APPENDIX M

Section 4(f) De Minimis Findings
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Section 1—Introduction

1.1 Purpose of the Report

The Section 4(f) legislation, established under the Department of Transportation Act of 1966 (49 USC 303, 23 USC 138), provides protection for publicly owned parks, recreation areas, historic sites (regardless of ownership), wildlife and/or waterfowl refuges from conversion to a transportation use. The Section 4(f) process requires that impacts to such protected land be evaluated as part of the NEPA Environmental Assessment (EA) process for the Trenton-Mercer Airport (TTN) obstruction removal project.

Section 4(f) legislation was revised in August 2005 with the implementation of Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which simplified the process and approval of projects that have only de minimis impacts on lands protected by Section 4(f). Under the new provisions, once the US DOT determines that a transportation use of Section 4(f) property results in a de minimis impact, analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete.

A de minimis impact is defined by the Federal Highway Administration as “one that, after taking into account avoidance, minimization, mitigation and enhancement measures, results in no adverse effect to the activities features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f)”.

As part of the TTN obstruction removal project, obstructions to navigable airspace will be mitigated on or contiguous to Section 4(f) lands including the Mountain View Golf Course, West End Soccer Complex, Delaware and Bound Brook (Reading) Railroad Historic District, First Presbyterian Church, Ewing Cemetery Historic Property, and archeologically sensitive areas.

The purpose of this Section 4(f) de minimis assessment is to evaluate potential impacts and mitigation to occur on Section 4(f) lands as a result of the TTN obstruction removal project.
1.2 Project Background, Purpose and Need

Background

In March 2015, a Runway Protection Zone Analysis and Obstruction Evaluation of “Title 14 CFR Part 77 – Safe, Efficient Use, and Preservation of Navigable Airspace” was completed by C&S Engineers, Inc. to determine if there were any obstructions that penetrate airspace surfaces surrounding the airport and identify incompatible land uses within the RPZs.

Table 1 provides a summary of airspace obstructions identified at the Airport.

Table 1—Airspace Obstructions

<table>
<thead>
<tr>
<th>Location</th>
<th>Obstructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On airport</strong></td>
<td>• Acres of trees: 67 acres of tree canopy area</td>
</tr>
<tr>
<td></td>
<td>• Individual trees: 53</td>
</tr>
<tr>
<td></td>
<td>• Terrain obstruction: 3.3 acres</td>
</tr>
<tr>
<td></td>
<td>• Other obstructions:</td>
</tr>
<tr>
<td></td>
<td>- Hangar (Currently Lit)</td>
</tr>
<tr>
<td></td>
<td>- Two (2) buildings (Currently Lit)</td>
</tr>
<tr>
<td></td>
<td>- Air traffic control tower (Currently Lit)</td>
</tr>
<tr>
<td></td>
<td>- Four (4) fence locations (1 Location Lit)</td>
</tr>
<tr>
<td></td>
<td>- Two (2) antennae</td>
</tr>
<tr>
<td></td>
<td>- Two (2) windcones (Currently Lit)</td>
</tr>
<tr>
<td></td>
<td>- Four (4) utility poles</td>
</tr>
<tr>
<td><strong>Off airport</strong></td>
<td>• Acres of trees: 53 acres of tree canopy</td>
</tr>
<tr>
<td></td>
<td>• Individual trees: 188</td>
</tr>
<tr>
<td></td>
<td>• Other obstructions:</td>
</tr>
<tr>
<td></td>
<td>- Nine (9) utility poles</td>
</tr>
<tr>
<td></td>
<td>- Ten (10) residences (including 3 sheds, one gazebo)</td>
</tr>
<tr>
<td></td>
<td>- Other residential structures (i.e., two sheds, one garage, and one gazebo)</td>
</tr>
<tr>
<td></td>
<td>- Four Communication / Powerline Towers (1 location lit)</td>
</tr>
<tr>
<td></td>
<td>- Roadway vertical clearances (Robin Road, Meadow Lark Lane, Bear Tavern Road)</td>
</tr>
<tr>
<td></td>
<td>- Railroad vertical clearance (Runway 34 End)</td>
</tr>
</tbody>
</table>


Initially a broad view was taken in identifying and evaluating obstructions to be addressed. As the EA progressed, the area was narrowed down and the number of potential obstructions was reduced to what is identified in Section 1.3 – Description of Proposed Project.
Purpose and Need

The purpose and need for the Proposed Project is to:

- Remove critical obstructions identified in the March 2015 Obstruction Evaluation (see Appendix C) and FAA Flight Procedure Office TERPS Analysis completed in April/May 2015 (see Appendix D).
- Enhance the safety of aircraft operations.
- Comply with federal design standards and grant assurances (obligations) with respect to obstructions to airspace and incompatible land uses in the RPZs.

Chapter 1 of the Environmental Assessment provides a more detailed discussion of the purpose and need for the Proposed Project.

1.3 Description of Proposed Project

The County considered two alternatives in addressing the needs stated above. Alternatives reviewed include the “No-Action” and “Proposed Project”.

No-Action Alternative

The No-Action alternative, involves the Airport remaining as it is today, with known safety hazards associated with existing obstructions to Runways 6-24 and 16-34 airspace and incompatible land uses in the RPZs.

If the obstructions are not addressed, it would require the modification of the existing precision and non-precision instrument approach procedures, the inactivation of navigational aids, and displaced thresholds which reduces the runway length available for landing.

As no action would occur, there would be no impact to Section 4(f) resources.

Proposed Project – Remove Critical Obstructions

The proposed project (see Figure P-1) involves addressing critical obstructions (i.e., penetrations to RESS, TERPS, and NAVAIDS surfaces) and incompatible land uses within the Runway Protection Zones (i.e., residential homes).

Runway 6 End:

- Remove tree canopy areas (5.4 acres on and 1.8 acres off airport property)
  - 5.7 acres of trees will be removed using Method 1
  - 1.5 acres of trees will be removed using Method 3
- Remove individual trees (10 off airport property)

- Land Acquisition (Voluntary Program)
  - Fee simple acquisition/relocation of 6 residential properties (tax parcels 423-18.01, 423-110, 423-218, 424-28, 424-26, and 424-27) to remove residential structures that are located in the RPZ (i.e., six homes and one garage) and critical obstructions
  - Fee simple acquisition of 1 parcel within the RPZ (tax parcel 423-18) to remove critical obstructions
  - Avigation easement for 1 parcel (tax parcel 423-57) to remove critical obstructions

Runway 24 End:

- Remove tree canopy areas (11.1 acres on and 1.4 acres off airport property)
  - 9.3 acres of trees will be removed using Method 1
  - 0.5 acres of trees will be removed using Method 2
  - 2.7 acres of trees will be removed using Method 3

- Land Acquisition (Voluntary Program)
  - Avigation easements for 3 parcels (tax parcels 369-1, 371-3.04, and 371-3.05) to remove critical obstructions

Runway 16 End:

- Remove tree canopy area (3.5 acres on and 0.1 acres off airport property)
  - 2.7 acres of trees will be removed using Method 1
  - 0.9 acres of trees will be removed using Method 3

Runway 34 End:

- Remove tree canopy areas (3.2 acres on and 4.2 acres off airport property)
  - 6.7 acres of trees will be removed using Method 1
  - 0.7 acres of trees will be removed using Method 3

- Remove/lower one utility pole (on airport)

- Install seven obstruction lights to mark a railroad (Runway 34 end)

- Land Acquisition (Voluntary Program)
  - Avigation easements for 2 parcel (tax parcels 365-2, 366-1) to remove critical obstructions
Section 2— Section 4(f) Resources

Properties subject to Section 4(f) evaluation include publicly owned land of a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance. As shown in Figure P-2, Section 4(f) resources are located within the Project Area and have the potential to be impacted by the TTN obstruction removal project. These resources include the following:

Parks and Recreational Areas
- Mountain View Golf Course
- West End Soccer Complex

Historic District
- Delaware and Bound Brook Railroad Historic District

Historic Properties
- First Presbyterian Church and Cemetery of Ewing
- Trenton Mercer Armory
- Burt/Hendrickson/Atchey Farmstead

Archeologically Sensitive Areas
- Three areas have been identified as archeologically sensitive based on the results of the Stage IA and IB archaeological surveys that were prepared for the EA (see Appendix J).

