

JONES MEMORIAL AIRPORT

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

PREPARED BY

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IN ASSOCIATION WITH



CEC
infrastructure solutions

Supplement Environmental Assessment

For

Runway Construction

Jones Memorial Airport
Bristow, Oklahoma

Prepared for:

City of Bristow

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Responsible FAA Official

Date

Table on Contents

Contents	iii
Tables	iv
Illustrations	iv
Executive Summary	v
I. Introduction	1
1.1 Airport Background	1
1.2 Project Background	1
1.3 Project Funding	3
II. Purpose and Need	4
2.1 Aviation Activity Forecasts	4
2.2 Airfield Design Standards	5
2.3 Proposed Action	5
2.4 Purpose and Need	5
2.5 Proposed Federal Action	6
III. Alternatives	7
3.1 No Action Alternative	7
3.2 Development Alternatives	7
3.3 Summary of Development Alternatives	9
IV. Affected Environment	13
V. Environmental Consequences	14
5.1 Resources Dismissed from Further Study	14
5.2 Resources Evaluated	14
Appendix	

Tables

Table 2-1, Existing and Forecast Operations	4
Table 2-2, Forecast Operations from the 2007 EA and 2015 Actual Operations	5
Table 5-1, Baseline Emissions (2018) at Jones Memorial Airport (grams/year)	17
Table 5-2, Summary of Project-related Emissions (grams/year)	17
Table 5-3, ESA Listed Species in Creek County	19
Table 5-4, Summary of Project-related Greenhouse Gas Emissions (CO _{2e} metric tons/year)	21

Illustrations

Figure 1-1 Vicinity/Location Map	2
Figure 3-1 Extend Proposed Runway 625 Feet North	10
Figure 3-2 Extend Proposed Runway 625 Feet South	11
Figure 3-3 Extend Proposed Runway 625 Feet, Combination of North and South	12
Figure 5-1 Study Area Map	15
Figure 5-2 Prime Farmlands	23
Figure 5-3 Cultural Resources	27
Figure 5-4 2018 Baseline Noise Contours	30
Figure 5-5 2023 Noise Contours (No Project)	31
Figure 5-6 2018 Noise Contours (With Project)	32
Figure 5-7 2023 Noise Contours (With Project)	33
Figure 5-8 Water Resources	35

Executive Summary

In 2007, the City of Bristow issued an Environmental Assessment (2007 EA) for the construction of a new runway 3,375 feet in length and 60 feet in width, to be located 240 feet east of the existing Runway 18/36 at Jones Memorial Airport. The existing runway would have been converted to a parallel taxiway and connector taxiways would have been constructed. Activities associated with the project would have included tree clearing within the Runway Protection Zones (RPZs), perimeter fencing and gates, narrowing/overlaying/reconstructing existing runway pavement as a partial parallel taxiway, extension of the partial parallel taxiway to full length of runway, installation of taxiway lights, and installation of Precision Approach Path Indicator (PAPI) on both ends of runway. A future 625-foot extension was expected to occur in the future, but was not a part of the original 2007 EA. On August 9, 2007, the Federal Aviation Administration (FAA) issued a Finding of No Significant Impact (FONSI) for the proposed construction of this new single runway.

The City of Bristow initiated the acquisition of the necessary properties to implement the runway construction, the latest of which occurred in 2012. Therefore, continuous progress has occurred to date on the 2007 EA, so that the 2007 EA and FONSI are valid, and the original proposed project can be considered as the baseline condition.

However, since the issuance of the 2007 EA, the aviation demand placed on the Airport has changed substantially to the point that a runway length of 4,000 feet and a width of 75 feet is now a necessity (see Appendix A, FAA Justification Letters). As such, this Draft Supplemental Environmental Assessment (Draft Supplemental EA) is needed to evaluate the potential environmental impacts from a proposed 625-foot extension to the original proposed project, and a runway width increase from 60 to 75 feet. The Proposed Action anticipates constructing the additional 625 feet of runway by extending the north end of Runway 18 by 325 feet and the south end of Runway 36 by 300 feet, however all alternatives were evaluated. The existing runway would still be converted to a parallel taxiway and connector taxiways would be constructed. In addition to the associated activities described for the original project, there would be an installation of a Jet A fuel system.

This Draft Supplemental EA includes: (1) a purpose and need for a longer and wider runway than proposed in the 2007 EA; (2) an alternatives analysis for runway improvements; (3) an analysis on potential environmental effects and potential mitigation measures; and (4) air quality and noise analyses per FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*.

I. INTRODUCTION

The FAA has prepared this Draft Supplemental EA pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA), and in accordance with Title V of Public Law 97-248 of the Airport and Airway Improvement Act of 1982, as amended, as well as the FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, and FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*. It has been prepared in response to substantial changes in demand at the Airport since the 2007 EA was issued and associated changes needed for runway improvements.

1.1 Airport Background

Jones Memorial Airport (Airport) is a general aviation airport located in the City of Bristow within Creek County, Oklahoma. Owned and operated by the City of Bristow, the City Council comprises the ultimate decision making body of the Airport. Additionally, the Jones Memorial Airport Board provides recommendations on airport matters and the Airport Manager oversees operation of the facility on a daily basis.

The Airport consists of one runway (Runway 18/36) that is 3,375 feet long and 50 feet wide. Airport property spans 81 acres and includes the runway, aircraft parking apron and numerous T-hangar facilities (see **Figure 1-1**, *Vicinity/Location Map*).

According to data provided by the Airport, the Airport handles approximately 2,100 operations per year and has 17 based aircraft. All operations, whether local or itinerant, are classified as general aviation. Local businesses such as Platinum Cross Welding, Inc., Oklahoma Tire Recyclers, Vertical Aerospace, Timco, and Consolidated Turbine Specialists use the Airport for aircraft operations and T-hangar facilities.

1.2 Project Background

In 2007, the City of Bristow submitted an Environmental Assessment (2007 EA) pursuant to NEPA (see Appendix B, 2007 EA), and the FAA issued a FONSI for the construction of a new runway at Jones Memorial Airport. The new runway was to be located 240 feet east of the existing runway, with a length of 3,375 feet and 60 feet in width. The existing runway was to be converted to a parallel taxiway and connector taxiways were to be constructed for aircraft access.

At the time, the existing dimensions were consistent with the existing and future aircraft fleet expected to use the Airport. A future 625-foot extension was expected to occur in the future, but it was not included in the original 2007 EA. The City of Bristow initiated the acquisition of the necessary properties to implement



Figure 1-1 Vicinity/Location Map

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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the runway construction, the latest occurring in 2012. Therefore, continuous progress has occurred to date on the 2007 EA, so that the 2007 EA and FONSI are valid, and the original proposed project can be considered the baseline conditions.

However, since the issuance of the FONSI, aviation demand placed on the Airport has increased substantially. According to runway length justification letters (see Appendix A, FAA Justification Letters), aircraft forecast to use the Airport include larger aircraft such as King Airs, Citation Jets, and Embraer Phenoms. A runway length of 4,000 feet is now considered necessary to meet the operational requirements of these aircraft. Most of these aircraft are classified as Runway Design Code (RDC) B-II or greater, which requires a runway width of 75 feet.

Therefore, it has been determined that the proposed runway length of 3,375 feet and width of 60 feet discussed in the 2007 EA does not meet the needs of forecast airport users. In order to provide for safe and efficient operations, the Airport proposes to increase the length of the proposed runway to 4,000 feet and the width to 75 feet to meet design standards for B-II aircraft. This would result in an increase of runway length by 625 feet and runway width by 15 feet beyond the proposed project evaluated in the 2007 EA.

In addition to the proposed extension and width of the new runway, the project would include the installation of a Jet A fuel system. It is anticipated that the new fuel system would be installed approximately 100 feet south of the T-hangar that is south of the existing fuel system.

In light of changes over time in use and demand at the Airport, this Draft Supplemental EA includes analyses of potential environmental effects resulting from a change in the specifications of the runway construction project. FAA has prepared this Draft Supplemental EA to address the following elements:

- (1) A purpose and need for a longer and wider runway than proposed in the 2007 EA;
- (2) An alternatives analysis for runway improvements;
- (3) An analysis on potential environmental effects and potential mitigation measures; and
- (4) Air quality and noise analyses per 1050.1F guidance.

1.3 Project Funding

The FAA is being requested to provide 86.3% of all project costs. The City would be responsible for 9.6% of the project cost and the Oklahoma Aeronautics Commission is responsible for about 4.2% of the project costs. The project may be funded through FAA's Airport Improvement Program (AIP). AIP provides money called non-primary entitlement funds, discretionary funds, and state apportionment funds to airports around the country based on the airport's size and the number of passenger enplanements. The funds, which are provided for the planning and development of public-use airports, are eligible for those airports included in the National Plan of Integrated Airport Systems (NPIAS). See the FAA's AIP Handbook for a more detailed discussion on AIP grants.

II. PURPOSE AND NEED

This section provides existing and forecast conditions for the Airport, identifies the Purpose and Need for the Proposed Action, and describes the Proposed Action and Proposed Federal Action.

2.1 Aviation Activity Forecasts

The aviation activity forecast used in this Draft Supplemental EA was prepared using data provided by the Airport and the FAA Aerospace Forecast. These forecasts were utilized to evaluate the need for the proposed runway improvements, and to evaluate noise and air quality impacts associated with the Proposed Action. Aviation activity forecasts consider the most recent year of complete data available (2015), and then forecasted aviation activity for the expected opening day of the Proposed Action (2018) and five years after implementation (2023) (see **Table 2-1, Existing and Forecast Operations**).

Table 2-1, Existing and Forecast Operations

Aircraft Type	2015	2018	2023
General Aviation	2,000	2,435	2,935
Single Engine	1,400	1,470	1,575
Multi-Engine Piston	100	80	60
Turboprop	300	575	850
Business Jet	0	35	100
Helicopter	200	275	350
Military	100	100	100
Helicopter	100	100	100
Total	2,100	2,535	3,035

Source: Jones Memorial Airport, FAA Aerospace Forecasts

Table 2-2, Forecast Operations from the 2007 EA and 2015 Actual Operations, contrasts the forecast operations identified in the 2007 EA and the actual operations for that year. Forecast demand documented in the 2007 EA called for future operations to grow from 1,000 operations in 2006 to 1,150 in 2016. However, according to the estimates provided for use by the Airport for the Draft Supplemental EA, current operations (2015) at the Airport are 2,100 per year, exceeding the 2007 EA's forecasted demand.

Table 2-2, Forecast Operations from the 2007 EA and 2015 Actual Operations

Aircraft Type	2006 (EA)	2016 (EA)	2015
General Aviation	1,000	1,150	2,000
Single Engine	847	978	1,400
Multi-Engine Piston	95	110	100
Turboprop	58	62	300
Business Jet	---	---	---
Helicopter	---	---	200
Military	---	---	100
Helicopter	---	---	100
Total	1,000	1,150	2,100

Source: 2007 Jones Memorial Airport Environmental Assessment, Jones Memorial Airport

2.2 Airfield Design Standards

In order to determine the appropriate dimensions and facilities for the Airport, it is necessary to identify the type of aircraft that use the Airport. According to runway length justification letters (see Appendix A, FAA Justification Letters), aircraft forecast to use the Airport include King Airs, Citation Jets, and Embraer Phenoms. Most of these aircraft are classified as Runway Design Code (RDC) B-II or greater. The dimensional and performance characteristics of these aircraft are used to determine the appropriate RDC and associated dimensional standards for facilities at the Airport. According to design standards described in AC 150/5300-13A, Change 1, *Airport Design*, an airport should have a runway width of 75 feet to accommodate RDC B-II aircraft types for proper operational functionality. Additionally, according to the runway justification letters provided in Appendix A, a minimum runway length of 4,000 feet is now considered necessary to meet the operational requirements of these aircraft.

2.3 Proposed Action

The Proposed Action is to construct a longer and wider runway than was described in the 2007 EA in order to accommodate existing demand and future growth at the Airport, and to accommodate RDC B-II aircraft. The Proposed Action would entail constructing a new 4,000 foot by 75 foot runway approximately 240 feet east of the existing runway 18/36. Activities associated with the Proposed Action would include tree clearing within the RPZs, perimeter fencing and gates, narrowing/overlaying/reconstructing existing runway pavement as a partial parallel taxiway, extension of the partial parallel taxiway to full length of runway, installation of taxiway lights, and installation of PAPI on both ends of runway. Additionally, a new, Jet A fuel system would be installed and is anticipated to be located approximately 100 feet south of the T-hangar that is south of the existing fuel system.

2.4 Purpose and Need

The purpose of the Proposed Action is to adequately accommodate forecasted growth and to accommodate B-II aircraft by improving airside facilities at Jones Memorial Airport.

The implementation of this Proposed Action will address the following needs:

- Providing adequate runway length of 4,000 feet
- Providing adequate runway width of 75 feet

2.5 Proposed Federal Action

The FAA is the Federal Lead Agency for the proposed project and the City of Bristow is the project sponsor. The Proposed Federal Action is approval of the Proposed Action of a newly constructed 4,000 foot by 75 foot runway at the Airport. As a Federal agency, FAA can neither approve nor fund proposed projects without performing an evaluation of the project's potential impacts on the natural and human environment.

The purpose of this Draft Supplemental EA is to allow FAA to determine whether a significant impact would result from the Proposed Action, which is different from the project description in the 2007 EA. If no significant impact is identified, a Final Supplemental EA will be prepared and FAA will issue an environmental finding. This would either be a FONSI, or, if additional data are required, or if potentially significant impacts are identified during the performance of this Draft Supplemental EA, FAA would issue a Notice of Intent to prepare an Environmental Impact Statement (EIS).

If the FAA deems that environmental impacts are great enough to warrant that an Environmental Impact Statement will be required. A timeline for this path will be drafted at the time of decision.

III. ALTERNATIVES

The identification, consideration, and analysis of alternatives are essential to the NEPA process and the goal of objective decision making. Federal environmental regulations concerning the environmental review process require that all reasonable alternatives that may accomplish the objectives of a proposed project be identified and evaluated.

In accordance with the Council on Environmental Quality (CEQ) regulations and other applicable guidance regarding compliance with NEPA, a range of reasonable alternatives has been identified that may accomplish the objectives of the Proposed Action. The alternatives evaluated include: No Action Alternative, Extend Proposed Runway 625 feet North, Extend Proposed Runway 625 feet South, and Extend Proposed Runway, Combination of North and South.

3.1 No Action Alternative

NEPA requires consideration of a No Action Alternative. The No Action Alternative serves as a reference point of baseline conditions. When compared with another alternative, the No Action Alternative enables the identification of the probable impact of that alternative. The No Action Alternative for this Draft Supplemental EA is the same as previously disclosed in the 2007 EA (new runway 3,375 feet in length and 60 feet in width). Therefore, the No Action Alternative would not meet the project Purpose and Need. However, because the CEQ regulations require consideration of the No Action Alternative as a baseline, it is carried forward for evaluation.

3.2 Development Alternatives

Development alternatives for the Proposed Action were designed to meet the Purpose and Need. To accommodate forecasted growth and safe operations for B-II aircraft, a number of reasonable runway improvement options were considered for accomplishing the objectives of the project. The Proposed Action in the 2007 EA included a new runway 3,375 feet in length and 60 feet in width located approximately 240 feet east of the existing runway at Jones Memorial Airport.

All development alternatives assessed in this Draft Supplemental EA would involve the construction of a new runway 4,000 feet in length and 75 feet in width, located approximately 240 feet east of the existing runway. The existing runway would be converted to a taxiway, new access taxiways between the new runway and parallel taxiway would be constructed, and runway and taxiway lighting for new pavement surfaces would be installed. All development alternatives would include tree clearing, perimeter fencing and gates, narrowing/overlaying/reconstructing existing runway pavement as a partial parallel taxiway, extension of the partial parallel taxiway to full length of runway, installation of taxiway lights, installation of PAPI on both runway ends, and installation of a new Jet A fuel system to be located approximately 100 feet south of the T-hangar that is south of the existing fuel system. Note that all development alternatives would impact a small water body just east of the existing runway. This pond would need to be filled in order to implement any of the development alternatives.

3.2.1 Extend Proposed Runway 625 feet North

This alternative would extend the proposed runway 625 feet north of the previously approved runway (**Figure 3-1, *Extend Proposed Runway 625 feet North***). Extending the runway 625 feet north of the previously approved runway would require the purchase of additional property and aviation easements (beyond what has already been acquired by the Airport) to accommodate the associated Runway Safety Area (RSA), Runway Object Free Area (ROFA), and RPZ. Trees located on either side of the runway within the aviation easement would need to be cleared to eliminate obstructions. Jaycee Road (located just north of the Airport) would either have to be closed or re-routed. While there is currently a segment of a power line just north of the Airport that would result in an obstruction, coordination is ongoing to purchase and mitigate this obstacle. This alternative would place the runway extension within the 100-year floodplain associated with the drainage ditch adjacent Jaycee Road, and would potentially require a 404 permit for impacts to the drainage ditch itself.

Runway improvements associated with this alternative would maintain the 20:1 threshold siting surface Type 4 as identified in Table 3-2 of AC 150/5300-13A, Change 1, *Airport Design*. Additionally, the existing LNAV non-precision instrument approach associated with the existing Runway 18 end would potentially be able to transition to the future Runway 18 end associated with this alternative.

3.2.2 Extend Proposed Runway 625 feet South

This alternative would extend the proposed runway 625 feet south of the previously approved runway (**Figure 3-2, *Extend Proposed Runway 625 feet South***). Extending the runway 625 feet south of the previously approved runway would require no additional land or easements to be purchased by the City. Trees located on either side of the runway within the aviation easement would need to be cleared to eliminate obstructions.

Two wooden H-brace poles for transmission power lines located south of the Airport would result in obstructions. It was determined that the power lines cannot be lowered and the cost to bury a transmission line is not considered feasible in regards to funds allocated to this project. These obstructions would penetrate the 20:1 threshold siting surface Type 4 identified in Table 3-2 of AC 150/5300-13A, Change 1, *Airport Design*. Without burial of the power line, the full 4,000 feet of runway length cannot be provided without a Runway 36 displaced threshold of approximately 500 feet. Additionally, it does not appear that the existing LNAV non-precision instrument approach associated with the existing Runway 36 end can be implemented to the future Runway 36 end associated with this alternative. Therefore, this alternative would not meet the proposed Purpose and Need.

3.2.3 (Preferred Alternative) Extend Proposed Runway, Combination of North and South

This alternative would extend the runway 325 feet north and 300 feet south of the previously approved runway (**Figure 3-3, *Extend Proposed Runway, Combination of North and South***). This is the sponsor's preferred alternative. This alternative would require no additional land or easements to be purchased. Similar to the other development alternatives, the trees located on either side of the runway would need to be cleared. While the H-brace power line poles located south of the runway would still be considered

obstructions to the 34:1 non-precision FAR Part 77 approach surfaces, they would not penetrate the 20:1 threshold siting surface Type 4 identified in Table 3-2 of AC 150/5300-13A, Change 1, *Airport Design*. Therefore, this alternative would not require a displaced threshold. It appears the existing LNAV non-precision instrument approach associated with the existing Runway 36 end could be implemented to the future Runway 36 end. Even though the H-brace power line poles penetrate the 30:1 Glidepath Qualification Slope (GQS), it is anticipated that the Runway 36 end would still qualify for a vertically guided GPS approach that is still useable at night; however, the published minimums would need to be adjusted to mitigate the penetrations. Nevertheless, this combined north-south extension alternative presents less obstructions to the runway when compared to the southern extension alternative.

3.3 Summary of Development Alternatives

Of the development alternatives discussed above, the full extension to the north and the combination north-south extension would accommodate forecast demand, would accommodate B-II design standards and would meet the Purpose and Need of the project. The full extension to the south would require a displaced threshold, would not accommodate future demand and would not meet the Purpose and Need for the project. Mitigation to reduce obstructions would be required for all development alternatives.

The implementation potential for Development Alternatives considered potential environmental impacts and the ability to implement non-precision instrument approaches to the future runway ends. All development alternatives would impact a small water body just east of the existing runway. Extending the runway 625 feet north would result in the need to close or re-route Jaycee Road, would impact the 100-year floodplain of the drainage ditch adjacent to the road, and would potentially require a 404 permit for impacts to the drainage ditch. Extending the runway 625 south would potentially require an approximately 500-foot displaced threshold to the future Runway 36 end and it does not appear that the existing LNAV non-precision instrument approach to the existing Runway 36 end could be implemented to the future runway end. Further, the cost to bury the transmission line south of the runway would not be feasible for this project. A combination of north and south extensions would avoid impacts to Jaycee Road, avoid impacts to the drainage ditch and the 100-year floodplain, and would allow for the existing LNAV non-precision instrument approach to be implemented to the future Runway 36 end. Because of these differences, the Development Alternative to Extend Proposed Runway, Combination of North and South was found to be the preferred alternative. Only this alternative was carried forward with the No Action Alternative for evaluation of runway improvements at the Airport; therefore, it is referred to as the Proposed Action.

