

Draft Environmental Assessment

Durant Regional Airport

Durant, Oklahoma

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Chapter One

Introduction

1.0 INTRODUCTION

The City of Durant proposes to construct an extension to an existing runway at Durant Regional Airport – Eaker Field (DUA) and establish an associated runway protection zone (RPZ) on property located to the south.

The FAA has prepared this Draft Environmental Assessment (EA) to evaluate the consequences of the Proposed Action on the physical and human environment in the project area. Any airport development (unless it is categorically excluded) that involves the expenditure of Federal funds and/or Airport Layout Plan (ALP) approval must be the subject of an EA to provide officials and decision-makers, as well as members of the public, with an understanding of the potential environmental impacts of the Proposed Action. This Draft EA has been prepared in compliance with FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*. FAA Order 5050 4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects* was also consulted for guidance in the preparation of the EA. These orders provide FAA policy and procedure to ensure agency compliance with the requirements set forth in the Council on Environmental Quality (CEQ) regulations for implementing the provisions of the *National Environmental Policy Act of 1969* (NEPA).

This Draft EA has been prepared to provide a clear understanding of the Proposed Action at DUA, evaluate reasonable and feasible alternatives, identify potential consequences associated with the Proposed Action, and identify mitigation measures for potential negative environmental impacts.

1.1 PROPOSED ACTION

The Proposed Actions that are the subject of this Draft EA include:

- ❖ Extend runway 17/35 approximately 1,800 feet to the south
- ❖ Extend parallel taxiway to the new end of the runway
- ❖ Acquire and establish a runway protection zone (RPZ) south of the runway extension
- ❖ Complete site work, including grading, drainage, utilities, and fencing

1.2 BACKGROUND

1.2.1 Airport Information

The Durant Airport is a general aviation airport located in Durant, Oklahoma, approximately three miles south of downtown Durant, with the three letter identifier DUA. The majority of the Airport traffic is light, single and twin-engine aircraft. The airport is home to Southeastern Oklahoma State University's Aviation Sciences Institute. **Figure 1-1**, found in **Appendix A**, illustrates the location of DUA within the state.

The Airport is owned and operated by the City of Durant. Construction of the Durant Airport was established in 1943 with two runways and associated runway protection zones (RPZ). An Airport Diagram is shown in **Figure 1-2**, found in **Appendix A**, which depicts the current runway configuration:

- ❖ Runway 17/35 – 5,001 feet long by 100 feet wide

1.2.2 Existing Airport Runway Information

The existing runway consists of an asphalt runway (17/35) that was constructed in 1943. Runway 17/35 is 5,001 feet long and 100 feet wide. The associated RPZ's are located on the north and south of Runway 17/35. Currently, the entire Durant Airport is owned by the City of Durant and consists of approximately 840 acres.

1.2.3 Historic and Forecast Airport Activity

Owned and operated by the City of Durant, DUA has experienced on average approximately 50,030 aircraft operations annually over the last five years. **Table 1-1** presents the historic operational activity.

**Table 1-1:
Historic Airport Operational Activity**

| | Local Operations | Itinerant Operations | Air Taxi and Commuter | Total Airport Operations |
|--------------|------------------|----------------------|-----------------------|--------------------------|
| 2000 | 41,660 | 2,460 | 0 | 44,120 |
| 2005 | 45,000 | 1,030 | 0 | 46,030 |
| 2010 | 47,000 | 3,030 | 0 | 50,030 |
| 2015* | 47,000 | 3,030 | 0 | 50,030 |

Source: FAA Terminal Area Forecasts; * TAF first forecast year

To establish operations forecasts, an Aviation Activity Forecasts was prepared by Garver in conjunction with the FAA. The full report is available in **Appendix B**. **Table 1-2** presents the forecast for DUA for fifteen years following completion of the proposed action.

**Table 1-2:
Activity Forecasts**

| | FAA Terminal Area Forecast | DUA 2014 Utilization Rate | DUA ATCT 1990 – 2014 Trend Line | FAA Aerospace Forecasts (2015 - 2035) | DUA Average Utilization Rate (1990 - 2014) | DUA Historical Utilization Rate (90-16 for SE)/FAA Standard Utilization Rate (Turbines) |
|---|----------------------------|---------------------------|---------------------------------|--|--|---|
| 2015 | 50,030 | 50,030 | 50,030 | 50,030 | 50,030 | 50,030 |
| 2020 | 50,030 | 54,452 | 55,245 | 53,632 | 63,948 | 59,842 |
| 2025 | 50,030 | 57,106 | 58,254 | 57,492 | 75,455 | 68,002 |
| 2030 | 50,030 | 59,961 | 61,264 | 61,631 | 79,228 | 71,402 |
| 2035 | 50,030 | 62,899 | 64,274 | 66,068 | 83,110 | 74,901 |
| Notes: 2015 is the first forecast year; Preferred Forecast is in Bold | | | | | | |

Source: Garver Forecast Data for DUA, 2015, FAA TAF – FAA APO Terminal Area Forecasts

Chapter Two

Purpose and Need

2.0 PROJECT PURPOSE AND NEED

The **Purpose** of the proposed project is to provide a runway of sufficient length to meet the operational needs of existing and expected based aircraft.

The **Need** for the proposed project is twofold as follows:

- to accommodate existing based aircraft so that they are able to take off at maximum load under anticipated weather conditions
- to accommodate the operational requirements of larger aircraft that users have indicated an interest in basing at the airport

2.1 BACKGROUND

In September, 2015, LBR Airport Consultants (LBR) completed a Runway Length Justification Report for the airport. This report succeeded other similar reports. In the report, letters from several based aircraft and airport users indicated that the runway length was restricting their operations as they couldn't take off current based aircraft at maximum load and get to their intended destinations without stopping to refuel.

In addition, several entities indicated an interest in obtaining larger aircraft with greater range if the runway was lengthened sufficiently to support the aircraft. Other entities indicated that they would begin using the airport if the runway was lengthened.

Calculations with various aircraft and weather conditions were presented within the report as well as statistics indicating sufficient operations to justify the extension. The report concluded that the maximum runway length determined through this justification process was 7,000 feet. The actual, practical runway length determined given the geometry of the airport is 6,800 feet and is what was recommended.

Chapter Three

Alternatives

3.0 GENERAL

The NEPA process requires that all reasonable alternatives which might accomplish the objectives of a proposed action be identified and evaluated. The examination of alternatives is of critical importance to the environmental review process, ensuring that all alternatives which address the project's purpose and need, including those which may enhance environmental quality or result in a less detrimental effect, are considered.

As stated in **Chapter Two, Purpose and Need**, the purpose of the Proposed Action is to provide the City of Durant Airport – Eaker Field with a runway of sufficient length to meet the operational needs of existing and expected based aircraft.

3.1 ALTERNATIVES

3.1.1 No Action Alternative

The no action alternative does not meet the purpose and need. This alternative may result in a negative economic impact to DUA and the City of Durant due to the lack of infrastructure needed to keep existing based aircraft and attract new ones.

3.1.2 Extend Runway 17/35 1,800 Feet to the north

Extending the runway to the north would require the relocation of a county road (Rodeo Rd or E2110 Rd), and purchasing several homes. In addition, 65 dNL noise contours would also likely necessitate the purchase of additional homes. This alternative is considered cost prohibitive and no environmental impact analysis of it will be performed.

3.1.3 Extend Runway 17/35 1,800 Feet to the south – Preferred Alternative

Extending the runway to the south is the preferred alternative and will be evaluated throughout the remainder of the EA as the proposed action. It involves extending the existing runway 1,800 feet to the south, the construction of a parallel taxiway, and acquiring and designating ~46 acres south of the runway as the runway protection zone (RPZ). **Figure 3-1** found in **Appendix A** shows the programming sketch associated with the proposed action.

Chapter Four

Environmental Impact Categories

4.0 INTRODUCTION

The purpose of this chapter is to describe the existing environmental conditions of the potentially affected geographic areas where the Proposed Action would occur.

4.1 AIR QUALITY

The air quality provisions that are applicable to the proposed activities at DUA include the *Clean Air Act* (CAA), the 1977 CAA Amendments, and the 1990 CAA Amendments. The air pollutants with National Ambient Air Quality Standards (NAAQS) are carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter (measured as particulate matter less than 10 microns in size [PM10] and particulate matter less than 2.5 microns in size [PM2.5]), ozone, and lead.

Under the authority of the CAA, the USEPA designates all areas of the United States with respect to the NAAQS as attainment, non-attainment, maintenance, or unclassifiable areas. DUA is located in Bryan County, Oklahoma. USEPA publishes the Green Book Nonattainment Areas for Criteria Pollutants. From this report it was determined that Bryan County, the location of the project area, is designated as in attainment for all criteria pollutants.

While not specifically a threshold of significance under the NEPA, the General Conformity regulations provide *de minimis* thresholds to establish if a determination of conformity with an applicable State Implementation Plan (SIP) is required to bring an area into compliance with the NAAQS. A *de minimis* threshold is a level that provides an indication of the significance that a project may have on local and/or regional air pollutant concentrations. The General Conformity Rule only applies to areas that EPA has designated nonattainment or maintenance.

4.2 BIOLOGICAL RESOURCES

The term “endangered species” means any member of the animal kingdom (mammal, fish or bird) or plant kingdom (seeds, roots, etc.) that is in danger of extinction throughout all or a significant portion of its range. “Threatened species” refers to those members of the animal kingdom or plant kingdom, which are likely to become endangered within the foreseeable future. Section 7 of the *Endangered Species Act (ESA)* Amendments of 1978 requires each federal agency to insure that:

... If an agency determines that an action “may affect” a threatened or endangered species, then Section 7(a)(2) requires each agency, generally the lead agency, to consult with the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS), as appropriate, to ensure that any action the agency authorizes, funds, or carries out is not likely to jeopardize the continued existence of any Federally listed endangered or threatened species or result in the destruction or adverse modification of critical habitat

According to the U.S. Fish and Wildlife Service's (USFWS) Information Planning and Conservation (IPaC) system report, located in **Appendix C**, there are a total of five (5) federally-listed threatened and endangered (T&E) species known to occur in this particular area of Tulsa County, Oklahoma. The T&E species that have a potential to occur are: Least Tern, Piping Plover, Red Knot, American Burying Beetle and Whooping crane. Habitat descriptions for each of these species are listed below.

Least Tern – Least terns nest on barren to sparsely vegetated sandbars along rivers, sand and gravel pits, lake and reservoir shorelines, and occasionally gravel rooftops. They hover over and dive into standing or flowing water to catch small fish.

Piping Plover – Piping plovers use wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands.

Red Knot – Red Knots prefer tidal flats, shores; tundra (summer). In migration and winter on coastal mudflats and tidal zones, sometimes on open sandy beaches of the sort favored by Sanderlings. Nests on Arctic tundra, usually on rather high and barren areas inland from coast, but typically near a pond or stream.

American Burying Beetle – Current information suggests that this species is a habitat generalist, or one that lives in many types of habitat, with a slight preference for grasslands and open understory oak hickory forests. However, the beetles are carrion specialists in that they need carrion the size of a dove or a chipmunk in order to reproduce. Carrion availability may be the greatest factor determining where the species can survive.

Whooping crane – Whooping cranes pass through western Oklahoma each spring and fall during migration. The Salt plains National Wildlife Refuge, near Jet, Oklahoma, is a very important migration stopover area and is designated critical habitat. During migration, Whooping cranes sometimes are sighted elsewhere in Oklahoma along rivers, in grain fields, or in shallow wetlands. Whooping cranes primarily use shallow, seasonally and semi-permanently flooded palustrine wetlands and various cropland and emergent wetlands.

Existing habitat in the runway area is comprised mainly of agriculture (wheat) and the majority of the RPZ area is farmed as well. It is likely that the proposed project area supports limited vegetation and wildlife species, due to the existing airport facilities and agricultural operations.

State-listed species are protected by the Oklahoma Department of Wildlife Conservation (ODWC) and were given opportunity to comment on this project. State-listed species in Oklahoma do not have coverage under the ESA and do not require protection for federally funded projects as USFWS supersedes jurisdiction over the ESA. The ODWC was provided an opportunity to comment on this project. On December 2, 2015 ODWC wrote a letter stating that, "...there are no state listed species of concern that are found within the project area."

4.3 CLIMATE

The climate provisions that are applicable to the proposed activities at DUA include the *Clean Air Act* (CAA), the 1977 CAA Amendments, and the 1990 CAA Amendments. Additionally, Executive Order 13514, Federal Leadership in Environmental, Energy and Economic Performance is applicable for proposed activities at DUA. The Executive Order makes it the policy of the United States that Federal Agencies measure, report, and reduce their Greenhouse Gas (GHG) emissions from direct and indirect activities.

4.4 DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(f)

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

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

If it is determined that an action would involve a Section 4(f) resource, then the lead federal agency, in this case the FAA, is required to prepare a Section 4(f) evaluation. This evaluation can be included within the NEPA document for that project, as included here, or issued in a separate document, referred to as a Section 4(f) Statement.

In addition to lands identified under Section 4(f) of the DOT Act, other lands funded by the *Land and Water Conservation Fund Act of 1964* (LWCF) (Section 6(f)), Pittman-Robertson and Dingell-Johnson moneys must be considered. When proposed improvements affect lands purchased or developed using Land and Water Conservation Fund (LAWCON) funds, as administered by the U.S. Department of the Interior (USDOI), changes in use to other than public outdoor recreation at assisted sites may only be made with the prior approval of the Secretary of the Interior. Also, converted properties must be replaced by substitute properties of at least equal fair market value and of reasonably equivalent location and usefulness.

The City owned and operated Billy Miller Park is the closest Section 4(f) resource and is located approximately 3.23 miles northeast from the proposed runway extension location. There are no other 4(f) properties within the vicinity.

4.5 FARMLANDS

The *Farmland Protection Policy Act*, Public Law (P.L.) 97-98, directs federal agencies, such as the FAA, to identify and take into account the adverse effects of federal programs on the preservation of farmland. The federal agencies are also directed to consider alternative actions that could lessen such adverse effects and assure that federal programs, to the extent practicable, are compatible with state, unit of local government and private programs and policies to protect farmland. The purpose of the *Federal Farmland Protection Policy Act* (FPPA) as adopted by the United States Department of Agriculture is to:

Minimize the extent of the role of federal programs to the conversion of farmland to nonagricultural uses and to assure that federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government and private programs and policies to protect farmland.

The areas being considered for development will be located entirely on airport property within areas that are currently mowed turf or existing airport uses and are used for farmland.

4.6 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

Hazardous Waste is a general term relating to substances that, if spilled, dumped, or released, could threaten human and animal life. To identify these materials and protect the environment from harmful interaction with hazardous wastes, several federal laws and regulations have been enacted, including the following: the National Priorities List (Superfund Sites), the *Comprehensive Environmental Response, Compensation and Liability Act* (CERCLA), and the *Resource Conservation and Recovery Act* (RCRA).

An Environmental Due Diligence Audit (EDDA) for the RPZ site will be prepared. It is anticipated that the investigation will reveal no evidence of Recognized Environmental Conditions (RECs) from either onsite or offsite sources in connection with the proposed RPZ site. This is based on the fact that the RPZ property is undeveloped with no signs of soil staining or stressed vegetation.

4.7 HISTORICAL, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES

The *National Historic Preservation Act of 1966* as amended (NHPA) requires that the lead agency, FAA, consult with the State Historic Preservation Office (SHPO). In Oklahoma, the SHPO is part of the Oklahoma Historical Society (OHS). The NHPA also requires that the FAA gather information to determine which properties in a project's area of potential effect (APE) are listed in or eligible for, the National Register of Historic Places (NRHP). The NRHP is maintained by the Secretary of the Interior.

The NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources. Resources listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture and possess integrity of location, design, setting, materials, workmanship, feeling and association.

There are no known resources that are listed on the NRHP located within the APE. Further, the Oklahoma Archaeological Survey stated that there are no archaeological materials likely to be encountered based on the topographic and hydrologic setting of the Project area.

4.8 LAND USE

The Durant Regional Airport – Eaker Field is located in Bryan County, south of the City of Durant urbanized area and near the town of Calera. The Airport is located in Sections 18 and 19, in Township 7 South, Range 9 East of the Indian Meridian. Access to the Airport is provided from Highway 9 to Waldron Road. Currently, the airport property contained within the perimeter fencing is zoned for mixed industrial and agricultural use. Areas of the property outside of the perimeter fencing are zoned for residential and agricultural use.

Bryan County has a total of 604,160 acres with the predominant topographic features being rolling timber prairie, Lake Texoma and rural development. The county has several small stock ponds that dot the landscape, it is bordered on the west by Lake Texoma and is bordered on the south by the Red River. The Airport is located within a section of flat prairie adjacent to the town of Calera and Highway 69. The airport environs are not unique in any manner in comparison to natural resources in the general area.

The predominant land use in Bryan County is residential and agriculture. Just northwest of the Airport is the Choctaw Casino. The runway extension is located entirely on airport property in a mowed area that is surrounded by public roads and the RPZ is being purchased by the airport.

Future projects are planned for the airport property. There is a new hangar that will be constructed on the north end of the runway.

4.9 NATURAL RESOURCES AND ENERGY SUPPLY

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

Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, renewable energy, sustainable buildings, electronics stewardship, fleets, and water conservation. Also, energy demands of projects should not exceed available natural resource or energy supplies.

Utilities are provided to DUA by OG&E, which would have sufficient capacity to service the proposed project.

4.10 NOISE AND COMPATIBLE LAND USE

The FAA provides federal compatible land use guidelines for several land uses as a function of DNL values. FAA Order 5050.4B defines a noise sensitive area as “an area where noise interferes with the area’s typical activities or its uses.” Noise sensitive areas typically include residences, educational institutions, health care facilities, religious structures and sites, parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites. FAA Orders 1050.1F and 5050.4B define a significant noise impact as one which would occur if the proposed action would cause noise-sensitive areas to experience an increase in noise of 1.5 dB or more at or above the 65 DNL noise contour when compared to a No Action alternative for the same time frame. The “No Action” Noise Exposure Map shown in **Figure 4-1** in **Appendix A** depicts DUA’s existing noise contours.

4.11 SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN’S ENVIRONMENTAL HEALTH AND SAFETY RISKS

Executive Order (EO) 12898, issued in 1994, requires each federal agency to include environmental justice as part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse impacts of its programs, policies, and activities on minority and/or low-income populations.

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

The project area is located entirely on Airport property in a mowed area that is surrounded by public roads. There are no environmental justice (minority or low-income) populations or children that reside in proximity of the project area. The closest residential area is approximately 175 feet from the RPZ site. According to 2010 U.S. Census data, the annual median income for Durant, OK was \$35,584; while annual median income for Bryan County was \$38,743.

4.12 VISUAL EFFECTS

The current viewscape and light environment is dominated by runway and taxiway lights, illuminated airport support facilities, hangar structures, and high-mast light poles.

4.13 WATER RESOURCES

Besides being a basis for life, water provides an essential ingredient for many ecosystems. The chemical, physical and biological characteristics of water determine its particular quality. The *Federal Water Pollution Control Act*, as amended by the *Clean Water Act (CWA)* of 1977, provides the authority to establish water quality standards, to control discharges into surface and

subsurface waters, to develop waste treatment management plans and practices, and to issue permits for discharges and for dredged or fill material.

The closest named streams are Caney Creek to the east of the property and Moore Creek to the west. The property is situated on a plateau of sorts and the gradient of the property gently slopes away to the southeast toward Caney Creek. Drainage, in the form of storm water runoff at the Airport, is conveyed through a system of open ditches to surrounding natural drainage courses away from the property in all directions.

4.13.1 Wetlands

Assessment of wetland impacts is required under Section 404 of the *Clean Water Act*; Executive Order 11990, *Protection of Wetlands*; FAA Order 5050.4B, and FAA Order 1050.1F. In addition, the U.S. Department of Transportation (DOT) developed and issued DOT Order 5660.1A, *Preservation of the Nation's Wetlands*, to provide more guidance to DOT agencies regarding their actions in wetlands. This DOT Order, which governs the FAA's actions, defines wetlands as:

Lowlands covered with shallow and sometimes temporary or intermittent waters. This includes, but is not limited to, swamps, marshes, bogs, sloughs, potholes, wet meadows, river overflows, tidal overflows, estuarine areas, and shallow lakes and ponds with emergent vegetation. Areas covered with water for such a short time that there is no effect on moist-soil vegetation are not included in the definition, nor are the permanent waters of streams, reservoirs, and deep lakes. The wetlands ecosystem includes those areas which affect or are affected by the wetland area itself; e.g., adjacent uplands or regions up and down stream.

