Draft Environmental Assessment

Construction Of Crosswind Runway 7-25 and Ancillary Airport Improvements

Morris Municipal Airport
Morris, Illinois

January 2024

Prepared for:
Illinois Department of Transportation
Office of Intermodal Implementation System
Aeronautics - Bureau of Airport Engineering

Prepared by:
Crawford, Murphy and Tilly, Inc., on behalf of
Chamlin Associates, Inc. for the City of Morris

MORRIS
ILLINOIS

Illinois Department of Transportation
Office of Intermodal Project Implementation
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Draft Environmental Assessment

Morris Municipal Airport, Morris, IL

The City of Morris is proposing to construct the following airport development items:

- Acquisition of 179.53 acres of land in fee simple title and 0.73 acres of avigation easements per the requirements of the Uniform Relocation and Real Property Assistance Act of 1970.
- Construct Runway 7-25, 3,500 feet long by 60 feet wide.
- Construct Taxiway B at 25 feet wide and 400 feet east of Runway 18-36 from Taxiway C to Runway 18 threshold.
- Construct/Relocate (includes pavement removal of existing Taxiway A3) and construct new Taxiway A3 at 25 feet wide from Taxiway B to Taxiway A.
- Construct Full-Length Parallel Taxiway "C" at 25 feet wide and 240 feet north of Runway 7-25. Install Medium Intensity Runway Lights (MIRL) on Runway 7-25.
- Install Medium Intensity Taxiway Lights (MITL) on all proposed taxiways.
- Install Precision Approach Path Indicator (PAPI) Lights to serve pilots on approach to both runway thresholds.
- Relocate the existing Lighted Windcone and Segmented Circle.
- Install a Wind Cone to serve pilots on approach to Runway 25.
- Install Runway End Identifier Lights (REIL) to serve pilots on approach to both of Runway 7-25 thresholds.
- Removal and/or trimming of trees for site clearing and obstruction removal within the FAR Part 77 Airport Imaginary Surfaces.

This Environmental Assessment (EA) is submitted for review in accordance with the following public law requirements: Section 102(2)(C) of the *National Environmental Policy Act of 1969* (PL 91-190, 42 U.S.C. 4321 et seq.); the *Federal Aviation Act of 1958* (Recodified as 49 U.S.C. Section 40101 et seq.); the *Airport Airway Improvement Act of 1982* (Recodified as 49 U.S.C. Section 47101 et seq., PL 97-238, as amended by the *Airport and Airway and Capacity Expansion Act of 1987*); Section 4(f) of the *Department of Transportation Act of 1966* Recodified at Section 303c, as amended; Sections 401 and 404 of the *Clean Water Act of 1972*, (P.L. 107-303); Section 7(c) of the *Endangered Species Act of 1973*, as amended; *Fish and Wildlife Coordination Act of 1934*, as amended; *Migratory Bird Treaty Act of 1918*, as amended; *Clean Air Act of 1970*, as amended; *National Historic Preservation Act of 1966*, as amended, and other laws as applicable.

The format and subject matter included in this report conforms to the requirements and standards of FAA *Order 1050.1F, Environmental Impacts: Policies and Procedures* and FAA *Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects*. This assessment was prepared pursuant to the requirements of *Executive Order 11990, Protection of Wetlands*; *Executive Order 11998, Floodplain Management*; Title V of Public Law 97-248; and other laws as applicable.

This report is the IDOT decision document for approval under their authority granted to the State of Illinois under the FAA's State Block Grant Program.

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Chapter One

Purpose and Need

1.1 Introduction

The City of Morris, owner, and Sponsor of the Morris Municipal Airport (Airport or C09) is proposing to construct various airfield and landside improvement projects over the next several years, as included in the Airport's Capital Improvement Program (CIP). The City intends to implement proposed safety, capacity, and standards improvements to accommodate existing and projected aeronautical demand at the Airport. The City plans to apply for Federal financial assistance under the Airport Improvement Program, as authorized by the public law requirements of the FAA Reauthorization Act of 2018 to construct eligible portions of the proposed improvements. To receive Airport Layout Plan (ALP) approval and be eligible for Federal financial assistance, the City is required by the FAA to prepare an Environmental Assessment (EA) in conformance with the applicable sections of the FAA's Order 5050.4B, NEPA Implementing Instructions for Airport Actions and FAA Order 1050.1F, Environmental Impacts: Policies and Procedures. This EA has been prepared to provide information on the Proposed Action, evaluate reasonable and feasible alternatives, and identify, analyze, and disclose potential environmental consequences associated with the proposed development and, if required, mitigate potential environmental impacts.

1.2 Airport Ownership

The Airport is a publicly owned facility operated by the City of Morris. The City is a municipal corporation under the laws of the State of Illinois. C09 is operated as an office of the City.[1]

1.3 Airport Location

The Airport is located in Morris, Grundy County, Illinois, which is southwest of the Chicago metropolitan area. The Airport is located approximately 2.85 miles north of Interstate 80 and adjacent to Illinois Route 47. A map of the Airport within the State of Illinois and the vicinity of the Airport within the Morris area is depicted on Figure 1-1 - Location Map. C09 is situated in a rural portion of Grundy County. The Airport is within the corporate limits of the City of Morris. Figure 1-2 - Vicinity Map depicts the location of the existing Airport facilities.

1.4 Project Background

C09 is designated by the FAA as a "General Aviation Airport". The Airport serves the general aviation and corporate needs for Morris and Grundy County and is a major contributor to the local economy.[2] C09 has also been designated by the FAA as a "Local Airport."[3] A Local Airport is an airfield that "supplements local communities by providing access primarily to intrastate and some interstate markets".[4] Currently, C09 has primary Runway 18/36, that is 5,501 feet long by 75 feet wide. There is no crosswind runway. Runway 18/36 does not meet planning and design criteria for 95% wind coverage for Category A and B aircraft operators.

[1] https://morrisil.org/departments/#staff
[2] C09-Economic-Impact.pptx (live.com)
[3] Appendix B: Airport Listings of General Aviation Airports: A National Asset, May 2012 (faa.gov)
[4] General Aviation Airports: A National Asset (May 2012) (faa.gov)

Figure 1-1: Location Map

Figure 1-2: Vicinity Map

1.5 Purpose and Need

The following describes the purpose and need for the Proposed Action at C09 and identifies FAA regulations and policies for aviation safety. The purpose and need serve as the foundation for the identification of reasonable and feasible alternatives to the Proposed Action and the comparative evaluation of impacts. Except for the No Action Alternative, for an alternative to be considered viable and carried forward for detailed evaluation within the NEPA process, it must address the project purpose and need.

The **purpose** of this project is to address non-standard airfield facilities and existing insufficient wind coverage for Category A and B aircraft.

The **need** for the project is that the existing primary runway does not provide 95% wind coverage for Categories A and B aircraft.

1.6 Aviation Demand

As a part of the NEPA process, the baseline and forecast of aeronautical demand was developed for the following years of analysis that are evaluated in this EA.

- 2021: Existing Conditions (Baseline Year)
- 2026: Future Without Project ("No-Build")
- 2026: Future With Project "Build" (Proposed Action)

Construction of the Proposed Action is anticipated to be completed by 2025. The first complete year of aircraft operations is expected to be in 2026. Aeronautical demand is depicted in Table 1-1 and includes annual operations by aircraft category and fleet mix (aircraft type) and is based on the FAA approved forecasts contained in Appendix A - Forecast Working Paper - Morris Municipal Airport.

General Aviation activity levels and fleet mix projections that are specifically associated with the proposed project are assessed in this EA. Coordination with stakeholders such as corporate users, general aviation users, and the Airport helped determine the aeronautical demand levels provided to the FAA for forecast approval.

Table 1-1 - Aviation Demand Summary

Year	Aircraft Operations - No Build			Aircraft Operations - Build		
	Itinerant	Local	Total	Itinerant	Local	Total
2021 (Existing)	12,646	3,162	15,808	12,646	3,162	15,808
2022 (+1)	12,679	3,170	15,849	13,895	3,474	17,369
2023 (+2)	12,712	3,178	15,890	13,975	3,494	17,468
2024 (+3)	12,745	3,186	15,932	14,011	3,503	17,514
2025 (+4)	12,778	3,195	15,973	14,048	3,512	17,559
2026 (+5)	12,812	3,203	16,015	14,084	3,521	17,605
	CAGR 0.26%			**CAGR[1] 0.72%**		

Sources: Forecast Working Paper – Morris Municipal Airport; CMT Analysis. [1]CAGR represents a 20-year growth rate.

1.7 FAA Design Requirements

FAA Advisory Circular (AC) 150/5300-13B, Airport Design, identifies the standards that FAA has established for airfields to ensure operational safety. The Airport Reference Code (ARC) is a system developed by the FAA to relate airport design criteria to the operational and physical

characteristics of the aircraft that use an airport. The ARC has two components. The first component, depicted by a letter A through E, is the aircraft approach category and relates to certified aircraft approach speed. Based on FAA AC 150/5300-13A, aircraft are grouped into five approach speed categories:

- Category A: Approach speeds less than 91 knots
- Category B: Approach speed of 91 knots or more, but less than 121 knots
- Category C: Approach speed of 121 knots or more, but less than 141 knots
- Category D: Approach speed of 141 knots or more, but less than 166 knots
- Category E: Approach speed of 166 knots or more

Aircraft Approach Categories A and B typically include small piston engine aircraft and a limited number of smaller, commuter turboprops and business jets. Category C consists of business jets as well as commercial service regional and other commercial jet and propeller aircraft. Categories D and E include some business jet models and some high-performance smaller jets, as well as larger jet aircraft generally associated with wide-body commercial and/or military use. The second component of the ARC, depicted by a Roman numeral, is the airplane design group, which is categorized by wingspan and tail height.

The FAA defines a critical aircraft as the most demanding aircraft or a grouping of aircraft with similar characteristics with at least 500 annual operations a year.[5] The Forecast Working Paper identifies the proposed C09 crosswind critical aircraft for Runway 7/25 as the Cessna 172, which is a A-I (Small) design classification. C09 has insufficient crosswind coverage ($\geq$95%) as defined by FAA.

1.8 Requested State Actions

Actions by the State are required to obtain environmental approval and/or coordination of the proposed project. IDOT is responsible, under the FAA's State Block Grant Program, for ensuring compliance under NEPA for the Proposed Action. Outlined below is a list of actions necessary to develop the Proposed Action.

1.8.1 State Actions

Development at the Airport would require actions on the part of the following state and local agencies as identified below:

ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) DIVISION OF AERONAUTICS

- Issue an environmental finding to allow approval of the Airport Layout Plan (ALP) for the Proposed Action under the State Block Grant Program

ILLINOIS HISTORIC PRESERVATION AGENCY - STATE HISTORIC PRESERVATION OFFICER (SHPO)

- Coordination pursuant to Section 106 of the National Historic Preservation Act of 1966 (NHPA)

ILLINOIS DEPARTMENT OF NATURAL RESOURCES (IDNR)

- Coordination regarding State-listed Threatened and/or Endangered Species protected under the Illinois Endangered Species Act.
- Coordination regarding wetlands protected under the *Illinois Interagency Wetland Act of 1989* (20 ILCS 830/).

[5] FAA Advisory Circular 150/5000-17, Critical Aircraft and Regular Use Determination

- Coordination with the Office of Water Resources for a Floodway/Floodplain Development Permit

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA)

- National Pollutant Discharge Elimination System (NPDES) Permits
- Individual Water Quality Certification under Section 401 of the *Clean Water Act*

Chapter Two

Alternatives

Federal guidelines require that all reasonable and feasible alternatives that might address the purpose and need of the project be considered. The examination of alternatives is of critical importance and serves to ensure that an alternative that might enhance or have a less detrimental effect on environmental quality has not been prematurely dismissed from consideration. This chapter provides a discussion of the alternatives that could meet the purpose and need for the Proposed Action as described in Chapter 1.

2.1 Alternatives

Reasonable and feasible alternatives to meet the purpose and need, including the No Action Alternative, have been identified and evaluated in this EA in accordance with NEPA, Council on Environmental Quality (CEQ) guidance, and FAA guidance and policies, including FAA Order 1050.1F and FAA Order 5050.4B. FAA Order 5050.4B specifically states: *"To select a preferred alternative under NEPA, the approving FAA official considers the environmental effects a proposed action and its reasonable alternatives would cause in meeting a defined purpose and need. During that process, the official also considers the safety, economic, technical, and engineering factors of those alternatives."*

2.1.1 No Action Alternative

CEQ Section 1502.14(d) indicates that *agencies shall include the evaluation of a no action alterative in any environmental analysis.* Under the No Action Alternative, C09 would maintain its existing airfield infrastructure and runway configuration, and would not address the non-standard design criteria, including the existing insufficient crosswind runway capability. This alternative would not meet the purpose and need.

2.1.2 Proposed Action Alternative

Based on CEQ and FAA guidance referenced above, detailed evaluations were limited to a range of reasonable and feasible alternatives that met the purpose and need, defined in Section 1.5. The Proposed Action includes addressing safety, economic, technical, and engineering factors and does satisfy the project Purpose and Need. See Exhibit 2-1.

- Acquisition of 179.53 acres of land in fee simple title and 0.73 acres of avigation easements the requirements of the Uniform Relocation and Real Property Assistance Act of 1970.
  - PIN # 02-15-200-005 - 136.94 acres in fee simple title.
  - PIN # 02-15-300-008 - 9.91 acres in fee simple title.
  - PIN # 02-15-200-003 - 14.35 acres in fee simple title.
  - PIN # 02-14-100-004 - 18.33 acres in fee simple title.
  - PIN # 02-14-100-002 - 0.73 acres in avigation easements.
- Construct Runway 7-25, 3,500 feet long by 60 feet wide.
- Construct Taxiway B at 25 feet wide and 400 feet east of Runway 18-36 from Taxiway C to Runway 18 threshold.
- Construct/Relocate (includes pavement removal of existing Taxiway A3) and construct new Taxiway A3 at 25 feet wide from Taxiway B to Taxiway A.
- Construct Full-Length Parallel Taxiway "C" at 25 feet wide and 240 feet north of Runway 7-25.
- Install Medium Intensity Runway Lights (MIRL) on Runway 7-25.
- Install Medium Intensity Taxiway Lights (MITL) on all proposed taxiways.

- Install Precision Approach Path Indicator (PAPI) Lights to serve pilots on approach to both runway thresholds.
- Relocate the existing Lighted Windcone and Segmented Circle.
- Install a Wind Cone to serve pilots on approach to Runway 25.
- Install Runway End Identifier Lights (REIL) to serve pilots on approach to Runway 7-25 thresholds.
- Removal and/or trimming of trees for site clearing and obstruction removal within the FAR Part 77 Airport Imaginary Surfaces.

2.2 Alternatives Eliminated from Further Consideration

The No Action Alternative and the Proposed Action Alternative are considered for further consideration. No alternatives have been eliminated from further consideration.

2.3 Alternatives Carried Forward

All alternatives have been carried forward for consideration.

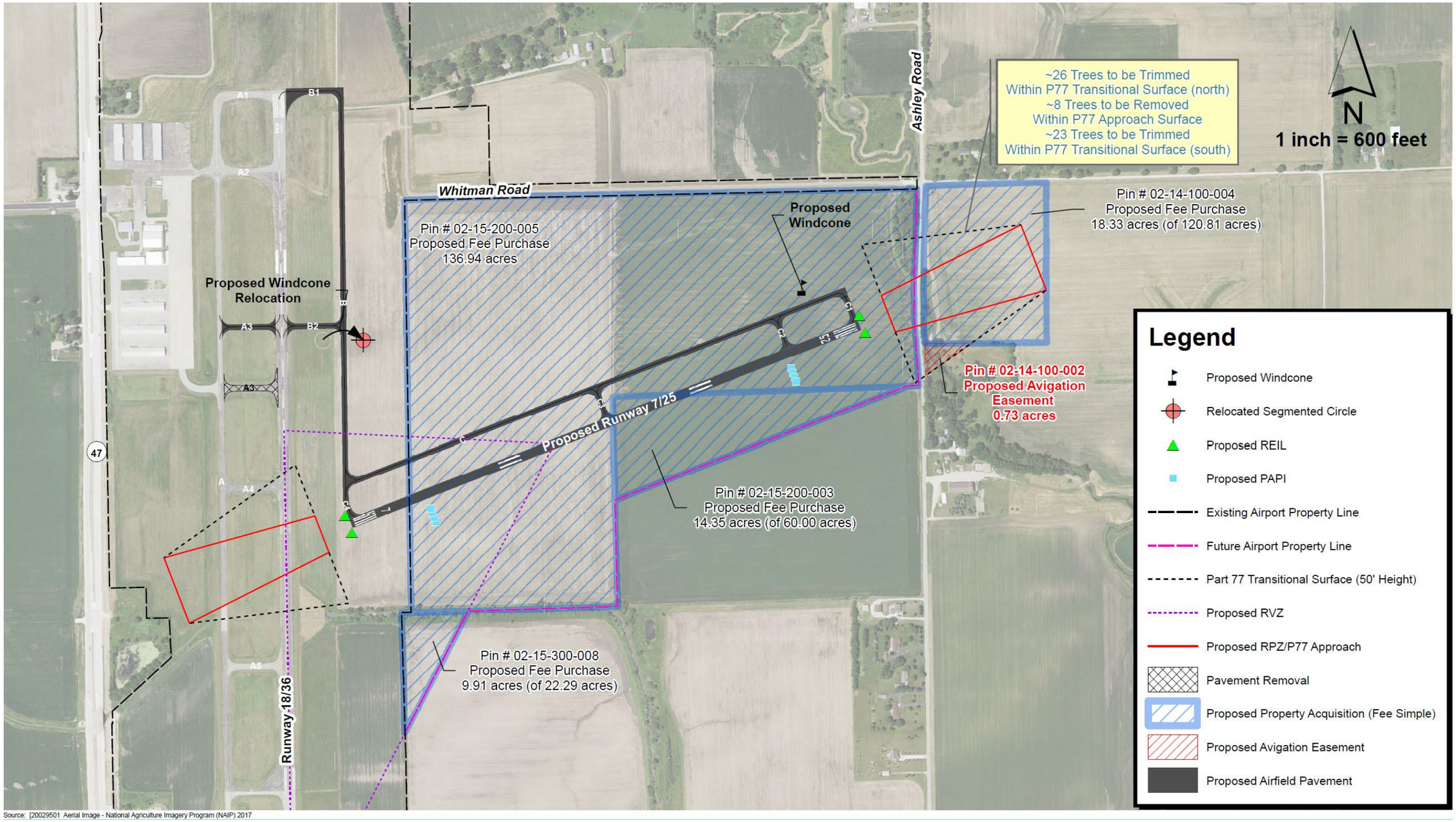
2.3.1 No Action Alternative

The No Action Alternative would not meet the project purpose and need. However, CEQ guidance and the FAA *Order 5050.4B, NEPA Implementing Instructions for Airport Acti*ons, prescribe the need to analyze and compare the No Action Alternative to the Proposed Action. Therefore, the No Action Alternative will be carried forward for further analysis.

