SR 0083, Section 079
ENVIRONMENTAL ASSESSMENT

HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

November 2022

ENVIRONMENTAL ASSESSMENT
for the
SR 0083, SECTION 0079 WIDENING AND RECONSTRUCTION PROJECT
MPMS #97828 (Lead Project)

Prepared by:
U.S. Department of Transportation
Federal Highway Administration
and
Pennsylvania Department of Transportation
Engineering District 8-0

Pursuant to 42 U.S.C. 4332(2)(c)

and as applicable:

Executive Order 11990, Protection of Wetlands; Executive Order 11988, Floodplain Management; Executive Order 12898, Environmental Justice; Executive Order 13895, Advancing Racial Equity and 49 U.S.C. Section 303(c), Section 4(f)

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Executive Summary

In October 2019, the Federal Highway Administration (FHWA) approved the *Level 2 Categorical Exclusion Evaluation (CEE), MPMS Number 97828, CE Expert System Package Number 28768,* for the SR 0083, Section 079 project in Dauphin County. Since that approval, the logical terminus of the project has changed. The environmental studies along with all associated technical documents, were updated to reflect the design changes that have occurred on the SR 0083, Section 079 project. Based on new guidance from the U.S. Department of Transportation, it was determined that an Environmental Assessment (EA) was a more appropriate class of action to re-evaluate the project. As a result, the Pennsylvania Department of Transportation (PennDOT) and the FHWA have prepared this EA to evaluate the environmental effects of the proposed SR 0083, Section 079 Widening and Reconstruction Project. In accordance with the National Environmental Policy Act (NEPA) and FHWA's implementing regulations 23 CRF 771, the purpose of this EA is to determine if this project would have "significant" environmental effects. This EA also satisfies PennDOT's obligations under Section 2002 of the Administrative Code of 1929 (71 P.S. 512).

Project Overview

PennDOT in coordination with FHWA, is proposing transportation improvements in Dauphin County, Pennsylvania to facilitate safe and efficient travel and to meet the transportation needs of the community. The SR 0083, Section 079 project limits include parts of Paxtang Borough, Swatara Township, and the City of Harrisburg. The project begins just west of Cameron Street and extends approximately 1.5 miles to just east of the 29th Street overpass. *See Figure ES-1: Project Location Map*. The project setting is urban, a mix of residential, commercial, and industrial land uses.

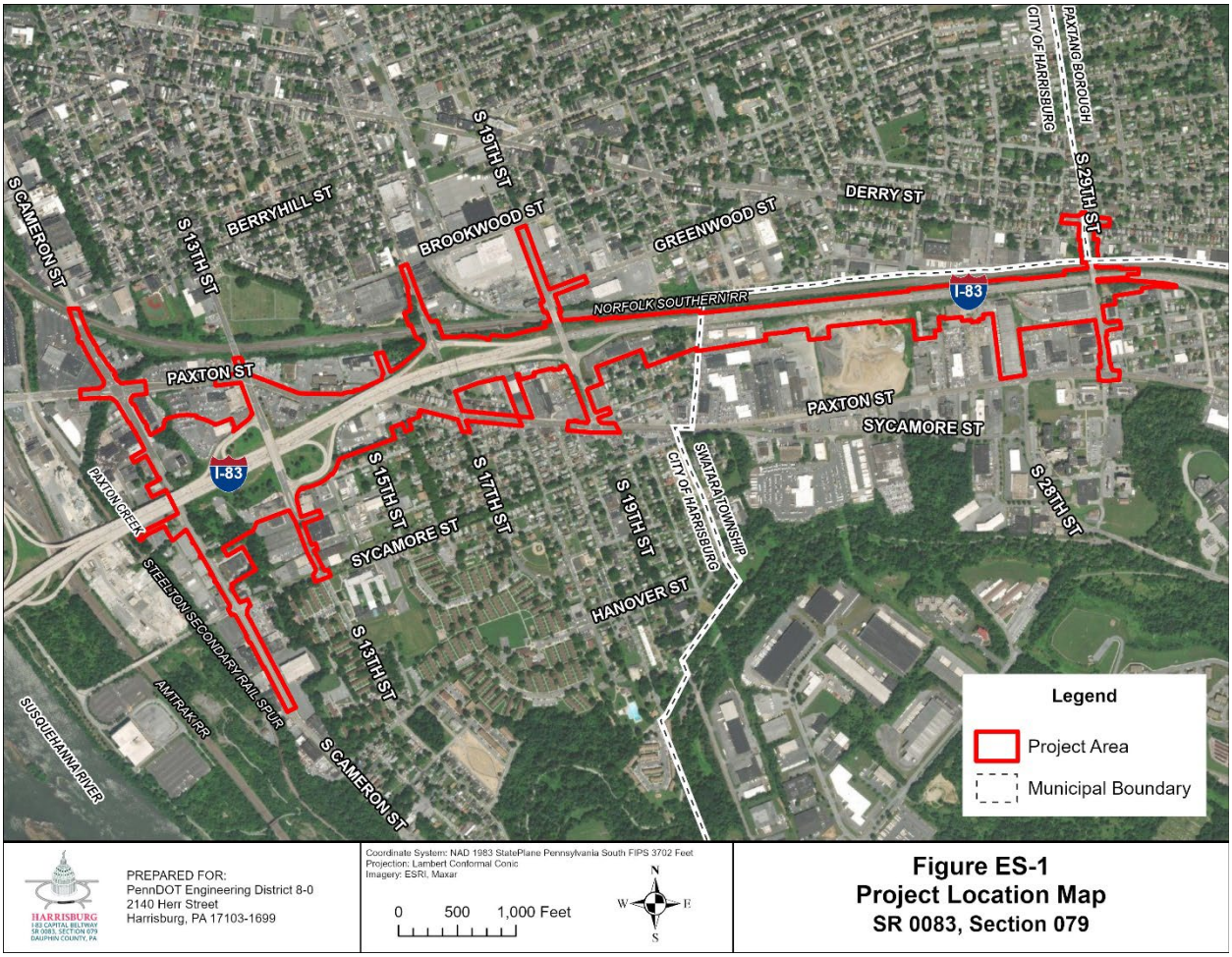

Figure ES-1: Project Location Map

Purpose and Need

The purpose of the SR 0083, Section 079 project is to improve traffic flow and safety around the City of Harrisburg by providing upgraded transportation facilities. The SR 0083, Section 079 corridor was designed and constructed nearly 60 years ago. As a consequence, many of the engineering design elements, including the number of lanes, ramp radii, weave distances, and lengths of acceleration/deceleration lanes were structured for conditions including much lower traffic volumes and speeds, that no longer exist today. In addition, the physical condition of the pavement has deteriorated over time and should be addressed to keep the roadway safe and functional.

Four transportation needs were established for the SR 0083, Section 79 Project. The needs include:

- Need #1: The existing pavement for the majority of the project corridor is over 50 years old (specifically SR 0083) and has reached the end of its serviceable life span.

- Need #2: The existing roadway configuration will not accommodate existing traffic volumes and will fail system-wide with future traffic volumes.

- Need #3: The existing roadway system features design elements from 50 years ago which do not afford the safety characteristics of modern roadway design for high-speed, high-volume facilities. As a consequence, there are operational safety concerns with the existing mainline and interchange configurations.

- Need #4: The existing regional and local roadway network impedes north/south mobility for pedestrians and bicyclists to safely access adjacent communities within the project corridor.

Preferred Alternative

The Preferred Alternative (Proposed Action) that best meets the project purpose and need consists of widening and full reconstruction of SR 0083, Section 079. The No-Build Alternative would not meet the project purpose and need but is carried forward in the EA for baseline comparison purposes.

The Proposed Action provides an Interstate facility that includes six mainline through lanes (three in each direction) and a two-lane Collector Distributor (CD) road with ramp lanes providing access for local traffic at the interchanges. The CD Road will extend from immediately east of the 19th Street interchange to Cameron Street. Access to SR 0083, Section 079 will be provided via the Cameron Street, 17th Street, and 19th Street interchanges. Improvements to these interchanges are proposed as part of the SR 0083, Section 079 project and include the following:

- Cameron Street (SR 0230) Interchange - a new full interchange will be constructed at this major arterial roadway which directly serves the City of Harrisburg; and the existing 13th Street interchange will be removed
- 17th Street Interchange - the existing partial interchange serving southbound traffic will be reconstructed, similar to the existing configuration
- 19th Street Interchange - the existing partial interchange serving northbound traffic will be reconstructed, similar to the existing configuration

The Proposed Action will widen the mainline along the southern right-of-way limits, and the existing northern right-of-way limits abutting the historic Norfolk Southern rail lines will not change. Stormwater management facilities will be included for the project to accommodate roadway drainage. *See Figure ES-2: Preferred Alternative Design (Proposed Action).*

Figure ES-2: Preferred Alternative Design (Proposed Action)

Environmental Impacts and Mitigation

Chapter 4 of the EA provides a summary of each resource evaluated in the project area; the impact to the resource as a result of the Proposed Action and the No-Build Alternative; and the avoidance, minimization and, if necessary, the mitigation measures proposed.

The following resources are not present within the project area; therefore, no further discussion of these resources is provided: Coastal Zones; Navigable Waters; Wetlands; Wild and Scenic Rivers; National Natural Landmarks; Wildlife Sanctuaries; Threatened and Endangered Species; Wilderness, Natural and Wild Areas; Recreational Resources; State or Federal Forest/Park Lands; Unique Geological Features; and Agricultural Resources.

The SR 0083, Section 079 project has been designed to avoid and minimize impacts, where practicable. Where impacts are unavoidable, mitigation commitments have been made to compensate for impacts. The **Table ES-1** summarizes the natural resources, cultural resources, and socioeconomic resources in the project area, the anticipated impacts to the resources as a result of the SR 0083, Section 079 project, and the mitigation commitments proposed. Efforts will continue to further minimize impacts and the mitigation commitments will be tracked and carried into construction, as necessary, via PennDOT's Environmental Commitments and Mitigation Tracking System (ECMTS).

Table ES-1: Project Area Resources - Impacts and Mitigation Commitments

Resource		Impacts	Mitigation
Natural	**Streams**	• 70 linear feet of permanent and 63 linear feet of temporary stream channel impacts (See **Figure 9**).	• PennDOT is currently in the process of considering mitigation options for unavoidable permanent impacts to watercourses associated with the proposed project. • Erosion and sedimentation controls will provide mitigation during construction and includes protective fencing and other BMPs. • Temporary watercourse impacts will be restored and monitored in accordance with Chapter 105 and/or Section 404 permit conditions. • Further coordination with the USACE and PA DEP regarding mitigation of stream impacts will be conducted in final design.
	Floodplains	• 0.57 acre of impact to the FEMA-designated 100-year floodplain/floodway and 0.25 acre of impact to non-FEMA designated floodways. • The floodplain encroachments are not anticipated to result in an increase in base flood elevations.	• Prior to construction, all required state and federal water obstruction and encroachment permits will be obtained. • Any proposed fill within the 100-year floodplain will comply with FEMA regulations, and PennDOT will coordinate with the appropriate municipalities regarding consistency with local floodplain regulations.
	Geology and Groundwater	• Nine domestic withdrawal wells identified within 500 feet of the project area, four of which are located within the LOD of the Proposed Action.	• Stormwater facilities are included as part of the Proposed Action that will benefit the overall project area by reducing ponding on roadways and impacts from flood events. • Pre- and post-construction monitoring of groundwater wells. • Erosion and sediment controls will be utilized during construction activities.

Resource		Impacts	Mitigation
Natural Resources	**Vegetation, Invasive Species, and Pollinators**	• Potential for the spread of invasive species. • Potential for the elimination of plant species that pollinators use for larval hosts and foraging.	• Utilization of BMPs as outlined in PennDOT Publication 756, Design Manual Part 2, and Publication 408 to mitigate spread of invasive species. • Seed mixes will be implemented with plant species that provide forage and larval host species used by pollinators in small remnant areas • Disturbed earthen surfaces will be promptly seeded to minimize colonization of invasive species. • Provide and maintain natural buffers around surface waters of the Commonwealth, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible. NPDES permits will be implemented.
	Wildlife	• Construction of the Proposed Action could alter the movement of local wildlife in the project area, and potentially result in increased wildlife road kills, unless otherwise mitigated.	• No further Action is required per PennDOT Publication 13M (DM2); therefore, no mitigation is needed for wildlife.
Cultural	**Above Ground Resources**	• The Proposed Action would not affect or adversely affect historic properties located the APE: the Philadelphia & Reading Railroad and East Shore Diner.	• The East Shore Diner will be relocated and installed in a new location, preserving the features and characteristics that make it eligible for listing in the NRHP. • Documentation of the successful relocation will be sent to the State Historic Preservation Office (SHPO) for their records, upon completion.
	Archaeological Resources	• Two locations required a Phase 1B Archaeological Survey, see project technical file for survey locations.	• The Proposed Action would not affect NRHP eligible or listed archaeological resources. • No mitigation is needed for archaeological resources.

Resource		Impacts	Mitigation
Socioeconomic	**Displacements and Tax Base**	• 34 residential household displacements, 13 commercial building acquisitions that house 22 businesses, and 58 partial property acquisitions	• All relocations are complete or are in the process of being completed. Displaced residents and businesses received relocation assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended; Title VI of the Civil Rights Act of 1964; and the Pennsylvania Eminent Domain Code of 1964. • Mitigation for loss of tax revenue is not required
	Air Quality and Climate Change	• The Proposed Action would not cause or contribute to a new violation, increase the frequency or severity of any violation, or delay timely attainment of NAAQS.	• All construction activities are to be performed in accordance with 25 Pa. Code Article III (Chapters 121-145, Air Resources) to ensure adequate control measures are in place. • The Proposed Action will include the installation of stormwater infrastructure as part of the roadway construction.
	Noise	• Four NSAs were impacted by noise (NSA 11, 12, 13, and 15).	• One noise barrier is warranted feasible and reasonable using PennDOT Criteria. Project will advance a noise wall for NSA 15.
	Community Facilities and Services	• Improved pedestrian and bicycle mobility. • No long-term disruptions or impacts to the public transportation. • No impacts to emergency services and no impacts to public housing.	• Coordinated with EMS providers to ensure no impacts to the service areas occur as a result of design decisions. • Coordination with schools, transit, and other community and facility services will continue to ensure no disruption of service occurs as a result of the project.
	Environmental Justice, Title VI, and Equity	• Impacts to minority and low-income populations will not be disproportionally high and adverse. • The Proposed Action would have beneficial effects to both minority and low income and the general populations by improving mobility and safety throughout the project area. • No disparate impacts are anticipated under Title VI and related statutes.	• Provide noise barrier along the residential area from near 19th Street to offset increased noise levels. • All relocations are complete or are in the process of being completed. Displaced residents and businesses received relocation assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended; Title VI of the Civil Rights Act of 1964; and the Pennsylvania Eminent Domain Code of 1964. • Include traffic signals, new ADA-accessible ramps and sidewalks, and bike lane/shoulders to improve the safety for non-motorized travelers throughout the corridor within the project limits.

Resource		Impacts	Mitigation
		• Benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the LEP and Non-LEP community.	• Include the use of pedestrian-scale lighting in addition to highway lighting to further improve safety of pedestrian and bicycle users along the local roadway corridors. • In remnant right-of-way areas, will provide natural and pollinator plantings that would improve the community streetscape, as appropriate. • As design advances, consider the use of retaining walls to minimize impacts. • Coordinate with EMS providers to ensure no impacts to the service areas occur as a result of design decisions. • Coordination with CAT through in-person meetings and plan reviews resulted in improved bus stop locations within the project area. • Conduct continued public engagement through final design and construction with stakeholder meetings, project website announcements, and community leader outreach. • Provide future outreach materials to accommodate individuals with limited English proficiency, as appropriate.
Section 4(f)	**Section 4(f)**	• Two Section 4(f) properties: East Shore Diner and the Philadelphia and Reading Railroad (Philadelphia to Harrisburg).	• To mitigate the impact, avoid an adverse effect, and qualify for de minimis Section 4(f) use, the diner is planned to be relocated to a nearby location in a manner that protects and preserves the character-defining features of the resource and retains the integrity that reflects its architectural significance. • Documentation of its successful relocation will be provided to the SHPO, upon completion. • There is no effect to the Philadelphia and Reading Railroad so there is no proposed mitigation.

1.0 Project Overview and Introduction

The Federal Highway Administration (FHWA) approved the *Level 2 Categorical Exclusion Evaluation (CEE), MPMS Number 97828, CE Expert System Package Number 28768,* for the SR 0083, Section 079 project in Dauphin County in October 2019. Since that approval, the logical termini of the project have changed. The environmental studies along with all associated technical documents, were reinvestigated to reflect the design changes that have occurred on the SR 0083, Section 079 project. It was originally anticipated that the approved 2019 CEE would be re-evaluated to document these changes; however, based on new guidance from the U.S. Department of Transportation, it was determined that an Environmental Assessment (EA) was a more appropriate class of action. As a result, the Pennsylvania Department of Transportation (PennDOT) and FHWA have prepared this EA to evaluate the environmental effects of the proposed SR 0083, Section 079 Widening and Reconstruction Project. The SR 0083, Section 079 EA will build upon the approved 2019 CEE and associated technical documents to advance National Environmental Policy Act (NEPA) studies in accordance with current guidance. The purpose of an EA is to determine if this project would have "significant" environmental effects. This EA also satisfies PennDOT's obligations under Section 2002 of the Administrative Code of 1929 (71 P.S. 512).

Introduction

PennDOT in coordination with FHWA, is proposing transportation improvements in Dauphin County, Pennsylvania to facilitate safe and efficient travel and to meet the transportation needs of the community. The project area includes portions of Paxtang Borough, Swatara Township, and the City of Harrisburg in Dauphin County, see **Figure 1**.

The proposed project includes widening and full reconstruction of the SR 0083, Section 079, from just west of Cameron Street (SR 0230) to just east of 29th Street (SR 3013), to provide an Interstate facility that includes six mainline through lanes (three in each direction) and a two-lane collector distributor (CD) road with ramp lanes providing access for local traffic at 17th and 19th Street and local and regional traffic at Cameron Street.

The project setting is urban including a mix of residential, commercial, and industrial land uses. Transportation facilities within the area include SR 0083, various state routes, and numerous local roadways. In addition, the Norfolk Southern Railroad corridor extends through the project area. There are Capital Area Transit bus routes and stops/facilities throughout the project area that are used regularly, in addition to bicycle and pedestrian routes.

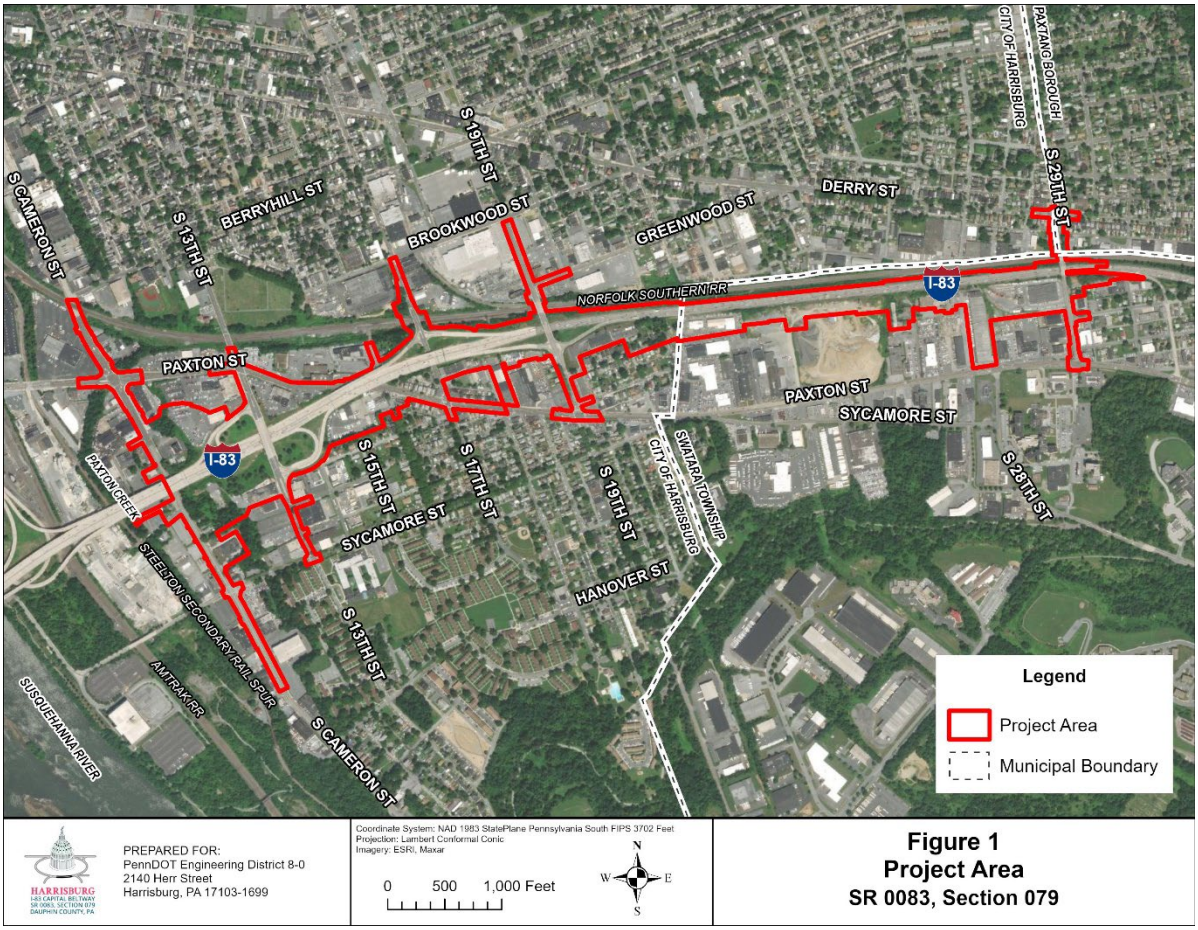

Figure 1
Project Area
SR 0083, Section 079

In accordance with FHWA regulation 23 CFR Part 771.111(f), the proposed project connects logical termini and is of sufficient length to assess a broad scope of environmental matters, would be a reasonable expenditure if no additional transportation improvements are completed in the area, and does not restrict alternatives for other reasonably foreseeable transportation projects.

FHWA (as the lead federal agency on this highway project) and PennDOT (as the project sponsor) are producing this EA pursuant to document the engineering and environmental review process; agency coordination and public outreach efforts; impact assessments; and avoidance, minimization, and mitigation efforts undertaken for the Proposed Action.

This EA intends to be reader-friendly, clear, and concise; therefore, detailed technical data are contained in the technical files for the project and this document only summarizes the findings. The technical files include reports and approvals pertaining to:

- Engineering and General Project Information
- Aquatic Resources
- Land Resources
- Wildlife and Vegetation
- Cultural Resources
- Section 4(f) Resources
- Air Quality and Noise
- Socioeconomic Areas
- Public and Agency Involvement

Project mapping, glossary and acronyms, laws and regulations, distribution list, and list of preparers are provided in the Appendices of this EA.

This project is included in the Harrisburg Area Transportation Study (HATS) Municipal Planning Organization's (MPO) fiscally constrained Transportation Improvement Program (TIP), the State Transportation Improvement Program (STIP), and PennDOT's Twelve-Year Plan for final design, right-of-way acquisition, utilities, and construction phases. The Twelve-Year Plan shows federal funding during the construction phase. The project is funded under two MPMS numbers in the documents which corresponds to the anticipated construction sections. These MPMS numbers include 97828 (SR 0083-079 lead project) and 113357 (SR 0083-B79).

1.1 Project History

The Harrisburg Capital Beltway is a limited-access roadway network that encircles the City of Harrisburg, the State Capital of Pennsylvania. The Beltway extends through surrounding municipalities within Dauphin and Cumberland Counties and includes sections of Interstate 81 (I-81), Interstate 83 (I-83) (also known as SR 0083), and PA Route 581. It serves as a vital asset to the economy of the Harrisburg region and stands as an important hub in the transportation network for the northeastern United States.

In 2003, PennDOT developed an I-83 Master Plan. The purpose of the I-83 Master Plan was to evaluate congestion and safety issues, inventory environmental features, and serve as a planning and cost estimating tool for the identification of future transportation improvement projects for the I-83 portion of the Capital Beltway.

The Master Plan identified four separate improvement projects: the East Shore Section 1 (ESS1) project, the East Shore Section 2 (ESS2) project, the East Shore Section 3 (ESS3) project, and the West Shore Section project, see **Figure 2**. The East Shore Section 3 project was officially renamed SR 0083, Section 079 during the preliminary design phase of project development.

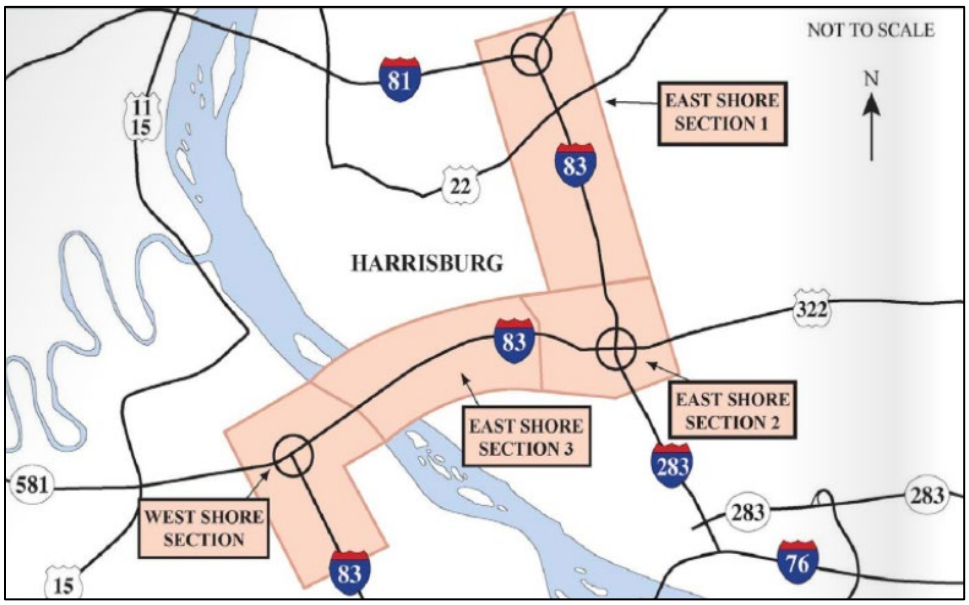

Figure 2: I-83 Master Plan – Planned Projects
Taken from the I-83 Master Plan (PennDOT 2003)

2019 – Preliminary Design and Environmental Study of the SR 0083, 079 Project

The proposed SR 0083, Section 079 project preliminary design was initiated in 2016. A Level 2 CE evaluation was developed and received environmental clearance in October 2019. The evaluation for the SR 0083, Section 079 project included parts of Paxtang Borough, Swatara Township, and the City of

Harrisburg in Dauphin County, Pennsylvania. The 2019 project limits extended from just east of the 29th Street (SR 3013) overpass approximately two miles to the western project terminus at the South Bridge over the Susquehanna River, see **Figure 3.**

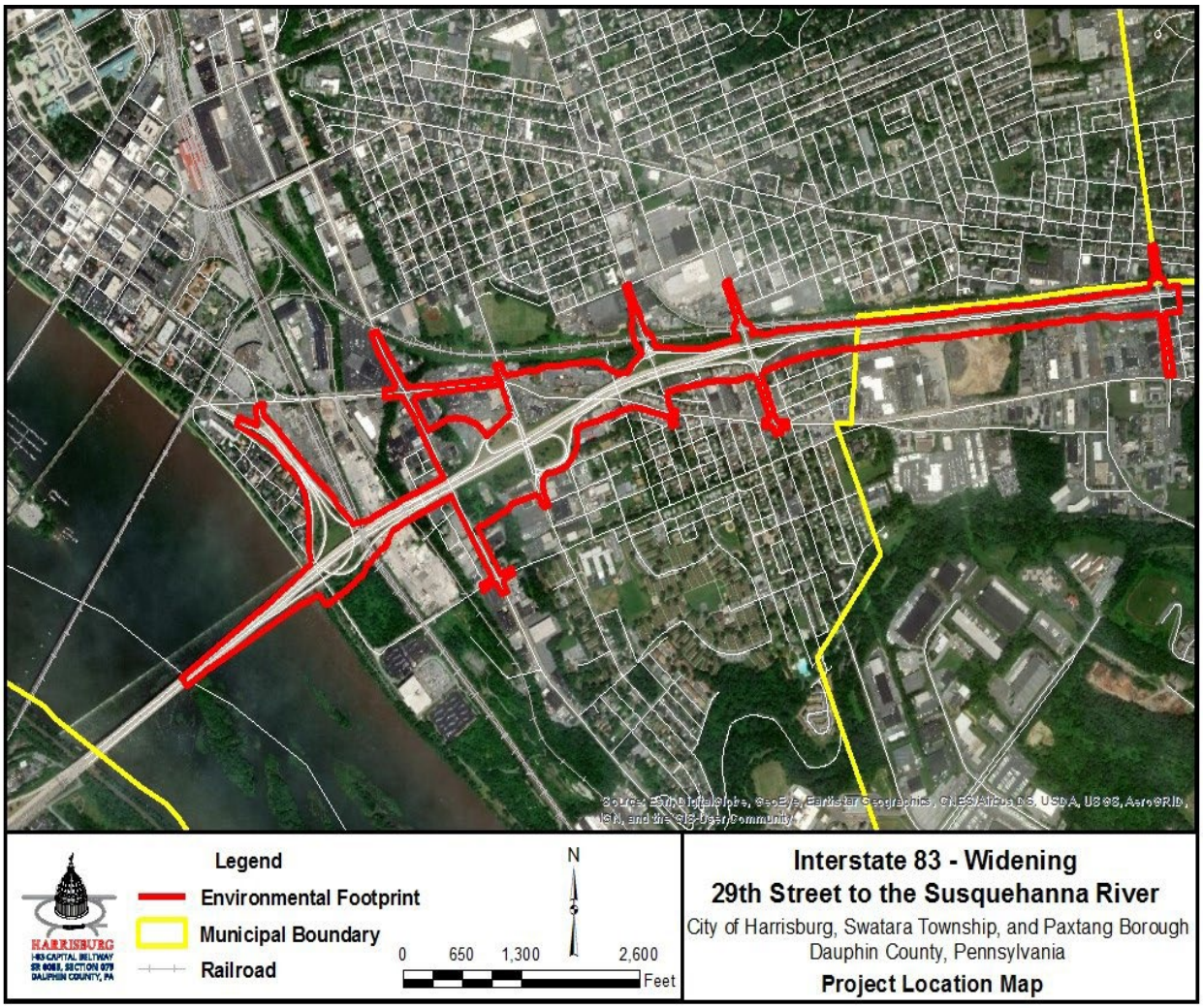

Figure 3: 2019 Project Area and Design Footprint

Taken from the 2019 Approved CEE (PennDOT 2019)

The proposed project was anticipated to be advanced under three construction contracts which would be phased to maintain traffic flow and local/regional access. Construction Contract 1 (Contract 1) was anticipated to be let for construction in 2022. This contract has been delayed as right-of-way acquisition could not occur during COVID-19 pandemic restrictions prohibiting the required in-person consultations. The revised let date is 2023. Construction Contract 2 (Contract 2) is anticipated to be let for construction in

2024, and Construction Contract 3 is anticipated to be let for construction in 2027. For more information on current construction sequencing see **Chapter 3.0 Project Development**.

Area Planning Initiatives

Concurrent to the SR 0083, Section 079 final design of Contract 1, the Greater Harrisburg Area Susquehanna River Bridge Master Plan was completed which evaluated five Susquehanna River bridge crossings within PennDOT District 8-0. Of specific interest to the SR 0083, Section 079 project was the in-depth bridge inspection of the South Bridge. The inspection revealed that the structure was aging more rapidly than originally anticipated and would reach the end of its serviceable lifespan sooner than expected. The inspection resulted in the recommendation that a full replacement of the South Bridge occur versus the previously anticipated rehabilitation. As a result of this recommendation, the South Bridge project needed to advance faster than the viaduct portion of the SR 0083, Section 079 project and would have a higher cost than rehabilitation of the bridge. With this new information, PennDOT and FHWA determined to advance the South Bridge as a separate independent transportation project. Additionally, it was determined that the southern logical terminus for the SR 0083, Section 079 project should be altered to transfer the viaduct portion of the SR 0083, Section 079 project to the South Bridge. The transfer of the viaduct portion to the South Bridge project would allow for a seamless structural design and construction while still providing logical termini and independent utility for both projects, see **Figure 4**.

Figure 4: Independent Projects in the I-83 Corridor

Taken from the South Bridge Logical Termini and Independent Utility Memorandum (PennDOT 2022)

2022 Project Design Update

Following the findings of the Greater Harrisburg Area Susquehanna River Bridge Master Plan, the SR 0083, Section 079 project terminus was adjusted to begin at Cameron Street at the eastern end of the viaduct and extends to just east of 29th Street, see **Figure 5**.

Figure 5: 2022 SR 0083, Section 079 Project Limits

The proposed project connects logical termini and is of sufficient length to assess a broad scope of environmental matters, would be a reasonable expenditure if no additional transportation improvements are completed in the area, and does not restrict alternatives for other reasonably foreseeable transportation projects. The South Bridge Logical Termini and Independent Utility Memorandum (PennDOT 2022) is located in the project technical file.

1.2 Existing Roadway Conditions

The SR 0083, Section 079 project area covers approximately 119 acres of which 88 acres (73%) are located within the City of Harrisburg, 31 acres (26%) are within Swatara Township, and the remaining 1 acre (1%) is within Paxtang Borough. The project limits extend from just west of Cameron Street at the eastern end of the viaduct to just east of 29th Street. See **Figure 6**, Existing Roadway Conditions.

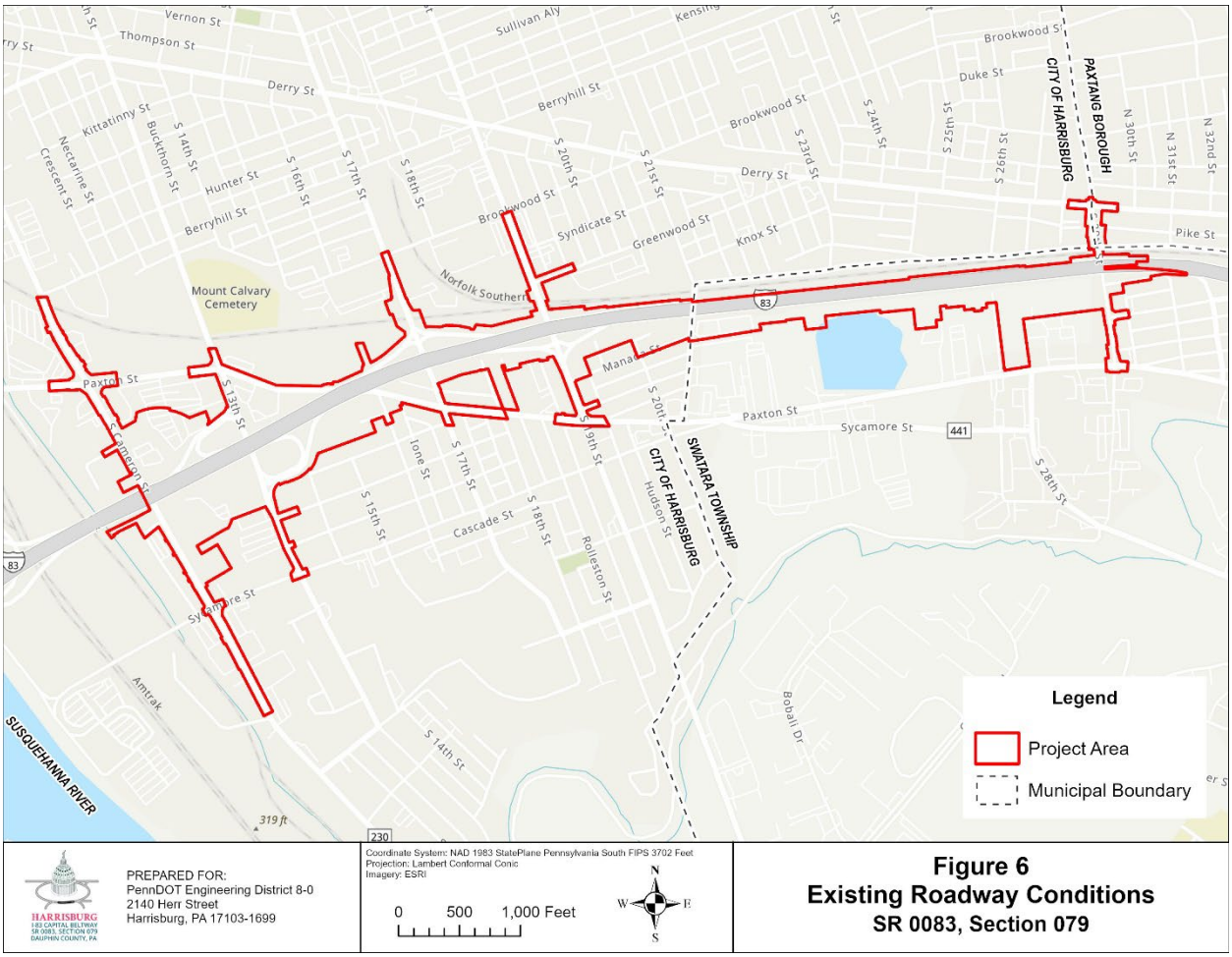

Figure 6
Existing Roadway Conditions
SR 0083, Section 079

SR 0083, Section 079 is classified as an Urban Interstate/Freeway throughout the project area, with an average daily traffic (ADT) volume of 49,155 (2019); 13% of that volume consists of truck traffic. The current design speed and posted speed are both 55 miles per hour (mph). The existing highway varies from 6-lanes to 4-lanes with a lane reduction occurring at 19th Street (SR 3007). North/south crossings of the Interstate occur at Cameron Street (SR 0230), 13th Street, Paxton Street (SR 3010), 17th Street, 19th Street, and 29th Street. There are pedestrian accommodations at each of these crossings; however, the crossings do not meet current Americans with Disability Act (ADA) standards. There are three interchange locations along this section of SR 0083, Section 079. These include a full interchange at 13th Street (Exit 44A) and partial interchanges at 17th/19th Street (Exit 44B).

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2.0 Project Purpose and Need

The purpose of the SR 0083, Section 079 project is to improve traffic flow and safety around the City of Harrisburg by providing upgraded transportation facilities. The SR 0083, Section 079 corridor was designed and constructed now closer to 60 years ago. As a consequence, many of the design elements, including the number of lanes, ramp radii, weave distances, and lengths of acceleration/deceleration lanes were structured for conditions including much lower traffic volumes and speeds, that no longer exist today. In addition, the physical condition of the pavement has deteriorated over time and should be addressed to keep the roadway safe and functional.

Four transportation needs were established for the SR 0083, Section 79 Project. The needs include:

- **Need #1: The existing pavement for the majority of the project corridor is over 50 years old (specifically SR 0083) and has reached the end of its serviceable life span.**
    - From the eastern limit at the 29th Street overpass to the western limit near Cameron Street, the pavement was originally built in stages in 1960 and 1961 with various partial reconstruction and overlays since then.

- **Need #2: The existing roadway configuration will not accommodate existing traffic volumes and will fail system-wide with future traffic volumes.**
    - Travel forecasts for the 2050 design year indicate an average annual growth rate of 0.69% per year within the project area. On average, the traffic volumes in 2050 are forecasted to be 26% higher than in 2016.
    - The results of highway capacity analyses for SR 0083 mainline indicate that, by 2050, travel demand would exceed the existing available roadway capacity during the morning and afternoon peak hours on 75% of the roadway segments within the Section 079 project area.
    - Compared to the off-peak free-flow speeds that exceed 60 mph, travel time records from 2016 indicate heavily congested travel speeds within SR 0083, Section 079 project area during the peak morning and afternoon commuting hours. Average travel speeds for the northbound lanes were 32 mph during the morning peak hour and 23 mph during the afternoon peak hour. Average speeds for southbound lanes were 46 mph during the morning peak hour and 26 mph during the afternoon peak hour.

- **Need #3: The existing roadway system features design elements from 50 years ago which do not afford the safety characteristics of modern roadway design for high-speed, high-volume facilities. As a consequence, there are operational safety concerns with the existing mainline and interchange configurations.**

- Crashes that occur on the SR 0083 mainline are spread throughout the study area, with noticeable concentrations at the interchange locations in both northbound and southbound directions. The crash data confirms this statement.
- Segments of SR 0083, Section 079 experience crash rates greater than 50% of the statewide average for full access control, divided highways in an urban setting.
    - Three of four segments of SR 8017 (SR 0083 - 13th Street interchange) have a crash rate greater than 50% above the statewide average.
    - All SR 8019 (SR 0083 - 17th Street interchange) segments have crash rates greater than 50% above the statewide average.
    - All SR 8021 (SR 0083 - 19th Street interchange) segments have crash rates greater than 50% above the statewide average.

- **Need #4: The existing regional and local roadway network impedes north/south mobility for pedestrians and bicyclists to safely access adjacent communities within the project corridor.**
    - Public outreach with study area stakeholders for the SR 0083, Section 079 project confirmed that there are concerns with the local mobility for pedestrians and bicyclists in the study area. Local crossings over and under SR 0083, Section 079 are located in a dense residential and commercial area and the crossings often do not have ADA crosswalks or are missing sidewalks. Bicyclists are forced to use traffic lanes due to inadequate or nonexistent shoulder or dedicated bicycle facilities.

The SR 0083-079 Purpose and Need Evaluation and Correspondence Documentation and the 2022 Purpose and Need Addendum provide detailed purpose and need support information and are located in the project technical tile.

3.0 Project Development

3.1 Alternative Development Process for Build Alternative

Preliminary alternatives development was initiated by collecting background environmental and traffic operation data within a broad study area to build the foundation for preliminary alternatives development that would address the project's purpose and need. Traffic data was collected to develop a traffic model that could simulate current traffic operations and provide a basis for developing future traffic operations and assess their performance for various alternative scenarios. Environmental data collected includes information regarding natural, socio-economic, and cultural resources within the project area. Environmental data assisted in guiding preliminary alternatives development by avoiding and minimizing potential impacts to key resources. Information collected through stakeholder and community outreach also influenced the development of preliminary alternatives.

Based on the traffic analyses, it was determined that the mainline would need six through lanes (three northbound and three southbound) to accommodate future regional traffic. In addition, it was determined that a two-lane CD roadway system would best accommodate the local traffic access on SR 0083, Section 079 at the interchanges. Once the number of lanes was determined, several potential build alternatives were considered for the mainline SR 0083, Section 079 widening, local street configurations, and ramp connections.

An Alternatives Analysis Report was prepared in March 2019. The full alternatives evaluation discussion is included in **Appendix H**. A summary of the report findings is below.

The mainline was divided into two sections for evaluation and at each section consideration was given to widening the facility by shifting the alignment to the north, south, or maintaining the existing alignment and widening to both sides. The following summarizes the options advanced in each section and provides a rationale for why it was advanced:

- Cameron Street to 19th Street Section – it was determined that a shift to the south with limited change to the roadway profile was the best option, as it would best accommodate the 17th and 19th Street interchanges; would not have a linear impact to the Norfolk Southern Railroad corridor, which is part of the historic Philadelphia and Reading Railroad, a resource eligible for listing in the National Register of Historic Places (NRHP); and would not require excessive cut or cause constructability issues.
- 19th Street and 29th Street Section - it was determined that shifting south while holding the northern shoulder of SR 0083, Section 079 was the best option, as it would not impact the Norfolk Southern Railroad corridor which is part of the historic Philadelphia and Reading Railroad corridor, a resource eligible for listing in the NRHP; and would be built significantly off-line with little effect to existing traffic during construction.

Interchange options were considered at Cameron/13th Street area, and 17th/19th and Paxton Street areas. The following summarizes the number of options considered, identifies the option advanced, and provides a rationale for advancement.

- Cameron/13th Street area - three interchange options were considered. The option which provided for a partial cloverleaf design at Cameron Street was advanced as it would provide the best access by eliminating the current circuitous travel routes to the City of Harrisburg's business district and would maintain acceptable alignment profiles. The result would also eliminate the existing 13th Street interchange.
- 17th/19th and Paxton Street areas – six interchange options were considered. Ultimately maintaining the existing interchange option was advanced as it is consistent with the City of Harrisburg's local planning initiatives and provides sufficient interchanging spacing, intersection queuing, and signalization.

3.2 Preferred Alternative / Proposed Action

The Preferred Alternative (Proposed Action) consists of widening and full reconstruction of the SR 0083, Section 079 to provide an Interstate facility that includes six mainline through lanes (three in each direction) and a two-lane CD road with ramp lanes providing access for local traffic at the interchanges. The CD Road will extend from immediately east of the 19th Street interchange to Cameron Street. Access to SR 0083, Section 079 will be provided via the Cameron Street, 17th Street, and 19th Street interchanges. Improvements to these interchanges are proposed as part of the SR 0083, Section 079 project and include the following:

- Cameron Street (SR 0230) Interchange - a new full interchange will be constructed at this major arterial roadway which directly serves the City of Harrisburg; and the existing 13th Street interchange will be removed
- 17th Street Interchange - the existing partial interchange serving southbound traffic will be reconstructed, similar to the existing configuration
- 19th Street Interchange - the existing partial interchange serving northbound traffic will be reconstructed, similar to the existing configuration

The project design will widen the mainline along the southern right-of-way limits, and the existing northern right-of-way limits abutting the historic Norfolk Southern rail lines will not change. See **Figure 7**. Stormwater management facilities will be included for the project to accommodate roadway drainage.

Figure 7: Preferred Alternative Design (Proposed Action)

Access points over and under SR 0083 Section 079 will remain as it is today with improvements made for bicycle and pedestrian traffic. Existing bridges will be replaced at all existing crossings including 13th Street, Paxton Street, 17th Street, 19th Street, and 29th Street to accommodate mainline widening. Bridges over the Norfolk Southern Railroad corridor at 29th Street, 19th Street, and 17th Street will be replaced and widened. SR 3010 (Paxton Street) will be realigned from a point east of the intersection at 13th Street to the intersection at 16th Street to minimize the skewed crossing under the mainline SR 0083 bridge. The local roadway network crossing of SR 0083 within the project limits will have bicycle/pedestrian facilities upgrades and lighting improvements as coordinated with local officials.

Detailed information regarding alternative development and analysis can be found in the I-83 Section 3 Reconstruction Alternatives Analysis Report, and the 2022 Alternatives Analysis Report Addendum, located in the project technical file.

During construction, SR 0083, Section 079 traffic will be maintained with four lanes of traffic. Only one bridge over or under SR 0083 and/or the Norfolk Southern railroad will be under construction at a time, allowing the other crossings to be used for detours. Generally, the proposed vehicular detour routes utilize state-owned roadway with the exception of the 13th Street detour. This detour uses both 13th and Sycamore Streets which are city-owned. Based on the estimated timing of the 13th Street Bridge construction, it is anticipated that this detour would largely be utilized by local traffic to and from local destinations.

Pedestrian detour routes were determined based on the best overall route for pedestrians to travel considering ADA accessibility and lighting. However, local residents may use shorter routes that are available.

Residents living between Cameron Street and 19th Street and traveling by bicycle or walking have four bridge crossings within 0.6 miles. The closure of one bridge would still allow crossing SR 0083, Section 079 and Norfolk Southern within a similar distance. Residents living in the vicinity of 29th Street could also utilize City Park Drive/South Paxtang Avenue during construction, with a similar detour distance. For transit users living in the project area, public transit and para-transit vehicles would continue to be operational during construction. Utilizing these services would provide similar travel distances and have no adverse effect on minority or low-income populations. See **Appendix A-3**, Project Area Mapping for Vehicular and Pedestrian Detours.

Maintenance and protection of traffic (MPT) plans, signage, and project communications to local media outlets will ensure no adverse impacts to businesses, special events, commuters, commercial deliveries, and others. MPT and Transportation Management Plan (TMP) will be updated for each construction contract and will be coordinated with local and regional emergency management officials.

SR 0083, Section 079 will be constructed in two contracts. The Contract 1 (Section 079) includes reconstructing and widening SR 0083 northbound from approximately 17th Street to 29th Street and SR 0083 southbound from 29th Street for approximately one-half mile towards 19th Street. A new interchange will be constructed to connect SR 0083 to Cameron Street and the 13th Street interchange and ramps will be removed. Also included are the 19th Street and 29th Street roadway corridors and replacement bridges over SR 0083. Cameron Street will also be widened to provide turn lanes at the ramps.

The Contract 2 (Section B79) will include reconstructing and widening SR 0083 northbound from Cameron Street to 17th Street and SR 0083 southbound from approximately one-half mile south of 29th Street to Cameron Street. Also included are the 13th Street roadway corridor and replacement bridge over SR 0083, the Paxton Street and 17th Street roadway corridors, and two SR 0083 replacement bridges over 17th Street and Norfolk Southern Railroad. (See **Figure 8).**

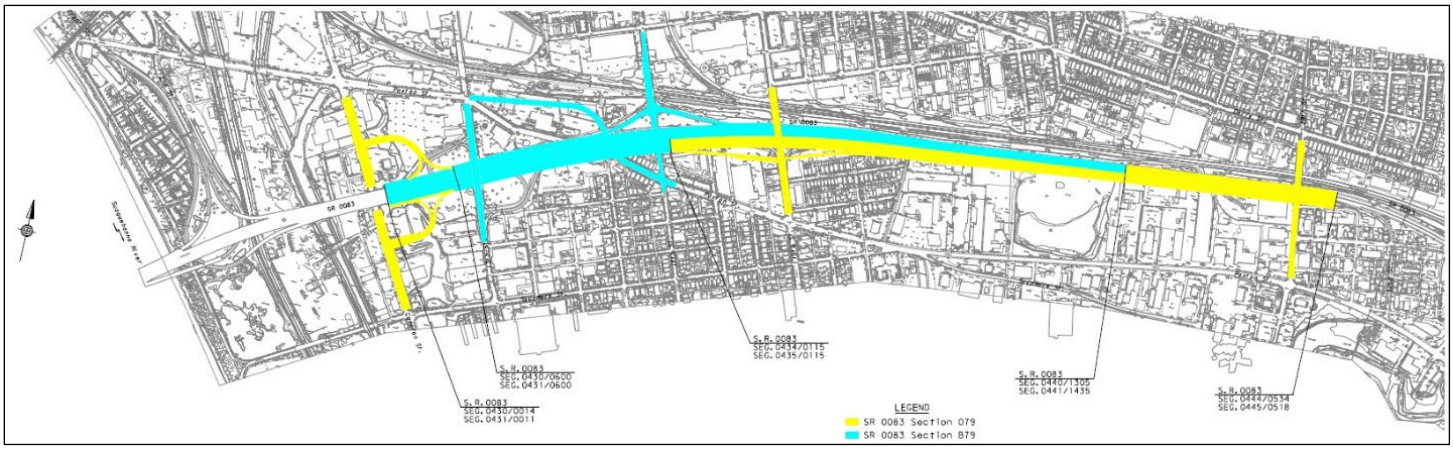

Figure 8: Contracts 1 and 2

3.3 No-Build Alternative

Under the No-Build Alternative, increasing frequency of inspections and maintenance would be needed, such as improvements to the existing failing pavement and bridges. This alternative would fail to address other project needs such as accommodating existing and system-wide traffic volumes; providing safety characteristics of modern roadway design for high-speed, high-volume facilities; addressing operational safety concerns with the existing mainline and interchange configurations; and improving north/south mobility for pedestrians and bicyclists to safely access adjacent communities within the project corridor.

The No-Build Alternative would not be a reasonable alternative, as it does not address the identified transportation purpose and need and is presented in this EA as a baseline for comparison purposes only.

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4.0 Environmental Consequences

This section provides a summary of each resource evaluated in the project area; the impact to the resource as a result of the Proposed Action and the No-Build Alternative; and the avoidance, minimization and, if necessary, the mitigation measures proposed.

An impact boundary for the Proposed Action was developed to calculate impacts, and encompasses the following:

- proposed roadway cut and fill and structure limits
- proposed permanent required right-of-way and proposed temporary construction access
- proposed major on-site stormwater mitigation areas developed to date
- potential residential and commercial business displacements

The following resources are not present within the project area; therefore, no further discussion of these resources is provided:

- Coastal Zones
- Navigable Waters
- Wetlands[1]
- Wild and Scenic Rivers
- National Natural Landmarks
- Wildlife Sanctuaries
- Threatened and Endangered Species[2]
- Wilderness, Natural and Wild Areas
- Recreational Resources
- State or Federal Forest/Park Lands
- Unique Geological Features Agricultural Resources

[1] No palustrine wetlands were identified in the project area during the field investigations.

[2] Per receipt of the Pennsylvania Natural Diversity Inventory (PNDI), no Threatened and Endangered Species are present within the project area.

