Expanded Environmental Notification Form

Submitted Pursuant to the Massachusetts Environmental Policy Act

Westfield-Barnes Regional Airport Runway 15 Obstruction Removal, Taxiway B, and Southwest Quadrant

Submitted to:
Executive Office of Energy and Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Submitted by:
Westfield-Barnes Regional Airport Commission
110 Airport Road
Westfield, MA 01085

Prepared by:
Epsilon Associates, Inc.
3 Mill & Main Place, Suite 250
Maynard, MA 01754

In Association with:
Airport Solutions Group, LLC

June 28, 2022

Epsilon
ASSOCIATES INC.

June 28, 2022

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Secretary Bethany A. Card
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Attn: MEPA Office

Subject: Expanded Environmental Notification Form, Westfield-Barnes Regional Airport, Westfield, Massachusetts

Dear Secretary Card:

On behalf of the Proponent, Westfield-Barnes Regional Airport Commission, I am pleased to re-submit an Expanded Environmental Notification Form for proposed projects at Westfield-Barnes Regional Airport. At Director Tori Kim's request, we redistributed the Environmental Justice Screening Form pursuant to Section 11.05(4)(b) of the MEPA regulations and Section II.A of the MEPA Public Involvement Protocol on June 24, 2022 to the requisite circulation list.

The Project proposes to widen and realign the southern segment of Taxiway B, realign a northern segment of Taxiway B, acquire six off-airport avigation easements for obstruction removal off Runway 15 end, and construct a new taxiway and apron to the existing Southwest Quadrant (SW Quad) area of the airport in order to improve operational efficiency and enhance safety at the Westfield-Barnes Regional Airport. The Project will upgrade and improve facilities at the Airport to comply with current Federal Aviation Administration (FAA) and Department of Defense (DOD) standards.

An EENF is being filed to commence MEPA review for the Project and respectfully requests a Single Environmental Report (SEIR). This EENF includes extensive and detailed information that describes and analyzes the Project and its potential environmental impacts, the alternatives considered, and the proposed environmental mitigation measures. The Proponent anticipates that the EENF will be noticed in the Environmental Monitor on July 8th. Because we are requesting a SEIR, we understand the comment period will be extended to August 8th with a certificate to be issued on August 15th, 2022.

On behalf of the Proponent, we look forward to working with your office on review of the EENF. Please call me if you have any questions at (978) 461-6271 or ajacobs@epsilonassociates.com.

Sincerely,

EPSILON ASSOCIATES, INC.

Alyssa Jacobs, PWS
Principal & Manager, Ecological Sciences

cc: Chris Willenborg, Westfield-Barnes Regional Airport

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Westfield-Barnes Regional Airport

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MEPA Environmental Notification Form

Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Westfield-Barnes Regional Airport Runway 15 Obstruction Removal, Taxiway B South Widening, and Southwest Quadrant Taxiway**		
Street Address**: 110 Airport Rd**		
Municipality: **Westfield**	Watershed: **Westfield**	
Universal Transverse Mercator Coordinates: **1183782.10, 4701371.77**	Latitude: **42°09'33"North** Longitude: **72°43'01"West**	
Estimated commencement date: **2023**	Estimated completion date: **2024**	
Project Type: **Airport**	Status of project design: **10 % complete**	
Proponent: **Westfield-Barnes Regional Airport**		
Street Address: **110 Airport Road**		
Municipality: **Westfield**	State: **MA**	Zip Code: **01085**
Name of Contact Person: **Alyssa Jacobs**		
Firm/Agency: **Epsilon Associates, Inc.**	Street Address: **3 Mill & Main Place, Suite 250, Maynard, MA**	
Municipality: **Maynard**	State: **MA**	Zip Code: **01754**
Phone: **(978)-897-7100**	Fax: **(978)897-0099**	E-mail: **csnowdon@epsilonassociates.com**

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☒Yes ☐No **11.03 (1)(a) Land Disturbance, (10 Acres+ Impervious Area)**

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))	☒Yes ☐No
a Rollover EIR? (see 301 CMR 11.06(13))	☐Yes ☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes ☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes ☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes ☒No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
11.03 (1)(a) Land Disturbance, (10 Acres+ Impervious Area)
11.03 11.03(6)(b) (New Taxiway)
11.03(2)(b) Greater than two acres of disturbance of designated priority habitat

Which State Agency Permits will the project require?

Superseding Order of Conditions from MassDEP (if local order of conditions is appealed)
Potential Amendment to Conservation and Management Permit from NHESP

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

$525,000 from MassDOT Aeronautics, FAA is funding 90%, MassDOT 5%, and BAF 5% easement acquisition of 49 acres

Summary of Project Size & Environmental Impacts	**Existing**	**Change**	**Total**
LAND			
Total site acreage	1,200		
New acres of land altered		~58	
Acres of impervious area	270	+14.35	284.35
Square feet of new bordering vegetated wetlands alteration		41,382 (conversion of forested to scrub shrub wetlands)	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	859,551	0	859,551
Number of housing units	n/a	n/a	n/a
Maximum height (feet)			
TRANSPORTATION			
Vehicle trips per day	207	30	237
Parking spaces	157	0	157
WASTEWATER			
Water Use (Gallons per day)	n/a	n/a	n/a
Water withdrawal (GPD)	n/a	n/a	n/a
Wastewater generation/treatment (GPD)	2,800	0	2,800
Length of water mains (miles)	2.68	0	2.68
Length of sewer mains (miles)	1.23	0	1.23

Has this project been filed with MEPA before?
☐ Yes (EEA #_____) ☒No

Has any project on this site been filed with MEPA before?
☒ Yes (EEA #_____) ☐No

#14806, #14206, #10691, #12343, #8909, #8655, #8743, #6588, #4246

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the **project site**:

The Westfield-Barnes Regional Airport (BAF) is owned, operated, and in the City of Westfield, Hampden County, Massachusetts, located in the southwestern portion of the state, near the Connecticut border, as shown on **Figures 1 and 2 in Attachment B**. As the owner and operator, the City of Westfield is also identified by the FAA as the designated Sponsor of the airport and accepts federal grants and the associated grant assurances. The airport is identified in the National Plan of Integrated Airports System (NPIAS) with a service level of General Aviation and an Asset classification of Regional, serving as a critical component of the general aviation system in Massachusetts as well as fulfilling a principal role of a regional airport.

The Airport is a public-use, general aviation facility that is overseen by the Westfield Airport Commission (the Commission) and managed by a full-time Airport Manager. The Airport is situated on approximately 1,200 acres of land in Westfield, Massachusetts and serves business, corporate, emergency, military, and recreational flyers. The Airport is home to both the Massachusetts Air National Guard (MANG) and the Massachusetts Army National Guard. The land located to the north and west of the Airport has been largely developed and is occupied primarily by commercial and industrial land uses, the land south of the Airport is primarily residential in character, and the areas located to the east have residential and commercial uses with large undeveloped parcels. The Airport has two paved runways. The primary runway, Runway 2-20, is 9,000 feet long and 150 feet wide. The crosswind runway, Runway 15-33, is 5,000 feet long and 75 feet wide. The Airport has several aircraft parking aprons, hangar buildings of varying types and sizes, as well as an equipment storage and maintenance facility, air traffic control tower and an administration building.

The airport has one fixed-base operator, Ross Aviation, providing aircraft fueling, aircraft management, and aircraft maintenance. Gulfstream Aerospace Corporation is the airport's largest and most active tenant, providing certified Gulfstream aircraft maintenance. Military operations comprise a significant amount of airport activity and include the Massachusetts Air National Guard 104th Fighter Wing and the Army National Guard 226th Division Army Aviation Support Battalion.

While the airport supports a significant amount of flight training and military activity, a considerable portion of the airport's general aviation traffic is related to corporate activity, recreational flying, and business charters. The airport also serves as an important gateway to area attractions and recreational venues.

Please refer to additional information provided in **Attachment A** relating to the project site, proposed project, and programmatic and physical elements.

Describe the proposed project and its programmatic and physical elements:

There are several airport improvements proposed for the Westfield-Barnes Regional Airport. The projects included below are those proposed in both the Airport's Capital Improvement Plan for the next five years (the Capital Improvement Plan is an airport's multi-year plan for financing and implementing

projects) and the Airport's 2020 Master Plan Update. In general, these projects are needed to address Miliary, FAA and State aviation safety regulations and requirements, as well as to support regional and local air service needs.

The Proposed Project builds upon the 2020 Airport Master Plan Update for the airport and includes the following short-term projects:

1) Realignment and widening of Taxiway B South and a segment of Taxiway B North (see **Figure 5a in Attachment B)**;

2) Acquisition of six avigation easements off the Runway 15 end to facilitate obstruction removal of hazards to airspace (see **Figure 5b in Attachment B**); and

3) Adding a new taxiway and apron area in the SW Quad to (see **Figure 5c in Attachment B**).

These project components are described in more detail below.

Taxiway B South Realignment and Widening

Taxiway B is the primary parallel taxiway serving the airport infrastructure to the west of Runway 2-20 and is the primary taxiway for military operations utilizing Runway 2-20. The northern portion of Taxiway B (north of Runway 15-33) has been previously reconstructed to comply with Department of Defense (DOD) airport design standards of 75 feet wide paved taxiway width and 25-foot paved shoulders on each side. The southern portion of Taxiway B (south of Runway 15-33) has a current pavement width of 50 feet. Additionally, the current alignment of these two runway segments results in an awkward crossing and intersection of Taxiway A and Runway 15-33, leading to the current FAA identified airport geometry "hot spot" designated for this taxiway, stemming from the potentially unsafe conditions that are sought to be corrected by the proposed realignment of the northern and southern segments of Taxiway B. The southern segment of the taxiway is proposed to be reconstructed to meet the same military standards of 75-feet wide with 25-foot paved shoulders as the northern segment of Taxiway B.

The widening and realignment of the southern portion of Taxiway B to meet DOD standards increases safety at the airport by reconstructing the intersection of Taxiway A and Runway 15-33 to resolve confusing airfield geometry. The relocation of this segment of taxiway is proposed to shift inwards (towards the runway) while maintaining a 400 feet of separation from the runway per FAA design standards. The realignment for the taxiway will allow the airport to enhance safety by meeting DOD design standards and realigning the Taxiway B to improve safety at the crossing of Taxiway A and Runway 15-33 (Hot Spot #1 – see **Figure 6 in Attachment B**).

Runway 15-33 Approach Surface Obstruction Removal

The Proposed Project will acquire avigation easements on six parcels (49 acres total) to facilitate obstruction (tree) removal and updating the airport's Vegetation Management Plan. Once the airspace is clear of obstructions/hazards (trees) to the runway's approach surface, the airport can correct the existing displacement markings to the Runway 15 threshold and move the threshold to the standard location at the actual end of runway pavement, regaining approximately 490 feet of landing and stopping distance for the runway. The airport is responsible for management, and removal, of hazardous obstructions to the airspace surfaces surrounding runways and off each runway end. As documented in the Airport Master Plan (2020), the Plan and Profile view of both ends of Runway 15-33 identify obstructions to the Runway 15 20:1 (20-feet horizontal for each one-foot vertical) visual

approach Federal Aeronautical Regulations (FAR) Part 77 Imaginary Surfaces. This airspace analysis identified airspace obstructions/hazards (trees) in the airspace surfaces to Runway 15, on private property (off-airport) totaling 10.5 acres. Existing obstructions that penetrate the airspace create hazards to air travel and results in the temporary limitation to the available runway pavement for landings due to the runway threshold displacement of approximately 490 feet. The displacement to the runway threshold also results in the "hold position" markings to be placed in a non-standard location approximately 100 feet back on Taxiway A leading to RW 15 end. This is identified in the airport diagram as Hot Spot #2 (HS2) by the FAA Runway Safety Action Team (RSAT).

Hot Spot #2 is denoted for the unusual location of runway hold position marking on Taxiway A for Runway 15 (see **Figure 6 in Attachment B**). The displaced threshold to Runway 15, results in the hold-position line markings (denotes entrance to runway from a taxiway) being placed further down Taxiway A in a non-standard location, prior to the 90-degree turn. Standard airfield geometry locates hold positions markings at the elbow of the taxiway, such that the aircraft is at a 90-degree (perpendicular) orientation to the runway. The ability to position aircraft perpendicular to the runway enhances safety by allowing pilots to better observe any incoming/departing aircraft traffic.

Southwest Quadrant New Taxiway and Apron Area

The proposed projects include infrastructure enhancements to the Southwest Quad area of the airport to create a new taxiway connection off Taxiway B South, that is 35-feet wide and supports an existing operation/hangar by a current airport tenant (Air Methods) which provides air medical services. The project also includes a new paved aircraft apron designed to accommodate approximately six new hangars. This enhancement is proposed to address operational needs in this portion of the airport where current facilities are inadequate for the existing tenant operator to allow for taxiing/access to hangars by fixed wing aircraft. This project requires new taxiway pavement connecting the hangar area to Taxiway B South and addition of pavement of the aircraft apron.

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Taxiway B

Design to FAA Standards instead of DOD Requirements: This alternative would realign the centerline to of Taxiway B South to a separation of 400' with Runway 2-20 to create a safer crossing geometry at Taxiway A and Taxiway B to Runway 15-33 and eliminating Hot Spot #1 . There would be no modifications to either the width of the taxiway pavement or the shoulders and they would remain grassed. This alternative would reduce the amount of new pavement as a result of the elimination of the paved shoulders and widening.

This alternative was rejected as it would not meet the purpose and need for the project and mission of the Air Force and Army National Guard Base.

No-Build Alternative: The no-build alternative would not reconstruct Taxiway B South from just north of Runway 15-33 to the approach end of Runway 2. The northern part of Taxiway B would remain at its current dimensions which meet DOD requirements. The southern part of Taxiway B would remain at its

current, insufficient width of 50-feet and would continue to require a waiver from the DOD design standards. The taxiway would not be realigned to from its current position of 500 feet runway taxiway separation to 400 feet, and the airport would not eliminate the Hot Spot #1 at the intersection of Taxiway A and Taxiway B at Runway 13-55 midfield. The no-build alternative would not enhance safety by meeting DOD and FAA design standards for aircraft and resolving safety concerns with airfield geometry by eliminating Hot Spot #1 at the airport. No modifications to the taxiway would occur and no additional impacts to mapped state-listed bird species Habitat would occur.

Given the existing airfield configuration of taxiways and runways, the Preferred alternative detailed above under project description of proposed realignment and widening of Taxiway B is the only feasible alternative to meet both DOD and FAA safety requirements, without major airfield reconfigurations and increased impacts.

Obstruction Removal

No Build Alternative: Under at no-build scenario, the airport would not acquire off-airport avigation easements and would not remove tree obstructions/hazards to the airspace for Runway 15. Additionally, the Runway 15 threshold would remain displaced by approximately 490 feet and the hold position markings on Taxiway A would remain in a non-standard location. The "hot spot" identified in this area (Hot Spot #2) would not be eliminated; therefore, operational safety concerns of the airport would not be corrected.

Airspace surfaces to Runway 15-33 are determined by the FAA regulations, and therefore, the proposed obstruction removal is the only feasible alternative to meet FAA requirements to keep airspace surfaces free of obstructions as described above.

Southwest Quadrant Taxiway

No Build Alternative: No new taxiway or apron area would be constructed at this location. If the airport does not construct a new taxiway connection to the southwest quadrant then this area remains inaccessible to fix wing aircraft which would not meet the operational needs of the existing hangar tenant (Air Methods) or provide for future hangar development. The helicopters in this area would continue to only air hover for taxiing and would not be able to ground taxi or be towed on a dolly (as needed). No modifications to the taxiway and apron for the southwest quadrant area would occur and no additional impacts to mapped state-listed bird species habitat would occur.

The existing Southwest Quad is a redevelopment of an industrial area within the airport property boundaries and is consistent with the airport's Master Plan findings regarding the need for hangar spaces. Land-uses at Westfield-Barnes (the "Airport Sponsor") based on acceptance of Federal airport grants, are bound by conditions and assurances in the associated grant agreements to use aeronautical facilities/land on the airport for exclusively aeronautical purposes. The Preferred Alternative is the approved use for this area in the Airport's Layout Plan and in the Airport's Master Plan update.

NOTE*: The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

Stormwater Management

Impacts from new impervious surfaces are mitigated and minimized by the removal of existing impervious surfaces (e.g., taxiway pavement, demolished buildings, utilities), and restored to grassed pervious area where feasible. Permanent stormwater management and treatment measures such as catch basins and infiltration practices will be implemented to provide attenuation and treatment of runoff from impervious surfaces. Erosion and sediment control will be implemented during construction.

Wetlands

Felled trees in Bordering Vegetated Wetlands (BVW) and Riverfront Area will not be uprooted; this will prevent disruption to the wetland soil structure in the work area. These wetland resource areas will be allowed to re-vegetate naturally into a low growing scrub-shrub environment. Work in resources areas will occur as directed within the vegetative management plan. Generally, work will occur during those periods when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used. It is likely that low ground pressure equipment or swamp mats will be used to access trees within wetlands.

Rare Species

The increase in pavement width for Taxiway B from 50' to a 75' wide taxiway with additional 25-foot paved shoulder will result in both temporary impacts and permanent impacts to rare species Priority Habitat on the airport in the vicinity of the proposed work. Estimated impacts from new pavement are approximately 12.40 ac and temporary impacts of 9.30 ac due to construction activities, and grading of existing grassed areas.

Mitigation measures, and specific locations, for rare species have yet to be determined, however, the project proponent is conducting coordination with NHESP, relative to the airport's Rare Species Master Plan (RSMP), which provides a comprehensive framework for managing all identified rare species present, to determining appropriate mitigation for known or new projects, and ensuring that wildlife/aviation issues will be addressed effectively and not adversely affect aviation safety. The airport's RSMP identifies and incorporates rare species habitat mitigation performed at the Airport over the past 13 years for various projects and proposes specific mitigation coordination processes with NHESP and mitigation ratios for new projects. It also includes a combination of continued management with some areas being converted from management to mitigation as projects occur.

Mitigation may consist of habitat management measures in existing rare species habitat on Airport property, habitat restoration on airport property, payments in lieu of formal mitigation, or other measures. In addition, there is "surplus" mitigation from past airport projects which could be applied to this project.

If the project is proposed to be constructed in phases, please describe each phase:

The current project schedule for the Capital Improvement Plan projects will be constructed within the next 5 years as funding is released. Projects will be phased as follows:
2022-23: Easement acquisition for obstruction removal

2024: Taxiway B Construction and Obstruction Removal
2025: Southwest Quad

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____)
☒No

if yes, does the ACEC have an approved Resource Management Plan? ___ Yes ___ No;
If yes, describe how the project complies with this plan.

_____
Will there be stormwater runoff or discharge to the designated ACEC? ___ Yes ___ No;
If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

_____

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)

☒Yes (Specify_____**#PH985**_) ☐No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes (Specify_____) ☒No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐Yes (Specify_____) ☐No

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? _Yes X No;
if yes, identify the ORW and its location. _____

Are there any impaired water bodies on or within a half-mile radius of the project site? ___Yes X No; if yes, identify the water body and pollutant(s) causing the impairment:_____.

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? ___Yes X No

STORMWATER MANAGEMENT:

The project will result in up to approximately 12.40 acres of new impervious surfaces. The proposed permanent and temporary stormwater management measures have not yet been designed for each component but will be designed to comply with state and local stormwater regulations as required. Stormwater runoff from the Project area will be managed through; 1) the Airport's existing stormwater management system, and 2) the installation of a new drainage system in each discrete project area. The stormwater management system will be designed to prevent an increase in peak stormwater runoff and to provide treatment when and where necessary. To meet this goal, management of runoff will include both temporary and permanent Best Management Practices ("BMPs") so that runoff will be appropriately managed both during and after construction. The proposed stormwater management system will be designed to comply with MassDEP's stormwater management regulations as per the City of Westfield's requirements. Stormwater from new pavement aera will be managed by a series of deep

sump catch basins with exit hoods and leeching basins to adequately treat the runoff from new development. The BMPs proposed for the Project are expected to meet the goal of no increase in peak stormwater runoff and provide stormwater treatment where needed.

The project includes MassDEP's Best Management Practices to minimize erosion for work near wetlands and jurisdictional areas. The airport also proposes a short-term and long-term pollution prevention plan to mitigate the effects of construction and development of the site. The Project also includes stormwater discharges within the Zone II Area of a public water supply, and as a result the project will use of the specific source control and pollution prevention measures and structural stormwater best management practices suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook (Stormwater Standard #6).

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes X No __; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):

To determine the potential for encountering soils contaminated from historical releases or former land development practices during excavation and grading activities associated with the proposed projects, the MassDEP reportable release database was reviewed for spills at sites located within 300 feet of the Proposed Project sites. No releases were reported within 300 feet.

Beyond 300 feet there are a total of three reportable release sites at the airport. Release Tracking Number (RTN) 1-0014085 submitted a Response Action Outcome (RAO) on October 22, 2001. RTN 1-0016157 submitted a RAO on June 16, 2006 and RTN 1-0017689 submitted a RAO on October 23, 2012. These are associated with the activities on the airfield and are located over 1,000 feet away from the Preferred Alternative.

Please note that a detailed site investigation for per- and poly-fluoroalkyl substances (PFAS) was completed in 2020 for the Barnes Air National Guard Base and no areas containing PFAS materials were located within 1000 feet of the proposed project site. [1]

Hazardous materials used for operation and maintenance of aircraft, runways, and taxiways include fuels, degreasers, and aviation lubricants and oils. The Airport has a Spill Prevention Control and Countermeasures (SPCC) Plan that establishes procedures for handling these substances.

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes ___ No X ;
if yes, describe which portion of the site and how the project will be consistent with the AUL:

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN?
Yes ___ No X ; if yes, please describe:

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

The primary demolition waste will be asphalt, which will be reused on site where feasible. Tree cutting for obstruction removal at the Runway 15 end will generate wood waste, which will be a mix of tree trunks, tops, and branches. A portion of this material may be merchantable trunks suitable for timber

[1] http://eeaonline.eea.state.ma.us/EEA/fileviewer/Default.aspx?formdataid=0&documentid=575805

or firewood. The remaining material, primarily low-grade tops and branches will be chipped and removed. Some wood chips may be used on site for erosion control, where acceptable. Wood chips not used on site for erosion control may be used off site in landscaping activities. Unusable wood chips will be composted. Construction procedures will allow for the segregation, reuse, and recycling of materials.

Disposal of construction debris will be accomplished in accordance with applicable laws and regulations.

Will your project disturb asbestos containing materials? Yes ___ No _**X** ;
if yes, please consult state asbestos requirements at http://mass.gov/MassDEP/air/asbhom01.htm

Describe anti-idling and other measures to limit emissions from construction equipment:

Construction contracts will require contractors to take steps to reduce potential emissions and minimize impacts from construction vehicles, including:

- The Proponent will require contractors to use construction equipment with engines manufactured to Tier 4 federal emission standards or which have been retrofitted with best available control technology to reduce exhaust emissions;
- The use of Low Sulfur Diesel for all trucks and construction machinery;
- Turning off idling equipment, and limiting idling to five minutes whenever possible;
- The use of wetting agents where needed on a scheduled basis and the minimization of exposed storage of debris on-site;
- Monitoring construction practices to minimize unnecessary transfers and mechanical disturbances of loose materials; and
- The use of appropriate mufflers on equipment and properly maintain intake and exhaust mufflers.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes ___ No X ; if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River?
Yes ___ No ___ ; if yes, specify name of river and designation: _____;
if yes, will the project will result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River. Yes ___ No ___ ;
if yes, describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

ATTACHMENTS:

1. List of all attachments to this document. **See below**

2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries. **See Attachment B.**

3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities. **See Attachment B.**

4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts. **See Attachment B.**

5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase). **See Attachment B.**

6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2). **See Attachment C.**

7. List of municipal and federal permits and reviews required by the project, as applicable. **See Attachment D.**

8. Printout of output report from RMAT Climate Resilience Design Standards Tool, available here. **See Attachment E.**

9. Printout from the EEA EJ Maps Viewer showing the project location relative to Environmental Justice (EJ) Populations located in whole or in part within a 1-mile and 5-mile radius of the project site. **See Attachment F**

ATTACHMENT A	**PROJECT NARRATIVE**
ATTACHMENT B	**FIGURES**
ATTACHMENT C	**CIRCULATION LIST**
ATTACHMENT D	**ANTICIPATED PERMITS, REVIEWS, AND APPROVALS**
ATTACHMENT E	**RMAT OUTPUT REPORT**
ATTACHMENT F	**ENVIRONMENTAL JUSTICE DOCUMENTATION**
ATTACHMENT G	**AGENCY CORRESPONDANCE**

LAND SECTION

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1) X Yes ___ No; if yes, specify each threshold:

11.03 (1)(a).2 Land Disturbance (Creation of ten or more acres of impervious area)

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	Total
Footprint of buildings	20	0	20
Internal roadways	123	+14.35	137.35
Parking and other paved areas	16	0	16
Other altered areas	0	0	0
Undeveloped areas	1,041	-14.35	1,026.65
Total: Project Site Acreage	1,200	0	1,200

B. Has any part of the project site been in active agricultural use in the last five years?

___ Yes X No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?

___ Yes X No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes X No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? ___ Yes X No; if yes, does the project involve the release or modification of such restriction? ___ Yes ___ No; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes X No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ___ No X; if yes, describe:

III. CONSISTENCY

A. Identify the current municipal comprehensive land use plan

Title: ***City of Westfield Open Space and Recreation Plan 2018-2025****

* The City of Westfield does not have a current master plan. An effort is underway to update the 1967 Master Plan which is functionally obsolete.

Date: **August, 2018**

B. Describe the project's consistency with that plan with regard to:

1) Economic development: As noted in the City's Open Space Plan (2018), Westfield is a regional commercial and industrial center. Over the past 25 years, the City's economic and employment growth have outpaced the population growth, an uncommon trend in the Pioneer Valley. The City has seen a number of major commercial and industrial businesses locate to Westfield since 2000. Manufacturing, education, health and social services and retail trade are the largest sources of employment. Westfield State University is located in the City, as well as two health care facilities, the municipally-owned Westfield-Barnes Regional Airport, and privately-maintained Stanley Park – one of the region's most outstanding parks. Even with these urban characteristics, the City maintains its rural roots and some agriculture is still carried on in parts of Westfield.

The City has experienced increased development activity along the Route 20 corridor in eastern Westfield and along the Route 10/202 corridors in northern Westfield. Most job growth within the community is centered around the City's north side, which is located close to the Massachusetts Turnpike and Interstate-91. Additionally, Westfield-Barnes Regional Airport and the Pioneer Valley Railroad serve as community assets that attract business investment and activity.

The airport is located 3 miles from the central business district of Westfield along the Massachusetts Turnpike (Interstate 90). Airport Road bounds the airport to the north and west, and Massachusetts Route 10 (State Route 202) to the north and south. The airport's primary (public entrance) is via Airport Road and Apremont Way.

2) Adequacy of Infrastructure As identified in the City's Open Space Plan, the City of Westfield is conveniently located at the junction of several major transportation routes, such as I-90, Routes 10 & 202 and Route 20; it is also a short distance to I-91. The City hosts a regional airport, (Westfield-Barnes Airport), and two active railways, The Boston and Albany, which follow along the Westfield River and the Pioneer Valley Railroad, a short-haul line to Holyoke.

Additionally, the City's 2020, ***Community Resilience and Building Workshop: Summary of Findings***, notes " Westfield-Barnes Regional Airport as a community asset with strength to mitigate impacts of climate change, due to its role in providing the City and the Region with a "large staging area, emergency response via airlift, backup emergency power, potential for intergovernmental partnership related to energy." The airport's role in providing a regional transportation asset and climate/hazard emergency resource is supported by the proposed projects that improves the airport's ability to operate safely and efficiently.

3) Open Space Impacts Westfield-Barnes Regional Airport, which encompasses 1,000+ acres in the northeast quadrant of the City and occupies a large portion of the recharge area of another regionally significant feature – the Barnes Aquifer. Considered one of the most important groundwater supplies in the state, the aquifer is a source of drinking water for the City as well as for Holyoke, Easthampton and Southampton residents.

Westfield-Barnes Regional Airport is situated on approximately 1,200 acres of land in Westfield, Massachusetts – the majority maintained as open space due to safety requirements for maintaining airfield and airspace conditions. The proposed projects are safety and efficiency enhancements to the existing infrastructure of the airport and located entirely on and/or adjacent to Airport property. The projects are planned to enhance the existing infrastructure of the airport and avoid/minimize impacts to open space. The Southwest Quadrant apron and taxiway project is a redevelopment of previously used industrial area. The removal of vegetative obstructions in the Runway 15 airspace does not result in the loss of open space. All of the proposed projects seek to support the safety and efficiency of the Airport's operations and support the surrounding open space provided by the airport.

4) **Compatibility with adjacent land uses**: The proposed projects are compatible with existing land uses and zoning in the vicinity of the Airport, based on the July 15, 2021 City of Westfield Zoning Ordinance. Land within the airport property boundaries is designated at "AD" or "Airport District" zoning. The zoning guidelines for the Airport District establish, promote compatible development, protect the airport, and minimize any adverse impact on the surrounding neighborhoods. The intent of the Airport District zoning is to: 1) Provide for future development of the airport to better serve the community; and 2) Encourage the establishment of uses that are compatible and foster a harmonious relationship between the airport and the surrounding area.

The land immediately to the northwest of the airport and within the approach surface to Runway 15-33 has a "industrial" zoning designation and areas with "residential" zoning. Land immediately to the west is given a "industrial" zoning designation, within the vicinity of the Taxiway B South adjacent to Runway 2-20. Also, within runway approaches, areas to the south-southeast contain parcels designated as "industrial" and "airport district". Zoning areas to the east of the airport are comprised largely of "business" and "rural residential" areas. North of the airport and in the Runway 20 approach surface contains both business and residential areas. The Proposed Projects are within the Airport Zoning District, with a portion of the of the obstruction removal on avigation easements for the removal of hazards to the airport's airspace surfaces. The proposed projects are compatible with existing adjacent land uses and support the safe and efficient use of the airport.

C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)

RPA: ***Pioneer Valley Planning Commission***

Title: ***2020 Update to the Regional Transportation Plan*** Date**: *July 2019***

D. Describe the project's consistency with that plan with regard to:

1) **Economic Development**

The Pioneer Valley Planning Commission's *2020 Update to the Regional Transportation Plan* (2019), includes "Regional Goal #9: Economically Productive - To maintain a transportation system that promotes and supports economic stability and expansion".

The plan notes that Westfield-Barnes Regional Airport is a vital component for the air travel needs of the region. Compatible industrial uses and associated jobs have located around the western borders of the Airport. It is necessary that the Airport operate as safely and efficiently as possible, which is the primary goal of the Proposed Projects, to continue to support and promote the economy of the City and Region.

2) Adequacy of infrastructure

The Pioneer Valley Planning Commission's *2020 Update to the Regional Transportation Plan* (2019), includes "Regional Goal #3: "Operations and Maintenance – To provide a transportation system that is dependable, resilient, and adequately serves users of all modes. To give priority to adaptable repair of existing infrastructure."

The Proposed Projects are consistent with this policy, as they seek to improve existing infrastructure (runways, taxiways, and aircraft aprons) at the Airport for the purpose of improving operational safety and efficiency.

3) Open Space Impacts

Pioneer Valley Planning Commission's 2020 Update to the Regional Transportation Plan (2019), states that the "region has researched, planned, and worked collaboratively to implement a regional Smart Growth plan, Valley Vision, since 1998. The goals of Valley Vision, promoting compact, mixed-use

development in and around existing urban and town centers while protecting open space and natural resources, are in sync with the RTP [Regional Transportation Plan]."

The airport supports the development within existing urban/industrial areas. The Proposed Projects are consistent with this policy, as they seek to improve the existing infrastructure at the Airport for the purpose of improving operational safety and efficiency, and do not expand development beyond the airport's boundaries.

RARE SPECIES SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? X Yes __No; if yes, specify, in quantitative terms:

11.03(2)(b) Greater than two acres of disturbance of designated priority habitat

The Proposed Projects will result in approximately 12+/- acres of permanent impacts to mapped Priority Habitat from new pavement, and approximately 13+/- acres of temporary impacts from construction/grading activities.

Westfield-Barnes Airport management and the project team held a pre-filing consultation meeting on April 13th, 2022, with NHESP staff, to discuss the project impacts, mitigation options, and the safety requirements that the airport is required to meet to avoid existing and any future potential wildlife aviation conflicts. The project team will continue to coordinate with NHESP to determine appropriate mitigation for the Proposed Projects, under the Airport's existing Rare Species Master Plan (RSMP) and associated Habitat Management Plan (HMP) and in compliance with state and federal aviation laws and regulations.

B. Does the project require any state permits related to **rare species or habitat**? X Yes __ No

C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? X Yes ___ No.

D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? X Yes ___ No. If yes,

1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? X Yes __ No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species?

X Yes ___ No; if yes, attach the letter of determination to this submission.

See Attachment G.

2. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? X Yes ___ No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts

The RSMP (developed in 2014) addresses impacts to state-listed rare species from future Airport development. "The Airport, in coordination with the Massachusetts Natural Heritage and Endangered Species Program (NHESP), has developed within this Plan a rare species management strategy that sets forth how the Airport will manage future impacts and provide mitigation within the scope of the Massachusetts Endangered Species Act (MESA) and its implementing regulations" (p.1).

The airport's RSMP provides a comprehensive framework for managing impacts to state-listed rare species habitat from new projects. The Airport, in coordination with NHESP, has developed within its RSMP a rare species habitat management strategy within the documents "Habitat Management Plan" (HMP) and associated habitat mitigation bank (930+ acres of mitigation banked), that sets forth how the Airport will manage habitat alterations from future alterations (including the Proposed Project), and provide habitat mitigation within MESA and its implementing regulations, avoiding a "take" of rare species.

These impacts will be fully mitigated for under the airport's existing Rare Species Master Plan using the mitigation coordination framework codified in Table 6-6.

3. Which rare species are known to occur within the Priority or Estimated Habitat?

Scientific Name	Common Name	Taxonomic Group	MESA Status
Ammodramus savannarum	Grasshopper Sparrow	Vertebrate Animal	Threatened
Pooecetes gramineus	Vesper Sparrow	Vertebrate Animal	Threatened
Bartramia longicauda	Upland Sandpiper	Vertebrate Animal	Endangered
Sturnella magna	Eastern Meadowlark	Vertebrate Animal	Special Concern
Speranza exonerata	Pine Barrens Speranza	Invertebrate Animal	Special Concern
Callophrys irus	Frosted Elfin	Invertebrate Animal	Special Concern

4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? X Yes ___ No

The site has previously been surveyed as part of the RSMP development. During coordination with NHESP, additional surveys may be required for the host plants of the above listed invertebrates.

5. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ___ Yes X No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? ___ Yes ___ No

This Project is not located within Estimated Habitat.

B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? X Yes ___No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

NHESP has determined that the proposed projects will result in a "Take" determination based on preliminary project information provided thus far (see Attachment G). As noted above, the Airport's RSMP incorporates and documents "the management and projects that occurred under the previous permit and addresses how projects and mitigation will proceed with new projects relative to the protected species at the Airport." (p. 41). Section 6.5 of the RSMP describes "the process for projects (RSMP-defined or other) including the approach for mitigation of new impacts under the new CMP, the interaction with NHESP, and the projects that require no mitigation and/or notice to NHESP. The Southwest Quad taxiway is included in the defined project list of the RSMP.

Additionally, in Section 6.2 of the RSMP, "under the prior CMP to date, significant areas of grassland were being managed beginning in 2002, when the entire airfield was placed under grassland management. Much of this area exceeded what was required for actual mitigation. In agreement with NHESP, portions of this additional area under management would be able to be used in the future as offsets for mitigation of future projects, subject to the agreed upon areas, ratios of mitigation, and some appropriate limits. In effect, some of the existing "surplus" grassland management areas will be used as a grassland habitat mitigation bank to mitigate future actions.

The RSMP, documents the "existing CMP included a Grassland Management Plan that placed most open areas not already managed for safety into infrequently mown (IM) habitat for the grassland birds. This mostly included areas outside the runway safety zones and other FAA regulated area up to forested edges at that time. This resulted in 400 acres of managed habitat beyond the grassland mitigation created for the projects.

The RSMP "discusses the approach to a new project as it occurs, whether that be a parcel being leased and developed according to the RSMP or a project with altered impacts or not specifically defined in the RSMP. When a new/altered project is proposed, the Airport is likely to need to coordinate with NHESP. The level of this coordination will vary depending on the project and whether it is defined in the RSMP (Table 6-6)" (p.50). The avigation easements and Taxiway B project would fall under this category.

Table 6-6, of the RSMP requires coordination with NHESP since the impact calculations need to be defined to determine acceptable mitigation. These projects could include a significant alteration of a described project, or the introduction of a new project, such as projects planned as part of the Airport Master Plan Update. For these types of projects, the

Airport would:

- Submit project plans to NHESP potentially as part of permit amendment. Identify/describe project conformance or deviation from Master Plan elements.
- Identify proposed mitigation area and location for specific project impacts based upon ratios and factors, following Master Plan (Sections 6.4 and 6.5)
- Provide updated Grassland Management Plan Figure including new mitigation for the project, and updated Table 6-1 with the tally of the remaining acreage of mitigation available
- 30-day review by NHESP with comments; and
- Approval process proceeds for amended permit unless objections are raised.

"This review allows new projects to proceed within the RSMP framework and under the current CMP (potentially with an amendment). This process aids the Airport by having known habitat areas as defined by RSMP and eliminates the need for a filing fee, since a new permit is not required. It provides a net benefit to the rare species, since the mitigation bank is maintaining habitat in advance of the need to provide mitigation" (p. 52).

The airport will continue to coordinate with NHESP relative to developing measures to minimize and mitigate impacts to significant habitat, consistent with the approach outline above in the Airport's RSMP, and in compliance with state and federal aviation safety guidance and requirements.

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? __Yes X _ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? X Yes ___ No; if yes, specify which permit:

Order of Conditions from the Westfield Conservation Commission

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

- Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? X Yes ___ No; if yes, has a Notice of Intent been filed? ___ Yes X No; if yes, list the date and MassDEP file number: _____; if yes, has a local Order of Conditions been issued? ___ Yes ___ No; Was the Order of Conditions appealed? ___ Yes ___ No. Will the project require a Variance from the Wetlands regulations? ___ Yes ___ No.
- Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

Where required by federal and state aviation safety regulations and requirements, obstruction removal (tree cutting) will occur, in off-airport avigation easement parcels, adjacent to Southampton Road (Route 2020), within Bordering Vegetation Wetlands under an amendment to the Airport's existing Vegetation Management Plan (VMP), proximate to the Approach Surface of Runway 15-end only. Impacts are limited to cutting vegetation only, no stump removal or grubbing is proposed. There will be no permanent fill impacts either. Swamp mats will be used if equipment is to enter vegetated wetlands. Up to **41,382 sf** of BVW will be converted from forested wetland to scrub shrub wetland by these activities.

The MA Wetlands Protection Act (WPA; 310 CMR 10.00) allows for vegetation management at airports as a Limited Project Status for existing facilities. The identification of areas with trees that are obstructions (and need to be removed) in and near wetlands is presented in the airport's Vegetation Management Plan which was developed, and amended, to minimize adverse effects on the wetlands.

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

Coastal Wetlands	Area (square feet) or Length (linear feet)	Temporary or Permanent Impact?
Land Under the Ocean	_____	_____
Designated Port Areas	_____	_____
Coastal Beaches	_____	_____
Coastal Dunes	_____	_____
Barrier Beaches	_____	_____
Coastal Banks	_____	_____
Rocky Intertidal Shores	_____	_____
Salt Marshes	_____	_____
Land Under Salt Ponds	_____	_____
Land Containing Shellfish	_____	_____
Fish Runs	_____	_____
Land Subject to Coastal Storm Flowage	_____	_____

Inland Wetlands

Bank (lf)	_____	_____
Bordering Vegetated Wetlands	up to **41,382 sf**	temporary selective tree - cutting (with stumps to remain)
Isolated Vegetated Wetlands	_____	_____
Land under Water	_____	_____
Isolated Land Subject to Flooding	_____	_____
Bordering Land Subject to Flooding	_____	_____
Riverfront Area	**204,732 sf**	temporary selective tree - cutting (with stumps to remain)

D. Is any part of the project:

1. proposed as a **limited project**? X Yes ___ No; if yes, what is the area (in sf)? **41,382**
2. the construction or alteration of a **dam**? ___ Yes X No; if yes, describe:
3. fill or structure in a **velocity zone** or **regulatory floodway**? ___ Yes X No
4. dredging or disposal of dredged material? ___ Yes X No; if yes, describe the volume of dredged material and the proposed disposal site:
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? ___ Yes X No
6. subject to a wetlands restriction order? ___ Yes X No; if yes, identify the area (in sf):
7. located in buffer zones? X Yes ___No; if yes, how much (in sf) **124,581 sf**

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? ___ Yes X No
2. alter any federally-protected wetlands not regulated under state law? ___ Yes X No; if yes, what is the area (sf)?

III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? ___ Yes X No; if yes, is there a current Chapter 91 License or Permit affecting the project site? ___ Yes ___ No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

A. Does the project require a new or modified license or permit under M.G.L.c.91? ___ Yes X No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current ___ Change ___ Total ___

If yes, how many square feet of solid fill or pile-supported structures (in sf)?

