



Interstate 0080 Section 17M I-80 Reconstruction Project Environmental Assessment

Stroud Township
Borough of Stroudsburg
Borough of East Stroudsburg
Monroe County, PA

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Prepared by:

U.S. Department of Transportation
Federal Highway Administration
and
Pennsylvania Department of Transportation
Engineering District 5-0

ENVIRONMENTAL ASSESSMENT

FOR THE

I-80 RECONSTRUCTION PROJECT

Interstate 0080 SECTION 17M I-80 Reconstruction Project

Prepared by:
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Federal Highway Administration
and
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Engineering District 5-0

Pursuant to 42 U.S.C. 4332(2)(c)
and, as applicable:

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- Attachment A: 2014 Phase I Alternatives Analysis Summary Comparison Tables
- Attachment B: Alternative Design Plans
- Attachment C: Environmental Resources Mapping
- Attachment D: Technical Reports Index
- Attachment E: 2016 Preliminary Noise Analysis Summary Tables
- Attachment F: Agency Correspondence
- Attachment G: Section 4(f) *De Minimis* Use Forms
- Attachment H: Historic Aerial Photographs
- Attachment I: 2009 *I-80 Corridor Study* Public Involvement Summary
- Attachment J: Alternative 2D Refinements
- Attachment K: List of Preparers
- Attachment L: References

1. Introduction and Project Description

The Pennsylvania Department of Transportation (PennDOT), in coordination with the Federal Highway Administration (FHWA), prepared this Environmental Assessment (EA) for the proposed Interstate 0080 Section 17M I-80 Reconstruction Project in Monroe County, Pennsylvania (Figures 1 and 2). The project would involve 3.5 miles of full roadway reconstruction, widening, and interchange reconfiguration. In this EA, FHWA and PennDOT evaluate Build Alternatives and the No-Build Alternative for their abilities to achieve the purpose and need for the project, as well as for their benefits and impacts on the natural and built environment. The EA preliminarily recommends a preferred alternative. The EA will be made available for public review and comment. PennDOT will consider public comments prior to adopting a preferred alternative from among the alternatives considered in this EA.

Figure 1: Project Location Map

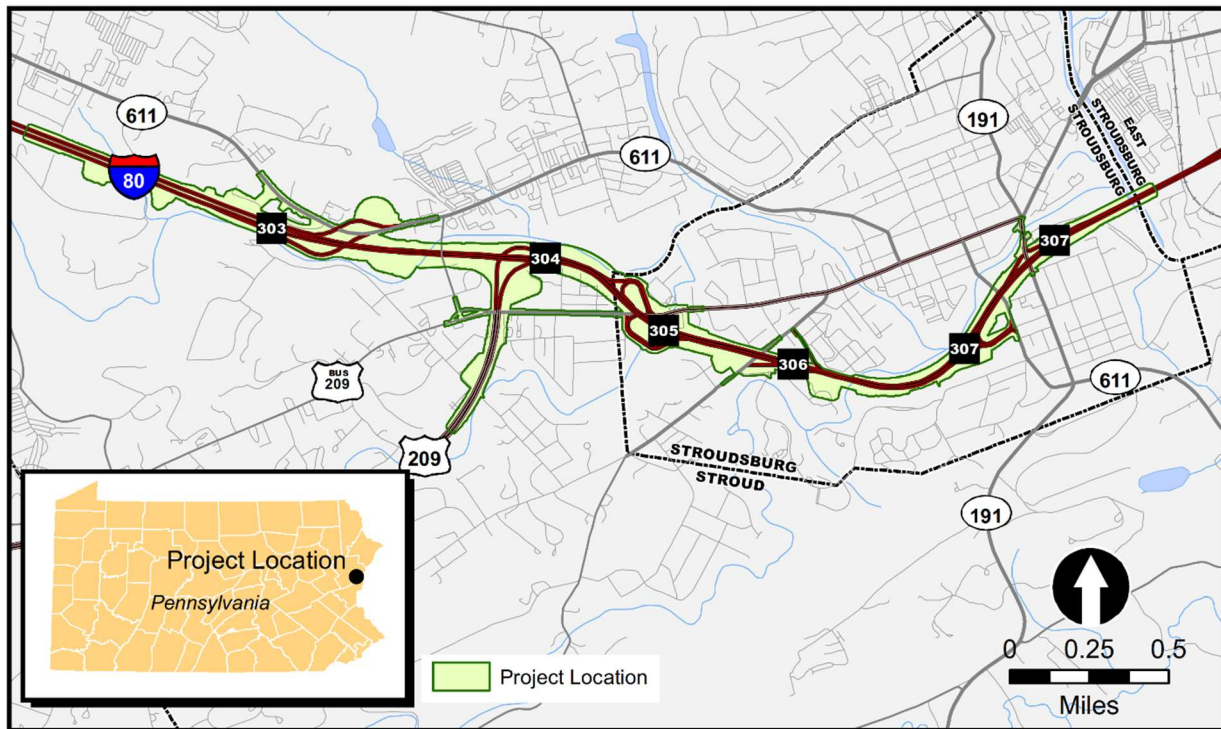
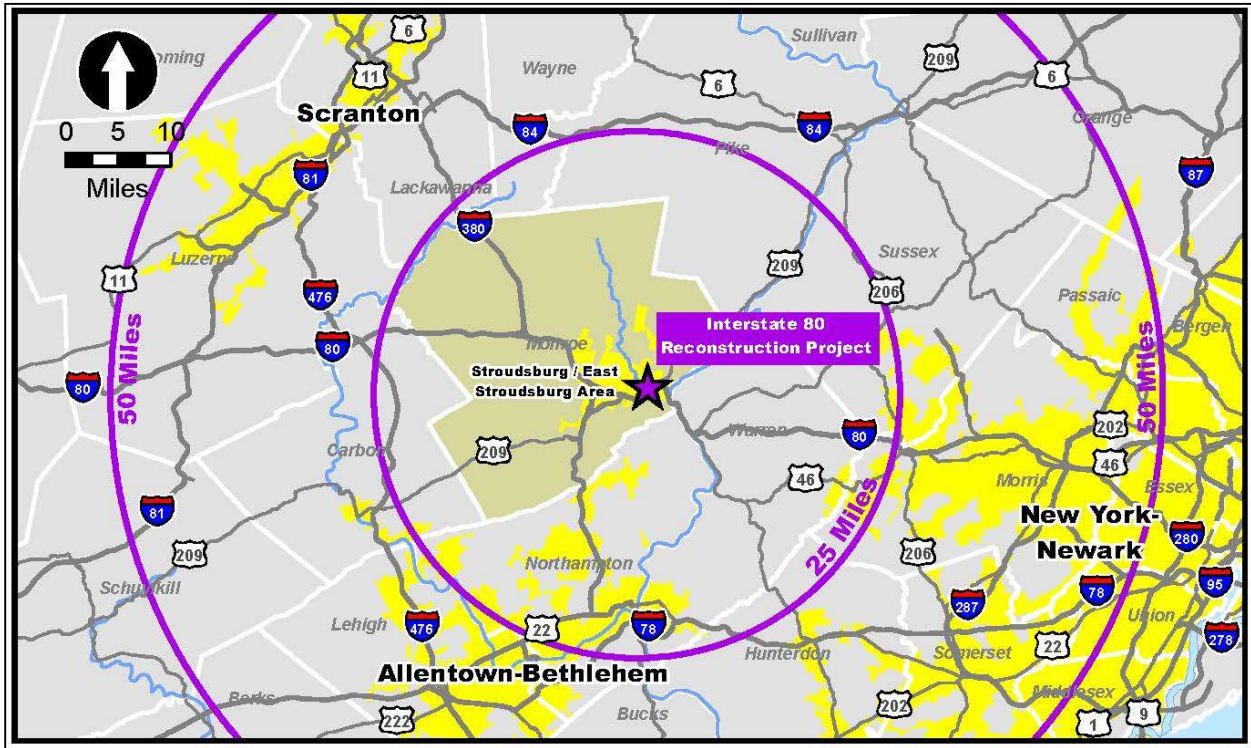


Figure 2: Regional Context Map



The project study area is centered on I-80. Access to, from, and across I-80 is provided by PA 611 (via North 9th Street [at Interchange 303] and Park Avenue [at Interchange 307]), US 209 (at Interchange 304), BUS 209/SR 2012/West Main Street (Interchange 305), SR 2004/Dreher Avenue (at Interchange 306), and PA 191/Broad Street (at Interchange 307). US 209 and PA 611 are described as follows:

- US 209 extends from the Hudson Valley in New York to central Pennsylvania, cutting through the Catskill and Pocono Mountains. The route merges with I-80 east of the project area, at Interchange 309. The two routes are co-located until US 209 splits off to the south at Interchange 304.
- PA 611 extends from Philadelphia to the Poconos, mostly running along the Delaware River. Just east of the project area, it turns west, away from the river, and runs roughly parallel to I-80, along the following local streets: Foxtown Hill Road, Park Avenue, Main Street, and North 9th Street. PA 611 crosses over I-80 on the Park Avenue Bridge, and Interchanges 303 and 307 provide direct access to PA 611.

1.1. Purpose and Need

I-80 is classified as an urban interstate within the project area and serves as a major east/west limited-access highway running through northern Pennsylvania, including Monroe County, as part of its 2,900-mile route between Teaneck, New Jersey and San Francisco, California.

The study area for the project is the portion of I-80 from just west of Interchange 303 to the Lincoln Avenue Bridge in East Stroudsburg. It passes through three municipalities: Stroud

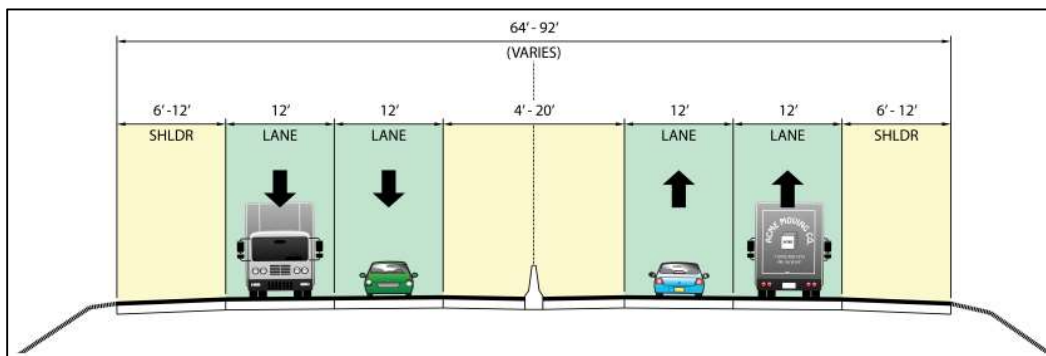
Township, the Borough of Stroudsburg, and the Borough of East Stroudsburg (Figure 1). The project study area extends approximately 1/4 mile on either side of I-80 and includes Interchanges 303, 304, 305, 306 and 307. In addition to I-80, the area is served by several routes that are important arterials and collectors in the area. They are, from west to east: PA 611/North 9th Street (Interchange 303), US 209 (Interchange 304), BUS 209/SR 2012/West Main Street (Interchange 305), SR 2004/Dreher Avenue (Interchange 306), PA 611/Park Avenue (Interchange 307), PA 191/Broad Street (Interchange 307), and other smaller but locally important routes. More detail regarding these roadways is provided in Section B of the project's Conceptual Point of Access Study.

Within the project study area, I-80 provides two lanes in each direction with a median barrier and variable width inside and outside shoulders (Figures 3 and 4).

Figure 3: I-80 Looking East to Interchange 307



Figure 4: I-80 Existing Typical Section





FHWA and PennDOT developed the purpose and need for the project during the National Environmental Policy Act (NEPA) scoping process and presented it to the public (refer to the project's Purpose and Need, 2014). The purpose of the I-80 Section 17M Project is to provide a safe and efficient transportation system on this National Highway System component for both local and regional connections in the area by reducing future congestion on I-80 in the 2045 design year to Level of Service (LOS) E or better, improving safety, and bringing the I-80 roadway and structures up to current design standards with no or minimal design exceptions. The following project needs have been identified:

Safety

Recent crash data (2008-2012) showing rates above the statewide average (see crash data summary in the project's 2014 Purpose and Need technical report in the project technical file) indicate a high percentage of rear-end, side swipe, and hit-fixed-object crashes, which can be attributed to congestion (see below) and the geometric deficiencies in this portion of I-80, which is currently designated as a highway safety corridor. Geometric deficiencies include:

- The acceleration and deceleration lane lengths for 9 of the 14 existing movements within the project limits are below PennDOT and American Association of State Highway Transportation Officials (AASHTO) design criteria. See Table 1 for existing versus criteria lengths. Lack of sufficient length contributes to safety issues throughout the corridor, as indicated by the collision types and numbers (refer to the crash data summary in the project's Purpose and Need).
- The westbound I-80 to US 209 ramp at Interchange 304 and the West Main Street to westbound I-80 ramp at Interchange 305 also have an entrance/exit weave which requires a total of 2,000 feet based on PennDOT/AASHTO criteria. The available length is 1,000 feet. This contributes to the high number of rear-end and hit-fixed-object collisions in this roadway section.
- I-80 has varying inside and outside shoulder widths below minimum design criteria. Existing inside shoulders range from 1' - 9', with 12' minimum required. Outside shoulders also vary between 6' - 12', where 12' is required. This results in reduced access for emergency vehicles during incidents, as well as the potential for disabled vehicles to impact the travel lanes.
- Deteriorated roadway and bridge components cause hazardous conditions under normal use as well as requiring frequent lane closures for ongoing maintenance issues. The I-80 corridor in the project area was constructed in the 1950s and early 1960s. The roadway pavement has reached the end of its useful life and is in poor condition.



Table 1: Acceleration and Deceleration Lane Criteria Lengths

Interchange	Movement	Existing Length (feet)	Ramp Speed (MPH)	Required Length (feet)*
303	Eastbound to PA 611	715	35	342
303	PA 611 to Westbound	930	35	490
304	US 209 to Eastbound	700	40	130
304	Westbound to US 209	500	35	285
305	Westbound to BUS 209	150	25	355
305	BUS 209 to Westbound	500	25	550
305	Eastbound to BUS 209	180	25	355
305	BUS 209 to Eastbound	195	25	550
306	Dreher Avenue to Eastbound	280	35	350
306	Westbound to Dreher Avenue	170	35	285
307	Eastbound to PA 611	180	35	285
307	PA 611 to Eastbound	260	15	660
307	Westbound to PA 191	500	35	285
307	PA 191 to Westbound	225	35	350

*Based on 50 miles per hour (MPH) Existing Mainline Posted Speed
Movements that provide less than required length are shaded

Source: The project's Phase I Alternatives Analysis, 2014.

Congestion

Existing and projected future high traffic volumes, as well as the geometric deficiencies detailed above, contribute to congestion in the project area.

- Current volumes on I-80 average approximately 47,300 to 70,500 vehicles per day (2013) with 12% heavy vehicles (trucks). Both overall and truck volumes increase from approximately Interchange 305 eastward; overall, truck volumes tend to be heavier eastbound. Design year projections (2045) show volumes of approximately 89,200 to 132,800 vehicles per day. The additional future traffic will increase congestion, with the entire mainline from Interchange 304 to Interchange 307 and most ramps

operating at LOS F in the No-Build scenario. This will also then increase the potential for conflicts at the interchange acceleration and deceleration ramps, as congested conditions make movements more difficult (refer to LOS tables in the project's Purpose and Need). Table 2 and Figure 5 below generally describe each LOS.

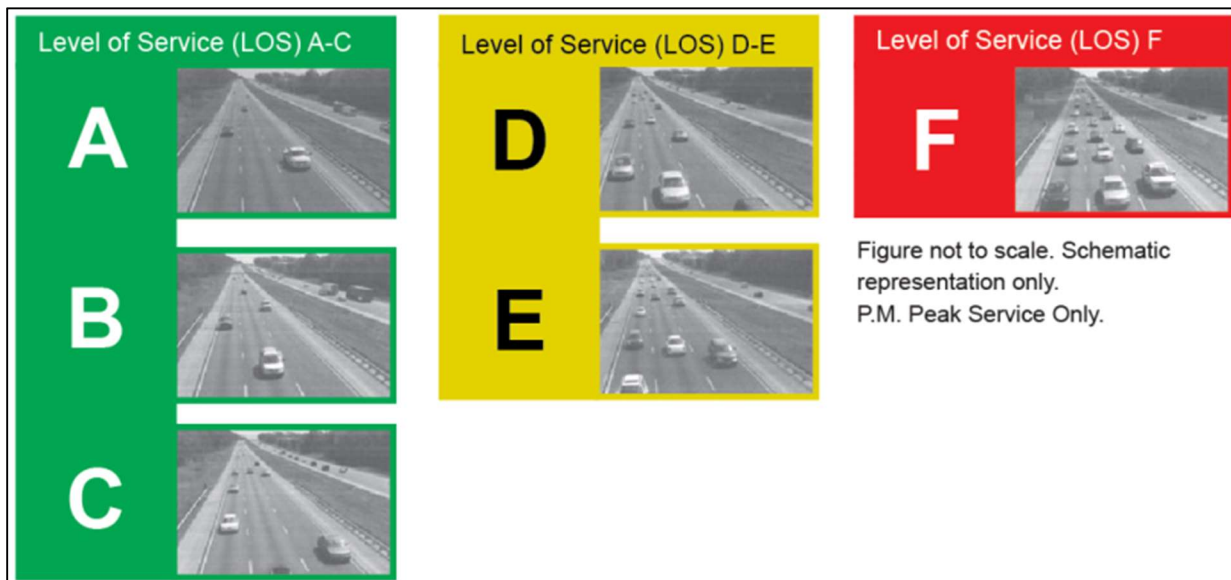
- Lack of sufficient length for acceleration and deceleration lanes also contributes to the congestion throughout the corridor (as shown in the LOS tables provided in the project's Purpose and Need). Table 2 and Figure 5 below generally describe each LOS.

Table 2: General Definitions of LOS

Level of Service	General Operating Conditions
A	Free flow
B	Reasonably free flow
C	Stable flow
D	Approaching unstable flow
E	Unstable flow
F	Forced or breakdown flow

Source: *A Policy on Geometric Design of Highways and Streets, 7th Edition* (AASHTO 2018).

Figure 5: General LOS





Mobility

- System continuity is lacking. PennDOT and AASHTO design requirements for interstate systems call for all traffic movements to be available at each interchange. In addition, drivers generally expect full movement availability. Interchanges 303, 304, and 306 provide only some of the connections available (see Table 3), which contributes to congestion and safety issues in the region, such as the illegal left-hand turns made on PA 611 at Interchange 303 by exiting eastbound traffic.
- The project corridor services both local and through traffic, creating conflicts between the types of traffic and deviating from the intent of the interstate system to facilitate long range travel. A significant portion of project study area traffic is local use that both enters and exits I-80 within the project area. For example, 48% of the traffic entering at Interchange 307 westbound exits at Interchanges 306, 305, or 304.
- Four lanes of traffic, two in each direction, must be maintained on I-80 at all times during construction, except for short-term closures necessary for the safe execution of specific construction activities.
- The Strategic Highway Network (STRAHNET) system is the system of roads deemed necessary to support the Department of Defense's operations. As a component of this system, I-80 should include minimum vertical clearances of 16'0", particularly to facilitate freight mobility. PennDOT requires an additional 6 inches of vertical clearance to accommodate future pavement overlay. The existing Interchange 303 ramp bridge over I-80 provides 16'0" vertical clearance, the existing Interchange 304 ramp bridge over I-80 provides 16'4", and the existing PA 191/Broad Street structure over I-80 provides only 15'0" vertical clearance.

Table 3: Available Movements at Interchanges

Interchange	Eastbound On	Eastbound Off	Westbound On	Westbound Off
303 (PA 611/North 9 th Street)		X	X	
304 (US 209)	X			X
305 (BUS 209/SR 2012/West Main Street)	X	X	X	X
306 (SR 2004/Dreher Avenue)	X			X
307* (PA 191/Broad Street and PA 611/Park Avenue)	X	X	X	X

*Interchange 307 movements are split: eastbound connects to PA 611, westbound to PA 191.
Source: The project's Conceptual Point of Access Study, 2015



1.2. Project History

The project is an outgrowth of studies initiated by PennDOT and others, beginning with the Safe 80 Task Force in 2001 and the 2009 *I-80 Corridor Study*. In particular, the proposed project includes many of the improvement concepts identified in the *I-80 Corridor Study*. The following sections summarize the relevant aspects of each study.

Safe 80 Task Force (2001)

Safety problems prompted the creation in 2001 of the Safe 80 Task Force, a coalition of community and regional planners, developers, businesspersons, state and local police, emergency services personnel, elected state and local officials, representatives from PennDOT and other transportation agencies, the media and concerned citizens. Since its inception, the Task Force has recommended various safety initiatives, including increased enforcement efforts by the state police.

Corridor Study (2009)

In 2009, PennDOT published the *I-80 Corridor Study*, a transportation planning study of 18 miles of I-80 in Monroe County, including the portion of I-80 in the EA study area (known as part of the eastern section in the corridor study). The study serves as a comprehensive transportation planning tool to assist PennDOT and the Northeastern Pennsylvania Alliance, the Metropolitan Planning Organization (MPO) for Monroe County, in planning and programming future transportation projects on the I-80 corridor. The study provides the required background information for programming specific environmental and preliminary engineering studies and design/construction projects.

The *I-80 Corridor Study* identified deficiencies and needs, developed proposed solutions and alternatives, evaluated impacts and costs, and advanced solutions to provide measurable benefits in terms of safety, congestion relief, and/or replacing aging infrastructure.

The *I-80 Corridor Study* examined a broad range of potential transportation solutions to address the deficiencies and needs, including:

- **Non-capacity adding solutions**
 - Transportation Systems Management (TSM) – TSM initiatives are traffic operation improvement techniques and strategies such as park-and-rides, High-Occupancy Vehicle (HOV) lanes, and encouraging carpooling, telecommuting, and staggered work schedules in order to increase vehicle occupancy and reduce the number of single-occupant vehicles on the road.
 - Intelligent Transportation Systems (ITS) – ITS involves the use of various technologies, such as message signs, to inform motorists of conditions and managing traffic more effectively.
 - Transit service improvements – Enhancing existing transit services that already provide an alternative transportation option in the corridor potentially could further reduce single occupant vehicle use.



- **Traditional capacity adding roadway improvements** – Adding travel lanes or increasing lane widths and applying current design criteria would be aimed at addressing bottlenecks and accommodating existing and forecasted future traffic.

The *I-80 Corridor Study* determined that some of the non-capacity adding solutions, such as the well-used park-and-ride lot at the Delaware Water Gap Welcome Center adjacent to Interchange 310, are already in place. Other solutions, such as high-occupancy vehicle (HOV) lanes, would not be effective in the corridor because of the many access points within a relatively short distance. ITS solutions were recommended by the study to provide some relief.

However, the need for congestion relief would not be fully met, and the problems of safety and aging infrastructure would not be addressed by non-capacity adding solutions. Traditional capacity adding solutions would be required. Specifically, the I-80 mainline and ramps require reconstruction to correct deteriorating pavement, add capacity, and apply current design criteria to the roadway geometry. Mainline improvement options considered in the *I-80 Corridor Study* include widening to three lanes in each direction, widening to four lanes in each direction, and development of express/local lanes. Furthermore, three options for express lane locations were considered: on the same alignment as the local lanes (existing I-80 mainline), on a new alignment as a bypass, and double-decked with the local lanes. Each mainline improvement option would provide minimum operational requirements, which include achieving current interstate standards; 60 MPH design speed on the mainline, and three through lanes in each direction between interchanges. However, the express/local lane concept would require a significantly larger footprint and would have significantly higher construction costs and impacts. Therefore, in the spirit of “right-sizing” the Commonwealth’s transportation dollars, the express/local lanes concept was dismissed from further consideration. The study also developed individual interchange improvement concepts that could provide measurable benefits and be funded and constructed independent of the mainline widening. Geometric deficiencies and environmental features were identified at key interchange areas, and preliminary costs were estimated for each concept.

2. Alternatives Considered

Following the conclusion of the *I-80 Corridor Study*, PennDOT took action to advance the project by coordinating with the Northeastern Pennsylvania Alliance to program the project on the adopted Transportation Improvement Plan (TIP). Once the project was on the adopted TIP, PennDOT began the Preliminary Engineering (PE)/ NEPA phase of the project development process in 2012. Activities in the PE/NEPA phase included scoping, followed by the project's Phase I Alternatives Analysis, a Conceptual Point of Access Study, alternatives refinement, and the Environmental Assessment (EA) document. The following subsections summarize each of these activities.

2.1. Scoping

Scoping is the initial activity in the PE/NEPA phase, which involves the evaluation of existing and proposed environmental features, assessing potentially impacted resources, and considering public and agency involvement. Scoping determines the level of environmental documentation required in the NEPA process.

A scoping field view meeting occurred between FHWA and PennDOT on January 22, 2013 to review the engineering and environmental issues as determined from the *I-80 Corridor Study* and outline a plan for public and agency involvement during the PE/NEPA phase. The scoping field view meeting concluded that the project warrants an EA level of documentation because the project is complex (involves multiple components: roadway, bridges, ramps and interchanges) and because activities to identify environmental resources and potential project effects on those resources are needed.

2.2. Phase I Alternatives Analysis (2014)

PennDOT undertook an initial alternatives evaluation that culminated in the project's 2014 Phase I Alternatives Analysis report. Subsequent to the Phase I report, the alternatives were renamed and reorganized for ease of reference. The alternatives listed below follow this renamed convention. The alternatives considered included the following:

- Highway Improvement (Build) Alternatives A, B, C, D, and E. Based on the existing and proposed lane widths, traffic analyses, and the development of construction staging schemes, a six-lane section was warranted. Therefore, each of the proposed highway improvement alternatives provides six travel lanes with full median and shoulders.
- A TSM Alternative. The TSM concepts evaluated include ramp metering within the Stroudsburg metropolitan area, mass transit, HOV facilities, park and ride facilities, and ITS/incident management.
- A No-Build Alternative



The analysis considered the extent to which each alternative would achieve the project purpose and need, as well as the benefits and impacts each alternative would have on the specific transportation, roadway geometry, and environmental criteria in the project study area.

Likewise, roundabouts were conceptually laid out at each signalized intersection of each alternative to evaluate their feasibility. All alternatives have shown major environmental and/or right-of-way impacts at each interchange with the inclusion of roundabouts. Therefore, the use of roundabouts in the project design was not carried forward.

The findings of the project's Phase I Alternatives Analysis were that each Build Alternative would achieve the project purpose and need by improving roadway geometry to current design standards, improve deteriorated roadway and bridges, and accommodate future traffic volumes, resulting in improved safety and traffic operations in the project study area. The No-Build and TSM Alternatives would not achieve the project purpose and need. The analysis identified the need for further study of potential natural and built environment impacts of the Build Alternatives. A summary of the environmental, engineering, and traffic impacts associated with each Build Alternative evaluated in the project's Phase I Alternatives Analysis are included in Attachment A for reference.

PennDOT held public meetings in 2014 to present the results of the project's Phase I Alternatives Analysis. A summary table of the public support received for each Build Alternative is provided in Attachment A. As a result of public input and comment, the Build Alternatives were refined to avoid or minimize impacts, additional alternatives were developed and evaluated, and some alternatives were dismissed. Alternatives were dismissed for a variety of reasons, such as vertical clearance constraints from the newly constructed PA 611/Park Avenue Bridge, increased residential and/or business property impacts, promotion of higher traffic volumes on township roads, ramp configurations unfamiliar to the public, need for additional structures, increased construction costs, and lack of public support. Specifically, Build Alternative C was dismissed primarily due to the unfamiliar ramp configuration at the Exit 306 I-80 westbound off-ramp. Build Alternative E was dismissed primarily due to the lack of public support. Further, Build Alternative E has two connections between BUS 209 and US 209, which created additional design complexity without much benefit to traffic. In addition, both Build Alternatives C and E had larger impacts to industrial and retail land use areas. Following these Phase I refinements, three Build Alternatives (2A, 2B, and 2D) were ultimately advanced for further study, each with three lanes in each direction, a full median, and full shoulders.

2.3. Conceptual Point of Access Study (2015)

The project's Conceptual Point of Access Study supports the PE/NEPA phase by evaluating the operations and safety aspects of Build and No-Build Alternatives under consideration for a project. A Conceptual Point of Access Study is required for projects where a change in access would occur, such as a change in interchange design that adds or removes movements. In the case of I-80, the Conceptual Point of Access Study examined the alternatives advanced by the project's Phase I Alternatives Analysis: No-Build, TSM, and Build Alternatives 2A, 2B, and 2D.



The results of the project's Conceptual Point of Access Study reiterate the findings of the project's Phase I Alternatives Analysis that the No-Build and TSM Alternatives do not achieve the project purpose and need. The study findings for the Build Alternatives 2A, 2B, and 2D are the following:

- Design – Build Alternatives 2A, 2B, and 2D can be designed to meet current design criteria regarding lane, median, and shoulder widths and acceleration/deceleration lane and weave lengths as well as superelevation; each Build Alternative can provide the required minimum vertical clearance of 16'6" at bridges over I-80; each Build Alternative can address deteriorated roadway and bridge components.
- Safety – Build Alternatives 2A, 2B, and 2D would substantially reduce the potential for crashes; Build Alternative 2D would have the lowest number of predicted crashes.
- Congestion – Build Alternatives 2A, 2B, and 2D would similarly improve roadway operating conditions during peak periods in the design year (2045).
- Mobility – Build Alternatives 2A, 2B, and 2D would provide two lanes of travel in each direction on I-80 during construction, except for short-term closures necessary for safe execution of specific construction activities. Otherwise, all three Build Alternatives would have three lanes in each direction in the final condition. The Build Alternatives differ in the provision of movements at interchanges. Build Alternative 2A would provide the least improvement to mobility by adding full movement at only one interchange (Interchange 303), while Build Alternatives 2B and 2D would provide full mobility at Interchanges 303 and 304, provide a new interchange at US 209 and West Main Street, and eliminate or combine ramp movements in other locations (Interchanges 305 and 306, as well as a new SR 2004/Dreher Avenue Connector Road).

The conclusions of the project's Conceptual Point of Access Study are as follows:

- **Build Alternative 2D** would best achieve the project purpose and need, while also providing the opportunity to implement improved incident management strategies and minimize traffic diversions to the local roadway network during incidents on I-80. Compared to Build Alternatives 2A and 2B, the proposed changes to the interchange configurations in Build Alternative 2D (particularly the provisions for all traffic movements, fewer ramps to access I-80 and more ramp connections to auxiliary lanes), would reduce impacts to traffic on local roads. Build Alternative 2D would also have fewer property impacts (acreage, number of parcels, and number of residential displacements) than Build Alternatives 2A and 2B.
- **Build Alternative 2B** would perform less well than Build Alternative 2D because of the requirement for more ramps accessing I-80, fewer ramp connections to auxiliary lanes, and less spacing between Interchanges 303 and 304. As with Build Alternative 2D, Build Alternative 2B would have less impact to traffic on local roads compared to Build Alternative 2A. Build Alternative 2B would have more property impacts (acreage, number of parcels, and number of residential displacements) than Build Alternative 2D, but less than Build Alternative 2A.



- **Build Alternative 2A** would perform the least well among the Build Alternatives in addressing the project purpose and need, because the provision for most ramps accessing I-80 would not overcome safety and mobility problems. Build Alternative 2A would retain the partial movements at Interchange 304 and full movements at Interchanges 305 and 307 with minimal mobility improvement. Build Alternative 2A would have more impact to traffic on local roads compared to Build Alternatives 2B and 2D. Build Alternative 2A would have more property impacts (acreage, number of parcels, and number of residential displacements) than Build Alternatives 2B and 2D.

The results of the project's Conceptual Point of Access Study were presented to the Agency Coordination Committee for consideration. At the February 22, 2017 meeting, the Agency Coordination Committee determined that Alternative 2A would be eliminated from further consideration because it would perform the least well among the Build Alternatives considered, and it would have more traffic impacts on local roadways (see below).

2.4. Alternatives Eliminated from Consideration

The following alternatives and interchange configurations were considered but eliminated from consideration prior to this EA.

Transportation Systems Management (TSM) and Transit

TSM strategies that were evaluated include ramp metering, high-occupancy vehicle (HOV) facilities, park-and-ride facilities, part-time shoulder use, Intelligent Transportation Systems (ITS) facilities and transit investment alternatives. The TSM Alternative, including ramp metering alone does not satisfy the project needs and, therefore, is not a viable alternative. Existing ITS features in the project study area will be retained. The Build Alternatives provide opportunities to expand the existing ITS and implement improved incident management strategies to minimize diversions through the local road network during incidents.

Part-time shoulder use was preliminarily assessed to determine if the outside shoulder could be used in lieu of adding a third travel lane to I-80 to try to reduce the project footprint and potentially minimize property and other environmental impacts. The evaluation identified several challenges, including: a reduction in safety (approximately 11% more crashes); shoulders would need to be extended up to 30' wide in several curve areas to maintain sight distance and appropriate geometry for a 60 MPH speed limit; overhead electronic signs would be needed to designate when shoulders are open for use; additional inlets and maintenance would be needed to address sheet flow runoff in the shoulder; a high level of active traffic management would be needed to ensure the shoulder is clear of debris and/or stranded vehicles; additional pull-off areas, access gates, and moveable median barrier may be necessary to minimize incident management response issues. The existing outside shoulders are 6' -12' wide; part-time shoulder use requires a 16' wide minimum outside shoulder. Additionally, use of the outside shoulders as travel lanes would require new emergency pull-off areas at various points along I-80 to handle disabled vehicles. These pull-off areas would require further roadway widening. Therefore, part-time shoulder use would still require overall widening of I-80 and would not significantly reduce the number of property impacts compared to the estimated acquisitions for the Build Alternatives. Due to the numerous



design and operational issues noted above, part-time shoulder use on the outside shoulder would not meet the safety need. Part-time shoulder use was also assessed for the inside shoulder and resulted in similar design and operational issues. Thus, part-time shoulder use compromises safety without providing a worthwhile reduction of impacts to the surrounding properties.

Build Alternative 2A

Build Alternative 2A was eliminated at the Agency Coordination Meeting on February 22, 2017. The reasons for eliminating Build Alternative 2A are that it would provide the least improvement in mobility compared to Build Alternatives 2B and 2D:

- The configuration of the interchanges in Build Alternative 2A would have more diversions to local roads;
- Less opportunity is provided for PennDOT to implement improved incident management strategies and minimize traffic diversions to the local roadway network during incidents on I-80;
- Not all ramp movements would be provided between I-80, US 209, and BUS 209; and,
- The connection at I-80 westbound between Interchanges 304 and 305 would be eliminated, requiring drivers to travel to Shafers School House Road.

In addition, the environmental impacts of Build Alternative 2A, particularly property acquisitions and displacements, would be substantially greater than those of Build Alternatives 2B and 2D. Finally, Build Alternative 2A has the least support from the public for the foregoing reasons.

Additional detail regarding the alternatives eliminated from consideration prior to the EA and the rationale for their elimination may be found in the project's 2015 Conceptual Point of Access Study.

2.5. Alternatives Refinement (2016-2017)

Stakeholder comments received following completion of the project's Conceptual Point of Access Study indicated the following key concerns about the project: property acquisitions and displacements and effects on local traffic access and circulation from closure of Interchange 306 (SR 2004/Dreher Avenue). In response to these concerns, PennDOT refined Build Alternative 2B and Build Alternative 2D to reduce potential impacts (see the Build Alternative 2B and Build Alternative 2D design plans in Attachment B). For instance, SR 2004/Dreher Avenue at Interchange 306 was adjusted to avoid the Hollinshead Cemetery and PA 191/Broad Street at Interchange 307 was adjusted to minimize impacts to Rotary Creek and Ann Street Parks and the medical facility driveway (the cemetery and parks are identified on the environmental resource figures in Attachment C). In addition, PennDOT refined roadway horizontal alignments, profiles, and typical sections to improve constructability, clearances, sight distance, and safe operations, particularly where proposed ramps would interconnect or connect to local roadways. Revisions were made to the cut/fill lines (limits of



disturbance) at the western limits of the project to better match the existing edges of roadway. Finally, refinements were made to the conceptual stormwater management basin locations and design based on the results of testing of basin locations for infiltration capabilities and coordination with the Monroe County Conservation District. Note that the Build Alternative 2B and Build Alternative 2D maps provided in Attachment B reflect these refinements.

2.6. Alternatives Considered in this EA

The studies described in the previous subsections resulted in identifying two Build Alternatives, along with the No-Build Alternative, to consider in the EA. Each of these alternatives is described in this subsection.

2.6.1. No-Build Alternative

The No-Build Alternative assumes no improvements to the transportation system by year 2045, other than those contained in the *2017-2020 Transportation Improvement Program* (TIP) that was adopted by the Northeastern Pennsylvania Alliance and supported by the December 2014 *Monroe County Comprehensive Plan Update*, which is the long-range transportation plan of the Monroe County Planning Commission.

The TIP also includes the following types of roadway improvement projects in Monroe County: roadway maintenance and repair, bridge replacement and rehabilitation, interchange and intersection improvements, widening, and other improvements to meet current design criteria. Transit projects in Monroe County involve maintenance and repair of existing bus services related to equipment and existing facilities. Within the project study area, projects separate from the proposed I-80 Section 17M Project include bridge replacement of the SR 2009 (Bridge Street) Bridge over Pocono Creek (completed in 2016), PA 611/Park Avenue Bridge at I-80 (completed in 2012), the SR 2024/Ridgeway Street Bridge over the railroad, and the I-80-05S, Exit 308 realignment (in design). I-80 will remain in its existing condition with two travel lanes in each direction with substandard shoulder widths and vertical clearances under bridges. Interchanges 303 through 307 will remain in their existing configurations. Deteriorated pavement and structures will continue to be repaired through maintenance activities only.

The No-Build Alternative serves as the baseline for comparing the Build Alternatives in achieving the project purpose and need and for assessing benefits and impacts on the natural and built environment.

2.6.2. Build Alternatives

Build Alternatives 2B and 2D (see maps in Attachment B) reflect the year 2045 condition with all projects listed on the current TIP completed and operational, and this proposed project. Build Alternatives 2B and 2D share the characteristics described in the bullets below. Following the bullets, the characteristics that distinguish each Build Alternative are described.

- **I-80 Roadway Section:** Three 12' wide travel lanes would be provided in each direction with a 26' wide median (consisting of two 12' wide inside shoulders and a 2' wide median barrier) and 12' wide outside shoulders; all elements would meet current



design criteria. Minor alignment modifications would be made along I-80 to achieve current design criteria while minimizing the impacts to adjacent properties and environmentally sensitive areas. All vertical clearances at bridges over I-80 in the project study area would be adjusted to meet the required 16'6" design criteria. Superelevation issues at curves would be resolved through grade adjustments. Deteriorated pavement and structures would be replaced.

- **Interchange 303 (PA 611/North 9th Street):** The interchange would be improved from a partial to a full movement interchange.
- **Interchange 307 (PA 191/Broad Street):** The eastbound on- and off-ramps to I-80 would be relocated to tie in adjacent to the new PA 611/Park Avenue Bridge. The westbound ramps would remain at the same location with some reconfiguration to achieve current design criteria. All ramp geometry would have a 40 MPH design speed in the vicinity of I-80. In this configuration the eastbound on-ramp would pass under PA 191/Broad Street and would require a rock cut along its entire length to reduce impacts to the adjacent neighborhood. The I-80 eastbound ramps at PA 611 and the I-80 westbound ramps at PA 191 would remain in a similar configuration to the existing condition.
- **I-80 between Interchanges 304 and 305:** The weave sections between Interchanges 304 and 305 in both directions would be eliminated. Auxiliary lanes would be provided between Interchanges 305 and 307 in the eastbound direction, between Interchanges 304 and 307 in the westbound direction, and between Interchanges 307 and 308 in each direction.
- **Congestion:** The project's Conceptual Point of Access Study describes congestion characteristics and problems. A summary of the Conceptual Point of Access Study findings is provided below:

For each Build Alternative, 2045 design year volumes on all freeway segments would operate at LOS D or better during the AM peak period, and LOS E or better during the PM peak period. Between Interchanges 302 and 303, the PM peak period would experience LOS F due to the bottleneck condition created at the project limits (3 lanes to existing 2 lanes).

Build Alternatives 2B and 2D would include extended auxiliary lane lengths to achieve PennDOT's design criteria of 2,000 feet at locations where an on-ramp is followed by an off-ramp. In Build Alternatives 2B and 2D, the proposed auxiliary lane lengths are a minimum of 4,600 feet and extend up to 6,400 feet. The increased weave lengths add more distance for motorists to maneuver along I-80 and to/from US 209 than the existing condition. Build Alternative 2D would provide more auxiliary lane length than Build Alternative 2B, resulting in better LOS and traffic operations.

Ramp terminus intersections would operate at acceptable LOS D or better for Build Alternatives 2B and 2D during the 2045 peak periods. The analyses recommend signalization at ramp terminus intersections at the following locations in Build Alternatives B and D:



- Interchange 303, PA 611/Interchange 303 Connector Road
- Interchange 304, West Main Street (BUS 209)/I-80 On and Off Ramps
- Interchange 305, West Main Street/I-80 Westbound Ramps
- Interchange 307, PA 611/Westbound I-80 On/Off Ramps
- Interchange 307, PA 191/Eastbound I-80 On/Off Ramps
- SR 2004/Dreher Avenue Connector/West Main Street

Congestion on several local roads was also evaluated in the *Conceptual Point of Access Study*. Within Stroud Township, all evaluated intersections' LOS are acceptable in the No-Build Alternative and in Build Alternatives 2B and 2D in the 2045 peak hours with the implementation of split phasing at one intersection. Within Stroudsburg Borough, several intersections are expected to decline in LOS in the 2045 peak hours between the No-Build Alternative and Build Alternatives 2B and 2D. However, potential improvements to LOS could be accomplished by reevaluating pedestrian phasing times at key intersections. In addition, it is reasonable to assume that traffic at the 9th and 7th Street intersections in Stroudsburg Borough will find its way to less congested adjacent streets such as 6th Street and 8th Street, which are shown to operate at LOS C or better, providing a balanced LOS that is an acceptable level throughout the network.

Furthermore, traffic volumes were projected along sections of BUS 209/West Main Street and Bridge Street for the 2045 peak hours. Build Alternative 2B and 2D when compared to the No-Build Alternative have slightly higher volumes northbound north of US 209, and lower volumes southbound. South of US 209, Build Alternatives 2B and 2D volumes are substantially lower than the No-Build Alternative. Along Bridge Street, the volumes are lower for Build Alternatives 2B and 2D compared to the No-Build Alternative. The additional ramps proposed in Build Alternatives 2B and 2D would offset the traffic volumes and local road impacts along BUS 209/West Main Street and Bridge Street.

- **Mobility:** The project's Conceptual Point of Access Study also describes mobility characteristics and problems, as summarized below:

In Build Alternatives 2B and 2D, interchange and ramp configuration changes would occur, resulting in changes to traffic circulation patterns at interchanges and the connecting roadway network. However, movements to and from I-80 as well as across I-80 would be provided as described in Section 2.6.2.

Build Alternatives 2B and 2D would improve mobility by providing required minimum vertical clearances at bridges and full movement interchanges at Interchanges 303, 304, and 307. Interchange 305 would be a partial interchange with westbound ramps provided. The new interchange at US 209 and West Main Street would accommodate the Interchange 305 eastbound ramps that are eliminated. Additional mobility benefits would be achieved by providing the SR 2004/Dreher Avenue Connector.



Overall, Build Alternatives 2B and 2D would provide good system continuity and connections. Build Alternatives 2B and 2D would meet traffic criteria; the LOS (2045) for Build Alternatives 2B and 2D is good. Local road impacts would be good under Build Alternatives 2B and 2D. Lastly, Build Alternatives 2B and 2D would have improved incident management opportunities.

Build Alternative 2B

Interchange 303 (PA 611): Build Alternative 2B would provide a tight diamond interchange configuration, implementing a new stacking order on the mainline as well as a grade separation on PA 611. This configuration would provide a new connector road that loops from PA 611 south to I-80, with PA 611 and I-80 as overhead crossings.

The interchange would be shifted slightly to the east to accommodate and improve the geometry of the entrance and exit ramps. All entrance and exit ramps would be designed for a design speed of 40 MPH. Ramp lengths would be increased to accommodate the new overhead crossings (grade separation) and retaining walls would be provided along I-80 to accommodate the difference in grades at this location.

Additionally, the new PA 611 Connector would require retaining walls as well as rock cuts to accommodate the new alignment and profile. The new PA 611 Connector would provide additional queuing and capacity for exiting traffic to PA 611.

For Interchange 304, Build Alternative 2B would provide an eastbound ramp that begins at the same location as the eastbound Interchange 303 ramp. The Interchange 304 ramp would separate from the Interchange 303 ramp and continue to Interchange 304. Additionally, two ramps from the Interchange 304 area would be combined into a new, short collector-distributor road; the new road would include a weave section before separating into an on-ramp to I-80 westbound and a ramp to Interchange 303. The new eastbound I-80 on-ramp from PA 611 would not connect to the new collector-distributor road. Further discussion of the new collector-distributor road is provided below for Interchanges 304/305/306.

Interchanges 304, 305, and 306 (US 209/BUS 209/SR 2004/Dreher Avenue): Due to the proximity of Interchanges 304 and 305 to one another, they function as a single interchange. A full interchange would be provided at Interchange 304. Interchange 305 would maintain the westbound on- and off-ramps, but the eastbound on- and off-ramps would be eliminated. A full diamond interchange would be provided to connect US 209 with BUS 209/SR 2012/West Main Street), allowing for the elimination of the I-80 eastbound on- and off-ramps at Interchange 305. At Interchange 306, the on-ramp from SR 2004/Dreher Avenue to I-80 eastbound, and the off-ramp from I-80 westbound to SR 2004/Dreher Avenue would be eliminated. All entrance and exit ramps would be designed for a 40 MPH design speed, except the US 209 northbound off-ramp to West Main Street, which would achieve a 35 MPH design speed.

The proposed new northbound US 209 to I-80 westbound ramp would cross over I-80. The I-80 westbound ramp to US 209 southbound would be on a structure over Pocono Creek. A ramp would connect the Interchange 305 on-ramp to I-80 westbound while allowing another ramp to connect I-80 westbound to PA 611 (to Interchange 303).



As noted for Interchange 303, the I-80 eastbound ramp to US 209 southbound/BUS 209 would begin at the same location as the I-80 eastbound ramp to PA 611 to eliminate weaving between the new eastbound on-ramp at Interchange 303 and the new eastbound off-ramp at Interchange 304. Interchange 305 would be changed to a half diamond interchange. The I-80 eastbound on-ramp would be relocated 0.5 mile to the west with access from West Main Street near US 209 in order to eliminate weaving at the interchange. In addition, the off-ramp from I-80 eastbound to BUS 209 would be relocated to west of Interchange 304 to eliminate weaving at the interchange.

The US 209 northbound on-ramp to I-80 eastbound and the proposed I-80 eastbound on-ramp from West Main Street would run adjacent to each other but remain separated. The US 209 ramp would merge onto I-80, and the West Main Street on-ramp would become an auxiliary lane that continues to Interchange 307.

A new collector-distributor road would be provided along I-80 westbound, which would eliminate the current weaving between the on-ramp from Interchange 305 and the off-ramp for US 209 southbound. The I-80 westbound off-ramp to Interchanges 303 and 304 would be the beginning of this collector-distributor roadway. The new US 209 northbound ramp would connect to the left side of the new collector-distributor roadway. The new collector-distributor road would access the Interchange 303 off-ramp to the right, and I-80 westbound to the left. The new ramps and collector-distributor road would be provided on a multi-span structure to avoid impacts to Pocono Creek.

Retaining walls would be provided at the toe of the existing I-80 slope in the area of the existing Stroudsburg Cemetery, so as not to impact the cemetery. The Stroudsburg Cemetery is identified on the environmental resource figures in Attachment C. Bridge Street would be connected to BUS 209 at a T-intersection.

With the elimination of the Interchange 306 ramps to SR 2004/Dreher Avenue, the connector road between West Main Street and SR 2004/Dreher Avenue proposed as part of Build Alternative 2A is included in Build Alternative 2B. However, with the elimination of the Interchange 305 eastbound on and off ramps, the connector road is realigned to follow closer to the I-80 mainline to reduce environmental impacts.

Build Alternative 2D

Build Alternative 2D is similar to Build Alternative 2B at Interchanges 305, 306 and 307; differences in design are at Interchange 303 and 304.

Interchange 303 (PA 611): A diamond interchange configuration is proposed with a direct access to PA 611 at the main signalized intersection with the Shoppes at Stroud driveway. This interchange would be located further west than Build Alternative 2B due primarily to the need to increase the ramp lengths to tie into the adjusted I-80 geometry. The I-80 profile would be lowered in this area to minimize the elevation difference between PA 611 and the PA 611 Connector over I-80. All interchange ramps would have a 35 MPH design speed. Improvements on PA 611 would extend east and tie into the existing section. Driveway relocations or improvements would be developed as the project design advances.



Interchanges 304, 305, and 306 (US 209/BUS 209/SR 2004/Dreher Avenue): Build

Alternative 2D would be similar in configuration to Build Alternative 2B and would provide the same ramp movements. However, since the Interchange 303 ramp would be moved further west, adequate space is available for ramps and there is no need for the westbound collector-distributor road and eastbound Interchange 304 bypass ramp. Thus, the I-80 westbound off-ramp to Interchange 303 would not need to begin near Interchange 304. In addition, the I-80 westbound on-ramp from Interchange 305 would enter I-80 sooner. With elimination of the collector-distributor and bypass ramp, the on- and off-ramps in each direction between Interchanges 303 and 304 would connect to auxiliary lanes. All ramps would have a minimum design speed of 35 MPH.

The interchange design of Build Alternative 2D would result in fewer impacts to traffic on local roads and better performance during incidents on I-80 than Build Alternative 2B due to the proposed changes to the interchange configurations (particularly the provisions for all traffic movements, fewer ramps to access I-80, and more ramp connections to auxiliary lanes).



3. Environmental Consequences

3.1. Overview

This section describes the existing natural and built environment resources in the project area and the potential for the No-Build Alternative and Build Alternatives 2B and 2D to benefit or impact those resources. In each topic area, summaries are provided of the methodology and regulatory context, minimization measures taken to reduce or eliminate impacts, and mitigation measures to address impacts. Project technical reports referenced below are indexed in Attachment D and provide more information on the study methodologies and results. These reports are available in the project's technical file.

An Area of Potential Impact (API) was developed for Build Alternatives 2B and 2D in order to evaluate the environmental consequences for each of these alternatives. The API includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway; in addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction. The API is shown on the maps provided in Attachments B and C.

Based on scoping, public and agency coordination, and review of the benefits and impacts of the No-Build Alternative and Build Alternatives 2B and 2D, no impacts would occur to farmlands.¹ For this reason, no further assessment of farmlands is provided. Furthermore, visual resources and impacts are the same for Build Alternatives 2B and 2D. The roadway exists currently, and Build Alternatives 2B and 2D generally follow the existing roadway alignment; hence, changes to visual resources would not be significant and thus had no bearing in the decision making process for selecting a preferred alternative. Therefore, a discussion of visual resources is not included herein; however, an assessment of the visual resources within the project study area is provided in the project's Visual Resources Technical Memorandum, which is available in the project's technical file.

¹According to soil surveys conducted by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (<http://websoilsurvey.nrcs.usda.gov>), prime, unique, and farmland soils of statewide importance are identified; however, all project area soils are within transportation use or an urban setting. No such soils are currently in agricultural production and the potential is low for agricultural production. The nearest active farms are approximately one mile from the project area. None of the alternatives would convert active farmland to non-farmland use and none would impact properties benefitted by the farmland exclusion portion of the Taxpayer Relief Act, Act 319 (the Clean and Green Program), farmland conservation easements, agricultural security areas, agriculturally zoned lands, or other incentives for farming.



3.2. Existing and Future Land Use

3.2.1. Methodology and Regulatory Context

NEPA provides the general legal framework for the consideration of potential impacts of the project to the broad patterns of land use in the project area (40 C.F.R. Parts 1502.15 – 1502.16). Broad patterns of land use are established by comprehensive plans; such plans serve as guides for the types and locations of residential, commercial, industrial, governmental and institutional uses. In general, land use is planned by the local county or municipal government. Counties and municipalities regulate land use and development using tools such as comprehensive plans and municipal development codes/ordinances. This assessment considers the *Monroe County Comprehensive Plan Update* (2014).

3.2.2. Affected Environment

As shown in Figure 6, the western portion of the project area contains several large tracts of minimally developed land, including the Kirkwood Camp and Retreat Center, undeveloped floodplain and wetlands associated with Pocono Creek. Other development in the western portion of the project area includes a Stroud Township maintenance yard and compost facility near Interchange 303 and several large shopping areas along PA 611.

Near Interchange 304 and US 209, undeveloped forest is south of I-80, and single-family residences are beyond the forest. The north side of I-80 in this area is bordered by Pocono Creek and floodplain forest. Beyond Pocono Creek are mostly commercial properties with some undeveloped parcels and single-family residences. An auto repair business is in the southeast quadrant of Interchange 304; a residential multi-family complex is in the southwest quadrant.

Between Interchanges 304 and 305, single-family homes predominate on the south side of I-80, while the Pocono Creek corridor runs along the north. Near the border of the Borough of Stroudsburg, the Little Pocono Creek is flanked by a large wetland and floodplain south of I-80.

Near the SR 2004/Dreher Avenue underpass, single-family residences predominate on both sides of I-80. Immediately east of SR 2004/Dreher Avenue and south of I-80 is a vacant scrap yard and an industrial site. The Stroudsburg Cemetery is on the north side of I-80. For the next half-mile eastward, I-80 is flanked primarily by wooded areas and wetlands. Rotary Creek Park straddles the PA 611/Park Avenue overpass on the north side of I-80. Downtown Stroudsburg, including the Stroudsburg Commercial Historic District, lies north of the park. To the south side of I-80, the area consists of single-family homes.

East of PA 191/Broad Street, single-family homes predominate on the south side of I-80 for about one quarter of a mile up to the wooded floodplain of Brodhead Creek, which passes under I-80 near the border with the Borough of East Stroudsburg. The north side of I-80 from PA 191/Broad Street to Brodhead Creek is developed with commercial and service facilities with McMichael Creek and its levee just north of the development.



The environmental resource maps in Attachment C also show the project area on an aerial background, which depicts the surrounding land uses, and some of the resources mentioned above, such as the Kirkwood Camp and Conference Center and cemeteries.

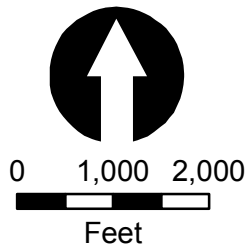
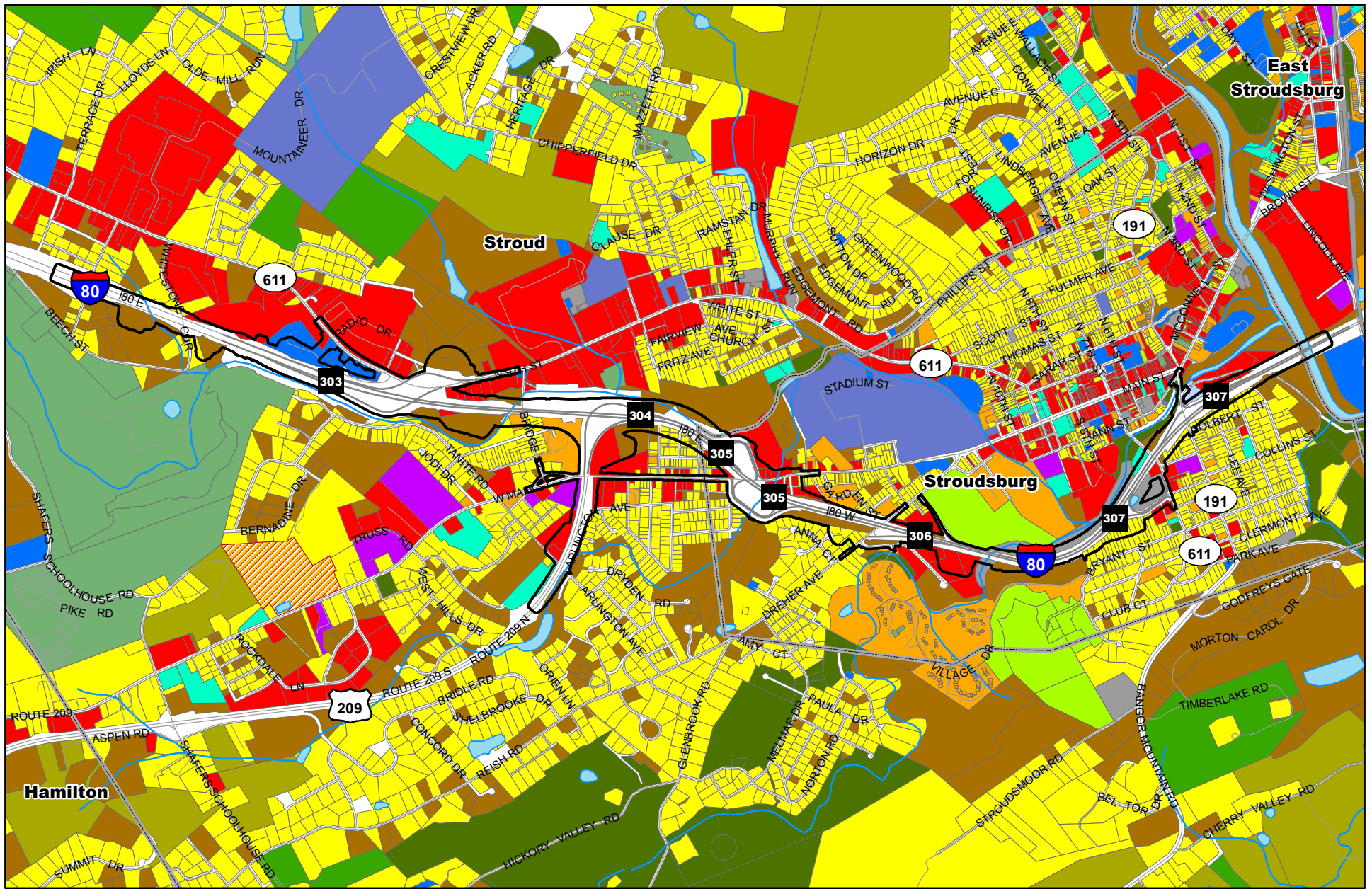
3.2.3. Environmental Consequences


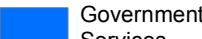

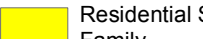




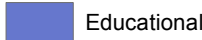

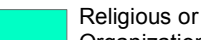




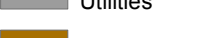
The No-Build Alternative will not impact land use in the project area because the types of projects (maintenance, repair, and replacement of existing transportation facilities) will not change how existing transportation facilities serve the project area. As a result, no changes in the broad patterns of land use will occur.

There would be some localized impacts to land use due to the conversion of residential, commercial, municipal, and undeveloped parcels to transportation use (refer to Section 3.4 for further discussion of property impacts and displacements). However, because the nature of project is a reconstruction of existing transportation facilities (involving maintenance, repair, and replacement of existing facilities), Build Alternatives 2B and 2D would not impact or change the broad patterns of land use.

3.2.4. Minimization and Mitigation

Design refinements, such as alignment adjustments and the use of retaining walls to steepen slopes, have been implemented to minimize property, and thereby land use, impacts. Further, as no impacts to the broad patterns of land use would occur, mitigation is not warranted.



- | | | | |
|--|---|--|--|
|  Agricultural |  Government Services |  Recreational-Private |  Residential Single Family |
|  Cemetery |  Industrial |  Recreational-Public |  Retail & Services |
|  Educational |  Keystone Opportunity Zone |  Religious or Service Organization |  Transportation & Utilities |
|  Forest Reserve |  Medical |  Residential Multi-Family |  Undeveloped Land |

 Project Area



I-80 RECONSTRUCTION EXISTING LAND USE

Source: Monroe County, PA.



3.3. Community Facilities and Services

3.3.1. Methodology and Regulatory Context

PennDOT used available municipal, county, and online sources to identify community facilities and services in the project area. Impact assessment considered the potential for direct impacts to community facilities and services. NEPA provides the general legal framework for the consideration of potential social benefits and impacts, such as effects on community facilities and services resulting from transportation projects (40 C.F.R. Parts 1502.15 – 1502.16).

3.3.2. Affected Environment

Community facilities and services include schools, emergency management services, and other public or publicly-funded facilities (Figure 7).

Existing fire, rescue, and police services rely on the existing transportation network to provide their services to the project study area, such as responding to incidents. Each of the 17 municipalities in Monroe County has a local coordinator, emergency operations plan, and an emergency operations center. The County Office of Emergency Management is responsible to plan for and respond to multi-jurisdictional and multi-agency incidents or when the emergency exceeds the capabilities of the local response groups. Safety and security for the region are provided by the Monroe County Office of Emergency Management, the Pennsylvania State Police, the Stroud Area Regional Police, and the Monroe County Sheriff's Department. There are also approximately eight fire stations in the general project area and one hospital (Pocono Medical Center). Emergency medical services (EMS) are provided by the Bushkill Emergency Corps and Suburban EMS. Also of importance in the wider area are the Marshalls Creek Fire Company, the Shawnee Fire Company, and the Delaware Water Gap Fire Company

Most community facilities are located within the town center of Stroudsburg and would not be directly impacted by the project. However, a few facilities are located near I-80 where there is the potential for impacts:

- Stroud Township Yard Waste Compost Facility – Located north of I-80 and south of North 9th Street (PA 611), along Gaunt Road (northeast of Interchange 303), the facility provides waste disposal and composting services for the township. This facility is currently on approximately 12 acres, and the compost facility covers about five acres.
- Ann Street and Rotary Creek Parks – Located north of I-80, west of PA 191/Broad Street, and south of Ann Street in the Borough of Stroudsburg along McMichael Creek (northwest of Interchange 307), these parks provide recreational public access to the creek. The parks include 5.02 acres.
- Levee System – A local flood protection works project located along McMichael and Brodhead Creeks north of I-80 and east of PA 191/Broad Street.



- Stroudsburg Cemetery – A 24.81-acre cemetery situated along the southeast side of SR 2004/Dreher Ave and abutting I-80. Both paved and gravel roads allow unrestricted access throughout the grounds. In addition to the cemetery grid, the complex consists of the Stroudsburg Cemetery office, the Creekside Pet Crematory, the Stroudsburg Memorial, the Norton Mausoleum, St. George’s Chapel, and a recently constructed garage.
- Hollinshead Cemetery – A small historic cemetery located on the northwest side of SR 2004/Dreher Avenue and bound on the west side by the residence at 1228 Dreher Avenue. This cemetery contains 13 marked graves.

3.3.3. Environmental Consequences

The No-Build Alternative will not impact community facilities or services. Existing fire, rescue and police services will continue to operate within the existing roadway network. Growth in project study area roadway congestion has the potential to increase response times.

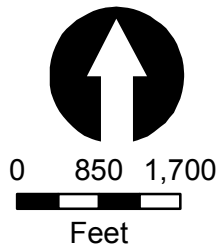
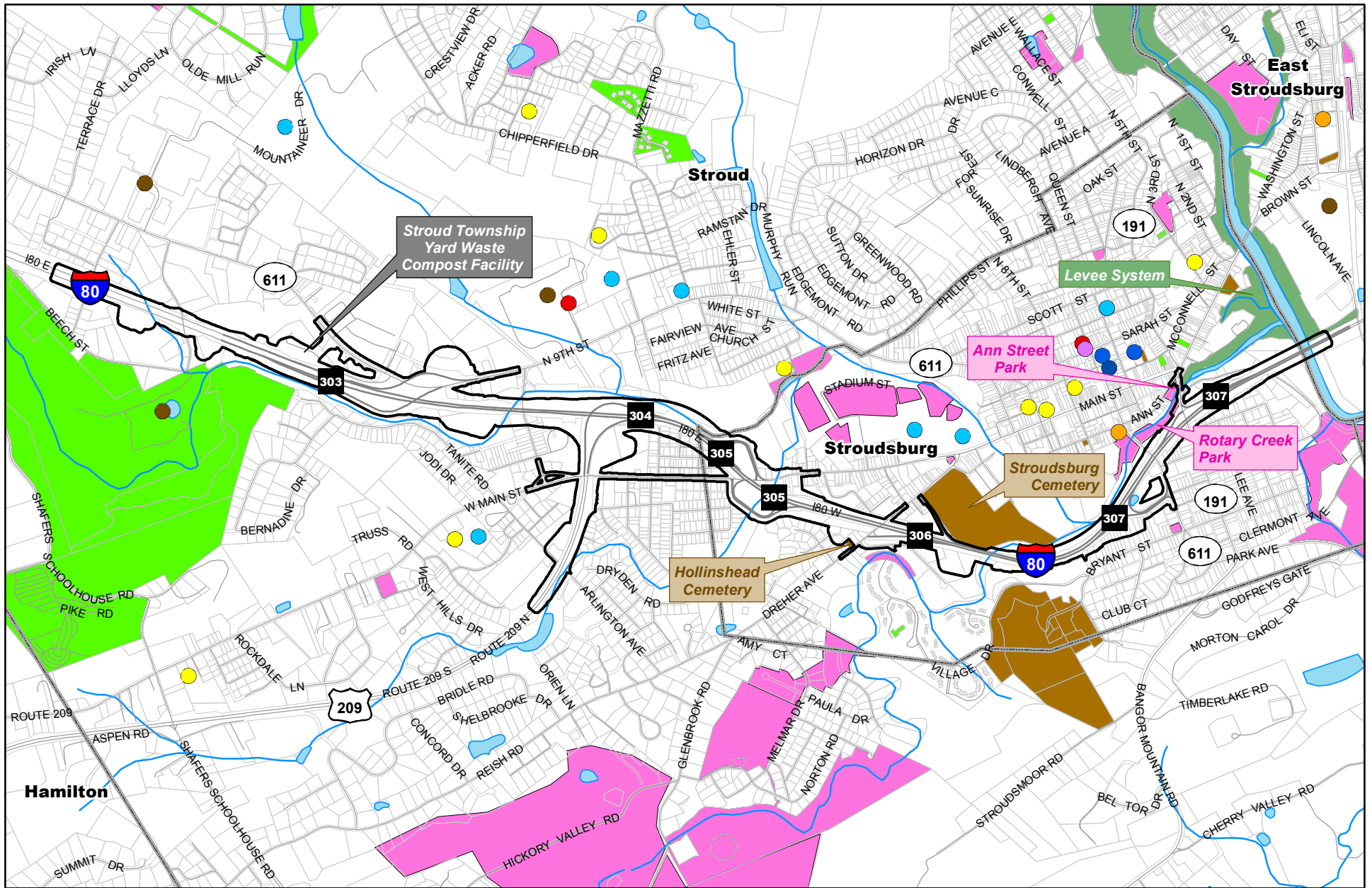
The safety performance of the improvements provided by Build Alternatives 2B and 2D was assessed using the Highway Safety Manual Enhanced Interchange Safety Analysis Tool (ISATe) for the I-80 mainline and ramps and the Predictive Method for Urban and Suburban Arterials for the ramp termini intersections. Specific geometry and traffic volume data were input for each alternative, and output results indicate that Build Alternatives 2B and 2D would improve safety compared to the No-Build Alternative (approximately 44% fewer predicted crashes per year). As a result, Build Alternatives 2B and 2D would provide improved safety and improved traffic flow, which would help reduce the number of incidents requiring emergency services and also reduce emergency response times.

