Department of Transportation
Federal Aviation Administration
Finding of No Significant Impact

LOCATION

Northeast Philadelphia Airport (PNE)
9800 Ashton Road
Philadelphia, Philadelphia County, PA 19114

INTRODUCTION

This Finding of No Significant Impact (FONSI) sets out the Federal Aviation Administration's (FAA) consideration of environmental and other factors for Airport Layout Plan (ALP) approval, and eligibility for federal funding, for the described proposed action at PNE by the City of Philadelphia, the airport sponsor. The FAA arrived at the determinations and approvals presented in this FONSI by considering public comments and reviewing the Environmental Assessment (EA), "*Corporate Aircraft Hangar and Ancillary Projects," August 2016*. The FAA must comply with the National Environmental Policy Act of 1969 (NEPA) before being able to take the federal actions necessary to allow the proposed action to take place at PNE. In accordance with Title 40, Code of Federal Regulation (CFR) § 1501.3 of the President's Council on Environmental Quality Regulations (CEQ), the implementing federal regulations for the NEPA of 1969, the FAA supervised preparation of the aforementioned EA. The EA was prepared in accordance with the requirements of NEPA as discussed in FAA Orders 5050.4B, *Airport Environmental Handbook*; 1050.1F, *Environmental Impacts: Policies and Procedures;* and the *Airports Desk Reference*.

PROPOSED FEDERAL ACTION

Allow for approval of changes to the PNE Airport Layout Plan (ALP) as related to this project.

PROJECT DESCRIPTON (Refer to Section 2 of the EA)

The proposed project involves the construction of a pre-engineered, metal, general aviation hangar with adjoining buildings on three sides for workshops, offices, and storage space for ground support equipment (GSE). The proposed project would be located on approximately eight acres of undeveloped airport land along Norcom Road by the approach end of Runway 24. The project site consists of Urban-land covered with turf grass and is bordered by trees and shrubs. The area is actively managed and mowed on a regular basis. Land uses adjacent to the project site include a warehouse to the northwest, open space (wooded) to the northeast, the airfield (Runway 6-24) to the southeast, and open space (wooded, stream corridor) to the southwest.

Major elements of the project include:

- Aircraft hangar (± 40,000 square feet)
- Support space (± 15,000 square feet)
- Access roads w/ gates (main entrance and a deliveries entrance)
- Auto parking (±60 spaces)

- Aircraft parking ramp (±80,000 square feet)
- Access taxiways/signage (±900 linear feet, plus optional ±300)
- Aircraft fuel storage/handling (2 x 20,000 gallon above-ground storage tanks)

Ancillary elements of the project include site preparation, utility connections, stormwater management, perimeter/security fencing and lighting. There are no proposed changes to the airfield runways or taxiways, navigational aids, or other airport facilities, except where the proposed access taxiway(s) would connect to existing Taxiway L. The project would be located on approximately eight acres of undeveloped airport property along Norcom Road near the approach end of Runway 24. Once complete, ownership of Chubb's existing hangar and facilities will be transferred to the airport.

BACKGROUND (Refer to Sections 1 and 3 of the EA)
PNE is a general aviation/reliever airport located in the northeast section of the City of Philadelphia. Chubb INA Holdings, Inc. (Chubb) is a long-term tenant at PNE. Currently they occupy a hangar located along the terminal/transient ramp on the south side of the airport. Since 2001, when Chubb first built its current hangar, the Chubb's fleet has increased from two aircraft to three, the aircraft have increased in size to carry more passengers over longer distances, and most maintenance/repairs are now self-performed inside the building. As a result, Chubb's flight department has expanded to the point that nearly every functional area within the building is operating at or above the intended capacity. Outside the building, the hangar door opening faces the transient ramp, which is operated by the fixed-base operator (FBO). Chubb has dedicated space to maneuver to and from the hangar, but they must share the ramp with the FBO. Despite coordination and cooperation between the two entities, there is occasional interference in front of the existing hangar. Directly behind Chubb's hangar, PNE has constructed a maintenance building which includes an access road and a yard for storing equipment. Chubb's hangar is now surrounded on three sides, resulting in no available space for expansion.

PURPOSE AND NEED (Refer to Section 2 of the EA)
The purpose of the project is to accommodate the Chubb's expanded fleet and flight department. The project is needed because the existing hangar is too small to support the current aircraft fleet, the offices and shop areas are no longer sufficient to meet the current or future needs of the flight department, and there is no room to expand.

ALTERNATIVES TO THE PROPOSED PROJECT (Refer to Section 5 of the EA)
Six alternatives to the proposed project, plus the No Action alternative, were considered. The alternatives are described below:

- Alternative 1: Expand the Existing Facility. Under this alternative, Chubb's existing hangar and support facilities would be expanded in the current location. A second hangar bay would be constructed with additional aircraft parking apron, offices, shop space, auto parking, and a second fuel storage tank. This was the first and most desirable option, but no practical site plan or design solution could be achieved within the confined space available. In order to expand the Chubb's existing operational facilities to meet current and future needs, the airport would have to relocate either the airport Administration Building (to the east) or the airport Maintenance Building (to the west) to accommodate

this alternative. This alternative was eliminated from consideration because it is not reasonable or prudent to demolish and replace a building for the purpose of constructing another. Both buildings are essential to airport operations and are situated to provide both airside and landside access. Development impacts on the environment would not be reduced because the displaced building would have to be replaced in-kind using an undeveloped site elsewhere on the airport (instead of one construction project now there would be two). Lastly, demolition and replacement of the displaced building would increase the cost of the project and delay the project schedule.

- Alternative 2: Use a Different Hangar/Facility at PNE. There are no existing hangars or other facilities available at PNE that could reasonably substitute for the proposed project.

- New Construction Alternatives. Under Alternatives 3, 4, and 5, a new corporate hangar/flight department would be constructed on airport property. Using the FAA-approved ALP for PNE, the airport identified three possible locations to construct a new facility to accommodate the project: Sites A, B and C. Given the current limitations and constraints associated with the existing hangar facility, the following minimum requirements were established and used to consider alternate sites for a new facility:

    - Parcel/Lot Size. Sufficient space to accommodate all the major elements of the project, plus an option for future expansion.
    - Airfield Access. Close proximity to runways and taxiways for efficient aircraft movements and uninterrupted flow.
    - Construction Feasibility. Site conditions suitable for development with minimal engineering difficulty or environmental constraints.
    - Privacy/Security. Exclusive use of an isolated location with dedicated access to both airside and landside facilities.

- Alternative 3: New Construction—Site A. Under this alternative, a new corporate hangar/flight department would be constructed in the southeast quadrant of the airport along Taxiway C. This location is part of the potential general aviation development area (±48.1 acres) identified on the current ALP. With Site A, this project would be the first of several future hangars and support facilities that are planned to be constructed as part of a multi-tenant complex. Site A accommodates all the major elements of the project and there is expansion capability. Site A is also located in close proximity to Taxiway C and the conditions are suitable for development. However, given the infield location and surrounding airside and landside infrastructure, it was determined that there is no feasible plan or design solution to provide exclusive use or dedicated access to the project site. In keeping with the planned development depicted on the ALP, the hangar will eventually be surrounded by additional general aviation development. Site A was dismissed because relocating to a future multi-tenant complex does not meet the minimum requirements for privacy/security.

- Alternative 4: New Construction—Site B. Under this alternative, a new corporate hangar/flight department would be constructed in the southwest quadrant of the airport using an undeveloped area along Taxiway F. This location is secluded and offers privacy

that Site A does not. However, the existing site conditions are the least favorable of the alternatives considered. There is currently no landside access to this area or utilities nearby, which means higher infrastructure costs and more construction impacts. In addition, the developable area is limited by a steep decline in terrain towards the wooded area on the south side of the site. There is no feasible site plan or design solution that avoids the need for substantial fill material and a retaining wall to create enough level ground to support the project. Site B was dismissed because this location does not meet the minimum requirements for construction feasibility.

- Alternative 5: New Construction—Site C. Under this alternative, a new corporate hangar/flight department would be constructed on the north side of the airport along Taxiway L. This is the site of the former Flat Spin Restaurant, which is identified on the current ALP for potential general aviation development. The restaurant has been closed for more than 10 years. The building is vacant and would have to be demolished and the site cleared for development. This location offers an established lease parcel with a private access road and exclusive use of the site, and there are no apparent engineering or environmental constraints. Site C may accommodate the major elements of the project. However, the site is confined and the layout would be compact. There is concern that there may not be enough land to accommodate stormwater management, and there is no remaining or adjacent land available for future expansion. Given that Chubb is currently faced with having to relocate, rather than expand, Site C was dismissed because it is very compact and offers no expansion potential.

- Alternative 6: Relocate to a Different Airport. Under this alternative, Chubb would terminate its lease agreement, vacate the existing hangar, and move the flight department to a different airport most likely in New Jersey. Construction and operation of the project would not take place. As a result, PNE would lose a long-standing and valued airport tenant and the airport would lose potential revenue from the future lease agreement. Approximately 25 jobs associated with the flight department would be lost to the area. Alternative 6 is not a reasonable solution because Chubb desires to stay at PNE and there is sufficient space at PNE to accommodate their needs.

- The No-Action Alternative. Under this alternative, no action would be taken by the FAA or the airport to accommodate the Chubb's expanded fleet and flight department. The proposed project would not be approved or implemented; construction and operation of the project would not take place. As a result, the Applicant would have no choice but to relocate to a different airport, as described in Alternative 6.

After careful consideration of all the alternatives, FAA agrees that the proposed project and location is the most practicable and reasonable alternative.

DISCUSSION

The attached EA addresses the effect the proposed actions would have on the human and natural environment. Although not currently planned, the EA considered potential impacts of constructing both taxiways. The following impact categories highlight the analysis provided in the EA.

Assessment (Refer to Section 6 of the EA)

The impacts of the proposed federal action on noise, land use compatibility, social, indirect socioeconomic, air quality, water quality, DOT Section 4(f), historic and archaeological resources, biotic communities, endangered species, wetlands, floodplains, coastal zones, coastal barriers, wild and scenic rivers, prime and unique farmland, energy supply and natural resources, light emissions, solid waste impacts, hazardous materials, environmental justice, and cumulative impacts were evaluated in the EA. The results of these environmental studies are summarized below. It is the FAA's finding that the proposed action will not have any significant environmental impacts.

The proposed project will have no impact on the following resources:

- Climate
- Coastal Resources
- Section 4(f) Resources
- Historic, Architectural, Archeological, and Cultural Resources
- Farmlands
- Land Use
- Natural Resources and Energy Supply
- Compatible Land Use
- Socioeconomics, Environmental Justice, and Children's Health and Safety Risks
- Visual Impacts (including light emissions)
- Water Resources (including wetlands, floodplains, surface waters, ground waters, and wild and scenic rivers)

The below resources may experience minor and/or temporary changes as a result of this project. These minor and/or temporary changes are not considered significant.

Air Quality

The proposed project is located in Philadelphia County, Pennsylvania, which is included in the EPA-designated Philadelphia-Wilmington-Atlantic City (PA-NJ-MD-DE) Non-Attainment Area. This area is designated as marginal non-attainment for the 8-hour ozone standard. Construction activities will have short-term impacts to air quality. Probable impacts on ambient air quality include mobile source emissions from construction vehicles and equipment, and fugitive dust emissions from earthmoving activities. Air emissions were quantified to determine whether construction-related air emissions would equal or exceed *de minimis* thresholds. The analysis was conducted using the *Airport Construction Emissions Inventory Tool (ACEIT)*. The analysis demonstrated that project-related construction emissions would be less than applicable *de minimis* thresholds. Since the day-to-day operations and frequency of aircraft operations is not expected to change as a result of this project, indirect emissions will not appreciatively change. Therefore, no significant air quality impacts would result from construction activities.

Biological

Based on the conceptual site plan, probable impacts to biotic communities would be limited to the loss of approximately 8 acres of Urban land with minimal habitat value and the displacement of common wildlife species (i.e. squirrels, gophers, mice, insects, etc.). Tree clearing would be

minimal and implemented in accordance with City of Philadelphia land development requirements.

Hazardous Materials, Solid Waste, and Pollution Prevention

A Phase I Environmental Site Assessment (ESA) was performed, and the results indicate that the project would not involve a known hazardous waste site or environmentally contaminated property. According to the Phase I ESA, no historical recognized environmental conditions (RECs) or controlled RECs were identified in connection with the site property. There will be temporary increases in solid waste disposal resulting from construction activities. The volume of solid waste from construction activities would be minor. No demolition is required so there would be no large quantities or inordinate amounts of construction debris that would otherwise need disposal.

Noise

The proposed project does not involve a change in airport or runway location, a runway extension, runway strengthening, or any other capacity enhancing elements that would permit operations by larger or noisier jet aircraft. A user is moving from one location at the airport to another, which would have no effect on the type, frequency, or flight paths of aircraft arriving or departing the airport. Forecasted takeoffs and landings at PNE are not expected to increase as a result of the project. Therefore, there would be no change in the airport's noise exposure contours as a result of this project. Temporary noise increases can be expected during construction but these will be short term and are not considered significant.

Visual Effects and Light Emissions

The project site is located on existing airport property, adjacent to an industrial park. There are no residences, designated natural areas, or sensitive receptors within visual range of the project site. Lighting associated with the project will be consistent with the airport environment.

Surface Water/Stormwater

There is always a potential for water quality degradation during construction when topsoil is exposed, thereby making it more susceptible to erosion and possible increased sediment loading on downstream receiving waters. A National Pollution Discharge Elimination System (NPDES) / Pennsylvania Chapter 102 Erosion and Sediment Control permit will be required for construction. This permit also requires a post-construction Stormwater Management Plan. Aside from construction, there are no planned land uses or activities that would increase stormwater pollution concentrations when compared to existing conditions. The airport has a current *State Pollution Discharge Elimination System (SPDES) Permit* for the discharge of storm runoff and a *Spill Prevention Control and Countermeasures (SPCC)* plan. No point source discharge of industrial wastewater to surface waters is anticipated. The SPDES permit and SPCC plan will be amended to reflect construction and operation of the project. Compliance with the airport's SPDES permit, including temporary permits for construction and an approved post-construction Stormwater Management Plan, should ensure potential project-related impacts on water quality standards will not be significant.

Cumulative Impacts

The environmental analysis considered projects completed in the past and planned projects for the next five years. Other than routine maintenance and repair, no new development projects have been undertaken at PNE in the past three years, there are no ongoing projects, and no new development projects proposed to be undertaken in the next five years. The last development project was the expansion of the helicopter assembly facility (formerly Agusta Westland); completed in 2010. According to the latest Airport Capital Improvement Plan (2017-2021), two FAA-funded maintenance and repair projects are programmed:

- Rehabilitation of Runway 6-24
  - 2017 design
  - 2018-2019 construction

- Rehabilitation of Apron Pavements (Agusta, TW-J, H-Hangar, Jet Center aprons)
  - 2020 design
  - 2021 construction

In addition, several other maintenance and repair projects are identified including: three electrical substation replacements, perimeter fence repairs, airfield signage upgrades, and a proposed perimeter sidewalk along Roosevelt Boulevard and Red Lion Road. The cumulative impacts of these projects are not expected to reach or exceed significant thresholds.

PERMITS (Refer to Section 7 of the EA)

The following permits are anticipated:

- A Section F-105 permit of the Philadelphia Building Construction and Occupancy Fire Code for the construction and operation of aviation facilities, including use of the facility for aircraft servicing and repair, and aircraft fueling operations.
- PA Department of Environmental Protection (DEP), 25 PA Code Section 245 permit for the registration, operation and maintenance of fuel storage tanks in the Commonwealth of Pennsylvania.
- National Pollution Discharge Elimination System (NPDES) / Pennsylvania Chapter 102 Erosion and Sediment Control permit is required for construction. The permit also requires a post construction Stormwater Management Plan.
- A general Building Permit from the City of Philadelphia Department of Licenses and Inspections.
- License/permits from the City of Philadelphia, Department of Public Health, Office of Air Management Services, for the installation and operation of different types of equipment including, but not necessarily limited to, the following: gas fired heating and hot water systems, diesel-powered standby generator, fuel storage and handling facilities, and a spray paint booth.
- License/permits from the City of Philadelphia, Water Department (PWD), Industrial Wastewater Unit, for the discharge of industrial wastewater to the City's sanitary sewer system.

MITIGATION (Refer to Section 8 of the EA)
Environmental permit requirements and best management practices notwithstanding, no mitigation measures are required for this project.

PUBLIC INVOLVEMENT (Refer to Section 9 of the EA)
Since the proposed project does not involve a new airport location, a new runway, or a major runway extension, the requirement for "the opportunity for public hearing" of paragraph 49, "Public Hearing", of FAA Order 5050.4B, does not apply. FAA has determined that a public hearing is not appropriate for this action since the proposal does not have substantial environmental controversy. The EA and FONSI will be made available for public review for thirty days.

CONCLUSION AND APPROVAL:
I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101 (a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental requirements. I also find the proposed Federal action will not significantly affect the quality of the human environment or include any conditions requiring consultation pursuant to section 102(2)(c) of NEPA. As a result, FAA will not prepare an EIS for this action.

Recommended: _____ Date: 8/18/16
Susan L. McDonald
Environmental Protection Specialist
Harrisburg ADO

Approved: _____ Date: 8/19/2016
Lori K. Pagnanelli
Manager, Harrisburg ADO

Disapproved: _____ Date: _____
Lori K. Pagnanelli
Manager, Harrisburg ADO

FEDERAL AVIATION ADMINISTRATION

EASTERN REGION
AIRPORTS DIVISION

Short Environmental Assessment Form for AIRPORT DEVELOPMENT PROJECTS

Airport Name: **Northeast Philadelphia Airport** Identifier: **PNE**

Project Title: **Corporate Aircraft Hangar and Ancillary Projects**

This Environmental Assessment becomes a Federal document when evaluated, signed, and dated by the Responsible FAA official.

Responsible FAA Official

8/19/2016
Date

INSTRUCTIONS

THIS FORM IS FOR LIMITED USE ON SPECIFIC TYPES OF PROJECTS. AIRPORT SPONSORS MUST CONTACT YOUR LOCAL AIRPORTS DISTRICT OFFICE (ADO) ENVIRONMENTAL PROTECTION SPECIALIST (EPS) BEFORE COMPLETING THIS FORM.

This form was prepared by FAA Eastern Region Airports Division and can only be used for proposed projects in this region.