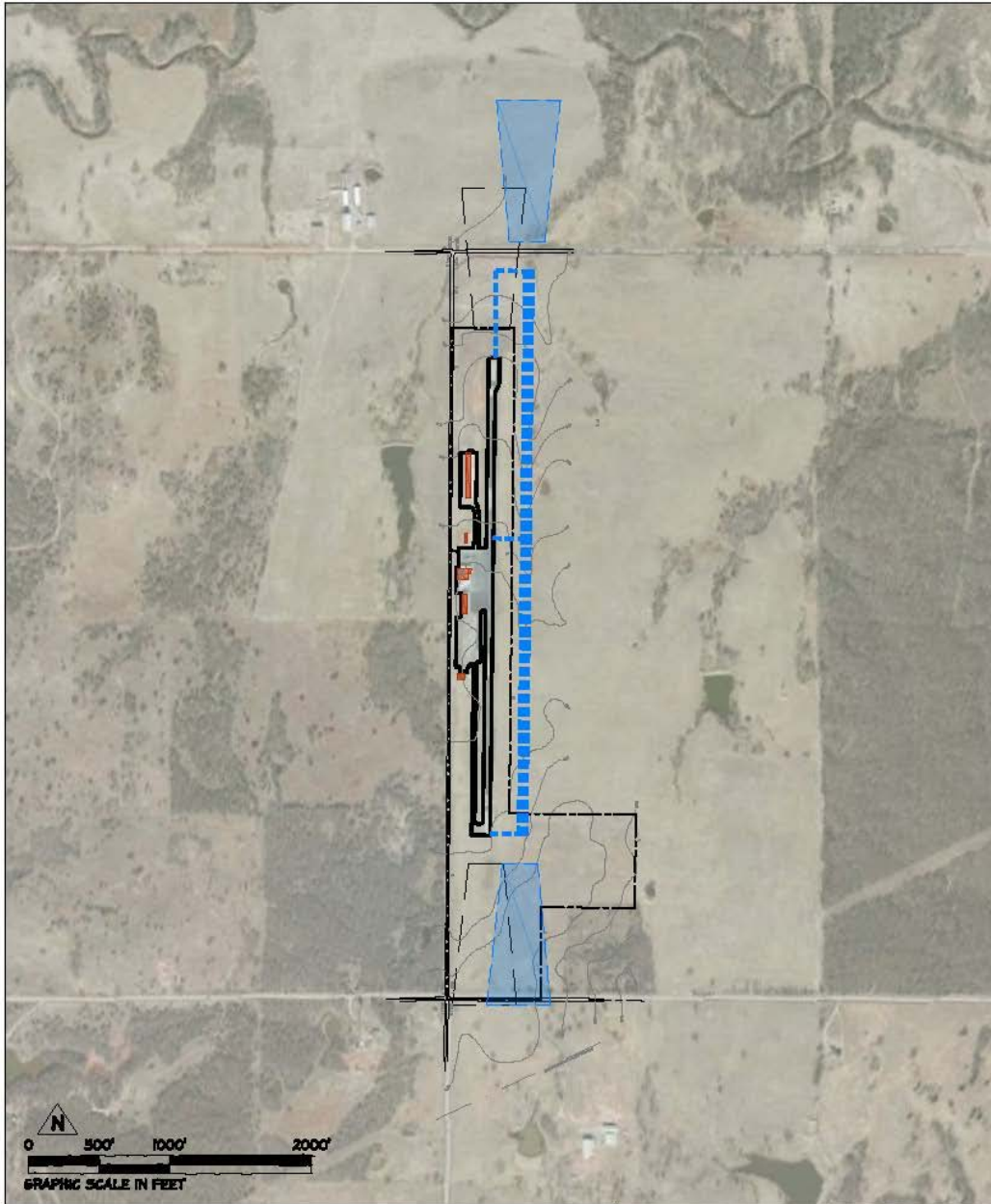


Figure 3-1 Extend Proposed Runway 625 feet North

Image courtesy of USGS ImagePatch.com © 2015 Microsoft Corporation

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Environmental Assessment*

**Jones Memorial Airport
Bristow, Oklahoma**

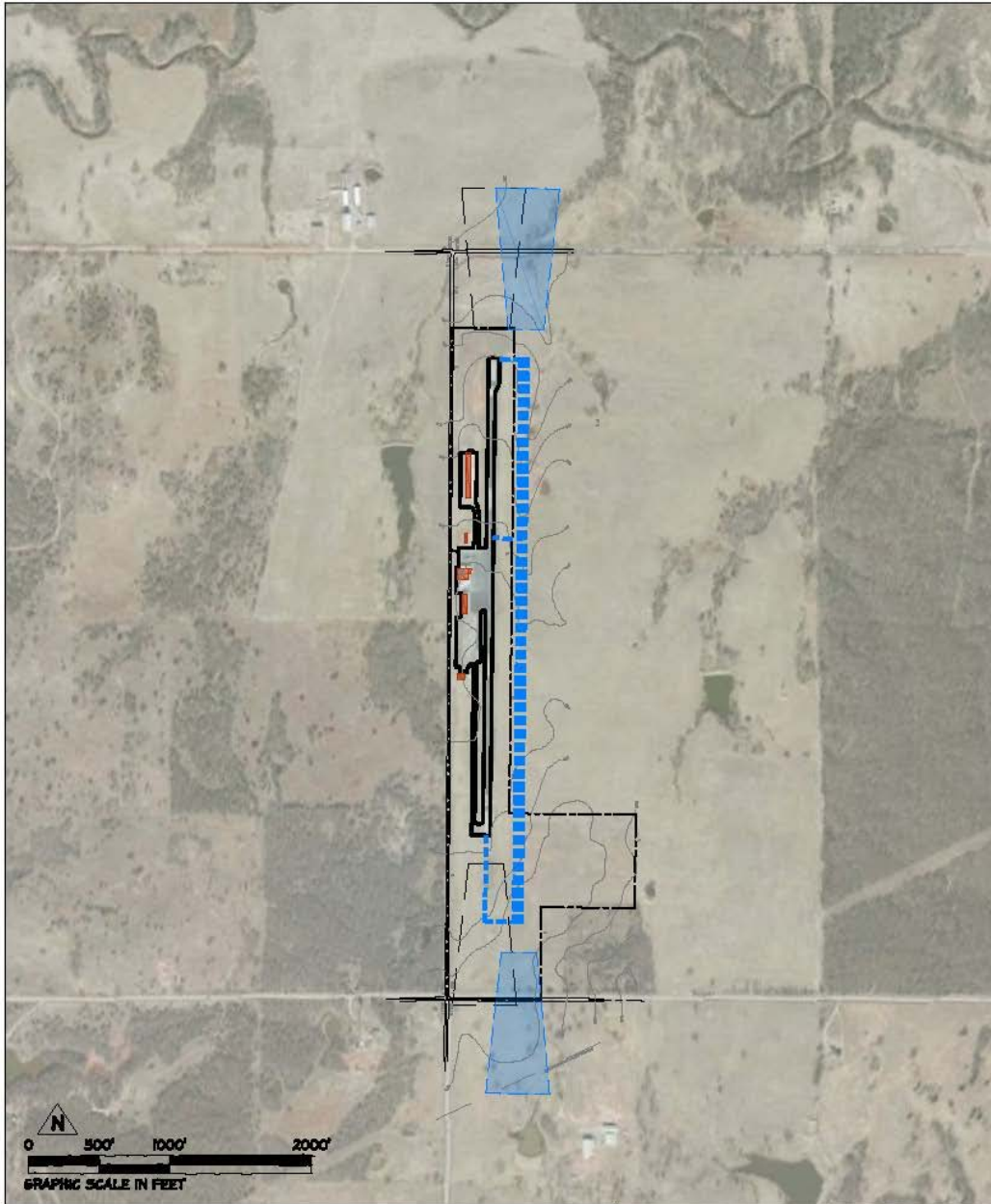
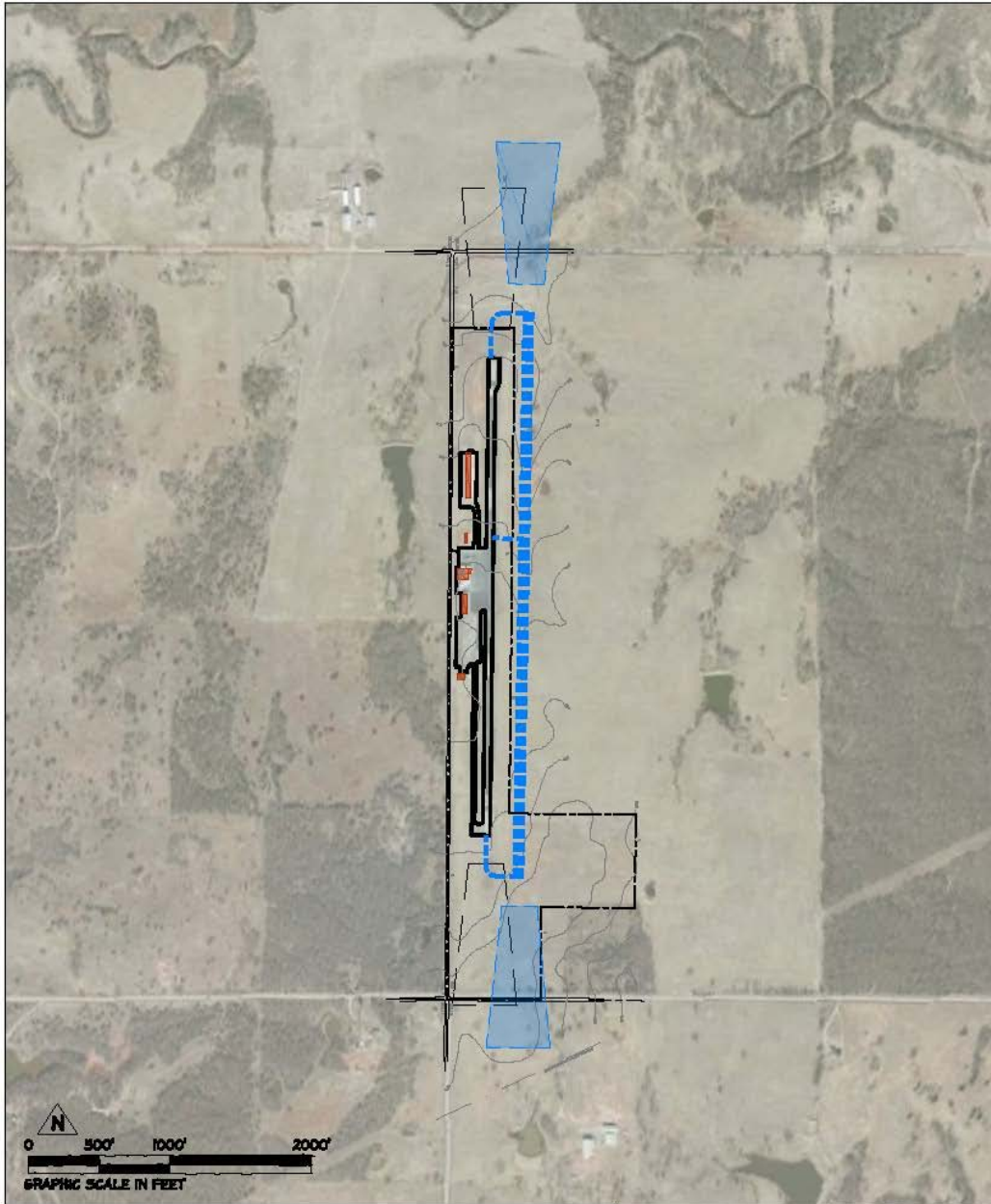


Figure 3-2 Extend Proposed Runway 625 feet South

Image courtesy of USGS ImagePatch.com © 2015 Microsoft Corporation



**Figure 3-3 Extend Proposed Runway 625 feet,
Combination of North and South**

Image courtesy of USGS ImagePatch.com © 2015 Microsoft Corporation

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Environmental Assessment*

**Jones Memorial Airport
Bristow, Oklahoma**

IV. AFFECTED ENVIRONMENT

Because the environmental setting for the proposed improvements has changed little since the preparation of the 2007 EA, the description of the affected environment has not been updated. Refer to Appendix B, 2007 Environmental Assessment for Jones Memorial Airport, for a description of the affected environment surrounding the Airport. Note that the following environmental resources are not evaluated in Section V. Environmental Consequences: Coastal Resources, Visual Effects and Light Emissions, Natural Resources and Energy Supply, and Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks. The following environmental resources are evaluated: Air Quality, Biological Resources, Climate, Section 4(f) Resources, Farmlands, Hazardous Materials, Solid Waste, and Pollution Prevention, Historical, Architectural, Archeological, and Cultural Resources, Land Use, Noise and Compatible Land Use, Water Resources, Cumulative Impacts, and Irreversible and Irretrievable Commitment of Resources.

V. ENVIRONMENTAL CONSEQUENCES

This section outlines the potential environmental consequences associated with implementing the No Action Alternative and the Proposed Action. Chapter III, *Alternatives*, describes these options in detail.

5.1 Resources Dismissed from Further Study

In some cases, resources do not exist in the proposed study area or would not be directly or indirectly affected by any of the alternatives. These resources were dismissed from further evaluation and are addressed briefly below.

5.1.1 Coastal Resources

Bristow, Oklahoma is not located near any coastal resources. Therefore an assessment of impacts to coastal areas is not necessary.

5.1.2 Visual Effects and Light Emissions

Neither alternative would have a significant impact on visual or light resources. While runway and taxiway lighting for new pavement surfaces would be included in both the No Action and Proposed Action Alternatives, these lights would not result in any adverse light emission impacts at the Airport. Further, construction of the new runway would not result in visual impacts that are not already associated with the Airport.

5.1.3 Natural Resources and Energy Supply

Neither of the alternatives would significantly increase electrical or natural gas usage above existing consumption levels at the Airport. Therefore, neither alternative would impact the future capabilities of the City of Bristow's local energy supplies. Neither local water supplies nor natural resources would be significantly depleted as a result of either alternative.

5.1.4 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

Neither of the alternatives would directly impact socioeconomic conditions in the area. The No Action Alternative would have a slight indirect impact on socioeconomic conditions in that the community would not be able to accommodate existing and forecast demand at the Airport. The Proposed Action would allow the City of Bristow to adequately accommodate existing and forecast demand, and could potentially attract new industry to the community.

5.2 Resources Evaluated

The following environmental resources were evaluated for potential impacts as a result of the No Action Alternative and Proposed Action. A project study area was delineated to show all areas that potentially could be directly or indirectly affected by the proposed project (see **Figure 5-1**, *Study Area Map*). The Study Area is centered on the Airport's proposed new runway for the Proposed Action (a larger, more conservative estimate than the 3,375 by 60 foot runway for the No Action Alternative) and encompasses



Figure 5-1 Study Area Map

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the approach-departure corridor and the approximate boundaries of the future noise contours for Runway 18/36.

5.2.1 Air Quality

Under the Clean Air Act (CAA) the U.S. Environmental Protection Agency (EPA) developed the National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These criteria air pollutants are carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), sulfur dioxide (SO₂), and lead (Pb).¹ The EPA determined that these criteria air pollutants may harm human health and the environment, and cause property damage. The EPA regulates these pollutants to permissible levels through human health-based (primary standards) and environmental-based (secondary standards) criteria.

All areas of the country are required to demonstrate attainment with the NAAQS. Areas that are in compliance with the NAAQS are considered to be in attainment. Areas that currently do not meet these standards are referred to as non-attainment areas. Other areas, where prior exceedance occurred, but that now achieve the standards are referred to as maintenance areas. Such areas are subject to State Implementation Plans, which reflect plans by the state for how to achieve (and maintain) compliance with the NAAQS.

In accordance with the Clean Air Act, an airport action is subject to General Conformity requirements only if it would occur in a nonattainment or maintenance area. The EPA designated Creek County as being within attainment for all NAAQS, with no pollutant maintenance areas. Therefore, General Conformity of the Clean Air Act does not apply based on the guidance.

According to the *Aviation Emissions and Air Quality Handbook*, “there is no single, universal criterion for determining what type of analysis is appropriate for FAA-supported projects or actions.” It is important to note that the 2007 Jones Memorial Airport EA did not include an air quality analysis because it was not required per regulations at the time. However, it was decided that an emissions inventory would be appropriate to provide disclosure of potential air quality effects of this project. Therefore, the air quality analysis for this project compares the existing baseline emissions at the Airport and the proposed emissions resulting from the project. This differs from the No Action Alternative, which would include the construction of a 3,375 foot by 60 foot runway. **Table 5-1, Baseline Emissions**, shows the existing (No Project, 2018) emissions for sources that could be affected by the Proposed Action.

¹ EPA regulates particulate matter (PM) in two categories, particles with aerodynamic diameters of 10 micrometers or less (PM₁₀) and particles with aerodynamic diameters of 2.5 micrometers or less (PM_{2.5}).

Table 5-1, Baseline Emissions (2018) at Jones Memorial Airport (grams/year)

Pollutant	Aircraft	Construction	Total
Carbon Monoxide (CO)	83,185.74	N/A	83,185.74
Volatile Organic Compounds (VOC)	782.47	N/A	782.47
Nitrogen Oxides (NO _x)	1,360.61	N/A	1,360.61
Sulfur Oxides (SO _x)	268.81	N/A	268.81
Particulate Matter (PM ₁₀)	102.89	N/A	102.89
Particulate Matter (PM _{2.5})	102.89	N/A	102.89

Source: Mead & Hunt, Inc., February 2016 using AEDT. (Totals may not add due to rounding.)

Table 5-2, Summary of Project-related Emissions, summarizes the operational emissions and construction emissions associated with the proposed project forecast for the expected opening day of the Proposed Action (2018) and five years after implementation.

Table 5-2, Summary of Project-related Emissions (grams/year)

Pollutant	No Action (Baseline)	Proposed Action		Project Related Emissions
		Operational Emissions	Construction Emissions*	
Year 2018				
Carbon Monoxide (CO)	83,185.74	100,653.40	5,872,923	5,890,390.66
Volatile Organic Compounds (VOC)	782.47	1,000.05	11,909,610	11,909,827.58
Nitrogen Oxides (NO _x)	1,360.61	1,563.19	10,376	10,578.58
Sulfur Oxides (SO _x)	268.81	345.69	26,832	26,908.88
Particulate Matter (PM ₁₀)	102.89	147.02	739,515	739,559.13
Particulate Matter (PM _{2.5})	102.89	147.02	250,686	250,730.13
Year 2023				
Carbon Monoxide (CO)	114,150.1	112,325.80	N/A	-1,824.30
Volatile Organic Compounds (VOC)	1,014.31	1,092.12	N/A	77.81
Nitrogen Oxides (NO _x)	1,507.21	2,220.98	N/A	713.77
Sulfur Oxides (SO _x)	321.28	472.83	N/A	151.55
Particulate Matter (PM ₁₀)	130.58	198.47	N/A	67.89
Particulate Matter (PM _{2.5})	130.58	198.47	N/A	67.89

Source: Mead & Hunt, Inc., April 2016 using AEDT and December 2015 using EDMS 5.1.4.1 (Totals may not add due to rounding.)

* Jones Memorial Airport does not anticipate construction activities in 2023.

No Action Alternative

The No Action Alternative would not significantly change traffic patterns or increase the number of Airport operations, or otherwise change air quality in the Bristow area. However, as it shown in **Table 5-2, Summary of Project-related Emissions**, emissions of all pollutants are anticipated to increase between 2018 and 2023 regardless of whether or not the proposed runway extension is implemented.

Proposed Action

The Proposed Action would result in the extension of the runway, which could result in increases in emissions. However, emissions associated with increases in surface traffic are not anticipated to contribute significantly to overall emissions in the region. Temporary emissions would occur during the construction of the runway extension. **Table 5-2, Summary of Project-related Emissions**, shows that the proposed improvements would result in increases in NAAQS emissions for all pollutants except carbon monoxide (CO). The slight decrease in CO could be a result of more efficient aircraft that will be in operation in 2023. Even though a General Conformity analysis was not required as part of this air quality evaluation, it is important to note that increases in NAAQS pollutants associated with the No Action Alternative are well below the Clean Air Act defined *de minimis* thresholds.²

Minimization and Mitigation Measures for Air Quality Resources

The Proposed Action would not generate significant adverse air quality impacts. However, FAA anticipates that Best Management Practices (BMPs) would be implemented to minimize air emissions during construction of the runway extension. Examples of BMPs that would be employed include the following:

- Minimize land disturbance.
- Use watering trucks to minimize dust.
- Cover trucks when hauling dirt or debris.
- Stabilize the surface of dirt piles and any disturbed areas.
- Use windbreaks to prevent any accidental dust pollution.
- Segregate storm water drainage from construction sites and material piles.
- Cover trucks when transferring materials.
- Minimize unnecessary vehicular and machinery activities.
- Re-vegetate any disturbed land not used.
- Remove unused material and dirt piles.
- Re-vegetate all disturbed areas as appropriate.

² A *de minimis* level is the minimum threshold for which a conformity determination must be performed for NAAQS criteria pollutants. Under the Clean Air Act, *de minimis* emission levels are defined for each criteria pollutant. In creating the *de minimis* emission levels, EPA sought to limit the need to conduct conformity determinations for actions with minimal emission increases. When the total direct and indirect emissions from the project/actions are below the *de minimis* levels, the project/action would not be subject to a conformity determination. For *de minimis* levels, see <http://www3.epa.gov/airquality/genconform/deminimis.html>

5.2.2 Biological resources (including fish, wildlife, and plants)

The proposed improvements to the Jones Memorial Airport were evaluated to determine if there would be any potential impacts to biological resources near the Airport. Wildlife species commonly found in the vicinity of the Airport include rabbit, quail, skunk, raccoon, squirrel and opossum. The most prevalent vegetation includes Bermuda grass, Johnson grass, Blue grama, Switch grass, and Indian grass. Overhead vegetative species comprise cottonwood, post oak, American elm, sycamore, hackberry, redbud, and red cedar.

The Endangered Species Act (ESA) requires federal agencies to examine if proposed projects may have an adverse impact on federally listed endangered or threatened species. The agency must ensure that the project is not likely to jeopardize the continued existence of a federally listed species or significantly alter or destroy key habitat for these species. **Table 5-3, ESA Listed Species in Creek County**, summarizes the listed species and their statuses. There are no state-listed threatened or endangered species in the county.

Table 5-3, ESA Listed Species in Creek County

Listed Species	Status
American peregrine falcon (<i>Falco peregrinus anatum</i>)	Recovery
Piping Plover (<i>Charadrius melodus</i>)	Threatened
Least tern (<i>Sterna antillarum</i>)	Endangered
Red knot (<i>Calidris canutus rufa</i>)	Threatened
American burying beetle (<i>Nicrophorus americanus</i>)	Endangered

Source: U.S. Fish and Wildlife Service (USFWS) countywide species listing, accessed December 29, 2015.

No Action Alternative

The No Action Alternative would require the construction of a new runway 3,375 feet in length and 60 feet in width approximately 240 feet east of the existing runway. The airport property does not contain any high quality ecosystems. The ditches and water bodies north of the existing runway could potentially be used by wildlife as a water source. However, the common wildlife documented to occur in the airport's general vicinity would likely find refuge outside of the proposed study area during construction activities and during future operations on the proposed runway.

The No Action Alternative is not anticipated to significantly impact vegetative or wildlife species populations or their habitats.

Proposed Action

Potential impacts of the Proposed Action are similar to those of the No Action Alternative. The 625 feet of extended length and 15 feet of extended width of the runway would not result in appreciably greater impacts to wildlife or vegetative species.

Consultation with the US Fish and Wildlife Service (USFWS) was conducted to identify federal or state threatened or endangered species that could occur within the project area and to determine concurrence

that there would be no impacts (see Appendix C, Coordination). At the release of this Draft Supplemental EA, no comments have been received from USFWS.

The Proposed Action is not anticipated to significantly impact vegetative or wildlife species populations or their habitats.

Minimization and Mitigation Measures for Biological Resources

No impacts to ESA-listed or state-identified wildlife or vegetation would result from implementation of the No Action or Proposed Action Alternatives. Therefore, no mitigation is required. BMPs would be implemented to stabilize barren soils and re-establish appropriate vegetation communities post construction. Should any threatened or endangered species be discovered during construction, appropriate measures will be taken to remain in compliance with the Endangered Species Act.

5.2.3 Climate

The Intergovernmental Panel on Climate Change (IPCC) estimates that aviation accounted for 4.1% percent of global transportation greenhouse gas (GHG) emissions. In the United States, U.S. Environmental Protection Agency (EPA) data indicate that commercial aviation contributed 6.6% percent of total CO₂ emissions in 2013, compared with other sources, including the remainder of the transportation sector (20.7 percent), industry (28.8 percent), commercial (16.9 percent), residential (16.9 percent), agricultural (9.7 percent) and U.S. territories (.05 percent).³

In December 2014, CEQ issued revised draft NEPA guidance for considering the effects of climate change and GHG emissions.⁴ FAA Order 1050.1F officially added Climate to the list of impact categories that must be considered in FAA NEPA documents. However, the FAA has not yet established a significance threshold for climate. Therefore, there are no Federal standards for aviation-related GHG emissions and how increases might affect climate change, and there are no corresponding levels of local emissions increases or thresholds to establish significance.

No Action Alternative and Proposed Action

The GHG emissions at the Airport are primarily linked to fuel burn associated with aircraft operations. Because the No Action and Proposed Action Alternatives would not significantly affect air quality conditions, it is anticipated that no substantial change would occur with regard to GHG emissions.

The Proposed Action would result in some minor increases in fuel burn (and therefore GHG emissions) due to slightly longer taxi times; however, this is not anticipated to result in appreciably greater emissions than the No Action Alternative. Short-term increases in GHGs would result from the construction activities (i.e., vehicular activity in support of construction, movement of construction vehicles along haul routes, and

³ GHG allocation by economic sector. Environmental Protection Agency (2015). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013. Available at: <http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html#fullreport>

⁴ CEQ (2014). Revised Draft Guidance, Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews, 79 Federal Register 77801 (December 24, 2014). Available at: <https://www.federalregister.gov/articles/2014/12/24/2014-30035/revised-draft-guidance-for-federaldepartments-and-agencies-on-consideration-of-greenhouse-gas>

construction worker commuting) associated with both alternatives. However, these increases in fuel burn would result in relatively small and short-term increases in GHGs relative to the current conditions.