Build Alternatives 2B and 2D would require full acquisition of the Stroud Township Yard Waste Compost Facility property for a proposed stormwater basin in Build Alternative 2B and a proposed structure between PA 611 and I-80 as well as a stormwater basin in Build Alternative 2D.

In addition, both Build Alternatives 2B and 2D would require sliver takes of Ann Street and Rotary Creek Parks totaling 0.09 acres near I-80 and the existing PA 191/Broad Street Bridge crossing to enable the bridge replacement and widening and reconstruction of Broad Street and the I-80 westbound on-ramp. Park impacts would be considered *de minimis* and are further described in Section 3.12 and Attachment G. Detailed maps showing Build Alternatives 2B and 2D, the API, Ann Street Park, and Rotary Creek Park are provided in Attachment C.

Build Alternatives 2B and 2D would require sliver takes of portions of the Levee System totaling 0.20 acres adjacent to the Broad Street Bridge and I-80 Bridge over Brodhead Creek for bridge widening. Levee System impacts would be considered *de minimis* and are further described in Sections 3.10 and 3.12 and Attachment G. Detailed maps showing Build Alternatives 2B and 2D, the API, and the Levee System are provided in Attachment C.

Both Build Alternatives 2B and 2D would avoid the Stroudsburg and Hollinshead Cemeteries.



- | | | | |
|-------------|----------------|----------------------|---------------------|
| County | Police | Project Area | Recreational-Public |
| Educational | Post Office | Levee System | Cemetery |
| Fire | Religious | Recreational-Private | |
| Municipal | Retail/Tourist | | |



I-80 RECONSTRUCTION COMMUNITY FEATURES



3.3.4. Minimization and Mitigation

As the project advances, PennDOT will examine safety and security needs. PennDOT will continue to refine the geometry and improvements through final design and evaluate the safety performance of the modifications. PennDOT will evaluate and design appropriate safety elements, modify existing incident management plans, coordinate with emergency response personnel, and develop operational protocols and procedures.

PennDOT has coordinated with the Township to understand how the compost facility property is utilized. The project team will continue to refine the design with the aim of minimizing impacts to the facility and enabling Township use of a portion of the property. If full acquisition is ultimately necessary, PennDOT would follow the land acquisition processes described in Section 3.4.1, which involve identifying a new location for the Stroud Township Yard Waste Compost Facility in coordination with Stroud Township.

PennDOT has coordinated and will continue to coordinate with Stroudsburg Borough regarding impacts and mitigation related to the Ann Street Park and Rotary Creek Park property acquisition needs.

Refer to Sections 3.10.4 and 3.12.4 and Attachment G for minimization and mitigation measures associated with the Levee System. In addition, any alteration to the Levee System is covered by US Army Corp of Engineers (USACE) 38 USC 408, and as further described in Section 5.2, a Section 408 Permit will be obtained.

3.4. Property Impacts and Displacements

3.4.1. Methodology and Regulatory Context

For the purpose of the EA, the numbers of property impacts and displacements were quantified for Build Alternatives 2B and 2D by overlaying the area of project impact on County-derived parcel mapping in GIS.

As the project advances, all activities related to acquisitions and displacements would be conducted in conformance with the Uniform Relocation and Real Property Acquisitions Policies Act of 1970 (42 United States Code §4601) (the Uniform Act). This statute mandates that certain relocation services and payments be made available to eligible residents, businesses and nonprofit organizations displaced as a direct result of projects undertaken by a federal agency or with federal financial assistance. The Uniform Act provides for uniform and equitable treatment for persons displaced from their homes and businesses, and it establishes uniform and equitable land acquisition policies.

Property acquisitions and displacements would also be conducted in conformance with the applicable regulations, Pennsylvania statutes, and Executive Orders.

3.4.2. Affected Environment

Land uses in the project area are a mix of residential and non-residential uses, along with community facilities and undeveloped land, as described in Section 3.2.2.



3.4.3. Environmental Consequences

The No-Build Alternative is not expected to require property acquisitions.

Build Alternatives 2B and 2D would require additional right-of-way to accommodate the proposed mainline and interchange improvements. Table 4 summarizes proposed property acquisitions for each alternative. Acquisitions shown in the table refer to full acquisitions. Full acquisitions affect the entire parcel or a significant portion of the parcel, resulting in a displacement of the existing use.

Both alternatives would necessitate acquiring property in several areas, including near Interchange 304, in the Myrtle Street /Jamie Court neighborhood, along West Main Street near Interchange 305, and in the area near Interchange 306. As shown in Table 4, Build Alternative 2B would result in slightly more property acquisitions than Build Alternative 2D.

Table 4: Proposed Property Acquisitions

Build Alternative	Land Use Type	Full Acquisitions	
		Number of parcels	Number of units*
2B	Residences	38	70
	Non-residences	34	28
	Undeveloped	10	na
	Totals	82	98
2D	Residences	34	66
	Non-residences	32	26
	Undeveloped	8	na
	Totals	74	92

* The number of residential units may be slightly higher than reported here because some houses may contain more than one dwelling unit. For example, properties identified as single-family residences may have been converted into multiple rental unit properties. The number of non-residential units includes both occupied and vacant commercial spaces; thus, the amount of active businesses subject to displacement, as described in Section 3.4.3, would be less than the total number of non-residential units shown in this table.
na = not applicable

In addition to the full property acquisitions discussed above, partial property acquisitions would also be required to implement Build Alternatives 2B and 2D. Partial property acquisitions would involve strips of land but would not impact access to or the existing uses of the parcels. Sufficient land would remain for the properties to serve their current use. Build Alternative 2B would require 175 partial property acquisitions, consisting of 98 residential, 48 non-residential, and 29 undeveloped parcels. Build Alternative 2D would also require 175 partial property acquisitions, consisting of 101 residential, 46 non-residential, and 28 undeveloped parcels.



3.4.4. Minimization and Mitigation

After an alternative is selected by PennDOT and design refinement continues, PennDOT would coordinate with individual property owners regarding means to minimize and mitigate property acquisitions and displacements. Property acquisition activities would occur in accordance with the Uniform Act as amended and State laws that establish the process through which PennDOT may acquire real property through a negotiated purchase or through condemnation.

3.5. Community Cohesion

3.5.1. Methodology and Regulatory Context

NEPA provides the general legal framework for the consideration of potential social benefits and impacts, such as effects on community cohesion resulting from transportation projects (40 C.F.R. Parts 1502.15 – 1502.16). PennDOT used FHWA's 2018 publication, *Community Impact Assessment: A Quick Reference for Transportation*, as a guide to considering potential effects of the proposed project on community cohesion.

Cohesion relates to the sense of community within an area and is formed by social interaction and physical connection among people and groups. To comparatively assess the potential benefits and impacts of the alternatives regarding community cohesion, the following qualitative measure was evaluated: whether and where the alternatives have the potential to create, change or eliminate barriers within a community that physically isolate populations.

3.5.2. Affected Environment

Having been constructed in the 1950's and 1960's as the project area began to grow and develop, I-80 has been part of the fabric that has shaped the growth and configuration of the communities of Stroud Township and the Boroughs of Stroudsburg and East Stroudsburg. I-80 is a vital link between these communities as evidenced by use of the highway by local traffic. Crossings of I-80 are provided by five roadways in the project area (SR 2009/Bridge Street, BUS 209/SR 2012/West Main Street, SR 2004/Dreher Avenue, PA 611/Park Avenue, and PA 191/Broad Street), facilitating access to destinations on both sides of the highway.

Most local roads that cross I-80 in the project study area have sidewalks; these roads include West Main Street, SR 2004/Dreher Avenue, PA 611/Park Avenue, and PA 191/Broad Street. Two roads (SR 2004/Dreher Avenue and PA 611/Park Avenue) are part of a "Bike 2 Nature" on-road bicycle route loop. This bike trail is identified on the environmental resource figures in Attachment C. No project study area sidewalks have signed or striped crosswalks at their crossings of intersections with I-80 ramps, nor are the bicycle routes signed or striped.

No pedestrian or bicycle facilities are located along I-80, nor are any designated bicycle or pedestrian-only crossings of I-80 present in the project study area. However, Glen Park is located adjacent to Brodhead Creek at the southeast corner of Stroudsburg Borough and is a popular mountain biking park that is the site for several mid-Atlantic and east coast racing events. Residents from the north side of Stroudsburg cross over I-80 via PA 611/Park Avenue and/or PA 191/Broad Street to access Glen Park on the south side of I-80. Additionally, the Pocono Bike Club is active in the region and regularly hosts road rides in and around the



project study area. For example, there are club road rides on Tuesday evenings from spring through fall originating at Stroudsburg High School.

3.5.3. Environmental Consequences

The No-Build Alternative will not change existing conditions with regard to community cohesion because the maintenance, repair, and replacement projects will not create, change, or eliminate barriers within a community. Further, no improvements to the existing sidewalk and bike route crossings of I-80 are proposed.

The provisions for access improvements at the I-80 interchanges that are part of Build Alternatives 2B and 2D are expected to benefit local circulation patterns and reduce congestion. As described in Section 2.6.2, the configuration of the interchanges in Build Alternative 2D would provide better mobility, access, and circulation than Build Alternative 2B.

Furthermore, existing bicycle and pedestrian facilities on the I-80 crossings would remain or be improved with Build Alternatives 2B and 2D. Bike traffic will be accommodated along the Interchange 307 Broad Street overpass and along routes that pass under I-80. Therefore, in either Build Alternative, the ability for motorists, bicyclists, and pedestrians to access the communities, resources, and services in the project area will improve. This benefit is a positive effect on community cohesion.

Proposed project designs are intended to allow the later addition of new connections or enhancement of existing connections across or through the I-80 corridor. PennDOT is open and willing to work with local agencies to improve any such connections within the project study area as a part of or alongside this project.

3.5.4. Minimization and Mitigation

PennDOT would design the new interchange configurations and ramps while considering pedestrian and bicycle flows and would incorporate appropriate design elements to balance vehicular flow with pedestrian and bicycle safety and access. These elements may include adding signage, signals, and striping for crosswalks and bicycle travel, adjusting existing crosswalk locations and sidewalk routing, and connecting sidewalk facilities on new roadway elements within the project limits to meet existing facilities in the adjacent local roadway network. Proposed project designs are intended to allow the later addition of pedestrian and bicycle facilities by local authorities. PennDOT is open and willing to work with local agencies to facilitate the creation of pedestrian and bicycle facilities within the project study area as a part of or alongside this project.

3.6. Environmental Justice (EJ)

3.6.1. Methodology and Regulatory Context

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse environmental effects of federal agency actions on minority and low-income populations. Following is a list of other orders and guidance that are used in the environmental justice analysis:



- Council on Environmental Quality (CEQ), 1997, Environmental Justice Guidance under the National Environmental Policy Act;
- United States Department of Transportation (USDOT), 2012, Order 5610.2(a): Updated Final Order on Environmental Justice;
- FHWA, 2012, Order 6640.23A, FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations; and
- PennDOT, 2016, Publication 746, Project Level Environmental Justice Guidance.

The USDOT Order on environmental justice (Order 5610.2a) defines minority and low-income populations as follows:

- **Minority Population:** A minority population includes persons who are American Indian or Alaskan Native, Asian American, Native Hawaiian or Other Pacific Islander, Black, or Hispanic or Latino.
- **Low-Income Population:** Any readily identifiable group of low-income persons whose household income is at or below the U.S. Department of Health and Human Services poverty guidelines.

3.6.2. Affected Environment

The demographic profile of the project area includes minority and low-income populations as evidenced by the most recent 2010 US Census data and the 2014 American Community Survey data summarized in Table 5 and shown in Figure 8. Table 5 provides demographic data for the eleven Census block groups in the project area along with Pennsylvania, Monroe County, and each municipality. The block group percentages of low-income and/or minority populations were compared to those for the county. Of the eleven block groups, nine contain percentages of minority and/or low-income populations that are greater than those for the county. Based upon this assessment, nearly all the project area meets the criteria to be considered an environmental justice community.

FHWA and PennDOT conducted additional reviews to identify other indicators of minority and low-income populations, which support the U.S Census data findings. These reviews included the following:

- Field investigation in 2016 found land uses serving ethnic groups (e.g. retail establishments, houses of worship, and governmental services); public, elderly, and subsidized housing; and non-English language signs, printed materials, and media.
- Coordination with knowledgeable parties, such as the MPO, Monroe County, the municipalities, school district administrators, the Interagency Council of Monroe County (an organization that provides services to low-income and other disadvantaged residents), the Federation of Latinos for the Education about Cultures of Hispanic America (a nonprofit group that promotes the Latino population of northeastern Pennsylvania), the African American Network of the Poconos (a nonprofit organization that focuses on



networking, education, economic development, and cultural heritage for black persons), and other non-governmental organizations that provide human services to minority, low-income, and other at-risk residents in Monroe County.

More detail on the methodology and findings of the environmental justice analysis as well as demographic data may be found in the project's 2018 Environmental Justice Technical Memorandum.

3.6.3. Environmental Consequences

The No-Build Alternative will not achieve the project purpose and need and, therefore, will not provide the transportation benefits of the project to EJ and non-EJ populations in the project area. The No-Build Alternative will not cause substantial natural or built environmental impacts to EJ and non-EJ populations. Consequently, the No-Build Alternative will not have disproportionately high and adverse effects on minority and low-income populations in the project area.

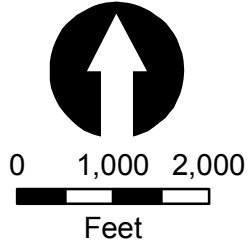
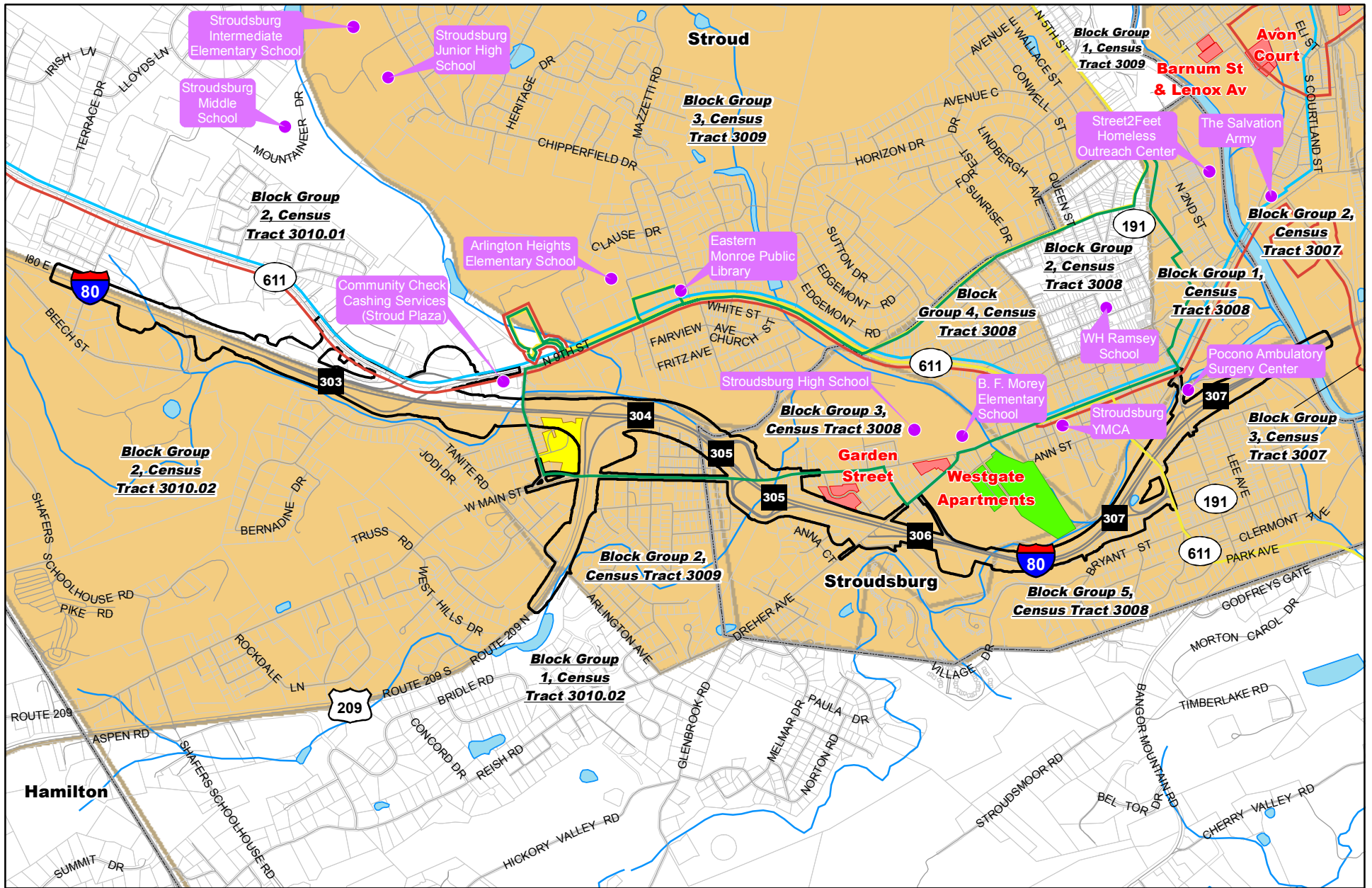






Table 5: 2014 American Census Survey Data




Geography	Census Tract	Block Group	Total Population	Percent Minority	Population for Poverty*	Percent in Poverty	EJ Area?
Pennsylvania	-	-	12,758,729	18.1	12,346,333	13.5	-
Monroe County	-	-	168,342	30.9	165,152	12.5	-
East Stroudsburg	-	-	9,773	34.6	8,007	22.6	-
Stroudsburg	-	-	5,528	34.6	5,504	34.8	-
Stroud Twp.	-	-	19,013	35.6	19,003	10.9	-
East Stroudsburg	3007	2	1870	34.7	1867	34.2	Yes
East Stroudsburg	3007	3	1,541	40.8	825	10.2	Yes
Stroudsburg	3008	1	1,059	46.6	1059	41.7	Yes
Stroudsburg	3008	3	1,310	58.7	1298	44.2	Yes
Stroudsburg	3008	4	1,266	22.7	1266	51.4	Yes
Stroudsburg	3008	5	1,161	27.5	1149	15.7	Yes
Stroud Twp.	3009	2	462	21.4	462	13.0	Yes
Stroud Twp.	3009	3	3617	37.8	3617	10.1	Yes
Stroud Twp.	3010.01	2	1,774	22.3	1774	2.3	No
Stroud Twp.	3010.02	1	1,407	12.7	1397	3.9	No
Stroud Twp.	3010.02	2	473	7.0	473	17.8	Yes





*Population for which poverty status is determined. The population for which poverty status is determined includes the non-institutionalized civilian population above 15 years of age who are not housed in college dormitories or unconventional housing.
- Not applicable

Source: American Community Survey, 2014



-  Project Area
-  EJ Census Block Group
-  Non-EJ Census Block Group
-  EJ Community Resources

- Low Income Housing**
-  Monroe Co. Housing Authority Properties
 -  Bridge Street Apartments
 -  Creekview Apartments

- MCTA Pocono Pony**
-  Tobyhanna Express
 -  Red Route
 -  Yellow Route
 -  Stroudsburg Circulator



I-80 RECONSTRUCTION ENVIRONMENTAL JUSTICE

Source: U.S. Census Bureau American Community Survey
5-year Estimates (Tables B03002 and C17002),
The Housing Authority of Monroe County, PennDOT



Build Alternatives 2B and 2D would have benefits and impacts that would affect both EJ and non-EJ populations. Both alternatives would have largely positive effects on traffic congestion, safety, emergency response time, local circulation, and quality of life in the project study area. Notably, the project would reduce the impact of highway incidents on local roads and maintain, if not improve, on-time performance for the Pocono Pony bus routes in the study area. Similarly, the project would maintain and improve access to local businesses, social services, community facilities, and parks and recreational facilities. The project also would help to sustain and grow the local and regional economy. In the short term, the project would benefit the local economy by creating construction jobs and related spending. When complete, the improved traffic flow would have a beneficial long-term economic effect of maintaining and enhancing the region's attractiveness for tourism, shopping, and distribution businesses. Employment growth would generate more income, spending, and tax revenues for the study area municipalities while providing job opportunities for residents of EJ and non-EJ areas.

There would be negative impacts such as property acquisitions, noise, and park impacts, which would be experienced by both EJ and non-EJ populations. PennDOT has endeavored to avoid or minimize negative impacts in designing the Build Alternatives and is committed to applying appropriate minimization and mitigation measures where necessary.

A disproportionately high and adverse effect on minority and low-income populations is defined as an adverse effect that:

- Is predominantly borne by a minority population and/or a low-income population, or
- Will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

Determinations as to whether a project will have disproportionately high and adverse effects must take into consideration "mitigation and enhancements measures that will be taken and all offsetting benefits to the affected minority and low-income populations..." (USDOT Order, Section 8.b).

FHWA has examined the process that PennDOT has taken to identify and engage with potentially affected property owners to identify and refine Build Alternatives 2B and 2D to minimize potential impacts on EJ as well as non-EJ populations. FHWA has considered the data indicating where in the project area concentrations of EJ populations exist and the relationship of those concentrations to Build Alternatives 2B and 2D. FHWA has also considered the wide range of potential benefits and impacts of Build Alternatives 2B and 2D.

In consideration of these factors and findings, FHWA has determined that Build Alternatives 2B and 2D would have benefits and impacts experienced by both EJ and non-EJ populations. None of the benefits or impacts would be predominantly borne by a minority and/or low-income population, and none of the potential impacts on EJ populations would be more severe or greater in magnitude than the potential impacts on non-EJ populations. As a result,



FHWA has determined that Build Alternatives 2B and 2D would not have a disproportionately high and adverse effect upon EJ populations.

3.6.4. Minimization and Mitigation

By continuing to minimize property acquisitions as design refinements continue, EJ community impacts will also be minimized. Since Build Alternatives 2B and 2D will not disproportionately or substantially affect EJ populations, mitigation is not warranted.

3.7. Local and Regional Economy

3.7.1. Methodology and Regulatory Context

NEPA regulations require considering the direct effects of a proposed action, as well as the significance of those effects. The term “effects” is defined to include the economic impacts of an action (40 C.F.R. §§ 1502.16; 1508.8). To assess the economic effects of the project, PennDOT used qualitative and quantitative data from several source documents that are cited in the subsections below.

This assessment considers the economic effects of the project on the project study area as well as the county in terms of travel time and cost savings (public and personal), safety, and environmental impacts. This assessment also considers the economic benefits of the project to local residents in general, including effects on property values, which is a key concern of residents.

3.7.2. Affected Environment

Monroe County’s proximity to the New Jersey-New York Metropolitan area, the Philadelphia-Delaware Valley Metropolitan area, and the Allentown-Bethlehem-Easton Metropolitan area makes it a prime location for visitors and businesses alike.

Tourism is a major factor in the local economy. The Pocono Region is known for skiing, camping, hiking, shopping, and many other outdoor events all year round. Of Pennsylvania’s eleven tourism regions, it ranks fourth in total visitor spending and second in the share of spending and tourism (*Monroe County Comprehensive Plan Update*, 2014).

Retail is another important industry; several large shopping centers are located along the I-80 corridor. These centers include the Stroud Mall, Pocono Plaza, Pocono Commons, and the Shoppes at Stroud.

According to the *Monroe County Comprehensive Plan Update*, major companies (including Pocono ProFoods, Wal-Mart Distribution, Johnson & Johnson, and more), find the accessibility provided by I-80 and I-380 and the regional roadway network a major benefit to doing business in markets in the Northeast.

Of the 81,000 persons in the Monroe County civilian labor force, 76,500 were employed and 4,500 unemployed in April 2018, according to the *Pennsylvania Department of Labor & Industry, Center for Workforce Information & Analysis, Monroe County Profile*. The 5.5% county unemployment rate was noticeably higher than the 4.7% unemployment rate for the



Commonwealth. The annual average wage in 2016 for Monroe County was \$39,960 which is lower than the state annual average of \$47,540.

According to the Pennsylvania Department of Labor & Industry (2018), almost half the jobs in the county are in the retail trade, accommodation and food services, and health care and social assistance sectors.

The top 10 employers in the county (as of the third quarter of 2017) are the federal government, Aventis Pasteur Inc., Wal-Mart Associates Inc., the Pocono Mountain School District, Pocono Medical Center, Kalahari Resorts LLC, Mount Airy Casino Resort, the East Stroudsburg Area School District, Highgate Hotels, and the Pleasant Valley School District.

3.7.3. Environmental Consequences

The existing problems of roadway congestion, safety, and access in the project study area will continue and become worse in the future No-Build Alternative due to growth in traffic demand on I-80 and local roadways. These problems have the potential to negatively affect the ability of the project study area to attract businesses and investment.

In the short term, Build Alternatives 2B and 2D would benefit the local economy by creating construction jobs and related spending. Based on an economic analysis, employment generated by I-80 reconstruction is anticipated to result in more than \$200 million in earnings for Monroe County. The following economic impacts are anticipated:

- Direct economic construction impacts:
 - The project will add an estimated 1,200 jobs in Monroe County for the three years of construction, including jobs in:
 - Construction.
 - Construction support (materials, supplies, equipment, etc.).
 - Services to support increased activity (restaurants, retail, etc.).
 - For every \$100,000 spent on accommodation (such as for construction workers), \$3,000 would be generated in tax revenue since Monroe County levies a 3% tax on every hotel room transaction for a stay of less than 31 days.
- Potential indirect community economic impacts:
 - Similar highway projects in the nation have supported new economic growth:
 - Travel time savings from reduced congestion.
 - Increased revenue for service businesses located near full interchanges due to improved interstate access.
 - Potential for increased business opportunities.

Construction could result in some additional short-term delays to traffic, particularly along I-80, but when complete the improved traffic flow would have a beneficial long-term effect to the local and regional economy. In the long term, the mobility, access, and safety benefits of Build Alternatives 2B and 2D would maintain and enhance the region's attractiveness for tourism, shopping, and distribution businesses. Travel through the project area would be



improved for customers that use I-80 to frequent the businesses within the project study area. Thus, the project could increase revenues to businesses near interchanges due to the traffic improvements. Furthermore, employment growth would generate more income, spending, and tax revenues for the project study area municipalities.

On the other hand, Build Alternatives 2B and 2D would require several full and partial acquisitions of properties with commercial uses. Build Alternative 2B would result in more loss of municipal tax revenue from acquired parcels than Build Alternative 2D because more parcels would be acquired for Build Alternative 2B. Business displacements have the potential to result in long-term employment losses depending on the ability for displaced businesses to relocate within the area. However, an improved transportation system typically benefits the overall economy.

The acquisition of properties for the project would reduce the tax base for Monroe County, as well as Borough of Stroudsburg and Stroud Township; however, the impact would not be significant in relation to the total property tax revenue of the county and municipalities. For instance, as shown below in Table 6, proposed county and municipal tax losses from Build Alternative 2D are estimated to be approximately 0.7%.

Table 6: Fiscal Impacts of Property Acquisitions for Build Alternative 2D

Fiscal Impact	Amount
Estimated Total Property Tax Revenue Loss	\$325,858
Estimated Municipal Tax Revenue Loss	\$44,612
County Total Property Tax Revenue	\$46,483,361
Municipal Tax Revenue	\$6,265,922
Change as Percent of Total County Property Tax Revenue	0.70%
Change as Percent of Municipal Tax Revenue	0.71%

Property values in the project study area should be relatively unaffected by Build Alternatives 2B and 2D. Both Build Alternatives involve upgrades to the existing transportation infrastructure within the existing transportation corridors. Therefore, existing property values already take into account the nearby transportation network. For properties with noise barriers installed as part of the project (see Section 3.9), noise impacts would be reduced resulting in an increase in property values. Academic literature found that noise barriers have increased the value of residential houses located within 300 meters of the barrier by approximately 15%, and by nearly 7% for residential houses that are between 300 and 600 meters away (Nakakeeto et al. 2016). This in turn would generate additional tax revenue, offsetting some of the impacts of property acquisitions for the project.



3.7.4. Minimization and Mitigation

PennDOT will continue to refine the design of the preferred alternative to minimize the necessary acquisition of commercial properties. PennDOT has undertaken a preliminary study of commercial real estate availability in the project study area that identified available properties for business use. This finding indicates that relocation of commercial properties in the project study area is potentially possible. PennDOT will follow established procedures in working with displaced businesses to identify suitable relocation opportunities, which would mitigate the potential decrease in employment.

3.8. Air Quality

3.8.1. Methodology and Regulatory Context

Section 176(c) of the Clean Air Act (CAA), as well as the transportation planning provisions of 23 USC § 135 and 49 USC § 5304, require transportation activities that receive federal funding or approval to be consistent with (“conform to”) the air quality goals established by a state air quality implementation plan (SIP). Conformity with the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the National Ambient Air Quality Standards (NAAQS).² The U.S. Environmental Protection Agency (EPA) adopted regulations at 40 CFR Part 51.390 and Part 93 (referred to as the Transportation Conformity Rule or TCR) to implement the requirements of Section 176(c) of the CAA. The TCR requirements apply to transportation plans, transportation improvement programs (TIPs), and transportation projects approved, funded, or implemented by the FHWA. Additionally, the TCR requirements apply in nonattainment and maintenance areas for transportation-related criteria pollutants. Transportation conformity is not required in attainment areas. On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* (“*South Coast II*,” 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone national ambient air quality standard (NAAQS) and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. These conformity determinations are required in these areas after February 16, 2019.

Additionally, local air quality must be assessed on a micro-scale by evaluating peak carbon monoxide (CO) concentrations at the project level. High concentrations of CO tend to occur in areas of high traffic volumes or areas adjacent to a stationary source of the pollutant. CO emissions are associated with the incomplete combustion of fossil fuels in motor vehicles and are considered to be a good indicator of vehicle-induced air pollution. A quantitative CO hot-spot analysis was performed to identify “worst-case” CO concentrations throughout the

² The EPA develops and enforces the regulations related to air quality. In 1970, the federal CAA established the NAAQS to protect the public health. Six criteria air pollutants have been identified by the EPA as being of concern nationwide: carbon monoxide, sulfur oxides (sulfur dioxide), nitrogen oxides (nitrogen dioxide), ozone, particulate matter with a size of 10 micrometers or less (PM₁₀), particulate matter with a size of 2.5 micrometers or less (PM_{2.5}), and lead. In addition to these six criteria air pollutants, the EPA also regulates air toxics. Currently, neither the TCR nor the NEPA regulations require analysis of mobile source air toxics. As a result, an assessment of mobile source air toxics will not be conducted.



project corridor to demonstrate compliance with the CO NAAQS as a result of the proposed improvements

In addition to the criteria air pollutants for which there are NAAQS, EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources, and stationary sources (e.g., factories or refineries). Mobile source air toxics (MSAT) are a subset of the 188 air toxics defined by the CAA.

More detail regarding air quality regulations, methodology, and the National and Pennsylvania Ambient Air Quality Standards is found in the project's 2016 Final Air Quality Technical Report.

3.8.2. Affected Environment

According to EPA's *Green Book for Nonattainment Areas for Criteria Pollutants* (January 30, 2015), Monroe County is in attainment for all six criteria air pollutants. Attainment means that the air pollutant concentration levels are within acceptable levels with respect to the NAAQS.

3.8.3. Environmental Consequences

Monroe County was designated a maintenance area at the time of the 1997 ozone NAAQS revocation on April 6, 2015 and was also designated attainment for the 2008 ozone NAAQS on May 21, 2012. Therefore, per the South Coast II decision, a conformity determination has been completed for the 1997 ozone NAAQS. The conformity determination includes the I-80 Reconstruction Project (Build Alternatives 2B or 2D). This conformity determination was completed consistent with CAA requirements, existing associated regulations at 40 CFR Parts 51.390 and 93, and the *South Coast II* decision, according to EPA's *Transportation Conformity Guidance for the South Coast II Court Decision* issued on November 29, 2018. Therefore, all regional conformity requirements have been satisfied.

Although regional conformity requirements have been met on a plan and program level, a project level hot-spot analysis was required. The results of the hot-spot analysis indicate that CO concentrations for the No-Build Alternative as well as Build Alternatives 2B and 2D would be within acceptable levels compared to the CO standards. This means that no air quality impact would occur with regard to CO under the No-Build Alternative or Build Alternatives 2B or 2D.

As stated above, the project is located in Monroe County, an area designated as in attainment for the PM_{2.5} and PM₁₀ NAAQS. Consequently, the project does not require a project-level conformity determination. According to the PM_{2.5} and PM₁₀ hot-spot analysis requirements established in the March 10, 2006 final transportation conformity rule (71 FR 12468), no further project-level air quality analysis for these pollutants is required.

The project is characterized as one with "low potential MSAT effects" since design year traffic is projected to be significantly less than 140,000 to 150,000 annual average daily traffic (AADT) thresholds that are provided in FHWA's 2017 Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. The AADT for the I-80 project study area mainline is estimated at 114,000 under Design Year Build (2045) conditions for Build



Alternative 2B, which has the highest AADT of the two Build Alternatives and is considered worst case. As a result, MSATs is not a pollutant of concern with regard to the project.

Therefore, the No-Build Alternative and Build Alternatives 2B or 2D would not cause or contribute to any violations of the NAAQS, worsen any existing violations, or interfere with the attainment of any applicable NAAQS.

3.8.4. Minimization and Mitigation

As Build Alternatives 2B or 2D would not cause air quality impacts, minimization and mitigation are not warranted.

3.9. Noise

3.9.1. Methodology and Regulatory Context

In accordance with 23 CFR Part 772.5, the project is defined as a Type I project warranting noise analysis. The FHWA and PennDOT established a noise analysis methodology and noise level criteria to assess the potential noise impacts associated with construction and use of transportation projects. Measurements of existing noise were obtained and characterized at 30 noise receptor sites to gain a thorough understanding of the existing noise environment. In addition, the noise analysis included noise projections for undeveloped lands. These sites were also modeled, and an additional 124 noise modeling "only" receptor sites were added to better quantify the effect of the improvements to noise-sensitive land uses within the project area. The project was divided into areas of common noise environment, referred to as Noise Study Areas (NSAs) (Figure 9). Noise modeling was completed for existing (2013), Design Year (2045) No-Build Alternative, and Design Year (2045) Build Alternatives 2B and 2D. Where noise impacts due to the project are identified, the feasibility and reasonableness of mitigating or abating noise impacts are assessed. The information presented in this section is supported by the project's 2016 Preliminary Noise Analysis technical report. Summary tables from the analysis are included in Attachment E for reference and show the following for Build Alternatives 2B and 2D:

- Future build noise levels
- Whether noise mitigation is warranted
- Mitigated noise levels
- Feasible/reasonable analyses

3.9.2. Affected Environment

Existing (2013) worst-case noise levels exceed FHWA/PennDOT Noise Abatement Criteria (NAC) at 52 receptor sites representing 112 residences, four commercial properties and one cemetery. The dominant source of noise at each measured location is traffic on I-80 and/or the local roadway network. As expected, land uses in closest proximity to I-80 experience the highest noise levels within the project area.

3.9.3. Environmental Consequences

The results of noise modeling are the following (also refer to Attachment E):



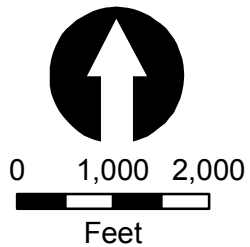
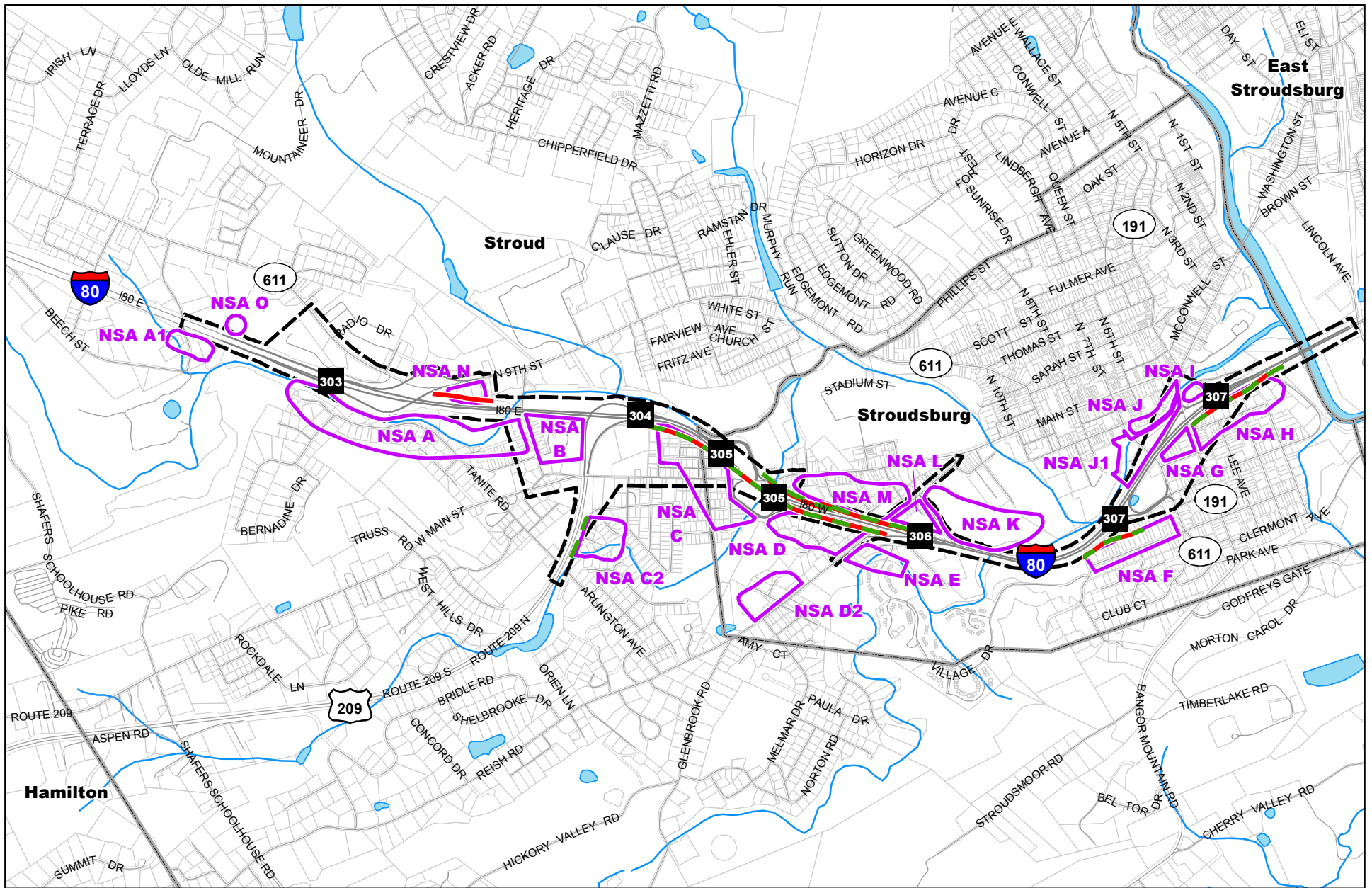
- No-Build Alternative - Noise levels will increase by approximately one decibel (dBA) throughout the project study area and exceed the NAC at 66 receptor sites representing 152 impacted units (residences, businesses, and one cemetery);
- Build Alternative 2B – Noise levels are projected to increase, as a result of widening and reconstruction of I-80 and the associated ramps. Noise levels would exceed the NAC at 75 receptor sites representing 134 impacted units (residences, businesses, and one cemetery); and,
- Build Alternative 2D – Noise levels are also projected to increase and would exceed the NAC at 69 receptor sites representing 108 impacted units (residences, businesses, and one cemetery).



PennDOT is also concerned with noise generated during the construction phase of the project. The use of heavy machinery and construction techniques may cause temporary impacts to noise-sensitive land uses in close proximity to construction work zones. Based on review of the project area, no significant, long-term construction-related noise impacts are anticipated. Existing noise levels are relatively high along I-80, with significant noise influences from heavy trucks and high traffic volumes; therefore, temporary construction noise will be minimal in comparison. Any construction-related noise impacts that do occur are anticipated to be temporary in nature and would cease at the completion of the project.



3.9.4. Minimization and Mitigation

As noise impacts are predicted for Build Alternatives 2B and 2D, FHWA/PennDOT procedures require a feasibility and reasonableness evaluation of noise abatement strategies to reduce the noise impacts. The evaluation focused on noise barriers because, unless additional property acquisitions occur, insufficient land area is available for other strategies such as berms, buffer zones, and traffic control measures. PennDOT's preliminary noise barrier analysis determined that the use of noise barriers is feasible and reasonable at several impacted locations. Refer to Attachment E for summary tables of the feasible/reasonableness evaluation, and see Figure 9 for a map of proposed noise wall locations. The project will be reassessed for potential noise impacts during final design. Final recommendations on the construction of any noise abatement measures will be determined after a detailed noise analysis has been completed and public input has been received in final design.

To help minimize construction-related noise impacts, the contractor would use equipment adapted to operate within reasonable noise levels, and would conduct construction work in a responsible manner, to limit annoyance to the occupants of nearby properties.



 Area of Potential Effects for the Noise Study
 Noise Study Area (NSA) Boundary

 Noise Barrier - Feasible and Reasonable for Alt 2D
 Noise Barrier - Feasible and Reasonable for Alt 2B



I-80 RECONSTRUCTION NOISE STUDY

Source: Monroe County, PA,
& McCormick Taylor, Inc.



3.10. Historic Properties

3.10.1. Methodology and Regulatory Context

FHWA is responsible for reviewing projects in accordance with the state and federal laws that protect cultural resources. The Pennsylvania State Historic Preservation Office (PA SHPO) provides comments and/or concurrence. 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 are the primary federal legislation. The Pennsylvania History Code (37 Pa. Cons. Stat. §§500 et seq.) is the primary state legislation. Historic values of the environment are also protected by Article 1, Section 27 of the Pennsylvania Constitution. These laws require consideration of the project's potential effects on both historic and archaeological resources.

The 1961 Historic District Act, also known as Act 167, authorizes municipalities to create and designate historic districts under local ordinance. The Pennsylvania Municipalities Planning Code (Act 67 & 68, Article 6, Section 603-8-7-G-2 and Section 604) authorizes municipalities to use zoning for protection and preservation purposes. The Municipalities Planning Code (as revised in 2000) also includes a provision for historic preservation planning. Act 167 historic districts are not specifically protected by either the State History Code or Section 106 unless they are also listed or eligible for listing on the National Register of Historic Places (NRHP).

The assessment involved the following steps:

- Initiation of Section 106 consultation – Consultation for the project was initiated with the PA SHPO, also known as the Pennsylvania Historical and Museum Commission (PHMC), on August 7, 2013. Also in August of 2013, PennDOT solicited consulting parties through ProjectPATH, where 188 individuals and organizations were offered the opportunity of consulting party status. Consulting parties may include Native American tribes/nations, individuals, organizations, and government agencies with a demonstrated interest in the project. A consulting party may provide input regarding matters arising from the Section 106 process. Solicitation also occurred through direct mailings to an additional 155 groups and property owners. Twenty-nine positive responses were received. PennDOT provided opportunity for consulting parties to comment on all subsequent steps in the Section 106 process.
- Identify an Area of Potential Effects (APE) – The APE is the “geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist” [36 CFR Part 800.16(d)]. The APE for the proposed project was determined in consideration of both direct and indirect effects, including potential visual and audible effects. The APE for historic properties is the area immediately adjoining the proposed project and includes the Area of Potential Impacts (API) as well as the area immediately surrounding the API for the consideration of potential visual and noise impacts. PHMC concurred on the APE on November 13, 2014, the Monroe County Planning Commission issued their concurrence on November 26, 2014, and Kevin Leondi (another consulting party) also concurred; copies of the concurrence letters are provided in Attachment F.



- Identify historic properties – PennDOT identified properties that are listed on, eligible for listing on, or potentially eligible for listing on the NRHP and locally designated historic preservation districts in coordination with PHMC. Copies of these coordination letters are included in Attachment F.
- Assess the effects of the alternatives on historic properties by applying the criteria of adverse effect under Section 106. PennDOT determined the proposed project will have no adverse effect to historic properties.

More detail on methodology, regulatory context, and the historic properties eligibility is in the project's Historic Structures Survey & Determination of Eligibility Report.

3.10.2. Affected Environment

Table 7 below lists the NRHP-listed and eligible historic properties within the APE; Figure 10 shows an overview of the locations of these features. Refer to the project's Historic Structures Survey & Determination of Eligibility Report Volumes 1 and 2 for detailed resource mapping. The APE includes individual historic properties as well as defined districts.

- Four previously identified NRHP-listed and eligible resources are located within the APE: Kitson Woolen Mill, Stroudsburg Commercial Historic District, Stroudsburg U.S. Post Office, and Wallace Hardware Building. The NRHP status of these resources was confirmed as part of the architectural survey.
- Twelve properties were considered potentially eligible for the NRHP and were documented through the completion of standard Pennsylvania Historic Resource Survey (PHRS) forms. These properties included the Stroud-Hollinshead House, Camp Kirkwood, Kautz-Kintz House, Hollinshead Cemetery, South Stroudsburg, Howard Palmer Property, Mengle House, Perfection Shoe Machinery Company, Stroudsburg Cemetery, H.B. Marsh & Sons, Inc. Foundry, Stroudsburg Motor Supply Company, and the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works.
 - PennDOT, on behalf of FHWA, initially determined the Stroud-Hollinshead House as National Register eligible under Criterion C. However, the PHMC believed the Stroud-Hollinshead House lacks the significance required for NRHP eligibility and disagreed with PennDOT's determination. PennDOT moved forward considering the property not eligible.
 - The Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works was determined eligible for the NRHP.
 - The remaining ten properties were determined not eligible for NRHP listing.
- Twenty-two properties were photo-documented as part of the project. These properties are located within the APE, but have a low potential to be impacted by Build Alternatives 2B or 2D. No formal recommendations are being made at this time for these resources. Further investigations would be required if the project plans are revised and any of these resources has the potential to be impacted.



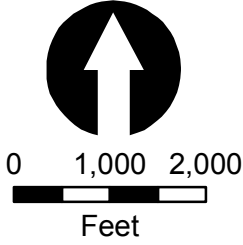
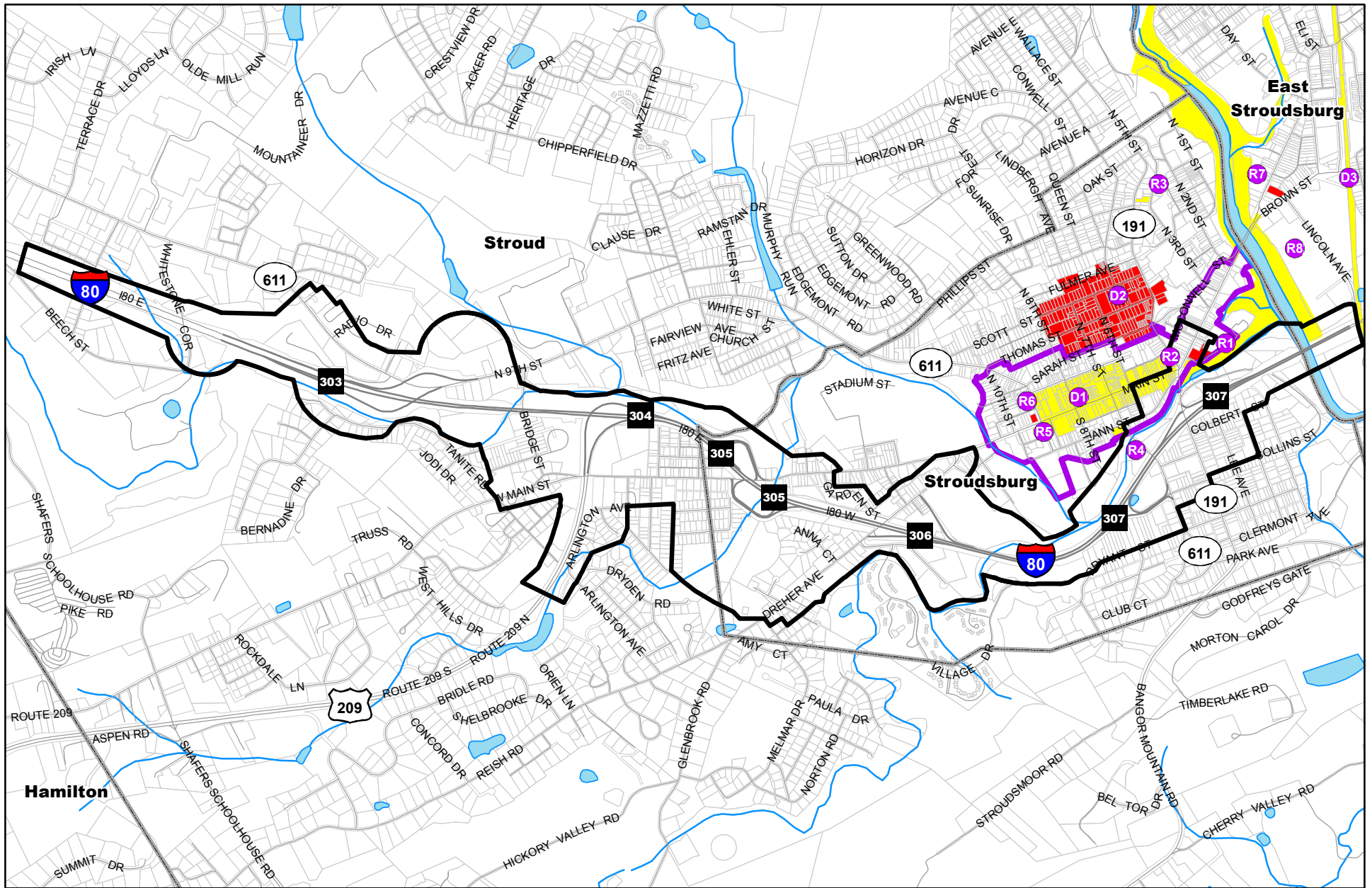
- Twenty-six properties were documented on abbreviated PHRS forms. These properties are recommended not eligible for the NRHP due to various reasons, including lack of architectural distinction and/or lack of significance.
- Ten groupings were documented as part of the survey. Each grouping represents a cluster of similar resources by built date, style, and/or function. Each grouping was documented as a single collection, or grouping, rather than surveyed individually. The ten groupings are recommended not eligible for the NRHP due to a combination of the lack of architectural distinction and historical significance as well as a loss of integrity of design and layout.





In summation, a total of five resources located within the APE are listed or eligible for listing in the NRHP. Table 7 lists these resources.












Table 7: NRHP-Listed and Eligible Resources

Resource	Location	Description	NRHP Status
Kitson Woolen Mill (#064337)	Stroudsburg Borough	Late 19 th -early 20 th century Italianate style mill.	Listed, Criterion A
Stroudsburg Commercial Historic District (#141880)	Stroudsburg Borough	Downtown commercial district.	Eligible, Criteria A & C
Stroudsburg U.S. Post Office (#064420)	Stroudsburg Borough	Art Deco style post office built in 1933-34.	Eligible, Criteria A & C
Wallace Hardware Building (#038768)	Stroudsburg Borough	C. 1857, C. 1902 Italianate style department store.	Eligible, Criterion A
Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works	Stroudsburg and East Stroudsburg Boroughs	C. 1960	Eligible, Criterion A

Additionally, a portion of the locally-designated Stroudsburg Historic Preservation District is located within the APE and is shown on Figure 10. The Stroudsburg Historic Preservation District is a local preservation ordinance (certified by the PHMC), which is not the equivalent of NRHP-eligible or listed status. Therefore, compliance with Section 106 as part of the proposed project is not required.



-  Area of Potential Effects for Historic Resources
-  Stroudsburg Historic Preservation District-HDA
-  NRHP Listed
-  NRHP Eligible

KEY	NAME	KEY	NAME
	R1 Kitson Woolen Mill; Holland Thread Company		R7 East Stroudsburg Armory
	R2 Wallace Hardware Building		R8 Stroudsburg & East Stroudsburg Unit No. 1 Local Flood Protection Works
	R3 Little Bethel African Methodist Church		D1 Stroudsburg Commercial Historic District
	R4 Stroudsburg U.S. Post Office		D2 Academy Hill Historic District
	R5 George Tillotson House		D3 Delaware, Lackawanna & Western Railroad District
	R6 Stroud Mansion		



I-80 RECONSTRUCTION HISTORIC RESOURCES

Source: CRGIS, Monroe County, PA, & McCormick Taylor, Inc.



3.10.3. Environmental Consequences

The No-Build Alternative would not have direct or indirect impacts on historic properties.

In accordance with Section 106, and in coordination with the PHMC, FHWA has made the following determinations of effect:

- **Build Alternative 2B:** Widening the Broad Street and I-80 bridges would require acquisition of portions of the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works (Levee System) property (0.04 acres and 0.16 acres, respectively). The impacted element of the property would be the portion of the levee embankment immediately adjacent to each bridge. Build Alternative 2B would not impact other elements of the Levee System property that make the property historically significant. Therefore, the proposed project was determined to have no adverse effect on the Levee System as described in the project's Determination of No Adverse Effect Memorandum prepared by PennDOT and posted to ProjectPATH on November 7, 2018. The effects determination further identified no effect to the Stroudsburg Commercial Historic District, the Kitson Woolen Mill, and the Wallace Hardware Building. PHMC concurred with this determination on November 27, 2018 (Attachment F). Further, the U.S. Post Office was determined to be outside the APE in the *Effects Memo*. Thus, Build Alternative 2B would not impact other NRHP-eligible or listed historic properties in the project area.
- **Build Alternative 2D:** In areas where historic resources are present, Build Alternatives 2B and 2D are identical. Therefore, the impacts identified for Build Alternative 2B above also apply to Build Alternative 2D (no adverse effect).

Within the local Stroudsburg Historic Preservation District, Build Alternatives 2B and 2D involve the widening and replacement of the Broad Street Bridge over McMichael Creek. The existing structure is a 2-span, steel stringer with a concrete deck that was built in 1955. The bridge railing consists of concrete posts and open steel railing. The bridge was previously determined ineligible for the NRHP.

3.10.4. Minimization and Mitigation

Design refinements resulted in minimizing the overall project footprint, which resulted in the Stroudsburg U.S. Post Office ultimately being outside of the APE. Further minimization measures included reducing the footprint of work within the National Register boundaries of the other four properties. In the case of the Levee System, a special provision will be prepared as part of the construction documents for sheeting or other measures to protect the berm. Since the proposed project will have no adverse effect on NRHP-listed or eligible historic properties, no mitigation is necessary.

Stroudsburg Borough requested the historic character of the area be considered when designing the new Broad Street Bridge over McMichael Creek. The Borough would prefer an open railing along the bridge barrier. PennDOT will work with local officials to identify a railing that meets both aesthetic and safety requirements. PennDOT will coordinate with the Borough regarding the railing options in final design.



3.11. Archaeology

3.11.1. Methodology and Regulatory Context

Section 106 of the NHPA protects archaeological sites as well as historic properties (see methodology and regulatory context in Section 3.10.1). The APE for archaeology is the API, the limits of physical project disturbance. PennDOT completed a Phase IB/II archaeological survey in the APE to determine the potential for and significance of archaeological sites. The survey included desktop research as well as field investigations. More detail regarding methodologies may be found in the project's 2017 Phase IB/II Archaeological Identification and Evaluation Survey report and 2018 Addendum Phase 1B Archaeological Identification and Evaluation Survey Negative Survey Form.

3.11.2. Affected Environment

The rich history and prehistory of Monroe County suggest the potential for archaeological resources in the APE. However, because of previous disturbance to build I-80 and other development in the APE, predictive modelling conducted prior to the project's Phase 1B/II survey indicates that 98 percent of the APE has low potential for intact pre-contact resources, one percent medium probability, and 0.7 percent high probability. For historic archaeological resources, the model identified 75 percent of the APE as having low probability, 11 percent medium probability, and 13 percent high probability.

3.11.3. Environmental Consequences

The No-Build Alternative would not have direct or indirect impacts on archaeological resources.

The results of the project's Phase IB/II archaeological surveys identified 32 archaeological sites in the APE for Build Alternatives 2B and 2D. Of these, four were recommended Not Eligible for the National Register of Historic Places. The portions of the remaining 28 sites that are within the APE are recommended as non-contributing to the overall eligibility of the sites. As a result of these findings, no further archaeological work within the APE is recommended. The PHMC concurred with these findings in their September 21, 2017 letter (Attachment F). PennDOT did not seek PHMC concurrence on the Addendum Phase 1B Archaeological Identification and Evaluation Survey Negative Survey Form results since there are no sites present, and one concurrence from the Delaware Nation was received within the 30-day review period (Attachment F). Therefore, Build Alternatives 2B and 2D would not impact significant archaeological resources.

Note that an archaeological survey at one proposed stormwater basin located in the southeast quadrant of the I-80 and US 209 interchange was not completed due to soil and groundwater contamination of hazardous materials. Further archaeological testing at this site to assess potential impacts will be conducted once the contamination has been remediated. A deferral of archaeology for this site was processed and is included in Attachment F.



3.11.4. Minimization and Mitigation

An archaeological survey will be conducted in the southeast quadrant of the I-80 and US 209 interchange once the hazardous materials contamination has been remediated.

3.12. Section 4(f) Resources

3.12.1. Methodology and Regulatory Context

FHWA cannot approve a transportation project that uses a property that is protected by Section 4(f) of the USDOT Act of 1966 (49 USC 303(c)) unless FHWA determines as defined in 23 CFR Part 774.3(a)(1) that:

- "There is no feasible and prudent avoidance alternative, as defined in 23 CFR Part 774.17, to the use of land from the property, and
- The action includes all possible planning, as defined in 23 CFR Part 774.14, to minimize harm to the property resulting from such use; or
- The FHWA determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, would have a *de minimis* impact, as defined in 23 CFR Part 774.17, on the property."

PennDOT prepared a Section 4(f) Evaluation in compliance with the regulations of Section 4(f), FHWA's Section 4(f) Policy Paper (FHWA 2012) and PennDOT's Section 4(f)/Section 2002 Handbook, Publication No. 349.

3.12.2. Affected Environment

Several properties that are protected by Section 4(f) are within the project study area. Note that historic properties listed or eligible for the NRHP are also protected by Section 4(f):

- **Rotary Creek Park (Borough of Stroudsburg):** This publicly owned and publicly accessible community park is located along McMichael Creek roughly between PA 191/Broad Street and the point where I-80 crosses McMichael Creek west of the PA 611/Park Avenue Bridge.
- **Ann Street Park (Borough of Stroudsburg):** Another publicly owned and publicly accessible park located along the north side of McMichael Creek at the PA 191/Broad Street and Ann Street intersection.
- **Stroudsburg & East Stroudsburg Unit No. 1 Local Flood Protection Works (Levee System):** The Levee System protects Stroudsburg Borough from flood events associated with Brodhead Creek and the lower portion of McMichael Creek. The southern boundary of the Levee System is at the I-80 Bridge over Brodhead Creek. The Levee System is determined eligible for listing on the NRHP (Section 3.10.2).

The portion of the Levee System within the project study area along Broad Street does not possess a recreational component. The Levee System is completely fenced off



along Broad Street and behind the adjacent business. There appears to be a gap in fence approximately 150 feet downstream (northeast) of the Broad Street Bridge, but the bank is steep with no stairs. The stream-side of the levee consists of a tall wall and stormwater outfall that is impassable. Further, there is no paved or earthen pathway on top of the levee. Therefore, the Levee System is not considered a recreational Section 4(f) resource.

- **Stroudsburg Commercial Historic District:** This historic district is located along Main Street in Stroudsburg from the five-point intersection (intersection of BUS 209/Main Street, North Fifth Street, PA 191/Broad Street, and Ann Street) west to PA 611/Ninth Street. The historic district is NRHP-eligible (Section 3.10.2).
- **Kitson Woolen Mill:** A NRHP-listed property on the south side of Main Street and east of the five-point intersection (Section 3.10.2).
- **Wallace Hardware Building:** A NRHP-eligible property on the south side of Main Street, east of the five-point intersection, and west of the Kitson Woolen Mill (Section 3.10.2).
- **Stroudsburg U.S. Post Office:** A NRHP-eligible property in the southwest quadrant of the Ann Street and PA 611/Park Avenue intersection (Section 3.101.2).

3.12.3. Environmental Consequences

The No-Build Alternative would not affect any Section 4(f) resources.

Build Alternatives 2B and 2D would use portions of Rotary Creek Park, Ann Street Park, and the Levee System at the PA 191/Broad Street and I-80 Bridges because bridge widening would be required to implement Build Alternatives 2B or 2D, and the bridges are adjacent to the Section 4(f) properties. Maps showing Build Alternatives 2B and 2D, the API, and the Section 4(f) properties are provided in Attachment C. PennDOT completed a Section 4(f) *de minimis* use form for each property. A *de minimis* impact determination is appropriate because no adverse effect would occur from either Build Alternative to the features, attributes, or activities that qualify Rotary Creek Park and Ann Street Park for Section 4(f) protection, and because both Build Alternatives 2B and 2D are anticipated to have no adverse effect on the Levee System property as defined by Section 106 of the National Historic Preservation Act. A completed and signed *de minimis* use form for each property is provided in Attachment G.

With both Build Alternatives 2B and 2D, the existing sidewalk within the Stroudsburg Commercial Historic District along Ann Street would be impacted, but no permanent land acquisition within the historic district boundary would occur. The sidewalk would be replaced as needed in order to facilitate the tie-in of the proposed PA 191/Broad Street Bridge replacement with the five-point intersection. The existing sidewalk is modern and constructed of concrete with ADA-style ramps. As such, the sidewalk is a non-contributing element to the historic district. Since Section 4(f) only applies to contributing elements of historic districts, any impacts to the sidewalk would not be considered a Section 4(f) use.



Furthermore, the Kitson Woolen Mill, Wallace Hardware Building, and Stroudsburg U.S. Post Office are all outside the API and would not be impacted by either Build Alternative 2B or 2D; therefore, there will be no use of these Section 4(f) properties. Section 4(f) use forms for the Stroudsburg Commercial Historic District, Kitson Woolen Mill, Wallace Hardware Building, and Stroudsburg U.S. Post Office are not needed since there will be no Section 4(f) use for any of these properties with either Build Alternative 2B or 2D.

3.12.4. Minimization and Mitigation

The completed forms in Attachment G describe measures to minimize harm to Rotary Creek Park, Ann Street Park, and the Levee System properties.

3.13. Contaminated Materials and Hazardous Waste

3.13.1. Methodology and Regulatory Context

A Phase I Environmental Site Assessment (ESA) of the project area was undertaken in accordance with PennDOT's Publication 281, *Transportation Project Development Process Waste Site Evaluation Procedures Handbook*. The purpose of the Phase I ESA was to identify existing and potential hazardous substances within and near the project area. Activities in the Phase I ESA included research into the current and previous ownership and uses of properties, examination of the potential for environmental concerns related to the properties, and assessment of the potential for contaminated materials and hazardous waste to impact the project. Additional detail on the Phase I ESA is provided in the project's Phase I Environmental Assessment Report.

Phase III ESAs were conducted for nine sites based on the findings of the Phase I ESA and in consultation with the Monroe County Conservation District and PennDOT Bureau of Maintenance and Operations. The Phase III ESAs involved collection and analysis of surface soil samples, subsurface soil samples, and groundwater samples to determine the presence, characteristics, and extent of soil and groundwater contamination on the sites. The methodology was in accordance with the PennDOT-approved Field Sampling Plan and the methods and procedures. Additional detail on the Phase III ESA is provided in the project's I-80 Reconstruction Phase III Environmental Assessment Report. The locations of the sites for which Phase III ESAs were conducted are depicted on Figures 2 and 3 of the project's Phase III Environmental Site Assessment Report.

3.13.2. Affected Environment

There were twenty-nine sites of potential concern identified in the Phase I ESA. Of those sites, Phase III ESAs were conducted at nine of the sites, while no further action was recommended for the remaining twenty sites. The sites included in the Phase III ESA investigations are identified in Table 8 below.

As a result of the Phase III ESAs, no further actions are recommended for one of the nine sites of potential concern. The Klingel Cleaners and West Main Street PCE sites do not have contaminant concentrations above regulatory criteria. Based on the analysis of the samples collected, the sites do not pose a risk to human health. The remaining eight sites had



evidence of contaminants above the regulatory criteria. The contaminants of concern at each site are listed in Table 8 below.

Table 8: Phase III ESA Sites of Potential Concern

Site Name	Address/Location	Contaminants of Concern
APS Recycling	Katz Drive	PAHs ¹ , pesticides, metals, and PCBs ² in soil; VOC ³ and metals in groundwater
Biobuffer Solutions, Inc./Pocono Foundry	Foundry Street	Metals and PAHs ¹ in soil; metals in groundwater
Former Gas Station	440 Main Street	Lead in soil
Former Research Laboratory/Chemical Plant	70 Storm Street	SVOCs ⁴ in soil
Klingel Cleaners & West Main Street PCE Site	1710 West Main Street	None
Main Street Stop & Go	1650 West Main Street	Lead in soil; VOC ³ and lead in groundwater
Pocono Gas Station	1230 West Main Street	Lead in soil and groundwater
Rinehart EM, Inc.	1875 West Main Street	PCBs ² and metals in soil; metals in groundwater
Perfection Shoe Company	Beers Street	SVOCs ⁴ and metals in soil
¹ PAH = Polycyclic aromatic hydrocarbon ² PCB = Polychlorinated biphenyl ³ VOC = Volatile Organic Compound ⁴ SVOC = Semi-volatile Organic Compound		

3.13.3. Environmental Consequences

Future projects in the No-Build Alternative, such as programmed bridge replacements (refer to Section 2.6.1), have the potential to encounter contaminated soils and/or groundwater. It will be the responsibility of the implementing agency to assess and resolve this potential issue as each project is implemented.