Parks and Recreational Areas

County of Mercer, Mountain View Golf Course
Mountain View Golf Course is owned and maintained by Mercer County. During peak season (spring-fall), the course is open to the public from dawn until dusk. This is an 18-hole golf course with clubhouse, food service, gathering space for events, and other golf-related facilities. The course occupies roughly 147 acres of land and is identified on the Mercer County Land and Tax Map as Section 1102, Block 372, Lot 1. The course is bounded by Interstate 95 and Trenton Mercer Airport to the east, municipal buildings to the south, residential properties to the west, and wooded and agricultural parcels to the north. Access is provided from an entrance located off Bear Tavern Road.

County of Mercer, West End Soccer Complex
The West End Soccer Complex is located on airport property (i.e., property owned by the County), and operated/maintained by Ewing Township. The complex includes eight marked
soccer fields that are used primarily for youth programs including league play and tournaments. In addition to the fields, the complex provides at-grade spectator areas and parking areas. During peak season, the complex is open to the public dawn until dusk. The complex is comprised of two parcels that are roughly 35 acres and 7 acres for a combined 42 acres, and is identified on the Mercer County Land and Tax Map as Section 1102, Block 365, Lots 1 and 17, respectively. The complex is bordered by a shopping complex to the east and to the south, the railroad corridor to the west, and the Ewing Cemetery to the north. Access is provided from entrances at the shopping complex off Parkway Avenue or Scotch Road.

**Historic District**

**Delaware and Bound Brook Railroad Historic District**

The Delaware and Bound Brook Railroad Historic District encompasses a historic rail route passing through several municipalities in Mercer County and Somerset County. The rail line remains active, and is owned by CSX. The rail line and associated historic district pass along the length of the Airport to the east. The Stage 1A Archeological Survey (see Appendix J) indicates that this district is listed on the National Register of Historic Places (NRHP).

**Historic Properties**

**First Presbyterian Church, Ewing Cemetery**

Ewing Cemetery is owned and maintained by the First Presbyterian Church, and is identified as eligible for listing on the NRHP by the Stage 1A Archeological Survey conducted for the obstruction removal project. The cemetery occupies slightly more than 50 acres of land and is identified on the Mercer County Land and Tax Map as Section 1102, Block 365, Lot 2. Based on NJ DEP Bureau of GIS “Historic Properties of New Jersey” mapping published in November 2015, only a 23 acre portion of the cemetery site has been designated as a historic property. The cemetery is bounded by Scotch Road to the east, the West End Soccer Complex to the south, the railroad corridor to the west, and apartment complexes to the north. Access is provided from three separate entrances located off Scotch Road.

**Trenton Mercer Armory & Burt/Hendrickson/Atchey Farmstead**

The Trenton Mercer Armory and Burt/Hendrickson/Atchey Farmstead are located within the Project Area. However, no project activities (i.e., obstruction removal, land acquisition) will take place on either of these properties. As a result, there will be no impacts.

**Archeologically Sensitive Areas**

According to 23 CFR §774.13(b), archeological sites are generally exempt from Section 4(f) requirements except for cases in which archeological sites warrant preservation in place.
Three archeologically sensitive areas with potential to be impacted by the obstruction removal project were identified by the Stage 1A and 1B Archeological Surveys. These include a state-owned parcel on the Runway 6 end (referred to as Block 423 Lot 18), a masonry remnant off the Runway 24 end (referred to as Area 1), and the McIlvane-Hough Farm site and associated historic resources located off the Runway 34 end (referred to as Area 7). More detail regarding these sites can be found in the surveys that are included in Appendix J of the EA.
Section 3— Impacts and Mitigation

Figure P-3 illustrates the locations where TTN obstruction removal activities will occur on and near the Section 4(f) resources identified for evaluation. Table 2 provides a summary of Section 4(f) impacts by runway end.

Table 2—Section 4(f) Impacts

<table>
<thead>
<tr>
<th>Runway End</th>
<th>Section 4(f) Resource</th>
<th>Land Acquisition (Acres)</th>
<th>Affected Parcel #</th>
<th>Tree Removal (Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Fee Simple</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Avigation Easement</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Runway 6 End</td>
<td>Archeologically Sensitive Area</td>
<td>18.07</td>
<td>423-18</td>
<td>1.6</td>
</tr>
<tr>
<td>Runway 24 End</td>
<td>Delaware &amp; Bound Brook Railroad</td>
<td>8.5</td>
<td>369-1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Archeologically Sensitive Area</td>
<td>*</td>
<td>369-1</td>
<td>0.16</td>
</tr>
<tr>
<td>Runway 16 End</td>
<td>Mountain View Golf Course</td>
<td></td>
<td></td>
<td>1.6</td>
</tr>
<tr>
<td>Runway 34 End</td>
<td>Delaware &amp; Bound Brook Railroad</td>
<td>6.5</td>
<td>366-1</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Archeologically Sensitive Area</td>
<td>*</td>
<td></td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>West End Soccer Complex</td>
<td>*</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Ewing Cemetery</td>
<td>18.29</td>
<td>365-2</td>
<td>4</td>
</tr>
</tbody>
</table>

*Located on Airport Property

Source: C&S Engineers, Inc.
Impacts and mitigation will be discussed in further detail below by the type of Section 4(f) resource affected (i.e., parks and recreational areas, historic districts, historic properties, and archeologically sensitive areas).

Parks and Recreational Areas

County of Mercer, Mountain View Golf Course
The Proposed Project involves the removal of 1.6 acres of tree canopy on the golf course property. Tree removal will take place within 50 feet of the teeing ground for Hole # 4 and 80 feet of the green for Hole #4. In addition, the existing tree canopy serves as a visual screen between the golf course and Interstate Highway 95. The recommended method for tree removal in the golf course area involves cutting tree trunks within three inches of the surface, the removal of woody material, and leaving the understory (with a height of 4 foot or less) intact in environmentally sensitive areas (i.e., floodways, floodplains, wetlands, wetland transition areas, and riparian zones) and clearing, grading, grubbing, seeding and mulching in non-environmentally sensitive areas. In order to minimize the amount of tree removal required on the golf course property and associated impacts it is recommended that a survey be conducted during project design to mark and identify specific trees that penetrate the TERPS and RESS surfaces and need to be removed. In addition, measures should be taken during construction to reduce the potential for tree removal to impact golf course property, and the adjacent teeing ground/greens. These measures can include felling trees away from the golf course grounds, limiting construction vehicle access to existing paved roadways, and using low ground pressure or handheld equipment.

It is recommended that tree removal take place during off-season (i.e. winter) months to avoid the interruption of golf play and other seasonal use of the property, that a tree replanting/landscaping plan be developed in conjunction with the County Parks Department to maintain the visual integrity of the golf course and repair any damage done to golf course that may take place during construction activities. Based on coordination with the County, it is recommended that a golf course landscape architect develop the replanting/landscaping plan (see Appendix A, page A-2).

With the implementation of the above minimization measures, no impacts to the function or quality of the golf course or to public use of the land are anticipated.

County of Mercer, West End Soccer Complex
The Proposed Project involves the removal of 1.7 acres of tree canopy adjacent to a portion of the soccer complex. The recommended method for tree removal adjacent to the soccer complex area involves cutting tree trunks within three inches of the surface, the removal of woody material, and leaving the understory (with a height of 4 foot or less) intact in environmentally sensitive areas (i.e., floodways, floodplains, wetlands, wetland transition areas, and
county of mercer
environmental assessment

riparian zones) and clearing, grading, grubbing, seeding and mulching in non-environmentally sensitive areas.

No direct impacts to the soccer complex are anticipated, however, there could be indirect impacts related to construction activities taking place adjacent to the soccer fields (i.e., tree removal, construction vehicle access) and minor visual impacts due to the removal of vegetative screening. Since there are 15 acres of trees that will remain and continue to provide a vegetative screen significant visual and/or sound-related impacts are not expected. Based on coordination with the Township of Ewing it is recommended that replacement planting take place in areas that are not environmentally sensitive (see Appendix A, page A-11).

It is recommended that tree removal take place during off-season (i.e. winter) months to avoid interruption of use and events during the sports season and measures be taken during construction to minimize the potential for tree removal to impact the soccer complex. These measures can include felling trees away from the soccer fields, limiting construction vehicle access to existing paved roadways, using low ground pressure or handheld equipment, and repairing any damage done to soccer complex as a result of construction activities.