The following resources are presented in detail in the following section:

- **Natural Resources**
  - Streams, Rivers, and Watercourses
  - Floodplains
  - Vegetation and Wildlife
  - Geology and Groundwater
- **Cultural Resources**
  - Above-Ground Resources
  - Archaeological Resources
- **Socioeconomic Resources**
  - Hazardous Waste
  - Air Quality and Climate Change
  - Noise
  - Community Facilities and Services
  - Environmental Justice and Title VI
  - Displacements and Tax Base

In summary the SR 0083, Section 079 project limits include parts of Paxtang Borough, Swatara Township, and the City of Harrisburg in Dauphin County, Pennsylvania. The project begins just west of Cameron Street and extends approximately 1.5 miles to just east of the 29th Street overpass. The project setting is urban, a mix of residential, commercial, and industrial land uses. Transportation facilities within the area include SR 0083, various state routes, and numerous local roadways. In addition, the Norfolk Southern rail lines traverses through the project area, just north of and parallel to the SR 0083, Section 079 corridor. The Steelton Secondary rail spur also extends perpendicular to SR 0083, Section 079 just west of the project area near Paxton Creek and is owned and operated by Norfolk Southern. There are Capital Area Transit bus routes and stops/facilities throughout the project area that are used regularly. Utilities within the project area include water, cable, gas, electric distribution and transmission, sanitary sewers, telephone, and cell towers.

This section provides an overview of the project area environmental resources and focuses on three categories: natural resources, cultural resources, and socioeconomic resources. A summary of the resource impacts, and proposed mitigation can be found in **Table ES-1.**

4.1 Natural Resources

Natural resources located within the project area include streams, floodplains/floodways, geology and groundwater, vegetation, invasive species, pollinators, and wildlife. The following section provides information regarding these resources as well as potential impacts and proposed mitigation measures to offset potential impacts, when necessary.

4.1.1 Streams, Rivers, and Watercourses

Identification

Watercourses were identified, delineated, and mapped within the project area in accordance with Chapter 105 of Title 25 of the Pennsylvania Code and Section 404 of the Federal Clean Water Act and its regulations at 33 C.F.R. Parts 320-330. Field investigations were conducted periodically between February of 2018 to July of 2022 and resulted in the identification of three watercourses or Waters of the U.S. (WUS) within the Paxton Creek HUC-12 sub-watershed. The identified watercourses included Paxton Creek (WUS-2) and two unnamed tributaries (UNT) to Paxton Creek (WUS-3 and WUS-4), (**Figure 9**). **Table 1** describes the streams within the project area. Additional details on the streams identified in the project area can be found in the Aquatic Resource Identification & Delineation Report dated 2022, located in the project technical file.

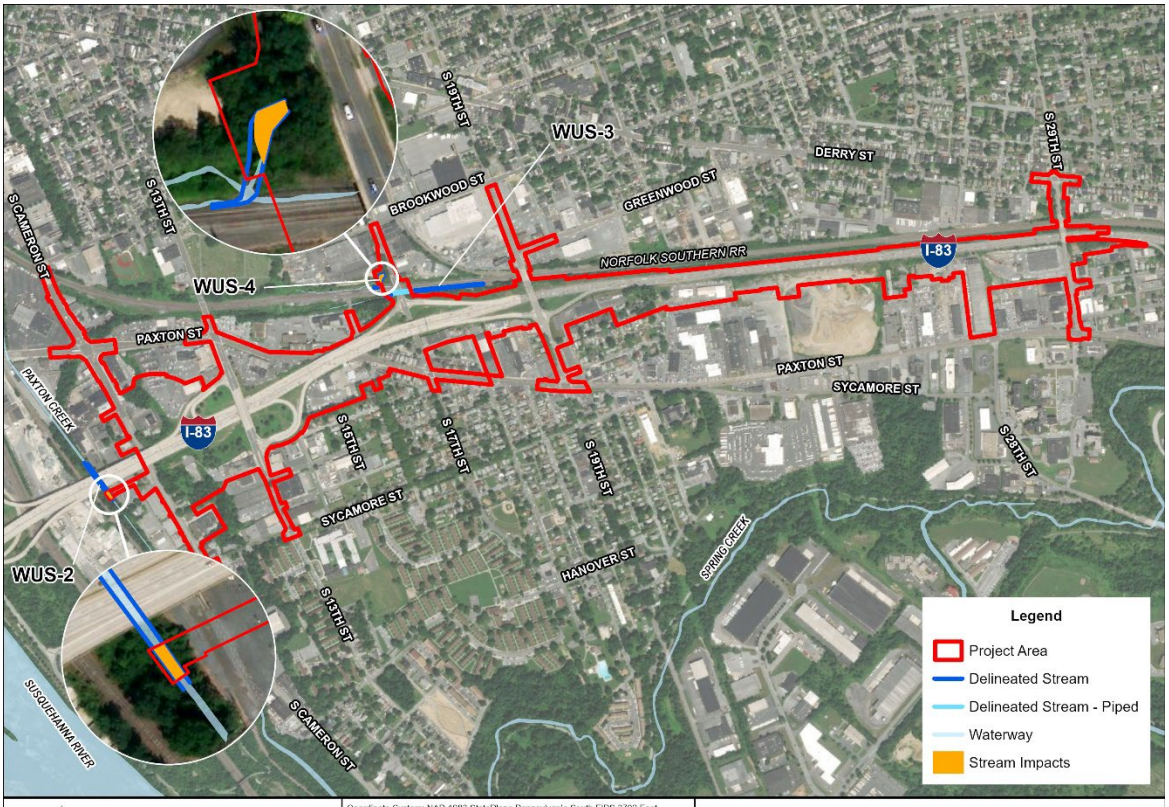


Figure 9
Streams and Proposed Action Impacts
SR 0083, Section 079

Table 1: Project Area Stream Summary

Stream Name	Stream Type	Classifications	Federal Emergency Management Agency (FEMA)-designated 100-yr floodplain/regulatory floodway	Navigable
Paxton Creek WUS-2	Perennial	Warm Water Fishery (WWF) and Migratory Fishery (MF)	Yes	No
UNTs to Paxton Creek WUS-3 & WUS-4	Intermittent	WWF and MF	No	No

Impacts

Based on the anticipated Limits-of-Disturbance (LOD) for the Proposed Action, impacts to two project area watercourses are anticipated, (See **Figure 9** and **Table 2**). A new 60-inch diameter concrete stormwater outfall pipe is proposed to be installed on the eastern side of Paxton Creek (WUS-2) and to the south of SR 0083, at the western end of the project area. Fill placement associated with the replacement and widening of the 17th Street Bridge over the existing Norfolk Southern railroad will result in a potential stream enclosure to the upstream end of WUS-4. No impacts to WUS-3 are anticipated. Direct impacts to watercourses will be adjusted during final design as additional avoidance and minimization efforts are evaluated and erosion and sediment controls are established.

Table 2: Stream Impacts by Stream and Stream Type

Stream ID	Stream Name	Stream Type	Proposed Action Proposed Activity	Proposed Action Impacts Permanent/Temporary (linear feet)
WUS-2	Paxton Creek	Perennial	new stormwater outfall	0/63
WUS-3	UNT to Paxton Creek	Intermittent	bridge replacement/ fill placement	0/0[1]
WUS-4	UNT to Paxton Creek	Intermittent	culvert extension/ fill placement	70[2] /0
Total Impact (linear feet)				**70[2]/63**

[1] No direct channel impacts to WUS-3 are anticipated. The replacement of the 19th Street Bridge over WUS-3 and the Norfolk Southern railroad will not result in impacts to the existing pipes conveying WUS-3 beneath the roadway

[2] Impact quantities are preliminary and are based on the overall potential impact in the anticipated design LOD. Impacts will be further minimized and classified as permanent vs. temporary during final design

The No-Build Alternative would not result in any impacts to watercourses within the project area.

The Aquatic Resource Identification & Delineation Report dated 2022, is located in the project technical file.

Mitigation

PennDOT is currently in the process of considering mitigation options for unavoidable permanent impacts to watercourses associated with the proposed project. Erosion and sedimentation controls will provide mitigation during construction and includes protective fencing and other best management practices (BMPs).

Temporary watercourse impacts will be restored and monitored in accordance with Chapter 105 and/or Section 404 permit conditions.

Mitigation commitments related to watercourse impacts will be defined during final design to satisfy Chapter 105 and Section 404 permit requirements and in coordination with the U.S. Army Corps of Engineers (USACE), Pennsylvania Department of Environmental Protection (PA DEP), and the Pennsylvania Fish and Boat Commission (PFBC).

4.1.2 Floodplains

Identification

Published FEMA maps were used to identify designated floodways and floodplains within the project area. FEMA published Flood Insurance Rate Maps (FIRM) and a Flood Insurance Study (FIS) contain the results of a detailed study performed on a combined floodplain for the Susquehanna River and Paxton Creek.

Paxton Creek features a detailed FEMA floodway and floodplain (Zone AE) in the western portion of the project area (**Figure 10**). The portion of the FEMA floodplain within the project area includes base flood elevations ranging from approximately 314 to 319 feet. According to federal regulations, when fill encroaches on a FEMA-delineated floodway, there is no allowable increase in the 100-year flood profile between existing and proposed conditions.

When streams do not feature FEMA-mapped floodways/floodplains, then it is assumed per PA DEP regulations (Chapter 105 of Pennsylvania Title 25), absent evidence to the contrary, that the floodway extends from the stream 50 feet landward from the top of bank. Therefore, any studies conducted for stream crossings will be used to delineate the floodway/floodplain boundaries; otherwise, 50 feet from the top of bank on each side of the stream will be considered the regulated floodway. These floodway boundaries are mapped on **Figure 10** for segments of streams that were officially delineated and lacked FEMA-mapped floodways/floodplains, which include WUS-3 and WUS-4.

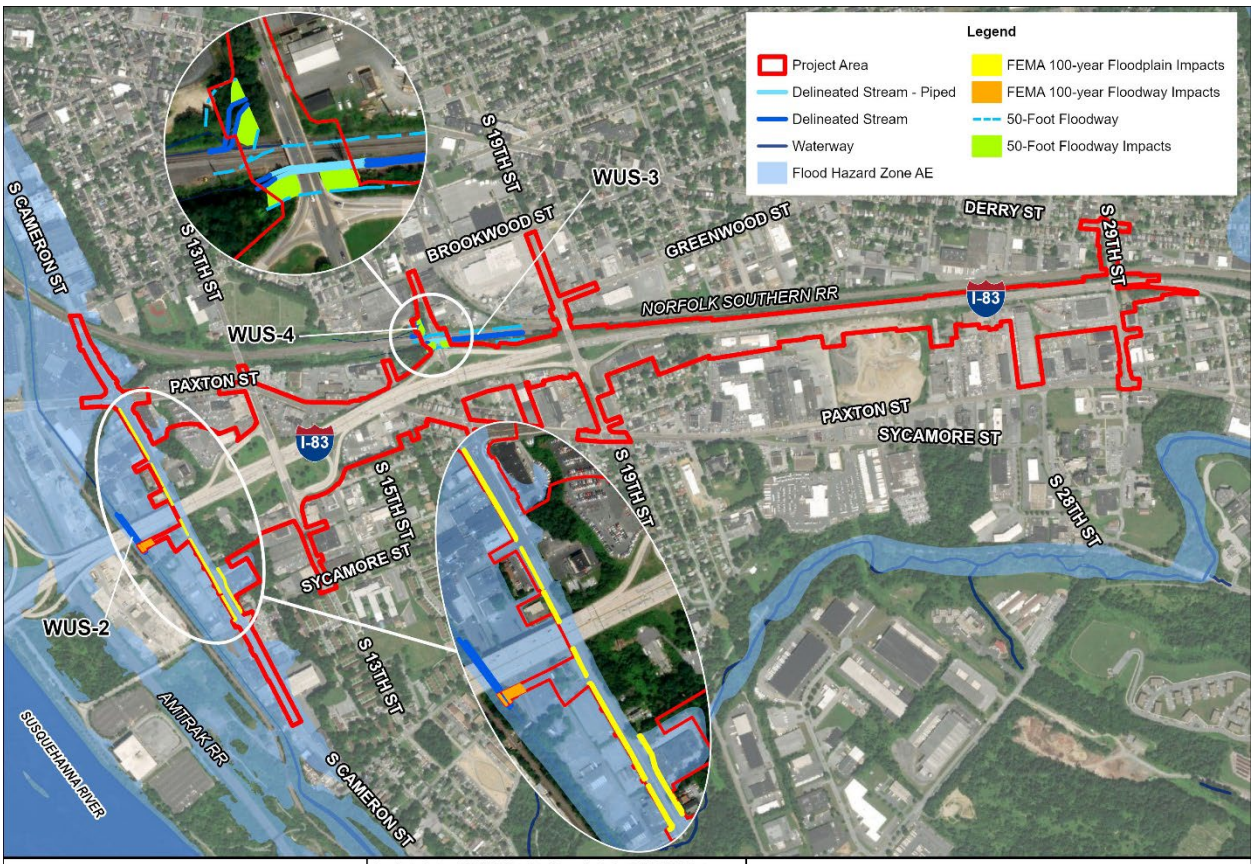


Figure 10
FEMA-Designated 100-year Floodplain and Proposed Action Impacts
SR 0083, Section 079

Impacts

Based on the current design, the Proposed Action would result in impacts to project area floodplains and floodways, see **Figure 10** and **Table 3**

Because Paxton Creek runs north/south through the entire width of the project area, encroachment in the floodplain cannot be avoided. Based on a Chapter 106 Floodplain Management Evaluation completed for the impacts to the FEMA 100-year floodplain along the Cameron Street corridor, the proposed project will not negatively impact Paxton Creek or the Susquehanna River floodplains.

The floodplain/floodway encroachments associated with the Proposed Action will be further minimized during Final Design engineering to avoid increases to flood elevations and are thus not anticipated to result in an increase to the potential for flood damages in the project area.

The No-Build Alternative would not result in any impacts to project area floodplains or floodways.

The Aquatic Resource Identification & Delineation Report dated 2022, is located in the project technical file.

Table 3: Floodplain/Floodway Impacts for FEMA and Non-FEMA Delineated Streams

Stream ID	Floodplain/ Floodway Type	Proposed Action Proposed Activity	Proposed Action Impact (acres)[1]
WUS-2	FEMA 100-year floodplain[2]	roadway widening, fill placement	0.46
Total FEMA 100-Year Floodplain Fill Impacts			**0.46**
WUS-2	FEMA 100-year floodway	new stormwater pipe outfall	0.11
Total FEMA 100-Year Floodplain/Floodway Impacts			**0.11**
WUS-3	50-foot Floodway	roadway widening, fill placement	0.16
WUS-4	50-foot Floodway	roadway widening, fill placement	0.09
Total Non-FEMA Floodway Impacts			**0.25**

[1] Impact quantities are preliminary and are based on the overall potential impact in the anticipated design LOD. Impacts will be further minimized and classified as permanent vs. temporary during final design
[2] Impacts quantified for the FEMA 100-year floodplain only include fill impacts

Mitigation

Prior to construction of the Proposed Action, PennDOT will coordinate appropriately with PADEP and USACE to obtain all required state and federal water obstruction and encroachment permits. Any proposed fill within the 100-year floodplain will comply with FEMA regulations, and PennDOT will coordinate with the appropriate municipalities regarding consistency with local floodplain regulations.

It is not expected that the Proposed Action will result in an increase in the potential for flood damage in the project area, and therefore mitigation for floodplain impacts is not anticipated for this project. Should an increase in water surface elevation be identified later in final design, a Conditional Letter of Map Revision (CLOMR) will be submitted for FEMA compliance. PennDOT will coordinate with the municipalities as part of this submission.

4.1.3 Vegetation and Wildlife

Vegetation, Invasive Species, and Pollinators

Identification

The project area encompasses predominately urban land uses that include commercial, residential, and industrial development. The vegetative communities within the project area are comprised mainly of maintained lawn and roadway right-of-way areas, with small pockets of woodlands and disturbed riparian corridors. Because of the extensive urban development within the project area, a detailed evaluation and vegetative land cover analysis was not considered appropriate for this project. Many of the vegetative communities in the project area feature invasive species such as Multiflora Rose (*Rosa multiflora*), Bush Honeysuckle (*Lonicera* sps.), Japanese Honeysuckle (*Lonicera japonica*), and Japanese Knotweed (*Reynoutria japonica*). Much of the roadside vegetation consists of non-native species, invasive species, and species considered noxious weeds. Due to the typical type of road vegetation, these species are not considered good quality habitat; therefore, the study area does not have identified quality pollinator habitat.

Executive Order 13751 requires FHWA to limit, to the extent practicable, the spread of invasive species. PennDOT Publication 756 provides BMPs to limit the spread of invasive species in the design, construction, and maintenance of highways.

Invertebrate pollinators (e.g., bees, butterflies, and moths) are economically critical to agriculture and ecologically critical to ecosystems. Pollinators use a variety of vegetative habitats in both urban and rural landscapes, including the vegetated habitats in the vicinity of the project area. Pollinator populations have been in decline for several years, and many state and federal agencies have developed policies to reverse this trend. In 2015, FHWA published “Roadside Best Management Practices that Benefit Pollinators.” In 2017, The Pennsylvania Pollinator Protection Plan (P4:2017) was completed through a collaborative effort of 28 state, national, and private stakeholder organizations and includes general guidelines in considering pollinator habitat development along roadsides and right-of-ways. The PennDOT Pollinator Habitat Plan was developed in support of the P4 and State and Federal actions, and supports the establishment of pollinator habitat, applies vegetation management measures to sustain developed pollinator habitats, protects the species from vehicle/pollinator conflicts, partners with local community organizations through the PennDOT Adopt and Beautify Program, and promotes the importance of pollinators and their habitats in right-of-ways.

Impacts

The construction of the Proposed Action could result in the spread of invasive species and the elimination of plant species that pollinators use for larval hosts and foraging, unless otherwise mitigated.

The No-Build Alternative would not result in the spread of invasive species nor implement strategies to control existing populations of them.

Consideration

Per FHWA's Guidance on Pollinator Species, Pollinators and Roadsides: Best Management Practices for Managers and Decision Makers, several BMPs can be implemented that will be beneficial for pollinator species. Strategic reduced mowing and consideration of the timing of mowing as well as spot-spraying of herbicides vs. broadcast spraying or pellet dispersal will be recommended in future roadway maintenance plans to promote pollinators. In addition, seed mixes will be implemented with plant species that provide forage and larval host species used by pollinators in small remnant areas.

Mitigation

PennDOT BMPs included in Publication 756, Design Manual Part 2, and Publication 408 will be used to mitigate the spread of invasive species. In addition, disturbed earthen surfaces will be promptly seeded to minimize the colonization by invasive species. Riparian buffers and stormwater management facilities may have specific invasive species performance standards as conditions of the USACE Section 404, PA DEP Chapter 105, and National Pollution Discharge Elimination System (NPDES) permits that will be implemented. Specifically, natural buffers will be provided and maintained around surface waters of the Commonwealth, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible.

Wildlife

Identification

A review of U.S. Geological Survey mapping, Pennsylvania Department of Conservation and Natural Resources (DCNR) listings, and the Nature Conservancy listings indicated that no sanctuaries, refuges, or other critical or unique wildlife habitat areas are present within the project area. The project area consists of an existing urban transportation corridor with surrounding land uses predominantly consisting of commercial, residential, and industrial development. The vegetative communities within the project area are comprised mainly of maintained lawn and roadway right-of-way areas, with small pockets of woodlands and disturbed riparian corridors. Because of the extensive urban development and limited wildlife habitat within the project area, a detailed evaluation of project area wildlife species was not considered appropriate for this project. Based on field views of the project area, wildlife in the project area would be anticipated to include species common to urban environments such as squirrels, mice, raccoons, common snakes, and various birds. Although it is anticipated that the various species find shelter and food within the project area, it is unlikely that significant wildlife dispersal corridors occur within the project area.

Paxton Creek and an unnamed tributary to Paxton Creek are located within or adjacent to the study area. While no aquatic critical habitat or threatened and endangered species were noted in the study area, common aquatic species (e.g., fall fish, frogs, northern water snakes, and crayfish) would be anticipated in the study area.

Based on review of the Pennsylvania Game Commission (PGC) and the PFBC Wildlife Action Plan Mapping tool, (wildlifeactionmap.pa.gov), "species of greatest conservation need" are present within

Dauphin County, and include various fish, rodents, bats, birds, reptiles, amphibians, and invertebrates. Because these species are identified by the state as a conservation need, it is assumed they could be considered target species per PennDOT Publication 13M (DM-2), Chapter 20 Wildlife Crossings. A target species is defined as a species that has been identified as the subject of conservation or monitoring actions. However, as noted in the previous paragraph, because of the extensive urban development within the project area, a detailed evaluation of project area wildlife species was not considered appropriate for this project.

Impacts

The construction of the Proposed Action would not alter the existing movement of local aquatic and wildlife species within in the project area.

The No-Build Alternative would not result in impacts to project area wildlife.

Mitigation

No mitigation is required.

4.1.4 Geology and Groundwater

Identification

Soils, geology, and groundwater are major factors in determining the types of foundations, cut slopes, pavement sections, subsurface drainage, retaining walls, and bridges required for the project area. Soils and geology refer to the physical material that makes up the ground. These physical characteristics also determine the risk of erosion, acid runoff, and other types of behavior, which can affect the environment. Groundwater refers to the water that occurs underground in saturated zones beneath the land surface. The quality and quantity of groundwater sources can affect drinking water supplies and the hydrology of water bodies such as wetlands, streams, and ponds, as well as slope stability.

An online search of the Pennsylvania Groundwater Information System (PaGWIS), which is compiled by the Pennsylvania Topographic and Geological Survey, was conducted for approximate depths to bedrock and static water levels at the vicinity of the project site. According to well data within the project vicinity, the depth to bedrock varied between three and 62 feet below ground surface (ft. bgs), with an average depth of approximately 18 ft. bgs. The depth of recorded static water levels varied between 15 and 69 ft. bgs, with an average depth of approximately 32 ft. bgs. A review of PA DEP eMapPA and the PaGWIS website identified PaGWIS Well Water Inventory location records within approximately 500 feet of the project area (**Figure 11**). Based on the PA DEP database, the use of many of these wells was listed as observation, monitoring, or abandoned, and thirteen wells were identified as withdrawal wells, (nine noted for domestic use and four for industrial use).

According to the Geological Desktop Study, the project area primarily occurs within the St. Paul Group Formation, which consists of limestone with numerous layers of chert. Portions of the northern side of the project area are located within the Pinesburg Station Formation, which consists primarily of dolomite and

limestone. Karst-like features were also identified within the vicinity of the project area, including mapped sinkholes and closed depressions. Detailed information regarding each formation is in the Geological Desktop Study located in the technical file. There are no unique geologic features in the project area.

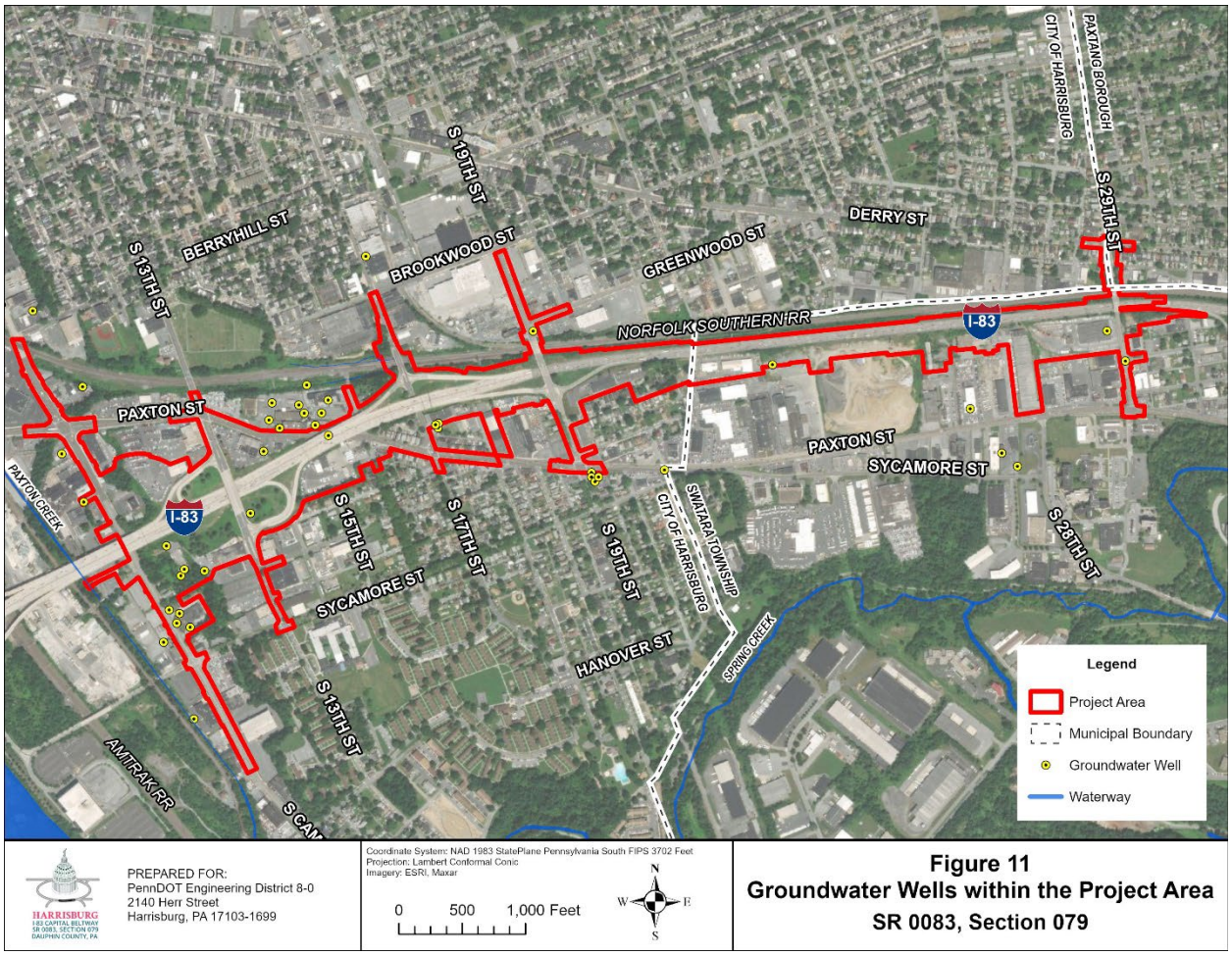


Figure 11
Groundwater Wells within the Project Area
SR 0083, Section 079

Impacts

Preliminary subsurface and other studies were conducted to aid in assessing potential impacts to/from groundwater that would result from the Proposed Action. Additional geotechnical studies will be conducted throughout final design, and any concerns will be addressed as final design progresses. Hazardous Waste studies identified both confirmed and potential groundwater contamination at multiple sites throughout the project area. The Phase I ESA Report and the Phase II/III ESA Report found in the project technical file, as well as the Hazardous Waste Discussion in this EA (Section 4.3.1) summarizes this information and provides recommendations on how to address the potential groundwater contamination during construction.

Nine domestic withdrawal wells identified in the PaGWIS database occur within 500 feet of the project area, four of which are located within the anticipated LOD for the Proposed Action. Pre- and post-construction sampling of any groundwater wells within the LOD (this excludes abandoned and closed-loop geothermal

wells) would be determined throughout final design based on the potential for impacts during construction activities. Wells that are directly impacted by the project, are located in the LOD, would be decommissioned and should follow the well decommissioning procedures outlined in the PA DEP Groundwater Monitoring Guidance Manual.

The karst-like features in this area have caused numerous noted closed depressions and sinkholes in the vicinity of the project area. There is a potential for sinkholes during construction within the area of the Proposed Action. Subsurface investigations will continue as final design progresses to define areas of concern as the roadway and bridge designs are further developed. Areas of concern include foundation stability which could impact project costs; and concerns in relation to the ultimate location and design of stormwater management BMPs which could impact the project's LOD. Should these investigations uncover concerns, the concerns will be addressed accordingly during final design and construction. Construction of the Proposed Action has the potential to temporarily increase erosion during construction, disturb soils during cut and fill operations, and produce construction-related vibration; however, these impacts will subside upon the completion of construction.

The No-Build Alternative would have no impact on geology or groundwater.

Mitigation

Erosion and sediment controls will be utilized during construction activities. Stormwater facilities are included as part of the Proposed Action, and include ditches, swales, and detention basins with regulated, permitted outlets to area watercourses that will benefit the overall project area by reducing ponding on roadways and impacts from flood events.

4.2 Cultural Resources

The cultural resources analysis was conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended, 36 CFR 800, and Executive Order 11593. Cultural resources evaluated within the project area include above ground historic resources (including buildings and districts) and archaeological resources. Early in the process, Native American tribal consultation was undertaken, and consulting parties were solicited in consideration of the following:

- Federal regulations and laws require federal agencies (like FHWA) to consult with federally recognized Native American tribes on projects or policies that may affect culturally sensitive or important places, objects, or archaeological sites.
- Federal regulations and laws also require federal agencies (like FHWA) to solicit input from consulting parties. Certain individuals and organizations with a demonstrated interest in cultural resources may participate as consulting parties.

Native American Tribes and consulting parties have been notified of each cultural resource-related submission via email, letter, or PennDOT's publicly available website, Project for Pennsylvania Transportation and Heritage (PATH) (https://path.penndot.gov). PATH provides users with a searchable

database of all PennDOT highway and bridge projects, and this project's coordination and relevant documentation has been posted to the website throughout the project development process.

4.2.1 Above Ground Resources

Identification

An above-ground Reconnaissance Survey Report was completed in April 2017. The purpose of the reconnaissance survey was to review the Area of Potential Effect (APE), identify known above-ground historic resources (buildings, structures, or historic districts that are listed in, or eligible for listing in, the NRHP), and recommend additional analysis for properties or districts that might be eligible for listing in the NRHP. The Reconnaissance Survey Report documented a total of 852 properties within the entire APE. Eight resources in the APE were previously determined eligible for or listed in the NRHP. Through subsequent survey efforts, the State Historic Preservation Office (SHPO) determined that two additional resources were eligible for listing in the NRHP. In total, the APE was found to contain 10 above-ground historic resources. The project's potential to affect those resources was discussed in the February 2019 Determination of Effects Report.

Since the completion of the Determination of Effects Report the project alignment was shifted slightly. Based on the updated engineering, the APE was revised accordingly. Eight of the 10 resources identified and evaluated in the 2017 Reconnaissance Report and 2019 Determination of Effects Report now fall outside of the project APE. As a result, the project will have no effect on those resources. These changes were outlined and discussed in the Architectural History Technical Addendum dated August 2022.

As identified by the above-described studies, two above-ground historic resources that are eligible for listing in the NRHP are located within the APE. Those resources are described below and depicted on **Figure 12**.

- Philadelphia and Reading Railroad (Philadelphia to Harrisburg) (Eligible, PA SHARE Resource Number #1993RE00578)
- East Shore Diner (Eligible, PA SHARE Resource Number #2006RE00189)

To be determined eligible for the NRHP, the resource must meet certain criteria defined by the National Park Service and outlined by the Secretary's Standards and Guidelines for Evaluation in 36 CFR 63.

The **Philadelphia & Reading Railroad** runs on an east/west alignment through Harrisburg and is located adjacent and parallel to SR 0083. The Philadelphia & Reading Railroad is eligible for listing in the NRHP under Criterion A, for its association with the industrial and transportation history of the region, and its role as a critical connection for freight, especially coal, and to a lesser extent, passengers, among Philadelphia, Reading, and Harrisburg. There are three contributing features to the Philadelphia & Reading Railroad in the project APE, including one signal tower and two railroad bridges. None of the contributing features present in the project APE are located within the project LOD.

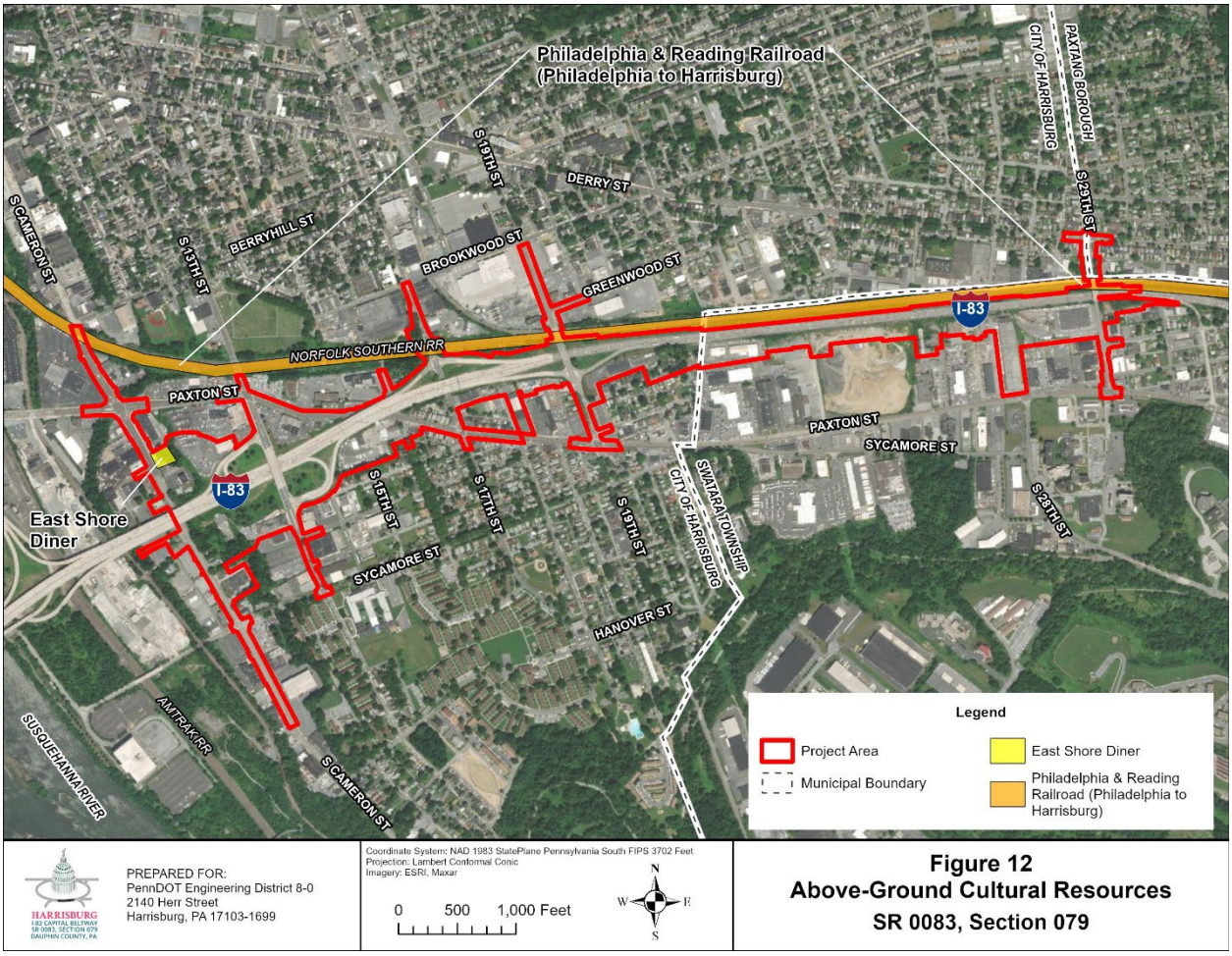


Figure 12
Above-Ground Cultural Resources
SR 0083, Section 079

The **East Shore Diner** is located at 711 South Cameron Street in Harrisburg, north of SR 0083. The resource will be relocated in accordance with the 2019 approved CEE. The East Shore Diner is determined eligible for listing in the NRHP under Criterion C, as the building embodies the distinctive characteristics of a Moderne style diner. The diner retains key elements of the Moderne style diner, including the stainless-steel cladding, curved corners, and floor plan with a lunch counter and surrounding booths.

Impacts and Mitigation

PennDOT prepared a Determination of Effect Report in February 2019, analyzing the effect the Proposed Action would have on the NRHP listed or eligible resources. The findings of the 2019 Determination Effects Report were reviewed and validated in the Architectural History Technical Addendum dated August 2022. The PennDOT Cultural Resources Professional (CRP), acting on behalf of FHWA, determined that the project would have no effect on the Philadelphia & Reading Railroad and no adverse effect on the East Shore Diner as outlined in **Table 4**. The PA SHPO concurred with this determination.

Table 4: Historic Resource Determinations of Effect

Property Name	No-Build	Proposed Action
Philadelphia & Reading Railroad	*No Effect*	*No Historic Property Affected*
East Shore Diner	*No Effect*	*Historic Property Not Adversely Affected*

Based on the criteria for adverse effect per 36 CFR 800.5 and the definition of effect provided in 36 CFR 800.16, the No-Build Alternative would not affect or adversely affect either of the two resources within the project APE, however, the area would continue to be impacted by current and anticipated congestion and safety issues.

The Proposed Action consists of widening and full reconstruction of the SR 0083, Section 079 to provide an Interstate facility that includes six mainline through lanes (three in each direction) and a two-lane CD road with ramp lanes providing access for local traffic at the interchanges. The project team considered alternatives in order to avoid or minimize effects to those historic resources within the project APE.

In the vicinity of the Philadelphia & Reading Railroad, the Proposed Action involves widening the main line highway to the south of the railroad and replacing several bridges carrying local streets over the railroad. The existing bridges do not contribute to the resource, and the new bridges will be constructed on alignment. All widening activities will occur on the side opposite the railroad. These activities will not alter the characteristics which qualify the resource for inclusion on the NRHP. The resource will retain all aspects of integrity which help convey its significance.

In the vicinity of the East Shore Diner, the Proposed Action involves widening SR 0083 south of the diner and relocating the existing 13th Street interchange to Cameron Street, including on- and off-ramps on the north and south sides of SR 0083. The construction of the northern ramps will require widening Cameron Street to accommodate increase traffic volumes and removing the East Shore Diner from its current location. Alternatives considered to avoid and minimize effects to the East Shore Diner including a total avoidance of the resource by not relocating the 13th Street interchange, not improving Cameron Street, and evading ramp modifications. However, relocating the 13th Street interchange ramps to Cameron Street

was found to be the alternative that best meets project purpose and needs while having the least impact to the surrounding area.

Without being able to totally avoid impacts to the diner, minimization measures were analyzed through relocation of the interchange, modification of the interchange ramps, and planned improvements to Cameron Street. Through evaluation minimization could be achieved by relocating the diner to a new location. This would allow the structure to preserve the features and characteristics that make it eligible for listing in the NRHP. The relocation of the East Shore Diner will affect the location and setting of the resource, and therefore the resource's integrity. However, location and setting are not aspects of integrity that are central to the resource's eligibility under Criterion C. The relocation of the diner will not affect the integrity of design, workmanship, materials, or feeling that are central to its eligibility. Therefore, successfully relocating the diner from its original location will not constitute an adverse effect on the resource.

The PA SHPO concurred with the finding of No Adverse Effect to the East Shore Diner, based upon the preservation of the original diner structure as discussed in the overall Determination of Effects for the SR 0083, Section 079 project. To mitigate the impact and avoid an adverse effect, the diner will be relocated to a nearby location in a manner that protects and preserves the character-defining features of the resource and retains the integrity that reflects its architectural significance. The SHPO requested notification of the new location for the diner as part of their concurrence. Currently, the East Shore Diner appears to be on track for successful relocation. Location information was provided to the SHPO on May 31, 2022, and documentation of its successful relocation will be provided for the agency's records, upon completion.

For more information on above-ground resources, please review the 2017 Reconnaissance Survey Report, the 2019 Determination of Effect Report in the technical files or via PATH (https://path.penndot.gov), the 2022 Architectural History Technical Addendum, and Section 4(f) forms, located in the project technical file.

4.2.2 Archaeological Resources

The archaeological investigation was conducted in accordance with Section 106 of the NHPA, 36 CFR 800, and Executive Order 11593. In accordance with PennDOT's Section 106 Programmatic Agreement, PennDOT notified tribes of the project on December 12, 2018. The following tribes were notified:

1. Absentee-Shawnee Tribe of Oklahoma
2. Delaware Nation - Oklahoma
3. Delaware Tribe
4. Eastern Shawnee Tribe of Oklahoma
5. Shawnee Tribe

A Statewide Pre-Contact Probability Model Testing Methodology Form was prepared for this project in 2018, a Phase 1B Archaeological Survey and Report was completed in 2020, and a Phase 1B Archaeological Survey Report Addendum in 2022. Initial archaeological work identified three locations within the project area for conducting Phase I investigations (Areas A, B, and C). Since the completion of the Statewide Pre-Contact Probability Model Testing Methodology Form and Phase 1B Archaeological

Survey and Report, the project alignment was shifted slightly. Based on the updated engineering, the APE was revised accordingly. As a result, Area A falls outside of the boundaries of the current project APE, and therefore, only the results of the archaeological studies for Areas B and C are described herein.

The results of the 2018 assessment identified two locations (Areas B, and C) within the project area for conducting Phase I investigations.

- Area B encompasses, approximately, the northwestern half of the block formed between SR 0083 and South Cameron, Sycamore, and South 13th Streets.
- Area C encompasses the infield between South 13th Street and the off-ramp from SR 0083 northbound, as well as a small section of infield located between the SR 0083 northbound offramp and the 13th Street on-ramp.

A Phase 1B Archaeological Survey and Report was completed in October 2020. Results from that investigation area presented below:

- Area B: The Phase IA Archaeological Survey identified Area B as possessing low potential for pre-contact and historical archaeological resources based on soil mapping which revealed the possibility of undisturbed soils in the western half of Area B, and light historic development along South Cameron Street. Area B was subjected to a surface survey and subsurface testing in the form of shovel test pits. One historic-period archaeological site—the Metzgar-McCormick-Lewis Site (36DA0271)—was identified within Area B. The site encompasses an area of 0.12 hectares (0.3 acres). The artifact assemblage was determined to lack integrity due to an excessive redistribution of artifacts from a neighboring commercial property. The Metzgar-McCormick-Lewis does not have the potential to provide information important to our understanding of local or regional history. The site is not eligible for listing in the National Register of Historic Places. Based on the results of the Phase 1B survey, no further archaeological investigation is recommended for Area B.
- Area C. The Phase IA Archaeological Survey identified Area C as possessing low potential for pre-contact and historical archaeological resources based on soil mapping which revealed the possibility of undisturbed soils, and sparse residential and commercial development within and around the area in the mid-twentieth century. Area C was subjected to a surface survey and subsurface testing in the form of shovel test pits. The results of the investigation indicated that there was extensive ground disturbance in the area and that no precontact artifacts associated with Native American activities or intact precontact or historic features were recorded within Area C. Based on the extensive ground disturbance and lack of findings, no further archaeological investigation is recommended for Area C.

The final conclusion of the archaeological survey was no further archaeological investigation is recommended for Areas B, C, or the Metzgar-McCormick-Lewis Site (36DA0271).

The PennDOT archaeologist, acting on behalf of FHWA, determined that neither the Proposed Action nor the No-Build Alternative would affect NRHP eligible or listed archaeological resources. No mitigation is needed for archaeological resources.

For more information on archaeological resources, please review the 2018 I-83 Section 3 Probability Model Testing Form, the SR 0083 Section 79 Phase 1B Report dated 2020, and the Phase I Archaeological Resource Report Addendum dated September 2022, located in the project technical file, and Tribal Consultation Coordination can be seen via PATH (https://path.penndot.gov).

The PennDOT Archaeologist will review any potential alignment shifts during final design and determine if additional testing is required.

4.3 Socioeconomic Resources

Socioeconomic resources present within the project area encompass: Hazardous or Residual Waste Sites; Air and Noise analysis; Demographics and Economics, which include Environmental Justice, Title VI or Underserved populations, residential and commercial displacements, and tax base analysis; and Community Facilities and Services, which include pedestrian and transit considerations, emergency management services (EMS), schools, places of worship, and community assets.

4.3.1 Hazardous and Residual Waste

Identification

The PennDOT waste site investigation process employs a phased evaluation approach, consisting of three flexible phases termed Phase I, Phase II, and Phase III Environmental Site Assessment (ESA), to identify actual or potential waste areas/sites that have the potential to adversely impact the construction project. PennDOT's Publication 281, Waste Site Evaluation Procedures Handbook provides the guidance for each of the three phases.

The first phase, Phase I ESA is a broad site information-gathering survey to identify potential areas of environmentally regulated substance release(s), termed Areas of Concern (AOC). A property within the transportation project, whether privately owned and subject to a partial acquisition, or is entirely acquired by PennDOT, which contains one or more actual or potential AOCs is typically termed a waste site of concern. The Phase II ESA uses information obtained in the Phase I ESA to implement more detailed site-specific research which may include geophysical or other surface/shallow materials sampling. The third phase, a Phase III ESA, is an intrusive investigation of soil or groundwater using power equipment to identify and characterize potential releases of regulated substances to soil and groundwater identified during the Phase I and II ESA investigations.

The SR 0083, Section 079 project will require excavation to accommodate the widened roadway footprint, new interchange ramps, bridge footings and abutments, sidewalk improvements, utility relocations, and other associated improvements.

A Phase I ESA was completed in July 2019. The purpose of the Phase I ESA was to identify all real estate properties within the original project area, which were known or were suspected to currently, or previously

generate, use, or store materials and/or substances that are now regulated as wastes. The Phase I ESA identified 73 potential waste sites (WS) or sites (WS01 – WS73) that had the presence or likely presence of hazardous substances or petroleum products under conditions that indicated an existing release, a past release, or a material threat of a release of hazardous substances or petroleum products into the structures, on to the ground, into the groundwater, or into the surface water of the project area.

Impacts and Mitigation

Based on the information obtained during the Phase I ESA, 38 out of the 73 potential waste sites with recognized environmental concerns (RECs) required further investigation. Thirty-five of the 73 sites were determined to have no threat of contamination or would not be impacted by the project and therefore, did not warrant additional study. Additionally, all sites identified in the Phase I ESA west of Cameron Street are no longer potentially impacted by the Proposed Action as a result of the revised project termini. **Figure 13** shows the potential waste sites identified in the approved Phase I ESA within the revised limits of impact and the level of study recommended.

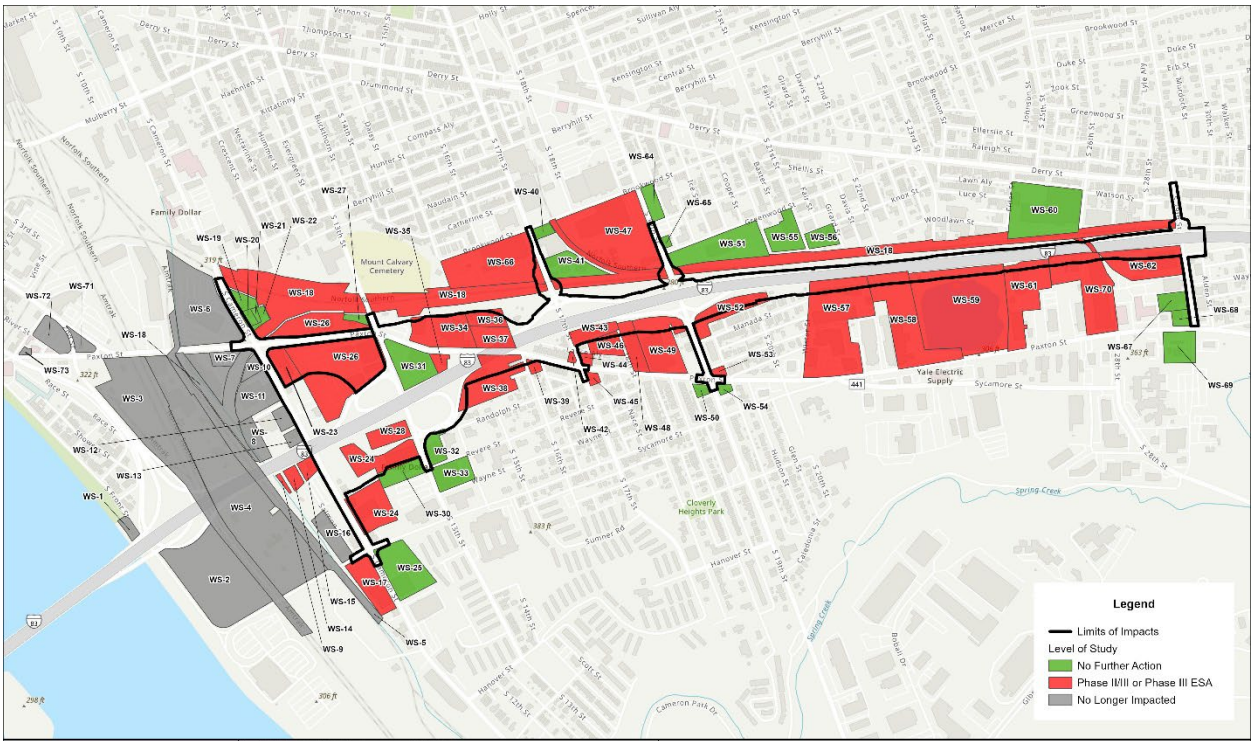


Figure 13
Revised Phase I ESA Waste Site Inventory Map
SR 0083, Section 079

The project was separated into two sections for construction consisting of Contract 1 and Contract 2. A total of 22 Contract 1 waste sites were subject to Phase II and/or Phase III ESA investigations within the project limits. The Phase II and Phase III environmental fieldwork under Contract 1 was completed in 2020 and included Phase II geophysical investigations, sampling of existing groundwater monitoring wells,

subsurface soil sampling, and temporary monitor well sampling. Results of the Phase II/III ESA were presented in the SR 0083, Section 079 Phase II/III ESA Report, dated April 12, 2021. Approval of this report was recommended on April 27, 2021.

Of the 22 waste sites included in Contract 1 Phase II and/or Phase III investigations, 16 resulted in No Further Action, and five resulted in Further Action recommendations. **Table A** in **Appendix I** provides a summary of these sites. More detailed information regarding the recommended actions can be found in the Phase II/III ESA Report dated 2021, and Phase II/III Environmental Site Assessment Addendum dated 2022, located in the project technical file.

Out of the original 38 waste sites identified by the Phase I ESA, four additional sites will be impacted during Contract 1 and six sites will be impacted during Contract 2. Additional Phase II/III investigations will be completed for these sites later in final design, and mitigation measures and remediation recommendations, if applicable, will be developed following these Phase II/III investigations. **Figure 14** shows the additional Phase II/III Investigations needed for the project and **Table B** in **Appendix I** provides a summary of these sites.

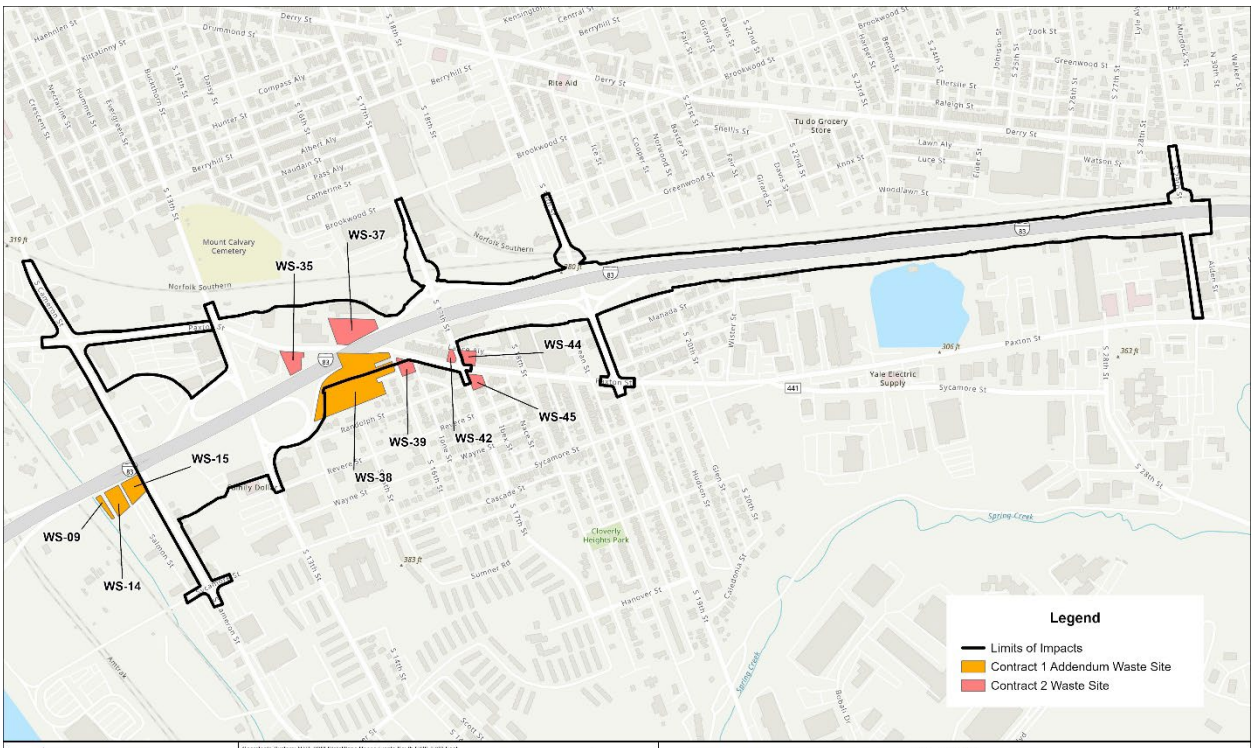


Figure 14
Additional Phase II/III Investigations Under Contracts 1 & 2
SR 0083, Section 079

As part of the project, numerous buildings or other structures will be/have been demolished. As a result, pre-demolition surveys including materials surveys for asbestos containing materials, lead-based paint, and other hazardous materials may be/has been conducted, as appropriate.

A Health and Safety Plan will be required prior to construction that notifies and educates workers of potential health and safety issues and establishes methods to monitor sites for health and safety issues, as necessary. During construction, the general contractor is responsible and legally liable for ensuring the health and safety of its workers and for conducting the appropriate investigations to determine what are acceptable (safe) working conditions and practices. Workers conducting field investigations must be trained, certified, and possess experience in accordance with the state and federal requirements. Hazardous materials, when discovered, would be documented, removed, transported, and disposed of in accordance with the appropriate laws and regulations.

