

# **BLAIR EXECUTIVE AIRPORT (BTA)**

## **BLAIR, NEBRASKA**

**AIG/BIL Project Number 3-31-0109-020**

**Olsson Project Number A21-03923**

### **DRAFT ENVIRONMENTAL ASSESSMENT (EA)**

- Extension of Runway 13 (1,300 feet)
- Land Acquisition for ultimate Runway 13 (approximately 26 acres)
- Removal and Relocation of County Roads 35 and 38

and other work as described within the EA.

**May 2023**

**Prepared by:** Olsson, Inc.

**For:** Blair Airport Authority

This environmental assessment becomes a Federal document when evaluated, signed, and dated by the Responsible Federal Aviation Administration (FAA) Official.

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Responsible FAA Official

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Date

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# 1. Purpose and Need

## 1.1 Introduction

This Environmental Assessment (EA) was prepared per Federal Aviation Administration (FAA) Order 1050.1F and FAA Order 5050.4B for proposed improvements to the Blair Executive Airport (BTA) located near Blair in Washington County, Nebraska. Proposed modifications to the existing airport facilities would involve construction of a runway extension and supporting taxiways, acquisition of land, removal of trees, removal of airport owned buildings and the relocation of two county roads.

## 1.2 Purpose and Need

The purpose of the Proposed Action is to safely accommodate existing and forecasted aircraft operations at BTA per guidelines in FAA Advisory Circular 150/5300-13A *Airport Design*.

The project is needed because the existing Runway 13/31 length does not meet operational requirements for BTA's current and forecasted critical aircraft for all weather conditions. The critical aircraft is the most demanding group of aircraft that make regular use of an airport. Regular use is 500 annual operations. The critical aircraft determines the applicable airport design standards. The critical aircraft group for BTA was identified as B-II large aircraft in the report entitled "Runway Extension Justification Analysis with Updated Demand Forecasts" completed by Coffman Associates in 2021, **Appendix B**. The B-II large aircraft group includes jets with approach speeds up to 120 knots and maximum take-off weights (MTOW) exceeding 12,500 lbs. Blair Executive Airport had 556 annual operations by the critical aircraft group in 2021. By 2026, BTA is forecasted to have more than 700 annual operations and by 2031, nearly 1,000 operations by these critical aircraft. Table J in **Appendix B** lists the current critical aircraft operations for a single year as well as the forecasted critical aircraft operations for 2026 and 2031. Table F in **Appendix B** lists the number of based aircraft and total operations for 2021 as well as the forecasts for 2026 (5-year forecast) and 2031 (10-year forecast).

The recommended runway length to safely accommodate B-II large aircraft at BTA is 5,500 feet, as discussed in **Appendix B**. The existing runway length is only 4,200 feet, or 1,300 feet less than required.

Based on letters of support from aircraft owners in **Appendix B**, many of the critical aircraft operators have chosen to base their aircraft at other airports or chosen not to use BTA due to safety concerns with runway length. Future forecasts show that the critical aircraft would return to BTA if runway length safety concerns were alleviated.

If not addressed, these issues and concerns pose a significant safety threat to the critical aircraft operating at the airport and non-compliance with FAA safety guidelines and standards. The inability to accommodate critical aircraft will limit the growth of the airport and its' ability to be self-supporting.

## 1.3 Proposed Action

The Proposed Action includes the following, as shown on Figure 1 on the next page.

- **Land acquisition** for Runway 13 extension, parallel taxiway extension, ultimate Runway Protection Zone (RPZ) and County Road 35/38 relocation (approximately 26 acres) – (Planned for 2024-2025)
- **Tree and airport-owned building removal** on land within the RPZ and county road relocation – (planned for 2024)
- **Relocate County Road 35/38** to meet FAA standards regarding RPZs – (planned for 2024-2026)
- **Grading safety area of Runway 13 and parallel taxiway** to comply with B-II large aircraft – (planned for 2026)
- **Extend Runway 13 (1,300 feet by 100 feet)** to meet FAA standards for B-II large aircraft – (planned for 2025-2027)
- **Extend Runway 13/31 Parallel Taxiway (1,300 feet by 35 feet)** – (planned for 2025-2027).
- **Construct connecting taxiway to Runway 13 end** – (planned for 2025-2027)
- **Light Runway 13/31** with Medium Intensity Runway Lights (MIRL) – (Planned for 2027)
- **Relocate/Install Precision Approach Path Indicators (PAPIs) and Runway End Indicator Lights (REILs)** on Runway 13 – (Planned for 2027)
- **Install Medium Intensity Taxiway Lights (MITL)** on connecting and parallel taxiways – (Planned for 2027)
- **Install and relocate fence** – (Planned for 2024-2026)
- **Relocate utilities** – (Planned for 2024-2026)
- **Implement new non-precision instrument approach procedures** listed below with one-mile minimum visibility for these new runway threshold locations. These procedures will replace the existing RNAV/GPS approaches with one-mile and 7/8-mile visibility – (Planned for 2024-2027)
  - Runway 13 – RNAV (GPS)
  - Runway 31 – RNAV (GPS)
  - Takeoff/Departure Minimums
  - Circling Approach Minimums

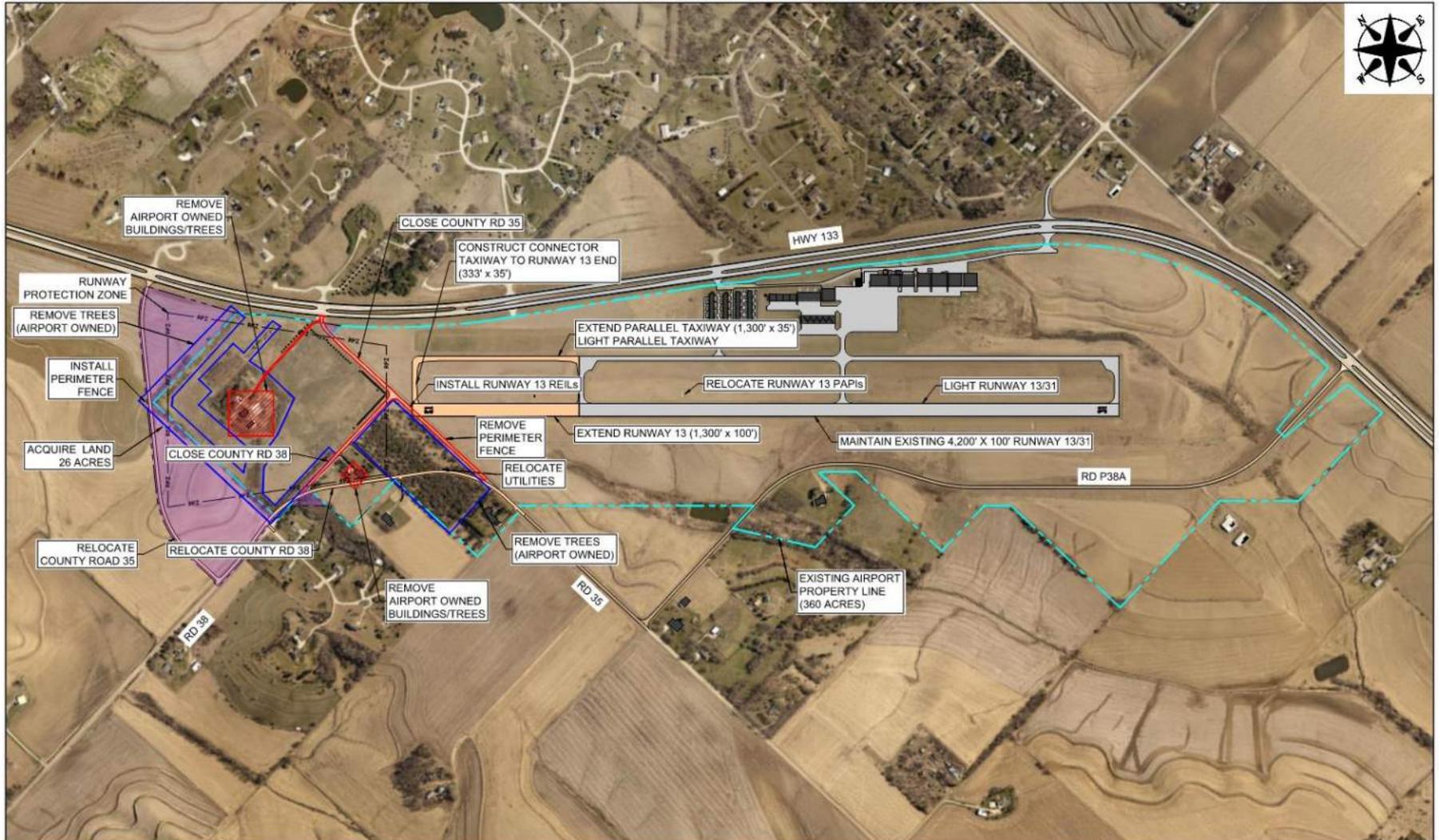


Figure 1 – Proposed Action

## **2. Alternatives**

### **2.1 Introduction**

This section defines the no action, the Proposed Action, and reasonable alternatives. It also briefly explains why each alternative meets or does not meet the project purpose and need and whether it is considered reasonable or not reasonable. The alternatives discussed here were partially identified in the 2019 Airport Layout Plan and further evaluated at the time of the Environmental Assessment. Exhibits depicting all alternatives 2 thru 6 are included below each description.

### **2.2 Alternative 1 - No Action Alternative**

The No Action Alternative would not make any changes to the existing airport facilities or runway. The airport would continue to operate under the existing conditions.

Existing Runway 13/31 is currently 4,200 feet in length and 100 feet wide. The instrument approach procedures published for Runway 13/31 have visibility minimums as low as 7/8 of a mile.

Under the No Action Alternative, unsafe and nonstandard conditions at the airport would continue to exist, specifically concerning the runway length for the larger critical aircraft at BTA. There would be no improvements for the safety of the flying public nor for the operational safety of the facility. The airport would have very limited growth in based aircraft and operations, adversely affecting the airport's ability to be financially self-supporting.

The No Action Alternative does not meet the project purpose and need; however, in addition to serving as a requirement of the Council on Environmental Quality/National Environmental Policy Act (CEQ/NEPA), the No Action Alternative serves as a baseline for a comparison of impacts to the preferred alternative and is retained for analysis.

### **2.3 Alternative 2 – Extend Runway 31 (1,300 feet by 100 feet); Relocate Highway 133 and County Road P38A**

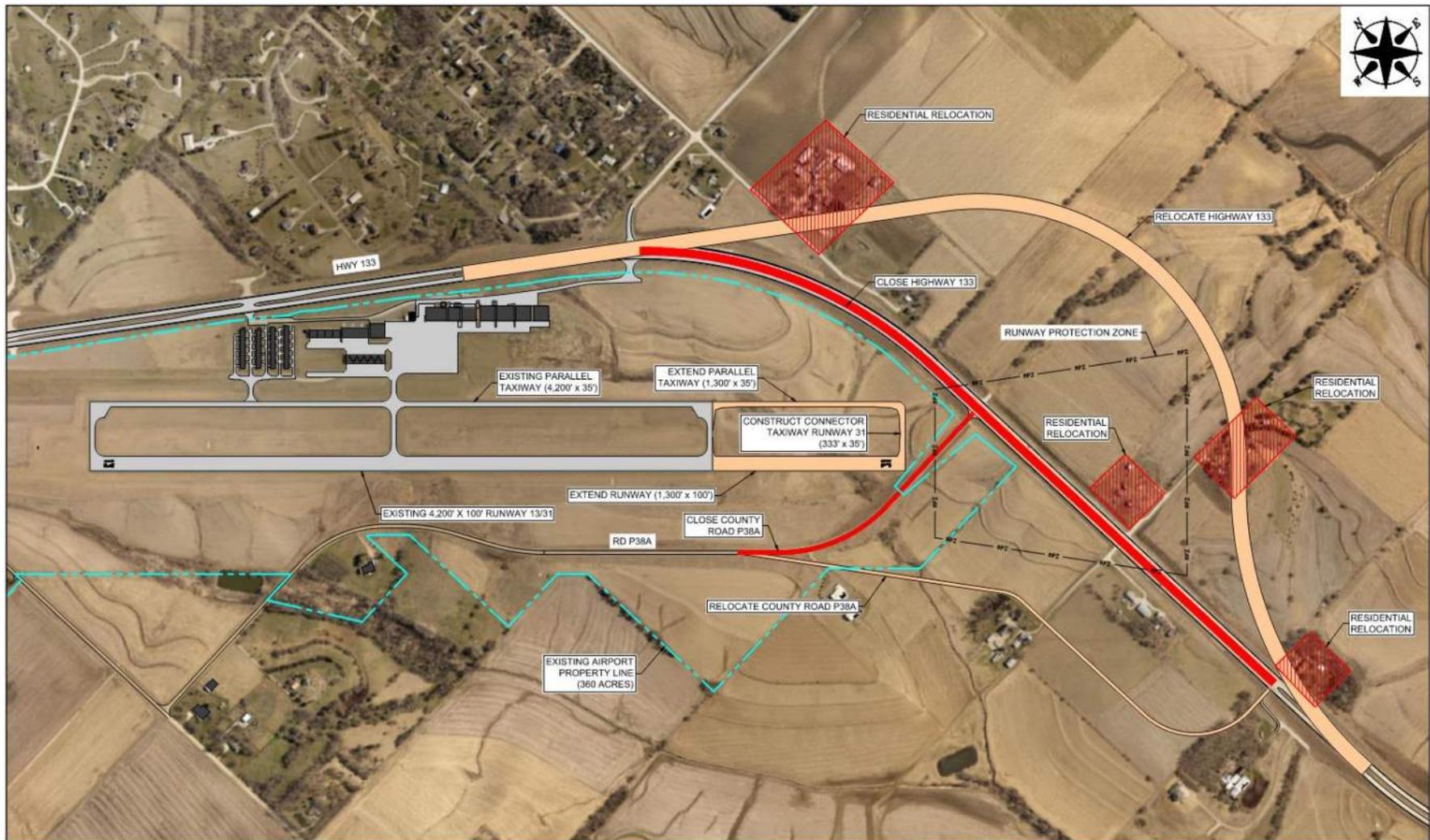
Alternative 2 would extend Runway 31 southeast 1,300 feet to bring runway 13/31 to a total length of 5,500 feet, thereby allowing the larger critical aircraft to safely utilize the BTA runway in all weather conditions.

Alternative 2 would require the relocation of portions of Highway 133 to accommodate for the new Runway 31 RPZ, which would extend east over Highway 133 and into the adjacent agricultural fields. Approximately 0.5 miles of Highway 133, adjacent to the east end of Runway 31, would need to be relocated into the abutting agricultural fields on the east side of Highway 133. This relocation of Highway 133 would inevitably require the acquisition and removal of four private residences located within the path of the proposed Highway 133, along with additional tree clearing within the proposed new RPZ.

This alternative would also require the relocation of County Road P38A to accommodate the proposed extension of Runway 31. County Road P38A would be rerouted to intersect with Highway 133 across from a private residential drive and into several agricultural fields to the southeast of the current road. County Road P38A would be approximately 0.5 miles to the south of its current position.

Although Alternative 2 meets the purpose and need of providing a safer runway for critical aircraft, it requires significant and costly amounts of land acquisition, significant amounts of grading and earthwork, road removal, and relocation including a state highway and county road, as well as the acquisition of four private residential homes and a feedlot, and additional tree clearing. Moreover, the construction of the proposed Runway 31 extension would result in permanent impacts to wetlands and waterways. Due to the financial infeasibility of Alternative 2, along with the high quantity of impacts to the public, wetlands, and local traffic, Alternative 2 was not carried forward for further review.

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**Figure 2 – Alternative 2 - Extend Runway 31 (1,300 feet by 100 feet); Relocate Highway 133 and County Road P38A**

## **2.4 Alternative 3 – Realign Runway 13/31 to Accommodate 5,500-Foot Runway**

Alternative 3 proposes the realignment of Runway 13/31 to accommodate a runway that is 5,500 feet by 100 feet, thereby allowing larger critical aircraft to safely utilize the BTA runway in all weather conditions. This alternative would require the complete removal of the existing Runway 13/31 and associated taxiways, which would be repositioned to the west of the existing runway, within the current BTA property.

To construct the new runway in the proposed alignment, significant amounts of grading and earthwork would need to occur along the entire length of the runway. Additionally, the proposed new alignment would require the relocation of county roads 35, 38 and P38A. These county roads would lie within the runway's RPZs and therefore would not meet updated FAA standards and would present a safety hazard.

County Road relocations will be required at both ends of the newly aligned runway. On the north end of the property, approximately 0.35 miles of County Road 35 will need to be closed and a section of County Road 38 will be realigned through airport property to connect to the new County Road 35 connection to Highway 133, located approximately 0.4 miles to the west. The intersection of County Road 35 and Highway 133 would be relocated approximately 0.25 mile north. The new alignment would accommodate the new RPZ and proposed runway alignment. The south end of the runway will close and reroute approximately 0.63 miles of County Road P38A. This section of roadway would be rerouted southeast through adjacent agricultural fields.

Airport owned buildings and trees will be removed as part of this new configuration of both the runway and county road relocations. This alternative would also require the additional acquisition and removal of three (3) private residences and a feedlot located southeast of current County Road P38A.

In addition to road removal and relocation, significant amounts of tree clearing, and structure removal would need to occur. Proposed pavement and all existing and ultimate safety areas associated with this alternative would remain on airport property except for the outermost corners of the RPZ. Wetland and/or channel impacts are likely to occur along County Road P38A removal, along with the potential for wetland impacts to occur while grading and constructing the new runway alignment.

Although Alternative 3 avoids the removal and relocation of Highway 133, this alternative still requires significant amounts of grading and earthwork, as well as removals of private residences and a feedlot, buildings, trees, utilities, and roads. Alternative 3 would meet the purpose and need of providing a safer runway for critical aircraft, but due to significant environmental and social impacts as well as infeasible costs, Alternative 3 was not carried forward for further review.

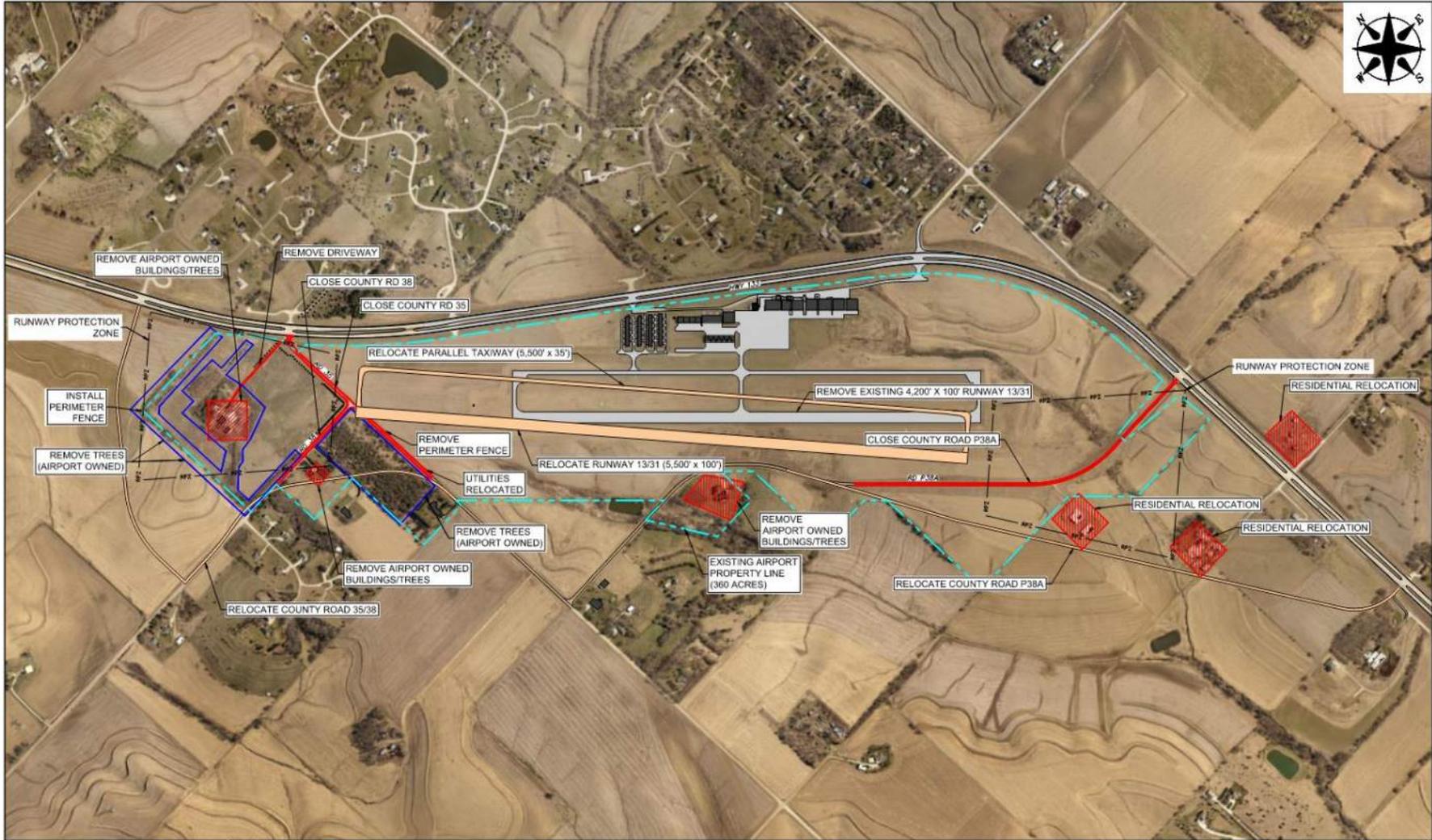


Figure 3 – Alternative 3 – Realign Runway 13/31 to Accommodate 5,500-foot Runway

## **2.5 Alternative 4 – Extend Runway 13 (1,300 feet) and Close County Roads 35 and 38**

Alternative 4 proposes the extension of Runway 13 by 1,300 feet to the northwest to bring the runway to a total length of 5,500 feet, thereby allowing larger critical aircraft to safely utilize the BTA runway in all weather conditions. The runway extension would extend across County Road 35 near its intersection with County Road 38 and portions of both county roads would be permanently closed. These roads would not be relocated or replaced.

While County Roads 35 and 38 can be closed with minimal work, Alternative 4 would require the removal of two airport-owned building areas: 1) A home located along the south side of County Road 38 and 2) an unoccupied former farmstead located on the west of the intersection of County Road 35 and Highway 133. Residents along Pheasant Drive, Morgan Circle and County Road 38, would be required to take an alternative route to Highway 133 due to these closures. A relocated access to one residence would be required. This residential access would be rerouted off County Road P38A to the southeast.

Additional land acquisition would be required for the for the new RPZ. Tree removal would be necessary within the RPZ and the primary surface.

Alternative 4 meets the purpose and need of the project of allowing safe runway conditions for critical aircraft at BTA in all weather conditions. However, the Washington County board reviewed the closure of County Roads 38 and 35 and enacted Resolution 2022-20, which states that the county roads shall not be closed and must be realigned to best serve its citizens. See **Appendix C** for this Resolution. Therefore, this alternative was not carried forward for further review.

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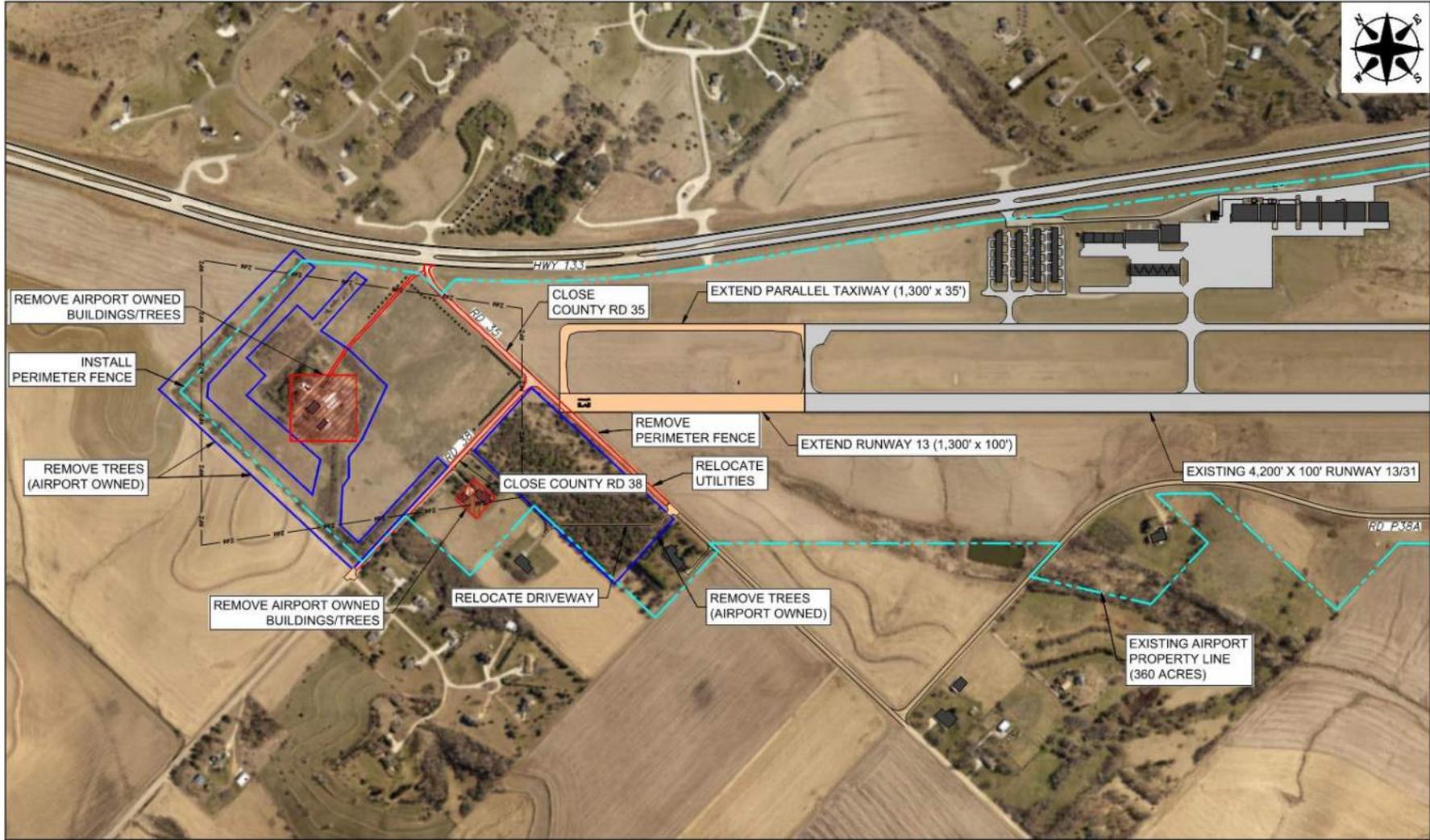


Figure 4 – Alternative 4 – Extend Runway 13 (1,300 feet) and Close County Roads 35 and 38

## **2.6 Alternative 5 – Extend Runway 13 (1,300 feet) and Relocate County Road 35 and 38 within the RPZ.**

Alternative 5 proposes the extension of Runway 13 by 1,300 feet to the northwest to bring the Runway to a total length of 5,500 feet, thereby allowing critical aircraft to safely utilize the BTA runway in all weather conditions. In addition, Alternative 5 proposes the relocation of County Roads 35 and 38 around the runway extension but within the new RPZ.

Approximately 0.35 miles of County Road 35 will need to be closed and a section of County Road 38 will be realigned through airport property to connect to the new County Road 35 connection to Highway 133, located approximately 0.2 miles to the west. The new alignment would accommodate the new RPZ and proposed runway alignment.

Alternative 5 would also require the removal of two airport-owned building areas: 1) An airport owned building located along the south side of County Road 38 and 2) an unoccupied building located west of the intersection of County Road 35 and Highway 133.

Additional land acquisition would be required for the realignment of the county roads and to meet FAA standards for the new RPZ. Tree removal would be necessary within the RPZ.

Alternative 5 would eliminate access issues related to Highway 133 created by the closure of County Roads 35 and 38. However, Alternative 5 still leaves the relocated county roads within the new RPZ, thereby violating FAA standards. Due to the lack of adherence to FAA safety standards, Alternative 5 does not meet the purpose and need, therefore was not carried forward for further evaluation.

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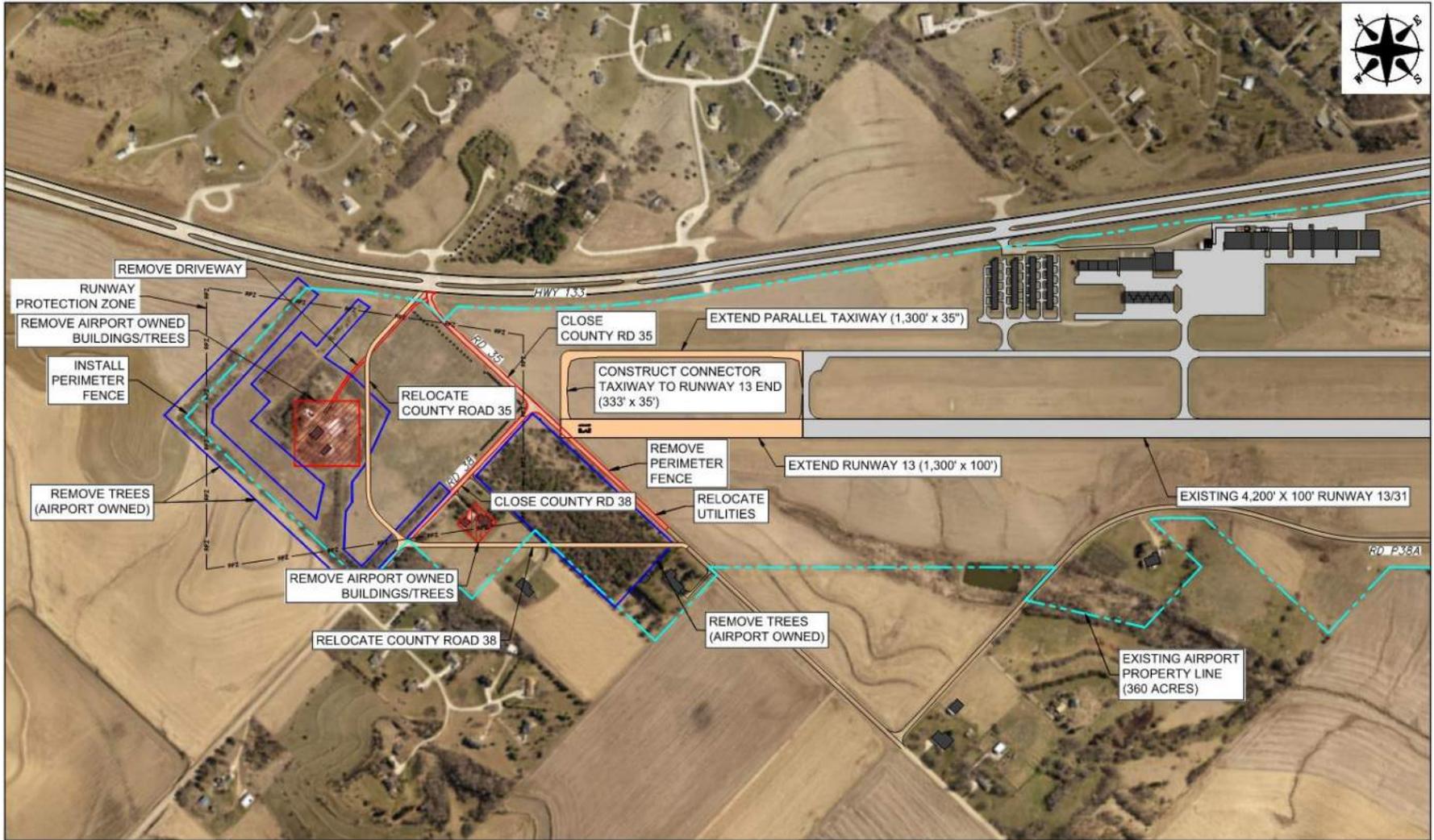


Figure 5 – Alternative 5 – Extend Runway 13 (1,300 feet) and Relocate County Road 35 and 38 within the RPZ.

## **2.7 Alternative 6 (Proposed Action) – Extend Runway 13 (1,300 feet) and Relocate County Road 35 and 38 Outside of the New RPZ**

Finally, Alternative 6 proposes the extension of Runway 13 by 1,300 feet to the northwest to bring the Runway to a total length of 5,500 feet, thereby allowing the larger critical aircraft to safely utilize the BTA runway in all weather conditions. Alternative 6 also proposes removing and relocating County Roads 35 and 38 outside of the new RPZ.

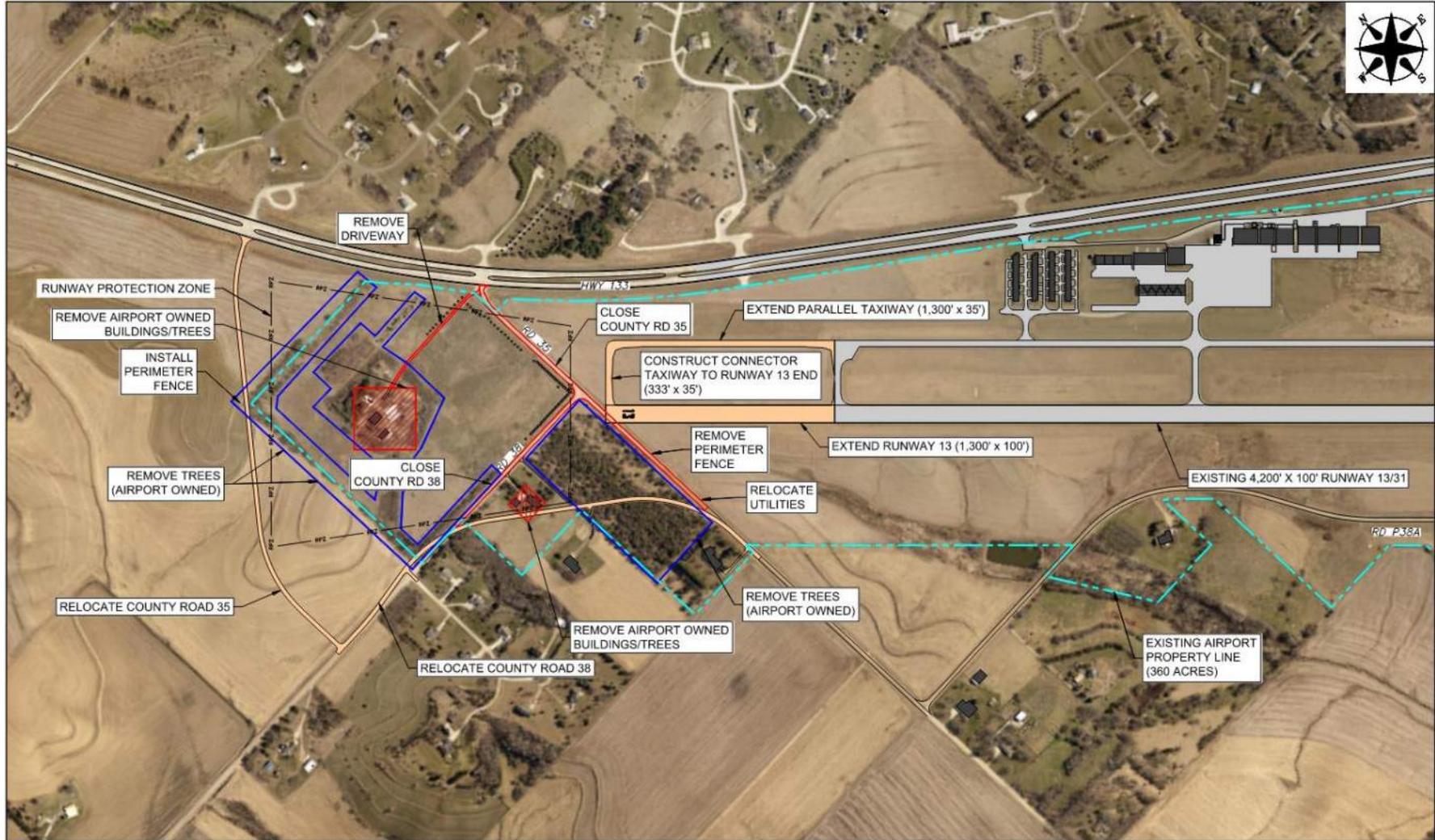
Approximately 0.35 miles of County Road 35 will need to be closed and a section of County Road 38 will be realigned through airport property to connect to the new County Road 35 connection to Highway 133, located approximately 0.4 miles to the west. The intersection of County Road 35 and Highway 133 would be relocated approximately 0.25 mile north. The new alignment would accommodate the new RPZ and proposed runway alignment.

Alternative 6 would also require the removal of two airport-owned building areas: 1) An airport owned building located along the south side of County Road 38 and 2) an unoccupied building located west of the intersection of County Road 35 and Highway 133.

Additional land acquisition would be required for the realignment of the county roads and to meet FAA standards for the new RPZ. Tree removal would be necessary within the RPZ and the primary surface which includes the RPZ from an airport owned parcel near the northwest corner of the runway extension.

Alternative 6 would meet the purpose and need of providing a safer runway for the larger critical aircraft and would meet all FAA requirements for the runway RPZ. This alternative was carried forward for further analysis of potential environmental impacts.

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**Figure 6 – Alternative 6 (Proposed Action) – Extend Runway 13 (1,300 feet) and Relocate County Road 35 and 38 Outside of the New RPZ**

## **3. Affected Environment**

### **3.1 Introduction**

This section describes the existing environmental conditions of the potentially affected geographical area.

### **3.2 Location Map, Vicinity Map, Airport Diagram, Photographs**

- Figure 7 – Location Map, Page 16
- Figure 8 – Vicinity Map, Page 17
- Figure 9 – Airport Diagram with Proposed Action, Page 18

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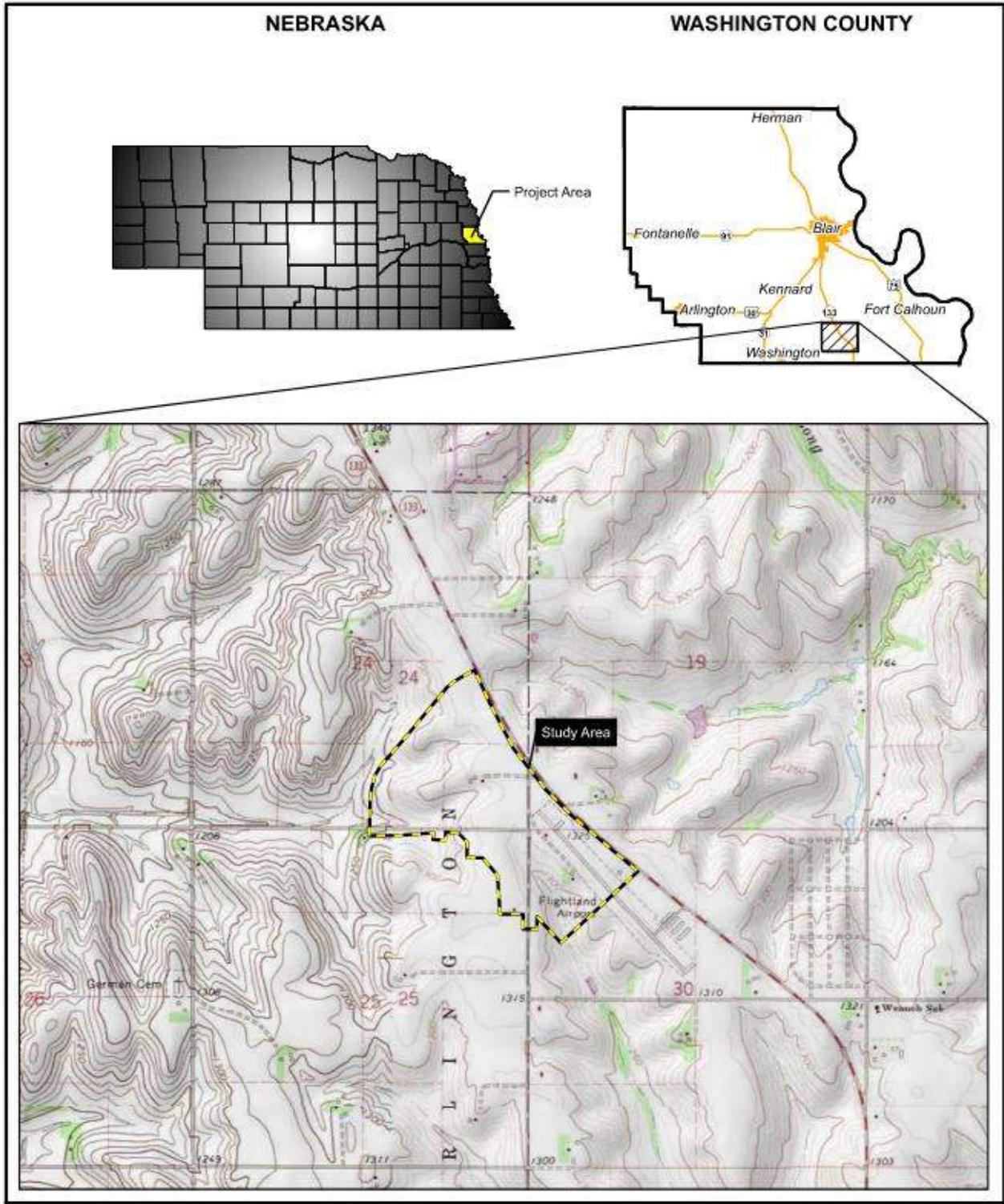


Figure 7 – Location Map



Figure 8 – Vicinity Map

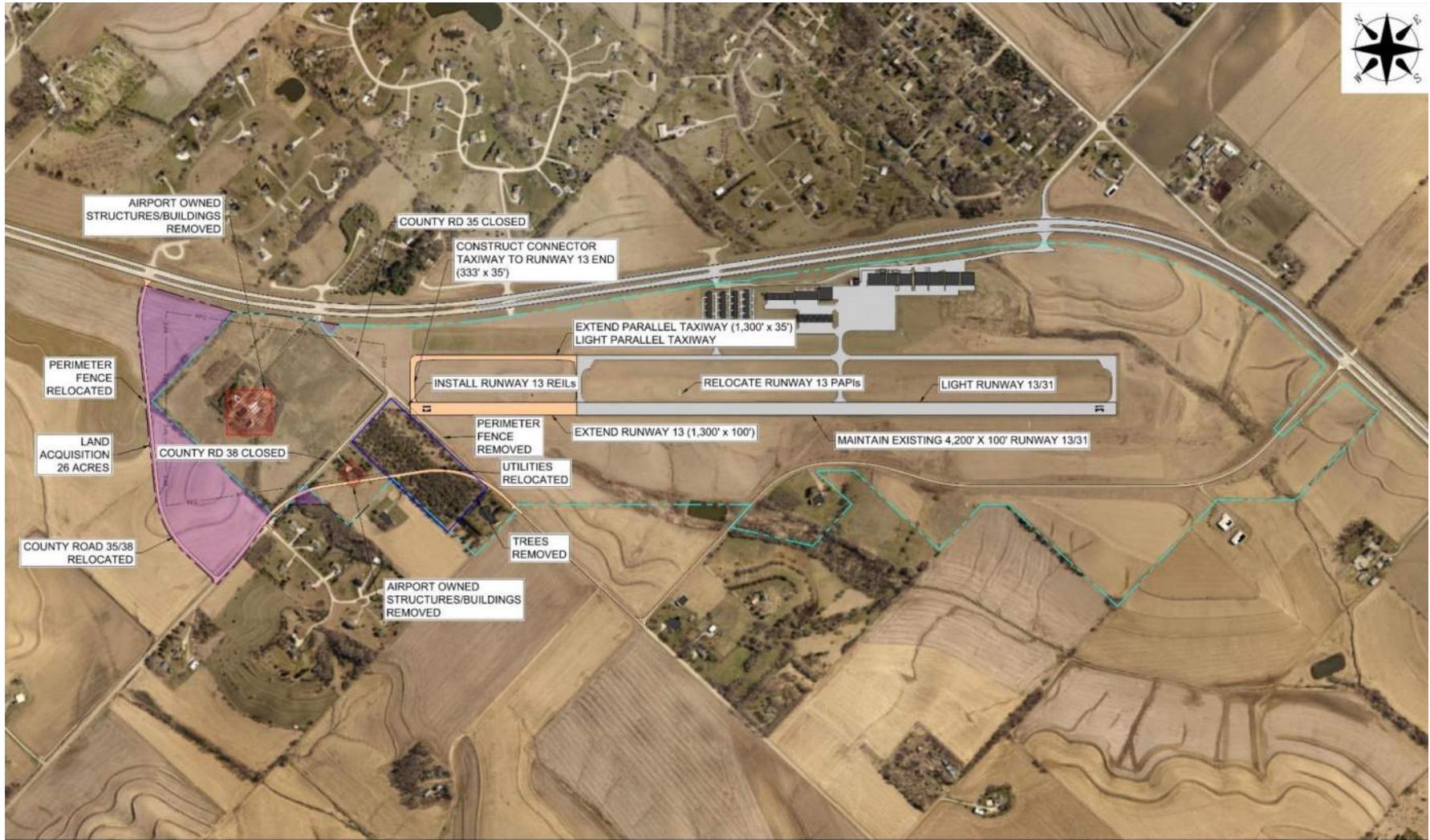


Figure 9 – Airport Diagram with Proposed Action

Site photographs depicting the general airport site, Proposed Action site location conditions, and new RPZ are included on the following pages.



**Photograph 1** - Aerial view of the existing Blair Executive Airport facilities. The proposed runway extension would be built northwest of existing Runway 13 end, extending to the northwest into County Road 35 near the top of this photograph. The Proposed Action would result in removal and relocation of County Road 35 and County Road 38.



**Photograph 2** - View of a forested corridor located north of County Road 38, along a farmstead. Area would need to be cleared to accommodate new FAA RPZ standards.



**Photograph 3** – View of an existing agricultural field north of County Road 38. County Road 35 would be rerouted to run north/south along this section of field.



**Photograph 4** – View of a forested corridor located west of County Road 35. To meet current FAA RPZ standards, trees in this area would need to be cleared to avoid any safety hazards.

### **3.3 Existing/Planned Land Uses and Zoning**

#### **3.3.1 Industrial/Commercial Activities**

The project site consists of structures associated with airport traffic – terminal, hangars, taxiways, and aircraft parking ramps. Agricultural fields are located on either side of the existing runway and taxiways, which are used for row crop production. There are no additional industrial or commercial activities situated within the existing airport property boundary.

#### **3.3.2 Residential Areas, Schools, Churches, and Hospitals**

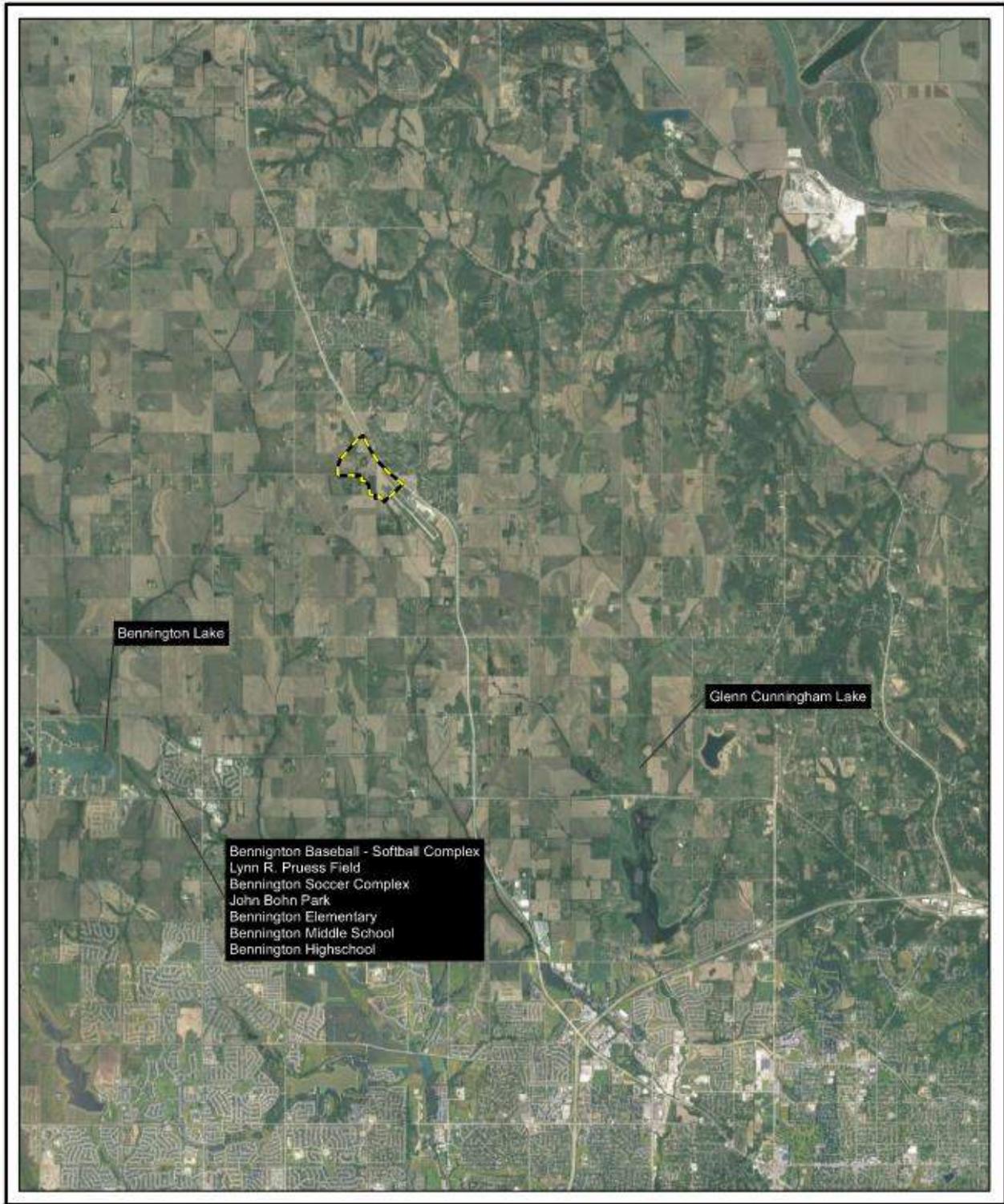
The project site is located approximately 6.2 miles south of the city of Blair. There is an old unoccupied farmstead toward the north end of the airport property. Residential buildings are present to the northwest of the property and a residential development consisting of residential buildings with associated out buildings is present along Pheasant Drive. Additional residential buildings are located directly southwest of the airport across from County Road P38A. Three larger residential developments are located to the northeast of Highway 133 consisting of multiple residential and outbuildings.

The Church Life LLC is approximately 1.5 miles west of the project boundary along County Road 38. The nearest school and hospital are greater than 1.0 mile from the project boundary.

#### **3.3.3 Section 4(f) Resources - Publicly-Owned Parks, Recreational Areas, Wildlife and Waterfowl Refuges**

Bennington Lake, which offers public fishing and a public pedestrian trail, is located approximately 5 miles southwest of the project boundary, east of the intersection of North 204<sup>th</sup> Street and Pawnee Road. Several recreational facilities and parks are located within the city limits of Bennington, approximately 5 miles southwest of the project boundary. Glenn Cunningham Lake and recreation area begins approximately 2.5 miles southeast of project boundary near the intersection of County Road 41 and Dutch Hall Road and extends to the south along State Street. The property is a no wake lake with fishing, recreation trails, passive recreational land, camping, and other recreational opportunities within the limits. No wildlife or waterfowl refuges are located within a 5-mile buffer of BTA (See Figure 10).

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**Figure 10 – Section 4(f) Map**

### **3.3.4 National/State Forests, Wilderness Areas, Wild & Scenic Rivers, Nationwide Rivers Inventory**

There are no National or State Forests, Wilderness Areas, Wild and Scenic Rivers or Nationwide Rivers Inventory (NRI) resources on the project site or within the general vicinity.

### **3.3.5 Federally-Listed/State-Listed Threatened & Endangered Species (TES) / Habitat**

According to the USFWS Information for Planning and Consultation (IPaC) tool (**Appendix D**), three federal and state-listed species may potentially occur within the project area with no critical habitat identified: northern long-eared bat (*Myotis septentrionalis*), piping plover (*Charadrius melodus*) and the pallid sturgeon (*Scaphirhynchus albus*). The piping plover and pallid sturgeon are included in case a project may involve depletions to the Platte River, which are not anticipated to occur due to the Proposed Action because it is not a water dependent activity. Additionally, the Nebraska Game and Parks Commission's (NGPC) Conservation and Environmental Review Tool (CERT), indicates there has been regional documented occurrences of the state-endangered sturgeon chub (*Macrhybopsis gelida*) within one mile of the project area. The monarch butterfly (*Danaus plexippus*) was also included within the IPaC report; however, this species is a federal candidate to be listed and is not included in any federal or Nebraska threatened or endangered list and therefore has no legal precedence for regulation regarding this project. Nonetheless, habitat considerations for this species were included within this report.

The BTA project area provides little habitat for wildlife species and is comprised mainly of row crop agricultural and hayed areas within the airport property consisting of grass and forb species. Forested areas on the west side of Road 35 and north of County Road 38 mainly contain oak (*Quercus sp.*), eastern cottonwood (*Populus deltoides*), mulberry (*Morus sp.*), and eastern red cedar (*Juniperus virginiana*). These forested areas provide the most potential habitat for wildlife in the area. Trees and other wooded areas located within the project area may provide habitat for migratory birds and/or the federally listed northern long-eared bat.

The National Hydrography Dataset (**Figure 3, Appendix E**) depicts one unnamed channel on BTA property to the northwest of the existing runway. Thomas Creek is depicted within BTA property to the southwest of the runway. An unnamed intermittent channel is depicted to the north of the BTA property across from Highway 133. Based on the results of the wetland delineation, no channel characteristics were present within BTA property and it is unlikely that the channel north of the BTA property has sufficient habitat conditions to support the sturgeon chub. Field edges, roadside ditches and fence lines may provide habitat for common milkweed (*Asclepias syriaca*), which is the host plant for the monarch butterfly, although these areas are not protected.

### **3.3.6 Wetlands, Floodplains, Floodways, Coastal Zones, and Coastal Barriers**

The National Wetland Inventory (**Figure 3, Appendix E**) depicts no wetlands within the project boundary.

A wetland delineation was completed on October 20, 2022 (report date November 2022). The delineation identified one Palustrine Freshwater Forested Seasonally Flooded (PFOA) wetland totaling 0.79 acres within the Project Study Area. No channels were delineated within the Proposed Action project boundary. The wetland delineation can be found in **Appendix E**.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the project boundary is located within Flood Zone X, Area of Minimal Flood Hazard. A floodplain memo is available in **Appendix F**.

The project site is not located within coastal zones or associated with coastal barriers.

### **3.3.7 Historic, Archeological, or Cultural Resources**

A cultural resources report, including a Phase II cultural resources investigation and historic standing structures survey, was completed for the project area on November 1 and 2, 2022. The survey identified two structures within the Area of Potential Effect (APE); however, both structures are less than 50 years old and as such do not meet minimum 50 years of age requirement for eligibility for nomination to the National Register of Historic Places (NRHP). No new properties are recommended NRHP eligible as part of this survey effort.

One prior archaeological site (Site 25WN40) is located within the APE; however, the Nebraska State Historical Preservation Office (NeSHPO) determined the site to not be eligible for NRHP on October 1, 1992. No archaeological sites were recommended for inclusion on the NRHP.

Project coordination with NeSHPO was completed via mail correspondence. Based on a review of the proposed Project, NeSHPO determined that there will be “no historic properties affected” by this Project as planned, **Appendix D**.

### **3.3.8 Affected Political Jurisdiction**

The Blair Airport Authority has agreed to adopt zoning laws and restrict the use of land to activities and purposes compatible with normal airport operations. A letter stating these commitments can be found in **Appendix G**.

### **3.3.9 Demographic Information**

Environmental Justice means ensuring that the environment and human health are protected fairly for all people regardless of race, color, national origin, or income. In generating results from the EJScreen tool the city of Blair was used to portray information at the city level, although Blair Executive Airport lies six miles south of Blair city limits. Table 3-1 below, examines the demographic characteristics of the nearby City of Blair and Washington County overall, in comparison to Nebraska and United States average values.

**Table 3-1. Demographic Information for US Census Tract around BTA, Blair, Washington County, Nebraska, and the U.S.**

Data	U.S. Census Tract #: 31177050201 <sup>1</sup>	City of Blair	Washington County	Nebraska	U.S.
<b>Race and Hispanic Origin<sup>1</sup></b>	%	%	%	%	%
White alone	99.0	97.0	94.2	90.1	75.8
Black/African American alone	0.0	1.1	0.5	2.9	12.6
American Indian/Alaska Native	0.0	0.0	0.0	0.4	0.9
Asian alone	0.0	0.1	0.3	1.7	4.8
Native Hawaiian/Other Pacific Islander	0.0	0.4	0.2	0.1	0.2
Hispanic/Latino (of any race)	0.0	2.0	2.9	4.6	16.3
<b>Persons 65 years and over<sup>1</sup></b>	19.5	17.5	18.5	17.7	16.8
<b>Income and Poverty<sup>2</sup></b>					
Percent individuals below poverty level	5.2	13.6	5.3	28	30
Median household Income	\$59,116	\$90,350	\$85,028	\$61,836	\$64,994

<sup>1</sup> Data from the 2020 Census

<sup>2</sup> Data from the 2016-2020 American Community Survey 5-Year Estimates

### **3.3.10 Past, Present, and Reasonably Foreseeable Future Actions**

In 1996, the city of Blair purchased an existing airfield that now serves as BTA. The airport was previously known as Eagle Field and was opened to the public in 1962. In 2005, Runway 13/31 was constructed and since then, numerous hangars and other improvements have been made. The airport now offers amenities such as a 24-hour self-service 100 low-lead and Jet-A fuel, full service quick turn Jet-A fueling, aircraft hangars and tiedown parking and a pilot's lounge.

In the future, the Blair Airport Authority plans to update on-site facilities, which will likely include the addition of new hangar spaces and storage, an aircraft wash facility, and an on-site restaurant/terminal, along with accompanying sewer/water system improvements to new buildings.

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## **4. Environmental Consequences and Mitigation**

### **4.1 Introduction**

This section is organized by resource topics, with the impacts of all alternatives combined under resource headings. It provides concise analysis, environmental impacts, and conceptual measures needed to mitigate those impacts only for resources affected by at least one of the alternatives. All information presented in this section complies with FAA Order 1050.1F. A summary of this section is included in Table 4-3 on Page 40.

### **4.2 Environmental Impact Categories Not Affected**

The no action alternative (Alternative 1) and the Proposed Action (Alternative 6) would not affect the following resources listed below:

#### **4.2.1 Air Quality**

Blair Executive Airport is in Washington County, Nebraska which is in attainment for all federal criteria pollutants. Thus, general conformity review per the Clean Air Act would not be required. Planned projects at the airport could result in temporary impacts to air quality. Temporary impacts would result during the construction of improvements, such as the runway extension, building and structure removal, and road construction. This includes exhaust emissions from the operation of construction vehicles and fugitive dust from earthmoving and pavement removal.

#### **4.2.2 Climate**

The project is located in southeast Washington County, where local climate typically is humid with hot summers and cold winters marked by variable weather patterns and large seasonal temperature differences. Precipitation is generally seasonal, and the area receives an average of 30 inches of rainfall per year.

The proposed project would not result in significant increases of aircraft operations, and therefore would have no impacts to climate. No further analysis is required.

#### **4.2.3 Coastal Resources**

The proposed project does not occur in a coastal area; thus, no further analysis of coastal resources is required.