With the implementation of the above minimization measures, no impacts to the function or quality of the golf course or to public use of the land are anticipated.

historic district

Delaware and Bound Brook Railroad Historic District

The Proposed Project involves the installation of obstruction lights to mark the CSX railroad track and the removal of 0.3 acres of tree on the Runway 34 end, and the removal of 0.1 acres of trees on the Runway 24 end. In addition, land acquisition (i.e., avigation easements) will be obtained on two parcels (369-1 and 366-1). The acquisition of an avigation easement allows the County to remove obstructions that penetrate into protected airspace surfaces above the property but does not restrict the use of the property.

Installation of the obstruction lights will involve directional boring at the ROW Line and perpendicular to the track from an on airport electrical vault. Directional boring will provide electricity to the first obstruction light, the
remaining obstruction lights will be connected to the first light with pull boxes along the ROW line that the obstruction lights are set on.

The recommended method for tree removal within the Delaware and Bound Brook Railroad Historic District involves cutting tree trunks within three inches of the surface, the removal of woody material, and leaving the understory (with a height of 4 foot or less) intact in environmentally sensitive areas (i.e., wetlands, and wetland transition areas) and clearing, grading, grubbing, seeding and mulching in non-environmentally sensitive areas.

In order to minimize impacts related to construction activities, it is recommended that trees are felled away from the railroad tracks, construction activities take place when the railroad cars are not operating, and any damage done as a result of construction activities is repaired.

The railroad within the Historic District is privately owned and operated by CSX Transportation. In addition, it is not accessible to the public. Measures have been recommended to minimize impacts related to construction activities within the Historic District. Based on the above information, installation and use of obstruction lights and the removal of trees are not expected to have an adverse effect to the activities, features, or attributes of the Historic District.

**Historic Property**

**First Presbyterian Church, Ewing Cemetery**

The Proposed Project involves the removal of 4 acres of trees within the Ewing Cemetery property. In addition, land acquisition (i.e., avigation easements) will be obtained on one parcels (365-2). The proposed tree removal will not take place within the limits of the area designated as a historic property. However, the proposed avigation easement will be obtained over the entire parcel so it would meet the Section 4(f) criteria of a physical use of the property. The acquisition of an avigation easement allows the County to remove obstructions that penetrate into protected airspace surfaces above the property but does not restrict the use of the property or affect historic buildings.
The existing tree canopy serves as a visual screen between the cemetery property and the railroad / airport. Minor impacts related to the loss of screening may occur. Since there are 16 acres of trees that will remain and continue to provide a vegetative screen significant visual impacts are not expected. Based on coordination with Ewing Cemetery, it is recommended that a hedgerow be planted between the airport property and the cemetery to maintain a vegetative screen (see Appendix A, page A-8).

In order to minimize impacts it is recommended that construction activities take place winter months when the ground is dry or frozen, limiting construction vehicle access to existing paved roadways, and repairing any damage done as a result of construction activities. With the implementation of above minimization measures no impacts to the site’s historic character or public use are expected.

**Archeologically Sensitive Areas**

The Proposed Project involves the removal of 2.44 acres of trees on three runway ends in areas that have been identified as archeologically sensitive based on Stage 1A and 1B surveys or correspondence with the NJ HPO. The archeologically sensitive areas are discussed by runway end below.

**Runway 6 End:** The Proposed Project involves the fee simple acquisition of one state owned parcel (Block 423 Lot 18) and the removal of 1.6 acres of trees in an area identified as having the potential to be archeologically sensitive. Correspondence with NJ HPO stated a Stage 1B archeological testing would be required in order to determine the potential for archeological resources to be impacted (see Appendix J, pages J-200 to J-201).

**Runway 24 End:** The Proposed Project involves the removal of 0.16 acres of trees adjacent to a remnant masonry structure that was identified in Survey Area 1 of the Stage 1B Archeological Survey. The remnant masonry structure has potential significance and the Stage 1B Report recommended “the ruins be set off from any disturbance from the obstruction removal work. If, for engineering reasons, the masonry structure should be regarded as an obstruction in and of itself, additional investigation at the level of Stage II would be appropriate” (see Appendix J, page J-187). In their May 2, 2017 response letter, the NJ HPO concurred stating “if the site cannot be avoided, the HPO recommends additional Phase 1B shovel testing around the structure to determine if intact archeological deposits are present, and the identified archeological site would need to be registered with the NJSM” (see Appendix J, page J-200). Additional investigation would take place only if the masonry structure was an obstruction. Since it is not an obstruction, there will be no future investigations, thus eligibility listing will not be determined. However, approximately 0.16 acres of trees obstructions have been identified adjacent to the masonry structure that need to be removed.
In addition, land acquisition (i.e., avigation easements) will be obtained on one parcel (369-1). The acquisition of an avigation easement allows the County to remove obstructions that penetrate into protected airspace surfaces above the property but does not restrict the use of the property.

**Runway 34 End:** The Proposed Project involves the removal of 0.68 acres of trees within the limits of a historic landscape, including plantings, a stone lined well, an old farm lane, a collapsed brick wall that contained glazed bricks, two masonry foundations, and poured concrete piers and historic-period artifacts associated with The McIlvane-Hough Farm (Site 28-ME-389) that was identified in Survey Area 7 of a Stage 1B Archeological Survey. The Ar-Report recommended the “ruins and associated remains be set off from any disturbance from the obstruction removal work…small trees should be cut, but not destumped. The large specimen trees should be trimmed only…grubbing is not recommended because it would be detrimental to structural remnants and artifacts…the open well should be covered in a non-destructive manner or filled with clean earth…If ground-altering activities cannot be avoided, Stage II Survey would be appropriate” (see Appendix J, pages J-187 to J-188). In their May 2, 2017 response letter, the NJ HPO concurred stating “if avoidance of archeological site 28-ME-389 is not possible, a Phase II archeological evaluation is recommended” (see Appendix J, page J-200).

An avoidance plan was prepared as part of the EA to avoid impacts to archeological resources. The avoidance plan was approved by the NJ HPO (see Appendix J, pages J-213 to J-216) and the Ewing Historic Preservation Committee (see Appendix J, page J-217). It is designed for the short and long term protection of archeologically sensitive sites and includes the following:

- The masonry remnant in Survey Area 1 and structural remains and three specimen trees in Survey Area 7 will be marked on the vegetation and obstruction removal maps as “Environmentally Sensitive, Do Not Impact.”

- The masonry remnant in Survey Area 1 and structural remains and three specimen trees in Survey Area 7 will be marked with orange flags in the field by a NJ HPO approve archeologist prior to construction activities taking place.

- If ground disturbing activities are expected to take place on the state-owned parcel (Block 423 Lot 18), Stage 1B testing will be conducted after the County acquires the property in fee simple.

- If for any reason project recommendations were to change and ground disturbing activities were to take place near the masonry remnant in Survey Area 1 and Survey Areas 6, 7, and 8, a Phase II Archeological Survey would be conducted and further coordination with the NJ HPO would take place.
• Tree removal will be conducted only when the ground is frozen or dry, and all visible structural remains will be avoided.

• Only handheld equipment will be used for tree removal within 25 feet of the masonry remnant in Survey Area 1 and within Survey Area 7, and no disturbance will be made to the ground surface during tree removal.

• The trees, brush, and stumps will be cut as close to the ground as practicable, but shall not be to a height of more than three inches above the ground.

• The trees, branches, and brush will be removed from the site area, and no grubbing of stumps will be allowed in the archeologically sensitive areas.

• Proper soil erosion and sediment control plans will be utilized and maintained during tree removal.

Once tree removal is completed, the masonry remnant in Survey Area 1 and Survey Areas 6, 7, and 8 will be included on the Trenton Mercer Airport Layout Plan and marked appropriately “Environmentally Sensitive, Do Not Impact.” The County of Mercer agrees to provide for the long and short-term protection of the two sites through avoidance.

With reference to 23 CFR §774.13(b), archeological sites are generally exempt from Section 4(f) requirements, except for cases in which a site warrants preservation in place. Given the recommended avoidance measures to be implemented, no Section 4(f) impacts to archeological sites or archeologically sensitive lands are expected.
Section 4—— Coordination

Coordination with several agencies and stakeholder parties has been ongoing throughout the NEPA review process, including Section 4(f) correspondence with consulting parties identified in accordance with 36 CFR Part 800.