During final design, special provisions will be developed to direct the contractor on disposal of potentially hazardous material or soil. These activities will be conducted in accordance with the most current PA DEP Management of Fill (MoF) Policy (revised January 16, 2021) and PennDOT Publication 281 (May 2019), to determine the classification of excess soils and/or fill materials.

If excavated material is determined to be Clean Fill, it may be used within project right-of-way, but will not be placed in waters of the Commonwealth. Clean Fill may also be exported outside of the project right-of-way for use, through completion and submission of Form FP-001 to PA DEP. If the excavated material is determined to be Regulated Fill, it shall be managed in accordance with PA DEP General Permit WMGR096, or shall be disposed of in an appropriately permitted landfill. Residual Waste will be managed in accordance with applicable Solid Waste Management Act regulations.

Any material to be disposed of in a landfill shall be sampled in accordance with the disposal facility requirements, U.S. Environmental Protection Agency (US EPA)- or PA DEP-approved sampling protocols and analytical methods for soils (e.g., 40 CFR 261, US EPA Method SW846, or other Standard Methods). If applicable, sampling methods will be conducted per the PA DEP municipal or residual waste regulations (25 PA Code, Chapters 271-285, and 25 PA Code, Chapters 287-299, respectively), storage tank regulations (25 PA Code, Chapter 245), MoFP requirements, and/or other relevant Federal, State, and local regulations and statutes. If applicable, sampling and analysis for landfill characterization shall be handled in accordance with the guidelines of PA DEP's Form U Request to Process or Dispose of Residual Waste. Analyses will be completed by a laboratory that is registered with the PA DEP in accordance with PA Act 25 of 2002 (the Environmental Laboratory Accreditation Act) and is in no manner associated with the Contractor.

The No-Build Alternative would have no impacts on hazardous waste sites. There would also be no net benefit with this alternative as there would be no mitigation of hazardous waste sites. The Proposed Action

would result in a net benefit with regards to hazardous materials by remediating areas of known contamination.

Detailed information regarding Hazardous and Residual Waste is included in the Phase I ESA Report dated 2019, the Phase II/III ESA Report dated 2021, and the Phase I Environmental Site Assessment and Phase II/III Environmental Site Assessment Addendum dated 2022, located in the project technical file.

4.3.2 Air Quality

Identification

The U.S. Environmental Protection Agency (EPA) is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They have developed the National Ambient Air Quality Standards for air pollutants including carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM2.5 and PM10), and sulfur dioxide (SO2). EPA is the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and mobile source air toxics (MSAT).

EPA designates geographic regions that do not meet the National Ambient Air Quality Standards for one or more air pollutants as “non-attainment areas.” Areas previously designated as non-attainment but subsequently redesignated to attainment because they no longer violate the National Ambient Air Quality Standards, are reclassified as “maintenance areas” and require maintenance plans and a State Implementation Plan. A State Implementation Plan is the guidance for states to comply with the Clean Air Act requirements to reduce air pollution in areas that do not meet the National Ambient Air Quality Standards.

The proposed project is located within a region currently designated as a "maintenance" area for two of the National Ambient Air Quality Standards established by EPA as follows:

- Harrisburg-Lebanon-Carlisle, PA – maintenance area for the 1997 8-hour ozone standard
- Harrisburg-Lebanon-Carlisle, PA – moderate maintenance area for the 2006 24-hour fine particulate matter (PM2.5)

Because of the above designations, the project is subject to transportation conformity requirements under the Clean Air Act pertaining to ozone and PM2.5.

The proposed SR 0083, Section 079 project was assessed for potential air quality impacts and conformity consistent with applicable air quality regulations and requirements. For this project, an air quality analysis was completed to evaluate whether the project will cause or contribute to a new localized exceedance of carbon monoxide (which plays a role in the formation of ozone) or PM2.5; an increase in the frequency or severity of any existing exceedances; the mobile source air toxics impacts of the project; or the greenhouse gas impacts of the project (**Figure 15**).

The Air Quality Analysis Technical Report dated May 2019, the concurrence letter from FHWA dated June 4, 2019, the Air Quality Analysis Technical Report Addendum dated August 15, 2022, and the concurrence on the addendum from FHWA dated August 22, 2022, can be found in the project technical file. The following discussion is based on the technical report.

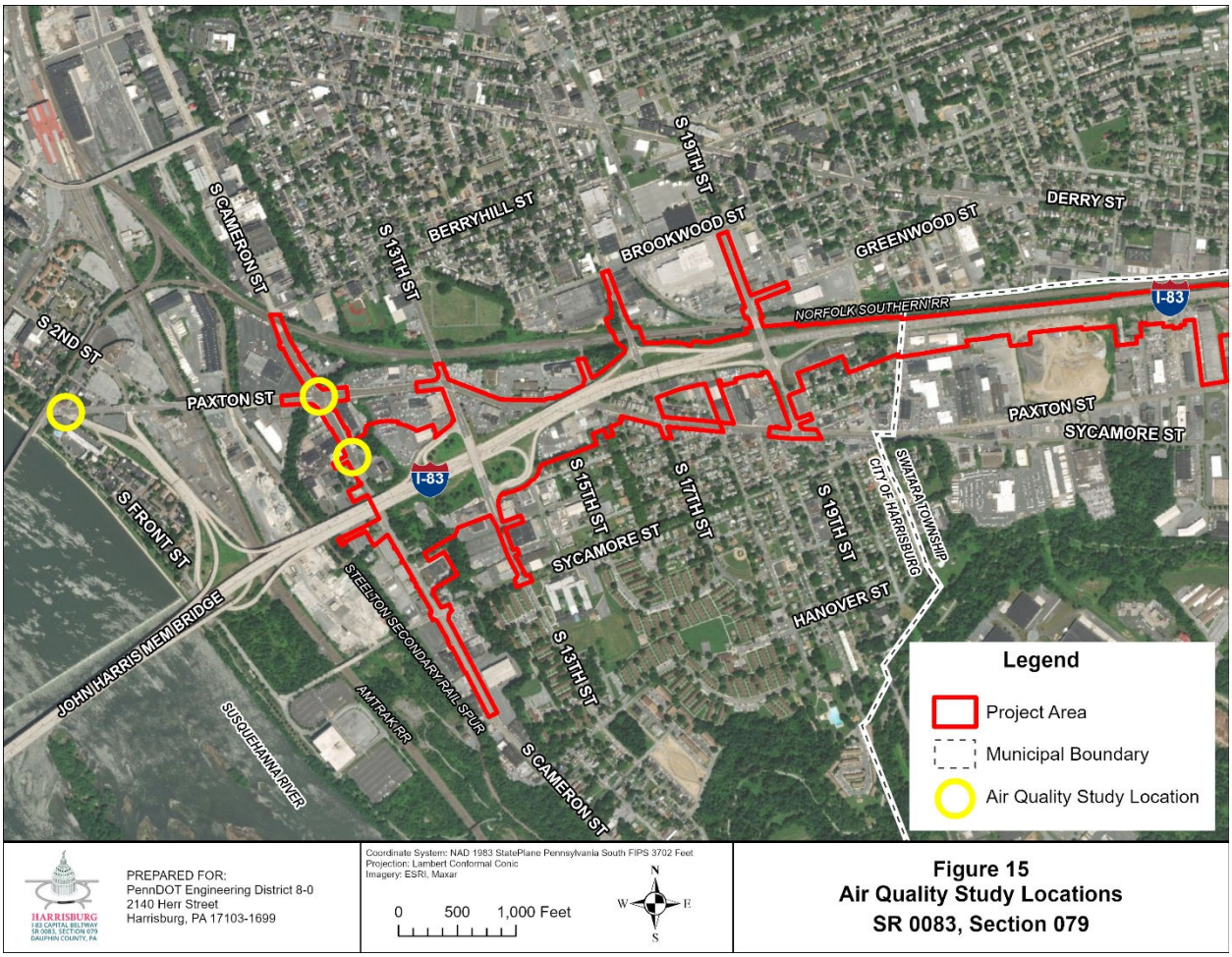


Figure 15
Air Quality Study Locations
SR 0083, Section 079

Impacts and Mitigation

Table 5 identifies the project area pollutants investigated within the project area, the impacts the Proposed Action would have on air quality, and proposed mitigation measures, if applicable. Detailed Air Quality information can be found in the Air Quality Analysis Technical Report dated May 2019, and the Air Quality Analysis Technical Report Addendum dated August 15, 2022. Located in the project technical file.

Table 5: Air Quality Impacts

Pollutants	Impacts	Mitigation Measures
Carbon Monoxide (CO)	Worst- case CO concentrations for the Proposed Action are predicted to be well below the CO standard in both the open year (2030) and design year (2050) alternatives for each of the worst-case locations analyzed along the proposed project corridor. This screening analysis included the worst-case signalized intersections. The Proposed Action would have no significant adverse impact on air quality as a result of CO emissions.	No mitigation measures would be required.
Particulate Matter (PM2.5)	Dauphin County has been designated "maintenance" for PM2.5, therefore the project was screened to determine if it is considered a project of air quality concern. The project is not exempt, however, it is not considered to be of air quality concern based on an Interagency Consultation Group (ICG) review of project data on February 14, 2019, and information according to 40 CFR 93.123(b)(1)(iv) and Appendix B of the November 15 EPA Guidance (EPA-420-B-15-084) entitled "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas."	No mitigation measures would be required.
Mobile Source Air Toxics (MSAT)	The Proposed Action would not significantly increase the total vehicle miles traveled within the project area, and would improve traffic operations and overall system efficiency, which would offset increases in emissions due to future greater traffic volumes. On a regional scale, there may be no net change in emissions or potentially an overall benefit from this project.	No mitigation measures would be required.

Pollutants	Impacts	Mitigation Measures
Greenhouse Gases (GHG)	The Proposed Action is not expected to have significant impacts on regional vehicle miles traveled, and the Proposed Action is generally located within the existing interstate right- of-way. The temporary air quality impacts from construction are not expected to be substantial. Emissions will be produced during the construction of this project by heavy equipment and vehicle travel to and from the site. Earthmoving and ground-disturbing operations will generate airborne dust. Construction emissions are short term or temporary in nature.	All construction activities are to be performed in accordance with 25 Pa. Code Article III (Chapters 121-145, Air Resources) to ensure adequate control measures are in place.
Climate Change	Related to climate change and extreme storm events, PennDOT has initiated a multi-phase effort aimed to better anticipate the consequences and impacts of extreme weather events and to identify funding priorities and strategies to improve the transportation system.	The Proposed Action will include the installation of stormwater infrastructure designed to handle anticipated storm events as part of the roadway construction.

Conformity

The federal transportation conformity rule (40 CFR Parts 51 and 93) requires air quality conformity determinations for transportation plans, programs, and projects in “non-attainment” or “maintenance” areas for transportation-related criteria pollutants. Transportation- related pollutants, as specified in the conformity rule, include the air pollutants mentioned previously. Regional conformity analysis requirements apply to plans and programs; hot-spot analysis requirements of 40 CFR 93.116 and 93.123 apply to projects.

The HATS is responsible for developing a TIP that addresses mobile source emissions within the region, which includes Dauphin County and the City of Harrisburg.

The TIP outlines the staged development with priority projects selected for programming in the first year of the five-year program. There are two levels of transportation conformity:

Regional conformity: Demonstration of regional transportation conformity is through the development of transportation planning documents including the Draft Regional Transportation Plan (RTP) and the Transportation Improvement Program. This project is included in the HATS Municipal Planning Organization’s (MPO) fiscally constrained TIP, STIP, and PennDOT’s Twelve-Year Plan for final design, right-of-way acquisition, utilities, and construction phases. The project is funded under two MPMS numbers in the documents which corresponds to the anticipated construction sections. These MPMS numbers include 97828 (SR 0083-079 lead project) and 113357 (SR 0083-B79). The project has state and federal funding.

Project-level conformity: In addition to the conformity regulation requirements referenced above, the federal NEPA and Pennsylvania Act 120 are the federal and state acts requiring environmental review of actions that have the potential to affect the environment. Specifically, transportation projects using Federal-aid funds and/or requiring FHWA approval actions must be evaluated for the potential impacts the actions will have on the natural and human environment. Air quality is one of several elements within the human environment to be considered as part of the NEPA/Pennsylvania Act 120 evaluation. The quantitative analyses discussed above (See **Table 5**) validates project-level conformity.

The Proposed Action would not cause or contribute to a new violation, increase the frequency or severity of any violation, or delay timely attainment of NAAQS.
As a result of increased design year traffic volumes and increased congestion/decreased traffic speed, the No-Build Alternative would be expected to negatively impact air quality.

4.3.3 Noise

The noise analysis was conducted in accordance with PennDOT's Publication 24 Project Level Highway Traffic Noise Handbook (May 2019) and the U.S. Department of Transportation Federal Highway Administration's Measurement of Highway-Related Noise (FHWA-PD-96-046 May 1996) manual and Title 23 United States Code of Federal Regulations, Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise (July 2010).

Identification

Decibels (dB) are used to measure the intensity of sound. To conduct noise investigations for highway projects, the decibels are weighted to focus on those sound levels that are more easily distinguished by the human ear (dBA). Additionally, criteria for noise abatement are identified for various land uses. The identified noise-sensitive land uses within the project area include FHWA/PennDOT defined activities: Category B (residential), Category C (daycare centers, cemeteries, hospitals, playgrounds, etc.), and Category E (hotels, offices restaurants, other developed lands) land uses. Categories B and C have a noise abatement criteria of 67 dBA (decibels) and Category E has a noise abatement criteria of 72 dBA. These criteria were informed by sound levels that would interfere with outdoor speech communication.

The SR 0083, Section 079 project corridor was divided into 13 noise sensitive areas (NSAs) from Cameron Street to approximately 1,500 feet west of 29th Street (**Figure 16**). Within the NSAs, noise monitoring was conducted in May and July of 2018 to document ambient noise levels (existing noise levels). Initial monitoring consisted of 24-hour tests conducted at two distinct locations, followed by short-term ambient readings taken at forty-one (41) sites. Simultaneous traffic counts and speed determinations were conducted along the study corridor during the short-term ambient noise monitoring tests to aid in validating the noise model. A noise study area warrants consideration of noise abatement if one of the following criteria is met:

- Predicted Highway Traffic Noise levels (for the design year) approach or exceed those outlined above. (Note: PennDOT has a defined "approach" for situations with one decibel below the noise abatement criteria, or
- Predicted Highway Traffic Noise levels are predicted to substantially increase by 10 dB(A) or more over existing levels.

The ambient monitoring was followed by TNM v2.5 noise modeling to determine modeled existing noise levels and predicted noise level with the implementation of the Proposed Action which includes proposed design features and future traffic volumes.

Impacts & Mitigation

Predicted noise levels were assessed to determine if noise abatement was warranted, meaning levels approach or exceed federal and state standards and abatement must be considered. **Table 6** provides an overview of the noise predicted noise level at each of the NSAs. Four NSAs warranted abatement consideration (NSA 11, 12, 13, and 15).

After determining that mitigation was warranted at four NSAs, several noise barrier designs were investigated for feasibility (e.g., barriers would reduce noise levels) and reasonableness (e.g., barriers provide benefit to enough sensitive receptors to be financially viable). Due to right-of-way constraints and the close proximity of residences to SR 0083, earth berms were not feasible and noise barriers were considered to be the only feasible form of noise mitigation for this project.

For the four NSAs impacted by noise (NSA 11, 12, 13, and 15), two barrier systems comprised of two barriers each were investigated. The barriers were optimized to determine the most cost-effective barrier while meeting the sound barrier abatement goals.

2016 Existing Worst Case, 2050 No-Build, 2050 Build without noise barriers, and with noise barriers analysis conditions were analyzed. The results showed that two barrier systems (Barrier System 1 (NSAs 11, 12 & 13) and Barrier System 2 (NSA 15)) were warranted.

Table 6: Noise Analysis Results

Receiver Number	Property Address or Description		2016 Existing Worst-Case Noise Level	2050 No-Build Noise Level	2050 Build Noise Level
NSA-2					
M-02-01	825	S. Cameron Street	63	*	*
NSA-7					
M-07-01	1025	S. Cameron Street	60	*	*
NSA-8					
M-08-01	1079	S. Cameron Street	59	59	60
NSA-9					

Receiver Number	Property Address or Description		2016 Existing Worst-Case Noise Level	2050 No-Build Noise Level	2050 Build Noise Level
M-09-01	914	S. 13th Street	66	*	*
NSA-10					
M-10-01	805	S. 16th Street	63	62	62
NSA-11					
M-11-01	1416	Randolph Street	65	66	70
M-11-02	900	S. 16th Street	65	65	69
M-11-03	1627	Paxton Street	68	68	69
M-11-04	1515	Randolph Street	59	58	62
M-11-05	1717	Paxton Street	71	71	71
NSA-12					
M-12-01	915	S. 13th Street	65	65	67
M-12-02	951	S. 13th Street	55	55	56
NSA-13					
M-13-01	1618	Paxton Street	66	*	*
M-13-02	831	S. 17th Street	65	65	68
M-13-03	1716	Paxton Street	60	59	64
NSA-14					
M-14-01	856-858	S. 19th Street	64	63	65
NSA-15					
M-15-01	2010	Manada Street	68	*	*
M-15-02	2036	Manada Street	71	*	*
M-15-03	1930	Manada Street	57	57	69
M-15-04	1911	Manada Street	53	53	58
M-15-05	2013	Manada Street	55	55	69
NSA-16					
M-16-01	1910	Manada Street	*	*	*
NSA-17					
M-17-01	742	Melrose Street	54	54	56
M-17-02	736	Melrose Street	55	55	57
M-17-03	1040	S. 23rd Street	53	52	53
M-17-04	2307	Luce Street	53	53	54
M-17-05	2351	Luce Street	56	56	57
M-17-06	2359	Luce Street	55	54	56
NSA-18					
M-18-01	2201	Woodlawn Street	61	61	62

** Indicates that the noise level was not predicted at this location due to it being within the limits of disturbance of the project.*

Grey highlight denotes that receptors are impacted in the indicated condition with predicted noise levels equal or exceeding PennDOT NAC or with a substantial noise level increase (10 dB(A)) over existing.

A combination of two barriers were investigated for the barrier system to mitigate noise for NSA 11, 12, & 13. One along northbound I-83 from 13th Street to 19th Street and one along the eastbound side of Paxton Street west of 16th Street. During the optimization process of the noise barrier system, it was determined that at a maximum height of 30 feet, the barriers did not provide benefit to at least 50% of the impacted equivalent residential units (ERU). Therefore, this barrier system was determined to be not feasible and was not advanced.

One noise barrier at NSA 15 was determined warranted, feasible, and reasonable as a result of the noise analyses. A community noise meeting was held on November 24, 2020. Residents were provided a project overview, design overview, and noise study guidance, noise analysis process, and noise abatement results. The meeting ended with an overview of the noise barrier voting process and an open discussion from the residents on their preference for noise barrier aesthetics including color and texture of the residential side of the noise barrier. The final voting resulted in 100% approval to advance a noise barrier for NSA 15 by the residents. **Figure 16** shows the final location, color, and texture of the approved noise barrier.

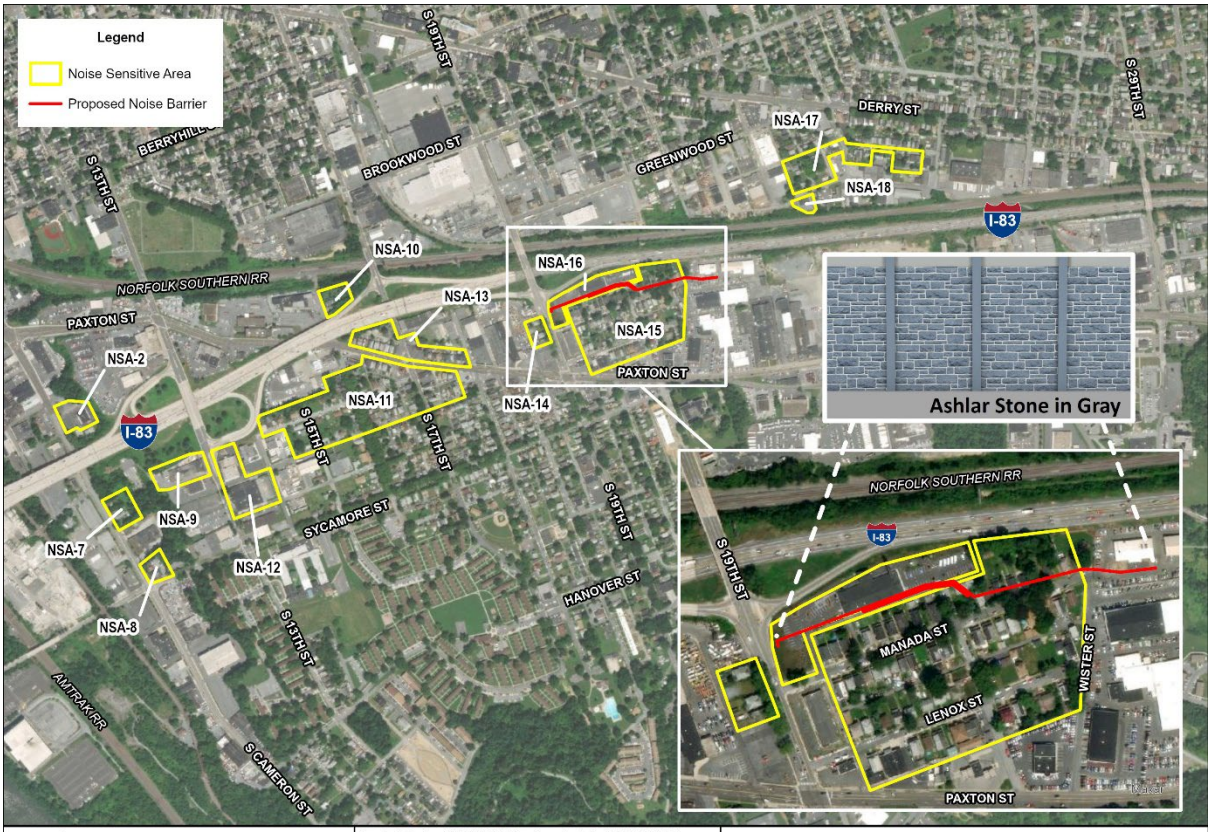


Figure 16
Noise Study
SR 0083, Section 079

For details regarding the investigations please refer to the Final Design Noise Report Dated 2020, the Final Design Noise Report Addendum dated 2022, and all corresponding FHWA concurrence memos, located in the project technical file.

The No-Build Alternative would experience a lesser amount of noise impacts than the Build Alternative (see **Table 6**) due to natural increase in traffic volumes over time rather than from an increase in capacity or change in design.

4.3.4 Environmental Justice, Title VI, and Equity

Presidential Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that each federal agency "shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations…"

The three fundamental principles of environmental justice are as follows:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or substantial delay in the receipt of benefits by minority and low-income populations.

EO 12898 expands upon the requirements of Title VI of the Civil Rights Act of 1964, 42 USC 2000d, which prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.

President Biden furthered awareness with the issuance of EO 13895 *Advancing Racial Equity and Support for Underserved Communities through the Federal Government.* This EO directs federal agencies to revise policies to account for racial inequities in their implementation. Furthermore, the EO defines equity as "…the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality." It further defines underserved communities as "...populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of 'equity.'"

Additionally, EO 13166, Improving Access to Services for Persons with Limited English Proficiency, requires federal agencies to examine the services they provide and identify any need for services to those with limited English proficiency (LEP). The EO requires federal agencies to ensure that recipients of federal financial assistance provide meaningful access to their LEP applicants and beneficiaries. Failure to ensure that LEP persons can effectively participate in or benefit from federally assisted programs and activities may violate the prohibition under Title VI of the Civil Rights Act of 1964, 42 USC 2000d and Title VI regulations against national origin discrimination.

Identification

Environmental Justice or Underserved Populations

In order to determine the presence of Environmental Justice or underserved populations within the project area, the 2020 American Community Survey 5-year estimates, a dataset developed by the U.S. Census, was utilized to identify baseline demographic information within the project area. To supplement this information, discussions with the local community and field observations within the project area were conducted. Using the federal Council on Environmental Quality (CEQ) guidance document Environmental Justice: Guidance Under the National Environmental Policy Act, the community was considered a minority population when the minority population of the area exceeded 50-percent, or the minority population percentage of the area was meaningfully greater than the minority population percentage in the associated county. The community was considered low-income if the household income is at or below the Department of Health and Human Services (HSS) poverty guideline.

Demographic data were compiled for the project area block groups to analyze whether Environmental Justice or underserved populations are present within the project area. Following a comprehensive review of the datasets noted above and through local coordination, it was determined that both minority and low-income populations are located within the project area. **Figures 17 and 18** depict where these populations predominantly exist.

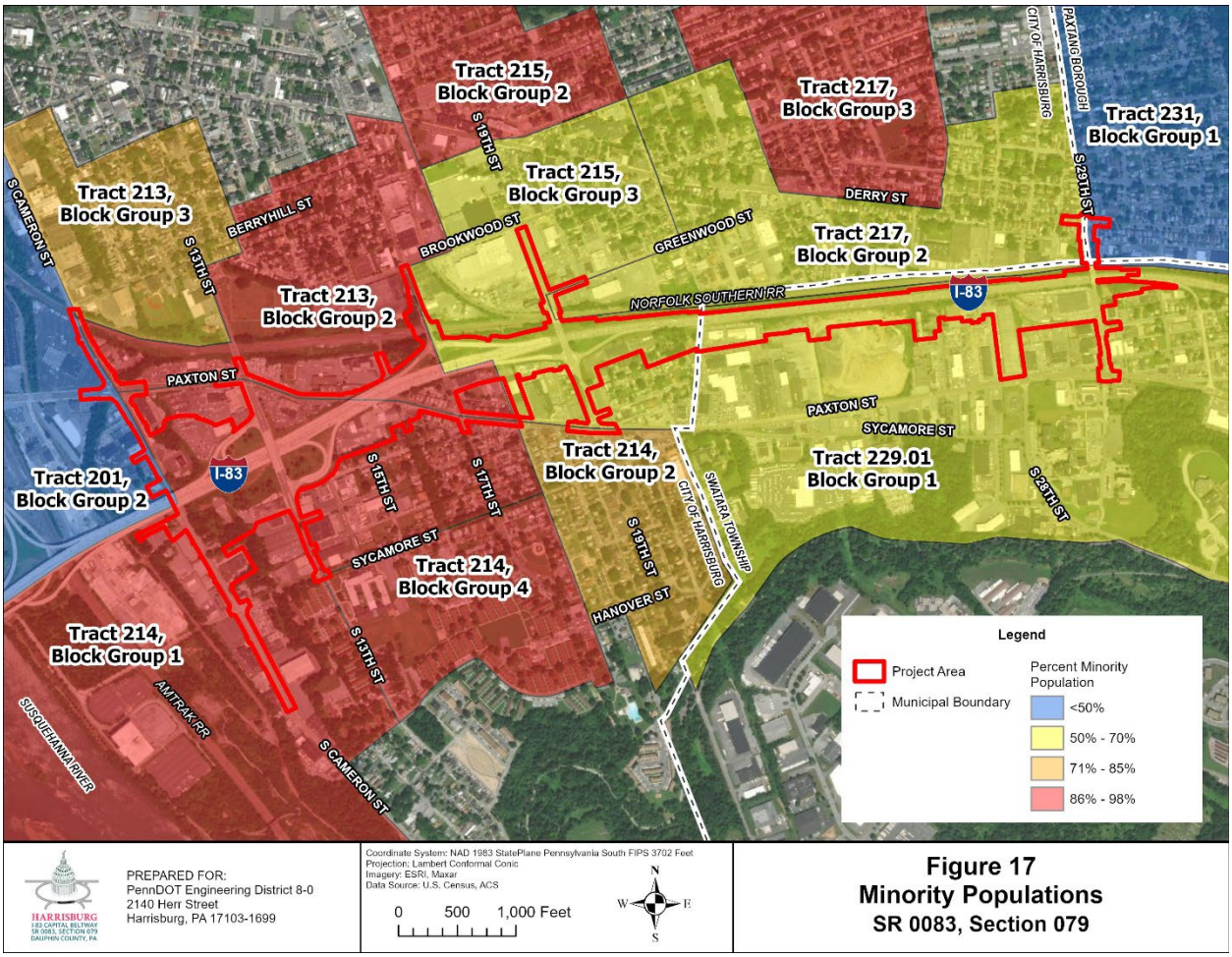


Figure 17
Minority Populations
SR 0083, Section 079

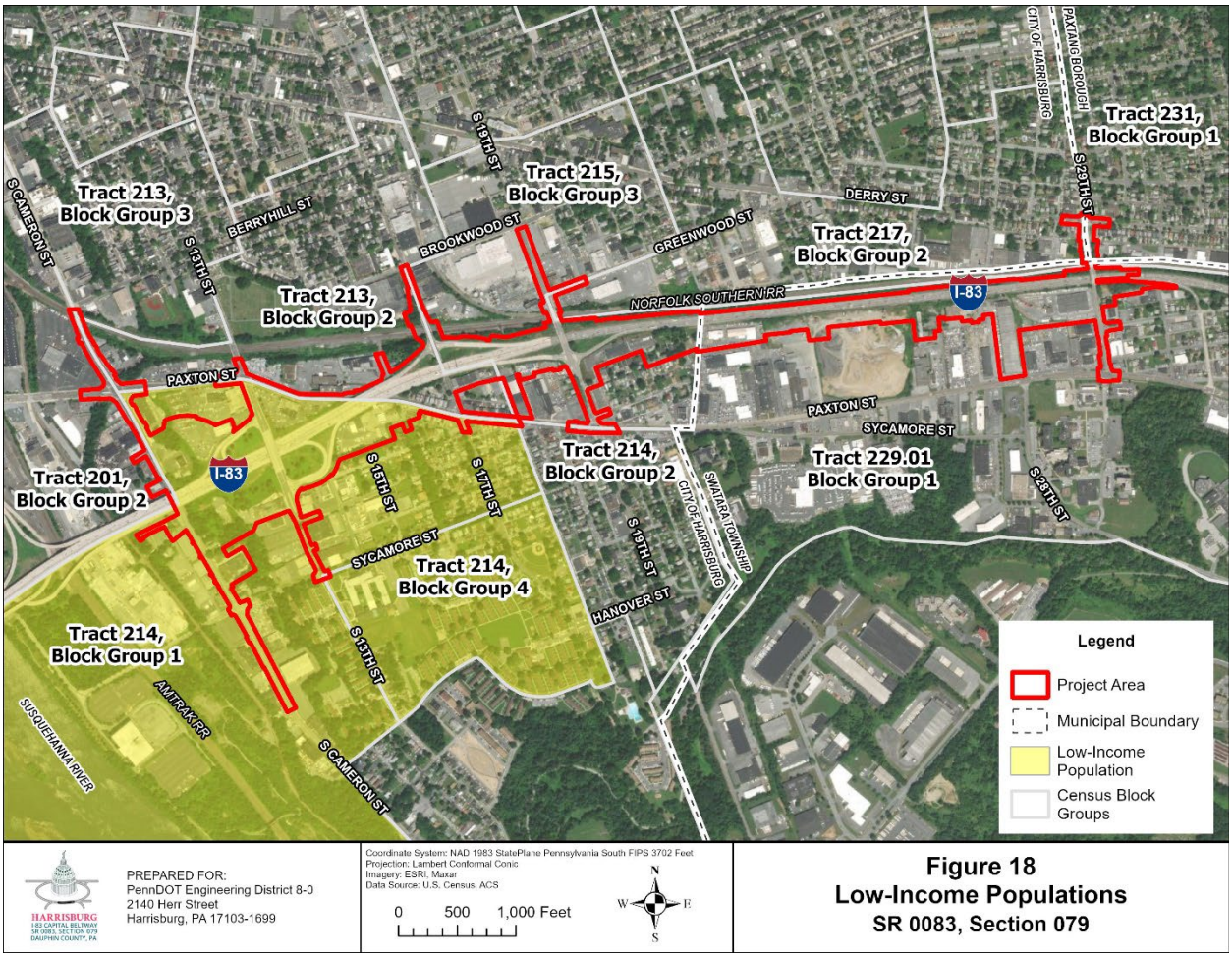


Figure 18
Low-Income Populations
SR 0083, Section 079

Limited English Proficiency Populations

In order to determine the presence of LEP populations within the project area, the 2020 American Community Survey 5-year estimates was again utilized to identify baseline demographic information within the project area. To supplement this information, discussions with the local community and field observations within the project area were conducted. Additional information on outreach efforts is located in **Chapter 5.** LEP populations were identified based on Census information as individuals 5 years and older that speak English "less than very well" or "not at all."

Demographic data were compiled for the project area block groups to analyze whether LEP populations are present within the project area. Following a comprehensive review, it was determined that LEP populations are located within the project area.

During field studies in the project area, community or commercial signage were noted to be in languages other than English and ethnic commercial establishments were found to be present. Minority places of worship were also identified. During the public workshops held for the project, (See Section 5.0, Public and

Agency Involvement, for details on workshops and outreach), accommodations were provided to enable persons that had limited English capabilities to discuss the project in other languages utilizing a phone translation service. Spanish speaking staff were also available at the meeting to directly speak to attendees about the project.

Impacts and Mitigation

Environmental Justice or Underserved Populations

According to the census data, field observations, and community outreach, the Proposed Action traverses through areas that contain majority minority populations and resulted in 34 residential displacements. Of these displacements, there were four residential displacements in an area with a higher percentage of households below the HHS poverty level.

While the direct impact of relocating for each individual resident and household may personally be substantial, when examining the overall impact to the community the residential relocations account for less than 1-percent of the households within the four impacted study area Census block groups. At this time, all relocations are complete. Additionally, all households were relocated into decent, safe, and sanitary housing, consistent with the needs and desires of the displaced persons. Of note is that every housing and rental supplement paid, exceeded the respective benefit thresholds as fully documented in individual claim files and calculated as per agency policy.

Overall, impacts to minority, low-income, or underserved populations will not be disproportionally high and adverse. The Proposed Action would benefit the community by improving mobility and safety throughout the project area. Impacts were minimized to the extent practicable, and mitigation will be implemented to offset anticipated impacts from the proposed project. No disparate impacts are anticipated under Title VI and related statutes.

The following bullets summarize the mitigation measures to be implemented as part of the project to offset the potential for adverse impacts on the socioeconomic features, including the Environmental Justice or underserved communities within the project area.

- Provide noise barrier along the residential area from 19th Street to Wister Street to offset increased noise levels.
- All relocations are complete or are in the process of being completed. Displaced residents and businesses received relocation assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended; Title VI of the Civil Rights Act of 1964; and the Pennsylvania Eminent Domain Code of 1964.
- Include traffic signals, new ADA-accessible ramps and sidewalks, and bike lane/shoulders to improve the safety for non- motorized travelers along local roadway corridors within the project limits.
- Include the use of pedestrian-scale lighting in addition to highway lighting to further improve safety of pedestrian and bicycle users along the local roadway corridors.
- In remnant right-of-way areas, will provide natural and pollinator plantings that would improve the

community streetscape, as appropriate.

- As design advances, consider the use of retaining walls to minimize impacts.
- Coordinate with EMS providers to ensure no impacts to the service areas occur as a result of design decisions.
- Coordination with CAT through in-person meetings and plan reviews resulted in improved bus stop locations within the project area.
- Conduct continued public engagement through future design and construction activities with stakeholder meetings, project website announcements, and community leader outreach.

More information on Environmental Justice can be found in the Socio-Economic Technical Memorandum dated 2022, located in the project technical file.

Limited English Proficiency Populations

According to the census data, field observations, and community outreach, the Proposed Action traverses through an area that contains an LEP population. However, benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the community. Accommodations for the public with limited English capabilities were included at public outreach events by providing translation services and select community flyers were printed in English and Spanish. Non-English accommodation will continue to be offered and provided throughout the remainder of this project.

More information on LEP can be found in the Socio-Economic Technical Memorandum dated 2022, located in the project technical file.

The No-Build Alternative would have no impacts on LEP populations, nor would it provide benefits for those populations.

The Socioeconomic Technical Memorandum dated 2022, is located in the project technical file and provide more detailed information.

4.3.5 Displacements and Tax Base

Identification

The project area is primarily urban including a mix of residential, commercial, and industrial land uses. Zoning throughout the project area is primarily industrial and commercial general with small portions of open space recreational and commercial neighborhood (**Figure 19**).

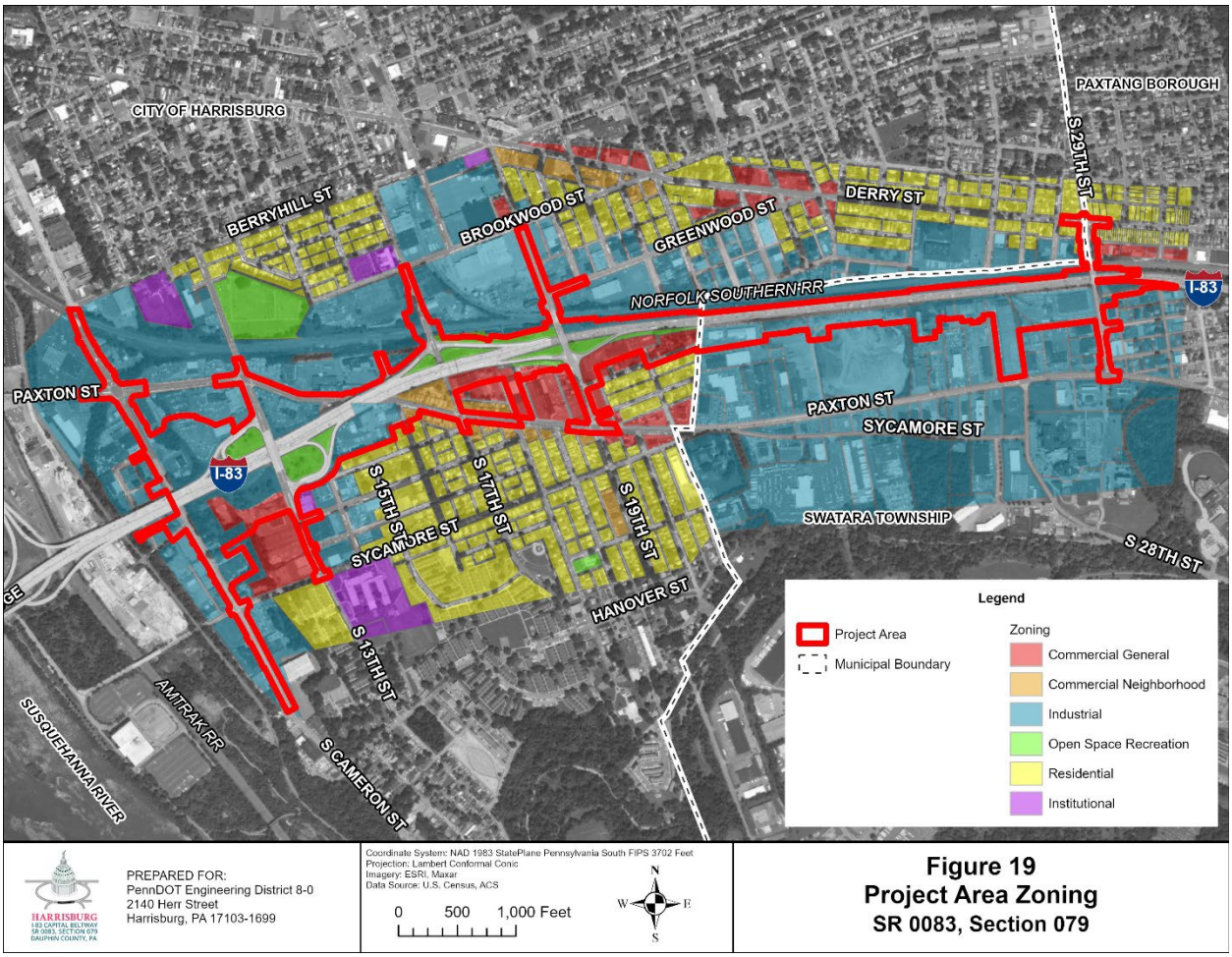


Figure 19
Project Area Zoning
SR 0083, Section 079

Impacts and Mitigation

During the development of the Proposed Action a concerted effort was taken to minimize business and residential displacements and right-of-way acquisition to taxable parcels in the City, Borough, and Township, in order to avoid strain on the local tax base and area employment.

The Proposed Action resulted in 34 residential household displacements, 13 commercial building acquisitions that housed 22 businesses, and 58 partial property acquisitions.

Based on the CE approval, residential and business relocations and partial right-of-way acquisitions under Contract 1 are almost complete, and many of the acquired properties have been demolished. All residential and commercial relocations were conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as amended (Public Law 91-646) (42 USC 4601) (Uniform Act); Title VI of the Civil Rights Act of 1964; and the Pennsylvania Eminent Domain Code of 1964. However, it should be noted that residential relocations on this project were complicated by Covid-19 restrictions and limitations, as well as an historic scarcity of relocation properties. Yet nearly all residential

displacements were resolved with relocations into decent, safe, and sanitary housing consistent with the needs and desires of displaced persons. Of note is that every housing supplement paid, as well as every rental supplement, exceeded the respective benefit thresholds as fully documented in individual claim files and calculated as per agency policy.

Regarding business relocations, the business dislocation damages (BDD) payments were calculated with sensitivity to the loss of income due to Covid-19 closures. Landlords who had experienced loss of rental income were provided the state-law benefit up to the statutory limit of $30,000 when eligible. And, finally, PennDOT accommodated several business moves that were required to be made in stages along with payments for storage fees to facilitate the move. All of the relocated businesses chose to relocate in the greater Harrisburg region. PennDOT staff coordinated with the individual businesses. All full relocations were conducted as part of Contract 1 and partial acquisition for properties under Contract 2 will be conducted as final design progresses.

The direct impact of relocation for each individual resident and household may personally be substantial. However, when examining the overall loss to the community, the residential relocations account for less than 1-percent of the households within the four impacted study area Census block groups.

While the business relocation impacts could also potentially be individually significant, the long-term impact on the overall community is more limited as a majority of the businesses chose to continue operation at an alternative location generally within the region. Thus, allowing community members the opportunity to continue accessing the business for commercial or employment purposes differently.

The conversion of land associated with the right-of-way acquisition resulted in minimal impact to tax base. Additionally, as travel mobility and access throughout the corridor improves with the project, new development or redevelopment could occur, which may further offset any tax base issues and actually benefit the communities. Therefore, mitigation for loss of tax revenue is not required.

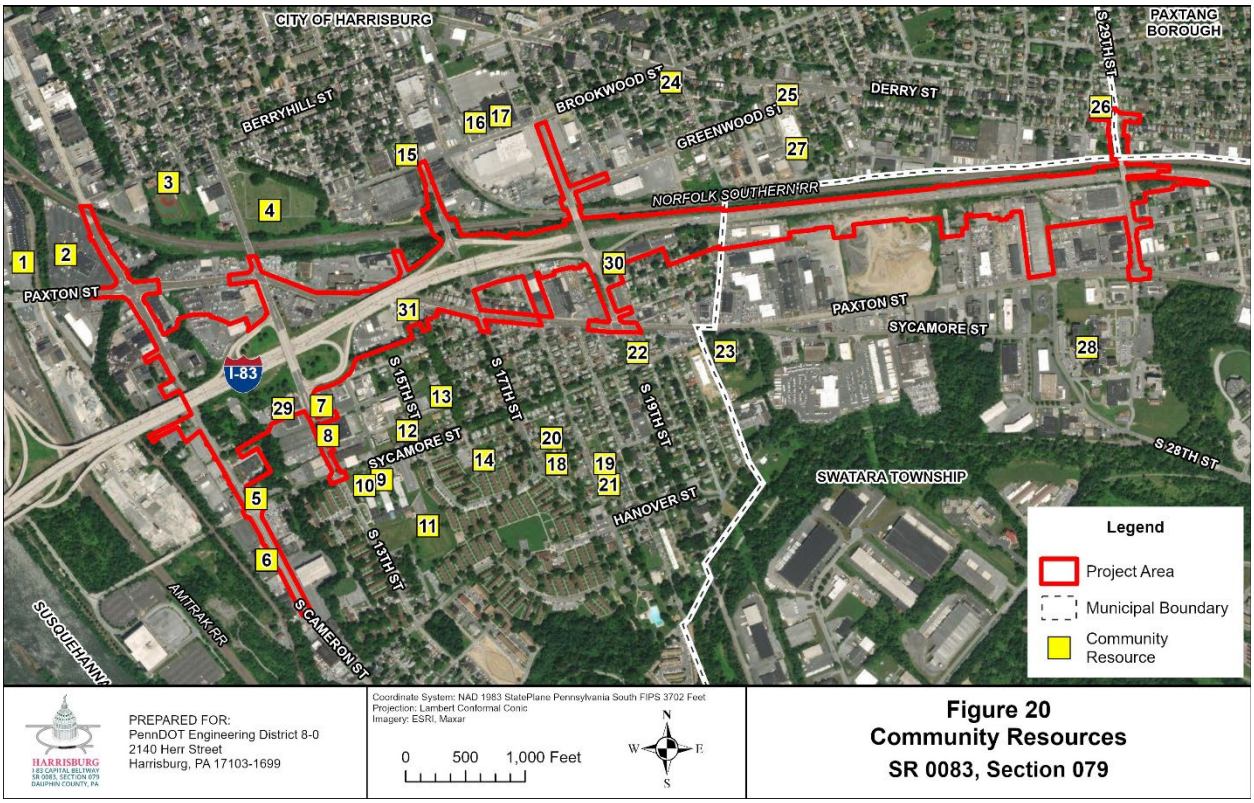
The No-Build Alternative would have no impact on displacements or tax base within the project area.

The Socioeconomic Technical Memorandum dated 2022, is located in the project technical file and provide more detailed information.

4.3.6 Community Facilities and Services

Identification

Community facilities and services noted within the project vicinity include community support services; emergency and medical services; schools; assisted living; places of worship; government services; bicycle, pedestrian, and recreational facilities; and public transit services. The Community Facilities and Services are discussed in detail in the Socio-Economic Technical Memorandum dated 2022, located in the project technical file. **Figure 20** and **Table 7** provide a summary of these resources.



PREPARED FOR:
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
Imagery: ESRI, Maxar

0 500 1,000 Feet

N W E S

Figure 20
Community Resources
SR 0083, Section 079

Table 7: Community Resources

#	Community Resource	#	Community Resource
1	Habitat for Humanity- Greater Harrisburg Area ReStore	17	Pennsylvania Bureau of Audits
2	UPMC Community Life Team	18	Cloverly Heights Park
3	Boys and Girls Club of Harrisburg	19	Cloverly Heights Playground
4	Mount Calvary Cemetery	20	Cham Muslims Association of Pennsylvania
5	The Church of Pentecost U.S.A., Inc.	21	Kingdom Life Christian Center
6	Dauphin County Drug & Alcohol Support Services	22	Christian Fellowship Church
7	Sylvan Heights Science Charter School	23	Paxton Ministries
8	From the Heart Church Ministries	24	Bethany AME Church
9	Foose Elementary School	25	Harrisburg Brethren in Christ Church
10	Hamilton Health Center-Foose	26	The Journey Church
11	Putnam Park	27	Harrisburg River Rescue and Emergency Services, Inc.
12	John Paul Scott Community Church	28	Spring Creek Rehabilitation and Healthcare Center
13	At the Cross Church of God in Christ	29	Mikayla's Place
14	Grace House Ministries of Covenant Community Church	30	Senior Life Harrisburg
15	Pennsylvania Counseling Services (17th Street)	31	Paxton Dental Care
16	Pennsylvania Department of Revenue		

Impacts and Mitigation

The Proposed Action resulted in the displacements of three community resources: Senior Life Harrisburg, Paxton Dental Care, and Mikayla's Place (daycare center). Details regarding these resources can be found in the Socio-Economic Technical Memorandum dated 2022, located in the project technical file. Since the right-of-way acquisitions have largely been completed, these three community resources have already been relocated. Each of the facilities chose to relocate outside of the project area but still within the greater Harrisburg area and will continue to serve the surrounding community.

There would be no adverse impacts to the Harrisburg School District and the Central Dauphin School District as a result of this project. However, the project would benefit the Harrisburg School District's Foose Elementary School by relocating the interchange from 13th Street to Cameron Street. This relocation eliminates the need for motorists to utilize Sycamore Street to access SR 0083, Section 079, thus reducing the volume of vehicles passing by the Foose Elementary School. The reduction in traffic would improve safety for children walking to and from school.

Overall, pedestrian and bicycle mobility would be improved with the project. Paxton Street, Cameron Street, 13th Street, 17th Street, 19th Street, and 29th Street would be widened to accommodate sidewalks (ADA standards) or multiuse paths along with pedestrian scale lighting. In addition, shoulders and/or multiuse paths would be designed to accommodate bicycles out of the main travel path of motor vehicles.

There would be no long-term disruptions or impacts to the public transportation as a result of the project. Some bus routes and stop locations may need to be temporarily detoured during construction, but this

would only be in effect for a short time. Coordination with CAT through in-person meetings and plan reviews resulted in improved bus stop locations within the project area.

The Proposed Action would not permanently impact any emergency services, and no impacts to public housing are anticipated.

Coordination with EMS providers ensured no impacts to the service areas occurred as a result of design decisions. Coordination with schools, transit, and other community and facility services will continue to ensure no disruption of service occurs as a result of the project.

As the project progresses through design and construction, public outreach would occur to inform the community and the traveling public about pedestrian, bicycle, and vehicular detours along with the construction schedule. Outreach will include accommodation for individuals with limited English proficiency, as appropriate.

The No-Build Alternative would result in no adverse or beneficial impacts to public facilities and services within the project area.

The Socioeconomic Technical Memorandum dated 2022, is located in the project technical file and provide more detailed information.

5.0 Public and Agency Involvement Activities

Throughout project development, coordination with multiple organizations, agencies, public entities, and individuals regarding the SR 0083, Section 079 project was conducted. Using information received from this outreach, alternatives were developed and evaluated as to how they address the transportation purpose and needs, type and level of potential resource impacts were discussed, and public feedback and preferences were received.

5.1 Public Outreach

5.1.1 Public Outreach Supporting the 2019 Approved CEE

Outreach with stakeholders and the public within the project area occurred via meetings, telephone calls, participation in local events, newsletters, and the project website throughout preliminary design and prior to the approval of the 2019 CEE. A summary of the public outreach conducted includes:

Project Website

A project website was created for the Master Plan study and has been and will be continually updated to include project specific information and schedules. The website address is www.i-83beltway.com. The public can sign up to receive project updates and notifications via the "Join Mailing List" link on the project website. While project outreach has been conducted with various stakeholders, the project website was the main repository for public information on the project.

Meetings

Master Plan Outreach

- As part of the Master Plan, there were 33 municipal and local organization meetings which included the three project area municipalities (City of Harrisburg, Paxtang Borough, and Swatara Township). There were also two rounds of public meetings (September 24 and 25, 2002 and April 23 and 24, 2003)

Special Purpose Meetings

- Foose Elementary School Meeting - March 21, 2018
- 29th Street Methodist Church Community Leader Interview – April 9, 2018
- Traffic Incident Management Coordination Meeting – July 30, 2018
- East Shore Diner Meetings – November 29, 2018, and February 6, 2019
- Capital Area Greenbelt – January 15, 2019, and February 19, 2019
- Pennsylvania Fish and Boat Commission Coordination Meeting – February 26, 2019
- Harrisburg River Rescue and Harrisburg Bureau of Fire Meeting – March 14, 2019

Municipal Meetings

- Swatara Township Coordination Meeting – May 10, 2017
- Paxtang Borough Coordination Meeting – May 24, 2017
- City of Harrisburg Coordination Meeting – May 24, 2017, February 9, 2018, February 19, 2019, and April 29, 2019

- Traffic Incident Management Coordination Meeting – July 30, 2018
- Public Official's Briefing Meeting – October 18, 2018

Open House Public Plans Display

- Open House Public Plans Display – October 18, 2018
    - PennDOT and FHWA jointly held a public meeting and plans display in a vacant space in the Harrisburg Mall. The display covered both Section 078 and Section 079 of the SR 0083 project. Project team members, as well as PennDOT staff, were on hand to answer questions from area residents and business owners. Translation services were available near the registration desk, and a bilingual staff member was present. The location for the public meeting was also selected for its location along a CAT bus route to allow carless residents to attend.

Telephone Outreach

The project team contacted the following organizations in 2018 to ask if they could suggest any community members or leaders who may be able to provide the Team with an introduction to the wider community in order to disseminate information about the project. The majority of organizations provided information and indicated they would prefer to stay informed about the project by signing up for notifications from the project website.

- Harrisburg Area NAACP – March 28, 2018
- Latino Connection – March 28, 2018
- Tri-County Community Action – March 29 and April 5, 2018
- Harrisburg River Rescue – January 16, 2019
- Hispanic Chamber of Commerce – March 19, 2018
- Bethany AME Church – March 9 and March 26, 2018
- Harrisburg Boys & Girls Club – March 16 and March 26, 2018
- King Community Center – March 27, April 5, and April 6, 2018
- Senior LIFE Harrisburg – March 9, March 21, and March 26, 2018
- 29th Street Methodist Church – March 26, 2018 and April 9, 2018

Consulting Party

- Cultural Resources station at the Open House Public Plans Display – October 18, 2018
- East Shore Diner Meetings – November 29, 2018 and February 6, 2019
- Capital Area Greenbelt – January 15, 2019 and February 19, 2019

Tribal Coordination

- Tribal consultation was conducted on December 12, 2018. This included Absentee-Shawnee Tribe of Oklahoma, Delaware Nation, Delaware Tribe, Eastern Shawnee Tribe of Oklahoma, and Shawnee Tribe. A consulting party request from the Delaware Tribe was received on January 1, 2019.