Due to the presence of sites of concern in the project area, soil excavation and movement during construction of each Build Alternative has the potential to encounter contaminated soils and/or groundwater. In addition, the construction of unlined basins on the hazardous waste impacted sites may lead to leaching of contaminants from the soil to groundwater, further smearing of soil contamination and/or the creation or progression of groundwater contaminant plumes.

3.13.4. Minimization and Mitigation

For Build Alternatives 2B and 2D, PennDOT will develop and implement a Waste Management Plan (WMP) and a site-specific Health and Safety Plan (HASP) for the eight hazardous waste



sites to address soil and groundwater management, environmental health, worker safety, and public health safety during project construction activities for all sites. The WMP and HASP would address all known contaminants that were identified during the Phase III ESA investigations. The WMP would outline the specific areas of impact, the magnitude, and the recommendations on management, including phasing and staging of material. Additionally, any stormwater basins at the eight sites will be lined, where necessary, to prevent further soil and groundwater contamination.

PennDOT will review and consider the sampling data during the design process, with a focus on minimizing disturbance of area containing contaminated materials to the extent reasonably feasible, and handling and disposing of such materials in accordance with federal, state, and local regulations.

3.14. Water Resources

3.14.1. Methodology and Regulatory Context

Water resources in Pennsylvania are protected by federal and state regulations including but not limited to: Sections 401 and 404 of the Clean Water Act; Executive Order 11990 (Wetlands); the Safe Drinking Water Act; 25 Pa. Code Chapter 105 Dam Safety and Waterway Management; 25 Pa. Code Chapter 93.3 Designated Water Uses and Water Quality; Executive Order 11988 (Floodplains); USDOT Order 5650.2, Floodplain Management and Protection; and 25 Pa. Code Chapter 102 Erosion and Sediment Control.

Water resources in the project study area, including groundwater, surface waters, floodplains, floodways, and wetlands, were identified and characterized using existing online information and field investigations. The primary sources utilized for the desktop investigation included the Pennsylvania Department of Conservation and Natural Resources (DCNR) PaGEODE mapping application, Geology and Groundwater Resources of Monroe County, Pennsylvania (1979), 25 Pa. Code Chapter 93.9: Designated Water Uses and Water Quality Criteria, Pennsylvania Department of Environmental Protection (PADEP)-approved updated 2006 Act 167 (Stormwater Management Plan) for the Brodhead Creek Watershed, the Federal Emergency Management Agency's (FEMA) 2013 Flood Insurance Study and Flood Insurance Rate Map for Monroe County, and the USACE 2012 Wetlands Delineation Manual: Northcentral and Northeast Region (Version 2.0). Field investigations supplemented available information and included assessment of the location, physical characteristics, and general quality of project study area surface waters. The jurisdictional limits of the field-identified surface waters were delineated based on their observed Ordinary High Water Mark (OHWM). Wetlands were delineated and surveyed using the USACE methodologies outlined in the resources identified above.

3.14.2. Affected Environment

According to the online EPA Sole Source Aquifer database, a sole source aquifer does not underlie the project study area. A search of the Pennsylvania Groundwater Information System (PaGWIS) database shows a number of groundwater wells within the project area. The existence and location of these wells will be confirmed as the design is advanced.



Surface waters in the project study area are part of the Middle Delaware River Watershed and include Brodhead Creek, McMichael Creek, Pocono Creek, Little Pocono Creek, and tributaries to these surface waters. I-80 roughly parallels Pocono Creek and McMichael Creek throughout the project study area. Existing I-80 roadway and interchange ramps cross over surface waters on existing bridges in the following primary locations: the I-80 bridge at Pocono Creek, I-80 bridge at Little Pocono Creek, Interchange 305 ramps at Little Pocono Creek, I-80 bridge at McMichael Creek, and the I-80 bridge at Brodhead Creek. Table 9 lists the surface waters identified within the project study area.

Brodhead, McMichael, and Pocono Creeks are identified as recreationally navigable in *Keystone Canoeing* (Gertler 2015). In addition, Brodhead Creek is listed as navigable on PADEP's Submerged Lands License Agreement program list.

Brodhead, McMichael, and Pocono Creeks have FEMA-defined floodways and 100-year floodplains, while Little Pocono Creek only has a defined FEMA 100-year floodplain. The largest floodway/floodplain areas are located at the confluence of Pocono and McMichael Creeks and the confluence of McMichael and Brodhead Creeks. McMichael Creek and Brodhead Creek have a history of flooding and are now subject to flood control projects implemented by the PADEP. An example is the non-federal Levee System that has been established along Brodhead and McMichael Creeks. The identified surface waters and their FEMA-mapped floodways and floodplains are shown on the figures in Attachment C. The boundaries of all watercourses within the project study area have been delineated, and a preliminary jurisdictional determination was issued on September 14, 2018 by the USACE (available in the project's technical file).

Currently drainage from I-80 enters the surrounding surface waters without an existing system of stormwater management basins to control the rate, volume, or quality of the runoff. This unregulated runoff results in flooding, water quality, and sedimentation issues within the watershed.



Table 9: Project Study Area Surface Waters

Watercourse	Length (linear feet)	Stream Type	Number ¹	Chapter 93 Designated (Existing) Use ²	PFBC Trout Stream Classification ³	PFBC Water Trail ⁴
Brodhead Creek	451	Perennial	1	TSF, MF (CWF, MF)	Stocked trout and natural reproduction of trout	No
UNTs to Brodhead Creek	560	Intermittent	2	TSF, MF	Stocked trout and natural reproduction of trout	No
UNT to Brodhead Creek	394	Ephemeral	1	TSF, MF	Stocked trout and natural reproduction of trout	No
McMichael Creek	5,733	Perennial	1	HQ-CWF, MF & TSF, MF	Stocked trout and natural reproduction of trout	No
UNTs to McMichael Creek	2,149	Perennial	7	HQ-CWF, MF & TSF, MF	Stocked trout and natural reproduction of trout	No
UNTs to McMichael Creek	376	Intermittent	1	HQ-CWF, MF & TSF, MF	Stocked trout and natural reproduction of trout	No
UNTs to McMichael Creek	806	Ephemeral	3	HQ-CWF, MF & TSF, MF	Stocked trout and natural reproduction of trout	No
Pocono Creek	7,068	Perennial	1	HQ-CWF, MF	Class A wild brown trout, stocked trout, and natural reproduction of trout	No
UNTs to Pocono Creek	2,214	Perennial	4	HQ-CWF, MF	Class A wild brown trout, stocked trout, and natural reproduction of trout	No



Watercourse	Length (linear feet)	Stream Type	Number ¹	Chapter 93 Designated (Existing) Use ²	PFBC Trout Stream Classification ³	PFBC Water Trail ⁴
UNTs to Pocono Creek	2,490	Intermittent	4	HQ-CWF, MF	Class A wild brown trout, stocked trout, and natural reproduction of trout	No
UNTs to Pocono Creek	84	Ephemeral	1	HQ-CWF, MF	Class A wild brown trout, stocked trout, and natural reproduction of trout	No
Little Pocono Creek	1,902	Perennial	1	HQ-CWF, MF	Natural reproduction of trout	No
UNTs to Little Pocono Creek	115	Perennial	1	HQ-CWF, MF	Natural reproduction of trout	No
Total	24,342					

A preliminary jurisdictional determination regarding the surface waters listed in this table was issued on September 14, 2018 by the USACE.

¹Number = quantity of the stream type in project study area

²Designated Use = 25 Pa. Code § 93.9c. Existing Use = 25 Pa. Code § 93.1; PADEP's Existing Use Classification

³Pennsylvania Fish and Boat Commission (PFBC) Trout Stream = the designation by PFBC of waters that support trout

⁴PFBC Water Trail = the Pennsylvania Fish and Boat Commission's list of waters that serve as trails

UNT = Unnamed tributary; TSF = Trout Stocking; HQ = High Quality; CWF = Cold Water Fishes; MF = Migratory Fishes

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The boundaries of the freshwater wetland areas possessing all three wetland criteria (and therefore potentially under the jurisdiction of the USACE and/or PADEP) within the project study area are shown in Attachment C and summarized in Table 10 below.

Most of the wetlands in the project study area have been altered by past development, including the original construction of I-80. The wetlands typically are in or adjacent to project study area streams and floodplains and since all of the streams within the project study area are naturally reproducing trout streams, the wetlands are considered exceptional value wetlands under 25 Pa. Code Chapter 105.17(1)(iii). Project area wetlands are informally identified as three different types based on their hydrology sources: natural, groundwater-driven; floodplains with additional groundwater contribution; and stormwater management structures. The wetlands are further classified based on the dominant vegetative cover types, as reflected in Table 10 below. The boundaries of all wetlands within the project study



area have been delineated, and a preliminary jurisdictional determination was issued on September 18, 2018 by the USACE (available in the project technical file).

Table 10: Project Study Area Wetlands

Wetland Type ¹	Area (acres)	Number ²
PEM	0.72	12
PEM/SS	1.33	2
PEM/SS/FO	0.60	2
PEM/FO	0.48	2
PSS/FO	0.10	1
PFO	0.38	1
PFO/EM	0.12	1
PFO/EM/SS	1.20	1
PUB	0.32	1
Total	5.25	23

A preliminary jurisdictional determination regarding the wetlands described in this table was issued on September 14, 2018 by the USACE.

¹Wetland Type is based on the Cowardin classification of each resource. P = Palustrine; EM = Emergent; SS = Scrub-Shrub; FO = Forested; UB = Unconsolidated Bottom

²Number = quantity of the wetland type in project study area

3.14.3. Environmental Consequences

The No-Build Alternative is not expected to require new waterway crossings or cause water resources impacts because of the minor nature of the proposed activities. The No-Build Alternative will also not provide opportunities to address existing drainage, runoff, water quality, and sedimentation issues that are present in portions of the project study area, which contribute to the degradation of water resources.

Build Alternatives 2B and 2D would replace four main surface water crossings: I-80 over Pocono Creek west of US 209, I-80 over McMichael Creek east of SR 2004/Dreher Avenue, PA 191/Broad Street over McMichael Creek and I-80 over Brodhead Creek. In addition, several smaller stream crossing structures would also be improved or replaced. The Alternative 2B and 2D designs would follow PADEP's hydrologic and hydraulic procedures to allow passage of ordinary water flows as well as water flows from regulated storm events without worsening existing flooding conditions. The construction of the new bridge structures over Pocono, McMichael, and Brodhead Creeks will temporarily affect the navigability of these streams. The streams will either be closed with a designated portage route or a portion



of the channel will remain open to boaters during construction. Nevertheless, the stream channels will be open to boaters after construction is complete. The proposed bridges will not impede recreational navigability.

Build Alternatives 2B and 2D would impact surface waters, including 100-year floodplains and wetlands as summarized in Table 11. Wetlands impacts are broken down by dominant cover type (i.e. Cowardin classification) in Table 12. These impacts are primarily the result of widening I-80 and impacting surface waters that run parallel and in close proximity to the roadway and its associated facilities. In Build Alternatives 2B and 2D, impacts at bridges would require minor amounts of fill that would not substantially change the amount, quality, or characteristics of waterways and wetlands. Placement of fill in waterways and wetlands will require permits and mitigation to offset the impacts.

Build Alternatives 2B and 2D would provide a stormwater management system with basins along I-80 to address drainage, runoff, water quality, and sedimentation issues associated with the existing roadway conditions. The proposed stormwater management system would control the rate, volume, and quality of runoff from I-80. Proposed stormwater basins and identified surface waters for each Build Alternative are depicted on the Environmental Resources Mapping in Attachment C.

Table 11: Surface Water Impacts for Build Alternatives 2B and 2D

Water Resource	Build Alternative 2B	Build Alternative 2D
Streams (linear feet)	9,540	9,140
Class A Wild Trout Streams (linear feet)	1,791	2,144
100-year Floodplains (acres)	29.3	25.8
Floodway (acres)	8.8	6.6
Wetlands (acres)	1.30	1.57



Table 12: Wetland Impacts by Type for Build Alternatives 2B and 2D

Wetland Type ¹	Build Alternative 2B (acres)	Build Alternative 2D (acres)
PEM	0.14	0.14
PEM/SS	0.49	0.75
PEM/SS/FO	0.01	0.01
PEM/FO	0.07	0.07
PSS/FO	0.22	0.22
PFO	0.35	0.35
PUB	0.03	0.03
Total	1.30*	1.57

¹Wetland Type is based on the Cowardin classification of each resource. P = Palustrine; EM = Emergent; SS = Scrub-Shrub; FO = Forested; UB = Unconsolidated Bottom
*The sum of the individual amounts listed does not add up to 1.30 due to individual rounding. The total wetland impact for Build Alternative 2B is 1.30 acres.

3.14.4. Minimization and Mitigation

PennDOT will examine means to avoid or minimize impacts to water resources through the use of design modifications and the implementation of best management practices (BMPs). Additionally, PennDOT will coordinate with the USACE, PADEP, and the Monroe County Conservation District to obtain permits for and identify the need for and appropriate type of mitigation to address unavoidable impacts to water resources. As needed, PennDOT will obtain the following permits and approvals: Section 404/Chapter 105 Joint Permit for activities in surface waters including wetlands, NPDES Permit for Stormwater Discharges Associated with Construction Activities, and Erosion and Sediment Control Plan approval.

PennDOT will also coordinate with the Pennsylvania Fish and Boat Commission (PFBC) and prepare aids to navigation (ATON) plans for the proposed work affecting Pocono, McMichael, and Brodhead Creeks. The ATON plans will notify boaters of the construction zones and identify safe passages around the work zones.

Furthermore, instream work restrictions will be followed to minimize impacts to trout streams within the project study area. For stocked trout streams, no instream work will be conducted from March 1 through June 15. The physical restriction zone includes the area that is stocked and 0.5 mile upstream of the upper stocked trout limit to and including 0.5 mile upstream of the confluence on all tributaries within that stream reach. For naturally reproducing trout streams, no instream work will be conducted from October 1 through December 31. For Class A wild trout streams (brown trout), no instream work will be conducted October 1 through April 1.



Since wetland impacts are anticipated to exceed the *de minimis* threshold of 0.05 acre, compensatory mitigation is anticipated. Wetland banking is the preferred compensatory mitigation option; however, there are no approved banking sites in Monroe County or within the affected watersheds. Therefore, constructed wetland replacement will most likely be necessary. The API and surrounding areas were assessed for potential mitigation site suitability. Features such as hydric soils, floodplains, and national wetlands inventory (NWI) mapped wetlands were identified as areas of positive suitability. Agricultural areas, developed areas, parks, cemeteries, forests, and other protected lands were removed from the suitability analysis. Based on this preliminary analysis, there are no potentially suitable wetland mitigation sites within or immediately adjacent to the API. The project team is looking at potential offsite wetland mitigation sites within the Delaware River watershed.

Since stream impacts are anticipated to be over 9,000 linear feet, stream mitigation will also likely be necessary. Many of the impacted streams within the API will only be temporarily impacted (e.g. temporarily dewatered to replace a bridge) and therefore will be restored and stabilized post-construction. For permanent stream impacts, there is limited opportunity for onsite or nearby stream mitigation due to the developed nature of the project corridor. Thus, the project team is looking at potential offsite stream mitigation sites within the Delaware River watershed.

As the project progresses, the potential mitigation sites will be identified, and a wetland and stream mitigation plan will be developed. As noted above in Table 12, there are several different types of wetlands that will be impacted. Each wetland type will be replaced at a minimum area ratio of 1:1 and provide the same biological and physical functions and values of the impacted wetlands. Stream mitigation may include replacement through the creation of new stream channels or restoration and enhancement of existing streams.

PennDOT will develop and implement an approved Post-Construction Stormwater Management Plan for the project to protect water resources. Plan goals will be to preserve the integrity of stream channels and the quality of water resources that receive drainage from I-80 to the extent reasonably feasible. Specific techniques such as infiltration and riparian buffers have been part of the assessment to date. The quality and quantity of stormwater runoff will be managed through the use of preventative non-structural BMPs where possible and through mitigation using structural BMPs, such as the proposed basins and establishment of buffers.

3.15. Threatened and Endangered Species

3.15.1. Methodology and Regulatory Context

Threatened and endangered species are protected by federal and state regulations, including but not limited to: the Fish and Wildlife Conservation Act of 1980 (16 U.S.C 2901-2911), the Fish and Wildlife Coordination Act of 1958, the Migratory Bird Treaty Act of 1918 (16 USC 703-712), Endangered Species Act of 1973, the Bald and Golden Eagle Protection Act of 1940 (16 USC 668-668d), Section 404/401 of the Clean Water Act, Wild Resource Conservation Act (32 Pennsylvania Statute 5301-5314), 17 Pa. Code Chapter 45 Conservation of Pennsylvania Native Wild Plants, and 34 Pa. Code Chapter 21 Game or Wildlife Protection and Wild Resource Conservation Act (32 Pennsylvania Statute 5301-



5314). In Pennsylvania, United States Fish and Wildlife Service (USFWS) has jurisdiction over federally listed species, and the Pennsylvania Game Commission (PGC), PFBC, and DCNR have jurisdiction over state listed species.

A Pennsylvania Natural Diversity Inventory (PNDI) environmental review was conducted to identify potential impacts to threatened and endangered species within the project study area. Field investigations supplemented available information and included assessment of the location, physical characteristics, and general quality of project study area habitat and wildlife.

3.15.2. Affected Environment

The PNDI search for the project study area, which identifies potential impacts to threatened and endangered species and expires on September 24, 2021 (Attachment F), identified the following results:

- PGC – Potential impacts to state and federally listed species which are under the jurisdiction of both the PGC and the USFWS may occur as a result of this project. As a result, the PGC has deferred comments on potential impacts to federally listed species to the USFWS. No further coordination with the PGC is required at this time.
- DCNR – No threatened or endangered species or species of special concern under DCNR jurisdiction are located within the project study area. Therefore, no impacts are anticipated, and no further review is required.
- PFBC – Potential impact to an unidentified special concern species was identified. Subsequent coordination with PFBC resulted in a no adverse impact determination. A copy of the PFBC clearance letter is included in Attachment F.
- USFWS – The project is within the known range of the bog turtle (*Clemmys muhlenbergii*), warranting further evaluation. As stated above, there are potential impacts to the Indiana bat and northern long-eared bat, which are both federally listed species with ranges in the project study area. A seasonal tree clearing restriction will be followed; therefore, the proposed project may affect, but is not likely to adversely affect the Indiana and northern long-eared bat species. The potential impact is resolved, and no further coordination with the USFWS regarding the bat species is required.

At the request of the USFWS, the project study area was evaluated for the potential to provide habitat for bog turtle and for the presence of bog turtles. A Phase 1 Bog Turtle Habitat Assessment was conducted in March 2014. The findings of this survey identified four wetlands in the project study area that were potential bog turtle habitat. As a result of this finding, a Phase 2 bog turtle (presence/probable absence) survey was conducted in May and June 2014. Although the four wetlands were of good quality and each exhibited potential habitat for bog turtles, no bog turtles or their signs (i.e. tracks, nests, eggs or shells, etc.) were found. Therefore, it was determined that the likelihood of the presence of bog turtles in any of these four wetlands was highly improbable. The USFWS reviewed the finding of these investigations and concluded that the project is not likely to adversely affect bog turtles or their habitat in their April 3, 2015 letter (Attachment F).



Subsequent to these studies, the project design was modified to expand the potential impact area. An addendum study to the Phase 1 Bog Turtle Habitat Assessment was conducted in March 2018. Eight additional wetlands were evaluated, and two wetlands were determined to be potential habitat for bog turtles. Phase 2 bog turtle surveys were conducted for these two wetlands in May and June of 2018, during which time no bog turtles or their signs (i.e. tracks, nests, eggs, shells, etc.) were found. Due to the results of these surveys, it was determined that the likelihood of the presence of bog turtles in the two wetlands is highly improbable. Current project information was sent to the USFWS, and a request was made for an updated determination for the wetlands surveyed in 2014 and a determination for the additional wetlands surveyed in 2018. The USFWS responded that the project is not likely to adversely affect the bog turtle in their October 5, 2018 letter (Attachment F).

More detail on the bog turtle surveys can be found in the project's Phase I Bog Turtle Survey Report and Addendum and the Phase II Bog Turtle Survey Report and Addendum.

3.15.3. Environmental Consequences

Widening I-80 and reconfiguring the interchanges, as proposed in Build Alternatives 2B and 2D, would require removal of trees and other vegetation within the proposed right-of-way. Build Alternative 2B would impact approximately 73.6 acres of woodlands while Build Alternative 2D would impact approximately 65.2 acres of woodlands. Vegetation in most of the areas to be removed is not part of larger woodland tracts but provides edge habitat between the highway and developed areas. A seasonal tree clearing restriction will be implemented so that the project is not likely to adversely affect threatened and endangered bat species that may utilize the woodlands within the project study area as summer habitat.

The PNDI search did not differentiate between Build Alternative 2B and Build Alternative 2D; thus, potential impacts apply to both Build Alternatives. Based on the PNDI search results, no adverse impacts to threatened or endangered plant species or their habitats would occur due to Build Alternatives 2B or 2D.

3.15.4. Minimization and Mitigation

As part of design refinement, PennDOT will examine ways to reduce the amount of new right-of-way needed, thereby potentially reducing impacts to woodlands and potential summer bat habitat.

Since the proposed project is within the range of the Indiana bat and northern long-eared bat, a seasonal tree clearing restriction will be implemented to minimize impacts to bat habitat. Any tree clearing would be conducted between October 15 and March 31 while the bats are hibernating.

3.16. Construction Impacts

PennDOT anticipates the project (Build Alternative 2B or Build Alternative 2D) being constructed over a three-year period beginning in 2022 and ending in 2025 (the opening year).



Prior to construction, PennDOT will develop and implement a construction plan that identifies construction work activities, protocols, and stipulations the contractor must follow to protect workers and the public during project construction. The plan will cover the following topics:

- **Transportation and Traffic Management:** PennDOT will develop and implement a transportation management plan and a maintenance and protection of traffic plan that specifies the need to preserve access for owners of private properties and businesses during construction, maintain or temporarily relocate sidewalks, bus stops and on-street parking, provide directional signage, alert the public and emergency service providers in advance of changes in access and routing, and designate haul routes for construction trucks. The plan will require that four lanes of traffic, two in each direction, be maintained on I-80 at all times during construction, except for short-term closures necessary for the safe execution of specific construction activities.
- **Safety:** As part of its construction plan, PennDOT will develop and implement construction protocols and procedures prior to the start of construction with the goal of providing a safe and secure environment in and near the project construction site. The protocols and procedures will be project-specific and will focus on worker and public safety, securing work and staging areas including equipment, materials, and permanent elements of the project. Temporary fencing with locking gates around construction staging areas is an example of a typical technique to secure a work area. PennDOT will incorporate its standard worksite safety procedures into the project-specific plan. PennDOT also will work with local law enforcement personnel and emergency service providers in developing and implementing its plan to ensure it is consistent and coordinated with local safety and emergency response procedures. PennDOT's contractor(s) will be required to adopt PennDOT's procedures and protocols, including monitoring and reporting.

Prior to construction, PennDOT will develop and implement an E&S Control Plan for the project to minimize the generation of increased stormwater runoff during earth disturbance activities. The plan will include provisions for minimizing the extent and duration of the earth disturbance with staged construction, maximizing protection of existing drainage features and vegetation with defined limits of disturbance, and isolating infiltration areas from potential soil compaction. Degradation of the quality of receiving waters will be prevented to the extent practicable through implementation of BMPs for adequate site access; sediment barriers, filters, and traps; stable runoff conveyance; outlet protection; and soil stabilization measures.

3.17. Indirect Effects

Indirect effects are defined as "effects which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems" (40 CFR Part 1508.8(b)).

As described in Chapter 1, the project study area is largely developed with I-80 providing connections for local and through traffic. The project (Build Alternatives 2B or 2D) would



provide needed improvements to the existing I-80 infrastructure. The improvements would not create new opportunities for new development that currently aren't available in the existing condition. The *Monroe County Comprehensive Plan Update* (December 2014) identifies no designated growth areas in the project study area. The *Multi-Municipal Comprehensive Plan for Hamilton Township, Stroud Township, Pocono Township, and Stroudsburg Borough* (2005) identifies proposed (approved and unapproved) developments located predominantly in Stroud Township, near SR 447, along PA 611, and south of Stroudsburg Borough. A Future Land Use Plan identifies the area along the I-80 corridor primarily as a Managed Corridor Development area; the goal for these areas is to achieve attractive mixed use development. The Future Land Use Plan is implemented through:

- Adopting municipal zoning maps and corresponding zoning district provisions consistent with the Plan.
- Assuring Act 537 Plans are compatible with the Future Land Use Plan.
- Assuring government and school district policies for major land uses are consistent with the Plan.
- Increasing density and intensity of development only when public sewer and water and other necessary infrastructure of sufficient capacity can be made available.

No specific areas of active development were identified during preparation of the EA. As previously stated, the area immediately surrounding I-80 is developed and already accessible. Therefore, the project is not opening up a new area to potential growth and will not indirectly affect growth.

The project will impact approximately 0.3 percent (65.2 – 73.6 acres) of the total forest land within Monroe County (over 270,800 acres); therefore, the potential exists for the project to have minimal indirect effect on the Indiana bat and the northern long-eared bat. No direct impacts will occur due to the implementation of time of year timber cutting restrictions; however, the removal of potential swarming habitat and roosting trees may indirectly affect the Indiana bat and the northern long-eared bat. USFWS concluded, after considering indirect and cumulative effects, that the proposed project may affect, but is not likely to adversely affect the Indiana and northern long-eared bat species. PennDOT and the FHWA commit to conducting all tree clearing activities required for the proposed project between November 15 and March 31.

The project is located in a geographic area with known bog turtle habitat and populations; therefore, the project has the potential to indirectly affect the bog turtle. Phase I (habitat) and Phase 2 bog turtle (presence/probable absence) surveys determined that it is highly improbable that bog turtles are present in the project study area wetlands. The USFWS reviewed the finding of these investigations and concluded, after considering indirect and cumulative effects, that the project is not likely to adversely affect bog turtles or their habitat.

Build Alternatives 2B and 2D would directly impact surface waters and wetlands as summarized in Table 11. These impacts are primarily the result of widening I-80 and impacting surface waters that run parallel and in close proximity to the roadway and its associated facilities. Indirect impacts to wetlands could result from loss of hydrology or a change in vegetative diversity or classification. The proposed project will be designed in a way that maintains the existing hydrologic sources to wetlands and waterways nor change any



hydrologic sources such that the source of a wetland or waterway is removed. Once the project design has been finalized, the project team will evaluate any potential indirect impacts to wetlands and waterways, document them in the Section 404/Chapter 105 Joint Permit, and work with the reviewing agencies to appropriately mitigate any indirect effects.

Indirect impacts from roadway runoff could impact project area water quality and volumes during precipitation and spring runoff. To address this potential indirect impact, the proposed project will be designed in a way that ensures any runoff is contained and conveyed in an approved manner within the project area through a stormwater management system to control the rate, volume, and quality of runoff during construction and post-construction. No sedimentation or other erosion related effects would occur outside of the project area. Therefore, there will be no indirect impacts to water quality.

3.18. Cumulative Effects

Cumulative effects are defined as the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR Part 1508.7). Cumulative effects include the direct and indirect impacts of a project together with the past, present, and reasonably foreseeable future actions of others.

This assessment is in accordance with NEPA and CEQ regulations.

3.18.1. Methodology

The cumulative effects analysis will focus only on those resources directly or indirectly impacted by the proposed project (Build Alternatives 2B or 2D); and those currently in poor or declining health or at risk.

- The resources of interest to this analysis are waterways, wetlands, floodplains, residential and commercial properties, parks, forest, noise, and environmental justice.
- A boundary or research study area (RSA) for each resource was then identified for each resource.
- A determination was made to identify the past time frame based on the availability of information within the RSA's for the resources being reviewed.
- The existing condition (or health) of each resource was examined to determine the role the project would have in cumulative effects.
- Available data for each resource was reviewed and evaluated for effects due to past projects and trends that may have contributed to the current state of the resource.
- Next, reasonably foreseeable future project information from the current Long Range Transportation Plan (LRTP) for the region and PennDOT's Twelve Year Program (TYP) and discussions with PennDOT, local municipality and county planners was factored into the cumulative effects analysis. After the list of proposed projects was produced, a

determination of the extents of direct or indirect effects on the resource was completed. The potential impacts identified for the future projects were assessed based on project type along with professional knowledge/judgment of such projects.

- The proposed project’s impacts were then combined with these past trends and future potential effects to generate a cumulative effect.
- Conclusions about how substantial the cumulative effects to resources would be was based on the current health identified for the resource and how likely the resource would be to recover or improve from the impact.

3.18.2. RSAs

A research study area (RSA) for each resource considered in the cumulative effects analysis was identified. The RSA is a geographic boundary used to view the resource in an appropriate context for the cumulative effects analysis. Table 13 lists the RSAs.

Table 13: Research Study Areas

Resource	RSA
Water Resources	Lower McMichael Creek Watershed, Lower Pocono Creek Watershed, ¹ and associated wetlands
Floodplains	Lower McMichael Creek Watershed, Lower Pocono Creek Watershed, ¹ and associated wetlands
Residential Properties	Stroudsburg and East Stroudsburg Boroughs, Stroud Township
Commercial Properties	Monroe County
Parks	Monroe County
Forest	Monroe County
Noise Environment	Project noise study areas
Environmental Justice	3008 Stroudsburg (Census Tract)
	3009 Stroud Twp. (Census Tract)
	3010 Stroud Twp. (Census Tract)
¹ The RSA boundary for the listed watersheds follows the hydrologic unit code (HUC) 12 sub-watershed boundaries. The following HUC 12 codes apply: 020401040805 (Lower McMichael Creek) and 020401040804 (Lower Pocono Creek).	

3.18.3. Analysis Time Frame

Existing development characteristics in the project study area are a result of the growth of eastern Monroe County from a primarily agricultural focus to an industrial focus in the 19th Century to a post-industrial focus on tourism in the late 20th Century. Existing waterways provided sources of water, food, water power, and transportation. Subsequent railroad, roadway, and highway infrastructure supported the growth and urbanized land use patterns that are seen today.

The completion of I-80 through the project study area in 1956 played a central role in these land use patterns, providing desirable access for the communities at the time and development of the more recent multi-family housing and industrial uses found in the project



study area. As a result, 1956 is the temporal boundary for understanding the past context of the cumulative effects analysis. The design year of the project, 2045, serves as the foreseeable future year.

3.18.4. Current Conditions

The current conditions or health of the resources was determined by identification of resources through project investigations and by utilizing readily available secondary source information. Table 14 summarizes the existing resource conditions.

Current stream length totals and wetland acreages were calculated from the project GIS database utilizing NWI wetlands and PADEP mapped streams. There are approximately 2,100 acres of NWI wetlands and approximately 120 miles of streams in the combined Lower McMichael Creek-Lower Pocono Creek sub-watersheds.

The Lower Pocono Creek and Lower McMichael Creek watersheds contain more than 3,100 acres of FEMA identified 100-year floodplain based on data available through FEMA Flood Insurance Rate Mapping.

The *Monroe County Comprehensive Plan Update* and additional regional planning information was utilized to determine existing numbers of residential housing units and businesses in the RSA's. A total of 9,966 residential housing units and 3,563 businesses were identified.

There are approximately 19,550 acres of local, county, and state parks and national recreation areas within Monroe County. This total does not include state game lands or state forest land.

There are an estimated 270,800 acres of forest in Monroe County, making up approximately 68.7% of the area in the county.

The affected receptors identified in the projects Noise Study Area (NSA) included 112 residences, four commercial properties, and one cemetery.

The Environmental Justice populations in the local census tracts were utilized to compare current percentages and trends to county and state levels.



Table 14: Existing Resource Conditions

Resource	RSA	Existing Amounts in RSA	Current Health in RSA
Water Resources	Lower McMichael Creek, and Lower Pocono Creek sub-watersheds and associated wetlands	120 miles streams 2,100 acres wetlands	Excellent ¹
Floodplains	Lower McMichael Creek, and Lower Pocono Creek sub-watersheds and associated wetlands	3,100 acres	Good ²
Residential (displacements)	Stroudsburg (Census Tract 3008)	2,752 residential housing units	Good ³
	Stroud Twp. (Census Tract 3009, 3010)	7,214 residential housing units	
Business (commercial displacements)	Monroe County	3,563 businesses	Good ⁴
Parks	Monroe County	2,255 acres (county, local) 9,655 acres (state) 7,638 acres (federal)	Excellent ⁵
Forest	Monroe County	270,800 acres	Good ⁶
Noise Environment	Project Noise Study Areas (NSAs)	117 affected receptors	Good ⁷
Environmental Justice	Stroudsburg (Census Tract 3008)	24.4% minority population 24.1% low income population	Strongly Represented ⁸
	Stroud Twp. (Census Tract 3009)	22.1% minority population 15.6% low income population	
	Stroud Twp. (Census Tract 3010)	29.4% minority population 9.6% low income population	

¹The wetlands/streams in the project area and within the identified sub-watersheds are generally of high quality-cold water fishes designated use; multiple wild and stocked trout streams.

²Pocono Creek (including Little Pocono Creek) and McMichael Creek have significant floodplains within the watersheds which for the most part are undeveloped. The floodplain of McMichael Creek has flood control structures within Stroudsburg.

³ Municipalities have well documented and enforced planning and zoning. Availability of real-estate for rent/purchase is adequate for the business and residential markets. See the project's Conceptual Stage Relocation Report (December 2018). Estimates for existing units identified from U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

⁴ Determination of health based on the PA Department of Labor & industry Center for Workforce Information & Analysis Monroe County Profile, Jan 2019.

⁵ Based on current GIS boundaries obtained from DCNR Local Parks (2015), DCNR State Park Boundaries (2017), and ERRI - National Parks in Pennsylvania (1996), accessed from PASDA, 2019.

⁶ Based on GIS boundaries obtained from Pennsylvania State University Land Cover Change by Pennsylvania County 1992 - 2011, 2001 - 2011, 2005 - 2011 (2018), accessed from PASDA, 2019.⁷ Because of the current condition of existing noise impacts from I-80, resource was assessed as good. The no-build condition is estimated to have impacted receptors increasing from the current number.

⁸ Based on the U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates. The minority communities are strongly represented in the EJ areas.



3.18.5. Past Projects/Patterns or Activities

No significant past development projects or housing developments were identified through USGS mapping/aerial review of the project area. The aerial photographs revealed that the project area has not changed substantially since the 1950's. The majority of the I-80 corridor within Stroud Township and Stroudsburg Borough was developed prior to construction (circa 1959). Comparing the aerial photo from 1959 to those following the construction of I-80 (Attachment H), several small areas of new residential development are present on the 1969 aerial photo south of I 80 near Exits 304 and 305. Some commercial development is occurring along SR 611 west of Chipperfield Drive. Two small areas of residential development occurred immediately adjacent to the project study area in the 20 years between the 1969 aerial and the 1999 aerial: the westernmost is south of SR 209 along Bridle Road and Shelbrooke Drive; the second area is south of I-80 along Village Drive. Commercial areas outside of the project study area with the most development are located along the PA 611 corridor, west of Phillips Street. The 1999 aerial also shows the development associated with Stroudsburg High School. In the 2008 aerial, new residential development can be seen south of Exit 304, along Arlington Avenue and Dryden Road. New commercial development continues along PA 611, west of the Stroud Mall.

A review of the PennDOT One Map online tool revealed 14 transportation projects that have been completed (completion dates from 1985 through 2015) within Stroud Township and Stroudsburg Borough (I-80 EB Segments 3040 to 3074, WB Segments 3041 to 3075):

- Of the 14 completed projects indicated, 12 are general maintenance, highway restoration, preventative maintenance, safety improvements, or intelligent transportation system.
- Two of the 14 completed projects are bridge preservation, bridge restoration, bridge deck rehabilitation, or bridge painting.

Twenty projects had been completed (completion dates from 1981 through 2017) in/adjacent to the project area on State Routes 191, 209, 447, and 611:

- Of the 20 completed projects indicated, 12 are general maintenance, highway restoration, preventative maintenance, safety improvements, or intelligent transportation system.
- Seven of the 20 completed projects are bridge preservation, bridge restoration, bridge deck rehabilitation, or bridge painting.
- One of the completed projects involved congestion reduction (SR 611: Seventh to Ninth Street in Stroudsburg Borough - Corridor Safety Improvements).

3.18.6. Future Projects

Reasonably foreseeable future projects for northeastern Pennsylvania were identified through a review of PennDOT's current 2019 Twelve Year Program (TYP) and the Northeastern Pennsylvania Metropolitan Planning Organization (MPO) Long-Range Transportation Plan (LRTP) (March 2016) for the region. In addition, discussions with PennDOT, local municipality, and county planners were factored into the cumulative effects analysis.



The projects reviewed on the TYP are located in Hamilton, Stroud, and Smithfield Townships and the Boroughs of Delaware Water Gap, Stroudsburg, and East Stroudsburg. Most of the projects are maintenance type projects or bridge replacements on existing alignment. Preservation projects (TYP-1, 2, 4, and 7) would have no anticipated impacts. Larger safety and general improvement projects (TYP-5, 8, and 11) would have few and insignificant impacts. The bridge rehabilitation/replacement projects (TYP-3, 6, 9, 10, 12, 13, 17, and 18) would result in limited impacts to the resources being crossed. The bridge rehabilitation/replacement projects (TYP-15, 16, and 19) would result in no impacts to the roadway systems being crossed. The bridge rehabilitation/replacement projects (TYP-14) would result few minor impacts to adjacent properties.

Table 15: Projects on 2019-2030 PennDOT TYP

ID#	MPMS	Route	Section	Type	General Location	Municipality	Probable Environmental Effects
TYP-1	96414	33	03S	Safety Improvement, guiderails, median barriers, crash cushions	SR 115 to SR 2002	Hamilton and Ross Twps.	None – all impacts within existing right-of-way
TYP-2	110456	33	04S	Safety Improvement, guiderails, median barriers, crash cushions	SR 209 to SR 611	Hamilton Twp.	None – all impacts within existing right-of-way
TYP-3	76370	191	0	Bridge	PA 191 over Brodhead Creek	Stroud Twp.	Few – replacement on existing alignment; impact to Brodhead Creek
TYP-4	95574	209	15M	Pavement	East of Lesh Rd to PA 33	Hamilton Twp.	None – pavement resurfacing
TYP-5	104432	209	17S	Safety Improvement	SR 209 at Shafers School House Rd (SR 2005) & Beaver Valley Rd	Hamilton Twp.	Few – developed area
TYP-6	109964	209	20B	Bridge	209 & 33 NB over Appenzell Creek	Hamilton Twp.	Few – replacement on existing alignment; impact to Appenzell Creek
TYP-7	96442	209	28M	Pavement	PA 33 to I-80	Hamilton Twp.	None – pavement resurfacing
TYP-8	96481	611	0	Highway General	PA 611 Retaining Wall Rehab	Delaware Water Gap	Few – rehab of existing structure
TYP-9	79178	2010	02B	Bridge	SR 2010 over McMichael Creek	Hamilton Twp.	Few – rehab of existing structure; impact to McMichael Creek
TYP-10	85882	2012	02B	Bridge	SR 2012 over Kettle Creek	Hamilton Twp.	Few – replacement on existing alignment; impact to Appenzell Creek
TYP-11	95516	2012	04S	Safety Improvement	Mount Tom Rd to Airport Rd	Smithfield Twp.	Few – developed area



ID#	MPMS	Route	Section	Type	General Location	Municipality	Probable Environmental Effects
TYP-12	79179	2012	ABB	Bridge	SR 2012 over Pocono Creek	Stroudsburg	Few – rehab of existing structure; impact to Pocono Creek
TYP-13	47668	2023	01B	Bridge	SR 2023 over Shawnee Creek	Smithfield Twp.	Few – replacement on existing alignment; impact to Shawnee Creek
TYP-14	67265	2024	01B	Bridge	SR 2024 over Delaware Lackawanna Railroad	East Stroudsburg	Few – replacement on existing alignment; impact to adjacent properties
TYP-15	85808	2036	0	Bridge	SR 2036 over PA 33	Hamilton Twp.	None – replacement on existing alignment over PA 33
TYP-16	93634	3023	0	Bridge	SR 3023 over McMichael Creek	Hamilton Twp.	Few – replacement on existing alignment; impact to McMichael Creek
TYP-17	11728	7205	FRB	Bridge	Foundry Road (T-231) over Appenzell Creek	Hamilton Twp.	Few – replacement on existing alignment; impact to Appenzell Creek
TYP-18	57921	80	05S	Interstate	I-80/Exit 308 Realignment	East Stroudsburg	Moderate – developed area

The projects reviewed on the Northeastern Pennsylvania Alliance MPO region's LRTP are located in Stroud and Smithfield Townships and are along I-80 or within the existing project area.

Table 16: Projects on Current LRTP

ID#	Route	Type	Municipality	Probable Environmental Effects
12	611	Route 611 Corridor Improvements	Stroud Twp.	Low property displacements with moderate partial acquisitions – commercially developed area with dense development but also with properties having sizable setbacks from the existing right-of-way. Minimal if any impacts to natural and cultural resources due to existing development.
47	80	Route 80 Access Ramp West at US 209	Smithfield Twp.	Few – developed interchange area

The Route 611 corridor improvements is a larger project (#12) and could have few to moderate impacts within the already developed area. Impacts are anticipated to primarily be the result of property acquisition and utility conflicts. The Route 80 Access Ramp West at US 209 is presumed to be a replacement to match current criteria and could have few and insignificant impacts within the previously disturbed area.

Two substantial non-transportation projects that are planned to occur over the next few years are located beyond the project limits, in Tobyhanna Township and Smithfield Township, according to publicly available information online and several local newspaper reports.

Pocono Springs Entertainment Village, Tobyhanna Township: Potential construction includes Ripley's aquarium, a movie theater, themed restaurants, a Ferris wheel, and more. To prepare,



Route 940 is undergoing rehabilitation of a ramp, additional turning lanes, and creation of a new signalized intersection. Route 611 is also being re-worked to handle four lanes. Interstate 380 would also be repaved. The Pocono Springs site is approximately 175 acres immediately adjacent to the existing Kalahari Hotel and Waterpark.

Gateway Project, Smithfield Township: Potential construction includes a mixture of retail, multi-family residential, and office space development at the intersection of SR 447 and US 209. US 209 will be widened moving north from the traffic light at the SR 447 intersection to five lanes, building a new connector road through the Gateway site as an alternative link between SR 447 and US 209, and adding three traffic lights. The total development of Smithfield Gateway will comprise approximately 121 acres, including 91 acres on the west side of US 209 and 30 acres on the east side of US 209. The location is just one-half mile north of the I-80 Marshalls Creek Exit 309.

The probable environmental effects of these projects will be seen primarily in direct impacts to natural resources through the conversion of forested habitat. There is also potential for positive effects to levels of employment as both projects could create significant numbers of jobs for local residents.

3.18.7. Proposed Direct/Indirect Impacts and Potential Cumulative Effects

The proposed direct and indirect impacts and potential cumulative effects of Build Alternatives 2B or 2D that are described in the EA are assessed to be incremental in the context of present and reasonably foreseeable future non-transportation and transportation projects. The reasons for this finding are as presented in Table 17:

Table 17: Anticipated Cumulative Impacts

Resource	Existing Amounts in RSA	Anticipated Direct/Indirect Impacts					Anticipated Cumulative Impacts		Mitigation Required for Cumulative Impact?
		Non-transportation (Gateway/Pocono Springs)	TYP	L RTP	Build Alt 2B	Build Alt 2D	Total	Percent of Existing	
Water Resources	120 miles streams	0.1/0	<0.15	0	1.8	1.7	1.8	0.02%	No – health of resource not affected; individual projects will have resource mitigation as necessary
	2,100 acres wetlands	0/0	0.4	0	1.2	1.4	1.8	0.09%	
Floodplains	3,100 acres	0/0	1.6	0	29.3	25.8	<30	1.0%	No – health of resource not affected
Residential (displacements)	9,966 residential housing units	5/0	0	2	70	74	>70	0.7%	No – adequate replacement properties are available
Business (commercial displacements)	3,563 businesses	2/0	1	4	28	26	>27	0.7%	No – adequate replacement properties are available



Resource	Existing Amounts in RSA	Anticipated Direct/Indirect Impacts					Anticipated Cumulative Impacts		Mitigation Required for Cumulative Impact?
		Non-transportation (Gateway/Pocono Springs)	TYP	L RTP	Build Alt 2B	Build Alt 2D	Total	Percent of Existing	
Parks	2,255 acres (county, local) 9,655 acres (state) 7,638 acres (federal)	0/0	0	0	0.3	0.3	0.3	<0.001%	No – health of resource not affected
Forests	270,800 acres	0/100	<5	0	73.6	65.2	<179	<0.001%	No – health of resource not affected
Noise Environment	117 affected receptor sites	0/0	0	0	75	69	69-75	65%	No – reasonable and feasible abatement is proposed by individual projects
Environmental Justice	24.4% minority 24.1% low income (Census Tract 3008) 22.1% minority 15.6% low income (Census Tract 3009) 29.4% minority 9.6% low income (Census Tract 3010)	0/0	See Note 1	0	See Note 1	See Note 1	0	See Note 1	No – health of resource not affected
Note 1: Temporary and non-disproportionate									

The Gateway Project, Smithfield Township has recently been permitted, and impacts to water resources are included in Table 17. Impacts to residential and business properties are anticipated. No parkland, forest, noise or environmental justice impacts are anticipated.

Based on current available water resource data at the Pocono Springs Entertainment Village, Tobyhanna Township site, there will be no water resource impacts. The site to be developed consists of abandoned golf fairways and forested areas. No impacts to residential or business properties are anticipated. No noise or environmental justice impacts are anticipated.

The proposed project will have no cumulative effect on the following resources, as the percent of impact will not affect the health of the resource: streams, wetlands, floodplains, residential properties, commercial properties, parks, forests, noise receptors, and environmental justice communities.

3.18.8. Solutions/Mitigation

There will be no cumulative effects for either Build Alternative 2B or Build Alternative 2D since each resource’s health will not be affected. Therefore, cumulative impact mitigation is not proposed. All proposed future projects are anticipated to address individual project environmental impacts through project level mitigation as required.



4. Public Involvement and Agency Coordination

4.1. Overview

Public involvement for the I-80 corridor began in 2005 as part of the *I-80 Corridor Study*; a summary of prior public involvement efforts is included in Attachment I. Throughout alternatives and EA development, PennDOT conducted additional outreach to solicit feedback from and provide information to members of the public, local stakeholders, and regulatory agencies.

4.2. Public Involvement and EA Development

As part of the EA process, PennDOT has undertaken a public involvement and agency coordination program to inform interested persons about the project and obtain feedback to help PennDOT make decisions about alternatives. Table 18 summarizes the outreach and coordination activities undertaken to date for this program. Additional details regarding the public and agency involvement are in the project's technical file.

Of note, a Project Advisory Committee (PAC) was formed in 2018 to clearly communicate key details about the project and provide a forum for Monroe County groups to speak directly with project staff, government agencies, and each other about the project. PAC members represented groups who had expressed both support and skepticism about the project.

Additionally, a project website, <http://www.i80project.com/> is being maintained, and a mailing list is being used to inform interested persons about the project.

Table 18: Summary of Meetings and Public Open Houses

Activity	Date	Purpose
Public Open House Round #1	February 20 and 23, 2014	Inform the public about preliminary plans for the project and solicit feedback on alternatives
Agency Coordination Meeting #1	September 24, 2014	Update government staff about the project's progress
Public Open House Round #2	December 4 and 7, 2014	Inform the public about progress made since the previous open house and solicit feedback on the remaining alternatives
Agency Coordination Meeting #2	February 22, 2017	Update government staff about the project's progress



Activity	Date	Purpose
Local Public Officials Meeting #1	July 11, 2017	Update local public officials about the project and gather feedback
Local Public Officials Meeting #2	February 15, 2018	Update local public officials about the project and gather feedback
Project Advisory Committee Meeting #1	May 30, 2018	Present the project to local stakeholders and answer questions
Project Advisory Committee Meeting #2	September 25, 2018	Update PAC on design decisions made to date and trade-offs to be made in identifying a preferred alternative
Public Open House Round #3	December 4, 2018	Inform the public about progress made since the previous open house and solicit feedback on the remaining alternatives
Project Advisory Committee Meeting #3	April 30, 2019	Follow-up with PAC on their requests made at PAC Meeting #2, summarize the public open house, and share design refinements

4.3. Environmental Justice and Public Involvement

As noted in Section 3.6.2, environmental justice (EJ) populations exist within the project study area. As such, efforts were made to involve EJ communities in the project. Beginning in 2014, postcards were mailed to all property owners within the project study area to advertise the upcoming public open house. At the February 2014 Public Open House Round #1, sign language and foreign language interpreters were available upon request. In 2016, the project team identified key stakeholders/knowledgeable parties that support EJ communities in the project study area. Stakeholders were contacted by mail to inform them about the project and request their feedback. Stakeholders were contacted by phone to ensure they had received the letters and to obtain further feedback. As a result of these efforts, the InterAgency Council (IAC) of Monroe County was identified as a major stakeholder crucial to the engagement of minority and low income populations and was invited to join the PAC. IAC of Monroe County attended PAC Meeting #1 (May 2018) and noted that if there are low-income housing displacements, then the appropriate resources should be made available such as relocation assistance, replacement housing, and information about residents' rights. The IAC of Monroe County and surrounding residents were also invited to the December 2018 Public Open House Round #3. More detail about EJ public involvement, including the knowledgeable parties/stakeholder correspondence summary, can be found in the project's 2018 Environmental Justice Technical Memorandum.

4.4. Common Themes and Concerns Addressed

Public outreach and agency coordination activities described in Section 4.2 identified a number of issues that are important to these interested persons. Understanding these issues



has enabled PennDOT to address concerns in the alternatives evaluation and design processes. A complete record of public comments received is available in the project's technical file. Among the most common issues are the following:

- **Property Impacts:** Residents and local leaders expressed concerns about the extent of property impacts as a result of the project. In addition to concerns from individual property owners that may be impacted, there are broad concerns that property impacts will negatively affect the character and cohesiveness of the Borough and negatively impact the Borough's tax revenue. In response to this concern, PennDOT worked to reduce the potential number of property impacts by introducing retaining walls to minimize slope impacts thereby reducing the amount of land needed for the project as well as modifying the location and configuration of elements such as the stormwater management basins and interchange ramps (Section 3.4.3 and Chapter 5). Additionally, community cohesion was considered in the project design. As discussed in Section 3.5.3, both Build Alternatives will benefit local vehicle, bicycle, and pedestrian circulation. All existing routes over or under I-80 that connect the northern portion of Stroudsburg with the southern portion will be maintained in both Build Alternative 2B and Build Alternative 2D.
- **Interchange Closure and Effect on Local Traffic:** Project area residents use I-80 to accelerate local trips. The proposed removal of Interchange 306 (SR 2004/Dreher Avenue) and loss of access was concerning to residents. In response, PennDOT designed Build Alternatives 2B and 2D to compensate for the removal of Interchange 306 by improving Interchanges 304 and 305 as well as creating a new access route from SR 2004/Dreher Avenue to West Main Street (Interchange 305), known as the Dreher Avenue Connector (Section 2.6.2). In addition, the 2009 *Corridor Study* considered Exits 304, 305, and 306 as one interchange system; this interchange system was identified as the highest priority for improvements due to safety. Elimination of the Dreher Avenue interchange (Exit 306) reduces the number of vehicular conflict points along I-80.
- **Congestion:** While eager for solutions to alleviate highway congestion, local residents expressed concern that the proposed widening of the highway would induce further demand and not address traffic issues. PennDOT responded by designing Build Alternatives 2B and 2D to achieve the project purpose and need, thereby addressing existing roadway condition deficiencies, increasing I-80 capacity and safety, and improving the ability to manage incidents (Sections 2.6.2 and 3.3.3). Another public concern is traffic congestion at the eastern and western limits of the project area, where the proposed three lanes would merge to two lanes. PennDOT assessed the future traffic volumes at the project limits and found there will be acceptable levels of service until year 2032. Ideally, I-80 would be widened beyond the current project endpoints by 2032 as long as there is a need for additional capacity and congestion relief. However, a single project of that size would be exponentially expensive. Therefore, PennDOT has broken up the I-80 corridor at logical termini into smaller projects, such as this one, that are more reasonable to complete. Other sections of I-80 will be studied in future projects. PennDOT has recently initiated traffic studies for the I-80 corridor beyond this project in order to identify needs, potential upgrades, and future projects.



- **Highway Expansion:** Concerns were expressed that widening the highway from two to three lanes in each direction may cause increased speeding, traffic, and air pollution. The proposed highway is designed to safely convey traffic at 60 MPH, which is the design standard for this type of highway, and to accommodate future (2045) traffic volumes while still maintaining an acceptable level of service. Furthermore, as discussed in Section 3.8, an air quality analysis was performed for the proposed project. The analysis found that the proposed project will not cause air quality impacts.
- **Location:** It was suggested that this project is not the right area to start reconstructing I-80, and that other areas, such as the I-80/I-380 and Bartonsville interchanges, have bigger issues. While the 2009 *I-80 Corridor Study* identified Exits 298 (Scotrun) and 299 (Tannersville) as congestion priorities, the section of I-80 through Stroudsburg and Stroud Township (Exits 304 – 307) was chosen to be addressed first because this section has the highest priorities in terms of safety due to the exceptionally short weaving distances, deficient acceleration lane lengths, and the confusing nature of the interchanges. In addition, this section has 1960s era concrete pavement that has been overlain numerous times with bituminous pavement and is in worse condition than other sections.
- **Bicycle and Pedestrian Improvements:** There is a desire by the public for improved pedestrian and bicycle infrastructure at highway crossings. As noted in Sections 3.5.2 and 3.5.3, both Build Alternatives 2B and 2D will incorporate and accommodate existing bicycle and pedestrian routes over and under I-80.
- **Improvements to PA 611:** As an alternative to widening I-80, the public suggested that PA 611 be made two full travel lanes in each direction. PA 611 runs north of and adjacent to I-80 at the western end of the project study area, weaves through downtown Stroudsburg, crosses over I-80 at Exit 307 (Park Avenue), turns east south of Stroudsburg, and continues northeast to Delaware Water Gap. The existing condition of PA 611 varies from four travel lanes, to two travel lanes with one center turn lane, to only two travel lanes. Many homes and businesses are located close to the edge of the road because the area surrounding PA 611 is primarily developed. Therefore, any widening would have extensive property impacts, which the public has indicated is a major concern and not preferred. Further, widening of PA 611 alone would not address the existing substandard shoulder widths on I-80 and lack of sufficient length for acceleration and deceleration lanes. Regarding traffic, widening PA 611 would improve traffic for local users; however, it would not address the increased truck, commercial vehicle, and through-traffic volumes anticipated on I-80.
- **Bypass Option:** Several residents have requested a bypass be built around Stroudsburg instead of widening I-80. A bypass option was evaluated in the 2009 *I-80 Corridor Study* and was dismissed due to exceptionally high construction costs and impacts. Furthermore, the area around Stroudsburg is fairly developed with a variety of land uses. A bypass route would undoubtedly displace many more residents, businesses, and farms than either Build Alternative 2B or Build Alternative 2D. Moreover, Monroe County and the region around Stroudsburg are known for their natural beauty, open spaces, recreation opportunities, and unique environment. For instance, Glen Run Nature Preserve and Cherry Valley National Wildlife Refuge are located to the southeast of Stroudsburg. If a

bypass was routed to avoid populated areas, minimize displacements, and located in forested or open spaces, there would be major impacts to agricultural or natural resources in the region.

- Noise: Residents are concerned that construction techniques, such as rock blasting, may result in increased noise and vibrations. Residents and representatives from the Pocono Ambulatory Surgery Center, an eye surgery center, expressed concerns about general noise increases and construction impacts. As noted in Section 3.9, a preliminary noise analysis has been conducted to predict noise levels in 2045 (the design year) for Build Alternative 2B, Build Alternative 2D, and the no-build alternative. Noise levels were then compared to the noise abatement criteria, which establish thresholds for highway traffic noise impacts. For medical facilities the noise abatement criterion is 52 decibels and for exterior residential areas, the noise abatement criterion is 66 decibels. For comparison, the sound level of an air conditioner is 60 decibels, a washing machine or dishwasher is 70 decibels, and a gas-powered lawnmower is 90 decibels.³ PennDOT is committed to the construction of warranted, feasible, and reasonable highway traffic noise abatement measures (e.g. noise walls) at noise impacted locations. Build Alternatives 2B and 2D include noise walls where warranted, feasible, and reasonable based on the preliminary analysis. The project will be reassessed for potential noise impacts after the project design has been finalized. Final locations of noise walls will be determined after a detailed noise analysis has been completed and public input has been received.

Regarding noise during construction, PennDOT will develop appropriate noise reduction measures to minimize noise impacts during construction – balancing residential needs during overnight hours and daytime noise/vibration levels that may affect adjacent business operations. This may involve sequencing of work, muffling of construction equipment, and specific construction methods that will reduce excessive noise/vibration levels.

Detailed geotechnical analysis will be conducted in final design to assess existing rock slopes and determine where rock blasting may be appropriate in the proposed project corridor. There are several options for rock removal that may be used, including production blasting, presplit blasting, and mechanical excavation. Production blasting causes the most widespread noise and vibration and involves detonating explosives to fragment the rock to the size required for removal. Presplit blasting uses reduced explosive charges to create a fracture line along the plane of the new proposed rock face. If the rock slopes are located within defined buffer zones adjacent to sensitive structures or residences, then mechanical excavation will be necessary. Also, if the rock is deemed to be rippable (excavatable), mechanical excavation methods may be proposed. If either blasting technique (production or presplit) is used, an exterior and interior pre- and post-blast survey will be conducted on all structures, buildings, or utilities in the vicinity of the blasting site. In addition, vibration monitoring would be conducted during blasting events.

³ According to the Centers for Disease Control and Prevention Environmental Health webpage (https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html)



5. Preferred Alternative

FHWA and PennDOT identified Build Alternative 2D as the preferred alternative for the I-80 Reconstruction Project after considering the information presented in this EA and input received from project stakeholders, agencies, and the public. Build Alternatives 2B and 2D would meet the project purpose and need (Section 1.1) by addressing deteriorated roadway and bridge components, existing and future safety concerns, and mobility and system continuity by improving interchange connections and providing all traffic movements on I-80.

However, as described in Section 2.3, the interchange design of Build Alternative 2D would result in fewer impacts to traffic on local roads and better performance during incidents on I-80. Specifically, the proposed changes to the interchange configurations, particularly the provisions for all traffic movements, fewer ramps to access I-80, and more ramp connections to auxiliary lanes, would reduce impacts to traffic on local roads and provide a better opportunity for PennDOT to implement improved incident management strategies and minimize traffic diversions to the local roadway network during incidents on I-80. In addition, Build Alternative 2D would provide longer lane lengths between acceleration and deceleration ramps than Build Alternative 2B, thereby providing for better traffic operations and improved safety along I-80.

Table 19 summarizes the benefits and impacts of Build Alternatives 2B and 2D that are described in this EA. The analyses of Build Alternatives 2B and 2D indicate that Build Alternative 2D would have fewer impacts on the natural and built environment compared to Build Alternative 2B:

- Fewer full property acquisitions and fewer residential and business displacements;
- Smaller decrease in property tax revenue;
- Less impact on woodlands;
- Fewer noise impacts; and,
- Less stream, floodway, and floodplain impacts.



Table 19: Build Alternatives 2B and 2D - Summary of Benefits and Impacts

Resource	Build Alternative 2B	Build Alternative 2D
Transportation	Benefits: achieve purpose and need; improve interchange movements and local roadway interconnections; reduced local roadway traffic impacts; mobility and safety improvements	Same benefits as Build Alternative 2B; would also provide improved access to shopping center at Interchange 303; longer lane lengths thereby providing better performance for acceleration and deceleration movements
Land use	No impact on broad land use patterns	Same as Build Alternative 2B
Community facilities	1 relocation: Stroud Township Yard Waste Compost Facility	Same as Build Alternative 2B
Partial property acquisitions	175 parcels	Same as Build Alternative 2B
Full property acquisitions/ displacements	82 full parcel acquisitions; displacement of 70 residential units and 28 non-residential units; all but eight parcels and five units are in EJ areas	74 full parcel acquisitions; displacement of 66 residential units and 26 non-residential units; all but six parcels and three units are in EJ areas
Community cohesion	Improved mobility for drivers, bicyclists, and pedestrians; no new barriers	Same as Build Alternative 2B
Economy	Potential economic benefits from improved access and mobility; greater municipal tax revenue loss from acquired parcels than Build Alternative 2D	Potential economic benefits from improved access and mobility; less annual municipal tax revenue loss from acquired parcels than Build Alternative 2B
Visual resources	Neutral to moderate impacts	Same as Build Alternative 2B
Air quality and energy	No Impact	Same as Build Alternative 2B
Noise (number of receptor sites exceeding NAC/number of impacted units)	75/134	69/108
Historic properties	Impacts to Levee System by I-80 and Broad Street bridge widening (no adverse effect)	Same as Build Alternative 2B
Archaeology	No impacts to significant sites	Same as Build Alternative 2B
Section 4(f) Evaluation	Ann Street Park, Rotary Creek Park, and Levee System <i>de minimis</i> impacts	Same as Build Alternative 2B
Contaminated materials	8 sites of potential concern in the project area	Same as Build Alternative 2B



Resource	Build Alternative 2B	Build Alternative 2D
Stream Impacts (linear feet)	9,540	9,140
Class A Wild Trout Stream Impacts (linear feet)	1,791	2,144
FEMA 100-year Floodplain impacts (acres)	29.3	25.8
Floodway impacts (acres)	8.8	6.6
Delineated wetland impacts (acres)	1.30	1.57
Vegetation and wildlife impacts	73.6 acres of woodlands	65.2 acres of woodlands
Threatened and endangered species	No impacts per avoidance measures	Same as Build Alternative 2B
Construction impacts	Temporary impacts to roadway circulation, bus routing and potentially stop locations	Same as Build Alternative 2B
Indirect impacts	None	None
Cumulative effects	Incremental impacts	Same as Build Alternative 2B
Public and local public officials input	Less support compared to Build Alternative 2D: mobility and access benefits would be less, and the number of property impacts and displacements would be higher	Most support: additional mobility and access benefits, and fewer property acquisitions and displacements compared to Build Alternative 2B

5.1. Design Refinements

FHWA and PennDOT recognized that public and stakeholder concerns remained regarding the potential impacts of the project as described in this EA: property acquisitions and displacements, noise, wetlands, water quality, floodplains, and construction phase impacts. The estimated impacts presented in this EA are based on a conceptual level of design undertaken by PennDOT for the EA. As the project design advances, PennDOT is committed to refining the design with the goal of avoiding or minimizing impacts and providing mitigation where effective and reasonably feasible. For example, PennDOT already has made additional design refinements to the Preferred Alternative (Build Alternative 2D) with the specific goal of reducing the potential number of full property acquisitions and displacements. These refinements included using techniques such as narrowing the proposed work area by using retaining walls instead of naturalized earth slopes. The following reductions of anticipated property acquisitions have been made:

- Number of proposed full acquisitions reduced from 74 parcels to 44 parcels;
- Number of proposed residential displacements reduced from 66 units to 33 units;



- Number of proposed residential displacements from low-income housing reduced from 32 units to 16 units; and,
- Number of proposed active business displacements reduced from 21 units to 14 units.

Furthermore, in response to public feedback, the proposed I-80 eastbound Exit 307 ramp onto Park Avenue (Ramp Q) will be located along a similar alignment as the existing ramp. This will reduce property impacts to the commercial property at 101 Park Avenue, currently occupied by First Northern Bank & Trust. See Sheet 1 of the Alternative 2D refinement figure in Attachment J for a view of the refined Exit 307 Ramp Q configuration.

As engineering refinements continue, other design factors are considered, such as flattening curves to achieve the required driver sight distance, maintenance of traffic during construction, and overall constructability. This ensures that the proposed roadway changes meet design and safety criteria set by PennDOT, the project can reasonably be constructed as designed, four lanes (two lanes in each direction) of traffic can be maintained during the various construction stages, and that there are minimal disruptions to entrances and exits on I-80 during construction. The above design factors were conceptually considered for refinement of Build Alternative 2D, and as a result, it was determined that the entire US 209/I-80 interchange (Exit 304) needed to be shifted approximately 100 feet to the northeast. Thus, the proposed US 209 northbound ramp onto I-80 westbound (Ramp E) needed to be shifted slightly northeast closer to Pocono Creek, and the I-80 westbound ramp onto US 209 south (Ramp I) ultimately needed to be pushed to the north across Pocono Creek. The revised US 209/I-80 interchange, Ramp E, and Ramp I alignments are shown on Sheet 2 of the Alternative 2D refinement figure in Attachment J. These design refinements have the added benefit of further reducing impacts to the Bridge Street Apartments complex, residences along Bridge Street, and other properties along the south side of I-80 in this area. Additionally, the revised US 209/I-80 interchange, Ramp E, and Ramp I alignments were presented to the PAC at the April 30, 2019 meeting.

In addition, the project limits needed to be extended to the west along I-80 to accommodate the distance needed to safely taper the proposed six-lane section down to the existing four-lane section. The extended roadway taper is shown on Sheet 1 in Attachment J. The proposed lane tapering would occur within the existing median, and proposed work is not anticipated to extend beyond the existing transportation right-of-way.

In the sections that follow, the three distinct design refinements discussed above will be referred to as follows:

- I-80 Western Extension
- Exit 307 Ramp Q
- Exit 304 Ramps E and I

5.1.1. Additional Environmental Studies

The I-80 Western Extension and Exit 304 Ramps E and I areas described above and illustrated in Attachment J were not previously assessed for environmental resources. Thus, the API was expanded in these areas to assess the environmental resources present and potential



impacts from these design refinements. The expanded API is displayed on the Alternative 2D refinement figure in Attachment J.

5.1.1.1. Methodology and Regulatory Context

Water resources, including surface waters, floodplains, floodways, and wetlands, were identified and delineated within the expanded API. Other environmental studies were conducted and included an analysis of property impacts and displacements, visual resource analysis, noise analysis, cultural resources evaluation, Phase I ESA for contaminated materials and hazardous waste, threatened and endangered species search, and Phase I Bog Turtle Habitat Assessment. The methodologies and regulatory contexts for each study followed those previously mentioned throughout Chapter 3.

Some environmental studies were excluded because the affected environment and environmental consequences for certain resources within the expanded API are expected to be consistent with the existing analysis presented in Chapter 3. Therefore, no additional studies or analyses for land use, community facilities and services, community cohesion, environmental justice, local and regional economy, and air quality were conducted.

