County)

Trail Alignment - The proposed trail will follow School Lane northwest to Penn Avenue where it will turn and proceed northeast to Main Street. At this point, the trail will turn northwest on Main Street (County line) a short distance to the railroad line right-of-way. The trail will turn northeast and follow the rail right-of-way to Washington Street. It will continue on Washington Street to Reliance Road where it will turn northeast. The trail will continue until it reaches Centennial Road where it will jog and join Township Line Road and leave the Borough. This section of the trail is on-road, and the portion proposed for Reliance Road closely follows the historic route, except at the jog where there are homes where the trolley passed. The route selected through Telford specifically will allow direct access to many Borough features (noted below).

Area Features - The alignment provided access to Borough Hall, former SEPTA train station (farmers market), post office, Telford Crossing Park, and several churches.

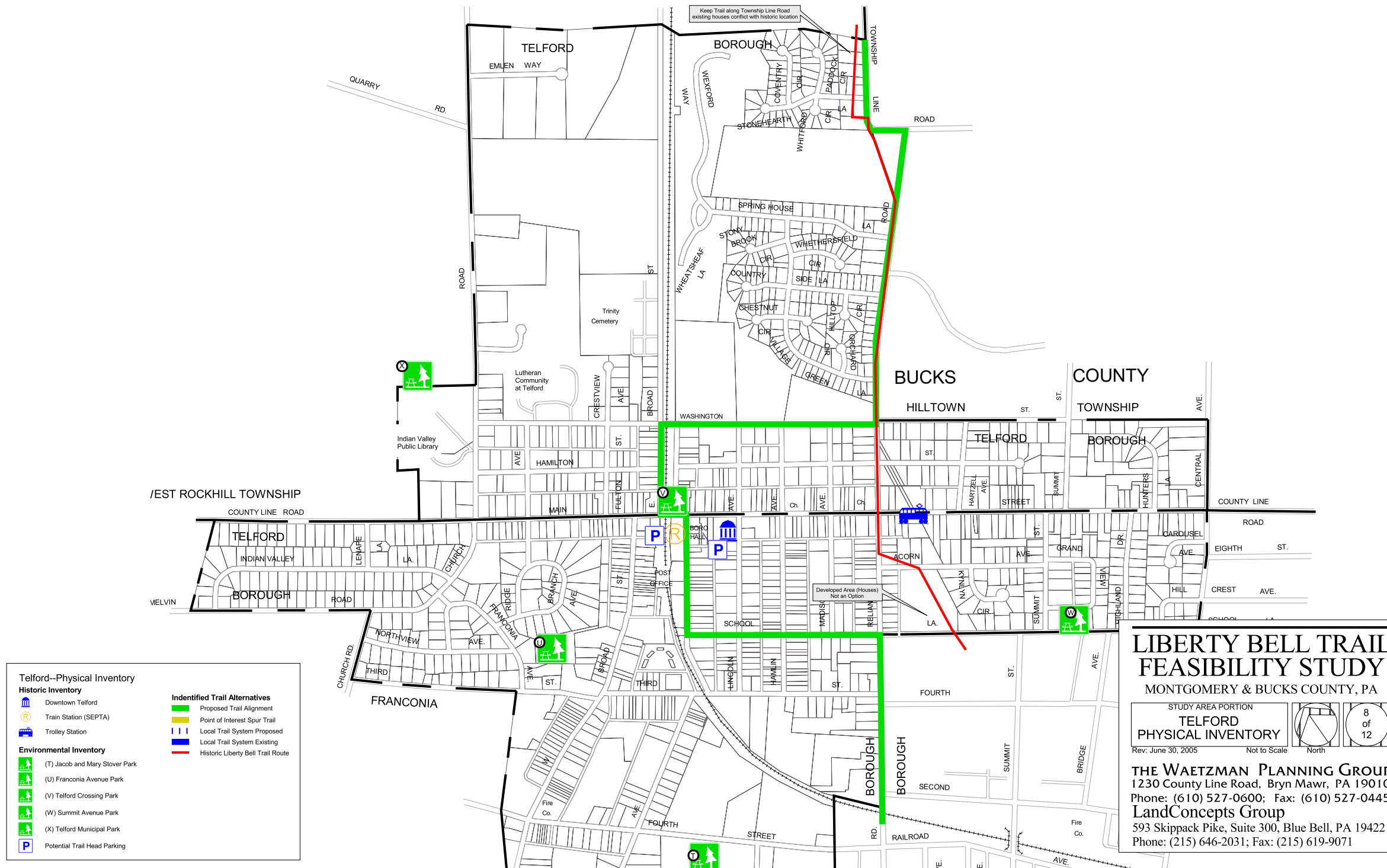
Environmental Features - None noted along the selected alignment.

Engineering Concerns - None noted along the selected alignment.



SECTION 5

Figure 11
Telford Physical Inventory





Segment 9 - Hilltown Township & West Rockhill Township (south)

Trail Alignment - The alignment in these townships will follow Township Line Road (border between the townships) to a proposed new local trail that will run northwest along Meetinghouse Road. The trail must turn onto Meetinghouse Road at this location due to the conflict with (elevated) Route 309. It will follow Meetinghouse Road crossing the SEPTA rail corridor at-grade to State Road (Route 152). It will follow State Road crossing under Route 309 and over the rail line to State Road/Keystone Drive. The trail will turn north on Keystone Drive, and then rejoin the historic trolley line along a current utility right-of-way. The trail will continue to follow the historic route into Sellersville Borough at Clymer Avenue. The trail is to be on- and off-road in this segment and will largely traverse farmland and undeveloped land.

Area Features - The trail will pass near Highland Park Camp Meeting, Rockhill Cemetery, Sellersville Elementary School, and an intact trolley bridge.

Environmental Features - The trail will cross a small tributary to Mill Creek along Old State Road.

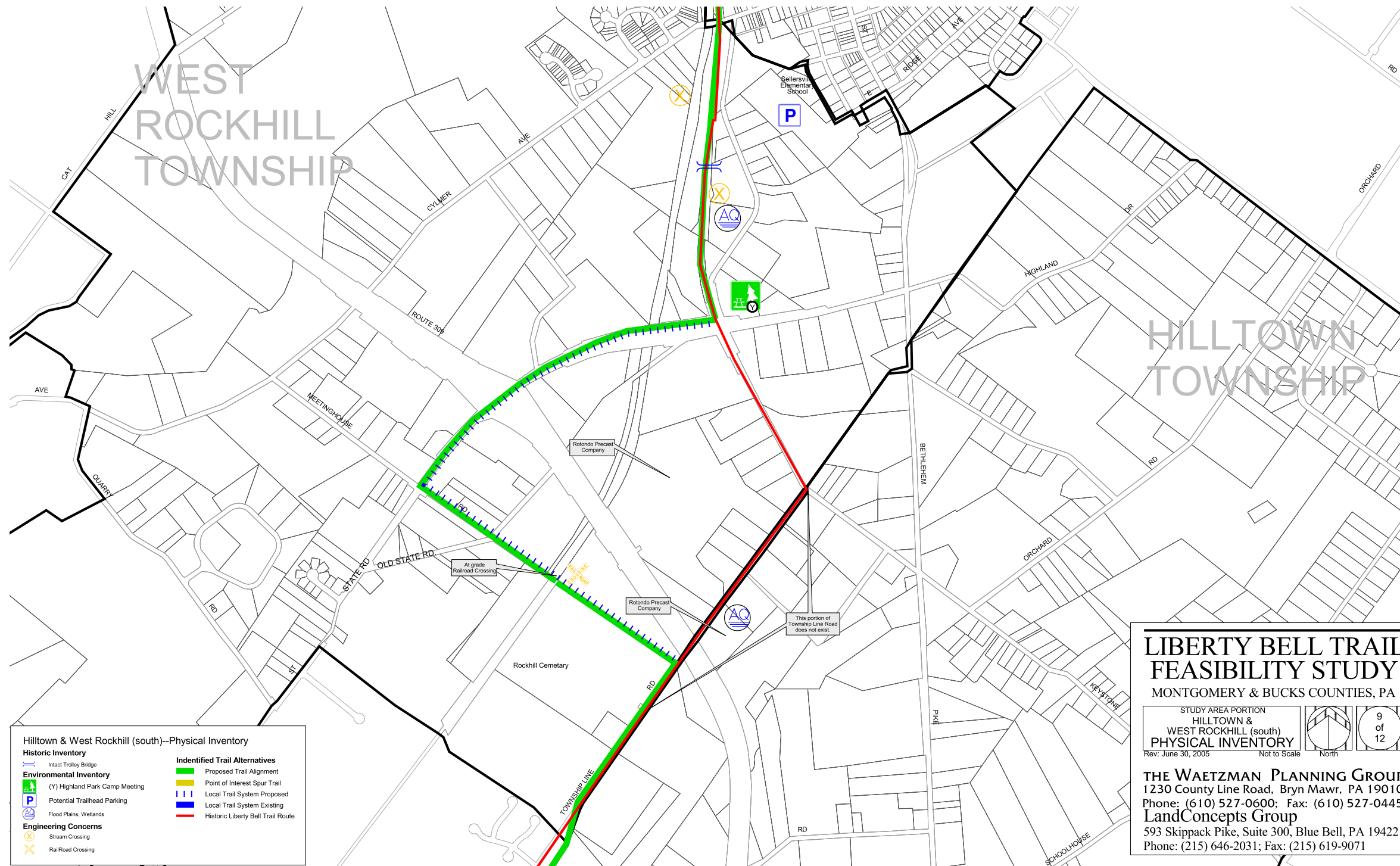
Engineering Concerns - The trail will need to cross the stream noted above several times and the at-grade railroad crossing on Meetinghouse Road.

Bicycle Compatibility - Meetinghouse Road was reviewed among the alternatives. As a result of low traffic volumes, it can be safely used for the on-road trail, although it is not bicycle or pedestrian compatible according to the State criteria. State Road is considered compatible because of adequate shoulders, especially through the Route 309 interchange. It is noted that the shoulders vary in terms of condition (loose gravel and grass) and require improvements, as well as markings and signage, especially at the entrance and exit ramps to Route 309. Crossing of State Road should be directed to one location with concentrated warning signage. It is advisable to cross it at Meetinghouse Road since the roadway has only two lanes at this location. No sidewalks are available along these routes.



SECTION 5

Figure 12
Hilltown & West Rockhill (south) Physical Inventory



Hilltown & West Rockhill (south)--Physical Inventory

| | |
|--------------------------------|-----------------------------------|
| Intact Trolley Bridge | Proposed Trail Alignment |
| (Y) Highland Park Camp Meeting | Point of Interest Spur Trail |
| Potential Trailhead Parking | Local Trail System Proposed |
| Flood Plains, Wetlands | Local Trail System Existing |
| Stream Crossing | Historic Liberty Bell Trail Route |
| Railroad Crossing | |

LIBERTY BELL TRAIL FEASIBILITY STUDY
MONTGOMERY & BUCKS COUNTIES, PA

STUDY AREA PORTION
HILLTOWN & WEST ROCKHILL (south)
PHYSICAL INVENTORY

Rev. June 30, 2005 Not to Scale North

THE WAETZMAN PLANNING GROUP
1230 County Line Road, Bryn Mawr, PA 19010
Phone: (610) 527-0600; Fax: (610) 527-0445

LandConcepts Group
593 Skippack Pike, Suite 300, Blue Bell, PA 19422
Phone: (215) 646-2031; Fax: (215) 619-9071



Segment 10 - Sellersville Borough & Perkasio Borough

Trail Alignment - The trail will enter Sellersville Borough along the historic route at Clymer Avenue and will proceed on West Park Avenue to Diamond Street. The trail diverges from the historic route on these two streets as the decking for the former trolley line between the bridge abutments is no longer present. The trail will proceed northwest on Diamond Street crossing the East Branch of the Perkiomen Creek and joining an existing gravel/dirt/paved trail through Lake Lenape Park and Menlo Park to Walnut Street in Perkasio Borough. The trail will turn northwest on Walnut Street and will proceed to South Seventh Street, through an existing tunnel and to the intersection of Park Avenue and Ridge Road. It will join with Bethlehem Pike entering East Rockhill Township. The trail will pass through a variety of land uses, including parkland, single-family and multi-family residential, retail, and industrial.

Area Features - The proposed trail follows portions of the historic trolley route through these two boroughs and several area features. Among them are Lake Lenape Park, Menlo Park, trolley and railroad bridge abutments, intact trolley bridge, trolley station (Perkasio Historical Society office), Eisenlohr Cigar Factory, Borough Hall, police station, and nearby Sellersville Tavern/Washington House.

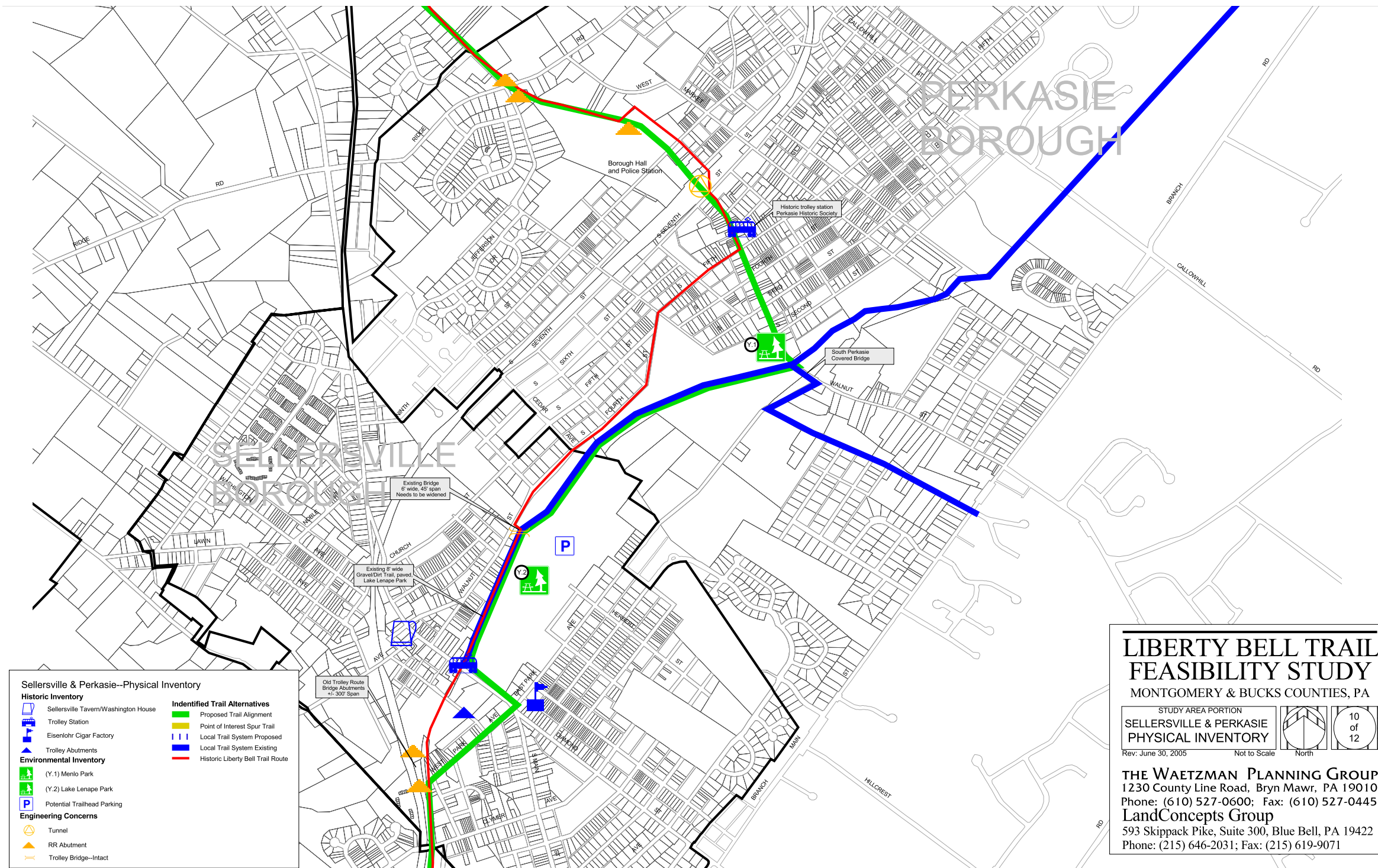
Environmental Features - The alignment will pass over the East Branch of the Perkiomen Creek on existing bridges.

Engineering Concerns - The former trolley bridge is 6 feet wide with a 45-foot span and will need to be widened to accommodate the trail. The old trolley route bridge abutments may be usable for a future trail crossing.



SECTION 5

Figure 13
Sellersville & Perkasie Physical Inventory





Segment 11 - East Rockhill Township & West Rockhill Township (north)

Trail Alignment - The proposed alignment from the Perkasio Borough line to the Richland Township line will be on-road and will follow Old Bethlehem Pike, which is also the historic trolley route. This road separates East and West Rockhill Townships. The route will pass primarily through single-family residential and undeveloped land, plus a small amount of utility and industrial land.

Area Features - The main features are the open spaces that flank much of this section of the proposed trail.

Environmental Features - A stream crossing and wetlands associated with Threemile Run (tributary to Lake Nockamixon) will need to be crossed using an existing crossing of Old Bethlehem Pike. The trail will also need to cross a small tributary to the Tohickon Creek on Old Bethlehem Pike near the Richland Township boundary.

Engineering Concerns - The trail will cross Rich Hill Road, which is a high volume street crossing.



SECTION 5

Figure 14
East and West Rockhill (north) Physical Inventory





Segment 12 - Quakertown Borough & Richland Township

Trail Alignment - The proposed trail will enter Richland Township on Old Bethlehem Pike following the historic trolley route. It will proceed into Quakertown Borough where the road becomes South Main Street and will terminate at Broad Street. At one location, it is proposed that the trail deviate from Old Bethlehem Pike to connect a new development near Tollgate Road. It will also intersect with numerous proposed local trails in the southern part of Richland Township. The proposed route will traverse a variety of land uses ranging from rural landscape dominated by undeveloped land and single-family homes to multi-family residential, institutional and retail.

Point of Interest Spur Trail - A spur trail is proposed from the northern terminus (Broad Street) east on Mill Street to Quakertown Memorial Park and the Borough line. This spur trail will link the park, as well as numerous other existing and proposed trails to the north in Richland Township.

Area Features - This segment of trail passes numerous features among which are: Penrose House, Richland Friends Meeting and School, Richard Moore House, Friends Meeting, and Richard E. Strayer Middle School. A short distance from the route are: Main Street Park, Cedar Grove Park, Parkland, Quakertown Memorial Park, and a future YMCA site. At the terminus are additional features - the Green Tree Inn, Enoch Roberts House, William Green Store and House, Liberty Hall, Burgess Folke House, Red Lion Inn, trolley station, post office, and the Main Street Theatre.

Environmental Features - The trail will need to cross Threemile Run and a small tributary to the Tohickon Creek.

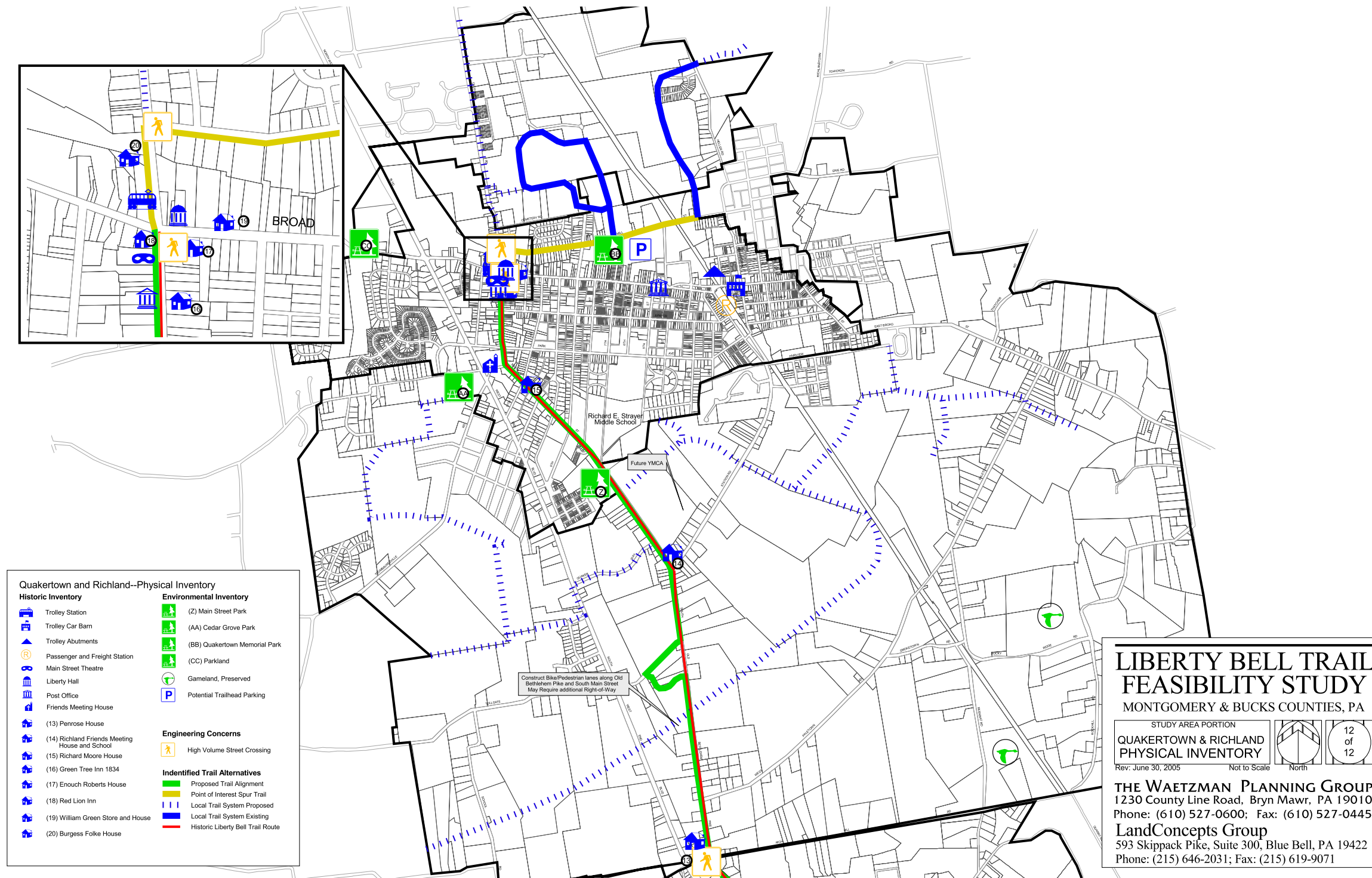
Engineering Concerns - The trail will need to cross a high volume street at Main and Mill Streets in Quakertown Borough.

Bicycle Compatibility - Due to the current width and narrow shoulders, Old Bethlehem Pike along most of its length is incompatible for bicyclists. A sidewalk with a separating grass strip would be ideal, although a 4-foot wide (minimum) shoulder would be acceptable. Initial review of the road suggested that environmental constraints would have little impact on widening for shoulders. Narrow sidewalks within Quakertown Borough are also a concern for bicycle/pedestrian safety.



SECTION 5

Figure 15
Quakertown and Richland Physical Inventory





CONCLUSIONS AND RECOMMENDATIONS

At the outset of this study, the Study Committee, Core Group, and consultants were asked to test whether it would be feasible to create a regional trail linking East Norriton Township and Quakertown Borough, plus the intervening communities, and to follow the historic Liberty Bell Trolley line. Based on developing an understanding of current conditions within the possible trail corridor and exploring alignment options, the study was organized to reach a pivotal decision point of “Go” or “No Go”. Specifically, the question would be posed whether obstacles pertaining to a permanently lost trolley right-of-way, the existing land use pattern, and current land ownership would allow such a trail to be accomplished and in a way consistent with the stated trail goals.

In fact, as the study evolved and as the Study Committee that represented the 17 affected municipalities learned of the potential for this trail, the focus of the work shifted. It was reoriented to a new critical question – “How can this trail be achieved?” With this attitude, efforts were concentrated on exploring a myriad of trail alignment alternatives derived to specifically surmount the types of obstacles noted above. In brief, the “No Go” prospect was eliminated.