Other

- Harrisburg Housing Authority (HHA) Community Day - August 17, 2018

- Postcards describing the project and providing contact information were distributed at the HHA Community Day at Hall Manor.

5.1.2 Public Outreach Following the 2019 Approved CEE

PennDOT and the project team continued to conduct public outreach with stakeholders and the public in the project area after the approval of the CEE, and as part of this EA effort. The purpose of the continued outreach is to keep the public informed of project design updates, notify the public of the revised project limits and solicit feedback regarding community changes since the 2019 approved CEE. A summary of the public outreach conducted for the project includes:

Project Website

The project website has been and will continue to be updated throughout the life of the SR0083, 079 project. While project outreach has continued with various stakeholders, the project website is still the main repository for public information on the project.

Pertinent project website updates include the following:

- November 2019 Update – Announced efforts to minimize right-of-way impacts.
- February 2020 Update – Displayed pedestrian and bicycle accommodation updates within the vicinity of 13th, 17th, 19th, and Paxton Streets, right-of-way activities and Phase II/III fieldwork updates, and provided other general project updates.
- February 2021 Update – Provided information regarding noise wall efforts and highway lighting.
- 2022 update – It is anticipated that the website will be updated again in the Fall of 2022 to inform the public of the project design and termini revisions, and to announce availability of the EA.

Special Purpose Meetings

- Foose Elementary School Meeting – July 8, 2022
- King Community Center Phone Interview – July 26, 2022

Telephone Outreach

The project team contacted the following organizations in 2022 to notify them of the revised project limits, discuss any design changes, and to update any information they may have provided in the 2018 telephone outreach efforts.

The following organizations were successfully contacted:

- Foose Elementary School – July 8, 2022
- King Community Center – July 26, 2022
- Journey Church (formerly 29th Street Methodist Church) – July 12, 2022

The project team attempted to contact the following organizations but were unsuccessful.

- Bethany AME Church – July 12, 2022 and July 20, 2022
- Harrisburg Boys & Girls Club – July 12, 2022, July 20, 2022, and July 29, 2022
- Tri-County Community Action – July 20, 2022 and July 22,2022

- Senior LIFE Harrisburg – July 12, 2022 and July 20, 2022. The facility relocated outside the project area to North Front Street in Steelton.

The following organizations were not contacted in 2022 via telephone outreach, as a result of the information gathered in 2018.

- Harrisburg Area NAACP – March 28, 2018 – Interested in the project through the website/signed up for project notice.
- Latino Connection – March 28, 2018 – Organization is focused on public relations and marketing.
- Harrisburg River Rescue – January 16, 2019 – No longer in the project limits.
- Hispanic Chamber of Commerce – An incorrect contact number is displayed on the website. No other contact information was available. The website directs you to an online form. No response from the 2018 attempt using the website.

Open Houses

- Foose Elementary School, Open House – September 13, 2022
    - Plans displayed at the 2022 Foose Elementary School Open House and business cards with the project website were distributed to attendees. PennDOT Representatives, including a bilingual staff member, were available to describe the project and answer questions.

5.2 Agency Coordination

An Agency Coordination Meeting (ACM) was held on September 26, 2018. Project purpose and needs, community outreach and coordination efforts, environmental features, the recommended preferred alternative, traffic conditions, and next steps for the project were presented to the agency representatives in attendance. Project and environmental issues were shared with state and federal agencies that are either participating in the project or will be part of the environmental review process. Meeting minutes are found in the project technical file.

In 2022, PennDOT representatives met with EPA and PA DEP, individually, to discuss project changes and invite them to be cooperating agencies in the EA process. Per the 2022 outreach, the EPA agreed to be a cooperating agency and PA DEP a participating agency for this project. Agency coordination will continue throughout final design and into the construction of the project, as applicable.

5.3 Future Coordination

As the project continues through final design and construction, the project team will continue to reach out to the public for input on the project. Future planned public outreach includes the following:

- Project website will be maintained and updated at major milestones to discuss the project.
- Coordination with Paxtang Borough, Swatara Township, and the City of Harrisburg will continue as the project progresses through final design and into construction.

- Emergency service providers will be contacted to discuss maintenance of traffic during the various phases of construction.
- Continue coordination with state and federal agencies to update threatened and endangered species coordination and facilitate permitting.
- Continue public outreach during construction phases regarding road closures and detours.

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6.0 Indirect Effects

Identification

The CEQ regulations require the examination of both the direct and indirect impacts of a project (40 CFR § 1508.25 [c]). Direct and indirect impacts can be defined as follows (from 40 CFR § 1508.8):

- Direct effects are caused by the action and occur at the same time and place as the action.
- Indirect effects are caused by the action and occur later in time or are farther removed in distance but are still reasonably foreseeable.

According to FHWA guidance, the determination or estimation of future impacts is essential to indirect impact analysis. However, the focus must be on reasonably foreseeable actions; those that are likely to occur or probable, rather than those that are merely possible.

Indirect effects attributable to a Proposed Action for a project may include changes in land use and associated impacts on environmental resources. In addition, the definition of indirect effects also includes other potential environmental impacts caused by a Proposed Action, such as the future degradation or loss of streams and wetlands due to sedimentation, stormwater runoff, or changes in hydrology.

Natural and cultural resources are present within the project area; however, the Proposed Action would not have an indirect effect on these resources after considering the proposed mitigation; therefore, the analysis of indirect impacts focuses on socioeconomic resources. The Socio-Economic Technical Memorandum dated 2022, located in the project technical file, details the project area socio-economic resources and impacts (direct, indirect, and cumulative). The discussion below provides a brief summary of those findings. The No-Build Alternative would not contribute to indirect effects and is not discussed.

Impacts and Mitigation

The indirect effects analysis for the Proposed Action was completed by following the guidance outlined in PennDOT Publication 640, Indirect and Cumulative Effects (ICE) Desk Reference, and reviewing the municipal comprehensive plans and county and municipal zoning plans. As outlined in the reference guide, one of the most likely causes of indirect effects is related growth. The determination of potential indirect effects is based on a combined analysis of project type, project location, and growth pressure.

- Project Type
  - The SR 0083, Section 079 project proposes widening and full reconstruction of the SR 0083, Section 079, from just west of Cameron Street (SR 0230) to just west of 29th Street (SR 3013), to provide an Interstate facility that includes six mainline through lanes (three in each direction) and a two-lane CD road with ramp lanes providing access for local traffic at the interchanges.
- Project Location

- Current zoning and land controls influence the development potential of the surrounding area. The land adjacent to and south of the proposed alternative design is densely developed mix of residential, commercial, and industrial land uses. The land adjacent to and north of the proposed alternative design is densely developed commercial and transportation land uses. SR 0083 is bound by the Norfolk Southern Railroad corridor to the north, from 19th Street east through the project area. See **Figure 19**, Project Area Zoning, in Section 4.3.5 Displacements and Tax Base.

- Growth Pressure
  - Based on a review of the Dauphin County, City of Harrisburg, Paxtang Borough, and Swatara Township Comprehensive Plans, and the Harrisburg Area Transportation Study, the project area is suitable for development/redevelopment. Additionally, utilities are available throughout the communities, and the existing roadway network provides accessibility and mobility to the surrounding region.

Based on review of analysis above, the proposed project has the potential to induce development activities in the SR 0083, Section 079 corridor as mobility improves. While the majority of the land use in the area is developed, it would be expected that induced development would occur as redevelopment of abandoned or underutilized parcels.

The potential for the proposed alternative design to result in indirect effects to project area resources was also evaluated:

- Induced new development or redevelopment would benefit the tax base and provide additional economic opportunities for community residents. The Cameron Street interchange has the potential to induce new development or redevelopment in this area as it provides new direct access to the interstate system. It is not anticipated that Harrisburg City would change its zoning, therefore development or redevelopment would be of the same land use. This direct connection could make this area more attractive for future development opportunities. However, it should be noted that much of this area lies within the 100-year floodplain so any development would have to conform to current rules, regulations, and guidance.
- While new or induced development/redevelopment would benefit the tax base and provide additional economic opportunities for community residents, it could put additional strain on community facilities and the school districts. Additionally, improved mobility could induce changes to development/redevelopment patterns which could require adjustments to community cohesion and internal neighborhood access.
- The Proposed Action may provide new economic opportunities in the project area. The potential for employment during construction or as part of any infill development within the area are opportunities that the minority and low-income populations and underserved communities may not have otherwise been afforded. In addition, this community will have improved access and mobility throughout the project area and would not be further isolated.

Because indirect impacts are anticipated to be beneficial for the project area community resources, and will not impact natural or cultural resources, no mitigation is recommended.

Direct Impacts to project area resources are discussed in Section 4.0, Environmental Consequences.

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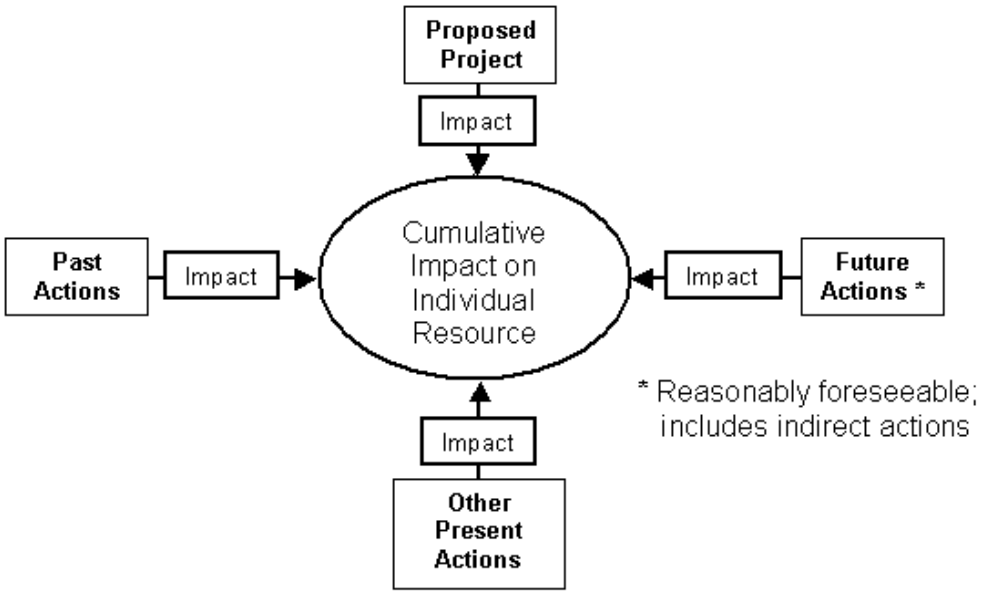
7.0 Cumulative Effects

Cumulative impact is the impact on the environment, which results from the incremental impact on a resource when combined with other past, present, and reasonably foreseeable future actions regardless of who (e.g., agency or individual) undertakes such action. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Cumulative impacts are assessed for individual resources which have a direct or indirect effect from the project.



Cumulative effects are only considered for resources with a direct or indirect effect from the SR 0083, Section 079 project. The following resources, while present, would not have direct or indirect effects that would contribute to cumulative effects after considering proposed mitigation, and are therefore not considered in detail in the cumulative effects analysis.

- Natural Resources – There are no natural resource effects that would contribute to a cumulative effect. As discussed in Section 4.1 Natural Resources, only minor permanent and temporary impacts are anticipated as a result of the Proposed Action. Mitigation measures to unavoidable impacts will be applied to the project per permitting requirements and agency coordination. Due to mitigation measures, there would not be a contribution to cumulative natural resource impacts from the project.
- Cultural Resources - There are no cultural resource effects that would contribute to a cumulative effect. As discussed in Section 4.2. Cultural Resources, the Proposed Action Alternative would not affect NRHP eligible or listed archaeological resources. Additionally, the project would not affect one of the two historic properties within the project APE, nor adversely

affect the second property. Therefore, there would not be a contribution to cumulative cultural resource impacts from the project.

- Hazardous and Residual Waste – As discussed in Section 4.3.1, Hazardous and Residual Waste, the project is anticipated to result in impacts associated with excavation of potentially contaminated soils. However, appropriate mitigation is proposed to avoid and minimize further contamination. Where hazardous materials are encountered during construction, they will be handled and disposed of appropriately, resulting in an overall reduction in hazardous waste contamination in the project area.
- Air Quality and Climate Change – As discussed in Section 4.3.2, Air Quality and Climate Change, the Proposed Action would not cause or contribute to a new violation, increase the frequency or severity of any violation, or delay timely attainment of NAAQS. There are no long-term air quality impacts anticipated as a result of the project that will require implementation of mitigation measures.
- Noise – while there may be noise contributions from the project, the project includes the development of a noise barrier at NSA 15, as deemed warranted and feasible by the noise analyses, and concurred upon by FHWA. Because mitigation measures are being applied further cumulative effects to noise are not included in this analysis. See Section 4.3.3, Noise.
- Land Use and Planned Development - As discussed in Section 4.3., Socioeconomic Resources, the majority of the land use in the area is developed. Any development that would occur would be expected as redevelopment of abandoned or underutilized parcels. The proposed improvements would not provide new access into areas that would induce growth. The project is consistent with locally adopted plans. No cumulative impacts are anticipated on regional and community planning and land uses.
- Economy - As discussed in Section 4.3, Socioeconomic Resources, the project is not expected to have an adverse effect on the local and regional economy. The right-of-way acquisition for the Proposed Action is nearly complete. The conversion of land associated with the right-of-way acquisition resulted in minimal impact to tax base loss. Additionally, as travel mobility and access throughout the corridor improves with the project, new development or redevelopment could occur, which may further offset any tax base issues and actually benefit the communities. No cumulative impacts are anticipated on community economics.
- Community Facilities and Services. As discussed in Section 4.3, Socioeconomic Resources, the project is not expected to negatively affect project area schools, emergency services building or facilities, public housing, or public transportation. Overall, pedestrian and bicycle mobility would be improved with the project. No Adverse Effects were identified to recreational resources. No cumulative impacts are anticipated on community facilities and services. No cumulative impacts are anticipated on community cohesion.
- Based on the direct and indirect impacts for this project, a cumulative impact assessment was conducted for socioeconomic resources, specifically Environmental Justice populations within the project area.

Socioeconomic Resources (past, present, and future)

The time frame for analysis dates back 50 years (approximately 1970) around the time SR 0083, Section 079 was designed and constructed. The following section provides information on the past, present, and reasonably foreseeable future conditions and provides context for understanding the potential cumulative effects.

Past

The Cultural Resource Reconnaissance Survey dated 2017, located in the project technical file, provides the history of the project area. The following is a synopsis of the pertinent history:

> *The 20th century brought modernized interstates and turnpikes to Harrisburg and its surroundings. In 1939 buses replaced Harrisburg's remaining trolleys and starting in the mid-20th century, automobile ownership would rise becoming the most popular mode of transportation in the city. The segments of I-83 and I-81 that passed through Harrisburg were completed by 1970.*

The SR 0083, Section 078 Dauphin County Eisenhower Interchange Reconstruction Project (East Shore Section 2) EA also contains pertinent details on the development of SR 0083 that are relevant to understanding the cumulative effects analysis. The following is a synopsis of the pertinent context:

> *The State Route 0083 had its origins with the Harrisburg-York-Baltimore Expressway, constructed in 1951. During the early 1950s, State Route 0083 was constructed from the Legislative Route (LR) 767/LR 139 split north to State Route 0022. This section later became designated as the US 230 Bypass. In 1956, the bypass traveled south from its intersection with State Route 0022 to Derry Street in Swatara Township. During the 1960s, State Route 0083 began construction in several sections, starting first between Front Street, through 29th and Paxton Streets. In 1960, the riveted steel Southbound bridge was built and carried two-way traffic. The John Harris bridge was completed in 1961. The Eisenhower Interchange was completed and opened to traffic in 1971.*

While growth and development in the project was likely spurred by the improved access these roadways provided, the railroad, which has been in the area for nearly 100 years, limited the connectivity between the City of Harrisburg and the growing areas to the south (current study area).

An exact account of what resources were impacted over the study timeframe to the present is not easily quantifiable; however, it can reasonably be noted that prior to the construction of project area infrastructure, the general region was largely agricultural. Over time, commercial, industrial, and residential development, changed the once agricultural area to the urban area it is today.

Present

Current conditions of the Environmental Justice populations are summarized below. Details are described in Chapter 4.0 Environmental Consequences of the Environmental Assessment Document, and in the Socio-Economic Technical Memorandum, dated 2022, located in the project technical file.

Environmental Justice or Underserved Populations - Low-income and/or minority populations are located throughout the region and are generally concentrated in the cities of Harrisburg, Lancaster, Lebanon, York, and Pottsville. Both minority and low-income populations are located within the project area including within Paxtang Borough, Swatara Township, and the City of Harrisburg.

Future Growth Trends

The project is not anticipated to result in substantial project-related growth; therefore, no substantial indirect effects or induced growth are expected. While the majority of the land use in the area is developed, it would be expected that induced development would occur as redevelopment of abandoned or underutilized parcels. Additionally, the proposed improvements provided improve but not new access to developable areas; therefore, it is unlikely that the project would induce development.

Reasonably Foreseeable Future Actions

The following projects are planned within the vicinity of the SR 0083, Section 079 Proposed Action that were evaluated for potential contribution to cumulative impacts. The identified projects include local development projects, capital improvement projects, as well as transportation projects listed on the 12-year program. The identified projects include:

- Cameron Street Improvements: Intersection improvements at Cameron Street/Maclay Street/Arsenal Boulevard and signal improvements along Cameron Street corridor.
- Capital Gateway Improvements: Bicycle/pedestrian improvements along Forster Street from the Susquehanna River to 2nd Street.
- Derry Street Safety Improvements: Safety improvements along Derry Street from 13th to 40th Streets.
- SR 0083, Section 078: Widening of SR 0083 to provide additional travel lanes in each direction between the Union Deposit Interchange and 29th Street. It includes the reconstruction of the Eisenhower Interchange and portions of US 322, I-283, and Eisenhower Boulevard. It includes new local access to Derry Street and a new interchange that will connect SR 0083 to Paxton Street in the Harrisburg Mall area.
- SR 0083 South Bridge Replacement Project: Replacement of the John Harris Memorial Bridge (South Bridge) on SR 0083 over the Susquehanna River, reconstructing the SR 0083 Front Street/2nd Street interchange and associated viaduct on the river's east shore in Dauphin County, and improving the SR 0083 Lemoyne interchange on the river's west shore in Cumberland County
- Sycamore Homes: A 23-unit affordable apartment building planned for the 1400-block of Sycamore Street, near Foose Elementary School. The project will offer high-quality studio units to low-income residents.
- Capital Region Water: Repairs and replacement of the water supply systems throughout Dauphin County. Within the project area: Cameron Street Water Main Improvements which

proposes water main improvements on Cameron Street in Harrisburg by rehabilitating about 3,500 linear feet of cast iron water main between State and Berryhill streets.

- Veterans Outreach of Pennsylvania: Development of a 5-acre parcel with 15 tiny home community along the Susquehanna River south of Sycamore Street.

Summary

Based on the analysis of the project on Environmental Justice populations when added to other past, present, and reasonably foreseeable future actions, no significant cumulative effects resulting from this project are identified.

Environmental Justice or Underserved Populations

Based on the anticipated direct impacts (Chapter 4.0 Environmental Consequences) and indirect impacts (Chapter 6.0 Indirect Impacts), residential relocations and disruption to community cohesion have the potential for cumulative social impacts. Displacements from past roadway construction and reasonably foreseeable projects are anticipated to result in residential and commercial displacements. However, as presented in Chapter 4.3 Socioeconomic Resources, anticipated mitigation measures should be implemented as part of the project to offset the potential for adverse impacts on the socioeconomic resources and the Environmental Justice/underserve communities within the project area.

Based on the mitigation, no disproportionately high and adverse effects on low-income or minority populations have been identified for the project. For these reasons, the Proposed Action is not anticipated to have a significant cumulative effect.

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8.0 Section 4(f) Evaluation

In accordance with Section 4(f) of the U.S. Department of Transportation Act of 1966 and Section 2002 of PA Act 120, Section 4(f)/2002 resources were identified in the project area. Section 4(f) resources include publicly owned parks and recreational lands; wildlife and waterfowl refuges; and historic properties of national, state, or local significance, whether publicly- or privately-owned. The SR 0083, Section 079 project area contains two Section 4(f) Resources including the NRHP eligible East Shore Diner and the NRHP eligible Philadelphia and Reading Railroad (Philadelphia to Harrisburg).

The East Shore Diner: The East Shore Diner is located at 711 South Cameron Street in Harrisburg, north of SR 0083 and was determined eligible for listing on the NRHP under Criterion C, as the building embodies the distinctive characteristics of a Modern Stainless diner manufactured by the Jerry O'Mahoney Company.

The Philadelphia & Reading Railroad: The Philadelphia & Reading Railroad (Philadelphia to Harrisburg), known as the P&R, runs on an east/west alignment through Harrisburg and is located adjacent and parallel to SR 0083 between 13th and 29th Street. The Philadelphia & Reading Railroad (Philadelphia to Harrisburg) is eligible for listing in the NRHP under Criterion A, for its association with the industrial and transportation history of the region, and its role as a critical connection for freight, especially coal, and to a lesser extent, passengers, among Philadelphia, Reading, and Harrisburg. There are three contributing features to the Philadelphia & Reading Railroad in the project APE, including one signal tower and two railroad bridges. None of the contributing features present in the project APE are located within the project Limits of Impact

The proposed project would have the following use of 4(f) resources:

East Shore Diner – De minimis Use. The proposed project involves widening SR 0083 south of the diner and relocating the existing 13th Street interchange to Cameron Street, including on- and off-ramps on the north and south sides of SR 0083. The construction of the northern ramps will require widening Cameron Street to accommodate increase traffic volumes and removing the East Shore Diner from its current location. Alternatives considered to avoid and minimize effects to the East Shore Diner included a total avoidance of the resource by not relocating the 13th Street interchange, not improving Cameron Street, and evading ramp modifications. However, relocating the 13th Street interchange ramps to Cameron Street was found to be the alternative that best meets project purpose and needs while having the least impact to the surrounding area.

To mitigate the impact, avoid an adverse effect, and qualify for de minimis Section 4(f) use, the diner is planned to be relocated to a nearby location in a manner that protects and preserves the character-defining features of the resource and retains the integrity that reflects its architectural significance. The PA SHPO concurred with the finding of No Adverse Effect to the East Shore Diner, based upon the preservation of the original diner structure as discussed in the overall Determination of Effects for the SR 0083, Section 079 project. The SHPO requested notification of the new location for the diner as part of their concurrence. Currently, the East Shore Diner appears to be on track for successful relocation. Location information was

provided to the SHPO on May 31, 2022, and documentation of its successful relocation will be provided for the agency's records.

Philadelphia and Reading RR (Norfolk Southern) - No Use. The bridges carrying 17th, 19th, and 29th Streets over the railroad will be replaced with wider and longer structures requiring only minor permanent and temporary easements from non-contributing land within the Section 4(f) resource boundary.

None of the proposed work will alter the alignment of the railroad or any contributing features. The interchanges and bridges slated for replacement, widening, or reconstruction do not involve significant features associated with the Philadelphia & Reading Railroad and the railroad right-of-way itself is not contributing.

Cameron Street will be widened south of the existing historic railroad bridge; this involves no impacts to the historic bridge. The project will not affect the characteristics which make the district eligible for the NRHP or affect the ways it conveys its association with transportation and industrial history under Criterion A.

The project involves reconstructing and widening the existing transportation facility, which includes a perpendicular crossing of the Section 4(f) property. The proposed highway project would not substantially impair the features, activities, or attributes that make the Philadelphia & Reading Railroad eligible for protection under Section 4(f) – the project will not involve any impacts to the historic resource, and it will remain an active railroad during and after construction.

Table 8 Summarizes the Section 4(f) resources and associated impacts within the project area.

Table 8: Summary of Section 4(f) Resources

Section 4(f) Resource	Proposed Action Impact	Section 4(f) Use	Coordination and Mitigation
East Shore Diner	Relocation	De Minimis	PA SHPO Section 106 Concurrence on No Adverse Effect
			Mitigation Approved
Philadelphia and Reading RR (Norfolk Southern)	Minor Right-of-Way Acquisition	No Use	PA SHPO Section 106 Concurrence on No Historic Properties Affected
			No Mitigation Required

The Determination of Effects Report dated February 22, 2019, is located in the project technical file. The Approved Final East Shore Diner De Minimis Form dated May 2, 2019, and the Approved Final Philadelphia and Reading Railroad No Use Form dated May 2, 2019, are located in the project technical file and in **Appendix B**.

The No-Build Alternative would have no use of Section 4(f) resources.

9.0 Permitting

Regulatory agency permits and approvals will be required as the SR 0083, Section 079 project continues into final design prior to construction.

An NPDES permit is required for all point source discharges to WUS. The EPA has delegated the administration of these permits in Pennsylvania to PA DEP. Per PA DEP Chapter 102 regulations, based on the amount of earth disturbance (greater than one acre) and overall location associated with the proposed project, an Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities was issued on July 2, 2021. The overall permit will cover both the SR 0083 Section 078 and SR 0083 Section 079 projects and will be amended for each individual construction section advanced for the two projects. The detailed focus of the initial NPDES permit application was for SR 0083, Section 079, Contract 1. This project will have one major amendment to the initial permit to address Contract 2. Additional stormwater runoff resulting from the project will be mitigated with post-construction stormwater controls.

The PA DEP and USACE require permits for encroachments or obstructions in any WUS or Waters of the Commonwealth, which includes wetlands and watercourses. In addition, PA DEP requires permits for highway obstructions in a FEMA 100-year floodplain or mapped floodway. Chapter 105 and 106 Water Obstruction and Encroachment permits from PA DEP and Section 404 permits from USACE would be required for impacts within the SR 0083, Section 079 project area. Section 401 of the Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.) is advanced when the construction or operation of a facility requires federal license or approval under the CWA (e.g., a Section 404 permit) and would result in a discharge into WUS under Section 401(a)(1) of the CWA (33 U.S.C. § 1341). States have the issuing authority for these certifications; thus, a Section 401 Water Quality Certification would be obtained for this project, if necessary, through PA DEP Section 105 permitting process.

A Small Projects Joint Permit Application (JPA) was issued on March 17, 2021 (DEP Permit # E2203120-028) for impacts to Paxton Creek (WUS-2) and its floodway/floodplain associated with Contract #1 for Section 079. A Chapter 105/Section 404 permit will also be required for impacts to WUS-3 and WUS-4 under the subsequent Contract #2 for Section B79. The required permit type (General Permit vs. JPA) will be determined following additional design updates and agency coordination.

PennDOT will ensure that environmentally sensitive project activities are addressed properly and in accordance with the contract provisions, project plans, and permits provided. PennDOT will continue to refine and advance these measures in the contract documents.

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APPENDICES

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APPENDIX A: PROJECT MAPPING

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APPENDIX A-1: PROJECT PLAN

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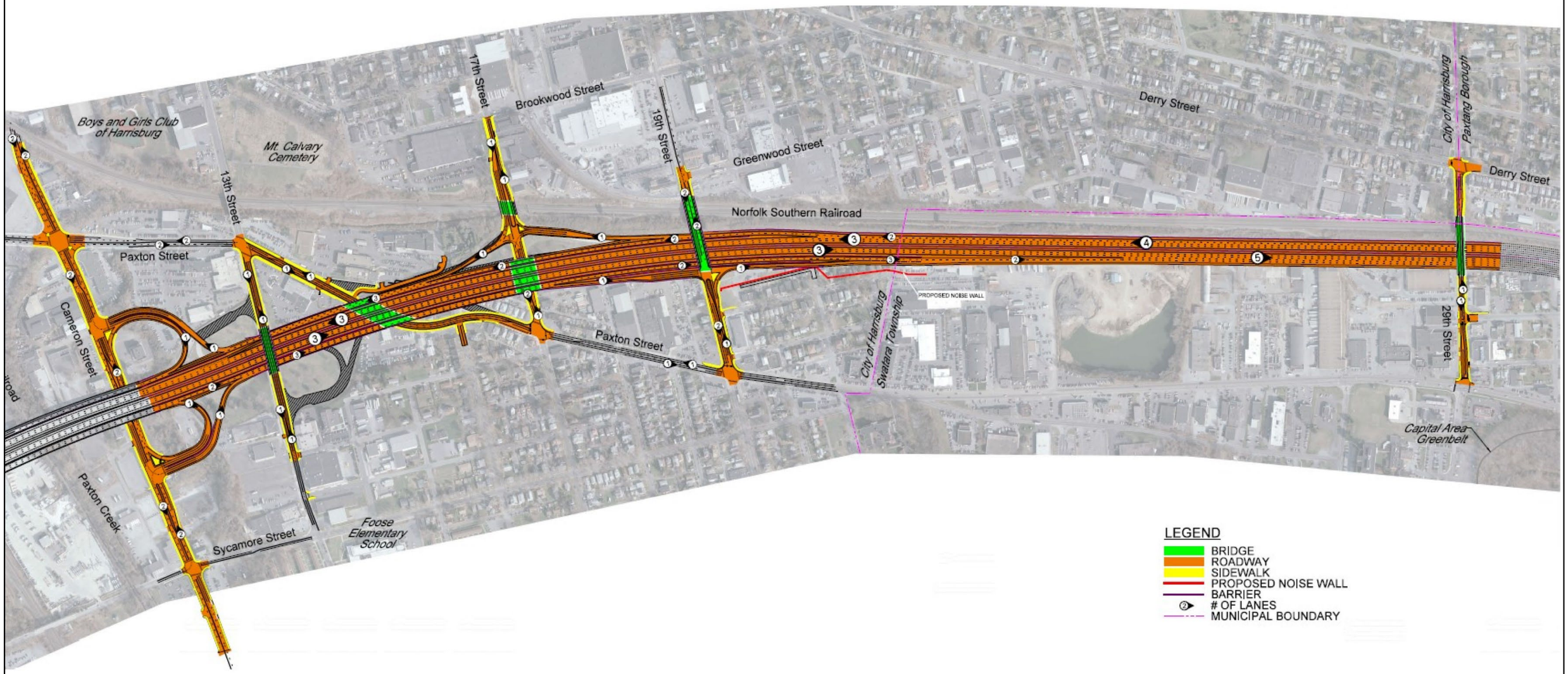

HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

PREPARED FOR:
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

Note: Not to Scale

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Project Plan

SR 0083, Section 079
City of Harrisburg, Swatara Township and Paxtang Borough
Dauphin County, Pennsylvania

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APPENDIX A-2: PROJECT RESOURCE MAPPING

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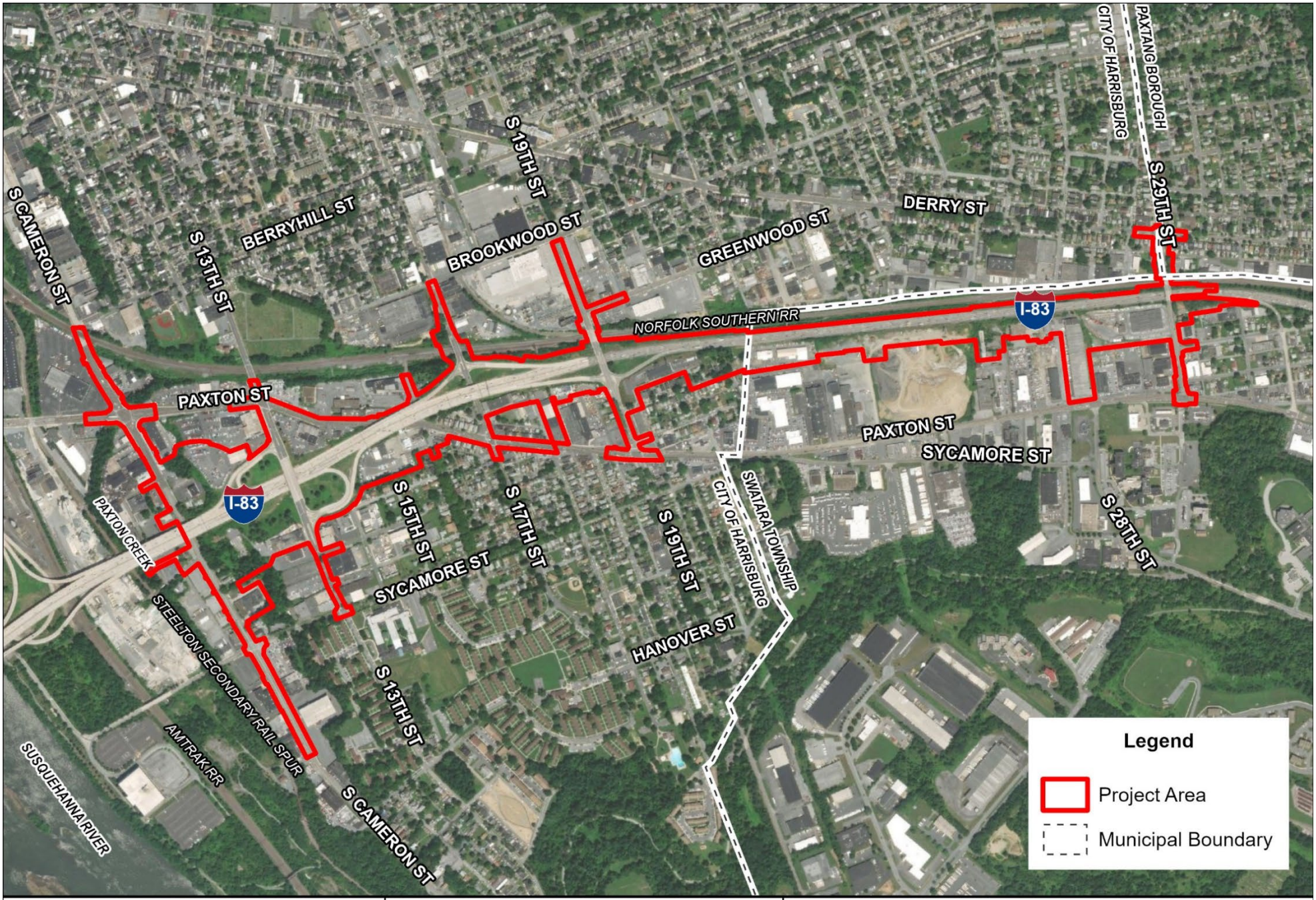

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Harrisburg, PA 17103-1699

Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
Imagery: ESRI, Maxar

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Figure 1
Project Area
SR 0083, Section 079

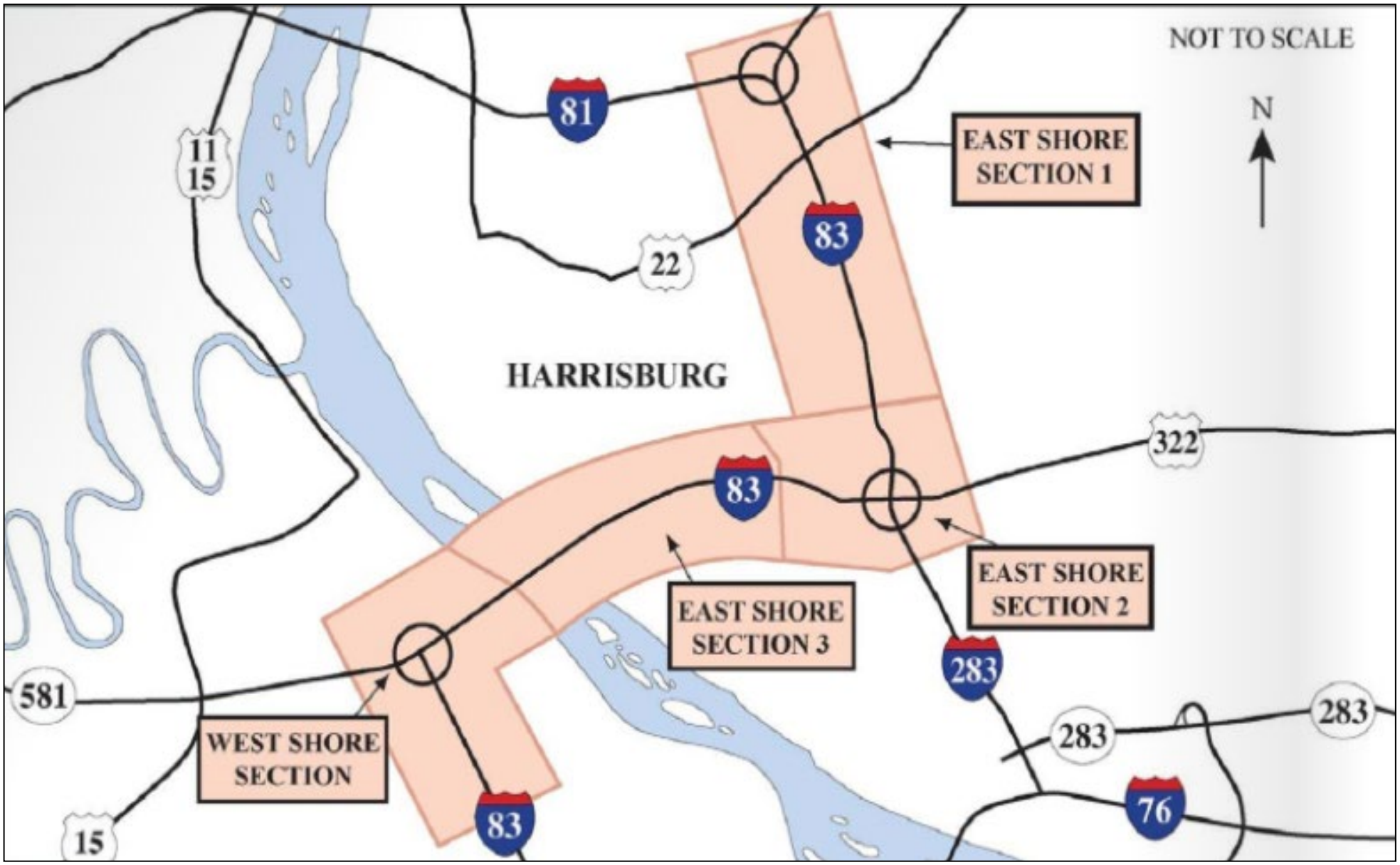


Figure 2: I-83 Master Plan – Planned Projects

Taken from the I-83 Master Plan (PennDOT 2003)

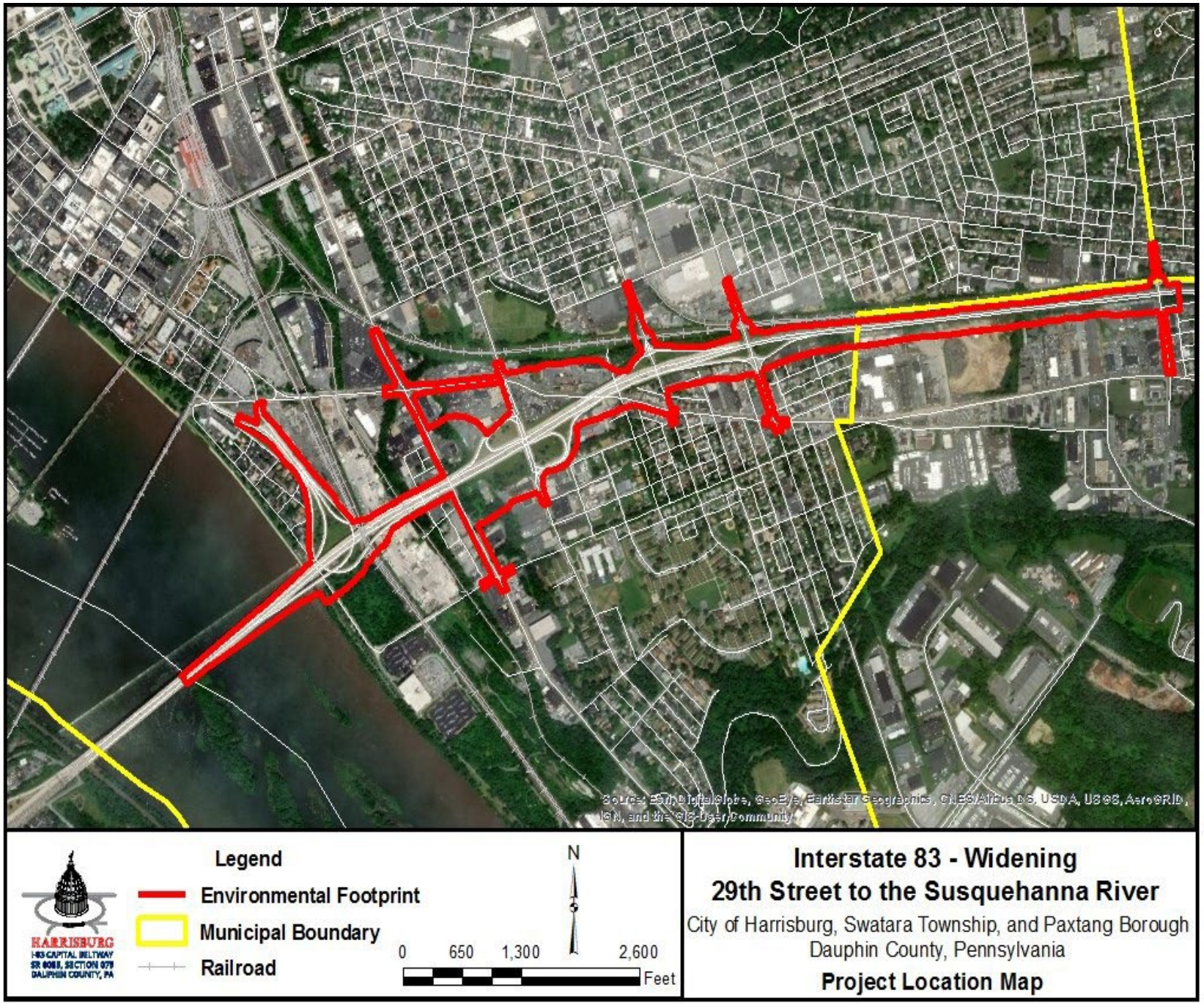
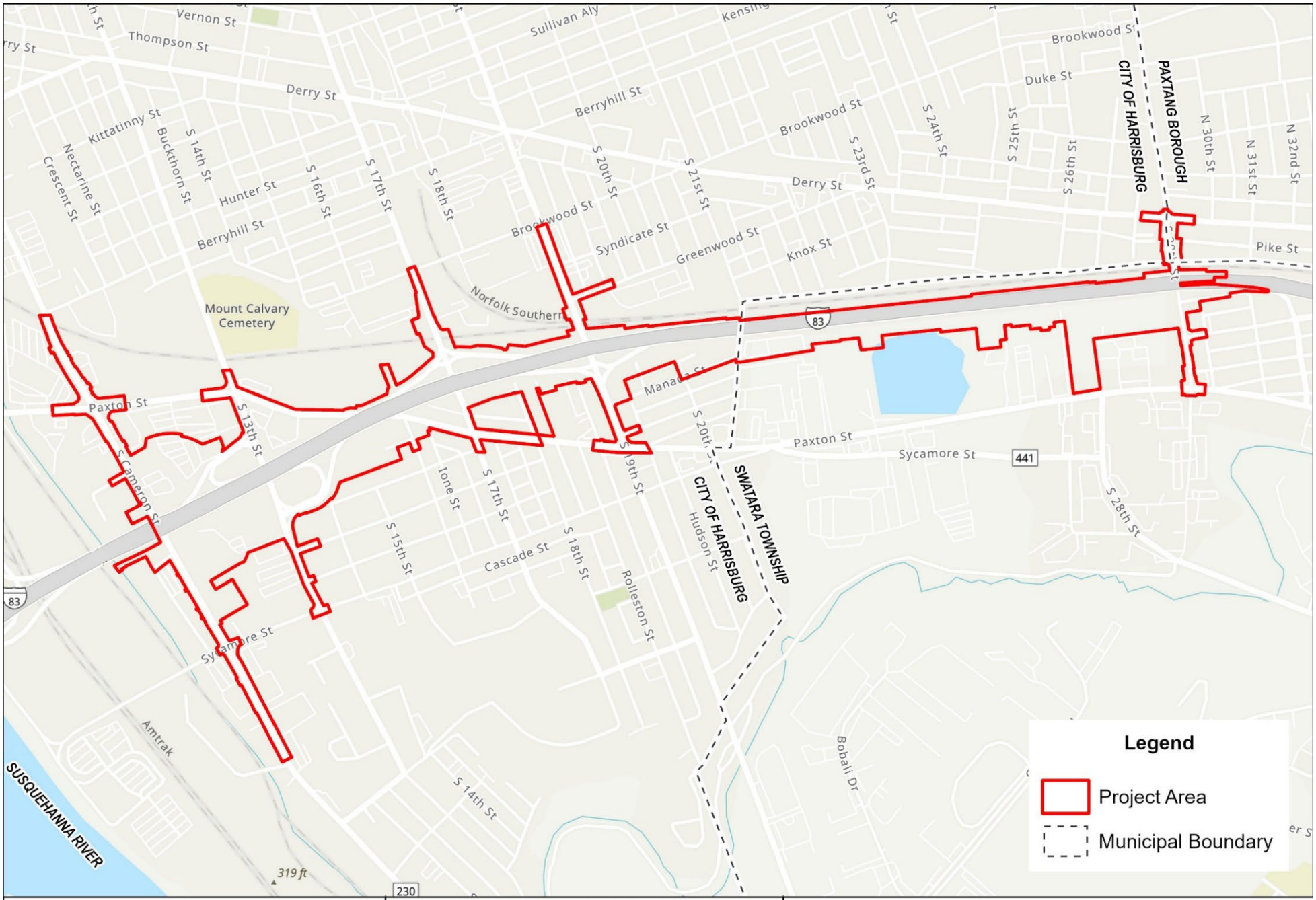


Figure 3: 2019 Project Area and Design Footprint

Taken from the 2019 Approved CEE (PennDOT 2019)

Figure 4: Independent Projects in the I-83 Corridor

Taken from the South Bridge Logical Termini and Independent Utility Memorandum (PennDOT 2022)



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Projection: Lambert Conformal Conic
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Figure 6
Existing Roadway Conditions
SR 0083, Section 079

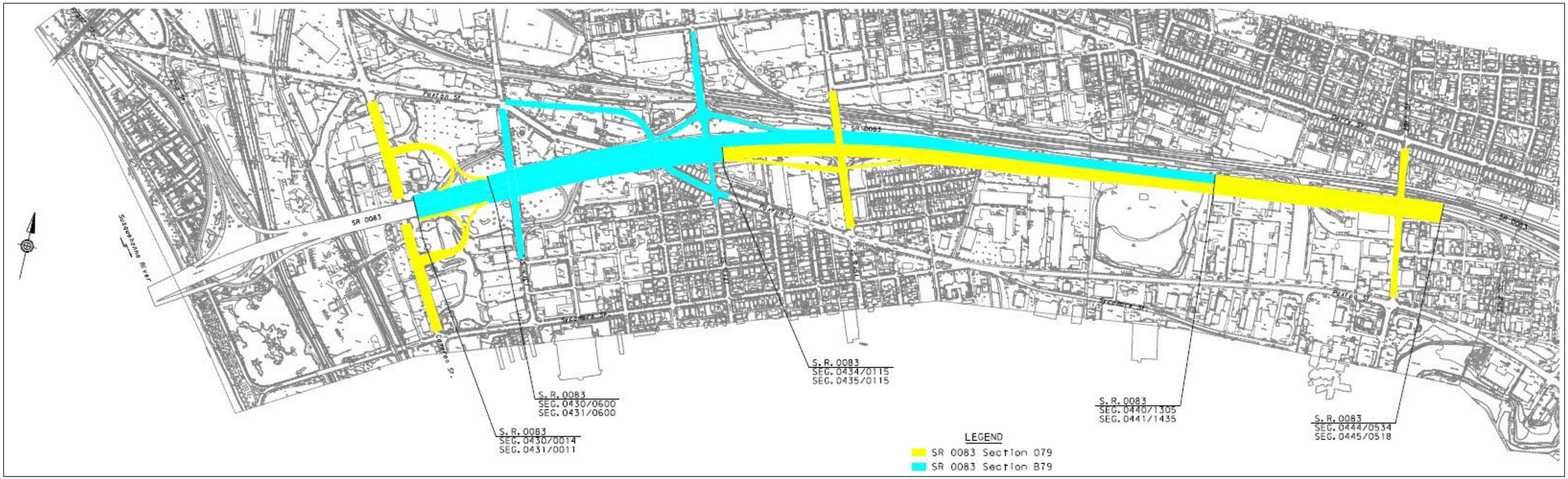
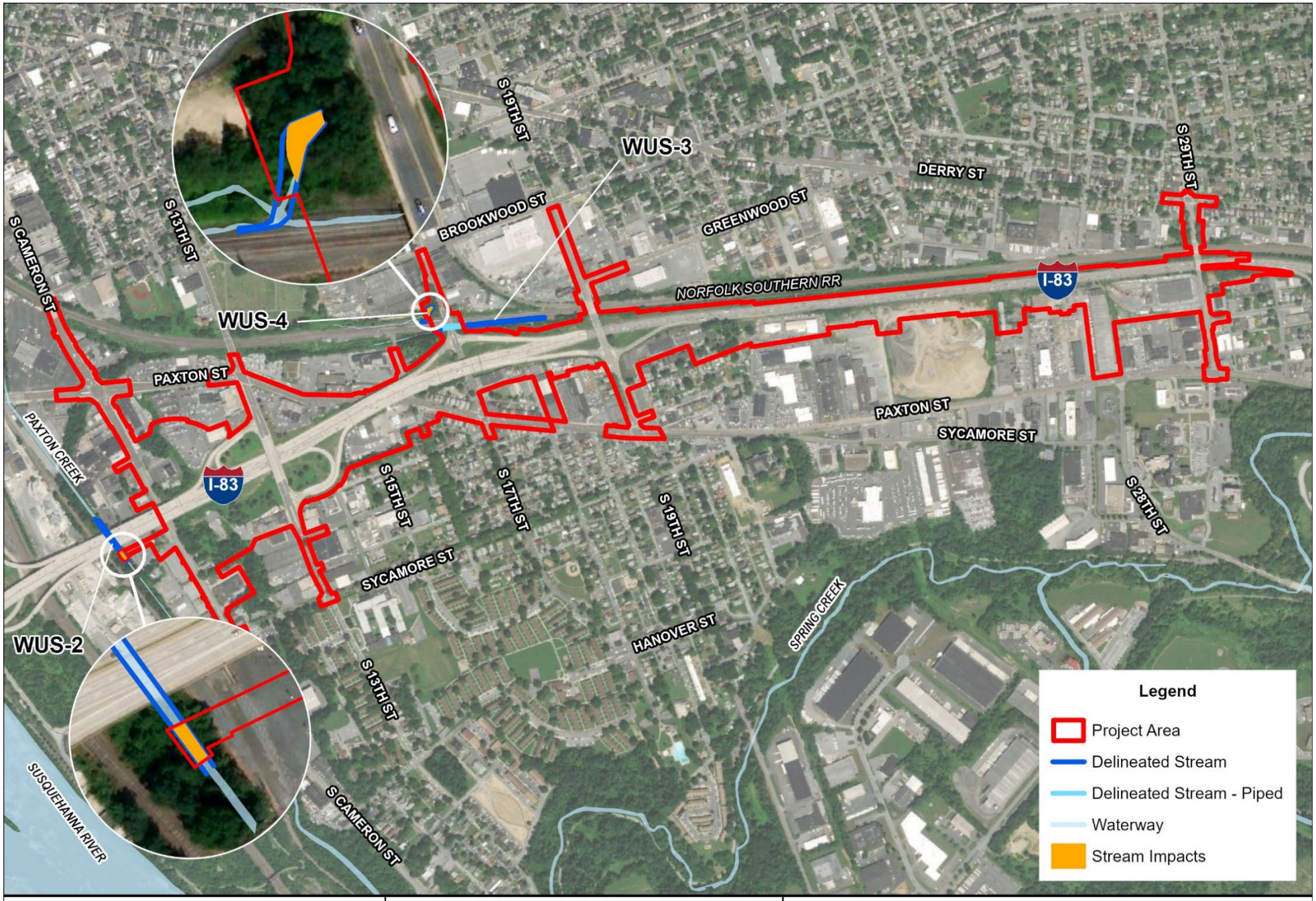


Figure 8: Contracts 1 and 2



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Imagery: ESRI, Maxar

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Figure 9
Streams and Proposed Action Impacts
SR 0083, Section 079

