CONNECTICUT ENVIRONMENTAL IMPACT EVALUATION

Prepared Pursuant to the Sections 22a-la-1-12, inclusive, of the Regulations of Connecticut State Agencies

WATERBURY-OXFORD AIRPORT PROPOSED HANGARS H and I TOWNS OF OXFORD AND MIDDLEBURY, CONNECTICUT

February 2011

Prepared for: The Connecticut Department of Transportation 2800 Berlin Turnpike Newington, CT

elely Approved by:

Date:___

For the Connecticut Department of Transportation-



STATE OF CONNECTICUT

OFFICE OF POLICY AND MANAGEMENT OFFICE OF THE SECRETARY

то:	Robbin L. Cabelus, Transportation Planning Director DOT
FROM:	Benjamin Barnes, Secretary
DATE:	March 24, 2011
SUBJECT:	Waterbury-Oxford Airport Hangar H and I Environmental Impact Evaluation

Based on a review of the subject environmental impact evaluation and related documentation conducted pursuant to C.G.S. 22a-1e and Section 1 of the PA 10-120, I am herewith advising you of my finding that this evaluation satisfies the requirements of the Connecticut Environmental Policy Act.

Please contact Dimple Desai (418-6412) if there are any questions with regard to this finding.

cc: Paul Potamianos, OPM Karl Wagener, CEQ

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ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation		
ALP	Airport Layout Plan		
AMPU	Airport Master Plan Update		
ATCT	Air Traffic Control Tower		
BMP	Best Management Practice		
CEPA	Connecticut Environmental Policy Act		
CFR	Code of Federal Regulations		
CGS	Connecticut General Statutes		
COGCNV	Council of Governments of the Central Naugatuck Valley		
ConnDOT	Connecticut Department of Transportation		
CTDEP	Connecticut Department of Environmental Protection		
CY	Cubic Yards		
DNL	Day-Night Average Noise Level		
EA	Federal Environmental Assessment		
EIE	Environmental Impact Evaluation		
EPA	U.S. Environmental Protection Agency		
FAA	Federal Aviation Administration		
FAR	Federal Aviation Regulations		
FEMA	Federal Emergency Management Agency		
GIS	Geographic Information System		
GPS	Global Positioning System		
MSL	Mean Sea Level		
MPH	Miles per Hour		
MPO	Metropolitan Planning Organization		
NAAOS	National Ambient Air Quality Standards		
NDDB	Natural Diversity Database		
NEPA	National Environmental Protection Act		
NGVD	National Geodetic Vertical Datum		
NHPA	National Historic Preservation Act		
NRCS	Natural Resource Conservation Service		
NRHP	National Register of Historic Places		
NTSB	National Transportation Safety Board		
OPM	State of Connecticut Office of Policy and Management		
OXC	Waterbury-Oxford Airport		
PE	Preliminary Engineering		
PM	Particulate Matter		
POCD	Plan of Conservation and Development		
PPM	Parts Per Million		
RCSA	Regulations of Connecticut State Agencies		
sf	Square Feet		
LRTP	Long-Range Regional Transportation Plan		
SHPO	State Historical Preservation Officer		
SIP	State Implementation Plan		
SWPPP	Stormwater Pollution Prevention Plan		
TIA	Transportation Investment Area		
TSB	Transportation Strategy Board		
USACE	United States Army Corps of Engineers		
USDA	United States Department of Agriculture		
USFWS	United States Fish & Wildlife Service		

EXECUTIVE SUMMARY

Project Name: Waterbury-Oxford Airport Proposed Hangars H and I, Oxford and Middlebury

Date: January 2011

Sponsoring Agency: Connecticut Department of Transportation (CTDOT)

Participating Agency: Federal Aviation Administration (FAA)

Preparer: BL Companies, Inc., 355 Research Parkway, Meriden, Connecticut 06450

INTRODUCTION

The Waterbury-Oxford Airport (OXC) is located at 300 Christian Street in Oxford, Connecticut. It is approximately five miles west of Waterbury on the Oxford-Middlebury town-line and approximately 1.5 miles south of Interstate 84. OXC is primarily within the Town of Oxford. However, a small, northern portion of the airport lies in the Town of Middlebury. The airport is located within the Central Naugatuck Valley Region and New Haven County, Connecticut (see Figure ES-1). State route 188, to the west of OXC, is the primary arterial road to access OXC, with a direct connection to Interstate 84 north of OXC. Routes 67 and 42 provide access to OXC from the south. To the east of OXC, local roads, including Prokop Road and Riggs Road, provide access to the airport.

In May 1968, the Federal Aviation Administration (FAA) allocated approximately 1.2 million dollars for the construction of a public use airport, which was opened in December 1969. OXC is a General Aviation (GA) facility, denoting that it serves charter, corporate, and personal aircraft users. OXC does not offer scheduled commercial air service. The OXC is an approximately 425-acre facility owned and managed by the CTDOT. It is a 24-hour facility with four main tenants, Keystone Aviation, LLC, Key Air, Executive Flight Services and Double Diamond. The proposed action of constructing Hangars H and I and the associated facilities is being funded privately and undertaken by Keystone Air.

PURPOSE AND NEED

The purpose of this project is to provide additional conventional hangar space at OXC by constructing a new hangar facility (Hangars H and I), thereby creating an additional 161,000 square feet (sf) of conventional hangar space. Projections were made for both conventional hangar space and T-hangar space. Conventional hangar space was calculated with respect to based aircraft, typically only turboprop and jet aircraft. Based on the 2007 Waterbury-Oxford Airport Master Plan Update (AMPU) 2023 projected space deficit for conventional hangar space, the proposed project would create a surplus of 127,500 sf of hangar space. However, since the AMPU projections were made, there have been substantial increases in demand for conventional hangar space.

Based on coordination with Keystone Aviation LLC, the proposed tenant for the new facility, agreements are already in place to fill over 75% of Hangar H with based aircraft, this is approximately 66,750 sf of conventional hangar space. In addition, there are existing



proposals to base aircraft at OXC that would completely fill Hangar H and 24% of Hangar I, approximately 107,250 sf of conventional hangar space. A proprietary market analysis conducted by Keystone Aviation LLC shows that Hangars H and I will be at full capacity, 161,000 sf, with based aircraft by 2012. Hangars H and I must be of sufficient size to accommodate these based aircraft.

In addition to satisfying future based aircraft needs, the proposed project will also serve the purpose of improving safety and operations at OXC by removing congestion within and in front of Hangar G. The proposed action will provide more space for maneuvering of aircraft due to the newer, larger apron of Hangars H and I.

The addition of Hangars H and I, and the associated office space, will provide additional revenue for the state. This increase in revenue will move the OXC facility closer to a revenue producer for the state. OXC currently operates as an expense to the state. The increased revenue from this land lease with Keystone Air will benefit OXC and the state and is needed to produce additional revenue. The proposed action will also create new temporary and permanent jobs, which will be an additional economic benefit to the region. It is estimated that approximately 300 new temporary construction jobs would be created during the 14-18 month construction of the facility, and an additional 300 jobs would be created for the operation and maintenance of the facility when completely filled, including all aircraft operation personnel.

The project has been in design since early 2007. The permitting approvals and coordination with changing state policy has led to a few anticipated start of construction dates. The process was reasonably assumed by all, to be required to follow the same development and approval processes followed by the recently completed Hangar G. Originally, the approval process required local Inland Wetlands approval, the filing of a DEP Construction Stormwater Discharge Permit and document reviews by DOT and the State Building Official for issuance of a Construction Permit.

The site was approved by the Town of Oxford's Conservation Commission Inland Wetland Agency, which included a public hearing. The Agency issued a permit with conditions on December 18th, 2007. Prior to the issuance of the wetland permit, in October the lessee performed clearing and grubbing activities on the site. The intent of the clearing and grubbing was to clear and grub only upland areas outside of the 100-foot local upland review area. The clearing contactor exceeded the limits marked in the field and did clear some areas within the 100-foot upland review area. No wetland areas were cleared or altered. The DOT environmental group required the lessee to provide an extensive sedimentation and erosion control installation to properly protect the wetlands from sedimentation. They also issued an order to the contractor to stop all other activity on the site. The site is now fully stabilized. No other work has been performed on the site. During this process a Construction Stormwater Permit was filed. The permit was issued by DEP December 13th 2007.

In mid 2008 it was determined by a change in DOT policy that a State Traffic Commission Certification would be required. The state had previously exempted the airport and other state run facilities from the need to get a certification. Changes in policy required an STC filing.

The STC filing covers the entire enterprise of the airport, both the existing facilities and the planned Hangar H&I expansion. The STC issued a certification on September 16th, 2008.

It was ultimately decided, with a change in state policy, that an environmental assessment in conformance with the CEPA process would be required in mid 2008. This document is prepared in response to that change in policy.

DESCRIPTION OF PROPOSED ACTION

Claris Construction, Inc. (Claris) is proposing to construct a new hangar/office facility with a total footprint of approximately 206,000 square feet (sf) on the southern portion of the existing Waterbury-Oxford Airport property in the Town of Oxford. The proposed action will consist of 161,000 sf of conventional hangar space on the main floor, and approximately 139,675 sf of office space, spread over three stories. Hangars H and I will contain 89,250 sf and 72,000 sf, respectively, of conventional hangar space. The ground floor will include approximately 20,746 sf of covered parking. The existing property (Figure ES-2) is comprised of a contiguous parcel of approximately 425 acres (ac), which houses the Waterbury-Oxford Airport, a CTDOT owned and operated general aviation airport that is utilized for business/corporate purposes. The site where the proposed action will occur is directly south of and adjacent to the existing Hangar G in the southern portion of OXC.

The proposed action will provide additional aircraft storage and office space, as well as the extension of the existing taxilane from Hangar G to the proposed tarmac located to the west side of the proposed action (Figure ES-3). The proposed action includes the construction of a new access roadway from Prokop Road to the north and east sides of the proposed action facility. This access road will provide a construction entrance, and post-construction access to parking areas associated with the proposed action. As part of the Proposed Action, the intersection of Prokup Road and Juliano Drive will be reconstructed to standard geometry and sigh line requirements. In order to minimize impacts to the wetlands, upland review area and the existing vegetation, 2,300 linear feet of retaining walls are also included in the development. In addition, an extensive stormwater management system has been designed to collect, store, and treat stormwater from the site. Minimization efforts were also made to reduce parking lot area and impervious surfaces by incorporating some of the facility parking on the ground floor of the structure.

ALTERNATIVES

Alternatives that were considered were evaluated on their ability to address the project Purpose and Need and to avoid and/or minimize resource impacts. In addition to the No-Action Alternative, CTDOT considered three Action Alternatives for the new conventional hangar space in the AMPU. These three alternatives, Option A, Option B and Option C, plus the No-Action Alternative, were further evaluated in the AMPU. Option A was sited directly within the Northeast Ramp of OXC, and Option C was sited directly within the Northwest Ramp. The siting of a conventional hangar in either of these locations would require the displacement of all existing tiedowns on these ramps, which could result in the displacement of the light aircraft tenant. While these two hangar alternatives would have no wetland impact, they would result in unacceptable displacement of existing tiedowns at OXC. The remaining alternative, Option B, emerged as the Recommended Action in the AMPU based on projected





conventional hangar space needs at the time. Two of the hangar alternatives considered, Option A and Option C, resulted in unacceptable displacement of existing tiedowns, which are located at the northwest and northeast ramps on OXC. Options A, B, and C were also reevaluated as alternative locations in this EIE using the revised building size, 161,000 sf. Relocation of the existing tiedowns was also considered at the Option A and Option C locations. Neither Option A or Option C is able to accommodate a 161,000 sf conventional hangar facility due to site constraints such as available land area, FAA clear zone requirements, and topography. Therefore, Option B is the preferred location for siting of a new hangar facility.

The proposed action must be located adjacent to the existing runway system for safety and operational purposes, and because the existing airport in the vicinity of the runway is constrained by existing structures and tiedowns. No other alternative sites were considered reasonable or feasible.

The No-Action Alternative would not allow CTDOT to increase conventional hangar space at OXC to meet future projected space demands. The No-Action Alternative would require a continuation of current operations at current levels and allow no new construction.

ENVIRONMENTAL CONSEQUENCES ANALYSIS

OXC is situated on a plateau approximately 727 feet above mean sea level (MSL). The surrounding elevations are approximately 50 to 100 feet lower than the average airport elevation. OXC is located approximately 1.25 miles southeast of Interstate 84 in the Towns of Oxford and Middlebury. The airport can be accessed via Christian Road, which parallels the western boundary of the airport north to south, State Routes 188 and 486 to the west, and Prokop Road to the east.

Land Use

The proposed action will not result in the displacement of individuals or businesses or involve any additional property acquisitions. The larger OXC property is bounded by the Triangle Boulevard and Christian Road intersection to the north, the intersection of Donovan Road and Airport Access Road to the west, Jacks Hill Road to the south, and the Oxford municipal landfill to the east. The OXC property is surrounded by roads, woodlands, wetlands, stream corridors, residences, and commercial and industrial uses.

Land use impacts were evaluated based on the effect that the proposed action would have on existing land uses and compatibility with existing land uses and land use patterns.

The Proposed Action Alternative is to occur within the limits of OXC property. The proposed action is consistent and compatible with surrounding land uses, and would not adversely impact land use patterns, including residential areas, therefore, no mitigation is proposed.

Consistency with Local, Regional, and State Plans

The proposed action falls within two successively larger planning areas, namely the Town of Oxford and the Central Naugatuck Valley Region. The proposed action also lies within two of Connecticut's Transportation Investment Areas (TIAs). The plans formulated for the region

and each of the TIAs articulate policies, goals, and standards for both physical and economic growth including the most desirable use of land and transportation corridors.

No mitigation is required or proposed since the Proposed Action Alternative is consistent with local, regional, and state plans.

Consistency with State Plan of Conservation and Development

The Connecticut Office of Policy and Management (OPM) *Conservation and Development Policies Plan for Connecticut 2005–2010* (State C&D Plan) contains development area policies and conservation area policies that focus on growth management.

No mitigation is required or proposed since the Proposed Action Alternative is consistent with local, regional, and state plans.

Traffic and Parking

OXC is located approximately 1.5 miles south of Interstate 84 (I-84) off of Route 188 (see Figure ES-1). The airport is directly accessed from Airport Access Road and Juliano Drive. Surface parking lots are located throughout the property, primarily adjacent to the airport buildings. Approximately 125 additional vehicle parking spaces are provided for the east and west aprons. In total, these parking lots provide approximately 400 parking spaces for passenger vehicles associated with the airports activities.

As a result of the proposed action, the amount of available parking provided by OXC will be increased. Approximately 287 additional parking spaces and four handicapped designated spaces, for a total of 291 spaces, will be constructed for the proposed action. A State Traffic Commission Certificate, #1796, was issued for the proposed Hangars H and I project on 9/16/08.

No mitigation is required as there are no adverse impacts on traffic, surface transportation patterns, or parking.

Air Quality

To ensure human health and public welfare, the Clean Air Act of 1970 and subsequent Clean Air Act Amendments established National Ambient Air Quality Standards (NAAQS) for six criteria pollutants. The Clean Air Act requires that states monitor air quality to determine if regions meet the NAAQS.

The criteria pollutants of greatest concern for transportation projects are carbon monoxide, ozone, and particulate matter since they are heavily influenced by motor vehicle activity. Diesel engines in particular are responsible for increased particulate matter releases.

Since there are no short-term or long-term adverse air quality impacts expected from the proposed action, no air quality mitigation measures are required or proposed.

Noise

Airport noise and land use compatibility are regulated at the federal level to ensure that all public airports are evaluated in the same manner, and compatibility determinations follow the

same procedures. For airport noise evaluations, Federal Aviation Regulations (FAR) require the use of an average noise metric to determine impacts and land use compatibility. The required metric is the Day-Night Average Noise Level or DNL.

In January of 2009, CTDOT completed a FAR Part 150 Noise Study for OXC. This study used the FAA's Integrated Noise Model (INM) Version 7.0 to identify existing and forecasted noise levels at OXC to the year 2012. One of the products of the Noise Study was a Noise Exposure Map depicting DNL noise contours for 2007 and 2012.

Federal regulations consider residential land use compatible with airport noise up to a level of DNL 65 dB. Any homes located within the 65 DNL contour are considered impacted by the airport. As shown on the Figures ES-4 and ES-5, there are several dozen homes located immediately north of the runway located within the 65 DNL contour (in both 2007 and 2012). Note that the 2007 contour (orange) is larger than the 2012 contour (yellow), as fewer of the older and noisier "Stage 2" jet aircraft will remain in service by 2012. These noisy "Stage 2" aircraft have a pronounced affect on the size of the DNL contours.

The evaluation conducted for the development of the proposed action used the same model created for the Part 150 Study. The evaluation addressed the additional airport noise that may result from the development the proposed action. It should be noted that the development of a large hangar was incorporated in the previous airport noise study; however, the size and capacity of the proposed action exceeds what was anticipated at that time.

It is anticipated that the construction of the proposed action will begin in 2010 and will be completed and fully occupied during 2012. The first full year of occupancy is anticipated to be 2013. Therefore, 2013 was the year used in this noise evaluation. The development process, assumptions, and associated INM input data can be found in Appendix B.

The proposed action would have no adverse noise impact (see Appendix B). Based on the additional activity data added, the total area of the DNL 65 contour did slightly increase between the 2012 baseline activity forecast and the 2013 expanded activity. However, no additional residential properties would be located within the 65 DNL contour created by the additional airport operations associated with the proposed action. Figures ES-4 and ES-5 show the 2007, 2012, and 2013 contour comparisons.

CTDOT is currently moving forward with plans to offer voluntary acquisition, relocation, and noise insulation (in some locations) to all of the homes in the impact area as a result of impacts associated with the proposed action, located immediately adjacent to and west of the proposed Action. The acquisition may include up to 72 homes located within or adjacent to the DNL 65 dB contour. This area is known as the Triangle Hill neighborhood of Middlebury. Since the proposed action does not cause any additional impacts to sensitive noise receptors, the mitigation associated with the proposed action is considered sufficient, and no additional mitigation is proposed.

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

Oxford is a rapidly growing town, with a population increase of over 10 percent between 2000 and 2004, a four-fold increase since 1950. Oxford is still a predominantly rural community,





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especially northern Oxford where OXC is located. Oxford has lower population densities than neighboring towns including Naugatuck, Middlebury, Newtown, and Southbury. The airport is surrounded by several industrial parks in various stages of development and scattered residential areas.

The proposed action would have a positive economic benefit to the region. Approximately 300 construction jobs will be created during the 18-month construction of the facility. It is estimated that 300 jobs, distributed over several shifts, will be created by the long-term operation and maintenance of the proposed action facility. In addition, the office space created by the new facility would draw new tenants to OXC.

Environmental Justice

According to Census data, the study area, Oxford, and Middlebury have a much lower percent minority population and percentage of people living below the poverty level than New Haven County or Connecticut. The percentage of unemployed persons in the study area is also lower. Although not necessarily an indicator of an Environmental Justice population, the percentage of elderly persons living in the study area is comparable to Oxford, Middlebury, New Haven County, and the state as a whole. There do not appear to be any Environmental Justice populations in the study area; therefore, there would be no impacts on such populations from the No-Action or the proposed Action.

Children's Health and Safety Risks

There are no known hazardous waste sites on OXC property, based on a 2007 Phase 1 study of the site. There are aircraft fueling facilities at three locations at OXC (see Section 5.16 on Hazardous Sites/Materials.) These fueling facilities are located within a fenced in area with controlled access and comply with state and federal environmental regulations. The fueling facilities are not accessible to the general public including children, and currently pose no environmental health risk to children. Other potential health risks to children come from the use of pesticides on airfield turf and substances used to de-ice, clean, and maintain aircraft. However, these substances are located in restricted areas at OXC, not accessible to the general public including children. Due to the restricted nature of the proposed action, there would be no impact on Children's Health and Safety.

The No-Action Alternative would not alter existing conditions. Therefore, the No-Action Alternative would have no impact on Children's Health and Safety.

Water Quality

The Proposed Action Alternative proposes to replace existing vegetation and other pervious features with increased impervious surfaces. In doing so, potential degradation to surface waters will be introduced. The Proposed Action Alternative will create approximately 572,693 sf (13.15 ac) of new impervious surface. The new tarmac, roofs, parking areas, and other impervious surfaces, such as walkways, would serve as accumulation areas for contaminants such as fuel and oil, deicing fluids/chemicals and salts, brake and tire dust, and other potentially toxic materials associated with aircraft and maintenance vehicle operations. During precipitation events, runoff flowing over these impervious surfaces can create faster moving,

more erosive runoff velocities down gradient as compared to natural and/or pervious surfaces. The project is located within the headwaters of the Little River. The Little River is rated as a class A surface water body in Connecticut's Water Quality Standards, and is an important fisheries resource. The river is stocked with trout downstream of the airport along Route 67 and is designated as a wild trout management area between Towner Land and Park Road in Oxford.

To account for potential water quality degradation, both during construction and post construction, best management practices (BMPs) and proper stormwater management will be provided to prevent and minimize sedimentation, siltation, and/or pollution of watercourses and off-site wetlands.

Preventing pollution to the Little River and associated off-site wetlands is imperative and measures will be taken to prevent and minimize sedimentation, siltation, and/or pollution of these water bodies in accordance with the 2004 Connecticut Stormwater Quality Manual and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. The permanent stormwater management system that has been incorporated into the proposed action and the Stormwater Pollution Prevention Plan (SWPPP) has several components that are shown on Figure ES-3The DEP Office of Environmental Review, in correspondence dated August 19, 2009 requested the inclusion of

- *the use of pervious pavement or grid pavers (which are compatible for parking lot and fire land applications), or impervious pavement without curbs or with notched curbs to direct runoff to properly designed and installed infiltration areas.* The project uses curbless impervious surface at the apron area and has a properly designed infiltration basin. Use of porous pavement in the parking area is not a sound engineering judgment because of the fill and retaining walls. The infiltration of surface water behind a retaining wall results in an unacceptable increase in lateral wall pressures. The site addresses this item to the best of its abilities.
- The use of vegetated swales, tree box filters and or infiltration islands to infiltrate and treat stormwater runoff (from building roofs and parking lots. The site is constrained by wetlands and grading the use of infiltrative islands in the parking area would create a design scenario that would not meet the program requirements. In lieu of surface infiltration the entire roof runoff is directed into an underground storage and detention facility that will provide infiltration of the runoff into the ground water in compliance with the DEP's water quality manual.
- The minimization of access road widths and parking lot areas to the maximum extent possible to reduce the area of impervious surface. The site provides significantly fewer parking spaces than required by local zoning. Parking lot surface area is minimized to the level required for the planned building operations. Additionally the runoff from parking areas is reduced by the inclusion of covered parking under a portion of the building. Instead of providing the difficult to treat parking lot runoff, clean roof runoff is provided and discharged to the underground infiltration/detention area. The access roadways and onsite drives are designed at the minimum widths that provide proper access for large delivery vehicles and safety. The width of the taxi lanes is prescribed by the aircraft type and the apron size is the minimum necessary to allow for safe circulation of aircraft in front of the hangar.

- If soil conditions permit, the use of drywells to manage runoff from the building roofs. The site stormwater management provides storage and recharge of the roof runoff for the entire roof surface.
- *the use of vegetated roofs (green roofs) to reduce the runoff from buildings.* This suggested option was not selected as the roof will be fitted with solar voltaic panels to provide electricity for the buildings operations. A green roof is incompatible with solar panels.
- proper treatment of special activity areas (e.g. loading docks, covered maintenance and service areas). The entire hangar structure is a special activity area. No work or maintenance will be allowed to be performed on the aprons as a matter of policy. All deliveries Hangar-side will be done within the covered hangars and no major maintenance will be performed onsite. Major maintenance will be done at special operations facilities located off of OXC property.
- *the installation of rainwater water harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation* There is a minimum of maintained landscape areas. The landscape areas were designed with drought resistant plantings such that irrigation will not be necessary.
- providing for pollution prevention measure to reduce the introduction of pollutants to the environment. The entire stormwater management system design incorporates best management practices (bmps) throughout the treatment train to reduce the introduction of pollutants. Using the South Carolina assessment method for the removal of TSS from runoff this system will remove over 85% of the TSS.

Floodplains

According to the Flood Insurance Rate Map (FIRM) for the Town of Oxford, Connecticut, New Haven County ([FEMA] Community Panel 090150-0001-B Effective December 4, 1979) there are no mapped floodways or 100-year floodplains in the southeastern quadrant of the airport in the vicinity of the proposed action. The only 100-year floodplain on airport property is associated with an unnamed tributary of the Little River and a wetland complex located to the southwest of Runway 36; this 100-year floodplain is located approximately 1,400 feet west of the proposed action.

There is a 500-year floodplain in the southeastern quadrant of the airport on the eastern side of the proposed action. Associated with the Little River, this 500-year floodplain extends slightly beyond the northern tip of the river and onto airport property. The southern point of the Proposed Action Alternative is less than 100-feet from the 500-year floodplain associated with the Little River. No activity will take place in the 100-yr or 500-yr floodplains, therefore, no impacts to these resources are anticipated.

Since the proposed action would take place on State of Connecticut property containing floodplain areas and has the potential to affect stormwater, a Flood Management General Certification (FMGC) must be obtained from the CTDOT. A FMGC will be submitted to the CTDOT.

Wetlands

Wetlands on the OXC property were field delineated between May 25 and June 7, 2004 by a

Certified Soil Scientist and re-investigated on August 27, 2007 and evaluated in August 2009. The delineation was undertaken as part of other improvements on the airport property. As part of these efforts it was determined that the OXC includes approximately 12.4 ac of wetlands, primarily on the southern, western, and eastern portions of the property. The existing regulated wetland systems located along these portions of the property are made up of low-lying, flat areas, a pond and a stormwater detention pond (for Hangar G). The wetlands drain south parallel to the proposed action and west along, and through, the southern portions of the project site. The wetland system exits the property via a natural channel to the southwest of the proposed action location. A narrow palustrine forested (PFO) wetland finger extends into the site from the Little River wetland complex. This wetland is located within the woodland area to the east of and adjacent to the mowed field area in the southern portion of the site. This wetland possesses the wildlife habitat, production export and groundwater discharge functions.

In order for the proposed action (new hangars and taxiway) to meet the Federal Aviation Commission's requirements for slope and distances, the proposed action has to be raised to a maximum elevation of 692.15 above MSL. The site requires a total of about 175,000 CY of fill to achieve the proposed elevation. The proposed action will permanently impact a total wetland area of approximately 2,553 sf (0.06 ac). The impacts occur at the area immediately south of the proposed Hangar I facility within the proposed parking areas (See Figure ES-3).

Approximately 3,018 sf (0.07 ac) of wetlands will be enhanced through the removal of invasive species and additional native plantings. In addition to the wetland enhancement, there are 8,504 sf (0.2 ac) of wetland creation proposed just north of the existing detention basin. The proposed wetland impact will have no detrimental effect to flood storage or cause any negative impacts to downstream wetlands. The proposed action received a permit for this work from the Town of Oxford on December 18, 2007 (Appendix C).

Biotic Communities/Federal and State Listed Endangered and Threatened Species

Site visits to observe ecological and habitat conditions were conducted in the Spring of 2009 and September 25, 2009. The results of these observations, resource mapping, and aerial photographs were used to evaluate conditions and potential impacts to biotic communities and threatened and endangered species. A response letter has been received by the CTDEP NDDB and is provided in Appendix D. A CTDEP NDDB coordination letter states that there are known records for the Eastern box turtle (*Terrapene carolina carolina*) and American Kestrel (*Falco sparverius*) in the "vicinity" of the proposed action, although NDDB mapping shows no records less than 0.5 miles from the site, as noted above. Neither of these species were observed during field work.

Clusters of deciduous woodlands dominate the undeveloped southeastern quadrant of OXC, along with wetlands and field habitat. Upland habitat is composed of woodlands, active hay field, and successional field habitat. Within the boundaries of the proposed action site, there are approximately 10.27 acres of total upland habitat, however, the upland component extends beyond the proposed action site to other areas within OXC as well as off the OXC property. The proposed action would require the removal of a total of approximately 10.27 acres of

upland habitat, composed of woodlands and field habitat. This disturbance of upland habitat would impact wildlife species in the proposed action site, however, the loss of habitat under the proposed action would not impact regional or local populations of any wildlife species,

although some individuals would be lost or forced to relocate. No forest interior habitat is located on the site; therefore, no forest interior species will be impacted. Due to the high level of stormwater management and treatment incorporated into the design of the proposed action, no negative impacts are expected to down gradient habitats, including fisheries in the Little River.

The wetland mitigation package prepared for this project will mitigate adverse impacts to wildlife habitats resulting from the proposed action. The wetland enhancements proposed in this report will also provide added and improved habitat for all wildlife.

Farmlands

Natural Resource Conservation Service (NRCS) mapping shows that soils within the proposed action site primarily consist of the Charlton-Chatfield complex, with three to 15 percent slopes and 15 to 45 percent slopes, which is not considered a prime farmland soil. However, an approximately four-acre area near the southern end of the proposed action site consists of Canton and Charlton soils, with three to eight percent slopes, which are considered prime farmland soils. The land is presently a mowed/maintained field that has not been subjected to agricultural activities since the OXC opened in 1969, despite being classified as prime farmland. It is unknown whether the land was farmed prior to 1969. Since it is not reasonably foreseeable that this land will be used for farming, due to the restricted nature of the site on OXC, there is no adverse impact to farmland soils and no mitigation is proposed.

Topography and Surficial Geology

The peak elevation of the site is approximately 727 feet above MSL and is located in the northern portion of the study area. The topography proceeds to slope downward to an elevation of 650 feet MSL near the Larkin State Park Trail and Little River corridors. Unique geologic formations are not known to exist in the vicinity of the proposed action.

The substantial topographic relief in the vicinity of the proposed action means this alternative would consist primarily of filling as opposed to excavation and cutting whereby limiting impacts to surficial topography. Due to site elevation and grading requirements, a retaining wall, 40 feet high at its highest point, will be required on the southern end of the site.

Historical, Architectural, Archeological, and Cultural Resources

The Connecticut Commission on Culture and Tourism, as the State's Historic Preservation Office (SHPO), is a mandated review agency for state-sponsored undertakings under the authority and regulations of the Connecticut Environmental Policy Act. Section 22a-1a-3 (a) (4) of the implementing regulations specifies that consideration of environmental significance shall include an evaluation concerning the "disruption or alteration" of a historic, architectural, or archaeological resource or its setting. The SHPO staff will work with the Connecticut Office of Policy and Management and the CTDOT in order to integrate cultural resource consideration as a component of state agency project planning efforts and to assure that all mitigating measures will be addressed to the satisfaction of all parties concerned prior to ground related disturbances or construction activities.

A formal information and review request letter has been submitted to the SHPO for review and comment (Appendix D). A response letter, dated October 13, 2009, was received from SHPO.

The letter states that the proposed action is located in an area of that possesses moderate to high sensitivity for prehistoric and historic archaeological resources, and recommends that a professional reconnaissance survey be undertaken to identify and evaluate archaeological resources which may exist within the project limits prior to ground disturbance or initiation of construction activities.

Section 303c and Section 6(f) Lands

Section 303c of the Department of Transportation Act of 1966 (49 USC 303) protects historic resources eligible for listing or listed on the NRHP, as well as significant publicly owned parks, recreation areas, and wildlife/waterfowl preserves. Per the Act, Section 303c properties may only be impacted if there is no feasible and prudent alternative to their use and if the proposed action includes all possible planning to minimize harm resulting from such use.

A review of the Section 303c resources indicates there is only one located within the vicinity of the proposed action site, the Larkin State Park Trail. This resource is situated approximately 300 feet south of the proposed action and is considered to be a Section 303c resource due to its significance as a public multi-use recreational trail.

Section 6(f) of the Land and Water Conservation Act Fund (1965) provides funds for acquisition, maintenance, and enhancement of public recreational open space by municipalities. There are no public recreational properties or facilities funded and protected under Section 6(f) within or adjacent to the proposed action study area.

No impacts to these resources are proposed under this action.

Economy

Both local and regional economies would be stimulated by the construction of the proposed action. One effect would be the creation of jobs directly and peripherally affiliated with construction such as on- and off-site construction, trade, transportation, manufacturing, and services in support of construction. The project-related workers personal expenditures generated by the earnings from these jobs would help stimulate the local and regional economy. Expenditures would also encompass materials used in construction. Overall, the effect on the economy would be beneficial during the construction period.

Solid Waste

The type of waste generated by OXC would not change with the construction of the proposed action, however, the volume of waste would increase. The proposed facility would utilize five additional dumpsters to manage solid waste generated at the site. There would be no negative impacts as a result of solid waste production at the site.

Hazardous Sites/Materials

Fuel is stored at OXC by Keystone Aviation, CTDOT, Double Diamond Aviation, and Executive Flight Services. Keystone Aviation maintains four, 20,000-gallon, double-walled, aboveground storage tanks (ASTs) on the western side of the airport, north of the control tower. CTDOT stores fuel in two, 1,000-gallon, double-walled ASTs located south of the airport manager's office. Double Diamond Aviation and Executive Flight Services each maintain one, double-walled AST, 15,000 and 8,000 gallons, respectively.

The Proposed Action Alternative would not significantly change the type and volume of hazardous waste generated by OXC. De-icing and fueling of aircraft will take place at other existing locations within the airport. Other fueling options may include a fuel truck mobilizing to Hangars H and I to fuel aircraft onsite.

The addition of parking spaces and a taxiway will create additional pavement, which would require de-icing in the event of inclement weather. Herbicides and pesticides would also be applied on turf surrounding the new parking areas, taxiways, and Hangars H and I/office structure as part of the landscape maintenance of the facility. All of these substances would be handled, applied, and disposed of in accordance with federal and state regulations. Clean fill would be used to bring the topography to existing grade (see Section 5.21 on Construction Impacts). The stormwater management system has been designed and sized to hold more than the capacity of a fuel truck in the event there is a release of fuel.

Light Emissions and Visual Effects

Runway 18/36 is equipped with High Intensity Runway Lights (HIRLs). Runway End Identifier Lights (REILs), which consist of two high intensity flashing white lights directed toward the approach zone, are located on the end of Runway 36. Taxiways are equipped with Medium Intensity Taxiway Lights (MITLs).

A plateau created by extensive fill is the landform on which the airport sits, while the land immediately surrounding the airport is lower in elevation. The deciduous forests that surround a majority of the OXC largely obscure the view of the airport from the ground. About a half-mile west of the OXC, a hillside with a few scattered residences sits at a higher elevation than the airport. The inhabitants of these residences can see the paved runway and taxiways and surrounding turf, the air traffic control tower, and the hangars. Planes landing at the OXC can be seen and heard from most vantage points.

A grass embankment can be seen from a short segment of the Larkin State Park Trail. However, a few trees seasonally obscure the view of the embankment from the recreational trail. During the winter season, partial views of the existing building to the north of the proposed site can be seen from the trail. Due to the floor elevation requirements of the structure, extensive fill must be utilized to raise the site elevation, requiring the construction of a 40-foot high retaining wall on the southern end of the site. This wall, and the Hangar structure, will be visible from the trail.

The proposed structures would be built to the LZ3 standard as described in the LEED 2009 Green Building Design and Construction guidance document provided by the United States Green Building Council.

Offsetting the visual impacts from the Proposed Action Alternative to the Larkin State Park Trail will occur by planting trees between the proposed 206,000 square foot Hangar H and Hangar I facility and the trail. A landscaping plan has been developed that provides partial screening of the proposed action site from the trail.

Energy Supply and Natural Resources

There is currently no existing energy consumption within the proposed project area since it is vacant land. The existing energy consumption at OXC primarily includes the use of electricity to operate both airside and landside airport facilities, and fuel for aircraft and ground service and maintenance vehicles. The proposed action will incorporate an extensive solar panel array on the roof of the Hangars H and I and office space structure.

Although there are existing natural resources in the project area, including forested land and water resources, these resources are discussed elsewhere in this EIE (see Chapter 5.1 on Land Use, Chapter 5.8 on Water Quality, Chapter 5.11 on Biotic Communities, and Chapter 5.12 on Farmlands).

There are three different aircraft fuel operators at the OXC. Keystone Aviation operates a traditional fuel service, providing both Jet-A and Avgas (i.e., 100 octane low lead) fuel to the traveling public. All tanks are self-contained and above-ground. There are also automobiles, fuel trucks, delivery trucks, maintenance vehicles, and other ground service vehicles on airport property that use fuel as well as a natural gas pipeline (Algonquin Company) running east-west on the northern portion of Runway 18-36.

Coastal Barriers and Coastal Management Program

Since there are no Coastal Barriers or Coastal Zones at or immediately adjacent to the proposed action, the No-Action and Proposed Action Alternatives would not have an impact on Coastal Barriers or Coastal Zones.

Wild and Scenic Rivers

According to the National Wild and Scenic Rivers System and the CTDEP, there are no designated Wild and Scenic Rivers in the study area.

Construction Impacts

Temporary impacts during construction of the proposed action are anticipated in relation to traffic and parking, air quality, water quality/wetlands, noise, economy, solid waste, hazardous materials, energy supply and natural resources. Through the implantation of a traffic management plan, and construction BMPs for water/stormwater, air, noise, solid waste, and hazardous waste, these temporary impacts will be mitigated. Implementation of a construction BMP monitoring plan, to be carried out by on-site inspectors, will ensure adherence to these techniques.

Unavoidable Adverse Impacts

The unavoidable adverse impacts from the construction of the proposed action would include:

- Addition of 13.15 ac (572,693 sf) of impervious surface
- Loss of 0.06 acres (2,553 sf) of wetlands and associated functions and values and biotic communities
- Temporary construction-related impacts

The proposed action would include mitigation measures that would be fully coordinated with all appropriate agencies to ensure that they serve their intended purpose. The mitigation measures would effectively reduce potential adverse impacts while maintaining the safety and quality of life that currently exists at and around OXC. Based on this information, the unavoidable adverse impacts are determined to be insignificant.

Irreversible and Irretrievable Commitment of Resources

• *Energy:* Various types of fuel and electricity would be consumed in project construction.

• *Land:* Land would be developed and the placement of fill would alter the topography of the landscape.

• Natural Resources: proposed action development would require that 0.06 ac

of existing wetlands within the proposed action area be impacted by earth moving activities. In addition, approximately 13.15 ac of vegetated land would be converted to impervious coverage types. Approximately 1.5 ac of prime farmland would be impacted.

• *Construction Materials*: Concrete, cement, steel, asphalt, paint and other building material would be utilized to complete the proposed action. Turf and tree plantings would be placed around the proposed action. There is a need for clean fill to create a level grade to stabilize the location of the proposed facility.

• *Human Labor:* The necessity of human labor for the planning and construction of the proposed action represents an irretrievable expenditure of time and production that is thus unavailable for other endeavors.

INDIRECT AND CUMULATIVE EFFECT ANALYSIS

As a requirement of CEPA, indirect and cumulative effects (ICE) must be studied and identified prior to the initiation of construction activities. ICE analysis is conducted to determine if the proposed action would induce or accelerate development beyond the immediate project site and if the proposed action, when considered in conjunction with other actions, collectively result in significant environmental impacts.

Cumulative effects are defined as the impacts to the environment that result from the incremental impacts of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR 508.7). Cumulative effects may include direct, indirect, and/or induced impacts and may also occur later in time or at a location removed from the action itself. An example would be the inducement of off-site development as a result of an action. Cumulative effects may result from actions that are individually minor, but collectively significant. The potential cumulative effects of the proposed action and associated parking, taxiways, and access roads are briefly summarized below.

The ICE analysis must be conducted for several reasonable time periods. For the proposed action, the following time frames were investigated: 1969 (inception of OXC operations); 2009 (current timeframe of area-wide development and current OXC conditions); and 2025 (build-out of airport development capacity outlined in the AMPU).

The proposed action would not displace other uses at OXC, nor would it require acquisition of lands beyond the current OXC property boundaries. Implementation of the Proposed Action would not prevent development in the surrounding areas and the cumulative effects of

development at OXC and in the surrounding areas would not have a significant adverse effect on the natural or built environments. The proposed action would not preclude or require the development of a Taxiway B Extension project on OXC.

Water Quality/Floodplains

The proposed action would result in an increase of impervious surface at OXC. As a result, the cumulative adverse effects to downstream water quality and floodplain storage capacity are expected to be minor, and no additional mitigation for this cumulative effect is proposed. The proposed action will incorporate effective stormwater BMPs and storage facilities into the design, as discussed in the Water Quality section above.

Wetlands/Biotic Communities

Construction of the proposed action would have an impact on inland wetlands. Cumulative effects on a wetland's functions and wildlife habitat may be caused by other current and future developments within the ICE study area through direct impacts to other wetlands and biotic communities. Where unavoidable impacts occur, compensatory mitigation is typically required to replace the wetland functions lost. An inland wetland permit from the Town of Oxford has been obtained for the proposed action (see Section 5.10 and Appendix C). Due to the existing regulatory framework present at each of the ICE study area towns, and the wetland enhancement and mitigation approved for this action by the Town of Oxford, cumulative adverse effects to wetlands and biotic communities are expected to be minor, and no additional mitigation for this cumulative effect is proposed.

Section 303(c) and 6(f) Lands

Construction of the proposed action will have a visual impact to the Larkin State Park Trail. Ongoing new development within Oxford and abutting towns may also have a cumulative effect on the Park Trail. The proposed action would include a landscaping plan for the site and the re-establishment of an existing dirt road to the south of the site with vegetation. This will help reduce the visibility of the proposed action to users of the Larkin State Park Trail.

MITIGATION MEASURES

Impacts from the Proposed Action are summarized in Table ES-1. The proposed action satisfies the Purpose and Need of the project while avoiding and minimizing impacts to the most practicable extent. In addition, the Proposed Action will generate significant socioeconomic and energy conservation benefits through the creation of temporary and permanent jobs, and the incorporation of LEED design elements into the Proposed Action to achieve a LEED Gold Certification. The implementation of the Proposed Action would have minor adverse environmental impacts on the following resources, for which mitigation is proposed:

- The Proposed Action is inconsistent with the goals stated in the State Plan of Conservation and Development "Preservation Areas" due to development of the proposed action partially within wetlands;
- Minor temporary construction impacts to air quality;

- Minor temporary construction noise impacts;
- Approximately 13.15 acres of new impervious surface area created, with associated risk of downstream pollution and risk of increased runoff and downstream flooding effects;
- 0.06 acres of direct impact to forested wetlands, which currently provide the functions of wildlife habitat, production export, groundwater discharge, and;
- Adverse visual impacts on recreational (Larkin State Park) trail users.