In evaluating alternatives, fundamental guidance was provided mid-course by Bucks County and Montgomery County representatives regarding very limited use and dependence on the currently unused SEPTA rail rights-of-way. The result is an interesting mix of on-road and off-road trail options. In some cases, the decisions regarding alternatives benefited individual communities by allowing the route to be woven into areas offering more diverse experiences and better access to sites of interest, as well as local goods and services. With the use of Point of Interest Spur Trails and intentional connections to other existing and proposed trails, the end result will be a 25+ mile trail and an interconnected trail network. This network is intended to provide an alternate means of transportation with less automobile dependence to move about and between communities and a recreational resource for residents and visitors. Based on the analysis and community input, this study concluded that the Liberty Bell Trail is feasible.

The Trail Concept and Implementation

An important element of this work and feasibility study is a clear understanding of what the Trail Concept is, and what it is not. It is a concept plan and should be used as a beginning point for the next level of detailed planning and design. There are portions of the proposed trail that are used today as a trail (e.g., Hatfield Borough Park, Sellersville Borough Lake Lenape Park) and others that could be used now with little or no modification. Many more sections, however, are not safe or usable as a pedestrian path or bicycle trail and will require improvements. The initiative to implement this trail plan will now be taken at the municipal level.

The tasks and next steps vary broadly depending on the proposed trail location and existing conditions. On-road trail sections will require improvements to allow a share-the-road solution to be safe and viable. Among the improvements are enlarged and paved/repaved shoulders,



Examples of on-road trails.

pavement painting and striping, crosswalks, signage, parking reconfigurations, and traffic signal additions or modification. The primary work in these cases will be design, engineering, and construction. In these cases, such changes are likely to be within the road right-of-way and will not require substantial land acquisition or easements; however, as design proceeds for various sections, the need for some minor right-of-way expansions may be identified.

Off-road trail sections are expected to be more complex. The simplest case will be use of sidewalks or pathways that will be within the public domain. Improvements to surfaces, extensions, and signage are the most common changes required for use. The other more complicated situations will be where acquisition of land or easements are necessary to secure public access and use as a trail. The easier cases are most likely to be within utility or abandoned rail corridors. These corridors were targeted in the trail concept where they appeared feasible (e.g., Sumneytown Pike to Wissahickon Avenue, Upper Gwynedd Township). The more difficult cases will be crossing privately held land, especially where privacy and security are issues for landowners. There is considerable trail literature and case experiences that demonstrate the value and impact of trails on property values and use. (A list of sources is provided in Appendix D.)

The Trail Concept and this report are **tools** for each municipality through which it will run or to which it will link and to the two Counties, especially the Planning Commissions. As municipal open space plans are prepared or updated, the concept for the Liberty Bell Trail should be part of those documents. One good example is the Shaping Our Future: A Comprehensive Plan for Montgomery County, which is being drafted as this study is concluded. The Liberty Bell Trail is included in one of the Comprehensive Plan elements (Open Space, Natural Features, and Cultural Resources Plan, Draft September 2004, pp.124-125). Most Montgomery County municipalities are currently updating their open space plans through the County’s Green Fields/Green Towns Program; the timing to include the Liberty Bell Trail in these plans, is therefore ideal.



Examples of off-road trails, including a portion of the Liberty Bell Trail in Hatfield Borough.

Another municipal application is where proposed local trails are coincident with the proposed Liberty Bell Trail. A number of municipal open space and trail plans have anticipated the Liberty Bell Trail or have proposed local trails in the location of and intersecting with the historic Liberty Bell Trolley line. In such cases, the local initiatives are ahead of the regional trail planning work and will enhance the likelihood for implementation of a continuous trail in the future. Hatfield and Perkasio Boroughs already have sections of the trail in place that follow the historic alignment. Sellersville Borough has completed sections of a trail system that are coincident with or in close proximity to the proposed trail and historic alignment. Richland Township has proposed a network of trails that intersect the proposed trail and historic line at several locations along Old Bethlehem Pike. The Richland Township network also extends the proposed trail north of the Liberty Bell Trail terminus in Quakertown Borough.

In addition, in reviewing proposed development plans, each community and the County Planning Commissions should use this plan as a means of finding ways that the trail can be implemented as part of development approvals. The options will range from dedication of land

and easements to accommodate the trail to installation of a trail section. The Trail Concept incorporates these ideas where they are currently known (e.g., Old Bethlehem Pike, Richland Township). Once finalized and printed, the Liberty Bell Trail Feasibility Study should be distributed to each participating municipality, including their governing body, respective Planning Commissions, and public libraries, and the report (or an Executive Summary) should be posted on their municipal websites.

County and Municipal Responsibilities

The Liberty Bell Trail Feasibility Study has experienced considerable fluctuation in the direction of the overall study, due to the fact of a complete realignment which created complex and unique situations for each municipality. The proposed initial alignment was along existing rail corridors; the new alignment follows roads, sidewalks, utility, rail and stream corridors creating a hybrid multi-surface trail element. With so many new factors for each municipality to address, it was established that each Montgomery County municipality would design and construct their segment of trail utilizing County funds from the Montgomery County open space bond initiative along with other funding sources. Each municipality is aware of their responsibility towards the development of the trail. Responsibilities consist of: hiring a design consultant; right-of-way and land acquisition; applying for County and other related trail development funds; construction; and maintenance of individual trail segments.

Once constructed, Montgomery County municipalities are responsible for maintaining their segment of trail until two or more adjoining municipalities establish a connection to one another with formal end point trailhead facilities. Montgomery County and municipalities will then determine the feasibility of a County takeover of the newly established regional segment of the Liberty Bell Trail at that point in time. To date, the Liberty Bell Trail is not identified on Montgomery County's 4 Year Trail Plan (2004-2007) and proportioned funds and County staff are not in place to construct or maintain any portions of the Liberty Bell Trail at the County level.

All municipalities are encouraged to proceed with the development of their segments of trail as funds and staff resources become available at the local, county, state and federal level while coordinating with the appropriate county body and neighboring municipalities throughout the design and construction phases to complete the much anticipated Liberty Bell Trail.



Expected Trail Costs

Table 3
Baseline Estimates for Constructing Trail Type Surfaces*

| 12' Multiuse Wide Trail - Cost Range Per Linear Foot | | | |
|---|----------------|----------------|---|
| Macadam | Concrete | Cinder | Road Improvements (Macadam) |
| \$43.00 | \$77.00 | \$21.00 | Variable dependent on scope and design of improvements. |
| \$26.00 | \$53.00 | \$11.00 | |
| 6' Multiuse Wide Trail - Cost Range Per Linear Foot | | | |
| Macadam | Concrete | Cinder | Road Improvements (Macadam) |
| \$21.50 | \$38.50 | \$10.50 | Variable dependent on scope and design of improvements. |
| \$13.00 | \$26.50 | \$5.50 | |

**The above stated estimates were derived from Montgomery County's experience in developing the Schuylkill River and Perkiomen Trails using force account labor (materials, trucks and equipment rentals included), utilizing regional and local engineering cost estimates, and a national trail estimate. The estimated cost ranges calculated in the table above, represent a high and low cost construction scenario for municipalities to consider when planning future trails.*

NOTE: The above stated cost estimates do not include preliminary and/or final engineering design costs. Only after a careful review on a case-by-case basis of each project, can a reliable and accurate cost be calculated. The above-stated cost estimates within this trail guideline document could increase due to many variables and unforeseen factors in the construction phase.

The cost of constructing a paved, concrete or cinder (gravel-surfaced) trail varies depending on whether the trail is built where there already exists a suitable base. For example, trail construction along an abandoned railroad corridor or a former roadway typically requires less site preparation work because a base already exists upon which the trail surface can be applied. If, however, a new trail is being blazed through virgin territory or where a dirt footpath is being upgraded to a more formalized trail, then the trail route must also be cleared, excavated and provided with an adequate subbase prior to application of the actual trail surface. This extra work adds time and expense to the overall project cost.

The expense of design engineering (i.e., the preparation of line and grade drawings; details/specifications; erosion and sedimentation control plans; applications to regulatory agencies for environmental clearance and approvals; etc.) must also be factored into a trail's overall development

cost. Other qualifiers that could fluctuate the overall cost are: base thickness; surface thickness; motorized vehicle weight consideration; direction of alignment; curb cuts; access/driveway aprons; signage/signals; landscaping; and other amenities related to trail development. This component of cost is perhaps most difficult to accurately build into a typical cost estimate because each trail project is unique and will have its own set of design and engineering requirements. Generally, design costs will be higher for a trail that is being built through virgin territory because it will likely involve a greater degree of environmental impact versus a trail that takes advantage of an existing man-made corridor.

Another variable that will affect typical trail development costs is the labor. If an outside contractor is used, then local prevailing rates for construction crews can make the project more expensive than if public employees were to be used to perform the construction work. For example, a government-sponsored trail project can often be implemented using its force account labor (i.e., crews from its parks department, public works, or roads and bridges departments) to cut down on expenses since its employees' salaries are already paid for in the agency's regular payroll system. This approach assumes that departmental employees have time available to spend on the trail project without sacrificing other essential duties of their positions. It also assumes that the governing body has reviewed and approved of the approach to devote staff resources to the construction effort.

Trail Amenities and Costs

It is anticipated that trail amenities will be installed throughout the trail. The following will be among the amenities anticipated for this trail: signage, information kiosks, bike racks, benches, fencing, and trail maps. The need for such amenities will vary among segments. While the Liberty Bell Trail will be readily accessible from many neighborhoods, trailheads will be another key feature and amenity for this trail. It is expected that trailhead parking will be available from many public parking lots and most probably at specified times from some private commercial lots at the discretion of the owner. (As noted in Section 5, for this reason, some potential public parking lots for use as trailhead parking, are shown on the maps in that Section.) It is estimated that completion of the trail will require expenditures up to \$100,000 for such amenities (excluding improvements to or addition of trailhead parking areas).

Funding

Inherent with implementation is funding so more detailed planning and design, trail improvements, land and easement acquisitions can be done. As noted previously, communities should look for opportunities to work within the land development process to implement portions of the Trail Plan. Communities should also look to partner with corporations, citizens, and organizations to provide funding or land outside of the land development process. Advantages of trails to provide recreation, health and fitness activity, and alternative transportation modes may offer sufficient incentives and benefits to garner tangible and financial support.

Much of the implementation will result from availability of public funds. These funds will include local dollars provided by the municipalities, which in some cases, may occur through annual budgeting or special funding. However, it can be expected that local dollars will be supplemented significantly by State, Federal, and County funds. A listing appears below with more detailed information on many of these sources, provided in Appendix E. Potential funding sources (listed according to their administering agencies) are:



PA Department of Conservation and Natural Resources (DCNR)

1. Community Grant Program
2. Rails-to-Trails Grant Program
3. River Conservation Grant Program
4. Heritage Parks Grant Program
5. Pennsylvania Recreational Trails Program
6. Land Trust Grant Program

PA Department of Transportation (PennDOT)

1. Transportation Equity Act for the 21st Century (TEA-21)
2. Surface Transportation (Transportation Enhancement) Program
3. Congestion Mitigation and Air Quality (CMAQ) Improvement Program
4. Home Towns Streets (HTS) Program
5. Safe Routes to School (SRS) Program

National Park Service (NPS)

1. Rivers, Trails, and Conservation Assistance Program

Delaware Valley Regional Planning Commission (DVRPC)

1. Transportation and Community Development Initiative (TCDI)

PECO Energy

1. Green Region Grant Program (administered by Natural Lands Trust)

Montgomery County

The County Open Space bond issue that was passed in November 2003 has provided planning money through the previously mentioned Green Fields/Green Towns Program for each of the County's 62 municipalities to update their Open Space and Environmental Resource Protection Plan. With completion of the updated Plan, each municipality has access to implementation dollars with special emphasis on trails and inter-municipal trail linkages. Round 1 implementation of this program provides specific allocations for each municipality to be used for various activities, including trail design and development; Round 2 implementation is anticipated to be a competitive process to secure funding.

Conclusion

The Liberty Bell Trail Feasibility Study has been an extraordinary example for regional planning and inter-governmental coordination. It has provided guidance for locating and implementing a trail system that will better link people and communities along a corridor extending more than 25 miles and spanning two counties. It will provide healthy and enjoyable alternatives to motorized travel and will consequently benefit our environment.

For reasons discussed in this Plan, the proposed trail has deviated from the historic alignment more than originally anticipated, in a few locations. This has not compromised the end result nor the value of the potential trail. Reasonable alternative alignments have been found in these areas, and in most cases, spur trails will allow the trail user to appreciate the historic and cultural vestiges of the original trail, which still exist.

An ambitious plan such as this one will be implemented in phases and over many years depending on funds, community commitment and inspiration, and simple and complex obstacles. Ultimately connecting to other local and regional trails, the Liberty Bell Trail will be a model from which others will learn and will be a legacy for future generations.



APPENDICES



HISTORIC PRESERVATION ELEMENT

Wise Preservation Planning, Paoli, PA

03.07.2003



Quakertown Car Barn

INTRODUCTION

The Liberty Bell Trail Feasibility Study was initiated to consider the possibility of creating a multi-purpose trail along the route of the historic Liberty Bell Trolley. The project was undertaken by Waetzman Planning Group of Bryn Mawr, Pa., in conjunction with Wise Preservation Planning, of Paoli, Pa.

The project involved an investigation of the feasibility of creating a continuous trail following the route of the historic Liberty Bell Trolley from East Norriton, Montgomery County, to Quakertown, Bucks County.

Waetzman Planning Group was the team leader. It was responsible for an assessment of the physical evaluation of the trail, including the impact of changes during the fifty years since the trolley ceased to function. In addition, Waetzman was responsible for coordinating the interests of all stakeholders in order to produce a consensus-based plan. Among the stakeholders are the Bucks and Montgomery County Planning Departments, the twelve municipalities in the project area, and local historical societies. Waetzman was responsible for providing information on the status of the trolley rights-of-way.

The project team consisted of four supplemental organizations, each being deliberately chosen as "leaders in their respective specialty areas." Land Concepts, a land planning firm based in Blue Bell, Pa., was responsible for some planning tasks and the public participation element of the study. Orth-Rodgers, a transportation planning firm based in Philadelphia, Pa., was responsible for reviewing road characteristics where the trail corridor will have to follow public roads and providing expertise on bikeway planning and pedestrian mobility. EDM, a professional engineering firm based in Lansdale, Pa., was responsible for evaluating existing utilities and structures and assisting in capital cost estimates. Wise Preservation Planning, of Paoli, Pa., was responsible for the historic preservation components of the plan.

CONTENT

Introduction

- I. **Task C.1.a.**
Historical Background of the Liberty Bell Route
- II. **Task C.1.b.**
The Route of the Liberty Bell Trolley from Quakertown to Norristown
- III. **Task D.2.a.6**
Landmarks on the Route of the Liberty Bell Trolley from Quakertown to Norristown



I. TASK C.I.a. HISTORICAL BACKGROUND OF THE LIBERTY BELL ROUTE

The following history of the Liberty Bell Route has been adapted from “The Vanishing Cultural Landscape of the Liberty Bell Limited,” written by David Kimmerly (Internship Project in the Historic Preservation Certificate Program, Bucks County Community College, 2001).

The Lehigh Valley Transit Company

[The electric trolley was introduced in Chicago in 1882. It replaced earlier horse-drawn carriages (or “horse cars”) which ran on rails to provide transportation for workers living in the suburbs of cities.] Electric trolley lines were first introduced to the Allentown area in 1891 by the Allentown and Bethlehem Rapid Transit Company. The company had a monopoly on the street railway system in the Lehigh Valley until 1893 when an entrepreneur from Cleveland, Ohio, named Albert L. Johnson came to Allentown. His vision was to break the monopoly held by the Allentown and Bethlehem Rapid Transit Company, extend his trolley lines throughout the Lehigh Valley region, and introduce interurban transit lines that would connect Allentown to Philadelphia and Philadelphia to New York. The Allentown to Philadelphia line would become the Liberty Bell Route, but the Philadelphia to New York trolley line would be an unfulfilled dream.

Lehigh Valley Traction Company formed

Johnson was successful in breaking the monopoly held by the Allentown and Bethlehem Rapid Transit Company by obtaining or building trolley lines in the Lehigh Valley and even extending his lines to the foothills of the Poconos. In 1899 Johnson organized his holdings into a single trolley company called the Lehigh Valley Traction Company. His dream to extend a trolley line to Philadelphia from Allentown was blocked by a small trolley company in Bucks County with limited trackage, but lots of ambition. The company was the Quakertown Traction Company. In 1898, it built a short trolley line that began at Main and Broad Streets in Quakertown and served nearby Richlandtown and Perkasio. Quakertown Traction Company proposed lines to Doylestown and

Trumbauersville, and planned to extend its line north to Allentown and south to Philadelphia.

Inland Traction Company formed

In order for the Lehigh Valley Traction Company to build a trolley to Philadelphia, the Quakertown Traction Company would have to be blocked or eliminated. To do this Johnson had a business associate named Hugh Crilly form the Inland Traction Company. The Inland Traction Company proposed a trolley line that would connect Perkasio to Chestnut Hill (Philadelphia). In 1900, the Inland Traction Company began providing trolley service from Perkasio to Lansdale. This maneuver successfully thwarted the ambition of the Quakertown Traction Company. It could no longer build a line south towards Philadelphia without major competition.

Trolley competition with railroads

Another difficulty faced by the Lehigh Valley Traction Company was the lack of cooperation from railroad companies. The Philadelphia and Reading Railroad’s North Penn line in particular provided passenger and freight service between Bethlehem and Philadelphia. Trolley lines which operated cars that were smaller, considerably cleaner, less noisy, and more maneuverable than railroad cars represented a serious threat to the passenger service and light freight services offered by the railroads. As a result when the Lehigh Valley Traction Company would have to cross the right of way of the railroad company, major conflicts ensued. Many of these incidents led to lawsuits and sometimes heated, nearly violent, confrontations. Newspapers had numerous accounts of the trolley line “stealing” a crossing from a railroad company in the middle of the night, confrontations over trolley construction in and around railroad property, and controversies over tunneling under or bridging over a rail line by the trolley company.

New Ownership of Lehigh Valley Traction Company

Another setback to the expansion of the Lehigh Valley Traction Company came in July of 1901 when Albert Johnson died suddenly. His successor Robert Wright immediately began looking at the holdings of the Lehigh Valley Traction Company and decided to eliminate the Philadelphia to New York plans. Wright, however, spearheaded the effort to connect Allentown and Philadelphia. Wright successfully negotiated a lease and

acquired all of the cars of the Quakertown Traction Company. Since the Inland Traction Company was friendly to the Lehigh Traction Company, obtaining it was a relatively simple process. Between 1901 and 1903 Wright built the line from Allentown to Chestnut Hill where passengers could then transfer to the trolleys of the Philadelphia Rapid Transit Company and complete their journey to center city Philadelphia. Financial problems related to construction costs and other expenses of the Allentown to Philadelphia route resulted in financial difficulties for the Lehigh Valley Traction Company. In 1905 the company was bankrupt and it was auctioned. William Harrity purchased the company, all of its holdings, and renamed it the Lehigh Valley Transit Company.

The Liberty Bell Route

R.P. Stevens was elected president of the Lehigh Valley Transit Company in 1907. Stevens’s goal was to make the trolley line among the best in the United States. In December of 1907, the Allentown to Philadelphia line was first advertised as the Liberty Bell Route. Prior to this the route was known simply as the Philadelphia Division. The naming of the line was directly related to the fact that it paralleled the Bethlehem Pike, which was the route the Liberty Bell took when it was evacuated to Allentown from Philadelphia in 1777. The Lehigh Valley Transit Company promoted the Liberty Bell Route in 1910 by publishing a booklet entitled *A Little Journey Through History*. It contained a map of the line as it existed at that time. The booklet was given to passengers who traveled on the Liberty Bell Route from Philadelphia to Allentown and also made an extended trip to the Delaware Water Gap from Allentown. Delaware Water Gap was a popular destination and a major resort in the early 1900s. A section of the booklet entitled *A Famous Highway* (page 3) directly correlates the trolley line with the Bethlehem Pike:

Along this road (Bethlehem Pike) now run the cars of the Lehigh Valley Transit Company. Here, where our forefathers plodded painfully afoot beside the corded wain and the pack-horse, rifle in hand, the ‘Liberty Bell Route’ carries in luxurious ease the interested tourist through scenes that for historic charm are surpassed by none in America.

The booklet also gives a fascinating account of the methods used to promote the line and the reasons for establishing the Liberty Bell Route. Short histories and



information about the commerce of the many towns and villages in Bucks and Montgomery Counties through which the Liberty Bell line passed are contained in the booklet. As the riders passed through a town or village, they could read the historical account and learn about the commerce and industry of the place. Today we call this heritage tourism. The Lehigh Valley Transit Company used heritage tourism to sell passengers on the idea of using the route. In addition, at this time in the United States automobile travel was beginning to become popular. Touring the countryside by car was only attainable however by the very rich. Trolleys offered the opportunity for the less well off to tour the countryside as well. The Lehigh Valley Transit Company appealed directly to this sentiment (page 4):

As the population of the United States increases, its historical features are becoming more and more objects of intense interest to all who are able to travel. The trolley now places these educational pleasure trips within the reach of even people of the smallest means, while affording all the comforts of the most luxurious modes of travel.

Consolidation of the Liberty Bell Route

Between the years of 1907 and 1913 the Lehigh Valley Transit Company under the direction of R.P. Stevens began a massive improvement project. The goal was to streamline the system by eliminating sharp curves and acquiring as much right of way off of public roads as possible. This would allow for higher speeds. However, Liberty Bell trolleys continued to use public streets in towns, and trolleys ran on the Old Bethlehem Pike from Quakertown to a point just north of Perkasio. Liberty Bell trolleys also ran on Sumneytown Pike from North Wales to Springhouse and on Old Bethlehem Pike from Springhouse to Chestnut Hill. Trolley freight service was introduced on the line and became a lucrative part of the Liberty Bell's business. In 1911, the Lehigh Valley Transit Company threatened the Quakertown Traction Company with termination of its lease and construction of a new line parallel, and in competition, with its lines. In fear, the Quakertown Traction Company sold a majority of its shares to the Lehigh Valley Transit Company. By 1915 the Lehigh Valley Transit Company had purchased the remaining stock and took complete control of the Quakertown Traction Company. In 1912, the Lehigh Valley Transit Company purchased Montgomery Traction Company, a route that ran from Lansdale to Norristown in Montgomery

County. The intention was to connect to the recently constructed Philadelphia and Western Railway which was a high speed trolley line that ran from 69th Street in Upper Darby to Norristown. By connecting to the Philadelphia and Western, the Lehigh Valley Transit Company could more easily access downtown Philadelphia. The travel time from Allentown to Philadelphia via Chestnut Hill was approximately three hours. Connecting to the Philadelphia and Western reduced the travel time from Allentown to Philadelphia to one hour and 58 minutes. Trolleys could reach speeds of over 100 miles per hour, and speeds of 80 miles per hour were routine.

The new branch line to Norristown was constructed from a point just south of Lansdale, called Wales Junction. Lehigh Valley Transit Company continued to operate trolleys from the Wales Junction to Chestnut Hill. The entire system, including the new branch line to Norristown, retained the Liberty Bell Route name. However, the shorter travel time to Philadelphia resulted in decreasing use of the Chestnut Hill branch, and by 1926 the route was replaced by bus service. Beginning in 1926 the Liberty Bell line consisted exclusively of the Allentown to Norristown route.

Declining profitability of the Liberty Bell trolleys

In the 1920s Lehigh Valley Transit Company faced increasing competition from automobiles. Ownership of automobiles was rapidly becoming accessible to everyone. In 1929, the branch line from Quakertown to Richlandtown, originally owned by the Quakertown Traction Company, was replaced with bus service. The 1930s and the Great Depression represented hard times for the nation, and the trolley line suffered as well. World War II however, resulted in gas rationing and the trolley line briefly became popular again. In the post-World War II era, automobiles flourished and the Liberty Bell line suffered immensely. By the late 1940s, however, the Liberty Bell Route was still operating with a steady stream of loyal riders. It was the longest operating trolley system in both Bucks and Montgomery Counties. All other trolley systems operating in those counties had long since been abandoned.