Introduction: This Short Environmental Assessment (EA), is based upon the guidance in Federal Aviation Administration (FAA) Orders 1050.1F – *Environmental Impacts: Policies and Procedures*, and the *Environmental Desk Reference for Airport Actions* and 5050.4B – *NEPA Implementing Instructions for Airport Actions.* These orders incorporate the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act (NEPA), as well as US Department of Transportation environmental regulations, and other applicable federal statutes and regulations designed to protect the Nation's natural, historic, cultural, and archeological resources. The information provided by sponsors, with potential assistance from consultants, through the use of this form enables the FAA ADO offices to evaluate compliance with NEPA and the applicable special purpose laws.

Use: For situations in which this form may be considered, refer to the APPLICABILITY Section below. The local ADO has the final determination in the applicability of this form to a proposed Federal Action. Proper completion of the Form will allow the FAA to determine whether the proposed airport development project can be processed with a short EA, or whether a more detailed EA or EIS must be prepared. **If you have any questions on whether use of this form is appropriate for your project, or what information to provide, we recommend that you contact the environmental specialist in your local ADO.**

This Form is to be used in conjunction with applicable Orders, laws, and guidance documents, and in consultation with the appropriate resource agencies. Sponsors and their consultants should review the requirements of special purpose laws (See 5050.4B, Table 1-1 for a summary of applicable laws). Sufficient documentation is necessary to enable the FAA to assure compliance with all applicable environmental requirements. Accordingly, any required consultations, findings or determinations by federal and state agencies, or tribal governments, are to be coordinated, and completed if necessary, prior to submitting this form to FAA for review. Coordination with Tribal governments must be conducted through the FAA. We encourage sponsors to begin coordination with these entities as early as possible to provide for sufficient review time. Complete information will help FAA expedite its review. This Form meets the intent of a short EA while satisfying the regulatory requirements of NEPA for an EA. Use of this form acknowledges that all procedural requirements of NEPA or relevant special purpose laws still apply and that this form does not provide a means for circumvention of these requirements.

Submittal: When using this form for an airport project requesting *discretionary funding*, the documentation must be submitted to the local ADO by April 30th of the fiscal year preceding the fiscal year in which funding will be requested. When using this form for an airport project requesting *entitlement funding*, the documentation must be submitted to the local ADO by November 30th of the fiscal year in which the funding will be requested.

Availability: *An electronic version of this Short Form EA is available on-line at http://www.faa.gov/airports/eastern/environmental/media/short-form-ea-final.docx. Other sources of environmental information including guidance and regulatory documents are available on-line at http://www.faa.gov/airports_airtraffic/airports/environmental.*

APPLICABILITY

Local ADO EPSs make the final determinations for the applicability of this form. If you have questions as to whether the use of this form is appropriate for your project, contact your local EPS BEFORE using this form. Airport sponsors can consider the use of this form if the proposed project meets either Criteria 1 or Criteria 2, 3, and 4 collectively as follows:

1) It is normally categorically excluded (see paragraphs 5-6.1 through 5-6.6 in FAA Order 1050.1F) but, in this instance, involves at least one, but no more than two, extraordinary circumstance(s) that may significantly impact the human environment (see paragraph 5-2 in 1050.1F and the applicable resource chapter in the 1050.1F Desk reference).

2) The action is one that is not specifically listed as categorically excluded or normally requires an EA at a minimum (see paragraph 506 in FAA Order 5050.4B).

3) The proposed project and all connected actions must be comprised of Federal Airports Program actions, including:

(a) Approval of a project on an Airport Layout Plan (ALP),
(b) Approval of Airport Improvement Program (AIP) funding for airport development,
(c) Requests for conveyance of government land,
(d) Approval of release of airport land, or
(e) Approval of the use of Passenger Facility Charges (PFC).

4) The proposed project is not expected to have impacts to more than two of the resource categories defined in the 1050.1F Desk Reference.

This form cannot be used when any of the following circumstances apply:

1) The proposed action, including all connected actions, requires coordination with or approval by an FAA Line of Business of Staff Office other than the Airports Division. Examples include, but are not limited to, changes to runway thresholds, changes to flight procedures, changes to NAVAIDs, review by Regional Counsel, etc.

2) The proposed action, including all connected actions, requires coordination with another Federal Agency outside of the FAA.

3) The proposed action will likely result in the need to issue a Record of Decision.

4) The proposed action requires a construction period exceeding 3 years.

5) The proposed action involves substantial public controversy on environmental grounds.

6) The proposed project would have impacts to, or require mitigation to offset the impacts to more than two resources[1] as defined in the 1050.1F Desk Reference.

7) The proposed project would involve any of the following analyses or documentation:
    a. The development of a Section 4(f) Report for coordination with the Department of the Interior,
    b. The use of any Native American lands or areas of religious or cultural significance,
    c. The project emissions exceed any applicable *de minimis* thresholds for criteria pollutants under the National Ambient Air Quality Standards, or
    d. The project would require noise modeling with AEDT 2b (or current version).

If a project is initiated using this form and any of the preceding circumstances are found to apply, the development of this form must be terminated and a standard Environmental Assessment or Environmental Impact Statement (if applicable) must be prepared.

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[1] A resource is any one of the following: Air Quality; Biological Resources (including Threatened and Endangered Species); Climate; Coastal Resources; Section 4(f); Farmlands; Hazardous Materials, Solid Waste, and Pollution Prevention; Historical, Architectural, Archaeological, and Cultural Resources; Land Use; Natural Resources and Energy Supply; Noise and Noise-Compatible Land Use; Scoioeconomics; Environmental Justice; Children's Environmental Health and Safety Risks; Visual Effects; Wetlands; Floodplains; Surface Waters; Groundwater; Wild and Scenic Rivers; and Cumulative Impacts.

Complete the following information:

Project Location
Airport Name: Northeast Philadelphia Airport Identifier: PNE
Airport Address: 9800 Ashton Road
City: Philadelphia County: Philadelphia State: PA Zip: 19114

Airport Sponsor Information
Point of Contact: Raymond Scheinfeld
Address: Philadelphia International Airport, Division of Aviation
International Plaza 1, Suite 100
City: Philadelphia State: PA Zip: 19113
Telephone: 215-906-7604 Fax:
Email: Raymond.Scheinfeld@phl.org

Evaluation Form Preparer Information
Point of Contact: Bryan Oscarson
Company (if not the sponsor): AECOM
Address: 1700 Market Street, Suite 1600
City: Philadelphia State: PA Zip: 19103
Telephone: 215-399-4333 Fax: 215-399-4350
Email: bryan.oscarson@aecom.com

1. Introduction/Background:

Chubb INA Holdings Inc. ("the Applicant") is proposing to construct a corporate aircraft hangar/flight department at the Northeast Philadelphia Airport ("PNE" or "the airport") in Philadelphia County, Pennsylvania (see Figure 1: Project Location Map (USGS Quadrangle). The airport is owned and operated by the City of Philadelphia, Division of Aviation (or "the DOA"). The Applicant has been a tenant at PNE since 2001 and their current hangar is located along the terminal/transient ramp on the south side of the airport. The aircraft fleet consists of three business jets that vary in size and provide transcontinental to intercontinental range. The existing hangar facility includes support space for flight operations, aircraft maintenance, and administrative functions. The ground lease includes auto parking and an aircraft fuel storage tank.

2. Project Description (List and clearly describe **ALL** components of project proposal including all connected actions). **Attach a map or drawing of the area with the location(s) of the proposed action(s) identified:**

The proposed corporate aircraft hangar is a pre-engineered metal building (PEMB) with an adjoining building on three sides for workshops, offices, and storage space for ground support equipment (GSE). The project site is ±8 acres of undeveloped airport property located along Norcom Road near the approach end of Runway 24 (see Figure 2: Proposed Site Plan).

Major elements of the project include:

- Aircraft hangar (± 40,000 square feet)
- Support space (± 15,000 square feet)
- Access roads w/ gates (main entrance and a deliveries entrance)
- Auto parking (±60 spaces)
- Aircraft parking ramp (±80,000 square feet)
- Access taxiways/signage (±900 linear feet, plus optional ±300)
- Aircraft fuel storage/handling (2 x 20,000 gallon tanks)[2]

Ancillary elements of the project include site preparation, utility connections, stormwater management, perimeter/security fencing and lighting. There are no proposed changes to the airfield runways or taxiways, navigational aids, or other airport facilities, except where the proposed access taxiway(s) would connect to existing Taxiway L.

The project is being developed under a design-build contract using a fast-track schedule to start construction before the design is finished. Planning, engineering and design is scheduled to be complete by November 2016. The tentative occupancy date is September 2017.

Ownership of the Applicant's existing hangar and ancillary facilities would be transferred to the DOA. This includes the hangar, adjunct offices and shop space, auto parking, and one aircraft fuel storage tank. There is no plan or proposal at this time to reuse the existing hangar, although several existing airport tenants have expressed interest in leasing the facility when it becomes available.

3. Project Purpose and Need:

The purpose of the project is to accommodate the Applicant's expanded fleet and flight department. The project is needed because the existing hangar is too small to support the current aircraft fleet, the offices and shop areas are no longer sufficient to meet the current or future needs of the flight department, and there is no room to expand.

Since 2001, when the Applicant built the current hangar, the fleet has increased from two aircraft to three, the aircraft have increased in size to carry more passengers over longer distances, and most maintenance and repair activities are now self-performed inside the building. As a result, the flight department has expanded over time and nearly every functional area within the building is operating at or above the intended capacity. Outside the building, the hangar door opening faces the transient ramp, which is operated by the fixed-base operator (FBO). The Applicant has dedicated space to maneuver to and from the hangar but having to share the ramp with the FBO requires coordination and cooperation, and still there is occasional interference in front of the existing hangar. Also, the DOA constructed a maintenance building directly behind the hangar including an access road and a yard for storing equipment. The Applicant's hangar is now surrounded on three sides and there is no space available to expand the building or the site.

[2] The fuel storage/handling system would include two horizontal double-wall skid mounted above-ground storage tanks (ASTs) connected to a single refueling cabinet. Aircraft would be refueled outside on the aircraft parking apron within range of the cabinet dispenser (no underground pipes or hydrants are proposed). See Section 7 for information regarding applicable permits for ASTs. Note: The purpose for the second fuel tank is to save money on fuel costs whenever possible. When jet fuel is available at a lower price, the added storage capacity allows for the purchase of fuel in excess of that immediately required for flight operations, thus avoiding having to purchase fuel at higher prices because the reserves are low.

4. Describe the affected environment (existing conditions) and land use in the vicinity of project:

PNE is a busy general aviation/reliever airport located in the northeast section of the City of Philadelphia. The surrounding population is between 300,000 to 450,000 depending on how the area is defined. Major roadways in the vicinity of the airport include Grant Avenue, Academy Road, Roosevelt Boulevard, and Woodhaven Road. The surrounding area is dominated by residential development with light industrial and commercial uses along the major roadways. See Figure 3.

The project site is a vacant lot located on existing airport property between Norcom Road and the approach end of Runway 24. The project site consists of Urban-land covered with turf grass and is bordered by trees and shrubs. The area is actively managed and mowed on a regular basis; the habitat value is low. No water resources or other environmentally-sensitive features are present. Land uses adjacent to the project site include a warehouse to the northwest, open space (wooded) to the northeast, the airfield (Runway 6-24) to the southeast, and open space (wooded, stream corridor) to the southwest.

5. Alternatives to the Project: Describe any other reasonable actions that may feasibly substitute for the proposed project, and include a description of the "No Action" alternative. If there are no feasible or reasonable alternatives to the proposed project, explain why (attach alternatives drawings as applicable)**:**

The following alternatives were considered:

- Alternative 1: Expand the Existing Facility. Under this alternative, the Applicant's existing hangar and support facilities would be expanded in the current location. A second hangar bay would be constructed with additional aircraft parking apron, offices, shop space, auto parking, and a second fuel storage tank. This was the first and most desirable option, but no practical site plan or design solution could be achieved within the confined space available. In order to expand the Applicant's existing operational facilities to meet current and future needs, the DOA would have to relocate either the airport Administration Building (to the east) or the airport Maintenance Building (to the west) to accommodate this alternative.

  It is neither reasonable nor prudent to demolish and replace either building for the purpose of the proposed project. First, these buildings are essential to airport operations and, as such, they are uniquely situated to provide both airside and landside access. Second, development impacts on the environment would not be reduced because the displaced building/facilities would have to be replaced in-kind using an undeveloped site elsewhere on the airport (instead of one construction project now there would be two). Third, demolition and replacement of the displaced building would increase the cost of the project and delay the project schedule. On this basis, Alternative 1 is not a reasonable solution.

- Alternative 2: Use a Different Hangar/Facility at PNE. There are no existing hangars or other facilities available at PNE that could reasonably substitute for the proposed project.

Using the FAA-approved Airport Layout Plan (ALP) for PNE, the DOA identified three possible locations to construct a new facility to accommodate the project—Sites A, B and C. Given the current limitations and constraints associated with the existing hangar facility, the following minimum requirements were established and used to consider alternate sites for a new facility:

- Parcel/Lot Size. Sufficient space to accommodate all the major elements of the project as described in Section 2, plus an option for future expansion.[3]
- Airfield Access. Close proximity to runways and taxiways for efficient aircraft movements and uninterrupted flow.
- Construction Feasibility. Site conditions suitable for development with minimal engineering difficulty or environmental constraints.
- Privacy/Security. Exclusive use of an isolated location with dedicated access to both airside and landside facilities.

- Alternative 3: New Construction—Site A. Under this alternative, a new corporate hangar/flight department would be constructed in the southeast quadrant of the airport along TW-C. See Figure 3. This location is part of the Potential GA Development Area (±48.1 acres) identified on the current ALP (not shown). With Site A, this project would be the first of several future hangars and support facilities that are planned to be constructed as part of a multi-tenant complex.

  Test fit analysis indicates Site A accommodates all the major elements of the project and there is expansion capability. Site A is also located in close proximity to TW-C and the conditions are suitable for development. However, given the infield location and surrounding airside and landside infrastructure, it was determined that there is no feasible plan or design solution to provide exclusive use or dedicated access to the project site. In keeping with the ALP, the hangar will eventually be surrounded by additional GA development. Site A was dismissed because relocating to a future multi-tenant complex does not meet the minimum requirements for privacy/security.

- Alternative 4: New Construction—Site B. Under this alternative, a new corporate hangar/flight department would be constructed in the southwest quadrant of the airport using an undeveloped area along TW-F. See Figure 3. This location is secluded and offers privacy that Site A does not. However, the existing site conditions are the least favorable of the alternatives considered.

  There is currently no landside access to this area or utilities nearby, which means higher infrastructure costs and more construction impacts. In addition, the developable area is limited by a steep decline in terrain towards the wooded area on the south side of the site. Test fit analysis indicates that there is no feasible site plan or design solution that avoids the need for substantial fill material and a retaining wall to create enough level ground to support the project. Site B was dismissed because this location does not meet the minimum requirements for construction feasibility.

- Alternative 5: New Construction—Site C. Under this alternative, a new corporate hangar/flight department would be constructed on the north side of the airport along TW-L. See Figure 3. This is the site of the former Flat Spin Restaurant, which is identified on the current ALP for Potential GA Development (±5.3 acres, not shown). The restaurant has been closed for more than 10 years. The building is vacant and would have to be demolished and the site cleared for development. This location offers an established lease parcel with a private access road and exclusive use of the site, and there are no apparent engineering or environmental constraints.

[3] The proposed project includes all the facilities required to meet the Applicant's current and foreseeable needs plus a reasonable allowance for unanticipated growth. There is no plan or proposal for additional aircraft or facilities. However, as a precautionary measure, the Applicant is requesting a right-of-first refusal to lease adjacent airport property for future expansion, if necessary.

Test fit analysis indicates that Site C may accommodate the major elements of the project. However, the site is confined, the layout would be compact, there may not be enough land to accommodate stormwater management, and there is no remaining or adjacent land available for future expansion. Given that the Applicant is currently faced with having to relocate, rather than expand, Site C was dismissed because it would not be prudent to select a new location that is already a tight fit and offers no expansion potential.

The Applicant has considered other airport opportunities and subsequently indicated their preference to remain at PNE *provided the Division of Aviation is able to accommodate the expanded fleet and flight department.*

- Alternative 6: Relocate to a Different Airport[4]. Under this alternative, the proposal would be withdrawn. The Applicant would terminate its lease agreement, vacate the existing hangar, and move the flight department to a different airport most likely in New Jersey. Construction and operation of the project would not take place, and the project-induced environmental consequences (as described in Section 6 of this EA) would not occur. As a result, PNE would lose a long-standing and valued airport tenant, the Division of Aviation would lose potential revenue from the future lease agreement, and Philadelphia would lose approximately 25 jobs associated with the flight department. Alternative 6 is not a reasonable solution because the Division of Aviation would not be able to accommodate the Applicant's expanded fleet and flight department "at PNE."

