

April 18, 2023

Secretary Rebecca Tepper Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston MA 02114

Attn: MEPA Office

# Subject: Environmental Notification Form Plymouth Municipal Airport, Runway 6 Extension Project, Plymouth, MA

Dear Secretary Tepper:

On behalf of the Plymouth Municipal Airport, Epsilon Associates, in association with DuBois & King, is pleased to submit the Environmental Notification Form (ENF) for the proposed Runway 6 Extension Project in Plymouth, MA.

The Project proposes to extend Runway 6 southwestward by 351 feet, increasing the total runway length to 5,001 feet to increase available pavement and safety margins. The Runway 6 extension would be 75-ft wide and includes extensions of Taxiway E and Taxilane A to meet FAA standards for parallel taxiways. In addition, the Project proposes to construct two (2) general aviation hangars along Taxilane A, each approximately 10,000 square feet, to meet hangar space needs at the Airport. The Project will increase overall safety and efficiency of the Airport in accordance with the recent 2023 Technical Master Plan Update.

The Project is anticipated to meet the following ENF review thresholds:

- **301 CMR 11.03 (2) Rare Species** greater than two acres of disturbance of designated priority habitat, as defined in 321 CMR 10.02, that results in a take of a state—listed endangered or threatened species or species of special concern.
- 301 CMR 11.03 (6) (b) 3 Transportation Expansion of an existing runway at an airport.

Given the impact to approximately 7.04 acres of mapped Priority Habitat, the Project will require an amended Conservation and Management Permit from the MassWildlife's Natural Heritage & Endangered Species Program.

Secretary Rebecca Tepper Executive Office of Energy and Environmental Affairs April 18, 2023

The Proponent anticipates that the ENF will be noticed in the Environmental Monitor on April 26, 2023 with a comment period ending on May 16, 2023.

We look forward to working with the MEPA Office on this Project that will contribute to the region's transportation infrastructure and the continued positive growth of the Commonwealth.

If you have any questions about the project, please call me at (978) 897-7100.

Sincerely,

EPSILON ASSOCIATES, INC.

Nate Rawding Senior Scientist, Ecological Sciences

cc: Brenda Bhatti, EA Manager, DuBois and King Matthew Cardillo, Airport Manager, Plymouth Municipal Airport



# Environmental Notification Form

Submitted Pursuant to the Massachusetts Environmental Policy Act

# **Plymouth Municipal Airport Runway 6 Extension Project**



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

Submitted by: **Plymouth Airport Commission** 246 South Meadow Road Plymouth, MA 02360 Prepared by: **Epsilon Associates, Inc.** 3 Mill & Main Place, Suite 250 Maynard, MA 01754

In Association with: **DuBois & King, Inc.** 





# Plymouth Municipal Airport Runway 6 Extension Project

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

> Submitted by: **Plymouth Airport Commission** 246 South Meadow Road Plymouth, MA 02360

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

In Association with: **DuBois & King, Inc.** 

April 18, 2023



**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: Plymouth Municipal Airport Runway 6 Extension and Technical Master Plan Update				
Street Address: South Meadow Re	bad			
Municipality: Plymouth and Carver		Watershee	: Buzzards Bay	
Universal Transverse Mercator	-	Latitude: 4	1° 54 32.5" North	
4641120.474 Northing, 356619.771 E	asting	-	70° 43' 43.6" West	
Estimated commencement date	e: 2024		completion date: 2025	
Project Type: Airport		Status of p	project design: Concept <30%	
Proponent: Plymouth Municipal Ai				
Street Address: 246 South Meado	w Road			
Municipality: Plymouth		State: MA	Zip Code: 02360	
Name of Contact Person: Corinn				
Firm/Agency: Epsilon Associates, I	nc		ress: 3 Mill & Main Place Suite 250	
Municipality: Maynard		State: MA	Zip Code: 01754	
Phone: (978)-897-6271	Fax: (978)89	97-0099	E-mail: csnowdon@epsilonassociates.com	
Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?         □Yes ⊠No         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 301 CMR 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.)				
(Note: Greenhouse Gas Emissions and				

Which State Agency Permits will the project require?