Section 4(f) coordination has been initiated with parties having jurisdiction over each of the Section 4(f) resources addressed in this De Minimis Evaluation. Coordination with the following agencies has taken place seeking comments and/or concurrence that the project will not adversely affect the activities, features, or attributes of the Section 4(f) resources (Appendix A):

- Mercer County Park Commission: Mountain View Golf Course and West End Soccer Complex – meetings held on May 14, 2018 with the County (see Appendix A, pages A-1 to A-3) and with the Township of Ewing (see Appendix A, pages A-4 to A-6 and A-10 to A-12)
- First Presbyterian Church of Ewing: Ewing Cemetery – meeting held on May 14, 2018 (see Appendix A, pages A-7 to A-9)
- New Jersey Historic Preservation Office (NJ HPO): Delaware and Bound Brook Railroad Historic District, First Presbyterian Church of Ewing Historic Property, and three archeological sites – email and telephone communications May 10 to May 15, 2018 (see Appendix A, pages A-13 to A-22)

Statements of concurrence have been received and are provided in Appendix A, pages A-28 to A-33. Following the concurrent publication of the Draft EA and De Minimis Finding, Section 4(f) considerations will be addressed at a public meeting providing opportunities for public review and comment.
Section 5— Conclusion

Based on the review of existing conditions, proposed project, potential impacts and mitigation measures regarding the Section 4(f) resources identified for the TTN obstruction removal project, the Federal Aviation Administration has determined that the Proposed Action will constitute a *de minimis* impact for each of the Section 4(f) resources as defined in 23 CFR §774.17(5).

A final *de minimis* finding will be made upon completion of the public review period, response to comments regarding Section 4(f) resources, and documentation of approval in accordance with 23 CFR §774.7(F).
Figures

Pond data digitized from ESRI Imagery Layer. NHP data and Species data from NJDEP (New Jersey Department of Environmental Protection). Vernal Habitat from the NJDEP Bureau of GIS "Species-Based Habitat - Vernal Habitat" dataset.
**Figure P-3**

**Section 4(f) Resource Impacts**

*On-Airport Obstructions* are shown in **ORANGE**
*Off-Airport Obstructions* are shown in **BLUE**

**Legend**
- **Airport Property Line**
- **Project Study Area**
- **Phase IB Survey Areas**
- **Parks and Recreational Areas**
- **New Jersey and National Register of Historic Places**
- **Potential Archeologically Sensitive Areas**
- **Historic Districts (Eligible)**
- **Historic Properties (Identified, Eligible, and Listed)**

**Project Areas**
- On/Off Airport Obstructions
  - Individual Tree Obstruction
  - Railroad Obstruction
  - Residential Home
  - Tree Canopy Obstruction
  - Utility Pole
  - Obstruction Light

*On-Airport Obstructions are shown in ORANGE*  
*Off-Airport Obstructions are shown in BLUE*


**1 inch = 250 feet**

When printed at 22” x 34”
Appendix A

Section 4(f) Coordination
Section 4(f) Coordination Meetings
Mercer County Parks Commission – Mountain View Golf Course

1. Project Background

The Trenton-Mercer Airport (TTN), in cooperation with the Federal Aviation Administration (FAA), is proposing to undertake a Runway Protection Zone (RPZ) and obstruction mitigation project. The proposed project involves the removal of tree canopy areas and individual trees located on and off airport property, the acquisition of land (i.e., fee simple or avigation easement) to remove residential structures in the RPZ, and the installation of obstruction lights to mark a railroad track. This project will remove critical obstructions that would negatively affect airport operations, will enhance the safety of aircraft operations, and is needed in order for TNN to comply with federal standards and grant assurances.

Some of the trees that are creating obstructions to the airport are located on the Mountain View Golf Course property. As a publically owned public use recreational area, the golf course is afforded protection under Section 4(f) of the U.S. Department of Transportation Act. Section 4(f) of the U.S. Department of Transportation (DOT) Act requires agencies within the Department of Transportation to make an effort to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It also prohibits the use of a Section 4(f) resources if a feasible and prudent alternative is available, unless the impact is determined to be de minimis.

The impacts of a project may be determined to be de minimis if:

- The use of the Section 4(f) resource, together with any avoidance, minimization, and mitigation, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f).
- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) resource.

2. Proposed Project - Remove Critical Obstructions

The proposed project (see Figure 1.7) involves addressing critical obstructions (i.e., obstructions that negatively affect airport operations) and incompatible land uses within the Runway Protection Zones (i.e., residential homes).

- Remove tree canopy areas (23.5 acres on and 7.5 acres off airport property)
- Remove individual trees (10 off airport property)
- Land Acquisition
  - Fee simple acquisition/relocation of 6 residential properties to remove residential structures that are located in the RPZ and critical obstructions
  - Fee simple acquisition of 1 parcel within the RPZ to remove critical obstructions
  - Avigation easement for 6 parcels to remove critical obstructions
- Install seven obstruction lights to mark a railroad (Runway 34 end)

3. Impacts: County of Mercer, Mountain View Golf Course

The Proposed Project involves the removal of 1.6 acres of tree canopy on the golf course property. Tree removal will take place within 50 feet of the teeing ground for Hole # 4 and 80 feet of the green for Hole
#4. In addition, the existing tree canopy serves as a screening effect for visual impacts from Interstate Highway 95. The recommended method for tree removal in the golf course area involves cutting tree trunks within three inches of the surface, the removal of woody material, and leaving the understory (with a height of 4 foot or less) intact in environmentally sensitive areas (i.e., floodways, floodplains, wetlands, wetland transition areas, and riparian zones) and clearing, grading, grubbing, seeding and mulching in non-environmentally sensitive areas.

4. **Measures to Minimize Harm / Mitigate Potential Impacts**

In order to minimize the amount of tree removal required on the golf course property and associated impacts it is recommended that a survey be conducted during project design to mark and identify specific trees that penetrate the TERPS and RESS surfaces and need to be removed. In addition, measures should be taken during construction to reduce the potential for tree removal to impact golf course property, and the adjacent teeing ground/greens. These measures can include felling trees away from the golf course grounds, limiting construction vehicle access to existing paved roadways, and using low ground pressure or handheld equipment.

It is recommended that tree removal take place during off-season (i.e. winter) months to avoid the interruption of golf play and other seasonal use of the property, that a tree replanting/landscaping plan be developed in conjunction with the County Parks Department to maintain the visual integrity of the golf course and repair any damage done to golf course that may take place during construction activities.

5. **Concerns / Comments / Additional Measures Identified During Meeting**

Mercer County Parks Commission would require a Golf Course Landscape Architect to be involved in the FAA funded removal and restoration planning, design and construction observation.
Figure 1.7

Methods to Address Obstructions
- Tree Removal - clearing, grubbing & grading
- Tree Removal - clearing, grubbing, grading & replanting
- Tree removal - clearing & leaving stumps in place
- Environmental Sensitivity Areas
- Remove & lower utility pole

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<thead>
<tr>
<th>RUNWAY 6 END AFFECTED PROPERTIES</th>
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<td>Acura Lot</td>
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Legend
- Airport Property Line
- Runway Protection Zone
- Environmentally Sensitive Areas
- Tax Parcels
- Parcel Blocks
- Project Areas

On/Airport Obstructions*
- Individual Tree Obstruction
- Railroad Obstruction
- Residential Home
- Tree Canopy Obstruction
- Utility Pole
- Obstruction Light

On/Airport Obstructions are shown in GREEN
Off/Airport Obstructions are shown in BLUE

Trenton-Mercer Airport

Proposed Project
Section 4(f) Coordination Meetings
Township of Ewing & Mercer County Parks Commission – West End Soccer Complex

1. Project Background
The Trenton-Mercer Airport (TTN), in cooperation with the Federal Aviation Administration (FAA), is proposing to undertake a Runway Protection Zone (RPZ) and obstruction mitigation project. The proposed project involves the removal of tree canopy areas and individual trees located on and off airport property, the acquisition of land (i.e., fee simple or avigation easement) to remove residential structures in the RPZ, and the installation of obstruction lights to mark a railroad track. This project will remove critical obstructions that would negatively affect airport operations, will enhance the safety of aircraft operations, and is needed in order for TNN to comply with federal standards and grant assurances.