Finally, the No-Action Alternative is described below:

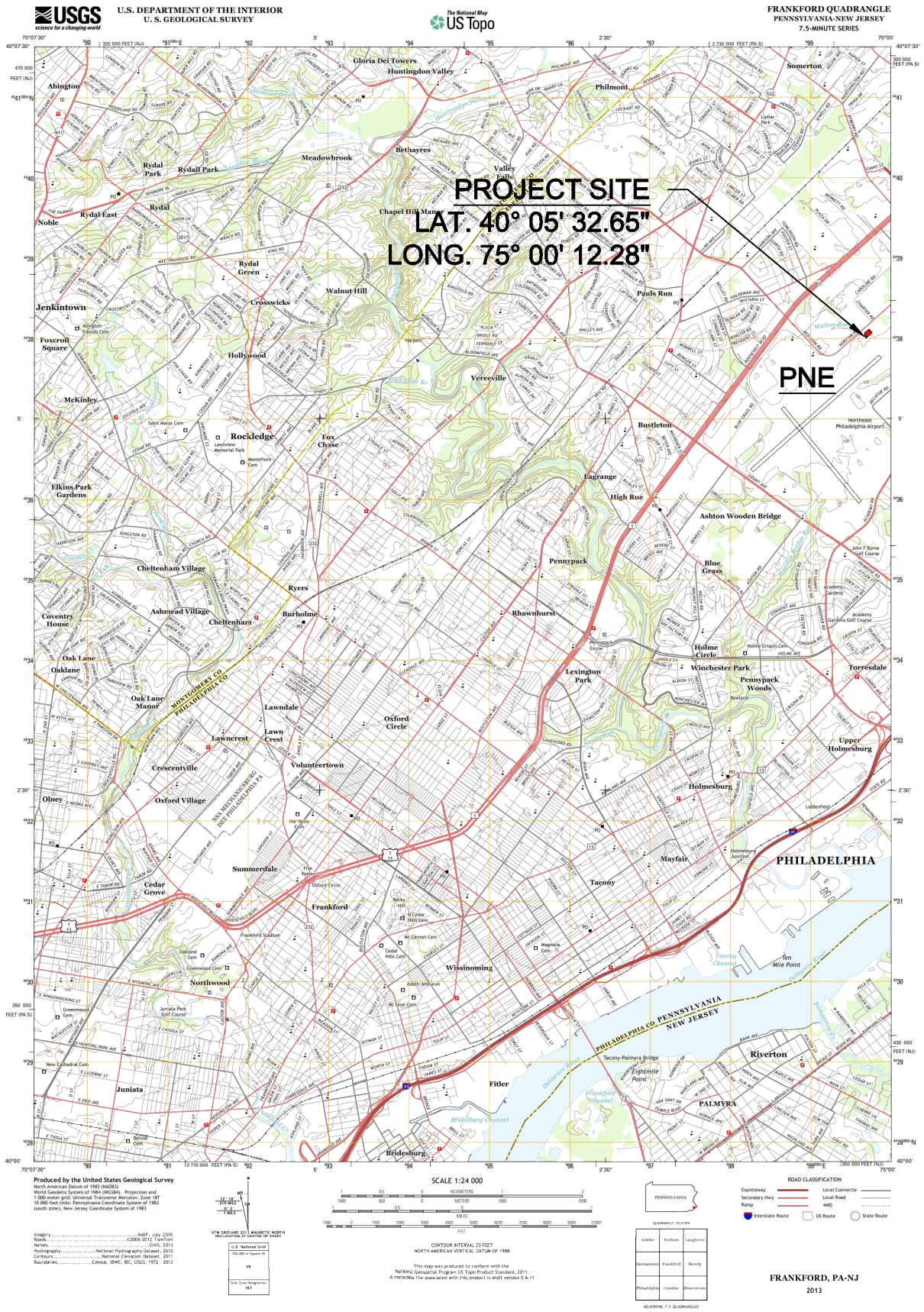
- The No-Action Alternative. Under this alternative, no action would be taken by the FAA or the Division of Aviation to accommodate the Applicant's expanded fleet and flight department. The proposed project would not be approved or implemented, construction and operation of the project would not take place, and the project-induced environmental consequences (as described in Section 6 of this EA) would not occur. As a result, the Applicant would have no choice but to relocate to a different airport, as described in Alternative 6 above.

For comparison, implementation of the proposed project allows the Division of Aviation to accommodate the Applicant's expanded fleet and flight department at PNE. The problems and deficiencies associated with the current facility would be resolved by constructing a larger facility in a different location that is better suited to meet the current and future needs of the Applicant. In addition, the proposed project site is the only location that meets all four minimum requirements for a build alternative:

- Parcel/Lot Size. The project site offers sufficient space to accommodate all the major elements of the project plus an option for future expansion.
- Airfield Access. The project site is located in close proximity to the airfield and it provides efficient aircraft movements and uninterrupted flow.
- Construction Feasibility. The project site conditions are suitable for development with minimal engineering difficulty and no known environmental constraints.
- Security/Privacy. The project site offers exclusive use of a remote location with dedicated access to both airside and landside facilities.

No other alternatives were identified that could reasonably substitute for the proposed project.

[4] This alternative is outside the jurisdiction of the Division of Aviation because it would occur "off-airport."



N

6,000' 3,000' 0 6,000'

GRAPHIC SCALE

Figure 1
USGS 7.5 Minute Quadrangle Map

AECOM

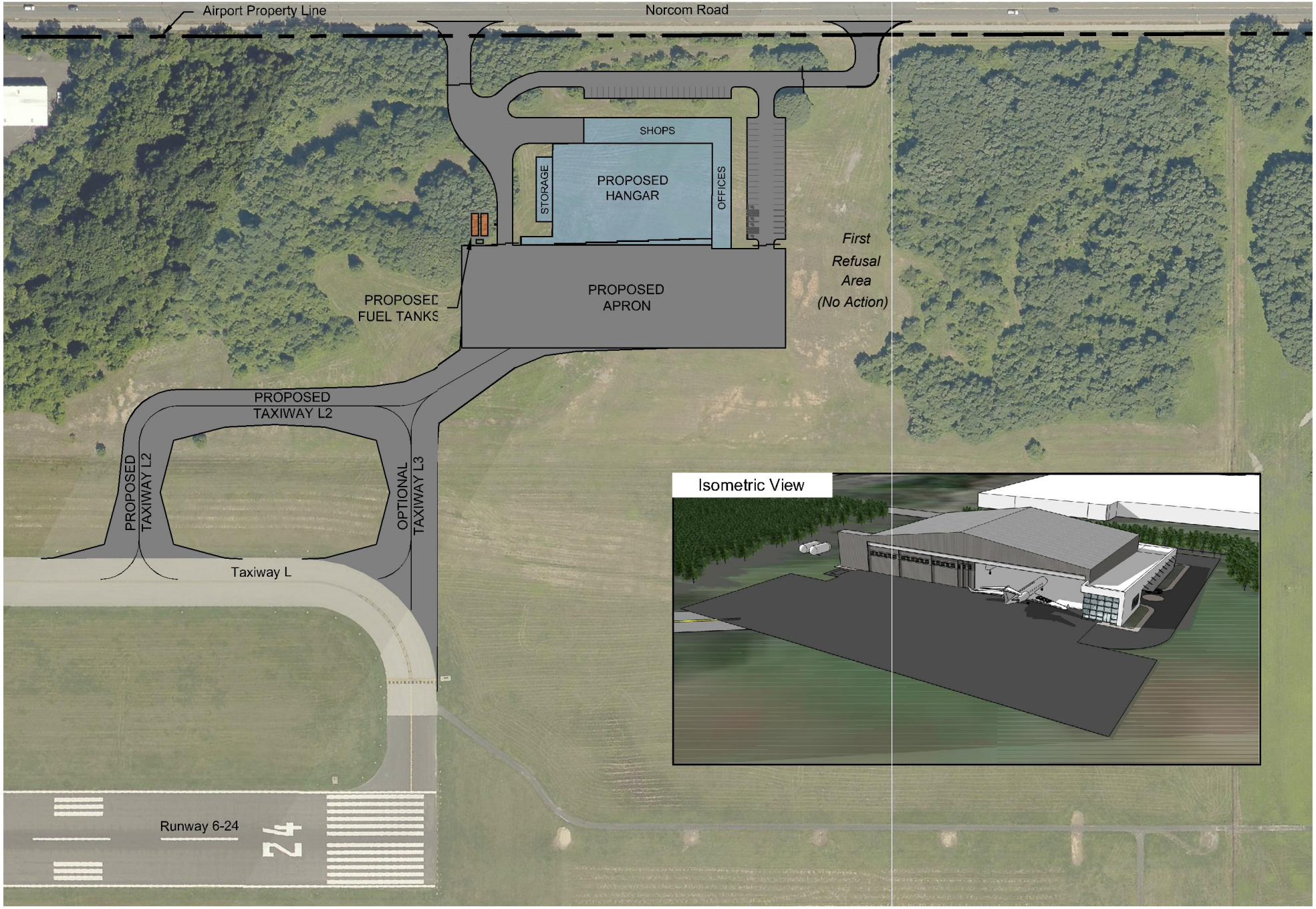


Figure 2
Proposed Site Plan

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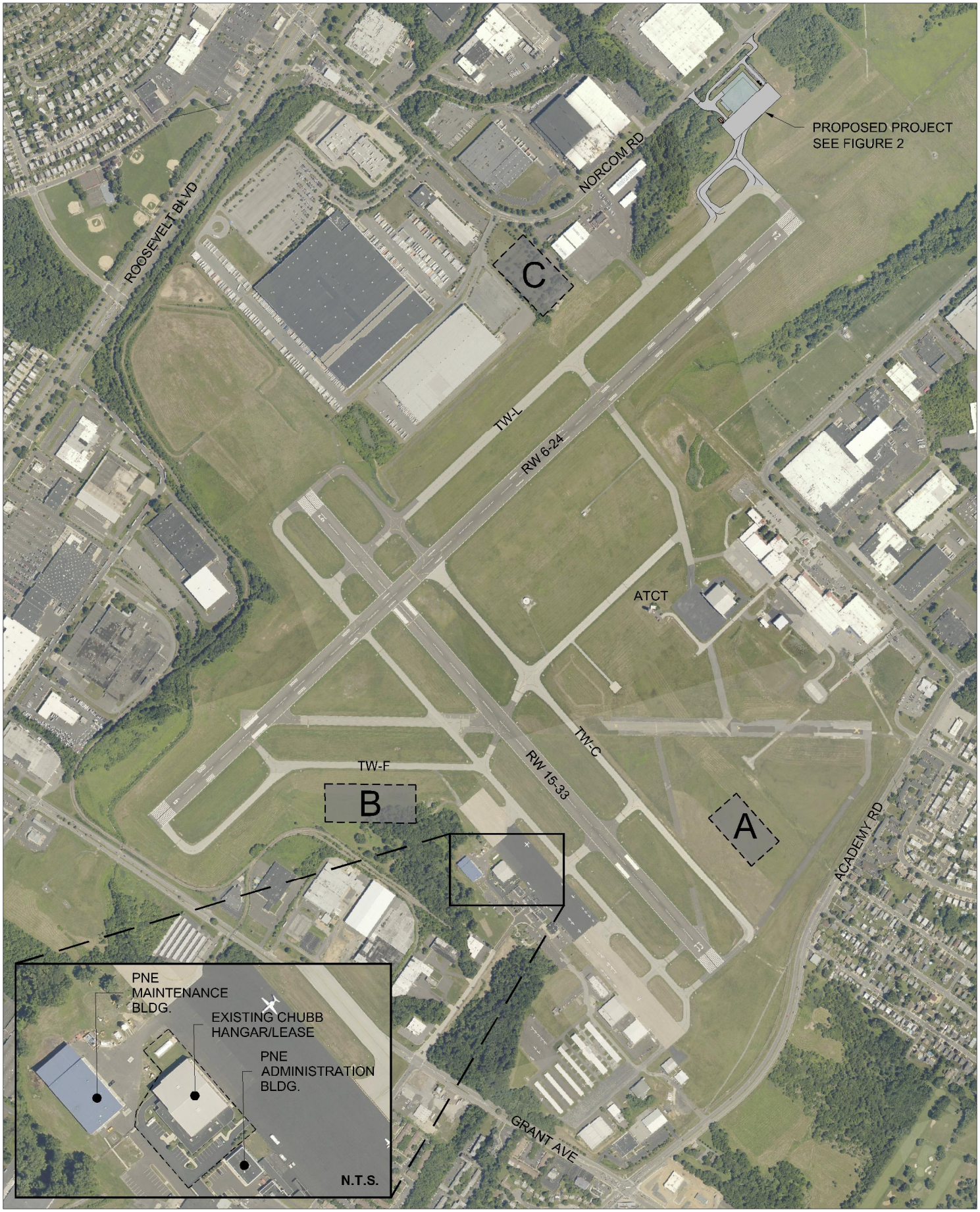

Figure 3
Airport Environs And Alternatives

AECOM

6. Environmental Consequences – Special Impact Categories (refer to the Instructions page and corresponding sections in 1050.1F, the 1050.1F Desk Reference, and the Desk Reference for Airports Actions for more information and direction. Note that when the 1050.1F Desk Reference and Desk Reference for Airports Actions provide conflicting guidance, the 1050.1F Desk Reference takes precedence. The analysis under each section must comply with the requirements and significance thresholds as described in the Desk Reference).

(A) AIR QUALITY

(1) Will the proposed project(s) cause or create a reasonably foreseeable emission increase? Prepare an air quality assessment and disclose the results. Discuss the applicable regulatory criterion and/or thresholds that will be applied to the results, the specific methodologies, data sources and assumptions used; including the supporting documentation and consultation with federal, state, tribal, or local air quality agencies.

A variety of air pollution sources are associated with aviation, in general, and at airports, in particular. *Mobile sources* include aircraft, auxiliary power units (APUs), ground support equipment (GSE), and motor vehicles traveling on and off the roadways. Typical *stationary/area* sources include heaters, generators, fuel storage tanks, de-icing and anti-icing operations, and paint facilities. Air quality analysis and assessment predicts the additional emissions that a project would cause and examines the effect of the emissions on the air environment. For the purposes of this analysis, project-related air emissions are divided into two categories: *direct emissions* are associated with the (short-term) construction of the project, while *indirect emissions* are associated with the (long term) operation of the project.

Construction Phase (Direct) Emissions. Probable impacts on ambient air quality include mobile source emissions from construction vehicles and equipment, and fugitive dust emissions from earthmoving activities. Construction-induced air emissions cannot be avoided but they can be minimized to help reduce the temporary adverse effects on air quality, if necessary.

Air emissions were quantified to determine whether construction-related air emissions would equal or exceed established screening emissions rates known as *de minimis* thresholds. The analysis was conducted using the *Airport Construction Emissions Inventory Tool (ACEIT)*.[5] ACEIT facilitates modeling of airport construction emission scenarios based on the project's construction plan.[6]

A Level 1 assessment was performed using input data that reflects the project type, size, location, and timing. The data used represents construction activities associated with the various sub-projects (hangar, taxilane, apron, parking lot, access road, lighting, markings, etc.). The results of the assessment are listed in the emissions inventory presented in Attachment A and summarized in the table below. The assessment demonstrates that project-related construction emissions

[5] Guidance for Estimating Airport Construction Emissions, prepared by the Transportation Research Board, Airport Cooperative Research Program, Report 102 (2014). The guidebook (including the companion ACEIT software) is intended to be used for airport construction emissions calculations, General Conformity assessments, and NEPA compliance.

[6] Using input data derived from the project's construction plan, ACEIT applies default emissions factors derived from EPA-approved emissions models for non-road construction equipment and for on-road vehicles.

would be less than applicable *de minimis* thresholds. Therefore, it can be concluded that no significant air quality impacts would result from construction activities. No mitigation measures are proposed.

Construction Emissions Inventory Results

Pollutant	Annual Emissions (tons/year)	NAAQS Threshold (tons/year)	*de minimis*
Ozone (NO_X)	2.93	100	Yes
Ozone (VOC)	1.88	50	Yes
CO and SO_2	4.41	100	Yes
PM-10	0.37	100	Yes

Operations Phase (Indirect) Emissions. After construction, day-to-day airport operations would not be appreciably different than existing conditions. On the airside, the Applicant would have additional hangar space to perform aircraft maintenance and repairs with more ease and efficiency, but the frequency of aircraft takeoffs and landings is not expected to change with or without the project. The Applicant expects to maintain a three aircraft fleet for the foreseeable future. Existing ground support equipment (GSE) would be transferred to the new facility.

On the landside, traffic activity associated with the hangar would not be appreciably different either. Although the flight department is a busy operation it is a relatively small employer/traffic generator when compared to the industrial complexes nearby. According to PennDOT records for the year 2014 (www.penndot.gov), average annual daily traffic (AADT) volumes on the surrounding roadways range from 14,000 (Academy Road) to 39,000 (Roosevelt Boulevard). The Applicant has approximately 25 employees at PNE. With passengers, visitors, and deliveries, the hangar/flight department generates approximately 100 trips on a busy day, which is not expected to increase as a result of the project. Therefore, it is reasonable to conclude that there would be no discernable change in traffic-induced air emissions with or without the project.[7]

As a condition of development plan/building permit approval, Philadelphia businesses must obtain air pollution permits and/or licenses to install or operate equipment that emits or controls air pollution. As a general rule, a permit to install equipment may be needed if the equipment burns fuel, uses paint or solvent, emits particles outdoors, or is used to control emissions from these sources. These types of stationary sources are *not* unusual for general aviation facilities including a corporate aircraft hangar. Sources of stationary air emissions may include the following:

- *Combustion units for heating and hot water*—A natural gas furnace and hot water heater are indicated for the office, shops, and storage areas, and linear infrared heating is indicated for the hangar. New, high efficiency commercial HVAC systems incorporate a variety of leading edge components designed to provide exceptional comfort and efficiency with reduced energy consumption and lower emissions. No additional control measures are proposed.

[7] Given the relatively low level of projected traffic volumes associated with the project, a traffic operations analysis (TOA) is not anticipated for City of Philadelphia land development plan approval.

- *Internal combustion engines*—A diesel generator for emergency standby power (ESP) may be installed to provide for uninterrupted power supply to the building systems in the event of a utility outage or equipment malfunction. Emissions occur when these generators are activated and/or periodically started for testing and maintenance purposes. However, ESP's normally only run for less than 200 hours per year and thus have a very small impact on the local air quality.

- *Equipment used to store and transfer fuel*—Fuel storage and handling activities represent sources of evaporative emissions. The emissions occur when ozone-producing VOCs, along with toxic air pollutants, are expelled or otherwise escape from the fuel storage tanks during fuel handling and/or quality control procedures. Two storage tanks for Jet-A fuel and one storage tank for diesel fuel (for the standby generator) are indicated for the project. Storage and handling of jet fuel and diesel fuel do not produce significant emissions because these fuels have a relatively low vapor pressure and the emissions remain well confined within the containment vessels and the distribution system. For higher-emitting tanks, such as those used to store aviation gasoline (AvGas) or motor gasoline, pressure vacuum vents are employed when it is desirable to reduce evaporation of tank contents into the atmosphere. These devices are normally not necessary for tanks used to store Jet A or diesel fuel.

- *Spray paint booth*—A spray booth may be installed for coating aircraft components. Spray booths emit solvent vapors (VOCs) through the booth exhaust stack and depending on the pollutant levels may require the use of exhaust air treatment equipment. If installed, the paint booth would be used only occasionally and for smaller parts capable of fitting inside the booth (the booth would not be large enough to accommodate an aircraft, fuselage, or other large components).