Service Ends, 1951

The end of operation of the trolleys on the Liberty Bell Route came suddenly. One of the best accounts of the demise

of the Liberty Bell Route is told by Randolph L. Kulp in History of the Lehigh Valley Transit Company: Railway Operations (1966, page 77):

Lehigh Valley Transit Company on Thursday, September 6, 1951, at 6:00 p.m. suddenly announced conversion of Liberty Bell Route railway service to autobus operation effective with commencement of schedules on September 7, 1951. During the remaining hours of September 6th, the company's operators quickly moved all rolling stock from Liberty Bell route trackage into storage at Allentown Division's Fairview Car barn until disposition had been arranged. At 11:06 p.m. car number 1006 departed from Allentown on the last scheduled passenger car trip over the Liberty Bell Route and returned to Norristown at 2:46 a.m., Friday, September 7, 1951. Unceremoniously Liberty Bell Route's railway service passed into history. Track crews commenced the removal of Liberty Bell Route track at 8:00 a.m. Friday, September 7th.

On September 7th, 1951, many passengers waited for trolleys that never came. One reason given for the sudden removal of the Liberty Bell tracks was provided by O.P. Young in an article in the Quakertown Free Press published on September 13, 1951. He states that the tracks were removed so suddenly due to the Korean War and the desire to help with the war effort by scrapping and reusing the tracks. Young also explained that the trolley company applied to the Public Utility Commission many months ago to terminate Liberty Bell trolleys. On September 6th the approval was given. Between 1951 and 1953 the overhead wires, bridges, signals, and crossing lights were scrapped.

End of the Lehigh Valley Transit Trolleys

In 1953 Lehigh Valley Transit Company ceased all trolley operations in the Allentown area. A trolley line was built to the Bethlehem Steel plant on which most of the trolleys, operating under their own power, traveled to be set on fire and later scrapped at the plant. Two trolley cars survived the scrapping operation. One was sold to the Seashore Electric Railway's trolley museum in Kennebunkport, Maine, and is still on display. The other was sold to the Philadelphia Transportation Company and operated as a subway car on the Broad Street line. Its fate is unknown.



II. TASK C.1.b. THE ROUTE OF THE LIBERTY BELL TROLLEY FROM QUAKERTOWN TO NORRISTOWN

Task C.1.b. is to identify the route of the Liberty Bell line. The following report outlines the route with information on spurs and substantial track changes. Included in the description are some of the historic resources; a fuller account of historic resources will be completed as a part of Task D.2.a.

The route of the Liberty Bell Trolley from Quakertown to Norristown is well-documented. A detailed map showing its course through Montgomery County is given in Trolleys of Montgomery County, Pennsylvania. This map includes information on the original route and later alternations. Information for the Bucks County portion of the study was derived from maps included in "The Vanishing Cultural Landscape of the Liberty Bell Limited" by David Kimmerly (2001).

The trolley line has generally withstood development pressures. Large sections of the route ran along public roads, which though still in place, present challenges in terms of recreation and interpretation. Some of these roads have sidewalks providing the opportunity for walking the route. Automobiles shared the roads with the trolleys from an early date. Around 1910 the Lehigh Valley Transit Company began straightening the track to allow for high speed service. This involved relocating the track off streets, abandoning some sharp turns, and laying new track through open terrain. Some of the off-road sections of the line have been converted to walking and biking trails, including the sections in Perkasio and in Hatfield. In some other cases, the right-of-way for the trolleys is intact, often used for power lines. Other sections have been developed. One large tract in Whitpain Township between Route 73 and Township Line Road has been developed into a gated community and golf course. Lot lines within the community border the line's right-of-way, possibly indicating that the right-of-way has not been vacated or destroyed. The presence of the earlier trolley route along the roads east of the development may provide an acceptable – and interpretable – alternate route if passing through this area is not possible.

Aside from the line itself, there are remaining historic elements that help interpret its history. These include infrastructure improvements, such as bridges, stations, "street car suburbs" such as Oak Park, associated buildings such as Norristown's old shirt factory building, and, of course, the surrounding small towns and villages whose development was influenced by, or its citizens relied on, the trolley.

The following paragraphs detail the route of the Liberty Bell trolleys from Quakertown south to Norristown. Note: for the purposes of this description, the Liberty Bell line is called a trolley, while the Philadelphia and Reading Line is called the railroad.

Quakertown to Perkasio

The line ran along the east side of Old Bethlehem Pike, through the small towns of Rich Hill, Smoketown, and Rocky Ridge. It left Old Bethlehem Pike near Ridge Road and continued across fields to Perkasio. A spur ran from Quakertown to Richlandtown. This section of the line has not faced the tremendous development pressures found further south.

Historic resources in Quakertown include the trolley station at the corner of Main and Broad Streets, a stone bridge abutment, and a stone car barn.

Perkasio

The trolleys entered the Borough of Perkasio across fields, headed southwest along South Fifth Street, and followed Arthur Street south towards Telford.

Historic resources in Perkasio include the trolley station, bridge abutments, and a tunnel under the railroad bridge. Bungalows near the line were constructed as housing for workers who used the trolley for transportation.

Perkasio to Telford

The line ran southwest from Arthur Street along the north bank of the East Branch of the Perkiomen Creek. This portion of the line has been converted into a biking and hiking trail, leading past the old Sellersville Station. From there, the line crossed the East Branch over a bridge (abutments survive), just east of the extant railroad bridge. The trail continuing south from this point is being used as the electrical transmission line route running south just east of the railway (crossing over an

intact bridge). The line picks up Keystone Drive near Derstines, following it 2000 feet before turning southwest onto Reliance Road. The line followed Reliance Road 7000 feet towards Telford, leaving the road 600 feet northeast of the Montgomery County line.

Historic resources include the Sellersville station, two bridges (one in Sellersville and one north of Telford), and a bridge abutment in the southern part of Sellersville.

Telford

The trolley originally ran through Telford; the route bypassed Telford after 1904, with a spur running north to the center of Telford. The three following paragraphs detail the route in and around Telford:

- The original route entered Telford along Lincoln Street, turned northwest onto Main Street briefly, then turned southwest onto Penn Street to pass the railroad station. This portion of the line was abandoned in 1904 when the bypass was laid out.
- The Telford spur began at the railroad station on Penn Street, turned southeast onto Third Street, then southwest onto Reliance Road, and ran across country to Summit Street. At this point, the Telford spur met the main route of the trolley. The spur was abandoned in 1925.
- The 1904 bypass route crossed over open terrain from the point 600 feet inside Bucks County, continuing straight to the point where the Telford spur reached Summit Street.
- A service spur ran southeast along Second Street from the junction with the spur to a carbarn in Souderton.

Historic resources include a collection of bungalows along Reliance Road south of Telford, constructed to serve as workers' housing.

Souderton

The trolleys ran southwest along Summit Street, turning southeast onto Main Street for 2500 feet. At Broad Street, the line ran briefly southwest, then followed Penn Street to Cherry Lane. The line was changed in 1910 at this point.



- The original line followed Souderton Road southeast from Cherry Lane, running along the east side of Penn Road to Hatfield.
- In 1910 a new line continued southeast from Penn Street in Souderton across country rather than following Souderton Road. This line crossed a bridge at Gehman's Trestle and continued southeast across fields to Hatfield.

Historic resources include Gehman's Trestle abutments.

Hatfield

The line through Hatfield was re-routed in 1910, giving two historic lines for interpretative purposes:

- The original line zigzagged along public roads, following Penn Road southeast, then Lincoln south, then briefly on Main Street, before crossing a field briefly before turning southwest onto Vine Street. The line then followed Franconia Pike to Orvilla.
- This line was changed in 1910 to a new overland route, a continuation of the Souderton route mentioned above. The new route continues southwest from Penn Road, crossing a small concrete bridge over a tributary of the West Branch of Neshaminy Creek, and follows the power line right of way into Hatfield Borough. The route has been converted into a walking trail in Hatfield Borough, running along the west side of the Neshaminy Creek before turning south parallel to the Philadelphia and Reading Railroad line.

Historic resources include a concrete bridge north of the borough, two concrete bridges in the borough, and the Hatfield trolley station. Oak Park, located west of Hatfield, is a trolley suburb.

Orvilla to Lansdale

The line from Orvilla to Lansdale was substantially re-routed in 1912.

- The original line departed from Franconia Pike and ran across a field, turning southwest onto Franconia Road and southeast onto Krupps Road. It then turned southwest onto Clifton Road and southeast onto Main Street in Lansdale. The 1912 line entered into the

original track at this point. The line continued southeast along Main Street to the old trolley station, turning south and then southwest onto Broad Street. The trolleys turned south onto Allentown Road towards Wales Junction.

- Much of the line between Orvilla and Lansdale was re-routed in 1912. Trolleys left Orvilla along the west side of the railroad line (as mentioned above), then curved southwest to run along the north side of Squirrel Lane to a substation at the intersection of Squirrel Lane and Main Street in Lansdale. The trolleys continued southeast along Main Street to the Lansdale station. The 1912 line used just under a mile of the original track, following Broad Street southwest from the station. Then the new line departed from Broad Street at the intersection with Hancock Street and ran south across fields, crossing under the Stony Creek Branch of the Philadelphia & Reading Railroad and ran along the east side of the railroad to Wales Junction.

Wales Junction

This was an important depot on the railway. The original and 1912 routes intersected here, with the option of proceeding to either Chestnut Hill or Norristown.

- The original route continued southeast from Wales Junction along Sumneytown Pike to Chestnut Hill.
- With the purchase of the Montgomery Traction Company in 1912, a second route led southwest from Wales Junction to Norristown. This line ran along the east side of the Stony Creek Branch line to Township Line Road; upon entering Whitpain Township the line ran south across fields to a point on DeKalb Pike.
- A two-mile section of the line running across a formerly open field in Whitpain Township has been developed, although the right of way is still reflected in the tax maps. One means of continuing the trail through this developed section (if it is not possible to use the right-of-way through the gated community) would be to follow the original track of the Montgomery Traction Company, which primarily followed these roads from Lansdale to Center Square: Susquehanna Avenue, Whites

Road, Green Street, Allentown Road, Broad Street, Garfield Street, West Point Road, Morris Road, DeKalb Pike.

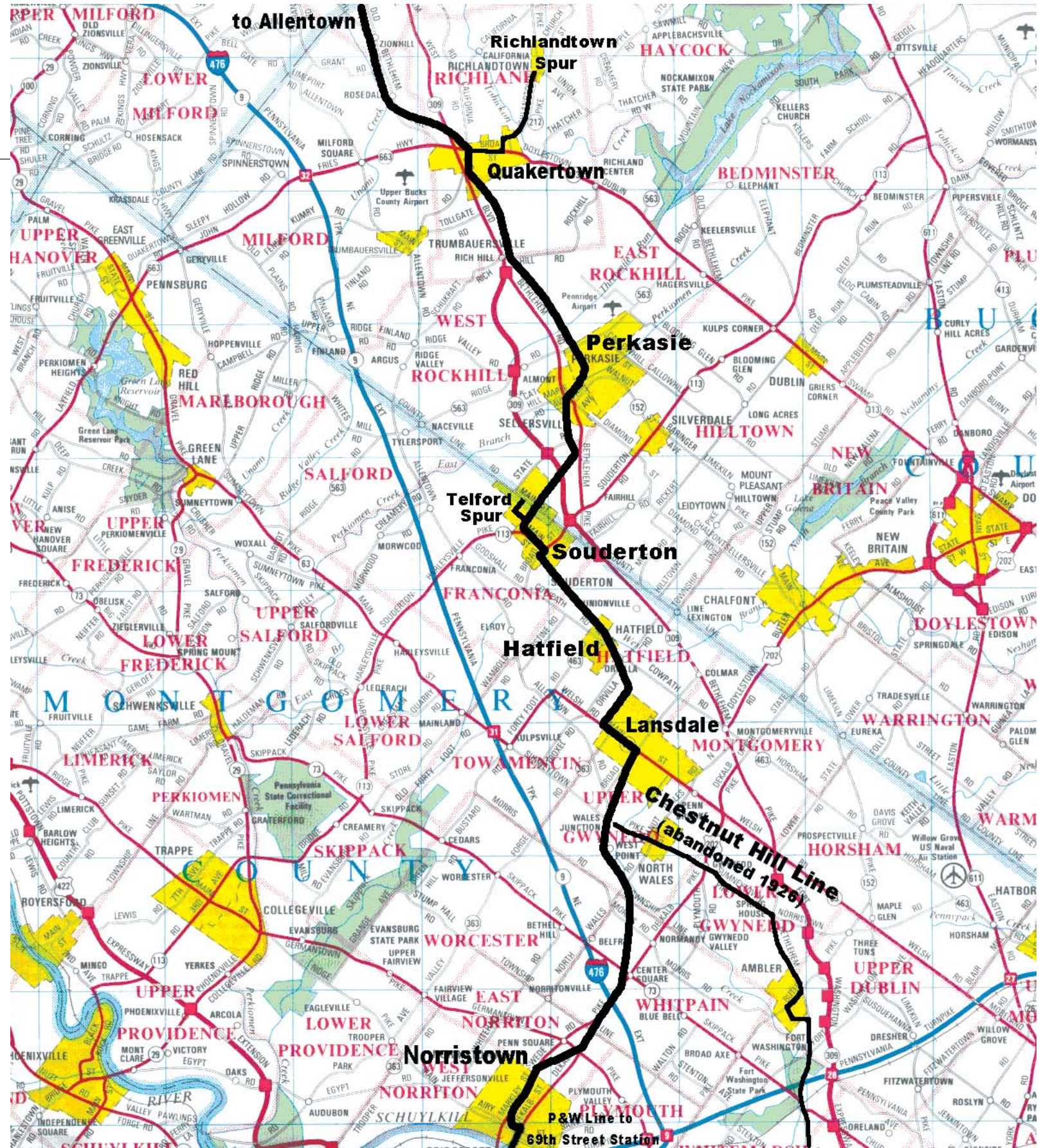
Center Square to Norristown

The trolley line continued 8000 feet along the west side of DeKalb Pike through Washington Square (location of an extant substation) to a point 350 feet northeast of the intersection with Germantown Avenue. A portion of the trolley line southwest of Washington Square remains as a side street. At the point where the trolleys left DeKalb Pike, they turned west, crossed Germantown Avenue, and followed along an extant walking path 6000 feet to Swede Street. Trolleys ran southwest along Swede / Markley Street past factories before turning southwest, running to Airy Street, then turning at the court house south on Swede Street. The line ended at the train station in Norristown.

Historic resources include the Washington Square substation, a bridge east of Norristown, the shirt factory on Markley Street, and the Norristown station. Two housing developments between Washington Square and Norristown (Grand View and Washington Heights) appear to be trolley suburbs. A trolley bridge on Markley Street partially collapsed in the mid-1990s and was repaired; it has not been determined how much of the original trolley bridge survives.



Figure 16
The route of the Liberty Bell Trolley (1950)





APPENDIX A

HISTORIC PRESERVATION ELEMENT

Prepared by
Wise Preservation Planning, Paoli, PA
03.07.2003

III. TASK D.2.a.6 LANDMARKS ON THE ROUTE OF THE LIBERTY BELL TROLLEY FROM QUAKERTOWN TO NORRISTOWN

The following element has been divided into three parts. Part I outlines historic resources either directly associated with the Liberty Bell Line or located nearby. This discussion follows the route from Quakertown to Norristown (north to south). In Part II, each resource was evaluated for its structural condition, integrity, its ability to convey its historic function, and whether it needs to be rehabilitated. An attached table summarizes this information. Part III offers suggestions for interpretation options.

PART I. LIST OF HISTORIC RESOURCES

Quakertown.

Quakertown originally grew as two clusters of historic resources. The eastern cluster grew up around the train station and is called the Train Downtown. This is the larger of the two clusters and is the center of town. The Trolley Downtown is located west of the Train Downtown. A Liberty Bell spur ran west from the Train Downtown to the Trolley Downtown.

- **Trolley Downtown.** A cluster of resources at the intersection of Main and Broad Streets forms the heart of the Trolley Downtown, which is located west of the Train Downtown. The neighborhood consists of two-story residences from the eighteenth and early nineteenth century and is highly walkable, with sidewalks. Historic resources are remarkably intact, especially on the façades facing the roads.
- **Trolley Station.** This two-story, five-bay residence was converted in the early twentieth century for use as the Trolley Station. It stands on the northwest corner of the intersection of Main and Broad Streets. The building was originally constructed to serve as a bank. Alterations to the house during the latter half of the twentieth century appear to be limited to the removal of two segmental-arched headed dormers and the removal of the porch on the south façade.

- **Red Lion Inn.** This building is located south of the Trolley Station on the southwest corner of the intersection. The three-story, six-bay inn is in excellent condition and is an appropriate place for bicyclists to stop for a meal during their tour of the trolley line.
- **Main Street Theatre.** This building is located immediately west of the Red Lion Inn. The theatre was started by an investor from New York City.
- **Richland Library.** The library was one of the first ten public library buildings constructed in Pennsylvania.
- **Liberty Hall.** This two-story, two-bay building is located near the northeast corner of the intersection. The building is one of the locations where the Liberty Bell stopped during its travels out of Philadelphia.
- **Burgess Foulke House.** This house, owned by the Quakertown Historical Society, was constructed in 1812. It was constructed at the intersection of 309 and Mill Road and was moved to its current location when its original location was developed into a shopping center.
- **Friends Meeting House.** This stone building was constructed in 1862 to replace an earlier building constructed in 1795. It appears to be in its original state. A schoolhouse on the property dates to 1860.
- **Train Downtown.** The Train Downtown, as mentioned earlier, is the center of Quakertown today. A line of buildings on the north side of Broad Street dates to the nineteenth century. Other historic resources of note are:
 - **The Train Station.** The one-and-a-half story stone train station is undergoing restoration in early 2003. The building partially burned several years ago. It is located in an area of Queen Anne buildings.
 - **The Trolley Car Barn.** South of the train station is the car barn. Originally constructed by the Quakertown Traction Company in 1897, the building has a stone main façade facing the street and a brick rear façade with large doors for trolleys

to enter. This is a quite remarkable building which has been rehabilitated for use for antique shops.

- **An intact abutment** is located west of the car barn. The vertical stone column was part of a bridge that carried the trolley over the railroad tracks.

Quakertown to Perkasio

The Liberty Bell line ran along the east side of Old Bethlehem Pike, through the small towns of Rich Hill, Smoketown, and Rocky Ridge. It left Old Bethlehem Pike near Ridge Road and continued across fields to Perkasio.

- **Richard Moore House.** This building is located south of the Friends Meeting House. Moore was a local potter and a stationmaster on the Underground Railroad.
- **Rich Hill** is a small settlement with several historic resources, including the Penrose House (below). Other historic resources line Old Bethlehem Pike along its route. This section of Old Bethlehem Pike was a route on the Underground Railroad, and several of the houses have extant tunnels.
- **Penrose House.** This house, located at the intersection with Station Road, is a two-story, five-bay stone house with large end chimneys. The first Quaker meetings were held there.

Perkasio

The trolleys entered the Borough of Perkasio across fields, headed southwest along South Fifth Street, and followed Arthur Street south towards Telford. As with Quakertown, Perkasio had two nodes of development: one associated with the trolley station and one with the train station.

- **Abutments on Ninth Street.** The trolley line ran over Ninth Street and has two large concrete abutments dating to c. 1915.
- **Perkasio Park Camp Meeting.** This is a highly intact Methodist camp meeting located west of the abutments on Ninth Street. The camp meeting consists of a series of two-story frame buildings arranged on a grid pattern and facing a centrally located tabernacle. It was started in 1882.



APPENDIX A

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03.07.2003

- **Trolley Tunnel.** The trolley passed underneath the North Penn Railroad near Seventh and Walnut Streets. The tunnel is intact.
- **Train Downtown.** Much of the Train Downtown in Perkasio burned in the twentieth century and was rebuilt. The train station is a one-story brick building with widely overhanging eaves. A fake train engine appears to be driving through a Richardsonian arch on the south façade of the building.
- **Trolley Downtown.** The Trolley Downtown consists of several late nineteenth century buildings, several with decorative cornices. Nearby are several bungalows dating to the trolley era.
- **Perkasie Trolley Station.** Now owned by the Perkasie Historical Society, the Perkasie Trolley Station is located on Walnut Street in the Trolley Downtown. It is highly intact.
- **Perkasie Carousel.** This was one of the tourist attractions associated with the trolley line. The Carousel is a large frame building with a hipped roof which looks much as it did during the trolley era.

Sellersville to Telford

The line ran southwest from Arthur Street along the north bank of the East Branch of the Perkiomen Creek. This portion of the line has been converted into a biking and hiking trail, leading past the old Sellersville Station. From there, the line crossed the East Branch over a bridge, just east of the extant railroad bridge. The trail continuing south from this point is used as the electrical transmission line route running south just east of the railway (crossing over an intact bridge). The line picks up Keystone Drive near Derstines, then turns southwest onto Reliance Road before leaving public streets to cross country south of Telford.

- **Sellersville Trolley Station.** Located in downtown Sellersville, the station has been renovated to serve as a dentist's office.
- **Downtown Sellersville.** The center of town is located one block west of the trolley station. Several large brick and stone buildings from the latter quarter of the nineteenth century comprise the picturesque village of Sellersville.

- **Eisenlohr Cigar Factory.** This building is the largest of several cigar factories located in Sellersville from 1914–1927. The building was later rehabilitated for use by Industrial Safety Specialties Company, which manufactured industrial safety clothing.
- **Railroad Bridge and Trolley Abutments.** West of the Sellersville Fire Department is a pair of abutments which formerly carried the trolley over the East Branch of the Perkiomen Creek. The arcaded railroad bridge is intact.
- **Bridge on Old State Road.** This is an intact trolley bridge west of the main road.
- **Highland Park Camp Meeting.** A second intact Methodist camp meeting which used the trolley line is located near Highland Park off Old State Road.

Telford

The trolley originally ran through Telford; the route bypassed Telford after 1904, with a spur running north to the center of town.

- **Telford Train Station.** This one-story brick building has been renovated and now is the home of the "Depot Greenery" store.
- **Telford's downtown** consists of several two- and three-story brick buildings dating to the latter half of the nineteenth century.
- **Telford Freight Station.** This one-story, two-bay brick building appears to be in its original state, south of the train tracks.
- **Downtown Telford.** Among the historic buildings in downtown Telford are the Towne Restaurant and the Telford Inn.
- **South Main Street Trolley Station.** This highly-altered building is aligned with the old trolley line, although it is located on South Main Street.

Souderton

The trolleys ran southwest along Summit Street, turning southeast onto Main Street for 2500 feet. At Broad Street, the

line ran briefly southwest, then followed Penn Street to Cherry Lane. The line was changed in 1910 at this point, crossing across open fields towards Hatfield.

- **The Summit Street Bridge** used by trolleys is still in use for automobiles.
- **Downtown.** Souderton has many buildings of architectural interest, including its Broad Street Theatre, located at a trolley turn. Trolley-related bungalows along Franklin Street form one of the street car suburbs.
- **Train Station.** An intact one-and-a-half story stuccoed building located at the intersection of Main and Broad Streets.
- **Gehman's Trestle** is located on Township Line Road between Souderton and Hatfield. These two large abutments on either side of the road formerly carried the trolleys high above grade.
- **Jacob Reed House.** Reed was appointed to muster in troops during the American Revolution; his house is located near the Gehman's Trestle. The house has been enlarged several times.

Hatfield

The line through Hatfield originally zigzagged along public roads and was re-routed overland in 1910. The latter route has been converted into a walking and biking trail through the town.

- **Downtown Hatfield.** Hatfield is a small and relatively unaltered town, with several one- and two-story buildings, including the Main Hotel (1867).
- **The Trolley Stop.** This store along the trolley route is located in a two-story building which formerly served as the trolley stop. Associated with the shop is a service trailer painted like a trolley car.

Lansdale

The original trolley line ran across fields into Lansdale, then followed public streets through town and toward Wales



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03.07.2003

Junction. In 1912, the line was altered coming into town in both directions to cross open fields.

- **Oak Park** is a trolley, or streetcar, suburb. Three gateposts lead into the subdivision, two having a Mercer tile mosaic. Residences vary widely, including some bungalows and larger two-story houses.
- **Downtown Lansdale** was drastically altered in the late twentieth century. Some fabric remains from the late nineteenth century.
- **Jenkins Homestead.** A c. 1795 house in downtown Lansdale was the center of a large eighteenth century farm; it is the oldest building in town.
- **The Train Station** is a stone Beaux-Arts building with a tile roof in the center of town.
- **An Intact Trolley Bridge** over Hancock Road has large stone abutments.