• 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: **Funding is anticipated from MassDOT Aeronautics Division** 

Summary of Project Size	Existing	Change	Total
& Environmental Impacts			
LAND			
Total site acreage	785		
New acres of land altered		± 7.04	
Acres of impervious area	90.39	± 2.46 net	92.85
Square feet of new bordering vegetated wetlands alteration		<b>0</b> <sup>1</sup>	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	533,068 sf	±20,000	553,068 sf
Number of housing units	0	0	0
Maximum height (feet)	35 ft	0	35 ft
TRANSPORTATION			
Vehicle trips per day	1,789	<b>4</b> (2 per hanger/day)	1,791
Parking spaces	333	0	333
WASTEWATER			
Water Use (Gallons per day)	8,500 gpd	0	8,500 gpd
Water withdrawal (GPD)	0	0	0
Wastewater generation/treatment (GPD)	8,500 gpd	0	8,500 gpd
Length of water mains (miles)	3.85 miles	0	3.85 miles
Length of sewer mains (miles)	3.79 miles	0	3.79 miles
Has this project been filed with MEPA	before?		
Has any project on this site been filed ☐ Yes (EEA #15663, #14511, #14801 2590, 2437, 911)) □No	, 13289, 9689, 9033,		024, 2817, 2591,

1. Potential for wetland alterations will be determined pending an analysis by the FAA relative to relocation and realignment of Gate 6 Access Roadway and perimeter fence line within the Project area to avoid interference with the runway landing instrumentation and navigational aids. Existing wetland areas and associated buffers are depicted in Figure 3.

# **GENERAL PROJECT INFORMATION – all proponents must fill out this section**

#### PROJECT DESCRIPTION:

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

The Plymouth Municipal Airport ("Airport") is located on approximately 785 acres in the towns of Plymouth and Carver (see Figure 1, USGS Locus Map in Attachment A). The Airport has operated since 1934 and now supports multiple businesses including flight schools, aircraft maintenance, aircraft sales, and corporate flight departments. Approximately half of the site is developed and consists of paved runways and taxiways, hangars, an administration building, several office buildings, and other ancillary buildings.

The existing airfield configuration at the Airport consists of two runways: Runway 6-24 and Runway 15-33. These two runways are identified on Figure 2, Existing Conditions Plan. As shown on Figure 2, Runway 6-24 is oriented northeast-to-southwest and is 4,650 feet long and 75 feet wide; and Runway 15-33 is oriented in a northwest-to-southeast and is 4,650 feet long and 75 feet wide. Runway 6-24 is the primary runway.

Runway 6-24 is served by Taxiway E, which is a full length parallel taxiway (4,650 feet by 35 feet) located on the north side of the runway. Taxiway E provides access to existing hangars, administration building, and the fixed base operator's ("FBO") ramp. Runway 15-33 is served by Taxiway S, which is a full-length parallel taxiway (4,350 feet by 40 feet) located on the south side of the runway. Taxiway D is a 2,500-foot long parallel taxiway that connects Taxiway K to Taxiway S and Runway 15-33. It provides access from hangars located on the south side of the Airport along the Gate 6 access road, including the Cape Cod Community College hangar.

Three of the four airport approaches extend over the Town of Plymouth. Approximately 250 acres, including the approach end of Runway 6, Gate 6 access, and associated access roadway lies in Carver. For the purposes of this submittal, the project site consists of the proposed work area on the approach end of Runway 6 encompassing approximately 100 acres.

The undeveloped areas on the Airport include wetlands, upland grasslands, and forested habitats. Portions of South Meadow Pond and an unnamed pond, associated with a nearby cranberry bog, are located on the southern portion of the Airport site. There are approximately 31 acres of wetlands on the Airport, as mapped by MassGIS. Approximately 352 acres of Airport property is mapped by the Massachusetts Natural Heritage and Endangered Species Program ("NHESP") as Estimated Habitat, Priority Habitat, or both; of this total, approximately 60 acres are managed pursuant to the Airport's NHESP-approved Grassland Management Plan for grassland bird species. Land uses adjacent to the Airport include residential, commercial, agricultural (cranberry bogs) and open space. The Town of Plymouth has incorporated the Airport Zone to protect the airspace surrounding the airport. Existing developed land within the Town of Plymouth Airport Zone includes a mixture of cranberry bogs, office space associated with the Plymouth Municipal Airport, residential development and some industrial/commercial development along South Meadow Road.