Resource	Section in Document	Impact Analysis	Mitigation (same for each alternative unless noted)
		Proposed Action Alternative	
Compatible Land Use	5.1	No impact	None proposed
Consistency with Local, Regional and State Plans	5.2	No impact	None proposed
Consistency with State Plan of Conservation and Development	5.3	2,553 sf of permanent inland wetland impact	A total of approximately 11,522 sf of compensatory wetland mitigation area is proposed: 3,018 sf of wetland enhancement through the removal of invasive species and additional native plantings, and; 8,504 sf of wetland creation.
Traffic and Parking	5.4	Positive impact – increase in parking spaces; LEED Design	None proposed
Air Quality	5.5	Minor temporary construction impacts only	Mitigation through fugitive dust control and erosion and sedimentation control during construction activities. Institute best management practices (BMPs); a storm water pollution prevention plan (SWPPP) per the 2002 Connecticut Guidelines for Erosion and Sedimentation Control; LEED Design
Noise	5.6	Minor temporary construction impacts only	Construction BMPs – limit construction hours
Socioeconomics, Environmental Justice, and Children's Health and Safety Risks	5.7	Socioeconomic: positive impact through temporary and permanent job creation Environmental Justice: No impact Children's Health and Safety Risks: No impact	Socioeconomic: None proposed Environmental Justice: None proposed Children's Health and Safety Risks: None proposed
Water Quality	5.8	Approximately 13.15 acres of new impervious surface area created, with	Stormwater best management practices (BMPs); a storm water

Table ES-1: Summary of Impacts and Proposed Mitigation

		associated potential risk of downstream pollution	pollution prevention plan (SWPPP) per the 2002 Connecticut Guidelines for Erosion and Sedimentation Control; temporary and permanent storm water management facilities per the Connecticut Stormwater Quality Manual (2004); see Section 5.8; LEED Design
Floodplains	5.9	No impact to 100-year floodplain or the floodway	None proposed
Wetlands	5.10	2,553 sf of permanent inland wetland impact	A total of approximately 11,522 sf of compensatory wetland mitigation area is proposed: 3,018 sf of wetland enhancement through the removal of invasive species and additional native plantings, and; 8,504 sf of wetland creation; LEED Design.
Biotic Communities and Federal and State Listed Threatened and Endangered (T&E) Species	5.11	Biotic Communities: Habitat loss from impacts to forested wetlands and 10.27 acres of upland habitat Threatened or endangered species: No known impacts	Habitat Impacts: Largely compensated by wetland mitigation plan (Section 5.10); upland landscape planting plan; LEED Design Threatened or endangered species: None proposed
Prime Farmlands	5.12	No impact	None proposed
Historical, Architectural, Archaeological, and Cultural Resources	5.13	SHPO required Archaeological Survey, which is being conducted.	Coordinate with SHPO.
Section 303(c) and Section 6(f) Resources	5.14	No impact	None proposed
Solid Waste	5.15	No adverse impacts from Solid Waste; LEED Design	None proposed
Hazardous Sites/Materials	5.16	No impact	None proposed
Light Emissions and Visual Effects	5.17	Light emissions: No impact; LEED Design Visual impacts: Adverse impact on recreational trail users on the Larkin State Park Trail	Light emissions: None proposed Visual impacts: vegetative screening would be planted between the Hangar I and the trail; LEED Design
Energy Supply and Natural Resources	5.18	No impact – LEED Design	None proposed

Coastal Resources		Coastal Resources: No impact	
and Wild and	5.19 and 5.20		None proposed
Scenic Rivers		Wild and Scenic Rivers: No impact	

POTENTIAL CERTIFICATES, PERMITS AND APPROVALS

State and local permits and approvals anticipated for the proposed action include the following:

Federal

- U.S. Army Corp of Engineers, Section 404 Permit (Category 1 non reporting)
- FAA Notice of Proposed Construction or Alteration Form 7460-1
- FAA Notice of Actual Construction or Alteration Form 7460-2

State

- Connecticut Department of Environmental Protection (CTDEP), Section 401 Water Quality Certification (Category 1 non-reporting)
- CTDEP, General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities Registration
- CTDEP, General Permit for the Discharge of Stormwater Associated with Industrial Activity (modify existing OXC-wide general permit registration to incorporate this action into the DOT existing permit and file a general permit under the leasees control for the Hangar facility)
- State of Connecticut Flood Management General Certification from the CTDOT
- State Traffic Commission Certification (#1796 issued for the proposed Hangars H and I project on 9/16/08.

Local

• Town of Oxford Inland Wetlands and Watercourses Permit (permit obtained on December 18, 2007 [see Appendix C])

PUBLIC INVOLVEMENT AND AGENCY CONSULTATION

The 45-day review period begins on November 3, 2009. Comments on this EIE should be directed via letter, email or fax by 4:30pm Friday December 18, 2009 to:

Agency Contact

Connecticut Department of Transportation Mr. Keith Hall, Transportation Supervising Planner Office of Environmental Planning 2800 Berlin Turnpike P.O. Box 317546 Newington, CT 06131-7546 Phone: (860)594-2926 Fax: (860)594-3028 E-Mail: <u>Keith.hall@ct.gov</u>

EIE Distribution List

The following agencies/persons received a copy of the Environmental Impact Evaluation for the Waterbury-Oxford Airport, 300 Christian Street, Oxford, CT.

U.S. Congressional Representatives and Senators

Hon. Christopher Dodd	Hon. Joseph Lieberman
U.S. Senator	U.S. Senator
448 Russell Senate Office Building	706 Hart Senate Office Building
Washington, D.C. 20510-0702	Washington, D.C. 20510-0703
Hon. Christopher Murphy	Hon. Jim Himes
U.S. Representative	U.S. Representative
501 Cannon House Office Building	214 Cannon House Office Building
Washington D.C. 20515-0705	Washington D.C. 20515-0705

Governor, State Representatives and Senators

Hon. Jodi Rell	Hon. Anthony D'Amelio
Governor, State of Connecticut	State Representative
State Capitol	4200 Legislative Office Building
Hartford, CT 06106	Hartford, CT 06106-1591
Hon. David Labriola	Hon. Arthur O'Neill
State Representative	State Representative
4200 Legislative Office Building	4200 Legislative Office Building
Hartford, CT 06106-1591	Hartford, CT 06106-1591

Chief Elected Municipal Officials

Hon. Thomas Gormley	Hon. Mary Ann Drayton-Rogers
Town of Middlebury, Town Hall	Town of Oxford, Town Hall
1212 Whittemore Road	486 Oxford Road, Oxford, CT 06478-1298
Middlebury, CT 06762	
Hon. Robert Kane	
State Representative	
4200 Legislative Office Building	
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Mr. David Fox	Mr. Judd Everhart
Supervising Environmental Analyst	Department of Transportation
Department of Environmental Protection	Office of Communications
79 Elm Street	P.O. Box 317546
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	Newington, CT 06131-7546
Hon. Raeanna V. Curtis	Hon. J. Robert Galvin, M.D., M.P.H.
Commissioner	Commissioner
Department of Public Works	Department of Public Health
165 Capitol Avenue	410 Capitol A venue
Hartford, CT 06106	Hartford, CT 06134
Mr. Robert L. Genuario	Ms. Julie B. Fagan
Secretary	Connecticut Department of Housing and
Office of Policy and Management	Urban Development
450 Capitol Avenue	One Corporate Center
Hartford, CT 06106-1308	20 Church Street, 19 th Floor
	Hartford, CT 06103
Mr. David Bahlman	Hon. Amey Marrella
Connecticut Commission on Culture and	Commissioner
Tourism	Department of Environmental Protection
State Historic Preservation Office	79 Elm Street
One Constitution Plaza, Second Floor	Hartford, CT 06106
Hartford, CT 06103	
Hon. Joan McDonald	Mr. Tom Tyler
Commissioner	Bureau Chief
Dept of Economic and Community	Bureau of Outdoor Recreation
Development	Conn Dept of Environmental Protection
505 Hudson Street	79 Elm Street
Hartford CT 06106	Hartford, CT 06106
Ms. Denise Ruzicka	Hon Robert M Ward
Director-Inland Water Resources Division	Commissioner
Department of Environmental Protection	Connecticut Department of Motor Vehicles
79 Elm Street	60 State Street
Hartford, CT 06106	Wethersfield, CT 06161
Ms. Laurie Mathieu	Mr. Donald Shubert
Public Health Services Manager	Director of Regulatory Affairs
Department of Public Health	Connecticut Construction Industries
P.O. Baox 34038	912 Silas Deane Hwy
410 Capital Avenue MS 51-WAT	Wethersfield, CT 06109
Hartford, CT 06134-0348	
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Office of Planning and Zoning	Executive Director
City of Middlebury	Council on Environmental Quality
1212 Whitemore Rd	79 Elm Street
Middlebury, CT 06762	Hartford, CT 06106
Ms. Jessica Pennell	Mr. Kendall Wiggin
Office of Planning and Zoning	State Librarian
City of Oxford	Connecticut State Library
486 Oxford Rd	231 Capitol Avenue
Oxford, CT 06478	Hartford, CT 06106

U.S. Departments/Officials

Mr. John Silva	
Federal Aviation Administration	
12 New England Park	
Burlington MA 01803	
Durinigion, ini i oroos	

Other

Mr. Peter Dorpalen	Herman Schuler,
Executive Director	Economic Development Director
Council of Governments of the Central	Town of Oxford
Naugatuck Valley	S.B. Church Memorial Town Hall
60 North Main Street, 3rd Floor	486 Oxford Road
Waterbury, Connecticut 06702	Oxford, CT 06478

1. INTRODUCTION

The Waterbury-Oxford Airport (OXC) is located at 300 Christian Street in Oxford, Connecticut. It is situated in the northwest corner of New Haven County and is approximately 5 miles west of Waterbury on the Oxford-Middlebury town-line. OXC is primarily within the Town of Oxford, however, a small area in the northern portion of the airport lies in the Town of Middlebury (see Figure 1). It has close access to major roadways, including Interstate 84, 1.5 miles to the north. The airport is located within the Central Naugatuck Valley Region.

In May 1968, the Federal Aviation Administration (FAA) allocated approximately 1.2 million dollars for the construction of a public use airport, and in December 1969, the airport was opened. OXC is classified as a General Aviation (GA) facility, meaning it serves charter, corporate, and personal aircraft users. OXC does not offer scheduled commercial air service. OXC, as shown on Figure 2, is a 425-acre facility owned and managed by the Connecticut Department of Transportation (CTDOT). OXC property contains the airside facilities presented in Table 1 and the landside facilities presented in Table 2. Table 3 presents information on existing tenants and airport services, and Table 4 shows the number of annual operations at OXC, by type of aircraft. Figure 2 depicts existing airport buildings and facilities. OXC is a 24-hour facility with four main tenants, Keystone Aviation, Key Air, Double Diamond, and Executive Flight Services.

Connecticut Environmental Policy Act

Implementation of the proposed action will be subject to a State of Connecticut lease approval by CTDOT and, therefore, compliance with CEPA is required. Under CEPA (CGS 22a-1a), any state entity proposing or sponsoring an activity that may result in a significant environmental impact must conduct an appropriate environmental review prior to sponsoring or funding the project. Under CEPA, the agency must investigate and document the effects of the activity upon both the natural and built environments. CEPA further requires an assessment of alternatives to the Proposed Action that may result in a lesser environmental impact. Approval of the CEPA document is required prior to the approval of a State of Connecticut lease agreement. The State of Connecticut Office of Policy and Management (OPM) is charged with review and approval of the CEPA document. Upon approval of the CEPA document, OPM will issue a Record of Decision (ROD) to conclude the CEPA process.

On July 21, 2009, the CEPA process for this Oxford EIE officially began with the publication of the Notice of Scoping to prepare an EIE in the *Environmental Monitor*, a web site administered by the Connecticut Council on Environmental Quality (CEQ). Public comments on scoping were accepted during a 30-day scoping period, which ended August 19, 2009. Appendix A contains all of the scoping material as well as the comments that were received.




Runway/Taxiway	Length	Width	Surface Type	Lighting
	(in feet)	(in feet)		0 0
Runway 18-36	5,800	100	Asphalt (grooved)	HIRL
				Runway 18:
				VASI
				Runway 36:
				REIL, PAPI
Taxiway A	6,300	40	Asphalt	MITL
Taxiway B	3,700	50	Asphalt	MITL
Taxiway C	300	40	Asphalt	MITL
Taxiway D	600	25	Asphalt	MITL
Taxiway E	300	50	Asphalt	MITL
Taxiway G	750	40-100	Asphalt	MITL
Parking Aprons	Total Size	Tiedowns	Surface Type	Users**
	(square feet)			
Northeast Ramp	100,000	40	Asphalt	Based
Northwest Ramp	140,000	50	Asphalt	Based
South Ramp	24,000	26	Asphalt	Based
Main Ramp	50,000	10	Asphalt	Based/Itinerant
Executive Flight *	20,000	12	Asphalt	Based
Key Air	100,000	Staging	Concrete/Asphalt	Tenants
Double Diamond	40,000	Staging	Asphalt	Tenants
Keystone (A,B,C,D)	105,000	Staging	Asphalt	Tenants
Transient - Keystone	72,000	Variable	Asphalt	Visitors

Table 1: Existing Airside Facilites

Source: Clough Harbour & Associates (CHA), AMPU, September 2007.

Notes: HIRL-High Intensity Runway Lights; VASI - Visual Approach Slope Indicator;

PAPI - Precision Approach Path Indicator; MITL - Medium Intensity Taxiway Lights; REIL - Runway End Identifier Lights.

* Based aircraft at Elecutive Flight are located along the perimeter of the apron and surround the T-hangar. **Definition of Users: "Based" aircraft are those owned by individuals, businesses, or organizations that are stored at OXC on a regular basis. "Itinerant" aircraft are those arriving from outside the local area. "Tenants" have privately developed hangars at OXC through lease agreements with ConnDOT and provide services to aircraft.

Facility	Building	Area In	Use	
	Number	Square Feet		
	(See Figure 2)	(units)		
Keystone FBO Hangar A	1	5,000	Storage, Maintenance	
Air Traffic Control Tower	1	2,500	Air Traffic Control	
Keystone FBO Hangar B, C, D, & E	2&3	50,000	Storage, Maintenance	
Airport Management/Aircraft Rescue and Firefighting (ARFF)/Maintenance	4	3,500	Operations, Storage	
T-hangar	5	17,500 (16 units)	Storage	
T-hangar	6	17,500 (16 units)	Storage	
T-hangar	7	7,200 (6 units)	Storage	
T-hangar	8	17,500 (16 units)	Storage	
Key Air Hangar F	9	62,500	Storage, Maintenance	
Double Diamond Hangar	10	15,000	Storage, Maintenance	
1-nangar	11	13,000 (10 units)	Storage	
Executive Flight Hangar	12	2,500	Storage, Maintenance	
Fuel Farm	13	three 15,000 gallon tanks	Fuel Storage	
Key Air Hangar G	14	62,500	Storage, Maintenance	
Restaurant	15	4,350	Food service	

Source: CHA, AMPU, September 2007.

Table 3: Existing Tenants and Airport Services

Company	Services	Location	Fuel	Parking
			(gallons)	(Spaces)
Keystone Aviation	Fuel sale, aircraft rental, flight training, aircraft maintenance	West side	45,000 Jet A	120
			12,000 100LL	
Key Air	Aircraft management, charter	East side	N/A	100
Double Diamond	Charter	East side	15,000 Jet A	20
Executive Flight Services	Aircraft sales & maintenance, flight training, charter	West side	8,000 100LL	20

Source: CHA, AMPU, September 2007.

Notes: Separate auto parking is also provided for east and west apron, 50 and 75 spaces respectively.

LL - low lead

Table 4: Existing Aircraft and Annual Operations

	Single & Multi-Engine Piston	Turboprop	Jet	Rotor	Total
Based Aircraft	188	10	37	1	236
Annual Operation	58,656	3,120	3,700	473	65,949

Source CHA, AMPU, September 2007.

Airport Facilities and Operations

In 2007, there were approximately 64,100 total "operations" at OXC, as compared with 66,000 operations in 2003. An operation consists of either an aircraft take-off *or* a landing. The 2007 Final Waterbury-Oxford Airport Master Plan Update (AMPU) reports that the number of annual operations is expected to grow to 69,485 by 2012 and 86,600 by 2023. As the number of annual operations grows at OXC, the physical characteristics of the airport, hangar space for based aircraft is evaluated to determine if there are additional space needs for future based aircraft projections.

The existing design aircraft at OXC is the Gulfstream IV, a corporate jet aircraft (Airport Reference Code, or ARC, D-II). The design aircraft is used to determine the physical characteristics of the airport design, its operation protocols, and to what standards it must conform. The "design aircraft" represents the largest aircraft anticipated to use an airport on a regular basis, which is at least 500 annual operations (AMPU, 2007).

According to the AMPU, there are approximately 236 total aircraft currently based at OXC. Of the 236, about 188 are single- or multi-engine piston aircraft (which are typically smaller aircraft), and 37 are jets (which tend to be larger aircraft). Currently, there are seven conventional hangars on OXC as shown on Figure 2 and expressed in Table 2.

The AMPU 2023 based aircraft projections for turboprop and rotocraft aircraft and jet aircraft were 15 and 72, respectively. This is an increase of 4 turboprop and rotocraft aircraft and 35 jet aircraft. The AMPU conducted a comparison of the existing hangar space at OXC and the projected future hangar space requirements, due to the increase in based aircraft, to determine if existing infrastructure at OXC could accommodate the projected future number of based aircraft. This comparison assumed the completion of Hangar G, a 62,500 sf conventional hangar on OXC. The result of the AMPU comparison determined that a deficit of 33,500 sf of conventional hangar space would exist for the 2023 future year.

2. PURPOSE AND NEED

The purpose of this project is to provide additional conventional hangar space at OXC by constructing a new hangar facility (Hangars H and I), thereby creating an additional 161,000 sf of new conventional hangar space. The AMPU, dated September 2007, conducted an assessment of the existing hangar space on OXC in the 2003 base year. Projected OXC hangar requirements were determined based on industry planning standards, and through coordination with airport tenants and management. Projections were made for both conventional hangar space and T-hangar space. Conventional hangar space was calculated with respect to based aircraft, typically only turboprop and jet aircraft. The 2003 based aircraft assumptions for turboprop and rotocraft aircraft and jet aircraft were 11 and 37, respectively. The 2023 based aircraft assumptions for turboprop and rotocraft aircraft and jet aircraft were 15 and 72, respectively. This is an increase of 4 turboprop and rotocraft aircraft and 35 jet aircraft. Assuming a space requirement for turboprop and rotocraft aircraft of 1,600 sf and 2,500 sf for jet aircraft, respectively, a total deficit of 96,000 sf was projected for 2023. Since this projection was made, Hangar G has been built at OXC, with a storage area of 62,500 sf, leaving a remaining deficit of 33,500 sf of conventional hangar space for the 2023 future year as reported in the 2007 AMPU.

Based on the 2023 projected space deficit for conventional hangar space, the proposed project would create a surplus of 127,500 sf of hangar space. However, since the 2007 AMPU projections were made, there have been substantial changes in demand for conventional hangar space.

Based on coordination with Keystone Aviation LLC, the proposed tenant for the new facility, agreements are already in place to fill over 75% of Hangar H with based aircraft, this is approximately 66,750 sf of conventional hangar space. In addition, there are existing proposals to base aircraft at OXC that would completely fill Hangar H and 24% of Hangar I, approximately 107,250 sf of conventional hangar space. A proprietary market analysis conducted by Keystone Aviation LLC shows that Hangars H and I will be at full capacity, 161,000 sf, with based aircraft by 2012. Proposed Hangars H and I must be of sufficient size to accommodate these based aircraft.

In addition to satisfying future based aircraft needs, the proposed project will also serve the purpose of improving safety and operations at OXC by removing congestion within and in front of Hangar G. The proposed action will provide more space for maneuvering of aircraft due to the newer, larger apron of Hangars H and I.

The addition of Hangars H and I, and the associated office space, will provide additional revenue for the state. This increase in revenue will move the OXC facility closer to a revenue producer for the state. OXC currently operates as an expense to the state. The increased revenue from this land lease with Keystone Air will benefit OXC and the state and is needed to produce additional revenue.

The proposed action will create new temporary and permanent jobs, which will be an additional economic benefit to the region. It is estimated that approximately 300 new temporary construction jobs would be created during the 14-18 month construction of the facility, and an additional 300 jobs would be created for the operation and maintenance of the facility when completely filled, including all aircraft operation personnel.

3. PROJECT DESCRIPTION

Background

Claris Construction, Inc. (Claris) is proposing to construct a new hangar/office facility with a total footprint of approximately 206,000 square feet (sf) on the southern portion of the existing Waterbury-Oxford Airport property in the Town of Oxford. The existing property is comprised of a contiguous parcel of land owned by CTDOT. The project site is directly south of and adjacent to the existing Hangar G in the southern portion of OXC.

The site largely consists of meadow, woodlands, and a large freshwater wetland system. The wetlands flow through the property from the north to the south. There is a large area of standing water on the southern portion of the site, which discharges in a southwesterly direction offsite (See Figure 3).

The Proposed Action

The proposed action is the state approval of a lease agreement between CTDOT and Keystone Air for the construction of a new hangar/office complex on OXC. The construction of the new 206,000 sf hangar/office facility is a direct effect of this lease approval.

The proposed action will consist of 161,000 sf of conventional hangar space, and approximately 139,675 sf of office space, spread over three stories (see Figure 4). Hangars H and I will contain 89,250 sf and 72,000 sf, respectively, of conventional hangar space. The ground, main and second floors will contain 38,621 sf, 45,527 sf, and 45,527 sf, of office space, respectively. The ground floor will include approximately 20,746 sf of covered parking. The total footprint of the structure, including the Hangars H and I and office space is 206,000 sf (4.73 acres). The outside parking areas, and access roads add an additional 366,625 sf (8.4 acres) to the total footprint of the development. Therefore, the total footprint of the development is 13.15 acres. The facility will require an extension of the existing taxilane from Hangar G to the proposed tarmac to the west side of the proposed action. The development includes the construction of a new access roadway from Prokop Road to the north and east sides of the proposed action. This access road will provide a construction entrance, and post-construction access to proposed parking areas associated with the Hangars H and I and associated office space. As part of the Proposed Action, the intersection of Prokup Road and Juliano Drive will be reconstructed to standard geometry and sigh line requirements. Two detention basins, a bioretention basin and an underground detention facility have been incorporated into the design for stormwater management. In order to minimize impacts to the wetlands and existing vegetation, 2,300 linear feet of retaining walls are also included in the design (see Figure 4). The proposed action will require potable water, gas, sanitary sewer, electric, telecommunications, and fire water for utilities.

The project will be designed with a goal of obtaining a LEED designation of "Gold" certification. The *LEED Reference Guide for Green Building Design and Construction* manual, 2009 edition, version 3, has been used to develop portions of the project design. The following elements have been incorporated into the design to achieve this designation:

- A 1,000 kw solar array on the roof
- Stormwater quality design
- Exterior light pollution reduction
- Water efficient landscaping





- Parking capacity
- Waterless urinals and two flush option toilets
- Recycled flooring
- Low VOC paints, mastics and glues used for construction
- Super insulated roof
- Silver reflective roofing material
- Native, non-invasive plantings used for landscaped areas
- Erosion control measures during construction
- 50% greater HVAC efficiency then ASHREA 90.1
- Geothermal heating and cooling system closed loop
- Solar tinted glazing on windows
- Concrete will be produced within 500 miles of the site

Project Funding

The proposed project will be completely financed with private funding.

Project Schedule

Construction of the proposed project is anticipated to start in January 2010. Construction is anticipated to take 14 to 18 months to complete. This schedule would enable the opening of the facility by June 2011.

4. ALTERNATIVES CONSIDERED

An important element in the CEPA process is the identification and evaluation of alternatives to a proposed action when feasible alternatives are available that would meet the overall project's purpose and need. CEPA requires consideration of reasonable alternatives to a proposed action that would minimize adverse effects of the action on the quality of the human environment.

Alternative Actions

This project is intended to provide sufficient conventional hangar space to meet the future projected space deficit (see Section 2) requirements for conventional hangar space at OXC. As discussed in Section 2, future projections of based aircraft were originally made by the AMPU, but have been updated by a proprietary market study conducted by the lessee to reflect current economic conditions since publication of the AMPU in 2007. Alternatives considered were evaluated on their ability to address the project Purpose and Need and to avoid and/or minimize resource impacts. In the AMPU, CTDOT conducted a comprehensive alternatives analysis for new conventional space hangars on OXC property. The AMPU considered several alternative sites on OXC for the placement of a new conventional hangar, as well as different sized hangars, to meet the projected 2023 conventional hangar space deficit. In addition to the No-Action Alternative, CTDOT considered three Action Alternative sites for the new conventional hangar space in the AMPU. These three alternatives, Option A, Option B, and Option C, plus the No Action Alternative were further evaluated. Figure 5 shows the location of the three conventional hangar sites, Option A, Option B and Option C, considered by the AMPU. From these three alternative sites, one alternative, Option B, emerged as the Recommended Action in the AMPU based on projected conventional hangar space needs at the time. Two of the hangar alternatives considered, Option A and Option C, resulted in unacceptable displacement of existing tiedowns, which are located at the northwest and northeast ramps on OXC (see Figure 5). Options A, B, and C were also re-evaluated as alternative locations using the revised building size, 161,000 sf. Relocation of the existing tiedowns were also considered to be unacceptable at the Option A and Option C locations.

Option A was sited directly within the Northeast Ramp of OXC. This option would have the capacity to provide between 25,000 to 35,000 sf of conventional hangar space. However, the siting of a conventional hangar in this location would require the displacement of all 40 existing tiedowns on this ramp, which could result in the displacement of the light aircraft tenant. Since this option would have a maximum size of 35,000 sf of conventional hangar space as identified in the AMPU, and likely less, it alone may not have met the need to satisfy the projected design year conventional hangar space deficit of 33,500 sf, and would not meet current projected needs of 161,000 sf. The space provided at this location would not allow for the construction of a 161,000 sf conventional hangar facility due to clear elevation requirements for instrument and radio control required by the FAA clear zone. The distance between the runway and the roadway loop does not allow enough distance to install the hangar and maintain the clear zone required. It is not possible to lower the building and maintain taxiway, taxilane, and apron grading elevations consistent with FAA requirements. This site is not a feasible alternative and has not been further considered.

Option C was sited directly within the Northwest Ramp of OXC. Like Option A, the siting of a conventional hangar in this location would require the displacement of 50 existing tiedowns, which could result in the displacement of the light aircraft tenant. Other obstacles to this site include difficulty connecting to automobile parking, and no pedestrian access due to extreme topographic elevation differences. Similar to Option A, this hangar alone may not have met the need to satisfy the projected design year conventional hangar space deficit of 33,500 sf as identified by the AMPU, and would not



meet current projected needs. This location, as identified in the APMU, is not large enough to house a 161,000 sf conventional hangar facility. Additionally, the increase in office space would exacerbate the difficulties in automobile parking and pedestrian access. This site is not a feasible alternative and has not been further considered.

The recommended alternative in the AMPU, Conventional Hangar Option B, was a 60,000 sf hangar located directly south of Hangar G (see Figure 6). At the time, this alternative met the projected year 2023 space requirements for conventional hangar space on OXC, 33,500 sf. However, as discussed in Section 2 of this EIE, future projected 2012 conventional hangar space requirement has increased over the AMPU deficit of 33,500 sf to 161,000 sf. As a result, the Conventional Hangar Option B set forth in the AMPU, only 60,000 sf, no longer meets future space projection requirements, and therefore, does not meet the purpose and need for this project. The proposed action meets the future projected deficit for conventional hangar space of 161,000 sf.

The proposed project must be located adjacent to the existing runway system for safety and operational purposes, and because the existing airport in the vicinity of the runway is constrained by existing structures, tiedowns, and topography, no other alternative sites were considered reasonable or feasible.

As a result, only the No Action Alternative and the Proposed Action were further analyzed in this EIE.

No-Action Alternative

The No-Action Alternative does not meet the project Purpose and Need and therefore is not considered a feasible alternative. The No-Action Alternative would not allow CTDOT to increase conventional hangar space at OXC to meet future projected space demands. The No-Action Alternative would require a continuation of current operations and no new construction.



5. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Waterbury-Oxford Airport (OXC) is situated on a plateau 727 feet above mean sea level (MSL). The surrounding elevations are approximately 50 to 100 feet lower than the average on airport elevation. The OXC is located approximately 1.25 miles southeast of Interstate 84 in the Towns of Oxford and Middlebury. The airport can be accessed via Christian Road, which parallels the western boundary of the airport north to south, State Routes 188 and 486 to the west, and Prokop Road to the east.

The OXC is located in an area dominated by wooded land. There are scattered residences surrounding the entire airport, with the highest density being Triangle Hills subdivision to the north. Land use to the south includes the Larkin State Park Trail, which is a linear park used for recreation. The majority of the lands to the east and west include wooded land, wetlands, and stream corridors with rolling to steep topography.

5.1. Compatible Land Use

Affected Environment

Land Use

The proposed project will be constructed within the existing property boundaries of the OXC. The project will not result in displacement or involve any additional property acquisitions. The larger OXC property is bounded by the Triangle Boulevard and Christian Road intersection to the north, the intersection of Donovan Road and Airport Access Road to the west, Jacks Hill Road to the south, and the Oxford municipal landfill to the east. The area surrounding the proposed project site is comprised of the airport and its associated facilities, as well as several industrial parks, undeveloped land, a network of roadway corridors, and scattered residences. Land use in the vicinity of the project site is illustrated in Figure 7.

Airport

The 430-acre airport owned by CTDOT and is severely constrained by topography in every direction. The airside area at OXC consists of Runway 18-36, associated taxiways, and Runway Protection Zones (RPZs) and Runway Safety Zones (RSZs) on each runway end. Landside areas on the east side of Runway 18-36 include a tie-down apron, T hangars, Key Air hangars, and the Double Diamond hangar.

Landside areas on the west side of Runway 18-36 include several tie down aprons, Executive Flight Thangar, Keystone hangars and aprons, the air traffic control tower, airport management/maintenance building, and fuel farm. The majority of the airport property is paved with runways, taxiways, aprons, and parking areas. Airside facilities are presented in Table 1 (on page 5), and the landside facilities are presented in Table 2. Table 3 (on pages 7) presents information on existing tenants and airport services at OXC. There are also maintained grass and landscaped areas throughout the airport property, as well as some undeveloped woodland, grassland, and wetland areas, particularly to the southwest and southeast of Runway 18-36.

Surrounding Area

The OXC property is surrounded by roads, wooded land, wetlands, stream corridors, residences, and commercial and industrial uses.



<u>North of OXC</u>: Land to the north of the OXC includes the Triangle Hills residential subdivision and other scattered residences in the Town of Middlebury.

<u>South of OXC</u>: Land to the south of OXC is open and/or wooded and is dominated by the Larkin State Park Trail. The trail is a linear state park primarily used for horseback riding, hiking, and bicycling. There is also an electrical transmission line, owned by Northeast Utilities, located southeast of the airport and trail.

East of OXC: Land to the east of OXC includes wooded areas, wetlands, stream corridors, open fields, and scattered single-family residences along Prokop Road.

<u>West of OXC</u>: Land to the west of OXC is a mix of transportation corridors, wooded land, open areas, industrial parks (Woodruff Hill), and residential land. Christian Road, Hurley Road, Hawley Road, Donovan Road, and Airport Access Road are all located to the west of the OXC.

Neighborhoods

Neighborhoods can be defined by 1) formal designation, 2) presence of a neighborhood organization, and/or 3) by a tangible sense of community cohesion. Most of the residences adjoining the OXC are scattered along Donovan Road, Christian Street, Hawley Road, Hurley Road, and Prokop Road. There is one subdivision, the Triangle Hills neighborhood in Middlebury, situated to the north of the airport. This development is comprised of approximately 50 single-family dwellings, each on approximately one or less acres of land. The subdivision, with homes that were built around the same time, has community-tended plant boxes and benches located in common areas of developments.

Zoning

The Oxford Detailed Zoning Map (COGCNV, 2005), Oxford Zoning Regulations (Town of Oxford, Zoning Regulations with amendments through January 5, 2009, Middlebury Zoning Regulations (Town of Middlebury, Zoning Regulations with amendments through July 2006), and the Middlebury Zoning Map (Town of Middlebury, Zoning Map with amendments through July 22, 2009) were consulted for zoning information. Zoning in the vicinity of the project site is illustrated in Figure 8.

According to the Town of Oxford's Detailed Oxford Zoning Map, the entire OXC property and most of the immediate surrounding land is zoned "Industrial District." The uses permitted in this zone include: aviation facilities, wholesale and distribution, manufacturing and assembly, broadcast and media production, banks and financial institutions, corporate offices, and printing and publishing services.

To the west of OXC (north of Hawley Road and west of Donovan Road and Christian Street), land is zoned "Corporate Business District". Permitted uses include corporate offices, research and development facilities, printing and publishing services, broadcast and media production, and manufacturing and assembly.

To the north of the OXC, in Middlebury, land is zoned "R-40 - Residential District". Permitted uses include single detached dwellings for one family, professional offices in dwelling units, schools, parks, playgrounds, open space lands, farms, garden centers, nurseries, and landscape services.



Environmental Consequences

Land Use

Land use impacts were evaluated based on the effect that the proposed project would have on existing land uses and compatibility with existing land uses and land use patterns.

No-Action Alternative

The No-Action Alternative would not change existing land use conditions and would have no impact on land use or zoning.

Proposed Action Alternative

The Proposed Action Alternative is entirely contained within existing airport property and, therefore, would not encroach on or change existing land uses or future access to adjacent land. This alternative does not require purchase of adjoining, non-airport, lands and conforms to existing zoning and land use patterns.

Neighborhoods

Neighborhood impacts were assessed in terms of disruptions to normal, everyday activity, such as convenient ingress and egress to both vehicles and/or pedestrians, physical barriers (i.e. noise, fugitive dust, construction equipment) that would hinder resident interaction and emergency response, loss of or change to community institutions (i.e. church, shopping, school), and/or loss of structures and other features important to the cohesive architectural or historical fabric of the neighborhood.

No-Action Alternative

The No-Action Alternative would not change existing conditions and would have no direct or indirect impacts on neighborhoods.

Proposed Action Alternative

The Proposed Action Alternative is contained within existing OXC property, at the south end of the airport. The majority of the residential land use is north of the airport and contained within the Triangle Hills subdivision. There would be minor temporary impacts resulting from added truck traffic required to transport fill and other equipment for the construction of the proposed project. These impacts, however, would be realized primarily during daylight hours and only for the duration of the project. The proposed action would not significantly or permanently disrupt convenient access, or introduce barriers to resident interaction, to the Triangle Hills subdivision or other scattered residential development within proximity to the airport. There would also be no loss of community institutions or structures and no impact to neighborhood cohesion.

Zoning

Federal and State projects are generally exempt from local municipal zoning requirements. However, it is CTDOT goal to avoid non-conformance with local zoning regulations. For this project, the proposed

action is consistent with the types of uses allowed by local zoning regulations. This project is exempt from local zoning regulation (i.e., Town of Oxford), and did not require local Planning and Zoning Commission approval.

No-Action Alternative

The No-Action Alternative would not alter existing conditions and would have no impact on zoning.

Proposed Action Alternative

The Proposed Action Alternative is located on OXC property and within an industrial zone. The proposed-action alternative involves new Hangars H and I, office space, associated parking, and taxiway, which is consistent with allowable airport facility uses in the zone.

Mitigation

Land Use

The Proposed Action Alternative is to occur within the limits of OXC property. The proposed action is consistent and compatible with surrounding land uses, and would not adversely impact land use patterns, including residential areas. No mitigation is proposed.

Neighborhood Cohesion and Community Disruption

As there would be no significant or permanent adverse impacts on neighborhoods or community from the Proposed Action Alternative, no mitigation is required or proposed.

Zoning

There would be no adverse impacts on zoning from the Proposed Action Alternative. Therefore, no mitigation is required or proposed.

5.2. Consistency with Local, Regional, and State Plans

Affected Environment

The project site falls within two successively larger planning areas, namely the Town of Oxford and the Central Naugatuck Valley region. The project site also lies within two of Connecticut's Transportation Investment Areas (TIAs). The plans formulated for the region and each of the TIAs articulate policies, goals, and standards for both physical and economic growth including the most desirable use of land and of transportation corridors. Consistency with each plan was evaluated for this proposed project. Pertinent findings within the reports for policy and planning developed for these regions (such as airport recommendations) are summarized below.

Town of Oxford

Town of Oxford 2007 Plan of Conservation and Development (the Oxford POCD):

The Oxford POCD serves as the comprehensive development guide for the community. It contains an overview of current conditions in Oxford, with chapters on: Demographics & housing, Environmental & Natural Resources, Economic Development, Transportation & Circulation, Community Services &

Facilities, Historical & Cultural Resources, and Land Use. The Oxford POCD provides for policies and broad goals for the community as a whole.

The proposed project is consistent with the Oxford POCD. The subsequent passages from the Oxford POCD demonstrate that the proposed project is consistent with the Oxford POCD:

- The Waterbury Oxford Airport is a significant employer and an asset to the Town and surrounding communities.
- Oxford Airport is a unique transportation asset in the town and should be protected.

These passages demonstrate that the proposed action is consistent with the Oxford POCD because this project would create additional business and improve operations at OXC with the potential to generate additional tax revenue for the Town and stimulate other service oriented business growth.

Town of Middlebury

Town of Middlebury 2001 Plan of Conservation and Development (the Middlebury POCD): The Middlebury POCD serves as the comprehensive development guide for the community. It contains an overview of current conditions in Middlebury, with chapters on: Land Use and Fiscal Conditions, Open Space and Environment, Transportation, Housing, Economic Development, Community Facilities and Government. The Middlebury POCD provides for policies and broad goals for the community as a whole.

The proposed project is consistent with the Middlebury POCD. The subsequent excerpt from the Middlebury OCD demonstrates that the proposed project is consistent with the Middlebury POCD "*Encourage the State to work with the Town in developing a long-term expansion plan for the airport.*"

Two important components of the EIE process are public involvement and agency coordination. During the public comment period, the Town of Middlebury will receive a copy of the EIE since the Town is on the EIE distribution list. CTDOT is not required, but has volunteered to conduct an informational public hearing as part of this CEPA process. Representatives of the Town of Middlebury, along with the general public can submit comments on the Proposed Action during the public comment period. The proposed action is consistent with the Middlebury POCD because the EIE process includes a public involvement and agency coordination in the process, as well as considering the statements noted above for the Town of Oxford

Central Naugatuck Valley Region

The Central Naugatuck Valley planning region includes 13 communities in the Greater Waterbury area. The Council of Governments of the Central Naugatuck Valley (COGCNV) is the state-designated Regional Planning Organization (RPO) and the federally designated Metropolitan Planning Organization (MPO) for the Central Naugatuck Valley Region.

The proposed action is consistent with the COGCNV regional planning documents (Regional POCD and Regional LRTP), which endorse such infrastructure improvements at OXC. The two relevant documents are described below.

Central Naugatuck Valley Regional Plan of Conservation & Development (COGCNV, 2008): The COGCNV is required by state statute to prepare a Regional Plan of Conservation and Development (Regional POCD). The purpose of the Regional POCD is to provide planning guidance for land use,

housing, transportation, community assets, and natural and other resources. The Regional POCD, last updated in 2008, is an advisory document that promotes consistency in decision-making and makes policy recommendations. The proposed project is consistent with the Regional POCD. The subsequent excerpt from the June 2008 Draft Regional POCD demonstrates the project's consistency: "Continue to identify and make improvements that encourage use of the Waterbury-Oxford Airport, while limiting land use conflicts."

Long Range Regional Transportation Plan 2007–2035 (COGCNV, 2007): COGCNV is required, by federal regulation, to prepare the Region's long-range transportation plan (Regional LRTP) for the region and update it at least every three years. The primary stated purpose of the Regional LRTP is to identify transportation deficiencies, recommend improvements, and advance priority transportation projects. It also presents plans for the area's transportation system to meet future needs. This Regional LRTP presents and summarizes recommended transportation projects, actions and programs for the Central Naugatuck Valley Planning Region over the next 25 years. The subsequent excerpt from the June 2008 Draft Regional POCD demonstrates the project's consistency: "Continue the Waterbury-Oxford Airport expansion plan and associated infrastructure improvements."

State Transportation Investment Areas

Established in 2001, the Connecticut's Transportation Strategy Board (TSB) develops statewide strategies to "strengthen and expand the State's transportation system over the next 20 years to enhance Connecticut's prospects for sustainable economic growth and a premier quality of life". The planning process for the TSB included creation of five regional planning areas in Connecticut called Transportation Investment Areas (TIAs). The Town of Oxford falls within two TIAs: the Coastal Corridor TIA and the I-84 TIA. Section 3(d) Public Act 01-5, An Act Implementing the Recommendations of the Transportation Strategy Board (the Act) mandates that the participants in each TIA prepare an initial TIA Corridor Plan for submission to the TSB. Described below are the two relevant TIA plans that support improvements at OXC.

Twenty-Year Strategic Plan for Transportation in the Coastal Corridor Transportation Investment Area (Coastal Corridor TIA Board, November 2002): This initial plan was developed to provide an overview of the Coastal Corridor TIA and its primary regional and inter-regional transportation concerns, and to put forth a 20-year strategy for enhancing the TIA's transportation system. The proposed project is consistent with the Coastal Corridor TIA Plan, as demonstrated by the subsequent excerpt: "Develop a statewide airport strategy, including improvements to smaller regional airports."

Interstate 84 Corridor Transportation Investment Area Final Corridor Plan (I-84 Corridor TIA Board, November 2002): This initial plan was developed to provide an overview of the I-84 Corridor TIA and its primary regional and inter-regional transportation concerns, and to put forth a 20-year strategy for enhancing the TIA's transportation system. The proposed project is consistent with the I-84 TIA Plan, as shown by the subsequent excerpt: "Improve our major regional airports, such as Bradley International Airport, and our system of smaller airports, which provide important link to the national and global economies."

Consistency

No-Action Alternative

The revitalization goals expressed in the local and regional plans, such as improving Connecticut's smaller airports and continuing expansion of OXC and associated infrastructure improvements, are not supported by the No-Action Alternative.

Proposed Action Alternative

The vision, goals, and recommendations set forth in the local (Town of Oxford and Town of Middlebury), regional (Central Naugatuck Valley Region), and state plans (State of Connecticut) for the future development of OXC are consistent with the Proposed Action Alternative.