2.3.2 Proposed Action Alternative

The Proposed Action Alternative addresses the purpose and need and will be carried forward for further analysis.

Figure 2-1: Proposed Action



Source: [20029501 Aerial Image - National Agriculture Imagery Program (NAIP) 2017

Sponsor's Proposed Action

Proposed Runway 7/25 3,500' x 60'

Chapter Three

Affected Environment and Environmental Consequences

3.1 Introduction

In accordance with FAA's environmental orders *5050.4B, NEPA Implementing Instructions for Airport Actions*, *JO 7400.2M, Procedures for Handing Airspace Matters* and *1050.1F, Environmental Impacts: Policies and Procedures*, the potential impacts of the projects associated with the No Action Alternative and Proposed Action are described in this chapter. This chapter includes a description of the existing conditions and potential impacts for the following environmental resource categories:

- Noise and Noise-Compatible Land Use
- Land Use
- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- Air Quality
- Climate
- Water Resources
- Coastal Resources
- Farmlands
- Department of Transportation, Section 4(f) Lands
- Historical, Architectural, Archaeological, and Cultural Resources
- Biological Resources
- Natural Resources and Energy Supply
- Visual Effects
- Hazardous Materials, Solid Waste, and Pollution Prevention

3.2 Noise and Noise Compatible Land Use

3.2.1 General

Noise generated by the operation of aircraft is one of several factors included in airport operations. Specific types of human activity may be incompatible with certain levels of noise. For this reason, the influence of noise from aircraft operations on land surrounding airports requires careful study by the aviation community. A fundamental fact of noise that needs to be understood is sound. Sound is a physical phenomenon which affects people and things. The sound experienced in our everyday lives is a result of bodies or objects being vibrated.

This vibration causes a motion in the surrounding air resulting in a minute variation in atmospheric pressure called "sound pressure." This sound pressure forms the basis to measure sound and is usually expressed as a sound pressure level in decibels which are dimensionless units expressing logarithmically the ratio of two values (i.e., a measured quantity and a referenced value). A decibel (dB) is defined as ten times the logarithm (to the base 10) of a power or intensity ratio. Because of the logarithmic nature of the decibel scale, a sound pressure level of 60 dB

corresponds to a pressure, not 60 times the reference pressure, but 1000 times the reference pressure.[6]

Each aircraft noise "event" can be considered to begin when the noise level observed by the receiver increases above the background level and ends when the noise level returns to that of the background. Then for each aircraft operation, the maximum noise level occurring during the event may be measured and specified, using any of several noise rating scales. This maximum noise level is the first and simplest type of noise measure and is the "base" measure from which others may be determined.

When sound is measured in order to correlate to the reactions of people, it is necessary to use a measure which relates to the way human beings hear sound. This is accomplished electrically using a device called a "weighting network." One of these weighting networks was designated "A." A-weighted Sound Level has been found to correlate well with people's subjective judgment.

Different land uses have different sensitivities to noise. Individuals may each have different perceptions of what is an acceptable level of noise. The background or residual noise against which a specific noise is perceived varies both by location and by time of day. The location of the receiver (i.e., outdoor, indoor with windows open or closed) as well as the receiver's level of activity at a specific moment affects the perception of a noise as either interfering or non-intrusive. An accepted variation of the A-weighted Sound Level measurement tool is the day-night average sound level (DNL) as described below:

While people certainly respond to the noise of single events (particularly to the loudest single event in a series), the long-range effects of prolonged exposure to noise appear to best correlate with cumulative metrics. Such a unit provides a single number which is equivalent to the total noise exposure over a specified time period. Thus, cumulative noise units are based on both time and level. The Day-Night average sound level (DNL) specified as the noise metric for cumulative exposure under Federal Aviation Regulations (FAR) Part 150 is such a unit. Specifically, the DNL is the yearly average of the A-weighted sound level integrated over a 24-hour period. It also incorporates a 10-dB step function weighting to aircraft events between 10:00 p.m. and 7:00 a.m. to account for the increased annoyance of noise during the night hours.

Description and measurement of noise, which occurs at any given time (single event) may be read from a meter. As noted, the long-range effects of prolonged exposure to noise appear to best correlate with cumulative metrics. This type of measure provides a single number, which is equivalent to the total noise exposure over a specified time period. For aircraft noise, the FAA requires that the average annual DNL be found to determine noise compatibility planning.

METHODOLOGY

The analysis of noise exposure around C09 was prepared using the FAA's Aviation Environmental Design Tool (AEDT) Version 3d. Inputs to the AEDT include runway definition, number of aircraft operations during the time period evaluated, the types of aircraft flown, the time of day when they are flown, how frequently each runway is used for arriving and departing aircraft, and the routes of flight used when arriving to and departing from the runways. The AEDT calculates noise exposure for the area around an airport and outputs contours of noise exposure using the Day-Night Average Sound Level (DNL) metric. Noise exposure contours for the levels of 65, 70, and 75 DNL were calculated and represent average-annual day conditions.

[6] Noise Control and Compatibility Planning for Airports, FAA AC 150/5020-1, August 5, 1983, Page 11.

NOISE ANALYSIS INPUT ASSUMPTIONS

The AEDT input assumptions are based on the existing and forecast aircraft operations and fleet mix as presented in Chapter 1.

RUNWAY END UTILIZATION

Average-annual day, runway end utilization was derived from review of the available data and in close coordination with the C09 management. This data provided the average annual daily runway use for each aircraft type during day and night periods at C09. **Table 3-1** lists the average daily operations by aircraft for the existing conditions. **Table 3-2** summarizes the percentage of use by each aircraft category (departure or arrival), by runway end percentages and by time of day (day or night).

Table 3-1 – Average Daily Operations by Aircraft Type - Existing (2021) Condition

Aircraft Category	Aircraft Type	Arrivals		Departures		Total Operations
		Daytime	Nighttime	Daytime	Nighttime	
Jet	Cessna Citation CJ3	0.084	0.009	0.084	0.009	0.187
	Cessna Citation CJ4	0.042	0.005	0.042	0.005	0.094
	Cessna Citation Excel	0.013	0.001	0.013	0.001	0.029
	Cessna Citation Mustang	0.013	0.001	0.013	0.001	0.029
	Eclipse 500	0.013	0.001	0.013	0.001	0.029
Turboprop	Ayres Corporation S2R-G6	0.949	0.105	0.949	0.105	2.109
	Socata TBM9	0.015	0.002	0.015	0.002	0.033
	Beechcraft Super King Air 200	0.010	0.001	0.010	0.001	0.022
	Beechcraft Super King Air 350	0.005	0.001	0.005	0.001	0.011
	Cessna 414 Chancellor	0.005	0.001	0.005	0.001	0.011
Piston	Cessna 172 Skyhawk	7.762	0.862	7.762	0.862	17.249
	Van's Aircraft RV-8	0.267	0.030	0.267	0.030	0.594
	Bellanca 8KCAB	0.191	0.021	0.191	0.021	0.424
	Piper PA-28-180 Cherokee	0.191	0.021	0.191	0.021	0.424
	Aviat Aircraft Pitts S-2B	0.153	0.017	0.153	0.017	0.339
Rotor	Robinson Helicopter R44 II	0.032	0.004	0.032	0.004	0.072
Total Operations		9.745	1.082	9.745	1.082	21.654

Notes: Daytime Hours = 07:00AM to 09:59PM. Nighttime Hours = 10:00PM to 06:59AM.; Data Sources: TFMSC, OPSNET, CMT 2021. Due to rounding, total operations by aircraft type may not tally exactly.

Table 3-2 - Runway End Utilization - Existing (2021) Condition

Operation Category	Aircraft Category	Runway End Percent Usage	
		Runway 18	Runway 36
Daytime Arrivals	Jets	75.0%	25.0%
	Turboprops	75.0%	25.0%
	Props	75.0%	25.0%
Nighttime Arrivals	Jets	75.0%	25.0%
	Turboprops	75.0%	25.0%
	Props	75.0%	25.0%
Daytime Departures	Jets	75.0%	25.0%
	Turboprops	75.0%	25.0%
	Props	75.0%	25.0%
Nighttime Departures	Jets	75.0%	25.0%
	Turboprops	75.0%	25.0%

Table 3-2 - Runway End Utilization - Existing (2021) Condition			
Operation Category	Aircraft Category	Runway End Percent Usage	
		Runway 18	Runway 36
	Props	75.0%	25.0%

Notes: Daytime Hours = 07:00AM to 09:59PM. Nighttime Hours = 10:00PM to 06:59AM. Source: CMT 2022.

Additional noise model input assumptions, including runway definitions, aircraft operations, fleet mix, percentage of nighttime operations by aircraft type, aircraft trip lengths and operation profiles and flight tracks for the Existing (2021) Noise Contour, Future (2026) No Action Noise Contour and Future (2026) Proposed Action Noise Contour is presented in Appendix B, Morris Municipal Airport - AEDT Noise Report. The following sections present the results of the noise analysis and noise compatible land uses.

3.2.2 Affected Environment

EXISTING (2021) NOISE EXPOSURE CONTOUR

Figure 3-1 reflects the average-annual noise exposure contour at C09 during the Existing (2021) condition. Noise contours are presented for the 65, 70, and 75 DNL. DNL contours are a graphic representation of how the noise from C09's annual average daily aircraft operations are distributed over the surrounding area. DNL represents an average sound level over the course of an average annual day.

Table 3-3 summarizes the land areas within each noise contour level for the Existing (2020) Condition. The noise contour extends from the Airport along each extended runway centerline, reflecting the flight tracks used by all aircraft. The relative distance of a contour from the Airport along each route is a function of the frequency of use of each runway end for total aircraft arrivals and departures, the type of aircraft assigned to it, and the time of day of the flight.

Table 3-3- Existing (2021) Noise Exposure Contours Land Area	
Contour Range	Total Land Area (acres)
DNL 65-70 dB	33
DNL 70-75 dB	12
DNL > 75 dB	4
Total	**49**

Source: CMT 2022.

All noise contours depicted in the figure are located on airport property.

NOISE COMPATIBLE LAND USE

The FAA has created guidelines regarding the compatibility of land use with various aircraft noise levels measured using the DNL metric. These guidelines are defined in 14 CFR Part 150. The land use compatibility table is contained in **Table 3-4**. These guidelines show the compatibility parameters for residential, public (schools, churches, nursing homes, hospitals, and libraries), commercial, institutional, and recreational land uses. All land uses exposed to noise levels below the DNL 65 dB noise contour are generally considered compatible with airport operations.

Figure 3-1 – Existing (2021) Noise Exposure Contours

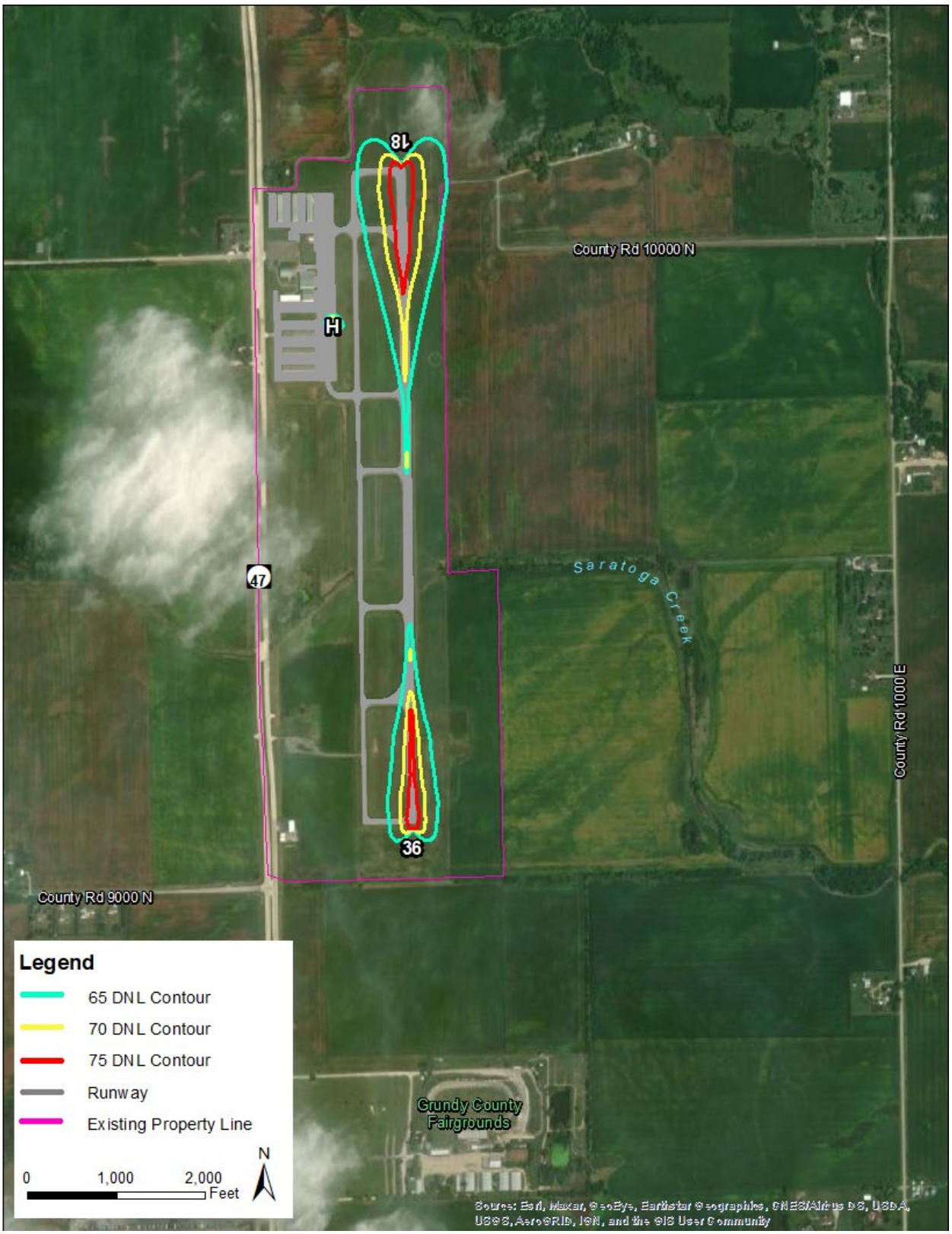


Table 3-4 - Land Uses Normally Compatible with Various Noise Levels						
Land Use	Yearly Day Night Average Sound Level (DNL) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Residential						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public Use						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware, and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
Manufacturing and Production						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheatres	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N

Table 3-4 - Land Uses Normally Compatible with Various Noise Levels						
Land Use	Yearly Day Night Average Sound Level (DNL) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

(1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year-round. However, the use of NLR criteria will not eliminate outdoor noise problems.
(2) Measures to achieve NLR 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
(3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
(4) Measures to achieve NLR 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal level is low.
(5) Land use compatible provided special sound reinforcement systems are installed.
(6) Residential buildings require an NLR of 25.
(7) Residential buildings require an NLR of 30.
(8) Residential buildings not permitted.

Notes:1. The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute Federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.
2. SLUCM=Standard Land Use Coding Manual.
3. Y (Yes)=Land Use and related structures compatible without restrictions.
4. N (No)=Land Use and related structures are not compatible and should be prohibited.
5. NLR=Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
6. 25, 30, or 35=Land use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.
Source: 14 CFR Part 150, Airport Noise Compatibility Planning. December 18, 1984. Appendix A, Table 1.

There are no residences, public schools, churches, nursing homes, hospitals, or libraries within any of the existing condition contours.

3.2.3 Environmental Consequences

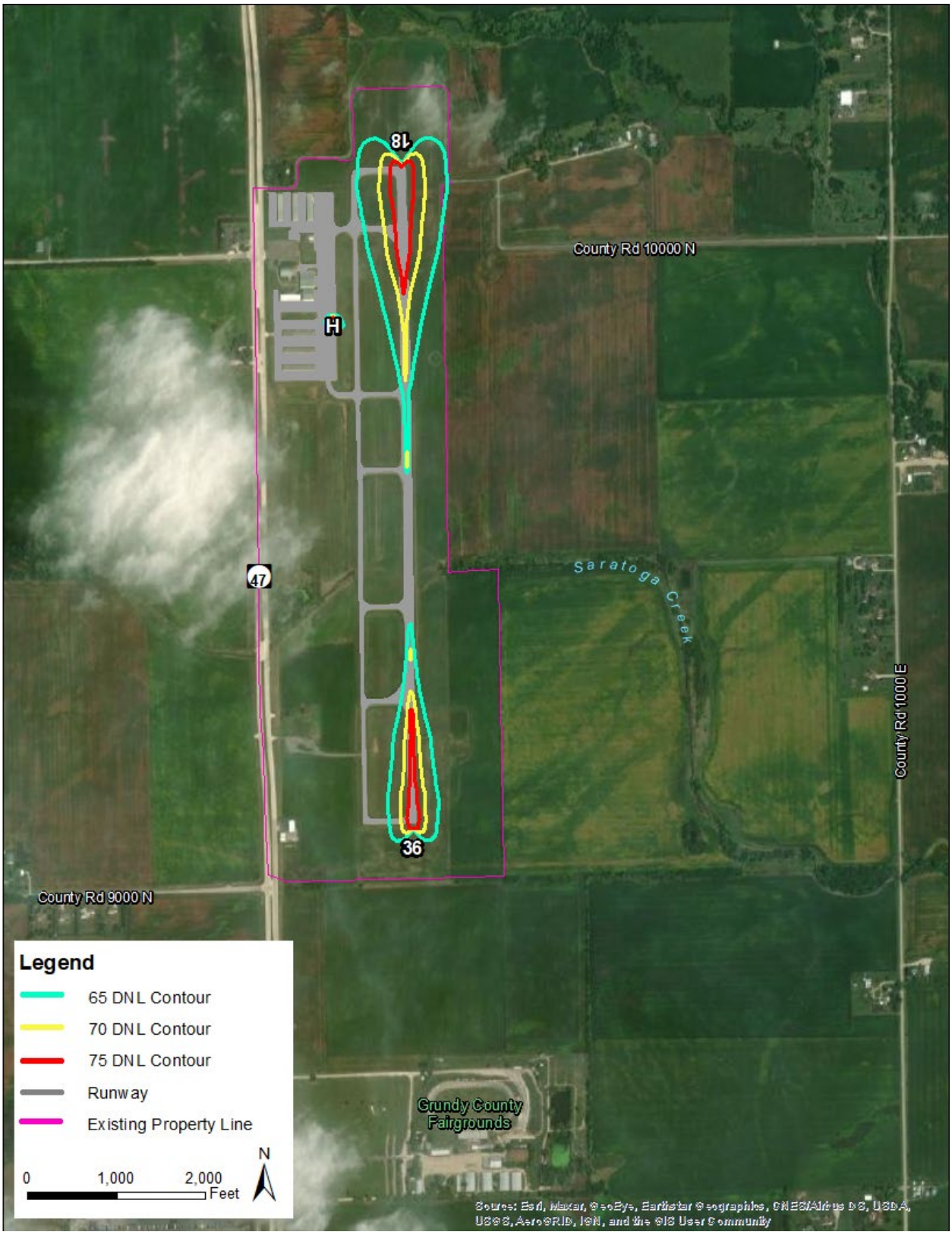
NO ACTION ALTERNATIVE

No changes to the runway configuration would occur under the No Action alternative, therefore, the runway layout discussed for the Existing Condition was also used to model the Future (2026) No Action Noise Exposure Contour. **Figure 3-2** reflects the average-annual noise exposure pattern at C09 during the Future (2026) No Action condition. Noise contours are presented for the 65, 70 and 75 DNL. **Table 3-5** summarizes the land areas within each noise contour level for the Future (2026) No Action.