According to the Aviation Environmental Design Tool (AEDT) model, current operations at the Airport emit 0.724 metric tons of CO_{2e}. **Table 5-4, Summary of Project-related Greenhouse Gas Emissions**, shows forecast CO_{2e} emissions from the Proposed Action.

Table 5-4, Summary of Project-related Greenhouse Gas Emissions (CO_{2e} metric tons/year)

	No Action	Proposed Action	
		2018	2023
Aircraft Operations	.724	.931	1.274
Construction*	N/A	2,006.824	N/A
TOTAL	.724	2,007.669	1.274

Source: Mead & Hunt, Inc., February 2016 using EDMS 5.1.4.1

*Construction emissions were calculated using non-road, on-road, and fugitive sources.

Because neither alternative would substantially affect air quality, and emissions resulting from construction emission would be relatively small and short-term, the alternatives are not anticipated to affect climate.

Minimization and Mitigation Measures for Climate Impacts

FAA anticipates that BMPs would be implemented to minimize air emissions and energy usage during construction of the project. When implemented, these types of BMPs could help to reduce GHG emissions at the Airport.

5.2.4 Section 4(f) Resources

Section 4(f) of the U.S. DOT Act of 1966 (now codified at 49 U.S.C. § 303) protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites. Section 4(f) provides that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land off a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance, only if there is no feasible and prudent alternative to the using that land and the program or project includes all possible planning to minimize harm resulting from the use.

There are no local, state, or national parks or recreational areas that would be affected by the alternatives. According to Oklahoma’s National Register Handbook from the State Historic Preservation Office and Oklahoma Historical Society (dated January 1, 2016), the Little Deep Form Creek Bridge, an historic bridge, is located approximately 0.33 miles from the Airport at the junction of County Roads 830 and 3700.

No Action Alternative and Proposed Action

The closest Section 4(f) resource to the proposed project is the Little Deep Form Creek Bridge located approximately 0.33 miles from the Airport. No significant increases in noise are expected as a result of

the Alternatives, and there are no Section 4(f) properties located within the 65 DNL noise contour. Therefore neither this cultural resource, nor any other known Section 4(f) resource in the vicinity of the Airport, would be adversely affected directly or indirectly from the No Action or Proposed Action Alternatives.

Minimization and Mitigation Measures for DOT Section 4(f) Impacts

No Section 4(f) properties would be affected as a result of either alternative, therefore no mitigation is required.

5.2.5 Farmlands

The Farmland Protection Policy Act (FPPA), a subtitle of the Agriculture and Food Act of 1981, was passed by Congress with the intent to “...minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses...” (P.L. 97-98, Sec. 1539-1549; 7 U.S.C. 4201, et seq.). Federal programs include construction projects such as highways, dams, and federal buildings, and airport developments that are sponsored or financed in part by the federal government. As defined in FPPA, “farmland” includes prime farmland, unique farmland, and land of statewide or local importance.

The proposed improvements to the Jones Memorial Airport would qualify as “federal programs” under the FPPA. Consultation with the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) is required to determine if the Farmland Protection Policy Act (FPPA) applies to any land set to be converted to non-agricultural use as a result of a proposed action.

To determine whether any prime or unique farmland soils or farmland soils of statewide or local importance are present in the study area, data were downloaded from the 2015 NRCS Soil Survey Geographic Database. **Figure 5-2, Prime Farmlands**, shows the soils within the airport boundary and in the vicinity of the Airport that are classified as “prime farmland.”

No Action Alternative and Proposed Action

While the soil types indicate that there is prime farmland soil on airport property, the FPPA states that farmland does not include land already in or committed to urban development. Therefore, soils that are

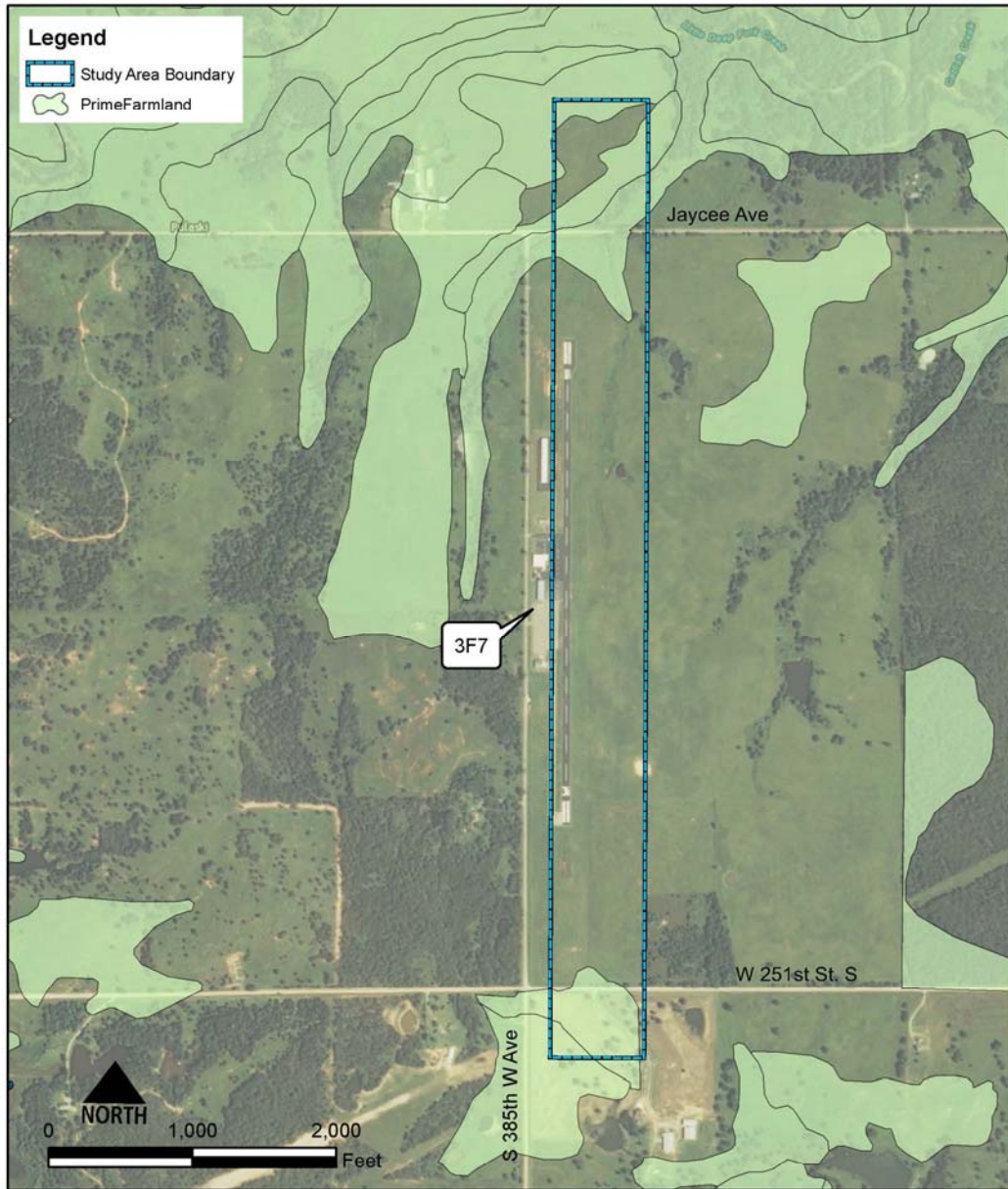


Figure 5-2 Prime Farmlands

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already located on airport property, and have been dedicated to airport uses, are not covered under the FPPA. Further, there would be no indirect noise or air quality impacts on agricultural uses around the Airport.

On January 21 2016, correspondence was sent to the USDA NRCS Stillwater Field Service Center (see Appendix C, Coordination). As of the release of this document, no comments have been received from the NRCS on this project.

Minimization and Mitigation Measures for Farmland Impacts

No prime farmland, unique farmland, or farmland of statewide or local importance would be significantly impacted as a result of the either alternative. Therefore, no mitigation is required.

5.2.6 Hazardous Materials, Solid Waste, and Pollution Prevention

Hazardous materials, solid waste, and pollution prevention as an impact category includes an evaluation of the following:

- Waste streams that would be generated by a project, potential for the wastes to impact environmental resources, and the impacts on waste handling and disposal facilities that would likely receive the wastes;
- Potential hazardous materials that could be used during construction and operation of a project, and applicable pollution prevention procedures;
- Potential to encounter existing hazardous materials at contaminated sites during construction, operation, and decommissioning of a project; and
- Potential to interfere with any ongoing remediation of existing contaminated sites at the proposed project site or in the immediate vicinity of a project site.

There are no known landfills, sewage treatment plants or other hazardous materials located near Jones Memorial Airport. Aviation fuel is presently stored on airport property. The capacity of the existing fuel facility consists of a 2,000-gallon AVGAS underground storage tank. The tank complies with all federal, state, and local regulations. The City currently owns the storage tank and sells fuel to airport users. It is anticipated that a Jet A fuel system will be provided in the future as increased turbine-powered aircraft utilize the Airport as a result of the improved facilities.

No Action Alternative

Construction activities associated with the No Action Alternative could generate hazardous wastes and some construction materials constitute hazardous substances. However, the contractor would be required to implement proper practices to prevent or minimize the potential for these hazardous substances to be released into the environment. There would be no significant changes to existing pollution prevention practices, and increases in solid waste generation would be minimal. Overall, no significant impacts are anticipated for hazardous materials as a result of implementation of the No Action Alternative.

Proposed Action

Similar to the No Action Alternative, construction activities associated with the Proposed Action could generate hazardous wastes, but the contractor would be required to implement proper practices to prevent

or minimize the potential for these hazardous substances to be released into the environment. No changes would be made to existing pollution prevention practices, and increases in solid waste generation would be minimal.

To accommodate forecast demand at the Airport, the Proposed Action would eventually include the installation of a Jet A fuel system. The current fuel facility consists of a 2,000-gallon underground tank; the new fuel system would consist of a 10,000-gallon aboveground tank. The proposed new fueling system would be located approximately 100 feet south of the T-hangar that is south of the existing fuel system. Construction activities associated with the installation of the new fuel system would be in compliance with federal laws governing the handling and disposal of hazardous materials, chemicals, substances, and wastes, including the Resource Conservation and Recovery Act (RCRA) (as amended by the Federal Facilities Compliance Act of 1992), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA or Superfund), the Community Environmental Response Facilitation Act of 1992 and the Emergency Planning and Community Right to Know Act of 1986.

Minimization and Mitigation Measures for Hazardous Materials Impacts

Construction equipment maintenance would be performed in a designated area and include control measures, such as drip pans to contain petroleum products. Any hazardous materials utilized during construction of the proposed terminal expansion would be done according to applicable regulations and the person or entity responsible for handling the hazardous material will take immediate corrective action, including notifying the National Response Center if there is an accidental release or other incident that could endanger people or environmental resources.

Best Management Practices to prevent or minimize the potential for the generation or disposal of hazardous substances will be employed during the construction phase of the propose project. Pollution prevention measures will be followed.

5.2.7 Historical, Architectural, Archeological, and Cultural Resources

The National Historic Preservation Act of 1966 requires a review to determine if any properties within the environmental impact area of a proposed action are in or eligible for inclusion in the National Register of Historic Places (NRHP). The Archeological and Historic Preservation Act of 1974 provides for the preservation of historic American sites, buildings, objects, and antiquities of national significance by providing for the survey, recovery and preservation of historical and archeological data. Section 106 requires Federal agencies to consider the impact of their undertaking on properties on or eligible for inclusion in the NRHP.

An Area of Potential Effect (APE) was defined to encompass those areas on and near the Airport that could potentially be affected by the proposed project (see **Figure 5-3, Cultural Resources**). The APE (same as the project Study Area) is centered on the Airport's proposed new runway for the Proposed Action and encompasses the approach-departure corridor and the approximate boundaries of the future noise contours for Runway 18/36. It is not anticipated that there would be any indirect impacts beyond this study area.

According to Oklahoma's National Register Handbook from the State Historic Preservation Office and Oklahoma Historical Society (dated January 1, 2016), the Little Deep Form Creek Bridge, an historic bridge, is located approximately 0.33 miles from the Airport at the junction of County Roads 830 and 3700.

No Action Alternative and Proposed Action

The closest historic site to the Airport is the Little Deep Fork Creek Bridge located approximately 0.33 miles northeast of the Airport at the junction of County Roads 830 and 3700. This structure is listed on the NRHP, but would not be impacted by the construction of the proposed runway associated with the No Action Alternative or Proposed Action. Based on analysis, no significant changes in noise would occur as a result of either the No Action Alternative or Proposed Action; therefore, there would not be any noise related effects on historic properties. Therefore, neither the No Action Alternative nor the Proposed Action would have an impact any known historical, architectural, archeological, or cultural resources.

The State Historic Preservation Officer (SHPO), Oklahoma History Society and Oklahoma Archeological Survey were contacted in January 2016 to determine concurrence with this finding. Further, consultation with the Muscogee (Creek) Tribe, a tribe local to Creek County,⁵ was conducted. On February 10, 2016, the Oklahoma Archeological Survey confirmed that no impacts would occur to prehistoric or historic archaeological materials as a result of the project. On March 14, 2016, SHPO concurred that the Proposed Action would not affect any historic resources. No response from the Muscogee (Creek) Tribe has been received by the release of this document.

Minimization and Mitigation Measures for Cultural Impacts

No historic, cultural or archaeological resources would be affected as a result of the either alternative. Therefore, no mitigation is required.

5.2.8 Land use

Development of incompatible land uses can degrade airport operations, impede airport expansion, and reduce quality of life for airport neighbors. Land use compatibility for airports also addresses issues related to navigational safety (e.g. encroaching structures and terrain), congregations of people, and hazardous wildlife.

Land uses on and near Jones Memorial Airport property are agricultural and generally used for grazing. Since the issuance of the 2007 EA, a residential structure was constructed south of W 251st Street South, just south of the Airport. The City of Bristow has taken steps to ensure that existing and planned land use in the immediate vicinity of the Airport lends to safe and efficient operational activities.

⁵ Oklahoma Department of Transportation, Planning and Research Division. Recognized Tribe GIS map, 2010.

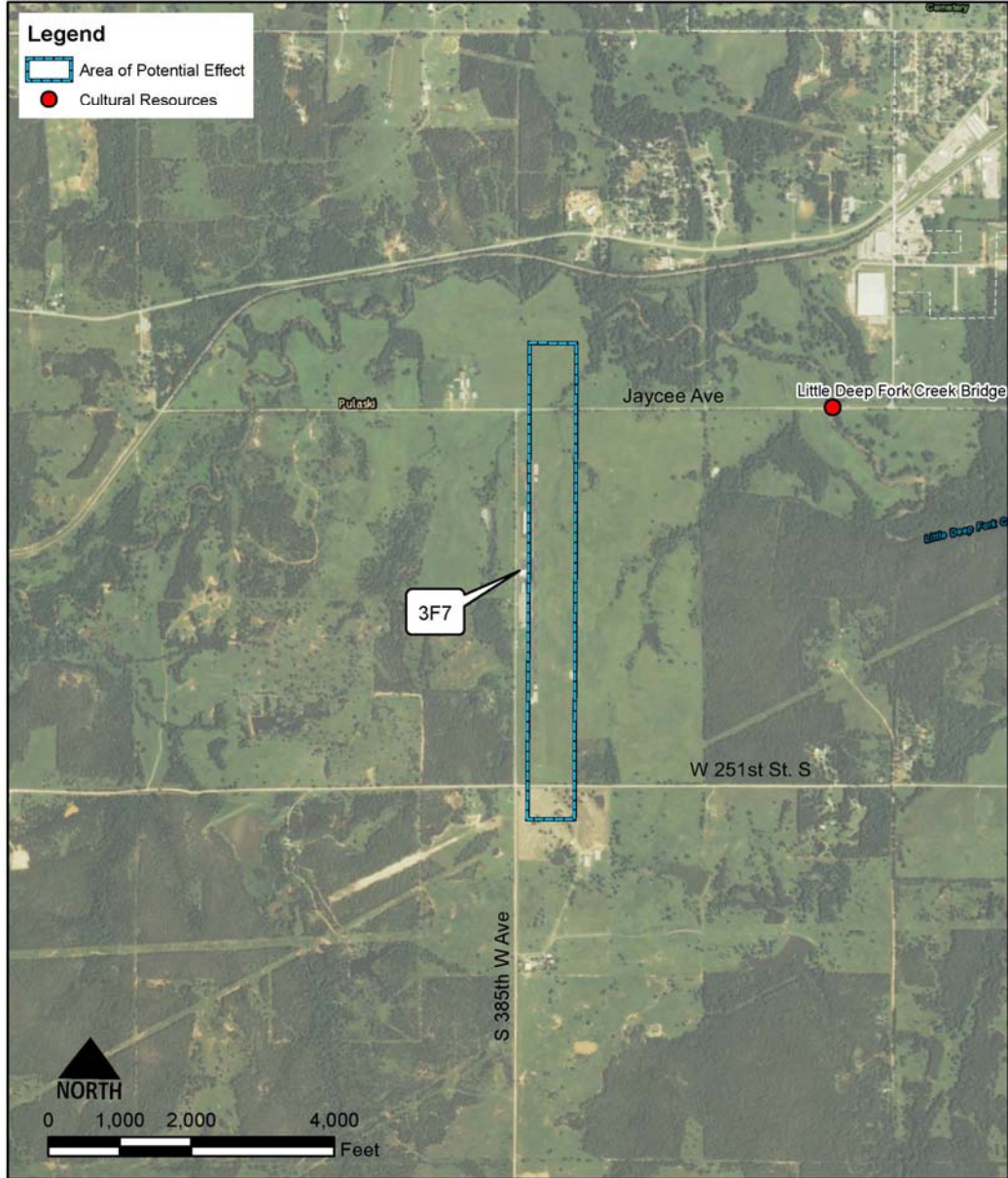


Figure 5-3 Cultural Resources

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No Action Alternative and Proposed Action

Currently, the land uses surrounding the Airport are generally compatible with airport operations. The Airport has already acquired 65 acres of land and 16 acres of aviation easement in efforts to accommodate the improvements associated with either alternative. Neither alternative would result in the disruption of communities, Section 4(f) impacts, or socioeconomic impacts. No relocations would be required.

Land use compatibility is frequently tied to the noise associated with airports. According to the noise analysis, there would be no noise impacts as a result of either alternative. Temporary land use and noise impacts would occur during construction. Noise impacts from construction activities may affect the new residence south of 251st Street South; however these impacts would be temporary. Overall, construction of a new runway would not result in adverse noise, air quality, or other indirect impacts. It is not anticipated that either alternative would have a significant adverse impact on land use compatibility.

Minimization and Mitigation Measures for Land Use Compatibility Impacts

Neither the No Action Alternative nor the Proposed Action would produce significant short-term or long-term land use impacts. Construction BMPs would be implemented throughout development of the proposed improvements to minimize noise and construction impacts.

5.2.9 Noise and compatible land use

Often the predominant aviation environmental concern of the public, aviation noise, primarily results from the operation of fixed and rotary wing aircraft, such as departures, arrivals, overflights, taxiing, and engine run-ups. The compatibility of existing and planned land uses with proposed aviation actions is usually determined in relation to the level of aircraft noise.

The study area for noise analysis is the project study area described initially in this chapter. The study area is centered on the Airport's proposed new runway for the Proposed Action and encompasses the approach-departure corridor and the approximate boundaries of the future noise contours for Runway 18/36. Aircraft-related noise exposure has been defined through the use of noise contours prepared with the FAA's Aviation Environmental Design Tool (AEDT). This software program models the noise exposure levels from aircraft operations and produces contours of equal noise exposure for selected points on the ground. These contours are presented using Day Night Average Sound Level (DNL) noise contour metric. DNL metric measures the overall noise experienced during an entire (24-hour) day. DNL calculations account for the sound exposure level of aircraft, the number of aircraft operations and a penalty for nighttime operations. In the DNL scale, noise occurring between the hours of 10:00 p.m. to 6:59 a.m. is penalized by 10 decibels (dB). This penalty was selected to account for the higher sensitivity to noise in the nighttime and the expected further decrease in background noise levels that typically occur at night. DNL provides a numerical description of the weighted 24-hour cumulative noise energy level using the A-weighted decibel scale, typically over a period of a year.

AEDT requires information concerning the number of aircraft operations, the types of aircraft (fleet mix), the time of day (or night) that activity occurs, runway utilization patterns and the typical flight tracks of aircraft. Aircraft noise contours for Jones Memorial Airport were developed using these data. The baseline noise contours for the year 2018 is presented in **Figure 5-4, 2018 Baseline Noise Contours**. The contours are

entirely contained within airport property. The threshold of significance for aircraft noise is defined in FAA Order 1050.1F as:

The action would increase noise by DNL 1.5dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65dB noise exposure level, or that will be exposed at or above the DNL 65dB level due to a DNL 1.5dB or greater increase, when compared to the no action alternative for the same timeframe.

For example, an increase from DNL 65.5dB to 67dB is considered a significant impact, as is an increase from DNL 63.5dB to 65dB.

No Action Alternative

The baseline noise contours are presented in **Figure 5-4, 2018 Baseline Noise Contours**. The 65 DNL noise contour for the runway does not extend off airport property. **Figure 5-5, 2023 Noise Contours (No Project)** show that contours will expand slightly with the No Action Alternative, and no noise sensitive land uses would be affected by this noise contour, now or in the future.

Proposed Action

In predicting the approximate noise impacts that could occur from the extension of the runway, FAA approved operations forecasts were incorporated into the AEDT model. According to the model, implementation of the Proposed Action would have an indiscernible effect on noise. **Figure 5-6, 2018 Noise Contours (With Project)** depicts noise contours with the project in 2018 and **Figure 5-7, 2023 Noise Contours (With Project)** shows noise contours with the project in 2023. While the 65 DNL contour would increase slightly on the north end of the runway, all contours would still be located on airport property and would have no effect on noise sensitive land uses. Neither the 2018 nor the 2023 65 DNL contours will encompass any residences, Section 4(f) resources, or other sensitive land uses or areas. Therefore, the Proposed Action would have no significant noise impacts on land uses surrounding Jones Memorial Airport.

Minimization and Mitigation for Noise Impacts

Because there would be no significant noise impacts as a result of the project, no mitigation measures would be implemented.