The Proposed Action Alternative is consistent with:

- The treatment of OXC as a unique, transportation asset, as called for in the Oxford POCD
- Coordination with the State on airport expansion plans, as called for in the Middlebury POCD
- Encouraging the growth of the airport by making improvements, as called for in the Regional POCD
- Continuing the airport expansion plan and associated infrastructure improvements as called for in the Regional LRTP
- Improving regional airports, as called for in the Coastal Corridor TIA and I-84 TIA Plans

Mitigation

No mitigation is required or proposed since the Proposed Action Alternative is consistent with local, regional, and state plans.

5.3. Consistency with State Plan of Conservation and Development

Affected Environment

The Connecticut Office of Policy and Management (OPM) Conservation and Development Policies Plan for Connecticut 2005–2010 (State C&D Plan) contains development area policies and conservation area policies that focus on growth management. These policies are intended to reinforce and conserve existing urban areas, to promote staged, appropriate, sustainable development, and to preserve areas of significant environmental value. The State C&D Plan also contains six growth management principles (GMPs) and related policies to guide future development.

The Development and Conservation Locational Guide Maps for the Towns of Middlebury and Oxford, which accompanies the State C&D Plan provides a geographical interpretation of the State's conservation and development policies. According to these maps, most of the OXC property and proposed project located are within a "Growth Area." Growth Areas and their associated State Action Strategies are defined as follows:

<u>Growth Areas</u>: Support staged urban-scale expansion in areas suitable for long-term economic growth that are currently less than 80% built up, but have existing or planned infrastructure to support future growth in the region (State C&D Plan, 2005-2010).

<u>State Action Strategy for Growth Areas</u>: To provide support toward the concentration of new urban growth in areas, outside of the Regional Centers, capable of supporting large mixed uses while at the same time utilizing the infrastructure already existing within the Regional Centers.

One of the key Principles for Growth Areas is to concentrate development around existing infrastructure, including transportation nodes, schools, and commercial amenities. The idea behind this principle is to ultimately save taxpayer dollars and make both private and public sector investments more cost effective. This principle supports prioritized development in and around airports, over time, as the need for more concentrated land use patterns emerge.

There are several small "Preservation Areas" in and around the OXC. According to the State C&D Plan Locational Guide Maps, the Proposed Action Alternative is partially within a Preservation Area. Preservation Areas and their associated State Action Strategies are defined as follows:

<u>Preservation Areas</u>: Protect significant resource, heritage, recreation, and hazard-prone areas by avoiding structural development, except as directly consistent with the preservation value (State C&D Plan, 2005-2010).

State Action Strategy for Preservation Areas: Foster the identification of significant resource, heritage, recreation, and hazardous areas of statewide significance and advocate their protection by public and quasi-public agencies in their planning and investment decisions. Avoid support for structural development except as directly consistent with the preservation values (State C&D Plan, 2005-2010).

Consistency

No-Action Alternative

The No-Action Alternative would be a continuation of existing conditions. The No-Action Alternative would not involve improvements to OXC, a key regional transportation asset in a Growth Area. However, the No-Action Alternative would be consistent with the State Strategy for Preservation Areas, as it would not involve impacts to wetlands designated as Preservation Areas.

Proposed Action Alternative

The Proposed Action Alternative involves minor impacts to wetlands as defined by the State C&D Plan as Preservation Area, which is not consistent with the State C&D Plan. However, the Proposed Action Alternative is consistent with Growth Areas, which is to concentrate development around transportation nodes, such as OXC, to support the viability of transportation options. The proposed action is similar to infill development, in that is uses and improves the existing transportation infrastructure at the airport.

Mitigation

The Proposed Action Alternative is not consistent with the State C&D Plan due to a small wetland impact (0.06 ac) associated with the project. The proposed wetland mitigation, discussed in detail in Section 5.10, will compensate for this wetland loss, making the project consistent with the State C&D Plan. No additional mitigation is proposed.

5.4. Traffic and Parking

This section is intended to discuss the existing traffic and parking conditions at OXC as well as the potential impacts to transportation patterns associated with the proposed action.

Affected Environment

Traffic

Waterbury-Oxford Airport is located approximately 1.5 miles south of Interstate 84 (I-84) off of Route 188 (see Figure 1). The airport is directly accessed from Airport Access Road and Juliano Drive. The following describes the airport area roadways.

Airport Access Road: This roadway is the main road providing access to OCX. It extends from Route 188 and provides access to the most of the airport facilities for the airports tenants and the general public. Some of the airport facilities that are accessible from this roadway are the Keystone Aviation FBO, Airport Management, Executive Flight, and the west parking aprons and Hangar T. This road consists of two eastbound lanes and one westbound lane between Route 188 and Christian Street. The section east of Christian Street narrows to only two-lanes and it terminates at the airport. Between Route 188 and the airport, this roadway has a posted speed limit of 40 miles per hour (MPH) and intersects with Donovan Road, Christian Street, and Tarby Road. Based on a traffic count conducted by CTDOT in 2006, a daily average of 2,100 vehicles travel the portion of Airport Access Road situated west of Christian Street. This study also concluded that a daily average of 600 vehicles traverse the portion of Airport Access Road situated east of Christian Street.

Route 188: This two-lane roadway intersects I-84 at two signalized intersections; at Interchange 16, which is north of the airport and at Route 67, south of the airport. It also crosses Airport Access Road to the west of the airport. The intersection is with Airport Access Road is unsignalized, however there is a stop-sign control for Airport Access Road approach and has a posted speed limit of 40 MPH.

Christian Street: This roadway is a north/south collector road providing a majority of the access to the eastern portions of OXC along with Juliano Drive. This two-lane roadway has a posted speed limit of 35 MPH and extends from Airport Access Road to Juliano Drive.

Juliano Drive: This roadway road is responsible for providing a majority of the access to the eastern portions of OXC along with Christian Street. This 24-foot wide, two-lane roadway currently provides access the eastern-most portions of the airport facility. Juliano Drive has a posted speed limit of 25 MPH and terminates at the intersection with Prokop Road.

Tarby Road: This two-lane road extends north from Oxford Airport Road providing access to the

northwestern ramp area of the airport facility.

Prokop Road: This residential street extends from the intersection of Riggs Street and Towantic Hill Road and intersects with Juliano Drive in the vicinity of the project area, near Hangar G. Prokop Road access is able to be restricted via a metal gate.

Parking

Surface parking lots are located throughout the property, primarily adjacent to the airport buildings. The following describes the amount of parking available by each tenant.

- Keystone Aviation: This facility provides 120 parking spaces.
- Key Air: This facility provides 100 parking spaces.
- Double Diamond: This facility provides 20 parking spaces
- Executive Flight Services: This facility provides 20 parking spaces

It should be noted that approximately 125 additional vehicle parking spaces are provided for the east and west aprons. In total, these parking lots provide approximately 400 parking spaces for passenger vehicles associated with the airports activities.

As a result of the proposed project, the amount of available parking provided by OXC will be increased. Approximately 287 additional parking spaces and four handicapped designated spaces, for a total of 191 spaces, will be constructed for the proposed action.

Environmental Consequences

No-Action Alternative

Use of this alternative would not change the existing traffic circulation, parking supply, or surface transportation patterns currently existing at the airport. Any airport traffic safety benefits from the construction of the proposed hangars, roadway improvements, and taxiway extension would not be realized.

Proposed-Action Alternative

The proposed action includes a new Hangars H and I, associated office space, parking, and taxiway access. As stated, this alternative will increase the amount of parking provided at OXC. The proposed action will provide a total of 291 additional parking stalls at OXC.

The Proposed Action would create additional vehicle parking at the airport, while maintaining the existing surface traffic circulation. However, this alternative is not expected to generate a significant amount of new vehicle traffic at the airport. Therefore, the proposed action alternative would have a positive impact on parking and safety within OXC.

During the construction period for the proposed-action alternative, there would be some minor impacts from construction vehicles using local roads and traveling through airport parking areas. Section 5.21, Construction Impacts, further discusses potential construction-period traffic and parking issues. A State

Traffic Commission (STC) Certificate, #1796, was issued for the proposed action on 9/16/08 (see Appendix C). The following conditions are set forth in the STC Certificate:

- The Hangar H and I site driveway onto Prokup Road will be constructed in substantial conformance with the referenced plans,
- Intersection sight distances will be provided and maintained from Hangar H and I site driveway onto Prokup Road as shown on referenced plan,
- A "Stop" sign and stop bar will be installed on the Hangar H and I site driveway at Prokup Road in accordance with the "Manual on Uniform Traffic Control Devices," latest edition,
- The intersection of Prokup Road and Juliano Drive will be reconstructed to provide normalized geometry with appropriate signs and pavement markings in accordance with the "Manual on Uniform Traffic Control Devices," latest edition,
- The site driveway onto Airport Access Road (SSR 486) reflect the geometry shown on the referenced plans,
- All site driveways onto Tarby Road will reflect the geometry shown on the referenced plans,
- 280 feet of intersection sight distance to north and south will be provided from all site driveways onto Tarby Road, except the northern most drive on Tarby Road at which 280 feet of intersection sight distance will be required to the south only,
- The site driveway (Juliano Drive) onto Christian Street will reflect the geometry shown on the referenced plans,
- 500 feet of intersection sight distance to the south will be provided and maintained from the site driveway (Juliano Drive) along Christian Street as measured from a point 15 feet back from the edge of the roadway,
- Southbound Christian Street and Benson Road will be stop controlled at their intersection with Juliano Drive,
- All work on roadways that are owned and maintained by the Town of Oxford will be performed in conformance with the standards and specifications of the Town,
- Prior to the issuance of a Certificate, a bond will be posted and maintained with the Town of Oxford to cover the cost of work required on Town roads, and
- An encroachment permit will be obtained from the Department of Transportation's District 4 Office prior to performing any work within the State highway right-of-way.

Mitigation

According to the STC Certificate, modification will be made to various intersections in and around the site to improve traffic circulation and safety. No mitigation is required as there are no adverse impacts on traffic, surface transportation patterns, or parking.

5.5. Air Quality

Affected Environment

To ensure the protection of human health and public welfare, the Clean Air Act of 1970 and subsequent Clean Air Act Amendments, established National Ambient Air Quality Standards (NAAQS) for six criteria pollutants. The NAAQS were established for carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), lead (Pb), ozone (O_3), and particulate matter (PM). The Clean Air Act requires that states monitor air quality to determine if regions meet the NAAQS. If a region shows exceedances of any of the NAAQS, that portion of the state is classified as non-attainment for that particular pollutant standard and an air quality plan, called a State Implementation Plan (SIP), is required to bring that area into compliance.

OXC is located in New Haven County. According to the US Environmental Protection Agency's 2008 Annual Report on Air Quality in New England (EPA, July 2009), the current air quality attainment designations for the six criteria pollutants in New Haven County are:

CO: The entire state of Connecticut is currently designated as in attainment for CO. A limited maintenance plan for CO is in effect for the New Haven-Meriden-Waterbury region.

NO2: The entire State of Connecticut is in attainment for NO2. Over the past 24 years the annual concentrations of NO2 concentrations have been constant with a downward trend since 2001.

SO2: The entire State of Connecticut is in attainment for SO2.

Pb: The entire State of Connecticut is in attainment for Pb.

O3: The entire State of Connecticut is designated as non-attainment for O3. New Haven County is classified as "moderate non-attainment" for the 8-hour O3 standard and "non-attainment" for 1-hour O3. A projected attainment date of 2010 has been set.

PM: EPA has established NAAQS for two size ranges of PM, PM with a diameter of 10 microns or less (PM10) and PM with a diameter of 2.5 microns or less (PM2.5). The entire state of Connecticut is currently in attainment of PM10. According to the EPA, New Haven County is in non-attainment for PM2.5.

The criteria pollutants of greatest concern for transportation projects are CO, O3, and PM since they are heavily influenced by motor vehicle activity. Diesel engines in particular are responsible for increased PM releases.

The "non-attainment" status listed above for PM and O3 creates the need for Air Quality Conformity analysis for these pollutants as they relate to New Haven County. This process ensures that any future projects relating to transportation contained in the Long Rang Plans and Transportation Improvement Programs meet the standards of the NAAQS by means of each State's Statewide Implementation Plan. Because the OXC project is already listed in the State of Connecticut's Master Transportation Plan, the construction of Hangar H is considered to meet the conformity process.

Conformity determinations for O3 and PM2.5 are found in documents entitled Connecticut Department of Transportation Ozone Air Quality Conformity Determination, June 2006 and Connecticut Department of Transportation PM2.5 Air Quality Conformity Determination June 2006.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would not change existing conditions, and has no impact on air quality.

Proposed-Action Alternative

The proposed action includes new Hangars H and I, associated office space, parking, and taxiway access. As previously stated, this alternative is not expected to contribute to or create exceedances of the NAAQS. The proposed-action alternative would primarily improve operations at the airport and would not generate significant additional traffic. New mobile and stationary sources of air emissions will be added under the proposed action.

During construction of the proposed action, potential air quality impacts would be temporary in nature and include airborne dust particles from exposed soils and emissions from construction vehicles. Best management practices (BMPs) would be followed during the course of this alternative. Construction-related air quality issues are further discussed in Section 5.21, Construction Impacts.

Mitigation

Since there are no short or long-term adverse air quality impacts expected from this project, no air quality mitigation measures are required or proposed.

5.6. Noise

Affected Environment

Airport noise and land use compatibility are regulated at the federal level to ensure that all public airports are evaluated in the same manner, and compatibility determinations follow the same procedures. For airport noise evaluations, Federal Aviation Regulations (FAR) require the use of an average noise metric to determine impacts and land use compatibility. The required metric is the Day-Night Average Noise Level or DNL.

Day-Night Average Noise Level (DNL) is defined as the total accumulation of aircraft noise spread out uniformly throughout the day (i.e., over a 24-hour period). DNL is an annualized metric representing the noise of a typical day of the year. To compensate for the added annoyance created by nighttime aircraft activity, DNL adds a 10-decibel weighting (a "penalty") to night operations (between 10:00 pm and 7:00 am).

In January of 2009, the CTDOT completed a FAR Part 150 Noise Study for the OXC. This study used the FAA's Integrated Noise Model (INM) Version 7.0 to identify existing and forecast noise levels at OXC to the year 2012. One of the products of the Noise Study was a Noise Exposure Map depicting DNL noise contours for 2007 and 2012.

Federal regulations consider residential land use compatible with airport noise up to a level of DNL 65 dB. Any homes located within the 65 DNL contour are considered impacted by the airport. As shown on the attached maps, there are several dozen homes located in the neighborhood immediately north of the runway, the Triangle Hills neighborhood, located within the 65 DNL contour (in both 2007 and 2012).

The 2007 contour (orange) is larger than the 2012 contour (yellow), because fewer of the older and noisier "Stage 2" jet aircraft will remain in service by 2012. These noisy "Stage 2" aircraft have a pronounced affect on the size of the DNL contours. The percent of "Stage 2" aircraft within the fleet mix will continue to decrease over time. These types of aircraft are no longer produced and as they fall out of service, newer models will replace them.

The evaluation conducted for the development of the proposed action used the same model that was created for the Part 150 Study. The evaluation addressed the additional airport noise that may result from the development of the proposed action. It should be noted that the development of a large hangar was incorporated in the previous airport noise study; however, the size and capacity of the current proposed action exceeds what was anticipated at that time.

This airport noise evaluation was conducted to provide a "worst case" scenario (i.e., a substantial increase in airport takeoffs and landings) of the future activity levels created by completion of Hangars H and I. As the exact activity level of the future based aircraft tenants of Hangars H and I is unknown, a worst case scenario was evaluated for use in this CEPA document.

Noise-sensitive land uses in the vicinity of OXC consist primarily of homes, found within the following residential areas:

- Triangle Hills neighborhood
- Brookside Drive and Steeplechase Drive neighborhood
- Christian Road/Christian Street
- Donovan Road
- Hawley Road
- North Larkey Road

In addition to residential areas, the Larkin State Park Trail, a public linear recreational trail, is located within the study area. The Larkin State Park Trail is a 10.7 mile long trail, stretching from Waterbury to Southbury, located adjacent to the southern OXC property line. According to the OXC Noise Study (May 2008), only a small section, less than 2 miles of the trail, is affected by airport-generated noise. The small section east of Christian Street and west of Riggs Street is most affected by airport noise.

Environmental Consequences

No-Action Alternative

The No-Action Alternative represents no change to the existing noise environment at the proposed site and the OXC, and therefore would have no adverse noise impacts to sensitive receptors.

Proposed Action Alternative

The FAA approved activity forecasts for OXC for the years 2012 and 2023 are shown in Table 1 of Appendix B. The operations are divided into categories of aircraft (e.g., single-engine, multi-engine, jets, etc.) for input into the INM. As noise varies by aircraft type, the fleet mix is typically the most critical data input, ahead of the number of operations and the time of day. As shown, the 2012 forecast activity includes a total of 69,486 annual operations, including 7,613 jet operations. For 2023, the forecast of total and jet operations is anticipated to increase to 86,600 and 8,300 respectively.

These forecasts were prepared before the current economic recession, which has affected OXC and most airports. The 2008 activity level at OXC is down from recent years, and includes about 55,000 total

operations. Nevertheless, for this noise evaluation, it was assumed that activity would rebound and reach forecast levels presented in Table 1 of Appendix B, to avoid underestimating future noise.

It is anticipated that the construction of Hangars H and I will begin in 2010 and will be completed and fully occupied during 2012. The first full year of occupancy is anticipated to be 2013. Therefore, 2013 was the year used in this noise evaluation. Table 1 shows the activity forecast for 2013. The development process, assumptions, and associated INM input data can be found in Appendix B.

According to FAA Order 1050.1E, Policies and Procedures for Considering Environmental Impacts, a significant noise impact occurs when an action, compared to the no action alternative, would cause the following:

- A residence, or other noise sensitive land use (school, hospital, etc.), would be subject to a DNL above 65 dB. For example, a home with a current DNL of 64 dB or lower, increasing to a DNL of 65 dB as a result of the project would be considered an impact.
- A residence currently subject to airport noise of over DNL 65 dB, experiencing a noise increase of at least DNL 1.5 dB. For example, the noise at a home increases from DNL 66.0 dB to DNL 67.5 dB would be considered an impact.

The proposed action would have no adverse noise impact (see Appendix B). Based on the additional activity data added, the total area of the DNL 65 contour did slightly increase between the 2012 baseline activity forecast and the 2013 expanded activity. However, no additional residential properties would be located within the 65 DNL contour created by the additional airport operations associated with Hangars H and I. Figures 9 and 10 show the 2007, 2012, and 2013 contour comparisons.

Noise impacts from construction vehicles would be noticeable during the project construction period. These impacts are addressed in Section 5.21, Construction Impact.

Mitigation

CTDOT is currently moving forward with plans to offer voluntary acquisition, relocation, and noise insulation (in some locations) to all of the homes in the impact area as a result an increase in operations and changes in fleet mix at OXC. The voluntary acquisition may include up to 72 homes located within or adjacent to the DNL 65 dB contour. This area is known as the Triangle Hills neighborhood of Middlebury. Since this project does not cause any additional impacts to sensitive noise receptors as a result of increased operations and a change in fleet mix, the mitigation above is considered sufficient, and no additional mitigation is proposed.

5.7. Socioeconomics, Environmental Justice, and Children's Health and Safety Risks

Socioeconomic conditions are the social and economic characteristics of the study area. Demographic information on population, housing, employment, income, and poverty levels was analyzed. Comparative information on socio-economic conditions was obtained from the U.S. Census 2000, the Connecticut Economic Resource Center, Town of Oxford and Town of Middlebury, and through field observation.



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Affected Environment

Socio-Economic Conditions

Oxford is a rapidly growing town, with a population increase of over 10 percent between 2000 and 2004, a four-fold increase since 1950. Oxford is still a predominantly rural community, especially northern Oxford where OXC is located. Oxford has lower population densities than neighboring towns including Naugatuck, Middlebury, Newtown, and Southbury. The area surrounding OXC is largely rural, with wooded areas, wetlands, and several farms. The airport is also surrounded by several industrial parks in various stages of development and residential areas.

In addition to industrial parks, there are numerous businesses on Christian Street, immediately northwest of OXC. On Christian Street southwest of OXC, there are several working farms and industrial facilities. Many home-based businesses can be found interspersed throughout the study area.

Major Employers, Jobs, and Economic Trends

Table 5 presents an economic profile of Oxford and Middlebury, showing the percent of total business by sector for these two towns. The Services sector leads in both Oxford and Middlebury. The Construction and Mining industry and the Trade industry are two sectors that are also important in both of these towns.

	Percent of Business		
Business Sector	Oxford	Middlebury	
Agriculture	5.8%	2.2%	
Construction/Mining	26.5%	13.1%	
Manugacturing	7.2%	4.9%	
Transportation and Utilities	6.4%	1.7%	
Trade	16.6%	15.8%	
Finance, Insurance and Real Estate	4.8%	11.9%	
Services	27.3%	45.0%	
Government	5.4%	5.4%	

Table 5: Economic Profile, Oxford and Middlebury

Source: CERC Town Profiles of Oxford and Middlebury, 2005.

Table 6 contains demographic data for population, housing, and employment and poverty within the study area and the surrounding region and state. According to this data, the study area, Oxford, and Middlebury have a higher median household income and higher percentage of owner occupied housing units than New Haven County or Connecticut as a whole. The percentage of people living below the poverty level is much lower in the study area, Oxford, and Middlebury, than in New Haven County or Connecticut.

Environmental Justice

The U.S. Department of Transportation has a policy to insure nondiscrimination under Title VI of the Civil Rights Act of 1964. The specifics of Title VI are that "no person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and

Low- Income Populations, issued in 1998, states "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

The following is an assessment of the presence of environmental justice populations in the vicinity of the proposed project site. U.S. Census Bureau (Census) data (2000) were used to determine the presence or concentration of environmental justice (minority and low-income) populations in the project area. For the purposes of defining low-income populations, the data for people living below poverty level are examined. While the Census data, which was collected in late 1999, is somewhat dated, more current demographic data for the project study area was not available from the U.S. Census, the Council of Governments of Central Naugatuck Valley (COGCNV), or other state and local agencies. The relevant minority and poverty data are shown in Table 6.

According to Census data, the study area, Oxford, and Middlebury have a much lower percent minority population and percentage of people living below the poverty level than New Haven County or Connecticut. The percentage of unemployed persons in the study area is also lower. Although not necessarily an indicator of an Environmental Justice population, the percentage of elderly persons living in the study area is comparable to Oxford, Middlebury, New Haven County, and the state as a whole.

Based on this analysis, there do not appear to be environmental justice populations in the study area or in adjacent neighborhoods.

Children's Health and Safety Risks

Acknowledging that children may suffer disproportionately from health and safety risks, Federal agencies are required to make child protection a high priority. The following section considers potential environmental health risks and safety risks to children relative to the project.

Environmental Health Risks

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, defines the risk to children's safety as those attributable to products or substances that a child is likely to touch or ingest and can include substances they breath, eat, drink, use for recreation, or that are contained in the soil used to grow their food.

There are no known hazardous waste sites on OXC property. A Phase 1 investigation performed for the proposed action site in 2007 confirms that the site has no hazardous waste concerns. There are aircraft fueling facilities at three locations at OXC (see Section 5.16 on Hazardous Sites/Materials.) These fueling facilities are located within a fenced in area with controlled access and comply with state and federal environmental regulations. The fueling facilities are not accessible to the general public including children, and currently pose no environmental health risk to children.

Other potential health risks to children come from the use of pesticides on airfield turf and substances used to de-ice, clean, and maintain aircraft. However, these substances are located in restricted areas at OXC, not accessible to the general public including children.

	Study Area*	Oxford	Middlebury	New Haven County	Connecticut
Population	4,429	9,821	6,451	824,008	3,405,565
Males	2,142	4,950	3,127	395,931	1,649,319
Females	2,287	4,871	3,324	428,077	1,756,246
Median Age	40.2	38.4	42.8	37.0	37.4
Elderly (65+ years	524	857	1,067	119,292	470,183
Percent Elderly (65+ Years)	12.0%	8.7%	16.5%	14.5%	13.8%
Minority	184	224	297	170,294	627,771
Percent Minority	4.4%	2.3%	4.6%	20.7%	18.4%
Household Characteristics					
Households	1,591	3,343	2,398	319,040	1,301,670
Housing Units	1,622	3,420	2,494	340,732	1,385,975
Vacant Units	77	77	96	21,692	84,305
Percent Vacant	4.8%	2.3%	3.8%	6.4%	6.1%
Owner Occupied	1,358	3,043	2,135	201,317	869,729
Percent Owner Occupied	83.7%	89.0%	89.0%	63.1%	62.7%
Renter Occupied	187	300	263	117,723	431,941
Percent Renter Occupied	11.5%	9.0%	11.0%	36.9%	31.2%
Average Household Size	2.87	2.99	2.73	2.7	2.67
Income/Poverty					
Below Poverty	58	206	174	75,733	259,514
Median Household Income	\$73,782	\$77,126	\$70,469	\$48,834	\$53,935
Percent Below Poverty	1.31%	2.10%	2.70%	9.50%	7.90%
Employment Status					
Armed Forces	0	0	0	324	8,211
Of Employment Age	3,388	7,447	5,164	643,641	2,652,316
Employed	2,391	5,435	3,326	396,326	1,664,440
Unemployed	33	172	87	24,864	92,668
Percent Unemployed	1.36%	3.07%	2.55%	5.9%	5.27%
Labor Force	2,424	5,607	3,413	421,514	1,765,319
Not in Labor Force	964	1,840	1,751	222,127	886,997

Table 6 Com	parison of Census	s 2000 Population	. Household. and	Employment Data
Table 0 Com	parison or consu		, mousenora, ana	Employment Data

Source: U.S. Census 2000

* Study Area corresponds to the following Census Tract-Block Group: Tract 3442 Block Group 1 and Tract 3461.02 Block Group 2
Safety and Security

There is fencing around the perimeter of OXC, which prevents children and the general public from entering the site. There are also gates with controlled access at key entrances and exits to the airport. Surveillance technology, including a live video feed to CTDOT headquarters in Newington, is used to monitor activities around the airport. For children who are old enough to read, there are numerous "no trespassing" signs on airport property in places where the general public should not go.

The airport has its own emergency response and firefighting facilities. The Aircraft Rescue and Firefighting (ARFF) facility is located on the west side of the airport property, adjacent to the Airport Management office. It houses one T-1,500 gallon truck that fights fires with water, foam, or powder. The facility also houses a back-up 350 gallon truck that propels a chemical fire extinguisher. During the day, the ARFF is manned by three OXC staff, cross-trained in both maintenance and firefighting. At night, one fire-fighter staffs the ARFF. Local volunteer fire-fighters from the Oxford Fire Department have also trained with OXC ARFF staff and can provide support in the event of an emergency at the airport. They also provide routine support if ARFF staff are not present at the airport.

OXC is additionally served by local emergency responders who serve children and adults alike. These are the following:

<u>Ambulance Services</u>: The Oxford Ambulance Association, located at 484 Oxford Road, serves Oxford and is comprised of 35 active members, including Emergency Medical Technicians and Medical Response Technicians. The nearest hospitals are Waterbury Hospital (10 miles away from Waterbury-Oxford Airport), St. Mary's Hospital in Waterbury (about 10 miles away), and Griffin Hospital in Derby (13 miles away).

<u>Fire Protection</u>: There are three volunteer fire companies in Oxford: Oxford Center Fire Station at 486 Oxford Road (3.2 miles away from the airport), Quaker Farms Fire Company at 403 Quaker Farms Road (5.7 miles away), and Riverside Fire Company at 151 Coppermine Road (8.4 miles away). There are approximately 98 volunteers. Typical response times are six minutes or less. The Oxford Fire Department has mutual aid agreements with each of the surrounding towns: Beacon Falls, Naugatuck, Middlebury, Southbury, Monroe, and Seymour. The three fire stations maintain the following equipment:

- Quaker Farms Fire Company:
 - One Class A pumper truck
 - One brush truck
 - One tanker truck
- Oxford Center Fire Station
 - Two Class A pumper trucks
 - One aerial ladder truck
 - One tanker truck
 - One heavy rescue truck
 - One technical rescue trailer with hazmat equipment and confined spaces equipment

- Riverside Fire Company
 - Two Class A pumper trucks
 - One brush truck
 - One heavy rescue truck
 - One rescue boat

<u>Police Protection</u>: The Town of Oxford Police Department is located at 429 Oxford Road (3.6 miles from Waterbury-Oxford Airport). There are eight full-time and one part-time police officers employed by the Town of Oxford, five Resident State Troopers and six constables employed by the Connecticut State Police who provide routine protection and law enforcement services to Oxford including patrolling roads and responding to emergencies. The Oxford Police Department has six patrol vehicles and one sport utility vehicle.

Connecticut State Police Troop A in Southbury, approximately 8 miles to the west of OXC, provides coverage to Oxford 24 hours a day, seven days per week.

Environmental Consequences

Socio-Economic Conditions

Impacts to local socio-economic conditions were assessed in terms of displacing people from their homes or businesses, dividing or disrupting established communities, or creating a notable change in employment.

No-Action Alternative

The No-Action Alternative would not change existing conditions and, as such, would have no direct or indirect impacts on local socio-economic conditions or neighborhoods.

Proposed Action

The proposed project would have a positive benefit to the local and regional economies. An estimated 300 construction jobs will be created during the 18-month construction of the facility. It is estimated that approximately 300 jobs will also be created for the long-term operation and maintenance of the new hangar facilities. These jobs will include aircraft staff (3 pilots, 2 mechanics, and two flight attendants per aircraft), and other ancillary support staff. In addition, the office space created by the new facility would draw new tenants to OXC. The proposed project would take place on airport property and would not involve property acquisitions or relocations of people from their homes or businesses. The project would not result in negative changes in economic activity, public service demands, or shifts in population movement or growth.

Environmental Justice

There do not appear to be any Environmental Justice populations in the study area; therefore, there would be no impacts on such populations from the No-Action or the proposed Action.

Children's Health and Safety

No-Action Alternative

The No-Action Alternative would not alter existing conditions. Therefore, the No-Action Alternative would have no impact on Children's Health and Safety.

Proposed Action

There are hazardous substances at OXC (such as fuel and aircraft de-icing substances). However, the construction of Hangars H and I and the associated facilities (office space, parking, access roadway and extension of taxiway for Hangar G) would not introduce any new substances than those already used at other hangar facilities on OXC. The project would fully comply with federal and state regulatory requirements for safe design, construction, storage, use, security, staff training, inspection and certification, and waste management. The project would not introduce hazardous substances that may lead to cancer, lead-based developmental disorders, or other health risks. The project would not result in degradation of air quality, or increase the chances that children in the study area would develop asthma or suffer from other air pollution related illnesses. The project would not result in increased opportunities for unintentional injuries, as there is currently a fence around the OXC airfield with gated entrances and controlled access. This perimeter fencing and access control would extend to the perimeter of Hangars H and I and the associated facilities.

The construction of the proposed action would, however, result in an increase of impervious surface at OXC. This new paved area would serve as an accumulation area for contaminants such as fuel and oil, salts, brake and tire dust, and other potentially toxic materials associated with aircraft and vehicle operations. Stormwater from these impervious areas would increase toxicants on the site.

Without mitigation or BMPs, downstream water quality impacts could occur. While these water quality impacts are not likely to have a disproportionate impact on children, mitigation for potential impacts on water quality are included in this project (see Section 5.8 on Water Quality).

Mitigation

Socio-Economic Conditions

The project would not result in any direct or indirect impacts to neighborhoods, housing, or socioeconomic conditions. Therefore, no mitigation is required or proposed.

Environmental Justice

There are no Environmental Justice populations in the study area; therefore, no impacts would occur. No mitigation is required or proposed.

Children's Health and Safety

The project would fully comply with federal and state regulatory requirements for safe design, construction, use, security, staff training, inspection and certification, and waste management.

If best management practices for stormwater management are employed, no adverse impacts are anticipated relative to children's health and safety. To mitigate for the creation of new impervious surface

and potential water quality degradation, mitigation measures would be implemented, as described in Section 5.8 on Water Quality.

5.8. Water Quality

Affected Environment

Drainage Basins

The airport is located at the juncture of four subregional drainage basins, which are all part of the Housatonic River major drainage basin. The northern and western subregional basins are associated with the Eightmile Brook and the southern and eastern subregional basins are associated with the Little River. The drainage divide is located just north of the midpoint of Runway 18/36. The proposed project site is located entirely within the southern subregional drainage basin of the Little River.

Surface Water

Surface water features within the Little River watershed consist of a network of unnamed streams and wetlands that flow and drain south and west. The Little River originates from a pond and headwater wetlands located just south of Prokop Road and east of Hangar G and flows in a southerly direction along the eastern boundary of the airport property. The river then curves to the southwest, following the path of the Larkin State Park Trail along the southern perimeter of the airport. On the western side of the airfield, the Little River is fed by an unnamed stream that parallels Taxiway A on the west and flows to the south. Further to the west, beyond the airport property boundary, the Little River flows in a southerly direction to the Naugatuck River. The Naugatuck River then flows into the Housatonic River, which discharges into Long Island Sound at Stratford, Connecticut.

According to the CTDEP Surface Water Quality Standards (December 17, 2002) and classifications map, the airport property does not contain any classified surface water resources. The closest surface water resources classified by the CTDEP are located close to a mile from the airport and are B/A waters.

Groundwater

According to the CTDEP Groundwater Quality Standards (April 12, 1996), groundwater quality in the area of the project site is classified as "GA." Designated uses of Class GA groundwater resources include: existing private and potential public or private supplies of water suitable for drinking without treatment and baseflow for hydraulically connected surface water bodies. There is one small area on OXC property that is classified by the CTDEP as Class GB/GA — groundwater with an existing classification of GB and a goal of GA. This area lies east of Christian Street, adjacent to existing airport buildings. Groundwater classified as GB may not be suitable for direct human consumption without treatment, due to incompatible land uses, spills, or waste discharges. The designated uses of Class GB groundwater resources include industrial process and cooling waters and baseflow for hydraulically connected surface water bodies.

According to the CTDEP Aquifer Protection Areas (APAs) mapping (June 19, 2009), there are no state identified APAs within the project study area. Most of the development on and surrounding the airport remains dependent upon private wells for drinking water supply. There are no sole source aquifers within the project area or within OXC.

Environmental Consequences

Surface Water and Stormwater

When it rains a portion of that rainfall is absorbed by plants or infiltrates into the ground. That portion of rainfall that remains is called runoff and is what we see flowing across streets and lawns during storms. That runoff is often carried by pipes and/or drainage conveyances to streams and other waterbodies. Any pollutants that have accumulated on the ground between storms can be washed off and deposited in waterbodies by this runoff.

Non-point source pollution is the term used to describe pollutants that may be present in storm water runoff because it can come from many sources and is discharged to waterbodies through various means. The following are typical pollutants that can be found in storm water runoff:

- Debris: litter and other floatable materials such as plastic and cans can be washed down storm sewers out into waterbodies.
- Sediment: sand and fine sediment, along with metals and oils that cling to the fine particles. Road sanding during the winter, and erosion are the typical sources of sediment.
- Total Suspended Solids (TSS): is a measure of very fine sediment or other particles found in stormwater that can impact water quality.
- Salt: road salt for winter snow and ice removal.
- Oil & Grease: oils and gasoline residue can be washed off streets and parking areas during small frequent storms.
- Trace Metals (Cd, Cu, Pb, Zn): fine particles of metal such as cadmium, copper, lead, and zinc can be deposited on impervious surfaces from air pollution, or from vehicles.
- Ethylene glycol based fluids are the primary aircraft anti-icing/deicing fluids used at OXC; they are associated with designated de-icing areas on OXC.
- Phosphorous: a nutrient that stimulates algae blooms in fresh waterbodies, such as ponds and lakes, but is not generally a significant problem in tidal waters. Phosphorous can come from either residential, commercial, or farming activities.
- Nitrogen: a nutrient that stimulates algae blooms in salt waterbodies. A significant source of nitrogen is excess fertilizing of lawns, commercial areas, farms, and municipal sewage treatment plants.
- Bacteria: coliform bacteria is used as an indicator to evaluate when pathogens or viruses may present a public health hazard. These may be present in street runoff following large storms.
- Oxygen Demand (BOD & COD): oxygen is depleted from the water when organic matter is decomposed by microorganisms. This organic matter can be from a variety of sources including landscaping clippings, pet wastes, excessive nutrients, etc.
- Pesticides and Herbicides: when used around residential, commercial or agricultural areas, can be washed into aquatic ecosystems following storms.

No-Action Alternative

The No-Action Alternative would result in no additional direct or indirect impacts on surface or groundwater resources.

Proposed Action

The Proposed Action Alternative proposes to replace existing vegetation and other pervious features with increased impervious surfaces. In doing so, potential degradation to surface waters will be introduced. The Proposed Action Alternative will create approximately 572,800 sf (13.15 ac) of new impervious surface. The different categories of impervious surface and their respective area are as follows:

- Tarmac Area=233,116 sf (5.35 ac)
- Roof Area=206,068 sf (4.73 ac)
- Remaining areas=133,509 sf (3.07 ac)

The new tarmac, roofs, parking areas, and other impervious surfaces would serve as accumulation areas for contaminants such as fuel and oil, deicing fluids/chemicals and salts, brake and tire dust, and other potentially toxic materials associated with aircraft and maintenance vehicle operations. During precipitation events, runoff flowing over these impervious surfaces can create faster moving, more erosive runoff velocities as compared to natural or vegetated pervious surfaces.

Adverse impacts of increased impervious surface are primarily associated with the post construction condition. However, the highest risk of water quality degradation often occurs during construction, when soils are exposed during earth moving operations including excavation, filling, and grading. Clearing of vegetation, soil excavation, filling and grading, if not properly managed, can trigger erosion and sedimentation of receiving waters. To avoid potential water quality degradation, both during construction and post construction, BMPs would be provided to prevent and minimize sedimentation, siltation, and/or pollution of watercourses and off-site wetlands. BMPs are described in more detail below. With the implementation of the proposed BMPs, adverse impacts on water quality from the proposed action would be minimized to treatment levels consistent with CTDEP 2002 Connecticut *Guidelines for Soil Erosion and Sediment Control* and the 2004 Connecticut *Stormwater Quality Manual*.

Groundwater

Although there are no sole source aquifers and no aquifer protection areas or wells in close proximity to the proposed project site, impacts to groundwater could still occur when contaminants, either on the surface or within the soil, infiltrate the groundwater table. Given the fact that a substantial amount of fill is needed in order to bring the grade of the proposed action up to the existing grade of other developed portions of the OXC, such an impact is very unlikely for this project. The deep, compacted fill layer would create a greater buffer for treatment of surface water as it infiltrates and percolates down to the water table. Therefore, impacts to groundwater quality are not anticipated from any of the project alternatives.

Stormwater management complies with the 2004 Connecticut Stormwater Quality Manual Chapter 7 Section 7.5, where recharge of groundwater is based on the hydrologic soil group and the impervious coverage. This proposed action exceeds the minimum recharge volume and uses only roof collected runoff to meet this requirement. Roof collected runoff does not contain the non-point source pollution generators associated with paved surfaces.

Mitigation

To account for potential water quality degradation, both during construction and post construction, best management practices (BMPs) and proper stormwater management will be provided to prevent and minimize sedimentation, siltation, and/or pollution of watercourses and off-site wetlands. Before and during construction, and until vegetation is fully established and slopes are stabilized, sediment and erosion controls will be installed to avoid and minimize impacts to the inland wetlands, surface waters, and potentially, groundwater. The sediment and erosion controls are designed to meet the requirements of the Town of Oxford Zoning Regulations, and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (Guidelines). These measures include anti-tracking pads at the construction entrances, sweeping off-site roads, hay bale filters, silt fence, erosion blankets, geotextile fabrics, tree protection, permanent vegetative buffers, and internal controls. Several temporary sediment basins and temporary diversion ditches are proposed around the site to act as the primary sediment controls during construction. Traps and other controls will be fitted with outlet controls beyond the requirements of the Guidelines. The permanent stormwater management system has had additional structures added to provide connection and to control runoff during construction. There are multiple phases of sedimentation and erosion control implemented throughout the construction process. These phases are developed in response to the metamorphosis of the site during construction. It is recognized that flexibility and response to the current conditions during construction is paramount to providing adequate protection. Calling for and implementing multiple phases of control within the plan notations will maintain full control of runoff throughout construction process. All construction runoff will be controlled and treated during construction process to minimize sediment transport.

The permanent stormwater management system that has been incorporated into the proposed project has several components that are shown on the Figure 11. They perform various functions in treating storm water runoff and include:

- **Buffer Strips** are existing woodland or lawn areas around the edge of the wetlands that will remain or be enhanced with native plantings to form a vegetated filter strip between the developed portions of the site and the wetland areas. The mowed lawns around the perimeter of the project will be overseeded with meadow grasses and wildflowers, and allowed to grow as a dense meadow for increased filtering ability, and wildlife habitat. Buffer strips trap sediment and remove nutrients. Native shrub plantings will be added in wetland enhancement areas for aesthetics and wildlife food supplies and habitat. A buffer area of existing trees is also being preserved on the wooded knoll as a filter strip. The existing wooded buffer will remain between the parking area and the wetland to provide a physical barrier to the wetland.
- **Catch Basins/Manholes** are inlets and connection points to the storm sewer system that collect runoff and allow it to drain through the storm pipes. The catch basins (CBs) are equipped with 4-foot deep sumps and hoods over the outlets which trap road sand, floatable debris, and small amounts of other pollution that cling to the sediment particles. Per the Town of Oxford requirements all Manholes on site will be fitted with passive skimmers to aid in the removal of floatable oils and greases. CBs have limited capacity to remove fine sediment due to the small storage capacity. CBs are distributed around the road system and parking lot areas. Refer to the Grading and Drainage Plan for catch basin locations.
- **Detention/Retention Pipes** are large, long beds of solid and perforated pipe set in crushed stone which provide cooling of hot runoff from impervious surfaces (thermal pollution), filters sediment, reduce peak rates of runoff, infiltrate surface discharge into the ground to recharge the water table,



and protect against downstream erosion (detention). The system is shown on the Grading and Drainage Plan and details are shown on the Detail Sheets. The outlets from this oversize pipe detention system discharge into the forebay of a detention basin and then through an extended wet pond detention basin, then to a vegetated swale and eventually overland flow to the wetland. The use of underground detention and infiltration will mitigate the temperature increase of the runoff due to the development.