The United States Fish and Wildlife Service (USFWS) National Wetland Inventory Map for Tulsa County was reviewed, and shown on **Exhibit 4-2** in **Appendix A**, no wetlands are located within the proposed project limits. The closest wetland is located approximately 0.10 miles to the west of the runway extension.

4.13.2 Floodplains

Floodplains are defined in Executive Order 11988, *Floodplain Management*, as:

" the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year;" i.e., the area that would be inundated by a 100 year flood.

The National Flood Insurance Program (NFIP) criteria include minimum standards for adoption of floodplain management regulations by local communities enrolled in the program. In support of the NFIP, Federal Emergency Management Agency (FEMA) publishes Flood Insurance RateMaps (FIRM) and Flood Insurance Studies (FIS) which delineate the limits of the floodplains and usually the floodways. There are no designated floodplains within the proposed project limits, and the closest floodplain is located approximately 0.29 miles to the southeast of the proposed RPZ. See **Exhibit 4-3** in **Appendix A**.

Chapter Five

Environmental Consequences

5.0 INTRODUCTION

Pursuant to the FAA's environmental orders 1050.1F, Environmental Impacts, Policies and Procedures and 5050.4B, *NEPA Implementing Instructions for Airport Actions*, the potential impacts of the projects associated with the No Action Alternative and the Proposed Action are described in this chapter. Potential impacts to the following environmental resource categories have been evaluated:

- ❖ 5.1 Air Quality
- ❖ 5.2 Biological Resources
- ❖ 5.3 Climate
- ❖ 5.4 Department of Transportation Act, Section 4(f)
- ❖ 5.5 Farmlands
- ❖ 5.6 Hazardous Materials, Solid Waste, and Pollution Prevention
- ❖ 5.7 Historical, Architectural, Archeological, and Cultural Resources
- ❖ 5.8 Land Use
- ❖ 5.9 Natural Resources and Energy Supply
- ❖ 5.10 Noise and Compatible Land Use
- ❖ 5.11 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- ❖ 5.12 Visual Effects
- ❖ 5.13 Water Resources
- ❖ 5.14 Secondary (Induced) Impacts
- ❖ 5.15 Construction Impacts
- ❖ 5.16 Cumulative Effects

There are no coastal resources or wild and scenic rivers in the project area and therefore, these resources are not addressed in this EA.

5.1 AIR QUALITY

5.1.1 No Action Alternative

The No Action Alternative does not propose the construction of any airport facilities. Therefore, no significant air quality impacts would be expected under this alternative.

5.1.2 Preferred Alternative

Because the Airport is located within an attainment area for the National Ambient Air Quality Standards (NAAQS), a conformity determination would not be required for the Proposed Action at DUA. Construction operations would result in minimal temporary decreases in local air quality during implementation of the proposed project. However, this will be only a short term and temporary increase in emissions. Daily pollution loads produced by clearing and construction/demolition activities depend upon several factors.

These include the type, number and emission rates of various construction/demolition machines and trucks and the daily private vehicle traffic of construction personnel. Construction/demolition equipment will include, excavators, trucks and power equipment typical of heavy construction sites. Dust hazards are possible due to the presence of fine silts and sands, which are subject to wind erosion. The use of dust palliative treatments (i.e. dampening and stabilization) should minimize these problems if they occur. In general, while construction/demolition activity could affect local air quality, the effects would be minimal and would terminate upon completion of the project.

5.1.3 Mitigation

Since neither the No Action Alternative nor Alternative Extension of Runway and Associated RPZ exceed the levels of significance of air quality criteria, as outlined above, no mitigation is required. The use of dust palliative treatments during construction/demolition activities should minimize dust hazards.

5.2 BIOLOGICAL RESOURCES

Section 7 of the *Endangered Species Act of 1973* mandates all federal agencies to avoid actions that will harm species and their critical habitat. Agencies must review their actions and determine whether the action may affect federally listed and proposed species or proposed or designated critical habitat. Agencies must coordinate with the U.S. Fish and Wildlife Service (USFWS) to determine if species and or critical habitat may be in the project area.

This section also addresses state-listed threatened or endangered species and their habitats.

5.2.1 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance. No impacts to fish, wildlife, or plants would be expected under this alternative.

5.2.2 Preferred Alternative

Alternative Extension of Runway and Associated RPZ will be located entirely on airport owned property. The proposed development would not directly affect any publicly owned wildlife or waterfowl refuge of local, state or Federal significance. Existing habitat in the proposed project area is comprised of existing airport uses, agricultural fields and wooded pasture. The majority of the surrounding area is developed agricultural fields, residential development and airport property. The proposed project would eliminate approximately six (6) acres of ground cover, which is less than 0.007 percent of the total airport property.

It is likely that the land area in question supports only common wildlife species adapted to industrial and agricultural environment. The species are anticipated to find similar habitat in adjoining areas around the Airport. For these reasons it is assumed that only "minor alterations" will occur.

The U.S. Fish and Wildlife Service (USFWS) Information Planning and Conservation (IPaC) system was accessed on January 28, 2016. According to the Official Species list, five (5) federally listed Threatened and Endangered (T&E) species have to potential to exist within the alternative site location. The listed species are: the Threatened Piping Plover and Red Knot; the Endangered Least Tern, Whooping crane and American Burying Beetle (ABB). Descriptions of these species habitats are described in Section **4.2 Biological Resources**.

A majority of the habitat within the Alternative Site area is comprised of mowed grass and agriculture, which is not generally favorable for any of the listed T&E species.

Regarding the ABB, a survey will be required to determine presence of species before habitat alteration can take place. In the solicitation letter sent to the USFWS on November 16, 2015 found in **Appendix D**, it was proposed that presence/absence surveys would be conducted to determine any effect the project would have on the ABB. In accordance with USFWS guidelines, this survey would be conducted in the second survey period of 2016 as the estimated construction start would be October 2016.

5.2.3 Mitigation

After the survey is conducted and assuming that the ABB presence/absence survey results are negative, neither the No Action Alternative nor Alternative Extension of Runway and Associated RPZ would create any significant impacts to fish, wildlife, or plants, including federally-listed nor state-listed endangered or threatened species. Therefore, no mitigation measures will be required. If the survey results are positive, DUA will initiate formal consultation with USFWS to determine the extent of required mitigation.

5.3 CLIMATE

5.3.1 No Action Alternative

The No Action Alternative does not include any construction activities. No significant impacts to Climate would be anticipated under this alternative.

5.3.2 Preferred Alternative

No significant GHG emissions will be generated by the proposed runway extension and associated RPZ. Minimal GHG emissions will be generated as a result of the proposed construction and associated construction and demolition equipment. However, no significant impacts to climate are anticipated.

5.3.3 Mitigation

Neither the No Action Alternative nor Alternative Extension of Runway and Associated RPZ would impact climate. Therefore, no mitigation would be required.

5.4 DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(f)

5.4.1 No Action Alternative

The No Action Alternative does not propose the acquisition of property or the construction of any airport facilities. No impacts to Section 4(f) or 6(f) lands would be expected under the No Action Alternative.

5.4.2 Preferred Alternative

Alternative Extension of Runway and Associated RPZ does require the acquisition of property in fee. However, the FAA would enter into a lease for the proposed RPZ site. The area being considered for development will be located entirely on airport property. No construction would occur on any Section 4(f) or 6(f) lands. Also noted in **Section 5.10, Noise**, there would be no significant impact to noise sensitive areas, including Section 4(f) or 6(f) lands, as a result of the proposed project. Therefore, the Proposed Action is not anticipated to result in any significant impacts to Section 4(f) or 6(f) lands.

5.4.3 Mitigation

Neither the No Action Alternative nor Alternative Extension of Runway and Associated RPZ would be anticipated to create any adverse, significant impacts to public lands identified under Section 4(f), including lands funded with *Land and Water Conservation Fund Act of 1964* (LWCF) (Section 6(f)), Pittman- Robertson and Dingell-Johnson moneys. Therefore, no mitigation measures would be required.

5.5 FARMLANDS

5.5.1 No Action Alternative

The No Action Alternative does not include any land acquisition or construction activities. No significant impacts to farmlands would be anticipated under this alternative.

5.5.2 Preferred Alternative

Approximately 49 acres of farmland exists at the site of the proposed runway extension and RPZ. According to USDA six acres of farmland will be impacted as a result of the proposed construction. Six acres is approximately 0.001 percent of available farmland in Bryan County and USDA sees no adverse environmental impacts from the Project.

5.5.3 Mitigation

The No Action Alternative would not impact farmlands. The alternative to extend the runway and associated RPZ area would impact six acres of farmland. However, this impact amount is minimal and mitigation will not be required.

5.6 HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

Hazardous waste impacts are typically associated with the current or future use, transfer, or generation of hazardous material within the limits of the proposed improvements or the acquisition of properties that contain hazardous materials.

Environmental concerns related to solid waste disposal range from adequate landfills for normal urban trash and garbage to the safe disposal of industrial waste. Unless an airport has related industry or a major paint and repair service facility, it does not generate appreciable amounts of solid waste.

5.6.1 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance at the Airport. No hazardous waste or solid waste impacts are expected under this alternative.

5.6.2 Preferred Alternative

Construction associated with the Alternative Extension of Runway and Associated RPZ would include the generation of construction and demolition (C&D) debris and solid waste. General disposal of these wastes would be monitored and processed properly. While the proposed projects would most likely cause an increase in solid waste generation associated with construction, it is not likely to be a substantial amount. C&D debris from demolition of the existing RPZ property could include scrap building materials and similar wastes that can be accepted at existing landfills or recycled.

Post-construction wastes are not anticipated to increase greatly above existing levels as a result of the proposed project. Solid wastes resulting from construction would be transported to a licensed landfill site (or transfer station).

The FAA has developed a new contract clause, Construction Waste Management, which mandates C&D recycling in all contracts for construction, demolition, and modernization of facilities when the value of the contract is expected to exceed \$100,000. Waste generated as a result of the construction of the runway extension and development of the proposed RPZ will follow this mandate.

5.6.3 Mitigation

The No Action Alternative assumes that there would be no construction of any facilities at the Airport. Therefore, no hazardous waste or solid waste impacts would be expected under this alternative. Under Alternative Runway Extension and Associated RPZ, no significant adverse impacts would be anticipated. Therefore, no mitigation would be required.

5.7 HISTORICAL, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES

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

If the FAA determines the undertaking has the potential to affect a NRHP listed or eligible property, the FAA must initiate consultation with the SHPO and other interested parties in accordance with Section 106 of the NHPA. As previously indicated in Chapter 4, Affected Environment, the existing Airport property and RPZ property are not eligible for listing on the NRHP.

5.7.1 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance. No impacts to archaeological, architectural, historic, or cultural resources would be anticipated under this alternative.

5.7.2 Preferred Alternative

Alternative Extension of Runway and Associated RPZ includes the construction of facilities that would include ground disturbance on existing airport property. The FAA completed a review of the proposed project area and coordinated with the Oklahoma Historic Preservation Officer to ensure that all evidence or artifacts of past human life are recorded and preserved. Through this coordination, it was determined that no cultural survey or further coordination is required. The OAS memo containing this determination is included in **Appendix D**.

5.7.3 Mitigation

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance. No impacts to archaeological, architectural, historic, or cultural resources would be anticipated under this alternative. In addition, Alternative Extension of Runway and Associated RPZ would have no impacts to archaeological, architectural, historic, or cultural resources. Therefore, no mitigation will be required.

5.8 LAND USE

5.8.1 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance. No impacts to land use would be anticipated under this alternative.

5.8.2 Preferred Alternative

Alternative Extension of Runway and Associated RPZ includes the construction of facilities that would include ground disturbance on existing airport property. This construction will take place on a currently harvested agricultural field of hay that is already zoned for agriculture and light industrial use. Therefore, no change in zoning would result from construction of the runway extension or associated RPZ.

5.8.3 Mitigation

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance. No impacts to land use would occur under the No Action Alternative. Under Alternative Extension of Runway and Associated RPZ, no significant impacts to land use would occur. Therefore, no mitigation would be required.

5.9 NATURAL RESOURCES AND ENERGY SUPPLY

5.9.1 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance. No impacts to energy supply and natural resources would occur under the No Action Alternative.

5.9.2 Preferred Alternative

The proposed project would not cause an increase in demand that would exceed available natural resources such as building materials or energy supplies. Construction equipment will include excavators, trucks and power equipment typical of heavy construction sites. During the construction of the proposed projects, items such as concrete, asphalt, crushed stone, fuel oil, gasoline, wire, glass, and paint would be used. All materials needed for construction may be purchased from area firms or manufacturers who specialize in airport equipment. Alternative Runway Extension and Associated RPZ would not involve the use of any unusual materials or of those in short supply. The project would not utilize any natural resources that are considered to be in short supply during either the construction or the operation of the facility. No significant impacts to energy generation or natural resources in short supply would be anticipated under Alternative Runway Extension and Associated RPZ.

5.9.3 Mitigation

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance. No impacts to energy supply and natural resources would occur under the No Action Alternative. Under Alternative Runway Extension and Associated RPZ, no significant impacts to energy generation or natural resources in short supply would be anticipated. Therefore, no mitigation would be required.

5.10 NOISE AND COMPATIBLE LAND USE

5.10.1 Noise

FAA Order 1050.1F states that a significant noise impact would occur if the proposed project would cause noise sensitive areas to experience an increase in noise of 1.5 decibels (dB), or more, at or above day/night average sound level (DNL) 65 dB noise exposure when compared to the No Action Alternative.

Cumulative noise exposure of individuals from aviation activities is measured in terms of annualized day/night average sound level (DNL) measured in decibels (dB). The FAA has determined that 65 DNL is the recommended threshold above which it proves to be incompatible for residential, institutional, and commercial areas. Areas where 65 DNL and greater are expected to occur are mapped as noise contours. Two noise exposure maps (NEM) have been developed for DUA, a “No Action” option and the Proposed Action with a 1,800 foot extension to Runway 18-36. Each NEM was developed based on the operations forecast for 2035 developed specifically for this noise analysis. The FAA’s Aviation Environmental Development Tool, Version 2B (AEDT 2B) was used for the noise analysis and creation of the noise contours. Data from AEDT 2B was exported into AutoCAD for the final presentation of the noise contours at DUA. NEMs are depicted in **Figures 4-1** and **5-1** found in **Appendix A** with noise contours from the 65 DNL contour up to the 75 DNL contour.

5.10.1.1 No Action Alternative

The No Action Alternative shown in **Figure 4-1** found in **Appendix A** depicts DUA’s existing noise contours. Those higher than 65 DNL are located wholly within airport property. There are two small areas of totaling approximately 6.4 acres on the northwest side of the airfield where the 65 DNL falls outside of existing airport property boundaries. The first encompasses an approximately two acre spike shape along the extended runway centerline to the north. The second area is to the northwest of the Runway 17 end directly north of the end of the parallel taxiway and appears to be pasture land with no structures on it. No changes are proposed as a part of the proposed action for either of these areas – they are existing and remain the same as they are currently. There is also a less than two-acre area southwest of the Runway 35 end where the 65 DNL falls outside of the existing airport boundary. This property is pasture land with a pond immediately south.

5.10.1.2 Preferred Alternative

The Proposed Action shown in **Figure 5-1** found in **Appendix A**, Runway 17-35 1,800 – foot runway extension, continues to encompass approximately two acres along the extended runway centerline to the north. This is nearly the same area encompassed by the existing 65 DNL described above. The area to the northwest of the Runway 17 end is slightly larger and includes approximately 4.5 acres all of which appear to be used for cattle grazing or pasture land. The latest plans for DUA show a portion (2.6 acres) of this property is slated for future acquisition. On the south end beyond the proposed runway extension, nearly all of the future 65 DNL falls within existing or proposed airport property that goes from the existing airport boundary to McKenna Road / east County Road 2130. There are two small areas to the southwest and southeast of approximately one third of an acre each where the future 65 DNL falls outside of existing and proposed airport property. Neither area has any development and appears to be used as pasture land.

Figure 5-2 found in **Appendix A** depicts the dB gains or losses between the “No Action” noise contours and those of the Proposed Action. The purple dots depict areas of 60/65 DNL contours with a 3.0 dB gain while those depicted by yellow dots reflect areas of a 3.0 dB loss for the same noise contours. The orange dots depict a 1.5 dB loss between the “No Action” and Proposed Action for the 65 DNL contours. The red dots depict areas with a 1.5 dB gain based on the Proposed Action 65 DNL contour.

All of the areas experiencing a dB loss between the “No Action” and Proposed Action, either a 3dB loss within the 60 DNL contour or a 1.5 dB loss within the 65 DNL contour, occur on airport property. The 65 DNL for the Proposed Action experiences a 1.5 dB gain that is all contained on existing or proposed airport property except for two very small areas to the southeast and southwest of the future Runway 35 end. The 60 DNL contour shows a 3.0 dB gain beyond the southern runway that is almost entirely contained on existing or proposed airport property. At present, there are two private residences just beyond the existing and proposed airport boundary that will experience 3.0 dB gain from the 60 DNL contour but fall outside of the 65 DNL contour for both the existing and future scenarios. The area that experiences the 3.0 dB gain of the 60 DNL contour to the southwest is within 250-feet of another residence; however, the property contained is all in pasture land/grazing use with other rural residences adjacent to it along McKennon Road. Noise impacts are not expected to increase at any noise-sensitive areas. The Proposed Action does not exceed the threshold for cumulative noise impacts.

5.10.1.3 Mitigation

Neither the No Action Alternative nor Alternative Extension of Runway and Associated RPZ is anticipated to have significant noise impacts. Therefore, no mitigation is required.

5.10.2 Compatible Land Use

The compatibility of existing and planned land uses in the vicinity of an airport is usually associated with the extent of the airport’s noise environment. The proposed project will change flight patterns, altitudes, or aircraft traffic volumes. However, there will be minimal change to noise impacts on adjacent land use. Land use compatibility is also evaluated in terms of land uses that may adversely affect safe airport operations, such as development within runway protection zones.

5.10.2.1 No Action Alternative

The No Action Alternative would result in no construction activities. The existing runway and RPZ would remain at their current locations. The existing runway is compatible with adjacent land uses; therefore, land uses would not be impacted.

5.10.2.2 Preferred Alternative

The proposed Runway Extension and Associated RPZ site is within an undeveloped area within airport property boundaries. No other planned uses have been identified in these areas of the Airport. The proposed uses are compatible with adjacent land uses in terms of operations and noise impacts. Compatible land use would not be impacted.

5.10.2.3 Mitigation

Neither the No Action Alternative nor Alternative Extension of Runway and Associated RPZ would create any significant impacts to existing or planned land uses around the Airport. Therefore, no mitigation is required.

5.11 SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY

The principal social impacts to be considered are those associated with relocation or other community disruption, transportation, planned development, and employment.

5.11.1 No Action Alternative

There are no impacts to Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks associated with the No Action Alternative.

5.11.2 Preferred Alternative

Alternative Extension of Runway and Associated RPZ requires the acquisition of any property in fee. However, the FAA would enter into a lease for the proposed RPZ site. The project will not require relocations; alter any surface transportation facility; divide or disrupt any established community; disrupt orderly and/or planned development; create an appreciable change in employment; change local or regional land use and will not impact existing neighborhoods or businesses. The project will not impact minority or low-income populations. There are no health or safety risks that would disproportionately affect children. Therefore, no significant Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks are anticipated.

5.11.3 Mitigation

There are no impacts to Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks associated with the No Action Alternative or Alternative Extension of Runway and Associated RPZ. Therefore, no mitigation is required.

5.12 VISUAL EFFECTS

Aviation lighting required for the purposes of security, obstruction clearance, and aeronautical navigation is the chief contributor to light emissions radiating from airports. These lights usually fall within the following categories: airfield lights (runways and taxiway), aircraft parking apron lights, building lights, auto parking lot lights, and navigational lights (rotating beacon, approach lighting). Airport light emissions are considered to have a noticeable impact if light is directed towards a nearby residential area.