In Philadelphia, air quality permits for equipment installation are issued by Air Management Services (AMS), a unit in the Department of Public Health. See also Section 7. These permits must be issued before the equipment is installed. No difficulties are expected in obtaining the applicable permits. Emissions from permitted equipment and/or activities do not cause or contribute to a significant deterioration of air quality. No mitigation measures are proposed.

Implementation of the Proposed Action would result in no emissions increase or an increase that is clearly *de minimis;* whereas, the No-Action Alternative would result in no emissions increase.

(2) Are there any project components containing unusual circumstances, such as emissions sources in close proximity to areas where the public has access or other considerations that may warrant further analysis? If no, proceed to (c); if yes, an analysis of ambient pollutant concentrations may be necessary. Contact your local ADO regarding how to proceed with the analysis.

No. The project would be a private facility situated in a remote location at PNE. There would be no public areas or public access to the project site. The sources and types of emissions associated with this project are *not* unusual for airports or general aviation facilities.

(3) Is the proposed project(s) located in a nonattainment or maintenance area for the National Ambient Air Quality Standards (NAAQS) established under the Clean Air Act?

Yes. The proposed project is located in Philadelphia County, Pennsylvania, which is included in the EPA-designated Philadelphia-Wilmington-Atlantic City (PA-NJ-MD-DE) Non-Attainment Area. This area is designated as marginal non-attainment for the 8-hour ozone standard.

4) Are all components of the proposed project, including all connected actions, listed as exempt or presumed to conform (See FRN, vol.72 no. 145, pg. 41565)? If yes, cite exemption and go to (B) Biological Resources. If no, go to (e).

No. The proposed project is not an exempted action under the General Conformity Rule nor is it Presumed to Conform.

(5) Would the net emissions from the project result in exceedances of the applicable *de minimis* threshold (reference 1050.1F Desk Reference and the *Aviation Emissions and Air Quality Handbook* for guidance) of the criteria pollutant for which the county is in non-attainment or maintenance? If no, go to (B) Biological Resources. If yes, stop development of this form and prepare a standard Environmental Assessment.

No. Net emissions from the project would not exceed thresholds established by the EPA for the criteria pollutants. Therefore, it can be concluded that the Proposed Action conforms to the Pennsylvania State Implementation Plan (SIP) and the Clean Air Act. According to FAA guidance, agency consultation is not required for *de minimis* projects. No mitigation measures are proposed and no further analysis is recommended for Clean Air Act or NEPA purposes.

(B) BIOLOGICAL RESOURCES

Describe the potential of the proposed project to directly or indirectly impact fish, wildlife, and plant communities and/or the displacement of wildlife. Be sure to identify any state or federal species of concern (Candidate, Threatened or Endangered).

The project site consists of open meadow with trees and shrubs along the perimeter. The site is located inside the airport's security fence and is actively managed and mowed on a regular basis. No water resources, including wetlands or floodplains, are associated with the project site. As discussed in Section N, the nearest water resource is a well-incised stream channel approximately 300 feet southwest of the site and would not be affected by the project.

1) Are there any candidate, threatened, or endangered species listed in or near the project area?

No. The Pennsylvania Department of Conservation and Natural Resource (DCNR) PA Natural Diversity Inventory (PNDI) database was used as a screening tool to search for any known records of threatened or endangered species in the project area. The PNDI response indicates "no known impact" for state listed species under the jurisdiction of the PA Game Commission, PA Fish and Boat Commission, and the PA DCNR and that "no further coordination is required with jurisdictional agencies." A copy of the PNDI receipt is included in Attachment B. Also, as stated in the receipt, "no impacts to federally-listed or proposed species are anticipated."

(2) Will the action have any long-term or permanent loss of unlisted plants or wildlife species?

Based on a conceptual site plan, probable impacts to biotic communities include the permanent loss of approximately 8 acres of Urban land with limited habitat value and displacement of wildlife. Tree clearing would be minimal and implemented in accordance with City of Philadelphia land development/permit requirements. Impacts to wildlife would be limited to local indigenous/common species of upland plants and animals (i.e., trees, shrubs, grasses, squirrels, gophers, mice, insects, etc.).

(3) Will the action adversely impact any species of concern or their habitat?

No species of special concern have been identified in the project area (*Quigley*, 2012).

(4) Will the action result in substantial loss, reduction, degradation, disturbance, or fragmentation of native species habitats or populations?

Given the urban project setting and a site with low habitat value, the project is not expected to cause or contribute to adverse impacts on native plants or animals.

(5) Will the action have adverse impacts on a species' reproduction rates or mortality rate or ability to sustain population levels?

No adverse impacts are anticipated.

(6) Are there any habitats, classified as critical by the federal or state agency with jurisdiction, impacted by the proposed project?

No federal or state-listed critical habitats are associated with the project site.

(7) Would the proposed project affect species protected under the Migratory Bird Act? (If **Yes**, contact the local ADO).

No. According to Pennsylvania Natural Heritage Program mapping, no "important bird areas" are located on or adjacent to the project site. Given the urban project setting and a site with low habitat value, it is unlikely that the proposed project would have any effect on migratory bird species.

If the answer to any of the above is "Yes", consult with the USWFS and appropriate state agencies and provide all correspondence and documentation.

Not applicable.

(C) CLIMATE

(1) Would the proposed project or alternative(s) result in the increase or decrease of emissions of Greenhouse gases (GHG)? If neither, this should be briefly explained, no further analyses is required, and proceed to (D) Coastal Resources.

There would be a temporary increase of GHG emissions during the construction period. After construction, there would be a permitted increase of GHG emissions from stationary sources identified previously in Section 6(A)(2). There would be no net increase or decrease of GHG emissions resulting from aircraft, vehicles, or ground service equipment operations, as these activities are not expected to change with or without the project.

(2) Will the proposed project or alternative(s) result in a net decrease in GHG emissions (as indicated by quantitative data or proxy measures such as reduction in fuel burn, delay, or flight operations)? A brief statement describing the factual basis for this conclusion is sufficient.

Not applicable.

(3) Will the proposed project or alternative(s) result in an increase in GHG emissions? Emissions should be assessed either qualitatively or quantitatively as described in 1050.1F Desk Reference or Aviation Emissions and Air Quality Handbook.

Yes. Under the Proposed Action, GHG emissions would increase during the construction period. These emissions would be short-term and temporary, diminishing as the project nears completion. GHG emissions (CO2, CH4, and N2O) resulting from construction are included in Appendix A. After construction, there would be a permitted increase in emissions including GHGs from stationary sources associated with the project. There would be no emissions increase from mobile sources including aircraft, vehicles, and ground support equipment. Under the No-Action Alternative, there would be no increase in GHG emissions.

There are currently no federal standards or significance thresholds for aviation-related GHG emissions. However, in July 2016, the EPA finalized a determination under the Clean Air Act that GHG emissions from certain types of aircraft engines contribute to the pollution that causes climate change. GHG pollutants that represent the largest driver of human-caused climate change are carbon dioxide (CO2), methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6), all of which come primarily from engines used on large commercial jets. According to officials, the EPA is not yet issuing proposed emissions standards for aircraft engines. Until then, the FAA has determined that it is not useful to attempt to determine the significance of such impacts.

No large commercial jet operations are associated with the project and no increase in general aviation aircraft operations (fuel burn) would occur at PNE as a result of the project. For the purpose of this evaluation, it is reasonable to conclude that GHG emissions levels associated with temporary construction activities and small stationary sources are so low as to be considered inconsequential. No further analysis is warranted.

(D) COASTAL RESOURCES

(1) Would the proposed project occur in a coastal zone, or affect the use of a coastal resource, as defined by your state's Coastal Zone Management Plan (CZMP)? Explain.

No. Agency resource mapping[8] confirms that PNE is located outside of the Pennsylvania Coastal Zone Boundary. The project would not affect the use of coastal resources.

[8] http://www.depgis.state.pa.us/emappa/

(2) If **Yes**, is the project consistent with the State's CZMP? (If applicable, attach the sponsor's consistency certification and the state's concurrence of that certification).

Not applicable.

(3) Is the location of the proposed project within the Coastal Barrier Resources System? (If **Yes**, and the project would receive federal funding, coordinate with the FWS and attach record of consultation).

No. PNE is not located within the Coastal Barrier Resource System.

(E) SECTION 4(f) RESOURCES

(1) Does the proposed project have an impact on any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or an historic site of national, state, or local significance? Specify if the use will be physical (an actual taking of the property) or constructive (i.e. activities, features, or attributes of the Section 4 (f) property are substantially impaired.) If the answer is "No," proceed to (F) Farmlands.

No. The proposed project is located on existing airport property and would not affect a Section 4(f) resource. According to Pennsylvania Natural Heritage Program mapping, there are no protected lands located on or adjacent to the project site. The nearest mapped resource is a City park (Palmer Recreation Facility). The park is approximately one half mile east and northeast of the project site near the intersection of Comly Road and Thorton Road.

(2) Is a *De Minimis* impact determination recommended? If "yes", please provide; supporting documentation that this impact will not substantially impair or adversely affect the activities, features, or attributes of the Section 4 (f) property; a Section 106 finding of "no adverse effect" if historic properties are involved; any mitigation measures; a letter from the official with jurisdiction concurring with the recommended *de minimis* finding; and proof of public involvement. (See Section 5.3.3 of 1050.1F Desk Reference). If "No," stop development of this form and prepare a standard Environmental Assessment.

Not applicable.

(F) FARMLANDS

Does the project involve acquisition of farmland, or use of farmland, that would be converted to non-agricultural use and is protected by the Federal Farmland Protection Policy Act (FPPA)? (If **Yes**, attach record of coordination with the Natural Resources Conservation Service (NRCS), including form AD-1006.)

No. The project site is not used for farmland nor does the site contain soils used for agriculture. According to the Natural Resources Conservation Service Web Soil Survey mapping, the project site is located on soils classified as Urban land (see Attachment C). The Urban land category indicates a history of past disturbances that have altered the natural soil types, mixing and modifying their original soil properties. Urban land is not classified as prime, unique, state or locally important farmland soil. There would be no impacts to farmlands.

(G) HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

(1) Would the proposed project involve the use of land that may contain hazardous materials or cause potential contamination from hazardous materials? (If Yes, attach record of consultation with appropriate agencies). Explain.

No. A Phase I Environmental Site Assessment (ESA) was performed[9] and the results indicate that the project would not involve a known hazardous waste site or environmentally contaminated property (see Attachment D). According to the Phase I ESA, no historical recognized environmental conditions (RECs) or controlled RECs were identified in connection with the subject property. During the assessment process, three RECs were identified:

- *Due to the historical use of the project site for residential housing, there is potential to encounter abandoned underground storage tanks (USTs) containing heating oil.* Further investigation of the project site using ground penetrating radar indicated no evidence of abandoned USTs.

- *Due to the historical use of fill material of unknown origin, and reports of historically dumped construction debris at the subject property, there is potential to encounter buried debris.* Further investigation of the project site using ground penetrating radar indicated "areas with debris and metal objects but nothing looked like a utility." No other subsurface anomalies were found.

- *Due to historical reports of a leaking underground storage tank and groundwater contamination involving an off-site property, the potential for groundwater contamination involving the subject property cannot be ruled out*. Records indicate remedial activities at the off-site property were performed in 1985 and 1986. Subsequent testing indicated residual contamination, and natural attenuation of groundwater impacts was recommended. The leaking UST case for the off-site property was closed in 1996. The project site is located on topographically high ground. Groundwater is not expected to be encountered during construction activities. No impacts are anticipated and no mitigation measures are proposed.

No hazardous waste sites or soils contamination are known to exist where the construction activities would occur. Further investigation of the project site using ground penetrating radar has alleviated potential issues or concerns (buried debris is more of a construction issue and less of an environmental concern). Geotechnical investigation and testing will be conducted to determine the physical properties of the soils for development. There is no expectation of encountering contaminated soils or groundwater. However, if preliminary engineering or construction-related activities result in the discovery of previously unknown hazardous substances, then the Division of Aviation would be responsible for removing and disposing of contaminated media in accordance with state and local laws and regulations for hazardous waste management.

[9] Phase I Environmental Site Assessment of the Proposed Chubb Aircraft Hangar Site, Northeast Philadelphia Airport, Norcom Road, Philadelphia, Pennsylvania. Prepared by AECOM (June, 2016).

(2) Would the operation and/or construction of the project generate significant amounts of solid waste? If **Yes**, are local disposal facilities capable of handling the additional volumes of waste resulting from the project? Explain.

No. There would be a temporary increase in solid waste disposal requirements during the construction period followed by an incremental increase in solid waste collection resulting from the operation of one new hangar at PNE. The volume of solid waste from construction activities would be minor. No demolition is required so there would be no large quantities or inordinate amounts of construction debris that would otherwise have to be disposed of. The construction contractor would be responsible for using proper disposal methods. After construction, the volume of municipal solid waste (MSW) resulting from the operation of the hangar would also be minor. The Applicant uses a licensed contractor/hauler for regularly scheduled trash pick-ups and the agreement would be changed to reflect the new location. No solid waste impacts are anticipated.

(3) Will the project produce an appreciable different quantity or type of hazardous waste? Will there be any potential impacts that could adversely affect human health or the environment?

The applicant performs aircraft maintenance within the existing hangar in accordance with state/local requirements. Similar activities would be undertaken in the proposed hangar. No changes are anticipated with respect to the ongoing aircraft maintenance program. Therefore, it is reasonable to conclude that there would be no appreciable difference in the type or quantity of waste products when compared to existing conditions. No hazardous waste impacts are anticipated and no mitigation measures are proposed.

(H) HISTORIC, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES

(1) Describe any impact the proposed project might have on any properties listed in, or eligible for inclusion in the National Register of Historic Places. (Include a record of your consultation and response with the State or Tribal Historic Preservation Officer (S/THPO)).

There are no existing buildings or structures located on or adjacent to the project site, and no historic properties have been recorded within visual range of the project site. No impacts to above ground resources are anticipated, as none are present in the vicinity of the proposed undertaking.

In a transmittal letter dated July 18, 2016, a Request to Initiate SHPO Consultation form was submitted to the Pennsylvania Historical and Museum Commission/State Historic Preservation Office (PHMC/SHPO). In addition to the form, the initiation package included a site location map showing the project boundary and the area of potential effect (APE); a description of the project and surrounding area; a site plan showing the locations of buildings near the project area; and current and historical photographs of the project site.

PHMC reviewed the project initiation package and determined that there are "No Historic Properties" within the APE.[10] They did not request any additional information or work, so the project has been cleared of cultural resources concerns. A copy of the project initiation package and PHMC's response is included in Attachment E. No further analysis or consultation is required.

[10] PHMC/SHPO ER Number: 2016-1692-101-A (July 16, 2016).

(2) Describe any impacts to archeological resources as a result of the proposed project. (Include a record of consultation with persons or organizations with relevant expertise, including the S/THPO, if applicable).

Three cultural resources studies have been conducted on and/or adjacent to airport property resulting in two archeological sites having been recorded at PNE—Colbert's Run (36PH0056), a precontact site with jasper and quartz debitage, and Philadelphia Northeast Site 1 (36PH0134), a late nineteenth-, early twentieth-century site. Neither site yielded sufficient data to be evaluated for NRHP eligibility. Both sites are located south of Runway 6-24 and would not be affected by the project.

Historic aerial photography indicates the project site was originally used for farmland. It was then developed for residential housing in the 1950s before being redeveloped for airfield construction in the 1960s. Given the nature and extent of earth disturbance and earthen fill in the project area, the likelihood of encountering intact prehistoric remains is low because the pre-airport soils have been removed. If construction activities such as excavation result in the discovery of historic resources or artifacts, then those construction activities would be suspended until the FAA, in consultation with the DOA and SHPO, determines what actions must be taken to address the potential for adverse effects.

PHMC has determined that there are "No Historic Properties" within the APE. See FN 10.They did not request any additional information or work, so the project has been cleared of cultural resources concerns. A copy of the project initiation package and PHMC's response in included in Attachment E. No further analysis or consultation is recommended.[11]

(I) LAND USE

(1) Would the proposed project result in other (besides noise) impacts that have land use ramifications, such as disruption of communities, relocation of residences or businesses, or impact natural resource areas? Explain.

The project site is located on existing airport property—no land acquisition is proposed. Development of the project site for an aircraft hangar is consistent with aviation-related activity approved for use under the current airport zoning. There would be no change in local land use plans or City zoning ordinances to accommodate the project. No impacts are anticipated.

(2) Would the proposed project be located near or create a wildlife hazard as defined in FAA Advisory Circular 150/5200-33, "Wildlife Hazards On and Near Airports"? Explain.

[11] SHPO consultation was initiated during the planning process using maps and information prepared prior to the preparation of this EA. During the process, the project description was amended to include a 300-foot segment of taxiway that may, or may not, be constructed as part of the project, but it is intended to be covered under this EA for the purpose of ALP approval. Both taxiway segments are depicted in Figure 2 and the impacts addressed in this EA are based on construction of *both* taxiways. The project's construction limit of disturbance has not been determined yet. However, the optional segment of taxiway would be located in the same post-war disturbed soils as the rest of the project, where cultural resource sensitivity has been determined to be low. Therefore, the SHPO's opinion would not be expected to change as a result of the new information.

There are no known wildlife hazards in the vicinity the project site. The project does not involve new facilities or land use practices that would cause or contribute to potentially hazardous wildlife attractants. Stormwater management and facility operations would comply with FAA guidance to avoid or minimize potential hazards.

(2) Include documentation to support sponsor's assurance under 49 U.S.C. § 47107 (a) (10), of the 1982 Airport Act, that appropriate actions will be taken, to the extent reasonable, to restrict land use to purposes compatible with normal airport operations.

The Division of Aviation is in compliance with applicable grant assurances for PNE.

(J) NATURAL RESOURCES AND ENERGY SUPPLY

What effect would the project have on natural resource and energy consumption? (Attach record of consultations with local public utilities or suppliers if appropriate)

There would be no appreciable increase in the demand for energy or natural resources. All utilities are readily available including electricity for power, gas for heat, and water for domestic use and fire protection. No additional capacity or upstream improvements to utilities are anticipated to meet the projected needs of the project. Coordination with utility suppliers will be initiated during the design phase of the project.