#### **4.2.4 Department of Transportation Act of 1966, Section 4(f)**

All potential 4(f) properties are located at least 2.5 miles away from BTA and none of the properties would be directly impacted by the Proposed Action. The Proposed Action would not create visual impacts to Section 4(f) properties due to the distance, the topography of the landscape, and the nature of the Proposed Action. No permanent change to the landscape visible from any of the 4(f) properties. Additionally, the Proposed Action would not permanently incorporate any Section 4(f) properties, would not include a temporary occupancy of the Section 4(f) properties, would not be a constructive use of the Section 4(f) properties (a proximity effect that would substantially impair the

protected features of the property). Thus, the alternatives carried forward for review would not impact Section 4(f) resources. See Section 4.4 for additional discussion regarding historic properties.

#### **4.2.4.2 Section 6(f) of the Land and Waters Conservation Fund**

Section 6(f) resources were eliminated from further study because no properties which could or have receive 6(f) funding are present in the general vicinity of BTA.

#### **4.2.5 Noise and Noise Compatible Land Use**

The noise increase for the Proposed Action is 1.4 percent for the initial runway extension and 1.5 percent increase after the 5-year period. The FAA threshold for additional screening and noise level contour analysis is a 17 percent increase. The Proposed Action falls below the threshold of a 17 percent increase; however, the contours were provided to validate the findings of the noise study. The 65 DNL noise exposure contour remains on airport property under the 2031 Proposed Action and would not cause significant impacts to potential noise sensitive land uses surrounding the airport. The Aviation Environmental Design Tool (AEDT) noise contours and Noise Study completed by Coffman can be found **Appendix H**.

### **4.3 Environmental Impact Categories with Potential Affects**

This section describes impact categories with a potential to be affected by the Proposed Action (Alternative 6), in addition to resulting impacts from the No Action Alternative. Where applicable impacts to a resource category could be considered either identical or similar for the No Action Alternative (Alternative 1) or the Proposed Action (Alternative 6), discussion of potential resulting impacts were paired together.

#### **4.3.1 Biological Resources (including fish, wildlife, and plants)**

A significant impact to federally-listed Threatened and Endangered Species (TES) would occur when the USFWS determines that the Proposed Action would likely jeopardize the continued existence of the species in question or would result in the destruction or adverse modification of Federally-Designated critical habitat in the affected area.

##### **4.3.1.1 No Action Alternative**

The No Action Alternative would not result in ground disturbing activities. Thus, no impacts to federal and state-listed TES, critical habitat or biologically unique resources are anticipated.

##### **4.3.1.2 Proposed Action (Alternative 6)**

As described in Section 3.3.5, the project may have appropriate habitat for the federal and state-listed northern long-eared bat (*Myotis septentrionalis*). Additionally, woody areas provide potentially suitable habitat for migratory birds, and potential bald eagle habitat is present approximately two miles northeast of the project site.

The NGPC was contacted for their review of the proposed project on January 9, 2023. NGPC indicated that the project is located within the range of the northern long-eared bat (*Myotis septentrionalis*): however, the project area has been previously disturbed and highly

fragmented, thus it is unlikely to provide suitable habitat for the species. NGPC indicated there were no project-specific concerns as dated January 17, 2023. Correspondence with NGPC is included in **Appendix D**.

The USFWS was contacted for their review of the proposed project on February 4, 2023. The USFWS stated that based on the information provided, this project is in compliance with the Endangered Species Act of 1973 and amended. Correspondence with USFWS is included in **Appendix D**.

Tree removal may impact migratory birds if trees are removed during the nesting season (feinted as April 1 to September 15). Tree removal during the nesting season would require pre-construction surveys for active migratory bird nests. Standard seasonal tree clearing restrictions would be applied (avoid construction activities where active nests are present between the dates April 1 and September 15), and nesting surveys would be conducted as needed to avoid potential migratory bird impacts. Additionally, no removal of trees or removal of roosting structures would occur between June 1 and July 31 to avoid any potential impacts to the northern long-eared bat unless agency approved clearance surveys are completed.

With implementation of NGPC and USFWS tree clearing restrictions and nesting surveys, significant impacts to biological resources are not anticipated as a result of the project. No special concern, threatened, or endangered species were observed during the November 2022 site visit.

## **4.4 Historical, Architectural, Archeological, and Cultural Resources**

The FAA has not established a significance threshold for historical, architectural, archeological, and cultural resources; however, the Section 106 determination should be considered.

The Cultural Resources report and Phase I archeology survey did not identify any NRHP listed resources during a November 1 and 2, 2022 investigation. No new properties or sites are recommended NRHP eligible as part of this survey effort.

### **4.4.1 No Action Alternative**

The No Action Alternative would not result in construction or ground disturbing activities. Thus, no impacts to historical, architectural archeological, and cultural resources would be anticipated.

### **4.4.2 Proposed Action (Alternative 6)**

The project Area of Potential Effect (APE), due to the runway extension, consists of approximately 173.67 acres along a ridge above Long Creek in southeastern Washington County. A Phase II intensive cultural resources investigation was completed, which identified two modern structures (both are single-story ranch-style houses) located within the APE. Structure 1 was built in 1975 and Structure 2 was built in 1976. Neither meet the current minimum 50 years of age requirement for eligibility for nomination to the NRHP. No new properties are recommended NRHP eligible as part of this survey effort.

One prior archaeological site (Site 25WN40) is located within the APE; however, NeSHPO determined the site to not be eligible for NRHP on October 1, 1992. No archaeological sites were recommended for inclusion on the NRHP.

The project would have no impact to historical, architectural, archeological, and cultural resources. In an email dated February 22, 2023, the Nebraska State Historic Preservation Office concurred with the determination of “no historic properties affected” to Section 106 resources. Correspondence is included in **Appendix D**.

## 4.5 Farmlands

Important farmlands include pastureland, cropland, and forest considered to be prime, unique, or statewide or locally important land. An impact to farmlands would occur if an action would have the potential to convert important farmland to non-agricultural uses. A significant impact to farmlands would occur if the total combined score on US Department of Agriculture (USDA) AD-1006, Farmland Conversion Impact Rating, ranges between 200 and 260 points.

### 4.5.1 No Action Alternative

The No Action Alternative would not result in ground disturbing activities. Thus, no impacts to prime farmlands are anticipated.

### 4.5.3 Proposed Action (Alternative 6)

Construction activities under the Proposed Action would convert approximately 14 acres of farmland directly and 160 acres indirectly for a total of 174 acres. An AD-1006 Farmland Conversion Impact Rating Form was completed by the USDA Natural Resources Conservation Services (NRCS). The NRCS provided the rating on January 4, 2023 and determined that the total site assessment scored 145. The FPPA law states that sites with a rating less than 160 will need no further consideration and no additional evaluation is necessary. The complete for Correspondence with NRCS, including the AD-1006 Farmland Conversion Impact Rating Form is included in **Appendix D**.

## 4.6 Hazardous Materials, Solid Waste, and Pollution Prevention

The FAA has not established a significance threshold for Hazardous Materials, Solid Waste, and Pollution Prevention. However, several factors should be considered if the action would have the potential to involve a contaminated site, produce an appreciably different quantity or type of hazardous or solid waste, use a different method of collection or disposal and/or would exceed local capacity, or adversely affect human health and the environment.

An Environmental Records Review (ERR [**Appendix I**]) of the Proposed Project including the anticipated limits of construction was completed in December 2022. Available environmental databases were searched to identify facilities listed on state and federal environmental programs. The ERR identified one site which involved the release of petroleum products and underground storage tanks don BTA property. Based on review of the NDEE records, the release has a low potential to impact the Project because April 1991 groundwater sampling and laboratory analysis found no contamination, and the site was recommended for closure with no further remedial action required.

#### **4.6.1. No Action Alternative**

The No Action Alternative would not result in ground disturbing activities. Thus, no impacts to hazardous materials are anticipated. Solid waste would likely increase proportionate to airport activities anticipated to occur at the site because of increased operations at BTA.

#### **4.6.2 Proposed Action (Alternative 6)**

Construction of the project would not increase solid waste, pollution, or production of hazardous waste. Short term, temporary increases in solid waste production associated with construction activities would likely occur. Long term, solid waste would likely increase proportionate to airport activities anticipated to occur at the site because of increased operations. However, construction of the Proposed Action would not generate an appreciable amount of solid waste and disposal would not exceed local landfill capacity. Long term operation of the Proposed Action would be similar to the existing airport and would not generate an appreciably different quantity or type of solid waste and collection and disposal would not exceed local landfill capacity.

Based on the ERR, the Proposed Action would not create short term hazardous materials impacts or result in long term or permanent hazardous materials impacts.

For pollution prevention, best management practices (BMPs) would be employed during construction to limit runoff and erosion to ensure there would be no direct significant impacts due to the Proposed Action. Additional impervious surface may result from the Proposed Action. However, the Proposed Action would incorporate storm water management into the design and storm water would be discharged in compliance with applicable regulatory requirements and in accordance with the National Pollutant Discharge Elimination System (NPDES) permit, including the development of a Stormwater Pollution Prevention Plan (SWPPP) or modification of an existing SWPPP to account for the Proposed Action. Therefore, significant impacts associated with pollution prevention are not anticipated.

## **4.7 Land Use**

The FAA has not established a significance threshold for Land Use and there are no specific independent factors to consider. The determination that significant impacts exist is normally dependent on the significance of other impacts. The City's Land Use Assurance Letter is included in **Appendix G**.

The predominant land uses surrounding BTA are agriculture and sparse residential development. Farmsteads, private homes, and associated outbuildings are located adjacent to the project boundary. The Church Life LLC is located approximately 2 miles west of BTA.

#### **4.7.1 No Action Alternative**

The No Action Alternative would not result in ground disturbing or construction activities. Thus, no impacts to land use are anticipated.

#### **4.7.2 Proposed Action (Alternative 6)**

Access to The Church Life LLC may temporarily be impeded when County Road 35 is rerouted;

however, The Church Life LLC can be accessed from the north via Road 31 while the two county roads are under construction. Once rerouted, access to The Church Life LLC via County Road 38 can resume. The nearest school and hospital are greater than four and eight miles from the project boundary, respectively and are not anticipated to be impacted from the Proposed Action.

## **4.8 Natural Resources and Energy Supply**

Natural resources may be impacted by a construction project and may require soil, rock, or gravel that could diminish or deplete a supply of those and other natural resources. In addition, the operation of an airport requires energy supplies in the form of electricity, natural gas, aviation fuel, diesel fuel, and gasoline. The FAA has not established a significance threshold for natural resources and energy supply; however, the analysis should consider situations in which the Proposed Action or alternative(s) would have the potential to cause demand to exceed available or future supplies of these resources.

### **4.8.1 No Action Alternative**

No significant impacts to natural resources and energy supply are anticipated with the No Action Alternative as the amount of aircraft traffic would continue at its current slow rate of growth. In addition, light emissions and energy usage would likely remain the same.

### **4.8.2 Proposed Action (Alternative 6)**

Use of aircraft fuel would likely increase proportionate to the increase in forecasted aircraft operations. The Proposed Action would not consume a notable quantity of natural resources, nor would it exceed local supplies for fuel and energy. The Proposed Action would be constructed with a base of fill materials such as soil, crushed aggregate, concrete, and steel for the runway, taxiways, apron, and buildings. All of these materials are currently readily available. Therefore, significant impacts to natural resources or the local energy supply would not occur as a result of the Proposed Action.

## **4.9 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks**

The FAA has not established a significance threshold for this impact category. However, impacts should be evaluated if the Proposed Action would have the potential to:

### **Socioeconomic**

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

**Environmental Justice**

- Lead to a disproportionately high and adverse impact to an environmental justice population, i.e., low-income or minority population due to significant impacts in other environmental impacts categories; or
- The FAA determines that environmental impacts are unique to the environmental justice population and significant to that population.

**Children’s Environmental Health and Safety Risks**

- The Proposed Action would have the potential to lead to a disproportionate health or safety risk to children.

The BTA is located south of the city of Blair within United States Census Tract 31177050201. Farmsteads including private homes and outbuildings are located on adjacent properties and residential areas are located along the northeast side of Highway 133, approximately 0.1 mile from the north project boundary. The nearest hospital is approximately eight miles from the project boundary. The nearest church is The Church Life, LLC, located more than two miles to the west of the project boundary. The nearest school is more than four miles from the project boundary. Table 4-1, below, presents information related to limited English proficiency, race, and poverty demographics.

**Table 4-1. EJ Screen Results for the City of Blair, Washington County, and the State of Nebraska**

Characteristic	Census Tract #: 31177050201 <sup>1</sup>	Blair Area Value <sup>1</sup>	Washington County Area Value <sup>1</sup>	State of Nebraska Value <sup>1</sup>	United States Value <sup>1</sup>
Approximate Population	4,087	7,992	20,546	1,967,923 <sup>2</sup>	331,287,557 <sup>2</sup>
Demographic Index	5%	14%	12%	25%	35%
People of Color Population	2%	31%	6%	21%	40%
Low Income Population	7%	29%	18%	29%	30%
Linguistically Isolated Population	0%	0.1%	0.1%	3%	5%

<sup>1</sup> Data from the 2016-2020 American Community Survey 5-Year Estimates

<sup>2</sup> Data from July 1, 2022, U.S. Census Bureau

Based on the 2016-2020 American Community Survey, within the U.S. Census tract that includes the Project area, approximately two percent of the population consists of minorities, seven percent of the population is considered low income, and zero percent is considered linguistically isolated (limited English speaking). In reviewing these environmental justice categories, the BTA falls under a U.S. census tract which has substantially lower population percentages of socially and economically at-risk communities.

**4.9.1 No Action Alternative**

The No Action Alternative would not result in a change from the existing conditions. Thus, no impacts to socioeconomics, environmental justice, and children’s environmental health and safety are anticipated.

**4.9.2 Proposed Action (Alternative 6)**

The Proposed Action would remove County Road 35 and County Road 38 due to the proposed runway and accompanying RPZ extending across the existing roadways. As part of the Proposed Action, County Roads 35 and 38 would be rerouted to accommodate traffic traveling to State Highway 133. A traffic evaluation, **Appendix J**, was conducted to calculate travel times and travel time costs due to the realignment of County Road 35 and County Road 38. The technical evaluation estimates the anticipated increase in travel time and user cost associated with a modified transportation network. The current and new travel times are shown in Table 4-2.

**Table 4-2. Existing and New Travel times for County Road 35 and County Road 38 Relocation**

Path		Existing Travel Time (min.)	New Travel Time (min.)	Increase in Travel Time (min.)
From	To			
North N-133	West CR 38	0.86	0.59	-0.27
North N-133	South CR 35	0.68	1.18	+0.50
South N-133	West CR 38	0.64	0.81	+0.17

With the new roadway configuration, there is anticipated to be an increase of no more than 30 seconds for any new route, and one new route is anticipated to decrease travel time by approximately 15 seconds. Ultimately, the change in travel time between existing and new routes is expected to be marginal with the proposed roadway configuration.

Based off the traffic evaluation and the rerouting of County Road 35 and County Road 38, no substantial adverse effects to local traffic patterns are anticipated. Furthermore, access to The Church Life LLC would not be impeded. Based on the EJ Screen, the minority, low-income, and Limited English Proficiency populations are lower than those located within the city of Blair. Thus, no impacts to socioeconomics environmental justice, or children’s environmental health and safety are anticipated.

**4.10 Visual Effects (including light emissions)**

The FAA has not established a significance threshold for this environmental impact category. However, FAA’s Order 1050.1F states that the visual effects deal with the extent to which the Proposed Action would have the potential to: 1) produce light emissions that create annoyance or interfere with normal activities; 2) affect the visual character of the area due to light emissions, including the importance, uniqueness and aesthetic value of the affected visual resources; 3) affect the nature of the visual resources or visual character of the area, including the importance, uniqueness and aesthetic value of the affected visual resources; 4) contrast with the visual resources and/or the visual character of the existing environment; or 5) block or obstruct the views of visual resources, including whether those resources would still be viewable from other locations.

#### **4.10.1 No Action Alternative**

The No Action Alternative would not result in a change from the existing conditions. Thus, no impacts to visual effects are anticipated.

#### **4.10.2 Proposed Action (Alternative 6)**

Consideration was given to impacts on people and properties due to light emissions or visual impacts. The proposed project includes lighting along the new runway and taxiway extensions. The project would be located adjacent to farmland in a sparsely populated area. The lights would not create an annoyance or interfere with normal activities. In addition, the lights would not affect the visual character of the area or significantly increase light emissions from present conditions.

### **4.11 Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)**

A significant impact occurs if the Proposed Action would:

#### **Wetlands**

- Adversely affect the function of a wetland's function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other potable water aquifers;
- Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected;
- Substantially reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety, or welfare (this includes cultural, recreational, and scientific resources or property important to the public);
- Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands;
- Promote development of secondary activities or services that would cause the circumstances listed above to recur; or
- Be inconsistent with applicable state wetland strategies.

#### **Floodplains**

- The action would cause notable adverse impacts on natural and beneficial floodplain values.

#### **Surface Water and Groundwater**

The action would:

- Exceed water quality standards established by Federal, state, local, and tribal regulatory agencies;
- Or contaminate public drinking water supply such that public health may be adversely affected.

### **Wild and Scenic Rivers**

- The FAA has not established a significance threshold. However, factors to consider are if the action would have an adverse impact on the values for which a river was designated.

The wetland delineation identified one Palustrine Forested Temporarily Flooded (PFOA) wetland totaling 0.79 acres located southwest of the existing BTA runway (See Figure 11).

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the majority of BTA is located within Flood Zone X, Area of Minimal Flood Hazard, with Flood Zone A, areas with 1 percent annual chance of flooding (100-year) located south and southwest of BTA (See Figure 12).

There are no Wild and Scenic Rivers located within the project area.

#### **4.11.1 No Action Alternative**

The No Action Alternative would not result in a change from the existing conditions. Thus, no impacts to water resources are anticipated.

#### **4.11.2 Proposed Action (Alternative 6)**

Construction of the Runway 13 extension and associated RPZ clearing, as well as road removal and relocation would not result in a change from existing conditions regarding wetlands and/or Waters of the U.S. No impacts to the PFOA wetland due to runway extension, vegetation clearing, or relocation of roads are anticipated. In addition, the lights would not affect the visual character of the area or significantly increase light emissions from present conditions.

If impacts to Waters of the U.S. become likely, a Clean Water Act (CWA) Section 404 permit from the United States Army Corps of Engineers (USACE) would be obtained and if necessary, wetlands would be mitigated through the purchase of credits from an approved wetland bank.

The Proposed Action is located only within the Flood Zone X, which is an area of minimal flood hazard. Proposed grading would only occur north of all Flood Zone A areas located south of the airport and not occur in any non-Flood Zone X areas; therefore, no impacts to water resources are anticipated. As documented in the floodplain memo included as **Appendix F**, the Proposed Action would not encroach on any FEMA floodplains and is not subject to the flood damage prevention ordinance for Washington County and does not require a floodplain development permit.



Figure 11 – Wetland Delineation Map

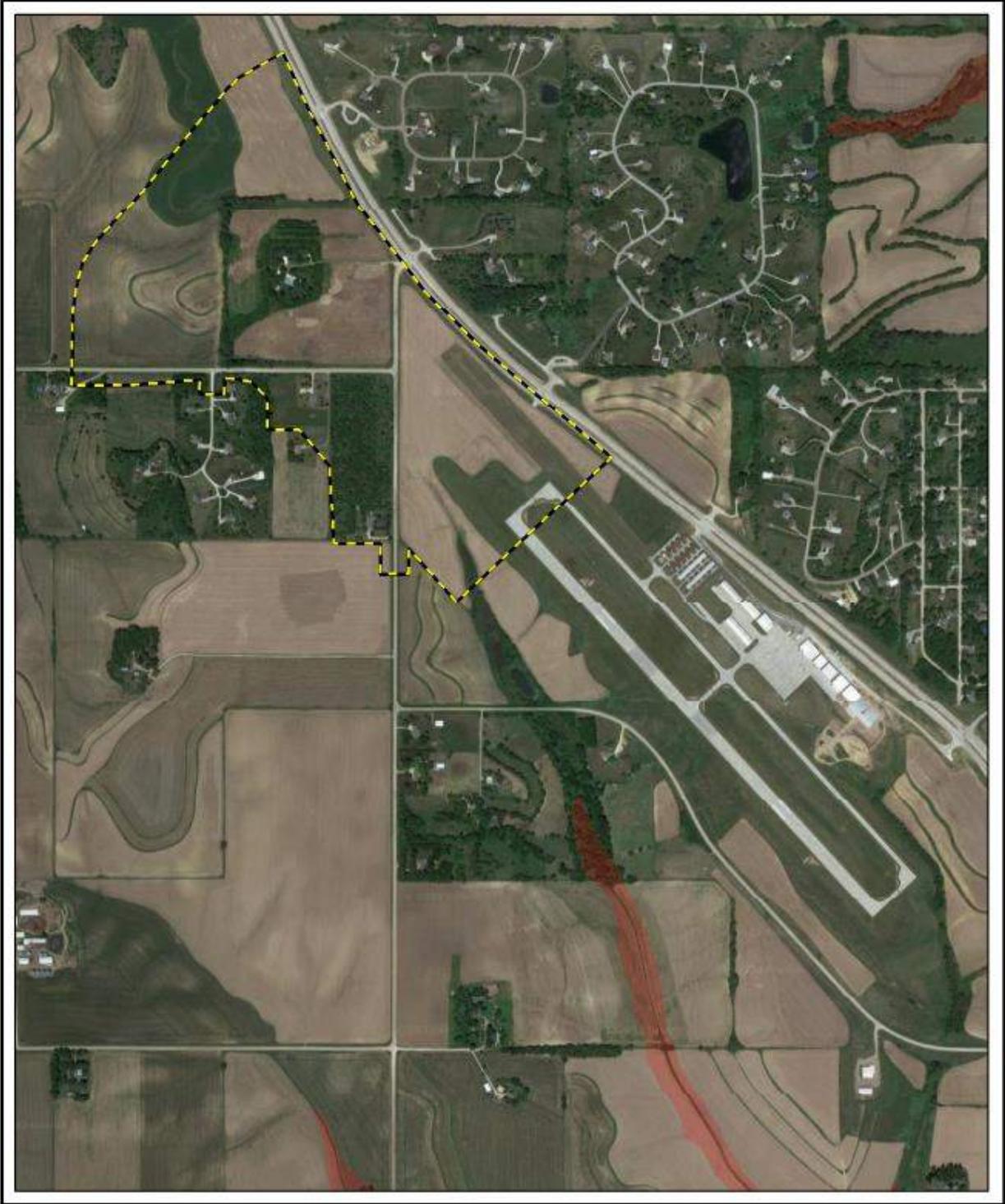


Figure 12 – FEMA Floodzone Map

**Table 4-3. Summary of Impact Category Determinations and Mitigation**

Environmental Consequences	Proposed Action Alternative		No Action Alternative	
	Impacts	Mitigation	Impacts	Mitigation
Air Quality	None	None required	None	None
Biological Resources	Not Significant	Compliance with the Migratory Bird Treaty Act and with USFWS/NGPC Indiana bat and northern long-eared bat guidelines is required for tree removal, clearing, and grubbing.	None	None
Climate	None	None required	None	None
Coastal Resources	None	None required	None	None
Section 4(f)	None	None required	None	None
Farmlands	Not Significant	BMPs will be used to minimize impact on farmland to the maximum extent possible – available land may be leased for agricultural use	None	None
Hazardous Materials, Solid Waste, & Pollution Prevention	Not Significant	None required	None	None
Historical, Architectural, Archeological, and Cultural Resources	None	None required	None	None
Land Use	None	None required	None	None
Natural Resources and Energy Supply	Not Significant	None required	None	None
Noise and Noise Compatible Land Use	None	None required	None	None
Socioeconomic, Environmental Justice, & Children's Health	Not significant	None required	None	None
Visual Effects	None	None required	None	None
<b>Water Resources</b>				
Wetlands	None	None	None	None
Floodplains	None	None	None	None
Surface Water	Not significant	NPDES, SPCC	None	None
Ground Water	None	None required	None	None
Wild and Scenic Rivers	None	None required	None	None
Cumulative Impacts	None	None required	None	None

## **5. Cumulative Impact Analysis**

A review of the Proposed Action's effects on resources when combined with other past, present, and reasonably foreseeable actions has determined that there are no significant cumulative impacts.

## **6. Public Involvement**

Appendix K will be included in the final report.

## **7. Conclusion**

This EA has been developed consistent with the existing national environmental policies and objectives of Section 101(a) of NEPA and meets the CEQ requirements. The Proposed Action meets the purpose and need as described in Section 1 and would address existing operational deficiencies at the airport. After careful review, it has been determined that the Proposed Action would not yield any significant impacts to either the natural or human environment. Mitigation measures have been outlined as environmental commitments to offset the project related impacts described herein.

## **APPENDIX A Preparers & Qualifications**

Diane Hofer – Ms. Hofer is a professional engineer with over 35 years of experience in airport planning, design, and construction. She has a bachelor's degree in civil engineering from the University of Nebraska.

Caleb Pharris – Mr. Pharris is a natural resources technical leader with over eleven years of experience completing natural resources documentation including wetland delineations, threatened and endangered species reviews and environmental consulting. Mr. Pharris has extensive experience in NEPA document preparation for various agencies and an in-depth background in Section 404 permitting and wetland and stream mitigation. He has a bachelor's degree in Environmental Studies from the University of Nebraska.

Chase Jelden – Mr. Jelden has over six years of experience in natural resources consultation and has completed NEPA documentation for multiple federal agencies over the course of his career. Additionally, Mr. Jelden has a comprehensive skill set which includes wetland delineations, Section 404 permitting, and noise analysis. He has a bachelor's degree in Environmental Studies from the University of Nebraska

Heather Olson – Ms. Olson is a professional engineer with over 27 years of experience in engineering of which over 20 years are in airport planning, design, and construction. She has a bachelor's degree in civil engineering from the North Dakota State University.

Jake Vencil – Mr. Vencil is an environmental scientist with three years of experience in wetland delineations, NEPA, threatened and endangered species, and Section 404 permitting. He has a bachelor's degree in Fisheries and Wildlife from the University of Nebraska.

Kris Davenport – Ms. Davenport is an environmental scientist with five years of experience in wetland delineations, Section 404 permitting, threatened and endangered species, Phase I and II ESAs, and NEPA. She has a bachelor's degree in environmental studies and life science from the University of Nebraska.

**APPENDIX B**  
**Runway Extension Justification**  
**Analysis with Updated Forecasts**

**FINAL**  
**Runway Extension Justification Analysis with**  
**Updated Demand Forecasts**

**For**  
**Blair Municipal Airport (BTA)**  
**Blair, NE**

Prepared by



**December 2021**

In March 2019, the Blair Municipal Airport (BTA) updated their Airport Layout Plan (ALP), documenting the development direction and facility changes that had taken place since the previously approved ALP in 1999. Part of this process included a summary of historical airport activity and a forecast of future aviation demand. The forecasts in that report began in, and used, 2015 as a base year for its predictions. This analysis is being undertaken to determine if sufficient demand increases support the runway extension plan. As such, this report provides updated aviation demand data with a new base year of 2021 and a revised forecast. Documentation from aircraft owners and operators, including letters of support for the extension of the existing runway, is also included.

### ***AIRPORT SERVICE AREA***

The initial step in determining any general aviation (GA) demand for an airport is to define its service area. The airport service area is a generalized geographical area where there is a potential market for airport services, particularly based aircraft. Access to GA airports and transportation networks enter the equation to determine the size of a service area, as well as the quality of aviation facilities, distance, and other subjective criteria. With several competing GA airports in the region, BTA's primary service area is defined by its convenience to its users. Millard Airport is better positioned to serve southern Douglas County, and Council Bluffs Municipal Airport and Eppley Airfield are better positioned to serve eastern Douglas County. However, the availability of affordable hangars and other services are also considered by aircraft owners when deciding where to base their aircraft. Typically, the service area for a rural Regional GA airport can extend up to and beyond 30 miles. Therefore, the service area for BTA encompasses the greater Omaha region, including the counties of Washington, Douglas, and Sarpy.

### ***BASED AIRCRAFT FORECAST***

An inventory of based aircraft was conducted in June 2021 with a verified total number of aircraft of 64. Market share analysis and trendline projection forecasting approaches were used to generate forecasts for the future based aircraft totals at BTA. **Table A** shows that, from 2011 to 2021, BTA has experienced an increase in the market share of registered aircraft within the tri-county area, growing from 5.7 percent to 12.83 percent. Holding the current market share constant at 12.83 percent, future based aircraft projections were calculated by applying the tri-county registered aircraft projection to the market share of registered aircraft. This approach results in a projection of 70 based aircraft by 2031. Based on the historic trend, an increasing market share projection was also applied, resulting in 78 based aircraft by 2031 and a CAGR of 2.0 percent. The 10-year annual growth rate of 6.53 percent was also used to project based aircraft at BTA, resulting in 120 aircraft by 2031 (6.49% CAGR).

The FAA's TAF for BTA was also considered. The TAF reflects a current based aircraft level of 60, four less than what is currently reported by airport records. The TAF reflects a zero-growth projection, keeping the based aircraft forecast at 60 through 2031. It is common for the FAA TAF to reflect no growth for non-towered airports. Since the TAF does not reflect current conditions or consider the potential for future growth, it is used for comparison purposes only and is not considered a reliable forecast.

The TAF for the State of Nebraska does show an increase in total based aircraft (0.51% CAGR) through the planning period. This growth forecast was used to project based aircraft at BTA, resulting in a total aircraft count of 67 by 2031, a CAGR of 0.46 percent.

A 10-year linear regression analysis was also completed for the based aircraft at BTA for 2011 to 2021. Regression analysis measures statistical relationships between dependent and independent variables, yielding a “correlation coefficient.” The correlation coefficient (Pearson’s “r”) measures association between the changes in the dependent variable and the independent variable(s), in this case, year versus based aircraft count. If the “r<sup>2</sup>” value (coefficient determination) is greater than 0.95, it indicates good predictive reliability. A value of less than 0.95 may be used, but with the understanding that the predictive reliability is lower. For the 10-year regression analysis for BTA, a coefficient determination (r<sup>2</sup>) of 0.889 was produced, indicating a strong trend. Carrying the trendline forward through 2031 produces a forecast of 103 based aircraft at BTA (4.88% CAGR).

**TABLE A | Based Aircraft Forecast – Blair Municipal Airport**

Year	BTA Based Aircraft	Tri-County Registrations	BTA Market Share
2011	34	596	5.70%
2012	40	563	7.10%
2013	52	535	9.72%
2014	49	521	9.40%
2015	60	523	11.47%
2016	56	525	10.67%
2017	59	519	11.37%
2018	64	497	12.88%
2019	60	495	12.12%
2020	60	499	12.02%
2021	64	499	12.83%
<b>Constant Market Share Projection (0.90% CAGR)</b>			
2026	67	519	12.83%
2031	70	547	12.83%
<b>Increasing Market Share Projection (2.00% CAGR) – Selected Forecast</b>			
2026	69	519	13.28%
2031	78	547	14.20%
<b>10-Year Growth Rate Forecast (6.49% CAGR)</b>			
2026	88	519	16.96%
2031	120	547	21.94%
<b>Nebraska FAA TAF Growth Rate (0.46%)</b>			
2026	66	519	12.72%
2031	67	547	12.25%
<b>10-Year Trendline Forecast (4.88% CAGR)</b>			
2026	86	519	16.65%
2031	103	547	18.85%

*Sources: Airport based aircraft information; FAA NE TAF; Woods and Poole; Coffman Associates analysis*

The increasing market share forecast has been selected as the preferred planning forecast. This projection has been selected based upon historic based aircraft trends and the growth of hangar facilities at the airport, as well as the potential for future hangar growth that could support increased based aircraft demand. The selected forecast is based upon an unconstrained growth model, however, and will be determined by the airport’s ability to generate funding for aircraft hangar and capital improvement projects.

**GENERAL AVIATION OPERATIONS FORECAST**

General aviation operations are classified as either local or itinerant. A local operation is a take-off or landing performed by an aircraft that operates within the immediate airspace of the airport, or which executes simulated approaches or touch-and-go operations at the airport. Generally, local operations are characterized by training operations. Itinerant operations are those performed by aircraft with a specific origin or destination away from the airport. Typically, itinerant operations increase with business and commercial use, since business aircraft are not typically used for large scale training activities.

Although the FAA TAF estimates operational levels for BTA, the current TAF, which presents a flat line forecast of 15,500 total annual operations through 2031, does not represent the current operational level occurring at the airport. As such, the FAA recommends applying an approved forecast model specifically developed for small non-towered GA airports. The report, entitled *Model for Estimating General Aviation Operations at Non-Towered Airports Using Towered and Non-Towered Airport Data* (GRA, Inc., 2001), presents the methodology and formula for the model. Independent variables used in the model include airport characteristics, demographics, and geographic features. The model was derived using a combined data set for small towered and non-towered GA airports and incorporates a dummy variable to distinguish the two airport types. Specifically, the model uses the following variables:

- Based aircraft
- Percent of aircraft based at the airport among GA airports within 100 miles
- Number of FAR Part 141 flight training schools at the airport
- Population within 100 miles
- Ratio of population within 25 and 100 miles

The model factors each of these variables so that both local and national factors are considered when estimating operations. The model forecasts an estimate of **24,236** total annual GA operations. **Table B** presents the calculations of operations for the airport.

**TABLE B | Model for Estimating Operations at Non-Towered Airports – Blair Municipal Airport**

Function	Category	2021
	775	775
+	241 (BA)	15,424
-	0.14 (BA <sup>2</sup> )	573
+	31,478 (%100mi)	1,379
+	5,577 (VITFSnum)	0
+	.001 (Pop100)	1,845
-	3,736 (WACAORAK)	0
+	12,121 (Pop25/100)	5,386
=	<b>Total</b>	<b>24,236</b>

**Category Definitions**

BA – Based aircraft: 64  
 BA2 – Based aircraft squared: 4,096  
 %100mi – % based aircraft among based GA aircraft within 100 miles: 4.38%  
 VITFSnum – # of FAR Part 141 flight schools on-airport: 0  
 Pop100 – Population within 100 miles: 1,845,028  
 WACAORAK – 1 if WA, CA, OR, or AK; 0 if otherwise: 0  
 Pop25/100 – Ratio of population with 25 miles to Pop100: 0.444394

*Source: Model for Estimating General Aviation Operations at Non-Towered Airports, Equation #15, FAA (2001)*

**ITINERANT GENERAL AVIATION OPERATIONS FORECAST**

Utilizing the operations estimate derived from the model above, four forecasts of itinerant general aviation operations have been developed and are presented in **Table C**. The forecasts presented examine and/or manipulate variables, such as BTA’s market share of itinerant operations, forecast growth rates in the FAA’s *Aerospace Forecast 2021-2041*, and operations per based aircraft. The first projection considers the airport maintaining its market share of total U.S. itinerant GA operations at a constant level. In 2021, BTA is forecast to account for 0.019 percent of U.S. itinerant operations. By carrying this percentage forward through the planned years of this report, a forecast emerges generating a CAGR of 1.51 percent and 2,900 itinerant GA operations by 2031. The second forecast considers an increasing BTA market share of national GA itinerant operations and produces a CAGR of 3.29 percent and 3,450 itinerant operations by 2031.

The national itinerant GA operations forecast presented in the FAA’s *Aerospace Forecast* was also examined. The forecasted growth rate from the *Aerospace Forecast* for 2021-2031 of 1.5 percent was used to forecast itinerant operations. This method forecasts 2,897 annual GA itinerant operations by 2031. An additional forecast was prepared by examining the airport’s operations per based aircraft. By maintaining a constant ratio of operations per each of the 64 based aircraft, a forecast of 3,042 itinerant GA operations by 2031 (2.0% CAGR) results through the planning period.

**TABLE C | Itinerant GA Operations Forecast – Blair Municipal Airport**

Year	BTA Itinerant GA Operations	US ATCT Itinerant Operations	Market Share of Itinerant Operations	BTA Based Aircraft	Itinerant Operations per Based Aircraft
2021	2,496	13,199,000	0.019%	64	39
<b>Constant Market Share Projection (CAGR 1.51%)</b>					
2026	2,863	15,139,000	0.019%	69	41
2031	2,900	15,333,000	0.019%	78	37
<b>Increasing Market Share Projection (CAGR 3.29%)</b>					
2026	3,044	15,139,000	0.020%	69	44
2031	3,450	15,333,000	0.023%	78	44
<b>FAA Aerospace Forecast (CAGR 1.5%)</b>					
2026	2,689	15,139,000	0.018%	69	39
2031	2,897	15,333,000	0.019%	78	37
<b>Constant Operations per Based Aircraft (CAGR 2.0%) – Selected Forecast</b>					
2026	2,691	15,139,000	0.018%	69	39
2031	3,042	15,333,000	0.020%	78	39

*Sources: Airport based aircraft information; FAA Aerospace Forecast 2021-2041; Model for Estimating General Aviation Operations at Non-Towered Airports, Equation #15, FAA (2001); Coffman Associates analysis*

The constant operations per based aircraft projection has been retained as the selected forecast. The potential for facility upgrades can support BTA market share growth. The potential for new facilities catering to itinerant traffic may draw both an increase in transient traffic as well as local operations and based aircraft. The selected forecast maintains a reasonable level of operations per based aircraft, while modestly increasing the airport’s market share.

**LOCAL GENERAL AVIATION OPERATIONS FORECAST**

A similar methodology was used to generate a planning forecast for local GA operations. The same four forecasts employed to forecast future itinerant GA operations were also used to forecast local GA operations. The first and second forecasts apply a constant and increasing market shares of total U.S. general aviation operations. Maintaining a constant market share of 0.171 percent of U.S. general aviation operations produces a CAGR of 0.86 percent and 23,673 local GA operations at BTA by 2031. An increase in market share of national GA local operations results in a forecast of 29,142 local operations in 2031 (2.97% CAGR).

The Aerospace Forecast projects a growth rate through 2031 of 0.9 percent for local GA operations. Applying this growth rate to BTA results in 23,778 annual local operations by 2031. By examining the airport’s operations per based aircraft and applying a constant ratio of local operations per each of the 64 based aircraft, a forecast of 26,520 itinerant GA operations by 2031 (2.01% CAGR) is produced. **Table D** presents the forecast for local general aviation operations at BTA.

**TABLE D | Local GA Operations Forecast – Blair Municipal Airport**

Year	BTA Local GA Operations	US ATCT Local Operations	Market Share of Local Operations	BTA Based Aircraft	Local Operations per Based Aircraft
2021	21,740	12,744,000	0.171%	64	340
<b>Constant Market Share Projection (CAGR 0.86%)</b>					
2026	23,255	13,632,000	0.171%	69	337
2031	23,673	13,877,000	0.171%	78	303
<b>Increasing Market Share Projection (CAGR 2.97%)</b>					
2026	25,046	13,632,000	0.184%	69	363
2031	29,142	13,877,000	0.210%	78	374
<b>FAA Aerospace Forecast (CAGR 0.90%)</b>					
2026	22,736	13,632,000	0.167%	69	330
2031	23,778	13,877,000	0.171%	78	305
<b>Constant Operations per Based Aircraft (CAGR 2.01%) – Selected Forecast</b>					
2026	23,460	13,632,000	0.172%	69	340
2031	26,520	13,877,000	0.191%	78	340

*Sources: Airport based aircraft information; FAA Aerospace Forecast 2021-2041; Model for Estimating General Aviation Operations at Non-Towered Airports, Equation #15, FAA (2001); Coffman Associates analysis*

The constant operations per based aircraft has been selected as the planning forecast. The possibility for increased based aircraft indicates potential growth to local general aviation operations at BTA and an increase in market share of national local GA operations.

**Air Taxi and Military Operations Forecast**

Air taxi operations are those that provide “on-demand” or “for-hire” transportation services for persons or property using aircraft with fewer than 60 passenger seats. Air taxi includes a broad range of operations, including smaller commercial air services, charter aircraft, air cargo aircraft, fractional ownership aircraft, and air ambulance services. Many of these operations are conducted with business jet or turboprop aircraft.

An examination of flight plans filed or closed at BTA for the previous five years was conducted. For the 12 months of July 2020 to June 2021, air taxi operations totaled 116 and represented 0.0021 percent of all air taxi operations in the U.S. Based on this current data, a set of projections was prepared with forecasts based on the constant market share of the total U.S. air taxi operations and an increasing (growth) market share. The FAA’s Aerospace Forecast predicts air taxi operations will grow at a rate of 1.20 percent over the planning period; a forecast was also prepared using this projection. The results of these projections are shown in **Table E**.

**TABLE E | Air Taxi Operations Forecast – Blair Municipal Airport**

Year	BTA Air Taxi Operations	US ATCT Air Taxi Operations	Market Share of Air Taxi Operations
2021*	116	5,398,427	0.0021%
<b>Constant Market Share Projection (CAGR 8.07%)</b>			
2026	115	5,336,000	0.0021%
2031	128	5,960,000	0.0021%
<b>Increasing Market Share Projection (CAGR 10.35%) – Selected Forecast</b>			
2026	130	5,336,000	0.0024%
2031	179	5,960,000	0.0030%
<b>FAA Aerospace Forecast (CAGR 1.20%)</b>			
2026	123	5,336,000	0.0023%
2031	131	5,960,000	0.0022%

\*Current data for the 12-month period: July 2020-June 2021.

Sources: Airport based aircraft information; FAA Aerospace Forecast 2021-2041; AirportIQ Data Center; Coffman Associates analysis

The increasing market share projection has been selected as the forecast for the planning period. It represents the recent increase in air taxi operations at BTA, as well as current and planned hangar construction for new based aircraft. With reasonable growth expected in based aircraft, as well as itinerant operations, it is reasonable to assume that some of these aircraft will be utilized for air taxi operations.

Military aircraft can and do use civilian airports across the country. Current operational data does not identify any military operations at BTA. Forecasts of military activity are inherently difficult to predict because of the national security nature of their operations, and the fact that their missions can change without notice. Thus, it is typical for the FAA to use a flat-line forecast for military operations. For BTA, the FAA TAF reflects no future military operations. Therefore, military operations are not forecasted to account for any operations at BTA thorough the planning period.

**Total Operations Forecast Summary**

**Table F** presents the aggregate total of the estimated current operations, as well as operations and based aircraft for the planning period. The CAGR for the total operations at BTA through 2031 is 2.01 percent.

**TABLE F | Operations Forecast Summary – Blair Municipal Airport**

Year	Based Aircraft	Air Taxi Operations	Itinerant GA Operations	Military Operations	Local GA Operations	Total Operations
2021	64	176*	2,496	0	21,740	24,412
2026	69	45	2,691	0	23,460	26,196
2031	78	62	3,042	0	26,520	29,624

\*176 operations derived from linear projection of 88 operations, Jan-Jun 2021.

Sources: Airport based aircraft information; FAA Aerospace Forecast 2021-2041; Model for Estimating General Aviation Operations at Non-Towered Airports, Equation #15, FAA (2001); Coffman Associates analysis

## HISTORICAL JET FUEL SALES

Historical sales of jet fuel at an airport can provide an additional indicator to the trend of activity of a particular grouping of aircraft. Even though most operations at BTA are conducted by small, piston-powered aircraft, the sale of jet fuel to turbine-powered aircraft would indicate an increase of activity at BTA by jet aircraft as well. Since opening in 2011, SkyWerx, the fixed-base operator (FBO) at the airport, has sold over one million gallons of Jet-A fuel to turboprop and jet customers. **Table G** shows the historical sales numbers of Jet-A aviation fuel by SkyWerx. The rising trend of jet fuel sales can be attributed to a rise in jet and turboprop activity, some of which may not be reflected in the TFMSC, indicating a potential for higher-than-portrayed amount of jet activity at BTA. In other words, the significant increase in jet fuel sales at BTA confirms turbine operations are increasing at a rate higher than shown in TFMSC operational increases.

**TABLE G | Jet-A Fuel Sales – Blair Municipal Airport**

Year	Gallons Pumped
2011	4,022
2012	21,290
2013	63,772
2014	70,155
2015	77,808
2016	106,033
2017	135,866
2018	115,535
2019	130,898
2020	170,384
2021*	132,708
<b>CAGR 2011-2020</b>	<b>45.44%</b>

\*For the period of Jan-Jun 2021.

Source: SkyWerx sales records

## AIRCRAFT AND RUNWAY CLASSIFICATION

The FAA has established multiple aircraft classification systems that group aircraft based upon performance (approach speed in landing configuration) and on design characteristics (wingspan and landing gear configuration). These classification systems are used to design certain airport elements, such as runways, taxiways, aprons, safety areas, and separation standards, based upon the aircraft expected to use the airport facilities more frequently.

### AIRCRAFT CLASSIFICATION

The use of appropriate FAA design standards is generally based upon the characteristics of aircraft commonly using, or expected to use, the airport facilities. The aircraft used to design the airport is designated as the “critical aircraft.” The design criteria used in the aircraft classification process are presented in **Exhibit A**. An airport’s critical aircraft can be a single aircraft or a grouping of similar aircraft

commonly using the airport. The design aircraft or collection of aircraft is classified by three different categories: Aircraft Approach Category (AAC), Airplane Design Group (ADG), and Taxiway Design Group (TDG). The FAA Advisory Circular (AC) 150/5300-13A, *Airport Design*, describes the following classification systems and parameters.

**Aircraft Approach Category (AAC):** A grouping of aircraft based on a reference landing speed ( $V_{REF}$ ), if specified. If  $V_{REF}$  is not specified, 1.3 times the stall speed ( $V_{SO}$ ) at the maximum certificated landing weight is used. These numbers are those values as established for an aircraft by the certification authority of the country of registry. The AAC refers to the approach speed of an aircraft in landing configuration. The higher the approach speed, the more restrictive the design standards. The AAC is depicted by letters A through E and applies to runways and runway-related facilities, such as runway width, runway safety area (RSA), runway object free area (ROFA), runway protection zone (RPZ), and separation standards.

**Airplane Design Group (ADG):** The ADG, depicted by a Roman numeral I through VI, is a classification of aircraft relating to the aircraft wingspan or tail height. If the wingspan and tail height fall under different classifications, the higher category (more restrictive) is used. The ADG is used to establish design standards for taxiway safety area (TSA), taxiway object free area (TOFA), taxilane object free area, apron wingtip clearance, and other separation standards.

**Taxiway Design Group (TDG):** A classification of aircraft based on dimensions of the airplane undercarriage: the outer-to-outer main gear width (MGW) and cockpit-to-main gear (CMG) distance. Several taxiway design elements are determined by the TDG, including the taxiway width, taxiway edge safety margin, taxiway shoulder width, taxiway fillet design and dimensions, and separation standards. It is appropriate for taxiways to be planned and built to different taxiway design standards based on expected use.

**Exhibit B** presents the aircraft classification of common aircraft in operation today.

## AIRPORT AND RUNWAY CLASSIFICATION

The airport and runway classifications, along with the aircraft classifications defined above, are used to determine the appropriate FAA design standards that the airfield facilities are to be designed and built.

**Airport Reference Code (ARC):** An airport designation that signifies the airport's highest runway design code without the visibility component. The ARC is used for planning and design purposes only and does not limit the aircraft capable of operating safely on the airport. Airports with one runway will have an ARC that is the same as their runway design code. The current ALP, which was last updated in March 2019, indicates that BTA is currently designed to ARC B-II standards.

**Runway Design Code (RDC):** A code signifying the design standards to which a runway is to be built. The RDC is based upon planned development and has no operational component.

The AAC, ADG, and runway visual range (RVR) are combined to form the RDC of a certain runway. The RDC provides the information necessary to determine critical design standards. The first two components, the AAC and ADG, are depicted as a letter A-E and a Roman numeral I-VI as defined previously. The third component related to the visibility minimums expressed by RVR values in feet of 1,200 (1/8-mile); 1,600 (1/4-mile); 2,400 (1/2-mile); 4,000 (3/4-mile); and 5,000 (1-mile). The RVR values approximate standard visibility minimums for established instrument approaches to the runway. Visual-only approaches are designated by "VIS."

### **CRITICAL DESIGN AIRCRAFT**

The selection of airport design criteria is based upon the aircraft currently using, or expected to use, the airport. The critical aircraft is used to establish the design parameters of the airport. These criteria are typically based upon the most demanding aircraft using the airfield facilities on a relatively frequent basis. The critical design aircraft can be a single aircraft or a composite of multiple aircraft that represent a collection of aircraft characteristics. Upon the selection of multiple aircraft, the most demanding aircraft characteristics are used to establish the design criteria of the airport based upon the AAC, ADG, and TDG. If the airport contains multiple runways, a critical design aircraft will be established for each runway.

The primary consideration for a critical design aircraft is to ensure safe operation of the aircraft using the airport. If an aircraft larger than the critical design aircraft is to operate at the airport, it may result in reduced safety margins or unsafe operations. However, airports typically do not establish design criteria based solely upon the largest aircraft using the airfield facilities if it operates on an infrequent basis. Certainly, the FAA will not financially support facilities to meet the need of infrequent aircraft operators.

The critical design aircraft can be defined as an aircraft conducting at least 500 annual operations at an airport or the most regularly scheduled aircraft in commercial service. When planning for future airport facilities, it is extremely important to consider the demands of aircraft operating at the airport in the future. As a result of the separation standards based upon the critical aircraft, caution must be exercised to ensure that short-term development does not preclude the long-term needs of the airport. Thus, it is important to strike a balance between the facility needs of aircraft currently operating at the airport and the facility needs of aircraft projected to operate at the airport in the future. Although precautions must be taken to ensure long-term airport development, airports with critical aircraft that do not use the airport facilities on a regular basis are unable to operate economically due to added development and maintenance expenses.

### **AIRPORT DESIGN AIRCRAFT**

It is imperative to have an accurate understanding of what type of aircraft operate at the airport both now and in the future. The type of aircraft utilizing airport facilities can have a significant impact on numerous design criteria. Thus, an aircraft activity study by type and aircraft category can be beneficial in determining future airport standards that must be met to accommodate certain aircraft.

The most recent annual data was obtained from the FAA’s Traffic Flow Management System Counts (TFMSC), a program maintained by the FAA to monitor the amount and type of aircraft activity at airports. Typically, information is added to the system when pilots file flight plans and/or when flights are detected by the National Airspace System (NAS) on radar. The TFMSC program includes commercial service (air carrier and air taxi), military, and general aviation aircraft. Although the program can identify aircraft operating under IFR filed flight plans and on radar, TFMSC does not account for all aircraft operating without a flight plan due to limited radar coverage. Thus, it is possible for an airport to experience additional operations that are not counted within TFMSC. Despite its shortcomings, the program is a valuable source of information when it comes to identifying the primary airport users and type of aircraft operating at the airport on a regular basis.

A TFMSC report was generated to identify the primary users and aircraft operating at BTA. **Exhibit C** presents the operational mix of turbine aircraft reported by TFMSC to be operating at BTA.

Although many of the aircraft identified by the TFMSC fall within the RDC A/B-I small aircraft category, numerous aircraft within the B-II category were identified as well. Of the B-II aircraft identified, some have a maximum takeoff weight (MTOW) of less than 12,500 pounds, falling under the “small” aircraft category; those aircraft with a MTOW greater than 12,500 pounds are classified as “large” aircraft. The operational characteristics of the B-II turbine aircraft operating at BTA can be seen in **Table H**.

**TABLE H | Category B-II Aircraft Characteristics – Blair Municipal Airport**

	MTOW (lbs.)	Approach Speed (kts)	Wingspan (ft)	Tail Height (ft)
Cessna 441 Conquest	9,850	98	49.33	13.17
Citation Bravo/II/SP	14,800	112	52.17	15.00
Citation V	16,300	107	52.17	15.00
King Air 350	16,500	107	57.92	14.33
Fairchild Metro 23	16,500	120	56.99	16.66
Phenom 300	17,968	116	52.17	16.75
Citation Excel	20,000	107	55.71	17.21
Citation XLS/XLS+	20,200	117	56.33	17.17
Hawker 850XP	28,000	120	54.33	18.08
Citation Sovereign*	30,300	108	63.33	20.33
Falcon 2000*	36,500	111	63.42	23.17
Challenger 300*	38,850	117	63.83	20.33
Falcon 900EX	49,000	111	63.42	24.79

\*Indicates previously based aircraft

Sources: Airport based aircraft records; FAA Traffic Flow Management System Counts (TFMSC)

The 1999 ALP designates the airport’s overall airport reference code (ARC) as B-II. Since that time, the runway design code (RDC) has become the proper definition of a single runway’s design code based on the runway’s critical aircraft definition. The ARC was based strictly upon the B-II category, or family of similar aircraft, as opposed to identifying a specific critical aircraft. Based upon TFMSC analysis included in this report, as well as based aircraft records, RDC B-II remains the proper designation for BTA. Numerous B-II aircraft are currently based at BTA, including a couple of Cessna Citation II/SPs, which is the largest based aircraft. The Citation II/SP is classified within TDG 2 due to the dimensions of the undercarriage of the aircraft. Thus, the design aircraft is best described as RDC B-II-2. Although aircraft more demanding than B-II were identified using the airport, these aircraft do not conduct at least 500 annual operations to justify a larger critical design aircraft. **Table J** identifies specific critical aircraft groupings and their total operations from 2011-2021. Data for 2021 includes the period from May 2020 to April 2021.

**TABLE J | Critical Aircraft Operations – Blair Municipal Airport**

Aircraft Grouping	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*
Citation CJ1	4	0	4	4	0	4	40	52	40	72	52
Citation I/SP	0	0	4	14	14	6	8	4	2	0	0
Citation CJ2/CJ3/CJ4	0	0	0	6	2	20	8	6	4	56	52
Citation II/SP/Latitude	0	32	88	98	92	238	306	282	240	216	218
Citation V/Sovereign	0	36	142	144	148	176	198	88	26	16	44
Citation Excel/XLS	0	0	0	6	0	0	4	6	6	10	40
Falcon 2000	0	0	0	0	0	0	0	52	110	14	0
Phenom 300	0	0	0	0	0	0	0	0	2	58	150
<b>Total</b>	<b>4</b>	<b>68</b>	<b>238</b>	<b>272</b>	<b>256</b>	<b>444</b>	<b>564</b>	<b>490</b>	<b>430</b>	<b>442</b>	<b>556</b>

\*2021 data consists of activity from May 2020 through April 2021.

Source: Traffic Flow Management System Counts (TFMSC)

It is important to note that since 2015, larger aircraft that were based at BTA have moved to other airports, such as Eppley Airfield in Omaha. The operators of these aircraft, which include the previous critical design aircraft, the Cessna Citation Sovereign, as well as a Falcon 2000, have indicated that they could not consistently operate out of BTA due to the short runway length.

**LETTERS OF SUPPORT FOR RUNWAY EXTENSION**

Beginning in the spring of 2021, airport stakeholders began submitting letters to airport management in support for extending Runway 13-31. The group consists of large corporations with multiple aircraft, small business owners who operate their own aircraft, private pilots, and the airport FBO. In a packet submitted to the airport, examples are presented that illustrate the consequences of BTA having a runway length of only 4,200 feet. Examples include based aircraft operators that were forced to relocate to another airport, aircraft diverting to Omaha Eppley (OMA) or Sioux Gateway Airport (SUX) due to weather or runway surface conditions, and aircraft departing from BTA with less than adequate fuel to reach their intended destination, requiring an otherwise unnecessary fuel stop enroute. Many of the parties expressed a willingness or awareness of even more operators who would prefer to base their aircraft at BTA but cannot do so because of the airport’s current runway length limitations on their aircraft. Specific examples include:

- Gottsch Enterprises was the first jet customer to base with SkyWerx – the airport FBO – with a Citation Encore. The company upgraded to a Citation Sovereign and built their own hangar. In 2018, Gottsch upgraded aircraft again, this time to a Falcon 2000. The aircraft is now based at OMA due to the inadequate runway length at BTA. The company wants to return to BTA with their aircraft once the runway is extended.
- Viking Industrial Painting operates a Socata TBM 930 and a Citation V, the latter out of Lincoln Airport (LNK). The Citation operates 10 times per month and the company would relocate the aircraft to BTA if the runway “were increased to 5,500” feet. The Socata is already based at BTA.

- Pinnacle Bancorp flies a Citation XLS+ that is based at OMA. The intent of the company is to be based at BTA, but only when the runway is of “adequate” length. The company expects 10 to 15 operations per month.
- Matt Vining is a business owner who operates a Hawker 850XP that is located at OMA, despite the fact he leases a hangar at BTA. The aircraft management company Wheels Up, who handles the operations of his aircraft, imposes restrictions on the aircraft that demand it remain at OMA due to the longer runway lengths available. Mr. Vining will be acquiring another similarly sized jet and locating both aircraft at BTA.

These are just a few examples that illustrate an existing demand for a longer runway at BTA. While the total number of operations of these aircraft do not currently exceed the minimum threshold of 500 per year, it is only because the aircraft cannot safely and efficiently operate out of the 4,200-foot runway. Extending the runway would allow for the return of these and other businesses with an anticipated number of annual operations exceeding 700 per year. The letters of support for extending the runway at BTA are presented in **Appendix A**.

**Table K** presents a selection of jet aircraft that is presented in support to extend the runway at BTA. These aircraft represent stakeholders who are currently, once was, or would like to be, based at the airport but cannot be due to the restrictive length of the existing runway. These “critical” aircraft were used during forecasting analysis as presented in the Critical Aircraft Operations Forecast section.

**TABLE K | Critical Jet Aircraft – Blair Municipal Airport**

Citation CJ1	Citation II/SP	Hawker 850XP	Challenger 300
Citation CJ2/CJ3	Citation Excel/XLS	Falcon 900EX/LX	Gulfstream V
Phenom 300	Citation V/Sovereign	Falcon 2000	Gulfstream 650

*Sources: Airport based aircraft records; stakeholders’ letters of support for runway extension*

### CRITICAL AIRCRAFT OPERATIONS FORECAST

In the previous section, the total annual number of operations was forecasted. While this is sufficient for airport master planning documents, to better understand the demand for a longer runway, a forecast specific to the critical aircraft grouping was also prepared. Justification for facilities growth at an airport is dependent on the critical aircraft or aircraft grouping, including runway lengths. If it can be demonstrated that certain critical aircraft are expected to increase their use of airport facilities, the annual operations minimum of 500 may not have to be currently met. **Table L** presents the four forecast methods used, as well as the average of all four.

A 10-year trendline analysis was conducted on the number of operations of the critical aircraft identified in **Table J**. This “best-fit” line determines a mathematical relationship between an independent variable (years) and a dependent variable (number of operations). A coefficient determination ( $r^2$ ) of 0.79 was produced, indicating a substantial correlation. While not ideal, it is a fairly accurate method for forecasting future growth. Carrying the trendline forward through 2031 produces a forecast of 1,101 operations, a CAGR of 8.65 percent.

The aggregate growth rate of operations conducted by the critical aircraft group for the previous five years was used to generate another forecast. Total operations in 2016 was 444. 2021 operations – defined as the period of May 2020 through April 2021 – totaled 556, resulting in a 5-year CAGR of 4.60 percent. This growth rate results in 696 operations in 2026 and 872 operations by 2031 (6.37% CAGR).

Some of the operations conducted by the critical aircraft group were performed by aircraft based at BTA. Therefore, the 10-year growth rate of based aircraft was also used. This method results in a forecast of 763 operations in 2026 and 1,047 operations by 2031, a CAGR of 6.53 percent. It is important to note that any increase in based aircraft of the critical design aircraft type will result in higher operations of the B-II category.

A fourth projection was prepared using the total operations forecasted from **Table F**. Applying the total operations forecast CAGR of 2.01 percent to the critical aircraft operations results in 678 operations by 2031 (2.00% CAGR).

**TABLE L | Critical Aircraft Operations Forecast – Blair Municipal Airport**

Year	10-Year Trendline	5-Year Growth Rate	10-Year Based AC Growth Rate	Total Operations Forecast	Average of Forecasts
2021				556	
2026	847	696	763	614	730
2031	1,101	872	1,047	678	925
CAGR	7.07%	4.60%	6.53%	2.00%	5.22%

*Sources: Traffic Flow Management System Counts (TFMSC); Coffman Associates analysis*

It is important to understand this forecast is not meant to specifically identify a total number of operations by 2031, but rather illustrate that under a wide range of growth conditions, **the annual number of operations conducted by the critical design aircraft group will exceed 500**. This is critical when examining the possibility of extending the runway at BTA.

