

Springettsbury Township Transportation Plan

Springettsbury Township York County, PA



Prepared By:



October 2019

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1 | TRANSPORTATION VISION AND GOALS

A Plan Vision and Goals	3
B Approach	6
C Public Involvement Summary	8

2 | EXISTING CONDITIONS AND KEY ISSUES

A Overarching Themes	12
B Crash History	13
C Multimodal Considerations	15
D Current Traffic Operations	18

3 | MULTIMODAL NETWORK

A Future Traffic Analysis	39
B Pedestrian and Bicycle Connections	65
C Public Transportation	70
D Multimodal Toolbox	72
E Corridor Evaluation	74

4 | GUIDING POLICIES

A Ordinance Recommendations	83
B Roadway Functional Classification	92
C Additional Land Use Tools	96

5 | TRANSFORMATIVE INITIATIVES

A Priority Projects	97
B New Roadway Connections	119
C Connected and Autonomous Vehicle Technologies	121

6 | ACTION PLAN

A Overview	123
B Funding Strategies	126
C Implementation Plan	130

Acknowledgments

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A | Plan Vision and Goals

The Springettsbury Township Transportation Plan evaluates existing conditions, develops a vision, and identifies capital improvement projects that will enhance the transportation network in Springettsbury Township for years to come. These efforts help achieve the community's vision for transportation. Concurrent with the Transportation Plan, Springettsbury Township updated the Township's Comprehensive Plan. These two documents together guide the community's vision for the future.

Implementable plans are guided by clear and concise visions. An effective vision should inform of the values and overarching goal for the future of the community. Springettsbury Township's vision for transportation is as follows:

Springettsbury Township's transportation network provides connections and convenient mobility for all modes of transportation.

This vision perfectly encapsulates how the transportation network will evolve to serve everyone, not just people who drive, in Springettsbury Township. Quotes from the future were provided by the steering committee to illustrate the sentiments of future residents and visitors to the township. Here are a few:

"(Springettsbury is) really a convenient place to live: we're close to everything, and even with the number of people who live, work or shop here, it's easy to get to where you're going, and safe, too. I like to walk to the store when I have time."

"Everything is right here, close and convenient. I don't have to worry about children on their bikes or walking because there are great sidewalks and bike paths to get to all the parks."

Springettsbury Township's vision for transportation was used to guide the development of this plan, and it is reflected in the ten goals identified on the following pages.

Foster Connectivity

Increase and enhance multimodal connections across major barriers to reduce congestion, expand mobility, and improve access.



Strengthen Local Identity

Ensure that transportation improvements incorporate design elements that promote the character and identity of Springettsbury Township, which is rooted in local businesses, institutions, and historic neighborhoods.



Enhance Streetscapes

Promote streetscape enhancements on primary corridors with consistent sidewalks and amenities that is attractive, functional, cohesive, and uniquely identifiable with Springettsbury Township.



Increase Access to Open Space

Improve access to open space and parkland for township residents and visitors by providing cross-township connections that link residential areas with parks and open space.



Aid (Re)Development Efforts

Advance transportation projects that appropriately support development/redevelopment efforts while promoting ways to manage additional demands on the transportation network.



Improve Safety & Traffic Flow

Employ a range of strategies to reduce congestion and enhance safety in the township through access management, intersection improvements, modern signal technology, and new roadway connections.



Encourage Goods Movement

Support the movement of goods and freight while discouraging truck traffic on residential and local roadways that were not designed for heavy/large vehicles.



Upgrade Public Transit Infrastructure

Support use of public transit through enhanced transit stop amenities and connected pedestrian infrastructure; focusing on the routes and stops with the highest ridership/most demand.



Increase Bicycle & Pedestrian Mobility

Create a multimodal transportation network where residents and visitors feel safe and comfortable walking or biking to their destinations.



Strive to be a Leader in New Mobility

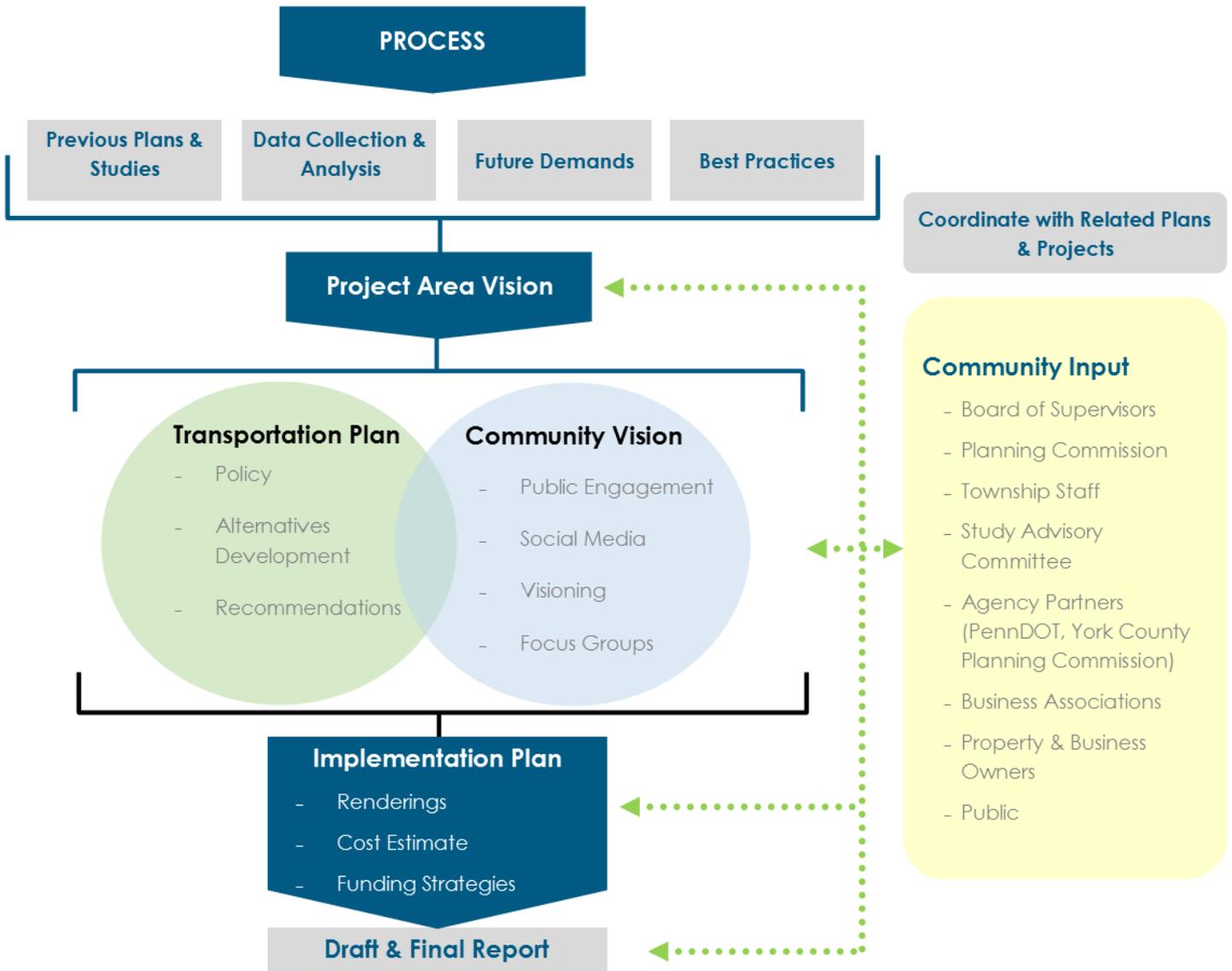
Prepare for emerging technologies that will impact transportation choices and patterns, including electric, autonomous, and connected vehicle technologies and various forms of shared and demand responsive mobility options.



B | Approach

The chart below illustrates the coordinated effort used to advance this project. The following principles guided the development of the plan. The plan is/does:

- As unique as Springettsbury itself
- A Hybrid Planning Document
- Inclusive to all constituents
- Address specific transpiration issues with real world solutions
- Foremost a multimodal plan seeking to reduce the reliance on vehicles
- Implementable and identifies funding options



This plan considers recommendations from various plans and studies that were previously completed by Springettsbury Township and other planning partners. Those documents include:

- Springettsbury Town Center Plan
- Springettsbury Township Comprehensive Recreation, Park & Open Space Plan
- North Hills, Pleasureville, and Augustus H. Schaefer park Master Plans Report
- Springettsbury Township Comprehensive Plan (2006)
- York County Bicycle and Pedestrian Connectivity and Safety Inventory
- York County Report on Congestion
- York County Long Range Transportation Plan
- Rabbitransit Transit Development Plan
- Various land development plans including traffic impact statements

The concepts and recommendations presented in these documents are further explored in the Springettsbury Township Transportation Plan.

Additionally, ongoing transportation infrastructure projects in Springettsbury Township and the surrounding area were considered. Those included:

- I-83 Widening Project
- Mt Rose and N. Hills Road Intersection Improvements
- Market Street Adaptive Signal Project
- Davies Road Extension

C | Public Involvement Summary

Steering Committee

A diverse project steering committee was identified to represent the varied interests within Springettsbury Township. The steering committee guided all aspects of the Transportation Plan; providing input at six meetings during the project. A brief summary of each meeting is provided below.

Meeting #1—identified issues, opportunities, and priorities related to transportation in Springettsbury Township

Meeting #2—reviewed of traffic, safety, and observations at key intersections and identified gaps in the multimodal network

Meeting #3— identified draft vision and goals; identified vision for primary and secondary corridors; special presentations on connected and automated vehicle technologies and Rabbit Transit’s Hopper Service

Meeting #4—reviewed future traffic analysis; identified improvement corridors and priority projects; discussed multimodal level-of-service ordinance

Meeting #5—reviewed concept plans, cost estimates, and prioritized improvement projects; discussed ordinance recommendations

Meeting #6—review of the implementation plan

Stakeholder Interviews

Stakeholders and community leaders with knowledge of and interest in the transportation network of Springettsbury Township were identified to conduct interviews with. The purpose of the interviews were to gather opinions and perceptions on current opportunities, issues, and challenges. The input received during the interviews helped identify issues to address in the Springettsbury Township Transportation Plan. The following is a summary of the input received.

Popular Destinations

The first question asked was designed as an ice-breaker. However, it was useful in identifying potential key destinations within Springettsbury Township. The most popular responses included restaurants along East Market Street, parks, and Old East York.

What’s Working Well?

Due to stakeholders’ varied backgrounds, certain aspects that were identified as

Steering Committee

Name, Title or Organization

This section to be populated

an asset by one individual may have been identified as an issue by another. However, there was general consensus that connectivity south of US 30 was much better than north of US 30. Specifically, east-west connections were thought to be better than north-south. These provide alternative routes for drivers to avoid major congestion. The sidewalk infrastructure, especially in Old East York but in the southern part of the township in general, was thought to be an asset. Stakeholders with a stronger business interest identified access to major highways (US 30 and I-83) as an important aspect to the transportation network. Rabbit Transit's fixed route service was noted to be reliable for employees in most circumstances (barring a major weather event or other emergency).

What's Not Working?

Overwhelmingly, the first thing people responded with when asked about the major issues in Springettsbury Township was congestion. One major area identified was on US 30 where it transitions from an expressway to having traffic signals. Most stakeholders wish that US 30 were an expressway through Springettsbury Township and York. Other areas identified were Mt. Zion Road (PA 24) and East Market Street; with comments about the traffic signals being spaced too closely. Additional comments related to the lack of east-west road connections north of US 30, the high volumes of truck traffic in the area, and missing pedestrian connections.

Transportation Affecting Economic Development

Access to major regional highways is generally good. As a result of the traffic congestion on US 30, truck traffic generally tries to avoid travelling westbound on US 30. Another effect of traffic congestion in the area is the "East York – West York Effect". Where people that live on the east side of York are deterred to going to the west side to avoid the dealing with the congestion. More locally, some missing sidewalk segments and difficulty for pedestrians to cross East Market Street were identified.

Impacts on Quality of Life

Most stakeholders interviewed cited the traffic congestion contributing to the length of time spent in a car as a quality of life issue. Additionally, they would like to see a proactive approach to improving multimodal connectivity, starting with "low-hanging fruit" projects, and encouraging development that is appropriate and fits with the community character.

Top Projects

Stakeholders were asked to identify the top projects they would invest money in to improve the transportation network in Springettsbury Township. Their responses are below:

- US 30 expressway
- Davies Road extension over Norfolk Southern
- Bike lanes/ boulevard treatment on Industrial Highway
- Filling in sidewalks gaps
- Safety improvements at intersections along Concord Road
- Intersection operational improvements on Mt Zion Road
- Public transportation connections into York
- A better link between York and Harrisburg

Multimodal Focus Areas

Stakeholders were asked where improvements to pedestrian and bicycle infrastructure would have the biggest impact on mobility for people who walk, bike, and use public transportation. These were there responses:

- In general – distances are too far for people to walk
- Need for a full trail network
- Connection between Central High and Rudy Park
- Improved sidewalks along Mt. Zion Road
- Improved sidewalk connections to schools
- US 30 is a major barrier

What Can the Township Do?

Stakeholders had ideas of different policies and programs that the township and other partners can implement to improve the transportation network. Their responses are below:

- Mix residential and commercial/retail uses to create live/work/play locations
- Complete missing connections between neighborhoods and commercial areas
- Implement better access management
- Restrict the movement of large trucks and heavy equipment in residential areas (specifically on East Market Street in Old East York)
- Promote public transportation as a viable alternative

Community Engagement

Input from the community is a valuable piece to any planning process. The Springettsbury Township Transportation Plan is no different. Community members provided input via various opportunities during the development of this plan. A public meeting was held to gather community feedback, and an online engagement platform was utilized to facilitate a community conversation. Below is a summary of the comments that were received.

Study Intersection Comments

- Priority intersections for improvements include:
 - Mt Zion Road and Druck Valley Road
 - Mt Zion Road and Deininger Road
- Memory Lane and Industrial Highway: Queuing and delay is an issue, particularly on market days
- Mt Zion Road and Concord Road: Signal timing adjustments are needed
- Eastern Blvd and Mills Street: Safety and operational issues, particularly due to school traffic
- Consider potential changes in traffic patterns due to I-83 improvements

Multimodal Connections Comments

- Walking and biking can help to alleviate traffic congestion
- East-West Connection north of Route 30 is not feasible
- Priority multimodal connections:
 - Mt Zion Road between Whiteford and Market
 - Town Center: Connections between Market Street, bus stops, and store entrances
- Improve access to Rocky Ridge
- Improve connections south of Market Street
- Ideas for improved connections to the County Rail Trail
- Need for education: Ride With and Walk Against Traffic
- Need for wayfinding, particularly for Town Center and Park Connection

Public meeting attendees were asked to identify whether they would like or dislike multimodal infrastructure along key corridors in the township. Additionally, participants voted for the types of multimodal improvements that they believed would be appropriate on other roadways. These community preferences were used to identify recommendations in the plan.

A | Overarching Themes

Key assets, issues, and potential transformative projects were identified by community stakeholders and the Transportation Plan Steering Committee.

Key Assets

There is plenty of good in Springettsbury Township's transportation network.

- Convenience: everything is close by
- Access to the regional highway network
- Park and recreational facilities
- Residential neighborhoods

Key Issues

A few areas are in need of improvement.

- Congestion
US Route 30; Mt. Zion Road; East Market Street
Lack of connectivity exacerbates congestion
- Truck traffic
- Gaps in bicycle and pedestrian connections

Transformative Projects

These potential projects could transform the way people and goods move around the township.

- US Route 30 / I-83 connection (and North Hills Road)
- US Route 30 expressway conversion
- Key Corridors
Mt. Zion Road
East Market Street
Memory Lane / Haines Road
- Multimodal improvements
- Public transportation enhancements



B | Crash History

Unsurprisingly, many crashes in Springettsbury Township are clustered along major corridors like I-83, US 30, East Market Street, and Mt. Zion Road. The most intensive clusters occur at intersections and interchanges. The highest crash densities are at the intersection of Mt. Rose Avenue and Haines Road and the intersection of East Market Street and North Hills Road; both of these locations are major access points to Interstate 83. The crash densities throughout Springettsbury Township are illustrated on the map on the following page.

For the five year period starting in January 2013 and ending in December 2017, there were over 2,000 reportable crashes in Springettsbury Township. The tables below describe the crash severity level and crash types by year. A detailed crash analysis for 19 intersections throughout the township was performed as part of this plan.

Crash Severity Level by Year

	2013	2014	2015	2016	2017	All Years
Fatal Injury	2	1	2	1	4	10
Suspected Serious Injury	7	9	6	9	12	43
Suspected Minor Injury	24	30	24	62	80	220
Possible Injury	106	111	87	61	63	428
Unknown Severity	56	54	46	52	50	258
Unknown if Injured	3	3	6	10	8	30
Property Damage Only	215	258	179	214	238	1104
Total	413	466	350	409	455	2093

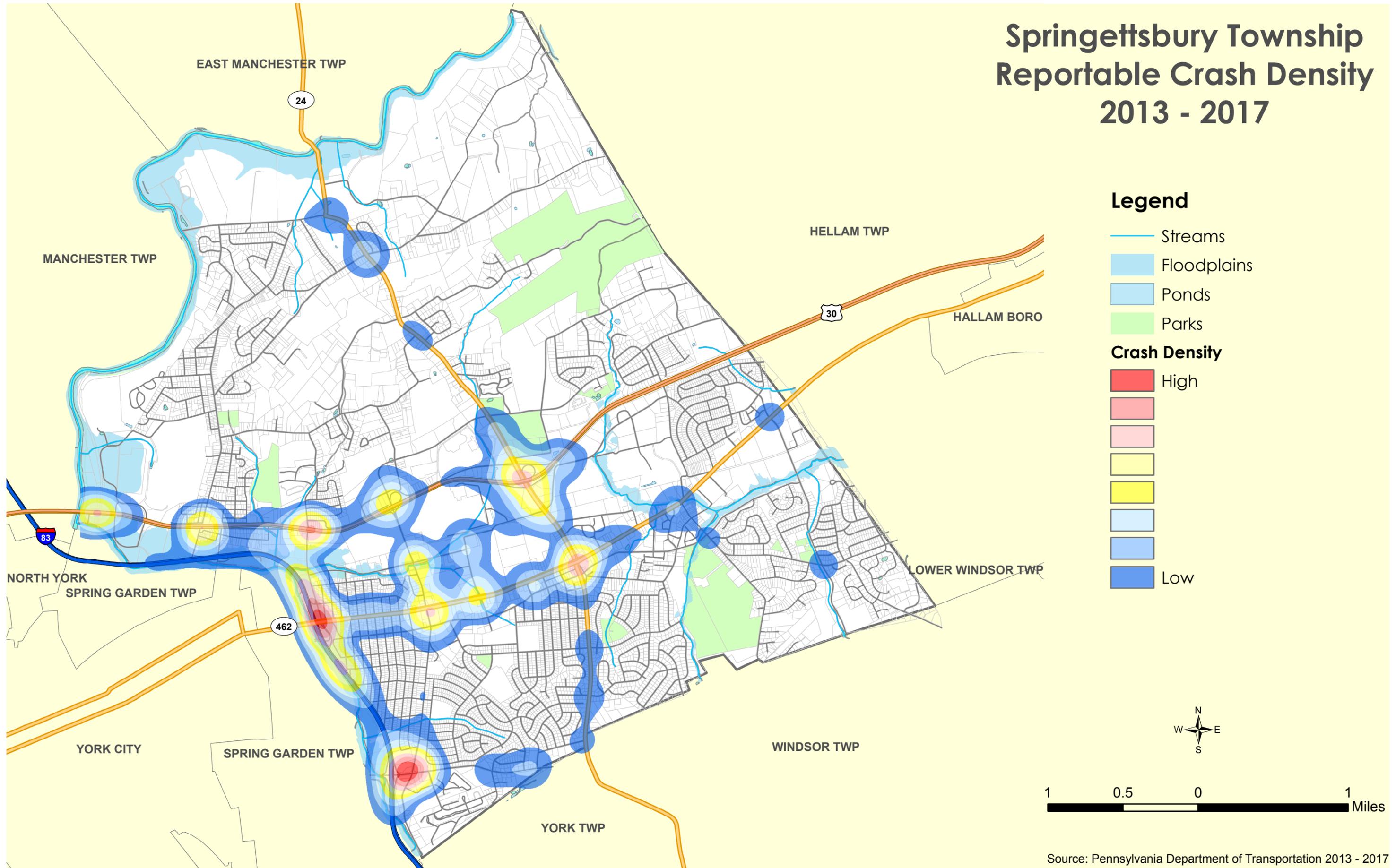
Source: PennDOT 2019

Crash Types by Year

	2013	2014	2015	2016	2017	All Years
Angle	151	150	101	107	154	663
Head On	11	12	4	13	8	48
Hit Fixed Object	80	113	77	93	85	448
Non Collision	8	14	6	9	11	48
Opposite Direction Sideswipe	4	4	0	3	3	14
Pedestrian	6	4	6	5	7	28
Rear End	137	150	135	156	166	744
Same Direction Sideswipe	11	16	18	20	13	78
Unknown Type	5	3	3	3	8	22
Total	413	466	350	409	455	2093

Source: PennDOT 2019

Springettsbury Township Reportable Crash Density 2013 - 2017

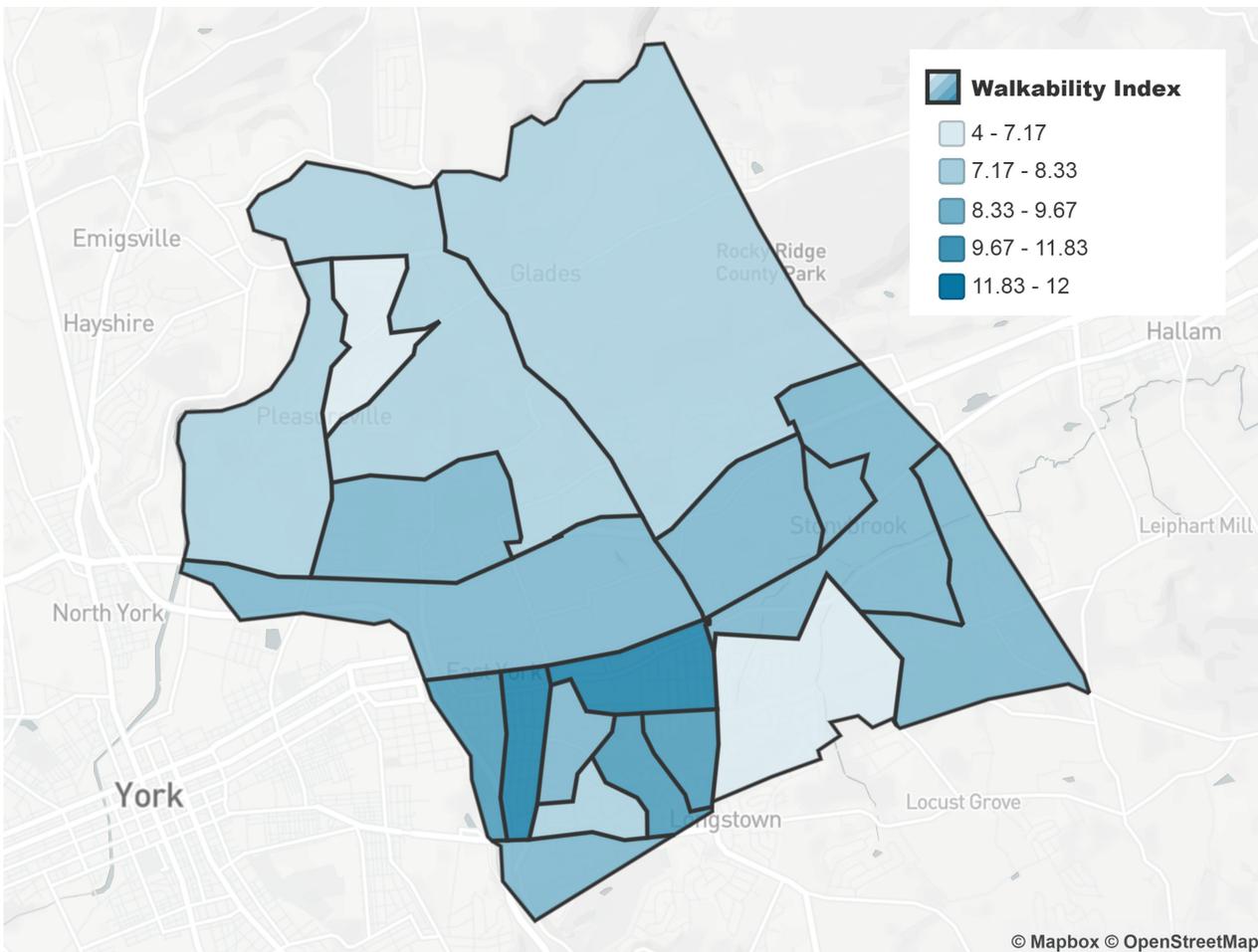


Source: Pennsylvania Department of Transportation 2013 - 2017

C | Multimodal Considerations

The EPA National Walkability Index characterizes each geography in terms of relative walkability on a 1-20 point scale. Higher values, those closer to 20, are areas with a high level of walkability while low values, those closer to 1, are less walkable areas. The overall Walkability Index for Springettsbury Township is 8.41 out of a possible 20. However, the Walkability Index for census block groups in and around Old East York (as illustrated on the map below) tend to have a higher Walkability Index than other areas of Springettsbury Township. This is due primarily to more sidewalks, higher density development, and easier access to services.

EPA Walkability Index by Census Block Group



A Multimodal Gap Analysis identified six major gaps in the multimodal network that, if completed, would have a great impact on the mobility of residents and visitors, and allow for a less reliance on single occupancy vehicles.

2 | EXISTING CONDITIONS AND KEY ISSUES

- Access to the Heritage Rail Trail
- Connections to the heart of Springettsbury Township
- An east-west connection north of Route 30
- A north-south connection east of Mt. Zion Road
- Safe crossings of Route 30
- An east-west connection south of Route 30

These multimodal gaps are identified on the map on the following page.

The York County Heritage Rail Trail Park follows Codorus Creek in Springettsbury Township from a trailhead near Route 30 until it crosses the creek utilizing the Mundis Mill Road bridge. From there, the trail continues to John Rudy County Park, where it currently terminates. To the south, the trail continues through York City to the Maryland border where it meets the Torrey C. Brown Trail. In all, residents and visitors have access to over 45 miles of multi-use trail. However, other trail opportunities are limited to private systems maintained by home owners associations and walking trails within parks.

Rabbitransit provides public transit service in Springettsbury Township. There are four fixed route buses, a shuttle to the GIANT Food Store, and the Stop Hopper (an on-demand service). Transit services are further detailed in **Chapter 3 | Multimodal Network**.

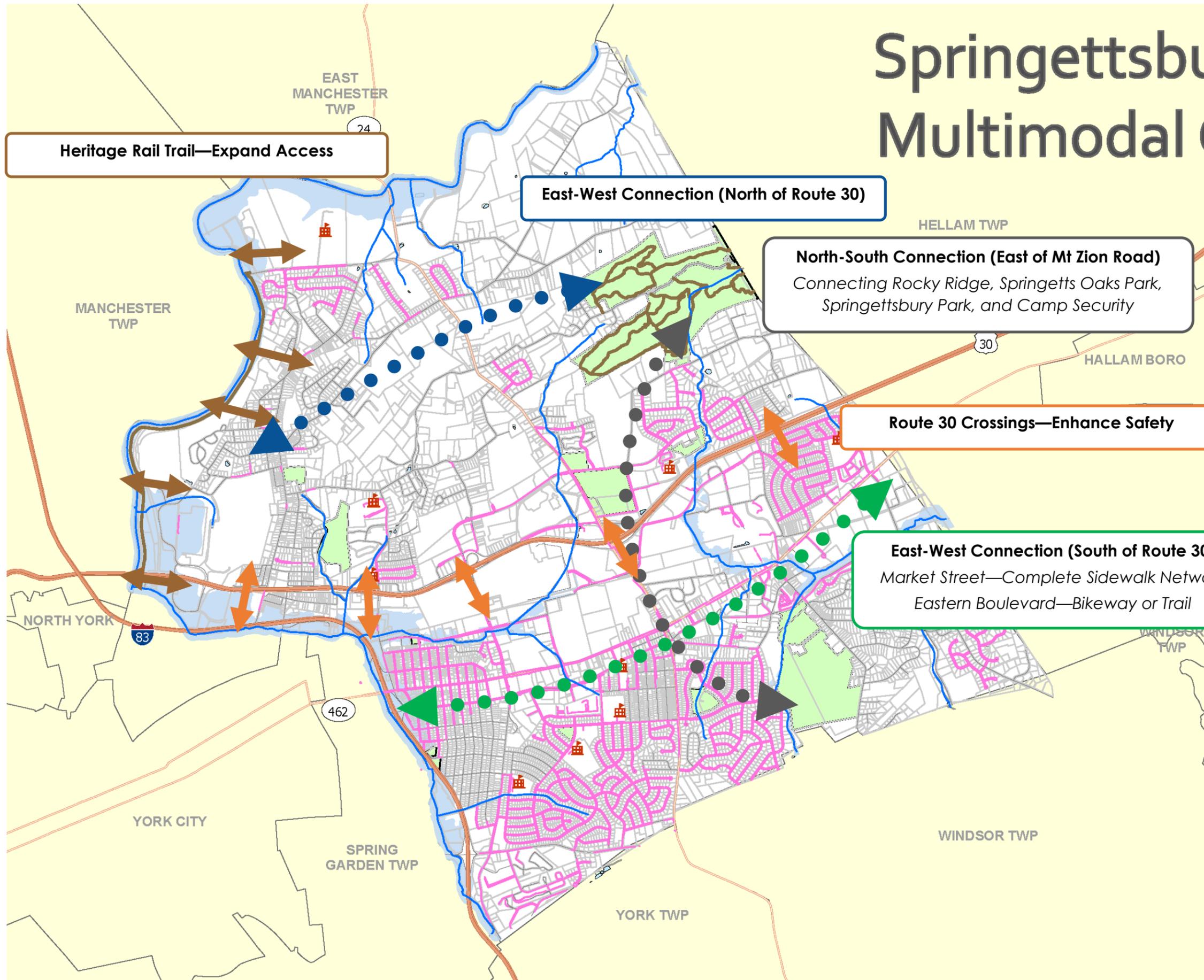


Commuter Services of Pennsylvania serves as the transportation management associations for York County and other member communities in the Susquehanna Regional Transportation Partnership. The services provided include:

- Carpooling & vanpooling
- Transit promotion; TransitChek
- Emergency Ride Home program
- Preferential parking
- Biking & walking
- Teleworking
- Scheduling, including flextime, staggered shifts and compressed work weeks
- Payroll tax savings
- Promotional & educational activities

The goal of these programs is to promote alternatives to single occupancy vehicle commuting and ensure access to employment for all.

Springettsbury Township Multimodal Gap Analysis



- Legend**
- Trails
 - Sidewalks
 - Streams
 - Ponds
 - Floodplains
 - Parks
 - Schools

11/21/18

D | Current Traffic Operations

Intersections are the pinch point of any transportation network. They are the location where there is the most conflict between users. Therefore, traffic operations at a few key intersections dictate the success or failure of an entire transportation network.

Nineteen key intersections were identified for further study in Springettsbury Township. These intersections represent the important traffic and multimodal connections with the township, and thus, have a distinct impact on the transportation network. The intersections are:

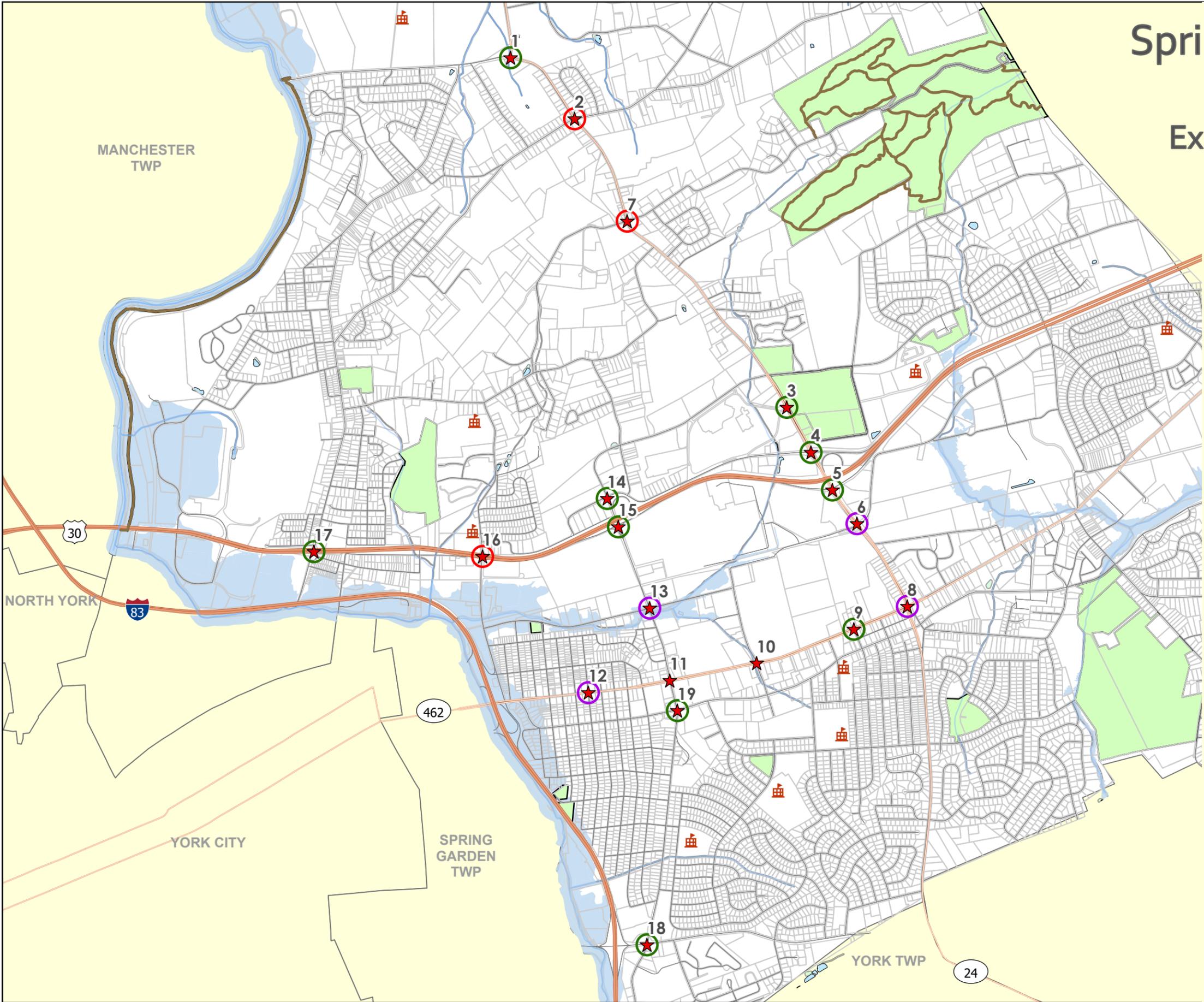
1. Mt. Zion Road & N. Sherman Street Extension
2. Mt. Zion Road & Druck Valley Road
3. Mt. Zion Road & Municipal Complex/Galleria Entrance
4. Mt. Zion Road & Whiteford Road
5. Mt. Zion Road & US 30 Interchange
6. Mt. Zion Road & Concord Road
7. Mt. Zion Road & Deininger Road
8. E. Market Street & Mt. Zion Road
9. E. Market Street & Pinehurst Road
10. E. Market Street & Northern Way
11. E. Market Street & Memory Lane/Haines Road
12. E. Market Street & Vernon Street
13. Memory Lane & Industrial Highway
14. Memory Lane & Whiteford Road
15. Memory Lane & US 30 Interchange
16. US 30 & N. Hills Road
17. US 30 & N. Sherman Street
18. Haines Road & Mt. Rose Avenue
19. Eastern Boulevard & Haines Road

The map on the following page illustrates the geographic location and indicates the current operational conditions of each of these intersections within Springettsbury Township. Additional information about each intersection can be found on the intersection profiles following the map. Each intersection profile includes a description of the intersection, summary of current operations, crash analysis, multimodal considerations, photos of existing conditions, and a location map.

Springettsbury Township

Study Intersections

Existing Conditions Analysis



Legend

- Trails
 - Streams
 - Ponds
 - Floodplains
 - Parks
 - Schools
 - Intersections
- Condition
- Does Not Work
 - Works
 - At Capacity



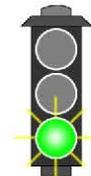
Intersection 1 - Mt Zion Road & N Sherman Street Ext



The intersection of Mt. Zion Road and N. Sherman Street Ext. is located approximately one half (1/2) mile to the east of the Central York High School driveway. The surrounding land uses are agricultural, rural, and utilities. However, some single-family residential neighborhoods are within close proximity.

Current Operations:

- Intersection works acceptably
- Curve and roadway grades may be making left turns difficult



Crash Analysis:

- 7 crashes between 2013-2017; 57% angle crashes
- 4 resulting in injury; 1 suspected serious injury resulting from a head-on crash
- 5 crashes as a result of speeding/too fast for conditions

Multimodal Considerations:

- Bicycle and pedestrian infrastructure does not exist currently at this intersection
- Sidewalks exist nearby along Glen Hollow Road

Intersection 2 - Mt Zion Road & Druck Valley Road



The intersection of Mt. Zion Road and Druck Valley Road is located along S.R. 0024 in the northern part of Springettsbury Township. Land use surrounding this intersection is primarily single family residential. However, a small farm is located on the southeast corner of the intersection.

Current Operations:

- Intersection works poorly
- Druck Valley Road is an operational concern
- Mt Zion Lefts are causing delay
- Traffic Signal Volume Warrants are not met.

Crash Analysis:

- 21 crashes between 2013-2017; 67% angle crashes
- 9 crashes resulting in injuries
- 5 crashes as a result of proceeding without clearance; 4 crashes due to improper/careless turn

Multimodal Considerations:

- There are no crosswalks at this intersection
- An existing sidewalk along the north side of Druck Valley Road on the east side of Mt Zion Road serves homes on Valley Vista Drive

Intersection 3 - Mt Zion Road & Municipal Complex/Galleria Entrance



The intersection of Mt. Zion Road and the driveways to the Springettsbury Township Municipal Complex and the York Galleria Mall is located near the center of the township; approximately one third (1/3) of a mile north of US 30. The surrounding land uses are commercial and institutional.

Current Operations:

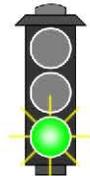
- Intersection works acceptably
- Master Controller location for the adaptive system

Crash Analysis:

- 3 crashes between 2013-2017; all angle crashes
- 1 crash resulting in injury

Multimodal Considerations:

- Sidewalks are present on both sides of S.R. 0024
- Crosswalks with push-buttons on each intersection approach; no pedestrian signals
- Pedestrian walkways do not continue to the interior of the York Galleria property



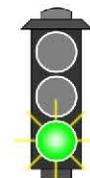
Intersection 4 - Mt Zion Road & Whiteford Road



The intersection of Mt Zion Road and Whiteford Road is near the geographic center of Springettsbury Township, south of the township building and north of US 30. The surrounding land uses are commercial/retail, institutional (township complex), and transportation.

Current Operations:

- Intersection works acceptably
- Traffic queues at the peak demand is affecting operations



Crash Analysis:

- 24 crashes between 2013-2017; 58% angle crashes; 25% rear-end crashes
- 10 crashes resulting in injury; 2 suspected serious injuries
- 7 angle crashes as a result of improper/careless left turn
- ◇ *Most of the rear-end crashes occurred before the current responsive/adaptive signal system was installed. Crash numbers are expected to decrease due to safety benefits gained by new signal system.*

Multimodal Considerations:

- Existing sidewalk in the northeast quadrant of the intersection
- Push-buttons and crosswalks present, but do not meet current ADA standards

Intersection 5 - Mt Zion Road & US 30 Interchange



The intersection of Mt. Zion Road and eastbound off-ramp/westbound on-ramp of US 30 is located just south of US 30. The surrounding land uses are commercial/retail and transportation.

Current Operations:

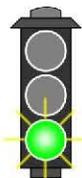
- Intersection works acceptably
- Traffic queues at the peak demand is affecting operations

Crash Analysis:

- 27 crashes between 2013-2017; 63% rear-end crashes; 30% angle crashes
- 13 crashes resulting in injuries
- 4 crashes as a result of red light running

Multimodal Considerations:

- No sidewalks present
- Pedestrian crossing is prohibited; however, pedestrians observed in intersection



Intersection 6 - Mt Zion Road & Concord Road



The intersection of Mount Zion Road (S.R. 0024) and Concord Road (T773) is located near the geographic center of the township. The surrounding land uses are primarily retail and commercial. However, Norfolk Sothern's rail line runs adjacent and roughly parallel to Concord Road.