5.1.1.2. Property Impacts and Displacements

I-80 Western Extension: The project area consists of a divided highway with herbaceous vegetation or rock outcrops in the median. The property is existing transportation right-of-way. There will be no additional property impacts.

Exit 307 Ramp Q: The project area consists of an existing exit ramp and wooded depression in between the exit ramp and I-80 mainline. All areas are existing transportation right-of-way. One property impact reduction and no new property impacts are anticipated. The First Northern Bank & Trust commercial property was previously impacted by the proposed Build Alternative 2D Exit 307 configuration; this property will now be avoided by the Build Alternative 2D refinement.

Exit 304 Ramps E and I: Both ramps are within forested floodplains along Pocono Creek. Ramp E and a portion of Ramp I are located within the existing transportation right-of-way or easement area. Ramp I would also cross undeveloped areas of two commercial properties (with businesses and access points off PA 611), an undeveloped parcel owned by Stroud Township, and undeveloped areas of several private/residential properties.

Property impact reductions and no new full property acquisitions are anticipated. There will more than likely be partial property acquisitions for some of the residential properties along Fritz Avenue, north of Ramp I, although no full displacements are anticipated. Property impacts on the south side of I-80 at the I-80/US 209 interchange will be reduced. This affects residential properties along Bridge Street, Myrtle Street, Jamie Court, and the Bridge Street Apartments, a low-income housing complex. Overall, property impacts associated with the refined Exit 304 Ramps E and I will be improved.

After design refinements are completed during the final design phase of the project, PennDOT will coordinate with individual property owners regarding means to minimize and mitigate property acquisitions and displacements. Property acquisition activities will occur in accordance with the Uniform Act as amended and State laws that establish the process



through which PennDOT may acquire real property through a negotiated purchase or through condemnation.

5.1.1.3. Visual Resources

I-80 Western Extension: This section of I-80 is in a cut area and is surrounded by steep slopes lined with trees; therefore, views from the roadway are primarily limited to the existing transportation right-of-way. Existing views of the I-80 corridor from surrounding properties are largely shielded by trees and other vegetation. There will be no change to the visual environment.

Exit 307 Ramp Q: Views from the existing exit ramp consist of the surrounding forest. Approaching the intersection with PA 611, the commercial and residential development along PA 611 comes into view. Existing views of the ramp corridor from surrounding properties are largely shielded by trees and other vegetation. The proposed ramp will follow the existing ramp corridor. Minor tree clearing and fill will be necessary at the infield area in between the ramp and I-80; nevertheless, the visual environment will largely remain the same.

Exit 304 Ramps E and I: Existing views from the proposed ramp areas consist of the forested floodplain of Pocono Creek. Views of I-80, existing Ramp I, and development to the north are shielded by vegetation and topography; the floodplain is approximately 30-50 feet below the surrounding roadway and development. Likewise, travelers along I-80 and the existing Ramp I see the forest to the north where the proposed ramps would be located. The views from the commercial properties and residences to the north of the proposed ramps also consist of the floodplain forest. In addition, the forest obstructs their views of I-80.

The proposed Ramp E will not significantly alter the visual environment since a forested riparian strip will remain along Pocono Creek. The proposed Ramp I will be approximately 350 feet closer to residential property owners along Fritz Avenue and Flagler Street and a few commercial properties off PA 611. These viewers will have their views altered by project-related vegetation removal and the proposed Ramp I structure itself, which will be elevated above the floodplain on a viaduct. The proposed Ramp I would also disrupt the natural harmony of the viewers who appreciate the views of Pocono Creek and natural environment in this area.

PennDOT will examine ways to reduce right-of-way needs for the proposed project. Reducing right-of-way needs could reduce visual changes that are caused by removal of vegetation that currently offers screening. Staging areas will be restored to preconstruction conditions once the facilities are decommissioned and removed to minimize the impact on visual quality and character. Replacement plantings, consisting of native vegetation, will be installed in areas where vegetation was removed.

5.1.1.4. Noise

I-80 Western Extension: Traffic on I-80 contributes to noise in this area. The proposed work will be within the existing transportation right-of-way and no capacity is being added to this section of I-80; therefore, there will be no changes to noise levels in this area because of the refinement. However, the potential for noise impacts to the residential community north of I-80 exists. Once the project design is finalized, a detailed noise analysis will be completed. The



detailed noise analysis will likely include a new noise study area to assess the Hemlock Lane residential area. Final recommendations on the construction of any noise abatement measures will be determined after the detailed noise analysis in conjunction with public input.

Exit 307 Ramp Q: The previous noise study (see Section 3.9) covered this area. Existing (2013) worst-case noise levels exceed FHWA/PennDOT NAC at two receptor sites representing six residences. The dominant source of noise at each measured location is traffic on I-80 and the Exit 307 ramps. Noise levels are projected to increase and would exceed the NAC at five receptor sites representing 17 residences. A preliminary noise barrier was modeled along the terrace above and to the southwest of the ramp. The preliminary barrier benefits 12 residences and is warranted, feasible, and reasonable at this time, although six residences would still experience noise levels exceeding the NAC.

Exit 304 Ramps E and I: A preliminary noise analysis using the existing noise model that is based on 2013 traffic was completed for the residential area along Flagler Street, Fritz Avenue, Fairview Avenue, Rosemond Avenue, and Columbus Avenue. The residential area was characterized by two noise sensitive areas, which included 18 receptor sites representing 24 residences. Existing (2013) noise levels do not exceed the FHWA/PennDOT NAC at any receptor locations.

Noise levels are projected to increase between 4–8 dBA as a result of the relocation of these ramps to the north. Noise levels are projected to exceed the NAC at five receptor sites representing seven residences.

Multiple barrier scenarios were modeled to provide attenuation to the residential community along Fritz Avenue and Flagler Street. The noise barrier mitigation evaluation concluded that, within these limits of this study, noise abatement is warranted, feasible (i.e. capable of reducing Design Year noise levels by at least five dBA), and reasonable (cost-effective) as per FHWA and PennDOT procedures under one scenario, which includes a barrier along the residential property lines. This scenario would provide adequate noise attenuation to the impacted residences.

A detailed noise analysis will be conducted and final recommendations on the construction of any noise abatement measures will be determined during the final design phase of the project.

5.1.1.5. Cultural Resources

I-80 Western Extension: Proposed work will be within the existing transportation right-of-way; therefore, no additional cultural resource evaluations were performed.

Exit 307 Ramp Q: This area was previously assessed for cultural resources. This area was found to have low archaeological probability, and no NRHP-listed or eligible above-ground historic resources occur in this area.

Exit 304 Ramps E and I: The PennDOT District Cultural Resources Professional reviewed this area and determined that no additional archaeological or above-ground historic resource evaluations were needed.



No archaeological or above-ground historic resources are present in the three project areas (I-80 Western Extension, Exit 307 Ramp Q, and Exit 304 Ramps E and I); therefore, there will be no cultural resource impacts. An updated no adverse effects finding was posted to ProjectPATH on August 21, 2019. PHMC concurrence was not requested due to the limited scope of the changes.

5.1.1.6. Contaminated Materials and Hazardous Waste

I-80 Western Extension: Proposed work will be within the existing transportation right-of-way; therefore, no additional hazardous waste evaluations were performed.

Exit 307 Ramp Q: This area was previously assessed for hazardous waste concerns. No sites of potential concern were identified.

Exit 304 Ramps E and I: Topographic maps and historic aerial photographs did not indicate any previous land uses of the Ramp I area or surrounding properties that would indicate potential waste disposal concerns. Additionally, no visual indicators of potential waste disposal concerns were identified except for some trash that has been dumped in the area. Three leaking underground storage tank (LUST) sites are located within a 0.25-mile radius to the north of the Ramp I area, but at least 500 feet away. None of the LUST sites are located within the Ramp I area. Based on a subsequent PADEP file review, the three LUST sites do not represent potential environmental concerns for the Ramp I area. The project's Phase I ESA concluded that no further action is required at this time for the Ramp I area.

No sites of concern are present in the three project areas (I-80 Western Extension, Exit 307 Ramp Q, and Exit 304 Ramps E and I); therefore, there will be no hazardous waste impacts. As part of the overall project, a WMP and a site-specific HASP will be prepared to address soil, sediment, and groundwater management, environmental health, and worker safety during all project construction activities.

5.1.1.7. Water Resources

The boundaries of the water resources described below have been delineated, and a preliminary jurisdictional determination update was issued on September 10, 2019 by the USACE (available in the project's technical file).

I-80 Western Extension: Surface waters within this area include a small perennial stream, identified as an UNT to Wigwam Run, that flows roughly north to south under I-80 and Beech Street. The UNT to Wigwam Run drains to Wigwam Run and then Pocono Creek approximately 700 feet downstream of I-80. The UNT to Wigwam Run is designated as HQ-CWF, MF; a Class A wild brown trout stream; a stocked trout stream; and a wild trout stream. No wetlands or FEMA-mapped floodways or floodplains are present in this area.

Any additional pavement to facilitate the lane tapering would occur in the existing median, where the stream is already culverted under I-80. However, approximately 12 linear feet of stream lie within the API. Any impacts to the stream in this area will be temporary, and the stream will be restored to pre-construction conditions.

Exit 307 Ramp Q: A PEM/SS wetland and FEMA-mapped 100-year floodplain exist in the depression in the infield area, a PUB wetland is located in a low-lying area on the southwest



side of the exit ramp, and a small stream (UNT to McMichael Creek) connects these aquatic resources through a culvert under the ramp. The UNT to McMichael Creek is designated as HQ-CWF; MF, TSF, MF; a stocked trout stream, and a wild trout stream. In addition, since the wetland is within the floodplain of a wild trout stream, it is considered an exceptional value resource. No FEMA-mapped floodways are present in this area.

The reconstructed ramp includes a retaining wall along the north side of Ramp Q to reduce the amount of fill needed in the infield area. However, the proposed ramp will still require filling in a portion of the PEM/SS wetland and possibly extending the culvert under the ramp in the infield area. These impacts were already accounted for in Section 3.14.3 since the refined ramp alignment is within the previously defined API. The additional fill in the infield area may also affect its hydraulic capacity in relation to the FEMA floodplain. A complete hydrologic and hydraulic (H&H) analysis will be performed during the final design phase of the project.

Exit 304 Ramps E and I: Pocono Creek is the main perennial stream in this area and flows west to east parallel to I-80. Two additional streams were identified: Flagler Run (perennial) and an UNT to Pocono Creek (ephemeral). These streams are designated as HQ-CWF, MF; Class A wild brown trout streams; stocked trout streams; and wild trout streams. A FEMA-defined floodway and 100-year floodplain are mapped along Pocono Creek as well. Furthermore, Pocono Creek is identified as recreationally navigable in *Keystone Canoeing* (Gertler 2015). No wetlands were identified in this area.

The proposed Ramp E will be closer to Pocono Creek, although it will not span the creek. Ramp I will cross Pocono Creek (twice), the UNT to Pocono Creek, and Flagler Run. Additional stream impacts total 1,870 linear feet; additional floodway impacts total 8.1 acres; and additional floodplain impacts total 4.06 acres. These impacts will primarily be aerial impacts because the proposed Ramp I will be on an elevated viaduct across these resources. Additionally, the I-80 mainline will include a retaining wall, which will minimize fill in the aquatic resources. A conceptual H&H analysis determined that the Ramp I piers and I-80 mainline retaining wall results in 100-year water surface elevation increases up to 0.4 feet. The water surface elevation increases will not impact any structures located in the floodplain. A complete H&H analysis will be performed during the final design phase of the project.

Regarding the potential 100-year water surface elevation increase due to the refined Ramp I, the design team will continue to look at ways to minimize and possibly eliminate the increase. For instance, the proposed pier size could potentially be reduced and oblong piers (as opposed to circular) oriented in the direction of flow could be used. Currently, several piers are located within the channel banks or in overbank areas of higher velocities, which raise water surface elevations for Pocono Creek. These piers should be set in locations that avoid the stream channel or low overbank areas. Another option that will be considered in final design is the removal of the existing embankments along the former ramps, thereby restoring a portion of the floodplain. If water surface elevation increases cannot be eliminated, a Conditional Letter of Map Revision will be required from FEMA. The map revision would need to extend upstream until no increase is found. Any impacts of the water surface elevation increase would need to be documented, including any structures affected by the increase.

In addition, since Pocono Creek is recreationally navigable, provisions will be made to ensure either a designated portage route is available, or a portion of the channel remains open to



boaters during construction. The proposed piers will also be placed to allow clear passage for recreational boaters. Therefore, any impacts to navigability will be temporary.

The minimization and mitigation measures discussed in Section 3.1.4 are applicable to the I-80 Western Extension, Exit 307 Ramp Q, and Exit 304 Ramps E and I areas. During the final design phase of the project, refinements will continue to be made to minimize the water resource impacts. Instream restrictions for trout will be followed as necessary. No instream work will be conducted from March 1 through June 15 (stocked trout), October 1 through December 31 (wild trout), and October 1 through April 1 (Class A wild brown trout). A complete H&H analysis will be performed during final design to assess any changes to water surface elevations and flooding patterns. PennDOT will coordinate with the appropriate regulatory agencies to obtain the necessary permits and approvals. Wetland and stream impacts will be appropriately mitigated according to current state and federal regulations.

5.1.1.8. Threatened and Endangered Species

The PNDI environmental review discussed in Section 3.15 also included the three Build Alternative 2D refinement areas (I-80 Western Extension, Exit 307 Ramp Q, and Exit 304 Ramps E and I). Thus, the same potential impacts to threatened and endangered species apply here, which include:

- PGC/USFWS – Potential impacts to state and federally listed species (i.e. Indiana bat and northern long-eared bat) which are under the jurisdiction of both the PGC and the USFWS may occur as a result of this project. A seasonal tree clearing restriction will be implemented to minimize impacts to bat habitat. Any tree clearing would be conducted between October 15 and March 31 while the bats are hibernating. Thus, the proposed project is not likely to adversely affect the Indiana bat and northern long-eared bat.
- PFBC –Coordination with PFBC resulted in a no adverse impact determination for an unidentified special concern species. A copy of the PFBC clearance letter is included in Attachment F.
- USFWS –A Phase 1 Bog Turtle Habitat Assessment was conducted in June 2019 within the previously unassessed areas associated with the I-80 Western Extension, Exit 307 Ramp Q, and Exit 304 Ramps E and I areas. The findings of this survey identified no resources that are considered potential bog turtle habitat. The USFWS reviewed the findings and concluded that the project is not likely to adversely affect the bog turtles in their August 30, 2019 letter (Attachment F).

5.1.2. Summary

The proposed design refinements to Build Alternative 2D discussed above have a mixture of positive and adverse impacts. The realignment of Ramp I provides safer conditions for the travelling public. The main adverse impacts are the increased water resources impacts and the visual and noise impacts to the handful of affected residents along Flagler Street and Fritz Avenue. Although the proposed Build Alternative 2D refinements have some adverse environmental impacts, they can be appropriately mitigated as discussed above. The main benefit is a net reduction in property impacts. Based on the public feedback (Chapter 4), property impacts tend to be the main concern amongst residents, business owners, public



officials, and other project stakeholders. Therefore, since the design refinements improve safety, improve constructability, reduce property impacts, and do not create environmental impacts of significant magnitude, they have been incorporated into the preferred alternative, Build Alternative 2D.

5.2. Mitigation Commitments

Table 20 summarizes the mitigation commitments made for the proposed project. As described in the EA, the design engineers incorporated avoidance measures for sensitive features wherever possible. Those items are not summarized in the table but are integral to the project design. As final design progresses, efforts will be made to further minimize impacts to sensitive natural, cultural, and socioeconomic features.

Table 20: Mitigation Commitments

Resource	Alternative Effect/Impact	Recommended Commensurable Mitigation
Emergency Management Services	Potential delays in response times.	Develop a project specific safety plan for construction. Evaluate and design appropriate safety elements, modify existing incident management plans, coordinate with local law enforcement and emergency service providers, and develop operational protocols and procedures.
Stroud Township Yard Waste Compost Facility	Full acquisition	Continue design refinements to minimize impacts to the facility. Consider allowing Township use of a portion of the property. Continue to coordinate with the Township.
Properties	43	Continue design refinements to minimize property (residential, commercial, and undeveloped land) impacts. Coordinate with individual property owners regarding means to minimize and mitigate property acquisitions and displacements.
Noise	115 units	Conduct detailed noise analysis in final design. This may require adding a new noise study area to assess the Hemlock Lane residential area. Incorporate community input for feasible and reasonable noise barriers. Minimize construction-related noise impacts. Use construction equipment adapted to operate within reasonable noise levels. Conduct construction work in a responsible manner, to limit annoyance to the occupants of nearby properties.
Levee System	0.20 acres	Coordinate alterations of Levee System with USACE to obtain Section 408 Permit at PA 191/Broad Street over McMichael Creek and I-80 over Brodhead Creek bridge replacement work areas. Include a special provision for sheeting or other measures to protect the Levee System berm. Minimize permanent and temporary impacts as design refinements are made in final design. Restore temporary impact areas to preconstruction conditions as best possible.
Archaeology	Potential unassessed site	Conduct an archaeological survey in the southeast quadrant of the I-80 and US 209 interchange once the hazardous materials contamination has been remediated.
Hazardous Waste	8 sites	Develop and implement a Waste Management Plan (WMP), a site-specific Health and Safety Plan (HASP), and a project-specific HASP to address soil and groundwater management, environmental health, and worker safety during project construction activities. Conduct surveys for asbestos containing materials (ACM) and lead based paint (LBP) of any



Resource	Alternative Effect/Impact	Recommended Commensurable Mitigation
		bridges or other structures that will be impacted by the project. If intrusive activities will be conducted in the vicinity of the I-80 Bridge over Brodhead Creek, prepare a soil and sediment management work plan. Contact PADEP prior to any intrusive activities to determine if any new information for the Brodhead Creek NPL Site is available.
Wetlands	1.57 acres	Continue design refinements to minimize impacts to wetlands. Develop a wetland mitigation plan and coordinate with PADEP/USACE during final design.
Streams	11,022 linear feet	Continue design refinements to minimize impacts to waterways. Develop a stream mitigation plan and coordinate with PADEP/USACE during final design. Maintain recreational navigability of designated streams.
Floodways	14.7 acres	Conduct a complete H&H analysis in final design. Continue design refinements to minimize impacts. If necessary, obtain a Conditional Letter of Map Revision from FEMA.
Floodplains	29.9 acres	Conduct a complete H&H analysis in final design. Continue design refinements to minimize impacts. If necessary, obtain a Conditional Letter of Map Revision from FEMA.
Trout Streams	11,022 linear feet	Follow seasonal trout instream work restrictions. All streams are naturally reproducing trout streams. Majority of streams are also stocked trout streams and Class A wild trout streams. No instream work may occur within the following dates: - March 1 - June 15 for stocked trout. - Oct 1 - Dec 31 for naturally reproducing trout. - Oct 1 - Apr 1 for Class A trout. In summary, instream work is permitted July 1 - Sept 30.
Aquatic Species of Concern	11,022 linear feet	No instream activity will be conducted in McMichael Creek or Brodhead Creek from March 15 to May 15, all instream work should be done during low flow periods, and the BMPs outlined in the approved Erosion and Sedimentation (E&S) Control Plan should be implemented and maintained during construction.
Indiana and Northern Long-eared Bat	65.2 acres	Conduct tree clearing between Oct 15 and March 31 while Indiana and northern long-eared bats are hibernating.
Rotary Creek and Ann Street Parks	0.05 and 0.04 acres, respectively, (permanent)	Context sensitive treatment of Broad Street Bridge. Accommodate bike/ped users. Regrade and pave gravel access drive entrance. Refer to Attachment G for complete details. Develop a planting plan in final design. Restore and stabilize temporary impact areas.

5.2.1. Other Mitigation Commitments

The following are typical considerations for pollinators, invasive species, and wildlife crossings that will be incorporated into the final design.

Vegetative BMPs will be included in the final design to provide foraging habitat; places to breed, nest, and overwinter; and to act as corridors to link patches of fragmented habitat for pollinators. For instance, only native plants should be used for revegetation purposes. Plantings and/or seed mixes should include a diverse mix of plants, including grasses, sedges, and wildflowers that bloom at different times from spring to fall. Coordination should occur



with the District maintenance department to identify long-term maintenance strategies that minimize mowing and herbicide use and/or other Integrated Roadside Vegetation Management practices.

Invasive vegetative species are prevalent throughout the project study area. Another invasive species of concern is the spotted lanternfly. The spotted lanternfly is native to Asia, was first observed in Berks County in 2014, and has spread since then. Currently, Monroe County is under quarantine by the Pennsylvania Department of Agriculture for the spotted lanternfly. Measures should be taken to minimize the spread of invasive species within and outside of the project area. The project's limits of disturbance will be minimized to the greatest extent practicable. Disturbed areas should be revegetated and stabilized with native species as soon as possible; seed mixes should omit invasive and nonnative species. In addition, any mulch or hay used should be weed-free. Any fill, soil, topsoil, rip-rap, and gravel brought onsite should not be from sites where invasive species are known to occur. Likewise, any material excavated onsite is assumed to contain invasive plant material and should only be reused within the project limits. If excavated material cannot be reused onsite, then the material should be stockpiled on an impervious surface until viable plant material is destroyed. Prior to moving equipment offsite, all equipment, machinery, and hand tools should be cleaned of all visible soil and plant material.

In order to minimize the spread of the spotted lanternfly, the contractor should comply with the latest Pennsylvania Department of Agriculture, United States Department of Agriculture, and Penn State Extension guidance. Likely a special provision will need to be prepared as part of the construction documents identifying best management practices, such as inspecting equipment prior to moving it outside the quarantined area.

Since I-80 is a major highway that runs through the project corridor, wildlife may travel across I-80 during their regular movements. Within the project study area, I-80 is generally built up on fill and acts as a physical barrier for wildlife movement. In addition, median barriers are present throughout the majority of the project study area; beginning just east of Exit 303 and continuing east unbroken throughout the remainder of the project study area. Some wildlife may use the existing underpasses created by bridges/structures as travel corridors; however, the potential for wildlife vehicle collisions exists throughout the project study area. Based on the 2008-2012 crash data for the project corridor, deer or other animals were factors in 13 crashes or 4% of total crashes. The majority of these crashes (8 out of 13) occurred roughly between Milepost 303 and 304.5, which is roughly west of Gaunt Road. This section of I-80 is predominantly surrounded by forest with limited development and there is no median barrier. In the portion of the project study area where there was the highest rate of animal-related crashes (west of Gaunt Road), no noise walls and limited retaining walls are proposed for the Preferred Alternative; however, new median barriers are proposed here. This may result in increased wildlife-related crashes. Due to the overall low number of wildlife-related crashes in the project study area and primarily urban setting of the project study area, the need to incorporate wildlife passages in the project design is largely unnecessary. The use of wildlife fencing or structures designed to promote the safe passage of wildlife to minimize wildlife-vehicle interactions will be evaluated in final design.

Attachment A

2014 Phase I Alternatives Analysis
Summary Comparison Tables



2014 I-80 Reconstruction SR 0080 Section 17M Phase I Alternatives Analysis
Summary Comparison Tables

TABLE 6.1 ENVIRONMENTAL IMPACTS

Resource	Phase I Alternative				
	A	B	C	D	E
Total Area of Disturbance (ac)	123.30	148.43	135.27	133.72	135.87
NWI Wetlands (ac)	1.170	0.781	0.790	0.785	0.789
Waterways (linear ft)	2,004.45	2,263.17	1,632.14	1,507.65	1,966.67
Class "A" Trout Stream-Pocono Ck (linear ft)	241.34	332.80	350.21	305.60	350.80
FEMA 100yr Floodplain (ac)	8.20	12.04	11.45	9.84	9.91
FEMA Floodway (ac)	3.29	3.71	3.67	3.72	3.69
Potential Acid Producing Sulfide Materials (ac)	106.07	127.57	118.60	118.42	118.93
Landuse-Government Service (ac)	1.70	0.27	0.56	0.50	0.56
Landuse-Industrial (ac)	0.01	0.15	0.37	0.20	0.37
Landuse-Public Recreation (ac)	0.18	0.19	0.19	0.18	0.18
Landuse-Residential (ac)	5.16	5.64	3.93	4.30	4.19
Landuse-Retail & Services (ac)	6.28	8.60	9.24	8.76	9.46
Steep Slope (15% and Greater) (ac)	7.69	8.54	5.87	5.69	6.19
ROW Acquisition - Residential (parcels)	12	18	8	4	8
ROW Acquisition - Commercial (parcels)	9	7	6	8	6

Data based on a 20-foot buffer from Proposed Edge of Shoulder

TABLE 6.2 COMPARISON MATRIX

Engineering and Traffic	Phase I Highway Improvement Alternative				
	A	B	C	D	E
Meets Purpose and Needs	Yes	Yes	Yes	Yes	Yes
Meets Min Accel Decel Lane Length	Yes	Yes	Yes	Yes	Yes
Meets Min Superelevation Required	Yes	Yes	Yes	Yes	Yes
Meets Vertical Clearance	Yes	Yes	Yes	Yes	Yes
Meets Horizontal Clearance	Yes	Yes	Yes	Yes	Yes
Requires Design Exception	No	No	No	No	No
System Continuity and Connections	Fair	Good	Good	Fair	Good
Bypass Ramp Design (locations)	Fair (1)	Good (2)	Good (2)	Fair (1)	Good (2)
Mainline Weaving (locations)	Good (4)*	Good (4)*	Good (4)*	Fair (5)*	Good (4)*
Safety	Good	Good	Good	Fair	Good
Geometric Curvature	Fair	Good	Fair	Fair	Fair
Meets Traffic Criteria	Yes	Yes	Yes	Yes	Yes
LOS (2045)	Good	Good	Good	Good	Good
Construction Cost (\$in thousands)	\$403,261	\$542,765	\$580,661	\$584,984	\$568,956
Right-of-Way Cost (\$ in thousands)	\$8,346.00	\$10,901	\$9,466	\$9,126	\$9,331
Utility Cost (\$ in thousands)	\$835.00	\$1,091	\$947	\$913	\$934
Design Cost (\$ in thousands)	\$40,327.00	\$54,277	\$58,067	\$58,499	\$56,896

See Appendices K and L for cost estimate worksheets
* Weaving via long auxiliary lanes

2014 I-80 Reconstruction SR 0080 Section 17M Phase I Alternatives Analysis
Summary Comparison Tables

PUBLIC OPEN HOUSE RESULTS

	Phase I Highway Improvement Alternative				
	A	B	C	D	E
Public Support*	13%	15%	13%	16%	8%

* Based on comment forms received from public open house (February 2014). 34% of respondents did not select a favored alternative.

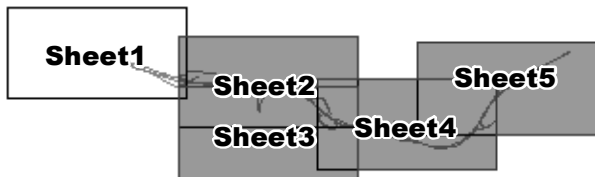
Attachment **B**

Alternative Design Plans





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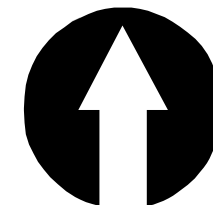


Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction.

Alternative Footprint

- Area of Potential Impact (API)
- Structure
- Pavement Shoulder
- Pavement Lanes
- Retaining Wall
- Recommended Noise Wall
- Storm Water Basin
- Exit

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.



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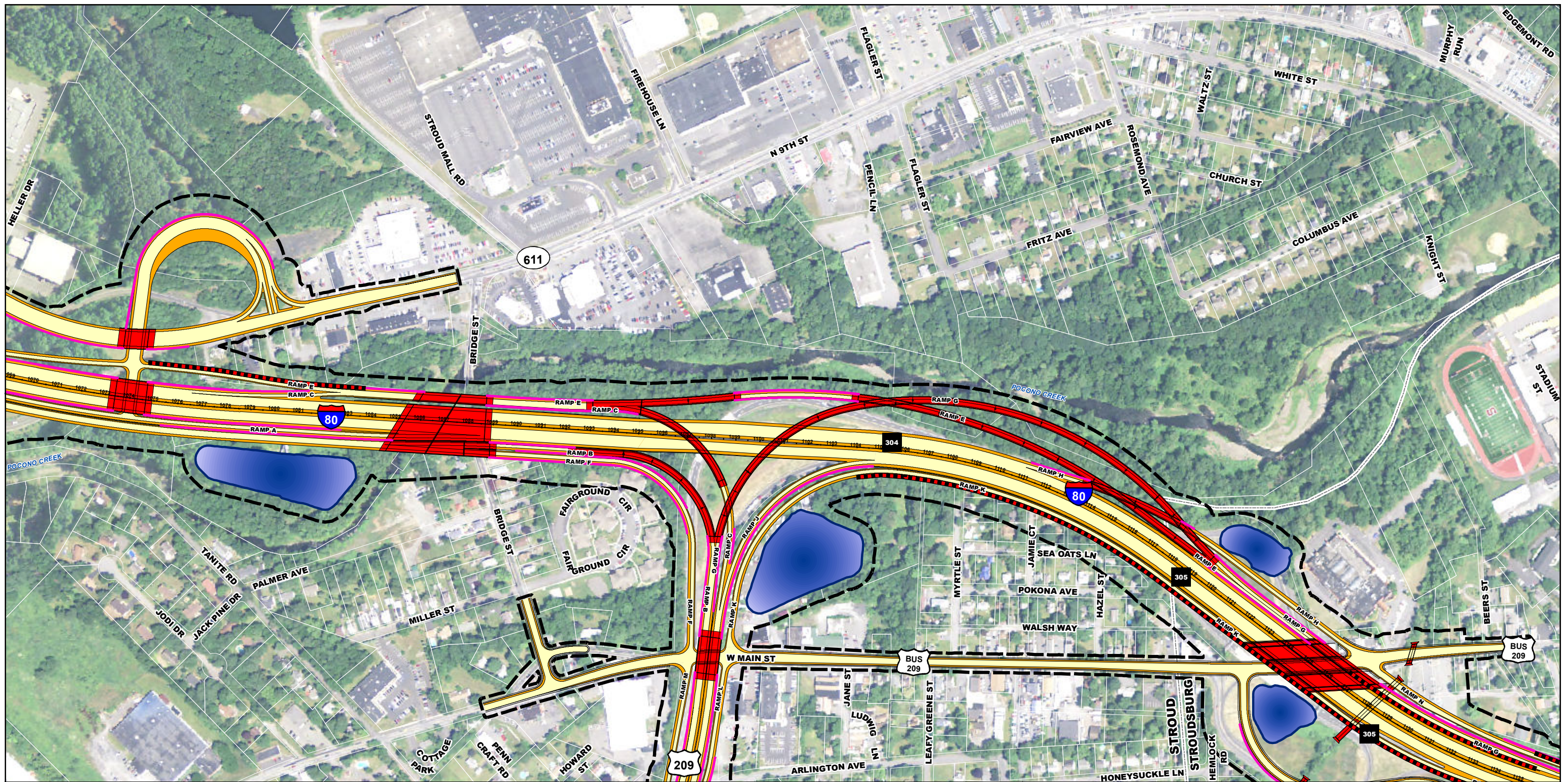


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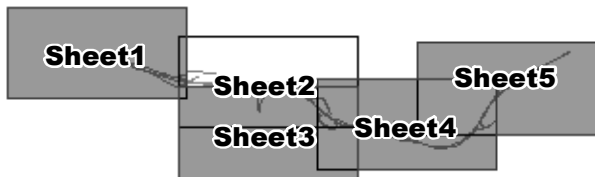
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ALTERNATIVE 2B





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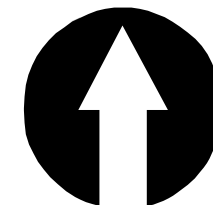


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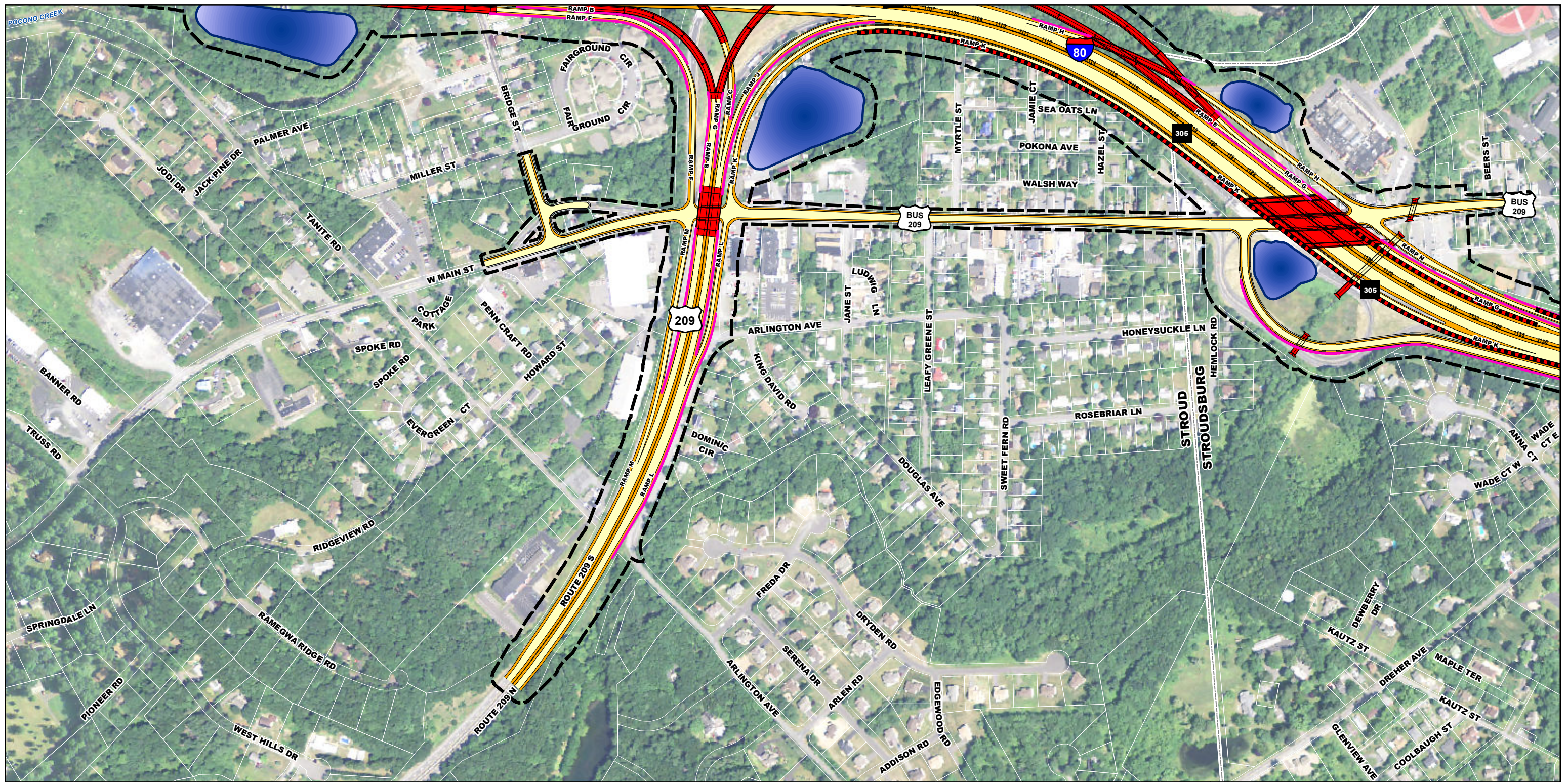


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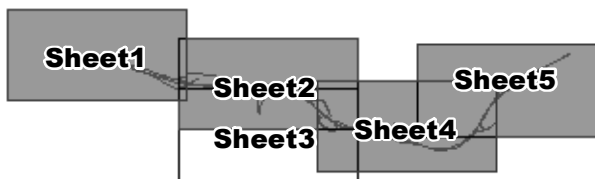
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ALTERNATIVE 2B












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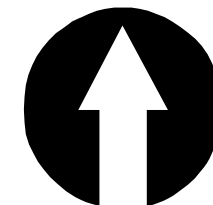


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Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.



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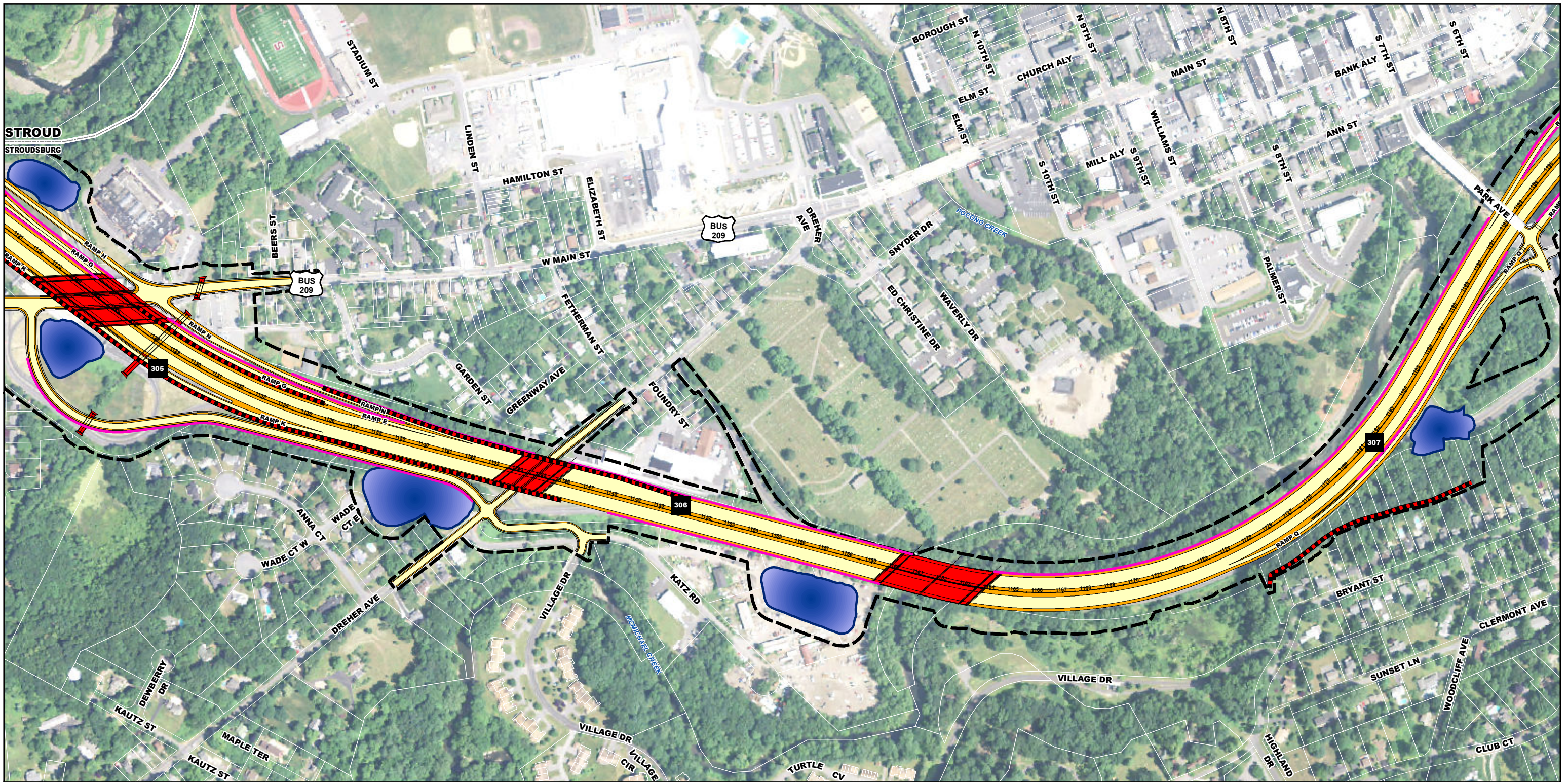
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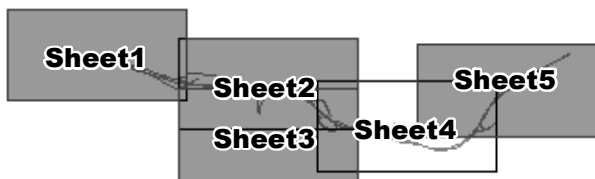
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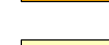






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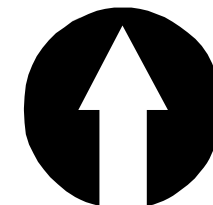


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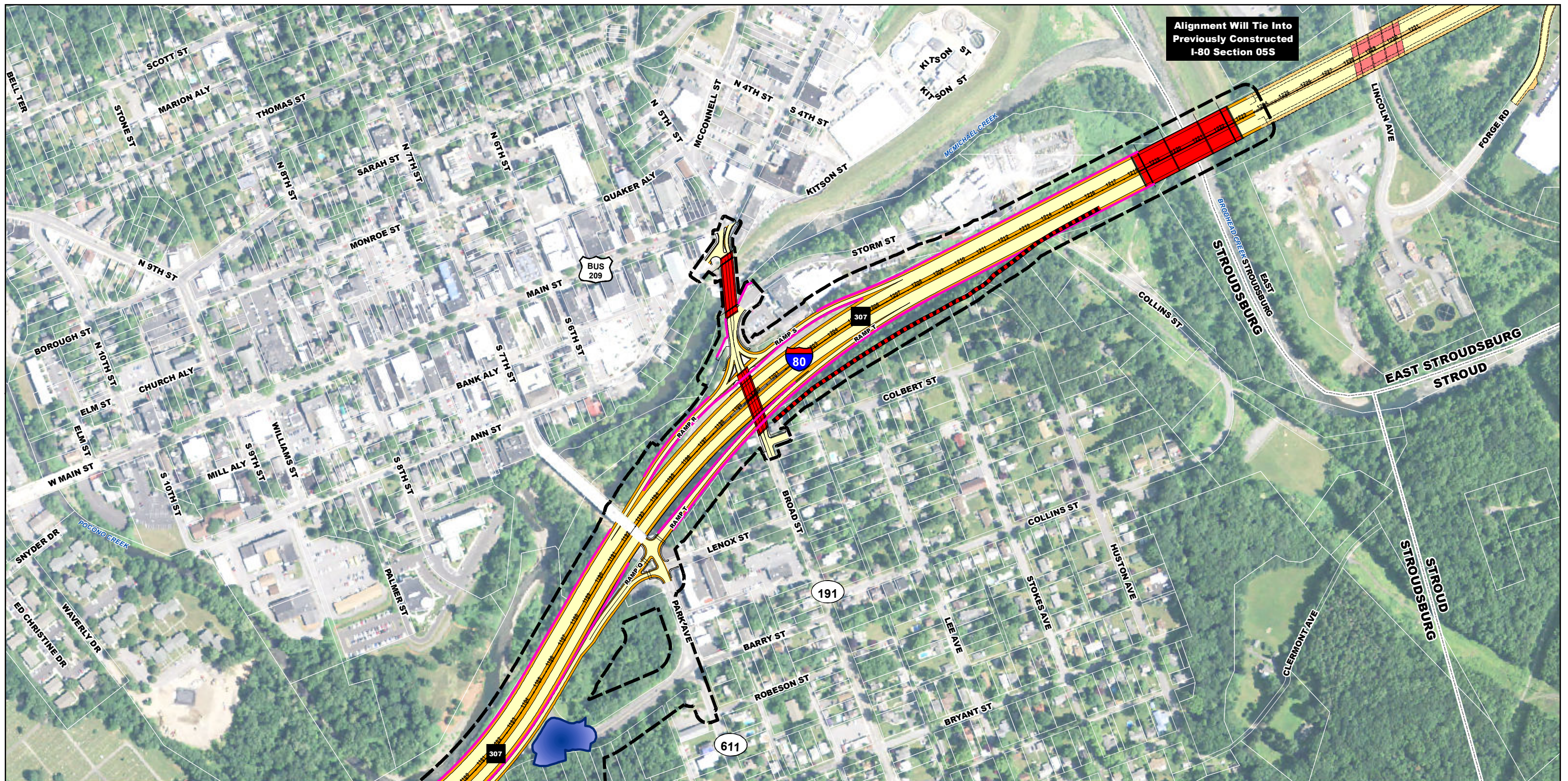
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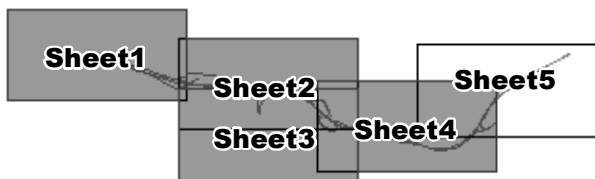
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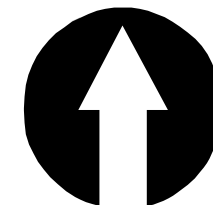


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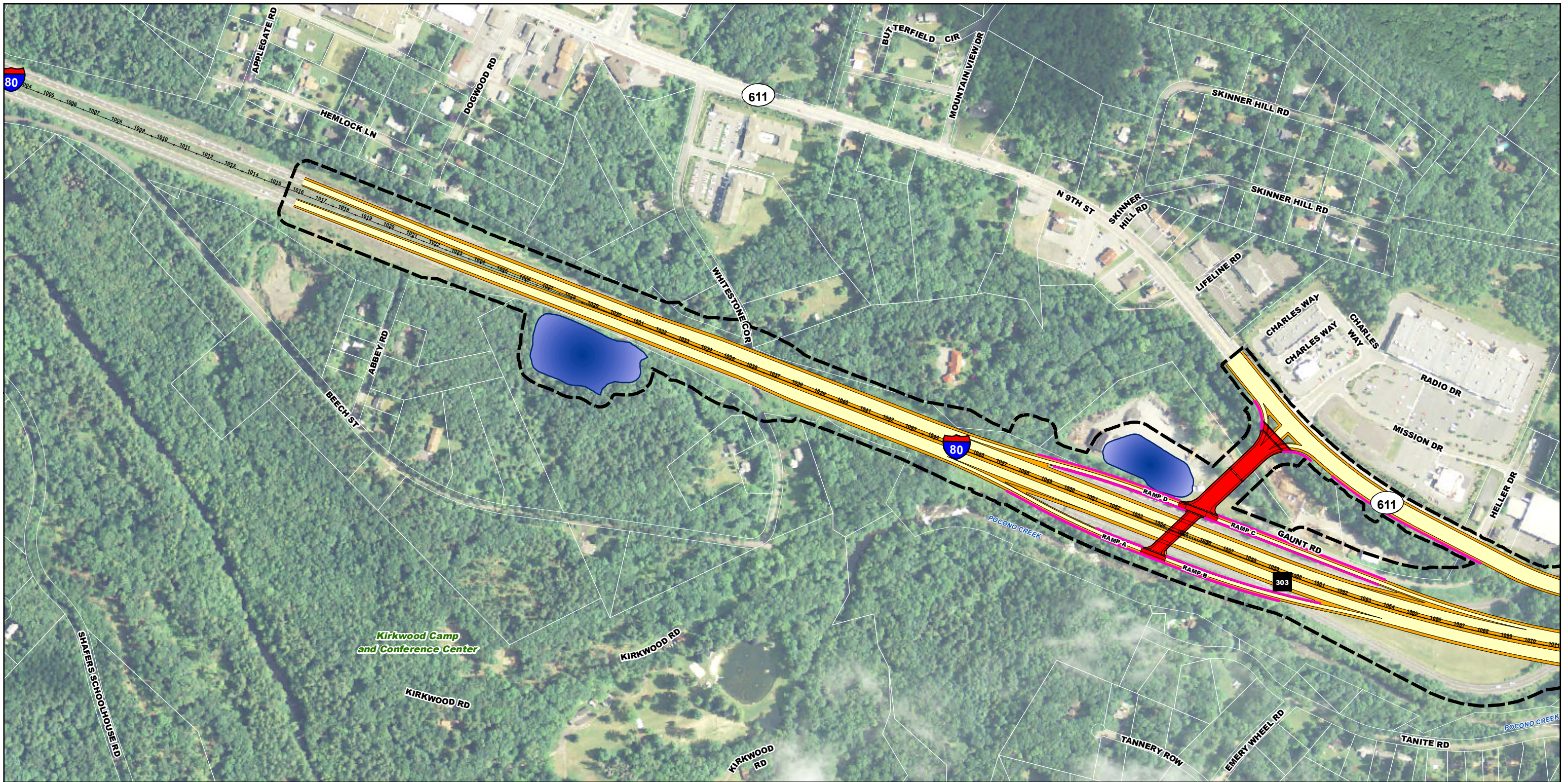


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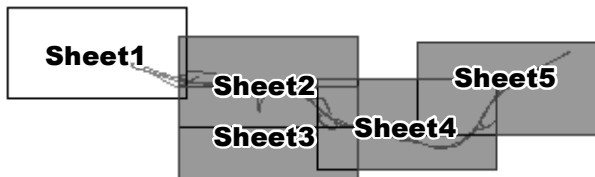
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ALTERNATIVE 2B





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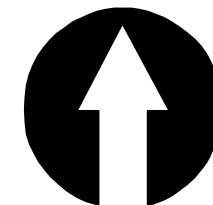


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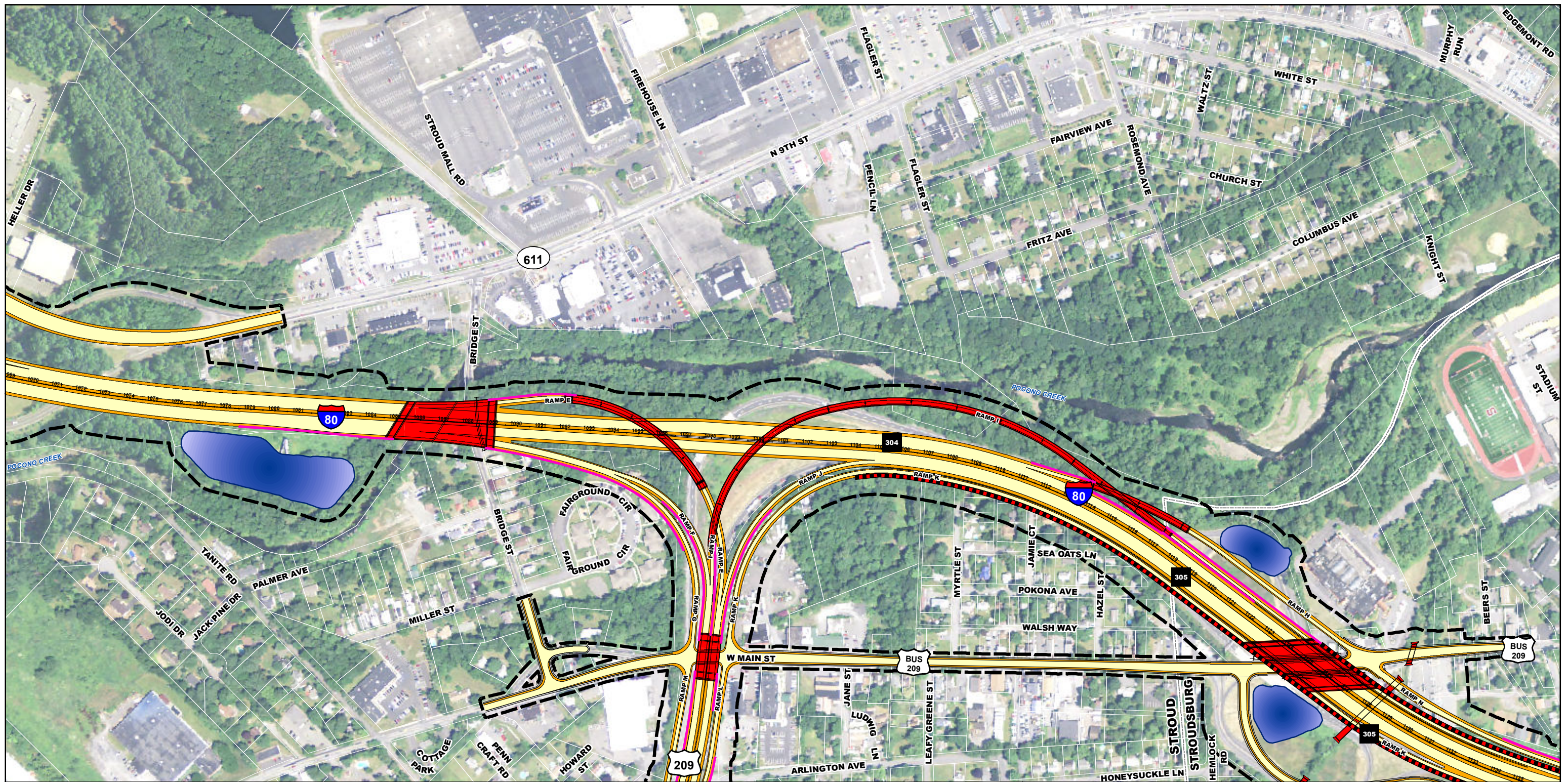


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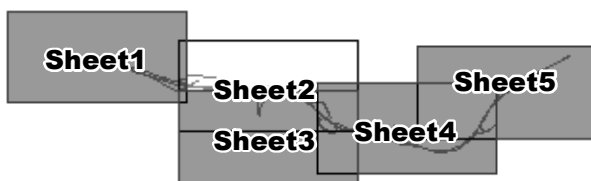
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ALTERNATIVE 2D





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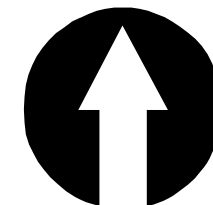


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Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.



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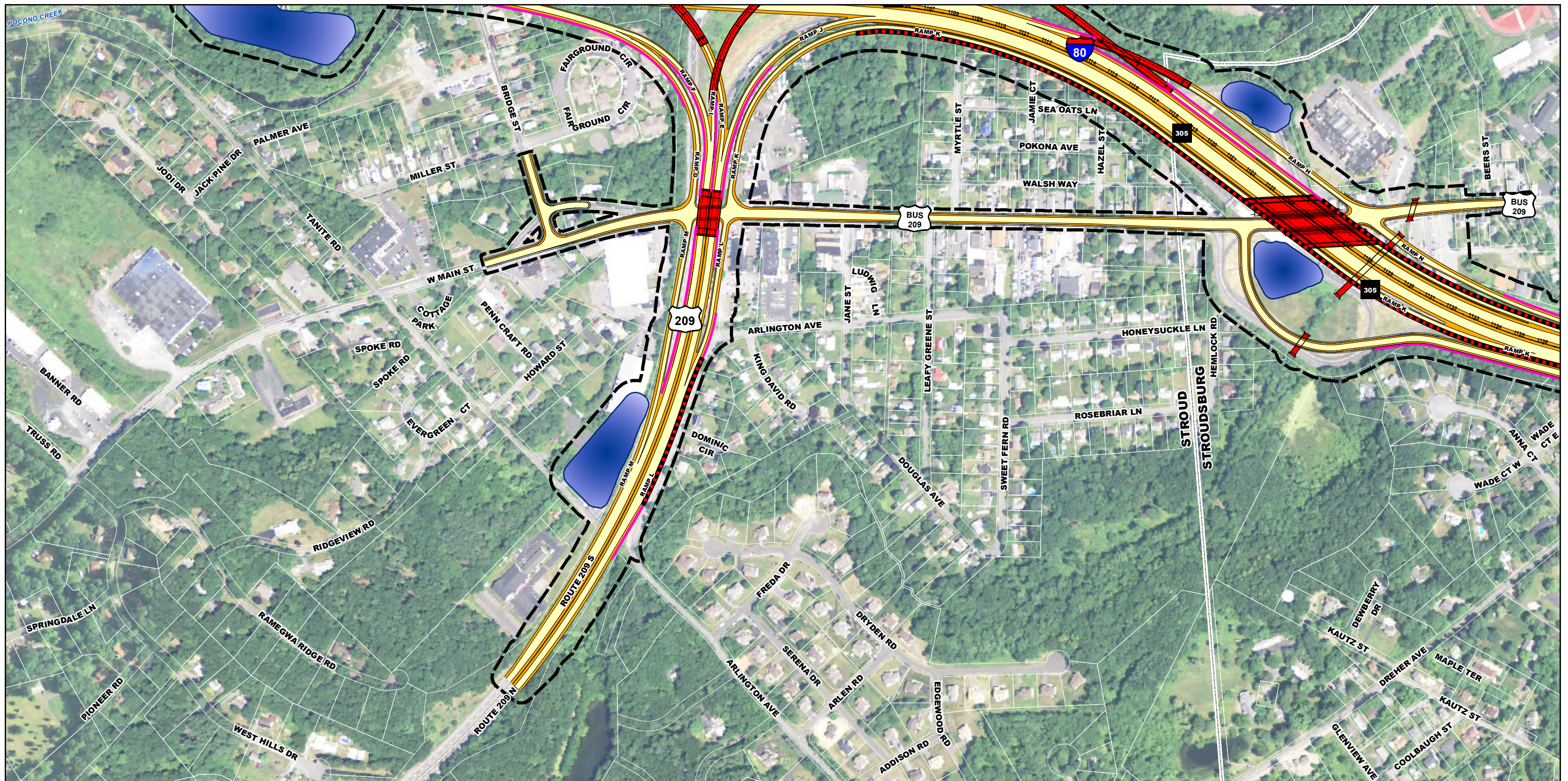
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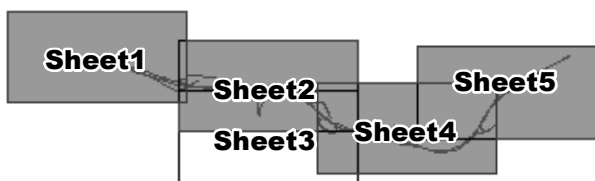
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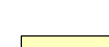






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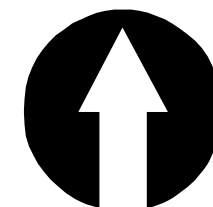


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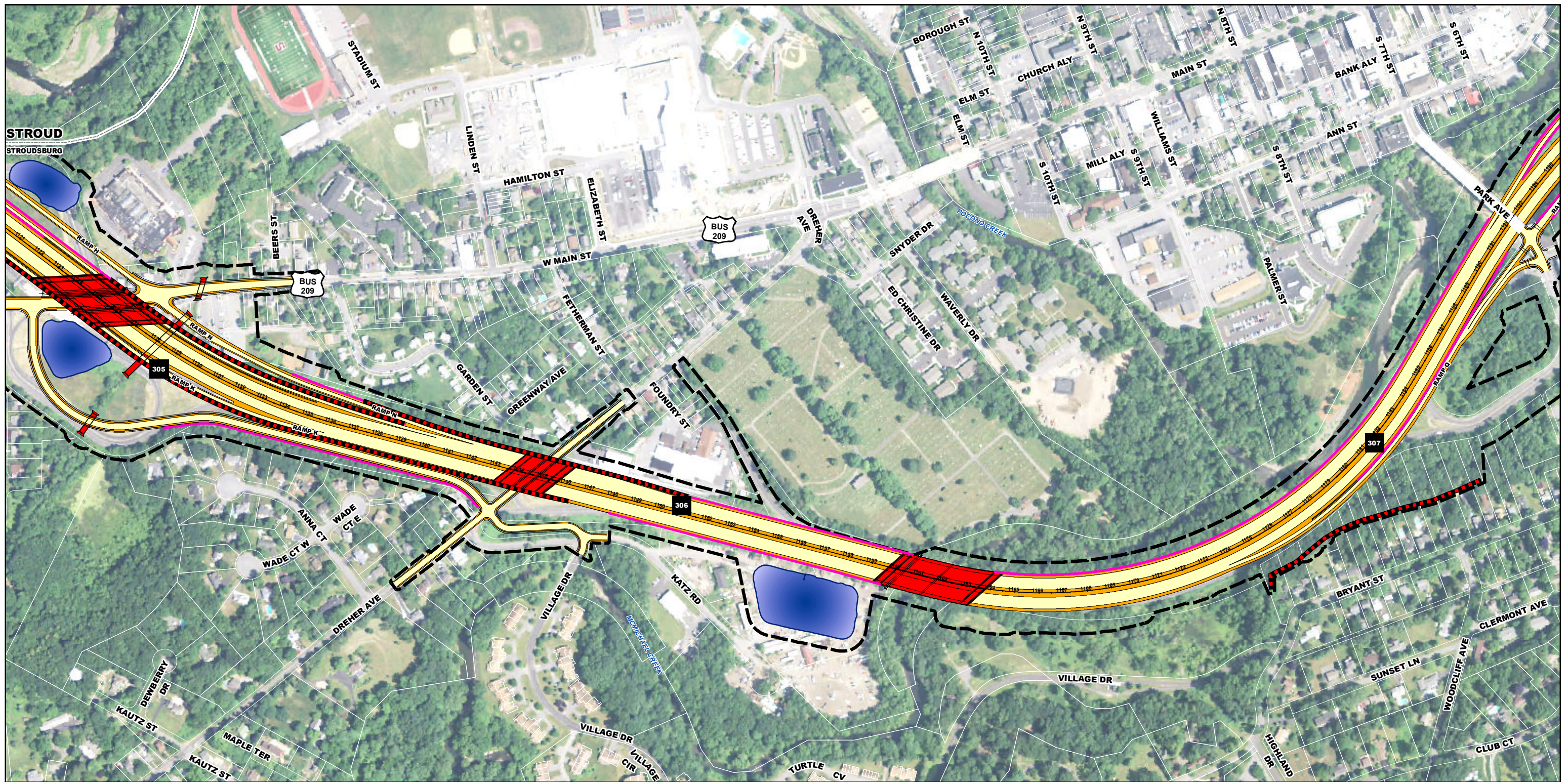


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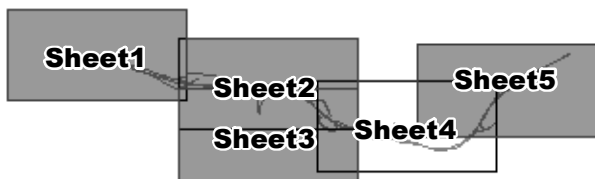
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ALTERNATIVE 2D













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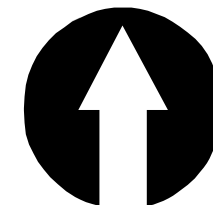


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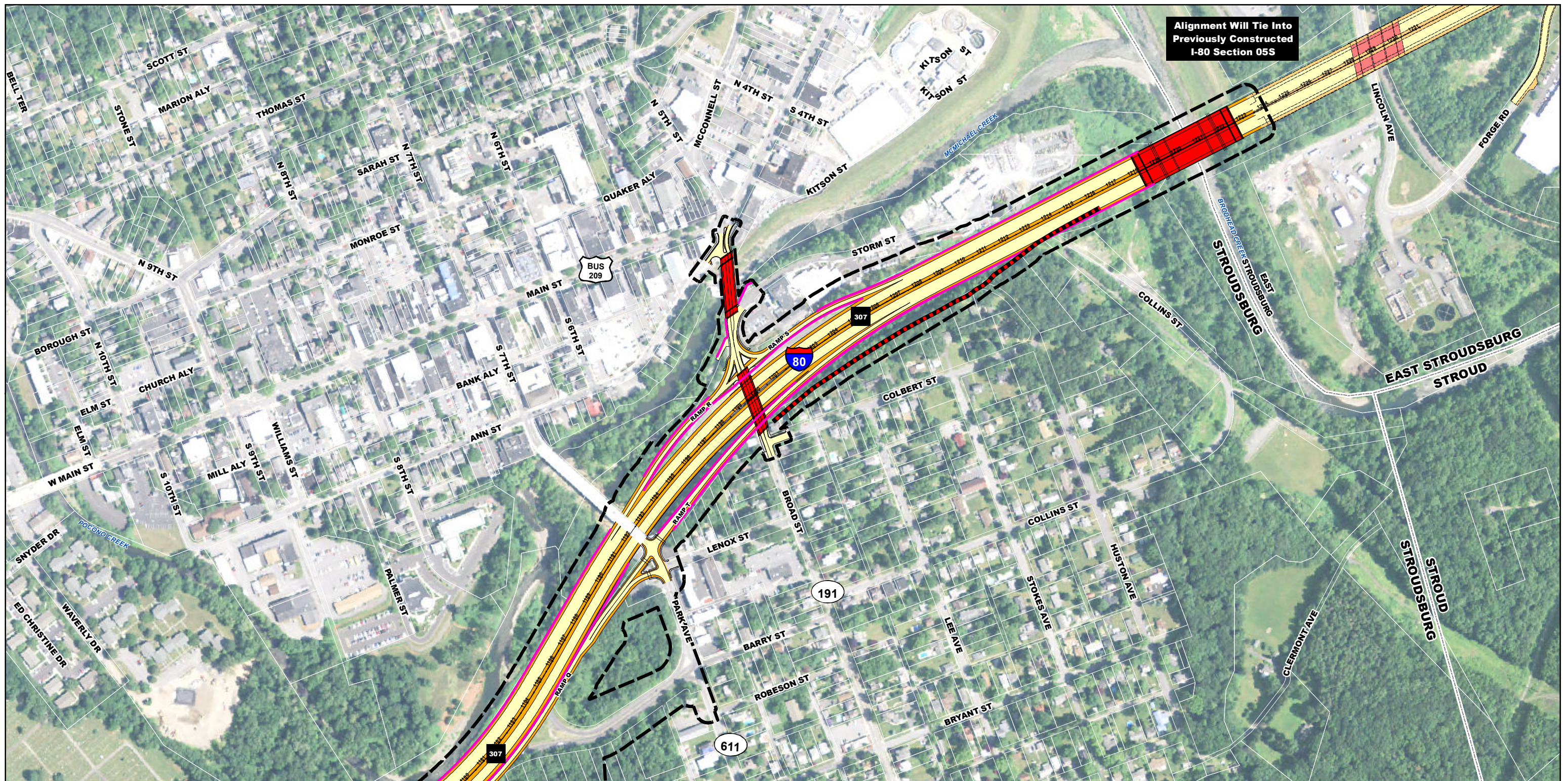
I-80 RECONSTRUCTION

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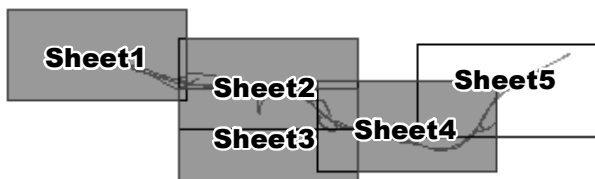
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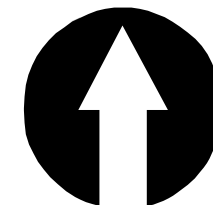


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I-80 RECONSTRUCTION

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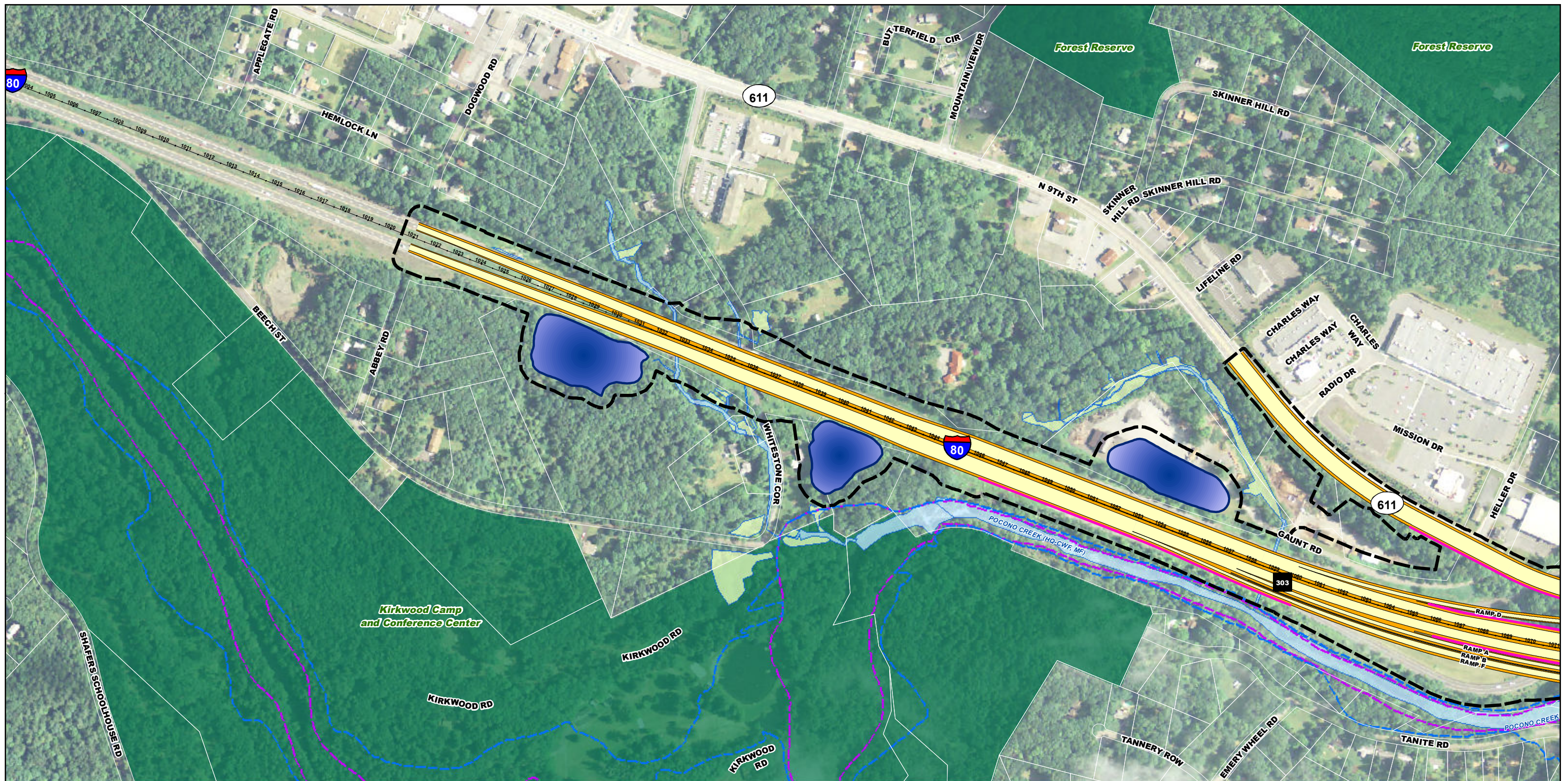
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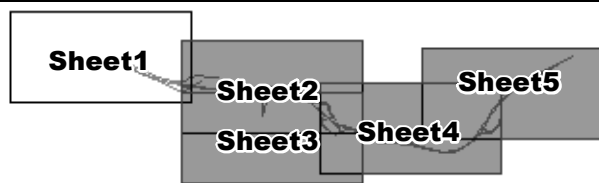
Attachment C

Environmental Resources Mapping





SHEET KEY



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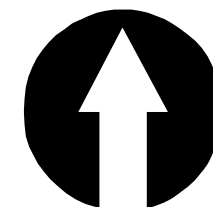
- Area of Potential Impact (API)
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Features

- FEMA 100-yr Floodplain
- FEMA Floodway
- Delineated Waterway (Designated Use)
- Wetland
- Exit

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

- Cemetery
- Private or Public Open Space
- Public Park
- Existing Trail
- Planned Trail
- NRHP Listed
- NRHP Eligible



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Print Date: 6/17/2019



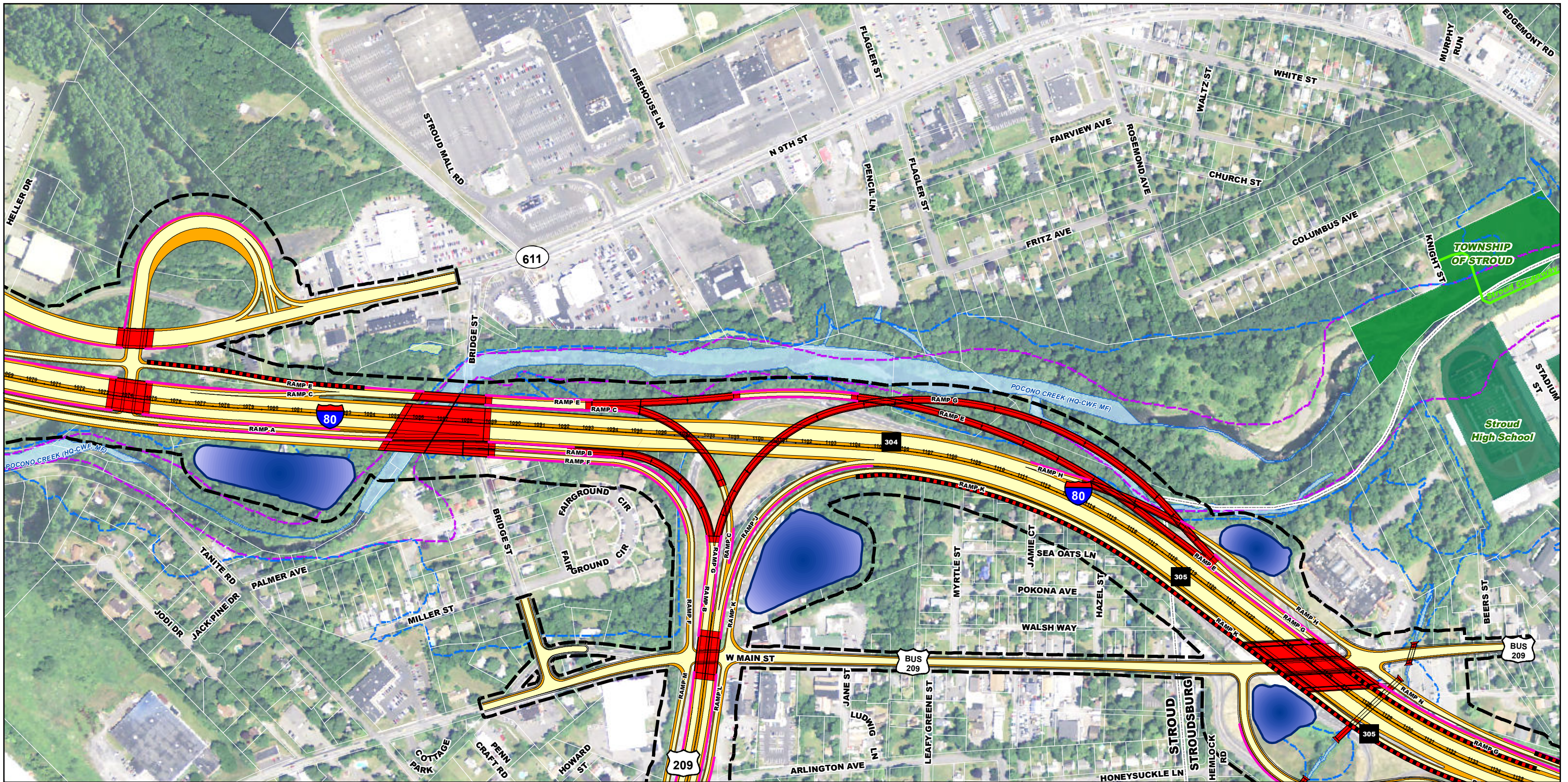
I-80 RECONSTRUCTION

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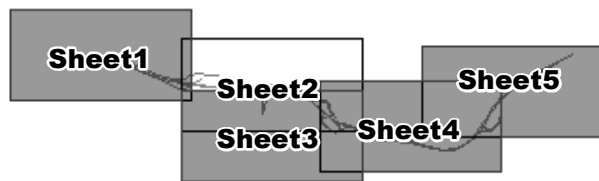
ALTERNATIVE 2B



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SHEET KEY



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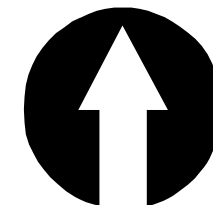
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Features

- FEMA 100-yr Floodplain
- FEMA Floodway
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- Wetland
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- Cemetery
- Private or Public Open Space
- Public Park
- Existing Trail
- Planned Trail
- NRHP Listed
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Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.