In addition to recognizing that the critical aircraft group will exceed 500 annual operations in the future, it will be beneficial to identify the breakdown of operations by each of the critical aircraft group through the forecast period.

In the past couple years, aircraft that had previously been based at the airport – such as the Falcon 2000 operated by Gottsch Enterprises – have had to move to other airports with longer runways. Therefore, their operations have fallen off, as reflected in the TFMSC (**Table H**). For this reason, the operational mix of critical aircraft to total category operations from 2019 will be used.

**Table M** projects the 2019 operations mix of each critical aircraft using the average critical aircraft operations forecast from the previous section. Again, it is important to note that this is not meant to be a definitive forecast but rather an illustration to the potential growth of specific aircraft. These aircraft may become the ultimate airport design aircraft. Furthermore, with the possibility of larger aircraft returning to BTA, this projection will not be as valid.

**TABLE M | Forecast of Individual Critical Aircraft Operations – Blair Municipal Airport**

Aircraft Grouping	2019	% of 2019 Group Operations	2026	2031
Citation CJ1	40	9.3%	68	86
Citation I/SP	2	0.5%	3	4
Citation CJ2/CJ3/CJ4	4	0.9%	7	9
Citation II/SP/Latitude	240	55.8%	407	516
Citation V/Sovereign	26	6.0%	44	56
Citation Excel/XLS	6	1.4%	10	13
Falcon 2000	110	25.6%	187	237
Phenom 300	2	0.5%	4	4
<b>Total</b>	<b>430</b>	<b>100%</b>	<b>730</b>	<b>925</b>

*Sources: Traffic Flow Management System Counts (TFMSC); Coffman Associates analysis*

Once again, it is shown that the B-II(Large) group will remain the primary aircraft design group at BTA through the planning period. In this forecast, the **Citation II/SP/Latitude** may be identified as the critical design aircraft.

**EXISTING RUNWAY DESIGN**

Each runway at an airport is assigned an RDC. The RDC relates to specific design criteria set forth by the FAA that should be met. The RDC is determined by a specific aircraft, or category of aircraft, expected to use each runway.

**Runway 13-31 Runway Design Code**

Runway 13-31 is the only runway and should be designed to accommodate the critical design aircraft. The runway is currently 4,200 feet long and 100 feet wide. The runway is equipped with non-precision GPS instrument approach procedures with visibility minimums down to 7/8 of a mile. Given these characteristics, Runway 13-31 is currently categorized as **B-II-4500**.

**FUTURE RUNWAY DESIGN**

The aviation demand forecasts indicate the potential for continued growth in turbine activity at the airport. The type and size of business jets and turboprops using the airport regularly can impact the design standards to be applied to the airport system. Therefore, it is important to understand what type of aircraft may use the airport in the future. Factors such as population and employment growth in the airport service area, the proximity and level of service of other regional airports, and development at the airport can influence future activity.

BTA has a single paved runway measuring 4,200 feet in length. There are numerous operators and businesses with aircraft currently and previously based at the airport that have indicated a need for additional runway length, as discussed previously. These stakeholders have communicated with airport management, in written form, their support for additional runway length. Those communications are contained at the end of this analysis in **Appendix A**.

According to FAA Order 5100.38D, *Airport Improvement Program Handbook*, Section 3-12:

“The ADO has the option to determine that a project is justified based on existing activity at the airport or activity that is projected to be at the airport within the next five years. The ADO has the option to require the sponsor to submit letters of support from airport users if the justification is based on projected activity. The letter must describe the airport user’s plans or anticipated activity by the most demanding airplane, or critical aircraft.”

### Runway Length Analysis

AC 150/5325-4B, *Runway Length Requirements for Airport Design*, provides guidance for determining runway length needs. The determination of runway length requirements for the airport is based on five primary factors: airport elevation, mean maximum temperature of the hottest month, runway gradient (difference in runway elevation of each runway end), critical aircraft type expected to use the runway, and the stage length of the longest nonstop destination (typically specific to larger aircraft).

Aircraft performance declines as each of these factors increases. Warmer summertime temperatures and long stage lengths are the primary factors in determining runway length requirements, especially for turbine aircraft. Runway gradient adjustments are not typically factored for aircraft with a maximum takeoff weight of less than 12,500 pounds.

The mean maximum daily temperature of the hottest month for BTA is 87.3 degrees Fahrenheit (F), which occurs in July. The airport elevation is 1,317.6 feet mean sea level (MSL). Runway 13-31 has a gradient of 0.46 percent and thus conforms to FAA design standards for gradient. Using this site-specific data, runway length requirements for the various classifications of aircraft that may operate at the airport were examined using AC 150/5325-4B. The FAA runway analysis groups general aviation aircraft into several categories, reflecting the percentage of the fleet within each category. The runway design should be based upon the most critical aircraft (or group of aircraft) performing at least 500 annual operations.

While an analysis was conducted for all general aviation aircraft that use BTA, this report is focused on the anticipated demand of larger business jet aircraft and the need for extending the existing runway. Although the current 4,200-foot runway is adequate for small airplanes with less than 10 seats, the FAA recommends providing a runway capable of meeting the needs of the critical design aircraft, which is ultimately planned to be in the ARC B-II family as listed in **Table L**.

Runway length requirements for business jets weighing less than 60,000 pounds have been calculated based on FAA AC 150/5325-4B. These calculations take into consideration the runway gradient and landing length requirements for contaminated (wet) runways. Business jets tend to need greater runway length when landing on a wet surface because of their higher approach speeds.

AC 150/5325-4B stipulates that runway length determinations for large aircraft consider a grouping of airplanes with similar operating characteristics. The AC provides two separate groupings of airplanes, each based upon their representative percentage of aircraft in the national fleet. The first group is those

business jets that make up 75 percent of the national fleet, and the second group is those jets that make up the remaining 25 percent of the national fleet. **Table N** presents a representative list of aircraft for each grouping. A third group includes business jets weighing more than 60,000 pounds; runway lengths for these aircraft types must be based on their individual performance characteristics.

**TABLE N | Business Jet Fleet Mix Categories for Runway Length Determination**

75 Percent of the National Fleet	MTOW (lbs.)	76-100 Percent of the National Fleet	MTOW (lbs.)	Greater than 60,000 Pounds	MTOW (lbs.)
Citation CJ2	12,300	Lear 55B	21,500	Falcon 7X	70,000
Beechjet Premier	12,500	Citation III/IV	22,000	Gulfstream IV	73,200
Beechjet 400A	15,780	Lear 60	22,750	Gulfstream V	90,500
Lear 35	18,000	Hawker 800	28,000	Gulfstream 550	91,000
Citation Excel	20,000	Hawker 1000	31,100	Global Express	99,500
Lear 45	21,500	Citation X	36,100	Gulfstream 650	99,600
Citation Sovereign	30,300	Falcon 2000	36,500		
Challenger 300	38,850	Challenger 601	42,100		
Falcon 900	46,500	Challenger 604	47,600		

MTOW - Maximum Takeoff Weight

Source: FAA AC 150/5325-4B, Runway Length Requirements for Airport Design

**Table P** presents the results of the runway length analysis for business jets developed following the guidelines provided in AC 150/5325-4B. To accommodate 75 percent of the business jet fleet at 60 percent useful load, a runway length of **5,500 feet** is recommended. This length is derived from a raw length of 4,839 feet that is adjusted, as recommended, for runway gradient and consideration of landing length needs on a contaminated (wet and slippery) runway. To accommodate 100 percent of the business jet fleet at 60 percent useful load, a runway length of **5,900 feet** is recommended.

**TABLE P | Business Jet Runway Length Requirements – Blair Municipal Airport**

Airport Elevation	1,317.6 feet MSL			
Average High Monthly Temp.	87.3° F (July)			
Runway Gradient	19.2 feet			
Fleet Mix Category	TAKEOFF LENGTHS		LANDING LENGTHS	Final Runway Length
	Raw Runway Length from FAA AC	Runway Length with Gradient Adjustment (~192')	Wet Surface Landing Length for Jets (+15%)*	
75% of fleet at 60% useful load	4,839'	5,031	5,500'	5,500'
100% of fleet at 60% useful load	5,716'	5,908'	5,500'	5,900'

\*Max 5,500' for 60% useful load in wet conditions

Source: FAA AC 150/5325-4B, Runway Length Requirements for Airport Planning

### Business Jet Runway Length Analysis

Another method to determine runway length requirements for aircraft operations at BTA is to examine the aircraft flight planning manuals under conditions specific to the airport. Several aircraft – including current based aircraft, as well as previously based aircraft and aircraft interested in relocating to BTA– were analyzed for takeoff length requirements at a design temperature of 87.3 degrees F at a field elevation of 1,317.6 feet MSL.

**Table Q** provides a detailed runway length analysis required for takeoff for several of the most common turbine aircraft in the national fleet. This analysis includes the Citation Sovereign, which was the previously established critical design aircraft, as well as select aircraft from the runway extension campaign. This data was obtained from UltrNAV software, which computes operational parameters for specific aircraft based on flight manual data. The analysis includes the maximum takeoff weight (MTOW) allowable and the percent useful load from 60 percent to 100 percent.

**This analysis shows that the current length of 4,200 feet available on Runway 13-31 is not adequate for several of the critical business aircraft, even at only 60 percent of their respective useful loads. As aircraft useful loads are increased, the runway becomes even less sufficient for operations. The average takeoff length needed for all turbine aircraft analyzed at 100 percent useful load is 5,336 feet. The average takeoff length needed for just 70 percent useful load is 4,178 feet, just 22 feet less than the total runway length, not the best of safety margins.**

**TABLE Q | Business Aircraft Takeoff Length Requirements – Blair Municipal Airport**

Aircraft Name	MTOW	Takeoff Length Requirements (feet)				
		Useful Load				
		60%	70%	80%	90%	100%
Pilatus PC-12	9,921	2,155	2,298	2,518	2,713	2,916
Citation (525) CJ1	10,600	3,680	4,250	4,828	5,425	6,039
Citation I/SP	11,850	2,894	3,141	3,404	3,683	3,978
Citation (525A) CJ2	12,375	3,341	3,634	3,948	4,241	4,516
Citation II (550)	13,300	3,209	3,538	3,892	4,269	4,671
Citation CJ3	13,870	3,049	3,253	3,509	3,777	4,064
King Air 350	15,000	3,546	3,698	3,868	4,145	4,502
Citation V (Model 560)	15,900	2,988	3,242	3,516	3,808	4,118
Citation Encore Plus	16,830	3,281	3,566	3,907	4,272	4,676
Phenom 300	17,968	3,679	3,778	3,886	4,002	4,132
Citation 560 XLS	20,200	3,540	3,842	4,107	4,436	4,736
Citation III	21,500	4,816	5,300	5,830	6,404	Climb Limited
Hawker 800/850 XP	28,000	4,601	4,949	5,424	Climb Limited	Climb Limited
Citation Sovereign	30,300	3,633	3,693	3,824	4,112	4,421
Citation X	35,700	4,951	5,381	5,909	6,471	7,071
Falcon 2000	35,800	4,884	5,499	6,081	6,693	7,503
Challenger 300	38,850	4,648	5,093	5,554	6,033	6,537
Falcon 900EX	49,200	4,320	4,860	5,480	6,150	6,760
Gulfstream V	90,500	4,496	5,039	5,689	6,809	7,905
Gulfstream 650	99,600	5,005	5,515	6,087	6,754	7,509
<b>Average Takeoff Length</b>		<b>3,836</b>	<b>4,178</b>	<b>4,563</b>	<b>4,958</b>	<b>5,336</b>

Green figures are less than or equal to the length of the runway at BTA; red figures are greater than the length of the runway at BTA.  
Runway length calculation assumptions: 1,317 feet MSL field elevation; 86.8° F ambient temperature; 0.45% runway grade.  
MTOW – Maximum Takeoff Weight

Sources: UltrNAV software, Coffman Associates analysis

**Table R** presents the runway length required for landing under three operational categories: Title 14 Code of Federal Regulations (CFR) Part 25, CFR Part 135, and CFR Part 91k. CFR Part 25 operations are those conducted by individuals or companies which own their aircraft. CFR Part 135 applies to all for-hire charter operations, including most fractional ownership operations. CFR Part 91k includes operations in fractional ownership which use their own aircraft under direction of pilots specifically assigned to said aircraft. Part 91k and Part 135 rules regarding landing operations require operators to land at the destination airport within 60 percent of the effective runway length. An additional rule allows for operators to land within 80 percent of the effective runway length if the operator has an approved destination airport analysis in their operations manual. The landing length analysis conducted accounts for all three scenarios.

The landing length analysis shows that all but one of the analyzed aircraft can land at BTA under Part 25 dry conditions, but the 4,200-foot runway becomes very restrictive when used by aircraft operating under Part 91k and Part 135 rules, even when the surface is dry. Once the runway becomes contaminated, it is unusable for most of the aircraft analyzed. Only six aircraft could land at BTA during wet Part 25 operations, while only two aircraft can land under the 80 percent rule, and none of the evaluated aircraft can land at BTA during wet conditions.

**TABLE R | Business Aircraft Landing Length Requirements – Blair Municipal Airport**

Aircraft Name	MLW	Landing Lengths Required (feet)					
		Dry Runway Conditions			Wet Runway Conditions		
		Part 25	80% Rule	60% Rule	Part 25	80% Rule	60% Rule
Citation (525) CJ1	9,800	3,070	3,838	5,117	4,155	5,194	6,925
Pilatus PC-12	9,921	2,373	2,966	3,955	N/A		
Citation I/SP	11,350	2,459	3,074	4,098	2,828	3,535	4,713
Citation (525A) CJ2	11,500	3,436	4,295	5,727	4,947	6,184	8,245
Citation II (550)	12,700	2,512	3,140	4,187	6,070	7,588	10,117
Citation CJ3	12,750	3,268	4,085	5,447	4,446	5,558	7,410
King Air 350	15,000	2,956	3,695	4,927	3,400	4,250	5,667
Citation V (Model 560)	15,200	3,260	4,075	5,433	4,836	6,045	8,060
Citation Encore Plus	15,200	3,293	4,116	5,488	4,971	6,214	8,285
Phenom 300	16,865	2,826	4,710	3,533	N/A		
Citation 560 XLS	18,700	3,650	4,563	6,083	5,806	7,258	9,677
Citation III	19,000	4,221	5,276	7,035	6,144	7,680	10,240
Hawker 800/850 XP	23,350	2,730	3,413	4,550	4,212	5,265	7,020
Citation Sovereign	27,100	3,103	3,879	5,172	4,004	5,005	6,673
Citation X	31,800	4,167	5,209	6,945	5,944	7,430	9,907
Falcon 2000	33,000	3,209	4,011	5,348	3,691	4,614	6,152
Challenger 300	33,750	2,675	3,344	4,458	5,127	6,409	8,545
Falcon 900EX	44,500	3,769	4,711	6,282	4,335	5,419	7,225
Gulfstream V	75,300	2,868	3,585	4,780	3,298	4,123	5,497
Gulfstream 650	83,500	4,029	5,036	6,715	5,269	6,586	8,782
<b>Average Landing Length</b>		<b>3,194</b>	<b>4,051</b>	<b>5,264</b>	<b>4,638</b>	<b>5,797</b>	<b>7,730</b>

Green figures are less than or equal to the length of the runway at BTA; red figures are greater than the length of the runway at BTA. Runway length calculation assumptions: 1,317 feet MSL field elevation; 86.8° F ambient temperature; 0.45% runway grade.

MLW – Maximum Landing Weight

N/A – Not Applicable. Select turboprop aircraft landing lengths are not adjusted for wet runway conditions.

Sources: UltrNAV software, Coffman Associates analysis

## Runway Length Summary

BTA is increasingly being used by aircraft with more than 10 seats and/or those weighing more than 12,500 pounds. This includes small- to mid-size business jet aircraft. AC 150/5325-4B stipulated that runway length determinations for business jets consider a grouping of airplanes with similar operating characteristics. As such, runway length calculations specific to BTA for business jets that make up 75 percent of the national fleet, at a 60 percent useful load, would require a 5,500-foot runway. Further calculations for select turbine aircraft that are currently based at BTA, as well as former based aircraft who had to relocate due to operating restrictions and tenants expressing intent to base their aircraft at BTA, were performed. While the current length is adequate for some individuals or companies operating their own aircraft on a dry runway several other aircraft are limited as shown in Table R above. Moreover, the existing runway quickly becomes prohibitive for Part 135 and fractional aircraft operators, regardless of the condition of the runway surface. The results of this analysis suggest that a longer runway is justified in support of real, current aviation demand characteristics at BTA.

**APPENDIX A**  
**Letters of Support from Airport Stakeholders**

**Blair Municipal Airport - B-II Large Aircraft - Runway Extension analysis - TFMSC Data and Aircraft Owners/Pilots Supporting Letters**

Aircraft Category	TFMSC 2020	TFMSC 2021*	Landing Lengths			Aircraft No.	Letter No.	Company	Operator Type Part 91 or 135	Author	Aircraft	Estimated Total Operations per month (current + future)**	Estimated Total Operations per year (current + future)**	Based at BTA	Notes		
			Take off Length	Dry Runway Conditions	Wet Runway Conditions												
			Part 91 or 135	Part 91 or 135	Part 91 or 135												
Citation CJ1/ Swearingen Metro 23	72	153	4,400	3,838	5,194	N55CE	3	Dyna Tech	91	Robert Krist/ Paul Jelinek	Swearingen Metro 23	24-28 ops/mo	300	yes	Other based aircraft: Cessna Caravan and 441 Conquest Reroutes when contaminated; Letter from Pilot as well *Citation CJ3 (N72ZW) was recently replaced (October 2020) with the Phenom 300 (N1505P)		
			3,680	5,117	6,925				135								
Citation CJ2/CJ3/CJ4	56	15	3,948	4,085	5,558	N19RC	2	Cizek Partners LLC	91	CS Johnson	Citation CJ2 525	6-8/mo	96	yes	Contaminated Runway has to divert to KOMA; Flight aware had XXX flights		
						N260LF	8	Siefken Aircraft Management LLC	91	Shane Siefken	Cessna CJ3+	5 trips/month (10 ops/mo)	120	yes	Currently based and expanding their fleet - travels to both east and west coasts		
Citation II/SP/Latitude/C550	216	218	3,892	3,140	7,588		1	Aircrew Leasing	91	George Babcock	Cessna Citation C550	5 trips/month (10 ops/mo)	120	yes	Two letters submitted; Nebraska to Florida and Nebraska to California		
							9	Skywerx	91	Tim Hauder	Citation II/SP	8-9/mo	89	yes	adjusts fuel to ensure using BTA		
							4	SWA Charter First	135	Pete Johnson	Citation 2 (3) Citation 3 (2) Citation 7	4-5/mo increase to 8/10 mo	60 120	No	3 mid size jets, three light jets, six king air turbo props with runway length		
Citation V/Sovereign	16	92	3,824	4,075	6,045	N458DA	7	Omaha Eye and Laser	91	Sao J Liu MD	Citation V Ultra	10 ops/mo*	120	yes	Owned aircraft for 6 years; 3 years hangared at Blair, upgraded to Beech Premier Jet (N72JT) - had to move to KOMA due to runway length; Sold larger aircraft to come back to Blair 10 ops/mo is based on activity at Blair - due to contaminated runway Owner has more from Eppley.		
						N379EC	8	Siefken Aircraft Management LLC	91	Shane Siefken	Citation Encore	5 trips/month (10 ops/mo)	120	yes	Currently based and expanding their fleet - travels to both east and west coasts		
							3	Pinnacle Bancorp	91	Kent Heaton	Citation 560XLS	10-15/mo	170	no			
							5	Morrissey Engineering	135	George Morrissey	Citation Ultra V	150-200 hours per year		yes	Has a turbo prop based at Blair - TBM 940; Part Owner in the Citation but is based in Lincoln. Due to Charter rules owner needs to be picked up at KOMA, preference is to be picked up at BTA where he has his other aircraft based. *		
							10	Viking Industrial Painting	135	Ryan Lutikanin	Citation 560	10/mo (20 ops/mo)	240	No	will move to BTA when runway lengthened		
							1	Gottsch Enterprises	135	Brett Gottsch	Citation Sovereign	200-220 hours/year KOMA 350 hours/year		no	Will use runway when extended		
Citation Excel/XLS	10	91	3,540	6,083	9,677	N228PC / 18GY	4	Gregg Young	135	Gregg Young	Citation 2/ Cessna XLS	10 ops/mo	120	yes	Will increase in coming month. 15-20 ops/mo; February changed to Cessna XLS previously a Citation 2 Brandon Hill (Silverhawk manages aircraft below writes letter on behalf of Gregg Young as well)		
								Silverhawk Aviation	135	Brandon Hill	Cessna XLS		276	no	Owner of aircraft will be picked up and dropped off at Blair airport		
Hawker 800/850 XP	0	6	4,601	4,550	7,020	N751MT	6	Navigator CO2 Ventures LLC Wheels Up	135	Matt Vining	Hawker 850XP	10-20 trips/mo (40 ops/mo)	480	yes	Hangar aircraft at Blair - Has aircraft on apron at KOMA and when weather is bad comes back to Blair - Will have aircraft Full Time at Blair as runway extended		
Falcon 950	0	2	5,480	4,711	5,419		8	Siefken Aircraft Management LLC	91	Shane Siefken	Dassault Falcon 950	15 trips/month (30 ops/mo)	360	Arrives Dec 2021	Currently based and expanding their fleet - travels to both east and west coasts - aircraft will be arriving by end of year - currently purchase agreement and inspection phase.		
Falcon 2000	14	0	6,061	4,011	4,614				91						Gottsch Enterprises - sold plane and moved away from Blair		
Phenom 300	58	278	3,886	4,710	N/A	N1505P	3	Dyna Tech	91	Robert Krist/ Paul Jelinek	Phenom 300	10-12 ops/mo	140	yes	Other based aircraft: Cessna Caravan and 441 Conquest; reroutes when contaminated; Letter from Pilot as well *Citation CJ3 (N72ZW) was recently replaced (October 2020) with the Phenom 300 (N1505P)		
							11		91	Shawn Farwell	Phenom 300	14 ops/mo	168	yes			
Challenger 300		2	5,554	3,344	6,409		2	Cargill	91	Timothy Wollmuth	Challenger 300			no	3 at Blair past 10 years, but 330 operations at KOMA - Since Plant in in Blair would like to have more flights land in Blair		
<b>Total</b>	<b>442</b>	<b>857</b>															
												<b>Total (red only)</b>	<b>1784</b>				
												<b>Total (black and red)</b>	<b>3099</b>				

\*TFMSC 2021 Data was from September 2020 to September 2021

\*\* Data provided from Pilots within letters submitted and phone call discussions.

## AIRCREW LEASING, LLC

16264 Rolling Ridge Rd, Omaha, Nebraska 68135  
Telephone 402-216-4419 Email: gtbackcock@gmail.com

March 15, 2021

Blair Airport Authority  
2785 State Highway 133  
Blair, NE 68008

RE: Runway Expansion

Dear Airport Board Members:

Many of you know me. For those who do not, I am an attorney and pilot. I previously served as the director of operations and chief pilot for Skywerx Aviation during the time they were operating a part 135 on demand charter air carrier. Skywerx contemplated adding jet aircraft to their charter fleet of King Air C90s. Unfortunately, runway length inhibited operation of charter jets from Blair.

Specifically, jet charter operations raise two concerns. First, all transport category aircraft certified under part 25 of the Federal Aviation Regulations are designed to allow their safe operation in the event of engine failure. The design criteria employed by FAR part 25 requires the aircraft to either be capable of stopping in the remaining runway, if an engine failure occurs at or before take-off decision speed (V1), or continuing the take off roll and flying away in the event of an engine failure after take-off decisions speed (V1). Those numbers can increase dramatically in the event a runway is contaminated (e.g., wet with rain). Second, charter aircraft, and those operated under subpart K of FAR part 91 must comply with significant limitations on runway length for landing. Those landing runway requirements are similarly increased for contamination. I have also attached an excerpt from Richie Lengel's excellent book that discusses runway requirements in greater detail.

As a practical matter, the greater the weight of the aircraft, particularly jet aircraft, the longer the runway required to operate the aircraft safely within its design parameters. Thus, even where aircraft are theoretically capable of operating from the Blair airport, operations may, nonetheless, be significantly restricted due to the inability to carry full fuel due to runway constraints. I operate a Citation II as a contract pilot from the Blair Airport on a regular basis. I have to constantly remain alert to balancing payload and runway requirements. A longer runway would ameliorate those concerns.

As an attorney, I practice in the area of aviation law. That practice is varied, but often involves assisting in the acquisition of aircraft. As a proponent of the airport, whenever it makes sense, I generally suggest that prospective aircraft purchasers consider basing their aircraft at Blair. Unfortunately, a recurring theme that I continue to encounter with newly acquired large aircraft is that the runway simply is not long enough to full accommodate the capabilities of many airplanes.

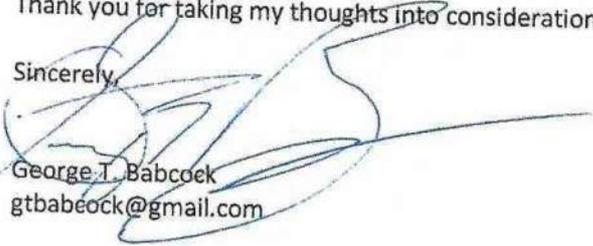
The fruition of a unique public-private partnership, that could well serve as a model throughout the country, has allowed the development of necessary infrastructure at the Blair Airport to set the stage for launching the Blair airport to an entirely different level. Given the airport's location, the growth patterns of population bases in eastern Nebraska, and the need and desire for corporate aviation facilities, it is not difficult to foresee BTA evolving into a facility much like that of Spirit of St. Louis in (SUS) in Missouri.

Just a few years ago, Spirit of St. Louis, like BTA is today, was surrounded by cornfields. Today it is a bustling hub of commerce and industry.

The time is ripe and the need is present to expand the runway to take BTA to that next level.

Thank you for taking my thoughts into consideration.

Sincerely,



George T. Babcock  
gtbabcock@gmail.com

# Aircrew Leasing LLC

16264 Rolling Ridge Rd, Omaha, Nebraska 68135  
Telephone 402-216-4419 Email: gtbabcock@gmail.com

August 18, 2021

Blair Airport Authority  
2785 State Highway 133  
Blair, NE 68008

RE: Runway Expansion

Dear Airport Board Members:

Initially, I would ask you to refer to the letter I previously wrote on this topic dated March 15, 2021. As a supplement, I would like to add that on average the operations I conduct for my primary customer who operates a Cessna Citation C550, primarily consist of trips from Nebraska to Florida and trips from Nebraska to California. In both cases, our preference is to depart with full fuel, (at or near maximum gross takeoff weight), in order to avoid the expense and inconvenience of enroute technical stops for fuel.

On average, we conduct five trips per month. Unfortunately, we are frequently restricted by the length of the runway when dry and we are severely restricted by the length of the runway when wet or otherwise contaminated. I have attached four documents copied from the software that I use to determine runway requirements that illustrate the operational limitations imposed on this particular aircraft when utilizing the Blair Airport under both dry and wet conditions.

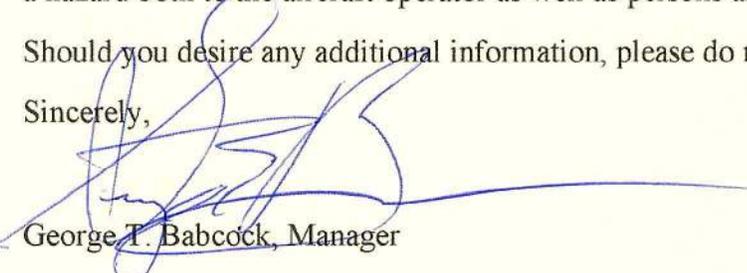
Exhibits 1 and 2 show that at 25 degrees C with a dry runway the maximum allowable takeoff weight is restricted to 13,633 even though the aircraft is certified for a maximum takeoff weight of 14,500.

Exhibits 3 and 4 show that at 25 degrees C with a wet runway the maximum allowable takeoff weight is restricted to 11,063 even though the aircraft is certified for a maximum takeoff weight of 14,500.

Obviously, the current runway length in relation to the type of aircraft being operated at this time severely curtails the utility of the operations. In addition, to the extent that an operator disregards the operating limitations imposed by the length of the runway, such operations obviously present a hazard both to the aircraft operator as well as persons and property on the ground.

Should you desire any additional information, please do not hesitate to contact me.

Sincerely,



George T. Babcock, Manager

N1	97.3 %
Max Weight Climb	14500 Lbs
T/O Distance	5205 feet
Max Wgt Field	13633 lbs
V1	111 kts
Vr	113 kts
V2	117 kts
Venr	155 kts

**EXHIBIT #**   1  

*Dry Runway 25°C*



OAT / Wgt



TODA



Climb



WAT

14500 Lbs



14200 Lbs



13900 Lbs



13600 Lbs



13300 Lbs



13000 Lbs



12700 Lbs



12400 Lbs



12100 Lbs



11800 Lbs



11500 Lbs



11200 Lbs



10900 Lbs



10600 Lbs



10300 Lbs



10000 Lbs



9700 Lbs



EXHIBIT # 2

9400 Lbs



9100 Lbs



8800 Lbs



8500 Lbs



N1	97.3 %
Max Weight Climb	14500 Lbs
T/O Distance	6133 feet
Max Wgt Field	11063 lbs
V1	106 kts
Vr	107 kts
V2	114 kts
Venr	151 kts

**EXHIBIT #** 3

	OAT / Wgt		TODA		Climb		WAT
44C / 111F		—		—		●	
42C / 107F		—		—		●	
40C / 104F		—		—		●	
38C / 100F		—		—		●	
36C / 96F		—		—		●	
34C / 93F		●		—		●	
32C / 89F		●		—		●	
30C / 86F		●		—		●	
28C / 82F		●		—		●	
26C / 78F		●		—		●	
24C / 75F		●		—		●	
22C / 71F		●		—		●	
20C / 68F		●		—		●	
18C / 64F		●		—		●	
16C / 60F		●		—		●	
14C / 57F		●		—		●	
12C / 53F		●		—		●	
10C / 50F		●		—		●	
8C / 46F		●		—		●	
6C / 42F		●		—		●	
4C / 39F		●		—		●	
2C / 35F		●		—		●	

EXHIBIT # 4

To: BTA Airport Board

My name is CS Johnson and I am a professional pilot flying out of BTA. I fly a Citation jet and a Cessna 441 on a regular basis, and have been doing so for the last three years.

There are two issues that I believe should be addressed to advance the future of BTA.

The first issue is, I would like to see the runway lengthened. During the winter months, required landing and takeoff distances increase greatly due to diminished braking capabilities. This can often require diverting to OMA, causing the obvious delays and increased expense to our passengers. The second issue, is the fact that we need a dedicated remote receiver at BTA to insure the ability to obtain a clearance from OMA approach control. Using the current capability, I can converse with approach control less than half the time. Using cell phone is a stopgap measure that BTA traffic has outgrown.

I believe that the airport has a great growth potential and these are changes that I believe will foster such growth.

CS Johnson 402-209-3473



PO BOX 34848  
Omaha, NE 68134

Blair Airport Authority  
218 South 16<sup>th</sup> St.  
Blair, NE 68008  
Attention: Mr. Geary Combs, Chairman

11 March 2021

Mr. Combs and Board,

Thank you for the opportunity to express my opinion regarding the Blair Airport.

As you know I have brought several of our clients to KBTA both to build hangars and to “home base” their aircraft in existing Authority and FBO provided structures. I have also tried to attract others to move their aircraft to Blair. The number one reason for others to not relocate has been the length of the runway.

On most days, the length is not an issue, however weather and contaminated conditions make the runway length a restrictive issue. In the past six months two of my potential customers have declined to move to Blair until the runway is extended. I know this is not an anomaly. However, as the availability of local alternative basing becomes more and more restrictive it is imperative this issue be resolved. And also as you are aware, someone who built a hangar has already left based on these conditions.

I am extremely optimistic that with your leadership we can continue to grow KBTA to be the airport it can be, with all the great service and alternatives it offers to the Omaha area.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Bob Krist", is written over a large, faint, semi-transparent watermark of the Dyna-Tech Aviation Services logo.

Robert J. “Bob” Krist  
Vice President, Operations and USACE Contract Manager  
Dyna-Tech Aviation Services, Inc.,



[bob.krist@dynatechaviation.com](mailto:bob.krist@dynatechaviation.com)

**Heather Olson**

---

**From:** Heather Olson  
**Sent:** Tuesday, August 24, 2021 1:45 PM  
**To:** Bob Krist  
**Cc:** Tim Hauder  
**Subject:** RE: Actions at KBTA

Thank you so much for this detailed information.

I will pass this on to our team in preparation for meeting with the FAA

Heather

---

**From:** Bob Krist <bob.krist@dynatechaviation.com>  
**Sent:** Tuesday, August 24, 2021 1:24 PM  
**To:** Heather Olson <holson@olsson.com>  
**Cc:** Tim Hauder <tim@skywerxaviation.com>  
**Subject:** Actions at KBTA

Heather,

Actions are defined as either a take off or landing in or out of KBTA. All actions for aircraft over 12,500 LBS managed by Dyna-Tech Aviation month by month summary follows:

August-September 2020, N72ZW, CJ3+, Total 30 Actions at KBTA (CJ3+ was sold in September 2020)

October 2020-August 2021, N1505P, Phenom 300, Total 102 Actions at KBTA (Phenom was purchased in October 2020)  
 Projected Actions at current known schedule will exceed 140 for a year.

March-August 2021, N55CE, Sweringen Metro 23, Total 120 Actions at KBTA. This aircraft repositioned to KBTA in March and averaged 20 Actions per month. We project the next 6 months will exceed 24 actions each month.  
 Current projection for September alone, based on our known schedule will be 28 actions.

Robert J. "Bob" Krist  
 Vice President of Operations  
 402.740.8338  
[bob.krist@dynatechaviation.com](mailto:bob.krist@dynatechaviation.com)





BASED AIRCRAFT - 3C

PO BOX 34848  
Omaha, NE 68134

To the Blair Airport Authority:

My name is Paul Jelinek, and I fly several aircraft that we have based at BTA. These are a Cessna 441 Conquest, a Phenom 300, a Swearingen Metro 23, and a Cessna Caravan.

I would like to comment on a couple of concerns that are often a consideration on my flights. The first is the length of the runway. If the runway is wet or contaminated with snow and ice in the winter, there are times that I must consider a divert to Eppley. In the summer, on a hot day and little to no wind, I would be limited on the fuel for departure, necessitating an early fuel stop. I would certainly be in favor of the runway being lengthened. I am aware of other operators that would like to use BTA with larger aircraft but are unable to. This has an impact on the bottom line with fuel sales, overnight hangar revenue, etc.

The other item that is often an issue is the inability to pick up an instrument clearance while on the ground using the radios, requiring a phone call to OMA approach. They would like us to use a remote frequency which is assigned to the CBF airport, but unless I happen to be at the right spot on the airport, I cannot contact them. It would simplify the process if BTA could have their own clearance frequency.

I enjoy the accessibility of the BTA airport, and the group at SkyWerx Aviation has always been more than responsive to our needs. Hopefully with the growth that is happening at the BTA airport, these issues could be resolved.

Sincerely,

Paul Jelinek  
Chief Pilot  
Dyna-Tech Aviation Services,  
402-960-8901  
Jelinek90@gmail.com



17750 Burt Street  
Omaha, NE 68118  
402-572-8080  
800-572-8000 TOLL FREE  
402-572-6876 FAX

March 15, 2021

Blair Municipal Airport Authority  
218 S 16th St, Blair, NE 68008

To Whom It May Concern:

It is my understanding that a longer runway for the airport is under consideration. I would like to emphatically encourage the project go forward.

I currently have a 2006 Cessna XLS that is on charter with Silverhawk Aviation. There are many times that the pilots are hesitant to land in Blair due the runway length if visibility is low or weather is bad. We have had multiple occasions when we had to land in Omaha because of weather. This was true with our Cessna Citation II as well.

In addition to the landing issues with weather, there is also an issue with longer trips. We can't put enough fuel in to go to Florida, for example. We recently had to take off from Omaha for this reason.

I have knowledge of several people that would move their planes to Blair if the runway was 5,500 feet.

Sincerely,



Gregg Young

Revised July 7, 2021

Blair Airport Authority  
218 S 16<sup>th</sup> Street  
Blair, NE 68008

Blair Airport Authority:

I am writing this letter in support of extending the runway at the Blair Airport. I am a pilot of 21 years and have been hangered at the Blair Airport for the past 8 years with a turboprop airplane. I fly 150-200 hours per year, primarily for business travel.

Blair has been a great choice for me with high levels of service and convenience. As my business has grown, I have been seeking to move to a jet to service clients. The runway length at Blair is prohibitive due to contaminated runway restrictions. My business travels still allow the turboprop to serve my needs for many of my missions, so I have kept the plane and bought a fractional airplane from Silverhawk Aviation for longer trips. The same contaminated runway issues create issues for them to land and depart from Blair. I am forced to fly out of TAC Air at Eppley when there is potential for rain or snow.

An extension of the runway will drive more traffic to Blair, creating higher fuel sales and greater synergies for regional aviation. Without this, the chance for continued growth from the market sector that purchases services and high quantities of fuel is extremely limited.

I encourage you to respond favorably and extend the runway at the Blair Airport.

**Additional Information:**

**Aircraft stationed at BTA: TBM 900**

**Aircraft stationed at other locations: Citation Ultra**

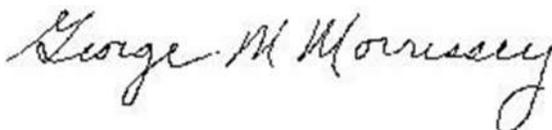
**Typical operations: 150 landings/departures per year at BTA average**

**Operations lost due to runway length limitations: 15 per year average due to contaminated runway limitations and accelerate-stop limitations. Need a minimum of 5000'.**

**Common trip destinations: Midwest region for TBM. Arizona and Florida for Citation Ultra.**

**Requirements for take off and landing lengths – minimum 5000'.**

Sincerely,



George Morrissey

Mr. Chairman:

Re: Support for Blair Airport Upgrades

My name is Matt Vining and I am currently a customer of SkywerX Aviation via hangar lease for my Hawker 850XP (N751MT). My wife and I reside in Bennington, Nebraska and Blair represents the most convenient choice to operate my plane for personal, charter, and business use.

Locating the plane at Blair in its current form is an imperfect situation. WheelsUp, the aircraft management company I utilize has imposed operating constraints that do not allow me to land at night or attempt take-offs when the runway is not dry. WheelsUp will also not allow me to originate a charter flight out of Blair. For those reasons, and even though I lease a hangar at Blair, I am forced to keep the aircraft at Eppley Field so that I may operate with the greatest flexibility and maximize the value of the aircraft.

To the extent that were able to originate without the current constraints at Blair, that would translate into 10-20 trips per month, plus taking approximately 1,200 gallons of fuel per origination. Neither of which the airport benefits from currently. My company, Navigator Midstream recently launched a new venture named Navigator CO2 Ventures, LLC that will have a long-term office presence in the Bennington, NE area. It is our intention to shuttle employees to and from Dallas Love Field, in Dallas, TX (the company's current headquarters) weekly, as well as to distribute employees regionally across the project's footprint. To facilitate this focused business use, I am currently looking at options to purchase a second aircraft, in the super-mid class that will be hangered with my existing Hawker.

As I am making long term investments, the absence of a long-term solution for Blair's operating constraints forces me to shift my business to a less convenient, but more accessible option. Competing FBOs at Eppley are currently out of hangar space, but seeing the influx of demand, are moving forward with construction to meet the market.

Blair's opportunity cost of not expanding its capability is substantial, because having to drive a little farther and a pay more for a hangar is worth being able to utilize a multi-million dollar aircraft when necessary and without issue.

To the extent that Blair proceeds with its planned upgrades, it is my family and business's intention to make Blair our long-term home base and participate in the growth of the region and airfield. We fully support the expansion of the airport.

Sincerely,



Matt Vining

Aircraft Owner



11606 Nicholas Street  
 Omaha, NE 68154  
 (402) 493-2020  
 (800) 766-8705  
 Fax (402) 493-8987  
 Billing/Insurance  
 Fax (402) 493-8341  
 www.omahaeye.com

**OPHTHALMOLOGY STAFF**

Sao J. Liu, M.D., P.C.  
*Medical Director*

Sao C. Liu, M.D., P.C.  
*Consultative Ophthalmology*

William J. Thomas, M.D., P.C.  
*Retina Specialist*

Mark R. Young, M.D., P.C.  
*Consultative Ophthalmology*

John T. Halgren, M.D., P.C.  
*Consultative Ophthalmology*

Mary C. Haschke, M.D., P.C.  
*Consultative Ophthalmology*

**OPTOMETRY STAFF**

Christopher T. Bergman, O.D.  
*Consultative Optometry*

JoAnna Liu-Picchietti, O.D.  
*Consultative Optometry*

Andria N. Louis, O.D.  
*Consultative Optometry*

**MANAGERIAL STAFF**

Kelsea Bingman  
*Clinic Administrator*

Stacy Robbins  
*Technician Manager*

Michelle Katawara  
*Retina Manager*

Kristy Osborn  
*Financial Manager*

Leah Rosengren  
*Human Resource Manager*  
*Patient Accounts Manager*

Kellie Johnson, R.N., B.S.N.  
*Surgery Manager*

Susan Messersmith  
*Patient Services Manager*

Michael Wong  
*Refractive Manager*

Chelsey Evans  
*Marketing Manager*

March 3, 2021

RE: The Blair Airport Board

Dear Gentlemen,

I have owned a plane for six years now. The first 3 years I was able to hangar and fly in and out of the Blair airport. It was a great set up with a very convenient commute to my home in west Omaha. The Skywerx Aviation FBO provided great support with nice hangar space, competitive fuel prices, very supportive and friendly personnel. In 2018 I upgraded to a newer Jet and it needed a longer runway, so I had to relocate to the Omaha Eppley Airport and hangar at Signature. I miss the Blair airport and certainly would come back gladly if you were able to extend the runway.

I encourage you all to do so and to think BIG and long term as a much longer runway of say 7000 feet will put the city of Blair on the map and make a definitive statement that Blair is open for business and it will drive all kinds of investments in Blair beyond your imagination.

I applaud you all for considering the expansion and urge you all to cast your doubts aside and commit BIG and put this project into action.

Best Regards,

Sao J. Liu MD  
 President, Omaha Eye & Laser Institute INC  
 Member, David Turner International Aviation LLC

Attn: Geary Combs, Chairman

Blair Airport Authority  
218 S. 16<sup>th</sup> St.  
Blair, NE 68008

Dear Gary:

I provide aircraft management service for several different operators utilizing different types of aircraft. I currently manage two Pilatus PC12s, with another one in the works, and a Citation Encore. Between these three aircraft, I average approximately 600 operations from the Omaha Metro Area per year or 50 operations per month, equally divided between the three aircraft. Although our preference is to operate exclusively from the Blair Airport, because we typically operate to the East Coast in the Citation Encore, we are generally restricted to utilizing Omaha Eppley for those trips, (approximately five per month), because we cannot take off at full maximum gross weight and meet required accelerate stop limitations applicable to the aircraft due to the length of the Blair runway. Our only other alternative is cost prohibitive and requires us to incur the penalty of making an otherwise unnecessary fuel stop.

I am also involved with a Cessna Citation CJ3+ that is scheduled to arrive at the Blair Airport at the end of August, 2021. Based upon the utilization of the aircraft the CJ3+ is replacing, I anticipate that it will conduct a minimum of 5 operations from the Omaha metro area per month. The CJ3+ is similarly limited by runway length when operated at gross weight.

In addition, an Omaha-based corporation for whom I currently manage aircraft has tasked me with acquiring a long-range jet to supplement its current operations. We anticipate that acquisition will occur during the fall of 2021, but it must occur no later than the end of calendar year 2021. Based upon projections, we anticipate that the aircraft will conduct a minimum of fifteen operations from the Omaha area per month. Most of the operations will be to both the east and west coasts but will also include international destinations. We have narrowed the selection of proposed aircraft to either a Dassault Falcon 9EX/LS (balanced field length at MGTOW at sea level on a standard day equals 5300 feet) or a Dassault Falcon 7X (balanced field length at MGTOW at sea level on a standard equals 5710 feet). My client's hope and ultimate intent is to base the newly acquired aircraft at Blair Airport. Given the current runway, based upon my review of the performance specifications for these aircraft, none of these aircraft are capable of conducting long-range operations from the Blair Airport given its current length.

The expansion of the Blair runway is critical to our ability to fully utilize the aircraft currently under our management and those aircraft that we are in the process of acquiring.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Shane Siefken, Manager

Siefken Aircraft Management LLC



2785 STATE HIGHWAY 133, SUITE H | BLAIR, NE 68008

SKYWERXAVIATION.COM

June 15, 2021

Mr. Geary Combs  
 Airport Board Chairman  
 Blair Municipal Airport  
 216 So. 16<sup>th</sup> St.  
 Blair, NE 68008

Dear Mr. Combs,

My name is Tim Hauder. I am the founder and owner of SkyWerx Aviation. Ten years ago BTA had 40 old T hangars, a new 10 place T hangar, a new four plex corporate hangar, a new self-serve fuel farm, and lots of new concrete; but no FBO.

I approached the BTA Airport Board in hopes of securing a place to build a new hangar with intentions of housing my King Air and starting a Part 135 Charter business. After a little negotiation we were instead building an FBO and what became SkyWerx.

Next year we will celebrate our tenth anniversary. We have seen the airport grow its annual fuel sales from 20,000 gallons to over 200,000 gallons and we will complete the 9<sup>th</sup> Corporate hangar this summer. These hangars mostly house corporate jets and turbo props. The growth has been amazing to all involved.

But what is most frustrating is to see a based customer relocate to Eppley because of our runway length. There has been a Falcon 2000, a Premier and a Hawker 850 all leave. The Falcon owner had even built his own hangar. SkyWerx now owns it. While I wish we had kept a log, I can attest to thousands of gallons of lost fuel sales, costing not only me, but in addition lost revenue to the airport through our flowage fees. All due to our inadequate runway length. We have also lost the opportunity to attract many new based customers, transient aircraft, local business aircraft (Cargill), and charter aircraft because of our 4200-foot runway.

It might seem that I have many selfish reasons to see the runway extended, but I am also a pilot and jet owner (Citation II SP N277JM). I fly my family off of this runway. Approximately 20 times a year we depart with less fuel than I would like or I adjust my departure time to accommodate the temperature or runway conditions for safe operations.

Remember; my BTA hangar started as a personal dream that grew into SkyWerx. That original cooperate hangar constructed 10 years ago, has grown into an FBO housing and servicing over 20 jet and turbine aircraft.

**WE BUILT IT! THEY CAME!**  
 It's time to extend the runway!

Sincerely,

Tim Hauder  
 President  
 SkyWerx Aviation

July 17, 2021

Blair Municipal Airport Authority  
218 S16th St, Blair, NE 68008

To Whom It May Concern,

I am writing to encourage the airport authority and appropriate city officials to consider increasing the runway length of the Blair Municipal Airport.

I represent Viking Industrial Painting here in Omaha – we own two aircraft. A 2016 TBM930 hangered at Blair, and a 1995 Citation 560 hangered at Lincoln. I fly the TBM about three out of every 5 days at Blair and our Citation about 10 times a month out of Lincoln. Any time we get weather that restricts visibility or much rain at all, I am forced to relocate to Omaha for the larger runway use.

If the runway length at Blair Municipal Airport were increased to 5,500' I would not have to relocate the TBM almost ever and further, we could hanger our Citation here at Blair. Our common trip destinations range from Kansas City, Salt Lake City, Tampa, etc. The extra runway at Blair would allow about a dozen more days each month that we could operate both our aircraft here.

Sincerely,

Ryan Lutzkanin

Chief Pilot

C (540)-656-0952

[ryan@viptanks.com](mailto:ryan@viptanks.com)



To whom it may concern,

The co-owners I represent have had a Phenom 300 based at the Blair Airport since September 25<sup>th</sup> 2020. My owners have expressed that the facilities are well maintained and comfortable, but the parking lot needs more stalls. The runway is however another issue. The runway has been maintained very well during any snow events we had this winter, but due to the length of 4200 ft our operations at Blair during snow or rain events can sometimes prohibit take-offs, but has a major impact on landings.

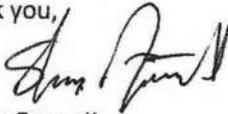
During a rain event, the landing distance numbers will require me to divert into Eppley Airfield. The current length of 4200 ft is a safety and operational issue for my owners during inclement weather events. The necessity to divert will add cost to my owners in flight time and passenger transportation back to Blair. I have been asked if there are plans, by my owners, if Blair intends to lengthen the runway? I have talked with Tim and one of the board members and they indicate that a plan could be in the works. I have relayed this information to my owners.

In the planning proposal the runway length of 5500 ft would be an acceptable minimum for our operations. Anything less than mentioned above would still require, on occasion, for a diversion into Eppley Airfield during rain and snow events.

If my owners would purchase a larger aircraft, in the future, the current runway of 4200 ft would prohibit that upgrade in equipment. With an increase to 5500 ft my owners would have more flexibility in equipment choices. Without an increase in runway length, my owners would have to relocate to Eppley Airfield.

If you have any questions please feel free to contact me.

Thank you,



Shawn Farwell

702-960-2992

**Heather Olson**

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**From:** Heather Olson  
**Sent:** Tuesday, August 24, 2021 2:09 PM  
**To:** Shawn Farwell  
**Cc:** Tim Hauder  
**Subject:** RE: FGII-N272NR Landings at Blair, NE

Perfect.

Thank you for the clarification

Heather

---

**From:** Shawn Farwell <omahafgfarwell@gmail.com>  
**Sent:** Tuesday, August 24, 2021 2:08 PM  
**To:** Heather Olson <holson@olsson.com>  
**Subject:** Re: FGII-N272NR Landings at Blair, NE

Hello,

The 57 is for landings only. So it would be 57 takeoff also.  
Eppley would be 4 takeoffs and 4 landings.

Thank you  
Shawn

On Tue, Aug 24, 2021 at 2:02 PM Heather Olson <[holson@olsson.com](mailto:holson@olsson.com)> wrote:

Thanks Shawn – appreciate the information.

Just wanted to clarify – does the 57 times identified below only account for the landing of the aircraft or does the 57 include takes offs as well?

I want to make sure that we are accounting for all operations. The FAA counts a takeoff and landing separate so I just want to make sure that the Airport is getting credit for all operations occurring at the airport.

Thanks in advance for clarifying.

Heather

**From:** Shawn Farwell <[omahafgfarwell@gmail.com](mailto:omahafgfarwell@gmail.com)>  
**Sent:** Tuesday, August 24, 2021 1:37 PM  
**To:** Heather Olson <[holson@olsson.com](mailto:holson@olsson.com)>  
**Subject:** FGII-N272NR Landings at Blair, NE

Hello Heather,

I represent FGII-N272NR. We fly a Phenom 300.

Skywerx at Blair has asked me to send you our landing and diversion to Omaha Eppley airport in the last year.

We have landed in Blair a total of 57 times in 2021. In that time we have had 4 diversions to Eppley airfield. The diversions were due to the runway being too short for the Phenom 300 operational limitations.

Thank you,

Shawn Farwell

702-960-2992



Virus-free. [www.avast.com](http://www.avast.com)



## GOTTSCH ENTERPRISES

March 15, 2021

Blair Municipal Airport Authority  
218 S 16th Street  
Blair, NE 68008

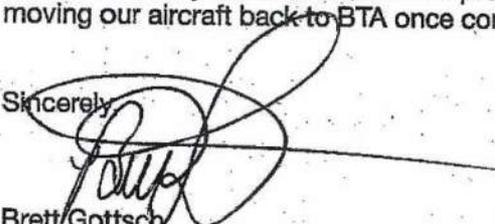
To Whom it May Concern:

In 2012 we bought a Citation Encore and became the first Jet customer to base with SkyWerx Aviation. Two years later we upgraded to a Citation Sovereign and continued to operate it from BTA. This aircraft acquisition lead to a second hangar being built by SkyWerx to accommodate the size of the Sovereign.

In 2018 Gottsch Brothers decided to build our own hangar at BTA and we eventually traded up to a Falcon 2000. Unfortunately; due to the challenges of operating this aircraft off of BTA's short runway we decided to move the aircraft to Omaha. This lead to the sale of our hangar to SkyWerx.

I am very much in favor of the proposed runway extension at BTA and would consider moving our aircraft back to BTA once construction is complete.

Sincerely,

  
Brett Gottsch

20507 Nicholas Circle, Suite 100  
Elkhorn, Nebraska 68022

Tel: 402.289.4421 • [gfc@gottsch.net](mailto:gfc@gottsch.net) • Fax: 402.289.4202

Geary Combs  
Chairman, Blair Airport Authority  
218 S 16<sup>th</sup> st  
Blair Ne. 68008

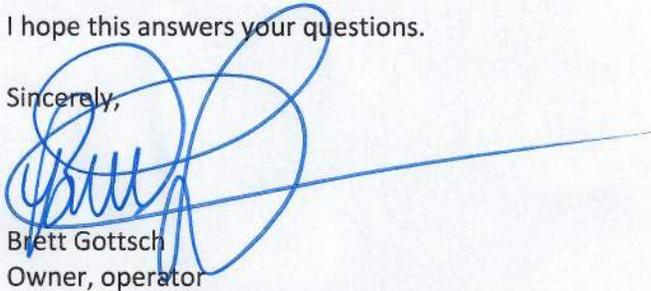
Mr. Combs,

This letter is in response to your questions from your June 30<sup>th</sup> letter referring to run way extension at the Blair airport.

- 1) We flew 200 to 220 hours a year with an avg. leg being 1 hour
- 2) We were forced to leave Blair in August 2019 because the runway length was too short to operate our plane under certain weather conditions. Once we moved to Eppley Airfield, we have been able to operate as a Part 135 and now operate 350 hours annually with avg flight time of 1 hour
- 3) N/A
- 4) 5,000 foot minimum.

I hope this answers your questions.

Sincerely,



Brett Gottsch  
Owner, operator  
Gottsch Brothers of Elkhorn LLC  
20507 Nicholas Circle  
Suite 100  
Elkhorn Ne. 68022

OMAHA NE 680

15 JUL 2021 PM 4:11

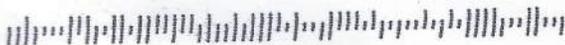


RECEIVED

JUL 20 2021

CITY OF BLAIR  
NEBRASKA

Airport Authority  
S. 16th St.  
NE 68008





Timothy W. Wollmuth  
Chief Pilot  
Cargill, Incorporated  
6905 34th Avenue South, Minneapolis, MN 55450  
Phone: 612-970-7570

April 4, 2021

To whom it may concern:

I am writing to urge the State of Nebraska, Washington County, the city of Blair, the Federal Aviation Administration, the airport authorities, and private enterprises collocated at Blair Municipal (KBTA) to support the lengthening of the runway to at least 5500 feet. In the Blair community, Cargill, Incorporated has invested along with its partners more than \$1.2 billion in a facility that spans more than 600 acres and employs more than 1200 people, while impacting the economy by roughly a half a billion dollars per year. The Cargill facilities at Blair, Nebraska, integrated into a Cargill business portfolio spanning 70 countries and 160,000 employees, are made possible by community support of a vibrant workforce, solid infrastructure and a local community committed to making Blair a desirable location to continue to conduct and grow business.

Cargill operates four aircraft connecting its many disparate facilities together under one umbrella and one leadership team. These aircraft are critical business tools in safely and efficiently transporting shareholders, board members, executives, managers, engineers, other employees and guests to its many facilities located around the world. We simply cannot be successful without high quality and safe infrastructure wherever we operate.

The aircraft we currently operate are challenged by the current runway length of 4200 feet. In the past we have planned trips to KBTA, only to have the trip and the passengers frustrated by high density altitudes on summer days or contaminated runways, both of which negatively impact aircraft performance and eliminate what little safety margin we currently enjoy under perfect conditions. As a result of this experience, in the past ten years we have only had 3 Blair Municipal Airport operations, of the 247 planned visits (494 departures/landings) to Blair Municipal Airport. Our passengers run very tight schedules and this 40 minute extra drive time between Omaha Eppley Field to our Blair facilities often results in overnight stays and/or early or late departures and arrivals, ultimately affecting employee efficiency and customer/guest experience at Blair.

While runway length is the greatest limiting factor and we primarily would utilize our Challenger 300 aircraft for our operations, weight bearing capacity or Pavement

Classification Number (PCN) do not currently support our Gulfstream aircraft. If an effort is undertaken to improve the airport capabilities, please also consider including engineering analysis, to validate if modest weight bearing increases would prove to be acceptable so that at reduced load limits our Gulfstream aircraft could operate in and out of Blair Municipal Airport.

In support of my proposition, I have included operating limits for our Gulfstream 650, Gulfstream V and Challenger 300 aircraft. As you can see, our current operating guidelines only allow for Challenger 300 operations, and even manufacturer performance data only support limited operations.

Temp 31C/88F

Aircraft	Cargill Policy		Runway Length	Runway Length	Ramp Weight (30 minute flight with IFR reserves)
	Minimum Runway Length	Width	for 30 minute flight with IFR reserves (dry runway)	for 30 minute flight with IFR reserves (wet runway)	
Challenger 300	4000	75	4070	5090	30,500
Gulfstream V	5000	100	3503	5050	60,000
Gulfstream 650	5000	100	3420	4930	65,000

I realize this is a large request and there are always limited resources and competing interests, yet I strongly encourage you to seriously consider lengthening and strengthening the runway at Blair. Thank you for your time and discernment.

Sincerely,

  
Timothy W. Wollmuth  
Chief Pilot



Heaton Flying Service, LLC  
7175 Co Rd P32  
Fort Calhoun, NE 68023

July 28, 2021

To Whom it may concern;

My name is Kent Heaton, Chief pilot for Pinnacle Bancorp since January of 2021. Currently we are flying a Citation 560XLS+ (medium sized business jet). We are based out of Omaha Eppley Airfield. Our intent is to base at the Blair Municipal Airport. The location of the Blair airport is a much easier commute for our passengers, much easier to fly in and out of Blair because Omaha's air traffic control gets congested and causes delays in the air and on the ground which costs extra fuel and precious time.

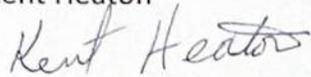
I was based at the Blair airport from 2015 to 2021 flying several different corporate airplanes. Mostly Citation 550 series and the TBM 900. Unfortunately, because of the inadequate runway length we had to restrict the amount of fuel required for 21 departures/arrivals in 5 yrs. because our take-off weight would have put us over the balanced field length of 4200ft that Blair has. This caused us to make a fuel stop which costs precious time and expense to the company. The owners of these airplanes are counting on the shortest possible travel time and fuel stops are not user friendly. Also, we had to divert to Omaha several times because Blair had a contaminated runway, (rain, snow, etc) and when you figure the penalty for the contaminated runway, Blair was just too short.

We will move our Citation 560XLS+ to Blair if it has adequate runway length. Not to mention the outstanding service that Skywerx offers compared to the Omaha FBO's. Our typical destinations are Fort Worth, TX., Fort Collins, CO, Palm beach, FL, Aspen, CO, Scottsdale, AZ, Chicago, IL, New Braunfels, TX, Prescott, AZ.

We will complete 10 to 15 departures and arrivals per month.  
Please consider extending the runway length for the Blair airport. The benefits to  
the community would also be greatly enhanced.

Thank you for your time.

Very Sincerely,  
Kent Heaton

A handwritten signature in cursive script that reads "Kent Heaton".