Table 3-5 - Future (2026) No Action Noise Exposure Contours Land Area	
Contour Range	**Total Land Area (acres)**
DNL 65-70 dB	34
DNL 70-75 dB	12
DNL > 75 dB	4
Total	**50**

Source: CMT 2022.

Figure 3-2: Future (2026) No Action Noise Exposure Contours



NOISE COMPATIBLE LAND USE – NO ACTION ALTERNATIVE

As in the case for the existing noise conditions, there are no residences, public schools, churches, nursing homes, hospitals, or libraries within any of the contours for the Future No Action condition.

PROPOSED ACTION

FAA requires that a comparison of the Future Airport Conditions with the Proposed Action versus the Future Airport Conditions with No Action Alternative be conducted. To determine if the Proposed Action has a significant impact, FAA Order 1050.1F states that: "*The action would 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.*"

The Future (2026) Proposed Action Noise Exposure Contour, showing 65, 70, and 75 DNL levels, is presented on **Figure 3-3**. The 65+ DNL of the Future (2027) Proposed Action Noise Exposure Contour encompasses approximately 56 acres.

The Future (2026) Proposed Action Noise Exposure Contour retains a similar shape as the Future (2026) No Action Noise Exposure Contour but is larger due to the increase in aircraft operations that would occur as a result of the implementation of the Proposed Action. The primary difference in the shape of the Future (2026) Proposed Action noise contour compared to the Future (2026) No Action noise contour is due to the crosswind runway being constructed to the east. **Table 3-6** summarizes the land areas within each noise contour level for the Future (2026) Proposed Action.

Table 3-6 – Estimated Land Area
Future (2026) Proposed Action Noise Exposure Contours

Contour Range	Total Land Area (acres)
DNL 65-70 dB	38
DNL 70-75 dB	13
DNL > 75 dB	5
Total	**56**

Source: CMT 2022.

NOISE COMPATIBLE LAND USE - PROPOSED ACTION

There are no residences, public schools, churches, nursing homes, hospitals, or libraries within the 65+ DNL of the Future (2026) Proposed Action noise contours.

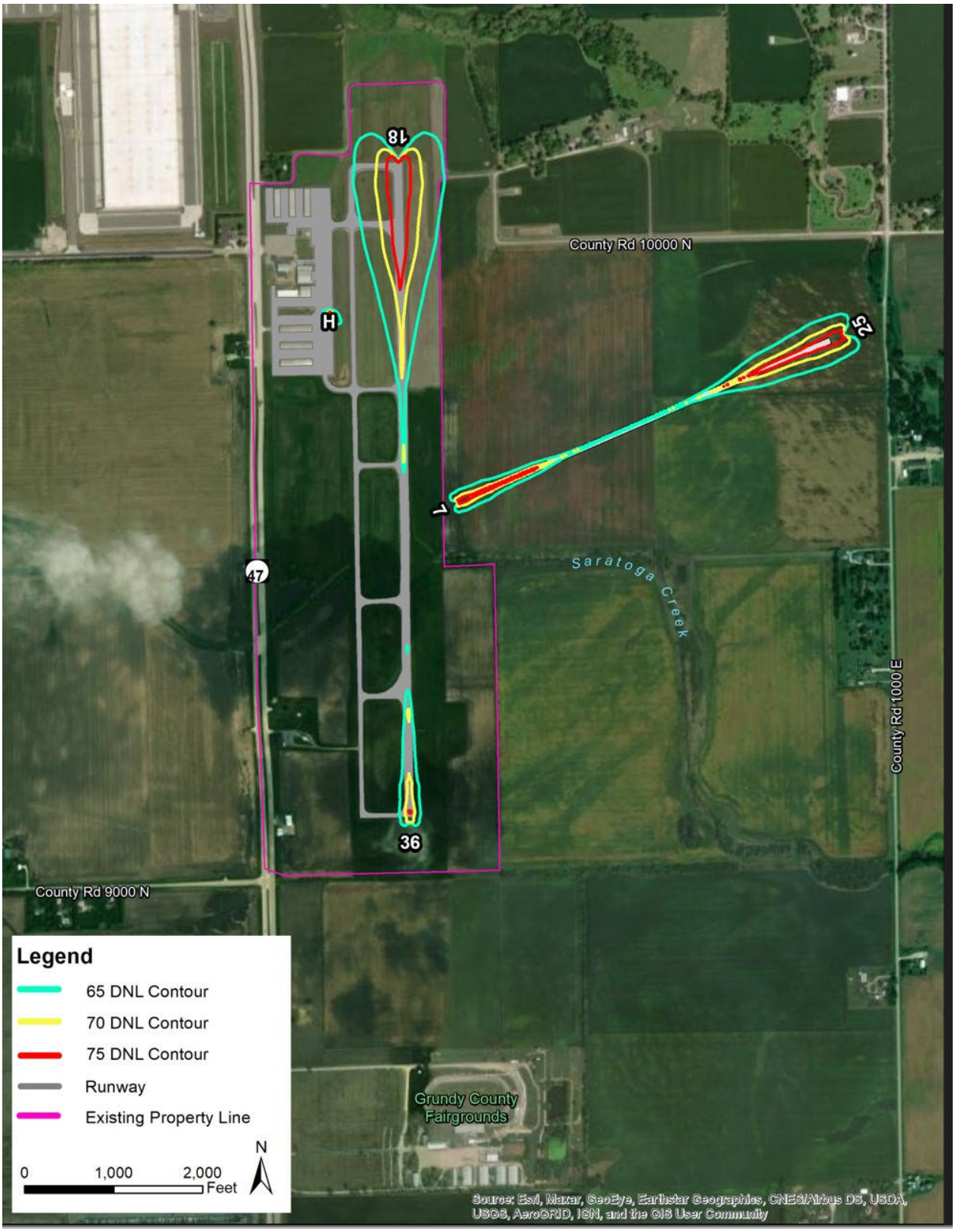
COMPARISON TO FEDERAL THRESHOLD OF SIGNIFICANCE

An aircraft noise impact would be considered significant if noncompatible land uses are newly exposed to DNL 65+ dB as a result of a Proposed Action Alternative or an increase of DNL 1.5 dB or more over a noncompatible land use within the DNL 65 dB contour is predicted when comparing the future (2026) No Action Alternative to the Proposed Action Alternative. For this analysis, there are no land uses that are incompatible with aircraft noise within the DNL 65+ dB contour with either the Future (2026) No Action Alternative or the Proposed Action Alternative. Therefore, no significant impacts are forecast to occur due to implementation of the Proposed Action Alternative.

3.2.4 Mitigation

Because no noise sensitive land uses would experience a DNL 1.5 dB increase at or above DNL 65 dB in 2026 as a result of the Proposed Action Alternative, no mitigation is required for the aircraft noise that is predicted to occur with the improvement to C09.

Figure 3-3: Future (2026) Proposed Action Noise Exposure Contours



3.3 Land Use

3.3.1 General

The previous section, Noise and Noise Compatible Land Use, focused specifically on potential land use impacts associated with aircraft noise. According to the FAA, thresholds of significance are primarily related to noise impacts and the 65 DNL noise contour. If noise sensitive land use within the 65 DNL contour is subject to a 1.5 DNL or greater increase in noise level, the impact is considered significant. Although the compatibility of existing and planned land uses within a proposed project area are normally associated with noise impacts, impacts of a Federal action may also affect land use compatibility in other ways like fee-simple acquisition/relocation, induced socioeconomic impacts, or impacts to land uses protected under Section 4(f).

Land use compatibility for airports also addresses issues related to navigational safety (e.g., encroaching structures and terrain), congregations of people, and wildlife attractants. It should be noted that Grundy County and the City of Morris do not have zoning restrictions to regulate and help protect off-airport land uses, or an airport overlay zone for C09. However, IDOT Aeronautics has enacted Airport Hazard Zoning Regulations that parity FAA's FAR Part 77 Surfaces.

Land use compatibility is also evaluated in terms of uses that may adversely affect safe airport operations, including potential wildlife attractants that may be in proximity of the airport's air operating areas. Advisory Circular (AC) 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports, provides separation guidance for potential wildlife attractants. According to AC 150/5200-33B, waste disposal operations, water management facilities, wetlands, agricultural activities, and dredge spoil containment areas are considered incompatible if located near airports through the application of the following criteria:

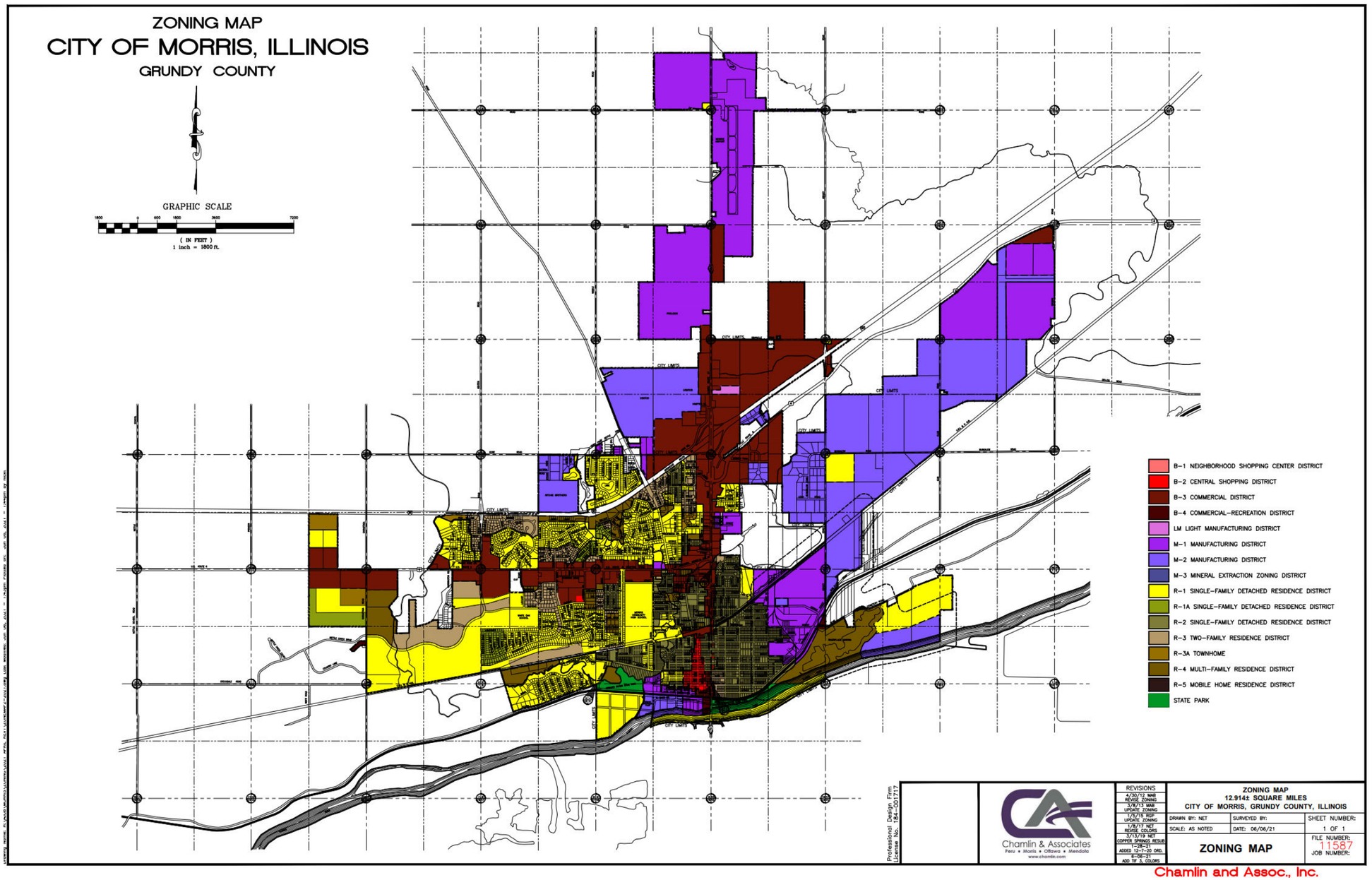
- within 10,000 feet of any Airport Operating Area (AOA) used or planned to be used by turbine-powered aircraft
- within 5,000 feet of any AOA used only by piston-powered aircraft
- within five miles of the farthest edge of the Airport's AOA that could cause hazardous wildlife movement into or across the approach or departure airspace

3.3.2 Affected Environment

C09 is a publicly owned airport, operated by the City of Morris and the existing airfield is located within the corporate limits of the City of Morris. The City of Morris's Zoning Map, depicted in Figure 3-4, shows C09 as zoned as M-1 – Manufacturing District. Residential areas located to the southeast of C09 are zoned as R2 – Single-family Residence (Minimum lot size 7,200 sf). There is one area zoned R5 – Limited General Residence (Minimum lot size 6,000) to the east of the airport and two separate areas zoned B2 – Community Shopping (Commercial).

The Republic Services Environtech Landfill, which is located approximately 3.5 miles southeast of C09 is closed. The next nearest landfill is located near Pontiac, IL approximately 35 miles southwest of Morris and outside the five-mile FAA threshold for consideration of aircraft bird interaction and outside the 10,000-foot incompatibility threshold.

Figure 3-4: City of Morris Zoning Map



Source: https://morrisil.org/wp-content/uploads/2021/11/zoning-map.pdf

3.3.3 Environmental Consequences

NO ACTION ALTERNATIVE

As part of the No Action Alternative, Runway 7/25 would not be constructed, and Runway 18/36 would remain in its current configuration. Lack of crosswind components would remain.

PROPOSED ACTION

Runway improvements associated with the Proposed Action would create a 65 DNL contour on at the Airport along the centerline of the proposed runway. To avoid land use incompatibilities, the Proposed Action would result in the acquisition of approximately 179.53 acres of land to protect the replacement runway's safety and object free areas and provide compatible land use within the RPZs. The acquisition would include 0 residences/businesses and it would also include approximately 0.73 acres of avigation easement.

As a result of these acquisitions, no incompatible land uses would fall within this new area affected by aircraft noise levels more than 65 DNL or greater. In addition, the relocated and extended RPZs would all be controlled by the airport as part of the Proposed Action. Further, aircraft noise from the proposed improvements, which would solely on airport property, would not significantly impact any parks, schools, churches, or other noise sensitive areas around the Airport.

Stormwater design would incorporate management techniques and wildlife hazard deterrents into design features to the extent practicable. The USDA, Wildlife Services recommends that any temporary or permanent open-water retention area be avoided, and that new water drainage should be below ground to avoid attracting any wildlife. If not underground, the drainage system should be designed to minimize any standing water and remove runoff. Any stormwater feature would be designed to drain within 48 hours of an event, in accordance with FAA AC 150/5200-33B.

3.3.4 Mitigation

Neither the Proposed Action nor the No Action Alternative would create any significant land use impacts associated with noise. Impacts and mitigation associated with the proposed property acquisition are discussed in Section 3.4. Storm water detention facilities should be designed, engineered, constructed, and maintained to minimize potential hazardous wildlife attractants. Any seeding required within the project would use the Illinois Standard Specifications for Construction of Airport, Division V, Item 901 – Seeding.[7]

3.4 Socioeconomic, Environmental Justice, and Children's Environmental Health and Safety Risks

3.4.1 General

The character of a community is largely determined by the people that live or work there. Associated factors that contribute to the characteristics of a community are business and labor markets, transportation systems, and utilities. The geography, geology, and climate of an area are also contributing factors. Any proposed action that affects individuals within a community is a social impact. The primary guidance document for this section is the "*Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*".[8] by USEPA.

[7] https://idot.illinois.gov/assets/uploads/files/doing-business/manuals-guides-&-handbooks/aero/new%20spec%20book%20(effective%204-1-2012).pdf
[8] https://www.epa.gov/environmentaljustice/technical-guidance-assessing-environmental-justice-regulatory-analysis

This section evaluates potential socio-economic impacts that would result from the construction of the proposed projects. Additionally, this section presents the analysis of environmental justice and the potential impacts on children's environmental health and safety risks.

SOCIOECONOMICS

This section of the document evaluates the proposed project's effects on the social and economic characteristics of affected communities, specifically evaluating shifts in population, public service demands, roadway capacity, businesses, and economics. FAA *Order 1050.1F indicates that the principal social impacts to be considered are those associated with relocation or other community disruption, transportation, planned development, and employment*."[9] As noted in FAA Order 1050.1F, if acquisition of property or displacement of persons is involved, then 49 CFR Part 24, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970[10] (Uniform Act), must be implemented. In addition, FAA provides guidance in FAA Advisory Circular 150/5100-17[11] and FAA Order 5100.37B[12] for projects that require or involve land acquisition and relocation.

Factors to consider that may be applicable to socioeconomic resources, include, but are not limited to, the following:

- Inducing substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area).
- Disrupting or dividing the physical arrangement of an established community.
- Causing extensive relocation when sufficient replacement housing is unavailable.
- Causing extensive relocation of community businesses that would cause severe economic hardship for affected communities.
- Disrupting local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities.
- Producing a substantial change in the community tax base.

ENVIRONMENTAL JUSTICE

Executive Order (EO) 12898, issued in 1994, requires each Federal agency to include environmental justice as part of its mission by identifying and addressing, as appropriate, disproportionately high, and adverse impacts of its programs, policies, and activities on minority and/or low-income populations. DOT Order 5610.2, Environmental Justice in Minority Populations and Low-Income Populations establishes how DOT, and its operating administrations would integrate EO 12898 with existing regulations and guidance. It states that it is the policy of DOT to promote the principles of environmental justice through the incorporation of those principles into existing agency programs, policies, and activities. The Order goes on to state it is DOT's policy to promote the principles of environmental justice by considering them during or as a part of the planning and decision-making processes in the development of programs, policies, and activities, using the principles of NEPA, Title VI, the Uniform Act, and other applicable DOT statutes, regulations, and guidance. This Order provides guidance related to environmental justice impacts as follows: A *"disproportionately high and adverse effect on minority and low-income populations" is defined as an adverse effect that: "(1) is predominantly borne by a minority population and/or low-income population; or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that*

[9] FAA, Order 1050.1F, Desk Reference, July 2015, pg. 12-4
[10] Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 USC 4601et seq.) (PL 91-528 amended by the Surface Transportation and Uniform Relocation Act Amendments of 1987, PL 100-117).
[11] Federal Aviation Administration (FAA) Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects, Advisory Circular 5100-17, Change 7, July 10, 2017.
[12] Federal Aviation Administration (FAA) Land Acquisition and Relocation Assistance for Airport Projects, FAA Order 5100.37B, August 1, 2005.

will be suffered by the non-minority population and/or low-income population." The DOT Order also states that "[i]n making determinations regarding disproportionately high and adverse effects . . . mitigation and enhancement measures. . . and all offsetting benefits to the affected minority and low-income population may be taken into account . . ."