Existing wetland resource areas, as defined by the Massachusetts Wetlands Protection Act (MGL c.131 §40) (WPA), the Carver Wetland Bylaw and Regulations (Chapter 9) and U.S. Clean Water Act (33 U.S.C. 1344, waters of the U.S.), are located within the Project area at the Runway 6 approach end and adjacent to Taxilane A; see Figure 3: Environmental Constraints. Field delineated wetland resource areas include Bordering Vegetated Wetlands ('BVW") and Isolated Vegetated Wetlands ("IVW"). Portions of the Airport also contain areas mapped as Bordering Land Subject to Flooding ("BLSF") i.e., FEMA-FIRM 100-year floodplain.

### Describe the proposed project and its programmatic and physical elements:

The Airport recently completed a Technical Master Plan Update (MPU) with a focus on airside infrastructure to determine if the current airside infrastructure is appropriate for the level of traffic or if changes are necessary to accommodate the current and future uses. The Technical MPU reviewed existing conditions, determined aviation demand forecasts, and developed a runway length analysis with corresponding alternatives. The airside facilities looked at in the Technical MPU include areas of the airport where aircraft move, from the apron side of the terminal to the runways and taxiways.

The Technical MPU identifies existing and long-range airside facility requirements anticipated through the year 2042. Additionally, the capacity of existing facilities is analyzed and assessed against future aviation demand projections. The Technical MPU explores and identify options that best meet projected facility requirements and addresses the goals of the airport. This process included four public meetings to receive community input and address questions.

#### Runway 6 Extension

The Proposed Project involves the extension of the Runway 6 approach end, southwestward by 351 ft for a total runway length of 5001 ft, as shown in Figure 4. The project contains the following physical elements:

- Construct a 351-ft long, 75-ft wide extension on the approach to Runway 6 for a total runway length of 5001-ft;
- Construct a 351-ft long, 35-ft wide extension to the parallel taxiway (E) in order to serve the runway with a full-length parallel taxiway to meet the requirements of Parallel Taxiway Standards of AC/5300-13B in order to maintain less than mile visibility on Precision Approaches or Approaches with vertical guidance;
- Adds 1.68 acres of pavement (net of removal);
- No additional easements are required to be obtained;
- One (tree) obstruction is currently within 10 ft of the approach surface and could be required to be removed in order to maintain a clear and unobstructed approach path to Runway 6 as per AC 5300-13B Tables 3-2 through 3-5 in the future. Currently, there are no obstructions that would penetrate the approach surface to Runway 6 with the 351-ft extension;
- Relocated medium intensity runway lighting (MIRL), Medium Intensity Approach Light System with Sequenced Flashing Lights (MALSF), Precision Approach Path Indicator (PAPI), and Runway End Identifier Lights (REILS) on Runway 6.
- Pending an analysis being conducted by the FAA, relocation and realignment of Gate 6 Access Roadway and perimeter fence line within the Project area to avoid interference with the Runway landing instrumentation and navigational aids.

A 351-ft extension increases the total runway length of Runway 6-24 to 5,001 ft. This length does not meet the full extent of runway length recommended in the Technical MPU of 5,500- ft for the critical aircraft but does provide increased pavement use and increases safety margins while allowing aircraft to take a higher weight of occupants, cargo, and baggage.

The Technical MPU studied two additional Runway 6 extension alternatives: a 550-ft extension and an 850-ft long extension. Both runway extension options were not recommended due to the number of (off-airport) properties that would be impacted, the number of easements that need to be acquired, and the number of obstructions that would need to be mitigated. Additionally, other potential impacts to environmental resources jurisdictional wetlands, Sole Source Aquifer (SSA), and grasslands that would be paved or regraded.

#### New Hangars

Within the Airport boundary there is a total building footprint of approximately 533,068-square feet (inclusive of previously committed/approved structures, but not yet built, see EEA# 15663). This includes both group and maintenance hangars. According to the results of the Technical MPU and consistent with the economic needs, the Airport continues to attract new hangar owners and businesses to the airfield. The Airport currently maintains a waitlist for hangar space, and additional hangar space would allow the Airport flexibility in attracting new businesses and meet the facility needs of users. The Project proposes construction of two (2) new aircraft hangars approximately 100'x100' (20,000 square feet total) located north of the Gate 6 Access Road and along Taxilane A, see Figure 4.