Owner, Heaton Flying Service, LLC  
Chief Pilot, Pinnacle Bank Corp.  
7175 County Road P32  
Fort Calhoun, NE 68023



August 10, 2021

To Whom It May Concern, Blair Airport Authority.

The intent of this letter is to express our company's support of the Blair Airport Improvements Plans, specifically additional runway length. Airports are a "360-degree Interstate" for access to a community whether for commerce or emergencies and the improvements in this plan will provide additional ease of access to your community.

Our company, Southwest Aviation, Inc (since 1962) owns, operates, and maintains a FAA Certified Air Carrier Charter Company based at KMML Marshall, Minnesota. We operate three mid-sized jets, three light jets, and six King Air Turbo Props in the upper mid-west. Our jets complete approximately 1,000 landings per year and our turbo props about 2,500 landings per year at airports throughout North America and the Caribbean.

We have clients that frequent the Omaha area, currently we can only utilize Blair with our Turbo-Prop King Airs (4-5 trips per month). Airports with less than 5,010 feet send a red flag for dispatching jet operations. Only our light jets would be considered at your current length of 4,201 feet. Light jet and turbo prop operations would only happen on fair weather days with considerations being inclement weather, high density altitude, and contaminated runways with rain or snow.

For safety, convenience, and easy access to your community for our clients, we request that you consider 5,500-foot main runway length. With demand growing for Jet charters in the area we could utilize KBTA additional 4-5 jet trips per month, currently having to utilize KOMA.

Please take our request under considerations for future planning and needs of KBTA. If would like to talk further regarding our operations, you can reach me at 507-532-3164.

Sincerely,

***Pete Johnson***

***President***

***SWA Charter First***

***Executive Air Charter / Aircraft Management***

***Main 800.862.6807 Cell 507.829.9656***

***[petej@charter-first.com](mailto:petej@charter-first.com) [www.charter-first.com](http://www.charter-first.com)***

**IS-BAO ARGUS Platinum Operator**

Dear Members of the Blair Airport Authority,

I am writing this letter to demonstrate my support for an extension of the runway at the Blair Municipal Airport. Before I address that subject let me give you a brief summary of my personal experience and connection to the Blair Airport. I was raised north of Elkhorn Nebraska and my first job outside of my Fathers horse stable was at Washco Feed and Supply in the city of Blair. Over the 5 years that I worked there I became quite familiar with the city and many of the locals. While pursuing my Aviation degree at the University of Nebraska at Omaha in 2014 I was hired at SkyWerx Aviation as one of their first line service personnel. During this time I watched the management of SkyWerx work towards making the Blair Airport more viable for Jet and Turboprop traffic. In 2016 I left Skywerx to be a flight instructor at the Council Bluffs Airport. After two years of flight instructing I returned to SkyWerx this time as the general manager. I am currently employed as a Citation 500, Citation Excel, and Citation Sovereign first officer at SilverHawk Aviation in Lincoln.

As a result of my experience working in the Omaha Aviation community I've come to realize that the Blair Airport has the potential to be a very busy general aviation airport, acting as a reliever and lower cost alternative to Eppley. The Millard Airport lacks the infrastructure and runway lengths to fulfill this purpose and Council Bluffs is too far away from downtown and west Omaha. Also, the high volume of pilot training conducted at the Council Bluffs Airport discourages Jet customers. That being said the current runway length of 4200 feet at Blair is too short for many Jets, especially when it is contaminated by rain or snow. Even the Cessna Citation series, that was specifically developed with shorter runways in mind, sometimes cannot meet the performance criteria required by part 91 or 135. In order to make the performance numbers work on the relatively short runway these aircraft will often take off with less fuel, which cuts down on fuel sales and revenue for the airport and the FBO. Jet aircraft with longer takeoff and landing distances such as Lear Jets, Challengers, and Gulf Streams will not even attempt to land at Blair because of the short runway lengths.

As the wealth of Omaha continues to move west the Blair Airport will become more and more attractive to individuals who want to base an aircraft closer to where they live and do business. A runway extension will be an important step towards making the Blair Airport attractive to those individuals and companies like SilverHawk who are looking to increase their business in the area. This will strengthen the airport itself and also bring business to the local economy.

I conclude this letter by reaffirming my wholehearted support of a runway extension at the Blair Airport. I believe it to be in the best interest of the local area and all parties involved.

Sincerely,



Tom Arington  
Flight Instructor  
(Former) General Manager-SkyWerx Aviation  
Charter Pilot-SilverHawk Aviation

To Whom it may concern

As a corporate pilot flying private jets off of Blair airport for nearly 7 years, August 2012 to April 2019 I would like to stress the importance of moving forward with expanding the existing runway. Over the time I flew corporate jets off of Blair I flew 3 different types of jets a Citation Encore (light jet), Citation Sovereign (midsize jet), and a Falcon 2000ex (super midsize jet).

Each one of these planes presented its own challenges operating off a relatively short runway like KBTA especially when the runway was wet.

All three of these planes performed amazing well on a dry runway but as soon as the runway becomes wet each had restrictions on how they could be flown off a short runway.

1. The citation encore had a maximum takeoff weight of 16,600 lbs on a dry runway but on a wet runway the Encore is limited to a takeoff weight of 13,400 lbs at a temperature of 80 degrees.
2. The Citation Sovereign and the Falcon 2000ex had similar restrictions on a wet runway.
3. All three airplanes would land with ease on a wet runway at KBTA

Equally if not more important to the operating characteristics and limitations of the airplane is the skill level and confidence in the pilots own ability to operate a jet off of shorter runways. After I left Gottsch brothers the two pilots that where hired after me numerous times moved their airplane to Omaha Eppley because they erred on the side of caution if the weather was forecast to be less then ideal for their departure, which was a big factor I'm sure for Gottsch Brothers to decide to sell their hangar to Skywerx and move their airplane to KOMA. We have two pilots at the company I currently work for that if it were left entirely up to them they would never operate a jet off a runway less then 5000 feet, but because the planes we are flying are capable of meeting FAR part 25 takeoff and landing requirements on runways shorter then 5000 they don't have a choice. Also some larger fractional and charter jet operators won't let all their pilots operate from shorter runways so that could prevent them from landing at airports like KBTA if one of the approved pilots were not available for that flight. Bottom line here is the pilot has the final say in flying the airplane so if they aren't comfortable operating off short runways their going to airports like KOMA and not even giving airports like KBTA a second thought.

So in closing hopefully you can see the importance in extending the existing runway at KBTA, after all the way KBTA has grown over the last ten years it would be a shame to lose future jet operators because of the relatively short runway.

Thank you



Kelly B Harris



8/17/21

To whom it may concern,

This document shall serve as a letter of opinion on the extension of the runway 13/31 for Blair Municipal airport. Blair municipal airport has seen large growth and will continue to see large growth moving forward. The hindrance for this growth will be partly due to runway length. Part 135 charter operators like myself need the extra runway with 60%/80% rules of runways length for performance. During the winter months runway contamination plays a role in our ability to move larger aircraft into and out of the Blair airport. The extension of the runway would open up the opportunity for larger aircraft to fly in, and depart in all-weather conditions. I hope to see larger aircraft into and out of the Blair airport.

Charles Raber

Signed Charles Raber

Date: 8/26/21



March 16<sup>th</sup>, 2021

Blair Airport Authority  
218 S. 16th St.  
Blair, NE 68008

Subject: Runway extension at the Blair Municipal Airport

As Omaha continues to grow westward, Blair Municipal Airport has an opportunity to absorb a large percentage of corporate/private travel. Silverhawk Aviation also sees the value in using Blair as a satellite base, but we are greatly limited because of the runway length. We currently have one aircraft based at Blair and could potentially base other aircraft at Blair with additional runway length. Several of our customers live in West Omaha and have expressed the preference of Blair over Eppley.

As a part 135 operator we are required to adhere to stricter safety requirements with regards to runway performance. For this reason, any runway under 5,000 feet requires special consideration. With the reduction in gross weight we are forced to make fuel stops which greatly inconvenience our clients. For this reason, we typically depart from Eppley. This causes Blair to miss out on the fuel sales.

Our BTA based aircraft, the Citation Excel, was designed to be a great short runway performer. However, the 4,200 ft runway at Blair is extremely limiting. With dry runway conditions, we must start limiting our payload for takeoff anytime the temperature is above 70 degrees. With a wet or contaminated runway, it is almost impossible to use Blair. For comparison, we are almost never limited using runway 17 (5,800 feet) at Lincoln.

Thank you,

Brandon Hill  
Chief Pilot  
Silverhawk Aviation, Inc.































**APPENDIX C**  
**Washington County Roadway**  
**Resolution 2022-20**

**Resolution No. 2022-20**

A RESOLUTION PERTAINING TO THE POSSIBLE RELOCATION AND/OR VACATION OF PARTS OF COUNTY ROADS 35 AND 38 ADJACENT TO THE BLAIR EXECUTIVE AIRPORT.

WHEREAS, the Blair Airport Authority has made the determination that it is in the interest of the Blair Executive Airport to extend the runway from 4200 feet to 5500 feet, and

WHEREAS, the Airport Layout Plan was last updated in 2017 to meet all Federal Aviation Administration requirements for the extension of the runway to 5500 feet for non-precision runway to meet the needs of the aviation industry benefiting Blair, Washington County, and surrounding area; and

WHEREAS, the runway extension will require an updated environmental assessment before any construction can be undertaken, and

WHEREAS, prior to starting the environmental assessment the Airport Authority must establish all limits of acquisition and construction so the environmental assessment can be as inclusive as possible; and

WHEREAS, parts of County Roads 35 and 38 will need to be relocated, and relocated out of the runway protection zone (RPZ) per Federal Aviation Administration regulations; and

WHEREAS, the Blair Airport Authority for the City of Blair, Nebraska has requested that the Washington County Board of Supervisors review and select a preferred relocation route that would best serve the needs of Washington County and the citizens in the area around the airport with as minimal impact possible should the Airport Authority proceed with extension of the runway at some time in the future; and

WHEREAS, the Airport Authority has presented the County with two proposed alignments that minimize the necessary land acquisition and travel impact to the citizens living in the airport area and County Roads committee suggested a possible third alternative that would allow for the vacation of parts of these roads; and

WHEREAS, the Authority has reviewed the proposed alternatives with the Pheasant Circle Homeowners association, owner of the property that would be acquired, and others so that they would have a better understanding of the alternatives for the road relocation.

NOW THEREFORE BE IT RESOLVED BY THE CHAIRMAN OF THE BOARD AND THE BOARD OF COUNTY SUPERVISORS OF WASHINGTON COUNTY, that after reviewing the three alternatives for possible relocation and/or vacation of parts of County Roads 35 and 38 should the Blair Airport Authority move forward with the plan to extend the runway to 5500 feet, said Supervisors prefer alternative "B" as shown on the attached to this resolution as the preferred relocation routing.

FURTHER BE IT RESOLVED, that by the adoption of this resolution it is understood that the Washington County Board of Supervisors does not take a position as to the extension of the Airport runway to 5500 feet and this action is clearly for the purpose of establishing a preferred relocation route should the Airport Authority move forward with any future extension.  
Passed this 9<sup>th</sup> day of August 2022

ATTEST: *Barbara Sullivan*  
WASHINGTON COUNTY CLERK



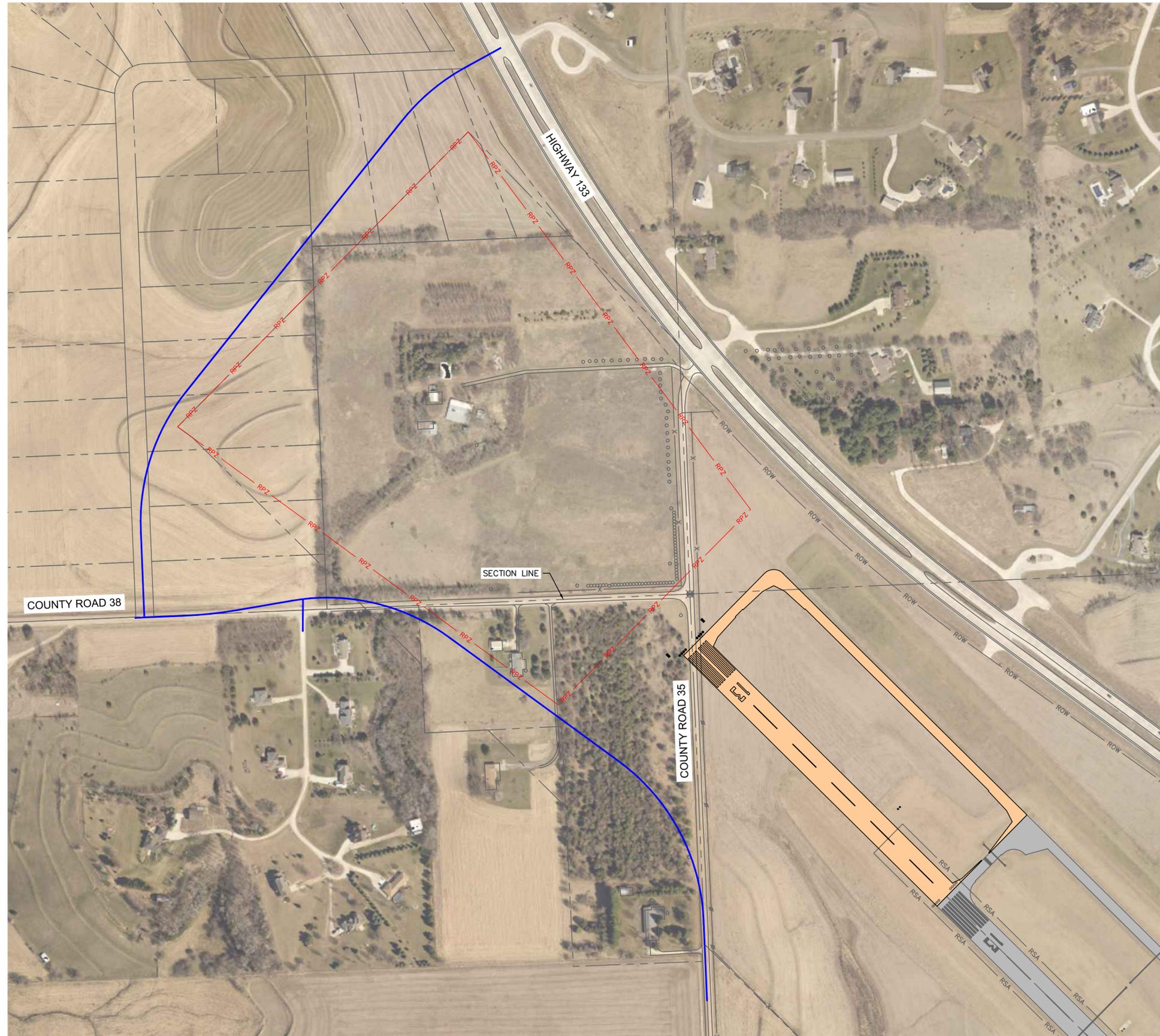
*St. Denis* CHAIRMAN  
BOARD OF SUPERVISORS

# COUNTY ROAD 38 / 35 ALTERNATE B

PRELIMINARY PLAN  
NOT FINAL - SUBJECT TO CHANGE



ALTERNATE B: ADJUSTED ROADWAY LAYOUT TO MINIMIZE LONG CURVES AND SAFER INTERSECTIONS.



**olsson**

2111 South 67th Street, Suite 200  
Omaha, NE 68106  
TEL 402.341.1116  
FAX 402.341.5895  
www.olsson.com

County Road 38 / 35 Relocation  
**BLAIR AIRPORT  
AUTHORITY**

SHEET  
**2**

**APPENDIX D**  
**Agencies, Tribes, Persons Consulted**



February 15, 2023

Betty Gillespie  
Nebraska History  
1500 R Street  
Lincoln, NE 68508-1651

RE: Blair Executive Airport, Environmental Assessment, Washington County, Nebraska

Dear Ms. Gillespie,

On behalf of the Blair Airport Authority, Olsson is in the process of completing an Environmental Assessment for improvements to the Blair Executive Airport, Washington County, Nebraska. Portions of the project may be completed with Federal Aviation Administration (FAA) grant funds. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; and the Council on Environmental Quality (CEQ) NEPA implementation guidelines (40 Code of Federal Regulations [CFR] 1500-1508); the Airport Authority and FAA is requesting input from your agency on potential impacts.

The Blair Airport Authority is proposing improvements to the existing airport facility. We have included maps showing the project location and proposed improvements (Figures 1-2, Exhibit 1, enclosed). The proposed project would include:

- Land acquisition for ultimate Runway 13/31 (approximately 33 acres)
- Extend Runway 13/31 (1,300 feet) – (5,500 feet x 100 feet)
- Extend Runway 13/31 Parallel Taxiway (1,300 feet x 35 feet)
- Construction of Runway Protection Zone (RPZ)
- Relocation of County Road 35/38
- Construction of Runway 13/31 and parallel taxiway safety area (grading to comply with B-II large aircraft)
- Construction of connecting taxiway to Runway 13 end
- Stormwater improvements
- Tree and building structure removal of land within the RPZ and county road relocation

Project Name: Blair Executive Airport

General Project Location: Blair, Washington County, Nebraska

Section, Township, Range: Sections 19, 24, 25 & 30, Township 17 North, Range 11 East

Based on a review of the National Park Service National Register of Historic Places (NRHP) mapping tool, the nearest listed NRHP standing structure is the Long Creek School, located

approximately 3.5 miles north of the Project Site. A Phase II intensive cultural resources investigation was completed for this Project by Augustana University in December 2022. The result from the Phase II investigation was a determination of No Historic Properties Affected for the proposed Project. Additionally, the tribes listed in the Native American Graves Protection and Repatriation Act databases for the area have been notified of the project.

The Airport Authority and FAA requests your input regarding potential concerns your agency may have regarding the proposed project to be in accordance with Section 106. Please provide comment within 30 days of receipt of this letter. If you have any questions, or require additional information, please contact Caleb Pharris, Project Scientist at Olsson, 308.627.3338, [cpharris@olsson.com](mailto:cpharris@olsson.com).

Sincerely,



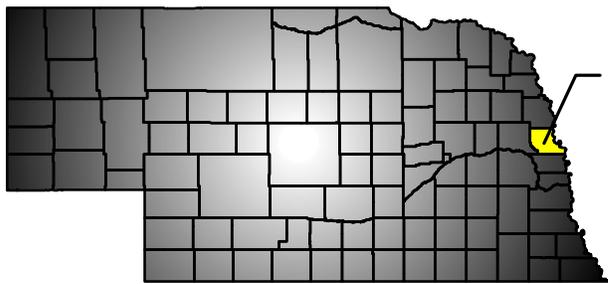
Caleb Pharris  
Project Scientist, Olsson  
308.627.3338  
[cpharris@olsson.com](mailto:cpharris@olsson.com)  
2111 S. 67th Street, Suite 200  
Omaha, NE 68106

Enclosures:

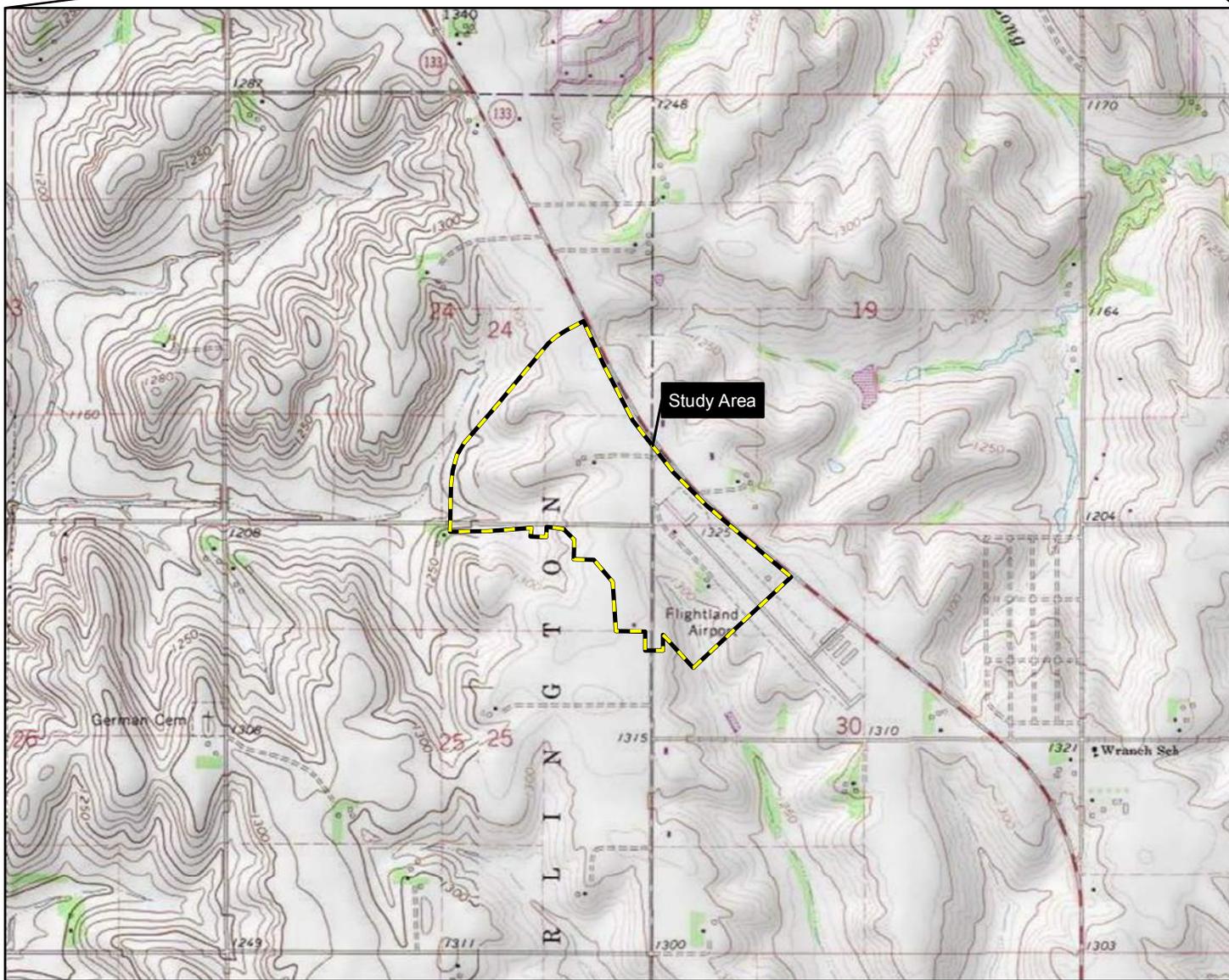
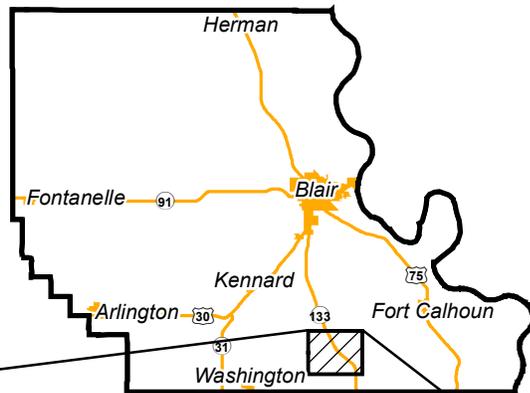
Figure 1 - Project Location Map  
Figure 2 - Project Site Map  
Exhibit 1 - Proposed Projects Map

NEBRASKA

WASHINGTON COUNTY

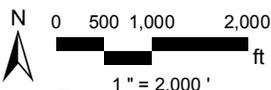


Project Area



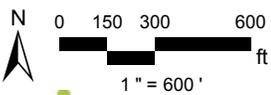
Study Area

 Study Area



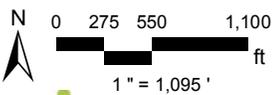
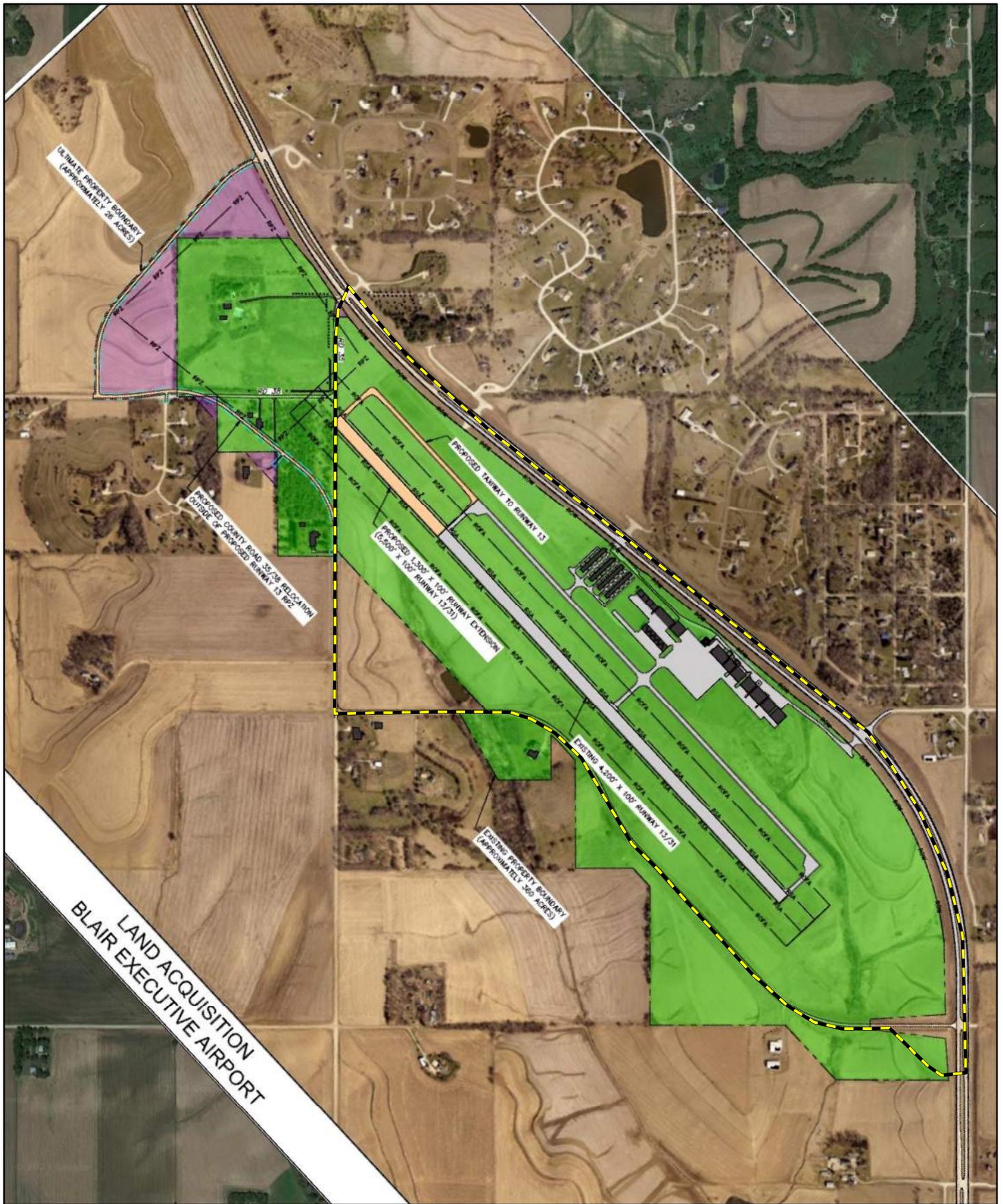
**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923

**Location Map**  
Figure 1



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Site Map**  
Figure 2



 Blair Airport

**Blair Executive Airport  
Environmental Assessment**

Blair, Washington County, Nebraska

Olsson Project # A21-03923

**Site Map**

Figure 2

February 22, 2023

Caleb Pharris  
Project Scientist  
Olsson  
VIA EMAIL

RE: HP# 2302-076-01 2735 NE-133, Blair Executive Airport Improvement Project, Blair, Washington  
County, NE

Dear Caleb Pharris,

Thank you for submitting the project proposal for our review and comment. Our comment on this project and its potential to affect historic properties is required by Section 106 of the National Historic Preservation Act of 1966, as amended, and implementing regulations 36 CFR Part 800.

According to the information you have provided, there will be **no historic properties affected** by this project as planned. Should any changes in this project be made or in the type of funding or assistance provided through federal or state agencies, please notify this office of the changes before further project planning continues.

Please retain this correspondence and your documented finding in order to show compliance with Section 106 of the National Historic Preservation Act, as amended. If you have any questions, please contact me at [betty.gillespie@nebraska.gov](mailto:betty.gillespie@nebraska.gov) or 402-805-7392.

Sincerely,



Betty Gillespie  
Interim Deputy SHPO  
Section 106 Review and Compliance Coordinator

Tribal Coordination – Environmental Assessment  
Blair Municipal Airport, Blair; Washington County, NE

Contact	Delivered (Cert Mail)	Response Returned	Action Requested
Amy Scott, THPO Iowa Tribe of Oklahoma 335588 E 750 Road Perkins, OK 74059	3/15/23	No response as of 4/26/23	
Bobby Komardley Chairman Apache Tribe of Oklahoma PO Box 1330 Anadarko, OK 73005	3/15/23	No response as of 4/26/23	
Lance Foster, THPO Iowa Tribe of Kansas and Nebraska 3345 B Thrasher Rd. White Cloud, KS 66094	3/15/23	3/23/23 email and voicemail from Deputy THPO, Allan Kelly	If human skeletal remains or NAGPRA objects uncovered, stop construction and contact their office
Max Bear, THPO Cheyenne and Arapaho Tribes, Oklahoma 700 Black Kettle Blvd. Concho, OK 73022	3/15/23	No response as of 4/26/23	
Tiauna Carnes, Chairperson Sac & Fox Nation of Missouri in Kansas and Nebraska 305 N. Main St. Reserve, KS 66434	3/15/23	No response as of 4/26/23	
Vern Jefferson, Chairwoman Sac and Fox Tribe of the Mississippi in Iowa 349 Meskwaki Road Tama, IA 52339	3/15/23	No response as of 4/26/23	
Sandra Massey, THPO Sac & Fox Nation, Oklahoma 920883 South Highway 99 Building A Stroud, OK 74079	3/15/23	No response as of 4/26/23	New address: 920963 S. Hwy 99 Stroud, OK 74079
Thomas Parker, THPO Omaha Tribe of Nebraska PO Box 368 Macy, NE 68039	3/17/23	No response as of 4/26/23	

Elsie Whitehorn, THPO  
Otoe-Missouria Tribe of Indians,  
Oklahoma  
8151 Highway 177  
Red Rock, OK 74651-0348

Stacy Laravie, THPO  
Ponca Tribe of Nebraska  
PO Box 288  
Niobrara, NE 68760

**Email Preferred for Section 106  
Consultation Request;  
dhunter@miamination.com**

Ms. Diane Hunter  
Tribal Historic Preservation Officer  
Miami Tribe of Oklahoma  
P.O. Box 1326  
Miami, OK 74355

Mr. Matt Reed  
Tribal Historic Preservation Office  
Pawnee Nation of Oklahoma  
P.O. Box 470  
Pawnee, OK 74058

Mr. Kip Spotted Eagle  
Tribal Historic Preservation Officer  
Yankton Sioux Tribe of South Dakota  
P.O. Box 1153  
Wagner, SD 57380-1153

3/17/23	No response as of 4/26/23	
3/17/23	No response as of 4/26/23	
3/15/23 Emailed	No response as of 4/26/23	
3/17/23	No response as of 4/26/23	
3/17/23	No response as of 4/26/23	

This website is recommended by ACHP: <https://egis.hud.gov/TDAT/>



FAA Central Region  
Airports Division Director  
Jim Johnson  
901 Locust  
Kansas City MO  
816-329-2603 [amy.walter@faa.gov](mailto:amy.walter@faa.gov)

03/22/2023

Re: Section 106 Consultation, Environmental Assessment (EA), Blair Municipal Airport, Blair NE,  
Washington, County.

Request MOU or MOA

Copy of SHPO Report. Archeological Survey

I Concur with (OSA) Office State Archaeologist

Site Visit/Have Concerns May wish to monitor ground disturbance

No interest in the area geographically

No Comment or Objections on the proposed undertaking at this time.

No objections to the project as proposed. Concur with SHPO

If human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction  
Please stop immediately and notify this office.

*Alan Kelley*  
Sincerely,

Alan Kelley,  
Deputy THPO  
3345 Thrasher Rd  
White Cloud KS 66094  
Iowa Tribe of Kansas and Nebraska 785-351-0080 [akelley@iowas.org](mailto:akelley@iowas.org)



December 12, 2022

United States Fish and Wildlife Services  
Nebraska Field Office  
Ecological Services  
9325 South Alda Road  
Wood River, NE 68883

RE: Blair Executive Airport, Environmental Assessment, Washington County, Nebraska

To whom this may concern:

On behalf of the Federal Aviation Administration (FAA), Olsson is in the process of completing an Environmental Assessment for the rehabilitation of Blair Executive Airport, Washington County, Nebraska. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; and the Council on Environmental Quality (CEQ) NEPA implementation guidelines (40 Code of Federal Regulations [CFR] 1500-1508); FAA is requesting input from your agency on potential impacts.

The FAA is proposing improvements to the existing airport facility. We have included maps showing the project location (Figures 1 and 2, Attachment A) The proposed project includes:

- Land acquisition for ultimate Runway 13/31 (approximately 33 acres)
- Extend Runway 13/31 (1,300 feet) – (5,500 feet x 100 feet)
- Extend Runway 13/31 Parallel Taxiway (1,300 feet x 35 feet)
- Construction of Runway Protection Zone (RPZ)
- Relocation of County Road 35/38
- Construction of Runway 13/31 and parallel taxiway safety area (grading to comply with B-II large aircraft)
- Construction of connecting taxiway to Runway 13 end
- Stormwater improvements
- Tree and building structure removal of land within the RPZ and county road relocation

Project Name: Blair Executive Airport

General Project Location: Blair, Washington County, Nebraska

Section, Township, Range: Sections 19, 24, 25 & 30, Township 17 North, Range 11 East

Olsson conducted a review of U.S. Fish and Wildlife Service (USFWS) Threatened, Endangered, Proposed, and Candidate Species that may potentially occur within the project area. Results from the USFWS Information Planning and Consultation (IPaC) Database indicate that the Northern Long-eared Bat (*Myotis septentrionalis*), Piping Plover (*Charadrius melodus*), Pallid Sturgeon

(*Scaphirhynchus albus*), and Monarch Butterfly (*Danaus plexippus*) may potentially occur within the project area (Table 1). We do not believe that the project will significantly impact Federally-Listed Threatened or Endangered Species.

**Table 1. Federally-Listed Threatened and Endangered Species and Designated Critical Habitat Potentially Occurring Within the Project Area.**

Common Name	Scientific Name	Status	Impact Evaluation*
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Threatened	A
Piping Plover	<i>Charadrius melodus</i>	Threatened	A
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	Endangered	A
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	A

**Impact Evaluation\***

A- The project is not located within the range of this species; suitable habitat is not present.

**Migratory Bird Treaty Act**

The project is located in a rural setting surrounded by agricultural fields, hay fields, wooded areas, lakes, and reservoirs that may be frequented by migratory birds. The project will likely require the removal of trees within the project footprint. Tree removal would be conducted outside of the migratory bird nesting season (April 1 to September 31). If tree removal cannot be avoided during the times, surveys would be conducted by a qualified biologist to determine if occupied or active nests are present. If found, construction activities would cease and consultation with the USFWS would be initiated to determine the appropriate course of action. Given these conditions, we believe there will likely be no impacts to migratory birds.

FAA requests your input regarding potential concerns your agency may have regarding the proposed project. Please provide comment within 30 days of receipt of this letter. If you have any questions, or require additional information, please contact Caleb Pharris, Project Scientist at Olsson, 308.627.3338, [cpharris@olsson.com](mailto:cpharris@olsson.com).

Sincerely,

Caleb Pharris  
 Project Scientist, Olsson  
 308.627.3338  
[cpharris@olsson.com](mailto:cpharris@olsson.com)  
 2111 S. 67th Street, Suite 200  
 Omaha, NE 68106

Enclosures:

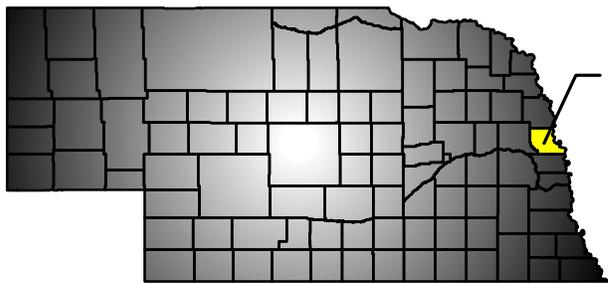
Figure 1 - Project Location Map

Figure 2 - Project Site Map

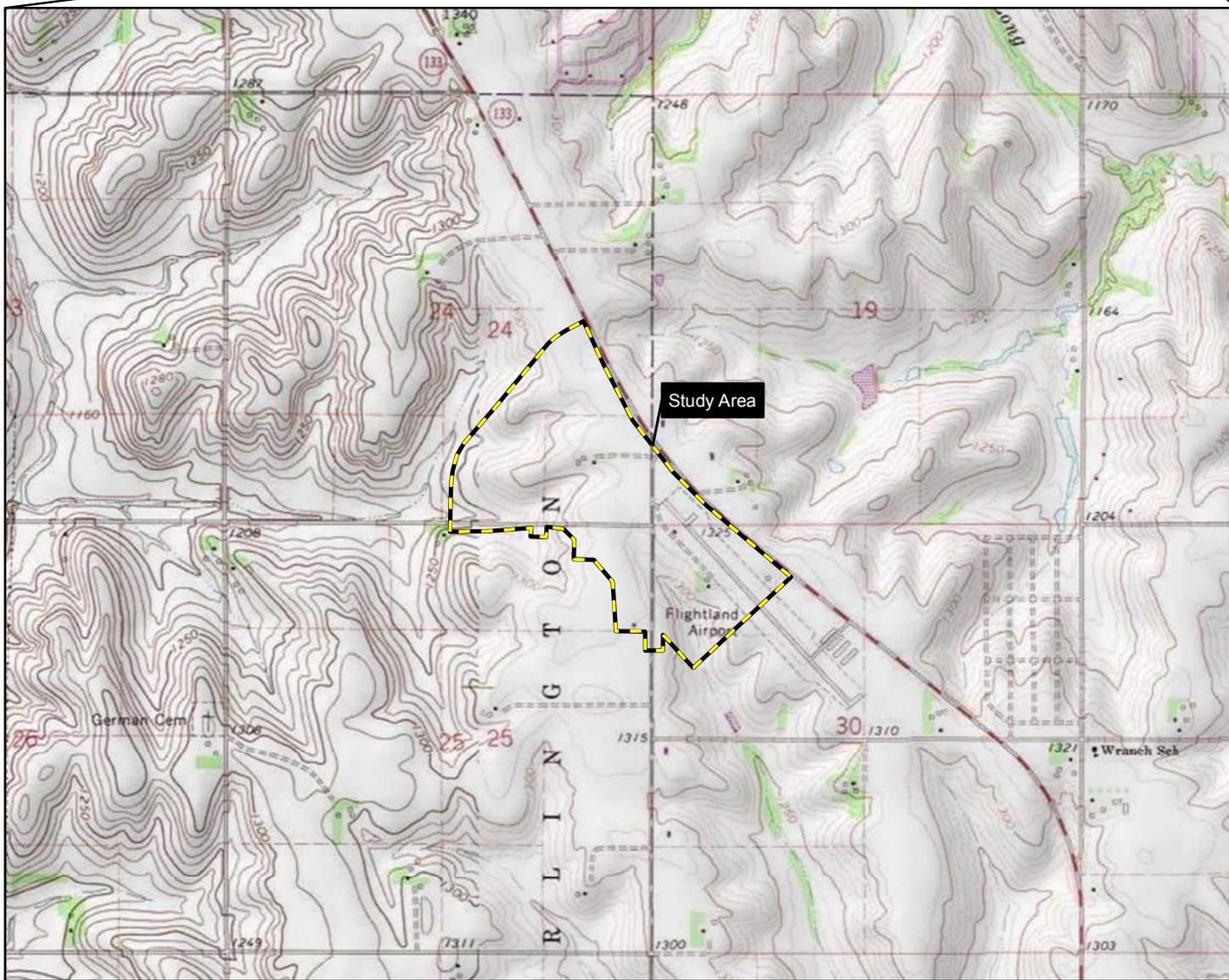
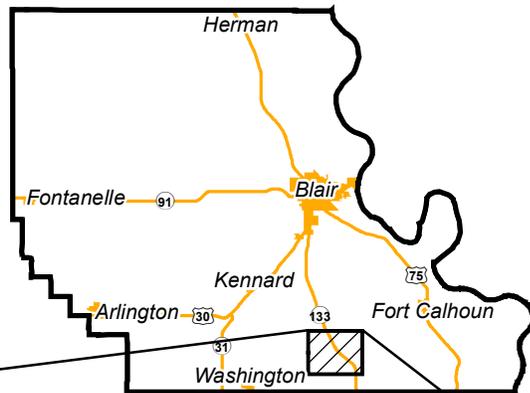
Exhibit 1 - Proposed Projects Map

NEBRASKA

WASHINGTON COUNTY

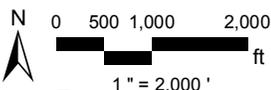


Project Area

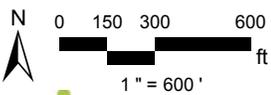


Study Area

Study Area

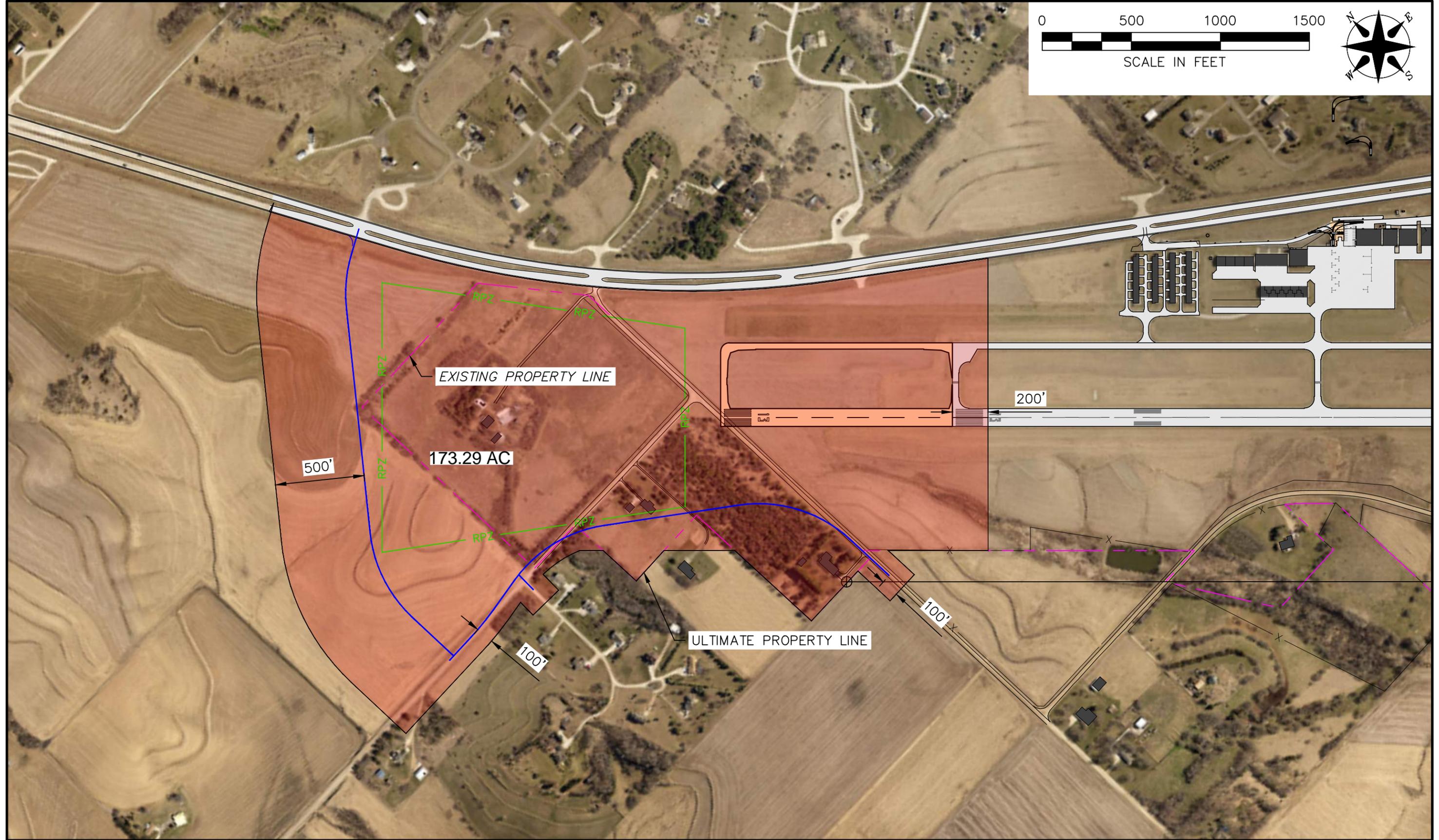
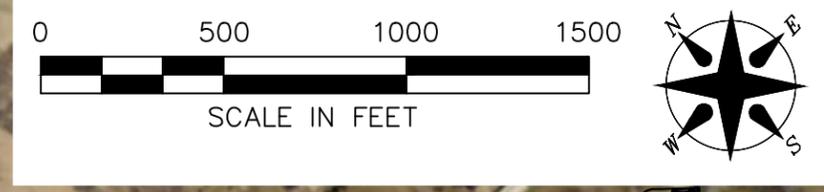


Blair Municipal Airport  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Location Map**  
Figure 1



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Site Map**  
Figure 2



PROJECT NO: 021-03923  
DRAWN BY: MLD  
DATE: 08/10/22

RUNWAY 13 EXTENSION/ROAD RELOCATION CULTURAL SURVEY AREAS  
BLAIR MUNICIPAL AIRPORT - BLAIR, NE

**olsson**  
601 P Street, Suite 200  
P.O. Box 84608  
Lincoln, NE 68508  
TEL 402.474.6311  
FAX 402.474.5160

EXHIBIT  
1



December 12, 2022

United States Fish and Wildlife Services  
Nebraska Field Office  
Ecological Services  
9325 South Alda Road  
Wood River, NE 68883

U.S. Fish and Wildlife Service

Based on the information provided, you may consider this project to be in compliance with the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et. seq.* The project should be reanalyzed by our office if any new information indicates there may be effects to protected species or their habitats.

**MARK  
PORATH** Digitally signed  
by MARK PORATH  
Date: 2023.02.04  
10:57:06 -06'00'

Project Leader, Nebraska Field Office Supervisor

RE: Blair Executive Airport, Environmental Assessment, Washington County, Nebraska

To whom this may concern:

On behalf of the Federal Aviation Administration (FAA), Olsson is in the process of completing an Environmental Assessment for the rehabilitation of Blair Executive Airport, Washington County, Nebraska. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; and the Council on Environmental Quality (CEQ) NEPA implementation guidelines (40 Code of Federal Regulations [CFR] 1500-1508); FAA is requesting input from your agency on potential impacts.

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- Tree and building structure removal of land within the RPZ and county road relocation

Project Name: Blair Executive Airport

General Project Location: Blair, Washington County, Nebraska

Section, Township, Range: Sections 19, 24, 25 & 30, Township 17 North, Range 11 East

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(*Scaphirhynchus albus*), and Monarch Butterfly (*Danaus plexippus*) may potentially occur within the project area (Table 1). We do not believe that the project will significantly impact Federally-Listed Threatened or Endangered Species.

**Table 1. Federally-Listed Threatened and Endangered Species and Designated Critical Habitat Potentially Occurring Within the Project Area.**

Common Name	Scientific Name	Status	Impact Evaluation*
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Pallid Sturgeon	<i>Scaphirhynchus albus</i>	Endangered	A
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	A

**Impact Evaluation\***

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**Migratory Bird Treaty Act**

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Sincerely,



Caleb Pharris  
 Project Scientist, Olsson  
 308.627.3338  
 cpharris@olsson.com  
 2111 S. 67th Street, Suite 200  
 Omaha, NE 68106

Enclosures:

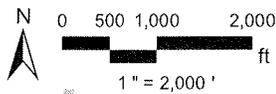
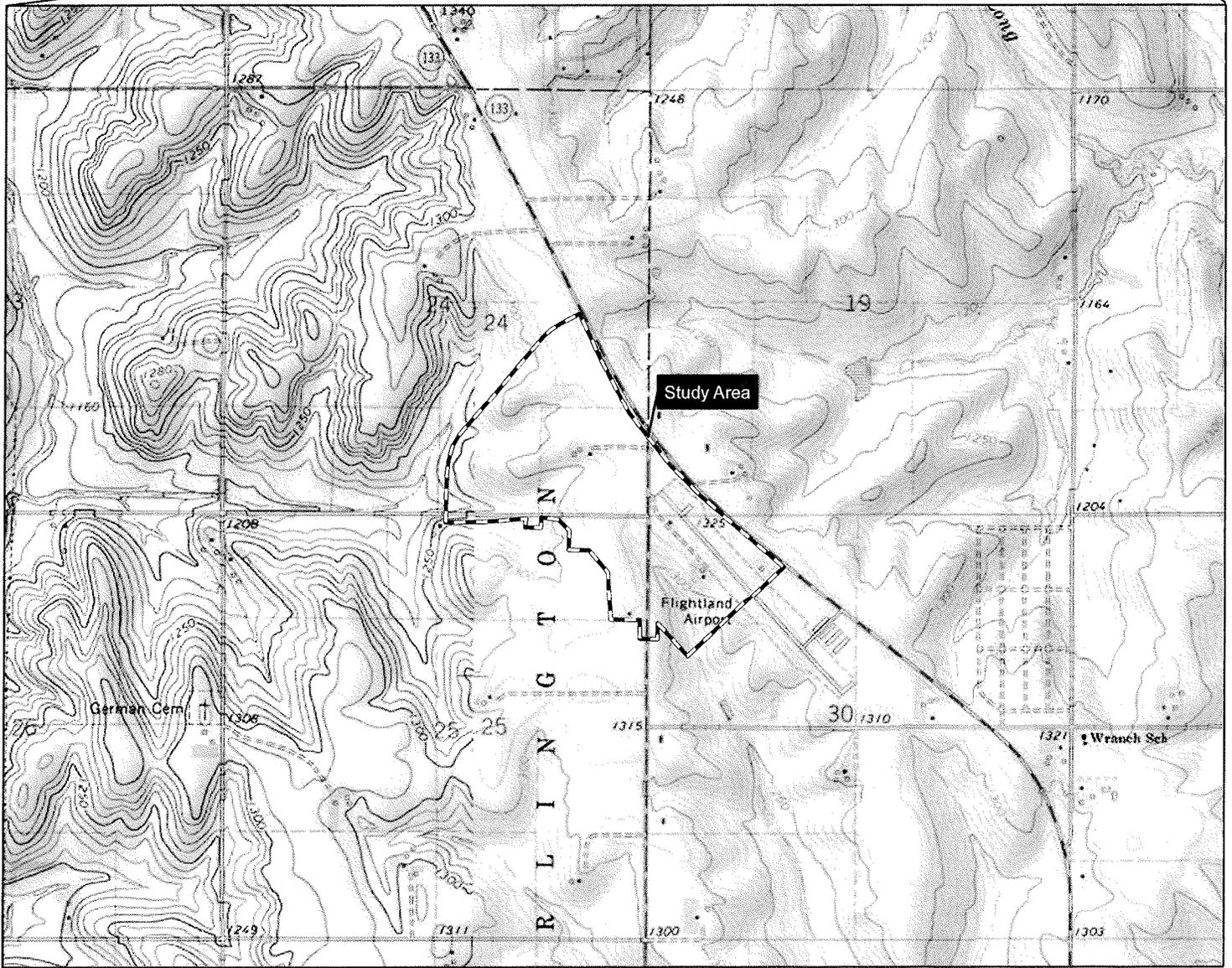
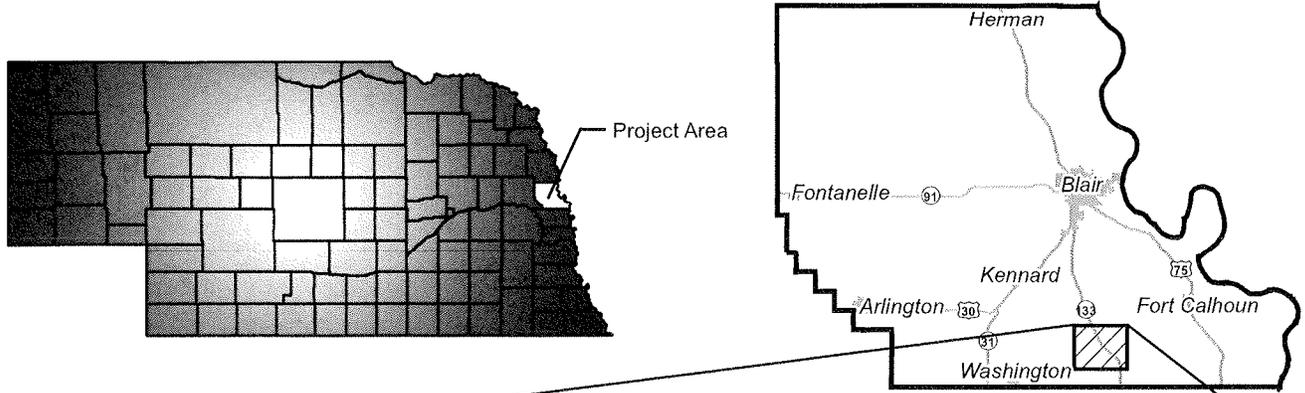
Figure 1 - Project Location Map

Figure 2 - Project Site Map

Exhibit 1 - Proposed Projects Map

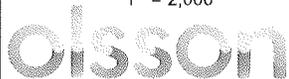
NEBRASKA

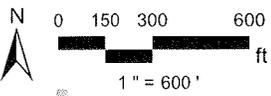
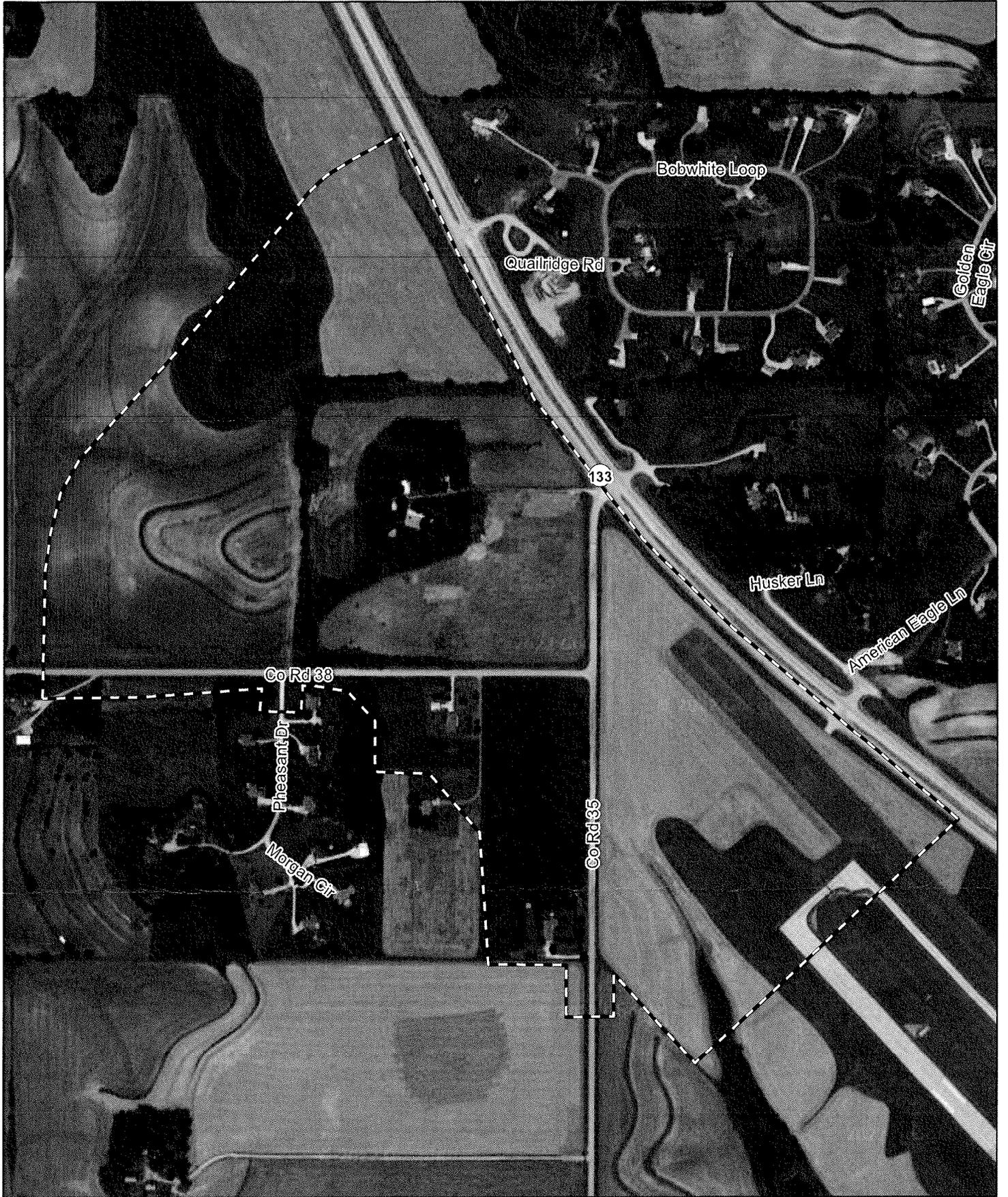
WASHINGTON COUNTY



Study Area

**Blair Municipal Airport**  
 Washington County, Nebraska  
 Olsson Project # A21-03923  
**Location Map**  
 Figure 1





 Study Area

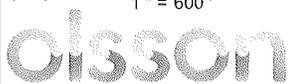
**Blair Municipal Airport**

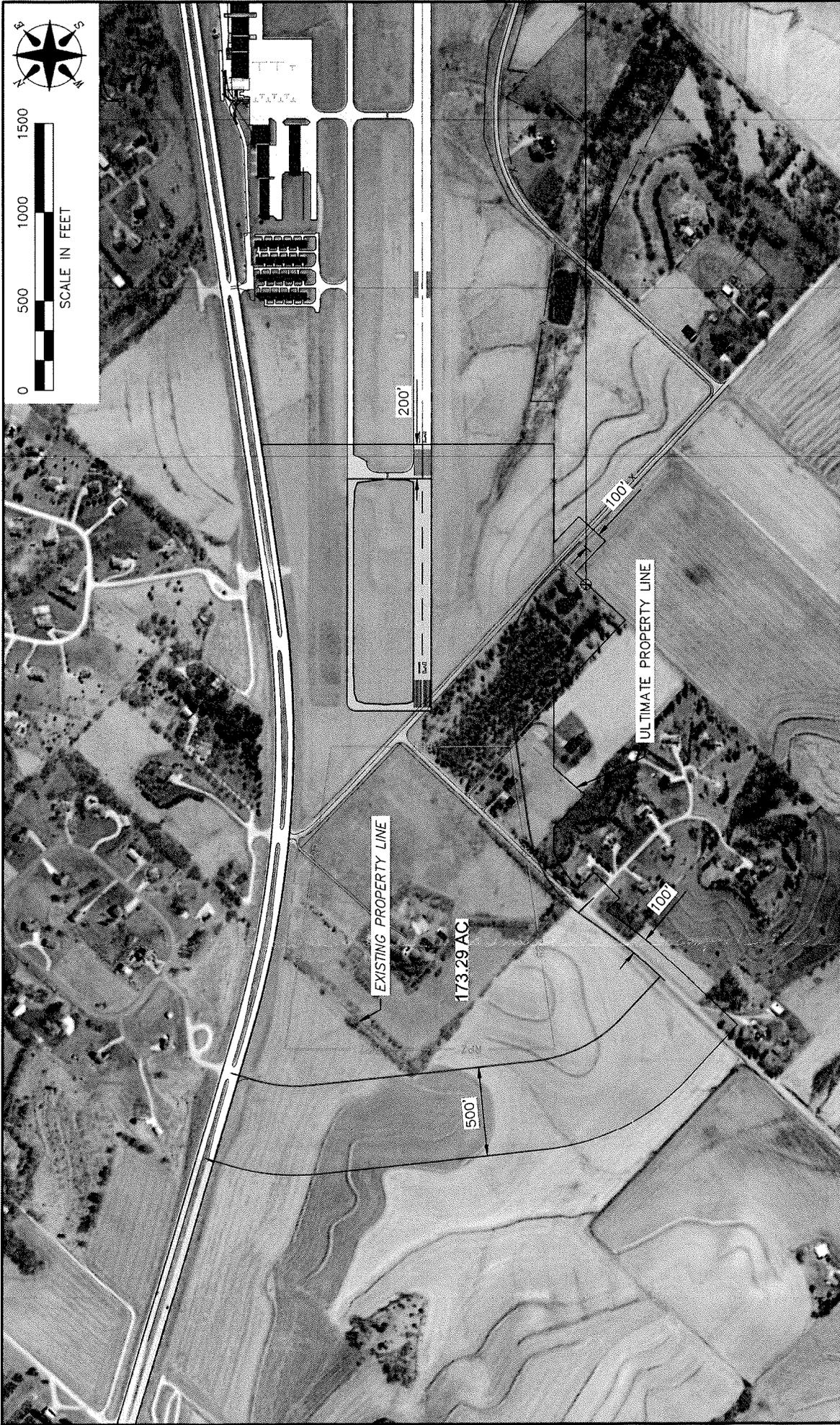
Washington County, Nebraska

Olsson Project # A21-03923

**Site Map**

Figure 2





SCALE IN FEET

PROJECT NO: 021-05923  
 DRAWN BY: MLD  
 DATE: 08/10/22

**RUNWAY 13 EXTENSION/ROAD RELOCATION CULTURAL SURVEY AREAS  
 BLAIR MUNICIPAL AIRPORT - BLAIR, NE**

601 P Street, Suite 200  
 P.O. Box 86698  
 Lincoln, NE 68504  
 FAX: 402.474.5190

**olsson**

EXHIBIT  
 1

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Washington County, Nebraska



## Local office

Nebraska Ecological Services Field Office

☎ (308) 382-6468

📅 (308) 384-8835

MAILING ADDRESS

9325 B South Alda Rd., Ste B  
Wood River, NE 68883-9565

PHYSICAL ADDRESS

9325 South Alda Rd., Ste B  
Wood River, NE 68883-9565

<https://fws.gov/office/nebraska-ecological-services>

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Birds

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened

## Fishes

NAME	STATUS
Pallid Sturgeon <i>Scaphirhynchus albus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7162">https://ecos.fws.gov/ecp/species/7162</a>	Endangered

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON

<p><b>American Golden-plover</b> <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere
<p><b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Oct 15 to Aug 31
<p><b>Bobolink</b> <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Jul 31
<p><b>Chimney Swift</b> <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 25
<p><b>Henslow's Sparrow</b> <i>Ammodramus henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3941">https://ecos.fws.gov/ecp/species/3941</a></p>	Breeds May 1 to Aug 31
<p><b>Lesser Yellowlegs</b> <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a></p>	Breeds elsewhere
<p><b>Red-headed Woodpecker</b> <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10
<p><b>Rusty Blackbird</b> <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p><b>Wood Thrush</b> <i>Hyllocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Aug 31

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

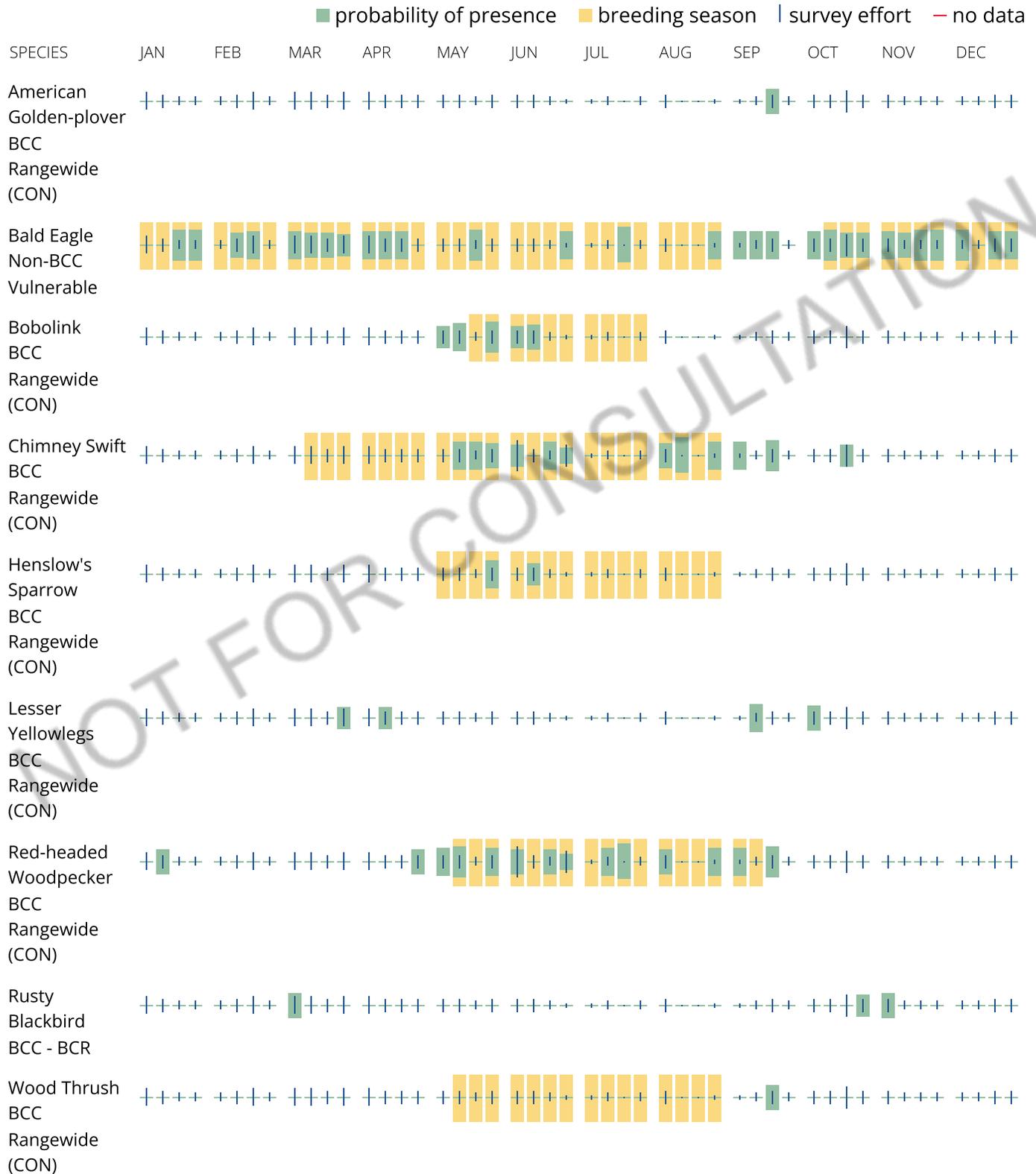
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



## **Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

## **What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

## **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

## **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation

measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on Federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

### Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

### Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact [CBRA@fws.gov](mailto:CBRA@fws.gov).