Disproportionately high and adverse human health or environmental effects on minority and low-income populations may represent a significant impact. Additional guidance provided in a document titled "*Promising Practices for EJ Methodologies in NEPA Reviews*"[13] (Promising Practices) was referenced for the specific steps used to identify minority and low-income populations presented in this EA.

CHILDREN'S HEALTH AND SAFETY RISK

Pursuant to *Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks*, Federal agencies are directed, as appropriate and consistent with the agency's mission, to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. Environmental health and safety risks are defined as risks to health or safety that are attributable to products or substances that a child is likely to come in contact with or ingest. Disproportionate health and safety risks to children may represent a significant impact.

SURFACE TRANSPORTATION IMPROVEMENTS

IDOT Highways has previously approved an EA for the widening of Illinois Route 47. This effort was coordinated with the local communities, the Airport and constructed. The Airport's Sponsor's Proposed Action does not include any surface transportation improvements.

3.4.2 Affected Environment

Table 3-7 present demographic characteristics for the affected environment based on available geographic data from the U.S Census.[14] Because census geographies are used, the affected environment for this analysis differs from the project study area discussed in other sections of this chapter. The project study area includes the project construction limits and the proposed acquisition areas, including fee simple and avigation easement areas, included in the proposed action. The affected environment for this analysis includes the census tract for affected community characteristics presented in **Table 3-7,** that wholly contains the project study area. This census geographic area was selected for the affected environment because it represents the smallest geographical unit available in the U.S. Census 2016-2020 5-year American Community Survey, for each characteristic examined.

[13] Promising Practices for EJ Methodologies in NEPA Reviews, Report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee, March 2016.
[14] U.S. Census website: https://www.census.gov/data.html

Table 3-7: Demographic Data, Population, And Income Characteristics		
Demographics	Community Of Comparison (COC): Grundy County, Illinois	Affected Community (AC) Census Tract 2 Grundy County, Illinois
Age Distribution Demographic Data		
Total Population Counted	50,798	6,967
Number Under 5 Years Old	3,084	437
Percentage Under 5 Years Old	6.1%	6.3%
Number Under 18 Years Old	12,818	1,938
Percentage Under 18 Years Old	25.2%	27.8%
Number 65 Years Old or Older	7,080	1,164
Percentage 65 Years Old or Older	13.9%	16.7%
Minority Analysis		
Total Population Counted	50,798	6,967
Number of Minority Individuals	7,252	1,017
Percentage of Minority Individuals	14.3%	14.6%
125% of COC	17.8%	AC < 125% COC
Minority EJ Population?		No
Poverty Analysis		
Total Population Counted	50,158	6,787
Number of Persons with Income Below Poverty	3,537	800
Percentage Persons with Income Below Poverty	7.1%	11.8%
125% of COC	8.8%	AC > 125% COC
EJ Population in Poverty?		Yes
Food Assistance Demographic Data		
Total Households Counted	20,071	2,700
Number of Households Receiving Assistance	1,844	324
Percentage of Households Receiving Assistance	9.2%	12.0%
125% of COC	11.5%	AC > 125% COC
EJ Population in Poverty (alternate measure)?		Yes

Source: U.S. Census, American Community Survey, 2016-2020 5 Year Period Estimate.

MINORITY AND LOW-INCOME POPULATION ANALYSIS

The *fifty percen*t and *meaningfully greater* analyses described in the **Promising Practices** document were used to identify minority populations in the affected environment. The meaningfully greater analysis requires a reference community. The purpose of comparing data for the reference community to that of the affected environment is to determine if there is a meaningfully greater minority population present within the affected environment when compared to the larger geographical area around the Airport.

The selected reference community is the County of Grundy. Data for the reference community are also presented in **Table 3-7**.

The meaningfully greater analysis requires comparison of the percentage of minorities residing within each of the affected environment's census blocks to the percentage of minority individuals residing in the reference community. A threshold is typically applied above which an affected minority population is meaningfully greater than that in the general population. For this analysis the threshold was set at 125% of the reference community's percentage of minority population.

The *Low-Income Threshold Criteria* analysis described in the **Promising Practices** document was used to identify low-income populations in the affected environment. Two indicators of poverty were examined: population poverty levels in comparison with the Census Bureau's poverty threshold and household poverty levels as indicated by receipt of Federal food assistance. **Table 3-7** presents the census data. Because no affected environment's census tract had levels of either poverty indicator that exceeded the reference community's levels, no low-income population was identified.

3.4.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative does not require any land acquisition; business or residential relocations; altering any surface transportation facility; dividing or disrupting any established community; disrupting orderly, planned development; or creating an appreciable change in employment. Therefore, there would be no social impacts under the No Action Alternative.

PROPOSED ACTION

The Proposed Action would require the acquisition of approximately 179.53 acres of land in fee simple title and approximately 0.73 acres in avigation easement. The acquisition would not include the purchase of any residences and or non-agrarian businesses in fee simple and no residences and/or businesses in easement. The acquisition will purchase three farm operations. Any impacted owner, tenant, or business in the acquisition area would be afforded all appropriate rights established in the Uniform Act and by FAA guidance.

The Proposed Action would be consistent with orderly, planned development in the area. This development project would not disrupt traffic patterns, and or create temporary disruption in traffic flows due to construction. Access to existing businesses and residences would be maintained during construction. Sufficient roadway capacity exists on all roadways serving the Airport.

The project study area does not contain a minority population of concern because the affected community is not more than 50 percent minority, nor is the minority population meaningfully greater than Grundy County. Based on the information presented in Table 3-7, the project area does contain a significant low-income population. The Sponsor's Proposed Action does not include the acquisition and/or relocation of any homes, non-agrarian businesses, or structures. Landowners, including the present farming operations, have been notified by the City of Morris on the potential acquisition of their property through Scoping. Since the SPA does not include any housing relocation, there does not appear to have any disproportionate impact on low-income individuals. The project will conduct a meaningful involvement for low-income individuals through a concerted public involvement process. The public involvement will include placing the Environmental Assessment on the Airport's website, placement of copies of the EA in publicly accessible venues and continued dialogue with affected landowners. See Appendix F - Agency and Citizen Coordination.

The benefits of the proposed improvements include a temporary increase in employment in the construction sector proportionate to the construction projects. This increased temporary employment would result in a boost to local merchants/professionals from the sale of goods and

services and would result in positive growth and a temporary increase in the community tax base. The induced economic and employment effects likely to result from the Proposed Action are positive and consistent with local plans. Based on these factors, it is anticipated that the Proposed Action would not create any adverse socioeconomic impacts.

3.4.4 Mitigation

Neither the No Action Alternative nor the Proposed Action would produce significant socioeconomic impacts or health and safety risks to children, nor would either produce disproportionately high and adverse impacts to populations of environmental justice concern. The Proposed Action includes land acquisition and no disruption to established communities or planned development was identified. Further, any impacted owner, tenant, or business in the acquisition area would be afforded all appropriate rights established in the Uniform Act and by FAA guidance. No mitigation is required.

3.5 Air Quality

3.5.1 General

At the Federal level, under the Clean Air Act (CAA), the United States Environmental Protection Agency (EPA) establishes the guiding principles and policies for protecting air quality conditions in the study area (and throughout the nation). EPA's primary responsibility is to promulgate and update National Ambient Air Quality Standards (NAAQS)[15] which define outdoor levels of air pollutants that are considered safe for the health and welfare of the public. The EPA's other responsibilities include the approval of State Implementation Plans (SIPs), plans that detail how a State will comply with the CAA. The FAA is the primary agency involved in, and responsible for, ensuring that air quality impacts associated with proposed airport projects adhere to the reporting and disclosure requirements of NEPA as well as the General Conformity Rule of the CAA. The General Conformity Rule is applicable to non-highway projects that are Federally funded, licensed, permitted, or approved. The rule ensures that project-related air pollutant emissions do not contribute to the degradation of air quality conditions in an area.

The CAA requires the EPA to establish and periodically review NAAQS. There are NAAQS for six "criteria" air pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), and sulfur dioxide (SO_2). There are standards for two sizes of PM, $PM_{2.5}$ which are particles with a diameter of 2.5 microns or less and PM_{10} which are particles with a diameter of 10 microns or less. There are two sets of standards. Primary Standards provide protection for the health of the public and Secondary Standards provide public welfare protection. The NAAQS and their averaging periods are provided in **Table 3-8**.

[15] EPA, National Ambient Air Quality Standards (NAAQS) at https://www.epa.gov/criteria-air-pollutants/naaqs-table, September 2019.

Table 3-8: National Ambient Air Quality Standards					
Pollutant		Primary/ Secondary	Averaging Time	Standards	Form
Carbon Monoxide (CO)		Primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead (Pb)		Primary and Secondary	Rolling 3-month average	0.15 µg/m^3 (1)	Not to be exceeded
Nitrogen Dioxide (NO_x)		Primary	1-hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Primary and Secondary	1 year	53 ppb (2)	Annual Mean
Ozone (O_3)		Primary and Secondary	8-hour	0.070 ppm (3)	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particulate Matter	$PM_{2.5}$	Primary	1 year	12.0 µg/m^3	Annual mean, averaged over 3 years
		Secondary	1 year	15.0 µg/m^3	Annual mean, averaged over 3 years
		Primary and Secondary	24-hour	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	Primary and Secondary	24-hour	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulphur Dioxide (SO_2)		Primary	1-hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year
(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m^3 as a calendar quarter average) also remain in effect.					
(2) The level of the annual NO2 standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.					
(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O3 standards additionally remain in effect in some areas. Revocation of the previous (2008) O3 standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.					
(4) The previous SO2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO2 standards or is not meeting the requirements of a SIP call under the previous SO2 standards (40 CFR 50.4(3)).					

Notes:ppm is parts per million; ppb is parts per billion, and µg/m^3 is micrograms per cubic meter.
Source:EPA, https://www.epa.gov/criteria-air-pollutants/naaqs-table Accessed May 2018.

The EPA designates areas as having air pollutant levels that are either lower than or meeting the NAAQS or higher than the NAAQS. An area with measured pollutant concentrations which are lower/meeting the NAAQS is designated as an *attainment area* and an area with pollutant concentrations that exceed the NAAQS is designated as a *nonattainment area*. After air pollutant concentrations in a nonattainment area are reduced to levels that meet or are below the NAAQS, the EPA re-designates the area to be a *maintenance area* for a period of 20 years. An area is designated as unclassifiable when there is a lack of sufficient data to determine the status of a pollutant within the area.

To evaluate the interdependencies between air quality and noise the FAA developed the Aviation Environmental Design Tool (AEDT)[16]. AEDT is a software system that models aircraft performance in space and time to estimate fuel burn, emissions, and noise. AEDT is a comprehensive tool that provides information to FAA stakeholders on each of these specific environmental impacts. AEDT facilitates environmental review activities required under NEPA by consolidating the modeling of these environmental impacts in a single tool.

3.5.2 Affected Environment

C09 is located in Grundy County, Illinois. Based on air quality data, emissions and emissions-related data, meteorology, geography/topography, and jurisdictional boundaries, the EPA has designated Grundy County to be an attainment area for all NAAQS. The General Conformity Rule of the CAA prohibits Federal agencies (including the FAA) from permitting or funding non-highway projects that do not conform to a SIP. Because the Proposed Action is within Grundy County, an area designated as in attainment, a General Conformity applicability analysis is not required.

The CAA also contains a Transportation Conformity Rule that functions similar to the General Conformity Rule. The Transportation Conformity Rule restricts Federal funding to highway or transportation projects that do not conform to a SIP. As with General Conformity, Transportation Conformity regulations apply only to Federal actions located within a nonattainment or maintenance area. As noted, Grundy County is in attainment for all NAAQS. Because the Proposed Action would not be developed, funded, or approved by the Federal Highway Administration or the Federal Transit Administration, the Transportation Conformity regulations of the CAA do not apply to the Proposed Action.

Finally, the General Conformity Rule requirements, Section 102(2) of NEPA, also requires environmental review of Federally funded projects that have the potential to affect the environment irrespective of location (i.e., nonattainment/maintenance areas). The emission inventories presented, which disclose project-related emissions of criteria air pollutants and pollutant precursors, as well as Greenhouse Gases (GHGs), were prepared.

3.5.3 Environmental Consequences

This section presents and discusses the potential air quality impacts associated with the Proposed Action. For the analysis, the short-term criteria air pollutant and pollutant precursor emissions that would result from construction as well as long-term operational emissions that would result with the Proposed Action were derived. Detailed air quality modelling input assumptions are presented in Appendix C, Morris Municipal Airport - Air Quality and Climate Assessment.

CONSTRUCTION ACTIVITIES

Air pollutant emissions associated with construction activities are temporary and variable depending on project location, duration, and level of activity. These emissions occur predominantly in engine exhaust from the operation of construction equipment and vehicles at the site (e.g., scrapers, dozers, delivery trucks, etc.) and from transporting construction workers to and from the site. Additionally, fugitive dust emissions result from site preparation, land clearing, material handling, equipment movement on unpaved areas; and from evaporative emissions that occur during the application of asphalt paving.

The construction equipment typically utilized in airport projects is comprised both of on-road vehicles (i.e., on-road-licensed) and non-road equipment (i.e., off-road). The former category of vehicles is used for the transport and delivery of supplies, material, and equipment to and from

[16] AEDT 2d, at the time of the analysis, was the current release version of AEDT. Additional information on AEDT is available at https://aedt.faa.gov/.

the site and includes construction worker vehicles. The latter category of equipment is operated on-site for activities such as soil/material handling, site clearing and grubbing.

The Airport Construction Emissions Inventory Tool (ACEIT)[17] was used to estimate short-term construction emissions associated with the proposed improvements at C09. Project-specific details were used in the ACEIT to estimate construction activities and equipment/vehicle activity data (e.g., equipment mixes/operating times). Because the default emission factors used by ACEIT are outdated and do not reflect the emission rates from the EPA's MOtor Vehicle Emission Simulator (i.e., MOVES)[18] model, only activity data was extracted from ACEIT. Emission factors were then developed using MOVES, which provides emissions data for both on-road vehicles and off-road construction equipment. Fugitive dust emissions were calculated using emission factors within EPA's Compilation of Air Pollutant Emission Factors (AP-42)[19] and evaporative emissions were developed using EPA guidance on asphalt paving.[20]

Table 3-9 lists the construction activities that would be necessary to implement the Proposed Action. As also shown, the construction is assumed to begin in the year 2024 and continue through the year 2026. Further details on a construction schedule breakdown along with the type of equipment/vehicles and activity levels per year are provided in **Appendix C**.

Table 3-9: Construction Schedule and Activities

Construction Schedule	Construction Activities
2024-2026	Site Preparation
2024-2026	Corporate Hangar (10,000 ft^2)
2024-2026	Service Road
2024-2026	Auto Parking Lot
2024-2026	Construct Runway 7/25
2024-2026	Construct Parallel and Connecting Taxiway
2024-2026	General Aviation Apron

Source: CMT 2022

Estimates of CO, VOC, NOx, Sulfur Oxides (SOx), PM_{10} and $PM_{2.5}$ that would occur to construct the proposed improvements are provided in **Table 3-10**. As shown, it is anticipated that emissions of pollutants and pollutant precursors would be the greatest in 2025. Notably, the emission estimates are below the de minimis threshold of 100 tons per year (tons/year) for NOx or VOC.

Table 3-10: Construction Emissions Proposed Action Alternative (Short Tons Per Year)

Construction Emissions Year	CO	NOx	VOC	PM_{10}	$PM_{2.5}$	SOx	Pb
2024	10.5	10.7	40.6	3.3	0.8	<0.1	NA
2025	20.5	27.1	43.4	5.9	1.8	<0.1	NA

[17] TRB, ACRP Report 102, Guidance for Estimating Airport Construction Emissions, http://www.trb.org/ACRP/Blurbs/170234.aspx.
[18] EPA's MOVES2014a, at the time of the analysis, was the latest version of MOVES, which includes the NONROAD model. Additional information on MOVES2014a is available at https://www.epa.gov/moves/moves2014a-latest-version-motor-vehicle-emission-simulator-moves.
[19] EPA, Emissions Factors & AP-42, Compilation of Air Pollutant Emission Factors, http://www.epa.gov/ttn/chief/ap42/index.html#toc.
[20] EPA, Emission Inventory Improvement Program, Asphalt Paving, Chapter 17, Volume III, April 2001.

Table 3-10: Construction Emissions Proposed Action Alternative (Short Tons Per Year)							
Construction Emissions Year	CO	NOx	VOC	PM_{10}	$PM_{2.5}$	SOx	Pb
2026	10.6	16.2	2.8	3.0	1.0	<0.1	NA

Notes: CO - Carbon Monoxide, NO_x - Nitrogen Oxides, SO_x - Sulfur Oxides, $PM_{10/2.5}$ - Particulate Matter & VOC - Volatile Organic Compounds. Totals may reflect rounding. Source: CMT 2022

OPERATIONAL EMISSIONS

The operational emissions inventory was prepared for aircraft, auxiliary power units (APUs), and ground support equipment (GSE). Emissions from motor vehicles were not considered in the analysis as the emissions from this source of pollutants would not change as a result of the Proposed Action. It is not anticipated that the number of airport-related employees will increase due to the Proposed Action. The aircraft, APU and GSE-related emissions were computed using the latest version of the FAA's AEDT.[21] The inventories were prepared for emissions of CO, NO_x, VOC, $PM_{10/2.5,}$ SO_x and Pb.

Aircraft emissions were calculated for the Future (2026) No Action and Proposed Action. Similar to the noise analysis, the information concerning operating levels and aircraft fleet mix was based upon the Forecast Working Paper – Morris Municipal Airport (See **Appendix A**).

The No Action and Proposed Action conditions include 16,016 and 17,605 annual operations, respectively. The aircraft fleet mix was assumed to remain the same for both conditions. For the future Proposed Action, aircraft taxi times were adjusted to reflect the use of the primary runway and the new crosswind runway. **Table 3-11** summarizes the aircraft fleet mix and number of annual aircraft operations modeled in AEDT for the future year 2026 conditions.