- **Spill Containment Manhole** the tarmac/apron stormwater collection system incorporates a specially designed Spill Containment Manhole. This manhole is a hydraulic trap designed to contain the spill of the largest fuel delivery vehicle anticipated for this site. Using the specific gravity of water versus jet fuel, there is enough capacity to completely capture over 7,000 gallons of fuel, the size of the largest fuel truck on OXC. No significant discharge of fuel to the detention basin would occur. During normal operations this manhole will function as an oil/grease separator.
- Stormwater Detention Basins are fairly shallow above-ground depressions or impoundments planted with native vegetation that trap sediment and filter runoff, reduce peak rates of runoff, reduce velocities to protect downstream wetlands from increased erosion, provide nutrient uptake via native vegetation, and provide wildlife habitat. Both of the basins are wet pond basins with forebays. Permanent access has been provided for maintenance of the basins. Wet pond basins are designed to provide new, wetland like areas for the retention of stormwater. The bottom of the basin is planted with a native wetland emirgent plants. The basin interior is shouldered to provide different planting environments necessary for a diverse flora. The areas above the water surface are planted with upland plants and a wet meadow seed mix. The stormwater detention basins have outlets that distribute outflow into the existing wetland systems at low velocities. A soil scientist and biologist will finalize all planting and seed mixes for these basins in the field during construction. The construction of these basins will be monitored during construction.
- **Rain Garden** will look like a landscaped bed with a shallow 6-12 inch depression from edge of pavement to bottom of Garden, and 2 feet of sandy soil below a layer of topsoil and compost. The runoff for most storms will be able to soak back into the ground, and will be distributed across the site in a manner that is similar to existing conditions.

The DEP Office of Environmental Review, in correspondence dated August 19, 2009 requested the inclusion of

- *the use of pervious pavement or grid pavers (which are compatible for parking lot and fire land applications), or impervious pavement without curbs or with notched curbs to direct runoff to properly designed and installed infiltration areas.* The project uses curbless impervious surface at the apron area and has a properly designed infiltration basin. Use of porous pavement in the parking area is not a sound engineering judgment because of the fill and retaining walls. The infiltration of surface water behind a retaining wall results in an unacceptable increase in lateral wall pressures. The site addresses this item to the best of its abilities.
- The use of vegetated swales, tree box filters and or infiltration islands to infiltrate and treat stormwater runoff (from building roofs and parking lots. The site is constrained by wetlands and grading the use of infiltrative islands in the parking area would create a design scenario that would not meet the program requirements. In lieu of surface infiltration the entire roof runoff is directed into an underground storage and detention facility that will provide infiltration of the runoff into the ground water in compliance with the DEP's water quality manual.
- The minimization of access road widths and parking lot areas to the maximum extent possible to reduce the area of impervious surface. The site provides significantly fewer parking spaces than required by local zoning. Parking lot surface area is minimized to the level required for the

planned building operations. Additionally the runoff from parking areas is reduced by the inclusion of covered parking under a portion of the building. Instead of providing the difficult to treat parking lot runoff, clean roof runoff is provided and discharged to the underground infiltration/detention area. The access roadways and onsite drives are designed at the minimum widths that provide proper access for large delivery vehicles and safety. The width of the taxi lanes is prescribed by the aircraft type and the apron size is the minimum necessary to allow for safe circulation of aircraft in front of the hangar.

- If soil conditions permit, the use of drywells to manage runoff from the building roofs. The site stormwater management provides storage and recharge of the roof runoff for the entire roof surface.
- *the use of vegetated roofs (green roofs) to reduce the runoff from buildings.* This suggested option was not selected as the roof will be fitted with solar voltaic panels to provide electricity for the buildings operations. A green roof is incompatible with solar panels.
- proper treatment of special activity areas (e.g. loading docks, covered maintenance and service *areas*). The entire hangar structure is a special activity area. No work or maintenance will be allowed to be performed on the aprons as a matter of policy. All deliveries Hangar-side will be done within the covered hangars and no major maintenance will be performed onsite. Major maintenance will be done at special operations facilities located off of OXC property.
- the installation of rainwater water harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation There is a minimum of maintained landscape areas. The landscape areas were designed with drought resistant plantings such that irrigation will not be necessary.
- *providing for pollution prevention measure to reduce the introduction of pollutants to the environment.* The entire stormwater management system design incorporates best management practices (bmps) throughout the treatment train to reduce the introduction of pollutants. Using the South Carolina assessment method for the removal of TSS from runoff this system will remove over 85% of the TSS.

The permanent stormwater management system provides a reduction of discharge flow rates, through a combination of detention, infiltration and retention, for all storms analyzed. This includes the 2, 10, 25, 50 and 100 year, 24 hour storm events. This will mitigate an increase of downstream flow rates that would exacerbate erosive conditions.

The site specifics of a hangar facility also incorporate structural elements that aid in the reduction of nonpoint source pollution. Grading of the apron and taxiway are necessarily low sloping, less than 1.5 % (less than one and one half-foot drop in a one hundred foot run). This flat surface does not provide sufficient energy to produce runoff with erosive velocities, which would mobilize fine sediments on the pavement.

Taxiways and aprons are required to be kept clean of debris, grit and sand as these can be inducted into jet engines and cause damage. Garbage and debris will not be an issue in these areas. Winter weather management will be accomplished with the spraying of ice melters. No grit or sand will be used. Therefore these cannot be collected within this storm collection system.

There are only minor landscape areas in the rear parking lot. The runway side of the proposed action will only be planted with meadow grasses and will not be fertilized. Pesticides and herbicides will not be used. There should be no discharge of excess nutrients created by this use. Excess nutrients if present would be absorbed within the wet pond detention basins.

5.9. Floodplains

Affected Environment

Floodplains

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRMs) that depict floodways, 100-year floodplains and 500-year floodplains for a multitude of areas throughout the United States. As defined by FEMA, a floodway is "...the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height..." A 100-year floodplain is an area that has a 1% chance of being flooded in any given year. A 500-year floodplain is an area that has a 0.2% chance of being flooded in any given year. The locations of the floodways, 100-year floodplain and 500-year floodplain resources are depicted in Figure 12.

According to the FIRM *for the Town of Oxford, Connecticut, New Haven County* ([FEMA] Community Panel 090150-0001-B Effective December 4, 1979) there are no mapped floodways or 100-year floodplains in the southeastern quadrant of the airport in the vicinity of the project site. The only 100-year floodplain on airport property is associated with an unnamed tributary of the Little River and a wetland complex located to the southwest of Runway 36; this Zone A9 100-year floodplain is located approximately 1,400 feet west of the project.

There is a 500-year floodplain in the southeastern quadrant of the airport on the eastern side of the project site. Associated with the Little River, this 500-year floodplain extends slightly beyond the northern tip of the river and onto airport property. The FIRM map identifies this floodplain as Zone B. Zone B signifies areas between the limits of the 100-year flood and the 500-year flood, or certain areas subject to 100-year flooding with average depths less than one foot, or where the contributing drainage area is less than one square mile.

Stream Channel Encroachment Lines

Stream Channel Encroachment Lines (SCELs) are not located within or in the vicinity of the project site.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would involve no construction and in no direct or indirect impacts on floodways, 100-year floodplain resources, or 500-year floodplain resources.

Proposed Action Alternative

The southern point of the Proposed Action Alternative is less than 100-feet from the 500-year floodplain associated with the Little River. The current design calls for 2:1 terraced side slopes to support the proposed action that would extend to the south towards the limits of the 500-year floodplain. There would be no activity within the 100-yr or 500-yr floodplains and, therefore, no impact to those resources.

Any state agency proposing an activity within or affecting a floodplain or that impacts natural or manmade storm drainage facilities, must submit a flood management general certification (FMGC). These activities may include: a) any structure, obstruction or encroachment proposed for emplacement within



the floodplain area; b) any proposal for site development which increases peak runoff rates; c) any grant or loan which affects land use, land use planning or the disposal of state properties in floodplains; or d) any program regulating flood flows within the floodplain. A FMGC application will be submitted to CTDDOT.

Mitigation

BMPs would be provided for increased stormwater runoff by some of the same measures employed to mitigate potential water quality impacts (refer to Section 5.8 of this EIE). Detention facilities will be incorporated into the design. The post-runoff stormwater rates will not increase over pre-runoff values. Catch basins, manholes, detention/retention pipes, and stormwater detention basins will be used to control stormwater generated from the proposed action.

5.10. Wetlands

Affected Environment

According to the United States Fish and Wildlife Service National Wetland Inventory (NWI) mapping, there are currently no mapped wetlands located within the proposed project limits. Wetlands on the OXC property were field delineated between May 25 and June 7, 2004 by Edward Pawlak, Soil Scientist with Connecticut Ecosystems, LLC. The delineation was undertaken as part of other improvements on the airport property. The wetland boundaries associated with the current proposed undertaking were field verified by Michael S. Klein, Registered Soil Scientist on August 27, 2007. Wetlands were field verified according to the Connecticut Inland Wetlands and Watercourses Act definition of a wetland (CGS Section 22a-38, as amended). As part of these efforts, it was determined that the OXC includes approximately 12.4 ac of wetlands, primarily on the southern, western, and eastern portions of the property. The wetland systems located within the project area are made up of low lying flat areas, a pond and a stormwater detention pond for the Hangar G facility. These wetlands are located to the west, east and south of the proposed Hangars H and I facility. Wetlands on the site tend to drain to the south parallel to the proposed project site and west along, and through, the southern portions of the proposed project site and west along, and through, the southern portions of the proposed project site and west along, and through, the southern portions of the proposed project site and west along, and through, the southern portions of the proposed project site. The wetland system flows out of OXC via a natural channel in a southwesterly direction.

The wetland to the west of the proposed action is a red maple (*Acer rubrum*) forested wetland, located immediately adjacent to the airfield and approximately 600 feet south of the project area. This wetland resides approximately 350 feet to the east of Runway 18/36 and approximately 1300 feet south of Hangar G. The wetland between the existing runway and the Proposed action site occupies a ravine that is approximately 40 feet lower in elevation than the adjacent airfield. The landscape leading down to the intermittent stream within this wetland system consists of heavily wooded deciduous forest. The linear wetland system is approximately 175 feet wide and extends more than 2,000 feet to the south. An airport perimeter road and a perimeter fence represent artificial barriers between this wetland and a large forested wetland corridor along the Little River to the south. A culvert under the perimeter road creates a hydraulic connection between the two wetlands. This wetland system possesses the following wetland functions and values: groundwater recharge/discharge, sediment/toxicant retention, nutrient removal/ retention/transformation, production export, and wildlife habitat. The primary functions and values of this wetland system are sediment/toxicant retention, and wildlife habitat.

The wetland resources to the east and south of the proposed action consist of wetlands associated with the Little River system. These wetlands are composed of a diverse collection of wetland types, including palustrine forested, scrub-shrub, emergent, and open water wetlands. Much of this wetland system is located within the 100-yr and 500-yr floodplains. Red maple dominates the tree layer, with winterberry

(*Ilex verticillata*) and highbush blueberry (*Vaccinium corymbosum*) dominating the shrub layer. Emergent species are composed of a diverse mixture of sedges, rushes, grasses and forbs. This wetland system possesses the following wetland functions and values: groundwater recharge/discharge, floodflow alteration, fish and shellfish habitat, sediment/toxicant retention, nutrient removal/retention/ transformation, production export, sediment shoreline stabilization, wildlife habitat, recreation, education/scientific value, uniqueness/heritage, and visual quality/aesthetics. The primary functions and values of this wetland system are sediment/toxicant retention, flood storage and flood attenuation, and wildlife habitat.

Within this system, a narrow palustrine forested (PFO) wetland finger extends north, into the site, from the Little River wetland complex. It is located within the woodland area to the east of and adjacent to the mowed field area in the southern portion of the site (Figure 12). This wetland possesses the wildlife habitat, production export and groundwater discharge functions. However it is of much lower value than the larger Little River wetland system down gradient and to its south, as described above. Dominant vegetation within this wetland consists of red maple, winterberry, highbush blueberry, and poison ivy (*Toxicodendron radicans*). These vegetation species do provide food and shelter for wildlife, but vegetation is sparse in this wetland and its wildlife value is considered low to moderate.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would require no earthmoving activities that would result in direct or indirect impacts on wetlands. Under this alternative, the wetland systems traversing the southern and eastern portions of the property would not be adversely impacted.

Proposed Action Alternative

In order for the Proposed Action to meet the Federal Aviation Commission's requirements for slope and distances, the proposed site has to be raised up to a maximum elevation of 692.15. The site requires a total of about 175,000 CY of fill to achieve the proposed site elevation. The project will permanently impact a total area of approximately 2,553 sf (0.06 ac) of forested wetlands. The impacts occur at the area immediately south of the proposed Hangar I, where the side parking areas are located (See Figure 4).

Mitigation

The use of a retaining wall along this parking aisle is utilized in order to minimize disturbance to the existing wetland. A wetland mitigation area will compensate for the wetland impact due to the parking area encroachment. During the inland wetland permitting process through the Town of Oxford, wetland impacts were avoided and minimized the extent practicable through design modifications of the parking areas, access roads, and structure configurations. Once all avoidance and minimization techniques were implemented, unavoidable wetland impacts were mitigated. Approximately 3,018 sf (0.07 ac) of wetlands will be enhanced through the removal of invasive species and additional plantings. In addition to the wetland enhancement, there is 8,504 sf (0.2 ac) of wetland creation proposed just north of the existing detention basin. The wetland impact will have no detrimental effect to flood storage or cause any negative impacts to downstream wetlands. A permit was granted for the proposed action by the Town of Oxford on December 18, 2007 (see Appendix C).

5.11. Biotic Communities/Federal and State Listed Endangered and Threatened Species

Affected Environment

Site visits to observe ecological and habitat conditions were conducted in the Spring of 2009 and September 25, 2009. The results of these observations, resource mapping, and aerial photographs were used to evaluate conditions and potential impacts to biotic communities and threatened and endangered species.

The majority of the OXC property is developed. It includes the following components: the main runway, taxiways, aprons, access roadways, an administration building, and numerous hangars, navigational aids/structures and other airport related facilities. The majority of the development associated with the airfield is located in the northern, western, and eastern portions of the property. The southern portion or the property is comparatively less developed and includes a steep topographic gradient from the OXC down to the Little River and its associated wetland system. The construction of Hangars H and I will occur southeast of Hangar G, while an associated access road will extend from Hangar H northward, ultimately connecting to Prokop Road.

Biotic Communities

Clusters of deciduous woodlands dominate the undeveloped southeastern quadrant of the property along with wetlands and field habitat. Upland habitat is composed of woodlands, active hay field, and successional field habitat. Within the boundaries of the proposed action site, there are approximately 10.27 acres of total upland habitat, however, the upland component extends beyond the proposed action site to other areas within OXC as well as off the OXC property. Upland woodland habitat is dominated by oaks (*Quercus alba, Q. rubra*), black cherry (*Prunus serotina*), shagbark hickory (*Carya ovata*), mapleleaf viburnum (*Viburnum acerfolium*), and lowbush blueberry (*Vaccinium angustifolium*). The successtional field area on the site is dominated by multiflora rose (*Rosa multiflora*), pin cherry (*Prunus pennsylvanica*), honeysuckle (*Lonicera* spp.), Oriental bittersweet (*Celastrus orbiculatus*), and blackberry and raspberry species (*Rubus* spp.). At the time of the site visits the field had been mowed, however plant species identified on the fringes of the field included goldenrod (*Solidago* spp.) and aster (*Aster* spp.), plant species indicative of early successional field habitats.

Wetland resources, discussed in more detail in Section 5.8, bound the proposed action site to the east, west and south. These wetlands are primarily forested and dominated red maple, as well as by other natural associations of native plant species, such as green ash (*Fraxinus pennsylvanica*), speckled alders (*Alnus rugosa*), and oak species (*Quercus spp.*). Spicebush (*Lindera benzoin*), multiflora rose (*Rosa multiflora*), jewelweed (*Impatiens capensis*), sweet pepperbush (*Clethra alnifolia*) and skunk cabbage (*Symplocarpus foetidus*), among other species, are present in the shrub and herbaceous layer. Several pockets of open water, including a large pond located at the southern end of the maintained field, comprise the Little River wetland system located just beyond the perimeter fencing.

Wildlife Habitat

A majority of the area on the proposed action site remains undeveloped and is comprised of maintained fields, early successional habitat, deciduous and mixed forests, and wetlands. Dense vegetative cover and extensive wetland systems provide large adjoining habitats and excellent movement corridors for a wide variety of wildlife, expected to include (but not be limited to): beaver, deer, coyote, weasel, mink, rabbits, amphibians (salamanders, frogs, and newts), reptiles (turtles and snakes), turkey, raptors, game birds

(potentially stocked), and woodland songbirds. Reports of deer and other wildlife observed on the airfield have been reported by the airport manager despite the perimeter fencing that surrounds the airport property, and evidence of deer has been observed on the proposed action site (tracks). During site visits, beaver and pheasant were observed in the southern portion of the airport. It can therefore be inferred the barrier fence does not completely restrict wildlife access. The wetland areas associated with the Little River are surrounded by native upland woodlands and possess a high probability of being used as breeding habitats for amphibians and reptiles. Beavers (*Castor canadensis*) are very active in the larger wetland system along the Little River, based on observed dams and freshly gnawed trees.

Additionally, invasive plants were observed on the proposed action site, although not in high concentrations. The ability of invasive plants to replace native plants and also their poor value as food and forage for native wildlife is well documented. It is therefore likely this area has a moderate potential for biodiversity due to the relative low density of invasive species and varied habitat types on the site. Native habitats documented in the area reflect strong and prolific ecosystems, supporting habitats for a wide array of wildlife found in inland portions of the state. The site is highly fragmented, which typically increases biodiversity. However, forest interior species are not expected to be prolific at the site.

The project is located within the headwaters of the Little River. The large wetland complex associated with the Little River down gradient from the proposed action is a diverse mixture of palustrine open water, emergent, scrub-shrub and forested wetlands. This wetland exhibits a high diversity of habitat types and supports diverse assemblages of vegetation and wildlife species. The Little River is rated as a class A surface water body in Connecticut's Water Quality Standards, and is an important fisheries resource. The river is stocked with trout downstream of the airport along Route 67 and is designated as a wild trout management area between Towner Land and Park Road in Oxford.

Threatened and Endangered Species

CTDEP maintains Geographic Information System (GIS) files that contain information related to the Natural Diversity Data Base (NDDB). A preliminary consultation of these files indicated that no statelisted plant and animal species or significant natural communities exist in the vicinity of the OXC. The NDDB contains information on the status of more than 1,000 rare species of plants and animals, including invertebrates, and 45 significant natural communities. The 2009 GIS data review revealed that no known state-listed rare plant or animal species or significant natural communities are present in the study area. The closest NDDB resources are located approximately 0.54 miles to the northeast of the study area, as shown on Figure 12. A request for project review was send to the NDDB on October 9, 2009, and is attached in Appendix D. The site was field investigated several times in 2007, and again in 2009 by qualified wetland and wildlife biologists. No state or federal listed species were observed on the site during any field investigations.

A response letter has been received by the CTDEP NDDB and is provided in Appendix D. The letter states that there are known records for the Eastern box turtle (*Terrapene carolina carolina*) and American Kestrel (*Falco sparverius*) in the "vicinity" of the proposed action, although NDDB mapping shows no records less than 0.5 miles from the site, as noted above.

Environmental Consequences

No-Action Alternative

The lack of construction resulting from the No-action Alternative would result in no direct or indirect impacts on flora, fauna, habitats, or threatened and endangered species.

Proposed Action Alternative

The proposed action would be located partially in existing deciduous forest, partially in open field and partially within a small red maple swamp at its southern end. Construction would require the placement of fill material in order to construct the proposed action at the same elevation as the airfield. Fill would also need to be placed along the northern fringe of the wetlands associated with the Little River. The proposed action would require the removal of a total of approximately 10.27 acres of upland habitat, composed of woodlands and field habitat.

The removal of 10.27 acres of upland habitat would impact wildlife species in the proposed action site. Currently, the site is highly fragmented with existing development and or anthropogenic alterations such as fill piles, active hayfield, and gravel roads. Edge habitat, therefore is prevalent on the site and will continue to be a habitat component after construction of the proposed action. Although woodland habitat exists on the site, it is not anticipated that forest interior species breed on the proposed action site with success, due to the existing high level of fragmentation.

The proposed project would have minor adverse effects on mammalian species within the project area. Specifically, the loss of habitat within the areas of development would cause the relocation of individuals of a number of species. Most species, however, are adaptable, and could either co-exist with proposed actions or relocate to an adjacent area. The loss of habitat under the proposed action would not impact regional or local populations of any mammalian species, however, some individuals would be lost or forced to relocate. Additionally, species such as Virginia opossum, raccoon, Norway rat, house mouse, and stripped skunk, if they occur at the site, would be relatively unaffected by the proposed project. Water dependent species such as beaver and muskrat would also remain unaffected since the proposed action would not alter large areas of their habitat.

Avian species that require specific habitat types or occupy narrow niches (specialists) are more susceptible to environmental disturbance than species that are more adaptable to changes in the environment (generalists). The loss of woodland as a result of land clearing can result in secondary impacts to forest species through loss of habitat and introduction of parasitic or predatory species to the forest. No specialist species would be impacted by the proposed activity since their habitats, mostly wetland areas, would not be affected. Some generalist species, such as the Black-capped Chickadee, Blue-gray Gnatcatcher (*Polioptila caerulea*), Tufted Titmouse (*Parus bicolor*) and Black and White Warbler (*Mniotilta varia*), would lose some feeding and nesting habitat as a result of the proposed action. Although these species may lose some habitat, the habitat loss would be small in comparison to the remaining wooded areas on and off-site of OXC, thus there would be no negative impact to their populations. The woodlands associated with the proposed action site and OXC property are not considered to be forest interior habitat due to their small size and irregular shape in the landscape (Foreman, 1995). Therefore, no interior habitat will be lost, and there would be no adverse impact to forest interior species as a result of the proposed action. The proposed action is not located near any known sensitive avian receptors such as breeding sites, roosting sites, and other high value habitat.

Reptilian and amphibian habitat would be lost as a result of the proposed action through filling of upland areas and a small wetland area. Although wetlands would be impacted, no local or regional populations of reptiles and amphibians would be negatively impacted. Some individuals may be lost or forced to permanently relocate, however. The proposed action is located near wetlands that are used by amphibians for breeding, however, much of the upland habitat surrounding this wetland area has already been deforested due to farming activities and other historic development. Therefore, loss of this area would not be an adverse impact to local or regional populations.

Approximately 0.06 ac of forested wetland habitat would be lost, and therefore the wildlife habitat function now associated with this wetland area would also be lost. Degradation and/or total loss of habitat from the proposed action is shown on Figure 4, within the project site limits. Impacts to wildlife will occur as a result of the proposed action by the displacement of existing wildlife and the loss of wildlife habitat within the project site limits. Although wildlife habitat will be lost, no listed species will be affected by the loss of habitat, and non-listed wildlife species will likely be displaced into adjacent habitats. Loss of some wildlife, such as limited numbers of small mammals, will likely occur as a result of site work, however, the loss of these non-listed species is not anticipated to have a negative impact on the stability of local and/or regional populations.

Due to the high level of stormwater management and treatment incorporated into the design of the proposed action, no negative impacts are expected to down gradient habitats, including fisheries in the Little River.

Since the proposed action is not located within any areas of known federal or state threatened, endangered, or special concern species of areas of critical habitat, it would have no impacts on listed species.

Mitigation

To minimize potential impacts to reptiles, amphibians, and other aquatic and semi-aquatic wildlife species, a comprehensive storm water management/treatment system has been developed for the Proposed Action. By pre-treating storm water before it is discharged to receiving waters, the water quality of the receiving waters would be maintained, thereby reducing or eliminating impacts to species due to untreated storm water inputs. The 2002 Connecticut *Guidelines for Soil Erosion and Sediment* Control and 2004 Connecticut *Stormwater Quality Manual* will be adhered to for the stormwater management of the proposed action (see Section 5.8). No mitigation is proposed for the loss of 10.27 acres of fragmented upland habitat.

The wetland mitigation prepared for this project will mitigate adverse impacts to wetland habitats resulting from the proposed alternative. The wetland enhancements proposed in this report will also provide added and improved habitat for all wildlife users. The plantings proposed in the wetland mitigation area will provide food and cover opportunities for wildlife, as well as other ecological functions. Approximately 3,018 sf (0.07 ac) of wetlands, the former North Larkey Road gravel road located in the center of the site, will be restored through the removal of invasive species and additional plantings. In addition to the wetland enhancement, there is 8,504 sf (0.2 ac) of wetland creation proposed just north of the existing detention basin. Refer to Section 5.10 for additional detail on the proposed wetland mitigation.

5.12. Farmlands

Affected Environment

Farmlands

The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) has established guidelines under the Farmland Protection Policy Act (FPPA) for federal activities that involve undertaking, financing, or approving a project that would convert farmland soils to non-farm uses. These Federal guidelines recognize that soil conditions affect the quality of farmland, and soils with

high productivity potential receive a higher value. The labels "prime" and "statewide important" farmland soils are given by the NRCS to help preserve these highly productive soils. Before these soil types are converted to non-farming uses by federal programs, the NRCS requires that soils in these categories be studied thoroughly and given proper consideration.

According to the NRCS, prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Therefore, this land has limited uses. The land could be cropland, pastureland, rangeland, forestland, or other land, but not urban built-up land or water. Prime farmlands can economically produce sustained high yield crops when treated or managed properly, using modern farming methods due to adequate soil quality, growing season, and moisture supply.

NRCS mapping shows soils within the study area primarily consist of the Charlton-Chatfield complex, with three to 15 percent slopes and 15 to 45 percent slopes, very rocky. According to the NRCS, the Charlton-Chatfield complex is not considered to be prime farmland. However, an approximately four-acre portion near the southern end of the project site consists of Canton and Charlton soils, with three to eight percent slopes. The land is presently a mowed/maintained field that has not been subjected to agricultural activities since the OXC opened in 1969, despite being classified as prime farmland. It is unknown whether the land was farmed prior to 1969.

There is no other prime or statewide important farmland soil on or adjacent to the project site.

Topography and Surficial Geology

The peak elevation of the project site is approximately 720 feet above mean sea level (AMSL) and is located in the northern portion of the study area. The project proceeds to slope downward to an elevation of 650 feet AMSL near the Larkin State Park Trail and Little River corridors.

According to the Southbury, Connecticut Surficial Geology Quadrangle Map (CTDEP Bedrock Geologic Quadrangle Maps, 1985), the project site is underlain by a geologic formation identified as the Basal Member of the Taine Mountain Formation around the Waterbury Dome; a formation comprised of well-layered, gray granofels (layered metamorphic rock consisting primarily of quartz and feldspars). Unique geologic formations are not known to exist in the project study area.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would not directly or indirectly impact soils and/or surficial geologic formations since construction activities would not occur.

Proposed Action Alternative

This project will have a direct impact on approximately 1.5 acres of prime farmland soils through the placement of fill material associated with the construction of the terrace to support the proposed action (Figure 13). As such, a Farmland Conversion Impact Rating Form (Form AD-1006) may be required following necessary coordination with the NRCS. Form AD-1006 would likely indicate no adverse impacts. However, since this location is entirely within state-owned property dedicated to transportation uses, contains no active farming operations and would not be used for agricultural purposes under any



foreseeable scenario, there would not be any adverse impacts.

The substantial topographic relief in the vicinity of the project means this alternative would consist primarily of filling as opposed to excavation and cutting whereby limiting impacts to existing surficial geologic formation.

Mitigation

Since it is not reasonably foreseeable that this land will be used for farming, due to the restricted nature of the site on OXC, there is no adverse impact to farmland soils and no mitigation is proposed.

5.13. Historical, Architectural, Archeological, and Cultural Resources

Affected Environment

The Connecticut Commission on Culture and Tourism, as the State's Historic Preservation Office (SHPO), is a mandated review agency for state-sponsored undertakings under the authority and regulations of the Connecticut Environmental Policy Act. Section 22a-1a-3 (a) (4) of the implementing regulations specifies that consideration of environmental significance shall include an evaluation concerning the "disruption or alteration" of a historic, architectural, or archaeological resource or its setting. The SHPO staff will work with the Connecticut Office of Policy and Management and the CTDOT in order to integrate cultural resource consideration as a component of state agency project planning efforts and to assure that all mitigating measures will be addressed to the satisfaction of all parties concerned prior to ground related disturbances or construction activities.

A formal information and review request letter has been submitted to the SHPO for review and comment (Appendix D). A response letter, dated October 13, 2009, was received from SHPO. The letter states that the proposed action is located in an area of that possesses moderate to high sensitivity for prehistoric and historic archaeological resources, and recommends that a professional reconnaissance survey be undertaken to identify and evaluate archaeological resources which may exist within the project limits prior to ground disturbance or initiation of construction activities.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would result in no ground disturbance and no direct, indirect visual or subsurface adverse effects to the project site.

Proposed Action Alternative

SHPO coordination (Appendix D) has recommended that a professional reconnaissance survey be undertaken to identify and evaluate archaeological resources that may exist within the project limits prior to ground disturbance or initiation of construction activities. This investigation has been initiated, and once completed will provide a baseline upon which an impact analysis can be made.

A Phase 1a archaeological investigation has been completed, with no further action recommended based upon several conclusions including the absence of diagnostic prehistoric or historic cultural material.

Mitigation

No mitigation is proposed at this time since the professional reconnaissance survey is currently underway, and no conclusions have been made regarding potential impacts to cultural resources on the site since the inventory has not yet been completed. Upon completion of the professional reconnaissance survey, Coordination will continue with the SHPO to determine if the proposed action would have any adverse impact to cultural resources. If a "no adverse impact" determination is made by SHPO, no additional coordination will be required. If an "adverse impact" determination were made by SHPO, additional coordination would be required to establish appropriate mitigation measures.

5.14. Section 303c and Section 6(f) Lands

Affected Environment

Section 303c of the Department of Transportation Act of 1966 (49 USC 303) protects historic resources eligible for listing or listed on the NRHP, as well as significant publicly owned parks, recreation areas, and wildlife/waterfowl preserves. Per the Act, Section 303c properties may only be impacted if there is no feasible and prudent alternative to their use and if the project includes all possible planning to minimize harm resulting from such use. A review of the Section 303c resources indicates there is only one resource located within the vicinity of the project site — the Larkin State Park Trail. This resource is situated approximately 300 feet south of the project site and is considered to be a Section 303c resource due to its significance as a public multi-use recreational trail. This resource is located beyond the southern OXC property boundary and consists of an 11-mile long connection between Southbury, Oxford, Middlebury, and Naugatuck. Recreational opportunities include horseback riding, cross county skiing, running/walking and cycling.

Section 6(f) of the Land and Water Conservation Act Fund (1965) provides funds for acquisition, maintenance, and enhancement of public recreational open space by municipalities. There are no public recreational properties or facilities funded and protected under Section 6(f) within or adjacent to the project study area.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would result in no ground disturbance and no direct or indirect impacts on the project site.

Proposed-Action Alternative

The proposed-action alternative would take place within the grounds of OXC, and therefore would have no effect on Section 303c and Section 6(f) lands.

Mitigation

Since the proposed project would have no effect on Section 303c or 6(f) lands, no mitigation is required.

5.15. Solid Waste

Affected Environment

Proper disposal of trash and food waste produced at OXC enhances the facility's aesthetic appearance, discourages wildlife conflicts, and prevents pollution of the surrounding land and water bodies. Approximately six covered dumpsters and compactors are situated throughout the property and are utilized by CTDOT and the OXC tenants. These dumpsters and compactors are emptied on a regular basis by an independent waste disposal hauler with all waste being disposed of off-site. The most common types of refuse produced at OXC include packaging materials, waste paper products, and cardboard. In addition, a restaurant is now available to the staff and users of OXC, therefore grease and food waste also require proper disposal. An independent hauler is responsible for the removal of this type of perishable refuse and the proper off-site disposal. The proposed project will have 5 solid waste dumpsters in support of proposed action operations.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would result in no change to existing conditions. The No-Action Alternative, therefore, would not introduce any impacts from solid waste.

Proposed-Action Alternative

The type of waste generated by OXC would not change with the construction of the proposed action, however, the volume of waste would increase. The proposed facility would utilize 5 additional dumpsters to manage solid waste generated at the site. There would be no negative impacts as a result of solid waste production at the proposed site.

When generated by the construction processes of this alternative, any/all refuse, such as milling waste and land clearing debris, would be disposed of at an approved disposal facility in compliance with all applicable regulations, ordinances, and policies.

Mitigation

There would be no impacts from solid waste from the project; therefore no mitigation is proposed or required.

5.16. Hazardous Sites/Materials

Affected Environment

Information relating to the history of releases of hazardous materials, the presence of underground storage tanks, and hazardous waste handling practices was obtained through a review of existing GIS database information, a search of files maintained at CTDEP, and conversations with OXC personnel. The GIS database information and CTDEP files revealed that there are no known hazardous waste sites on OXC property.

Fuel is stored at the airport by Keystone Aviation, CTDOT, Double Diamond Aviation, and Executive Flight Services. Keystone Aviation maintains four 20,000-gallon double-walled aboveground storage tanks (ASTs) on the western side of the airport, north of the control tower (Table 7). CTDOT stores fuel

in two 1,000-gallon double-walled ASTs located south of the airport manager's office. Double Diamond Aviation and Executive Flight Services each maintain one double-walled AST, 15,000 and 8,000 gallons, respectively. Figure 2 shows the location of the OXC fuel farm, in the northwest portion of OXC.

De-icing fluids are used on OXC to keep airport facilities safe under inclement weather conditions. Ice, snow, and heavy frost can affect an aircraft's performance, and removing them from an aircraft typically involves using de-icing fluids, which contain propylene glycol and corrosive inhibitors. These chemicals can be harmful to the environment if not handled and disposed of properly. Aircraft de-icing takes place at designated locations at OXC to ensure proper handling and disposal. No de-icing will take place at the proposed action site.

Fuel Facility Operator	Fuel Storage Capacity		
	Avgas	Jet-A	
Keystone Aviation	12,000 gallon tank	Four 20,000 gallon tanks	
Executive Flight	8,000 gallon tank		
Double Diamond		15,000 gallon tank	
ConnDOT	Two 1,000 gallon tank		
Total			

Table 7:	OXCI	Fueling	Facility	Storage	Capacity
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Source: Clough, Harbour, & Associates (CHA), AMPU, September 2007

Maintenance and cleaning of aircraft and ground vehicles requires the use of solvents, paints, and other industrial chemicals. The use of these substances is restricted to locations on OXC equipped to capture and treat them. These substances are currently prevented from contaminating stormwater, and spills and leaks are cleaned up immediately. Herbicides and pesticides are applied to turf in accordance with federal and state regulations.

Although there are currently no known hazardous waste sites on OXC property, liquid wastes or petroleum releases can drain from offsite industrial sites, landfills, or storage tanks onto the airport property in a surface or subsurfce plume.

As previously stated, the land surrounding the airport is primarily rural and not highly developed. There are several industrial parks and manufacturing companies within proximity to the airport that could potentially impact it. According to the CTDEP GIS database, there are two former industrial/manufacturing sites and one active landfill in proximity to the OXC identified as wastewaster discharge points:

• Lewis: Leachate & waste water discharge #6023004. Former ground discharge of solvents. Status: Inactive.

• Mikon: Leachate & waste water discharge #6023003. Former ground discharge of solvents. Status: Inactive.

• Oxford Landfill: Leachate & waste water discharge #6920001. Mixed waste landfill. Status: Active.

A Phase 1 Environmental Assessment Report was prepared for the proposed action site by LFR. The Phase 1 documented no Areas of Potential Concern on the site. A large portion of the site had been

historically used as farmland, and the remaining area was in forest use.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would result in no change to existing conditions and would not introduce any impacts from hazardous materials.

Proposed Action Alternative

The Proposed Action Alternative would not significantly change the type and volume of hazardous waste generated by OXC. De-icing and fueling of aircraft will take place at other existing locations within the airport. Other fueling options may include a fuel truck mobilizing to Hangars H and I to fuel aircraft onsite. As discussed in Section 5.8, the stormwater management system is also equipped to collect and store a fuel spill greater in volume that the largest fuel truck on OXC.

The addition of parking spaces and a taxiway will create additional pavement, which would require deicing in the event of inclement weather; there is no sanding on the taxiway. Due to the increased volume of activities, more plane de-icing would also be required, however, the existing de-icing facilities have the capacity to handle the additional volume of aircraft. Herbicides and pesticides would also be applied on turf surrounding the new parking areas, taxiways, and hangar/office structures as part of the landscape maintenance of the facility. All of these substances would be handled, applied, and disposed of in accordance with federal and state regulations. Clean fill would be used bring the topography to existing grade (see Section 5.21 on Construction Impacts).

Mitigation

As discussed in Section 5.8, the stormwater management system has been designed and sized to hold more than the capacity of a fuel truck in the event there is a release of fuel. As there would be no other direct or indirect impacts from hazardous sites/materials, no other mitigation is required or proposed.

5.17. Light Emissions and Visual Effects

Affected Environment

Light Emissions

Runway 18/36 is equipped with High Intensity Runway Lights (HIRLs). The HIRLs help to improve pilot reference during low visibility conditions and at night. Runway End Identifier Lights (REILs), which consist of two high intensity flashing white lights directed toward the approach zone, are located on the end of Runway 36 and enable pilots to identify the threshold of a usable runway from a distance and in reduced visibility conditions. Taxiways, including Taxiway B, are equipped with Medium Intensity Taxiway Lights (MITLs) (see Table 8).

On individual runway ends, a Visual Glide Slope Indicator (VGSI), which improves safety and helps to standardize approach altitudes, supply lights that guide the pilot to the appropriate approach slope to the runway touchdown point. At OXC, two different VGSI systems are provided. A Precision Approach Path Indicator (PAPI) is installed on the Runway 36 end and a Visual Approach Slope Indicator (VASI) is provided on the Runway 18 end.

Visual Effects

A plateau created by extensive fill is the landform on which the airport sits, while the land immediately surrounding the airport is lower in elevation. The deciduous forests that surround a majority of the OXC largely obscure the view of the airport from adjacent locations. However, about a half-mile west of the OXC, a hillside with a few scattered residences sits at a higher elevation than the airport. The inhabitants of these residences can see the paved runway and taxiways and surrounding turf, the air traffic control tower, and the hangars. Therefore, to these residences, the OXC stands out against the wooded landscape surrounding a majority of the airport. The Triangle Hills neighborhood located north of the OXC have a view of the northern-most portion of the airport.

Runway/Taxiway	Lighting	Length (in feet)	Width (in feet)
	HIRL, Runway 18: VASI		
Runway 18-36	Runway 36: REIL, PAPI	5,800	100
Taxiway A	MITL	6,300	40
Taxiway B	MITL	3,700	50
Taxiway C	MITL	300	40
Taxiway D	MITL	600	25
Taxiway E	MITL	300	50
Taxiway G	MITL	750	40-100

Table 8: Airside Lighting

Source: Clough, Harbour, & Associates (CHA), AMPU, September 2007

Notes: HIRL: High Intensity Runway Lights; VASI: Visual Approach Slope Indicator

PAPI: Precision Approach Path Indicator; MITL: Medium Intensity Taxiway Lights;

REIL: Runway End Identifier Lights.

Views to and from the project site typically include the following features of the OXC: airport hangars and other buildings (such as the air traffic control tower), turf, roadways and broad expanses of pavement associated with runways, taxiways, and parking lots. Planes landing at the OXC can be seen and heard from most vantage points.

A grass embankment can be seen from a short segment of the Larkin State Park Trail, however a few trees seasonally obscure the view of the embankment from the recreational trail.

Environmental Consequences

Light Emissions

No Action Alternative

Existing conditions would not change under the No-Action Alternative, therefore the introduction of impacts from light emissions would not occur.

Proposed Action Alternative

The proposed structures would be built to the LZ3 standard as described in the LEED 2009 Green Building Design and Construction guidance document provided by the United States Green Building Council. According to this guidance, the LZ3 standard is meant for commercial and/or industrial and high-density residential areas. This standard requires exterior lighting be designed so that all site and building-mounted luminaries produce a maximum illuminance value no greater than 0.20 horizontal and vertical foot candles at the site boundary and no greater than 0.10 horizontal foot candles 10 feet beyond the site boundary. It needs to be documented that no more than 5% of the total initial designed fixture lumens are emitted at an angle of 90 degrees or higher from nadir.

Visual Effects

No-Action Alternative

No direct or indirect impacts on visual quality would occur under the No-Action Alternative. The No-Action Alternative would preserve the existing visual and aesthetic appearance of the project study area.

Proposed Action Alternative

The Proposed Action Alternative would come within 200-feet of the Larkin State Park Trail. During the winter season, partial views of the existing building to the north of the proposed site can be seen from the trail. Due to the floor elevation requirements of the structure to match the elevation of the existing airfield, extensive fill must be utilized to raise the site elevation, requiring the construction of a 40-foot high retaining wall on the southern end of the site. This wall and the Hangars H and I structure will be partially visible from the trail. The terrace and expansion of the grass embankment, created to support the proposed action, would create a visual impact on the Larkin State Park Trail.

Construction period impacts from the Proposed Action are discussed in Section 5.21 of this EIE.

Mitigation

There would be no impacts from light emissions; therefore, no mitigation is proposed.

Offsetting the visual impacts from the Proposed Action Alternative on users of the Larkin State Park Trail will occur by planting trees between the proposed action and the trail. A landscaping plan has been developed to provide additional visual screening of the project site from the trail. Through planting trees and implementation of a landscaping plan, visual and aesthetic impacts associated with the facility can generally be successfully mitigated. Visual impacts during the construction period are discussed in Section 5.21 of this EIE.

5.18. Energy Supply and Natural Resources

Affected Environment

This section describes existing energy and natural resource conditions in the project area and potential impacts associated with the project. There is currently no existing energy consumption within the proposed project area, since it is a vacant lot. The existing energy consumption at the airport primarily includes the use of electricity to operate both airside and landside airport facilities, and fuel for aircraft and ground service and maintenance vehicles.

Although there are existing natural resources in the project area, including forested land and water resources, these resources are discussed elsewhere in this EIE (see Chapter 5.1 on Land Use, Chapter 5.8 on Water Quality, Chapter 5.11 on Biotic Communities, and Chapter 5.12 on Farmlands).