Figure 5-4 2018 Baseline Noise Contours

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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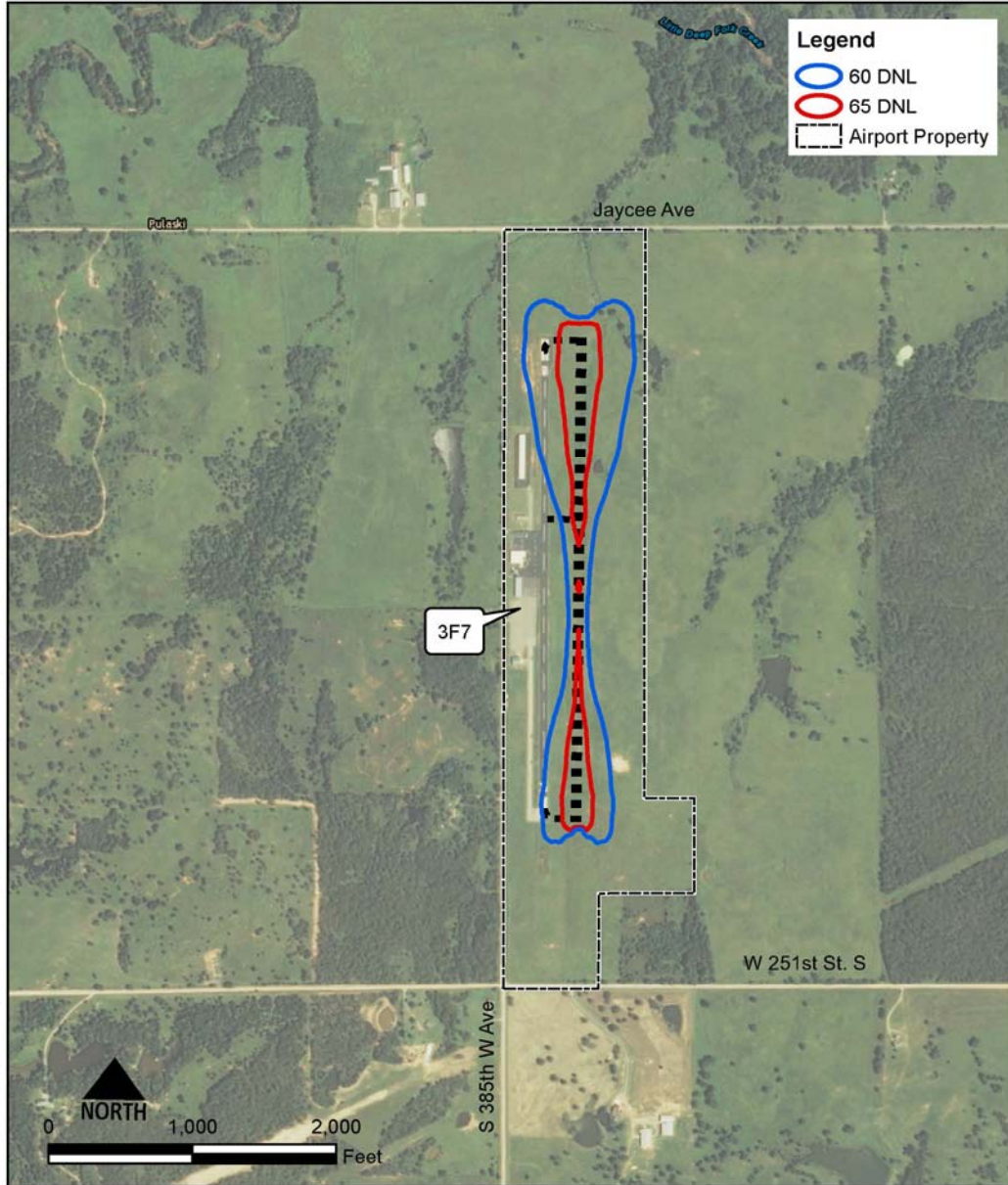


Figure 5-5 2023 Noise Contours (No Project)

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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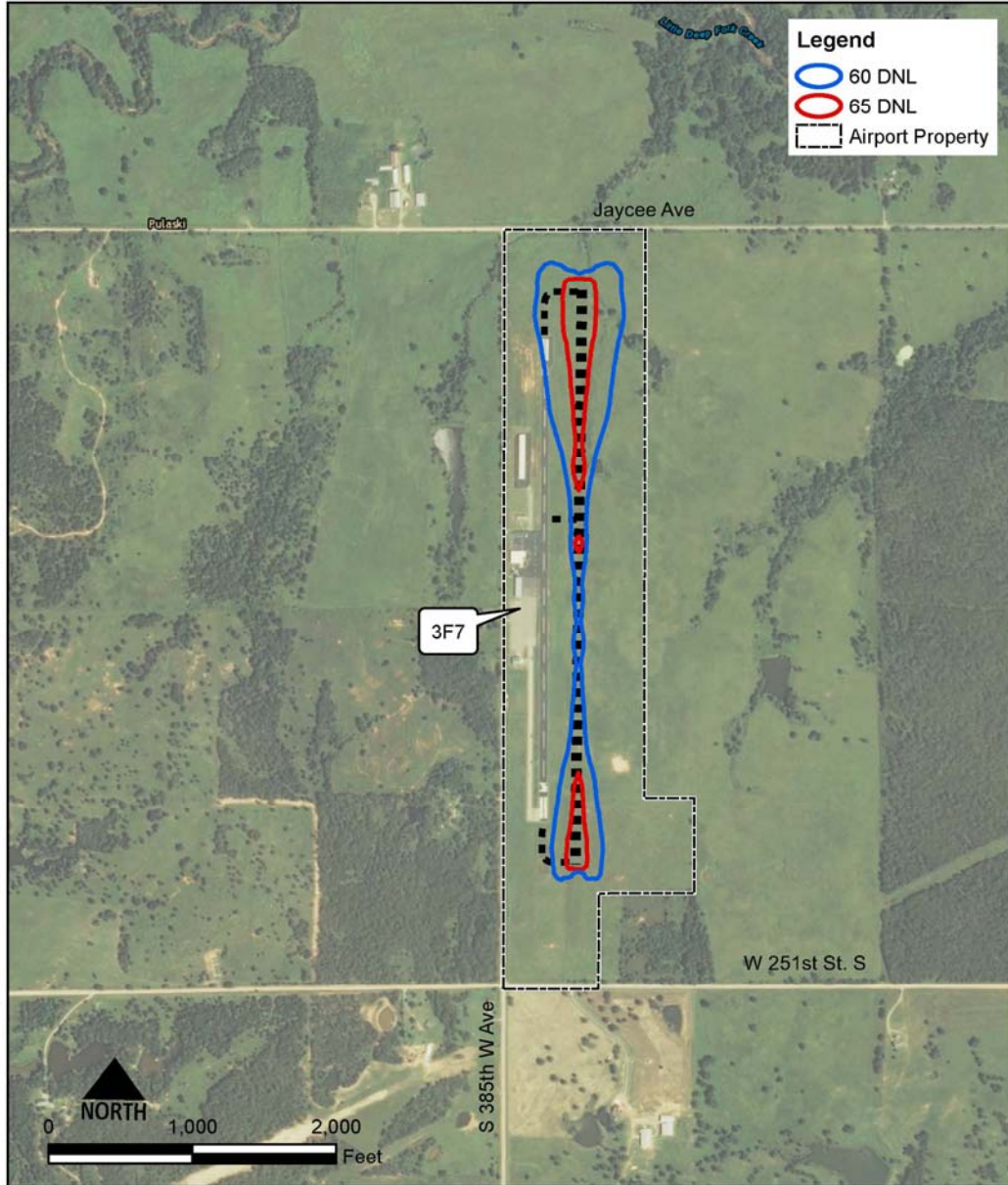


Figure 5-6 2018 Noise Contours (With Project)

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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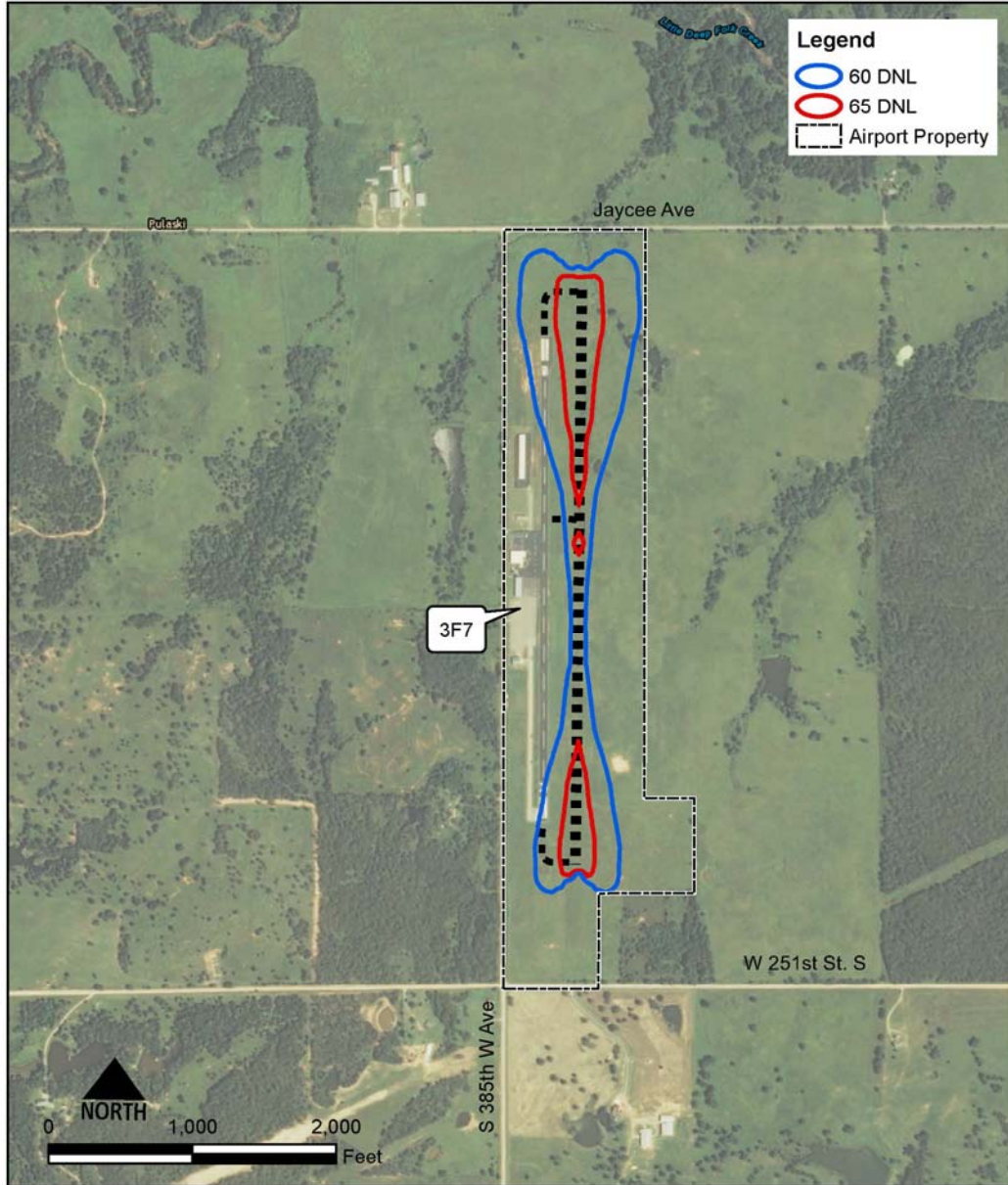


Figure 5-7 2023 Noise Contours (With Project)

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
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5.2.10 Water resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

Water resources are surface waters and groundwater that are vital to society; they are important in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. Surface water, groundwater, floodplains, and wetlands do not function as separate and isolated components of the watershed, but rather as a single, integrated natural system.

A number of small freshwater ponds are located on airport property, and according to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Creek County, a 100 year floodplain is located just north of the Airport. There are no wetlands on airport property according to the National Wetlands Inventory. The Airport does not currently have any water quality compliance issues (see **Figure 5-8**, Water Resources).

No Action Alternative

Since there would be no increase of impervious surfaces beyond the 2007 EA project description, there would not be an increase in stormwater runoff over baseline conditions, and the No Action Alternative would not alter the stormwater drainage system. A pond located within the study area would need to be filled in order to construct the 3,375 foot runway. No wetlands or 100-year floodplains would be affected by the No Action Alternative. There are no designated wild and scenic rivers near Jones Memorial Airport. All necessary permits and approvals for the project would be obtained before construction activities take place.

Proposed Action

The increased amount of impervious surfaces due to the runway extension may alter the stormwater drainage system and/or increase the potential for stormwater runoff slightly, however the effects are expected to be minimal. A pond located within the study area would need to be filled in order to construct the 4,000 foot runway. No wetlands or 100-year floodplains would be impacted by the Proposed Action. There are no designated wild and scenic rivers near Jones Memorial Airport.

Similar to the No Action Alternative, the only water resource impact associated with the Proposed Action would be the filling of the pond. All necessary permits and approvals for the project would be obtained before construction activities take place. Consultation with the US Army Corps of Engineers (USCOE) was conducted to determine concurrence that there would be no impacts to wetlands nor would a Section 404 permit be required (see Appendix C, Coordination). At the release of this Draft Supplemental EA, no comments have been received from the USCOE.

Minimization and Mitigation for Water Resource Impacts

Mitigation for water quality impacts could include flow control and treatment BMPs in accordance with federal, state, and local regulations. Flow control BMPs are methods to reduce or prevent development-related increases in stormwater runoff at or near the source of the increases. Source control and runoff treatment BMPs are methods of reducing pollutants from entering the stormwater runoff and treating pollutant runoff as part of the storm drainage system. For example, stormwater pollution and erosion

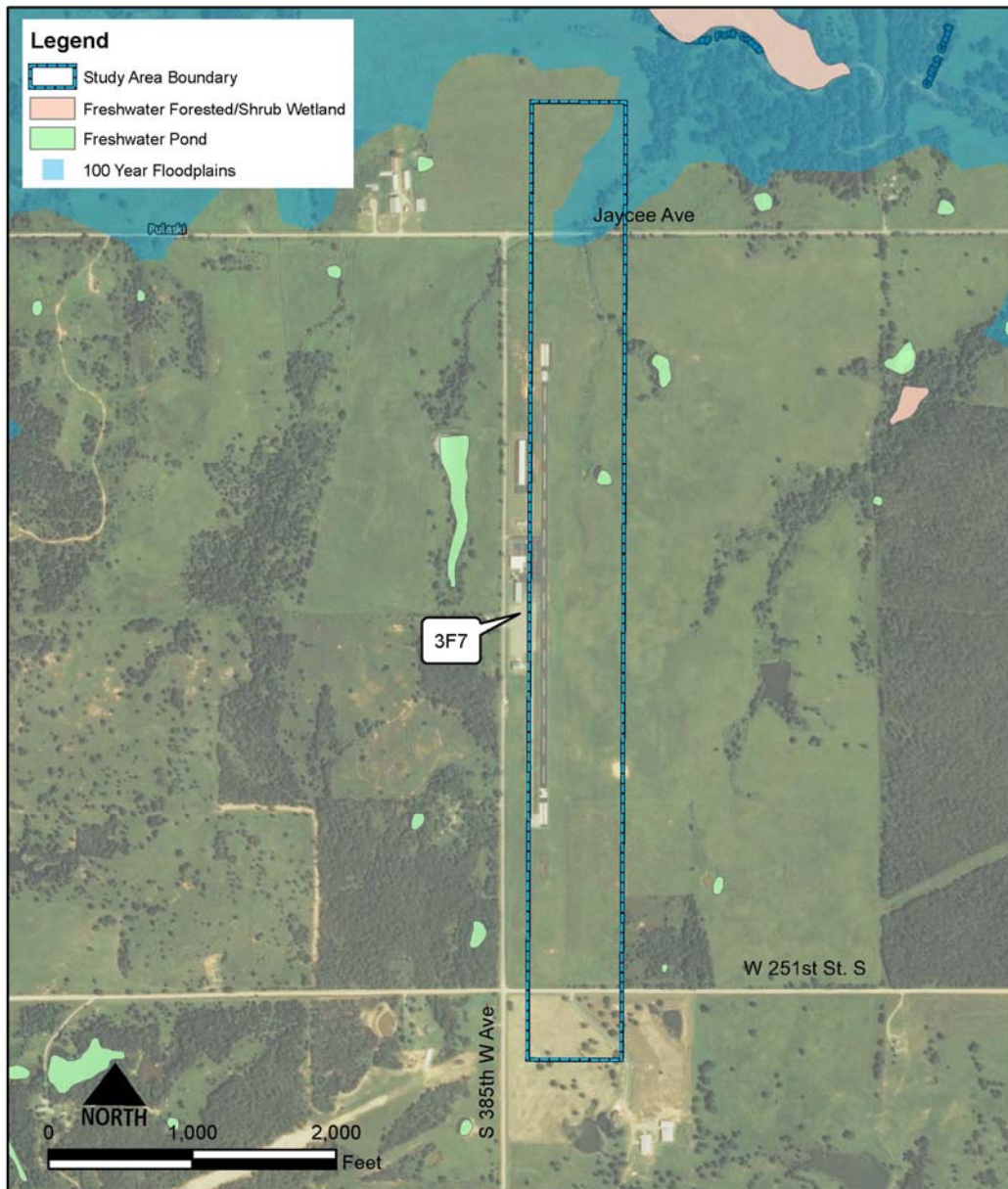


Figure 5-8 **Water Resources**

Service Layer Credits: Federal Emergency Management Agency (FEMA)
 Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics,
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would be prevented by implementing measures including sedimentation basins, silt traps, catch basins, and drip pans and following the NPDES permit. Additionally, contractors will be required to follow the best management practices outlined in FAA AC 150/5370-10G, *Standards for Specifying Construction of Airports*.

5.2.11 Cumulative Impacts

Cumulative impacts are those impacts on the environment that result from the incremental impact of an action added to other past, present, and reasonably foreseeable future actions, regardless of what agency, federal or non-federal, or person undertakes such other actions. Cumulative impacts can result from actions which are individually minor, but collectively significant over a period of time.

In the environs surrounding the Airport, development is generally guided through the use of zoning and land use regulations. It is expected that growth will continue to occur in the area in compliance with the Creek County Zoning Designations. In order to help evaluate possible cumulative impacts, research was conducted to identify projects that have occurred, are currently occurring, or are planned to occur near the Airport. Coordination with the Creek County Planning Department conducted in March 2016 revealed that there is limited development within the county near the Airport. Coordination with the City of Bristow identified the following projects:

Past Projects

- A new Consolidated Turbine Specialist Building just north of the existing small hangars on airport property was recently constructed. The building is approximately 10,500 square feet.

Present Projects

- A gravity flow sewer line from the lift station is currently being installed (along existing right-of-way of West 385th Avenue) at the north end of the runway to serve the Consolidated Turbine Specialist Building and points south for future airport development.

Reasonably Foreseeable Future Projects

- An expansion of the Consolidated Turbine Specialist Building may occur based on business growth.
- Additional hangars may be constructed at the Airport to accommodate potential growth.
- Potential construction of an on-airport facility for Timco.
- An FBO hangar (for aircraft maintenance) is planned to be constructed at the Airport.
- Addition of a gravity flow sewer line from the lift station that will run from the west to the east side of airport property, crossing the new runway for future improvement may take place on the east side.

Proposed Action

The Proposed Action involves the construction of a new runway 325 feet north and 300 feet south of the previously approved runway. Construction will take place on previously disturbed ground located on airport property. Consequently, impacts to most resources are avoided entirely.

As discussed in the individual environmental resource category sections, the Proposed Action would not result in significant increases in air emissions or adverse impacts from noise, visual or other resources that are likely to create cumulative effects when combined with other past, present, or recently foreseeable actions. The greatest effect would be an increase of impervious surfaces that trap pollutants and increase runoff to receiving waterways, as there is a general correlation between new pavement and reduction in water quality due to increased runoff. Therefore, it would be imperative that BMPs are employed for the Proposed Action to minimize these potential effects. The implementation of the Proposed Action would allow the City of Bristow to adequately accommodate existing and forecast demand, and could potentially attract new industry to the community. With these considerations in mind, implementation of the Proposed Action along with other past, present, or reasonably foreseeable projects would not result in significant cumulative impacts to environmental resources as defined by FAA Environmental Order 1050.1F.

5.2.12 Irreversible and Irretrievable Commitment of Resources

An irreversible or irretrievable commitment of resources refers to impacts on or losses to resources that cannot be recovered or reversed. Irreversible is a term that describes the loss of future options. It applies primarily to the impacts of use of nonrenewable resources, such as minerals or cultural resources, or to those factors that are renewable only over long periods of time (i.e., soil productivity). Irretrievable is a term that applies to the loss of production, harvest, or use of natural resources.

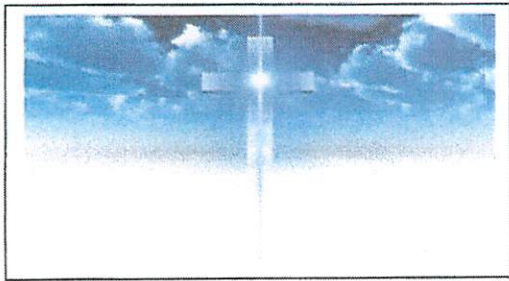
During the construction of the new runway, natural and human-made resources would be expended. However, the resources expended (e.g., fossil fuels, electricity, construction materials) would be used in relatively small quantities and are not in short supply throughout the region or globally. Further, the features and characteristics of the development area are neither rare nor significant. Therefore, the project is not anticipated to result in an irreversible or irretrievable commitment of resources.

APPENDIX

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APPENDIX A: FAA JUSTIFICATION LETTERS

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PLATINUM CROSS WELDING, INC.

Corporate Office
514 W. Broadway
Okemah, OK 74859
Phone: 918-623-9130
info@pcwelding.com
Fax: 918-623-9160

B & G Leasing, LLC

March 17, 2015

Ms. Linda Tate
Director of Finance
City of Bristow
Bristow, OK 74010

Dr. Ms. Tate:

Please be advised that our business utilizes a King Air size plane. Due to the shortness of the runway we cannot utilize the City of Bristow Jones Airport. We currently employ a staff of forty personnel. Our Oil & Gas Manufacturing business consist our Corporate office here in Oklahoma and customers primarily in Oklahoma and Texas, whoever we do interact with several other states as well, and only do our work here in the United States.

If the Jones Airport has a runway of 4,000 feet we would utilize the facility for planes and would expect to have approximately fifty five landing per year.

This additional runway would allow us to land in a closer proximity to our Corporate office and not forty miles away in Tulsa.

Please contact the undersigned should you have any questions.

Sincerely,

Bart Hays,
Owner/President



Ms. Linda Tate
Director of Finance
City of Bristow
Bristow, Ok. 74010

Dear Ms. Tate:

Please be advised that our business is currently located in the Arthur Foster Industrial Park somewhat adjacent to the City of Bristow Jones Airport. We currently employ 125 personnel. Our business consists of Tire Recycling with offices and customers in 4 states and 1 countries.

If the Jones Airport had a runway of 4,000 feet we would utilize this for our King Air size planes (describe this in additional detail if you like) and would expect to have approximately 25 landings per year.

This additional runway allows us to land within a mile of our plant and not 40 miles away in Tulsa. We can bring in our own corporate executives as well as customers.

Please contact me if you have any further questions.

Regards,

Gary Humphreys
Oklahoma Tire Recyclers, LLC
ghumphreys@maalt.com



Consolidated Turbine Specialists
304 Old Trail RD
Bristow, OK 74010
Work # 918-367-9665

2/04/2014

Mr. Toby Baker
CEC//Infrastructure Solutions
Email: toby.baker@connectcec.com

Subject: City of Bristow Jones Memorial Airport

Dear Toby,

Consolidate Turbine Specialist LLC is a FAA & EASA approved Repair Station. The Repair Station is certified by the FAA & EASA to Repair/Overhaul Pratt & Whitney PT6 Turboprop & Tuboshaft Aircraft Engines. We are an international company, supporting Aircraft throughout all cotenants.

We currently employ thirteen individuals and plan to expand to 30 within 18 months. The current work force is highly skilled with combined years of experience exceeding 150 years. The average wage for our work force is 60k and the company has a benefit package exceeding its competitors. This compensation package is essential to attract the best individuals in our market space.

We are currently located in Bristow Oklahoma occupying a rented 3,200 square foot facility. We are expanding our business model / facilities and need to relocate on an airport. We have the funding to erect a 10,000 square foot facility in phase one expansion of our existing capabilities. Phase 2 will be erecting an aircraft hangar to develop an FBO to perform maintenance on aircraft.

We will require a 4000 ft. runway to accommodate the King Air C90 & Air Tractor 502 markets. We intend to attract these markets thought out Oklahoma and the surrounding states. We anticipate performing maintenance on 25 Aircraft a year and expanding in the future years.