Table 3-11: Year 2026 Aircraft Fleet Mix and Operations				
Aircraft Category	Aircraft Type	Number of Aircraft Operations		
		2021	2026	
			No Action Alternative	Proposed Action Alternative
Jet	Cessna Citation CJ3	137	138	142
	Cessna Citation CJ4	69	70	74
	Cessna Citation Excel	21	21	23
	Cessna Citation Mustang	21	21	23
	Eclipse 500	21	21	23
Turboprop	Ayres Corporation S2R-G6	1,540	1,560	1,715
	Socata TBM9	24	24	27
	Beechcraft Super King Air 200	16	16	17
	Beechcraft Super King Air 350	8	8	9
	Cessna 414 Chancellor	8	8	9
Piston	Cessna 172 Skyhawk	12,592	12,757	14,037

[21] AEDT 2d, at the time of the analysis, was the current release version of AEDT. Additional information on AEDT is available at: https://aedt.faa.gov/.

Table 3-11: Year 2026 Aircraft Fleet Mix and Operations				
Aircraft Category	Aircraft Type	Number of Aircraft Operations		
		2021	2026	
			No Action Alternative	Proposed Action Alternative
	Van's Aircraft RV-8	433	439	482
	Bellanca 8KCAB	310	314	345
	Piper PA-28-180 Cherokee	310	314	345
	Aviat Aircraft Pitts S-2B	248	251	276
Rotor	Robinson Helicopter R44 II	52	53	58
Total Operations		15,808	16,016	17,605

Source: Morris Municipal Airport Forecast Working Paper.

3.5.4 Mitigation

Neither the Proposed Action nor the No Action Alternative would result in any significant air quality impacts. Construction activities associated with the No Action and the Proposed Action would result in temporary emissions from construction equipment, trucks, and fugitive dust emissions from site demolition and earthwork. The impacts would occur only within the immediate vicinity of the construction sites and would be minimized through best management practices to reduce emissions, particularly fugitive particle emissions, during construction.

While the annual emissions from construction equipment would not equal or exceed the applicable *de minimis* thresholds defining insignificant and negligible emissions, the Proposed Action would result in a short-term increase of airborne fugitive dust emissions from vehicle movement and soil excavation in and around the construction site. All possible best management practices should be taken to reduce fugitive dust emissions by adhering to guidelines included in FAA *Advisory Circular (AC), Standards for Specifying Construction of Airports*.[22] Methods of controlling dust and other airborne particles could include, but may not be limited to, the following:

- Exposing the minimum area of erodible earth
- Applying temporary mulch with or without seeding
- Using water sprinkler trucks
- Using covered haul trucks
- Using dust palliatives or penetration asphalt on haul roads
- Using plastic sheet coverings

3.6 Climate

3.6.1 General

Research has shown that an increase in atmospheric GHG emissions is significantly affecting the Earth's climate. These conclusions are based upon a scientific record that includes substantial contributions from the United States Global Change Research Program (USGCRP), a program mandated by Congress in the Global Change Research Act to "*assist the Nation and the world to*

[22] FAA Advisory Circular (AC)150/5370-10H, Standards for Specifying Construction of Airports, December 21, 2018.

understand, assess, predict, and respond to human-induced and natural processes of global change."[23]

In 2009, based primarily on the scientific assessments of the USGCRP, as well as the National Research Council (NRC) and the Intergovernmental Panel on Climate Change (IPCC), the EPA issued a finding that it was reasonable to assume that changes in our climate caused by elevated concentrations of GHG in the atmosphere endanger the public health and public welfare of current and future generations.[24] In 2015, EPA acknowledged more recent scientific assessments that "highlight the urgency of addressing the rising concentration of carbon dioxide (CO_2) in the atmosphere".[25]

The EPA and the FAA traditionally work within the standard-setting process of the International Civil Aviation Organization's (ICAO) Committee on Aviation Environmental Protection (CAEP) to establish international emission standards and related requirements, which individual nations may later adopt into domestic law. In February of 2016, ICAO/CAEP agreed on the first-ever international standards to regulate CO_2 emissions from aircraft. In July 2016, the EPA formally announced that GHG emissions from certain classes of aircraft engines contribute to climate change. In March of 2017, the ICAO Council adopted a new aircraft CO_2 emissions standard which will reduce the impact of aviation GHG emissions on the global climate.[26]

Although there are currently no Federal standards for aviation related GHG emissions, it is well-established that GHG emissions can affect climate. The CEQ has indicated that climate should be considered in NEPA analyses and in 2016 released the final guidance titled "*Final Guidance for Federal Departments and Agencies on Consideration of GHG Emissions and the Effects of Climate Change in NEPA Reviews*," for Federal agencies on how to consider the impacts of their actions on global climate change in their NEPA reviews, a Notice of Availability for which was published on August 5, 2016 (81 FR 51866). However, pursuant to Executive Order 13783 of March 28, 2017, "*Promoting Energy Independence and Economic Growth*," the final guidance was withdrawn effective April 5, 2017, for further consideration. Notably, on June 21, 2019, the CEQ submitted draft guidance titled "*Draft NEPA Guidance on Consideration of GHG Emissions*," to the Federal Register for publication and public comment. The public comment period was originally set to close on July 26, 2019, but was extended to August 26, 2019. If finalized, this guidance would replace the final guidance CEQ issued in August 2016.[27, 28].

The GHG emissions associated with the construction and operation of the Proposed Action are presented in **Table 3-12**. GHG emissions are presented in metric tons of CO_2 equivalent (CO_2e). As previously stated, there are no standards by which the emissions of GHG can be evaluated. Therefore, the estimates are provided for disclosure purposes only.

[23] Global Change Research Act of 1990, Pub. L. 101–606, Sec. 103 (November 16, 1990), http://www.globalchange.gov.
[24] Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66496 (December 15, 2009).
[25] EPA, Final Rule for Carbon Pollution Emission Guidelines for Existing Stationary Sources Electric Utility Generating Units, 80 Fed. Reg. 64661, 64677 (October 23, 2015).
[26] ICAO, https://www.icao.int/Newsroom/Pages/ICAO-Council-adopts-new-CO2-emissions-standard-for-aircraft.aspx.
[27] Executive Office of the President of the U.S., Council on Environmental Quality Initiatives, Fact Sheet: CEQ'S Draft NEPA Guidance on Consideration of GHG Emissions, https://www.whitehouse.gov/wp-content/uploads/2017/11/20190724-FINAL-GHG-Guidance-Fact-Sheet-FR-Notice-Comment-Extension.pdf.
[28] Council on Environmental Quality, Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions, [Docket No. CEQ-2019-0002], June 26, 2019. Available at: https://www.govinfo.gov/content/pkg/FR-2019-06-26/pdf/2019-13576.pdf.

Table 3-12: Forecast (2024-2026) CO_2e Emissions (Metric Tons) Proposed Action			
Year	**Emission Sources**		**CO_2e**
2024	Construction	Off & On Road Equipment/Vehicles	3,817
2025	Construction	Off & On Road Equipment/Vehicles	8,659
2026	Construction	Off & On Road Equipment/Vehicles	4,979
	Operation	Aircraft	381
		Motor Vehicles	341
		Total	6,409

Note: Construction emissions modelled using ACEIT and MOVES2014b modeling tools. Operational emissions modelled using AEDT 2d. Table reflects the change in operational emissions due to the proposed project only. Aircraft operations between 2021 and 2026 are anticipated to remain constant to 2021 emissions levels due to the ongoing construction of the Proposed Action.
Source: CMT, 2022.

3.6.2. Mitigation

The FAA has not identified specific factors to consider in making a significant determination for GHG emissions; therefore, no mitigation measures are required to mitigate the potential increase in GHGs attributed to the Proposed Action.

3.7 Water Resources

3.7.1 General

FAA *Order 1050.1F Desk Reference*, Chapter 14 defines water resources as the following: *"Water resources are surface waters and groundwater that are vital to society; they are important in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. Surface water, groundwater, floodplains, and wetlands do not function as separate and isolated components of the watershed, but rather as a single, integrated natural system."*

Wetlands, floodplains, surface water, groundwater, and wild and scenic rivers each need to be evaluated as parts of a whole to determine any potential impacts to the water resources relevant to a project. Besides being a basis for life, water is an essential component of many ecosystems. The chemical, physical, and biological characteristics of water determine its particular quality. The Federal Water Pollution Control Act, as amended by the Clean Water Act (CWA) of 1977, provides the authority to establish water quality standards, to control discharges into surface and subsurface waters, to develop waste treatment management plans and practices, and to issue permits for discharges of dredged or fill material. Documentation for this section is contained in Appendix D - Ecological Resource Report.

As contained in the Guidance Manual for the Preparation of NPDES Permit Applications for Storm Water Discharges Associated with Industrial Activity published by the USEPA, the Federal Water Pollution Act (also known as the CWA), as amended in 1977, requires NPDES permits for stormwater discharges associated with industrial activity.

WETLANDS

Wetlands, as defined in Federal Executive Order 11990 - Protection of Wetlands, are: *"…those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands*

generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats and natural ponds."

Wetlands also include estuarine areas, tidal overflows, and shallow lakes and ponds with emergent vegetation. Furthermore, the wetland ecosystem includes those areas that affect or are affected by the wetland itself e.g., adjacent uplands or regions upstream and downstream. Areas covered with water for a short time such that there is no effect on moist soil vegetation are not included within the definition of wetlands, nor are the permanent waters of streams, reservoirs, and deep lakes. Three criteria are required for an area to be considered a wetland: hydrophytic vegetation, hydric soils, and wetland hydrology. The hydrophytic vegetation criterion is met when the dominant vegetation in an area is composed of 50 percent or more of species that are specifically adapted to living under waterlogged conditions. Hydric soils are soils that exhibit characteristics indicative of long-term saturated or inundated conditions. Wetland hydrology is present if an area sustains a level of soil saturation or inundation sufficient in duration to result in the dominance of hydrophytic vegetation. The term "Waters of the United States," as defined in 33 CFR Part 328, constitutes:

- All territorial seas and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide.
- Tributaries.
- Lakes and ponds, and impoundments of jurisdictional waters.
- Adjacent wetlands.

FLOODPLAINS

Floodplains perform many important functions included in wildlife habitat, food chain support, nutrient retention and removal, and erosion control. Regulatory floodplains are those with a designated 100-year floodplain that are mapped on National Flood Insurance Rate Maps by the Federal Emergency Management Agency (FEMA). Longitudinal encroachment of transportation projects on designated floodplains requires a formal review under *Executive Order 11988, Floodplain Management*.

Executive Order 11988 directs Federal agencies to "take actions to reduce the risk of flood loss, minimize the impact of floods on human safety, health and welfare and restore and preserve the natural and beneficial value served by floodplains." *U.S. DOT Order 5650.2, Floodplain Management* and Protection contain procedures for implementing the Executive Order and establish a policy of avoiding actions within the 100-year floodplain. Floodplains are defined in *Executive Order 11988, Floodplain Management*, as: *"the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year;"* i.e., the area that would be inundated by a 100-year flood.

The National Flood Insurance Program (NFIP) criteria include minimum standards for adoption of floodplain management regulations by local communities enrolled in the program. In support of the NFIP, the Federal Insurance Administration publishes Flood Insurance Rate Maps, which delineate the limits of all floodplains and usually any floodways. In certain circumstances where no detailed flood studies were performed, the Flood Maps were created utilizing approximate methods. State and local governments may adopt floodplain management regulations that vary from those developed by NFIP, as long as they exceed the minimum standards developed by NFIP. The IDNR, Office of Water Resources (OWR) controls development within the floodway of a stream of a watershed with a tributary area of one square mile or greater, through their Part 700 regulations. OWR has developed standards that are more stringent than those required by NFIP.

SURFACE WATERS

Surface waters are identified by the visible presence of water on the surface. Common examples of surface waters would include streams, rivers, lakes, ponds, estuaries, and oceans.[29] FAA Order 1050.1F, Desk Reference describes potential direct impacts to surface waters as "permanent infrastructure, or temporary construction located on a surface water resource." FAA Order 1050.1F Desk Reference also describes potential indirect impacts as, "sedimentation or petro-chemical spills from construction activities."

GROUND WATER

FAA Order 1050.1F, Desk Reference, Section 14.4 defines groundwater as subsurface water that occupies the space between sand, clay, and rock formations. The term aquifer is used to describe the geologic layers that store or transmit groundwater, such as to wells, springs, and other water sources. The U.S. Environmental Protection Agency's National Sole Source Aquifer Database (last updated July 7, 2016) was reviewed; there are no sole source aquifers in Illinois.

WILD AND SCENIC RIVERS

The Wild and Scenic Rivers Act was created by congress to protect rivers with exceptionally natural, cultural, and recreational values. Section 7 of the Wild and Scenic Rivers Act prohibits Federal assistance to projects which would depreciate the value of a wild and scenic river. No wild or scenic rivers exist within the proposed project area; therefore, no impacts to these resources would occur due to the proposed project.

3.7.2 Affected Environment

WETLANDS

The project study area was investigated for the presence of regulated surface water resources. Wetland areas identified during the on-site investigation were delineated using standard protocols by the United States Army Corps of Engineers in the Corps of Engineers Wetlands Delineation Manual (1987) and 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region and the United States Department of Agriculture National Food Security Act Manual (1994 and 1996).

A wetland survey was conducted on September 23, 2020, by CMT personnel. When evaluating the presence of wetlands, CMT personnel used the routine method presented in the 1987 Corps of Engineers Wetlands Delineation Manual and the Midwest Regional Supplement. In order for an area to be classified as a jurisdictional wetland, the area has to have dominance of hydrophytic vegetation, hydric soils and wetland hydrology and be an adjacent wetland as defined by the 2020 Navigable Waters Protection Rule. Routine Wetland Determination Data Forms were completed for both the wetland and upland data points, and are included in Appendix D.

The wetland boundaries were surveyed using a handheld GPS device with sub-meter accuracy. The wetland boundaries with the wetland and upland data point locations are found on the ecological resource and wetland delineation map in **Figure 3-5**, along with all published mapping and data.

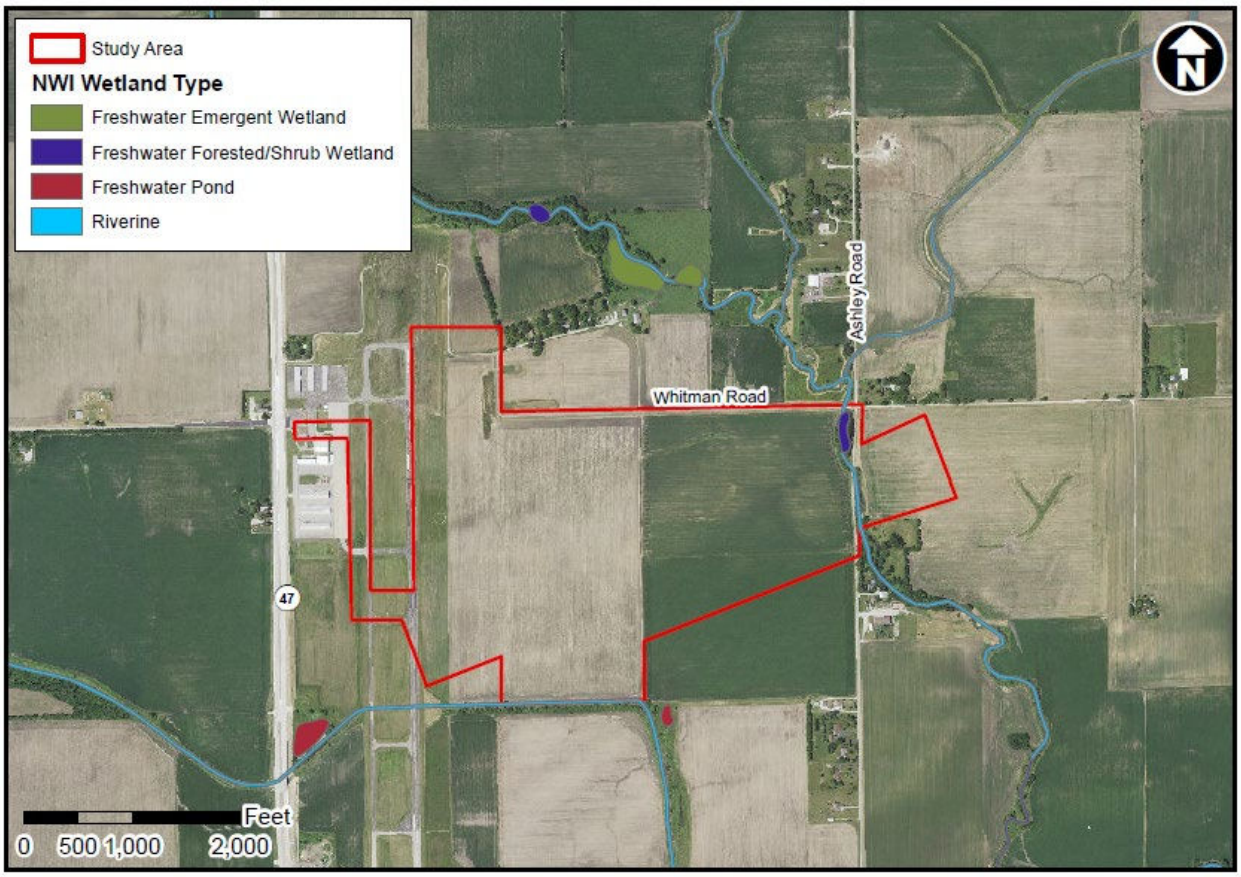
The ecological integrity of each wetland based on its plant species composition was completed using the Floristic Quality Index (FQI). The FQI forms and comprehensive plant species lists for each wetland are included in Appendix D.

[29] FAA Order 1050.1F Desk Reference, Section 14.3, July 2015, pg. 14-19.