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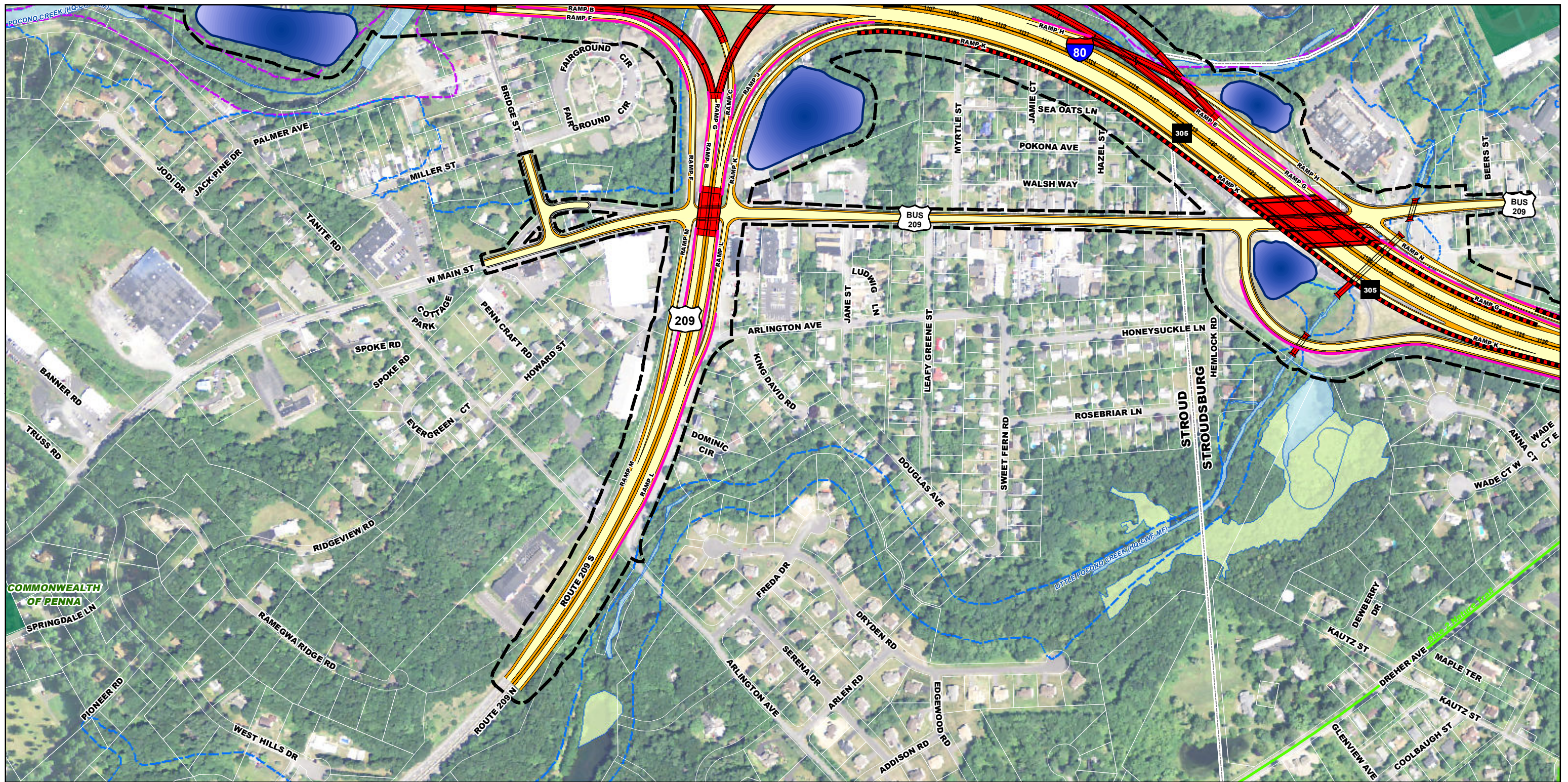


I-80 RECONSTRUCTION

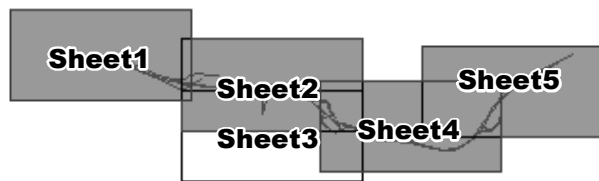
Sheet 2 of 5

ALTERNATIVE 2B





SHEET KEY



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Alternative Footprint

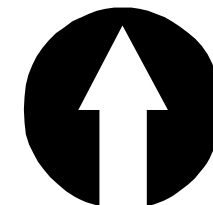
- Area of Potential Impact (API)
- Structure
- Pavement Shoulder
- Pavement Lanes
- Retaining Wall
- Recommended Noise Wall
- Storm Water Basin

Features

- FEMA 100-yr Floodplain
- FEMA Floodway
- Delineated Waterway (Designated Use)
- Wetland
- Exit

- Cemetery
- Private or Public Open Space
- Public Park
- Existing Trail
- Planned Trail
- NRHP Listed
- NRHP Eligible

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.



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Feet

Print Date: 6/17/2019

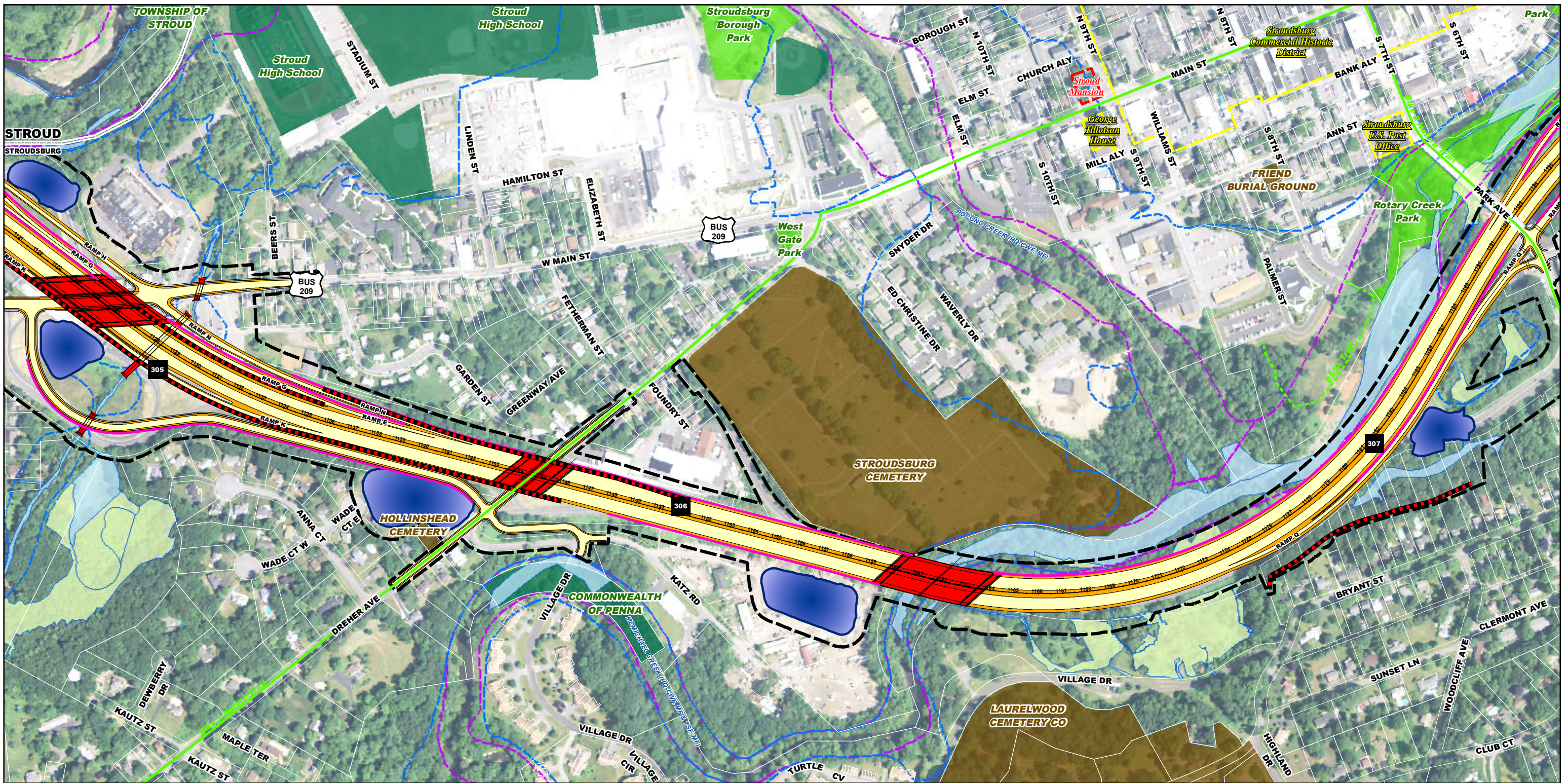


I-80 RECONSTRUCTION

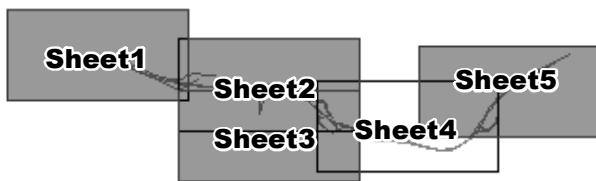
Sheet 3 of 5

ALTERNATIVE 2B





SHEET KEY



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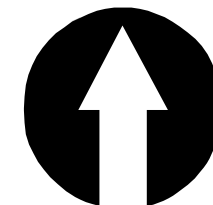
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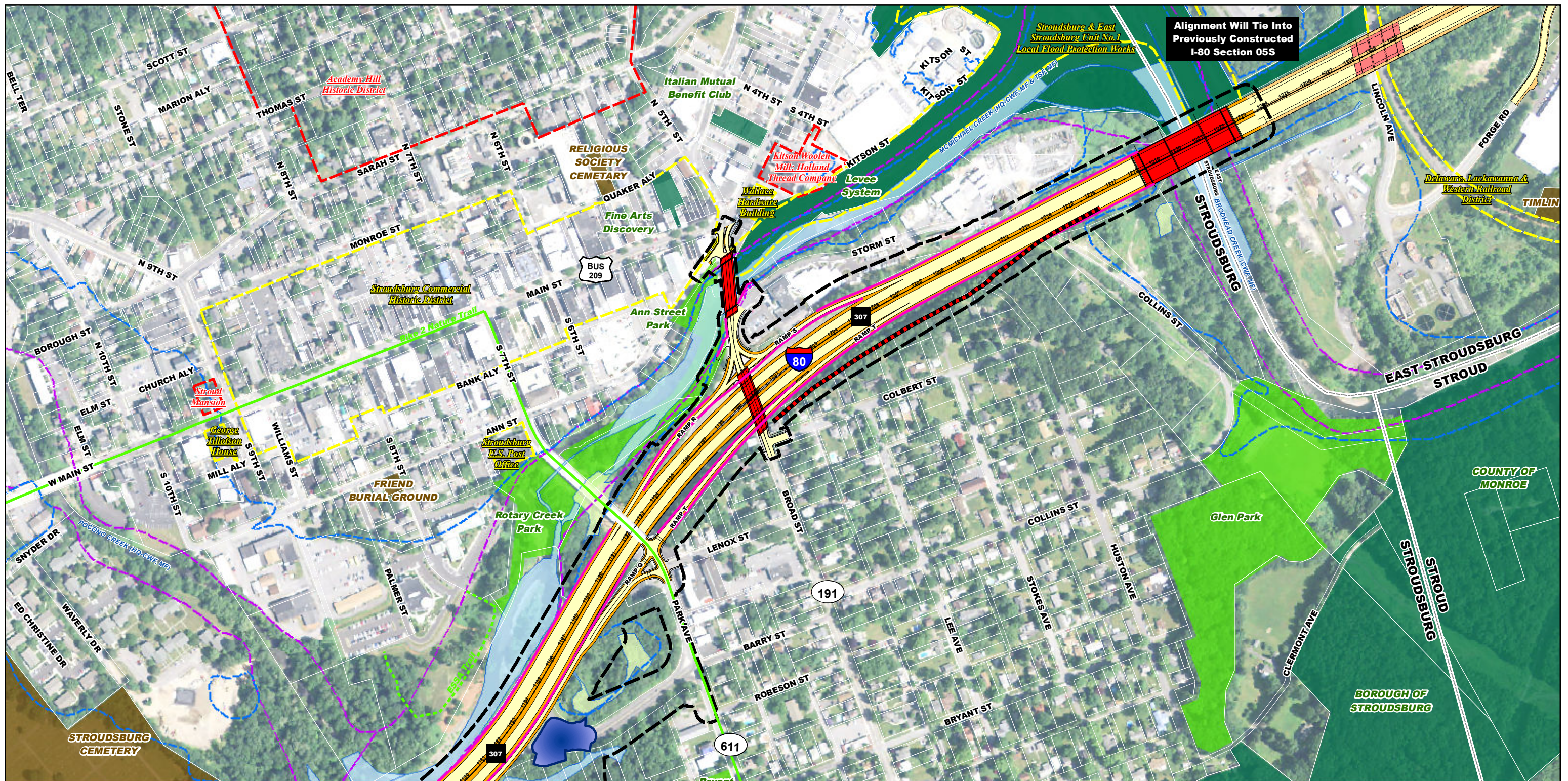


I-80 RECONSTRUCTION

Sheet 4 of 5

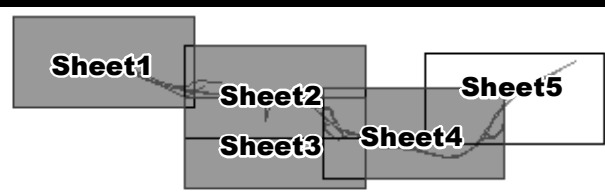
ALTERNATIVE 2B





Alignment Will Tie Into Previously Constructed I-80 Section 05S

SHEET KEY



Alternative Footprint

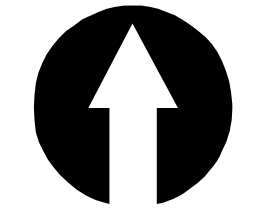
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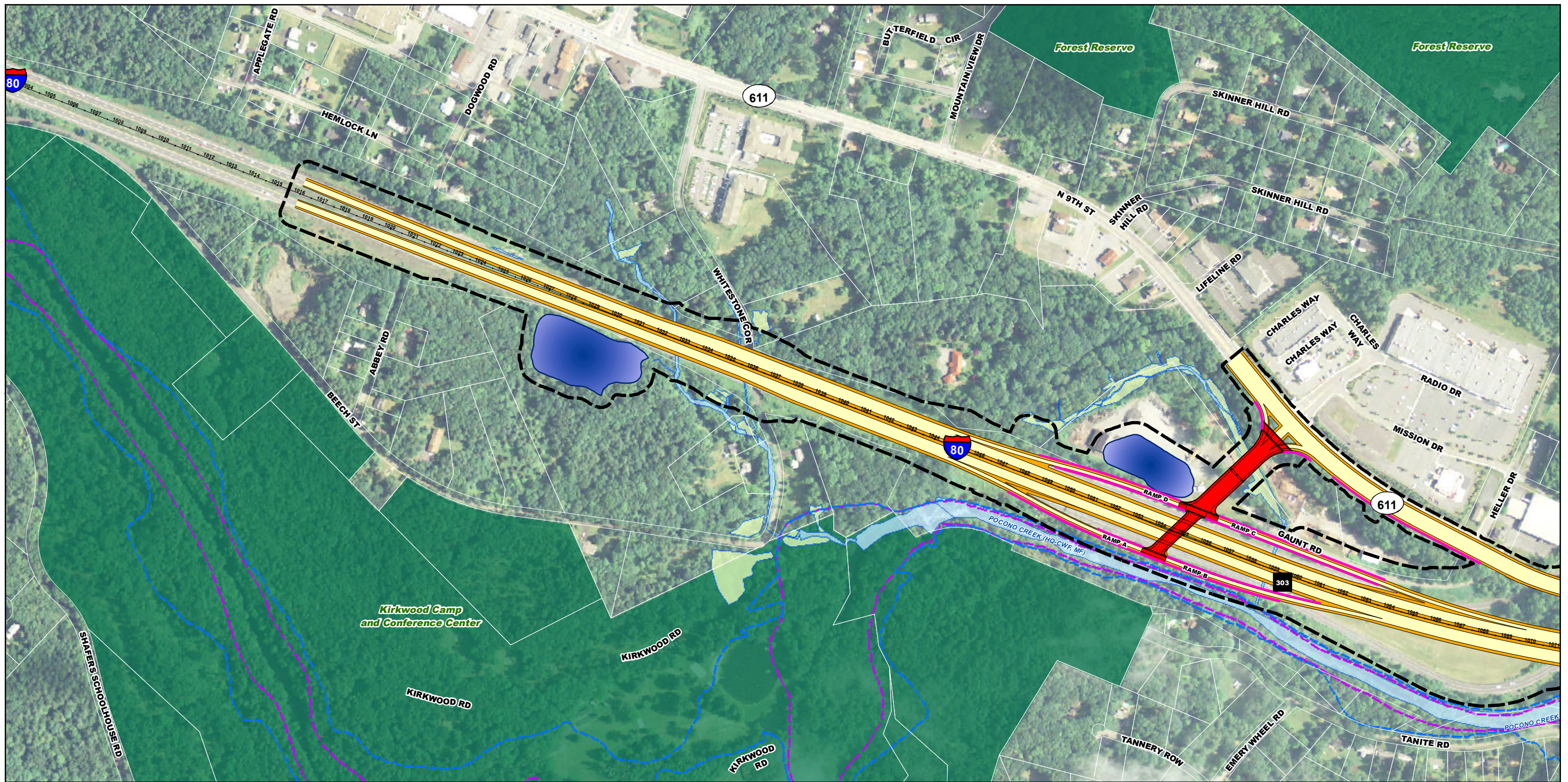
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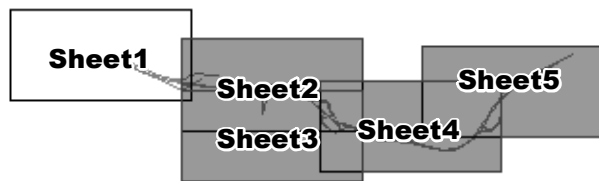
I-80 RECONSTRUCTION
Sheet 5 of 5

ALTERNATIVE 2B





SHEET KEY



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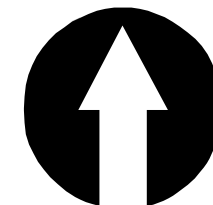
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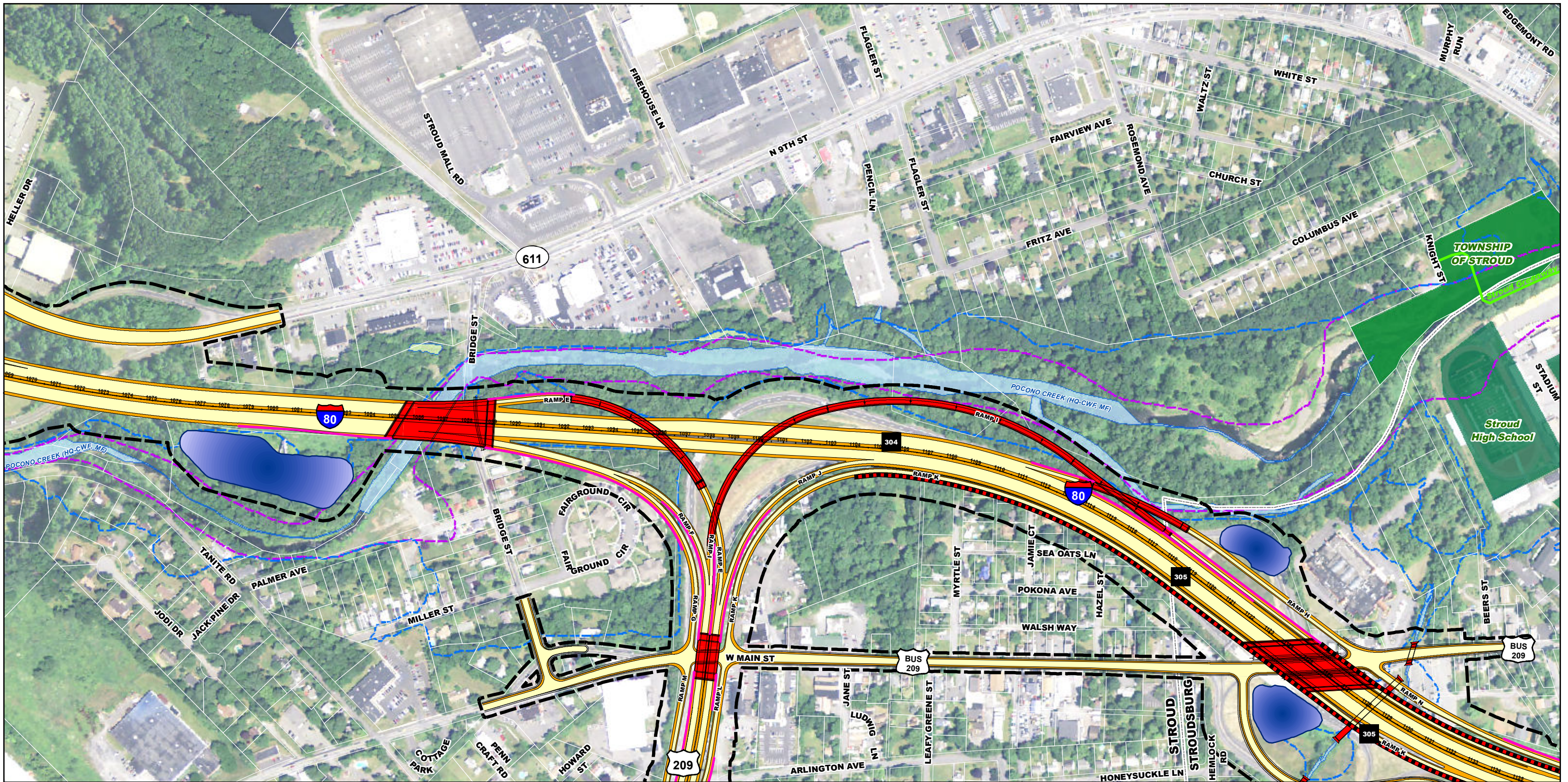


I-80 RECONSTRUCTION

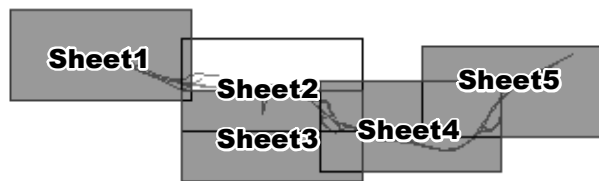
Sheet 1 of 5

ALTERNATIVE 2D





SHEET KEY



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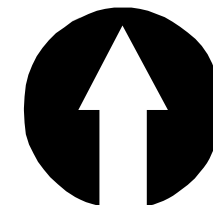
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Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.



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Print Date: 6/17/2019

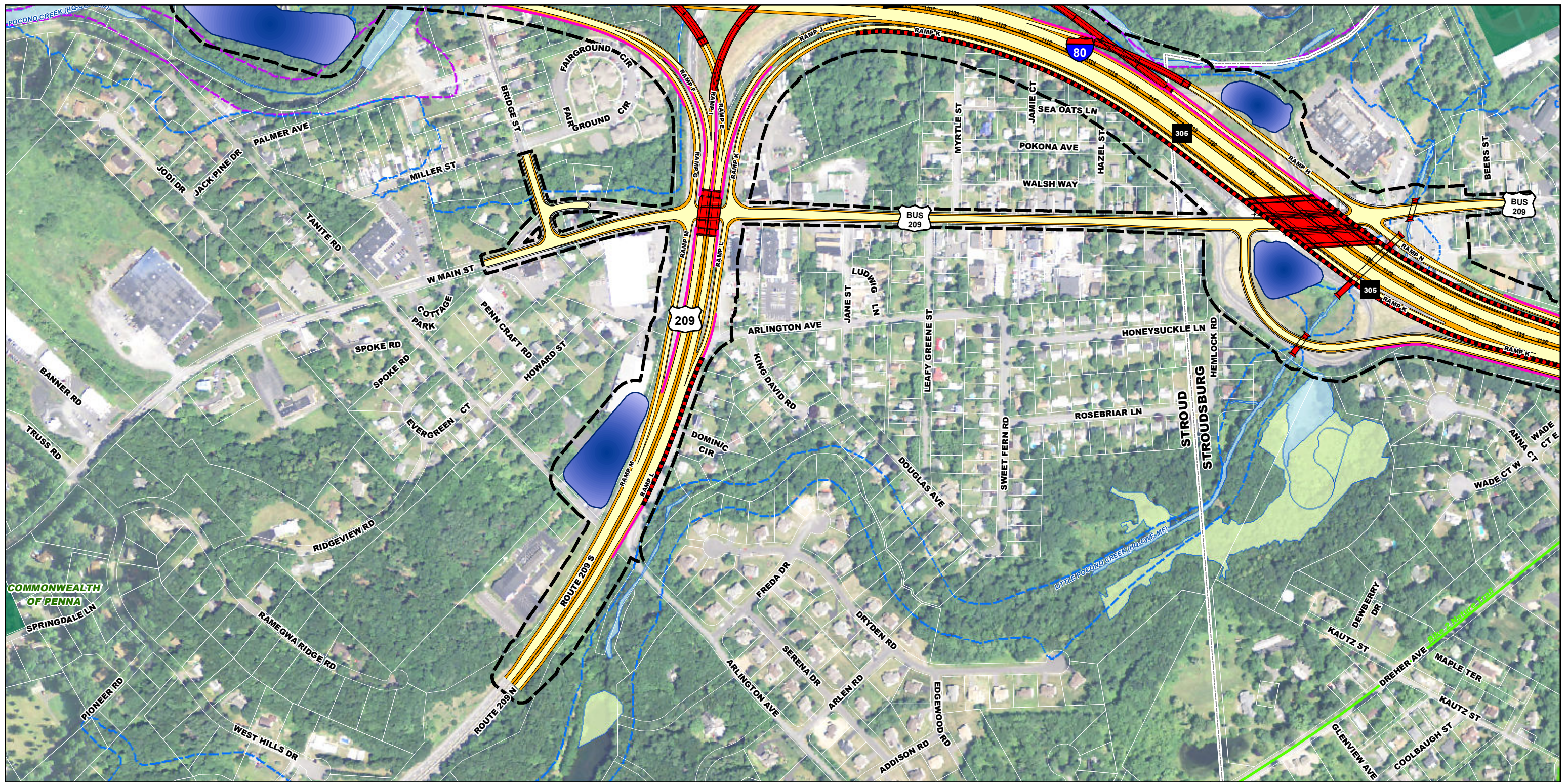


I-80 RECONSTRUCTION

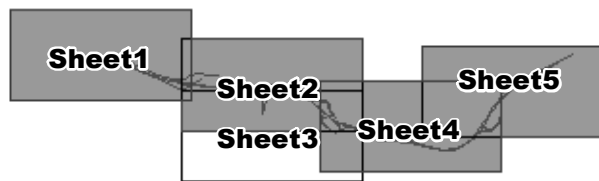
Sheet 2 of 5

ALTERNATIVE 2D





SHEET KEY



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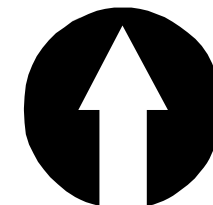
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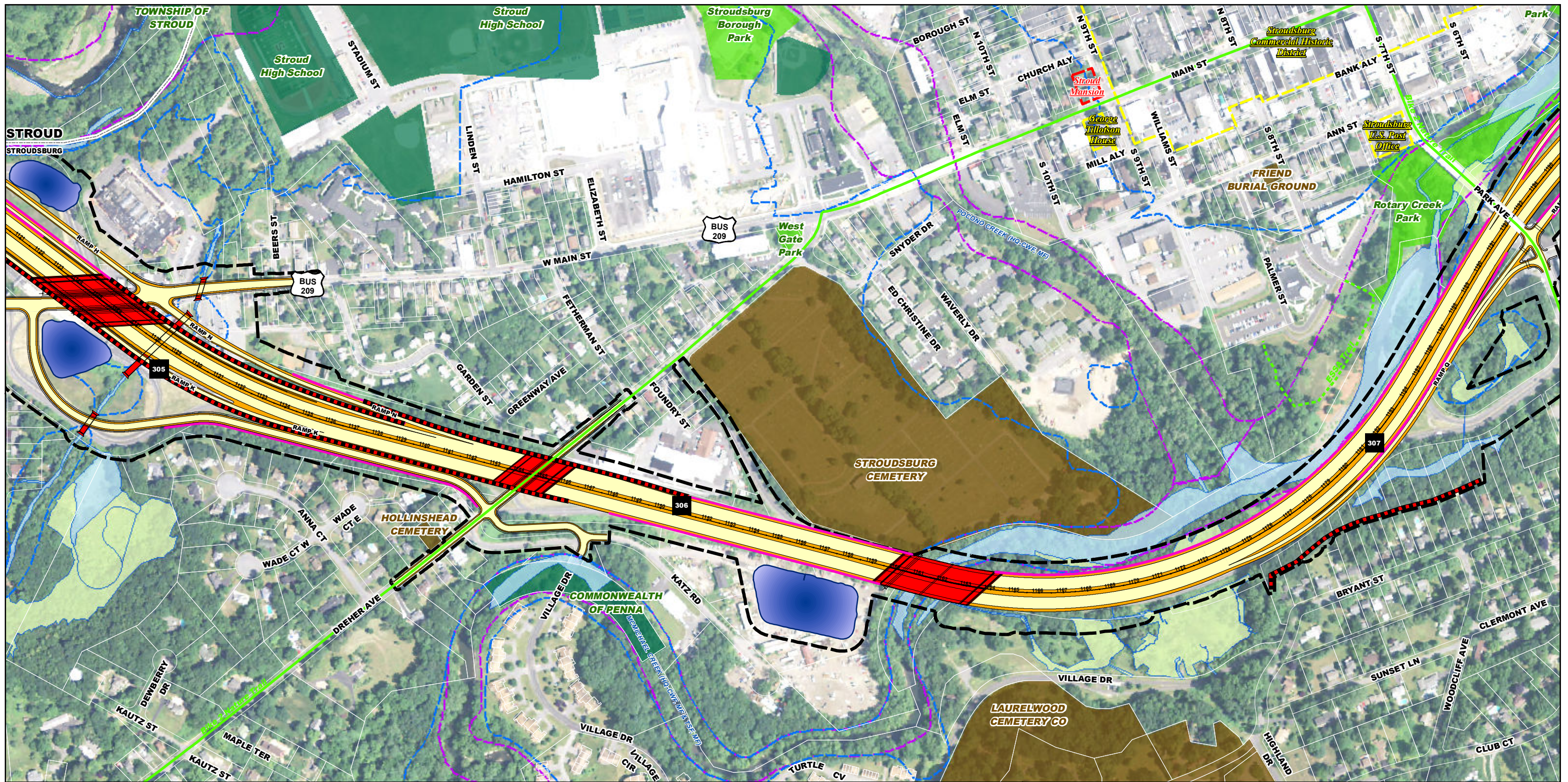


I-80 RECONSTRUCTION

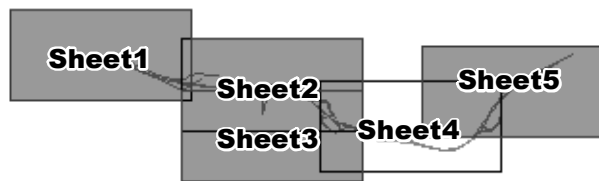
Sheet 3 of 5

ALTERNATIVE 2D





SHEET KEY



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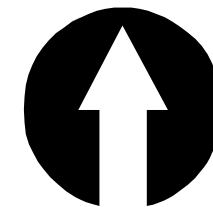
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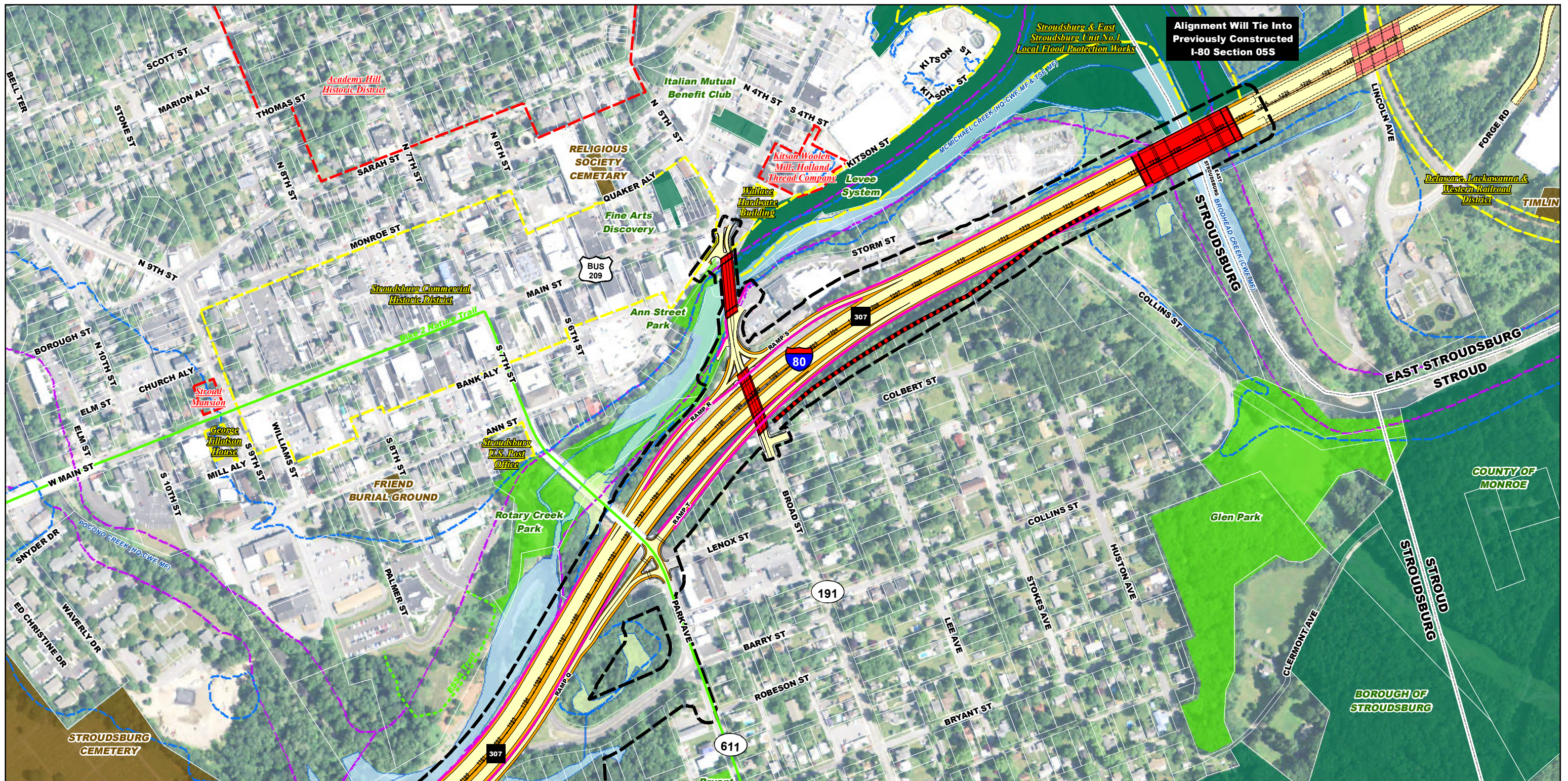


I-80 RECONSTRUCTION

Sheet 4 of 5

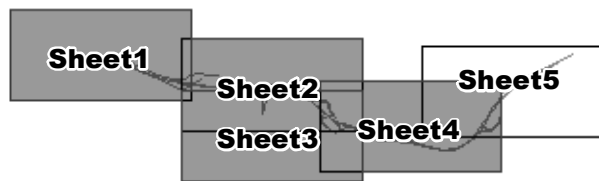
ALTERNATIVE 2D





Alignment Will Tie Into Previously Constructed I-80 Section 05S

SHEET KEY



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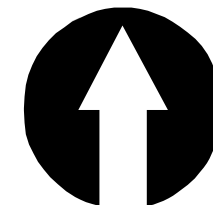
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Feet

Print Date: 6/17/2019



I-80 RECONSTRUCTION

Sheet 5 of 5

ALTERNATIVE 2D



Attachment D

Technical Reports Index



TECHNICAL REPORTS INDEX

- AECOM, 2014. *I-80 Reconstruction SR 0080 Section 17M Phase I Alternatives Analysis*
- AECOM, 2014. *Interstate 80 Reconstruction Project SR0080, Section 17M Monroe County, Pennsylvania Phase 1 Bog Turtle (Clemmys muhlenbergii) Habitat Assessment*
- AECOM, 2014. *Interstate 80 Reconstruction Project SR0080, Section 17M Monroe County, Pennsylvania Phase II Bog Turtle Survey Report*
- AECOM, 2014. *I-80 Reconstruction Purpose and Need*
- AECOM, 2015. *I-80 Reconstruction SR 0080 Section 17M Conceptual Point of Access Study*
- AECOM, 2015. *Interstate 80, Section 17M Water Resources Delineation Report*
- AECOM, 2018. *I-80 Reconstruction Project Environmental Justice Technical Memorandum*
- AECOM, 2018. *Interstate 80 Section 17M Reconstruction Project Phase 1 Bog Turtle Survey Addendum*
- AECOM, 2018. *Interstate 80 Section 17M Reconstruction Project Phase 2 Bog Turtle Survey Report Addendum*
- AECOM, 2018. *Interstate 80, Section 17M Water Resources Delineation Report 2018 Addendum – Expanded Study Area*
- AECOM, 2018. *SR 0080 Section 17M I-80 Reconstruction Project Conceptual Stage Relocation Report*
- AECOM, 2019. *Interstate 80, Section 17M Water Resources Delineation Report 2019 Addendum – Expanded Study Area*
- AECOM, 2019. *Interstate 80, Section 17M Visual Resources Technical Memorandum*
- BrightFields, 2017. *Phase I Environmental Site Assessment for the I-80 Reconstruction Project*
- BrightFields, 2017. *Phase III Environmental Site Assessment Field Sampling Plan I-80 Reconstruction Project*
- BrightFields, 2018. *Supplemental Phase III Environmental Site Assessment Field Sampling Plan I-80 Reconstruction Project*

BrightFields, 2019. *Phase I Environmental Site Assessment Addendum for the I-80 Reconstruction Project Ramp I Realignment Area*

BrightFields, 2019. *Phase III Environmental Site Assessment Report I-80 Reconstruction Project*

McCormick Taylor, 2014. *Phase IA Archaeological Predictive Model I-80 Reconstruction Project Monroe, Pennsylvania*

McCormick Taylor, 2014. *SR 0080-17M, Interstate 80 (I-80) Reconstruction Project MPMS 76357 Monroe County Area of Potential Effect (APE) Description*

McCormick Taylor, 2016. *Historic Structures Survey & Determination of Eligibility Report SR 0080-17M, Interstate 80 (I-80) Reconstruction Project ER No. 2013-8131-089 Volume 1*

McCormick Taylor, 2016. *Historic Structures Survey & Determination of Eligibility Report SR 0080-17M, Interstate 80 (I-80) Reconstruction Project ER No. 2013-8131-089 Volume 2*

McCormick Taylor, 2016. *I-80 Reconstruction SR 0080 Section 17M Preliminary Noise Analysis*

McCormick Taylor, 2016. *Interstate 80 Reconstruction Project Final Air Quality Technical Report*

McCormick Taylor, 2017. *Phase IB/II Archaeological Identification and Evaluation Survey I-80 Reconstruction Project Monroe County, Pennsylvania Volume I: Report Body*

McCormick Taylor, 2017. *Phase IB/II Archaeological Identification and Evaluation Survey I-80 Reconstruction Project Monroe County, Pennsylvania Volume II: Appendices*

McCormick Taylor, 2018. *Addendum Phase 1B Archaeological Identification and Evaluation Survey Negative Survey Form I-80 Reconstruction Project Monroe County, Pennsylvania*

McCormick Taylor, 2019. *I-80 Reconstruction – Ramp I Noise Analysis*

NTM Engineering, 2015. *Alternatives Analysis – Hydrology & Hydraulics Interstate 80 Reconstruction over Brodhead Creek, McMichael Creek, Pocono Creek, & Little Pocono Creek.*

NTM Engineering, 2019. *I-80 H&H Results for Alternative 2D*

PennDOT, 2018. *I-80 Reconstruction-Monroe Determination of No Adverse Effect
Memorandum*

Thompson Environmental, 2019. *Interstate 80 Section 17M Reconstruction Project Phase 1
Bog Turtle Survey Addendum*

Attachment E

2016 Preliminary Noise Analysis
Summary Tables



Table 4-2
I-80 Reconstruction Project
Alternative 2B
Summary Noise Mitigation Evaluation

NSA	Receptor Site	Site Representation	Future Build Noise Level (2045)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet	
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)
A1	R1-A1	1 Residence	67	62	6	61	7	60	7	59	8	59	8	59	9	58	9
	M1-A1	2 Residences	67	62	5	60	6	59	7	59	8	58	8	58	9	58	9
A	R1	3 Residences	68	65	3	64	4	63	5	62	5	62	6	61	6	61	7
	R2	5 Residences	65	64	1	63	2	62	3	62	3	61	4	61	4	61	4
	R3	4 Residences	65	65	0	65	0	65	0	65	0	65	1	65	1	64	2
	MA1	5 Residences	62	62	0	62	0	62	0	62	0	62	0	61	1	61	1
	MA2	1 Residence	65	65	0	65	0	64	0	64	0	64	0	64	1	64	1
B	Not Warranted																
C	R8	2 Residences	63	62	1	61	2	60	3	60	3	60	3	59	4	59	4
	R9	2 Residences	69	63	6	62	7	61	8	61	8	60	9	60	9	59	10
	MC2	3 Residences	69	62	6	61	7	61	8	60	9	60	9	59	10	59	10
	MC3	3 Residences	68	64	4	64	5	63	5	63	5	62	6	61	7	61	7
	MC4	1 Residence	67	65	2	64	3	63	4	63	4	62	5	62	5	62	5
	MC5	3 Residences	68	63	5	62	6	61	7	61	7	61	7	60	8	60	8
	MC6	2 Residences	66	65	1	64	2	63	4	62	4	62	4	62	4	62	5
	MC7	2 Residences	67	65	2	64	3	63	4	63	4	62	4	62	5	62	5
	MC8	2 Residences	67	64	3	63	4	62	4	62	5	61	5	61	6	61	6
	MC9	2 Residences	67	63	5	61	6	61	7	60	7	60	8	59	8	59	9
	MC10	2 Residences	67	66	1	65	2	64	3	64	3	64	3	64	3	64	4
	MC11	4 Residences	67	63	3	63	4	62	4	62	5	61	5	61	5	61	6
	MC12	5 Residences	70	68	1	68	1	68	2	68	2	68	2	68	2	68	2
	MC13	4 Residences	65	62	3	61	4	60	5	59	5	59	6	59	6	58	6
	MC14	2 Residences	65	62	4	61	5	60	5	59	6	59	6	59	7	58	7
	MC15	5 Residences	64	61	3	60	4	59	5	59	5	58	6	58	6	57	7
	MC16	2 Residences	66	62	4	61	5	60	5	60	6	59	6	59	7	59	7
	MC17	3 Residences	63	61	2	60	3	58	5	58	5	57	6	57	6	57	6
	MC18	2 Residences	64	61	3	60	4	59	5	58	6	58	6	57	7	57	7
MC19	3 Residences	64	61	3	60	4	59	5	58	6	58	6	57	7	57	7	
D	R11	1 Residence	66	64	2	63	3	62	4	60	6	60	6	59	7	59	7
	R12	2 Residences	66	65	1	65	1	64	2	64	2	63	3	61	4	61	5
	R13	2 Residences	67	67	1	66	1	66	2	65	2	64	3	63	4	62	6
	MD1	1 Residence	57	56	1	55	2	54	3	54	4	53	4	53	4	52	5
	MD2	2 Residences	60	59	1	59	1	58	2	57	3	56	4	56	5	55	5
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	MD4	2 Residences	62	60	1	60	1	60	2	59	3	58	4	57	4	57	5
	MD5	2 Residences	63	62	1	62	1	62	1	61	2	60	3	59	4	58	5
	MD6	2 Residences	64	63	1	63	1	62	1	62	2	61	3	60	4	60	4
MD7	2 Residences	66	64	1	64	2	64	2	62	3	62	4	61	5	61	5	
MD8	2 Residences	67	64	2	63	3	62	5	61	5	61	6	61	6	60	6	
MD9	1 Residence	65	63	2	62	2	62	3	60	4	60	5	59	6	59	6	


Table 4-2 Continued


NSA	Receptor Site	Site Representation	Future Build Noise Level (2045)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet		
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	
C2	Not Warranted																	
E	Not Warranted																	
F	R15	1	Residence	75	68	7	66	9	65	10	64	11	63	12	62	13	61	13
	R16	3	Residences	61	59	3	58	3	58	4	57	4	57	4	56	5	56	5
	R17	5	Residences	64	62	2	62	2	62	2	62	2	62	2	62	2	62	2
	MF1	1	Residence	65	64	0	64	0	64	0	64	1	64	1	64	1	64	1
	MF2	5	Residences	68	63	5	63	6	62	6	61	7	61	8	60	8	60	9
	MF3	4	Residences	63	61	1	61	2	61	2	60	2	60	3	60	3	60	3
	MF4	4	Residences	68	62	6	61	7	60	7	60	8	59	9	59	9	58	10
	MF5	2	Residences	66	60	6	59	6	59	7	58	8	57	8	57	9	56	9
MF6	3	Residences	56	55	1	55	1	55	2	55	2	54	2	54	2	54	2	
G	Not Warranted																	
H	R20	4	Residences	60	55	5	54	5	54	5	54	5	54	6	54	6	54	6
	R21	1	Residence	75	69	6	69	6	68	7	68	7	67	8	67	8	67	8
	MH1	4	Residences	52	52	0	52	0	52	0	52	0	52	0	52	0	52	0
	MH2	4	Residences	53	53	0	53	0	53	0	53	0	53	0	53	0	53	0
	MH3	3	Residences	65	60	5	60	5	59	6	59	6	59	7	58	7	58	7
	MH4	4	Residences	55	55	0	55	0	55	0	55	0	55	0	55	0	55	0
	MH5	3	Residences	68	60	8	60	8	60	8	60	8	59	9	59	9	59	9
	MH6	2	Residences	69	59	10	59	10	58	11	58	11	58	11	57	11	57	12
	MH7	1	Residence	73	63	10	63	10	63	10	63	11	62	11	62	11	62	11
	MH8	2	Residences	67	64	3	64	3	64	3	64	3	63	4	63	4	63	4
	MH9	2	Residences	63	60	3	60	3	60	3	60	3	59	4	59	5	58	5
MH10	1	Residence	69	66	4	65	4	64	6	63	6	63	7	63	7	62	7	
J	R22	4	Residences	66	64	2	63	3	62	4	62	4	62	4	62	4	62	4
	MJ1	3	Residences	67	63	4	62	5	61	6	61	6	60	7	60	7	60	7
	MJ2	3	Residences	64	60	3	60	4	59	5	59	5	59	5	59	5	58	5


Table 4-2 Continued

NSA	Receptor Site	Site Representation	Future Build Noise Level (2045)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet	
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)
L/M	R23	2 Residences	67	64	3	62	4	61	5	61	6	60	6	60	7	60	7
	R24	4 Residences	67	63	4	62	5	61	6	60	7	60	7	59	8	59	8
	R25	4 Residences	66	65	1	64	2	62	3	62	4	61	4	61	5	61	5
	R26	4 Residences	69	68	1	68	2	66	3	66	3	66	4	66	4	66	4
	ML1	1 Residence	64	61	3	59	4	59	5	58	5	58	5	58	5	58	6
	ML2	2 Residences	63	59	4	58	4	58	5	57	6	57	6	57	6	56	6
	ML3	2 Residences	65	61	4	59	5	58	6	58	7	57	8	57	8	57	8
	MM1	3 Residences	70	68	2	68	2	68	2	66	4	65	5	65	5	65	5
	MM2	4 Residences	73	71	2	70	3	70	3	68	5	67	6	67	6	66	7
	MM3	4 Residences	72	70	2	69	3	68	4	66	6	65	7	64	8	64	8
	MM4	3 Residences	68	67	2	66	2	66	3	64	5	63	6	62	6	62	7
	MM5	4 Residences	69	67	2	67	2	65	4	64	6	63	7	62	7	62	7
	MM6	4 Residences	71	68	2	68	3	67	4	65	6	64	7	63	7	63	8
	MM7	4 Residences	74	72	2	71	3	70	4	68	7	66	8	65	9	65	10
MM8	2 Residences	71	68	3	67	4	65	7	64	7	63	8	62	9	62	9	
MM9	3 Residences	68	63	5	62	6	61	7	61	8	60	8	60	9	59	9	
MM10	3 Residences	70	64	6	63	7	62	8	61	8	61	9	60	9	60	10	
MM11	2 Residences	67	65	2	62	4	61	6	61	6	60	7	60	7	60	7	
MM12	1 Residence	66	62	4	61	5	60	6	60	7	59	7	59	7	59	7	
N	MN1	4 Offices	77	66	10	65	12	64	13	63	14	62	15	61	15	61	16
O	MO1	1 Residence	68	67	1	67	1	67	1	66	2	66	2	65	3	64	4

* Category E land use (72 dBA threshold)

 Impacted Receptor

 Protected Residences

 Feasible/Optimized Barrier Modeled

All sound levels documented as one hour Leq (Leq(h))

Note: NSA K was not included in the Alternative 2B Mitigation Evaluation. NSA K was determined to be "not reasonable" do to cost calculation for All Alternatives.

Barriers C/D and L/M have been optimized at 14 feet.

Barriers F and N have been optimized at 8 feet.

Barriers H has been optimized at 12 feet.

Barriers J has been optimized at 16 feet.

Table 4-3
I-80 Reconstruction Project
Alternative 2D
Summary Noise Mitigation Evaluation

NSA	Receptor Site	Site Representation	Future Build Noise Level (2045)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet	
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)
A1	R1-A1	1 Residence	66	62	4	60	5	60	6	59	7	58	7	58	8	58	8
	M1-A1	2 Residences	65	62	4	60	6	59	7	58	7	58	7	58	8	58	8
A	MA3	2 Residences	67	61	6	60	7	60	7	60	8	60	8	59	8	59	8
	MA4	3 Residences	64	61	3	61	4	60	4	60	4	60	4	60	4	60	4
B	Not Warranted																
C	R8	2 Residences	63	62	1	61	2	61	2	60	3	60	3	60	3	59	4
	R9	2 Residences	67	62	4	62	5	62	5	61	5	61	6	60	6	60	7
	R10	1 Residence	64	61	3	61	3	61	3	60	4	60	4	59	5	59	5
	MC2	3 Residences	66	63	4	61	5	61	6	60	6	60	7	59	7	59	8
	MC3	3 Residences	68	65	3	64	4	63	5	62	6	61	7	60	7	60	8
	MC4	1 Residence	67	66	1	65	2	64	3	64	3	63	3	63	4	62	4
	MC5	3 Residences	66	63	3	62	4	61	5	61	5	60	6	60	6	59	7
	MC6	2 Residences	65	65	1	64	1	63	3	63	3	62	3	62	4	62	4
	MC7	2 Residences	66	65	1	64	2	63	3	63	3	62	4	62	4	61	5
	MC8	2 Residences	65	63	2	63	3	62	3	61	4	61	4	60	5	60	6
	MC9	2 Residences	64	61	3	60	4	60	4	59	5	59	5	59	5	58	6
	MC10	2 Residences	65	64	1	63	2	62	3	62	4	61	4	61	5	60	5
	MC11	4 Residences	65	62	3	61	3	60	4	60	5	59	6	59	6	59	6
	MC12	5 Residences	65	62	4	61	4	60	5	60	5	59	6	59	6	59	7
	MC13	4 Residences	64	62	2	61	4	60	4	59	5	59	6	58	6	58	6
	MC14	2 Residences	65	62	3	60	4	59	5	59	6	58	6	58	7	58	7
	MC15	5 Residences	64	61	2	60	3	59	5	58	5	58	6	57	6	57	7
	MC16	2 Residences	65	62	4	60	5	59	6	59	7	58	7	58	8	57	8
	MC17	3 Residences	63	60	2	60	3	58	4	58	5	57	6	57	6	56	7
MC18	2 Residences	64	61	3	60	4	59	5	58	6	57	6	57	7	57	7	
MC19	3 Residences	64	61	3	60	4	59	5	58	6	57	7	57	7	57	8	
D	R11	1 Residence	66	64	2	63	3	62	4	61	6	60	6	59	7	58	8
	R12	2 Residences	66	64	2	64	2	63	3	63	3	62	4	61	5	60	6
	R13	2 Residences	68	66	2	65	3	65	3	64	4	63	5	62	5	61	6
	MD1	1 Residence	66	62	4	61	5	60	6	59	7	59	7	58	8	58	8
	MD2	2 Residences	60	59	1	59	2	59	2	58	3	56	4	56	5	55	5
	MD3	2 Residences	63	61	2	60	3	59	4	58	5	57	6	57	6	56	6
	MD4	2 Residences	62	60	2	60	2	60	2	59	3	58	4	57	5	57	5
	MD5	2 Residences	63	62	1	62	1	62	2	61	2	60	3	59	5	58	6
	MD6	2 Residences	64	62	1	62	2	62	2	61	3	60	4	60	4	59	4
	MD7	2 Residences	66	62	3	61	4	61	4	61	5	61	5	60	5	60	6
	MD8	2 Residences	67	61	5	61	6	61	6	61	6	61	6	60	7	60	7
MD9	1 Residence	66	61	6	60	6	60	6	59	7	59	7	58	8	58	8	


Table 4-3 Continued


NSA	Receptor Site	Site Representation	Future Build Noise Level (2045)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet	
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)
C2	R1-C2	3 Residences	65	57	8	56	9	55	10	55	10	54	11	54	11	53	12
	M1-C2	4 Residences	62	58	4	57	5	57	5	57	5	57	5	57	5	57	5
	M2-C2	2 Residences	58	54	4	54	5	53	5	53	6	53	6	52	6	52	6
	M3-C2	2 Residences	66	59	7	58	8	57	9	57	9	56	10	56	10	55	11
F	R15	1 Residence	75	67	8	66	9	65	10	64	11	63	12	62	13	61	14
	R16	3 Residences	61	59	2	58	3	58	3	57	4	57	5	56	5	56	5
	R17	5 Residences	63	60	4	59	4	59	5	58	5	58	5	58	6	57	6
	MF1	1 Residence	65	64	0	64	0	64	0	64	0	64	0	64	1	64	1
	MF2	5 Residences	68	63	5	63	5	62	6	61	7	61	7	60	8	60	8
	MF3	4 Residences	63	61	1	61	2	60	2	60	3	60	3	59	3	59	3
	MF4	4 Residences	67	62	6	61	6	60	7	60	7	59	8	59	8	58	9
MF5	2 Residences	65	60	5	59	6	59	6	58	7	57	8	57	8	56	9	
H	R20	4 Residences	57	54	3	54	3	54	3	54	3	54	3	53	3	53	3
	R21	1 Residence	73	69	4	68	5	68	6	67	6	67	6	67	7	66	7
	MH1	4 Residences	47	47	0	47	0	47	0	47	0	47	0	47	0	47	0
	MH2	4 Residences	49	49	0	49	0	49	0	49	0	49	0	49	0	49	0
	MH3	3 Residences	65	60	5	60	5	59	5	59	6	59	6	59	6	58	7
	MH4	4 Residences	55	55	0	55	0	55	0	55	0	55	0	55	0	55	0
	MH5	3 Residences	68	60	7	60	8	60	8	59	8	59	9	59	9	59	9
	MH6	2 Residences	67	59	8	59	8	58	9	58	9	58	9	57	10	57	10
	MH7	1 Residence	71	63	8	63	8	63	9	63	9	62	9	62	9	62	10
	MH8	2 Residences	66	64	2	64	2	64	2	64	2	63	3	63	3	63	3
MH9	2 Residences	63	61	2	60	2	60	3	60	3	59	3	59	4	58	4	
MH10	1 Residence	69	66	3	64	5	63	6	63	6	62	7	62	7	62	7	
J	R22	4 Residences	65	64	2	63	2	62	3	62	3	62	3	62	3	62	3
	MJ1	3 Residences	67	63	3	62	5	61	5	61	6	60	6	60	6	60	7
	MJ2	3 Residences	63	61	2	60	3	59	4	58	5	58	5	58	5	58	5


Table 4-3 Continued

NSA	Receptor Site	Site Representation	Future Build Noise Level (2045)	Barrier Height 8 Feet		Barrier Height 10 Feet		Barrier Height 12 Feet		Barrier Height 14 Feet		Barrier Height 16 Feet		Barrier Height 18 Feet		Barrier Height 20 Feet	
				Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)	Mitigated Noise Level	Insertion Loss (IL)
L/M	R23	2 Residences	70	63	7	62	8	61	9	61	9	60	10	59	11	59	11
	R24	4 Residences	69	63	6	62	7	61	8	60	9	59	10	59	10	59	10
	R25	4 Residences	70	66	4	64	6	63	7	63	7	62	8	62	8	62	8
	R26	4 Residences	70	68	2	66	4	65	6	64	7	63	7	63	7	63	8
	ML1	1 Residence	64	61	3	60	4	59	5	59	5	59	5	59	5	59	5
	ML2	2 Residences	63	59	4	58	5	58	5	57	6	57	6	57	6	57	6
	ML3	2 Residences	65	60	5	59	6	59	6	58	7	58	7	57	8	57	8
	MM1	3 Residences	70	68	2	68	2	67	3	64	6	63	7	63	7	62	8
	MM2	4 Residences	74	71	3	70	4	70	4	67	7	66	8	65	9	64	10
	MM3	4 Residences	73	70	3	69	4	69	4	66	7	65	9	64	9	63	10
	MM4	3 Residences	69	67	3	66	3	66	4	63	6	62	7	62	8	61	8
	MM5	4 Residences	70	67	3	67	3	66	4	64	7	62	8	62	8	62	9
	MM6	4 Residences	72	69	3	68	4	68	4	65	7	63	9	63	9	62	10
MM7	4 Residences	76	72	4	71	4	71	5	67	8	65	10	64	11	64	12	
MM8	2 Residences	72	68	4	67	5	65	7	64	9	63	9	63	10	62	10	
MM9	3 Residences	69	63	6	62	7	61	8	60	9	60	9	59	10	59	10	
MM10	3 Residences	70	63	7	62	8	61	9	61	9	60	10	60	10	60	11	
MM11	2 Residences	67	64	3	63	5	62	6	61	6	61	7	61	7	61	7	
MM12	1 Residence	67	61	5	61	6	60	7	60	7	59	7	59	8	59	8	
N	MN1	4 Offices	77	73	4	72	5	68	8	67	10	66	11	66	11	65	12
O	MO1	1 Residence	66	66	0	66	0	66	1	65	1	65	1	64	2	63	3

* Category E land use (72 dBA threshold)

 Impacted Receptor

 Protected Residences

 Feasible/Optimized Barrier Modeled

All sound levels documented as one hour Leq (Leq(h))
 Note: NSA K was not included in the Alternative 2D Mitigation Evaluation. NSA K was determined to be "not reasonable" do to cost calculation for All Alternatives.