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

## Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

### Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



January 6, 2023

Jessica Tapp  
Nebraska Game and Parks Commission  
2200 North 33<sup>rd</sup> Street  
Lincoln, NE 68503

RE: Blair Executive Airport, Environmental Assessment, Washington County, Nebraska

Dear Ms. Tapp:

On behalf of the Blair Airport Authority, Olsson is in the process of completing an Environmental Assessment for improvements to the Blair Executive Airport, Washington County, Nebraska. Portions of the project may be completed with Federal Aviation Administration (FAA) grant funds. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; and the Council on Environmental Quality (CEQ) NEPA implementation guidelines (40 Code of Federal Regulations [CFR] 1500-1508); the Airport Authority and FAA is requesting input from your agency on potential impacts.

The Blair Airport Authority is proposing improvements to the existing airport facility. We have included maps showing the project location and proposed improvements (Figures 1-2, Exhibit 1, enclosed). The proposed project would include:

- Land acquisition for ultimate Runway 13/31 (approximately 33 acres)
- Extend Runway 13/31 (1,300 feet) – (5,500 feet x 100 feet)
- Extend Runway 13/31 Parallel Taxiway (1,300 feet x 35 feet)
- Construction of Runway Protection Zone (RPZ)
- Relocation of County Road 35/38
- Construction of Runway 13/31 and parallel taxiway safety area (grading to comply with B-II large aircraft)
- Construction of connecting taxiway to Runway 13 end
- Stormwater improvements
- Tree and building structure removal of land within the RPZ and county road relocation

Project Name: Blair Executive Airport

General Project Location: Blair, Washington County, Nebraska

Section, Township, Range: Sections 19, 24, 25 & 30, Township 17 North, Range 11 East

## **Nebraska Game and Parks Conservation and Environmental Review Tool (CERT)**

The CERT lists the northern long-eared bat (*Myotis septentrionalis*) as a possible concern for the project area. Northern long-eared bats utilize deciduous and/or pine woodlands and/or buildings, bridges, or large box culverts for roosting. Further surveying will need to be completed to access for concerns for the northern long-eared bat.

### **Migratory Bird Treaty Act**

The project is located in a rural setting surrounded by agricultural fields, hay fields, wooded areas, lakes, and reservoirs that may be frequented by migratory birds. The project will likely require the removal of trees within the project footprint. Tree removal would be conducted outside of the migratory bird nesting season (April 1 to September 31). If tree removal cannot be avoided during the times, surveys would be conducted by a qualified biologist to determine if occupied or active nests are present. If found, construction activities would cease and consultation with the USFWS would be initiated to determine the appropriate course of action. Given these conditions, we believe there will likely be no impacts to migratory birds.

The Airport Authority and FAA requests your input regarding potential concerns your agency may have regarding the proposed project. Please provide comment within 30 days of receipt of this letter. If you have any questions, or require additional information, please contact Caleb Pharris, Project Scientist at Olsson, 308.627.3338, [cpharris@olsson.com](mailto:cpharris@olsson.com).

Sincerely,



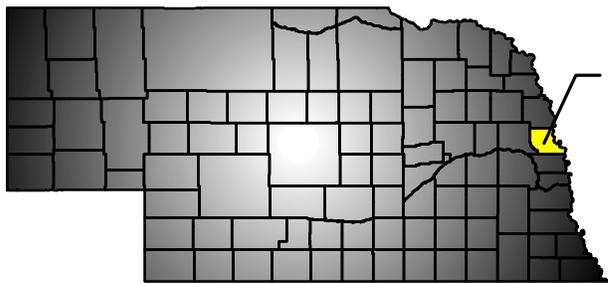
Caleb Pharris  
Project Scientist, Olsson  
308.627.3338  
[cpharris@olsson.com](mailto:cpharris@olsson.com)  
2111 S. 67th Street, Suite 200  
Omaha, NE 68106

Enclosures:

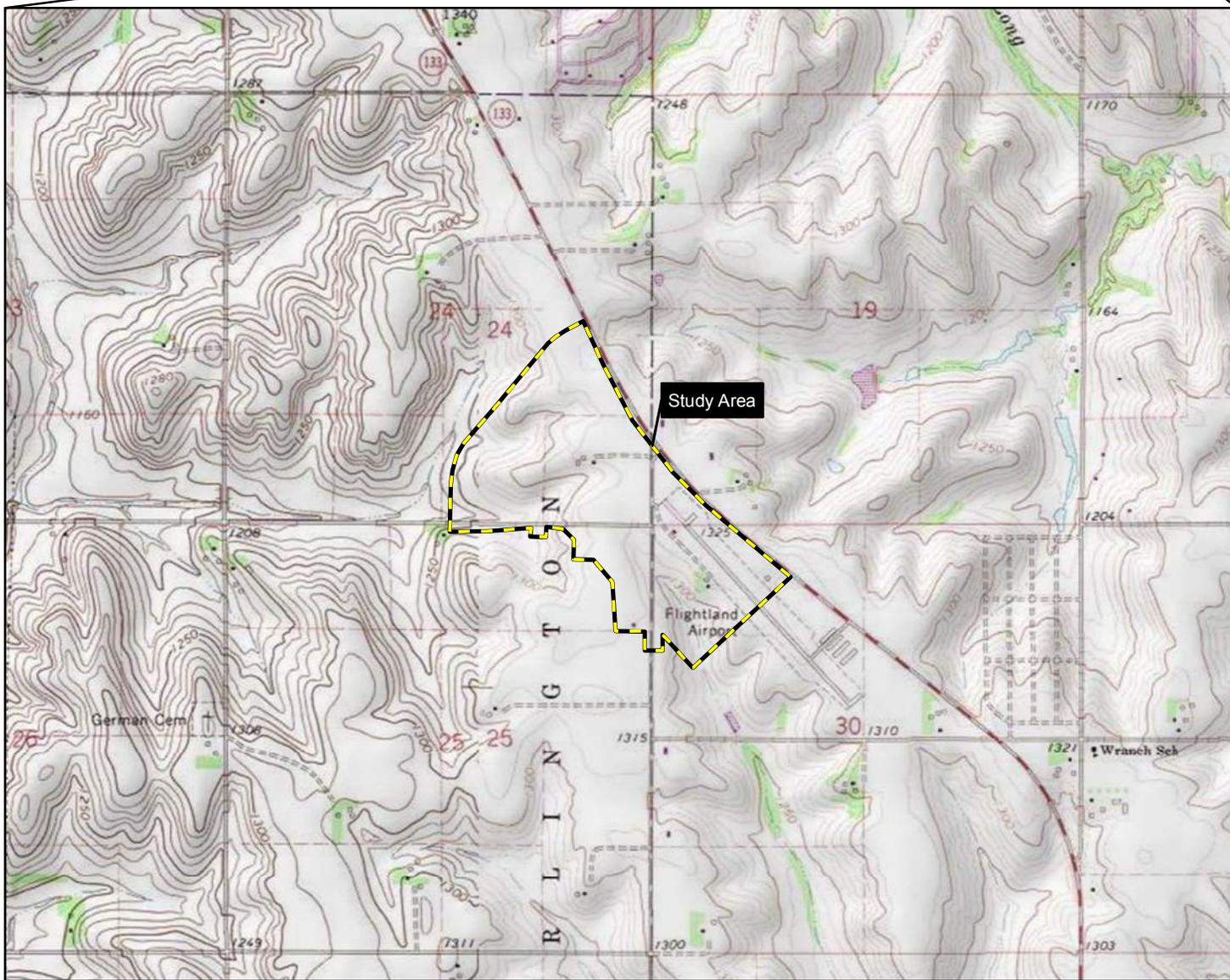
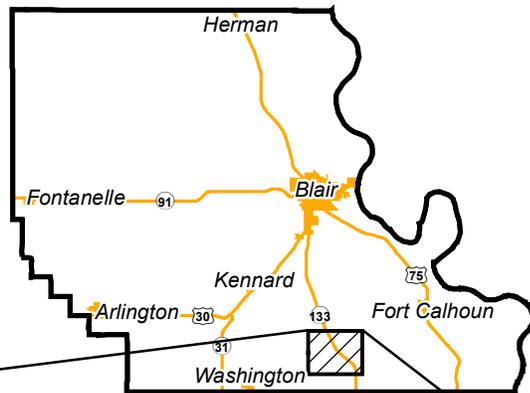
Figure 1 - Project Location Map  
Figure 2 - Project Site Map  
Exhibit 1 - Proposed Project Exhibit

# NEBRASKA

# WASHINGTON COUNTY

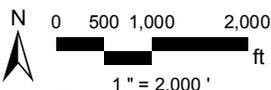


Project Area



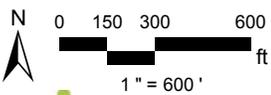
Study Area

Study Area



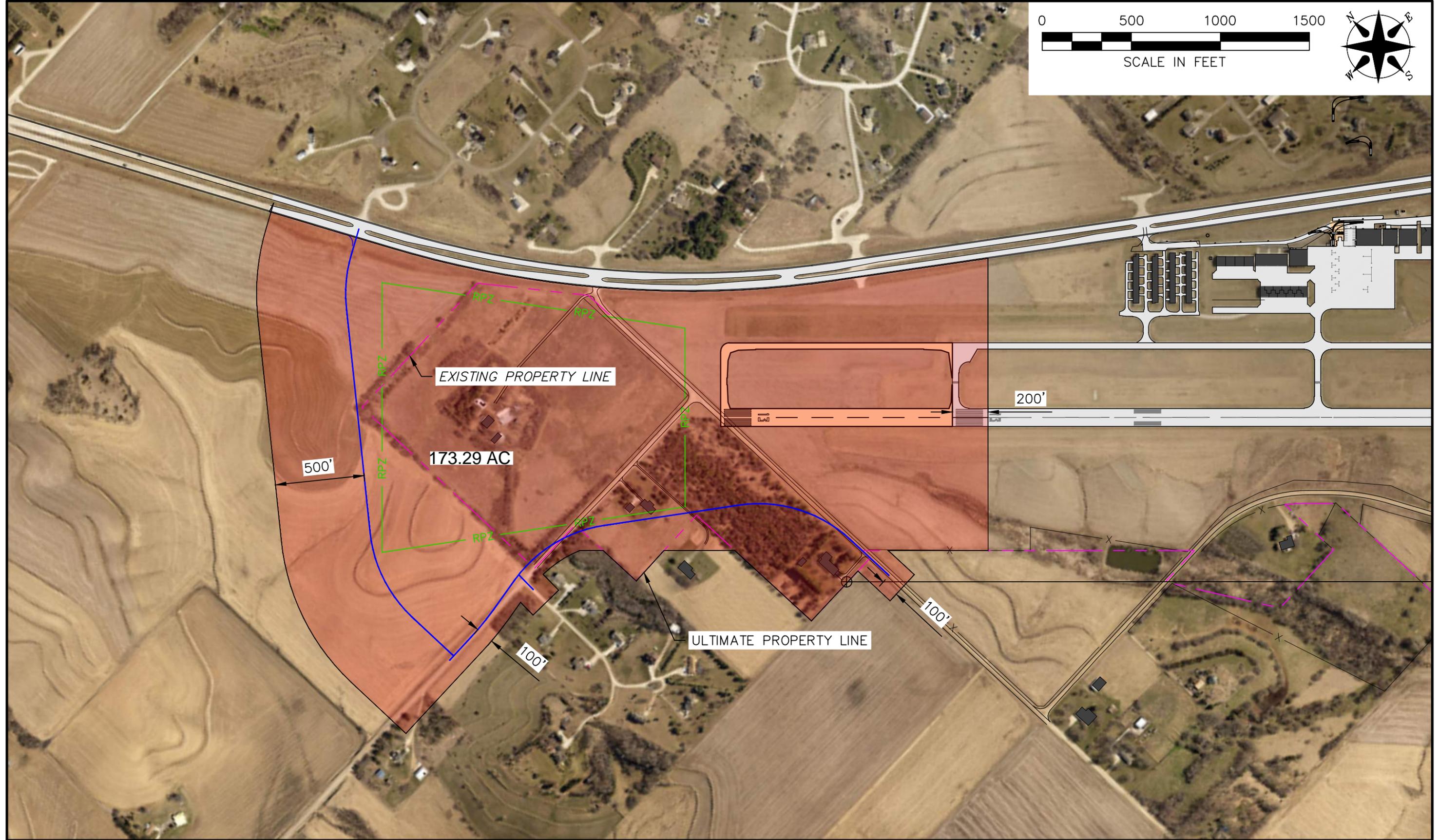
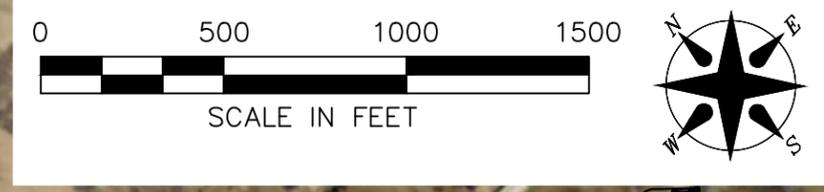
**Blair Municipal Airport**  
 Washington County, Nebraska  
 Olsson Project # A21-03923

**Location Map**  
 Figure 1



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Site Map**  
Figure 2



PROJECT NO: 021-03923  
DRAWN BY: MLD  
DATE: 08/10/22

RUNWAY 13 EXTENSION/ROAD RELOCATION CULTURAL SURVEY AREAS  
BLAIR MUNICIPAL AIRPORT - BLAIR, NE

**olsson**  
601 P Street, Suite 200  
P.O. Box 84608  
Lincoln, NE 68508  
TEL 402.474.6311  
FAX 402.474.5160

EXHIBIT  
1



2200 N. 33rd St. • P.O. Box 30370 • Lincoln, NE 68503-0370 • Phone: 402-471-0641

January 17, 2023

Caleb Pharris  
Olsson  
2111 S. 67<sup>th</sup> Street, Suite 200  
Omaha NE 68106

**RE: Blair Executive Airport – Improvements & Expansion, NGPC Project NO. COLS23001, Washington County**

Dear Caleb Pharris:

Please make reference to your letter dated January 09, 2023. This letter is in response to your request for a review of this project's potential impacts to endangered and threatened species in Washington County, Nebraska. As we understand it, the project involves expansion and improvements at existing airport facility that includes construction of a taxiway, extend runway(s), land acquisition, and removal of infrastructure and trees. Nebraska Game and Parks Commission (NGPC) staff members have reviewed the information for the proposal identified above. This review was requested pursuant to the National Environmental Policy Act (NEPA).

The proposed project will not impact any NGPC State Park, State Recreation Area, or State Wildlife Management Areas, as none are located in the immediate project area.

Based on our review of the information provided, aerial photographs, and the Nebraska Natural Heritage database, the project is located within the estimated range of the state and federally listed threatened Northern long-eared bat (*Myotis septentrionalis*). However, the project area has been previously disturbed and is highly fragmented, thus unlikely to have suitable habitat for the listed species. Therefore, it is not anticipated that the project, as described, would have an adverse impact to state-listed endangered or threatened species.

Under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712: Ch 128 as amended) construction activities in grassland, wetland, stream, and woodland habitats that would otherwise result in the taking of migratory birds, eggs, young, and/or active nests should be avoided. The primary nesting season for migratory birds is from April 1 to July 15. However, some species of migratory birds are known to nest outside of this period. Construction activities that involve vegetation removal should be scheduled to avoid impacting migratory bird nesting. If this is not feasible, then a survey will be needed. The U.S. Fish and Wildlife Service, Ecological Services Office in Grand Island can be contacted for information on how to avoid the unnecessary take of migratory birds.

Please note this correspondence does not satisfy requirements of Neb. Rev. Stat. §37-807 (3) of the Nongame and Endangered Species Conservation Act. Under authority of Neb. Rev. Stat. §37-807 (3), all Nebraska state agencies are required to consult with the Commission to ensure any actions authorized, funded or carried out by them do not jeopardize the continued existence of a state listed species. This requirement would extend to any permit issued or authorized by a state agency.

Thank you for the opportunity to review this proposal. Please contact me if you have any questions regarding these comments at (402) 471-5423 or [Jonathan.tejeda@nebraska.gov](mailto:Jonathan.tejeda@nebraska.gov)

Sincerely,

Jonathan Tejeda  
Environmental Specialist II  
Planning and Programming

Ec: USFWS (Nebraska Field Office)

TIME OUTDOORS IS TIME WELL SPENT

OutdoorNebraska.org



# Environmental Review Report

## Project Information

Report Generation Date:	11/10/2022 04:54:38 PM
Project Title:	Blair Executive Airport
User Project Number(s):	A21-03923
System Project ID:	NE-CERT-008095
Project Type:	Transportation, Airport
Project Activities:	New runways, terminals, concourses, or other facilities at existing airport
Project Size:	202.78 acres
County(s):	Washington
Watershed(s):	Missouri Tributaries
Watershed(s) HUC 8:	Big Papillion-Mosquito
Watershed(s) HUC 12:	Butter Flat Creek-Big Papillion Creek; Little Papillion Creek; Long Creek
Biologically Unique Landscape(s):	None
Township/Range and/or Section(s):	T17R11ES24; T17R11ES25; T17R12ES19; T17R12ES30
Latitude/Longitude:	41.422714 / -96.120084

## Contact Information

Organization:	Olsson
Contact Name:	Emily Nelson
Contact Phone:	4028802506
Contact Email:	enelson@olsson.com
Contact Address:	601 P St Suite 200 Lincoln NE 68508
Prepared By:	
Submitted On Behalf Of:	

## Project Description

new runway addition

## Introduction

The Nebraska Game and Parks Commission (Commission) and the U.S. Fish and Wildlife Service (Service) have special concerns for endangered and threatened species, migratory birds, and other fish and wildlife and their habitats. Habitats frequently used by fish and wildlife species are wetlands, streams, riparian areas, woodlands, and grasslands. Special attention is given to proposed projects which modify wetlands, alter streams, result in loss of riparian habitat, convert/remove grasslands, or contaminate habitats. When this occurs, the Commission and Service recommend ways to avoid, minimize, or compensate for adverse effects to fish and wildlife and their habitats.

## CONSULTATION PURSUANT TO THE NEBRASKA NONGAME AND ENDANGERED SPECIES CONSERVATION ACT (NESCA)

The Commission has responsibility for protecting state-listed endangered and threatened species under authority of the Nongame and Endangered Species Conservation Act (NESCA) (Neb. Rev. Stat. § 37-801 to 37-811). Pursuant to § 37-807 (3) of NESCA, all state agencies shall, in consultation with the Commission, ensure projects they authorize (i.e., issue a permit for), fund or carry out do not jeopardize the continued existence of state-listed endangered or threatened species or result in the destruction or modification of habitat of such species which is determined by the Commission to be critical. If a proposed project may affect state-listed species or designated critical habitat, further consultation with the Commission is required.

Informal consultation pursuant to NESCA can be completed by using the Conservation and Environmental Review Tool (CERT). The CERT analyzes the project type and location, and based on the analysis, provides information about potential impacts to listed species, habitat questions and/or conservation conditions.

- If project proponents agree to implement conservation conditions, as outlined in the report and applicable to the project type, then this document serves as documentation of consultation and the following actions can be taken to move forward with the project:
  - Sign the report in the designated areas.
  - Upload the signed PDF as part of their "final" project submittal.
  - By agreeing to and implementing the conservation conditions as outlined (if applicable), then further consultation with the Commission is not required.
- If the report indicates the project may have impacts on state-listed species, then the following actions must be taken:
  - Project proponent is required to contact and consult with the Commission. Contact information can be found within this document.

## TECHNICAL ASSISTANCE AND CONSULTATION PURSUANT TO THE ENDANGERED SPECIES ACT (ESA)

The Service has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public under the following authorities: 1) Endangered Species Act of 1973 (ESA); 2) Fish and Wildlife Coordination Act; 3) Bald and Golden Eagle Protection Act; and 4) Migratory Bird Treaty Act. The National Environmental Policy Act (NEPA) requires compliance with all of these statutes and regulations.

Pursuant to section 7(a)(2) of ESA, every federal agency, shall in consultation with the Service, ensure that an action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat.

If a proposed project may affect federally listed species or designated critical habitat, Section 7 consultation is required with the Service. It is the responsibility of the lead federal action agency to fully evaluate all potential effects (direct and indirect) that may occur to federally listed species and critical habitat in the action area. The lead federal agency provides their effect determination to the Service for concurrence. If federally listed species and/or designated/proposed critical habitat would be adversely affected by implementation of the project, the lead federal agency will need to formally request further section 7 consultation with the Service prior to making any irretrievable or irreversible commitment of federal funds (section 7(d) of ESA), or issuing any federal permits or licenses.

**The information generated in this report DOES NOT satisfy consultation obligations between the lead federal agency and the Service pursuant to ESA.** For the purposes of ESA, the information in this report should be considered as TECHNICAL ASSISTANCE, and does not serve as the Service's concurrence letter, even if the user signs and agrees to implement conservation conditions in order to satisfy the consultation requirements of NESCA.

## Overall Results

The following result is based on a detailed analysis of your project.

- More information needed - refer to the following sections. Answer the habitat question(s) in the section below. Additional consultation with the Nebraska Game and Parks Commission and/or the U.S. Fish and Wildlife Service may or may not be required. Refer to the "Conservation Conditions Agreement" section for additional information.

## Questions and Conservation Conditions

### **Northern Long-eared Bat**

This project is within the range of the state and federally listed threatened northern long-eared bat (*Myotis septentrionalis*).

Habitat Questions for Northern Long-eared Bat:

**Are the Project Limits within or adjacent to deciduous and/or pine woodlands with live or dead trees or snags that exhibit peeling bark or have crevices or hollows?**

**OR**

**Do the Project Limits include buildings, bridges over drainages (wet or dry), and/or box culverts over 5-feet in height?**

Unknown for EITHER question

No for BOTH questions. Conservation measures are not needed for this species unless otherwise indicated.

Yes for EITHER question. The following conservation measures must be implemented in order to avoid adverse impacts on northern long-eared bat.

**NLEB CM-2:** No removal of trees or removal of roosting structures between June 1 and July 31.

## Conservation Measures Agreement

Based on the information contained in the report, follow the instructions for A, B or C below.

A) IF one or more of the habitat questions were answered with "Yes", insert an "X" for one of the two options below:

\_\_\_\_\_ Option 1. For all species for which there is habitat present (as indicated by checking "yes" to a habitat question) I understand and agree to implement and/or incorporate the conservation measures for those species as indicated. By agreeing to implement and/or incorporate the conservation measures for those species as indicated, no further consultation with the Nebraska Game and Parks Commission is required. However, further consultation between the lead federal agency and the U.S. Fish and Wildlife Service (Service) may be required. Contact the Service for additional information. Sign and date on the line below, and also sign and date the "Certification" section. Submit a copy of the signed report with any type of permit/application required for the project.

\_\_\_\_\_  
Applicant/project proponent signature

\_\_\_\_\_  
Date

\_\_\_\_\_ Option 2. I have concerns regarding one or more of the conservation measures. Sign the "Certification" section below. When submitting the project as "Final" in CERT, please attach a separate document explaining your concerns with the conservation measures and why they cannot be implemented. Then, contact the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service for further information.

B) IF one or more habitat questions were answered with "Unknown," then sign the "Certification" section below, submit the project as "Final" in CERT, and contact the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service for further information.

C) IF ALL the habitat questions were answered "No" or if the "Overall Results" section indicated the project was unlikely to impact listed species, then sign the "Certification" section below and submit the project as "Final" in CERT. No further consultation with the Nebraska Game and Parks Commission is required. Additional coordination with the U.S. Fish and Wildlife Service may be necessary depending on the determination made by the lead federal agency pursuant to their obligations under ESA. Submit a copy of the signed report with any type of permit/application needed for the project.

## Certification

I certify that ALL of the project information in this report (including project location, project size/configuration, project type, project activities, answers to questions) is true, accurate, and complete. If the project type, activities, location, size, or configuration of the project change, or if any of the answers to any questions asked in this report change, then this information is no longer valid and we recommend running the revised project through CERT to get an updated report.

Emily Nelson

Digitally signed by Emily Nelson  
DN: c=US, e=emelson@emelson.com, cn=Clason,  
Reason: I am a Clason. CN=Emily Nelson  
Date: 2022.11.14 08:44:06-0500'

2022.11.14

\_\_\_\_\_  
Applicant/project proponent signature

\_\_\_\_\_  
Date

## Additional Considerations

### **Bald and Golden Eagle Protection Act**

The federal Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668-668c) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). Under the Eagle Act, “take” of eagles, their parts, nests or eggs is prohibited. Disturbance resulting in injury to an eagle or a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior is a form of “take.”

Bald eagles use mature, forested riparian areas near rivers, streams, lakes, and wetlands and occur along all the major river systems in Nebraska. The bald eagle southward migration begins as early as October and the wintering period extends from December-March. The golden eagle is found in arid open country with grassland for foraging in western Nebraska and usually near buttes or canyons which serve as nesting sites. Golden eagles are often a permanent resident in the Pine Ridge area of Nebraska. Additionally, many bald and golden eagles nest in Nebraska from mid-February through mid-July. Disturbances within 0.5-miles of an active nest or within line-of-sight of the nest could cause adult eagles to discontinue nest building or to abandon eggs. Both bald and golden eagles frequent river systems in Nebraska during the winter where open water and forested corridors provide feeding, perching, and roosting habitats, respectively. The frequency and duration of eagle use of these habitats in the winter depends upon ice and weather conditions. Human disturbances and loss of wintering habitat can cause undue stress leading to cessation of feeding and failure to meet winter thermoregulatory requirements. These affects can reduce the carrying capacity of preferred wintering habitat and reproductive success for the species.

To comply with the Eagle Act, it is recommended that the project proponent determine if the proposed project would impact bald or golden eagles or their habitats. This can be done by conducting a habitat assessment, surveying nesting habitat for active and inactive nests, and surveying potential winter roosting habitat to determine if it is being used by eagles. The area to be surveyed is dependent on the type of project; however for most projects we recommend surveying the project area and a ½ mile buffer around the project area. If it is determined that either species could be affected by the proposed project, the Commission recommends that the project proponent notify the Nebraska Game and Parks Commission as well as the Nebraska Field Office, U.S. Fish and Wildlife Service for recommendations to avoid “take” of bald and golden eagles.

### **Migratory Bird Treaty Act and Nebraska Revised Statute §37-540**

We recommend the project proponent comply with the Migratory Bird Treaty Act (16 U.S.C. 703-712: Ch. 128 *as amended*) (MBTA). The project proponent should also comply with Nebraska Revised Statute §37-540, which prohibits take and destruction of nests or eggs of protected birds (as defined in Nebraska Revised Statute §37-237.01). Construction activities in grassland, wetland, stream, woodland, and river bank habitats that would result in impacts on birds, their nests or eggs protected under these laws should be avoided. Although the provisions of these laws are applicable year-round, most migratory bird nesting activity in Nebraska occurs during the period of May 1 to July 15. However, some migratory birds are known to nest outside of the aforementioned primary nesting season period. For example, raptors can be expected to nest in woodland habitats during February 1 through July 15, whereas sedge wrens, which occur in some wetland habitats, normally nest from July 15 to September 10. If development in this area is planned to occur during the primary nesting season or at any other time which may result in impacts to birds, their nests or eggs protected under these laws, we request that the project proponent arrange to have a qualified biologist conduct a field survey of the affected habitats to determine the absence or presence of nesting migratory birds. If a field survey identifies the existence of one or more active bird nests that cannot be avoided by the planned construction activities, the Nebraska Game and Parks Commission and the Nebraska Field Office, U.S. Fish and Wildlife Service should be contacted immediately. For more information on avoiding impacts to migratory birds, their nests and eggs, or to report active bird nests that cannot be avoided by planned construction activities, please contact the U.S. Fish and Wildlife Service and/or the Nebraska Game and Parks Commission (contact information within report). Adherence to these guidelines will help avoid unnecessary impacts on migratory birds.

### **Fish and Wildlife Coordination Act**

The Fish and Wildlife Coordination Act (FWCA) requires consultation with the U.S. Fish and Wildlife Service (Service) and the State fish and wildlife agency (i.e., Nebraska Game and Parks Commission) for the purpose of preventing loss of and damage to fish and wildlife resources in the planning, implementation, and operation of federal and federally funded, permitted, or licensed water resource development projects. This statute requires that federal

agencies take into consideration the effect that the water related project would have on fish and wildlife resources, to take action to prevent loss or damage to these resources, and to provide for the development and improvement of these resources. The comments in this letter are provided as technical assistance only and are not the document required of the Secretary of the Interior pursuant to Section 2(b) of FWCA on any required federal environmental review or permit. This technical assistance is valid only for the described conditions and will have to be revised if significant environmental changes or changes in the proposed project take place. In order to determine whether the effects to fish and wildlife resources from the proposed project are being considered under FWCA, the lead federal agency must notify the Service in writing of how the comments and recommendations in this technical assistance letter are being considered into the proposed project.

#### **Section 404 of the Clean Water Act**

In general, the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service have concerns for impacts to wetlands, streams and riparian habitats. We recommend that impacts to wetlands, streams, and associated riparian corridors be avoided and minimized, and that any unavoidable impacts to these habitats be mitigated. If any fill materials will be placed into waterways or wetlands, the U.S. Army Corps of Engineers Regulatory Office in Omaha should be contacted to determine if a 404 permit is needed.

## **Agency Contact Information**

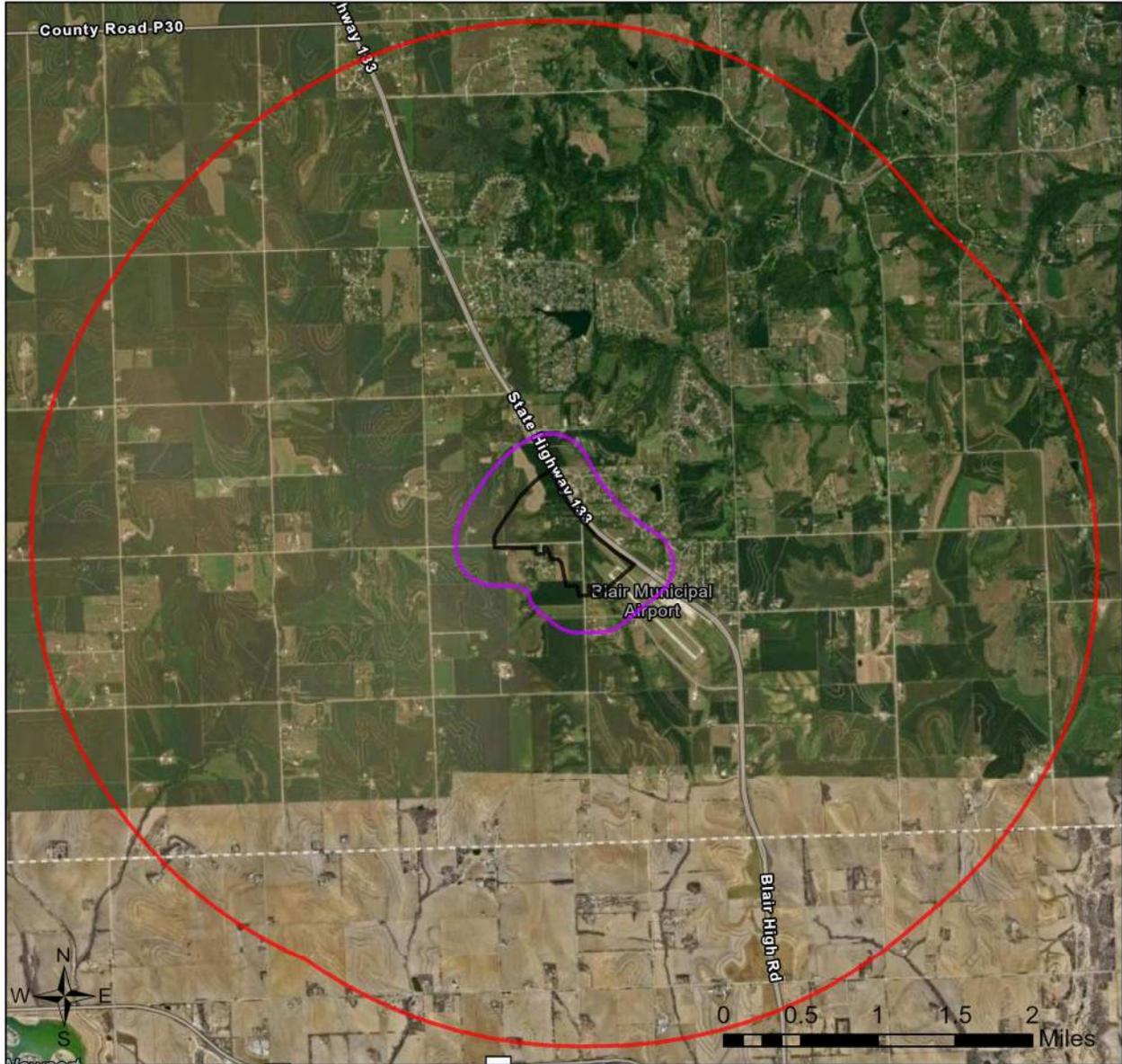
### **Nebraska Game and Parks Commission**

Environmental Review Team  
2200 North 33rd Street  
Lincoln, NE 68503  
phone: (402) 471-5423  
email: [ngpc.envreview@nebraska.gov](mailto:ngpc.envreview@nebraska.gov)

### **U.S. Fish and Wildlife Service**

Nebraska Ecological Services  
9325 South Alda Road  
Wood River, NE 68883  
phone: (308) 382-6468  
email: [nebraskaes@fws.gov](mailto:nebraskaes@fws.gov)

# Blair Executive Airport Aerial Image Basemap With Locator Map



- 3-mile Information Buffer Boundary
- Project Review Boundary
- Project Boundary

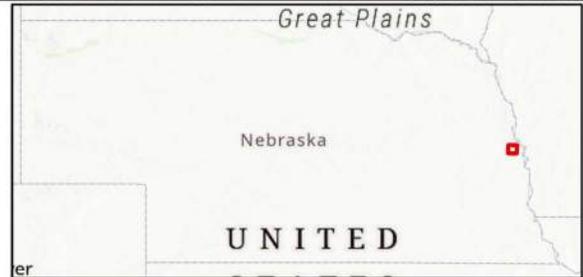
Project Size (acres): 202.78

Lat/Long (DD): 41.4227 / -96.1201

County(s): Washington

BUL(s):

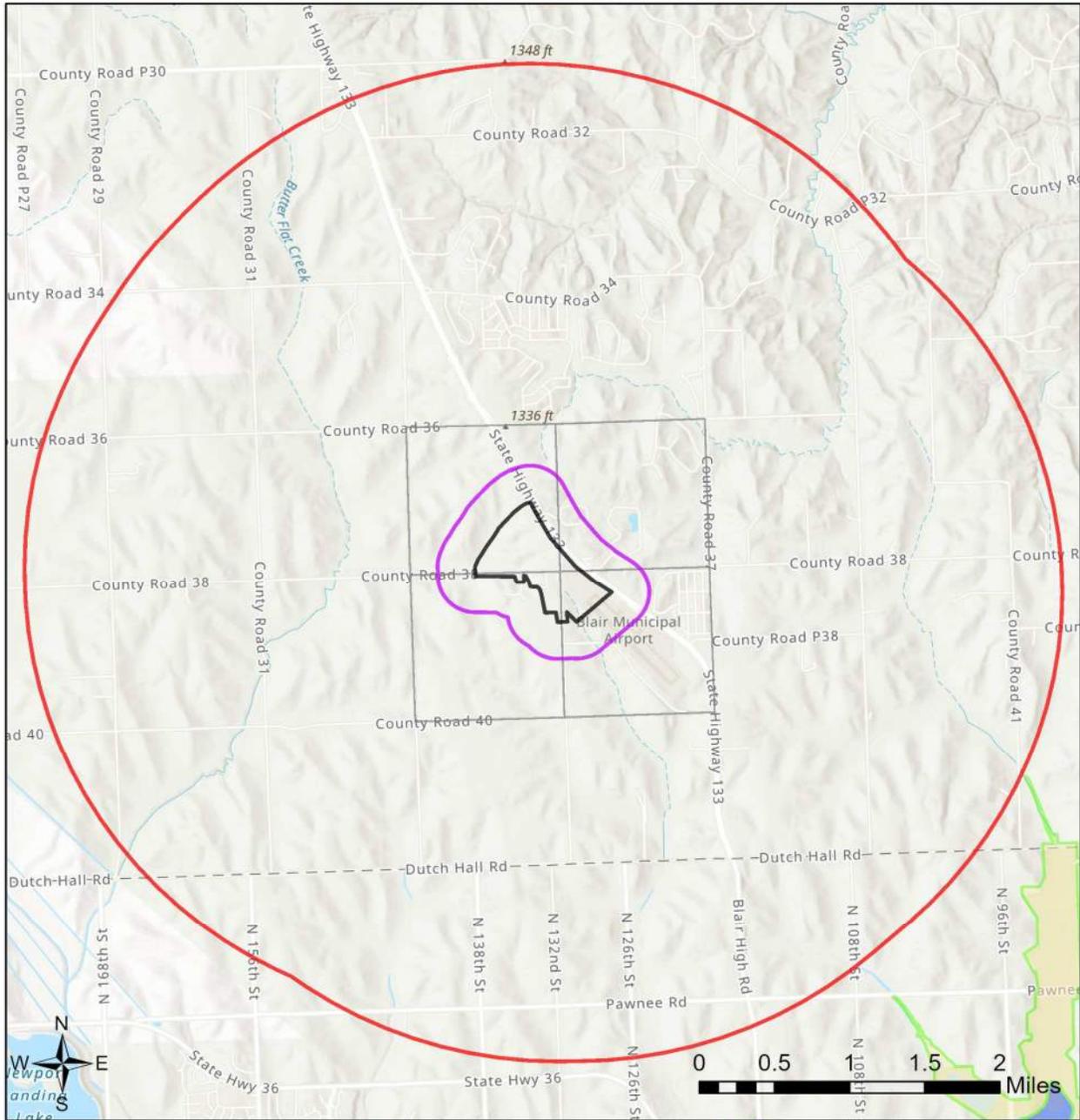
Township/Range/Section(s): T17R11ES24; T17R11ES25; T17R12ES19; T17R12ES30



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community  
 Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

# Blair Executive Airport

## Topographic Basemap With Sections and Protected Areas

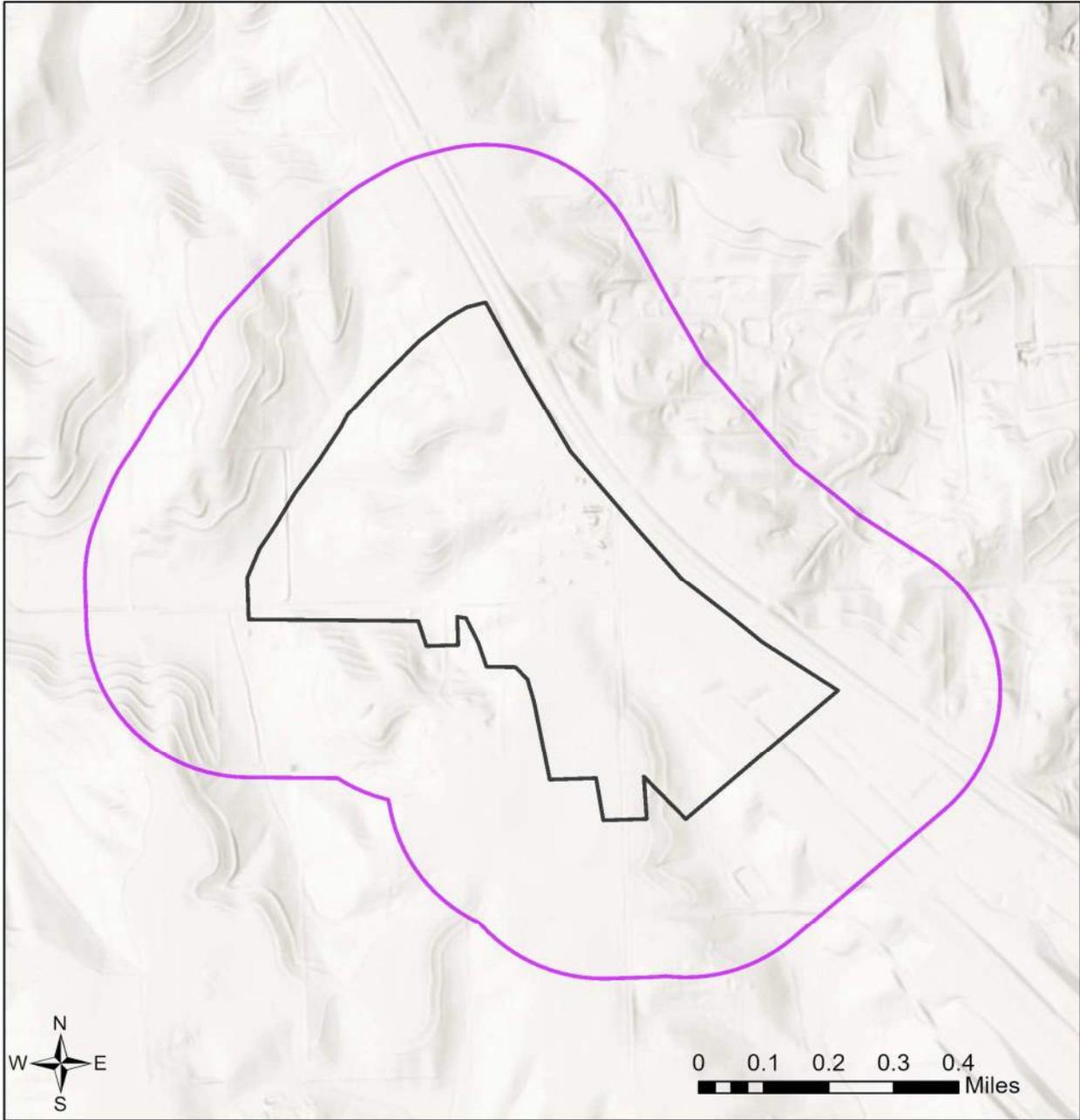


- |                                |                       |                                    |
|--------------------------------|-----------------------|------------------------------------|
| PAD (USGS) - boundaries        | Designation           | NGPC Properties                    |
| U.S. Fish and Wildlife Service | Regional Agency       | Sections                           |
| U.S. Forest Service            | State (NGPC)          | 3-mile Information Buffer Boundary |
| National Park Service          | Other State           | Project Review Boundary            |
| Bureau of Reclamation          | NGO or Private        | Project Boundary                   |
|                                | Other (City, Unknown) |                                    |

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, MMA, Geodastyrreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community  
 Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

# Blair Executive Airport

## Web Map As Submitted By User



-  Project Review Boundary
-  Project Boundary

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, MMA, Geodastystreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

**Table 1**  
Protected Areas in Immediate Vicinity of Project (project review area)

This table has no results.

**Table 2**  
Documented Occurrences in Immediate Vicinity of Project (project review area):  
Natural communities and selected special areas

This table has no results.

**Table 3**  
Regional Documented Occurrences of Species within 1 Mile of Project Review Area:  
Tier 1 and 2 at-risk species and additional S1-S3 plants

Scientific Name	Common Name	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
<i>Anguilla rostrata</i>	American Eel			Tier 2	SNR	G4	Vertebrate Animal - Fishes
<i>Cylopterus elongatus</i>	Blue Sucker			Tier 1	S1	G3G4	Vertebrate Animal - Fishes
<i>Haliaeetus leucocephalus</i>	Bald Eagle			Tier 2	S3	G5	Vertebrate Animal - Birds
<i>Hybognathus placitus</i>	Plains Minnow			Tier 1	S2	G4	Vertebrate Animal - Fishes
<i>Machrybopsis gelida</i>	Sturgeon Chub		E	Tier 1	S1	G3	Vertebrate Animal - Fishes
<i>Machrybopsis meeki</i>	Sicklefin Chub			Tier 1	S1	G3	Vertebrate Animal - Fishes
<i>Machrybopsis storieriana</i>	Silver Chub			Tier 2	S2	G5	Vertebrate Animal - Fishes
<i>Najas marina</i>	Prickly Naiad			Tier 2	S1	G5	Vascular Plant - Monocots
<i>Noturus gyrinus</i>	Tadpole Madtom			Tier 2	S3	G5	Vertebrate Animal - Fishes
<i>Polyodon spathula</i>	Paddlefish			Tier 2	S2	G4	Vertebrate Animal - Fishes
<i>Pompeius verna</i>	Little Glassywing			Tier 2	S2S3	G5	Invertebrate Animal - Butterflies and Skippers
<i>Scaphirhynchus albus</i>	Pallid Sturgeon	E	E	Tier 1	S1	G2	Vertebrate Animal - Fishes
<i>Senna marilandica</i>	Southern Wild Senna			Tier 2	S1S3	G5	Vascular Plant - Dicots

**Table 4**  
Potential Occurrences in Immediate Vicinity of Project (project review area):  
Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
<a href="#">Ammodramus henslowii</a>	Henslow's Sparrow	Range			Tier 1	S1	G4	Vertebrate Animal - Birds
<a href="#">Asio flammeus</a>	Short-eared Owl	Range			Tier 1	S2	G5	Vertebrate Animal - Birds
<a href="#">Atrytone atrogos iowa</a>	Iowa Skipper	Range			Tier 1	S1	G2G3T2T3	Invertebrate Animal - Butterflies

**Table 4**  
**Potential Occurrences in Immediate Vicinity of Project (project review area):**  
**Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps**

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
<a href="#">Boloria selene nebraskensis</a>	Nebraska Fritillary	Range			Tier 1	SNR	G5T3T4	Invertebrate Animal - Butterflies and Skippers
<a href="#">Callidris subruficollis</a>	Buff-breasted Sandpiper	Range			Tier 1	S2N	G4	Vertebrate Animal - Birds
<a href="#">Catocala nuptialis</a>	Married Underwing	Range			Tier 1	SNR	G3	Invertebrate Animal - Underwing Moths
<a href="#">Catocala whitneyi</a>	Whitney Underwing	Range			Tier 1	S1	G2G3	Invertebrate Animal - Underwing Moths
<a href="#">Coccyzus erythrophthalmus</a>	Black-billed Cuckoo	Range			Tier 1	S3	G5	Vertebrate Animal - Birds
<a href="#">Danaus plexippus</a>	Monarch	Range			Tier 1	S2	G4	Invertebrate Animal - Butterflies and Skippers
<a href="#">Emydoidea blandingii</a>	Blanding's Turtle	Range		NC	Tier 1	S4	G4	Vertebrate Animal - Turtles
<a href="#">Erynnis martialis</a>	Mottled Duskywing	Range			Tier 1	S2	G3	Invertebrate Animal - Butterflies and Skippers
<a href="#">Euphyes bimaculata illinois</a>	Two-spotted Skipper	Range			Tier 1	S3	G4T1T2	Invertebrate Animal - Butterflies and Skippers
<a href="#">Euphyes conspicua buchholzi</a>	Buchholz Black Dash	Range			Tier 1	S1	G4G5T1	Invertebrate Animal - Butterflies and Skippers
<a href="#">Fundulus sciadicus</a>	Plains Topminnow	Range			Tier 1	S3	G4	Vertebrate Animal - Fishes
<a href="#">Haliaeetus leucocephalus</a>	Bald Eagle	Range			Tier 2	S3	G5	Vertebrate Animal - Birds
<a href="#">Hesperia ottoe</a>	Ottoe Skipper	Range			Tier 1	S2	G3	Invertebrate Animal - Butterflies and Skippers
<a href="#">Lanius ludovicianus</a>	Loggerhead Shrike	Range			Tier 1	S3	G4	Vertebrate Animal - Birds
<a href="#">Lasionyxteris noctivagans</a>	Silver-haired Bat	Range			Tier 1	S3	G3G4	Vertebrate Animal - Mammals
<a href="#">Lasiurus borealis</a>	Eastern Red Bat	Range			Tier 1	S3	G3G4	Vertebrate Animal - Mammals
<a href="#">Lasiurus cinereus</a>	Hoary Bat	Range			Tier 1	S3	G3G4	Vertebrate Animal - Mammals
<a href="#">Letho eurydice fumosus</a>	Smoky-eyed Brown	Range			Tier 1	S3	G5T3T4	Invertebrate Animal - Butterflies and Skippers
<a href="#">Myotis septentrionalis</a>	Northern Long-eared Myotis	Range	T	T	Tier 1	S1S2	G1G2	Vertebrate Animal - Mammals

**Table 4**  
**Potential Occurrences in Immediate Vicinity of Project (project review area):**  
**Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps**

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
<a href="#">Perimyotis subflavus</a>	Tricolored Bat	Range			Tier 1	S3	G2G3	Vertebrate Animal - Mammals
<a href="#">Perognathus flavescens peringer</a>	Plains Pocket Mouse	Range			Tier 1	SNR	G5TNR	Vertebrate Animal - Mammals
<a href="#">Speyeria idalia</a>	Regal Fritillary	Range			Tier 1	S3	G3?	Invertebrate Animal - Butterflies and Skippers



December 12, 2022

Jim Macy  
Nebraska Department of Environment & Energy  
PO Box 98922  
Lincoln, NE 68509-8922

RE: Blair Executive Airport, Environmental Assessment, Washington County, Nebraska

Dear Mr. Macy:

On behalf of the Blair Airport Authority, Olsson is in the process of completing an Environmental Assessment for improvements to the Blair Executive Airport, Washington County, Nebraska. Portions of the project may be completed with Federal Aviation Administration (FAA) grant funds. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; and the Council on Environmental Quality (CEQ) NEPA implementation guidelines (40 Code of Federal Regulations [CFR] 1500-1508); the Airport Authority and FAA is requesting input from your agency on potential impacts.

The Blair Airport Authority is proposing improvements to the existing airport facility. We have included maps showing the project location and proposed improvements (Figures 1-2, Exhibit 1, enclosed). The proposed project would include:

- Land acquisition for ultimate Runway 13/31 (approximately 33 acres)
- Extend Runway 13/31 (1,300 feet) – (5,500 feet x 100 feet)
- Extend Runway 13/31 Parallel Taxiway (1,300 feet x 35 feet)
- Construction of Runway Protection Zone (RPZ)
- Relocation of County Road 35/38
- Construction of Runway 13/31 and parallel taxiway safety area (grading to comply with B-II large aircraft)
- Construction of connecting taxiway to Runway 13 end
- Stormwater improvements
- Tree and building structure removal of land within the RPZ and county road relocation

Project Name: Blair Executive Airport

General Project Location: Blair, Washington County, Nebraska

Section, Township, Range: Sections 19, 24, 25 & 30, Township 17 North, Range 11 East

The Airport Authority and FAA requests your input regarding potential concerns your agency may have regarding the proposed project. Please provide comment within 30 days of receipt of this

letter. If you have any questions, or require additional information, please contact Caleb Pharris, Project Scientist at Olsson, 308.627.3338, cpharris@olsson.com.