There would be no appreciable change in aircraft movements or ground vehicle use that would cause or contribute to a noticeable increase in fuel consumption, and fuel is not in short supply. No scarce or unusual materials would be needed for the project. During the architecture/engineering phase, sustainable building design initiatives would be incorporated into plans for the building and development of the site. For instance, energy efficient (LED) lighting would be used to greatest extent possible. Other examples include: economizers for the rooftop HVAC units, lighting controls in the offices and shop spaces, solar gain measures on windows, water-saver plumbing fixtures, and energy code compliant furnaces, appliances and other mechanical equipment. Although no City capital funding has been identified for this project, if City capital funding is used then the building design must follow pertinent energy efficient design and LED lighting requirements (per Section 17-111 and 16-307 of Philadelphia Code).

(K) NOISE AND NOISE-COMPATIBLE LAND USE

Will the project increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe? (Use AEM as a screening tool and AEDT 2b as appropriate. See FAA Order 1050.1F Desk Reference, Chapter 11, or FAA Order 1050.1F, Appendix B, for further guidance). Please provide all information used to reach your conclusion. If yes, contact your local ADO.

No. The proposed project does not involve airport location, runway location, major runway extension, runway strengthening, or any other capacity enhancing elements that would permit operations by larger or noisier jet aircraft. The Applicant is moving from one location at the airport to another, which would have no effect on the type, frequency, or flight paths of aircraft arriving or departing the airport. The proposed hangar would provide the Applicant with additional space to

perform aircraft maintenance and repairs, and to operate more efficiently. Forecast takeoffs and landings at PNE are not expected to increase as a result of the project. Therefore, it is reasonable to conclude that there would be no change in the airport's noise exposure contours with or without the project. No further analysis is recommended.

(L) SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, and CHILDREN'S HEALTH and SAFETY RISKS

(1) Would the project cause an alteration in surface traffic patterns, or cause a noticeable increase in surface traffic congestion or decrease in Level of Service?

The project site consists of vacant airport property located along an established local road (Norcom Road). There would be no changes to Norcom Road except for two curb-cuts for vehicle access to the project site. Compliance with traffic planning and roadway design standards (Philadelphia Department of Streets) and building permit requirements (Philadelphia Department of Licenses and Inspections) provides adequate assurance that there would no adverse effects on local traffic patterns or levels of service on roadways surrounding the airport.[12] No further analysis is recommended and no mitigation measures are proposed.

(2) Would the project cause induced, or secondary, socioeconomic impacts to surrounding communities, such as changes to business and economic activity in a community; impact public service demands; induce shifts in population movement and growth, etc.?

If the project is implemented, the Applicant would relocate flight operations from one location on the airport to another, and the same number of employees would continue to commute to PNE. The project would not cause or contribute to a noticeable shift in population, income, or employment trends in the community. No induced or secondary impacts are anticipated.

(3) Would the project have a disproportionate impact on minority and/or low-income communities? Consider human health, social, economic, and environmental issues in your evaluation. Refer to DOT Order 5610.2(a) which provides the definition for the types of adverse impacts that should be considered when assessing impacts to environmental justice populations.

No adverse effects to human health or the environment are identified in this EA; therefore, there is no potential for *disproportionate* effects to occur.

(4) Would the project have the potential to lead to a disproportionate health or safety risk to children?

No adverse effects to human health or the environment are identified in this EA; therefore, there is no potential for *disproportionate* effects to occur.

If the answer is "YES" to any of the above, please explain the nature and degree of the impact. Also provide a description of mitigation measures which would be considered to reduce any adverse impacts.

[12] Given the relatively low level of projected traffic volumes associated with the project, a traffic operations analysis (TOA) is not anticipated for City of Philadelphia land development plan approval.

Not applicable.

(M) VISUAL EFFECTS INCLUDING LIGHT EMISSIONS

(1) Would the project have the potential to create annoyance or interfere with normal activities from light emissions for nearby residents?

The project site is located on existing airport property adjacent to an industrial park. There are no residences, designated natural areas, or sensitive receptors within visual range of the project site.

(2) Would the project have the potential to affect the visual character of nearby areas due to light emissions?

Lighting associated with the project consists of pole-mounted lights in the parking lot, flood lighting for the aircraft parking apron, pavement edge lighting along the taxilane, and area lighting for pedestrian stairs and sidewalks. There would be no addition of high intensity directional lighting or sequenced flashing lights that are typically associated with the runway environment. Given the presence of high-mast street lighting along Norcom Road, any changes in ambient lighting resulting from the project would be minimal and would not be expected to change the visual character of the surrounding area.

(3) Would the project have the potential to block or obstruct views of visual resources?

No visual resources have been identified in the nearby area.

If the answer is "YES" to any of the above, please explain the nature and degree of the impact using graphic materials. Also provide a description of mitigation measures which would be considered to reduce any adverse impacts.

Not applicable.

(N) WATER RESOURCES (INCLUDING WETLANDS, FLOODPLAINS, SURFACE WATERS, GROUNDWATER, AND WILD AND SCENIC RIVERS)

(1) WETLANDS

(a) Does the proposed project involve federal or state regulated wetlands or non-jurisdictional wetlands? (Contact USFWS or appropriate state natural resource agencies if protected resources are affected) (Wetlands must be delineated using methods in the US Army Corps of Engineers 1987 Wetland Delineation Manual. Delineations must be performed by a person certified in wetlands delineation Document coordination with the resource agencies).

USFWS National Wetlands Inventory (NWI) mapping indicates there are no wetlands associated with the project site (see Attachment F). In addition, no wetlands were observed during a site visit conducted for a previous proposal at the same location (*Quigley*, 2012). The nearest mapped wetland is located on the south side of Runway 6-24 and is associated with Walton Run. The project would not involve wetland areas.

(b) If yes, does the project qualify for an Army Corps of Engineers General permit? (Document coordination with the Corps).

Not applicable.

(c) If there are wetlands impacts, are there feasible mitigation alternatives? Explain.

Not applicable.

(d) If there are wetlands impacts, describe the measures to be taken to comply with Executive Order 11990, Protection of Wetlands.

Not applicable.

(2) FLOODPLAINS

(a) Would the proposed project be located in, or would it encroach upon, any 100-year floodplains, as designated by the Federal Emergency Management Agency (FEMA)?

No. The Flood Insurance Rate Map (FIRM) for the project area indicates there are no FEMA-designated flood hazard zones associated with the project site. The nearest mapped floodplain occurs along a portion of Walton Run on the south side of Runway 6-24 and is approximately 1,500 feet away from the project site. See Attachment G.

(b) If Yes, would the project cause notable adverse impacts on natural and beneficial floodplain values as defined in Paragraph 4.k of DOT Order 5620.2, *Floodplain Management and Protection*?

Not applicable.

(c) If Yes, attach the corresponding FEMA Flood Insurance Rate Map (FIRM) and describe the measures to be taken to comply with Executive Order 11988, including the public notice requirements.

Not applicable.

(3) SURFACE WATERS

(a) Would the project impact surface waters such that water quality standards set by Federal, state, local, or tribal regulatory agencies would be exceeded or would the project have the potential to contaminate a public drinking water supply such that public health may be adversely affected?

PNE is situated at the headwaters of two major watersheds—the Poquessing and Pennypack Creeks. The project site is located in the Poquessing Creek watershed and drains to the headwaters of Walton Run, which flows south and southeast to join Byberry Creek, which in turn, joins the main stem of Poquessing Creek about a half mile north of I-95.

The project site is located on topographically high ground that slopes from north to south towards a drainage ditch that runs along Taxiway L. No surface water bodies are associated with the project site. There are no wetlands, floodplains, or hydric soils. The nearest water resource is a well-incised steam channel located approximately 300 feet west and southwest of the project site and would not be affected.

(b) Would the water quality impacts associated with the project cause concerns for applicable permitting agencies or require mitigation in order to obtain a permit?

Surface Water/Stormwater. The potential for water quality degradation would be greatest during the construction period when topsoil is exposed thereby making it more susceptible to erosion that can cause or contribute to increased sediment loading on downstream receiving waters. A National Pollution Discharge Elimination System (NPDES) / Pennsylvania Chapter 102 Erosion and Sediment Control permit would be required for construction. The Philadelphia Water Department and PADEP Southeast Regional Office jointly regulate NPDES permits in the City of Philadelphia. This permit would also require a post construction Stormwater Management Plan. After construction, no new land use or activity would be introduced that is likely to increase stormwater pollution concentrations when compared to existing conditions.[13] The airport has a current *State Pollution Discharge Elimination System (SPDES) Permit* for the discharge of storm runoff and a *Spill Prevention Control and Countermeasures (SPCC)* plan. No point source discharge of industrial wastewater to surface waters is anticipated.

The airport's SPDES permit and SPCC plan would be amended as necessary to reflect construction and operation of the proposed project. Compliance with the SPDES permit, including temporary permits for construction and an approved post-construction stormwater management plan, provides adequate assurance that project-related impacts on water quality standards would be less than significant. See Section 7 for related permit information.

Wastewater/Sewer. An industrial waste system for shop floor and hangar floor drainage with a triple basin interceptor (oil/water separator) would be provided. Wastewater from aircraft washing, maintenance, or other industrial activities occurring inside the hangar would be collected by floor drains, treated as necessary, and released into the existing sanitary sewer along Norcom Road in accordance with local, state and federal regulations governing wastewater discharges to municipal sewer systems.

The Philadelphia Water Department (PWD), Industrial Wastewater Unit (IWU), issues permits regulating industrial, commercial and non-routine discharges to the City's sewers and wastewater treatment plants. All permits issued by IWU establish specific discharge, monitoring and reporting requirements. No difficulties are expected in obtaining applicable permits. See Section 7 for related permit information.

If the answer to any of the above questions is "Yes", consult with the USEPA or other appropriate Federal and/or state regulatory and permitting agencies and provide all agency correspondence.

Not applicable.

[13] The Applicant maintains a vehicle and equipment for aircraft deicing during winter precipitation but deicing events are unusual and minimal when they occur because the aircraft are kept inside the hangar until preparations for departure.

(4) GROUNDWATER

(a) Would the project impact groundwater such that water quality standards set by Federal, state, local, or tribal regulatory agencies would be exceeded or would the project have the potential to contaminate an aquifer used for public water supply such that public health may be adversely affected?

Geotechnical investigations will be performed to obtain information on the soil conditions and depth to the water table at the project site. Groundwater is not expected to be encountered during construction. There would no production wastewater disposal or other industrial discharges to groundwater resources.

(b) Would the groundwater impacts associated with the project cause concerns for applicable permitting agencies or require mitigation in order to obtain a permit?

No impacts to groundwater resources are anticipated. No mitigation is proposed.

(c) Is the project to be located over an EPA-designated Sole Source Aquifer?

No. According to the EPA's EnviroMapper website, the New Jersey Coastal Plain aquifer extends to the eastern boundary of the airport's property but does not underlie the airport or the project site.

If the answer to any of the above questions is "Yes", consult with the USEPA or other appropriate Federal and/or state regulatory and permitting agencies and provide all agency correspondence as an attachment to this form.

Not applicable.

(5) WILD AND SCENIC RIVERS

Would the proposed project affect a river segment that is listed in the Wild and Scenic River System or Nationwide River Inventory (NRI)? (If Yes, coordinate with the jurisdictional agency and attach record of consultation).

There are no wild or scenic rivers in the project area. The nearest waterbody designated as a National Wild and Scenic River is a segment of the Delaware River (Lower) and is located north of Trenton, NJ.

(O) CUMULATIVE IMPACTS

Discuss impacts from past, present, and reasonably foreseeable future projects both on and off the airport. Would the proposed project produce a cumulative effect on any of the environmental impact categories above? Consider projects that are connected and may have common timing and/or location. For purposes of this Form, generally use 3 years for past projects and 5 years for future foreseeable projects.

Other than routine maintenance and repair, no new development projects have been undertaken at PNE in the past three years, there are no ongoing projects, and no new development projects

proposed to be undertaken in the next five years. The last development project was the expansion of the Leonardo helicopter assembly facility (formerly AgustaWestland) and that project was completed in 2010. According to the latest Airport Capital Improvement Plan (2017-2021), two FAA-funded maintenance and repair projects are programmed:

- Rehabilitation of Runway 6-24
    - 2017 design
    - 2018-2019 construction

- Rehabilitation of Apron Pavements (Agusta, TW-J, H-Hangar, Jet Center aprons)
    - 2020 design
    - 2021 construction

In addition, several other maintenance and repair projects are identified including: three electrical substation replacements, perimeter fence repairs, airfield signage upgrades, and a proposed perimeter sidewalk along Roosevelt Boulevard and Red Lion Road.

If the proposed corporate hangar project is approved and implemented, construction is expected to take approximately nine to twelve months—beginning in the summer 2016 and ending by the summer of 2017. The tentative date for occupancy is September 2017, which means construction of the hangar would end before the runway rehabilitation project begins. Pavement rehabilitation projects normally do not cause or contribute to adverse environmental effects; these two projects are expected to be categorically excluded from the requirement to prepare an EA.[14]

Temporary construction impacts notwithstanding, no adverse environmental impacts are identified with the proposed hangar project. Further, no environmental resource category has been identified as potentially vulnerable to the effects of ongoing development at or near the airport. Because no potentially significant adverse effects have been linked to the proposed action in this EA, it is unlikely that the incremental impact of the proposed project would cause or contribute to a significant adverse impact on the environment when added to any past, ongoing, or future projects or actions at the airport.[15] No further analysis is recommended.

7. PERMITS

List all required permits for the proposed project. Has coordination with the appropriate agency commenced? What feedback has the appropriate agency offered in reference to the proposed project? What is the expected time frame for permit review and decision?

Code search for project compliance with <u>all</u> applicable permit requirements would be conducted during the design phase. Permits for the proposed project would include, but are not necessarily limited to, the following:

[14] By definition, projects eligible for a categorical exclusion do not individually or cumulatively have significant adverse effects on the environment.

[15] If the Proposed Action is approved and implemented, it will be incumbent on the NEPA analyses for future projects to look back on this EA as a past project and to reevaluate the potential for cumulative effects.

- Permits for the construction and operation of aviation facilities, including use of the facility for aircraft servicing and repair, and aircraft fueling operations, are covered under Section F-105 of the Philadelphia Building Construction and Occupancy Fire Code. Agency consultation would occur during the design phase. No difficulties are expected in obtaining applicable permits.

- Fuel storage tanks in the Commonwealth of Pennsylvania must be registered and permitted with the PA Department of Environmental Protection (DEP). Operation and maintenance of fuel storage tanks is covered under 25 PA Code Section 245. Agency consultation would occur during the design phase. No difficulties are expected in obtaining applicable permits.

- As discussed in Section 6(A), air pollution permits and/or licenses would be required to install and operate different types of equipment including, but not necessarily limited to, the following: gas fired heating and hot water systems, diesel-powered standby generator, fuel storage and handling facilities, and a spray paint booth. Permits and applicable licenses are issued by the City of Philadelphia, Department of Public Health, Office of Air Management Services. Agency consultation would occur during the design phase. No difficulties are expected in obtaining applicable permits.

- As discussed in Section 6(N), a National Pollution Discharge Elimination System (NPDES) / Pennsylvania Chapter 102 Erosion and Sediment Control permit would be required for construction. The Philadelphia Water Department and PADEP Southeast Regional Office jointly regulate NPDES permits in the City of Philadelphia. The permit would also require a post construction Stormwater Management Plan. A permit application will be prepared and submitted to the Philadelphia Water Department after the Schematic Design phase. Initial consultation is underway and it is expected to take approximately three to four months to complete the Stormwater Plan Review process. No difficulties are expected in obtaining applicable permits.

- As discussed in Section 6(N), a permit for the discharge of industrial wastewater to the City's sanitary sewer system would be required.[16] The Philadelphia Water Department (PWD), Industrial Wastewater Unit (IWU), issues permits regulating industrial, commercial and non-routine discharges to the City's sewers and wastewater treatment plants. All permits issued by IWU establish specific discharge, monitoring and reporting requirements. Agency consultation would occur during the design phase. No difficulties are expected in obtaining applicable permits.

- A general Building Permit would be required from the City of Philadelphia Department of Licenses and Inspections (L&I) and construction must be inspected by a professional from L&I. The permit processing time is 20 business days from submission of the application and is accompanied by the applicable plans and specifications.

No other environmental or building permits have been identified at this early stage of the project.

[16] There would be no discharge of industrial wastewater to any surface water resources.

8. MITIGATION

Describe those mitigation measures to be taken to avoid creation of significant impacts to a particular resource as a result of the proposed project, and include a discussion of any impacts that cannot be mitigated.

Environmental permit requirements and best management practices notwithstanding, no mitigation measures or environmental commitments are included with the project. No mitigation measures or other environmental commitments have been proposed by any agency consulted with; and, no mitigation measures or other environmental commitments are needed to reduce potentially significant adverse environmental effects below a threshold level in order to avoid a significance determination. For the purpose of determining the impact level that the project would have on the environment, the environmental consequences described in Section 6 are *un-mitigated*.

Although no specific mitigation measures are *required,* the Applicant and the airport Sponsor are committed to implementing the proposed project in accordance with all environmental laws, regulations, policies, and permit requirements applicable to the project.

9. PUBLIC INVOLVEMENT

Describe the public review process and any comments received. Include copies of Public Notices and proof of publication.

No impacts have been identified on properties protected under Section 106 of the National Historic Preservation Act, Section 4(f), or floodplain or wetland resources. No adverse impacts are identified in this EA that cannot be satisfactorily managed with best management practices. No public interest or concerns are anticipated. The project is not expected to be controversial on environmental grounds. Therefore, no public meeting is recommended.

An announcement of the FAA's decision will be placed in local newspapers. Copies of the Final EA and the FAA's decision will be available at the airport's Administration Building, at the Division of Aviation offices at PHL, and at the FAA's Airports District Office in Harrisburg.

10. LIST OF ATTACHMENTS

Attachment A: Air Quality Construction Emissions
Attachment B: PNDI Receipt
Attachment C: Soils/Farmlands
Attachment D: Phase 1 ESA (Executive Summary)
Attachment E: PHMC Correspondence
Attachment F: USFWS National Wetlands Inventory (NWI) mapping
Attachment G: FEMA FIRM Map

11. PREPARER CERTIFICATION

I ~~certify~~ that the information I have provided above is, to the best of my knowledge, correct.

Signature 8-11-16 Date

Bryan Oscarson
Name

Technical Leader/Aviation
Title

AECOM (215) 399-4333
Affiliation Phone #

12. AIRPORT SPONSOR CERTIFICATION

I certify that the information I have provided above is, to the best of my knowledge, correct. I also recognize and agree that no construction activity, including but not limited to site preparation, demolition, or land disturbance, shall proceed for the above proposed project(s) until FAA issues a final environmental decision for the proposed project(s), and until compliance with all other applicable FAA approval actions (e.g., ALP approval, airspace approval, grant approval) and special purpose laws has occurred.