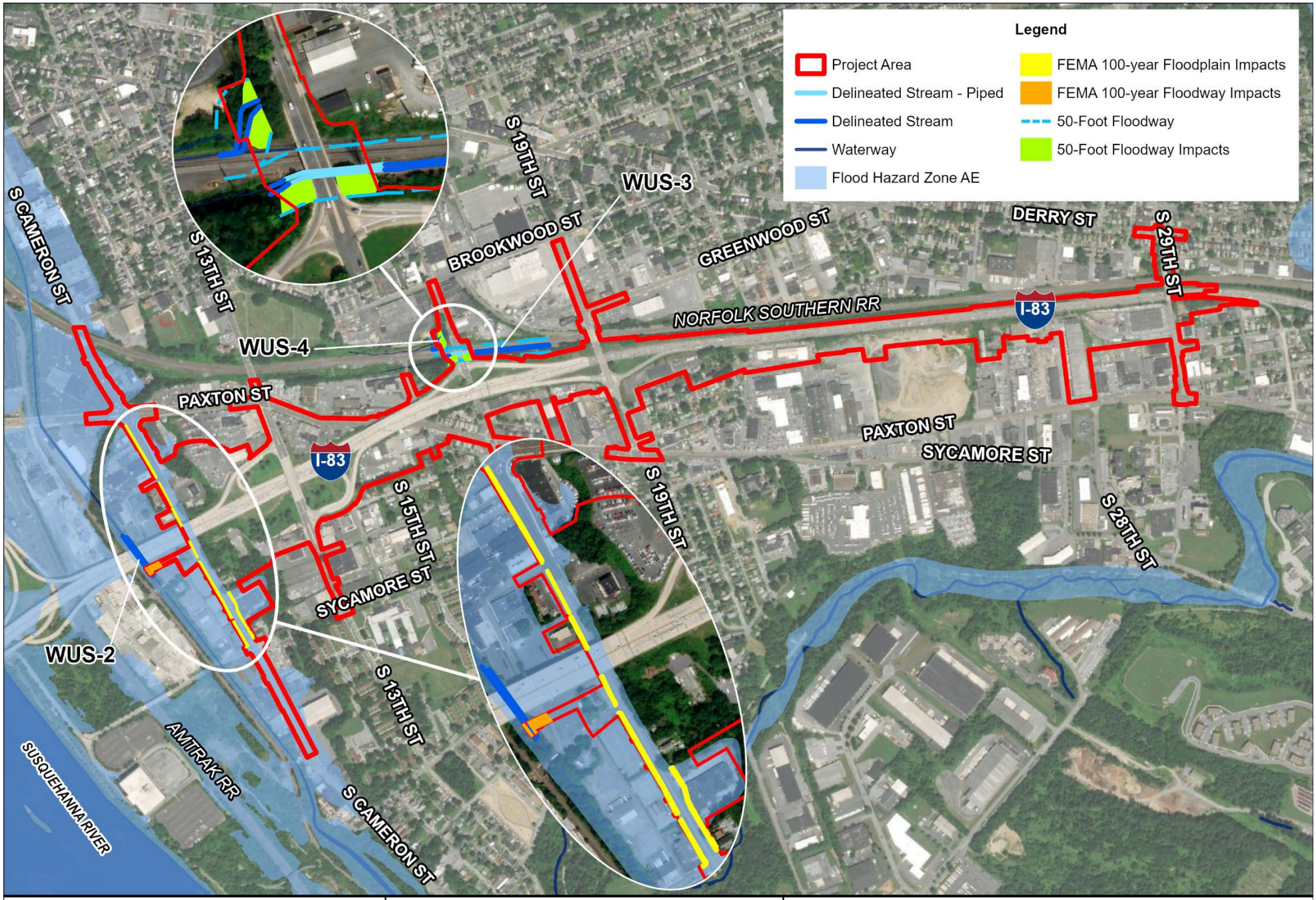

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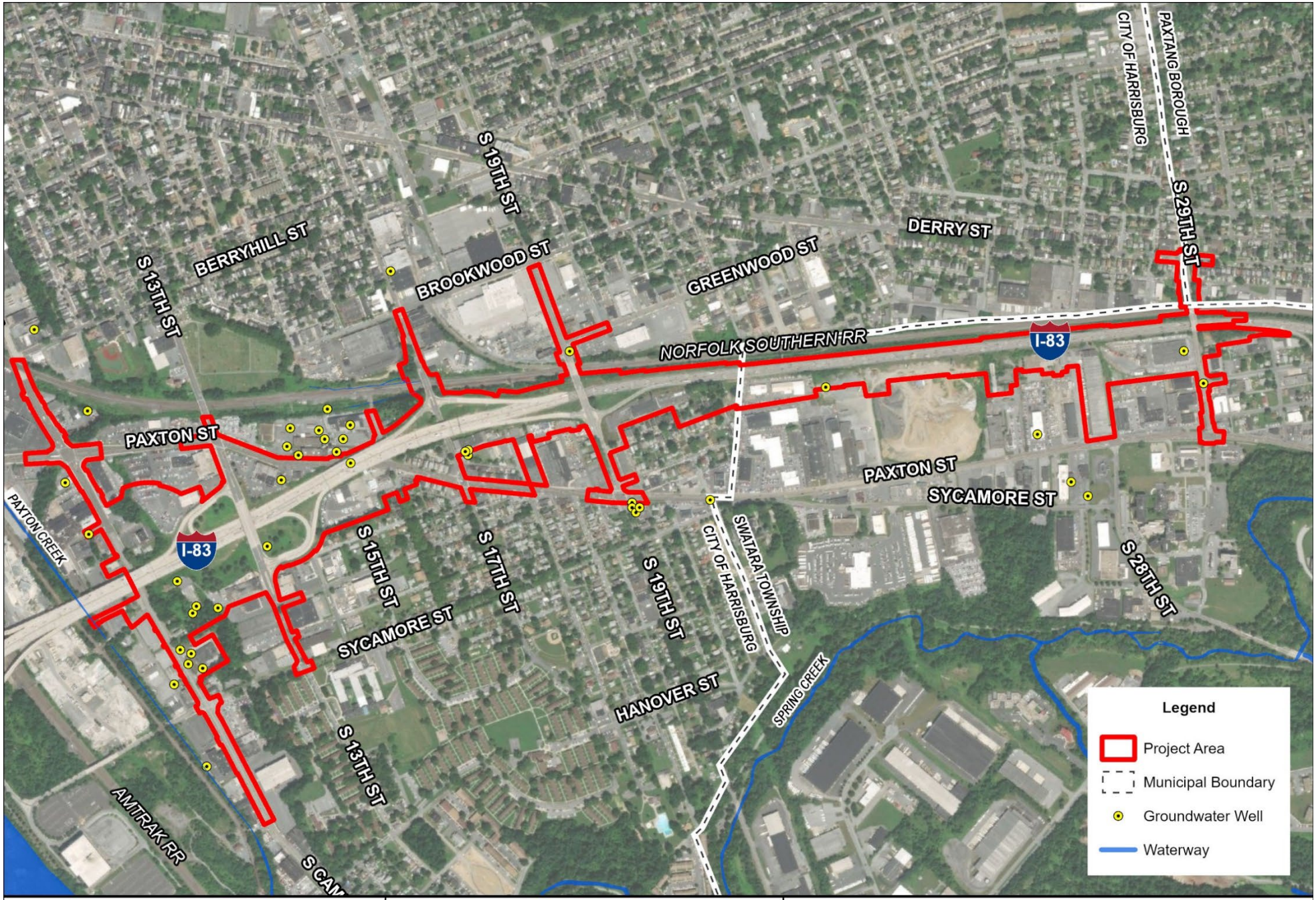
Figure 10
FEMA-Designated 100-year Floodplain and Proposed Action Impacts
SR 0083, Section 079



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Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
Imagery: ESRI, Maxar

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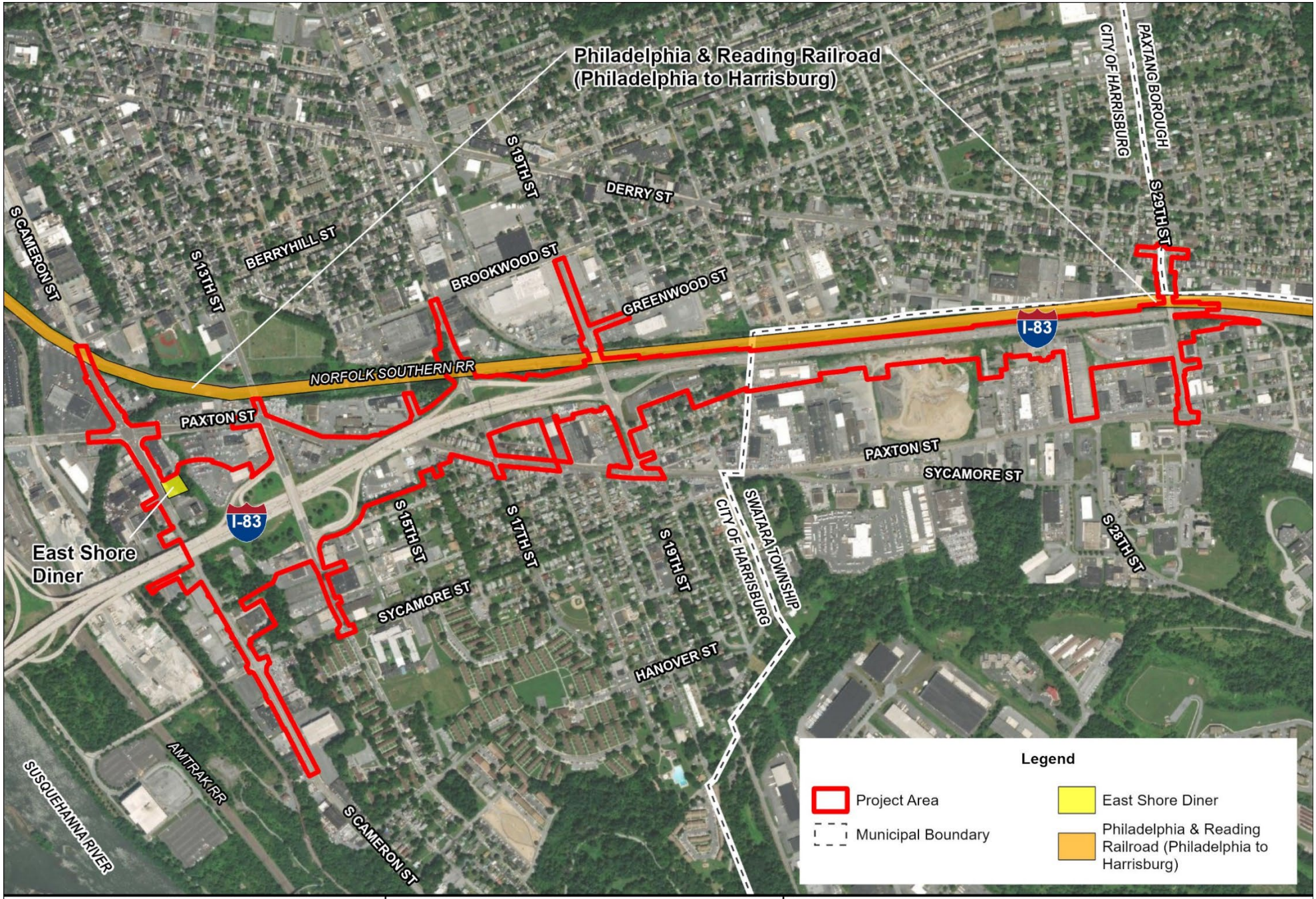
Figure 11
Groundwater Wells within the Project Area
SR 0083, Section 079



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Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
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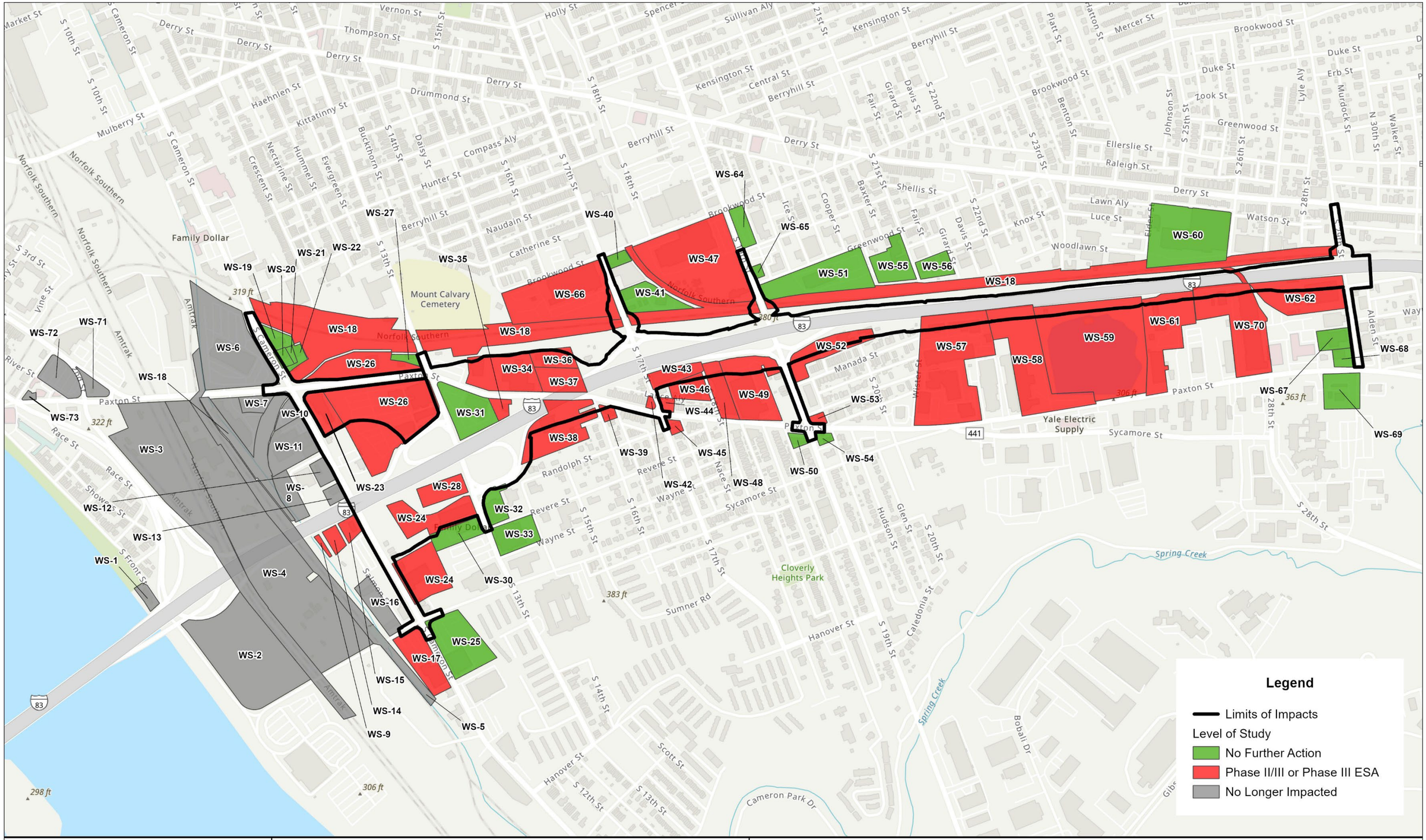
Figure 12
Above-Ground Cultural Resources
SR 0083, Section 079



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SR 0083, SECTION 079
DAUPHIN COUNTY, PA

Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
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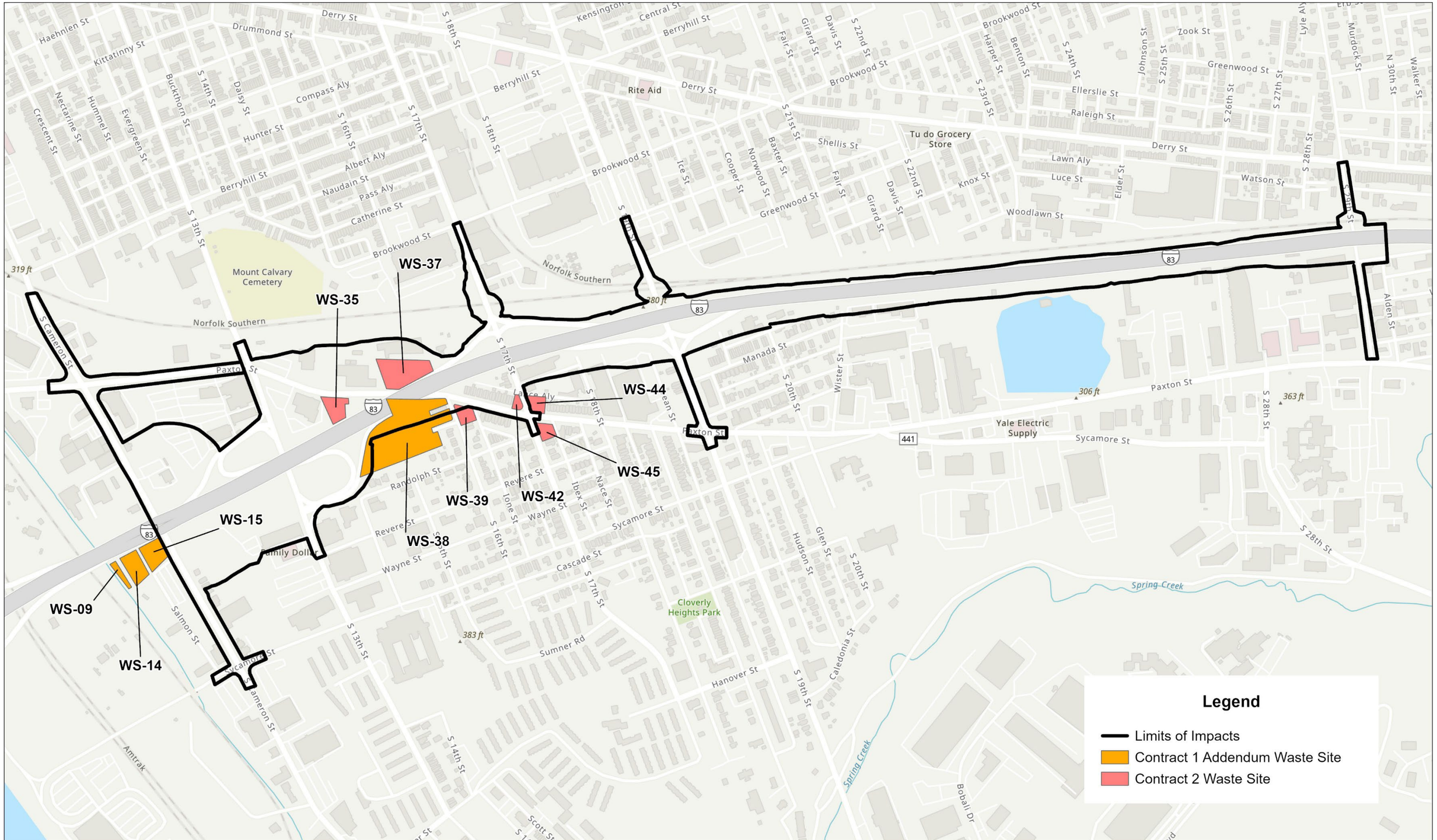
Figure 13
Revised Phase I ESA Waste Site Inventory Map
SR 0083, Section 079



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Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
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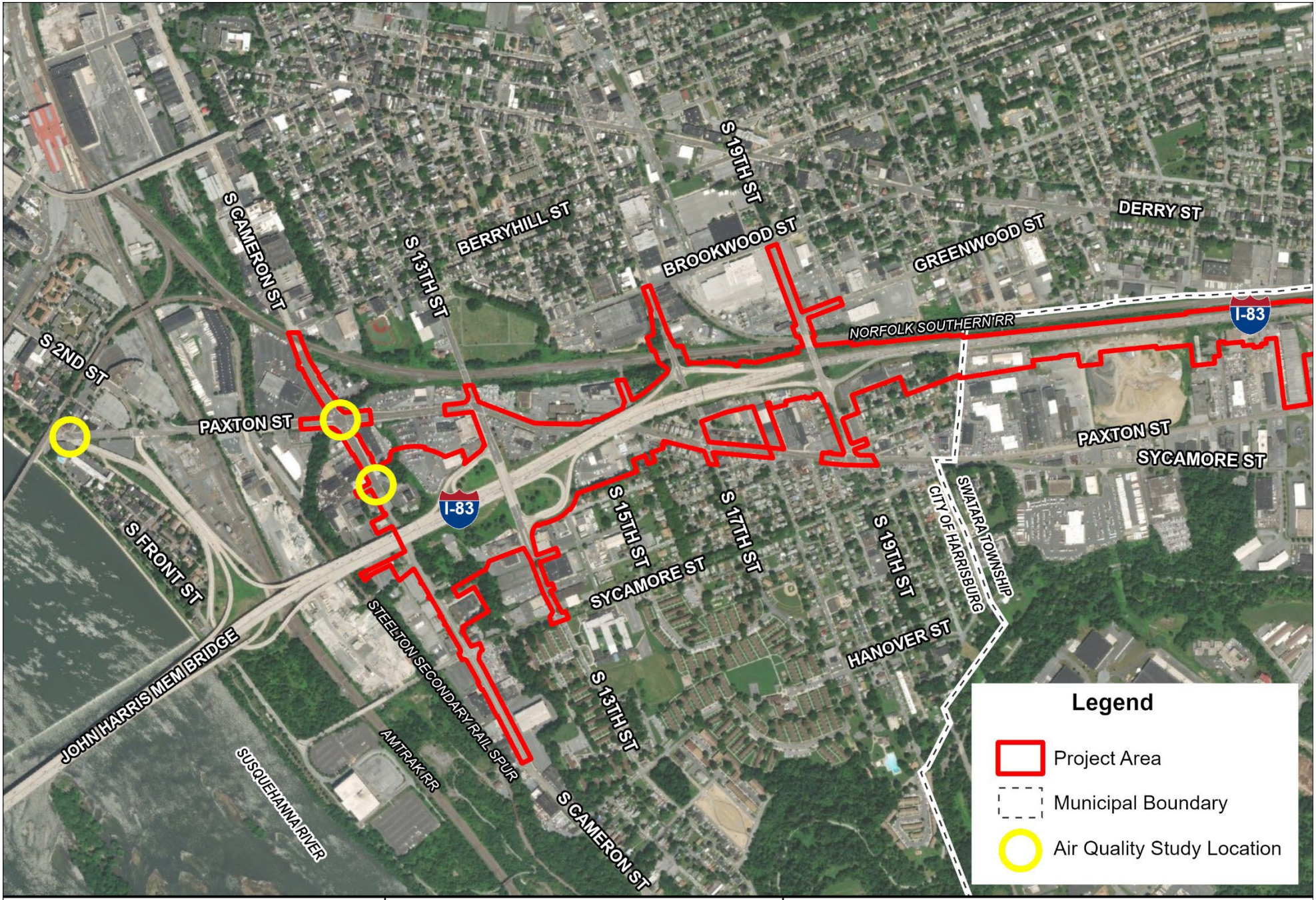
Figure 14
Additional Phase II/III Investigations Under Contracts 1 & 2
SR 0083, Section 079



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Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
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Figure 15
Air Quality Study Locations
SR 0083, Section 079

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SR 0083, SECTION 079
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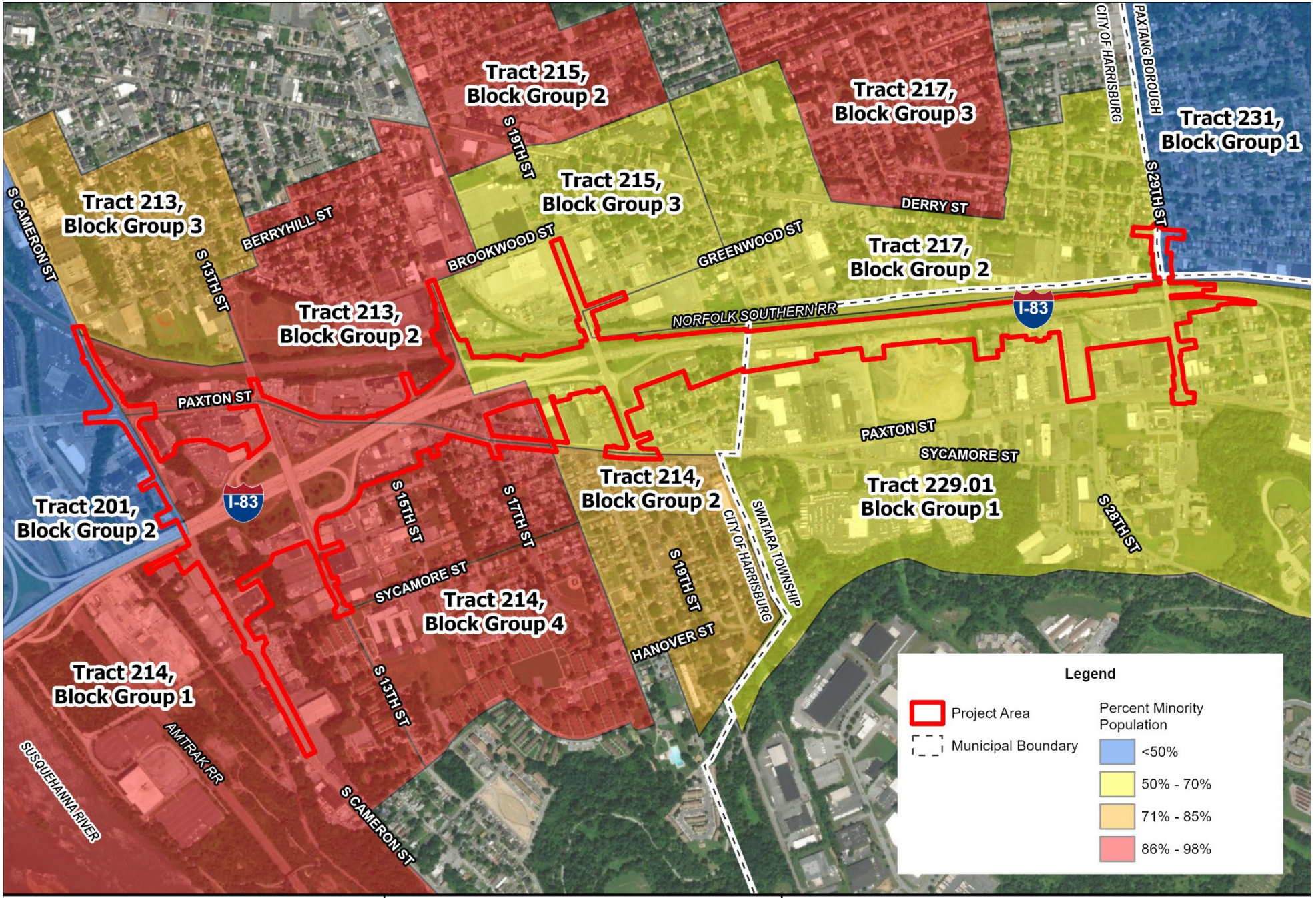
2140 Herr Street
Harrisburg, PA 17103-1699

Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
Imagery: ESRI, Maxar

0 500 1,000 Feet

N W E S

Figure 16
Noise Study
SR 0083, Section 079



HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

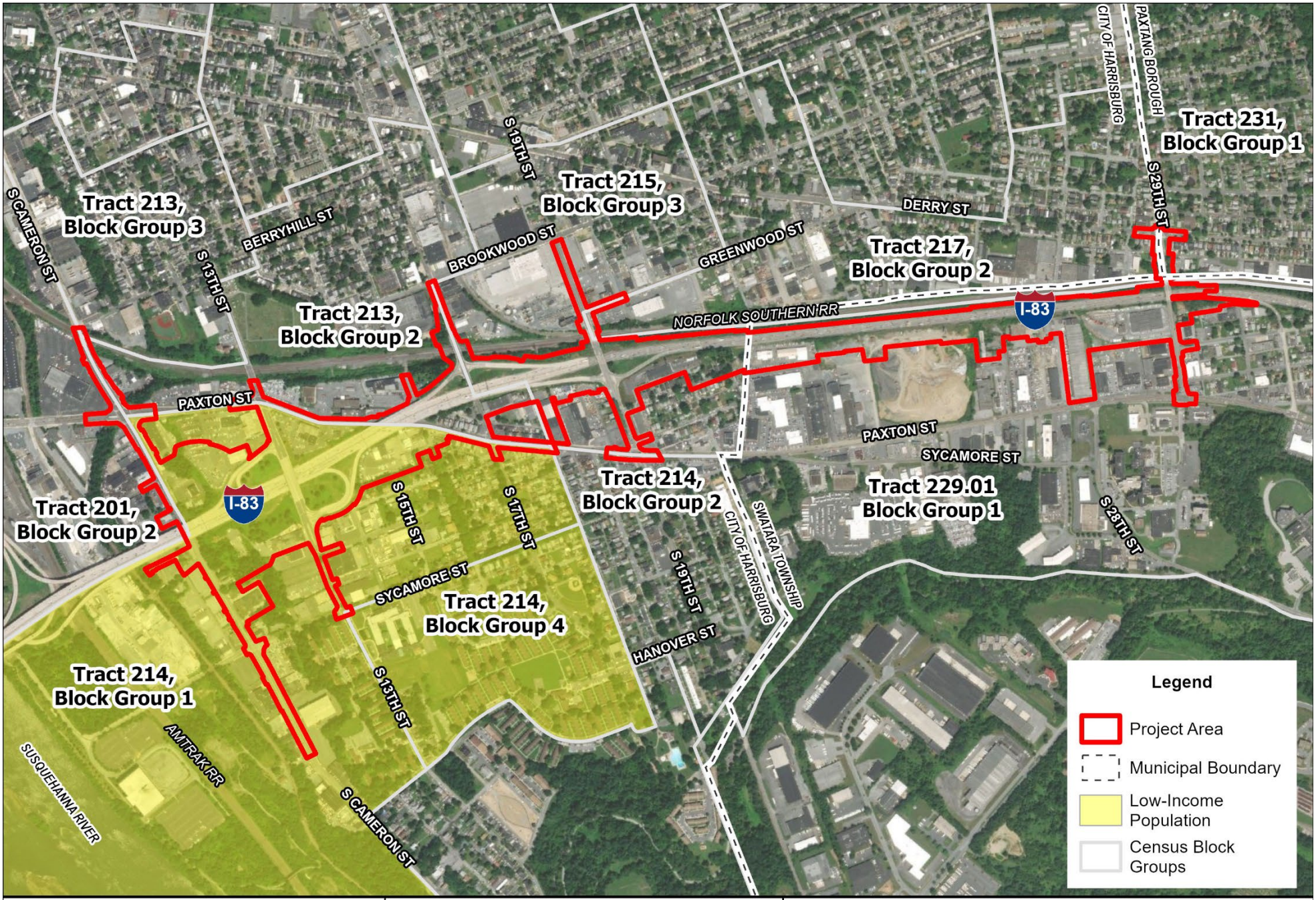
PREPARED FOR:
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
Imagery: ESRI, Maxar
Data Source: U.S. Census, ACS

0 500 1,000 Feet

N W E S

Figure 17
Minority Populations
SR 0083, Section 079



PREPARED FOR:
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

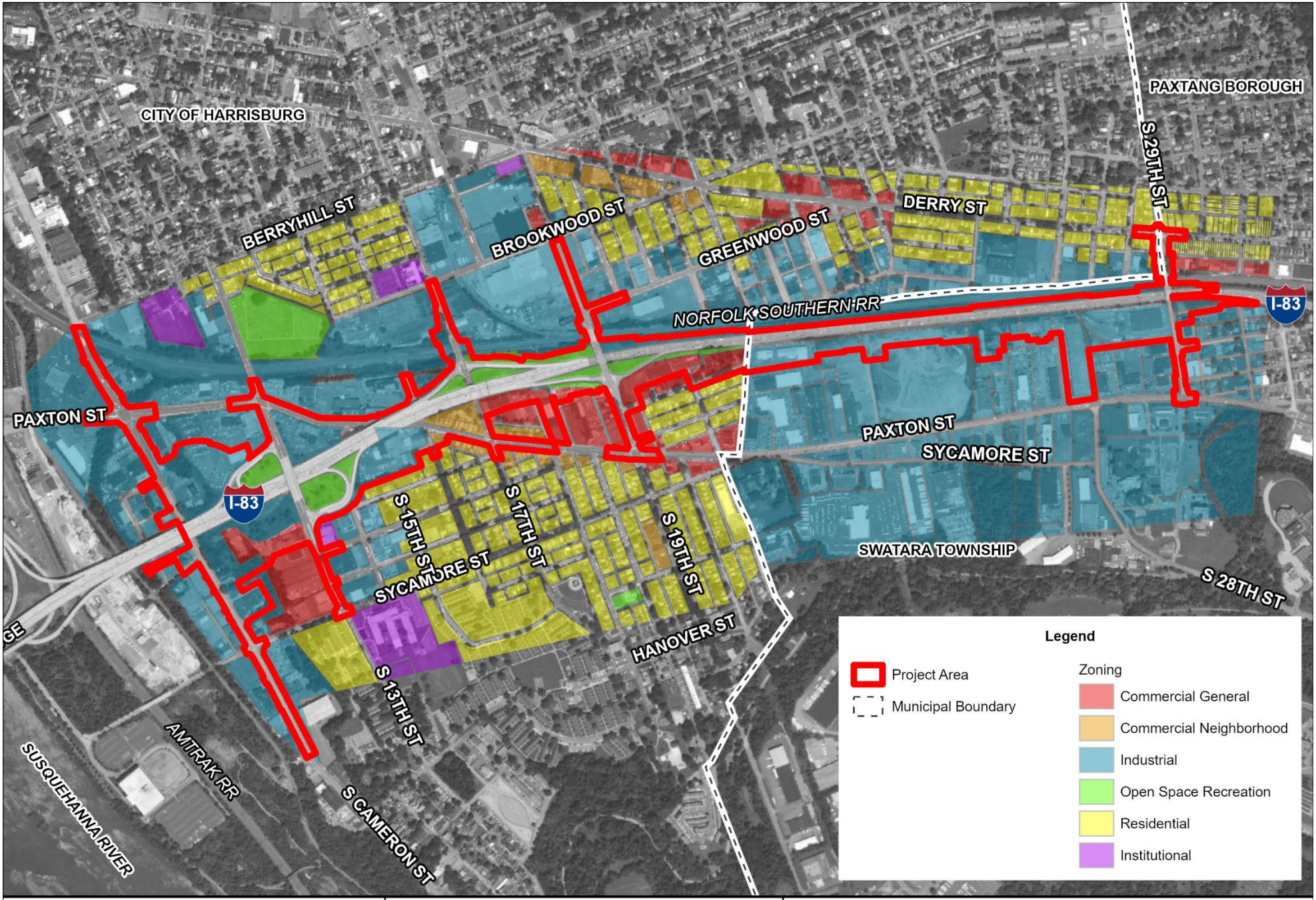
HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
Imagery: ESRI, Maxar
Data Source: U.S. Census, ACS

0 500 1,000 Feet

N W E S

Figure 18
Low-Income Populations
SR 0083, Section 079



HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

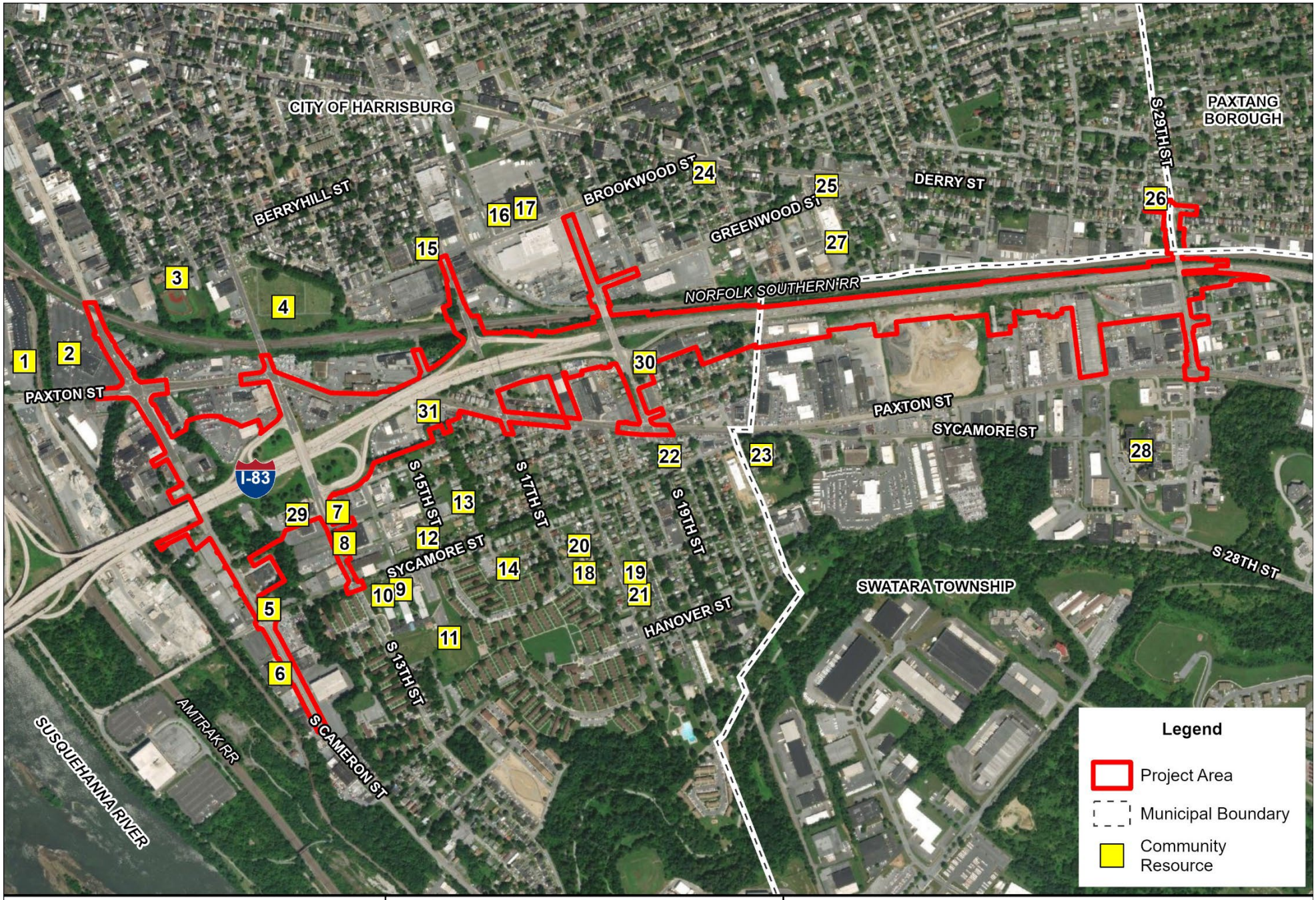
PREPARED FOR:
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
Imagery: ESRI, Maxar
Data Source: U.S. Census, ACS

0 500 1,000 Feet

N
W E
S

Figure 19
Project Area Zoning
SR 0083, Section 079



HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

PREPARED FOR:
PennDOT Engineering District 8-0
2140 Herr Street
Harrisburg, PA 17103-1699

Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
Projection: Lambert Conformal Conic
Imagery: ESRI, Maxar

0 500 1,000 Feet

N
W E
S

Figure 20
Community Resources
SR 0083, Section 079

APPENDIX A-3: VEHICULAR AND PEDESTRIAN DETOURS

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HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

LEGEND

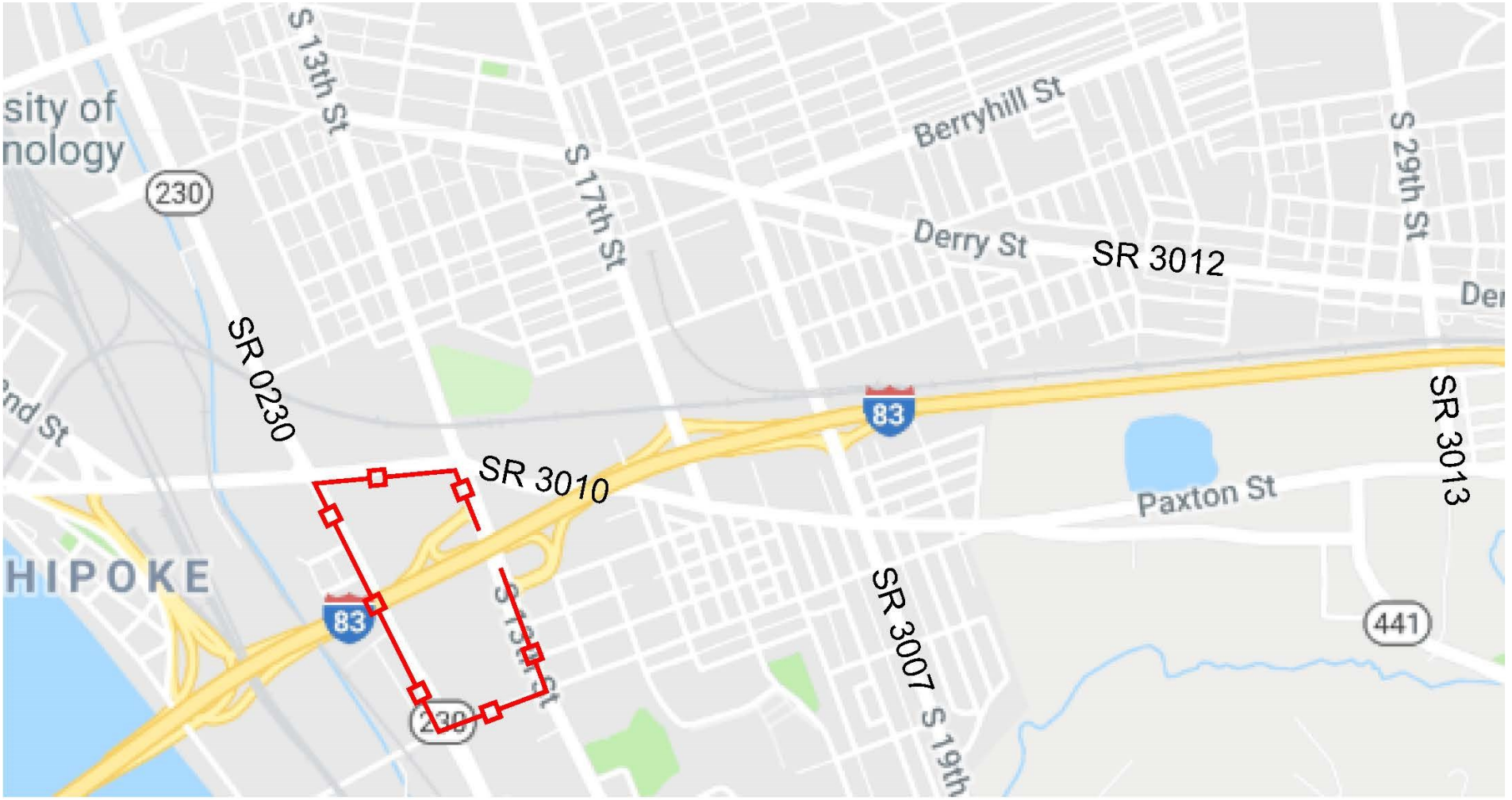
Paxton Street Vehicular and Pedestrian Detour—
0.38 miles

S.R. 0083, Section 079

29th Street to **Cameron Street**

Dauphin County, Pennsylvania

Paxton Street Detour Map



HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

LEGEND

13th Street Bridge Vehicular and Pedestrian Detour

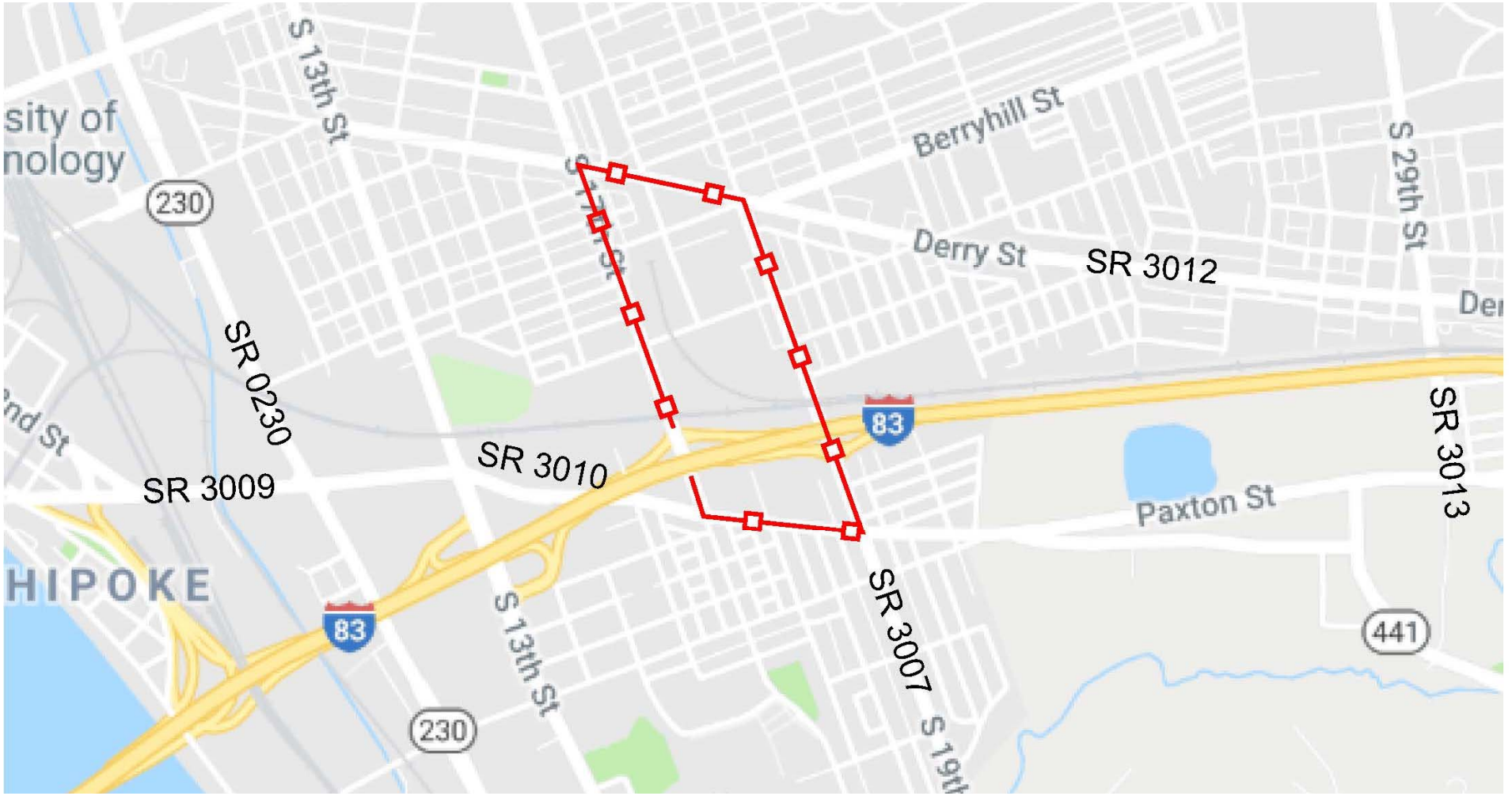
—1.10 miles

S.R. 0083, Section 079

29th Street to Cameron Street

Dauphin County, Pennsylvania

13th Street Detour Map



LEGEND

17th Street Bridge Vehicular and Pedestrian Detour

—1.39 miles

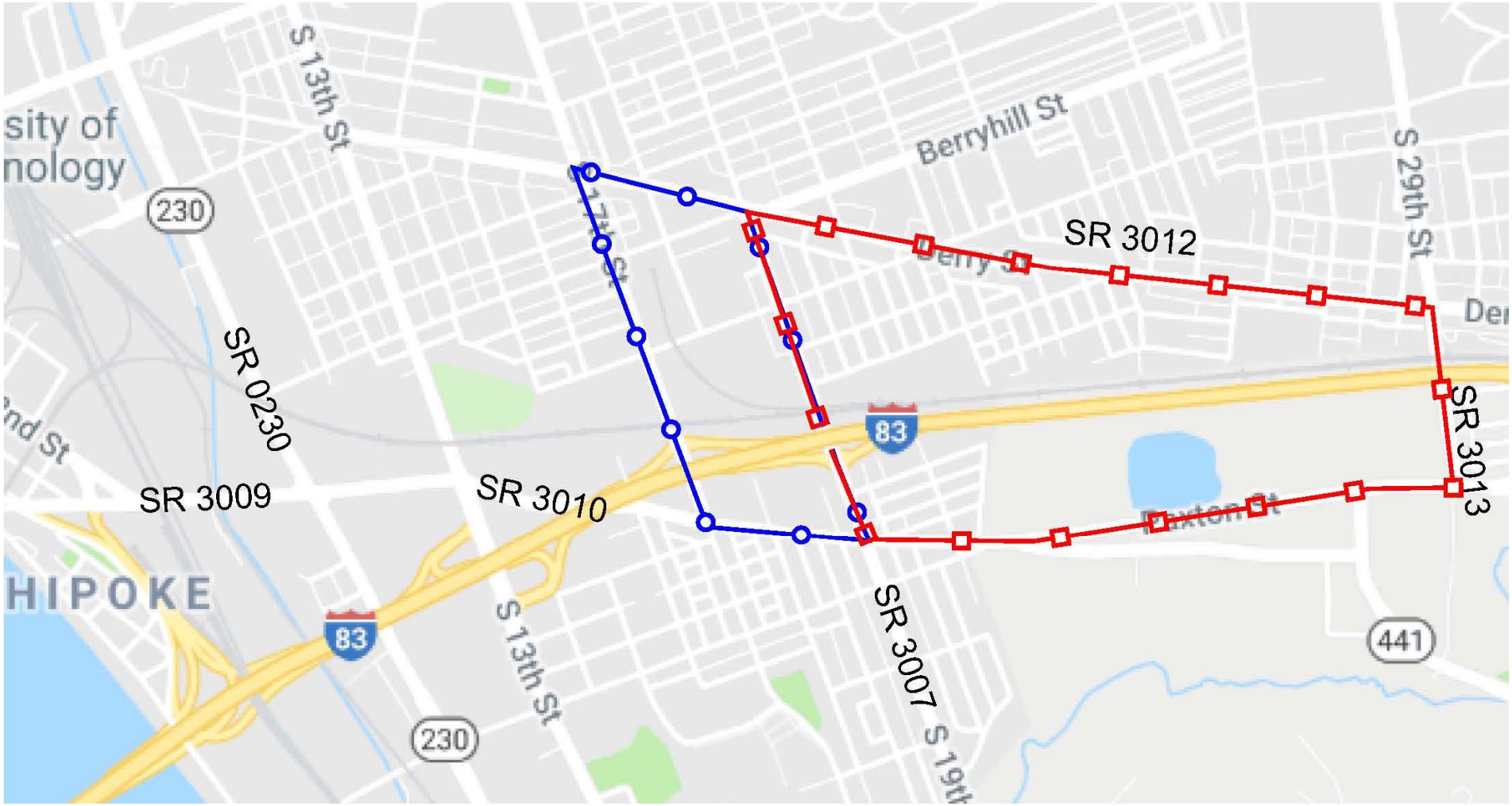
HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

S.R. 0083, Section 079

29th Street to Cameron Street

Dauphin County, Pennsylvania

17th Street Detour Map



LEGEND

19th Street Bridge Vehicular Detour— 2.55 miles

19th Street Bridge Pedestrian Detour— 1.36 miles

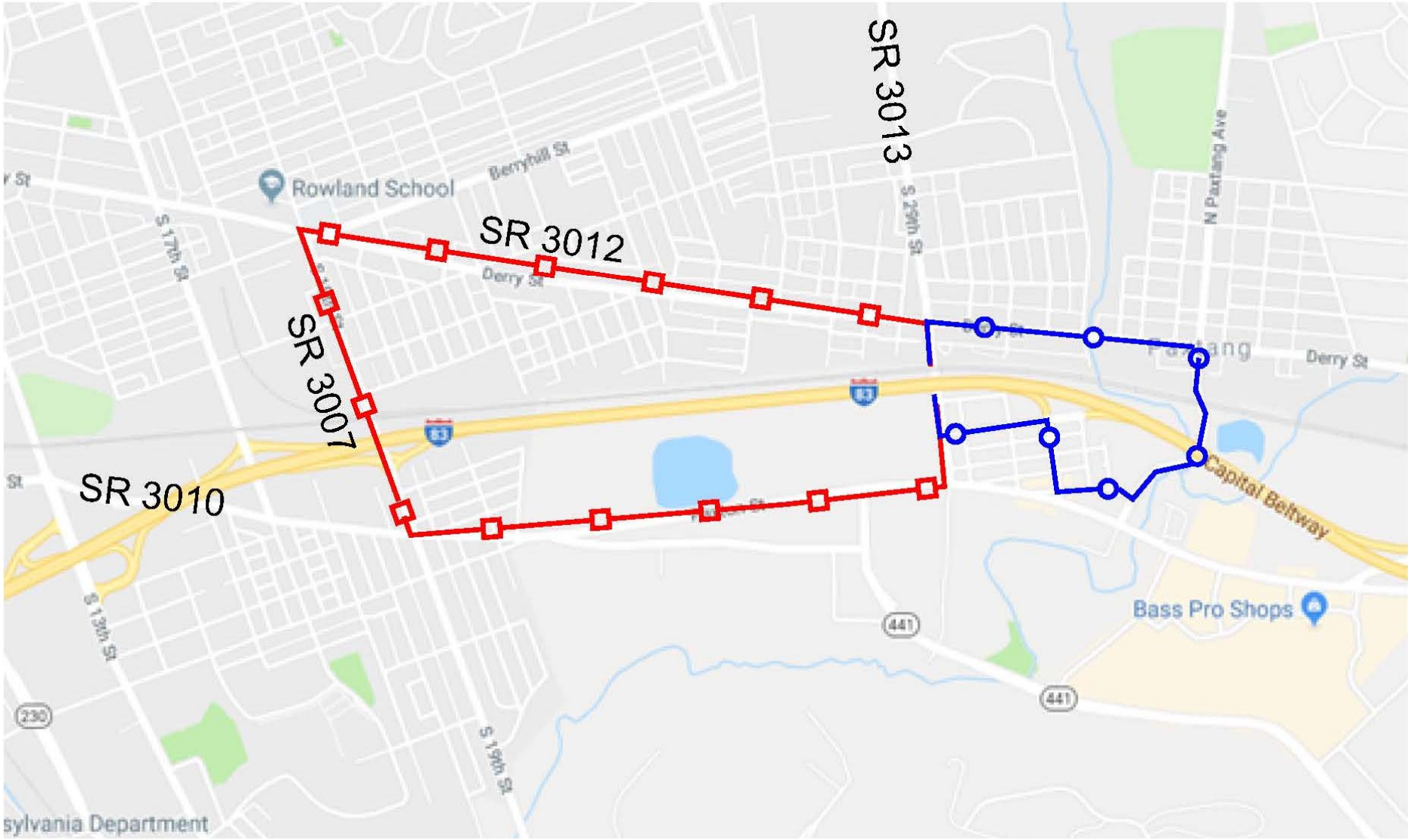
HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