Some of the trees that are creating obstructions to the airport are located adjacent to the West End Soccer Complex. As a publicly owned public use recreational area, the soccer complex is afforded protection under Section 4(f) of the U.S. Department of Transportation Act. Section 4(f) of the U.S. Department of Transportation (DOT) Act requires agencies within the Department of Transportation to make an effort to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It also prohibits the use of a Section 4(f) resources if a feasible and prudent alternative is available, unless the impact is determined to be de minimis.

The impacts of a project may be determined to be de minimis if:

- The use of the Section 4(f) resource, together with any avoidance, minimization, and mitigation, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f).
- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) resource.

2. Proposed Project – Remove Critical Obstructions
The proposed project (see Figures 1.7) involves addressing critical obstructions (i.e., obstructions that negatively affect airport operations) and incompatible land uses within the Runway Protection Zones (i.e., residential homes).

- Remove tree canopy areas (23.5 acres on and 7.5 acres off airport property)
- Remove individual trees (10 off airport property)
- Land Acquisition
  - Fee simple acquisition/relocation of 6 residential properties to remove residential structures that are located in the RPZ and critical obstructions
  - Fee simple acquisition of 1 parcel within the RPZ to remove critical obstructions
  - Avigation easement for 6 parcels to remove critical obstructions
- Install seven obstruction lights to mark a railroad (Runway 34 end)

3. Impacts: West End Soccer Complex
The Proposed Project involves the removal of 1.7 acres of tree canopy adjacent to a portion of the soccer complex. The recommended method for tree removal adjacent to the soccer complex area involves cutting
tree trunks within three inches of the surface, the removal of woody material, and leaving the understory (with a height of 4 foot or less) intact in environmentally sensitive areas (i.e., archeologically sensitive areas) and clearing, grading, grubbing, seeding and mulching in non-environmentally sensitive areas.

No direct impacts to the soccer complex are anticipated, however, there could be indirect impacts related to construction activities taking place adjacent to the soccer fields (i.e., tree removal, construction vehicle access) and minor visual and/or sound-related impacts due to the removal of vegetative screening. Since there are 15 acres of trees that will remain and continue to provide a vegetative screen significant visual and/or sound-related impacts are not expected.

4. **Measures to Minimize Harm / Mitigate Potential Impacts**

It is recommended that tree removal take place during off-season (i.e. winter) months to avoid interruption of use and events during the sports season and measures be taken during construction to minimize the potential for tree removal to impact the soccer complex. These measures can include felling trees away from the soccer fields, limiting construction vehicle access to existing paved roadways, using low ground pressure or handheld equipment, and repairing any damage done to soccer complex as a result of construction activities.

5. **Concerns / Comments / Additional Measures Identified During Meeting**

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________________________________________________________________________
Figure 1.7

Methods to Address Obstructions

1 - Tree Removal - clearing, grubbing & grading
2 - Tree Removal - clearing, grubbing, grading & replanting
3 - Tree removal - clearing & leaving stumps in place
4 - Environmental Sensitivity Areas
5 - Remove/lower utility pole

Proposed Project

Trenton-Mercer Airport
Section 4(f) Coordination Meetings
First Presbyterian Church of Ewing – Cemetery

1. Project Background
The Trenton-Mercer Airport (TTN), in cooperation with the Federal Aviation Administration (FAA), is proposing to undertake a Runway Protection Zone (RPZ) and obstruction mitigation project. The proposed project involves the removal of tree canopy areas and individual trees located on and off airport property, the acquisition of land (i.e., fee simple or avigation easement) to remove residential structures in the RPZ, and the installation of obstruction lights to mark a railroad track. This project will remove critical obstructions that would negatively affect airport operations, will enhance the safety of aircraft operations, and is needed in order for TNN to comply with federal standards and grant assurances.

Some of the trees that are creating obstructions to the airport are located on church property. As an historical church, the First Presbyterian Church of Ewing is afforded protection under Section 4 (f) of the U.S. Department of Transportation Act. Section 4(f) of the U.S. Department of Transportation (DOT) Act requires agencies within the Department of Transportation to make an effort to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It also prohibits the use of a Section 4(f) resources if a feasible and prudent alternative is available, unless the impact is determined to be de minimis.

The impacts of a project may be determined to be de minimis if:

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• The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) resource.

2. Proposed Project – Remove Critical Obstructions
The proposed project (see Figures 1.7) involves addressing critical obstructions (i.e., obstructions that negatively affect airport operations) and incompatible land uses within the Runway Protection Zones (i.e., residential homes).

• Remove tree canopy areas (23.5 acres on and 7.5 acres off airport property)
• Remove individual trees (10 off airport property)
• Land Acquisition
  ✷ Fee simple acquisition/relocation of 6 residential properties to remove residential structures that are located in the RPZ and critical obstructions
  ✷ Fee simple acquisition of 1 parcel within the RPZ to remove critical obstructions
  ✷ Avigation easement for 6 parcels to remove critical obstructions
• Install seven obstruction lights to mark a railroad (Runway 34 end)

3. Impacts: First Presbyterian Church of Ewing
The Proposed Project involves the removal of 4 acres of trees within the Ewing Cemetery property. In addition, land acquisition (i.e., avigation easements) will be obtained on one parcel (365-2). The proposed tree removal will not take place within the limits of the area designated as a historic property. However, the proposed avigation easement will be obtained over the entire parcel so it would meet the Section 4(f)
criteria of a physical use of the property. The acquisition of an avigation easement allows the County to remove obstructions that penetrate into protected airspace surfaces above the property but does not restrict the use of the property or affect historic buildings.

The existing tree canopy serves as a screening effect for sound and visual impacts from the railroad and the airport, and minor impacts related to the loss of screening may occur. Since there are 16 acres of trees that will remain and continue to provide a vegetative screen significant visual and/or sound-related impacts are not expected.

4. **Measures to Minimize Harm / Mitigate Potential Impacts**

In order to minimize impacts it is recommended that construction activities take place winter months when the ground is dry or frozen, limiting construction vehicle access to existing paved roadways, and repairing any damage done as a result of construction activities.

5. **Concerns / Comments / Additional Measures Identified During Meeting**

They would request a hedge row between the airport property and the cemetery.

The church would request language in the easement stating a maximum height and allowing for the building of mausoleums and restrooms within the RPZ, but below any avigation surfaces.

Requested that the address anything is sent to would be the Church’s address – 100 Scotch Road.

Met with N. McLaughlin and M. Montgomery @ 9am on 5/14/18.
Figure 1.7

First Presbyterian Church - Cemetery Fields Section 4(f) Tree
Section 4(f) Coordination Meetings

Township of Ewing & Mercer County Parks Commission – West End Soccer Complex

1. Project Background
The Trenton-Mercer Airport (TTN), in cooperation with the Federal Aviation Administration (FAA), is proposing to undertake a Runway Protection Zone (RPZ) and obstruction mitigation project. The proposed project involves the removal of tree canopy areas and individual trees located on and off airport property, the acquisition of land (i.e., fee simple or avigation easement) to remove residential structures in the RPZ, and the installation of obstruction lights to mark a railroad track. This project will remove critical obstructions that would negatively affect airport operations, will enhance the safety of aircraft operations, and is needed in order for TTN to comply with federal standards and grant assurances.

Some of the trees that are creating obstructions to the airport are located adjacent to the West End Soccer Complex. As a publicly owned public use recreational area, the soccer complex is afforded protection under Section 4(f) of the U.S. Department of Transportation Act. Section 4(f) of the U.S. Department of Transportation (DOT) Act requires agencies within the Department of Transportation to make an effort to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It also prohibits the use of a Section 4(f) resource if a feasible and prudent alternative is available, unless the impact is determined to be de minimis.

The impacts of a project may be determined to be de minimis if:

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- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) resource.

2. Proposed Project – Remove Critical Obstructions
The proposed project (see Figures 1.7) involves addressing critical obstructions (i.e., obstructions that negatively affect airport operations) and incompatible land uses within the Runway Protection Zones (i.e., residential homes).