Signature 11 August 2016 Date

Raymond Scheinfeld
Name

Planning & Environmental Services Manager
Title

City of Philadelphia, Division of Aviation (215) 906-7604
Affiliation Phone #

Attachments

Airport Construction Emissions Inventory Tool (ACEIT)
Version 1.0
Run Date & Time: 5/20/2016 11:29:27 AM

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STUDY

Study Name

PNE CHUBB Corporate Hangar

Study Description

New corporate hangar at PNE

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EMISSIONS INVENTORY - SUMMARY

Total Emissions by Year
Units for Non-Greenhouse Gases Emission: Short Ton
Units for Greenhouse Gases (CO2, CH4, and N2O) Emission: Metric Ton

Year	CO	NOx	SO2	PM10	PM2.5	VOC	CO2	CH4	N2O
2017	4.389034332	2.935539	0.015575	0.369981	0.143008	1.882315	1456.548	0.081574	0.00692

Total Emissions by Source Categories
Units for Non-Greenhouse Gases Emission: Short Ton
Units for Greenhouse Gases Emission: Metric Ton

Year	Emission Source	CO	NOx	SO2	PM10	PM2.5	VOC	CO2	CH4	N2O
2017	NonRoad	1.060877	2.523704	0.008738	0.143481	0.132003	0.375214	1047.322	--	--
2017	OnRoad	3.243458	0.406535	0.005864	0.011619	0.011005	0.206078	409.2265	0.081574	0.00692
2017	Fugitive	0.0847	0.0053	0.000973	0.214881	--	1.301023	--	--	--
2017	TOTAL	4.389034	2.935539	0.015575	0.369981	0.143008	1.882315	1456.548	0.081574	0.00692

ACEIT Study: PNE CHUBB Corporate Hangar

ASSUMPTIONS

Emission factors were developed from the following models:

On-Road Vehicles: MOVES 2010b, revised January 2013

Non-Road Equipment: NONROAD2008a, July 2009

In addition to the overall project size dimensions (e.g., Length and width) provided by the user, an additional 10 ft length and 10 ft width is added to account for disturbance areas.

The number of employees is based on the higher of two methods: (1) number of equipment, and (2) multiply the project cost in million by 11.

The average employee travels 30 miles round-trip from home to construction site each day.

The average on-road material delivery round-trip distance per truck is 40 miles per day.

For calculating fugitive, re-entrained PM emissions from on-road and non-road material delivery and handling equipment, a nominal VMT of 5 miles is used for each vehicle per day.

In deriving emission factors from NONROAD, the horsepower for each equipment represents the most popular in each equipment category.

The total length of each modeled scenario is used to define the number of days associated with vehicle/equipment evaporative emissions.

The choice of location and season are assumed to adequately represent differences in fuel characteristics affecting emissions.

Only two seasons (Summer and Winter) are used to represent all seasons.

14 U.S. Counties are used to represent all other counties in the U.S. (all other counties are mapped to the 14).

The default methods assume that all construction equipment use diesel as well as heavy-duty on-road vehicles, while passenger vehicles (including motorcycles) use gasoline.

Fugitive emissions are only modeled for:

- Asphalt drying
- Asphalt storage and batching
- Concrete mixing/batching
- Soil handling
- Unstabilized land and wind erosion
- Material movement (unpaved roads)
- Material movement (paved roads)

On-Road vehicle speeds are not explicitly modeled. The associated emission factors for each modeled vehicle from MOVES represent averages over the driving cycles, the roadway type, and daily temperature variations.

The default equipment hours-of-use data are developed based on the overall size of the project provided by the user and activity rates based on expert engineering judgment.

Under the Construction Activity Type list (Activity Tab), when a choice between asphalt and concrete materials occurs, asphalt is always selected as default. To choose concrete, de-select the aphalt item and select the corresponding concrete item.

Two trips per day were assumed for each on-road material handling trucks.

Only CO2, CH4, and N2O are used to represent greenhouse gas emissions. Other potential greenhouse gases including air conditioning refrigerants were not included.

The following equipment are always modeled using diesel emission factors since gasoline-based emission factors are not available:

- Asphalt Deliveries/Ten Wheelers
- Bulldozer
- Concrete Ready Mix Trucks
- Concrete Ready Trucks Mix for Cores
- Concrete Truck
- Crack Filler (Trailer Mounted)
- Delivery of Tanks (3)
- Distributing Tanker
- Dozer
- Dump Truck
- Dump Truck (12 cy)
- Excavator
- Excavator for U/G Services/Tanks
- Flat Bed or Dump Trucks
- Flatbed Truck
- Grader
- Grout Wheel Truck
- Hoist Equipment with 40 Ton Rig
- Hydralic Hammer
- Hydroseeder
- Line Painting Truck and Sprayer
- Material Deliveries
- Off-Road Truck
- Pickup Truck
- Scraper
- Seed Truck Spreader
- Small Dozer
- Survey Crew Trucks
- Ten Wheelers
- Ten Wheelers- Material Delivery
- Tool Truck
- Tractor Trailer- Equipment Delivery
- Tractor Trailer- Material Delivery
- Tractor Trailer- Steel Deliveries
- Tractor Trailer- Stone Delivery
- Tractor Trailer- Topsoil & Seed
- Tractor Trailer- Truck Delivery
- Tractor Trailer with Boom Hoist- Curbs Del & Place
- Tractor Trailer with Boom Hoist- Delivery
- Tractor Trailers- Rebar Deliveries
- Tractor Trailers Temp Fac.
- Truck for Topsoil & Seed Del & Spread
- Water Truck
- Excavator with Bucket
- Excavator with Hoe Ram

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Attachment B: PNDI Receipt

1. PROJECT INFORMATION

Project Name: **PNE Hangar Development**
Date of Review: **5/2/2016 09:58:59 AM**
Project Category: **Transportation, Airports (runways, taxiways, terminals, control towers, beacons, fuel depots)**
Project Area: **5.72 acres**
County(s): **Philadelphia**
Township/Municipality(s): **PHILADELPHIA**
ZIP Code: **19154**
Quadrangle Name(s): **FRANKFORD**
Watersheds HUC 8: **Lower Delaware**
Watersheds HUC 12: **Poquessing Creek**
Decimal Degrees: **40.093164, -75.002607**
Degrees Minutes Seconds: **40° 5' 35.3910" N, 75° 0' 9.3847" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

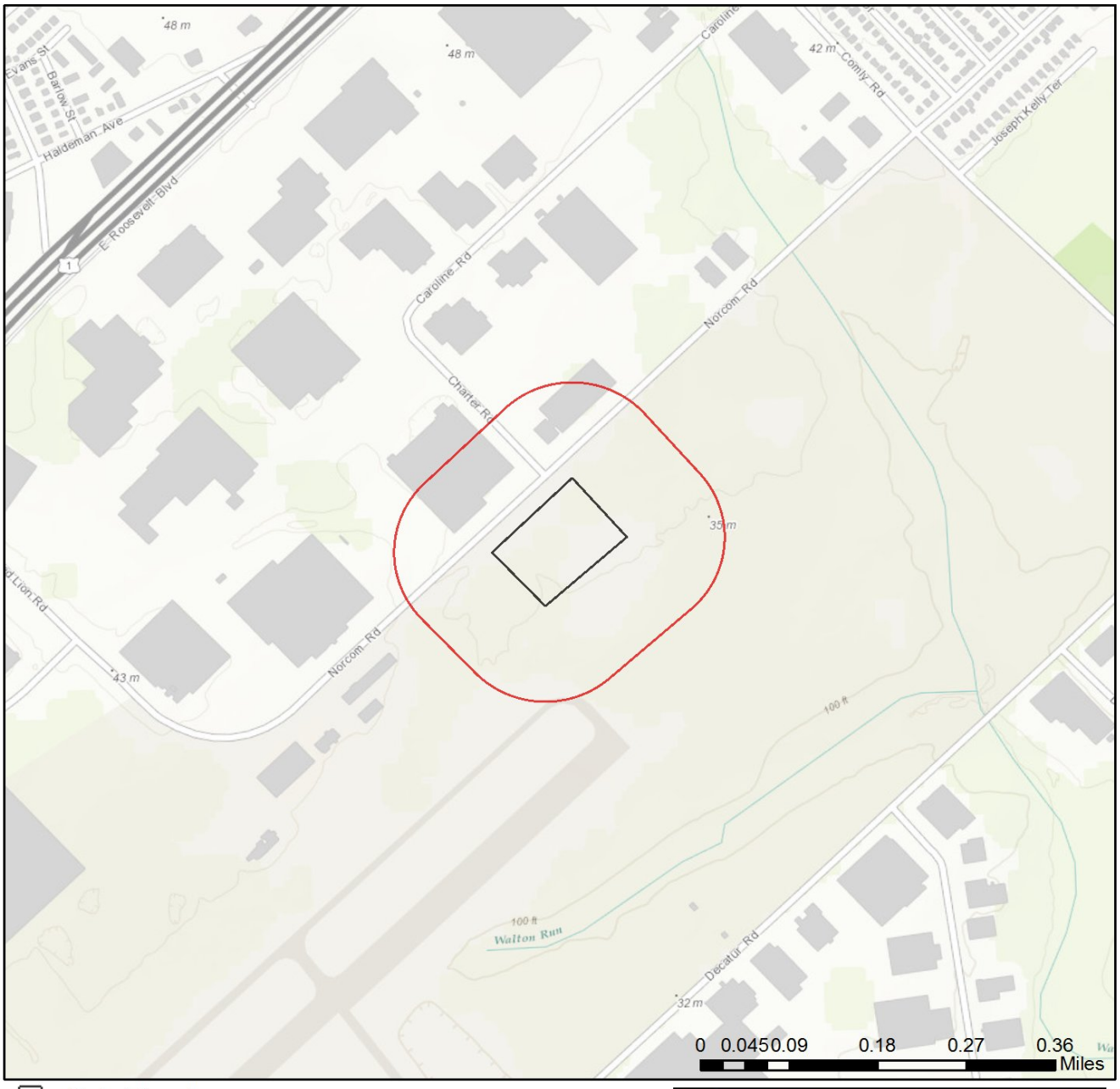
PNE Hangar Development

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
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,

PNE Hangar Development



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

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 jursidictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

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

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:

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

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

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
Fax:(717) 772-0271

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
450 Robinson Lane, 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: Bryan Oscarson
Company/Business Name: AECOM
Address: 1700 Market Street, Suite 1600
City, State, Zip: Philadelphia, PA 19103
Phone:(215) 399-4333 Fax:(215) 399-4371
Email: bryan.oscarson@aecom.com

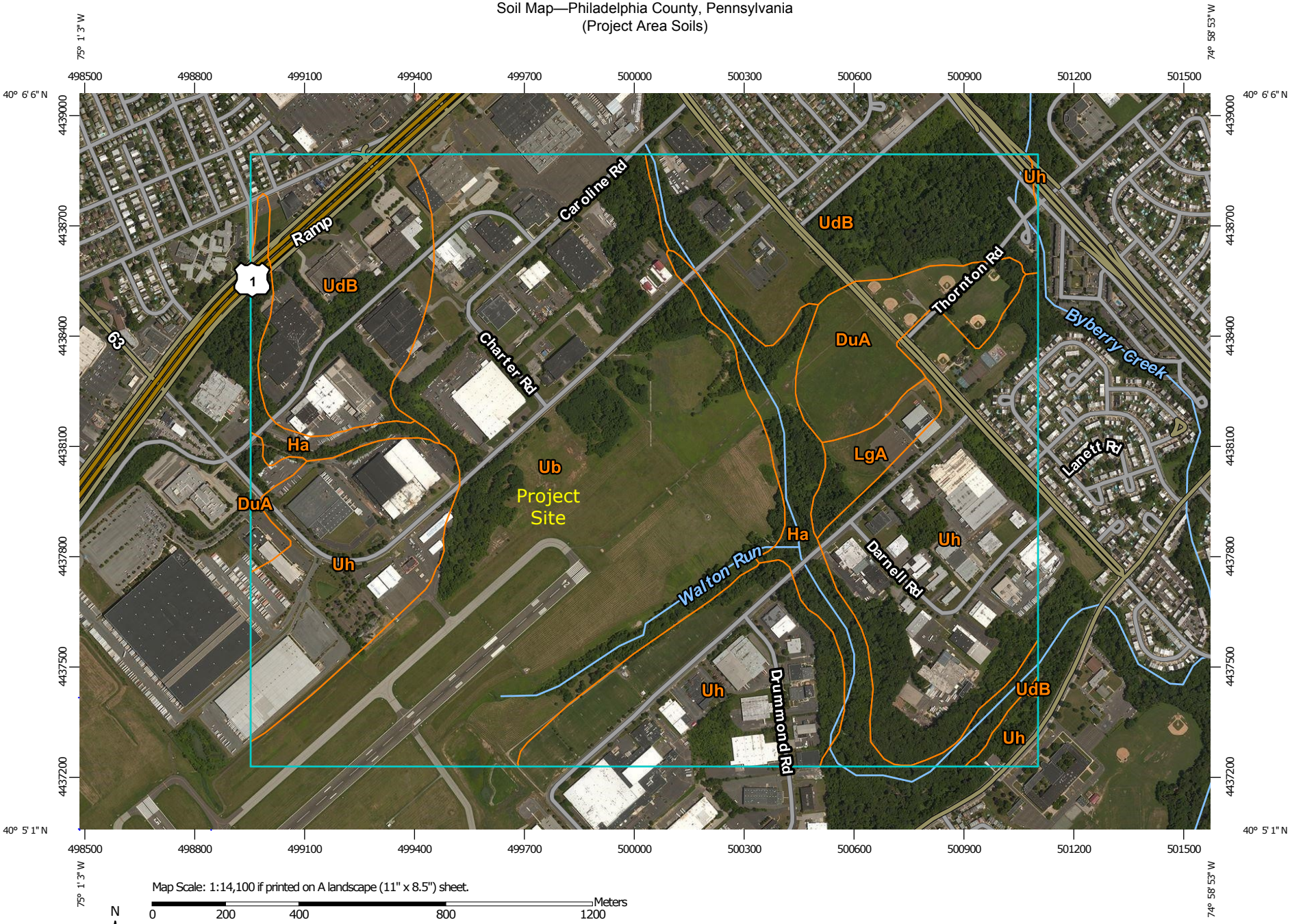
8. CERTIFICATION

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.

Bryan Oscarson
applicant/project proponent signature

July 12, 2016
date

Soil Map—Philadelphia County, Pennsylvania
(Project Area Soils)



Map Scale: 1:14,100 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 200 400 800 1200

Feet
0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Philadelphia County, Pennsylvania
Survey Area Data: Version 8, Nov 16, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 20, 2014—Jul 5, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Philadelphia County, Pennsylvania (PA101)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
DuA	Duncannon silt loam, 0 to 3 percent slopes	45.7	5.1%
Ha	Hatboro silt loam	57.0	6.4%
LgA	Lawrenceville silt loam, 0 to 3 percent slopes	13.6	1.5%
Ub	Urban land	327.3	36.8%
UdB	Urban land-Chester complex, 0 to 8 percent slopes	170.4	19.2%
Uh	Urban land-Howell complex	274.3	30.9%
Totals for Area of Interest		**888.3**	**100.0%**

Attachment D: Phase 1 ESA
(Executive Summary)

AECOM Environment

Prepared for:
Chubb
Philadelphia, PA

Prepared by:
AECOM
Conshohocken, PA
60508078
June 2016

Phase I Environmental Site Assessment of the Proposed Chubb Aircraft Hangar Site, Northeast Philadelphia Airport, Norcom Road, Philadelphia, Pennsylvania

Executive Summary

Chubb contracted with Tishman, an AECOM Company, and AECOM Design (AECOM) to perform a Phase I Environmental Site Assessment (ESA) of an undeveloped property located at the Northeast Philadelphia Airport (PNE) south of Norcom Road in Philadelphia, Philadelphia County, Pennsylvania (subject property). This Phase I ESA was performed in general conformance with the scope and limitations of ASTM Standard Practice Designation E 1527-13 for ESAs. Exceptions to, or deletions from, this practice are described in this report.

The site visit occurred on May 6, 2016. The subject property consists of an approximately 8.5-acre partially wooded, undeveloped property located in the northeastern portion of the larger land parcel occupied by the PNE. No visual evidence of underground storage tanks (e.g., vent pipes, fill ports), potable water wells, monitoring wells, clarifiers, dry wells, septic tanks, or leach fields was observed during the site visit.

The subject property is located in a mixed use area consisting of commercial and industrial properties. The subject property is bordered to the north by Norcom Road, beyond which is a vacant industrial building formerly occupied by Hadco Metal Trading to the north and Atkore/TJ Cope (manufacturer and distributor of cables systems) to the north-northwest. The subject property is bordered to the east and northeast by partially wooded undeveloped land that is also part of the larger PNE parcel. The subject property is bordered to the south-southwest by Taxiway L of the PNE, and undeveloped land owned by PNE to the south-southeast. The subject property is bordered to the west by Norcom Road and wooded land owned by PNE and leased by the North Philadelphia Jet Center (NORPAC), beyond which is Walton's Run, then the main NORPAC facility and former Allied Tube & Conduit facility. Gasoline service stations and dry cleaners were not observed in the immediate vicinity (approximately 500 feet) of the subject property. Underground storage tanks (USTs) containing jet fuel and gasoline are present at the NORPAC facility to the west; however, are located approximately 1,200 feet from the subject property. With the exception of the north-northwesterly adjacent Atkore/TJ Cope site, no off-site sources of concern were identified in the immediate vicinity of the subject property. Details pertaining to the Atkore/TJ Cope property are provided in further detail below.

AECOM's historical research indicates that the subject property consisted of agricultural land (row crops) from as early as1938 until at least 1944. Additionally, topographic maps and historical atlases reviewed prior to this time do not show any on-site structures. In 1948, the subject property appeared to be occupied by single family homes in a residential development identified as the Northeast Village, which remained present through at least 1958. As of 1965, the residences had been demolished and only roadways in the development remained evident. By 1971, the subject property consisted of cleared, vacant land. In the late 1970s and 1980s, land disturbance was evident at the property (vegetation cleared and manmade paths). These areas appeared to be re-vegetated by 1993. In 1995, an area in the western corner of the property also appears to be disturbed, but was re-vegetated by 1999. No structures have been present on the subject property since the historical residential homes were demolished circa late 1950s to early 1960s.