C. For non-water-dependent use projects, indicate the following:

Area of filled tidelands on the site:_____
Area of filled tidelands covered by buildings:_____
For portions of site on filled tidelands, list ground floor uses and area of each use:
_____
Does the project include new non-water-dependent uses located over flowed tidelands? Yes ___ No ___
Height of building on filled tidelands_____

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and

exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

D. Is the project located on landlocked tidelands? ___ Yes X No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? ___Yes X No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR? _ Yes X No; *(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)*

G. Does the project include dredging? ___ Yes X No; if yes, answer the following questions:
What type of dredging? Improvement ___ Maintenance ___ Both ____
What is the proposed dredge volume, in cubic yards (cys) _____
What is the proposed dredge footprint ____length (ft) ___width (ft)____depth (ft);
Will dredging impact the following resource areas?
Intertidal Yes__ No__; if yes, ___ sq ft
Outstanding Resource Waters Yes__ No__; if yes, ___ sq ft
Other resource area (i.e. shellfish beds, eel grass beds) Yes__ No__; if yes __ sq ft
If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?
If no to any of the above, what information or documentation was used to support this determination?
Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis.
Sediment Characterization
Existing gradation analysis results? __Yes ___No: if yes, provide results.
Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? ___Yes ____No; if yes, provide results.
Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option.

Beach Nourishment ___
Unconfined Ocean Disposal ___
Confined Disposal:
Confined Aquatic Disposal (CAD) ___
Confined Disposal Facility (CDF) ___
Landfill Reuse in accordance with COMM-97-001 ___
Shoreline Placement ___
Upland Material Reuse____
In-State landfill disposal____
Out-of-state landfill disposal ____
(NOTE: This information is required for a 401 Water Quality Certification.)

IV. Consistency:
A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? ___ Yes X No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

B. Is the project located within an area subject to a Municipal Harbor Plan? ___ Yes X No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	Existing	Change	Total
Municipal or regional water supply	_____	_____	_____
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? ___ Yes ___ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? ___ Yes ___ No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results. _____

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? _____Will the project require an increase in that withdrawal? ___Yes ___No; if yes, then how much of an increase (gpd)? _____

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ___ Yes ___No. If yes, describe existing and proposed water supply facilities at the project site:

	Permitted Flow	Existing Avg Daily Flow	Project Flow	Total
Capacity of water supply well(s) (gpd)	_____	_____	_____	_____
Capacity of water treatment plant (gpd)	_____	_____	_____	_____

F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve:

1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? ___ Yes ___ No
2. a Watershed Protection Act variance? ___ Yes ___ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? ___ Yes ___ No

III. Consistency

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	Existing	Change	Total
Discharge of sanitary wastewater	_____	_____	_____
Discharge of industrial wastewater	_____	_____	_____
TOTAL	_____	_____	_____

	Existing	Change	Total
Discharge to groundwater	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Discharge to municipal or regional wastewater facility	_____	_____	_____
TOTAL	_____	_____	_____

B. Is the existing collection system at or near its capacity? ___ Yes ___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

C. Is the existing wastewater disposal facility at or near its permitted capacity? ___ Yes___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ___ Yes ___ No; if yes, describe as follows:

	Permitted	Existing Avg Daily Flow	Project Flow	Total
Wastewater treatment plant capacity (in gallons per day)	_____	_____	_____	_____

E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)

F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? ___ Yes _ No

G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? ___ Yes ___ No; if yes, what is the capacity (tons per day):

	Existing	Change	Total
Storage	_____	_____	_____
Treatment	_____	_____	_____
Processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

III. Consistency

A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ___ Yes ___ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	Existing	Change	Total
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):	_____	_____	_____

B. What is the estimated average daily traffic on roadways serving the site?

Roadway	Existing	Change	Total
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

E. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? ____ Yes ____ No; if yes, describe if and how will the project will participate in the TMA:

F. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ____ Yes ____ No; if yes, generally describe:

G. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? X Yes __ No; if yes, specify, in quantitative terms:

11.03(6)(b) (New Taxiway)

The project includes a proposed new taxiway connecting Taxiway B and existing Southwest Quadrant hangars and apron.

B. Does the project require any state permits related to **roadways or other transportation facilities**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)? _____no_____
2. Cutting of living public shade trees (number)? _____no_____
3. Elimination of stone wall (in linear feet)? _____no_____

III. Consistency -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

The project is consistent with the two highest goals in the *Pioneer Valley Planning Commission, 2020 Regional Transportation Plan* (2019) of safety and operations and maintenance, since the project supports the airport's safety and efficiency. Also, the project is consistent with the goals in **Fixing America's Surface Transportation (FAST) Act**: to support the economic vitality of the United States, the States, non-metropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency, and to increase the safety of the transportation system for motorized and non-motorized users among other goals. The Proposed Projects are consistent with the Plan's goal of maintaining a safe, efficient travel system for the Region that also enhances recreational, business, and industry, travel.

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	Existing	Change	Total
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are:

1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? ___Yes ___No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

III. Consistency

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? ___ Yes ___ No; if yes, describe existing and proposed emissions (in tons per day) of:

	Existing	Change	Total
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ___ Yes ___ No; if yes, what is the volume (in tons per day) of the capacity:

	Existing	Change	Total
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ___ Yes ___ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	Existing	Change	Total
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos? ___ Yes ___ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? __ Yes X No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ____Yes ____ No; if yes, attach correspondence

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes X No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ___ Yes ___ No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes X No; if yes, does the project involve the destruction of all or any part of such archaeological site? ___ Yes ___ No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

III. Consistency

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

CLIMATE CHANGE ADAPTATION AND RESILIENCY SECTION

This section of the Environmental Notification Form (ENF) solicits information and disclosures related to climate change adaptation and resiliency, in accordance with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency (the "MEPA Interim Protocol"), effective October 1, 2021. The Interim Protocol builds on the analysis and recommendations of the 2018 Massachusetts Integrated State Hazard Mitigation and Climate Adaptation Plan (SHMCAP), and incorporates the efforts of the Resilient Massachusetts Action Team (RMAT), the inter-agency steering committee responsible for implementation, monitoring, and maintenance of the SHMCAP, including the "Climate Resilience Design Standards and Guidelines" project. The RMAT team recently released the RMAT Climate Resilience Design Standards Tool, which is available here.

The MEPA Interim Protocol is intended to gather project-level data in a standardized manner that will both inform the MEPA review process and assist the RMAT team in evaluating the accuracy and effectiveness of the RMAT Climate Resilience Design Standards Tool. Once this testing process is completed, the MEPA Office anticipates developing a formal Climate Change Adaptation and Resiliency Policy through a public stakeholder process. Questions about the RMAT Climate Resilience Design Standards Tool can be directed to rmat@mass.gov.

All Proponents must complete the following section, referencing as appropriate the results of the output report generated by the RMAT Climate Resilience Design Standards Tool and attached to the ENF. In completing this section, Proponents are encouraged, but not required at this time, to utilize the recommended design standards and associated Tier 1/2/3 methodologies outlined in the RMAT Climate Resilience Design Standards Tool to analyze the project design. However, Proponents are requested to respond to a respond to a user feedback survey on the RMAT website or to provide feedback to rmat@mass.gov, which will be used by the RMAT team to further refine the tool. Proponents are also encouraged to consult general guidance and best practices as described in the RMAT Climate Resilience Design Guidelines.

Climate Change Adaptation and Resiliency Strategies

I. Has the project taken measures to adapt to climate change for all of the climate parameters analyzed in the RMAT Climate Resilience Design Standards Tool (sea level rise/storm surge, extreme precipitation (urban or riverine flooding), extreme heat)? X Yes __ No

A. If no, explain why.

B. If yes, describe the measures the project will take, including identifying the planning horizon and climate data used in designing project components. If applicable, specify the return period and design storm used (e.g., 100-year, 24-hour storm).

Based on RMAT Tool results, and information from the following resources, the proponent analyzed relevant climate risks, potential weather and climate related hazards, and associated mitigation goals specific to the City of Westfield and the Pioneer Valley Region.

- *The City of Westfield: Local Natural Hazards Mitigation Plan (2009)*
- *The City of Westfield Hazard Mitigation Plan Update (2017)*
- *Pioneer Valley Climate Action and Clean Energy Plan (2014)*

- *The City of Westfield Municipal Vulnerability Preparedness (MVP) Program: Community Resilience Building Workshops Summary of Findings (2020)*

The City of Westfield has developed a Hazard Mitigation Plan (2009, updated 2017) to assess the possible risks posed by natural hazards, identify action steps that can be taken to prevent damage to property and loss of life, and prioritize funding for mitigation efforts.

A mitigation action is any action taken to reduce or eliminate the long-term risk to human life and property from hazards. The proposed project has considered the following design components and resiliency strategies – related to the RMAT Tool outputs for extreme precipitation, urban flooding, and heat:

Stormwater

Mitigating aspects of the airport for climate-related weather impacts (e.g., rainfall intensity, and flooding) include the Airport's existing large areas of undeveloped, pervious, naturally vegetated areas (970+ acres), including extensive areas of managed grassland within the airport boundaries. In addition to these mitigative benefits, the natural areas also provide habitat benefits to rare species, and the large, contiguous areas of managed grasses function as a carbon sink (in the carbon cycle) removing carbon emissions from the atmosphere and sequestering them in the soil.

The maintained grasses in the Airport's infield areas (surrounding runway and taxiway pavement) function as "green infrastructure", providing natural benefits to mitigating impacts of stormwater. Unlike roadway surfaces with curbing resulting in channelized stormwater flows and flooding and erosion in local waterways, stormwater on airport surfaces has the ability to sheet flow off (referred to as Disconnected Impervious Surfaces, or DIS) of runway and taxiway pavements, into graded grassed areas, where stormwater flows are naturally attenuated, and filtered prior to entering into the airport's stormwater systems. This feature of the airport design mitigates climate impacts (erosion, and flooding) in surrounding rivers and wetland systems, particularly in response to future severe weather events (e.g., increased rainfall intensity).

The project also includes construction of stormwater treatment structures and infiltration for stormwater along Taxiway B and SW Quad areas for impervious surfaces – enhancing overall stormwater management for the Project area. Additionally, where feasible, stormwater infiltration structures will be diverted away from Zone II areas (a wellhead protection area that has been determined by hydro-geologic modeling and approved by MassDEP).

Heat-Related Impacts and Tree Removal

Any potential for climate impacts from tree removal in obstruction removal areas (e.g. heat island), will be mitigated and minimized by utilizing a "selective cutting" approach to removing tall trees that have penetrated the airspace surfaces (hazards) to Runway 15 approaches. By selectively removing only tall vegetation (identified as an airspace hazard), smaller growing tree species and shrub layer will be maintained in these areas consistent with the airport's existing vegetation management plan (VMP). Selectively removed trees will allow for greater vegetative growth within the shrub layer of the forest, maintaining the vegetative cover and carbon sequestration, and other habitat benefits within these

parcels. The project is located outside of an urban area and is not anticipated to contribute to the "heat island" effect.

Strengthening Facilities and Infrastructure

The Proposed Project supports the airport's ability to operate efficiently and safely. As it relates to climate impacts, the Proposed Project strengthens the facilities and infrastructure at Westfield-Barnes Regional Airport/Air National Guard Base.

Furthermore, in the state's Municipal Vulnerability Program (MVP) report for Westfield, the Airport is identified as " a community asset to strengthen the response of the city and to mitigate impacts of climate change. The report notes the airport strengthens the City and Region to respond to impacts by providing infrastructure for a "large staging area, emergency response via airlift, backup emergency power, potential for intergovernmental partnership related to energy".

C. Is the project contributing to regional adaptation strategies? X Yes __ No; If yes, describe.

See above response to I.A-B

II. Has the Proponent considered alternative locations for the project in light of climate change risks? ___ Yes X No

A. If no, explain why.

The location of the project is determined by the existing airport infrastructure (e.g., pavement geometry), built structures (e.g., existing hangars), and federally controlled and regulated protective airspace surfaces to existing airport runways. Therefore, it is not feasible to relocate these projects in alternative locations.

B. If yes, describe alternatives considered.

III. Is the project located in Land Subject to Coastal Storm Flowage (LSCSF) or Bordering Land Subject to Flooding (BLSF) as defined in the Wetlands Protection Act? ____Yes X No

If yes, describe how/whether proposed changes to the site's topography (including the addition of fill) will result in changes to floodwater flow paths and/or velocities that could impact adjacent properties or the functioning of the floodplain. General guidance on providing this analysis can be found in the CZM/MassDEP Coastal Wetlands Manual, available here.

ENVIRONMENTAL JUSTICE SECTION

I. Identifying Characteristics of EJ Populations

A. If an Environmental Justice (EJ) population has been identified as located in whole or in part within 5 miles of the project site, describe the characteristics of each EJ populations as identified in the EJ Maps Viewer (i.e., the census block group identification number and EJ characteristics of "Minority," "Minority and Income," etc.). Provide a breakdown of those EJ populations within 1 mile of the project site, and those within 5 miles of the site.

1-Mile Radius from Project Site

Town/City	Block Group/Census Tract Number	EJ population with the criteria	EJ characteristics of the block group
Westfield	Block Group 3/8128	Income	Median household income: $55,250: this is 64.4 % of the MA median
Westfield	Block Group 2/Census Tract 8125	Income	Median household income: $54,375: this is 63.3 % of the MA median

5-Mile Radius from Project Site

Town/City	Block Group/Census Tract Number	EJ population with the criteria	EJ characteristics of the block group
Westfield	Block Group 3, Census Tract 8125	Minority	Total minority population: 46.5 %
Westfield	Block Group 2, Census Tract 8127.01	Minority	Total minority population: 29.5 %
Westfield	Block Group 3, Census Tract 8127.02,	Minority and income	Median household income: $33,594: this is 39.1 % of the MA median. Total minority population: 26.1 %
Westfield	Block Group 1, Census Tract 8127.02	Minority and income	Median household income: $53,690: this is 62.5 % of the MA median. Total minority population: 38.7 %
Westfield	Block Group 3, Census Tract 8127.01	Income	Median household income: $45,219:
Westfield	Block Group 1, Census Tract 8127.01	Income	Median household income: $42,596: this is 49.6 % of the MA median.
Westfield	Block Group 2, Census Tract 8126	Income	Median household income: $53,281: this is 62.1 % of the MA median.
Westfield	Block Group 2, Census Tract 8127.02	Income	Median household income: $37,470: this is 43.6 % of the MA median.
Holyoke	Block Group 3, Census Tract 8121.01	Minority	Total minority population: 34.7 %
Holyoke	Block Group 3, Census Tract 8121.04	Minority	Total minority population: 45.0 %

Holyoke	Block Group 2, Census Tract 8121.03	Minority and income	Median household income: $40,438: this is 47.1 % of the MA median. Total minority population: 67.6 %
Holyoke	Block Group 1, Census Tract 8121.03	Minority and income	Median household income: $49,615: this is 57.8 % of the MA median. Total minority population: 61.6 % Households with language isolation:2.4 %
Chicopee	Block Group 4, Census Tract 8111.02	Minority	Median household income: $58,726: this is 68.4 % of the MA median. Total minority population: 47.7 %
Chicopee	Block Group 1, Census Tract 8111.02	Minority and Income	Median household income: $33,313: this is 38.8 % of the MA median. Total minority population: 54.7 %
Chicopee	Block Group 2, Census Tract 8111.02	Minority and Income	Median household income: $36,424: this is 42.4 % of the MA median. Total minority population: 55.4 %
West Springfield	Block Group 1, Census Tract 8122.02	Minority and Income	Median household income: $49,177: this is 57.3 % of the MA median. Total minority population: 36.3 %
West Springfield	Block Group 2, Census Tract 8122.02	Minority	Median household income: $57,670: this is 67.2 % of the MA median. Total minority population: 32.6 %
West Springfield	Block Group 3, Census Tract 8122.02	Income	Median household income: $33,816: this is 39.4 % of the MA median. Total minority population: 7.5 % Households with language isolation:6.5 %
West Springfield	Block Group 3, Census Tract 8122.01	Income	Median household income: $27,500: this is 32.0 % of the MA median. Total minority population: 13.6 % Households with language isolation:2.7 %
West Springfield	Block Group 1, Census Tract 8124.04	Minority	Median household income: $66,815: this is 77.8 % of the MA median. Total minority population: 32.4 % Households with language isolation:7.5 %

B. Identify all languages identified in the “Languages Spoken in Massachusetts” tab of the EJ Maps Viewer as spoken by 5 percent or more of the EJ population who also identify as not speaking English “very well.” The languages should be identified for each census tract located in whole or in part within 1 mile and 5 miles of the project site, regardless of whether such census tract contains any designated EJ populations.

1-Mile Radius from Project Site

None

5-Mile Radius from Project Site

Westfield
Tract 8129.01 Other Indic language: 11%
Tract 8127.01 Russian: 5.8%

Holyoke
Tract 8120.02 Spanish or Spanish Creole: 6.4%
Tract 8121.04 Spanish or Spanish Creole: 10.8%
Tract 8121.03 Spanish or Spanish Creole: 25.7%

Chicopee
Tract 8111.02 Spanish or Spanish Creole: 7.5%

West Springfield
Tract 8122.02 Spanish or Spanish Creole: 5%

C. If the list of languages identified under Section I.B. has been modified with approval of the EEA EJ Director, provide a list of approved languages that the project will use to provide public involvement opportunities during the course of MEPA review. If the list has been expanded by the Proponent (without input from the EEA EJ Director), provide a list of the additional languages that will be used to provide public involvement opportunities during the course of MEPA review as required by Part II of the MEPA Public Involvement Protocol for Environmental Justice Populations ("MEPA EJ Public Involvement Protocol"). If the project is exempt from Part II of the protocol, please specify.

Not applicable

II. Potential Effects on EJ Populations

A. If an EJ population has been identified using the EJ Maps Viewer within 1 mile of the project site, describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

As identified above, the Project is located within 1- and 5-miles of EJ populations. ExENF Attachment A Project Narrative, Section 6 - Environmental Justice, identifies existing environmental burdens and assesses potential impacts on EJ populations. ExENF Attachment A Section 7 - Draft Section 61 Findings and Mitigation identifies measures to mitigate potential environmental impacts.

In the built condition, the taxiway improvements and obstruction removal will have no effect on EJ populations or non-EJ populations as the project does not generate any air emissions, generate or release pollutants, generate noise, or increase traffic. Therefore, it is not expected to materially exacerbate any existing unfair or inequitable environmental or public health burden on the EJ populations in the Designated Geographic Area ("DGA").

Potential construction-period effects on EJ and non-EJ populations are related to air emissions, fugitive dust, noise and traffic related the project will not materially exacerbate any existing unfair or inequitable environmental or public health burden on the EJ populations in the DGA.

B. If an EJ population has been identified using the EJ Maps Viewer within 5 miles of the project site, will the project: (i) meet or exceed MEPA review thresholds under 301 CMR 11.03(8)(a)-(b) __ Yes _X_No; or (ii) generate150 or more new average daily trips (adt) of diesel vehicle traffic, excluding public transit trips, over a duration of 1 year or more. ___ Yes _X_ No

C. If you answered "Yes" to either question in Section II.B., describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

III. Public Involvement Activities

A. Provide a description of activities conducted prior to filing to promote public involvement by EJ populations, in accordance with Part II of the MEPA EJ Public Involvement Protocol. In particular:

1. If advance notification was provided under Part II.A., attach a copy of the Environmental Justice Screening Form and provide list of CBOs/tribes contacted (with dates). Copies of email correspondence can be attached in lieu of a separate list.

   The advance notification Environmental Justice Screening Form was provided to CBOs/Tribes on 3/16/2022. See attached email correspondence. The project proponent also conducted additional notification and public involvement activities, based on the MEPA EJ Public Involvement Protocol via a project informational fact sheet sent to CBOs/tribes on 5/16/2022. The fact sheet was provided to the MEPA distribution list for Westfield, and also to additional relevant CBO and community contacts identified by the project proponent and the proponent's consultants. The fact sheet explains the project's purposed and estimated impacts. It also provides information on the MEPA review process, links to sources with more information, and how to submit questions and comments on the project, for both the pre-filing phase and during the MEPA review process phase.

2. State how CBOs and tribes were informed of ways to request a community meeting, and if any meeting was requested. If public meetings were held, describe any issues of concern that were raised at such meetings, and any steps taken (including modifications to the project design) to address such concerns.

   Community Based Organizations, City of Westfield specific advocacy groups, and Tribes were informed of the ability to request a community meeting via the advance notification Environmental Justice Screening Form provided to the project EJ distribution list on March 16, 2022. The project team did not receive any requests for such a meeting. As noted above, a fact sheet was provided on 5/16/2022 to CBOs/tribes with project contract information for any project-related requests and questions.

3. If the project is exempt from Part II of the protocol, please specify.

   N/A

B. Provide below (or attach) a distribution list (if different from the list in Section III.A. above) of CBOs and tribes, or other individuals or entities the Proponent intends to maintain for the notice of the MEPA Site Visit and circulation of other materials and notices during the course of MEPA review.

   As noted above, the CBO/tribes distribution list has been enhanced by the project proponent. Please refer to **Attachment F** for the updated and enhanced distribution list.

C. Describe (or submit as a separate document) the Proponent's plan to maintain the same level of community engagement throughout the MEPA review process, as conducted prior to filing.

   The enhanced CBO/tribes distribution list will continue to be used to provide project information to CBOs/tribes regarding public meetings for the project with any local/state/federal agency, and electronic copies of any project filings. The MEPA documents associated with this project, and any other relevant project (e.g., federal Environmental Assessment) materials will be provided on the Proponent's website along with notice, as appropriate, provided by the distribution list with information on translations services if requested.

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

   (Name) The Westfield News and Pennysaver (Date) June 18, 2022

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

06/15/2022		6/14/2022	Alyssa Jacobs
Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ENF (if different from above)
Chris Willenborg		Alyssa Jacobs	
Name (print or type)		Name (print or type)	
Westfield-Barnes Regional Airport		Epsilon Associates	
Firm/Agency		Firm/Agency	
110 Airport Road		3 Mill & Main Place, Suite 250	
Street		Street	
Westfield, MA 01085		Maynard, MA 01754	
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Phone		Phone	

Attachment A

Project Narrative

1.0 INTRODUCTION

1.1 Overview

The Westfield-Barnes Regional Airport Commission (the Airport or the Proponent) proposes to widen and realign the southern segment of Taxiway B, realign a northern segment of Taxiway B, acquire six off-airport avigation easements for obstruction removal off Runway 15 end, and construct a new taxiway and apron to the existing Southwest Quadrant (SW Quad) area of the airport, to improve operational efficiency and enhance safety at the Westfield-Barnes Regional Airport (Proposed Project site).

This Expanded Environmental Notification Form (EENF) is being submitted on behalf of the Airport and has been prepared in accordance with the MEPA regulations, and requirements for requesting that the Secretary allow a Single Environmental Impact Report (SEIR) under 301 CMR 11.06(8). In addition to a completed ENF and the required attachments (e.g. a project description, supporting data detailing potential environmental impacts, etc.), the EENF provides more extensive and detailed information that describes and analyzes a proposed project and its alternatives and assesses its potential environmental impacts and environmental mitigation measures.

For projects located in "Designated Geographic Areas" around EJ populations, an EENF requesting a Single EIR must contain all the content specified above, except that a greenhouse gas (GHG) analysis is required only if the project exceeds mandatory EIR thresholds or is otherwise required to prepare a GHG analysis by the MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations. The EENF must, in addition to the criteria above:

- describe and analyze all aspects of the project that may affect EJ populations located in whole or in part within the Designated Geographic Area around the project;
- describe measures taken to provide meaningful opportunities for public involvement by EJ populations prior to filing the EENF, including any changes made to the project to address concerns raised by or on behalf of EJ populations; and
- provide a detailed baseline in relation to any existing unfair or inequitable Environmental Burden and related public health consequences impacting EJ populations in accordance with 301 CMR 11.07(6)(n)1.

The Proposed Projects are based on the recent 2020 Airport Master Plan Update (AMPU) and Airport Layout Plan (ALP). The AMPU and ALP serve as the framework for planning future development at the Airport. The last ALP update was conducted as part of a Master Plan Update in 2004, and since then the Airport has undergone several changes in the form of facilities, operations, and other issues that need to be formally documented. The 2020 AMPU and ALP allow for the planning necessary to preserve the Airport's role in the state, region, and national transportation system and is essential to reaffirm and maintain the future function of the Airport.

1.2 Proposed Project Site

The Westfield-Barnes Regional Airport (BAF) is owned, operated, and in the City of Westfield, Hampden County, Massachusetts, located in the southwestern portion of the state, near the Connecticut border, as shown on **Figure 1 in Attachment B**. As the owner and operator, the City of Westfield is also identified by the FAA as the designated Sponsor of the airport and accepts federal grants and the associated grant assurances. The airport is identified in the National Plan of Integrated Airports System (NPIAS) with a service level of General Aviation and an Asset classification of Regional, serving as a critical component of the general aviation system in Massachusetts as well as fulfilling a principal role of a regional airport.

The Westfield-Barnes Regional Airport covers 1,200 acres at an elevation of 270 feet above mean sea level. It has two paved runways, with a primary instrument runway and a secondary crosswind runway. The primary runway, Runway 2-20, is 9,000 feet long and 150 feet wide. The crosswind runway, Runway 15-33, is 5,000 feet long and 75 feet wide. The Airport has several aircraft parking aprons, hangar buildings of varying types and sizes, as well as an equipment storage and maintenance facility, air traffic control tower and an administration building. The airport is located three miles from the central business district of Westfield along the Massachusetts Turnpike (Interstate 90). Airport Road bounds the airport to the north and west, and Massachusetts Route 10 (State Route 202) to the north and south. The airport's primary (public entrance) is via Airport Road and Apremont Way.

The airport has one fixed-base operator, Ross Aviation, providing aircraft fueling, aircraft management, and aircraft maintenance. Gulfstream Aerospace Corporation is the airport's largest and most active tenant, providing certified Gulfstream aircraft maintenance. Military operations comprise a significant amount of airport activity and include the Massachusetts Air National Guard 104th Fighter Wing and the Army National Guard 226th Division Army Aviation Support Battalion.

- MA Air National Guard. Flying the F-15, the MA Air National Guard's 104th Fighter Wing supports Air Force wartime contingency requirements and performs a variety of peacetime missions required by the Air Force. The 104th is also readily available to the Governor of Massachusetts to respond to natural or human-made disasters.

- MA Army National Guard. The MA Army National Guard has three units based out of Westfield-Barnes as part of the Army Aviation Support Facility #2. The units consist of Detachment 1, Charlie Company, 3-126th General Support Aviation Battalion with 6 Medical Evacuation HH-60M Blackhawk helicopters. Included is Detachment 1, Charlie Company, 1 224th Security & Support Battalion with 2 LUH-72 helicopters, and Detachment 3, Bravo Company, 638th Aviation Support Battalion, with is a maintenance detachment in support of the HH-60 and LUH-72 helicopters

While the airport supports a significant amount of flight training and military activity, a considerable portion of the airport's general aviation traffic is related to corporate activity, recreational flying, and business charters. The airport also serves as an important gateway to area attractions and recreational venues.

The Proposed Project sites consist of the three following areas: 1) The southern and northern portion of Taxiway B ("Taxiway B South"; "Taxiway B North", respectively); 2) A new taxiway connection and apron area for the SW Quad area; and 3) Off-airport avigation easements for removal of tree obstructions to Runway 15-33 airspace located on privately-owned industrial, undeveloped, and residential parcels adjacent to Route 202 (see **Figure 2 in Attachment B**). Portions of the project site contain vegetated wetlands and stream resource areas (Arm Brook), along with mapped rare species habitat (grassland birds), as shown in **Figures 3** and **4** in **Attachment B**.

1.3 Federal, State, and Local Agency Jurisdiction

In addition to MEPA review, the Project will require permits and approvals from local, state, and federal agencies. The anticipated federal, state, and local permits, reviews, and approvals required for the Project are listed in **Table 1.1.** The Proposed Project would be subject to review under the Massachusetts Environmental Policy Act (MEPA) and its implementing regulations (301 CMR 11.00 et seq.) and consulted with the MEPA office. It was determined that the Proposed Project is within MEPA jurisdiction and will exceed MEPA thresholds 11.03 (1)(a) Land Disturbance, (10 Acres+ Impervious Area) , 11.03(2)(b) Greater than two acres of disturbance of designated priority habitat, and 11.03(6)(b) (New Taxiway), and is therefore subject to MEPA review.

Table 1-1 Permits and Approvals Required for the Proposed Project

Permit	Agency	Measures to Comply with Applicable Performance Standards
Federal		
Review under Section 106 of the National Historic Preservation Act (36 CFR 800)	FAA, U.S. Army Corps of Engineers; Tribal Consultation; State Historic Preservation Officer (SHPO)	The Project would be designed to avoid or minimize impacts to historic resources. Consultation has occurred with FAA and a determination of "no effect" has been made by the MA SHPO based on review of the prior Taxiway B and new Taxiway
Federal Aviation Administration (FAA) planning, design, and safety Standards: AC 150/5300-13A Airport Design	Federal Aviation Administration (FAA)	Avigation easements, obstruction removal, and taxiways would be designed to comply with FAA requirements
Section 7 Consultation under U.S. Endangered Species Act	Department of Interior, U.S. Fish and Wildlife Service (USFWS)	The Proposed Project would be reviewed by the USFWS through the NEPA process
State		
M.G.L. c. 90 § 35B, 780 CMR 111.7	Massachusetts Department of Transportation (MassDOT)– Aeronautics Division	Taxiway surfaces would be designed to comply with MassDOT Aeronautics Division requirements
Review under Massachusetts Endangered Species Act	Natural Heritage and Endangered Species Program	Avoid and minimize impacts to state listed species habitats

Table 1-1 Permits and Approvals Required for the Proposed Project (continued)

PERMIT	AGENCY	MEASURES TO COMPLY WITH APPLICABLE PERFORMANCE STANDARDS
State Historic Register Review (Chapter 256)	Massachusetts Historical Commission (MHC)	The Proposed Project would be designed to avoid or minimize impacts to historic resources. Consultation would be led by FAA and a determination of "no effect" is anticipated to be made by the MA SHPO
Local		
Local Wetlands Protection Act M.G.L. c. 131 § 40, (310 CMR 10.24(7)(c)(5) and 10.53(3)(n))	Westfield Conservation Commission	Construction of the Preferred Alternative would require the Westfield Conservation Commission to approve revisions to the airport's Vegetation Management Plan (VMP) to remove tree obstructions in the Runway 15 end airspace surfaces avigation easements
Wetlands Bylaw Order of Conditions, (Ordinance # 1109)	Westfield Conservation Commission	Construction of the Preferred Alternative would require that the Westfield Conservation Commission approve revisions to the airport's Vegetation Management Plan (VMP) to remove tree obstructions in the Runway 15 end airspace surfaces avigation easements

1.4 Request for a Single Environmental Impact Report

The MEPA Regulations at 301 CMR 11.06 (8) outline the process by which a project proponent may request a Single EIR as follows provided that the expanded ENF:

- describes and analyzes all aspects of the Project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope;
- provides a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed; and
- demonstrates that the planning and design of the Project use all feasible means to avoid potential environmental impacts.

Section 2.0 describes all aspects of the project. Section 3.0 details all feasible alternatives relative to Taxiway B realignment and widening avigation easement and obstruction removal, and SW Quad enhancements proposed by this project. Section 4.0 describes existing and proposed impacts to wetland resource areas as well as the requisite avoidance, minimization and mitigation practices. Section 4.0 describes existing and proposed stormwater management practices and mitigation efforts. Section 5.0 describes the short-term construction impacts anticipated from this Project. Section 7.0 summarizes all mitigation efforts and presents the draft Section 61 Findings.

2.0 PROPOSED PROJECT AND PURPOSE AND NEED

2.1 Proposed Project

The Proposed Project builds upon the 2020 Airport Master Plan Update for the airport and includes the following short-term projects:

- Realignment and widening of Taxiway B South and a segment of Taxiway B North to improve airfield safety and compliance with FAA design guidelines and DOD guidelines by achieving necessary width of the pavement and paved shoulders for existing airport users (see **Figure 5a in Attachment B**);

- Adding a new taxiway and apron area in the SW Quad to meet the operational needs of existing airport users (see **Figure 5b in Attachment B**); and

- Acquisition of six avigation easements off the Runway 15 end to facilitate obstruction removal of hazards to airspace, meeting the runway length needs of existing aircraft using the Airport, and resolving an existing "hot spot" issue with a non-standard hold line on Taxiway A for Runway 15-33 (see **Figure 5c in Attachment B**).

2.2 Purpose and Need

The Proposed Project has the following purposes:

1. To improve airfield safety and compliance with FAA and design guidelines by removing obstructions/hazards to Runway 15 approaches Terminal Instrument Procedures (TERPS) and eliminating the displaced runway threshold[1],

2. eliminate airfield safety issues identified by FAA as "Hot Spots" by reconstructing pavement geometry and markings to correct existing non-standard design conditions,

3. widening Taxiway B South to meet the DOD design standards of 75 feet wide with 25-foot-wide paved shoulders on each side, and the realignment of a portion of Taxiway B North

4. to meet the operational needs of the existing aircraft using the Airport.

The Proposed Project is needed to eliminate existing "Hot Spot" areas on the airfield and enhance safety. An "airport surface hot spot" is a location on an airfield movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary. A hot spot is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically, it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of

[1] A displaced threshold is a runway threshold located at a point other than the physical beginning or end of the runway. The portion of the runway so displaced may be used for takeoff but not for landing. Landing aircraft may use the displaced area on the opposite end for roll out.

increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as, but not limited to, airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

At Westfield-Barnes, two hot spots exist on the airport diagram. Hot Spot #1 (HS1) is identified due to the complex and confusing intersection of Taxiway A and Taxiway B in close vicinity of the hold position markings to Runway 2-20. The intersection geometry of these two taxiways results in potentially confusing markings increasing the possibility of pilots inadvertently taxiing past the Runway 15-33 hold position markings and entering the active airspace without authorization. Hot Spot #2 (HS2) results from a non-standard location of the hold short line marking for Taxiway A, prior to the 90-degree turn to the Runway 15 end. This non-standard airfield geometry increases the potential for pilot error resulting in incursions/accidents from entering runway areas without prior authorization.

The Proposed Project also allows the airport to meet dimensional design standards for widths and clearances required to optimize safe operations. These dimensional standards vary depending upon the FAA Airport Reference Code (ARC) for the runway. Because the Westfield-Barnes Regional Airport is a joint-use facility, the airport must meet both FAA and DOD design standards. While FAA standards are paramount, principal areas where military activity occurs must meet DOD standards. These areas include Runway 2-20, as well as Taxiways B and G. Ramp and taxilanes used exclusively by DOD aircraft, are designed to DOD standards. Runway Safety Areas, Object Free Areas, etc., are designed to FAA standards.

As described below in further details, the Proposed Project is needed to improve overall operational safety and efficiency and to meet DOD and FAA design standards at Westfield-Barnes Regional Airport.

2.2.1 Taxiway B South & North

Taxiway B is the primary parallel taxiway serving the west side of Runway 2-20 and is the primary taxiway for military operations on Runway 2-20. The northern portion of Taxiway B meets military standards with 75 feet wide with 25-foot paved shoulders. The southern portion of Taxiway B has a current pavement width of 50 feet. This segment of taxiway is proposed to be reconstructed to meet the same military standards of 75-feet wide with 25-foot paved shoulders.

The Proposed Project includes the widening and realignment of the southern portion of Taxiway B (from Runway 15-33 to the approach end of Runway 2), to meet DOD standards, and the realignment of a segment of Taxiway B north (from Runway 15-33 to the approach end of Runway 20) in order to improve safety by addressing HS1. The relocation of Taxiway B south is proposed to shift inwards (towards the runway) with 400’ of separation from Runway 2-20 per FAA design standards. The proposed width along with the northern realignment for the taxiway will allow the airport to enhance safety by meeting DOD design standards and realigning the Taxiway B to improve safety at the crossing of Taxiway A and Runway 15-33 (HS1). This project is jointly funded using sources from the Military, FAA, MassDOT and the City of Westfield.

2.2.2 Taxiway Width

Taxiway B South currently has a military waiver for the existing F-15s. During reconstruction for this taxiway, the airport proposes to meet the requirements of DOD design standards. The DOD design standards are independent of FAA requirements. These standards require the width of taxiways to be 75 feet with 25 foot wide paved shoulders. The northern part of Taxiway B, from Runway 15-33 to the approach end of Runway 20, meets DOD standards, whereas the Taxiway B southern portion, from Runway 15-33 to the approach end of Runway 2, does not.

2.2.3 Taxiway Realignment

Taxiway B South and Taxiway B North realignment and widening results from the need to correct airfield geometry and pavement markings identified as HS1 near the intersection of the Runway 15-33 and Taxiways A and B. The plans require the removal of the existing 5,500-foot existing Taxiway B south and constructing a new 5,300-foot Taxiway B south (to DOD and FAA standards). The Taxiway B north realignment will consist of constructing a 1,100-foot taxiway section to be directly across where the new Taxiway B south intersects Runway 15-33.

The Proposed Project will realign the position of the taxiway consistent with FAA requirements for separation taxiway and runway distance requirements (center line of runway to centerline of taxiway) of 400', which shifts the taxiway inwards towards the runway from the current configuration of 500' separation distance.

2.2.4 Runway 15-33 Approach Surface Obstruction Removal

The airport is responsible for management of obstructions to the airspace surfaces surrounding runways and off each runway end. The Proposed Project incorporates the results of the recent ALP update which identifies, based on an evaluation, obstructions to air navigation and effect on the safe and efficient use of airspace at the airport. In addition to the obstructions to the Runway 15 Obstacle Clearance Surface (OCS) the AMPU and ALP Update undertook an obstruction analysis on all four runway ends for the following surfaces:

- Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace (FAR Part 77)
- Terminal Instrument Procedures (TERPS)
- Obstacle Clearance Surfaces
- Siting and Survey Considerations for Precision Approach Path Indicator (PAPI) and Other Visual Glide Slope Indicators (VGSI)

As documented in the Airport Master Plan (2020), the Plan and Profile view of both ends of Runway 15-33 identify obstructions to the Runway 15 20:1 (20-feet horizontal for each one-foot vertical) visual approach Federal Aeronautical Regulations (FAR) Part 77 Imaginary Surfaces.

The airspace analysis identified airspace obstructions (trees) in the Runway 15 airspace, on private property (off-airport). These airspace obstructions limit the available runway pavement that aircraft can use due to the current runway threshold displacement of approximately 490'. The displacement to the runway threshold also results in the "hold position" markings[2] to be placed in a non-standard location approximately 100 feet back on Taxiway A leading to RW 15 end. This is identified in the airport diagram as Hot Spot #2 (HS2) by the FAA Runway Safety Action Team (RSAT).

Hot Spot #2 is denoted for the unusual location of runway hold position marking on Taxiway A for Runway 15 (see **Figure 6 in Attachment B**). The displaced threshold to Runway 15, has results in the hold-short line markings being placed further down Taxiway A in a non-standard location, prior to the 90-degree turn. Standard airfield geometry locates hold positions markings at the elbow of the taxiway, such that the aircraft is at a 90-degree (perpendicular) orientation to the runway. The ability to position aircraft perpendicular to the runway enhances safety by allowing pilots to better observe any incoming/departing aircraft traffic.

Additionally, due to the non-standard location of the hold line markings, pilots have missed this critical hold position, and have taxied through the hold short line without permission to proceed. Aircraft going beyond this marking without permission create potentially unsafe conditions by continuing without clearance into the Approach Surface used by landing aircraft to Runway 15.

Once the airspace (Approach Surface) is clear of obstructions (trees) to the approach surface, the airport can remove the existing displacement markings to the Runway 15 threshold and move the threshold to the actual end of runway pavement regaining approximately 490 feet of the runway. This enhances safety by increasing usable pavement length for aircraft, and eliminating the non-standard location for the hold position on Taxiway A leading up to the Runway 15 end (HS2).

2.2.5 Southwest Quadrant Area

The Proposed Project includes enhancements to the Southwest Quad to create a new taxiway and apron off Taxiway B South to support existing facilities (Air Methods) and future hangar development. This improvement is addressed in the AMPU and ALP. The taxiway will be 35 feet wide by approximately 1,100 feet long while the apron will be approximately 78,000 square feet.

2.3 Future Master Plan Projects

Future projects under consideration by Westfield-Barnes that could have effects within the area subject to this ExENF include the following:

- 2023 Reconstruct Taxiway E. This is a normal phased reconstruction of the taxiway.

[2] For runways, these markings indicate where aircraft must stop when approaching a runway. They consist of four yellow lines, two solid and two dashed, spaced six or twelve inches apart, and extending across the width of the taxiway or runway. The solid lines are always on the side where the aircraft must hold.

- 2023 Expand South De-Arm Pad (this is a DOD funded project). This project involves doubling the size of the de-arm area that will make room for additional aircraft.

- 2023 Expand SRE Building. This project doubles the size of the existing SRE building.

- 2023 Construct Taxiway J. This is a DOD funded project that would provide a second access point between the Air National Guard ramp and Taxiway B North. The purpose is to permit short-term itinerant parking along the north de-arm area without impeding ramp and runway access.

- 2023 Relocate ILS Glideslope Antenna. Moving the glideslope antenna from the Runway 2-20 west to east side is necessary because traffic along Taxiway B South and the aircraft hold area lies in antenna's critical area. The relocation will also allow Taxiway J to be extended easterly to Runway 2-20.

- 2024 Expand B1 Apron Area. This project is designed to improve aircraft movement around the taxiway.

- 2024 Develop Hangar Areas 36, 40, and 41. These are demand driven projects designed to increase the airport's hangar capacity.