- Remove tree canopy areas (23.5 acres on and 7.5 acres off airport property)
- Remove individual trees (10 off airport property)
- Land Acquisition
  - Fee simple acquisition/relocation of 6 residential properties to remove residential structures that are located in the RPZ and critical obstructions
  - Fee simple acquisition of 1 parcel within the RPZ to remove critical obstructions
  - Avigation easement for 6 parcels to remove critical obstructions
- Install seven obstruction lights to mark a railroad (Runway 34 end)

3. Impacts: West End Soccer Complex
The Proposed Project involves the removal of 1.7 acres of tree canopy adjacent to a portion of the soccer complex. The recommended method for tree removal adjacent to the soccer complex area involves cutting...
tree trunks within three inches of the surface, the removal of woody material, and leaving the understory (with a height of 4 foot or less) intact in environmentally sensitive areas (i.e., archeologically sensitive areas) and clearing, grading, grubbing, seeding and mulching in non-environmentally sensitive areas.

No direct impacts to the soccer complex are anticipated, however, there could be indirect impacts related to construction activities taking place adjacent to the soccer fields (i.e., tree removal, construction vehicle access) and minor visual and/or sound-related impacts due to the removal of vegetative screening. Since there are 15 acres of trees that will remain and continue to provide a vegetative screen significant visual and/or sound-related impacts are not expected.

4. Measures to Minimize Harm / Mitigate Potential Impacts
It is recommended that tree removal take place during off-season (i.e. winter) months to avoid interruption of use and events during the sports season and measures be taken during construction to minimize the potential for tree removal to impact the soccer complex. These measures can include felling trees away from the soccer fields, limiting construction vehicle access to existing paved roadways, using low ground pressure or handheld equipment, and repairing any damage done to soccer complex as a result of construction activities.

5. Concerns / Comments / Additional Measures Identified During Meeting
The township would request replacement plantings in the areas that are not environmentally sensitive.

Meeting held with N. McLaughlin and Charles Latini at 3:00pm 5/14/18.
Figure 1.7

Methods to Address Obstructions
- Tree Removal - clearing, grubbing & grading
- Tree removal - clearing & leaving stumps in place

On/Airport Obstructions* are shown in
BLUE
Off-Airport Obstructions are shown in
ORANGE

Sources: Stream location data downloaded from the USGS Stream Reach Dataset, NHP data and Species data from NJDEP (New Jersey Department of Environmental Protection), Vernal Habitat from the NJDEP Bureau of GIS "Species-Based Habitat - Vernal Habitat" Dataset.
Hello Everyone!

I spoke with Michelle Sebestyen on the telephone a few days ago regarding the status of the EA for the Trenton Mercer Airport and some additional follow up that is required with the NJ HPO. She suggested I contact your office directly.

To date we have been in consultation with NJ HPO as part of the 106 process, that has included Phase 1A/1B surveys, and the Federal Aviation Administration’s submittal of an avoidance plan. However, no coordination has taken place with NJ HPO in regards to Section 4(f) impacts.

Section 4(f) of the U.S. DOT Act of 1966 protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites. Section 4(f) provides that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land off a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, State, or local significance, only if there is no feasible and prudent alternative to the using that land and the program or project includes all possible planning to minimize harm resulting from the use.

Some of the trees that are creating obstructions to the airport are located within the Delaware and Bound Brook Railroad Historic District; First Presbyterian Church, Ewing Cemetery (a historic property); and archeologically sensitive areas. These resources are afforded protection under Section 4(f) of the U.S. Department of Transportation Act.

We would like to schedule a meeting with the NJ HPO to discuss the following information:

1. Project Background
2. Proposed Project – Remove Critical Obstructions (note the proposed obstruction removal project has been significantly reduced)
3. Section 4(f) Impacts
4. Measures to Minimize Harm / Mitigate Potential Impacts
5. Concerns / Comments / Additional Measures Identified During Meeting

The information to be covered at the meeting has been attached for your review. If the meeting could be held via WebEx and conference call that would be the most efficient and cost effective. However, if needed we could meet at the NJ DEP offices. We are on a time constraint to complete the EA and make it available for public review by June 11, 2018. Please let me know how you would like to proceed. Thank you!
CONFIDENTIALITY NOTICE: This e-mail, including any attachment(s) to it, is intended for the exclusive use of the addressee(s) and may contain proprietary, confidential, or privileged information. If you are not the intended recipient, you are hereby notified that any use, disclosure, copying, distribution, or taking of any action in reliance on this information is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately by e-mail and delete the message.
Section 4(f) Coordination Meetings
First Presbyterian Church of Ewing – Cemetery

1. Project Background
The Trenton-Mercer Airport (TTN), in cooperation with the Federal Aviation Administration (FAA), is proposing to undertake a Runway Protection Zone (RPZ) and obstruction mitigation project. The proposed project involves the removal of tree canopy areas and individual trees located on and off airport property, the acquisition of land (i.e., fee simple or avigation easement) to remove residential structures in the RPZ, and the installation of obstruction lights to mark a railroad track. This project will remove critical obstructions that would negatively affect airport operations, will enhance the safety of aircraft operations, and is needed in order for TNN to comply with federal standards and grant assurances.

Some of the trees that are creating obstructions to the airport are located within the Delaware and Bound Brook Railroad Historic District; First Presbyterian Church, Ewing Cemetery (a historic property); and archeologically sensitive areas. These resources are afforded protection under Section 4 (f) of the U.S. Department of Transportation Act. Section 4(f) of the U.S. Department of Transportation (DOT) Act requires agencies within the Department of Transportation to make an effort to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It also prohibits the use of a Section 4(f) resources if a feasible and prudent alternative is available, unless the impact is determined to be de minimis.

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- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) resource.

2. Proposed Project – Remove Critical Obstructions
The proposed project (see Figures 1.7 and 1.8) involves addressing critical obstructions (i.e., obstructions that negatively affect airport operations) and incompatible land uses within the Runway Protection Zones (i.e., residential homes).

- Remove tree canopy areas (23.5 acres on and 7.5 acres off airport property)
- Remove individual trees (10 off airport property)
- Land Acquisition
  - Fee simple acquisition/relocation of 6 residential properties to remove residential structures that are located in the RPZ and critical obstructions
  - Fee simple acquisition of 1 parcel within the RPZ to remove critical obstructions
  - Avigation easement for 6 parcels to remove critical obstructions
- Install seven obstruction lights to mark a railroad (Runway 34 end)
3. Impacts

**Delaware and Bound Brook Railroad Historic District**

The Proposed Project involves the installation of obstruction lights to mark the CSX railroad track and the removal of 0.3 acres of tree on the Runway 34 end, and the removal of 0.1 acres of trees on the Runway 24 end. In addition, land acquisition (i.e., avigation easements) will be obtained on two parcels (369-1 and 366-1). The acquisition of an avigation easement allows the County to remove obstructions that penetrate into protected airspace surfaces above the property but does not restrict the use of the property.

Installation of the obstruction lights will involve directional boring at the ROW Line and perpendicular to the track from an on airport electrical vault. Directional boring will provide electricity to the first obstruction light, the remaining obstruction lights will be connected to the first light with pull boxes along the ROW line that the obstruction lights are set on.

The recommended method for tree removal within the Delaware and Bound Brook Railroad District involves cutting tree trunks within three inches of the surface, the removal of woody material, and leaving the understory (with a height of 4 foot or less) intact in environmentally sensitive areas (i.e., wetlands, and wetland transition areas) and clearing, grading, grubbing, seeding and mulching in non-environmentally sensitive areas.

**First Presbyterian Church, Ewing Cemetery**

The Proposed Project involves the removal of 4 acres of trees within the Ewing Cemetery property. In addition, land acquisition (i.e., avigation easements) will be obtained on one parcel (365-2). The proposed tree removal will not take place within the limits of the area designated as a historic property. However, the proposed avigation easement will be obtained over the entire parcel so it would meet the Section 4(f) criteria of a physical use of the property. The acquisition of an avigation easement allows the County to remove obstructions that penetrate into protected airspace surfaces above the property but does not restrict the use of the property or affect historic buildings.

The existing tree canopy serves as a screening effect for sound and visual impacts from the railroad and the airport, and minor impacts related to the loss of screening may occur. Since there are 16 acres of trees that will remain and continue to provide a vegetative screen significant visual and/or sound-related impacts are not expected.

**Archeologically Sensitive Areas**

The Proposed Project involves the removal of 2.44 acres of trees on three runway ends in areas that have been identified as archeologically sensitive based on Stage 1A and 1B surveys or correspondence with the NJ HPO. The archeologically sensitive areas are discussed by runway end below.