Sincerely,



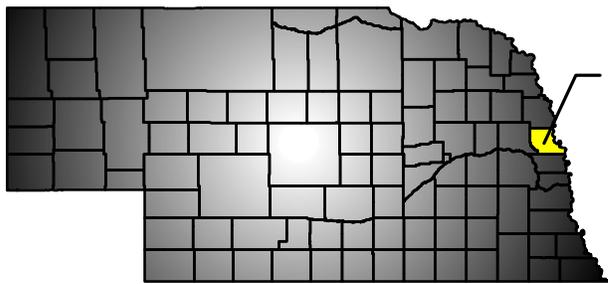
Caleb Pharris  
Project Scientist, Olsson  
308.627.3338  
cpharris@olsson.com  
2111 S. 67th Street, Suite 200  
Omaha, NE 68106

Enclosures:

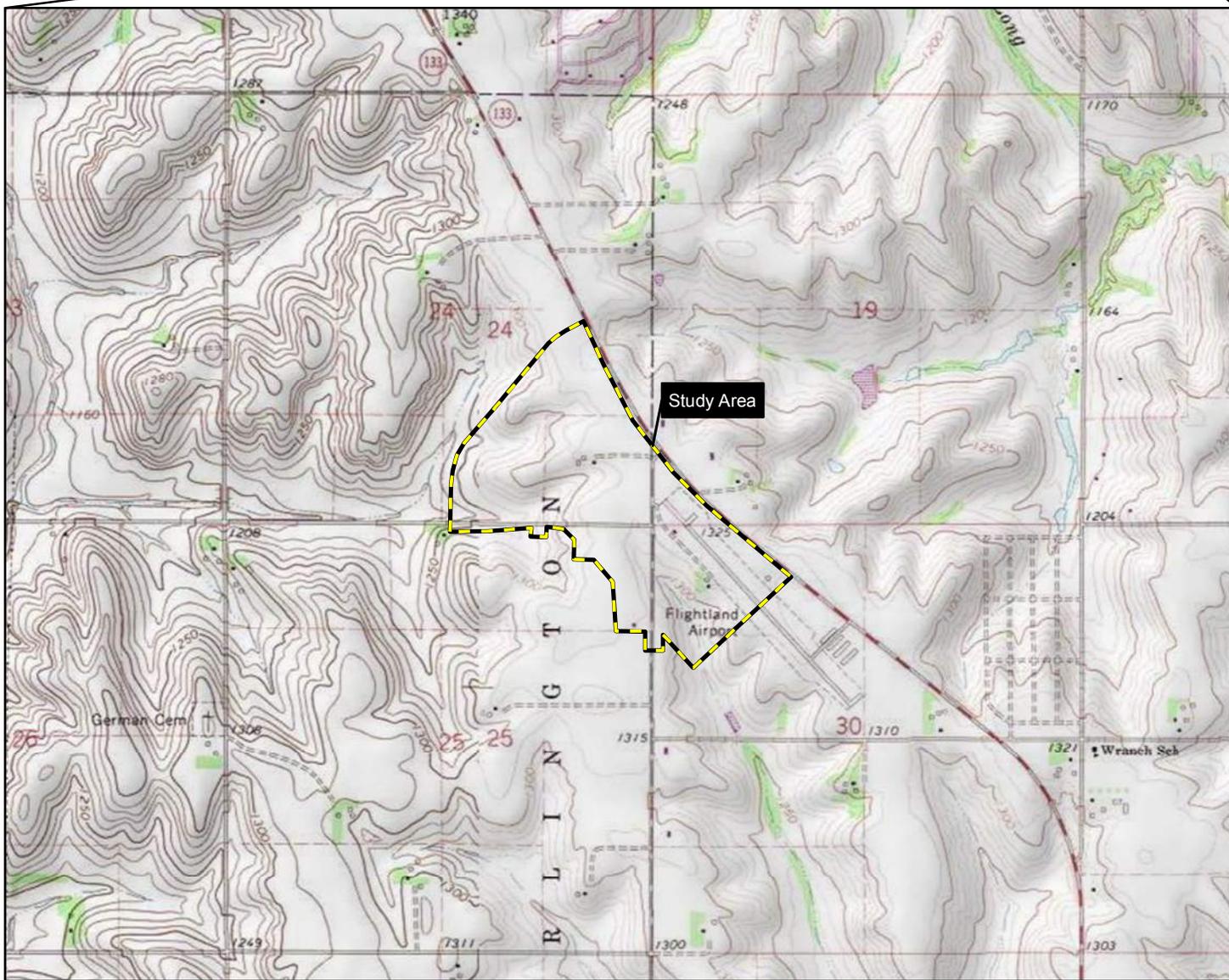
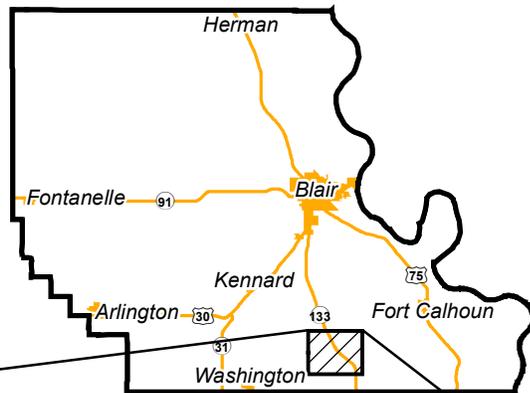
Figure 1 - Project Location Map  
Figure 2 - Project Site Map  
Exhibit 1 - Proposed Projects Map

NEBRASKA

WASHINGTON COUNTY

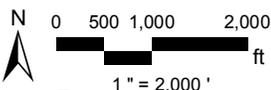


Project Area



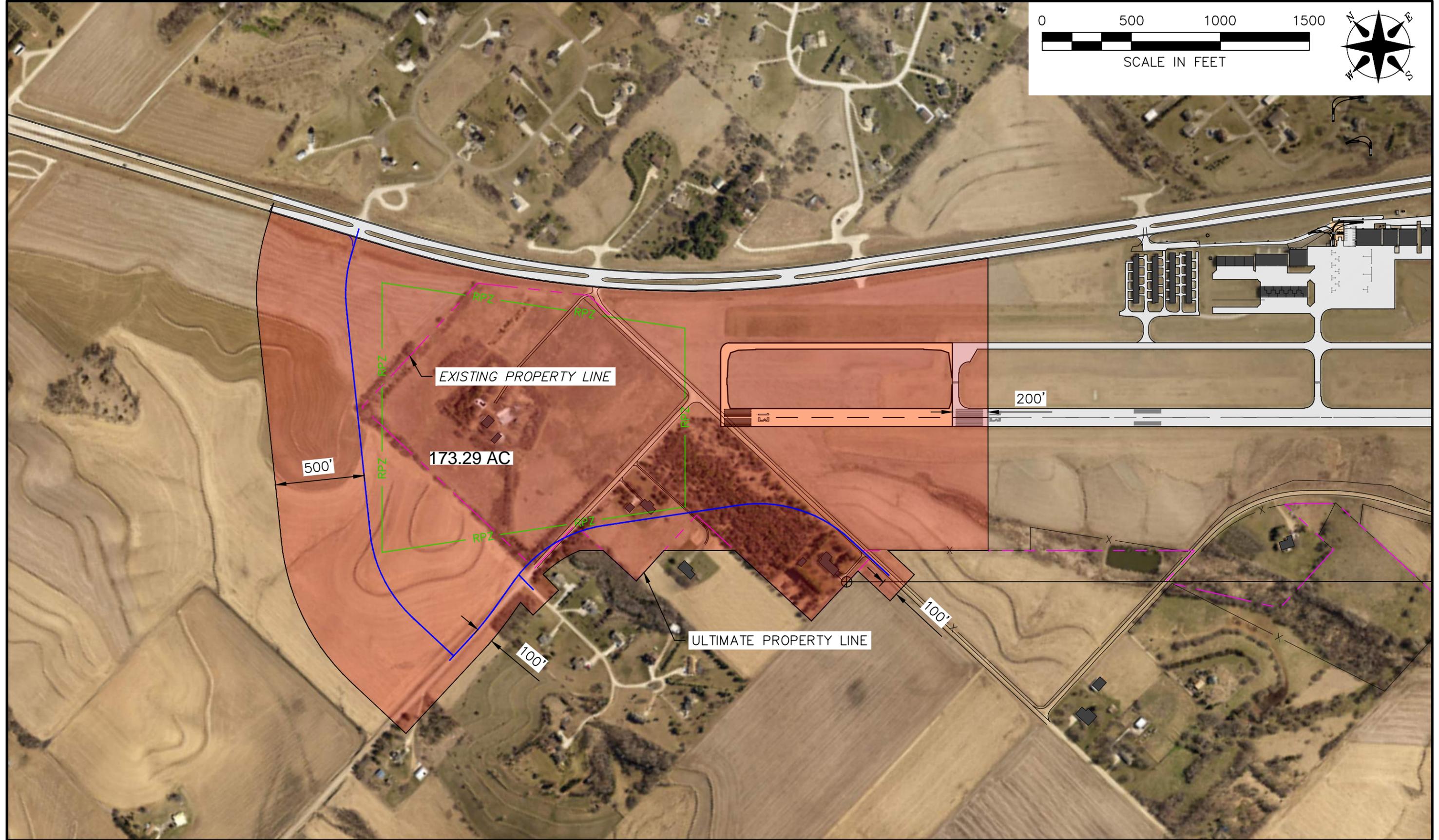
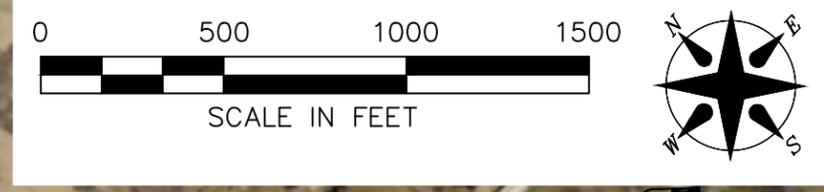
Study Area

 Study Area



**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923

**Location Map**  
Figure 1

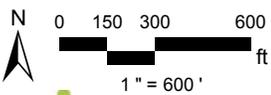


PROJECT NO: 021-03923  
DRAWN BY: MLD  
DATE: 08/10/22

RUNWAY 13 EXTENSION/ROAD RELOCATION CULTURAL SURVEY AREAS  
BLAIR MUNICIPAL AIRPORT - BLAIR, NE

**olsson**  
601 P Street, Suite 200  
P.O. Box 84608  
Lincoln, NE 68508  
TEL 402.474.6311  
FAX 402.474.5160

EXHIBIT  
1



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Site Map**  
Figure 2



January 10, 2023

ATTN: Mr. Caleb Pharris

RE: Blair Executive Airport Washington Co NOI

Dear Mr. Pharris,

The Nebraska Department of Environment and Energy (NDEE) has reviewed the above referenced project. As with any project, permits may be required prior to beginning construction or operation. At a minimum, you should be aware of the possible requirements or permits:

	<b>Contact</b>	<b>Phone</b>
Air Quality	Lindsey Hollmann	(402) 471-4212
Construction Storm Water	Daniel Kroll	(402) 471-4370
Drinking Water	Hillary Stoll	(402) 471-4252
Wastewater	Hillary Stoll	(402) 471-4252
Water Quality	Dane Pauley	(402) 471-1056
Waste Disposal	Erik Waiss	(402) 471-8308

**Air Quality:** Fugitive Dust Title 129 Chapter 15 Section 003 regulations shall apply to all demolition, grading, and construction activities.

**Construction Storm Water:** The proposed project will require authorization under the Construction Storm Water General Permit (CSW-GP).

A Threatened and Endangered Species consultation may be required prior to CSW-GP notice of intent (NOI) approval. The Nebraska Game and Parks Commission, Conservation and Environmental Review Tool (CERT), is used to complete this consultation.

The land application of concrete grooving/grinding slurry generated from any Public Agency, or their contractor, in a transportation right-of-way requires authorization under the general NPDES permit for the Land Application of Concrete Grooving/Grinding Slurry

Excavation dewatering requires authorization under a general permit unless comprised entirely of storm water. Notification to the Department is required for excavations encountering contamination, or in areas of known contamination.

**Drinking Water:** The project discussed in your correspondence deals with construction on the edge of a community setting. If the project adheres to all State regulations and local ordinances (i.e., does not encroach upon a public water system), the Department does not foresee issues affecting drinking water quality.

**Wastewater:** No comments.

**Water Quality:** There is not a Title 117 stream or wetland on this site but proper BMPs should be applied to the construction site to prevent possible runoff to streams.

**Waste Disposal:** Airport improvements, land improvements, stormwater improvements, utility and electrical trenching and installation. No Waste Permit Required. All waste generated or discovered on site must be properly handled, contained, and disposed as per all applicable regulations found in [NE Title 128 - Nebraska Hazardous Waste Regulations](#) and [NE Title 132 - Integrated Solid Waste Management Regulations](#). This includes proper waste determinations and characterization before disposal. Where possible, NDEE urges reuse and recycling of any materials generated by the project. If you have any questions about solid or hazardous waste regulations, please contact the Environmental Assistance Coordinator for the Waste Compliance Section of DEE at (402) 471-8308.

If you have any other questions, feel free to contact the individuals listed above. For more information, please visit our website at [dee.ne.gov](http://dee.ne.gov)

Sincerely,

*Alicia Boss*

Administrative Specialist



December 12, 2022

John Berge  
United States Department of Agriculture  
Farm Service Agency  
7131 A Street  
Lincoln, NE 68510

RE: Blair Executive Airport, Environmental Assessment, Washington County, Nebraska

Dear Mr. Berge:

On behalf of the Blair Airport Authority, Olsson is in the process of completing an Environmental Assessment for improvements to the Blair Executive Airport, Washington County, Nebraska. Portions of the project may be completed with Federal Aviation Administration (FAA) grant funds. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; and the Council on Environmental Quality (CEQ) NEPA implementation guidelines (40 Code of Federal Regulations [CFR] 1500-1508); the Airport Authority and FAA is requesting input from your agency on potential impacts.

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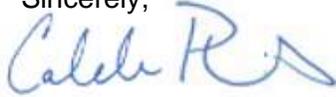
Project Name: Blair Executive Airport

General Project Location: Blair, Washington County, Nebraska

Section, Township, Range: Sections 19, 24, 25 & 30, Township 17 North, Range 11 East

The Airport Authority and FAA requests your input regarding potential concerns your agency may have regarding the proposed project. Please provide comment within 30 days of receipt of this letter. If you have any questions, or require additional information, please contact Caleb Pharris, Project Scientist at Olsson, 308.627.3338, [cpharris@olsson.com](mailto:cpharris@olsson.com).

Sincerely,



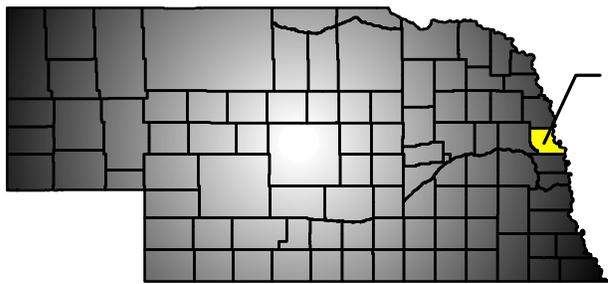
Caleb Pharris  
Project Scientist, Olsson  
308.627.3338  
[cpharris@olsson.com](mailto:cpharris@olsson.com)  
2111 S. 67th Street, Suite 200  
Omaha, NE 68106

Enclosures:

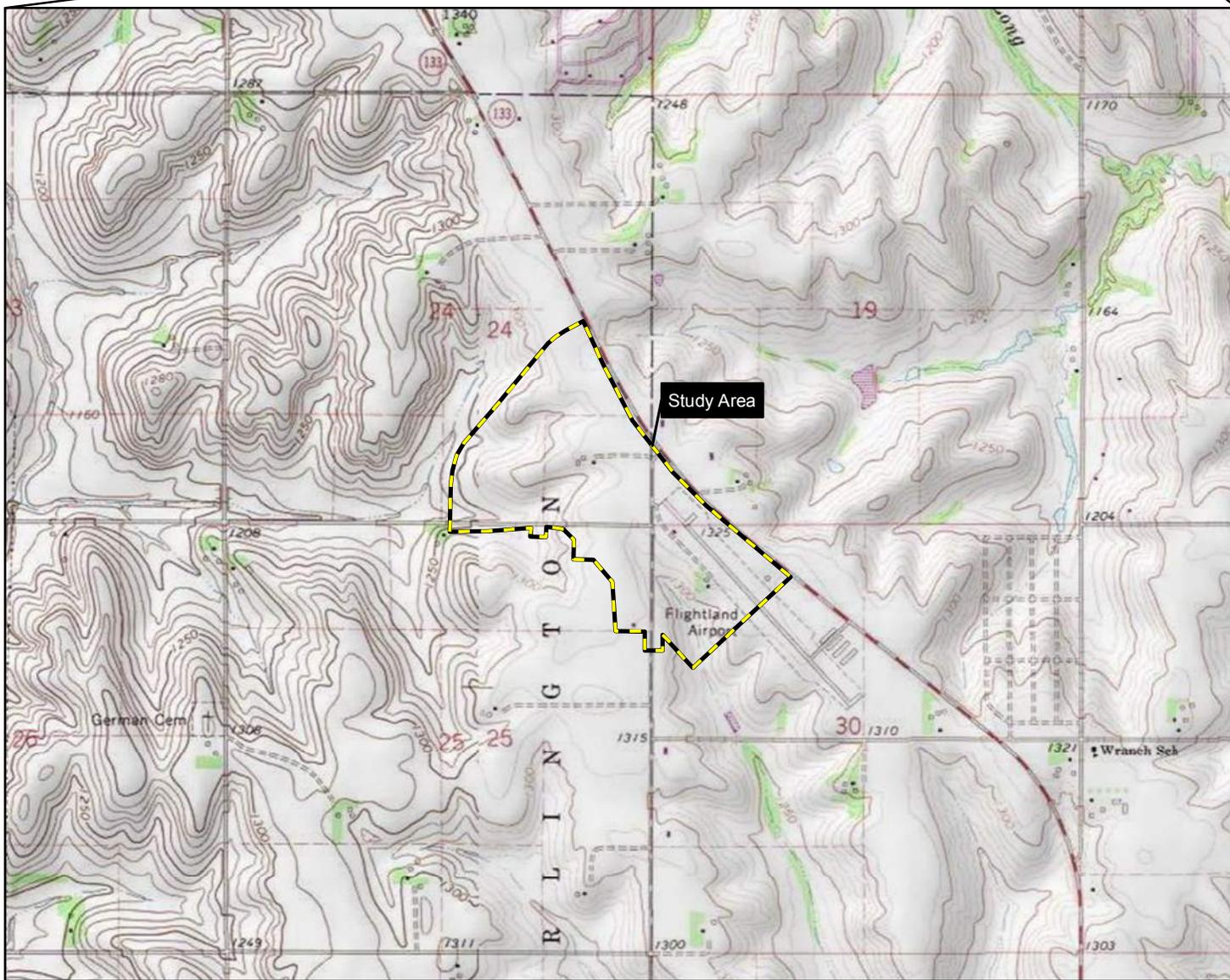
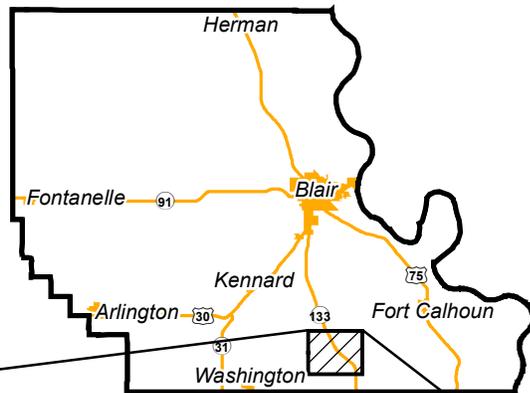
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Figure 2 - Project Site Map  
Exhibit 1 - Proposed Projects Map

# NEBRASKA

# WASHINGTON COUNTY

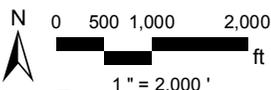


Project Area



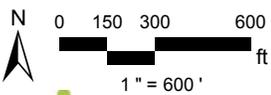
Study Area

Study Area



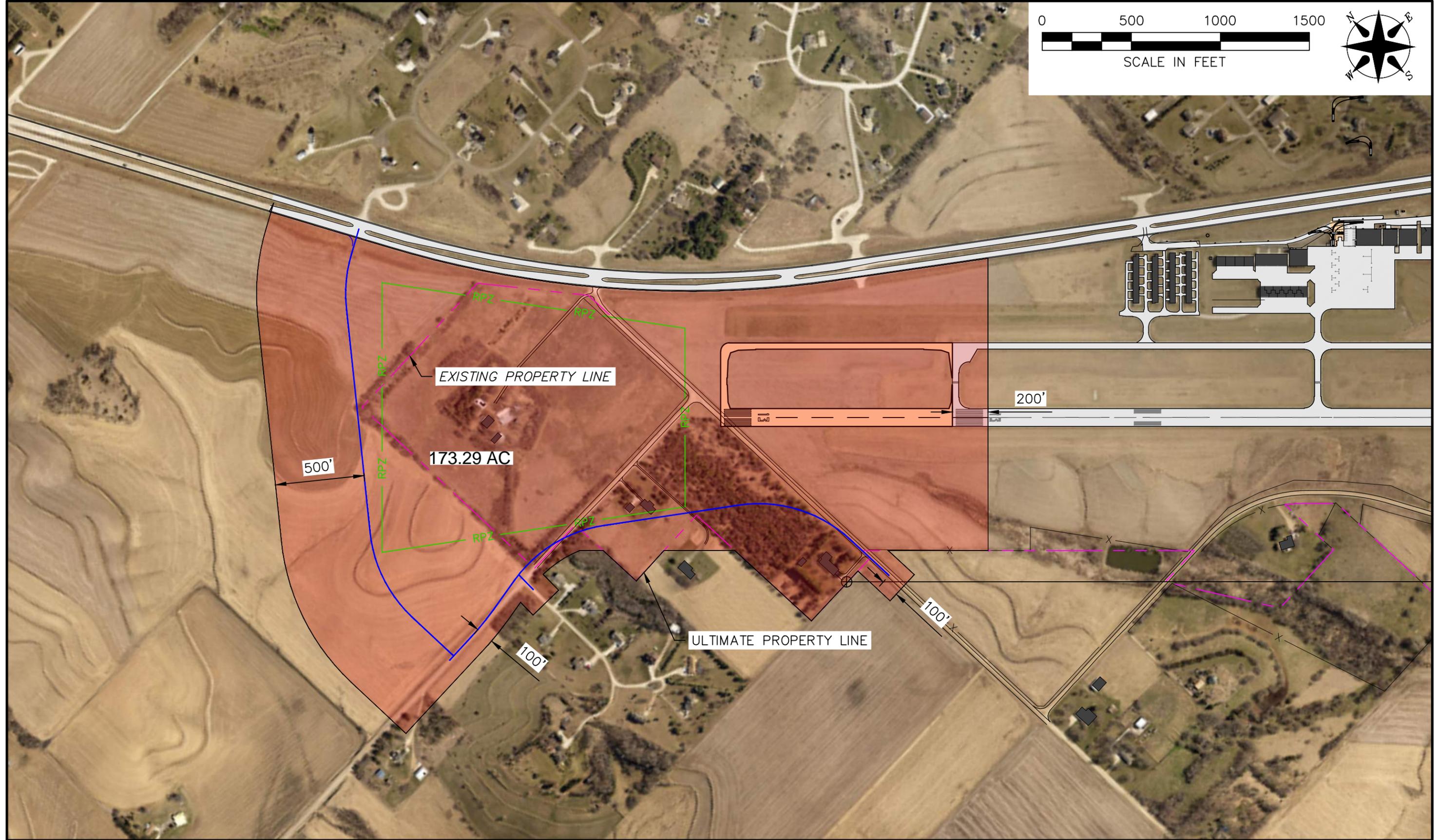
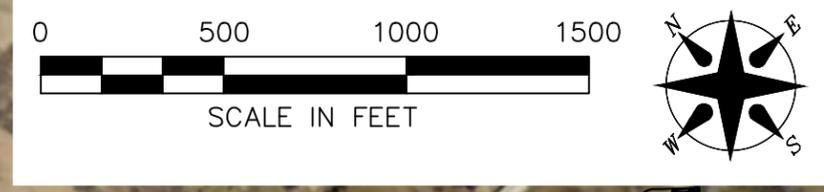
**Blair Municipal Airport**  
 Washington County, Nebraska  
 Olsson Project # A21-03923

**Location Map**  
 Figure 1



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Site Map**  
Figure 2



PROJECT NO: 021-03923  
 DRAWN BY: MLD  
 DATE: 08/10/22

**RUNWAY 13 EXTENSION/ROAD RELOCATION CULTURAL SURVEY AREAS**  
**BLAIR MUNICIPAL AIRPORT - BLAIR, NE**

**olsson**  
 601 P Street, Suite 200  
 P.O. Box 84608  
 Lincoln, NE 68508  
 TEL 402.474.6311  
 FAX 402.474.5160

EXHIBIT  
 1

United States Department of Agriculture



Natural Resources Conservation Service  
Nebraska State Office  
Federal Building, Room 152  
100 Centennial Mall North  
Lincoln, NE 68508-3866  
(402) 437-5300

<http://www.ne.nrcs.usda.gov>

**Subject:** LNU – Farmland Protection  
Proposed Blair Airport Improvement Project  
NEPA/FPPA Evaluation  
Washington County, Nebraska

**Date:** January 4, 2023

**To:** Olsson Associates  
**Attn:** Caleb Pharris, Project Scientist (cpharris@olsson.com)  
**File Code:** 310

We have reviewed the information provided in your correspondence dated December 12, 2022, concerning the proposed airport improvement project located in Washington County, Nebraska. This review is part of the National Environmental Policy Act (NEPA) evaluation for the Federal Aviation Administration (FAA). We have evaluated the proposed site as required by the Farmland Protection Policy Act (FPPA).

The proposed site contains areas of Prime Farmland and we have completed the Farmland Conversion Impact Rating form (AD-1006) for the proposed site. The rating of the proposed site is 145. The FPPA law states that sites with a rating less than 160 will need no further consideration for protection and no additional evaluation is necessary. We strongly encourage the use of acceptable erosion control methods during the construction of this project.

If you have further questions, please contact Elizabeth Gray at 402.437.4068 or by email at [Elizabeth.gray@usda.gov](mailto:Elizabeth.gray@usda.gov) (preferred).

Sincerely,

**ELIZABETH  
GRAY**

 Digitally signed by ELIZABETH  
GRAY  
Date: 2023.01.04 09:28:45 -06'00'

ELIZABETH GRAY  
USDA-NRCS Nebraska Assistant State Soil Scientist

Attachment: Blair Airport Improvement Project\_NE177 (AD-1006)





December 12, 2022

Natural Resources Commission  
Soil and Water Conservation Program  
245 Fallbrook Boulevard, Suite 201, Box C  
Lincoln, NE 68521-6729

RE: Blair Executive Airport, Environmental Assessment, Washington County, Nebraska

To whom this may concern:

On behalf of the Blair Airport Authority, Olsson is in the process of completing an Environmental Assessment for improvements to the Blair Executive Airport, Washington County, Nebraska. Portions of the project may be completed with Federal Aviation Administration (FAA) grant funds. In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; and the Council on Environmental Quality (CEQ) NEPA implementation guidelines (40 Code of Federal Regulations [CFR] 1500-1508); the Airport Authority and FAA is requesting input from your agency on potential impacts.

The Blair Airport Authority is proposing improvements to the existing airport facility. We have included maps showing the project location and proposed improvements (Figures 1-2, Exhibit 1, enclosed). The proposed project would include:

- Land acquisition for ultimate Runway 13/31 (approximately 33 acres)
- Extend Runway 13/31 (1,300 feet) – (5,500 feet x 100 feet)
- Extend Runway 13/31 Parallel Taxiway (1,300 feet x 35 feet)
- Construction of Runway Protection Zone (RPZ)
- Relocation of County Road 35/38
- Construction of Runway 13/31 and parallel taxiway safety area (grading to comply with B-II large aircraft)
- Construction of connecting taxiway to Runway 13 end
- Stormwater improvements
- Tree and building structure removal of land within the RPZ and county road relocation

Project Name: Blair Executive Airport

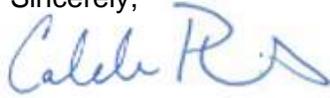
General Project Location: Blair, Washington County, Nebraska

Section, Township, Range: Sections 19, 24, 25 & 30, Township 17 North, Range 11 East

The Airport Authority and FAA requests your input regarding potential concerns your agency may have regarding the proposed project. Please provide comment within 30 days of receipt of this

letter. If you have any questions, or require additional information, please contact Caleb Pharris, Project Scientist at Olsson, 308.627.3338, cpharris@olsson.com.

Sincerely,



Caleb Pharris  
Project Scientist, Olsson  
308.627.3338  
cpharris@olsson.com  
2111 S. 67th Street, Suite 200  
Omaha, NE 68106

Enclosures:

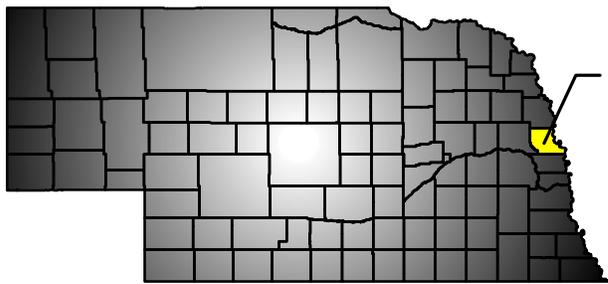
Figure 1 - Project Location Map

Figure 2 - Project Site Map

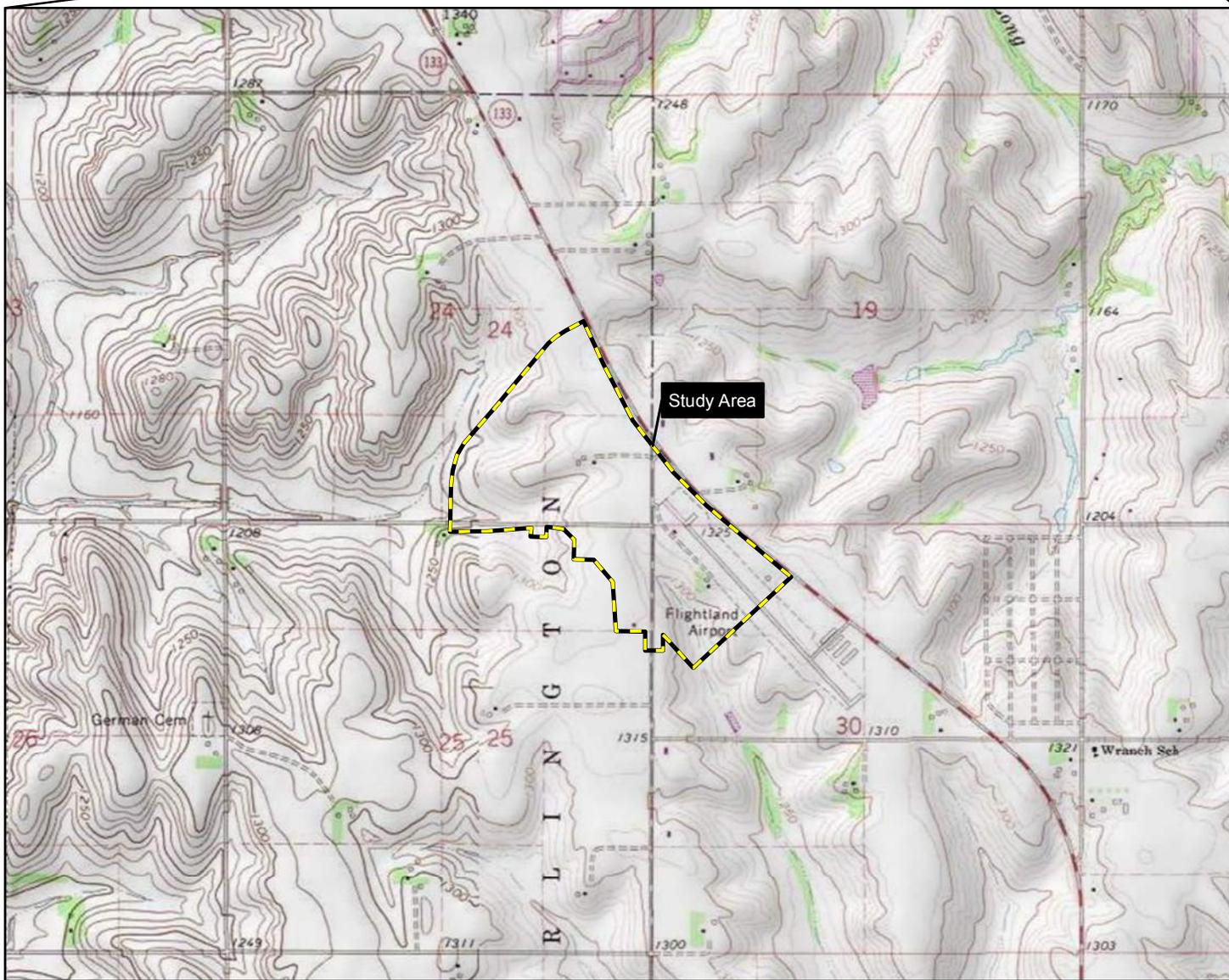
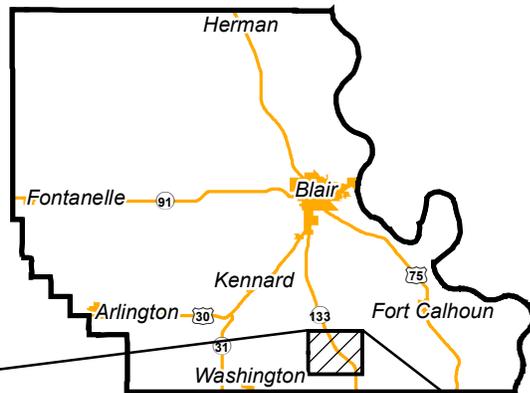
Exhibit 1 - Proposed Projects Map

NEBRASKA

WASHINGTON COUNTY

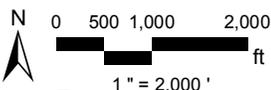


Project Area



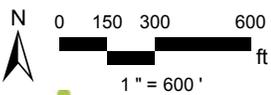
Study Area

 Study Area



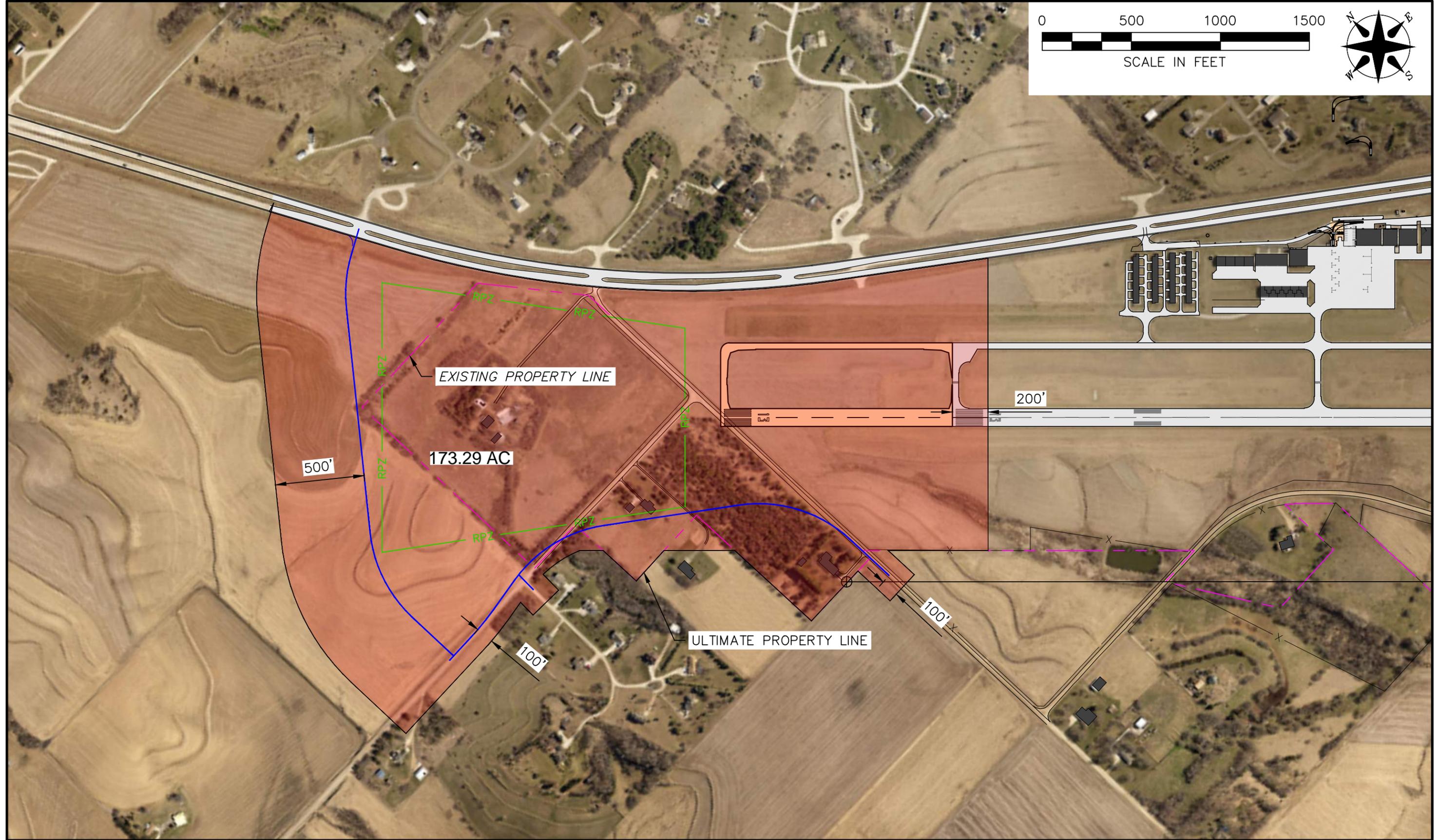
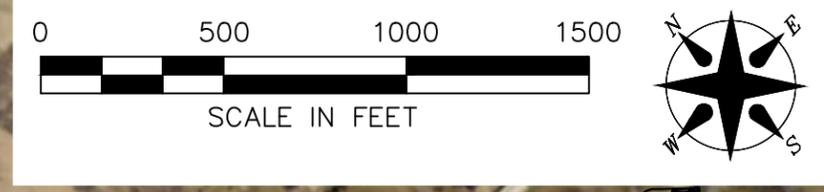
**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923

**Location Map**  
Figure 1



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Site Map**  
Figure 2



PROJECT NO: 021-03923  
 DRAWN BY: MLD  
 DATE: 08/10/22

**RUNWAY 13 EXTENSION/ROAD RELOCATION CULTURAL SURVEY AREAS**  
**BLAIR MUNICIPAL AIRPORT - BLAIR, NE**

**olsson**  
 601 P Street, Suite 200  
 P.O. Box 84608  
 Lincoln, NE 68508  
 TEL 402.474.6311  
 FAX 402.474.5160

EXHIBIT  
 1



Good Life. Great Water.

DEPT. OF NATURAL RESOURCES

# Project Review

DATE: December 30, 2022  
TO: Caleb Pharris, Olsson  
FROM: Lucas Batenhorst, NeDNR  
SUBJECT: Blair Executive Airport, Environmental Assessment, Washington County, NE

---

## **Comments**

As requested, the Nebraska Department of Natural Resources (NeDNR) has reviewed the proposed project for potential impacts to jurisdictional dams, floodplain management, registered groundwater wells, stream gages, and surface water rights, and has listed the comments below:

## **Groundwater Wells**

According to NeDNR records, there is one (1) public supply well within the 1,000-foot spacing for the proposed project area and several registered wells within close proximity to the proposed project area. Please note that the attached map shows the 1,000-foot spacing, but does not show the public supply well location. Please contact the local municipality for more information on public supply well names and locations. All other registered wells are shown on the map. Special care should be taken to locate and avoid impacting these wells in any significant way. If the registration status, use, or ownership of a well changes due to the project, one or both of the following forms must be filed with NeDNR: the water well registration modification form and/or the change of ownership form. Furthermore, the appropriate Natural Resources District (NRD), which may have additional rules and regulations regarding such changes, should be notified. If you have any questions on groundwater well registration, please contact Mike Thompson at (402) 471-0587 or reference the groundwater links below.

## **Groundwater Links:**

*Groundwater general information:* <http://dnr.nebraska.gov/groundwater>

*Groundwater well data:* <http://nednr.nebraska.gov/dynamic/wells/Menu.aspx>

*Groundwater forms:* <https://dnr.nebraska.gov/groundwater/forms>

*Local NRD Information:* <https://www.nrdnet.org/nrds/find-your-nrd>

The review did not identify any potential impacts to jurisdictional dams, floodplain management, stream gages or surface water rights. If you have any questions about this review, please feel free to contact me at (402) 471-0584 or [lucas.batenhorst@nebraska.gov](mailto:lucas.batenhorst@nebraska.gov).

Enclosure (s)

Cc: Mike Thompson, NeDNR

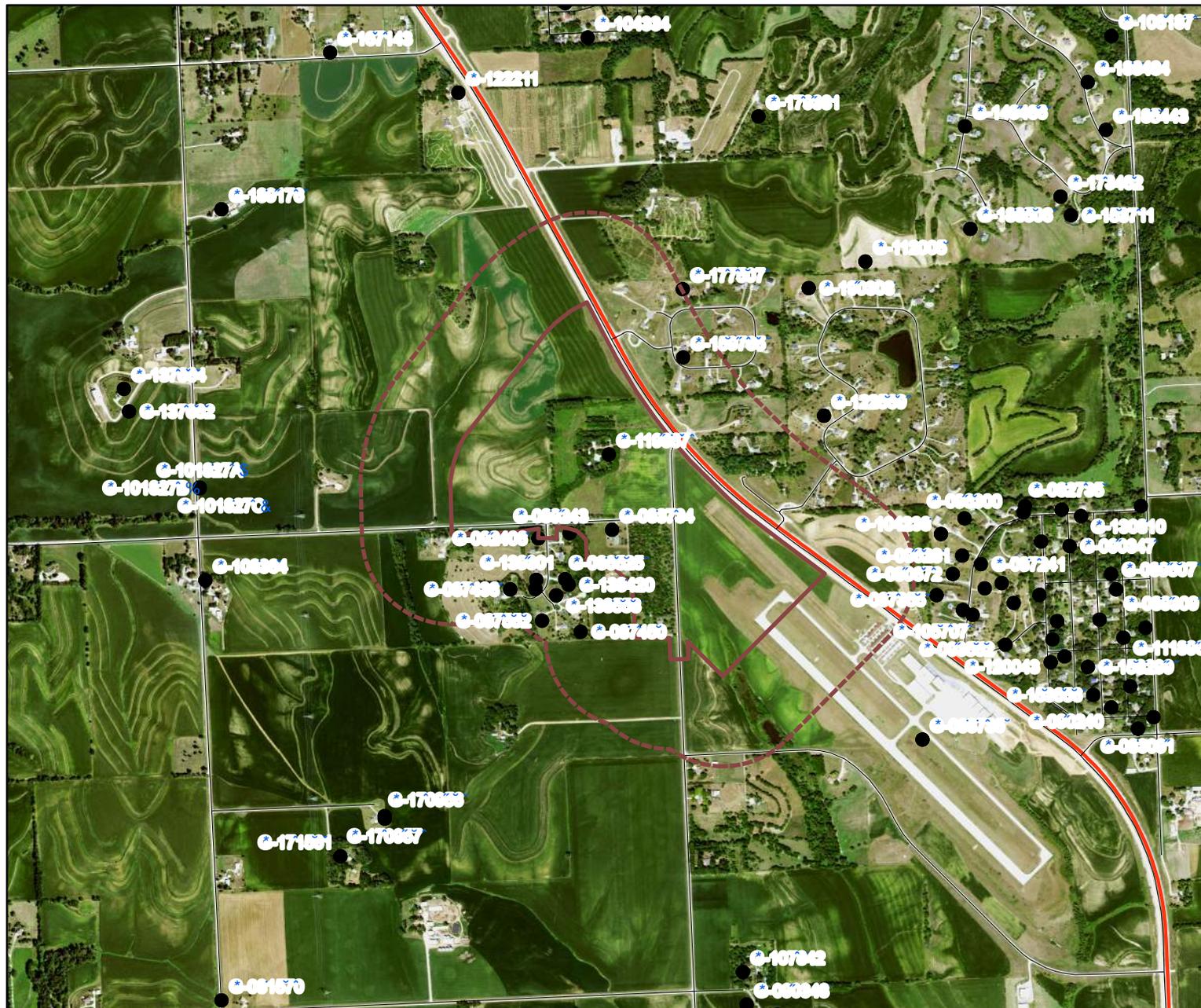
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NEBRASKA

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DEPT. OF NATURAL RESOURCES



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3&7 \$QQXDO



)ORRG &KDQFH



)HHW

**APPENDIX E**  
**Wetland Delineation**  
**Report**

# **BLAIR EXECUTIVE AIRPORT WETLAND DELINEATION REPORT**

**PREPARED FOR:**

**Blair Airport Authority**

**Blair, Nebraska**

**November 2022**

**Olsson Project No. A21-03923**



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2.4 SSURGO Database .....	2
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## APPENDICES

Appendix A Figures

Appendix B WETS Tables

Appendix C Wetland Determination Data Forms

Appendix D Photo Log

# 1. INTRODUCTION

This report documents the findings of a wetland delineation for the Blair Executive Airport (Project). The Project is a proposed runway improvement located in Blair, Washington County, Nebraska (Figure 1 and Figure 2, Appendix A). The Project is located northwest of the existing runway and near the intersection of U.S. Highway 133 and County Road 35 (Study Area). Blair Airport Authority contracted Olsson, Inc. (Olsson) to identify and delineate wetlands, stream channels, and other waters within the proposed Study Area. This report provides a description of the Study Area, methods used, investigation results, and a discussion of the results.

The Study Area consists of approximately 177 acres located in Section 19 and Section 30 in Township 17 North, Range 12 East and Section 24 and Section 25 in Township 17 North, Range 11 East in the Fort Calhoun, Nebraska, Quadrangle. The geometric center of the Study Area is located at latitude 41.422855 degrees and longitude -96.119463 degrees.

## 2. DESKTOP REVIEW

Olsson reviewed publicly available information to identify areas with the potential to support wetlands, streams, and other aquatic resources within the Study Area. Data sources reviewed included aerial photography (ESRI 2020; Google Earth 2022), U.S. Geological Survey (USGS) topographic maps (USGS 2014), U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) database (USFWS 2021), USGS National Hydrography Dataset (NHD) database (USGS 2021), U.S. Department of Agriculture (USDA) National Agricultural Imagery Program (NAIP) aerials (USDA 2012), and Washington County Soil Survey data via the Soil Survey Geographic (SSURGO) database (SSURGO 2021). Data from these resources are shown on Figure 1 and Figure 3 in Appendix A. The desktop review identified areas that may have wetland indicators (e.g., mapped wetlands, areas with hydric soils, saturation visible on aerial imagery, etc.). The field investigation was not limited to or restricted to these areas identified by the desktop review. Additional points were taken for documentation of areas observed with wetland characteristics not previously identified.

### 2.1 USGS Topographic Maps

The Location Map (Figure 1, Appendix A) indicates the relief is sloped with elevations ranging from 1,325 feet above mean sea level in the north and central portion of the Study Area to 1,235 feet above mean sea level in the western and southeastern portion of the Study Area. The USGS topographic layer depicts one unnamed intermittent stream channel in the southeastern corner of the Study Area. The southern portion of the Study Area is depicted as the Flightland Airport.

## 2.2 Aerial Imagery Review

The Site Map (Figure 2, Appendix A) shows the Study Area contains a small portion of an existing runway, County Road 35, County Road 38, associated roadside ditches, three farmsteads, two forested areas, a shelterbelt made of evergreens, and multiple row crop agricultural fields. There are no visible open water features within the Study Area.

## 2.3 NWI and NHD Databases

On the Natural Resources Map (Figure 3, Appendix A), the NHD depicts one intermittent stream channel, Thomas Creek, within southeast corner of the Study Area. The NWI depicts one riverine habitat which is consistent with the NHD mapped channel, Thomas Creek.

## 2.4 SSURGO Database

The Natural Resources Map (Figure 3, Appendix A) identified the following seven SSURGO soil map units within the Study Area:

- 7234 - Judson silty clay loam, 2 to 6 percent slopes; two percent hydric rating
- 8010 - Ida silt loam, 6 to 11 percent slopes, eroded; non-hydric rating
- 8016 - Marshall silty clay loam, dry, 0 to 2 percent slopes; five percent hydric rating
- 8076 - Monona silt loam, 1 to 6 percent slopes, eroded; non-hydric rating
- 8097 - Monona-Pohocco complex, 6 to 11 percent slopes, eroded; non-hydric rating
- 8136 - Pohocco-Ida complex, 11 to 17 percent slopes, eroded; non-hydric rating
- 8142 - Pohocco-Monona complex, 11 to 17 percent slopes, eroded; non-hydric rating

The hydric percentage indicates what percentage of the soil map unit meets the criteria for hydric soils, which may indicate wetland conditions.

## 2.5 Climate Analysis for Wetlands Tables

To identify potential wetland areas in farmed fields, methods identified in the USDA Natural Resources Conservation Service Part 650 Engineering Field Handbook, Chapter 19 – Hydrology Tools for Wetland Identification and Analysis (USDA NRCS 2012) were used. As part of the analysis, Climate Analysis for Wetlands Tables (WETS Tables) were completed to determine in which years NAIP aeriels were taken during “normal” precipitation periods. The NAIP aeriels for “normal” years were then reviewed for signs of wetland hydrology in the agricultural fields (Appendix B). Possible hydrology indicators such as saturation and inundation were then outlined and overlaid on each other. Areas where these outlines overlapped in a majority of the years were identified as WETS Areas in Appendix B. The WETS Areas identified during the analysis represent potential boundaries of farmed wetland locations based on wetland characteristics observable on NAIP aerial imagery.

### 3. FIELD INVESTIGATION METHODS

Olsson staff visited the Study Area on October 20, 2022, to complete the wetland delineation field investigation. The wetland delineation followed methodology described in the *U.S. Army Corps of Engineers Wetland Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (USACE 2010). All conditions described represent conditions at the time of the field investigation. U.S. Army Corps of Engineers Wetland Determination Data Forms are included in Appendix C. Photographs were taken during the visit and are shown in Appendix D. Sample point locations, photo locations, and delineated water features are shown on Figure 4, Appendix A.

### 4. RESULTS

#### Wetland

A total of one wetland was delineated within the Study Area. Wetland 16 was identified near the southeast boundary of the Study Area and is classified as a Palustrine Forested Temporarily Flooded (PFOA) wetland. No stream channels were delineated within the Study Area. Table 1 summarizes the wetlands delineated within the Study Area.

Table 1. Delineated Wetland.

Feature ID	Sample Point(s)	Cowardin Classification*	Photograph(s)	Figure(s)	Size (Acres)
Wetland 16	16	PFOA	16	4	0.79
<b>TOTAL</b>					<b>0.79</b>

PFOA = Palustrine Forested Temporarily Flooded

\*(Cowardin et al. 1979)

### 5. DISCUSSION

Wetland 16 (PFOA) wetland extends south, beyond the extents of the Study Area. This area was shown on the NHD as Thomas Creek, an intermittent stream channel and on the NWI as a riverine habitat; however, this area lacked a defined bed and bank and ordinary high-water mark (OHWM); therefore, it is not a channel.

Sample Points (SPs) 1, 3 through 10, and 15 were taken in WETS Areas. These areas were all determined to be upland due to the lack of all three wetland indicators.

This report has been prepared for the use of Blair Airport Authority. It is intended for specific application to the proposed project and has been produced in accordance with generally accepted practices. If any changes occur within the Study Area, or regarding previously outlined

methodologies or regulations, the information in this report cannot be considered valid unless it has been further reviewed and verified by Olsson.

## 6. REFERENCES

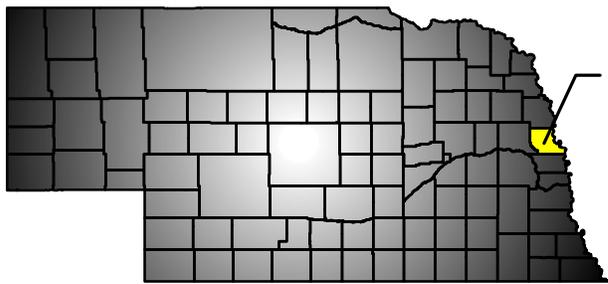
- Cowardin, L. M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service (USFWS) Report No. FWS/OBS/-79/31. Washington, D.C.
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- U.S. Geological Survey (USGS). 2014. 7.5-minute digital topographic quadrangle, Fort Calhoun/Washington, 1:25,000.
- USGS. 2021. National Hydrography Dataset (NHD). (USGS NHD Best Resolution 20191002 for Nebraska State File GDB 10.1 Model Version 2.2.1).

# **APPENDIX A**

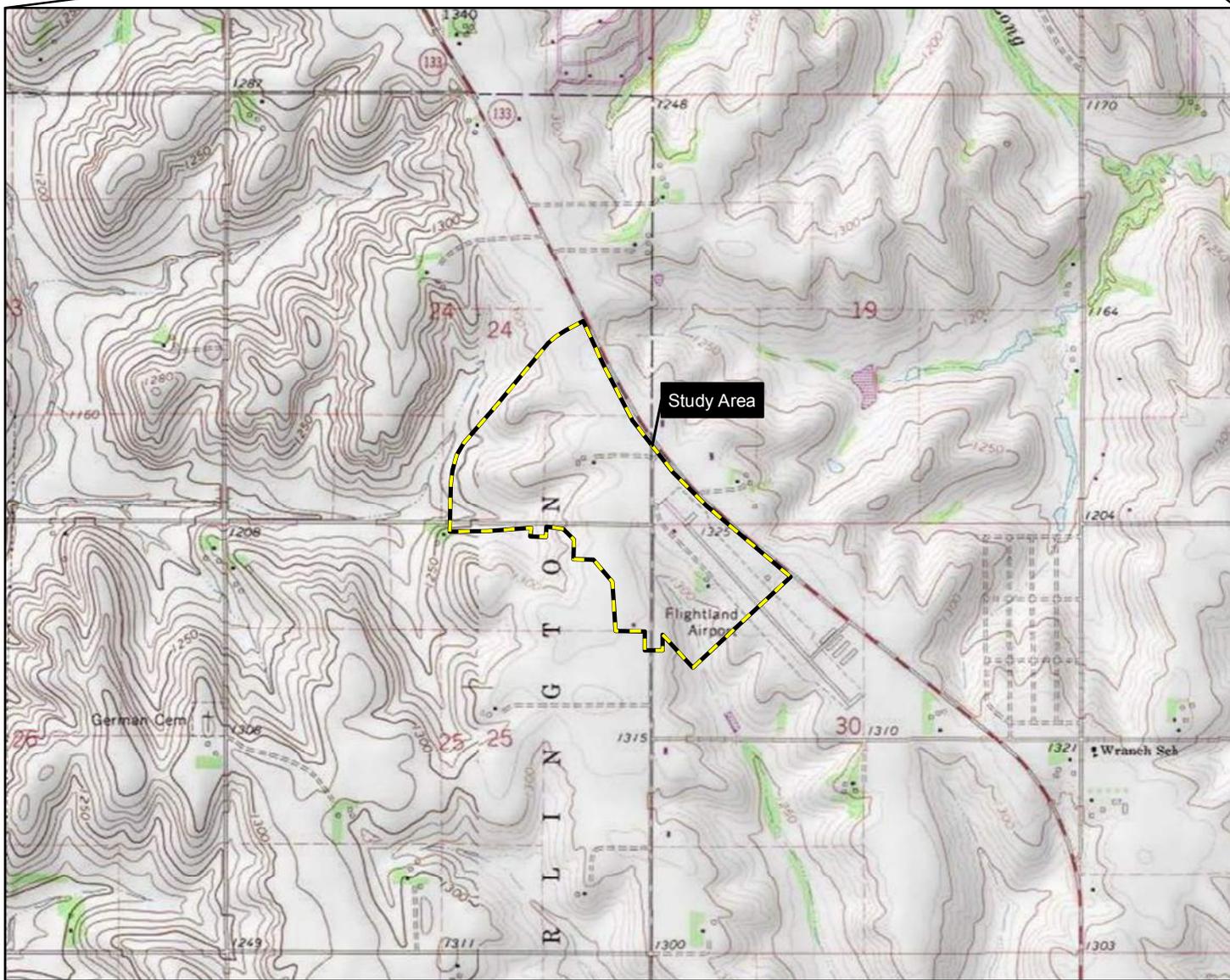
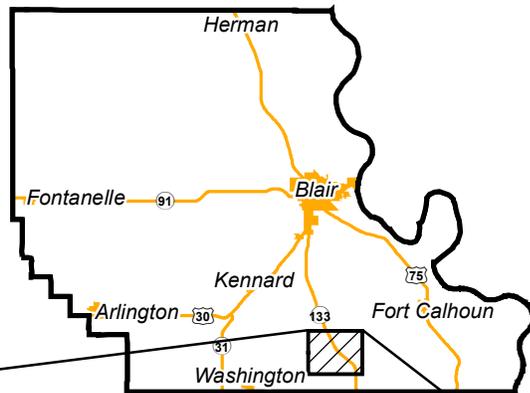
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NEBRASKA

WASHINGTON COUNTY

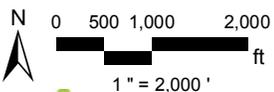


Project Area



Study Area

 Study Area



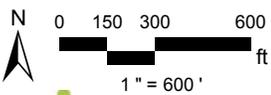
**Blair Executive Airport  
Environmental Assessment**

Blair, Washington County, Nebraska

Olsson Project # A21-03923

**Location Map**

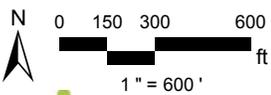
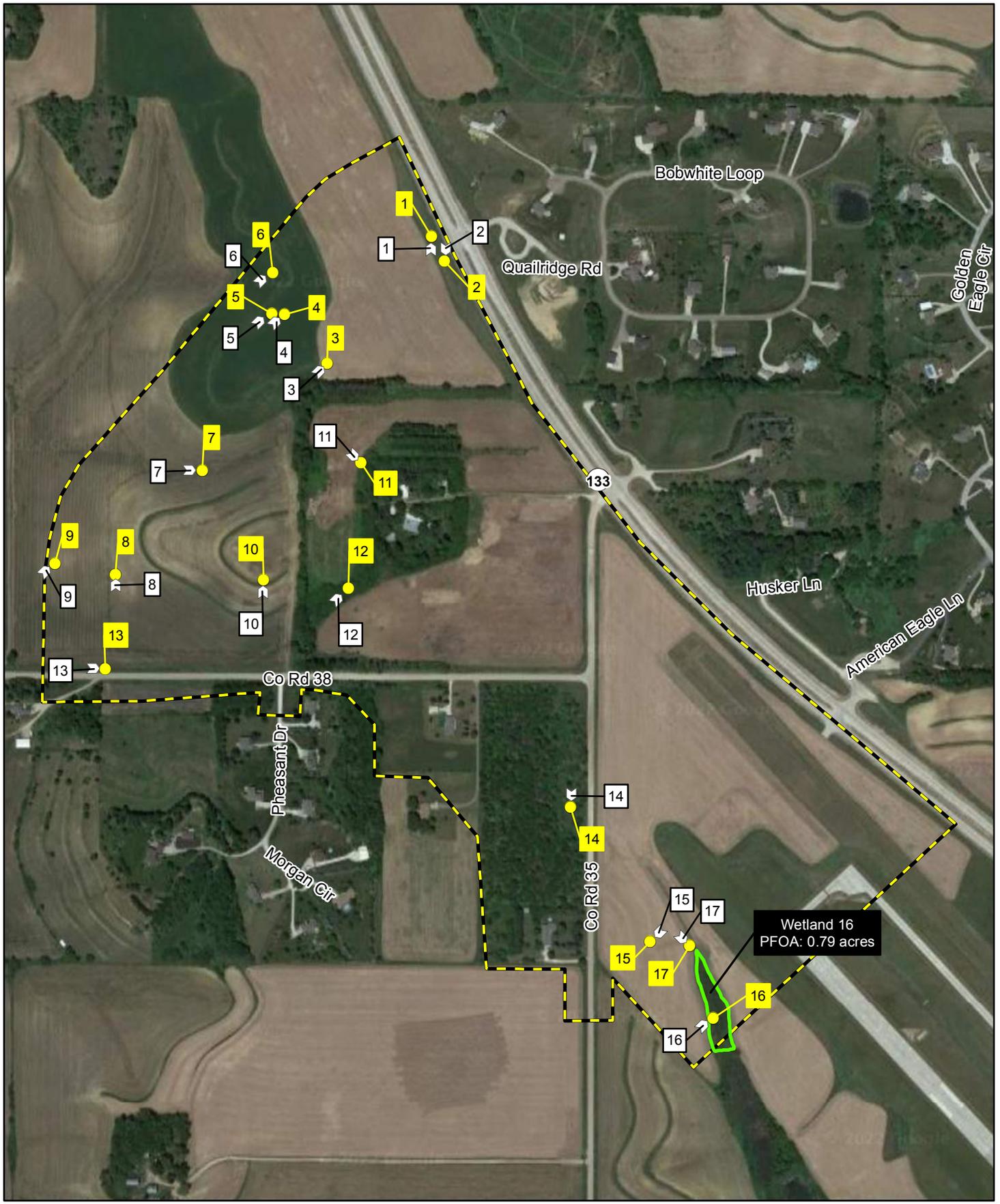
Figure 8



 Study Area

**Blair Executive Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Site Map**  
Figure 2





-  Photo Point
-  Sample Point
-  PFOA Wetland
-  Study Area

**Blair Executive Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Delineation Map**  
Figure 4

# **APPENDIX B**

## WETS Tables

**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 7/15/2003

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	June	2.38	3.98	4.86	3.25	NORMAL	2	3	6
2nd PRIOR MONTH*	May	3.25	4.62	5.49	4.37	NORMAL	2	2	4
3rd PRIOR MONTH*	April	1.84	2.88	3.47	3.66	WET	3	1	3
								SUM =	13

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

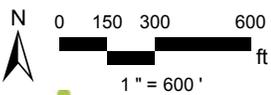
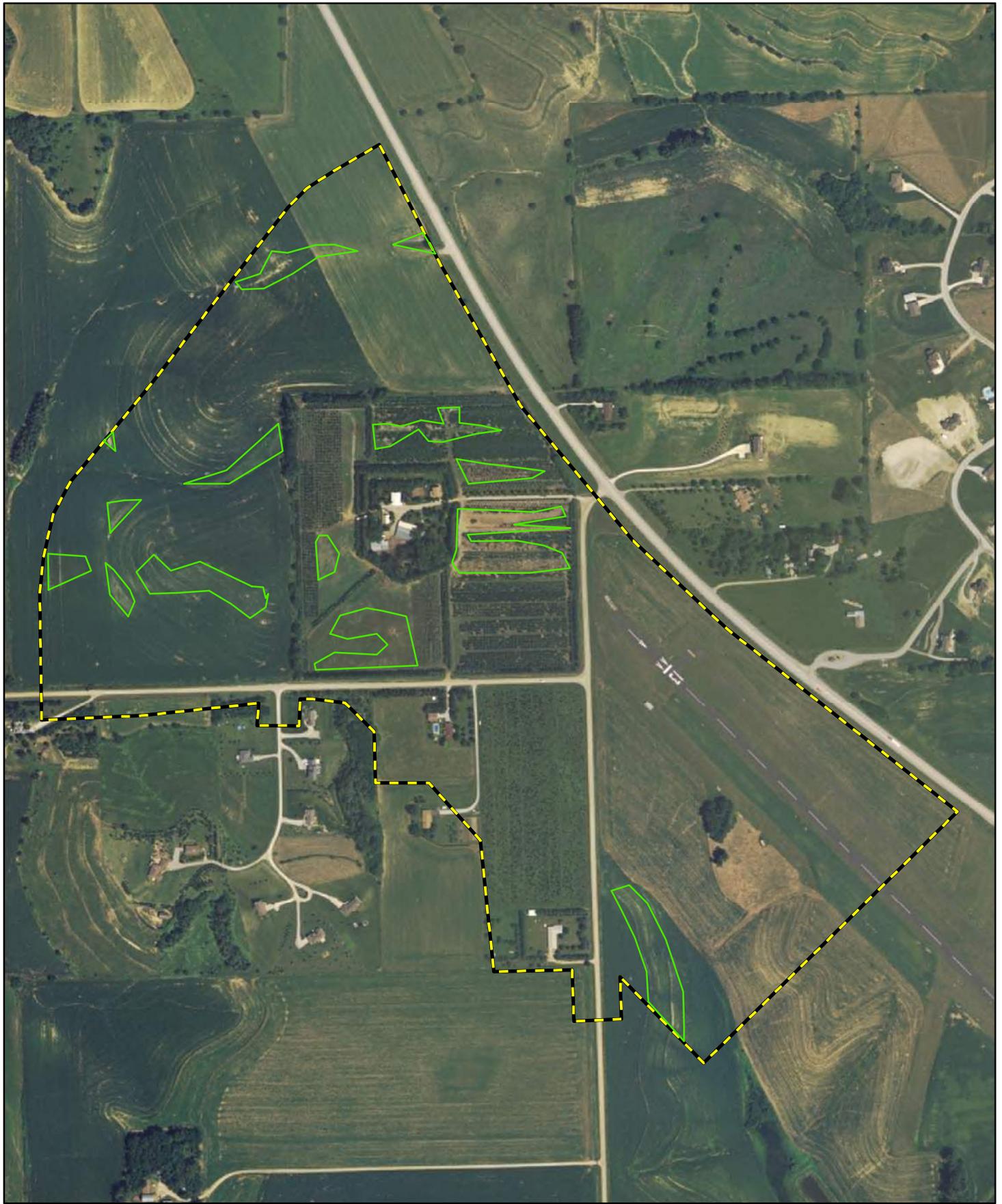
CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Normal

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.