The proposed hangars will result in 0.78 acres of permanent (from impervious surfaces) impacts, and 0.50 acres of temporary (land grading) impacts within mapped Habitat. As discussed in Rare Species Section I.B. below, mitigation will be identified and provided under an amendment to the Airport's existing Conservation and Management Permit from NHESP and corresponding update to the Grassland Habitat Management Plan.

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:

[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.]

In addition to the "No Build" alternative, the Technical MPU evaluated three additional alternatives for extending Runway 6 based on the needs of the critical aircraft. Ultimately, the shortest extension was selected. Even though it does not meet the requirements for 60% capacity of the critical aircraft, the Airport determined that the 351-ft extension was the Preferred Alternative when taking into consideration Purpose and Need, feasibility, and environmental considerations.

Alternative 1 – No Build – The No Build or "No Action" (under NEPA) is a scenario in which the Airport does nothing and the existing condition remains the same. This does not serve the Purpose and Need of the project, but is required to be carried forward under NEPA analysis. There would be no change to the current runway or taxiway lengths; therefore, this alternative does not fulfill the minimum runway length required for the critical aircraft as analyzed in the Technical MPU.

Alternative 2 – 351-ft Extension – This alternative includes the extension of the Runway 6 approach end, southwestward by 351 ft for a total runway length of 5001 ft. The Technical MPU determined that this length does not meet the recommended unconstrained runway length of 5,500 ft, but would increase available pavement for use and increase safety margins. The extension also allows for an equivalent runway length as 15-33 when conditions and/or NOTAMs result in that runway being unavailable. The Runway 6 extension would be 75-ft wide and entails extensions of the 35-ft wide parallel taxiway (E) and Taxilane A to meet the new runway end. No additional easements are required to be obtained. One

obstruction (tree) is currently within 10 ft of the approach surface and could be required to be removed to maintain a clear and unobstructed approach path. Navigational aids would need to be relocated in direct relation to the 351-ft extension. The anticipated environmental impacts involve the related installation of impervious surfaces, and existing surfaces that are no longer needed where they meet the current Runway 6 end would be removed. This would result in conversion of the existing Taxiway E and Taxilane A end pavement back to grassland. Alternative 2 is being carried forward in the MEPA and NEPA evaluations as described in the project description above.

Alternative 3 – 550-ft Extension – This alternative would involve the extension of the Runway 6 approach end southwestward by 550 ft resulting in a total length of 5,200 ft. The Technical MPU determined that this length does not meet the recommended unconstrained runway length of 5,500 ft, but would increase available pavement for use and increase safety margins. Two additional easements could be required to maintain a clear and unobstructed approach surface. Alternative 3 is not proposed to be carried forward in the MEPA and NEPA analysis beyond the preliminary Alternatives description sections.

**Alternative 4 – 550-ft Extension –** This alternative would involve the extension of the Runway 6 approach end southwestward by 850 ft resulting in a total length of 5,500 ft. The Technical MPU determined that this length would meet the recommended unconstrained runway length of 5,500 ft, but at a higher cost and more resulting environmental impacts. Four easements would be required to maintain clear approaches on an 850-ft extension. Alternative 5 is not proposed to be carried forward in the MEPA and NEPA analysis beyond the preliminary Alternatives description sections.

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

Mitigation measures for an increase in stormwater runoff resulting from proposed impervious areas will include traditional stormwater management measures such as groundwater recharge including infiltration basins, infiltration trenches, and/or detention basins. Management of runoff will include both temporary and permanent Best Management Practices (BMPs) so that runoff will be appropriately handled both during and after construction.

For wetland impacts associated with the potential relocation and realignment of Gate 6 Access Roadway and perimeter fence line within the Project area, appropriate mitigation measures will be adopted to minimize impacts according to local and state regulations. Mitigation for wetlands and jurisdictional buffers includes restorative plantings for temporarily disturbed areas and replication for wetland losses.

The Project will provide mitigation for rare species impacts under the Airport's existing Conservation and Management Permit from NHESP and Grassland Habitat Management Plan. The Airport has maintained an Airport-wide grassland habitat management plan since 2011 and has managed grassland bird habitat as required by existing Conservation and Management Permits (CMP; Permit No. 005-049 DFW dated October 25, 2005 and amended on July 24, 2007 and on April 22, 2010; Permit No. 014-240 DFW; and Permit No. 018-329 DFW) issued by the Massachusetts Division of Fisheries and Wildlife (DFW). Mitigation measures may include use of banked areas of grassland habitat created by converting forested or scrub upland areas to grassland in an area located off the end of Runway 6 in Carver, as well as placing additional existing grassland area under the management program approved in the Grassland Habitat Management Plan (2014).

