Chapter 1.0 Purpose and Need

1.1 Introduction

St. Clair County International Airport (Airport or PHN) is a county-owned and operated general aviation airport that serves St. Clair County, Michigan, and the surrounding region. The Airport is located approximately 54 miles northeast of Detroit in Kimball and St. Clair Townships, St. Clair County, in the Thumb region of Michigan (**Figure 1.0 Location Map**). Locally, PHN is three miles west of Marysville and five miles southwest of Port Huron (**Figure 1.1 Vicinity Map**).

Figure 1.0 Location Map

Source: U.S. Environmental Protection Agency (USEPA) NEPAssist Tool, with labeling by Mead & Hunt, Inc. 2024

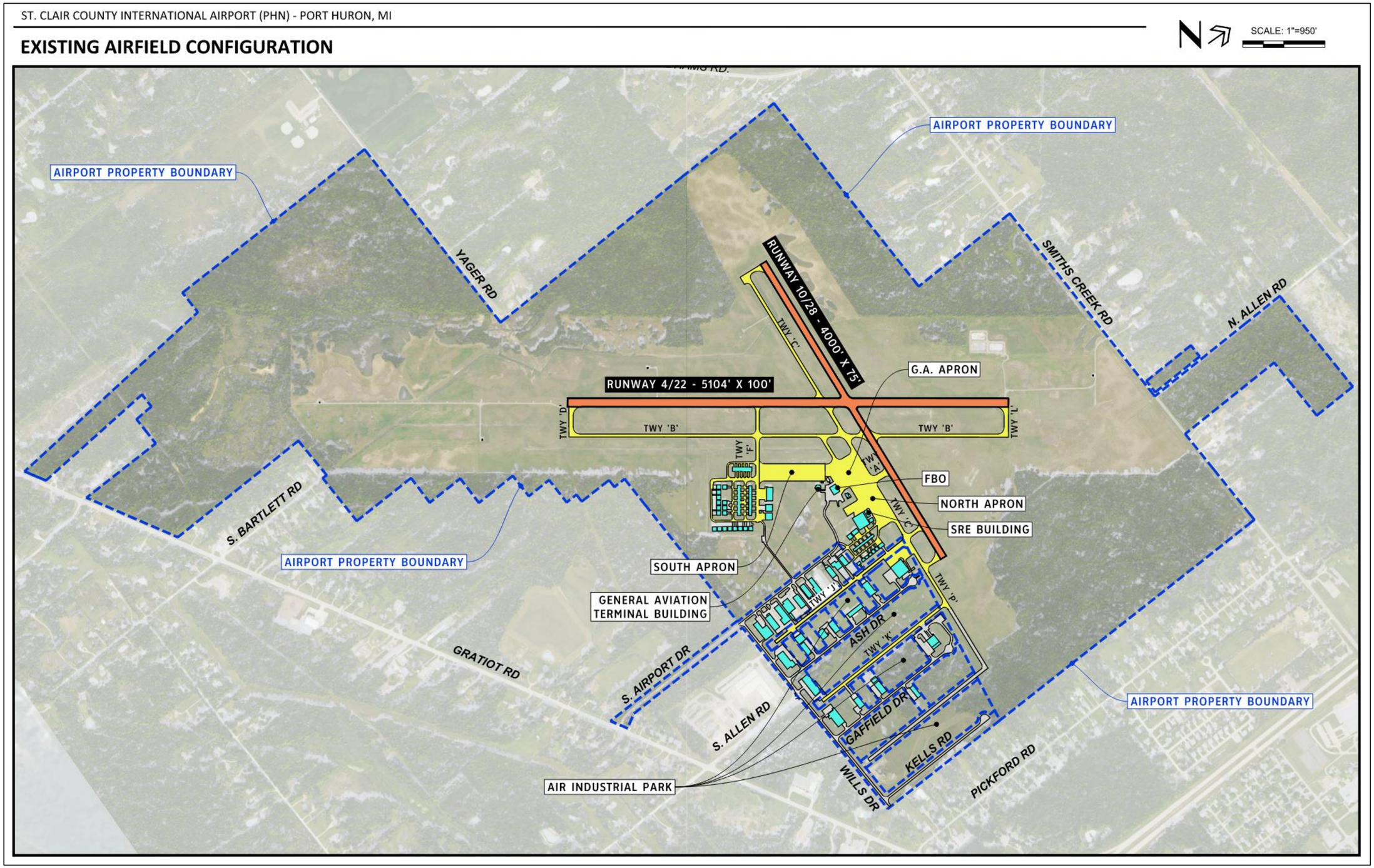
Figure 1.1 Vicinity Map

Source: USEPA NEPAssist Tool, with labeling by Mead & Hunt, Inc. 2024

Two paved runways support aircraft operations at PHN. Runway 4/22, the primary runway, is 5,104 feet long by 100 feet wide and oriented in a northeast-southwest direction. Runway 10/28 is the crosswind runway and is 4,000 feet long and 75 feet wide, oriented in an east-west direction. The Airport is 1,135 acres in size and includes a general aviation terminal building, hangars, aprons, a Fixed Base Operator (FBO), and a Snow Removal Equipment (SRE) building (**Figure 1.2 Existing Airfield Configuration**). Adjacent to the Airport is an 80-acre Michigan Certified Business Air Industrial Park, providing both aviation and non-aviation services. For additional maps and information on the Airport including its history, existing facilities, and the role it plays in the community and the region, see **Chapter 3.0 Affected Environment and Environmental Consequences**.

PHN is an important transportation resource that supports vital air transportation links, economic development, and jobs in St. Clair County and the surrounding region. The Michigan Department of Transportation Office of Aeronautics' (MDOT AERO) *2017 Michigan Aviation System Plan* (MASP) quantified the economic impact of PHN at the local level at 584 total jobs with a total annual payroll of $28.9 million and a total annual output of $110.1 million.

Figure 1.2 Existing Airfield Configuration



Source: Mead & Hunt, Inc., 2024