**Runway 6 End**: The Proposed Project involves the fee simple acquisition of one state owned parcel (Block 423 Lot 18) and the removal of 1.6 acres of trees in an area identified as having the potential to be archeologically sensitive. Correspondence with NJ HPO stated a Stage 1B archeological testing would be required in order to determine the potential for archeological resources to be impacted (see Appendix J, pages J-200 to J-201).

**Runway 24 End**: The Proposed Project involves the removal of 0.16 acres of trees adjacent to a remnant masonry structure that was identified in Survey Area 1 of the Stage 1B Archeological Survey. The remnant masonry structure has potential significance and the Stage 1B Report recommended “the ruins be set off from any disturbance from the obstruction removal work. If, for engineering reasons, the masonry structure
should be regarded as an obstruction in and of itself, additional investigation at the level of Stage II would be appropriate” (see Appendix J, page J-187). In their May 2, 2017 response letter, the NJ HPO concurred stating “if the site cannot be avoided, the HPO recommends additional Phase 1B shovel testing around the structure to determine if intact archeological deposits are present, and the identified archeological site would need to be registered with the NJSM” (see Appendix J, page J-200).

In addition, land acquisition (i.e., avigation easements) will be obtained on one parcel (369-1). The acquisition of an avigation easement allows the County to remove obstructions that penetrate into protected airspace surfaces above the property but does not restrict the use of the property.

**Runway 34 End:** The Proposed Project involves the removal of 0.68 acres of trees within the limits of a historic landscape, including plantings, a stone lined well, an old farm lane, a collapsed brick wall that contained glazed bricks, two masonry foundations, and poured concrete piers and historic-period artifacts associated with The McIlvane-Hough Farm (Site 28-ME-389) that was identified in Survey Area 7 of a Stage 1B Archeological Survey. The ArReport recommended the “ruins and associated remains be set off from any disturbance from the obstruction removal work...small trees should be cut, but not destumped. The large specimen trees should be trimmed only...grubbing is not recommended because it would be detrimental to structural remnants and artifacts...the open well should be covered in a non-destructive manner or filled with clean earth...If ground-altering activities cannot be avoided, Stage II Survey would be appropriate” (see Appendix J, pages J-187 to J-188). In their May 2, 2017 response letter, the NJ HPO concurred stating “if avoidance of archeological site 28-ME-389 is not possible, a Phase II archeological evaluation is recommended” (see Appendix J, page J-200).

4. **Measures to Minimize Harm / Mitigate Potential Impacts**

**Delaware and Bound Brook Railroad Historic District**

In order to minimize impacts related to construction activities, it is recommended that trees are felled away from the railroad tracks, construction activities take place when the railroad cars are not operating, and any damage done as a result of construction activities is repaired.

**First Presbyterian Church, Ewing Cemetery**

In order to minimize impacts it is recommended that construction activities take place winter months when the ground is dry or frozen, limiting construction vehicle access to existing paved roadways, and repairing any damage done as a result of construction activities.

**Archeologically Sensitive Areas**

An avoidance plan was prepared as part of the EA to avoid impacts to archeological resources. The avoidance plan is designed for the short and long term protection of archeologically sensitive sites and includes the following:

- If ground disturbing activities are expected to take place on the state-owned parcel (Block 423 Lot 18), Stage 1B testing will be conducted after the County acquires the property in fee simple.
- If for any reason project recommendations were to change and ground disturbing activities were to take place near the masonry remnant in Survey Area 1 and Survey Areas 6, 7, and 8 a Phase II Archeological Survey would be conducted and further coordination with NJ HPO would take place.
- The masonry remnant in Survey Area 1 and structural remains and three specimen trees in Survey Area 7 will be marked with orange flags in the field by a NJ HPO approved archeologist prior to construction activities taking place.
• Tree removal will be conducted only when the ground is frozen or dry and all visible structural remains will be avoided.
• Only handheld equipment will be used for tree removal within 25 feet of the masonry remnant in Survey Area 1 and within Survey Area 7 and no disturbance will be made to the ground surface during tree removal.
• The trees, brush, and stumps will be cut as close to the ground as practicable, but shall not be to a height of more than three inches above the ground.
• The trees, branches, and brush will be removed from the site area and no grubbing of stumps will be allowed in the archeologically sensitive areas.
• Proper soil erosion and sediment control plans will be utilized and maintained during tree removal.
• The masonry remnant in Survey Area 1 and Survey Areas 6, 7, and 8 will be marked on the approved ALP drawing as “Environmentally Sensitive, Do Not Impact.”

5. Concerns / Comments / Additional Measures Identified During Meeting
Figure 1.7

Sources: Stream location data downloaded from NHDPlus (2010-2011), and a field investigation conducted by Amy S. Greene Environmental Consultants, Inc. in May-June 2015. Pond data digitized from ESRI Imagery Layer. NHP data and Species data from NJDEP (New Jersey Department of Environmental Protection). Vernal Habitat from the NJDEP Bureau of GIS "Species-Based Habitat - Vernal Habitat" dataset.

Methods to Address Obstructions
- Tree Removal - clearing, grubbing & grading
- Tree Removal - clearing, grubbing, grading & replanting
- Tree removal - clearing & leaving stumps in place
- Environmentally Sensitive Areas
- Remove lower utility pole

RUNWAY 6 END AFFECTED PROPERTIES

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<tr>
<th>BLOCK</th>
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Appendix 3

Methods to Address Obstructions

- Tree Removal - clearing, grubbing & grading
- Tree Removal - clearing, grubbing, grading & replanting
- Tree removal - clearing & leaving stumps in place
- Environmentally Sensitive Areas
- Remove lower utility pole

1. Tree Removal - clearing, grubbing & grading
2. Tree Removal - clearing, grubbing, grading & replanting
3. Tree removal - clearing & leaving stumps in place
4. Environmentally Sensitive Areas
5. Remove lower utility pole

Airports: Trenton-Mercer Airport

Project Areas:
- On-Airport Obstructions
- Off-Airport Obstructions

On-Airport Obstructions are shown in ORANGE
Off-Airport Obstructions are shown in BLUE

Legend
- Airport Property Line
- Runway Protection Zone
- Environmentally Sensitive Areas
- Tax Parcels
- Parcel Blocks
- Project Areas
- On-Airport Obstructions
- Off-Airport Obstructions
- Individual Tree Obstruction
- Railroad Obstruction
- Residential Home
- Tree Canopy Obstruction
- Utility Pole
- Obstruction Light

When printed at 22" x 34"
Sources: Stream location data downloaded from: http://www.nj.gov.../Jan. 1972), and a field investigation conducted by Amy S. Greene Environmental Consultants, Inc. in May-June 2015.

Pond data digitized from ESRI Imagery Layer.
NHP data and Species data from NJDEP (New Jersey Department of Environmental Protection). Vernal Habitat from the NJDEP Bureau of GIS "Species-Basel Habitat - Vernal Habitat" dataset.
Figure 4.3

Section 4(f) Resource Impacts

On-Airport Obstructions are shown in ORANGE
Off-Airport Obstructions are shown in BLUE


1 inch = 250 feet

Trenton-Mercer Airport

Project Areas

Historic Districts (Eligible)
Historic Properties (Identified, Eligible, and Listed)
Potential Archeologically Sensitive Areas
Parks and Recreational Areas

Legend

Airport Property Line
Project Study Area
Phase 1B Survey Areas
Parks and Recreational Areas
New Jersey and National Register of Historic Places
Historic Districts (Eligible)
Historic Properties (Identified, Eligible, and Listed)
Project Areas

On-Airport Obstructions*
Off-Airport Obstructions*

Individual Tree Obstruction
Residential Home
Tree Canopy Obstruction
Utility Pole
Obstruction Light

* On-Airport Obstructions are shown in ORANGE
* Off-Airport Obstructions are shown in BLUE

Potential Archeologically Sensitive Areas

* On-Airport Obstructions are shown in ORANGE
* Off-Airport Obstructions are shown in BLUE

A follow up telephone call was held with Mr. Vincent Maresca, NJ HPO, on May 15, 2018. An email request was submitted to NJ HPO on May 10, 2018 to initiate coordination with NJ HPO on Section 4(f) impacts associated with the Proposed RPZ and Obstruction Mitigation Project at Trenton Mercer Airport.