S.R. 0083, Section 079

29th Street to Cameron Street

Dauphin County, Pennsylvania

19th Street Detour Map



HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

LEGEND

29th Street Bridge Vehicular Detour— 2.55 miles

29th Street Bridge Pedestrian Detour— 1.25 miles

S.R. 0083, Section 079

29th Street to **Cameron Street**

Dauphin County, Pennsylvania

29th Street Detour Map

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APPENDIX A-4: BIKE AND PEDESTRIAN CROSS-SECTIONS

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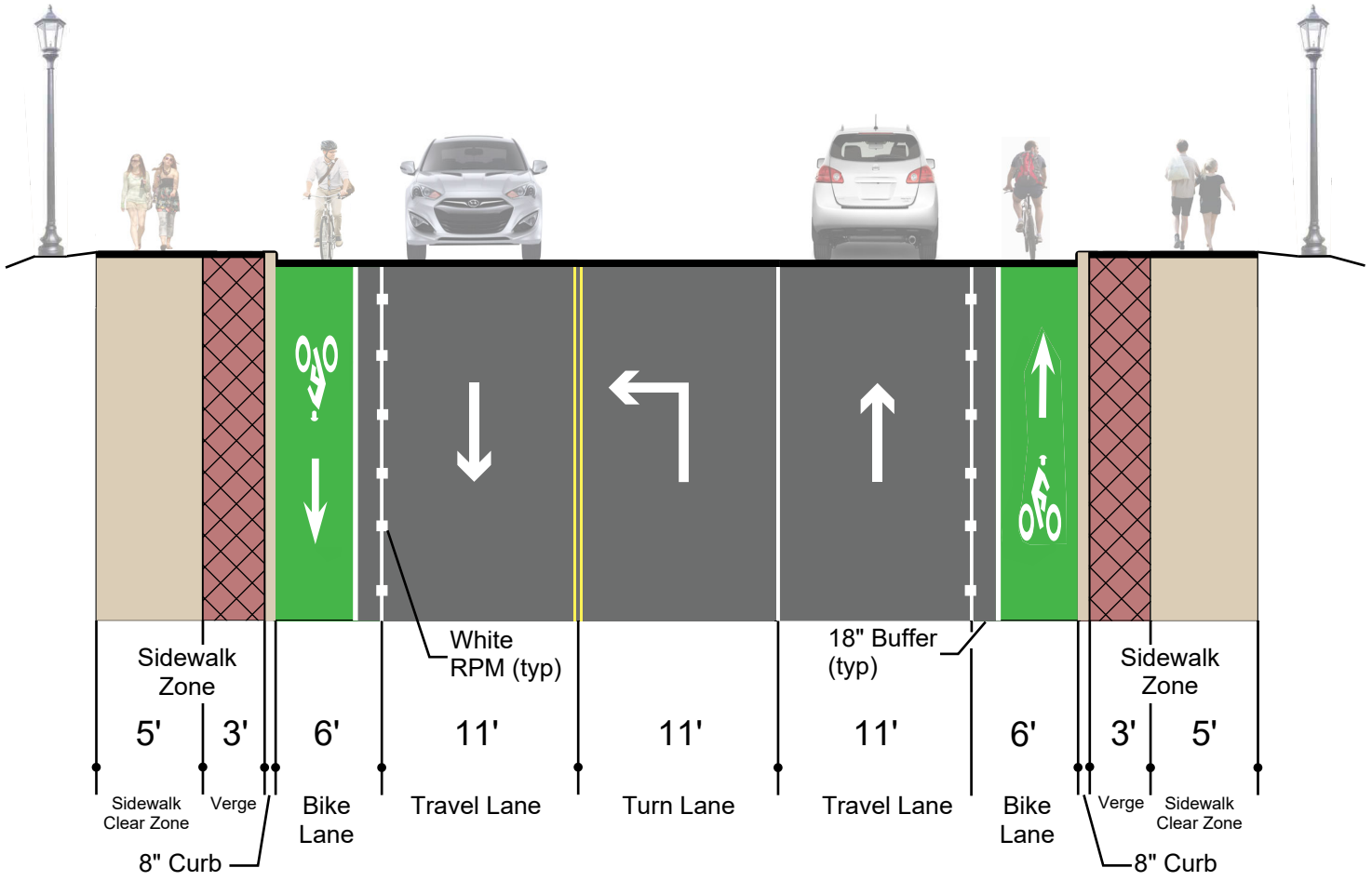
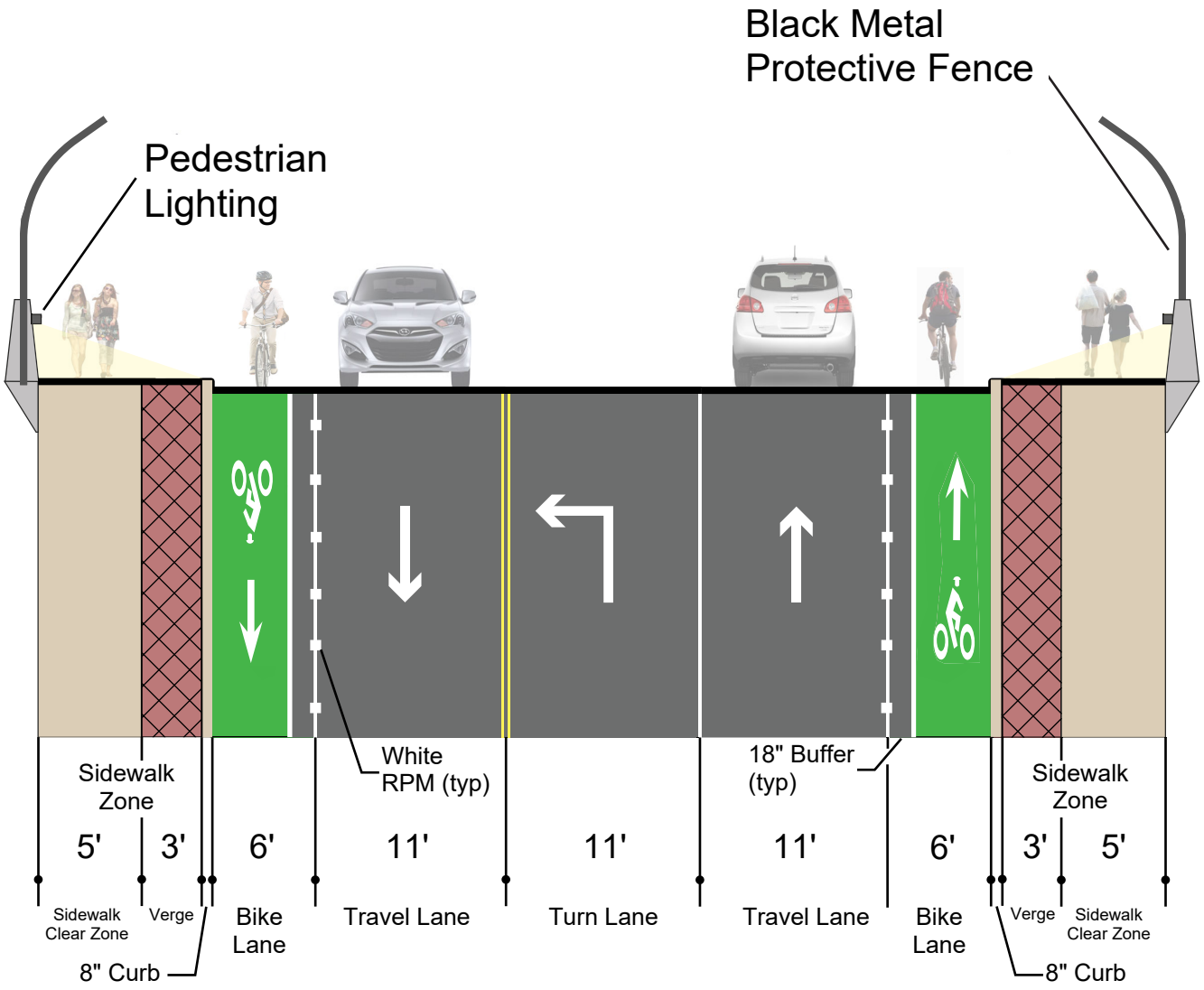


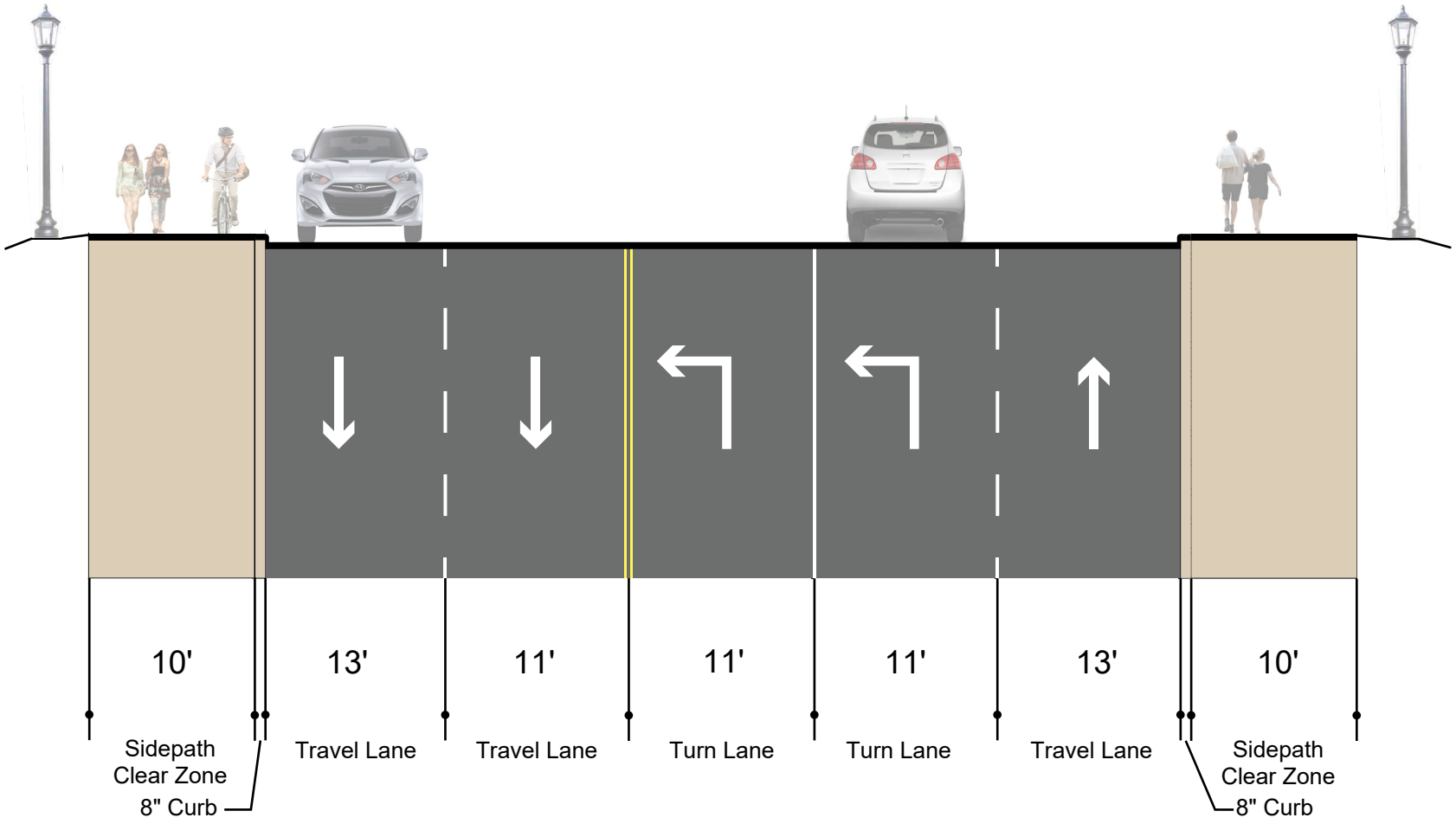
13th Street
Typical Section
Roadway

Figure
1



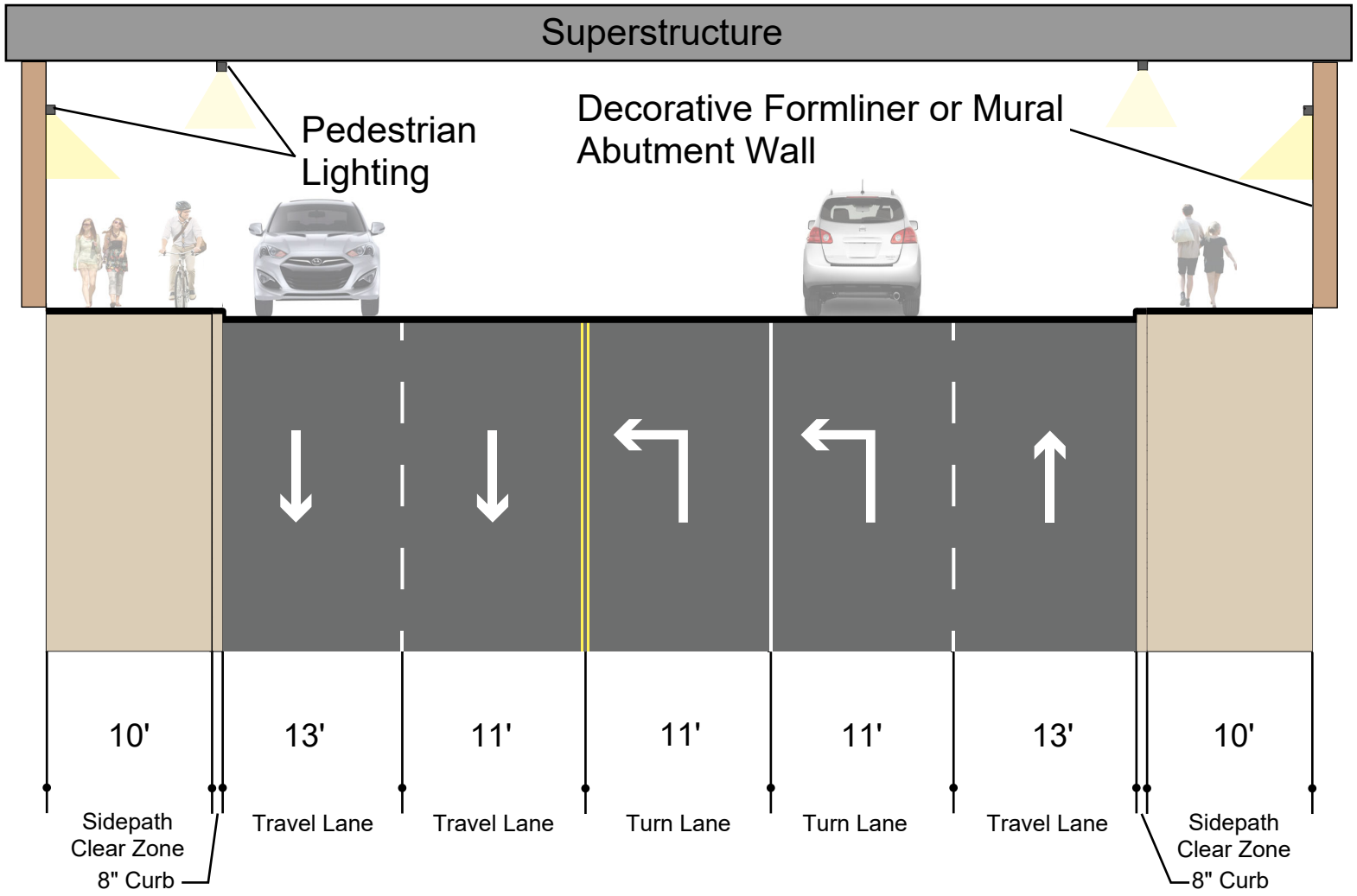
13th Street
Typical Section
Bridge over I-83

Figure
1



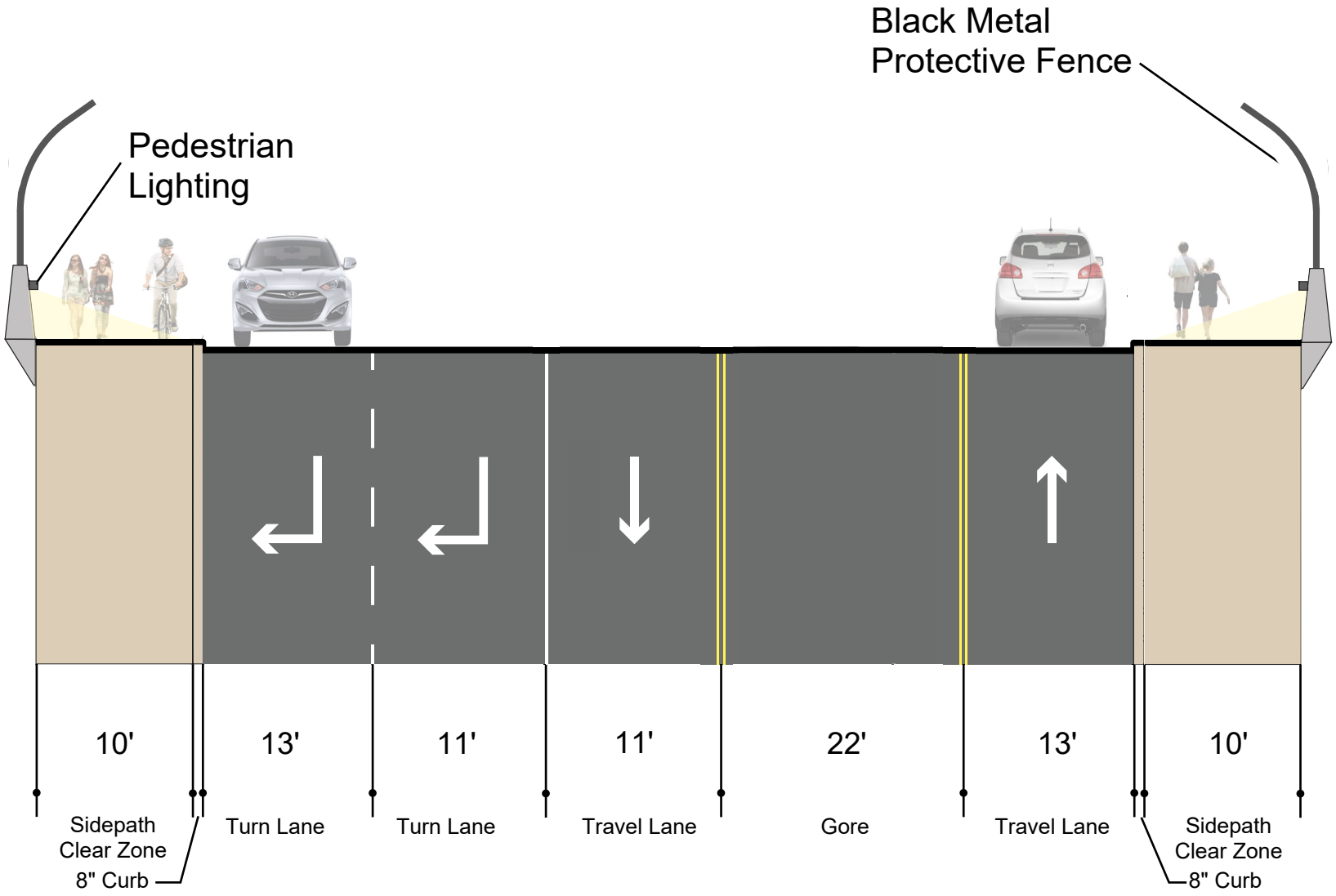
17th Street Typical Section Roadway

Figure 2



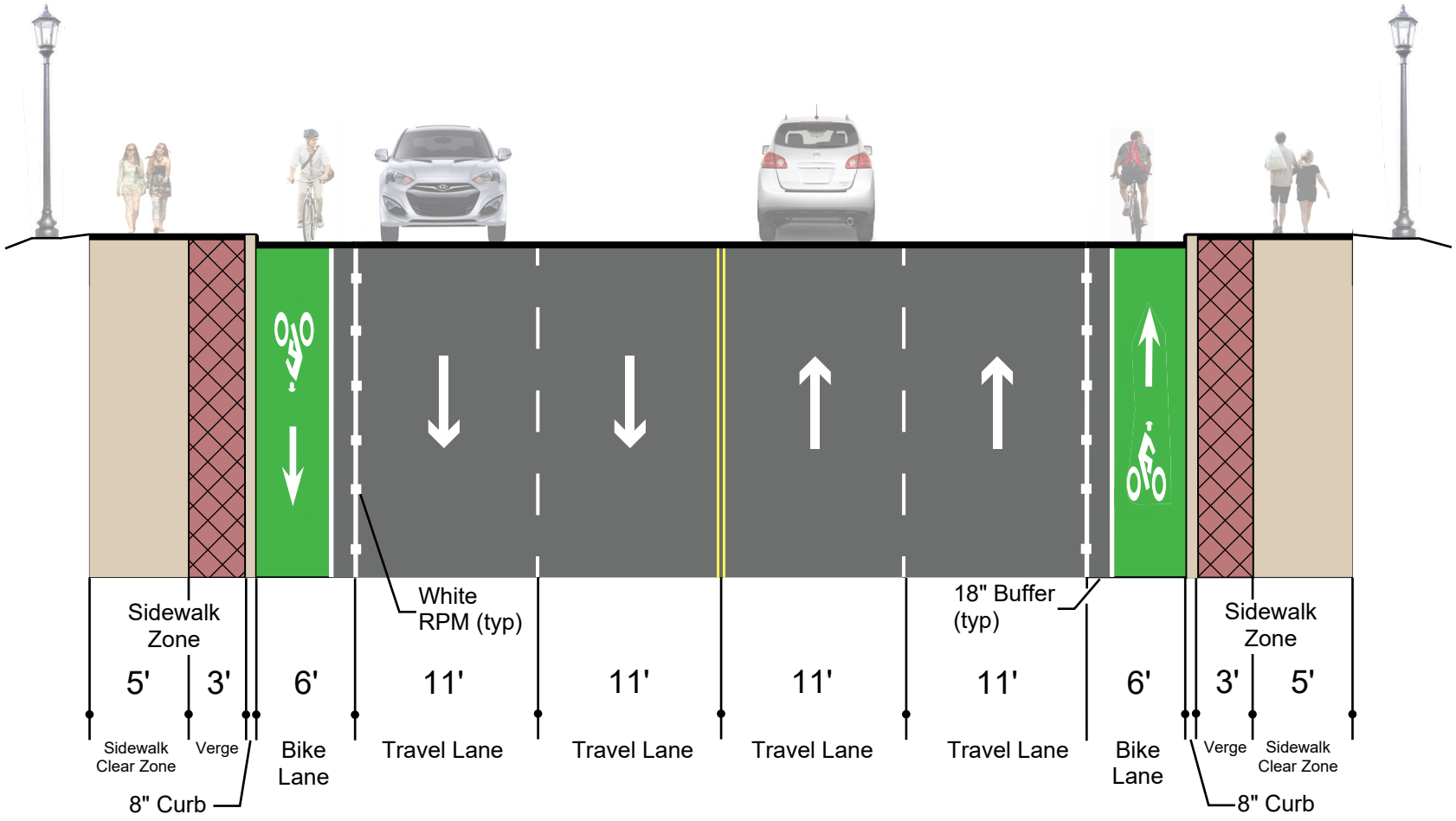
17th Street Typical Section under I-83

Figure 2



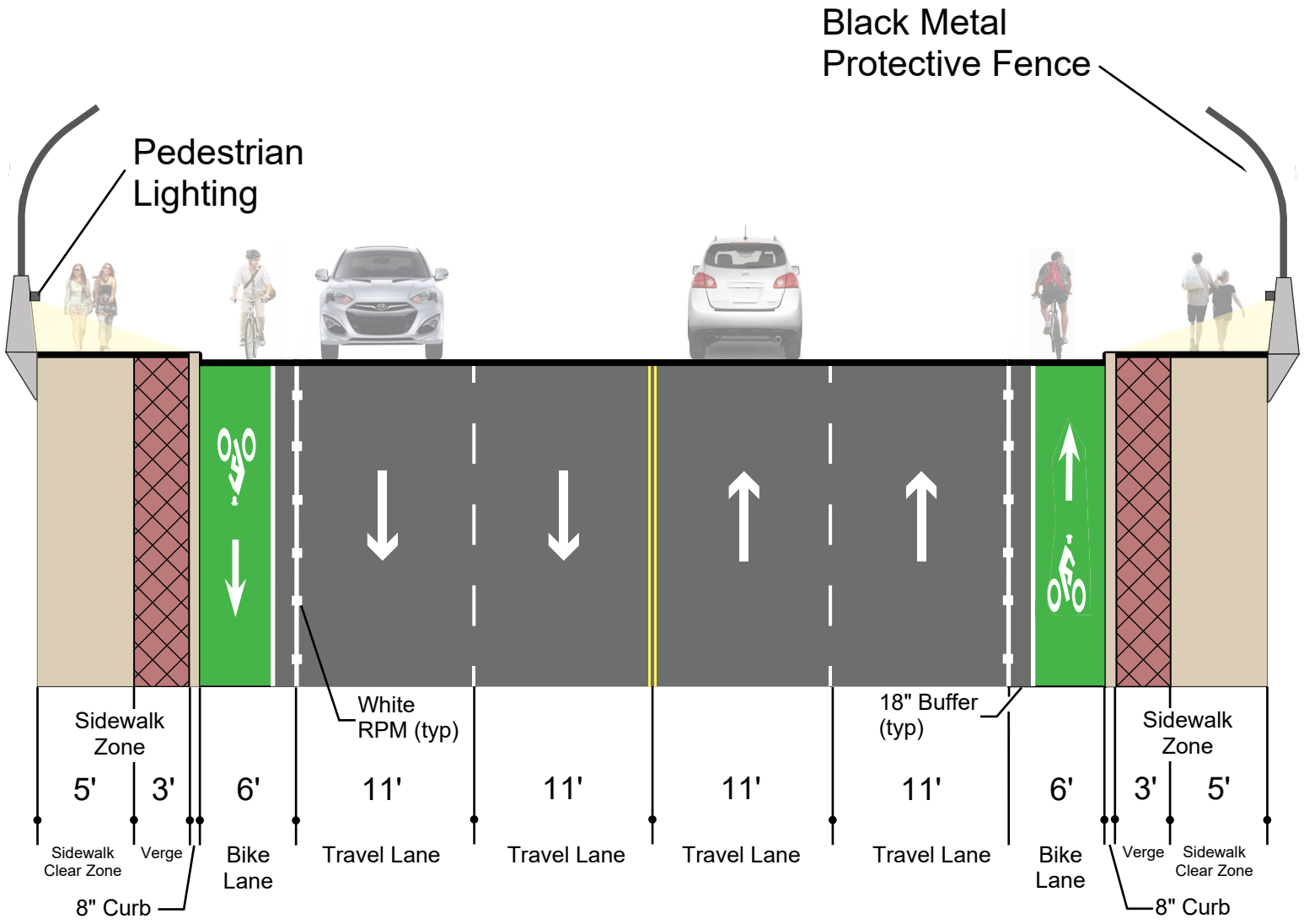
17th Street
Typical Section
Bridge over NS

Figure
2



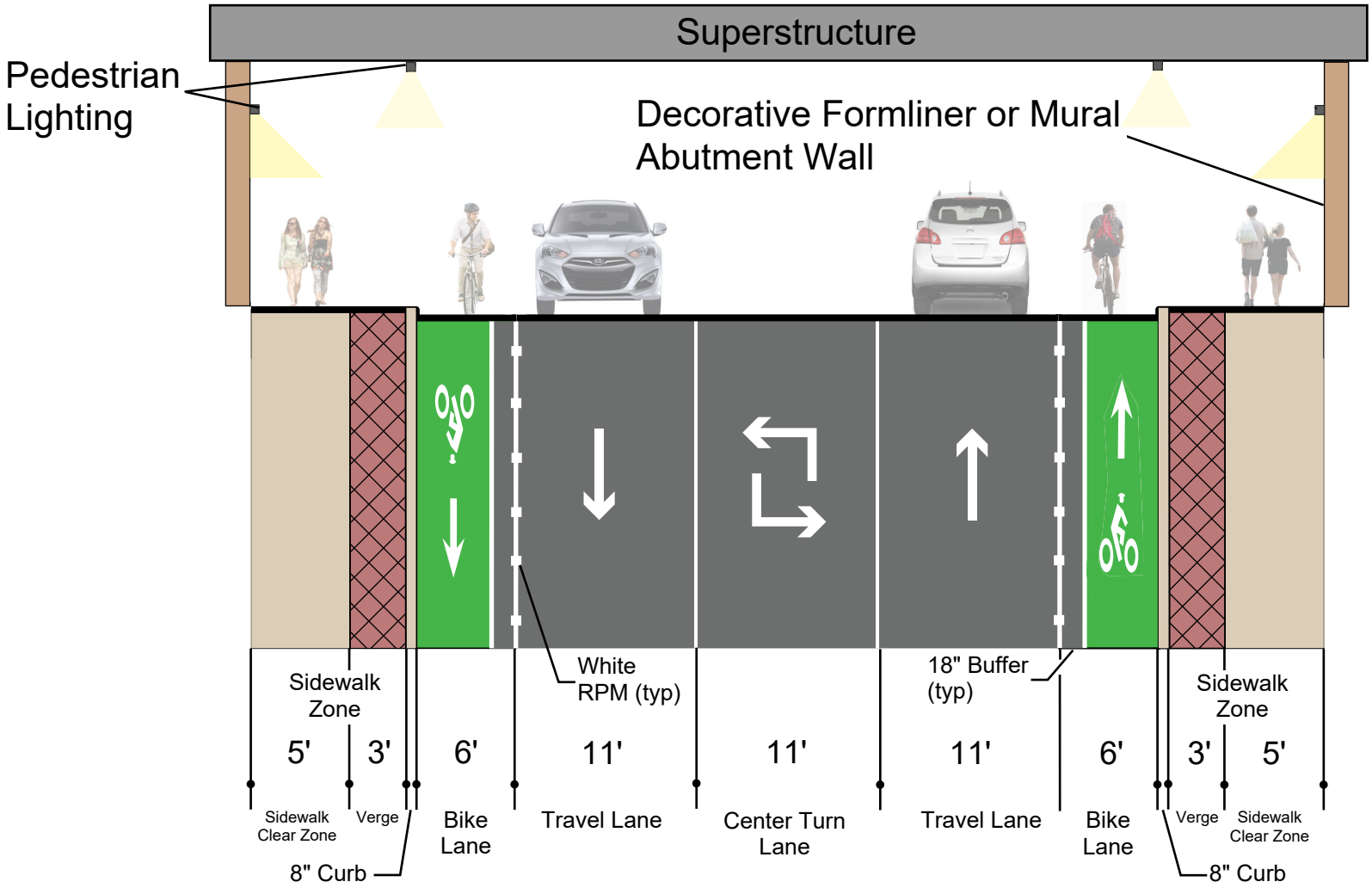
19th Street
Typical Section
Roadway

Figure
3



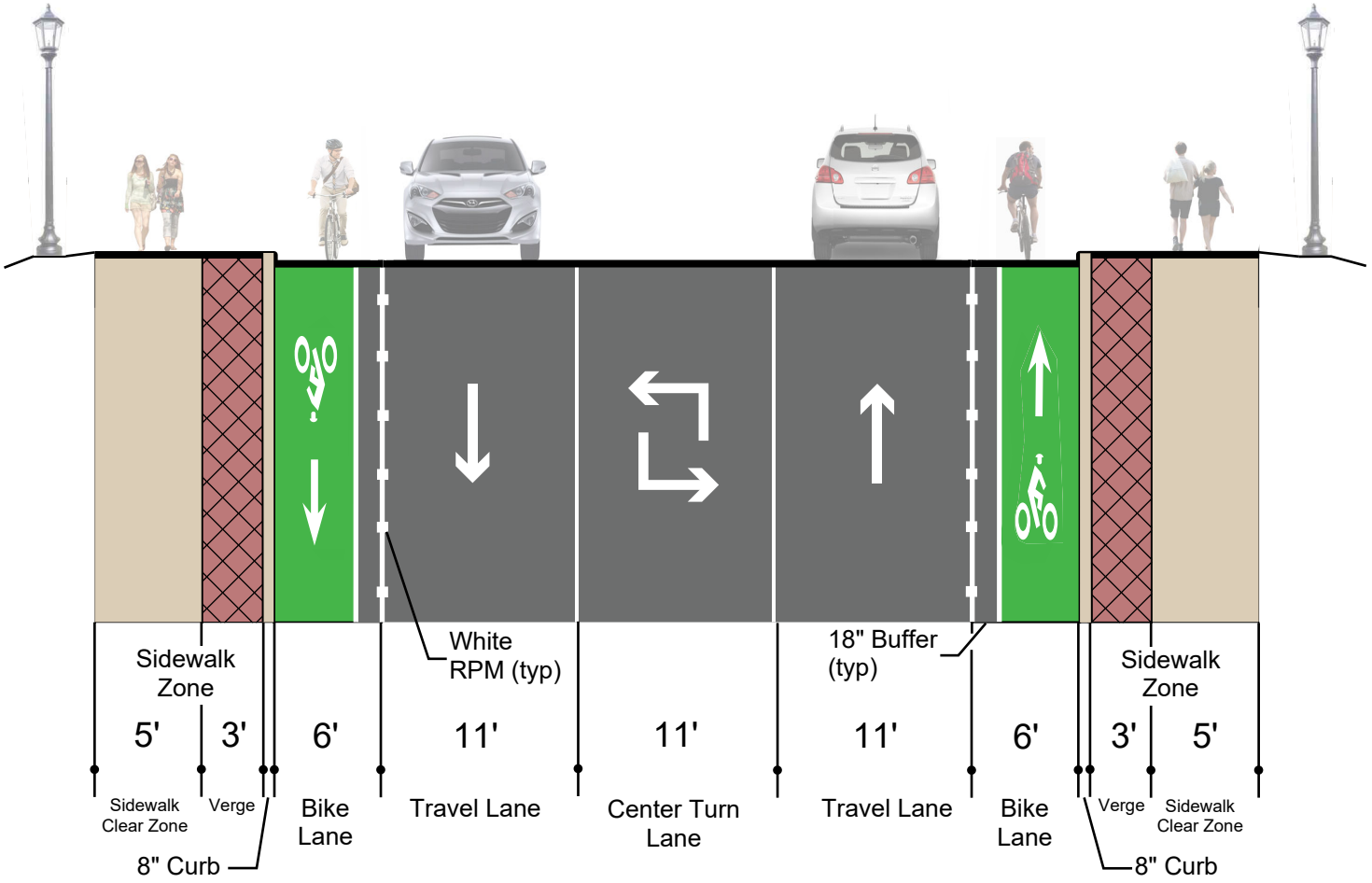
19th Street
Typical Section
Bridge over I-83 & NS

Figure
3



Paxton Street
Typical Section
under I-83

Figure
4



Paxton Street: 13th Street to 17th Street
Typical Section
Roadway

Figure 5

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APPENDIX B: SECTION 4(F) FORMS

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Section 4(f) *De Minimis* Use
East Shore Diner

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pennsylvania
DEPARTMENT OF TRANSPORTATION
On Behalf of the Federal Highway Administration–Pennsylvania Division Office

Determination of Section 4(f) *De Minimis* Use
Section 2002 No Adverse Use
Historic Properties

August 2017 Version

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

SELECT ONE: ☐ **EIS** ☐ **EA** ☒ **CE** ☐ **EER** ☐ **ED**

PROJECT DESCRIPTION:
(Provide a concise but thorough description of the proposed action.)

The proposed State Road (SR) 0083, Section 079 project is located in Paxtang Borough, Swatara Township and the City of Harrisburg in Dauphin County, Pennsylvania. The project begins at the SR 3013 (29th Street) overpass and extends approximately two miles to the western project terminus at the northbound 2nd Street off-ramp of the SR 0083 bridge over the Susquehanna River (South Bridge) (Attachment 1). An alternatives analysis resulted in the identification of a recommended preferred alternative. The recommended preferred alternative consists of widening and full reconstruction to provide an Interstate facility that includes six mainline through lanes (three in each direction) and a two-lane collector-distributor (CD) road with ramp lanes providing access for local traffic at the interchanges. The CD road extends from the South Bridge to just east of the SR 3007 (19th Street) Interchange.

The proposed project will shift the mainline alignment south and hold the existing northern right-of-way line along the Norfolk Southern rail lines, and the existing 13th Street interchange will be relocated to SR 0230 (Cameron Street).

Access over and under SR 0083, Section 079 will remain as it is today with improvements made for bicycle and pedestrian traffic along with project lighting. The existing bridges over SR 0083 will be replaced at 13th Street, 19th Street, and 29th Street to accommodate mainline widening. Mainline bridges including the SR 0083 South Bridge viaduct, as well as the bridges over Paxton and 17th Streets will be widened and replaced. Roadway bridges over Norfolk Southern will be replaced and widened at 17th, 19th, and 29th Streets. SR 3010 (Paxton Street) will be realigned from the intersection at 13th Street to the intersection at 16th Street to improve the geometry of the bridge carrying SR 0083 over Paxton Street. The recommended preferred alternative was presented to the public in October 2018 and is available on the project website (http://www.i-83beltway.com).

IDENTIFICATION OF SECTION 4(f)/SECTION 2002 PROPERTY:
(List the property and provide a description of the property as per Chapter 6 of the *Section 4(f)/Section 2002 Handbook.* Attach a map, photo(s), etc. as appropriate.)

East Shore Diner (Key No. 143137): The East Shore Diner was erected at its current location in 1953, replacing an earlier frame and block structure built in 1943. The East Shore Diner was determined eligible for listing on the National Register of Historic Places (NRHP) under Criterion C, as the building embodies the distinctive characteristics of a Modern Stainless diner manufactured by the Jerry O'Mahoney Company. The diner retains key elements of the Moderne style diner, including the stainless-steel cladding, horizontal bands of color, curved corners, and floor plan with a lunch

County:	Dauphin	**State Route:**	0083	**Section:**	079
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counter and surrounding booths. The neon DINER sign contributes to the feeling and association of the resource and contributes to its significance. The rear kitchen block is utilitarian and does not contribute to the Moderne aesthetic that makes the building eligible for listing on the NRHP.

OFFICIAL WITH JURISDICTION OVER SECTION 4(f)/SECTION 2002 PROPERTY:

1. Identify agency with jurisdiction:
   Pennsylvania State Historic Preservation Office (SHPO)

2. Name and title of contact person at agency:
   Andrea Lowery, State Historic Preservation Officer

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

APPLICABILITY DETERMINATION:

1. Does the project result in a "no adverse effect" or a "no historic properties affected" determination on the historic property as defined by Section 106 of the National Historic Preservation Act and its regulations? **(If NO, *de minimis*/no adverse use does not apply.)** ☒ YES ☐ NO

Identify the effects determination for the resource:

The project involves removing and relocating the diner to a new location. There is historical precedent for moving and reusing diners. Many diners fabricated in the mid-20th century were moved from their original locations and continue to function as diners or restaurants. The small modular structures lend themselves to easy relocation. The relocation of the East Shore Diner will affect the location and setting of the resource, and therefore the resource's integrity. However, location and setting are not aspects of integrity that are central to the resource's eligibility. The relocation of the diner will not affect the integrity of design, workmanship, materials, or feeling that are central to its eligibility under Criterion C.

The portion of the resource that exhibits the character defining features of the building, those of the Jerry O'Mahoney Company manufactured Modern Stainless diner, will be retained. The diner and the neon DINER sign will be relocated, but the concrete block kitchen will not. This utilitarian addition does not contribute to the Moderne aesthetic that makes the building eligible for listing on the NRHP, and it will be rebuilt in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Relocation plans and stipulations will be in place to ensure that the resource is protected during the move and reinstallation.

The SHPO concurred with PennDOT's determination that the SR 0083, Section 079 Widening and Reconstruction Project will result in an effect finding of Historic Property Not Adversely Affected for the East Shore Diner, contingent on the successful relocation of the resource.

Describe the use of land from the property (identify amount of the property to be used, including temporary and permanent acquisition). Include a description of any mitigation included when making the determination regarding effects to the resource:

The entire property, measuring approximately 0.74 acre, will be acquired and converted to permanent transportation use. To mitigate the impact, avoid an adverse effect, and qualify for *de minimis* Section 4(f) use, the diner will be relocated to a nearby location in a manner that protects and preserves the character-defining features of the resource and retain the integrity that reflects its architectural significance. Parameters and specifications will be established to ensure that the building is relocated, rehabilitated, and reused in a manner that is consistent with the Secretary of the

County:	Dauphin	**State Route:**	0083	**Section:**	079
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Interior's Standards for the Treatment of Historic Properties. The SHPO will remain involved to review the parameters and specifications.

☒ YES

2. Has the SHPO concurred in writing with the effects determination?

☐ CONCURRENCE NOT REQUIRED AS PER SECTION 106 DELEGATION PA

☐ NO

If YES, identify date of concurrence: 3/21/2019

If NO Response, identify specified time with no response from PHMC: Click here to enter text.

*(**Note:** Receipt of the SHPO's concurrence with the FHWA's finding, or a non-response after the specified time qualifies as the necessary correspondence from the official with jurisdiction over Section 106 properties. In agreement of an FHWA letter dated March 24, 2017, PHMC documented their written understanding on March 27, 2017 that PennDOT will make a de minimis finding for historic resources where a Section 106 effects determination of no adverse effect or no historic properties affected is made. Therefore, individual notices of the intent to apply the de minimis finding for historic resources are no longer required in Pennsylvania if the SHPO is the official with jurisdiction, and the SHPO has agreed that when a no adverse effect or no historic properties affected determination is made, that the de minimis use is appropriate.)*

Written correspondence is included in the following Attachment:
Attachment 5 – Letter from SHPO to PennDOT containing concurrence on No Adverse Effect Finding

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

3. The views of the consulting parties participating in the Section 106 consultation have been considered. (Attach relevant correspondence and any necessary responses to consulting party comments) ☒ YES

PennDOT has a website for the SR 0083 project (http://www.i-83beltway.com), through which the public can review information and provide comment. PennDOT hosted a public meeting on October 18, 2018 to provide a project update, share improvements under consideration, present the recommended preferred alternative, and gather public input. PennDOT solicited for Section 106 Consulting Parties through Project PATH on August 1, 2016 and by mailed letter in January 2018. Approximately 100 letters were sent to organizations and property owners in the project area. Including the Pennsylvania SHPO, the project has 11 consulting parties, consisting of four organizations and seven property owners. Section 106 consulting parties were invited to attend the public meeting and consult with PennDOT and consultant teams on determinations of eligibility and anticipated impacts. Opportunities to sign up as a Section 106 consulting party were also available at the public meeting. All Section 106-related project information has been uploaded to ProjectPATH and shared electronically with consulting parties. Consulting parties were offered opportunities to comment on all submissions, but no comments have been received from consulting parties other than the SHPO.

Representatives from PennDOT – including the Project Manager – met with the owners of the East Shore Diner on November 29, 2018 and February 6, 2019 to discuss the business operation and potential relocation as part of the SR 0083 widening and reconstruction project. The owners confirmed they are still interested in maintaining the business after relocation by PennDOT. The owners said they were flexible on the location but would like to stay near the current location to maintain their current client base. The owners stated they did not want to remain on Cameron Street because of periodic flooding.

A copy of the minutes from the November 29, 2018 and February 6, 2019 meetings with the property owners is included in Attachment 6.

4. The project does not involve any uses that would require an individual Section 4(f) evaluation. (It is acceptable if there are other Section 4(f) uses that are covered by one of the nationwide programmatic Section 4(f) evaluations or meet temporary occupancy criteria.) ☒ YES

If there are other Section 4(f) properties used, list them here, briefly describe the use, and identify which form(s) will be completed to address the use:

Harrisburg City Parks 7 Parkway Plan: Capital Area Greenbelt – convert aerial easement to fee-simple ownership and acquire additional land for permanent transportation use – *De Minimis* Use

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

Pennsylvania Railroad: Main Line (Philadelphia to Harrisburg) – replace non-contributing bridges spanning the railroad (AMTRAK), no ROW acquisition – Non-Applicability/No Use Form

Philadelphia & Reading Railroad (Philadelphia to Harrisburg)– replace non-contributing bridges spanning the railroad (Norfolk Southern), acquire ROW from non-contributing land – Non-Applicability/No Use Form

Susquehanna River Water Trail – temporary causeway for ramp construction in a no-portage zone – Non-Applicability/No Use Form

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

ALTERNATIVES ANALYSIS:

In accordance with PA Act 120 Section 2002 requirements, briefly summarize the impacts to other Section 2002 areas of concern that would occur if the use of the historic site was avoided. Other Section 2002 areas of concern to be discussed could include the following:

(1) residential and neighborhood character and location, (2) conservation including air, erosion, sedimentation, wildlife and general ecology of area, (3) noise, and air and water pollution, (4) multiple use of space, (5) replacement housing, (6) displacement of families and business, (7) aesthetics, (8) public health and safety, (9) fast, safe and efficient transportation, (10) civil defenses, (11) economic activity, (12) employment, (13) fire protection, (14) public utilities, (15) religious institutions, (16) conduct and financing of government including the effect on the local tax base and social service costs, (17) property values, (18) education, including the disruption of school district operations, (19) engineering, right-of-way and construction costs of the project and related facilities, (20) maintenance and operating costs of the project and related facilities, and (21) operation and use of existing transportation routes and programs during construction and after completion.

Alternative configurations were considered for the proposed northern ramps on Cameron Street to avoid or minimize the effect of the project on the Section 4(f) property, namely by either retaining the existing 13th Street interchange or modifying the ramps and Cameron Street improvements to avoid impacts. However, relocating the 13th Street interchange ramps to Cameron Street was found to be the alternative that best meets project purpose and needs while having the least impact to the surrounding area.

Foose Elementary School is located south of the of the southern interchange ramp on 13th Street. The 13th Street ramps send a large volume of traffic in front of school and through numerous adjacent crosswalks, creating safety concerns especially for children crossing the roadway to reach the school building. The school has requested improvements and supports the interchange relocation, as it would improve pedestrian safety surrounding the school. Furthermore, the origin-destination traffic study conducted for the project determined that the majority (over 60%) of SR 0083 users travel to or from downtown Harrisburg. The current interchange at 13th Street does not provide an efficient or direct connection between SR 0083 and downtown Harrisburg. Relocating the interchange to Cameron Street creates a more direct and efficient north/south route, requiring traffic to make fewer turns between the highway and downtown.

Retaining the existing 13th Street interchange would avoid impacts to the Section 4(f) property but would have negative impacts to (1) residential and neighborhood character, (8) public health and safety, (9) fast, safe and efficient transportation, and (18) education. Furthermore, it would not be considered a feasible alternative as it would not meet the project purpose, which is to “improve traffic flow and safety around the City of Harrisburg by providing upgraded transportation facilities.”

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

Moving the proposed Cameron Street ramp location was also considered as an avoidance alternative. Moving the ramp intersection to the parcel north of the diner is not viable because of the proximity to the Paxton Street/Cameron Street intersection. There is not enough space south of the diner to construct ramps that would meet modern safety requirements. The proposed alignment allows for enough space to incorporate the requirements of a modern interchange, establishes a standard four-way intersection with Hanna Street, and requires minimal property acquisition (the diner and the property to the south). Regardless of where the northern ramp is located, the additional traffic volume anticipated for Cameron Street requires the street to be widened. Widening Cameron Street to the west would result in impacts to two large masonry commercial or industrial buildings and a gas station that abut the sidewalk. Widening to the east minimizes the number and severity of building impacts, since the diner can be relocated.

Moving the ramp north or south of the diner would only avoid the Section 4(f) property if all Cameron Street widening occurred to the west side of the street. This would have negative impacts to (1) residential and neighborhood character and location, (6) displacement of families and business, (7) aesthetics, (8) public health and safety, (9) fast, safe and efficient transportation, (11) economic activity, (12) employment, (16) conduct and financing of government including the effect on the local tax base and social service costs, (17) property values, and (19) engineering, right-of-way and construction costs of the project and related facilities.

pennsylvania
DEPARTMENT OF TRANSPORTATION
On Behalf of the Federal Highway Administration–Pennsylvania Division Office

Determination of Section 4(f) *De Minimis* Use Section 2002 No Adverse Use Historic Properties

August 2017 Version

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

Include any additional information related to the historic property that is relevant to the determination of *de minimis*/no adverse use:

SUMMARY AND DETERMINATION:

The project involves a *de minimis/no adverse use* on the Section 4(f)/Section 2002 property as evidenced by a no adverse effect or no historic properties affected finding from the SHPO and/or as a result of mitigation to or avoidance of impacts to the qualifying characteristics and/or the functions/values of the resource. Based on the scope of the undertaking; the fact that the undertaking does not adversely affect the function/qualities of the Section 4(f)/Section 2002 property on a permanent or temporary basis; and with agreement from the official with jurisdiction (SHPO), the proposed action constitutes a *de minimis*/no adverse use; and therefore, no analysis of avoidance alternatives is required.

Name and Organization of Preparer: Lindsey Allen, JMT
Robert Bolich, HNTB Corp. Date: 5/2/2019

Project Manager: John M Bachman Date: 5/2/19

Environmental Manager: Sharon E. Oli Date: 5/2/19

PennDOT, BOPD: [signature] Date: 5/2/19

FHWA: [signature] Date: 05·02·2019

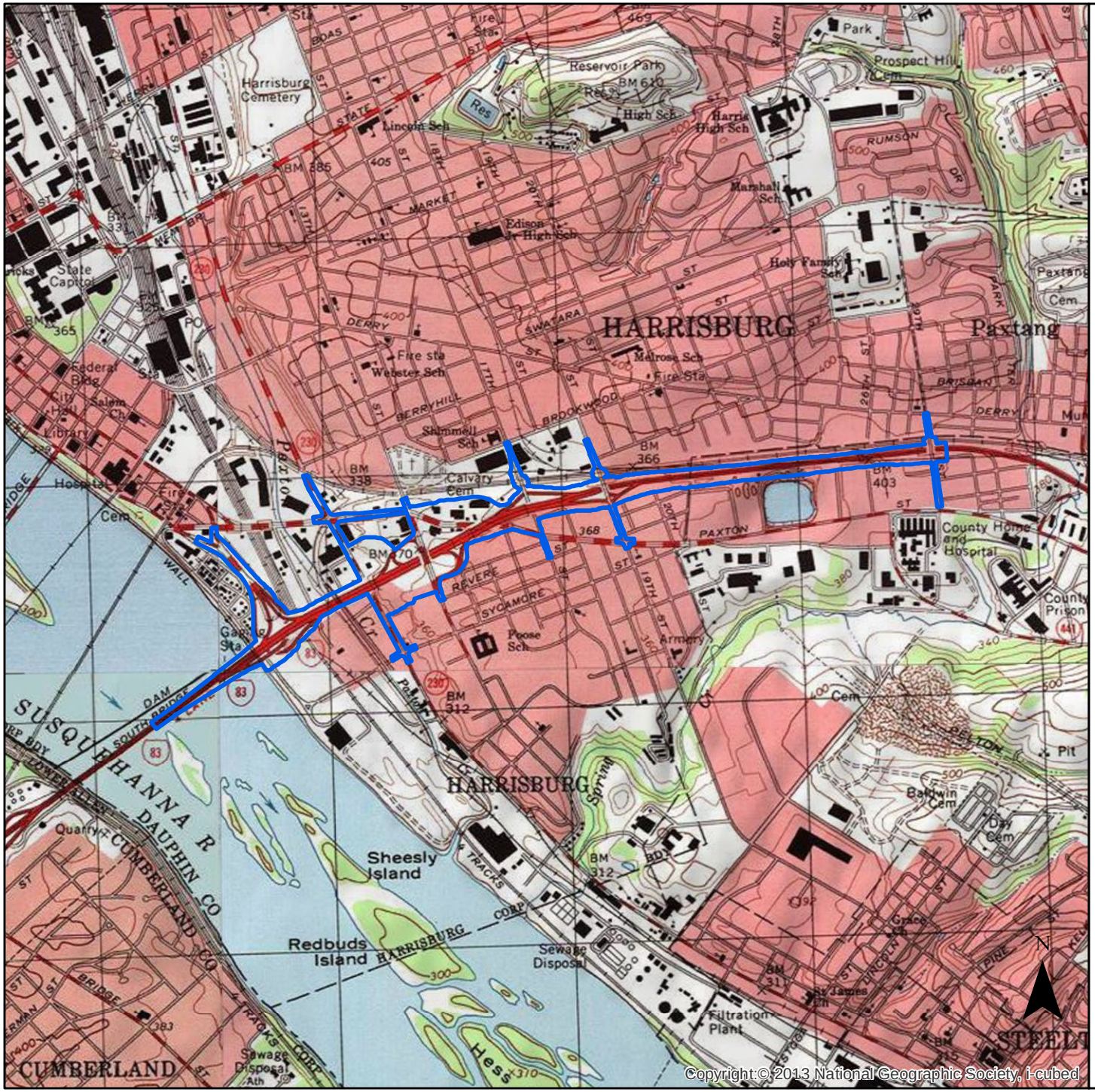
County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

List Section 4(f) mitigation measures associated with this *de minimis* use that are part of this project:

While numerous configurations were considered to minimize the impact of the project to the East Shore Diner, the proposed plan best meets the project needs and avoids larger impacts to the surrounding properties. Relocating the diner in a manner that protects and preserves the character-defining features of the Diner will not diminish the aspects of integrity that reflect its architectural significance. Parameters will be established to ensure that the building is relocated, rehabilitated, and reused in a manner that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The Application of the Criteria of Adverse Effect found that the successful relocation the East Shore Diner would not constitute an adverse effect on the resource.