Wales Junction / Kneedler

This was an important depot on the railway. The trolley track divided at this point, with some trolleys heading towards Chestnut Hill and others toward Norristown. The track to Norristown ran roughly parallel to the railroad. Much of the trolley route is intact, although it runs through corporate centers such as Merck.

Upper Gwynedd Township

The trolley ran through the west corner of Upper Gwynedd Township.

- **Milling Community.** A two-and-a-half story stone mill, an arcaded stone bridge, and several historic houses form a cluster of historic resources northeast the township line. The mill is owned by the Wissahickon Valley Water Association.

Whitpain Township

The trolley ran across fields towards Center Square, then followed along the west side of Route 202 to Washington Square.

- **A stuccoed** schoolhouse dated 1858 is located at 1701 Morris Road near the route of the trolley. It is owned by the Whitpain Historical Society.

- **Normandy Farms** is undergoing development in 2003. It has a series of historic buildings, including an intact barn. It is reached by expressive gateways.
- **Center Square** is a crossroads community with several buildings of interest. It has several Second Empire residences along Skippack Pike and Reed's Country Store at the intersection with DeKalb Pike.

Norriton Township

The trolley ran along a right-of-way on the west side of DeKalb Pike from Washington Square and ran across country from Germantown Pike to Swede Street.

- **A substation** at Washington Square was the first stop in Norriton Township. This one-story brick building has been rehabilitated for a hair salon.
- **Washington Heights** is a streetcar suburb west of the substation. The original trolley track runs parallel to DeKalb Pike and serves as one of the roads forming the southern boundary of the development. Houses include American Foursquares and Dutch Colonial Revivals, mostly of stone.
- **Grandview Heights** is a streetcar suburb on the western border of Norriton Township. The residential subdivision dates to the middle of the twentieth century and reaches south from the extant trolley path. Residences are generally stone and include several examples of residences in a zigzag shape.
- **A small building** which may have served as a trolley stop is located near Norristown on Swede Street. This building is oriented parallel to the trolley line rather than to Swede Street. The one-story building has been greatly altered for commercial use.

Norristown

Trolleys ran southwest along Swede / Markley Street past factories before turning southwest, running to Airy Street, then turning at the court house south on Swede Street. The line ended at the train station in Norristown.

- **Tyson Shirt Company** is located just off Markley Street in Norristown. This is one of several businesses served by the trolley. The five-story brick factory building is

in disrepair, although another factory nearby has been rehabilitated.

- **The Adam Scheidt Brewing Company** is located on Airy Street. It is located in a Beaux-Arts building with a corner entry marked by a cone supporting a lantern.
- **The Montgomery County Court House** is located on Swede Street. The trolley formerly turned here to run along Swede Street to the station. The courthouse is a large Classical Revival Style building with a prominent dome and dressed stone walls.
- **The Trolley Station** is located at the intersection of DeKalb and Swede Streets. The trolley station is a narrow three-story building which is planned for partial incorporation into a larger building complex. The trolley historically ascended a ramp to the second floor of the building, and passengers disembarked and walked downstairs for shopping or to switch to the trains.
- **The Norristown Train Station** is a brick Georgian-Revival Style building still in use by SEPTA.

PART II. ASSESSMENT OF HISTORIC RESOURCES

All historic resources were entered into an Excel spreadsheet with columns to indicate the four criteria listed in the scope of work: its structural condition, its integrity, its ability to convey its historic function, and whether it needs to be rehabilitated. This assessment is preliminary only, in that no resources were physically inspected nor surveyed by a structural engineer. The integrity of each resource was evaluated according to the National Register criteria. In this case, the period of significance is 1901–1953. The third assessment, ability to convey its historic function, considers the function of the building during the period of significance only. Rehabilitation was only considered for portions of the route which would be critical to the re-establishment of a hiking / biking route.

PART III. INTERPRETATION OPTIONS

Due to the wide variety of historic resources available on the Liberty Bell Trolley route, different types of interpretation may be necessary.



APPENDIX A
HISTORIC PRESERVATION ELEMENT

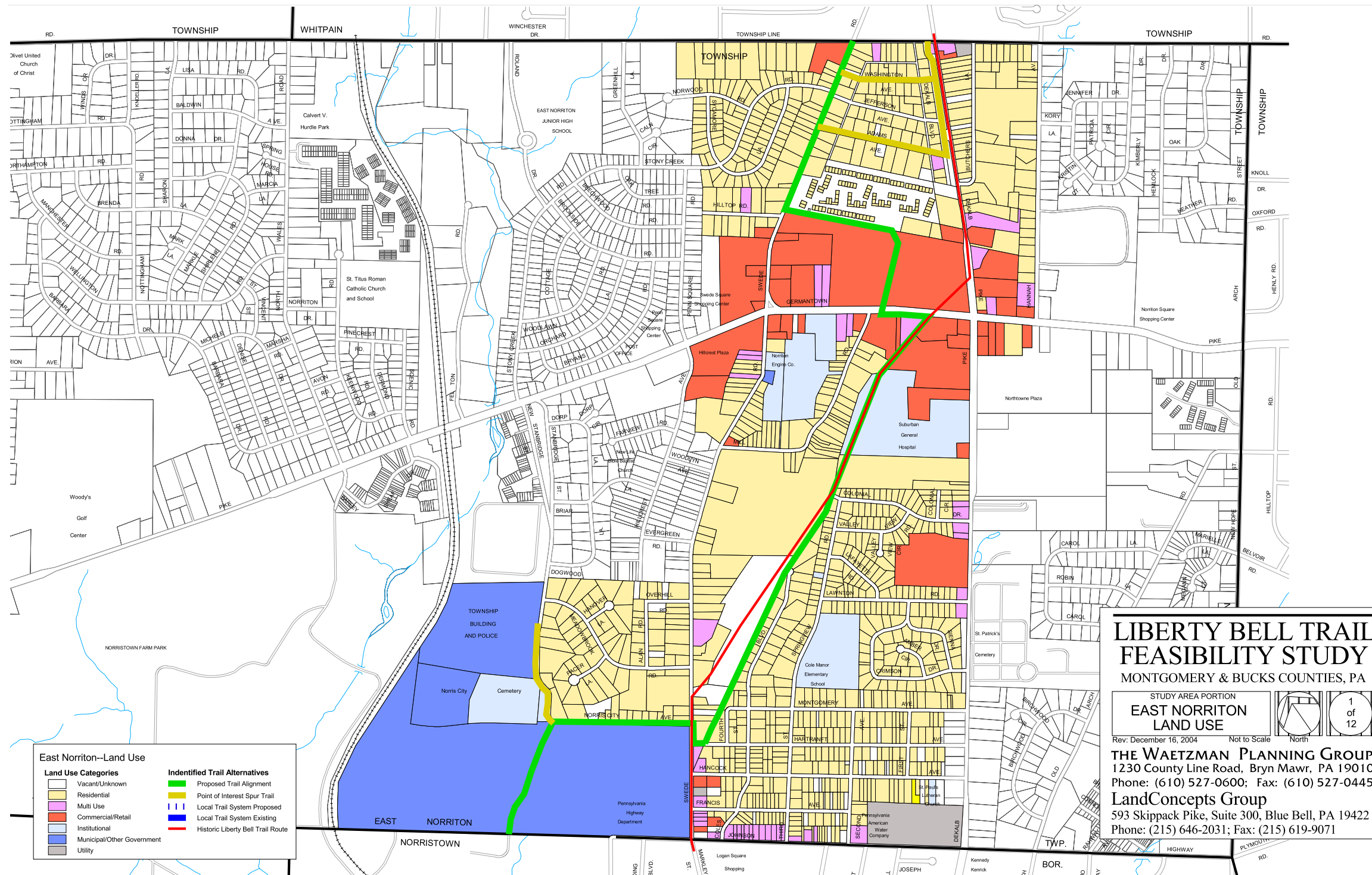
Prepared by
Wise Preservation Planning, Paoli, PA
03.07.2003

1. Local historical markers are one of the most commonly encountered types of interpretation. The Borough of Hatfield has already posted small markers on the walking trail to identify it as the former route of the trolley. Additional markers should be posted if additional sections of the historic route are added to the multi-purpose trail.
2. A historical brochure should be prepared containing both a short history of the trolley and a short paragraph on each of the more significant historic resources associated with the trolley route. The brochure would include a section on each village providing alternate routes for those interested in architecture or local businesses (restaurants, gift shops, drug stores, etc.).
3. Other interpretation options as they become available.



APPENDIX B
EXISTING LAND USE MAPS

Figure 17
East Norriton



LIBERTY BELL TRAIL FEASIBILITY STUDY
MONTGOMERY & BUCKS COUNTIES, PA

STUDY AREA PORTION
EAST NORRITON LAND USE

Rev: December 16, 2004 Not to Scale North

THE WAETZMAN PLANNING GROUP
1230 County Line Road, Bryn Mawr, PA 19010
Phone: (610) 527-0600; Fax: (610) 527-0445

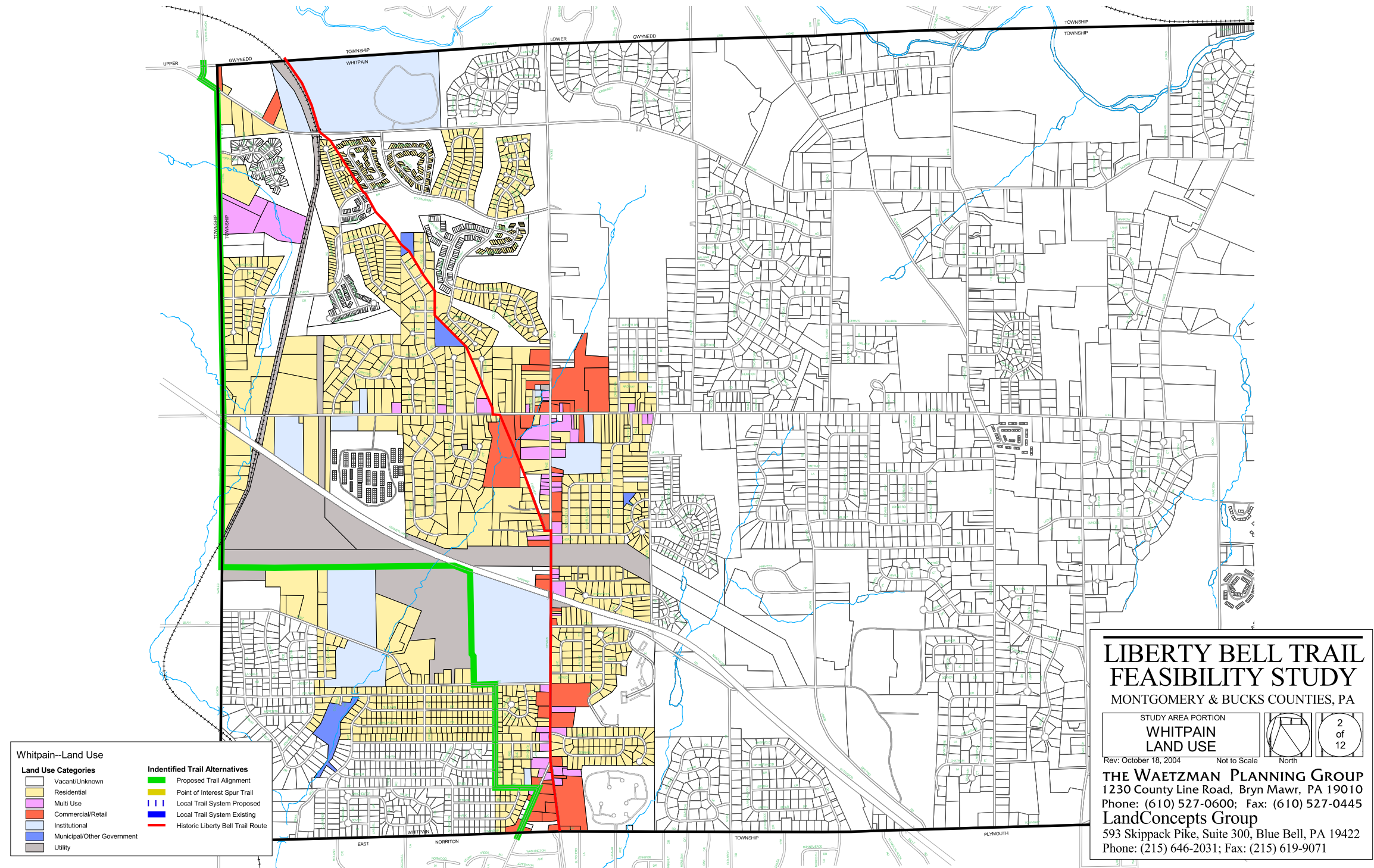
LandConcepts Group
593 Skippack Pike, Suite 300, Blue Bell, PA 19422
Phone: (215) 646-2031; Fax: (215) 619-9071

| East Norriton--Land Use | |
|----------------------------|--------------------------------------|
| Land Use Categories | Identified Trail Alternatives |
| Vacant/Unknown | Proposed Trail Alignment |
| Residential | Point of Interest Spur Trail |
| Multi Use | Local Trail System Proposed |
| Commercial/Retail | Local Trail System Existing |
| Institutional | Historic Liberty Bell Trail Route |
| Municipal/Other Government | |
| Utility | |