If these projects obtain funding and move forward, the applicable MEPA project submittals would be made by the appropriate project proponent. Additionally, in the airport's recent master plan update, projects for the "intermediate term", (2026-2030) includes the projects listed below. Potential projects beyond the short-term timeframe can be challenging to predict due to the funding availability and the possibility of changing priorities. Therefore, these projects have been grouped together into a single project list and not prioritized by year. Further evaluation of these projects will occur in the future to determine priorities based on airport safety, demand, and efficiency.

- Extend Taxiway H and Remove Taxiway G (leave Taxiway D)

- Taxiway B North Realignment

- Rehabilitate Taxiway S

- Taxiway A/Runway 33 Runup

- Construct Fabric Storage Building

Actual design and construction of these projects will depend on the availability of federal, state, and local funding. The projects identified in this section serve as a baseline for reasonably foreseeable future projects to assess cumulative impacts. These projects are not anticipated to result in significant cumulative impacts. While airfield pavement projects would result in the loss of some grasslands, overall it should be noted that Westfield-Barnes has been actively managing the amount of grasslands on the airport through its ongoing management program for rare species and has recently undertaken a runway width reduction project, removing a significant amount of pavement within mapped habitat.

3.0 PROJECT ALTERNATIVES

3.1 Taxiway B South

3.1.1 No-Build Alternative

The no-build alternative would not reconstruct Taxiway B South from just north of Runway 15-33 to the approach end of Runway 2. The northern part of Taxiway B would remain at its current dimensions which meet DOD requirements. The southern part of Taxiway B would remain at its current, insufficient width of 50 feet and would continue to require a waiver from the DOD design standards. The taxiway would not be realigned to from its current position of 500 feet runway taxiway separation to 400 feet, and the airport would not eliminate the Hot Spot #1 at the intersection of Taxiway A and Taxiway B at Runway 13-55 midfield. The no-build alternative would not enhance safety by meeting DOD and FAA design standards for aircraft and resolving safety concerns with airfield geometry by eliminating Hot Spot #1 at the airport. No modifications to the taxiway would occur and no additional impacts to mapped state-listed bird species Habitat would occur.

3.1.2 Preferred Alternative Realignment and Widening

The Proposed Project would widen Taxiway B South from Runway 15-33 to the approach end of Runway 2 to DOD design standards and realign it 400 feet from Runway 2-20 centerline. This Proposed Project will also realign and reconstruct a portion of Taxiway B north which already meets DOD design standards). The reconstruction of Taxiway B south and north will eliminate the concerns with Hot Spot #1.

The Proposed Project would result in approximately 12.40 acres of impacts to state-listed bird species habitat associated with pavement for the Taxiway B reconstruction, and an additional 9.30 acres of temporary disturbance from grading on existing grassland for the taxiway construction. Approximately 5.23 acres of the existing pavement for Taxiway B would be removed and restored with an appropriate grass seed mix included in the Taxiway B construction.

3.1.3 Design to FAA Standards instead of DOD Requirements

This alternative would realign the centerline to of Taxiway B South to a separation of 400’ with Runway 2-20 to create a safer crossing geometry at Taxiway A and Taxiway B to Runway 15-33 and eliminating Hot Spot #1 . There would be no modifications to either the width of the taxiway pavement orthe shoulders and they would remain grassed. This alternative would reduce the amount of new pavement as a result of the elimination of the paved shoulders and widening.

This alternative was rejected as it would not meet the purpose and need for the project and mission of the Air Force and Army National Guard Base.

3.2 New Taxiway Connector to Southwest Quadrant Hangars

3.2.1 No Build Alternative

No new taxiway or apron area would be constructed at this location. If the airport does not construct a new taxiway connection, to the southwest quadrant, and apron then this area remains inaccessible to fix wing aircraft which would not meet the operational needs of the existing hangar tenant (Air Methods) or provide for future hangar development. The helicopters in this area would continue to only air hover for taxiing and would not be able to ground taxi or be towed on a dolly (as needed). No modifications to the taxiway and apron for the southwest quadrant area would occur and no additional impacts to mapped state-listed bird species habitat would occur.

3.2.2 Preferred Alternative

As identified in the airport Master Plan Update, the Proposed Project includes the creation of a new taxiway and apron in the south quadrant area to support the existing hangar tenant (Air Methods) future needs and to provide for future potential hangar development. The new taxiway would connect off Taxiway B South near the approach end of Runway 2 and would be approximately 1,100 feet long and 35-feet wide. The new apron, connected to the new taxiway, would be approximately 81,900 square feet (1.88 ac) and would be designed to accommodate approximately six new future potential hangars. Approximately 2.7 acres of new pavement would be constructed under the Proposed Project as shown in **Figure 5b in Attachment B.**

This area of the airport was previously used as a lumber yard and proposed development is within areas previously disturbed. The current facilities in this area only allow for rotary wing aircraft and access to the airfield by hover taxiing. The existing tenant operator in this area has operational needs for fixed wing aircraft and requires new taxiway pavement connecting the hangar area to Taxiway B South. This also includes a new apron area to provide for potential future hangar development.

3.3 Runway 15 End Avigation Easements and Obstruction Removal

3.3.1 No Build Alternative

Under at no-build scenario, the airport would not acquire off-airport avigation easements and would not remove tree obstructions/hazards to the airspace for Runway 15. Additionally, the Runway 15 threshold would remain displaced by approximately 490 feet and the hold position markings on Taxiway A would remain in a non-standard location. The “hot spot” identified in this area (Hot Spot #2) would not be eliminated; therefore, operational safety concerns of the airport would not be corrected.

3.3.2 Preferred Alternative

The airport is required to keep airspace clear and free of obstructions. The Proposed Project will acquire avigation easements to facilitate obstruction (tree) removal and updating the airport’s Vegetation Management Plan (see **Figure 5c in Attachment B**). Removing airspace obstructions addresses the existing Hot Spot #2 (HS2) resulting from the displaced threshold on Runway 15 end. As described above, HS2 is

at the hold position marking on Taxiway A due to its unusual location. Instead of holding perpendicular to the runway, with a clear view of the entire runway, pilots are facing northwest at the hold short line, with no clear view behind them.

The FAA concern in both cases is because of the potential increase for incursions or accidents. Removing airspace obstructions will allow the airport to regain the original runway threshold location, which also results in the approach surface of the runway shifting outwards and allowing the "hold position" markings to be placed in the standard location per FAA design requirements. Approximately 41,210 sf (0.95 ac) of Bordered Vegetated Wetlands (BVW) associated with Arm Brook in this area would be impacted by the conversion of trees to a shrub dominated community, along with 2.86 acres of work in the 100 ft buffer zone. No permanent fill activities are proposed.

4.0 EXISTING CONDITIONS

This section describes existing conditions at Westfield-Barnes Regional Airport. The Region of Influence (ROI) includes the area where ground and resource disturbance would occur during construction due to the Proposed Project and the immediate surrounding area. The area of analysis for direct and indirect impacts includes the Westfield-Barnes Regional Airport, and where necessary, is expanded to include the surrounding communities.

Environmental concerns and possible hazards are an important consideration for any public use airport. The following sections describe the existing conditions of the MEPA review factors that potentially may be affected by the Proposed Project.

This EENF also relies on the 2020 Westfield-Barnes Regional Airport Master Plan Update for detailed discussion of airport-wide site conditions and overall proposed project context and potential impacts.

4.1 Operations and Future Forecasting

The operations trends at the Westfield-Barnes Regional Airport are consistent with the national trend of slight declines in general aviation aircraft (single piston) used for recreation, and growth in operations from business class of aircraft (turbo prop and jet). Over the 20-year planning period, trends at BAF for aircraft operations range from a high growth of 1% (to account for the favorable demographics and national trends) to a continued slight decline of 2.1% per year, one that reflects the 18-year downward trend. The delta between the 1% growth and 2.1% decline results in a median of -0.6%. annual change to operations since 2000 and the projected changes for the next 20 years.

Based aircraft forecasts at the Westfield-Barnes Regional Airport are not predicted to have a downward change in operations. Moreover, because single-engine aircraft, including sport and experimental aircraft, make up most based airplanes at the airport, the projected trend ranges from a growth rate of 2% per year to a likely decline of 1% per year, with a 0.5% growth as the median.

Through the 20-year planning period the Westfield-Barnes Regional Airport will remain a general aviation airport in support of recreational and business aviation, and the Air and Army National Guard. The population, per capita income and employment levels in the service area reflects changes in both national and state demographics. Moreover, the Airport's level of activity emulates that of the U.S. regarding the number of based aircraft, fleet mix, and operations.

4.2 Existing Conditions

4.2.1 Land Use and Zoning

This section describes land uses and zoning in the vicinity of the Airport.

Zoning is based on the July 15, 2021 City of Westfield Zoning Ordinance (see **Figures 7 and 8 in Attachment B**). The land within the airport property boundaries is designated at "AD" or "Airport District" zoning. The zoning guidelines for the Airport District establish, promote compatible development, protect the airport,

and minimize any adverse impact on the surrounding neighborhoods. The intent of this article is to: 1) Provide for future development of the airport to better serve the community; and 2) Encourage the establishment of uses that are compatible and foster a harmonious relationship between the airport and the surrounding area.

The surrounding land immediately to the northwest of the airport and within the approach to Runway 15-33 has a "industrial" zoning designation and areas with "residential" zoning. Land immediately to the west is given a "industrial" zoning designation, within the vicinity of the Taxiway B South adjacent to Runway 2-20. Also, within runway approaches, areas to the south-southeast contain parcels designated as "industrial" and "airport district". Zoning areas to the east of the airport are comprised largely of "business" and "rural residential" areas. North of the airport and in the Runway 20 approach surface contains both business and residential areas.

Two schools are located within approximately a half-mile of the Airport: Southampton Road School, which is located to the south of the Westfield Intermediate School, both public elementary schools located to the west of the airport. Police and fire stations are located near the center of town, more than a mile west of the Airport.

4.2.1.1 Vegetation

The geology of the area surrounding the airport has led to the establishment of Cultural/Sandplain Grassland, and Pitch Pine – Oak Forest/Woodland natural communities. On the airport, grassland areas are primarily associated with the runway and taxiway system and other maintained areas. The grasslands have been previously managed by the airport throughout the growing season. Beyond the grassland management areas, the open habitat transitions rapidly to forest in the unmaintained areas of the airport. Scrub Oak (*Quercus ilicifolia*) shrublands areas are limited and is generally limited to the forest edges. The forested areas tend to grade between areas of Pitch Pine/mixed oaks and oak-dominated areas, see **Figure 9 in Attachment B**.

4.2.1.2 Farmlands

Soils that exhibit good drainage are typically considered by the U.S. Department of Agriculture Soil Conservation Service to be prime farmland. The Farmland Protection Policy Act (FPPA) requires coordination with the local office of the Natural Resources Conservation Service (NRCS) if the proposed project entails irreversible conversion of prime farmland to nonagricultural uses. Farmland subject to this requirement does not have to be currently used for cropland; it may also be forestland or pastureland, but not urban or built-up land. This requirement is intended to monitor the impact that federal programs or federally funded projects have on the conversion of this resource.

The NRCS identifies important farmland areas by soils that have ideal combinations of physical and chemical attributes for a variety of farming uses; these are identified as Prime Farmland, Farmland of Unique Importance, and Farmland of Statewide Importance. Prime Farmland are those areas with ideal

farming conditions; Farmland of Unique Importance are those soil types that high-value crops require; and Farmland of Statewide Importance are those soils that do not meet the previous grouping criteria but are important at the state or local level.

The Proposed Project sites (on-airport) consist of low-quality soils considered "Urban Lands" and does not contain soils identified as farmland. Off-airport project site(s) for the avigation easement parcels and obstruction removal contain soils with "Farmland of Statewide Importance," designation, including 255A Windsor loamy sand, and 255B Windsor loamy sand (see **Figure 10 in Attachment B**). However, at these sites the proposed work to remove obstructions (trees) for the airport airspace requirements, does not propose any immediate or long-term impacts that entails irreversible conversion of prime farmland to nonagricultural uses.

4.2.2 Visual Effects

It is important to consider whether lighting associated with a proposed project might confuse or interfere with the vision of the air traffic controller, the vision of the pilots on approach to an airport runway, or whether it results in significant impacts to airport neighbors.

Existing light emissions at the Airport are associated with runway and taxiway edge lighting, rotating beacons, approach lighting systems, and other visual navigational aids that help pilots locate the Airport and execute safe landings. Additionally, apron ramp lighting and street lighting on access roadways create light emissions from the Airport.

4.2.3 Water Resources

4.2.3.1 Groundwater

The majority of Westfield Barnes Regional Airport is located within a Zone II Protection Area for the Barnes Aquifer. Located near the airport are also two public wells (Westfield Well # 08G and Westfield Well # 07G), see **Figure 11 in Attachment B**.

As stated in 310 CMR 22.02, a Zone II is: "That area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield, with no recharge from precipitation). It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone IIs shall extend up gradient to its point of intersection with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock , or a recharge boundary)."

The Barnes Aquifer recharge area lies beneath a major portion of the northeast quadrant of the city. Located directly above the aquifer, are the airport and industrial zoned areas. The Barnes Aquifer is the primary source of drinking water for Westfield and has a capacity for withdrawal of more than 21 million gallons per day.

The Proposed Project areas inside the Zone II boundaries include Runway 15 obstruction removal areas and Taxiway B reconstruction. The new taxiway and apron for the southwest Quad area are entirely outside of the Zone II area.

4.2.3.2 Wetlands

Wetland resource areas within the Study Area were delineated by Epsilon on August 10th and 12th 2021. Vegetated wetlands were delineated in accordance with the U.S. Army Corps of Engineers Wetland Delineation Manual (USACE, 1987), the "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0" (2012), the Massachusetts Wetlands Protection Act and implementing regulations (310 CMR 10.00), and the Massachusetts Department of Environmental Protection's handbook, Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act (MADEP, 1995). The state and federal delineation methodologies generally prescribe a multi-parameter approach, where hydrophytic vegetation and hydrology (including hydric soils) are reviewed in conjunction with one another when delineating a wetland edge.

The land use in this project area is comprised of mostly residential and commercial businesses, with undeveloped wooded areas. The topography of the Study Area was highly varied along the north side of the Servistar Industrial Way generally being upgradient of the south side of the road. A perennial stream, Arm Brook, flows in a southerly direction on the western side of Southampton Road (Route 202), through two of the parcels.

4.2.3.3 Surface Waters and Watersheds

The project site contains three Bordering Vegetated Wetland (BVW) series and one Isolated Vegetated Wetland (IVW) series, as delineated by Epsilon, along with one USGS-mapped perennial stream (See **Figure 12 in Attachment B**). Under the MA WPA, perennial stream series have 200-foot Riverfront Area (RFA). Where streams are identified on the figures by DEP but not delineated by Epsilon, the water was contained to culverts below the ground or outside of the study area, often behind private properties.

4.2.3.4 Floodplains

The current version of the FEMA FIRM Community Panel Numbers 25013C0190F for the City of Westfield, dated 9/17/2014 indicates that the proposed project is not located within mapped 100-year floodplain.

4.2.3.5 Aquatic Resources

Aquatic habitat refers to intermittent streams, ditches, and rivers located on the Airport property. There are no ponds located on the Airport property. This habitat type is primarily limited to ditches and their associated watercourses within the Proposed Project site (see **Figure 3 in Attachment B**).

The Arm Brook is located west of the airport, and on portions of the project site for the avigation easement parcels and vegetation removal. It runs parallel to Southampton Road (Route 10/220) approximately 300 ft from the road in a pine-oak-maple tree forest. Arm Brook runs southerly into the Arm Brook Reservoir.

Arm Brook Reservoir is primarily for flood control location consisting of a reservoir and dam, but also contains recreational and hunting areas. Powder Mill Brook flows out of Arm Brook Reservoir and continues to the south of the airport where it eventually flows into the Westfield River. To the east of the airport east is the Pond Brook, which flows from a pond system to the north of the airport, along the eastern side of the airport, adjacent to the Runway 33 end, southerly continuing toward and under the Mass Turnpike and ultimately into the Westfield River.

4.2.4 Biological Resources (Fish, Wildlife, Plants)

Biological resources include terrestrial and aquatic plant and animal species; game and non-game species; special status species (state-listed or federally-listed threatened or endangered species, marine mammals, or species of concern, such as species proposed for listing or migratory birds); and environmentally sensitive or critical habitats. Wildlife species have specific habitat requirements, such that the distribution and abundance of each species are limited by the quality and quantity of available habitat in each area.

The analysis area for biological resources affected by the Proposed Project focuses on the immediate site and the entire boundary for Westfield-Barnes Regional Airport. Certain undeveloped portions of the Airport provide suitable habitat for a number of plant and wildlife species common to Massachusetts.

4.2.4.1 Rare and Endangered Species

4.2.4.1.1 Federally Listed Species

The USFWS issued the Final Rule on the Northern Long-Eared Bat *(Myotis septentrionalis*) (NLEB) in the January 14, 2016 edition of the Federal Register (V. 81, No. 9, page 1900 – 1922) titled "Endangered and Threatened Wildlife and Plants; 4(d) Rule for the Northern Long-Eared Bat" (i.e., the "Final Rule). The purpose of the Final Rule is to prohibit the intentional, or purposeful, take of NLEB throughout its range; except for specific instances to protect human health, property, or for scientific and conservation purposes. Take of NLEB is prohibited in hibernacula throughout its range, in areas affected by white nose syndrome, unless permitted by the USFWS. Incidental take of NLEB outside of hibernacula from otherwise lawful activities, other than tree clearing, is not prohibited by the Final Rule.

The NLEB range includes much of the eastern and north central United States, and all Canadian provinces from the Atlantic Ocean west to the southern Yukon Territory and eastern British Columbia. NLEB spend winter hibernating in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. During the summer, NLEB roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and dead trees (snags). Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices.

4.2.4.1.2 State Listed Species

The Airport property is located within Priority and Estimated Habitat (PH985) for select state-listed rare species as indicated in the 12th Edition of the Massachusetts Natural Heritage Atlas for State-listed Rare Species and Associated Habitat (see **Figure 4 in Attachment B**).

The rare species known to exist within the airport area include upland sandpiper (*Bartramia longicauda*), grasshopper sparrow (*Ammodramus savannarum*), frosted elfin butterfly (*Callophrys irus*), New Jersey tea inchworm moth (*Apodrepanulatrix liberaria*), Pine barrens speranza (formerly Itame) moth (*Speranza exonerata* (formerly *Itame sp. 1 nrinextricata*)), and New England blazing star (*Liatris scariosa var. novae-angliae*).

Grasshopper Sparrow

The open grasslands that the Airport maintains with timed mowing is beneficial to this species. Past surveys have shown breeding populations of grasshopper sparrow in the grasslands in areas east of Runway 2-20 and in some years in the vicinity of Runway 15. Generally, this species prefers the bunch grasses of native little bluestem grasslands, which provide spaces for the sparrows to move along the ground under cover of grasses. Surveys at the Airport have shown this species to occur in little bluestem grasslands, but also within former agricultural grasslands, which can be denser and be comprised of non-native vegetation.

Upland Sandpiper

Surveys at the airport for Upland Sandpipers did not find the species present during the breeding season from 2001 through 2008. However, during the 2012 survey, three to four adults and three young were observed in the central part of the grasslands north of Taxiway H and Taxiway S.

Frosted Elfin Butterfly

Frosted elfin butterflies have not been observed in the vicinity of wild indigo at the Airport; therefore, they are unlikely to be associated with this host plant at the Airport. Although there are other potential host habitat areas on the Airport, based on prior wildlife surveys, frosted elfin butterflies only appear to be using the wild lupine habitat in the southern portion of the airport (Parcel 11).

New Jersey Tea Inchworm

The two largest populations of New Jersey Tea plant provide only sparse to moderate cover. These plants are located along a dirt path east of Runway 33 and in a cleared area south of the Mass Turnpike. Other scattered small populations of host plant exist on edges of tree lines, and in grassland areas that are mowed at least annually – each of these small, scattered patches of New Jersey tea plants are unlikely to support a viable population of New Jersey tea inchworm at the airport.

Pine Barrens Speranza Moth

Small patches of scrub oak at the Airport are combined, they total approximately 1+/- acre, which is much smaller than the smallest habitat that this species typically needs (12+ acre ridge top scrub oak habitat). The small sparse patches of scrub oak at the Airport could provide supporting habitat for a population of pine barrens speranza that may exist in a larger habitat block east of the Airport property, but this species would not likely utilize the Airport without larger offsite habitat in the vicinity.

New England Blazing Star

New England blazing star (Liatris scariosa var. novae-angliae) is a State Special Concern rare perennial composite with showy purple flowers that bloom from late August to October. In Massachusetts, New England blazing star inhabits open, dry, low-nutrient sandy soils of grasslands, heathlands, and barrens. It thrives in fire-influenced natural communities that are periodically disturbed and devoid of dense woody plant cover. New England Blazing Star plants are only found in the southern portion of the airport (Parcel 11). This area is outside of the project limits for the Proposed Project, and therefore, no impacts to the plant are anticipated.

4.2.5 Hazardous Materials, Solid Waste, and Pollution Prevention

To determine the potential for encountering soils contaminated from historical releases or former land development practices during excavation and grading activities associated with the Proposed Project, the MassDEP reportable release database was reviewed for spills at sites located within 300 feet of the Proposed Project site. No releases were reported within 300 feet.

There are a total of three reportable release sites within the vicinity of the Preferred Alternative. Release Tracking Number (RTN) 1-0014085 submitted a Response Action Outcome (RAO) on October 22, 2001. RTN 1-0016157 submitted a RAO on June 16, 2006 and RTN 1-0017689 submitted a RAO on October 23, 2012. These are associated with the activities on the airfield and are located over 1,000 feet away from the Preferred Alternative.

Hazardous materials used for operation and maintenance of aircraft, runways, and taxiways include fuels, degreasers, and aviation lubricants and oils. The Airport has a Spill Prevention Control and Countermeasures (SPCC) Plan that establishes procedures for handling these substances. Aircraft fuel storage and refueling areas are limited to the apron areas on the Airport.

Ross Aviation sells 100LL aviation gasoline (Avgas) and Jet fuel at the airport. Ross Aviation is the only FBO on the airport that sells fuel. Ross Aviation uses three 10,000 gallon above ground fuel storage tanks. Two of these tanks store Jet fuel and one for Avgas. In 2017, Ross Aviation sold approximately 600,000 gallons of Jet A and 150,000 gallons of 100LL, to most of which were aircraft coming into Ross Aviation for maintenance. Gulfstream also sells fuel to its customers.

4.2.6 Historical, Architectural, Archeological, and Cultural Resources

The Proposed Project is subject to Section 106 of the National Historic Preservation Act (36 CFR 800) and Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by the Acts of 1988 (950 CMR 71). Section 106 of the National Historic Preservation Act of 1966 requires Federal agencies to consider the effects of their projects on properties that are listed in, or are eligible for listing in, the National Register of Historic Places. The lead Federal agency for a project must determine whether any property located within the project's Area of Potential Effect (APE) is listed in, or may be eligible for listing in, the National Register. The APE for archaeological resources is defined as locations where the proposed project may alter or disturb surface and/or subsurface soils that contain, or have the potential to contain,

archaeological sites. For the purposes of Section 106, FHWA is the lead Federal Agency and the process will be administered on the state level by the State Historic Preservation Officer (Massachusetts Historical Commission).

In addition to the State Historic Preservation Officer (SHPO), projects that may cause potential impacts to historic properties must consult other involved parties including local historic commissions and Native American tribes. The FAA is required to engage in government-to-government consultation consistent with FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, if an Indian Tribe is a consulting party.

The following historic properties and archaeological sites are within ¼ mile of the Project Area (not NR or SR listed):

- WSF.920 Apremont Monument
- WSF.921 Apremont Park

A detailed assessment with field visits was also conducted in the Project Area for sensitivity for archaeological resources based on soil conditions, slope, presence of wetlands and rockiness, and evidence of disturbance. The majority of the projects (Taxiway B and Southwest Quad taxiway and apron) will occur within airport facilities. According to the field assessment, these areas have a low archaeological sensitivity due to prior disturbances of the land for "grading and disturbance" and previously existing buildings and business activities in the SW Quad area.

4.2.7 Noise and Noise-Compatible Land Use

The Proposed Project is not expected to generate an increase in the amount or different aircraft operational activity at the Airport. Consequently, increased noise impacts are not anticipated to occur. The Preferred Alternative would not affect community noise levels from the Airport. The realignment of Taxiway B is within 100' of its existing location, therefore, a change in noise levels in not expected. Furthermore, noise levels from taxi operations are insignificant as compared to takeoff and landings which are the operations used to develop the noise contour maps published by the FAA.

4.2.8 Air Quality

This section describes the existing air quality conditions at the Airport. The regulations that establish standards for the pollutants are overviewed, and Westfield-Barnes current attainment of these standards is reported.

4.2.8.1 National and State Ambient Air Quality Standards

The 1970 CAA was enacted by Congress to protect the health and welfare of the public from the adverse effects of air pollution. As required by the CAA, the United States Environmental Protection Agency (EPA) promulgated National Ambient Air Quality Standards (NAAQS) for six criteria pollutants: nitrogen dioxide

(NO_2), sulfur dioxide ($SO_{2)}$, particulate matter (PM10 and PM2.5), carbon monoxide (CO), ozone (O_3), and lead (Pb). The NAAQS are listed in Table 4-1. Massachusetts has similar standards, referred to as Massachusetts Ambient Air Quality Standards (MAAQS).

The NAAQS presented in Table 4-1 specify concentration levels for various averaging times. The NAAQS includes both "primary" and "secondary" standards. The primary standards are intended to protect human health; whereas the secondary standards are intended to protect public welfare from any known or anticipated adverse effects associated with the presence of air pollutants, such as damage to vegetation.

The NAAQS also reflect various durations of exposure. The short-term periods (24 hours or less) refer to exposure levels not to be exceeded more than once a year. Long-term periods refer to limits that cannot be exceeded for exposure averaged over three months or longer.

Although not considered a "criteria pollutant" in the traditional sense where there is a concentration standard protective of human health and/or property, carbon dioxide (CO_2) is considered a "greenhouse gas" and analysis of CO_2 emissions are required as part of an air quality analysis.

Table 4-1 National and Massachusetts Ambient Air Quality Standards

Pollutant	Averaging Period	NAAQS/MAAQS ($\mu g/m^3$)	
		Primary	Secondary
NO_2	Annual [1]	100	Same
	1-hour [2]	188	None
SO_2	3-hour [3]	None	1300
	1-hour [4]	196	None
PM2.5	Annual [1]	12	15
	24-hour [5]	35	Same
PM10	24-hour [3]	150	Same
CO	8-hour [3]	10,000	Same
	1-hour [3]	40,000	Same
Ozone	8-hour [6]	147	Same
Pb	3-month [1]	0.15	Same

Source: http://www.epa.gov/ttn/naaqs/criteria.html and 310 CMR 6.04
[1] Not to be exceeded.
[2] 98th percentile of one-hour daily maximum concentrations, averaged over three years.
[3] Not to be exceeded more than once per year.
[4] 99th percentile of one-hour daily maximum concentrations, averaged over three years.
[5] 98th percentile, averaged over three years.
[6] Annual fourth-highest daily maximum eight-hour concentration, averaged over three years.

4.2.8.2 Attainment Status

Section 107 of the 1977 CAA Amendment requires that the EPA publish a list of the geographic areas in compliance with the NAAQS, and those areas not in compliance with the NAAQS. Areas not in NAAQS compliance are deemed non-attainment areas. Areas that have insufficient data to make a determination

are deemed unclassified and are treated as being attainment areas until proven otherwise. An area's designation is based on the data collected by the state monitoring network on a pollutant-by-pollutant basis.

Westfield-Barnes Regional Airport is in west-central Massachusetts in Hampden County. The attainment status for each pollutant is shown in Table 4-2.

Table 4-2 Hampden County Attainment Status

Pollutant	Status
Sulfur Dioxide (SO_2) (1-hour and annual)	Better than national standards (Attainment) EPA is still designating States for the 1-hour SO_2 standard.
Carbon Monoxide (CO) (1- and 8-hour)	Not Classified/Maintenance (Only the city of: Springfield)
Ozone (O_3) (8-hour)	Unclassifiable/Attainment (2008) Unclassified (2015)
Particulate Matter (PM10) (24-hour)	Unclassifiable
Nitrogen Dioxide (NO_2) (annual)	Unclassifiable/Attainment
Particulate Matter (PM2.5) (Annual and 24-hour)	Unclassifiable/Attainment
Lead (Quarterly)	Unclassifiable/Attainment

Source: 40 CFR 81.322, EPA's "Green Book," and Massachusetts 2015 Air Quality Report

4.2.8.3 State Implementation Plan

States with nonattainment areas show their intent to meet the NAAQS by preparing State Implementation Plans (SIP) outlining realistic methods to do so in the required timeframe.

Massachusetts has an approved SIP for 1-hour ozone (from 2002) and an approved SIP for 8-hour ozone (from 2008).

4.2.8.4 Environmental Conditions

The study area for Air Quality includes the Westfield-Barnes Regional Airport.

4.2.8.5 Criteria Pollutant Ambient Air Quality Data

To estimate background pollutant levels representative of the area, the most recent data obtained from MassDEP air quality reports were reviewed. Typically, the use of the latest three years of available monitoring data is representative of a project site. The closest most representative monitoring location is

at 600 Liberty Street in Springfield. This site monitors all pollutants except Ozone. The monitor on Anderson Road in Chicopee is the closest ozone monitor. Also, the Liberty Street monitor ceased monitoring for PM10 in 2019. The Skyline Drive monitor in Ware was used for 2020 PM10.

A summary of the background air quality concentrations is presented in Table 4-3.

For short-term averages (24 hours or less), the highest of the yearly observations will be estimated to be the background concentration, with the exception of the PM2.5 24-hour value where the average of the 98th percentile concentrations was used, consistent with the short-term ambient air quality standards. The short-term ambient air quality standards are not to be exceeded more than once per year. For long-term averages, the highest yearly observation was used as the background concentration. Again, with PM2.5, the annual background concentration is the average of the three years.

Table 4-3 Observed Ambient Air Quality Concentrations

Pollutant	Averaging Time	2018	2019	2020	Background Concentration ($\mu g/m^3$)[3]	NAAQS	Percent of NAAQS
SO_2 (1)(5)	1-Hour (4)	20.4	6.6	7.3	11.4	196.0	6%
	3-Hour (6)	13.1	7.1	10.0	13.1	1300.0	1%
PM-10	24-Hour	21.0	15.0	16.0	21.0	150.0	14%
PM-2.5	24-Hour (4)	15.4	15.0	16.9	15.8	35.0	45%
	Annual (4)	6.7	6.7	6.9	6.8	12.0	56%
NO_2 (3)	1-Hour (4)	80.8	82.7	82.7	82.1	188.0	44%
	Annual	24.4	19.7	18.2	24.4	100.0	24%
CO (2)	1-Hour	1604.4	1829.0	1186.1	1829.0	40000.0	5%
	8-Hour	1031.4	1375.2	1031.4	1375.2	10000.0	14%
Ozone	8-Hour	137.4	129.6	119.7	137.4	147.0	93%
Lead (6)	Rolling 3-Month	N/A	N/A	N/A	N/A	0.15	N/A

Notes:

From 2018-2020 MA Annual Air Quality Reports and EPA's AirData Website

(1) SO_2 reported ppb. Converted to µg/m3 using factor of 1 ppb = 2.62 µg/m3.

(2) CO reported in ppm. Converted to µg/m3 using factor of 1 ppm = 1146 µg/m3.

(3) NO_2 reported in ppb. Converted to µg/m3 using factor of 1 ppb = 1.88 µg/m3.

(4) Background level is the average concentration of the three years.

(5) The 24-hour and Annual standards were revoked by EPA on June 22, 2010, Federal Register 75-119, page 35520.

(6) Lead is no longer monitored at any site in Massachusetts

[3] Micrograms per cubic meter.

The NAAQS also reflect various durations of exposure. The short-term periods (24 hours or less) refer to exposure levels not to be exceeded more than once a year. Long-term periods refer to limits that cannot be exceeded for exposure averaged over three months or longer.

The inhalable particulate (PM10) NAAQS were promulgated on July 1, 1987 at the federal level with the intent of replacing the existing standards limiting ambient levels of Total Suspended Particulate (TSP). EPA also promulgated a Fine Particulate (PM2.5) NAAQS effective December 2006 with an annual standard of 15 $\mu g/m^3$ and the 24-hour standard of 35 $\mu g/m^3$. The annual PM2.5 standard has since been strengthened to 12 $\mu g/m^3$ in 2012 while the annual PM10 standard was revoked in 2006.

4.2.8.6 Methodology

The FAA has produced guidance[4] on the necessary steps to perform an air quality analysis for airports undergoing changes as part of a Federal action. Since the Proposed Project is not an FHWA/FTA project, nor is it regionally significant, a Transportation Conformity determination is not necessary. Additionally, the Commonwealth of Massachusetts does not require indirect source permits, so that review is also not necessary. Since the Taxiway B South widening and realignment, Runway 15 easement acquisition, and the creation of Taxiway B are considered exempt and presumed to conform, a general conformity assessment is not required. However, for completeness, Conformity will be addressed.

4.2.8.7 Conformity

Section 176 (c) of the Clean Air Act requires that any entity of the federal government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity must demonstrate that the project conforms to the area's commitment of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of those standards.

General conformity applies to all other projects in non-attainment or maintenance areas not specifically covered by transportation conformity. To determine whether general conformity requirements apply to a project, the agency in charge must consider the nonattainment and maintenance status of the area, the exemptions from and presumptions to conformity, the Proposed Project's emissions, and the regional significance of the Proposed Project's emissions. The current conformity rule only applies to projects located in nonattainment and maintenance areas.

The proposed improvements can be considered projects "presumed to conform", under the list of exemptions presented in (72 Fed. Reg. 145 (Jul. 30, 2007). The rule states that "Airport maintenance, repair, removal, replacement, and installation work that matches the characteristics, size, and function of a facility as it existed before the replacement or repair activity typically qualifies as routine maintenance and repair for purposes of general conformity. Such activity does not increase the capacity of the airport or change the operational environment of the airport."

[4] Federal Aviation Administration (FAA) Air Quality Procedures For Civilian Airports and Air Force Bases, FAA-AEE-97-03 AL/EQ-TR-1996-0017, April 1997.

Subsequently, the rule states "Taxiway construction projects [presumed to conform] are limited to improvements of existing taxiways that will not affect runway use, increase capacity, enable new aircraft types, or change existing airfield operations when complete (e.g., new high-speed exits would represent such a change)."

The widening of Taxiway B would be improved to meet DOD standards and would not increase the capacity of the airport. The acquisition of the easements at the end of Runway 15 also would not affect airport operations. Finally, the construction of Taxiway B would allow for more efficient operations and would not increase capacity or operations. Therefore, the Preferred Alternative is "presumed to conform" and is deemed to comply with all requirements of General Conformity.

- North Road Recreational Area: consisting of soccer and other athletic fields. However, this area is north of the airfield, and adjacent to Route 202 (North Road). The Proposed Project is not within this recreational area and does not have any alterations or impacts to the site.

- East Mountain Country Club: is a golf course adjacent to the airport and is on privately owned and does not fall under the 4(f) lands description.

- Apremont Park: Located adjacent to the airport off Airport Road in the vicinity of Runway 15 end. The Apremont Park is owned by the City of Westfield. It is .93 acres. The Massachusetts State Militia trained at this site then called "Hampton Plains" in 1905. When World War I broke out, the site was reactivated for the 104th Infantry Regiment of the 26th Yankee Division and was renamed Camp Bartlett. The Park is named after a small French town of Apremont, which was defeated and saved by the 104th Infantry. Former Park Director, Walter Ayers, redesigned this symmetrically planted park in 1972. Bituminous curbing and three Linden trees were planted. While the park is within the airspace for Westfield Barnes and located in the vicinity of the obstruction removal for the Runway 15 end, the Proposed Project does not include tree removal within this recreational area and does not have any alterations or impacts to the site.

5.0 ENVIRONMENTAL IMPACTS

The Proposed Project would be an improvement in safety and operational efficiency at the airport over the existing conditions, with design considerations and components selected specifically to reduce and minimize costs and environmental impacts. Construction to remove tree obstructions to the Runway 15 airspace has been minimized through an updated airport vegetation management plan and associated mitigation; therefore, only resulting in minor environmental impacts associated with 100-foot Buffer Zone to wetland areas. The Proposed Project also includes the realigning and widening of Taxiway B and a new taxiway connection and apron area for the Southwest Quad facilities at the airport. These are required to meet safety and operational standards and result in minor environmental impacts to the rare species habitat, mainly grassland bird habitat, due to the airport's existing Rare Species Management Permit to offset impacts to habitat.

5.1 Biological Resources

5.1.1 Vegetation

Portions of Proposed Project for the Taxiway B South widening, and realignment are located within mapped Priority Habitat for the Grasshopper Sparrow and Upland Sandpiper.

Proposed permanent direct impacts within mapped Habitat due to the Preferred Alternative are expected to total approximately 12.40 ac in upland habitat for the Taxiway B, resulting from the widening and realignment of impervious surfaces. Temporary impacts, where vegetation is altered is an additional approximately 9.30 acres for the Taxiway B and Southwest Quad area of the airport. In the easement parcels another 3.38 ac of temporary disturbance results from tree removal, of which 0.95 ac is in vegetated wetlands, see **Figure 13 in Attachment B**, These temporarily impacted areas will be restored to existing conditions and seeded with an airport-approved grass seed mix.

A summary of projects and impacts to mapped Habitat is presented in Table 5-1.

Table 5-1 Summary of Potential impacts to State-Listed Species and/or Habitats

Project	Impacts (acres)	
	Permanent	Temporary
Taxiway B South widening and realignment, paved taxiway shoulders, and associated grading	12.40	9.30
New Taxiway to Southwest Quad and new apron	2.72	0
Avigation easements off-airport parcels for airspace obstruction removal	0	3.38
TOTAL	15.12	12.68

5.1.2 Rare and Endangered Species

With regards to federally-listed species such as the northern long-eared bat (*Myotis septentrionalis*), the Preferred Alternative is not anticipated to have any impacts on these species. The Preferred Alternative site does not contain any feeding or foraging habitat.

The Preferred Alternative proposes vegetation management activities on off-airport aviation easement parcels, however, there are no known hibernacula (e.g., caves) on the Airport property or on off-airport avigation easement parcels, or within 0.25 miles. The Project Site contains portions of forested and/or wetland areas within off-airport easement parcels, therefore, to identify, and mitigate for possible impacts, habitat surveys for NLEB will be conducted prior to construction to exclude the presence of any potential bat roosting habitats – which is found generally in mature, upland forested areas.

The Preferred Alternative further commits that all tree removal activities will be conducted in compliance with the 4(d) rule under the Endangered Species Act (effective 2/16/2016), which states:

- "Incidental take resulting from tree removal is prohibited if: 1) Occurs within 0.25-mile radius of known northern long-eared bat hibernacula; or
- 2) cuts or destroys known occupied maternity roost trees, or any other trees within a 150-foot radius from the known maternity tree during the pup season (June 1 through July 31)."
- The No-Action alternative would not meet the need for airport infrastructure that complies with FAA planning and design standards and improves overall operational safety and efficiency at the Airport.

Rare species present at the airport are managed under the guidance of a Habitat and Management Plan (2014) which presents a habitat management framework designed to meet the permit requirements of Natural Heritage and Endangered Species Program (NHESP) for long-term benefits to local populations of state-listed grassland birds. The plan focuses on the airport's management grassland areas and a smaller shrubland management area for rare moth species. The intent of the plan is to facilitate the development needs of the airport and rare species habitats with the following specific goals:

- To provide long-term net benefit to the species (relative to the prior unmanaged condition);
- To develop future individual Airport projects, in coordination with NHESP, to avoid any net loss of habitat determined to be appropriate for the Airport or harm to the species sustained by the habitats at the Airport;
- To provide a comprehensive mitigation and management strategy that will allow the Airport to plan for the mitigation of future projects and, at the same time, demonstrate to NHESP that the Airport has the capacity to adequately mitigate impacts.

The project proponent will coordinate with NHESP, relative to the airport's Rare Species Master Plan (RSMP) program to determine appropriate mitigation levels to offset impacts, and to ensure that wildlife issues will be addressed at the Airport and not adversely affect aviation safety. This program acknowledges and incorporates rare species habitat mitigation performed at the Airport over the past 13 years for various projects and proposes specific mitigation for new projects. It includes a combination of continued management with some areas being converted from management to mitigation as projects occur.

The increase in width for Taxiway B from 50 feet to a 75 feet taxiway with additional 25-foot paved shoulders will result in both temporary impacts and permanent impacts to rare species habitat on the airport in the vicinity of the proposed work. Permanent impacts are approximately 12.40 ac and temporary impacts of 9.30 ac due to construction activities, grading, equipment, and materials.

Impacts to grassland areas, both temporary and permanent, are mainly located in areas identified as "frequently mowed" or "mowed as needed" due to their location close to existing airfield pavement (the entire area between Taxiway B and Runway 2-20). The proposed realignment and increase in width for Taxiway B, will remain entirely within the portion of the airport designated as frequently mowed in the rare species management plan. These impacts are presumed to be less significant to due to the existing disturbance from mowing, and accordingly, mitigation formulas with NHESP allow for lower mitigation to impact ratios to be used.