Typical attachments for this form include, but are not limited to:

- Project location map
- Map of affected Section 4(f) property and other Section 4(f) property(ies) in the project vicinity
- Photographs of the Section 4(f) property
- Project plan sheet to show impacts
- Correspondence with the official with jurisdiction
- Consulting party correspondence



Attachment 1
Project Location Map

SR 0083
Section 079
Widening and Reconstruction Project

Source:
USGS 24k Topo Maps: Harrisburg East, Harrisburg West, Lemoyne, Steelton.

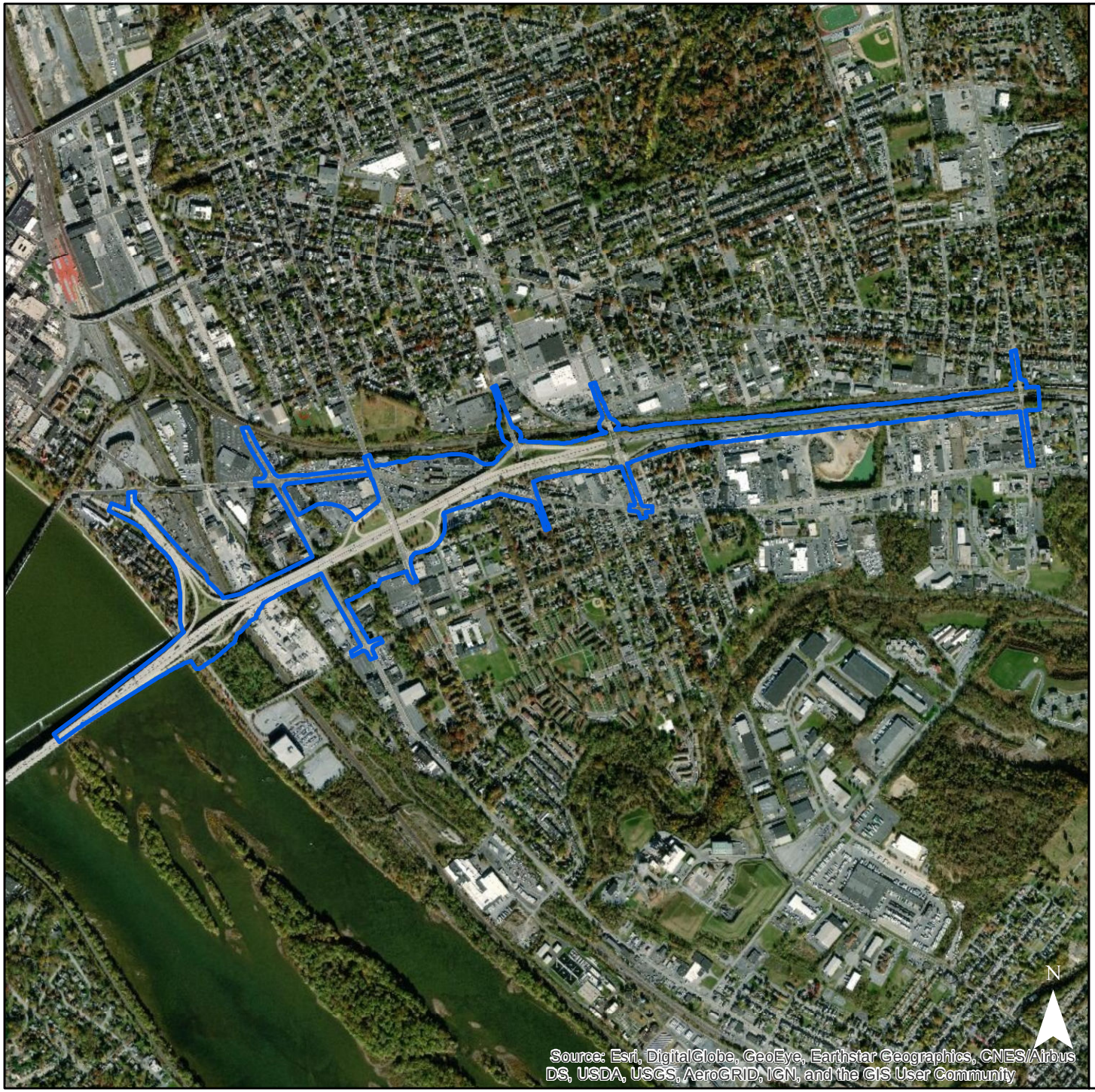
Scale:

0 750 1,500 3,000 Feet

N

Key

Limit of Impacts



Attachment 1
Project Location Map

Section 4(f)
De Minimis Use

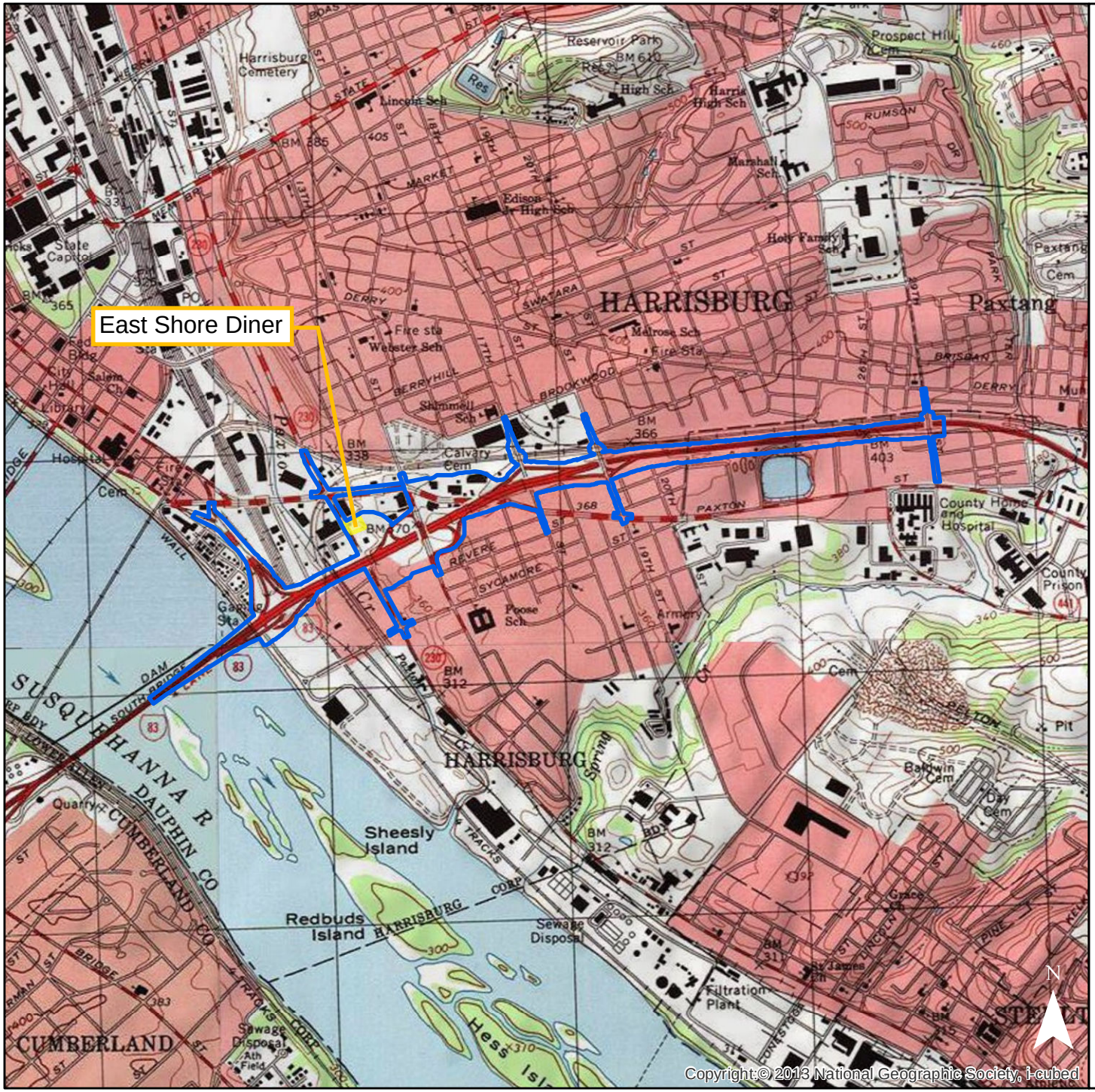
Scale:

0 625 1,250 2,500 Feet

Source:
ESRI 2019.

Key

Limit of Impacts



Attachment 2
Affected Section 4(f) Properties

Section 4(f)
De Minimis Use

East Shore Diner

Scale:

0 750 1,500 3,000 Feet

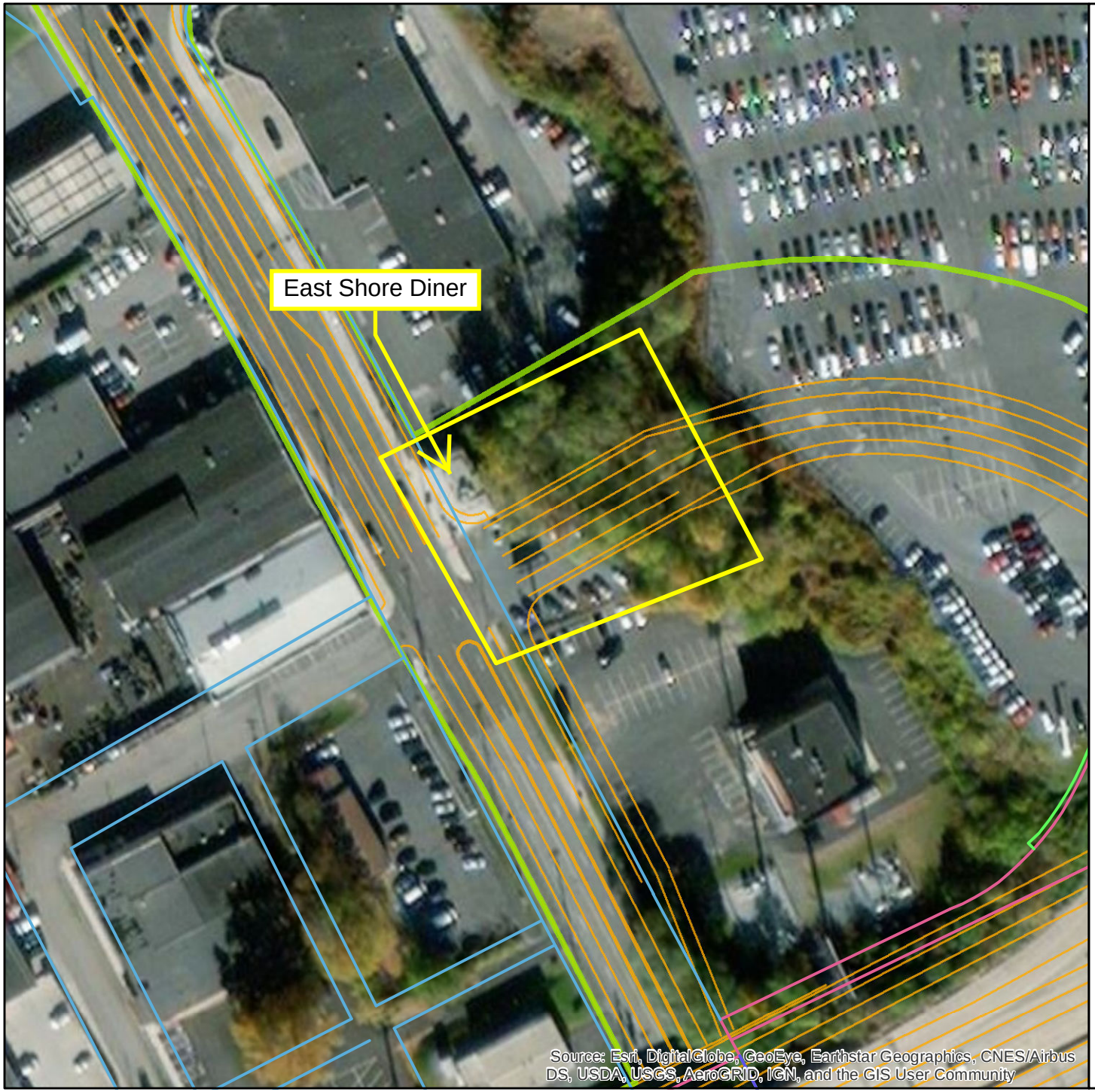
Source:

USGS 24k Topo Maps:
Harrisburg East, Harrisburg West, Lemoyne, Steelton.

Key

- Limit of Impacts
- Section 4(f) Properties

East Shore Diner, view looking northeast.



Attachment 4
Project Plan Sheet

Section 4(f) De Minimis Use

East Shore Diner

Source:
ESRI 2019

N

Scale:

0 40 80 160 Feet

Key

- Section 4(f) Property Boundary
- Limit of Impacts
- Proposed Pavement Marking
- ROW-Legal Right of Way Line
- ROW-Legal Limited Access Line
- ROW-Legal Limit of Slope Line
- ROW-Legal Aerial Easement
- ROW-Legal Drainage Easement

Pennsylvania State Historic Preservation Office
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

March 21, 2019

Brian Thompson, Director
Bureau of Project Delivery
Attn: Jeremy Ammerman, District 8-0
PA Department of Transportation
P.O. Box 2966
Harrisburg, PA 17105

RE: ER 2016-8479-043-U: I-83, Section 0709 (MPMS 97828); I-83 from the Susquehanna River to SR 3013 (29th Street); Harrisburg and Swatara Township, Dauphin County; Determination of Effects: Above Ground Resources

Dear Mr. Thompson,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources
Based on the information received and available within our files, we concur with the findings of the agency that the proposed project will result in an overall finding of **No Adverse Effect** to historic properties. Specifically, we concur that the proposed project will have No Effect on the following properties: Calvary Presbyterian Church (Key No.121109); Capital Roller Rink (Key No.208562); Harrisburg Historic District (Key No.000508); Kohl Brothers Artesian Well Drillers (Key No.208566); Mount Pleasant Historic District (Key No. 064470); Paxton Fire Station (Key No. 102204). We concur that the proposed project will have No Adverse Effect on the following properties: East Shore Diner (Key No. 143137), Pennsylvania Railroad: Main Line (Key No.105675); Philadelphia & Reading Railroad (Key No.112375), and the Harrisburg City Parks 7 Parkway Plan; Capital Area Greenway (Key No. 110669). With regards to the East Shore Diner (Key No. 143137), this No Adverse Effect finding is based upon the proposed plan to relocate the diner to a new location to continue its function as a diner. Please notify our office of the selected relocation once determined. If project plans should change to the degree that the diner cannot be successfully relocated to remain open for business, please notify our office to reopen consultation.

If you need further information concerning this review, please contact Emma Diehl at emdiehl@pa.gov or (717) 787-9121.

Sincerely,

Douglas C. McLearen, Chief
Division of Environmental Review

INTERSTATE 83
SR 0083, Section 079, Dauphin County, PA

Section 106 – Consulting Party Meeting – East Shore Diner

Date: February 6, 2019
Time: 1:30 PM
Location: East Shore Diner

ATTENDEES	ORGANIZATION
Bill "Stavros" Katsifis	East Shore Diner Owner
Dorothy Katsifis	East Shore Diner Owner
Jeremy Ammerman	PennDOT District 8-0
John Bachman	PennDOT District 8-0
Lori Cole	JMT

MEETING DISCUSSION

On February 6, 2019, John Bachman, Jeremy Ammerman and I met with Bill "Stavros" and Dorothy Katsifis, owners of the East Shore Diner. The purpose of the meeting was to obtain clarification from Mr. Katsifis regarding his business operation and potential relocation as part of the Interstate 83 (SR 0083, Sec. 079) Widening and Reconstruction Project.

Mr. Katsifis stated that he did not expect to hear from PennDOT until the project advanced a bit more and was thinking it would be a few more years. John Bachman stated that project is moving along, and environmental clearance is expected by the end of the year. After environmental clearance is received, PennDOT can initiate the right-of-way acquisition process for the project. He also said that after the last meeting Lori Cole, Environmental Manager for the project, had a few additional questions regarding the potential relocation area for the Diner.

Jeremy Ammerman first wanted to confirm that Mr. Katsifis was still interested in owning and maintaining the Diner after a relocation by PennDOT. Mr. Katsifis confirmed that they are still interested in maintaining the operation. Lori Cole stated that during initial discussions, Mr. Katsifis mentioned that he would not be opposed to a relocation within the neighborhood to maintain his current client base. Lori Cole asked for a general definition regarding what Mr. Katsifis considered his neighborhood. Mr. Katsifis stated that he is flexible on location, however; he wants to stay in the greater Harrisburg area not too far from his current location. He did mention that he does not really want to remain on Cameron Street because of the occasional flooding that occurs. He also mentioned that the proximity of the Diner to the road creates a minor concern as roadway accidents occasionally occur and come very close to hitting the building.

Lori Cole then inquired about his current parking area and if the space was sufficient for their operation. Mr. Katsifis stated that they have about 20 actual parking spaces but through a mutual agreement with the River City Blues Club,

customer overflow parking and employee parking utilize their parking area. He noted that the two businesses have different operating hours. Lori then asked if typically, 20 spaces was sufficient space. Mr. Katsifis was unsure if that would be sufficient.

Mr. Katsifis also inquired about the compensation for moving and how far PennDOT would move the building. John Bachman stated that when right-of-way agents for PennDOT officially contacted him regarding the acquisition of the property, they would outline the compensation package and coordinate the search for a new site.

Minutes Prepared by:
JMT, Inc.

Lori Cole

Lori Cole

Section 106 – Consulting Party Meeting – East Shore Diner

Date: November 29, 2018
Location: East Shore Diner

ATTENDEES	ORGANIZATION
Bill "Stavros" Katsifis	East Shore Diner Owner
Jeremy Ammerman	PennDOT District 8-0
John Bachman	PennDOT District 8-0
Linda Adler	PennDOT District 8-0

MEETING DISCUSSION

On November 29, 2018, John Bachman, Jeremy Ammerman and Linda Adler met with Bill "Stavros", owner of the East Shore Diner. The purpose of the meeting was to determine if Bill Katsifis would be interested in continuing to operate the diner if the Interstate 83 (SR 0083, Sec. 079) Widening and Reconstruction Project displaced the diner from its current location.

John Bachman and Jeremy Ammerman provided an overview of the proposed project and discussed the potential impact to the diner property. Jeremy Ammerman stated that the diner was determine eligible for the National Register of Historic Places, as such, the proposed project would need to mitigate any impact to the diner structure. He explained that one such mitigation opportunity for diners is to relocate them to another location. Jeremy further explained that PennDOT is starting to explore this as a potential mitigation opportunity for this site. However, he did note that continued operation of the diner would be one of the requirements for approval to relocate the historic diner. Bill Katsifis stated that he and his wife operate the diner and planned to continue its operation for 10 or so years until they are ready to retire. He said that they would be interested in relocating the diner to continue operation within the neighborhood.

John Bachman provided an estimated timeframe for when relocation would occur and a general discussion on what the right-of-way process would entail occurred. John Bachman and Jeremy Ammerman committed to continuing coordination and discussions with Bill Katsifis as the project progresses.

These minutes provide a general overview of the discussion that occurred on November 29, 2019.

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HARRISBURG
I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
DAUPHIN COUNTY, PA

Section 4(f) Non-Applicability / No Use
Philadelphia and Reading Railroad
(Philadelphia to Harrisburg)

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pennsylvania DEPARTMENT OF TRANSPORTATION
On Behalf of the Federal Highway Administration–Pennsylvania Division Office

Section 4(f) Non-Applicability/No Use

May 2014 Version

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

SELECT ONE: ☐ **EIS** ☐ **EA** ☒ **CE** ☐ **EER** ☐ **ED**

PROJECT DESCRIPTION:
(Provide a concise but thorough description of the proposed action.)

The proposed State Road (SR) 0083, Section 079 project is located in Paxtang Borough, Swatara Township and the City of Harrisburg in Dauphin County, Pennsylvania. The project begins at the SR 3013 (29th Street) overpass and extends approximately two miles to the western project terminus at the northbound 2nd Street off-ramp of the SR 0083 bridge over the Susquehanna River (South Bridge) (Attachment 1). An alternatives analysis resulted in the identification of a recommended preferred alternative. The recommended preferred alternative consists of widening and full reconstruction to provide an Interstate facility that includes six mainline through lanes (three in each direction) and a two-lane collector-distributor (CD) road with ramp lanes providing access for local traffic at the interchanges. The CD road extends from the South Bridge to just east of the SR 3007 (19th Street) Interchange.

The proposed project will shift the mainline alignment south and hold the existing northern right-of-way line along the Norfolk Southern rail lines, and the existing 13th Street interchange will be relocated to SR 0230 (Cameron Street).

Access over and under SR 0083, Section 079 will remain as it is today with improvements made for bicycle and pedestrian traffic along with project lighting. The existing bridges over SR 0083 will be replaced at 13th Street, 19th Street, and 29th Street to accommodate mainline widening. Mainline bridges including the SR 0083 South Bridge viaduct, as well as the bridges over Paxton and 17th Streets will be widened and replaced. Roadway bridges over Norfolk Southern will be replaced and widened at 17th, 19th, and 29th Streets. SR 3010 (Paxton Street) will be realigned from the intersection at 13th Street to the intersection at 16th Street to improve the geometry of the bridge carrying SR 0083 over Paxton Street. The recommended preferred alternative was presented to the public in October 2018 and is available on the project website (http://www.i-83beltway.com).

IDENTIFICATION OF SECTION 4(f) PROPERTY:
(List the property and provide a description of the property as per Chapter 6 of the *Section 4(f)/Section 2002 Handbook*. Attach a map, photo(s), etc. as appropriate.)

Philadelphia and Reading Railroad (Philadelphia to Harrisburg) (Key No. 112375): The Philadelphia & Reading Railroad (Philadelphia to Harrisburg) (Key # 112375), known as the P&R, runs on an east/west alignment through Harrisburg and is located adjacent and parallel to SR 0083 between 13th and 29th Street. The Pennsylvania State Historic Preservation Office (SHPO) determined that the Philadelphia & Reading Railroad (Philadelphia to Harrisburg) is eligible for listing in the National Register of Historic Places (NRHP) under Criterion A, for its association with the industrial and transportation history of the region, and its role as a critical connection for freight,

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

especially coal, and to a lesser extent, passengers, among Philadelphia, Reading, and Harrisburg. The P&R played a significant role in the commercial and industrial development of the region, as well as a significant role in the transportation history of the region. The resource as a whole retains sufficient integrity to convey its significance in this area.

The boundary generally consists of the railroad right-of-way (ROW) which is approximately 80 feet wide. There are three contributing features in the project Area of Potential Effect (APE), described as follows:

Signal Tower: A signal tower is located on the south side of the ROW at the juncture of the P&R and the Philadelphia Harrisburg and Pittsburgh spur. Although not accessible for survey, a 1929 Sanborn Fire Insurance Map indicates the presence of a two-story brick signal tower. Aerial photographs indicate the structure has a hipped roof and a single-story addition on the southeastern elevation, which was added between 1929 and 1937 based on historic maps and aerial images.

Bridges: Two contributing railroad bridges are located within the APE. The first bridge that carries the P&R over Cameron Street in Harrisburg was constructed in 1923. The structure is a single span, steel girder bridge with a reinforced concrete parapet. The bridge rests on stone and concrete abutments. “The Reading” is stamped on the concrete parapet. The span is supported by two concrete bents that separate the sidewalks from vehicular traffic on Cameron Street. The second bridge that carries the P&R over Paxton Creek in Harrisburg was built in 1927. The structure is a single span reinforced concrete bridge with concrete abutments and wing walls.

None of the contributing features present in the project APE are located within the project Limits of Impact (see Attachment 3).

OFFICIAL WITH JURISDICTION OVER SECTION 4(f) PROPERTY:

1. Identify agency with jurisdiction:
   Pennsylvania State Historic Preservation Office (SHPO)

2. Name and title of contact person at agency:
   Andrea Lowery, State Historic Preservation Officer

pennsylvania DEPARTMENT OF TRANSPORTATION
On Behalf of the Federal Highway Administration–Pennsylvania Division Office

Section 4(f) Non-Applicability/No Use

May 2014 Version

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

DETERMINATION OF NON-APPLICABILITY:

PennDOT has the autonomy to decide the applicability of Section 4(f) protection. However, per the *Section 4(f)/Section 2002 Handbook*, PennDOT is advised to consult with FHWA with questionable circumstances by completing the appropriate forms or through other means of correspondence.

Indicate which of the following apply (More than one may be applicable, indicate all that apply):
*(*Requires concurrence by the official with jurisdiction over the Section 4(f) property.) Provide additional information regarding each checked item.*

☐ 1. The project area includes a Section 4(f) property but results in no permanent incorporation or conversion of land into a transportation facility, no temporary occupancy, or does not result in a constructive use as determined by FHWA.

Click here to enter text.

☐ *2. The project is a bike or walkway project sponsored by the officials with jurisdiction over the Section 4(f) property [Negative Declaration applies]. (***Note:*** does not require FHWA signature).

Click here to enter text.

☒ *3. The project involves permanent acquisition of land within the boundaries of a historic district, but the land to be used does not contribute to the characteristics that make the district eligible for the *National Register* or has been determined to be part of a non-contributing element.

The bridges carrying 17th, 19th, and 29th Streets over the railroad will be replaced with wider and longer structures. Due to the constraints of working within an active railroad corridor, only minor ROW acquisition will be required from the Philadelphia & Reading Railroad (Philadelphia to Harrisburg) linear historic district.

None of the proposed work will alter the alignment of the railroad or any contributing features. The interchanges and bridges slated for replacement, widening, or reconstruction do not involve significant features associated with the P&R and the railroad ROW itself is not contributing. Cameron Street will be widened south of the existing historic railroad bridge; this involves no impacts to the historic bridge. The project will not affect the characteristics which make the district eligible for the NRHP or affect the ways it conveys its association with transportation and industrial history under Criterion A.

☐ *4. The project involves a multiple-use facility (state, federal, National Forest, large municipal-owned land, etc.) but does not impact an area that is managed for/functions specifically as a Section 4(f) property.

pennsylvania DEPARTMENT OF TRANSPORTATION
On Behalf of the Federal Highway Administration–Pennsylvania Division Office

Section 4(f) Non-Applicability/No Use

May 2014 Version

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

Click here to enter text.

☐ *5. The project involves an aerial crossing of a Section 4(f) property, but it does not impact the qualifying characteristics of the property, or it does not result in the conversion of land into a transportation facility, such as placement of a bridge over a historic railroad yard.

☒ *6. The project involves activities within the existing transportation right-of-way and would not result in proximity impacts that would substantially impair the features, activities, or attributes that make the property eligible for protection under Section 4(f).

The project involves reconstructing and widening the existing transportation facility, which includes a perpendicular crossing of the Section 4(f) property. The proposed highway project would not substantially impair the features, activities, or attributes that make the property eligible for protection under Section 4(f) – the project will not involve any impacts to the historic resource and it will remain an active railroad during and after construction.

☐ *7. The project involves underground activities such as tie-backs, horizontal borings, etc. and does not impact the qualifying characteristics of the Section 4(f) property or involve archaeology that warrants preservation in place.

Click here to enter text.

☐ *8. The project involves the restoration, rehabilitation, or maintenance of transportation facilities that are on or eligible for the *National Register* and would not adversely affect the historic qualities of the facility that caused it to be on or eligible for listing.

Click here to enter text.

☐ *9. The project involves a transportation enhancement or is a mitigation project where the use of the Section 4(f) property is solely for the purpose of preserving or enhancing the activities, features, or attributes that qualify the property for Section 4(f) protection.

Click here to enter text.

☐ *10. The project involves improvements to the interstate system, but does not require the use of any interstate elements formally designated by FHWA for Section 4(f) protection on the basis of national or exceptional historic significance.

pennsylvania DEPARTMENT OF TRANSPORTATION
On Behalf of the Federal Highway Administration–Pennsylvania Division Office

Section 4(f) Non-Applicability/No Use

May 2014 Version

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

☐ *11. The project involves certain trails, paths, bikeways, and sidewalks where (1) the trail-related project is funded under the Recreational Trails Program (23 U.S.C. 206(h)(2); (2) the trail is a national historic trail designated under the National Trails System Act (with the exception of segments that are historic sites) (16 U.S.C. 1241-1251); (3) the trail/path/bikeway/sidewalk occupies a transportation facility right-of-way and can be maintained somewhere within that right-of-way; or (4) the trail/path/bikeway/sidewalk is part of the local transportation system and functions primarily for transportation.

Click here to enter text.

pennsylvania
DEPARTMENT OF TRANSPORTATION
On Behalf of the Federal Highway Administration–Pennsylvania Division Office

Section 4(f) Non-Applicability/No Use

May 2014 Version

County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

Provide additional information regarding each checked item:

SUMMARY AND DETERMINATION:

The proposed action will not involve temporary or permanent incorporation or conversion of Section 4(f) land into a transportation facility, including construction easements and/or staging, therefore the proposed action does not constitute a use within the meaning of Section 4(f).

Section 4(f) Property: Philadelphia & Reading Railroad (Philadelphia to Harrisburg)

Official with Jurisdiction: Andrea Lowery, State Historic Preservation Officer Date: 3/21/2019

(Optional: other documentation such as attached letters or meeting minutes may be used in replacement of signing this page)
Other documentation is included in the following Attachment:
Attachment 5 – Correspondence with Official with Jurisdiction

Name and Organization of Preparer: Robert Bolich, HNTB Corp. Date: 5/2/2019

Project Manager: John M Bachman Date: 5/2/19

Environmental Manager: Adam E. Oh Date: 5/2/19

PennDOT, BOPD: [signature] Date: 5/2/19

FHWA: [signature] Date: 05.02.2019

pennsylvania DEPARTMENT OF TRANSPORTATION
On Behalf of the Federal Highway Administration–Pennsylvania Division Office

Section 4(f) Non-Applicability/No Use

May 2014 Version

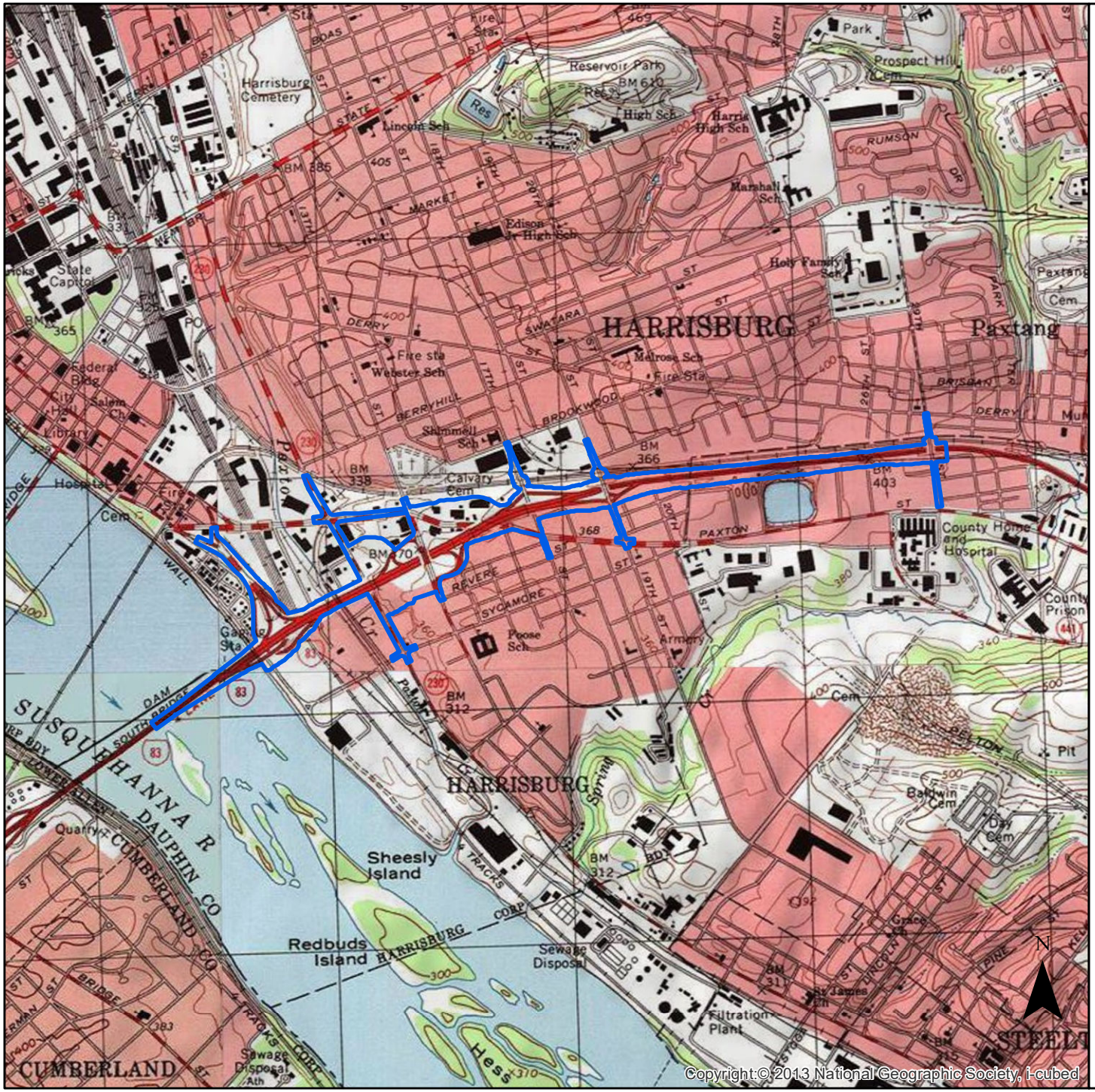
County:	Dauphin	**State Route:**	0083	**Section:**	079
Project Name:	SR 0083, Section 079 Widening and Reconstruction	**FPN:**	TBD	**MPMS:**	97828

List Section 4(f) environmental commitments associated with this non-applicability/no use that are part of this project:

n/a

Typical attachments for this form include, but are not limited to:

- Project location map
- Map of affected Section 4(f) property and other Section 4(f) property(ies) in the project vicinity
- Photographs of the Section 4(f) property
- Project plan sheet
- Correspondence with the official with jurisdiction
- Public involvement information



Attachment 1
Project Location Map

SR 0083
Section 079
Widening and Reconstruction Project

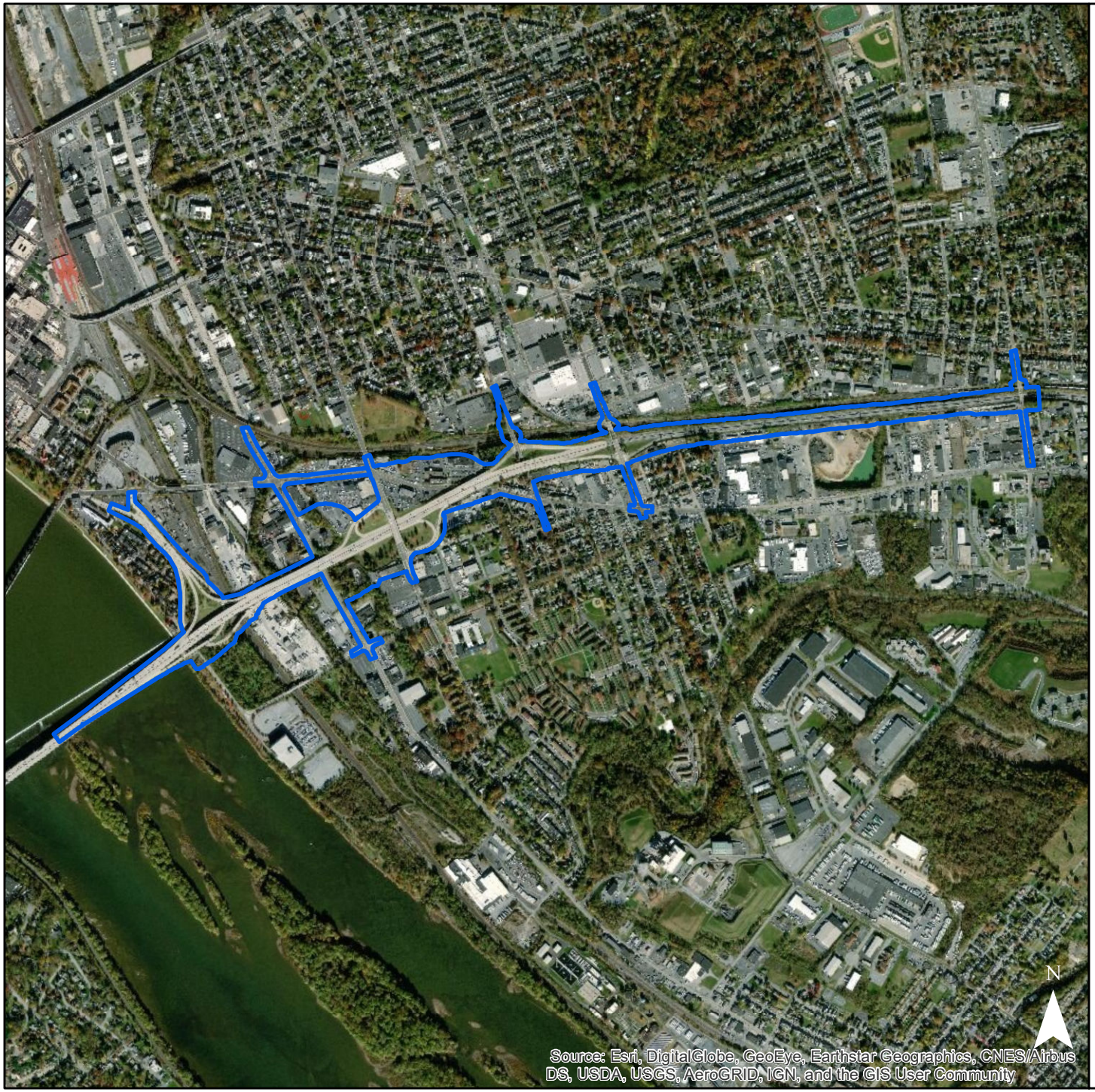
Source:
USGS 24k Topo Maps: Harrisburg East, Harrisburg West, Lemoyne, Steelton.

Scale:

0 750 1,500 3,000 Feet

Key

Limit of Impacts



Attachment 1
Project Location Map

Section 4(f)
No Use

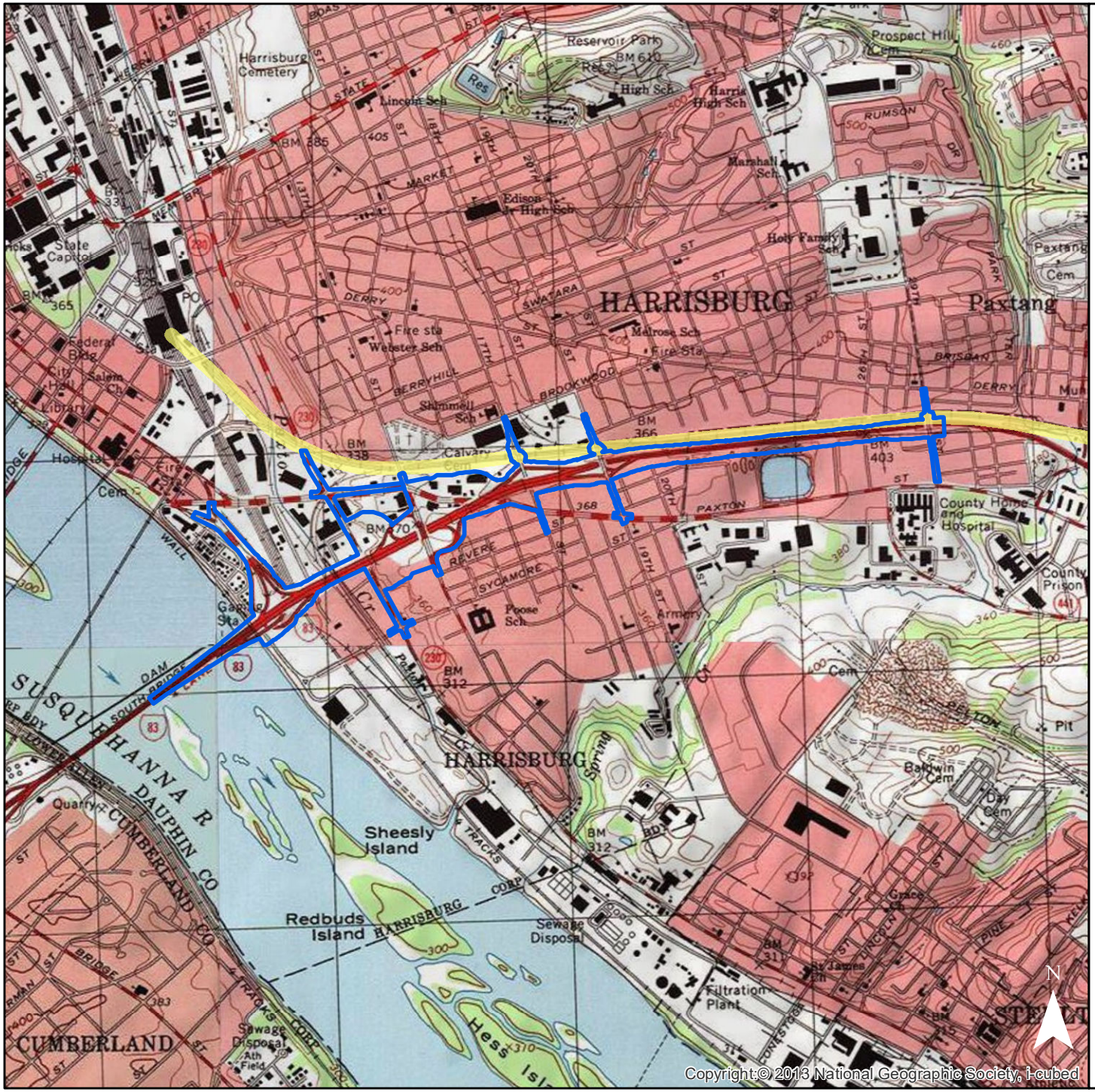
Scale:

0 625 1,250 2,500 Feet

Source:
ESRI 2019.

Key

Limit of Impacts



Attachment 2
Affected Section 4(f) Properties

Section 4(f)
No Use

Philadelphia & Reading Railroad

Scale:

0 750 1,500 3,000 Feet

Source:

USGS 24k Topo Maps:
Harrisburg East, Harrisburg West, Lemoyne, Steelton.

N

Key

- Limit of Impacts
- Section 4(f) Properties

View of the Philadelphia & Reading Railroad: Main Line (Philadelphia to Harrisburg) bridge over Cameron Street, looking northeast. The SR 0083, Section 079 project involves widening Cameron Street to the south (right) of the bridge, but does not involve any impacts to the historic bridge.

View of the Philadelphia & Reading Railroad: Main Line (Philadelphia to Harrisburg), looking west from the 19th Street Bridge towards the 17th Street Bridge in the background. The 17th, 19th, and 29th street bridges and the ROW do not contribute to the historic district.

Attachment 4
Section 4(f)
No Use

Philadelphia & Reading Railroad

Cameron and 13th Streets

Source:
ESRI 2019

N

Scale:

0 125 250 500 Feet

Key

- Section 4(f) Property Boundary
- Limit of Impacts
- Proposed Pavement Marking
- ROW-Legal Right of Way Line
- ROW-Legal Limited Access Line
- ROW-Legal Limit of Slope Line
- ROW-Legal Aerial Easement
- ROW-Legal Drainage Easement

Attachment 4
Section 4(f)
No Use

Philadelphia & Reading Railroad

17th and 19th Streets

Source:
ESRI 2019

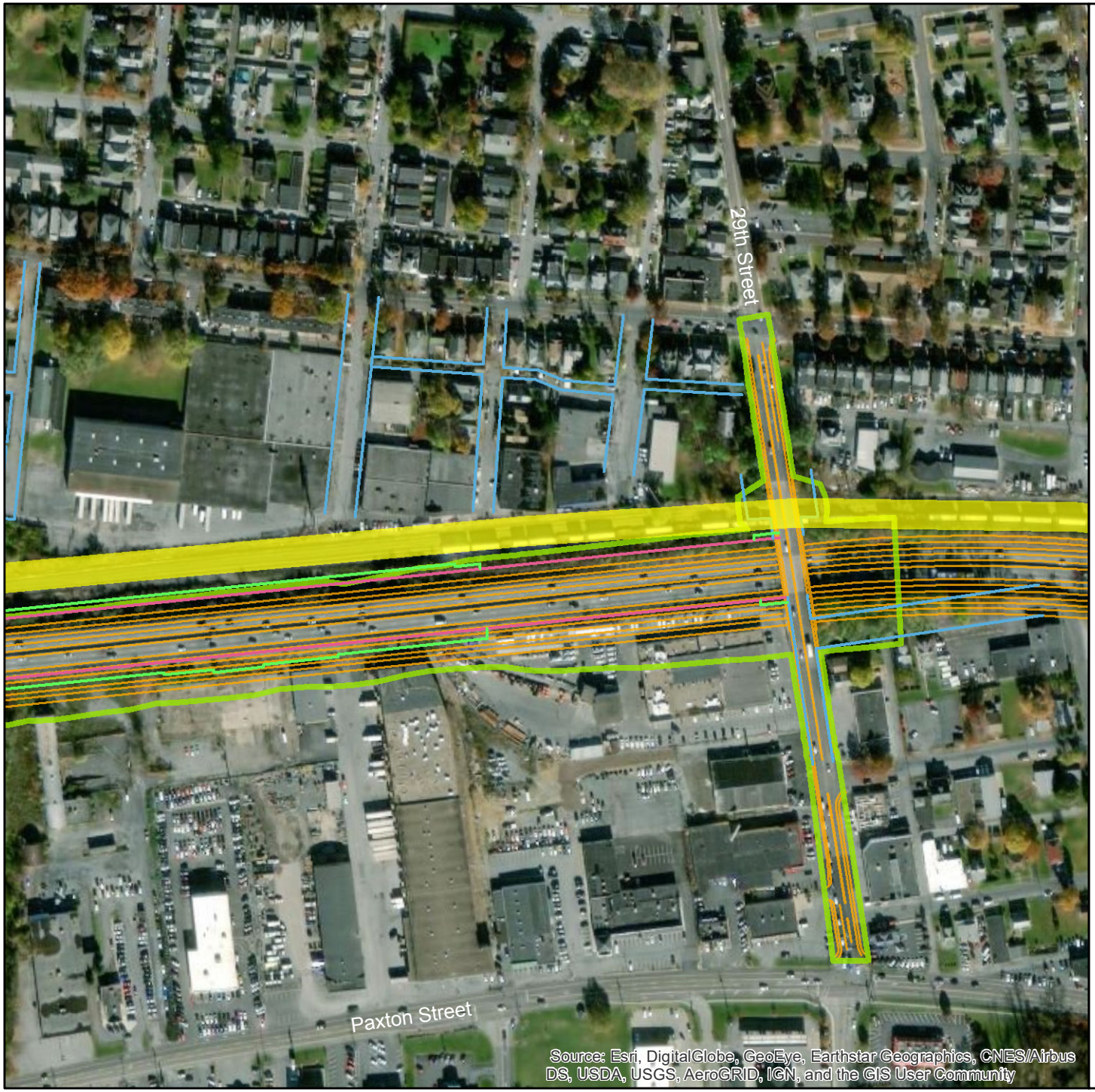
N

Scale:

0 125 250 500 Feet

Key

- Section 4(f) Property Boundary
- Limit of Impacts
- Proposed Pavement Marking
- ROW-Legal Right of Way Line
- ROW-Legal Limited Access Line
- ROW-Legal Limit of Slope Line
- ROW-Legal Aerial Easement
- ROW-Legal Drainage Easement



Attachment 4
Section 4(f)
No Use

Philadelphia & Reading Railroad

29th Street

Source:
ESRI 2019

N

Scale:

0 125 250 500 Feet

Key

- Section 4(f) Property Boundary
- Limit of Impacts
- Proposed Pavement Marking
- ROW-Legal Right of Way Line
- ROW-Legal Limited Access Line
- ROW-Legal Limit of Slope Line
- ROW-Legal Aerial Easement
- ROW-Legal Drainage Easement

Attachment 5 - Correspondence with the Official With Jurisdiction

Pennsylvania State Historic Preservation Office
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

March 21, 2019

Brian Thompson, Director
Bureau of Project Delivery
Attn: Jeremy Ammerman, District 8-0
PA Department of Transportation
P.O. Box 2966
Harrisburg, PA 17105

RE: ER 2016-8479-043-U: I-83, Section 0709 (MPMS 97828); I-83 from the Susquehanna River to SR 3013 (29th Street); Harrisburg and Swatara Township, Dauphin County; Determination of Effects: Above Ground Resources

Dear Mr. Thompson,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources
Based on the information received and available within our files, we concur with the findings of the agency that the proposed project will result in an overall finding of **No Adverse Effect** to historic properties. Specifically, we concur that the proposed project will have No Effect on the following properties: Calvary Presbyterian Church (Key No.121109); Capital Roller Rink (Key No.208562); Harrisburg Historic District (Key No.000508); Kohl Brothers Artesian Well Drillers (Key No.208566); Mount Pleasant Historic District (Key No. 064470); Paxton Fire Station (Key No. 102204). We concur that the proposed project will have No Adverse Effect on the following properties: East Shore Diner (Key No. 143137), Pennsylvania Railroad: Main Line (Key No.105675); Philadelphia & Reading Railroad (Key No.112375), and the Harrisburg City Parks 7 Parkway Plan; Capital Area Greenway (Key No. 110669). With regards to the East Shore Diner (Key No. 143137), this No Adverse Effect finding is based upon the proposed plan to relocate the diner to a new location to continue its function as a diner. Please notify our office of the selected relocation once determined. If project plans should change to the degree that the diner cannot be successfully relocated to remain open for business, please notify our office to reopen consultation.

If you need further information concerning this review, please contact Emma Diehl at emdiehl@pa.gov or (717) 787-9121.

Sincerely,

Douglas C. McLearen, Chief
Division of Environmental Review

Attachment 6 – Public & Consulting Party Coordination

PennDOT has a website for the SR 0083 Beltway (http://www.i-83beltway.com), through which the public can receive information and provide comment. PennDOT hosted a public meeting on October 18, 2018 to provide a project update, share improvements under consideration, present the recommended preferred alternative, and gather public input. PennDOT solicited for Section 106 Consulting Parties through Project PATH on August 1, 2016 and by mailed letter in January 2018. Approximately 100 letters were sent to organizations and property owners in the project area. Including the Pennsylvania State Historic Preservation Office (SHPO), the project has 11 consulting parties, consisting of four organizations and seven property owners. Section 106 consulting parties were invited to attend the public meeting and consult with PennDOT and consultant teams on determinations of eligibility and anticipated impacts. Opportunities to sign up as a Section 106 consulting party were also available at the public meeting. All Section 106-related project information has been uploaded to ProjectPATH and shared electronically with consulting parties. Consulting parties were offered opportunities to comment on all submissions, but no comments have been received from consulting parties other than the SHPO.

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APPENDIX C: GLOSSARY OF TERMS

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Glossary of Terms

A

Act 2 groundwater sampling and analysis plan – The procedures and analytical requirements for Brownfields Assessment projects involving the collection of water, soil, sediment, or other samples taken to characterize areas of potential environmental contamination.

Act 43 – Pennsylvania Act 1981-43, Agricultural Area Security Law, as amended.

Agency Coordination Meeting (ACM) - A monthly meeting sponsored by PennDOT and held with federal and state environmental review and regulatory agencies. The goal of these meetings is to review, discuss, and resolve environmental issues pertaining to transportation projects in Pennsylvania.

Alignment – The line which represents the location of a highway being considered.

Alternative – One of a number of specific transportation improvement proposals, alignments, options, design choices, etc. in a study. Following analysis, one improvement alternative is chosen for implementation.

B

Base Flood Elevation (BFE) – The computed elevation to which floodwater is anticipated to rise during the base flood. Base Flood Elevations are shown on Flood Insurance Rate Maps and on the flood profiles.

Benefitted Receptor (BR) – The recipient of an abatement measure that receives a noise reduction at or above the minimum threshold of 5 dB(A), but not to exceed the highway agency's reasonableness design goal.