-  Study Area
-  2003

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2003 WETS Map**

**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 7/31/2004

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	June	2.38	3.98	4.86	2.70	NORMAL	2	3	6
2nd PRIOR MONTH*	May	3.25	4.62	5.49	8.21	WET	3	2	6
3rd PRIOR MONTH*	April	1.84	2.88	3.47	0.97	DRY	1	1	1
								SUM =	13

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

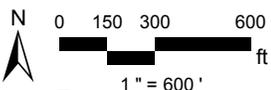
\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Normal

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.

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**olsson**

-  Study Area
-  2004

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2004 WETS Map**

**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 7/11/2005

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	June	2.38	3.98	4.86	2.69	NORMAL	2	3	6
2nd PRIOR MONTH*	May	3.25	4.62	5.49	4.60	NORMAL	2	2	4
3rd PRIOR MONTH*	April	1.84	2.88	3.47	2.63	NORMAL	2	1	2
								SUM =	12

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

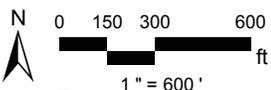
CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Normal

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.



**olsson**

-  Study Area
-  2005

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2005 WETS Map**

**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 7/19/2006

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	June	2.38	3.98	4.86	1.07	DRY	1	3	3
2nd PRIOR MONTH*	May	3.25	4.62	5.49	2.54	DRY	1	2	2
3rd PRIOR MONTH*	April	1.84	2.88	3.47	3.81	WET	3	1	3
								SUM =	8

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

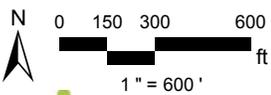
\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Dry

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.

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 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2006 WETS Map**



**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 8/27/2007

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	July	1.81	3.45	4.21	1.66	DRY	1	3	3
2nd PRIOR MONTH*	June	2.38	3.98	4.86	0.24	DRY	1	2	2
3rd PRIOR MONTH*	May	3.25	4.62	5.49	10.63	WET	3	1	3
								SUM =	8

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

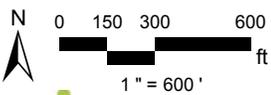
\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Dry

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.

\\oa.ad.oacconsulting.com\fnfs-ns\projects\2021-03923-A\40-Design\GIS\Blair Airport WETS\Untitled.mxd PUBLISHED BY: mczewinski DATE: November 09, 2022



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2007 WETS Map**



**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 6/25/2009

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	May	3.25	4.62	5.49	1.38	DRY	1	3	3
2nd PRIOR MONTH*	April	1.84	2.88	3.47	2.21	NORMAL	2	2	4
3rd PRIOR MONTH*	March	1.07	2.03	2.47	1.05	DRY	1	1	1
								SUM =	8

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

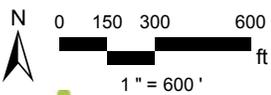
CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Dry

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2009 WETS Map**



**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 6/16/2010

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	May	3.25	4.62	5.49	2.54	DRY	1	3	3
2nd PRIOR MONTH*	April	1.84	2.88	3.47	3.01	NORMAL	2	2	4
3rd PRIOR MONTH*	March	1.07	2.03	2.47	1.72	NORMAL	2	1	2
								SUM =	9

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

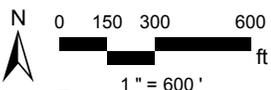
CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Dry

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.



 Study Area

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2010 WETS Map**



**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 6/26/2012

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	May	3.25	4.62	5.49	3.72	NORMAL	2	3	6
2nd PRIOR MONTH*	April	1.84	2.88	3.47	1.12	DRY	1	2	2
3rd PRIOR MONTH*	March	1.07	2.03	2.47	2.29	NORMAL	2	1	2
								SUM =	10

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

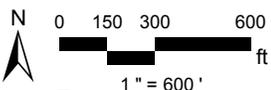
CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Normal

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.



-  Study Area
-  2012

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2012 WETS Map**

**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022 PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE LANDOWNER: Blair Airport

COUNTY: Washington STATE: Nebraska

SOIL NAME: See Report GROWING SEASON: May 1 - October 31

AERIAL DATE: 9/16/2014

LONG TERM RAINFALL RECORDS								
MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	August	2.11	4.03	4.92	9.59	WET	3	9
2nd PRIOR MONTH*	July	1.81	3.45	4.21	1.72	DRY	1	2
3rd PRIOR MONTH*	June	2.38	3.98	4.86	10.52	WET	3	3
							SUM =	14

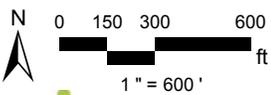
NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Normal

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.



**olsson**

-  Study Area
-  2014

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2014 WETS Map**

**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 7/20/2016

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	June	2.38	3.98	4.86	0.94	DRY	1	3	3
2nd PRIOR MONTH*	May	3.25	4.62	5.49	4.84	NORMAL	2	2	4
3rd PRIOR MONTH*	April	1.84	2.88	3.47	5.40	WET	3	1	3
								SUM =	10

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

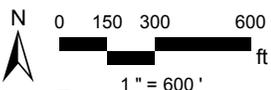
CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Normal

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.



-  Study Area
-  2016

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2016 WETS Map**

**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 7/11/2018

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	June	2.38	3.98	4.86	6.89	WET	3	3	9
2nd PRIOR MONTH*	May	3.25	4.62	5.49	1.97	DRY	1	2	2
3rd PRIOR MONTH*	April	1.84	2.88	3.47	0.27	DRY	1	1	1
								SUM =	12

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

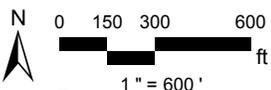
\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Normal

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.

\\oa.ad.oaconsulting.com\fnis-ns\projects\2021\03501-04000\021-03923-A\40-Design\GIS\Blair Airport WETS\Untitled.mxd WETS.mxd PUBLISHED BY: mczerwinski DATE: November 09, 2022



**olsson**

-  Study Area
-  2018

**Blair Municipal Airport**  
 Washington County, Nebraska  
 Olsson Project # A21-03923  
**2018 WETS Map**

**RAINFALL DOCUMENTATION**  
USE WITH PHOTOGRAPHS

DATE: 10/16/2022

PREPARED BY: Caleb Pharris

WEATHER STATION: Omaha Eppley Airfield, NE

LANDOWNER: Blair Airport

COUNTY: Washington

STATE: Nebraska

SOIL NAME: See Report

GROWING SEASON: May 1 - October 31

AERIAL DATE: 8/15/2020

**LONG TERM RAINFALL RECORDS**

	MONTH	3 YRS IN 10 LESS THAN	AVERAGE	3 YRS IN 10 MORE THAN	RAIN FALL	CONDITION WET, DRY, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	PRODUCT OF PREVIOUS TWO COLUMNS
1st PRIOR MONTH*	July	1.81	3.45	4.21	1.56	DRY	1	3	3
2nd PRIOR MONTH*	June	2.38	3.98	4.86	2.61	NORMAL	2	2	4
3rd PRIOR MONTH*	May	3.25	4.62	5.49	3.25	NORMAL	2	1	2
								SUM =	9

NOTE: If sum is  
 6 - 9 then prior period has been drier than normal  
 10 - 14 then prior period has been normal  
 15 - 18 then prior period has been wetter than normal

CONDITION VALUE:  
 Dry = 1  
 Normal = 2  
 Wet = 3

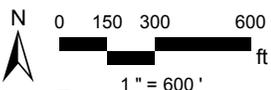
\*Photo Date

**CONCLUSIONS:**

At the time of the site visit, hydrologic conditions for the prior period were: Dry

Prior to the site visit monthly precipitation observed at the Fort Calhoun 4W, NE station was 1.97 inches, which would be considered light compared to the monthly average. These data indicate that hydrology indicators observed during the site visit were not reliable indicators.

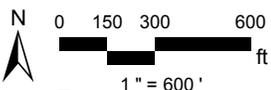
\\oa.ad.oaconsulting.com\fnfs-ns\projects\2021-03923-A\40-Design\GIS\Blair Airport WETS\Untitled.mxd WETS.mxd PUBLISHED BY: mczerwinski DATE: November 09, 2022



 Study Area

**olsson**

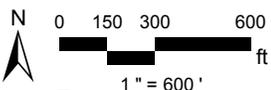
**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**2020 WETS Map**



**olsson**

- |            |      |
|------------|------|
| Study Area | 2012 |
| 2003       | 2014 |
| 2004       | 2016 |
| 2005       | 2018 |

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**WETS Map**



-  Study Area
-  Final WETS Areas

**Blair Municipal Airport**  
Washington County, Nebraska  
Olsson Project # A21-03923  
**Final WETS Map**

# **APPENDIX C**

## Wetland Determination Data Forms

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 1  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Roadside Ditch Local relief (concave, convex, none): Concave  
 Slope (%): 10-15 Lat: 41.427734 Long: -96.120072 Datum: NAD83  
 Soil Map Unit Name: 8097:Monona-Pohocco complex, 6 to 11 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks:  
 This area was identified as a potential wetland during the Climate Analysis for Wetland Tables (WETS Tables). However, the area is lacking sufficient wetland indicators and is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>					
1. <i>Populus deltoides</i>	2		FAC		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
2 = Total Cover					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>					
1. <i>Andropogon gerardii</i>	20	X	FAC		
2. <i>Helianthus annuus</i>	20	X	FACU		
3. <i>Sorghastrum nutans</i>	15		FACU		
4. <i>Poa pratensis</i>	15		FAC		
5. <i>Bromus inermis</i>	10		FACU		
6. <i>Silphium laciniatum</i>	10		UPL		
7. <i>Panicum virgatum</i>	10		FAC		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
100 = Total Cover					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
<b>Prevalence Index worksheet:</b>					
Total % Cover of:		Multiply by:			
OBL species	0	x 1 =	0		
FACW species	0	x 2 =	0		
FAC species	47	x 3 =	141		
FACU species	45	x 4 =	180		
UPL species	10	x 5 =	50		
Column Totals:	102	(A)	371 (B)		
Prevalence Index = B/A =				3.64	
<b>Hydrophytic Vegetation Indicators:</b>					
<ul style="list-style-type: none"> <li><input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation</li> <li><input type="checkbox"/> 2 - Dominance Test is &gt;50%</li> <li><input type="checkbox"/> 3 - Prevalence Index is ≤3.0<sup>1</sup></li> <li><input type="checkbox"/> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> <li><input type="checkbox"/> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</li> </ul>					
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					

Remarks: (Include photo numbers here or on a separate sheet.)  
 Photo Point (PP) 1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 3/2	100					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: <u>Compact Soils</u> Depth (inches): <u>4"</u>	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	---

Remarks:  
Soils are assumed to be non-hydric because of the lack of hydrophytic vegetation and the lack of sufficient wetland hydrology indicators.

**HYDROLOGY**

Wetland Hydrology Indicators:	Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches) <u>          </u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches) <u>          </u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches) <u>          </u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 2  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 2-3 Lat: 41.427425 Long: -96.119854 Datum: NAD83  
 Soil Map Unit Name: 8016: Marshall silty clay loam, dry, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks:  
 Sample Point (SP) 2 documents a roadside ditch near the northern boundary of Study Area, south of Highway 133. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)	
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>					
1. <u>Bromus inermis</u>	<u>20</u>	<u>X</u>	<u>FACU</u>		
2. <u>Schizachyrium scoparium</u>	<u>15</u>	<u>X</u>	<u>FACU</u>		
3. <u>Andropogon gerardii</u>	<u>15</u>	<u>X</u>	<u>FAC</u>		
4. <u>Helianthus annuus</u>	<u>10</u>	_____	<u>FACU</u>		
5. <u>Silphium laciniatum</u>	<u>10</u>	_____	<u>UPL</u>		
6. <u>Sorghastrum nutans</u>	<u>10</u>	_____	<u>FACU</u>		
7. <u>Solidago altissima</u>	<u>10</u>	_____	<u>FACU</u>		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
<u>90</u> = Total Cover					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
<b>Prevalence Index worksheet:</b>					
Total % Cover of:		Multiply by:			
OBL species	_____	x 1 =	_____		
FACW species	_____	x 2 =	_____		
FAC species	_____	x 3 =	_____		
FACU species	_____	x 4 =	_____		
UPL species	_____	x 5 =	_____		
Column Totals:	<u>0</u>	(A)	_____	(B)	_____
Prevalence Index = B/A = _____					
<b>Hydrophytic Vegetation Indicators:</b>					
1 - Rapid Test for Hydrophytic Vegetation					
<input checked="" type="checkbox"/> 2 - Dominance Test is >50%					
3 - Prevalence Index is ≤3.0 <sup>1</sup>					
4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)					
Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
1 <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-22	10YR 3/2	100					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 3  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 4-6 Lat: 41.426139 Long: -96.12182 Datum: NAD83  
 Soil Map Unit Name: 8136: Pohocco-Iida complex, 11 to 17 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

**Remarks:**

This area was identified during the WETS Tables as a potential wetland. Fifty percent planted corn was present at this SP and was not included in the calculations. However, if vegetation had not been disturbed by farming, it is unlikely that hydrophytic vegetation would be present because of the lack of hydric soil and sufficient wetland hydrology indicators. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
= Total Cover					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					

<b>Prevalence Index worksheet:</b>	
Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: <u>0</u> (A)	_____ (B)
Prevalence Index = B/A = _____	

<b>Hydrophytic Vegetation Indicators:</b>	
___	1 - Rapid Test for Hydrophytic Vegetation
___	2 - Dominance Test is >50%
___	3 - Prevalence Index is ≤3.0 <sup>1</sup>
___	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
___	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

<b>Hydrophytic Vegetation Present?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
--	------------------------------	--

Remarks: (Include photo numbers here or on a separate sheet.)

PP 3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	2.5Y 5/4	100					Loam	
3-7	2.5Y 5/4	80					Loam	
	GLE Y 1 5/10Y	10	5YR 4/6	10	C	M	Loam	
7-30	2.5Y 5/4	98	5YR 4/6	2	C	M	Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

Although redox is present in the soil profile, the soil color value is too high to meet hydric soil indicator criteria and this soil is determined to be non-hydric.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Presence of Reduced Iron (C4)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Thin Muck Surface (C7)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 4  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 20 Lat: 41.426749 Long: -96.122535 Datum: NAD83  
 Soil Map Unit Name: 8016: Marshall silty clay loam, dry, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks:  
 This area was identified during the WETS Tables as a potential wetland. Ninety percent planted alfalfa is present at this SP and is not included in the calculations. Although the alfalfa is dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>					
1. <u>Bromus inermis</u>	5	X	FACU		
2. <u>Taraxacum officinale</u>	2	X	FACU		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
<u>7</u> = Total Cover					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
<b>Prevalence Index worksheet:</b>					
Total % Cover of:		Multiply by:			
OBL species	_____	x 1 =	_____		
FACW species	_____	x 2 =	_____		
FAC species	_____	x 3 =	_____		
FACU species	_____	x 4 =	_____		
UPL species	_____	x 5 =	_____		
Column Totals:	<u>0</u>	(A)	<u>_____</u> (B)		
Prevalence Index = B/A = _____					
<b>Hydrophytic Vegetation Indicators:</b>					
___ 1 - Rapid Test for Hydrophytic Vegetation					
___ 2 - Dominance Test is >50%					
___ 3 - Prevalence Index is ≤3.0 <sup>1</sup>					
___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)					
___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 4

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	2.5Y 5/4	100					Silty Loam	
5-10	2.5Y 5/4	80	7.5YR 5/6	20	C	PL	Silty Loam	
10-30	10YR 6/4	95	7.5YR 5/6	5	C	M	Silty Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

**Remarks:**

Although redox is present in the soil profile, the soil color value is too high to meet hydric soil indicator criteria and this soil is determined to be non-hydric.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Thin Muck Surface (C7)
	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 5  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 4-5 Lat: 41.42676 Long: -96.122743 Datum: NAD83  
 Soil Map Unit Name: 8136: Pohocco-Iida complex, 11 to 17 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Remarks:  
 This area was identified during the WETS Tables as a potential wetland. Eighty percent planted alfalfa is present at this SP and is not included in the calculations. Although the alfalfa is dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
= Total Cover																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15'</u> )				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"><tr><td style="width: 50%;">Total % Cover of:</td><td style="width: 50%;">Multiply by:</td></tr><tr><td>OBL species</td><td>x 1 = _____</td></tr><tr><td>FACW species</td><td>x 2 = _____</td></tr><tr><td>FAC species</td><td>x 3 = _____</td></tr><tr><td>FACU species</td><td>x 4 = _____</td></tr><tr><td>UPL species</td><td>x 5 = _____</td></tr><tr><td>Column Totals:</td><td><u>0</u> (A) <u>_____</u> (B)</td></tr><tr><td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td></tr></table>	Total % Cover of:	Multiply by:	OBL species	x 1 = _____	FACW species	x 2 = _____	FAC species	x 3 = _____	FACU species	x 4 = _____	UPL species	x 5 = _____	Column Totals:	<u>0</u> (A) <u>_____</u> (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species	x 1 = _____																			
FACW species	x 2 = _____																			
FAC species	x 3 = _____																			
FACU species	x 4 = _____																			
UPL species	x 5 = _____																			
Column Totals:	<u>0</u> (A) <u>_____</u> (B)																			
Prevalence Index = B/A = _____																				
1. <u>Ulmus pumila</u>	<u>2</u>	_____	UPL																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
= Total Cover																				
<b>Herb Stratum</b> (Plot size: <u>5'</u> )				<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
1. <u>Setaria viridis</u>	<u>20</u>	<u>X</u>	UPL																	
2. <u>Bromus inermis</u>	<u>5</u>	<u>X</u>	FACU																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
= Total Cover																				
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
= Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 5

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 5/4	100					Silty Loam	
6-30	10YR 5/4	98	7.5YR 5/8	2	C	M	Silty Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No X

**Remarks:**

Although redox is present in the soil profile, the soil color value is too high to meet hydric soil indicator criteria and this soil is determined to be non-hydric.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Thin Muck Surface (C7)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 6  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 10 Lat: 41.427277 Long: -96.122726 Datum: NAD83  
 Soil Map Unit Name: 8097: Monona-Pohocco complex, 6 to 11 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks:  
 This area was identified during the WETS Tables as a potential wetland. Seventy percent planted alfalfa is present at this SP and is not included in the calculations. Although the alfalfa is dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>																	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)																	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)																	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																	
4. _____	_____	_____	_____																		
5. _____	_____	_____	_____																		
= Total Cover																					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																					
1. _____	_____	_____	_____																		
2. _____	_____	_____	_____																		
3. _____	_____	_____	_____																		
4. _____	_____	_____	_____																		
5. _____	_____	_____	_____																		
= Total Cover																					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																					
1. <u>Taraxacum officinale</u>	20	X	FACU	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>0</u></td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>		Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: <u>0</u>	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																				
OBL species _____	x 1 = _____																				
FACW species _____	x 2 = _____																				
FAC species _____	x 3 = _____																				
FACU species _____	x 4 = _____																				
UPL species _____	x 5 = _____																				
Column Totals: <u>0</u>	(A) _____ (B) _____																				
Prevalence Index = B/A = _____																					
2. <u>Setaria viridis</u>	10	X	UPL																		
3. _____	_____	_____	_____																		
4. _____	_____	_____	_____																		
5. _____	_____	_____	_____																		
6. _____	_____	_____	_____																		
7. _____	_____	_____	_____																		
8. _____	_____	_____	_____																		
9. _____	_____	_____	_____																		
10. _____	_____	_____	_____																		
30 = Total Cover																					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																					
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																	
2. _____	_____	_____	_____																		
= Total Cover																					

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 6

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-30	10YR 3/2	100					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Thin Muck Surface (C7)
	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_

Saturation Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
(includes capillary fringe)

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 7  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex  
 Slope (%): 15 Lat: 41.424785 Long: -96.123907 Datum: NAD83  
 Soil Map Unit Name: 7234: Judson silty clay loam, 2 to 6 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks:  
 This area was identified during the WETS Tables as a potential wetland. Sixty percent planted soybeans are present at this SP and is not included in the calculations. Although the soybeans are dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Dominant Species?	Indicator Status																																	
<u>Tree Stratum</u> (Plot size: <u>30'</u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)																																
1. _____																																				
2. _____																																				
3. _____																																				
4. _____																																				
5. _____				<b>Prevalence Index worksheet:</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Total % Cover of:</td> <td style="width: 10%;"></td> <td style="width: 10%;">Multiply by:</td> <td style="width: 10%;"></td> </tr> <tr> <td>OBL species</td> <td></td> <td>x 1 =</td> <td></td> </tr> <tr> <td>FACW species</td> <td></td> <td>x 2 =</td> <td></td> </tr> <tr> <td>FAC species</td> <td></td> <td>x 3 =</td> <td></td> </tr> <tr> <td>FACU species</td> <td></td> <td>x 4 =</td> <td></td> </tr> <tr> <td>UPL species</td> <td></td> <td>x 5 =</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td><u>0</u></td> <td>(A)</td> <td><u>0</u> (B)</td> </tr> <tr> <td colspan="4" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species		x 1 =		FACW species		x 2 =		FAC species		x 3 =		FACU species		x 4 =		UPL species		x 5 =		Column Totals:	<u>0</u>	(A)	<u>0</u> (B)	Prevalence Index = B/A = _____			
Total % Cover of:		Multiply by:																																		
OBL species		x 1 =																																		
FACW species		x 2 =																																		
FAC species		x 3 =																																		
FACU species		x 4 =																																		
UPL species		x 5 =																																		
Column Totals:	<u>0</u>	(A)	<u>0</u> (B)																																	
Prevalence Index = B/A = _____																																				
_____ = Total Cover																																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u> )																																				
1. _____																																				
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
_____ = Total Cover																																				
<u>Herb Stratum</u> (Plot size: <u>5'</u> )				<b>Hydrophytic Vegetation Indicators:</b> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0' <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <input type="checkbox"/>  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1. <u>Setaria viridis</u>	5	X	UPL																																	
2. <u>Amaranthus palmeri</u>	3	X	FACU																																	
3. <u>Physalis hispida</u>	2	X	UPL																																	
4. <u>Ambrosia trifida</u>	2	X	FAC																																	
5. <u>Trifolium repens</u>	2	X	FACU																																	
6. _____																																				
7. _____																																				
8. _____																																				
9. _____																																				
10. _____																																				
_____ = Total Cover																																				
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u> )																																				
1. _____																																				
2. _____																																				
_____																																				
_____ = Total Cover																																				

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 7

**Hydrophytic Vegetation Present?** Yes  No

**SOIL**

Sampling Point: 7

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-30	10YR 3/2	50					Loam	
	10YR 3/1	50					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 8  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 30 Lat: 41.423471 Long: -96.125358 Datum: NAD83  
 Soil Map Unit Name: 8136: Pohocco-Iida complex, 11 to 17 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks:  
 This area was identified during the WETS Tables as a potential wetland. Thirty percent planted soybeans are present at this SP and is not included in the calculations. Although the soybeans are dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>					
1. <u>Euphorbia maculata</u>	5	X	UPL		
2. <u>Taraxacum officinale</u>	3	X	FACU		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
8 = Total Cover					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
<b>Prevalence Index worksheet:</b>					
Total % Cover of:		Multiply by:			
OBL species	_____	x 1 =	_____		
FACW species	_____	x 2 =	_____		
FAC species	_____	x 3 =	_____		
FACU species	_____	x 4 =	_____		
UPL species	_____	x 5 =	_____		
Column Totals:	0	(A)	_____	(B)	
Prevalence Index = B/A = _____					
<b>Hydrophytic Vegetation Indicators:</b>					
1 - Rapid Test for Hydrophytic Vegetation					
2 - Dominance Test is >50%					
3 - Prevalence Index is ≤3.0 <sup>1</sup>					
4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)					
Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 8

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-30	10YR 3/2	100					Silty Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
---	---

Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:	Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	

<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches) _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches) _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches) _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 9  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex  
 Slope (%): 20 Lat: 41.423615 Long: -96.126367 Datum: NAD83  
 Soil Map Unit Name: 8136: Pohocco-Iida complex, 11 to 17 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No        (If no, explain in Remarks)  
 Are Vegetation X, Soil       , or Hydrology        significantly disturbed? Are "Normal Circumstances" present? Yes X No         
 Are Vegetation       , Soil       , or Hydrology        naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>      </u>	No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b>	Yes <u>      </u>	No <u>X</u>
Hydric Soil Present?	Yes <u>      </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u>      </u>	No <u>X</u>			

Remarks:  
 This area was identified during the WETS Tables as a potential wetland. Thirty percent planted soybeans are present at this SP and is not included in the calculations. This area lacks hydric soils and sufficient wetland hydrology indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
= Total Cover					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					

<b>Prevalence Index worksheet:</b>		<b>Multiply by:</b>	
Total % Cover of:			
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	_____	x 4 =	_____
UPL species	_____	x 5 =	_____
Column Totals:	<u>0</u>	(A)	(B)
Prevalence Index = B/A = _____			

<b>Hydrophytic Vegetation Indicators:</b>			
_____	1 - Rapid Test for Hydrophytic Vegetation		
_____	2 - Dominance Test is >50%		
_____	3 - Prevalence Index is ≤3.0 <sup>1</sup>		
_____	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)		
_____	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

<b>Hydrophytic Vegetation Present?</b>	Yes <u>      </u>	No <u>X</u>
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Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 9

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-30	10YR 5/6	60					Clay Loam	
	10YR 5/4	35					Clay Loam	
	Gley 1 6/5 GY	5					Clay Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Presence of Reduced Iron (C4)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Thin Muck Surface (C7)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 10  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Toe of Slope Local relief (concave, convex, none): Concave  
 Slope (%): 5-10 Lat: 41.423406 Long: -96.122883 Datum: NAD83  
 Soil Map Unit Name: 8097: Monona-Pohocco complex, 6 to 11 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Remarks:  
 This area was identified during the WETS Tables as a potential wetland. Forty percent planted soybeans are present at this SP and is not included in the calculations. Although the soybeans are dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>																	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)																	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)																	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)																	
4. _____	_____	_____	_____																		
5. _____	_____	_____	_____																		
= Total Cover																					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																					
1. _____	_____	_____	_____																		
2. _____	_____	_____	_____																		
3. _____	_____	_____	_____																		
4. _____	_____	_____	_____																		
5. _____	_____	_____	_____																		
= Total Cover																					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																					
1. <u>Bromus inermis</u>	10	X	FACU	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>7</u></td> <td>x 3 = <u>21</u></td> </tr> <tr> <td>FACU species <u>12</u></td> <td>x 4 = <u>48</u></td> </tr> <tr> <td>UPL species <u>4</u></td> <td>x 5 = <u>20</u></td> </tr> <tr> <td>Column Totals: <u>23</u> (A)</td> <td><u>89</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.87</u></td> </tr> </tbody> </table>		Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>7</u>	x 3 = <u>21</u>	FACU species <u>12</u>	x 4 = <u>48</u>	UPL species <u>4</u>	x 5 = <u>20</u>	Column Totals: <u>23</u> (A)	<u>89</u> (B)	Prevalence Index = B/A = <u>3.87</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>0</u>	x 2 = <u>0</u>																				
FAC species <u>7</u>	x 3 = <u>21</u>																				
FACU species <u>12</u>	x 4 = <u>48</u>																				
UPL species <u>4</u>	x 5 = <u>20</u>																				
Column Totals: <u>23</u> (A)	<u>89</u> (B)																				
Prevalence Index = B/A = <u>3.87</u>																					
2. <u>Panicum virgatum</u>	5	X	FAC																		
3. <u>Setaria viridis</u>	2		UPL																		
4. <u>Chamaesyce nutans</u>	2		FACU																		
5. <u>Convolvulus arvensis</u>	2		UPL																		
6. <u>Xanthium strumarium</u>	2		FAC																		
7. _____	_____	_____	_____																		
8. _____	_____	_____	_____																		
9. _____	_____	_____	_____																		
10. _____	_____	_____	_____																		
23 = Total Cover																					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																					
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																	
2. _____	_____	_____	_____																		
= Total Cover																					

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 10

**Hydrophytic Vegetation Present?** Yes  No

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-30	10YR 3/2	50					Loam	
	10YR 3/4	50					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 11  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 2-3 Lat: 41.424886 Long: -96.121249 Datum: NAD83  
 Soil Map Unit Name: 8097: Monona-Pohocco complex, 6 to 11 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Remarks:  
 SP 11 documents a forested area abutting an agricultural field. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. <u>Gleditsia triacanthos</u>	10	X	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)	
2. <u>Morus rubra</u>	5	X	FACU	Total Number of Dominant Species Across All Strata: <u>9</u> (B)	
3. <u>Populus deltoides</u>	5	X	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>44</u> (A/B)	
4. _____					
5. _____					
20 = Total Cover					
Sapling/Shrub Stratum (Plot size: <u>15'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>	
1. <u>Cornus drummondii</u>	15	X	FAC	Total % Cover of: _____ Multiply by: _____	
2. <u>Lonicera japonica</u>	15	X	FACU	OBL species _____ x 1 = _____	
3. <u>Rhus glabra</u>	10	X	UPL	FACW species _____ x 2 = _____	
4. _____				FAC species _____ x 3 = _____	
5. _____				FACU species _____ x 4 = _____	
40 = Total Cover				UPL species _____ x 5 = _____	
				Column Totals: <u>0</u> (A) _____ (B)	
				Prevalence Index = B/A = _____	
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>	
1. <u>Poa pratensis</u>	10	X	FAC	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2. <u>Bromus tectorum</u>	10	X	UPL		
3. <u>Smilax hispida</u>	5	X	FAC		
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
25 = Total Cover					
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____					
2. _____					
= Total Cover					

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 11

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 2/1	100					Loam	
6-22	10YR 2/1	50					Loam	
	10YR 6/6	50					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 12  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 2-3 Lat: 41.423299 Long: -96.121463 Datum: NAD83  
 Soil Map Unit Name: 7234: Judson silty clay loam, 2 to 6 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 SP 12 documents a forested corridor north of County Road 38. Although this area contains hydrophytic vegetation, it lacks hydric soils and sufficient wetland hydrology indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>			
1. <u>Morus rubra</u>	10	X	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>11</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>55</u> (A/B)			
2. <u>Morus alba</u>	10	X	FAC				
3. <u>Celtis occidentalis</u>	10	X	FAC				
4. <u>Pinus strobus</u>	10	X	FACU				
5. _____	_____	_____	_____				
40 = Total Cover							
Sapling/Shrub Stratum (Plot size: <u>15'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>			
1. <u>Lonicera japonica</u>	10	X	FACU			Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>0</u> (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Cornus drummondii</u>	10	X	FAC				
3. _____	_____	_____	_____				
4. _____	_____	_____	_____				
5. _____	_____	_____	_____				
20 = Total Cover							
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>			
1. <u>Urtica dioica</u>	10	X	FACW			1 - Rapid Test for Hydrophytic Vegetation _____ X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 <sup>1</sup> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) _____  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Panicum dichotomiflorum</u>	10	X	FACW				
3. <u>Cirsium arvense</u>	10	X	FACU				
4. <u>Cyperus esculentus</u>	5	X	FACW				
5. <u>Phytolacca americana</u>	5	X	FACU				
6. _____	_____	_____	_____				
7. _____	_____	_____	_____				
8. _____	_____	_____	_____				
9. _____	_____	_____	_____				
10. _____	_____	_____	_____				
40 = Total Cover							
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
1. _____	_____	_____	_____				
2. _____	_____	_____	_____				
_____ = Total Cover							

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 12

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/2	100					Loam	
3-22	10YR 3/1	100					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present? Yes \_\_\_\_\_ No X**

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Thin Muck Surface (C7)
	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_

Saturation Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_ (includes capillary fringe)

**Wetland Hydrology Present? Yes \_\_\_\_\_ No X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 13  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S24 T17N R11E  
 Landform (hillslope, terrace, etc.): Roadside Ditch Local relief (concave, convex, none): Convex  
 Slope (%): 0-2 Lat: 41.42228 Long: -96.125529 Datum: NAD83  
 Soil Map Unit Name: 7234: Judson silty clay loam, 2 to 6 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks:  
 This area is located within a roadside ditch north of County Road 38. This area has a mix of hydrophytic and non-hydrophytic vegetation and does not pass the dominance test and the prevalence index is greater than 3.0, which does not meet the criteria for hydrophytic vegetation. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>					
1. <i>Bromus inermis</i>	60	X	FACU		
2. <i>Persicaria pensylvanica</i>	20	X	FACW		
3. <i>Bromus tectorum</i>	10		UPL		
4. <i>Phalaris arundinacea</i>	10		FACW		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
100 = Total Cover					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					
<b>Prevalence Index worksheet:</b>					
Total % Cover of:		Multiply by:			
OBL species	0	x 1 =	0		
FACW species	30	x 2 =	60		
FAC species	0	x 3 =	0		
FACU species	60	x 4 =	240		
UPL species	10	x 5 =	50		
Column Totals:	100	(A)	350 (B)		
Prevalence Index = B/A =				3.50	
<b>Hydrophytic Vegetation Indicators:</b>					
<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
<b>Hydrophytic Vegetation Present?</b>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 13

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-22	10YR 3/2	33					Loam	
	10YR 2/1	34					Loam	
	10YR 4/4	33					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Presence of Reduced Iron (C4)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Thin Muck Surface (C7)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No X Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 14  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S25 17N R11E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 1-5 Lat: 41.420543 Long: -96.117749 Datum: NAD83  
 Soil Map Unit Name: 7234: Judson silty clay loam, 2 to 6 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Remarks:  
 SP 14 documents an upland forested area on the west side of County Road 35. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Morus rubra</u>	5	X	FACU	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)																
2. <u>Acer negundo</u>	5	X	FAC																	
3. <u>Pinus strobus</u>	5	X	FACU																	
4. _____																				
5. _____																				
15 = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Rhus glabra</u>	20	X	UPL	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>0</u></td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: <u>0</u>	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: <u>0</u>	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
2. <u>Cornus drummondii</u>	10	X	FAC																	
3. _____																				
4. _____																				
5. _____																				
30 = Total Cover																				
Herb Stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Bromus inermis</u>	100	X	FACU	<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
100 = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
2. _____																				
= Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 14

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-22	10YR 3/2	100					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
	<input type="checkbox"/> Coast Prairie Redox (A16)
	<input type="checkbox"/> Dark Surface (S7)
	<input type="checkbox"/> Iron-Manganese Masses (F12)
	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
	<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No X

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_

Saturation Present? Yes \_\_\_\_\_ No X      Depth (inches) \_\_\_\_\_

(includes capillary fringe)

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 15  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S30 T17N R12E  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex  
 Slope (%): 8-15 Lat: 41.418842 Long: -96.116414 Datum: NAD83  
 Soil Map Unit Name: 8136: Pohocco-Iida complex, 11 to 17 percent slopes, eroded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks:  
 This area was identified during the WETS Tables as a potential wetland. Ninety-eight percent planted corn is present at this SP and is not included in the calculations. However, if vegetation had not been disturbed by farming, it is unlikely that hydrophytic vegetation would be present because of the lack of hydric soil and sufficient wetland hydrology indicators. This area lacks all three wetland indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
= Total Cover					
<b>Herb Stratum (Plot size: <u>5'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
= Total Cover					
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
= Total Cover					

<b>Prevalence Index worksheet:</b>	
Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: <u>0</u> (A)	_____ (B)
Prevalence Index = B/A = _____	

<b>Hydrophytic Vegetation Indicators:</b>	
___	1 - Rapid Test for Hydrophytic Vegetation
___	2 - Dominance Test is >50%
___	3 - Prevalence Index is ≤3.0 <sup>1</sup>
___	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
___	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

<b>Hydrophytic Vegetation Present?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
--	------------------------------	--

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 15

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 3/2	100					Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type:                      Compact Soils  
 Depth (inches):                      18

Hydric Soil Present? Yes            No   X  

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes            No   X   Depth (inches)             
 Water Table Present? Yes            No   X   Depth (inches)             
 Saturation Present? Yes            No   X   Depth (inches)             
 (includes capillary fringe)

Wetland Hydrology Present? Yes            No   X  

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 16  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S30 T17N R12E  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave  
 Slope (%): 5-10 Lat: 41.417881 Long: -96.115366 Datum: NAD83  
 Soil Map Unit Name: 7234: Judson silty clay loam, 2 to 6 percent slopes NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			

Remarks:  
 Wetland 16 is a Palustrine Forested Temporarily Flooded (PFOA) wetland located within a swale surrounded by agricultural fields in the southwestern corner of Study Area. The wetland extends south beyond the Study Area. This area is depicted by the National Hydrography Dataset (NHD) as an intermittent stream channel and the National Wetlands Inventory (NWI) as a riverine habitat; however, the area lacks a defined bed and bank and an ordinary high-water mark (OHWM), and therefore, it is not a stream channel.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. <u>Salix amygdaloides</u>	75	X	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u> (A)
2. _____				Total Number of Dominant Species Across All Strata:	<u>3</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____					
5. _____					
<u>75</u> = Total Cover					
Sapling/Shrub Stratum (Plot size: <u>15'</u> )				<b>Prevalence Index worksheet:</b>	
1. _____				Total % Cover of:	Multiply by:
2. _____				OBL species _____	x 1 = _____
3. _____				FACW species _____	x 2 = _____
4. _____				FAC species _____	x 3 = _____
5. _____				FACU species _____	x 4 = _____
_____ = Total Cover				UPL species _____	x 5 = _____
				Column Totals:	<u>0</u> (A) _____ (B)
				Prevalence Index = B/A = _____	
Herb Stratum (Plot size: <u>5'</u> )				<b>Hydrophytic Vegetation Indicators:</b>	
1. <u>Cyperus esculentus</u>	35	X	FACW	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2. <u>Typha angustifolia</u>	20	X	OBL	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
3. <u>Symphyotrichum novae-angliae</u>	15		FACW	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
4. <u>Solidago gigantea</u>	10		FACW	<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
5. <u>Phragmites australis</u>	10		FACW	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
6. <u>Urtica dioica</u>	5		FACW		
7. <u>Galium aparine</u>	5		FACU		
8. _____					
9. _____					
10. _____					
<u>100</u> = Total Cover					
Woody Vine Stratum (Plot size: <u>30'</u> )				<b>Hydrophytic Vegetation Present?</b>	
1. _____				Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. _____					
_____ = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet.)  
 PP 16

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-22	10YR 3/2	45	7.5YR 5/8	5	C	M	Loam	
	10YR 2/2	45	7.5YR 5/8	5	C	M	Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present? Yes  No**

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)

**Field Observations:**

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____

(includes capillary fringe)

**Wetland Hydrology Present? Yes  No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## Wetland Determination Data Form - Midwest Region

Project/Site: Blair Executive Airport City/County: Blair/Washington Sampling Date: 10/20/2022  
 Applicant/Owner: Blair Airport Authority State: NE Sampling Point: 17  
 Investigator(s): Kris Davenport, Allison Buehring (Olsson) Section, Township, Range: S30 T17N R12E  
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex  
 Slope (%): 8-10 Lat: 41.418793 Long: -96.115755 Datum: NAD83  
 Soil Map Unit Name: 7234: Judson silty clay loam, 2 to 6 percent slopes NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

**Remarks:**

SP 17 is an upland outpost for Wetland 16 (PFOA). This SP was taken on a slope above Wetland 16. This area was depicted by the NHD as an intermittent stream channel and on the NWI as a riverine habitat; however, the area lacks a defined bed and bank and an OHWM, and therefore, it is not a stream channel. Ninety-eight percent planted corn is present at this SP and is not included in the calculations. Although the corn is dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. Although this area contained hydric soils, it lacks hydrophytic vegetation and sufficient wetland hydrology indicators, and therefore, is an upland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>0</u></td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: <u>0</u>	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: <u>0</u>	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover																				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Glechoma hederacea</u>	<u>10</u>	<u>X</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Coryza canadensis</u>	<u>5</u>	<u>X</u>	<u>FACU</u>																	
3. <u>Setaria viridis</u>	<u>5</u>	<u>X</u>	<u>UPL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
<u>20</u> = Total Cover																				
<b>Woody Vine Stratum (Plot size: <u>30'</u>)</b>																				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
2. _____	_____	_____	_____																	
_____ = Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)

PP 17

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-30	10YR 2/1	70	7.5YR 5/8	30	C	M	Loam	
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)

- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Dark Surface (S7)
- Iron-Manganese Masses (F12)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Gauge or Well Data (D9)
	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches) \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches) \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches) \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# **APPENDIX D**

## Photo Log



Photo Point (PP) 1

Photo Dir. North

Figure No. 4

Description: View of Sample Point (SP) 1. This area was identified as a potential wetland during the Climate Analysis for Wetland Tables (WETS Tables). However, the area is lacking sufficient wetland indicators and is an upland.



PP 2

Photo Dir. South

Figure No. 4

Description: View of SP 2. SP 2 documents a roadside ditch near the northern boundary of Study Area, south of Highway 133. This area lacks all three wetland indicators, and therefore, is an upland.



PP 3

Photo Dir. Northeast

Figure No. 4

Description: View of SP 3. This area was identified during the WETS Tables as a potential wetland. Fifty percent planted corn was present at this SP and was not included in the calculations. However, if vegetation had not been disturbed by farming, it is unlikely that hydrophytic vegetation would be present because of the lack of hydric soil and sufficient wetland hydrology indicators. This area lacks all three wetland indicators, and therefore, is an upland.



PP 4

Photo Dir. Northeast

Figure No. 4

Description: View of SP 4. This area was identified during the WETS Tables as a potential wetland. Ninety percent planted alfalfa is present at this SP and is not included in the calculations. Although the alfalfa is dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.



PP 5

Photo Dir. Northeast

Figure No. 4

Description: View of SP 5. This area was identified during the WETS Tables as a potential wetland. Eighty percent planted alfalfa is present at this SP and is not included in the calculations. Although the alfalfa is dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.



PP 6

Photo Dir. Northeast

Figure No. 4

Description: View of SP 6. This area was identified during the WETS Tables as a potential wetland. Seventy percent planted alfalfa is present at this SP and is not included in the calculations. Although the alfalfa is dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.



PP 7

Photo Dir. East

Figure No. 4

Description: View of SP 7. This area was identified during the WETS Tables as a potential wetland. Sixty percent planted soybeans are present at this SP and is not included in the calculations. Although the soybeans are dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.



PP 8

Photo Dir. North

Figure No. 4

Description: View of SP 8. This area was identified during the WETS Tables as a potential wetland. Thirty percent planted soybeans are present at this SP and is not included in the calculations. Although the soybeans are dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.



PP 9

Photo Dir. Northeast

Figure No. 4

Description: View of SP 9. This area was identified during the WETS Tables as a potential wetland. Thirty percent planted soybeans are present at this SP and is not included in the calculations. This area lacks hydric soils and sufficient wetland hydrology indicators, and therefore, is an upland.



PP 10

Photo Dir. North

Figure No. 4

Description: View of SP 10. This area was identified during the WETS Tables as a potential wetland. Forty percent planted soybeans are present at this SP and is not included in the calculations. Although the soybeans are dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. This area lacks all three wetland indicators, and therefore, is an upland.



PP 11

Photo Dir. Southeast

Figure No. 4

Description: View of SP 11. SP 11 documents a forested area abutting an agricultural field. This area lacks all three wetland indicators, and therefore, is an upland.



PP 12

Photo Dir. Northeast

Figure No. 4

Description: View of SP 12. SP 12 documents a forested corridor north of County Road 38. Although this area contains hydrophytic vegetation, it lacks hydric soils and sufficient wetland hydrology indicators, and therefore, is an upland.



PP 13

Photo Dir. East

Figure No. 4

Description: View of SP 13. This area is located within a roadside ditch north of County Road 38. This area has a mix of hydrophytic and non-hydrophytic vegetation and does not pass the dominance test and the prevalence index is greater than 3.0, which does not meet the criteria for hydrophytic vegetation. This area lacks all three wetland indicators, and therefore, is an upland.



PP 14

Photo Dir. South

Figure No. 4

Description: View of SP 14. SP 14 documents an upland forested area on the west side of County Road 35. This area lacks all three wetland indicators, and therefore, is an upland.



PP 15

Photo Dir. Southwest

Figure No. 4

Description: View of SP 15. This area was identified during the WETS Tables as a potential wetland. Ninety-eight percent planted corn is present at this SP and is not included in the calculations. However, if vegetation had not been disturbed by farming, it is unlikely that hydrophytic vegetation would be present because of the lack of hydric soil and sufficient wetland hydrology indicators. This area lacks all three wetland indicators, and therefore, is an upland.



PP 16

Photo Dir. Northeast

Figure No. 4

Description: View of Wetland 16. Wetland 16 is a Palustrine Forested Temporarily Flooded (PFOA) wetland located within a swale surrounded by agricultural fields in the southwest corner of Study Area. The wetland extends south beyond the Study Area. This area is depicted by the National Hydrography Dataset (NHD) as an intermittent stream channel and the National Wetlands Inventory (NWI) as a riverine habitat; however, the area lacks a defined bed and bank and an ordinary high-water mark (OHWM), and therefore, it is not a stream channel.



PP 17

Photo Dir. Southeast

Figure No. 4

Description: View of SP 17. SP 17 is an upland outpost for Wetland 16 (PFOA). This SP was taken on a slope above Wetland 16. This area was depicted by the NHD as an intermittent stream channel and on the NWI as a riverine habitat; however, the area lacks a defined bed and bank and an OHWM, and therefore, it is not a stream channel. Ninety-eight percent planted corn is present at this SP and is not included in the calculations. Although the corn is dominant and is not included in the calculations, other vegetative species are present and are included in the dominance test. Although this area contained hydric soils, it lacks hydrophytic vegetation and sufficient wetland hydrology indicators, and therefore, it is an upland.

# **BLAIR MUNICIPAL AIRPORT**

Blair, Nebraska - 2022

November 2022

Olsson Project No. A21-03923

**APPENDIX F**  
**Floodplain Memo**



# MEMO

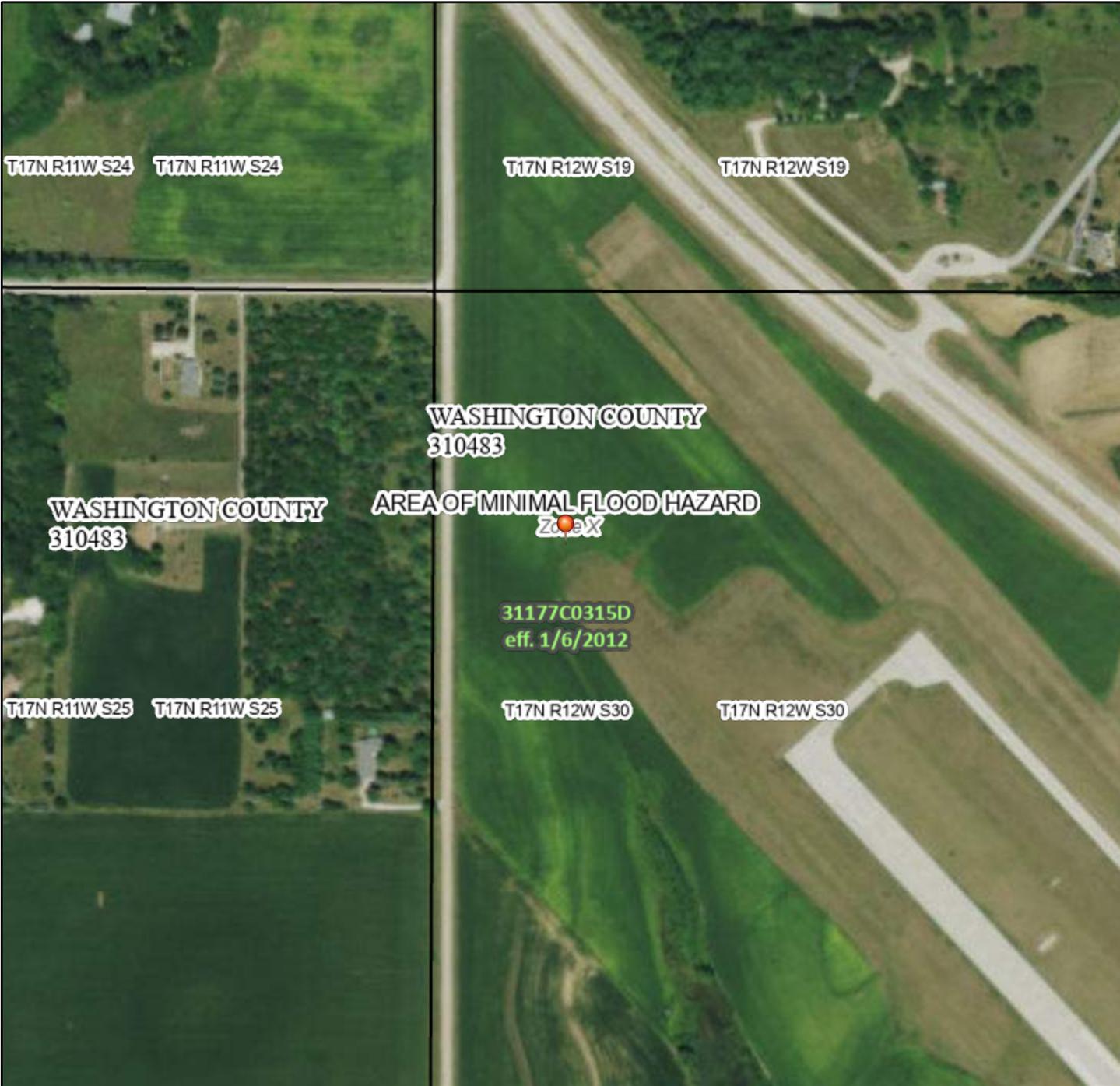
- Overnight
- Regular Mail
- Hand Delivery
- Email

<b>To:</b>	Caleb Pharris, PWS
<b>From:</b>	Carrie Romero, PE, CFM
<b>RE:</b>	Blair Airport Authority County Road 38/ 35 Relocation Blair, Nebraska
<b>Date:</b>	January 12, 2023
<b>Project #:</b>	A21-03923
<b>Phase:</b>	500
<b>Task:</b>	500506

## NOTES:

The Blair Executive Airport is located at the top of the Thomas Creek watershed. FEMA has mapped the floodplain of Thomas Creek through the National Flood Insurance Program (NFIP) Flood Insurance Study (FIS) for Washington County, Nebraska. Figure 1, FIRMette, shows the location of the Blair Executive Airport relative to the FEMA mapped floodplain. The location of the proposed county road relocation, northwest of the airport, is well outside of the mapped floodplain. As such, the construction associated with the project is not subject to the flood damage prevention ordinance for Washington County and does not require a floodplain development permit.

11/11/11



## FHGS

1) 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

68.52 68.55	L.W.H.R.W %D.H.J.P.R.G.O.H.D.V.L.R.Q % =F.H.S 9 S L.W.K.%R.U.F.S.V.K =F.H.S 2 3 4 5 S.H.O.D.V.R.U.J.P.R.R.G
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U.H.K.O.D.V.R.U.S.U.S.R.V.H

**APPENDIX G**  
**Land Use Letter**



---

# BLAIR AIRPORT AUTHORITY

218 S. 16 St. • Blair, NE 68008  
(402) 426-4191 • FAX (402) 426-4195



March 15, 2023

Blair Airport Authority  
218 South 16<sup>th</sup> Street  
Blair, NE 68008

Scott Tener  
Federal Aviation Administration  
Airports Division, ACE 600, Room 364  
901 Locust  
Kansas City, MO 64106-2325

Dear Mr. Tener:

The Blair Airport Authority assures that appropriate action, including adopting zoning laws, has been or will be taken, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the Blair Executive Airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. This action includes consideration of both existing and planned land uses. In addition, we will encourage and support other jurisdictions in the area in their efforts to do the same.