5.12.1 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities at the Airport. No new light emissions would take place under this alternative.

5.12.2 Preferred Alternative

The proposed Runway Extension and Associated RPZ would be located in the undeveloped area south of the existing runway and neighboring property to the south of the current airport boundary. The runway extension will be similar in scale and function to the existing visual elements of the Airport. There would be two red LED obstruction lights placed on top of the proposed ATCT. The proposed runway lighting would be similar to existing runway lighting at the Airport. The nearest residential dwelling is approximately 0.39 miles south of the proposed end of the runway extension. No adverse lighting or visual impacts would be created by the runway extension.

5.12.3 Mitigation

The No Action Alternative assumes that there would be no construction of any facilities at the Airport. Therefore, no light emission impacts would be expected under this alternative. Under Alternative Runway Extension and Associated RPZ, no significant light emission or visual impacts would be anticipated. Therefore, no mitigation would be required.

5.13 WATER RESOURCES

5.13.1 WETLANDS

5.13.1.1 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities at the Airport. No impacts to wetlands would be expected under this alternative.

5.13.1.2 Preferred Alternative

Early coordination was conducted with the U.S. Army Corps of Engineers (USACE) to determine the presence of wetlands in the proposed project area or vicinity. Based on the review of the U.S. Geological Survey 7.5-minute topographical map, soil survey, National Wetland Inventory (NWI) maps and correspondence from the Corps, it was determined that no USACE jurisdictional wetlands would be impacted by the proposed project. A copy of the USACE correspondence can be found in **Appendix D**.

5.13.1.3 Mitigation

The No Action would not impact wetlands. Therefore, no mitigation measures are required. According to the Tulsa District Corps of Engineers, Alternative Extension of Runway and Associated RPZ would not impact wetlands and mitigation will not be required.

5.13.2 FLOODPLAINS

FEMA classifies and defines flood prone areas by “zone” based upon the probability and potential intensity of flooding. All Airport property is within the area designated as Zone C as depicted on the Flood Rate Insurance Map, included as **Figure 4-2, Floodplain Map**, found in **Appendix A**. Zone C areas are classified as “areas of minimal flooding” and are above the 100- year level.

5.13.2.1 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities at the Airport. Therefore, no impacts to floodplains would be expected under this Alternative.

5.13.2.2 Preferred Alternative

The proposed projects will not encroach upon any designated floodplain.

5.13.2.3 Mitigation

Neither the No Action Alternative nor Alternative Extension of Runway and Associated RPZ would encroach upon any designated floodplain. Therefore, no mitigation measures are required.

5.14 SECONDARY (INDUCED) IMPACTS

In accordance with FAA Order 1050.1F, this section examines the potential for induced or secondary impacts directly attributable to the alternatives under consideration. FAA Order 1050.1F states:

Major development projects often involve the potential for induced or secondary impacts on surrounding communities. When such potential exists, the [environmental assessment] shall describe in general terms such factors. Examples include: shifts in patterns of population movement and growth; public service demands; and changes in business and economic activity to the extent influenced by the airport development.

FAA Order 1050.1F further states "[i]nduced impacts will normally not be significant except where there are also significant impacts in other categories, especially noise, land use, or direct social impacts."

5.14.1 No Action Alternative

The No Action Alternative does not propose the acquisition of property or the construction of any airport facilities. No significant secondary (induced) impacts would be expected under the No Action Alternative.

5.14.2 Preferred Alternative

While the proposed project is not expected to substantially accelerate changes in existing and future economic conditions, immediate benefits of the proposed improvements include a temporary increase in employment, in the construction sector, proportionate to the manpower needs during the proposed projects construction phase.

This increased employment would result in a temporary boost to local merchants/professionals from the sale of goods and services, and would result in a positive growth for a time period equivalent to the construction phase of development. Since there is no noise, land use, or direct social impacts, no significant induced socioeconomic impacts would be anticipated under Alternative Extension of Runway and Associated RPZ.

5.14.3 Mitigation

No significant secondary (induced) impacts are anticipated under the No Action Alternative or Alternative Extension of Runway and Associated RPZ. Therefore, no mitigation actions would be required.

5.15 CUMULATIVE EFFECTS

The Council on Environmental Quality's (CEQ) regulations for implementing NEPA defines cumulative effects as:

the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions (40 CFR §1508.7).

NEPA requires that cumulative effects be evaluated along with the direct and indirect effects of the actions. As with direct and indirect project-related effects discussed in the previous sections of this chapter, the No Action Alternative serves as the reference point against which to evaluate cumulative effects. Where numerical thresholds are not available or cannot be determined, impacts are typically quantified in relative terms of magnitude.

As required by FAA guidance, a NEPA document must consider past, present and reasonably foreseeable actions at the airport and in the airport environs. The basis for that approach is the recognition that, while the impacts of many actions may be individually minor, the cumulative effects of past, present, and reasonably foreseeable actions on populations or resources can be considerable. A list of the past, present, and reasonably foreseeable future actions is included in the following paragraphs.

5.15.1 Past Projects

The Airport was established in 1943 and consisted of two runways. Runway 12/30 at 3,000 ft. long and runway 17/35 at 5,001 ft. long. Currently only runway 17/35 is in use. An airport traffic control tower (ATCT) was planned for construction, but the project was never started because of cost restraints. A new taxiway was constructed in two phases for runway 17/35 and completed around 2010.

More recently, development projects undertaken in the past three years (2011-2014) include:

- ❖ Improve Runway Safety Areas
- ❖ Realign, reconfigure, and reconstruct parallel partial taxiways
- ❖ Reconstruct and reconfigure part of apron
- ❖ Install MIRLs to Runway 17/35
- ❖ Construct north hangar access apron
- ❖ Construct south hangar development area
- ❖ Construct terminal
- ❖ Install rotation beacon

5.15.2 Future Projects

In the context of the cumulative effects analysis, planned/programmed projects at the Airport are identified in **Table 5-1**.

**Table 5-1:
Planned Construction Projects**

| Project Description | Proposed Project Start Year |
|--------------------------------|-----------------------------|
| Seal Coat apron pavement | 2016 |
| Rehabilitation of Runway 17/35 | 2017 |
| Extend Runway 17/35 | 2018 |

Source: LBR Airport Consultants

5.15.3 No Action Alternative

The No Action Alternative assumes that there would be no construction of any facilities or any ground disturbance at the Airport to address the established “purpose and need”. Under this alternative there would be no environmental impacts to cumulatively add or assess in comparison to the past, the present, or the reasonably foreseeable future. Therefore, no cumulatively significant impacts would be realized.

5.15.4 Water Quality

Potential impacts to water quality may be caused directly and indirectly. Construction activities may include such things as clearing of vegetation, various demolitions, regrading the existing ground surface, installing drainage and utilities, installing additional pavement and buildings, and handling construction materials. Such activities generally change pervious surfaces to impervious surfaces, and could change the rate of infiltration. Development of impervious areas would create additional stormwater runoff and compensatory measures for stormwater runoff control would be provided through construction of detention/retention basins. The proposed project would result in some additional impervious surfaces; however, the areas would be small in comparison to the total land area drained. While developments within the region would likely result in additional impervious surfaces, local regulations generally force any entity to comply with local and State Ordinances for building permits to be issued. Activities and events that could occur during operation of the airport facilities, such as stormwater runoff, accidental spills, sanding and de-icing, and vegetation control all have the potential to affect surface water quality. Contaminant concentrations in stormwater coming from such surfaces would most likely not exceed State Water Quality standards due to treatment by selected Best Management Practices (BMPs). Therefore, cumulative effects would be negligible.

5.15.5 Solid Waste and Hazardous Materials

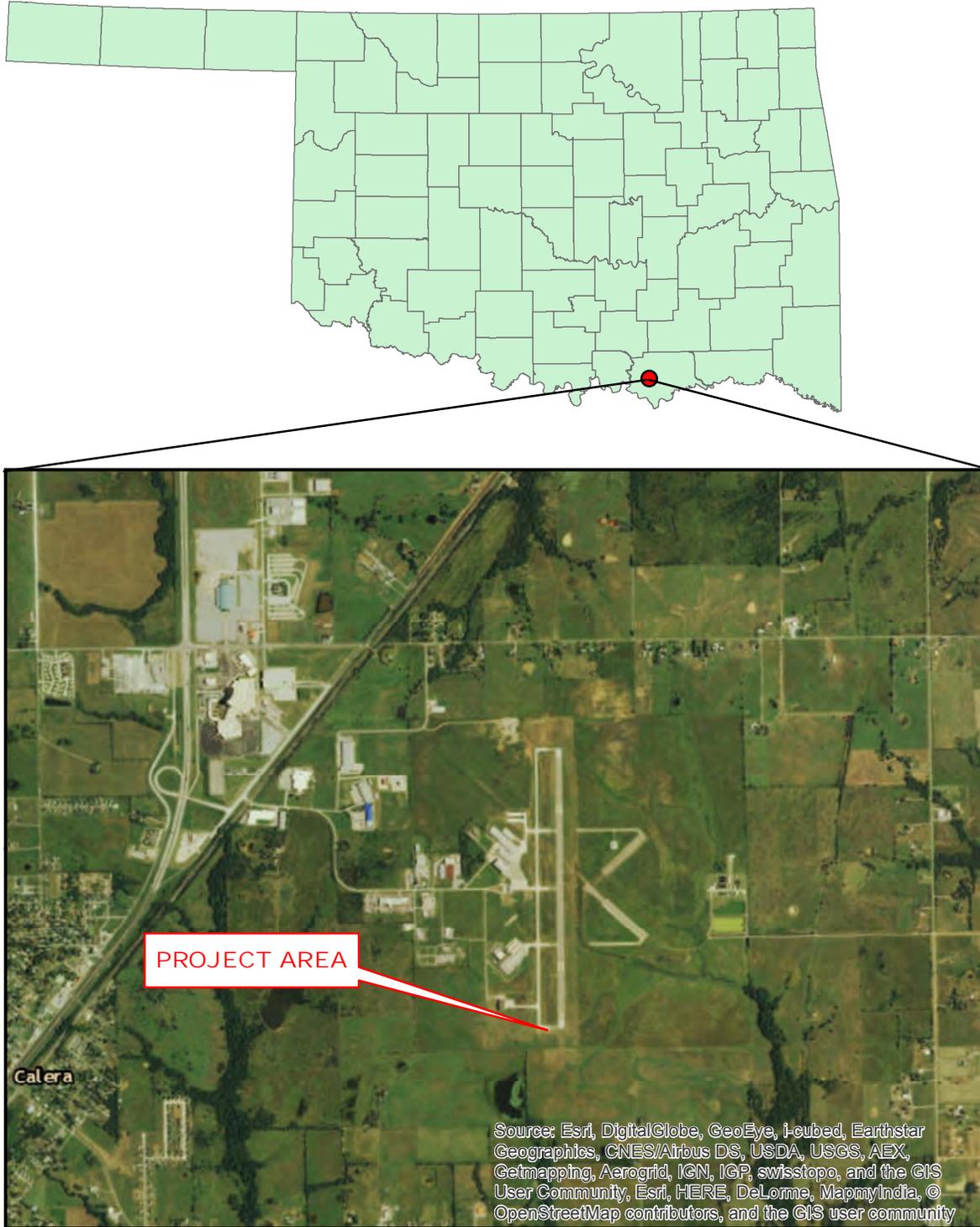
Construction of the proposed project and development within the surrounding area would result in the increased use of solid and hazardous materials and generation of greater amounts of wastes. Reasonably foreseeable future actions in the area would also contribute solid waste to the local landfills, primarily in the form of construction debris. Proper storage, use, and disposal procedures would reduce the probability of any improper releases of these materials and thus minimize impacts on human health and the environment.

5.15.6 Mitigation

Neither the Preferred Alternative nor the No Action Alternative would be anticipated to create a cumulatively significant impact on the environment. Therefore, no mitigation measures for cumulative impacts would be required.

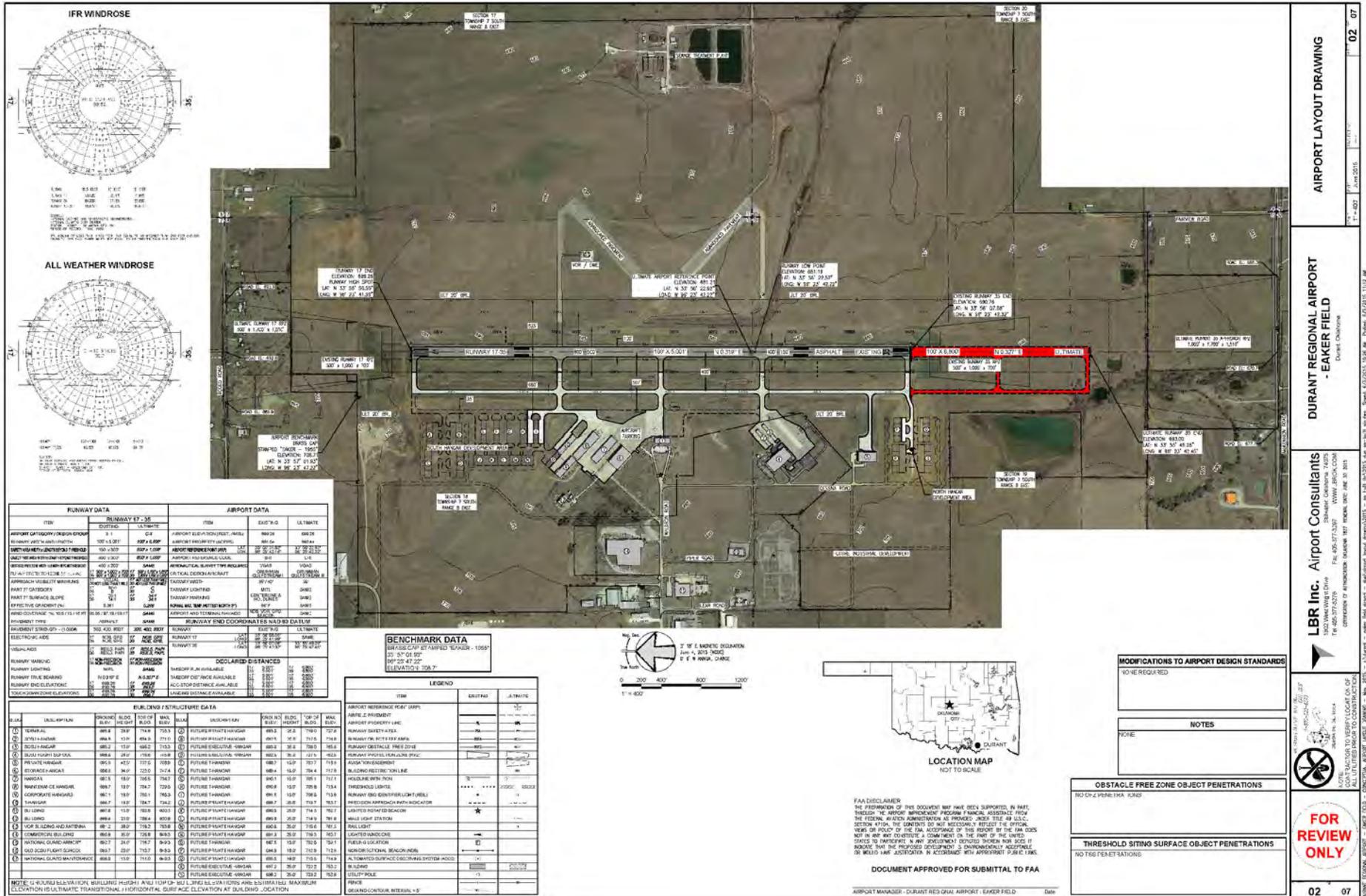
Appendix A
Exhibits

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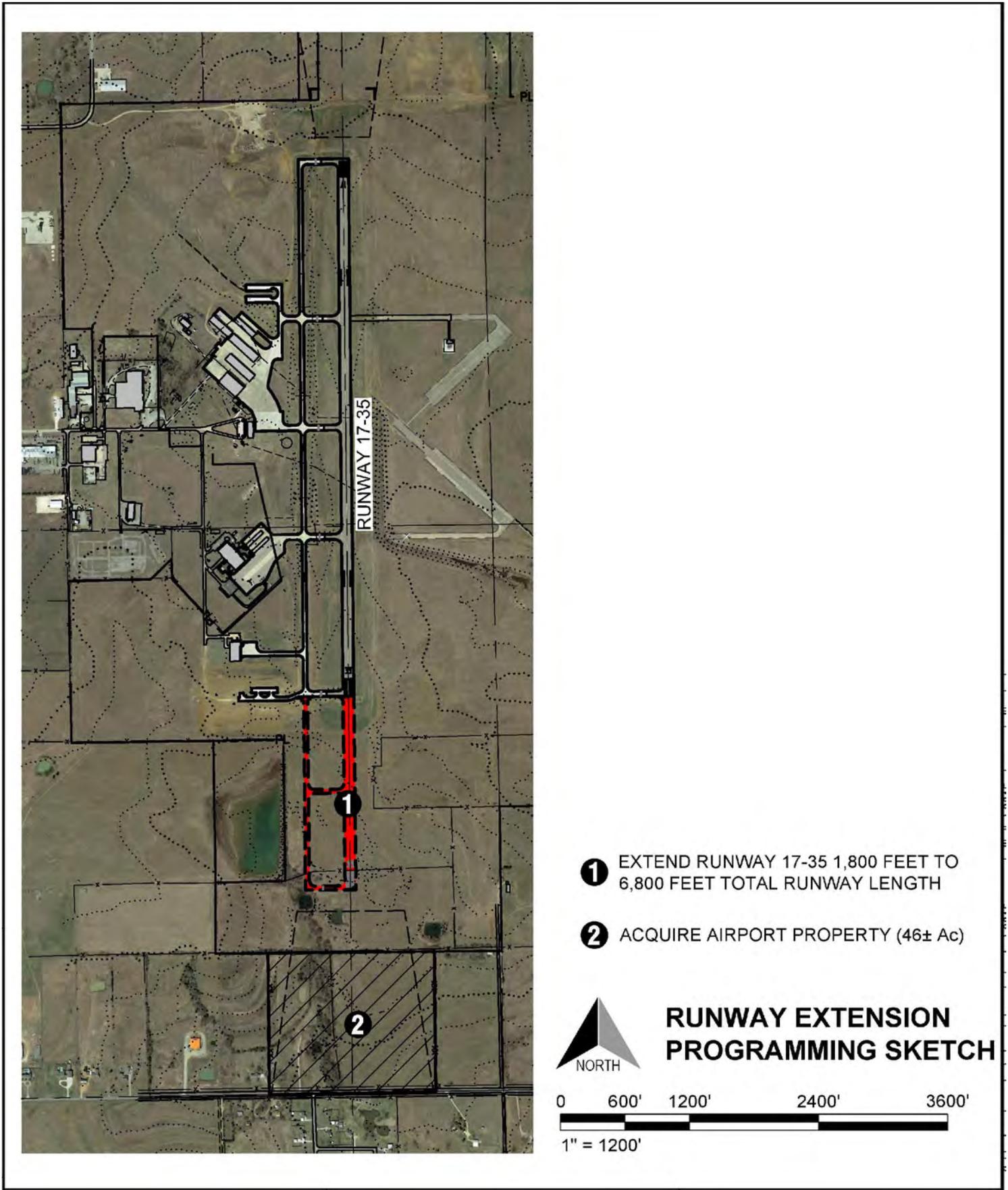
Airport Vacinity Map