APPENDIX B
EXISTING LAND USE MAPS

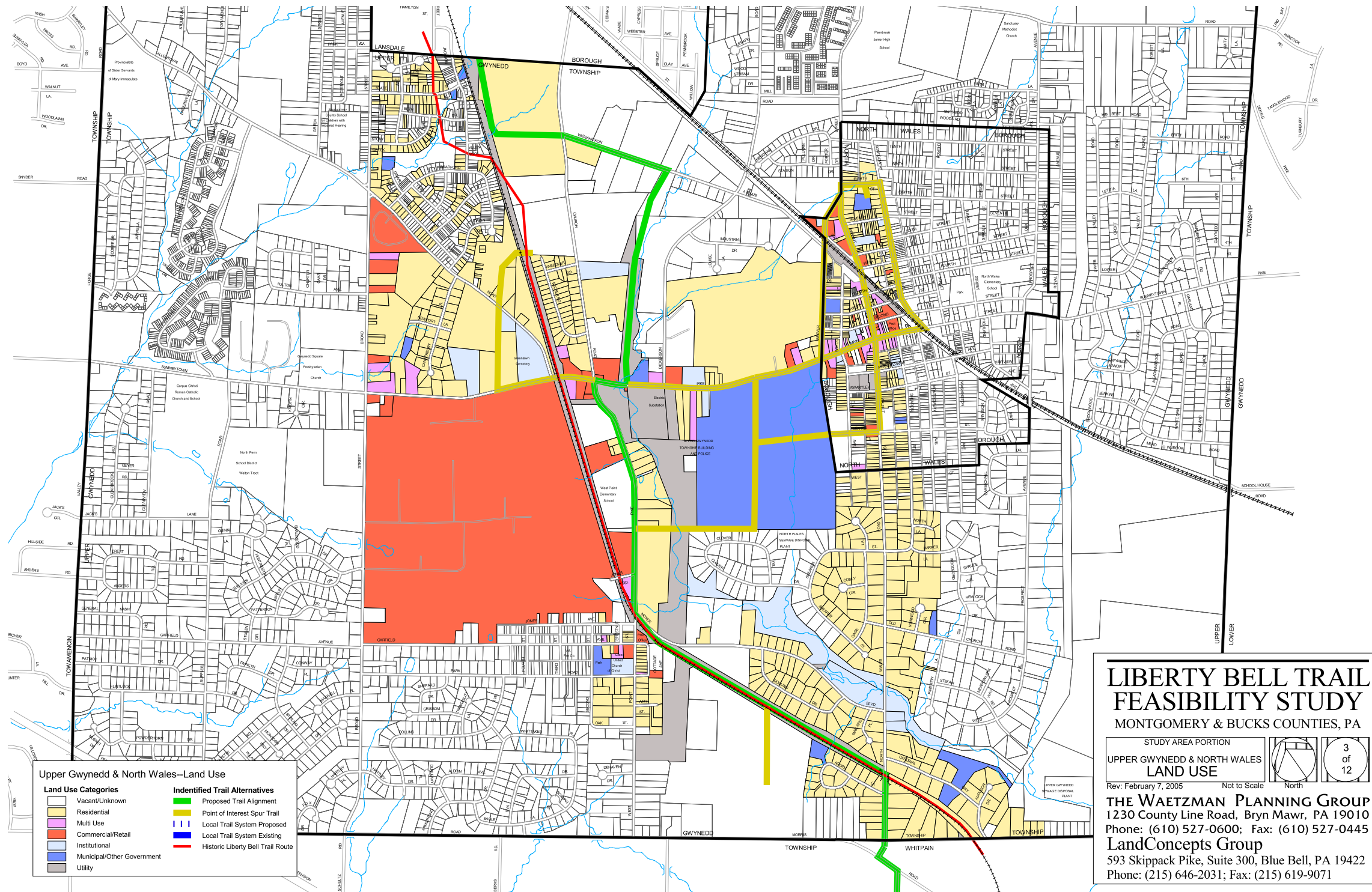
Figure 18
Whitpain





APPENDIX B
EXISTING LAND USE MAPS

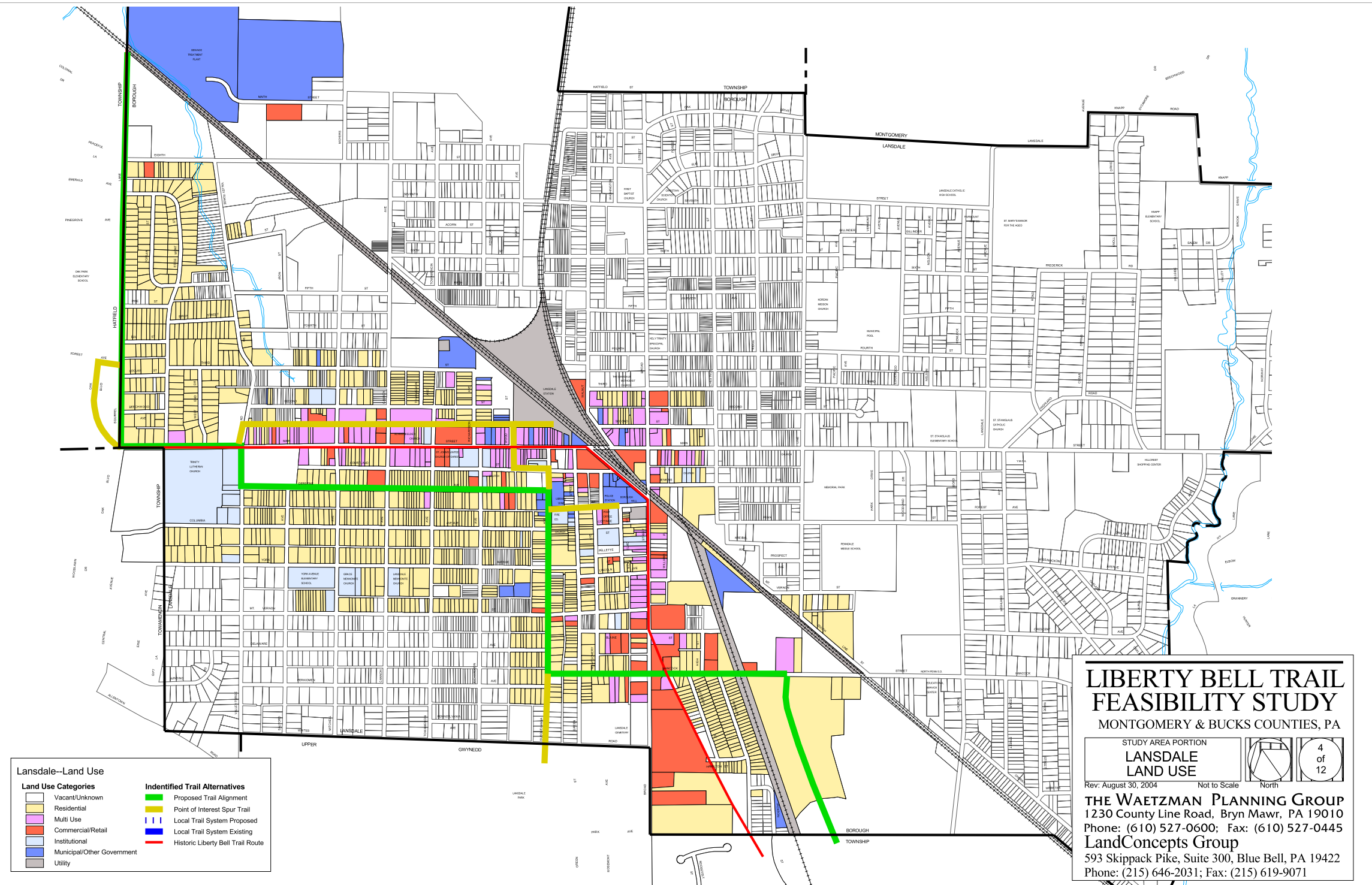
Figure 19
Upper Gwynedd & North Wales





APPENDIX B
EXISTING LAND USE MAPS

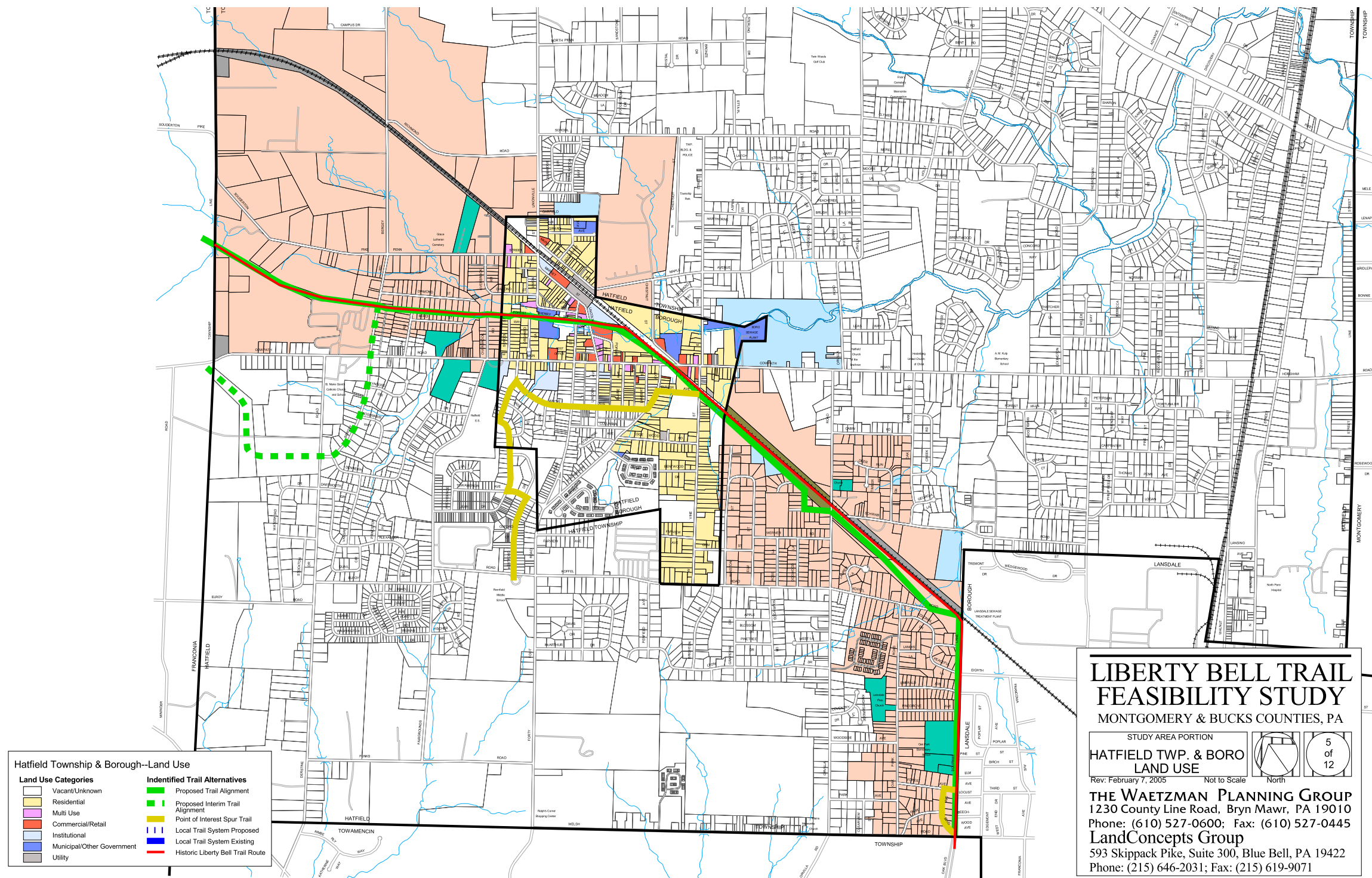
Figure 20
Lansdale





APPENDIX B
EXISTING LAND USE MAPS

Figure 21
Hatfield Township & Borough



**LIBERTY BELL TRAIL
FEASIBILITY STUDY**
MONTGOMERY & BUCKS COUNTIES, PA

STUDY AREA PORTION
**HATFIELD TWP. & BORO
LAND USE**

Rev: February 7, 2005 Not to Scale North

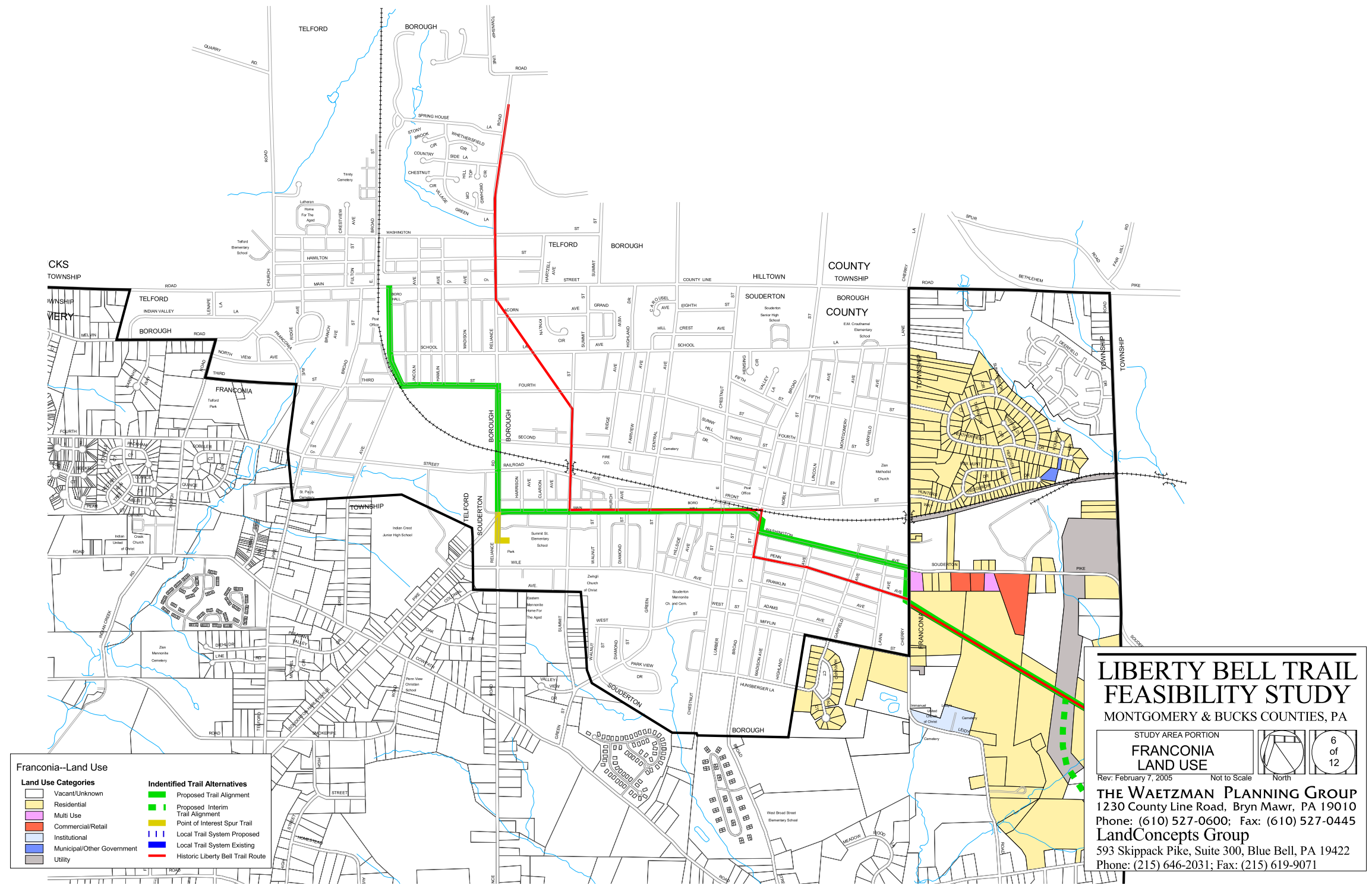
THE WAETZMAN PLANNING GROUP
1230 County Line Road, Bryn Mawr, PA 19010
Phone: (610) 527-0600; Fax: (610) 527-0445

LandConcepts Group
593 Skippack Pike, Suite 300, Blue Bell, PA 19422
Phone: (215) 646-2031; Fax: (215) 619-9071



APPENDIX B
EXISTING LAND USE MAPS

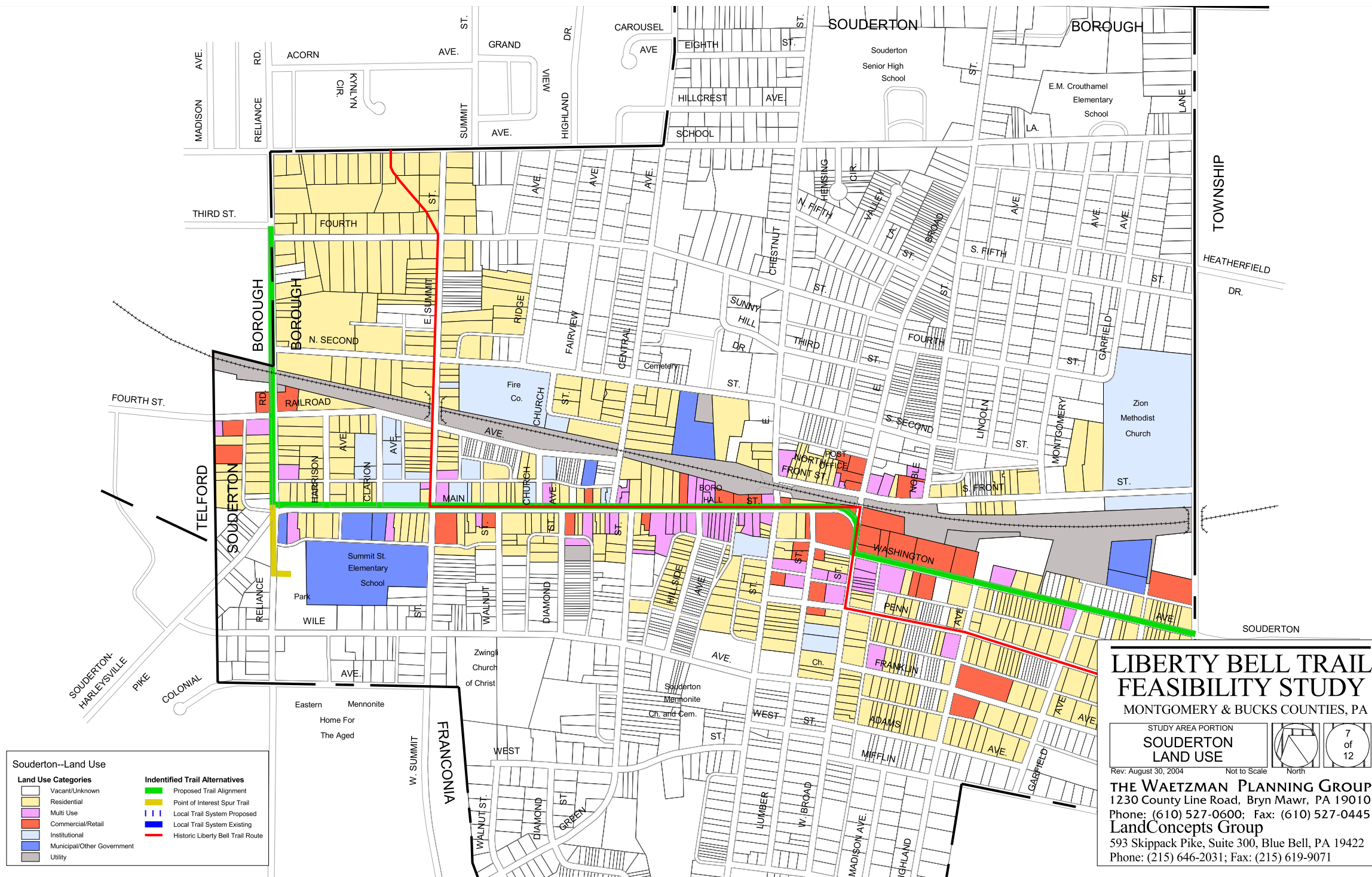
Figure 22
Franconia





APPENDIX B
EXISTING LAND USE MAPS

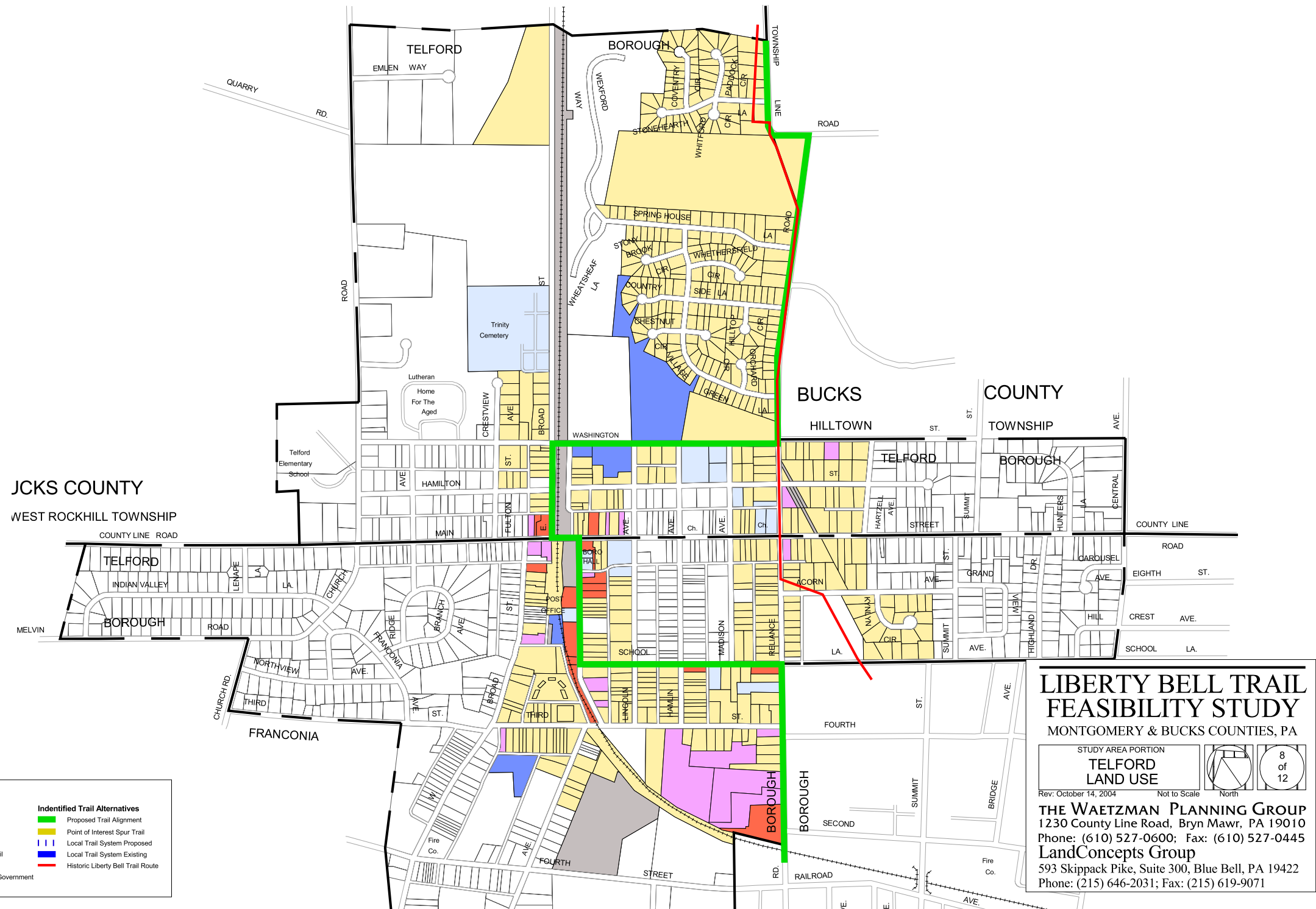
Figure 23
Souderton





APPENDIX B
EXISTING LAND USE MAPS

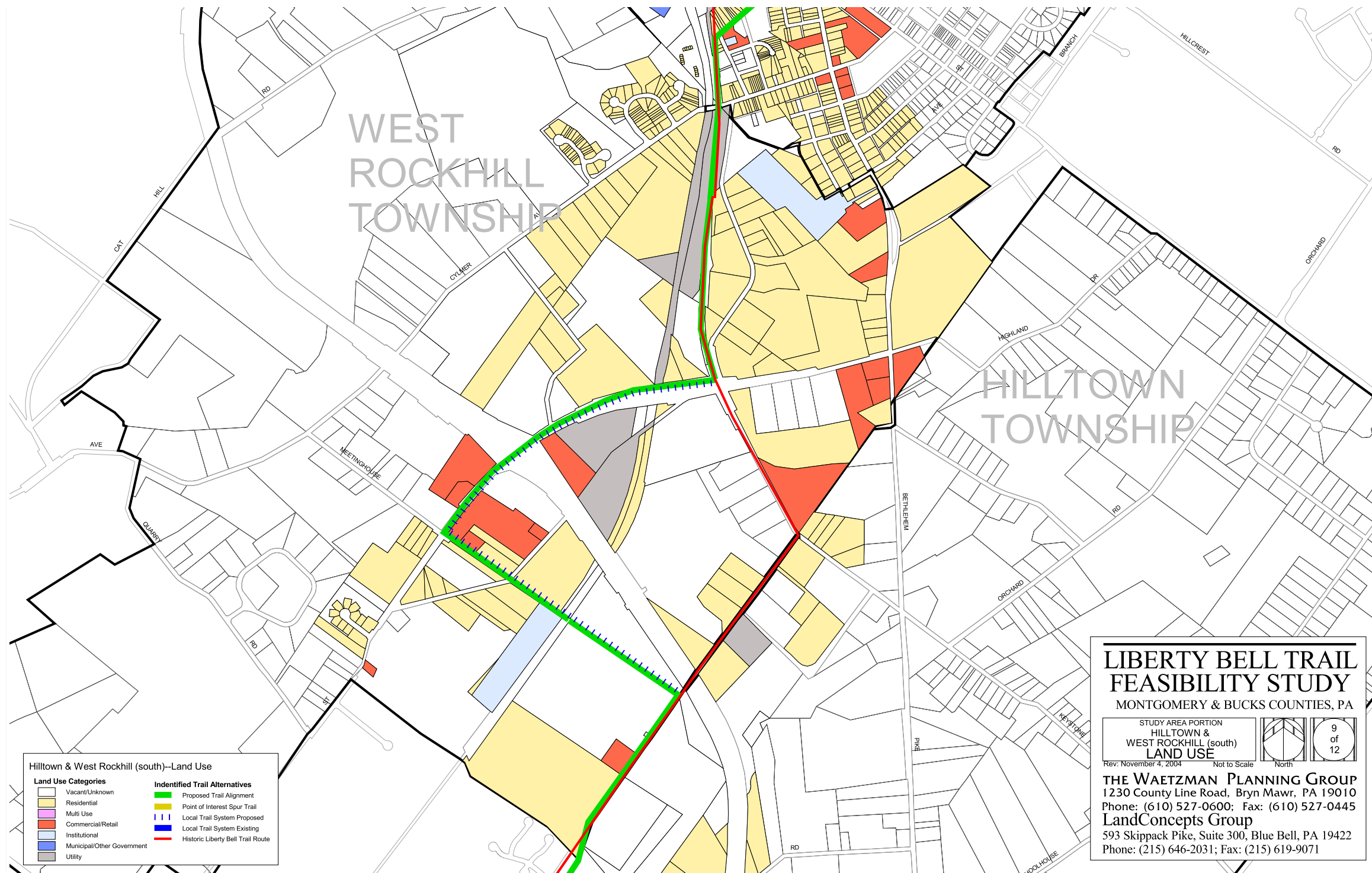
Figure 24
Telford





APPENDIX B
EXISTING LAND USE MAPS

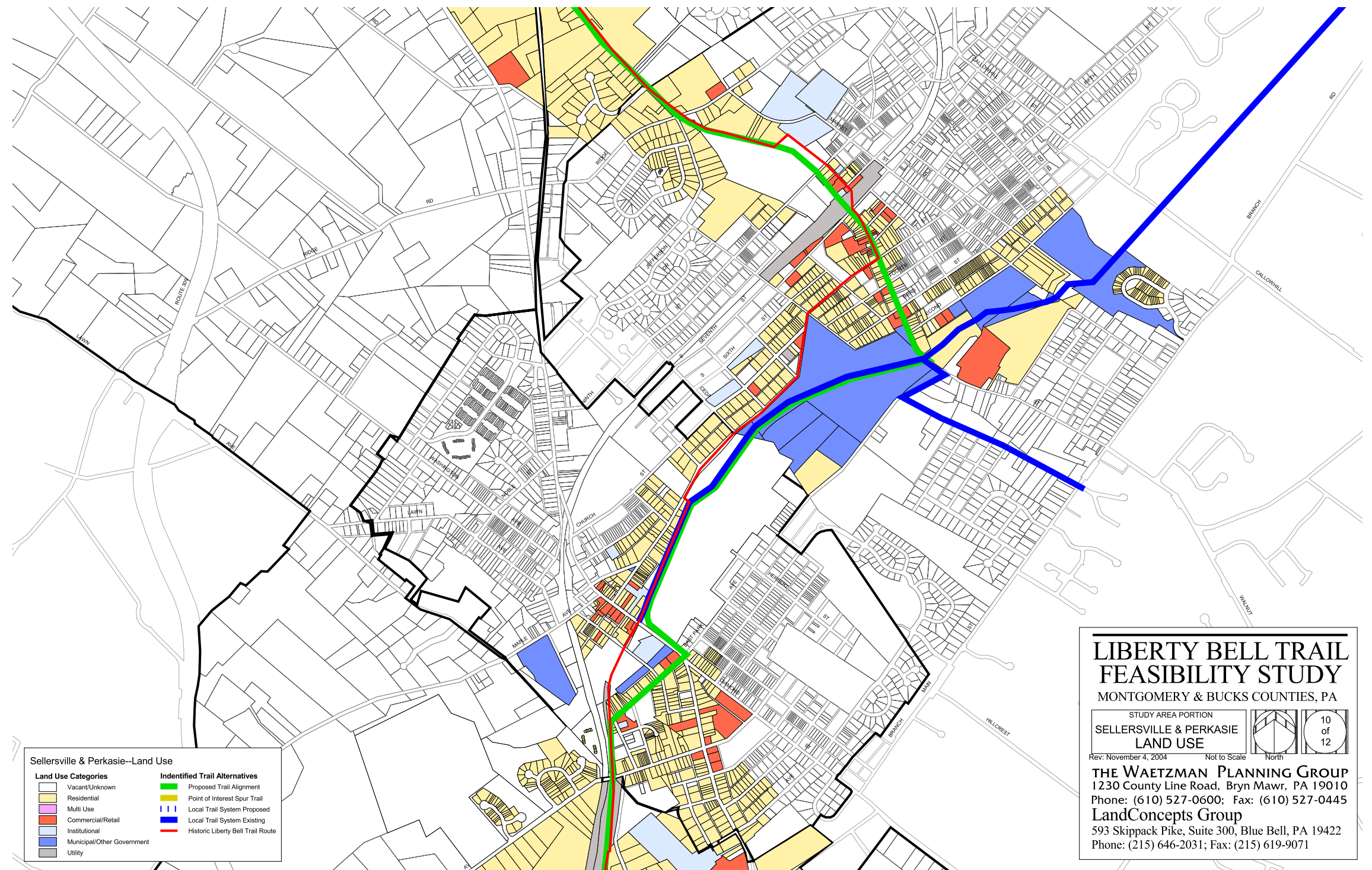
Figure 25
Hilltown & West Rockhill (south)





APPENDIX B
EXISTING LAND USE MAPS

Figure 26
Sellersville & Perkasie





APPENDIX B
EXISTING LAND USE MAPS

Figure 27
East & West Rockhill (North)



**LIBERTY BELL TRAIL
FEASIBILITY STUDY**
MONTGOMERY & BUCKS COUNTIES, PA

STUDY AREA PORTION
EAST & WEST ROCKHILL (north)
LAND USE

Rev: June 30, 2005 Not to Scale North

THE WAETZMAN PLANNING GROUP
1230 County Line Road, Bryn Mawr, PA 19010
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LandConcepts Group
593 Skippack Pike, Suite 300, Blue Bell, PA 19422
Phone: (215) 646-2031; Fax: (215) 619-9071

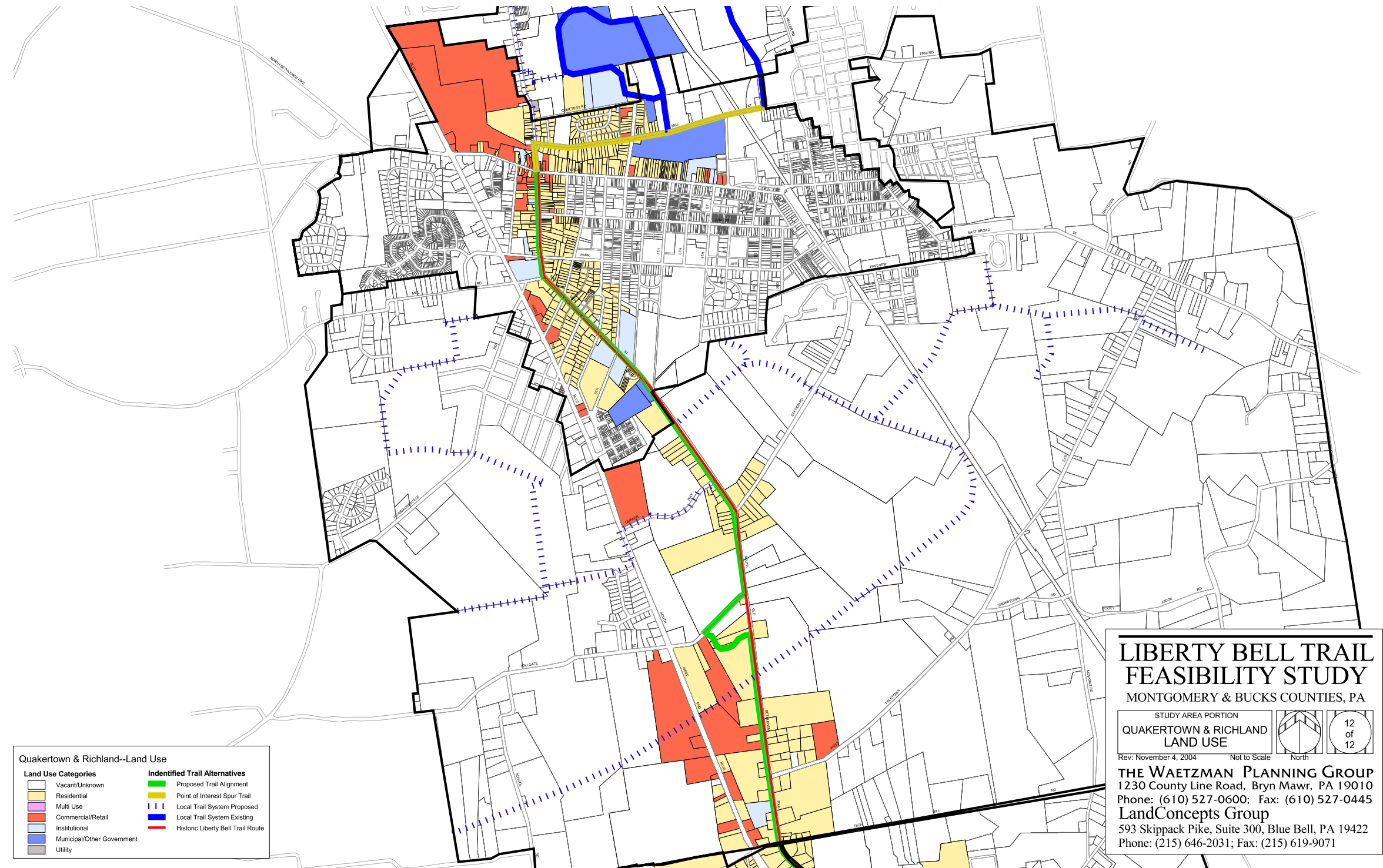
East & West Rockhill (north)--Land Use

| Land Use Categories | Identified Trail Alternatives |
|----------------------------|-----------------------------------|
| Vacant/Unknown | Proposed Trail Alignment |
| Residential | Point of Interest Spur Trail |
| Multi Use | Local Trail System Proposed |
| Commercial/Retail | Local Trail System Existing |
| Institutional | Historic Liberty Bell Trail Route |
| Municipal/Other Government | |
| Utility | |