Electricity

Electricity, provided by Northeast Utilities Power Company, is used to light both airside and landside facilities at OXC. On the airside, Runway 18-36 is equipped with High Intensity Runway Lights (HIRLs). On the Runway 18 end, there is a Visual Approach Slope Indicator (VASI-L4) to the left of the runway. On the Runway 36 end, there are Runway End Identifier Lights (REILs) and a Precision Approach Path Indicator (PAPI-L4) to the left of the runway. There is a rotating beacon located on the Air Traffic Control Tower (ATCT) on the west side of the airport. The wind direction indicator, located on the west side of the airport, includes a lighted wind cone with a segmented circle. Taxiways (A, B, C, D, E, and G) all have Medium Intensity Taxiway Lights (MITL).

Navigational aids (navaids), radio facilities that provide en-route or approach guidance information, provide visual cues and orientation to the pilot. Runway 36 is equipped with an Instrument Landing System (ILS), a precision-approach landing system. Global Positioning Systems (GPS), non-precision approaches, are available at both runway ends.

On the landside, electricity is used for lighting and communications in the ATCT, office buildings, and landside hangars. Electricity is also used for lighting access roads and parking lots.

There is power available underground and is capped underneath the parking lot behind Hangar G. The proposed system will tie into the existing underground system and will run underground to a pad mounted transformer that will be owned by Northeast Utilities.

Aircraft Fuel

There are three different aircraft fuel operators at OXC. Keystone Aviation operates a traditional fuel service, providing both Jet-A and Avgas (i.e., 100 octane low lead) fuel to the traveling public. Double Diamond and Executive Flight are private operators and store and dispense fuel strictly for the use of their own operations and clients. All three operators build, maintain, and operate their fueling facilities on land leased from CTDOT. Keystone Aviation and Executive Flight operate fuel facilities on the west side of the Airport along Christian Street. Double Diamond has a fuel facility located just south of their hangar. All tanks are self-contained and above-ground.

There are also automobiles, fuel trucks, delivery trucks, maintenance vehicles, and other ground service vehicles on airport property that use fuel.

There is also a natural gas pipeline (Algonquin Company) running east-west on the northern portion of Runway 18-36.

Environmental Consequences

No-Action Alternative

The No-Action Alternative would not change existing conditions in energy use within the project site or OXC property.

Proposed Action Alternative

The proposed structures would be built to the LZ3 standard as described in the LEED 2009 Green Building Design and Construction guidance document provided by the United States Green Building Council. According to this guidance, the LZ3 standard is meant for commercial and/or industrial and high-density residential areas. This standard requires exterior lighting be designed so that all site and building-mounted luminaries produce a maximum illuminance value no greater than 0.20 horizontal and vertical foot candles at the site boundary and no greater than 0.10 horizontal foot candles 10 feet beyond the site boundary. It needs to be documented that no more than 5% of the total initial designed fixture lumens are emitted at an angle of 90 degrees or higher from nadir. The proposed lighting system will not have an adverse impact on regional energy supply. The proposed action will not have a negative effect on fuel supply or electricity in the region.

Mitigation

Because the proposed project is not anticipated to change energy consumption to any great degree, no mitigation is proposed.

During the construction period, and during operation of the proposed action, there would be an increased use of fossil fuel use at the airport, associated with construction vehicles, however, this would not have a negative effect on fuel supply for the region.

5.19. Coastal Barriers and Coastal Management Program

Affected Environment

Per Title 16, Chapter 33 Coastal Zone Management, there are no Coastal Barriers or Coastal Zones within in the project site or within the OXC property. Additionally, OXC is not within the jurisdiction of the Coastal Zone Management Program.

Environmental Consequences

Since there are no Coastal Barriers or Coastal Zone at or immediately adjacent to the project site, the No-Action and Proposed Action Alternatives would not have an impact on Coastal Barriers.

Mitigation

Since there are no Coastal Barriers or a Coastal Zone at or immediately adjacent to the project site, no associated impacts would occur and no mitigation is proposed.

5.20. Wild and Scenic Rivers

Affected Environment

According to the National Wild and Scenic Rivers System and the CTDEP, there are no designated Wild and Scenic Rivers in the study area.

Environmental Consequences

Since there are no Wild and Scenic Rivers in the project site, the No-Action and Proposed Action Alternatives would not affect Wild and Scenic Rivers.

Mitigation

Since there are no Wild and Scenic Rivers in the project site, none of the alternatives would impact these resources. No mitigation is proposed.

5.21. Construction Impacts

Temporary impacts during construction of the project are anticipated in relation to traffic and parking, air quality, water quality/wetlands, noise, economy, solid waste, hazardous materials, energy supply and natural resources. The nature of these impacts and proposed mitigation measures for adverse impacts are described below.

In addition, the FHWA Work Zone Safety and Mobility Rule would be adhered to in accordance with CTDOT's *Policy on Systematic Consideration and Management of Work Zone Impacts*.

Traffic and Parking

It is estimated that 175,000 CY of fill would be needed at the project site. Construction vehicles would transport the fill to the project site. The fill would be brought to the project site over an estimated 150 to 180 days. It is estimated 40 hauling trucks per day would access the construction site during peak haul/delivery conditions. Route 188 along Airport Road to Christian Street and Juliano Drive provides the most feasible route of arrival for the construction traffic. Juliano Drive is narrow and has horizontal curves and is adjacent to some of the airport parking where vehicles have to back up onto Juliano Drive to exit parking spaces. Alerting the construction vehicle drivers and airport users by providing construction signing can significantly reduce safety impacts.

Mitigation: The following measures would help mitigate the impacts from traffic:

- Make users of the airport aware of construction activities. Provide construction vehicle drivers with an orientation of the airport access points, specifically their preferred path for accessing the project site, as well as areas of adjacent parking.
- Constraints would be instituted on the time of day in which hauling by construction vehicles can occur. Time would be limited to daytime hours between 7:30 a.m. and 3 p.m. No haul movements would occur after 3 p.m.
- Provide the contents of this document with the milestone submittals of proposed construction plans to regulators/reviewers. Approval of the construction plan should be contingent upon following the mitigation methods set forth in this environmental document.

Air Quality

During land clearing activities and construction of the proposed action, exposed soils and emissions from idling and mobile construction vehicles have the potential to impact air quality. Diesel-powered construction vehicles in particular have an increased potential to impact air quality. Diesel exhaust emissions typically include carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter (PM2.5). In 2004, the EPA developed new emission standards for new diesel-powered vehicles due to their concerns over diesel exhaust emissions. In an effort to offset pollution from diesel construction equipment and heavy-duty vehicles currently in service that would not be affected by the 2004 standards, the EPA developed the Voluntary Diesel Retrofit Program (EPA, 2003). Retrofit Emission Control

Devices, such as diesel oxidation catalysts, offer an inexpensive solution to reducing diesel emission impacts.

Mitigation: Air quality impacts can be mitigated during the construction period by utilizing the following measures:

- Emission control devices, such as oxidation catalysts or similar retrofit equipment control technology, should be retrofitted to all diesel-powered non-road construction equipment with engine horsepower ratings of 60 and above, that are continually on the project site or are assigned to the contract for a period in excess of 30 consecutive calendar days.
- State and federal regulations concerning exhaust emission controls and safety pertinent to construction work must be complied with by all motor vehicles and/or construction equipment (both on and off highway) involved.
- RCSA, Section 22a-174-18(b)(3)(C) states that idling of delivery and/or dump trucks or other diesel-powered equipment should be limited to three (3) minutes during non-activity.
- Exposure of erodible earth would be minimized through the use of covering, shielding, or stabilizing stockpiled material when necessary. Stabilization would occur through the use of grass, pavement, or other cover as early as possible. Additional stabilizing agents such as calcium chloride or water may also be applied to the work areas and haul roads as necessary.
- Haul trucks would be covered during construction activities.
- The potential transport of soil by construction equipment from unpaved to paved surfaces would be minimized by rinsing construction equipment with water or other equivalent method.

Water Quality/Wetlands

Stormwater management during construction activities would conform to accepted "Best Management Practices" (BMPs) for control of sedimentation, stormwater runoff, and erosion in order to mitigate potential water quality impacts. These practices would be incorporated in the construction specifications prepared for the selected alternative. In addition, a Stormwater Pollution Prevention Plan (SWPPP) for the project would be developed as part of the application to CTDEP for a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities in compliance with the *2002 Connecticut Guidelines for Erosion and Sedimentation Control* (CTDEP, 2002). The SWPPP would include the following mitigation practices: a description of the erosion and sedimentation controls to be used on the site, the management of dewatering wastewaters, measures that would be installed to ensure post-construction stormwater management, the disposal of wastes generated at the construction site, and the practices to be followed to minimize the off-site tracking of sediments by construction vehicles. The 2002 Connecticut *Guidelines for Soil Erosion and Sediment* Control and 2004 Connecticut *Stormwater Quality Manual* will be adhered to for the stormwater management of the proposed action (see Section 5.8).

Mitigation: Preventing pollution to the Little River and associated off-site wetlands is imperative and measures taken would prevent and minimize sedimentation, siltation, and/or pollution of these water bodies. In coordination with the CTDEP, the specific measures included in the SWPPP would be determined during the design phase, and possibly consist of the installation of infiltration swales, vegetated buffer strips, silt fencing and hay bale filters placed around the project perimeter and at

sensitive locations, vegetated open channels, temporary slope drains, and/or a piped stormwater collection and conveyance system. Stormwater runoff should be appropriately treated prior to discharge from the project site, therefore any temporary and permanent stormwater management facilities would be appropriately designed in conformance with the *Connecticut Stormwater Quality Manual* (CTDEP, 2004).

Consequently, by utilizing the BMPs and safeguards discussed above, and in Section 5.8, during construction, potential impacts to water quality would be minimized to levels deemed acceptable by the applicable regulatory agencies.

Noise

In the immediate vicinity of the project site, continuous as well as intermittent (or impulse) noise would be experienced during the construction period, which may be perceived by some to be intrusive, bothersome and uncomfortable. Pneumatic tools, which emit strong percussive sounds, and other construction equipment, would generate noise during construction activities. Additional generators of continuous and intermittent noise include the daily movement of dump trucks, loaders, backhoes, and other heavy equipment to, from, and on the construction site.

Table 9 provides typical noise emission levels in A-weighted decibels (dBA) 50 feet from construction equipment. For comparison, everyday noise levels within suburban environments range from about 50 to 60 dBA (Transit Noise and Vibration Impact Assessment, DOT-T-95-16, April, 1995).

It is commonly understood that noise levels are reduced by 6 dBA for each doubling of distance from a noise source. Thus, a construction vehicle with a noise level of 85 dBA at 50 feet would have a noise level of 79 dBA at 100 feet, 73 dBA at 200 feet, 67 dBA at 400 feet, 61 dBA at 800 feet, and so forth. Artificial barriers and natural barriers, such as buildings and dense forests respectively, located between a source and a receiver decrease the intensity of construction noise. Only one sensitive noise receptors close to the project site has been identified, the Larkin State Park Trail, a recreational trail (approximately 150 feet from the construction site) south of OXC property.

Construction Equipment	Noise Level (dBA) 50 feet from Source
Air compressor	81
Backhoe	80
Dozer	85
Generator	81
Jackhammer	88
Loader	85
Pneumatic Tool	85
Rock Drill	98
Dump Truck	85

Table 9: Noise Emission Levels from Construction Equipment

Source: Transit Noise and Vibration Impact Assessment (DOT-T-95-16, April 1995)

Mitigation: Mitigation measures that would be considered for noise include the use of properly mufflerized construction vehicles. In addition, construction activities operating solely on a daytime schedule would prevent nighttime noise impacts. It is not feasible to erect temporary boundaries around the work site since the majority of work would be done on top of a plateau along a downward slope.

Economy

Both local and regional economies would be stimulated by construction of the project. One effect would be the creation of jobs directly and peripherally affiliated with construction such as on- and off-site construction, trade, transportation, manufacturing, and services in support of construction. The project-related workers personal expenditures generated by the earnings from these jobs would help stimulate the local and regional economy. Expenditures would also encompass materials used in construction. Overall, the effect on the economy would be beneficial during the construction period.

Mitigation: No mitigation is required.

Solid Waste and Hazardous Materials

Solid waste would be generated from construction (e.g., milling waste, land clearing debris) and would be disposed of as municipal solid waste. Hazardous materials generated by construction activities will be managed as such and disposed of by a licensed waste hauler in accordance with applicable regulations. Clean fill would be used for raising the land to the elevation of the existing airfield.

Mitigation: No mitigation is required.

Visual Effects

Users of the Larkin State Park Trail, a recreational trail that abuts airport property to the south, would have a partial view of construction activities at the proposed action site. A large part of an existing wooded area would be cleared for the construction of the proposed action, and land would be raised and terraced to match the elevation of the airfield.

Mitigation: Mitigation of visual impacts would be accomplished by maintaining some of the vegetated buffer, between the construction area and the recreational trail, during the construction period.

Energy Supply and Natural Resources

An increased demand for fossil fuels (primarily diesel fuel) and an increased demand for electricity would occur for the duration of project construction. Possible, temporary construction period utility interference may occur. Earthen fill material will be imported from an off-site project with a surplus of suitable excavated material. Water will be used throughout the duration of the project and will be obtained from both potable sources and on-site detention basins as needed.

Mitigation: Efforts would be made to minimize and avoid impacts to utilities in the area to the greatest practicable extent during all phases of construction. Coordination would take place with all affected utility providers.

5.22. Unavoidable Adverse Impacts

The unavoidable adverse impacts from the construction of the proposed action would include:

- Addition of 13.15 acres (572,693 sf) of impervious surface area
- Loss of 0.06 acres (2,553 sf) of wetlands and associated functions and values and biotic communities
- Temporary construction-related impacts
- Loss of 1.5 acres of prime farmland soils

The use of the site for the proposed improvements has been found to conform with adjacent transportation land uses, consistent with state and local plans of conservation and development, and does not result in any adverse secondary development effects that have not already been considered. The proposed project would include BMPs and mitigation measures that would be fully coordinated with all appropriate agencies to ensure that they serve their intended purpose. The BMPs and mitigation measures would effectively reduce potential adverse impacts while maintaining the safety and quality of life that currently exists at and around OXC. Based on this information, the unavoidable adverse impacts are determined to be insignificant.

5.23. Irreversible and Irretrievable Commitment of Resources

Irreversible and irretrievable commitments of resources caused by the Proposed Action include the following:

- *Energy:* Various types of fuel and electricity would be consumed in project construction.
- *Land:* Land would be developed and the topography of the landscape would be altered by the emplacement of fill. The use of the project site for this purpose would preclude the possibility of other uses at the site into the foreseeable future.
- *Natural Resources:* Site development would require that 0.06 acres of existing wetlands within the lease area be impacted by proposed earth moving activities. In addition, approximately 13.15 acres of vegetated land would be converted to impervious coverage types. Approximately 1.5 acres of prime farmland would also be lost due to filling.
- *Construction materials*: Concrete, cement, steel, asphalt, paint and like material would be utilized to complete the proposed undertaking. Turf and tree plantings would be placed around the Hangars H and I site. There is a need for clean fill to create a level grade to stabilize the location of the proposed facility.
- *Human labor:* The necessity of human labor for the planning and construction of the proposed project represents an irretrievable expenditure of time and production that is thus unavailable for other endeavors.

6. INDIRECT AND CUMULATIVE EFFECTS

As a requirement of CEPA, indirect and cumulative effects (ICE) must be studied and identified prior to the initiation of construction activities. ICE analysis is conducted to determine if the proposed project would induce or accelerate development beyond the immediate project site and if the proposed project, when considered in conjunction with other actions, collectively result in significant environmental impacts.

Indirect effects are those reasonably foreseeable effects that are caused by the action and occur later in time or at a location removed from the action itself (40 CFR 1508.8). Indirect effects may include induced development and changes in land use patterns, population density or growth rate, and related effects to the natural environment, such as air, water, and land resources. Indirect effects were assessed and discussed within each of the resource categories detailed in Chapter 5 of this document.

Cumulative effects are defined as the impacts to the environment that result from the incremental impacts of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR 508.7). Cumulative effects may include direct, indirect, and/or induced impacts and may also occur later in time or at a location removed from the action itself. Cumulative effects may result from actions that are individually minor, but collectively significant. The potential cumulative effects of the proposed action are discussed below. The geographic area and reasonably foreseeable time frame within which cumulative effects might occur are discussed below.

ICE Analysis and Study Boundary

The resources assessed in the ICE analysis and the rationale for inclusion of each is summarized in Table 13. The rationales for inclusion are based on the assessment of potential direct and indirect resource impacts for the Proposed Action presented in Section 5 of this EIE.

This ICE analysis considered planned and/or programmed projects, which in addition to the proposed project, could result in an indirect and/or cumulative effect on the natural or built environment. An important part of the analysis is the establishment of a logical study boundary, within which indirect and/or cumulative effects are assessed. Using the environmental resources that may be affected by direct impacts of the project as a basis, multiple resource boundaries were considered to determine the appropriate boundary of study for each resource (see Table 10). Figure 14 shows the proposed study boundary for the analysis.


Resource	Rationale	Impact Boundary
	Potential for direct and indirect	
Water Quality/Flooplains	effects	Watershed sub-boundary
Wetlands/Biotic	Potential for direct and indirect	
Communities	effects	Watershed sub-boundary
	Potential for direct visual	
Section 303(c) and 6(f)	impacts to users of Larkin State	
Land/Visual Effects	Bridle Trail	Census tracts

Table 10: Resources Included in the Cumulative Effects Analysis

Study Timeframe

The ICE analysis was conducted for three time periods: past, present, and the reasonably foreseeable future. For the proposed action, the following time periods were investigated:

- Circa 1969 (past time frame the year OXC was built and opened).
- Circa 2009 (current time frame current OXC operating conditions and current level of areawide development).
- Circa 2025 (future time frame when build-out of airport development capacity is expected to be achieved as outlined in the AMPU).

Planned and Programmed Development and Development Trends

Circa 1969

In and around the year 1969 the population in the Town of Oxford was approximately 4,480 residents and the number of housing units was approximately 1,412 units (1970) (CERC profile for Oxford, 2009). Single-family homes comprised most new housing units, with most located in low-density residential subdivisions.

In recent years, the population in the Town of Oxford has grown to approximately 12,321 residents (2008). Residential growth has generally mirrored population trends, as the number of housing units has increased to approximately 4,392 units (2007) (CERC profile for Oxford, 2009). The economy of Oxford has also been growing steadily in recent years due to the construction of 27 new commercial or industrial buildings, a 34% increase in total building floor space in the town. Thirty new businesses moved into Oxford between 2004 and 2007. As a result of these trends, the town's tax base increased by 56% between 1998 and 2007.

Oxford has been very successful in stimulating infill development in its primary commercial/industrial zone surrounding OXC. Planned, programmed, and recently constructed development in the ICE study area includes:

Oxford

- Taxiway B Extension, OXC (located directly west of the proposed action)
- Proposed new 512 megawatt natural gas power plant (Towantic Energy) located just northwest of the airport
- Dulce Energy conversion of energy facility, located just northwest of the airport.
- Planned roadway improvements forming a perimeter road around the airport (including East Commerce Drive).
- 90 residential units (in an age-restricted community) approved south of OXC.
- 62 single-family residential units approved south of OXC.
- Technology Park (with a unified development plan), with the potential for 1 million square feet of industrial/office space.
- Multiple existing industrial parks in the ICE study area (including Woodruff Hill Industrial Park, Fox Hollow Industrial Park, Commerce Park Industrial Park, Jacks Brook Industrial Park) have plans to continue development.
- New CL&P substation south of the airport. and
- 932 residential units approved at Oxford Greens Golf Course Community.

Middlebury

- Re-development of the former Uniroyal/Chemtura industrial campus (near the Oxford town line).
- Eleven industrial lots at Pilots Mall near Middlebury-Oxford town line (adjacent to the Oxford Technology Park).
- 326 residential units (single and multifamily) planned along Long Meadow Road and
- 270 residential units (single and multifamily) planned in the Southford area of Middlebury along Route 188 (associated with a golf course).

Southbury

- 20 single-family residential units are planned as part of the Highland Estates/Vista View development on Strongtown Road.
- Two medical office buildings (totaling 50,000 square feet) are planned just north of Interstate 84, Interchange 16.

Circa 2025

According to the AMPU, the build-out of airport development capacity is expected to be achieved by 2023. The trend in population growth in Oxford and the region is expected to continue with an annual population growth rate in Oxford of 2.1% projected to 2013 (CERC profile for Oxford, 2009). The Economic Development Office in Oxford projects that build out of the available commercial properties surrounding the airport will occur as soon as 2010. As of August 2009 two of Oxford's industrial parks were sold out, and the town has approved several lot developments in the Woodruff Hill Industrial Park and the Morse Industrial Park. The Economic Development Commission continues their efforts to fill vacant industrial and commercial parkland, as well as attract new businesses to vacant buildings.

ICE Analysis

The proposed action would result in the construction and subsequent operation of new Hangars H and I, and new office space on OXC. The proposed action would not displace other uses at OXC, nor would it

require acquisition of lands beyond the current OXC property boundaries. Implementation of the Proposed Action would not prevent development in the surrounding areas and the cumulative effects of development at OXC and in the surrounding areas would not have a significant adverse effect on the natural or built environments. The proposed action would not preclude or require the development of a Taxiway B Extension project on OXC.

Water Quality/Floodplains

The proposed action would result in an increase of impervious surface at OXC. The paved portions of this area would accumulate contaminants associated with the operation and maintenance of aircraft and other vehicles such as fuel and oil, deicing fluids/chemicals and salts, brake and tire dust, and other potentially toxic materials (see Section 5.8). Downstream water quality impacts could occur if stormwater were not treated. The increased impervious surface could also result in additional stormwater volumes flowing into downstream waters, potentially increasing the risk of flooding, if no detention facilities were incorporated into the design.

The growth of new residential, commercial, and industrial development is expected to continue within the ICE study area. As a result of this growth in development, impervious surface area in the form of roofs, driveways, sidewalks and parking areas will likely increase. As discussed above, increases in impervious surfaces create more stormwater runoff and increases the potential for sedimentation and contamination of downstream waterbodies. This potential adverse cumulative effect on downstream water quality and floodplain storage capacity would be avoided by the stormwater management system of each project's design, which are required elements of all local inland wetland regulations and zoning regulations in the ICE study area's towns. As a result, the adverse cumulative effects to downstream water quality and floodplain storage capacity are expected to be minor, and no additional mitigation for this cumulative effect is proposed.

Wetlands/Biotic Communities

Construction of the proposed action would have an impact on inland wetlands. Cumulative effects on a wetland's functions and wildlife habitat may be caused by other current and future developments within the ICE study area through direct impacts to other wetlands and biotic communities. The ICE study area towns all have inland wetland regulations in place that set forth a permitting process for any activities within or adjacent to wetland areas. Central to these regulations is the requirement to avoid and minimize impacts to wetlands to the extent practicable. Where unavoidable impacts occur, compensatory mitigation is typically required to replace the wetland functions lost. An inland wetland permit from the Town of Oxford has been obtained for the proposed project (see Section 5.10). This approval incorporated extensive wetland compensatory mitigation, which has replaced the wetland function lost as a result of the project. Due to the existing regulatory framework in each of the ICE study area towns, and the approved mitigation for the impacts resulting from this project, adverse cumulative effects to wetlands and biotic communities are expected to be minor, and no additional mitigation for this cumulative impact is proposed.

Section 303(c) Lands (formerly Section 4(f))

The proposed action will not require the use of any land from a significant publicly owned park, recreation area, wildlife or waterfowl refuge, or historic site. Therefore, no impacts are anticipated under Section 303(c). Construction of the proposed action would have an indirect visual effect on the Larkin State Park Trail. New and proposed development within Oxford and neighboring towns may also have visual effects on the recreational trail, creating the potential for cumulative visual effects. This resource

can be protected though regulatory measures within neighboring towns, or through coordination with the CTDEP to mitigate cumulative visual effects. The proposed project will include screening vegetation to mitigate visual effect. No additional mitigation for this cumulative effect is proposed.

Section 6(f) Lands

The proposed action will not have a direct impact to any lands purchased with Section 6(f) funds, therefore, there will be no impacts to Section 6(f) lands. Similar to Section 303(c) lands above, Construction of the proposed action would have an indirect visual effect on the Larkin State Park Trail. New and proposed development within Oxford and neighboring towns may also have visual effects on the recreational trail, creating the potential for cumulative visual effects. This resource can be protected though regulatory measures within neighboring towns, or through coordination with the CTDEP to mitigate cumulative visual effects. The proposed project will include screening vegetation to mitigate visual effect. No additional mitigation for this cumulative effect is proposed.

7. SUMMARY OF MITIGATION MEASURES

Impacts from the Proposed Action are summarized in Table 11. The proposed action satisfies the Purpose and Need of the project while avoiding and minimizing impacts to the most practicable extent. In addition, the Proposed Action will generate significant socioeconomic and energy conservation benefits. The implementation of the Proposed Action would have minor adverse environmental impacts that can be mitigated, including:

- 0.06 acres of direct impact to forested wetlands, which currently provide the functions of wildlife habitat, groundwater discharge and production export.
- Approximately 13.15 acres of new impervious surface area created, with associated risk of downstream pollution and risk of increased runoff and downstream flooding effects.
- The Proposed Action is inconsistent with goals for the State Plan of Conservation and Development "Preservation Areas" due to development of the proposed action partially within wetlands.
- Temporary construction impacts to air quality.
- Adverse visual impacts on recreational (Larkin State Park) trail users.

The adverse impacts of the project are limited and can all be mitigated. Table 11 summarizes the proposed mitigation measures for each impacted resource category. Where no mitigation is proposed, the impact evaluations have determined that adverse impacts are insignificant and do not warrant mitigation, that no adverse impacts were identified, and/or that anticipated impacts would be beneficial.

Table 11:	Summary	of Impacts	and Proposed	Mitigation
	•	1	1	0

Resource	Section in Document	Imnact Analysis	Mitigation
itesource	Document	Proposed Action Alternative	
Compatible Land	5.1	i i oposed riedon riter native	
Use	0.1	No impact	None proposed
Consistency with	52		
Local. Regional	0.2		
and State Plans		No impact	None proposed
Consistency with	5.3		A total of approximately 11.522 sf of
State Plan of	010		compensatory wetland mitigation area is
Conservation and			proposed: 3.018 sf of wetland
Development			enhancement through the removal of
		2.553 sf of permanent inland	invasive species and additional plantings.
		wetland impact	and: 8.504 square feet of wetland creation.
	5.4	Positive impact – increase in	, .,
Traffic and Parking		parking spaces: LEED Design	None proposed
0	5.5		Mitigation through fugitive dust control
			and erosion and sedimentation control
			during construction activities. Institute
			best management practices (BMPs); a
			storm water pollution prevention plan
			(SWPPP) per the 2002 Connecticut
		Temporary construction	<i>Guidelines for Erosion and Sedimentation</i>
Air Quality		impacts only	Control; LEED Design
Noise	5.6	No impact	None proposed
	5.7	Socioeconomic: positive	
		impact through temporary and	
		permanent job creation	
			Socioeconomic: None proposed
Socioeconomics,		Environmental Justice: No	
Environmental		impact	Environmental Justice: None proposed
Justice, and			
Children's Health		Children's Health and Safety	Children's Health and Safety Risks: None
and Safety Risks		Risks: No impact	proposed
Water Quality	5.8		Stormwater best management practices
			(BMPs); a storm water pollution
			prevention plan (SWPPP) per the 2002
			Connecticut Guidelines for Erosion and
		Approximately 13.15 acres of	Sedimentation Control; temporary and
		new impervious surface area	permanent storm water management
		created, with associated	facilities per the Connecticut Stormwater
		potential risk of downstream	Quality Manual (2004); see Section 5.8;
		pollution	LEED Design
Floodplains	5.9	No impact to 100-year	
		floodplain or the floodway	None proposed

Resource	Section in Document	Imnact Analysis	Mitigation
	Document	Proposed Action Alternative	
Wetlands	5.10	2,553 sf of permanent inland wetland impact	A total of approximately 11,522 sf of compensatory wetland mitigation area is proposed: 3,018 sf of wetland enhancement through the removal of invasive species and additional plantings, and; 8,504 square feet of wetland creation. LEED Design
Biotic Communities and Federal and State Listed Threatened and Endangered (T&E) Species	5.11	Biotic Communities: Habitat loss from impacts to forested wetlands and 10.27 acres of upland habitat Threatened or endangered species: No impacts	Habitat Impacts: Largely compensated by wetland mitigation plan (Section 5.10); upland landscape planting plan; LEED Design Threatened or endangered species: None proposed
Farmlands	5.12	No impact	None proposed
Historical, Architectural, Archaeological, and Cultural Resources	5.13	No impact	None proposed
Section 303(c) and Section 6(f) Resources	5.14	No impact	None proposed
Solid Waste	5.15	No adverse impacts from Solid Waste; LEED Design	None proposed
Hazardous Sites/Materials	5.16	No impact	None proposed
Light Emissions and Visual Effects	5.17	Light emissions: No impact; LEED Design Visual impacts: Adverse impact on recreational trail users on the Larkin State Park Trail	Light emissions: None proposed Visual impacts: vegetative screening would be planted between Hangar I and the trail; LEED Design
Energy Supply and Natural Resources	5.18	Positive impact – LEED Design facility	None proposed
Coastal Resources and Wild and Scenic Rivers	5.19 and 5.20	Coastal Resources: No impact Wild and Scenic Rivers: No impact	None proposed

8. COST -BENEFIT ANALYSIS

As previously stated, this project will be constructed with private money; no local, state, or federal funding will be used. Claris Construction, Inc. will construct the facility and its appurtenances under contract with Keystone Air, the lessee for the completed project.

Project Benefit

Upon the issuance of the certificate of occupancy (CO), the State of Connecticut will take title of the proposed action facility. This represents a significant increase in equity to the State, since no State funds were expended to construct the facility. According to the land lease agreement, the tenant, Keystone Air, will pay land lease fees to the State of Connecticut on a yearly basis. The land lease fees produce revenue for the State. This increase in revenue will be in excess of the change in airport operational expenses. In addition, the tenant, Keystone Air, will be responsible for all operation and maintenance costs associated with the facility for the life of the land lease agreement. During the land lease term, the tenant will pay land use lease fees for the property, but they do not pay any fees for use of the building itself. Once the original land lease agreement reaches its full term, the State will then charge the tenant a lease fee for the facility. As of the date of publication of this EIE, the length of the land lease term between the State and Keystone Air has not been determined. In summary:

- the State will not expend any funds for the construction or maintenance/operation of this facility for the full term of the land lease agreement (length yet to be determined).
- the State will take title of the facility upon issuance of the CO.
- during the full term of the agreement, the tenant will pay land lease fees to the State, and
- at the termination of the land lease agreement, the State will receive fees for the lease of the land and the buildings.

As shown above, the State will realize substantial economic benefit as a result of the construction and operation of the proposed action facility.

Other benefits of construction and operation of the proposed action facility would include:

- Improves airport safety, by removing congestion of Hangar G and providing more space for maneuvering aircraft safely with the new large apron for Hangars H and I.
- Improves airport operations, lessening delays and improving overall efficiency of OXC, and
- Provides income to the State of Connecticut.

Project Cost

The primary costs of the project are associated with the construction period. Generally costs would include site preparation, filling and grading, foundation preparation, building construction, utility installation, interior work, landscaping, and start-up fees. In addition to labor, this requires obtaining fill material and building materials with construction vehicles. Pavement would be required for parking areas and the taxiway. The estimated construction cost of the Proposed Action is \$31 million.

Cost estimates do include wetland mitigation costs. Cost estimates are being made at the planning stage and, therefore, are subject to adjustments as data is gathered and the design refined. Estimating contingencies and incidentals of 10% were used to offset potential future adjustments.

The cost benefits associated with construction of the proposed action would relate to human resources, reduced aircraft idling time and fuel use, and positive economic effects. Considering the immediate and longer-term operational and financial benefits of the project to the State, town and airport users, and the lack of a state funding component for the project, weighed against the project's minimal adverse environmental impacts that will be mitigated, the proposed action appears to be an advantageous activity that justifies the expenditures, and the agreement of a land lease with the proposed tenant.

9. LIST OF CERTIFICATES, PERMITS, AND APPROVALS

This section identifies potential permits, approvals, certifications and registrations that may be required for completion of the project. Note that the "Applicant" for all permits associated with this project is a private entity, not the State of Connecticut.

The prime contractor, at it's sole cost and expense, shall apply for, obtain, maintain and comply with all terms and conditions in any and all environmental permits issued by any governmental authority, in order for the prime contractor to construct, maintain and operate the facility, including responsibility for any general or individual permit as may be required for the operation of each facility under any environmental law. CTDOT shall be named as the owner on all such applications and will make reasonable efforts (which shall exclude any obligation to make payments or contribute funds) to cooperate with the prime contractor in its obligation to obtain approvals from governmental authorities, as necessary or appropriate, for the improvements or operations at the facility.

Federal

- U.S. Army Corp of Engineers, Section 404 Permit (Category 1 non reporting)
- FAA Notice of Proposed Construction or Alteration Form 7460-1
- FAA Notice of Actual Construction or Alteration Form 7460-2

State

- Connecticut Department of Environmental Protection (CTDEP), Section 401 Water Quality Certification (Category 1 non-reporting)
- CTDEP, General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities Registration
- CTDEP, General Permit for the Discharge of Stormwater Associated with Industrial Activity (modify existing OXC-wide general permit registration to incorporate this project into the states overall permit and initiate a general permit for industrial use of this leased property under control of the leasee.)
- State of Connecticut Flood Management Certification
- State Traffic Commission Certification (#1796 issued for the proposed Hangars H and I project on 9/16/08.

Local

- Town of Oxford Inland Wetlands and Watercourses Permit (permit obtained on December 18, 2007 [see Appendix C])
- Sanitary connection review/approval

10. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

The preparation of this EIE document has involved coordination with the public as well as federal, state and regional resource and planning agencies with jurisdiction over potentially affected resources. Coordination with the Towns of Oxford and Middlebury has also been integral to the preparation of this document.

The CEPA process was initiated by CTDOT on July 21, 2009 through the placement of a public scoping notice for the project in Connecticut's Environmental Monitor. The notice requested that written comments be submitted to CTDOT by August 19, 2009. Since no requests for a public scoping meeting on the project were received during the comment period, one was not held. Public comments on scoping were accepted during a 30-day scoping period, which ended August 19, 2009. Appendix A contains a copy of the public scoping notice and all of the scoping materials.

During compilation of the EIE, extensive coordination had taken place with federal, state and regional resource and planning agencies for the purpose of assessing existing conditions, identifying potential project impacts, and assigning effective mitigation strategies. Wetlands mitigation and permitting necessitate continuing coordination with regulatory agencies. In addition, the public, officials and staff from the Towns of Oxford and Middlebury and other organizations have been contacted for information and input regarding various aspects of the project. Coordination and correspondence letters are included in Appendix A. Release of the EIE was advertised in the *Environmental Monitor* and local newspaper(s) of record on September 7, 2010 and all public comments received during a designated 30-day comment period were forwarded to CTDOT. A Public Hearing was held in the Town of Oxford at Oxford High School on October 13, 2010, and was advertised on three separate dates before the hearing in local newspaper(s) of record. All public hearing comments were received within the 30-day period following the public hearing, which ended on October 27, 2010.

In addition to the public involvement process relating specifically to this EIE, other studies have been conducted at OXC recently, that included consideration of conventional hangar options on OXC, for which there was public outreach. These studies included both the AMPU and the FAR Part 150 Noise Study. An OXC Advisory Committee was created to provide oversight and input to these studies. The Advisory Committee consisted of representatives from the Towns of Oxford, Middlebury, and Southbury; regional representation from the Council of Governments of the Central Naugatuck Valley; private stakeholders from Keystone Aviation and Executive Flight Services; and staff from the Connecticut Department of Environmental Protection, Connecticut Office of Policy and Management, CTDOT and FAA. The Advisory Committee met six times between February 2004 and June 2007, and three Public Information Meetings were held between April 2005 and June 2007. A Public Hearing for the Noise Study was held on June 12, 2008, and a two-way study website (www.OXCstudies.com) was created to disseminate public information and to receive written comments from the public. The feedback from the Advisory Committee, the Public Information Meetings, the Public Hearing, and the website helped to steer the AMPU, the Noise Study, and, ultimately, the recommendation for the Hangar Option B in the AMPU (see Section 4). This is the location the Proposed Action discussed in this EIE.

11. LIST OF PREPARERS

The following individuals prepared technical portions of this Environmental Impacts Evaluation:

BL Companies Inc. 355 Research Parkway Meriden, CT 06450	Environmental Analysis and Documentation
Jeffrey Shamas, PWS, CE Northeast Regional Manager Environmental Resources Group	Project Manager; Quality Assurance/Quality Control; Executive Summary
Derek Kohl, P.E. Director of Engineering	Quality Assurance/ Quality Control; Stormwater Management; Engineering Design Oversight
Brian Kuta Director of Infrastructure	Applicable Certificates, Permits, Approvals
Scott Mowery Senior Project Manager Environmental Resources Group	Wetlands; Biological Resources; Water Quality; Floodplains
Olivia Braun Project Scientist Environmental Resources Group	Light Impacts; Compatible Land Use; Consistency with Local, Regional and State Plans; Noise; Air Quality
Andy Kuder Project Archaeologist Environmental Resources Group	Cultural Resources; Farmland Soils; Solid Waste; Hazardous Sites and Materials; Graphics Preparation; Visual Affects; Section 303c and Section 6(f) Lands
Gretchen Yarnall Project Manager Environmental Resources Group	Socio-economics, Environmental Justice, and Children's Health and Safety Risks
John Whitcomb, P.E. Senior Project Manager Civil Group	Stormwater Management; Project Engineering Design; LEED Design; Quality Assurance/ Quality Control
James Kodlick, PWS, CE, RPA Principal and Director Environmental Resources Group	Cultural Resources; QA/QC
Claris Construction 153 South Main Street Newtown, CT 06470	Contractor
Phil Clark, AIA President	Project Construction; Project Schedule

Keystone Aviation 288 Christian Street Oxford, CT 06478	Owner/Operator
David "Buddy" Blackburn Senior Vice President	Aircraft Activity Forecasting; Socioeconomics
Clough Harbor Associates 2139 Silas Deane Highway Suite 212 Rocky Hill, CT 06067-2336	Noise Impact Study
Paul McDonnell, AICP, P.P. Senior Associate/Airport Planning Manager	Noise Study Manager; QA/QC
Erin Rowett, C.M. Aviation Planner	Document Preparation and Compilation

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APPENDICES

Appendix A

Scoping Materials



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Karl J. Wagener, Executive Director E-Mail Address: <u>karl.wagener@</u> ct.gov

Monitor Archives



ENVIRONMENTAL MONITOR

The official site for project information under the Connecticut Environmental Policy Act

July 21, 2009

Scoping Notices

1. NEW! Oxford Airport, Oxford

Environmental Impact Evaluations

1. RE-POSTED Two Academic Buildings UConn, Storrs

State Land Transfers

1. 7 Ballfall Road, Middlefield

file://K:/Jobs07/07C2427/DOCS/REPORTS/EIE/Scoping/CEQ July 21, 2009.htm

10/14/2009



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- 2. 68,72,75,91 Marguerite Avenue, 6, 9 Packard Street, Bloomfield
- 3. NEW! 16 Frank St., Trumbull
- 4. NEW! 167 Starr St., Newington
- 5. NEW! Riverside Drive, Milford
- 6. NEW! 0 Regan Rd., Vernon
- 7. NEW! Orehill Rd., New Fairfield
- 8. NEW! 7 Forest Rd., Woodbridge

Environmental Classification Documents

1. Proposed Generic Environmental Classification Document

The next issue will be published on August 4, 2009.

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Scoping Notices

study. Send your comments to the contact person listed for the project by the environmental impacts does not yet exist. Sponsoring agencies are asking for alternatives and environmental impacts that should be considered for further The following scoping notice is posted for review or comment in this edition. "Scoping" is for projects in the earliest stages of planning. At the scoping comments from other agencies and from the public as to the scope of stage, detailed information on a project's design, alternatives, and date indicated.

1. Notice of Scoping for Construction of a New Hangar at Waterbury / Oxford Airport, Oxford

Address of Possible Project Location: 300 Christian Street, Oxford, CT 06483

Project Description: The project consists of the construction of a hangar and office space building with a footprint of 206,000 square feet on the southeastern side of the Waterbury Oxford Airport parallel to Runway 36. The building will be constructed as a certified LEED® Building including the use of solar energy and geothermal heating.

Project Map: Click here to view a map of the project area.

Written comments from the public are welcomed and will be accepted until the close of business on: Wednesday, August 19, 2009.

represents 25 or more members, the sponsoring agency shall schedule Meeting by sending such a request to the address below. If a meeting Any person can ask the sponsoring agency to hold a Public Scoping is requested by 25 or more individuals, or by an association that a Public Scoping Meeting. Written comments and/or requests for a Public Scoping Meeting should be sent to:

Name: Mr. Robert Bruno - Chief of Engineering Services Bureau of Aviation and Ports
Agency: Connecticut Department of Transportation
Address: 2800 Berlin Turnpike
Newington, CT 06131-7546
Fax 860-594-2574 If you have questions about the scoping process for this project, contact:

Robert.Bruno@ct.gov

E-Mail:

Mr. Keith T. Hall - Transportation Supervising

10/14/2009

Name:	Planner
	Bureau of Policy and Planning
Agency :	Connecticut Department of Transportation
Address	2800 Berlin Turnpike
	Newington, CT 06131-7546
Phone:	860-594-2926
Fax:	860-594-3028

The agency expects to release an Environmental Impact Evaluation for this project, for public review and comment, in October, 2009.

Keith.Hall@ct.gov

E-Mail:

EIE Notices

The following Environmental Impact Evaluation (EIE) has been completed and is available for review and comment in this edition.

1. Notice of EIE for Construction of Two Academic Buildings, UConn

Municipality where proposed project will be located: Storrs

Address of Project Location: Fairfield Way

square foot LEED Silver certified classroom and academic offices building at the Project Description: This project notice has been re-posted with no changes certified classroom building at the location of the former Pharmacy Building. to the project. The University of Connecticut plans to construct a 136,000 location of the former UConn Co-op and a 60,000 square foot LEED Silver

Project Map: See Site Location Map.