5.2 Water Resources

The Preferred Alternative is not anticipated to have impacts on groundwater and water supply resources, either during or after construction due to the implementation of stormwater management BMPs. Any impacts to wetlands would be mitigated appropriately. Therefore, no irreversible and irretrievable impacts to water resources are anticipated.

5.2.1 Groundwater and Water Supply

The Airport would continue to implement practices to protect groundwater, which includes the following commitments:

- Refueling operations are conducted only on the apron areas;
- The Air National Guard uses environmentally friendly liquid runway deicers (Cryotech E-36 and pelletized New Deal) for Runway 2-20, as needed, and BAF uses utilizes environmentally friendly deicers (pelletized New Deal product) on the Runway 15-33 and taxiways as needed; and
- Post-construction stormwater management best management practices will be implemented as described Section 5.2.4 below.

No short- or long-term impacts on groundwater or water supply are anticipated as a result of the Preferred Alternative. Construction period stormwater management would ensure protection of adjacent surface waters and wetlands as described below.

5.2.2 Surface Water and Wetlands

The environmental consequences of the Preferred Alternative include unavoidable wetland resource impacts. These permanent impacts are summarized on Table 5-2 below and detailed in **Figure 14 in Attachment B**. Compliance with the Wetland Protection Act regulations is addressed in below.

Table 5-2 Summary of Wetland Resource Area Impacts

Wetland ID	Total BVW Impacts (square feet)	Total LUW Impacts (square feet)	Total Inland Bank Impacts (linear feet)	Total RFA Impacts (acres)	Proposed Work Component(s)
Wetland Series 1,4 & 6	41,382[(a)]	0	0	0	Selective tree cutting to remove obstructions to airspace surfaces
Bank Series 2	0	0	0	4.57[(a)]	Selective tree cutting to remove obstructions to airspace surfaces
TOTAL	**41,382**			**4.57**	

(a) The selective cutting of tree obstruction is proposed in these areas, thereby resulting in a smaller area than estimated in the impacts calculations. Only trees identified by the airport as "obstructions/hazards" (above the airspace surface) need to be removed. Estimated impacts areas are temporary in nature, resulting in a lower-growing wetland plant community over time.

The MA Wetlands Protection Act (WPA; 310 CMR 10.00) allows for vegetation management at airports as a Limited Project Status for existing facilities only, but requires that vegetation management must be done with careful design and precautions to minimize adverse effects on the wetlands. The identification of

areas that need to be cut in and near wetlands is presented in Vegetation Management Plans (VMPs) which are developed for each airport. The proposed tree removal work in the easement areas will be included in the airport's updated vegetation management plan.

The VMP update is based upon data from a recent "Obstructions Analysis" for the "Part 77 Surfaces" and the identification of other protected areas (e.g., line of sight from the control tower) and certain aircraft navigational aid (NAVAID) critical areas. The airport has developed a cutting plan based upon the critical vegetation requiring removal and the wetland resource information. The plan information on wetland resources and impacts included in the VMP document, will be filed as a Notice of Intent with the City of Westfield Conservation Commission for approval, with the analysis and contents reflecting the requirements under the Limited Project Status provision of the WPA. Those filings will more thoroughly address the Project's potential wetland impacts in terms of protected interests and the methods by which the Project will meet the performance standards for each resource area.

The airport's VMP is carefully designed to reduce impacts associated with selective tree removal by following a "zonation" and Integrated Vegetation Management approach – the further away from the runways, the taller vegetation can be permitted to grow without causing safety violations. The VMP update will identify vegetation management zones within which species that would grow to be penetrations are discouraged by active management such as selective cutting. The remaining species, which will not grow to the penetration height of protected airspace, will become dominant.

This approach minimizes future maintenance activities, thereby minimizing wetland intrusion and operational costs. Integrated Vegetation Management combines sequential use of mechanical, chemical and biological treatment. The typical approach is to mechanically remove the penetrating trees/shrubs, and encourage the natural development of desirable species which suppress the re-establishment of undesirable plants through shading and other biological means. Once the compatible vegetative structure is established, periodic selective cutting/mechanical removal may be needed every two to five years to maintain the plant height zones and prevent succession to vegetative communities with taller species.

Other mitigation measures include the following: methods avoiding, minimizing, or compensating for impacts to sensitive resources including residential properties; erosion controls and other BMPs; suppression of invasive species; time of year restrictions (e.g., heavy equipment use when ground is "frozen, dry, or otherwise stable to support the equipment used.").

5.2.3 Post-Construction Stormwater Management

The Preferred Alternative would increase impervious surface area at Taxiway B and the new taxiway to the Southwest quad and new apron area. The anticipated increase in stormwater runoff due to the increase in impervious surface area would be mitigated by directing stormwater runoff through the existing stormwater collection and treatment system, and additional deep sump catch basins and leeching basins to be constructed, where needed, to collect the runoff.

Due to the proximity of active Airport operations areas, the use of open water treatment systems is prohibited. Stormwater treatment systems with open surface water attract birds, which are a hazard to aircraft. As such, for stormwater management, the use of extended detention basins, wet ponds, and infiltration basins have been eliminated.

Stormwater runoff from the Project area will be managed through; 1) the Airport's existing stormwater management system, and 2) as needed, the installation of a new drainage structures in each discrete project area. The stormwater management system will be designed to prevent an increase in peak stormwater runoff and to provide treatment where necessary. To meet this goal, management of runoff will include both temporary and permanent Best Management Practices ("BMPs") so that runoff will be appropriately managed both during and after construction. The proposed stormwater management system will be designed to comply with MassDEP's stormwater management regulations to the extent practicable. A series of deep sump catch basins and leeching basins will be constructed to collect the runoff from Taxiway B and Southwest Quad. The deep sump catch basins will provide runoff pretreatment. For some portions of the project site, water will then be conveyed to the existing stormwater system or new infiltration basin to recharge groundwater, and to provide TSS removal, and attenuate peak flows. Proposed stormwater management and treatment features will be designed to comply with the applicable state stormwater regulations for projects within Zone II areas for public drinking water wells.

5.2.4 Construction Period Stormwater Management

The Proposed Project would disturb approximately 26 acres of the Airport's 1,200-acre watershed; therefore, the Airport would require coverage under the National Pollutant Discharge and Elimination System 2022 Construction General Permit (CGP) and would develop a Stormwater Pollution Prevention Plan (SWPPP).

The contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) to comply with the EPA construction general permit for stormwater discharges. In addition, construction will be phased so that disturbed areas are minimized to the extent feasible. The Stormwater Pollution Prevention Plan (SWPPP) and selected BMPs will be finalized as construction methods and schedule are determined by the selected contractor.

The SWPPP would implement EPA and MassDEP BMPs for controlling and reducing sediments and dust in stormwater discharges to the extent feasible. Grading associated with taxiway construction, construction access, storage and laydown areas have the potential to cause short-term erosion and sedimentation. The existing paved and gravel access roads would be used for construction access as much as possible. Side slopes would be stabilized and re-vegetated as soon as practicable.

The Preferred Alternative would incorporate sedimentation and erosion controls into design and construction practices.

5.3 Air Quality, Greenhouse Gas Emissions and Climate Change Adaptation and Resiliency

Greenhouse gas (GHG) emissions contribute to climate change and pose health risks. There are several sources of greenhouse gas emissions at the Westfield-Barnes Regional Airport including from buildings, vehicles, and aircrafts. Preferred Alternative is not expected to increase GHG emissions on a permanent basis. No buildings are being constructed as part of the preferred alternative. Temporary increases in emissions are anticipated as part of construction and are discussed below under Section 5.3.1.1. Regardless, Westfield-Barnes Regional Airport is committed to curbing GHG emissions long term through various strategies including:

- Installing LED lights to promote energy efficiency,
- Using motion sensors on lights to reduce energy wastage,
- Exploring the possible installation of solar canopies at the airport parking lot on Access Road, to provide cleaner energy and reduce energy costs,
- Limiting idling by aircrafts,
- Upgrading airport maintenance vehicles and requiring low sulfur diesel fuel use by contractors, and
- Carrying out regular energy audits on on-site buildings.

Other measures will be adopted to adapt to increasing climate-related hazards posed including:

5.3.1 Air Quality

Section 176 (c) of the Clean Air Act requires that any entity of the federal government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity must demonstrate that the project conforms to the area's commitment of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of those standards.

The Preferred Alternative can be considered a project "presumed to conform", under the list of exemptions presented in (72 Fed. Reg. 145 (Jul. 30, 2007). The rule states that "Airport maintenance, repair, removal, replacement, and installation work that matches the characteristics, size, and function of a facility as it existed before the replacement or repair activity typically qualifies as routine maintenance and repair for purposes of general conformity. Such activity does not increase the capacity of the airport or change the operational environment of the airport."

Subsequently, the rule states "Taxiway construction projects [presumed to conform] are limited to improvements of existing taxiways that will not affect runway use, increase capacity, enable new aircraft types, or change existing airfield operations when complete (e.g., new high-speed exits would represent such a change)."

Even with the increase in population and development, air quality has been improving, mainly due to emissions reductions because of improved technology, usage habits, and environmental awareness.

5.3.2 Preferred Alternative

The widening of Taxiway B would be improved to meet DOD standards and would not increase the capacity of the airport. The acquisition of the easements at the end of Runway 15 also would not affect airport operations. Finally, the construction of Taxiway B5 would allow for more efficient operations and would not increase capacity or operations. Therefore, the Preferred Alternative is "presumed to conform" and is deemed to comply with all requirements of General Conformity.

The Preferred Alternative can be evaluated in two phases: a construction phase and an operational phase.

5.3.2.1 Construction Phase

The proposed project would have a potential, albeit temporary, effect on air quality resulting from construction vehicles and equipment emissions, dust from earth moving operations, and installation of fresh asphalt for the new taxiways, aircraft aprons and shifting of Taxiway B. Air quality impacts are minimal due to the relatively short duration of the proposed projects and the limited amount of earth disturbance associated with each project. In addition, air quality impacts are not expected to extend beyond the immediate vicinity of each project area and no impacts are expected following completion of the projects.

The applicable mitigation measures identified in FAA AC 1505370-10, *Standards for Specifying Construction at Airports*, will be followed during the proposed projects. In addition, FAA specifications included in FAA AC 1505370-10, Item P-156 *Temporary Air and Water Pollution, Soil Erosion, and Siltation Controls* will be included in the project contract documents to ensure that construction impacts to air quality are minimized.

The construction phase is expected to temporarily increase emissions from the fugitive dust generated from earth moving activities and the exhaust of non-road construction equipment. Several strictly enforced measures would be used by contractors to reduce potential emissions and minimize impacts including:

- Using wetting agents on areas of exposed soil on a scheduled basis;
- Using covered trucks;
- Monitoring actual construction practices to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized;
- Minimizing storage of debris on the site;
- Periodic street and sidewalk cleaning with water to minimize dust accumulations;

- The contractor would comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) throughout demolition and construction activities;

In addition to measures to control earth material particulate dust, the contractor would also strive to minimize diesel emissions during construction. Specific measures to be taken to reduce diesel emissions and other construction related air quality impacts include the following;

- Using equipment retrofitted with diesel emissions control devices. The Proponent would specify during the procurement of the subcontractors, that the majority of the heavy equipment operating on the site be retrofitted with diesel emissions control devices;

- Maintaining an "idle free" work zone of fossil fuel trucks and equipment by providing supplemental hoisting and pumping equipment along with "just-in-time" delivery methods. On-site idling would be limited to five minutes. "Do Not Idle" signs would be posted at appropriate locations;

- By locating combustion engines away from sensitive receptors such as fresh air intakes, air conditioners and windows; and

- Using Ultra Low Sulfur Diesel for all trucks and construction machinery as required by the US EPA.

5.3.2.2 Aircraft Operation Phase

The Preferred Alternative is not being carried out to increase aircraft activity but rather to safely accommodate current operations. Aircraft operations would maintain their existing levels and forecast growth. Therefore, air quality impacts from operations would be unaffected.

5.3.2.3 No Action Alternative

The "no action" alternative consists of leaving the existing areas as they are. Thus, no construction would occur, and both aircraft operations and groundside activities would be unaffected.

Since no construction would occur, no adverse air quality impacts from construction activities would result.

5.3.3 Climate Change

The MEPA Interim Protocol on Climate Change Adaptation and Resiliency ("Climate and Resiliency Interim Protocol), effective October 1, 2021, complies with Governor Baker's Executive Order 569, which directs the Executive Office of Energy and Environmental Affairs ("EEA") and the Executive Office of Public Safety and Security ("EOPSS") to coordinate efforts across the Commonwealth to strengthen the resilience of communities, prepare for the impacts of climate change, and proactively plan for and mitigate damage from extreme weather events. The Climate and Resiliency Protocol prescribes that all new projects filing with the MEPA Office will be required to print the output report generated from the Resilient

Massachusetts Action Team ("RMAT") Climate Resilience Design Standards Tool and submit it as an attachment to an Environmental Notification Form ("ENF") or Expanded Environmental Notification Form ("EENF") submittal. A copy of the RMAT report generated for the Project is included as **Attachment E.**

The Climate and Resiliency Interim Protocol encourages, but does not require, project proponents to utilize the recommended design standards and associated methodologies associated with Tier 1,2, or 3 classified projects. As per the RMAT report, the Taxiway B and the Taxiway Connector to the SW Quad are classified as Tier 3 Projects. Acquisition of the avigation easements and obstruction removal is classified as a Tier 1 project. The project was determined to be a low risk for sea level rise and storm surge but high risks for Urban and Riverine Flooding and Extreme Heat. The Project's proposed stormwater management system will be designed utilizing the methodology prescribed for Tier 3 projects to consider future storm intensity and frequency from climate change.

5.3.3.1 Increased Flooding

Due to climate change, the Northeast is expected to experience more frequent and intense storms, with an average annual precipitation increase of 4.42 inches by 2090 (ReslientMA.org/maps, RCP4.5 scenario). All current and future upgrades to the stormwater management system will be designed for storm events and peak precipitation values derived from the National Regional Climate Center (NRCC) for each rain event to account for the predicted increase in rainfall quantities and frequency for the region. The Airport is not within a mapped floodplain.

5.3.3.2 Drought

Extended periods of drought are predicted due to climate change, with the occurrence of droughts lasting one to three months and could go up by as much as 75 percent over existing conditions by the end of the century, under the high emissions scenario.

To minimize susceptibility to drought conditions, the Preferred Alternative would utilize an appropriate native plant seed mix for the upland maintained grassy areas. Drought is not anticipated to have any effects on the actual Taxiway construction or pavement.

5.3.3.3 Extreme Heat

The Municipal Vulnerability Preparedness (MVP) report predicts that Westfield will have increased extreme heat days and heat waves. In Massachusetts, temperatures are projected to increase significantly over the next century. Winter average temperatures are likely to increase more than those in summer, with major impacts ranging from less snow and ice for winter recreation to increased pests and challenging conditions for timber harvesting.

ResilientMA.org predicts an annual average increase in rainfall of Westfield of 4.45 inches by the year 2090 under the medium stabilization scenario of emissions (RCP4.5). Impervious surfaces not only impede drainage, but they also increase temperatures, with every 20 percent increase in imperviousness estimated to raise surface temperatures by up to 1.8°F (Resilientma.org, Interactive Map). Approximately 22.5% percent of the surface at Westfield Barnes is impervious. To address heat sinks, municipalities can

adopt and encourage green infrastructure, white roofs, landscaping for parking lots and redevelopment. To mitigate increased temperatures, the Preferred Alternative would incorporate green infrastructure, where feasible.

5.4 Hazardous Materials, Solid Waste, and Pollution Prevention

5.4.1 Hazardous Materials

There are no reported releases of hazardous materials within the Preferred Alternative site at the Airport according the MassDEP reportable release database. Any contaminated soils encountered during construction would be managed pursuant to the Utility-related Abatement Measure (URAM) provisions of the Massachusetts Contingency Plan (MCP). As required under 310 CMR 40.046, a URAM would not be undertaken by the Airport until proper notification to MassDEP is made of:

(a) a release or threat of release of oil and/or hazardous material at the construction site for which notification is required under the provisions of 310 CMR 40.0315;

(b) Airport's intention to conduct a URAM in compliance with all applicable requirements; and

(c) the name and license number of the Licensed Site Professional who has been employed to carry out the URAM.

A status report would be submitted to MassDEP 120 days following the initial notification of intent to conduct a URAM and every six months thereafter until a URAM Completion Report is submitted. A URAM Completion Report would be submitted to MassDEP within 60 days of the completion of response actions associated with a URAM.

The Airport's response to any contamination found during construction would comply with the MCP at 310 CMR 40.0000.

The Preferred Alternative is not anticipated to result in the release of hazardous materials and is not anticipated to generate hazardous waste. If hazardous materials such as asbestos or lead are encountered during demolition and construction activities of the Preferred Alterative, any such materials would be removed at the time of demolition in accordance with laws and regulations. Management of hazardous materials and wastes associated with the Preferred Alternative would also be conducted in accordance with local and state regulations and Best Management Practices (BMPs) would be implemented in accordance with local, state, and federal regulations to ensure compliance. The no action alternative would not meet the need for Airport infrastructure that complies with FAA planning and design standards and improves overall operational safety and efficiency at the Airport.

5.4.2 Solid Waste

General aviation airports ordinarily do not generate significant quantities of solid waste. Aviation-related activities generate only minimal amounts of solid waste. Airport buildings, hangars for storage and maintenance of aircraft, office space, and administration buildings, generate solid waste normally associated with business activity. As the Preferred Alternative is not intended to increase aviation activity at the Airport, the volume of solid waste generated is not expected to change.

The Proponent is committed to minimizing construction waste. Proposed construction activities would generate solid waste, predominantly as a result of earth moving operations. Any solid waste generated during project implementation, including construction waste, would be recycled to the extent feasible and/or disposed of appropriately per federal, state, and local regulations addressing such materials.

Asphalt removed as part of the Taxiway B reconstruction would be ground up and recycled for use in the new location.

5.5 Historic and Archaeological Resources

A cultural resources sensitivity assessment was conducted by Commonwealth Heritage Group, Inc. (Commonwealth), in September 2021, to identify archaeologically sensitive areas for the proposed project areas at Westfield-Barnes Regional Airport. Areas in this investigation involved selected areas of tree cutting for runway approach surfaces, taxiway realignment and southwest quad improvements at the airport (the Project Area).

The cultural resources due diligence review encompassed the Project Area in Westfield, Massachusetts. Properties were identified through a search of the Massachusetts Historical Commission's (MHC's) Inventory of the Historic and Archeological Assets of the Commonwealth. For the purposes of the identification effort, a study area of one-quarter (1/4) mile from the Project Area was established to account for all known historic architectural properties and all known archeological sites in proximity to the Project Area.

No historic property listed in the National Register of Historic Places (NR) or the State Register of Historic Places (SR) is present within a ¼ mile radius of the Project Area. Two individual historic properties (WSF.920 and WSF.921) are located within a ¼ mile radius of the Project Area. No precontact or historic archaeological sites are located within a ¼ mile radius of the Project Area.

The assessment concluded that the northern tree clearing section may have canal remains further to the west and/or precontact resources associated with Arm Brook. Although the terrain is not suggestive of an ideal camp location, the meandering Arm Brook may have been utilized in precontact or historic periods. However, based on the presence of intact stratigraphy and proximity to Arm Brook, the wooded areas are considered sensitive for cultural resources. However, within this site, the junked car lot, truck center and paved or graded roadways or parking areas are considered to have a low sensitivity. No grading or stump removal is proposed in these area, so ground disturbance is minimized within the tree cutting area.

FAA will make a determination and submit for concurrence to the State Historic Preservation Officer (SHPO) for review under Section 106 of the National Historic Preservation Act of 1966, as amended. It is anticipated that SHPO will concur that the project will be "unlikely to affect significant historic or archaeological resources" based on prior review of Airport projects. The Preferred Alternative is not expected to result in a significant change in operations or noise impacts that could impact historic resources or native tribes.

The no action alternative would not meet the need for Airport infrastructure that complies with FAA planning and design standards and improves overall operational safety and efficiency at the Airport.

5.6 Noise and Noise-Compatible Land Use

The Preferred Alternative is not anticipated to generate an increase of different aircraft operational activity at the Airport. Consequently, impacts to community noise levels are not expected. Noise impacts anticipated would be minimal and temporary due to demolition and construction activities.

The Preferred Alternative would include a noise mitigation plan to minimize, to the extent practicable, the generation of sound levels that would impact off-site receptors. Every reasonable effort would be made to minimize the noise impact of construction activities, including:

The Preferred Alternative would include a noise mitigation plan to minimize, to the extent practicable, the generation of sound levels that would impact off-site receptors. Every reasonable effort would be made to minimize the noise impact of construction activities, including:

- Instituting a proactive program to ensure compliance with the applicable regulations or ordinances for noise limitation;
- Using appropriate mufflers on all equipment and ongoing maintenance of intake and exhaust mufflers;
- Muffling enclosures on continuously running equipment, such as air compressors and welding generators;
- Replacing specific construction operations and techniques by less noisy ones where feasible;
- Selecting the quietest of alternative items of equipment where feasible;
- Scheduling equipment operations to keep average noise levels low, to synchronize the noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels;
- Locating noisy equipment at locations that protect sensitive locations by shielding or distance;
- Allowable construction timeframes that adhere to local requirements, which are anticipated to be work hours between 7:00 a.m. and 5:00 p.m., and major activities such as excavation or demolition would typically be limited to normal working hours;

- In accordance with Massachusetts Vehicle Idling Regulations, idling of construction equipment would comply with 310 CMR 7.11;

- Construction equipment would be required to be properly maintained, lubricated, and fitted with properly functioning muffler systems; and

- To the extent practicable, specific activities such as crushing and pulverizing, as well as equipment staging areas, would be located at appropriate distances from residential receptors.

5.7 Visual Effects

The Preferred Alternative would not increase off-airport light emissions or create visual effects. The characteristics of most airport lighting systems create potential sources of annoyance to nearby residents, such as visual navigational aids, edge lights, and others, which may emanate disturbing emissions. There would be no net increase of such lighting emissions.

The Preferred Alternative is not expected to involve the replacement or addition of any taxiway lighting fixtures; the existing lights would be relocated along the new portion of the taxiway. Operation of all these lights and lighting systems are controlled by the FAA, not the Airport. All lighting would be designed with reduced energy use in mind with LED lighting utilized for signage and signals.

The no action alternative would not create visual impacts. However, it would not meet the need for Airport infrastructure that complies with FAA planning and design standards and improves overall operational safety and efficiency at the Airport.

5.8 Construction Period Impacts

Construction management and scheduling practices including plans for construction worker commuting and parking, routing plans and scheduling for trucking and deliveries, protection of existing utilities, maintenance of fire access, and control of noise and dust would be employed to minimize impacts on the surrounding environment. In addition, construction methodologies that ensure public safety and protect nearby airport businesses would be employed.

Techniques such as barricades, flaggers, and signage would be used as necessary. Specific measures proposed to mitigate construction impacts to air quality, waste management, noise, and stormwater are discussed in Table 6.1.

6.0 ENVIRONMENTAL JUSTICE

This section addresses the MEPA Public Involvement Protocol for Environmental Justice Populations (the "EJ Involvement Protocol") and the MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations (the "EJ Analysis Protocol"), both with an effective date of January 1,2022, and follows the applicable sections of the new protocols. This section describes the project's past and planned efforts to reach out to potentially affected Environmental Justice (EJ) communities. It then provides an analysis of impacts to demonstrate that the project and its impacts, together with historical or existing sources of environmental pollution, will not have a disproportionate impact on EJ populations.

Principal social impacts typically resulting from Airport projects include relocation of residences and businesses, alteration of surface transportation patterns, disruption of established communities or planned developments, and significant changes in employment. The Preferred Alternative proposed at Westfield-Barnes Regional Airport would not result in the above-mentioned social impacts. On the contrary, as a major construction project, the Preferred Alternative would result in positive economic impacts to the region. The generation of new, temporary construction jobs are anticipated during construction and the purchase of construction materials and services would result in direct and indirect impacts throughout the region, along with positive financial impacts as the initial rounds of spending circulate through the economy.

Potential secondary social impacts related to airport development typically includes shifts in patterns of population movement and growth, increased public service demands, and changes in business and economic activity. As stated herein, the purpose and need of the proposed improvements at the Airport is to enhance safety for existing Airport users by meeting FAA airport design standards and DOD design standards. The Preferred Alternative is not designed to increase growth or demand at the Airport, or to change the type or size of aircraft using the Airport. No shifts in population growth or public service demands would be created by the Preferred

6.1 Scope of Environmental Justice Consideration

Pursuant to the Massachusetts Executive Office of Energy and Environmental Affairs ("EEA"), EJ is based on the principle that all people have a right to be protected from environmental pollution, and to live in and enjoy a clean and healthful environment. The EEA established an EJ Policy (updated January 2022) to "*help address the disproportionate share of environmental burdens experienced by lower-income people and communities of color*" and "*ensure their protection from environmental pollution as well as promote community involvement in planning and environmental decision-making."*

This EJ enhanced analysis follows the recent EJ Analysis Protocol. The EJ Analysis Protocol applies "*for any project that is likely to cause damage to the environment and is located within a distance of 1 mile of an Environmental Justice (EJ) population*." The Project does not meet or exceed MEPA review thresholds under 301 CMR 11.03(8)(a)-(b) and will not add 150 or more new average daily trips ("adt") of diesel vehicle traffic over a duration of 1 year or more. Therefore, the Project is not subject to a 5-mile radius.

Under the EJ Analysis Protocol, the analysis must include:

- An assessment of existing unfair or inequitable environmental burdens on the EJ population
- An assessment of the Project's impacts to determine disproportionate adverse effect (if existing unfair or inequitable environmental burdens exist) on the EJ population
- An analysis of the Project to determine Climate Change Effects (if existing unfair or inequitable environmental burdens exist)
- Mitigation and Section 61 Findings (if the Project impacts causes a disproportionate adverse effect or Climate Change Effects on the EJ population)

6.1.1 Designated Geographic Area

MEPA has classified areas of Massachusetts as to whether they meet the criteria of an EJ Population by using the United States Census data to determine whether a block group meets one or more of the following criteria:

- The annual median household income is not more than 65% of the statewide annual median household income;
- Minority groups comprise 40% or more of the population;
- 25% or more of households lack English language proficiency;
- Minority groups comprise 25% or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150% of the statewide annual median household income; or
- The Secretary has determined that a particular neighborhood should be designated as an EJ population.

The Project Site is located within two block groups that meet the criteria as Environmental Justice populations. These two block groups are located within census tract 8128 and 8125. The EJ block groups located within the Designated Geographic Area (DGA) are summarized in Table 6-1. **Figure 15 in Attachment B** shows a circle denoting the one-mile radius around the project site and establishes the DGA that will be used as the basis for analyzing potential project impacts and for public outreach purposes. The remainder of this analysis will focus on all identified EJ populations located in whole or in part within the designated geographic area for the project.

Table 6-1 2020 EJ Block Groups within the DGA

Census Tract	Block Group	EJ Designation
8125	2	Income
8125	3	Minority
8128	3	Income

In accordance with the EJ Analysis Protocol, a four-step process has been developed for assessing whether EJ Populations have experienced existing unfair or inequitable environmental burdens within the DGA. As part of this approach a series of mapping tools have been developed that focus on,

1. the rates of four vulnerable health criteria as it relates to statewide averages (**Section 6.2**),
2. existing past and current polluting activities in the MA DPH EJ Tool (**Section 6.3**),
3. a review of the RMAT Climate Resilience Output Tool (**Section 6.4**), and
4. the use of the United States EPA's Environmental Justice Screening Tool (**Section 6.5**).

Each of these steps are described in detail below along with an assessment of the specific results for the environmental justice populations within the designated geographic area.

6.1.2 Vulnerable Health Criteria

The vulnerable health EJ criteria are four environmentally related health indicators to identify populations with evidence of higher-than-average rates of environmentally related health outcomes. Multiple terms are used to describe the vulnerable health EJ criteria as it relates to the EJ populations. These terms are defined and described below.

The vulnerable health EJ criteria are reported for a population in a specific area. The area can be a state, town, or census tract. Census tracts are small, relatively permanent areas of land with a population typically between 1,200 – 8,000 people.[5]

Health criteria are reported as *rates*, or the number of people with the identified condition divided by the population in consideration. The Department of Public Health Environmental Justice tool (DPH EJ tool) compares the *community rate*, or the town or census tract of interest, to the statewide rate, or the rate for the population of Massachusetts. A *rate* is the *casecount* divided by the denominator. The *casecount* is the number of surveyed individuals with the condition of interest out of the *denominator*, or total population surveyed. For example, if out of 40 children screened for blood lead levels, 1 child had elevated levels, the *casecount* would be equal to 1 and *denominator* equal to 40.

[5] United States Census Bureau

The DPH EJ tool uses two rate types: crude and age-adjusted. The crude rate is the fraction of affected individuals out the population surveyed. An age-adjusted rate, unlike a crude rate, is statistically modified to account for the unequal prevalence of a condition among age groups, as in the case of heart attacks affecting older populations. Rates are also classified as *stable* or *unstable*. Unstable rates occur when there are too few cases in a community for a rate to be considered reliable such that the addition or deletion of small number of cases would lead to a large change in the rate. Stable rates are the opposite; there are enough cases in a population so that the rate will not fluctuate dramatically. A *confidence interval* refers to the minimum and maximum value such that the actual rate has a 95% chance of occurring between the calculated range. In other words, the specified rate has a high likelihood to be included in the range of values. The confidence interval is helpful to determine if a rate for a community is much higher than the statewide rate and not due to chance.

As described above, using the DPH EJ Tool is the first step in determining whether EJ populations within the DGA have experienced higher rates of four different vulnerable health criteria when compared to the statewide rate. Specifically, the guidance states the following:

"First, Proponents should consult the Massachusetts Department of Public Health (MA DPH) EJ Tool to identify whether any municipality or census tract that includes any of the identified EJ populations exhibits any of four "vulnerable health EJ criteria." Such criteria are environmentally related health indicators that are measured to be 110% above statewide rates based on a five-year rolling average. Any EJ population that exists within those municipalities or census tracts could then be viewed as exhibiting "vulnerable health EJ criteria," and therefore potentially bearing an "unfair or inequitable" environmental burden and related public health consequences. The Proponent is encouraged to conduct its own research into localized sources of data that may show additional public health vulnerabilities of the identified EJ population."

The MA DPH EJ tool provides information on four different vulnerable health criteria:

- heart attack hospitalizations,
- childhood blood lead exposure,
- low birth weight, and
- childhood asthma for the most recent 5-year period of available data.

The MA DPH EJ tool[6] provides this information for the most recent 5-year period of available data. It should be noted that each of these datasets are available at different geographies, heart attack hospitalizations and childhood asthma are available at the community level, while low birth weight and childhood blood lead exposure are available at the census tract level. Each of these specific criteria are described below along with the results of the analysis for the designated geographic area.

[6] MA DPH Environmental Justice Tool, accessed 2/4/2022

6.1.2.1 Heart Attack Hospitalizations

As described on the MA DPH website, Heart attack hospitalization is a criterion used to identify vulnerable health EJ populations. Exposure to air pollution can increase the risk for heart attack and other forms of heart disease, and it is indicative of a serious chronic illness that can lead to disability, decreased quality of life and premature death. People living in EJ areas have higher than average heart attack hospitalization rates when compared to other communities.

Heart attack hospitalization data is based on data collected from all hospitals in Massachusetts and reflects individuals greater than 35 years of age who have been admitted to the hospital for a heart attack. The vulnerable health criterion for Heart Attack Hospitalizations is the most recent 5-year average age-adjusted rate of hospitalization for myocardial infarction that is equal to or greater than 110% of the state rate. This indicator is available on a community basis.

Heart Attack Vulnerable Health Criteria for the Project

As described above, the heart attack indicator is available on a town-wide basis only. This indicator was examined for the City of Westfield which includes all EJ populations within the Designated Geographic Area. The City of Westfield does not meet the vulnerable health criteria for heart attack. Between 2013-2017 the community rate was not greater than 110% the statewide rate. Table 6-2 contains the heart attack hospitalization rate for the City of Westfield, along with the state-wide rate for comparison.

6.1.2.2 Childhood Blood Lead Levels

As described on the MA DPH website, childhood lead exposure is a criterion used to identify vulnerable health EJ populations because lead exposure disproportionately impacts lower income communities and communities of color, and childhood exposure to relatively low levels can cause severe and irreversible health effects, including damage to a child's mental and physical development.

Childhood Blood Lead Level data is based on data collected as part of the Massachusetts Lead Poisoning Prevention and Control Act which is a state law that requires all children to be screened each year for lead poisoning through age three and children in high-risk communities must be screened through age four. The vulnerable health criterion for Childhood Blood Lead Level (BLL) is the five-year average prevalence of elevated (≥5 ug/dL estimated confirmed) childhood blood lead levels (ages 9-47 months) that is equal to or greater than 110% the state prevalence. This indicator is available at the community and census tract level.

Childhood Blood Lead Levels Vulnerable Health Criteria for the Project

As described above the childhood blood lead level indicator is available for individual census tracts. 110% of the statewide rate for childhood blood lead levels between 2016-2020 was 16.5 per 1,000 individuals. At the community level, the City of Westfield's blood lead level rate of 24.2 cases per 1,000 is greater than 110% of the statewide rate. The childhood blood lead level is considered stable and statistically significantly higher from the statewide level. The City of Westfield meets the Vulnerable Health Criteria for childhood blood lead levels.

This indicator was further examined for the EJ block groups in census tracts 812500 and 812800 within the designated geographic area. Census tract 812500 reported a rate of 16 cases per 1,000 from 2016-2020. This census tract is stable in the DPH EJ Tool data, meaning it has enough cases to be considered reliable. It is not statistically different compared to the statewide level. This tract's blood lead levels are not above 110% of the statewide average and do not meet the Vulnerable Health Criteria for childhood blood lead levels.

Census tract 812800 reported 17.5 cases per 1,000 from 2016-2020. This census tract is unstable in the DPH EJ Tool data, meaning it does not have enough cases to be considered reliable. It is also not statistically different compared to the statewide level. This tract's blood lead levels are above 110% of the statewide average and meet the Vulnerable Health Criteria for childhood blood lead levels. Census-level data are summarized in Table 6-2 below along with the statewide prevalence data for comparison.

6.1.2.3 Low Birth Weight

As described on the MA DPH website, low birth weight (LBW) is a criterion used to identify vulnerable health EJ populations because exposure to environmental contaminants can increase the risk of delivering a LBW baby and LBW is a significant predictor of maternal and infant health. Women of color and women of low income have a higher risk of delivering a LBW baby. LBW can increase the risk of infant mortality and morbidity, health problems throughout childhood, developing cognitive disorders, developmental delay and chronic diseases as an adult such as cardiovascular diseases and type 2 diabetes.

LBW data are collected by the Registry of Vital Records and Statistics. Medical data, such as birth weight and gestational age, are based on information supplied by hospitals and birthing facilities. The vulnerable health criterion for LBW is the five-year average low birth weight rate among full-term births that is equal to or greater than 110% of the statewide rate. This indicator is available at both the community and census tract level.

Low Birth Weight Vulnerable Health Criteria for the Project

As described above the low-birth-weight indicator is available on a census and town level basis. 110% of the statewide rate for low birth weight between was 238.5 per 1,000 individuals between 2011-2015. Westfield's community-level rate is 134.7 per 1,000, which is below the statewide average. The low-birth-weight rate for Westfield is considered unstable due to the small number of raw case count numbers and is statistically significantly lower than the statewide level. Westfield does not meet the Vulnerable Health Criteria for low birth weight.

This indicator was further examined at a census tract level for the EJ block groups within the designated geographic area. Census tract 812500 data was listed as "NS" (not shown) due to small numbers. Census tract 812800 data was also reported as not shown "NS" due to small numbers.

6.1.2.4 Childhood Asthma

As described on the MA DPH website, childhood asthma is a criterion used to identify vulnerable health EJ populations because people of color and low-income individuals are at greater risk for asthma exacerbations due to increased exposure to asthma triggers. Uncontrolled asthma can impact an individual's overall health and wellbeing. For example, uncontrolled asthma can reduce activity levels, negatively impact cardiovascular fitness, and increase school absenteeism.

Childhood asthma data are based on data collected from all hospitals in Massachusetts and reflects children between the ages of 5 and 14 years of age that have visited an emergency room for treatment for asthma. The vulnerable health criterion for childhood asthma is the five-year average rate of emergency department visits for childhood (5-14 years) asthma that is equal to or greater than 110% of the state rate. This indicator is available at the community, or town-wide, level.

Childhood Asthma Vulnerable Health Criteria for the Project

As described above, the childhood asthma indicator is available on a community level. This indicator was analyzed for Westfield. It was found that the childhood asthma rate for Westfield is 83 per 10,000 individuals. This rate is less than 110% of the statewide childhood asthma rate of 91 per 10,000. The Westfield childhood asthma rate is considered stable and is not statistically significantly different than the statewide average. Westfield, at the community level, does not meet the Vulnerable Health Criteria for childhood asthma.

6.1.2.5 Vulnerable Health Criteria Summary

Based on the information described above, Westfield meets the vulnerable health criteria for blood lead level. Census tract 812800 meets the criteria for blood lead level. Based on the descriptions provided above, the EJ communities in the designated geographic area are considered vulnerable and are subject to existing environmental burdens.

Table 6-2 Vulnerable Health Criteria

Vulnerable Health Criteria	Geography Type	Community Rate	Community Rate Confidence Interval	Statistical Significance	Stability	Statewide Rate	Statewide Rate Confidence Interval	110% Statewide Rate	>110% of Statewide Rate?
Heart Attack	Westfield	26.4	23.6, 29.2	NSSD	Stable	26.4	26.2, 26.6	29.1	No
Blood Lead Level	Westfield	29.4	24.2, 34.7	SSH	Stable	14.9	14.7, 15.2	16.5	Yes
Low Birth Weight	Westfield	134.7	79.7, 189.9	SSL	Unstable	216.8	21.7, 221.9	238.5	No
Childhood Asthma	Westfield	83.1	71.2, 94.9	NSSD	Stable	83.1	82.2, 84.0	91.4	No
Low Birth Weight	812500	NS	NS	NS	NS	216.8	21.7, 221.9	238.5	No
Low Birth Weight	812800	NS	NS	NS	NS	216.8	21.7, 221.9	238.5	No
Blood Lead Level	812500	16.0	7.3, 24.7	NSD	Stable	14.9	14.7, 15.2	16.5	No
Blood Lead Level	812800	17.5	7.2, 27.8	NSD	Unstable	14.9	14.7, 15.2	16.5	Yes

SSH: Statistically significantly higher

SSL: Statistically significantly lower

NSSD: Not statistically significantly different

NSD: Not statistically different

NS: Not shown due to small numbers

6.2 MassDEP Regulated Facilities

As described in the MEPA Interim Protocol for Analysis of Projects Impacts on Environmental Justice Populations, the next step of the existing environmental burden analysis focuses on other potential sources of pollution within the boundaries of the EJ population. Specifically, the MEPA Protocol provides the following description of the requirements for this analysis:

> *"Second, the Proponent should consult additional data layers in the MA DPH EJ Tool to survey other potential sources of pollution within the boundaries of the EJ population. While comparisons to statewide averages are not presently available in the DPH EJ Tool, the Proponent should provide a narrative description of the estimated number and type of mapped facilities/infrastructure in the area, and survey enforcement histories of any facilities permitted by Massachusetts Department of Environmental Protection (MassDEP).*
>
> *Available mapping layers in the MA DPH EJ Tool include the following:*

- MassDEP major air and waste facilities
- M.G.L. c. 21E sites
- "Tier II" toxics use reporting facilities
- MassDEP sites with AULs
- MassDEP groundwater discharge permits
- Wastewater treatment plants
- MassDEP public water suppliers
- Underground storage tanks
- EPA facilities
- Road infrastructure
- MBTA bus and rapid transit
- Other transportation infrastructure
- Regional transit agencies
- Energy generation and supply

Layers from the DPH EJ Tool were downloaded into ArcGIS and a one-mile buffer drawn around the project site boundary, see **Figure 16 in Attachment B**. Each of the resulting layers were used to develop a narrative of the number of types of facilities and infrastructure for the EJ populations in the DGA as well as used to survey the enforcement history. When available, enforcement histories and facility histories were searched in the Energy & Environmental Affairs Data Portal, MassDEP Underground Storage Tank ("UST") Facility Search, and EPA Resource Conservation and Recovery Act ("RCRA") Search. Below is a narrative discussion of the information gleaned using the mapping layers listed above in the MA DPH EJ Tool.

MassDEP major air and waste facilities

MassDEP major air and waste facilities are facilities that have air operating permits, treat, store, generate or recycle large quantities of hazardous waste, or utilize large quantities of toxics. These facilities are further specified in the following sections and include airports, facilities with air permits, draft NPDES permits, hazardous waste, treatment, storage, recycling, or disposal facilities, large quantity generators, large quantity toxic users, land disposal of solid waste, and toxics release inventory sites[7].

There is currently one Large Quantity generator within a one-mile radius of the Project Site, Pioneer Valley Energy Center, a proposed natural gas power plant on Servistar Way. No additional MassDEP major air and waste facilities exist within a one-mile radius of the Project Site.

Quantity Hazardous Waste Generators

According to the Massachusetts government website, there are three classifications of quantity hazardous waste generators that generate acute and non-acute hazardous waste or waste oil. A very small generator generates less than 220 pounds of non-acutely hazardous waste per month. A small quantity generator makes between 220 – 2,000 pounds per month of waste and up to 1 kilogram of acutely hazardous per month, and a large quantity generator makes over 2,200 pounds and over 1 kilogram of acutely hazardous waste per month.