The Federal Aviation Administration (FAA) classifies PHN as a Reliever Airport in the *National Plan of Integrated Airport Systems* (NPIAS). Designation in the NPIAS is indicative of the Airport's significance in the national air transportation system. At the state level, MDOT AERO classifies the Airport as a Tier 1 airport, the highest classification in the 2017 MASP, further demonstrating PHN's importance to the air transportation system within the state of Michigan.

1.2 State Block Grant Program

Michigan is one of 10 states that administers Airport Improvement Program (AIP) grants under the FAA's State Block Grant Program (SBGP). The SBGP, authorized under 49 U.S.C. § 47128, and 14 C.F.R. Part 156, allows the state of Michigan to assume environmental review responsibilities for FAA AIP grants in the state. Under the program, Michigan manages annual AIP grants that go to airports classified as "other than primary" airports, which includes PHN.

Under the SBGP, the state of Michigan provides funding and oversight for this proposed project at PHN along with the responsibility for evaluating the potential environmental impacts of the project, consistent with the National Environmental Policy Act of 1969 (NEPA).

1.3 Project Purpose and Need

To enhance safety and utility of the Airport for current and future users, PHN proposes to remove obstructions (trees) located off the ends of Runway 4/22. The proposed project is needed to provide unobstructed approaches to Runway 4/22 to meet FAA and MDOT AERO design standards for clear and unobstructed airspace.

The need for the proposed project is based on data contained in the Airport Layout Plan and a recent Light Detection and Ranging (LiDAR) aerial survey that identified tree obstructions to various avigation surfaces at both ends of Runway 4/22. These obstructions require removal to comply with FAA guidance and to enhance safe operations at the Airport. Tree clearing is needed to rectify the identified obstructions to the Federal Aviation Regulation (FAR) Part 77 Imaginary Surfaces, Threshold Siting Surface (TSS), Precision Approach Path Indicator (PAPI) Light Signal Clearance Surface (LSCS) and Obstacle Clearance Surface (OCS), and State of Michigan Licensing Surface.