Best Management Practices (BMPs) – Implemented in order to eliminate or reduce the negative impacts of stormwater runoff by controlling flooding, reducing erosion, and improving water quality.

C

Code of Federal Regulations (CFR) – The codification of the general and permanent rules and regulations published in the Federal Register by the executive departments and agencies of the federal government of the United States.

Conditional Letter of Map Revision (CLOMR) – FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, effective BFEs, or SFHA.

Conformity – The U.S. Clean Air Act stipulates that any approved transportation project, plan, or program must conform to the SIP, a document which prescribes procedures for the implementation, maintenance, and enforcement of primary and secondary pollutants.

Corridor – Land between two termini within which traffic, transit, land use, topography, environment, and other characteristics are evaluated for transportation purposes

Cumulative Effects (According to NEPA) – Effects that are the result of incremental impacts of an action, when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (federal or nonfederal) or person undertakes such actions.

D

DBA - Decibel scale readings that have been adjusted to attempt to take into account the varying sensitivity of the human ear to different frequencies of sound

Decommission – Abandon with proper procedure.

Design Manual – PennDOT Publication 10, published in six volumes, which defines criteria, processes, and procedures for the evaluation, assessment,

engineering design, and development of highway and bridge projects.

Design Year – The future year specified and used by planners and engineers to assess the conditions (population, number of vehicles, etc.) which are to be the basis for the design of a proposed improvement. The design year of a transportation facility is typically 20 years after the facility has been opened for use.

Determination of Effect – A finding made by FHWA, with assistance from PennDOT and in consultation with the SHPO, which determines whether a proposed project affects a property included on or eligible for the NRHP.

Determination of Eligibility – The process of determining whether an historic property meets the criteria for eligibility for the NRHP (36 CFR 60). FHWA, with the assistance of PennDOT and the SHPO, applies NRHP criteria when deciding matters of historical significance for federally assisted projects. PennDOT and the SHPO are involved with 100% state-funded projects.

Direct Effects – Influences or occurrences caused by a given action and occurring at the same time and place as the action. Changes in noise levels, traffic volumes, or visual conditions are some examples of direct effects of a new highway.

Displacement – Required movement of residences or businesses due to the need for the property for transportation uses.

E

Easement – A property right that gives its holder an interest in land owned by someone else.

Encroachment – Intrusion into water resources such as streams, wetlands, and floodplains.

Environmental Assessment (EA) – An exploratory report which is prepared when the significance of impacts is not clearly known for federal projects that are not eligible for a CEE and do not appear to be of sufficient magnitude to require an EIS. An EA provides the analysis and documentation to determine if an EIS or a FONSI should be prepared.

Environmental Justice (EJ) – In accordance with Executive Order 12898, provides that the actions of a federal agency do not result in disproportionately high or adverse effects on minority or low-income populations**.**

Environmental Site Assessment (ESA) – prepared to assure potential buyers that their property isn't contaminated by hazardous materials or waste.

Environmentally Sensitive Materials (ESM) – means oil, oil products and any other substance (including any chemical, gas or other hazardous or noxious substance) which is (or is capable of being or becoming) polluting, toxic or hazardous.

F

Federal Emergency Management Agency (FEMA) – An agency of the United States Department of Homeland Security that supports citizens and emergency personnel to build, sustain, and improve the nation's capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

Federal Highway Administration (FHWA) – An agency within the United States Department of Transportation that supports State and local governments in the design, construction, and maintenance of the Nation's highway system and various federally and tribal owned lands.

Federal Register – A daily publication of the U.S. Government Printing Office that contains notices, announcements, regulations, and other official pronouncements of U.S. government administrative agencies. Various printed announcements and findings related to specific environmental matters and transportation projects and activities appear in this publication.

Final Design Phase – The fourth of the five phases of PennDOT's Transportation Project Development Process. It includes preparation of final right-of-way

plans for property acquisition and construction plans and specifications for bidding contracts.

Finding of No Significant Impact (FONSI) – An administration determination by FHWA based on the data from EA studies.

Flood Insurance Rate Map (FIRM) – A flood map created by the Federal Emergency Management Agency (FEMA) and used by the National Flood Insurance Program (NFIP) for floodplain management, mitigation, and insurance purposes.

Flood Insurance Study (FIS) – A compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community.

Floodplain – The area directly adjacent to and outside of the watercourse channel that conveys and attenuates flow associated with high-water flood events (such as 1-, 10-, 100-, and 500-year storm events).

Floodway – The portion of the floodplain which is regulated to remain free of obstruction to allow the 100-year floodwaters to freely discharge downstream.

Functional Roadway Classification – The organization of roadways into a hierarchy based on the character of service provided. Typical classifications include arterial, local, and collection roadways.

G

Geographic Information System (GIS) – A computer-based system that links the geographic location of map features to text information or databases.

Greenhouse Gases (GHG) – a gas that contributes to the greenhouse effect by absorbing infrared radiation, e.g. carbon dioxide and chlorofluorocarbons.

H

Hazardous Waste – An environmental impact category encompassing all types of permitted and unregulated materials, sites, and substances which require prudent handling and treatment to prevent harm or danger. Sites are often referred to as Waste Management Sites.

Health and Safety Plan (HASP) – A written document that describes the process for identifying the physical and health hazards that could harm workers, procedures to prevent accidents, and steps to take when accidents occur.

Historic Resource – A building, structure, site, district, or object which is significant in American history, architecture, archaeology, engineering, and culture.

Hydrologic and Hydraulic (H&H) Study – The study of the movement of water, including the volume and rate of flow as it moves through a watershed, basin, channel, or man-made structure.

I

Impacts – Positive or negative effects upon the natural or human environment resulting from transportation projects.

In Attainment – As per the EPA, this refers to a geographic area that meets or does better than the NAAQS.

Indirect Effects – Effects that can be expected to result from a given action and that occur later in time or further removed in distance yet are reasonably foreseeable in the future; for example, induced changes to land use patterns, population density, or growth rate.

J

Joint Permit – The permit required for the obstruction and/or encroachment of Pennsylvania waters or wetlands. One joint permit is submitted for Pennsylvania's water obstruction and encroachment permit and a federal (USACE) Section 9, Section 10, or Section 404 permit. The permit is also considered by the state as a request for water quality certification under Section 401 of the federal Clean Water Act (CWA).

K

Karst – Landscape underlain by limestone which has been eroded by dissolution, producing ridges, towers, fissure, sinkholes, and other characteristic landforms

L

Level of Service (LOS) – A rating system used by traffic engineers to determine a roadway's ability to provide adequate capacity for the volume of traffic (number of vehicles) using the road. The LOS is the operating conditions within the stream of traffic describing safety, traffic interruptions, speed, freedom to maneuver, comfort, and convenience. The six levels are designated "A" through "F" with "A" representing the best (free-flow) condition while "F" is the worst-possible (congested) condition.

M

Migratory Fishery (MF) – A protected water use designation per PA DEP that refers to the passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which move to or from flowing waters to complete their life cycle in other waters.

Mitigation Measures – Measures taken to eliminate or reduce the negative impacts of a project.

N

National Ambient Air Quality Standards – Established by the EPA under authority of the Clean Air Act (42 U.S.C. 7401 et seq.), the NAAQS are standards for harmful pollutants and are applied to outdoor air throughout the country.

National Environmental Policy Act of 1969 (NEPA) – The National Environmental Policy Act was created to ensure federal agencies consider the environmental impacts of their actions and decisions.

National Historic Preservation Act (NHPA) – passed in 1966 primarily to acknowledge the importance of protecting our nation's heritage from rampant federal development.

National Register of Historic Places (NRHP) – The official list of our country's historic buildings, districts, sites, structures, and objects worthy of preservation. It was established as part of the National Historic Preservation Act of 1966 and is overseen by the National Park Service.

National Wetlands Inventory (NWI) Maps – Maps published by the USFWS which show wetland areas determined by stereoscopic analysis of high-definition aerial photography. Wetlands were identified on the photographs based on vegetation, visible hydrology, and geography in accordance with Classification of Wetlands and Deepwater Habitats of the United States (FWS/OBS 79/31 December 1979).

Natural Areas – Areas containing natural objects and features in an undisturbed condition.

Natural Resources – Land, fish, wildlife, water supplies and other assets belonging to, maintained by, or otherwise controlled by federal, state, or local government.

Noise Abatement Criteria (NAC) – Noise levels for various activities or land uses which represent the upper limits of acceptable traffic noise levels.

Noise Barrier – A structure designed to protect inhabitants of sensitive land use areas from noise pollution.

Non-Attainment Areas – Any county or other defined geographic region that the U.S. EPA has designated as a non-attainment area for a transportation-related pollutant (s) (such as ozone) for which NAAQS exist. The areas are ranked by the severity of their problem using marginal, moderate, serious, severe, or extreme. In accordance with the Clean Air Act Amendments of 1990, these areas must take specific emission-reduction measures.

No Build Alternative (also known as "No-Action Alternative") – Option of maintaining the status quo by not building transportation improvements. Usually results in eventual deterioration of existing

transportation conditions. Serves as a baseline for comparison of "Build" Alternatives.

P

Peak Hour – Time when a highway carries its highest volume of traffic, usually the morning or evening "rush" period when commuters travel to and from work.

Pennsylvania Department of Transportation (PennDOT) – PennDOT oversees transportation issues in the Commonwealth of Pennsylvania.

Pennsylvania Natural Diversity Index (PNDI) – The Pennsylvania Natural Heritage Program (PNHP) is a member of NatureServe, an international network of natural heritage programs that gather and provide information on the location and status of important ecological resources (plants, vertebrates, invertebrates, natural communities, and geologic features).

Permit – Written permission from an agency with governing authority over a regulated resource.

Phase I ESA – Identifies potential or existing environmental contamination liabilities.

Phase II ESA – A surface geophysical survey that is done to identify the existence and location of USTs and other underground concerns.

Phase III ESA – Evaluates the presence, or absence of, petroleum products or hazardous substances in the subsurface of a site. Typically involves the subsurface testing of vapor, soil, or groundwater.

PM 10 – Inhalable particles, with diameters that are generally 10 micrometers and smaller.

PM 2.5 – Fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.

Preliminary Engineering – Early phases of technical studies undertaken to determine all relevant aspects of transportation location, to identify feasible route alternatives or design options, and to assess various cost and benefit parameters before advancing the project into more detailed final design development.

Project Purpose – A broad statement of the overall goals to be achieved by a proposed transportation improvement.

Public Hearing – A meeting designed to afford the public the fullest opportunity to express support of or opposition to a transportation project in an open forum at which a verbatim record (transcript) of the proceedings is kept.

Public Meeting – An announced meeting conducted by transportation officials designed to facilitate participation in the decision-making process and to assist the public in gaining an informed view of a proposed project at any level of the Transportation Project Development Process. Such a gathering may also be referred to as a Public Open House Meeting.

R

Right-of-Way (ROW) – Land acquired by purchase, gift, or eminent domain in order to build and maintain a public road.

Riparian – Land situated or associated with the banks of a natural watercourse or stream.

Roadway Classification – The U.S. DOT's FHWA classifies our nation's urban and rural roadways by road function. Each function class is based on the type of service the road provides to the motoring public, and the designation is used for data and planning purposes. Design standards are tied to function class. Each class has a range of allowable lane widths, shoulder widths, curve radii, etc.

S

Special Flood Hazard Area (SFHA) – The land area covered by the floodwaters of the base flood on National Flood Insurance Program (NFIP) maps. The SFHA is the area where the NFIP's floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

State Historic Preservation Officer (SHPO) – Is responsible for the operation and management of the

Office of Historic Preservation, as well as long range preservation planning.

Stormwater Management (SWM) – An effort to reduce runoff of rainwater or melted snow into streets, lawns, and other sites and the improvement of water quality, according to the U.S. EPA.

Study Area – A geographic area, selected and defined at the outset of engineering or environmental evaluations, which is sufficiently adequate in size to address all pertinent project matters occurring within it.

T

Target Species – A species that has been identified as the subject of conservation or monitoring actions.

Technical File – A compilation of raw data from all of the technical studies (e.g. wetland surveys, noise analysis, agricultural surveys, etc.) conducted for a study.

Transportation Improvement Program (TIP) – A long-range transportation plan established by MPOs in each urbanized area which consists of a prioritized list of projects or project segments to be carried out within the next three years after adoption of the TIP.

Transportation Systems Management (TSM) Alternative – A set of strategies that focus on operational improvements that can maintain and even restore the performance of the existing transportation system. This limited construction option is generally evaluated when major construction activities are proposed.

U

United States Army Corps of Engineers (USACE) – A federal agency under the Department of Defense and a major Army command.

United States Environmental Protection Agency (EPA) – An independent agency of the U.S. federal government for environmental protection.

United States Fish and Wildlife Service (USFWS) – An agency of the U.S. federal government with the U.S. Department of the Interior dedicated to the management of fish, wildlife, and natural habitats.

W

Warm Water Fishery (WWF) – A protected water use designation per PA DEP that refers to maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.

Waste Site – Property, including structures on a property, which may have been impacted by hazardous or environmentally sensitive materials.

Watercourse – A natural or artificial channel along which water flows.

Watershed – The area drained by a river or river system enclosed by drainage divides.

APPENDIX D: ACRONYMS

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ACRONYMS

A

ACM – Agency Coordination Meeting

ADA – Americans with Disabilities Act

ADT – Average Daily Traffic

AOC – Areas of Concern

APE – Area of Potential Effect

B

BGS – Below Ground Surface

BMP – Best Management Practice

C

CD – Collector Distributor

CEE – Categorical Exclusion Evaluation

CEQ – Council on Environmental Quality

CFR – Code of Federal Regulations

CLOMR – Conditional Letter of Map Revision

CO – Carbon monoxide

CRP – Cultural Resources Professional

CWA – Clean Water Act

D

DCNR – Pennsylvania Department of Conservation and Natural Resources

E

EA – Environmental Assessment

ECMTS – Environmental Commitments and Mitigation Tracking System

EJ – Environmental Justice

EO – Executive Order

EPA – Environmental Protection Agency

ESA – Environmental Site Assessment

F

FEMA – Federal Emergency Management Agency

FHWA – Federal Highway Administration

FIRM – Flood Insurance Rate Map

FIS – Flood Insurance Study

ft. – Feet

G

GHG – Greenhouse Gases

H

HATS – Harrisburg Area Transportation Study

H&H – Hydrologic and Hydraulic

HSS – Health and Human Services

HUC – Hydrologic Unit Code

I

ICE – Indirect and Cumulative Effects

J

JPA – Joint Permit Application

L

LEP – Limited English Proficiency

LOD – Limits-of-Disturbance

LR – Local Road

M

MF – Migratory Fishery

mph – Miles per Hour

MPO – Municipal Planning Organization

MPT – Maintenance and Protection of Traffic

MSAT – Mobile Source Air Toxics

N

NAC – Noise Abatement Criteria

NEPA – National Environmental Policy Act

NHPA – National Historic Preservation Act

NO2 – Nitrogen dioxide

NPDES – National Pollutant Discharge Elimination System

NRHP – National Register of Historic Places

NSAs – Noise Sensitive Areas

O

O3 – Ozone

P

PA DEP – Pennsylvania Department of Environmental Protection

PaGWIS – Pennsylvania Groundwater Information System

PATH – Pennsylvania Transportation and Heritage

Pb – Lead

PennDOT – Pennsylvania Department of Transportation

PFBC – Pennsylvania Fish and Boat Commission

PGC – Pennsylvania Game Commission

PM – Particulate Matter

PNDI – Pennsylvania Natural Diversity Index

R

REC – Recognized Environmental Concerns

ROW – Right-of-Way

RTP – Regional Transportation Plan

S

SHPO – State Historic Preservation Office

SO2 – Sulfur dioxide

SR – State Route

STIP – State Transportation Improvement Program

T

TIM – Transportation Incident Management

TIP – Transportation Improvement Program

TMP – Transportation Management Plan

U

UNT – Unnamed Tributary

USACE – United States Army Corps of Engineers

UST – Underground Storage Tank

W

WWF – Warm Water Fishery

WUS – Waters of the United States

APPENDIX E: DISTRIBUTION LIST

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DISTRIBUTION LIST

Federal Agencies

Advisory Council on Historic Preservation
Eastern Office of Review
1100 Pennsylvania Avenue, NW, Suite 809
Washington, DC 20004
Attn: Preservation Specialist

Federal Emergency Management Agency
615 Chestnut Street
One Independence Mall, Sixth Floor
Philadelphia, PA 19106
Attn: Mitigation Division

Federal Highway Administration
Pennsylvania Division
Harrisburg, Pennsylvania 17101-1720
Attn: Jon Crum

US Army Corps of Engineers (USACE)
Baltimore District, Carlisle Field Office
401 East Louther Street, Suite 205
Carlisle, Pennsylvania 17013
Attn: John Gibble

U.S. Department of Agriculture Natural Resources
Conservation Service
359 East Park Drive, Suite 2
Harrisburg, PA 17111

U.S. Department of Health & Human Services
Centers for Disease Control & Prevention
National Center for Environmental Health
Special Programs Group, MSF
29 4770 Buford Highway,
NE Atlanta, GA 30341-3724
Attn: Chief, Special Programs Group

U.S. Department of Housing & Urban Development
Philadelphia Regional Office
The Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107-3380
Attn: Environmental Officer

U.S. Department of Interior
Office of Environmental Policy and Compliance
1849 C Street, NW MS 5538
Washington, DC 20240
Attn: Director

US Department of Transportation
Federal Transit Administration Office of Planning and Program Development
1835 Market Street, Suite 1910
Philadelphia, PA 19103-2968
Attn: Transportation Program Specialist

US Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029
Attn: Chief, Environmental Assessment and Protection Division

US Fish and Wildlife Service (USFWS)
Pennsylvania Field Office
110 Radnor Road, Suite 101
State College, PA 16801

Federally Recognized Tribes and Nations

Absentee-Shawnee Tribe of Oklahoma
John R. Johnson, Governor
Devon Frazier, THPO
2025 S. Gordon Cooper Drive
Shawnee, OK 74801

Delaware Nation - Oklahoma
Deborah Dotson, Tribal President
Katelyn Lucas, Historic Preservation Assistant
P.O. Box 825
31064 State Highway 281, Bldg 100
Anadarko, OK 73005

Delaware Tribe of Indians
Brad KillsCrow, Chief
5100 Tuxedo Blvd.
Bartlesville, OK 74006

Susan Bachor, Historic Preservation Representative
126 University Circle Stroud Hall, Rm 437
East Stroudsburg, PA 18301

Cayuga Nation
Clint Halftown
P.O. Box 803
Seneca Falls, NY 13148

Eastern Shawnee Tribe of Oklahoma
Glenna Wallace, Chief
Eastern Shawnee Tribe of Oklahoma
P. O. Box 350 Seneca, MO 64865

Shawnee Tribe
Cassie Harper, Tribal Administrator
Tonya Tipton, THPO
Rosanna Dobbs, Environmental Director
P.O. Box 189
29 South Highway 69a
Miami OK 74355

Seneca-Cayuga Nation
William L. Fisher, Chief
P.O. Box 453220
23701 S. 655 RD
Grove, OK 74344

Tuscarora Nation
Leo Henry, Chief
2006 Mt. Hope Road
Lewiston, NY 14092

State Agencies

PA Department of Agriculture
Bureau of Farmland Preservation Agriculture Office Building
2301 North Cameron Street, Room 402
Harrisburg, PA 17110-9408
Attn: Director

PA Department of Community and Economic
Development Policy Office
Commonwealth Keystone Building
400 North Street, 4th Floor
Harrisburg, PA 17120
Attn: Director

PA Department of Conservation and Natural Resources
Bureau of Recreation and Conservation
Rachel Carson State Office Building
400 Market Street, 5th Floor
Harrisburg, PA 17105-8767
Attn: Director

PA Department of Environmental Protection
Office of Policy
Rachel Carson State Office Building
P.O. Box 2063 400 Market Street, 15th Floor
Harrisburg, PA 17105-2063
Attn: Director

PA Department of Environmental Protection
Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110-8220

PA Department of Health
Office of Policy Health and Welfare Building
8th Floor West 625 Forster Street .
Harrisburg, PA 17120
Attn: Executive Policy Assistant

PA Department of Transportation
Bureau of Project Delivery Environmental Policy and Development Section
Commonwealth Keystone Building
400 North Street, 7th Floor
Harrisburg, PA 17120
Attn: Section Chief

PA Department of Transportation
Bureau of Project Delivery Commonwealth Keystone Building
400 North Street, 7th Floor
Harrisburg, PA 17120 Attn: Ryan Shiffler

PA Department of Transportation
Engineering District 8-0
Harrisburg, PA 17103
Attn: John Bachman, Sharon Okin

PA Fish and Boat Commission
Environmental Services Division
495 East Rolling Ridge Drive Bellefonte, PA 16823
Attn: Bill Savage

PA Game Commission
Environmental Planning and Habitat Protection
2001 Elmerton Avenue
Harrisburg, PA 17110-9797
Attn: Tracey Librandi Mumma

PA Game Commission South
Central Region
8627 William Penn Highway
Huntingdon, PA 16652-0537

Pennsylvania Governor's Office
Policy Development
506 Finance Building Harrisburg, PA 17120 PA

Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120-0093

Public Utility Commission (PUC)
PO Box 3265 Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Local Agencies

Harrisburg Area Transportation Study
Dauphin County Veterans Memorial Office Building
112 Market Street, 2nd Floor
Harrisburg, PA 17101-2015
Attn: Steve Deck

City of Harrisburg
10 N. 2nd Street,
Harrisburg, PA 17101
Attn: Percy Bullock

Swatara Township
599 Eisenhower Boulevard
Harrisburg, PA 17111-2397
Attn: Jim Fosselman, Township Manager

Paxtang Borough
3423 Derry Street, Harrisburg, PA 17111
Attn: Nathan Martin, Mayor

Dauphin County
2 S. 2nd St, 4th Floor.
Harrisburg, PA 17101
Attn: County Commissioners

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APPENDIX F: LAWS, REGULATIONS, AND EXECUTIVE ORDERS

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Laws, Regulations and Executive Orders Impacting Transportation Project Delivery

(This is not an all-inclusive list of applicable laws, regulations, and Executive Orders.)

Federal

Americans with Disabilities Act (ADA) of 1992 prohibits discrimination on the basis of disability in the services, programs, or activities of all state and local governments. Under the provisions of ADA, steps must be taken to make public involvement activities related to PENNDOT's Project Development Process accessible to persons with disabilities, including the provision of services and/or auxiliary aids to those with special needs.

Archaeological and Historic Preservation Act of 1966 (AHPA, also called the Archaeological Data Recovery Act) [16 U.S.C. § 469] requires agencies to notify the Secretary of the Interior when their actions will cause the loss or destruction of archaeological data.

Council of Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1500-1508, Nov. 29, 1978) addresses documentation of environmental impacts, agency and public comments, decision making, and compliance.

Civil Rights Act of 1964 Title VI of the Civil Rights Act (42 USC 2000d et seq.) requires that each Federal agency ensure all programs or activities receiving Federal financial assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin.

Clean Air Act Amendments (CAAA) of 1990 (42 U.S.C. 7400) calls for emission reduction measures in air quality non-attainment areas, including the consideration of transportation control measures as part of transportation improvement projects. These transportation control measures include, but are not limited to, mass transit, ridesharing, and carpooling.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 known also as Superfund. It was passed in 1980 in response to some alarming and decidedly unacceptable hazardous waste practices and management going on in the 1970s.

Endangered Species Act of 1973 (as amended) conserves endangered and threatened fish, wildlife, and plant species. (See Section 7 of this handout.)

Executive Order 11593 serves to protect, restore, and maintain the historic and cultural environment of the Nation. This regulation "institutes procedures to assure that Federal plans and programs contribute to the preservation and enhancement of non-Federally owned sites, structures, and objects of historical, architectural, or archaeological significance."

Executive Order 11988: Floodplain Management (as amended by Executive Order 12148) regulates long- and short-term adverse impacts associated with the modification of floodplains and is intended to restore and preserve the natural and beneficial values served by floodplains.

Executive Order 12898 of February 11, 1994: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations is intended to promote nondiscrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.

EO 13895 Advancing Racial Equity and Support for Underserved Communities through the Federal Government. directs federal agencies to revise policies to account for racial inequities in their implementation.

Federal Aid Highway Act of 1956 (as amended) is a national program developed to "protect the interest of every citizen in a safe and adequate highway system". This Act implemented the National System of Interstate Highways. Funding was provided by the issuance of bonds, which would be retired through revenue from gas taxes. Eighty (80) percent of the funding for this program would be provided through Federal aid while the remaining 20 percent would be the responsibility of the States.

Federal Highway Administration (FHWA) Regulations (23 CFR, Part 771, December 29, 1980, amended September 8, 1987) are the implementing regulations of the National Environmental Policy Act and 40 CFR 1500-1508 CEQ Regulations.

Fish and Wildlife Coordination Act (16 USC 661-666C) conservation, maintenance, and management of wildlife resources, Requires early coordination in project development with USFWS and State and Fish wildlife agency.

Historic Sites Act of 1935 forms the basis for the mandated by Congress that gave EPA authority to develop the RCRA program.

Public Hearings (23 USC 128) ensures adequate opportunity for public hearings on effects of alternatives project locations and major design features; as well as the consistency of the project with local planning goals and objectives.

Section 2 of the Fish and Wildlife Coordination Act (16 U.S.C. 661-666) addresses the conservation, maintenance, and management of wildlife resources and applies to any project which involves impoundment (surface area of 10 acres or more), diversion, channel deepening, or other modification of a stream or other body of water.

Section 4(f) of the Department of Transportation Act of 1966 (as amended 1968, 49 U.S.C. 303), requires the Federal Highway Administration to evaluate potential impacts on parks or recreation areas that are publicly owned or open to the public, wildlife or waterfowl refuges, or any significant historic sites. A Section 4(f) Determination is the administrative action by which FHWA confirms that, on the basis of extensive alternatives analysis, there are no "prudent and feasible" alternatives to the taking of land from protected resources.

Section 7 of the Endangered Species Act, as amended (16 U.S.C. 1530-1543) addresses the conservation of threatened and endangered fish, wildlife, and plant species and requires Federal agencies to consult with the Department of the Interior regarding any action that is likely to jeopardize continued existence of such species or result in destruction/modification of critical habitat.

Section 106 of the National Historic Preservation Act of 1966 [16 U.S.C. 470(f)] governs the identification, evaluation, and protection of historical and archaeological resources affected by state and Federal transportation projects. Principal areas identified include required evaluations to determine the presence or absence of sites, the eligibility based on National Register of Historic Places criteria and the significance and effect of a proposed project upon such a site.

Section 401 (Water Quality Certification) of the Federal Clean Water Act of 1977 (33 U.S.C. 1251-1376, as amended, 1987) required for projects involving the discharge of materials into surface waters, including wetlands. The applicant must demonstrate that activities will comply with Pennsylvania water quality standards and other provisions of Federal and state law and regulation regarding conventional and non-conventional pollutants, new source performance standards, and toxic pollutants. (See also Chapter 105 Regulations under "State" list.)

Section 404 (Waterway Dredge or Fill Permits) of the Clean Water Act of 1977 (33 U.S.C. 1251-1376, as amended, 1987) regulates the discharge of dredged, fill or excavated materials in the waters of the United States. The required Section 404 Alternatives Analysis examines practical alternatives to the possible discharge of dredged or fill material into certain aquatic ecosystems, such as wetlands, mudflats, vegetated shallows, or other special aquatic systems. Criteria guiding such an analysis are derived from the provisions of Section 404(b)(1). The analysis is required before the issuance of a permit by the Corps of Engineers

Title VI of the Civil Rights Act of 1964 requires that each Federal agency shall ensure all programs or activities receiving Federal financial assistance that affect human health of the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin.

Uniform Relocation Assistance and Real Properties Acquisition Act of 1970, as amended by the Uniform Relocation Act Amendments of 1987 requires assessment and mitigation of impacts associated with displacement of residents and businesses.

State

Chapter 93 of Pennsylvania Regulations, Title 25 (Water Quality Standards) sets water quality standards for waters of the Commonwealth including wetlands.

Chapter 102 of Pennsylvania regulations, Title 25 (Erosion and Sedimentation and Stormwater Management) controls construction activities to minimize erosion and sediment pollution.

Chapter 105 of Pennsylvania regulations, Title 25 (Wetlands and Waterway Crossings, Dam Safety and Encroachments Act) governs encroachments in waterways. "Encroachment" is defined as any structure or activity that in any manner changes, expands, or diminishes, the course, current, or cross-section of any watercourse, floodway, or body of water, including wetlands. Any activity that disturbs a wetland, whether or not it is associated with filling or fill materials, requires a Chapter 105 permit.

Chapter 106 of Pennsylvania regulations, Title 25 (The Flood Plain Management Act) governs encroachments in floodplains. The Pa. Code states that if the project includes any quasi-public entity and/or governmental building within a flood plain, a flood plain management permit from DEP must be obtained. This provision applies to any property owned or operated by the Commonwealth, political subdivisions, and public utilities.

Stormwater Management Act (Act 167) of 1978 each county must prepare and adopt a watershed stormwater management plan for each watershed located in the county as designated by DEP, in consultation with the municipalities located within each watershed, and must periodically review and revise such plans at least every five years.

Pennsylvania Act 120 of 1970 outlines the powers and duties of PennDOT and requires PennDOT to coordinate transportation development projects with other public agencies and authorities. Section 2002 [sometimes called a "State 4(f)"] requires PennDOT to issue a written determination whenever lands from recreation areas, wildlife and waterfowl refuges, historic sites, forest, wilderness, game lands, and public parks are needed for state funded highway or transportation purposes

Pennsylvania Clean Streams Law of 1937 (last amended in 1989) is Pennsylvania's comprehensive water pollution control legislation. This law states that the Commonwealth has the right to "preserve and improve" the purity of its surface and ground waters.

Pennsylvania Eminent Domain Code, Act of June 22, 1964, authorizes the Relocation Assistance Program to ensure that all displaced persons who must relocate because of a highway construction project receive all the assistance and payments to which they are entitled by law.

Pennsylvania Fish and Boat Code on Waterways Protection and Endangered and Threatened Aquatic Species (30 PA Cons. State Section 2305, 58 PA Administration Code, Chapter 51) requires the Fish and Boat Commission to consider, in their evaluation of Chapter 105 permits, (under the Dam Safety and Encroachments Act), the affect of any proposed activity on any threatened or endangered fish, reptiles, and amphibians under their jurisdiction.

Pennsylvania Game Code Threatened and Endangered Species Protection (34 PA Cons. State Section 2102, Section 2161 et seq.), requires the Game Commission to consider, in their evaluation of Chapter 105 permits (under the State Dam Safety and Encroachments Act), the effect of the proposed activity on any threatened or endangered birds and mammals under their jurisdiction.

Pennsylvania History Code, Act 72 of 1988, as amended, established historic preservation as a Commonwealth policy. The History Code permits the Pennsylvania Historical and Museum Commission (PHMC) to advise public officials on the planning and implementation of undertakings affecting historic resources and requires Commonwealth agencies and political subdivisions to notify PHMC of activities, which may affect archaeological resources.

Pennsylvania Solid Waste Management Act requires each county to develop a County Solid Waste Management Plan to address solid waste that poses potential adverse effects to health or the environment and to address provisions for the opportunity for resource conservation or recovery.

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APPENDIX G: LIST OF PREPARERS

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I-83 CAPITAL BELTWAY
SR 0083, SECTION 079
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APPENDIX H: ALTERNATIVES ANALYSIS REPORT SUMMARY

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The Alternatives Analysis Report was completed in March 2019 to document the analysis conducted in identifying the location of the Preliminary Alternatives in advance of selecting a Preferred Alternative/Proposed Action. This Appendix summarizes the findings of the Report.

Build Alternative - Preliminary Alternative Identification and Development

Mainline Alignment Considerations

Many potential Preliminary Alternative alignments were considered for mainline SR 0083, local streets, and ramp connections. Area railroads and major utilities greatly impacted how Preliminary Alternatives could be developed and ultimately designed. Existing SR 0083 parallels the Norfolk Southern rail line between 17th Street and 29th Street. Additionally, PPL's high-voltage transmission line crosses SR 0083 at 22nd Street, with a tower near the highway on the south side.

The mainline of SR 0083 was divided into two segments to develop Preliminary Alternatives: between Cameron Street and 19th Street and 19th Street to 29th Street.

Mainline SR 0083 between Cameron Street and 19th Street

Between Cameron Street and 19th Street, several mainline SR 0083 three options were investigated:

- Option 1 Alignment that widens SR 0083 to the north of the existing Paxton Street.
- Option 2 Alignment that widens SR 0083 to the south of the existing Paxton Street.
- Option 3 Alignment that widens SR 0083 to the north of the existing Paxton Street bridge with mainline SR 0083 going under 17th Street.

Option 1 was dismissed because it does not achieve current design criteria which allows for sufficient spacing for interchanges at 17th and 19th Streets; therefore, it does not meet transportation need #3 (to address modern roadway design safety features). Option 2 was advanced as it provides best alignment by minimizing the curve. Option 3 was dismissed due to excessive rock cut and constructability issues between 17th and 19th Street. Therefore, Option 2 was advanced.

Paxton Street between 13th Street and 17th Street

Changes to Paxton Street were considered in conjunction with the SR 0083 mainline options evaluated:

- Option 1 Eliminate the Paxton Street bridge and extend two-way Paxton Street, from its intersection with 17th Street west to connect to 13th Street in the vicinity of the existing northbound on and off ramps.
- Option 2 Maintain Paxton Street alignment but allow roadway to go over or under SR 0083 depending on the option selected for the mainline SR 0083 alignment.
- Option 3 Realign Paxton Street to cross SR 0083 perpendicularly, generally following the alignment of existing 16th Street but allow roadway to go over or under SR 0083 depending on the option selected for the mainline SR 0083 alignment.

Option 4 Eliminate the Paxton Street bridge and extend two-way Paxton Street east from its intersection with 13th Street and connect to 17th Street in the vicinity of the existing SB on and off ramps.

Option 5 Eliminate the Paxton Street bridge and construct two one-way frontage roads between 13th and 17th adjacent to the mainline.

Option 6 Realign Paxton Street to provide a perpendicular crossing of SR 0083 but maintain the general Paxton Street alignment of existing Paxton Street.

Option 1 was dismissed as it forced Paxton Street's through-traffic to mix with local traffic at 13th Street, causing traffic signals to fail at the existing 13th Street/Paxton Street intersection and the proposed intersection south of mainline SR 0083. Therefore, Option 1 did not meet transportation need #2 (accommodating existing traffic volumes) and need #3.

Option 2 was dismissed due to the skew under SR 0083 that would be required when lowering the SR 0083 mainline under Paxton Street and 17th Street which would cause excessive impacts to a known hazardous waste covenant area and increased right-of-way acquisition. In addition, this option would incorporate design considerations that would require special approval to advance as it would cause constructability concerns and increases to future maintenance.

Option 3 had similar concerns as Option 2 relative to the potential impacts associated with the known hazardous waste covenant area and based on a request from the City of Harrisburg to minimize right-of-way acquisitions.

Options 4 and 5 were dismissed as they forced Paxton Street's through traffic to mix with interchange traffic at 17th and 19th Streets, causing those traffic signals to fail. Therefore, Options 4 and 5 did not meet transportation need #2 and need #3.

Option 6 would meet the transportation purpose and need. In addition, this option accommodated Paxton Street's through traffic away from the interchanges at 17th and 19th Street, reduced the skew under SR 0083 thus improving future maintenance concerns, minimized right-of-way acquisitions, and avoided the hazardous waste covenant area.

Mainline SR 0083 between 19th Street and 29th Street

Between 19th and 29th Streets, several mainline SR 0083 Preliminary Alternative alignments were examined:

Option 1 Construct all widening to the north of existing SR 0083.

Option 2 Construct symmetrical widening on each side of existing SR 0083.

Option 3 Construct all widening to the south of existing SR 0083.

Option 4 Construct widening while holding the north shoulder of existing SR 0083.

Options 1 and 2 were dismissed due to their longitudinal impacts to the historic Norfolk Southern rail line to the north. Options 3 and 4 were deemed to be similar, but Option 4 (holding the north shoulder) minimized overall right-of-way acquisitions south of the highway which supports the request from the City of Harrisburg to minimize right-of-way acquisitions. Therefore, Option 4 was chosen to be advanced.

Interchange Location and Design Considerations

Cameron Street/13th Street Interchange

At the existing 13th Street interchange, the origin and destination analysis indicated that a majority of traffic using this interchange was coming from or going to Cameron Street. As a result, it was decided to evaluate interchange configurations that would better accommodate this movement of traffic. Three interchange options were investigated:

Option 1 A relocated interchange consisting of a partial cloverleaf at Cameron Street.

Option 2 A modified 13th Street interchange with a connector road to Cameron Street south of the SR 0083 mainline.

Option 3 A partial 17th Street interchange combined with frontage roads from 17th Street to 13th Street.

Option 1 was originally proposed in the SR 0083 master plan and provided a direct connection to Cameron Street and was advanced as the preferred option.

Option 2 created a connector road, resulting in an unacceptable grade that did not meet current design criteria; therefore, it would not meet transportation need #3 and was dismissed from further study. Option 3 was contingent upon a full interchange at 17th Street or Paxton Street and was dismissed once that option was also dismissed. Therefore Option 1 was advanced.

17th Street/Paxton Street/19th Street

There are two existing partial interchanges: ramps for southbound mainline SR 0083 intersect with 17th Street and ramps for northbound mainline SR 0083 intersect with 19th Street. Six options were considered to provide for theses traffic movements:

Option 1 A diamond interchange at 17th Street.

Option 2 A diamond interchange at 19th Street.

Option 3 A single-point urban interchange (SPUI) at 19th Street.

Option 4 An interchange at Paxton Street

Option 5 An interchange at Paxton Street combined with frontage roads to connect to the Cameron interchange.

Option 6 Maintaining the existing 17th Street and 19th Street split diamond.

Option 1 did not provide sufficient space between the interchange and the intersection of 17th Street and Paxton Street. Therefore, Option 1 did not meet transportation need #3 and was dismissed from further study.

Option 2 did not provide sufficient space between the interchange and the intersection of 19th Street and Paxton Street. Therefore, Option 2 did not meet transportation need #3 and was dismissed from further study.

Option 3 met the design needs. However, Option 3 would impact the City of Harrisburg's existing roadway network and was not acceptable to the City. Therefore, Option 3 was ultimately dismissed from further study.

Option 4 resulted in failing traffic signals along the Paxton Street corridor at 13th Street, 17th Street, and at the proposed interchange ramps. Therefore, Option 4 did not meet transportation need #3 and was dismissed from further study.

Option 5 dismissed as it would not meet current design criteria; therefore, it would not meet transportation need #3 and was dismissed from further study.

Option 6 met the design needs, minimized required right-of-way acquisition, and was consistent with the City of Harrisburg's existing roadway network. Therefore, Option 6 was advanced for further study.

Preferred Alternative

Based on the Preliminary Alternative analysis, the following summarized the Preferred Alternative to provide full reconstruction and widening of the SR 0083 mainline that would meet the transportation purpose and need for in the area. See **Figure 7** in the EA for a graphic representation.

- Collector-distributor roadways will be constructed from the Cameron Street interchange to the 19th Street interchange.
- The mainline will be centered at the existing viaduct, then the centerline realigned to the south to minimize impacts to the historic Norfolk Southern Railroad corridor north of SR 0083.
- A new partial cloverleaf interchange at Cameron Street will replace the one currently at 13th Street.
- At 17th and 19th Streets, the existing split diamond traffic pattern will be maintained.

Other Alternatives Considered

Transportation System Management and Operations (TSMO)

The Transportation Systems Management (TSM) Alternative, also known as Transportation Systems Management and Operations (TSMO) Alternative, is a set of strategies that focus on operational improvements that preserve and even improve the performance of the existing transportation network without additional capacity. Adding interim capacity can be considered a TSMO strategy if it extends the useful life of a facility or eliminates the need for systemwide capacity improvements. The TSM Alternative goal is to advance comprehensive solutions that consider multimodal opportunities and activities to manage travel demand, thus crossing over political, modal, and jurisdictional boundaries. The TSM Alternative extends beyond a single project or corridor and considers the impacts of the entire transportation system. For this Study, the TSM Alternative would consider:

- Incident and special event management
- Weather-based road management
- Freight logistics management
- Traffic signal coordination
- Real Time Traveler Information (e.g., PA 511)
- Intelligent Transportation Systems/Emerging Technology
- Integrated corridor management
- Part-time shoulder use for traffic
- Intersection improvements

The TSM Alternative did not meet purpose and need for this study. While the TSM Alternative strategies would improve the operation efficiency of the roadway, the alternative would not address the transportation

need #1 which is to expand the serviceable life span of the existing roadway elements including pavement and structures. In addition, the TSM Alternative strategies would not address the need for additional capacity (transportation need #2), nor would it address existing design issues associated with operational safety concerns along the existing mainline and at the interchange (transportation need #3). As a result, the TSM Alternative did not meet purpose and need for this study and was dismissed from further evaluation. However, some of the strategies could be considered in conjunction with the development and advancement of the Preferred Action, as applicable.

Transit Alternative

Public transportation within the study area is provided by Capital Area Transit (CAT). CAT provides transportation for the greater Harrisburg Area via a fixed route bus network and its shared-ride/paratransit division. The fixed route bus network, with more than 30 different bus lines, relies on a centralized transfer center located at 2nd Street and Market Street in downtown Harrisburg. It is estimated that CAT provides access to approximately 132,000 jobs for over 150,000 people within the region.

Most, if not all, of these routes directly or indirectly impact capacity and operations along the SR 0083 corridor region-wide, within the study area, and within the adjacent neighborhoods. For example, discontinuing one fixed bus route could indirectly impact SR 0083 by adding additional vehicular traffic. Most of the existing fixed route system is centered around south Harrisburg and the SR 0083 corridor. Additionally, Monday through Friday CAT (Rabbit Transit) provides fixed route express bus service between York and Harrisburg and LT provides roundtrip fixed route service from Lebanon. It should be noted that major traffic generators such as Harrisburg Area Community College (HACC), the Farm Show, and the Capitol Complex are served by both transit agencies.

The Transit Alternative did not meet purpose and need for this study. As a result, the Transit Alternative was dismissed for further evaluation.

TCM Alternative

The Transportation Control Measures (TCM) Alternative would consist of developing measures that focus on reducing the volume of vehicles on the transportation network. This strategy would include areawide programs as well as corridor specific strategies. The TCM Alternative would consider:

- Creating Park-and-Ride Facilities
- Designating High-Occupancy Vehicle (HOV) Lanes
- Advocating Ridesharing Services/Vanpool Programs
- Developing Active Transportation (Pedestrian/Bicycle) Facilities
- Promoting Employer-Based Travel Demand Measures (TDM) programs (including Telework or Flexible Work Schedules)

While the TCM Alternative measures could reduce the volume of vehicles traveling on the roadway, it would not address transportation need #1 which is to expand the serviceable life span of the existing roadway elements including pavement and structures. In addition, the TCM Alternative strategies would not address the need for additional capacity (transportation need #2), nor would it address existing design issues associated with operational safety concerns along the existing mainline and at the interchange (transportation

need #3). As a result, the TCM Alternative did not meet purpose and need for this study and was dismissed from further evaluation.

No-Build Alternative

Existing SR 0083 was constructed in the 1960s and widened in the 1980s. The pavement has reached the end of its service life and needs to be replaced. The highway has an ADT of 110,000 vehicles and is expected to increase to 150,000 by 2050. The existing corridor experiences daily chronic congestion at any time between the morning rush and the evening rush.

No-Build Conclusions

Without widening and replacing the roadway, this vital corridor will increasingly fail to meet the traffic demands placed on it. Therefore, the No-Build Alternative was dismissed but will be considered in the environmental document for comparison purposes.

APPENDIX I: HAZARDOUS AND RESIDUAL WASTE SUPPORTING INFORMATION

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Table A: SR 0083 Section 079 – Completed Phase II/IIII Hazardous and Residual Waste Recommendations

Waste Site	Project Impacts	Conclusions and Recommendations
WS-18	Excavation depths associated with the project construction activities, ranging from zero (0) to fifteen (15) feet bgs, will occur at three (3) overpasses (17th Street, 19th Street, and 29th Street) and will directly impact the potential waste site.	• Soil reuse options are limited based on Act 2 SHS exceedances. If exported from the project corridor, portions of soil may be classified as regulated fill and/or residual waste. • Further action is recommended to determine on-site reuse options and the regulatory status of the soil if excavation extends below the refusal depth of the samples collected as part of this study. Due to access restraints, samples were only collected from the structure grade and not from the railroad grade. ○ Updated project plans should be evaluated prior to additional environmental work to verify precise excavation location and depths. If excavation is anticipated within the railroad ROW or below the railroad grade, additional soil sampling is recommended. • The potential for historic fill exists at each of the three (3) structures associated with this waste site. It is recommended that excavated soil be reviewed for the presence of historic fill during excavation. • It should also be noted that surface water with a sheen was observed on both sides of the railroad tracks at all three (3) structure crossings at the time of the field work. Spare railroad ties were observed to impede the water flow and were likely a potential cause of the sheen. It is recommended that surface water samples be collected if surface water is encountered during construction. • Groundwater was not observed during the Phase III investigation and is not anticipated to be encountered during construction. Should groundwater be encountered, it is recommended that samples be collected if petroleum odor, free product, or sheen is observed. • Waste special provisions that may be applicable to this site include: transportation, handling, and disposal of regulated fill and residual waste.
WS-52	Excavation depths associated with roadway enhancements and ramp upgrades will extend from zero (0) to thirty (30) feet bgs along the northern property boundary. Excavation associated with utility upgrades and roadway enhancements will extend from zero (0) to fifteen (15) feet bgs along the western property boundary. The entire property will be acquired as part of this project and the existing ramps will be removed.	• Geophysical results indicated that two (2) existing USTs and one anomaly (likely an abandoned pipe segment) were observed within the surveyed area. During the Phase III investigation, environmental boring EB-4 was completed adjacent to the anomaly. The associated sample revealed low level detections of SVOCs, indicating the possibility of former spill or release. Based on the current design, project impacts, and proposed excavation depths, metallic anomalies, potential USTs, or UST system components, are likely to be encountered during construction activities at this site. • It is recommended that further investigation be completed to determine the source of the anomaly. One environmental boring was advanced in the area of the existing UST identified as 52-C; however, no additional characterization was completed relative the UST identified as 52-B. • None of the analytical results for the five (5) environmental borings exceeded the Act 2 SHSs. Soil from these areas may be reused within the project corridor without restriction and would be classified as clean fill if exported from the project. • Groundwater is not anticipated to be encountered during excavation. • Waste special provisions that may be applicable to this site include: removal of USTs, or UST system components by a certified UST removal contractor and transportation, handling, and disposal of residual waste for localized petroleum impacts associated with the USTs.

Waste Site	Project Impacts	Conclusions and Recommendations
WS-53	Excavation depths for construction activities will include a range from zero (0) to eight (8) feet bgs for roadway enhancements and utility upgrades on the western edge of the property.	• Geophysical evidence of seven (7) existing USTs and one (1) possible UST was observed within the surveyed area. Three (3) environmental borings were completed as part of the Phase III investigation and were located adjacent to the identified features, relative to the proposed impacts of the transportation project. No additional characterization was completed relative to the USTs. • Based on the current design, project impacts, and proposed excavation depths, metallic anomalies, potential USTs, or UST system components, are not likely to be encountered during construction activities at this site. • Relative to the findings of the Phase III ESA, soil may be reused within the project corridor without restriction and would be classified as clean fill if exported from the project. • Groundwater is not anticipated to be encountered during excavation. • Based on the current design, the facilities identified during the Phase II ESA are not anticipated to be impacted; however, waste special provisions may include: removal of USTs, or UST system components by a certified UST removal contractor and transportation, handling, and disposal of residual waste for localized petroleum impacts associated with the USTs.
WS-61	Excavation depths for construction activities will include a range from zero (0) to twenty (20) feet bgs for roadway enhancements through the northern portion of the property. Strip takes from this property will be required as part of this project.	• Shallow soil (3-5 feet bgs) in the area of EB-1 is not suitable for residential direct contact. • Soil in the areas of the remaining borings may be used throughout the project corridor without restriction. • Shallow soil in the area of EB-1 should be managed as regulated fill if exported. • Soil in the areas of EB-2, EB-3, and EB-4 would be classified as clean fill if export if export is required. • Groundwater is not anticipated to be encountered during excavation; however, it is recommended that groundwater samples be collected if petroleum odor, free product, or sheen is observed on groundwater encountered during excavation activities. • Waste special provisions that may be applicable to this site include: transportation, handling, and disposal of regulated fill.
WS-62	Excavation depths for construction activities will include a range from zero (0) to thirty (30) feet bgs throughout the property. The entire property will be acquired as part of this project.	• Geophysical evidence of a previous excavation containing multiple anomalies was observed to the west of the existing structure. A metallic anomaly and an additional anomaly with a metallic lid were also delineated at the site. Although environmental borings were advanced in the area of these features, a data gap may exist. Additional investigation is recommended prior to excavation activities to determine the source of the identified anomalies. • Based on the current design, project impacts, and proposed excavation depths, metallic anomalies, potential USTs, or UST system components, are likely to be encountered during construction activities at this site. • The depth to groundwater at existing monitoring well MW-1 was recorded at 33.1 feet. Analytes were not observed above the laboratory reporting limits in the associated sample. Groundwater is not anticipated to be encountered during excavation; however, it is recommended that groundwater samples be collected if petroleum odor, free product, or sheen is observed on groundwater encountered during excavation activities. • Relative to the findings of the Phase III ESA, soil may be reused within the project corridor without restriction and would be classified as clean fill if exported from the project. • No further soil characterization is recommended. • No waste special provisions are anticipated, relative to this waste site; however, contingent on the results of the recommended additional investigation, waste special provisions may include: removal of USTs, or UST system components by a certified UST removal contractor and transportation, handling, and disposal of residual waste for localized petroleum impacts associated with the USTs.

Table B: SR 0083 Section 079 – Remaining Phase II/IIII Hazardous and Residual Waste Site Investigations

Waste Site	Site Name	Level of Study Recommendation	Rationale
WS-9	Former Berkleys Garage	Phase III ESA	• A full take is planned for this property as part of this project. Additionally, piers associated with the SR 0083 roadway will be installed on this property. Based on site history and the anticipated work, a Phase III ESA is recommended.
WS-14	Former Kochenour H Revere Garage	Phase III ESA	• Strip takes from this property will be required as part of this project. Additionally, piers associated with the SR 0083 roadway will be installed on this property. Based on site history and the anticipated work, a Phase III ESA is recommended.
WS-15	Former Mark Cleaners	Phase III ESA	• A strip take is planned for this property as part of this project. Additionally, piers associated with the SR 0083 roadway will be installed on this property. Based on site history and the anticipated work, a Phase III ESA is recommended. If the building on the property is demolished, a pre-demolition survey including an asbestos containing materials survey, lead based paint survey, and hazardous materials survey should be conducted.
WS-35	Team One Auto Group and Service	Phase II/III ESA	• Excavation depths for construction activities will include a range from 0 to 5 feet bgs for roadway enhancements on the southern portion of the property, directly over the location of historic Sanborn USTs; therefore, a Phase III ESA is recommended. The value of take for this property will be determined in future project implementation. If the building on the property is demolished, a pre-demolition survey including an asbestos containing materials survey, lead based paint survey, and hazardous materials survey should be conducted.
WS-37	Former Motorcycle Sales and Service	Phase III ESA	• Excavation depths for construction activities will include a range from 0 to 15 feet bgs as part of the Paxton Street upgrade through the northeastern portion of the property. Based on site history, a Phase III ESA is required. The value of take for this property will be determined in future project implementation.
WS-38	Five Star International	Phase II/III ESA	• Excavation depths for construction activities will include a range from 0 to 5 feet bgs for roadway enhancements through the northeastern portion of the property. A portion of the anticipated excavation area is located directly over historic Sanborn USTs; therefore, a Phase II/III ESA is recommended. A full take is planned for this property as part of this project.
WS-39	Paxton Auto Sales	Phase II ESA	• Excavation depths for construction activities will include a range from 0 to 10 feet bgs for a temporary roadway. Due to the close proximity to historic Sanborn USTs, a Phase II ESA is recommended. A partial take is planned for this property as part of this project.
WS-42	Family Tire	Phase II/III ESA	• Excavation depths for construction activities will include a range from 0 to 5 feet bgs for roadway enhancements through the northeastern and southwestern portions of the property. The proposed excavation area is directly adjacent to historic Sanborn USTs; therefore, a Phase II/III ESA is recommended. If the building on the property is demolished, a pre-demolition survey including an asbestos containing materials survey, lead based paint survey, and hazardous materials survey should be conducted. A full take is planned for this property as part of this project.
WS-44	Murry's Shop N' Drive	Phase II ESA	• Excavation depths for construction activities will include a range from 0 to 5 feet bgs for roadway enhancements throughout the western portion of the property. The status of two (2) nearby Sanborn gasoline tank is unknown; therefore, a Phase II ESA is recommended. Based upon the findings of the Phase II ESA, a Phase III ESA may be required in future work orders. Strip takes from this property will be required as part of this project.
WS-45	Fuji Do Market and Restaurant	Phase II ESA	• Excavation depths for construction activities will include a range from 0 to 5 feet bgs for roadway enhancements along the western edge of the property. The status of two nearby Sanborn gasoline tank is unknown; therefore, a Phase II ESA is recommended. Based upon the findings of the Phase II ESA, a Phase III ESA may be required in future work orders.

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