Comments for this EIE will be accepted until the close of business on: Juy 22, 2009 (4:30 PM)

file://K:/Jobs07/07C2427/DOCS/REPORTS/EIE/Scoping/CEQ July 21, 2009.htm





STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

79 ELM STREET, HARTFORD, CT 06106-5127

То:	Robert Bruno - Chief of Engineering Services DOT - Bureau of Aviation & Ports, 2800 Berlin Turnpike, Newington		
From:	David J. Fox - Senior Environmental Analyst	Telephone: (860) 424-4111	
Date:	August 19, 2009	E-Mail: david.fox@ct.gov	
Subject:	New Hangar, Waterbury - Oxford Airport		

The Department of Environmental Protection has received the Notice of Scoping announcing preparation of an Environmental Impact Evaluation (EIE) for construction of a new hangar and office building at Waterbury - Oxford Airport. The following comments are submitted for your consideration.

The proposed new building would be 206,000 sq.ft. with hangar space totaling 149,100 sq.ft. The *Waterbury - Oxford Airport, Airport Master Plan Update* dated September 2007 noted that "the requirement for conventional hangar space at OXC includes approximately 33,500 square feet of additional area after 2015." The plan recommended this proposed site, identified as Option B, for construction of a hangar with a maximum size of 60,000 sq.ft. The Recommended Plan depicted conventional hangars immediately south of Hangar G that completely avoided wetlands. The EIE should document the need for a facility that includes $2\frac{1}{2}$ times the hangar space as well as 117,500 sq.ft. of office space at this location that encroaches, albeit slightly, into regulated wetlands.

The last General Note on the Conceptual Hangar Layout provided in the Scoping Notice indicated that "further review of site constraints associated with this conceptual layout is required. Review of impacts associated with slope/topography, stormwater management, wetlands, utilities, etc. is required to determine the feasibility of this option." The Department agrees with this statement; the EIE should provide the requisite analyses.

My memo dated August 22, 2007 submitting scoping comments for proposed extension of Taxiway B stated that "the magnitude of wetland impacts resulting from extension of Taxiway B is a significant issue" and that "the EIE and the applications for both Federal and State wetland permits must thoroughly document the need for the taxiway extension and demonstrate that other alternatives with lesser or no wetland impacts are not feasible or prudent." The EIE for the proposed hangar should discuss whether construction of the hangar would increase the need for the taxiway extension or preclude alternative taxiway designs that might minimize wetland impacts.

Assuming that ConnDOT would be the applicant, any work or construction activity within the inland wetland areas or watercourses on-site will require a permit from the Inland Water Resources Division pursuant to section 22a-39(h) of the Connecticut General Statutes (CGS). Unavoidable and unmitigated impacts to wetlands and watercourses must be compensated. Section 22a-41(a)(4) of the CGS establishes the following order of priority for compensatory mitigation: (1) restoration, (2) enhancement and (3) creation of productive wetland or watercourse resources. Any proposed compensatory mitigation should be guided by this order of priority.

Any work or construction activity within federally regulated wetland areas or watercourses at the site may require a permit from the U.S. Army Corps of Engineers pursuant to section 404 of the Clean Water Act. Projects that impact less than 1 acre of inland wetlands may qualify for a programmatic general permit from the U.S. Army Corps of Engineers issued on May 31, 2006. Projects impacting less than 5000 sq.ft. (Category I) regulated by the Department or a municipal wetland agency, are non-reporting to the Corps, provided they meet the conditions of the general permit. For projects impacting more than 5000 sq.ft. of wetlands (Category II), the applicant must send the standard application form to the Army Corps and may not proceed with the project until written notification is received from the Corps. All appropriate state and local permits must be obtained. In addition, the DEP must find, through the Category II Federal/State screening meeting, that any project which impacts more than 5000 sq.ft. of wetlands is likely to have minimal or no impact on water quality. If it is determined that the project is reasonably likely to have more than a minimal impact, an individual section 404 permit and 401 Water Quality Certificate would be required.

The proposed project site is not within the 100-year flood zone on the community's Flood Insurance Rate Map. However, because it is an activity as defined by 25-68b(1) of the CGS, the project will require floodplain/stormwater management certification pursuant to section 25-68d of the CGS. "Activity" includes any proposed state action that impacts natural or man-made storm drainage facilities that are located on property that the commissioner determines to be controlled by the state. The project would meet this definition since significant new impervious surface and installation of a stormwater collection system and site grading that alters drainage patterns is proposed.

In projecting the number of planes based at the airport, the *Master Plan Update* concluded that "the forecast of based aircraft for OXC recommended for planning purposes reflects the case where the demand for based business jets is constrained by the availability of suitable hangar facilities." The projected number of business jets increases from 37 in 2003 to 65 in 2008, reflecting the construction of Hangar G, but levels off, increasing to just 72 in 2023. The *Waterbury - Oxford Airport, FAA FAR Part 150 Noise Study* dated October 2008 included projections of noise levels surrounding the airport for 2012. In developing projections for based-jet operations, the study "assumed that a new hangar will be developed at OXC with storage capacity for 20 additional jets." The EIE should discuss whether these assumptions are still valid or if additional based jets, occupying the proposed new hangar, would warrant a supplement noise analysis.

The project is within the headwater area of the Little River. Little River is rated as a class A surface water body in Connecticut's Water Quality Standards, denoting fishable and swimmable water quality as well as potential drinking water supply. The river is an important

fisheries resource, stocked with trout downstream of the airport along Route 67. and is designated as a wild trout management area between Towner Land and Park Road in Oxford.

The EIE should discuss, at least on a conceptual level, the proposed treatment of stormwater. The location and method of any de-icing operations at the new hangar and apron should be specifically discussed. Exposure of deicing operations to stormwater should be prevented or minimized to the greatest feasible extent.

The Department's standard recommendation concerning stormwater management which follows should be observed, as appropriate.

Appropriate controls, designed to remove sediment and oil or grease typically found in runoff from parking and driving areas, should be included in any stormwater collection system to be installed or upgraded at the site. Non-structural measures to dissipate and treat runoff are strongly encouraged, including infiltration using pervious paving or sheetflow from uncurbed pavement to vegetated swales, water gardens or depression storage areas. The Department recommends a stormwater management treatment train approach. Such a system includes a series of stormwater best management practices (BMPs) that target the anticipated pollutants of concern. For example, parking lot runoff would be expected to contain petroleum hydrocarbons, heavy metals, sediment, organic material (leaves/grass clippings) and seasonally elevated temperatures. Potential structural stormwater BMPs include, but are not limited to, catch basin inserts, gross particle separators, deep sump catch basins fitted with passive skimmers, and/or detention/retention basins having adequate pre-treatment. For larger sites, a combination of structural and nonstructural BMPs are typically most effective and practical. If more than 1 acre of pavement drains to a common discharge point, a hydrodynamic separator, incorporating swirl technology, circular screening technology or engineered cylindrical sedimentation technology, is recommended to remove medium to coarse grained sediments and oil or grease. The treatment system should be sized such that it can treat stormwater runoff adequately. The Department recommends that the treatment system be designed to treat the first inch of stormwater runoff. Upon installation, a maintenance plan should also be implemented to insure continued effectiveness of these control measures. For additional guidance, consult the Connecticut Stormwater Quality Manual.

In order to reduce the impact of development and address stormwater quality issues, the Department strongly encourages the use of Low Impact Development (LID) measures. LID site planning principles involve controlling stormwater/snowmelt runoff volume at the source and hydrologically functional landscaping. Key strategies for effective LID include: conserving and restoring vegetation and soils, designing the site to minimize impervious surfaces, managing stormwater close to where the rain/snow falls, and providing for maintenance and education. Consequently, we typically recommend the utilization of one, or a combination of, the following measures:

- the use of pervious pavement or grid pavers (which are very compatible for parking lot and fire lane applications), or impervious pavement without curbs or with notched curbs to direct runoff to properly designed and installed infiltration areas,
- the use of vegetated swales, tree box filters, and/or infiltration islands to infiltrate and treat stormwater runoff (from building roofs and parking lots),
- the minimization of access road widths and parking lot areas to the maximum extent possible to reduce the area of impervious surface,
- if soil conditions permit, the use of dry wells to manage runoff from the building roofs,
- the use of vegetated roofs (green roofs) to reduce the runoff from buildings,
- proper treatment of special activity areas (e.g. loading docks, covered maintenance and service areas),
- the installation of rainwater harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation, and
- providing for pollution prevention measures to reduce the introduction of pollutants to the environment.

The project will require a *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* (DEP-PERD-GP-015). For projects disturbing five or more acres, registration describing the site and the construction activity must be submitted to the Department prior to the initiation of construction. A stormwater pollution control plan, including measures such as erosion and sediment controls and post construction stormwater management, must be prepared. For sites where more than 10 acres will be disturbed, the plan must be submitted to the Department. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing stormwater management measures.

The airport has a *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (DEP-PERD-GP-014). A stormwater pollution prevention plan (SWPPP), including measures such as a monitoring program, controls for outside storage of materials, spill control plan, maintenance and inspection, employee training and recordkeeping is required by the permit. The SWPPP for the airport will have to be modified to include the proposed new hangar and apron area.

Keystone Aviation had filed a Property Transfer Form III in 2007 for the transfer of a business operation, as defined in Section 22a-134(21) of the CGS, that met the definition of an establishment, as defined in Section 22a-134(3) of the CGS. This form is used when a discharge, spillage, uncontrolled loss, seepage or filtration of hazardous waste or a hazardous substance has occurred at the establishment or the environmental conditions at the establishment are unknown prior to the transfer. The person signing the certification agrees to investigate the parcel in accordance with prevailing standards and guidelines and to remediate pollution caused by any release of a hazardous waste or hazardous substance from the establishment in accordance with the remediation standards. There are environmental site assessments on file for areas of existing operations of Keystone Aviation. It is uncertain whether the proposed project location has historically been the site of any operations.

In order to ascertain the environmental status of the property, it is recommended that a Phase I environmental site assessment (ESA) be performed at the site. If the Phase I ESA indicates site contamination is likely, a Phase II ESA should be performed to confirm or deny the presence of contamination. In order to achieve proper remediation, the extent of contamination should be clearly defined through a Phase III ESA, a cleanup plan developed, and measures implemented that will clean up the site in accordance with applicable criteria in the Connecticut Remediation Standard Regulations adopted pursuant to section 22a-134k of the CGS. For further information, contact the Remediation Division at (860) 424-3705. The Connecticut Remediation Standard Regulations are available on-line at: http://www.ct.gov/dep/lib/dep/regulations/22a/22a-133k-1through3.pdf.

The Natural Diversity Data Base, maintained by DEP, contains no records of extant populations of Federally listed endangered or threatened species or species listed by the State, pursuant to section 26-306 of the Connecticut General Statutes, as endangered, threatened or special concern in the project area. This information is not the result of comprehensive or site-specific field investigations. Also, be advised that this is a preliminary review. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site. Consultation with the Natural Diversity Data Base should not be substituted for on-site surveys required for environmental assessments. The extent of investigation by competent biologist(s) of the flora and fauna found at the site would depend on the nature of the existing habitat(s). If field investigations reveal any Federal or State listed species, please contact the DEP Geologic & Natural History Survey at (860) 424-3540.

Thank you for the opportunity to review this project. If there are any questions regarding these comments, please contact me.

cc: Keith T. Hall, DOT Jeff Caiola, DEP/IWRD Patricia DeRosa, DEP/RD Robert Hannon, DEP/OPPD Robert Kaliszewski, DEP/OPPD Jessica Morgan, DEP/WPSD Nisha Patel, DEP/PED Susan Peterson, DEP/WPSD Stephen Tessitore, DEP/IWRD



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

July 24, 2009

Mr. Robert Bruno Chief of Engineering Services Bureau of Aviation and Ports Department of Transportation 2800 Berlin Turnpike Newington, CT 06131-7546

RE: Notice of Scoping for Construction of a New Hangar at Waterbury / Oxford Airport, Oxford

Dear Mr. Bruno:

The Drinking Water Section of the Department of Public Health has reviewed the abovementioned project for potential impacts to any sources of public drinking water supply. This project does not appear to be in a public water supply source water area; therefore the Drinking Water Section has no comments at this time.

Sincerely,

three

Lori Mathieu, Public Health Services Manager Drinking Water Section





(860) 509-7333 Telephone Device for the Deaf: (860) 509-7191 410 Capitol Avenue - MS # <u>_51 WAT</u> P.O. Box 340308 Hartford, CT 06134 Affirmative Action / An Equal Opportunity Employer

Appendix B

Noise Study

Appendix **B**

Airport Noise Analysis Hangars H & I Development

Introduction:

Airport noise and land use compatibility is regulated at the federal level to ensure that all public airports are evaluated in the same manor, and compatibility determinations follow the same procedures. For airport noise evaluations, Federal Aviation Regulations (FAR) require the use of an average noise metric to determine impacts and land use compatibility. The required metric is the Day-Night Average Noise Level or DNL.

Day-Night Average Noise Level (DNL) – is defined as the total accumulation of aircraft noise spread out uniformly throughout the day (i.e., over a 24-hour period). DNL is an annualized metric representing the noise of a typical day of the year. To compensate for the added annoyance created by nighttime aircraft activity, DNL adds a 10-decibel weighting (a "penalty") to night operations (between 10:00 pm and 7:00 am).

In January of 2009, the Connecticut Department of Transportation (ConnDOT) completed an FAR Part 150 Noise Study for the Waterbury-Oxford Airport (OXC). This study used the FAA's Integrated Noise Model (INM) Version 7.0 to identify existing and forecast noise levels at OXC to the year 2012. One of the products of the Noise Study was a Noise Exposure Map depicting DNL noise contours for 2007 and 2012.

Federal regulations consider residential land use compatible with airport noise up to a level of DNL 65 dB. Any homes located within the 65 DNL contour are considered impacted by the airport. As shown on the attached maps, there are several dozen homes located immediately north of the runway located within the 65 DNL contour (in both 2007 and 2012). Note that the 2007 contour (orange) is larger than the 2012 contour (yellow), as fewer of the older and noisier "Stage 2" jet aircraft will remain in serve by 2012. These noisy "Stage 2" aircraft have a major affect on the size of the DNL contours.

Note that ConnDOT is moving forward with plans to offer voluntary acquisition, relocation, and noise insulation (in some locations) to all of the homes in the impact area. The acquisition may include up to 72 homes located within or adjacent to the DNL 65 dB contour. This area is known as the Triangles Hill neighborhood of Middlebury.

The evaluation conducted for the development of Hangars H & I used the same model created for the Part 150 Study. The evaluation addresses the additional airport noise that may result from the development of Hangars H & I. It should be noted that the development of a large hangar was incorporated in the previous airport noise study; however, the size and capacity of the Hangar H & I plans exceeds what was anticipated.

This airport noise evaluation was conducted to provide a "worst case" scenario (i.e., a substantial increase in airport takeoffs and landings) of the future activity levels created by completion of the Hangars H and I. As the exact activity level of the future based aircraft tenants of Hangars H & I is unknown, a worst case scenario was evaluated for use in the CEPA document.

OXC Activity Levels and Forecasts

Table 1 illustrates the FAA approved activity forecasts for OXC for the years 2012 and 2023. The operations are divided into categories of aircraft (e.g., single-engine, multi-engine, jets, etc.) for input into the INM. As noise varies by aircraft type, the fleet mix is typically the most critical data input, ahead of the number of operations and the time of day. As shown, the 2012 forecast activity includes a total of 69,486 annual operations, including 7,613 jet operations. For 2023, the forecast of total and jet operations is anticipated to increase to 86,600 and 8,300 respectively.

These forecasts were prepared before the current economic recession, which has affected OXC and most airports. The 2008 activity level at OXC is down from recent years, and includes about 55,000 total operations. Nevertheless, for this noise evaluation, it was assumed that activity would rebound and reach forecast levels presented in Table 1, to avoid underestimating future noise.

It is anticipated that the construction of Hangars H & I will begin in 2010 and will be completed and fully occupied during 2012. The first full year of occupancy is anticipated to be 2013. Therefore, 2013 was the year used in this noise evaluation. Table 1 show the activity forecast for 2013. The development process, assumptions, and associated INM input data is listed below.

- The first 2013 column in Table 1 is a simple interpolation between the 2012 and 2023 activity forecast
- It is assumed that all aircraft stored in Hangars H and I will be jets, and that they will all be modern aircraft (i.e., "Stage 3") which are substantially quieter than the jets made in the 1970s and 80s.
- Currently OXC has 200,000 square feet (SF) of jet hangar storage space. Hangars H & I will add 149,000 SF, or a 75% increase in total aircraft storage.
- The activity levels resulting from Hangars H & I will be directly related to the increase in aircraft storage capacity at OXC.
- Currently, annual jet operations at OXC are approximately 5,500. A 75% increase would result in 4,125 additional operations.
- The potential 4,125 additional jet operations were added to the 2013 baseline forecast of jet operations (7,675, plus 4,125), which amounts to a total of 11,800 annual jet operations in 2013.
- These additional jet operations were divided into small jets (25%), mid-size jets (25%), and large jets (50%) based on input from the hangar owner and airport management. No additional Stage 2 jets were included.
- The resulting forecast is shown in the second 2013 column of Table 1. It includes a forecast of 75,167 total annual operations at OXC in 2013.

• The expanded 2013 activity data at OXC was distributed into the INM input data as shown in Table 2, with the same parameters as the 2012 data (i.e., day-night distribution, arrivals vs. departures, etc).

Noise Evaluation

According to FAA Order 1050.1E, <u>Policies and Procedures for Considering Environmental</u> <u>Impacts</u>, a significant noise impact occurs when an action, compared to the no action alternative, would cause the following:

- A residence, or other noise sensitive land use (school, hospital, etc.), would be subject to a DNL above 65 dB. For example, a home with a current DNL of 64 dB, increasing to a DNL of 65 dB as a result of the project would be considered an impact.
- A residence currently subject to airport noise of over DNL 65 dB, experiencing a noise increase of at least DNL 1.5 dB. For example, the noise at a home increases from DNL 66.0 dB to DNL 67.5 dB would be considered an impact.

With the additional activity data added, the total area of the DNL 65 contour increased by 5.6% or 15 acres (from 268 to 283 acres), between the 2012 baseline activity forecast and the 2013 expanded activity. The increase in the contour area is generally uniform in all directions, and thus it extends only slightly in any location. As a result, <u>no</u> additional residential properties would be located within the 65 DNL contour created by the additional airport operations associated with Hangars H & I. The 2007, 2012, and 2013 contour comparison is displayed on Figures 1 and 2.

Within the Triangles Hill neighborhood of Middlebury, where existing airport noise is currently over DNL 65, there is a slight increase in noise levels, but this increase is less than 1.5 DNL at all residential locations. For example, along Triangle Boulevard (just north of Hill Parkway) the DNL increases by only 0.1 dB. As such, per federal standards, it is concluded that the development of Hangars H & I and the potential additional air traffic will not create a noise impact per federal noise and land use compatibility standards.

Furthermore, it should be noted that all the homes that are impacted or nearly impacted by airport noise are located to the north of the runway, and are planned for voluntary acquisition by ConnDOT as recommended in the Part 150 Noise Study. ConnDOT is actively moving forward with the acquisition, which is not related to the development of Hangars H & I.

Sample Noise Levels Surrounding the Airport

As part of the Part 150 noise study, sample DNL noise levels were identified at numerous locations in neighborhoods surrounding the Airport. This evaluation was conducted at the 40 selected points listed in Table 3 and illustrated on Figure 3. The selected locations were chosen based on documented noise complaints, the location of noise sensitive facilities (e.g., schools), and planned residential developments.

As shown in Table 3, noise increases at all sample locations when comparing the 2012 baseline to the 2013 expanded activity level. However, all increases are minor, with the average increase consisting of DNL 0.5 dB.



MA S1:60:7 000S/7/01 9WG.10881 U:/13301/ACAD/MISC/CHECK_2013_NOISE_CONTOURS_



MA S1:50:7 000S/7/01 V. G. FOSE F. U:/13301/ACAD/MISC/CHECK_2013_NOISE_CONTOURS_



Figure B-1 - Grid Point Locations
		TABLE 1	- 2013 ANN	VUAL OP	ERATION	VS			
A inquaft Tyme	Common Airoroft	2	012	2013 Inte	rpolation	2013 Ex	pansion	202	23
Aircrait Type	Common Aircran	Ops.	%	Ops.	%	Ops.	%	Ops.	%
SE Piston	Cessna 172	25,974	75%	26,583	75%	26,583	75%	32,670	75%
ME Piston	Baron58B	8,658	25%	8,861	25%	8,861	25%	10,890	25%
	subtotal	34,633	100%	35,444	100%	35,444	100%	43,560	100%
(T&G) SE Piston	Cessna 172	21,934	95%	22,448	95%	22,448	95%	27,588	95%
(T&G) ME Piston	Baron58B	1,154	5%	1,181	5%	1,181	5%	1,452	5%
	subtotal	23,088	100%	23,630	100%	23,630	100%	29,040	100%
	Piston Total	57,721		59,074		59,074		72,600	
	Caravan 208	1,233	34%	1,279	34%	1,279	34%	1,734	34%
Turboprop	King Air 200	1,197	33%	1,241	33%	1,241	33%	1,683	33%
Turboprop	Cessna Conquest	1,197	33%	1,241	33%	1,241	33%	1,683	33%
	Turboprop Total	3,627	100%	3,761	100%	3,761	100%	5,100	100%
	Small Jet								
	Lear 25*	160	6%	134	5%	134	4%	-	0%
	Citation II/V	2,505	94%	2,552	95%	3,583	96%	2,905	100%
	subtotal	2,665	100%	2,686	100%	3,717	100%	2,905	100%
	Medium Jet								_
	Hawker 125-700*	164	6%	138	5%	138	4%	149	5%
Iat	HS 125-800	2,576	94%	2,625	95%	3,657	96%	2,839	95%
JCI	subtotal	2,741	100%	2,763	100%	3,795	100%	2,988	100%
	Large Jet								
	Gulfstream II/III*	309	14%	289	13%	289	7%	120	5%
	Gulfstream IV	1,214	55%	1,224	55%	2,256	53%	1,204	50%
	Global Express	684	31%	712	32%	1,743	41%	1,083	45%
	subtotal	2,208	100%	2,226	100%	4,289	100%	2,407	100%
	Jet Total	7,613		7,675		11,800		8,300	
	Hughes 500	263	50%	266	50%	266	50%	300	50%
Rotor	Blackhawk	263	50%	266	50%	266	50%	300	50%
	Rotor Total	525	100%	532	100%	532	100%	600	100%
	Overall Total	69,486		71,042		75,167		86,600	
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	an 1 0 7 C	2 000	1000/	2 000	1000/	2 000	1000/	2 000	1000/
Overtlights**	Sikorsky S-76	3,000	100%	3,000	100%	3,000	100%	3,000	100%
*Stage II Jet Aircr	Stage II Jet Aircraft								
**Helicopters trans	sitioning the Class D /	Airspace al	ove pattern k	evel - Dav '	VFR				

TA	BLE 2 - AVER	AGE AN 2013 R	NUAL DA	AILY A	IRCRA JARIO	1 <i>FT OI</i>	PERAT	TIONS	
		2013 D.				Daily Air	eraft On	erations	
Airer	aft			Denai	rtures	Δarri	vals	crations	
	Name	INM	Code	Dav	Night	Dav	Night	Total	Annual Total
Piston Aircraft Onerg	tions			Duy	Tight	Duy	inght	Total	
SE Piston	Cessna 172*	CNA172		32 774	3 642	32 774	3 642	72 830	26 583
ME Piston	Baron 58B	BEC58P		10 925	1 214	10 025	1 214	24.277	8 861
Piston Aircraft Totals		DLCJ01		43 698	4 855	43 698	4 855	97 107	35 444
Turbonron Aircraft O	narations			45.070	4.055	45.070	4.055	97.107	55,444
Turboprop SE	Caravan 208*	CNA 208		1 577	0.175	1 577	0.175	3 504	1 270
Turboprop ME	King Air 200*	DEC200		1.577	0.170	1.577	0.170	3.304	1,279
Turboprop ME	Cosspa Conquest	CNA441		1.530	0.170	1.530	0.170	3.400	1,241
		CNA441		1.550	0.170	1.550	0.170	10.204	1,241
Let Aircraft Organitie				4.637	0.515	4.63/	0.515	10.304	3,/01
Jet Aircraft Operation	ns	LEADOS		0.165	0.010	0.165	0.010	0.2/7	124
Small Jet - Stage II	Lear 25	LEAR25		0.165	0.018	0.165	0.018	0.36/	134
Small Jet - Stage III	Citation II/V*	CNA550		4.417	0.491	4.417	0.491	9.816	3,583
Medium Jet - Stage II	Hawker 125-700*	HSI25		0.170	0.019	0.170	0.019	0.378	138
Medium Jet - Stage III	Hawker 125-800*	HS1258		4.509	0.501	4.509	0.501	10.019	3,657
Large Jet – Stage II	Gulfstream II/III	GIIB		0.356	0.040	0.356	0.040	0.792	289
Large Jet – Stage III	Gulfstream IV	GIV		2.781	0.309	2.781	0.309	6.181	2,256
Large Jet – D-III	Gulfstream V	GV		2.149	0.239	2.149	0.239	4.775	1,743
Jet Aircraft Totals				14.548	1.616	14.548	1.616	32.329	11,800
Touch & Go Aircraft	and Helicopter Op	erations							
SE Piston	Cessna 172	CNA172		62	-	n/a	n/a	61.501	22,448
ME Piston	Baron 58B	BEC58P		3	-	n/a	n/a	3.236	1,181
Helicopter	Hughes 500	H500D		1	-	n/a	n/a	0.729	266
Helicopter	Blackhawk	S70		1	-	n/a	n/a	0.729	266
Touch & Go Operation	on Totals			66	-	n/a	n/a	66.197	24,162
Helicopter Overflight	t Operations								
Helicopter	Sikorsky S-76	S76		3,000	-	n/a	n/a	8.219	3,000
Overall Airport Operation Totals		129	7	62.88	6.99	205.937	75,167		
Notes: Touch & go ope	erations are prohibit	ed at night. Ea	ich touch & g	o is record	ed by the	ATCT as	a local o	peration (lis	sted here as a
departure). However, e	each touch & go doe	s include a lan	iding, which is	s incorpor	ated in th	e INM.			
			Aircraft Sub	stitutions					
*Non-standard INM ai	rcraft type INM pro	ovides a	Nor	-Standar	d Aircraf	ît	St	andard Su	bstitution
types listed above. The	e approved substitut	tions are	Nam	e Code		Name		Code	
listed at right.			Cessna	172	CN	A172	SE Pi	ston PF	GASEPF
			Caravar	n 208	CN	A208	SE Pi	ston PF	GASEPF
			King Ai	r 200	BE	C200	Twi	n Otter	DHC6
			Citation	II/V	CN	A550	Mitsubishi 300-1		MU3001
			Hawker 1	25-700	HS	5125	Lea	rjet 25	LEAR25
Hawker 1		25-800	HS1258		Learjet 35		LEAR35		

	TABLE 3 – DNL NOISE I	LEVELS	1			
		DNL Noise Level				
		A. 2012	A. 2013	Change		
ID	LOCATION	Baseline	Expansion	(A to B)		
1	Long Meadow School, 65 N Benson Rd	54.8	55.3	0.5		
2	Independence Circle on the south end	59.9	60.3	0.4		
3	Brookside Drive on the south end	55.4	55.9	0.5		
4	Avalon Farms, Middlebury	46.3	46.8	0.5		
5	Washington Drive	50.7	51.0	0.3		
6	Triangle Blvd, north of Hill Pkwy	68.6	68.7	0.1		
7	Andrew Mountain Rd, Naugatuck	37.8	38.4	0.6		
8	Reservoir Rd, Southbury	48.3	48.9	0.6		
9	221 Munn Rd, Southbury	47.8	48.4	0.6		
10	Glendale Development	58.6	59.0	0.4		
11	Homestead Rd	49.6	50.1	0.5		
12	Hulls Hill Rd, Southbury	46.9	47.2	0.3		
13	Independence Circle on the north end	56.7	57.2	0.5		
14	elementary school on CT Route 188	51.3	51.7	0.4		
15	Wildwood Circle, Naugatuck	42.6	42.7	0.1		
16	Hill Rd, Middlebury	43.7	43.9	0.2		
17	Corner of Christian Road and Midway Drive	49.6	50.1	0.5		
18	Ash Swamp Rd, Woodbury (not shown on B-1)	27.7	29.0	1.3		
19	Longmeadow Road on the north end	47.9	48.4	0.5		
20	Curtis Farm Rd, Middlebury	31.5	32.1	0.6		
21	Chestnut Tree Hill Rd, Oxford	40.3	40.7	0.4		
22	Kissawaug Rd	59.9	60.4	0.5		
23	Old Waterbury Rd, Southbury	52.5	53.0	0.5		
24	Benson Road on the east side	57.4	57.8	0.4		
25	Kimberwick Court on the south end	51.0	51.4	0.4		
26	Donovan Road north of Airport Access Road	51.9	52.4	0.5		
27	Prokop Road on the north side	50.5	50.9	0.4		
28	Hawley Road on the south side	52.0	52.4	0.4		
29	Jacks Hill Road on the east side	54.0	54.4	0.4		
30	Christian Street on the south end	55.6	55.9	0.3		
31	Wildflower Drive on the east side	51.6	52.0	0.4		
32	Towner Lane	50.8	51.1	0.3		
33	Glendale Development (South end of "C")	55.2	55.6	0.4		
34	Route 188, Southbury	49.1	49.3	0.2		
35	Greenbriar Road on the west side	45.9	46.4	0.5		
36	Country Farm Road on the north side	55.6	56.1	0.5		
37	Corner of Deanna Drive and Nancy Lynn Drive	51.2	51.9	0.7		
38	Oxford, town center	41.3	42.0	0.7		
39	Condon Road on the south side	52.1	52.6	0.5		
40	Pomperaug High School, 234 Judd Road	54.4	54.9	0.5		



Figure 3 – Grid Point Locations

Appendix C

Town of Oxford Inland Wetland Permit and State Traffic Commission Certificate



TOWN OF OXFORD

S.B. Church Memorial Town Hall 486 Oxford Road, Oxford, Connecticut 06478-1298 www.Oxford-CT.gov

Oxford Conservation Commission / Inland Wetlands Agency

December 18, 2007

David Blackburn 288 Christian Street Oxford, CT 06478

State of CT DOT Bureau of Aviation and Ports 2800 Berlin Turnpike Newington, CT 06131

Re: Disposition of Application # IW-07-173.

Dear Mr. Blackburn:

At its **Regular Meeting** on Monday, December 10, 2007 the Oxford Conservation Commission / Inland Wetlands Agency made the following decision on your application:

IW-07-173 David Blackburn State of CT DOT Buerau of Aviation and Ports "Waterbury-Oxford Airport" (Lot 1ET) (Hangar) (2,710 s/f of WL Impact) (295,700 s/f of URA Impact). Exp. 1/23/08.

MOTION made by Commissioner T. Adamski and seconded by Commissioner B. Richter to **APPROVE** application **<u>IW-07-173 David Blackburn State of CT DOT Buerau of Aviation and Ports "Waterbury-</u> Oxford Airport"** (Lot 1ET) (Hangar) (2,710 s/f of WL Impact) (295,700 s/f of URA Impact) with conditions based on the final approved plans dated *September 24, 2007* last revised *November 13, 2007* with conditions as recommended by the Town Engineer, Dave Nafis of Nafis & Young's report dated *December 4, 2007*. The conditions of approval are as follows:

- 1) The commission requires that if there are to be outdoor dumpster locations on site that the proposed dumpster areas are shown on the plans. These should be shown on sheet SP-1 with a detail of the enclosure on DN-5. One dumpster location shall be located to serve the lower level and a second shall be located to service the upper area near the hangers.
- 2) The commission requires that there be 3:1 wetland mitigation. This means that the total area of new wetlands begins created must equal 3 times that of the wetland area being permanently impacted. The soil scientist for the project, Michael Kline shall present wetland mitigation plans to the satisfaction of staff. Such mitigation area shall not include the enhancement area noted on the plans currently. A professional shall review the wetland creation area yearly for a period of five years after completion and file a report with the Commission. The owner shall modify and replant the mitigation area as noted in the yearly reports. A bond for the cost of plantings shall be provided for the five-year period.
- 3) The commission requires that oil absorbent sponges or an equivalent be installed in all manholes prior to discharge into the detention basins. Passive Skimmers shall be called out as note 13 in

the product notes of the Grading and Utilities Notes on sheet GN-1. A detail shall be provided to provide product information on sheet DN-5. It shall be called out on both sheets that the passive skimmers or an approved equal will be installed in each storm drainage manhole at the completion of construction.

- 4) The commission requires that the note, "There is no approval for storage of on site fuel and/or hazardous materials other than routine storage for lubricants used in servicing the aircraft." be added to the approved plan set.
- 5) Final revised plans are to be submitted to the Oxford Conservation Commission / Inland Wetlands Agency by 5:00 PM on Wednesday, December 12, 2007.

The reason for approval is the impacts to the wetlands are mitigated by a 3:1 ratio. Voted 5-0 in favor.

* Please Note: This application will remain on the agenda for the next Regular Meeting (1/14/08) to confirm that plans are revised in accordance with the conditions of approval detailed above.

PERMIT EXPIRES: December 10, 2012.

Permit duration is five (5) years. Additional extension must be requested prior to expiration. Permit duration for the activity in the wetlands is one (1) year.

THIS PERMIT IS NOT TRANSFERABLE UNLESS THE NEW OWNER PROVIDES THE COMMISSION WITH A SIGNED ACKNOWLEDGEMENT THAT HE/SHE UNDERSTANDS AND ACCEPTS THE CONDITIONS OF APPROVAL.

Attached please find a copy of the application and if you have any questions please call me at the office at (203) 888-2543 ext. 3065 between the hours of 9:00 AM to 5:00 PM Monday to Thursday.

By Direction of the Commission,

Anna M. Silva OCCIWA Secretary

OCCIWA/as

Cc: Planning & Zoning Claris Construction, Inc. BL Companies Russell A. Green, Attorney

REQUEST RETURN RECEIPT/CERTIFIED & REGULAR MAIL

Article Number: 7006 2760 0001 6983 2933



OXFORD CONSERVATION COMMISSION / INLAND WETLANDS AGENCY

IN. 07. 173

Ref #_____ Subdivision #_

US OS IN		N normit for					
	1) Approval for wetle	and/watercourse	delineatior	n and/or ro	oad layout.		
	2) Approval of site p	lan.			,		
	3) Activity in, impact	t to disturbance (of wetland,	watercou	irse and/or setb	back area.	
	B NOTIFICATION Wetlands nermi	N to Planning &	Zoning, Bi nroval hv	inding, an	cor Health De	er.	
	C. Permitted Operat	tions & Uses und	ter per CT	State Stat	utes 22a-40.		
	P	lease Print Clea	rly or Typ	e		Junitcombio	Ы.
						(C	mpanir
1) Applicants Name:	David Blackburn		_			Phone: (203) 264-6525	(()))
Address: 288 Chris	stian St Oxford, CT		Z	ip: 06478	5	Email: buddy@keystoneav.com	
2) Property Owner (it	not the applicant): State of C (If n	T DOT, Burea ot owner, attach a	u of Avia letter of con	tion and lisent)	Ports	Phone: (860) 594-2535	
Address: 2800 Ber	lin Tumpike Newington, C	T	Z	ip: 06131	l 		
3) Location of Site: V Subdivision Name	Vaterbury-Oxford Airport : N/A	Map: 7/18	Block:	22/24	Lot: 1ET	Unit:	
4) Total Size and Din	nension of Site (acres/ squar	re feet): Overal	1 Site = 40	04 AC; L	eased Area o	f Concern for Permit = 55+/- Ac	
5) Proposed Use/Acti	ivity/Alteration: Site Work	for Proposed H	langar/off	ice Space	e, taxiway, an	d tarmac.	
6) Total acreage/dime	ensions of wetlands/watercc	ourse on site (a	cres/ squa	re feet):]	Fotal Wetland	ls within Lease Area = 12.4 Ac	
7) Wetlands Impacted	d (s/f): 2,710 Square Feet	Up	land Revi	iew Area	Impacted (s/	f): 295,700 Square Feet	
8) Amount of materia	al to be Removed (CY): 0 C	ubic Yards		Deposi	ited (CY): 25	0,000 Cubic Yards	
9) Check whether any	y of the following apply:			·			
[] A portion	of the property affected by the	e decision of the	Commissio	on is locat	ed within five	hundred (500) feet of the boundary of	
an adjoini	ng municipality.			a			
[] A portion	of the sewer or water drainage	e from the project	t site will i	llow throu	ign and signific	cantly impact the sewage system	
Within the Water num	autorining municipality.	ill imnact streets	or other m	unicipal o	or private prop	erty within the adjoining municipality.	
[X] Not Appl	icable.		01 00001 00	F			
If any of the above a the adjoining munici	pply, the applicant is require pality and submit a copy to	ed to give writt OCCIWA. No	en notice tification	of his/hei must be l	r application t by <u>CERTIFI</u>	to the Inland Wetlands Agency of ED MAIL/RETURN RECEIPT.	
Dieses read: A fee mu	st he paid at the time of submi	ssion Annlicati	on Feet Ch	iecks nava	ble to the Oxf	ord Inland Wetlands Agency.	
Some applications may	require an additional State Fe	e due at time of	submission	n. State Fe	e: Checks pay	able to the Town of Oxford. All	
activities within a wetle	and and/or watercourse must b	e completed wit	hin 1 year (of start.			
The undersigned: 1) U	nderstands that submission is c	complete only w	hen all rem	nired fees	necessary info	ormation, supporting documents, maps,	
etc. has been submitted	I. 2) Warrants that all informat	tion submitted he	rein, inclu	ding all m	aterial and sup	porting documents are TRUE and	
CORRECT to the best	t of my knowledge. 3) Grants j	permission for M	lembers of	the Inland	i Wetlands Ag	ency and Commission to conduct site	
inspections and investi-	gate all information provided f	for this application	on during t	he applica	tion process a	nd post approval inspections and	
investigations.	\mathcal{O}						
I understand that if a	ny of the above statements a	are false, I may	be subjec	t to fines	and/or penal	ties.	
Signature of Applica	nt / Agent				Date:	9/24/07	
		ECTION TO P	E COMPI	ETED B	VACENCY		
Date application tece	$\frac{1}{2}$ + $\frac{1}$	Fees re	ceived: _	5 48, 170 5 48, 170		* Receipt #: 59176	
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Late of Final Approv	$\frac{1}{1} \frac{1}{3} \frac{1}$	E	OCCIWA	ן 104 (Rev. 24	16/05)		
Last Revised:		Form	ULLINAL	/07 (ICCY 4/	10000	yru >	
		_		د. د			

Page S of Permit

#070242)



STATE OF CONNECTICUT

STATE TRAFFIC COMMISSION DEPARTMENT OF TRANSPORTATION 2800 BERLIN TURNPIKE, P.O. BOX 317546 NEWINGTON, CT 06131-7546 Phone: (860) 594-3020 Fax: (860) 594-2377

MEMBERS

Commissioner of Transportation Commissioner of Public Safety Commissioner of Motor Vehicles

September 18, 2008

Mr. Mark T. Daley Interim Bureau Chief State of Connecticut Department of Transportation Bureau of Aviation and Ports 2800 Berlin Turnpike Newington, CT 06131-7546 RECEIVED SEP 1 9 2008 BL COMPANIES

Dear Mr. Daley:

Subject: Towns of Oxford and Middlebury Waterbury-Oxford Airport

Enclosed is a copy of Traffic Investigation Report No. 174-0802-01, approved at the September 16, 2008 meeting of the State Traffic Commission (STC), approving the issuance of a certificate for the subject development. Bonding to cover the cost of the certificate requirements is not required for state facilities. Consequently, the aforementioned report will be revised to rescind Condition No. 12. Enclosed is Certificate No. 1796.

The Certificate will expire two (2) years from the approval date of the aforementioned report unless all conditions and requirements are complied with within that period or permission is requested and obtained from the STC to extend the expiration date.

Operation of any portion of the expansion of the facility is prohibited until all conditions of the Certificate have been satisfied, unless permission to do so has been granted by the STC.

Very truly yours,

Robben J. Cabelul

Robbin L. Cabelus Executive Director

Enclosures

cc: Ms. Mary Drayton-Rogers Chief Richard Guisti

Mr. Christopher R. Laux, AIA - Please see Paragraph No. 3. Please confirm completion of certificate requirements prior to the issuance of any certificates of occupancy by calling the STC Office at (860)594-3020.
Mr. Gordon G. Gramolini - Please return the enclosed check list to confirm completion of certificate requirements on town roadways.
Planning and Zoning Commission - Oxford
Planning and Zoning Commission - Middlebury
Mr. Fred M. Greenberg, P.E.
Mr. Peter Dorpalen



STATE OF CONNECTICUT

STATE TRAFFIC COMMISSION DEPARTMENT OF TRANSPORTATION 2800 BERLIN TURNPIKE, P.O. BOX 317546 NEWINGTON, CT 06131-7546 *Phone: (860) 594-3020 Fax: (860) 594-2377* **MEMBERS**

Commissioner of Transportation Commissioner of Public Safety Commissioner of Motor Vehicles

CERTIFICATE NO. 1796

STC NO. 174-0802-01

APPROVED September 16, 2008

EXPIRES September 15, 2010

ISSUED TO: State of Connecticut Department of Transportation 2800 Berlin Turnpike Newington, CT 06131-7546

FOR: Waterbury-Oxford Airport SR 846 Towns of Oxford and Middlebury

> pursuant to Section 14-311 of the General Statutes of Connecticut, as revised, and the Regulations of the State Traffic Commission.

The applicant is hereby ordered to comply with the conditions and requirements as set forth in the attached report and plan(s). Failure to comply with all conditions and requirements will constitute sufficient basis for revocation of the Certificate.

NO PERSON SHALL OPERATE THE DEVELOPMENT OR ANY PORTION THEREOF UNTIL SUCH TIME AS THE APPLICANT HAS COMPLIED WITH THE ABOVE UNLESS PERMISSION HAS BEEN REQUESTED AND RECEIVED FROM THE STATE TRAFFIC COMMISSION TO OPERATE PRIOR TO COMPLETION OF THE CONDITIONS AND REQUIREMENTS.

THIS CERTIFICATE WILL EXPIRE TWO (2) YEARS FROM THE APPROVAL DATE OF THE ATTACHED REPORT UNLESS ALL CONDITIONS AND REQUIREMENTS ARE COMPLIED WITH WITHIN THAT PERIOD OR PERMISSION IS REQUESTED AND OBTAINED FROM THE STATE TRAFFIC COMMISSION TO EXTEND THE EXPIRATION DATE.

Upon due notice from this Commission, this Certificate may be reviewed and modified or revoked in the interest of public safety.