We also anticipate 10 customers from our existing engine Repair/Overhaul business to utilize this airport.

We believe Bristow Oklahoma's Airport is strategically located for expansion. The Airport is the only Airport in Creek County. Tulsa's airports are reaching full capacity, we anticipate and opportunity to encourage these aircraft operators to relocate/utilize Bristow's Airport for Engine and Aircraft Maintenance.

Sincerely,

Richard Kasabula
COO



Timco
BLASTING & COATINGS
"We Strip for Less"

200 North Main Street
Bristow, OK 74010
Phone: 918-367-1700* Fax: 918-367-9466

March 6, 2015

Linda

First of all, I would like to say how proud we are at Timco to call Bristow our home. The town has taken on a new look and attitude in the last year and we are proud to be a part of such a great little city and the future growth that is coming.

It has been brought to my attention recently that there may be some renewed interest in the Jones Memorial Airport here in Bristow. Such as interest in upgrading the existing runway to handle more and larger aircraft?

As you know, Timco had sincere interest in building a branch of our company at the airport a few years back. This venture fell through the cracks for various issues, but the driving issue was the short and poor maintained runway. We could not bring in the planes we were required to work on with the existing runway.

I'm sending this letter to let you know that Timco would possibly revisit the opportunity to expand to that arena if the airport runway and facility were to be brought up to handle more aircraft such as twin engines, special purpose planes and even small jets.

Timco has grown rapidly in the last few years. We currently have facilities in Eldorado, KS, San Antonio, TX, Stroud, OK as well as our two yards in Bristow.

We are currently doing work for the Construction Industry, Oil & Gas Industry, City Municipalities, Rail Car Industry and the Steel & Manufacturing Industry. Timco owns and operates our own rail yard and transloading facility. We also hold contracts for refurbish and coating in house and on site for the 138th Fighter Wing in Tulsa, OK as well as the 188th Fighter Wing in Fort Smith, AR for work on various fighter jets and planes.

We currently have over 50 employees in this area, not to mention our other locations.

If Timco were able to build a shop at the Bristow Airport Facility, we would potentially add up to eight employees and be able to move two to four aircrafts per week through the location. These aircrafts would be Twin Engine, King Airs and small Leers.

If the Jones Memorial Airport is something the City of Bristow is looking to revitalize, please keep me in the loop because as I mentioned above, Timco may still be interested in expanding and expanding means hiring more potential Bristow people.

Thank you for your time.


Tim Farley, President (Timco)



144
208





March 9, 2015

Ms. Linda Tate
Director of Finance
City of Bristow
Bristow, OK 74010

Dear Ms. Tate:

Our business, Vertical Aerospace is headquartered and located in the Arthur Foster Industrial Park, somewhat adjacent to the City of Bristow Jones Airport. We currently employ 70 personnel. We are a commercial aircraft maintenance, repair, and overhaul service business. We conduct business in approximately 20 states, and 8 countries. Have offices with reps in Asia and South America.

If the Jones Airport had a 4,000 foot long runway we would utilize it as part of our company transportation plan, to bring in customers in business turbine powered aircraft or lights jets, such as Beechcraft King Airs, CitationJets, and Embraer Phenoms. A 4,000 foot runway, would accommodate the payload of multiple passengers and fuel load, and necessary performance required for these aircraft to operate, as opposed to the existing 3,400 foot runway.

Economical justification to use the existing runway is extremely difficult. The size of aircraft is so small that only 1-2 passengers can use it, and only at a short range. Other options prove more economical and feasible.

This runway is located less than a mile from the front door of our facility, and not 40 miles from Tulsa. I expect our operations alone at this airport would be approximately 75-100 cycles per year.

Please don't hesitate contact me should you have any questions.

Sincerely,

Tray Siegfried
CEO, Vertical Aerospace

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**APPENDIX B:
2007 ENVIRONMENTAL ASSESSMENT FOR
JONES MEMORIAL AIRPORT**

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FINAL WITH
FOUSI

ENVIRONMENTAL ASSESSMENT

For

JONES MEMORIAL AIRPORT BRISTOW, OKLAHOMA

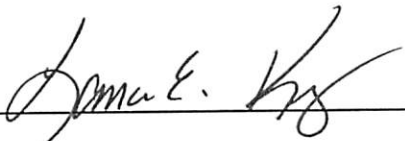
Prepared by:

**HORIZON
ENGINEERING INC**

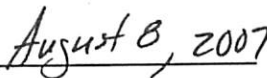
Horizon Engineering Inc.
1414-A East 71st Street
Tulsa, OK 74136
(918) 663-0870

June 2007

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



Responsible FAA Official



Date



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Donald Harris
 Federal Aviation Administration
 Airports Division, Southwest Region
 2601 Meacham Blvd.
 Ft. Worth, TX - 76137-4298

COMPLETE THIS SECTION ON DELIVERY

- A. Signature X Agent Addressee
- B. Received by (Printed Name) Addressee
 Kenneth Kenneth 8/20/07 Date of Delivery
- D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type

- Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number 7006 0100 0003 6544 4268
 (Transfer from service label)

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

**U.S. Postal Service™
 CERTIFIED MAIL™ RECEIPT**
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	\$ 4.15	Postmark Date	AUG 17 2007
Certified Fee	2.65		
Return Receipt Fee (Endorsement Required)	2.15		
Restricted Delivery Fee (Endorsement Required)			
Total Postage & Fees	\$ 5.21		

7006 0100 0003 6544 4268

Sent To **DONALD HARRIS**
 Street, Apt. No., or PO Box No. **2601 MEACHAM BLVD**
 City, State, Zip+4 **FT. WORTH TX - 76137-4298**

PS Form 3800, June 2002

See Reverse for Instructions

CITY OF BRISTOW

(established 1898)

110 West Seventh Street
Bristow, Oklahoma 74010

August 17, 2007


Mr. Donald C. Harris,
Federal Aviation Administration
Airports Division, Southwest Region
2601 Meacham Blvd.
Ft. Worth, Texas 76137-4298

RE: Proof of Publication

Dear Mr. Harris:

Enclosed please find the Proof of Publication on the FONSI for the Jones Memorial Airport. If anything further is required, please let me know.

Sincerely,



Linda Tate
Finance Director

AFFIDAVIT OF PUBLICATION

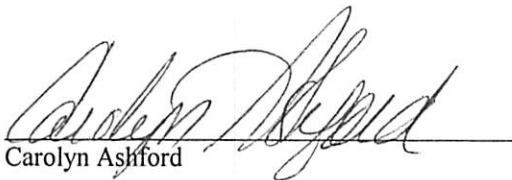
State of Oklahoma)
(ss. County of Creek)

Carolyn Ashford of lawful age, being duly sworn and Authorized, says that she is the Publisher of

THE BRISTOW NEWS & RECORD CITIZEN,

a weekly newspaper published in the City of Bristow, Creek County, Oklahoma, a newspaper qualified to publish legal notices, advertisements and publications as provided in Section 106 of Title 25, Oklahoma Statutes 1971, as amended, and complies with all other requirements of the laws of Oklahoma with reference to legal publications. That said notice, a true copy of which is attached hereto, was published in the regular edition of said newspaper during the period and time publication and not in a supplement on the following dates:

August 15, 2007


Carolyn Ashford


Anderson Bentley

Subscribed and sworn to before me this 15
day of August, 2007.

Commission expires: 03/2011
Commission No. 07003113

Legal

(Published one (1) time in the Aug. 15, 2007, edition of the Bristow News)

The Federal Aviation Administration (FAA), Southwest Region, after careful and thorough consideration of all facts and after coordination with appropriate local, state, and Federal agencies approved on August 9, 2007, an environmental Finding of No Significant Impact (FONSI) for the proposed construction of a new runway 17/35, the conversion of the existing runway to a parallel taxiway and the acquisition of adjacent supporting lands at Jones Memorial Airport, Bristow, Oklahoma. The FONSI is available for review at the Airports Division, Arkansas/Oklahoma Airports Development Office, FAA Southwest Region, 2601 Meacham Blvd., Fort Worth, Texas 76137. Copies of the FONSI are also available at the City of Bristow, 110 West Seventh Street, Bristow, OK.

*Sent an original
to Donald Harris
F A A. Cert. return receipt*



U.S. Department
of Transportation
**Federal Aviation
Administration**

Federal Aviation Administration
Airports Division, Southwest Region
Arkansas/Oklahoma Airports Development Office

Fort Worth, Texas 76193-0600

AUG 09 2007

Mayor Leon Pinson
City of Bristow
110 West Seventh Street
Bristow, OK 74010

City of Bristow

AUG 13 2007

Received

Dear Mayor Pinson:

Enclosed please find two copies of the completed environmental Finding of No Significant Impact (FONSI) for the proposed new runway and land acquisition at Jones Memorial Airport, Bristow, OK. The FONSI should be attached to the Final Environmental Assessment to form the completed document.

If the city intends to follow through with the project as planned, you are requested to announce the availability of the FONSI by way of legal notice or other suitable announcement. The announcement should be similar to the following:

The Federal Aviation Administration (FAA), Southwest Region, after careful and thorough consideration of all facts and after coordination with appropriate local, state, and Federal agencies approved on August 9, 2007, an environmental Finding of No Significant Impact (FONSI) for the proposed construction of a new runway 17/35, the conversion of the existing runway to a parallel taxiway and the acquisition of adjacent supporting lands at Jones Memorial Airport, Bristow, Oklahoma. The FONSI is available for review at the Airports Division, Arkansas/ Oklahoma Airports Development Office, FAA Southwest Region, 2601 Meacham Blvd, Fort Worth, Texas 76137. Copies of the FONSI are also available at the City of Bristow, 110 West Seventh Street, Bristow, OK.

Please provide our office a copy of the notice after publication in at least one newspaper of general circulation for the project area.

Enclosed is one copy of the signed Final Environmental Assessment, making it a Federal document. Please ensure this signed copy with the FONSI attached is made available for public review.

Thank you for your cooperation in this matter. If you need any additional assistance, feel free to contact this office.

Sincerely,

Donald C. Harris
Acting Manager, Arkansas/Oklahoma
Airport Development Office

3 Enclosures

cc:

Horizon Engineering, Inc.
1414-A East 71st Street
Tulsa, OK 74136

Dave Hellen
Wiley Post Airport, FAA Bldg
5909 Phillip J. Rhoads Avenue
Bethany, OK 73008

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT

ACTION: Decision - Finding of No Significant Impact (FONSI) for the proposed construction of a new single runway at Jones Memorial Airport, Bristow, Oklahoma.

A. ISSUE – PROPOSED FEDERAL ACTION.

This document is to request approval of this Finding of No Significant Impact (FONSI) for the proposed construction of a new 3375-foot by 60-foot runway to be located 240 feet east of the existing runway 17/35 at Jones Memorial Airport, Bristow, Oklahoma. The airport is owned and operated by the City of Bristow, Oklahoma and will continue to serve as a General Aviation (GA) airport for small single and twin-engine aircraft. The proposed airport project consists of the following items: 1) acquisition of 65 acres of land immediately adjacent to the airport to support the relocated runway (17/35); 2) conversion of the existing runway (17/35) to a parallel taxiway with new connecting access taxiways being constructed between the new runway and parallel taxiway; and 3) acquisition of approximately 16 acres of aviation easements at the north and south ends of the airport for the Runway Protection Zones (RPZ). Additional future development of the airport is envisioned, but was not evaluated at this time.

B. PROCEDURAL BACKGROUND AND FONSI FORMAT.

Summary: An Environmental Assessment (EA) was prepared for this proposed project under the direction of the City of Bristow and the Jones Memorial Airport Advisory Board. The EA was prepared in compliance with the format and content of Federal Aviation Administration (FAA) environmental assessments prescribed in FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions* and FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*. These orders are self-contained documents which include the information essential to meeting procedural and substantive environmental requirements set forth by the Council on Environmental Quality (CEQ) in its Regulations Implementing the National Environmental Policy Act (NEPA), specifically sections 1505.1 and 1507.3.

According to CEQ regulations, should an EA indicate no impact of significance associated with the proposed project, a FONSI should be prepared documenting such, approving the project for Federal action consideration.

No thresholds of significance were found to have been exceeded by this EA. After analysis of the EA, the public hearing transcript, comments/correspondence received from citizens, letters received during the intergovernmental coordination process and other supporting documentation, the FAA determined that a FONSI was justified for the proposed airport improvements.

The EA was circulated for review by appropriate Federal, State and local agencies. Local citizens were encouraged to provide comments. Public notification of the EA was

advertised in a local paper on July 4, 2007. A public hearing was held on August 7, 2007, in Bristow, Oklahoma. There were no concerns expressed at the public hearing.

This EA/FONSI will remain valid for three (3) years following its approval. Any project assessed by this document and not begun within this time frame will need to be reevaluated for environmental significance prior to its implementation.

C. PURPOSE AND NEED FOR THE PROPOSED AIRPORT IMPROVEMENTS, COMPARISON OF ALTERNATIVES, AND SELECTION OF PREFERRED ALTERNATIVE.

The purpose and need for the proposed runway is described in the EA on pages 1-2. The new runway will: 1) remove a safety hazard that currently exists resulting from the encroachment of parked aircraft in the current Runway Object Free Area (ROFA); 2) correct a severe gradient problem with the existing runway that exceeds the 2% maximum gradient set forth in Advisory Circular (AC) 150/5300-13; and 3) allow for the future expansion of hangars and operational area that is unavailable with the current runway location.

Comparison of Alternatives and Selection of Preferred Alternatives.

The following alternatives were considered in this EA (see pages 2 through 4) and FONSI: (1) Alternative A – No Action. This alternative would leave the airport in its current configuration, with severe gradient problems and a high propensity for incursions between parked, taxiing, and landing aircraft; (2) Alternative B – Construct New Runway West of Existing Runway. Although this would solve the safety issue, it would require the acquisition of much more land than the preferred alternative. In addition, all existing facilities would be facing away from the runway under this alternative, requiring extensive facility changes and modifications; (3) Alternative C – Move the Existing Hangars and Facilities. This would involve the acquisition of land east of the airport, relocation of the existing hangars, and construction of a new parallel taxiway. The existing runway would still need to be renovated to resolve the gradient problem; (4) Alternative D – Construct New Runway to the East (Preferred Alternative). Acquire 65 acres adjacent to the airport and construct a 3375-foot by 60 foot runway 240 feet east of the existing runway. Utilize the current runway as a taxiway. Remove the gradient deficiencies during construction of the new runway. Acquire 16 acres of aviation easement to the north and south of the airport to support the RPZ.

The alternatives were evaluated based on the following factors: Operational feasibility, safety, environmental feasibility, total development costs, and geographic conditions. After a complete consideration of all alternatives that was studied in the EA, construction of a new runway located 240 east of the existing runway (Alternative D) was selected as the preferred alternative by the City of Bristow and the Jones Memorial Airport Advisory Board and concurred with by the FAA. This option was preferred because, among other factors, it corrected the safety issue, fixed the gradient problem, and required less acquisition of land and relocation of current airport facilities than the other alternatives.

D. AFFECTED ENVIRONMENT AND AREA CHARACTERISTICS.

1. **Location:** Jones Memorial Airport is located just southwest of the City of Bristow, Oklahoma, in Creek County, in the north central portion of the state. The airport currently occupies approximately eighty-one acres and is at an elevation of 844 feet above mean sea level. It consists of one paved runway (17/35) which is 3,375 feet long by 50 feet wide, is constructed of asphalt and has a single wheel gross weight bearing capacity of 4,000 pounds. Jones Memorial Airport is located approximately 60 miles northeast of Oklahoma City, about 27 miles southwest of Tulsa and is just south of Interstate 44.
2. **Land Uses:** The airport is bounded on all sides by agricultural property. There is a section line road on the west and south sides of the airport. Little Deep Fork Creek lies approximately one mile east and north of the airport and the St. Louis-San Francisco Railroad and U.S. Highway 66 is approximately one-half mile to the north. The area surrounding the airport is outside the city limits and, as such, is not zoned. However, a height zoning ordinance was adopted in 1994 that protects the airport from height encroachments.

E. SUMMARY OF ENVIRONMENTAL IMPACTS.

For construction of a new single runway airport as described herein, an EA leading to a FONSI is normally appropriate; whereas, an EIS is required only if one of the thresholds of significance for the 18 environmental impact categories mentioned in Order 1050.1E is exceeded.

No categories were identified in the EA as suffering any environmental impact, which would exceed the thresholds of significance. The following categories were identified in the EA as having a potential to suffer some environmental impact due to the proposed project.

HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, and CULTURAL RESOURCES

Although no such sites were identified within the proposed project area during the cultural resource survey, if an archaeological or cultural site were to be exposed during construction, work must cease immediately and an opportunity will be provided for the State Historical Preservation Officer and the FAA to examine the site so that a determination can be made regarding the significance and the need for excavation and documentation of the site.

WATER QUALITY

Under the CWA (Section 402), a National Pollutant Discharge Elimination System (NPDES) permit will be required prior to any construction activity. This permit, from the U.S. Environmental Protection Agency (EPA), covers storm water discharges from construction projects that would result in the disturbance or re-disturbance of one or more acres. The NPDES permit requires the preparation of a storm water pollution prevention plan that will ensure appropriate Best Management Practices (BMP) are installed and

maintained during and after construction to prevent, to the extent practicable, pollutants in storm water runoff from entering waters of the U.S.

CONSTRUCTION IMPACTS

The negative impacts of construction noise, traffic disruptions, and air quality effects, etc. will be temporary and will be minimized by the use of appropriate controls contained in FAA AC 150/5370-10A in addition to Federal, state and local ordinances or permits required for construction.

F. PUBLIC HEARING AND COMMENT.

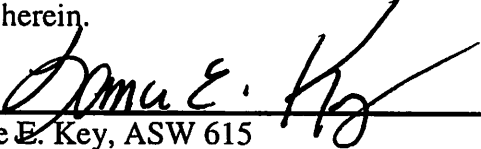
The EA was circulated for review by appropriate Federal, State and local agencies. Local citizens were encouraged to provide comments. Public notification of the EA was advertised in a local paper on July 4, 2007. A public hearing was held on August 7, 2007. There were no concerns or comments expressed at the public hearing.

G. FEDERAL FINDING.

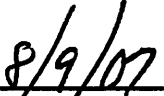
I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101 (a) of the National Environmental Policy Act of 1969 (NEPA). I also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

H. RECOMMENDATION.

I recommend that you approve the proposed development subject to the conditions set forth herein.



Lance E. Key, ASW 615
Airport Environmental Specialist



DATE

CONCUR/DO NOT CONCUR

Dave Hellen, OKC
Airport Program Manager

DATE

APPROVE DISAPPROVE



Donald C. Harris, ASW 630
Acting Manager, Arkansas/Oklahoma Airports Development Office



DATE

hp LaserJet 4345mfp series



Fax Call Report

1

City of Bristow
918-367-2207
Aug-13-2007 09:35 AM

Job	Date/Time	Type	Identification	Duration	Pages	Result
1175	Aug-13-2007 09:33 AM	Send	6271939	1:30	7	Success

CITY OF BRISTOW

110 West Seventh Street
Bristow, OK 74010
Telephone: (918) 367-2237
Fax: (918) 367-2207

Fax Coversheet

Date 8-13-07 Number of Pages (Including cover sheet) 7

To Carl - Harrison

Fax Number 627-1739 Attn. _____

From Janice Tate

Message Carl,

I will place the recommended
Ad in Wednesday's local paper.

Please let me know if anything further
is needed.

Janice

+++++

This message is intended only for the use of the individual or entity to which it is address, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any discrimination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us at the above address via U.S. Postal Service. Thank you.

CITY OF BRISTOW

110 West Seventh Street
Bristow, OK 74010
Telephone: (918) 367-2237
Fax: (918) 367-2207

Fax Coversheet

Date 8-13-07 Number of Pages (Including cover sheet) 7

To Carl - Harrison

Fax Number 627-1939 Attn. _____

From Janice Tate

Message Carl,

I will place the recommended
Ad in Wednesday's local paper.

Please let me know if anything further
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Janice

+++++

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Table of Contents

1.0	INTRODUCTION.....	1
1.1	Existing Conditions.....	1
1.2	Forecasted Aviation Activity	1
2.0	PURPOSE AND NEED	1
3.0	PROPOSED ACTION.....	2
3.1	Federal Action Requested.....	2
3.2	Time Frame.....	2
4.0	ALTERNATIVES	2
4.1	Alternative A: No Action	3
4.2	Alternative B: Construct New Runway to the West.....	3
4.3	Alternative C: Move the Existing Hangar Facilities	3
4.4	Alternative D: Construct New Runway to East.....	3
5.0	AFFECTED ENVIRONMENT	4
5.1	Project Setting.....	4
5.2	Airport Operations	5
5.3	Land Use and Zoning.....	5
5.4	Soils and Geology	5
5.5	Fish, Wildlife, and Plants	6
5.6	Water Resources	6
5.7	Socioeconomic Factors	6
5.8	Other Planned Activities	6
6.0	ENVIRONMENTAL CONSEQUENCES	7
6.1	Noise.....	7
6.2	Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks.....	7
6.3	Secondary (Induced) Impacts.....	7
6.4	Air Quality	7
6.5	Water Quality	8
6.6	Section 4(f) Property	8
6.7	Historical, Architectural, Archeological and Cultural Resources.....	8
6.8	Fish, Wildlife and Plants	9
6.9	Wetlands	9
6.10	Floodplains.....	9
6.11	Coastal Resources	10

6.12	Wild and Scenic Rivers	10
6.13	Farmland.....	10
6.14	Natural Resources and Energy Supply.....	10
6.15	Light Emissions and Visual Impacts	10
6.16	Hazardous Materials, Pollution Prevention and Solid Waste	10
6.17	Compatible Land Use.....	11
6.18	Construction Impacts.....	11
6.19	Cumulative Impacts.....	11

Tables

Existing and Forecast Operations.....	1
---------------------------------------	---

Appendix A

Location Map.....	1
Jones Memorial Airport (Existing).....	2
Jones Memorial Airport Alternate D.....	3
Jones Memorial Airport ROFA.....	4
Jones Memorial Airport ALD.....	5

Appendix B: Response Letters

Corps of Engineers.....	1
Oklahoma Archeological Survey.....	2
Oklahoma Historical Society.....	3
USDA Farmland Conversion Impact.....	4
Fish and Wildlife Services	5

Appendix C: Proof of Publication.....	1
---------------------------------------	---

Appendix D: Response to Comments.....	1
---------------------------------------	---

Appendix E: Public Hearing Transcript.....	1
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1.0 INTRODUCTION

Jones Memorial Airport is owned and operated by the City of Bristow, Oklahoma, situated in Creek County. (See Appendix A, Page 1) The City Council is the ultimate decision making body of the airport; however, the Jones Memorial Airport Advisory Board has been established to provide the city with recommendations concerning all airport matters. The actual responsibility for management of the airport on a daily basis rests with the Airport Advisory Board which has hired an Airport Manager.

1.1 Existing Conditions

The airport presently consists of one runway, Runway 17/35, which is 3,375 feet in length by 50 foot wide. The current airport consists of 81 acres of land which includes the runway, aircraft parking apron and several T-hangar facilities. (See Appendix A, Page2)

1.2 Forecasted Aviation Activity

In 2006, the airport accommodated approximately 1,000 operations, of which fifty-eight (58) were turboprop operations. In addition, there were nine (9) based aircraft at the airport. Table 1 indicates the number of operations at the airport and the growth to 2016.