Current Operations:

- Intersection is working at capacity
- Eastbound and Westbound (Concord Road) at or over capacity
- Significant queuing on Concord Road



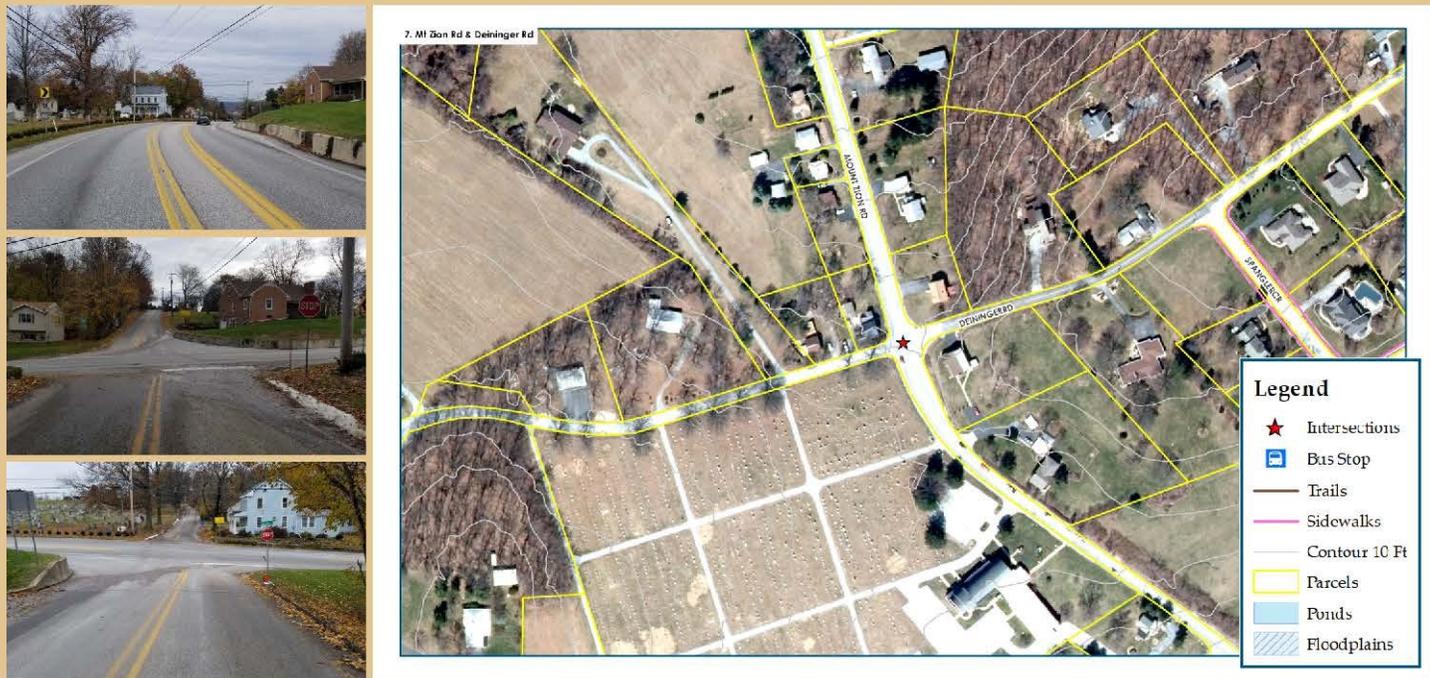
Crash Analysis:

- 18 crashes between 2013-2017 ; 39% angle crashes; 33% rear-end crashes
- 13 crashes resulted in injuries; 1 suspected serious injury
- 5 crashes as a result of red light running

Multimodal Considerations:

- Pedestrian activity observed at the intersection
- Sidewalk only present on the NW corner connecting to York Town Center
- Pedestrian signal push buttons on each corner
- Rabbit Transit service on Concord Road
- ◇ A sidewalk will be installed by a planned land development on the northeast quadrant.

Intersection 7 - Mt Zion Road & Deininger Road



The intersection of Mt Zion Road and Deininger Road is located north of the Springettsbury Township Building. Deininger Road provides access to Rocky Ridge County Park. The surrounding land uses are single-family residential and institutional (church cemetery).

Current Operations:

- Deininger Road is operating poorly
- Traffic Signal Volume Warrants are not met

Crash Analysis:

- 1 crash between 2013-2017; angle crash
- No injuries

Multimodal Considerations:

- No existing pedestrian accommodations at this intersection

Intersection 8 - E Market Street & Mt Zion Road



The intersection of East Market Street and Mt. Zion Road is located in the south-central area of Springettsbury Township. The surrounding land uses are commercial/retail. However, some of the commercial buildings were originally single-family residences.

Current Operations:

- Intersection is operating at capacity
- Intersection is fully built out and all auxiliary lanes are present



Crash Analysis:

- 33 crashes between 2013-2017; 82% angle crashes
- 18 crashes resulting in injuries; 1 suspected serious injury
- 13 crashes occurred between an eastbound left-turning vehicle and a westbound through vehicle; 9 crashes as a result of red light running

Multimodal Considerations:

- Sidewalks are present on all approaches to the intersection, except in the north-east quadrant
- Crosswalks with pedestrian signals are present; no countdown timers; crosswalks appear to meet ADA standards

Intersection 9 - E Market Street & Pinehurst Road



The intersection of East Market Street and Pinehurst is located just east of the suburban commercial core of Market Street. The surrounding land uses are commercial/retail. However, some of the commercial buildings were originally single-family residences.

Current Operations:

- Intersection operates as a right-in-right-out acceptably

Crash Analysis:

- NO CRASHES REPORTED

Multimodal Considerations:

- Sidewalks are present on all approaches
- Pedestrian crosswalks are not marked
- A concrete median impedes pedestrian crossing of Market Street
- Curb ramps are present for crossing of Pinehurst Road, but do not meet ADA standards

Intersection 10 - E Market Street & Northern Way



The intersection of East Market Street and Northern Way is located in the heart of the suburban commercial district in Springettsbury Township. The surrounding land uses are commercial/retail.

Current Operations:

- No current traffic volumes are available at this time.
- Opposing left turn lanes on Market Street block the vision of each other for on-coming traffic

Crash Analysis:

- 29 crashes between 2013-2017; 86% angle crashes
- 17 crashes resulting in injuries
- 1 crash involving a pedestrian—resulting in a minor injury
- 13 crashes involving left turning vehicles

Multimodal Considerations:

- Sidewalks are present on all approaches except the western side of North Northern Way
- Sidewalks on the western side of South Northern Way are deteriorated
- Pedestrian crossings and push buttons are present, however there are no pedestrian signals

Intersection 11 - E Market Street & Memory Lane/Haines Road



The intersection of East Market Street and Memory Lane/Haines Road is located in the heart of the suburban commercial district in Springettsbury Township. The surrounding land uses are commercial/retail.

Current Operations:

- No current traffic volumes are available at this time.

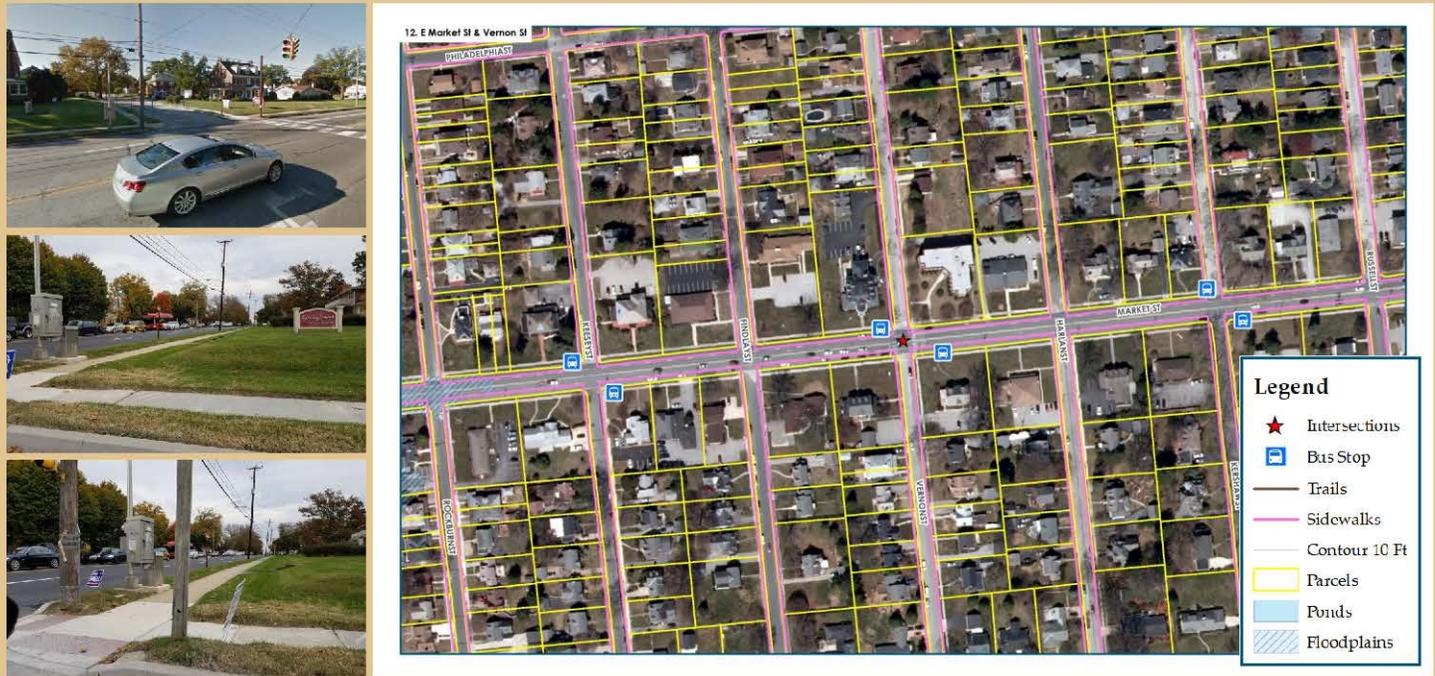
Crash Analysis:

- 22 crashes between 2013-2017; 68% angle crashes
- 10 crashes resulting in injuries
- 7 crashes occurred between an eastbound left-turning vehicle and a westbound through vehicle

Multimodal Considerations:

- Sidewalks are present on all approaches
- Crosswalks and pedestrian signals are present; crosswalks appear to meet ADA standards
- There is evidence that right-turning trucks from southbound Memory Lane to westbound East Market Street are hopping the curb; the signal control cabinet has been damaged

Intersection 12 - E Market Street & Vernon Street



The intersection of East Market Street and Vernon Street is in the Historic East York section of Springettsbury Township. The surrounding land uses are residential in character. However, many of the buildings fronting East Market Street are used for offices or other commercial purposes.

Current Operations:

- Antiquated traffic signal equipment
- Lane assignment issues and confusion when left turns stop in the shared lane to make turns



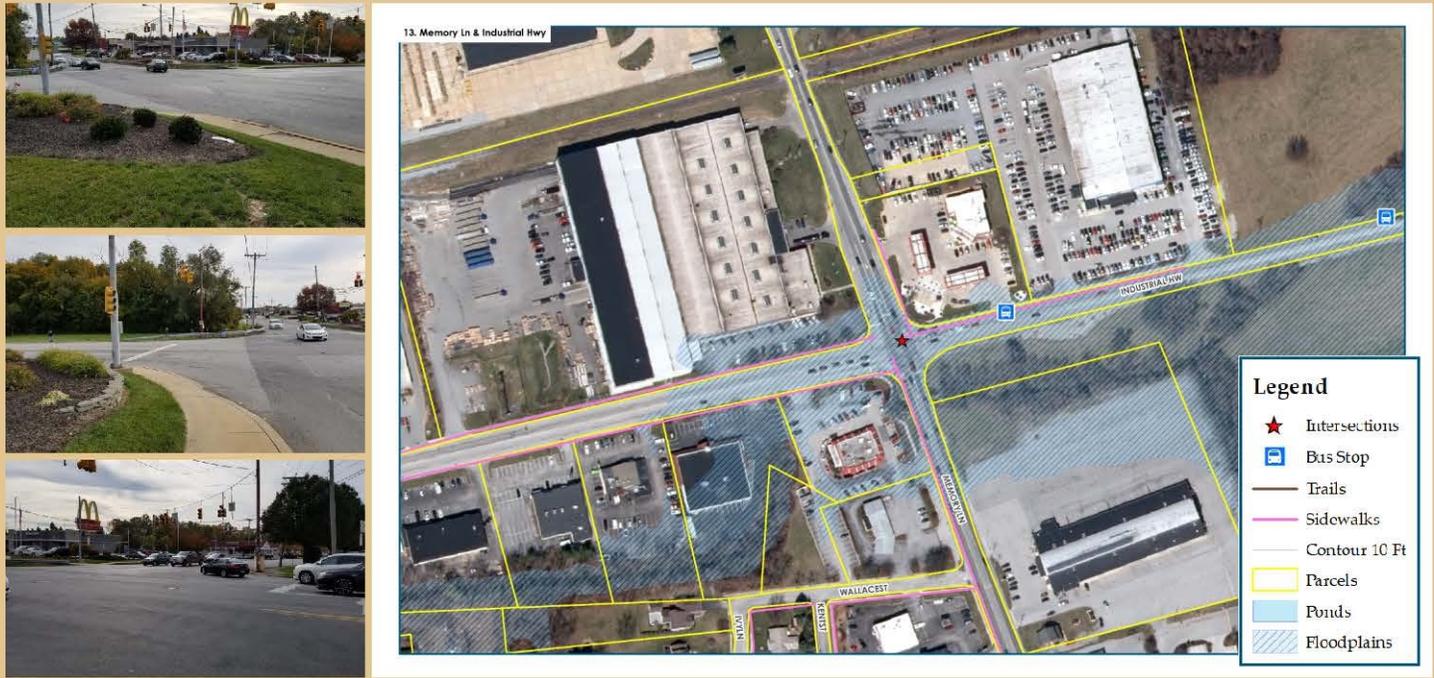
Crash Analysis:

- 8 crashes between 2013-2017 ; 63% angle crashes
- 4 crashes resulting in injuries
- 1 crash involving a pedestrian—unknown injury severity
- 3 crashes as a result of improper/careless turn; 2 crashes as a result of running red light

Multimodal Considerations:

- Sidewalks are existing on each intersection approach
- Crosswalks and pedestrian signals are present and appear to meet ADA standards

Intersection 13 - Memory Lane & Industrial Highway



The intersection of Memory Lane and Industrial Highway is located between US 30 and East Market Street in the southwest section of Springettsbury Township. The surrounding land uses are commercial/retail and industrial.

Current Operations:

- Industrial Highway is operating at or over capacity
- Truck Turning movements are an issue
- Driveways within the intersection functional area cause issues and delay



Crash Analysis:

- 6 crashes between 2013-2017; 83% angle crashes
- 3 crashes resulting in injuries

Multimodal Considerations:

- Sidewalks are present on the northeast and southwest quadrants of the intersection
- Pedestrian crossing is prohibited on each approach
- Pedestrian activity was observed during field visit

Intersection 14 - Memory Lane & Whiteford Road



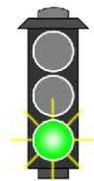
The intersection of Memory Lane and Whiteford Road is located just north of US 30. the surrounding land uses are commercial/retail and transportation.

Current Operations:

- Intersection is working acceptably

Crash Analysis:

- 10 crashes between 2013-2017; 90% angle crashes
- 7 crashes resulting in injuries



Multimodal Considerations:

- Sidewalks are present on the north side of Whiteford Road and the west side of Memory Lane north of the intersection
- A crosswalk is present on the northern intersection approach, but it does not meet ADA standards
- A bus stop is located approximately 350 feet north of the intersection

Intersection 15 - Memory Lane & US 30 Interchange



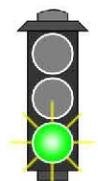
The intersection of Memory Lane and the US 30 Interchange is located just to the south of US 30. The surrounding land uses are industrial and transportation.

Current Operations:

- Intersection operates acceptably

Crash Analysis:

- 6 crashes between 2013-2017; 50% angle crashes; 33% rear-end crashes
- 3 crashes resulting in injuries
- 1 crash involving a pedestrian—resulting in a serious injury



Multimodal Considerations:

- There are no pedestrian or bicycle accommodations at this intersection

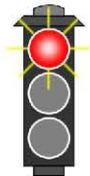
Intersection 16 - US 30 & N Hills Road



The intersection of US 30 and North Hills Road is located in the west-central section of Springettsbury Township. The surrounding land uses are commercial/retail, industrial, and institutional (North Hills Elementary and LCBC Church). A reverse-frontage road (Whiteford Road) is present in the southwest intersection quadrant.

Current Operations:

- Even with future improvements proposed by PennDOT and the adjacent land development the intersection works poorly
- All left turn movements are at or over capacity



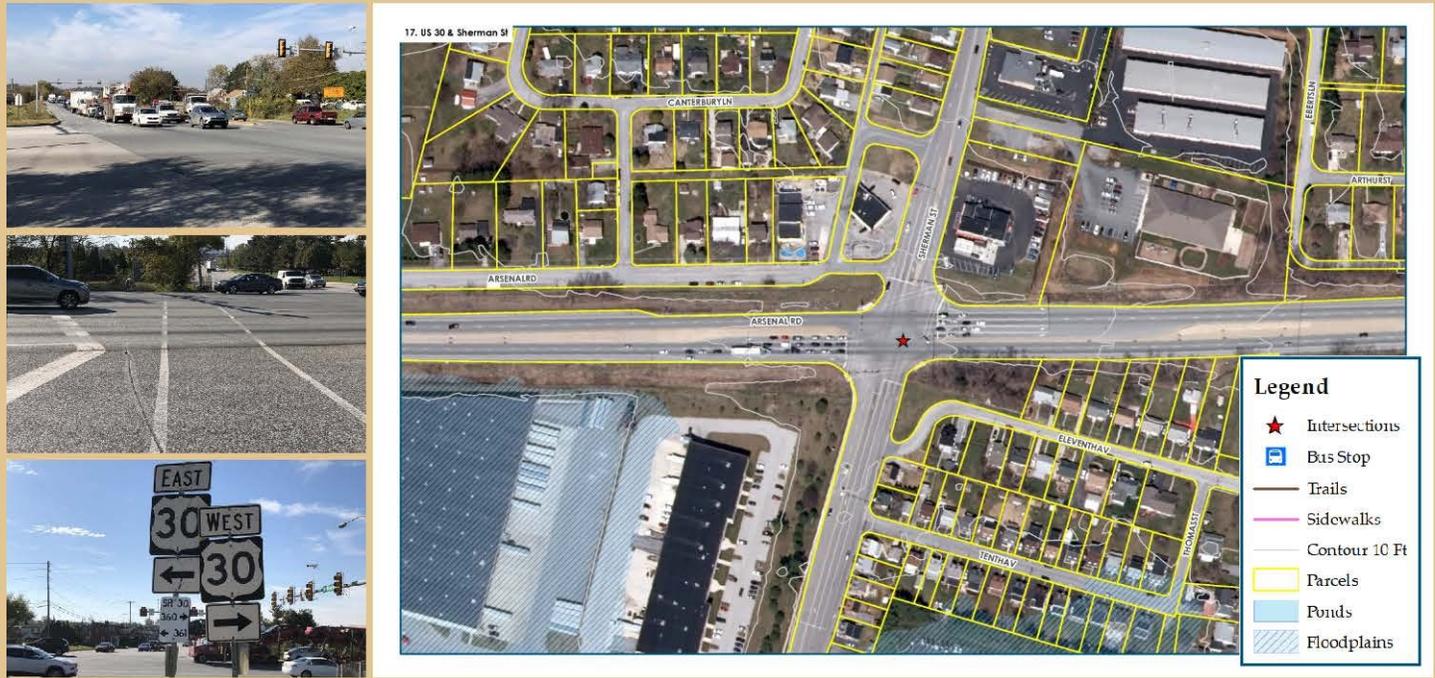
Crash Analysis:

- 25 crashes between 2013-2017; 64% rear-end crashes; 24% angle crashes
- 9 crashes resulting in injuries
- 9 rear-end crashes on westbound approach

Multimodal Considerations:

- A sidewalk is present on the LCBC Church property frontage on North Hills Road
- Crosswalks with pedestrian signals are present on each intersection approach and appear to meet ADA standards

Intersection 17 - US 30 & N Sherman Street



The intersection of US 30 and North Sherman Street is located in the western section of Springettsbury Township. The surrounding land uses are commercial/retail, residential, and industrial. A reverse-frontage street (Arsenal Road) is present in the northwest intersection quadrant.

Current Operations:

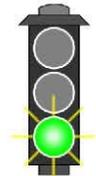
- Intersection works acceptably
- The eastbound lefts are at capacity

Crash Analysis:

- 18 crashes between 2013-2017; 67% rear-end crashes
- 4 crashes resulting in injuries
- 2 crashes involving pedestrians—1 resulting in unknown injury severity; 1 resulting in possible injury
- 10 crashes as a result of speeding

Multimodal Considerations:

- A sidewalk is present along the west side of North Sherman Street as it approaches US 30 from the south
- Crosswalks with pedestrian signals are present on each intersection approach and appear to meet ADA standards



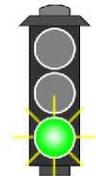
Intersection 18 - Haines Road & Mt Rose Avenue



The intersection of Haines Road and Mt Rose Avenue is located in the southwest section of Springettsbury Township. The surrounding land uses are commercial/retail.

Current Operations:

- The intersection operates acceptably with the PennDOT improvements constructed
- Analysis includes opening the eastbound right turn movement



Crash Analysis:

- 9 crashes between 2013-2017; 67% angle crashes
- 6 crashes resulting in injuries
- 1 crash involving a bicycle—northbound bicycle turning left on red struck by eastbound through vehicle
- 3 crashes as a result of red light running; 3 crashes from improper turn/turning from wrong lane

Multimodal Considerations:

- This intersection was under construction during the field visit, it appeared to be receiving appropriate pedestrian infrastructure

Intersection 19 - Eastern Boulevard & Haines Road



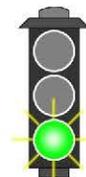
The intersection of Eastern Boulevard and Haines Road is located just to the east of the Historic East York section of Springettsbury Township. The surrounding land uses are commercial/retail.

Current Operations:

- Intersection is working acceptably

Crash Analysis:

- 6 crashes between 2013-2017 ; 50% rear-end crashes' 33% angle crashes
- 5 crashes resulting in injuries
- 1 crash involving a pedestrian—resulting in a minor injury



Multimodal Considerations:

- Sidewalks are present on all intersection approaches except the west side of Haines Road as it approaches Eastern Boulevard from the south
- Curb ramps are present at the intersection
- Crosswalks and pedestrian signals are not present

A | Future Traffic Analysis

The Springettsbury Township Transportation Plan assess future needs within the township to ensure that existing traffic is accommodated, as well as future growth associated with background traffic growth and additional traffic from increased land development. A ten-year time frame was selected, which produces a future horizon year of 2029.

Total future traffic volume forecasts for 2029 include existing traffic and future traffic volumes. The future traffic volumes reflect increase in traffic volumes from regional and local growth, which accounts for vacant commercial space within the township. Regional background growth was projected using a regional background growth factor of 0.60 percent per year (York County Urban, Non-Interstate), compounded for ten years to 2029 for a total of 6.16 percent total background growth. The future analysis assumes no improvements from the existing conditions.

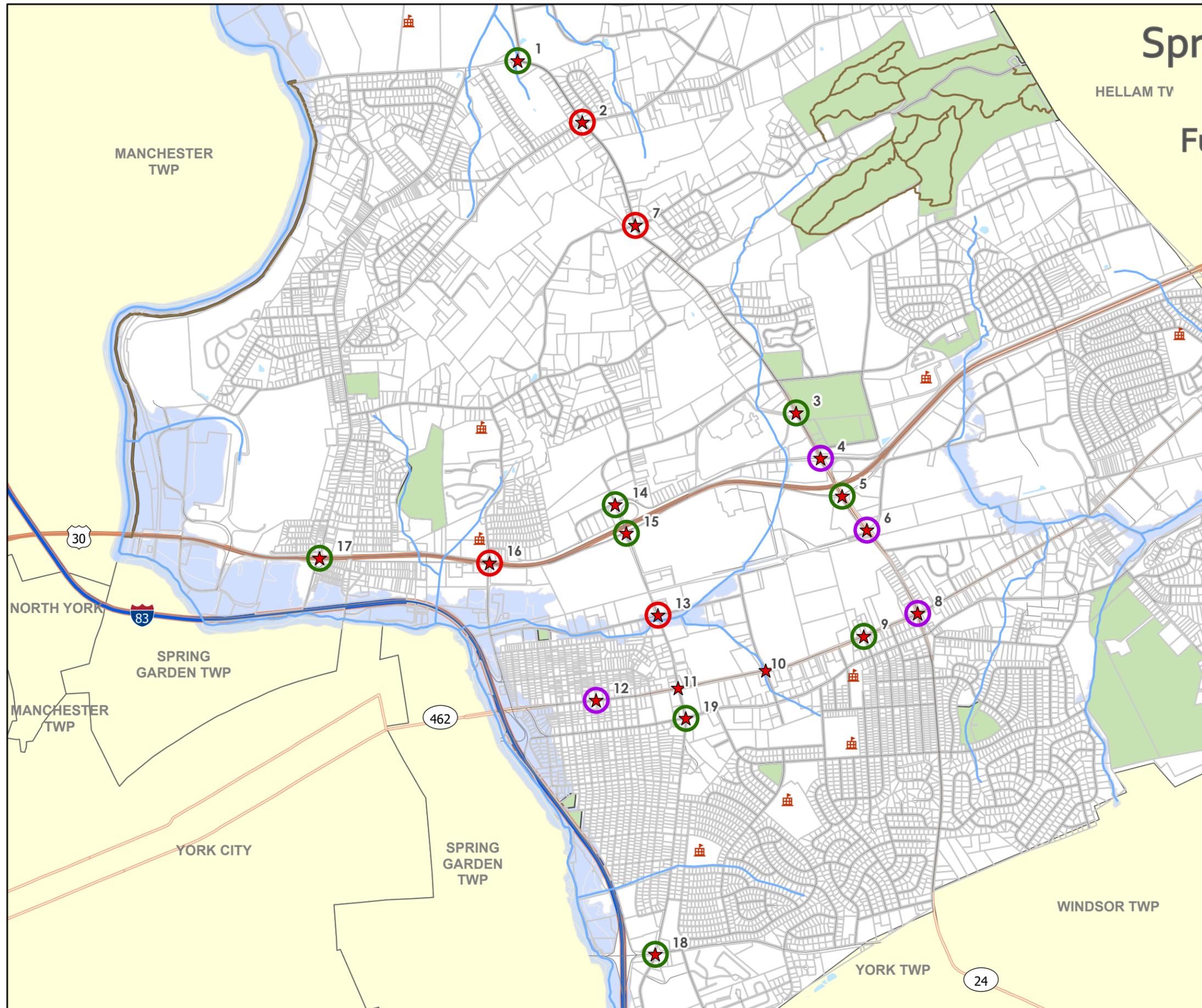
The following intersections are expected to operate poorly based on the future conditions analysis:

- Intersection 2—Mt Zion Road & Druck Valley Road
- Intersection 7—Mt Zion Road & Deininger Road
- Intersection 13—Memory Lane & Industrial Highway
- Intersection 16—US 30 & N Hills Road

The map on the following page illustrates the future traffic analysis for all nineteen study intersections. The following intersection profiles present recommendations to improve traffic operations and increase safety for all users are included for each study intersection.

Springettsbury Township

Study Intersections Future Conditions Analysis



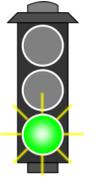
Legend

- Trails
- Streams
- Ponds
- Floodplains
- Parks
- School
- Intersections
- Condition
 - Will Not Work
 - Will Work
 - Will Operate at Capacity

Intersection 1 - Mt Zion Road & N Sherman Street Ext

Intersection Discussion

- This intersection operates well now and is expected to into the future. There is a safety concern with the speeds and curve of the northbound Mt. Zion approach to the intersection.

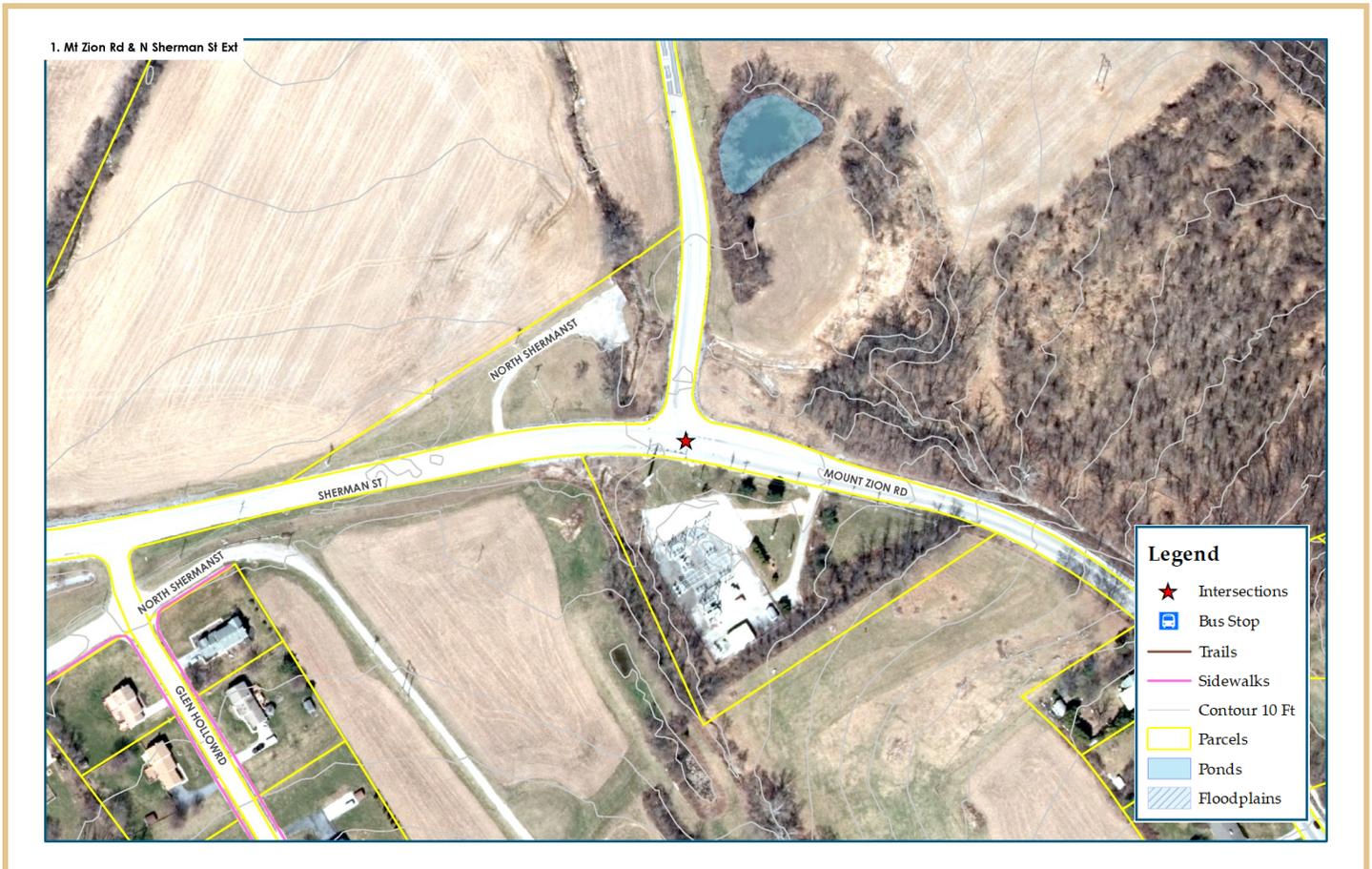


Recommended Improvements:

- Periodic signal timing updates
- Add Signal Ahead Signing to enhance safety for the northbound Mt. Zion approach to the intersection.

Multimodal Improvements:

- Provide pedestrian accommodations at the intersection concurrently with filling in sidewalk gaps per the Multi-modal plan.



Intersection 2 - Mt Zion Road & Druck Valley Road

Intersection Discussion

- This intersection operates poorly now and is expected to in the future. Left turn conflicts are causing delay and safety concerns. Several options were investigated including the installation of a traffic signal and a roundabout. Unfortunately, the traffic volumes at this intersection will not satisfy warrants for the installation of a traffic signal. It is not permissible to install a traffic signal without meeting the traffic volume warrants noted in the Federal Highway Administrations publication “Manual on Uniform Traffic Control Devices for Streets and Highways”. A roundabout at this location is undesirable due to the geometry, close proximity of residential homes and topography.

Recommended Improvements:

- Due to the availability of acceptable alternate routes, it is recommended that turn restrictions be implemented that will limit the left turns out of Druck Valley Road with the addition of a center median on Mt. Zion Road. A concept plan for this was developed and can be found in the priority projects section of this report.

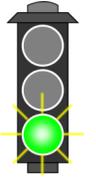
2. Mt Zion Rd & Druck Valley Rd



Intersection 3 - Mt Zion Road & Municipal Complex/Galleria Mall

Intersection Discussion:

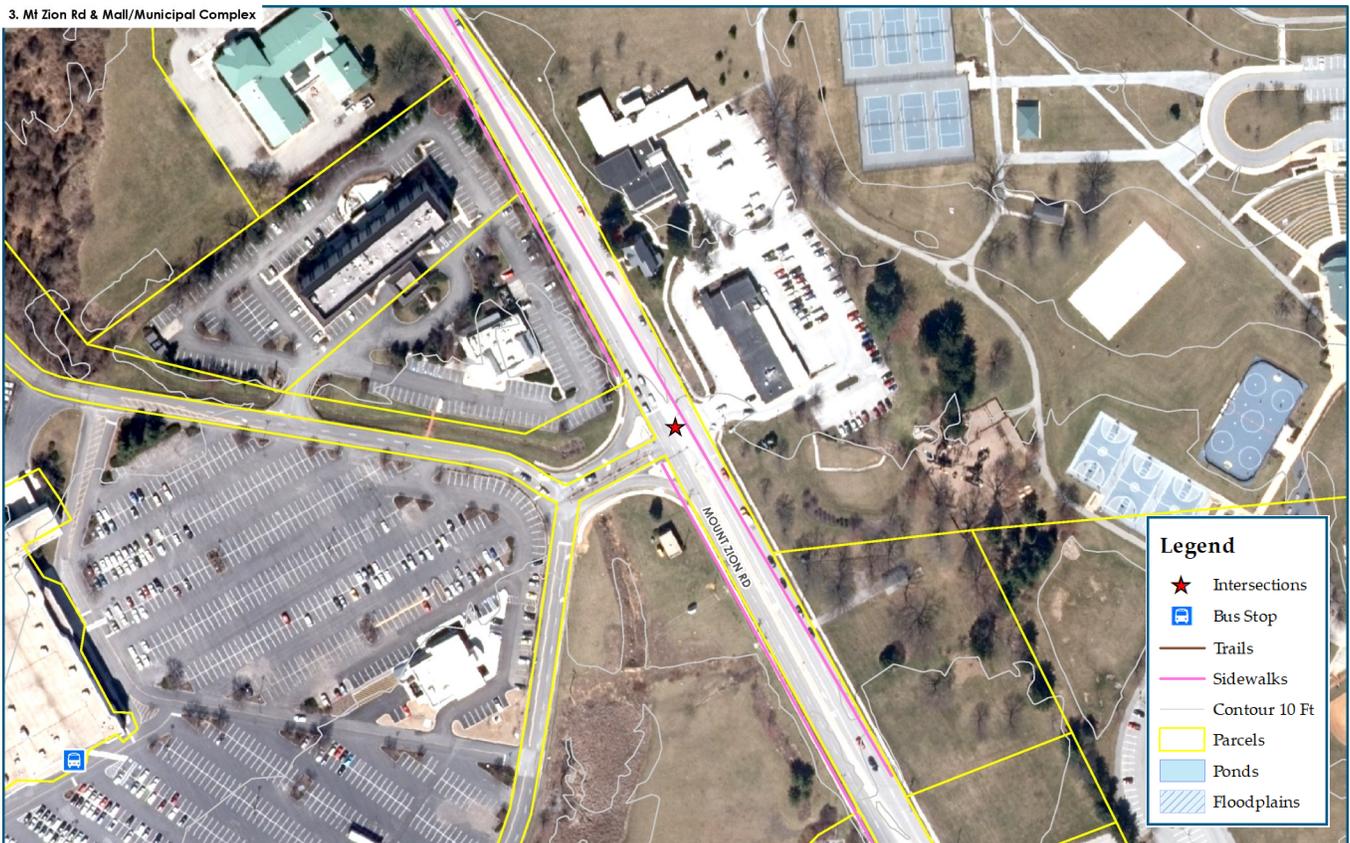
- This intersection is part of the PennDOT SR 0024 Adaptive Signal System. This is the gateway to the "Township Square/Complex." The intersection works acceptably now and is projected to continue to operate acceptably in the future. There is a safety concern regarding the negative offset of the opposing left turn lanes on Mt. Zion Road.



Recommended Improvements:

- Periodic signal timing program updates
- To increase safety, the negative offset of the opposing left turn lanes on Mt Zion should be removed. All left turn signals should be upgraded to the "flashing yellow arrow" display.
- As the gateway to the Township Square/Complex, when the traffic signal becomes antiquated and requires reconstruction, an option to be taken under consideration is decorative mast arms and ancillary equipment.

3. Mt Zion Rd & Mall/Municipal Complex



Intersection 3 - Mt Zion Road & Municipal Complex/Galleria Mall (Continued)

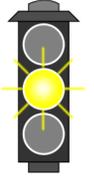
Multimodal Improvements:

- While crosswalks with push-buttons exist on each intersection approach, there are no pedestrian signals. Countdown Pedestrian signals should be added to the traffic signal.
- Continue the pedestrian walkways into the interior of the York Galleria property.

Intersection 4 - Mt Zion Road & Whiteford Road

Intersection Discussion:

- This intersection is part of the PennDOT SR 0024 Adaptive Signal System. The Intersection is currently “at capacity,” however future projected traffic volumes indicate that the intersection will operate with delay that is approaching “over capacity” for some of the turning movements. There is a safety concern regarding the negative offset of the opposing left turn lanes on Mt. Zion Road.