REGULATED SURFACE WATERS - STREAMS

Streams were evaluated based on the definition of waters of the United States, which requires the presence of an ordinary high-water mark (OHWM) and ultimate connection to downstream

Figure 3-5: Wetland Map



Traditional Navigable Waters (TNW). The following USACE definitions for the three stream types were used:

Ephemeral Streams have flowing water only during and for a short duration after precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Intermittent Streams have flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Perennial Streams have flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

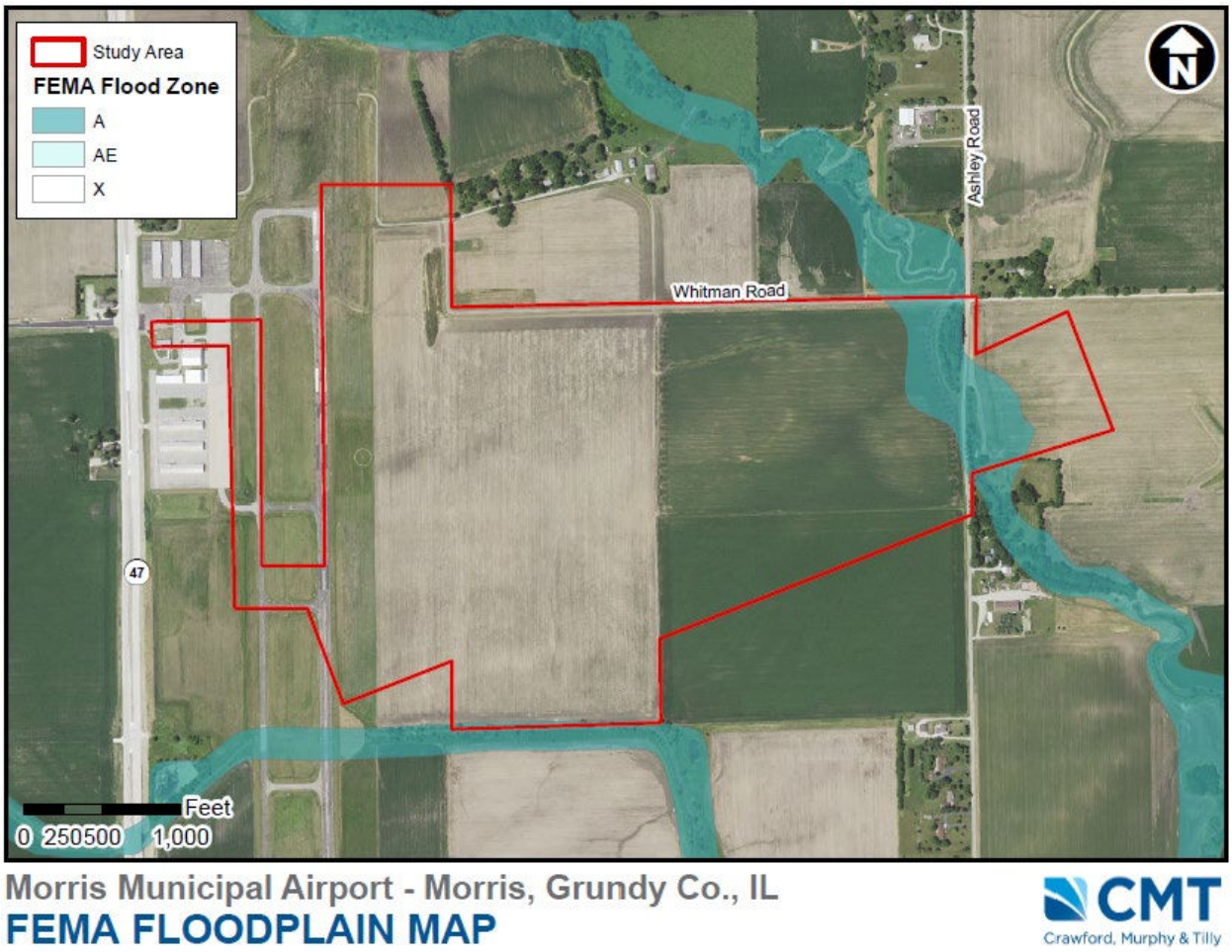
The determination of stream designation is based on an evaluation of the size of the watershed for each stream, the presence of flow during the on-site evaluation and the evidence observed of

the frequency of flow, and the presence of aquatic life. Valley Run Creek is located on the eastern portion of the project area.

FLOODPLAINS

Figure 3-6 depicts the limits of the 100-year floodplain and floodway in proximity of the Proposed Action based on the current FEMA Flood Insurance Rate Map for Valley Run Creek.

Figure 3-6: FEMA Floodplain Map



WILD AND SCENIC RIVERS

The National Wild and Scenic Rivers System was reviewed to determine the nearest Wild and Scenic River or a Study (Candidate) River in the vicinity of the Proposed Action. The nearest such river is the Middle Fork of the Vermilion River, located approximately 83 miles to the south, southeast. A 17-mile section of the Kishwaukee River from its confluence with the Rock River to Beaver Creek is listed on the Nationwide Rivers Inventory (NRI) as having outstanding scenic and recreational values. This NRI segment of the Kishwaukee River is located approximately 64 miles northwest of the Airport.

3.7.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative assumes that no new facilities associated with the Proposed Action would be constructed. There would be no impacts to wetlands or floodplains, and there would be

no new impervious surfaces beyond those projects that have already received environmental approval and that would occur independent of the Proposed Action.

PROPOSED ACTION

Wetlands

Within the study area, Wetland A is a 0.65-acre emergent wetland located approximately 50 feet west of the existing taxiway. Based on the Native FQI (3.6) and Native Mean-C Value (1.8), the identified wetland is low quality and severely degraded. The wetland extends west and south beyond the study area and drains south through a stormwater drainage ditch to Saratoga Creek, which ultimately drains to the Illinois River, a Traditional Navigable Waterway (TNW). Based on the surface connection to a TNW, the wetland may be federally jurisdictional.

Two wetland determination data points were evaluated to determine whether or not the areas met the wetland criteria. Data point B1 exhibited hydrophytic vegetation and wetland hydrology but did not meet any hydric soil indicators. Data point C1 was located within an NWI mapped wetland; while the data point exhibited hydrophytic vegetation and wetland hydrology, it did not meet any hydric soil indicators. Details on the soil, hydrology, and dominant vegetation for each wetland and wetland determination point are provided on the Routine Wetland Determination Data Forms included in Appendix D, along with qualitative assessment data. Photographs of the wetland are provided in Appendix D.

The Proposed Action originally identified the construction of electrical conduit in the area where the wetland was discovered. Subsequently, the Proposed Action was revised to move the electrical conduit installation to the other site of Taxiway A and totally avoid the wetland area entirely. As part of the coordination with the Illinois Interagency Wetland Policy Act of 1989, a Wetland Impact Evaluation (WIE) was submitted to IDOT Bureau of Design and Environment. The WIE was approved for construction on October 3, 2022. See Appendix D.

Floodplains

Based on the FEMA floodplain map, project construction encroachment of the 100-year floodplain and floodway is not anticipated. The runway, taxiway, and navigation aid facility are not located within the 100-year floodplain. The Proposed Action does identify the trimming of certain vegetation within the floodplain but does not include removal of any tree root balls (structural) and does not include any filling in the floodplain or floodway.

All proposed stormwater management facilities required as part of the Proposed Action would be designed to accommodate the modified development as a part of the detailed design process. Proposed stormwater management facilities would be designed in compliance with and in coordination with state and local regulatory agencies, as required. All construction and stormwater permits would be secured in coordination with Federal, state, and local regulatory agencies.

Surface and Ground Water

Water quality can be adversely impacted by several means including construction activities, storm water discharges from impervious surfaces, accidental releases of hazardous substances, and maintenance activities. Potential construction impacts could include disturbance from earth-moving and grading and discharge of contaminants such as fuels and lubricating oils used for construction machinery.

The Proposed Action would add approximately 14± acres of impervious surfaces and includes construction of additional storm water detention facilities to accommodate the additional impervious surfaces. Proposed additional detention facilities would be coordinated with the Airport's Wildlife Management Plan and would drain within 48 hours or less.

Prior to construction of the proposed airfield improvements, a NPDES permit for storm water discharges associated with construction site activities would need to be secured from IEPA in

accordance with Paragraph (1.c) Construction Activity 40 CFR 122.26(b)(14). The project is not anticipated to change local surface water runoff patterns. During construction, storm water and silt runoff from project areas would be managed in accordance with the NPDES permit.

Wild and Scenic Rivers

The proposed project would not occur in or near any designated wild and scenic river area; there would be no impact on Wild and Scenic Rivers as a result of the proposed project.

3.7.4 Mitigation

No significant impacts to Wetlands and Wild and Scenic Rivers or NRI Rivers are anticipated under the No Action or the Proposed Action. Therefore, no mitigation would be required for these resources.

Proposed stormwater management facilities would be designed in coordination with state and local regulatory agencies, as required. Further, all construction and stormwater permits would be secured in coordination with Federal, state, and local regulatory agencies.

An erosion control plan would be developed based on the FAA's *Temporary Air and Water Pollution Soil Erosion and Siltation Control Standards for Specifying Construction on Airports (*change 10 to FAA *Advisory Circular (AC) 150/5370-10H)*. The erosion control plan would incorporate BMPs to minimize impacts to water quality during construction. Depending upon the evaluations and conclusions of the design process for the proposed project, these BMPs could include requirements for erosion control and temporary seeding of all exposed soils, segregation and protection of fuel supplies and hazardous materials, and other measures for the protection of surface and subsurface waters, including periodic meetings between the Airport, resident engineer/architect, and contractor to ensure compliance with the BMPs. These BMPs would be incorporated into the project construction specifications. The Airport's SWPPP would be updated in support of the NPDES permit. This SWPPP would apply to activities conducted by airport personnel and those tenants who choose to be included in the Airport's SWPPP (rather than implementing a separate SWPPP for specific tenant operations). Various permanent sediment control measures, including vegetated filter strips, rock riffles, and detention basins, would be evaluated as part of the design process.

3.8 Coastal Resources

3.8.1 General

Coastal resources include all-natural resources occurring within coastal waters and their adjacent shorelands. Coastal resources include islands, transitional and intertidal areas, salt marshes, wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as fish and wildlife and their respective habitats within these areas. Coastal resources include the coastlines of the Atlantic and Pacific oceans, the Great Lakes, and the Gulf of Mexico.

Several Federal statutes, regulations, and executive orders can be relevant to the protection of Coastal Resources. These include *Coastal Barrier Resources Act*;[30] the *Coastal Zone Management Act*;[31] the *National Marine Sanctuaries Act*;[32] *Executive Order 13089, Coral Reef Protection*;[33] and *Executive Order 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes*.[34] The *National Marine Sanctuaries Ac*t and *Executive Order 13089, Coral Reef Protection*

[30] https://www.fws.gov/CBRA/
[31] https://coast.noaa.gov/czm/act/
[32] https://sanctuaries.noaa.gov/about/legislation/
[33] http://www.presidency.ucsb.edu/ws/index.php?pid=56122
[34] https://obamawhitehouse.archives.gov/the-press-office/executive-order-stewardship-ocean-our-coasts-and-great-lakes

are focused on oceanic areas, beyond the geographical region of the project area. *Executive Order 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes* is a Federal policy action, and the executive order has no implementing regulations or designated oversight agency.

The *Coastal Barrier Resources Act (CBRA) of 1982* was created to address problems caused by coastal barrier development. CBRA restricts most Federal expenditures and financial assistance that tend to encourage development, including Federal flood insurance, in the John H. Chafee Coastal Barrier Resource System (CBRS). Three important goals of CBRA are to:

- minimize loss of human life by discouraging development in high-risk areas.
- reduce wasteful expenditure of Federal resources.
- protect the natural resources associated with coastal barriers.

The Coastal Barrier Improvement Act (CBIA) of 1990 reauthorized the Coastal Barrier Resources Act and expanded the John H. Chafee Coastal Barrier Resources System by adding new units in Puerto Rico, the U.S. Virgin Islands, the Great Lakes, and enlarging some previously designated units along the Atlantic and Gulf coasts. The CBIA also designated a new category of lands called "otherwise protected areas" (OPAs). OPAs are based on areas established under Federal, state, or local law, or held by a qualified organization, primarily for wildlife refuge, sanctuary, recreational, or natural resource conservation purposes. Most of the land within OPAs is publicly held for conservation or recreational purposes; however, OPAs can contain private land held for conservation purposes, as well as private properties not held for conservation that are inholdings. The only Federal spending prohibition within OPAs is Federal flood insurance.

The Coastal Barrier Resources Reauthorization Act of 2000 reauthorized the Coastal Barrier Resources Act (CBRA) and directed the U.S. Fish and Wildlife Service to complete a Digital Mapping Pilot Project that includes digitally produced draft maps for up to 75 John H. Chafee Coastal Barrier Resources System areas and a report to Congress that describes the feasibility and costs for completing digital maps for all CBRS areas.

The Coastal Barrier Resources Reauthorization Act of 2005, signed into law on May 25, 2006, reauthorized the Coastal Barrier Resources Act and directed the U.S. Fish and Wildlife Service to finalize the Digital Mapping Pilot Project by:

- providing a public comment period for the draft maps created through the pilot project (covering approximately 10 percent of the entire Coastal Barrier Resources System, CBRS), and
- preparing a report to Congress that contains the final recommended digital maps and a summary of the comments received during the public comments period.

The 2005 Act also directed US Fish and Wildlife Service to create digital maps for the remainder of the CBRS. The US Fish and Wildlife Service's (USFWS) website was referenced to determine the location and/or existence of Federally designated Coastal Barriers in the project area. The USFWS Coastal Barrier Resources System mapper[35] indicated that there are no Coastal Barrier Resources units in Illinois.

The U.S. Congress recognized the importance of meeting the challenge of continued growth in the coastal zone by passing the Coastal Zone Management Act (CZMA) in 1972. This act, administered by the National Oceanic and Atmospheric Administration (NOAA), provides for the management of the nation's coastal resources, including the Great Lakes. The goal of the Act is

[35] https://www.fws.gov/CBRA/

to *"preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone."*

The CZMA outlines three national programs: the National Coastal Zone Management Program; the National Estuarine Research Reserve System; and the Coastal and Estuarine Land Conservation Program (CELCP). The National Coastal Zone Management Program aims to balance competing land and water issues through state and territorial coastal management programs, the reserves serve as field laboratories that provide a greater understanding of estuaries and how humans impact them. CELCP provides matching funds to state and local governments to purchase threatened coastal and estuarine lands or obtain conservation easements.

The Illinois Coastal Management Program (ICMP),[36] under the direction of the Illinois Department of Natural Resources, (IDNR) Office of Coastal Management, protects and manages the natural and cultural resources along the state's 63-mile stretch of Lake Michigan shoreline. Over the past one-hundred years the Illinois coast has undergone extensive change with hydrologic modifications, large industrial and transportation impacts, and the building of skyscrapers near the shoreline. Despite these changes, coastal resources still contain some of the richest, rarest, and most diverse plant and animal species and natural habitat areas in the state. Illinois' coastal zone has two components:

- The Lakeshore Boundary is based on the Lake Michigan watershed and is generally parallel to the Lake Michigan shoreline.
- The Inland Waterway Boundary includes Inland Waterway Corridors, which are select segments of the Chicago River system and select segments of the Little Calumet and Grand Calumet Rivers.

The ICPM was created in January 2012 with Federal approval from the National Oceanic Atmospheric Administration, Office of Ocean and Coastal Resources Management. The ICMP focuses on the following program areas:

- Invasive species
- Habitat, ecosystems & natural area restoration
- Bio-accumulative toxins
- Sustainable development
- Non-point source pollution
- Data collection
- Public access and recreation
- Economic development

3.8.2 Affected Environment

The coastal zone boundary for the Illinois Coastal Management Program (ICMP) defines the land and water areas that are within the limits of this program. A lakeward coastal zone boundary for Illinois is the Illinois state line in Lake Michigan. This state line borders the open-water areas of Wisconsin on the north, Michigan on the east, and Indiana on the south. Approximately 1,500 square miles of lake and lake bottom are included within this area. The neighboring Lake Michigan states similarly include all the lake and lake bottom within their defined coastal zone boundaries. Illinois defines the coastal zone boundary with a focus strictly on the landscape. Specifically, the boundary is primarily based on the Lake Michigan watershed within Illinois. There is no provision made for political boundaries. However, because of the high degree of altered drainage, river engineering and urban development, some flexibility was required in using the watershed

[36] https://www.dnr.illinois.gov/cmp/Pages/default.aspx

approach. The Morris Municipal Airport is beyond the boundaries of the Illinois Coastal Management Program.

3.8.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative assumes that no new facilities associated with the Proposed Action would be constructed. There would be no impacts to Coastal Zones and Coastal Zone Management Areas under the No Action Alternative.

PROPOSED ACTION

The Proposed Action is beyond the boundaries of the Illinois Coastal Management Program.

3.8.4 Mitigation

The Proposed Action is beyond the boundaries of the Illinois Coastal Management Program and therefore this section is not applicable.

3.9 Farmlands

3.9.1 General

Any airport development action funded under the Airport Improvement Program (AIP) or subject to FAA approval that would permanently convert an existing designated important farmland to a non-agricultural use is subject to FPPA coordination. Typical actions, which could involve such coordination include airside/landside expansion (new or expanded terminal and hangar facilities, new or extended runways and taxiways, airfield lighting, navigational aids, NAVAIDS, etc.); land acquisition for aviation-related use, new or relocated access roadways, remote parking facilities, and rental car lots, and any other actions that would result in important farmland conversion. FPPA does not apply to land already committed to "urban development or water storage" (i.e., airport developed areas), regardless of its importance as defined by NRCS.

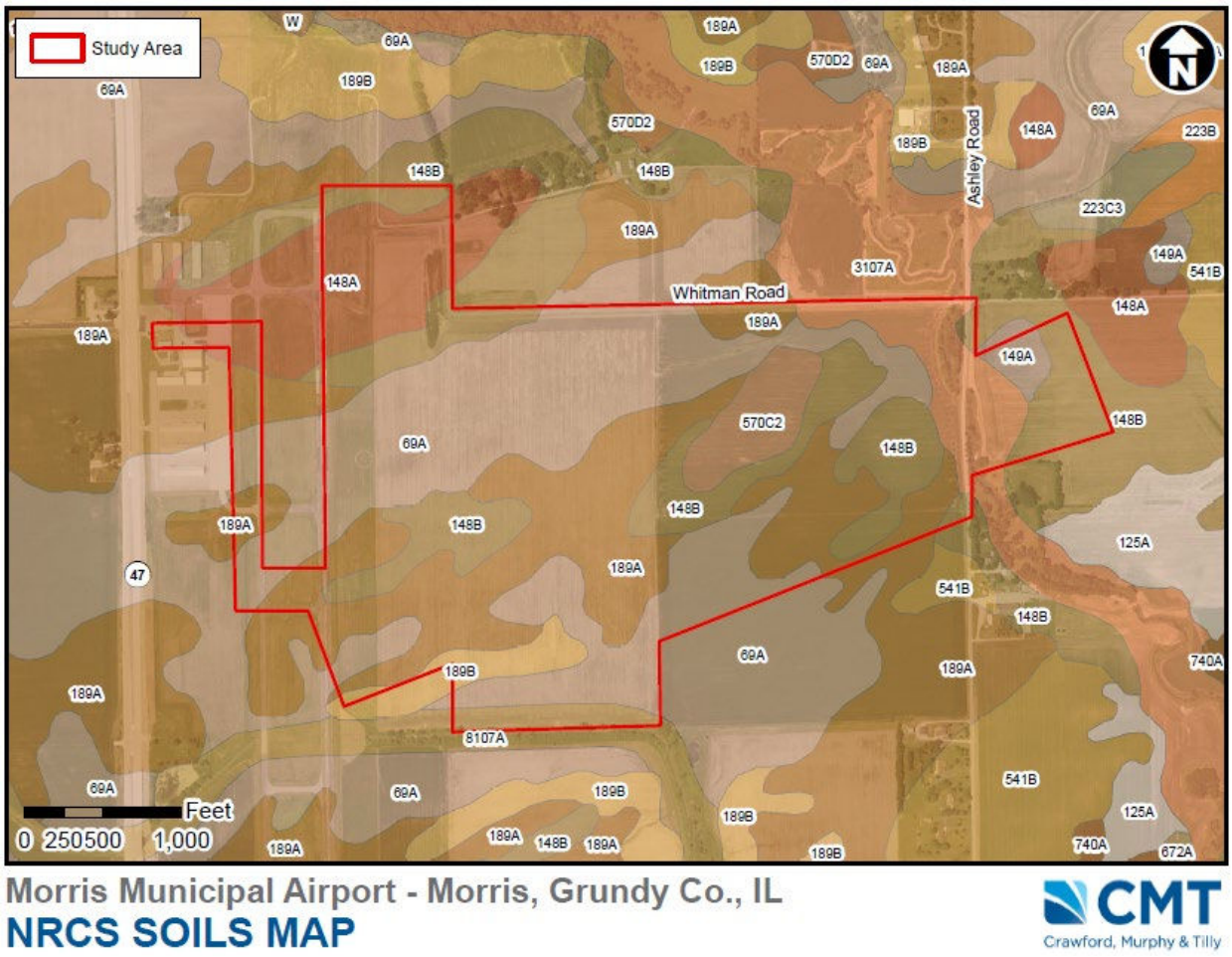
3.9.2 Affected Environment

The Morris Municipal Airport is located approximately 3.0 miles north of Interstate 80 and adjacent to Illinois 47. The Airport is within an agrarian area but is within the corporate limits of the City of Morris. Several large storage buildings are being constructed along Illinois Route 47, including one directly across from the Airport. The Grundy County Soil Survey and hydric soil list indicates the following soils are present within the study area and are depicted on **Figure 3-7**:

- 69A Milford silty clay loam, 0 to 2 percent slopes, hydric
- 148A Proctor silt loam, 0 to 2 percent slopes, not hydric
- 148B Proctor silt loam, 2 to 5 percent slopes, not hydric
- 149A Brenton silt loam, 0 to 2 percent slopes, hydric
- 189A Martinton silt loam, 0 to 2 percent slopes, hydric
- 189B Martinton silt loam, 2 to 4 percent slopes, hydric
- 570C2 Martinsville loam, 4 to 6 percent slopes, eroded, not hydric
- 3107A Sawmill silty clay loam, heavy till plain, 0 to 2 percent slopes, frequently flooded, hydric
- 8107A Sawmill silty clay loam, 0 to 2 percent slopes, occasionally flooded, hydric

NRCS's Farmland Protection Policy Act and its implementing regulations (7 CFR § 657.5) define prime, unique, statewide, and locally important farmlands: Prime farmland is land having the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimal use of fuel, fertilizer, pesticides, or products.