Specifically, the Airport cannot meet FAA safety standards outlined in FAA Order 5190.6B, *Airport Compliance Manual*, FAA Advisory Circular (AC) 150/5300-13B, *Airport Design*, and FAR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*, due to trees that have grown over time to now become penetrations to the approach surfaces of Runway 4/22. These FAA standards establish runway design guidance for surfaces intended to protect the runway environment from objects that may interfere with aircraft operations. Airports have a responsibility to protect and maintain these runway design surfaces so that objects do not become obstructions to aircraft operations.

Approximately 86 acres of obstruction clearing is proposed on both Airport-owned property and private property in the approaches of Runway 4/22. Potential obstructions are found on Airport-owned property,

private property with existing avigation easements, and 21 private properties requiring new avigation easements before any trees are removed.

1.4 Summary of Existing and Projected Operations

According to the 2024 FAA Terminal Area Forecast (TAF), in 2023 the Airport had:

- 27,839 total operations
    - 20,737 itinerant operations
    - 7,102 local operations
- 59 based aircraft

Table 1-0 PHN Projections Summary presents projections of aircraft operations and based aircraft at PHN from the 2024 TAF.

Table 1-0 PHN Projections Summary

Year	Itinerant Operations	Local Operations	Total Operations	Based Aircraft
Historical:				
2023	20,737	7,102	27,839	59
Projected:				
2028	21,470	7,410	28,880	62
2033	22,755	7,967	30,722	67
2038	24,121	8,568	32,689	72
2043	25,549	9,219	34,768	77
CAGR (2023-2043)	*1.05%*	*1.31%*	*1.12%*	*1.34%*

Source: 2024 FAA Terminal Area Forecast

1.5 Proposed Improvements

To meet the project's purpose and need, the following improvements are proposed and evaluated in this Environmental Assessment (EA):

- Removal of approximately 86 acres of forested land located in the Runway 4/22 approaches for current and future obstructions.
- Acquisition of avigation easements over 21 private parcels to allow for current and future obstruction removals in the Runway 4/22 approaches.

These improvements will be covered in detail as a part of the Preferred Alternative in **Chapter 3.0 Affected Environment and Environmental Consequences**. For additional discussion on the Preferred Alternative selection process, see **Chapter 2.0 Alternatives Considered**.

1.6 Required Environmental Review

Federal financial participation in projects through the Airport and Airway Improvement Act of 1982 requires environmental review under NEPA. An EA is a document prepared under NEPA that evaluates the effects of a proposed action on the surrounding natural, social, and economic environments.

This EA is prepared under the requirements of Title V of Public Law 97-248 of the Airport and Airway Improvement Act of 1982, NEPA, and FAA Order 5050.4B, *National Environmental Policy Act Implementing Instructions for Airport Actions* (April 2006). This EA also meets the requirements of FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, dated July 2015.

The intent of this EA is to provide the environmental documentation necessary to assist local, state, and federal officials and stakeholders in the evaluation of the proposed action at PHN. This EA evaluates the proposed action and a full range of alternatives that may meet the purpose and need. The analysis also identifies and discusses measures to avoid, minimize, and mitigate possible environmental impacts. MDOT AERO must evaluate this EA under NEPA, and, if the project does not have the potential for significant impacts, a Finding of No Significant Impact (FONSI) may be issued. If it does have significant impacts, they must prepare an Environmental Impact Statement (EIS).

1.7 Requested Federal Action

This EA will be submitted to the MDOT AERO for evaluation. If the MDOT AERO concludes the proposed action will not cause a significant environmental impact, they will issue a final determination. If it is found that a significant impact will result from the proposed action, the MDOT AERO may request additional environmental review or not approve the project.