If the project is proposed to be constructed in phases, please describe each phase: Construction is anticipated to be completed in 2025.

#### 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? <u>Yes</u> 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 <a href="http://www.mass.gov/dfwele/dfw/nhesp/regulatory">http://www.mass.gov/dfwele/dfw/nhesp/regulatory</a> review/priority</a> habitat/priority habitat home.htm)

#### 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
 The Project is located in previously disturbed and constructed portions of the airfield. An Archaeological Reconnaissance Survey and Intensive (Locational) Archaeological Survey completed at the Airport property by PAL in September 2003 assigns the Airport project area a "Low Sensitivity" designation for both prehistoric archaeological sensitivity and historic archeological sensitivity.

#### 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.

(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)

Are there any impaired water bodies on or within a half-mile radius of the project site? \_\_\_Yes  $X_N$ ; 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? <u>Yes</u>  $\underline{X}$  No

#### **STORMWATER MANAGEMENT:**

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

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 to the extent practicable.

#### 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 \_\_\_\_\_No  $X_{;}$  if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes \_\_\_\_ No  $\underline{X}$ ; 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  $\underline{X}$ ; 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 associated with the Runway 6 end extension will be asphalt, which will be reused on site where feasible. Construction procedures will allow for the segregation, reuse, and recycling of materials.

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes \_\_\_\_ No  $\underline{X}$ ; if yes, please consult state asbestos requirements at <u>http://mass.gov/MassDEP/air/asbhom01.htm</u>

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

The construction contract will require contractors to use several measures to reduce potential emissions and minimize impacts from construction vehicles including:

- Encouraging contractors to use EPA Tier 4 construction equipment or equipment retrofitted with diesel emission control devices to the greatest extent practicable.
- Using Ultra-Low Sulphur Diesel for all trucks and construction machinery.
- Maintaining an "idle free" work area.
- Minimizing exposed storage of debris on-site through measures such as wetting soils prior to disturbing and covering stockpiles

#### 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  $\underline{X}$ ; 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 \_\_\_\_\_\_; 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 <u>proposed</u>.

# **ATTACHMENTS:**

- 1. List of all attachments to this document. **See below.**
- 2. U.S.G.S. map (good quality color copy,  $8-\frac{1}{2} \times 11$  inches or larger, at a scale of 1:24,000) indicating the project location and boundaries. **See Attachment A.**
- 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 A.**
- 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 A.**
- 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 A.**
- 6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2). **See Attachment B.**
- 7. List of municipal and federal permits and reviews required by the project, as applicable. **Attachment C.**
- 8. Printout of output report from RMAT Climate Resilience Design Standards Tool, available <u>here</u>. **Attachment D.**
- 9. Printout from the EEA <u>EJ Maps Viewer</u> 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. **Attachment E.**
- ATTACHMENT A FIGURES
- ATTACHMENT B CIRCULATION LIST
- ATTACHMENT C ANTICIPATED PERMITS, REVIEWS, AND APPROVALS
- ATTACHMENT D RMAT CLIMATE RESILIENCE DESIGN TOOL PRINTOUT
- ATTACHMENT E EEA ENVIRONMENTAL JUSTICE MAPPING
- ATTACHMENT F PUBLIC OUTREACH AND ENVIRONMENTAL JUSTICE MATERIALS

# LAND SECTION – all proponents must fill out this section

#### I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to land (see 301 CMR 11.03(1) \_\_\_\_Yes \_X\_\_ No; if yes, specify each threshold:

#### II. Impacts and Permits

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

	Existing	<u>Change</u>	lotal
Footprint of buildings	12.23	0.46	12.69
Internal roadways	3.64	0	3.64
Parking and other paved areas	85.17	2.00	87.17
Other altered areas	346.20	0	346.20
Undeveloped areas	347.51	-2.46	345.05
Total: Project Site Acreage	785		785