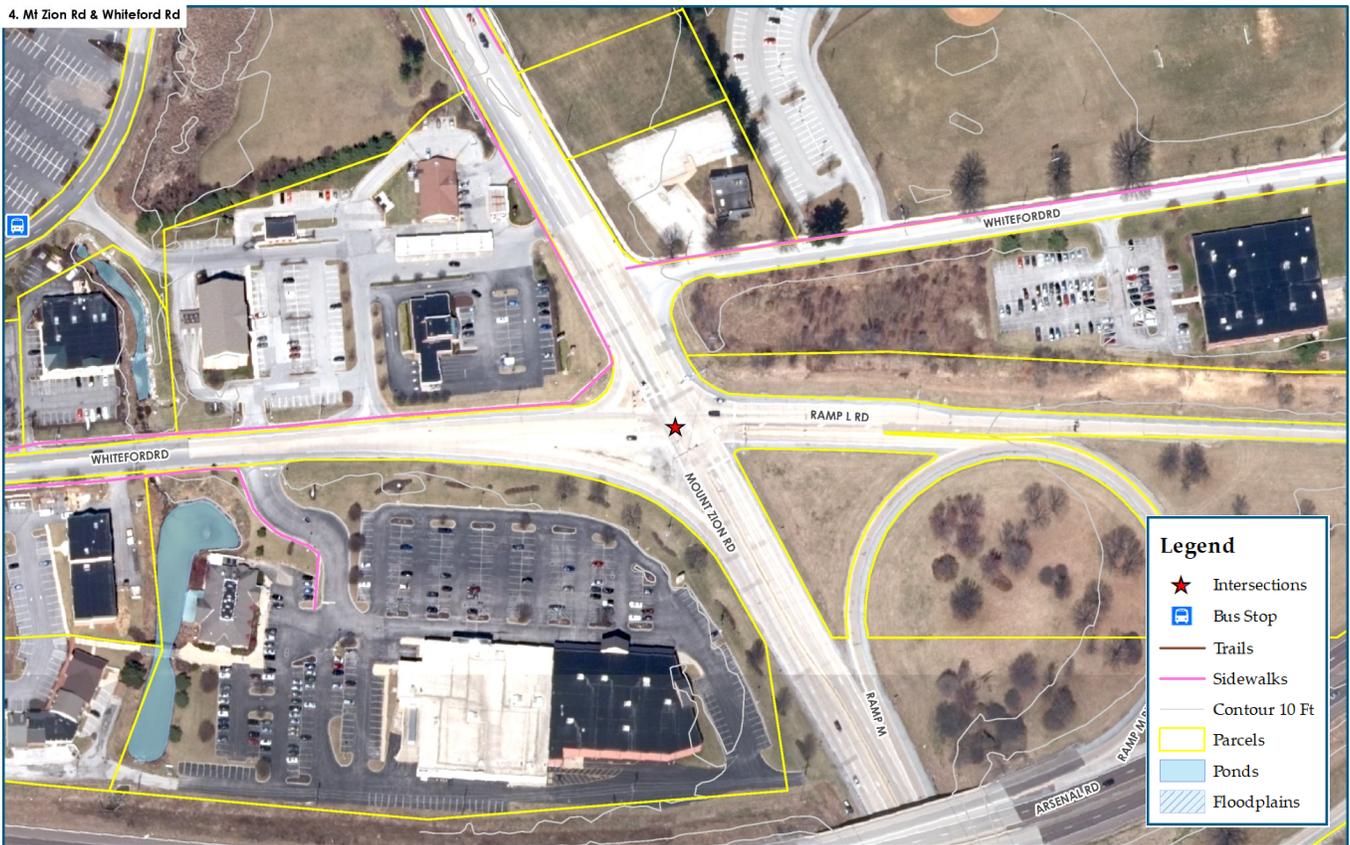
Recommended Improvements:

- Periodic signal timing program updates are projected to mitigate the delay at the intersection.
- To increase safety, the negative offset of the opposing left turn lanes on Mt Zion should be removed. All left turn signals should be upgraded to the “flashing yellow arrow” display.

Multimodal Improvements:

- Fill in sidewalk gaps per the Multi-modal plan.
- Upgrade the pedestrian access at the intersection to meet current ADA standards.

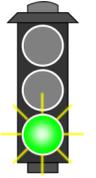
4. Mt Zion Rd & Whiteford Rd



Intersection 5 - Mt Zion Road & US 30 Interchange

Intersection Discussion:

- This intersection is part of the PennDOT SR 0024 Adaptive Signal System. The intersection works acceptably now and is projected to continue to operate acceptably in the future. There is a safety concern regarding the negative offset of the opposing left turn lanes on Mt. Zion Road.

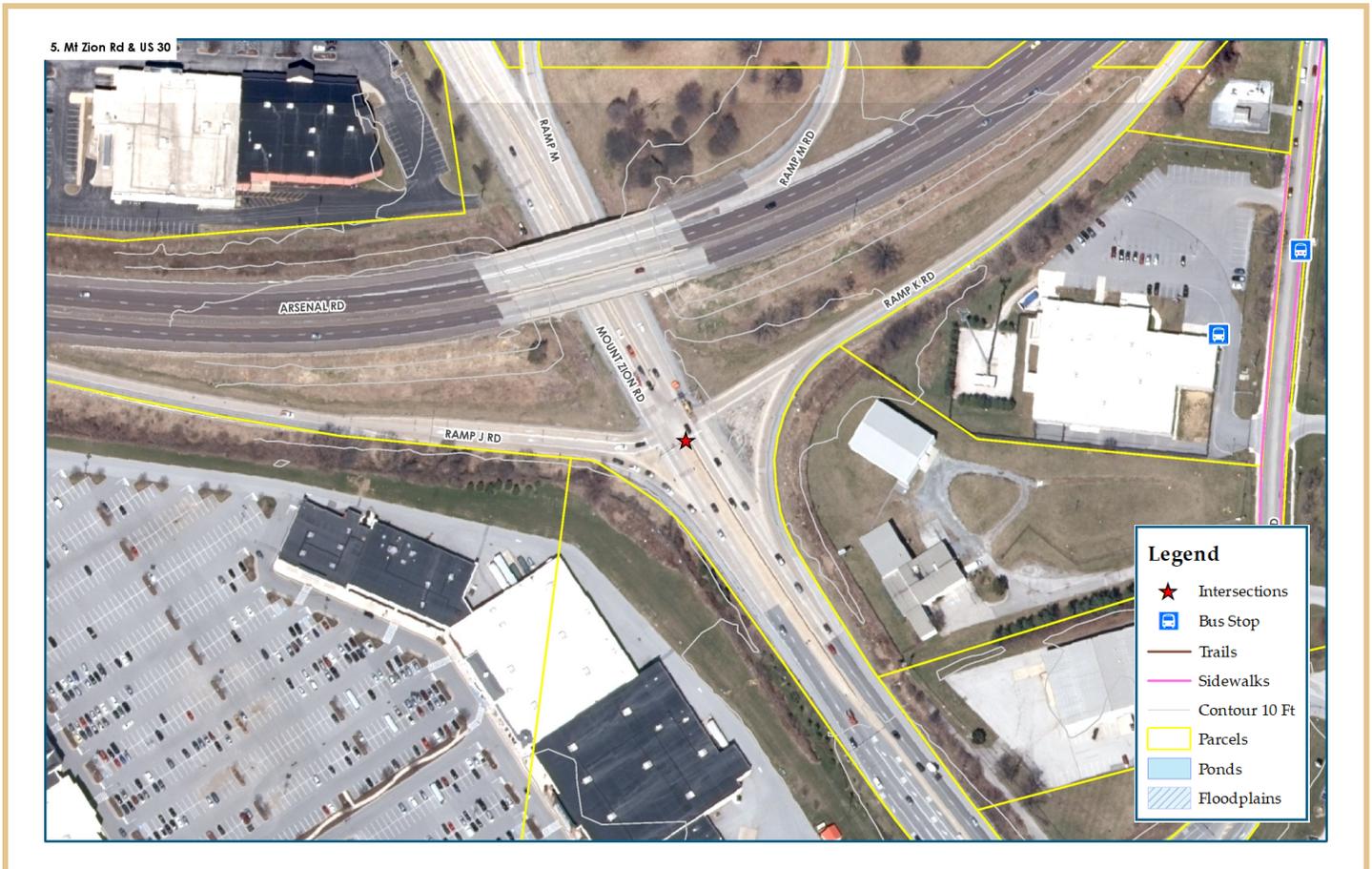


Recommended Improvements:

- Periodic signal timing program updates
- To increase safety, the negative offset of the opposing left turn lanes on Mt Zion should be removed. All left turn signals should be upgraded to the “flashing yellow arrow” display.

Multimodal Improvements:

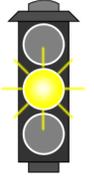
- Provide pedestrian accommodations at the intersection concurrently with filling in sidewalk gaps per the Multi-modal plan.



Intersection 6 - Mt Zion Road & Concord Road

Intersection Discussion:

- This intersection is part of the PennDOT SR 0024 Adaptive Signal System. The intersection works acceptably, however it is approaching an “at or over capacity” for some movements. There is a safety concern regarding the negative offset of the opposing left turn lanes on Mt. Zion Road.



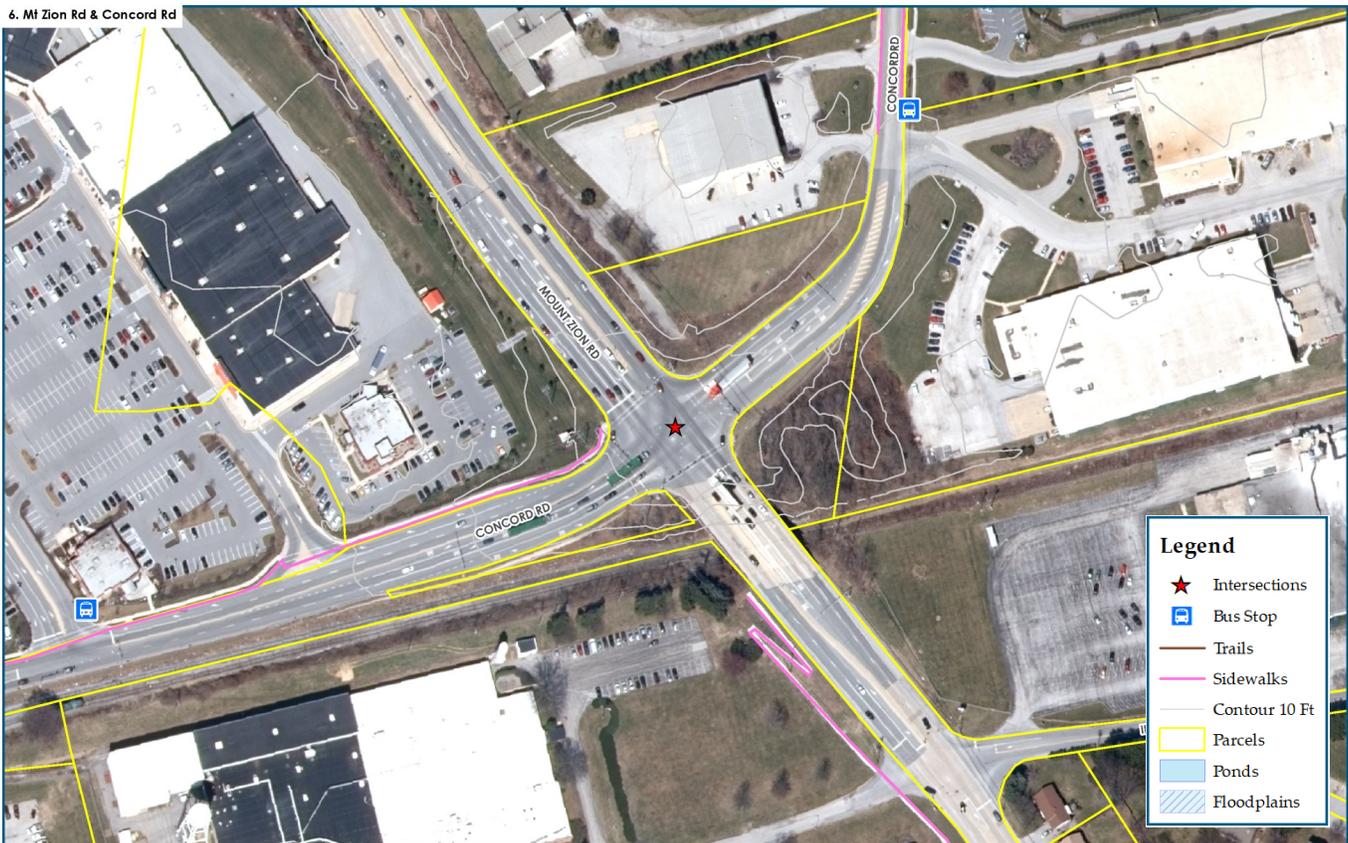
Recommended Improvements:

- Periodic signal timing program updates are projected to mitigate the delay at the intersection.
- To increase safety, the negative offset of the opposing left turn lanes on Mt Zion should be removed. All left turn signals should be upgraded to the “flashing yellow arrow” display.

Multimodal Improvements:

- Provide pedestrian accommodations at the intersection concurrently with filling in sidewalk gaps per the Multi-modal plan.

6. Mt Zion Rd & Concord Rd

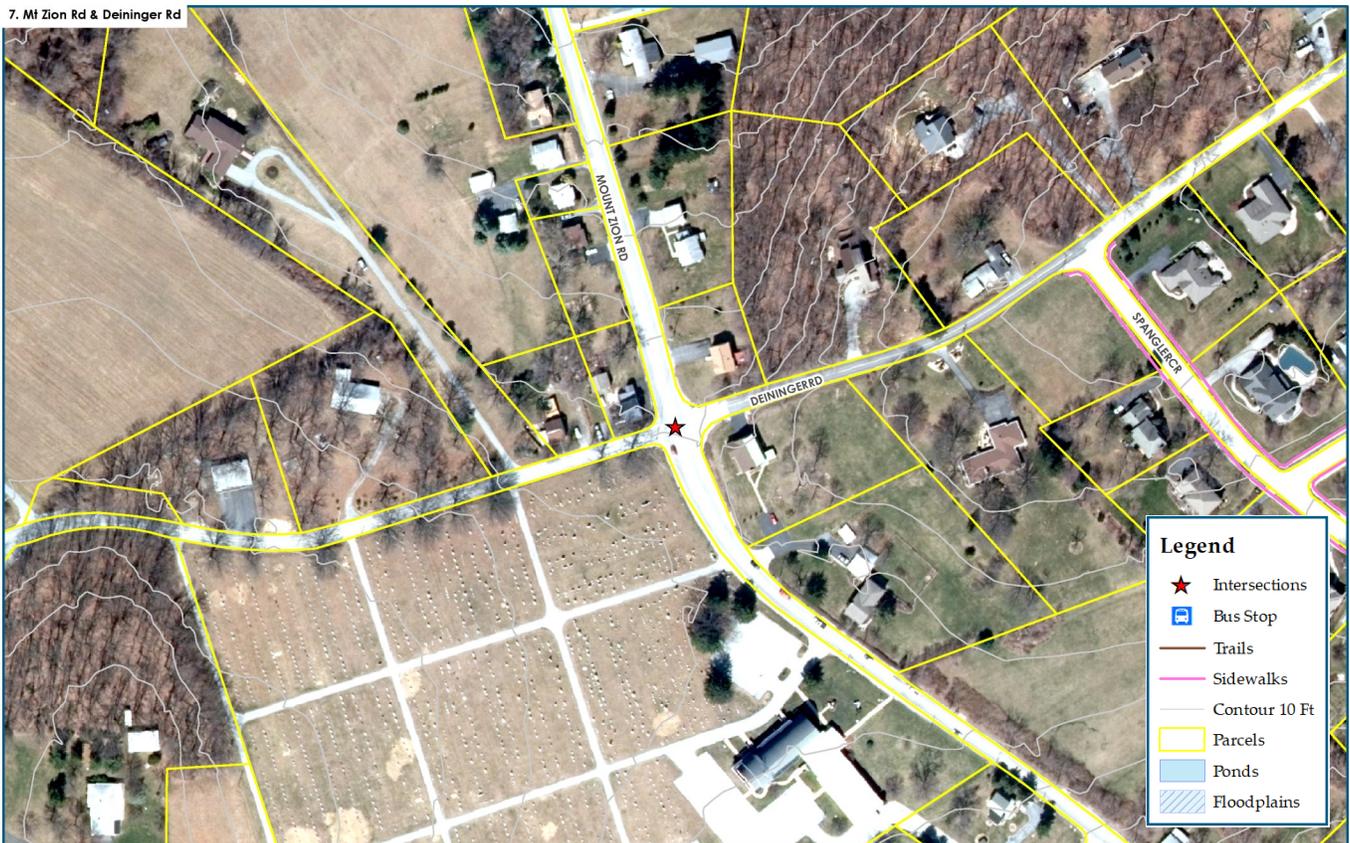


Intersection 7 - Mt Zion Road & Deininger Road

Intersection Discussion:

- This intersection operates poorly now and is projected to in the future, Left turn conflicts are causing delay and safety concerns. Trucks are also utilizing Mt. Zion Road as a cut through to and from Route 30 to the industrial areas in Manchester Township along Emig Road, Church Street, and Board Road. Several options were investigated including the installation of a traffic signal. Unfortunately, the traffic volumes at this intersection will not satisfy warrants for the installation of a traffic signal. It is not permissible to install a traffic signal without meeting the traffic volume warrants noted in the Federal Highway Administrations publication “Manual on Uniform Traffic Control Devices for Streets and Highways”. Turn restrictions are recommended to increase safety. This intersection is a key access to Rocky Ridge Park. As such, coordination with the County and Hellam Township for alternate access points should be investigated prior to restricting turns. A roundabout at this location is undesirable, however, consideration for a location further south between Poses Place and Barwood Road should be further investigated.

7. Mt Zion Rd & Deininger Rd



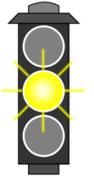
Intersection 7 - Mt Zion Road & Deininger Road**(Continued)****Recommended Improvements:**

- Turn restrictions should be implemented. A concept plan for the turn restrictions is located in the priority project section.
- Consider a roundabout on Mount Zion Road. This roundabout should be placed at a location along Mt. Zion Road that has the most advantageous vertical geometry. The roundabout option can provide multiple benefits, including traffic calming on Mt. Zion Road and help redirect truck traffic using Mt. Zion Road as a cut through to the Board Road and Emig Road industrial areas.

Intersection 8 - E Market Street & Mt Zion Road

Intersection Discussion:

- This intersection is part of the PennDOT SR 0024 Adaptive Signal System. The intersection works acceptably, however, it is approaching an “at or over capacity” for some movements. There is a safety concern regarding the negative offset of the opposing left turn lanes on Mt. Zion Road and East Market Street.



Recommended Improvements:

- Periodic signal timing program updates are projected to mitigate the delay at the intersection.
- To increase safety, the negative offset of the opposing left turn lanes on Mt Zion and East Market Street should be removed. All left turn signals should be upgraded to the “flashing yellow arrow” display.

Multimodal Considerations:

- Upgrade the pedestrian access facilities and add “Countdown Pedestrian” signals.
- Fill in sidewalk gaps per the Multi-modal plan.

8. E Market St & Mt Zion Rd



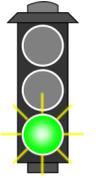
Intersection 9 - E Market Street & Pinehurst Road

Intersection Discussion:

- This intersection operates as a right-in-right-out acceptably.

Multimodal Considerations:

- Upgrade Curb ramps crossing of Pinehurst Road to meet ADA standards.



9. E Market St & Pinehurst Rd



Legend

- ★ Intersections
- Bus Stop
- Trails
- Sidewalks
- Contour 10 Ft
- Parcels
- Ponds
- Floodplains

Intersection 10 - E Market Street & Northern Way

Intersection Discussion:

- This intersection is part of the PennDOT SR 0462 Adaptive Signal System. There is a safety concern regarding the negative offset of the opposing left turn lanes on East Market Street.

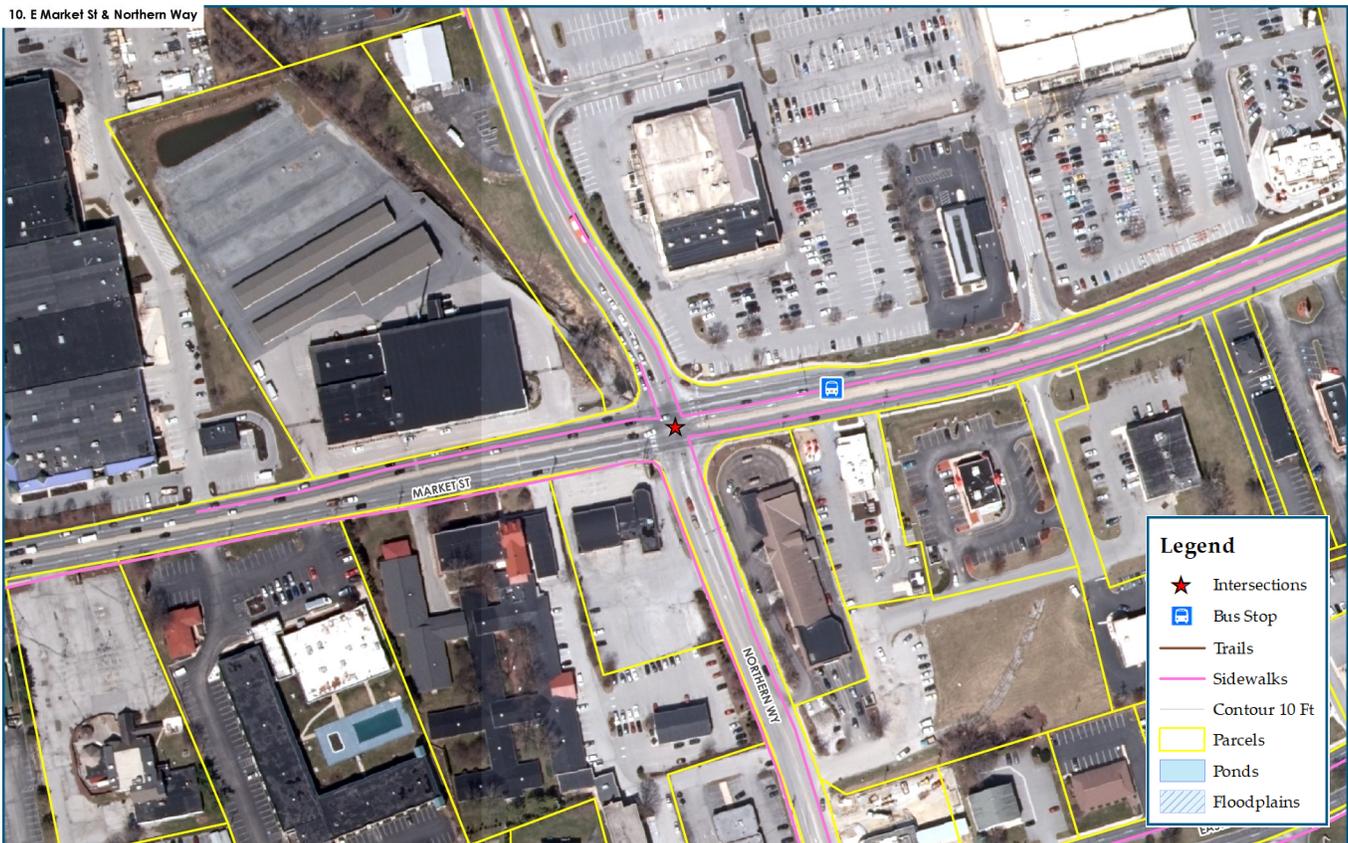
Recommended Improvements:

- Periodic signal timing program updates are projected to mitigate the delay at the intersection. To increase safety, the negative offset of the opposing left turn lanes on Mt Zion and East Market Street should be removed. All left turn signals should be upgraded to the “flashing yellow arrow” display.

Multimodal Improvements:

- While crosswalks with push-buttons exist on each intersection approach there are no pedestrian signals. Countdown Pedestrian signals should be added to the traffic signal.
- Fill in sidewalk gaps per the Multi-modal plan.
- Reconstruct the sidewalks on the western side of South Northern Way that are deteriorated.

10. E Market St & Northern Way

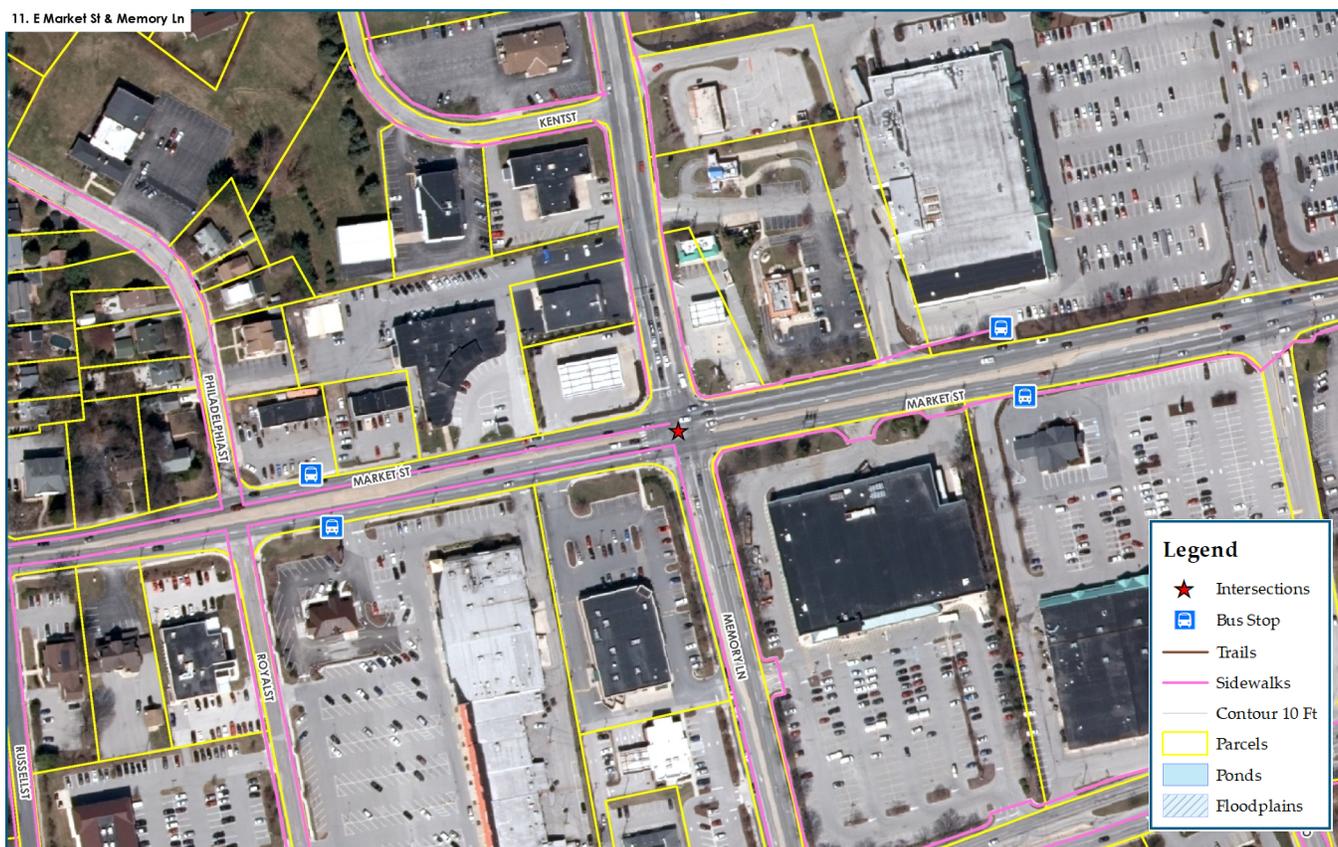


Intersection 11 - E Market Street & Memory Lane/Haines Road

Intersection Discussion:

- This intersection is part of the PennDOT SR 0462 Adaptive Signal System. The Northwest Quadrant (Giant Gas Station) of the intersection is routinely damaged by trucks unable to make the right turn from Memory lane onto East Market Street. The team investigated the removal of the southbound right-turn lane in order to increase pedestrian safety, however, the loss of that capacity is projected to have a negative affect on the operation of the intersection and would be problematic for truck access given the proximity of the I-83 interchange at Market Street. Trucks will continue to make right turns at this intersection. As such, accommodating trucks at this intersection will need to continue in the future.
- The intersection signal equipment is a span wire construction. This type of construction is considered antiquated and should be upgraded to a mast arm configuration.

11. E Market St & Memory Ln



Intersection 11 - E Market Street & Memory Lane/Haines Road (Continued)

Recommended Improvements:

- Periodic signal timing program updates
- Upgrade the traffic signal to a mast arm configuration, and to increase safety on the corridor, left turn signals utilizing the “flashing yellow arrow” display should be implemented.
- To increase safety, the negative offset of the opposing left turn lanes on Mt Zion and East Market Street should be removed.

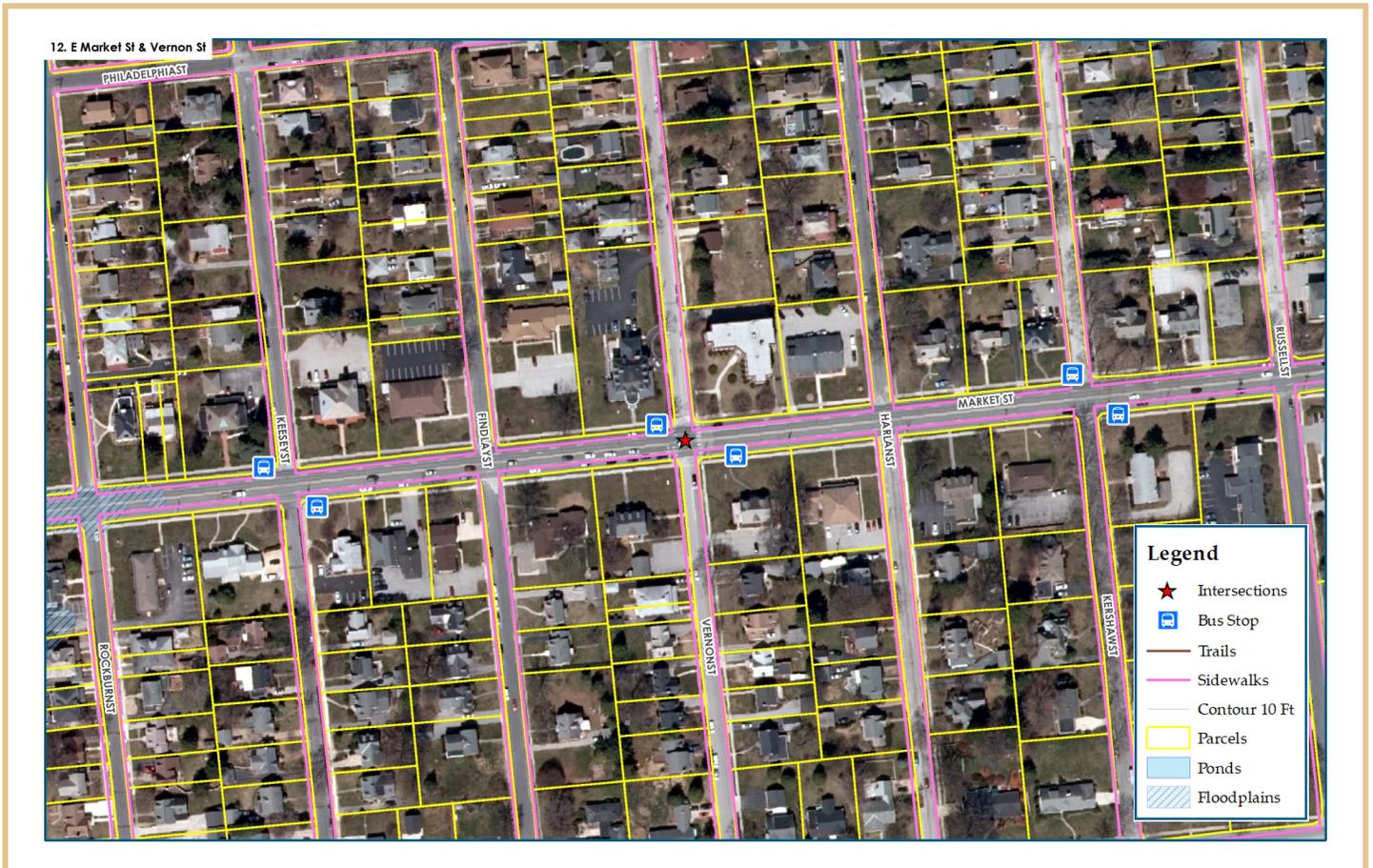
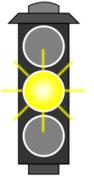
Multimodal improvements:

- Further investigate geometric and pedestrian safety improvements at the northwest Quadrant of the intersection. Improvements to include relocation of the signal cabinet, mast arms and pedestrian crossings out of the wheel path of trucks and the addition of “truck curb” for protection of the pedestrians.

Intersection 12 - E Market Street & Vernon Street

Intersection Discussion:

- This intersection is part of the PennDOT SR 0462 Adaptive Signal System. The intersection works acceptably. However, it is at capacity. Normal background growth in traffic is not projected to shift the intersection into an “over capacity” scenario; this should be monitored. This intersection has an emerging pattern of rear-end accidents attributed to left turn vehicles. A lane diet was investigated for this intersection to determine if separate left turn lanes could be implemented to address the safety concern with left turn vehicles stopping in the left through lane to wait for a gap in traffic to make a left. Due to the peak hour volumes, this was dismissed. The traffic equipment and signal display at this intersection is antiquated and should be replaced.



Intersection 12 - E Market Street & Vernon Street

(Continued)

Recommended Improvements:

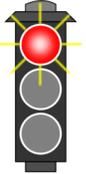
- Update signal timing and signal phasing to optimize the traffic flow.
- Periodic signal timing program updates.
- Replace the antiquated traffic signal equipment.
- Provide additional lane assignment pavement markings to warn motorists of the potential of stopped vehicles in the East Market Street left through lanes.

Multimodal Improvements:

- Upgrade the pedestrian access facilities, and add “Countdown Pedestrian” signals.

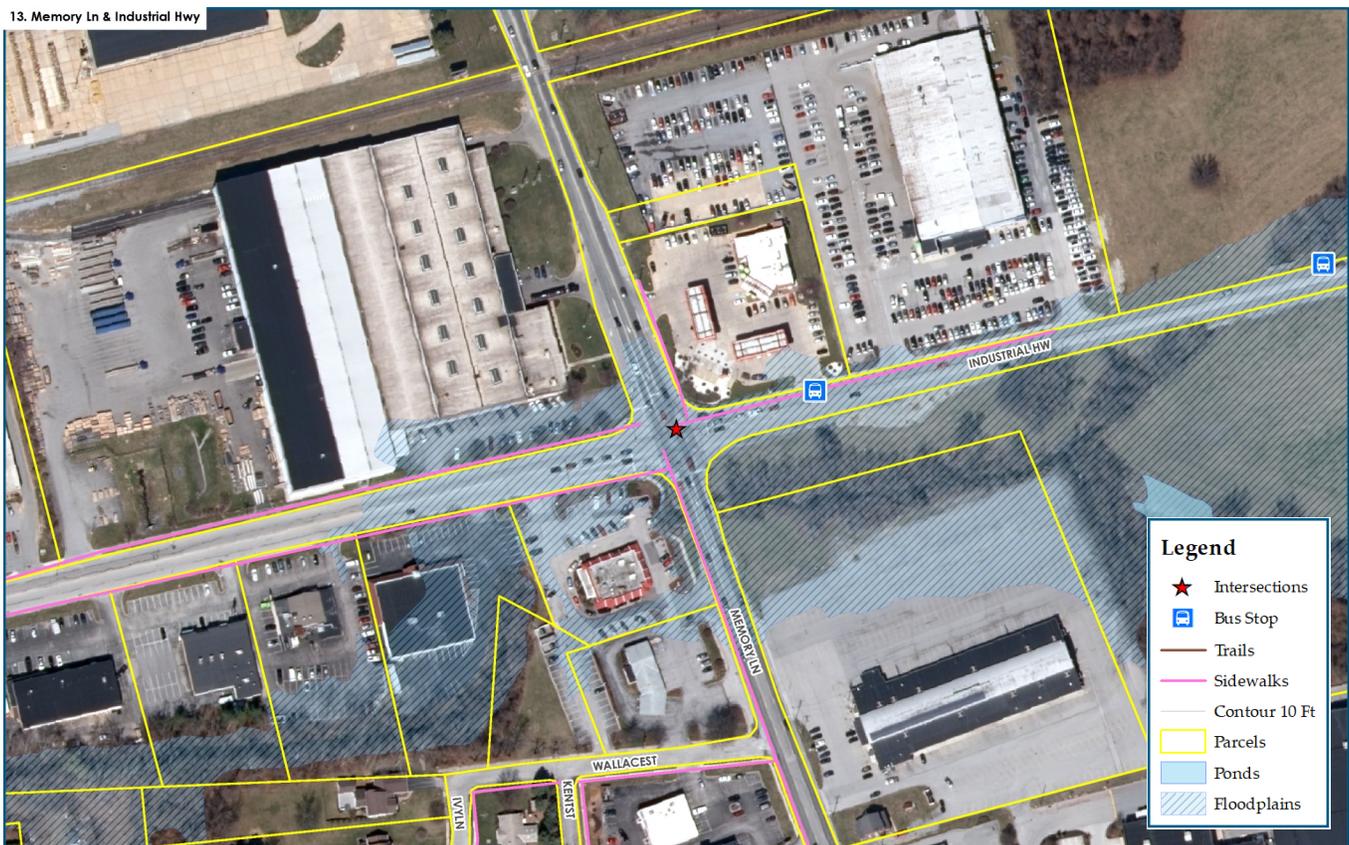
Intersection 13 - Memory Lane & Industrial Highway

Intersection Discussion:



- The intersection is projected to operate “over capacity” in the future. The Northwest Quadrant (Kloeckner Metals) of the intersection is routinely damaged by trucks unable to make the right turn from Memory Lane onto Industrial Highway. The team investigated the removal of the southbound right-turn lane in order to increase pedestrian safety and mitigate the truck damage caused to the sidewalk and signal equipment. The loss of that right turn lane is projected to cause the traffic queue past the train tracks. This would have a negative affect on the operation of the intersection and would be problematic for truck access given how many trucks use Industrial Highway to access the I-83 interchange at Market Street. Trucks will continue to make right turns at this intersection. As such, accommodating trucks at this intersection will need to continue in the future.
- The intersection signal equipment is a span wire construction. This type of construction is considered antiquated and should be upgraded to a mast arm configuration.

13. Memory Ln & Industrial Hwy



Intersection 13 - Memory Lane & Industrial Highway**(Continued)****Recommended Improvements:**

- Periodic signal timing updates will help mitigate delay at the intersection. To increase safety at the intersection, left turn signals utilizing the “flashing yellow” display should be implemented.
- Upgrade Signal to Mast Arms

Multimodal improvements:

- Further investigate geometric and pedestrian safety improvements at the northwest Quadrant of the intersection. Improvements to include relocation of the signal cabinet, mast arms, and pedestrian crossings out of the wheel path of trucks and the addition of “truck curb” for protection of the pedestrians.
- Complete the missing sidewalk links along Industrial highway as per the concept plans in the priority project section of this report.

Intersection 14 - Memory Lane & Whiteford Road

Intersection Discussion

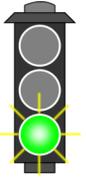
- Intersection is working acceptably and is projected to continue to do so.

Recommended Improvements:

- Periodic signal timing updates

Multimodal Considerations:

- Complete the missing sidewalk links along as per the concept plans in the priority project section of this report.
- Support access to the current bus stop, which is located approximately 350 feet north of the intersection by providing sidewalks.



14. Memory Ln & Whiteford Rd



Intersection 15 - Memory Lane & US 30 Interchange

Intersection Discussion:

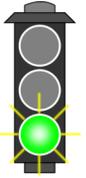
- This intersection operates acceptably

Recommended Improvements:

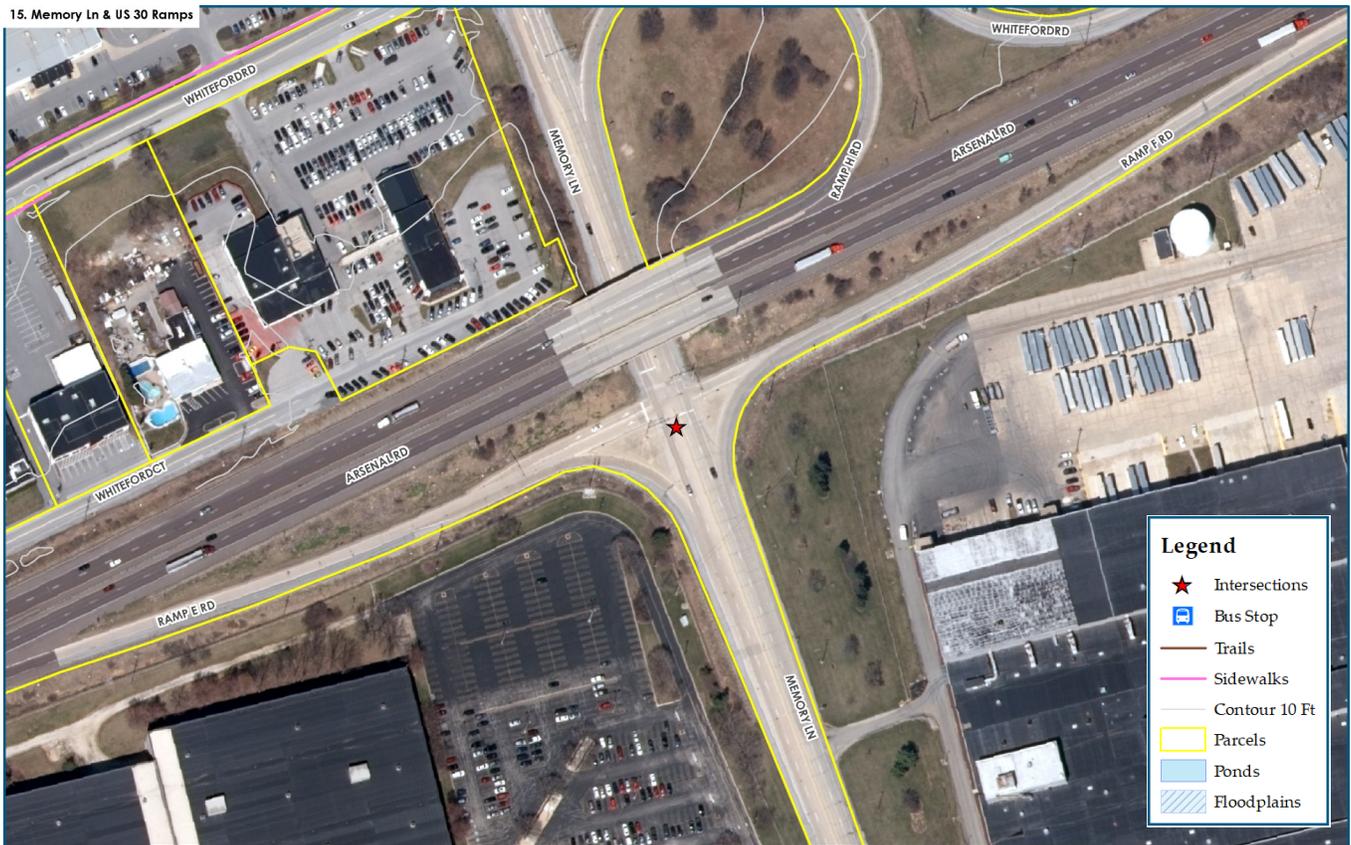
- Periodic signal timing updates

Multimodal Considerations:

- Install sidewalk along Memory Lane per the concept plans in the priority project section of this report.