Figure 1-1

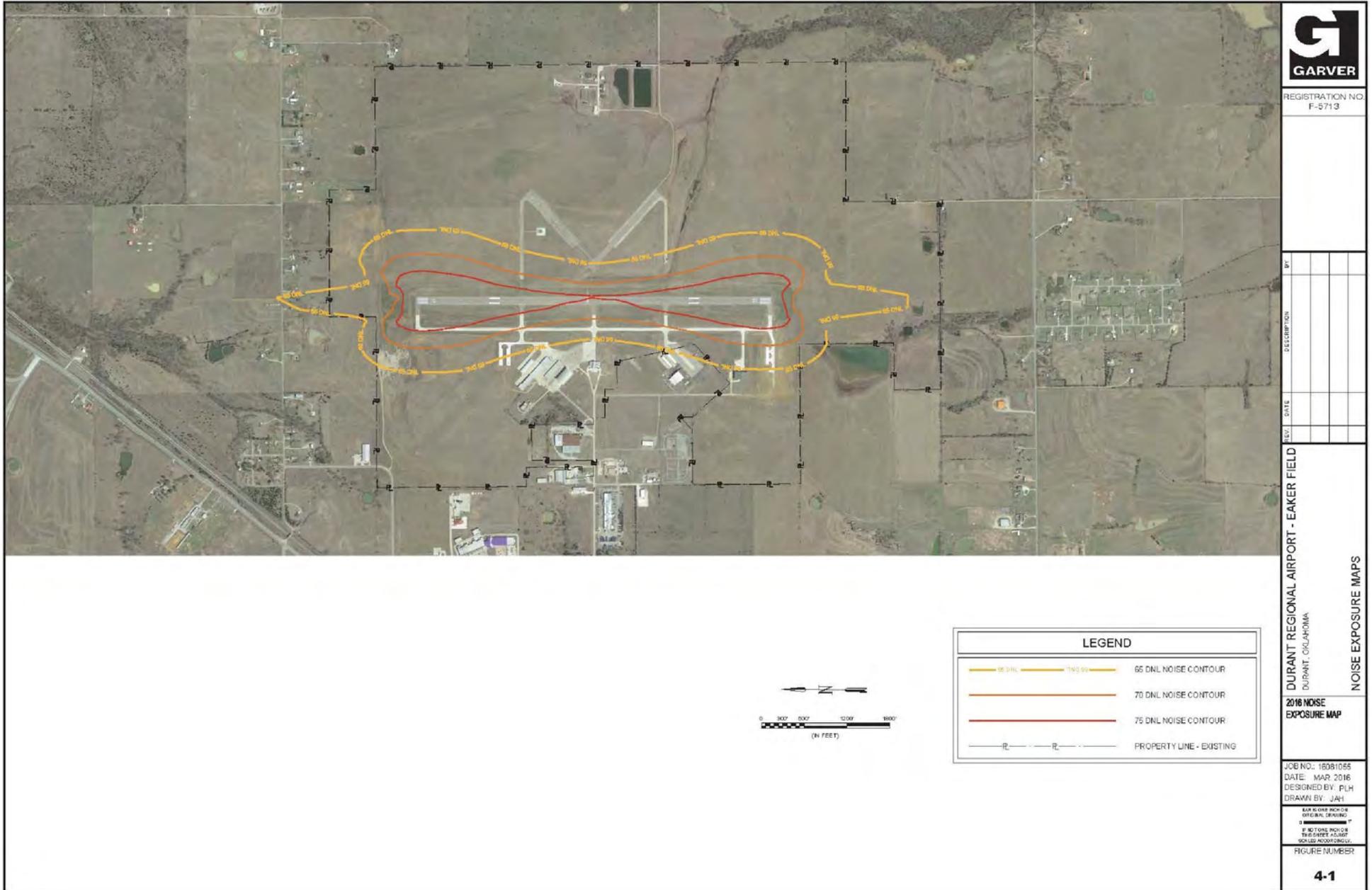


Existing Airport Layout

Figure 1-2

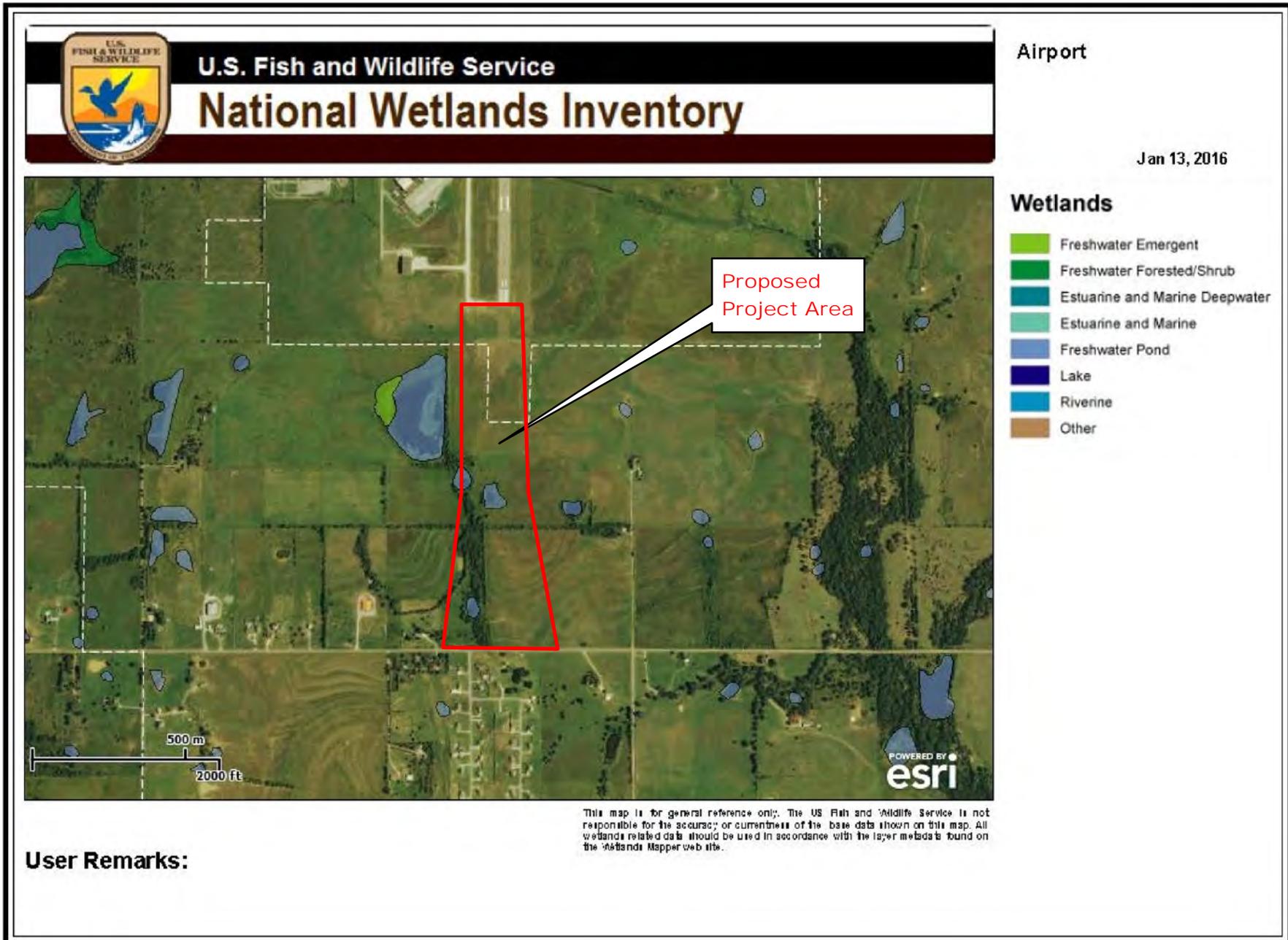


Airport Programming Sketch



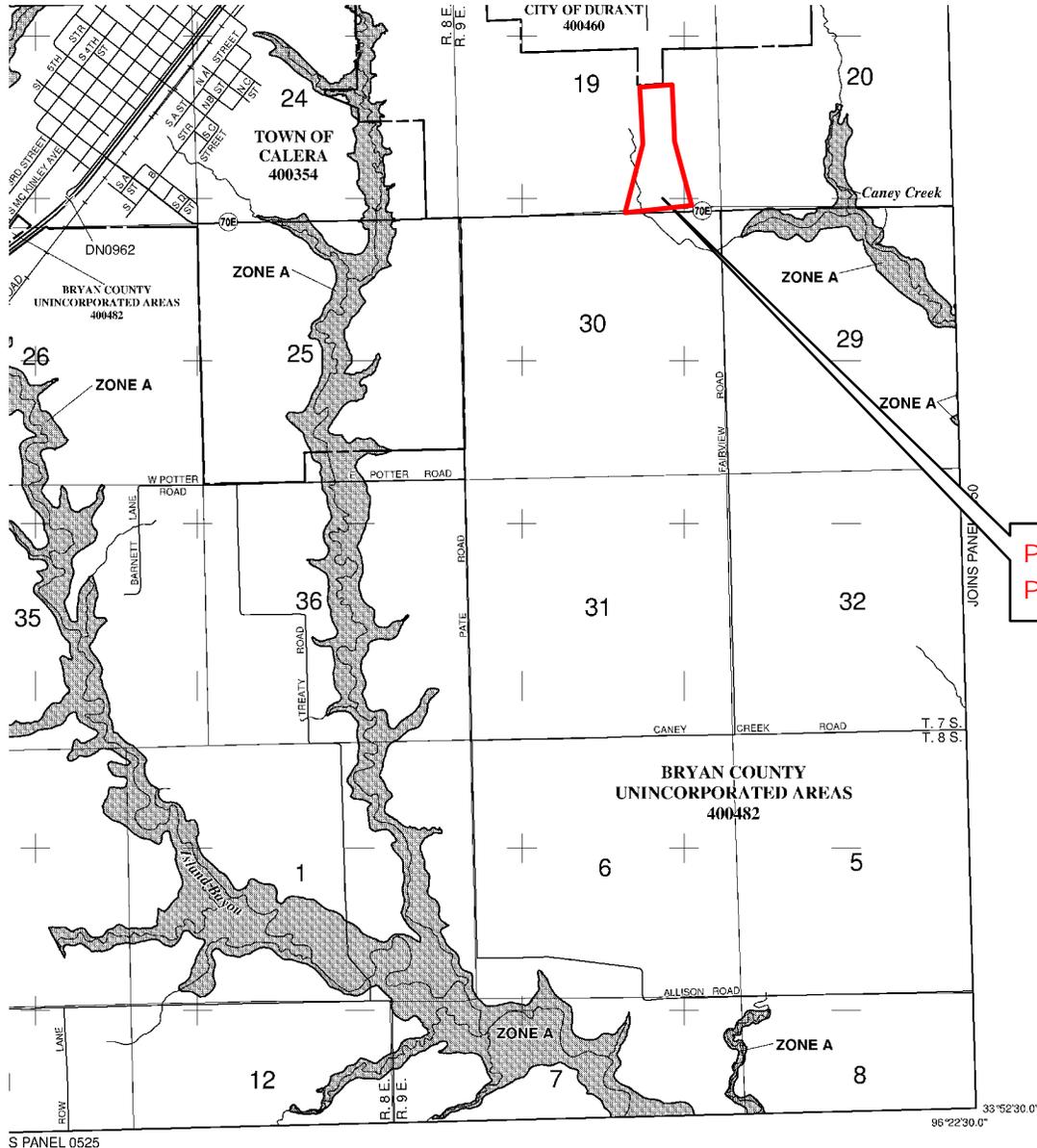
Noise Contour Map

Figure 4-1



Wetland Map

Figure 4-2



Proposed Project Area

M1.5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 18, 1991

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
September 30, 1992

June 2, 2011 - to update corporate limits, to update map format, to add roads and road names, to incorporate previously issued Letters of Map Revision, to reflect updated topographic information, and to change floodway.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'

1000 0 2000 4000 FEET
600 0 600 1200 METERS

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0325E

FIRM FLOOD INSURANCE RATE MAP

BRYAN COUNTY, OKLAHOMA AND INCORPORATED AREAS

PANEL 325 OF 725
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

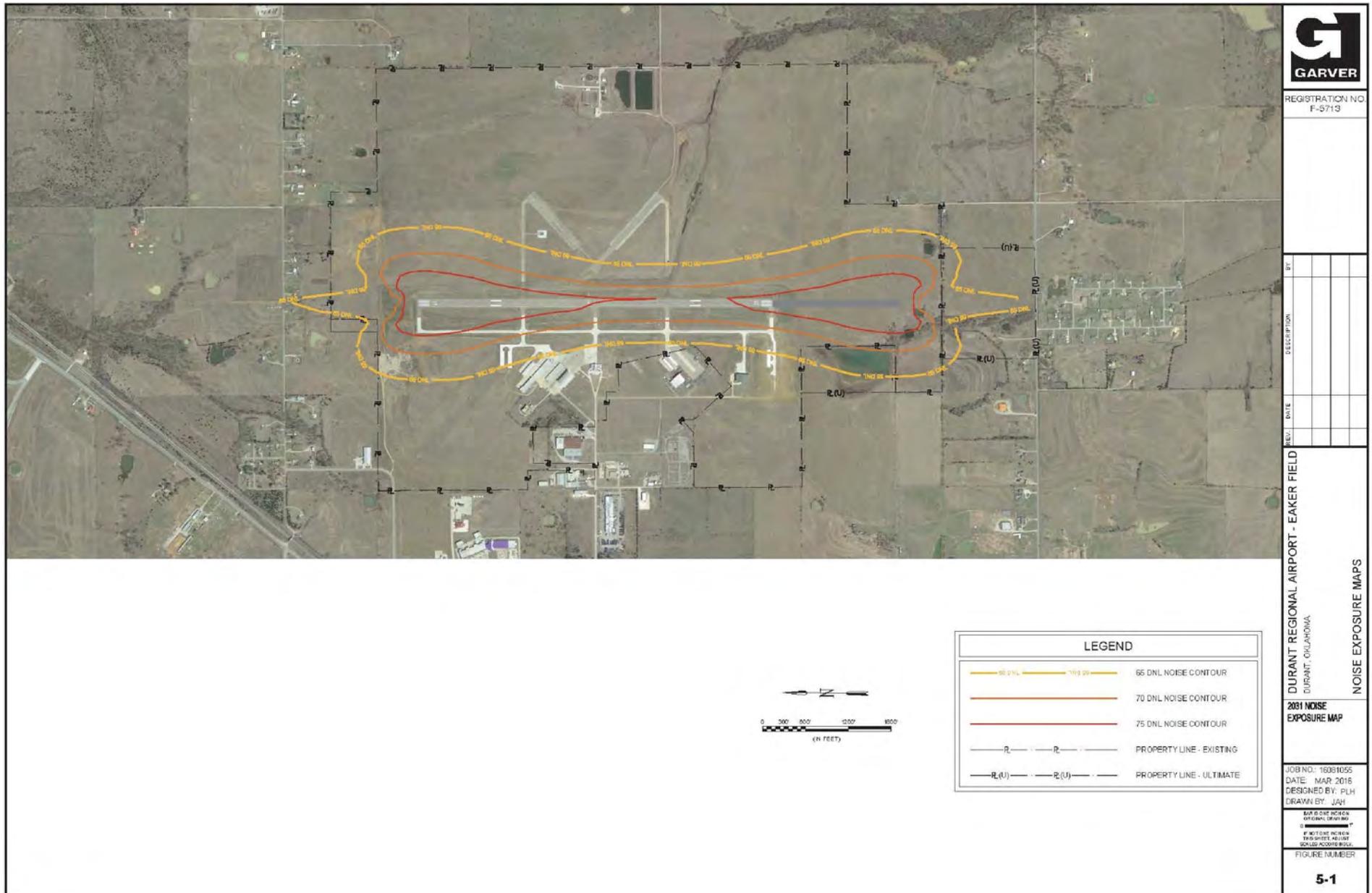
| COMMUNITY | NUMBER | PANEL | SUFFIX |
|-----------------------------|--------|-------|--------|
| BRYAN COUNTY | 400482 | 0325 | E |
| CALERA, TOWN OF | 400354 | 0325 | E |
| CIOCTAW, NATION OF OKLAHOMA | 400041 | 0325 | E |
| COLBERT, TOWN OF | 400359 | 0325 | E |
| DURANT, CITY OF | 400480 | 0325 | E |

Notes to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 40013C0325E

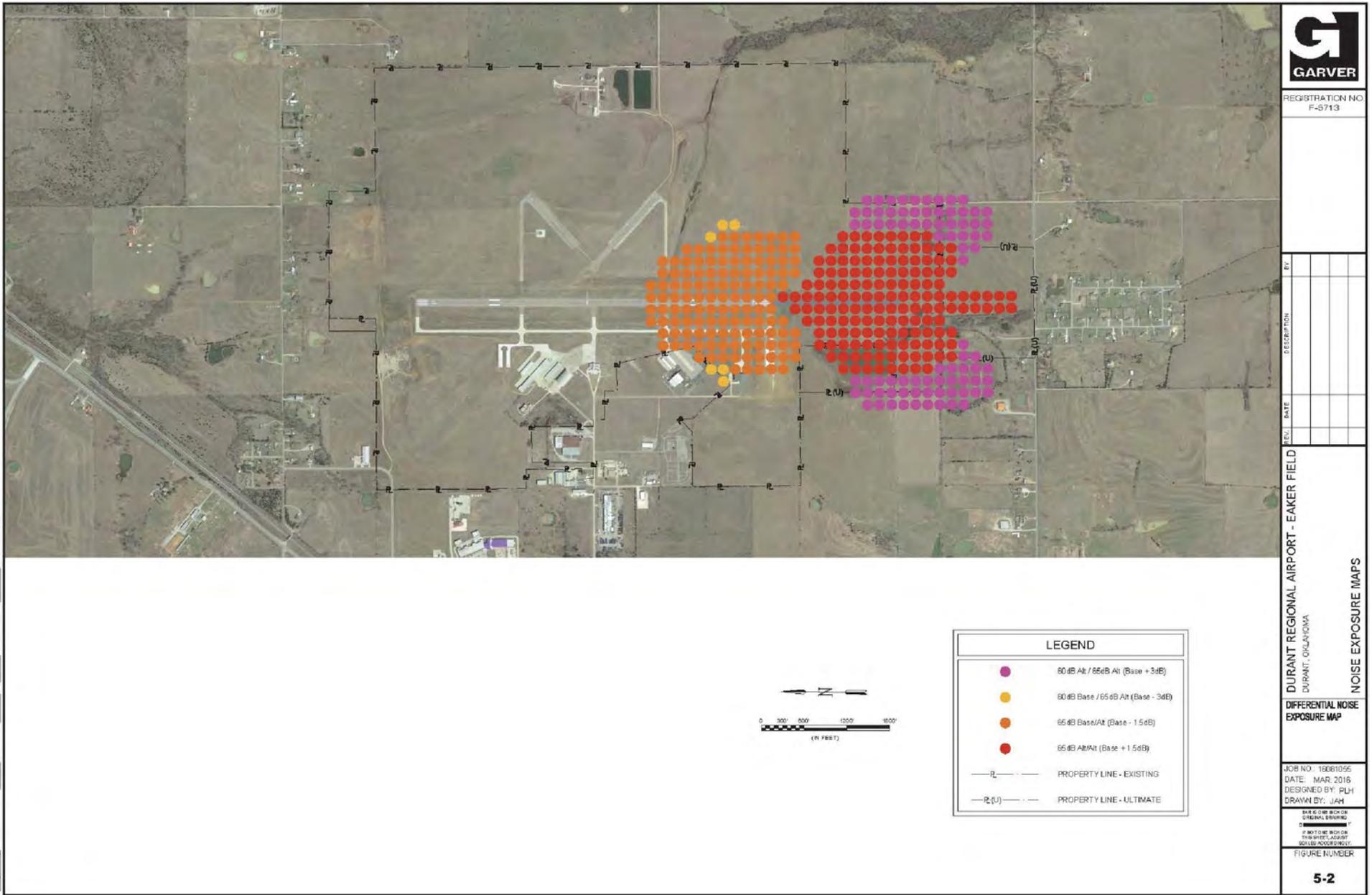
EFFECTIVE DATE JUNE 2, 2011

Federal Emergency Management Agency



Noise Contour Map

Figure 5-1



Noise Contour Map

Figure 5-2

Appendix B

Operations Forecast Report

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AVIATION ACTIVITY FORECASTS

INTRODUCTION

Forecasting aviation activity helps the local airport sponsor, state agencies, and Federal Aviation Administration (FAA) determine future airport facility and equipment needs. The preferred demand forecasts are used to identify the type, extent, and timing of aviation development. In addition, the forecasts are instrumental in identifying airport-related infrastructure and capacity needs, and guiding the timing and financial feasibility of airport development alternatives.