According to previous environmental reports and interviews with representatives of the Department of Aviation (DoA; operator of PNE), NORPAC had historically dumped construction debris at the subject property as well as on portions of their leasehold area offsite to the west in the early to mid-1990s. The previous reports also indicate that fill material had appeared to be brought onsite based on historical photographs reviewed. The source of the fill material was unknown. During the current site

reconnaissance, AECOM noted that the western portion of the subject property was at a higher elevation than the southern and eastern portions of the subject property. In addition, topographic mapping indicates an elevational change between 1997 and 2013 in these areas. Based on this information, the suspected fill material and historical dumping is considered a REC for the subject property. The subject property has remained undeveloped since demolition of the residential homes formerly located onsite. No off-site sources of concern were identified in the immediate vicinity except for the Atkore/TJ Cope property discussed below.

The subject property was not identified on the environmental database search report obtained for this project. A number of surrounding sites were identified in the environmental database search report. However, the majority of these sites were listed on non-contamination-related databases. Based on AECOM's review and analysis of the database listings and review of available Pennsylvania Department of Environmental Protection (PADEP) files, none of the surrounding sites are expected to present a recognized environmental condition (REC) to the subject property, based on their distance (generally greater than 500 feet), regulatory status (i.e. regulatory closure, no violations found), media impacted (soil only), and/or topographical position relative to the subject property (i.e. down-gradient or cross-gradient) except for the Atkore/TJ Cope site located adjacent to the north-northwest. Based on a review of PADEP files, groundwater in the southern portion of the Atkore/TJ Cope property was reported to have been impacted by chlorinated solvents in the early 1990s. Based on the most recent data available from September 1992 for the shallow well located nearest the subject property (MW-3), concentrations of tetrachloroethylene (PCE; 240 micrograms per Liter [µg/L]) and trichloroethylene (TCE; 58 µg/L) were detected above the residential PADEP Groundwater Vapor Intrusion Screening Levels (VISLs) of 110 µg/Land 8.8 µg/L, respectively. No information was identified during the course of this assessment with respect to more recent groundwater data at this site. Based on this information, it is AECOM's opinion that a VEC associated with this off-site property cannot be ruled out; and therefore, this VEC and the groundwater impacts at this site are considered a REC for the subject property.

The following RECs were identified during this assessment:

- Based on a review of historical sources, the subject property was historically occupied by a residential development of single family homes from as early as 1948 through at least 1958. The heating source of these homes is undetermined. Therefore, it is possible that these former homes may have been heated by USTs containing heating oil which may remain in place and could have impacted the subsurface. Based on this information, a VEC cannot be ruled out, and the potential for heating oil USTs to remain in place onsite is considered a REC for the subject property.
- According to previous environmental reports and interviews with representatives of the DoA, NORPAC had historically dumped construction debris at the subject property and other portions of their leasehold area offsite to the west in the early to mid-1990s. The previous reports also indicate that fill material had appeared to be brought onsite based on historical photographs reviewed. The source of the fill material was unknown. AECOM also noted that the western and central portions of the property were at a slightly higher elevation than other portions of the subject property. In addition, topographic mapping indicates an elevational change between 1997 and 2013 in these areas. Based on this information, the suspected fill material and historical dumping is considered a REC for the subject property.
- Based on a review of PADEP files, groundwater in the southern portion of the Atkore/TJ Cope property and historically occupied by Cardo Automotive was reported to have been impacted by chlorinated solvents in the early 1990s. Based on the most recent data available for this

site from September 1992, concentrations of PCE and TCE were detected above the residential PADEP Groundwater VISLs. No information was identified during the course of this assessment with respect to more recent groundwater data at this site. Based on this information, it is AECOM's opinion that a VEC associated with this off-site property cannot be ruled out; and therefore, this VEC and the groundwater impacts at this site are considered a REC for the subject property.

Based on the above-described activities, no controlled RECs (CRECs) or historical RECs were identified in connection with the subject property.

The following de minimis conditions (DMCs) were identified during this assessment:

- Based on the historical use of the subject property as agricultural from as early as1938 until at least 1944, residual concentrations of organo-chlorine pesticides (OCPs) may be present in shallow soil at the subject property, as this is common throughout most agricultural regions. Based on the non-residential use of the subject property, the potential presence of residual concentrations of OCPs remaining in the shallow on-site soils (if any) is considered a DMC in AECOM's opinion.

Pennsylvania Historical & Museum Commission

PROJECT REVIEW FORM

Request to Initiate SHPO Consultation on State and Federal Undertakings

SHPO USE ONLY	
DATE RECEIVED:	JULY 16, 2016
ER NUMBER:	2016-1692-101-A

REV: 10/2014

SECTION A: PROJECT NAME & LOCATION

Is this a new submittal? (●) YES ( ) NO OR ( ) This is additional information for ER Number:

Project Name	PNE Chubb Aircraft Hangar	County	Philadelphia	Municipality	Philadelphia
Project Address	NE Philadelphia Airport, Norcom Road	City/State/ Zip	Philadelphia	PA	19114

SECTION B: CONTACT INFORMATION & MAILING ADDRESS

Name	Grace H. Ziesing	Phone	(610) 832-2791
Company	AECOM	Fax	
Street/PO Box	625 West Ridge Pike, Suite E-100	Email	grace.ziesing@aecom.com
City/State/Zip	Conshohocken PA 19428		

SECTION C: PROJECT DESCRIPTION

This project is located on: (check all that apply) [ ] Federal property [ ] State property [✓] Municipal property [ ] Private property

List all federal and state agencies and programs providing funds, permits, licenses.	Agency Type	Agency/Program/Permit Name	Project/Permit/Tracking Number (if applicable)
	Federal	FAA/Federal Aviation Regulations Part 77.13-	
	State	NPDES/PA Chapter 102 Erosion & Sediment	

Proposed Work – Attach project description, scope of work, site plans, and/or drawings

Project includes (check all that apply): [✓] Construction [ ] Demolition [ ] Rehabilitation [ ] Disposition

Total acres of project area: 8 Total acres of earth disturbance: 8

Are there any buildings or structures within the project area? ( ) Yes (●) No Approximate age of buildings:

Does this project involve properties listed in or eligible for the National Register of Historic Places, or designated as historic by a local government?	Yes	No	Unsure	Name of historic property or historic districts
	( )	(●)	( )	

Please print and mail completed form and all attachments to:

PHMC
State Historic Preservation Office
400 North St.
Commonwealth Keystone Building, 2nd Floor
Harrisburg, PA 17120-0093

Attachments – Please include the following information with this form

- [✓] **Map** – 7.5' USGS quad showing project boundary and Area of Potential Effect
- [✓] **Description/Scope** – Describe the project, including any ground disturbance and previous land use
- [✓] **Site Plans/Drawings** – Indicate the location and age, if known, of all buildings in the project area
- [✓] **Photographs** – Attach prints or digital photographs showing the project site, including images of all buildings and structures keyed to a site plan

SHPO DETERMINATION (SHPO USE ONLY)

- [X] There are **NO HISTORIC PROPERTIES** in the Area of Potential Effect
- [ ] The project will have **NO EFFECT** on historic properties
- [ ] The project will have **NO ADVERSE EFFECTS** on historic properties:
- [ ] The project will have **NO ADVERSE EFFECTS WITH CONDITIONS** (see attached)
- [ ] **SHPO REQUESTS ADDITIONAL INFORMATION** (see attached)

SHPO REVIEWER: LD for Douglas McLEAREN **DATE:** JULY 20, 2016

AECOM

PNE Chubb Aircraft Hangar
Request to Initiate SHPO Consultation
Supporting Documentation

Chubb INA Holdings, Inc. ("Chubb") is proposing to construct an aircraft hangar on airport property at the Northeast Philadelphia Airport (PNE) in Philadelphia County, Pennsylvania. The proposed hangar would be a pre-engineered metal building (PEMB) with an adjoining building on three sides for workshops, offices and storage space typically associated with a corporate flight department. The project site consists of approximately 8 acres of undeveloped land located along Norcom Road near the approach end of Runway 24. Major elements of the project include:

- Aircraft hangar (~40,000 square feet)
- Support space (~15,000 square feet)
- Access roads w/ security gates
- Auto parking (~60 spaces)
- Aircraft parking ramp (~80,000 square feet)
- Access taxilane (~900 linear feet)
- Aircraft fuel storage (two ~20,000 gallon aboveground storage tanks)

Construction limits of disturbance and a lease boundary are not established yet but will be determined as part of the schematic design process. It is anticipated that construction would involve tree clearing, grading for stormwater management, trenching for utilities, construction of building foundations, installation of pavements, and general landscaping. There are no proposed improvements or changes to the airfield runways or taxiways, navigational aids, or any other airport facilities.

The Pennsylvania Historic and Museum Commission's (PHMC's) Cultural Resources GIS (CRGIS) was reviewed to identify previous cultural resources surveys conducted in the vicinity of the project area and archaeological sites and/or historic architectural properties that may have been recorded on the PNE property. Three cultural resources surveys have been conducted on and/or adjacent to the airport property, all of them south of Runway 6-24:

- McCarthy, J. (1993) Phase I Archaeological Survey of Proposed Detention Basin at NE Philadelphia Airport (ER # 1993-0123-101-D)
- DeCunzo, L. (1987) Phase I Cultural Resources Survey, Agusta Aviation Tract, Northeast Philadelphia Airport (ER # 1985-0688-101-D)
- Richmond, M. (2005) Phase IB Archaeological Survey of the Northeast Philadelphia Airport Readiness Center, Pennsylvania Army National Guard (ER # 2000-1831-042-BB)

Two archaeological sites have been recorded on the property: Colbert's Run (36PH0056), a precontact site with jasper and quartz debitage, and Philadelphia Northeast Site 1 (36PH0134), a late nineteenth-, early twentieth-century site. Neither site yielded sufficient data to be evaluated for NRHP eligibility. The sites are to the south of Runway 6-24 and the PNE Chubb Aircraft Hangar project area and will not be affected by the project. No aboveground historic properties have been recorded within or are known to be within visual range of the project site.

Historical aerial and map review indicates that the project site and surrounding area was open farmland with a stream running through or near it, at least as late as 1938. Sometime between 1938 and 1948 (but probably between 1945 and 1948) the residential development "Northeast Village" was built on the site with a suburban-type street system and dense, tract housing. The housing was removed sometime between 1958 and 1965, although the street grid remained until the airport was expanded between 1967 and 1971. It appears that fill was introduced to the site at that time. The current industrial redevelopment of the area occurred after the 1970s.

Currently, the project site is a vacant lot located on existing airport property between Norcom Road and the approach end of Runway 24. The approximately 8-acre project area consists of partially wooded, undeveloped land, and evidence of recent tree and vegetation clearing is evident in the western and south-southwestern portions of the project area, respectively. The soils are disturbed and mapped as Urban land. The concept plan avoids the stream channel west of the project site by approximately 250 feet or more.

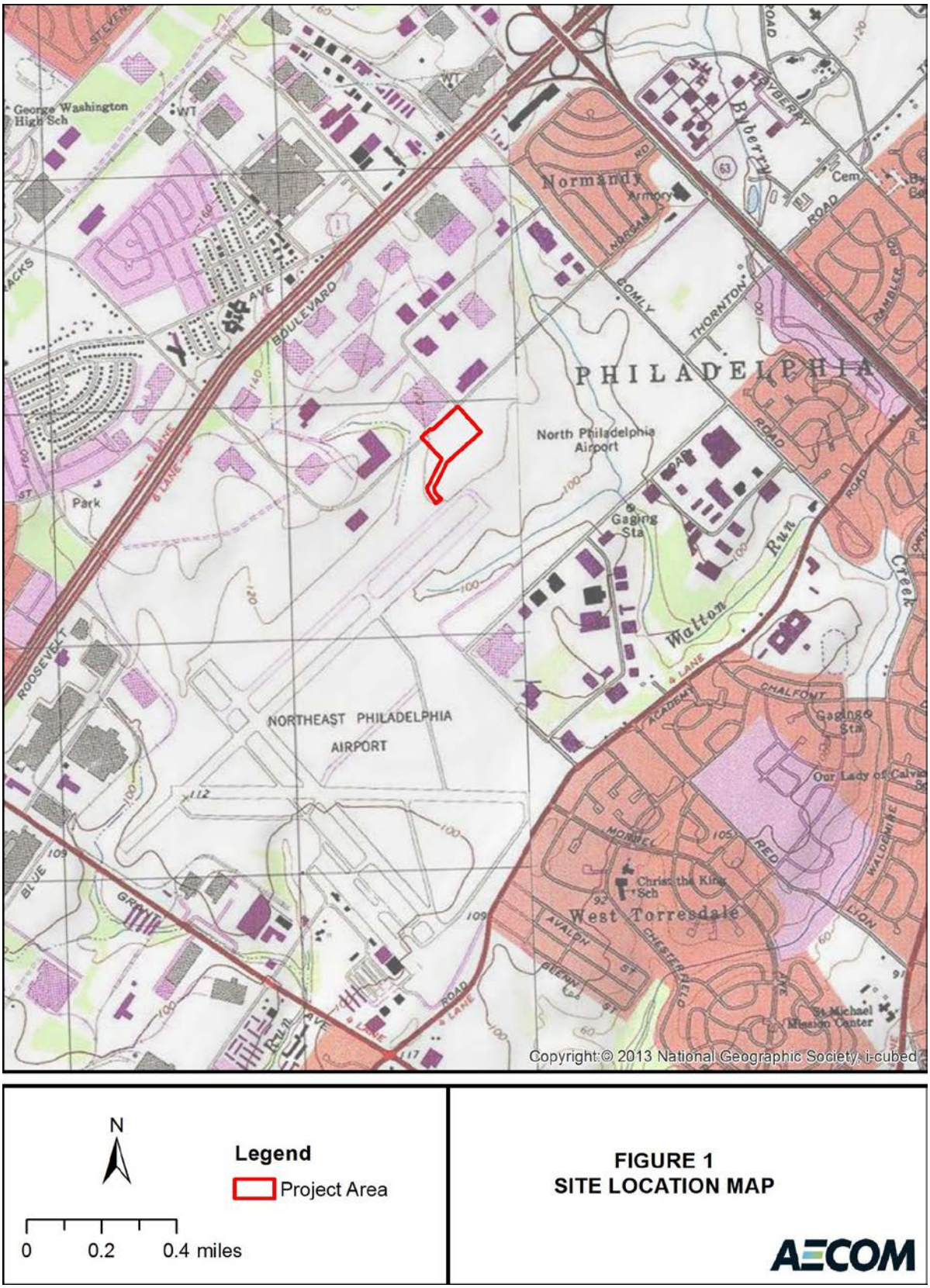
There are no existing buildings or structures located on or adjacent to the project site. The nearest buildings are two industrial warehouses located across Norcom Road at the intersection of Charter Road. The warehouses, which appear to be recently constructed in photography dated August 1971, would not be impacted by the proposed aircraft hangar. The only vestiges of Northeast Village are the remains of two streets, which are located on airport property along the south side of Norcom Road between Red Lion Road and Comly Road. The remnant pavements are located east of the project site and are not expected to be disturbed.

Given the original development of the project site for housing, the subsequent clearing and redevelopment of the property for airfield construction, and the other land modifications that took place in the vicinity, it is unlikely that there are any intact prehistoric remains in the project area because the pre-airport soils have been removed. Any buried remains potentially encountered during construction would most likely consist of remnant infrastructure and/or abandoned utilities associated with the previous use of the site for housing (e.g., foundations, pavements, water/sewer lines, demolition debris, etc.). The potential for significant historic-period archaeological remains is considered to be low. In addition, AECOM does not anticipate any potential impacts to historically significant aboveground resources, as none are present in the vicinity of the proposed undertaking.

AECOM

ATTACHMENT A

PROJECT MAPS



Map 1. Location of PNE Chubb Hangar project on 7.5′quadrangle (Frankford and Beverly, PA).

Map 2. Site plan showing photo locations and buildings near project area. All buildings shown post-date 1967.

ATTACHMENT B

SITE PHOTOGRAPHS

Photograph 1. View of the gravel drive located along the northeastern side of the project area leading from an access gate located at the northern corner of the property. Looking north.

Photograph 2. View of the eastern and southeastern portions of the subject property. Looking south.