Robben J. Cabelut

Robbin L. Cabelus Executive Director

September 17, 2008 Date

TRA	10 REV 1/08		
Report by:	MLW Date: 8/08	STATE OF CONNECTICUT	STC No: 174-0802-01
Checked by:	BMS Date: 8/08	DEPARTMENT OF TRANSPORTATION	Loc No.
Recommended	BR	REPORT TO THE STATE TRAFFIC COMMISSION	Approved by STC
See Previous Traf	fic Investigation Report No:	Towns of Oxford and Middlebury	SEP 1 6 2008
Requested by:	Mr. Fred Greenberg	Location: Oxford/Waterbury Airport	
How Requested: Date:	Certificate Application January 23, 2008	SR 486 (Airport Access Road) and Prokup Road	Hobben J. Cabelus
			EXECUTIVE DIRECTOR

Recommendation:

In accordance with Section 14-311 of the Connecticut General Statutes, as revised, it is recommended that the State Traffic Commission (STC) issue a certificate to the State of Connecticut Department of Transportation Bureau of Aviation and Ports for the Waterbury - Oxford Airport, a 553,132 square-foot gross floor area airport with 895 parking spaces, located on SSR 486 (Airport Access Road) and Prokup Road in the Towns of Oxford and Middlebury, stating that the operation thereof will not imperil the safety of the public based on the following conditions:

The requirements refer to the plan prepared by BL Companies, entitled and dated as follows:

- A. "Overall Site Plan for State Traffic Commission," dated January 31, 2008 last revised July 14, 2008.
- B. "ISD Profile and Plan View," sheet number ISD-1, dated September 24, 2007 last revised September 9, 2008.
- 1. That the Hangar H and I site driveway onto Prokup Road be constructed in substantial conformance with the referenced plans.
- 2. That intersection sight distances be provided and maintained from the Hangar H and I site driveway onto Prokup Road as shown on referenced plans.
- 3. That a "Stop" sign and stop bar be installed on the Hangar H and I site driveway at Prokup Road in accordance with the "Manual on Uniform Traffic Control Devices," latest edition.
- 4. That the intersection of Prokup Road and Juliano Drive be reconstructed to provide normalized geometry with appropriate signs and pavement markings in accordance with the "Manual on Uniform Traffic Control Devices," latest edition.
- 5. That the site driveway onto Airport Access Road (SSR 486) reflect the geometry shown on the referenced plans.
- 6. That all site driveways onto Tarby Road reflect the geometry shown on the referenced plans.

Traffic Investigation Report No. 174-0802-01 Towns of Oxford and Middlebury Waterbury - Oxford Airport SR 486 (Airport Access Road) and Prokup Road Page 2

- 7. That 280 feet of intersection sight distance to north and south be provided from all site driveways onto Tarby Road, except the northern most drive on Tarby Road at which 280 feet of intersection sight distance is required to the south only.
- 8. That the site driveway (Juliano Drive) onto Christian Street reflect the geometry shown on the referenced plan.
- 9. That 500 feet of intersection sight distance to the south be provided and maintained from the site driveway (Juliano Drive) along Christian Street measured from a point 15 feet back from the edge of the roadway.
- 10. That southbound Christian Street and Benson Road be stop controlled at their intersection with Juliano Drive.
- 11. That all work on roadways that are owned and maintained by the Town of Oxford be performed in conformance with the standards and specifications of the Town.
- 12. That prior to the issuance of a Certificate, a bond be posted and maintained with the Town of Oxford to cover the cost of work required on Town roads.
- 13. That an encroachment permit be obtained from the Department of Transportation's District 4 Office prior to performing any work within the State highway right-of-way. The permit forms must include the applicable detailed construction plans.
- 14. That the STC reserves the right to require additional improvements or changes, as deemed necessary, due to the development's traffic in the future. The cost of any additional improvements or changes shall be borne by the owner of the development.

Mr. Fred Greenberg, the applicant's authorized representative, concurred with the above recommendations on September 11, 2008.

Ms. Mary Ann Drayton-Rogers, the Local Traffic Authority for the Town of Oxford concurred with the above recommendations on September 10, 2008.

Chief Richard Guisti, the authorized representative for the Local Traffic Authority for the Town of Middlebury, concurred with the above recommendations on September 10, 2008.

Report of Findings Towns of Oxford and Middlebury Waterbury - Oxford Airport Traffic Investigation Report No. 174-0802-01

Description:

The Waterbury - Oxford Airport is located one mile south of Interstate 84 and east of Route 188 in the Towns of Oxford and Middlebury. It is owned by the Department of Transportation and serves corporate, charter, and personal aircraft users. No scheduled air services are offered, and the airport has never previously been certified.

At this time, it is proposed to expand the airport by adding 272,582 square feet of hangar and flex type office space, bringing the total gross floor area to 553,132 square feet with 895 parking spaces.

Site Access:

There are currently three points of direct access from the airport to the neighboring street system, Airport Access Road (SSR 486), Tarby Road, and Juliano Drive. The proposed expansion is located on the east side of the airport. Under the expansion a local street, Prokup Road, will be improved and extended to the site to provide further access.

Traffic Volumes:

The expansion is expected to generate 172 vehicle trips during the weekday morning peak hour and 190 vehicle trips during the afternoon. These volumes have been reviewed and approved by the Department's Bureau of Policy and Planning.

DOT Area Projects:

The intersection of Route 67 and Riggs Street is approximately 3.5 miles southeast of the airport. Riggs Street, which connects to Prokup Road, will serve traffic accessing the airport from the south and east. Under State Project 174-328, the intersection of Route 67 and Riggs Street will be signalized to increase operational efficiency and reduce the currently existing delays.

DOT Comments:

The intersection of Juliano Drive, Christian Street and Benson Road currently operates as a three-way stop with northbound Christian Street being the only free-flow approach. The intersection sight distances from Juliano Drive to the north onto Benson Road and Christian Street are short of the minimum considered adequate for the speed limits of those roads. Since both the Benson Road and southbound Christian Street approaches stop at the intersection, no improvements are required at this time. Should the Town wish to revisit the control of this intersection, modifications would be needed to insure minimum safety requirements could be met for these roads. It should be noted that significant geometric improvements would be needed to improve the vertical alignment which currently restricts the available intersection sight distances.

Conclusion:

The addition of the site generated traffic is not expected to adversely affect the overall roadway system provided that the recommended Certificate conditions are accomplished.

The Towns of Oxford and Middlebury and the Department of Transportation are in agreement with the recommendations of this report.



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Appendix D

Agency Coordination



October 9, 2009

Natural Diversity Database/Data Request Environmental and Geographic Information Center Connecticut Department of Environmental Protection – Store Level 79 Elm Street Hartford, CT 06106-5127

ATTN: Nancy Murray

RE: Environmental Impact Evaluation for Waterford-Oxford Airport Proposed Hangar/Office Facility Towns of Oxford and Middlebury New Haven County, Connecticut BL Project No. 07C2427

Dear Ms. Murray:

Claris Construction is proposing to develop an approximately 182,000 square foot property located on the southern portion of the existing Waterford-Oxford Airport property in the Town of Oxford. The project site will provide additional aircraft storage and office space, as well as the extension of the existing taxilane from an existing hangar, "Hangar G", to the proposed tarmac to the west side of the proposed hangar facility.

BL Companies (BL), acting on behalf of the Connecticut Department of Transportation (ConnDOT), is preparing an Environmental Impact Evaluation (EIE) for the project, and is requesting a written response from the Environmental and Geographic Information Center – Natural Diversity Database (NDDB) pertaining to any listed species or areas of critical habitat that may be affected by the proposed action. BL has attached a map of the project area showing the closest NDDB shaded area, which is approximately 0.54 miles to the northeast of the proposed project.

If you have any comments pertaining to listed species or areas of critical habitat relative to the project area, please respond within 30 days of receipt of this letter.

If you require additional information, please feel free to contact me at (203) 630-1406.

Respectfully Submitted,

BL Companies

Daniel A. Hagemah, PSS Project Manager Environmental Resources Group

150 Trumbull Street 6th Floor Hartford, CT 06103 Tel. (860) 249-2200 Fax (860) 249-2400



Connecticut Natural Diversity Data Base Review Request Form

Please complete this form *only* if you have conducted a review which determined that your activity is located in an area of concern.

Name: Daniel Hageman		
Affiliation: BL Companies		
Mailing Address: 355 Research Parkway		
City/Town: Meriden	State: CT	Zip Code: 06450
Business Phone: 203-630-1406	ext. 4202	Fax: 203-630-2615
Contact Person: Daniel Hageman		Title: Environmental Scientis
Project or Site Name: Waterbury-Oxford Airport	Proposed New H	langers
Project Location		
Town: Oxford		USGS Quad: Woodbury
Brief Description of Proposed Activities:		
The project proponent is proposing to develop facility on the southern portion of the existing Oxford. The project site will provide additional extension of the existing taxilane from an exist west side of the proposed hangar facility.	an approximate Waterbury-Oxfor I aircraft storage ting hangar, "Hai	ly 182,000 square foot hangar/office rd Airport property in the Town of and office space, as well as the ngar G", to the proposed tarmac to the
Have you conducted a "State and Federal Listed S	Species and Natur	al Communities Map" review?
Yes I No Date of Map: 200)9	
Has a field survey been previously conducted to de special concern species?	etermine the prese No	ence of any endangered, threatened or
If yes, provide the following information and submi Biologists Name: Address:	t a copy of the fiel	ld survey with this form.
If the project will require a permit, list type of perm	it, agency and dat	te or proposed date of application:

(See reverse side - you must sign the certification on the reverse side of this form)

The Connecti	cut Natural Diversity Data Base (CT NDDB) information will be used for:
	permit application
\boxtimes	environmental assessment (give reasons for assessment):
	Preparation of an EIE according to CEPA Regulations
	other (specify):
"I certify that t the CT NDDB	the information supplied on this form is complete and accurate, and that any material supplied by will not be published without prior permission."
Signature	Danly October 9, 2009 Date

All requests must include a USGS topographic map with the project boundary clearly delineated.

Return completed form to:

WILDLIFE DIVISION BUREAU OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 ELM ST, 6TH FLOOR HARTFORD, CT 06106-5127

* You must submit a copy of this completed form with your registration or permit application.







STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Natural Resources Division of Wildlife 79 Elm Street, 6th Floor Hartford, CT 06106 Natural Diversity Data Base

October 19, 2009

Mr. Daniel Hageman BL Companies 355 Research Parkway Meriden, CT 06450

re: New Hanger and Office on the Southern Portion of Waterbury-Oxford Airport in Oxford, Connecticut

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Dear Mr. Hageman:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed new hanger and office on the southern portion of the Waterbury-Oxford Airport in Oxford, Connecticut. According to our information, there are records for State Threatened *Falco sparverius*(American kestrel) and State Special Concern *Terrapene carolina carolina* (eastern box turtle) from the vicinity of this project site. I have sent your letter to Julie Victoria (DEP-Wildlife; 860-642-7239) for further review. She will write to you directly with her comments.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Environmental Protection's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions at 424-3592. Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely, m .m Dawn M. McKay Biologist/Environmental Analyst

Cc: Julie Victoria, NDDB # 17224

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STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

FRANKLIN WILDLIFE MANAGEMENT AREA 391 ROUTE 32 NORTH FRANKLIN, CT 06254 RECEIVED

TELEPHONE: (860) 642-7239



October 22, 2009

Mr. Daniel Hageman BL Companies 355 Research Parkway Meriden, CT 06450 OCT 2 2009

re: proposed new hanger and office on southern portion of Waterbury-Oxford Airport, Oxford Dear Mr. Hageman:

Your request was forwarded to me on 10/21/09 from Dawn McKay of the Department of Environmental Protection's (DEP) Natural Diversity Data Base. They have historic records of a state threatened species, American kestrel (*Falco sparverius*) and current records of a state species of special concern, Eastern Box Turtle (*Terrapene carolina*) in the vicinity of your project.

American kestrels nest in late March - April in open areas like woodland edges, parks, and open field habitat. They are cavity nesters and seek out abandoned woodpecker or flicker holes to nest. They catch and eat mice, voles, shrews and insects. They winter over much of the nesting range. If kestrels are nesting on this site then I recommend that work not be done near the nest during the nesting season (February - July) and that a sufficient buffer zone be left around the nest to minimize disturbance. This buffer should be determined after the nest is located. Silvicultural practices that maintain high densities of nesting and roosting cavities in trees with a minimum diameter of 30.5 cm will benefit this species.

Eastern box turtles require old field and deciduous forest habitats, which can include power lines and logged woodlands. They are often found near small streams and ponds, the adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April. They have an extremely small home range and can usually be found in the same area year after year.

If this work will be conducted in any American kestrel or Eastern Box Turtle habitat, the Wildlife Division recommends that an ornithologist and/or herpetologist familiar with the habitat requirements of these species conduct surveys between April and September to see if they are present. A report summarizing the results of such surveys should include habitat descriptions, avian and reptile species list and a statement/resume giving the ornithologist'/herpetologist' qualifications. The DEP doesn't maintain a list of qualified herpetologists/ornithologists. A DEP Wildlife Division permit may be required by the herpetologist/ornithologist to conduct survey work, you should ask if your herpetologist/ornithologist has one. The results of this investigation can be forwarded to the Wildlife Division and, after evaluation, recommendations for additional surveys, if any, will be made.

Standard protocols for protection of wetlands should be followed and maintained during the course of the project. Additionally, all silt fencing should be removed after soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted. Please be advised that the Wildlife Division has not made a field inspection of the project nor have we seen detailed timetables for work to be done. Consultation with the Wildlife Division should not be substituted for site-specific surveys that may be required for environmental assessments. The time of year when this work will take place will affect this species if they are present on the site when the work is scheduled. Please be advised that should state

permits be required or should state involvement occur in some other fashion, specific restrictions or conditions relating to the species discussed above may apply. In this situation, additional evaluation of the proposal by the DEP Wildlife Division should be requested. If the proposed project has not been initiated within 6 months of this review, contact the NDDB for an updated review. If you have any additional questions, please feel free to contact me at <u>Julie.Victoria@ct.gov</u>, please reference the NDDB # at the bottom of this letter when you e-mail. Thank you for the opportunity to comment.

Sincerely, W 11

Julie Victoria, Wildlife Biologist Franklin Wildlife Management Area 391 Route 32 N. Franklin, CT 06254 cc: NDDB – 17224

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October 9, 2009

Dr. David Poirier Commission on Culture & Tourism Connecticut State Historic Preservation Office One Constitution Plaza, Second Floor Hartford, CT 06103

RE: Waterford-Oxford Airport Proposed Hangar/Office Space Towns of Oxford and Middlebury New Haven County, Connecticut Project No. 07C2427

Dear Dr. Poirier:

Claris Construction is proposing to develop an approximately 182,000 square foot property located on the southern portion of the existing Waterford-Oxford Airport property in the Town of Oxford. The project site will provide additional aircraft storage and office space, as well as the extension of the existing taxilane from an existing hangar, "Hangar G", to the proposed tarmac to the west side of the proposed hangar facility.

BL Companies (BL), acting on behalf of the Connecticut Department of Transportation (ConnDOT), is requesting a written response from the Connecticut State Historic Preservation Office (CTSHPO) pertaining to the archaeological sensitivity of the Area of Potential Effect (APE). BL has attached a several maps of the APE with associated topographic and water resource information to assist in this process.

BL has reviewed the CTSHPO's *Environmental Review Primer for Connecticut's Archaeological Resources*, adopted 1987, and is prepared to perform an assessment survey should CTSHPO identify areas within the APE that have a high probability for unknown archaeological resources.

If you have any comments pertaining to the archaeological sensitivity of the project area, please respond within 30 days of receipt of this letter.

If you require additional information, please feel free to contact me at (717) 651-9850.

Respectfully Submitted,

BL Companies

James R. Kng

James R. Kodlick, RPA Principal Environmental Resources Group

150 Trumbull Street 6th Floor Hartford, CT 06103 Tel. (860) 249-2200 Fax (860) 249-2400







Historic Preservation and Museum Division

One Constitution Plaza Second Floor Hartford, Connecticut 06103

860.256.2800 860.256.2763 (f) **Connecticut Commission on Culture & Tourism**

October 13, 2009

OCT 21 2009 BL COMPANIES

Mr. James R. Kodlick BL Companies 150 Trumbull Street, 6th Floor Hartford, CT 06103

Subject: Waterford-Oxford Hanger/Office Space Oxford and Middlebury, CT BL Project No. 07C2427

Dear Mr. Kodlick:

The State Historic Preservation Office has reviewed the above-named project. This office notes that the project area possesses moderate to high sensitivity for prehistoric and historic archaeological resources. Therefore, we recommend that a professional reconnaissance survey be undertaken to identify and evaluate archaeological resources which may exist within proposed project limits, including, equipment storage and associated work areas. All archaeological studies must be undertaken in accordance with our *Environmental Review Primer for Connecticut's Archaeological Resources*.

No ground disturbance or construction-related activities should be initiated until this office has had an opportunity to review and comment upon the recommended archaeological survey report.

We anticipate working with all interested parties in the expeditious furtherance of the proposed undertaking as well as in the professional management of Connecticut's archaeological heritage.

For further information please contact Dr. David A. Poirier, Staff Archaeologist.

Sincerely,

Deeg DI

David Bahlman Deputy State Historic Preservation Officer

cc: Dr. Nicholas Bellantoni/OSA

CONNECTICUT www.cultureandtourism.org Historic Preservation and Museum Division

One Constitution Plaza Second Floor Hartford, Connecticut 06103

860.256.2800 860.256.2763 (f) January 5, 2011

Mr. Mark W. Alexander Bureau of Policy and Planning Department of Transportation 2800 Berlin Turnpike Newington, CT 06131

Subject: Phase I Archaeological Investigation – Proposed Waterbury-Oxford Airport Hangar and Office Space Project. State Project No. 107-153

Dear Mr. Alexander:

The State Historic Preservation Office has reviewed the Phase I Archaeological Investigation report prepared by BL Companies for the referenced project. The Connecticut Department of Transportation (ConnDOT) proposes to lease approximately 12 acres of land in order to allow for the construction of a hangar and office space building on the southeastern side of the Waterbury Oxford Airport. The proposed building will have a footprint of approximately with a footprint of 206,000 square feet and will be oriented roughly parallel to Runway 36.

SHPO reviewed the proposed lease and development plan in October 2009 and recommended that a professional archaeological reconnaissance survey be completed prior to construction. BL Companies (BL) completed the requested survey in November of 2010. The archaeological survey included archival research, a pedestrian survey, and systematic subsurface testing of archaeologically sensitive sections of the Area of Potential Effects (APE). In total, BL excavated 222 shovel test pits. The pits were placed at 15 meter intervals on 33 sample transects with supplemental array testing of isolated findspots. Evidence of prehistoric period use of the APE was recovered from eleven test pits, though artifacts were limited to small quantities of quartz debitage. SHPO notes that no more than two artifacts were recovered from a single test pit, and no stone tools or cultural features were identified during the survey. It is BL's professional opinion that the archaeological resources within the APE are not eligible for listing in the National Register of Historic Places. Based on the low density of cultural material and the lack of diagnostic artifacts and/or cultural features, SHPO concurs with BL's assessment. It is SHPO's opinion that this undertaking will have no effect on historic properties, including archaeological resources, listed in or eligible for listing in the National Register of Historic Places.

CONNECTICUT www.cultureandtourism.org



Alexander – Ph.1 Archaeological Survey, Waterbury-Oxford Airport Hangar and Office Space January 5, 2011 (Page 2/2)

The State Historic Preservation Office appreciates the cooperation of all interested parties concerning the professional management of Connecticut's archaeological resources. This comment updates and supersedes all previous correspondence regarding the proposed project.

For further information please contact Daniel Forrest, Staff Archaeologist, at (860) 256-2761 or daniel.forrest@ct.gov.

Sincerely,

David Bahlman Deputy State Historic Preservation Officer

cc: Nicholas Bellantoni/OSA

Appendix E

Environmental Monitor



ENVIRONMENTAL QUALITY STATE OF CONNECTICUT COUNCIL ON

ABOUT US PROGRAMS AND SERVICES PUBLICATIONS CONTACT US HOME

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STATE OF CONNECTICUT

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- MONITOR ARCHIVES





Environmental Quality 79 Elm Street Connecticut Council on



ENVIRONMENTAL MONITOR

The official site for project information under the Connecticut Environmental Policy Act

September 7, 2010

Scoping Notices

There are no Scoping Notices for review and comment in this edition.

Environmental Impact Evaluations

The following Environmental Impact Evaluations have been submitted for for review or comment.

1) **NEW!** Land Lease for New Hangar Facility at the Waterbury-Oxford Airport 2) NEW! Bristol Depot Square Redevelopment Hartford, CT 06106

(860) 424-4000 Phone: Fax:

(860) 424-4070

Executive Director Karl J. Wagener, E-Mail Address:

karl.wagener@ ct.gov

E-ALERTS

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State Land Transfers

STEP I - Notices of Intent to Transfer Property.

NEW! Town of Enfield, Easement
 NEW! Town of Vernon, Easement

STEP II - Public comments regarding proposed transfers that were posted Management's (OPM's) responses to those comments. None in this edition. previously in the Environmental Monitor, and the Office of Policy and

Protection regarding preservation of properties proposed for transfer. None in STEP III - Draft recommendations of the Commissioner of Environmental this edition.

transfer, along with comments and responses from Step III. None in this Environmental Protection regarding disposition of properties proposed for STEP IV - Final recommendations of the Commissioner of edition.

ultimate disposition of properties proposed for transfer. None in this edition. STEP V - Final determinations by the Secretary of OPM regarding the

The next edition of the Environmental Monitor will be published on September 21, 2010. Subscribe to e-alerts to receive an e-mail when The Environmental Monitor is published.

Scoping Notices

There are no Scoping Notices for review and comment in this edition.

environmental impacts does not yet exist. Sponsoring agencies are asking for 'Scoping" is for projects in the earliest stages of planning. At the scoping stage, detailed information on a project's design, alternatives, and

study. Send your comments to the contact person listed for the project by the alternatives and environmental impacts that should be considered for further comments from other agencies and from the public as to the scope of date indicated.

EIE Notices

The following Environmental Impact Evaluation (EIE) notices are submitted for review and comment in this edition.

1) Notice of EIE for: Land Lease for a New Hangar Facility at the Waterbury-Oxford Airport

Address of Possible Project Location: 300 Christian Street, Oxford

Project Description: The project consists of the construction of a hangar and office space building with a footprint of 206,000 square feet on the southeastern side of the Waterbury Oxford Airport parallel to Runway 36. The building will be constructed as a certified LEED® Building including the use of solar energy and geothermal heating.

Project Maps: Click here to view an aerial photo of the project area

Click here to view a map of the project area

Click here to view a detailed map of the project area

Comments on this EIE will be accepted until the close of business on October 27, 2010.

The public can view a copy of this EIE at:

- * The Town of Oxford Town Clerk's Office 486 Oxford Road, Oxford, CT 06478-1298
 - The Oxford Public Library 486 Oxford Road, Oxford, CT 06478

* *

The Town of Middlebury Town Clerks Office - 1212 Whittemore Road,

Middlebury, CT 06762

- The Connecticut Department of Transportation 2800 Berlin Turnpike, The Middlebury Public Library - 30 Crest Road Middlebury, CT 06762 × ×
 - Room 2155, Newington, CT 06131 * The Central Namostick Valley Council of Governments - 60
- The Central Naugatuck Valley Council of Governments 60 North Main The Connecticut State Library - 231 Capitol Avenue, Street Third Floor, Waterbury, CT 06702 ×
 - Hartford, CT 06106.

There is a public hearing scheduled for this EIE on:

DATE: Wednesday October 13, 2010

TIME: 7:00 pm

PLACE: Oxford High School, 61 Quaker Farms Road

NOTES: This document was prepared pursuant to the Regulations of Connecticut State Agencies, Sections 22a-1a-1 to 12, inclusive and was originally published on October 30, 2009. The Department is proceeding with the CEPA document pursuant to Section 1 of Public Act 10-120. The information contained in the document is still current and accurate. Deaf and hearing impaired persons wishing to attend this hearing and requiring an interpreter must make arrangements by contacting the Department of Transportation's Office of Communications(Voice only) at (860) 594-3062, TTY at 860-594-3090 at least five working days prior to the hearing. CTDOT Representatives will be at this location at 6:00 pm to answer any questions.

This document may be found online at: http://www.ct.gov/environmentaldocuments

Send your comments about this EIE to:

Name: Mr. Mark Alexander - Transportation Assistant Planning Director State of Connecticut Department of Transportation Address: 2800 Berlin Turnpike Newington, CT 06131 E-Mail: Mark.W.Alexander@ct.gov

If you have questions about the public hearing, or where you can review this EIE, or similar matters, please contact:

Name:	Mr. Keith T. Hall - Transportation Supervising Planner
Agency:	State of Connecticut Department of Transportation
Address:	2800 Berlin Turnpike - Room 2155 Newington CT 06131
E-Mail:	Keith.Hall@ct.gov
Phone:	860-594-2926

2. Notice of EIE for Bristol Depot Square Redevelopment Project

Municipality where project is proposed: Bristol

Address of Possible Project Location: 100 North Main Street, Bristol

south by Riverside Avenue, to the east by the Boston and Maine Railroad, and to the north located in downtown Bristol. The site is bordered to the west by North Main Street, to the by a small commercial parcel currently occupied by a Dunkin Donuts. The site was the location of the approximately 200,000 SF Bristol Centre Mall, which was demolished in 2008, and currently contains a detached 18,000 SF building occupied by the Bristol Development has prepared the Environmental Impact Evaluation for the Bristol Depot Project Description: The Connecticut Department of Economic and Community Square Redevelopment Project. The project site is an approximately 17-acre parcel Discount Food Outlet.

The proposed action consists of a mixed-use redevelopment of the 17-acre parcel known

Appendix F

Legal Notice

Affidavit of Publication

State of Connecticut County of Fairfield

I, <u>Arleen Rogers</u>, a billing representative of Graystone Group Advertising, 2710 North Avenue, Suite 200, Bridgeport, CT 06604, do solemnly swear that on:

Date: $9/7, 9/21 \notin 10/12/10$ Ad Title: LEGAL NOTICE Appeared in: WATERBURY REPUBLICAN publication and the newspaper extracts hereto annexed were clipped from the above named issue of said newspaper. Subscribed and sworn to this 23_day of <u>lttobu</u>, 2010 before me. Notary Public State of Connecticut My Commission Explored by State S


REPUBLICAN-AMERICAN

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LEGAL NOTICE

The Connecticut Department of Transportation has published a Connecticut Environmental Impact Evaluation for the leasing of land for a new hangar facility at the Waterbury-Oxford Airport in Oxford and Middlebury, Connecticut.

1 and Paracrearly, Connecticut. This document was prepared pursuant to the Regulations of Connecticut State Agencies, Sections 22a-1a-1 to 12, inclusive and was originally pub-lished on October 30, 2009. The Department is pro-ceeding with the CEPA document pursuant to Section 1 of Public Act 10-120. The information contained in the document is still current and accurate.

A public hearing on the document will be held on: Wednesday, October 13, 2010 at 7:00 p.m. at Oxford High School 61 Quaker Farms Road Oxford, CT

Residents, commuters, business owners and other interested parties are encouraged to take advantage of this opportunity to review the project. DOT staff will be present at 6:00 p.m. to answer questions prior

The document is available for public inspection at

Oxford Town Clerk's Office 486 Oxford Road Oxford, CT 06478

Oxford Public Library 486 Oxford Road Oxford, CT 06478

Middlebury Town Clerk's Office 1212 Whittemore Road Middlebury. CT 06762

Middlebury Public Library 30 Crest Road Middlebury, CT 06762

Connecticut Department of Transportation 2800 Berlin Turpike Room 2155 Newington, CT 06131

Central Naugaturk Valley Council of Governments 60 North Main Street – Third Floor Waterbury, CT 06702

Connecticut State 231 Capitol Avenue Hartford, CT 06106 ecticut State Library

http://www.ct.gov/environmentaldocuments Written comments on the document may be submitted on or before October 27, 2010 to:

Mr. Mark W. Alexander Transportation Planning Assistant Director Bureau of Policy and Planning Connecticut Department of Transportation 2800 Berlin Turapite P.O. Box 317546 Newington, CT 06131-7546

Such write astennests or exhibits must be repro-ducible in black and white and on paper not to exceed 8 $1/2^{\circ}$ X 11° is size. These writen statements or exhibits will be rande a part of the public hearing and will be considered in the same way as oral statements.

Will be connected in all source way so that software to Deaf and hearing impaired persons wishing to attend this hearing and requiring an interpreter must make arrangements by contacting the Department of Transportation's Office of Communications (Voice only) at (860) 594-3062 or TTY at 860-594-3000 at least five working days prior to the hearing.

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R-A- September 7 & 21, October 12, 2010

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Mary Ellen Fernandes, Cler 17 Sept 2010 R-A September 21, 2010

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PURCHASING SECRETARY

Dwyer, Secretary September 21, 2010

Legal Notice Planning and Zoning Com-sion of the Town of Salisbury hold a Public Hearing in the sbury Town Hall on Tuesday, bler 5, 2010 at 6:00 PM to con-r a request by the Lake ionscopomuc Association for ange in text from the Salis Zoning Regulations of Article Ction 1004-Enlargement of a

conforming use or nan-ing building or struct graph 4 as follows:

application is on file in the ing and Zoning Office and be reviewed Monday ah Friday between the hours J AM and 4:00 PM. At this IS, interested persons may ind and written communica-

ngand Zoning Commission vyer, Secretary otember 21, 2010

Legal Notice

anning and Zoning Com-n of the Town of Salisbury Id a Public Hearing on the Teapplication on Tuesday, r5, 2010 at 6:00 PM in the ry Town Hall:

13 Iowinnais Ioin Spie 2010-021 by Di-Monore for a Special Per-a Bod and Special Per-a Bod and Special Per-tic Special Control Per-Net Control De Not ambelic on the Control by Not ambelic on the East by Iam & Lorna Cotgan; on the NVF Robert & Valerie Stess: and on the Westby dall & Shiriley Cannon.

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Apen A: Service: CT Corporation System, One Corporate Center, Floor 11, Hartford, CT 05103-8200 HSBC Bank USA, N.A., formerly Marine Midland Bank, 1800 Tysons Boulevard, Suite 50, McClan, VA.2102 At the Regular Meeting of the Flanning and Zoning Commission of the Town of Beacon Falls, held on Sept. 16; 2010, a motion to AP-PROVE application P-2010-184, S& B Dex, LLC was made and passed. VA 22102 In Service: CT Corporation System, One Corporate Center, Floor 11, Hartford, CT Agent for 06103-3220

UPS Cepital Business Credit, formerty First International Bank, 280 Trumbull Street, Suite 12, Hantlord, CT 06103

- UPS Capital Business Careful, formerly First Internetional Back, 280 Trumbull Street, Suite 12. Again dro Savice: Corporation Service Company, 50 Vieston Street, Haitford, CT 06 120-1537 Wdows, heirs, representatives and oreditors of each parson named harein who now or hereafter may be dead. Being the persons and entities appearing of record of as holders of a modgage, Itan or other recumbrance on the property afficided hereby and described in the accompanying Statement of Compensation or any Interest therein: 1. The City of Waterbury has field with the dark of the Suparior Count for the Judicial District of Waterburg at Waterburg A Isolatement of Compensition relative and the sub of the property described in that Statement, and has caused to be recorded in the field of the property described in that Statement, and has caused to be recorded in the table of the provident accompanies this notice and is attached hereio as Exhibit A and made a toy's of which accompanies this notice and is attached hereio as Exhibit A and made a toy's of which accompanies this notice and is attached hereio as Exhibit A and made a toy's of the condemoner shaft file with the derk of Superior Count a return setting forth the city of Varier Day of the condemoner shaft file with the derk of Superior Count a return setting forth the city of a process having a record interest in the premises, as provided in Count. 1. Upon setting of cautor here of notice the day shaft the service of tables, setting forth the the notice of cautor here of notice the city shaft setting according to the setting of the process of the tables of the setting as the set of the setting of the process of the setting as a coording the setting as cordinates of the setting of the process of the setting as a coording the setting the setting of the condemoner shaft file with the derk of Superior Count a return setting forth the setting of cautor here of nonities the setting the derk shaft issue a cordinate of tables.
- nolice given to all persons having a record interest in the premises, as provided in CUNN. GEN, STAT, SP 4126. Upon receipt of such return of notion; the clark shall itsure a certificate of taking, asking forth in clard at activitiating, a description of all the provider so taken, and the names of all owners and other persons having an interest therein. for recording in the Town Clark's office of each toom the country of such certificate of taking, tills to the premises described therein shall both mit and a data chart certificate of taking, tills to the premises described therein shall such the country of such certificate of taking, the to the premises described therein shall such property and take write according in there the takes office of each vasit in the country of such certificate of taking, the to the premises described therein shall such through and takes write according the takes office of the proposed with the plannet use of the proposed with regime to such property in pursuance with the plannet use of the proposed with regime to such property in the country of such and use of the plannet proposed with regime to such property in the take there in which own or hereafter may be dead.

CITY OF WATERBURY By Michael G Tansley - Cicchelt, Tansley, & McGrath LLP - Its Altomeys 500 Chase Parkway, Waterbury, CT 05708 Telephone, (20) 574-6700 Facsimile: (203) 574-2902 Juris No. 402499

DOCKET NO ·

SUPERIOR COURT CITY OF WATERBURY J.D. OF WATERBURY VS. WATERBURY INDUSTRIAL COMMONS: AT WATERBURY ASSOCIATES, ET AL : AUGUST 31, 2010

STATEMENT OF COMPENSATION

The City of Waterbury ("Condemner"), represents and states:

- The Condemner is a political subdivision of the State of Connecticut. The governing body of the Condemner is the City of Waterbury Board of Adarmen ('Board of Adarmer') On March 22, 2010, the Board of Aldermen auly woled to acquire the real property located at and known as 1875 Thomesion Avanue, Waterbury, Connecticut, a portion of which includes the real property formely known as Old Colonia Road, Waterbury, Board ad no known as 1875 Thomesion as Old Colonia Road, and the real property breaked at within the tarritonial limit of the City of Waterbury, as hereinafter mice particularly described ("Property") and found that subdivision ordermation was required in order to develop and construct a new public works facility for the City of Waterbury Department of Public Works facility. 3.
- (Department) in order for the Department to be unboundary on a department of Compensation is located facility. The Property to be laken pursuant to this vote and this Stalarment of Compensation is located in the CVI of Westerbury and is more particularly bounded and described as set forth on Schedule A altached hereto and masks as part hereo. The American Schedule A altached hereto and masks and part here or may have a record interest in the Property are set forth on Schedule B actiched hereto and made a part hereof. The Consomer has determined that the anount of the compensation to be paid to the persons and entities entitied thereto is rule Property is Three Hundreis and 00/100 (\$300,000,000 Doltars and, on even date herewith, this sum is being deposited with the Clerk of the Superior Court in accordance with the provisions of §8-130 of the Connecticut General Statuses.

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CITY OF WATERBURY By Michael & Tensley - Citchetti, Tansley, & MoGrath LLP - Its Attorneys 500 Chase Parkoway, Waterbury, CT 04706 Telephone: (203) 574-4700 Facsimile: (203) 574-2902 Juris No. 40245

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TUESDAY, SEPTEMBER 21, 2010

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SCHEDULE B - Partles in Interest

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 20. 1991 and recorded Dec. 27. 1991 in Volume 2008, Page 13 of De Waterbury Land Records.
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- Agent for Service: CT Corporation System, One Corporate Center, Floor 11, Hartford, CT 05103-3220 32.
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- 05103-3220 Kennecott Mining Corporation, 397 Midland Building, Cleveland, Ort 44:115 Agent for Service pursuant for CONN, GEN, STAT, 552-550: Secretary of the State of Connecticut, 20 Triuly Street, Istardor, CT 05105 Magnetex, Inc., N49 W13550 Campbell Torke, Mexomonee Falls, WI 53051 Agent for Safety CT Corporation System, One Corporate Center, Floor 11, Hartford, CT Ethers 2020 Ether State Associates
- Harmagnetic General Corporation, Box S66, New Kamer Road, Criddarfand, NY 12084 Agent for Service pressuant for CONN, GEN, STAT, 552-56b: Secretary of the State of Connectiou. 30 Trinkly Street, Hardhord, CT 06106 Intermagnetics General Corporation, 450 Old Niskayuna Road, PO Box 461, Letham, NY 2110-0461 36
- 12110-07461 Agen for Sankap pursuant for CONN. GEN. STAT. 562-596: Secretary of the State of Connecticut, 30 Trinity Streat, Hardford, CT 08106 ICC Advanced Superconductors, Inc., do CT Corporation System, 1209 Orange Streat, Wilmington, DE 19801, and 1875 Thomaston Avenue, Waterbury, CT 08704 Adgent for Service: CT Corporation System, One Corporate Center, Floor 11, Hardford, CT 61103-079 37
- Bi Libo Industrial Products, Inc. 7900 Tanners Gate, Florence, KY 41042
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 Quincy Packaging Group, L.P., ed CT Comportation Trust Center, 1209 Orange Street, Weinington, DE 13901 Agent for Sender public Activity of Connection, 2016, 2017. Secretary 2017. Sec
- Oef03-3220
 UPS Capital Business Credit, formerly First International Bank, 280 Trumbull Street, Suite 12, Hardrod, CT 08103
- Agent for Service: Corporation Service Company, 50 Weston St, Hartford, CT 05 120-1537 R-A Sept. 21 & 28, 2010*

TRUE COPY ATTEST - MICHAEL J. BROWN, CONSTABLE

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25,000 car count. -800-801-8277; (203) 729-8277

Appendix G

Public Hearing Comments

Inlarging Oxord Airport Hanger Space

1 message

Barbara Colonel <cbcolonel@gmail.com>

Fri, Oct 8, 2010 at 1:48 PM

Draft Suptlemen "

I just finished reading the article in Voices about the environmental impact study hearing to be held on oct. 13 at@xford high school, I realize that all agencies have to be informed and money spent to have all studies completed before a hearing can be held. All these things are important, but to me none of them are the most important.

I live in Oxford Greens development, three miles from the airport. I witnessed a very very near miss this spring and called the airport. I was told I had to call the state building. After I

told my story ,he said, YOU KNOW THAT THERE IS NO RADAR AT OXFORD AIRPORT. I was so suprised i was speechless.

_____ How can an airport that has the third longest runway in the state and hangers 250 aircraft get the O K to build an additional hanger of 206,000 sq. ft. that will allow more aircraft to be kept there with NO RADAR to control them. That to me is the most important item that should be addressed. Every person that I told this to was as surprised as I was when they heard NO RADAR. -

My feelings are that very few people in the surrounding towns know that the airport has no radar and that the officials of these towns should make this fact known to them, not to scare them but maybe if enough people know this we can petition the FAA or the DOT or the agency responsible to take action

Thank you for reading my comment and as 2 of the over 600 residents of \$\$ ford @reens alone, hope someone can and will help.

ýou again,

Calvin J CoLOMEL Calvin J CoLOMEL Calving freen Lane 536 Putting Green Lane Oxford, CT 06478 Thank you again,

Response to Comment 1: Barbara Colonel

The radar issues presented on Ms. Colonel's comment note, while it may provide information on other issues, does not relate to the proposed Land Lease Agreement and Hangar project that was evaluated in the EIE document. Thus, there are no direct comments to respond to at this time with respect to Ms. Colonel's note.



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH ENVIRONMENTAL HEALTH SECTION

September 29, 2010

Mark W. Alexander Department of Transportation 2800 Berlin Turnpike Newington, CT 06131

RE: Draft EIE Waterbury-Oxford Airport Proposed Hangars H & I

Dear Mr. Alexander:

A review of the draft Environmental Impact Evaluation does not reveal the consideration of our comments submitted on September 17th in the text or the Appendix.

The project mentions construction of a hangar with office spaces. These occupied spaces should be built using radon resistant features. The Connecticut Department of Public Health Radon Program recommends that during the construction of the hangar and office space, radon resistant features should be built into the infrastructure of the building.

The list below describes the basic components of radon resistant new construction:

- A gas permeable layer, such as 4-inch gravel, placed beneath the slab to allow soil gases to move freely underneath the building
- Plastic sheeting over the gas permeable layer and under the slab to help prevent soil gases from entering the home
- o Sealing and caulking all openings in the foundation floor to reduce soil gas entry
- A vent pipe, such as 6 inch PVC pipe, to run from the gas permeable layer through the building to the roof to safely vent soil gases above the building
- o An electrical junction box installed in case an electric venting fan is needed later

The facility should be tested for radon after construction is completed. If radon results are at or above 4.0 picocuries per liter (pCi/L), the existing system should be activated by installing an in-line fan.

Additional inquiries on the subject of radon resistant new construction can be directed to Francesca Provenzano, Health Program Supervisor of the Radon Program, at 860-509-7367.

Sincerely,

Suzanne Blancaflor, M.S., M.P.H., Chief Environmental Health Section

C: J. Smith, Office of Policy Management



Phone: (860) 509-7299, Fax: (860) 509-7295 Telephone Device for the Deaf (860) 509-7191 410 Capitol Avenue - MS # 51LED P.O. Box 340308 Hartford, CT 06134 An Equal Opportunity Employer Response to Comment 2- State Department of Public Health

The private developer, Keystone Aviation, LLC, will take into consideration using the radon resistant and testing recommendations when constructing the building in order to minimize or eliminate the potential for radon exposure.



STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

79 ELM STREET, HARTFORD, CT 06106-5127

То:	Mark W. Alexander - Transportation Assistant Planning Director DOT - Office of Environmental Planning, 2800 Berlin Turnpike, Newington	
From:	David J. Fox - Senior Environmental Analyst	Telephone: 860-424-4111
Date:	October 27, 2010	E-Mail: david.fox@ct.gov
Subject:	Proposed Hangars H and I, Waterbury - Oxford Airport	

The Department of Environmental Protection has reviewed the Environmental Impact Evaluation (EIE) for construction of new hangars at Waterbury - Oxford Airport. The following comments are submitted for your consideration.

Page 7 states the project will be designed with a goal of obtaining a LEED designation of gold certification. Among the design elements are a 1000 kW solar array on the hangar roof, geothermal heating and cooling, and the stormwater treatment system. The Department commends the private developer of the hangars, as well as ConnDOT, for these commitments.

Page 36 lists the various Low Impact Development techniques that were provided as general recommendations during scoping for this document. The Department appreciates the fact that each of these recommendations were considered in the design of the stormwater system and, where they could not be accommodated, the reasons have been documented.