Airport activity is often influenced by the types of aviation services offered to transient and based aircraft and by the general business environment at an airport and in the local community. In addition, factors such as vigorous local airport marketing, gains in sales and services, increased industrialization, changes in transportation preferences, and fluctuations in the national or local economy all influence aviation demand. Aviation activity forecasts are developed in accordance with national trends and regional/local influences and are developed as a guide with the expectations that facilities needed to support them will be available as demands dictate.

OVERVIEW OF DURANT MARKET

The City of Durant and the Durant Regional Airport – Eaker Field (DUA) are located in Bryan County in south-central Oklahoma only ten miles from Lake Texoma. Durant is home to Southeastern Oklahoma State University who operates a flight program at DUA. Durant was ranked as the fastest growing city in Oklahoma in 2004 and was named an All-American City finalist in 2006. These trends bolstered by the more than \$600,000,000 in new investments in the City since 1999. Durant is currently the leading city in Oklahoma in economic development and boasts a day-time population of nearly double the reported permanent population figures. The regional employment forecast remains strong with heavy reliance on the tourism industry with the Choctaw Casino, Lake Texoma, and Fort Washita as strong draws to the area.

Table 1 presents the historical population trends for the market area encompassing Bryan County, OK and the surrounding counties in Oklahoma and Texas. As shown, nearly each county in the study area experienced positive growth in population since 1990. Grayson County, TX currently has the highest population of all the counties, while the average growth of the Bryan, Fannin, and Marshall counties is over 27 percent since 1990. For the entire service area, there was an increase of 17.8 percent since 1990.



**TABLE 1
HISTORICAL COUNTY POPULATION TRENDS: DUA SERVICE AREA**

| | 1990 | 2000 | 2010 | Percent Change |
|----------------------------|---------------|---------------|---------------|----------------|
| Bryan County, OK | 32,089 | 36,534 | 42,416 | 24.3% |
| Choctaw County, OK | 15,302 | 15,342 | 15,205 | -0.6% |
| Atoka County, OK | 12,778 | 13,879 | 14,182 | 9.89% |
| Marshall County, OK | 10,829 | 13,184 | 15,840 | 31.6% |
| Johnston County, OK | 10,032 | 10,513 | 10,957 | 8.4% |
| Fannin County, TX | 24,804 | 31,242 | 33,915 | 26.9% |
| Grayson County, TX | 95,021 | 110,595 | 120,877 | 21.4% |
| Study Area Average | 28,694 | 33,041 | 36,199 | 17.4% |

Source: US Census Bureau

DUA SERVICE AREA

There are five publicly owned and operated airports within DUA's 30 mile primary service area. There are numerous smaller private airfields within DUA's service area that encompasses all of Bryan County, Oklahoma and portions of four other counties in Oklahoma (Choctaw, Atoka, Marshall, and Johnston) and two counties in Texas (Fannin and Grayson). **Table 2** provides a comparison of service area airport facilities. Of the listed airports, four have runways of 4,000 feet or less and only one had a runway longer than 5,000 feet making it the best candidate for business jet activity in the absence of DUA. North Texas Regional Airport has the two longest runway in the service area (9,000 feet by 150 feet). DUA has the next longest runway in the service area with dimensions of 5,001 feet by 100 feet. Every airport in the service area has instrument approach procedures of some type except one (Tishomingo). Only one airport in the service area has an ILS approach system (North Texas Regional), which is also the only airport in the service area with an air traffic control tower.





TABLE 2
DUA SERVICE AREA: FACILITY COMPARISON

| Service Area Airports | Airport Code | Ownership | Acres | Number of Based Aircraft | | | | | | Runway | | Nav aids Highest | Tower |
|-----------------------------------|--------------|-----------|-------|--------------------------|-------|--------|------|-------|-------|-------------|--------------|------------------|-------|
| | | | | Jet | Multi | Single | Heli | Other | Total | First L x W | Second L x W | | |
| Durant Regional | DUA | Public | 460 | 2 | 11 | 69 | 3 | 0 | 85 | 5,001 x 100 | -- | GPS | No |
| Madill Municipal | 1F4 | Public | 228 | 0 | 7 | 7 | 0 | 0 | 14 | 3,005 x 60 | -- | GPS | No |
| Tishomingo Municipal | 0F9 | Public | 228 | 0 | 0 | 1 | 0 | 0 | 1 | 3,100 x 60 | -- | N/A | No |
| Jones Field, Bonham, TX | F00 | Public | 130 | 0 | 0 | 23 | 1 | 0 | 24 | 4,000 x 75 | -- | GPS | No |
| North Texas Regional, Denison, TX | GYI | Public | 2,184 | 4 | 3 | 1 | 0 | 0 | 8 | 9,000 x 150 | 2,227 x 60 | ILS | Yes |
| Sherman Municipal, Sherman, TX | SWI | Public | 270 | 0 | 1 | 18 | 0 | 0 | 19 | 4,000 x 75 | -- | GPS | No |

Source: Airport Master Record as Published November 2013 (www.gcr1.com/5010WEB and www.airnav.com).





SUMMARY OF AIRPORT HISTORICAL OPERATIONS AND PREVIOUS FORECASTS

There is only one existing source of historic and forecast data available for DUA, FAA Terminal Area Forecasts (TAF). The TAF was reviewed as a part of development of a final set of aviation demand forecasts to be used for development of noise analysis and exhibits. No official traffic counts were completed as a part of this analysis. The reported operations from the TAF are shown in **Table 3, Historical TAF Activity** that summarizes the available historical annual operations at DUA since 2000 as recorded through the FAA TAF program.

**TABLE 3
HISTORICAL TAF ACTIVITY
DURANT REGIONAL AIRPORT**

| Year | Local Operations | Itinerant Operations | Air Taxi and Commuter | Total Airport Operations |
|--------------|-------------------------|-----------------------------|------------------------------|---------------------------------|
| 2000 | 41,660 | 2,460 | 0 | 44,120 |
| 2001 | 41,660 | 2,460 | 0 | 44,120 |
| 2002 | 45,000 | 2,550 | 0 | 47,550 |
| 2003 | 41,660 | 2,460 | 0 | 44,120 |
| 2004 | 41,660 | 2,460 | 0 | 44,120 |
| 2005 | 45,000 | 1,030 | 0 | 46,030 |
| 2006 | 45,000 | 1,030 | 0 | 46,030 |
| 2007 | 45,000 | 1,030 | 0 | 46,030 |
| 2008 | 45,000 | 1,030 | 0 | 46,030 |
| 2009 | 47,000 | 3,030 | 0 | 50,030 |
| 2010 | 47,000 | 3,030 | 0 | 50,030 |
| 2011 | 47,000 | 3,030 | 0 | 50,030 |
| 2012 | 47,000 | 3,030 | 0 | 50,030 |
| 2013 | 47,000 | 3,030 | 0 | 50,030 |
| 2014 | 47,000 | 3,030 | 0 | 50,030 |
| 2015* | 47,000 | 3,030 | 0 | 50,030 |

Source: FAA Terminal Area Forecasts; * TAF first forecast year

The following observations were identified at DUA as part of the inventory of historic and current airport activity levels:

- ➔ Regional indicators are positive for growth in general aviation air transportation that has been linked to business activity and high-end tourism. In south-central Oklahoma, both of these activities are





concentrated. The business segment provides a significant portion of DUA's overall activity and tourism is a growing component of the overall aviation activity mix.

- The 2014 DUA runway extension feasibility study documented business aircraft operations and provided with some potential operational numbers as provided by potential users and instrument approach departures at the airport.
- TAF operational history has held steady at just over 50,000 operations since 2009.
- Some of the business jet operations at DUA are part of the Aircraft Situation Display to Industry (ASDI) program and have their specific aircraft information blocked.
- Over 500 operations at DUA are by large GA aircraft with maximum takeoff weights that exceed the 50,000 pounds DWG weight limitation for Runway 18-36 at DUA.

GENERAL AVIATION DEMAND FORECASTS

Based on information obtained, the following factors and assumptions have been incorporated into the GA forecasts of annual operations for DUA:

- The south-central Oklahoma and north-central Texas combined region is expected to continue experiencing robust economic and population growth. Continued economic growth and business needs will drive increased demand for air transportation;
- An "unconstrained" forecast of aviation demand assumes current facility infrastructure and future improvements in infrastructure and services will lead the demand with the proactive nature of the local airport sponsor;
- Greater aircraft utilization resulting from airfield and terminal area improvements as well as improvements in services can be directly and indirectly linked to economic development activity;
- Future operational levels are expected to remain primarily attributable to business/tourism needs;
- DUA will continue to maintain and/or grow its leading market share of business jet operations.
- The trend toward business investment in larger business jet types will continue in the future;
- Future airport facilities will continue to accommodate a broad array of GA aircraft and remain flexible in serving larger business-type aircraft; and,
- The forecast of operational levels is tied to the potential for the airport to attract employment and economic development to the area that could be aviation-related.

FORECAST METHODOLOGIES

Development of aviation forecasts involves analytical and judgmental assumptions to realize the highest level of forecast confidence. GA demand forecasts can be developed in accordance with national and regional trends, and in context with the specific findings, including aircraft operational trends, business environment, local population, and per capita income trends. The forecasts developed here begin with baseline information from 2014 with 2015 as the first forecast year. National GA trends and forecasts used to provide a baseline of growth rates are provided by the *FAA Aerospace Forecasts, Fiscal Years 2015-2035*. These forecasts are unconstrained, indicating facilities will be developed as the need arises. Various



forecast techniques are used to develop GA forecasts and could include: Trend Analysis, Regression Analysis, and Market Share Assessments.

AIRCRAFT OPERATIONS FORECAST

In developing the DUA operational projections, several existing forecasts were reviewed. This included the FAA TAF and the *FAA Aerospace Forecast Fiscal Years, 2015 – 2035* as well as those documented potential users identified during the runway feasibility study and preliminary design efforts. Additionally, the historical operations from these same sources were assessed for their impacts on the potential operational growth at DUA.

The forecasts from the FAA TAF are set and presented in **Table 8**. The TAF, as with most GA airports shows a no growth scenario and maintains operations at just over 50,000 through the next 20 years. The TAF fails to recognize the robust economy with an accompanying increasing level of overall operations at DUA. The growth rates shown in the TAF were deemed unreliable as a viable forecast for DUA.

A number of different operational forecast scenarios were examined in an effort to identify a preferred operations forecast for DUA. In addition to the TAF, forecasts based on historical DUA data, FAA Aerospace Forecasts, and a combination of others were developed.

During the 2014 DUA experienced a utilization rate of 858. The utilization rate is established by the ratio of airport operations per based aircraft for a given year or time frame. The 2014 DUA utilization rate was used as one method of forecasts and is predicted on a set of based aircraft forecasts. The 2014 DUA utilization rate forecast yielded a moderately increasing operations forecast that grew at approximately one percent annually. A second utilization forecast was developed based on the average utilization rate between 1990 and 2014 as operations were reported in the TAF records. This forecast method yielded an operations forecast that increased operations nearly two percent annually.

An additional forecast was developed based on the average utilization rate based on historical TAF data for DUA. This average utilization rate was 858 which yielded the most aggressive forecast presented in Table 4 below. The annual growth rate for this forecast was nearly two percent.

The trend line forecasts using the DUA historic figures as recorded in the TAF were developed. The trend line forecast based on historical operations between 1990 and 2014 showed a reasonable growth of just over 14,000 operations across the 20-year forecast period. This equates to an annual growth of only 1.11 percent.

A hybrid operations forecast was developed using the DUA utilization rate for single-engine piston aircraft and standard utilization rate for all turbine aircraft from the *FAA Aerospace Forecasts*. This forecast resulted in an aggressive growth schedule that was higher than expected for DUA with an annual growth rate of approximately 1.65 percent.



The Preferred Forecast provides DUA with an achievable but aggressive growth schedule that exceeds the existing ATCT trend line and the FAA TAF rates. It is tempered by knowledge of the economics and opportunities at DUA that include the region being one of the fastest growth areas in Arkansas with an airport that experiences an extremely high level of corporate/business traffic, approximately 85 percent of total operations.

A full summary of the preferred aviation forecast can be found in **Appendix A** and is shown as a comparison with the FAA’s TAF.

TABLE 4
SUMMARY OF AIRCRAFT OPERATIONS FORECASTS, 2015-2035
DURANT REGIONAL AIRPORT

| Year | FAA Terminal Area Forecast | DUA 2014 Utilization Rate | DUA ATCT 1990 – 2014 Trend Line | FAA Aerospace Forecasts (2015 - 2035) | DUA Average Utilization Rate (1990 - 2014) | DUA Historical Utilization Rate (90-16 for SE)/FAA Standard Utilization Rate (Turbines) |
|------|----------------------------|---------------------------|---------------------------------|--|--|---|
| 2015 | 50,030 | 50,030 | 50,030 | 50,030 | 50,030 | 50,030 |
| 2020 | 50,030 | 54,452 | 55,245 | 53,632 | 63,948 | 59,842 |
| 2025 | 50,030 | 57,106 | 58,254 | 57,492 | 75,455 | 68,002 |
| 2030 | 50,030 | 59,961 | 61,264 | 61,631 | 79,228 | 71,402 |
| 2035 | 50,030 | 62,899 | 64,274 | 66,068 | 83,110 | 74,901 |

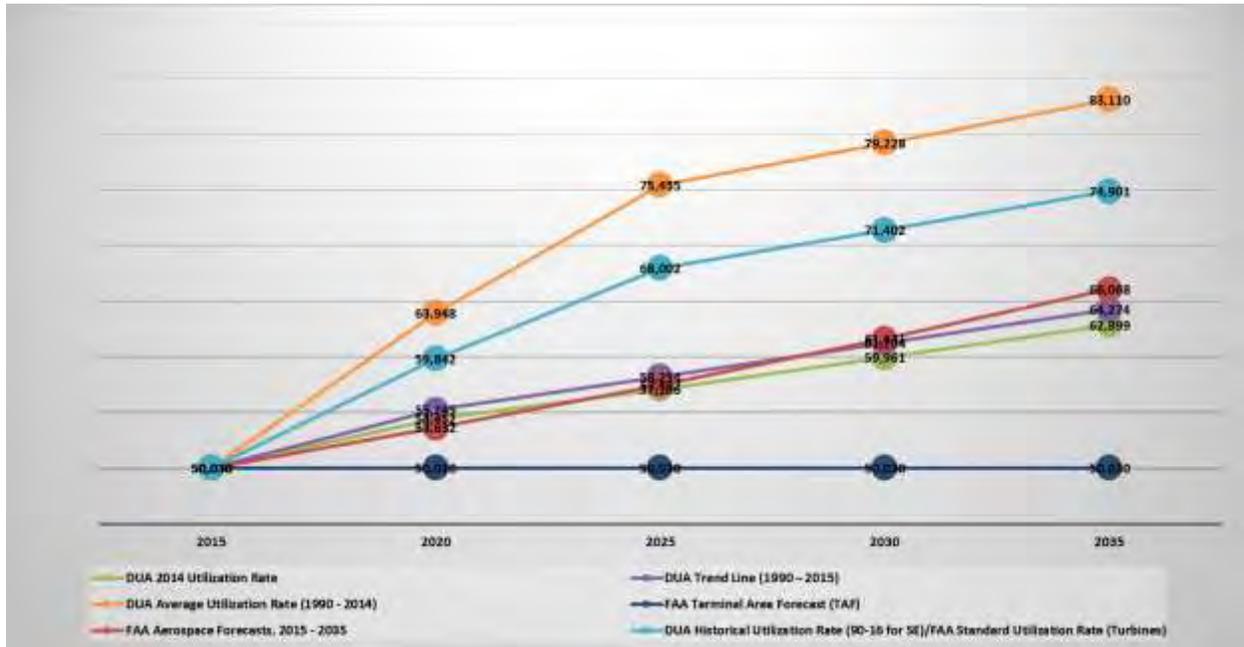
Notes: 2015 is the first forecast year; Preferred Forecast is in Bold

Source: Garver Forecast Data for DUA, 2015, FAA TAF – FAA APO Terminal Area Forecasts





FIGURE 1
SUMMARY OF AIRCRAFT OPERATIONS FORECASTS, 2015-2035
DURANT REGIONAL AIRPORT



Source: Garver Forecast Data for DUA, 2015





AIRCRAFT FLEET MIX FORECAST

Table 9, Figure 2, and Figure 3 display the aircraft fleet mix operations forecast for DUA for each phase throughout the 20-year planning period. An examination of TAF operations at DUA in combination with the level of corporate/business flights conducted provide some guidance towards an accurate fleet mix forecast. The operations forecast of aircraft mix is can be used to determine future airfield design, facility, and service needs, and the configuration of terminal area facilities.

Total operations can be further broken down into aircraft approach categories and airplane design groups. This additional breakdown helps to better define the types of aircraft that will operate at the airport in the future. It also allows for better planning of future facilities and airside needs for DUA and the ability to justify such facilities when the market demands. **Table 9, Fleet Mix Operations by Approach Category and Design Group, 2015-2035**, displays this breakdown for the 20-year planning effort. **Figure 2** depicts the growth/migration of fleet mix based on aircraft approach categories and **Figure 3** represents the forecasts of operational growth based on airplane design group.

**TABLE 9
FLEET MIX OPERATIONS BY APPROACH CATEGORY AND DESIGN GROUP, 2015-2035
DURANT REGIONAL AIRPORT**

| Aircraft Approach Category | 2015 | 2020 | 2025 | 2030 | 2035 |
|---|---------------|---------------|---------------|---------------|---------------|
| Category A (Less than 91 knots) | 37,512 | 39,146 | 40,712 | 43,428 | 47,022 |
| Category B (92 – 120 knots) | 11,383 | 13,197 | 15,090 | 15,800 | 16,811 |
| Category C (121 – 140 knots) | 775 | 872 | 1,226 | 1,378 | 1,570 |
| Category D (141 – 166 knots) | 80 | 87 | 109 | 120 | 135 |
| Airplane Design Group | | | | | |
| Group I (Wingspan: Less than 49 feet) (Tail Height: Less than 20 feet) | 36,142 | 37,700 | 38,670 | 39,951 | 41,854 |
| Group II (Wingspan: 49 feet to 78 feet) (Tail Height: 20 feet to less than 30 feet) | 13,133 | 15,012 | 17,702 | 19,929 | 22,734 |
| Group III (Wingspan: 79 feet to 118 feet) (Tail Height: 30 feet to less than 45 feet) | 475 | 590 | 765 | 846 | 950 |
| Helicopter | 250 | 300 | 325 | 375 | 500 |
| Military | 30 | 30 | 30 | 30 | 30 |
| Total | 50,030 | 53,632 | 57,492 | 61,131 | 66,068 |

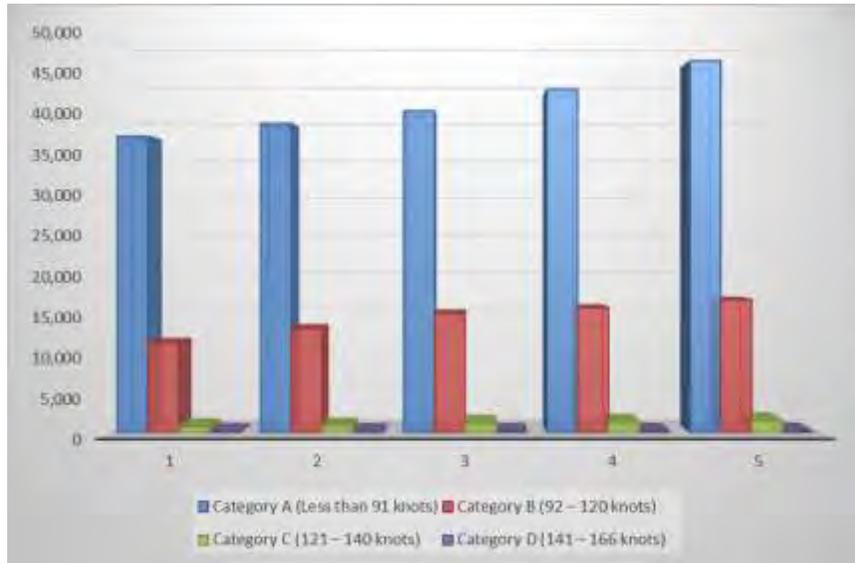
Source: Garver Forecast Data for DUA, 2015

Aircraft Approach Category is based on 1.3 times the stall speed of the aircraft at the maximum certified landing weight in the landing configuration. Representative of the anticipated operations for each aircraft approach category and airplane design group. Totals may not equal due to rounding.