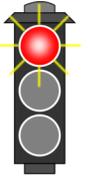
15. Memory Ln & US 30 Ramps



Intersection 16 - US 30 & N Hills Road

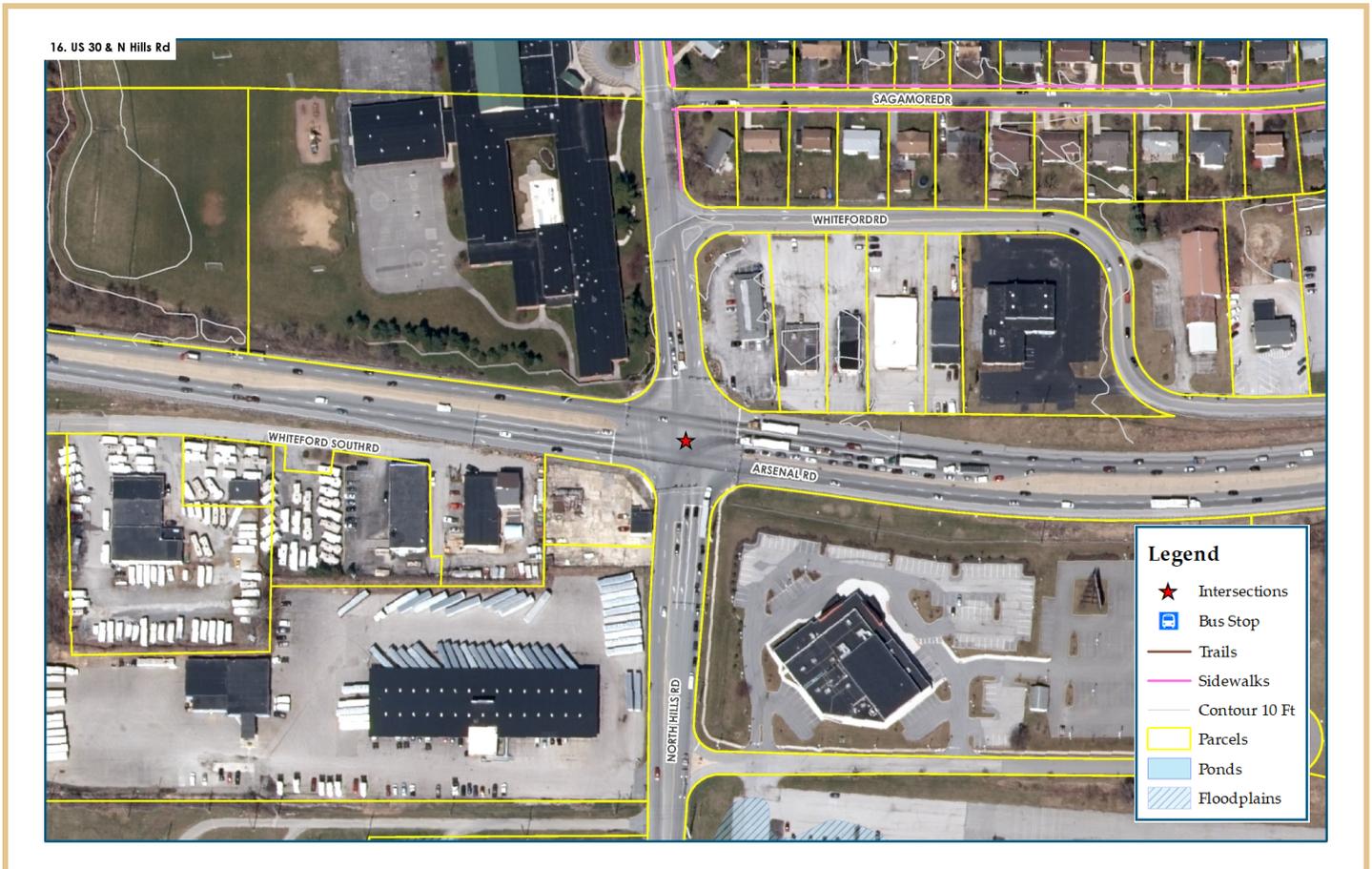
Intersection Discussion:

- Even with future improvements proposed by PennDOT and the adjacent land development, the intersection works poorly will continue to do so. All left turn movements are at or over capacity. The PennDOT improvements to I-83 may redistribute traffic within this area.



Recommended Improvements

- This intersection should be monitored and timing and phasing updates should be regularly implemented.



Intersection 17 - US 30 & N Sherman Street

Intersection Discussion

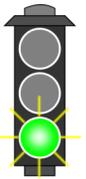
- Intersection is working acceptably and is projected to continue to do so.

Recommended Improvements:

- Periodic signal timing updates

Multimodal Considerations:

- Construct sidewalk on Sherman Street north bound and southbound to connect to residential areas.



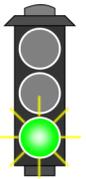
Intersection 18 - Haines Road & Mt Rose Avenue

Intersection Discussion

- Intersection is working acceptably and is projected to continue to do so.

Recommended Improvements:

- Periodic signal timing updates



18. Haines Rd & Mt Rose Ave



Legend

- ★ Intersections
- Ⓡ Bus Stop
- Trails
- Sidewalks
- Contour 10 Ft
- ▭ Parcels
- ▭ Ponds
- ▨ Floodplains

Intersection 19 - Eastern Boulevard & Haines Road

Intersection Discussion

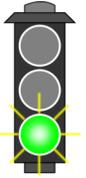
- Intersection is working acceptably and is projected to continue to do so.

Recommended Improvements:

- Periodic signal timing updates

Multimodal Considerations:

- Install crosswalks markings and pedestrian signals.



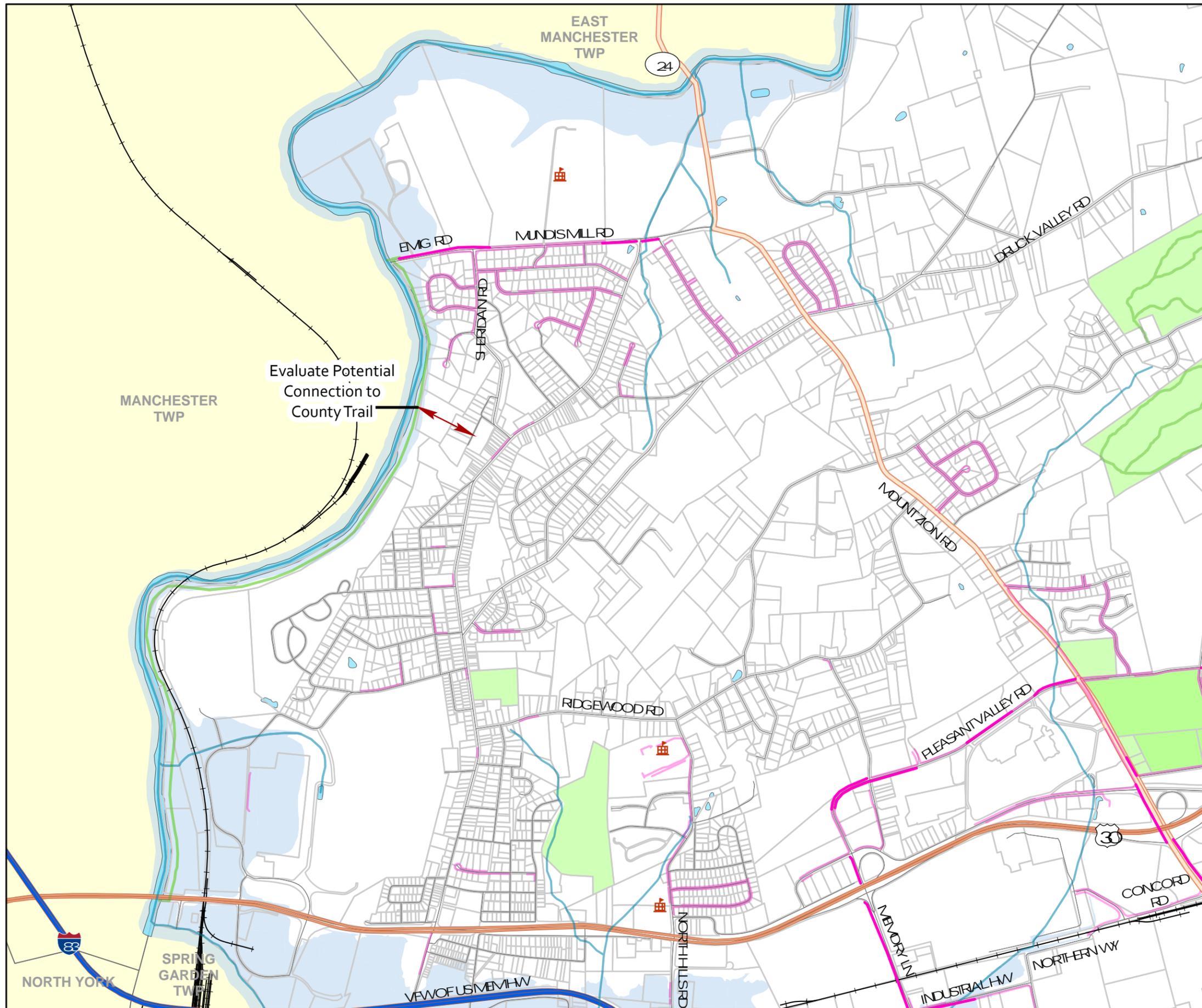
B | Pedestrian and Bicycle Connections

A major component of the Springettsbury Township Transportation Plan is identifying improvements to the multimodal network. That is, ensuring that people can safely and efficiently get around Springettsbury regardless of their age, ability, or mode of travel. This is often referred to as the 8-80 movement. The concept is; communities where 8-year-olds and 80-year-olds can easily and safely get around will result in transportation systems that are inclusive to everyone.

Pockets of sidewalks and trails can be found throughout Springettsbury Township, which provides a great resource to very localized areas. However, connectivity between these areas is often limited. Since people walking or biking are much more vulnerable than people driving, pedestrian and bicycle mobility can be blocked very easily. Barriers to multimodal mobility in Springettsbury Township include major roadways; including US 30 and Mt Zion Road; topographic challenges, and long distances between key destinations.

The maps on the following pages show the existing sidewalk and trails in Springettsbury Township and identify additional multimodal connections that would enhance the transportation network.

Springettsbury Township Multimodal Plan

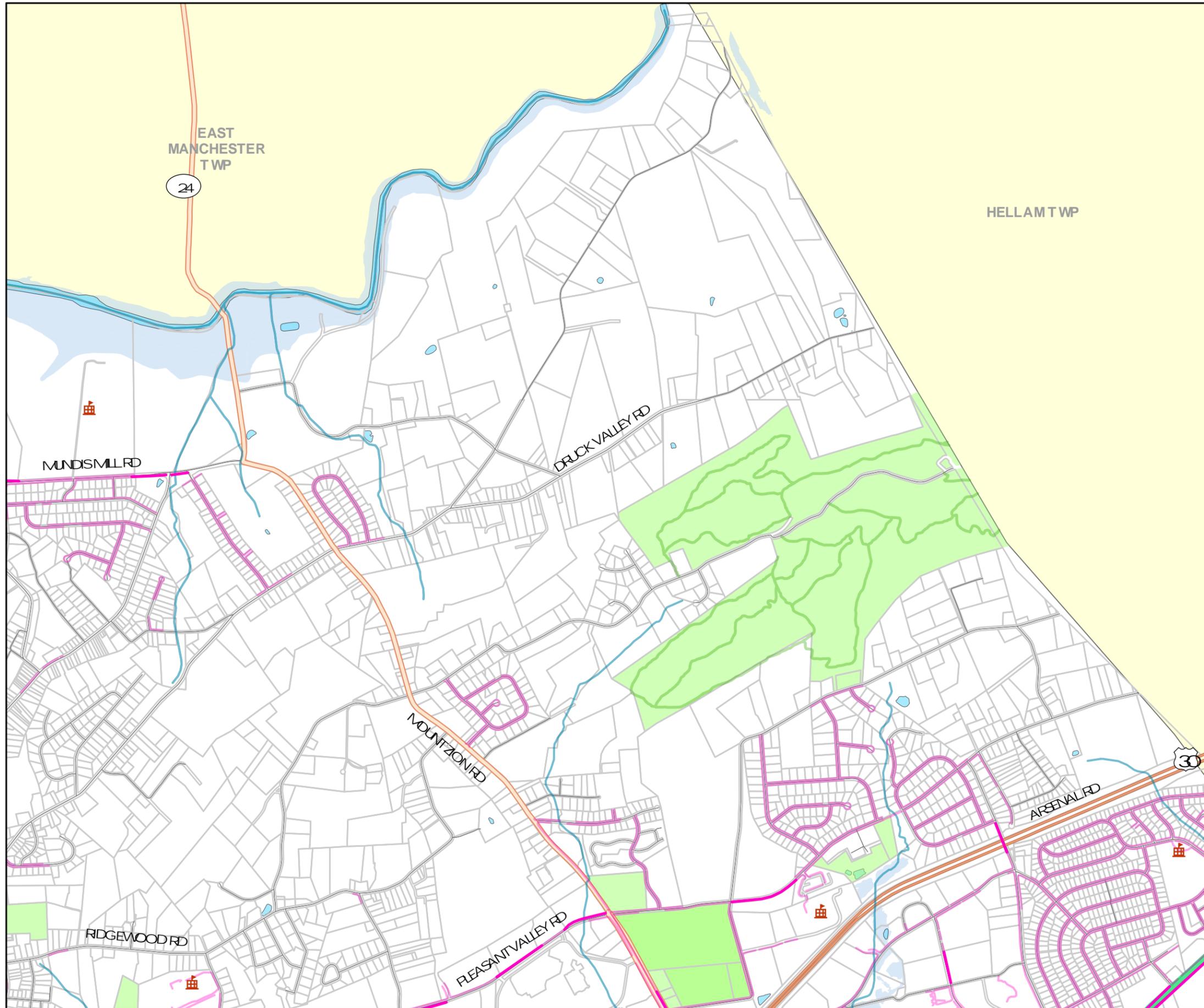


Legend

- Ponds
- Floodplains
- Streams
- Parks
- Schools
- Railroad
- Sidewalks - Existing
- Sidewalks - Proposed
- Trails - Existing
- Trails - Proposed
- On-Road Bicycle Facility - Proposed
- Enhanced Pedestrian Crossing - Proposed

6/14/19

Springettsbury Township Multimodal Plan

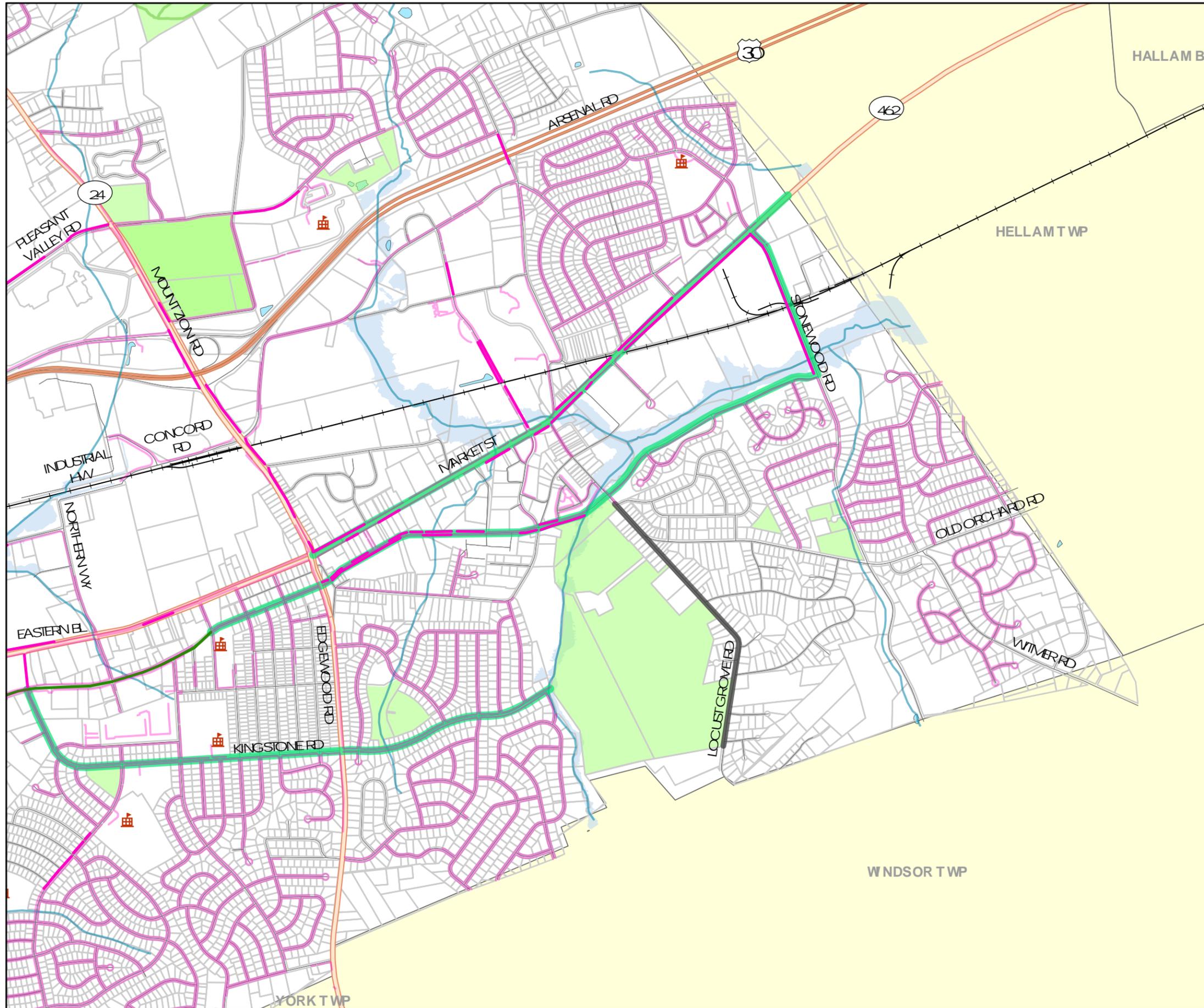


Legend

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- Floodplains
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- Sidewalks - Existing
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6/14/19

Springettsbury Township Multimodal Plan

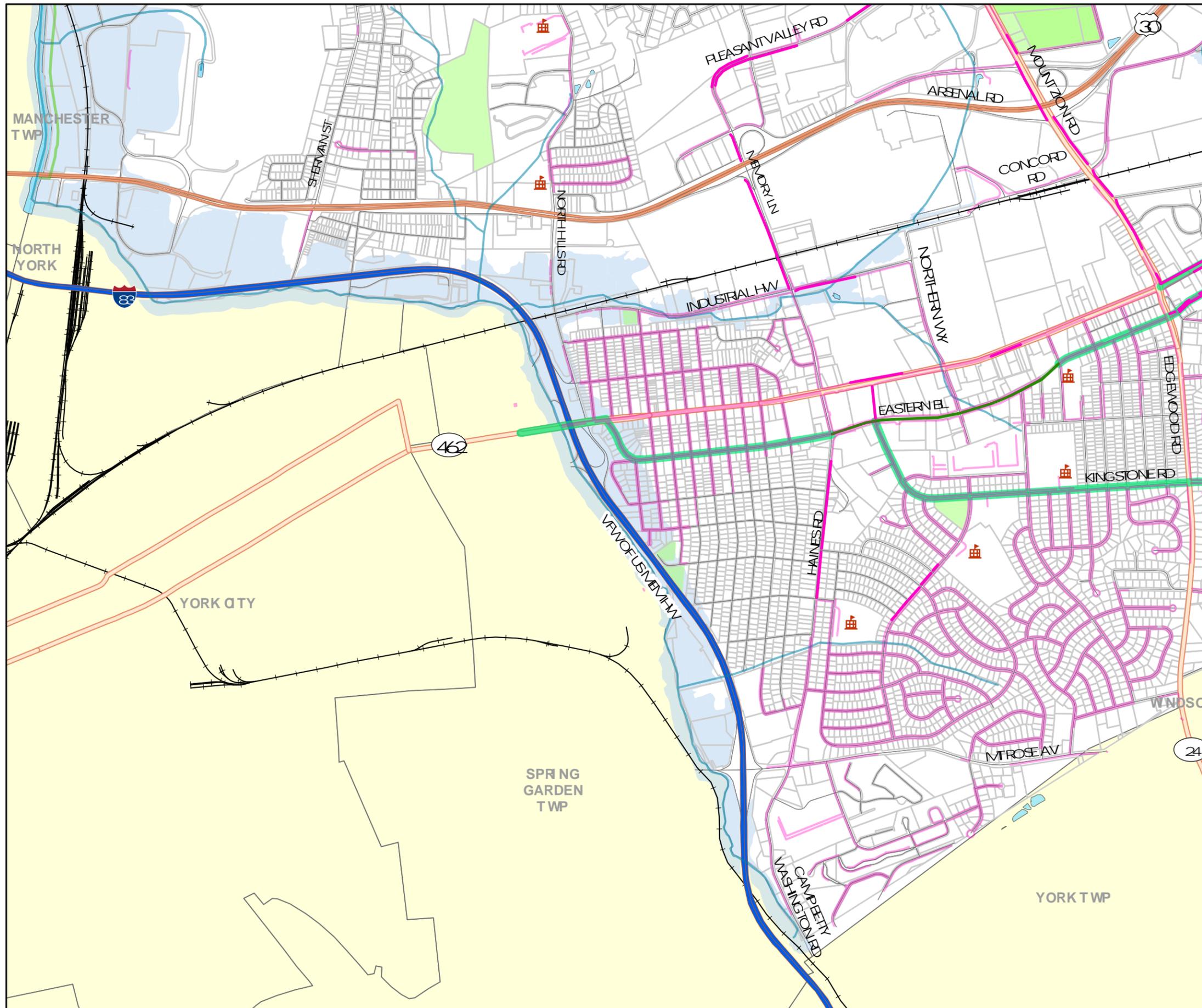


Legend

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6/14/19

Springettsbury Township Multimodal Plan



Legend

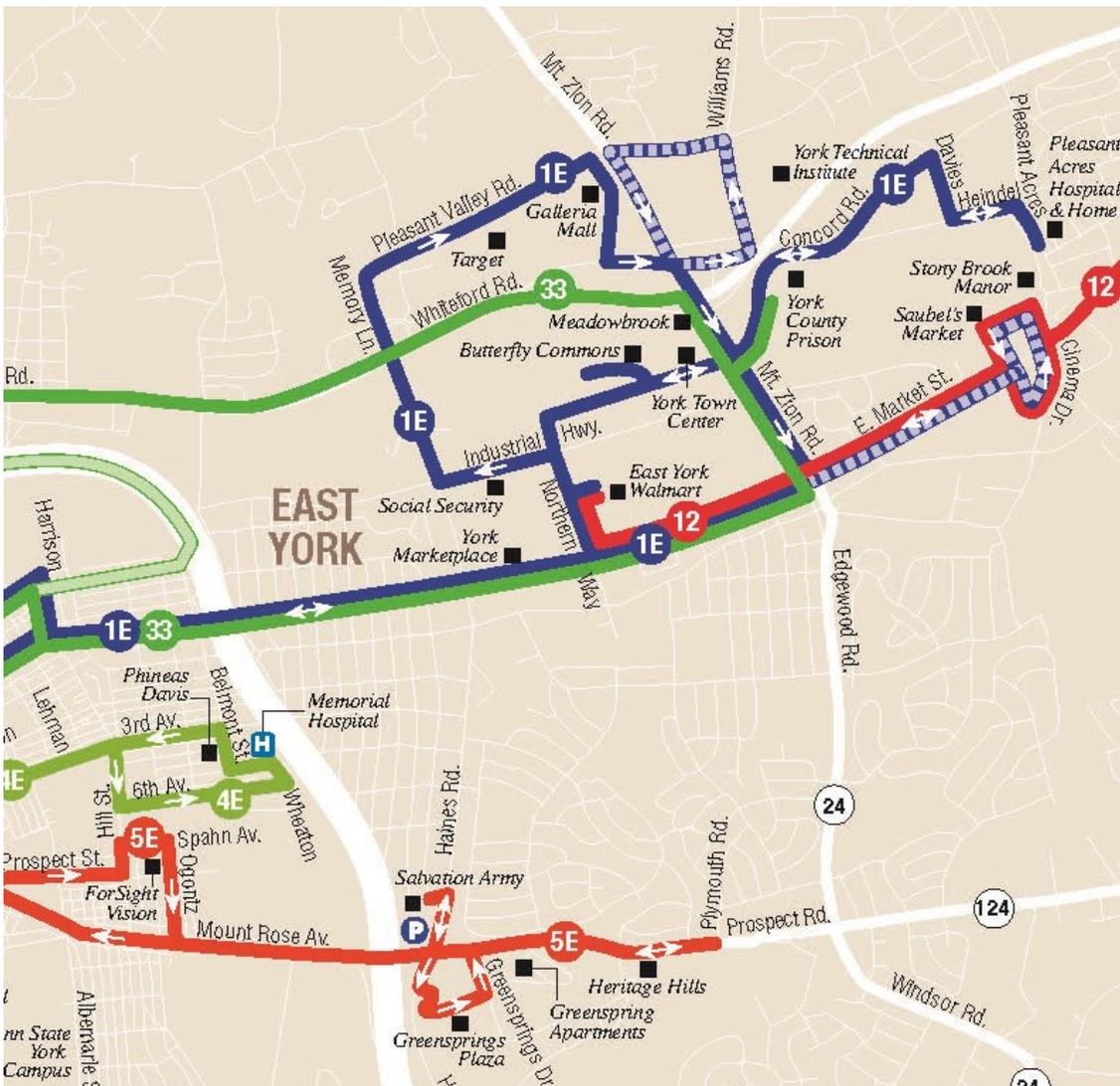
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6/14/19

C | Public Transportation

Rabbitransit provides public transportation service to York County. There are various types of public transit services available to residents and visitors of Springettsbury Township. These services include fixed route buses, shuttles, and on-demand services

Fixed route service is bus service to follows a predetermined route, stopping at designated stops, and adhering to a regular schedule. The routes 1E, 5E, 12 and 33 all serve Springettsbury Township. While routes 1E, 5E, and 33 provide regular service into York City, route 12 connects to Columbia, Lancaster County. There, riders may transfer to Red Rose Transit and continue to Lancaster City. The image below illustrates the fixed route service available in Springettsbury Township.



Source: Rabbit Transit

3 | MULTIMODAL NETWORK

York Mall Shopping Center is the busiest stop in Rabbitransit’s system outside of the York Transit Center. The existing stop includes a shelter in the middle of the parking lot with no connections between the shelter and the shops. The image below shows the current conditions at the stop. The “super stop” is a relatively new concept in transit planning. These are high frequency and high ridership volume stops that serve as transit hubs and provide additional amenities and features beyond a basic bus stop. There may be opportunities in the future to improve this stop so it better serves the community by adding “super stop” features like bus pull-outs for the buses to layover and pedestrian connections to the storefronts in the shopping center.



GIANT Food Stores sponsor free shuttles to their location in York Marketplace on East Market Street. This service operates on Tuesdays, Thursdays, and Saturdays and brings passengers from designated locations in York City.

The Stop Hopper provides on-demand transit service, similar to other transportation networking companies. Using a smartphone app, customers may request a ride from anywhere within Rabbitransit’s service boundaries. The app provides an alert of the estimated pick-up time, real-time ride tracking, and an alert upon reaching the location. The Stop Hopper also offers connections with traditional fixed route public transit service provided by Rabbitransit.

D | Multimodal Toolbox

Various facility improvements may be used to enhance the user experience.

Sidewalk

Concrete pathway parallel to the road that is intended for use by pedestrians with a number access points to adjacent land uses



Crosswalk

Pavement markings and signage to designate a location for pedestrians to cross a road; may be at in intersection or midblock



Street Trees

A tree located along streets to improve physical aesthetics and provide a visual queue to motorists of the street's right of way



Bus Shelter

A structure located at a bus stop meant to provide transit riders protection from the elements



Bus Loading Pad

A concrete pad at a bus stop designed to improve riders' ability to board and get off of buses



Beautification

Landscaping intended to improve the physical aesthetics of a roadway



Gateway Treatment

A feature intended to designate the entrance to a community and evoke a lower speed



Driveway Modifications

Combining / consolidating driveways and revising turning movements to reduce conflict points and improve traffic flow on a roadway



Bicycle Lane

A portion of the roadway designated for exclusive bicycle use by pavement markings and signage (5' minimum width)



Multi-use Trail

An off-road facility designated for shared use by bicycles, pedestrians, and other non-motorized modes of transportation (8' to 12' required width)



E | Corridor Evaluation

Eight corridors in Springettsbury Township were identified as in need of additional improvements to best serve the needs of residents, commuters, and the traveling public at large. Some of these corridors were identified for their strategic importance to the multimodal network within the township, while others were identified due to the need for traffic operations or safety improvements.

These improvement corridors were further divided into two categories: primary and secondary corridors.

Primary Corridors

Improvements to the primary corridors stand to make the largest impact to mobility in Springettsbury Township. The primary corridors can be considered the main thoroughfares of the community. The primary corridors include:

- US Route 30 (North Hills Road to Codorus Creek)
- Mt. Zion Road (Pleasant Valley Road to Market Street)
- Market Street (three segments)
 - Historic Old East York (West of Russell Street)
 - Suburban Retail Core (Russell Street to Mt. Zion Road)
 - Traditional Suburban Thoroughfare (East of Mt. Zion Road)

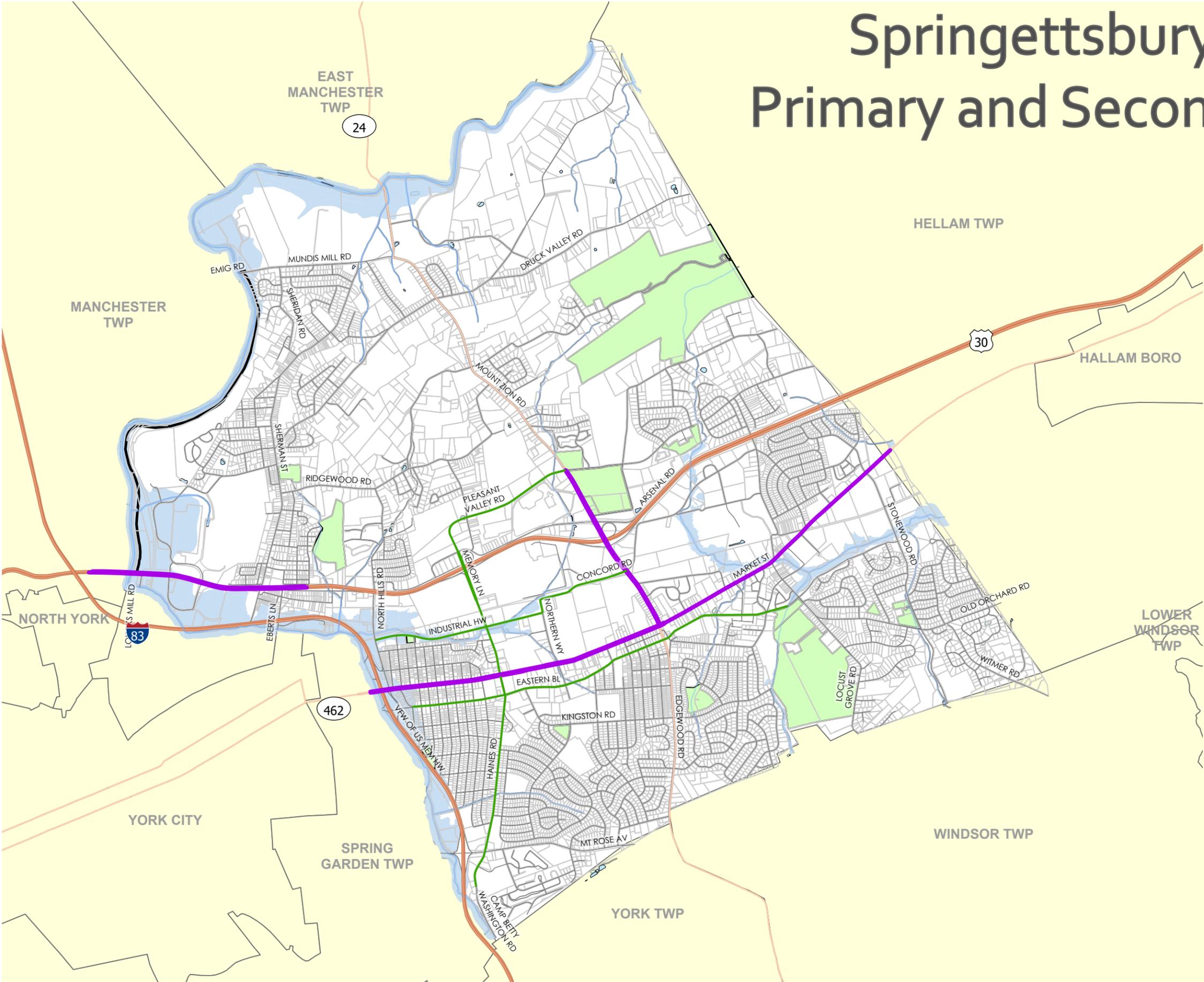
Secondary Corridors

Secondary corridors also play an important role in Springettsbury Township's transportation network. These are the roads that provide the most neighborhood connectivity for residents. They include:

- Eastern Boulevard (three segments)
 - Between Blackburn Street and Haines Road
 - Haines Road to Mill Street
 - East of Mill Street
- Industrial Highway
- Memory Lane
- Haines Road
- Ridgewood Road

Each of the primary and secondary roadways are identified on the map and described in detail on the following pages.

Springettsbury Township Primary and Secondary Corridors



Legend

- Streams
- Ponds
- Floodplains
- Roadways
 - Primary
 - Secondary



Primary Corridors

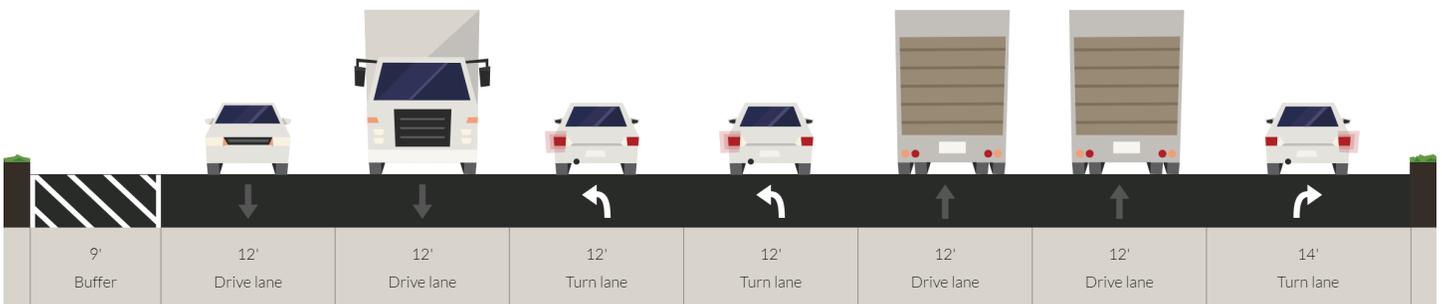
US Route 30 (North Hills Road to Codorus Creek)

Existing Features

- Two lanes in each direction, turning lanes at intersections
- Typical width is approximately 90'
- No sidewalks
- Served by one fixed route bus line
- ADT: 50,000
- Principal Arterial



Typical Existing Condition (Westbound Approach of US 30 and North Hills Road Intersection)



Corridor Vision

The long-term vision for Route 30 is to convert the highway to an expressway from N. Hills Road (limits of existing expressway) to the western township boundary with Manchester Township. This would require additional interchanges in Springettsbury Township to accommodate access. Also, new roadway connections may be required to maintain local circulation.

Primary Corridors

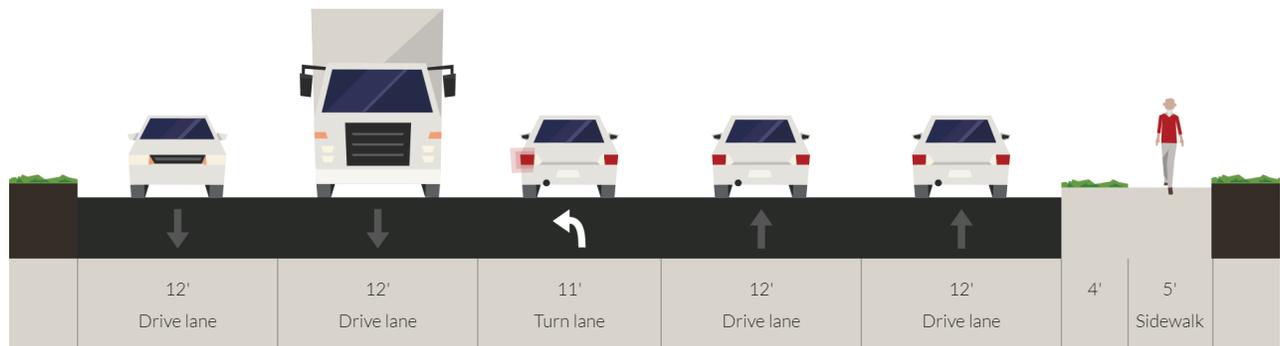
Mt Zion Road (Pleasant Valley Road to Market Street)

Existing Features

- Two lanes in each direction (turning lanes at intersections)
- Typical width is approximately 65' (varies)
- Sidewalks are present in some areas, but are not consistent
- Served by two fixed route bus lines
- ADT: 14,000-23,000
- Principal Arterial



Typical Existing Condition



Corridor Vision

Springettsbury Township wishes to improve pedestrian connectivity along Mt. Zion road between the Springettsbury Park and Market Street. The segment between Pleasant Valley Road and Market Street is the longest area with no sidewalks. Additionally, pedestrian crossings, particularly at the Route 30 Interchange and Pleasant Valley Road should be upgraded.

Primary Corridors

Market Street—Historic Old East York (West of Russell Street)

Existing Features

- Two lanes in each direction
- Typical width is approximately 50'
- Consistent sidewalk with vegetative buffer
- Served by two fixed route bus lines
- ADT: 22,000
- Principal Arterial



Typical Existing Condition



Corridor Vision

This segment of Market Street should retain its historic character while improving pedestrian and transit access.