Sincerely,

Dave Johnson, Chairman  
Blair Airport Authority

# **APPENDIX H**

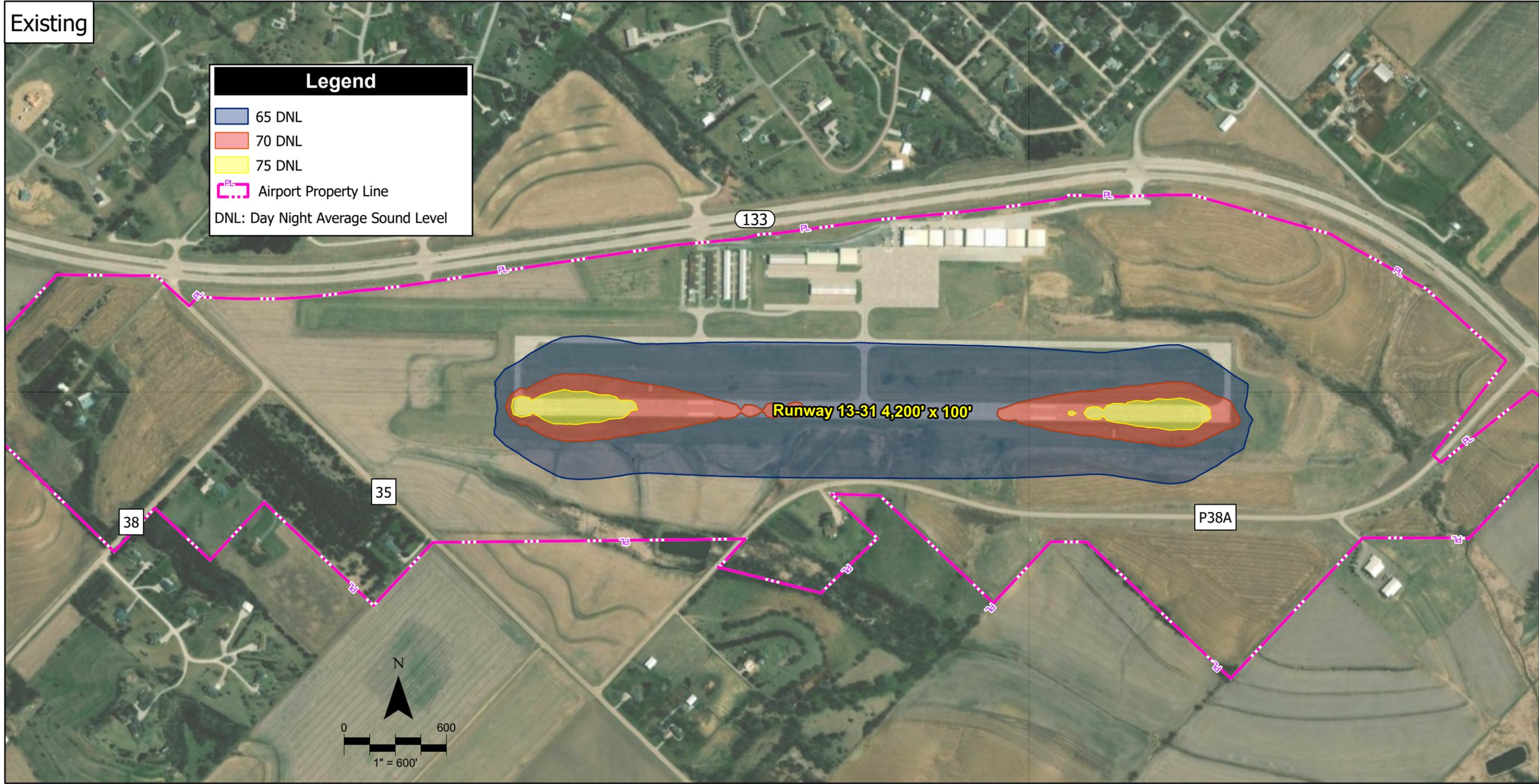
## **Noise Study**

Existing

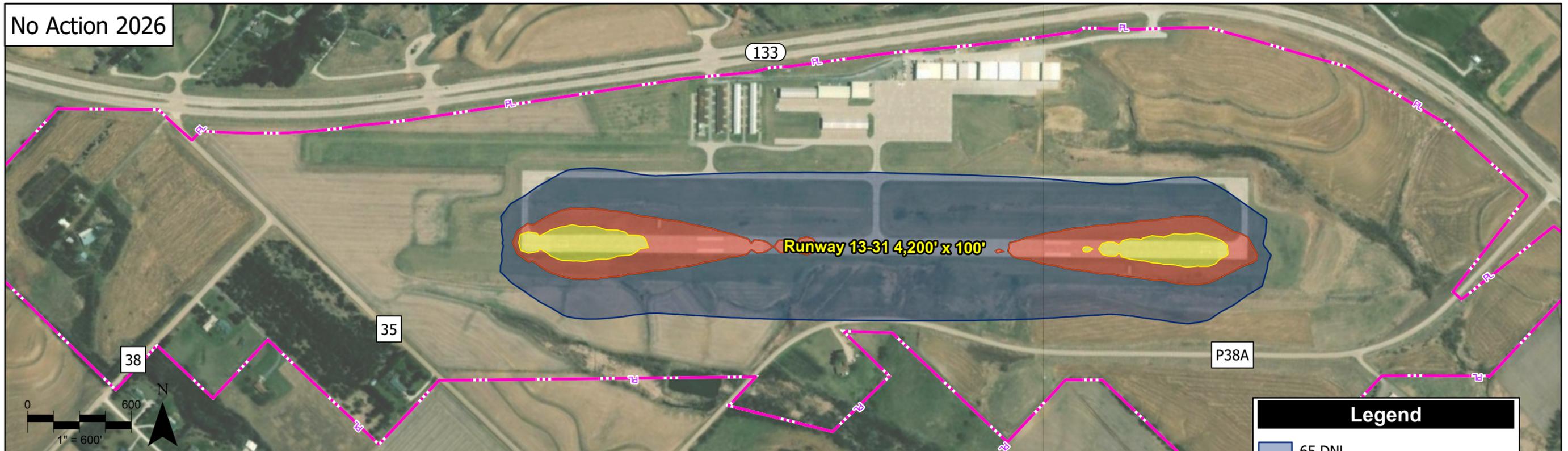
**Legend**

- 65 DNL
- 70 DNL
- 75 DNL
- Airport Property Line

DNL: Day Night Average Sound Level



No Action 2026

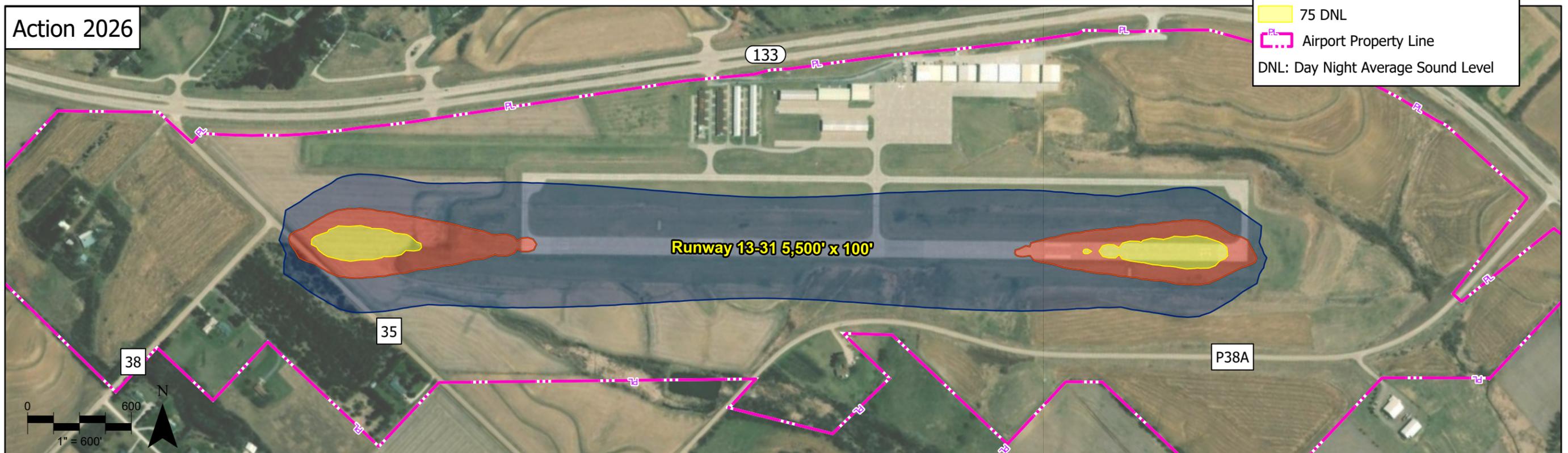


**Legend**

- 65 DNL
- 70 DNL
- 75 DNL
- Airport Property Line

DNL: Day Night Average Sound Level

Action 2026

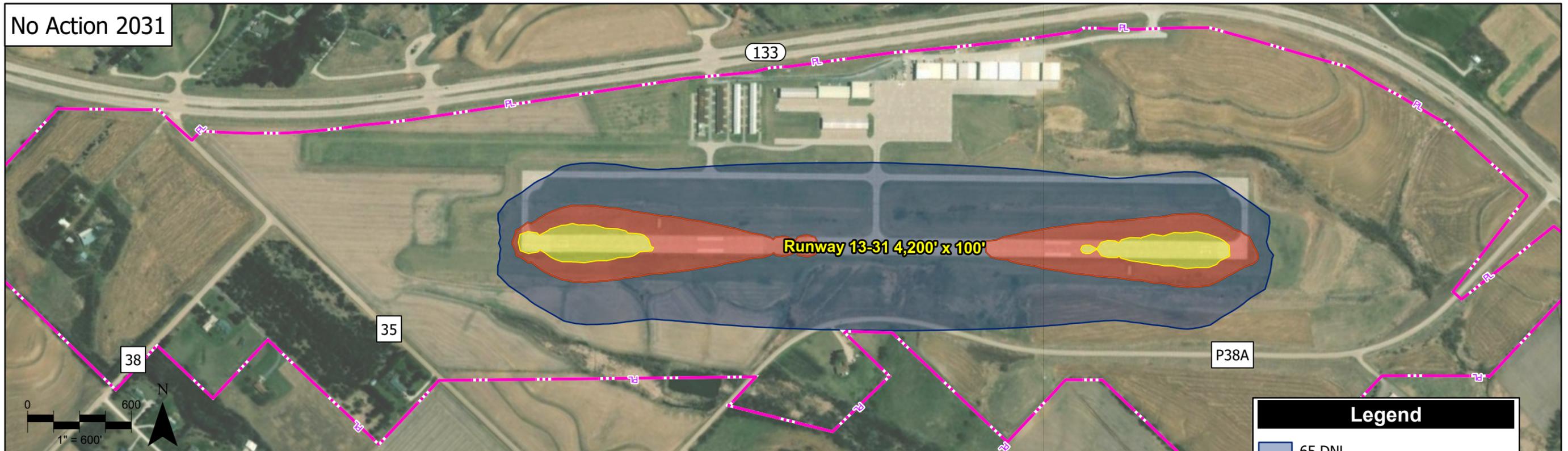


**Legend**

- 65 DNL
- 70 DNL
- 75 DNL
- Airport Property Line

DNL: Day Night Average Sound Level

No Action 2031



Action 2031



**APPENDIX I**  
**Environmental Records Review**

# **ENVIRONMENTAL RECORDS REVIEW**

## **Blair Executive Airport**

**Prepared for:**

Blair Airport Authority  
218 South 16<sup>th</sup> Street  
Blair, Nebraska 68008

December 2022

Olsson Project No. A21-03923

## **TABLE OF CONTENTS**

1. Introduction .....	1
2. Records Review.....	2
2.1 Blair Executive Airport (58269) .....	2
3. Evaluation and Conclusions .....	3

## **APPENDICES**

Appendix A	Figures
Appendix B	Regulatory Records

# 1. Introduction

Olsson, Inc. (Olsson) was retained by Blair Airport Authority to perform a hazardous materials desktop review for the Airport Improvement Program (AIP) Project No. 3-31-0109-020 (hereinafter referred to as 'Project' at the Blair Executive Airport located near Blair, Nebraska. Olsson reviewed publicly available records from the Nebraska Department of Environment and Energy (NDEE) and Nebraska State Fire Marshal (SFM) for sites indicative of hazardous material and/or petroleum storage or releases. The information provided within this report is intended to assist the Blair Airport Authority in identifying potential hazardous materials concerns and in considering the possible need to address hazardous materials concerns in Project decisions regarding materials management and worker health and safety.

The airport improvement project includes:

- Construction of Runway 13/31 Extension
- Construction of parallel taxiway extension to Runway 13/31
- Construction of a taxiway connecting to end of Runway 13
- Grade safety area of Runway 13/31 and parallel taxiway
- Relocation of County Road 35/38
- Storm Sewer Improvements
- Tree and building structure removal on land within Runway Protection Zone and county road relocation

Groundwater direction may fluctuate seasonally but based on surface topography, we determine flow to be generally to the north. Depth to groundwater is approximately 20-25 feet below ground surface (bgs) based on groundwater investigations in the Project area (see Section 2.2). Land use in the area is generally agricultural.

## 2. Records Review

The following sections summarize the review of state agency regulatory files for hazardous materials sites or petroleum release sites that are located adjacent to, or within the vicinity of, the proposed Project. The evaluation of the magnitude of impact to the Project from hazardous materials is based on several factors, including the distance between a hazardous materials site and the Project; regulatory status of the identified sites (e.g., active or inactive); known or suspected releases of hazardous materials and/or petroleum into soil, surface water or groundwater; the hydrogeologic relationship of the contamination to the Project; and the depth of excavation and/or duration of construction of the Project.

Identified sites are categorized as having either low, medium, or a high potential to impact the Project. The following describes the categories:

**Low Potential:** The records review indicates that it is unlikely that contamination would be encountered during Project construction.

**Medium Potential:** The records review indicates contamination is present at the site, but the extents have not been fully investigated. Contamination is unlikely to be present in the Project footprint based on results of previous investigations.

**High Potential:** The records review indicates contamination would likely be encountered during Project construction.

The Nebraska databases reviewed include:

- NDEE Environmental Facilities Online Database for Environmental Facilities within 1/10-mile of the Project
- NDEE Environmental Facilities Online Database for National Priority List (NPL) or Superfund (SF) sites within 1 mile of the Project
- Nebraska DNR Registered Wells Inventory within 1/10-mile of the Project
- Nebraska DNR and SFM Database - Registered Underground and Aboveground Storage Tanks within 1/10-mile of the Project

One Environmental Facility was identified within 1/2-mile of the Project (refer to Figure 2, Appendix A). Records for the Environmental Facilities were reviewed and are discussed in the following sections. Refer to Appendix B for pertinent regulatory records.

Registered wells are located within or near the Project boundaries as shown on Figure 3 in Appendix A. If wells are impacted by the Project, well abandonment should be completed in accordance with Nebraska regulations.

No NPL or SF sites are located within 1 mile of the Project.

### 2.1 Blair Executive Airport (58269)

According to spill number 10220-EPP-1100, low levels of contamination were detected in soil and groundwater samples taken during a Step 6 site assessment after the removal of two 1,800 gallon aviation gasoline storage tanks in 1990. During a resampling of groundwater for laboratory analysis in April 1991,

no contamination was found, and the site was recommended for closure with no further remedial action required.

In April 2009, two 2,000 gallon steel AV-100 UST and their associated product piping and dispensers were removed from the site. Both tanks, the piping, and dispensers were all in excellent condition with no corrosion found during the excavation. During sampling of the site after the UST removal, contamination was reported, but it was determined that the nature and extent of contamination was minimal and the site was closed with no further action required.

### **3. Evaluation and Conclusions**

Olsson performed this environmental records review to identify hazardous materials and/or petroleum storage or release sites and to consider the need to address environmental contamination in making Project decisions regarding materials management and worker health and safety.

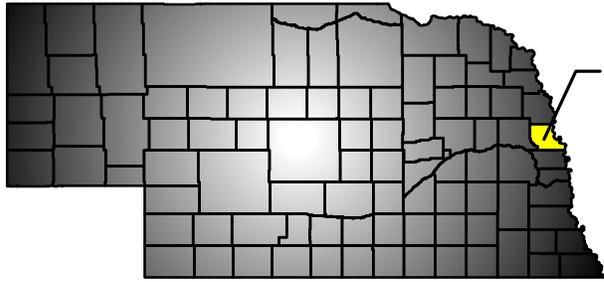
One site, involving the release of petroleum products underground storage tanks, was identified at the Blair Airport property. Based on review of the DNR records, the release has a low potential to impact the Project.

# **Appendix A**

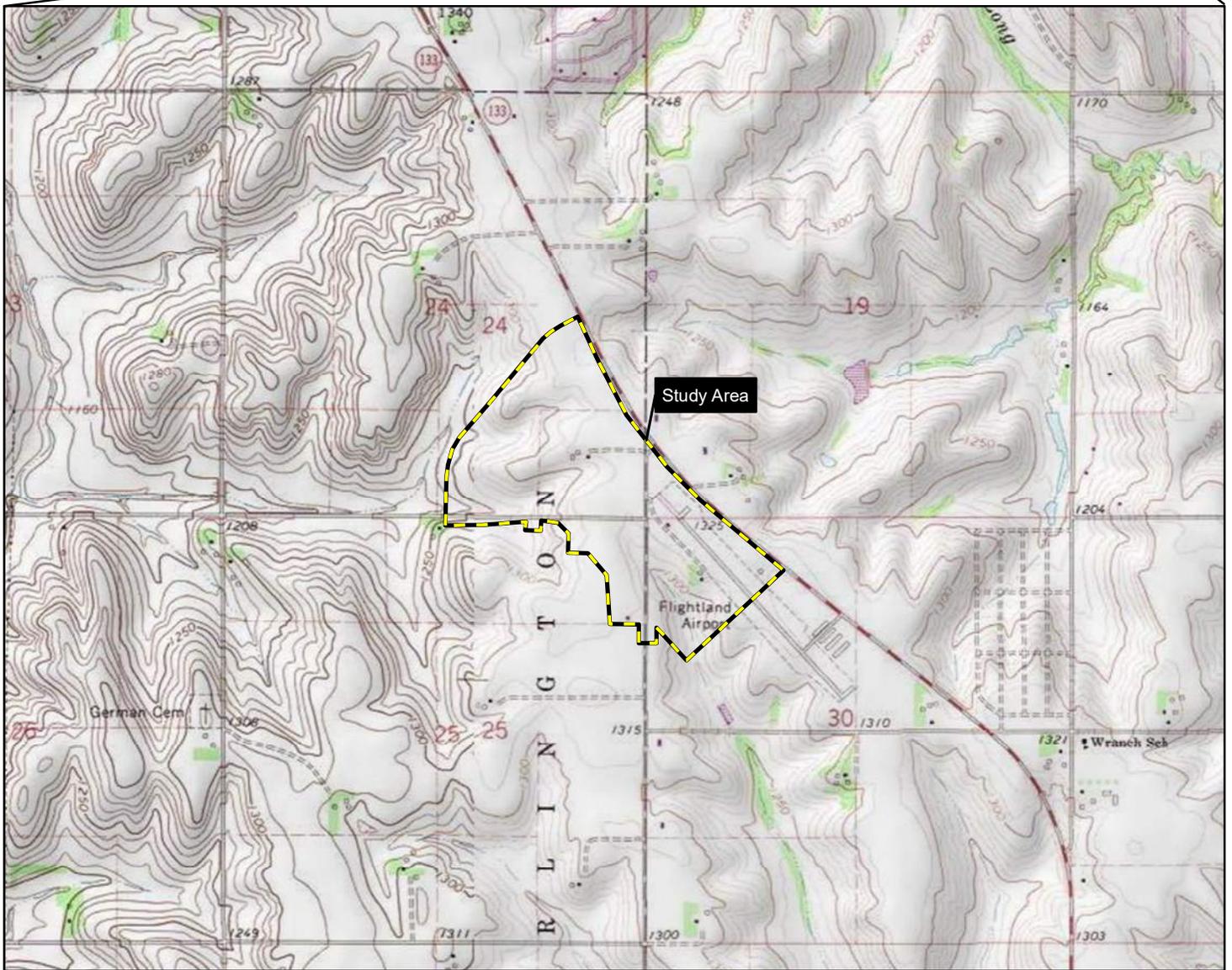
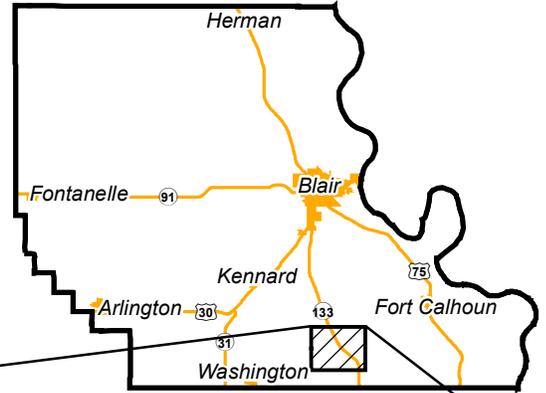
Figures

NEBRASKA

WASHINGTON COUNTY

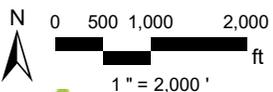


Project Area



Study Area

 Study Area



**Blair Executive Airport  
Hazardous Material Review**

Blair, Washington County, Nebraska

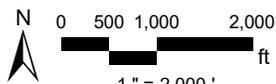
Olsson Project # A21-03923

**Location Map**

Figure 1



58269  
Blair Executive Airport  
LST, SFM

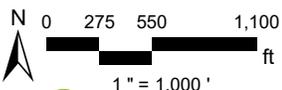


- NDEE Facility
- 1/10-mile buffer
- 1/2-mile buffer
- 1-mile buffer
- Study Area

**Blair Executive Airport  
Hazardous Material Review**

Blair, Washington County, Nebraska  
Olsson Project # A21-03923

**Site Map**  
Figure 2



1/10-mile buffer

Study Area

DNR Registered Well

● Domestic

● Ground Heat Exchanger well - Closed Loop Heat Pump well

**Blair Executive Airport  
Hazardous Material Review**

Blair, Washington County, Nebraska

Olsson Project # A21-03923

**Registered Well Map**

Figure 3

# **Appendix B**

Regulatory Records

# Memorandum

To: Ed Pedersen

Through: Dick Edman

From: Brad Bratt

Date: Jan 23, 1991

Subject: Eagle Institute/Flightland Airport, Blair (stept) /UG #10220-EMP-1100

The Flightland Airport can be considered a BAC-2 site. There are no wells within 2000 feet, but there is the potential for future ground water use in the area.

The site is located on 15 feet of silty clay and sand underlain by massive silty clay to a depth of at least 30 feet. The water table is about 21 feet below the surface. RPB believes this could be a perched water table because of the 50 foot drop in elevation in adjacent valleys.

Soil contamination reached a maximum of 561 ppm 5 feet below the water table. The water sample from the temporary well had BTEX levels that were at or near the detection limits.

## Recommendations

The high PID levels in soil and low BTEX levels in water may be explained by sorption by the soil while ground water has been diluted. The direction of flow is somewhat uncertain because the site is on a ground water divide. The one well was located in the area of the hole in the tank so it should be showing an accurate view of the contamination. However, it is possible that ground water movement has carried any contamination away from the single well. The water table is not necessarily perched just because of the difference in elevation between the 'upland' and the valleys. Regardless of the water table condition, this site seems to have no major problems based on the low contamination levels.



20220071795

# Memorandum

TO: DAVID CHAMBERS  
THROUGH: DALE BUSCH  
FROM: ED PEDERSEN  
DATE: FEBRUARY 26, 1991  
MAY 23, 1991  
RE: SITE CLOSURE  
EAGLE INSTITUTE  
FLIGHTLAND AIRPORT  
BLAIR, NE  
UG# 10220-EPP-1100

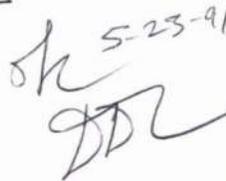
Dave, I recommend 62  
resamples well to insure  
lab results were not bogus.  
The high P.I.D. readings may  
also be bogus, but I would  
like to be sure since this  
is a RAC-2 site.

Ok, if well(s)   
are present 

THIS IS A RAC-2 SITE. LABORATORY ANALYSIS  
OF GROUNDWATER DURING THE STEP-6 INVESTIGATION  
INDICATES THAT GROUNDWATER WAS NOT IMPACTED.  
SOIL SAMPLES TAKEN DURING THE BORING WERE  
ANALYZED BY PID AND SHOWED HIGHER LEVELS  
OF CONTAMINATION. I TEND TO GO WITH THE LAB  
RESULTS AND RECOMMEND THAT WE CLOSE THIS  
SITE.



WELL WAS RESAMPLED 4/13/91. NO CONTAMINATION  
WAS DETECTED. I <sup>STILL</sup> RECOMMEND THAT WE CLOSE THIS  
SITE. 

OK 5-23-91  




APPROVALS

DIRECTOR _____	TSS SUPV _____	LC CH _____	WC CH _____	DRAFTER <i>EMP</i>
ASST DIR _____	LSS SUPV _____	AC SUPV _____	FGG SUPV _____	PIO _____
AQ CH _____	PSS SUPV _____	HW SUPV _____	WRF SUPV _____	ORDER <i>P</i>
SS CH _____	LAB SUPV _____	W/S SUPV _____	WPA SUPV _____	

MAY 31 1991

Mr. Richard Jeffries  
 1125 South 103rd Street  
 Omaha, NE 68125

RE: Site Closure  
 Flightland Airport  
 Blair, Nebraska  
 UG #10220-EPP-1100

Dear Mr. Jeffries:

The Department has reviewed the Step 6 initial site assessment report and additional sampling results submitted by RDG, Inc. The report indicated that ground water has not been impacted by this release.

No further remedial actions will be required at this time. However, if a problem arises in the future as a result of this release, Eagle Institute will remain responsible for further remedial action.

Thank you for your cooperation. If you have any questions, please contact me at (402) 471-4230.

Sincerely,

Edward P. Pedersen  
 Ground Water Geologist  
 Ground Water Section  
 Water Quality Division

EP/dph

cc: Jon Gross  
 RDG, Inc.



NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

SPILL REPORT FORM

060109-TH-0900  
SPILL NUMBER

DATE CLOSED

STAFF CODE \_\_\_\_\_  
PROJECT CODE \_\_\_\_\_  
REFERRAL DATE \_\_\_\_\_

ON-SCENE RESPONSE \_\_\_\_\_ DATE /INITIALS \_\_\_\_\_  
COMPUTER \_\_\_\_\_  
PROG. COORD \_\_\_\_\_  
PROG SUPV \_\_\_\_\_

GW \_\_\_\_\_ RC \_\_\_\_\_ IW \_\_\_\_\_ SW \_\_\_\_\_ PC \_\_\_\_\_ SF \_\_\_\_\_ AG \_\_\_\_\_ AR \_\_\_\_\_ LU \_\_\_\_\_

REPORTER CODE: 01 - SPILLER 08 - PRIV. CITIZEN 16 - EPA \* IF OTHER GIVE  
02 - NRC 14 - OTHER FED. 17 - NE. STATE AGENCY NAME, ADDRESS  
06 - NDEQ 15 - ANONYMOUS 18 - OTHER STATE AGENCY AND TELEPHONE

\* OTHER: \_\_\_\_\_

RESPONSIBLE PARTY INFORMATION

COMPANY: Blair Airport Authority NAME/POSITION: Rodney Storm  
STREET ADDRESS 218 S 16th St CITY: Blair  
STATE: NE ZIP: 68008 TELEPHONE - AREA CODE (712) 676-9918

SPILL INFORMATION

INCIDENT TYPE: 01-MOR VEH 04-PIPELINE 07-UG TANK 10-OTHER 13-UG PIPE (LUST) 16-ABANDONED DRUMS  
02-RAIL 05-AIRCRAFT 08-DISCHARGE 11-FROM FIRE 14-LUST EXEMPT  
03-MARINE 06-TANK 09-FIXED FAC 12-AIR RELEASE 15-LAND RELEASE

SPILL DATE \_\_\_\_\_ TIME \_\_\_\_\_ DISCOVERY DATE 4-14-09 TIME \_\_\_\_\_  
SPILL LOCATION 2785 State Hwy 133 LEGAL L1: L2: L3: SEC: TWN: RNG: \_\_\_\_\_  
SPILL CITY Blair SPILL COUNTY Washington  
(NEAREST VILLAGE, TOWN, OR CITY)

MATERIAL DESCRIPTION: AV-100 gas

PRIMARY MATERIAL CODE 01-PCB 08-ANIMAL OR VEG OIL 15-HERBICIDES 22-ALCOHOL  
02-DIOXIN 09-WASTE OIL 16-INSECTICIDES 23-AMINE  
03-CRUDE OIL 10-OTHER OIL 17-FERTILIZER 24-ALDEHYDE  
04-GASOLINE 11-PETRO. SOLVENTS 18-METALS 25-OTHER  
05-DIESEL OIL 12-NAPHTHA 19-ACIDS 26-UNKNOWN  
06-OTHER DIST. FUEL 13-MINERAL SPIRITS 20-ORG. SOLVENTS 27-RADIOLOGICAL  
07-ASPHALT/OTHER RESID 14-AGRI.CHEM. 21-CAUSTICS 28-BRINE  
29-GAS & OTHER FUEL OILS  
30. ANHYDROUS AMMONIA

AMOUNT SPILLED \_\_\_\_\_ 01-Gal 02-Lbs 03- Bbls 04-Ton 05-Sheen 06-Unk Qty 07-PPM 08-Pint 09-Quart

WAS OIL INVOLVED?  Y  N  U WAS MATERIAL HAZARDOUS?  Y  N  U WAS MATERIAL EXTREMELY HAZARDOUS?  Y  N  U  
WATERWAY DISCHARGE?  Y  N  U (CODE) WATERWAY THREATENED?  Y  N  U (CODE)

INCIDENT DESCRIPTION:  
Removed 2 AV-100 gasoline tanks, piping & dispensers.  
Lab analysis - highest reading .000529 mg/kg. Benzene  
@ 12'



Compliance Checklist for Closure Assessment Reports, DEQ

Contractor Charles Excavating, Inc. # CL 97002 Certified Individual Charles Ewin # 2023

4 Proper Facility I.D # 2748 4 Closure permit obtained

4 Cover page signed and dated at bottom 4 Completed tank/piping closure checklist

4 What was Closed? Tanks Piping Dispensers

4 Type of pumping system --- Suction Safe Suction Pressurized

4 What Substance (s)? Gasoline Diesel Oil Other AV-100

4 How Many Samples were required 4 What Locations tank ends What Depth 12'

4 Proper analysis done? OA1, 8260 (Gas) OA2 (Diesel) BTEX, MTBE, HEXAN

4 Proper Chain of Custody and Complete lab testing results attached.

N/A In Place Closure? Need Hollow stem auger at least 2" diameter (one each end of tank)

4 Drilled to Ground Water or Contamination Found. N/A Water Samples Required

4 Location of contaminated soils (address and if hole was left open) All soil returned to excavation.

4 Location of tank (address) Alter Scrap, 9th Ave, Council Bluffs, IA

N/A DEQ contacted if sampling was waived (Copy of letter to Owner)

4 Date tank system was last used 5-15-07 4 Owner of tank system when last in operation.

4 Proper site diagram with sampling points and distances to/from objects (such as tanks, buildings, streets etc.) North indicated, location of tank system to permanent objects such as curbs and buildings.

4 Closure assessment report submitted in 45 Days?

N/A suspected release form filed within 24 hours (if applicable)

N/A Replacement of tanks or piping? 4 Attachment A for DEQ

4 Approved \_\_\_\_\_ Reason Rejected

5/20/09 Date Received- Reviewed by WKS #8749

5/29/09 Date to DEQ - Copies made by WKS

RECEIVED

JUN 01 2009  
Nebraska Department of  
Environmental Quality  
By: SK





Dave Heineman  
Governor

## STATE OF NEBRASKA

DEPARTMENT OF ENVIRONMENTAL QUALITY

**Michael J. Linder**

Director

Suite 400, The Atrium

1200 'N' Street

P.O. Box 98922

Lincoln, Nebraska 68509-8922

Phone (402) 471-2186

FAX (402) 471-2909

website: [www.deq.state.ne.us](http://www.deq.state.ne.us)

JUN - 4 2009

MR RODNEY STORM  
BLAIR AIRPORT AUTHORITY  
218 S 16<sup>th</sup> ST  
BLAIR NE 68008

RE:

Facility Name: Blair Municipal Airport  
Address: 2785 State Hwy 133  
City: Blair  
State Fire Marshal ID#: 2748  
DEQ Incident Number: LST#060109-TH-0900  
IIS#: 58269

Dear Mr. Storm:

The Department has received the Closure Assessment Report for the assessment of all or part of the tank system at the above-referenced facility. Information presented in the report indicates that a release of petroleum resulting from the operation of this system has occurred. The nature and extent of the petroleum contamination appear to be minimal, therefore, the Department is not requiring you to take any further action at this time. However, should information become available in the future that warrants additional investigation and/or remediation of this release, the Department may require you to take further action.

If you have any questions, please contact me at (402) 471-3378.

Sincerely,

Tammie L. Holley  
Administrative Assistant  
Petroleum Remediation Section  
Water Quality Division



20220071824

UG # 10220-EP-1100

NW



## NEBRASKA TESTING CORPORATION

4453 South 67th Street  
PO Box 6075 Elmwood Station  
Omaha, Nebraska 68106-0075  
Phone 402/331-4453

May 11, 1990

RECEIVED

SEP 17 1990

DEPT. OF ENVIRONMENTAL CONTROL

Mr. Kevin Ross  
Jack's Pump and Meter Service  
8520 "G" Street  
Omaha, Nebraska 68127

Re: Report of Tank Closure Assessment,  
Eagle Field, Highway 133, Washington County, Nebraska,  
NTC 6200-90-517, Facility ID# 2748

Dear Mr. Ross:

This letter and its attachments constitutes our report of test results regarding the removal of two 1,800 gallon underground gasoline-storage tanks and their related dispensing lines and dispensers at the above referenced site. The testing was initiated to comply with testing requirements stipulated by the Nebraska Department of Environmental Control's (NDEC) "Underground Storage Tank System Site Assessment Protocol for Permanent Closure and Change In-Service," which became effective January 25, 1989 and amended September 30, 1989. The intent of the protocol is to document whether soils and/or groundwater in the vicinity of the tanks or fuel dispensing system have been impacted by the system contents.

### Scope of Service

The following scope of service has been provided for the assessment:

1. Mobilize an environmental professional to the site to observe site conditions, obtain representative samples of soil from ten locations in the tank excavation and nine locations along the product dispensing line;
2. Screen soils for organic vapor concentrations using a photoionization analyzer, and for hydrocarbon contamination using visual/olfactory indicators as criteria;
3. Draw a site sketch depicting physical features and sample locations;



STAFF CODE 10  
PROJECT CODE 3878  
REFERRAL-DATE \_\_\_\_\_  
AG HW WR SW

NEBRASKA DEPARTMENT OF ENVIRONMENTAL CONTROL

SPILL REPORT FORM

SWP COMPUTER  
\_\_\_\_ PROG COORD  
\_\_\_\_ PROG SUPV

10220-EPP-1100  
SPILL NUMBER

DATE CLOSED

REPORTER CODE: 01 - SPILLER 08 - PRIV. CITIZEN 16 - EPA IF OTHER GIVE  
02 - NRC 14 - OTHER FED. 17 - NE. STATE AGENCY Name, address  
06 - NDEC 15 - ANONYMOUS 18 - OTHER STATE AGENCY Telephone

OTHER: PROTOCOL

RESPONSIBLE PARTY INFORMATION

COMPANY EAGLE INSTITUTE, INC NAME/POSITION RICHARD JEFFRIES  
STREET ADDRESS 1125 So. 103 RD. Suite 720 CITY OMAHA  
STATE NE ZIP 68124 TELEPHONE - Area Code (402) 397-1700

SPILL INFORMATION

INCIDENT TYPE: 01-Motor Veh. 04-Pipeline 07-UG Tank 10-Other 13-UG Pipe  
02-Rail 05-Aircraft 08-Discharge 11-From Fire 14-LUST Exempt  
03-Marine 06-Tank 09-Fixed Fac. 12-Air Release 15-Land Release

AP# 2748

SPILL DATE \_\_\_\_\_ TIME \_\_\_\_\_ DISCOVERY DATE APRIL 3, 1990 TIME \_\_\_\_\_

SPILL LOCATION FLIGHTLAND AIRPORT LEGAL NW, SE, NW, sec 30, T18N R11E

SPILL CITY ALONG HIGHWAY 133 SPILL COUNTY WASHINGTON

MATERIAL DESCRIPTION: AVIATION GASOLINE

PRIMARY MATERIAL CODE	01-PCB	08-Animal or Veg. Oil	15-Herbicides	22-Alcohol
	02-Dioxin	09-Waste Oil	16-Insecticides	23-Amine
	03-Crude Oil	10-Other Oil	17-Fertilizer	24-Aldehyde
	04-Gasoline	11-Petro. Solvents	18-Metals	25-Other
	05-Diesel Oil	12-Naptha	19-Acids	26-Unknown
	06-Other Dist. Fuel	13-Mineral Spirits	20-Org. Solvents	27-Radiological
	07-Asphalt/Other Resid.	14-Agri. Chem.	21-Caustics	28-Brine

AMOUNT SPILLED \_\_\_\_\_ 01-Gal 02-Lbs 03-Bbls 04-Ton 05-Sheer 06-Unk Qty 07-PPM 08-Pint 09-Quart

Was Oil Involved?  Y  N  U Was Material Hazardous?  Y  N  U Was Material EHS?  Y  N  U

Waterway Discharge?  Y  N  U (Code \_\_\_\_\_) Waterway Threatened?  Y  N  U (Code 09)

INCIDENT DESCRIPTION: TWO TANKS WERE REMOVED. A HOLE WAS FOUND IN ONE.

OVA INDICATES CONTAMINATION. OVEREXCAVATION FAILED.

20220071830

**APPENDIX J**  
**Traffic Study**

# TECHNICAL MEMO

<b>To:</b>	Blair Airport Authority
<b>From:</b>	Dan Bellizzi, PE, PTOE
<b>RE:</b>	Blair Airport Environmental Assessment
<b>Date:</b>	January 27, 2023
<b>Olsson Project #:</b>	021-03923-A

## **Introduction and Objective**

An airport runway extension is proposed for the Blair Municipal Airport located along Nebraska Highway 133 (N-133) near County Road 38 in Washington County, Nebraska. The project intends to include relocating County Roads 35 and 38 to outside of the Runway Protection Zone (RPZ). The purpose of this memorandum is to evaluate the traffic impacts on the affected county roads associated with the runway extension project. A vicinity map is illustrated in **Figure 1**.

## **Existing Roadway Characteristics**

There are three roadways in the vicinity of the proposed site: N-133, County Road 35, and County Road 38. N-133 is a four-lane divided highway with a wide 36-foot grass median. It is classified as a Principal Arterial based on the Nebraska Department of Transportation (NDOT) functional classification map. The highway runs north and south from Omaha to Blair and is primarily used as a commuter highway. The posted speed is 70 mph in the vicinity of the airport. County Road 35 is a north-south 28-foot-wide gravel road that provides local access to residents in the area. Similarly, County Road 38 is an east-west 28-foot-wide gravel road that provides local access to residents. There are two stop-controlled intersections within the study area: N-133 with County Road 35 and County Road 35 with County Road 38.

## **Existing Traffic Volumes**

24-hour turning movement count data was collected at N-133 and County Road 35, and County Road 35 and County Road 38 on Tuesday, November 1, 2022. The documentation included light and heavy vehicle classification. The existing daily turning movement counts are illustrated in **Figure 2**.

## **Travel Time Evaluation**

A traffic evaluation was conducted to calculate travel times and travel time costs under two roadway configuration alternatives. The first alternative accounts for the realignment of County Road 35 and County Road 38 including the closure and shift of the intersection of N-133 and County Road 35 to the north approximately 1,350 feet. The second alternative considers the closure of portions of County Road 35 and County Road 38. Multiple impacted routes were identified based on the proposed changes to the roadway. Travel times were calculated for routes impacted by the change in the roadway network and were compared. The starting points of the routes were selected as the points of deviation between existing and proposed design. It is assumed that vehicles coming from south on N-133 with a destination on south County Road 35 would not use the new roadway configuration, but instead use the existing connection on N-133 at County Road P38A.

### County Road 35/38 Reconstruction – Alternative 1

The proposed changes to the roadway network for the first alternative are shown in **Figure 3**. Existing and new routes that were compared are shown in **Figure 4**. The detailed travel time comparison calculations are shown in **Table 1** below.

**Table 1. Travel Time Calculations**

Route	Path		Existing Travel Time (min.)	New Travel Time (min.)	Change in Travel Time (min.)
	From	To			
<b>A1 / A2</b>	North N-133	West CR 38	0.86	0.59	-0.27
<b>B1 / B2</b>	North N-133	South CR 35	0.68	1.18	+0.50
<b>C1 / C2</b>	South N-133	West CR 38	0.64	0.81	+0.17

With the new roadway configuration, there is anticipated to be an increase of no more than 30 seconds for any new route, where one new route is anticipated to decrease travel time by approximately 15 seconds. Ultimately, the change in travel time between existing and new routes is expected to be marginal with this proposed roadway configuration.

A cost evaluation was performed to compare travel time costs using the new routes compared to the existing routes. The costs were estimated using assumed travel time costs of \$14.24 per hour for a car (personal travel) and \$31.52 per hour for a truck. Existing traffic distributions were assumed to remain consistent between existing and new routes and were used in the user cost calculations. Travel time costs are summarized in **Table 2** below.

**Table 2. User Cost Calculations**

Path			Veh. Type	Volume (veh/day)	Cost (\$/hour/veh)	Change in Travel Time (min.)	Change in Travel Time Cost (\$/day)	Total Change in Travel Time Cost (\$/day)
Route	From	To						
<b>A1 / A2</b>	North N-133	West CR 38	Car	84	\$14.24	-0.27	(\$5.38)	(\$5.67)
			Truck	2	\$31.52		(\$0.28)	
<b>B1 / B2</b>	North N-133	South CR 35	Car	64	\$14.24	+0.50	\$7.59	\$7.86
			Truck	1	\$31.52		\$0.26	
<b>C1 / C2</b>	South N-133	West CR 38	Car	61	\$14.24	+0.17	\$2.46	\$2.46
			Truck	0	\$31.52		-	
Daily Change in Travel Time Cost								\$4.65

**County Road 35/38 Partial Closure – Alternative 2**

The proposed changes to the roadway network and new routes for the second alternative are shown in **Figure 5**. The detailed travel time comparison calculations are shown in **Table 3** below.

**Table 3. Travel Time Calculations**

Path			Existing Travel Time (min.)	New Travel Time (min.)	Change in Travel Time (min.)
Route	From	To			
<b>D1 / D2</b>	North N-133	West CR 38	2.19	2.09	-0.10
<b>E1 / E2</b>	North N-133	South CR 35	0.78	2.78	2.00
<b>F1 / F2</b>	South N-133	West CR 38	1.36	2.92	1.56

With the partial closure of County Road 35 and County Road 38, there is anticipated to be an increase of up to two minutes for new routes, where one new route is anticipated to decrease travel time by approximately 6 seconds. Ultimately, the change in travel time between existing and new routes is expected to be more impactful than Alternative 1.

A cost evaluation was performed to compare travel time costs using the new routes compared to the existing routes using the same costs and distributions as Alternative 1. Travel time costs are summarized in **Table 4** below.

**Table 4. User Cost Calculations**

Path			Veh. Type	Volume (veh/day)	Cost (\$/hour/veh)	Change in Travel Time (min.)	Change in Travel Time Cost (\$/day)	Total Change in Travel Time Cost (\$/day)
Route	From	To						
<b>D1 / D2</b>	North N-133	West CR 38	Car	87	\$14.24	-0.09	(\$1.86)	(\$1.86)
			Truck	0	\$31.52		-	
<b>E1 / E2</b>	North N-133	South CR 35	Car	36	\$14.24	+1.99	\$17.00	\$18.05
			Truck	1	\$31.52		\$1.05	
<b>F1 / F2</b>	South N-133	West CR 38	Car	50	\$14.24	+1.56	\$18.51	\$18.51
			Truck	0	\$31.52		-	
Daily Change in Travel Time Cost								\$34.70

## **Conclusions**

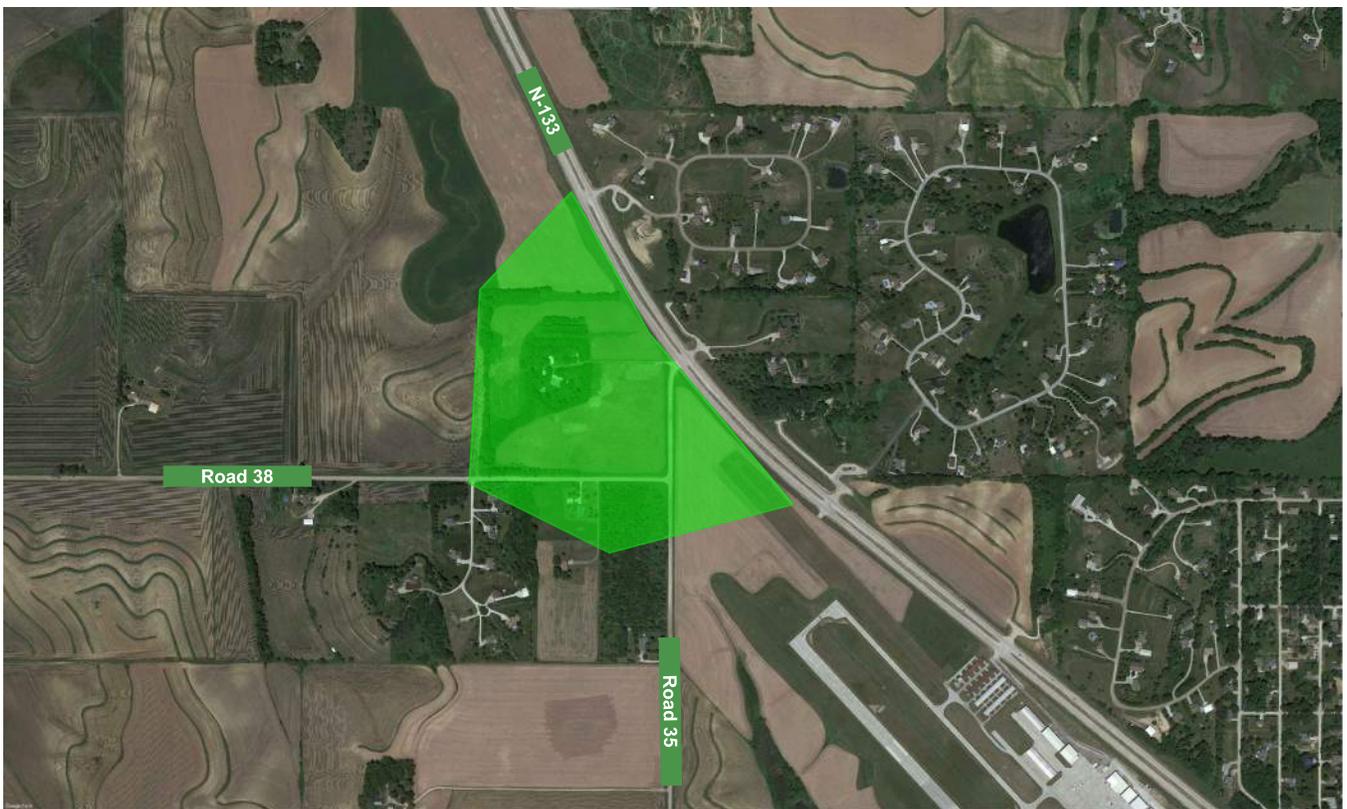
This traffic study evaluated travel time and user cost associated with the planned modified roadway network as proposed as part of the Blair Municipal Airport expansion project. Two roadway alternatives were evaluated. The first alternative evaluated reconstructing County Road 35 and County Road 38 in conjunction with the closure and shift of the intersection of N-133 and County Road 35 to the north approximately 1,350 feet (Alternative 1). The second alternative evaluated partial closure of County Road 35 and County Road 38 and closed access to N-133 from County Road 35 (Alternative 2).

Based on the evaluation, the change in travel time for displaced vehicles in Alternative 1 is expected to be no more than 30 seconds between existing and new routes. The cumulative cost increase for displaced vehicles in Alternative 1 is estimated to be \$4.65 per day.

The change in travel time for displaced vehicles in Alternative 2 is expected to be up to two minutes between existing and new routes. The cumulative cost increase for displaced vehicles in the second alternative is estimated to be \$34.70 per day.

# FIGURE 1

Blair, Nebraska  
Vicinity Map



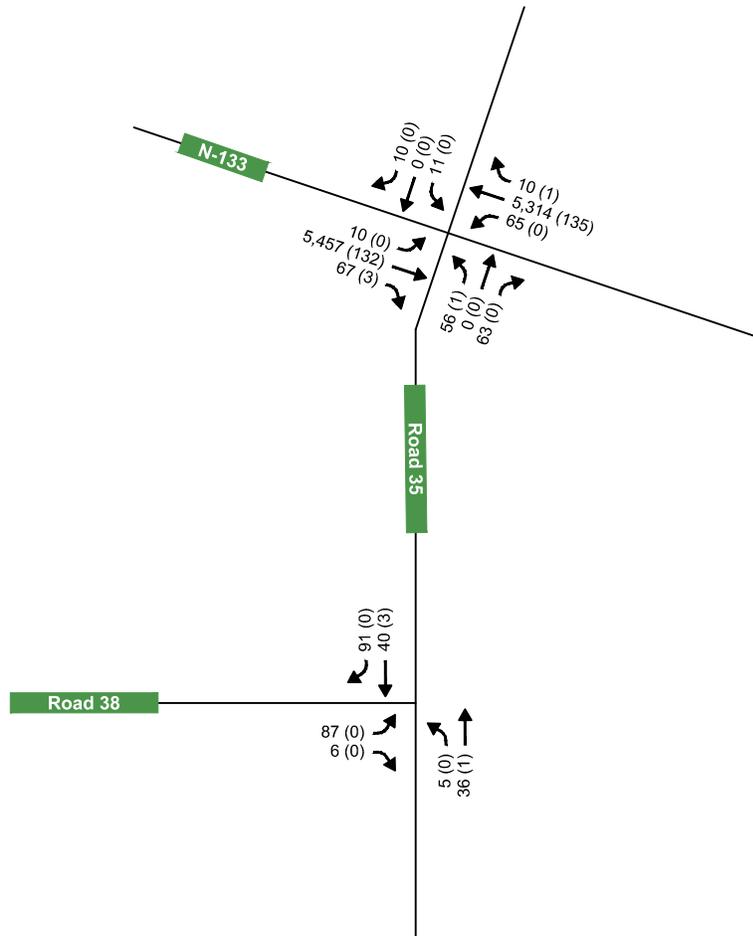
## LEGEND



Project Area

# FIGURE 2

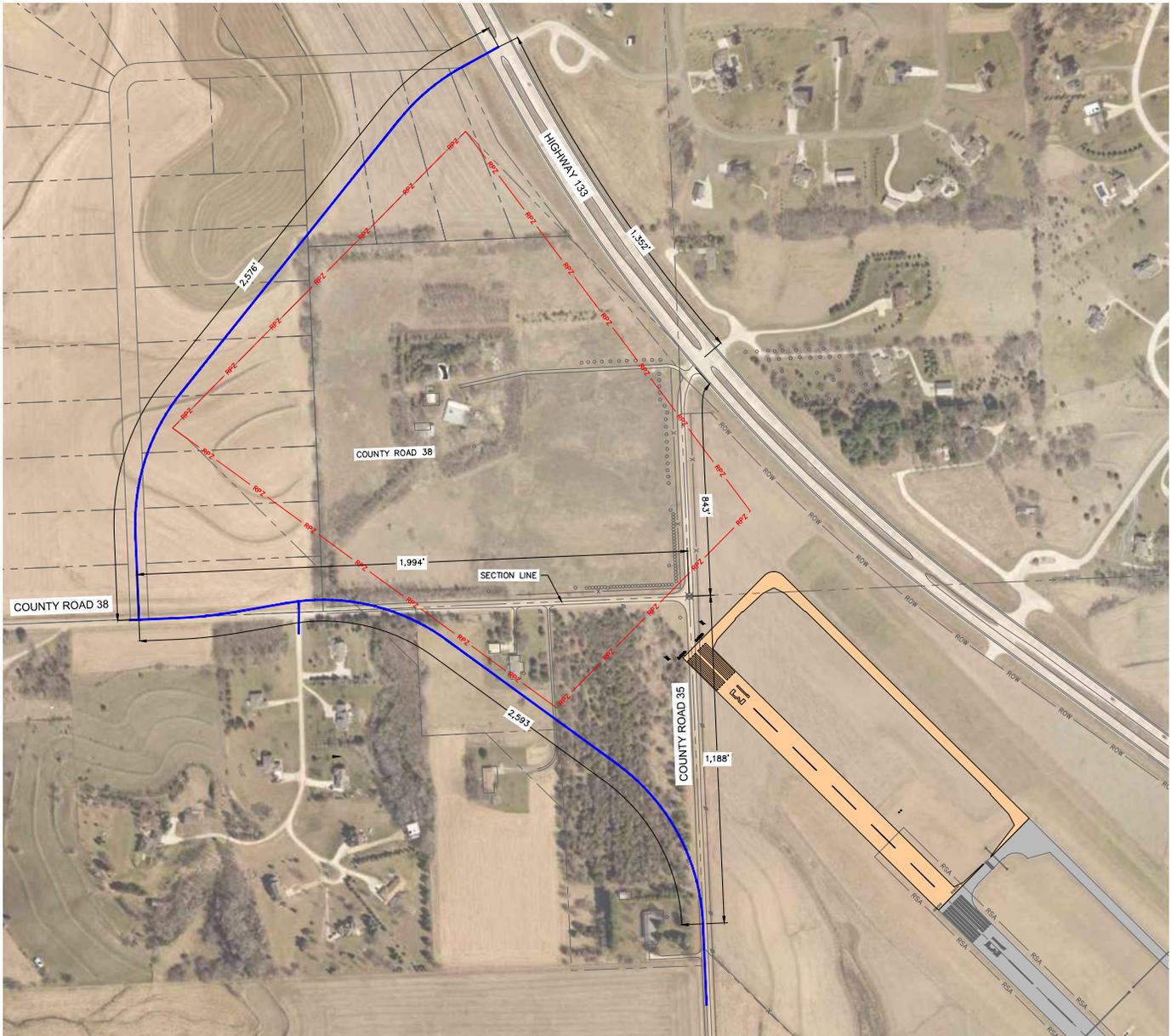
## Existing Daily Volumes



### LEGEND

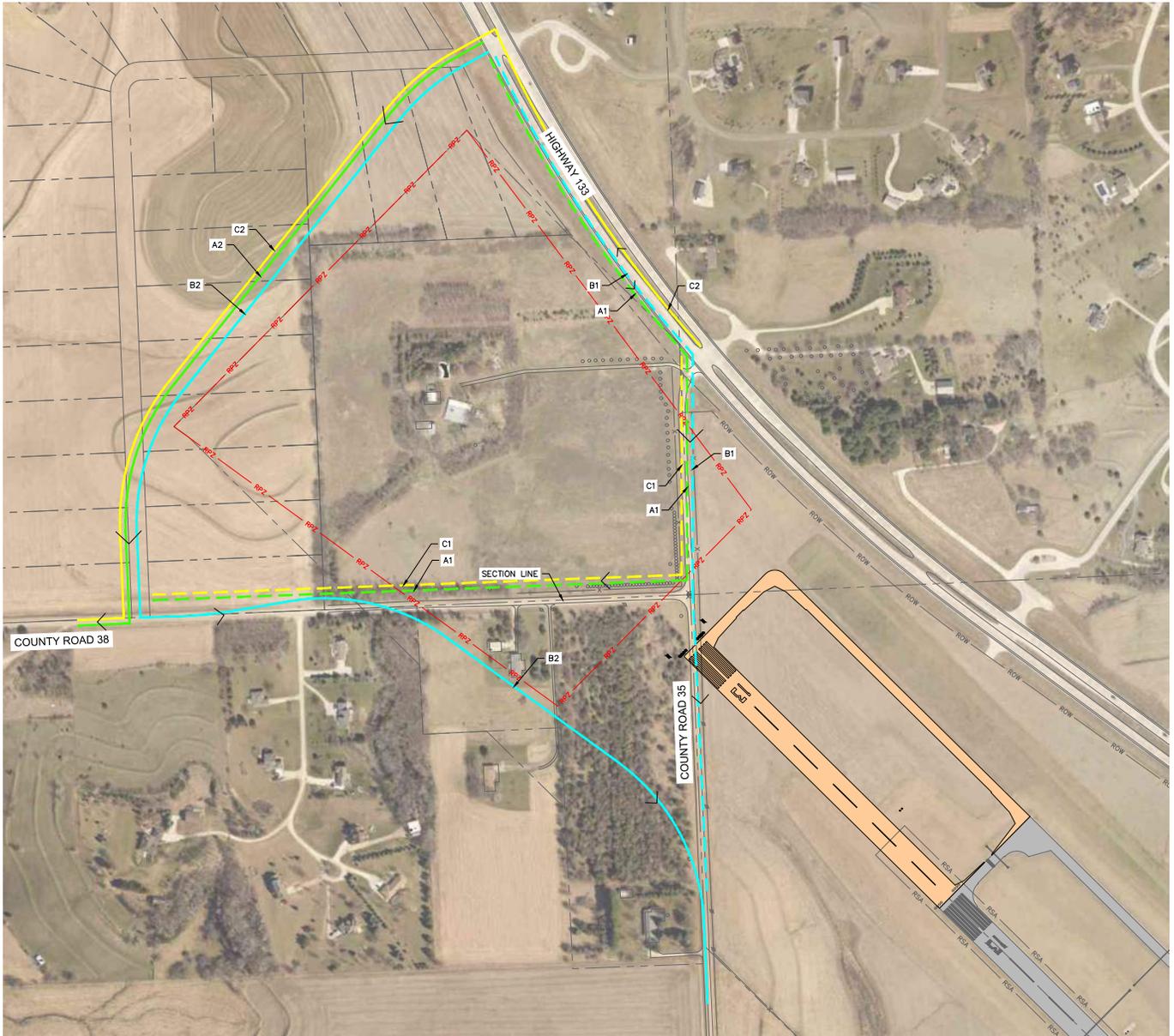
TOTAL (TRUCKS) Daily Vehicular Volumes

**FIGURE 3**  
Alternative 1  
Roadway Configuration



# FIGURE 4

## Existing and New Vehicle Routes - Alternative 1

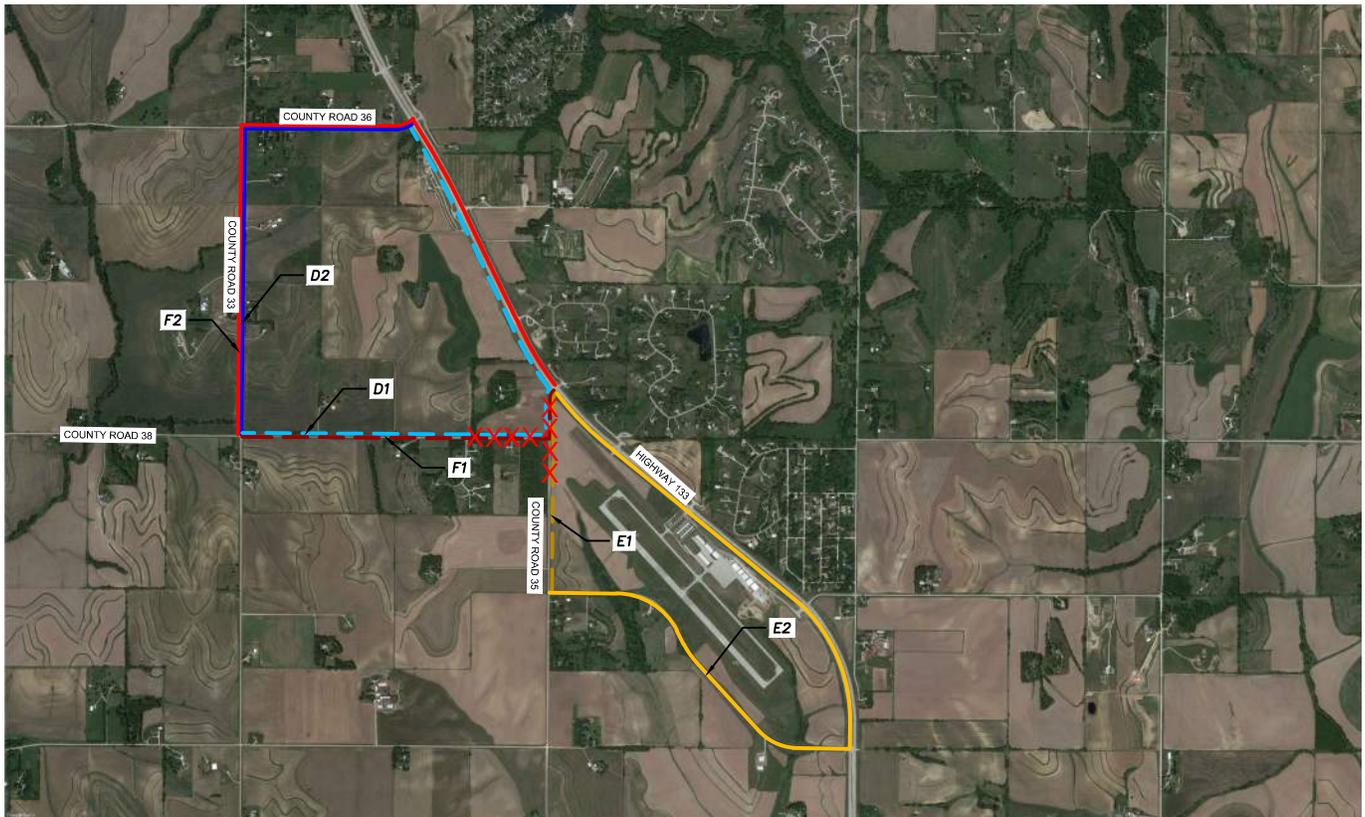


### LEGEND

- |                                     |                                |
|-------------------------------------|--------------------------------|
| Existing Path A1: N N-133 TO W CR38 | New Path A2: N N-133 TO W CR38 |
| Existing Path B1: N N-133 TO S CR35 | New Path B2: N N-133 TO S CR35 |
| Existing Path C1: S N-133 TO W CR38 | New Path C2: S N-133 TO W CR38 |

# FIGURE 5

## Existing and New Vehicle Routes - Alternative 2



### LEGEND

- |  |                                     |  |                                |
|--|-------------------------------------|--|--------------------------------|
|  | Existing Path D1: N N-133 TO W CR38 |  | New Path D2: N N-133 TO W CR38 |
|  | Existing Path E1: N N-133 TO S CR35 |  | New Path E2: N N-133 TO S CR35 |
|  | Existing Path F1: S N-133 TO W CR38 |  | New Path F2: S N-133 TO W CR38 |
|  | Road Closure                        |  |                                |

**APPENDIX K**  
**Public Comments and Outreach (to be inserted with  
final report)**