Barrier C/D has been optimized at 16 feet.
 Barriers C2 and F have been optimized at 8 feet.
 Barrier H has been optimized at 12 feet.
 Barrier J has been optimized at 20 feet.
 Barrier L/M has been optimized at 10 feet.

Table 5-2
I-80 Reconstruction Project
Noise Abatement Feasibility/Reasonableness Evaluation
Alternative 2B

NSA	Number of Benefited Receptors	Combined Noise Barrier Length	Feasible Noise Barrier Height	Square Footage	Total sf. per benefit (max 2000 sf.)	Feasible?	Reasonable?
A1	3	1,383	10	13,830	4,610	Yes	NO
A	3	2,952	20	59,040	19,680	Yes	NO
C/D	43	4,172	14	58,408	1,358	Yes	YES
F	12	975	8	7,800	650	Yes	YES
H	15	1,614	12	19,368	1,291	Yes	YES
J	6	853	16	13,648	2,275	Yes	NO
L/M	45	2,454	14	34,356	763	Yes	YES
N	4	902	8	7,216	1,804	Yes	YES
O*	<i>Not Feasible</i>						

Note: NSA K was not included. It has been determined that NSA K is not reasonable under all Alternatives.

Table 5-3
I-80 Reconstruction Project
Noise Abatement Feasibility/Reasonableness Evaluation
Alternative 2D

NSA	Number of Benefited Receptors	Combined Noise Barrier Length	Feasible Noise Barrier Height	Square Footage	Total sf. per benefit (max 2000 sf.)	Feasible?	Reasonable?
A	2	959	10	9,590	4,795	Yes	NO
A1	3	1,502	12	18,024	6,008	Yes	NO
C/D	54	4,205	16	67,280	1,246	Yes	YES
C2	5	655	8	5,240	1,048	Yes	YES
F	12	1,019	8	8,152	679	Yes	YES
H	11	1,614	12	19,368	1,761	Yes	YES
J	6	853	20	17,060	2,843	Yes	NO
L/M	25	2,756	10	27,560	1,102	Yes	YES
N	4	1,065	12	12,780	3,195	Yes	NO
O*	<i>Not Feasible</i>						

* Barriers do not receive a minimum 5 dBA decrease at the majority (50%) of impacted receptor sites.

Note: NSA K was not included. It has been determined that NSA K is not reasonable under all Alternatives.

Attachment **F**

Agency Correspondence





Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093
www.phmc.state.pa.us

13 November 2014

Brian Thompson, Director
Bureau of Project Delivery
Attn: Kris Thompson, District 5-0 CRP
PA Department of Transportation
P O Box 2966
Harrisburg, PA 17105

Re: ER No. 2013-8131-089-E (MPMS 76357)
I-80 Reconstruction, S.R. 0080, Section 17M
Stroud Township, East Stroudsburg,
Stroudsburg, Monroe County
Area of Potential Effects

Dear Mr. Thompson:

Thank you for submitting information concerning the above referenced project. The Bureau for Historic Preservation (the State Historic Preservation Office) 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.

We concur with the agency that the proposed Area of Potential Effects (APE) delineated for the above-referenced project is appropriate and encompasses all areas where historic properties may be directly or indirectly affected by the proposed project.

If you need further information concerning historic structures, please contact Emma Diehl at (717) 787-9121.

Sincerely,

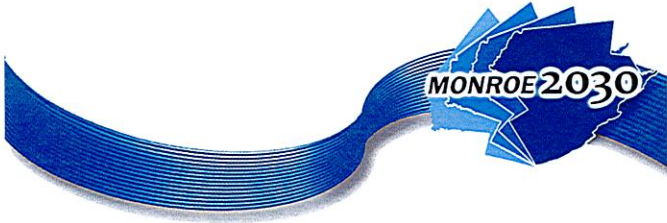
Douglas C. McLearn, Chief
Division of Archaeology and Protection

DCL/ekd



Pennsylvania Historical & Museum Commission

Tom Corbett, Governor · Andrew E. Masich, Chairman · James M. Vaughan, Executive Director



MONROE COUNTY PLANNING COMMISSION

November 26, 2014

Brian Thompson, Director
Bureau of Project Delivery
Attn: Kris Thompson, District 5-0 CRP
PA Department of Transportation
PO Box 2966
Harrisburg, PA 17105

ADMINISTRATIVE CENTER
1 Quaker Plaza, Room 106
Stroudsburg, PA 18360-2169
Phone: 570-517-3100
Fax: 570-517-3858
mcpc@monroecountypa.gov
www.monroecountypa.gov

Re: ER No. 2013-8131-089-E (MPMS 76357)
I-80 Reconstruction, S.R. 0080, Section 17M
Area of Potential Effects
Stroud Township, East Stroudsburg, Stroudsburg Borough
Monroe County

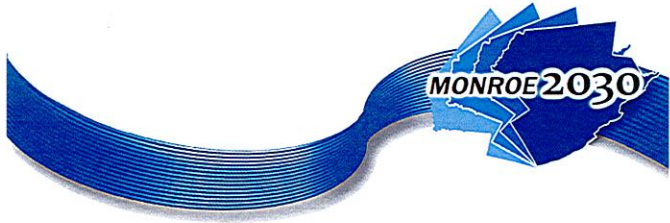
Dear Mr. Thompson:

Thank you for submitting information concerning the above referenced project to the Monroe County Planning Commission. The above cited plan was reviewed by Nathaniel Staruch, Community Planner, and George Basila, GIS Analyst, on behalf of the Monroe County Planning Commission. You will find their comments enclosed. Should you have any special concerns regarding these comments, please contact us immediately.

If you have any questions or if we can be of further service to you, please feel free to contact me at (570) 517-3157.

Sincerely yours,


Christine Meinhart-Fritz
Director



MONROE COUNTY PLANNING COMMISSION

TO: Christine Meinhart-Fritz, Director

FROM: Nathaniel Staruch, Community Planner *NS* *GD*

DATE: November 26, 2014

SUBJECT: ER No. 2013-8131-089-E (MPMS 76357)
I-80 Reconstruction, S.R. 0080, Section 17M - Area of Potential Effects
Stroud Township, East Stroudsburg, Stroudsburg Borough
Monroe County

ADMINISTRATIVE CENTER
1 Quaker Plaza, Room 106
Stroudsburg, PA 18360-2169
Phone: 570-517-3100
Fax: 570-517-3858
mcp@monroecountypa.gov
www.monroecountypa.gov

Upon review of the Area of Potential Effects (APE) Map, it has been determined that there are two sites which should be considered for the APE: The Academy Hill Historic District and the Stroud Mansion. The two sites are in close proximity to the proposed APE zone, are unique and pivotal elements to the cultural identity of the area, and may be affected by the I-80 reconstruction project. It is important to note that several other sites in this area of County have been placed on the waiting list to be recognized by the National Register of Historic Places.

Site #1: The Academy Hill Historic District

Located just north of Main Street and the Monroe County Courthouse, in Stroudsburg Borough, this residential neighborhood is comprised of single family and multi-family dwellings dating back to the nineteenth and early twentieth centuries. The amount of original architectural detail, the state of its preservation, and its setting near the downtown commercial district, makes this district a culturally important area.

Site #2: The Stroud Mansion

Located at the intersection of Main and Ninth Streets, in Stroudsburg Borough, the mansion is considered as one of the finest example of Georgian-style architecture in the County. The mansion dates back to 1795, and was built by Jacob Stroud, founder of Stroudsburg and a key influence in the development of the County. The structures original architectural detail, the state of its preservation, and its historical past, makes this a culturally significant building for the entire County.

It should be noted that additional sites in this area of County are awaiting recognition by the National Register of Historic Places; numerous cemeteries, private structures, and sites of local significance are located within the adjacent areas which surround the APE.

In conclusion, the proposed APE is appropriate and concurred with, and encompasses all areas where historic properties may be directly or indirectly affected by the project, with the addition of the two sites mentioned above.

From: [Leondi, Kevin J CIV USARMY ACC \(US\)](#)
To: [Thompson, Kristina L](#)
Subject: Review and Comment of PHMC for 180 project REF: Section 106
Date: Friday, October 31, 2014 6:38:50 AM

Kris,

I have reviewed the requested document and upon this, I currently have no additions or deletions and concur with the current APE Historical Structures Effect.

Thanks

Kevin J. Leondi
Associate Director
Management and Internal Review/Compliance
US Army Construction Director
ACC-NJ Building 10b 1st Floor
Picatinny Arsenal, New Jersey 07806-5000
Phone: 973.724.3586
Fax: 973.724.4195
Cell: 570.656.0918
email: kevin.j.leondi.civ@mail.mil



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

January 13, 2017

Brian Thompson, Director
Bureau of Project Delivery
Attn: Kristina Thompson, District 5-0
PA Department of Transportation
P.O. Box 2966
Harrisburg, PA 17105

RE: ER 2013-8131-089-F; S.R. 80, Section 17M (MPMS 76357); I-80 Reconstruction-Monroe;
East Stroudsburg, Monroe County; Stroud-Hollinshead House HRSF (Key No. 038764)

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

We are requesting additional information to complete our review for the Stroud-Hollinshead House. Please provide a comparative analysis of other properties within the local/regional area of similar architectural design and style. In addition, please provide any information (or repositories/sources consulted) regarding the architect for the Colonial Revival-style/era changes.

For questions and/or additional questions concerning this review, please contact Emma Diehl at emdiehl@pa.gov or (717) 787-9121.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. McLearn', is positioned above the typed name of the signatory.

Douglas C. McLearn, Chief
Division of Archaeology and Protection



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

August 15, 2017

Brian Thompson, Director
Bureau of Project Delivery
Attn: Kristina Thompson, District 5-0
PA Department of Transportation
P.O. Box 2966
Harrisburg, PA 17105

RE: ER 2013-8131-089-I; SR 80, Section 17M (MPMS 76357); I-80 Reconstruction, Monroe County, Stroudsburg Borough, Stroud-Hollinshead House HRSF

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 disagree with finding of the federal agency. It is the opinion of the State Historic Preservation Officer that the **Stroud-Hollinshead House (Key No. 038764)** is **Not Eligible** for listing in the National Register of Historic Places under Criterion C in the area of Architecture. Based on the information provided, the Stroud-Hollinshead House appears to lack significance and represents a modest example of Georgian architecture with Colonial Revival detailing and additions. The property does not appear to be associated with any important historic events or trends under Criteria A or individuals under Criteria B. The National Register eligibility of the resource has not been evaluated under Criterion D.

Our determination of eligibility is based upon the information provided and available in our files for review. If National Register listing for this property is sought in the future, additional documentation of the property's significance and integrity may be required to both verify this determination of eligibility and satisfy the requirements of the National Park Service (36 CFR Part 60). Thus, the outcome of the National Register listing process cannot be assured by this determination of eligibility.

If you have questions concerning this review, please contact Emma Diehl at 717-787-9121 or emdiehl@pa.gov.

Sincerely,

Douglas C. McLearn, Chief
Division of Archaeology and Protection



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

September 21, 2017

Pennsylvania Department of Transportation
District 8-0
Attn: Kevin Mock, Cultural Resources Professional
2140 Herr Street
Harrisburg, PA 17103

RE: ER 2013-8131-089-J – Phase IB/II Archaeological Identification and Evaluation Survey, I-80 Reconstruction Project, Stroud Township and East Stroudsburg and Stroudsburg Boroughs, Monroe County

Dear Mr. Mock:

Thank you for providing this report for 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. Our comments are as follows:

In accordance with your request, we concur with your finding that the proposed undertaking will have no effect on significant archaeological resources.

Please provide a .PDF copy of this report on a compact disk. Please also provide on shape file that includes the project area and the archaeological sites areas. We appreciate your cooperation.

If you have any questions or comments concerning our review, please contact Mark Shaffer at (717) 783-9900 or mshaffer@state.pa.us.

Sincerely,

Douglas C. McLearen, Chief
Division of Archaeology and Protection

cc: Camille Otto, FHWA

Mock, Kevin W

From: Kimberly Penrod <kpenrod@delawarenation.com>
Sent: Tuesday, October 16, 2018 12:08 PM
To: Mock, Kevin W
Subject: RE: PennDOT Updated Tribal Notification

Kevin,

The protection of our tribal cultural resources and tribal trust resources will take all of us working together. We look forward to working with you and your agency.

With the information you have submitted we can concur at present with this proposed plan.

As with any new project, we never know what may come to light until work begins.

The Delaware Nation asks that you keep us up to date on the progress of this project and if any discoveries arise please contact us immediately.

Our department is trying to go as paper free as possible. If it is at all feasible for your office to send email correspondence we would greatly appreciate.

If you need anything additional from me please do not hesitate to contact me.

Respectfully,

*Kim Penrod
Delaware Nation
Director, Historic Preservation
31064 State Highway 281
PO Box 825
Anadarko, OK 73005
(405)-247-2448 Ext. 1403 Office
(405)-924-9485 Cell
kpenrod@delawarenation.com*

Unless someone like you cares a whole awful lot, nothing is going to get better. It's not. ~Dr. Seuss

CONFIDENTIALITY NOTE:

This e-mail (including attachments) may be privileged and is confidential information covered by the Electronic Communications Privacy Act 18 U.S.C. 2510-2521 and any other applicable law, and is intended only for the use of the individual or entity named herein. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any retention, dissemination, distribution or copying of this communication is strictly prohibited. Although this e-mail and any attachments are believed to be free of any virus or other defect that might affect any computer system in to which it is received and opened, it is the responsibility of the recipient to ensure that it is virus free and no responsibility is accepted by Delaware Nation or the author hereof in any way from its use. If you have received this communication in error, please immediately notify us by return e-mail. Thank you.

[Project Home](#)[Postings Details \(/PostingDetails.aspx?ProjectID=8750&PostingID=27027&Tab=1\)](#)

MPMS 76357 • I-80 Reconstruction-Monroe • Monroe Co. • SR 80 Section 17M

Posting Name:

Determination of No Adverse Effect to Historic Properties

Synopsis (Summary):

This posting contains a determination of No Adverse Effect to Historic Properties and supporting documentation.

By: Kristina Thompson **On:** 11/7/2018 8:37:01 AM

Section 106 Comments Accepted now through **12/07/2018**.**General Information****Category:**

Determination of Effects: Consulting Party/Tribal Consultation Coordination, Determination of Effects: Effect Determination - non-form

Name:

Thompson, Kristina

Comment Status:

Pending

Comment Deadline:

12/7/2018

Comment Period (Days):

30

Consulting Agency:

PHMC SHPO

Date Submitted to Agency:

11/7/2018

Agency Agrees:

Yes

Date Received:

11/7/2018

Date of Agency Response:

11/27/2018

PHMC Comment /Concurrence Requested:

Yes

PHMC Objections to PA findings:**Associated Documents:****Additional Comments:****PHMC Comments:**

Based on the information received and available within our files, we concur with the findings of the agency that the proposed project will have No Adverse Effect on historic properties. Specifically, the project will have No Effect on the Stroudsburg Commercial Historic District, Kitson Woolen Mill, and the Wallace Hardware Building. The project will have No Adverse Effect on the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works.

By: Emma Diehl **On:** 11/27/2018 8:27:51 AM

Administrative Notes:

If you would like a full set of proposed project plans, please contact me at krthompson@pa.gov. The file size is large, so it is not posted in its entirety here. Only the sheets containing historic resources are posted.

By: Kristina Thompson On: 11/7/2018 11:27:19 AM

PennDOT sent the posting notice to consulting parties not in ProjectPATH via Outlook or USPS.

By: Kristina Thompson On: 11/7/2018 11:37:31 AM

Notifications





PennDOT
Deferral of Archaeological Testing
For Identification/Evaluation*
 Per 36 CFR 800.4(b)(2) and Stipulation III.B.6.c

County: Monroe

SR/SEC: 0080/17M

MPMS: 76357

Name of Project: I-80 Reconstruction-Monroe

ER#: 2013-8131-089

Municipality: Stroud Twp.

Lead Agency: FHWA

Funding Source: Federal-Aid

Brief Description of Project:

Highway reconstruction including improvements to the Interchange, Ramps, Replacement and/or Rehab of all Bridges along corridor. The project proposes to bring I-80 up to current design standards wherever possible, including shoulder and median widths, and also adding a third travel lane in each direction.

Reason for Deferring Archaeological Testing

(Select all that apply)

- Multiple Alternatives under consideration
- Access to property restricted
- APE is not known for the locations of items typically included as part of final design and permitting, including bridge piers, wetland mitigation sites, or storm water detention basins *(specify)*

Proposed Plan for Archaeological Testing

(Describe the location(s) and method(s) for testing the APE, or reference a Predictive Model or Archaeological Sensitivity Study or Geomorphology Report, as appropriate)

Stormwater Basin 1101 (see Attachment B) is located in the southeast quadrant of the I-80 and US 209 interchange. This location is currently inaccessible to archaeological survey due to hazmat concerns. When hazmat concerns have been resolved, archaeological survey will proceed as per the PA SHPO archaeological guidelines (2017). Other shifts in the APE that come up during final design that are not covered by previous archaeological survey efforts for this project will be archaeologically surveyed as necessary.

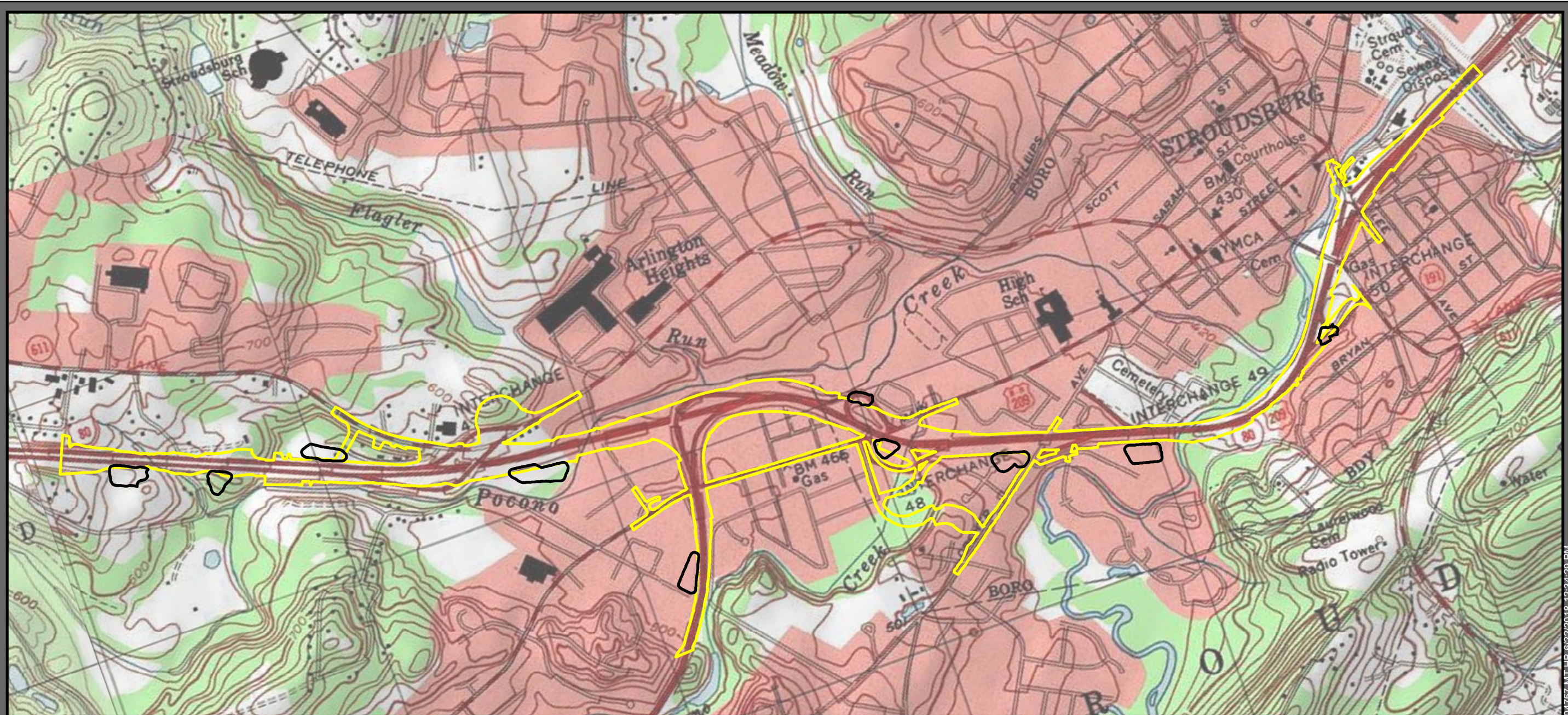
Steven McDougal Digitally signed by Steven McDougal
Date: 2019.10.10 14:30:09 -04'00'

10/10/2019

District Archaeologist

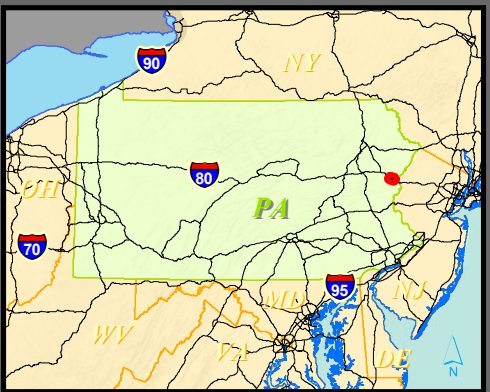
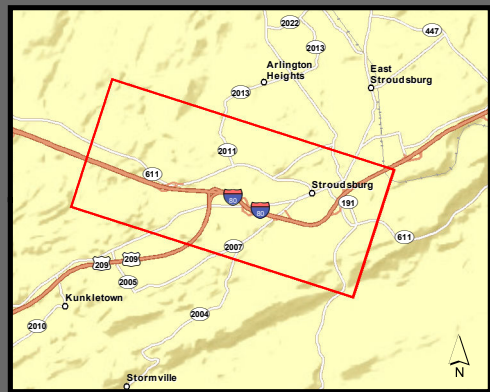
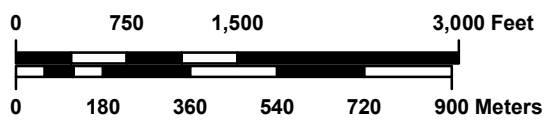
Date

* If Data Recovery excavations cannot be completed before NEPA approval, a MOA or LOA must be prepared.



04/57 MT HB 6/22/2018 12:34:29 PM

- Addendum Phase IB Archaeological Area of Potential Effects
- Phase IB/II Archaeological Area of Potential Effects (Concurred Upon 09/21/2017)



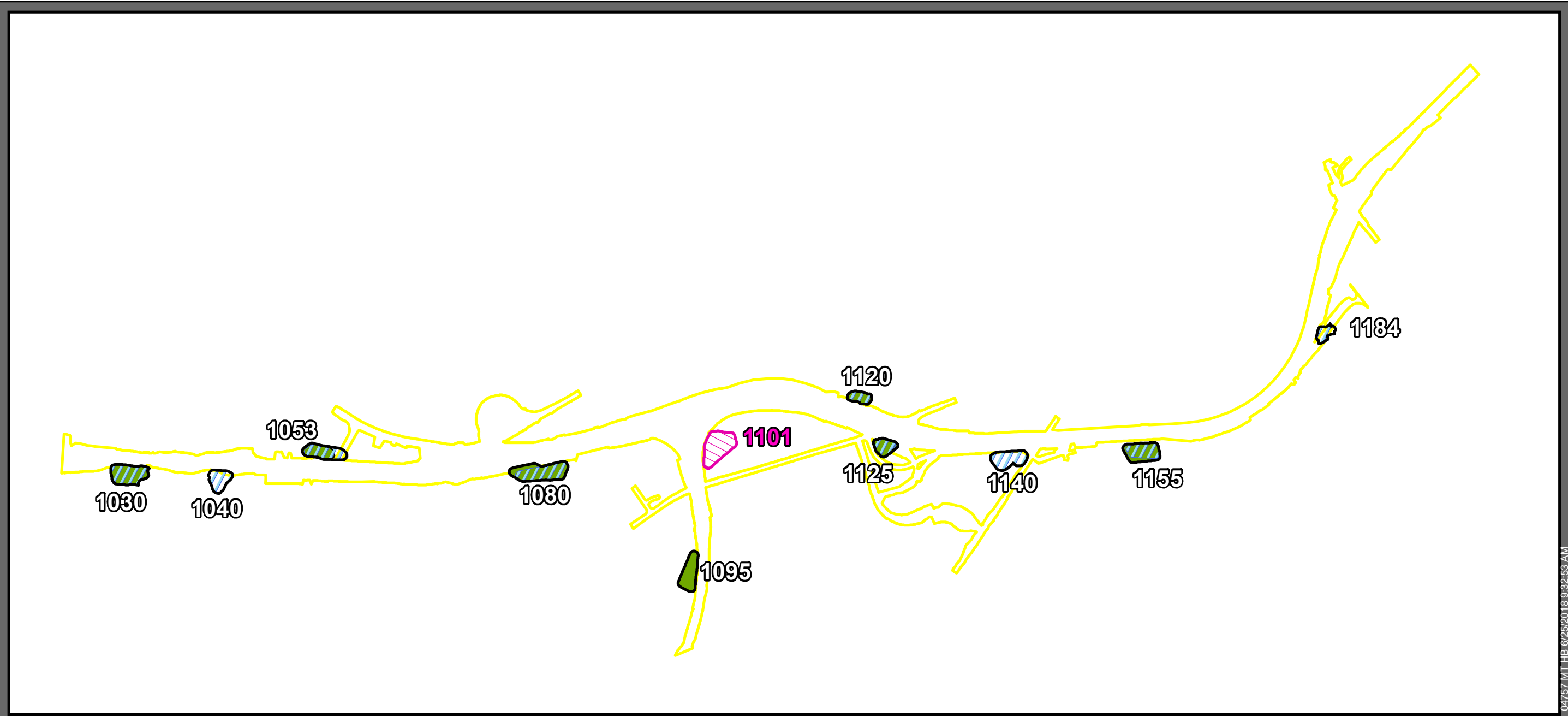
Attachment A
Archaeological Area of Potential Effects
Addendum Phase IB Archaeological Survey






I-80 Reconstruction Project

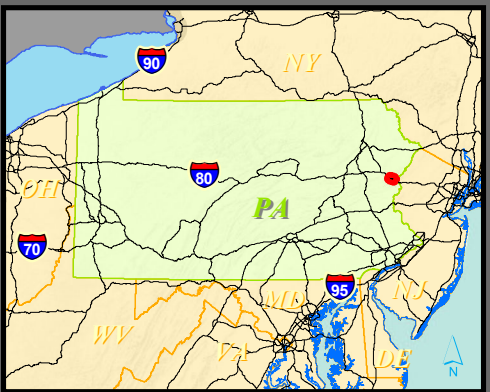
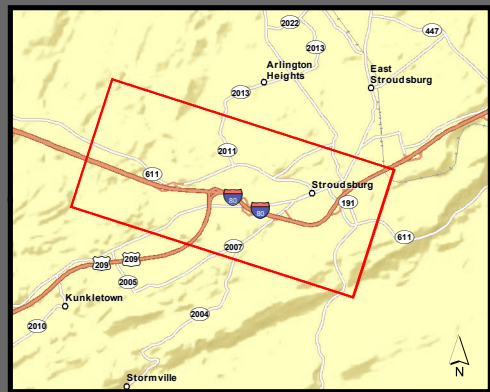
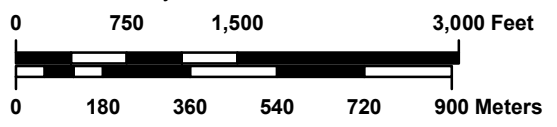
Stroudsburg Borough
And Stroud Township
Monroe County, Pennsylvania

Source: Stroudsburg, PA 7.5' USGS Quadrangle, 1999

04/15/18 MT HB 6/25/2018 9:32:53 AM



-  Addendum Phase IB Archaeological Area of Potential Effects
-  Phase IB/II Archaeological Area of Potential Effects (Concurred Upon 09/21/2017)
-  Proposed Basins for Alternative 2B
-  Proposed Basins for Alternative 2D
-  Alternative 2B Basin Not Included within Addendum Phase IB Survey Due to HAZMAT Concerns



Attachment B
Alternative-specific Basin Locations
within the Addendum Phase IB
Archaeological Area of Potential Effects

I-80 Reconstruction Project

Stroudsburg Borough
And Stroud Township
Monroe County, Pennsylvania

1. PROJECT INFORMATION

Project Name: **I-80 Section 17M Reconstruction Project**

Date of Review: **9/24/2019 01:32:28 PM**

Project Category: **Transportation, Roads, Widening, adding lanes with disturbance beyond existing shoulders
WITH drainage pipe replacements**

Project Area: **270.77 acres**

County(s): **Monroe**

Township/Municipality(s): **EAST STROUDSBURG; STROUD; STROUDSBURG**

ZIP Code: **18301; 18360**

Quadrangle Name(s): **SAYLORSBURG; STROUDSBURG**

Watersheds HUC 8: **Middle Delaware-Mongaup-Brodhead**

Watersheds HUC 12: **Lower Broadhead Creek; Lower McMichael Creek; Lower Pocono Creek**

Decimal Degrees: **40.984385, -75.218399**

Degrees Minutes Seconds: **40° 59' 3.7854" N, 75° 13' 6.2346" W**

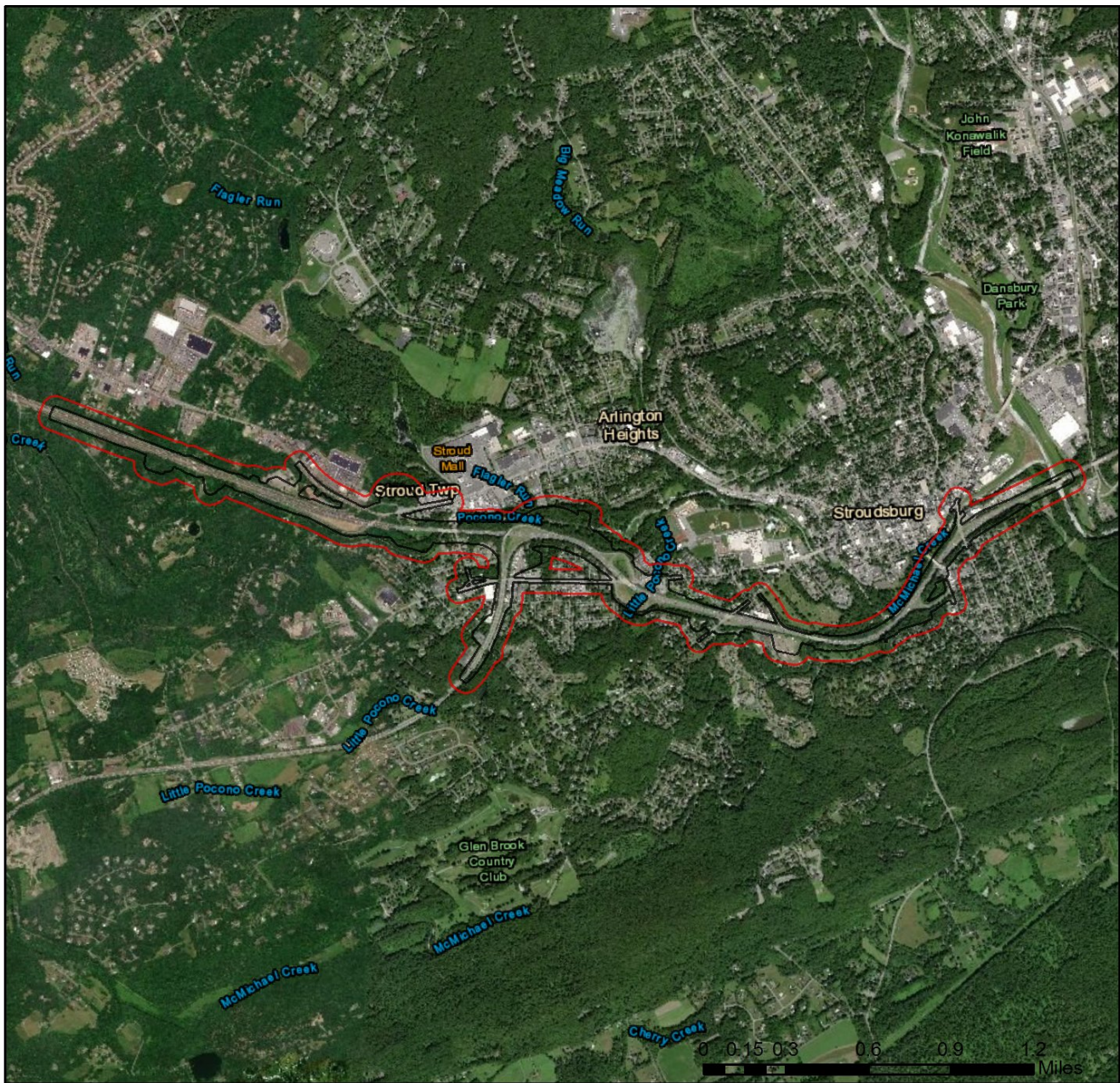
2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	Conservation Measure	No Further Review Required, See Agency Comments
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
U.S. Fish and Wildlife Service	Potential Impact	MORE INFORMATION REQUIRED, See Agency Response

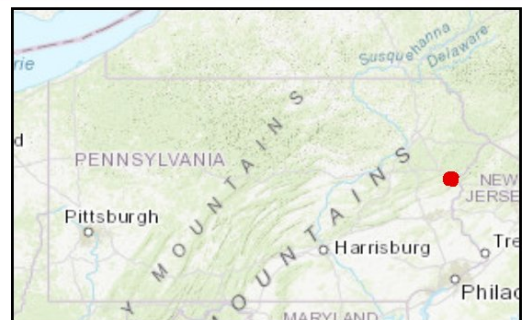
As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 must comply with the bog turtle habitat screening requirements of the PASPGP.

I-80 Section 17M Reconstruction Project

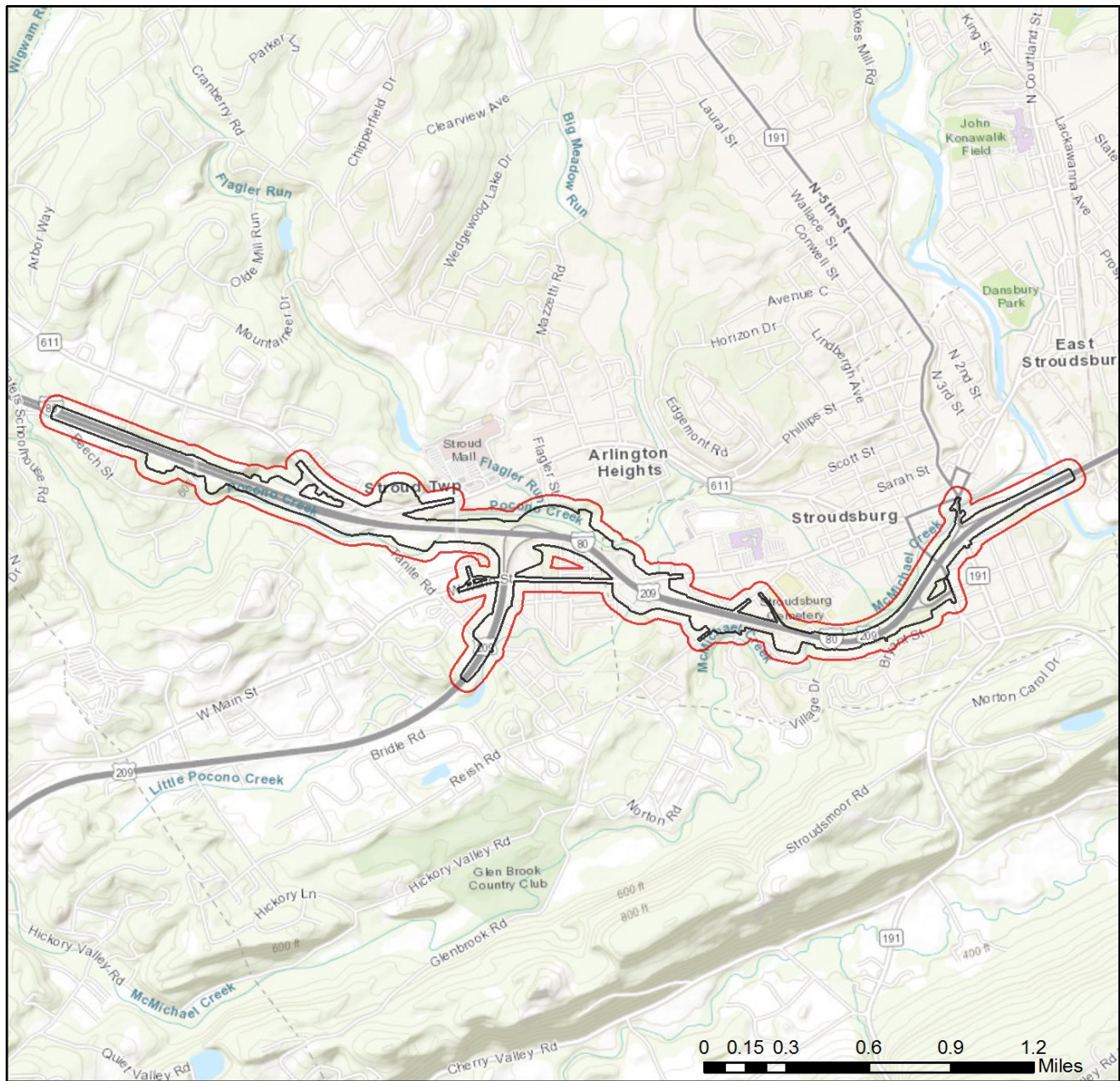


- Project Boundary
- Buffered Project Boundary



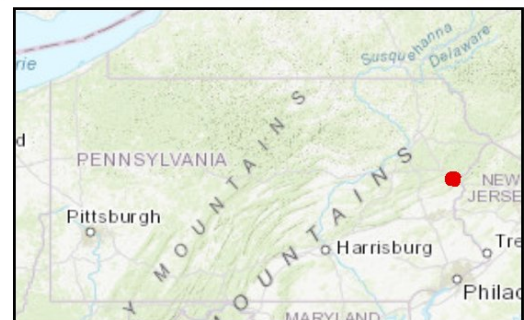
Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

I-80 Section 17M Reconstruction Project



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
 Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS,



RESPONSE TO QUESTION(S) ASKED

Q1: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: Someone qualified to identify and delineate wetlands has investigated the site, and determined that wetlands ARE located in or within 300 feet of the project area. (A written report from the wetland specialist, and detailed project maps should document this.)

Q2: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

Your answer is: The project will affect 40 to 200 acres of forests, woodlots and trees AND a seasonal restriction on tree clearing will be implemented.

Q3: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: Yes

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

Conservation Measure: Potential impacts to state and federally listed species which are under the jurisdiction of both the Pennsylvania Game Commission (PGC) and the U.S. Fish and Wildlife Service may occur as a result of this project. As a result, the PGC defers comments on potential impacts to federally listed species to the U.S. Fish and Wildlife Service. No further coordination with the Pennsylvania Game Commission is required at this time.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Sensitive Species**		Special Concern Species*

U.S. Fish and Wildlife Service

RESPONSE:

Information Request: Conduct a Bog Turtle Habitat (Phase 1) Survey in accordance with USFWS Guidelines for Bog Turtle Surveys (April 2006). Evaluate all wetlands within 300 feet of the project area, which includes all areas that will be impacted by earth disturbance or project features (e.g., roads, structures, utility lines, lawns, detention basins, staging areas, etc.). IF THE PHASE 1 SURVEY IS DONE BY A QUALIFIED BOG TURTLE SURVEYOR (see <https://www.fws.gov/northeast/pafo/endangered/surveys.html>): 1) Send positive results to USFWS for concurrence, along with a project description documenting how impacts will be avoided. OR, conduct a Phase 2 survey and send Phase 1 and 2 results to USFWS for concurrence. 2) Send a courtesy copy of negative results to USFWS (label as "Negative Phase 1 Survey Results by Qualified Bog Turtle Surveyor: USFWS Courtesy Copy"). USFWS approval of negative results is not necessary when a qualified surveyor does the survey in full accordance with USFWS guidelines. IF THE PHASE 1 SURVEY IS NOT DONE BY A QUALIFIED SURVEYOR: Send ALL Phase 1 results to USFWS for concurrence, and if potential habitat is found, also send a project description documenting how impacts will be avoided. As a qualified bog turtle surveyor, I _____ (name) certify that I conducted a Phase 1 survey of all wetlands in and within 300 feet of the project area on _____ (date) and determined that bog turtle habitat is absent.

_____ (Signature)

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email* the following information to the agency(s). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies. Alternatively, applicants may email or mail their project materials (see AGENCY CONTACT INFORMATION).

*Note: U.S. Fish and Wildlife Service requires applicants to mail project materials to the USFWS PA field office (see AGENCY CONTACT INFORMATION). USFWS will not accept project materials submitted electronically (by upload or email).

Check-list of Minimum Materials to be submitted:

____ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

____ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

____ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

____ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

____ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.



5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
NO Faxes Please

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission

Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Christopher C. Salvatico, GISP
Company/Business Name: AECOM Address: 437 High Street
City, State, Zip: Burlington, NJ 08016 Phone: (609)386-5444 Email: Christopher.salvatico@aecom.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.



applicant/project proponent signature

September 24, 2019

date



Pennsylvania Fish & Boat Commission

Division of Environmental Services
Watershed Analysis Section
595 E Rolling Ridge Dr.
Bellefonte, PA 16823

September 26, 2019

IN REPLY REFER TO
SIR# 49975

AECOM
Chris Salvatico
1700 Market Street
Suite 1600
Philadelphia, Pennsylvania 19103

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 664105_FINAL_2
I-80, Section 17M
Roadway Reconstruction Project
MONROE County: East Stroudsburg Borough, Stroud Township, Stroudsburg Borough**

Dear Chris Salvatico:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

An element occurrence of a rare, candidate, threatened, or endangered species under our jurisdiction is known from the vicinity of the proposed project. However, given the nature of the proposed project, the immediate location, or the current status of the nearby element occurrence(s), no adverse impacts are expected to the species of special concern.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

Our Mission:

www.fish.state.pa.us

To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

If you have any questions regarding this review, please contact Dakota Raab at 814-359-5117 and refer to the SIR # 49975. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dakota Raab".

Dakota Raab, Fisheries Biologist
Watershed Analysis Section

DR/dn



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Field Office
110 Radnor Road, Suite 101
State College, Pennsylvania 16801-4850

April 3, 2015

J. Thomas Cushman, Jr.
AECOM
1700 Market Street, Suite 1600
Philadelphia, PA 19103

RE: USFWS Project #2013-0652
PNDI Receipt #20130327397134

Dear Mr. Cushman:

This responds to your letter dated March 3, 2015, which provided the Fish and Wildlife Service (Service) with updated information regarding the S.R. 0080, Section 17M, reconstruction project located in Stroud Township, Stroudsburg Borough, and East Stroudsburg Borough, Monroe County, Pennsylvania. The proposed project is within the range of the bog turtle (*Clemmys muhlenbergii*), a species that is federally listed as threatened. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

Autumn Thomas of AECOM conducted a Phase 2 survey on four wetlands, which included wetlands identified as 2-05, 2-06, 3-02, and 3-10 in the project area. According to your October 2014 survey report, habitat conditions within these four wetlands are suitable for the support of bog turtle; however, no bog turtles were located within the identified wetlands habitat areas during the surveys on May 20, May 22, May 29, May 30, 2014 and June 3, June 4, June 11, and June 12, 2014. Based on our review of this information, we conclude that construction of this project will not affect the bog turtle.

If this project is implemented as proposed, construction will not affect any federally listed or proposed species or their habitat. This response relates only to endangered or threatened species under our jurisdiction. Consequently, this letter is not to be construed as addressing potential Service concerns under the Fish and Wildlife Coordination Act or other authorities.

This determination is valid for two years from the date of this letter. If the proposed project has not been fully implemented prior to this, an additional review by this office is necessary. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered.

If the Phase 2 survey did not include all potential habitat in all areas that will be directly or indirectly affected by the proposed project and project-associated features (e.g., roads, water and sewer lines, utility lines, stormwater and sedimentation basins, buildings and other structures, driveways, parking lots, yards/lawns, wells), expand the scope of the Phase 2 survey to include these areas. Submit the results of the expanded Phase 2 investigation to our office for review so that we can confirm whether the above determination is still valid.

To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

If you have any further questions regarding this matter, please contact Kayla Easler of this office at (814) 234-4090.

Sincerely,



Lora L. Zimmerman
Field Office Supervisor

cc:

PennDOT - Neal



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Field Office
110 Radnor Road, Suite 101
State College, Pennsylvania 16801-4850

October 5, 2018

Christopher Salvatico
AECOM
1700 Market Street, Suite 1600
Philadelphia, PA 19103

RE: USFWS Project #2013-0652
PNDI Receipt #664105

Dear Mr. Salvatico:

Thank you for your letter of August 17, 2018, which provides the Fish and Wildlife Service (Service) with additional information regarding the proposed Interstate 80 (I-80), Section 17M reconstruction project located Stroudsburg and East Stroudsburg Boroughs; and, Stroud Township, Monroe County, Pennsylvania. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

Mr. Bridger Thompson, a Service qualified bog turtle surveyor (QBTS) and his assistant Mr. Nathan Jones completed Phase 2 bog turtle surveys on Wetlands W-3-18 and W-3-19 on May 16, 22; June 1 and 5, 2018. According to the survey report, although the site contained suitable bog turtle habitat, and several amphibian species were observed (green frog, pickerel frog, wood frog, Northern red salamander, and red-spotted salamander), no bog turtles were found in either wetland. Based on our review of this information, including the project descriptions, project locations, and anticipated activities; and the absence of bog turtles in the subject wetlands, we conclude that construction and implementation of the proposed project is not likely to adversely affect the bog turtle.

This determination is valid for two years from the date of this letter. If the proposed project has not been fully implemented prior to this, an additional review by this office is recommended. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered.

If these projects are implemented as proposed, construction will not affect any federally listed or proposed species or their habitat. This response relates only to endangered or threatened species

under our jurisdiction, and is not to be construed as addressing potential Service concerns under the Fish and Wildlife Coordination Act or other authorities.

To avoid potential delays in reviewing of your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

If you have any further questions regarding this matter, please contact Jennifer Kagel of my staff at 814-234-4090.

Sincerely,

A handwritten signature in black ink, appearing to read "Sonja Jahrsdoerfer", with a long horizontal flourish extending to the right.

For Sonja Jahrsdoerfer
Project Leader



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Field Office
110 Radnor Road, Suite 101
State College, Pennsylvania 16801-4850
814-234-4090

August 30, 2019

J. Thomas Cushman
AECOM
1700 Market Street
Suite 1600
Philadelphia, PA 19103
thomas.chushman@aecom.com

RE: USFWS Project #2013-0652
PNDI #664105 (formerly 20130327397134)

Dear Mr. Cushman:

Thank you for your letter of July 30, 2019, which provided the U.S. Fish and Wildlife Service (Service) with updated information about fish and wildlife resources within the area affected by the proposed I-80, Section 17M, reconstruction project located in Stroud Township; Stroudsburg and East Stroudsburg Boroughs, Monroe County, Pennsylvania. The proposed project is within the known range of the bog turtle (*Clemmys muhlenbergii*), a species that is federally listed as threatened. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

The Pennsylvania Department of Transportation (PennDOT) proposes to reconstruct 3.5 miles of roadway, including reconstructing or eliminating five interchanges to relieve congestion, alleviate safety issues; relocating ramps; adding travel and auxiliary lanes; improving local roads; adding stormwater management facilities; and bringing the existing roadway up to current standards. We previously commented on this project by letters dated April 3, 2015, April 10, 2018, and October 5, 2018. Since that time, PennDOT has expanded the project area due to project design refinements.

To determine the potential effects of the proposed project on bog turtles and their habitat, Bridger Thompson, a recognized qualified bog turtle surveyor, conducted a Phase 1 bog turtle habitat assessment within the expanded project areas on June 6, 2019. According to the report three wetlands and one watercourse extends to within 300 feet of the proposed expanded limit of disturbance. Following the methods described under “*Bog Turtle Habitat Survey*” (Phase 1 survey) of the *Guidelines for Bog Turtle Surveys* (revised April 2006), Mr. Thompson

determined that the subject wetlands do not have the combination of soils, vegetation, and hydrology typical of habitat occupied by bog turtles. We concur with your habitat determination and conclude that implementation of the proposed project will not affect the bog turtle.

This determination is valid for 2 years from the date of this letter. If the proposed project has not been fully implemented prior to this, an additional review by this office is recommended. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered.

If the Phase 1 habitat assessment did not include all wetlands in all areas that will be directly or indirectly affected by the proposed project and project-associated features (e.g., roads, water and sewer lines, utility lines, stormwater and sedimentation basins, buildings and other structures, driveways, parking lots, yards/lawns, wells, staging areas, laydown areas), expand the scope of the Phase 1 survey to include these areas. If any wetlands are located, please submit the results of the expanded wetland and Phase 1 investigation to our office for review so that we can confirm whether the above determination is still valid.

This response relates only to endangered and threatened species under our jurisdiction, based on an office review of the proposed project's location. No field inspection of the project area has been conducted by this office. Consequently, this letter is not to be construed as addressing other potential Service concerns under the Fish and Wildlife Coordination Act or other authorities.

To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

If you have any questions regarding this matter, please contact Jennifer Kagel of my staff at 814-206-7451.

Sincerely,



For
Sonja Jahrsdoerfer
Project Leader

Attachment G

Section 4(f) *De Minimis* Use Forms





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:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 T054217 Q010 T054217	MPMS:	76357

SELECT ONE: EIS EA CE EER ED

PROJECT DESCRIPTION:

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

The Project would involve 3.5 miles of full roadway reconstruction, widening, and interchange reconfiguration (See Figure 1, Attachment A). The purpose of the I-80 Section 17M project, which extends from west of Interchange 303 in Stroud Township to west of Interchange 308 in East Stroudsburg Borough, is to provide a safe and efficient transportation system on this National Highway System component for both local and regional connections in the area by reducing future congestion on I-80 in the 2045 design year to level of service E or better, improving safety, and bringing the I-80 roadway and structures up to current design standards with no or minimal design exceptions.

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.)

Stroudsburg & East Stroudsburg Unit No. 1 Local Flood Protection Works (Levee System) – The Stroudsburg-East Stroudsburg Unit No. 1 Local Flood Protection Works is located in Stroudsburg Borough, East Stroudsburg Borough, and Stroud Township, Monroe County, Pennsylvania (See Figure 2, Attachment A). These municipalities sit within the floodplain of Brodhead Creek and McMichael Creek in southeastern Monroe County. Brodhead Creek forms the boundary between Stroudsburg and East Stroudsburg Boroughs. The northwestern section of the levee system is located in the Township of Stroud. The levee is built on the north bank of McMichael Creek from the Broad Street/North 5th Street Bridge approximately 1,875 feet to its confluence with Brodhead Creek and then is constructed north for approximately 7,300 feet on both sides of Brodhead Creek. The northeast leg follows Little Sambo Creek for approximately 2,200 feet along the east side of Dansbury Park.

The major components of the Unit No. 1 Local Flood Protection Works include the four segments of the earthen levee, an interior sub-levee, the Inter-Borough Bridge, two concrete flood walls, two ponding areas, two retaining walls, and the Day Street Culvert for a total of thirteen major components. These components are considered the contributing elements of the historic resource. Other features, such as small culverts, outlets, rip-rap, etc. are not counted as either contributing or non-contributing, but instead are considered uncounted landscape features. Refer to the Pennsylvania Historic Resource Survey Form (available on ProjectPATH: <https://search.paprojectpath.org/ProjectDetails.aspx?ProjectID=8750>) for a



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:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 T054217 Q010 T054217	MPMS:	76357

detailed description, location, photos, and history of the resource.

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

1. Identify agency with jurisdiction:
Pennsylvania Historical and Museum Commission
2. Name and title of contact person at agency:
Andrea MacDonald, Director

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: Kris Thompson, PennDOT District 5-0 Cultural Resources Professional, prepared a Determination of No Adverse Effects Memorandum on November 7, 2018 (ProjectPATH posting: <https://search.paprojectpath.org/ProjectDetails.aspx?ProjectID=8750>).

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:

In either Build Alternative 2B or Build Alternative 2D, The limits of disturbance slightly overlap the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works’ National Register boundary in two locations: where the SR 191/Broad Street Bridge over McMichael Creek will be rebuilt and where the I-80 Bridge over Brodhead Creek will also be rebuilt. The outside slope profile of the levee will be altered within these two sections of the resource, where they abut the bridges. The bridges will be widened by approximately 5’ toward the Levee System, extending the location of the abutments into the current boundary of the flood protection works. The work results in approximately 2% (0.2 acres) of the 81.3 acres within the boundary altered for abutment construction. The slope of the levee is a character-defining feature of the flood protection system and the five foot extension of the bridge into the boundary will have an Effect. However, the change of the small amount of levee wall is a minimal overall impact to this long resource. The flood protection system will



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:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 T054217 Q010 T054217	MPMS:	76357

continue its historic function and the impacts to the integrity of workmanship, design, and materials are negligible. It will not diminish the qualities that make the system National Register-eligible. The project will have No Adverse Effect to the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works.

Specifically, the Broad Street Bridge reconstruction would use 1,712 square feet/0.04 acres of Levee System land, and the I-80 Bridge reconstruction would use 6,914 square feet/0.16 acres of Levee System land within the area of potential impact (API). Note that a portion of the resource boundary falls within an existing slope easement for the I-80 roadway embankment. Refer to the figure in Attachment B for a map showing the proposed impacts.

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: 11/27/2018

If NO Response, identify specified time with no response from PHMC:

(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 C

Determination of Section 4(f) De Minimis Use
Section 2002 No Adverse Use
Historic Properties
August 2017 Version

County:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 T054217 Q010 T054217	MPMS:	76357

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

The area of potential effects (APE) for historic properties was established as the area immediately adjoining the proposed project and includes the API as well as the area immediately surrounding the API for the consideration of potential visual and noise impacts. PHMC and two other consulting parties issued their concurrence on the APE.

No comments were received within the 30-day review period for the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works eligibility determination.

No comments were received within the 30-day review period for the no adverse effect to historic properties determination.

All consulting party correspondence is available on ProjectPATH:
<https://search.paprojectpath.org/ProjectDetails.aspx?ProjectID=8750>

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:

Rotary Creek Park and Ann Street Park (Borough of Stroudsburg) – Both parks are publicly accessible and located along McMichael Creek, west of PA 191/Broad Street, north of I-80, and south of Ann Street.

The project, in both Build Alternatives 2B or 2D, would use portions of the parks. Specific project activities at the Ann Street and Rotary Creek Parks include replacing the PA 191/Broad Street Bridge over McMichael Creek with approximately 14-15 feet of overall widening, raising the profile of Broad Street, and repaving the roadway lanes and shoulders adjacent to the structure. The new bridge will include three 11-foot travel lanes, two five-foot shoulders, and two five-foot sidewalks. Furthermore, a new ramp (Ramp R) will be constructed for traffic merging onto I-80 westbound from PA 191/Broad Street. This ramp is located on the southeast side of the Rotary Creek Park. The ramp will have a similar configuration as existing but with minor modifications to achieve current design criteria.

Determination of Section 4(f) De Minimis Use
Section 2002 No Adverse Use
Historic Properties
August 2017 Version

County:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 T054217 Q010 T054217	MPMS:	76357

The proposed project will not permanently affect the qualities, activities, features, or attributes of Rotary Creek and Ann Street Parks.

A Determination of Section 4(f) *De Minimis* Use/Section 2002 No Adverse Use of Public Parks, Recreation Areas, Wildlife and/or Waterfowl Refuges, State Forest Land, and State Game Land Form has been completed.

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.

No. 6, 8, 9, 10, and 19: I-80 Bridge widening is proposed on the north (levee property) side of the roadway to minimize impacts to residential uses on the south side of the highway. Widening to the south instead of the north would result in additional residential property impacts (approximately 12 properties between Broad Street and the I-80 Bridge). The property impacts could result in displacement of existing residents in these homes because the homes are close to the I-80 right-of-way.

Avoiding both the Levee System property to the north and the residential properties to the south would require no expansion of the existing highway right-of-way. It would not be possible to provide the additional lane capacity and reconstruction of the roadway and its interchanges within the existing right-of-way. As a result, being constrained to the existing I-80 right-of-way would cause PennDOT to compromise the project to the extent that it would not achieve the purpose and need.

Furthermore, I-80 is a part of the Strategic Highway Network (STRAHNET) system, which

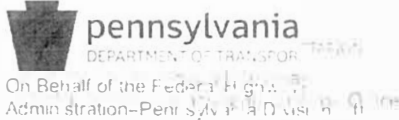
Determination of Section 4(f) De Minimis Use
Section 2002 No Adverse Use
Historic Properties
August 2017 Version

County:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 T054217 Q010 T054217	MPMS:	76357

is the system of roads deemed necessary to support the Department of Defense’s operations. As a component of this system, I-80 should include minimum vertical clearances of 16’0”, particularly to facilitate freight mobility. PennDOT requires an additional six inches of vertical clearance to accommodate future pavement overlay. Therefore, any bridge over I-80 should have a clearance of 16’6”. The Broad Street/SR 191 Bridge over I-80 currently has a vertical clearance of 15’0”. In order to achieve the necessary vertical clearance, the profile of the Broad Street Bridge over I-80 must be raised; and since the Broad Street Bridge over McMichael Creek is immediately north of I-80, it would be impossible tie the profile back down to existing prior to the McMichael Creek Bridge in a safe manner and while meeting design criteria. This necessitates the replacement of the Broad Street Bridge over McMichael Creek which would impact the Levee System. Thus, if impacts to the Levee System were completely avoided, then I-80 would not meet STRAHNET and PennDOT standards for vertical clearance and could potentially impede national civil defense.

The proposed Broad Street Bridge widening will also impact the surrounding properties, which include Rotary Creek and Ann Street Parks on the west side of the bridge. If the Broad Street Bridge was widened exclusively to the west, thereby avoiding or minimizing levee impacts, that would result in increased impacts to the park, another Section 4(f) protected resource. Even if the bridge was replaced in-kind with no widening, there would still be impacts to the Levee System because the existing abutment ties into the levee. Therefore, the only way to completely avoid the levee would be a no build alternative. The existing Broad Street Bridge was built in 1955 and is structurally deficient. Rehabilitation may be an option if it were not for profile adjustments needed in the proposed condition. If the Broad Street Bridge is not replaced, it will continue to deteriorate and eventually be unsafe for use. This would negatively affect the 10,930* members of the traveling public, emergency services, and commercial entities that use this bridge on a daily basis and greatly impact the safety and efficiency of the transportation network. (*Average daily traffic number.)

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



**Determination of Section 4(f) *De Minimis* Use
Section 2002 No Adverse Use
Historic Properties**
August 2017 Version

County:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 1054217 Q010 1054217	MPMS:	76357

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: Michael Landis Julia Moore, AECOM

Date: 5/21/2019

Project Manager: *Imhaz Nathaniel*

Date: 5/22/19

Environmental Manager: *[Signature]*

Date: 5/24/19

PennDOT, BOPD: *[Signature]*

Date: 5/23/19

FHWA:

Date: 7/18/19

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



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:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 T054217 Q010 T054217	MPMS:	76357

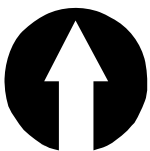
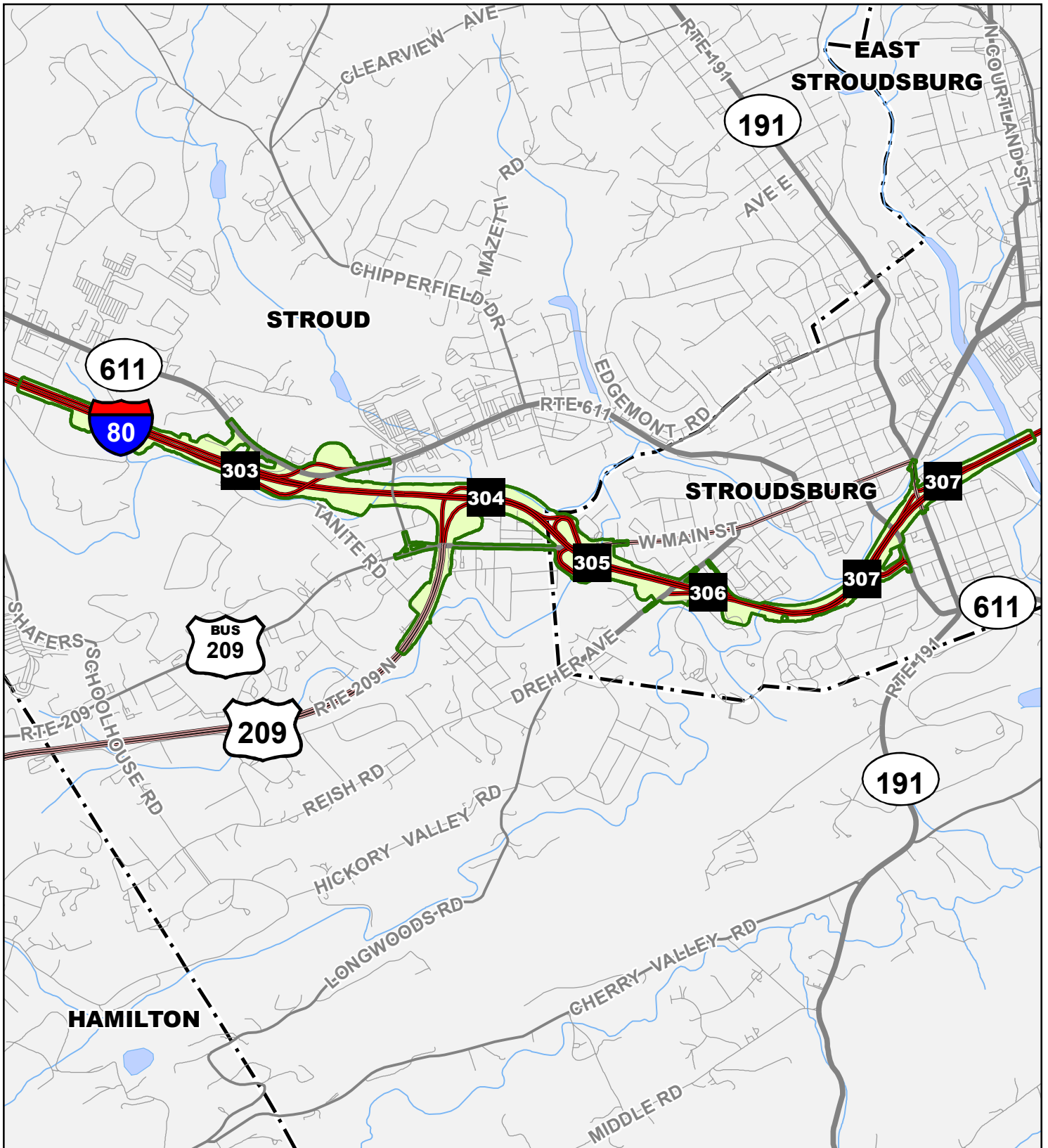
- Minimize permanent and temporary impacts to the Stroudsburg-East Stroudsburg Unit No. 1 Local Flood Protection Works and its contributing elements as design refinements are made in preliminary engineering and final design.
- Restore temporary impact areas of the Levee System to preconstruction conditions to the greatest extent possible.

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 A

FIGURES



0 0.25 0.5



Miles

Print Date: 8/22/2018



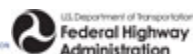
Project Location

Source: ESRI & PASDA.