Table 1
EXISTING AND FORECAST OPERATIONS
Jones Memorial Airport Environmental Assessment

AIRCRAFT TYPE	EXISTING (2006)	FUTURE (2016)
Single Engine	847	978
Multi-Engine	95	110
Turboprop	58	62
TOTAL	1,000	1,150

2.0 PURPOSE AND NEED

The current runway's location in relation to the existing T-hangars results in parked aircraft encroaching into the Runway Object Free Area (ROFA) which results in a safety hazard. (See Appendix A, Page 4) In addition, there is also a severe gradient problem with the runway. Portions of the existing runway exceed the 2% maximum runway gradient as set forth in Advisory Circular 150/5300-13, Airport Design. A reconstruction of the existing runway is necessary to improve the gradient and the runway needs to be relocated to allow aircraft to park outside the existing hangars and any proposed hangars without encroaching into the

runway object free area. Any future increase in traffic and expansion of hangars for either based or itinerant aircraft will be severely hampered by the location of the existing runway.

3.0 PROPOSED ACTION

In order to correct the safety issues identified at Jones Memorial Airport, the proposed project would require the acquisition of approximately sixty-five (65) acres of land immediately adjacent to the airport as well as approximately sixteen (16) acres of aviation easement at the north and south ends of the airport for Runway Protection Zones. The requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will be adhered to. No residences or businesses will be displaced or people relocated. The proposed project will result in the construction of a new 3375 foot by 60 foot runway being relocated 240 feet east of the existing runway 17/35. (See Appendix A, Page 3) The old runway will be converted to a parallel taxiway with new access taxiways between the new runway and the parallel taxiway. The new runway location would conform to the approved Airport Layout Plan. (See Appendix A, Page 5) The new runway will be capable of accommodating utility type aircraft. All construction practices will conform to Advisory Circular 150/5370-10B, Standards for Specifying Construction on Airports. There will be no roads closed or realigned by this project.

3.1 Federal Action Requested

Federal approvals and financial assistance will be requested to purchase land, acquire easements and construct a new runway at Jones Memorial Airport.

3.2 Time Frame

The City of Bristow plans to purchase the needed property during the summer of 2007 and begin grading for the new runway during 2008. The schedule for completion of the project is contingent upon funding.

4.0 ALTERNATIVES

In order to provide a safer airport and allow for expansion of the facilities, several alternatives were investigated as to their feasibility and cost. The alternatives evaluated for this assessment include: no action alternative; construct a new runway west of the existing hangars; move the existing hangar facilities; construct a new runway east of the existing runway. Each of these alternatives is explained in more detail in the following paragraphs.

4.1 Alternative A: No Action

This no action alternative would involve the airport remaining in its present condition. Aircraft parked outside the T-hangars would continue to encroach into the Runway Object Free Area and the possibility of incursions would remain high. In addition, Runway 17/35 would continue to experience gradient problems in excess of minimum FAA standards.

4.2 Alternative B: Construct New Runway to the West

This alternative involves the purchase of land west of the airport and constructing a new runway at a sufficient distance from the hangars. This alternative would solve the immediate problems including providing proper set back from the existing facilities. The amount of land needed would be greater than Alternatives C & D since land would be needed to construct both the new runway and parallel taxiway. The existing facilities would be facing the wrong direction and the existing section line road that runs along the west side of the airport would have to be relocated to the east of the Existing hangars. Some of the land to the west is low land prone to flooding, which would cause additional problems for locating a runway to the west. This appears to be the most expensive alternative and would impact a possible floodplain area.

4.3 Alternative C: Move the Existing Hangar Facilities

This alternative would involve buying land east of the airport in order to relocate the existing hangars and to construct a new parallel taxiway. The amount of land would be slightly more than Alternative D because additional land would be needed to construct an access road to the east of the new hangar facilities. The existing runway would still need to be renovated to resolve the gradient problem.

4.4 Alternative D: Construct New Runway to the East

This alternative involves the construction of a new runway 3375 feet long by 60 feet wide, 240 feet east of the existing runway and utilizing the existing runway as a taxiway. By locating the new runway 240 feet from the existing runway, the separation between the runway and future parallel taxiway will meet the minimum FAA design specifications required between the runway centerline and the taxiway centerline for Design Group II airports (Approach Category A & B). This would require the acquisition of approximately 65

acres of land and approximately 16 acres of aviation easements north and south of the airport. This is the sponsor's preferred alternative, and is reflected on the approved airport layout plan. (See Appendix A, Page 5)

5.0 AFFECTED ENVIRONMENT

5.1 Project Setting

Jones Memorial Airport is owned and operated by the City of Bristow, Oklahoma. The Bristow Airport Board was established to oversee the management and operation of Jones Memorial Airport. The airport is located in Creek County, in the north central portion of Oklahoma, in Section 1 of T15N, R8E. The airport currently occupies approximately eighty-one acres. The airport, at an elevation of 844 feet above mean sea level, consists of one paved runway, Runway 17/35 which is 3,375 feet in length, 50 feet in width, is constructed of asphalt, and has a single wheel gross weight bearing capacity of 4,000 pounds. The Jones Memorial Airport Master Plan and an Environmental Assessment prepared by Barnard Dunkelberg and Company dated February 1989, identified a gradient problem on Runway 17/35. The end to end elevation change on the existing Runway is approximately 47 feet, which would result in a moderately severe runway gradient of 1.4 %, if the runway sloped consistently from end to end. However, the runway slope increases and decreases over its length which results in an even more severe runway gradient greater than the 2 % maximum gradient set forth in AC 150/5300-13.

Currently, Runway 17/35 is served by a partial parallel taxiway on the west side of the runway. The partial parallel taxiway connects end of Runway 35 with the apron/terminal area which contains a municipal hangar/terminal building, one ten unit T-hangar structure, one four-unit open T-hangar structure, and a trailer house. There are currently nine based aircraft at the airport, seven of which are single engine aircraft and two multi-engine aircraft.

The area is characterized by a mild, temperate climate, with gradual seasonal changes and distinct seasons. Winters are mild and short, with January being the driest month. Summers are long and hot, with most rainfall occurring in the spring in the form of thunderstorms. May is the wettest month. Annual rainfall averages 33 inches. The area has an average daily maximum temperature of 71 degrees Fahrenheit and an average daily minimum temperature of 49 degrees, resulting in an average temperature of 60 degrees Fahrenheit. January is the coldest month and July the hottest, with average temperatures ranging from

36 degrees in January to 83 degrees in July. Prevailing winds at Jones Memorial Airport are from the south-southwest at approximately nine to fourteen knots.

5.2 Airport Operations

Jones Memorial airport operations, both existing and future, are listed in Table 1, page 1. The existing operations are consistent with the FAA Terminal Area Forecast (TAF) and the forecasted operations are within 15% of the TAF projections.

5.3 Land Use and Zoning

The airport is located southwest of the City of Bristow, approximately two miles southwest of the Central Business District. The airport property is bounded on all sides by agricultural property. On the west and south, the airport abuts a section line road. To the north, the section line road is approximately 650 feet north of the airport property line. Little Deep Fork Creek lies approximately one mile east and north of the airport. The St. Louis-San Francisco Railroad track and U.S. Highway 66 are approximately one-half mile north of Jones Memorial Airport.

The City of Bristow has adopted a zoning ordinance for the expressed purpose of encouraging the most appropriate uses of land within its jurisdiction by controlling the type and placement of development. The airport is presently zoned as a public use district. The area surrounding the airport is outside the city limits and, as such, is not zoned, however a height zoning ordinance was adopted in 1994 that protects the airport from height encroachments.

5.4 Soils and Geology

Creek County lies in the Osage Plains section of the Central Lowlands physiographic province. The Osage Plains, formerly a gentle sloping plain, is now a region of well-dissected sandstone hills. Shallow narrow valleys separated by stony ridges are characteristic. The airport site is located in the Stephenville and Darnell soil association. The association is composed of fine sandy loams, gently sloping to sloping, and sloping and severely eroded. The Stephenville soils occupy nearly level to moderately sloping areas and are closely associated with the very shallow Darnell soils. The two soils are similar in surface

appearance, but the Stephenville soils are twenty to thirty-six inches deep and the Darnell soils are five to twenty inches deep over sandstone. Sandstone outcrops are common in both.

5.5 Fish, Wildlife, and Plants

Wildlife species found on the airport site consist of rabbits, quail, deer, and squirrel. There is no prime wildlife habitat on the airport site nor are there any rare or endangered species which might be impacted by the airport expansion project. There are no wildlife preserves or refuges in the vicinity. Vegetation at the airport consists mostly of introduced grasses and native timber, with post oak and blackjack oak being the dominant species. There are no rare or endangered plant species on the airport. Three migratory wildlife species may visit the area at certain times of the year; the Southern Bald Eagle, the American Peregrine Falcon, and the Whooping Crane, but none have been identified on airport property.

5.6 Water Resources

One significant hydrological feature in the vicinity of the Airport is Little Deep Fork Creek. The creek is approximately one mile north and east of the airport, and flows in a southeasterly direction. There are some ponds east of the airport along with an intermittent watercourse. There are no wetlands on airport property or in the near vicinity.

5.7 Socioeconomic Factors

Bristow is located in north central Oklahoma, approximately forty miles west-southwest of Tulsa. The economy of the community has traditionally been based on the petroleum industry, although this has recently been changing. The nonpetroleum industries are now beginning to dominate economic development throughout the area.

5.8 Other Planned Activities

There are no other planned or developed activities in the affected areas which are interrelated to the proposed project or which would provide cumulative impacts.

6.0 ENVIRONMENTAL CONSEQUENCES

6.1 Noise

The proposed project does not require any noise analysis as the type and frequency of aircraft fall significantly below the requirements set forth in FAA order 1050.1E, Appendix A, Paragraph 14.6.

6.2 Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks

Alternative A will have little direct immediate impact on the socioeconomic conditions of the community, although the result would be that the community could not meet the goal of accommodating both existing and forecast aviation demand. The build alternatives will have direct immediate impact on the socioeconomic conditions of the community. The preferred alternative (Alternative D) would allow the City of Bristow to meet its goal of attracting new industry and adequately accommodating the existing aircraft desiring to use Jones Memorial Airport.

6.3 Secondary (Induced) Impacts

Indirect, long-term impacts, both beneficial and adverse, are typically associated with a secondary event or action which developed from implementing one or more primary actions. Indirect impacts, especially socioeconomic impacts, are very difficult, if not impossible to identify with any degree of accuracy. However, potential for employment exists on an airport through such sources as sales personnel, flight instruction, base operations, rent-a-car agencies and airport personnel. Additional airport employment could increase with increased aviation activity. Airports also serve a vital and desirable role in the service they provide a community, such as an employment center, a fast communications link in time of emergency, a fast and efficient transportation system in time of emergency, provision of facilities for recreation flying, and an airport's ability to help attract new industry and other related services.

6.4 Air Quality

Federal Aviation Administration Order 5050.4B states that "No air quality analysis is needed if...it is a general aviation airport that has less than 180,000 operations forecast annually." As

stated earlier, there are only 1,150 annual operations forecast for the airport by 2016. Therefore, no additional air quality analysis is necessary.

6.5 Water Quality

WATER RESOURCES. The build alternatives (B,C,D) will require minimal grading, which in turn will result in some erosion and sedimentation. However, the contractor will be required to follow the procedures outlined in Federal Aviation Administration AC 150/5370-10B, Standards for Specifying Construction of Airports, which is the FAA guidance to airport sponsors concerning protection of the environment during construction projects. These procedures include the following measures; sediment ponds, diversion ditches, seeding, sodding and mulching. There will be additional long-term runoff due to increased impermeability, but it will be minimal. No 404 permit will be required by the Corps of Engineers (See Appendix B, pg. 1)

Aircraft generated petroleum wastes also represent a potential source of water pollution. These petroleum wastes can occur through leaks or spills by tank trucks on apron areas, leaks or spills from maintenance or repair activities, leaks and spills from aircraft and service trucks. It will be required that oil traps and waste oil tanks be utilized to handle petroleum wastes. Absorbent material will also be required to remove small spills from work areas. The proposed project will not affect the watercourse north/ east of the airport nor will it affect the ponds to the east of the proposed runway.

6.6 Department of Transportation Act: Section 4(f).

There are no city, county state, or federal parks or recreation areas that would be impacted by the proposed project or any of the proposed alternatives. Based on this, a Section 4(f) determination is not required.

6.7 Historical, Architectural, Archeological and Cultural Resources

A Cultural Resource Survey conducted on November 9, 2006, has determined that no historical or archeological sites are located within the proposed project area. There are also no historical/archeological structures on the existing property or within the proposed project area (See letters in Appendix B, pages 2a-2c & 3). If at any time during construction activities any archeological, historical or cultural resources are discovered, construction will cease and the appropriate state officials will be notified and given an opportunity to survey the site and determine any further action deemed necessary.

6.8 Fish, Wildlife and Plants

Consultation with the Oklahoma Department of Wildlife Conservation and the U.S. Fish and Wildlife Service (USF&WS) has been conducted to identify any federal or state threatened or endangered species that may occur within the project area. According to the USF&WS the following species are listed as endangered or threatened species that may reside within Creek County:

1. American Burying Beetle
2. Interior Least Tern
3. Bald Eagle
4. Piping Plover

No known endangered or threatened species would be impacted by the Proposed Action. The USF&WS letter dated April 14, 2006 states that due to the past use of the land to be acquired for the proposed new runway project, and due to the existing airport use, it is highly unlikely that any of these four species exist within or near the proposed project site (See Appendix B, Page 5).

The build alternative would displace some vegetation and wildlife species. Wildlife species on the project site include rabbit, quail, skunk, raccoon, squirrel, and opossum. Dominant vegetation include Bermuda grass, Johnson grass, Blue Gamma, Switch grass and Indian grass. Over story species in the area include cottonwood, post oak, American elm, sycamore, hackberry, red bud, and red cedar. No significant vegetation or common wildlife species are expected to be adversely impacted by this project. The Oklahoma Department of Wildlife Conservation was contacted and did not respond.

6.9 Wetlands

The U.S. Army Corps of Engineers was contacted and their review has determined that a Section 404 permit will not be required for the proposed project (See Appendix B, Page 1). Therefore, authorization will not be required for the Proposed Action. There are no wetlands or marshes either on the airport or in the vicinity.

6.10 Floodplains

According to FEMA Flood Map (ID: 4004900006A), no portions of the airport or any of the land affected by the proposed project is located within a floodplain.

6.11 Coastal Resources

The proposed project is located in northeast Oklahoma and is not within the Coastal Barrier Resource System. No Coastal Management Plans would be impacted by the proposed project.

6.12 Wild and Scenic Rivers

There are no rivers classified as Wild and Scenic Rivers impacted by or within the immediate vicinity of the proposed project. Therefore, the proposed project would not negatively affect any Wild and Scenic classified rivers.

6.13 Farmland

The Farmland Protection Policy Act authorizes the United States Department of Agriculture (USDA) to develop criteria for identifying the effects of Federal programs on the conversion of farmland to nonagricultural uses. The USDA Natural Resources Conservation Service was contacted. According to the Farmland Conversion Impact Rating form completed by the NRCS, a total of 65 acres of farmland would be converted to non-agricultural uses. This would result in 0.001% of farmland to be converted within Creek County. (See Appendix B, Page 4). The score assigned by the NRCS under the Farmland Conversion Impact Rating is below the 160 points that would require further analysis of this impact category.

6.14 Natural Resources and Energy Supply

The proposed build alternatives would not require increases in electrical or natural gas usage as compared to current use by the existing airport. Any increase required would be within the current and future capabilities of the City of Bristow. There are no known energy reserves on airport property that would be impacted by the proposed project.

6.15 Light Emissions and Visual Impacts

The proposed project will not result in any adverse light emissions or create any visual impacts that are not already associated with the existing airport.

6.16 Hazardous Materials, Pollution Prevention and Solid Waste

Federal Aviation Order 5200.5B indicates that landfills or sewerage treatment plants within 5000 feet of all runways planned to be used by piston aircraft and within 10,000 feet of all

runways planned to be used by turbojet aircraft are considered an incompatible use. There are no landfills or sewerage treatment plants within 10,000 feet of the airport. The Proposed project would not adversely affect solid waste collection, control or disposal.

No hazardous wastes are expected to be produced or stored on airport property as a result of the proposed project. However, aircraft-generated petroleum waste can occur. The City of Bristow will require that oil traps and waste oil tanks be utilized to handle petroleum wastes and that absorbent materials be used to remove small spills. Disposal of any waste petroleum products generated by the proposed project will be done in accordance with applicable State and Federal laws and regulations. An Environmental Due Diligence Audit was conducted and the report is available at the Bristow City Hall and no significant impacts were identified.

6.17 Compatible Land Use

The land on all sides of the airport is agricultural and generally used for grazing purposes. The Proposed project will have no negative impact on the surrounding property or its use. The City of Bristow has taken all reasonable actions to restrict the use of land in the immediate vicinity of the airport to activities and purposes compatible with normal airport operation, including landing and takeoff of aircraft.

6.18 Construction Impacts

Final plans and specifications will not be available until a later stage in the project development. However, FAA policy requires in all cases that the specifications assume compliance with AC 150/5370-10B, Standards for Specifying Construction of Airports, which is the FAA guidance to airport sponsors concerning protection of the environment during a construction project. The final plans and specifications for the project will incorporate the provisions of AC 150/5370-10 to ensure minimal impact due to erosion, air pollution, sanitary waste and the use of chemicals.

6.19 Cumulative Impacts

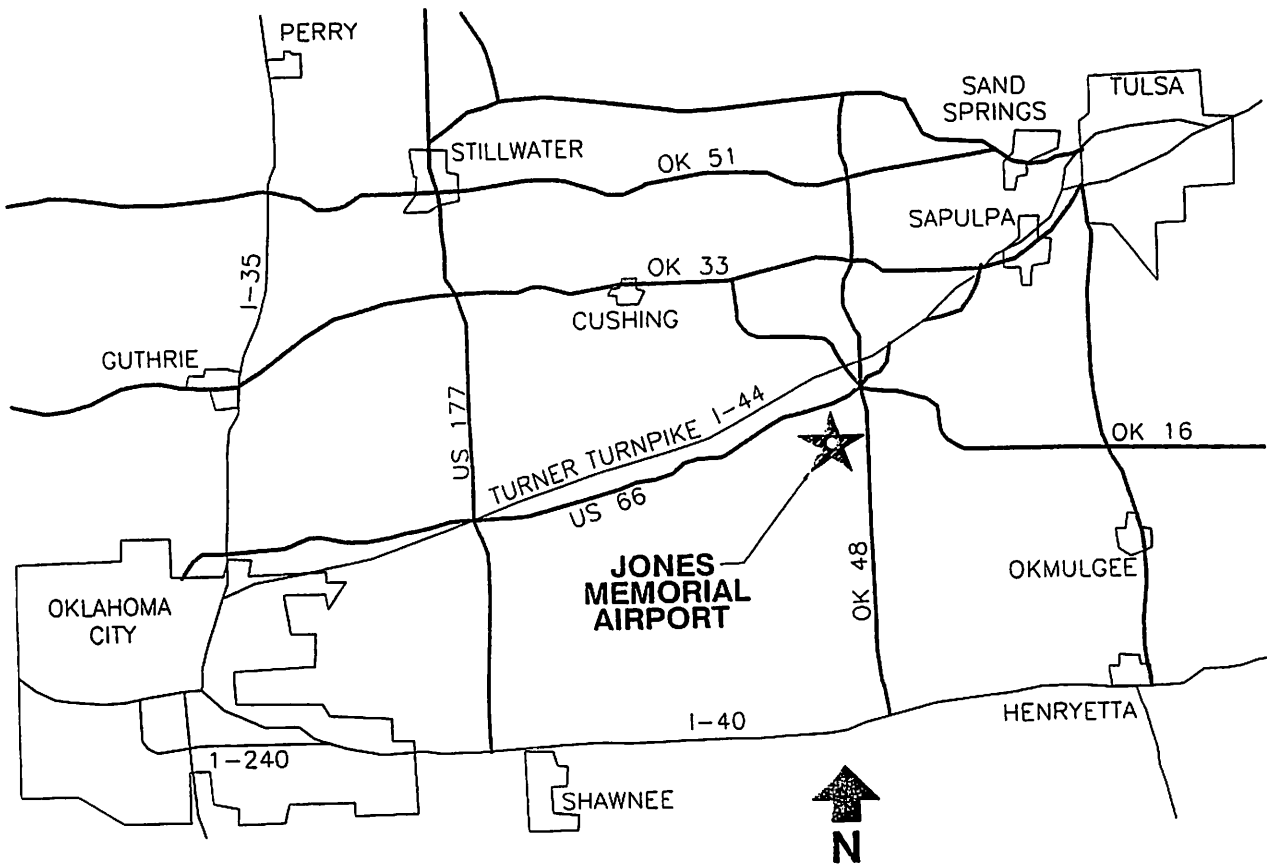
This environmental assessment was prepared to document the impacts which may occur from implementing the proposed project. The major impact categories have been delineated and discussed in this document. No significant cumulative impacts are expected to occur from this project whether federal, regional, state, or local.

PREPARER

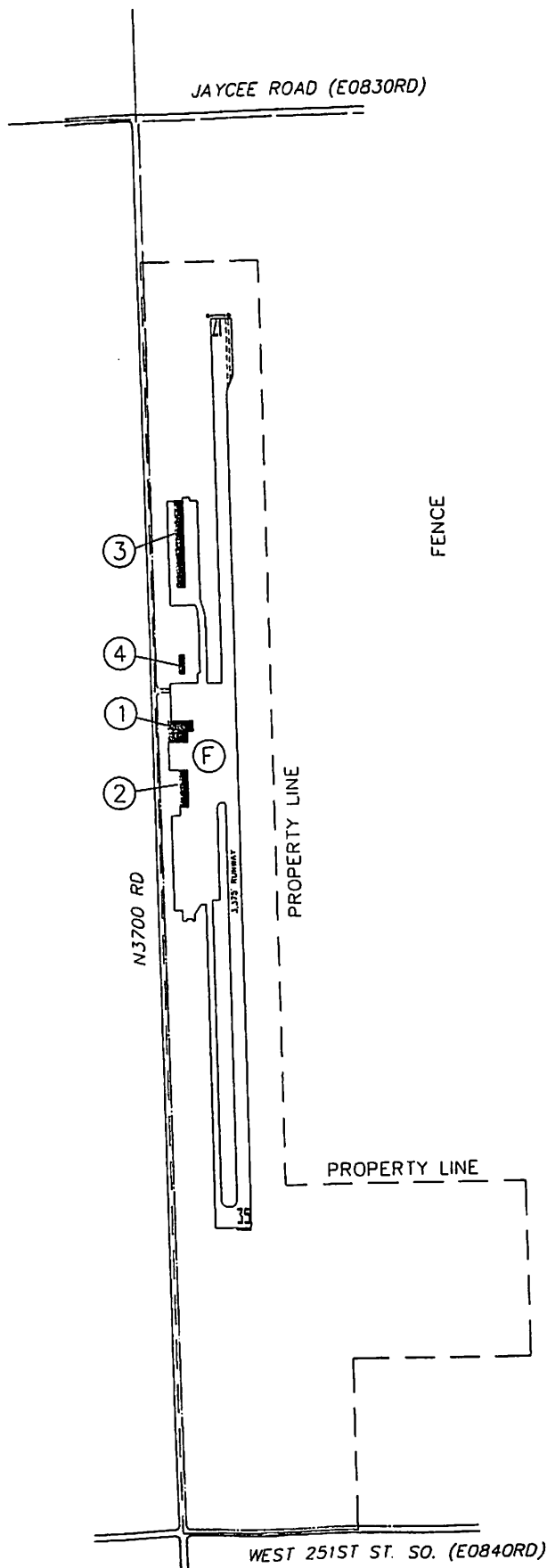
The following person was primarily responsible for the preparation of this assessment.