There are seven facilities identified as Large Quantity Generators of Hazardous Waste (MA regulated) within 1-mile of the Project Site.

M.G.L. c. 21E Sites

21E sites are sites that have experienced a release of a hazardous material above a certain threshold. Once a release is reported to MassDEP it must be cleaned up within a year or it is classified as Tier I, Tier ID, or Tier II. A Tier I site poses an immediate hazard, a Tier 1D site has not posed a permanent solution or final classification of the site while a Tier II site does not meet the criteria for an immediate hazard.

No 21E sites have been identified within the one-mile of the Project site or within the DGA.

MassDEP Sites with AULs

An Activity Use Limitation (AUL) provides notice of the presence of oil and/or hazardous material contamination remaining at the location after a cleanup has been conducted pursuant to Chapter 21E and the MCP. The AUL is a legal document that identifies activities and uses of the property that may and may not occur, as well as the property owner's obligation and maintenance conditions that must be followed to ensure the safe use of the property.

There are four facilities with AULs located within one-mile of the Project Site.

[7] https://www.mass.gov/info-details/massgis-data-massdep-major-facilities

MassDEP Groundwater Discharge Permits

This dataset contains the locations of permitted discharges of groundwater. This includes discharges from: Sanitary sewage in excess of 10,000 gallons per day (gpd), coin operated laundromats, car washes, industrial facilities, and reclaimed water (used in cooling towers and other closed-loop systems, no actual discharge).

There are no identified MassDEP Groundwater Discharge Permits identified within one-mile of the Project Site.

Wastewater Treatment Plants

The MA DPH tool provide information on facilities that have received a National Pollutant Discharge Elimination System (NPDES) permit. NPDES is a permit for facilities that treat wastewater. There are no facilities located within one-mile that hold a draft or final NPDES permit.

MassDEP Public Water Suppliers

This dataset contains locations of public community surface and groundwater supply sources based on data available in the DEP's Water Quality Testing System database for tracking water supply data. A community water system refers to the public water system which services at least 25 year-round residents.

There are two groundwater wells #7 and #8 (Id# 1329000-08G and 1329000-07G) associated with the City of Westfield Water Division that are considered a MassDEP Public Water Supplier.

Underground Storage Tanks

The MassDEP regulates the registration, installation, operation, maintenance, inspection, and closure of petroleum fuel and hazardous substance of underground storage tank (UST) systems. As part of the UST program, there eight USTs located within one-mile of the Project Site, including two existing USTs within Westfield-Barnes.

The Project does not propose to maintain an underground storage tank as a part of this Project.

EPA Facilities

EPA facilities are defined as Toxic Release Inventory (TRI) facilities. TRI facilities use and/or release over a certain threshold of toxic chemicals to the environment. There are 777 individual chemicals and 33 chemical categories covered by the TRI program.[8]

8

There are 17 EPA TRI facility release reports within Westfield. The sites identified in bold below are within 1-mile of the DGA.

Table 6-3 EPA TRI facility release reports

Tri Facility ID	Facility Name	Address
01085GNRLB61UNI	Abrasive Industries Inc General Abrasive Div	61 Union St Westfield, Ma 01085
01085NDRSN214NO	Anderson & Sons Inc	214 N Elm St Westfield, Ma 01085
01085BRKSH109AP	Berkshire Industries Inc	109 Apremont Way Westfield, Ma 01085
01085THCLM1CYCL	Columbia Manufacturing Inc	1 Cycle St Westfield, Ma 01085
01085DCRTD1ARCH	Decorated Products Co	1 Arch Rd Po Box 580 Westfield, Ma 01085
01085DGTLQ1111S	Digital Equipment Corp	1111 Southhampton Rd Westfield, Ma 01085
01086MCRBR720SO	Micro Abrasives Corp	720 Southampton Rd Westfield, Ma 01086
01085RDNTN260NO	Reed National Corp	260 N Elm St Westfield, Ma 01085
01085WSTFL221UN	Rpm Wood Finishes Group Inc	221 Union St Westfield, Ma 01085
0108WSVGRM1SPRI	**Savage Armsinc**	**100 Springdale Rd Westfield, Ma 01085**
01086TLLTLTURNP	Tell Tool Inc	Turnpike Indl Park Rd Westfield, Ma 010861278
01085TXNNCTURNP	Texon Footwear Inc	Turnpike Indl Rd Westfield, Ma 01085
01085SRFRC14THF	**Us DOD USAF Barnes Ang Ma**	**175 Falcon Dr Westfield, Ma 01085**
01085WSTFL68NOR	Westfield Electroplating Co	68 N Elm St Westfield, Ma 01085
01085WSTFLSOUTH	Westfield Gage Co Inc	S Broad St Westfield, Ma 01086
01085WSTFL135AP	Westfield Grinding Wheel Co	135 Apremont Way Westfield, Ma 01085
01085WSTFL403PA	Westfield Ready-Mix	403 Papermill Rd Westfield, Ma 01085

Road Infrastructure

Road infrastructure includes Massachusetts Department of Transportation (MassDOT) roads and bike lanes or shared use pathways. There are two major routes within a one-mile radius of the Project Site– Interstate I-90, and U.S. Route 202.

MBTA Bus and Rapid Transit

The Massachusetts Bay Transit Authority data includes all MBTA bus routes, stops, commuter rails, commuter rail stations, parking lots, and rapid transit stops. There is no MBTA infrastructure within one mile of the Project Site.

Other Transportation Infrastructure

Other transportation infrastructure includes airports, freight yards, water taxis, railroad tracks, and ferry routes. There are no freight yards, water taxis, ferry routes, or airports within one-mile of the Project Site. One railroad track (Pioneer Valley Railroad, Holyoke line) exists within the one-mile radius of the Project Site. The proposed Project is not anticipated to impact the railroad track in any way as a part of this Project.

Regional Transit Agencies

The Pioneer Valley RTA route (#B23) generally runs along U.S. Route 202 and along the western and northern boundary of the Project Site. One RTA stop exists within the one-mile radius of the Project Site, at Servistar Industrial Way off Southampton Road, just south/west of the proposed project sites.

Energy Generation and Supply

The Energy Generation and Supply layer includes nuclear power plants, power plants, and transmission lines from Massachusetts Geographic Information Systems (MassGIS) and the United States Geological Survey (USGS) databases. There is one transmission line within one mile of the Project Site.

6.3 Climate Adaptation (RMAT)

As described in the MEPA Interim Protocol for Analysis of Projects Impacts on Environmental Justice Populations the next step of the existing environmental burden analysis focuses on using the standard output report generated from the RMAT Climate Resilience Design Standards Tool (the "RMAT Tool").

Proponents should identify in the EIR whether the RMAT Tool indicates a "High" risk rating for sea level rise/storm surge or extreme precipitation (urban or riverine flooding) as applied to the project location. A "High" risk rating for these parameters could be an indicator of elevated climate risks for EJ populations that immediately surround the project site (meaning all EJ populations located in whole or in part within the project boundaries).

The RMAT Tool was run for the project location and returned a risk rating of high for extreme precipitation and extreme heat. Results from the standard output report of the RMAT Tool appear in **Attachment E**.

6.4 USEPA EJ Screen

As described in the MEPA Interim Protocol for Analysis of Projects Impacts on Environmental Justice Populations the next step of the existing environmental burden analysis focuses on using the United States Environmental Protection Agency (EPA) Environmental Justice Screening Tool (EJ Screen) and associated environmental indicators shown in Table 6-4. The MEPA protocol offers the following guidance when using the EJ Screen tool:

Fourth, Proponents, at their option, may consult U.S. EPA's "EJ Screen," which provides a percentile ranking by census block group, compared against statewide averages, for 11 environmental indicators. When using the tool, Proponents should select the "compare to state" function and turn off the "EJ index" data layer—while the EJ index is calculated from the 11 environmental indicators after considering demographic information and population density, this calculation may be inconsistent with the definition of "EJ population" codified in Massachusetts law. The environmental indicators/percentiles could be relevant for assessing potential environmental exposures in the relevant census block as compared to statewide averages, and, therefore, could serve as a potential (though not definitive) indicator of "unfair or inequitable" environmental burden impacting the EJ population.

Table 6-4 Environmental indicators available through EPA EJ Screen

Indicator	Exposure v. Risk	Key Medium
NATA Air Toxics Cancer Risk (lifetime exposure)	Risk/Hazard	Air
NATA Respiratory Hazard Index Ratio	Risk/Hazard	Air
NATA Diesel PM (DPM)	Potential Exposure	Air
Particulate Matter (PM2.5, annual average)	Potential Exposure	Air
Ozone (summer seasonal average, daily 8-hr max)	Potential Exposure	Air
Lead Paint (% of housing built before 1960)	Potential Exposure	Dust/lead paint
Traffic Proximity and Volume Count of Vehicles (average annual)	Proximity/Quantity	Air
Proximity to RMP (Risk Management Plan/hazardous waste cleanup) Sites	Proximity/Quantity	Waste/Water/Air
Proximity to TSDFs (Hazardous waste treatment, Storage, and Disposal Facilities)	Proximity/Quantity	Waste/Water/Air
Proximity to NPLs (National Priority List/Superfund sites)	Proximity/Quantity	Waste/Water/Air
Wastewater Discharge Toxicity (based on NPDES permitted discharge locations)	Proximity/Quantity	Water

The USEPA EJ Screen tool was run with the "compare to state" option turned on, and the "EJ Index" data layer turned off, for the census tracts immediately within one mile of the project site. **Figure 16 in Attachment B** shows the census tracts and block groups of interest located within the DGA. Each of the MEPA identified environmental indicators are summarized below.

Air Toxics Cancer Risk (lifetime exposure)

The Air Toxics Cancer Risk indicator in EJ Screen, maps data from the National-Scale Air Toxics Assessment (NATA) to assess health risks from air toxics on a nation-wide basis. NATA was last updated using data from 2017, this dataset indicator uses both emissions information as well as air dispersion modeling to determine cancer risk from air toxics. This indicator is available at the census tract level. The Air Toxics Cancer Risk indicator can be used to understand the life-time cancer risk from inhaling air toxics in EJ areas compared to the state-wide rate.

The results of the NATA Air Toxics Cancer Risk indicator are 20 in one million cancer risk in EJ areas within the DGA compared to an average statewide risk of 24 in one million cancer risk. As the Air Toxics cancer risk due to air toxics is lower in EJ areas within the DGA when compared to the state, there is no indication of unfair or inequitable environmental burden due to Air Toxics Cancer Risk for EJ areas within the DGA. Results from this analysis are presented in Table 6-5.

Respiratory Hazard Index Ratio

The Respiratory Hazard Index[9] Ratio indicator in EJ Screen maps data from the National-Scale Air Toxics Assessment (NATA) to assess health risks from air toxics on a nation-wide basis. NATA was last updated using data from 2017. This indicator uses both emissions information as well as air dispersion modeling to determine the risk of respiratory related (i.e., non-cancer health effects) from air toxics. This indicator is available at the census tract level and its units are dimensionless. The NATA Respiratory Hazard Index Ratio indicator can be used to understand the risk of respiratory (non-cancer related) health outcomes from inhaling air toxics in EJ areas compared to the state-wide rate.

The result of the NATA Respiratory Hazard Index Ratio indicator is 0.30 in EJ areas within the DGA compared to an average statewide risk of 0.30. As the Respiratory Hazard Index ratio due to air toxics is the same in EJ areas within the DGA when compared to the state, there is no indication of unfair or inequitable environmental burden due to respiratory hazards from air toxics in EJ areas within the DGA. Results from this analysis are presented in Table 6-5.

NATA Diesel PM

The NATA Diesel PM indicator in EJ Screen maps data from the National-Scale Air Toxics Assessment (NATA) to assess health risks from diesel particulate on a nation-wide basis. NATA was last updated using data from 2014, this indicator uses both emissions information as well as air dispersion modeling to determine the level of diesel particulates in the air. The Integrated Risk Information System (IRIS) program by the EPA has a diesel engine exhaust Reference concentration (Rfc) of 5 $\mu g/m^3$.[10] This indicator is available at the census tract level and its units are in micrograms (millionths of a gram) per cubic meter, or $\mu g/m^3$. The NATA Respiratory Hazard Index Ratio indicator can be used to understand the risk of respiratory (non-cancer related) health outcomes from inhaling diesel PM in EJ areas within the DGA compared to the state-wide rate.

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[9] The sum of the ratio of the potential exposure to an air toxic and the level at which no adverse effects are expected (i.e., summing each hazard quotient) for toxics that affect the same target organ or organ system. Because different air toxics can cause similar adverse health effects, combining hazard quotients from different toxics is often appropriate. A hazard index (HI) of 1 or lower means air toxics are unlikely to cause adverse noncancer health effects over a lifetime of exposure. However, an HI greater than 1 doesn't necessarily mean adverse effects are likely.

[10] The Reference Concentrations is developed by the EPA through a series of tests. This concentration refers to the estimate (with uncertainty spanning an order of magnitude) of a daily exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.

The result of the NATA Diesel PM indicator is 0.173 µg/m^3 in tract 812500, and 0.127 µg/m^3 in tract 812800, within the DGA compared to an average statewide value of 0.295 µg/m^3. As the NATA Diesel PM index is lower in EJ areas within the DGA when compared to the state and to the IRIS RfC, there is no indication of unfair or inequitable environmental burden due to respiratory hazards from air toxics in EJ areas within the DGA. Results from this analysis are presented in Table 6-5.

Particulate Matter (PM2.5, annual average)

The Particulate Matter (PM) indicator in EJ Screen maps data from EPA Office of Air and Radiation (OAR) and indicates increased health risks due to exposure to $PM_{2.5}$. OAR uses data from 2017. The PM data is a combination of data collected from monitoring sites around the country and data modeled using an air dispersion modeling program. This indicator is available at the census tract level and its units are µg/m^3. The Particulate Matter indicator can be used to understand the concentrations of PM in EJ areas within the DGA compared to the state-wide concentrations. This indicator is available at the census tract level and reports the annual average of ambient levels of $PM_{2.5}$ in micrograms (millionths of a gram) per cubic meter, or µg/m^3.

The results of the PM indicator is 6.41 µg/m^3 in tract 812500, and 6.25 µg/m^3 in tract 812800 compared to the state average of 6.78 µg/m^3. As the Particulate Matter Index is lower in EJ areas within the DGA when compared to the state and to the National Ambient Air Quality Standard (NAAQS) of 12 µg/m^3, there is no indication of unfair or inequitable environmental burden due to particulate matter concentrations in EJ areas within the DGA. Results from this analysis are presented in Table 6-5.

Ozone

The Ozone indicator in EJ Screen maps data from EPA Office of Air and Radiation and indicates increased health risks due to exposure to ozone. OAR uses data from 2017. Ozone data is a combination of data collected from monitoring sites around the country and data modeled using an air dispersion modeling program called CMAQ. Ozone data is reported as the summer, seasonal average of the daily maximum 8-hr concentration. This translates to the 8-hr period of the day when the average ozone concentration is the highest. This indicator is available at the census tract level and its units are parts per billion, or ppb. The Ozone indicator can be used to understand the risk of health outcomes, such as decreased lung function and increased hospital admissions, from inhaling ozone in EJ areas within the DGA compared to the state-wide rate.

The results of the Ozone indicator is 40.5 ppb in tract 812500, and 40.3 in tract 812800 compared to the state average of 39.5 ppb. These values are slightly elevated and rank in the 78th and 74th percentile statewide, respectively. The NAAQS for ozone is the 2015 standard of 0.070 ppm or 70 ppb for the fourth-highest daily maximum 8-hour concentration averaged across three consecutive years.[11] As the ozone

[11] National Ambient Air Quality Standards for Ozone

concentration for the EJ areas inside the DGA is well below 70 ppb, there is no indication of unfair or inequitable environmental burden due to ozone concentrations in EJ areas within the DGA. Results from this analysis are presented in Table 6-5.

Lead Paint

The Lead Paint indicator in EJ Screen maps data from the U.S. Census Bureau and the American Community Survey to assess lead exposure potential from houses built prior to 1960. Data is reported from the 2020 US census and 2014-2018 ACS. The lead paint indicator is reported as percent of housing units built pre-1960 and is available on the block group level. According to Jacobs et al., 43% of homes built between 1940-1959 have significant lead-based paints (2002).[12] Older houses have a higher risk. This indicator can be used to understand the risk of exposure to lead, especially to young children who may consume lead paint chips and have high blood lead levels.

The results of the Lead Paint indicator for share of houses in the block group built prior to 1960 are 39% for EJ block group 8125002, 20% for block group 8125003, and 23% for block group 8128003 compared to the state average of 50%. As the lead paint indicator values for the EJ areas inside the DGA is below the statewide average of 50%, there is no indication of unfair or inequitable environmental burden due to lead paint exposures from houses in EJ areas within the DGA. Results from this analysis are presented in Table 6-5.

Traffic Proximity and Volume Count of Vehicles

The Traffic Proximity and Volume Count of Vehicles indicator in EJ screen uses 2017 data from the U.S. Department of Transportation (MassDOT) to calculate a traffic proximity value that is an indicator of multiple health impacts including asthma onset, mortality rates, cardiovascular disease, and stress. The traffic indicator is the count of daily vehicles at major roads within 500 meters of the given location, divided by the distance in meters from the location. This data is available on a block group level and is reported as average annual daily traffic per meter. This indicator can be used to understand the health risk that various populations face due to proximity to highly trafficked roads.[13]

The results of the Traffic Proximity and Volume Count of Vehicles indicator for the EJ populations within the DGA are low in comparison to the statewide average of 2,100 average annual daily traffic (AADT) per meter. EJ block group 8125002 reports 480 AADT per meter, EJ block group 8125003 reports 420 AADT per meter, and EJ block group 8128003 reports 840 ADDT/meter. As the Traffic Proximity indicator results for the EJ areas inside the DGA is well below 2,100, there is no indication of unfair or inequitable environmental burden due to high volumes of traffic in EJ areas within the DGA. Results from this analysis are presented in Table 6-5.

[12] EJ Screen Technical Document, pg. 49
[13] EJ Screen Technical Document, pg. 51

Proximity to RMP sites

The Proximity to Risk Management Plan (RMP) sites indicator in EJ screen uses 2020 data from EPA's RMP database to calculate the proximity to a facility that uses hazardous chemicals and have a plan to manage spills. The RMP rule is part of the Clean Air Act Amendments at 40 CFR 68. Facilities that store over a certain threshold of a quantity of regulated substance (that could cause an offsite hazard if released) are required to submit a RMP plan. This indicator is calculated as the sum of RMP facilities within 5 km of a location (or the nearest one beyond 5 km), divided by the distance in kilometers between the RMP facilities and the location of interest. This data is available on a block group level and is reported as sum of total RMP facilities per kilometer.[14]

The results of the Proximity to RMP sites indicator for block group 8125002 reports 1.50 facilities per km, and block group 8128003 reports 2.40, within the DGA are elevated compared to the statewide average. Block group 8125003 reports 0.60 facilities per km, lower than the statewide average of 0.70 facilities per km. The Proximity to RMP indicator results for some EJ areas inside the DGA are elevated compared to the statewide average and may indicate unfair or inequitable environmental burden due to many facilities using hazardous chemicals close to EJ areas within the DGA. Results from this analysis are presented in Table 6-5.

Proximity to Hazardous Waste Facilities

The Proximity to Hazardous Waste Facilities indicator in EJ screen uses 2020 data from the Resource Conservation and Recovery Act (RCRA) Info database to calculate the proximity to facilities that handle hazardous waste that is potentially dangerous to human and environmental health. This indicator includes facilities that treat, store, dispose, or generate large quantities of hazardous waste and is calculated as the sum of total facilities divided by their distance in kilometers. This data is available on a block group level and is reported as facilities per kilometer distance. This indicator can be used to better understand how hazardous waste facilities are distributed between EJ and non-EJ areas. For example, an indicator value of ½ indicates that there is 1 facility 2 km away from a specific location.

The results of the Proximity to Hazardous Waste Facilities indicator for the EJ block groups inside the DGA are 3.9 facilities/km for block group 8125002, 3.7 facilities/km for block group 8125003, and 3.4 facilities/km for block group 8128003. As the Proximity to Hazardous Waste Facilities indicator results for the EJ areas inside the DGA are well below 5.2 facilities/km, the statewide average, there is no indication of unfair or inequitable environmental burden due to proximity to facilities that handle hazardous waste close to EJ populations within the DGA. Results from this analysis are presented in Table 6-5

Proximity to NPLs (National Priority List/Superfund sites)

The Proximity to National Priority List (NPL) sites indicator in EJ screen uses 2020 data from the EPA CERCLIS database to calculate the proximity to contaminated Superfund sites. CERCLIS is the search database for the Comprehensive Environmental Response Compensation and Liability Act (CERCLA),

[14] https://www.epa.gov/rmp/risk-management-plan-rmp-rule-overview, accessed 4/11/2022

otherwise known as Superfund. Superfund sites are contaminated with hazardous waste and include manufacturing facilities, processing plants, landfills, and mining sites. The Superfund Act, or CERCLA, allows the EPA to force responsible parties to clean up the contaminated site or reimburse the government for EPA-led cleanup work. This indicator is calculated as the count of proposed and listed NPL/Superfund sites within 5 km (or the nearest one beyond 5 km) divided by the distance in kilometers. This indicator can be used to better understand how hazardous waste facilities are distributed between EJ and non-EJ areas.

The results of the Proximity to NPL sites indicator for the EJ block groups inside the DGA are 0.033 facilities/km for block group 8125002, 0.035 facilities/km for block group 8125003, and 0.032 facilities/km for block group 8128003. As the Proximity to NPL sites indicator results for the EJ areas inside the DGA are well below 0.17 facilities/km, the statewide average, there is no indication of unfair or inequitable environmental burden due to proximity to NPL/Superfund sites. Results from this analysis are presented in Table 6-5

Wastewater Discharge Toxicity

The Wastewater Discharge Toxicity indicator in EJ Screen pulls data from the EPA's Risk-Screening Environmental Indicators (RSEI) to calculate toxics concentrations in streams. The RSEI model uses 2020 information about Toxics Release Inventory sites, chemical release volumes, toxicity, chemicals' fate and transport through the environment, and human exposure to calculate an overall RSEI score. The RSEI score includes a toxicity-weighted concentration that excludes population information, making it easier to use for low-density rural areas. The modeled toxicity-weighted concentrations in stream sections within 500 m of the location are divided by the distance from the location in kilometers to get an overall Wastewater Discharge Toxicity score.[15]. This indicator is available at the block group level and is reported in mg/L per km distance. This indicator can be used to understand the risk from exposure to toxics in surface water.

The Wastewater Discharge Toxicity indicator results for the EJ block groups within the DGA are 1.40E-05 mg/L per km for block group 8125002, 4.80E-05 mg/L per km for 8125003, and 2.90E-06 mg/L per km for block group 8128003. As the Wastewater Discharge Toxicity indicator results for the EJ areas inside the DGA are below the statewide average of 0.21 mg/L per km, there is no indication of unfair or inequitable environmental burden due to proximity to high wastewater discharge toxicity values close to EJ populations within the DGA. Results from this analysis are presented in Table 6-5.

[15] Toxicity-weighted concentrations are calculated from multiplying the concentration by the toxicity weight for a given chemical. Toxicity weights are relative, measure chronic human health effects only (include cancer and noncancer effects), and are for comparison purposes to ensure that more toxic chemicals get more attention. For example, the RSEI model uses a range of 0.02 for sulfuric acid to 1.4 billion for dioxin for toxicity weights. If there is more than one chemical present, then the toxicity-weighted concentrations can be added together to get the overall toxicity-weighted concentration of a batch of chemicals.

Table 6-5 MEPA Identified Environmental Impacts

Environmental Indicator	State Average	Block Groups					
		8125002		8128003		8125003	
		Value	%ile in State	Value	%ile in State	Value	%ile in State
National-Scale Air Toxics Assessment (NATA) air toxics cancer risk	24	20	56	20	56	20	56
NATA respiratory hazard index	0.30	0.30	81	0.30	81	0.30	81
NATA diesel PM ($\mu g/m^3$)	0.295	0.173	26	0.127	12	0.173	26
Particulate matter ($\mu g/m^3$)	6.78	6.41	31	6.25	22	6.41	31
Ozone (ppb)	39.5	40.5	78	40.3	74	40.5	78
Lead paint indicator (%)	0.50	0.39	38	0.23	20	0.20	18
Traffic proximity and volume	2100	480	40	840	55	420	37
Proximity to Risk Management Plan (RMP) sites	0.70	1.5	84	2.40	95	0.60	64
Proximity to Hazardous Waste Facilities	5.2	3.9	66	3.4	61	3.7	65
Proximity to National Priorities List (NPL) sites	0.17	0.033	4	0.032	2	0.035	5
Wastewater Discharge Indicator (Stream Proximity and Toxic Concentration)	0.21	1.40E-05	14	2.90E-06	9	4.80E-05	21

6.5 Public Involvement

This Project has been discussed at the Westfield Airport Commission's public meetings on January 14, 2021, February 11, 2021, March 11, 2021, April 8, 2021, May 13, 2021, June 10, 2021, August 12, 2021, September 15, 2021, and October 14, 2021. The project has also been discussed at the Westfield City Council Meeting on August 8, 2021. Please refer to **Attachment C** of this document for a circulation list.

Westfield-Barnes Regional Airport held a pre-filing meeting with the MEPA Office on December 1, 2021 and discussed the proposed project with MEPA staff. The Airport has communicated with the MEPA Office and the EEA EJ Director regarding recommended community-based organizations (CBOs) and tribes. Advance notification of the project was provided to community-based organizations and tribal organizations in accordance with the new Environmental Justice protocol that took effect on January 1, 2022, which used MEPA's EJ Screening Form, was provided on March 16, 2022 and again on June 24, 2022.

To facilitate addition outreach, and notification of the proposed project to EJ communities, the Airport has developed a Project "Fact Sheet", along with relevant information regarding the MEPA process and sites to provide comments on the project. The project Fact Sheet was provided on May 13, 2022 to the

notification list used for CBOs and tribal organizations, including Westfield specific advocacy organizations. It is also posted on its website at https://www.cityofwestfield.org/752/Westfield-Barnes-Regional-Airport and at several key community locations (Airport and City Hall).

Note, using the EOEEA mapping, the proponent analyzed the 1-mile DGA for all census tracts where at least 5% of the population has speakers who self-identify as "do not speak English very well", based on data from the U.S. Census Bureau, American Community Survey, Table B16001. The proponent did not identify any block groups classified as EJ, or not, within the DGA, meeting the English language isolation criteria and therefore warranting translation of outreach materials.

In addition to the efforts outlined above to provide project information to EJ communities, the Airport holds monthly Airport Commission meetings that are open to the public where project updates are provided. Furthermore, the public had the opportunity to comment on the project's Draft Environmental Assessment (EA) which is underway, with an anticipated Final Environmental Assessment completed in May 2022. The EA was publicly notified in a community newspaper, and copies were available in the City Hall, Airport Manager's Office, and the Westfield Athenaeum.

Relevant correspondence, list of contacted CBOs and tribes, fact sheets and outreach forms are provided in **Attachment F.**

6.5.1 Future Outreach

The Airport will continue outreach and engagement efforts, informed by questions posed and comments received during the MEPA process, including comments received on this ExENF. Future outreach will also be conducted in coordination with the City of Westfield.

The Project will also go through the local Conservation Commission filing process (for approval of the revisions to the Airport's Vegetation Management Plan), during which public meetings will be held to discuss the Project. Additionally, the Proponent will continue to include the CBOs and tribes provided by the MEPA EJ office in the Official EJ Reference list on all future MEPA submittals.

6.6 Assessment of Project Impacts to Determine Disproportionate Adverse Effect

6.6.1 Nature and Severity

In Section 3.0 of the EJ Analysis Protocol, the Project proponent is asked to describe the nature and severity of all short-term and long-term Project impacts, both in magnitude and duration. The text below presents the section of the Protocol with the detailed information.

> *"The Proponent should analyze whether the nature and severity of project impacts will materially exacerbate any existing unfair or inequitable environmental or public health burden impacting the EJ population. In assessing severity of an impact, the Proponent should consider both magnitude and duration.*

For example, a project that would have permanent traffic impacts affecting EJ populations with elevated public health conditions could be viewed as having a disproportionate adverse effect on such population. This is especially so, if any identified environmental or public health indicators related to air quality (such as PM 2.5/ozone exposure or asthma rates) are elevated in the EJ population, and the magnitude of the increase is at least 2,000 unadjusted adt (the ENF-level MEPA review threshold at 301 CMR 11.03(6)(b)13.) and is in close proximity to the EJ population. The Proponent should conduct analysis or modeling sufficient to demonstrate the magnitude of any relevant project impacts, for instance, by conducting air quality analysis of permanent increases in traffic consistent with the MassDEP Guidelines for Performing Mesoscale Analysis of Indirect Sources (1991). Mitigation measures that would specifically reduce the magnitude of the identified impact can be considered. It is important to note that, where the level of existing burden is high, even a small addition of project impacts may create disproportionate adverse effects. For instance, if any of the DPH vulnerable health EJ criteria or other public health or environmental indicators are well above statewide rates (e.g., an environmental indicator above the 80th percentile of statewide average in EPA's EJ Screen), even a small addition of impacts (e.g., below 2,000 unadjusted adt of permanent new traffic) could be viewed as creating a disproportionate adverse effect.

In addition, while MEPA review thresholds at 301 CMR 11.03 provide a guide for a discussion of impacts, the Proponent shall not limit the discussion to impacts that meet or exceed MEPA review thresholds, and, instead, shall address all short-term and long-term impacts associated with the project, including construction period activities. For instance, an estimate of construction vehicle traffic and routes of travel may be warranted if construction activities will be occurring in close proximity to already-burdened EJ populations."

6.6.1.1 Air Quality Impacts

Operational Air Quality Impacts

As discussed previously, the Project is located in an EJ community in Westfield, MA. The area is classified as a "minority" population and "income". However, the Project Site is located in "airport district" zoning and is also surrounded by industrial/commercial businesses. **Figure 7 in Attachment B** shows the airport, industrial, commercial, and residential land use areas within one mile of the Project.

Construction Air Quality Impacts

Air quality impacts due to construction activities will be short-term. The total construction period is expected to last less than 12 months. Anticipated air quality impacts include the creation of fugitive dust and emission of diesel exhaust. There are extensive mitigation measures in place to control dust and diesel emissions and ensure that construction activities create minimal impact to the surrounding communities.

6.6.1.2 Stormwater Impacts

Existing stormwater runoff from Project Site within the Taxiway B South area, and within the Southwest Quad, is generally collected in a system of catch basins and drainage pipes that discharge to surrounding areas or infiltrate on the Project Site. The existing drainage system in the area of the Proposed Project does not provide water quality treatment systems that would be required under current regulations.

The Proposed Project stormwater management has been designed to comply with the requirements and standards of the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Policy and Handbook to the extent practicable. The stormwater management will include the use of Best Management Practices (BMP) to provide the required treatment, detention, and recharge, and mitigate the impacts of the increase in impervious area. The proposed system will provide a significant improvement over the existing drainage system, which provides no water quality treatment.

6.6.2 Comparative Impact on EJ vs non-EJ Populations

Next, the MEPA protocol specifies that a comparison between EJ and Non-EJ Populations should be drawn to quantify adverse and disproportionate impacts.

In reviewing adverse impacts on the EJ population, the Proponent should also analyze whether the impacts on the EJ population are greater or less than those on non-EJ populations. The purpose of this analysis is to assess whether the project is adding impacts to an already burdened area in a "targeted" way that is disproportionate when compared to non-EJ populations. While the Proponent should generally compare EJ and non-EJ populations within the project site, a comparable area outside the project site could be chosen—for instance, if the EJ population itself is located outside the boundaries of the project site (but within the project's designated geographic area) or if the project is located entirely within an EJ population such that a comparison with non-EJ populations within the project site is not possible. In some cases, it may be appropriate to compare similar prior projects undertaken by the Proponent in non-EJ populations to explain why the area containing the EJ population was chosen for the project at hand and whether alternative locations outside the EJ population were considered. If a comparable area is selected outside the project site, the Proponent should provide a clear justification for why the area is viewed to be "comparable" or "similarly situated" such that a comparison with the applicable EJ population is reasonable. The Proponent should conclude that the project will have a disproportionate adverse effect on the EJ population, if the adverse impacts of the project are materially greater on EJ populations than on non-EJ populations in the comparison area. If so, the Proponent must provide an explanation of whether the project has considered practical alternatives to reduce or mitigate the impacts on EJ populations, and if so, what, if any, of such alternatives or mitigation were incorporated into the project.

The proposed Project does not result in targeted disproportionate effects to the EJ block groups within the DGA. When compared to the non-EJ communities in the surrounding area – an appropriate comparable population due to proximity, geography, and shared infrastructure – it is seen that 1) While there are several existing MassDEP-regulated facilities in the EJ areas, these facilities are compliant with regulations, do not present a risk, and do not occur in numbers that indicate a targeted approach to locating such facilities (refer to **Figure 16 in Attachment B**) the Proposed Project does not result in an any

stationary or mobile sources (vehicle ADT) therefore, it is anticipated that air pollution concentrations from the proposed Project are not disproportionate in EJ areas than in the non-EJ areas.; and 3) traffic during construction and daily operation will primarily be routed along I-90 and U.S. Route 202, and not within the residential areas located in close proximity. The traffic will generally avoid direct impacts to the EJ block groups within one-mile of the Project Site.

6.6.3 Project Benefits & Environmental Benefits

Project proponents also must consider the benefits that the proposed project would bring to the EJ population, as described below.

In addition to analyzing adverse impacts, Proponent should analyze any project benefits that improve environmental conditions or the public health of the EJ population, or otherwise reduce the potential for unfair or inequitable effects on the EJ population. Emphasis should be given to project benefits that are intended to reduce any existing environmental burdens or public health consequences identified under Part II, or intended to mitigate project impacts that specifically affect the identified EJ populations. The Proponent should also analyze whether the project will provide "Environmental Benefits" for the identified EJ population, so as to result in a more equitable distribution of energy and environmental benefits and environmental burdens in accordance with "Environmental Justice Principles" as defined in 301 CMR 11.02.

There are Project benefits that will directly and indirectly impact EJ population. The benefits include improved stormwater management, including the natural environment and bringing new construction related jobs and spending to the area.

The proposed stormwater management system will be designed to prevent an increase in peak stormwater runoff and to provide treatment when and where necessary. To meet this goal, management of runoff will include both temporary and permanent Best Management Practices ("BMPs") so that runoff will be appropriately managed both during and after construction. The proposed stormwater management system will be designed to comply with MassDEP's stormwater management regulations as per the City of Westfield's requirements. Stormwater from new pavement area will be managed by a series of deep sump catch basins with exit hoods and leeching basins to adequately treat the runoff from new development. The BMPs proposed for the Project are expected to meet the goal of no increase in peak stormwater runoff and provide stormwater treatment where needed.

In addition to positive construction related economic benefits and environmental noted above, Westfield-Barnes Regional Airport is a community asset with strength to mitigate impacts of climate change, due to its role in providing the City and the Region with a "large staging area, emergency response via airlift, backup emergency power, potential for intergovernmental partnership related to energy." The airport's role in providing a regional transportation asset and climate/hazard emergency resource is supported by the proposed projects that improves the airport's ability to operate safely and efficiently.

6.7 Analysis of Project Impacts to Determine Climate Change Effects

The EJ Analysis Protocol specifies the following analysis should take place in relation to whether the project will exacerbate the effects of climate change on the EJ populations. The text from the Protocol is included below.

> *"Unless the assessment in Part II shows the absence of any "unfair or inequitable" environmental burden or related public health consequence borne by the identified EJ population as compared to the general population, the Proponent must further analyze, in addition to the analysis in Part III if applicable, whether the proposed project will increase or reduce the effects of climate change on the EJ population. In conducting this assessment, the Proponent should consider the following:*

- Whether the project is likely to exacerbate the climate risks shown in the RMAT tool in a manner that affects the identified EJ population.; and
- Whether the greenhouse gas (GHG) emissions associated with the project are likely to affect EJ populations that use or occupy the project"

6.7.1 Climate Adaptation

The RMAT Tool was consulted to find risks associated with climate change, as specified by the Protocol below.

"The Proponent should review the output report generated from the RMAT Tool to assess whether the climate parameters for sea level rise/storm surge and extreme precipitation (urban or riverine flooding) are ranked "High" and would affect the applicable EJ population(s). For instance, a residential dwelling that may not be sufficiently elevated to accommodate future sea level rise conditions may affect EJ populations, if it is located within an EJ population or specifically intended for use by EJ populations. Also, if a project proposes to cut a substantial number of trees in a manner that potentially adds to heat conditions in the area, or proposes to add impervious cover in a manner that worsens flooding conditions in the surrounding neighborhood, such impacts could have effects on EJ populations located in and around the project site. Any aspects of the project that could reduce climate risks, such as improvements to stormwater management systems and the use of pervious pavement and surfaces should also be reviewed. The Proponent should conduct analysis or modeling to quantify any anticipated climate change effects as appropriate, and should apply best available data on future climate conditions where available. The recommended design standards in the RMAT tool may provide a resource in performing such quantitative analyses."

As described previously, the RMAT Tool was run for the project location and returned a risk rating of high for extreme precipitation (urban flooding and riverine flooding) and extreme heat. Results from the standard output report of the RMAT Tool appear in **Attachment E.** To the extent that the project will be subject to more frequent extreme precipitation events, project stormwater associated with those events will not impact any EJ population. For mapped EJ populations near the project site, no people or structures in EJ-mapped areas would be impacted by stormwater from the project site.

6.7.2 GHG Emissions (if over 2,000 tons per year of GHG CO2e)

The Protocol continues to quantify GHG emissions for projects that generate over 2,000 tons per year of CO2 equivalent greenhouse gas emissions.

> *"The Proponent should conduct a GHG emissions analysis if a project is expected to generate 2,000 or more tpy of GHG (CO2) emissions from conditioned spaces that are likely to be used or occupied by EJ populations. As a general matter, this analysis will be required only for residential dwellings or commercial buildings intended for human use or occupation and located in whole or in part within a census block designated as an EJ population. The estimate of GHG emissions can be generated by inserting building types and square footage into an* ***Emissions Footprint Estimation Tool, available here****. The analysis should generally follow the methodology set forth in the 2010 MEPA Greenhouse Gas Emissions Policy and Protocol (the "2010 GHG Policy"), and should provide energy efficiency modeling to support GHG estimates for the Base Case and Design Case. To the extent a project is already required to conduct a GHG analysis under the 2010 GHG Policy, that analysis will satisfy the requirements of this Part IV.B."*

The project has no conditioned spaces that are likely to be used or occupied by EJ populations (and proposes no increase in conditioned spaces at all).

6.7.3 Ecological Restoration (Wetlands)

Projects that fall under regulations at 310 CMR 10.00 the Wetlands Protection act are permitted to provide the above information in an abbreviated checklist format. The proposed project is not an Ecological Restoration Project and therefore does include information in this format.

6.7.4 Mitigation and Section 61 Findings

The Project is required to address any disproportionate adverse effects that fall onto the EJ populations, as described by the text from the EJ Analysis Protocol below.

> *"To the extent any disproportionate adverse effects or increased climate change risks are identified for the EJ population under Parts II-V, the Proponent must describe measures to address such effects on EJ populations. These measures should be considered in addition to those that the project proposes to take to avoid, minimize and mitigate its environmental impacts more generally. For instance, measures proposed to reduce traffic congestion in the area (such as roadway improvements or traffic signals) may be sufficient to address potential deterioration in traffic conditions, but may not sufficiently address the disproportionate adverse effects that may result from the addition of air pollutants to an already burdened EJ population. In this instance, additional mitigation to further reduce project impacts (such as a more robust traffic demand management (TDM) program or re-routing project related traffic away from EJ populations) or to ameliorate the existing burden borne by the EJ population (such as contributions to public health services or air quality monitoring) may be warranted. Measures to address climate change risks are particularly important, in light of the vulnerabilities faced by the EJ populations that hinder access to affordable energy resources and the ability to adapt to extreme climate events, such as*

extreme and more frequent storms and associated flooding. In accordance with 301 CMR 11.07(6)(n), any EIR prepared under Section 58 of the Act must include proposed Section 61 findings identifying any and all actions to be taken to address any identified disproportionate adverse effects, or any increase in the effects of climate change, on EJ populations. Any Agency required to issue Section 61 Findings must then specify, as applicable, "any and all actions to be taken to reduce the potential for unfair or inequitable effects upon Environmental Justice Populations." 301 CMR 11.01(4)(c)2."

Based on the results of this analysis, it was determined that the proposed Project does not contribute to any disproportionate adverse effects or increased climate change risks to the EJ populations within the DGA. The mitigation measures and Section 61 findings discussed below in Section 7.0 will sufficiently reduce impacts to EJ populations.

7.0 DRAFT SECTION 61 FINDINGS AND MITIGATION MEASURES

This Chapter provides a summary of proposed mitigation and Draft Section 61 Findings for the proposed Project. In addition, it describes measures to which the Proponent has committed to mitigate potential impacts on wetlands, threatened and endangered species, and stormwater quality or quantity, as well as construction period mitigation measures.