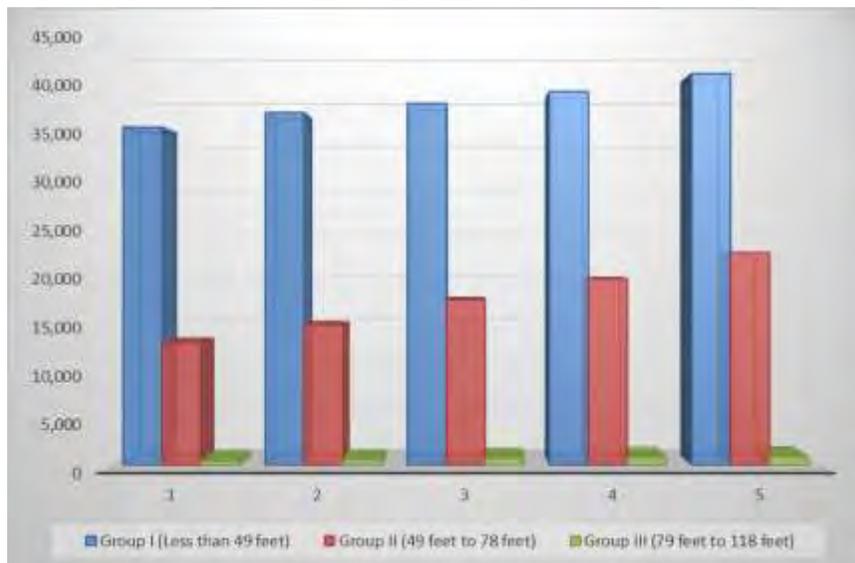


FIGURE 2
FLEET MIX FORECAST – AIRCRAFT APPROACH CATEGORY, 2015-2035
DURANT REGIONAL AIRPORT-CARTER FIELD



Source: Garver Forecast Data for DUA, 2015

FIGURE 3
FLEET MIX FORECAST – AIRPLANE DESIGN GROUP, 2015-2035
DURANT REGIONAL AIRPORT



Source: Garver Forecast Data for DUA, 2015





LOCAL AND ITINERANT OPERATIONS

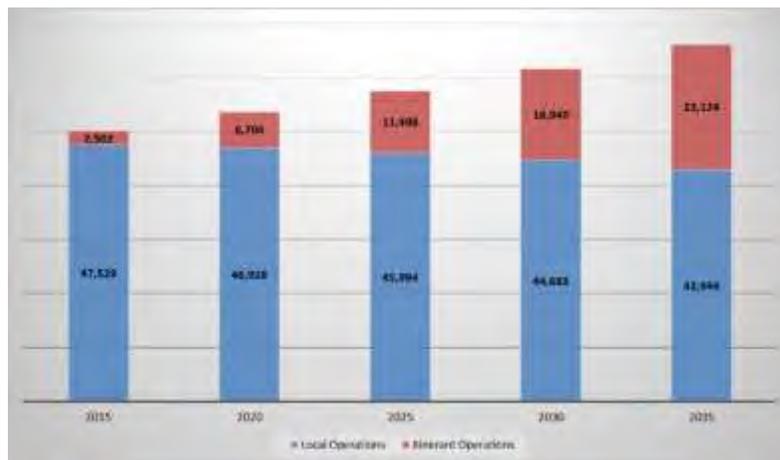
According to FAA Order 7210.3U, *Facility Operation and Administration, February 16, 2006*, a local operation is any operation performed by an aircraft that “remains in the local traffic pattern, performs a simulated instrument approach, or operates to or from the Airport and a practice area within a 20-mile radius of the field or tower.” An itinerant operation is any operation that is not considered local. According to TAF records, the local versus itinerant split at DUA since 2004 is 95 percent local and five percent itinerant. Based on the flight training conducted by the university program and others that is understandable; however, based on the ever increasing reliance on tourism generated by the lake and casinos these numbers should shift towards a greater amount of itinerant operations. **Table 10 Summary of Local and Itinerant Operations, 2015-2035**, provides a summary of this information that reflects a shift to a 2035 split of operations to be 65 percent local and 35 percent itinerant.

TABLE 10
SUMMARY OF LOCAL AND ITINERANT OPERATIONS, 2015-2035
DURANT REGIONAL AIRPORT

| Year | 2015 | 2020 | 2025 | 2030 | 2035 |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|
| Local Operations | 47,529 | 46,928 | 45,994 | 44,683 | 42,944 |
| Itinerant Operations | 2,502 | 6,704 | 11,498 | 16,949 | 23,124 |
| Total | 50,030 | 53,632 | 57,492 | 61,631 | 66,068 |

Source: Garver Forecast Data for DUA, 2015

FIGURE 4
LOCAL AND ITINERANT OPERATIONS, 2015-2035
DURANT REGIONAL AIRPORT



Source: Garver Forecast Data for DUA, 2015





CRITICAL AIRCRAFT

Determining the critical aircraft is important for assessing airport design and layout and the structural and equipment needs for both the airfield and terminal area pavements, safety areas, and facilities. Per FAA AC 150/5300-13A and FAA Order 5100.38D, the critical aircraft may be a single aircraft or a group of aircraft that have a similar design effect on the airport's given facility. For Runway 17-35 at DUA, a myriad of business jets, including Cessna Citations, Hawkers, and Gulfstream have been using DUA on a fairly regular basis. Letters of commitment were gathered by the Airport Sponsor indicating more than 1,800 operations by these types of business jets at DUA. The RDC/ARC associated with these aircraft falls into the C-II category. Combined, these aircraft are conducting more than 1,000 annual operations today and are forecast to conduct nearly 6,000 annual operations at DUA by 2035; hence as a group these aircraft make up the critical design aircraft for DUA. Based on the types of aircraft utilizing DUA, the existing and forecast critical aircraft is in the ARC C-II category.

DUA AND FAA TAF COMPARISON

As shown in **Appendix B**, the proposed DUA forecast and TAF operations forecasts are compared. For total operations, the proposed forecast is held equal to the TAF in the base year of 2015. The forecast operations increase at the five, ten, and 15 year marks with the differences of 7.2 percent, 14.9 percent, and 23.2 percent respectively.

The differences between the TAF and DUA begin immediately because the TAF reports a zero growth forecast for DUA. As outlined previously in this report, the City has obtained potential and anticipated operational information from various different existing and future airport users. The TAF also fails to recognize the complex business and tourism aviation environment and clientele that DUA serves, as well as the growth in the surrounding area as outlined in this report.

Appendix C
IPac Report

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United States Department of the Interior



FISH AND WILDLIFE SERVICE
Oklahoma Ecological Services Field Office
9014 EAST 21ST STREET
TULSA, OK 74129
PHONE: (918)581-7458 FAX: (918)581-7467
URL: www.fws.gov/southwest/es/Oklahoma/

Consultation Code: 02EKOK00-2016-SLI-0679

January 28, 2016

Event Code: 02EKOK00-2016-E-00713

Project Name: Durant Airport EA

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Non-federal entities conducting activities that may result in take of listed species should consider seeking coverage under section 10 of the ESA, either through development of a Habitat Conservation Plan (HCP) or, by becoming a signatory to the General Conservation Plan (GCP) currently under development for the American burying beetle. Each of these mechanisms provides the means for obtaining a permit and coverage for incidental take of listed species during otherwise lawful activities.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit through our Project Review step-wise process <http://www.fws.gov/southwest/es/oklahoma/OKESFO%20Permit%20Home.htm>.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

Official Species List

Provided by:

Oklahoma Ecological Services Field Office

9014 EAST 21ST STREET

TULSA, OK 74129

(918) 581-7458

<http://www.fws.gov/southwest/es/Oklahoma/>

Consultation Code: 02EKOK00-2016-SLI-0679

Event Code: 02EKOK00-2016-E-00713

Project Type: TRANSPORTATION

Project Name: Durant Airport EA

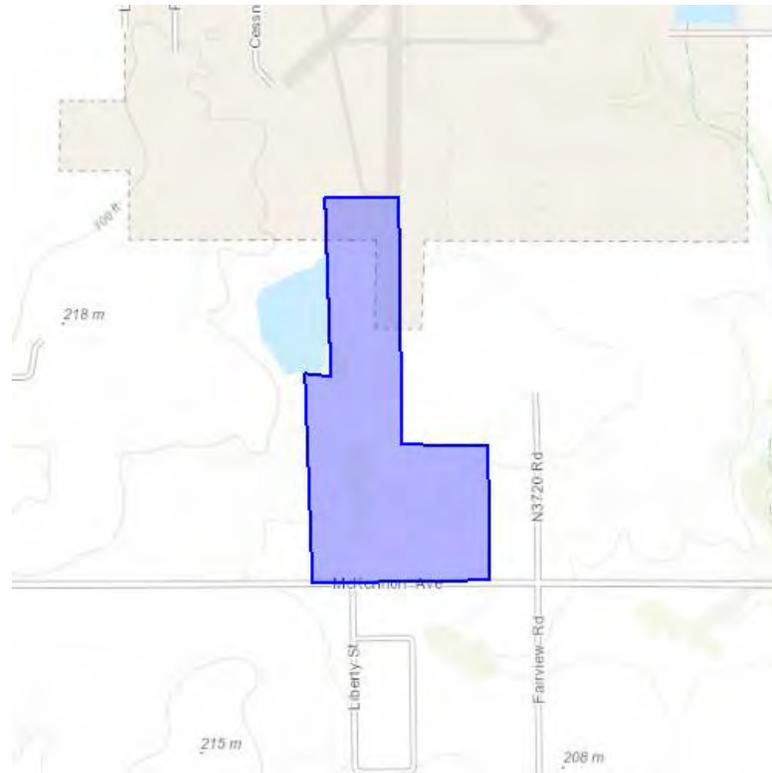
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-96.39205598752596 33.92877463728007, -96.39202852107701 33.92527409727107, -96.39763068917091 33.92518364936498, -96.39786543877563 33.93067609626758, -96.3970511185471 33.930589568768866, -96.39720754581504 33.935253665432604, -96.39487337961327 33.93528197230128, -96.39477896533208 33.92881950290866, -96.39205598752596 33.92877463728007)))

Project Counties: Bryan, OK



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

Endangered Species Act Species List

There are a total of 5 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

| Birds | Status | Has Critical Habitat | Condition(s) |
|---|------------|----------------------|--------------|
| Least tern (<i>Sterna antillarum</i>) Population: interior pop. | Endangered | | |
| Piping Plover (<i>Charadrius melodus</i>) Population: except Great Lakes watershed | Threatened | Final designated | |
| Red Knot (<i>Calidris canutus rufa</i>) | Threatened | | |
| Whooping crane (<i>Grus americana</i>) Population: except where EXPN | Endangered | Final designated | |
| Insects | | | |
| American Burying beetle (<i>Nicrophorus americanus</i>) Population: Entire | Endangered | | |



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

Critical habitats that lie within your project area

There are no critical habitats within your project area.



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

Appendix A: FWS National Wildlife Refuges

There are no refuges within your project area.



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

Appendix B: FWS Migratory Birds

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no otherwise lawful activities. For more information regarding these Acts see: <http://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>
<http://www.fws.gov/birds/policies-and-regulations/laws-legislations/bald-and-golden-eagle-protection-act.php>

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project. To meet these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and their habitat and develop and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to:

<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>

For information about conservation measures that help avoid or minimize impacts to birds, please visit:

<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>

To search and view summaries of year-round bird occurrence data within your project area, go to the Avian Knowledge Network Histogram Tools at:

<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php>

Migratory birds of concern that may be affected by your project:

There are 21 birds on your Migratory birds of concern list.

| Species Name | Bird of Conservation Concern (BCC) | Seasonal Occurrence in Project Area |
|--|------------------------------------|-------------------------------------|
| Bachman's sparrow (<i>Aimophila aestivalis</i>) | Yes | Breeding |
| | | |



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

| | | |
|--|-----|------------|
| Bald eagle (<i>Haliaeetus leucocephalus</i>) | Yes | Year-round |
| Bell's Vireo (<i>Vireo bellii</i>) | Yes | Breeding |
| Dickcissel (<i>Spiza americana</i>) | Yes | Breeding |
| Fox Sparrow (<i>Passerella iliaca</i>) | Yes | Wintering |
| Golden eagle (<i>Aquila chrysaetos</i>) | Yes | Wintering |
| Harris's Sparrow (<i>Zonotrichia querula</i>) | Yes | Wintering |
| Hudsonian Godwit (<i>Limosa haemastica</i>) | Yes | Migrating |
| Le Conte's Sparrow (<i>Ammodramus leconteii</i>) | Yes | Wintering |
| Least Bittern (<i>Ixobrychus exilis</i>) | Yes | Breeding |
| Little Blue Heron (<i>Egretta caerulea</i>) | Yes | Breeding |
| Loggerhead Shrike (<i>Lanius ludovicianus</i>) | Yes | Year-round |
| Mississippi Kite (<i>Ictinia mississippiensis</i>) | Yes | Breeding |
| Orchard Oriole (<i>Icterus spurius</i>) | Yes | Breeding |
| Painted Bunting (<i>Passerina ciris</i>) | Yes | Breeding |
| Prothonotary Warbler | Yes | Breeding |



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

| | | |
|--|-----|------------|
| <i>(Protonotaria citrea)</i> | | |
| Red-headed Woodpecker <i>(Melanerpes erythrocephalus)</i> | Yes | Year-round |
| Rusty Blackbird <i>(Euphagus carolinus)</i> | Yes | Wintering |
| Scissor-tailed Flycatcher <i>(Tyrannus forficatus)</i> | Yes | Breeding |
| Short-eared Owl <i>(Asio flammeus)</i> | Yes | Wintering |
| Sprague's Pipit <i>(Anthus spragueii)</i> | Yes | Wintering |



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

Appendix C: NWI Wetlands

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

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 and/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.

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.

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



United States Department of Interior
Fish and Wildlife Service

Project name: Durant Airport EA

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.

The following NWI Wetland types intersect your project area in one or more locations. To understand the NWI Classification Code, see <http://wetlandsfws.usgs.gov/Data/interpreters/wetlands.aspx>.

| Wetland Types | NWI Classification Code | Total Acres |
|-----------------|-------------------------|-------------|
| Freshwater Pond | PUBHh | 1.9 |
| Freshwater Pond | PUBHx | 12.8 |

Appendix D
Agency Coordination

This page left intentionally blank.

NOTE:

The following page contains a chart that lists all of the agencies that were sent a solicitation letter for comment on this EA. The page after the chart contains an example of the solicitation letter that was sent to all of the agencies. All of the agencies were sent the same letter with the exception of USFWS. The next page is the USFWS solicitation letter that was referenced in the EA on page 5 - 3. Finally, a copy of all the response letters we received from the agencies that are summarized in the chart are included at the end of this Appendix.

| DUA R/W EXT EA - Agency Solicitation List | | | | | | | |
|--|----------------|------------------------------|---|-------------------------------|------------------------------------|----------------------------------|-----------------|
| Agency Solicited | Submittal Date | Actual Response Receipt Date | Progress/Issues | Additional Response Required? | Additional Response Submittal Date | Additional Response Receipt Date | Progress/Issues |
| Choctaw Nation | 13-Nov-15 | 15-Jan-16 | The Tribal Historic Preservation Officer, Dr. Ian Thompson, agreed that the work should proceed as planned. Dr. Thompson did request, however, that if any Native American cultural materials or remains are encountered that the work should halt and the Tribe be immediately notified. | No | | | |
| Bryan County Commissioner | 13-Nov-15 | | No response | | | | |
| Oklahoma Aeronautics Commission | 13-Nov-15 | | No response | | | | |
| Natural Resources Conservation Service | 13-Nov-15 | 17-Nov-15 | Requested more information and to have a Form AD 1006 filled out and submitted. | Yes | 11/19/2015 | | |
| Bureau of Indian Affairs | 13-Nov-15 | 23-Nov-15 | Requested letters be sent to two recognized tribes: Dr. Andrea Hunter- Osage Nation, Chief Gary Batton - Choctaw Nation | Yes | 11/23/2015 | | |
| U.S. Corps of Engineers - Tulsa | 13-Nov-15 | 25-Mar-16 | Project not subject to regulation pursuant to Section 404 of the CWA | | | | |
| Durant I.S.D. | 13-Nov-15 | | No response | | | | |
| Central Oklahoma Economic Development | 13-Nov-15 | | No response | | | | |
| Oklahoma Department of Transportation | 13-Nov-15 | | No response | | | | |
| Oklahoma Geological Survey | 13-Nov-15 | | No response | | | | |
| Oklahoma Corporation Commission | 13-Nov-15 | | No response | | | | |
| Oklahoma Water Resources Board | 13-Nov-15 | | No response | | | | |
| Department of Agriculture | 13-Nov-15 | 23-Nov-15 | USDA filled out an AD-1006 form, finds no adverse environmental impacts | No | | | |
| Department of Wildlife Conservation | 13-Nov-15 | 7-Dec-15 | No state listed species | No | | | |
| Oklahoma Department of Commerce | 13-Nov-15 | | No response | | | | |
| Oklahoma Department of Environmental Quality | 13-Nov-15 | 7-Dec-15 | Project subject to OKR 10 Stormwater Construction Permit. Requires NOI and prior approval from DEQ prior to ground disturbing activity | No | | | |
| Durant Mayor | 13-Nov-15 | | No response | | | | |
| Oklahoma Archeological Survey | 13-Nov-15 | 30-Nov-15 | An archaerological field inspection was considered unnecessary, but should buried archaeological materials become exposed during construction the agency should be contacted immediately. | No | | | |
| USFWS | 13-Nov-15 | | No response | | | | |
| SHPO | 13-Nov-15 | | No response | | | | |
| Scenic Rivers Commission | 13-Nov-15 | 19-Nov-15 | No Comment | No | | | |
| Bryan Conservation District | 13-Nov-15 | | No response | | | | |
| USEPA Region 6 | 13-Nov-15 | | No response | | | | |
| Senator Josh Brecheen | 13-Nov-15 | | No response | | | | |
| Representative Dustin Roberts | 13-Nov-15 | | No response | | | | |

| Agency Solicited | Submittal Date | Actual Response Receipt Date | Progress/Issues | Additional Response Required? | Additional Response Submittal Date | Additional Response Receipt Date | Progress/Issues |
|--|----------------|------------------------------|--------------------|-------------------------------|------------------------------------|----------------------------------|-----------------|
| <i>U.S. Representative Markwayne Mullins</i> | 13-Nov-15 | | <i>No response</i> | | | | |
| <i>U.S. Senator Jim Inhofe</i> | 13-Nov-15 | | <i>No response</i> | | | | |
| <i>U.S. Senator James Lankford</i> | 13-Nov-15 | | <i>No response</i> | | | | |
| <i>City of Durant</i> | 13-Nov-15 | | <i>No response</i> | | | | |
| <i>Town of Calera</i> | 13-Nov-15 | | <i>No response</i> | | | | |
| <i>Mike Hearon - Mayor of Calera</i> | 13-Nov-15 | | <i>No response</i> | | | | |
| <i>Chief Gary Batton - Choctaw Nation</i> | 23-Nov-15 | | <i>No response</i> | | | | |
| <i>Dr. Andrea Hunter - Osage Nation</i> | 23-Nov-15 | | <i>No response</i> | | | | |
| <i>Chicksaw Nation THPO - Karen Brunso</i> | 12-May-16 | | <i>No response</i> | | | | |
| <i>Chicksaw Nation - Governor Bill Anoatubby</i> | 12-May-16 | | <i>No response</i> | | | | |
| <i>Choctaw Nation of Oklahoma THPO - Daniel Ragle</i> | 12-May-16 | | <i>No response</i> | | | | |
| <i>Choctaw Nation of Oklahoma - Chief Gary Batton</i> | 12-May-16 | | <i>No response</i> | | | | |
| <i>Oklahoma State Historic Preservation Office - Melvena Hesch</i> | 12-May-16 | | <i>No response</i> | | | | |

revised May 26, 2016



THE CITY OF DURANT

Office of Technical Projects

November 16, 2015

Mr. Nick Cody
Choctaw Nation
P.O. Box 1210
Durant, OK 74702-1210

**Subject: Proposed Runway Extension and Land Acquisition
Draft Environmental Assessment
Durant Regional Airport
Durant, Oklahoma**

Dear Mr. Cody,

The City of Durant, with funding from the Federal Aviation Administration (FAA), is proposing to extend the airport runway 1,800 feet (to a total of 6,800 feet) at the Durant Regional Airport (DUA) in Durant, Oklahoma. Also being proposed is the acquisition of an approximate 46-acre parcel of land for a Runway Protection Zone (RPZ). Per the Council on Environmental Quality (CEQ) regulations for implementing provisions of the National Environmental Policy Act of 1969 (NEPA) and FAA Order 1050.1F, the City of Durant is soliciting comments as we prepare a draft Environmental Assessment (EA) on the proposed project. The locations of the proposed runway extension and 46-acre land acquisition are referenced on the attached Area Map and Programming Sketch.