Carl S. Cannizzaro, P.E.

LOCATION MAP



JONES MEMORIAL AIRPORT (EXISTING)



LEGEND

- 1 FBO HANGAR
- 2 4 UNIT HANGAR
- 3 T-HANGAR
- 4 MOBILE HOME
- F FUEL STORAGE

JONES MEMORIAL AIRPORT ALTERNATE D



JAYCEE ROAD (E0830RD)

③

④

①

②

F

N3700 RD

PROPOSED TARMAC

PROPOSED TARMAC

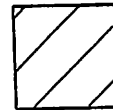
PROPOSED TARMAC

PROPOSED PROPERTY LINE

EXISTING PROPERTY LINE

PROPOSED PROPERTY LINE

WEST 251ST ST. SO. (E0840RD)



PROPERTY TO BE ACQUIRED

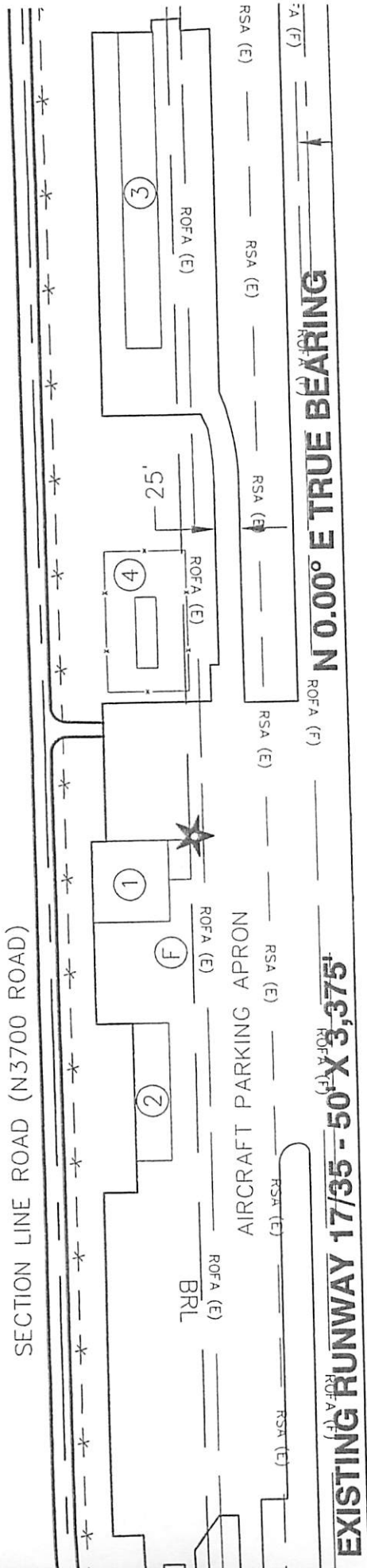
LEGEND

- 1 FBO HANGAR
- 2 4 UNIT HANGAR
- 3 T-HANGAR
- 4 MOBILE HOME
- F FUEL STORAGE

JONES MEMORIAL AIRPORT ROFA (E) EXISTING RUNWAY OBJECT FREE AREA

LEGEND

- 1 FBO HANGAR
- 2 4 UNIT HANGAR
- 3 T-HANGAR
- 4 MOBILE HOME
- F FUEL STORAGE

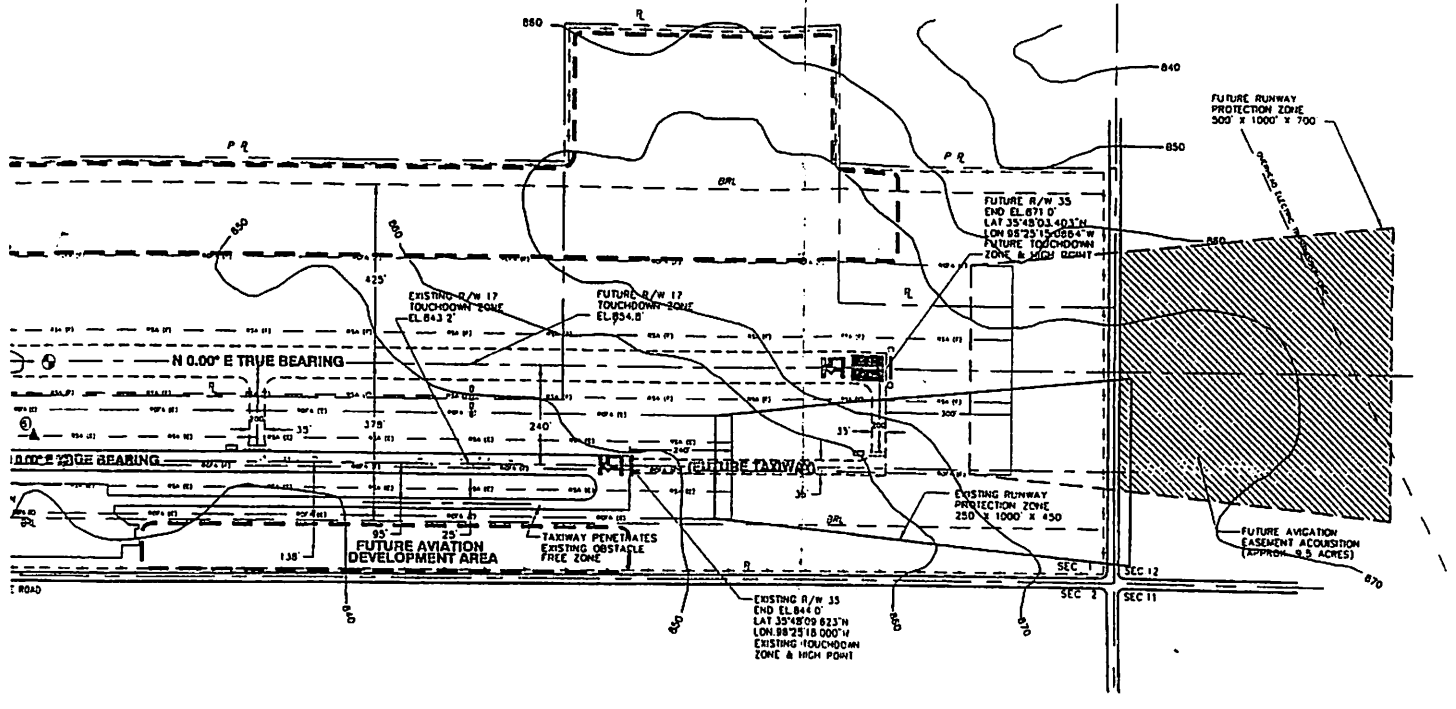


NON-STANDARD CONDITION

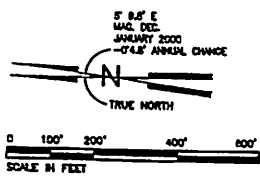
#	DESCRIPTION	EXISTING CONDITION	STANDARD CONDITION	FUTURE CONDITION	DISPOSITION
1	EXISTING SAFETY AREA LENGTH BEYOND RUNWAY 17 END	213'	240'	240'	TO BE RESOLVED w/ FUTURE RUNWAY CONSTRUCTION
2	EXISTING OBJECT FREE AREA LENGTH BEYOND RUNWAY 17 END	213'	240'	240'	TO BE RESOLVED w/ FUTURE RUNWAY CONSTRUCTION
3	EXISTING SAFETY AREA GRADIENT STANDARDS FOR RUNWAY 17	+3% W/M 200' +3% FOR REMAINDER	±3% W/M 200' ±3% FOR REMAINDER	±3% W/M 200' ±3% FOR REMAINDER	TO BE RESOLVED w/ FUTURE RUNWAY CONSTRUCTION
4	EXISTING SAFETY AREA GRADIENT STANDARDS FOR RUNWAY 35	POSITIVE GRADIENT W/M FIRST 200'	± NEGATIVE 3% W/M FIRST 200'	± NEGATIVE 3% W/M FIRST 200'	TO BE RESOLVED w/ FUTURE RUNWAY CONSTRUCTION
5	RUNWAY WIDTH	95'	80'	75'	TO BE RESOLVED w/ FUTURE RUNWAY CONSTRUCTION
6	PARALLEL RUNWAY SEPARATION FROM RUNWAY (CENTERLINE TO CENTERLINE)	95'	130'	240'	TO BE RESOLVED w/ FUTURE RUNWAY CONSTRUCTION

MODIFICATION OF STANDARDS

MODIFY DATE	DESCRIPTION	STANDARD EXISTING	STANDARD FUTURE	MODIFICATION EXISTING	MODIFICATION FUTURE	COMMENTS	APPROVAL DATE



FEDERAL AVIATION ADMINISTRATION
Southwest Region
Approved - Subject to Conditions in FAA Letter Waiver
Edward J. [Signature]
DATE: _____ Manager, Arkansas/Oklahoma Airports Development Office, ASW-630



Judy K. [Signature] *[Signature]* 1-25-07
DATE

AIRPORT DATA

ITEM	EXISTING	FUTURE
AIRPORT ELEVATION (MSL)	844.0'	871.0'
AIRPORT REFERENCE POINT (ARP) (LAT 33°45'28"N LONG 98°22'18"W)	LAT 33°45'28"N LONG 98°22'18"W	LAT 33°45'28"N LONG 98°22'18"W
FIELD ELEV. TEMP. HIGHEST MONTH	98°F	98°F
AIRPORT REFERENCE CODE (ARC)	0-0 (NORMAL A/C ONLY)	0-0
CATEGORY ENDING	NONE	0-0
TAXIWAY ENDING	CENTERLINE	EDGE
AIRPORT & TERMINAL HANDED	RIGHT	RIGHT
AIRPORT PROPERTY (ACRES)	81.13	722.32
TAXIWAY WIDTH	35'	35'

LAYOUT PLAN LEGEND

ITEM	EXISTING	FUTURE
BUILDING RESTRICTION LINE	---	---
AIRPORT PROPERTY LINE	---	---
EDGE	---	---
LANDSCAPE EASEMENT	---	---
RUNWAY PROTECTION ZONE	---	---
BUILDINGS	---	---
WORLD FENCEMENT	---	---
FUEL STORAGE	---	---
BEACON	---	---
WIND CODE	---	---
FREEDOM INFORMATION PLAIN INDICATOR (FAP)	---	---
RUNWAY END CENTER LIGHTS (RCLS)	---	---
RUNWAY SAFETY AREA (RSA)	---	---
RUNWAY OBJECT FREE AREA (ROFA)	---	---
OBSTACLES & TOWERS	---	---
DIRECTIONAL LIGHTS	---	---
EXTRACENTERS	---	---

NOTES:
1. This drawing reflects planning standards specific to this airport, and is not a product of detailed engineering design analysis. It is not intended to be used for construction administration or navigation.
2. The latest survey measurements are shown.
3. Existing data and runway and coordinate obtained from "Jones Memorial Airport, Airport Layout Plan", by Lloyd and Associates, November, 1988.

JONES MEMORIAL AIRPORT
BRISTOW, OKLAHOMA

AIRPORT LAYOUT DRAWING

HORIZON ENGINEERING INC.
CONSULTING ENGINEERS
1414-A EAST 71ST STREET
TULSA, OKLAHOMA 74136 (918) 683-0870

FIGURE NUMBER: _____
METRIC SCALE: _____
SCALE: 1" = 200'
DATE: JANUARY 2007
DRAWING NUMBER: 1 OF 7



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

January 18, 2006

Regulatory Office

Mr. Carl S. Cannizzaro
President
Horizon Engineering, Inc.
1422-D East 71st Street
Tulsa, OK 74136

Dear Mr. Cannizzaro:

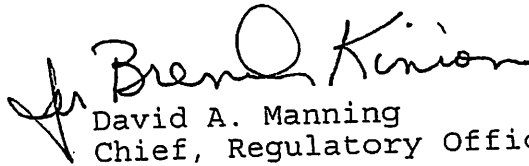
Please reference your letter of November 28, 2005, regarding the proposed purchase of land and easements east of the Bristow Municipal Airport. We have reviewed the submitted data relative to Section 404 of the Clean Water Act.

The provided information does not indicate that a placement of dredged or fill material will be required, permanently or temporarily, into any "waters of the United States," including jurisdictional wetlands. Therefore, your proposal is not subject to regulation pursuant to Section 404 of the Clean Water Act, and a Department of the Army (DA) permit will not be required. Should your method of construction necessitate such a discharge, we suggest that you resubmit that portion of your project so that we may determine whether an individual DA permit will be required.

Although DA authorization is not required, this does not preclude the possibility that other Federal, State, or local permits may be required.

If you have any questions about the Section 404 permit program, please telephone 918-669-7400.

Sincerely,


David A. Manning
Chief, Regulatory Office

City of Bristow, Page 2

NATURE AND DESCRIPTION OF PROJECT:

An archaeological and cultural resource survey of an area of ca. 85 acres adjacent to the Jones Memorial Airport was conducted at the request of Linda Tata, Finance Director, City of Bristow, 110 West Seventh St., Bristow, Oklahoma 74010 (918) 367 2237.

The survey was conducted in order to inventory and evaluate archaeological, historic, and cultural resources found within the study area.

ARCHAEOLOGIST and ASSISTANTS:

DATE(S) OF SURVEY:

Donald O. Henry, PhD

9 November 2006

PREFIELD INVESTIGATION:

No archaeological or historic sites were on record within the study area with the Oklahoma Archeological Survey or the Oklahoma Historical Society.

LEGAL & MAP DESCRIPTIONS:

Legal:

Portion of the E1/2 of Section 1, T15N/R8E, Creek County, OK

Map:

USGS 7.5' Quadrangle: Bristow (1973), See Map Attached.

FIELD METHODOLOGY:

An on-foot survey was conducted over a one day period under clear, mild conditions. The area was identified in the field on the basis of roads, fence lines and natural landmarks.

The area, forming a contiguous, long, rectangular unit oriented N-S, was walked and driven along transects parallel to its long axis. The area is a hay meadow that has been recently cut, leaving short grass and surface visibility ranging from moderate (>25-50%) to excellent (>75-100%). Additionally, gopher back-dirt piles are present over the entire study area in very high densities. Near the northern end of the study area, extensive areas of bare ground are present. Fire reddened and plow marked sandstone exposures were noted along the flanks of the drainage located in the north-central portion of the property near the 800' contour.

City of Bristow, Page 3

Areas of previous terrain disturbance consist of stock pond constructions and a shallow berm that runs along much of the western boundary of the study area.

ENVIRONMENTAL DESCRIPTION:


The study area rests in gently rolling uplands that fall away to the north to the Little Deep Fork River valley. The vegetation is principally Bermuda grass forming a hay meadow. Surface sediments consist of a reddish tan fine sand - silty loam. A shallow unnamed head-water stream drains the central portion of the study area to the north and the Little Deep Fork River. The stream displays collapsed, grass-covered banks and occasional buried sandstone blocks.

CULTURAL RESOURCES:

No cultural resources were encountered in the survey.

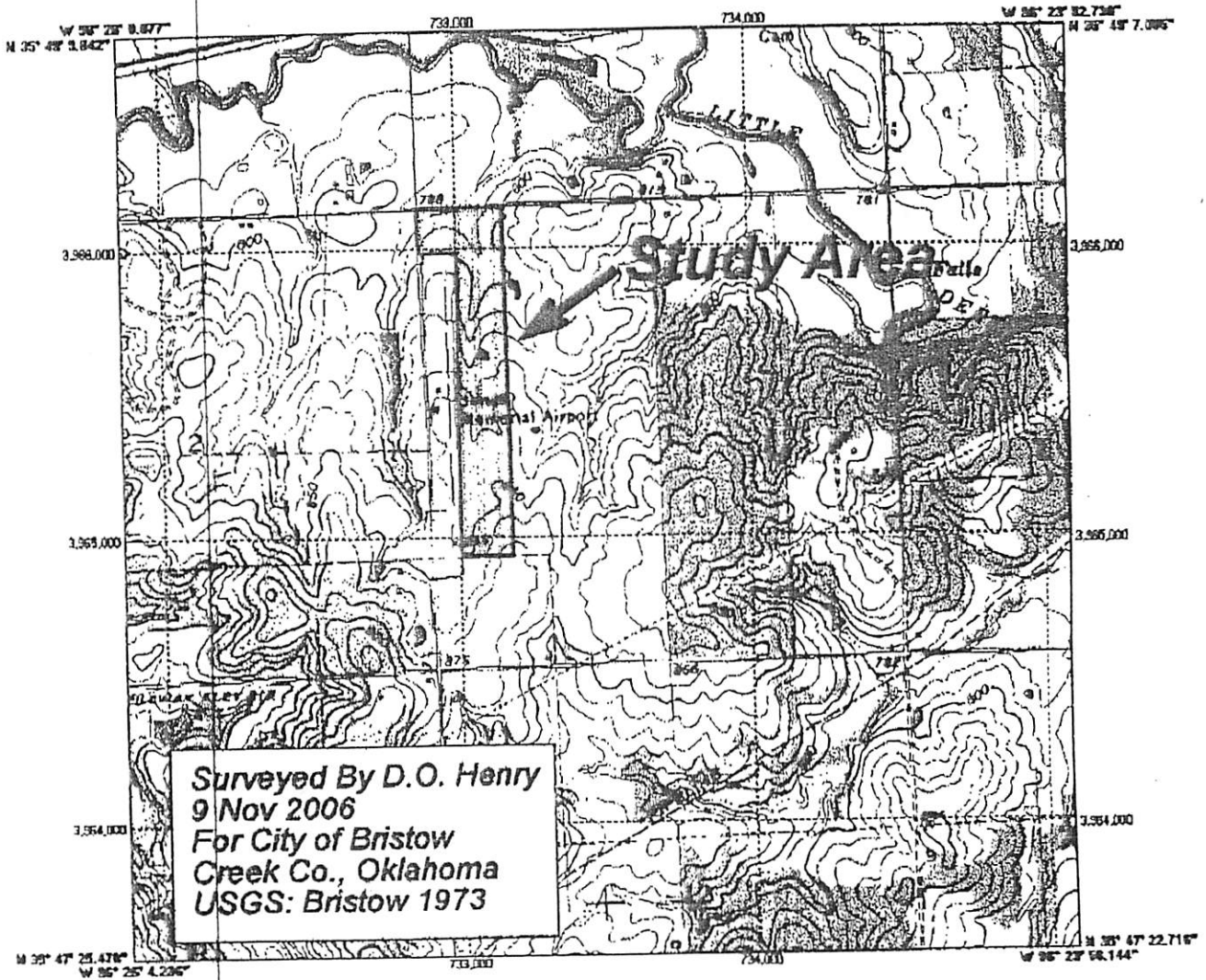
RECOMMENDATIONS:

I recommend that clearance be given for development of the study area. Cultural resources were not observed in the survey and none is on record with the Oklahoma Archaeological Survey or the Oklahoma Historical Society.



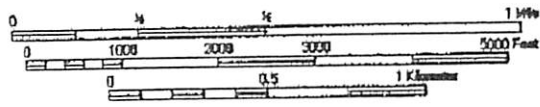
Donald O. Henry 13 November 2006

City of Bristow Study Area Map



Surveyed By D.O. Henry
 9 Nov 2006
 For City of Bristow
 Creek Co., Oklahoma
 USGS: Bristow 1973

1327 North American Datum, 1,000-meter UTM grid zone 14
 Generated by BigTopo (www.bigtopo.com)
 Map compiled from USGS Quads: Bristow, OK



BigTopo Map



Oklahoma Historical Society

Founded May 27, 1893

State Historic Preservation Office • 2704 Villa Prom • Shepherd Mall • Oklahoma City, OK 73107-2441
Telephone 405/521-6249 • Fax 405/947-2918

December 19, 2005

Mr. Carl Cannizzaro, President
Horizon Engineering, Inc.
1414-A East 71st Street
Tulsa, OK 74136

RE: File #0513-06; Bristow Municipal Airport Purchase of Land &
Easements

Dear Mr. Cannizzaro:

We have received and reviewed the documentation submitted on the referenced project in Creek County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no known historic properties affected within the referenced project's area of potential effect.

In addition to our review, you must contact the Oklahoma Archeological Survey (OAS), 111 E. Chesapeake, #102, Norman OK 73019-5111 (#405/325-7211, FAX #405/325-7604), to obtain a determination about the presence of prehistoric resources that may be eligible for the National Register of Historic Places. Should the OAS conclude that there are no prehistoric archeological sites or other types of "historic properties," as defined in 36 CFR Part 800.16(1), which are eligible for inclusion in the National Register of Historic Places within the project area and that such sites are unlikely to occur, we concur with that opinion.

The OAS may conclude that an on-site investigation of all or part of the project impact area is necessary to determine the presence of archeological resources. In the event that such an investigation reveals the presence of prehistoric archeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process. If sites dating from the historic period are identified during the survey or are encountered during implementation of the project, additional assessments by the State Historic Preservation Office will be necessary.

Should further correspondence pertaining to this project be necessary, the above underlined file number must be referenced. If you have any questions, please contact Charles Wallis, RPA, Historical Archeologist, at 405/521-6381. Thank you.

Sincerely,

Melvena Heisch
Deputy State Historic
Preservation Officer

MH:bh

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

Part I (To be completed by Federal Agency)		Date Of Land Evaluation Request 6/5/06
Name Of Project Jones Memorial Airport		Federal Agency Involved DOT/FAA
Proposed Land Use General Aviation Airport		County And State 6-9-06

Date of Report Received By NRCS		No.	Acres In State	Acres In County
<small>Small tracts include statewide or local important farmland. If this does not apply, do not complete additional parts of this form.</small>		4	33	199
Amount of Farmland Conversion	Amount of Farmland As Defined in FPPA			
Acres 329,180	Acres 14,180			
Name of Local Site Assessment System		Date Used Evaluation Returned By NRCS		
None		7/1/06		

Part III (To be completed by Federal Agency)	Alternative Site Rating			
	Site A	Site B	Site C	Site D
Total Acres To Be Converted Directly	65.0			
Total Acres To Be Converted Indirectly	0.0			
Total Acres In Site	65.0	0.0	0.0	0.0

Part IV (To be completed by NRCS) - Land Evaluation Information				
Total Acres State And Local Important Farmland	0.0			
Total Acres State And Local Important Farmland	0.0			
Percentage Of Farmland In County In Local Government Control	52.0			
Percentage Of Farmland In County In Local Government Control	3			
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)				

Part VI (To be completed by Federal Agency)		Maximum Points				
Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))						
1. Area In Nonurban Use		12				
2. Perimeter In Nonurban Use		5				
3. Percent Of Site Being Farmed		0				
4. Protection Provided By State And Local Government		0				
5. Distance From Urban Builtup Area		10				
6. Distance To Urban Support Services		0				
7. Size Of Present Farm Unit Compared To Average		5				
8. Creation Of Nonfarmable Farmland		0				
9. Availability Of Farm Support Services		0				
10. On-Farm Investments		0				
11. Effects Of Conversion On Farm Support Services		0				
12. Compatibility With Existing Agricultural Use		1				
TOTAL SITE ASSESSMENT POINTS	160	33	0	0	0	0

Part VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)	100	38	0	0	0	0
Total Site Assessment (From Part VI above or a local site assessment)	160	33	0	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	71	0	0	0	0

Reason For Selection:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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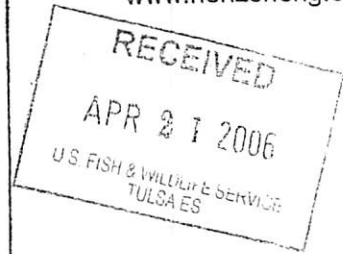
1414-A East 71st Street, Tulsa, Oklahoma 74136
918.663.0870 office 918.627.1939 fax
www.horizoneng.com

CONCURRENCE NOT LIKELY TO ADVERSELY AFFECT
The described action is not likely to adversely affect
federally-listed or proposed species or their habitats.