Primary Corridors

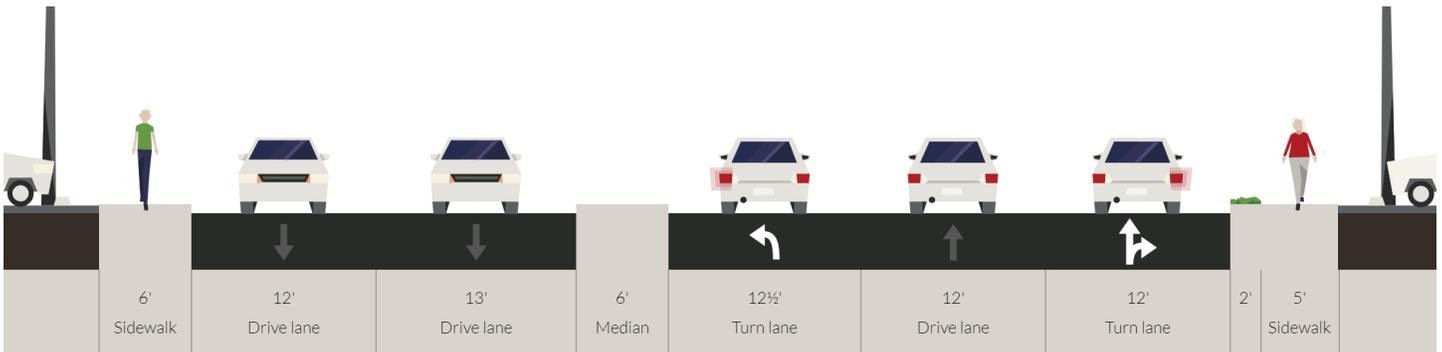
Market Street—Suburban Retail Core (Russell Street to Mt. Zion Road)

Existing Features

- Two lanes in each direction, turning lanes at intersections
- Typical width is approximately 55'-75'
- Generally sidewalk, but not consistent design
- Served by three fixed route bus lines
- ADT: 19,000
- Principal Arterial



Typical Existing Condition (Eastbound Approach of Market Street and Northern Way Intersection)



Corridor Vision

In the “Suburban Retail Core” targeted intersection improvements and pedestrian accessibility improvements to the surrounding neighborhoods is the primary objective.

Primary Corridors

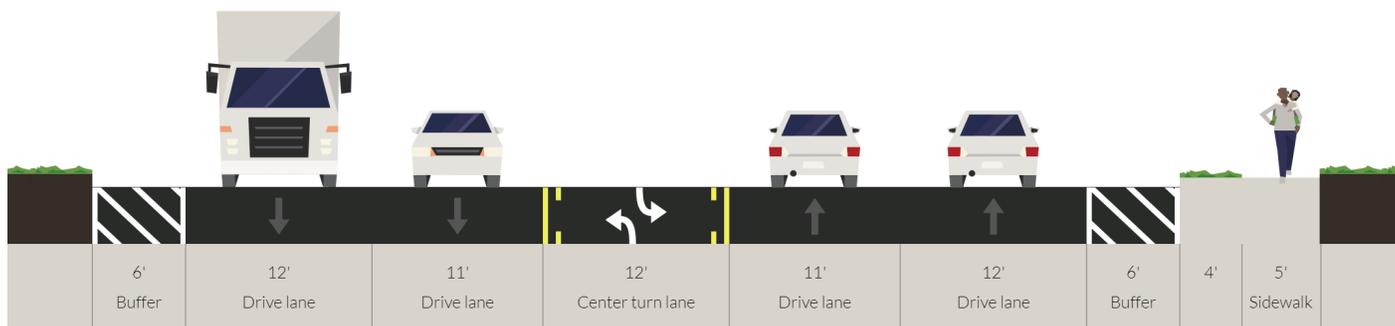
Market Street—Traditional Suburban Thoroughfare (East of Mt. Zion Road)

Existing Features

- Two lanes in each direction; one lane after Cinema Drive
- Center left-turn lane
- Typical width is approximately 50'-70'
- Inconsistent sidewalk
- ADT: 12,500-20,000
- Minor Arterial



Typical Existing Condition



Corridor Vision

This segment of Market Street lacks consistent pedestrian infrastructure and suffers from poor access management strategy implementation. Providing a consistent sidewalk and consolidating driveways should be considered.

Secondary Corridors

Eastern Boulevard (Between Market Street and Haines Road)

Typical Existing Features

- Consistent Sidewalks
- Approximately 50' Width
- On-street Parking Permitted
- PA Bicycle Route S



Eastern Boulevard (Haines Road to Mills Street)

Typical Existing Features

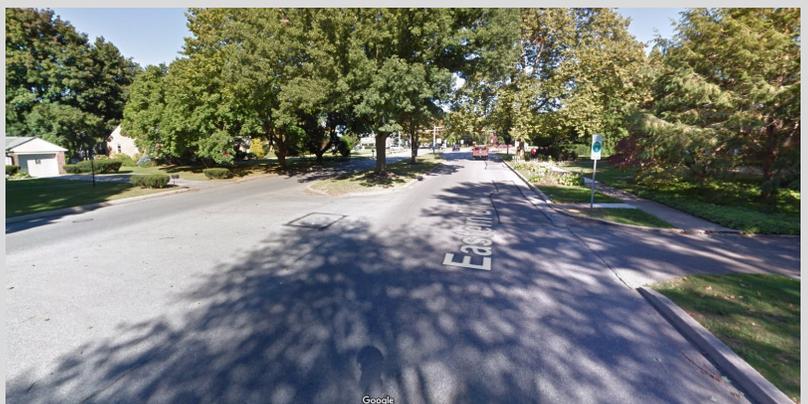
- Inconsistent Sidewalks
- Approximately 80' Width
- Approximately 30' Median
- PA Bicycle Route S
- 2 Travel Lanes in Each Direction
- Many Driveways



Eastern Boulevard (East of Mills Street)

Typical Existing Features

- Inconsistent Sidewalks
- Approximately 70' Width
- Approximately 20' Median
- PA Bicycle Route S (to Edgewood)
- On-street Parking Permitted



Corridor Vision

The overall vision for Eastern Boulevard is to enhance walkability and bikability by providing consistent sidewalks, on-road bicycle facilities, or multi-use trails along the corridor.

Secondary Corridors

Industrial Highway / Northern Way / Concord Road (between North Hills Rd and Mt Zion Rd)

Typical Existing Features

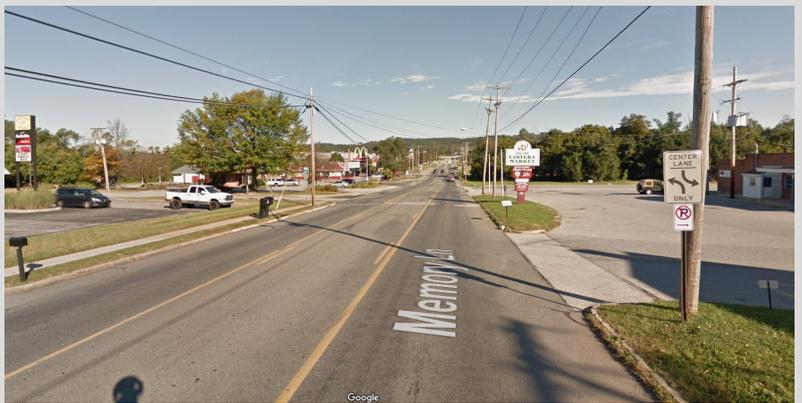
- Inconsistent Sidewalks
- Approximately 40'-55' Width
- 3-lane Cross-section East of Memory Lane



Memory Lane / Pleasant Valley Road (Market St to Mt Zion Rd)

Typical Existing Features

- Inconsistent Sidewalks
- Approximately 45' Width
- 3-lane Cross-section
- Pinch-point on Railroad Tracks
- 4 Lanes Near Rt. 30 Interchange
- Many Driveways



Haines Road (Market Street to Mt Rose Avenue)

Typical Existing Features

- Inconsistent Sidewalks
- Approximately 35' Width
- Wider With More Lanes Between Eastern Blvd and Market Street



Secondary Corridors Vision

Enhancing walkability and improving access management are key components to the vision for the secondary corridors.

A | Ordinance Recommendations

Springettsbury Township expressed a desire to encourage development patterns that would support biking, walking, and public transportation. To do so, the township's ordinances must be updated to clearly state the community's specific desires. The following is a list of recommendations that would help the township achieve this goal.

Definitions

The township should consider adding or revising the following definitions in the current Subdivision and Land Development Ordinance.

Alternative Transportation Plan (ATP) – a document prepared by an applicant that evaluates a wide range of strategies to improve future conditions for all transportation users (motorists, pedestrians, bicyclists, transit users, etc.) within a defined study area. The ATP may identify strategies that will be implemented by the applicant directly and strategies that should be implemented by public agencies. The primary focus of the ATP is to reduce single occupancy vehicle (SOV) trips produced by the proposed land development.

Transportation Demand Management (TDM) – a program of information, encouragement, and incentives provided by local or regional organizations to help people know about and use all transportation options to optimize all modes in the system.

Level of Service (LOS) – a qualitative measure used to relate the quality of motor vehicle traffic service.

Bicycle Lane (Bike Lane) – a portion of the street that has been designated by striping, signage, and pavement markings for the preferential or exclusive public use by bicyclists.

Bicycle Infrastructure – any infrastructure that facilitates bicycling, including striped shoulders, shared lanes, bicycle lanes, and multi-use trails. On-road bicycle infrastructure includes striped shoulders, shared lanes, and bicycle lanes, which are located between the edge of pavement or curbs along a roadway.

Crosswalk - an improved right-of-way for pedestrian travel across a street connecting sidewalks, paths, or multi-use trails. (revise current definition)

Multi-use Trail – a designated corridor designed for use by both bicyclists and

pedestrians of all abilities for transportation and recreation purposes. Multi-use trails located along or adjacent to a street are physically separated from motor vehicle traffic by a verge area, open space, fencing, or other barrier.

Pedestrian Infrastructure – any infrastructure that facilitates walking by pedestrians, including striped shoulders, sidewalks, paths, multi-use trails, and crosswalks.

Path – a designated corridor designed for use by pedestrians of all abilities. Paths located along or adjacent to a street are physically separated from motor vehicle traffic by a verge area or open space.

Shared Lane – signage and pavement markings on a street used to indicate shared use of a travel lane by bicycles and other vehicles. Pavement markings may include a “sharrow,” which is a bicycle symbol with two chevron arrows above.

Striped Shoulder with Buffer – a portion of the overall street adjacent to the travel lane that has been striped to provide a clear area for use by bicyclists and/or pedestrians, with an identified striped buffer area separating the vehicular travel lane and the shoulder.

Travel Lane – the portion of a roadway for movement of vehicles in one direction, not including shoulders or bicycle lanes.

Verge (Verge Area) – a strip of grass, vegetation, or pavers, sometimes containing trees, located between a street and a sidewalk, path or multi-use trail.

Bus Stop Loading Pad – a level loading area where the front, side, or rear door of a bus open to receive and discharge passengers.

Electric Vehicle Charging Station – also called EV charging station, electric recharging point, charging point, ECS (electronic charging station), EVSE (electric vehicle supply equipment), etc. – a device and associated infrastructure that supplies electricity for recharging plug-in electric vehicles.

Traffic Impact Study Requirements and Alternative Transportation Plan

Traffic Impact Study (TIS) (289-21)

The current traffic impact study (TIS) requirements in Springettsbury Township’s SALDO are specific to traffic impacts and are fairly general, which leaves room for interpretation. For the traffic analysis element, the township

may choose to include more specific requirements and also be more consistent with PennDOT's Policies and Procedures for Transportation Impact Studies (Publication 282—Appendix A), which is a requirement for obtaining Highway Occupancy Permits (HOPs) on state owned roadways. Additionally, the township may want to change the name of this section to "Transportation Impact Study" and expand the evaluation to include all modes of transportation. Outlined below are some potential updates to the TIS requirements.

- Study Area – The current ordinance requires, "sufficient area... based on engineering judgment," to define the TIS study area boundaries. Potential updates include:

Require, at a minimum, that the study area to include all site access drives, adjacent roadways, and adjacent major intersections.

Reference guidance included in Chapter 2 of ITE's *Transportation Impact Analyses for Site Development* for the selection of additional study intersections.

Require a scoping meeting or correspondence with the applicant to review and agree upon the study area.

- Existing Conditions Analysis –

Require descriptions and documentation of all existing and proposed elements of the transportation system, including pedestrian infrastructure; bicycle infrastructure; and public transit routes, stop locations, and service.

Add a requirement to review and analyze the most recent accident data.

- Future Conditions Analysis – The current ordinance includes a goal for impacted intersections to operate at a level of service which is not worse than existing conditions, which is a fairly high standard and does not account for current deficiencies or consider the specific impacts of the proposed development. The township should consider revising this requirement to be more consistent with PennDOT's current requirement of a LOS drops or increase in delay by 10 seconds for any studied period or provide requirements for acceptable LOS.

Reorganize and refine the ordinance language to more clearly define the various conditions for Capacity/LOS analysis to include existing, future

without development, and future with development.

Require a comparison of the future with and without development conditions.

Require mitigation analysis to address overall LOS drops and greater than 10-seconds drops in delay and safety concerns. Alternatively, identify acceptable LOS criteria. For example:

If future without development conditions have LOS E - F, require mitigation analysis for future with development conditions to operate no worse than future without development conditions.

All site access function at LOS D or better for all movements and the overall intersection

Add a requirement that proposed improvements shall consider all roadway users, including motorized vehicles, bicyclists, pedestrians, and transit users. Add a requirement to address future public transit service through coordination with Rabbittransit or the appropriate local transit provider.

Update all references to the Highway Capacity Manual "Sixth Edition."

- Proposed Improvements

Require the applicant to describe the location, nature, schedule for implementation, and responsible party for the identified improvements.

Require the applicant to demonstrate that the proposed access design is consistent with the Township requirements, particularly related to sight distance, auxiliary lands, and pedestrian crossings.

Alternative Transportation Plan

The Township should adopt a practice whereby Major Subdivisions in the following zoning districts to submit an Alternative Transportation Plan (ATP). This plan should be completed in concert with a TIS. The township may also consider setting a threshold for the size of development (based on number of units and/or square footage) in addition or alternatively to utilizing the district designation as the trigger for an ATP. The functional classification of the roadway which the proposed development is located could also be considered when requiring an ATP to be prepared by an applicant.

- Town Center Overlay

- Mixed Use (M-U)
- Commercial Highway (C-H)
- Flexible Development District (F-D)
- Business and Industrial Park (B-I)
- General Industrial (G-I)

The ATP should be added to the required documents list under 289-10. A.2. The ATP can be used to identify multimodal (bicycle, pedestrian, public transit) infrastructure improvements and Transportation Demand Management (TDM) measures to offset the traffic impacts associated with the proposed development.

The developer may choose to implement any or all of the improvements identified in the ATP to receive trip reduction credits. The trip reduction credit percentages would be approved by the Board of Supervisors with guidance from the Township Engineer and agreed upon by PennDOT. Trip reduction credits could be applied to the Traffic Impact Study to determine the required roadway improvements.

The ATP cannot be used as justification for any roadway or intersection in the township to go unimproved through the land development process or for any roadway or intersection to operate below an acceptable LOS during the peak condition. Additionally, all requirements under the current PennDOT HOP process must be met.

Roadway Design Standards

The current standards for streets within the Subdivision and Land Development Ordinance (289-41) contains only standards for right-of-way and cartway width based on the functional classification of each roadway in the township, and the functional classification names in the ordinance do not match those found on the Functional Classification Map. The map and ordinance should be revised. The township should consider providing additional detail on lane widths, parking lanes, shoulders, and on-road bicycle facilities. Additionally, the recommended changes to the functional classification of roadways in the township are depicted on the Functional Classification Map (attached). It should be noted that developers generally prefer specific requirements in ordinances when it comes to design standards.

Multimodal Infrastructure Requirements

Springettsbury Township’s Subdivision and Land Development Ordinance currently requires sidewalks to be constructed on both sides of all streets. The current required design standard is a four (4) feet wide sidewalk with a four (4) feet wide buffer area (a 5’ wide sidewalk is required for some uses). While this specification may technically meet current ADA standards, the ordinance should better reflect those standards. The township should consider requiring five (5) feet wide sidewalks and permitting four (4) feet wide sidewalks in areas where there is a limiting constraint. In cases where a four (4) feet wide sidewalk is necessary, five (5) feet wide passing zones every five-hundred (500) feet are required by ADA. Many municipalities reference “current ADA standards” in their ordinance.

Buffer areas can have more utility than as a grass planting strip as currently stated in the township’s ordinance. They may contain trees, plantings, streetlights, etc. Some of these are covered in the Improvement Specifications of the township’s ordinance. However, the ordinance leaves out bus stop loading pads, which are another appropriate use for this area. There may be other cases where it is inappropriate to include a grass planting strip. In those areas, a hardscape surface may be desired. Bus stop loading pads and other hardscape areas adjacent to the curb may serve additional utility in serving as passenger pick up/drop off areas for taxis, ride sharing, and transportation on-demand services.

Additionally, the township may wish to include requirements and design standards for the facility types listed below. Definitions may be found on earlier in this section.

- Crosswalks

These are defined in the SALDO, but no requirements are given.

Consider including crosswalk requirements with sidewalk requirements.

- Paths

May be appropriate for areas where sidewalks do not fit the physical or use characteristics.

Consider requirements for width/material and when paths should be required instead of sidewalks.

- Multi-use Trails

Can require developers to start building out a trail network. The township may want to designate said network on an official map or other document.

General standard – 10'-12', paved

- Bicycle Infrastructure

Should adhere to American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities – 4th Edition, 2012 (or current AASHTO standards).

Facility types may include: Shared lane/sharrow, two-way buffered bike lane, shoulder/stripping

- Bus Stops

Improvements should be made when there is an existing bus stop on site or the developer is requesting fixed route service.

Design and placement should be coordinated with the transit agency (Rabbit Transit) to ensure consistency and compatibility.

Features may include: bus loading pad, shelter, benches, or other street furniture

Off-Street Parking

Springettsbury Township's Zoning Ordinance (Article XXV) currently contains minimum requirements for the amount of parking to be provided based on specific uses and their size metrics. These standards were last amended in 2018. Staff stressed a concern that the current ordinance encourages site design that often has an inappropriate abundance of parking. For this reason, some municipalities in Pennsylvania have shifted away from minimum parking requirements.

Springettsbury Township may wish to consider establishing parking maximum standards to limit the number of parking spaces a development can be approved to have based on the size and land use of the proposed development. These maximum's can be used as a stand-alone parking ordinance (i.e. no minimum), or they can be used in conjunction with parking minimums to create a range of acceptable parking. ITE's Parking Generation Handbook can be used to identify an appropriate range of parking by land use type and size.

Parking maximums may be applied to specific uses and in specific areas of the township. They do not need to be applied to all uses. For land uses where demand for parking may exceed the maximum requirement during special events or periods, overflow parking standards may be established. Overflow requirements may also be identified using ITE's Parking Generation Handbook.

Emerging Transportation Trends & Technologies

There are many unknowns and potential future challenges related to technological advances in transportation that municipalities will have to consider in the coming years. This section is intended to provide some direction to Springettsbury Township to take a proactive rather than reactionary approach to these emerging issues.

- Electric Vehicles

With the advent of and increasing interest in renewable energy, it is tempting to consider requiring or regulating the installation of electric vehicle charging stations in new land development projects. However, the decision to install electric vehicle charging stations is market driven and can be left to the individual developer or property owner in these cases. Electric vehicle owners typically charge their vehicles at home or at work. Preferred parking could be allocated to these vehicles, but that doesn't require township regulations. Springettsbury Township may wish to amend the Zoning ordinance to identify electric vehicle charging as an accessory use in specific districts. However, chargers installed for personal use would not be regulated in this way.

Alternatively, some municipalities are considering installing public electric vehicle charging stations as a marketing tactic. The idea is that the charging stations will show up on GPS applications. In turn, the community will be seen as electric vehicle friendly.

- Ridesharing / Transportation on Demand

Springettsbury Township should consider editing the General Parking Regulations under 312-36 Standing or parking on roadway for loading or unloading. To allow for the loading or unloading of passengers in designated areas. The Code currently reads,

“It shall be unlawful for any person to stop, stand or park a vehicle (other than a pedalcycle) on the roadway side of any

vehicle stopped or parked at the edge or curb of any street, except that standing or parking for the purpose of loading or unloading persons or property shall be permitted on the following named streets on Monday through Saturday, between the hours of 9:00 a.m. and 11:30 a.m. and between the hours of 1:30 p.m. and 4:00 p.m., and for no longer than necessary for the loading or unloading.”

The time restrictions in the above code essentially prohibit any ridesharing or transportation on demand services (e.g. Uber, Lyft, etc.) from operating at the times when they typically see their highest demand (work commutes & nightlife hours). Additionally, the Code does not indicate any streets where this condition is permitted.

There is no provision for new land developments to accommodate on-site loading or unloading of passengers. The township should consider requiring passenger drop-off and pick-up areas in future land development plans. Specifically, this design feature would be useful in retail and restaurant uses, but it may also be appropriate for other larger office and/or multifamily housing developments.

- Connected & Autonomous Vehicles

Connected vehicles have communication systems that enable vehicles to communicate with other vehicles, roadway infrastructure (like traffic signals), and other surrounding devices (like smartphones). Automated and autonomous vehicles have the potential to dominate mobility and land use decisions, as the automobile did in the early to mid 20th century. While federal and state law will likely dictate most regulations of these new technologies, Springettsbury Township can remain engaged and have a say in how they are implemented locally.

B | Roadway Functional Classification

Functional classification refers to the categorization of roadways according to the function they serve. Different roadways serve varying traffic volumes, trip lengths, and accommodate different travel speeds. Functional classification can be used to establish roadway design guidelines, access management policies, and prioritize improvements. Function also reflects the relationship between access and mobility. Typically, the higher the roadway's capacity to facilitate traffic flow, the lower its ability to provide efficient access to adjacent properties, and vice versa.

PennDOT has a statewide roadway functional classification that is used to identify appropriate roadway design guidelines, as well as federal funding eligibility. The York County Planning Commission utilizes PennDOT's statewide roadway functional classification for planning efforts such as the Congestion Management Plan (CMP). There are some discrepancies between the roadway functional classification designations in the Springettsbury Township Subdivision and Land Development Ordinance (SALDO) and the designations used on the Functional Classification Map.

Based on the 2006 Springettsbury Township Comprehensive Plan, updated traffic volumes available from PennDOT, and other information, the Draft Recommended Roadway Functional Classification is listed on the table below (recommended changes from 2006 are highlighted) and the attached map. The DRAFT Recommended Functional Classification (2019) is meant to represent the future aspirational operation of roadways in Springettsbury Township. It is recommended that Springettsbury Township revise the SALDO to be consistent with the functional classification map. The table below includes a comparison with the PennDOT statewide roadway functional classifications. Any functional classification changes should be coordinated with the York County Planning Commission and PennDOT. Where roadways cross into adjacent municipalities, changes should also be coordinated with those jurisdictions.

Roadway Functional Classification Table (Recommended Changes Highlighted)

<u>Focus Roadways</u>	DRAFT Recommended Functional Classification 2019	Township Functional Classification Comp Plan 2006	PennDOT Functional Classification
I-83	Interstate Highway	Interstate Highway	Interstate
US 30 (East of Haines Rd)	Other Expressway	Other Expressway	Principal Arterial – Other Freeways and Expressways
US 30 (West of Haines Rd)	Major Arterial	Major Arterial	Principal Arterial
East Market Street (West of PA 24)	Major Arterial	Major Arterial	Principal Arterial
Mount Rose Avenue	Major Arterial	Major Arterial	Principal Arterial
Edgewood Road / Mt. Zion Road (PA 24; South of US 30)	Major Arterial	Major Arterial	Principal Arterial
East Market Street (East of PA 24)	Minor Arterial	Minor Arterial	Minor Arterial
Haines Road (North of Mt. Rose Avenue)	Minor Arterial	Minor Arterial	Minor Arterial
Memory Lane	Minor Arterial	Minor Arterial	Minor Arterial
Pleasant Valley Road (West of PA 24)	Minor Arterial	Minor Arterial	Major Collector
N. Hills Road (South of US 30)	Minor Arterial	Minor Arterial	Principal Arterial
N. Sherman Street	Minor Arterial	Minor Arterial	Minor Arterial
Mt. Zion Road (PA 24; North of US 30)	Minor Arterial	Minor Arterial	Minor Arterial
Witmer Road	Major Collector	Major Collector	Major Collector
Old Orchard Road	Major Collector	Major Collector	Major Collector
Locust Grove Road	Major Collector	Major Collector	Major Collector
Eastern Boulevard (Between Haines Road and Locust Grove Road)	Major Collector	Major Collector	Local; Major Collector (Between Haines Road and Northern Way)
Kingston Road (West of PA 24)	Major Collector	Major Collector	Major Collector
Northern Way (South of E. Market Street)	Major Collector	Major Collector	Major Collector
Industrial Highway (West of Haines Road)	Major Collector	Major Collector	Major Collector
N. Hills Road (North of US 30)	Major Collector	Major Collector	Major Collector
Ridgewood Road (West of Deiningger Road)	Major Collector	Major Collector	Major Collector
Eden Road	Major Collector	Major Collector	Local
Druck Valley Road	Major Collector	Major Collector	Major Collector
N. Sherman Street Extension (PA 24)	Major Collector	Major Collector	Major Collector
Mundis Mill Road	Minor Arterial	Major Collector	Major Collector
Sheridan Road	Major Collector	Major Collector	Major Collector
Deiningger Road (West of PA 24)	Minor Collector	Minor Collector	Local

Sources: Springettsbury Township Comprehensive Plan (2006); PennDOT One Map

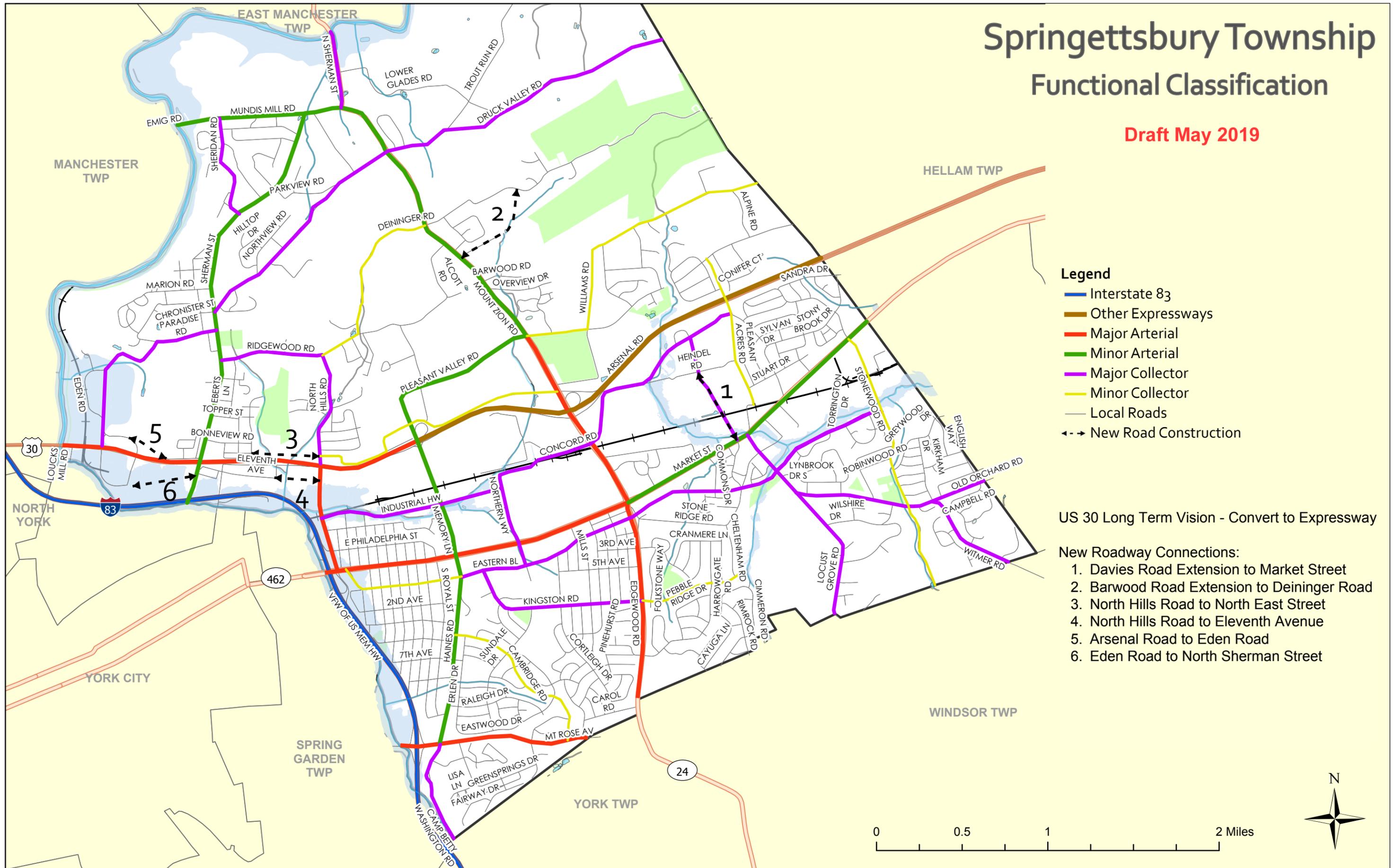
Roadway Functional Classification Table (Recommended Changes Highlighted) Continued

Focus Roadways	DRAFT Recommended Functional Classification 2019	Township Functional Classification Comp Plan 2006	PennDOT Functional Classification
Whiteford Road (West of PA 24)	Minor Collector	Minor Collector	Local
Eastern Boulevard (West of Haines Road)	Minor Collector	Minor Collector	Local
Haines Road (South of Mt. Rose Avenue)	Major Collector	Minor Collector	Major Collector
Cambridge Road	Minor Collector	Minor Collector	Local
Stonewood Road	Minor Collector	Minor Collector	Major Collector
Northern Way (North of E. Market Street)	Major Collector	Minor Collector	Major Collector
Industrial Highway (East of Haines Road)	Major Collector	Minor Collector	Major Collector
Concord Road (West of PA 24)	Major Collector	--	Major Collector
Eastern Boulevard (East of Locust Grove Road)	Major Collector	--	Local
Davies Road Extension	Major Collector	--	--
Mt. Zion Road (PA 24; Between Pleasant Valley Road and US 30)	Major Arterial	Minor Arterial	Minor Arterial
All other roads	Local	Local	Local

Sources: Springettsbury Township Comprehensive Plan (2006); PennDOT One Map

Springettsbury Township Functional Classification

Draft May 2019



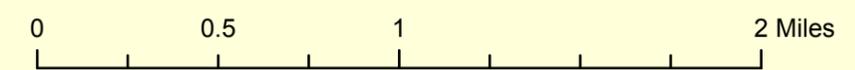
Legend

- Interstate 83
- Other Expressways
- Major Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local Roads
- - - New Road Construction

US 30 Long Term Vision - Convert to Expressway

New Roadway Connections:

1. Davies Road Extension to Market Street
2. Barwood Road Extension to Deininger Road
3. North Hills Road to North East Street
4. North Hills Road to Eleventh Avenue
5. Arsenal Road to Eden Road
6. Eden Road to North Sherman Street



C | Additional Land Use Tools

A zoning ordinance and a subdivision and land development ordinance are only two tools that municipalities in Pennsylvania have to guide the development of the built environment in their community. Two additional tools that are enabled by the Pennsylvania Municipalities Planning Code (MPC) that Springettsbury Township may wish to consider are the Official Map and Transportation Impact Fees.

Official Map

These are a combined map and ordinance that help municipalities prioritize investments in infrastructure. An official map may show the location of planned transportation facilities, recreational parks and trails, and open space within a community. The official map expresses the municipality's interest in acquiring land for a future public purpose, but it does not require the municipality to take any action. Features that may be identified on an official map include, but are not limited to:

- Proposed roadway improvements; including new roadways, extensions, widening, etc.
- Proposed pedestrian and bicycle facilities
- Proposed parks and open spaces

Transportation Impact Fees

Transportation Impact Fees are assessed to new development in proportion to its impact on the transportation network. Funds collected must be used to implement improvements identified in a Transportation Capital Improvement Plan. Transportation Impact Fee ordinances are often referred to as Act 209 ordinances; referring to PA Act 209 of 1990 which amended the MPC to enable municipalities to enact a Transportation Impact Fee.

A Transportation Capital Improvement Plan generally requires a detailed traffic analysis to identify the improvements that are expected to be required based on projected development and base future traffic growth. Pedestrian, bicycle, and transit improvements cannot be funded with money collected via a Transportation Impact Fee ordinance.

A | Priority Projects

Ten priority projects that would have a transformative effect on the transportation network in Springettsbury Township were identified. These projects include multimodal infrastructure, safety improvements, operational improvements, and new roadway connections.

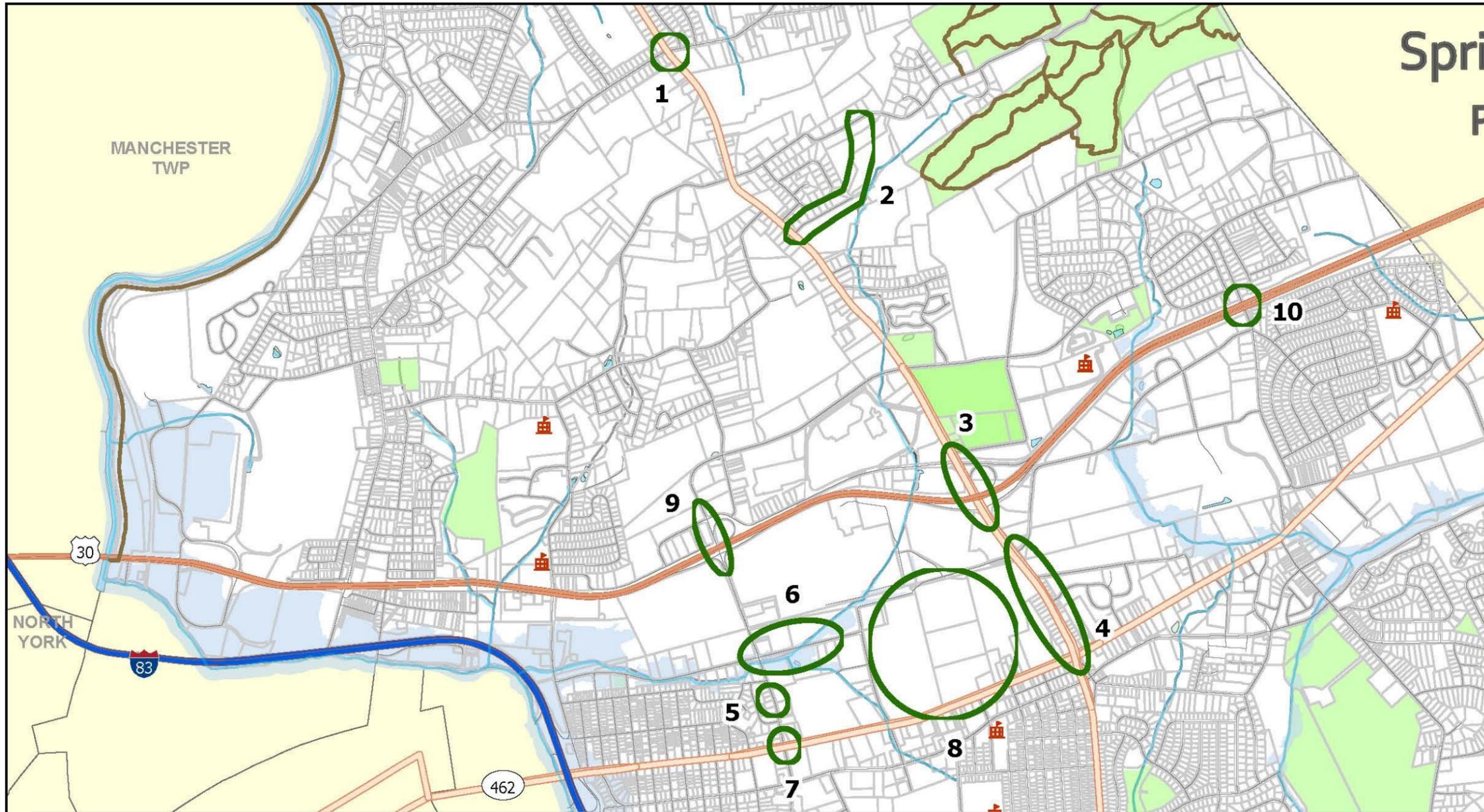
These ten projects were prioritized by the project steering committee as follows:

1. Mt. Zion Road / Druck Valley Road—left turn lanes on Mt. Zion Road and side street turning restrictions
2. Mt. Zion Road / Colonial Farm Lane—roundabout and new road connection to Deininger Road
3. Mt. Zion Road / Route 30 Interchange Area—sidewalks and pedestrian signals
4. Mt. Zion Road: Concord Road to Market Street—continuous sidewalks and pedestrian signals
5. Memory Lane Near Eastern Market—sidewalks and improved access management
6. Memory Lane / Industrial Highway—sidewalks along Industrial Highway and pedestrian signals
7. Memory Lane / Market Street—traffic signal upgrades and improved crosswalks
8. Town Center Area—improved pedestrian connections (sidewalks, crosswalks, etc.)
9. Memory Lane / Route 30 Interchange Area—sidewalks and crosswalks
10. Pleasant Acres Road under Route 30—pedestrian connection

Concept plans and cost estimates were developed for many of the projects on this list. The map on the following page illustrates the ten projects and identifies their priority and overall estimated cost for implementation. The concept plans follow the map.

Springettsbury Township will need to take a phased approach to implementing these projects to best utilize available resources. Implementation options are identified in **Chapter 6 | Action Plan**.