7.1 Introduction

M.G.L.c.30, s.61 requires that "[a]ll authorities of the Commonwealth … review, evaluate, and determine the impact on the natural environment of all works, projects or activities conducted by them and use all practicable means and measures to minimize [their] damage to the environment. Any determination made by an agency of the Commonwealth shall include a finding describing the environmental impact, if any, of the project and a finding that all feasible measures have been taken to avoid or minimize said impact." Each state agency that issues a permit for the Project shall issue a Section 61 Finding in connection with permit issuance, identifying mitigation that is relied upon to satisfy the Section 61 requirement. A proposed Section 61 Finding is provided in Section 7.3, and a table of mitigation measures is included as part of the Section 61 Finding. All mitigation will be the responsibility of the Proponent.

7.2 Anticipated State Permits

Table 7-1 identifies the Agency Actions that may be required for the proposed Project and which would require Section 61 Findings.

Table 7-1 Agency Actions Required for the Project

Agency Name	State Action / Permit
Division of Wildlife and Fisheries	♦ Approval under existing Rare Species Master Plan for Airport ♦ Potential CMP Amendment
Massachusetts Department of Transportation -- Aeronautics Division	♦ Project funding ♦ Certificate of Approval pursuant to 90 CMR 39B
Westfield Conservation Commission	Order of Conditions

7.3 Proposed Section 61 Finding

Project Name: Runway 15 Obstruction Removal, Taxiway B, and Southwest Quadrant
Project Location: Westfield, MA
Project Proponent: Westfield Barnes Regional Airport Commission
EEA Number: TBD
Date Noticed in Monitor: TBD

The potential environmental impacts of the Project have been characterized and quantified in the NPC dated November 2, 2020 which is incorporated by reference into this Section 61 Finding. Throughout the planning and environmental review process, the Proponent has been working to develop measures to mitigate significant impacts of the Project. With the mitigation proposed and carried out in cooperation with state agencies, the [AGENCY] finds that there are no significant unmitigated impacts.

The Proponent recognizes that the identification of effective mitigation, and implementation of that mitigation throughout the life of the Project, is central to its responsibilities under the Massachusetts Environmental Policy Act (MEPA). The Proponent has accordingly prepared the annexed Table of Impacts and Mitigation Measures that specifies, for each potential state permit category, the mitigation that the Proponent will provide.

Now, therefore, [AGENCY], having reviewed the MEPA filings for the Project, including the mitigation measures itemized on the annexed Table of Impacts and Mitigation Measures, finds pursuant to M.G.L. C. 30, S. 61, that with the implementation of the aforesaid measures, all practicable and feasible means and measures will have been taken to avoid or minimize potential damage from the Project to the environment.

_____
[Agency]

_____
By

_____
[Date]

Table 7-2 describes the measures to be implemented to mitigate the effects of the Project related to the required state actions and the schedule for implementation. The Proponent will be responsible for all mitigation measures

This EENF demonstrates that although the Preferred Alternative would result in some unavoidable impacts, those impacts have been minimized and mitigated to the greatest extent practicable, such that project implementation would have no long-term negative effects to natural resources, or airport facilities and operations. In addition to the information provided in the ENF form, the EENF contains an extensive

and detailed narrative that address the findings that the Secretary must consider when determining whether to grant the request for a Single EIR per Section 11.06(8) of the MEPA regulations. The EENF must:

- describe and analyze all aspects of the Project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope;
- provide a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed; and
- demonstrate that the planning and design of the Project use all feasible means to avoid potential environmental impacts.

Table 7-2, describes, by resource category, the impacts anticipated and associated mitigation measures.

Table 7-2 Summary of Impacts and Mitigation Measures

Subject Matter	Impact	Mitigation Measure	Schedule
Air Quality	No impacts are anticipated	Aircraft operations would maintain their existing levels and forecast growth. Therefore, air quality impacts from operations would be unaffected. See below for construction period impacts	During and Post-construction
Noise	No impact to noise contours is anticipated	Noise impacts anticipated would be minimal and temporary due to demolition and construction activities. See below for construction period impacts.	N/A
Water Quality	No impacts are anticipated, NPDES permit required for construction	Stormwater Pollution Prevention Plan (SWPPP) would be generated for construction-related activities. During construction, structural and non-structural controls to minimize erosion and sedimentation, including temporary stabilization, temporary seeding, permanent seeding, dust control, temporary sediment basins and check dams, diversion swales, catch basin inlet protection, and dewatering filters. During operation, consistency with MassDEP's Stormwater Regulations through measures including infiltration, peak runoff rate and volume control, and total suspended solids removal.	During and post-construction
Surface Water and Wetlands	Alter: 0.95 acre (41,210 sf) of BVW	The airport's VMP would be revised to incorporate work in the new avigation easement parcels. Wetland resource areas would be protected from direct impacts, including erosion and sedimentation, during construction.	Prior to and during construction
Energy Supply, Natural Resources and Sustainable Development	Minor increase in use of energy resources.	Westfield Barnes is committed to implementing programs aimed at sustainable development relative to energy usage and natural resources	Design, During and post-construction
Hazardous Materials	No known measures	If any hazardous materials are encountered during construction, it will be handled in accordance with local, state and federal regulations to ensure compliance.	Prior to and during construction

Table 7-2 Summary of Impacts and Mitigation Measures (Continued)

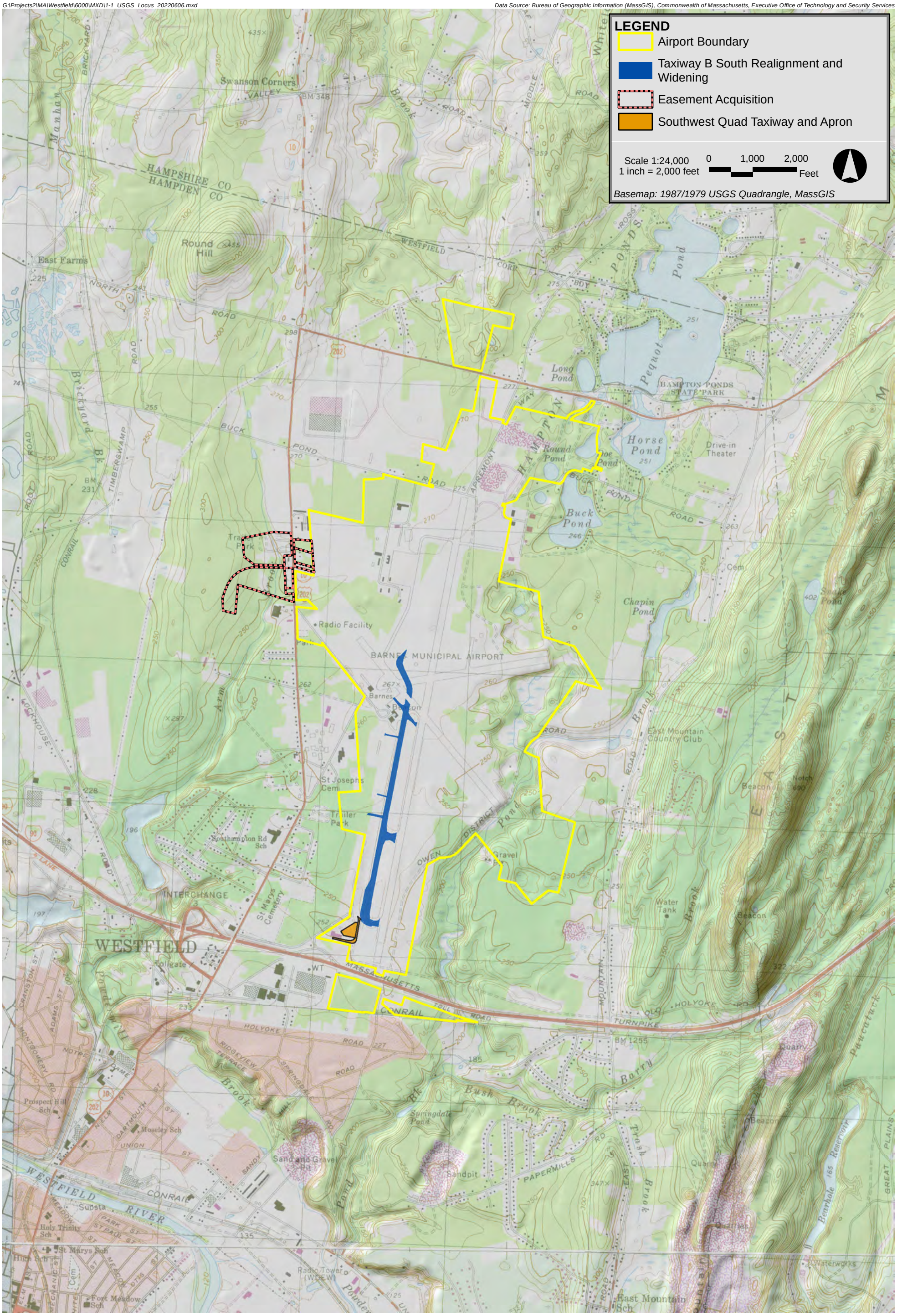
Subject Matter	Impact	Mitigation Measure	Schedule
Construction	Temporary impacts on traffic, air quality, noise, water quality	Implementation of measures to avoid or minimize environmental impacts during Project construction, including: ♦ Compliance with the SWPPP; ♦ Implementation of MassDEP and EPA Best Management Practices; ♦ Equipment maintenance to minimize noise; ♦ Low sulfur or ultra-low sulfur diesel fuel use by contractors; ♦ Designated truck routing; ♦ Limit truck idling; ♦ Site housekeeping, such as water use for dust suppression, and interim stabilization of surfaces not being worked; and ♦ Recycling and asphalt reclamation where possible.	During construction
Light Emissions and Visual Effects	No increase in light emissions	Taxiway lights will be relocated. No changes to light emissions are anticipated.	Design, During and post-construction
Wildlife Habitat	No impact to rare species habitat	General wildlife habitat features will be incorporated into the existing management and mitigation approach used by the airport in the RSMP	During construction
Stormwater	12.40 acres of new impervious area 6.32 acres of redeveloped impervious area	Construction: ♦ Compliance with the SWPPP; ♦ Implementation of MassDEP and EPA Best Management Practices including structural and non-structural controls to minimize erosion and sedimentation, including temporary stabilization, temporary seeding, permanent seeding, dust control, temporary sediment basins and check dams, diversion swales, catch basin inlet protection, and dewatering filters. Post-Construction: ♦ Stormwater management systems on site would be designed to remove TSS and new deep sump catch basins would be used where practicable to maximize the amount of TSS removal.	During construction and post construction
Greenhouse Gas Emissions	Temporary impacts on air quality	During construction, implement asphalt recycling where feasible and encourage low sulfur diesel fuel use by contractors.	During construction and post construction

Attachment B

Figures

G:\Projects2\MA\Westfield\6000\MXD\1-1_USGS_Locus_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

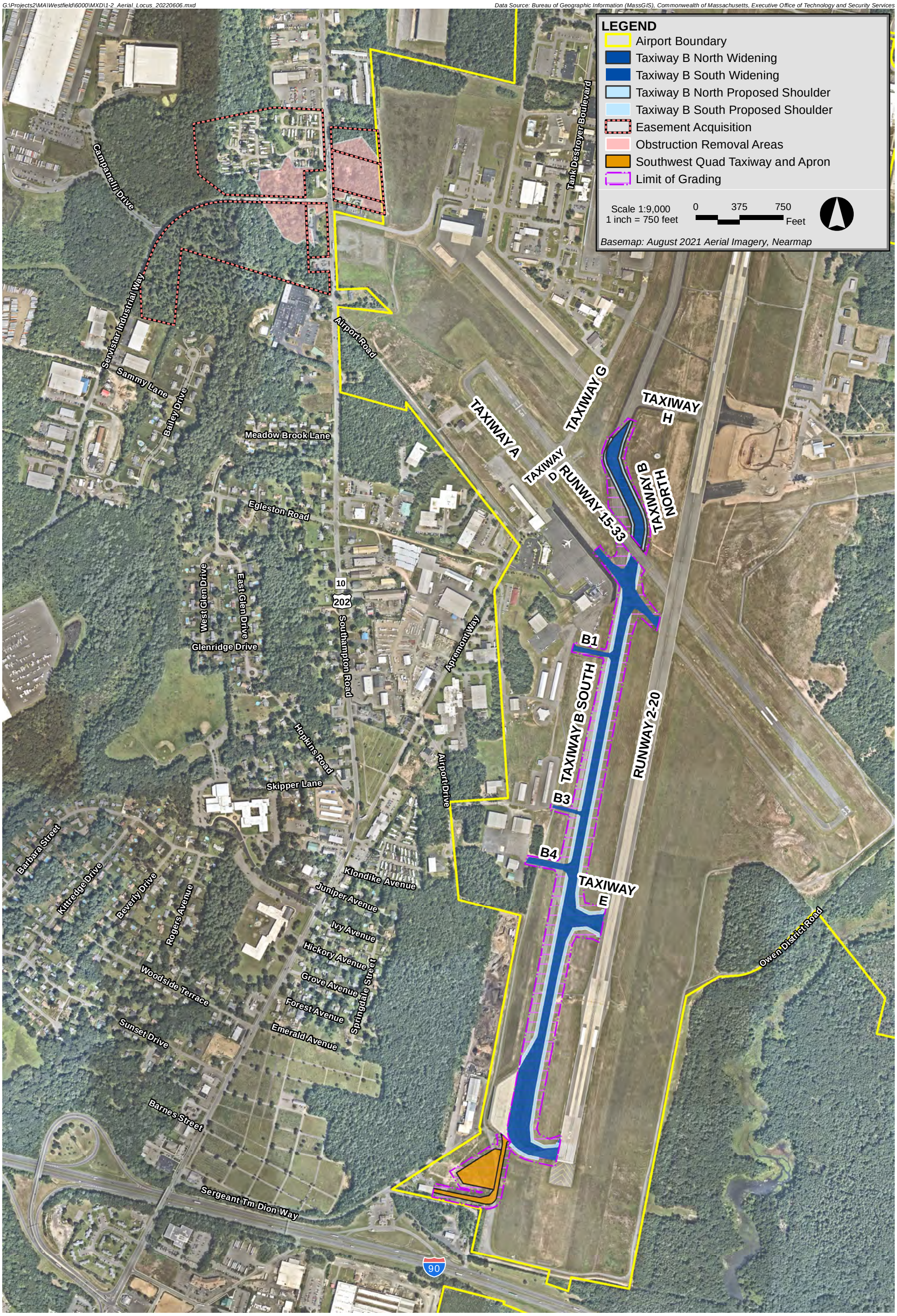
Epsilon Associates Inc.

Figure 1

USGS Locus Map

G:\Projects2\MA\Westfield\6000\MXD\1-2_Aerial_Locus_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

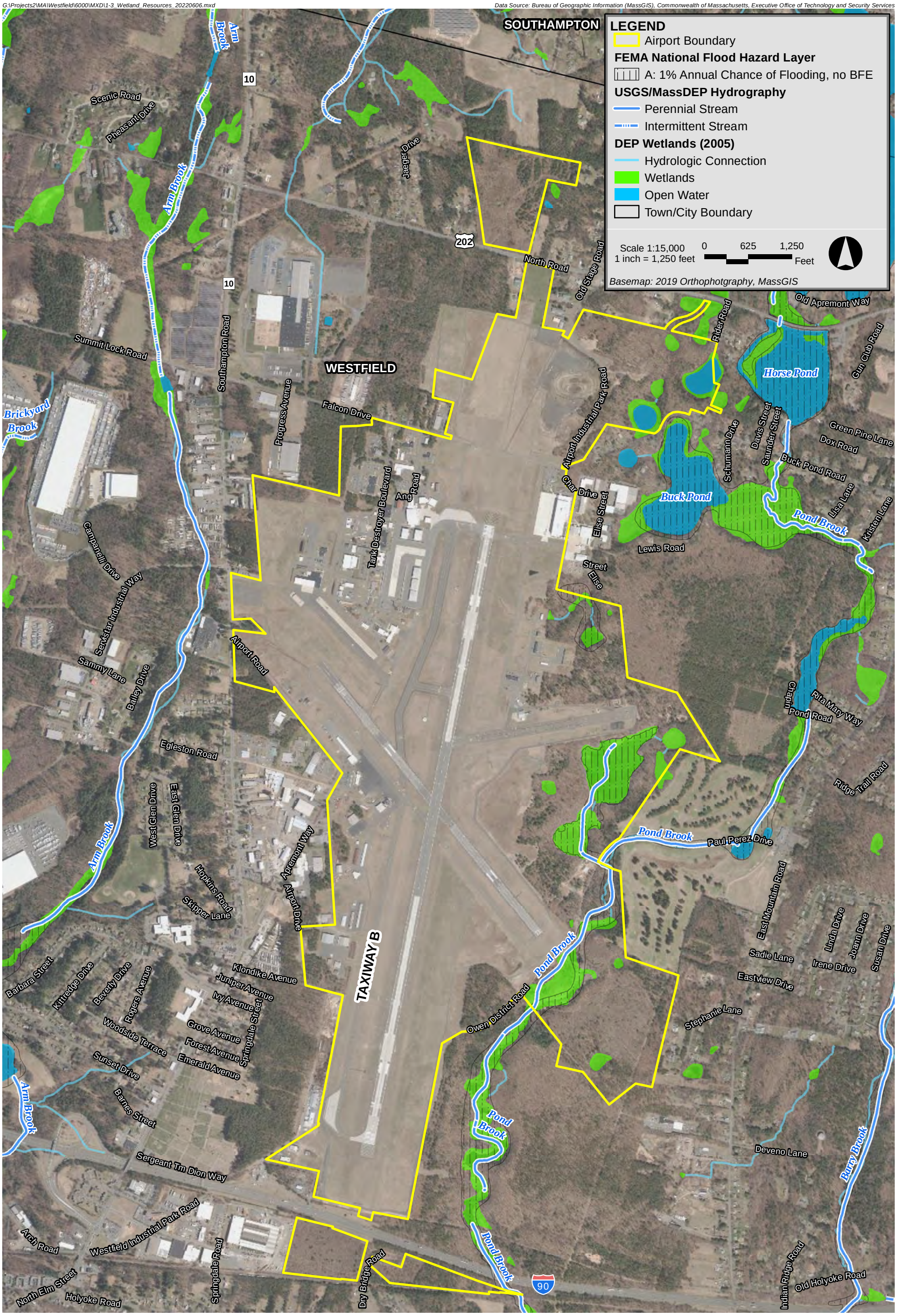
Epsilon Associates Inc.

Figure 2

Aerial Locus Map

G:\Projects2\MA\Westfield\6000\MXD\1-3_Wetland_Resources_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications Westfield, Massachusetts

Epsilon Associates Inc.

Figure 3

Wetlands Resource Map

G:\Projects2\MA\Westfield\6000\MXD\1-4_NHESP_ACEC_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services

LEGEND

- Airport Boundary
- Taxiway B South Widening
- Taxiway B Proposed Shoulder
- Easement Acquisition
- Obstruction Removal Areas
- Southwest Quad Taxiway and Apron
- Limit of Grading
- NHESP 2021 Certified Vernal Pools
- NHESP Potential Vernal Pools
- NHESP 2021 Priority Habitats for State-Protected Rare Species
- NHESP 2021 Estimated Habitats for Rare Wildlife
- Town/City Boundary

Scale 1:15,000
1 inch = 1,250 feet
0 625 1,250 Feet

Basemap: 2019 Orthophotgraphy, MassGIS

SOUTHAMPTON

WESTFIELD

TAXIWAY B

Note: There are no Areas of Critical Environmental Concern within the current map extent.

Runway 15 Easement Acquisition and Taxiway Modifications Westfield, Massachusetts

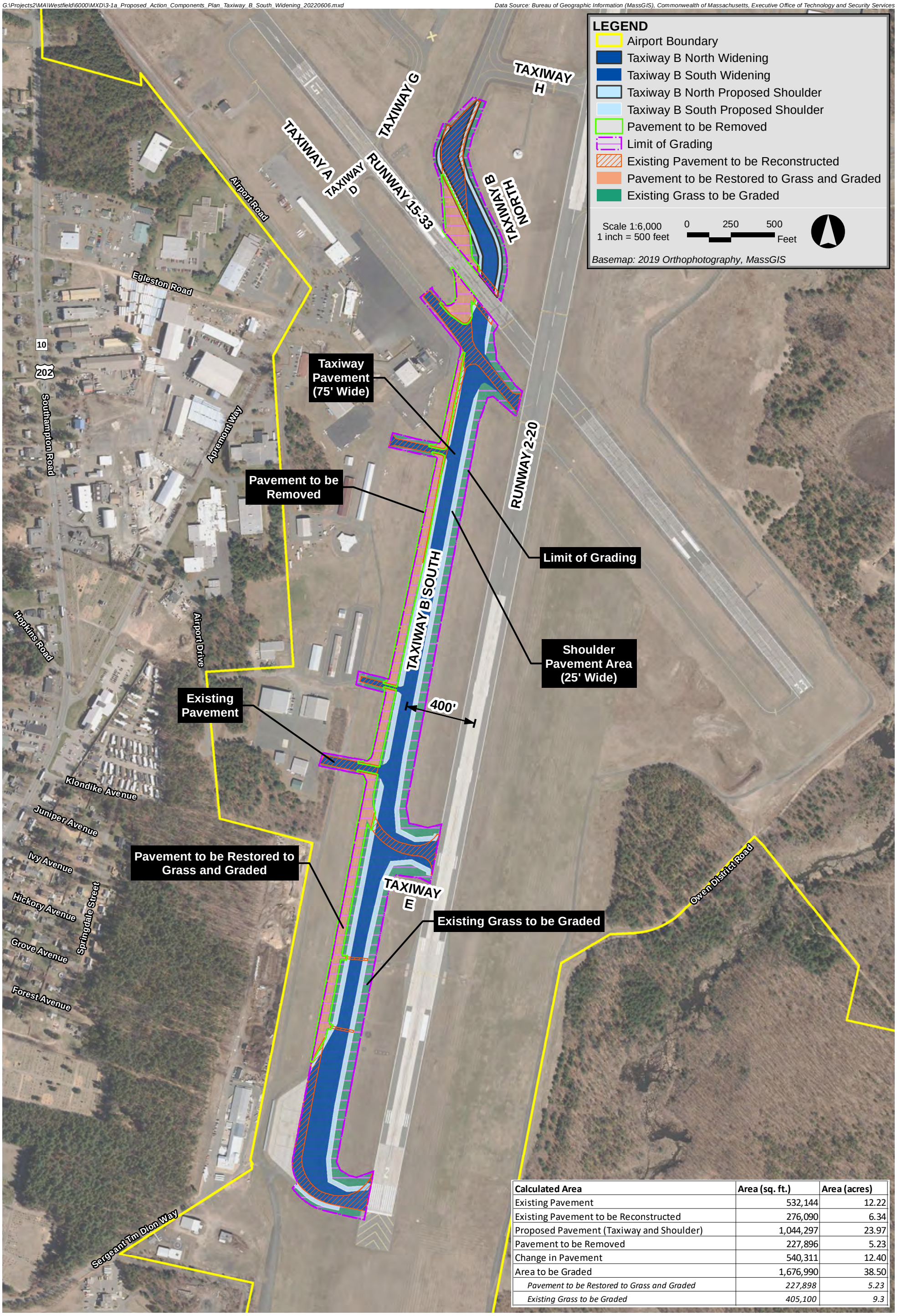
Epsilon Associates Inc.

Figure 4

NHESP and Area of Critical Environmental Concern

G:\Projects2\MA\Westfield\6000\MXD\3-1a_Proposed_Action_Components_Plan_Taxiway_B_South_Widening_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Calculated Area	Area (sq. ft.)	Area (acres)
Existing Pavement	532,144	12.22
Existing Pavement to be Reconstructed	276,090	6.34
Proposed Pavement (Taxiway and Shoulder)	1,044,297	23.97
Pavement to be Removed	227,896	5.23
Change in Pavement	540,311	12.40
Area to be Graded	1,676,990	38.50
Pavement to be Restored to Grass and Graded	*227,898*	*5.23*
Existing Grass to be Graded	*405,100*	*9.3*

Runway 15 Easement Acquisition and Taxiway Modifications Westfield, Massachusetts

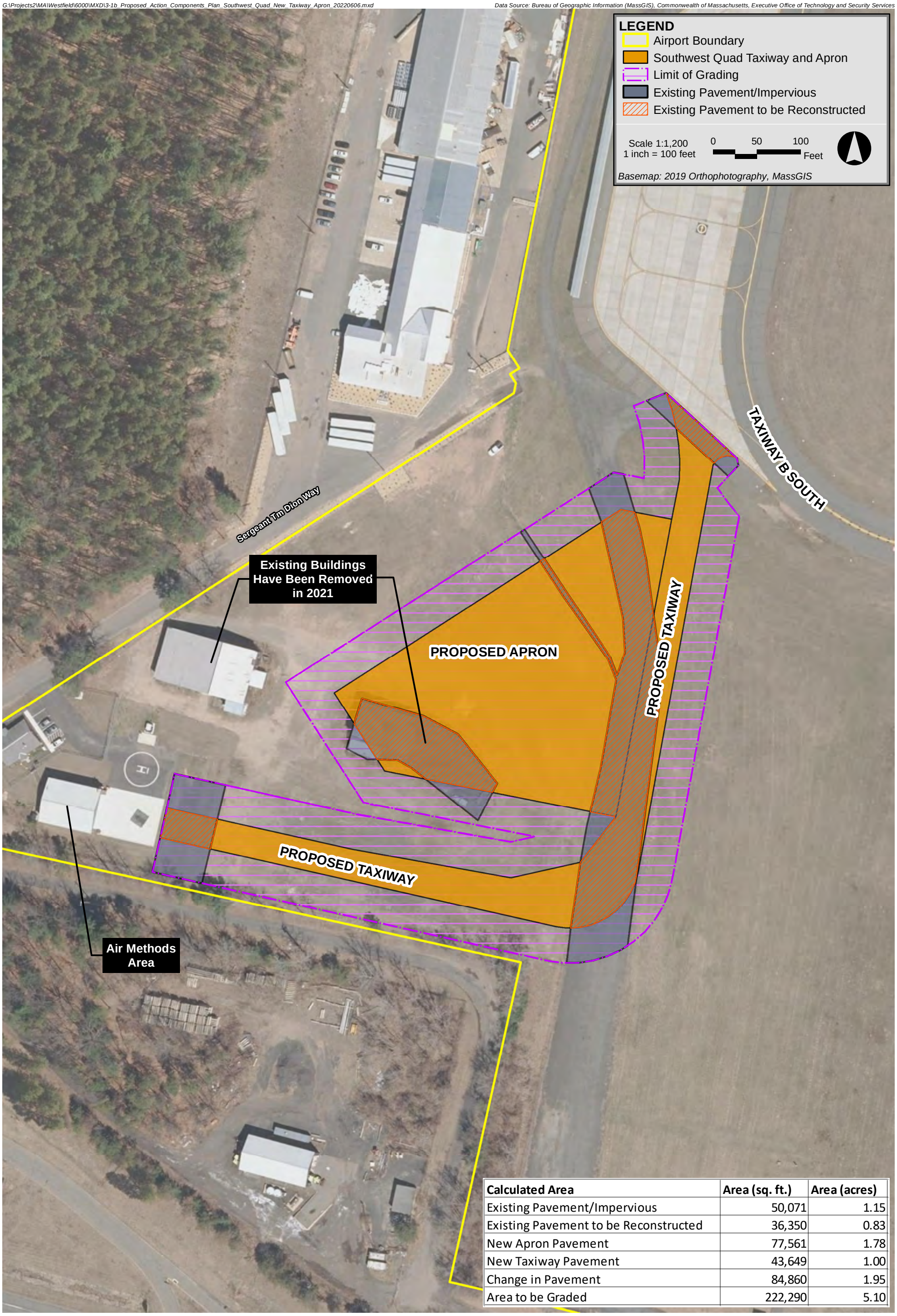
Epsilon Associates Inc.

Figure 5a

Proposed Action Components Plan - Taxiway B South Widening and Relocation

G:\Projects2\MA\Westfield\6000\MXD\3-1b_Proposed_Action_Components_Plan_Southwest_Quad_New_Taxiway_Apron_20220606.mxd

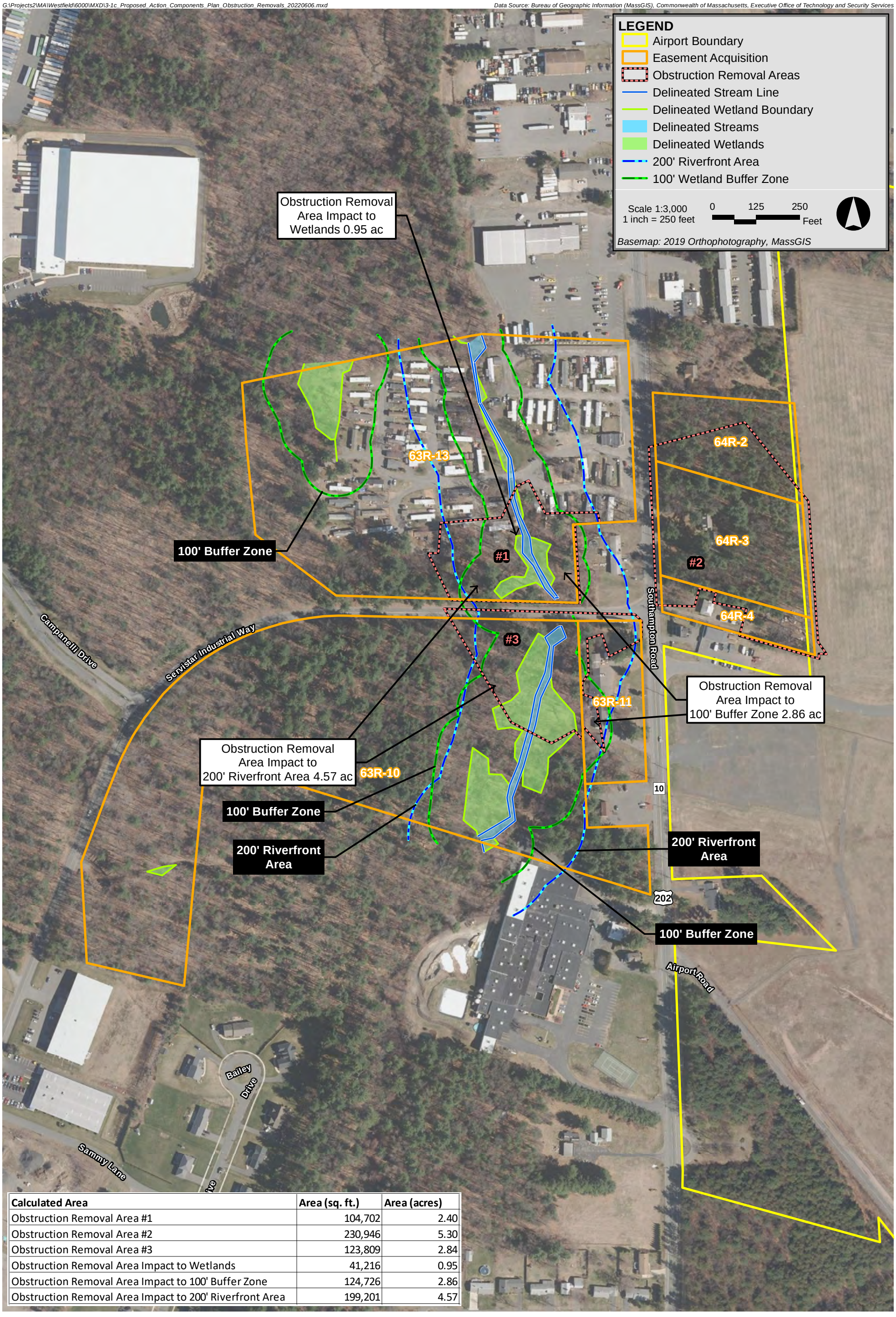
Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Calculated Area	Area (sq. ft.)	Area (acres)
Existing Pavement/Impervious	50,071	1.15
Existing Pavement to be Reconstructed	36,350	0.83
New Apron Pavement	77,561	1.78
New Taxiway Pavement	43,649	1.00
Change in Pavement	84,860	1.95
Area to be Graded	222,290	5.10

G:\Projects2\MA\Westfield\6000\MXD\3-1c_Proposed_Action_Components_Plan_Obstruction_Removals_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Calculated Area	Area (sq. ft.)	Area (acres)
Obstruction Removal Area #1	104,702	2.40
Obstruction Removal Area #2	230,946	5.30
Obstruction Removal Area #3	123,809	2.84
Obstruction Removal Area Impact to Wetlands	41,216	0.95
Obstruction Removal Area Impact to 100' Buffer Zone	124,726	2.86
Obstruction Removal Area Impact to 200' Riverfront Area	199,201	4.57

G:\Projects2\MA\Westfield\6000\MXD\2-1_Airport_Hot_Spots_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services

Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

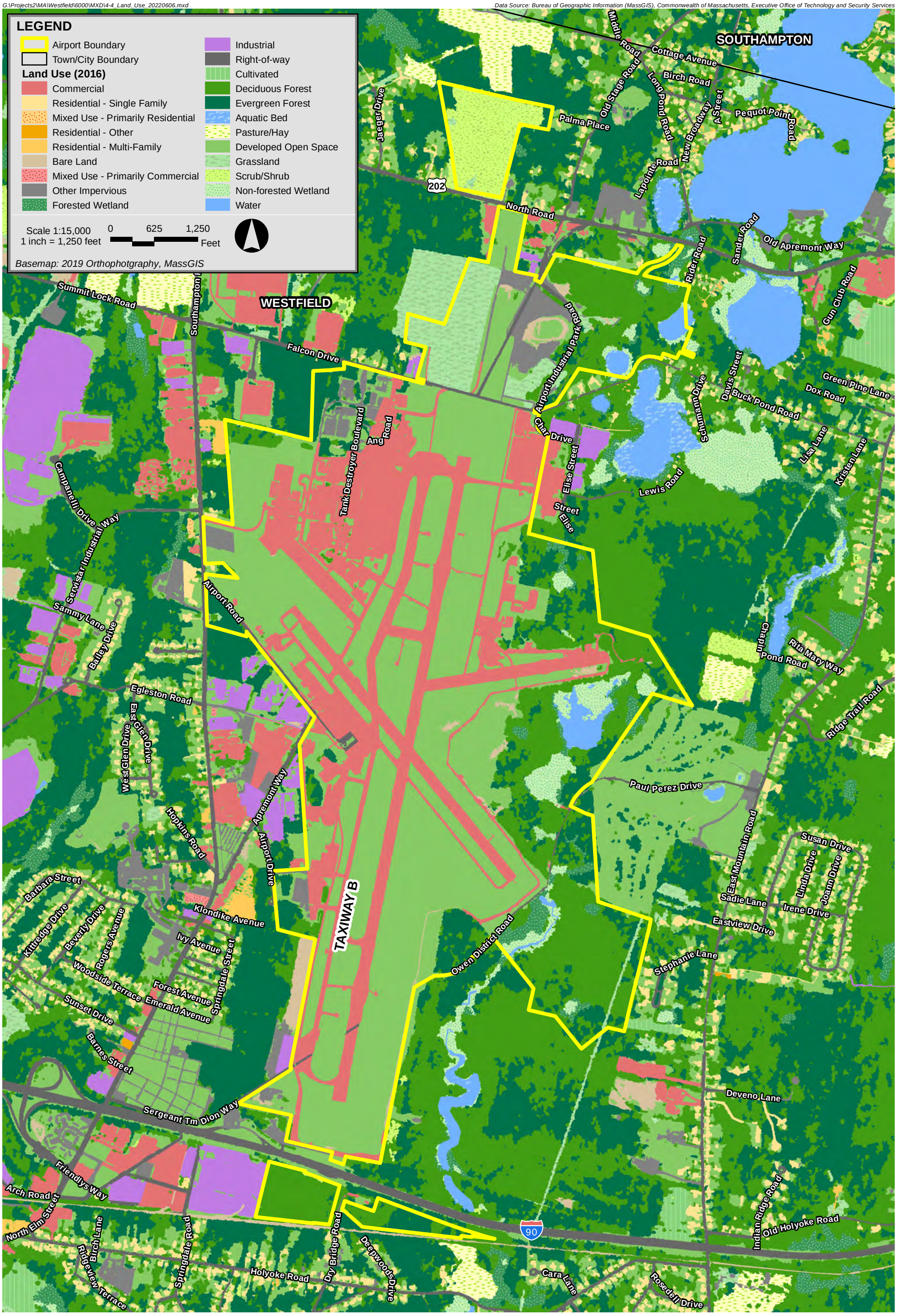
Epsilon Associates Inc.

Figure 6

Airport Hot Spots

G:\Projects2\MA\Westfield\6000\MXD\4-4_Land_Use_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



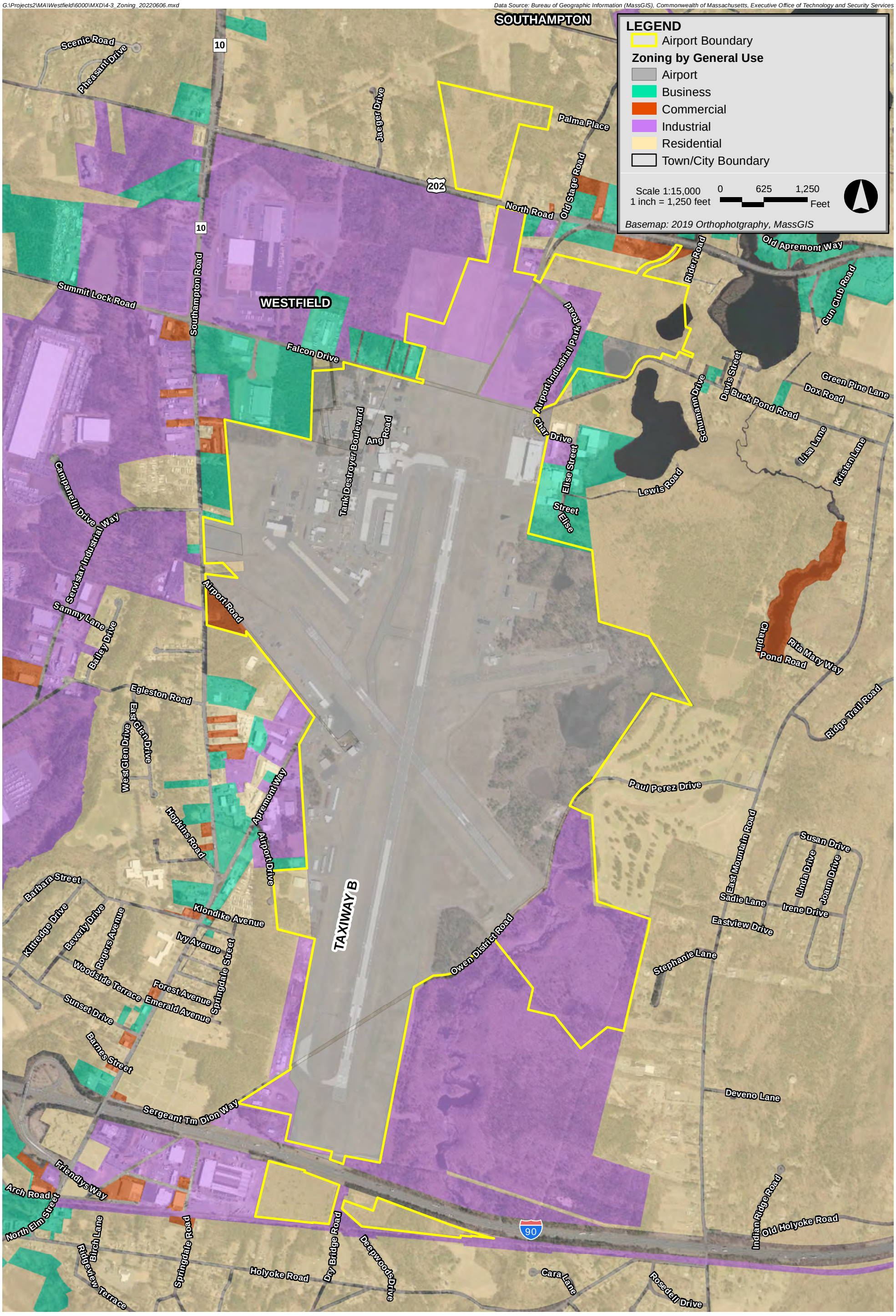
Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

Epsilon Associates Inc.