- B. Has any part of the project site been in active agricultural use in the last five years? <u>Yes X</u> 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? <u>Yes X</u> 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:	Town of Carver Master Plan	Date: 2017
	West Plymouth Village Center Master Plan Update	Date: 2016

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

#### 1) Economic Development

This project is consistent with the 2017 Carver Master Plan update in that it is encouraging development and redevelopment within existing commercial areas of the Airport District leading to regional employment growth as people move to the town from areas closer to Boston. Plymouth Airport has been identified as an existing Priority Development Area location for economic growth. The transportation and warehouse sector provided 65 jobs in Carver in 2001, and 83 jobs in 2014 - a 28% increase. The mission of the airport is to serve as a gateway to the community for developing business and recreation activities, further promoting economic development in the region.

The Plymouth Industrial Park along with the Mixed Commerce District located off Commerce Way and Cherry Street provide for a mix of retail and industrial uses. The Plymouth Airport District is also located in West Plymouth and provides for employment and economic development for airport related businesses and growth.

#### 2) Adequacy of Infrastructure

The project is consistent with the goals outlined in the Plymouth Master Plan in that it is improving and maintaining existing infrastructure, facilities and airport safety. The Carver Master Plan lists many transportation infrastructure related safety enhancements and upgrades. While the airport is not specifically listed, it would be consistent with enhancing the safety of existing transportation infrastructure.

#### 3) Open Space Impacts

The Project is consistent with both the Carver and Plymouth Master Plans' goals for open space. The open space portions of the two master plans focus on agricultural, water resource protection, and public access and recreational opportunities. These types of open spaces will not be affected by the proposed project. The proposed improvements are within existing areas identified in the plans as transportation lands (Airport District) where economic benefits are valued within those master plans.

#### 4) Compatibility with Adjacent Land Uses

Approximately 325 acres of land in the town of Carver is occupied by the Plymouth Municipal Airport and utility transmission lines, which cross the northern part of the town. In addition, local and state roads are included in the area of abutting land uses. The project is within the designated Airport District and is consistent with these adjacent land uses.

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

RPA: Old Colony Metropolitan Planning Organization (MPO)

[aka Old Colony Planning Council]

Title: 2020-2040 Old Colony Long Range Transportation Plan (LRTP)

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

#### 1) Economic Development

The Project is consistent with the plan's economic development goals in that fosters economic development (per LRTP Chapter 5). The LRTP specifies that the Plymouth Airport "...is a vital component of the overall transportation network serving personal, business and recreational, and serve[s] as an important factor in the region's economic development." Further the LRTP states, "The Old Colony Region should support its regional airport [to] meet the five goals laid out in the Statewide Plan." Those goals include "leveraging economic impacts and benefits of the incremental investments in the airport system" and "support and promote aviation education programs and conduct community outreach." Improving the safety of the Airport will allow the

Airport to continue to serve as a vital component of the overall transportation network in the Old Colony Region, serving personal, business and recreational purposes, as well as being a significant factor in the region's economic development efforts.

#### 2) Adequacy of Infrastructure

The Old Colony Region supports economic development that ultimately improves public infrastructure in the region. The Project is consistent with the adequacy of infrastructure in that it is improving local and regional transportation which will allow the Airport to integrate with other transportation modes.

#### 3) Open Space Impacts

The Project is consistent with the Old Colony Region's goals on protecting the region's most valuable assets in that no open space or resource areas will be impacted and will continue to attract tourists to the area.

# 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:

301 CMR 11.03 (2) Rare Species – greater than two acres of disturbance of designated priority habitat, as defined in 321 CMR 10.02, that results in a take of a state—listed endangered or threatened species or species of special concern.

The Project will impact 7.04 acres of mapped Priority Habitat. Of this area, 2.46 acres (net of pavement removals) will result in a permanent loss of habitat. Another 4.58 acres will be temporarily disturbed and restored (with appropriate seed mix) due to grading for Runway 6 extension side areas, taxiway extension, and hangar development.

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

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

The Airport has implemented an Airport-wide grassland habitat management plan since 2011 and has managed grassland bird habitat as required by existing Conservation and Management Permits (CMP; Permit No. 005-049 DFW dated October 25, 2005 and amended on July 24, 2007 and on April 22, 2010; Permit No. 014-240 DFW; and Permit No. 018-329 DFW) issued by the Massachusetts Division of Fisheries and Wildlife (DFW).