I-80 RECONSTRUCTION

**FIGURE 1
PROJECT LOCATION**



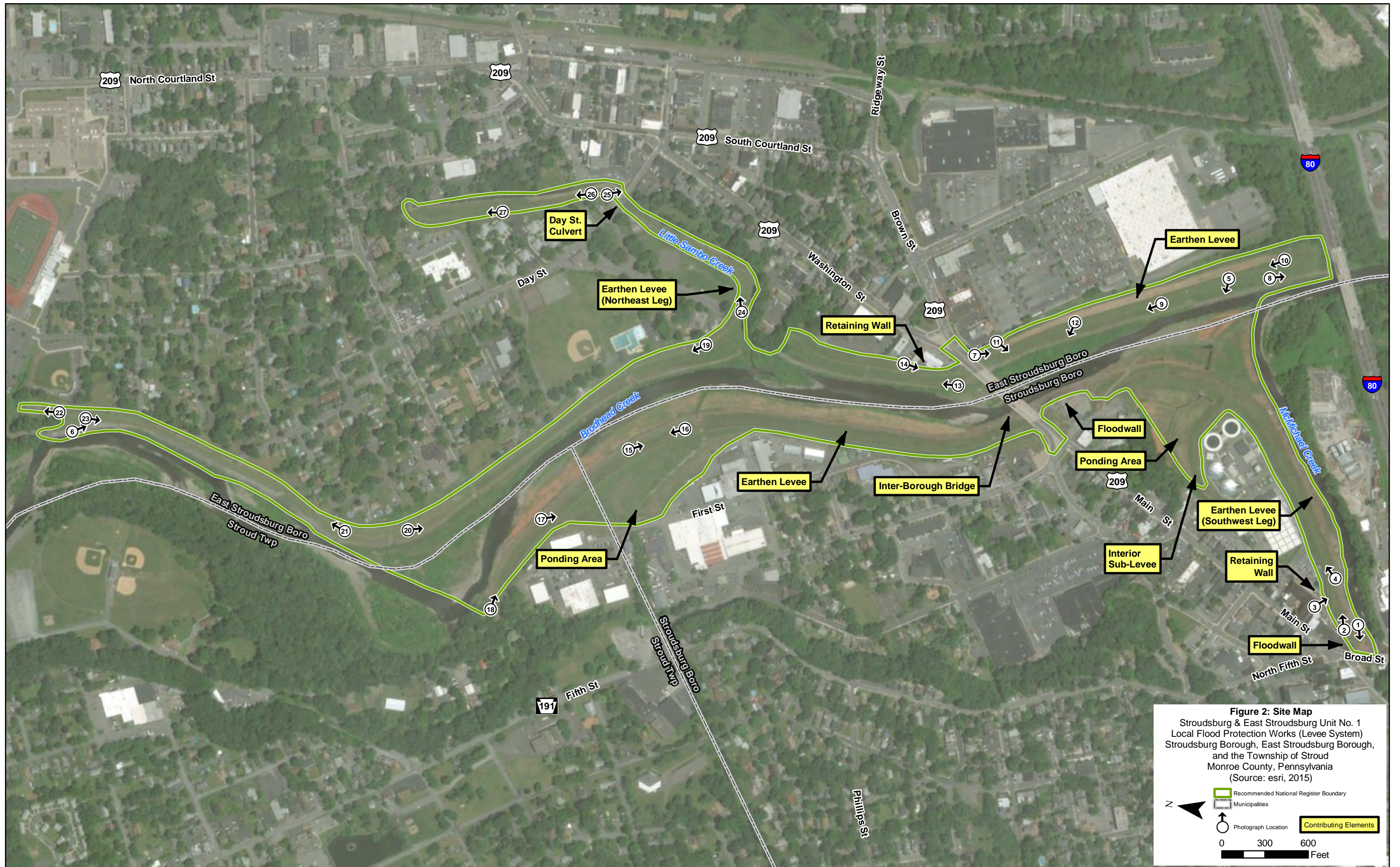










Figure 2: Site Map
 Stroudsburg & East Stroudsburg Unit No. 1
 Local Flood Protection Works (Levee System)
 Stroudsburg Borough, East Stroudsburg Borough,
 and the Township of Stroud
 Monroe County, Pennsylvania
 (Source: esri, 2015)

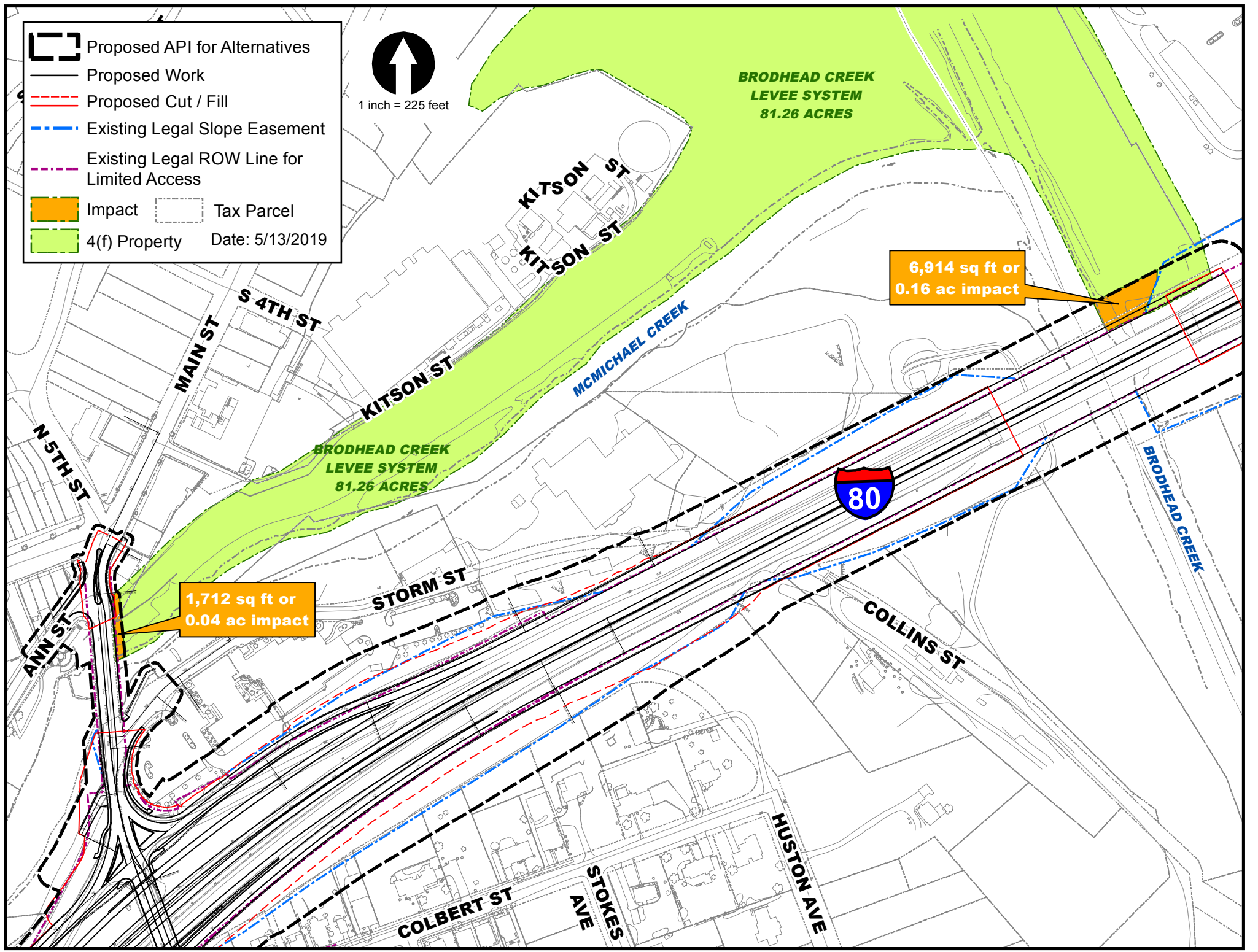
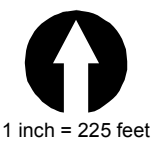
Recommended National Register Boundary
 Municipalities
 Photograph Location
 Contributing Elements

0 300 600
 Feet

ATTACHMENT B

IMPACT MAP

 Proposed API for Alternatives
 Proposed Work
 Proposed Cut / Fill
 Existing Legal Slope Easement
 Existing Legal ROW Line for Limited Access
 Impact
 Tax Parcel
 4(f) Property
 Date: 5/13/2019



1,712 sq ft or
0.04 ac impact

6,914 sq ft or
0.16 ac impact

**BRODHEAD CREEK
LEVEE SYSTEM
81.26 ACRES**

**BRODHEAD CREEK
LEVEE SYSTEM
81.26 ACRES**



ATTACHMENT C
PHMC CONCURRENCE

[Project Home](#)[Postings Details \(/PostingDetails.aspx?ProjectID=8750&PostingID=27027&Tab=1\)](#)

MPMS 76357 • I-80 Reconstruction-Monroe • Monroe Co. • SR 80 Section 17M

Posting Name:

Determination of No Adverse Effect to Historic Properties

Synopsis (Summary):

This posting contains a determination of No Adverse Effect to Historic Properties and supporting documentation.

By: Kristina Thompson **On:** 11/7/2018 8:37:01 AM

Section 106 Comments Accepted now through **12/07/2018**.**General Information****Category:**

Determination of Effects: Consulting Party/Tribal Consultation Coordination, Determination of Effects: Effect Determination - non-form

Name:

Thompson, Kristina

Comment Status:

Pending

Comment Deadline:

12/7/2018

Comment Period (Days):

30

Consulting Agency:

PHMC SHPO

Date Submitted to Agency:

11/7/2018

Agency Agrees:

Yes

Date Received:

11/7/2018

Date of Agency Response:

11/27/2018

PHMC Comment /Concurrence Requested:

Yes

PHMC Objections to PA findings:**Associated Documents:****Additional Comments:****PHMC Comments:**

Based on the information received and available within our files, we concur with the findings of the agency that the proposed project will have No Adverse Effect on historic properties. Specifically, the project will have No Effect on the Stroudsburg Commercial Historic District, Kitson Woolen Mill, and the Wallace Hardware Building. The project will have No Adverse Effect on the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works.

By: Emma Diehl **On: 11/27/2018 8:27:51 AM**

Administrative Notes:

If you would like a full set of proposed project plans, please contact me at krthompson@pa.gov. The file size is large, so it is not posted in its entirety here. Only the sheets containing historic resources are posted.

By: Kristina Thompson **On: 11/7/2018 11:27:19 AM**

PennDOT sent the posting notice to consulting parties not in ProjectPATH via Outlook or USPS.

By: Kristina Thompson **On: 11/7/2018 11:37:31 AM**

Notifications





On Behalf of the Federal Highway Administration—Pennsylvania Division Office

**Determination of Section 4(f) De Minimis Use
Section 2002 No Adverse Use
Public Parks, Recreation Areas,
Wildlife and/or Waterfowl Refuges,
State Forest Land, and State Game Land**
May 2014 Version

County:	Monroe	State Route:	SR 0080	Section:	17M
Project Name:	I-80 Reconstruction Project	FPN:	Z001 T054217 Q010 T054217	MPMS:	76357

SELECT ONE: EIS EA CE EER ED

PROJECT DESCRIPTION:

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

The overall project will involve 3.5 miles of full roadway reconstruction, widening, and interchange reconfiguration along Interstate 80 (I-80). The project limits extend from west of Interchange 303 in Stroud Township to west of Interchange 308 in East Stroudsburg Borough, including the existing I-80 roadway, associated ramps, and several adjacent roadways.

Specific project activities at the Rotary Creek and Ann Street Parks include replacing the PA 191/Broad Street Bridge over McMichael Creek with approximately 14-15 feet of overall widening, raising the profile of Broad Street, and repaving the roadway lanes and shoulders adjacent to the structure. The new bridge will include three 11-foot travel lanes, two five-foot shoulders, and two five-foot sidewalks. Furthermore, a new ramp (Ramp R) will be constructed for traffic merging onto I-80 westbound from PA 191/Broad Street. This ramp is located on the southeast side of the Rotary Creek Park. The ramp will have a similar configuration as existing but with minor modifications to achieve current design criteria.

The purpose of the I-80 Section 17M project is to provide a safe and efficient transportation system on this National Highway System component for both local and regional connections in the area by reducing future congestion on I-80 in the 2045 design year to level of service E or better, improving safety, and bringing the I-80 roadway and structures up to current design standards with no or minimal design exceptions.

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.)

Rotary Creek Park is located west of PA 191/Broad Street and primarily on the south side of McMichael Creek. The park extends under and west of the PA 611/Park Avenue/7th Street Bridge. The I-80 westbound on-ramp from Broad Street (Ramp R) and the I-80 mainline border the park to the south. As such, road noise is pronounced within the park. Access to the park is from a gravel drive off of PA 191/Broad Street, which leads to a small parking area. The park is also accessible to pedestrians via a sidewalk along Broad Street that connects to the gravel access road. The gravel road off of Broad Street is the only entrance point to the park. The park provides access to McMichael Creek, which offers boating and



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fishing opportunities. The park has a canoe/kayak launch area, and McMichael Creek is recreationally navigable above the dam at PA 191 according to *Keystone Canoeing* (Gertler 2004). Furthermore, McMichael Creek is designated as a naturally reproducing trout stream and is stocked with trout by the Pennsylvania Fish and Boat Commission. A commercial billboard is located at the northeast end of the park, at the Broad Street and I-80 ramp intersection. This billboard is situated on its own parcel that is landlocked by the park.

Ann Street Park is located on the north side of McMichael Creek and west of PA 191/Broad Street. Amenities in the park include a patio, waterfall overlook, information plaque about mill and dam history at this location, sidewalk and open space extending a short distance southwest along the creek, and another patio with a flagpole. The park is bounded by Ann Street to the northwest, Broad Street to the east, McMichael Creek to the southeast, and a business (The Thrift Shoppe) to the southwest. Activities include enjoyment of the creek from the patio. There is a fence completely surrounding the patios and concrete walls lining the streambank so that McMichael Creek is not accessible from the Ann Street portion of the park. The park is accessed by pedestrians from the sidewalks along Ann Street and Broad Street. Note that entrances to the waterfall viewing area include steps; ramps are not present. Additionally, an overhead utility line is located at the north end of the park along Broad Street.

Rotary Creek and Ann Street Parks are owned and managed by Stroudsburg Borough. Both parks are open to the public with no restrictions during normal hours of operation. Rotary Creek Park is closed dusk to dawn as noted by a sign at the entrance. Ann Street Park does not have a sign displaying open hours and there are many overhead lights, so presumably this area is always open. The major purpose of Rotary Creek and Ann Street Parks is recreation. A map of the parks and surrounding area is included in Attachment A. Site photographs illustrating existing park features are provided in Attachment B.

FOR PARKS, IDENTIFY KEY COMPONENTS OF ANY EXISTING MANAGEMENT PLAN (if it exists):

No formal management plan exists. The Borough performs regular maintenance at the park including trash pickup and snow removal.

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

1. Identify agency with jurisdiction:
Stroudsburg Borough



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2. Name and title of contact person at agency:

Ms. Jennifer Maier, Borough Manager
JMaier@StroudsburgBoro.com
570-421-5444, ext. 104
700 Sarah Street
Stroudsburg, PA 18360

APPLICABILITY DETERMINATION:

1. Provide the total acreage of the property: Rotary Creek Park is 4.49 acres. Ann Street Park is 0.53 acres.

Describe the use of land from the property (identify amount of the property to be used, including temporary and permanent acquisition):

The project, in both Build Alternatives 2B or 2D, will use portions of Rotary Creek and Ann Street Parks. Photos of the areas to be impacted are provided in Attachment B. A plan showing the proposed impacts is included in Attachment C.

At Rotary Creek Park, the PA 191/Broad Street Bridge will be reconstructed and widened, the profile of Broad Street will be raised, and the I-80 westbound ramp from PA 191/Broad Street (Ramp R) will be modified at the southeastern boundary of the park, resulting in the total use of approximately 13,020 square feet/0.30 acres of park property. The improvements to PA 191 will result in an approximate four-foot grade (elevation) difference between Broad Street and the existing park entrance elevation; therefore, PennDOT will pave and reconstruct a portion of the driveway (with a parallel retaining wall) to maintain access to Rotary Creek Park post-construction. The retaining wall will be approximately 5-7 feet high, tapering to zero at ground level at the end of the paved driveway. Permanent impacts include an approximate 12-foot wide right-of-way (ROW) acquisition along Broad Street for future maintenance of the portion of the retaining wall that will be owned and maintained by PennDOT. The remaining portion of the retaining wall for the driveway will be owned and maintained by the Borough. In addition, a small sliver of ROW acquisition is also needed along a proposed retaining wall for Ramp R. Therefore, total permanent impacts are approximately 0.05 acres for an approximate 12-foot wide ROW acquisition for future maintenance along the proposed retaining walls. Temporary impacts will be approximately 0.25 acres from the approximate 25-foot wide construction workspace needed around the proposed driveway and retaining walls. The impacted area includes a wooded strip along Broad Street, a wooded strip along the existing Ramp R, and the gravel access drive.



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At Ann Street Park, the Broad Street Bridge will be widened as noted above. Permanent impacts total approximately 0.04 acres of ROW acquisition so that PennDOT has enough space to access and maintain the bridge structure in the future after construction is completed. Temporary impacts total approximately 0.03 acres for temporary workspaces during construction. The impacted area will include the park entrance at the corner of Broad Street and Ann Street and a linear strip alongside the bridge within the fenced-off vegetated area. The waterfall viewing area will not be permanently impacted. Although the sidewalk and stairs at the park entrance off of Broad Street will be temporarily affected, pedestrian access will be restored (i.e. the sidewalk will be improved) prior to the end of construction so that there is no permanent loss of the park access point.

2. The project **does not** adversely affect the activities, features, and attributes of the resource that qualify it for protection under Section 4(f) or Section 2002. **(If this statement cannot be verified as true, de minimis/no adverse use does not apply.)** YES

Describe the effect to the qualities, activities, features, or attributes of the resource that qualify it for protection. Include a description of any mitigation included when making the determination regarding effects to the resource:

Rotary Creek Park:

The gravel access drive will be temporarily closed for part of the construction period. This is unavoidable due the proposed profile change on Broad Street. The Broad Street profile will be raised and the existing entrance will be regraded and paved to tie in to the new road height. A retaining wall is also proposed along the reconstructed portion of the driveway.

Since there is a canoe/kayak launch/takeout point within Rotary Creek Park and this portion of the park will experience temporary closures to land-based access, there may be impacts to boaters. The project team will coordinate with the Pennsylvania Fish and Boat Commission (PFBC) as the project design progresses to ensure any impacts to boaters are appropriately mitigated.

The project will use land from the park to widen the Broad Street Bridge and tie in grades for the raised Broad Street profile. The new bridge abutment will be very close to the existing condition and widening will be minor. Additionally, park land will be utilized to realign the existing I-80 on-ramp from Broad Street in the northwest quadrant of the Broad Street/ramp intersection. A retaining wall is proposed along Broad Street, the new access drive, and the new ramp to minimize impacts and disturbance. The park is forested in the



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area to be impacted. PennDOT will remove trees and vegetation within the impacted areas. PennDOT will develop a planting plan in final design with input from the Borough. The planting plan must ensure no trees are planted within a 12-foot buffer of the retaining walls for future maintenance. Wildflowers or other plants could be provided in that buffer area.

Ann Street Park:

The Broad Street Bridge will be widened and the existing northwest abutment will be replaced, which will require impacts to park property. This portion of the park is fenced off and inaccessible to the public. Furthermore, the new abutment will be very close to the existing condition and widening will be minor. There will be a reduction in maintained open space of approximately 0.04 acres; however, this will not affect the existing park amenities or activities.

Since the Broad Street Bridge over McMichael Creek is in the viewshed of the park and its users, the Borough requested a context sensitive treatment, specifically using an open railing. During final design, open railing options that meet the design standards will be presented to the Borough for their input on selection.

Replacement of the Broad Street Bridge over McMichael Creek will require acquisition of approximately 0.04 acres of permanent ROW from the park, along the fenced area that contains scrubby vegetation. In addition, a temporary construction easement of approximately 0.03 acres will be needed to access the area and perform construction. This will temporarily impact the sidewalk and stairs in the northern corner of the park at the Ann Street/Broad Street intersection, but the alternative access point off of Ann Street will remain open and unaffected throughout construction. At the completion of construction, the sidewalk and stairs will be repaired and restored. The waterfall viewing area is not anticipated to be impacted, but should impacts occur, repairs will be made to restore it to an equivalent pre-construction condition or better. All areas will be reseeded and returned to an equivalent pre-construction condition or better.

Pedestrian access across the Broad Street Bridge will likely be closed during construction. An initial assessment determined that Broad Street will likely need to be detoured during construction. Also, work space is limited at this bridge. It may not be feasible to maintain safe pedestrian access during construction and have enough space for necessary construction equipment, such as a crane. PennDOT is committed to maintaining pedestrian access during construction; however, due to construction restrictions and safety concerns we anticipate



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some temporary closures. The complete plan for maintaining traffic will be developed during the Final Design Phase and will be shared with the Borough and the public to ensure awareness. In the final condition, two five-foot sidewalks will be included on the new bridge; therefore, impacts to public access will be minor and temporary.

Avoidance/Minimization:

Complete avoidance of the parks is not feasible due to the surrounding development and presence of the levee that is located north of McMichael Creek, east of Broad Street, and immediately opposite the Ann Street Park. The levee is part of the larger Stroudsburg & East Stroudsburg Unit No. 1 Local Flood Protection Works, which is a National Register of Historic Places (NHRP) eligible resource and a Section 4(f) resource in addition to providing critical flood protection to Stroudsburg.

During refinement of the alternatives in 2016-2017, several design modifications were made in order to avoid and minimize impacts to Rotary Creek and Ann Street Parks. At Interchange 307, the Broad Street/I-80 alignment and typical sections across both bridges (Broad Street over I-80 and Broad Street over McMichael Creek) were adjusted to avoid and minimize impacts to the parks and medical facility drive opposite Rotary Creek Park. The layout was also revised to better facilitate the tie-in at the five-point intersection (intersection north of McMichael Creek, immediately adjacent to the park, and involving PA-191/Broad Street, Ann Street, Main Street, and N 5th Street in Stroudsburg). These refinements also make the proposed improvements more constructible.

Coordination with Stroudsburg Borough in 2018-2019 resulted in further refinements to minimize impacts to the parks. For instance, a retaining wall was added along the Rotary Creek Park access drive as opposed to an earthen slope to minimize the impact area. Furthermore, the Borough prefers a wider bridge so that bicycle and pedestrian access across the Broad Street Bridge over McMichael Creek and access to the parks can be improved. Thus, the bridge design was widened by approximately three feet in order to include designated sidewalks and shoulders for bicycle and pedestrian access.

In conclusion, the proposed project will not adversely affect the qualities, activities, features, or attributes of Rotary Creek and Ann Street Parks.

- 3. The public was afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the resource. YES



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Identify the opportunity(ies) for public comment and describe the input received (provide attachments as appropriate to document the public involvement activity):

Starting in 2014, PennDOT has undertaken a public involvement and agency coordination program to inform interested persons about the project and obtain feedback. Representatives from Stroudsburg, East Stroudsburg and Delaware Water Gap Boroughs; Stroud Township; Monroe County; Stroudsburg Area School District; Stroudsburg Fire Department; Pocono Medical Center; the Safe 80 Task Force; local businesses, and the general public have attended the public outreach meetings or responded with comments. The public meetings focused on the overall project design. Potential environmental impacts, including those to Rotary Creek and Ann Street Parks, were identified on project map boards. A summary table of the public meetings held to date is provided in Attachment D; meeting minutes can be found in the project technical file. A general public concern for maintaining access to and preserving existing recreational resources, including parks, was identified.

4. The official with jurisdiction over the property was informed of FHWA's and/or PennDOT's intent to make a *de minimis*/no adverse use finding. YES

Identify the method used to notify the official with jurisdiction, and attach appropriate correspondence.

Initial discussion with Ms. Maier about the proposed project and associated park impacts occurred over the phone and via email on October 15, 2018. Subsequently, a meeting with members of the project team, Ms. Maier, and other Borough representatives occurred on November 26, 2018 at the Borough Office. Various communications (email, phone calls, and letters) were exchanged between Nov 2018 and March 2019. On March 29, 2019, a conference call was held with Ms. Maier, the Stroudsburg Borough Historic Architectural Review Board, AECOM project team, PennDOT, and FHWA. On April 2, 2019, PennDOT issued a letter identifying opportunities to minimize and mitigate for the proposed impacts to the parks.

Correspondence documenting notification of the official with jurisdiction is included in the following Attachment: Attachment E includes the following: Initial email to Borough on 10/15/18, November 26, 2018 meeting minutes, Borough's February 14, 2019 response letter, March 28, 2019 meeting minutes, PennDOT's April 2, 2019 commitment letter, and the Borough's May 8, 2019 concurrence letter. Note that the figures referenced in these correspondences are not included in Attachment E. Attachment C contains the final versions of the figures.



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5. The official with jurisdiction over the property concurred in writing with FHWA's and/or PennDOT's determination that the project will not adversely affect the property. (NOTE: Public input must be received and considered prior to the official with jurisdiction making a final determination.) YES

Identify the official with jurisdiction and date of concurrence and attach written concurrence:

Ms. Jennifer Maier provided written concurrence on May 8, 2019 after the concurrence was reviewed and accepted by a majority of the Borough Council at their regular meeting on May 7, 2019.

Written concurrence from the official with jurisdiction is included in the following Attachment:
Attachment E

6. If the Section 4(f)/Section 2002 use involves State Game Land, verify that the use is considered *de minimis* in accordance with the *Cooperative Interagency Agreement for Interdepartmental Land Transfer of State Game Lands*. (Describe and obtain PA Game Commission concurrence signature below for use of a State Game Land Bank and/or Interdepartmental Land Transfer.) YES

State Game Land Bank

Debiting [Click here to enter text.](#) (acres)

From [Click here to enter text.](#) SGL bank

PGC Signature:

Date: [Click here to enter a date.](#)

Interdepartmental Land Transfer

PGC Signature:

Date: [Click here to enter a date.](#)

7. Have Federal or State funds [LWCF 6(f)/Project 70/Project 500/other recreation grants] been used in the acquisition of, or for any improvements to, the Section 4(f) property? YES
 NO

If Yes, the appropriate Federal agency has been coordinated with and is in agreement with the land conversion or transfer. YES

Provide more information regarding the Section 6(f)/Project 70/Project 500/other recreation grants coordination:



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8. 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:

Stroudsburg & East Stroudsburg Unit No. 1 Local Flood Protection Works (Levee System) – In either Build Alternative 2B or Build Alternative 2D, The limits of disturbance slightly overlap the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works’ National Register boundary in two locations: the southeast side of SR 191/Broad Street where the structure over McMichael Creek will be rebuilt, and on the north side of I-80 where the structure over Brodhead Creek will also be rebuilt. The outside slope profile of the levee will be altered within these two sections of the resource, where they abut the bridges. The bridges will be widened by approximately 5’, extending the location of the abutments into the current boundary of the flood protection works. The work results in approximately 2% (0.2 acres) of the 81.3 acres within the boundary altered for abutment construction. The slope of the levee is a character-defining feature of the flood protection system and the 5’ extension of the bridge into the boundary will have an Effect. However, the change of the small amount of levee wall is a minimal overall impact to this long resource. The flood protection system will continue its historic function and the impacts to the integrity of workmanship, design, and materials are negligible. It will not diminish the qualities that make the system National Register-eligible. The project will have No Adverse Effect to the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works.

A Determination of Section 4(f) *De Minimis* Use/Section 2002 No Adverse Use Historic Properties form has been prepared for the Stroudsburg and East Stroudsburg Unit No. 1 Local Flood Protection Works (Levee System).

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 public park, recreation area, or wildlife or waterfowl refuge 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



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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.

As currently proposed, the proposed Broad Street Bridge widening will also impact the surrounding properties, which include a medical facility (Pocono Ambulatory Surgery Center) in the southeast quadrant and the NRHP-eligible Levee System in the northeast quadrant.

If the bridge was widened exclusively to the east, thereby avoiding or minimizing park impacts, that would result in increased impacts to the Levee System and medical facility. In addition, the commercial business in the northeast quadrant, north of the Levee System would likely be a total displacement as the corner of the building is right at the edge of the existing narrow sidewalk. Therefore, avoiding the portion of the parks along Broad Street would result in increased impacts to a business, public health access, and a Section 106/Section 4(f) protected resource.

I-80 is a part of the Strategic Highway Network (STRAHNET) system, and any bridge over I-80 should have a clearance of 16’6”. The Broad Street/SR 191 Bridge over I-80 currently has a vertical clearance of 15’0”. In order to achieve the necessary vertical clearance, the profile of the Broad Street Bridge over I-80 must be raised; and since the Broad Street Bridge over McMichael Creek is immediately north of I-80, it would be impossible tie the profile back down to existing prior to the McMichael Creek Bridge in a safe manner and while meeting design criteria. This necessitates the replacement of the Broad Street Bridge over McMichael Creek which would impact both Rotary Creek and Ann Street Parks. Thus, if impacts to the Parks were completely avoided, then I-80 would not meet STRAHNET and PennDOT standards for vertical clearance and could potentially impede national civil defense.

Even if the Broad Street Bridge over McMichael Creek was replaced in-kind with no widening, there would still be impacts to the parks because the existing wingwalls are located within park property. Therefore, the only way to completely avoid the parks would be a no build alternative. The existing bridge was built in 1955 and is structurally deficient. Rehabilitation may be an option if it were not for the profile adjustments needed in the



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proposed condition. If the Broad Street Bridge is not replaced, it will continue to deteriorate and eventually be unsafe for use. This would negatively affect the 10,930* members of the traveling public, emergency services, and commercial entities that use this bridge on a daily basis and greatly impact the safety and efficiency of the transportation network. (*Average daily traffic number.)

The other aspect of the proposed project that will impact the park is the reconstruction of Ramp R – the I-80 westbound on-ramp from Broad Street. The ramp is being shifted toward the park property to tie into the widened I-80 mainline, to allow the ramp length to be extended to meet current design criteria, and to allow for the existing ramp to remain open during construction (a short detour will be necessary to execute the existing to new ramp transition). Additionally, the proposed Ramp R is as close to I-80 as possible due to a number of different constraints including vertical geometry, superelevation (banking of the roadway along curves), and turning movements. If I-80 were widened exclusively on the south side in this area, thereby utilizing the existing Ramp R footprint in entirety, then there will be additional residential displacements on the south side of I-80 and also necessitate the reconstruction of the existing PA 611/Park Avenue Bridge. The additional ROW acquisitions will increase project costs and negatively impact property values and the local tax base. Additionally, the public has emphasized that property impacts and displacements are a primary concern. Likewise, it is imperative to minimize detours throughout the project corridor to minimize traffic disruptions and maintain operation and use of this existing transportation route during construction.

Include any additional information related to the park impact 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 through the minimization of harm to a public park, recreation land, or wildlife and waterfowl refuge as a result of mitigation to or avoidance of impacts to the qualifying characteristics and/or the functions 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, the proposed action constitutes a *de minimis*/no adverse use; and therefore, no analysis of avoidance alternatives is required.

Name and Organization of Preparer: Julia Moore, AECOM

Date: 7/19/2019



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Project Manager: *Imtiaz Nathaniel* Date: *7/22/19*
 Environmental Manager: *Elbert* Date: *7/22/2019*
 PennDOT, BOPD: *Mina Kertel* Date: *7/22/2019*
 FHWA: *Carly Hutto* Date: *7/22/2019*

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

- Context sensitive treatment of Broad Street Bridge over McMichael Creek. During final design, open railing options that meet the design standards will be presented to the Borough for their input on selection.
- Provide for bicycle and pedestrian users in permanent condition. The proposed Broad Street Bridge will include two striped five-foot shoulders that could be used by bicyclists and two five-foot curbed sidewalks for pedestrians. Repair and restore sidewalk and stairs in the northern corner of Ann Street Park at the Ann Street/Broad Street intersection after construction is completed.
- Consider bicyclists and pedestrians during construction. PennDOT is committed to maintaining pedestrian access during construction; however, due to construction restrictions and safety concerns some temporary closures are anticipated. The complete plan for maintaining traffic on Broad Street will be developed during the Final Design Phase and will be shared with the Borough and the public to ensure awareness. Maintain Ann Street access point to Ann Street Park during construction.
- Regrade and pave gravel access drive entrance to Rotary Creek Park to tie into proposed profile raise on Broad Street.
- Restore and stabilize temporary impact areas at Ann Street Park. The waterfall viewing area is not anticipated to be impacted, but should impacts occur, repairs will be made to restore it to an equivalent pre-construction condition or better. All areas within Ann Street Park will be reseeded and returned to an equivalent pre-construction condition or better. Develop a planting plan in final design for impact areas at Ann Street Park with input from the Borough.
- Develop a planting plan in final design for impact areas at Rotary Creek Park with input from the Borough. The planting plan must ensure no trees are planted within a 12-foot buffer of the retaining walls for future maintenance. Wildflowers or other plants could be provided in that buffer area. The planting plan will include native trees and/or shrubs outside of the 12-foot buffer area.
- Coordinate with PFBC during final design for impacts to recreational navigability of McMichael Creek at Rotary Creek Park.



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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
- Public involvement information

ATTACHMENT A

ROTARY CREEK AND ANN STREET PARKS MAP



**Ann Street
Rotary Creek,
Bryant,
& Glen Parks**

-  Wooded Areas
-  Grassy Areas
-  Open Space Properties
-  Downtown District
-  Trails
-  Playground
-  Parking

ATTACHMENT B
PARK PHOTOGRAPHS

Photo Documentation

County:	Monroe	State Route, Section:	SR 0080, 17M
Project Name:	I-80 Reconstruction Project	MPMS:	76357

Date:
September 25, 2018

Photo 1:
View of the Rotary Creek Park entrance from PA 191/Broad Street south of McMichael Creek. This entrance will be temporarily impacted during construction. In addition, the wooded strip on the south side of the access drive (left side of photo) will be partially cleared to accommodate grading associated with the new Ramp R.



Date:
September 25, 2018

Photo 2:
Another view of the Rotary Creek Park entrance, looking north along PA 191/Broad Street. Broad Street will be widened and the profile will be raised. Therefore, the wooded strip visible here would be cleared as part of the proposed project.

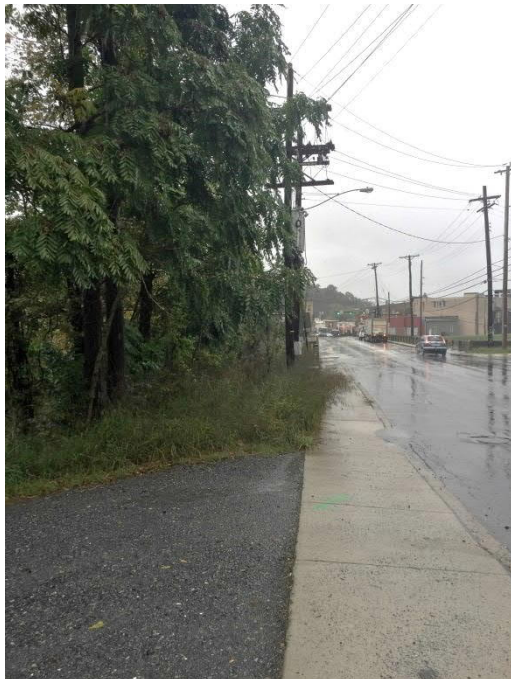


Photo Documentation

County:	Monroe	State Route, Section:	SR 0080, 17M
Project Name:	I-80 Reconstruction Project	MPMS:	76357

Date:
August 28, 2018

Photo 3:
View of the canoe/kayak launch area along McMichael Creek in Rotary Creek Park. This area will not be directly affected; however, there will be temporary access closures during construction. The PFBC will be consulted as the project progresses to ensure potential impacts to boaters are appropriately mitigated.



Date:
August 28, 2018

Photo 4:
Looking downstream from the canoe/kayak launch area in Rotary Creek Park. The Broad Street Bridge is visible in the background. The bridge will be widened resulting in minor strip takes and tree clearing adjacent to the bridge.



Photo Documentation

County:	Monroe	State Route, Section:	SR 0080, 17M
Project Name:	I-80 Reconstruction Project	MPMS:	76357

Date:
September 25, 2018

Photo 5:
View of the billboard at the northeast end of Rotary Creek Park. This billboard is located on a separate parcel and is surrounded by park property. This area is also within an existing transportation right-of-way. The billboard and surrounding open space visible here will be impacted by the proposed project.



Date:
September 25, 2018

Photo 6:
View of the Ann Street Park entrance from Ann Street. The northern entrance from Broad Street is visible in the background.



Photo Documentation

County:	Monroe	State Route, Section:	SR 0080, 17M
Project Name:	I-80 Reconstruction Project	MPMS:	76357

Date:
September 25, 2018

Photo 7:
View of the northern Ann Street Park entrance from Broad Street. This entrance will likely be temporarily closed during construction, but will be maintained in the permanent condition.



Date:
September 25, 2018

Photo 8:
View of the fenced waterfall viewing patio at Ann Street Park, looking toward the Broad Street Bridge.



Photo Documentation

County:	Monroe	State Route, Section:	SR 0080, 17M
Project Name:	I-80 Reconstruction Project	MPMS:	76357

Date:
September 25, 2018

Photo 9:
View of the dam/waterfall on McMichael Creek from Ann Street Park. The Broad Street Bridge is to the left.



Date:
September 25, 2018

Photo 10:
View of the informational plaque located at the Ann Street Park.

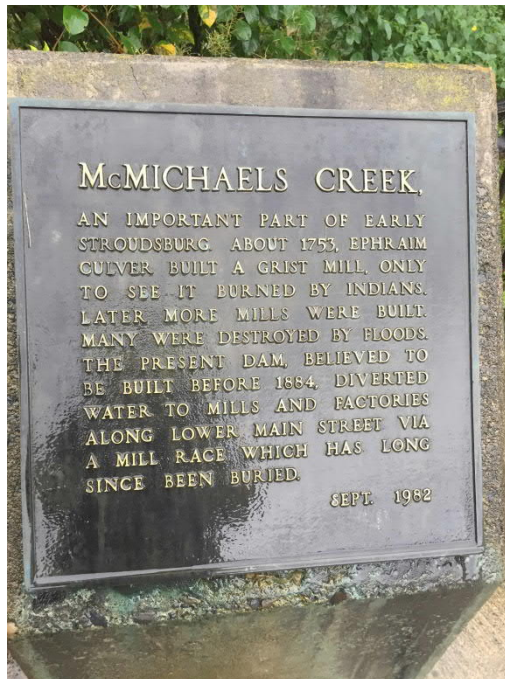


Photo Documentation

County:	Monroe	State Route, Section:	SR 0080, 17M
Project Name:	I-80 Reconstruction Project	MPMS:	76357

Date:
September 25, 2018

Photo 11:
View of the Ann Street
Park area on the north
side of McMichael
Creek that will be
impacted. Note this
area is fenced off and
access is restricted.



Date:
September 25, 2018

Photo 12:
Another view of the
area to be impacted
near Ann Street. The
existing bridge wing
wall is also visible.



Photo Documentation

County:	Monroe	State Route, Section:	SR 0080, 17M
Project Name:	I-80 Reconstruction Project	MPMS:	76357

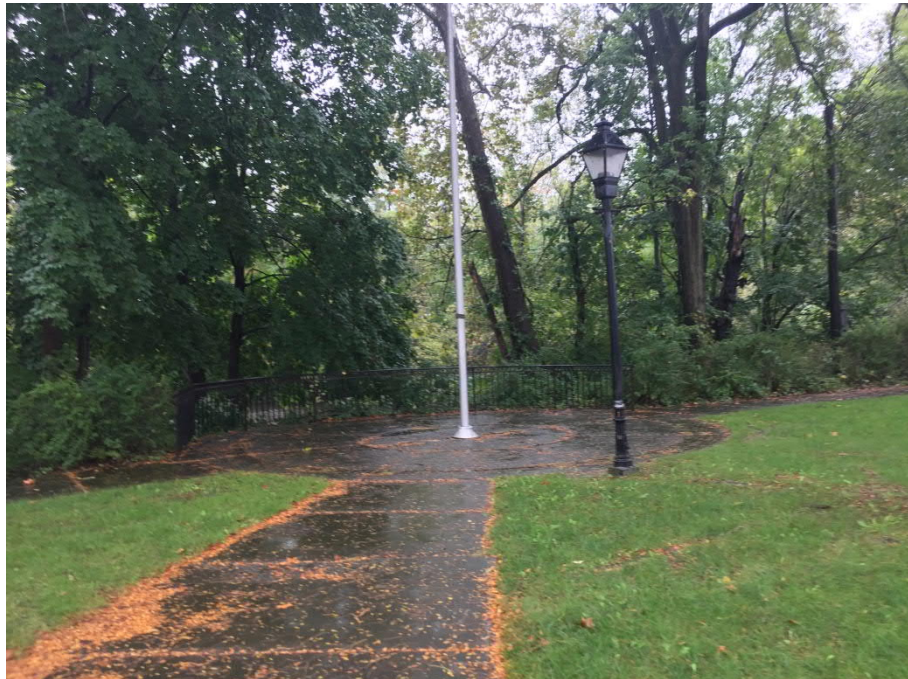
Date:
September 25, 2018

Photo 13:
View of the sidewalk
and open space
southwest of the
waterfall viewing area
along Ann Street.



Date:
September 25, 2018

Photo 14:
View of the patio and
flagpole at the
southwest end of the
Ann Street Park.



ATTACHMENT C
IMPACT FIGURES

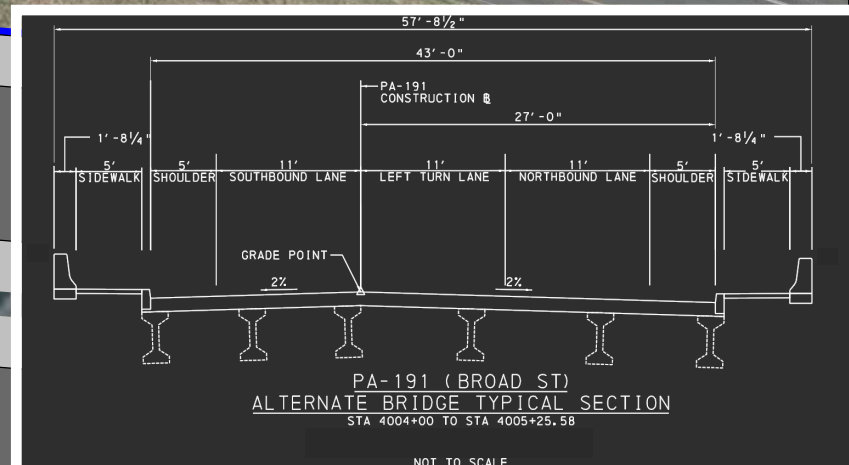
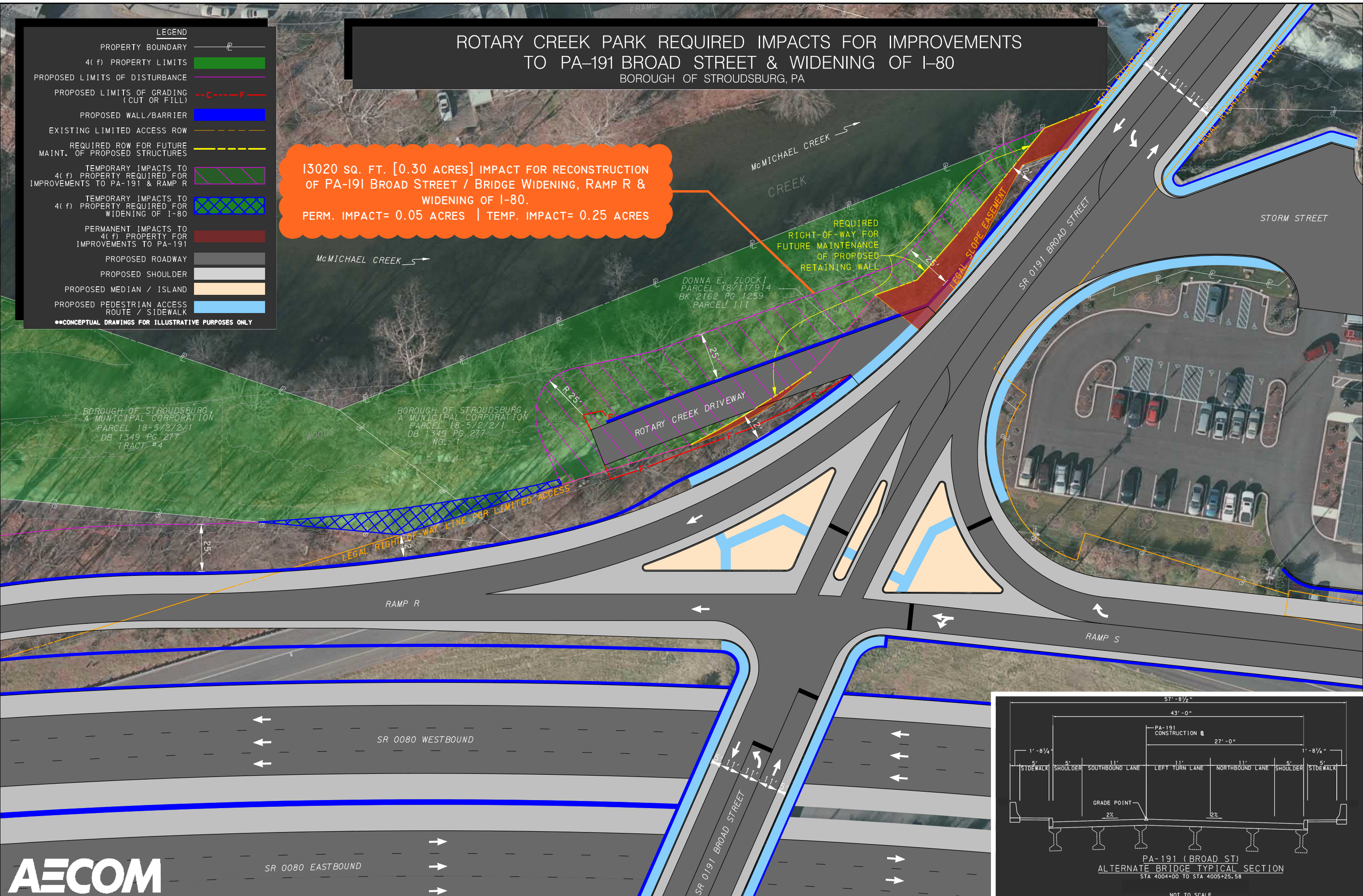
ROTARY CREEK PARK REQUIRED IMPACTS FOR IMPROVEMENTS TO PA-191 BROAD STREET & WIDENING OF I-80

BOROUGH OF STROUDSBURG, PA

13020 sq. ft. [0.30 ACRES] IMPACT FOR RECONSTRUCTION OF PA-191 BROAD STREET / BRIDGE WIDENING, RAMP R & WIDENING OF I-80.
PERM. IMPACT= 0.05 ACRES | TEMP. IMPACT= 0.25 ACRES

LEGEND	
PROPERTY BOUNDARY	
4(f) PROPERTY LIMITS	
PROPOSED LIMITS OF DISTURBANCE	
PROPOSED LIMITS OF GRADING (CUT OR FILL)	
PROPOSED WALL/BARRIER	
EXISTING LIMITED ACCESS ROW	
REQUIRED ROW FOR FUTURE MAINT. OF PROPOSED STRUCTURES	
TEMPORARY IMPACTS TO 4(f) PROPERTY REQUIRED FOR IMPROVEMENTS TO PA-191 & RAMP R	
TEMPORARY IMPACTS TO 4(f) PROPERTY REQUIRED FOR WIDENING OF I-80	
PERMANENT IMPACTS TO 4(f) PROPERTY FOR IMPROVEMENTS TO PA-191	
PROPOSED ROADWAY	
PROPOSED SHOULDER	
PROPOSED MEDIAN / ISLAND	
PROPOSED PEDESTRIAN ACCESS ROUTE / SIDEWALK	
●●CONCEPTUAL DRAWINGS FOR ILLUSTRATIVE PURPOSES ONLY	

User: rmlant
 AECOM
 \\usaph1p022\Data\Projects\60294833-I-80 Reconstruction\900-CADD\910-CAD\50-WORKING\Nolan\Rotary Creek Options_All Lines_Corridor.dwg
 3/5/2025 3:54:05 PM



ANN STREET PARK REQUIRED IMPACTS FOR IMPROVEMENTS TO PA-191 BROAD STREET

BOROUGH OF STROUDSBURG, PA

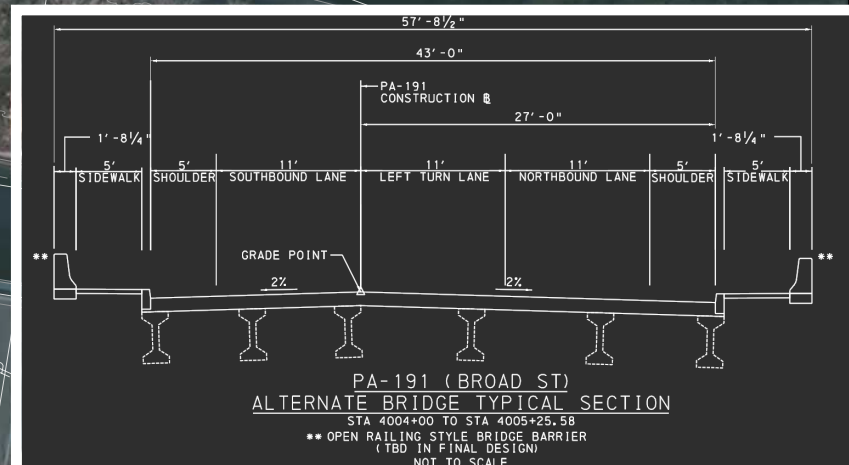
LEGEND	
PROPERTY BOUNDARY	
4(f) PROPERTY LIMITS	
PROPOSED LIMITS OF DISTURBANCE	
PROPOSED LIMITS OF GRADING (CUT OR FILL)	
PROPOSED WALL/BARRIER	
EXISTING LIMITED ACCESS ROW	
REQUIRED ROW FOR FUTURE MAINT. OF PROPOSED STRUCTURE	
TEMPORARY IMPACTS TO 4(f) PROPERTY FOR IMPROVEMENTS TO PA-191	
PERMANENT IMPACTS TO 4(f) PROPERTY FOR IMPROVEMENTS TO PA-191	
PROPOSED ROADWAY	
PROPOSED SHOULDER	
PROPOSED MEDIAN / ISLAND	
PROPOSED PEDESTRIAN ACCESS ROUTE / SIDEWALK	
**CONCEPTUAL DRAWINGS FOR ILLUSTRATIVE PURPOSES ONLY	

3190 sq. ft. [0.07 ACRES] IMPACT FOR RECONSTRUCTION OF PA-191 BROAD STREET / BRIDGE WIDENING

PERM. IMPACT= 0.04 ACRES | TEMP. IMPACTS= 0.03 ACRES

REQUIRED RIGHT-OF-WAY FOR FUTURE MAINTENANCE OF PROPOSED BRIDGE/WINGWALL

BOROUGH OF STROUDSBURG
A MUNICIPAL CORPORATION
PARCEL 18-5/2/2/1
DB 1349 PG 277
TRACT #4



User: rblant
 AECOM
 \\usaphp0202\Data\Projects\60284833_140_Reconstruction\900_CADD\910_CAD\90_WORKING\Ndam\Rotary Creek_Options_All Lines_Corridor.dwg
 3/5/2018 3:38 PM



ANN STREET AND ROTARY CREEK PARK REQUIRED RIGHT-OF-WAY FOR FUTURE MAINTENANCE OF PROPOSED STRUCTURES

BOROUGH OF STROUDSBURG, PA



4:09:23 PM
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User: nolan
AECOM



CONCEPTUAL DRAWINGS FOR ILLUSTRATIVE PURPOSES ONLY

ATTACHMENT D
PUBLIC INVOLVEMENT SUMMARY

I-80 Section 17M Project Public Involvement Summary

Activity	Date	Notes	Comments Received
Public Open House Round #1	February 20 and 23, 2014	Presented conceptual alternatives along with traffic and environmental data; solicited feedback.	18% of attendees had general concerns regarding recreational resources, including parks, trails, and greenways.
Public Open House Round #2	December 4 and 7, 2014	Informed the public about progress made since the previous open house and solicited feedback on the remaining alternatives.	In contrast to the previous meeting in which recreation was a primary concern among attendants, recreation including trails and parks comprised less than 2% of the responses. Monroe County Planning Commission stated, "It is crucial that access to these community open space properties be maintained throughout the project. Preservation of these properties is essential to the County's Open Space and Recreation Infrastructure."
Local Public Official Meeting #1	July 11, 2017	Updated local public officials about the project and gathered feedback.	No comments related to the parks.
Local Public Official Meeting #2	February 15, 2018	Served as the kick-off of the Public Advisory Committee. Updated stakeholders about the project and gathered feedback.	No comments related to the parks. Overall discussion was about reducing impacts to the community. Note: no official meeting minutes were prepared following this meeting.
Public Advisory Committee Meeting #1	May 30, 2018	Presented the project to local stakeholders and answered questions.	No comments related to the parks.
Public Advisory Committee Meeting #2	September 25, 2018	Updated committee on design decisions made to date and trade-offs to be made in identifying a preferred alternative.	No comments related to the parks.
Public Open House Round #3	December 4, 2018	Informed the public about progress made since the previous open house and solicited feedback on the remaining alternatives.	General environmental concerns. No specific comments related to the parks.
Public Advisory Committee Meeting #3	April 30, 2019	General project update, including discussion about impacts to Rotary Creek and Ann Street Parks	A representative from Stroudsburg Borough indicated that the Borough would offer Section 4(f) de minimis concurrence for the park impacts, which includes the mitigation steps previously discussed with PennDOT and FHWA.

ATTACHMENT E

NOTIFICATION AND CONCURRENCE OF OFFICIAL WITH JURISDICTION

Moore, Julia

From: Moore, Julia
Sent: Monday, October 15, 2018 3:07 PM
To: 'jmaier@stroudsburgboro.com'
Subject: I-80 Reconstruction Project Rotary Creek (Ann Street) Park Plan
Attachments: Draft_I_80_4f_Single_Maps_2018_October Parks.pdf

Hi Jennifer, thank you for speaking with me. As I mentioned on the phone, I am working on the environmental documentation for the I-80 Reconstruction Project on behalf of PennDOT. Although a specific alternative has not been chosen yet, the two primary alternatives known as Build Alternative 2B and Build Alternative 2D would require work within and adjacent to the Rotary Creek (Ann Street) Park. Here is a summary of the proposed impacts:

Specific project activities at the Rotary Creek (Ann Street) Park include replacing the PA 191/Broad Street Bridge over McMichael Creek with approximately 5-6 feet of widening on both sides, raising the profile of Broad Street, and repaving the roadway lanes and shoulders adjacent to the structure. Furthermore, a new ramp (Ramp R) will be constructed for traffic merging onto I-80 westbound from PA 191/Broad Street. The ramp will have a similar configuration as existing but with minor modifications to achieve current design criteria.

Recreational resources, such as the Rotary Creek (Ann Street) Park are protected environmental resources under Section 4(f) of the U.S. Department of Transportation Act of 1966 and Section 2002 of the Pennsylvania Administrative Code Of 1929 (PA Act 120). As the official with jurisdiction over this resource, we are coordinating with you to ensure impacts are minimized and appropriately mitigated. Please take a look at the attached draft plan and please give me a call so we can discuss the details further. My contact information is below. Thank you and have a nice day!

Julia Moore

Environmental Scientist, Transportation
D +1-717-790-3414
julia.moore@aecom.com

AECOM

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Minutes

Meeting name Rotary Creek (Ann Street) Park Impact Discussion	Subject I-80 Section 17M Reconstruction Project Section 4(f) Documentation	Attendees See attached list
Meeting date November 26, 2018	Time 10:00 am	
Location Stroudsburg Borough Office	Project name I-80 Section 17M Reconstruction Project	
MPMS number 76357	AECOM project number 60284833	
Prepared by Julia Moore		

The purpose of the meeting was to review the proposed I-80 Reconstruction Project impacts to Rotary Creek (Ann Street) Park and the Section 4(f) *De Minimis* Use form. The meeting started with introductions and a brief explanation that “Section 4(f)” refers to the federal regulation that protects recreational resources (U.S. Department of Transportation Act of 1966).

The draft Section 4(f) form was reviewed, section by section. An overview of the I-80 Reconstruction Project was given followed by identification of the Rotary Creek (Ann Street) Park features. The Borough noted the following:

- The Stroud Regional Open Space and Recreation Commission does not manage the park. Stroudsburg Borough is solely responsible for park management.
- The Borough does not have a formal management plan for the park but does perform regular maintenance such as snow removal and trash pickup. In fact, the portion of the park on the south side of the creek is used as a snow disposal area for the municipal plow trucks during snow events.
- Brian Ace, the Borough’s Public Works Director, also noted that sewer lines run through the park. Jeff Birks (AECOM) noted that extensive utility identification has been performed throughout the project study area, including at the park. Mr. Birks reviewed the utility information after the meeting and confirmed that the sewer line in question is identified.
- Ms. Jennifer Maier (Borough Manager) was confirmed as the official with jurisdiction.

Prior to discussing the impacts, Ms. Maier requested a reduction in the proposed curb bump out at the intersection of Ann Street and Broad Street be considered. The proposed curb line matches existing; however, the existing turn is tight. The reason the existing curb is so far out into the travel way is to protect the parked cars along Ann Street when vehicles turn left onto Ann Street from Broad Street. The design team will look at flattening the existing turn radius in the next stage of the design process (line and grade submission). Any revisions to the curb would not result in additional impacts to the park property.

Next, the proposed impacts were identified and the impact figure was reviewed. The following proposed project features will result in park impacts:

- Broad Street Bridge will be widened 5-6 feet on each side to meet current design criteria and will include two 14-foot travel lanes with shared bike lanes, one 12-foot turn lane, and two five-foot sidewalks (depicted as the “PA-191 Reduced Section over I-80 and McMichael Creek – 2017” in the attached figure). A discussion ensued regarding the proposed lane widths. Mr. Mark Connors (Borough Council member) noted that designated bike lanes would be preferred since many bicyclists currently use this bridge to get to the south end of Stroudsburg and Glen Park, a mountain biking park to the southeast. Specifically, 12-foot vehicle lanes and 4-foot designated bike lanes were proposed. In addition, Mr. Connors noted that the proposed islands at the I-80 ramp intersection would be helpful for bicyclists and pedestrians to get across this busy intersection. Ms. Maier noted that a shared lane (with appropriate pavement markings) may actually be safer since bicyclists would fully occupy the lane, especially when travelling in groups. Mr. Birks noted that an even wider bridge (necessary for designated bike lanes) would likely result in

additional impacts to the park, flood protection levee, and the first building on the northeast corner of the Broad Street Bridge because the proposed center line needs to match the existing to tie into the 5-point intersection. This intersection will not be reconfigured as part of the proposed project. Additionally, PennDOT design criteria specify six-foot minimum bike lanes in this case. Given these factors, everyone agreed the 14-foot shared lane option is preferred.

- Broad Street profile will be raised to account for necessary vertical clearance over I-80. The existing structure over I-80 provides 15'-7" of vertical clearance over I-80, while the required clearance is 16'-6".
- Ramp R will be reconstructed to tie into new I-80 alignment.
- 0.48 acres out of 5.02 acres of park property will be affected. It was also noted that the proposed impacts encompass both permanent and temporary impacts and are a worst-case scenario. Impacts may be minimized as the design is refined; however, we need to move forward with the Section 4(f) documentation per the project schedule.

Ms. Maier was concerned about the restoration of temporary impact areas. It is standard practice to restore and stabilize temporary impact areas, and this will be noted on the Section 4(f) form as a mitigation measure.

Mr. Connors stated that park impacts could be lessened if I-80 was not reconstructed with six lanes since that would allow the proposed Ramp R to be shifted away from the park. Ms. Moore noted that the proposed ramp entrance is at approximately the same location as the existing ramp entrance, and the primary extension of the ramp would occur outside of park property. Therefore, it was agreed that regardless of whether I-80 is four or six lanes, proposed park impacts from Ramp R would be the same.

An integral part of the Section 4(f) process is public involvement. The public involvement summary included with the draft Section 4(f) form was reviewed. Public feedback included general concerns regarding recreational resources. The project team has done their best to minimize park impacts while balancing impacts to other adjacent resources. In addition, there is a public meeting scheduled for December 4, 2018.

All parties agreed that due to the minor impacts which will not permanently affect the qualities, activities, and features of the park, a Section 4(f) *de minimis* use/no adverse use finding will be made. A written concurrence is needed for the Section 4(f) *de minimis* use form. Ms. Maier will discuss the Section 4(f) materials and impacts with the Borough Council at the November 27, 2018 meeting prior to providing written concurrence but sees no issues with the *de minimis* finding. Ms. Moore will provide an electronic copy of the impact map to Ms. Maier.

Mr. Jim Ruth (PennDOT Environmental) asked the Borough if Section 6(f) funds or other grants have been used for Rotary Creek (Ann Street) Park. Ms. Maier stated that she was not aware of any grants received for the park to date, but would double check.

Lastly, the Section 4(f) mitigation measures listed at the end of the form were verified. Mr. Birks noted that based on an initial assessment, Broad Street will likely need to be detoured during construction which will also affect pedestrian access. This will be confirmed as the bridge design progresses; however, sidewalks will be open after construction is complete. The Section 4(f) form will be revised based on the aforementioned discussion.

On a separate note, unrelated to the Section 4(f) discussion, the Borough requested specific information regarding overall property impacts so that they can begin planning for tax revenue replacement. Ms. Maier noted that Stroudsburg is designated as a distressed community, so negative impacts to the tax base will be felt by the Borough. Mr. Imtiaz Nathaniel (PennDOT Project Manager) responded that specific property impacts will not be determined until final design, which is 1-2 years away at this point.

Minutes
Rotary Creek (Ann Street) Park Impact Discussion

Ref	Action	Responsible	Due by	Initial
01	Evaluate curb bump out at Ann St/Broad St intersection.	Jeff Birks	L&G submission	
02	Email PDF of draft impact map to Borough.	Julia Moore	11/26/18	JLM
03	Discuss with Borough Council	Jennifer Maier	11/27/18	
04	Check if Section 6(f) or other grants were used for the park.	Jennifer Maier	12/14/18	
05	Revise Section 4(f) form per meeting discussion.	Julia Moore	12/14/18	
06	Written concurrence	Julia Moore/Jennifer Maier	12/14/18	

1-80 Section 17M

4(f) meeting date 11/26²⁶/18 at 10:00 am

1. Mark Connors, Borough Council. mconnors@stroudsburgboro.com
cell = 570-456-0684
2. Brian Aze - public works director
C - 570-656-9758 E - baze@stroudsburgboro.com
3. Jeffrey Bilks AECOM.
4. Imtiaz Nathaniel PennDOT D-5 Project Manager
5. Jim Ruth PENNDOT 5-0 Asst. Env. Manager
Jruth@pa.gov 610-871-4462
6. Julia Moore AECOM Julia.Moore@AECOM.com
7. JENNIFER MAIER 908 313 5050
jmaier@stroudsburgboro.com

Borough of Stroudsburg

Tarah D. Probst
Mayor

James B. Smith
Council President

Boyd Weiss
Council Vice-President

Joanne Kochanski
Council President Pro Tem



Matt Abell
Council Member

Anthony Lanfrank, Jr.
Council Member

Mark Connors
Council Member

Erica McCabe
Council Member

Heart of the Poconos

February 14, 2019

AECOM

100 Sterling Parkway
Suite 205
Mechanicsburg, PA 17050, United States of America
T +1-717-795-8001
aecom.com

Attn: Julia Moore

Environmental Scientist, Transportation
D +1-717-790-3414
julia.moore@aecom.com

Re: Determination of Section 4(f) *De Minimis* Use, Section 2002 No Adverse Use, Public Parks, Recreation Areas, Wildlife and/or Waterfowl Refuges, State Forest Land, and State Game Land.

Dear Ms. Moore,

The Borough of Stroudsburg is in receipt of the undated Draft Report – Determination of Section 4(f) De Minimus Use Section 2002 No Adverse Use Public Parks, Recreation Areas, Wildlife and/or Waterfowl Refuges, State Forest Land, and State Game Land for the I-80 Reconstruction Project, Section 17M and the minutes from the meeting between the Borough of Stroudsburg and AECOM of November 26, 2018.

The Borough has the following comments and corrections.

Background information provided in the report is accurate regarding the uses of the park, activities, amenities, extent, location, features etc.

Joseph P. McDonald, Jr., Esq., Borough Solicitor ❖ Jennifer Maier, Borough Manager

Municipal Building, 700 Sarah Street, Stroudsburg, PA 18360
570-421-5444 (P) ❖ 570-421-2690 (F)
www.StroudsburgBoro.com

Though the Park, on both sides of McMichael Creek, is referred to on the Borough website as “Rotary Creek Park” the North side is commonly referred to as “Ann St. Park” and the South side as “Rotary Creek Park”. The differentiation of the overall park into two distinct parks rather than one park of two parts is consistent with the way in which park users refer to the Parks and is convenient for identifying impacts and areas of mitigation of those impacts.

A little more information about the meaning of various specific undefined line-types on the map would be very helpful in evaluating impacts as would enlarged areas of detail at impact areas. The requests of the Borough Manager to AECOM for a map with a more limited focus, showing just the area of the Broad Street Bridge widening, was due to the fact that the Borough agreed that impacts of the Broad Street Bridge widening were acceptable, and that the Borough considered the impacts on the Parks due to the widening of I-80 as neither minimal nor acceptable.

PROJECT DESCRIPTION

Whereas the Borough largely concurs with the Project Description, the mention of the new Ramp “R” omits a key element that Ramp “R” will not just be lengthened with a “similar configuration as existing” but the ramp (except for its intersection / initiation at Broad St.) will be significantly farther north due to the widening of the mainline roadway to 6 lanes.

Furthermore, the inclusion of the standard overall Project Purpose and Needs restates several flawed assumptions relative to the portion of the project that would widen the mainline to 6 travel lanes and fails to distinguish between the widening aspects of the project vs other improvements. Because the widening portion would have a significant impact on the Parks, The Borough restates its objections to the widening here.

The Project Purpose restatement in the Section 4(f) report concludes “...with no or minimal design exceptions” yet The Federal Highway Administration’s (FHWA) publications relative to “Context Sensitive Solutions” specifically allows for consideration of design exceptions to standard criteria in order to accommodate unique situations. The Borough assumes that such contextual considerations include an Interstate bisecting a cute little town. The FHWA also states (paraphrased here) that Level of Service is not the only measure of project success to be considered.

Note that The Borough is in favor of safety improvements, however the mention of congestion needs restated in this report only compares the full project results with the “No-Build” alternative with no evaluation of the Project if only the increase to 6 travel lanes were omitted. It is the Borough’s contention that congestion will be improved by the proposed re-designed reconstruction of entrances and exits and that the 2045 Level of Service would be even more greatly improved if secondary roads in the area, specifically Route 611, were widened rather than adding travel lanes to Route 80. This is supported by the assertion in the overall Project Description that Route 80 serves

both local and interstate traffic. Providing effective alternatives for local traffic will directly reduce congestion on the Interstate.