Figure 7
Land Use

G:\Projects2\MA\Westfield\6000\MXD\4-3_Zoning_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



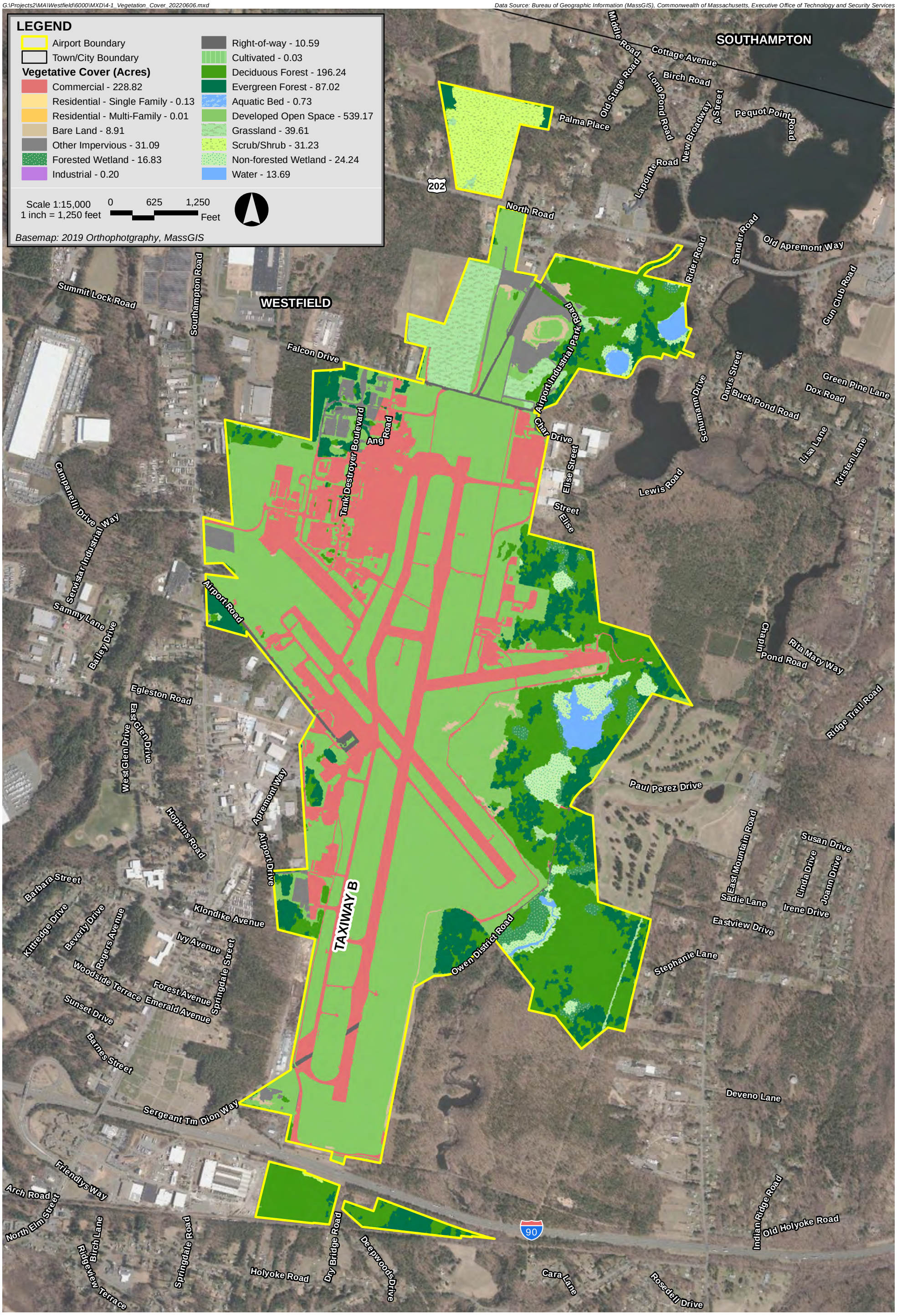
Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

Epsilon Associates Inc.

Figure 8
Zoning

G:\Projects2\MA\Westfield\6000\MXD\4-1_Vegetation_Cover_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

Epsilon Associates Inc.

Figure 9

Vegetative Cover

G:\Projects2\MA\Westfield\6000\MXD\4-2_Proposed_Action_Soil_Map_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services

LEGEND

- Airport Boundary
- SSURGO Soils (Map Unit Symbol)
- Town/City Boundary

Scale 1:15,000
1 inch = 1,250 feet

0 625 1,250 Feet

Basemap: 2019 Orthophotography, MassGIS

Map Unit Symbol	Map Unit Name	Acres in Project Area	% of Project Area
1	Water	8.32	0.67
253A	Hinckley loamy sand, 0 to 3 percent slopes	276.31	22.23
253B	Hinckley loamy sand, 3 to 8 percent slopes	54.88	4.41
253C	Hinckley loamy sand, 8 to 15 percent slopes	8.76	0.70
253D	Hinckley loamy sand, 15 to 25 percent slopes	25.99	2.09
253E	Hinckley loamy sand, 25 to 35 percent slopes	78.32	6.30
255A	Windsor loamy sand, 0 to 3 percent slopes	76.06	6.12
255B	Windsor loamy sand, 3 to 8 percent slopes	157.37	12.66
255C	Windsor loamy sand, 8 to 15 percent slopes	15.90	1.28
255D	Windsor loamy sand, 15 to 25 percent slopes	6.23	0.50
258B	Amostown fine sandy loam, 0 to 6 percent slopes	0.00	0.00
32A	Wareham loamy sand, 0 to 3 percent slopes	3.45	0.28
398B	Wethersfield fine sandy loam, 3 to 8 percent slopes, very stony	9.69	0.78
51A	Swansea muck, 0 to 1 percent slopes	8.67	0.70
54A	Freetown and Swansea soils, 0 to 1 percent slopes	24.12	1.94
600	Pits, gravel	27.75	2.23
602	Urban land	415.91	33.45
733C	Holyoke-Rock outcrop complex, 3 to 15 percent slopes	5.14	0.41
739C	Urban land-Hinckley-Windsor association, 0 to 15 percent slopes	40.39	3.25

Runway 15 Easement Acquisition and Taxiway Modifications Westfield, Massachusetts

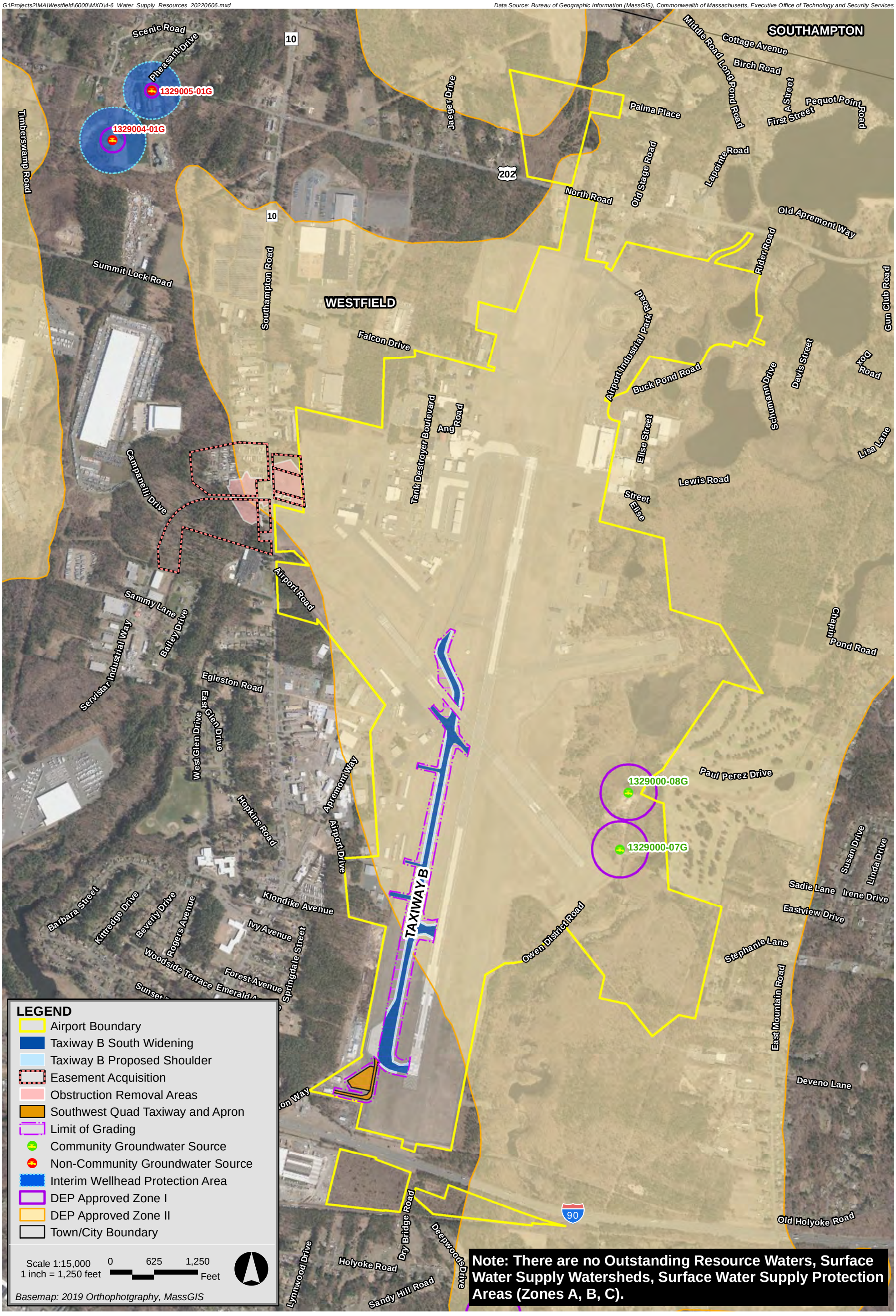
Epsilon Associates Inc.

Figure 10

Proposed Action Site Soil Map

G:\Projects2\MA\Westfield\6000\MXD\4-6_Water_Supply_Resources_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

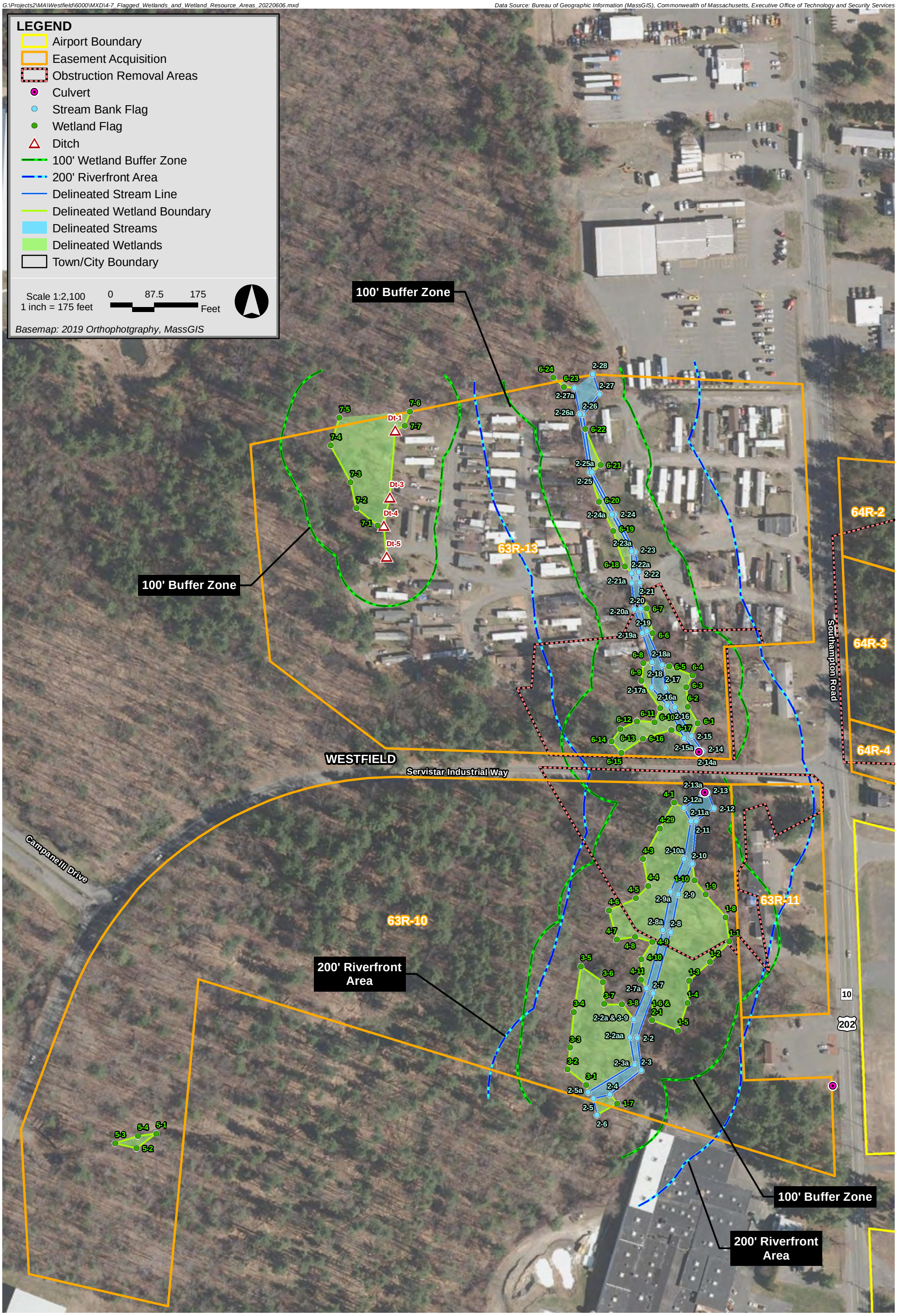
Epsilon Associates Inc.

Figure 11

Water Supply Resources

G:\Projects2\MA\Westfield\6000\MXD\4-7_Flagged_Wetlands_and_Wetland_Resource_Areas_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications Westfield, Massachusetts

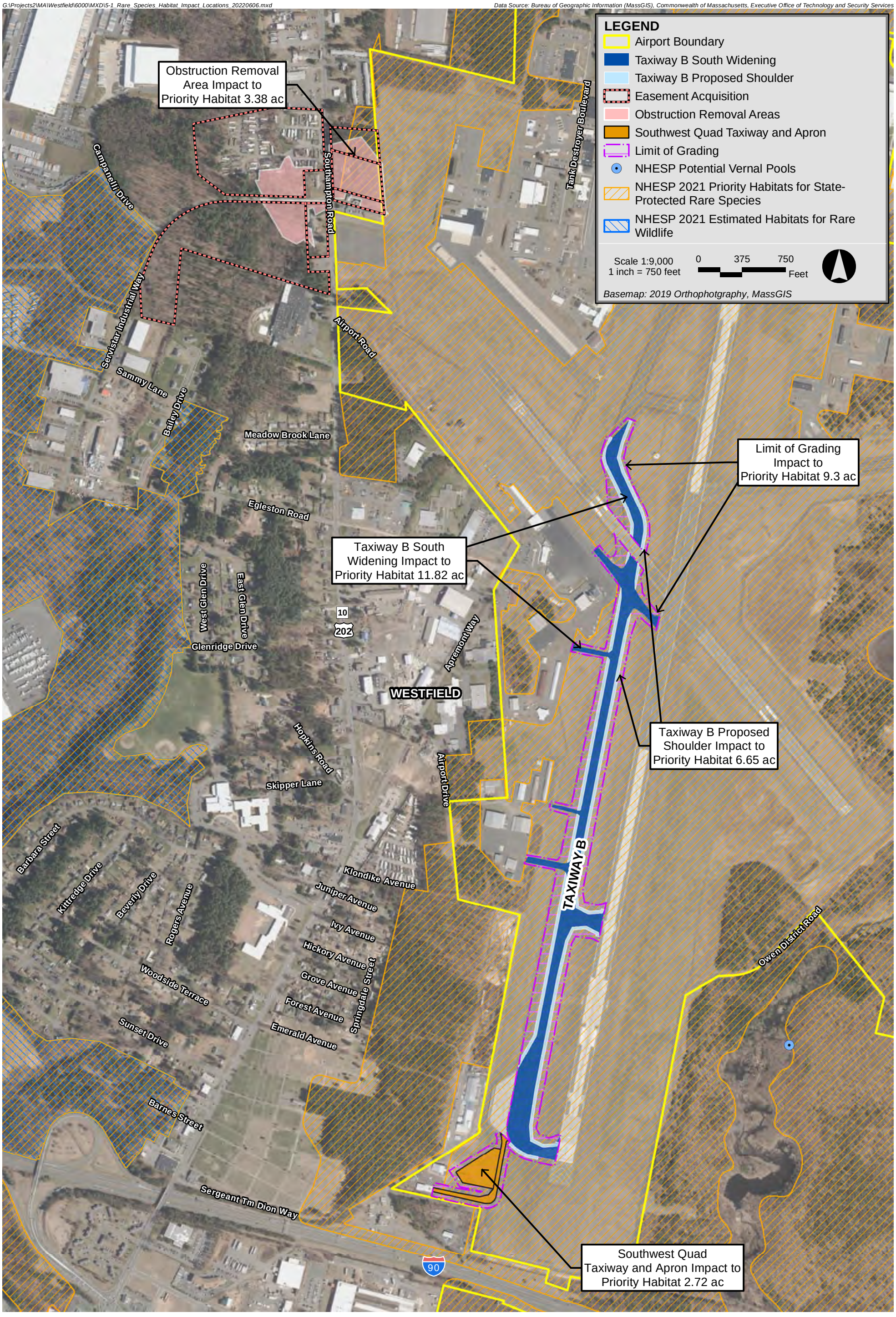
Epsilon Associates Inc.

Figure 12

Flagged Wetlands and Wetland Resource Areas

G:\Projects2\MA\Westfield\6000\MXD\5-1_Rare_Species_Habitat_Impact_Locations_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

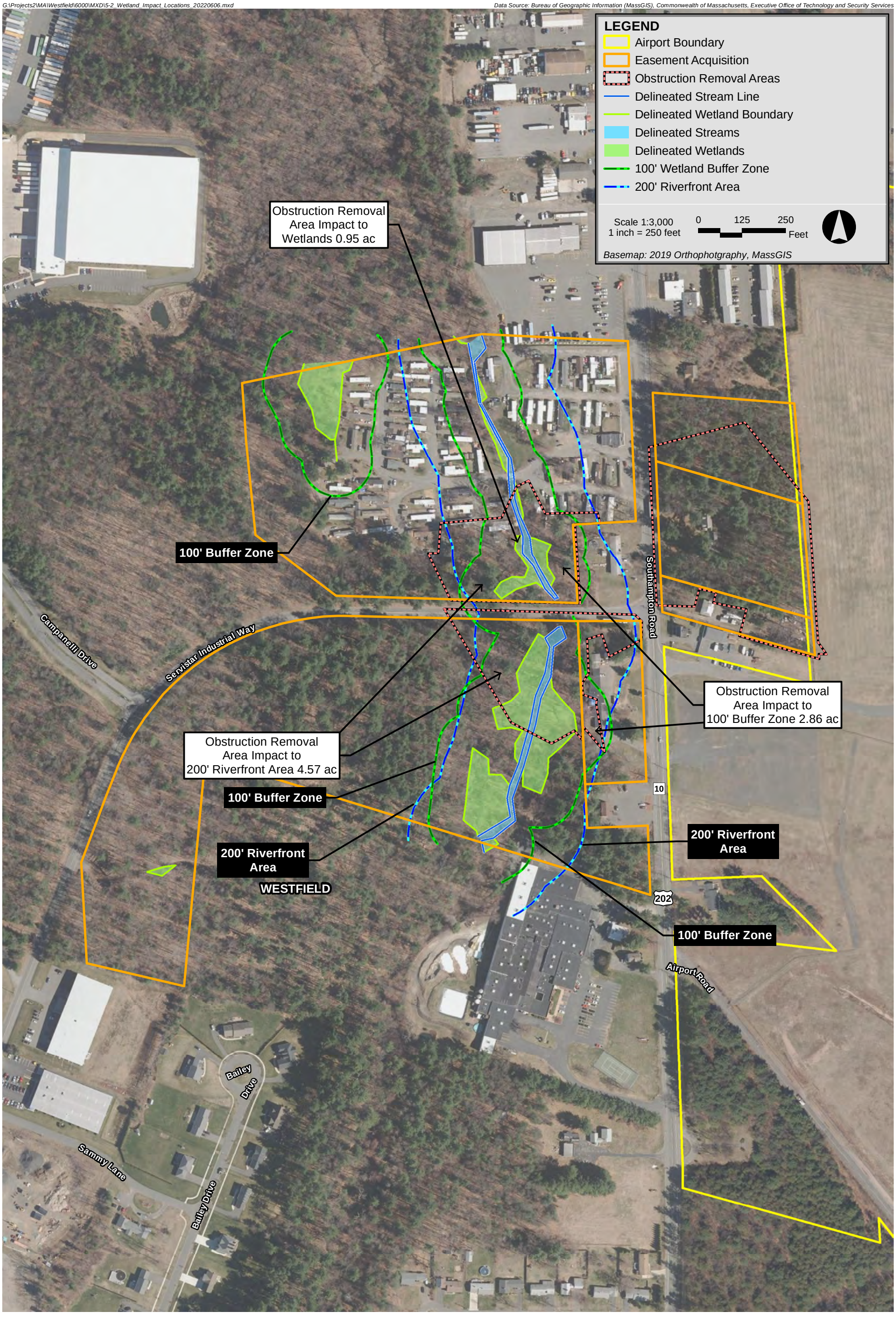
Epsilon Associates Inc.

Figure 13

Rare Species Habitat Impact Locations

G:\Projects2\MA\Westfield\6000\MXD\5-2_Wetland_Impact_Locations_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

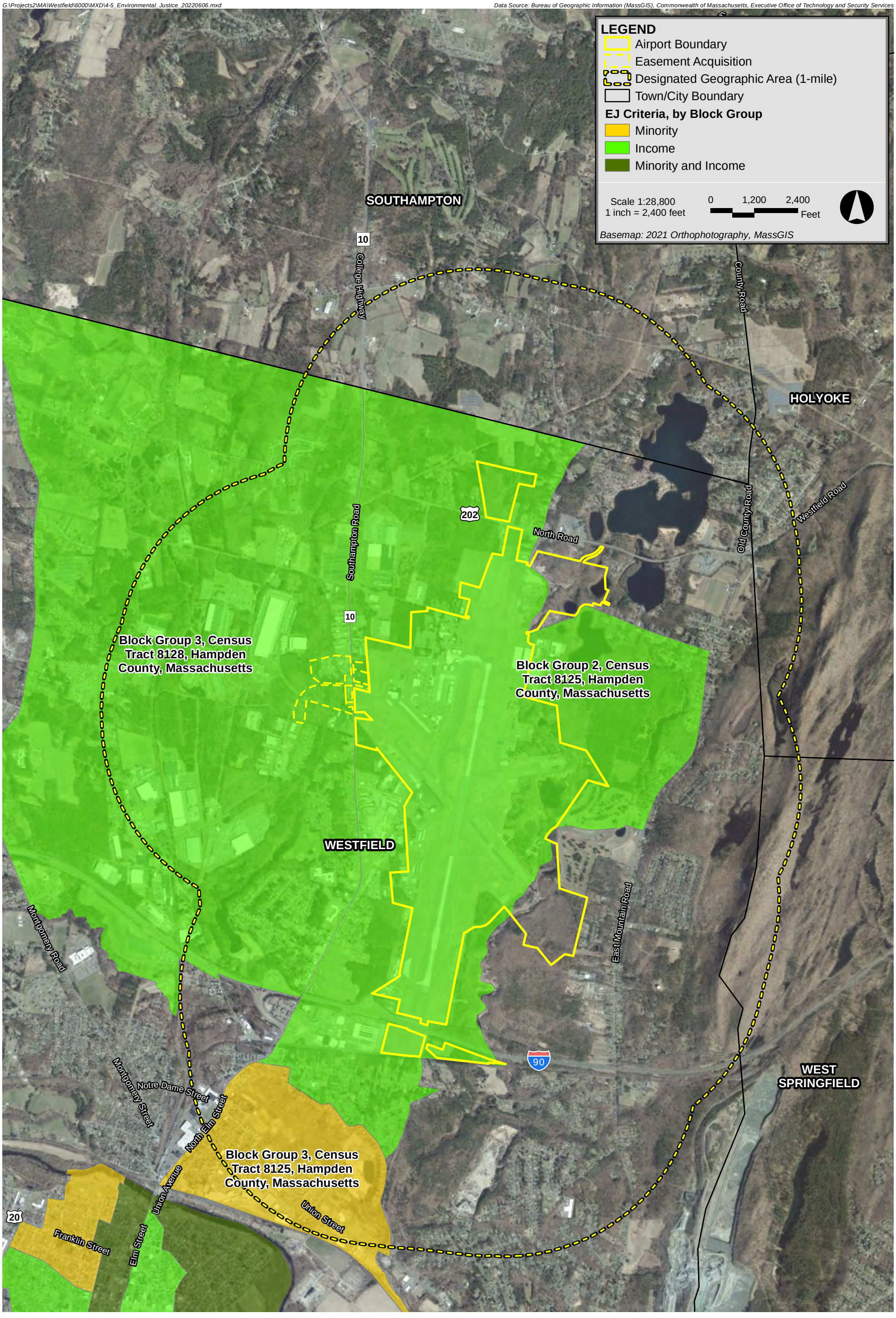
Epsilon Associates Inc.

Figure 14

Wetland Impact Locations

G:\Projects2\MA\Westfield\6000\MXD\4-5_Environmental_Justice_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services



Runway 15 Easement Acquisition and Taxiway Modifications **Westfield, Massachusetts**

Epsilon Associates Inc.

Figure 15

Environmental Justice Populations

G:\Projects2\MA\Westfield\6000\MXD\4-X_Environmental_Justice_Existing_Burden_20220606.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services

Facility Type

- Air Operating Permit
- AUL Sites
- Power Plants
- Toxics Release Inventory Sites
- Underground Storage Tanks

Large Quantity Generators

- EPA/RCRA-regulated Hazard. Waste
- MA-regulated Hazard. Waste
- MA and EPA/RCRA-regulated Hazard. Waste

LEGEND

- Airport Boundary
- Easement Acquisition
- Designated Geographic Area (1-mile)
- Town/City Boundary

EJ Criteria, by Block Group

- Minority
- Income
- Minority and Income

Scale 1:28,800
1 inch = 2,400 feet

0 1,200 2,400 Feet

Basemap: 2021 Orthophotography, MassGIS

SOUTHAMPTON
HOLYOKE
WESTFIELD
WEST SPRINGFIELD
College Highway
County Road
Southampton Road
Old County Road
Westfield Road
North Road
East Mountain Road
Montgomery Road
Notre Dame Street
Montgomery Street
North Elm Street
Union Street
Franklin Street
Elm Street
10
202
90
20

Block Group 3, Census Tract 8128, Hampden County, Massachusetts

Block Group 2, Census Tract 8125, Hampden County, Massachusetts

Block Group 3, Census Tract 8125, Hampden County, Massachusetts

Runway 15 Easement Acquisition and Taxiway Modifications Westfield, Massachusetts

Epsilon Associates Inc.

Figure 16

Environmental Justice Populations - Existing Burden

Attachment C

Circulation List

ATTACHMENT C CIRCULATION LIST

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Westfield Council on Aging

Attachment D

Anticipated Permits, Reviews, and Approvals

Attachment D – Anticipated Permits, Reviews, and Approvals Required

REGULATORY AGENCY	PROGRAM / PERMIT	STATUS
FEDERAL		
U.S. Environmental Protection Agency (USEPA)	National Pollutant Discharge Elimination System ("NPDES") General Permit for Discharges from Construction Activities ("Construction General Permit" or CGP)	Notice of Intent (NOI) to be filed one to two months prior to start of construction.
Federal Aviation Administration (FAA)	National Environmental Policy Act – Environmental Assessment	FONSI Issued May 2022
U.S. Army Corps of Engineers	Section 404 General Permit – Pre-Construction Notification (PCN)	PCN to be filed in Jan 20223
U.S. Army Corps of Engineers	Section 106 of the National Historic Preservation Act	Concurrent with PCN Review
STATE		
Executive Office of Energy and Environmental Affairs (EEA) Massachusetts Environmental Policy Act (MEPA) Office	MEPA Expanded Environmental Notification Form	EENF filed on or before June 15, 2022
Massachusetts Historical Commission (MHC)	Environmental Assessment Submitted to MHC in November 2021, EENF filed June 2022	No Comment Letter was received on EA
Natural Heritage and Endangered Species Program	MESA Review under the Massachusetts Endangered Species Act	Review under current Rare Species Master Plan
LOCAL		
Westfield Conservation Commission	Order of Conditions	Anticipated to be filed January 2023.

Attachment E

RMAT Tool Output

RMAT Climate Resilience Design Standards Tool Project Report

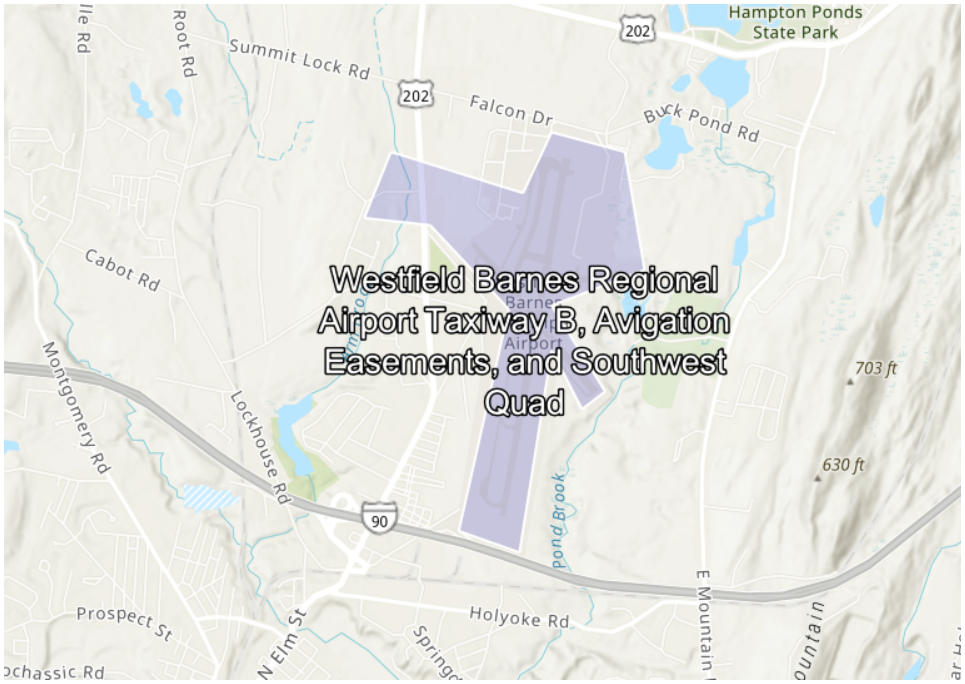
Westfield Barnes Regional Airport Taxiway B, Avigation Easements, and Southwest Quad
Date Created: 6/26/2022 3:28:44 PM Created By: nrawding@epsilonassociates.com Download

Project Summary

Link to Project

Estimated Construction Cost: $18000000.00
End of Life Year: 2053
Project within mapped Environmental Justice neighborhood: Yes

Ecosystem Benefits	Scores
Project Score	High
Exposure	**Scores**
Sea Level Rise/Storm Surge	Not Exposed
Extreme Precipitation - Urban Flooding	High Exposure
Extreme Precipitation - Riverine Flooding	High Exposure
Extreme Heat	High Exposure



Asset Summary

Number of Assets: 3

Asset Risk	Sea Level Rise/Storm Surge	Extreme Precipitation - Urban Flooding	Extreme Precipitation - Riverine Flooding	Extreme Heat
Taxiway B	Low Risk	High Risk	High Risk	High Risk
New Taxiway to Southwest Quad	Low Risk	High Risk	High Risk	High Risk
Avigation Easement Parcels	—— Natural Resource project assets do not receive a preliminary climate risk rating. ——			

Project Outputs

	Target Planning Horizon	Intermediate Planning Horizon	Percentile	Return Period	Tier
Sea Level Rise/Storm Surge					
Taxiway B					
New Taxiway to Southwest Quad					
Avigation Easement Parcels					
Extreme Precipitation					
Taxiway B	2050			50-yr (2%)	Tier 3
New Taxiway to Southwest Quad	2050			25-yr (4%)	Tier 2
Avigation Easement Parcels	2030				Tier 1
Extreme Heat					
Taxiway B	2050		90th		Tier 3
New Taxiway to Southwest Quad	2050		90th		Tier 2
Avigation Easement Parcels	2030		50th		Tier 1

Scoring Rationale - Exposure

Sea Level Rise/Storm Surge

This project received a "Not Exposed" because of the following:

- Not located within the predicted mean high water shoreline by 2030
- No historic coastal flooding at project site
- Not located within the Massachusetts Coast Flood Risk Model (MC-FRM)

Extreme Precipitation - Urban Flooding

This project received a "High Exposure" because of the following:

- Increased impervious area
- Maximum annual daily rainfall exceeds 10 inches within the overall project's useful life
- No historic flooding at project site
- Existing impervious area of the project site is between 10% and 50%

Extreme Precipitation - Riverine Flooding

This project received a "High Exposure" because of the following:

- Part of the project is within a mapped FEMA floodplain, outside of the Massachusetts Coast Flood Risk Model (MC-FRM)
- Part of the project is within 100ft of a waterbody
- Project is potentially susceptible to riverine erosion
- No historic riverine flooding at project site

Extreme Heat

This project received a "High Exposure" because of the following:

- Increased impervious area
- Existing trees are being removed as part of the proposed project
- Less than 10% of the existing project site has canopy cover
- 10 to 30 day increase in days over 90 deg. F within project's useful life
- Located within 100 ft of existing water body

Scoring Rationale - Asset Risk Scoring

Asset - Taxiway B
Primary asset criticality factors influencing risk ratings for this asset:

- Asset may inaccessible/inoperable for more than a day but less than a week after natural hazard event
- Greater than 100,000 people would be directly affected by the loss/inoperability of the asset
- Inoperability of the asset would be expected to result in possible loss of life
- Cost to replace is between $10 million and $30 million
- There are no hazardous materials in the asset

Asset - New Taxiway to Southwest Quad
Primary asset criticality factors influencing risk ratings for this asset:

- Asset may inaccessible/inoperable for more than a day but less than a week after natural hazard event
- Greater than 100,000 people would be directly affected by the loss/inoperability of the asset
- Inoperability of the asset would be expected to result in minor impacts to people's health, including minor injuries or minor impacts to chronic illnesses
- Inoperability may moderately impact other facilities, assets, or buildings, but is not expected to affect their ability to operate
- There are no hazardous materials in the asset

Asset - Avigation Easement Parcels
Primary asset criticality factors influencing risk ratings for this asset:

No score available

Project Design Standards Output

Asset: Taxiway B — Infrastructure

Sea Level Rise/Storm Surge — Low Risk

Applicable Design Criteria

Projected Tidal Datums: No
Projected Water Surface Elevation: No

Projected Wave Action Water Elevation: No
Projected Wave Heights: No
Projected Duration of Flooding: No
Projected Design Flood Velocity: No
Projected Scour & Erosion: No

Extreme Precipitation High Risk

Target Planning Horizon: 2050
Return Period: 50-yr (2%)

Applicable Design Criteria

Tiered Methodology: Tier 3

Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms: Yes

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Taxiway B	2050	50-Year (2%)	9.5	Downloadable Methodology PDF

Limitations: While precipitation depth is useful for project planning and design, rainfall distribution and peak intensity of the design storm is recommended to also be considered. Lower-intensity, longer-duration storms allow time for infiltration and reduce the load on the infrastructure system over the duration of the storm. Higher-intensity, shorter-duration storms often have higher runoff volumes because the water does not have enough time to infiltrate and infrastructure systems (e.g., catch basins) and may overflow or back up during such storms. In the Northeast, short -duration high intensity rain events are becoming more frequent, and there is often little early warning for these events, making it difficult to plan operationally. These events can result in the rapid inundation of the asset project location. Design should consider both short- and long-duration precipitation events and how they may impact the asset.

The precipitation values provided by this Tool (version 1) are recommended to inform planning and design, but they do not guarantee that the asset will be protected from or be able to withstand an extreme precipitation event. The planning, design, and review guidance accompanying these values is general and projects are encouraged to do their own due diligence to understand the vulnerability of their asset.

Projected Riverine Peak Discharge & Peak Flood Elevation: Yes

Extreme Heat High Risk

Target Planning Horizon: 2050
Percentile: 90th Percentile

Applicable Design Criteria

Tiered Methodology: Tier 3

Projected Annual/Summer/Winter Average Temperatures: Yes
Projected Heat Index: Yes
Projected Growing Degree Days: No
Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F: Yes
Projected Number of Heat Waves Per Year & Average Heat Wave Duration: Yes
Projected Cooling Degree Days & Heating Degree Days (base = 65°F): No

Asset: New Taxiway to Southwest Quad Infrastructure

Sea Level Rise/Storm Surge Low Risk

Applicable Design Criteria

Projected Tidal Datums: No
Projected Water Surface Elevation: No
Projected Wave Action Water Elevation: No
Projected Wave Heights: No
Projected Duration of Flooding: No
Projected Design Flood Velocity: No
Projected Scour & Erosion: No

Extreme Precipitation High Risk

Target Planning Horizon: 2050
Return Period: 25-yr (4%)

Applicable Design Criteria

Tiered Methodology: Tier 2

Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms: Yes

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
New Taxiway to Southwest Quad	2050	25-Year (4%)	8.3	Downloadable Methodology PDF

Limitations: While precipitation depth is useful for project planning and design, rainfall distribution and peak intensity of the design storm is recommended to also be considered. Lower-intensity, longer-duration storms allow time for infiltration and reduce the load on the infrastructure system over the duration of the storm. Higher-intensity, shorter-duration storms often have higher runoff volumes because the water does not have enough time to infiltrate and infrastructure systems (e.g., catch basins) and may overflow or back up during such storms. In the Northeast, short -duration high intensity rain events are becoming more frequent, and there is often little early warning for these events, making it difficult to plan operationally. These events can result in the rapid inundation of the asset project location. Design should consider both short- and long-duration precipitation events and how they may impact the asset.

The precipitation values provided by this Tool (version 1) are recommended to inform planning and design, but they do not guarantee that the asset will be protected from or be able to withstand an extreme precipitation event. The planning, design, and review guidance accompanying these values is general and projects are encouraged to do their own due diligence to understand the vulnerability of their asset.

Projected Riverine Peak Discharge & Peak Flood Elevation: Yes

Extreme Heat High Risk

Target Planning Horizon: 2050
Percentile: 90th Percentile

Applicable Design Criteria

Tiered Methodology: Tier 2

Projected Annual/Summer/Winter Average Temperatures: Yes
Projected Heat Index: Yes
Projected Growing Degree Days: No
Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F: Yes
Projected Number of Heat Waves Per Year & Average Heat Wave Duration: Yes
Projected Cooling Degree Days & Heating Degree Days (base = 65°F): No

Asset: Avigation Easement Parcels Natural Resources

Sea Level Rise/Storm Surge

Applicable Design Criteria

Projected Tidal Datums: No
Projected Water Surface Elevation: No
Projected Wave Action Water Elevation: No
Projected Wave Heights: No
Projected Duration of Flooding: No
Projected Design Flood Velocity: No
Projected Scour & Erosion: No

Extreme Precipitation

Target Planning Horizon: 2030

Applicable Design Criteria

Tiered Methodology: Tier 1

Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms: Yes

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Avigation Easement Parcels	2030	25-Year (4%)	7.5	Downloadable Methodology PDF

Limitations: While precipitation depth is useful for project planning and design, rainfall distribution and peak intensity of the design storm is recommended to also be considered. Lower-intensity, longer-duration storms allow time for infiltration and reduce the load on the infrastructure system over the duration of the storm. Higher-intensity, shorter-duration storms often have higher runoff volumes because the water does not have enough time to infiltrate and infrastructure systems (e.g., catch basins) and may overflow or back up during such storms. In the Northeast, short -duration high intensity rain events are becoming more frequent, and there is often little early warning for these events, making it difficult to plan operationally. These events can result in the rapid inundation of the asset project location. Design should consider both short- and long-duration precipitation events and how they may impact the asset.

The precipitation values provided by this Tool (version 1) are recommended to inform planning and design, but they do not guarantee that the asset will be protected from or be able to withstand an extreme precipitation event. The planning, design, and review guidance accompanying these values is general and projects are encouraged to do their own due diligence to understand the vulnerability of their asset.

Projected Riverine Peak Discharge & Peak Flood Elevation: Yes

Extreme Heat

Target Planning Horizon: 2030
Percentile: 50th Percentile

Applicable Design Criteria

Tiered Methodology: Tier 1

Projected Annual/Summer/Winter Average Temperatures: Yes
Projected Heat Index: No
Projected Growing Degree Days: Yes
Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F: No
Projected Number of Heat Waves Per Year & Average Heat Wave Duration: No
Projected Cooling Degree Days & Heating Degree Days (base = 65°F): No

Project Inputs

Core Project Information

Name:	Westfield Barnes Regional Airport Taxiway B, Avigation Easements, and Southwest Quad
Given the expected useful life of the project, through what year do you estimate the project to last (i.e. before a major reconstruction/renovation)?	2053
Location of Project:	Westfield
Estimated Capital Cost:	$18,000,000
Who is the Submitting Entity?	City/Town Westfield Christopher Willenborg (willenborg@barnesairport.com)
Is this project identified as a priority project in the Municipal Vulnerability Preparedness (MVP) plan or the local or regional Hazard Mitigation Plan (HMP)?	No
Is this project being submitted as part of a state grant application?	Yes
What stage are you in your project lifecycle?	Planning
Is climate resiliency a core objective of this project?	No
Is this project being submitted as part of the state capital planning process?	No
Is this project being submitted as part of a regulatory review process or permitting?	Yes
Brief Project Description:	The Westfield-Barnes Regional Airport Commission (the Airport or the Proponent) proposes to widen and realign the southern segment of Taxiway B, realign a northern segment of Taxiway B, acquire six off-airport avigation easements for obstruction removal off Runway 15 end, and construct a new taxiway and apron to the existing Southwest Quadrant (SW Quad) area of the airport, to improve operational efficiency and enhance safety at the Westfield-Barnes Regional Airport.
Project Submission Comments:	Please see Attachment A in the EENF.