Springettsbury Township Priority Project Ranking



- Legend
- Trails
 - Streams
 - Ponds
 - Floodplains
 - Parks
 - Schools
 - Priority Projects

Rank	Project	Description	Cost Estimate
1	Mt. Zion Road / Druck Valley Road	Left-turn lanes, side street restrictions	\$927,000
2	Mt. Zion Road / Colonial Farm Lane	Roundabout and new road connection to Deiningen Road	\$4,212,300
3	Mt. Zion Road / Route 30 Interchange Area	Sidewalks and pedestrian signals	\$1,185,500
4	Mt. Zion Road: Concord Road to Market Street	Continuous sidewalks and pedestrian signals	\$3,973,100
5	Memory Lane near Eastern Market	Sidewalks and improved access management	\$1,404,000
6	Memory Lane / Industrial Highway	Sidewalks along Industrial Highway and pedestrian signals	\$1,922,800
7	Memory Lane / Market Street	Traffic signal upgrades and improved crosswalks	<i>(estimate combined)</i>
8	Town Center	Improved pedestrian connections (sidewalks, crosswalks, etc.)	<i>(no estimate prepared)</i>
9	Memory Lane / Route 30 Interchange Aea	Sidewalks and crosswalks	\$1,281,500
10	Pleasant Acres Road under Route 30	Pedestrian connection	<i>(no estimate prepared)</i>

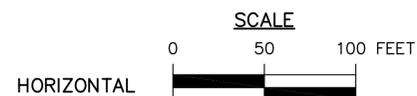
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SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



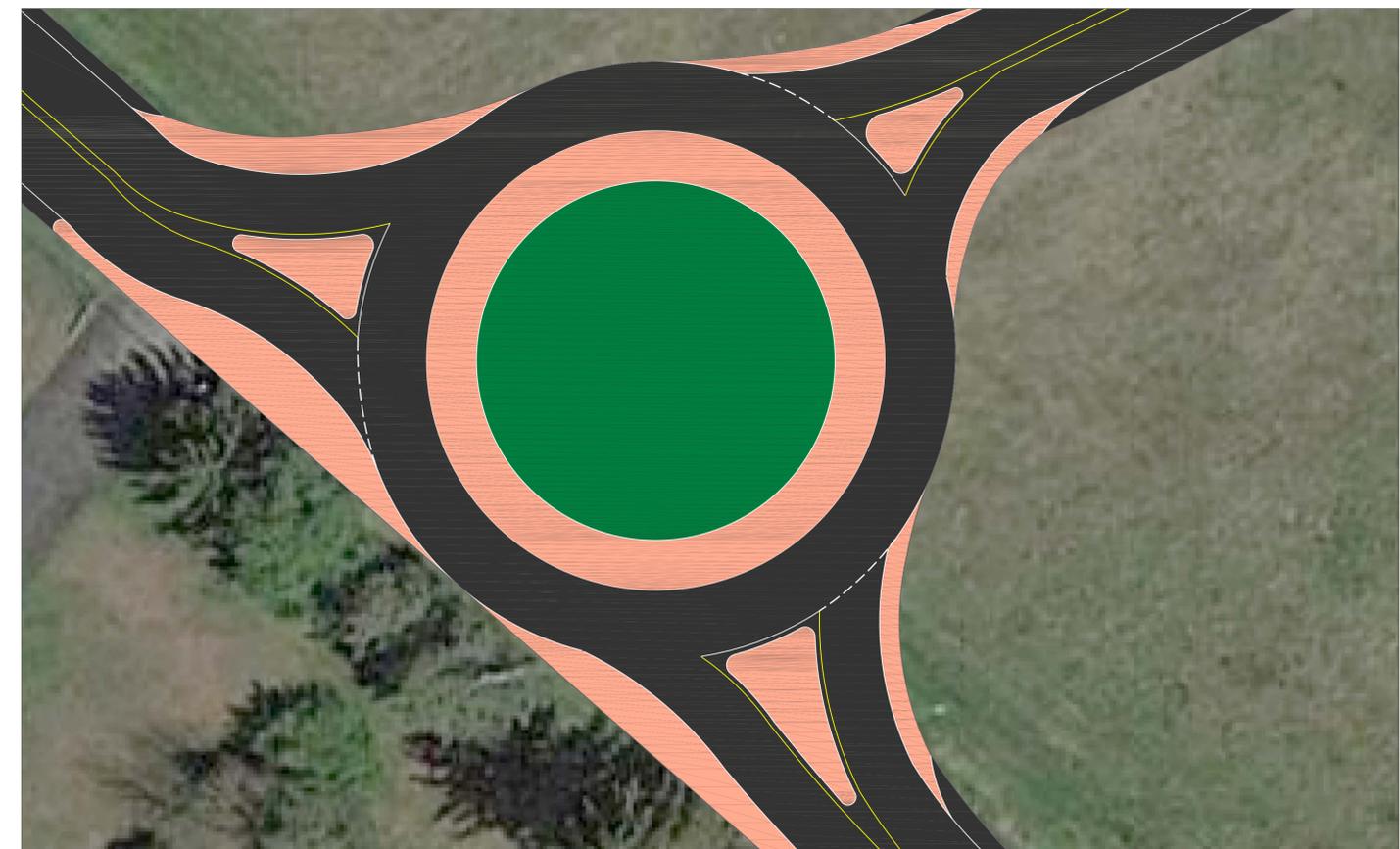
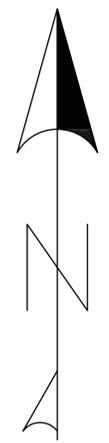
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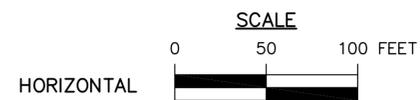
MT. ZION RD (SB) MT. ZION RD LEFT TURN TO DRUCK VALLEY RD MT. ZION RD (NB)



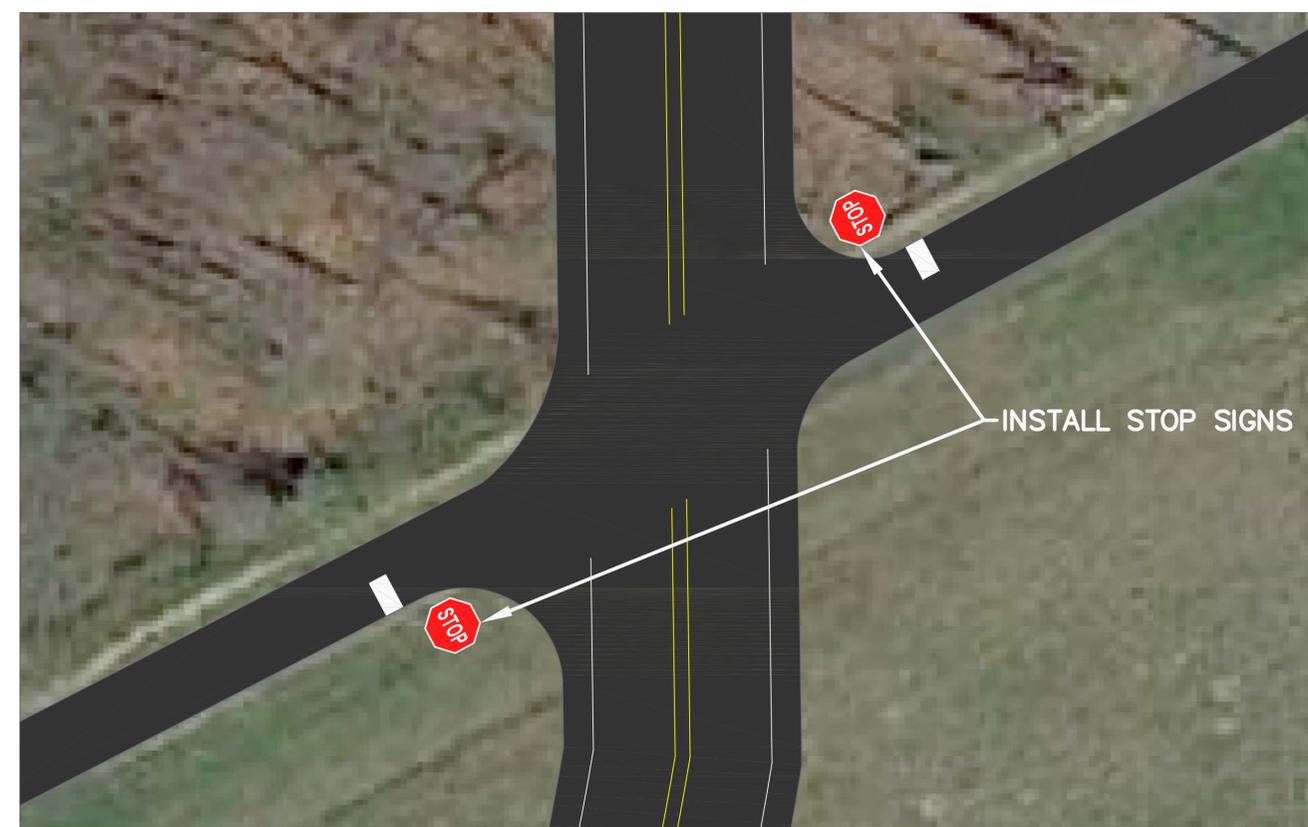
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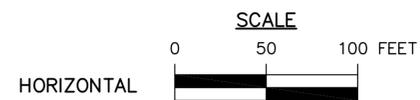
MT. ZION RD ROUNDABOUT



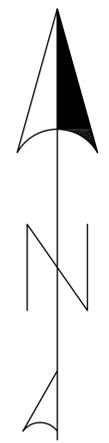
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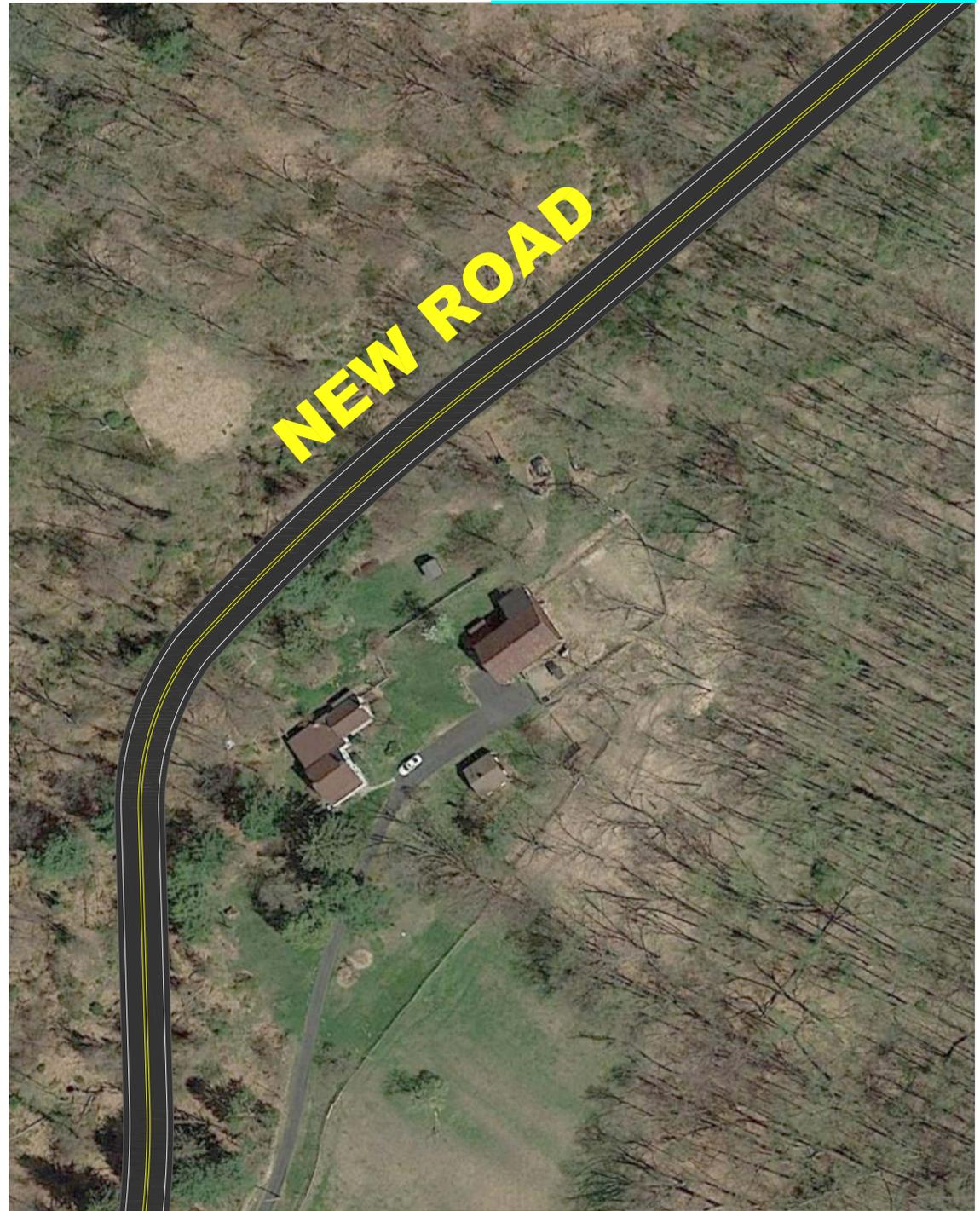
MT. ZION RD AND BARWOOD RD INTERSECTION



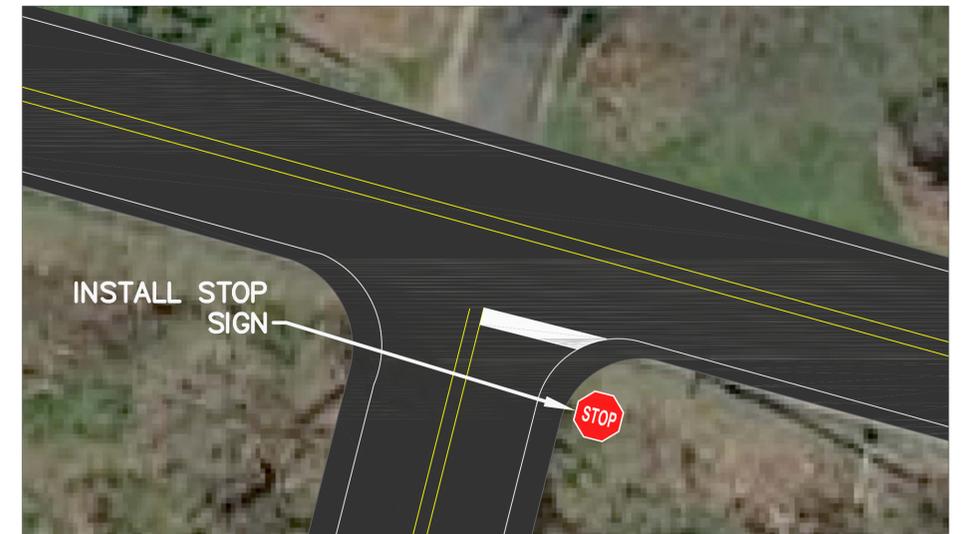
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REVISION NUMBER	REVISIONS	DATE	BY	



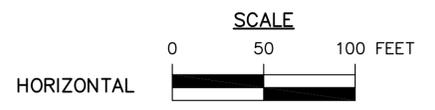
CONTINUE TO DEININGER RD



NEW ROAD CONTINUED



NEW ROAD AND DEININGER RD INTERSECTION

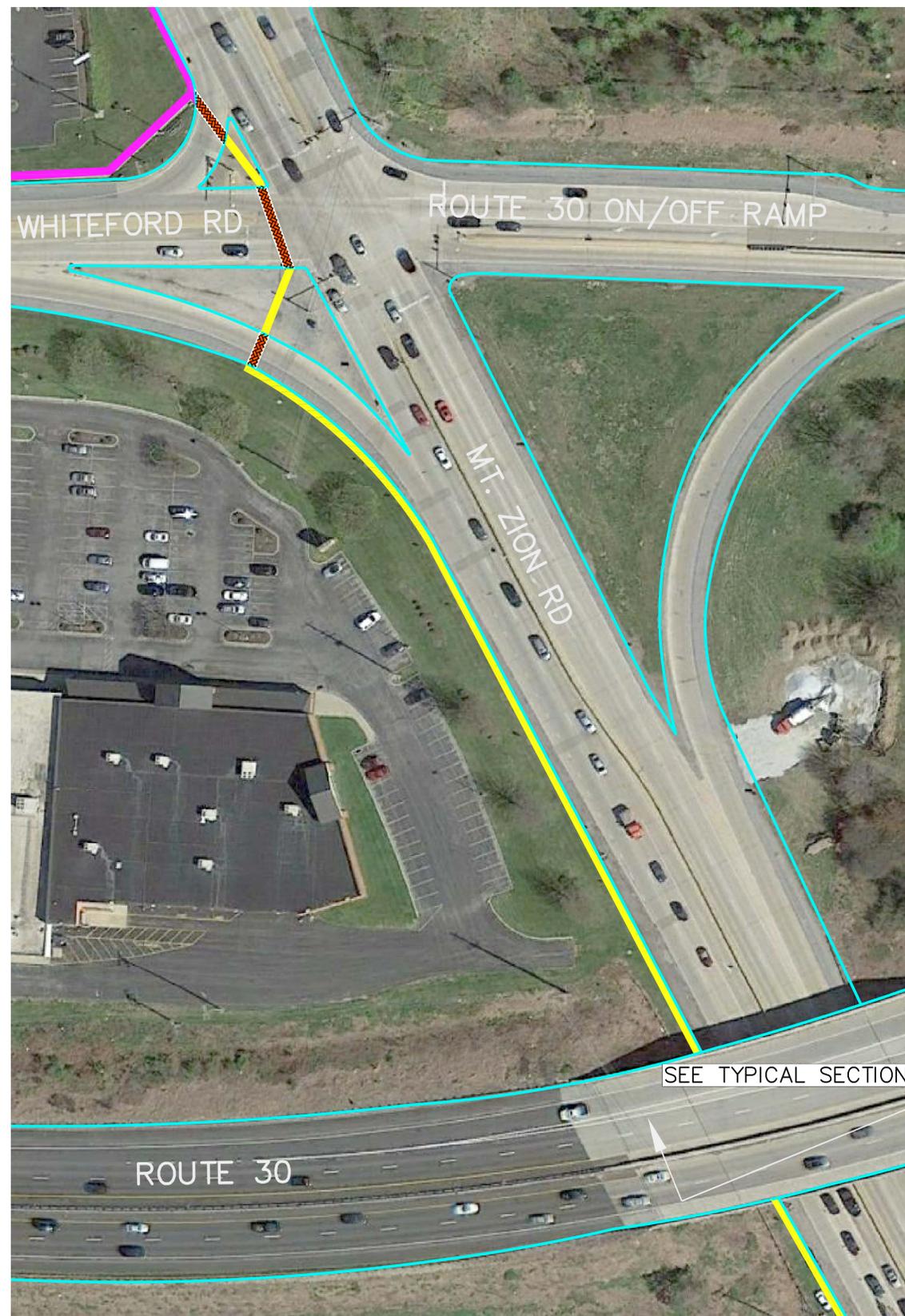


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REVISION NUMBER	REVISIONS	DATE	BY	

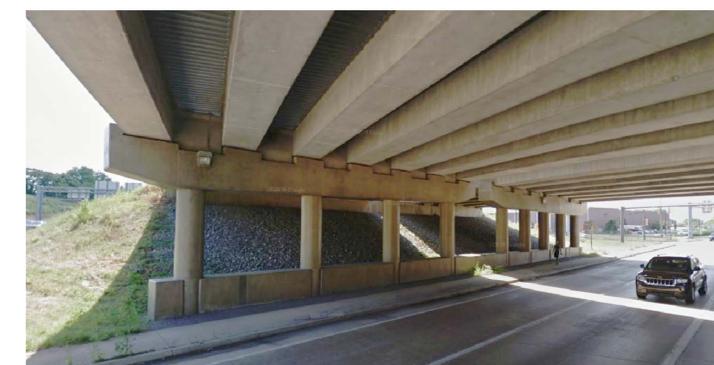
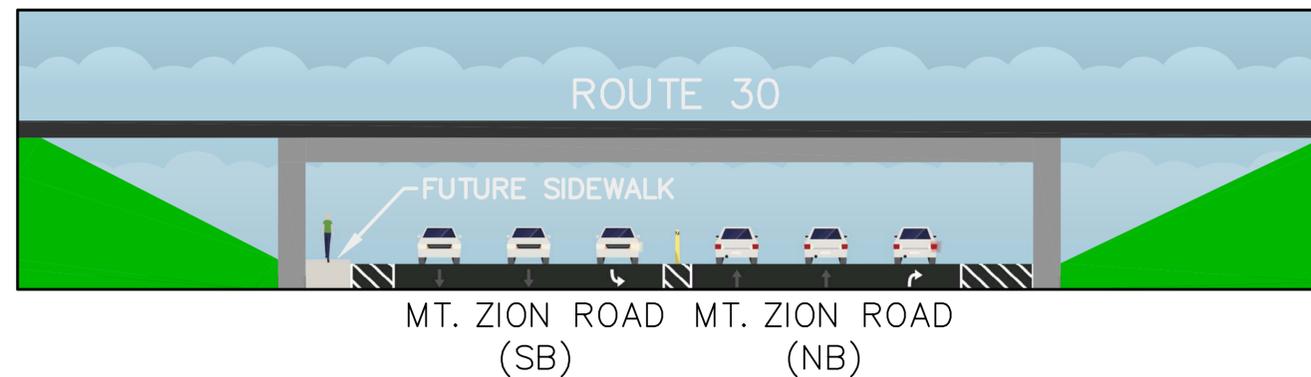
LEGEND

 PROPOSED SIDEWALK

 EXISTING SIDEWALK

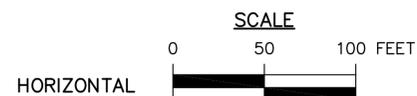


ROUTE 30 UNDERPASS

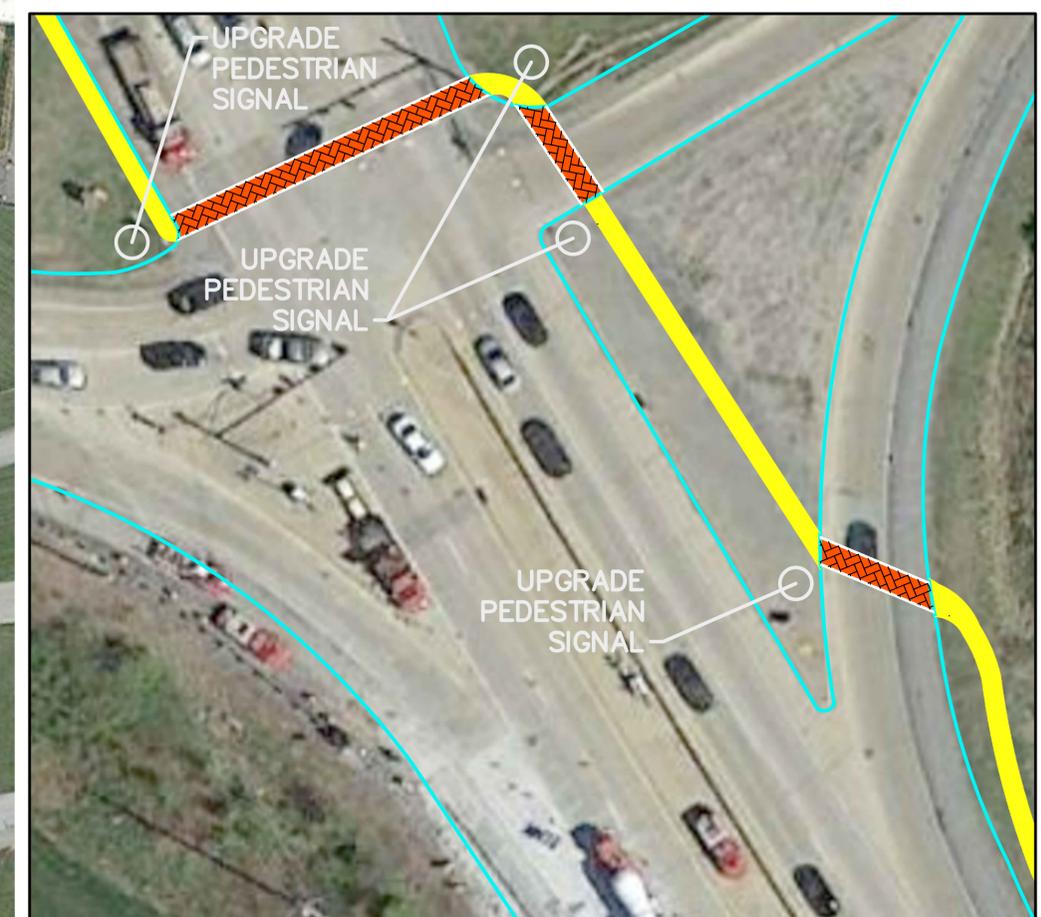
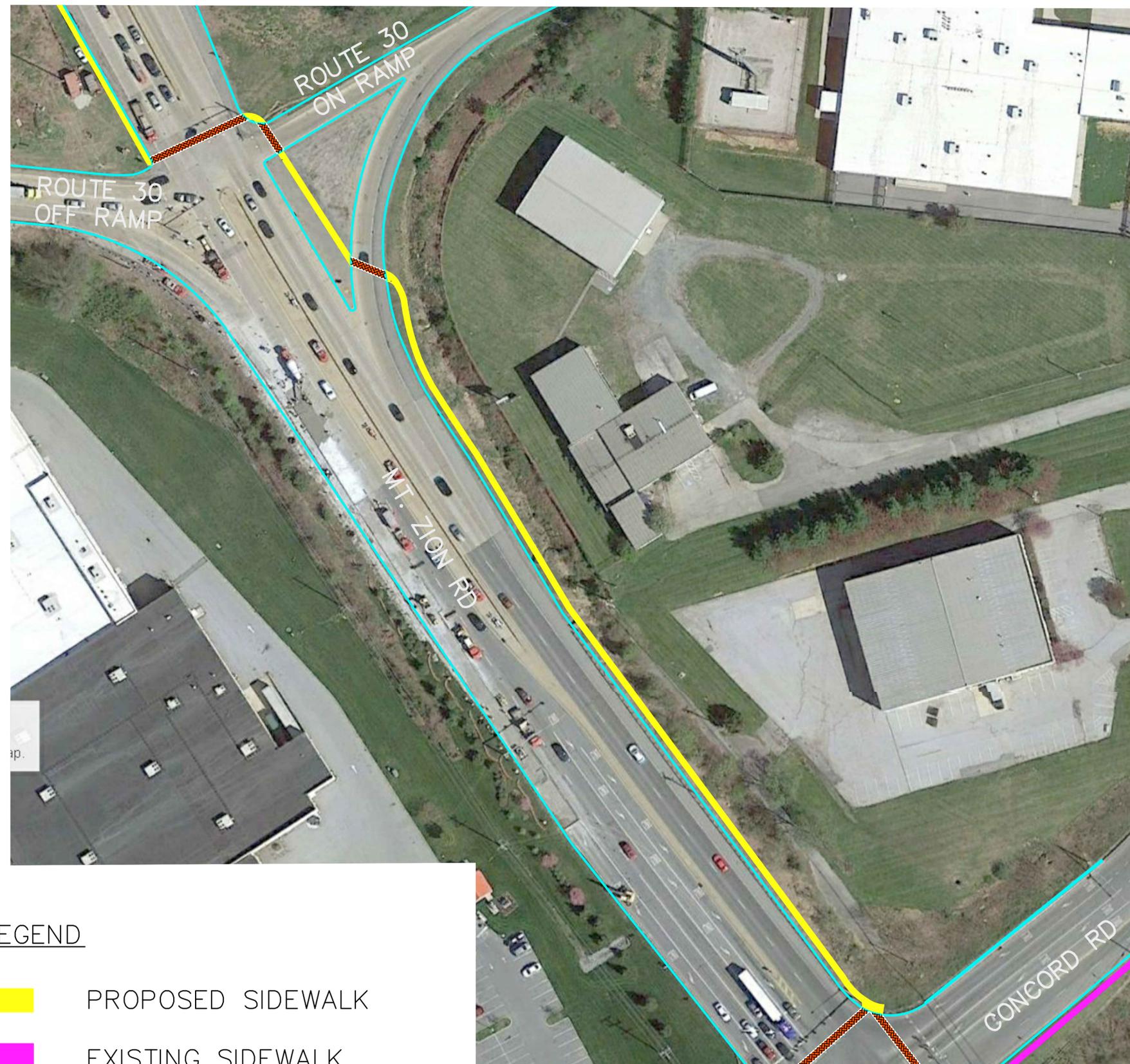


EXAMPLE ON LITIZ PIKE AND ROUTE 30 IN LANCASTER COUNTY, PA
ROUTE 30 UNDERPASS BARRIER BETWEEN PIER EXAMPLE

DECORATIVE CROSSWALK EXAMPLE



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	YORK	0024	-	01 OF 01
SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



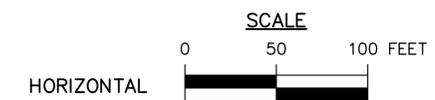
ROUTE 30 ON RAMP/OFF RAMP AND MT. ZION ROAD INTERSECTION

DECORATIVE CROSSWALK EXAMPLE

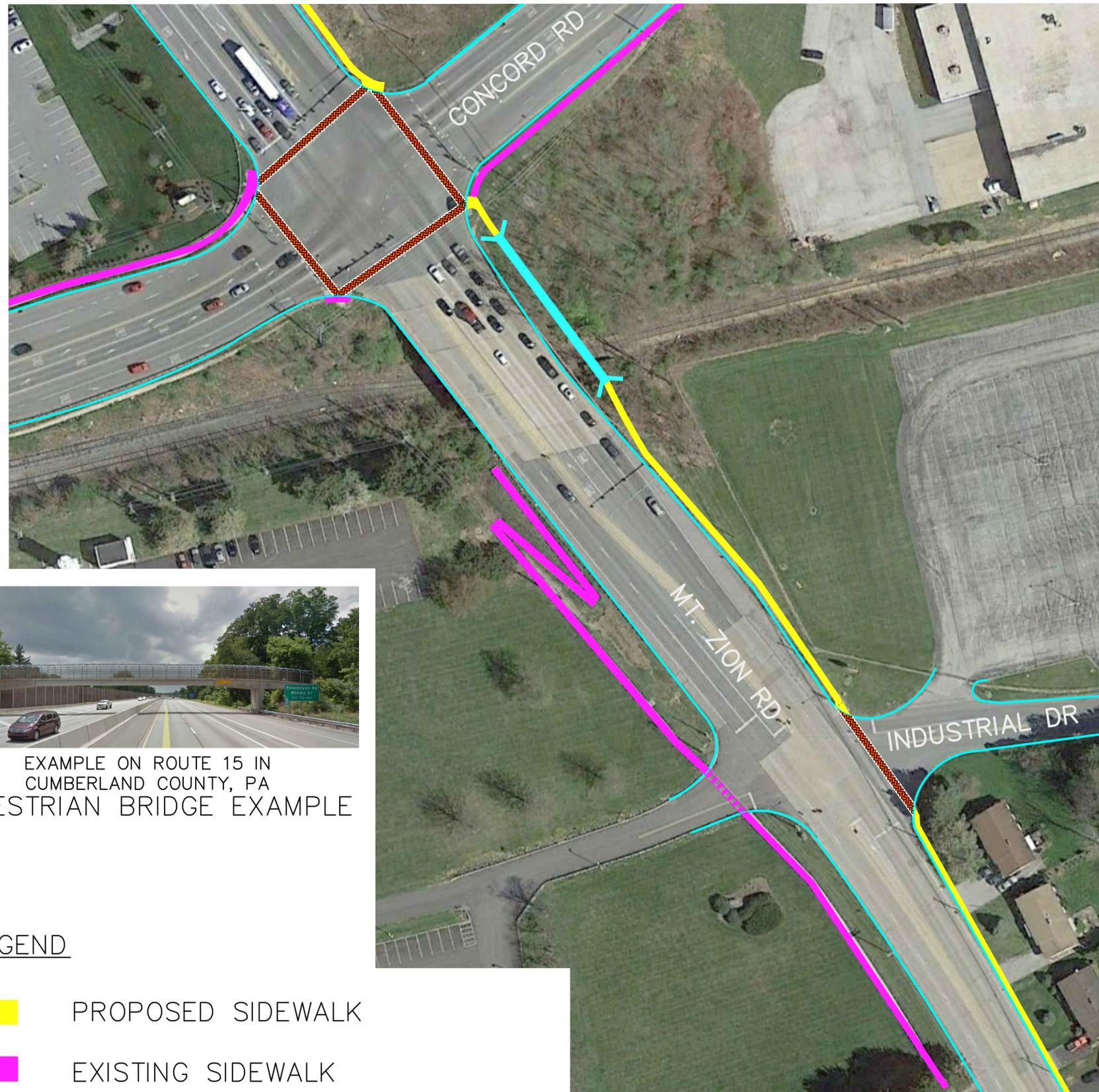


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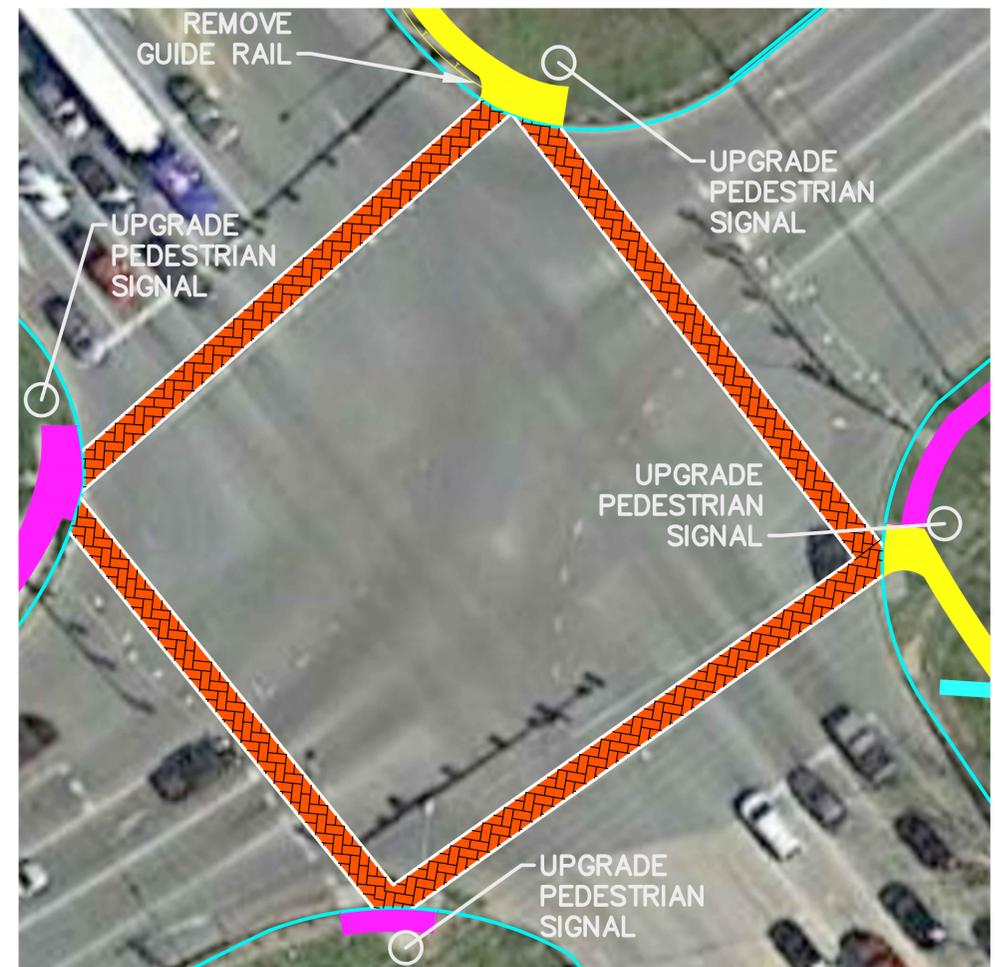
- PROPOSED SIDEWALK
- EXISTING SIDEWALK



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	YORK	0024	-	01 OF 01
SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



EXAMPLE ON ROUTE 15 IN CUMBERLAND COUNTY, PA
PEDESTRIAN BRIDGE EXAMPLE



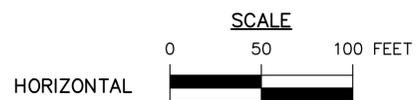
MT. ZION ROAD AND CONCORD ROAD INTERSECTION

DECORATIVE CROSSWALK EXAMPLE

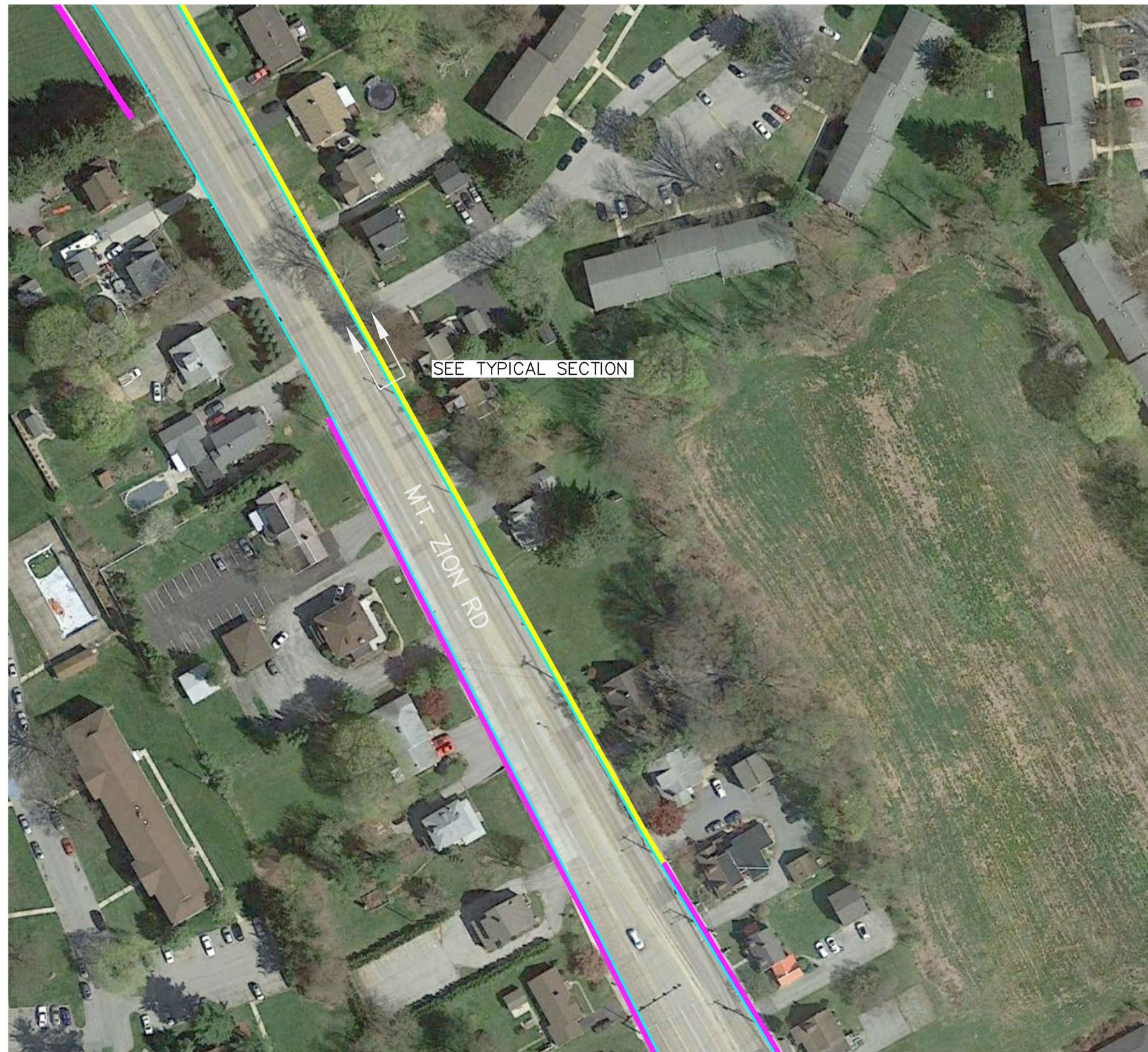


LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED PEDESTRIAN BRIDGE



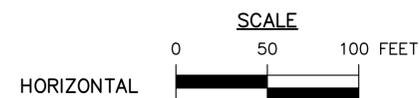
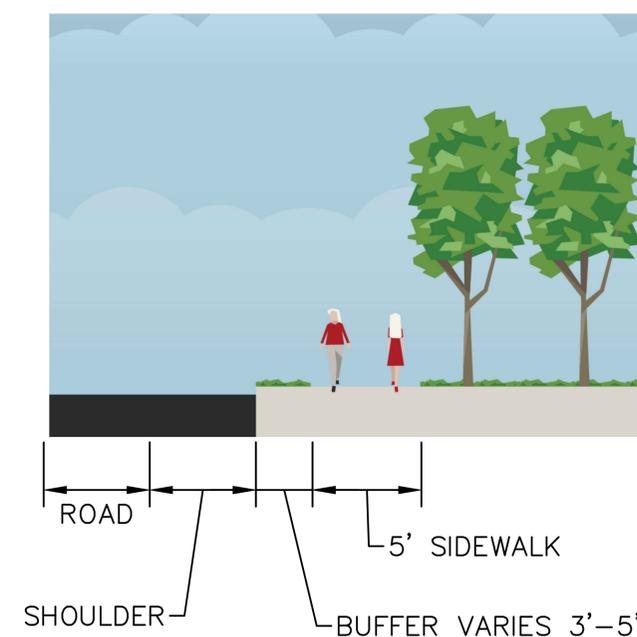
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8-0	YORK	0024	-	01 OF 01	
SPRINGETTSBURY TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY



LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK

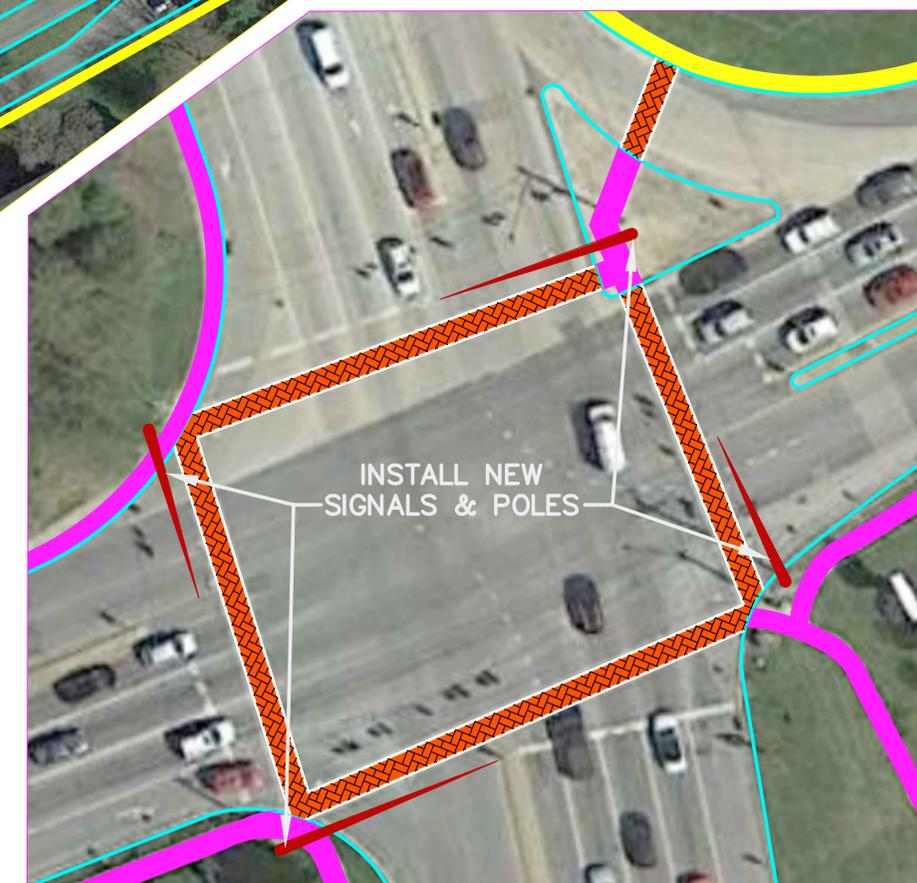
TYPICAL SECTION



DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
8-0	YORK	0024	-	01 OF 01	
SPRINGETTSBURY TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK



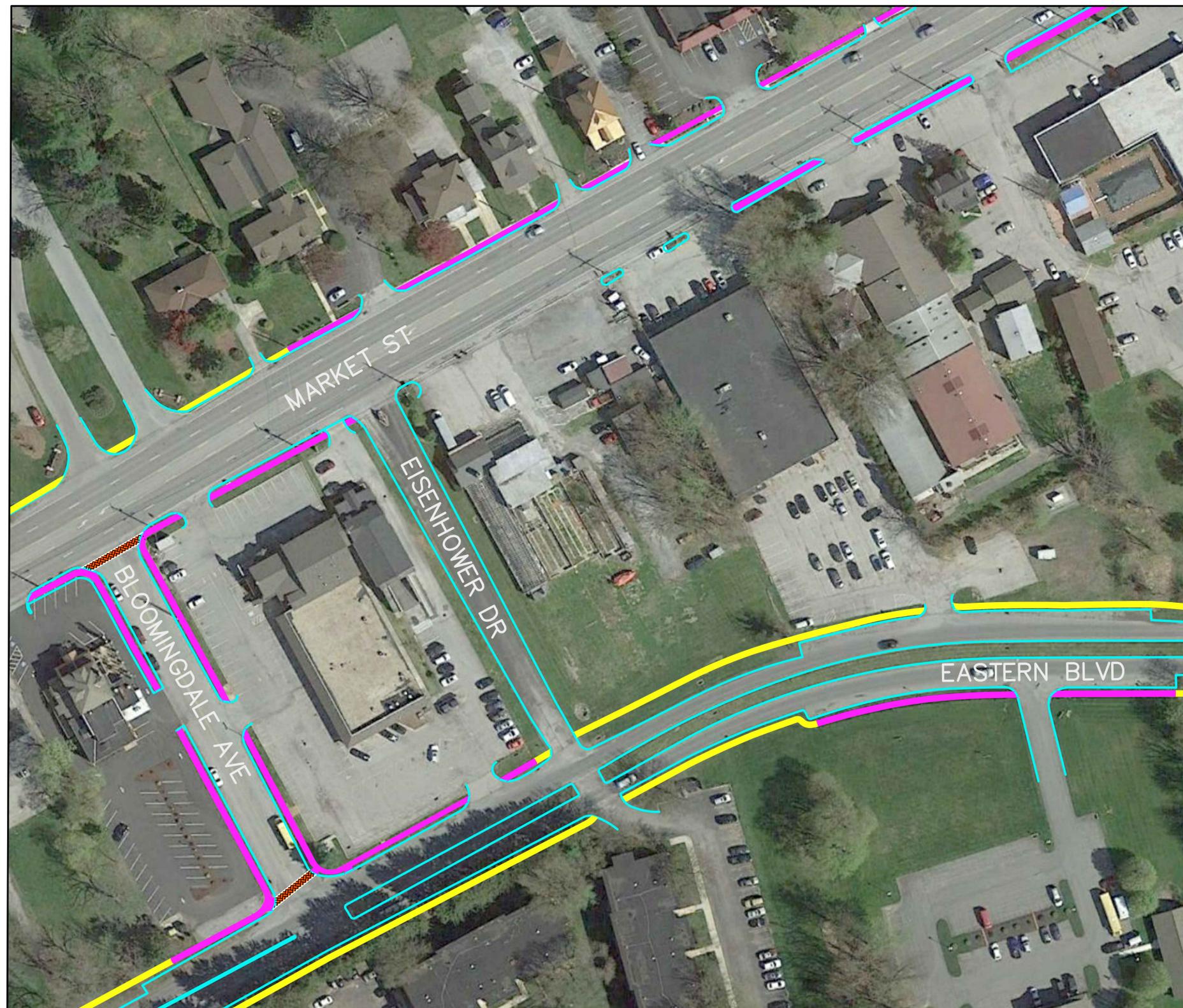
DECORATIVE CROSSWALK EXAMPLE



MT. ZION ROAD AND MARKET STREET INTERSECTION



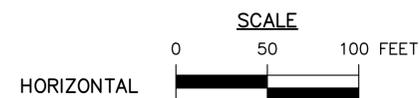
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SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



LEGEND

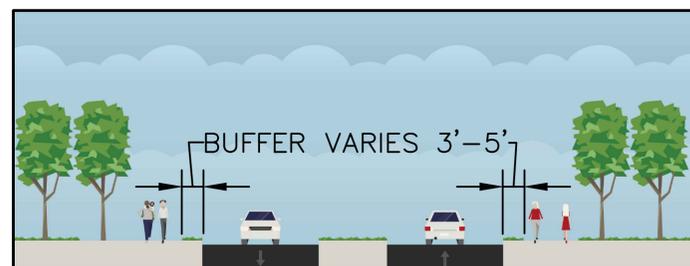
- PROPOSED SIDEWALK
- EXISTING SIDEWALK

DECORATIVE CROSSWALK EXAMPLE



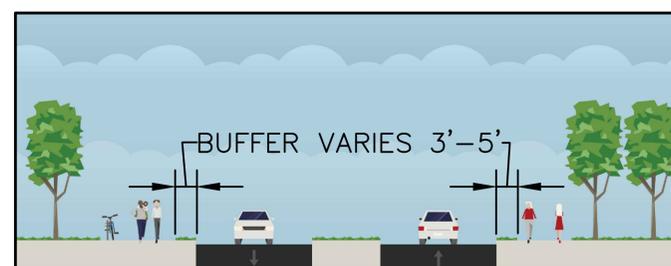
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8-0	YORK	0024	-	01 OF 01
SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

TYPICAL SECTION – OPTION 1



5' SIDEWALK → | ← 5' SIDEWALK
 ROAD | ROAD
 MEDIAN

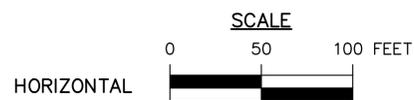
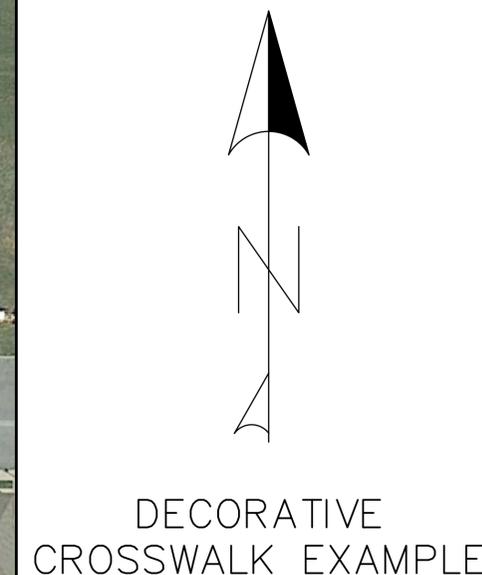
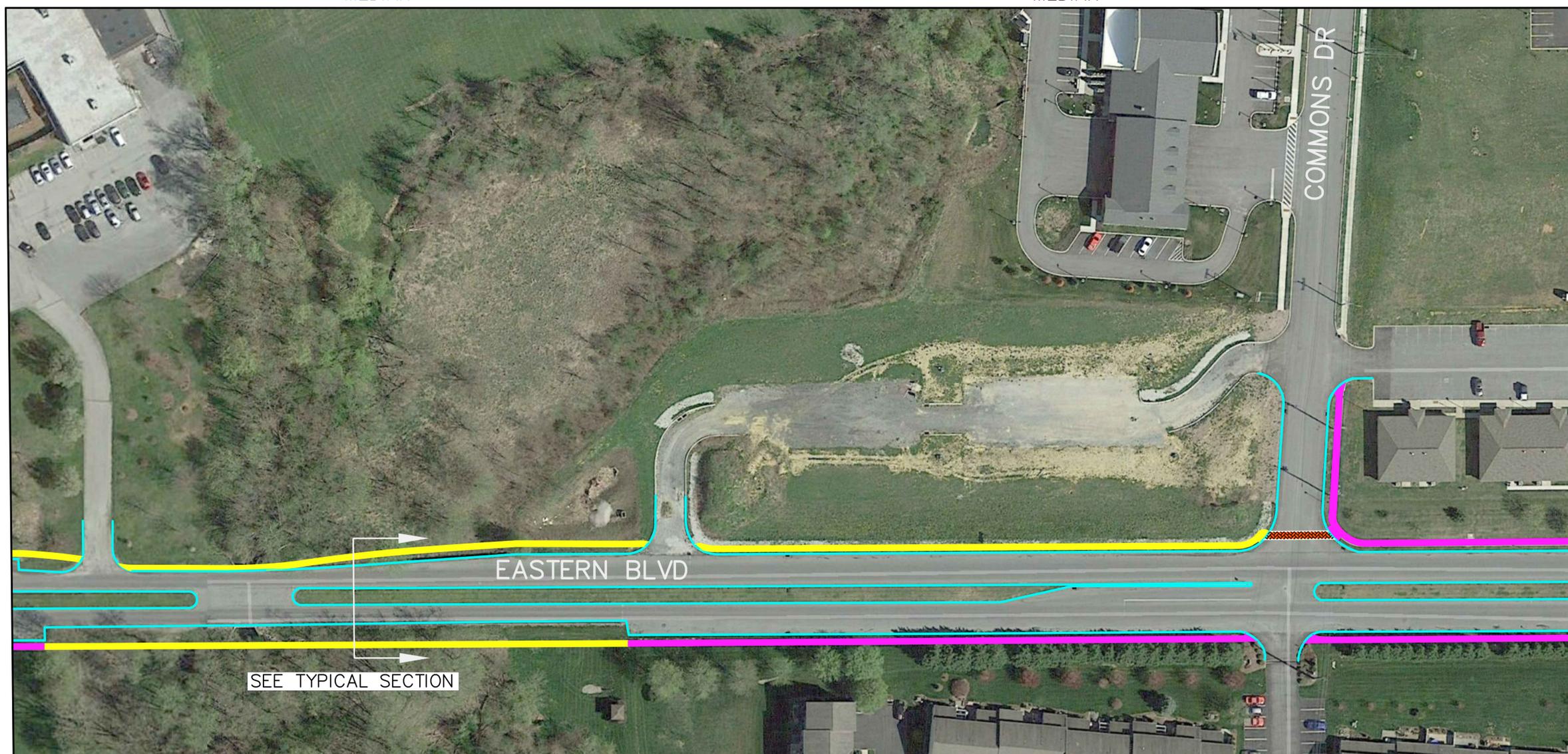
TYPICAL SECTION – OPTION 2



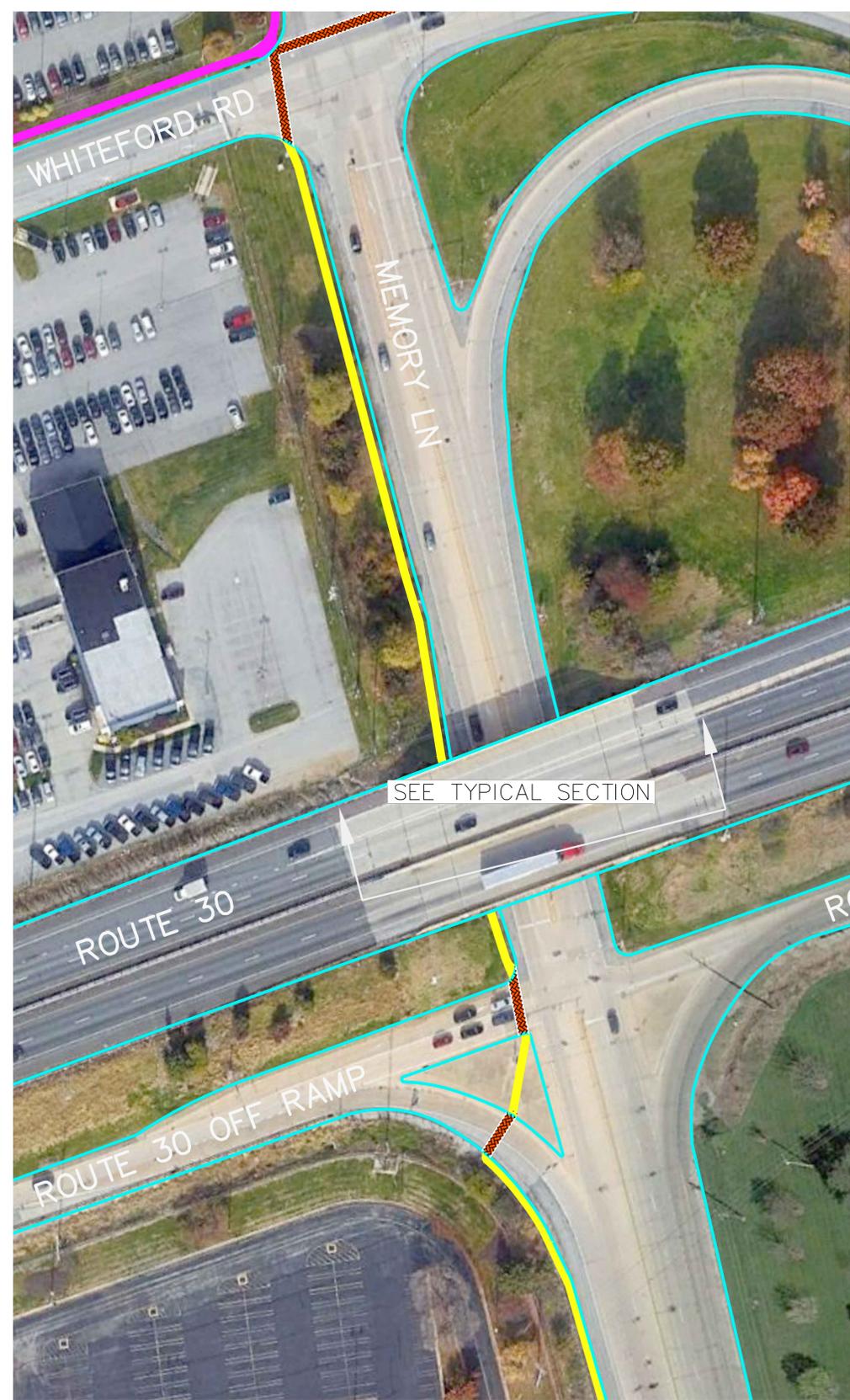
12' MULTIMODAL PATH | ROAD | ROAD
 MEDIAN | 5' SIDEWALK

LEGEND

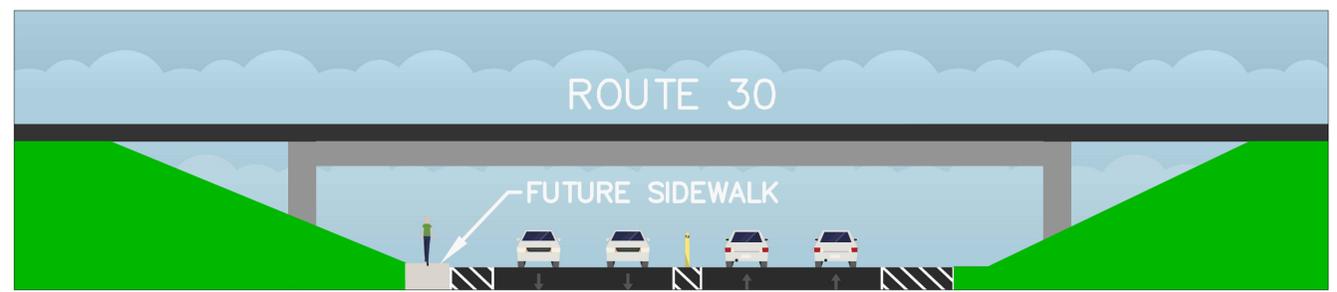
- PROPOSED SIDEWALK
- EXISTING SIDEWALK



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	YORK	0024	-	01 OF 01
SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

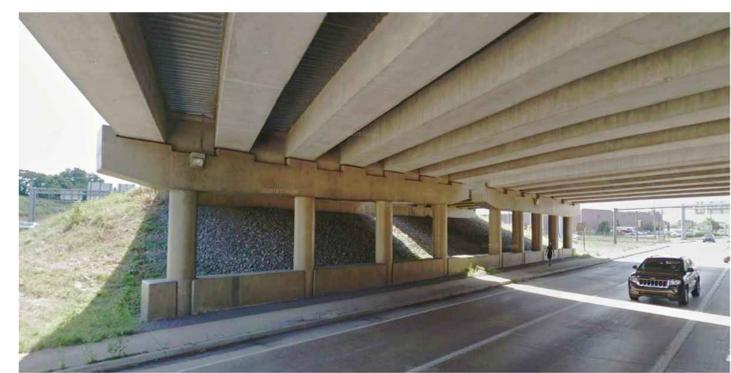


DECORATIVE CROSSWALK EXAMPLE



ROUTE 30 UNDERPASS

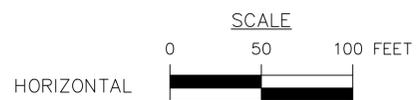
MEMORY ROAD (SB) MEMORY ROAD (NB)



EXAMPLE ON LITIZ PIKE AND ROUTE 30 IN LANCASTER COUNTY, PA
ROUTE 30 UNDERPASS BARRIER BETWEEN PIER EXAMPLE

LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK



DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
8-0	YORK	0024	-	01 OF 01	
SPRINGETTSBURY TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

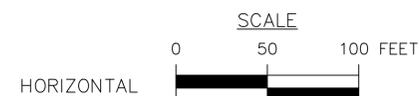
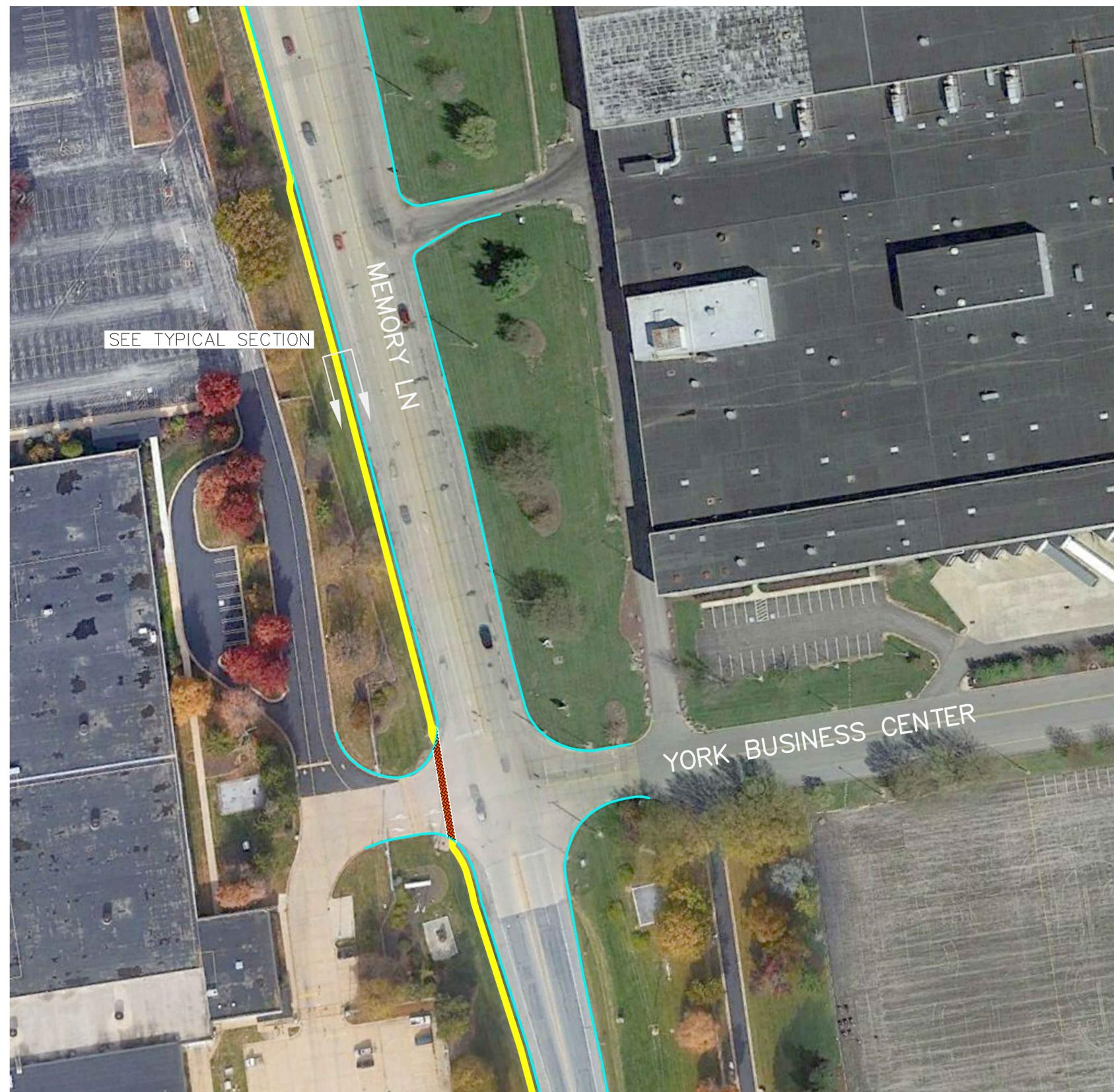
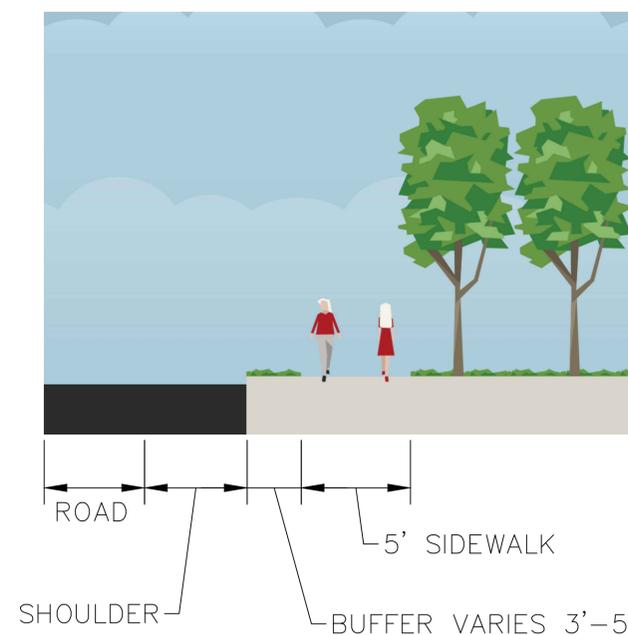
LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK

DECORATIVE CROSSWALK EXAMPLE



TYPICAL SECTION

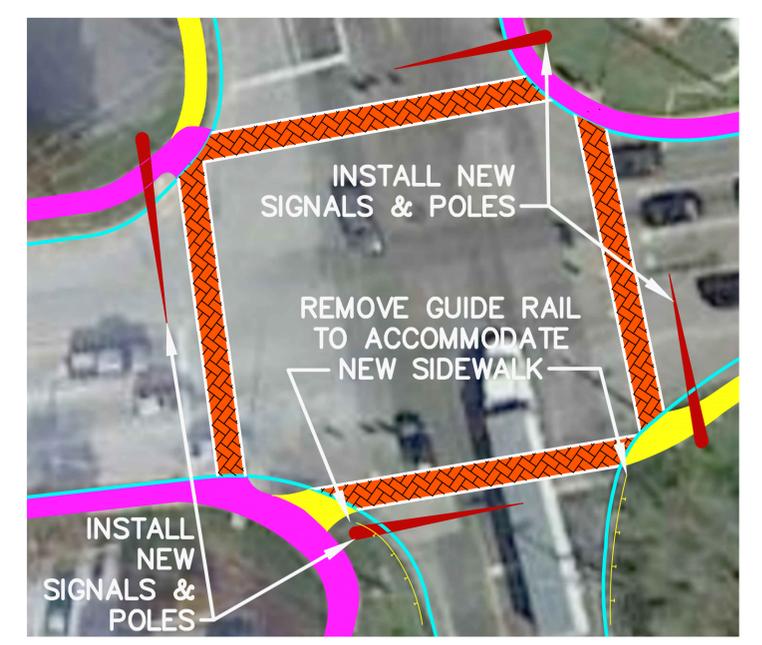
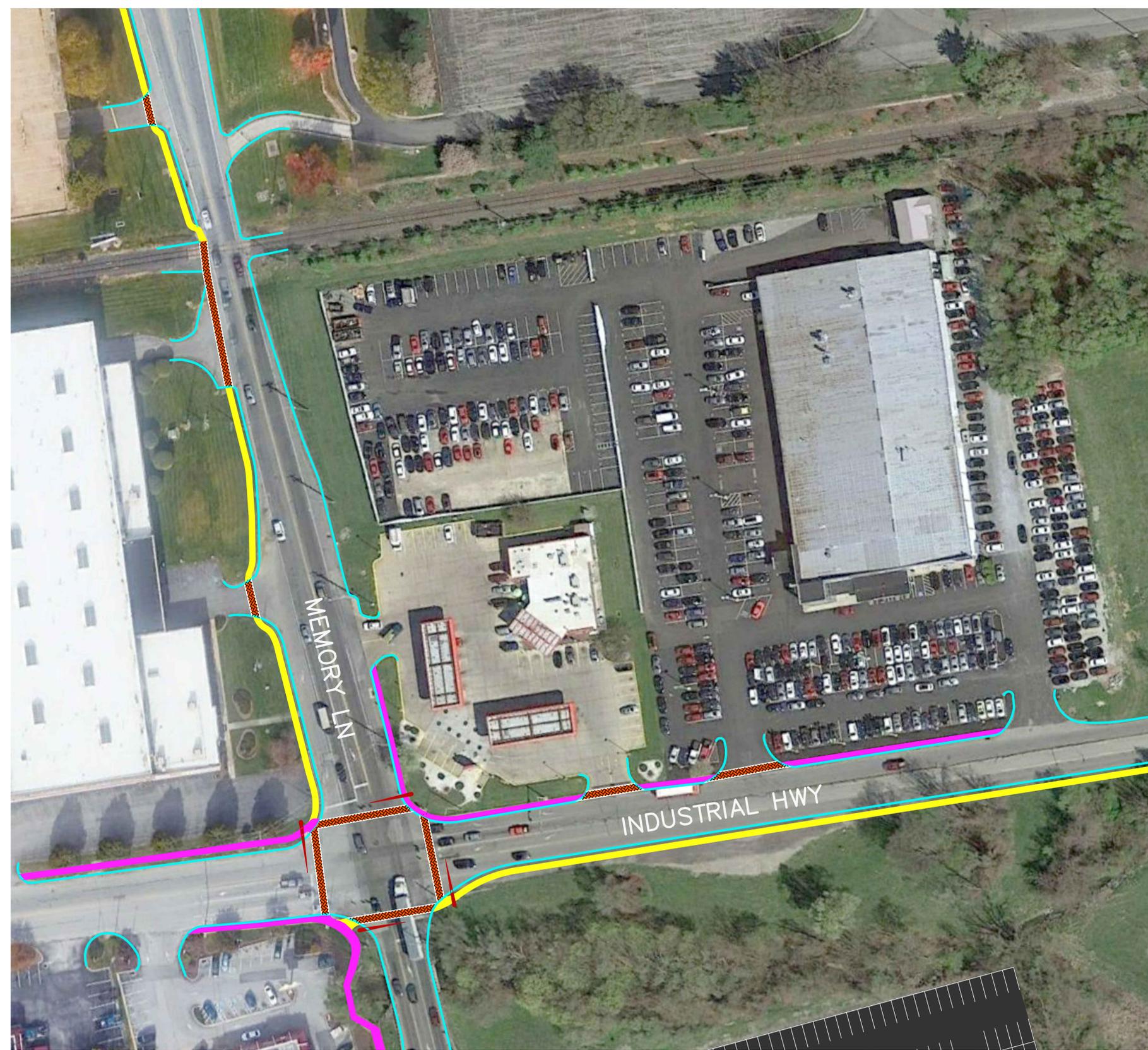


DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
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SPRINGETTSBURY TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

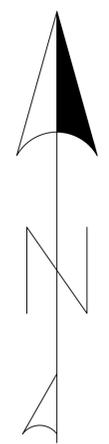
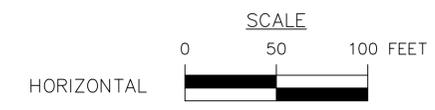
LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK

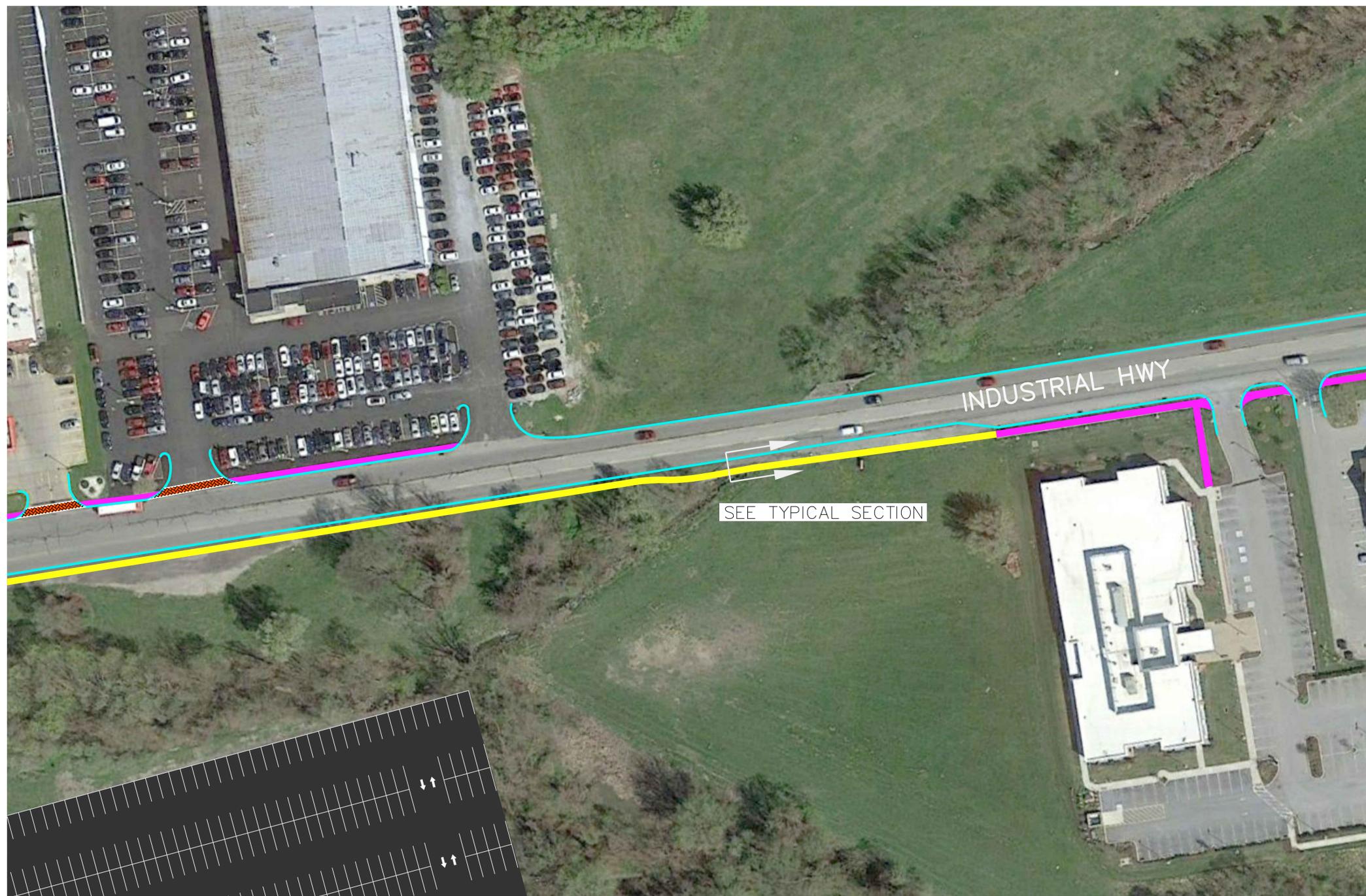
DECORATIVE CROSSWALK EXAMPLE



MEMORY LANE AND INDUSTRIAL HIGHWAY INTERSECTION



DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
8-0	YORK	0024	-	01 OF 01	
SPRINGETTSBURY TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY



LEGEND

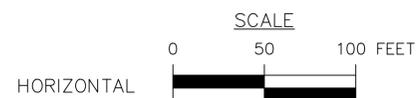
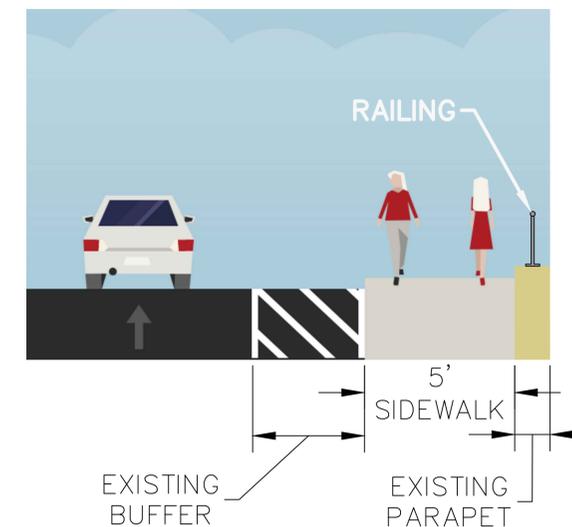
PROPOSED SIDEWALK

EXISTING SIDEWALK

DECORATIVE CROSSWALK EXAMPLE



TYPICAL SECTION



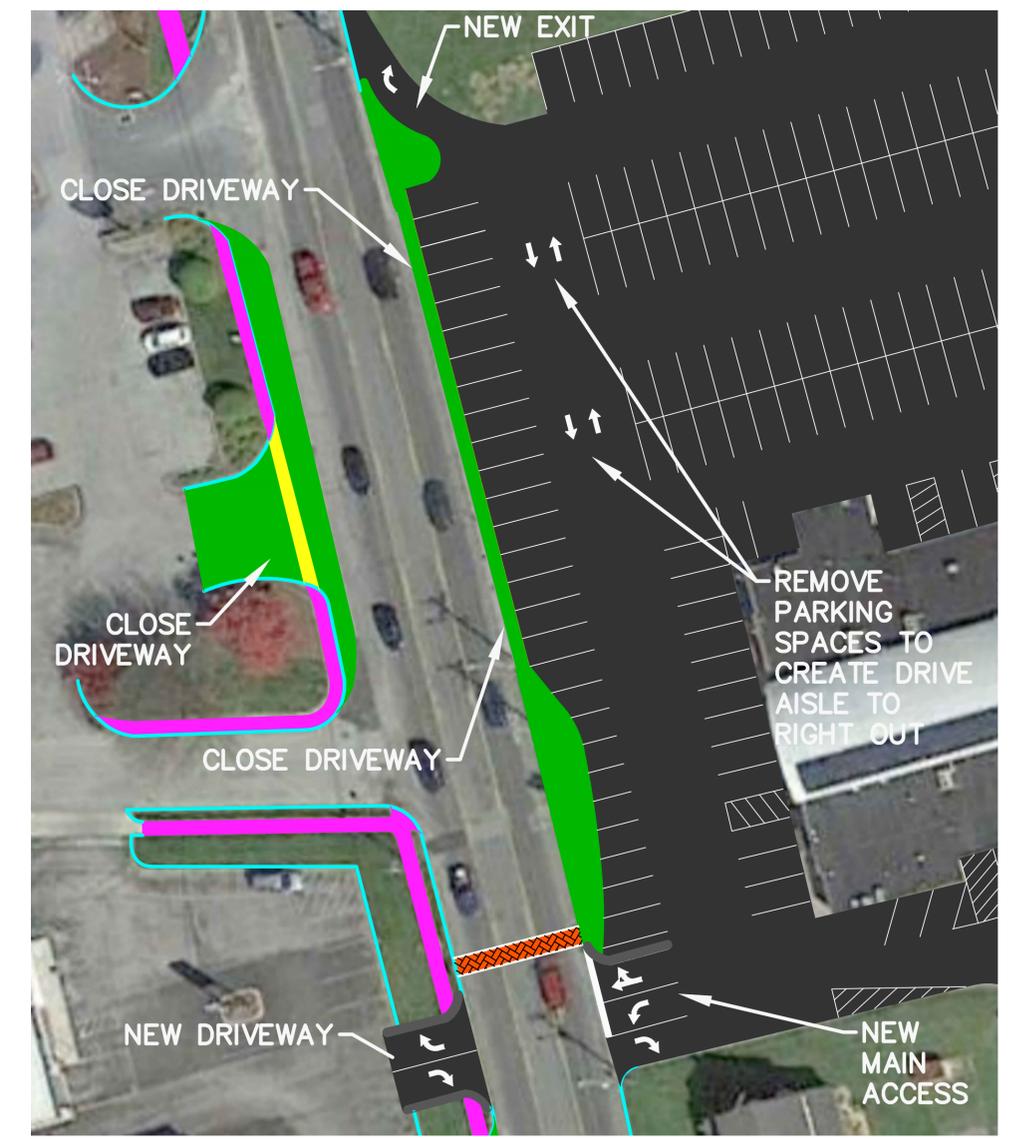
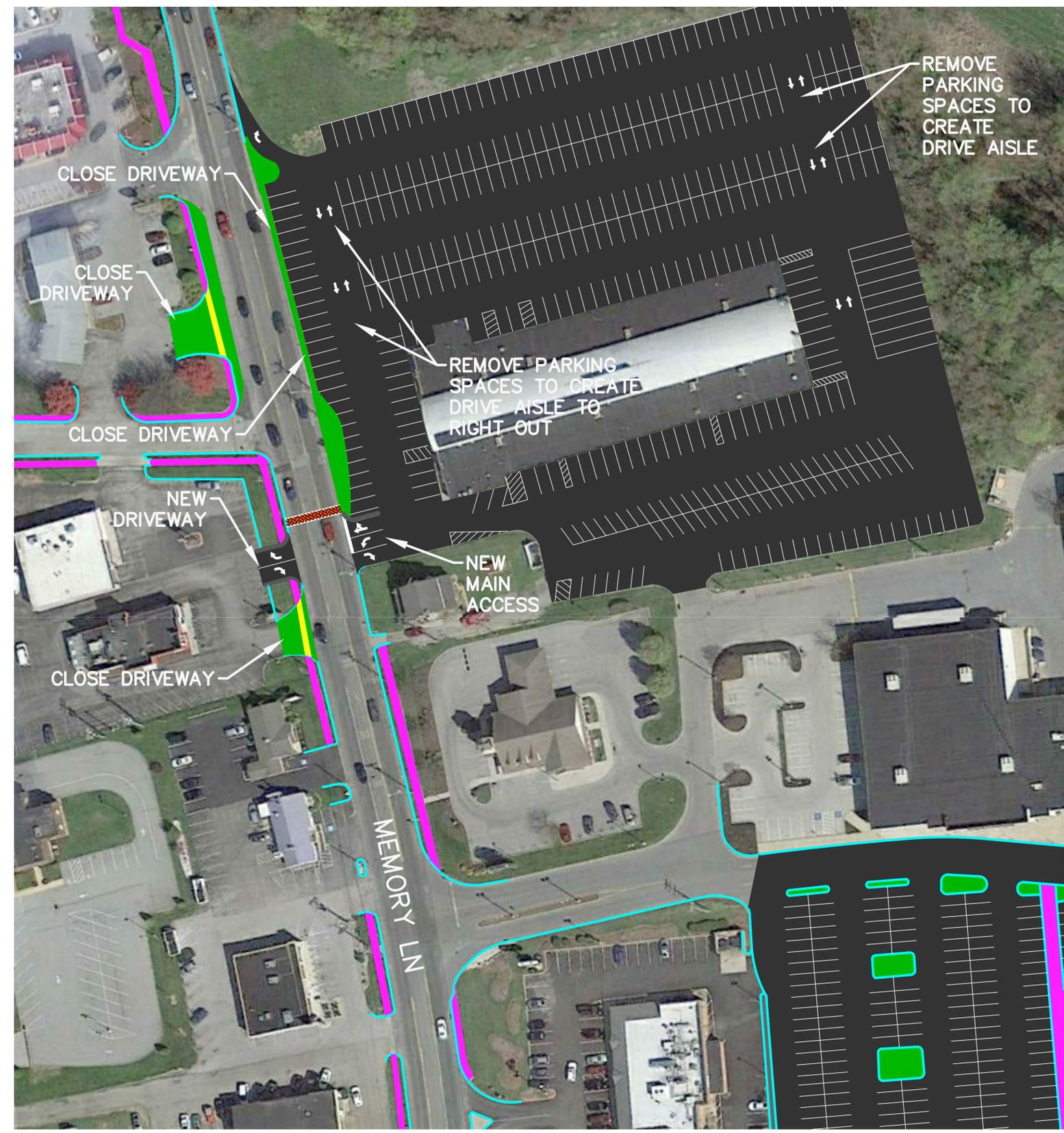
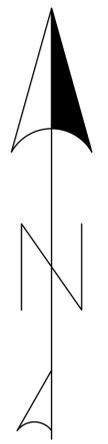
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SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