Figure 3-7: NRCS Soils Map



Unique farmland is land used for producing high-value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture necessary to produce high quality crops or high yields of crops. Statewide and locally important farmland is land that has been designated as "important" by either a state government (state Secretary of Agriculture or higher office), by county commissioners or by an equivalent elected body. The Federal Farmland Protection Act (FFPA) has delegated to Illinois the responsibilities of promulgating FFPA. Under the Illinois Farmland Act, lands within either the corporate limits of a municipalities or within the extraterritorial limits of a municipal corporation, conversion of farmland is exempt from FPPA.

3.9.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative assumes that no new land associated with the Proposed Action would be purchased. There would be no impact to Farmlands under the No Action Alternative.

PROPOSED ACTION

The Proposed Action includes the purchase of approximately 179 acres that is in agricultural pursuits. The land is adjacent to the existing Morris Municipal Airport, which is within the corporate limits of the City of Morris. The land is also within the extraterritorial limits of the City of Morris and is exempt from FFPA.

3.9.4 Mitigation

There are no farmland impacts and therefore there is no mitigation required.

3.10 Historical, Architectural, Archaeological, and Cultural Resources

3.10.1 General

In accordance with FAA *Order 1050.1F, Environmental Impacts: Policies and Procedures*, this EA includes an investigation of impacts due to Federal undertakings upon areas of historic, architectural, archaeological, and cultural significance. The purpose of this section is to document compliance with the *National Historic Preservation Act of 1966* as amended (NHPA) by identifying historic properties within the Area of Potential Effect (APE), including a description of the probable impact of the alternatives under consideration on these resources.

3.10.2 Affected Environment

It is the FAA's responsibility to define the APE in consultation with the SHPO/THPO (see 36 CFR § 800.4(a)). "*The APE is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. [The APE] is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking*" (see 36 CFR § 800.16(d)). Note that the APE is delineated based on the undertaking's potential effects, not on the location of historic properties. The APE must include all direct and reasonably foreseeable indirect effects but does not have to be one contiguous area."[37]

The FAA, in consultation with consulting parties, must identify historic properties that are either in, or eligible for listing in, the NRHP as set forth in 36 CFR § 800.4(b). Not all resources are known, and the FAA is expected to make a good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, and field surveys. Identification efforts can vary greatly depending on the scope of 1050.1F Desk Reference (v2) February 2020 Historical, Architectural, Archeological, and Cultural Resources (last updated 2/2020) 8-13 the undertaking and its potential effects. The scope of the undertaking may also help in deciding whether a cultural resources contractor is necessary to assist in properly identifying, documenting, and evaluating historic properties and other cultural resources.

A review of known archaeological resources and land-use patterns and was conducted by the Illinois State Archaeological Survey (ISAS).[38] ISAS is a part of the University of Illinois' Prairie Research Institutes and is under contract with IDOT to conduct surveys statewide. Also included was a *Historic Structures Review* report. The *Historic Structures Review* photographically documented on-airport and off-airport structures that were within the APE. IDOT's "*Photographing Historic Structures: Guidelines and Photo Logs*"[39] report was used in the creation of the *Historic Structures Review* report. See Appendix E -Attachment E-5 - Off-Airport Structure Log and Appendix E - Attachment E-6 - Historic Structures Review-Airport Buildings and Airport Landscaping Views.

The NHPA requires that the Lead Federal agency, FAA, consult with the SHPO. As such, consultation was initiated with the SHPO to inform them of the scope of the undertaking and to

[37] https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/apl/8-historical-architectural.pdf
[38] https://www.isas.illinois.edu/
[39] https://idot.illinois.gov/Assets/uploads/files/Transportation-System/Manuals-Guides-&-Handbooks/Highways/Environment/IDOT%20Guidance%20Photographing%20Historic%20Structures.pdf

provide ongoing opportunities for informal and formal review of the project's potential effect on historic resources.

3.10.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance beyond those projects that have already received environmental approval and that would occur independent of the Proposed Action. No impacts to archaeological, architectural, historic, or cultural resources would be anticipated under this alternative.

PROPOSED ACTION

Section 106 Findings

IDOT, in coordination with the FAA, has made a finding of "No Adverse Effect." The Illinois State Historic Preservation Officer (SHPO) stated that the project meets the Secretary of the Interior's "*Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*". SHPO also stated they concur in a Finding of No Adverse Effect to properties eligible for the National Register of Historic Places pursuant to 36 CFR 800. These documents are contained in Appendix E.

Tribal Coordination

Submission of the Environmental Survey Request (ESR) submittal to IDOT-BDE, automatically triggered IDOT's Project Notification System (PNS) for tribal notification. PNS is a statewide digital transportation project information distribution system that was created by the Information Technology and Communication Services, College of Agricultural, Consumer and Environmental Sciences and the ISAS at the University of Illinois with the financial support of IDOT. It is designed to facilitate early access to proposed IDOT construction projects by interested parties including tribal representatives, preservation planners, the State Historic Preservation Office, IDOT personnel, and transportation archaeologists. This early notification system is intended to maintain and enhance the efficiency and quality of IDOT's cultural resource investigations, protection, and preservation programs as carried out under state and Federal law and regulations by providing a mechanism for early input by various stakeholders during the initial planning process.

Through the PNS, early notification of proposed projects requiring survey and investigation is relayed to ISAS through the digital conveyance of an Environment Survey Request from the Chief Archaeologist, Environment Section, Bureau of Design and Environment, IDOT, Springfield. These documents contain basic preliminary engineering data on the project. Within 48 hours this information is transferred into a password protected, user-friendly database format. ISAS adds information on the locations of known mortuary sites and prepares maps showing the project location. When this data set is uploaded into the PNS by ISAS's Statewide Survey, an e-mail notification is automatically generated to tribal parties who have expressed an interest in the project or county. This e-mail directs them to the new project information packet and provides a digital mechanism for them to comment on the project and to send questions concerning it directly to IDOT. As additional information on survey results and State Historic Preservation Officer (SHPO) comments are obtained they are also added to the system.

The Morris Municipal Airport Crosswind Runway Program project was distributed and offered for review through the PNS. Tribal parties who have expressed an interest through the PNS in the County of Grundy were offered an opportunity to comment. No Tribal Historic Preservation Officers commented or raised objections to the project.

3.10.4 Mitigation/Commitments

The Illinois State Historic Preservation Officer (SHPO) concurred with the no effect determination on January 12, 2023. Therefore, no mitigation or commitments are required.

3.11 Department of Transportation Section 4(f) Lands

3.11.1 General

Section 4(f) of the *Department of Transportation Act of 1966* (DOT Act) currently codified as 49 USC Section 303(c), [hereinafter referred to as Section 4(f)], provides for the protection of certain publicly owned lands. These lands include public parks, recreation areas, or wildlife and waterfowl refuges of national, state, or local significance. In addition, Section 4(f) applies to all historic sites of national state, or local significance, regardless of whether these sites are publicly owned or open to the public. Typically, Section 4(f) protects only historic or archeological properties that are on, or eligible for inclusion on, the National Register of Historic Places (NRHP).

Programs or projects that are developed with Federal funding or require a Federal action, which adversely affect or use Section 4(f) lands, will not be approved unless there are no prudent and feasible alternatives to their use, and such programs include all planning to minimize harm. An airport development project can create adverse impacts on Section 4(f) lands through acquisition of all or a portion of Section 4(f) land, increased noise impacts, and increased surface traffic impacts.

If it is determined that an action would involve a Section 4(f) resource, then the lead Federal agency, in this case the FAA, is required to prepare a Section 4(f) Evaluation. This evaluation can be included within the NEPA document for that project or issued in a separate document, referred to as a Section 4(f) Evaluation. FAA may also make a *de minimis* impact determination with respect to a physical use of Section 4(f) property if, after considering any measures to minimize harm, the result is either:

- a determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or wildlife or waterfowl refuge for protection under Section 4(f); or
- a Section 106 finding of no adverse effect or no historic properties affected.

In addition to lands identified under Section 4(f), other lands funded by the Land and Water Conservation Fund Act of 1966 (LAWCON) (Section 6(f)), Pittman-Robertson and Dingell-Johnson moneys must be considered. When proposed improvements affect lands purchased or developed using LAWCON funds, as administered by the U.S. Department of the Interior (USDOI), changes in use to those lands may only be made with the prior approval of the Secretary of the Interior. Also, converted properties must be replaced by substitute properties of at least equal fair market value and of reasonably equivalent location and usefulness.

3.11.2 Affected Environment

The Proposed Action will purchase privately-owned land that is in active cultivation. The property to be purchased is not considered Section 4(f) property. No known grant funded parks or recreational areas, including those funded with: LAWCON Funds (Land and Water Conservation Fund Act of 1965); Pittman-Robertson (Federal Aid in Wildlife Restoration Act of 1937); or Dingell-Johnson (Federal Aid in Sport Fish Restoration Act of 1950) funds would be affected by the Proposed Action. Further, there are no NRHP-listed or eligible property and no known historic sites or archaeological resources of national, state, or local significance that would be impacted by the Proposed Action. The nearest parks to the Airport are listed in **Table 3-13**.

Table 3-13: Nearest Parks To The Morris Municipal Airport			
Park Name	Owner	Direction From Airport	Distance From Airport
William G. Stratton State Park	IDNR	South	5.25 Miles
Channahon State Park	IDNR	East	9.95 Miles
Chapin Park	City of Morris	South	4.64 Miles
Lions Park	City of Morris	South	4.05 Miles

Source: CMT, 2022

3.11.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative would not impact any publicly owned park recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance.

PROPOSED ACTION

The Proposed Action would not impact any publicly owned park recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance.

3.11.4 Mitigation

The No Action Alternative would not impact any publicly owned park recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance. The No Action Alternative would not create any impacts to public lands identified under Section 4(f), including lands funded with LAWCON (Section 6(f)), Pittman-Robertson and Dingell-Johnson moneys, or historic or archeological properties that are on, or eligible for inclusion on, the National Register of Historic Places (NRHP).

The Proposed Action would not impact any publicly owned park recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance. The Proposed Action would not create any impacts to public lands identified under Section 4(f), including lands funded with LAWCON (Section 6(f)), Pittman-Robertson and Dingell-Johnson moneys, or historic or archeological properties that are on, or eligible for inclusion on, the National Register of Historic Places (NRHP). In the Proposed Action scenario, all significant noise contours remain on Airport property. Therefore, the Proposed Action would not require mitigation.

3.12 Biological Resources

3.12.1 General

For purposes of this EA, the term, biological resources, refers to various types of flora and fauna, as well as habitat types that would support these species. This section also addresses Federally listed and state listed threatened or endangered species and their habitats.

The term “endangered species” means any member of the animal kingdom (mammal, fish, or bird) or plant kingdom (seeds, roots, etc.) that is in danger of extinction throughout all or a significant portion of its range. “Threatened species” refers to those members of the animal kingdom or plant kingdom, which are likely to become endangered within the foreseeable future. Section 7 of the *Endangered Species Act of 1973* requires each Federal agency that carries out, permits, licenses, funds, or otherwise authorizes activities that may affect a listed species must

consult with the US Fish and Wildlife Service to ensure that its actions are not likely to jeopardize the continued existence of any listed species.[40]

Further, Paragraph 341 of the *Illinois Endangered Species Protection Act of 1972* requires all agencies of state and local governments to further the purposes of this Act by: *…evaluating whether actions authorized, funded, or carried out by them are likely to jeopardize the continued existence of Illinois listed endangered and threatened species or are likely to result in the destruction or adverse modification of the designated essential habitat of such species, which policy shall be enforceable only by writ of mandamus.*

3.12.2 Affected Environment

The project study area was observed for suitable threatened and endangered species habitat. The habitats present were searched for suitability and the presence of species. The known or historic range of federally endangered or threatened species within the study area was determined by reviewing the United States Fish and Wildlife Service (USFWS) Illinois County Distribution of Federally Threatened, Endangered, and Candidate Species dated October 29, 2021, and the USFWS Information for Planning and Consultation (IPaC) species (completed by IDOT BDE) list generated for the project area. The NLAA Concurrence Verification Letter is contained in Appendix D - Ecological Resources Report.

USFWS provided direction and guidance on Federally, threatened, endangered, proposed and candidate species that could occur within the boundaries of the proposed airport development. Procuring the list from USFWS is the initial step of a potential consultation process under Section 7c of the Endangered Species Act. The official list includes:

- Indiana Bat *Myotis sodalis* (Endangered)
- Northern Long-eared *Bat Myotis septentrionalis* (Threatened)
- Scaleshell *Leptodea leptodon* (Endangered)
- Rattlesnake-master borer moth *Papaiperma eryngii* (Candidate)

There are no designated critical habitats within the project study area. This includes potential zone for the Rusty Patched Bumble Bee *(Bombus affinis)*. See Appendix D.

None of the wetlands had a native FQI score of 20 or greater or a Native Mean C of 3.5 or greater, and therefore Eastern prairie fringed orchid is likely not present. One tree within the study area was identified as a potential roost tree for the northern long eared and Indiana bats was identified. Additional suitable habitat and a wooded riparian corridor was observed along Valley Run and Saratoga Creek within the study area. Valley Run did not exhibit a stable channel with a sand/gravel substrate and good water quality; therefore, it does not provide appropriate habitat for the Scaleshell. No grassland or prairie habitats were observed within the study area; therefore, appropriate habitat for the rattlesnake-master borer moth is not present.

3.12.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative assumes that there would be no construction of any facilities at the airport to address the purpose and need. No impacts to any biological resources would be expected under this alternative.

PROPOSED ACTION

The project study area contains one stream (Valley Run) and one (1) wetland. Wetland A is severely degraded and low quality, located within a stormwater drainage ditch, exhibiting a

[40] Section 7(a)(2) of the Endangered Species Act of 1973.

surface water connection to a Traditionally Navigable Waterways (TNW). The wetland may be federally jurisdictional. Valley Run is a perennial stream of fair habitat quality that ultimately flows to the Illinois River, a TNW.

Wetlands and other surface water resources that are considered waters of the U.S. are subject to regulation under Section 404 of the Clean Water Act (CWA) and the jurisdictional regulatory authority lies with the U.S. Army Corps of Engineers (USACE). In addition, the state of Illinois regulates isolated wetlands through the Interagency Wetland Policy Act (IWPA), and counties, townships and municipalities may have local zoning authority over certain types of wetlands and waterways.

No critical habitat for federally threatened or endangered species is located within the project study area. Portions of the project study area provide suitable habitat for the Indiana and Northern long-eared bat.

3.12.4 Mitigation and/or Commitment

The No Action Alternative is not anticipated to create any significant impacts to biological resources. The Proposed Action has been designed to avoid impacts to the identified endangered species and wetlands and is not anticipated to have significant impacts to any biological resources. Therefore, no mitigation measures are required.

As a habitat Commitment for the development of the proposed crosswind runway, and as noted in the NRR, **"trees three (3) inches or greater in diameter at breast height will not be cleared from April 1st through September 30th to protect the Northern Long-Eared Bat and the Indiana Bat."**

3.13 Natural Resources and Energy Supply

3.13.1 General

Sources of energy originate from fossil fuels (coal, oil, gas, etc.), nuclear power (uranium) and renewable elements (wood, sun, wind, water, etc.). Natural resources refer to the various forms of wealth supplied by nature including the sources of energy listed above.

3.13.2 Affected Environment

Demands for energy required to operate facilities at C09 include electricity and natural gas. Electricity is the primary source of energy used to light and cool the airport buildings and related structures. Lighting for runways and navigational aids for aircraft also uses electricity as its energy source. Commonwealth Edison is the major supplier of electricity to the Airport. There are no known gas lines or other major utilities within the project area.

3.13.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative assumes that there would be no construction of any facilities at the airport to address the purpose and need. No impacts to energy supply and natural resources would be expected under the No Action Alternative.

PROPOSED ACTION

During the construction of the Proposed Action, items such as concrete, asphalt, crushed stone, fuel oil, and gasoline would be used. All materials needed for construction may be purchased from area firms or manufacturers who specialize in these materials. The proposed project would not involve the use of any unusual materials or of those in short supply.

The Proposed Action would require small increases in levels of electricity and natural resource consumption during construction and operation; however, these increases would be negligible in

nature and not induce any significant impact the surrounding community. The proposed action would result in a minor increase in electrical demand as a result of the additional runway/taxiway pavement lighting associated with the new Runway 7/25. The additional runway lighting would not utilize a significant amount of electrical energy. The minor increased electrical demand associated with the Proposed Action is not considered to be significant to local electrical supply.