This runway extension will take place on existing DUA property.

We would greatly appreciate any information or comments that should be considered as a part of the EA process. The information you provide will assist the FAA in determining the anticipated environmental impacts and appropriate environmental analysis required during project development. To allow adequate time for evaluation of your input and comments on the project, we would appreciate receiving your comments by December 16, 2015. Your written comments should be directed to Blackshare Environmental Solutions, Attention: Mr. Derek Blackshare, 5121 S. Wheeling Avenue, Tulsa, OK 74105.

We sincerely appreciate your input in this matter. For further information, or if you have any questions, please contact Mr. Derek Blackshare at Blackshare Environmental Solutions (918-388-0970 or dblackshare@blackshare-env.com).

Sincerely,

City of Durant

Jerry Yandell
Director of Technical Projects

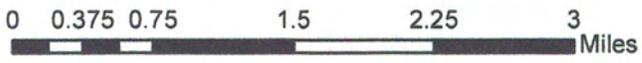


APPROXIMATE PROJECT AREA

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community, Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



BRYAN COUNTY, OKLAHOMA



AREA MAP
CITY OF DURANT
APPROXIMATE PROJECT AREA

PROJ: 3261-15 DATE: 10-30-15 BY: ALH

LAST SAVED: 10/20/2015 10:26 AM THIS SHEET PLOTTED: 10/20/2015 11:01 AM



- 1 EXTEND RUNWAY 17-35 1,800 FEET TO 6,800 FEET TOTAL RUNWAY LENGTH
- 2 ACQUIRE AIRPORT PROPERTY (46± Ac)



RUNWAY EXTENSION PROGRAMMING SKETCH



LBR Inc. Airport Consultants
 1802 West Wright Drive Stillwater, Oklahoma 74075
 Tel 405-377-8276 Fax 405-377-3297 WWW.LBROK.COM

DURANT REGIONAL AIRPORT - EAKER FIELD
 Durant, Oklahoma

RUNWAY EXTENSION PROGRAMMING SKETCH
 Scale 1" = 1,200'
 Date October 20, 2015

z:\durant - eaker field airport - dua\airport layout drawing\2015 - as built_lbr\2015 dua as-built_olp.dwg



THE CITY OF DURANT

Office of Technical Projects

November 16, 2015

United States Fish and Wildlife Service
9014 E. 21st St.
Tulsa, OK 74129

**Subject: Proposed Runway Extension and Land Acquisition
Draft Environmental Assessment
Durant Regional Airport
Durant, Oklahoma**

To Whom It May Concern:

The City of Durant, with funding from the Federal Aviation Administration (FAA), is proposing to extend the airport runway 1,800 feet (to a total of 6,800 feet) at the Durant Regional Airport (DUA) in Durant, Oklahoma. Also being proposed is the acquisition of an approximate 46-acre parcel of land for a Runway Protection Zone (RPZ). Per the Council on Environmental Quality (CEQ) regulations for implementing provisions of the National Environmental Policy Act of 1969 (NEPA) and FAA Order 1050.1F, the City of Durant is soliciting comments as we prepare a draft Environmental Assessment (EA) on the proposed project. The locations of the proposed runway extension and 46-acre land acquisition are referenced on the attached Area Map and Programming Sketch.

This runway extension will take place on existing DUA property.

According to the United States Fish and Wildlife Service's (USFWS) Information Planning and Conservation (IPaC) website, this project will take place within the suitable habitat range for the Least Tern, Piping Plover, Red Knot, Whooping Crane and American Burying Beetle (ABB). The project location does not contain open water or suitable stopover habitat for any of the listed bird species. However, in regard to ABB habitat and the potential for species presence, we propose to conduct surveys during the "second ABB survey period" of 2016 (between July 29th and the end of survey season in September 2016) as this project is estimated to begin construction (land clearing and grading) around October 2016. If a positive trap is found during presence/absence surveys, we will initiate formal consultation with the USFWS. If the survey is concluded with negative results, we will complete the EA with the **no effect** determination.

We would greatly appreciate any information or comments that should be considered as a part of the EA process. The information you provide will assist the FAA in determining the anticipated environmental impacts and appropriate environmental analysis required during project development. To allow adequate time for evaluation of your input and comments on the project, we would appreciate receiving your comments by December 17, 2015. Your written comments should be directed to Blackshare Environmental Solutions, Attention: Mr. Derek Blackshare, 5121 S. Wheeling Avenue, Tulsa, OK 74105.

United States Fish and Wildlife Service
November 16, 2015
Page 2 of 2

We sincerely appreciate your input in this matter. For further information, or if you have any questions, please contact Mr. Derek Blackshare at Blackshare Environmental Solutions (918-388-0970 or dblackshare@blackshare-env.com).

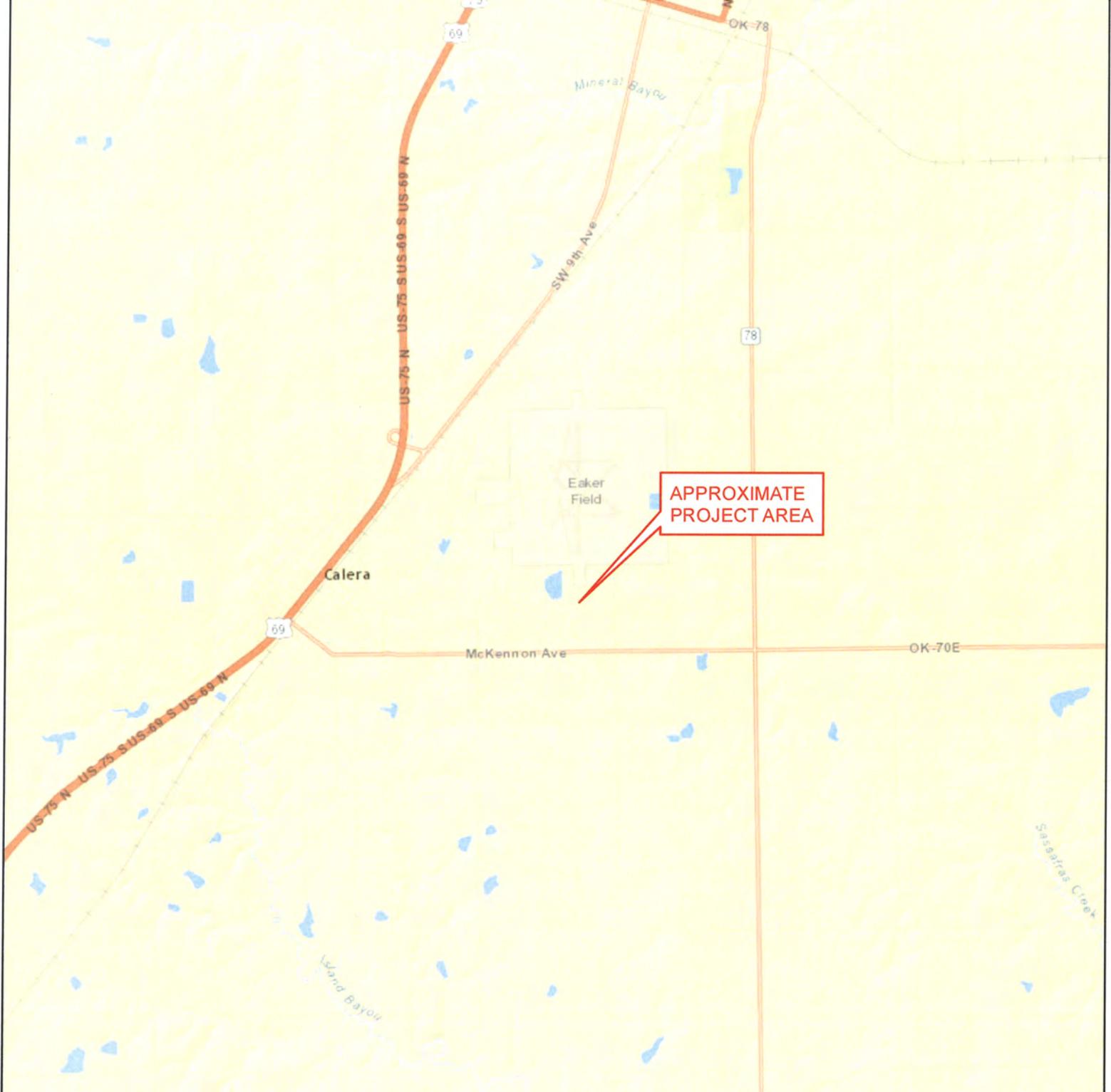
Sincerely,

City of Durant

A handwritten signature in black ink, appearing to read "Jerry Yandell", written in a cursive style.

Jerry Yandell
Director of Technical Projects

Enclosures: Area Map and Programming Sketch

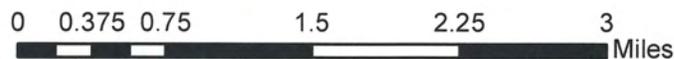


**APPROXIMATE
PROJECT AREA**

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community, Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



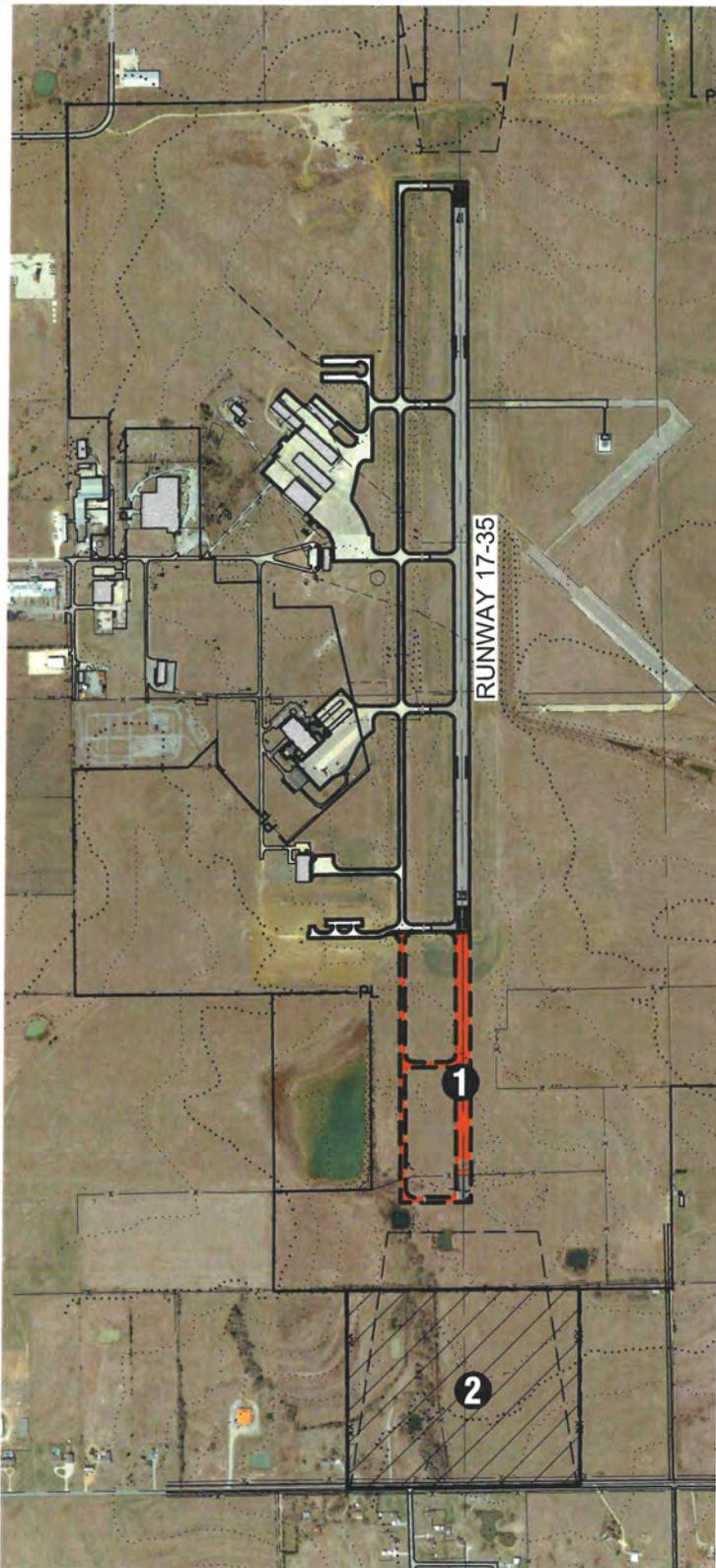
BRYAN COUNTY, OKLAHOMA



**AREA MAP
CITY OF DURANT
APPROXIMATE PROJECT
AREA**

PROJ: 3261-15 DATE: 10-30-15 BY: ALH

LAST SAVED: 10/20/2015 10:26 AM THIS SHEET PLOTTED: 10/20/2015 11:01 AM



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DURANT REGIONAL AIRPORT - EAKER FIELD

Durant, Oklahoma

RUNWAY EXTENSION PROGRAMMING SKETCH

Scale 1" = 1,200'
 Date October 20, 2015

z:\durant - eaker field airport - dua\airport layout drawing\2015 - as built lbr\2015 dua os-built alp.dwg



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Eastern Oklahoma Region
Eastern Oklahoma Regional Office

P.O. Box 8002
Muskogee, OK 74402-8002



NOV 17 2015

Division of Environmental and
Cultural Resources Management

Mr. Derek Blackshare
Blackshare Environmental Solutions
5121 S Wheeling Avenue
Tulsa, OK 74105

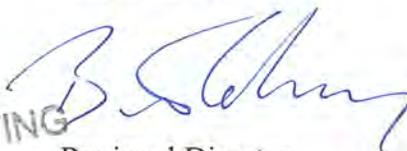
Dear Mr. Blackshare:

On November 16, 2015, the Bureau of Indian Affairs, Eastern Oklahoma Regional Office, received a request for comments from Blackshare Environmental Solutions, concerning a proposed runway extension and land acquisition for the city of Durant. The proposed project consists of extending the airport runway at Durant Regional Airport and acquisitioning approximately 46 acres for a runway protection zone. The project area is located in Bryan County, Oklahoma. This office has no comments regarding the project.

Two Federally recognized Tribes have been provided the notice by copy of this letter. As the Tribes may have environmental and/or cultural resources concerns relating to this action, it is recommended that Blackshare Environmental Solutions coordinate directly with the Tribes on any of their concerns. The contact addresses are enclosed.

If additional information is required, please contact Ms. Jeannine Hale, Division Chief, Division of Environmental, Safety and Cultural Resources Management, at (918) 781-4660.

Respectfully,


ACTING
Regional Director

Enclosure

Gary Batton
Chief, Choctaw Nation
P.O. Box 1210
Durant, OK 74702-1210
Phone: (580) 924-8280
Fax: (580) 924-1150

Doctor Andrea Hunter
Tribal Historic Preservation Officer,
Osage Nation
627 Grandview Avenue
Pawhuska, OK 74056
Phone: (918) 287-5432
Fax: (918) 287-5562



Choctaw Nation of Oklahoma

Historic Preservation

P.O. Box 1210 • Durant, OK 74702-1210

Gary Batton
Chief

Jack Austin, Jr.
Assistant Chief

January 15, 2016

Stewart Hoffman, Mayor
City of Durant
300 W Evergreen St
Durant, OK 74701-4742

RE: Proposed Runway Extension and Land Acquisition; Durant Regional Airport, Durant, OK.

Mr. Mayor,

The Choctaw Nation of Oklahoma thanks you for the correspondence regarding the above referenced project. Bryan County, Oklahoma lies within the Choctaw Nation of Oklahoma's area of historic interest. The Choctaw Nation of Oklahoma would concur that there should be no historic properties affected and that work should proceed as planned. However, as the project lies in an area that is of general historic interest to the Tribe, we request that work be stopped and our office contacted immediately if any Native American cultural materials or remains are encountered. If you have any questions, please contact me by email.

Sincerely,

Dr. Ian Thompson, Ph.D., RPA
Tribal Historic Preservation Officer
Tribal Archaeologist, NAGPRA Specialist

By: 

Daniel Ragle
NHPA Section 106 Reviewer
dragle@choctawnation.com
Choctaw Nation of Oklahoma
P.O. Drawer 1210
Durant, OK 74701



United States Department of Agriculture

Natural Resources Conservation Service, 20118 S. Indian Meridian Pauls Valley, OK 73075

405-238-6767

November 20, 2015

Blackshare Environmental Solutions
Derek Blackshare
5121 S. Wheeling Ave.
Tulsa, Oklahoma 74105

RE: Runway Expansion, Durant, Bryan County, Oklahoma.

Dear Mr. Blackshare:

In accordance with your request for environmental information on farmland soils we have completed and enclosed an AD-1006 (Farmland Conversion Impact Rating).

We see no adverse environmental impacts from this project. If you have any questions or need additional information, please do not hesitate contacting our office.

Sincerely,

A handwritten signature in black ink that reads "Carl Woods". The signature is written in a cursive style with a long horizontal stroke extending to the right.