The Project will require an amendment to the Airport's existing Conservation and Management Permit from NHESP and an update to the Grassland Habitat Management Plan, previously updated in 2018.

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.

Priority Habitat #591, see Figure 3.

D. If you answered "No" to <u>all</u> questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to <u>either</u> 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 <u>No. If yes</u>, Priority Habitat #591
  - Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? \_\_\_Yes X\_ No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? \_\_\_\_ Yes \_\_\_ No; if yes, attach the letter of determination to this submission.

No formal submittal has been made to NHESP at the time of this ENF submittal.

 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 Airport proposes to make updates to the Rare Species Master Plan to address impacts to state-listed rare species habitat as a consequence of this Project. The Airport, in coordination with NHESP, will develop a project-specific rare species habitat management strategy that sets forth how the Airport will manage habitat alteration from this Project, and provide habitat mitigation within MESA and its implementing regulations.

Proposed mitigation measures include providing preserved, managed grassland habitat at a suitable ratio to be negotiated with NHESP along with construction and post-construction rare species monitoring and reporting.

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

Upland sandpiper (Bartramia longicauda) Grasshopper sparrow (Ammodramus savannarum) Vesper sparrow (Pooecetes gramineus)

4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act?  $\underline{X}$  Yes \_\_\_\_ No

4. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? \_\_\_\_ Yes  $\underline{X}$  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:

See response to Question II. A. 2 above.

# 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  $\underline{X}$  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**? \_\_\_\_ Yes X\_ No; if yes, specify which permit:

Local Order of Conditions from the Carver Conservation Commission for work within a buffer zone to a resource area.

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

#### II. Wetlands Impacts and Permits

- A. 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.
- B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

Potential for wetland impacts is discussed under the Project Description pending FAA determination relative to relocation of Gate 6 access road to prevent interference with runway landing instrumentation and guides. Information on wetland impacts will be developed during the Draft and Final EIR stages, as appropriate.

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:

<u>Coastal Wetlands</u>	<u>Area (square feet) or</u> 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		
<u>Inland Wetlands</u> Bank (If) Bordering Vegetated Wetlands Isolated Vegetated Wetlands Land under Water	tbd1 tbd	tbd tbd

Isolated Land Subject to Flooding Borderi ng Land Subject to Flooding Riverfront Area

- 1. Potential for wetland impacts is discussed under the Project Description pending FAA determination. Information on wetland impacts will be developed during the Draft and Final EIR stages, as appropriate.
- D. Is any part of the project:
  - 1. proposed as a **limited project**? \_\_\_\_ Yes X No; if yes, what is the area (in sf)?\_\_\_\_\_
  - 2. the construction or alteration of a **dam**? Yes <u>X</u> 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? <u>Yes X</u> 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  $\underline{X}$  No
  - 6. subject to a wetlands restriction order? \_\_\_\_Yes  $\underline{X}$  No; if yes, identify the area (in sf):
  - 7. located in buffer zones? X Yes No; if yes, how much (in sf) tbd
- E. Will the project:
  - 1. be subject to a local wetlands ordinance or bylaw? X Yes 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:
- B. 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 \_\_\_\_\_ 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? <u>Yes X</u> 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? <u>Yes X</u> 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? No\_\_; if yes, \_\_\_ sq ft Intertidal Yes 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 to: 1) avoidance; 2) if avoidance is not possible, practicable steps 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 <u>X</u> 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? <u>Yes X</u> 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**? <u>Yes X</u> No; if yes, specify which permit:
- C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to <u>either</u> 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	<u>Change</u>	lotal
Municipal or regional water supply			
Withdrawal from groundwater			
Withdrawal from surface water			
Interbasin transfer	<u> </u>		

(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? <u>Yes</u> 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 <u>Flow</u>	Existing Avg <u>Daily Flow</u>	Project Flow	<u>Total</u>
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? <u>Yes</u> 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**? <u>Yes X</u> No; if yes, specify which permit:
- C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to <u>either</u> 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	<u>Change</u>	<u>Total</u>
Discharge of sanitary wastewater Discharge of industrial wastewater TOTAL			
	Existing	<u>Change</u>	<u>Total</u>
Discharge to groundwater Discharge to outstanding resource water Discharge to surface water Discharge to municipal or regional wastewater			<u> </u>
facility TOTAL			