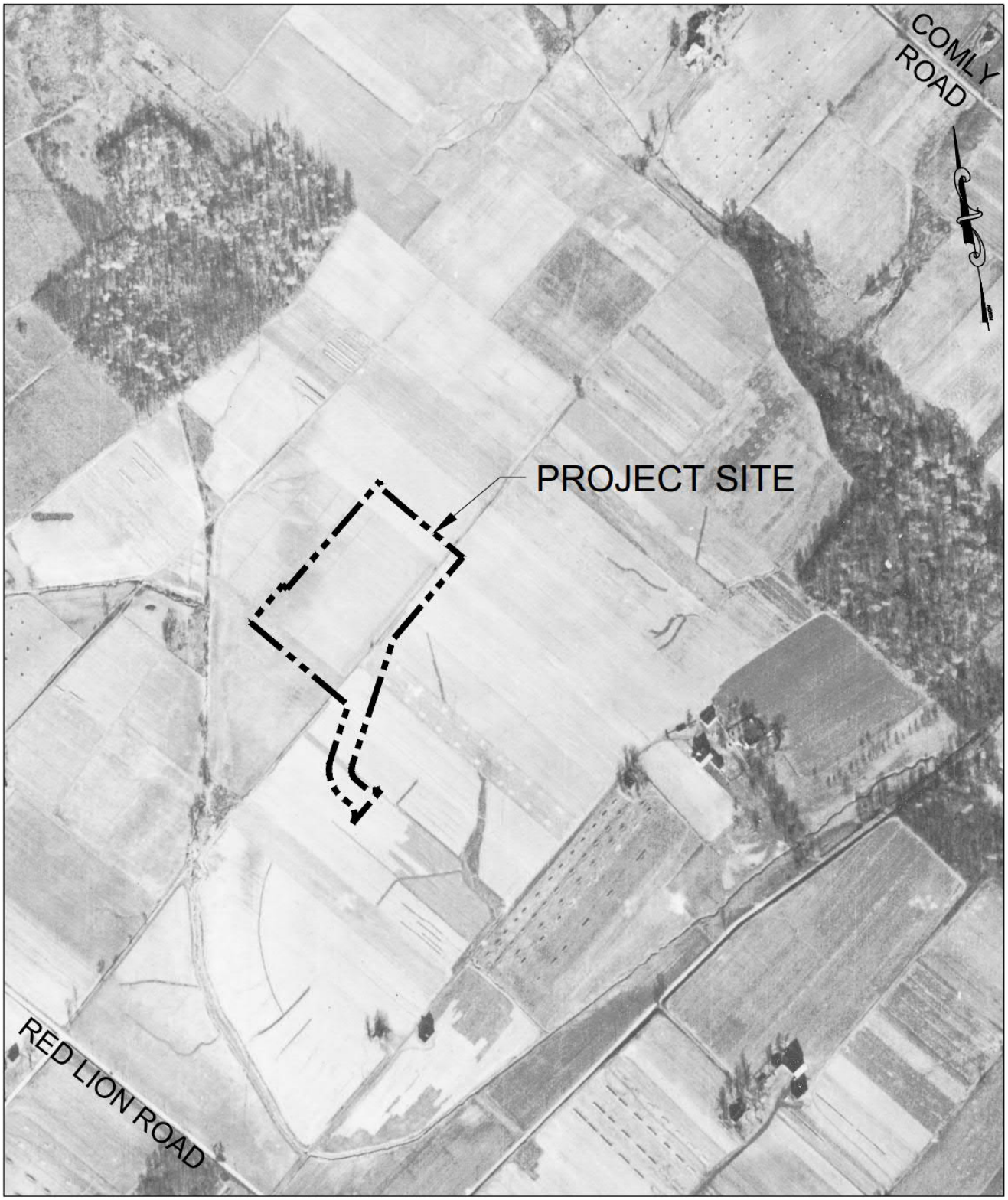
Photograph 3. View of the south-southwestern portion of the subject property. This area (portions with soil evident) appeared to have been recently cleared of vegetation (remnant pieces of vegetation were observed on the ground surface). A slight change in elevation was observed northeast (foreground) and west (right side of photograph) of this area. Looking southwest.

Photograph 4. View of the central (foreground) and northern (background) portions of the project area. Note the area in the foreground was observed to be at a slightly higher elevation than the northern portion of the property. Looking northeast.

AECOM

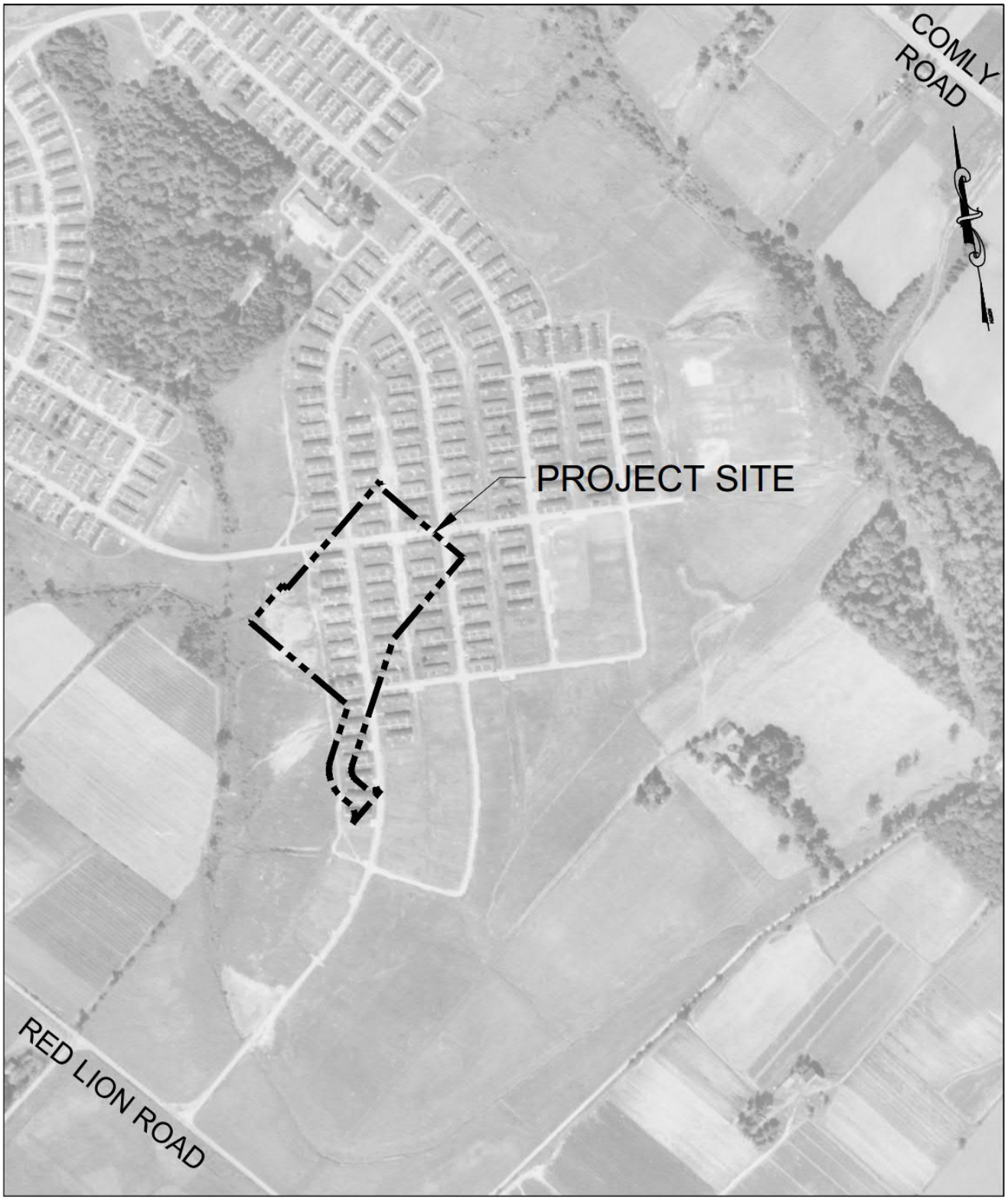
ATTACHMENT C

HISTORICAL AERIALS



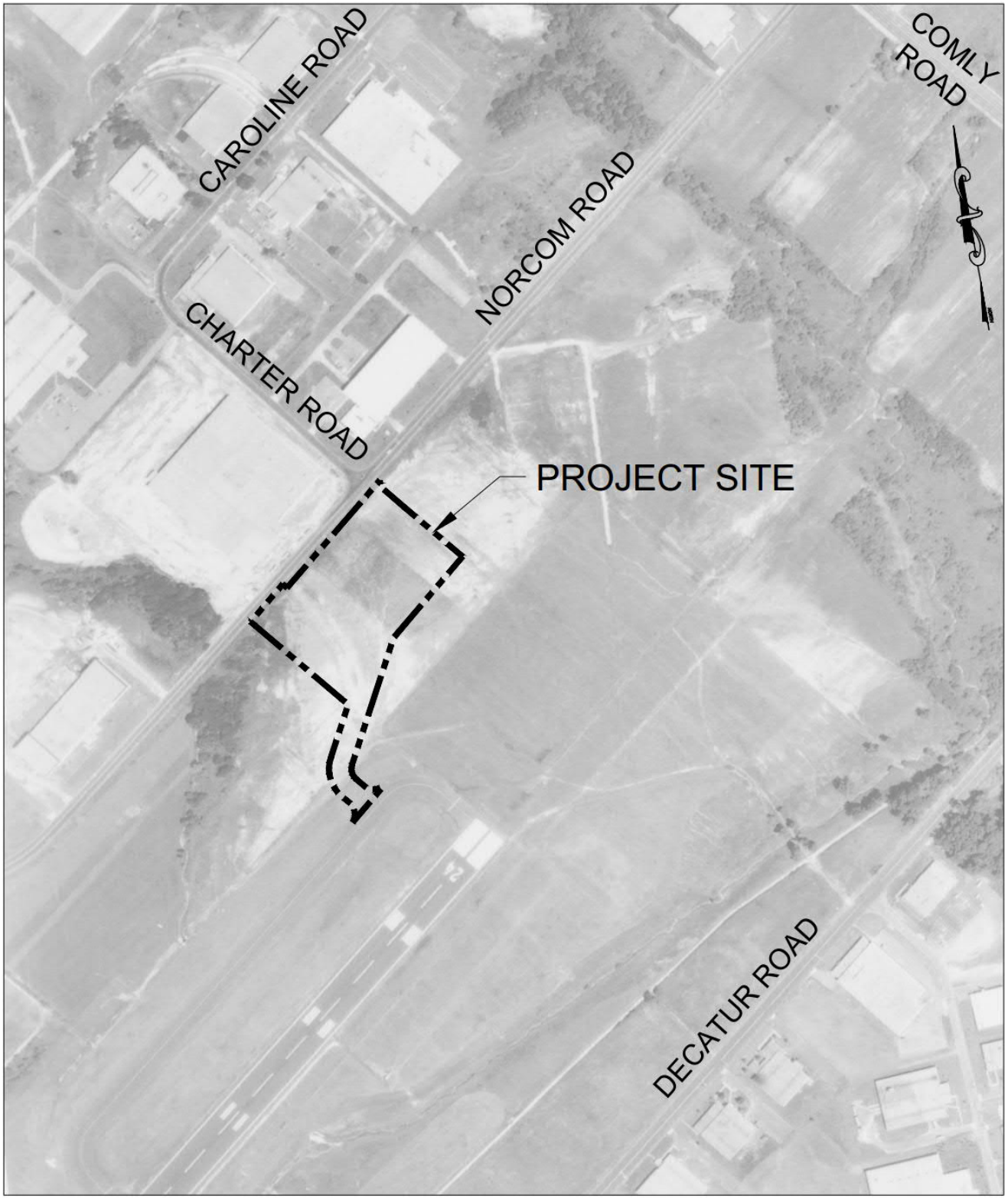
1938

AECOM



1958

AECOM


CAROLINE ROAD
COMLY ROAD
NORCOM ROAD
CHARTER ROAD
PROJECT SITE
DECATUR ROAD

1971

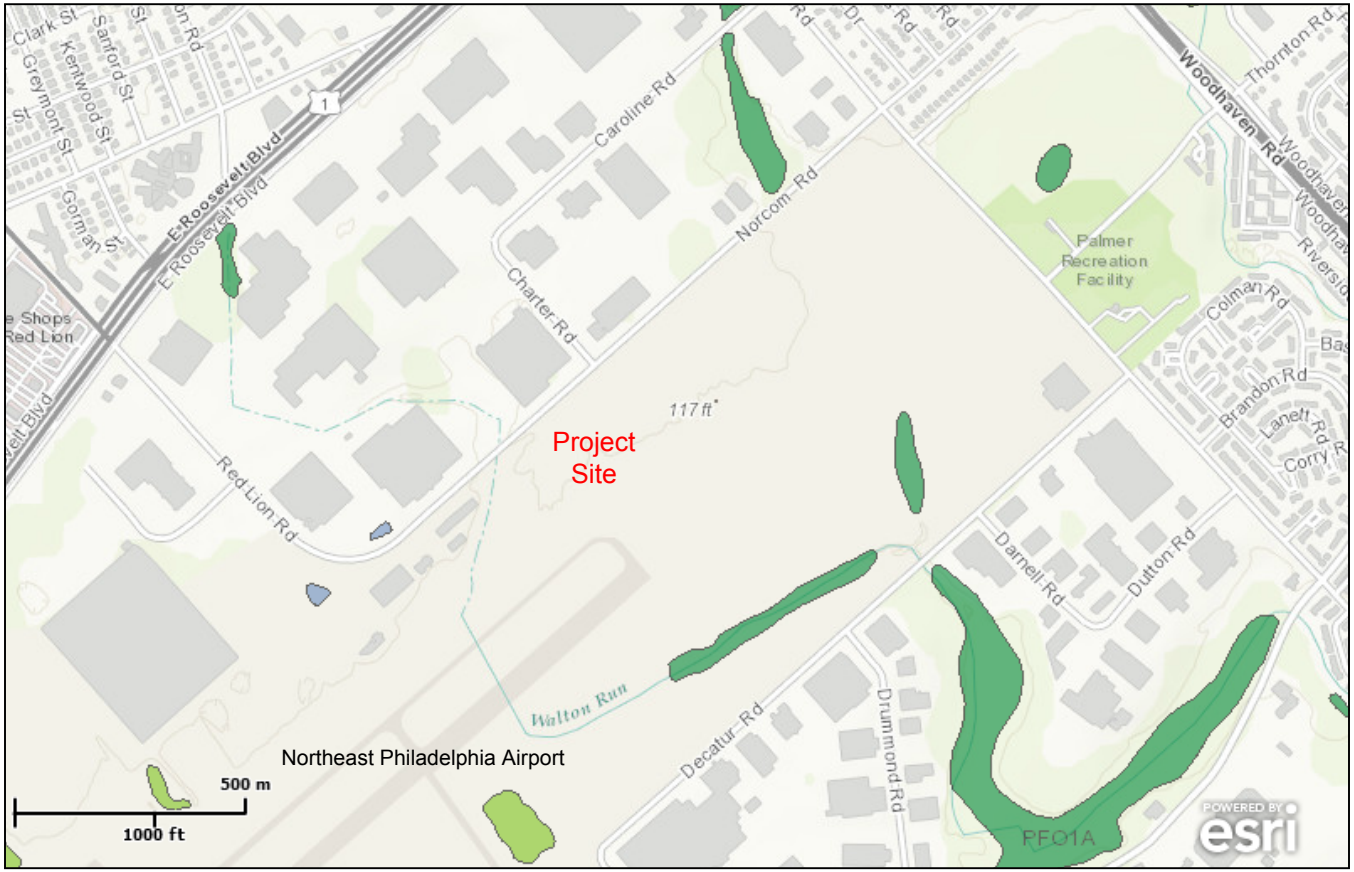
AECOM

Attachment F: USFWS National Wetlands Inventory (NWI) mapping

U.S. Fish and Wildlife Service
National Wetlands Inventory

Project Area
Wetlands

Aug 11, 2016



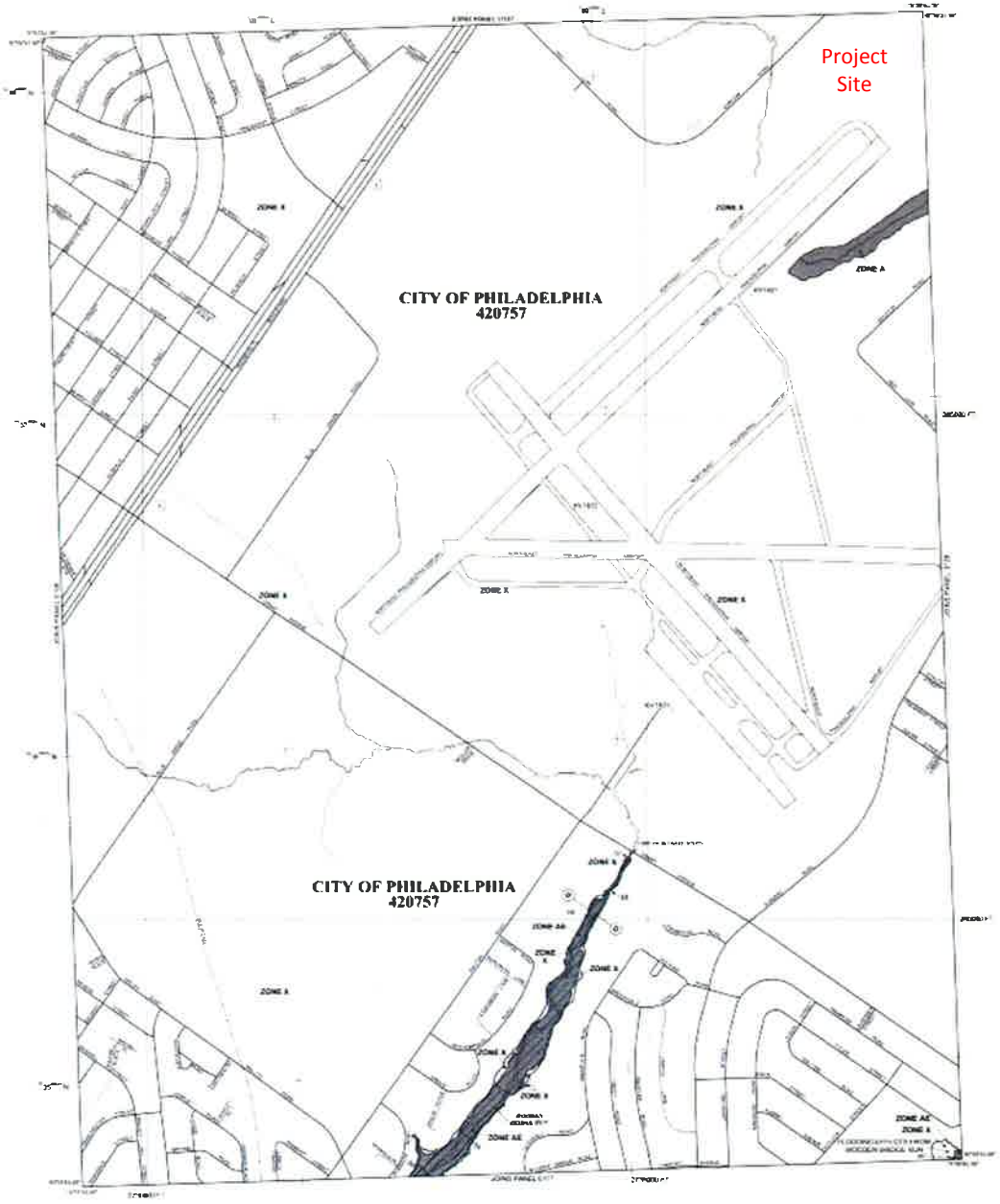
Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

User Remarks:

Attachment G: FEMA FIRM Map

NOTES TO USERS



LEGEND

PANEL 0109G

FIRM

FLOOD INSURANCE RATE MAP

CITY OF PHILADELPHIA

PENNSYLVANIA,

PHILADELPHIA COUNTY

PANEL 109 OF 230

MAP NUMBER
42075C0109G

MAP REVISED
JANUARY 17, 2007

Federal Emergency Management Agency