As discussed in the EIE, a portion of the runoff from the large roof area will be discharged to the underground detention/retention pipes and a portion to the proposed rain garden, which will be constructed with 2 feet of sandy soil below a layer of topsoil and compost. The amount of runoff to be directed to the rain garden and whether native soils will be utilized were not reported. The following on-line resources provide information regarding rain garden design and sizing:

- UConn's Rain Gardens in Connecticut: A Design Guide for Homeowners http://nemo.uconn.edu/publications/rain_garden_broch.pdf
- Wisconsin's Rain Gardens: A How-To Manual for Homeowners -<u>http://learningstore.uwex.edu/assets/pdfs/GWQ037.pdf</u>
- Urban Design Tools from the Low Impact Development Center http://www.lid-stormwater.net/bio_sizing.htm

Page 70 lists the Army Corps of Engineers (ACOE) Section 404 permit and DEP Section 401 Water Quality Certificate as Category 1 - non reporting. There is no documentation that the ACOE has been consulted to confirm this conclusion. In order to make a determination as to Category 1 eligibility for Section 404 and Section 401 permitting under the *Department of the*

Army, Programmatic General Permit, State of Connecticut, documentation of wetland impacts, including an accounting of any previous direct and secondary wetland impacts, should be submitted to the Army COE as part of a single and complete project review. In accordance with *Programmatic General Permit Conditions, General Requirements 5, Single And Complete Projects*, the sum of previous and proposed direct and secondary wetland impacts would have to be less than 5000 square feet in order to be potentially eligible for Category 1 authorization. Previous direct and secondary wetland impacts that were permitted or should have been subject to permitting under the Federal Clean Water Act (Section 404 and Section 401) within the bounds of the Waterbury-Oxford Airport site need to be identified. After reviewing that information, the ACOE would be able to determine the appropriate path for Section 404 and Section 401 permitting: either Category 1 or application for Category 2 under the Programmatic General Permit, or an individual permit application.

The proposed stormwater collection system includes two detention basins. The applicant should also be aware that any detention structures should be reviewed by the Inland Water Resources Division for possible dam construction permit requirements pursuant to section 22a-403 of the Connecticut General Statutes.

The document states that "any state agency proposing an activity within or affecting a floodplain or that impacts natural or man-made storm drainage facilities must submit a flood management general certification. (FMGC)" and that "a FMGC application will be submitted to CTDOT." This project is exempt from certification pursuant to section 25-68d(f) of the CGS, since it is a proposal by DOT for a project within a drainage basin of less than one square mile.

The Department acknowledges the noise analysis that was conducted for hangars H and I, that was a specific issue we had raised during previous CEPA review of the runway extension. As explained in Appendix B, the hangar construction will significantly increase jet operations at the airport. The analysis assumed that the 75% increase in hangar space will directly translate to a 75% increase in jet operations. The modeling determined that resultant noise increases will be minor, with the average increase being DNL 0.5 dB, primarily due to newer generation jets being much quieter.

Page 44 states that "since the proposed action is not located within any areas of known federal or state threatened, endangered or special concern species or areas of critical habitat, it would have no impacts on listed species." As noted in previous correspondence cited on page 42 and included in Appendix D, Eastern box turtles and American kestrels have been observed in the vicinity of the site. The fact that the Natural Diversity Data Base (NDDB) mapping was ½ mile away is cited in the document. The NDDB maps and records represent approximate locations of endangered, threatened and special concern species and significant natural communities in Connecticut. The locations of species and natural communities depicted on the maps are based on data collected over the years by DEP staff, scientists, conservation groups, and landowners. These data are compiled and maintained in the NDDB. The maps and records are intended to be a pre-screening tool to identify potential impacts to state-listed species as not all areas of the state have been surveyed. The NDDB records should not be substituted for on-site surveys required for environmental assessments. The lack of access to airport property could be a factor in the NDDB results.

The document notes that the site was field investigated several times in 2007 and in 2009 by qualified wetland and wildlife biologists and listed species were not observed. However, the extent of this effort or the time of day and year was not specified.

The description of existing habitat, a mixture of maintained fields, early successional habitat, deciduous and mixed forests and wetlands, is Eastern box turtle and American kestrel habitat. The project will result in the loss of 10.27 acres of this upland habitat. Therefore, the Department recommends that the following mitigation measures be observed:

- The time of year that the clearing of the upland habitat will be done can negatively impact box turtles. As these turtles over-winter on land, land clearing and heavy vehicle use during the winter could bury and destroy hibernating turtles. Box turtles are very active from June (when the females are nesting) to August (when the pairs are mating). The Wildlife Division recommends that land altering activities take place during the turtles' active season: April 1 to November 1.
- Just before the land clearing equipment goes into the area to work, 'turtle sweepers' (people who can identify Eastern box turtles, pick them up, and remove them from the work zone) should precede the equipment and clear the area of turtles. After an area has been 'swept' the work zone should be ringed with silt fencing to prevent additional turtles from entering.
- Workers should be notified of the possible existence of Eastern box turtles and instructed not to harm them. Times to be on the lookout for turtles would be during early morning and evening hours when basking or foraging turtles are out, or during or after summer rainstorms.
- Habitats of concern would be all old field habitat especially from June through October, and wetland habitats including wet meadows and seasonal pools. All precautions should be taken to avoid degrading the wetland habitats.
- Since the land altering activities are recommended for April 1, surveyors can search for American kestrels that are setting up territories in February and laying eggs in late March. Artificial nesting box plans can be provided. Nesting boxes and silvicultural practices that maintain high densities of nesting and roosting cavities in trees with a minimum diameter of 12" will benefit this species.

The official name of the Larkin State Bridle Trail is now the Larkin State Park Trail. The Department has changed the name to more accurately describe its use as a multi-functional, as opposed to a primarily equestrian, trail. Future maps and documents should incorporate the new name.

Page 56 notes that "air quality impacts <u>can</u> be mitigated during the construction period by utilizing the following measures (emphasis added)" and goes on to list several, including retrofitting non-road construction equipment and anti-idling regulations. There is no commitment to utilize the measures.

With regard to the retrofit of emission control devices on non-road construction equipment, the use of newer equipment that meets EPA standards would obviate the need for retrofits. The Department also recommends the use of diesel oxidation catalysts or diesel particulate filters for pre 2007-model year on-road vehicles typically used in construction projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites. Again, the use of newer vehicles that meet EPA standards would eliminate the need for retrofits.

Section 22a-174-18(b)(3)(C) of the RCSA limits the idling of mobile sources to 3 minutes. This regulation includes on-road vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. Adhering to the regulation will reduce unnecessary idling at truck staging zones, delivery or truck dumping areas and further reduce construction equipment emissions. Use of posted signs indicating the three-minute idling limit is recommended. It should be noted that only DEP can enforce Section 22a-174-18(b)(3)(C) of the RCSA. Therefore, it is recommended that the project sponsor include language similar to the anti-idling regulations in the contract specifications for construction in order to allow them to enforce idling restrictions at the project site without the involvement of the Department.

Thank you for the opportunity to review this project. If there are any questions regarding these comments, please contact me.

cc: Keith T. Hall, DOT Jeff Caiola, DEP/IWRD Robert Clapper, DEP/SPD Robert Gilmore, DEP/IWRD Robert Hannon, DEP/OPPD Jessica Morgan, DEP/WPSD Susan Peterson, DEP/WPSD Ellen Pierce, DEP/APSD Stephen Tessitore, DEP/IWRD Julie Victoria, DEP/WD

Response to Comment 3– State Department of Environmental Protection (CTDEP)

<u>Rain Garden Design Comment</u>- The developer has designed the rain garden and stormwater Best Management Measures in accordance with the DEP Stormwater Quality Manual (2004) and will take into consideration the additional references cited. Keystone will coordinate with CT DOT to amend the Airport's Stormwater Pollution Prevention Plan (SWPPP) based upon the addition of the new hangar facility. Additionally, on November 20, 2007 a General Permit for Stormwater Discharge associated with Construction Activities was submitted to Mr. Chris Stone prior to construction activities for this project before CEPA was required. That permit will be revised to reflect the current plan and dates.

Army Corps Section 404 Permitting and CTDEP 410 Water Quality Certification comment-

Keystone Aviation, LLC (Keystone) and the State Department of Transportation (CTDOT) believes that based on the project design, the proposal is under the threshold of 5,000 sq. ft of direct and indirect impacts to wetlands. The project is considered a Single and Complete project with no secondary or cumulative impacts projected from the development of this project. Secondary, temporary and cumulative impacts have been minimized through the use of the following measures:

- 1. Soil erosion and sedimentation measures;
- 2. Temporary and permanent sediment basins; and
- 3. Limits of disturbance around wetlands will be flagged prior to clearing activities to avoid inadvertent vegetation removal beyond what is permitted.
- 4. Care, protection, and planning for listed wildlife species (discussed further in following sections).
- 5. Restoration of portions of the temporary haul road, where it is not incorporated into the building or parking lot design.

There are no required additional taxiway improvements that are required to be constructed because of this project. Attached is a letter from the FAA to Mr. Robert Bruno of CT DOT Aviation indicating that taxiway improvements are not needed for the purpose of this project. The demand for additional hangar space is the driving need to develop this facility.

Presently, there are 2,553 sq. ft. of direct wetland impacts associated with the Hangar project evaluated in this EIE. Based upon the project design and incorporating environmental Best Management Measures to avoid secondary impacts, it is believed that the project meets the Category 1 PGP criteria.

Additionally, the storm water management system has been substantially designed to manage storm water runoff in a manner that will allow for no net increase in the rate of runoff to downgradient wetland areas, while renovating stormwater from impervious areas prior to discharging from the basins. In this way, the design prevents degradation to surface or ground waters.

Keystone Aviation in cooperation with the CTDOT, will coordinate with the Army Corps of Engineers to obtain a verification that a determination of a Category 1 non-reporting Programmatic General Permit (PGP) is appropriate. CTDOT will make this part of the regular project managers meeting among the CTDOT and the various state and federal agencies.

If it is determined, through coordination with the regulatory agencies that the project does not meet the CT PGP Category 1 threshold criteria, the developer will coordinate with these agencies to properly address any outstanding concerns and apply for the proper permits.

Detention Basin Design/Dam Permit-

A letter of permit need determination is currently being prepared and will be submitted to CT DEP for the proposed detention basins.

Based on experience and in light of the facts that:

- 1. The water storage elevation is less than three feet above existing grade
- 2. The volume of water stored is less than 2 acre feet for either basin
- 3. There is a large swamp area directly down gradient of the basins
- 4. There are no roads, structures or inhabited areas within approximately ½ mile down gradient of the basin location and the area between is heavily wooded.

It is unlikely that a dam permit will be required. <u>Flood Management General Certification (FMGC)</u>-We concur with the comments that no permit is required.

Listed Species Comments-

Keystone and CT DOT have reviewed the comments and the proposed scheduling of the project in relation to the species time of year constraints. Keystone will retain a herpetologist and an ornithologist to study the proposed site development area for the eastern box turtle and the American kestrel. These scientists would determine if species are present, work on mitigation management measures during construction, and prepare a brief report to CT DEP Wildlife Division on the results. Keystone will hire an ornithologist to conduct a survey for one week during the early spring. The herpetologist will be working through early spring and through the beginning of construction to help assist on identifying, protecting and relocating (if necessary) box turtles within the limits of construction areas.

During the period between January 2011 and April 1st, 2011 Keystone would like to pursue possible limited construction activities in areas where species avoidance is maximized. There are western facing slopes and open field areas that have been identified by CT DOT and Keystone as possibly suitable to conduct a limited amount of construction activities, while respecting other potentially more sensitive forested and shrub habitats where the turtle, if present, could presently be over wintering. Attached is an existing Vegetation Cover-Type map of the proposed site development area, which identifies the following habitat types: Forested (FO), Shrub-Scrub (SS) and Open Field

(OF). In addition, the slope-aspect is easily determined from the compass orientation on the plan. Keystone would request to construct a haul road within the existing compacted dirt road that extends from the current paved parking lot south of Hangar G toward to the open field. The temporary sediment basin would be located within the open field. All of this work is proposed outside of potential over winter habitats that the box turtle would prefer. Adjacent to the haul road is shrub-scrub habitat similar to adjacent habitats to the open field community.

By performing a portion of the foundation work (westerly foundation of Hangar H), it may help to prevent potential construction and turtle conflicts when any possible populations of turtles would emerge in the spring, in addition to having silt fence properly installed along the haul road. The proposed westerly foundation of Hangar H will run parallel with the open field and edge habitat. The turtle would not be able to traverse the foundation wall but rather would be safely relegated outside the construction envelope. In addition, the developer will be providing measures that will help alert contractors to sensitive areas, relegate species movement in order to avoid conflicts, and provide long-term beneficial habitat for the box turtles. These measures include the following:

- **a.** Notice to Contractors about working in Environmentally Sensitive Areas. These NTC's will be reviewed by CTDOT and will be coordinated with the DEP Wildlife Division.
- b. Early Succession habitat planting on easterly-facing slope behind the proposed Hanger. This will include spreading New England Wetland Plants (NEWP) Native Warm Season Grass Mix: and NEWP Conservation/Wildlife Mix. A mix of early successional shrubs will be utilized on this slope as part of the final planting plan. Species considered for planting include sweet fern (*Comptonia peregrina*), serviceberry (*Amelanchier canadensis*), eastern redcedar (*Juniperus virginiana*), and common juniper (var. *depressa*) and northern bayberry (*Myrica pennsylvanica*).
- **c.** Properly planned and execution of silt fence installation to keep turtles from entering construction zones with breaks within the fencing to allow movement safely past any work zones.
- d. Should turtles be discovered, DEP Wildlife Division will be notified.
- e. Ongoing herpetologist site visits to monitor any potential turtles and their movements. Practices to occur to protect any potential box turtle species will include:
 - i. Having the herpetologist and other biologists from BL sweep areas prior to land clearing equipment clearing areas, other than those that we coordinate with DEP to start on in advance of the early spring (April 1st). Any turtles observed will be removed from work zones and the area will be ringed with silt fence to prevent other turtles from entering.
 - ii. Workers will be educated as to what the box turtles look like, that they are sensitive species, the times of day to look out for turtles, and not to harm them. They will be instructed that if they do find a

turtle to call the Project Manager at BL Companies. BL will follow up coordinating having the turtle moved from the project area.

iii. All efforts will be made not to degrade or otherwise negatively affect areas outside of the limits of construction. It is not in the interest of Keystone or CT DOT to cause unnecessary impacts to areas on this or any project.

Based upon the site being an airport facility and having an anti-birding campaign for the safety of air travelers, we would not promote the installation of bird boxes. The ornithologist will study the area to assist in determining if nests are being built in late winter-early spring. If nests are discovered, we will coordinate with CT DOT and CT DEP Wildlife Division.

Larkin State Park Trail:

We have corrected the name of this state trail throughout the document to reflect the name change of Larkin State Park Trail.

Air Quality Impacts-

Keystone will review the equipment the contractor(s) may use to determine if retrofitting non-road construction equipment with emission control devices is needed. Additionally, Keystone will consider the use of diesel oxidation catalysts or diesel particulate filters on pre-2007 model year on-road vehicles typically used for construction, as noted in the CTDEP letter. The intent is to adhere to regulations relating to idling requirement and will consider signage at the project site indicating three-minute idling limits.

From: Kelly, James A SIK
Sent: Thursday, October 21, 2010 8:57 AM
To: 'Mark.W.Alexander@ct.gov'; 'David.Head@po.state.ct.us'
Cc: 'hallandsavarese@snet.net'; 'Sen. Kane, Rob'
Subject: New hangers Noise Impact?
Importance: High

Hi Dave,

I understood from our conversation almost 12 months ago that the new hangar would not cause any additional noise contour changes, however, in the local "Voices" paper, Mr Shamus indicates quite differently.

"With respect to noise, Mr. Shamus said jet activity at the airport is expected to increase by 4,125 operations for a total of 11,800 operations in 2013 as a result of the two hangars. Thus, the noise contours are expected to be slightly larger than they are now, Mr. Shamus said."

Is there a clarification that is needed in the paper? If this is the case, then can you be a little more sensitive on the perception of how airport changes may raise adjacent town residents' concerns. If you informed people upfront, who are on your email distribution from previous noise study briefings, then I would not be sending you these questions.

However, if there is a noise impact then:

1. What is going to be done to the Noise Studies Report?

2. What is public review process of noise impact to surrounding towns that will be required prior to giving an OK for the hangar building to begin?

3. Why was there no email invitation to the residents who have always been concerned and present at previous noise study briefings?

Don't get me wrong I love 300 jobs coming about because of this new hangar but their needs to fair compensation to those who get impacted by the increased safety issue of a higher estimate of aircraft operations, lower property values, and loss of sleep.

If you could respond to all those on this emails distribution, I would appreciate it.

Very respectfully,

Jim Kelly

V(203) 386 -3965 F(860) 998-5501

Response to Comment 4: Jim Kelly, Middlebury, CT

Unfortunately the quoted news article was not completely accurate or complete. The Department will review the public hearing transcripts to determine exactly what was said on this matter during the hearing. However, the Environmental Impact Evaluation (EIE) for the project provides the details needed to understand the project and anticipated outcome including noise impact.

Specifically, a large increase in jet aircraft operations is anticipated due to the hangar development; however, the noise analysis is based on the increase in airport noise in relationship to the overall noise created by all aircraft (single-engine, twins, helicopters, turboprops, and jets). The additional 4,125 jet operations are an increase of 6 percent above the total forecast activity of 69,485 annual operations. It was assumed that tenants of the new hangar will be of newer aircraft that have a substantially lower noise footprint.

A new noise evaluation was completed and found that no additional houses would be located within the noise impact area, and that existing impacted homes would experience an average noise level increase of approximately 0.5 dB. The results of the new evaluation are provided in the EIE. The new noise contours are slightly larger, but no additional noise impacts are anticipated.

The Department undertook due diligence in advertising and promoting the hearing as well as the publication of the EIE. The EIE and subsequent public hearing was advertised on multiple dates and in multiple publications. <u>The Waterbury Republican</u> also published an article on the subject in advance of the hearing.

Unfortunately, when the FAR Part 150 Noise Study was completed in 2008, the contract to update the noise study website and email lists and distribution was closed. That service was part of the noise study funded by the FAA. The current project is privately funded. While the advertisements conducted satisfied (and exceeded) requirements, it did not include individual emails to mailing lists maintained during the noise study.

From: CALABRJ2@nationwide.com [mailto:CALABRJ2@nationwide.com] Sent: Tuesday, October 26, 2010 1:58 PM To: Alexander, Mark W Subject: DOT Hearing re Oxford Airport

PRIVILEGED AND CONFIDENTIAL

ATTORNEY CLIENT COMMUNICATION AND/OR ATTORNEY WORK PRODUCT. If this e-mail is received in error, please call John P. Calabrese Esquire at (860)256-2521

Dear Mr. Alexander:

This email is being directed to your attention in response to the recent article regarding the construction of two hangars at the Waterbury Oxford Airport. The letter is being directed to your attention in response to the comments made with regard to noise emanating from the flights taking off and landing at that airport. The recent article characterized the increase in operations at approximately 50% with noise contours as "slightly" larger than they are now. I would request that this component of the reporting be looked into closely as the characterization may be somewhat minimized from the actuality.

As a resident of Middlebury, I have found a moderately significant increase in noise levels from that airport, and specific instances where noise levels and/or vibrations have been high. It would appear that there are increased number of instances where flights approaching the airport do so at lower altitudes than may be represented, thereby bringing significant noise and vibration to the surrounding area. I have found that at "off" times, flights seem to come in lower, with higher noise levels, and in my own instance, find the vibrations to radiate through the home. I am not that close to the airport that this should occur. It would appear as if these flights may not be following established flight paths, or otherwise drop too low too soon. The pattern of this is erratic, but seems to follow what I would call "off peak" times, i.e. where working adults may not be home to notice.

The characterization that a 50% increase in operations of flights would have a slightly larger impact seems to be an under representation at best. I would ask that closer exam be conducted on this issue to ensure that the neighboring residents, or their property values do not suffer. While I recognize the positive economic factors, I do not want the residents of the area to be lost in the process as is often the case.

If you have any questions that you would like to direct to my attention, please feel free to do so.

Regards,

John Calabrese, Esq. Middlebury, CT

Response to Comment 5: John P. Calabrese, Middlebury, CT

Approximately 50 percent increase in jet aircraft operations is anticipated due to the hangar development; however, the noise analysis is based on the increase in airport noise in relationship to the overall activity created by all aircraft (single-engine, twins, helicopters, turboprops, and jets). The additional 4,125 jet operations are an increase of 6 percent above the total forecast activity of 69,485 annual operations. The 4,125 operations are spread out over the year, and therefore amount to fewer than six (6) takeoffs per day on average. Furthermore, it was assumed that tenants of the new hangar will be of newer aircraft that have a substantially lower noise footprint than some of the jet previously operated at the Airport.

Note that all input data and assumptions are documented in the study reports, the results have been reviewed, and the evaluation used the approved FAA method. The provided documentation is adequate for independent verification.

The nature of airport operations and flight tracts includes aircraft overflying multiple locations surrounding the airport, at different elevations, and different turning points. These operation are under the direction of the Air Traffic Control Tower, but do vary based on aircraft type, size, and to some degree pilot discretion. As such, variability is common. The noise study illustrates the general flight patterns used most frequently at the Airport. The runway ends at the Airport are equipped with both visual and electronic vertical guidance systems intended to aid pilots in making consistent approaches to landing. These systems reduce, but do not eliminate the variability of approach altitudes. Departure altitudes vary highly base on the performance characteristics of the aircraft and current weight.

Variations in aircraft noise and vibration levels are also common and are primarily based on aircraft type. The older jet aircraft that still operate at the Airport are referred at Stage II jets, and have a very large noise and vibration footprint. These aircraft have not been produced in several decades but are still legally permitted to operate if they are under 75,000 lbs maximum gross weight. Fortunately, these older jet aircraft are anticipated to be nearly retired from service within the next five year. The decrease in activity level of Stage II jet aircraft has been documented at the Airport.

From: TOTH BALINT [mailto:sezitoba@msn.com]
Sent: Tuesday, October 26, 2010 11:42 PM
To: Alexander, Mark W
Subject: Comments regarding the Oxford Airpor Hangar Extension Porject

To: Mr. Mark W. Alexander, Transportation Assistant Planning Director, CT Dept of Transportation, Bureau of Policy and Planning

From: Balint Toth, resident of 4 Lorraine Lane, Oxford, CT

Dear Mr. Alexander,

I have come to know of the planned massive hangar development at the Waterbury-Oxford airport by an article in the Oct 20th, 2010 edition of the local newspaper Voices.

I would like to take the opportunity and submit my comments regarding the planned development and its impact to the environment and the neighborhood.

1. Public Hearing

First, I have to say I was shocked by the fact that there have been less than 20 participants in the public hearing regarding the Environmental Impact Evaluation. I have attended numerous public hearings in the past concerning various topics of the OXC airport and without exception, these hearings had an attendance level of 80-100 people, filling the rather large auditorium of the Crowne Plaza hotel in Southbury.

<u>Point in case</u>: the developer must have done a poor job in advertising the public hearing, which defeats the purpose of a hearing in the first place, and I question if they have sufficiently met the criteria of a public hearing mandated by the law, when in fact only a handful of truly "public" persons attended, the other participants were officers of various towns and commercial associations, such as the first selectman of Oxford and the president of the Greater Valley Chamber of Commerce.

I will not speculate that the builder has purposely kept a low profile in order to minimize public uproar in the hearing, nevertheless, I have to voice my concerns about the lack of public scrutiny in this planned development and <u>would like to hereby request that the public hearing be</u>

<u>repeated in the near future, before any further action is taken in this matter.</u> This new hearing should be publicized in local newspapers well before the meeting.

2. Environmental Impacts

As per the figures quoted by the journalist, Leda Quirke, due to the new increased hangar space the anticipated annual jet operations would grow at the airport by 4,125 from present levels, to an estimated 11,800 by 2013, which represents a 53.7% increase in a mere 3 years.

Considering that the annual growth rate estimates for jet operations in the 5-year period of 2007-2012 is only 6.25%, the projected 53.7%/3 years = 17.9% per annum increase is nearly the triple of the earlier estimates for the airport.

The following table was considered for the above figures, <u>http://www.oxcstudies.com/documents/farfinal/FinalReport-compressed.pdf</u>, Page 1-10, Table 1-5, which projects Jet operations to grow from 5800 to 7613 between 2007 and 2012.

<u>Point in case</u>: a 54% jump in the jet operations, drastically above any previously anticipated growth rates for the airport can hardly be dismissed as insignificant.

For this reason I question the sincerity of the statements by the experts hired by the builders. As per another article that I came across subsequently to the one quoted above: "The study found little or no impact on air quality, water quality, threatened or endangered species, prime farmlands and natural resources."

The sudden increase in operations ought to put a higher burden to the natural environment surrounding the airport, which includes wetlands and bird habitats.

I have also read in one of the airport studies in the past while researching the various noise abatement alternatives considered at the time, that hangar extension was planned earlier, but the development request was declined primarily due to the environmental effects that the antifreeze materials, used to spray the aircraft body and wings in winter freeze conditions, would have caused to the surrounding wetlands and groundwater. For this reason I would like to request that the environmental impacts be considered seriously and the negative impacts not to be ignored due to the emphasized green features, such as the solar panels proposed.

3. Noise Pollution

As per the selectman of Oxford quoted in the Voices article, this is a win-win-win project for the town and the state. She forgot to define who the third winner is. But my point is not to poke a hole in this overly-exuberant rhetorical tongue-twister in a linguistic fashion. Instead, I want to pose a serious question, who is the third winner, if any?

<u>Point in case</u>: A 54% swell in jet traffic can only render the residents of the neighborhood of the airport as one who does not win but loses. Why?

While the study talks about the mitigation measures planned to alleviate the negative effects on wetlands, <u>the builder and the town's decision makers appear to have forgotten</u>, that the vicinity <u>of the airport is also a "human habitat"</u>, and its population is ever increasing, considering the recently approved large 140-unit Central Park Associates development south of the airport, among others.

As per current and estimated future noise contours, published in various noise studies on the <u>http://www.oxcstudies.com</u> website, the airport is already responsible for a major noise pollution, the level of which would have increased even with the estimated "organic growth" rates.

According to the FAR-150 Noise Study,

<u>http://www.oxcstudies.com/documents/farfinal/FinalReport-compressed.pdf</u>, Page 2-8: "Jet aircraft activity accounted for approximately six percent of total operations. Nevertheless, jet aircraft are predominately responsible for the size and shape of the Airport's noise footprint."

Therefore, one can only conclude that such dramatic jump in air-traffic will radically increase the noise generated by the airport and thus dismissing the effects as "noise contours are expected to be slightly larger", as stated by Mr. Shamus as per the Voices article, is as untrue as is irresponsible.

While in mathematical terms, on the logarithmic decibel scale, the Day-Night Average Noise Levels (DNL) might not show a large numeric increase, but from a physiological and psychical experience standpoint a 54% growth of flyovers by noisy aircraft, reaching the 90-110 dB

Maximum Noise Levels per occasion, is a serious increase, that the normalized and logarithmic DNL numbers do little justice to.

If anyone stated that the traffic on such and such road will rise by such a large percentage in a short period of time, none of us would call such a change a "slight impact" in traffic. Similarly, to take an example from human biology, if anyone's body weight has increased by 54% in 3 years, the person would surely be referred to a dietitian or physician in short order.

For the above reasons I object to any major extension of airport capacities that would further worsen the living conditions of those present and future residents of the vicinity of the airport.

While I understand and appreciate the efforts to create jobs in the area, especially given the economic situation, I doubt if this project serves the local community as a whole, due to the negative side effects described above.

I am kindly requesting the consideration of my comments and suggestion regarding the repeat public hearing.

Sincerely Yours, Balint Toth 4 Lorraine Lane, Oxford

Response to Comment 6: Balint Toth, resident of 4 Lorraine Lane, Oxford, CT

Responses to Growth in Jet Activity:

There are several reason a 54 percent increase in jet operations does not have a substantial impact on off airport noise levels, including the following:

- Airport noise is based on all operations at the Airport, not just jets. The additional 4,125 jet operations are an increase of only 6 percent above the total forecast aircraft activity of 75,167 operations. The 4,125 operations are spread out over the year, and therefore amount to fewer than six (6) takeoffs per day on average.
- The airport activity includes a mixture of older noisier jets and newer (less noisy) jet aircraft. However, in recent years, the growth in jet activity has been exclusively in the newer aircraft models and older jet operations are decreasing. As such, it was assumed that the additional jet operations would be from newer jet aircraft, which have a substantially smaller noise footprint than the jet aircraft built in past decades.
- The nature of airport operations and flight tracks result in aircraft overflying multiple locations surrounding the airport and at different elevations. This situation diffuses the noise over a large area, which reduces the average noise levels compared to if all operations had an identical tract.

Responses to Comment on FAR 150 Study:

According to the FAR-150 Noise Study,

http://www.oxcstudies.com/documents/farfinal/FinalReport-compressed.pdf, Page 2-8: "Jet aircraft activity accounted for approximately six percent of total operations. Nevertheless, jet aircraft are predominately responsible for the size and shape of the Airport's noise footprint."

As indicated in the FAR 150 Study introduction, as well as in the beginning of Chapter 2, the above statement was written regarding conditions in 2003, when 30 percent of the jet operations were still conducted by older-noisier Stage II jets. The year (i.e., 2003) is clearly indicated. Later in the chapter, the decrease in Stage II jets is discussed in detail. The current study forecasts the percent of Stage II jets to be only five to eight percent. The effects of the ongoing trend towards newer (less noisy) aircraft are discussed in detail within the document and are a major factor in the study findings.

Please note that the study document provide all input data used in the noise analysis and enables independent verification of all findings. For the reasons discussed above only a slight increase in the overall noise contours is expected. Nevertheless, the study does not attempt to minimize the individual physiological and psychical experience of any residents disturbed by airport noise. The studies have documented that airport noise disturbance does occur in areas surrounding the Airport. However the study conclusions do identify that significant changes in that disturbance are not anticipated due to the hangar project.

The study and public hearing was advertised on multiple dates and publications, and a news article was published in advance of the hearing. The current project is privately funded. While the advertisements conducted satisfied (and exceeded) requirements, it did not include individual emails to mailing lists maintained during the noise study.

From: John Munno [mailto:johnmunno1@gmail.com]
Sent: Monday, October 25, 2010 2:31 PM
To: Alexander, Mark W
Subject: DOT Hearing, Oxford Airport Expansion Comments

Dear Mr. Alexander.

I was unable to attend the DOT hearing regarding the expansion of Oxford Airport and wanted to submet my comments.

I am not in favor of the planned expansion for a number of reasons and do not agree with First Selectman Mary Ann Drayton-Rogers who called the plan a win-win project for the town that will not negatively impact the areas around the airport.

I am not sure where First Selectman Mary Ann Drayton-Rogers lives, but I would imagine it is not near the Airport. I however, live in close proximity to the Airport at Oxford Greens and have to hear planes taking off and landing at the airport on a regular basis. I even hear the planes taking off at 2:30am which disturbs my sleep. It is not a win win situation for those hundreds of people in Oxford and Middlebury that live near the airport and with the airport expansion and expected increase in air traffic this noise issue will only get worse.

This noise issues impacts our health and well being and is a very undesirable part of living in Oxford especially near the airport.

I suggest a current airport curfew be made so planes are not taking off in the late night and early evening hours as there is no reason for it and it is a disturbance to the sleep of those who live near the airport.

I am also concerned about the environmetal impact the expansion will bring about. Something seems wrong with the idea of taking away 2,563 square feet of wetlands and mitigating it by creating 3,000 square feet of wetlands and 8,500 square feet of new wetlands somewhere else. Too much meddling with nature by man only leads to more problems.

I ask that you hear these comments and weigh them as I don't feel this is a win win situation. Everything has consequences and must be weighed out.

Oxford's scenic and rural character is Oxford's strength and it's greatest resource. Expanding the airport will cause a negative effect in this area and will have long term consequences which won't be able to be reversed.

Sincerely, John Munno

Response to Comment 7: John Munno, Oxford Greens, Oxford, CT

In the area of Oxford Greens, the average noise level, measured in the Day-Night Average Noise Level, is currently 46 dB and is anticipated to increase by less than 1.0 dB DNL. Federal noise and land use standard consider a DNL below 65 dB to be compatible with residential land use.

The potential for curfews was addressed in the airport noise study. However, federal regulations prohibit mandatory curfews on public transportation infrastructure such as roads, interstate highways, railroads, and airports; thus no such curfew can be imposed.

From: Dorothy Munno [mailto:dotfrank@sbcglobal.net]
Sent: Monday, October 25, 2010 3:44 PM
To: Alexander, Mark W
Subject: EIE Oxford Airport

Mark, I live in Oxford Greens along with 350 other families. I had not known along with many others about this public hearing. I obtained my info from the Voices newspaper article. Constructing two additional hangars brings more jet activity into the area. Currently we have a problem with the noise factor, especially at night. It could be 2:00 am, 4:00 am, 5:00 am, they are noisy and I don't know if the environmental impact study was done anytime after 12:00 midnight and throughout the night. The thought of the expected increase of 4,125 operations for a total of 11,800 operations in 2013 is insane. Also, the helicopters and the just for fun planes fly too low causing more noise. I lived in New York and know all about the impact of planes and hangars in Long Island. We are going to ruin Oxford and change its beautiful rural community. i

i lived near Westchester Airport for a number of years and watched it grow against the communities rejection of enlarging it. We had a big meeting with political figures including representatives from the Greenwich, Ct. and Armonk, White Plains area and complained about the noise factor after midnight. Finally, a voluntary curfew was instituted. I'm requesting that this be instituted in the Waterbury Oxford Airport! It's not all about the money or the jobs it will create, think about all the noise and discomfort it would create in the future. I could see many problems in the future and more voices will be heard when this proposal is finalized. More residents will be moving into the Oxford Greens housing complex and affordable housing is also proposed-thats an increase of discontented people. This is not a win win situation, unless your Keystone Avaition or Mary Ann Drayton Rogers! Sincerely, Dorothy Munno.

Response to Comment 8: Dorothy Munno, Oxford Greens, Oxford, CT

The noise study evaluated noise during both day and nighttime. Specifically, the evaluation incorporated the 11 percent of all activity that occurs between 10 PM - 7 AM, based on recorded data. The airport noise metric used in the analysis is the Day-Night Average Noise Level (DNL), which assigns a 10 decibel penalty to nighttime aircraft operations due to the added sensitivity to night time noise. As such, this penalty is included throughout the noise evaluation. The noise analysis also included all other aircraft types (in addition to jet aircraft), including helicopters and light recreational aircraft.

Note that the additional 4,125 jet operations are over a full year period. As such, this amounts to fewer than six (6) takeoffs per day on average.

Although the Airport is not considering a voluntary nighttime curfew, the Airport is working with the larger airport tenants to reduce nighttime jet activity. Particularly, by the few remaining older and noisier jet aircraft.



STATE OF CONNECTICUT

COUNCIL ON ENVIRONMENTAL QUALITY

Barbara C. Wagner Chair

DATE: September 28, 2010

M. Howard Beach

Janet P. Brooks

Bruce R. Fernandez

RE:

Karyl Lee Hall

John M. Mandyck

Richard Sherman

Norman VanCor

Karl J. Wagener Executive Director TO: Mark Alexander

Mark Alexander Assistant Planning Director Department of Transportation 2800 Berlin Turnpike Newington, CT 06131

FROM: Karl Wagener, Executive Director hy

New Hangar Facility at Waterbury-Oxford Airport

The Council has reviewed the Environmental Impact Evaluation (EIE) for the Waterbury-Oxford Airport Hangar project and offers the following comments.

The EIE describes adequately and clearly most of the project's anticipated impacts. The Council notes two problems, both of which have been noted in other EIEs and should be corrected.

First, the document is called a draft EIE. The Connecticut Environmental Policy Act (CEPA) does not provide for draft and final EIEs (and in this regard differs from NEPA). The agency is required to prepare and circulate an EIE, period. This is important to the public's expectations; if an EIE is termed a draft then the reader might reasonably expect to see a final EIE circulated, as is the case under NEPA. This EIE will be the last document circulated for public review and comment, and should not be termed a draft.

Second, the section on consequences for biotic communities (pp. 43-44) repeats an error that the Council sees too frequently. The EIE makes several references to animals being forced to "permanently relocate." Unless there is some evidence that surrounding habitat contains fewer individuals of those species than what can be supported – an anomalous situation under normal conditions – then the document should focus only on the loss of habitat. It is true that some individuals might relocate successfully, but their success would come at the expense of individuals already present in their "new" habitat. The overall effect of the loss of habitat is, in fact, loss of habitat and the wildlife supported by that habitat. Such losses can sometimes be mitigated through appropriate plantings. In this case, the nature of the habitat makes the loss of the habitat not particularly significant.

I will be happy to answer any questions you might have about these comments.

Response to Comment 9: State of Connecticut Council on Environmental Quality

The Draft designation was only to express to the public that the CEPA process was ongoing and that a Final Environmental Impact Evaluation (EIE) had not been completed and will only be completed after the public has had a chance to provide comments prior to submitting a final version. It is noted however, and we will make every attempt to avoid using Draft on future EIE documents.

We concur that the second comment regarding biotic communities and the effects of habitat loss. Wildlife population studies were not conducted on surrounding habitats as part of the scope of this Land Lease Agreement for the Hangar development. However, understanding that wildlife will respond to disturbances in different ways, it is anticipated that individuals would move to surrounding habitats, which may create a competition event or move further in the landscape to other adjacent habitats. Nonetheless, the species are capable of adapting to living within close proximity to human activity. The wetland mitigation proposal, planted basins, as well as other plantings and buffers will enhance habitat surrounding the development, thereby enhancing opportunities for wildlife. We also concur with the comment that although there is habitat loss, it is not significant due to the nature of the existing habitat.



TOWN OF OXFORD

S.B. Church Memorial Town Hall 486 Oxford Road, Oxford, Connecticut 06478-1298 Phone: (203) 888-2543 Fax: (203) 888-2136

October 21, 2010

Mark W. Alexander Transportation Assistant Planning Director Connecticut Department of Transportation Bureau of Policy and Planning P.O. Box 317546 Newington, CT. 06131-7546

Comments: Public Hearing Comments Land Lease Agreement for Hangars Hangars H and I – Waterbury-Oxford Airport, Oxford Connecticut

Dear Mark:

The Town of Oxford has supported Keystone Aviation and DOT in their efforts to expand hangar facilities on the Waterbury-Oxford Airport since December 2007 when the project received approval from Oxford's Conservation Commission & Inland Wetland Agency.

When questions were raised about the acceptability of the CEPA EIE prepared by B L Companies, the Town requested assistance from the CEQ to 1) obtain project documents through FOI processes to determine any issues that might prevent the project for going forward and 2) to support enabling legislation that would allow the completed CEPA EIE to progress to public hearing, record of decision and final approval.

One of the issues raised in an internal agency letter was a request to determine the need for construction of Taxiway B as a prerequisite to building Hangars H & I.

The current plan for Hangar H & I represents a very efficient use of Parcel 12, moving the hangars to the eastern property boundary and providing access from the existing Hangar G apron. This design avoids any conflicts with the wetland area west of the new hangars and relieves congestion on Hangar G's apron.

To address the issue raised in the internal agency letter, the FAA was contacted and asked to opine on the need for Taxiway B to support Hangar H & I activity.

The attached letter from Gail Lattrell, FAA Planner clearly states that a full parallel taxiway, i.e. Taxiway B, is NOT a prerequisite for developing the southeast quadrant of the airport, i.e. Parcel 12.

Please accept this comment and the content of the attached FAA letter as response to the concern previously raised in the internal document that we reviewed. According to the FAA, Taxiway B, or a full length parallel taxiway is not required as a prerequisite to developing the hangar complex in the southeast quadrant of the airport.

Regards

Herman Schuler Economic Development Director Town of Oxford, CT 203 828-8207 hermanschuler@sbcglobal. Net

cc: FAA Letter

U.S. Department of Transportation Federal Aviation Administration

 $= \frac{2\pi}{3} \frac{3}{2\pi} \frac{1}{2\pi} \frac{1}{2\pi}$

Federal Aviation Administration New England Region 12 New England Executive Park Burlington, MA 01803

April 21, 2010

Mr. Robert Bruno Senior Project Engineer Connecticut Department of Transportation Aviation and Ports 2800 Berlin Turnpike Newington, CT

Dear My Bruno:

The FAA does not view the construction of a full parallel taxiway to the Runway 36 end at the Waterbury Oxford Airport as a prerequisite of any kind for development of the southeast quadrant of the airfield. CONNDOT recognized the value of the taxiway construction to the airport and pursued it through the environmental process. The reasonable alternatives turned out to be prohibitively expensive. The project was dropped from further consideration at this time.

Should a developer want to proceed with site improvement and development of that side of the airfield in spite of the site constraints, they are free to do so, from an FAA standpoint. It is not the most desirable area on the airfield, but CONNDOT explored improving the taxiway for better airfield access and was not successful.

Thank, Bob. Any development of the southeast quadrant or change in airport land use would, however, need to be consistent with the airport layout plan on file, or considered in a future plan for inclusion.

Regards Gail Lattlell Planner

Response to Comment 10; Herman Schuler, Economic Development Director, Town of Oxford, Connecticut

We agree with this comment letter in that Taxiway B is not a prerequisite for the development and use of hangar facility project.



Via Certified Mail

October 25, 2010

Mr. Keith T. Hall Transportation Supervising Planner State of Connecticut Department of Transportation 2800 Berlin Turnpike Newington, CT. 06131

Mr. Jeffrey Shamas Northeast Regional Manager BL Companies 355 Research Parkway Meriden, CT. 06450

RE: Waterbury-Oxford Airport

Gentlemen:

In response to the CEPA document prepared for the construction of Hangars H and I to be erected at Waterbury / Oxford Airport, I hereby request that the hours of operation as written in the CEPA study, prepared by BL Companies, be expanded to say "from 6:30 a.m. to 6:30 p.m. Monday through Saturday, and 7 a.m. to 5 p.m. on Sundays".

Although, as Construction Manager, I rarely expect to utilize all of these hours, it will be necessary to have them available to us owing to the construction scheduling being condensed due to delays in the permitting

process. Sincerely, Philip Clark President and C∉O

cc: Buddy Blackburn, Keystone Aviation
Response to Comment 11: Philip Clark, Claris Construction, Inc., Newtown, CT

In response to the comment regarding time of day construction may occur, we will consider the request and determine if it meets local ordinances.