Ms. McKee explained that in addition to the Section 106 coordination, coordination with the NJ HPO is required under Section (f). The purpose of the meeting was to

- discuss the Proposed Project and historic resources that are protected under Section 4(f)
- present impacts to Section 4(f) resources (i.e., historic districts, historic properties, and archeologically sensitive sites)
- discuss the FAA’s intent to make a DeMinimis determination and request concurrence from agencies having jurisdiction over Section 4(f) resources

Mr. Maresca stated that typically the NJ HPO has a 30-day period to comment on requests submitted to their office. Ms. McKee explained the project is under a funding deadline. Mr. Maresca suggested rather than holding a meeting to have the FAA submit the Section 4(f) DeMinimis Report and concurrence request to their office.
May 22, 2018

Ms. Katherine Marcopul
Deputy State Historic Preservation Officer
State of New Jersey
Mail Code 501-04B
Historic Preservation Office
P.O. Box 420
Trenton, NJ 08625-0420

Dear Ms. Marcopul:

The Trenton-Mercer Airport (TTN), in cooperation with the Federal Aviation Administration (FAA), is proposing to undertake a Runway Protection Zone (RPZ) and obstruction mitigation project. The proposed project involves the removal of tree canopy areas and individual trees located on and off airport property, the acquisition of land (i.e., fee simple or avigation easement) to remove residential structures in the RPZ, and the installation of obstruction lights to mark a railroad track. This project will remove critical obstructions in order to enhance the safety of aircraft operations, and is needed in order for TTN to comply with federal standards and grant assurances.

Some of the tree obstructions to the airport are located in a historic district, on historic property, or within archeologically sensitive areas. As historic sites, these areas are afforded protection under Section 4(f) of the U.S. Department of Transportation Act. Section 4(f) of the U.S. Department of Transportation Act requires agencies within the Department of Transportation to make an effort to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It also prohibits the use of a Section 4(f) resources if a feasible and prudent alternative is available, unless the impact is determined to be de minimis.

The impacts of a project may be determined to be de minimis if:

- The use of the Section 4(f) resource, together with any avoidance, minimization, and mitigation, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f);
- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) resource; and
• The official with jurisdiction over the resource, after being informed of the public comments and the FAA’s intent to make the de minimis impact finding, concur in writing that the project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

Based on these requirements, the FAA believes that removal of trees located in a historic district, on historic property, or within archeologically sensitive areas will have de minimis impacts to the activities, features, or attributes of the properties. Enclosed is the Draft Section 4(f) De Minimis Finding document for your review. FAA is seeking your written concurrence to this de minimis determination and acknowledgement of FAA’s intent to issue such finding. If you agree, please sign and date the below statement and return it to the FAA by May 31, 2018 by mail, fax (717-730-2838) or email (susan.mcdonald@faa.gov).

If you have any comments regarding the analyses used to determine the potential effects of the proposed project, or have any questions regarding the project, please contact Susan McDonald at 717-730-2841.

Sincerely,

Lori K. Pagnanelli
Manager

Enclosure

As the official with jurisdiction over Section 106 resources, I hereby concur with the determination that the removal of trees creating obstructions to TTN will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f) of the Department of Transportation Act. I further acknowledge FAA’s intent to issue a de minimis finding under Section 4(f) of the Department of Transportation.

Katherine Marcopul
Deputy State Historic Preservation Officer

Date
May 22, 2018

First Presbyterian Church of Ewing
100 Scotch Road
Ewing, NJ 08628

To Whom It May Concern:

The Trenton-Mercer Airport (TTN), in cooperation with the Federal Aviation Administration (FAA), is proposing to undertake a Runway Protection Zone (RPZ) and obstruction mitigation project. The proposed project involves the removal of tree canopy areas and individual trees located on and off airport property, the acquisition of land (i.e., fee simple or avigation easement) to remove residential structures in the RPZ, and the installation of obstruction lights to mark a railroad track. This project will remove critical obstructions in order to enhance the safety of aircraft operations, and is needed in order for TTN to comply with federal standards and grant assurances.

Some of the tree obstructions to the airport are located on church property. As a historical church, the First Presbyterian Church of Ewing is afforded protection under Section 4(f) of the U.S. Department of Transportation Act. Section 4(f) of the U.S. Department of Transportation Act requires agencies within the Department of Transportation to make an effort to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It also prohibits the use of a Section 4(f) resources if a feasible and prudent alternative is available, unless the impact is determined to be de minimis.

The impacts of a project may be determined to be de minimis if:

- The use of the Section 4(f) resource, together with any avoidance, minimization, and mitigation, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f);

- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) resource; and

- The official with jurisdiction over the resource, after being informed of the public comments and the FAA’s intent to make the de minimis impact finding, concur in writing
that the project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

Based on these requirements, the FAA believes that removal of trees on First Presbyterian Church of Ewing property will have de minimis impacts to the activities, features, or attributes of the property. Enclosed is the Draft Section 4(f) De Minimis Finding document for your review. FAA is seeking your written concurrence to this de minimis determination and acknowledgement of FAA’s intent to issue such finding. If you agree, please sign and date the below statement and return it to the FAA by May 31, 2018 by mail, fax (717-730-2838) or email (susan.mcdonald@faa.gov).

If you have any comments regarding the analyses used to determine the potential effects of the proposed project, or have any questions regarding the project, please contact Susan McDonald at 717-730-2841.

Sincerely,

[Signature]

Manager

Enclosure

As the official with jurisdiction over the First Presbyterian Church of Ewing, I hereby concur with the determination that the removal of trees creating obstructions to TTN will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f) of the Department of Transportation Act. I further acknowledge FAA’s intent to issue a de minimis finding under Section 4(f) of the Department of Transportation.

[Signature]
First Presbyterian Church of Ewing
Authorized Representative

[Signature]
Date

May 17, 2018
May 22, 2018

Mr. Aaron T. Watson
Executive Director
Mercer County Park Commission
640 S. Broad Street
P.O. Box 8068
Trenton, NJ 08650-0068

Dear Mr. Watson:

The Trenton-Mercer Airport (TTN), in cooperation with the Federal Aviation Administration (FAA), is proposing to undertake a Runway Protection Zone (RPZ) and obstruction mitigation project. The proposed project involves the removal of tree canopy areas and individual trees located on and off airport property, the acquisition of land (i.e., fee simple or avigation easement) to remove residential structures in the RPZ, and the installation of obstruction lights to mark a railroad track. This project will remove critical obstructions in order to enhance the safety of aircraft operations, and is needed in order for TTN to comply with federal standards and grant assurances.

Some of the tree obstructions to the airport are located on golf course property and adjacent to the West End Soccer Complex fields (property owned by the County). As publicly owned, public-use parks and recreation lands, the Mountain View Golf Course and West End Soccer Complex are afforded protection under Section 4(f) of the U.S. Department of Transportation Act. Section 4(f) of the U.S. Department of Transportation Act requires agencies within the Department of Transportation to make an effort to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. It also prohibits the use of a Section 4(f) resource if a feasible and prudent alternative is available, unless the impact is determined to be de minimis.

The impacts of a project may be determined to be de minimis if:

- The use of the Section 4(f) resource, together with any avoidance, minimization, and mitigation, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f);

- The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) resource; and
• The official with jurisdiction over the resource, after being informed of the public comments and the FAA's intent to make the *de minimis* impact finding, concur in writing that the project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

Based on these requirements, the FAA believes that removal of trees on the Mountain View Golf Course and West End Soccer Complex properties will have *de minimis* impacts to the activities, features, or attributes of the property. Enclosed is the Draft Section 4(f) *De Minimis Finding* document for your review. FAA is seeking your written concurrence to this *de minimis* determination and acknowledgement of FAA's intent to issue such finding. If you agree, please sign and date the below statement and return it to the FAA by May 31, 2018 by mail, fax (717-730-2838) or email (susan.mcdonald@faa.gov).

If you have any comments, questions, or concerns regarding the analysis used to determine the potential effects of the proposed project, or have any questions regarding the project, please contact Susan McDonald at 717-730-2841.

Sincerely,

Lori K. Pagranelli
Manager

Enclosure

As the official with jurisdiction over the Mountain View Golf Course and West End Soccer Complex properties, I hereby concur with the recommendation of the project proponents that the use and impacts associated with this project along with the identified avoidance, minimization, and mitigation measures, will not adversely affect the activities, features, and attributes that qualify the property for protection under section 4(f).

Mr. Aaron T. Watson, Executive Director
Mercer County Park Commission