Project Ecosystem Benefits

Factors Influencing Output

- ✓ Project provides flood protection through nature-based solutions
- ✓ Project reduces storm damage
- ✓ Project protects public water supply
- ✓ Project recharges groundwater
- ✓ Project filters stormwater using green infrastructure
- ✓ Project improves water quality
- ✓ Project enables carbon sequestration
- ✓ Project protects fisheries, wildlife, and plant habitat
- ✓ Project provides pollinator habitat
- ✓ Project remediates existing sources of pollution
- ✓ Project provides recreation
- ✓ Project provides oxygen production

Factors to Improve Output

- ✓ Incorporate strategies that reduce carbon emissions
- ✓ Preserve, enhance, and/or restore coastal shellfish habitats
- ✓ Mitigate atmospheric greenhouse gas concentrations and other toxic air pollutants through nature-based solutions
- ✓ Incorporate education and/or protect cultural resources as part of your project

Is the primary purpose of this project ecological restoration?

No

Project Benefits

Provides flood protection through nature-based solutions	Yes

Reduces storm damage	Yes
Recharges groundwater	Yes
Protects public water supply	Yes
Filters stormwater using green infrastructure	Yes
Improves water quality	Yes
Promotes decarbonization	No
Enables carbon sequestration	Yes
Provides oxygen production	Yes
Improves air quality	No
Prevents pollution	Yes
Remediates existing sources of pollution	Yes
Protects fisheries, wildlife, and plant habitat	Yes
Protects land containing shellfish	No
Provides pollinator habitat	Yes
Provides recreation	Yes
Provides cultural resources/education	No

Project Climate Exposure

Is the primary purpose of this project ecological restoration?	No
Does the project site have a history of coastal flooding?	No
Does the project site have a history of flooding during extreme precipitation events (unrelated to water/sewer damages)?	No
Does the project site have a history of riverine flooding?	No
Does the project result in a net increase in impervious area of the site?	Yes
Are existing trees being removed as part of the proposed project?	Yes

Project Assets

Asset: Taxiway B
Asset Type: Transportation
Asset Sub-Type: Other Transportation
Construction Type: Major Repair/Retrofit
Construction Year: 2023
Useful Life: 30

Identify the length of time the asset can be inaccessible/inoperable without significant consequences.
Infrastructure may be inaccessible/inoperable for more than a day, but less than a week after natural hazard without consequences.

Identify the geographic area directly affected by permanent loss or significant inoperability of the infrastructure.
Impacts would be regional (more than one municipality and/or surrounding region)

Identify the population directly served that would be affected by the permanent loss or significant inoperability of the infrastructure.
Greater than 100,000 people

Identify if the infrastructure provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.
The infrastructure does not provide services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.

Will the infrastructure reduce the risk of flooding?
No

If the infrastructure became inoperable for longer than acceptable in Question 1, how, if at all, would it be expected to impact people's health and safety?
Inoperability of the infrastructure would be expected to result in possible loss of life

If there are hazardous materials in your infrastructure, what are the extents of impacts related to spills/releases of these materials?
There are no hazardous materials in the infrastructure

If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts on other facilities, assets, and/or infrastructure?
Moderate – Inoperability may impact other facilities, assets, or buildings, but cascading impacts do not affect the ability of other facilities, assets, or buildings to operate

If the infrastructure was damaged beyond repair, how much would it approximately cost to replace?
Between $10 million and $30 million

Does the infrastructure function as an evacuation route during emergencies? This question only applies to roadway projects.
No

If the infrastructure became inoperable for longer than acceptable in Question 1, what are the environmental impacts related to natural resources?
No impact on surrounding natural resources is expected

If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts to government services (i.e. the infrastructure is not able to serve or operate its intended users or function)?
Loss of infrastructure may reduce the ability to maintain some government services, while a majority of services will still exist

What are the impacts to loss of confidence in government resulting from loss of infrastructure functionality (i.e. the infrastructure asset is not able to serve or operate its intended users or function)?
Loss of confidence in government agency

Asset: New Taxiway to Southwest Quad
Asset Type: Transportation
Asset Sub-Type: Other Transportation
Construction Type: New Construction
Construction Year: 2023
Useful Life: 30

Identify the length of time the asset can be inaccessible/inoperable without significant consequences.
Infrastructure may be inaccessible/inoperable for more than a day, but less than a week after natural hazard without consequences.

Identify the geographic area directly affected by permanent loss or significant inoperability of the infrastructure.

Impacts would be limited to local area and/or municipality
Identify the population directly served that would be affected by the permanent loss or significant inoperability of the infrastructure.
Greater than 100,000 people
Identify if the infrastructure provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.
The infrastructure does not provide services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.
Will the infrastructure reduce the risk of flooding?
No
If the infrastructure became inoperable for longer than acceptable in Question 1, how, if at all, would it be expected to impact people's health and safety?
Inoperability of the infrastructure would be expected to result in minor impacts to people's health, including minor injuries or minor impacts to chronic illnesses
If there are hazardous materials in your infrastructure, what are the extents of impacts related to spills/releases of these materials?
There are no hazardous materials in the infrastructure
If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts on other facilities, assets, and/or infrastructure?
Moderate – Inoperability may impact other facilities, assets, or buildings, but cascading impacts do not affect the ability of other facilities, assets, or buildings to operate
If the infrastructure was damaged beyond repair, how much would it approximately cost to replace?
Less than $10 million
Does the infrastructure function as an evacuation route during emergencies? This question only applies to roadway projects.
No
If the infrastructure became inoperable for longer than acceptable in Question 1, what are the environmental impacts related to natural resources?
No impact on surrounding natural resources is expected
If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts to government services (i.e. the infrastructure is not able to serve or operate its intended users or function)?
Loss of infrastructure is not expected to reduce the ability to maintain government services
What are the impacts to loss of confidence in government resulting from loss of infrastructure functionality (i.e. the infrastructure asset is not able to serve or operate its intended users or function)?
Loss of confidence in government agency
Asset: Avigation Easement Parcels
Asset Type: Forested Ecosystems
Asset Sub-Type: Forested swamps
Construction Type: Maintenance (environmental)
Construction Year: 2023
Useful Life: 3

Report Comments

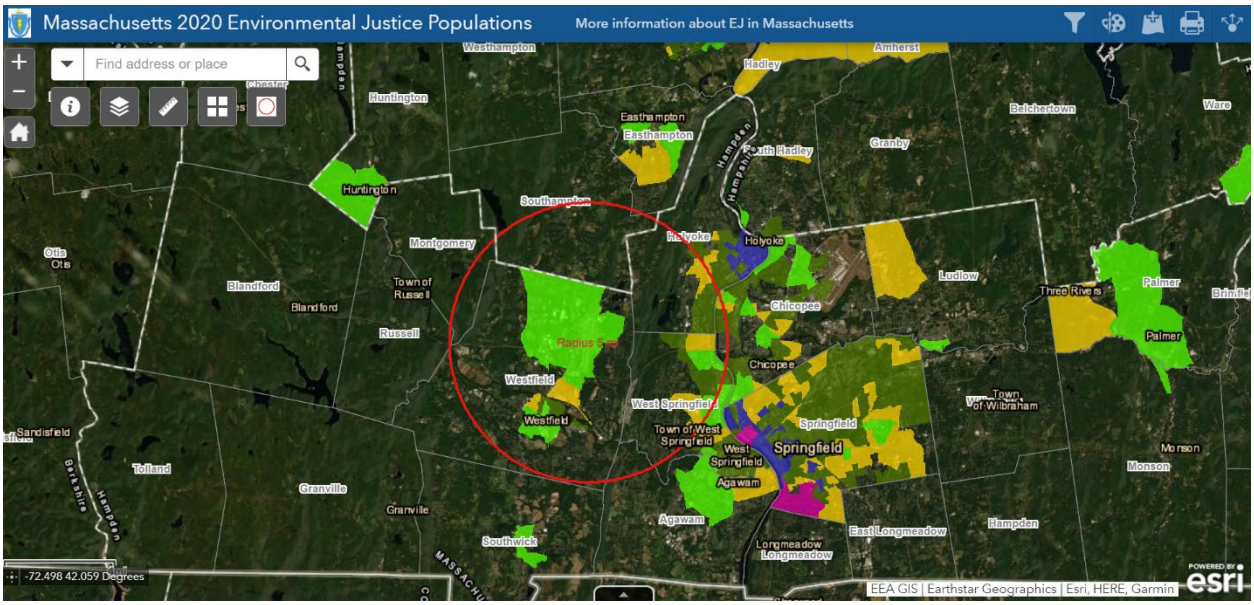
Please see Attachment A in the EENF.

Attachment F

Environmental Justice Documentation

Environmental Justice Characteristics within 5-miles of Project Site

Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles ofproject site (can attach map from [EJ Maps Viewer](#) in lieu of narrative)



1-Mile Radius from Project Site

Town/City	Block Group/Census Tract Number	EJ population with the criteria	EJ characteristics of the block group
Westfield	Block Group 3/8128	Income	Median household income: $55,250: this is 64.4 % of the MA median
Westfield	Block Group 2/Census Tract 8125	Income	Median household income: $54,375: this is 63.3 % of the MA median

5-Mile Radius from Project Site

Town/City	Block Group/Census Tract Number	EJ population with the criteria	EJ characteristics of the block group
Westfield	Block Group 3, Census Tract 8125	Minority	Total minority population: 46.5 %
Westfield	Block Group 2, Census Tract 8127.01	Minority	Total minority population: 29.5 %
Westfield	Block Group 3, Census Tract 8127.02,	Minority and income	Median household income: $33,594: this is 39.1 % of the MA

			median. Total minority population: 26.1 %
Westfield	Block Group 1, Census Tract 8127.02	Minority and income	Median household income: $53,690: this is 62.5 % of the MA median. Total minority population: 38.7 %
Westfield	Block Group 3, Census Tract 8127.01	Income	Median household income: $45,219:
Westfield	Block Group 1, Census Tract 8127.01	Income	Median household income: $42,596: this is 49.6 % of the MA median.
Westfield	Block Group 2, Census Tract 8126	Income	Median household income: $53,281: this is 62.1 % of the MA median.
Westfield	Block Group 2, Census Tract 8127.02	Income	Median household income: $37,470: this is 43.6 % of the MA median.
Holyoke	Block Group 3, Census Tract 8121.01	Minority	Total minority population: 34.7 %
Holyoke	Block Group 3, Census Tract 8121.04	Minority	Total minority population: 45.0 %
Holyoke	Block Group 2, Census Tract 8121.03	Minority and income	Median household income: $40,438: this is 47.1 % of the MA median. Total minority population: 67.6 %
Holyoke	Block Group 1, Census Tract 8121.03	Minority and income	Median household income: $49,615: this is 57.8 % of the MA median. Total minority population: 61.6 % Households with language isolation:2.4 %
Holyoke	Block Group 2, Census Tract 8121.03	Minority and Income	Median household income: $40,438: this is 47.1 % of the MA median. Total minority population: 67.6 %
Chicopee	Block Group 4, Census Tract 8111.02	Minority	Median household income: $58,726: this

			is 68.4 % of the MA median. Total minority population: 47.7 %
Chicopee	Block Group 1, Census Tract 8111.02	Minority and Income	Median household income: $33,313: this is 38.8 % of the MA median. Total minority population: 54.7 %
Chicopee	Block Group 2, Census Tract 8111.02	Minority and Income	Median household income: $36,424: this is 42.4 % of the MA median. Total minority population: 55.4 %
West Springfield	Block Group 1, Census Tract 8122.02	Minority and Income	Median household income: $49,177: this is 57.3 % of the MA median. Total minority population: 36.3 %
West Springfield	Block Group 2, Census Tract 8122.02	Minority	Median household income: $57,670: this is 67.2 % of the MA median. Total minority population: 32.6 %
West Springfield	Block Group 3, Census Tract 8122.02	Income	Median household income: $33,816: this is 39.4 % of the MA median. Total minority population: 7.5 % Households with language isolation:6.5 %
West Springfield	Block Group 3, Census Tract 8122.01	Income	Median household income: $27,500: this is 32.0 % of the MA median. Total minority population: 13.6 % Households with language isolation:2.7 %
West Springfield	Block Group 1, Census Tract 8124.04	Minority	Median household income: $66,815: this is 77.8 % of the MA median.

			Total minority population: 32.4 % Households with language isolation:7.5 %

Environmental Justice Areas Language Characteristics within 5-mile Radius

Languages other than English spoken by 5% or more of the population who do not speak English very well

Westfield

Tract 8129.01 Other Indic language: 11%

Tract 8127.01 Russian: 5.8%

Holyoke

Tract 8120.02 Spanish or Spanish Creole: 6.4%

Tract 8121.04 Spanish or Spanish Creole: 10.8%

Tract 8121.03 Spanish or Spanish Creole: 25.7%

Chicopee

Tract 8111.02 Spanish or Spanish Creole: 7.5%

West Springfield

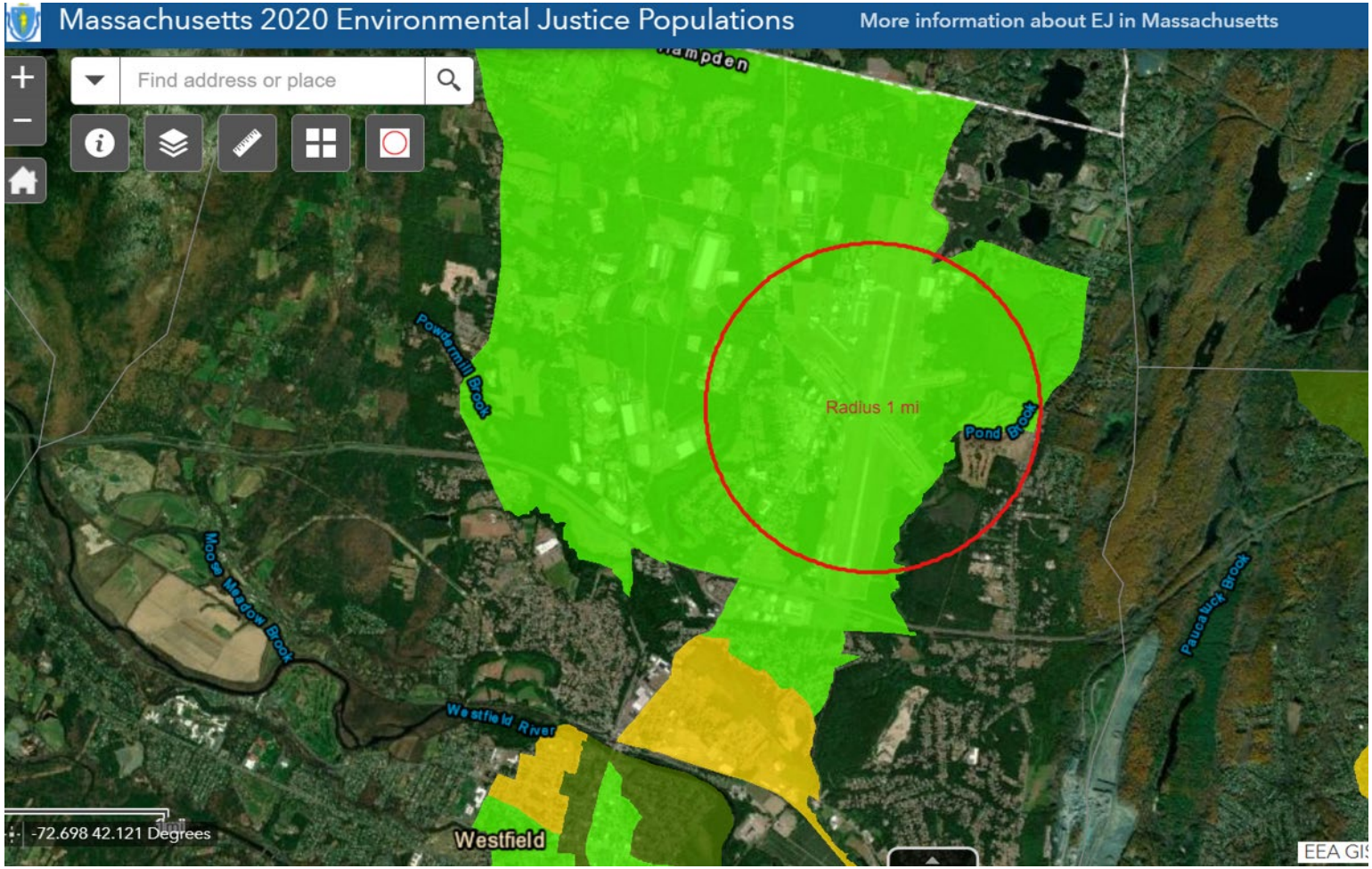
Tract 8122.02 Spanish or Spanish Creole: 5%

Figure 1

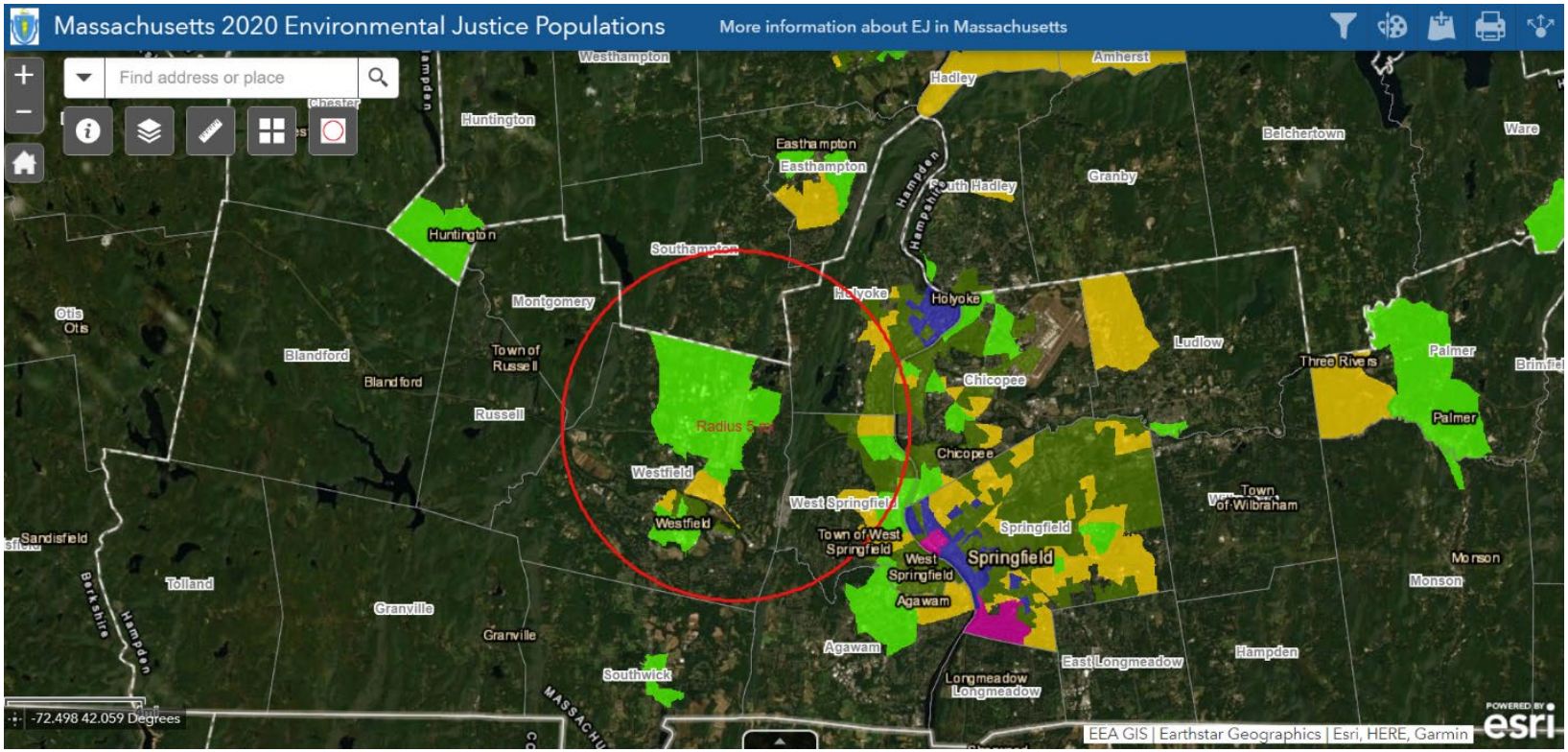
Environmental Justice Characteristics within 5-miles of Project Site

Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles ofproject site (can attach map from [EJ Maps Viewer](#) in lieu of narrative)

1-Mile Radius from Project Site



5-Mile Radius from Project Site



EJ 2020 with criteria explanation

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and income
- Minority and English isolation
- Income and English isolation
- Minority, income and English isolation

From:	Nathan Rawding
To:	ben@environmentmassachusetts.org; cluppi@cleanwater.org; deb.pasternak@sierraclub.org; elvis@n2nma.org; hclish@outdoors.org; hricci@massaudubon.org; juliablatt@massriversalliance.org; kelly.boling@tpl.org; kerry@msaadapartners.com; ngoodman@environmentalleague.org; pstanton@e4thefuture.org; rob@oceanriver.org; robb@massland.org; sarah@massclimateaction.net; srubin@clf.org; sylvia@communityactionworks.org; tsmookler@uumassaction.org; wvaughan@hcwh.org; tribalcouncil@chappaquiddick-wampanoag.org; thpo@wampanoagtribe-nsn.gov; crwritings@aol.com; john.peters@mass.gov; acw1213@verizon.net; melissa@herringpondtribe.org; rockerpatriciad@verizon.net; rhalsey@naicob.org; thpo@wampanoagtribe-nsn.gov; bonney.hartley@mohican-nsn.gov; Brian.Weeden@mwtribe-nsn.gov; shudson@publichealthwm.org; klm.wraft@gmail.com; MEPA-EJ (EEA)
Cc:	Alyssa Jacobs; Nathan Rawding
Subject:	MEPA Pre-Filing EJ Screening Form Notification - Westfield-Barnes Regional Airport Runway 15 Obstruction Removal, Taxiway B South, and Southwest Quadrant
Date:	Wednesday, March 16, 2022 3:16:00 PM
Attachments:	EJ Screening_WestfieldBarnes_Figure1_03162022.pdf

Community-based organizations and tribal organizations are receiving this communication at the request of the MEPA office, in accordance with the new Environmental Justice protocol that took effect on January 1, 2022.

Environmental Justice Screening Form

Project Name	Westfield-Barnes Regional Airport - Runway 15 Obstruction Removal, Taxiway B South, and Southwest Quadrant
Anticipated Date of MEPA Filing	Spring 2022
Proponent Name	Westfield-Barnes Regional Airport
Contact Information (e.g., consultant)	Mr. Christopher Willenborg, Westfield-Barnes Regional Airport, Manager cwillenborg@barnesairport.com Phone: (413) 572-6275 Ms. Alyssa Jacobs, Epsilon Associates, ajacobs@epsilonassociates.com Phone: (978) 461-6271
Public website for project or other physical location where project materials can be obtained (if available)	110 Airport Road, Westfield, MA 01085 Website for project materials (when available): https://www.cityofwestfield.org/752/Westfield-Barnes-Regional-Airport
Municipality and Zip Code for Project (if known)	City of Westfield Zip code 01085
Project Type* (list all that apply)	Airport
Is the project site within a mapped 100-year FEMA flood plain? Y/N/yet unknown	No
Estimated GHG emissions of conditioned spaces if known	N/A. The project does not include new buildings or expansion of existing buildings.

1. Provide a brief project description, including overall size of the project site and square footage ofproposed buildings and structures if known. **The Project consists of the following areas: 1) The realignment and widening of the southern portion of Taxiway B ("Taxiway B South"); 2) A new taxiway connection and apron area for the Southwest Quadrant area; and 3) Off-airport avigation easements for removal of tree obstructions to Runway 15-33 airspace located on privately-owned land adjacent to Rte. 202.**
2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known) **11.03 (1)(a) Land Disturbance, (10 Acres+ Impervious Area) and 11.03(6)(b) (New Taxiway)**
3. List all anticipated state, local and federal permits needed for the project (if known) **Obstruction removal (tree cutting) will occur within Bordering Vegetated Wetlands under an amendment to the Airport's existing Vegetation Management Plan (VMP). Habitat impacts for rare species will be mitigated under the Airport's existing Rare Species Master Plan (RSMP) and issued Conservation and Management Permit (014-236.DFW) from NHESP.**
4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles ofproject site (can attach map from EJ Maps Viewer in lieu of narrative)

See attached Figure 1.

5. Identify any municipality or census tract meeting the definition of "vulnerable health EJ criteria"in the DPH EJ Tool located in whole or in part within a 1 mile radius of the project site

The City of Westfield meets the vulnerable health EJ criteria for childhood blood lead, based on communities exceeding the 110% of the Statewide Rate of 18 micrograms per deciliter (ug/dl). The DPH EJ Tool was used to screen for and identify census tracts meeting the definition of "vulnerable health EJ criteria" within a 1-mile radius of the project site. Census tract #s 25013812800 and 25013812500 are within 1-mile of the project site. However, these tracts have values for childhood blood lead levels (BLL) of 15.2 ug/dl and 11.6 ug/dl respectively. This is below the criteria for Childhood Blood Levels statewide 110% rate of 18 mg/dl, and therefore these census tracts do not meet the definition of "vulnerable health EJ criteria".

6. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation

The project is not anticipated to result in any short-term and long-term environmental and public health impacts on EJ populations.

7. Identify project benefits, including "Environmental Benefits" as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population

The project will provide economic benefits due to the anticipated positive impact of construction spending and employment. The project will provide $18 million of infrastructure spending in the region, along with multiplier effects of this spending throughout the surrounding EJ communities attributable to this project.

8. Describe how the community can request a meeting to discuss the project, and how the community can request oral language interpretation services at the meeting . Specify how to request other accommodations, including meetings after business hours and at locations near public transportation.

Requests for meetings and/or oral language interpretation services can be made by sending an email to the airport's consultant: Alyssa Jacobs, Epsilon Associates, ajacobs@epsilonassociates.com.

Westfield-Barnes Regional Airport
Runway 15 Obstruction Removal, Taxiway B South, and Southwest Quad Projects

Project Summary

The Westfield-Barnes Regional Airport proposes the following capital improvement projects:

Taxiway B: Widen and realign the southern segment of Taxiway B, realign a northern segment of Taxiway B.

Avigation Easements: Acquire six off-airport avigation easements for tree hazards in airspace to Runway 15 end.

Southwest Quadrant: Construct a new taxiway and apron to existing and future operations.

Project Impacts and Benefits

Project related impacts include 12.40 acres of new pavement, removal of trees within 0.95 acres of wetlands and 2.86 acres of wetland buffer zones, and rare species habitat alterations due to construction impacts.

Taxiway B South realignment is needed for compliance Department of Defense guidelines on pavement width. The realignment also allows the airport to correct FAA safety concerns with the configuration of the crossing at Runway 15-33 and Taxiway B.

Avigation Easements acquisition will enhance safety by removing obstruction hazards off of Southampton Road in the Runway 15-33 airspace.

Southwest Quadrant Improvements will add a new taxiway and additional apron space within an area of the airport previously disturbed by industrial uses.

The projects will result in an estimated $18 million in construction spending to the region along with the creation of construction related jobs and spending benefits to local communities.

Ways to Learn More

- Visit the project website at the following link: https://www.cityofwestfield.org/752/Westfield-Barnes-Regional-Airport to learn more about the Proposed Projects. Here, you can find project related filings and materials including the project's recent Draft Environmental Assessment (EA) that contains a complete project description, impact calculations, and mapping. The Environmental Assessment and the MEPA filings, the Expanded Environmental Notification Form (ExENF), will also be available at the Westfield Athenaeum Library and the Airport Manager's Office (10 Airport Rd, Westfield, MA). You can request a copy from Epsilon Associates (csnowdon@epsilonassociates.com, 978-897-7100).

- Learn more about the MEPA review process by going to https://www.mass.gov/orgs/massachusetts-environmental-policy-act-office or by calling MEPA at (617) 626-1031.

Ways to Provide Input

Westfield Airport Commission holds public meetings on the second Thursday each month. https://www.cityofwestfield.org/755/Westfield-Airport-Commission

Westfield-Barnes Regional Airport will submit the ExENF to the MEPA Office in May 2022.

Submit comments on the MEPA filings:

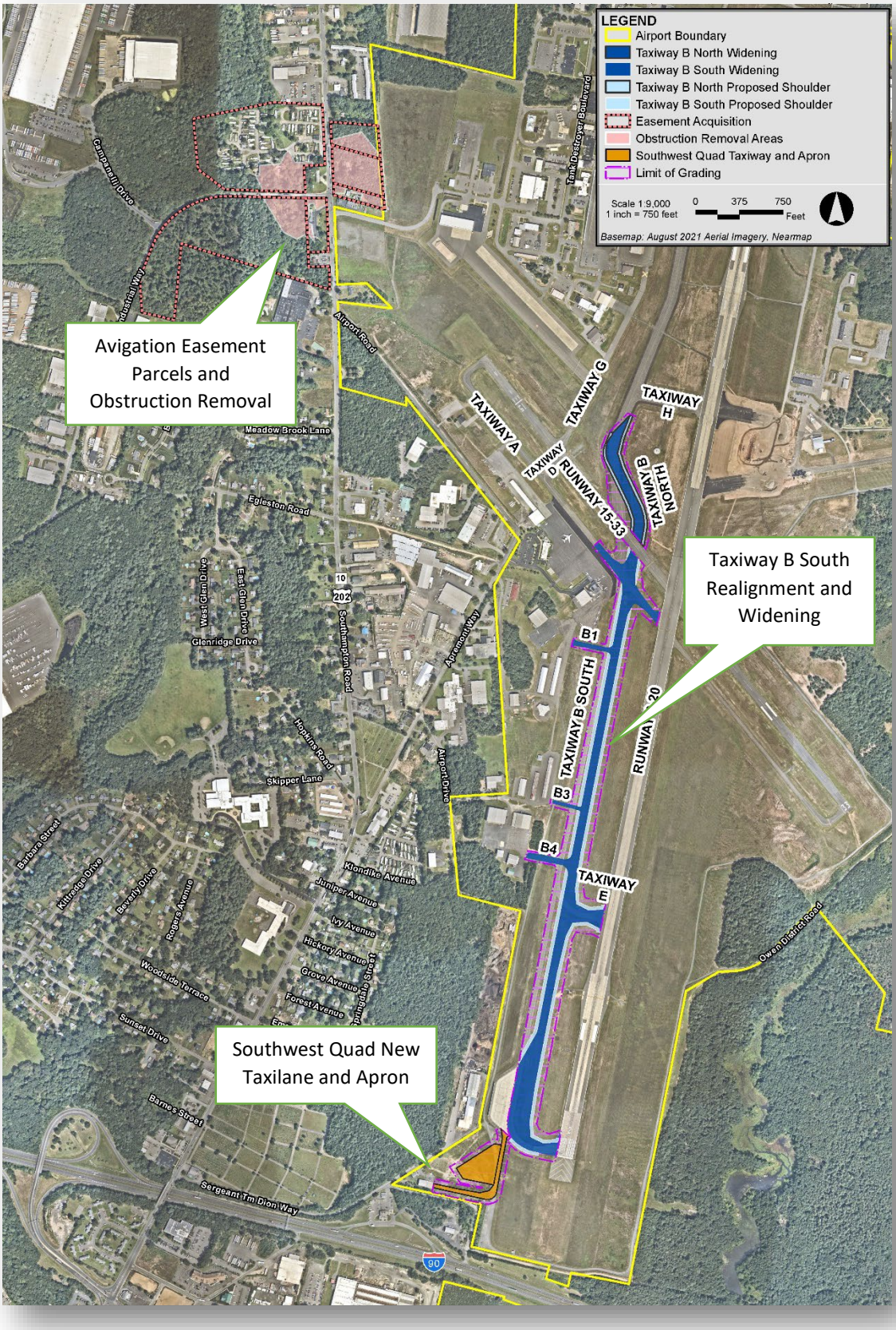
- MEPA online portal: https://eeaonline.eea.state.ma.us/EEA/PublicComment/Landing/
- Email: mepa@mass.gov
- Mail: Secretary of Energy and Environmental Affairs, Executive Office of Energy and Environmental Affairs (EEA), Attn: MEPA Office, 100 Cambridge Street, Suite 900, Boston MA 02114

Submit input to Epsilon Associates :

- Alyssa Jacobs, Principal
- ajacobs@epsilonassociates.com or (978) 897-7100

Westfield-Barnes Regional Airport
Runway 15 Obstruction Removal,
Taxiway B South, and Southwest Quad Projects

Westfield-Barnes
REGIONAL AIRPORT



Statewide Environmental Justice Community Based Organizations

First Name	Last Name	Title	Phone	Email	Affiliation
Ben	Hellerstein	MA State Director	617-747-4368	ben@environmentmassachusetts.org	Environment Massachusetts
Cindy	Luppi	New England Director	617-338-8131 x208	cluppi@cleanwater.org	Clean Water Action
Deb	Pasternak	Director, MA Chapter	617-423-5775	deb.pasternak@sierraclub.org	Sierra Club MA
Elvis	Mendez	Organizing Director	508 904-5359	elvis@n2nma.org	Neighbor to Neighbor
Heather	Clish	Director of Conservation & Recreation Policy	(617) 523-0655	hclish@outdoors.org	Appalachian Mountain Club
Heidi	Ricci	Director of Policy	Not Provided	hricci@massaudubon.org	Mass Audubon
Julia	Blatt	Executive Director	(617) 714-4272	juliablatt@massriversalliance.org	Mass Rivers Alliance
Kelly	Boling	MA & RI State Director	(617) 367-6200	kelly.boling@tpl.org	The Trust for Public Land
Kerry	Bowie	Board President	Not Provided	kerry@msaadapartners.com	Browning the GreenSpace
Nancy	Goodman	Vice President for Policy	Not Provided	ngoodman@environmentalleague.org	Environmental League of MA
Pat	Stanton	Project Manager	Not Provided	pstanton@e4thefuture.org	E4TheFuture
Rob	Moir	Executive Director	Not Provided	rob@oceanriver.org	Ocean River Institute
Robb	Johnson	Executive Director	(978) 443-2233	robb@massland.org	Mass Land Trust Coalition
Sarah	Dooling	Executive Director	Not Provided	sarah@massclimateaction.net	Mass Climate Action Network (MCAN)
Staci	Rubin	Senior Attorney	617 350-0990	srubin@clf.org	Conservation Law Foundation
Sylvia	Broude	Executive Director	617 292-4821	sylvia@communityactionworks.org	Community Action Works
Tali	Smookler	Organizing Director	508 308-9261	tsmookler@uumassaction.org	Unitarian Universalist Mass Action Network
Winston	Vaughan	Director of Climate Solutions	Not Provided	wvaughan@hcwh.org	Healthcare without Harm

Indigenous Organizations					
First Name	**Last Name**	**Title**	**Phone**	**Email**	**Affiliation**
Alma	Gordon	President	Not Provided	tribalcouncil@chappaquiddick-wampanoag.org	Chappaquiddick Tribe of the Wampanoag Nation
Bettina	Washington	Tribal Historic Preservation Officer	508-560-9014	thpo@wampanoagtribe-nsn.gov	Wampanoag Tribe of Gay Head (Aquinnah)
Cheryll	Toney Holley	Chair	774-317-9138	crwritings@aol.com	Nipmuc Nation (Hassanamisco Nipmucs)
John	Peters, Jr.	Executive Director	617-573-1292	john.peters@mass.gov	Massachusetts Commission on Indian Affairs (MCIA)
Kenneth	White	Council Chairman	508-347-7829	acw1213@verizon.net	Chaubunagungamaug Nipmuck Indian Council
Melissa	Ferretti	Chair	(508) 304-5023	melissa@herringpondtribe.org	Herring Pond Wampanoag Tribe
Patricia	D. Rocker	Council Chair	Not Provided	rockerpatriciad@verizon.net	Chappaquiddick Tribe of the Wampanoag Nation, Whale Clan
Raquel	Halsey	Executive Director	(617) 232-0343	rhalsey@naicob.org	North American Indian Center of Boston

Federally Recognized Tribes					
First	**Last**	**Title**	**Phone**	**Email**	**Affiliation**
Bettina	Washington	Tribal Historic Preservation Officer	508-560-9014	thpo@wampanoagtribe-nsn.gov	Wampanoag Tribe of Gay Head (Aquinnah)
Bonney	Hartley	Historic Preservation Manager	413-884-6048	bonney.hartley@mohican-nsn.gov	Stockbridge-Munsee Tribe
Brian	Weeden	Chair	774-413-0520	Brian.Weeden@mwtribe-nsn.gov	Mashpee Wampanoag Tribe

Sarita	Hudson	Director Programs & Development	Western Massachusetts	413 794-7739	shudson@publichealthwm.org	Public Health Institute of Western Mass
Kristen	Melo	Co-Founder/Director	Westfield	Not provided	klm.wraft@gmail.com	Westfield Residents Advocating for Themselves
Mary	Babinski	EJ group (unknown)	Westfield	Not provided	mababinski@comcast.net	EJ group (unknown)
Tina	Gorman	Director	Westfield	Not provided	t.gorman@cityofwestfield.org	Westfield Council on Aging
				Not provided	info@communityaction.us	Pioneer Valley Community Action

Attachment G

Agency Correspondence

MASSWILDLIFE

DIVISION OF
FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

March 28, 2022

Mr. Richard Doucette
Environmental Program Manager
Federal Aviation Administration
New England Region
12 New England Executive Park Drive
Burlington, MA 01803

Project Name:	*Westfield-Barnes Regional Airport Runway 15 Obstruction Removal, Taxiway B, and Southwest Quadrant*
Proponent:	*Westfield-Barnes Regional Airport Commission*
Location:	*Westfield-Barnes Regional Airport, 110 Airport Road, Westfield*
Project Description:	*Runway 15 Obstruction Removal, Taxiway B, and Southwest Quadrant*
Document Reviewed:	*Draft Environmental Assessment*
NHESP Tracking No.:	*08-24352*

Dear Mr. Doucette:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the Division) has reviewed the February 2022 *Draft Environmental Assessment* (EA) for the proposed Runway 15 Obstruction Removal, Taxiway B, and Southwest Quadrant projects in Westfield, MA and would like to offer the following comments.

The projects identified in the Draft EA are located within *Priority Habitat* and *Estimated Habitat* according to the Massachusetts Natural Heritage Atlas, 15th Edition. State-listed species and their habitats are protected pursuant to the MESA. The proposed projects will occur within habitat of the following state-listed species:

Scientific Name	Common Name	Taxonomic Group	MESA Status
Ammodramus savannarum	Grasshopper Sparrow	Vertebrate Animal	Threatened
Pooecetes gramineus	Vesper Sparrow	Vertebrate Animal	Threatened
Bartramia longicauda	Upland Sandpiper	Vertebrate Animal	Endangered
Sturnella magna	Eastern Meadowlark	Vertebrate Animal	Special Concern
Speranza exonerata	Pine Barrens Speranza	Invertebrate Animal	Special Concern
Callophrys irus	Frosted Elfin	Invertebrate Animal	Special Concern

The MESA is administered by the Division and prohibits the Take of state-listed species, which is defined as "in reference to animals…harm…kill…disrupt the nesting, breeding, feeding or migratory activity…and in reference to plants…collect, pick, kill, transplant, cut or process…Disruption of nesting, breeding, feeding, or migratory activity may result from, but is not limited to, the modification, degradation, or destruction of Habitat" of state-listed species (321 CMR 10.02).

Portions of Westfield-Barnes Regional Airport are currently managed in accordance with the provisions of a MESA Conservation and Management Permit issued in 2014 (CMP; 014-236.DFW) for state-listed species and their habitats. Projects occurring within Priority Habitat and Estimated Habitat require review through a direct filing with the Division for compliance with the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00; MESA).

The Draft EA details that Taxiway B modifications (widening and re-alignment), the Southwest Quadrant Apron and Taxiway development will result in ±15.12 acres of permanent grassland habitat loss with an additional ±9.30 acres of temporary grassland impact. The proposed Runway 15 Obstruction Removal will result in at least ±3.38 acres of alteration within Pine Barrens Speranza habitat. Based upon the information available in the Draft EA and in advance of a formal filing or consultation pursuant to the MESA, the Division anticipates these projects will result in a prohibited Take of state-listed species habitat.

Projects resulting in a Take of state-listed species may only be permitted if the performance standards for a CMP are met. For a project to qualify for a CMP, the applicant must demonstrate that the project has avoided, minimized and mitigated impacts to state-listed species consistent with the following performance standards: (a) adequately assess alternatives to both temporary and permanent impacts to the state-listed species, (b) demonstrate that an insignificant portion of the local population will be impacted, and (c) develop and agree to carry out a conservation and management plan that provides a long-term Net Benefit to the conservation of the state-listed species. The Division notes that the Westfield-Barnes Airport CMP remains valid, however, the projects detailed within the Draft EA are not specified within the 2014 CMP and may require an Amendment to the 2014 CMP.

The Proponent should begin consultation with the Division regarding the MESA permitting process and identify the components and details of a long-term Net Benefit plan (321 CMR 10.23). After consultation with the Division, it is recommended that the Proponent update Table 6-1 of the Draft EA to accurately reflect impacts, minimization, and mitigation measures for state-listed species.

We appreciate the opportunity to comment on the Draft EA. If you have any questions about this letter, please contact Amy Hoenig, Endangered Species Review Biologist, at Amy.Hoenig@mass.gov.

Sincerely,

Everose Schlüter

Everose Schlüter, Ph.D.
Assistant Directo

cc: Alyssa Jacobs, Epsilon Associates
Christopher Willenborg, Airport Manager