Date 5-16-06

Consultation # _____

Approved by *Kevin Stultz*
U.S. FISH and WILDLIFE SERVICE, TULSA, OK



April 14, 2006

U.S. Dept. of the Interior
Fish and Wildlife Services
Ecological Services Field Office
222 South Houston, Suite A
Tulsa, OK 74127

To Whom It May Concern:

The City of Bristow has initiated a project at Bristow Municipal Airport to purchase 65 acres of land and 16 acres of easement East of the existing Airport. Horizon Engineering Inc. has been employed to represent the City of Bristow in performing Environmental Evaluation of the Property.

The Federal Aviation Administration will be funding the purchase through an Airport Improvement Program Grant. We have accessed the Interior Department website and have reviewed the list of Threaten and Endanger Species for Creek County. The list included four species The American Burying Beatle, (Endangered-Historic), The Interior Least Tern, (Endangered), The Bald Eagle, (Threatened), and The Piping Plover, (Threatened).

We have reviewed the habitat of each of these species:

The American Burying Beatle, has not been identified existing in Creek County there is some indication that the Beatle exists in the adjacent Counties to the North-East and South, the proposed location is in Western Creek County at a great distance from each of these counties that have experienced The American Burying Beatle.

The land which is to be purchased is presently grazing land, which the property owner has indicated that before this year he had conducted controlled burns on the property on a regular basis. We therefore, do not believe that this habitat is condusive to maintaining the presence of the American Burying Beatle and believe that is does not exist in this area.

The Interior Least Tern: The habitat consists of islands or sand bars along large rivers for nesting. There are no rivers or sand bars in the area of the project, therefore it is unlikely that the Interior Least Tern exists within the project area.

Bald Eagle: The habitat requires large trees or cliffs near water with abundant fish for nesting. There are no rivers, trees, or cliffs in the project area which would encourage the Bald Eagle to nest in the area, therefore we believe there are no Bald Eagles in the project area.

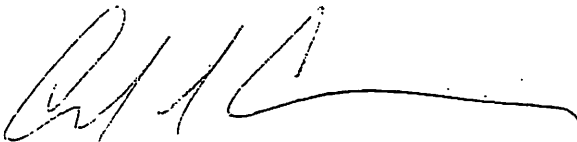
The Piping Plover: Their habitat is on sandy beaches along the ocean or lakes. There are no oceans or lakes on the project property and therefore is unlikely that there are any Piping Plovers within the project area.

We request that you review our assessment of the Threatened and Endangered Species in the project area and concur with our evaluation.

Should you have any questions or require additional please feel free to contact me.

Sincerely,

Horizon Engineering Inc.

A handwritten signature in black ink, appearing to read 'Carl S. Cannizzaro', with a long horizontal flourish extending to the right.

Carl S. Cannizzaro
President

Appendix C: Proof of Publication

AFFIDAVIT OF PUBLICATION

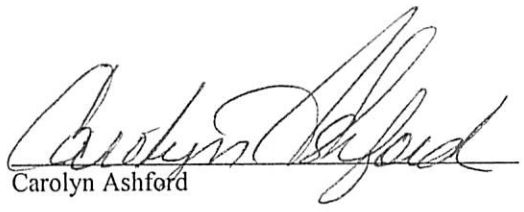
State of Oklahoma)
(ss. County of Creek)

Carolyn Ashford of lawful age, being duly sworn
and Authorized, says that she is the Publisher of

THE BRISTOW NEWS & RECORD CITIZEN,

a weekly newspaper published in the City of Bristow,
Creek County, Oklahoma, a newspaper qualified to
publish legal notices, advertisements and publications
as provided in Section 106 of Title 25, Oklahoma Statutes
1971, as amended, and complies with all other
requirements of the laws of Oklahoma with reference to
legal publications. That said notice, a true copy of which
is attached hereto, was published in the regular edition of
said newspaper during the period and time publication and
not in a supplement on the following dates:

July 4, 2007


Carolyn Ashford



Subscribed and sworn to before me this 6
day of July, 2007.
Commission expires: 03/2011
Commission No. 07003113



Legal

NOTICE OF PUBLIC HEARING

(Published one (1) time in the July 4, 2007, issue of the Bristow News)

The City of Bristow, Oklahoma, has submitted to the Federal Aviation Administration a Request for Funds to help finance the development of Jones Memorial Airport, Bristow, Oklahoma. The development program will consist of the following items: Land Acquisition, Grading and Drainage, Construct Runway, Taxiways and Airfield Lighting System, Utilities.
A document summarizing the impacts which the proposed project is expected to have upon the environment (Draft Environmental Assessment for Jones Memorial Airport, Bristow, Oklahoma, dated June 2007) has been prepared and is available to any person for review during normal working hours. This document

may be reviewed at the following locations: City Hall, Bristow Chamber of Commerce, and the Bristow Public Library. On August 7, 2007 at 10:00 a.m. in the Council Chambers at City Hall, a Public Hearing will be held for the purpose of considering the social, economic, and environmental effects of the proposed airport and the consistency with the goals and objectives of such urban planning as has been carried out for this area. Interested persons are invited to attend the Public Hearing to comment on the Environmental Assessment. Comments may also be made in writing and filed, by mail or in person and received no later than 5:00 p.m. on August 7, 2007, at the office of Leon Prinson, Mayor, City of Bristow, 110 W. 7th Street, Bristow, Oklahoma 74010.

Appendix D: Response to Comments

PUBLIC HEARING

The City of Bristow published a Notice of Public Hearing in the Bristow News & Record Citizen. Interested individuals were invited to review the Draft Environmental Assessment with copies located at the Library, City Hall, and the Chamber of Commerce. After a period of 30, days a Public Hearing on the Environmental Assessment was held at the City Hall on August 7, 2007. There were not any public comments at the meeting and no written comments were received.

Appendix E: Public Hearing Transcript

JONES MEMORIAL AIRPORT BOARD MEETING

August 7, 2007

MINUTES OF PUBLIC HEARING

A meeting of the Board of the Jones Memorial Airport was held at Bristow City Hall. The meeting was called to order at 10:00 a.m. Board members Albert Johns, Andrew Donohue, Louis Malinchak, and Randy Holzrichter were in attendance. Board members Jim Varner, Tex Slyman and Peter Kelly were unable to attend. Carl Cannizzaro with Horizon Engineering, Linda Tate, Melinda Smith and Canter Harmon with the City of Bristow attended as guests.

Mr. Johns explained that the City of Bristow has submitted to the Federal Aviation Administration a request for Grant funds in the amount of \$240,000.00 with the city matching \$12,000.00 for the purchase of property and airspace to expand the Jones Memorial Airport.

A Motion was made by Randy Holzrichter and second by Louis Malinchak to open the Public Hearing for the purpose of considering the social, economic, and environmental effects of purchasing land and airspace for the proposed construction of a new 3,375' X 75' runway at Bristow's Jones Memorial Airport.

Mr. Johns asked for a vote. The following members voted as follows: Donohue, Aye, Malinchak, Aye, Holzrichter, Aye.

Mr. Johns called on Carl Cannizzaro to conduct the Public Hearing.

Mr. Cannizzaro advised that the purpose of the Public Hearing was to receive written and verbal comments regarding the proposed Environmental Assessment. The comments will then be incorporated into the Environmental Assessment. This will complete the Environmental Assessment process and the Environmental Assessment can be sent to the FAA for a Finding.

Mr. Cannizzaro advised that an Environmental Assessment document summarizing the impact of the proposed project has been on file at the City Clerks Office, the Chamber of Commerce and the Montfort & Alley Brown Jones Public Library for Public Inspection for the past 30 days.

Mr. Cannizzaro ask if there were any written or oral comments regarding the environmental assessment or the scope of the project. He advised that any one making comments should list their name and address for the public record. There were no comments. No Public attended the Public Hearing. No written or verbal comments were received.

Mr. Johns called for a motion to close the Public Hearing.

Mr. Donohue made a motion to close the Public Hearing. Mr. Malenchak second the motion.

Mr. Johns called for a vote. The following members present voted as follows:
Holzrichter, Aye, Malinchak, Aye, Donohue, Aye.

The logo for Horizon Engineering Inc. features the word "HORIZON" in a bold, sans-serif font, positioned above the word "ENGINEERING INC". The text is contained within a semi-circular, shaded area that resembles a horizon line. A solid horizontal line runs beneath the entire logo.

**HORIZON
ENGINEERING INC**

Horizon Engineering Inc.
1414-A East 71st Street
Tulsa, OK 74136
(918) 663-0870

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APPENDIX C: COORDINATION

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U.S. Department
of Transportation
**Federal Aviation
Administration**

Arkansas/Oklahoma
Airports Development Office

10101 Hillwood Parkway
Fort Worth, TX 76177-4298

February 26, 2016

Melvena Heisch
State Historic Preservation Office, Oklahoma Historical Society
Oklahoma History Center
800 Nazih Zuhdi Drive
Oklahoma City, OK 73105

File #0799-16; Jones Memorial Airport, Bristow, Oklahoma
Environmental Assessment – Proposed New Runway Construction
Government to Government Consultation

Dear Ms. Heisch:

The Federal Aviation Administration (FAA) is the lead federal agency responsible for an environmental determination in accordance with the National Environmental Policy Act (NEPA) for the approval of proposed runway improvements at Jones Memorial Airport in Bristow, Oklahoma. The improvements comprise the construction of a new 4,000 foot by 75 foot runway located approximately 240 feet east of the existing runway. Approval of the runway improvements constitute a Federal undertaking, requiring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations in 36 Code of Federal Regulations (CFR) Part 800. This letter is submitted to initiate consultation with the State Historic Preservation Office (SHPO) pursuant to 36 CFR Part 800.2(c) (1) (i) and 36 CFR Part 800.3(c).

Description of Proposed Undertaking

In 2007, the City of Bristow issued an Environmental Assessment (EA) for the construction of a new runway 3,375 feet in length and 60 feet in width, approximately 240 feet from the existing runway. A future 625-foot extension was expected to occur in the future, but was not a part of the original EA. On August 9, 2007, the FAA issued a Finding of No Significant Impact (FONSI) for the proposed construction of this new single runway.

Since the issuance of the EA, however, aviation demand has increased at the airport and larger aircraft are using the runway. Therefore, a longer and wider runway is a necessity. As such, additional environmental evaluation is being conducted to assess the larger runway. The new runway would cover 4,000 feet in length, 75 feet in width, and would be located approximately 240 feet east of the existing runway.

An Area of Potential Effect (APE) was defined to encompass those areas on and near the Airport that could potentially be affected by the proposed project (see enclosed map). The APE is centered on the Airport's proposed new runway for the Preferred Alternative, and covers the associated parallel and connector taxiways and the area immediately surrounding these pieces of pavement. It is not anticipated that there would be any indirect impacts beyond this defined area.

According to Oklahoma's National Register Handbook from the State Historic Preservation Office and Oklahoma Historical Society (dated January 1, 2016), the Little Deep Form Creek Bridge, an historic bridge, is located approximately 0.33 miles from the airport at the junction of County Roads 830 and 3700. Neither this historic resource, nor any other eligible or listed sites, are located within the APE. Further, no significant noise impacts would occur over any listed or eligible sites as a result of the proposed action. Therefore, no impacts to historical, architectural, archeological or cultural resources are anticipated as a result of the Preferred Alternative.

Native American Consultation

The FAA sent letters to the Muscogee (Creek) Tribe to request they provide information concerning the proposed project area if any was available.

Summary of Preliminary Findings

Based upon available data there are no properties listed or eligible for listing on the National Register of Historic Places (NRHP) within the APE. The nearest listed site is the Little Deep Form Creek Bridge located approximately 0.33 miles from airport. No impacts are anticipated to cultural or archaeological resources. Additionally, no significant noise impacts would occur over any listed or eligible sites. We request that you review our assessment of cultural resources in the project area, and confirm whether you concur with our evaluation.

If you have any questions, concerns or need additional information on this submittal, please contact me at (817) 222-5359 or Roberto.Ramos@faa.gov.

Sincerely,



Robb Ramos
Environmental Protection Specialist
Arkansas/Oklahoma Airports Development Office ASW-630E
FAA Southwest Region

Enclosure: Project map



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

March 14, 2016

Mr. Robb Ramos
FAA Southwest Region
Arkansas/Oklahoma Airport Development Office
10101 Hillwood Parkway
Fort Worth, TX 76177

RE: File #0799-16; Jones Memorial Airport Proposed New Runway Construction

Dear Mr. Ramos:

We have received and reviewed the documentation concerning the referenced project in Creek County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no historic properties affected by the referenced project.

Thank you for the opportunity to comment on this project. We look forward to working with you in the future.

If you have any questions, please contact Catharine M. Wood, Historical Archaeologist, at 405/521-6381.

Should further correspondence pertaining to this project be necessary, please reference the above underlined file number. Thank you.

Sincerely,

Melvena Heisch
Deputy State Historic
Preservation Officer

MH:jr



1743 Wazee Street, Suite 400
Denver, Colorado 80202
303-825-8844
meadhunt.com

January 21, 2016

Robert Brooks
Oklahoma Archaeological Survey
111 East Chesapeake
Norman, OK 73019

Subject: Proposed Construction of New Runway at Jones Memorial Airport in Bristow, Oklahoma

Dear Mr. Brooks:

The Federal Aviation Administration (FAA) is the lead federal agency responsible for an environmental determination in accordance with the National Environmental Policy Act (NEPA) for the approval of proposed runway improvements at Jones Memorial Airport in Bristow, Oklahoma. The improvements comprise the construction of a new 4,000 foot by 75 foot runway located approximately 240 feet east of the existing runway. Approval of the runway improvements constitute a Federal undertaking, requiring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations in 36 Code of Federal Regulations (CFR) Part 800. This letter is submitted to initiate consultation with the State Historic Preservation Office (SHPO) pursuant to 36 CFR Part 800.2(c)(1) (i) and 36 CFR Part 800.3(c).

Description of Proposed Undertaking

In 2007, the City of Bristow issued an Environmental Assessment (EA) for the construction of a new runway 3,375 feet in length and 60 feet in width, approximately 240 feet from the existing runway. A future 625-foot extension was expected to occur in the future, but was not a part of the original EA. On August 9, 2007, the FAA issued a Finding of No Significant Impact (FONSI) for the proposed construction of this new single runway.

Since the issuance of the EA, however, aviation demand has increased at the airport and larger aircraft are using the runway. Therefore, a longer and wider runway is a necessity. As such, additional environmental evaluation is being conducted to assess the larger runway. The new runway would cover 4,000 feet in length, 75 feet in width, and would be located approximately 240 feet east of the existing runway.

An Area of Potential Effect (APE) was defined to encompass those areas on and near the Airport that could potentially be affected by the proposed project (see enclosed map). The APE is centered on the Airport's proposed new runway for the Preferred Alternative, and covers the associated parallel and

connector taxiways and the area immediately surrounding these pieces of pavement. It is not anticipated that there would be any indirect impacts beyond this defined area.

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Summary of Preliminary Findings

Based upon available data there are no properties listed or eligible for listing on the National Register of Historic Places (NRHP) within the APE. The nearest listed site is the Little Deep Form Creek Bridge located approximately 0.33 miles from airport. No impacts are anticipated to cultural or archaeological resources. Additionally, no significant noise impacts would occur over any listed or eligible sites.

If you have any questions or need additional information on this submittal, please contact me at (303) 597-0894.

Sincerely,

MEAD & HUNT, Inc.

A handwritten signature in black ink, appearing to read 'Jen Wolchansky', written in a cursive style.

Jen Wolchansky

Enclosure: (1) Study Area graphic



Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

February 10, 2016

Jen Wolchansky
Mead & Hunt
1743 Wazee Street, Ste. 400
Denver, Colorado 80202

RE: Proposed construction of new runway at Jones Memorial Airport in Bristow. Legal Description: W ½ Section 1 T15N R8E, Creek County, Oklahoma.

Dear Ms. Wolchansky:

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,

Cody L. Dalpra
Staff Archaeologist

Marjy Duncan
Interim State Archaeologist

Cc: SHPO





1743 Wazee Street, Suite 400
Denver, Colorado 80202
303-825-8844
meadhunt.com

January 21, 2016

Matthew Elliot
USDA Natural Resources Conservation Service
Stillwater Field Service Center
2600 S Main, Suite C
Stillwater, OK 74074

Subject: Proposed Construction of New Runway at Jones Memorial Airport in Bristow, Oklahoma

Dear Mr. Elliot:

The Federal Aviation Administration (FAA) is the lead federal agency responsible for an environmental determination in accordance with the National Environmental Policy Act (NEPA) for the approval of proposed runway improvements at Jones Memorial Airport in Bristow, Oklahoma. The improvements comprise the construction of a new 4,000 foot by 75 foot runway located approximately 240 feet east of the existing runway.

In 2007, the City of Bristow issued an Environmental Assessment (EA) for the construction of a new runway 3,375 feet in length and 60 feet in width, approximately 240 feet from the existing runway. A future 625-foot extension was expected to occur in the future, but was not a part of the original EA. On August 9, 2007, the FAA issued a Finding of No Significant Impact (FONSI) for the proposed construction of this new single runway.

Since the issuance of the EA, however, aviation demand has increased at the airport and larger aircraft are using the runway. Therefore, a longer and wider runway is a necessity. As such, additional environmental evaluation is being conducted to assess the larger runway. The new runway would cover 4,000 feet in length, 75 feet in width, and would be located approximately 240 feet east of the existing runway. Approval of the proposed runway improvements constitutes a Federal undertaking.

In accordance with NEPA, environmental analysis is being conducted to identify any potential environmental impacts. Please see enclosure for a map of prime farmlands at Jones Memorial Airport. No conversion of farmland, or direct or indirect impacts, are anticipated to occur as a result of the project.

Additionally, no significant noise impacts would occur as a result of the project. If you have any questions or need additional information on this submittal, please contact me at (303) 597-0894.

Sincerely,

MEAD & HUNT, Inc.

A handwritten signature in black ink, appearing to read "Jen Wolchansky". The signature is fluid and cursive, with the first letter of each word being significantly larger and more stylized than the others.

Jen Wolchansky

Enclosure: (1) Study Area graphic



1743 Wazee Street, Suite 400
Denver, Colorado 80202
303-825-8844
meadhunt.com

January 21, 2016

Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202

Subject: Proposed Construction of New Runway at Jones Memorial Airport in Bristow, Oklahoma

Dear Sir or Madam :

The Federal Aviation Administration (FAA) is the lead federal agency responsible for an environmental determination in accordance with the National Environmental Policy Act (NEPA) for the approval of proposed runway improvements at Jones Memorial Airport in Bristow, Oklahoma. The improvements comprise the construction of a new 4,000 foot by 75 foot runway located approximately 240 feet east of the existing runway.

In 2007, the City of Bristow issued an Environmental Assessment (EA) for the construction of a new runway 3,375 feet in length and 60 feet in width, approximately 240 feet from the existing runway. A future 625-foot extension was expected to occur in the future, but was not a part of the original EA. On August 9, 2007, the FAA issued a Finding of No Significant Impact (FONSI) for the proposed construction of this new single runway.

Since the issuance of the EA, however, aviation demand has increased at the airport and larger aircraft are using the runway. Therefore, a longer and wider runway is a necessity. As such, additional environmental evaluation is being conducted to assess the larger runway. The new runway would cover 4,000 feet in length, 75 feet in width, and would be located approximately 240 feet east of the existing runway. Approval of the proposed runway improvements constitutes a Federal undertaking.

In accordance with NEPA, environmental analysis is being conducted to identify any potential environmental impacts. If you have any questions or need additional information on this submittal, please contact me at (303) 597-0894.

Sincerely,

MEAD & HUNT, Inc.

A handwritten signature in black ink, appearing to read 'Jen Wolchansky', with a stylized, cursive script.

Jen Wolchansky

Enclosure: (1) Study Area graphic



1743 Wazee Street, Suite 400
Denver, Colorado 80202
303-825-8844
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January 21, 2016

Andrew Commer
US Army Corps of Engineers, Tulsa District
Planning and Environmental Division
1645 South 101st East Avenue
Tulsa, OK 74128-4609

Subject: Proposed Construction of New Runway at Jones Memorial Airport in Bristow, Oklahoma

Dear Mr. Commer :

The Federal Aviation Administration (FAA) is the lead federal agency responsible for an environmental determination in accordance with the National Environmental Policy Act (NEPA) for the approval of proposed runway improvements at Jones Memorial Airport in Bristow, Oklahoma. The improvements comprise the construction of a new 4,000 foot by 75 foot runway located approximately 240 feet east of the existing runway.

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In accordance with NEPA, environmental analysis is being conducted to identify any potential environmental impacts. As part of the project, fill will be placed in two ponds near the proposed runway construction (see enclosed map). We intentionally designed the grandig to maintain a buffer between the

FEMA-identified floodplain boundary, thus, the project would not disturb any nearby streams. We do not anticipate that any wetlands will be impacted based on the repositioned runway end points/grading requirements, and that a 404 Permit will not be required. Please let us know if you concur with our findings. If you have any questions or need additional information on this submittal, please contact me at (303) 597-0894.

Sincerely,

MEAD & HUNT, Inc.

A handwritten signature in black ink, appearing to read "Jen Wolchansky". The signature is fluid and cursive, with the first letter of each word being significantly larger and more stylized than the others.

Jen Wolchansky
(303) 597-0894

Enclosure: (1) Study Area graphic



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Denver, Colorado 80202
303-825-8844
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January 21, 2016

Ken Collins
United States Department of the Interior
Fish and Wildlife Services
Ecological Services Field Office
9014 East 21st Street
Tulsa, OK 74129-7467

Subject: Proposed Construction of New Runway at Jones Memorial Airport in Bristow, Oklahoma

Dear Mr. Collins:

The Federal Aviation Administration (FAA) is the lead federal agency responsible for an environmental determination in accordance with the National Environmental Policy Act (NEPA) for the approval of proposed runway improvements at Jones Memorial Airport in Bristow, Oklahoma. The improvements comprise the construction of a new 4,000 foot by 75 foot runway located approximately 240 feet east of the existing runway.

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There are five Endangered Species Act (ESA) listed species listed on the USFWS countywide list within Creek County. According to the Oklahoma Department of Wildlife Conservation, there are no state-listed threatened and endangered species for Creek County. The table below summarizes the listed species and their statuses.

Summary of Listed Species in Payne County, Oklahoma

Listed Species	Status
American peregrine falcon (<i>Falco peregrinus anatum</i>)	Recovery
Piping Plover (<i>Charadrius melodus</i>)	Threatened
Least tern (<i>Sterna antillarum</i>)	Endangered
Red knot (<i>Calidris canutus rufa</i>)	Threatened
American burying beetle (<i>Nicrophorus americanus</i>)	Endangered

Source: U.S. Fish and Wildlife Service (USFWS) countywide species listing, accessed December 29, 2015.

No endangered or threatened species have been observed at the Airport. The proposed runway improvements are not anticipated to adversely affect any listed endangered or threatened species or their designated critical habitat. We request that you review our assessment of threatened and endangered species in the project area, and confirm whether you concur with our evaluation.

If you have any questions, concerns or need additional information on this submittal, please contact me at (303) 597-0894.

Sincerely,

MEAD & HUNT, Inc.



Jen Wolchansky

Enclosure: (1) Study Area graphic

PREPARED BY

**Mead
& Hunt**

IN ASSOCIATION WITH



CEC
infrastructure solutions