Carl Woods
Resource Soil Scientist
Pauls Valley Technical Service Office
Pauls Valley, OK 73075
405-238-6767 x128

FARMLAND CONVERSION IMPACT RATING

| | | | | | |
|--|---|---|-----------------------------|---------------------------------|---------------------------------|
| PART I (To be completed by Federal Agency) | | Date Of Land Evaluation Request November 20, 2015 | | | |
| Name of Project DUA Runway Extension | | Federal Agency Involved FAA | | | |
| Proposed Land Use Runway Extension and RPZ | | County and State Bryan, Oklahoma | | | |
| PART II (To be completed by NRCS) | | Date Request Received By NRCS | | Person Completing Form: | |
| Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form) | | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | Acres Irrigated 9,492 | Average Farm Size 288 |
| Major Crop(s) Wheat | Farmable Land In Govt. Jurisdiction Acres: 485937% 80.6 | Amount of Farmland As Defined in FPPA Acres: 392,554% 65.1 | | | |
| Name of Land Evaluation System Used CALES | Name of State or Local Site Assessment System None | Date Land Evaluation Returned by NRCS 11/20/2015 | | | |
| PART III (To be completed by Federal Agency) | | Alternative Site Rating | | | |
| | | Site A | Site B | Site C | Site D |
| A. Total Acres To Be Converted Directly | +/- 6 acres | | | | |
| B. Total Acres To Be Converted Indirectly | +/- 46 acres | | | | |
| C. Total Acres In Site | +/- 52 acres | | | | |
| PART IV (To be completed by NRCS) Land Evaluation Information | | | | | |
| A. Total Acres Prime And Unique Farmland | | 49.1 | | | |
| B. Total Acres Statewide Important or Local Important Farmland | | 0.0 | | | |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted | | 0.001 | | | |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value | | 33.6 | | | |
| PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points) | | 80 | | | |
| PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106) | | Maximum Points | Site A | Site B | Site C |
| 1. Area In Non-urban Use | | (15) | | | |
| 2. Perimeter In Non-urban Use | | (10) | | | |
| 3. Percent Of Site Being Farmed | | (20) | | | |
| 4. Protection Provided By State and Local Government | | (20) | | | |
| 5. Distance From Urban Built-up Area | | (15) | | | |
| 6. Distance To Urban Support Services | | (15) | | | |
| 7. Size Of Present Farm Unit Compared To Average | | (10) | | | |
| 8. Creation Of Non-farmable Farmland | | (10) | | | |
| 9. Availability Of Farm Support Services | | (5) | | | |
| 10. On-Farm Investments | | (20) | | | |
| 11. Effects Of Conversion On Farm Support Services | | (10) | | | |
| 12. Compatibility With Existing Agricultural Use | | (10) | | | |
| TOTAL SITE ASSESSMENT POINTS | | 160 | 0 | 0 | 0 |
| PART VII (To be completed by Federal Agency) | | | | | |
| Relative Value Of Farmland (From Part V) | | 100 | 80 | 0 | 0 |
| Total Site Assessment (From Part VI above or local site assessment) | | 160 | 0 | 0 | 0 |
| TOTAL POINTS (Total of above 2 lines) | | 260 | 80 | 0 | 0 |
| Site Selected: | Date Of Selection | Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/> | | | |
| Reason For Selection: | | | | | |
| Name of Federal agency representative completing this form: | | | | | Date: |

(See Instructions on reverse side)

Form AD-1006 (03-02)

WILDLIFE CONSERVATION COMMISSION

| | |
|------------------------------------|-------------------------------|
| John P. Zelbst CHAIRMAN | Mike Bloodworth MEMBER |
| John D. Groendyke VICE CHAIRMAN | Leigh Gaddis MEMBER |
| Danny Robbins SECRETARY | Robert S. Hughes II MEMBER |
| Ed Abel MEMBER | Bruce Mabrey MEMBER |



MARY FALLIN, GOVERNOR
RICHARD T. HATCHER, DIRECTOR
wildlifedepartment.com

DEPARTMENT OF WILDLIFE CONSERVATION

P.O. Box 53465 Oklahoma City, OK 73152 PH. (405) 521-3851
December 2, 2015

Derek Blackshare
Blackshare Environmental Solutions
5121 S. Wheeling Avenue
Tulsa, OK 74105

Re: Proposed runway extension and land acquisition at Durant Regional Airport, Durant Oklahoma

Dear Mr. Blackshare,

This letter is written in response to your request for information regarding the presence of threatened or endangered species and other potential effects on fish and wildlife for the proposed Durant Regional Airport improvement project. Based upon the project description and location there are no state listed species of concern that are found within the project area. I have attached a recommendation sheet for construction projects with ways to minimize impacts to natural resources.

Please understand that due to time and a personnel constraint, the Oklahoma Department of Wildlife Conservation has not performed an actual field survey of this specific project area; therefore, we can provide only limited site-specific information. The information sent to this office regarding the proposed project has been reviewed and compared against our current records for endangered and threatened species. Based on this review, we do not have any records for state listed species in the immediate vicinity of this project area. I will make note that there is a difference between STATE and FEDERALLY listed species. The Oklahoma Department of Wildlife Conservation only oversees STATE listed species, whereas the U.S. Fish and Wildlife Service oversee FEDERALLY listed species. The Oklahoma Department of Wildlife Conservation is not the U.S. Fish and Wildlife Service and we have no authority over federal listed threatened or endangered species. For this reason, if you are concerned about species of federal interest, we urge you to consult with the Tulsa Ecological Service Office of the U.S. Fish and Wildlife Service (918-581-7458), as they may have additional information of which we are unaware.

-I applied the U.S. Fish and Wildlife Service online ECOS IPaC tool to the projected area. The result showed that there could be potential for five (5) species of federal interest; Interior Least Tern, American Burying Beetle, Piping Plover, Whooping Crane, and Red Knot. I highly urge you to contact the Tulsa Ecological Service Office for further information regarding these species listed.

We appreciate the opportunity to review this project and submit comments. If you have any questions or if I can be of any assistance, please contact me at either (405)325-7288 or clayton.porter@odwc.ok.gov

Sincerely,

Clayton Porter
500 E. Constellation
Norman, OK 73072

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION FACT SHEET CONCERNING CONSTRUCTION ACTIVITIES

As a result of construction activities, sediment erosion and runoff can have significant ramifications on the local fish and wildlife populations. The best approach in preventing such impacts is to use Best Management Practices (BMP) throughout the project. Best Management Practices are methods used to minimize or prevent pollution and its resulting derogatory effects on habitat or wildlife. We would like to make the following recommendations to reduce construction impacts on local wildlife populations. You may also contact your County Conservation District for guidelines pertaining to urban erosion prevention during construction. An additional source for BMPs is the Natural Resources Conservation Service website at <http://www.nrcs.usda.gov/technical/references/>

- Construction activities should be located in such a manner as to avoid disturbance to streams, wetlands and their associated riparian habitats. They should also accommodate the natural drainage patterns and anticipated runoff volumes at the site.
- A construction storm water permit must be obtained from the Oklahoma Department of Environmental Quality before any large-scale construction activities begin (Storm Water General Construction Permit). As part of this permit, a pollution prevention plan must be prepared and maintained on site that includes the following sections:

Part IV.D.2.a.(1) - Sediment must be retained on site to the greatest extent practicable using structural Best Management Practices (e.g. silt fencing, erosion control fabric)

Part IV.D.2.a.(2) - Vegetated buffer zones should be maintained along all perennial to ephemeral drainages

Part IV.D.2.a.(3) - Structural Best Management Practices must be used to divert uphill storm water away from construction areas.

Part IV.D.2.b. - Velocity dissipation devices should be used at all discharge locations

- Following construction, disturbed ground should be re-planted to native grasses and forbs where feasible.

Last updated 4/14/06

Recommendations for the Revegetation of Land to Native Grasses in Eastern Oklahoma

A mixture of perennial grasses and forbs is recommended for revegetating disturbed areas to native grassland. The ratio of grasses to forbs can be varied, but should approximate 70% grass species to 30% perennial forbs. At a minimum, the forb mixture should contain several species of legumes (clovers and their relatives) and composites (sunflowers and their relatives). Seeds should be planted in a tilled seed bed or broadcast over and raked lightly into moist soil. Consult your seed distributor for the recommended amount of seed per acre for your planting area. The use of a culti-packer or other roller device on the seedbed after planting is beneficial for successful seedling establishment. For the best germination results, planting should be conducted shortly after a rainfall event of one-inch or more in spring, early summer or mid-fall. A light straw mulch is beneficial for retaining soil moisture and protecting seedlings from wind exposure. The plant list below is comprised primarily of perennial species adapted to the rainfall patterns and soil conditions of eastern Oklahoma. If soil disturbance occurs the winter or summer months, mulch or erosion control fabric should be applied over the area until planting can take place (after early March or mid-September).

Recommended Plant Species:

Grasses

Switchgrass (Panicum virgatum)
Indian Grass (Sorghastrum nutans)
Eastern Gammagrass (Tripsicum dactyloides)
Reed Canary Grass (Phalaris arundinacea)
Big Bluestem (Andropogon gerardi)
Little Bluestem (Schizachyrium scoparium)

Forbs & Legumes

Purple Prairie Clover (Dalea purpurea)
Leadplant (Amorpha canescens)
Illinois Bundleflower (Desmanthus illinoensis)
Birdsfoot Trefoil (Lotus corniculatus)
Yellow Sweet Clover (Melilotus officinalis)
Prairie Plum (Astragalus crassicarpus)
Blue Indigo (Baptisia australis)
White Indigo (Baptisia leucantha)
Sensitive Briar (Schrankia uncinata)
Partridge Pea (Cassia fasciculata)
Roundhead Bush Clover (Lespedeza capitata)
Slender Lespedeza (Lespedeza virginica)

Composites

Smooth Blue Aster (*Aster laevis*)
New England Aster (*Aster novae-angliae*)
Purple Coneflower (*Echinacea purpurea*)
Pale Purple Coneflower (*Echinacea pallida*)
Dotted Blazing Star (*Liatris punctata*)
Largeflowered Coreopsis (*Coreopsis grandiflora*)
Lanceleaf Coreopsis (*Coreopsis lanceolata*)
Tall Coreopsis (*Coreopsis tripteris*)
Plains Coreopsis (*Coreopsis tinctoria*)
Maximilian Sunflower (*Helianthus maximiliani*)
Swamp Sunflower (*Helianthus angustifolia*)
Ashy Sunflower (*Helianthus mollis*)
Stiff Sunflower (*Helianthus rigidus*)
Willow-leaf Sunflower (*Helianthus salicifolius*)
Ox-eye Sunflower (*Heliopsis helianthoides*)
Gray-headed Prairie Coneflower (*Rudbeckia pinnata*)
Perennial Blanketflower (*Gaillardia aristata*)
Compass Plant (*Silphium laciniatum*)
Rosinweed (*Silphium integrifolium*)
Stiff Goldenrod (*Solidago rigida*)
Showy Goldenrod (*Solidago speciosa*)
Wrinkle-leaf Goldenrod (*Solidago rugosa*)

Misc.

Standing Cypress (*Ipomopsis rubra*)
Lemon Mint (*Monarda citriodora*)
Pitcher Sage (*Salvia pitcheri*)
Showy Milkweed (*Asclepias speciosa*)
Butterfly Milkweed (*A. tuberosa*)
Purple Poppy Mallow (*Callirhoe involucrata*)
Wild Bergamont (*Monarda fistulosa*)
Beardtongue (*Penstemon cobeia*)
Prairie Penstemon (*Penstemon tubaeflorus*)
White Penstemon (*Penstemon digitalis*)
Large-flowering Penstemon (*Penstemon grandiflorus*)
Rose Verbena (*Verbena canadensis*)
Hoary Vervain (*Verbena stricta*)

Several shrub species are suitable for planting over pipelines. The species listed below typically remain under three feet in height and do not produce root masses that are difficult to remove if line repairs become necessary. Planting scattered clumps of small shrubs provides additional wildlife cover and provides nesting sites for many species of birds.

Recommended Shrubs

Fragrant Sumac (Rhus aromatica)
American Beautyberry (Callicarpa americana)
Golden Current (Ribes aureum)
Blackberry species (Rubus sp.)

For grass and forb seeds, plants, etc., contact a local commercial nursery or vendor. If they cannot provide the necessary species, Please contact the sources below.

Oklahoma

Grasslander
Chuck Grimes
Rt. 1, Box 56
Hennessey, OK 73742
(405) 853-2607

Jonhston Seed Company
Ed Shovanec
P.O. Box 1392
Enid, OK 73702
(405) 233-5800

Guy's Seed Company
Rodney Guy
2520 Main Street
Woodward, OK 73801
(405) 254-2926

Lorenz OK Seed
Fred Lorenz
Rt. 2, Box 3
Okeene, OK 73763
1-800-826-3655

Out of State

Wild Flowers from the Ozarks
Hi-Mountain Farm
Seligman, MO 65745
(417) 662-2641

Browning Seed, Inc.
Box 1836
Plainview, TX 79072
(806) 293-5271

Plants of the Southwest
1812 Second Street
Sante Fe, NM 87501
(505) 983-1548

Turner Seed Co.
211 CR 151
Breckenridge, TX 76424-0978
1-800-722-8616

Sharp Bros. Seed Co.
P.O. Box 665
Clinton, MO 64735
1-800-451-3779

Stock Seed Farms, Inc.
RR 1, Box 112
Murdock, NE 68407
(402) 867-3771

Missouri Wildflower Nursery

Wildseed Farms

Route 2, Box 373
Jefferson City, MO 65109
(314) 496-3492

Wildlife Nurseries, Inc.
P.O. Box 2724
Oshkosh, Wisconsin 54903-2734
Specializes in wetland plants

Taylor Creek Restoration Nursery
Rt. 3, Smith Road
P.O. Box 256
Broadhead, WI 53520
(608) 897-8641

Western Native Seed
P.O. Box 1463-C
Salida, CO 81201
(719) 539-1071

P.O. Box 308
Eagle Lake, TX 77434
1-800-848-0078

Grassland West
P.O. Box 1604
Greeley, CO 80632
1-800-782-5947

Ion Exchange Nursery
1878 Old Mission Drive
Harpers Ferry, IA 52146
1-800-291-2143

Prairie Moon Nursery
Rt. 3, Box 163
Winona, MN 55987
(507) 452-1362



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

March 25, 2016

Regulatory Office

Mr. Jerry Yandell
The City of Durant
300 West Evergreen
Durant, OK 74701

Dear Mr. Yandell:

Please reference your correspondence dated November 13, 2015, for the Durant Regional Airport runway extension and land acquisition. The project is located in Section 30, Township 7 South, Range 9 East, Bryan County, Oklahoma. We have reviewed the submitted data relative to Section 404 of the Clean Water Act (CWA).

We have examined the property and an unnamed tributary to Caney Creek is within the review area, which is a waters of the United States subject to Section 404 of the CWA. Based on your project description there is no planned placement of fill material within the identified stream, therefore, your proposal is not subject to regulation pursuant to Section 404 of the CWA, and a Department of the Army (DA) permit will not be required.

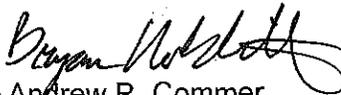
Should your method of construction necessitate such a discharge into an aquatic area or tributary stream, we suggest that you resubmit that portion of your project so that we may determine whether an individual DA permit will be required. Although Section 404 of the CWA authorization is not required, this does not preclude the possibility that a real estate interest or other Federal, State, or local permits may be required.

This determination is based on a Preliminary Jurisdictional Determination (PJD). The unnamed tributary to Caney Creek is a tributary to the Red River, a traditionally navigable water. We believe this determination to be a reasonable assessment of the presence of jurisdictional waters, including wetlands, on the site subject to Section 404 of the CWA. However, this is only a PJD, and as such, is not a definitive description of on-site wetlands or Corps jurisdiction over the area. Upon receipt of this letter please review, sign, and return to this office the enclosed PJD form.

If you desire to complete a "Customer Service Survey" on your experience with the Corps Regulatory Program, you are invited to visit <http://per2.nwp.usace.army.mil/survey.html> on the internet at your convenience and submit your comments.

This case has been assigned Identification No. SWT-2016-44. Please refer to this number during any future correspondence. If you have any questions, please contact Mr. Bryan Noblitt at 918-669-4904.

Sincerely,


for Andrew R. Commer
Chief, Regulatory Office

Enclosures

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): March 25, 2016

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Mr. Jerry Yandell
The City of Durant
300 West Evergreen
Durant, OK 74701

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: SWT-2016-44.

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: (USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: Oklahoma County/Parish/Borough: Bryan County City: Durant

Center coordinates of site (lat/long in degree decimal format):

Lat. 33.9302 N; Long. -96.3953 W

Universal Transverse Mercator:

Name of nearest waterbody: Caney Creek

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 1500 linear feet; width (ft) and/or acres.

Cowardin Class: Riverine

Stream Flow: Intermittent

Wetlands: 0 acres.

Cowardin Class:

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal:

Non-Tidal:

E. REVIEW PERFORMED FOR SITE EVALUATION (Check all that apply):

Office (Desk) Determination. Date: 25 March 2016

Field Determination. Date(s):

1 The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2 In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following:

(1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters;

(2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions;

(3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization;

(4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary;

(5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable;

(6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and

(7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply -checked items should be included in case file and where checked and requested , appropriately reference sources below):

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

Data sheets prepared/submitted by or on behalf of the applicant/consultant.

Office concurs with data sheets/delineation report.

Office does not concur with data sheets/delineation report.

Data sheets prepared by the Corps:

Corps navigable waters' study:

U.S. Geological Survey Hydrologic Atlas: ORM Data

USGS NHD data.

USGS 8 and 12 digit HUC maps.

U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 Durant S, OK.

USDA Natural Resources Conservation Service Soil Survey. Citation: ORM Data

National wetlands inventory map(s). Cite name: Durant S, OK

State/Local wetland inventory map(s):

FEMA/FIRM maps:

100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

Photographs: Aerial (Google Earth, 14-Mar-2014): or Other (Name & Date):

Previous determination(s). File no. and date of response letter:

Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Bryan Noblitt
Regulatory Project Manager
Regulatory Office, 918-669-7400
Tulsa District U.S. Army Corps of Engineers

Requestor Signature

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

| | | | |
|------------------------------|--|--------------------------|-------------------|
| Applicant: Mr. Jerry Yandell | | File Number: SWT-2016-44 | Date 25-MAR-2016 |
| Attached is: | | | See Section below |
| | INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission) | | A |
| | PROFFERED PERMIT (Standard Permit or Letter of Permission) | | B |
| | PERMIT DENIAL | | C |
| | APPROVED JURISDICTIONAL DETERMINATION | | D |
| X | PRELIMINARY JURISDICTIONAL DETERMINATION | | E |

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved jurisdictional determination (JD) or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.



Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

November 30, 2015

Jerry Yandell
City of Durant
300 West Evergreen
Durant, Oklahoma 74701

RE: Proposed Runway Extension and Land Acquisition, Durant Regional Airport. Legal Description: Parts of Section 19 T7S R9E, Bryan County, Oklahoma.

Dear Mr. Yandell:

The Community Assistance Program staff of the Oklahoma Archeological Survey has reviewed the above referenced project in order to identify potential areas that may contain prehistoric or historic archaeological materials (historic properties). The location of your project has been crosschecked with the state site files containing approximately 23,000 archaeological sites that are currently recorded for the State of Oklahoma. No sites are listed as occurring within your project area, and based on the topographic and hydrologic setting, no archaeological materials are likely to be encountered. Thus an archaeological field inspection is not considered necessary. However, should construction activities expose buried archaeological materials such as chipped stone tools, pottery, bone, historic crockery, glass, metal items or building materials, this agency should be contacted immediately at (405) 325-7211. A member of our staff will be sent to evaluate the significance of these remains.

This environmental review and evaluation is performed in order to locate, record, and preserve Oklahoma's prehistoric and historic cultural heritage in cooperation with the state Historic Preservation Office, Oklahoma Historical Society, and you must also have a letter from that office to document your consultant pursuant to Section 106 of the National Historic Preservation Act. In addition to our review comments, under 36CFR Part 800.3 you are reminded of your responsibility to consult with the appropriate Native American tribe/groups to identify any concerns they may have pertaining to this undertaking and potential impacts to properties of traditional and/or ceremonial value.

Sincerely,

J. Matthew Oliver
Staff Archaeologist

Robert L. Brooks
State Archaeologist

:ls

Cc: SHPO





Oklahoma Historical Society

Founded May 27, 1893

State Historic Preservation Office

Oklahoma History Center • 800 Nazih Zuhdi Drive • Oklahoma City, OK 73105-7917
(405) 521-6249 • Fax (405) 522-0816 • www.okhistory.org/shpo/shpom.htm

November 25, 2015

Mr. Jerry Yandell
City of Durant, Office of Technical Projects
300 West Evergreen
Durant, OK 74701

RE: File #0341-16; Durant Regional Airport Runway Extension Project

Dear Mr. Yandell:

We have received and reviewed the documentation concerning the referenced project in Bryan County. The Federal Aviation Administration (FAA) has advised us that requests for review pertaining to the Air Improvement Program (AIP) or other similar FAA programs, must be submitted to our office by FAA, not the applicants or their consultants.

The National Historic Preservation Act (Section 106) and the Advisory Council on Historic Preservation's (ACHP's) regulations (36 CFR Part 800) require that the responsible federal agency (in this case the U.S. Dept. of Transportation, F.A.A.) must consult directly with us. While the majority of projects we review do not involve effects on historic properties, it is extremely important that our formal communication on any federal undertaking be with the responsible entity, as only that entity can conclude the Section 106 process when a federally assisted project does effect historic properties (properties listed on or eligible for the National Register of Historic Places). You may find additional information about the Section 106 process on our website at www.okhistory.org/shpo/section106.htm or on the ACHP's website at www.achp.gov.

In the meantime, we urge you to direct any questions to the attention of Ms. Peg Wade, FAA Environmental Specialist, with the Southwest Regional Office at 817/222-5697, or you can also contact me at 405/521-6381. Please reference the above underlined file number when responding. Thank you.

Sincerely,

Catharine M. Wood
Historical Archaeologist

CMW:jr

CC: Mr. Derek Blackshare