APPENDIX B
EXISTING LAND USE MAPS

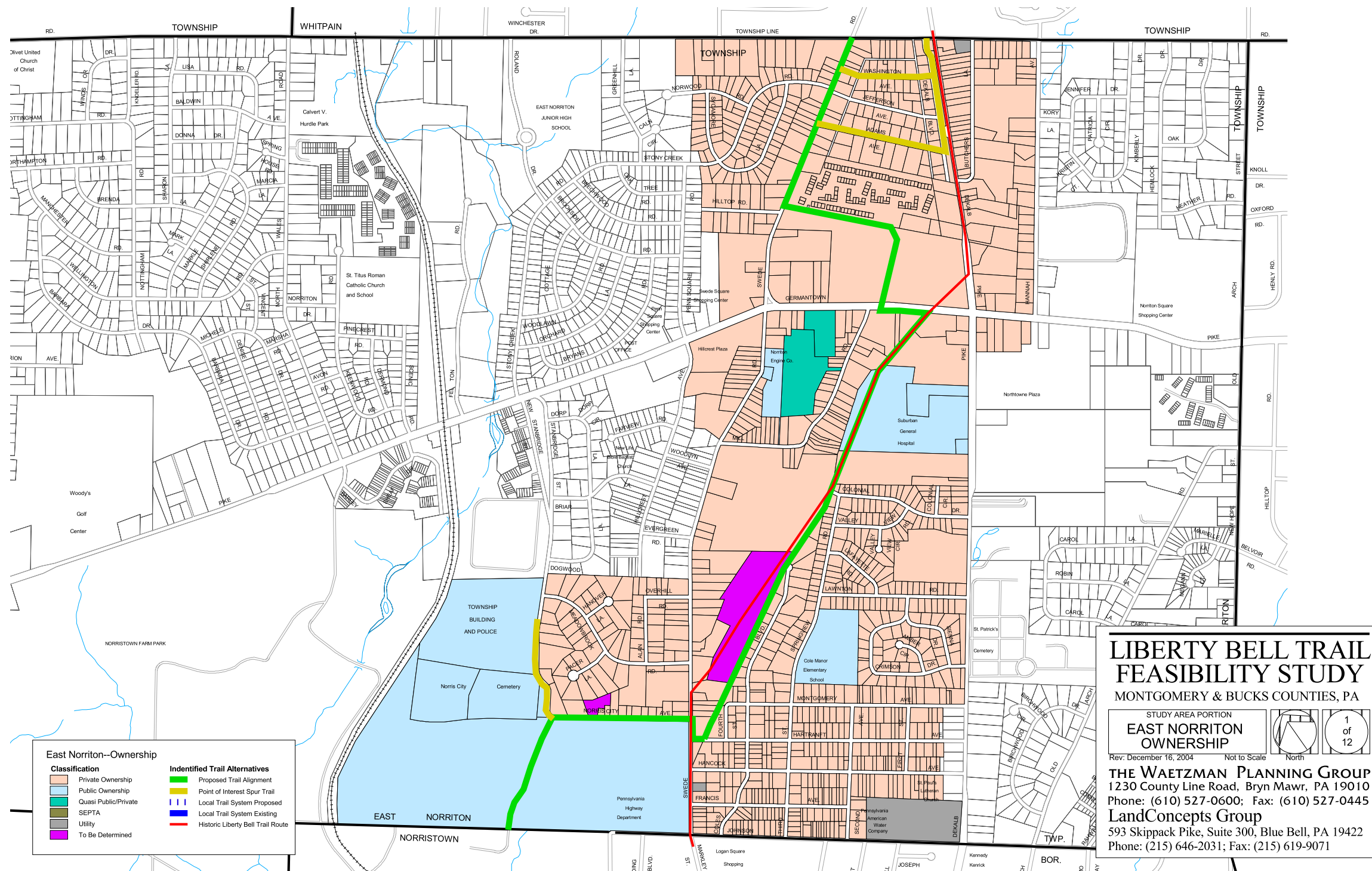
Figure 28
Quakertown & Richland





APPENDIX C
OWNERSHIP MAPS

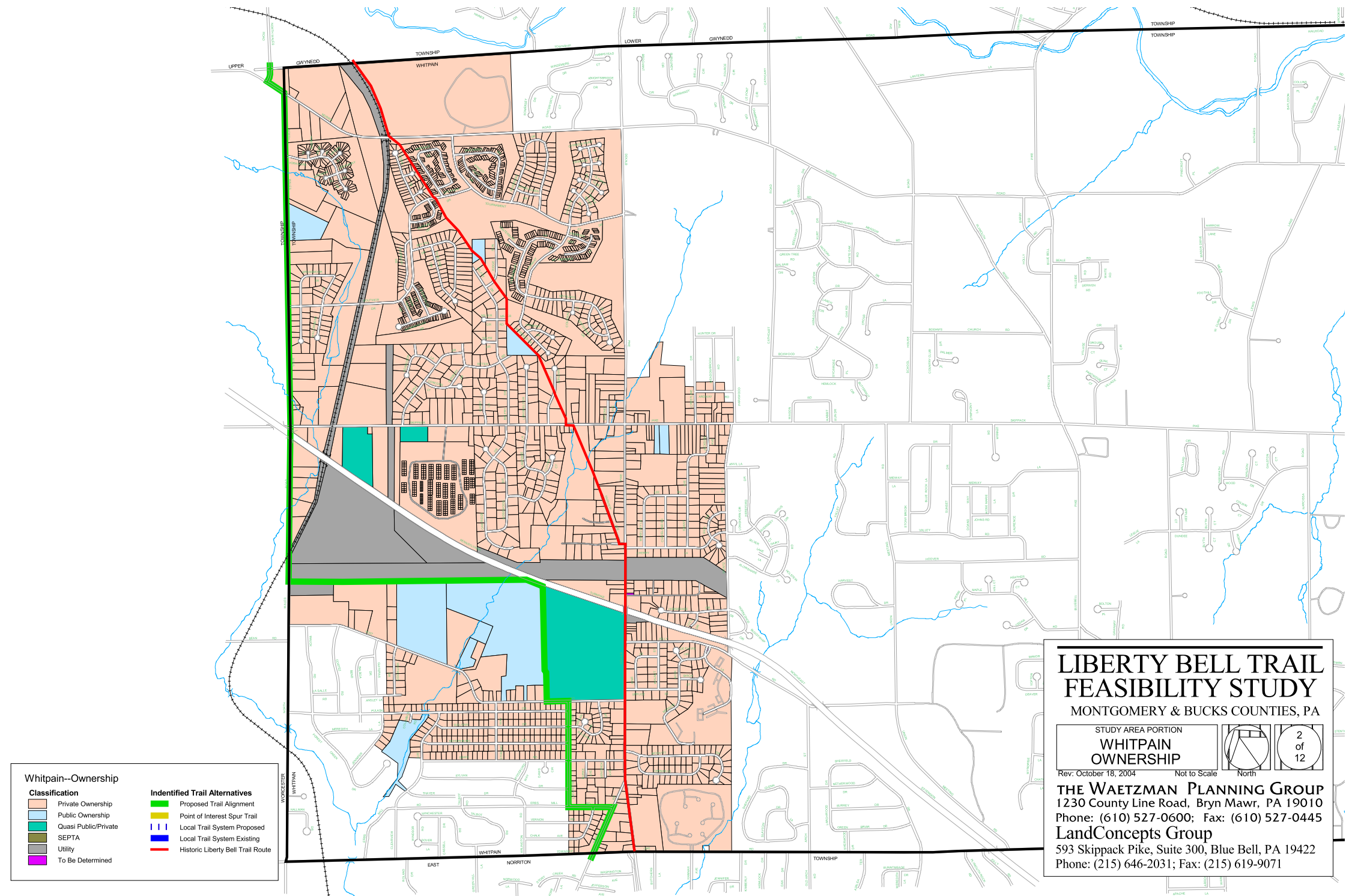
Figure 29
East Norriton





APPENDIX C
OWNERSHIP MAPS

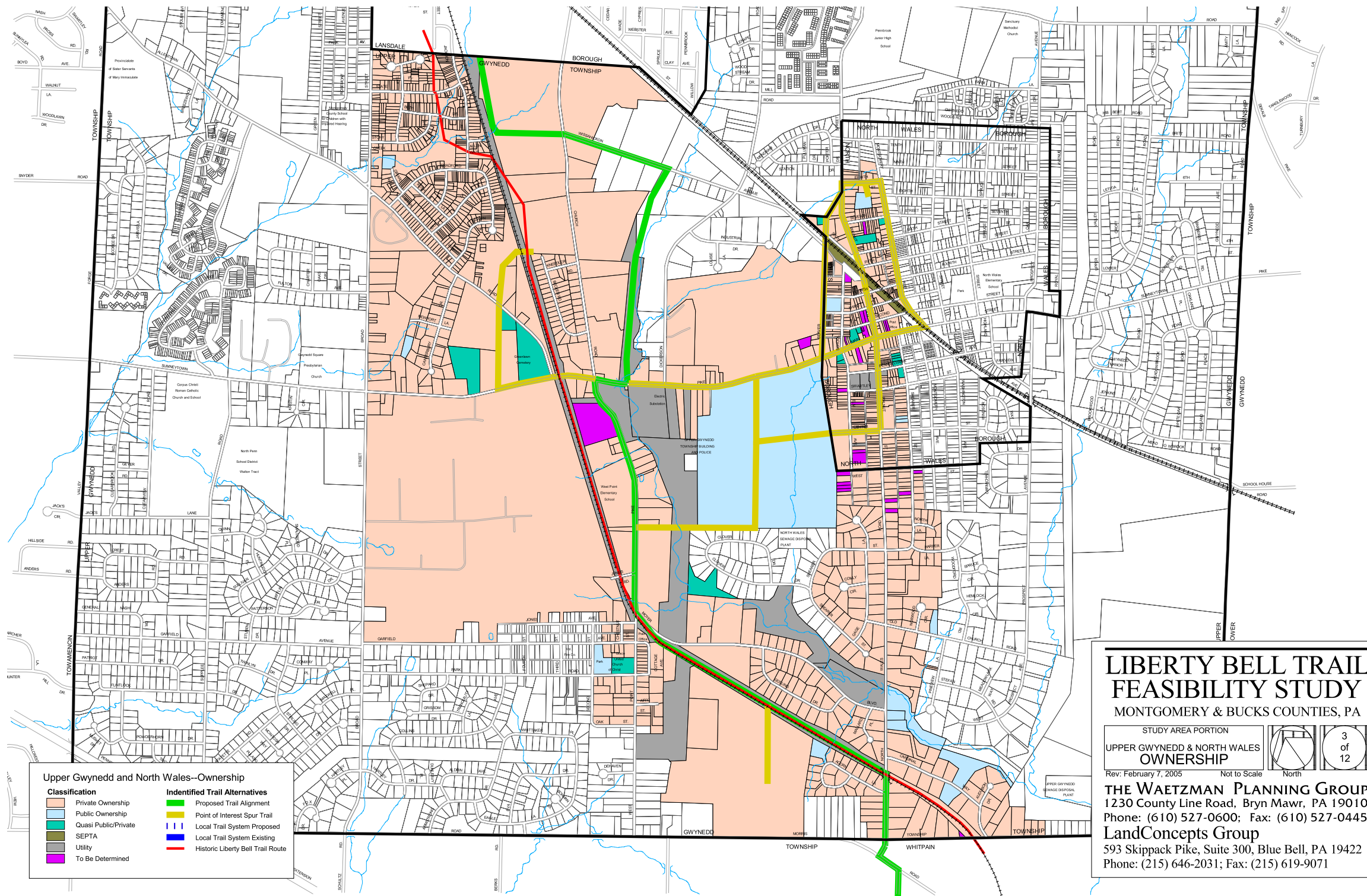
Figure 30
Whitpain





APPENDIX C
OWNERSHIP MAPS

Figure 31
Upper Gwynedd & North Wales



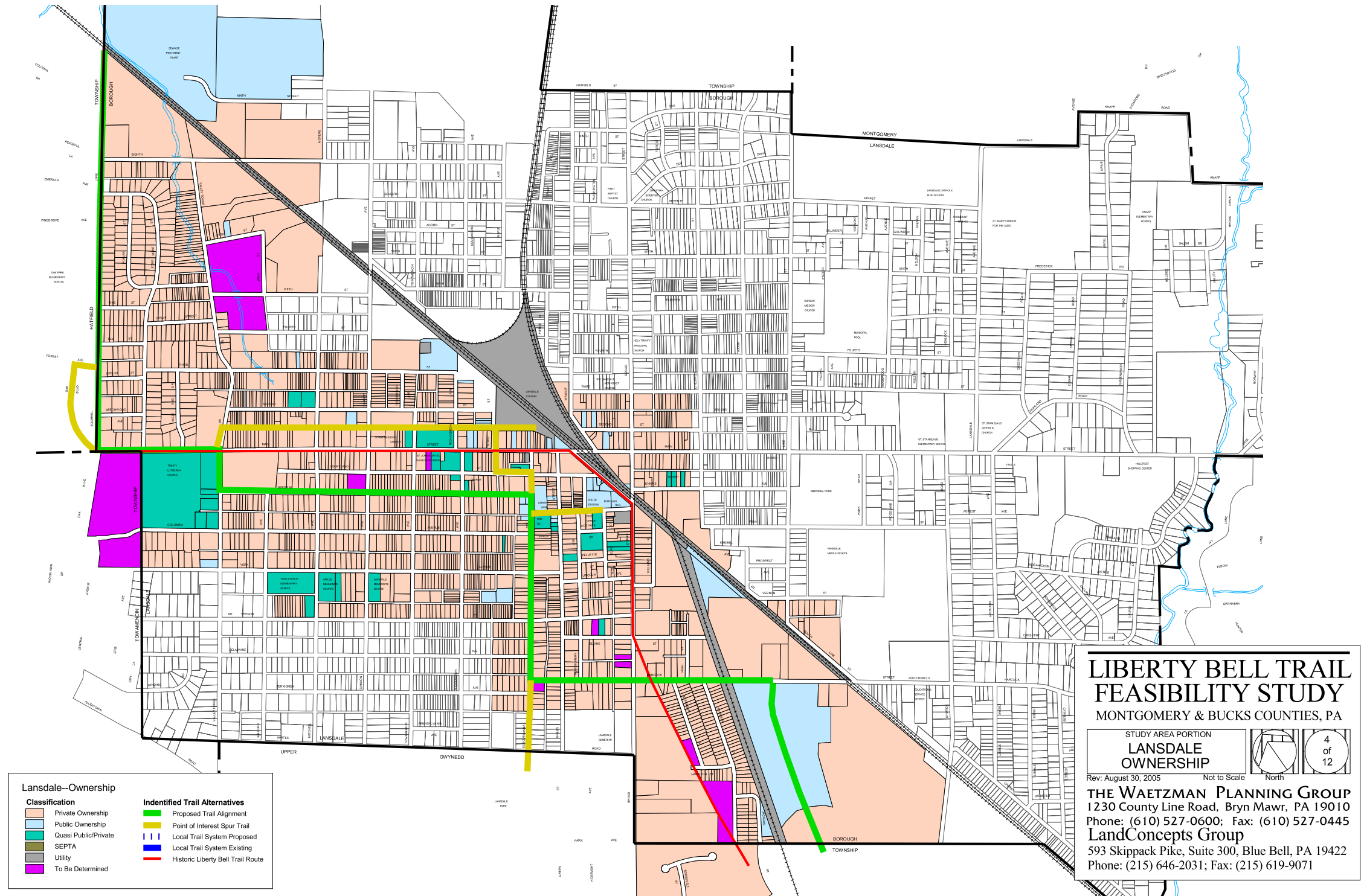


Liberty Bell Trail Feasibility Study

APPENDIX C
OWNERSHIP MAPS

68

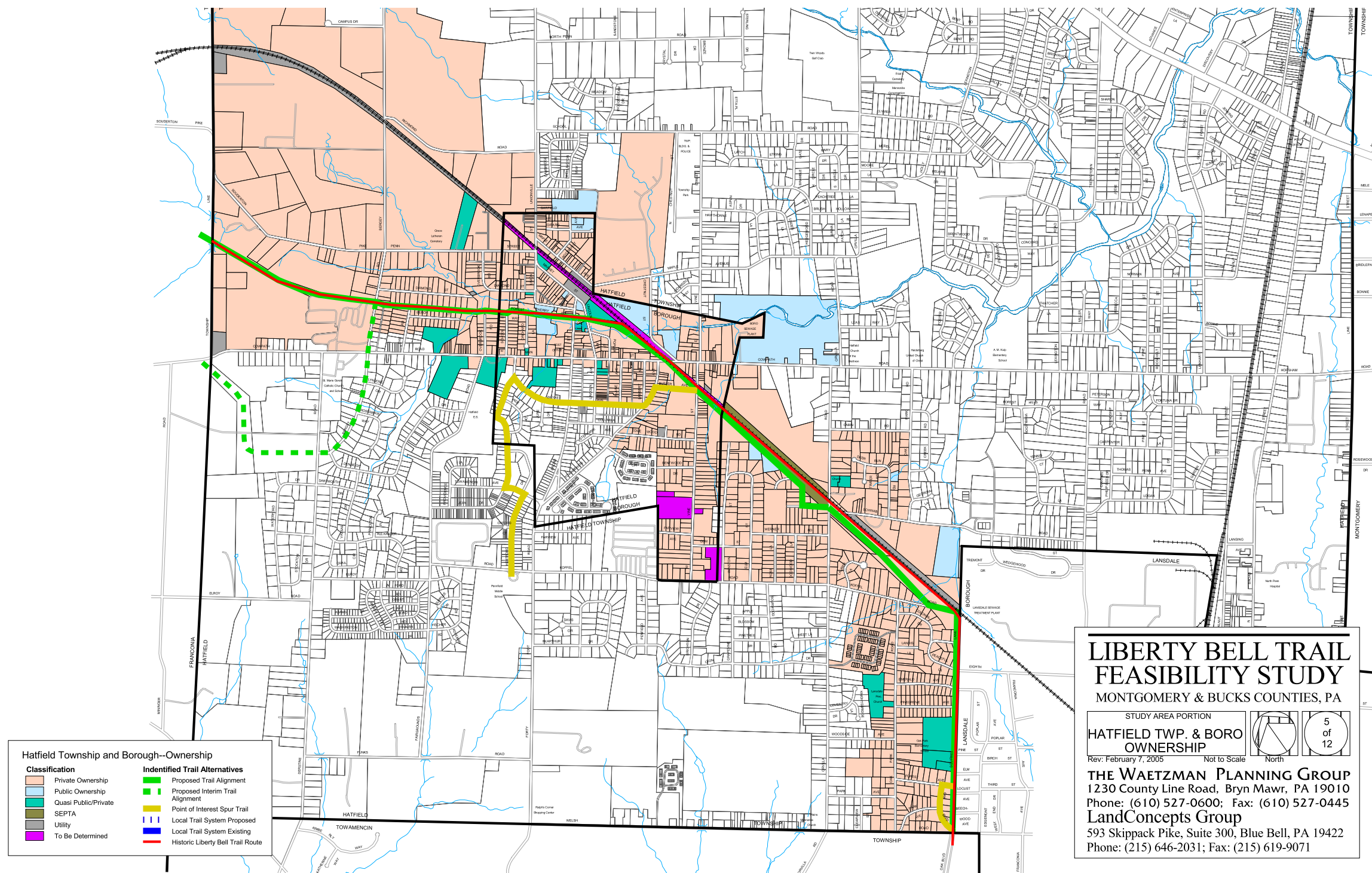
Figure 32
Lansdale





APPENDIX C
OWNERSHIP MAPS

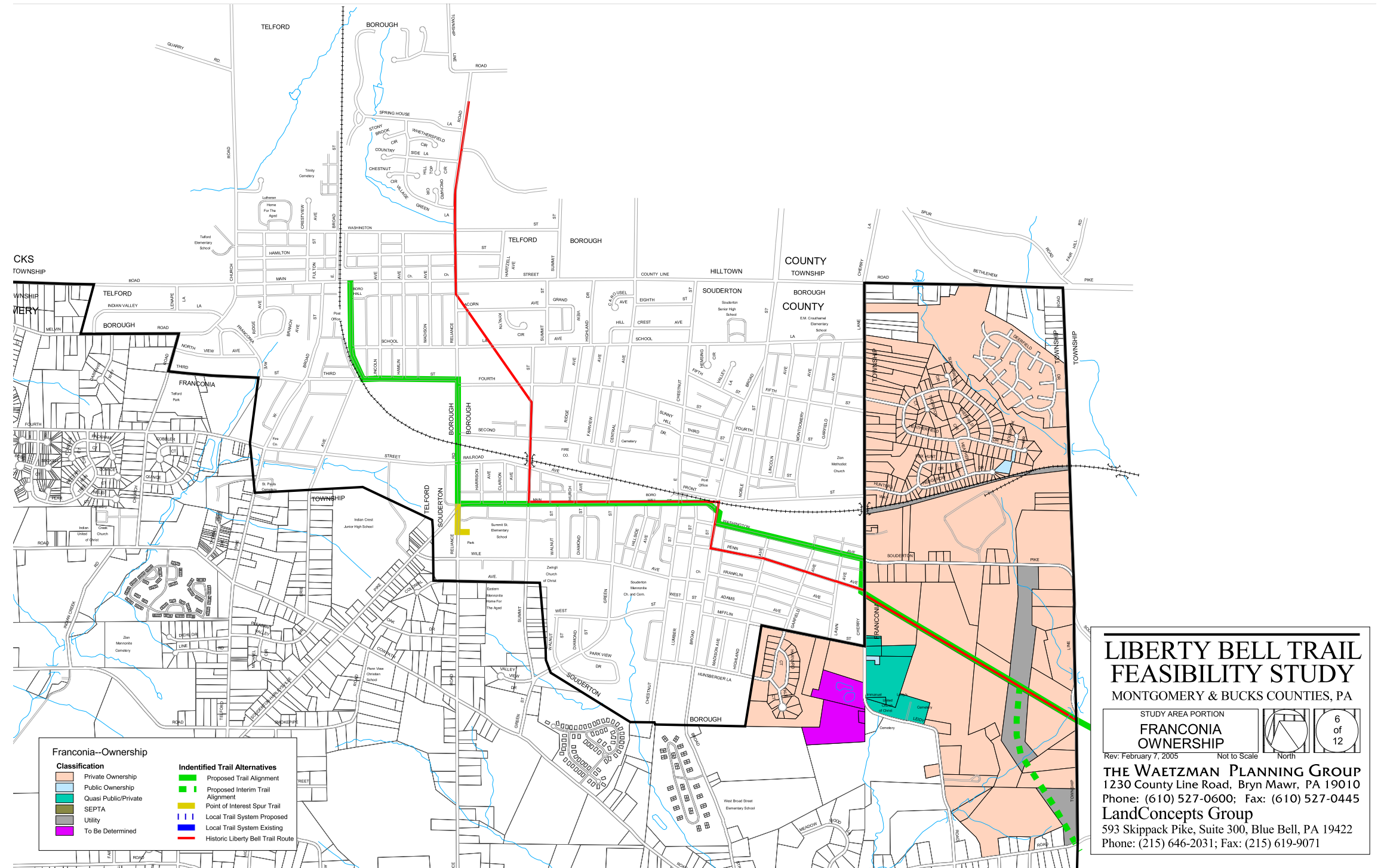
Figure 33
Hatfield Township & Borough





APPENDIX C
OWNERSHIP MAPS

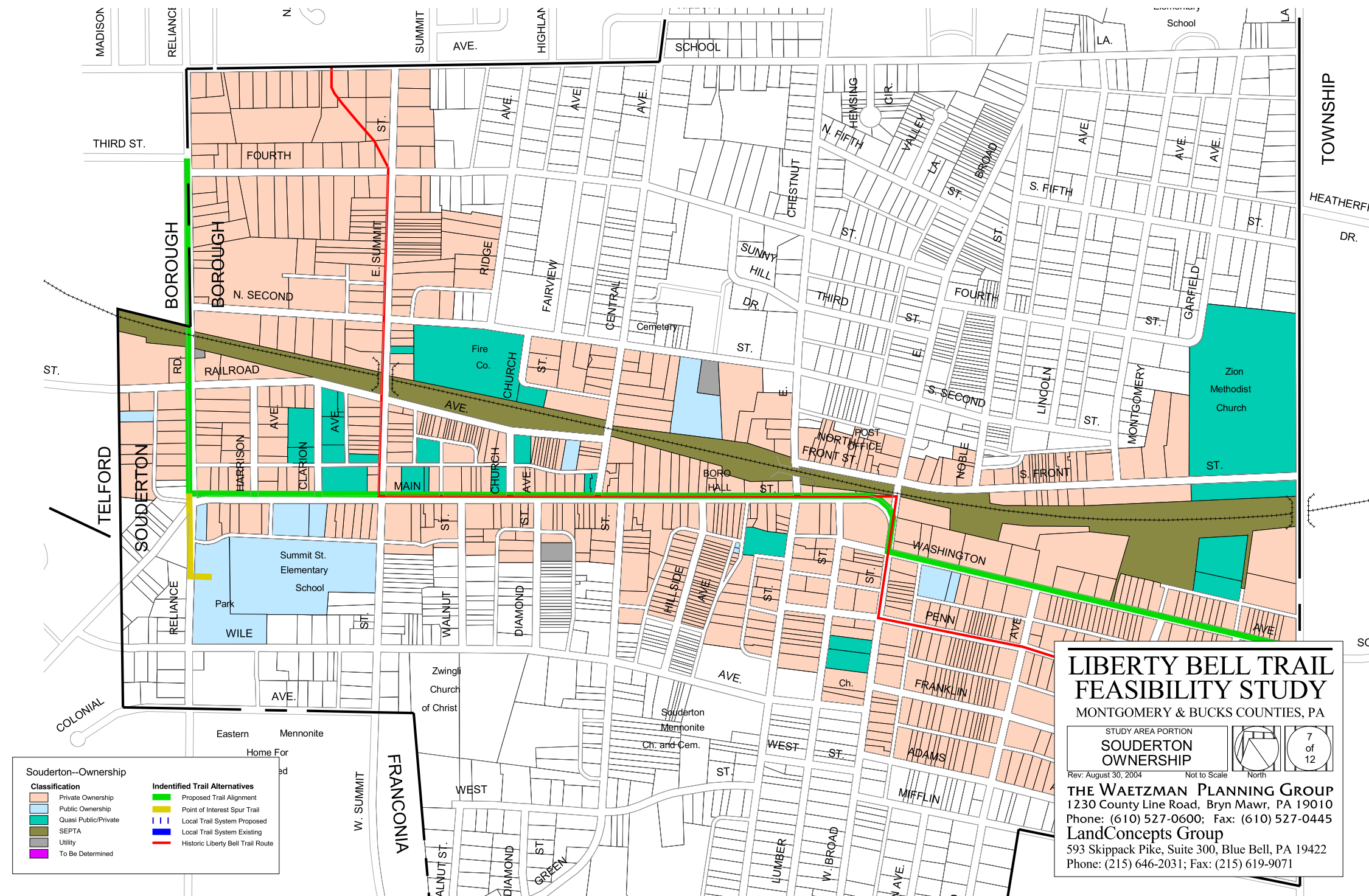
Figure 34
Franconia





APPENDIX C OWNERSHIP MAPS

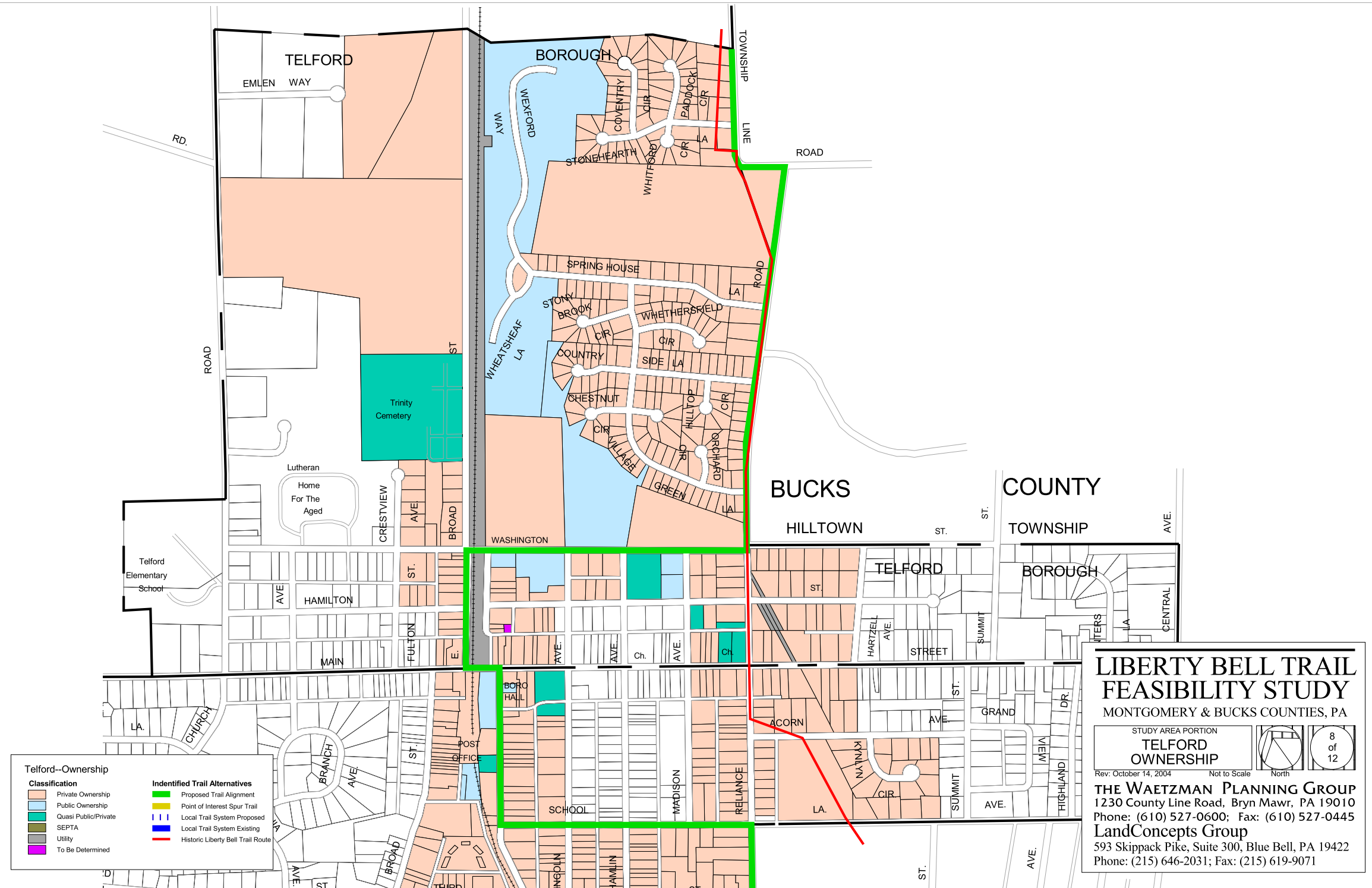
Figure 35 Souderton





APPENDIX C
OWNERSHIP MAPS

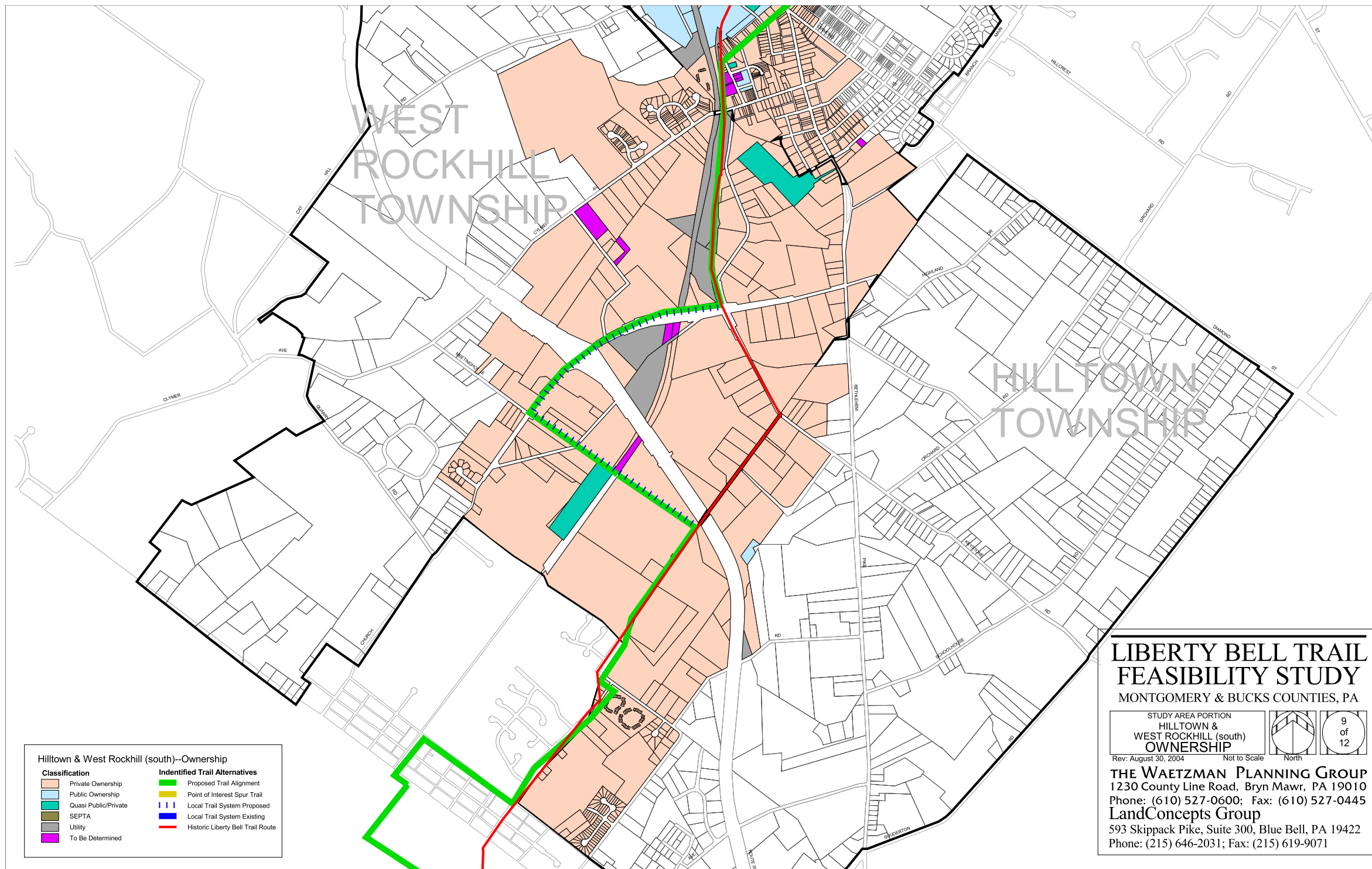
Figure 36
Telford





APPENDIX C
OWNERSHIP MAPS

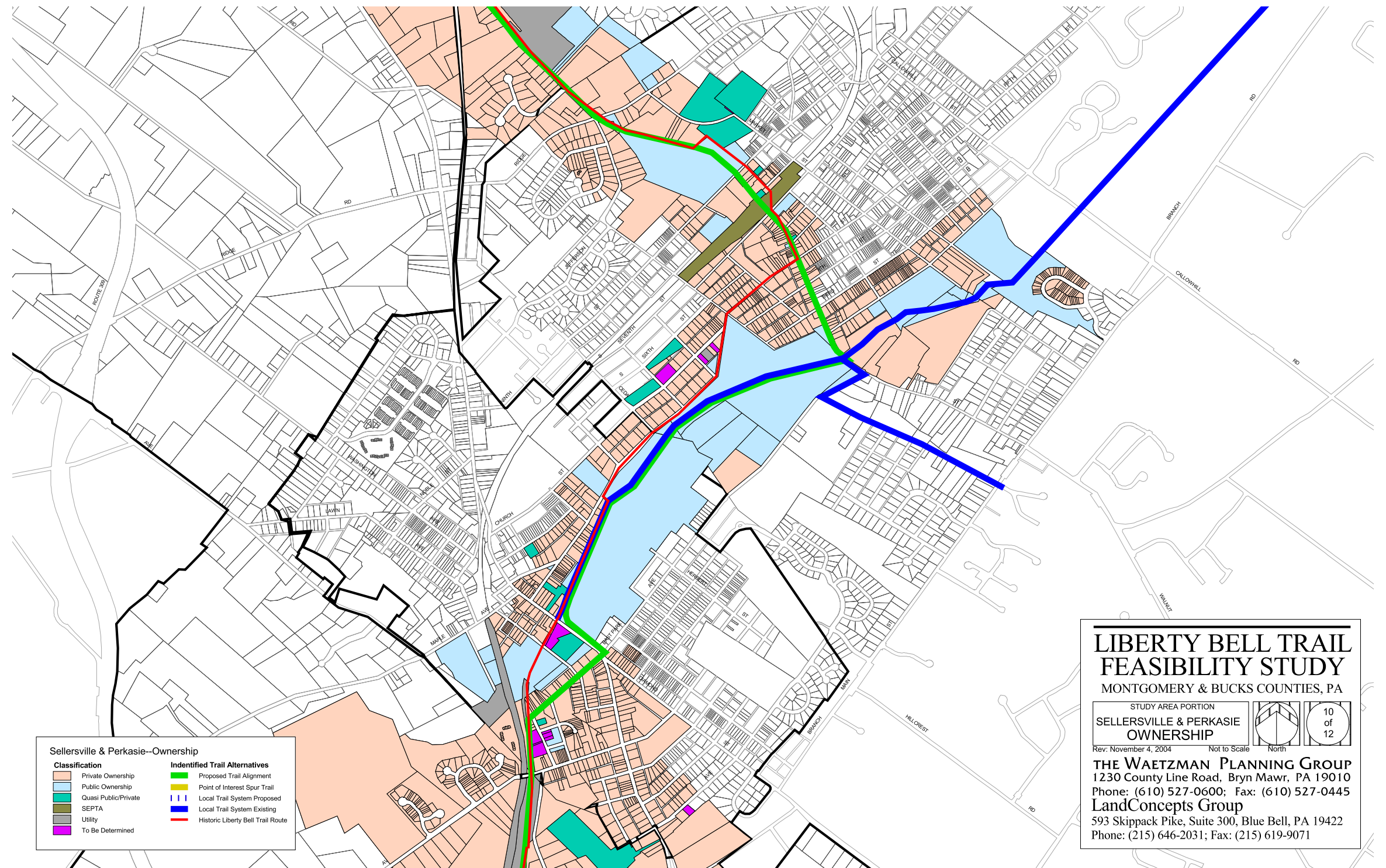
Figure 37
Hilltown & West Rockhill (South)





APPENDIX C
OWNERSHIP MAPS

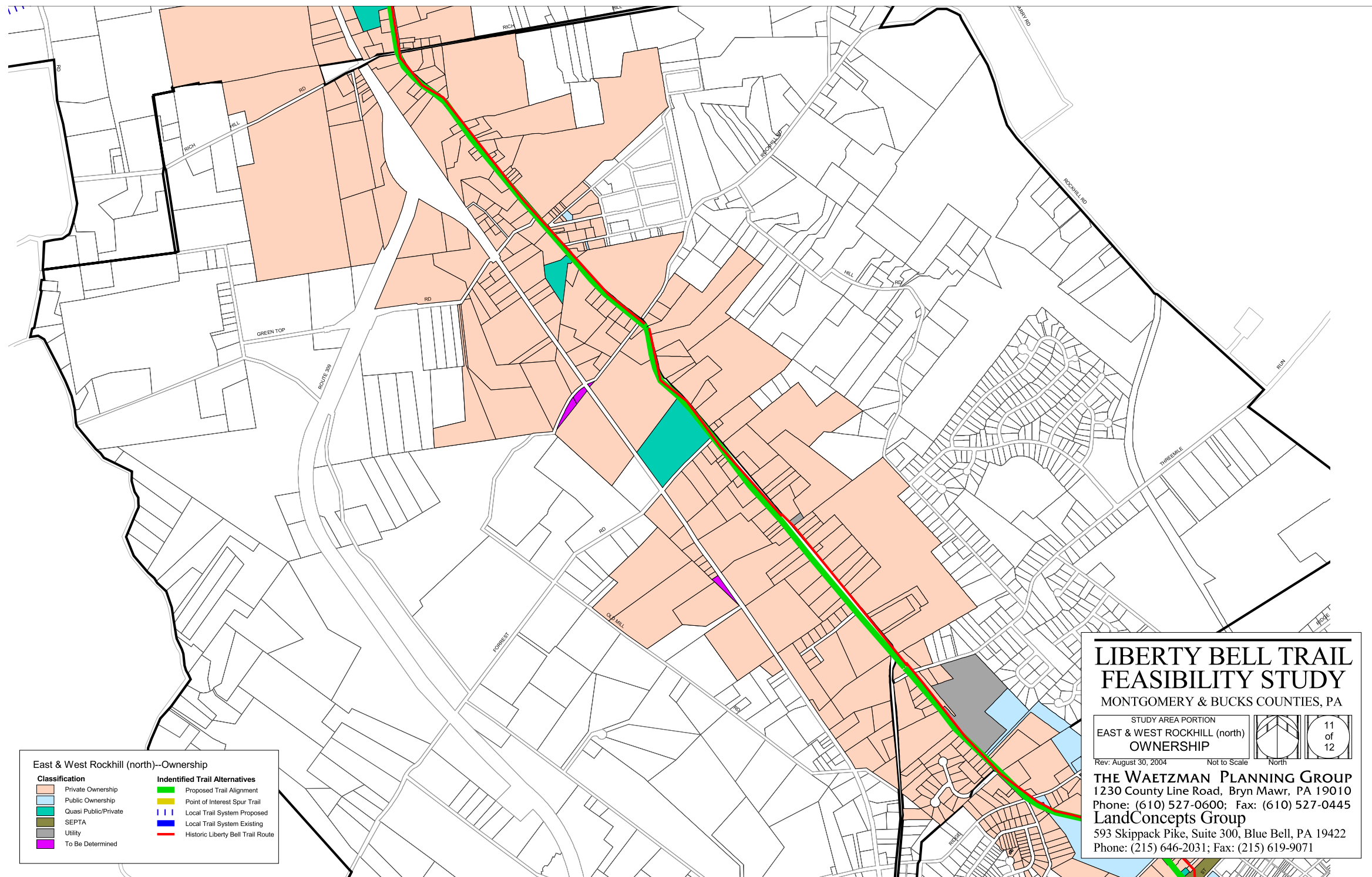
Figure 38
Sellersville & Perkasie





APPENDIX C
OWNERSHIP MAPS

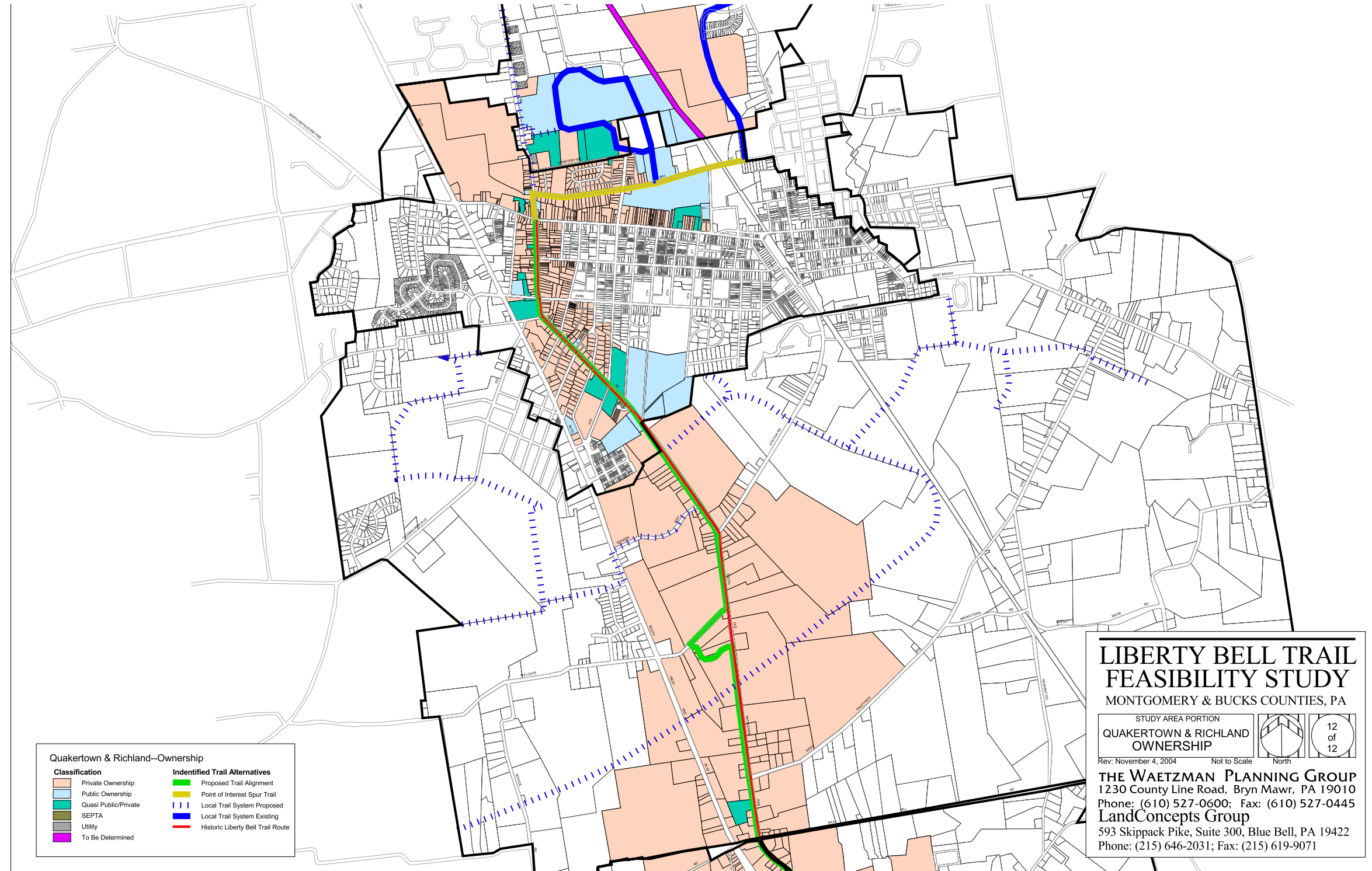
Figure 39
East & West Rockhill (north)





APPENDIX C
OWNERSHIP MAPS

Figure 40
Quakertown & richland





SOURCES OF TRAIL LITERATURE, CASE STUDIES

RESOURCES

Pennsylvania Greenways

<http://www.pagreenways.org/>

<http://www.pagreenways.org/funding.htm>

The goal of the Pennsylvania Greenways Program is to establish an interconnected network of greenways “on-the-ground.” This network will connect Pennsylvania’s natural, historic, and scenic landscapes, as well as our cultural and recreational sites. Greenways can be a tool for conserving natural resources, extending opportunities for outdoor recreation, and even providing the means to walk and bike to community destinations.

This network will come about by planning for greenways in our municipalities, counties, and state. The PA Greenways Program has identified a network of “Major Greenways” and encourages counties and municipalities to plan for greenways. Find out more about the network—including greenway types and examples—and how we’re planning to make it happen.

Heritage Conservancy

Using Conservation Easements to Preserve Open Space.

<http://www.heritageconservancy.org/news/publications/>

This guide is designed to provide Pennsylvania’s municipalities and their advisory groups, such as environmental advisory councils and open space committees, with an overview of conservation easements. Conservation easements are a land-saving tool that stretches the open space dollar.