DECORATIVE CROSSWALK EXAMPLE

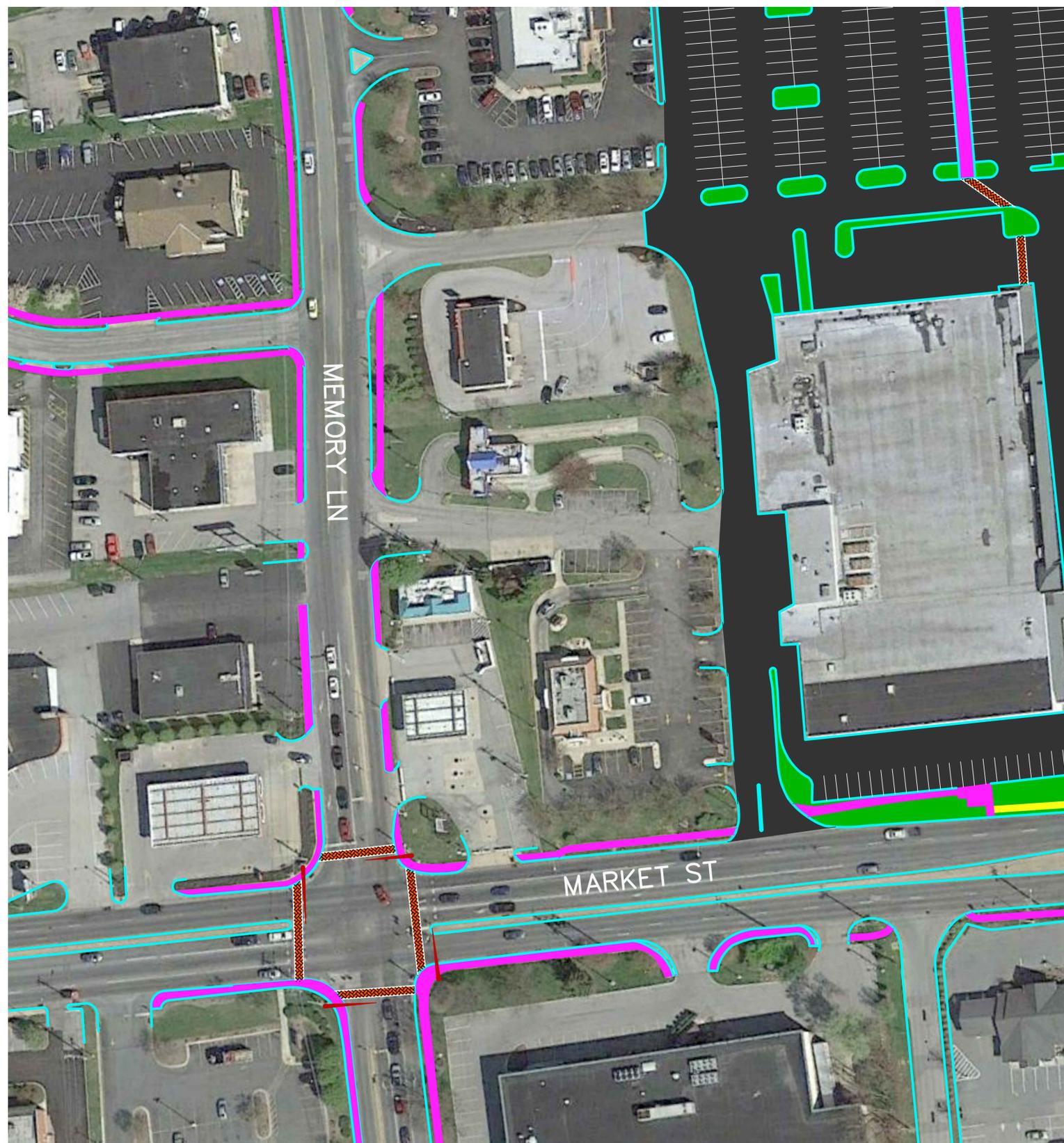


LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	YORK	0024	-	01 OF 01
SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK

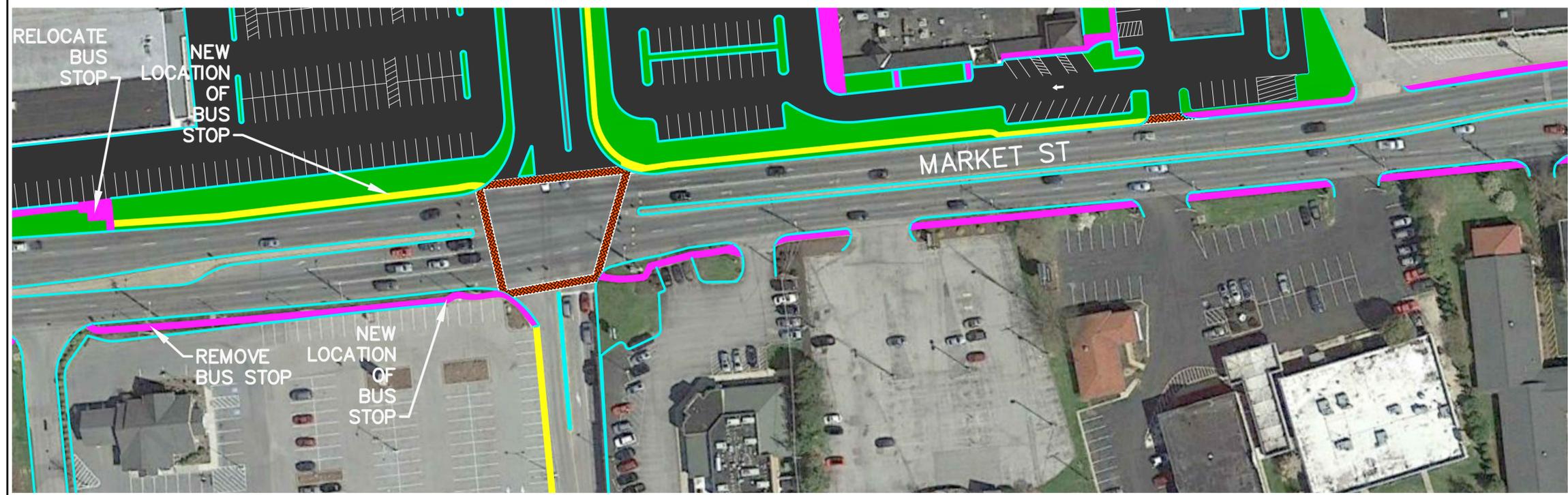
DECORATIVE CROSSWALK EXAMPLE



MEMORY LANE AND MARKET STREET INTERSECTION

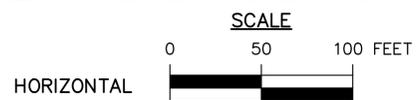
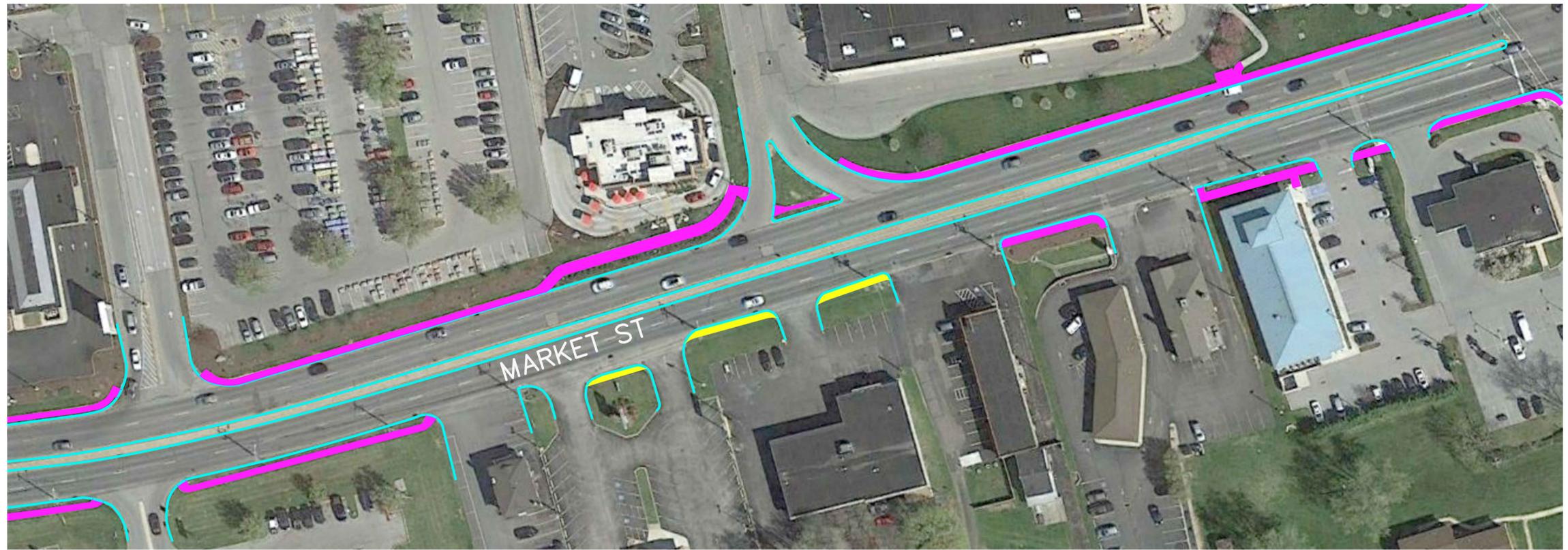


DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	YORK	0024	-	01 OF 01
SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	



LEGEND

- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- DECORATIVE CROSSWALK EXAMPLE

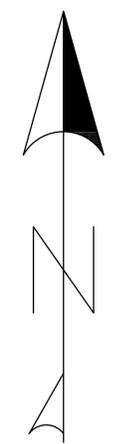
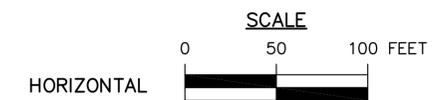
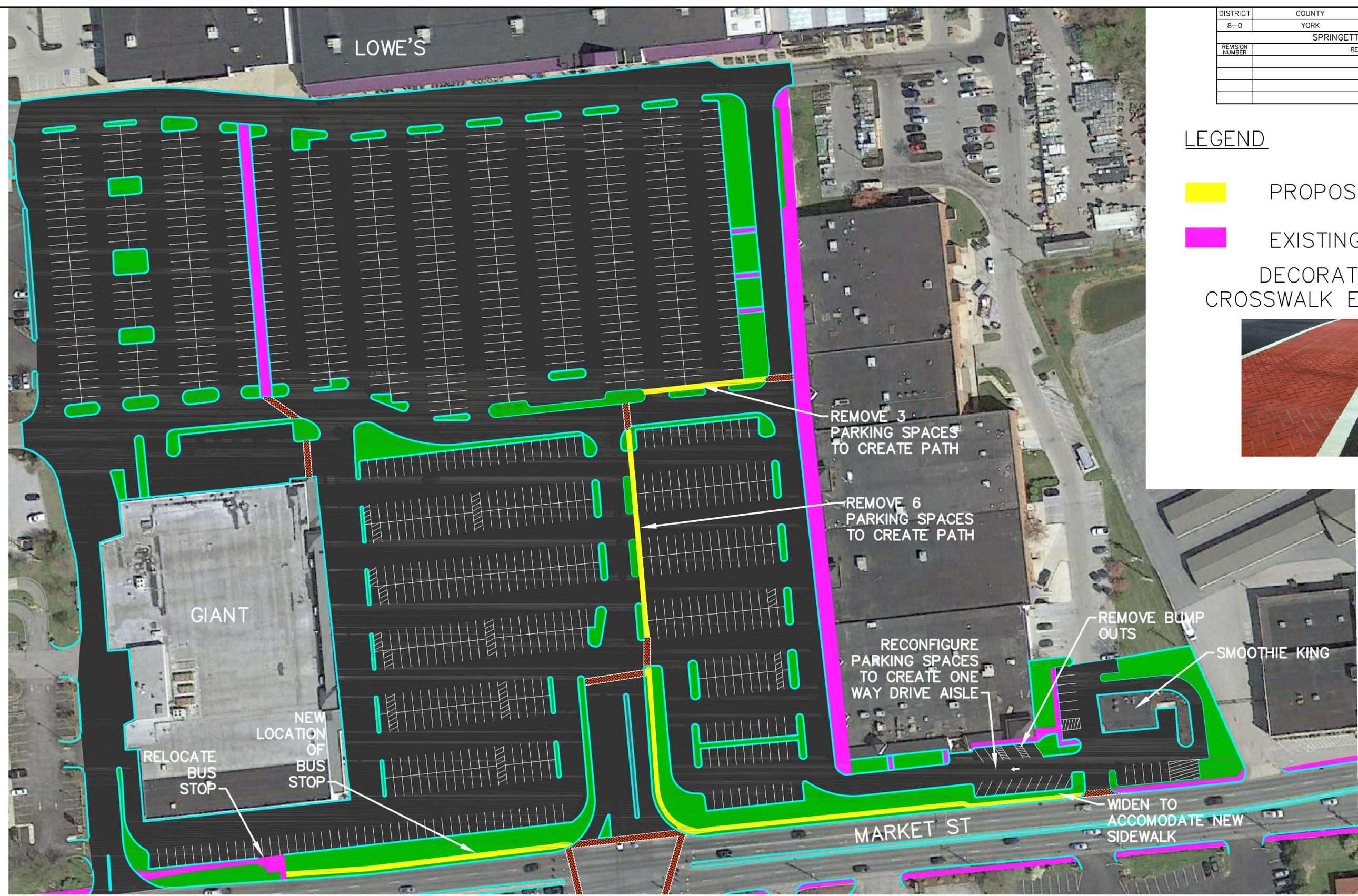
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	YORK	0024	--	01 OF 01
SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

LEGEND

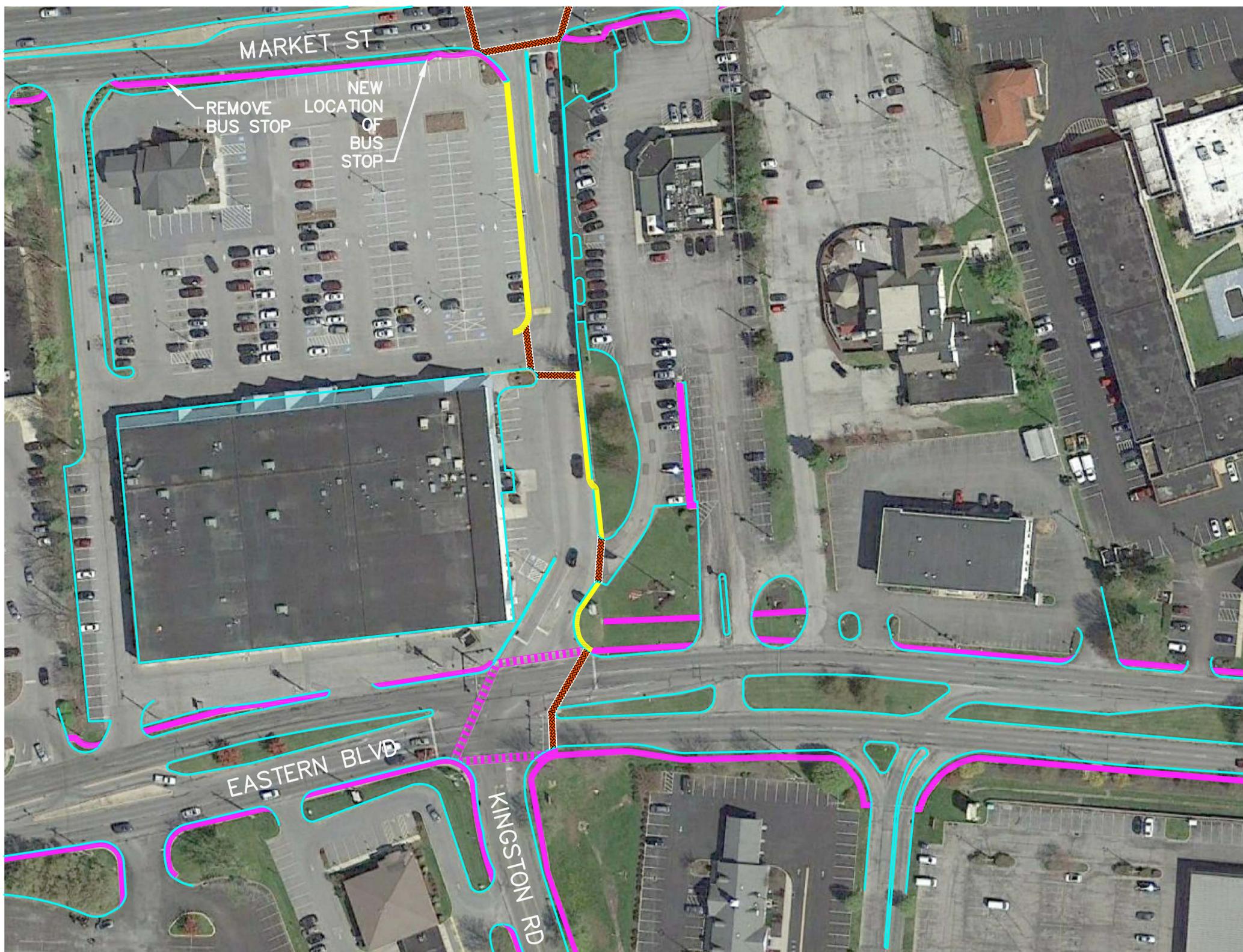
 PROPOSED SIDEWALK

 EXISTING SIDEWALK

DECORATIVE CROSSWALK EXAMPLE



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
8-0	YORK	0024	-	01 OF 01
SPRINGETTSBURY TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

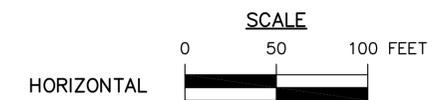


LEGEND

 PROPOSED SIDEWALK

 EXISTING SIDEWALK

DECORATIVE CROSSWALK EXAMPLE



B | New Roadway Connections

As shown on the Functional Classification Map, six new roadway connections were identified. These roadways would potentially provide alternative routes to the existing roadway network in Springettsbury Township. Many of the recommended new roadway connections were identified as parallel surface streets adjacent to US Route 30 on the western side of the township. This area of US Route 30 is very congested, and alternative routes may provide some relief to this corridor. It may be feasible to implement some of the roadways via the land development process. However, continued engineering analysis would be needed to justify public expenditures to construct the roadways. The potential new roadway connections include:

1. Davies Road Extension to Market Street
2. Colonial Farm Lane Extension to Deininger Road
3. North Hills Road to North East Street
4. North Hills Road to Eleventh Avenue
5. Arsenal Road to Eden Road
6. Eden Road to North Sherman Street

These new roadway connections are identified on the Functional Classification Map.

Davies Road Extension

An extension of Davies Road to connect to Market Street has long been planned in Springettsbury Township. This project has a long history dating back to a request made to the Public Utilities Commission (PUC) in 2007 to construct the at-grade crossing. That request was denied primarily on the basis that there was redundancy in the transportation network that provided access to the neighborhoods and businesses to the north of the railroad. However, that redundancy will soon be eliminated with the proposed weight restriction on the Pleasant Acres Road bridge. York County, the owner of the Pleasant Acres Road Bridge, has informed Springettsbury Township that the bridge will be load posted to 8 tons. This load posting has public safety implications as it creates issues for emergency services (fire and ambulance), school buses, service vehicles (plow/trash trucks), and transit buses. Providing an alternative crossing of the Norfolk Southern railroad has become a critical public safety need.

5 | TRANSFORMATIVE INITIATIVES

The proposed Davies Road Extension will connect to existing roads (Davies Drive and Cinema Drive) to provide a critical crossing of the Norfolk Southern right-of-way. The main access for many of the residents north of the rail line is the Pleasant Acres Road bridge. The Davies Road Extension, when completed, will reestablish the transportation network, improve reliability, and provide uninterrupted service for all transportation users. Additionally, the new roadway will enhance emergency response times, and it will create redundant access to critical locations within the township.

C | Connected and Autonomous Vehicle Technologies

New technologies in the transportation and technology sectors have started to change the way people view personal mobility. The development of autonomous, connected, electric, and shared vehicles stand to rapidly revolutionize the ways we travel and our transportation infrastructure needs. Given the potential for significant changes to both the transportation network and land use decisions, Springettsbury Township should be aware of technological advances, monitor federal and state policies, and consider development or revisions to township policies. Overall, it is critical to be flexible, nimble, and able to adapt to changes. An educated and proactive approach, rather than reactionary approach, can position Springettsbury Township to have a say in how these “revolutions” impact the built environment.

Connected

Connected vehicles have communication systems that enable them to continuously share important safety and mobility information with surrounding devices. These systems enable vehicles to communicate with other vehicles, roadway infrastructure (like traffic signals), and other surrounding devices (like smartphones). Connected vehicle technologies have the potential to improve both safety and traffic flow on roadways.

Potential actions for Springettsbury Township:

- Remain engaged with policy-makers
- Consider enacting ordinances that regulate infrastructure installation associated with connected vehicle technology
- Consider incorporating connected vehicle infrastructure into future maintenance programs (i.e. signal upgrades)

Automated

An automated vehicle has some level of human driver intervention, whereas full automation is a driverless vehicle. Without good planning, it would be easy for this new technology to dominate mobility and land use decisions, as the introduction of automobiles did about a century ago.

Potential actions for Springettsbury Township:

- Remain engaged with policy-makers

- Become educated on automated vehicle technologies and potential infrastructure needs
- Consider enacting ordinances regarding operations of automated vehicles on township-owned roads
- Consider allocating funding to maintain pavement markings and signage for autonomous vehicle usage

Electric

Electric vehicles operate using charged batteries are significantly more energy-efficient compared to an internal combustion engine.

Potential actions for Springettsbury Township:

- Consider updating Zoning and/or Subdivision and Land Development ordinances to accommodate the use of electric vehicle charging stations (particularly for commercial and multi-unit residential projects)

Shared

Ride sharing and vehicle sharing have the potential to reduce the number of vehicles on the road and the need for parking spaces. In the near-term, transportation network companies are already operating within the area and demand for these services may grow.

Potential actions for Springettsbury Township:

- Consider updating Zoning and/or Subdivision and Land Development ordinances to include drop-off/pick-up locations and reduced parking requirements

The new vehicle technologies presented here and others that may be developed in the future could have an immense impact on how people get around, which space is allocated for transportation, and what investments are made in infrastructure. We are many years away from realizing their full potential. However, sound planning now can ensure that these advancements enhance the peoples' lives rather than dictate their mobility decisions.

A | Overview

A complete multimodal transportation network in a township as large and complex as Springettsbury is not created overnight. A variety of implementation strategies would need to be used to implement the various recommendations in this plan.

Some non-infrastructure construction projects, or “Soft” projects, such as ordinance revisions, establishment of a transportation capital improvement plan, or creation of programs that encourage more walking and biking are possible to implement through existing township resources and staff time. However, the Springettsbury Township may solicit the professional expertise from an experienced consultant to perform this work.

Capital improvements provide the most visible queue that transportation improvements are being made in a community. However, these projects often require extensive monetary resources and staff effort to move through the design, permitting, and construction process. Some projects may be possible for the township to implement, for others, the township may need to lean on developers to install facilities during the land development process. The matrix on the next pages show the recognized improvements that would improve the transportation network in Springettsbury Township. The matrix includes the following information

- Improvement—a description of the recommended project
- Timeframe—whether the project would be a short, mid, or long term implementation
- Costs—a comparative illustration of the order of magnitude costs
- Supports Multiple Goals—identifies if the project is supported by the goals of this plan
- Grant Funding Candidate—some projects may be too large for Springettsbury to implement utilizing grant funding and township funds

Additionally, the priority projects are outlined in red on the matrix.

Improvement	Timeframe	Costs	Supports Multiple Goals	Grant Funding Candidate
Eastern Boulevard				
Multiuse Trail (Haines to Mill)	LONG	\$\$\$	★ ★ ★	✓
Sidewalks / Bike Lanes East of Rt 24	MID	\$\$\$	★ ★ ★	✓
Memory Lane / Haines Road				
Route 30 Interchange Improvements	LONG	\$\$\$\$\$	★ ★ ★	
Consistent Sidewalks Market to Whiteford	MID	\$\$	★ ★ ★	✓
Industrial Highway Intersection	MID	\$\$	★ ★	✓
Market Street Intersection	MID	\$\$\$	★ ★	✓
Consistent Sidewalks Eastern Blvd to Third	MID	\$		
Mt Zion Road				
Sidewalks Near Central York HS	SHORT	\$	★ ★ ★	✓
Sherman Street Intersection	SHORT	\$\$	★ ★	✓
Druck Valley Road Intersection	MID	\$\$	★ ★	✓
Pleasant Valley Road Intersection	MID	\$\$	★ ★	
Consistent Sidewalks Market to Whiteford	MID	\$\$	★ ★ ★	✓
Route 30 Interchange Improvements	MID	\$\$	★ ★ ★	
Market Street Intersection	MID	\$\$\$	★ ★	✓

Improvement	Timeframe	Costs	Supports Multiple Goals	Grant Funding Candidate
Park Connectivity				
Davies Road Extension	SHORT	\$ \$	★ ★ ★	✓
Multimodal Facilities Under Route 30	MID	\$ \$	★ ★ ★	✓
Sidewalks along Pleasant Valley Road	SHORT	\$ \$	★ ★ ★	✓
Route 30				
US 30 Expressway Conversion	LONG	\$ \$ \$ \$ \$	★ ★ ★	
New Connection—Sherman to Eden	LONG	\$ \$ \$ \$ \$	★ ★ ★	✓
Pedestrian Crossings at Sherman Street	SHORT	\$	★ ★ ★	✓
New Connection—N Hills to Stewart	LONG	\$ \$ \$ \$ \$	★ ★ ★	✓
New Connection—11th to North Hills	LONG	\$ \$ \$ \$	★ ★ ★	✓
Town Center Connectivity				
Front Door Connections	MID	\$ \$	★	
South Market Connections	MID	\$	★ ★ ★	✓
Market Street Streetscaping	MID	\$ \$ \$	★	✓
Market Street				
Gateway Improvements	SHORT	\$	★	
Multimodal Improvements	MID	\$ \$ \$	★ ★ ★	✓

B | Funding Strategies

Given the variety of improvements identified, additional funding beyond Springettsbury Township's general budget will likely be needed to implement many of the capital improvements identified in this plan. From programs to feasibility studies and design to construction, different funding sources may be appropriate depending on the type and scale of the project. Several potential federal and state funding sources are highlighted below. The twelve year plan that establishes which projects will receive state and federal funding is known as the Transportation Improvement Program (TIP). The regional metropolitan planning organization (MPO), in this case the York County Planning Commission, manages the development of the TIP.

Federal Grant Programs

Fixing America's Surface Transportation (FAST) Act is the federal transportation bill that authorizes federal spending on highway, public transportation, bicycle/pedestrian, and other projects for fiscal years 2017-2020. Programming for federal transportation funds for specific projects is done at a regional level, so coordination with the York County Planning Commission would be key to securing funding. Most federal funding programs require a minimum 20 percent of the project costs to be funded through non-federal sources; these could be state, local, or private funds.

- **Congestion Mitigation and Air Quality Improvement Program (CMAQ):** The CMAQ program provides funding to reduce emissions and improve air quality to meet National Clean Air Act standards. Projects must demonstrate emissions benefits either directly or by reducing congestion. Eligible projects include traditional traffic flow improvements and bicycle and pedestrian facilities that are not exclusively recreational and reduce vehicle trips. A portion of the region's CMAQ funds have historically been awarded through a competitive grant process.
- **Surface Transportation Program (STP):** The STP program provides flexible funding for improvements on federal-aid highways, bridges and tunnels on any public road, bicycle and pedestrian infrastructure, and transit capital projects. STP funds are programmed on the region's Transportation Improvement Program (TIP). A portion of the STP funds are set aside for the Transportation Alternatives (TA) Set-Aside.

- **Transportation Alternatives (TA) Set-Aside:** The TA Set-Aside program provides funding to support a variety of alternative modes of transportation, including walking and bicycling. Eligible activities include planning, design, and construction of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990. A portion of the state and region's TA Set-Aside funds will be awarded through a competitive grant process.

State Grant Programs

Pennsylvania's Transportation Funding Bill, Act 89 of 2013, provides stable, long-term funding for transportation projects including highways, roads, bridges, mass transit, and other modes. Funding programs made available through Act 89 are listed below.

- **PennDOT Multimodal Transportation Fund (MTF):** Act 89 also established a dedicated Multimodal Transportation Fund that stabilizes funding for ports and rail freight, increases aviation investments, establishes dedicated funding for bicycle and pedestrian improvements, and allows targeted funding for priority investments in any mode. PennDOT awards funding to projects between \$100,000 and \$3 million through a competitive grant process.
- **Commonwealth Financing Authority (CFA) Multimodal Transportation Fund (MTF):** The CFA MTF has the same funding source and similar requirements as the PennDOT MTF. However, the competitive grant process is administered by the Pennsylvania Department of Community Development (DCED), and funding is awarded by the CFA.
- **Green Light-Go:** This program provides state funds for the operation and maintenance of traffic signals along critical and designated corridors on state highways. Act 89 of 2013 created this new funding program for designated corridors.

In addition to these programs, there are other state funding programs to advance transportation improvements in Pennsylvania communities. A few of the available programs are listed below.

- **Act 13 (Marcellus Shale Impact Fee) - Greenways, Trails and Recreation Program (GTRP):** The CFA administers the GTRP for the development, rehabilitation and improvements to public parks, recreation areas, greenways, and trails utilizing Act 13—Marcellus Shale Impact Fees. Grants are awarded annually and most projects require a 50 percent local match for the total project cost.
- **Community Recreation and Conservation Program:** The Department of Conservation and Natural Resources (DCNR) provides grants for trail and greenway projects through two Community Conservation Partnerships Program (C2P2) grant opportunities. The C2P2—Community Recreation and Conservation program requires a 50 percent match and eligible projects include feasibility studies, trail studies, master site development plans, and comprehensive recreation, park and open space and greenway plans; land acquisition for trails; and new development and rehabilitation of parks, trails and recreation facilities. The C2P2—Recreational Trails Program requires 20 percent match (except for land acquisition projects, which require 50 percent match) and eligible projects include development, rehabilitation and improvements to public parks, recreation areas, greenways, and trails. There is an annual application period for all C2P2 grants.
- **Automated Red Light Enforcement (ARLE) Grant Program:** PennDOT administers a grant program to distribute a portion of the revenue generated by Automated Red Light Running Enforcement (ARLE) in the state. The ARLE grant program is focused on improving safety and mobility and there is an annual competitive application period. Eligible projects include roadway capacity upgrades, such as auxiliary turning lanes, and pedestrian safety and mobility improvements. The ARLE grant program does not require a local match, but all project funding must be identified at the time of the application.

The table on the following page provides an overview of the funding opportunities that are available to Springettsbury Township contemporary with this plan. This list will need to be monitored and updated periodically.

Competitive Funding Programs (as of 8/28/2019)

Program Administering Agency	Types of Projects*	Funding Details	Anticipated Timing
<u>Green Light – GO</u> PennDOT	Existing traffic signal operations and maintenance improvements	Annual competitive grant program State funds (Act 101) 20% match	Late 2019
<u>Community Conservation Partnerships Program (C2P2)</u> DCNR	Plan, acquire & develop Greenways & trails Parks & recreation areas	Annual competitive grant program Various federal and state funds 20% - 50% match	January 15-April 22, 2020
<u>Multimodal Transportation Fund (MTF)</u> Commonwealth Financing Authority (CFA) with DCED	Bicycle & pedestrian facilities Streetscapes Connectivity improvements Transit improvements Noise barriers	Two annual competitive grant programs State funds (Act 89) 30% match \$100,000 minimum \$3 million maximum	Annually: March 1-July 31
PennDOT			Fall 2019 or Spring 2020
<u>Automated Red Light Enforcement (ARLE)</u> PennDOT	Traffic signal upgrades Safety improvements	Annual competitive grant program Funded by revenue from automated red light enforcement No match required	Annually: June - July
<u>Greenways, Trails and Recreation Program (GTRP)</u> CFA with DCED & DCNR	Greenways & trails Parks & recreation areas	Annual competitive grant program State funds (Act 13) 15% match \$250,000 maximum	Annually: February 1 – May 31
<u>Transportation Alternatives Set-Aside (TA Set-Aside)</u> PennDOT	Bicycle & pedestrian facilities Stormwater management	Federal funds (MAP-21) 20% state/local cost share for all pre-construction \$50,000 minimum \$1 million maximum	Mid-Late 2019
<u>PA Walkworks</u> PA Department of Health / University of Pittsburgh	Transportation plans that focus on biking and/or walking Policies that support enhancing built environment to encourage physical activity	\$10,000-\$20,000 for plans \$3,000-\$5,000 for policies No match required	Annually: Mid-Late Summer

*See full program guidance for a complete list of eligible projects and activities

C | Implementation Plan

This implementation plan is intended to serve as a guide to Springettsbury Township staff and officials in advancing the recommendations in the Springettsbury Township Transportation Plan. However, not all recommendations are highlighted in the implementation plan. Priorities and progress will need to be reevaluated periodically to re-prioritize the projects that would most benefit Springettsbury Township. Over time, funding strategies will need to continually evolve as new transportation bills will change program requirements and funding sources may come and go. This implementation is a snapshot of the current state as of the preparation of this plan.

Immediate Implementation Projects

Memory Lane / Industrial Highway Intersection—This project supports the Transportation Plan Goal for increasing bicycle and pedestrian mobility in Springettsbury Township. In July 2019, Springettsbury Township submitted an Automated Red Light Enforcement (ARLE) program application to upgrade the signal equipment at this intersection. The township plans to submit an application to the PennDOT Multimodal Transportation Fund (MTF) to upgrade this intersection. Springettsbury Township is committed to implementing these vital improvements and will continue to seek grant funding to advance this project.

Davies Drive Extension—Springettsbury Township has long been committed to extending Davies drive between Heindel Road and East Market Street. The township is currently in negotiations with the Public Utilities Commission (PUC) to receive approval to install a new at-grade railroad crossing. This connection is vitally important to the township as it would greatly improve emergency vehicle response time. Springettsbury Township will continue to advance this project using township capital improvement funds.

Priority Capital Projects

The table on the following pages lists the priority capital projects that are recommended in the Springettsbury Township Transportation Plan. The table illustrates which goals are supported by the priority improvement projects, and it identifies potential funding strategies and next steps to implement the recommendations of the plan.

Project	Goals Supported	Funding Strategy (ies)	Next Steps
Mt. Zion Road / Druck Valley Road Intersection	<ul style="list-style-type: none"> • Improve Safety & Traffic Flow 	<ul style="list-style-type: none"> • Multimodal Transportation Fund (PennDOT or CFA) 	<ul style="list-style-type: none"> • Identify potential right-of-way needs • Apply for design/ construction funding
Mt. Zion Road / Colonial Farm Lane Intersection	<ul style="list-style-type: none"> • Improve Safety & Traffic Flow • Increase Access to Open Space 	<ul style="list-style-type: none"> • Coordinate with York County MPO to include project on TIP 	<ul style="list-style-type: none"> • Identify potential right-of-way needs • Continue outreach to affected property owners
Mt. Zion Road / Route 30 Interchange Area	<ul style="list-style-type: none"> • Increase Bicycle & Pedestrian Mobility • Foster Connectivity • Enhance Streetscapes 	<ul style="list-style-type: none"> • Multimodal Transportation Fund (PennDOT or CFA) • Transportation Alternatives (TA) Set-Aside 	<ul style="list-style-type: none"> • Coordinate with PennDOT to refine recommended improvements • Apply for design/ construction funding
Mt. Zion Road Sidewalks (Concord Road to Market Street)	<ul style="list-style-type: none"> • Increase Bicycle & Pedestrian Mobility • Enhance Streetscapes 	<ul style="list-style-type: none"> • Multimodal Transportation Fund (PennDOT or CFA) • Transportation Alternatives (TA) Set-Aside • Land Development Process 	<ul style="list-style-type: none"> • Identify segments to advance in a phased approach • Identify potential right-of-way needs • Coordinate with affected property owners • Apply for design/ construction funding
Memory Lane near Eastern Market	<ul style="list-style-type: none"> • Improve Safety & Traffic Flow • Enhance Streetscapes 	<ul style="list-style-type: none"> • Multimodal Transportation Fund (PennDOT or CFA) 	<ul style="list-style-type: none"> • Communicate concept plans to property owners • Apply for design / construction funding

Project	Goals Supported	Funding Strategy (ies)	Next Steps
Memory Lane / Market Street Intersection	<ul style="list-style-type: none"> • Improve Safety & Traffic Flow • Increase Bicycle & Pedestrian Mobility 	<ul style="list-style-type: none"> • Multimodal Transportation Fund (PennDOT or CFA) • ARLE • Green Light-Go 	<ul style="list-style-type: none"> • Apply for design / construction funding
Town Center Area Improvements	<ul style="list-style-type: none"> • Upgrade Public Transit Infrastructure • Increase Bicycle & Pedestrian Mobility • Strengthen Local Identity • Aid (Re) Development Efforts 	<ul style="list-style-type: none"> • Land Development Process 	<ul style="list-style-type: none"> • Communicate desired improvements to property owners • Modify land-use controls to support recommended improvements
Memory Lane / Route 30 Interchange Area	<ul style="list-style-type: none"> • Increase Bicycle & Pedestrian Mobility • Foster Connectivity 	<ul style="list-style-type: none"> • Multimodal Transportation Fund (PennDOT or CFA) • Transportation Alternatives (TA) Set-Aside 	<ul style="list-style-type: none"> • Apply for design / construction funding
Pleasant Acres Road multimodal access under Route 30	<ul style="list-style-type: none"> • Increase Bicycle & Pedestrian Mobility • Foster Connectivity 	<ul style="list-style-type: none"> • CMAQ • Transportation Alternatives (TA) Set-Aside • Greenways Trails and Recreation Program (GTRP) • Community Recreation and Conservation Program 	<ul style="list-style-type: none"> • Prepare concept plan / cost estimate • Apply for design / construction funding

Additional Priorities

There were additional projects identified during the development of this document that would potentially have a transformative effect on Springettsbury Township. These projects are listed in the table below. Ordinance Recommendations (found in Chapter 4) don't fit into the category of a capital improvement, but they have a major impact on the built environment in the township. The Route 30 Expressway Conversion is a project that would be largely out of the township's control. However, Springettsbury does play a role in advocating for the project.

Project	Goals Supported	Funding Strategy (ies)	Next Steps
Ordinance Recommendations	<ul style="list-style-type: none"> • Strive to be a Leader in New Mobility • Strengthen Local Identity • Aid (Re) Development Efforts 	<ul style="list-style-type: none"> • Township Staff resources • PA Department of Community and Economic Development—Municipal Assistance Program (MAP) 	<ul style="list-style-type: none"> • Draft ordinance amendments • Adopt proposed amendments pursuant to MPC
Route 30 Expressway Conversion	<ul style="list-style-type: none"> • Improve Safety & Traffic Flow • Encourage Goods Movement 	<ul style="list-style-type: none"> • Coordinate with York County MPO to include project on TIP 	<ul style="list-style-type: none"> • Reach out to elected officials to build broad support • Coordinate with York County Planning Commission and PennDOT