The consumption of potable water associated with the project is not expected to differ from the No Action Alternative even with the small increase in aircraft activity. The number of people and passengers moving through the facility after the runway is constructed would increase slightly as the expected increase in operations between build and no-build. Therefore, no substantial impacts to water supply systems are expected.

Since the new runway would be constructed as part of the Proposed Action, all aircraft will have slightly longer taxi distances versus to today. Aircraft based on the western portion of the airport will be closer to the new runway and will have slightly longer taxi distances. The construction activities associated with the project would also require the use of fuels for construction equipment, asphalt pavements, and the excavation/import of any fill material required. However, the additional fuel consumption associated with construction activities would not result in demands for fuel that would exceed available or future supply capacity. No significant impacts to energy generation or natural resources availability would be anticipated under the Proposed Action.

3.13.4 Mitigation

No significant impacts to energy supply and natural resources in short supply would be expected under the No Action Alternative or the Proposed Action. Therefore, no mitigation would be required.

3.14 Visual Effects

3.14.1 General

FAA *Order 1050.1F Desk Reference*, Section 13, states that *"visual effects deal broadly with the extent to which the proposed action or alternative(s) would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or the visual character of the existing environment."*

3.14.2 Affected Environment

LIGHT EMISSIONS

Light emissions include any light that emanates from a light source into the surrounding environment. Examples of sources of light emissions include airfield and apron flood lighting, navigational aids, terminal lighting, parking facility lighting, roadway lighting, safety lighting on launch pads, additional lighting to support nighttime commercial space launches, and light generated from such launches. Glare is a type of light emission that occurs when light is reflected off a surface (e.g., window glass, solar panels, or reflective building surfaces).

VISUAL RESOURCES AND VISUAL CHARACTER

Visual resources include buildings, sites, traditional cultural properties, and other natural or manmade landscape features that are visually important or have unique characteristics. Visual resources may include structures or objects that obscure or block other landscape features. In addition, visual resources can include the cohesive collection of various individual visual resources that can be viewed at once or in concert from the area surrounding the site of the proposed action or alternative(s). In unique circumstances, the nighttime sky may be considered a visual resource.

Visual character refers to the overall visual makeup of the existing environment where the proposed action and alternative(s) would be located. For example, areas in close proximity to densely populated areas generally have a visual character that could be defined as urban, whereas less developed areas could have a visual character defined by the surrounding landscape features, such as open grass fields, forests, mountains, or deserts, etc.

3.14.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative assumes that there would be no construction of any facilities at the airport to address the purpose and need. No significant changes in the visual character of the project area are anticipated as a result of the No Action Alternative.

PROPOSED ACTION

The Proposed Action includes the construction of crosswind Runway 7/25. The following is a list of items associated with the Proposed Action that will produce light:

- Install Medium Intensity Runway Lights (MIRL) on Crosswind Runway 7/25.
- Install Medium Intensity Taxiway Lights (MITL) on several new taxiways.
- Install Runway End Identifier Lights (REIL) beyond the thresholds of Runway 7/25.
- Install Precision Approach Path Indicators to serve both thresholds of Runway 7/25.

The Proposed Action, located southwest of the Chicago metropolitan region, is not located in an area valued for “dark skies” and is subject to numerous ambient light sources that are not airport created. The Proposed Action will produce light emissions very similar to the existing airport operation.

3.14.4 Mitigation

The No Action Alternative assumes that there would be no construction of any facilities at the Airport to address the purpose and need. No visual impacts would be expected under this alternative. The FAA has not identified a level of significance threshold for visual effects. There are no special purpose laws or requirements for visual effects. No mitigation is required.

3.15 Hazardous Materials, Solid Waste, and Pollution Prevention

3.15.1 General

Hazardous Waste is a general term relating to spills, dumping, and releases of substances that could threaten human and animal life. To identify these materials and protect the environment from harmful interaction with hazardous wastes, Federal laws and regulations have been enacted, including the following: *Comprehensive Environmental Response, Compensation and Liability Act* (CERCLA) and the *Resource Conservation and Recovery Act* (RCRA). CERCLA prescribes a very specific process for the investigation and cleanup of sites listed on the National Priorities List (NPL), also referred to as Superfund sites. RCRA is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. As a method of protection for the citizens of the State of Illinois, several state laws and reporting regulations have also been passed including the *Illinois Environmental Protection Act*, State Priority List, Leaking Underground Storage Tank (LUST) List, and the Underground Storage Tank (UST) Facilities List.

Hazardous waste impacts are typically associated with the current or future use, transfer, or generation of hazardous material within the limits of the proposed improvements or the acquisition of properties that contain hazardous materials. Environmental concerns related to solid waste disposal range from adequate landfills for normal urban trash and garbage to the safe disposal of industrial waste.

3.15.2 Affected Environment

A review of on-line environmental databases was conducted to identify sites and facilities located in the proposed project areas that may be of environmental concern from both site contamination and a NEPA perspective. The review included various on-line databases maintained by the USEPA.[41]

The National Priorities List (NPL) contains the most serious uncontrolled or abandoned hazardous waste sites throughout the United States. Based on a review of available on-line resources, the nearest site to C09 is the now closed Republic Services Environtech Landfill just east of Morris. The nearest active landfill is located at the Livingston Landfill near Pontiac, Illinois.

The RCRA on-line database lists facilities that store, generate, transport, treat, and dispose of hazardous wastes. This database records facilities that generate large or small quantities of hazardous wastes or are conditionally exempt generators. Reviewing the RCRA on-line database there do not appear to be any sites listed.

3.15.3 Environmental Consequences

NO ACTION ALTERNATIVE

The No Action Alternative assumes that there would be no construction of facilities at the Airport beyond those projects that have already received environmental approval and that would occur independent of the Proposed Action. No hazardous waste or solid waste impacts are expected under this alternative.

PROPOSED ACTION

Based upon the review of Federal and State environmental regulatory agency databases and the observations recorded during a field inspection of the project area, no areas of concern show the potential to encounter hazardous materials or contaminated subsurface media within the proposed construction area. All proposed land acquisition would undergo Phase I Environmental Due Diligence Audits, pursuant to FAA Order 1050.19C, before the property is acquired fee simple.

Solid waste generated from the operation of the C09 would increase slightly due to future growth; however, levels of additional daily waste because of the proposed improvements are not expected to be significant. Solid waste would be generated from the construction of the proposed runway and taxiway improvements; however, waste would be transported and disposed of as directed by the appropriate authorities. Typically, solid waste generated by airfield facilities (runways, taxiways, and ramps) is not significant. A review of the 2020 Illinois Landfill Disposal Capacity Report[42] indicated that any solid waste generated from construction is not anticipated to create capacity problems at the local landfill. Presently the landfill has a life expectancy of 19.6 years.

C09 currently uses a variety of hazardous materials, such as vehicle and aviation fuels and solvents, which could be released to the environment from a spill, ground support equipment accident, etc. The Airport addresses pollution prevention through stormwater management, proper storage and handling of hazardous materials, and best management practices for maintenance activities. C09 currently has an approved NPDES general permit and an airport-wide Storm Water Pollution Prevention Plan (SWPPP). During design, there would be a construction specific SWPPP that would be completed and approved prior to construction.

[41] https://www.epa.gov/nepa/nepassist
[42] https://www2.illinois.gov/epa/topics/waste-management/landfills/landfill-capacity/Documents/landfill-capacity-report-2020.pdf

3.15.4 Mitigation

Neither the Proposed Action nor the No Action Alternative would be anticipated to create any significant solid or hazardous waste impacts. Therefore, no mitigation measures would be required.

Chapter Four

Agency and Citizen Coordination

4.1 Introduction

FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, states that: *"NEPA and the CEQ Regulations, in describing the public involvement process, require Federal agencies to consider environmental information in their decision-making process; solicit appropriate information from the public; fully assess and disclose potential environmental impacts resulting from the proposed action and alternatives; and provide the public with this information and allow it to comment on these findings."*

4.2 Scoping

In preparing an EA, FAA can solicit input from the public and Federal, State and Local resource agencies through a scoping process. For this EA, letters were sent on March 30, 2023, to potential **Cooperating agencies**. **Cooperating Agencies** are Federal, state, or local municipal entities that may have jurisdiction by law and/or possess special expertise with respect to one or more environmental resources that could be impacted by the Proposed Action. Many of these agencies have been a source of data in the preparation of this document. Cooperating Agencies that were contacted by FAA are listed below:

- US Environmental Protection Agency (EPA)
- US Federal Emergency Management Agency (FEMA)
- US DOT, Federal Highways Administration (FHWA)
- US DOI, Fish and Wildlife Service (USFWS)
- US Army, Corps of Engineers (USACE)
- Illinois Department of Natural Resources (IDNR)
- Illinois Environmental Protection Agency (IEPA)

Two potential Cooperating Agencies formally declined participation as **Cooperating Agencies**, USFWS and USCOE. All other contacted agencies did not respond. The City of Morris notified all **Landowners** within the Study Area of the proposed development on June 20, 2022. Copies of all scoping documents are contained in Appendix F.

4.3 Agency Coordination

This Draft Environmental Assessment is the primary vehicle that ensures that appropriate local, state, and Federal governmental units have an opportunity to review the Proposed Action for conformance with the requirements of their jurisdictions and programs and to make known any concerns they may have. The following Federal, State, and local public agencies will receive an electronic copy of the DEA for their review and comment:

- US Department of the Interior, Fish and Wildlife Service
- US Department of the Army, Corps of Engineers
- US Department of the Interior, Fish and Wildlife Service
- US Department of the Army, Corps of Engineers
- US Department of Agriculture, APHIS, Wildlife Services
- US Environmental Protection Agency, Region 5
- Illinois Department of Natural Resources
- Illinois Department of Transportation, Division of Highways, Region 2, District 3

- Illinois Environmental Protection Agency
- Illinois Department of Natural Resources
- Illinois State Historic Preservation Officer
- County of Grundy

All comments received from these agencies along with comments from the Public, will be incorporated into Appendix F.

4.4 Public Involvement

The primary method of public involvement and solicitation of comments is through the Public Hearing process. A 30-day Notice for a Public Hearing will be placed into the **Morris Herald-News**, a secular newspaper of general circulation in the Morris and Grundy County area. A draft copy of the Public Hearing Notice is included in **Appendix F.**

A Public Hearing and co-located Airport Open House will jointly be held on March 5, 2024, from 10:00AM to 12:00PM Central Time in the City of Morris' Municipal Services Building located at 700 North Division Street, Morris, IL. The facility is compliant with the Americans With Disabilities Act (ADA). Representatives from the Airport and the preparers of the Draft Environmental Assessment will be available to answer questions from the public at the Airport Open House. Verbal and written comments for the public record will be recorded in the Public Hearing room. A Public Hearing Officer will officiate the hearing and a court reporter will take verbal testimony from the Public. A complete public hearing transcript and responses to comments received during the Public Hearing process will be included in the Final EA.

During the 30-day public hearing notice period and for 15 days following the Public Hearing, the Draft Environmental Assessment will be available to the public for review. Copies of the DEA will be available for review at the following public locations, during normal business hours:

Morris Municipal Airport
9980 North Route 47
Morris, IL 60450

City of Morris
700 North Division Street
Morris IL 60450

The Draft Environmental Assessment will be available for review and download on the Airport's website: https://morrisil.org/morris-airport/. The public can provide comments verbally or in writing at the Public Hearing or can provide written comments after the Public Hearing at the following address.

Airport Environmental Assessment Comments
Morris Municipal Airport
9980 North Route 47
Morris, IL 60450

Comments for the Public Record must be received by Close of Business, 5:00PM March 22, 2024 at the Airport's physical address listed above.

Chapter Five

References and Document Preparers

5.1 Reference Documents

The following is a list of some of the advisory circulars, orders, and guidance documents used in the preparation of the EA.

- 14 CFR Part 139.337. Wildlife Hazard Management.
- 14 CFR Part 151. Federal Aid to Airports.
- 14 CFR Part 152. Airport Aid Program.
- 14 CFR, Part 157. Notice of Construction, Alteration, Activation and Deactivation of Airports.
- 33 CFR Part 328. Definitions of Waters of the US.
- 40 CFR Part 122.26. Storm Water Discharges. (applicable to State NPDES Programs, see §123.25.
- 40 CFR 1502.22. Incomplete or unavailable information.
- 40 CFR Part 1508.7. Cumulative impact.
- 40 CFR § 50. National Primary and Secondary Ambient Air Quality Standards
- 20 Illinois Compiled Statutes (ILCS) 830/1-1, et seq. The Interagency Wetland Policy Act of 1989.
- 415 Illinois Compiled Statutes (ILCS) 5/. Environmental Protection Act.
- 520 Illinois Compiled Statutes (ILCS) 10/1, et seq. Illinois Endangered Species Protection Act.
- 16 U.S.C. 470(f), et seq. The National Historic Preservation Act (NHPA) of 1966. (P.L. 102-575, as amended through 1992).
- 16 U.S.C. 661-667e. March 10, 1934. Fish and Wildlife Coordination Act of 1934.
- 16 U.S.C. App. 2151, 2153-56, et seq. December 28, 1973. Endangered Species Act of 1973. (P.L. 93-205, amended in 1978).
- 33 U.S.C. 1251-1377. Clean Water Act (CWA) of 1977. (P.L. 95-217 amended by the Federal Water Pollution Control Act of 2002, P.L. 107-303).
- 42 U.S.C. 4321, et seq. The National Environmental Policy Act (NEPA), 1969. (P.L. 91-190).
- 42 U.S.C. 4341. Council on Environmental Quality (CEQ) Regulations. (Section 1502.14d).
- 42 U.S.C. 4601 et seq. January 2, 1971. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. (P.L. 91-646 amended by the Surface Transportation and Uniform Relocation Act Amendments of 1987, P.L. 100-117).
- 42 U.S.C. 6901-6992k. The Resource Conservation and Recovery Act (RCRA) of 1976.
- 42 U.S.C. 7401 et. seq. December 31, 1970. The Clean Air Act of 1970. (P.L. 91-604).
- 54 U.S.C. Ch. 2003: Land and Water Conservation Fund.
- Department of Transportation (DOT) Act of 1966, Section 4(f) was amended and codified in 49 U.S.C. Section 303(c).
- Department of Transportation (DOT). May 2, 2012. Order 5610.2a, Environmental Justice in Minority Populations and Low-Income Populations.
- Department of Transportation (DOT). April 23, 1979. Order 5650.2, Floodplain Management and Protection.
- Executive Order 11988. May 24, 1977. Floodplain Management.
- Executive Order 11990. May 24, 1977. Protection of Wetlands.
- Executive Order 12372. July 14, 1982. Intergovernmental Review of Federal Programs.
- Executive Order 12898. February 11, 1994. Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations.

- Executive Order 13045. April 21, 1997. Protection of Children from Environmental Health Risks and Safety Risks.
- Federal Aviation Act of 1958, (P.L. 85-726) [Recodified at 49 U.S.C. – "Aviation Programs," § 40101 et seq.]
- Federal Aviation Administration (FAA) Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects, Advisory Circular 5100-17, Change 7, July 10, 2017.Federal Aviation Administration (FAA) Land Acquisition and Relocation Assistance for Airport Projects, FAA Order 5100.37B, August 1, 2005.
- Federal Aviation Administration (FAA). April 28, 2006. Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions.
- Federal Aviation Administration (FAA). August 28, 2007. Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants on or near Airports.
- Federal Aviation Administration (FAA). December 21, 2018. Advisory Circular 150/5370-10H, Standards for Specifying Construction of Airports.
- Federal Aviation Administration (FAA). Effective July 16, 2015. Order 1050.1F, Environmental Impacts: Policies and Procedures.
- Federal Aviation Administration (FAA). October 5, 2018. FAA Reauthorization Act of 2018 (Public Law (P.L.) 115-254).
- Federal Emergency Management Agency (FEMA). National Flood Insurance Program.
- Illinois Department of Transportation (IDOT). Division of Aeronautics. April 1, 2012. Standard Specifications for Construction of Airports.
- Intergovernmental Panel on Climate Change, Climate Change 2014 Synthesis Report.
- U.S. Census, American Community Survey, 2013-2017 5-Year Period Estimate.
- U.S. Census, 2020 Decennial Census, DEC ReCitying Data.
- U.S. Environmental Protection Agency (USEPA). March 2016. Promising Practices for EJ Methodologies in NEPA Reviews.

5.2 Document Preparers

Crawford, Murphy & Tilly, Inc. prepared the C09 EA for Chamlin Associates on behalf of the City of Morris. The following from Crawford, Murphy & Tilly, Inc. prepared text and exhibits: Heather Lacey, Alexandra Zelles, Jennifer Miller, Derek Snyder, Boyd Nowicki (Exhibits); and Terry Schaddel.

5.3 List of Abbreviations

ABBREVIATIONS	
ACEIT	Airport Construction Emissions Inventory Tool
AEDT	Aviation Environmental Design Tool
AIP	Airport Improvement Program
ALP	Airport Layout Plan
AOA	Airport Operating Area
APE	Area of Potential Effect
ARC	Airport Reference Code
BDE	IDOT Bureau of Design and Environment
C09	Morris Municipal Airport
CAA	Clean Air Act
CAEP	Committee on Aviation Environmental Protection
CAGR	Compound Annual Growth Rate
CBIA	Coastal Barrier Improvement Act

ABBREVIATIONS	
CBRA	Coastal Barrier Resources Act
CEQ	President's Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CIP	Capital Improvement Program
CO	Carbon Monoxide
CWA	Clean Water Act of 1970
CZMA	Coastal Zone Management Act
DNL	Day-Night Noise Level
DOT	US Department of Transportation
EA	Environmental Assessment
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FFPA	Federal Farmland Protection Act
FHWA	US DOT, Federal Highways Administration
FQI	Floristic Quality Index
GHG	Green House Gases
ICAO	International Civil Aviation Organization
ICMP	Illinois Coastal Management Program
IDNR	Illinois Department of Natural Resources
IDOT	Illinois Department of Transportation
IEPA	Illinois Environmental Protection Agency
IPCC	Intergovernmental Panel on Climate Change
LAWCON	Land and Water Conservation Fund Act of 1966
MIRL	Medium Intensity Runway Lights
MITL	Medium Intensity Taxiway Lights
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1970
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966
NO_2	Nitrogen Dioxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
O_3	Ozone
OHWM	Ordinary High-Water Mark
OPA	Otherwise Protected Areas
OWR	IDNR-Office of Water Resources
PAPI	Precision Approach Path Indicator Lights
Pb	Lead
PM	Particulate Matter
PNS	IDOT Project Notification System
RCRA	Resource Conservation and Recovery Act
REIL	Runway End Identifier Lights
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan

ABBREVIATIONS	
SO_2	Sulfur Dioxide
SWPPP	Storm Water Pollution Prevention Plan
THPO	Tribal Historic Preservation Officer
TNW	Traditional Navigable Waters
USACE	US Army Corps of Engineers
USDOI	US Department of the Interior
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGCRP	United States Global Change Research Program
WIE	Wetland Impact Evaluation