Department of Environmental Protection

Pennsylvania Stream Releaf: Forest Buffer Toolkit.

<http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/StreamReleaf/Forestbufftool/default.htm>

The purpose of this toolkit is to provide individuals, local organizations and government agencies with the latest information on how to plan for, design, establish and maintain streamside forest buffers.

Rails to Trails

<http://railtrails.org/>

The Clearinghouse, a project of Rails-to-Trails Conservancy (RTC), provides technical assistance, information resources and referrals to trail and greenway advocates and developers across the nation. Services are free and available to individuals, government agencies, communities, grassroots organizations and anyone else who is seeking to create or manage trails and greenways.

<http://trailsandgreenways.org/resources/highlights/default.asp>

Provides numerous resources for the:

Resources on the Benefits of Trails and Greenways.

Resources on Trail and Greenway Development.

List of Highlights -

Technical Assistance Services

RTC Online Manuals, Reports and Fact Sheets

Resource Database

Funding Database

Trails Glossary and Acronyms

Conference Papers

National Trail Training Partnership (NTPP)

Rails-with-Trails: Lessons Learned

Literature Review, Current Practices, Conclusions.

<http://www.fhwa.dot.gov/environment/rectrails/rwt/toc.htm>

Department of Conservation and Natural Resources

The conversion of former railroad corridors into public use trails is a Pennsylvania success story. Each year, millions of outdoor enthusiasts now enjoy a growing network of Rail-Trails.

Through a dynamic partnership with DCNR, local Rail-Trail organizations, counties, townships, and municipalities have acquired, designed, constructed, and are managing and maintaining Rail-Trails in every region of the Commonwealth.

From small villages in rural areas to larger cities in highly urbanized centers, volunteers have come together to make the Pennsylvania Rail-Trail Program a national leader.

Contained in this web site is information on Rails-Trails open to the public, under construction, and proposed. DCNR will periodically update this site as information comes into us from our many trail partners.

American Trails

<http://americantrails.org/>

Numerous resources.

CASE STUDIES

Pennsylvania Examples from PA Greenways

- **Appalachian National Scenic Trail/Kittatinny Ridge**
The Appalachian Trail (AT) is a continuous, marked footpath extending along the Appalachian Mountain...
Status: Under design / construction / development
- **Baker Trail**
The Baker Trail was established in 1950 and named for the late Pittsburgh attorney, Horace Forbes...
Status: Existing
- **Chuck Keiper Trail**
The Chuck Keiper trail is a state forest hiking trail that runs through the southern part of the Sproul...
Status: Under design / construction / development
- **Clarion River Water Trail**
The Clarion River is one of the major tributaries of the Allegheny River and is located in the Ohio...
Status: Under design / construction / development
- **Conestoga River Water Trail**
The Conestoga River Water Trail is a designated Pennsylvania Water Trail that is located in the Susquehanna...
Status: Existing
- **Delaware and Lehigh (D&L) Trail**
Once complete, the Delaware and Lehigh Trail will be a 165-mile linear trail from Wilkes Barre to...
Status: Under design / construction / development



APPENDIX D

SOURCES OF TRAIL LITERATURE, CASE STUDIES

- **Delaware River Water Trail**
The Water Trail is one of the six designated in Pennsylvania and extends from Hanock, New York to...
Status: Existing
- **Donut Hole Trail**
The Donut Hole Trail heads north from Bucktail State Park through Kettle Creek State Park towards...
Status: Existing
- **East Coast Greenway**
A combination of trails from Maine to Florida (2600 miles). This has been designated a national millennium...
Status: Under design / construction / development
- **Great Allegheny Passage**
The Great Allegheny Passage is a 152-mile bicycle and walking trail connecting Cumberland, MD, with...
Status: Under design / construction / development
- **Horse-Shoe Trail**
The Horse-Shoe Trail is a 140 mile multi use trail which originates in Valley Forge National Park...
Status: Existing
- **Laurel Highlands National Scenic Trail**
The Laurel Highlands Trail extends for 70 miles from the 1000 foot deep Conemaugh Gorge near Johnstown...
Status: Existing
- **Lehigh River Water Trail**
A designated Pennsylvania Water Trails located in the Delaware River Basin. The trail runs 75 miles...
Status: Under design / construction / development
- **Link Trail**
The Link Trail is a 72 mile hiking path which connects the Mid-State Trail to the Tuscarora Trail....
Status: Under design / construction / development
- **Lower Susquehanna River Water Trail**
An official Pennsylvania Water Trail that runs 52 miles from Harrisburg to the Mason-Dixon Line. ...
Status: Existing
- **Loyalsock Trail**
The Loyalsock Trail follows mountain ridges and streams through the Loyalsock watershed as it travels...
Status: Existing
- **Mason Dixon Trail**
The Mason Dixon is a hiking trail. The Mason-Dixon starts at Chadd's Ford, crosses the Susquehanna...
Status: Existing
- **Mid State Trail**
The Mid State Trail System (MST) is a long distance hiking trail and its side trails in central Pennsylvania...
Status: Existing
- **Middle Allegheny River Water Trail**
An official Pennsylvania Water Trail, the Middle Allegheny River Water Trail runs from Kinzua Dam...
Status: Existing
- **Middle Susquehanna River Water Trail**
Designated as an official Pennsylvania Water Trail, the 51-mile trail extends from Sunbury to Harrisburg...
Status: Existing
- **North Branch Susquehanna Water Trail**
An official Pennsylvania water trail. The trail is sponsored by: The Pennsylvania Environmental...
Status: Under design / construction / development
- **North Country National Scenic Trail**
The North Country National Scenic Trail is a premier footpath that one day will stretch more than...
Status: Existing
- **Pine Creek Trail**
USA Today rated Pine Creek Rail Trail as one of the 10 great places to take a bike tour in their July...
Status: Under design / construction / development
- **Pittsburgh to Harrisburg Mainline Canal Greenway**
Introduced in 1998, the Pittsburgh to Harrisburg Mainline Canal Greenway is located in Pennsylvania's...
Status: Part of future plan, not under development
- **Quehanna Trail**
The Quehanna Trail is a 73-mile loop trail in the Moshannon and Elk State Forests. The Trail passes...
Status: Existing
- **Raystown Branch Juniata River Water Trail**
The Raystown Branch is the Juniata River's longest and largest tributary. It is classified as a high-quality...
Status: Existing
- **Schuylkill River Trail**
This greenway is located within the Schuylkill River National and State Heritage Area and Schuylkill...
Status: Existing
- **Schuylkill River Water Trail**
The Schuylkill River Water Trail is one of Pennsylvania's official water trail. Three and a half centuries...
Status: Existing
- **Susquehanna Greenway**
The Susquehanna Greenway will be developed along 500 miles of the Susquehanna River in Pennsylvania,...
Status: Part of future plan, not under development
- **Tuscarora Trail**
Closed for several years due to heavy briar growth and neglect, the Tuscarora Trail in Pennsylvania...
Status: Existing
- **Upper Monongahela Water Trail**
This official Pennsylvania Water Trail runs 60 miles from Fairmont, West Virginia, to Rice's Landing...
Status: Existing
- **Warrior Trail**
The Trail runs from Greensboro, PA on the Monongahela River in the east to the Ohio River in West...
Status: Existing
- **West Branch Susquehanna River Water Trail**
This Official Pennsylvania Water Trail runs 240 miles from Cherry Tree to Sunbury. The Trail sponsor...
Status: Existing
- **York Heritage Trail**
The Rail Trail is a 10-foot wide compacted stone trail designed for bicycling, hiking, and horseback...
Status: Existing



FROM AMERICAN TRAILS

Greenways and Community Trails

Abington Trails Project is working toward a system of trails in Abington to provide a safe place, close to home, for a variety of trail activities: www.abingtontrails.org/

Friends of the **Carantouan Greenway** work in the Penn-York Valley: <http://home.cqservices.com/greenway/>

The **Delaware River Greenway Partnership** works to promote and protect a continuous corridor of natural and cultural resources along the Delaware: www.drgrp.org/

Lancaster County Parks Department offers information on hiking, biking, and horseback riding in the area: www.LancasterOutdoors.com/

Friends of the Wissahickon help preserve and protect Fairmont Park in Philadelphia, including 50 miles of National Recreation Trails: www.fow.org

The **North Delaware Riverfront** is creating new recreation, riverfront neighborhoods, and a public greenway along the river's edge: <http://www.northdelariverfront.org/>

Pittsburgh Trail is a circular 50 mile itinerary within the city exploring its rich natural geography, urban setting, and architectural features: www.geocities.com/pittsburghtrail/

Greenways in **Pittsburgh and Allegheny County**: <http://slagarden.cfa.cmu.edu/dialogues/pittgreen.html>

The **Swatara Greenway** is a planned corridor of protected land along the Swatara Creek which runs 71 miles from Schuylkill Co. to Middletown: <http://www.manada.org/swatara/swgreen.htm>

The **Three Rivers Heritage Trail** is a major greenway project in Pittsburgh: <http://trfn.clpgh.org/fotr/>

Hiking Trails

Keystone Trails Association promotes hiking opportunities in Pennsylvania and neighboring states: <http://www.kta-hike.org/>

Appalachian Mountain Club, Delaware Valley Chapter, has a variety of News & Activities for Pennsylvania, Middle & Southern NJ, and Northern Delaware: <http://www.amcdo.org/>

The Alpine Club of Williamsport maintains the **Loyalsock Trail** which runs 60 miles thru the Tiadaghton and Wyoming State Forests: <http://www.lycoming.org/alpine/MidAtlanticHikes.com> has maps and trail descriptions for hikes in MD, PA, VA and WV.

For **Volkssport and Walking Events** in Pennsylvania: <http://www.ava.org/walk/pa.htm>

Keystone State Volkssport Association provides contacts for many local clubs: <http://www.ava.org/clubs/ksva/PAClubs.htm>

Long-Distance Trails

The **East Coast Greenway** is a project underway to link seaboard states with a largely off-road route: <http://www.greenway.org/>

The **Great Allegheny Passage** is the main line of a trail system running from the C&O Canal Towpath at Cumberland, Maryland, to the Forks of the Ohio River at Pittsburgh on a near-level rail-trail through the Allegheny Mountains: <http://www.atatrail.org>

The **North Country Trail** is being developed with a goal of 4,400 miles from New York to North Dakota; for information on the trail in Pennsylvania: http://northcountrytrail.org/explore/ex_pa/pa.htm

Another site is the **North Country Trail** in Pennsylvania: <http://northcountrytrail.org/pa/>

Rail Trails and Canal Trails

The **Allegheny Trail Alliance** is working to link up a multi-purpose trail from Pittsburgh, PA to Cumberland, MD, where the trail will join the C&O Canal Towpath Trail to Washington, DC: <http://www.atatrail.org/ata-info/aboutata.htm>

Contact information, maps, and contacts for most of **Pennsylvania's rail trails** can be found at: <http://www.dcnr.state.pa.us/railtrails/default.asp>

Penn State is leading a community partnership to develop a 1.3 mile section of the former **Bellefonte Central** railroad right-of-way into a multi-use recreational trail: <http://www.arboretum.psu.edu/planning/rail.html>

The **Butler-Freeport Community Trail** is a 20-mile abandoned railroad corridor owned by Buffalo, Winfield, and Jefferson Townships north of Pittsburgh, in Butler County: <http://www.butlerfreeporttrail.org/>

The Friends of **Chester Creek** are building a Hiking, Walking, Riding, Rail Trail in Delaware County, PA: <http://members.tripod.com/~ctrail/index.htm>

The **Five Star Trail** will traverse Westmoreland County

The **Ghost Town National Recreation Trail** is a 19.5 mile rail trail in the Blacklick Creek Valley of Pennsylvania from Nanty Glo in Cambria County to Dilltown in Indiana County: <http://mysite.verizon.net/warholc/trail.html>

Allegheny Trail Alliance is building the **Great Allegheny Passage**, a 152 mile bicycle and walking trail connecting Cumberland, MD with Pittsburgh, PA: <http://www.atatrail.org/ata-home.htm>

Rail Trails in **Lancaster County** with maps, mileages, and photos: <http://www.LancasterOutdoors.com/railtrail/main.htm>

The **Lebanon Valley Rail Trail** will run 15 miles from the Lancaster/Lebanon County line to the City of Lebanon: <http://www.lvrailtrail.com/index.asp>

The **Montour Trail Council** works to convert the abandoned Montour Railroad in Allegheny and Washington Counties, Pennsylvania, into a 54-mile trail: <http://www.montourtrail.org/>

The **Steel Heritage Trail** is a rail trail project that will run along the Monongahela River through Pittsburgh and south through Glassport to Clairton: www.steelvalleytrail.org/

Treasures Along the Trail is dedicated to the use, development and support of hike-n-bike trails across the Eastern USA. Emphasis on rail trails and Pennsylvania. <http://www.westol.com:80/tat/>

The **Youghiogheny River Trail** runs 43-miles between McKeesport and Connellsville: <http://www.YoughRiverTrail.com/> Also see the **Pennsylvania state trail** site

York County Heritage Rail Trail map, mileage, and trail access points: www.yorkcountytrails.org



For a locator map and detailed descriptions of **rail trails** in the Washington, D.C., area and a few others in **Pennsylvania**, Virginia, Maryland, and West Virginia: <http://bikewashington.org/trails/>

Waterway and Boating Trails

Water trails in the **Chesapeake Bay Gateways Network** offer a wide variety of paddling opportunities: <http://www.baygateways.net/paddling.cfm>

The Delaware River Greenway Partnership is working on the **Delaware River Water Trail**: <http://www.drgp.org/drwt.html>

Schuylkill River Water Trail is a National Recreation Trail: http://www.schuylkillriver.org/maps/water_trails.asp

The **Upper Mon Water Trail** is a 65-mile section of the Monongahela River from Fairmont, WV north to Rice's Landing, PA: <http://www.uppermon.org/>



POTENTIAL OPEN SPACE FUNDING SOURCES

POTENTIAL FUNDING SOURCES FROM DCNR

{Contact Info. Source- DCNR:www.dcnr.state.pa.us/brc/grants }

Six grant programs are administered by the PA Department of Conservation and Natural Resources, Bureau of Recreation and Conservation:

I. Community Grant Program

Grants require a 50 percent match except for Small Community Development type projects and certain technical assistance projects. Grants are awarded to municipalities for recreation, park and conservation projects. Projects types funded under the Community Grant Program include:

- **Rehabilitation and Development Projects** - These projects involve the rehabilitation and development of public indoor and outdoor park, recreation and conservation areas and facilities; and renovation of existing parks and indoor/outdoor recreation facilities to improve safety and accessibility to individuals with disabilities and special populations such as minorities, low income and the elderly.
- **Acquisition Projects** - These projects involve the acquisition of real property for park, recreation, conservation and open space purposes by fee simple title or other lesser interest that will insure the desired public benefit. Acquisition projects may be for the purchase of new park and recreation areas or expansion of existing sites.
- **The Small Community Development Projects** - These projects provide a municipal applicant with a population of 5,000 or less with an alternative method of funding for rehabilitation and development of minor indoor and basic outdoor park, recreation and conservation areas and facilities. The maximum grant under this project type is \$40,000.

- **Planning and Technical Assistance Projects** - These projects involve studies completed by professional consultants to help develop planning strategies and courses of action to address local park, recreation, and open space and conservation concerns. Long-range recreation plans, greenway studies, feasibility studies, and master site plans are eligible project types.

2. Rails-to-Trails Grant Program

This program provides 50/50 matching grants to municipalities and nonprofit organizations for the planning, acquisition and development of rail-trail corridors.

Eligible corridors include abandoned railroad rights-of-way or lands available for trail purposes under railbanking. Lands abutting rights-of-way which provide opportunities to form trail linkages and create trailheads and related support facilities are also eligible:

- **Rehabilitation and Development Projects** - Eligible projects include the construction of trails and associated structures as well as support facilities.
- **Acquisition Projects** - Land may be purchased through fee simple or a less than fee interest such as an easement.
- **Planning and Technical Assistance Projects** - Rail-trail feasibility studies, rail-trail master plans and special purpose studies are eligible project types.

3. River Conservation Grant Program

This program provides grants on a 50 percent matching basis to municipalities, counties, municipal and intermunicipal authorities, and river support groups to foster the conservation, restoration and enhancement of river resources:

- **Planning Projects** - These projects involve the preparation of a river conservation plan which inventories the environmental, cultural and recreational values of a waterway or watershed; identifies potential threats or opportunities to the

water resource; and defines the policies and actions necessary to conserve, restore, or enhance the resource. Once a plan is approved by DCNR, the waterway can be listed on the PA Rivers Conservation Registry to enable it to be eligible for implementation, acquisition and development funds.

- **Implementation Projects** - These projects involve implementation of a non-development and non-acquisition type projects defined in a river conservation plan for a waterway that has been listed on the registry. Examples of eligible projects include investigations into river access, water quality monitoring and preparation of ordinances and zoning documents.
- **Development Projects** - Grants are limited to a maximum of \$40,000 for development projects recommended in a river conservation plan for a registered waterway. Projects which involve river bank stabilization, riparian land improvement, stream improvement, and the provision of river access and recreation facility development (i.e., parking areas, restrooms, utilities, landscaping, etc.) are eligible.
- **Acquisition Projects** - Grants are limited to a maximum of \$40,000 for the acquisition of land recommended in a river conservation plan for a registered waterway. Fee simple title or a less than fee interest such as an easement are eligible for purchase.

4. Heritage Parks Grant Program

In April 1995, Governor Ridge designated the Schuylkill River Heritage Corridor a State Heritage Park. Grants require a 25-50 percent match, depending on project type.

Grants are available to municipalities, nonprofit organizations or federally designated commissions acting on behalf of the municipalities in a heritage park area. This designation allows grants to be awarded to further the objectives of the approved Management Action Plan for the heritage park area:



APPENDIX E

POTENTIAL OPEN SPACE FUNDING SOURCES

- **Special Purpose Study Projects** - Grants awarded may be used to conduct feasibility studies, develop management action plans for heritage park areas, carry out specialized studies and the possible hiring of state heritage park managers.
- **Implementation Projects** - Projects primarily include those related to acquisition, preservation, rehabilitation and development of sites and buildings and interpretive/educational exhibits and materials.

5. Pennsylvania Recreational Trails Program

Grants (range: \$2,500 to \$100,000) may range up to an 80/20 percent match except acquisition projects require a 50/50 match from the applicant. Eligible applicants include federal and state agencies, local governments and private organizations.

The grants provide funds to develop and maintain recreational trails and trail related facilities for motorized and nonmotorized trail use. The wide array of projects eligible for funding include:

- redesigning, reconstructing, nonroutine maintenance, and relocating trails in order to mitigate and minimize the impact to the natural environment;
- developing urban trail linkages near homes and workplaces;
- maintaining existing recreational trails, including the grooming and maintenance of trails across snow;
- restoring areas damaged by usage of recreational trails and backcountry terrain;
- developing trail side and trail head facilities that meet goals identified by the National Recreational Trails Advisory Committee;
- providing features, which facilitate the access and use of trails by persons with disabilities;
- acquiring easements for trails, or for trail corridors identified in the state trail plan;
- acquiring fee simple title to property from a willing

seller, when the objective of the acquisition cannot be accomplished by acquisition of an easement or by other means;

- constructing new trails on state, county, municipal or private lands, where a recreational need for such construction is shown; and
- only as otherwise permissible while abiding to all restrictions and regulations, construction of new trails on federally owned land.

6. Land Trust Grant Program

This program is a source of funding for non-profit conservation or preservation organizations, conservancies and land trusts.

Grants provide 50 percent funding for acquisition and planning of open space and natural areas, which face imminent loss. Lands must be open to public use and priority is given to habitat for threatened species.

- **Acquisition Grants** - Acquisition of lands which serve as critical habitat for rare, threatened or endangered plant or animal species or communities which are at risk of destruction or substantial degradation receive funding priority over other natural area acquisitions.
- **Planning Grants** - Grants may be utilized for the preparation of documents useful in planning, developing, operating, protecting and managing natural areas and programs. Examples of eligible projects include: preservation and management plans for critical habitat, open space and natural areas; natural area inventories and studies; greenway and open space plans and feasibility studies.

POTENTIAL FUNDING SOURCES FROM DOT

{Contact Info. Sources - DVRPC/PA DOT:
www.dvrpc.org/transportation/capital / www.dot.state.pa.us }

Funds made available from the Pennsylvania Department of Transportation (DOT) are monies apportioned to the state from the federal government as a result of the Transportation Equity Act for the 21st Century

(TEA-21). TEA-21 is the successor to the 1991 federal transportation bill commonly referred to as ISTEA. Projects which adhere to the following requirements are eligible for funding assistance on an 80/20 cost share basis, with 20% being the local share:

- Facilities must be located and designed pursuant to and incorporated within long range plans for the metropolitan planning area and the state.
- In general, no motorized vehicles shall be permitted to make use of the trails and pedestrian walkways.
- A bicycle project may only be carried out if it is determined that the project will be primarily for transportation purposes.

Below are three programs that relate to providing corridors for pedestrian and bicycle travel through surface transportation improvements:

I. Surface Transportation (Transportation Enhancements: TE) Program

The TE Program funds 'non-traditional' projects that enhance the transportation experience, mitigate the impacts of transportation facilities on communities and the environment, and enhance community character through transportation-related improvements.

Funding can be either 80/20 if the project entails design, engineering and construction or 100% for construction-only projects. Eligible applicants include any federal or state agency and county of municipal governments. Types of improvements eligible for funding include:

- provision of facilities for pedestrians and bicyclists; familiar
- provision of safety and educational activities for pedestrians and bicyclists;
- acquisition of scenic easements and scenic or historic sites;
- scenic or historic highway programs;
- landscaping or other scenic beautification;
- historic preservation;



- rehabilitation and operation of historic transportation buildings, structures or facilities;
- preservation of abandoned railway corridors, including the conversion and use thereof for trails;
- control and removal of outdoor advertising;
- archeological planning and research;
- mitigation of water pollution due to highway runoff, or reduction of vehicle-caused wildlife mortality; and
- establishment of transportation museums.

2. Congestion Mitigation and Air Quality (CMAQ) Improvement Program

Projects providing facilities for pedestrians and bicycles may be funded under CMAQ if it is either determined to contribute to the attainment of a national ambient air quality standard or included in the states implementation plan designed to comply with the Clear Air Act.

Projects are selected for their ability to cost effectively reduce emissions from highway sources. CMAQ is an 80/20 reimbursement program open to public agencies, incorporated private firms and non-profit entities.

3. Home Town Streets and Safe Routes to School (HTS & SRS) Program

The overall program has two primary objectives: a) enhancing and improving streets that run through the centers of cities and towns to promote pedestrian circulation and safety; b) establishing safe pedestrian (student) routes and connections to and from schools.

HTS and SRS is an 80/20 reimbursement program open to any federal or state agency, county or municipal government, school district and non-profit organization. Improvements under the following programs may include:

HTS

- Benches;
- Sidewalk improvements;

- Street Lighting;
- Transit bus shelter;
- Traffic calming;

SRS

- Sidewalk construction;
- Crosswalks;
- Bike lanes;
- Trails;
- Traffic diversion improvements; Crosswalks;
- Planter;
- Kiosks;
- Signage; and
- Bicycle amenities
- Curb extensions;
- Traffic circles; and
- Raised median islands

POTENTIAL FUNDING SOURCE FROM THE NATIONAL PARK SERVICE (NPS)

{Contact Info. Source - NPS: www.nps.gov/ncrc/programs/rtca}

Rivers, Trails, and Conservation Assistance Program

The program offers technical assistance only to nonprofit organizations, community groups, and local or state government agencies. Rivers and Trails technical staff offers the following types of assistance for recreation and conservation projects:

- Building partnerships to achieve community-set goals;
- Assessing resources;
- Developing concept plans;
- Engaging public participation;
- Identifying potential sources of funding;

- Creating public outreach;
- Organizational development; and
- Providing conservation and recreation information.

Examples of Rivers and Trails assisted community projects include trail and greenway planning, open space protection, river conservation, watershed planning, rail-trail conversions and urban greening.

National Park Service staff for the Rivers and Trails program are based in 30 field locations to make them more accessible to local governments and nonprofit organizations throughout the country.

Prepared by The Waetzman Planning Group

in association with Land*Concepts* Group,
Orth-Rodgers & Assoc., Inc.

EDM Consultants, Inc.

Robert Wise Consulting

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