And then, as far as the Project Needs go, it has not been clearly identified at which days and times of day and for how long, the Level of Service (LOS) target estimates might not be met. It has been reported in Advisory Group meetings that the LOS is estimated based on peak afternoon, worst-case scenarios. Though the Level of Service in 2045 with only 4 travel lanes, instead of 6, might dip into "F" territory only at afternoon peak-periods on a Friday, or on Sundays late afternoon into evening (as tourists return to NYC) then it may not be wise, prudent, safe or economical to expand the number of travel lanes just to accommodate these limited time periods.

The Borough concurs with the portion of the report entitled, IDENTIFICATION OF SECTION 4(f)/ SECTION 2002 PROPERTY

Though providing maintenance and ongoing management of the Parks, The Borough can confirm that there is no written Management Plan.

APPLICABILITY DETERMINATION

The Borough concurs with Item #1 of the APPLICABILITY DETERMINATION and largely concurs with Part 2 with emphasis on the mitigation conditions identified here, which would reduce impacts

However, The Borough *does not concur with* Item #2 of the Applicability Determination relative to the very important impacts on the Parks resulting from the widening of the mainline to 6 travel lanes which in The Borough's assessment is *not* "de minimus" and *does* constitute "adverse use" that is worthy of further study.

Those impacts on the Parks that are acceptable to the Borough are considered "minimal" only with appropriate mitigation and/or restoration measures, and would otherwise be considered non-minimal impacts. The mitigation measures that are essential to The Borough's acceptance of "de minimus" status of most of Part 2 (with the noted exception of impacts due to increasing the number of standard travel lanes) include the following: (Items # 1,4 & 5 are identified in the original Report Summary section)

1. Maintaining pedestrian access across the Broad St Bridge
 - a. both over the creek *and over Route 80* during construction
2. Provision at Ann St Park for increased accessibility to disabled park users where possible as part of re-design & reconstruction of the waterfall viewing areas.
3. Robust revegetation: Mitigation and restoration measures for impacts of tree and vegetation removal are non-specific in the report and should include commitment to reasonable-sized replacement trees and considerable, natural vegetation replacement for both visual enjoyment of the parks and mitigation of noise impacts from expanded road project. (p.5)

4. Reconstruction of the South side entrance to the park to accommodate the grade change of Broad St, as it is key to minimal long-term impacts of the project.
5. Including sidewalks on the new Broad St. Bridge
 - a. *and the new Bridge over Route 80.*
6. Sound walls should be included in the area of Rotary Creek Park
7. Consideration of the Historic Character of the area in design of the new bridge. For example, open decorative railings in lieu of solid concrete walls.

Item #3 of the APPLICABILITY DETERMINATION – regarding public input

At the AECOM public presentation, the Stroudsburg I-80 Task Force, collected comments from the public regarding the I-80 expansion. The results of the compilation of those comments made it clear that the overall public opinion does not support the impacts of I-80 expansion in the number of permanent travel lanes. Copies of the opinions received by The Borough were mailed to AECOM and are attached here as well. Public sentiment regarding the safety aspects of the I-80 Project was very positive but sentiment regarding the increase in the number of primary travel lanes was overwhelmingly negative with few exceptions.

The Borough is also in the process of receiving additional comments from the public from a mailing subsequent to the Dec 4th Open House. As soon as those results are compiled, they will be forwarded to AECOM.

Item #4 of the APPLICABILITY DETERMINATION – regarding minutes of the meeting of Nov. 26, 2018

The Borough disagrees with the following three statements from the meeting minutes which are inaccurate:

1. "Therefor it was agreed that regardless of whether I-80 is four or six lanes, proposed park impacts from Ramp R would be the same."
2. "All parties agreed that due to the minor impacts which will not permanently affect the qualities, activities, and features of the park, a Section 4(f) *de minimis* use/no adverse use finding will be made."
3. "Ms. Maier will discuss the Section 4(f) materials and impacts with the Borough Council at the November 27, 2018 meeting prior to providing written concurrence but sees no issues with the *de minimus* finding."

As is clearly indicated in the maps provided, the proposed ramp R, initially aligns with the existing ramp, but then moves significantly north moving the traffic much closer to the park to allow for the proposed widening of I-80. This will create a higher level of traffic noise in the park.

Councilman Connors and Jennifer Maier were very clear that The Borough agreed that impacts of the Broad Street Bridge widening were acceptable, and that The Borough

considered the impacts on the Parks due to the widening of I-80 as neither minimal nor acceptable.

Item #5 of the APPLICABILITY DETERMINATION

The Borough disagrees with item 5. On page 7 of 11, which states: "Ms. Jennifer Maier provided written concurrence at the November 26, 2018 meeting." Ms. Maier did not provide written concurrence with the determination of no adverse effect.

Public input is under further review per comments on Item #3 above.

Item #6 of the APPLICABILITY DETERMINATION

Does not Apply

Item #7 of the APPLICABILITY DETERMINATION

The Borough is not aware of any state, federal or recreational grant money recently expended on the Parks.

Item #8 of the APPLICABILITY DETERMINATION

The Borough generally concurs with the stated summary of impacts per PA Act 120 Section 2002 with the important and notable exception of the last paragraph of this section (page 10 of the report) related to the addition of permanent travel lanes, with which the Borough *does not* concur

Per suggested area of concern # 9 if impacts to Rotary Creek Park were reduced, it is the Borough's contention that "safe & efficient transportation" could still be achieved but that "fast" , or faster transportation is specifically *not* desirable in the Project area as evidenced by a reduced speed limit and the potential for dangerous situations where fast traffic using additional travel lanes encounters slow traffic where lane count will necessarily have to be reduced (ultimately at the bridge over the Delaware River) So impacts on the Rotary Creek Park could be reduced *and* safety could be enhanced at the same time by not constructing additional travel lanes on Route 80.

In areas where direct physical impact on the Parks is not indicated, indirect impacts of noise due to proximity of the proposed additional travel lanes must also be considered.

The Borough *does not concur* that the impacts to Rotary Creek Park due to the expanded width of Route 80 are "de minimus" The increase in travel lanes increases proximity & decreases separation of the roadway from the park, thereby increasing noise levels and the perception of nearby high-speed vehicular activity. Such perception of adjacent high-speed vehicles, regardless of actual safe separations, can decrease the sense of safety and enjoyment of Rotary Creek Park.

Mitigation of the impacts of this decrease in separation of roadway & park should include further study of reducing such impacts by not increasing the number of travel lanes. Such study should not be limited to the conclusion that the only trade-offs would be to expand the roadway width to the South or a "No-Build" scenario. The trade-off of reduced project level-of-service goals (by not increasing number of travel lanes) for a limited stretch of highway through our town must be considered if the level of impact on the parks is to be considered minimal or in any way acceptable. In addition, park-impact mitigation measures should include consideration of sound wall(s) in the park area

The Borough does agree that impacts due to the bridge widening and reconstruction are acceptable minimal impacts to the Parks. In addition, The Borough would agree that a bridge wider to the west by additional 2 ft more than proposed (minimally increasing the impact on the Parks) would still qualify as minimal impact relative to the advantage of 6 ft wide sidewalks on each side of bridge vs 5 ft sidewalks proposed. A portion of the additional safety afforded by the wider sidewalks is related to snow-plowing of the wider lane area which can reduce or imperil pedestrian access.

SUMMARY

Mitigation measures identified in the Summary Section of the report should have additional items and emphasis as mentioned earlier in this letter regarding item # 5 of the APPLICABILITY DETERMINATION

At the Borough Council meeting of February 5, 2019, the Borough Council reviewed and approved this response letter to the Draft Report.

If you have any questions, please contact Jennifer Maier, Borough Manager at 570 421 5444 x 104, or her email jmaier@stroudsburgboro.com.



Submitted by Borough Manager, Jennifer Maier

Reviewed, Accepted & Endorsed by Resolution of Stroudsburg Borough Council Feb 5th 2019

Minutes

Meeting name	Subject	Attendees	Organization	Email
Ann Street and Rotary Creek Parks Discussion	Section 4(f) Documentation	Jennifer Maier Ted Hoyt	Stroudsburg Borough Stroudsburg Boro HARB	jmaier@stroudsburgboro.com ehoyt3@ptd.net
Meeting date	Time	Cam Otto	FHWA	camille.otto@dot.gov
March 28, 2019	1:30 pm	Imtiaz Nathaniel	PennDOT	inathaniel@pa.gov
Location	Project name	Chris Kufro	PennDOT	CKUFRO@pa.gov
Conference Call	I-80 Section 17M Reconstruction Project	Kris Thompson	PennDOT	krthompson@pa.gov
MPMS number	AECOM project number	Jerry Neal	PennDOT	ENEAL@pa.gov
76357	60284833	Tom Cushman	AECOM	Thomas.Cushman@aecom.com
Prepared by		Chris Wright	AECOM	Christopher.Wright@aecom.com
Julia Moore		Jeff Birks	AECOM	Jeffrey.Birks@aecom.com
		Marian Hull	AECOM	marian.hull@aecom.com
		Julia Moore	AECOM	julia.moore@aecom.com

The meeting started with introductions of attendees. Note that Ted Hoyt indicated by email after the meeting that he was able to hear and see the meeting but was having a technical problem with the microphone.

Cam Otto, Environmental Program Manager with the Federal Highway Administration's Pennsylvania Division, stated that the purpose of the meeting was to review the proposed impacts to the Ann Street and Rotary Creek Parks and discuss minimization opportunities. Cam explained Section 4(f) regulations require that we avoid use of Section 4(f) resources unless there is no feasible and prudent alternative; or the use is *de minimis*. In the case for this project, there is no way to avoid the Section 4(f) resources and still achieve the project's purpose and need. Therefore, we are looking at minimization opportunities for impacts to those resources. If we can get to a point where all parties agree that impacts do not adversely affect the recreational function of the parks, then we can proceed with a Section 4(f) *de minimis* finding. If we cannot come to an agreement, then PennDOT will move forward with an Individual Section 4(f) evaluation, which would include efforts to minimize harm to the parks. As the official with jurisdiction, the Borough would be sent a copy of the Individual Section 4(f) evaluation for review and comment as part of the Environmental Assessment (EA) document.

An overview of the Section 4(f) resources surrounding the Broad Street Bridge over McMichael Creek was provided (see attached "Section 4(f) Resources" figure). There are two categories of Section 4(f) resources. The first being recreational resources, such as the Ann Street and Rotary Creek Parks. The second category includes historic sites that are eligible for or listed on the National Register of Historic Places (NRHP); there are several resources that meet the historic criteria as shown on the figure.

In addition to the NRHP historic sites, there is a local historic preservation district that the Borough's Historic Architectural Review Board (HARB) has governance over for local projects. The local historic district includes a portion of the Broad Street Bridge over McMichael Creek and Ann Street Park. Kris Thompson (PennDOT's designated Cultural Resource Professional) stated that the Pennsylvania State Historic Preservation Office (PASHPO) looked at the area along Ann Street as part of the recent 7th Street Bridge Replacement Project. PASHPO concluded that the buildings along Ann Street did not have enough historic integrity to be considered NRHP eligible and should not be added to the NRHP-eligible Stroudsburg Commercial Historic District. Ms. Thompson further clarified that the local historic district isn't a Section 106 or Section 4(f) resource; therefore, PennDOT did not assess effects to the local historic district. However, in response to their recent inquiry, the HARB has been added as a consulting party for Section 106 consultation. If there are design changes as the project progresses through final design, then the HARB will be notified and can offer input as part of the Section 106 process. Nevertheless, since the bridge replacement affects the recreational parks, Section 4(f) allows us to consider local context sensitive designs. As indicated in the Borough's February 14, 2019 letter and as relayed by Jennifer Maier, Stroudsburg Borough Manager, the HARB's primary concern was the barrier design for the Broad Street Bridge over McMichael Creek. The Borough would prefer to have an open rail type barrier. PennDOT has open barrier design options that meet various test levels, so depending on the design requirements, a suitable barrier will be selected that meets both aesthetic and safety requirements. PennDOT was agreeable to providing an aesthetic treatment on the proposed bridge over McMichael Creek and will coordinate with the Borough and the HARB on the specifics of the barrier design during the final design phase of the project. Ted Hoyt indicated after the meeting that the HARB's basic questions were answered.

The discussion moved to Ann Street Park (refer to “Ann Street Park Required Impacts for Improvements to PA-191 Broad Street” figure). The figure shows permanent impacts in red. These areas would be acquired by PennDOT through the right-of-way (ROW) process so that PennDOT has enough space to access and maintain the bridge structure in the future after construction is completed. The pink hatched area shows temporary impacts and is additional area needed during construction (known as temporary construction easements). The impacted area is a portion of the park that is currently fenced off. The waterfall viewing area would not be permanently impacted. The sidewalk and stairs at the park entrance off of Broad Street would be temporarily affected; however, pedestrian access would be restored (i.e. the sidewalk would be improved) prior to the end of construction so that there is no permanent loss of the park access point.

The Borough indicated they have bike/pedestrian concerns in their 2/14/19 letter. The bridge over McMichael Creek, as currently proposed, includes 5-foot wide sidewalks, two 14-foot shared bike/vehicle lanes, one 12-foot wide center turn lane, and no shoulders. It is anticipated that this configuration will also include sidewalk and cross walk accommodations at the intersection of Broad and Ann Streets. If the bridge is widened to accommodate additional bike/pedestrian facilities, then there would be a greater impact to the park. The bridge could be widened to have three 11-foot vehicle lanes, two 5-foot sidewalks, and two 5-foot striped shoulders, for instance, so that bike/pedestrian access to the park would ultimately be improved. If a wider bridge is the Borough’s preference, then the Borough would need to provide written concurrence that the additional impacts to the parks from the wider bridge footprint would ultimately offset and minimize impacts to the parks by improving overall bike/pedestrian access. Note that the specific lane and shoulder widths would be discussed with the Borough and determined during the final design process. In addition, the lane configurations for both Broad Street Bridges over McMichael Creek and over I-80 would be the same. The same lane widths would extend along the PA 191/Broad Street roadway then taper into the existing condition at the project’s end points along Broad Street. Ms. Maier felt that the Borough Council would be in favor of the wider bridge but would need to confirm that with the Borough Council. The only other concern at Ann Street Park is revegetation. Disturbed areas would be reseeded and revegetated as appropriate. There is limited area for revegetation at Ann Street Park due to the surrounding waterfall viewing area, sidewalk, and utilities. Also, any plantings within 12 feet of the bridge (permanent impact area) would need to be small enough as to not interfere with the maintenance of the bridge. PennDOT is agreeable to work with the Borough in final design to create a planting plan. Ms. Maier indicated she had no other concerns at Ann Street Park.

Next, Rotary Creek Park was discussed. Refer to the “Rotary Creek Park Required Impacts for Improvements to PA-191 Broad Street” figure. This figure shows what the impacts to the park would be if only the Broad Street Bridges were replaced (i.e. no widening of I-80). Improvements to PA 191 would result in approximately a 4-foot grade (elevation) difference between Broad Street and the existing park entrance elevation; therefore, PennDOT would pave and reconstruct a portion of the driveway (with a parallel retaining wall) to maintain access to Rotary Creek Park post-construction. The retaining wall would be approximately 5-7 feet high, tapering to zero at ground level at the end of the paved driveway. Permanent impacts would result from a 12-foot wide ROW acquisition along Broad Street for future maintenance of the portion of the retaining wall that would be owned and maintained by PennDOT. The remaining portion of the retaining wall for the driveway would be owned and maintained by the Borough. Temporary impacts would result from the 25-foot wide construction workspace needed around the proposed driveway and retaining wall (pink hatching on attached figure).

The discussion moved to the impacts to Rotary Creek Park if the Broad Street Bridges were replaced and I-80 was widened to six lanes. Refer to the “Rotary Creek Park Required Impacts for Improvements to PA-191 Broad Street and Widening of I-80” figure. By adding the widening of I-80, permanent impacts to the park increase by less than 0.01 acre. As shown on the figure, there is an additional sliver of permanent impact along the retaining wall for Ramp R (red shaded area). Temporary impacts would increase by approximately 0.02 acre for additional construction workspace needed 25 feet around the Ramp R retaining wall.

Ms. Maier noted the Borough Council and a majority of the Borough residents (90%) are against the I-80 widening in general. Ms. Otto explained that the purpose of this meeting was to focus on the project’s impacts to Section 4(f) resources, rather than the overall project impacts, which are being considered under NEPA. Section 4(f) requires us to look at impacts to the park and ask if they adversely affect recreational usage of the park. In this case it would appear to PennDOT and FHWA that the proposed impacts do not adversely affect the recreational usage of the parks.

Ms. Maier asked if Ramp R could be moved closer to I-80 and away from the park. The AECOM design team responded that the location of Ramp R was dependent on a number of different constraints including vertical geometry, superelevation (banking of the roadway along curves), and turning movements which impacted the degree to which the ramp can be pulled closer to I-80. Specifically, the ramp intersection is limited by the PA 191 Bridge over I-80 and turning movements to access the ramp to I-80 WB. Thus, Ramp R is as close to I-80 as possible. It was also noted that the retaining wall along Ramp R would be approximately 10-12 feet high.

Noise and exhaust fumes are another concern for the Borough. There are no air quality issues based on the air quality study. Furthermore, noise impacts to this park do not warrant a noise wall based on FHWA requirements; therefore, FHWA cannot fund a noise wall in this location. Alternatively, PennDOT offered to provide an aesthetic treatment or vegetative screening along the ramp retaining wall. Any plantings would need to consist of native vegetation suitable for the onsite soil and shade conditions. PennDOT stated that the proposed ROW line would not be fenced along Ramp R; therefore, the area owned by PennDOT would not be separated from the park. Ms. Maier will talk to the Borough Council about a vegetative screening. PennDOT can commit to developing a planting plan in coordination with the Borough in final design.

Ms. Maier requested that PennDOT provide a letter outlining the proposed impacts and commitments before next Tuesday's Borough Council meeting (4/2/19 at 7pm). Ms. Maier is available by email to answer questions if they arise.

PennDOT and FHWA requested that the Borough consider the information per the letter that will be prepared, and provide a written response regarding minimization options and the proposed *de minimis* finding. If written concurrence from the Borough is not received by April 30, 2019 on the Section 4(f) *de minimis* finding, PennDOT will assume the Borough is not in agreement and will move forward with an Individual 4(f) evaluation. The same general minimization strategies discussed above would be used to determine the Least Overall Harm Alternative in the Individual 4(f) Evaluation. The Borough would have the opportunity to review and comment on the Individual Section 4(f) evaluation in conjunction with the EA document.



April 2, 2019

Jennifer Maier, Borough Manager
Borough of Stroudsburg
700 Sarah Street
Stroudsburg, PA 18360

Re: Interstate 80 Section 17M, Determination of 4(f) De Minimis Use for Public Parks and Recreation Areas

Dear Ms. Jennifer Maier:

The Pennsylvania Department of Transportation (PennDOT) and Federal Highway Administration (FHWA) would like to thank you for taking the time to discuss your remaining questions and concerns regarding the I-80 Section 17M Project's impacts to Ann Street Park and Rotary Creek Park with us on March 28, 2019 (concerns as outlined in the Borough's February 14, 2019 letter). Efforts to avoid and minimize harm to parks plays an important role in the environmental process, specifically in relation to the Section 4(f) Process.

Section 4(f) of the USDOT Act of 1966 requires that studies be done to avoid, minimize, and mitigate for impacts to recreation areas, wildlife and/or waterfowl refuges, and national register eligible historic sites. On our March 28, 2019 conference call with Jennifer Maier of the Borough, we discussed several opportunities to minimize and mitigate for proposed impacts to the parks, as outlined below:

Ann Street Park:

1. The Borough is interested in context sensitive treatment of the State Route (SR) 191 Bridge over McMichael Creek since it is in the viewshed of the park and its users. PennDOT and FHWA verified that a context sensitive design will be provided. The Borough specifically mentioned the possibility of using an open railing. The Section 4(f) documentation will include a commitment to present the Borough with railing options that meet the design standards and gather their input for selection. This will include an open railing option(s).

2. Replacement of the SR 191 Bridge over McMichael Creek will require acquisition of approximately 0.04 acre of permanent right-of-way (ROW) from the park, along the fenced area that contains scrubby vegetation. In addition, a temporary construction easement of approximately 0.03 acre will be needed to access the area and perform construction. This would temporarily impact the sidewalk and stairs in the northern corner of the park at the Ann Street/Broad Street intersection, but the alternative access point off of Ann Street will remain open and unaffected throughout construction. At the completion of construction, the sidewalk and stairs will be repaired and restored. The viewing area is not anticipated to be impacted, but should impacts occur, repairs will be made to restore it to an equivalent pre-construction condition or better. All areas will be reseeded and returned to an equivalent pre-construction condition or better.
3. The Borough is interested in improved bicycle and pedestrian access across the SR 191 Bridge over McMichael Creek. The bridge design was revised slightly from what was shown for the March 28, 2019 call to accommodate a variety of options for pedestrians and bicycles based upon this request (see attached). Details on the width of the vehicular lanes and sidewalks, and use of shared vehicular/bike lanes versus use of a wide shoulder to accommodate bikes can be discussed with the Borough during the Final Design process. This would slightly increase the amount of ROW to be acquired (0.03 to 0.04 acre). However, if the Borough feels that this would improve access to the park, and therefore minimize impacts, PennDOT is willing to accommodate this request and coordinate with the Borough during Final Design to determine the safest option for pedestrians and bicyclists to provide access.

Rotary Creek Park:

1. The Borough is interested in improved bicycle and pedestrian access across the SR 191 Bridge over I-80. The bridge design was revised slightly from what was shown for the March 28, 2019 conference call to accommodate a variety of options for pedestrians and bicycles based upon this request (see attached). Details on the width of the vehicular lanes and sidewalks, and use of shared vehicular/bike lanes versus use of a wide shoulder to accommodate bikes can be discussed with the Borough during the Final Design process. This would slightly increase the amount of ROW to be acquired (0.04 to 0.05 acre). However, if the Borough feels that this would improve access to the park, and therefore minimize impacts, PennDOT is willing to accommodate this request and coordinate with the Borough during Final Design to determine the safest option for pedestrians and bicyclists to provide access.

2. A retaining wall is needed along the length of the SR 191 Bridge approach, stretching along the proposed Ramp to I-80 West. The Borough had some concerns about the visual and noise effects in this area for park users. While the noise levels do not meet criteria for noise walls, PennDOT is open to considering options to blend the wall into the surroundings. This could include native revegetation and/or aesthetic treatments to the side of the wall facing the park. PennDOT is willing to commit to creation of a planting plan with input from the Borough, or providing the Borough with money that could be used (solely) for plantings if the Borough would prefer to select the plants and do the work themselves. The details can be provided in the Section 4(f) documentation depending on the desires of the Borough. The only requirement PennDOT has is to ensure no trees are planted within a 12-foot buffer of the retaining wall to ensure their ability to maintain the wall. Wildflowers or other plants could be provided in that buffer area.
3. The proposed design would impact the driveway in order to properly transition the grade to meet the new elevation of SR 191. A retaining wall is proposed, as well as paving the reconstructed portion of the gravel driveway. PennDOT felt this would be an enhancement, to improve the Borough's ability to maintain the driveway in the future. This work would require a temporary construction easement. No permanent acquisition of property would be required.
4. The Borough is interested in maintaining pedestrian access across both SR 191 bridges throughout construction. PennDOT is committed to maintaining pedestrian access during construction, however, due to construction restrictions and safety concerns we anticipate some temporary closures. The complete plan for maintaining traffic will be developed during the Final Design Phase and will be shared with the Borough and the public to ensure awareness.

In accordance with Section 4(f) of the USDOT Act of 1966, conversion of parkland cannot occur unless:

- There is no feasible and prudent avoidance alternative to the use of land from the property, and all possible planning to minimize harm to the property resulting from the use is incorporated; or
- The use is de minimis (i.e. the use would not adversely affect the recreational activities, features or attributes of the park).

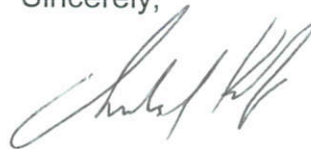
Ms. Jennifer Maier
Page 4
April 2, 2019

Based on the impacts as shown in the attached graphics, and the minimization and mitigation measures identified above in this letter, PennDOT and the FHWA feel that the use of both Ann Street Park and Rotary Creek Park qualifies as de minimis. In order to make the Section 4(f) de minimis finding, we require your written concurrence that the I-80 Section 17M Project would not adversely affect the recreational activities, features, and attributes of Ann Street Park and Rotary Creek Park. To acknowledge that you have been notified of our intent to apply the Section 4(f) de minimis use finding, and your agreement that the recreational activities, features, and attributes of Ann Street Park and Rotary Creek Park will not be adversely affected, please sign in the area below, and return the signed copy in the self-addressed, stamped envelope provided.

As discussed on the March 28, 2019 conference call, if we do not hear back from the Borough by April 30, 2019, we will assume you are not in agreement and we will move forward with preparation of an Individual Section 4(f) Evaluation. The minimization and mitigation measures discussed during the March 28, 2019 conference call (and reflected in minutes currently being prepared) will be used to assist in that Evaluation to determine the Least Overall Harm Alternative.

Should you require any additional information, please contact the Project Manager, Intiaz Nathaniel, at inathaniel@pa.gov or 610.871.4564.

Sincerely,



Christopher J. Kufro, P.E.
ADE - Design
Engineering District 5-0

Manager - Borough of Stroudsburg

Date

Enclosures

cc: Camille A. Otto, FHWA PA Division Office, Environmental Program Manager
Phil Bobitz, FHWA PA Division Office, Transportation Engineer
Nina Ertel, PennDOT Bureau of Project Delivery
Julia Moore, AECOM, Environmental Scientist

Borough of Stroudsburg

Tarah D. Probst
Mayor

James B. Smith
Council President

Boyd Weiss
Council Vice-President

Joanne Kochanski
Council President Pro Tem



Matt Abell
Council Member

Mark Connors
Council Member

Anthony Lanfrank, Jr.
Council Member

Erica McCabe
Council Member

Heart of the Poconos

May 8, 2019

AECOM

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Suite 205
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T +1-717-795-8001
aecom.com

Attn: Julia Moore

Environmental Scientist, Transportation
D +1-717-790-3414
julia.moore@aecom.com

Re: Determination of Section 4(f) *De Minimis* Use, Section 2002 No Adverse Use, Public Parks, Recreation Areas, Wildlife and/or Waterfowl Refuges, State Forest Land, and State Game Land.

Dear Ms. Moore,

The Borough of Stroudsburg is in receipt of the March 28, 2019 minutes of the Ann Street and Rotary Creek Parks Phone Discussion with participants from Stroudsburg Borough, FHWA, PennDOT, and AECOM.

The Borough of Stroudsburg agrees that the impacts which were evaluated, with the agreed-upon mitigation efforts to minimize those impacts, do not permanently nor in major fundamental ways, adversely affect the recreational functions of the Ann Street and Rotary Creek parks as long as the following items are addressed as discussed:

- A suitable railing / barrier, along the side edges of the new bridge over McMichael's Creek, will be selected to meet both aesthetic as well as safety requirements. PennDOT was agreeable to providing an aesthetic design treatment of the proposed bridge over McMichael Creek and will coordinate with the Borough and the Historic Architectural Review Board, regarding the specifics of the railing / barrier design, during the final design phase of the project. The

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appropriate aesthetic aspects of the bridge should be compatible with the historic character of the Borough – and the railing / barriers should be as visually open as possible to facilitate views of the waterfall and creek, as a fundamental function of the parks.

- The sidewalk and stairs at the park entrance off of Broad Street will be temporarily affected; however, pedestrian access will be restored (i.e. the sidewalk will be improved) prior to the end of construction so that there is no permanent loss of the park access point.
- The bridge will be widened to have three 11-foot vehicle lanes, two 5-foot striped shoulders, and two 5-foot sidewalks, so pedestrian & bicycle access to the park will ultimately be improved. This wider bridge is the Borough's preference, recognizing that the additional impacts to the parks will ultimately be offset and minimized by improving overall pedestrian & bicycle access. The lane configurations for both Broad Street Bridges over McMichael Creek and over I-80 will be the same.
- Disturbed areas of Ann Street Park will be reseeded and revegetated as appropriate. There is a limited area for revegetation at Ann Street Park due to the surrounding waterfall viewing area, sidewalk, and utilities. Also, any plantings within 12 feet of the bridge (permanent impact area) will need to be small enough as to not interfere with the maintenance of the bridge. PennDOT is agreeable to work with the Borough in final design to create a planting plan.
- PennDOT will reconstruct and pave a portion of the driveway leading to Rotary Creek Park (with a parallel retaining wall) to maintain access to Rotary Creek Park post-construction. The retaining wall will be approximately 5-7 feet high, tapering to zero at ground level at the end of the paved driveway. Permanent impacts will result from a 12-foot wide ROW acquisition along Broad Street for future maintenance of the portion of the retaining wall that will be owned and maintained by PennDOT. The remaining portion of the retaining wall for the driveway will be owned and maintained by the Borough.
- Ramp R is as close to I-80 as possible. It was also noted that the retaining wall along Ramp R will be approximately 10-12 feet high and will have an additional 3.5' high roadway barrier.
- In reference to the referenced figure "Rotary Creek Park Required Impacts for Improvements to PA-191 Broad Street and Widening of I-80", by adding the widening of I-80, permanent impacts to the park are increased by less than 0.01 acre.
- PennDOT offered to provide an aesthetic treatment or vegetative screening along the ramp R retaining wall. The type of vegetative screening along the Ramp R retaining wall will be specified in the planting plan that will be developed in final design, which is the next phase of the project after the Environmental Assessment is complete. PennDOT cannot plant anything

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that would potentially undermine the structural integrity of the retaining wall or prevent their maintenance of the wall. Therefore, no trees could be planted within a 12-foot buffer of the wall and herbaceous vegetation is preferred within 12 feet of the wall. Beyond that, a mixture of trees and shrubs will be provided. Plantings will be native plants, for instance, spicebush, viburnum, or maple might work well. What PennDOT commits to is herbaceous vegetation within 12 feet of the wall and trees and/or shrubs within the remaining disturbed areas.

Based on the aforementioned discussions and commitments, the Borough of Stroudsburg agrees with the Determination of Section 4(f) *De Minimis* Use, Section 2002 Minimal Adverse Use, Public Parks, Recreation Areas, Wildlife and/or Waterfowl Refuges, State Forest Land, and State Game Land.

This determination was reviewed and accepted by a majority of Borough Council at their regular meeting 7 May 2019.

Very truly yours,

Jennifer Maier
Stroudsburg Borough Manager

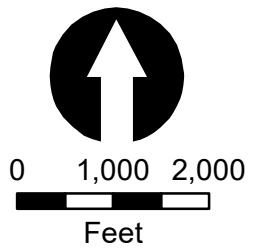
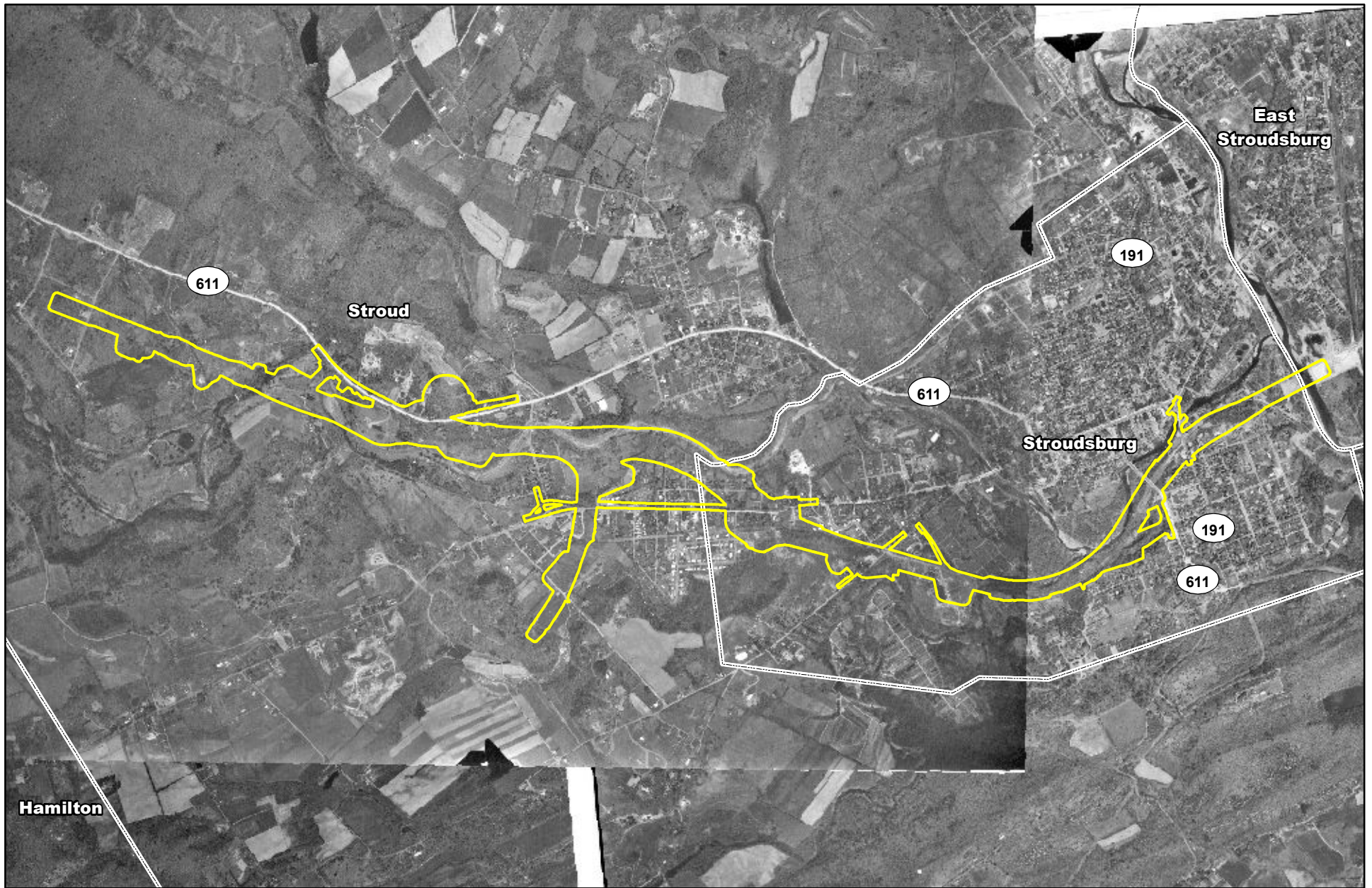
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Attachment H

Historic Aerial Photographs



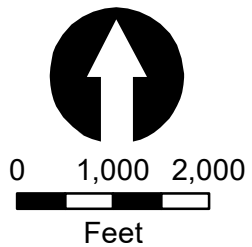
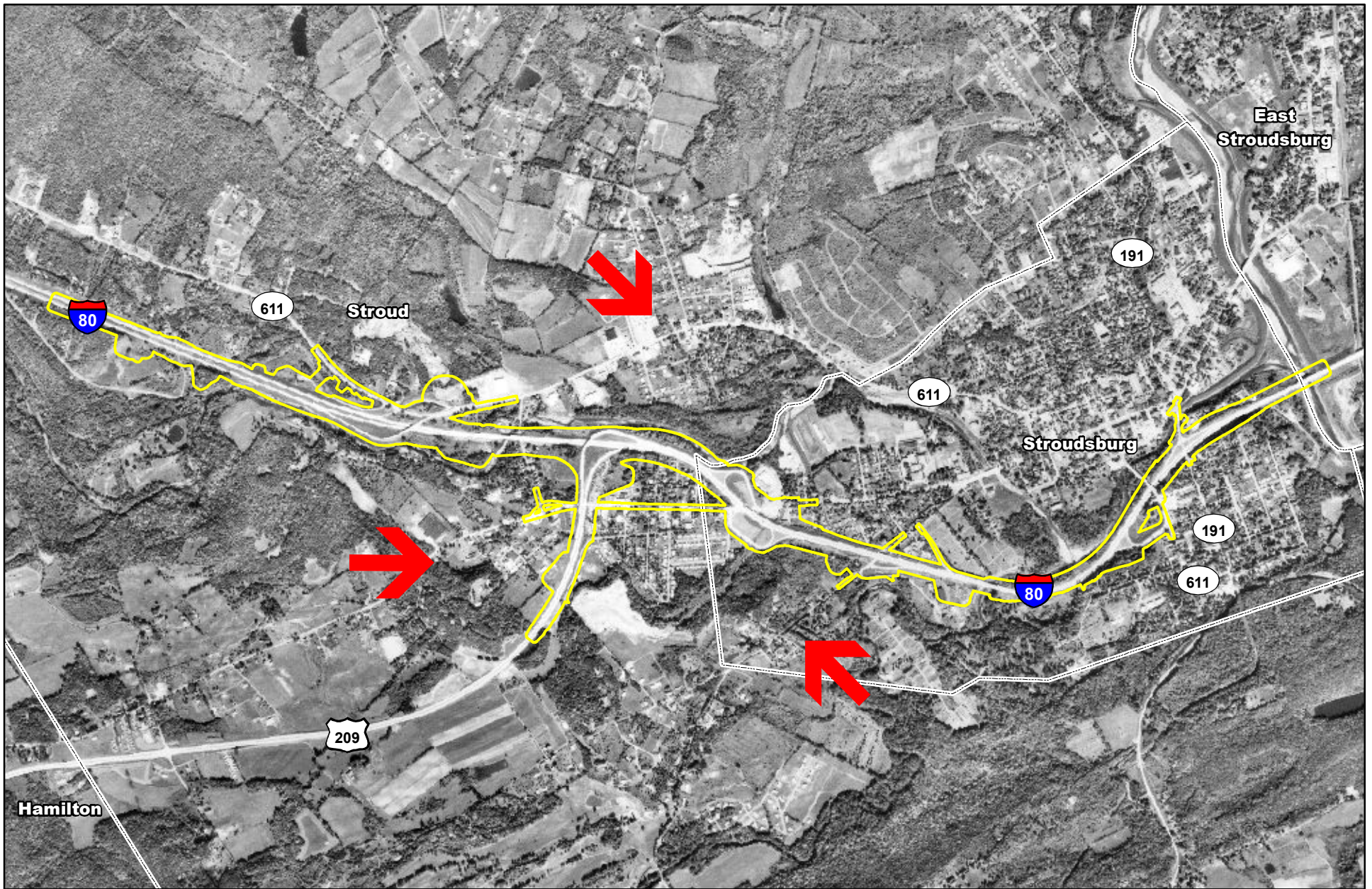


 Project Area



I-80 RECONSTRUCTION HISTORIC AERIAL MAPS 1959

Source: Penn Pilot; sponsored by the
Pennsylvania Geological Survey.



 Project Area

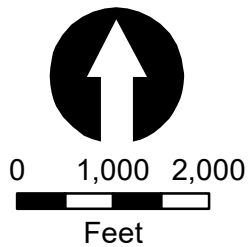
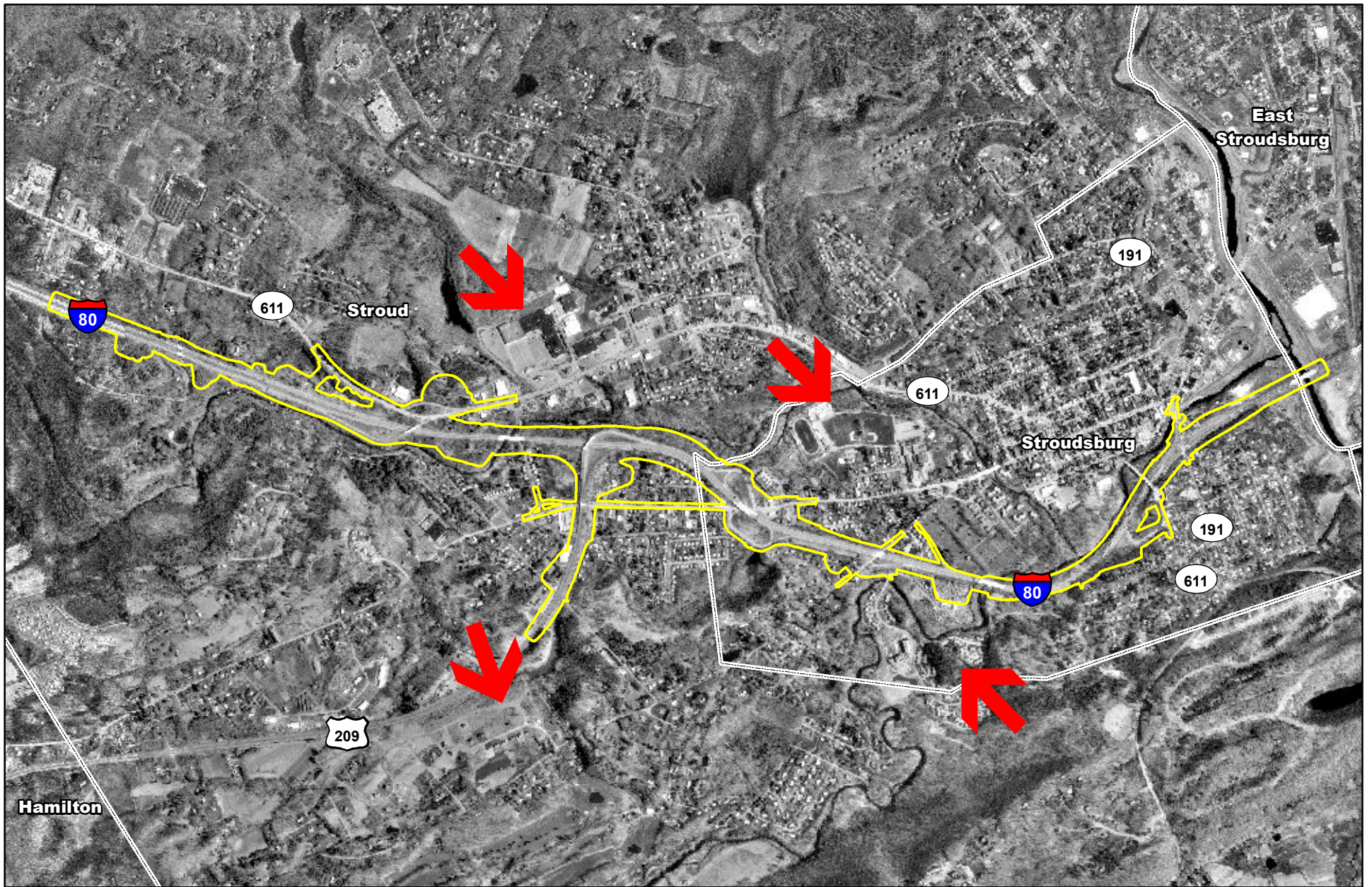
 Residential/Commercial Development



**I-80 RECONSTRUCTION
HISTORIC AERIAL MAPS**

1969

Source: Penn Pilot; sponsored by the
Pennsylvania Geological Survey.



 Project Area

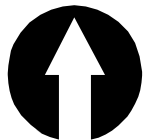
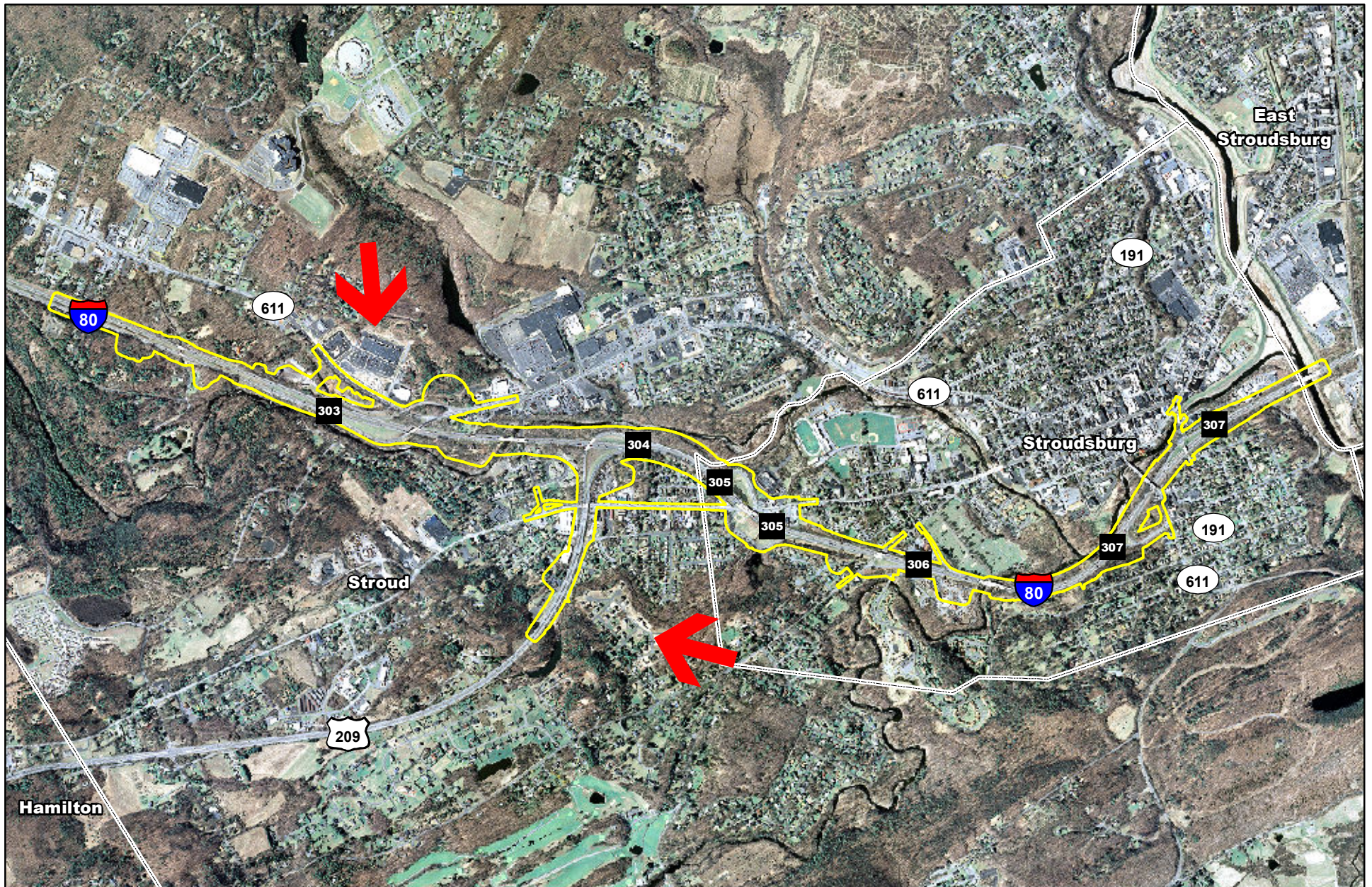
 Residential/Commercial Development



**I-80 RECONSTRUCTION
HISTORIC AERIAL MAPS**

1999

Source: U.S. Geologic Survey; Pennsylvania Bureau of Topographic and Geologic Survey, DOQQs.



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 Feet

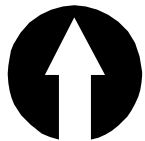
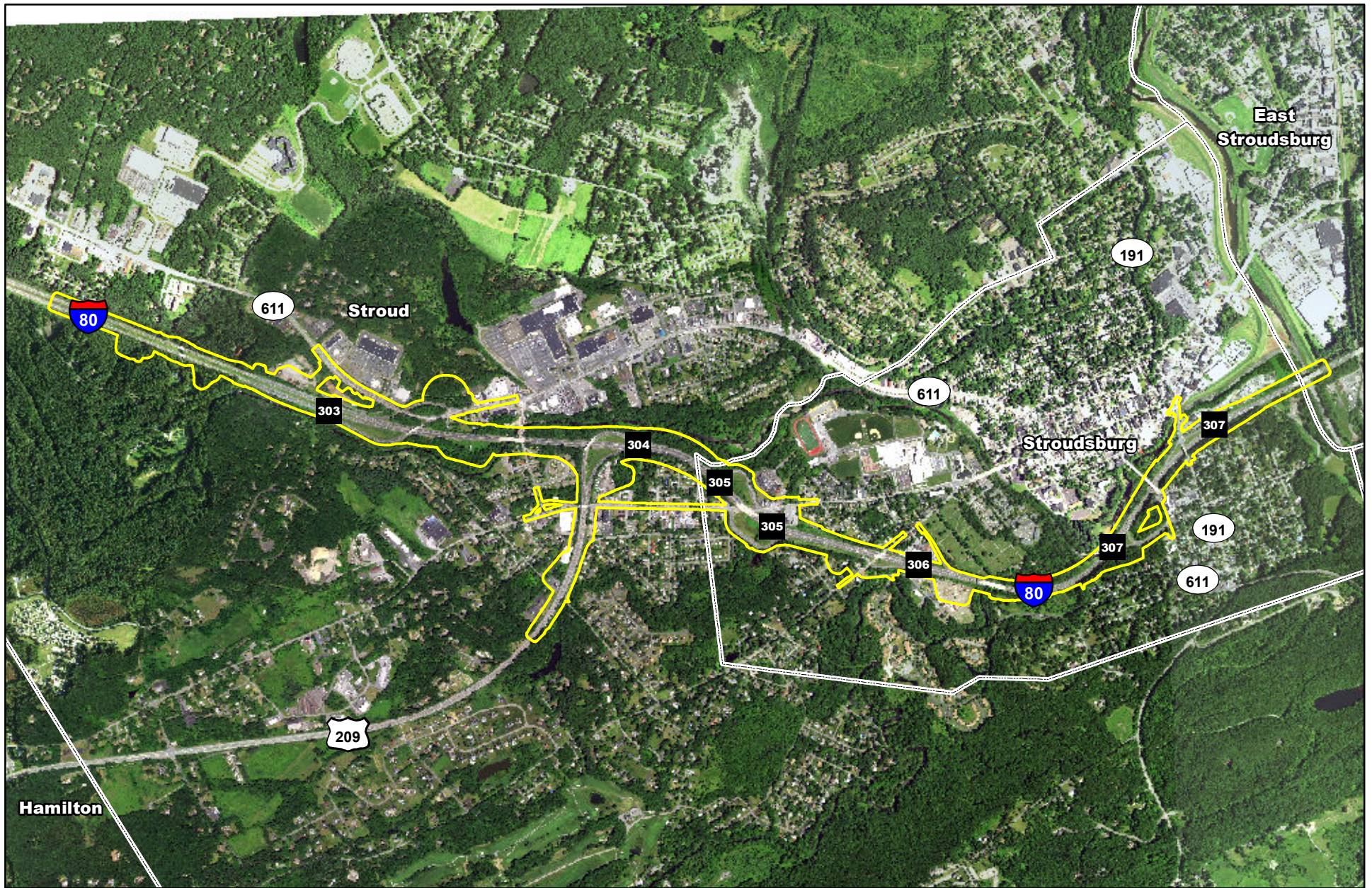
 Project Area

 Residential/Commercial Development



**I-80 RECONSTRUCTION
 HISTORIC AERIAL MAPS
 2008**

Source: PAMAP Program, PA DCNR, Bureau of
 Topographic and Geologic Survey.



0 1,000 2,000
Feet

 Project Area



I-80 RECONSTRUCTION HISTORIC AERIAL MAPS 2017

Source: USDA-FSA-APFO Aerial Photography Field Office
NAIP Digital Ortho Photo Image.

Attachment I

2009 I-80 Corridor Study Public
Involvement Summary



2009 I-80 CORRIDOR STUDY

PUBLIC INVOLVEMENT SUMMARY

During the I-80 Corridor Study, PennDOT held a stakeholder event in March 2005 to inform the public of PennDOT's planning efforts as well as receive comments and feedback. Over 30 stakeholders attended, representing 19 different organizations, including the Monroe County Planning Commission; Monroe County Redevelopment Authority; Northeastern Pennsylvania Alliance; the Boroughs of Delaware Water Gap, East Stroudsburg, and Stroudsburg; and the Townships of Jackson, Middle Smithfield, Pocono, Smithfield, and Tobyhanna.

In addition, interviews were conducted with representatives from the Pennsylvania State Police, the Stroud Regional Police Department, East Stroudsburg University, the Pocono Mountain School District, the Monroe County Transportation Authority, and others to discuss development patterns, safety, and congestion/capacity.

A public officials briefing was held on June 20, 2005 with 26 legislators, officials, and aides. PennDOT staff delivered a presentation and answered questions. The audience indicated interest in improving roadways to accommodate increased commuter traffic, including I-80, other important roadways in the project study area, I-80 interchange improvements, and traffic calming.

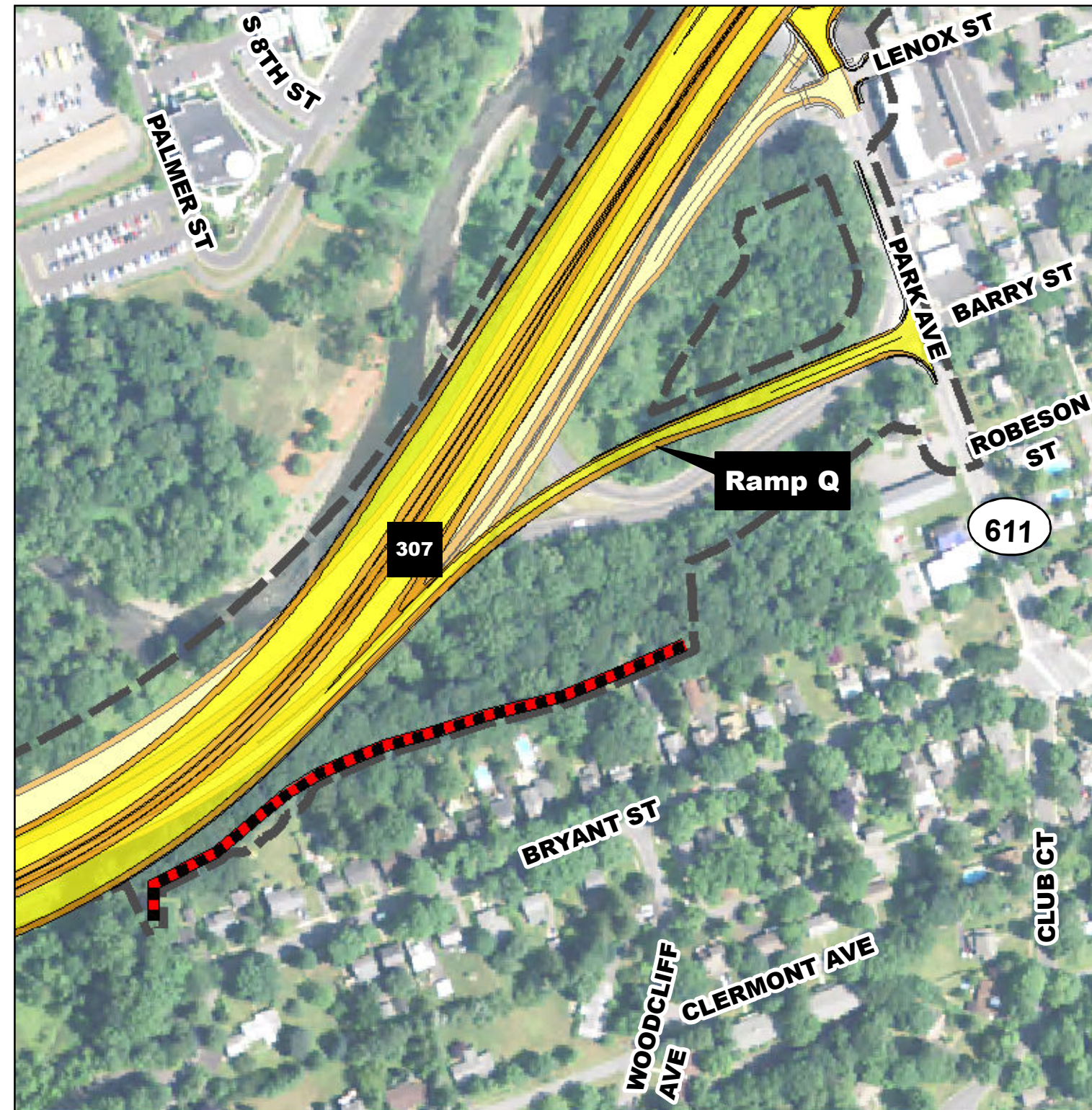
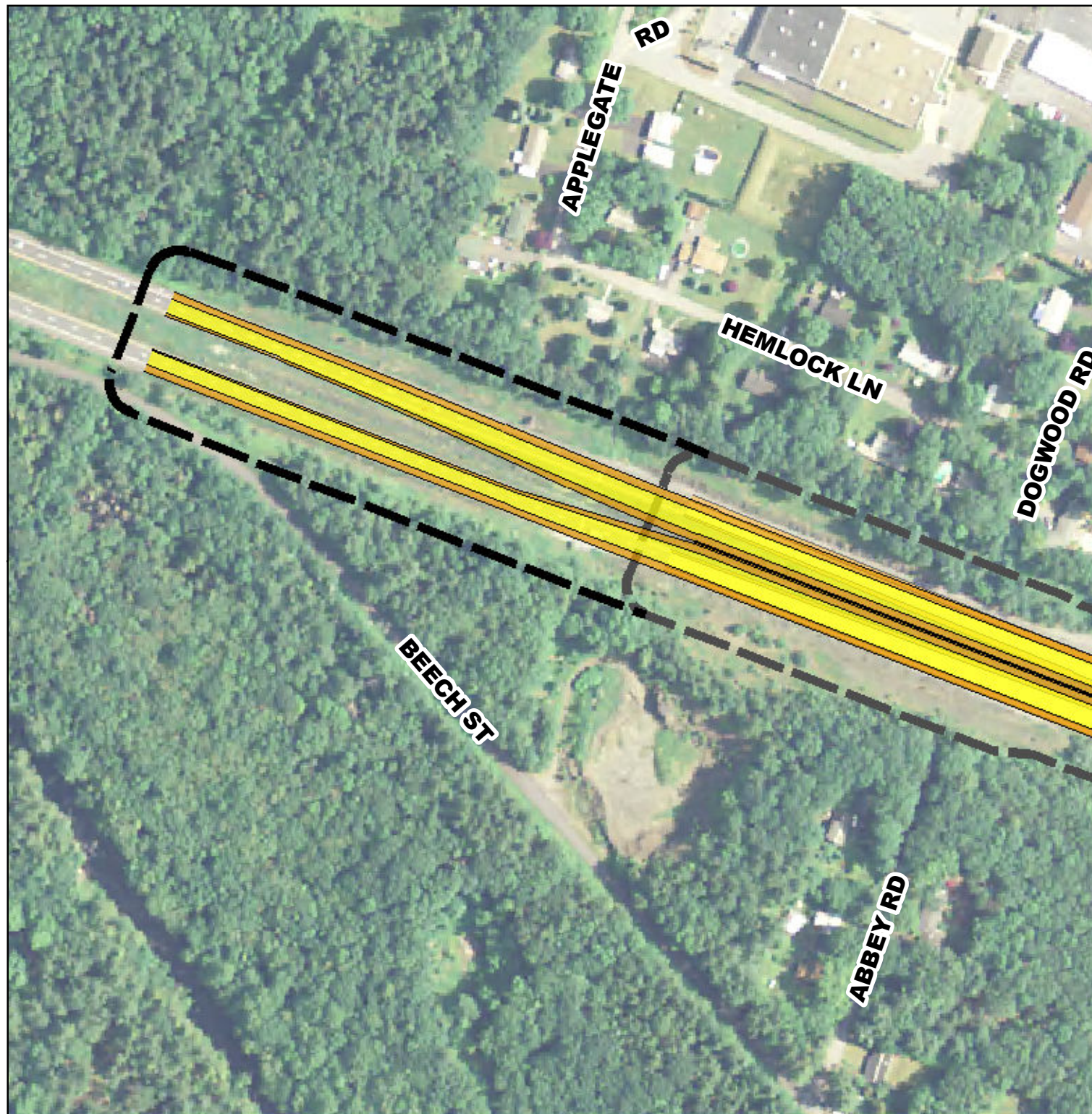
Following the public officials briefing, the same presentation was given to interested members of the general public on June 20, 2005 at the Central Pocono Ambulance Building. A second public meeting was held the following day (June 21, 2005) at Stroudsburg High School. Attendance at these meetings was approximately 60 residents, business people, officials, and media over the two days. Attendees were concerned about safety, congestion/capacity, signage, noise mitigation, environmental and historic resource protection, and truck traffic.

During the public involvement effort, informational material was mailed to over 1,700 area residents and businesses. Other activities included development of media materials, a project logo, and advertisements. Public bulletins relating to the project were also broadcast over public-access channels and printed in area newspapers. Coordination with public officials was ongoing throughout the project study period and included legislative and municipal officials as well as representatives from the Delaware River Joint Toll Bridge Commission (DRJTBC), which operates the bridge carrying I-80 across the Delaware River into New Jersey.

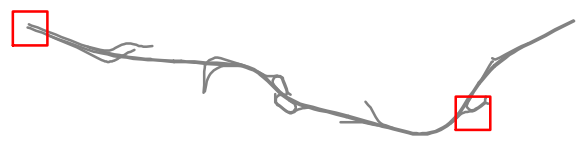
Attachment J

Alternative 2D Refinements









SHEET KEY






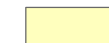


Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction.

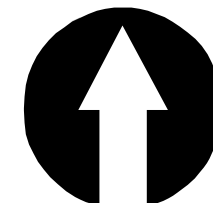
Alternative 2D Refined Footprint

-  Area of Potential Impact (API)
-  Structure
-  Pavement Shoulder
-  Pavement Lanes

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.

Alternative 2D Footprint

-  Area of Potential Impact (API)
-  Structure
-  Pavement Shoulder
-  Pavement Lanes
-  Recommended Noise Wall
-  Exit



0 125 250
Feet

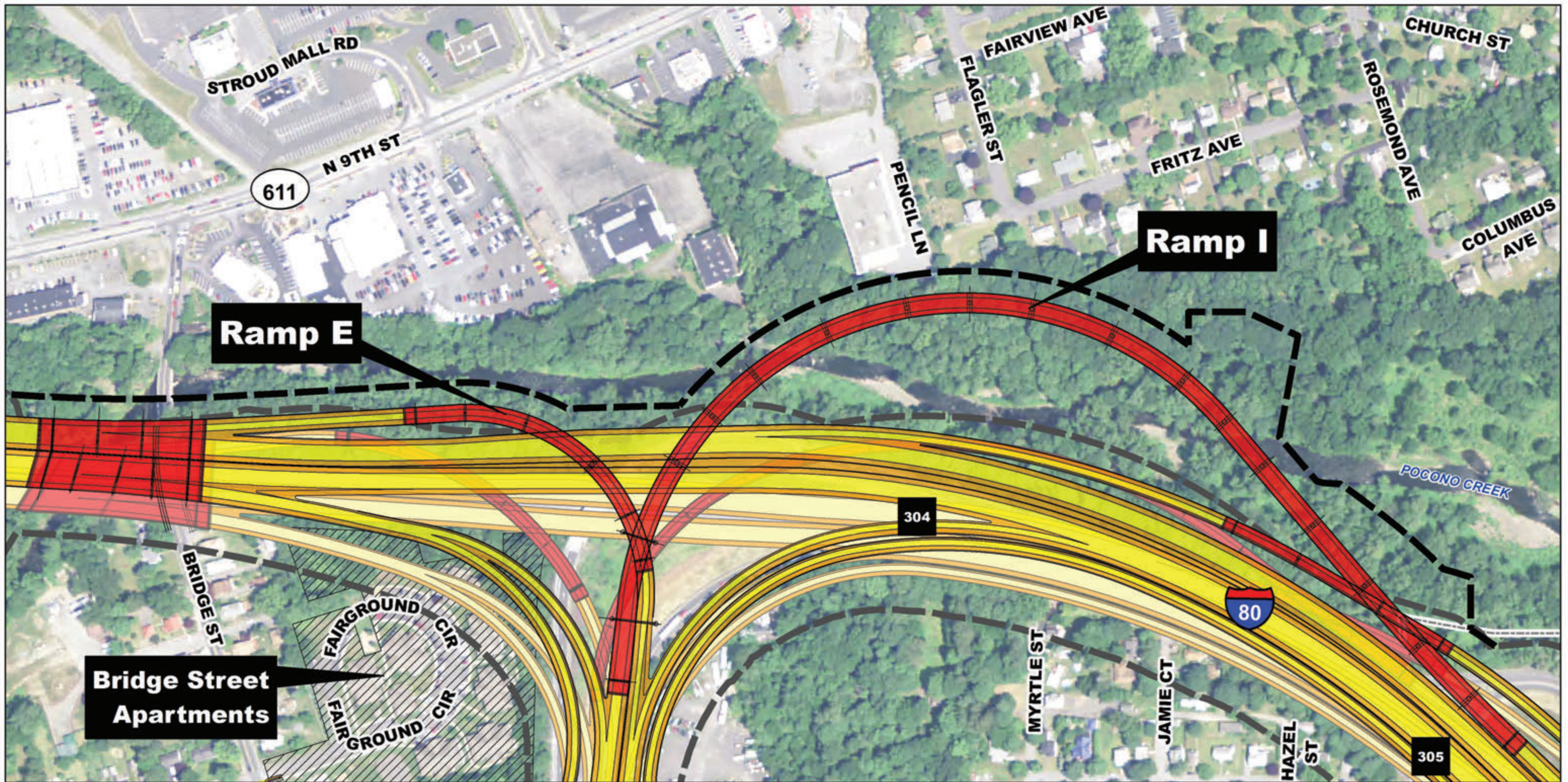
Print Date: 6/20/2019



I-80 RECONSTRUCTION

**ALTERNATIVE 2D
REFINED**





SHEET KEY



Note: The API for the refined alternatives includes the cut and fill lines for the alignment and stormwater basins and the footprint of structures and elevated roadway. In addition to pavement removal areas outside the anticipated proposed roadway limits, it also includes a buffer up to 50' wide to allow for potential temporary construction easements, drainage ditches, outfalls, and any temporary or permanent elements required as part of the highway reconstruction.

Alternative 2D Refined Footprint

-  Area of Potential Impact (API)
-  Structure
-  Pavement Shoulder
-  Pavement Lanes

Alternative 2D Footprint

-  Area of Potential Impact (API)
-  Structure
-  Pavement Shoulder
-  Pavement Lanes
-  Exit

Source: PASDA, PAMAP 2008, Monroe Co., SROSRC, FEMA, PADEP, PHMC.



0 125 250
Feet

Print Date: 6/11/2019



I-80 RECONSTRUCTION

**ALTERNATIVE 2D
REFINED**



Attachment **K**

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Attachment L

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https://ageconsearch.umn.edu/bitstream/252857/2/Nakakeeto.%20G.%20_The%20Impact%20of%20Noise%20Barriers1..pdf
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