- **B.** Is the existing collection system at or near its capacity? <u>Yes</u> 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? <u>Yes</u> 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 <u>Daily Flow</u>	Project Flow	<u>Total</u>
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):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage			
Treatment			
Processing			
Combustion			
Disposal			
Diepeedi			<u> </u>

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  $\underline{X}$  No; if yes, specify which permit:
- C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to <u>either</u> 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:

		<u>Existing</u>	<u>Change</u>	lotal
	Number of parking spaces			
	Number of vehicle trips per day ITE Land Use Code(s):		<u> </u>	
В.	What is the estimated average daily traf	fic on roadways s	erving the site?	
	<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
	1			
	2			
	3.			

- C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:
- E. 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?
- F. 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:
- G. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? \_\_\_\_ Yes \_\_\_\_ No; if yes, generally describe:
- H. 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))? <u>X</u> Yes <u>No; if yes</u>, specify, in quantitative terms:

301 CMR 11.03 (6) (b) 3 Transportation - Expansion of an existing runway at an airport.

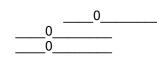
- B. Does the project require any state permits related to **roadways or other transportation facilities**? <u>Yes X</u> No; if yes, specify which permit:
- C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Energy Section**. If you answered "Yes" to <u>either</u> question A or 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:

South Meadow Road in Plymouth, MA is in the immediate vicinity of the Project site.

- B. Will the project involve any
  - 1. Alteration of bank or terrain (in linear feet)?
  - 2. Cutting of living public shade trees (number)?
  - 3. Elimination of stone wall (in linear feet)?



**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 does not result in any negative impacts associated with traffic, transit, or pedestrian/bicycle facilities, and therefore, is consistent with federal/state/local plans.

# 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 <u>both</u> questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to <u>either</u> 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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)			
Length of fuel line (in miles)			<u> </u>
Length of transmission lines (in miles)	<u> </u>		<u> </u>
Capacity of transmission lines (in kilovolts)		<u> </u>	

- 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 <u>both</u> questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to <u>either</u> 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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
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 <u>both</u> questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to <u>either</u> 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? <u>Yes</u> No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage		<u></u>	<u> </u>
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? <u>Yes</u> No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
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? <u>Yes X</u> No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? <u>Yes No</u>; 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 <u>all parts of both</u> questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to <u>any part of either</u> 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 <u>rmat@mass.gov</u>.

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 <u>user feedback survey</u> on the RMAT website or to provide feedback to <u>rmat@mass.gov</u>, 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 <u>RMAT Climate Resilience Design Guidelines</u>.

#### 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)? Yes <u>X</u> No

Note: Climate adaptation and resiliency strategies include actions that seek to reduce vulnerability to anticipated climate risks and improve resiliency for future climate conditions. Examples of climate adaptation and resiliency strategies include flood barriers, increased stormwater infiltration, living shorelines, elevated infrastructure, increased tree canopy, etc. Projects should address any planning priorities identified by the affected municipality through the Municipal Vulnerability Preparedness (MVP) program or other planning efforts, and should consider a flexible adaptive pathways approach, an adaptation best practice that encourages design strategies that adapt over time to respond to changing climate conditions. General guidance and best practices for designing for climate risk are described in the RMAT Climate Resilience Design Guidelines.

A. If no, explain why.

The proposed Project does not affect the number or type of aircraft operations, and thus does not result in any increases in GHG emissions compared to the No Action Alternative (baseline). The addition of pavement is not anticipated to result in any increases to impacts that would lessen the Airport's ability to withstand or remain resilient to future climate impacts. Further, the vast area of open/space and grassland surrounding the pavements act as a buffer to surrounding off-airport areas and reduces the potential for potential Heat Island Effects due to ample evapotranspiration available.

Other impacts (sea level rise/storm surge, extreme precipitation, urban or riverine flooding) are not anticipated to result in climate impacts to the Project site that would necessitate resiliency or adaptation measures.

- 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).
  N/A
- C. Is the project contributing to regional adaptation strategies? <u>X</u> Yes \_\_\_\_\_ No; If yes, describe. The Massachusetts State Hazard Mitigation and Climate Adaptation Plan (2018), notes that under the State's Sustainable development goals, MassDOT (project funding) supports climate resilience through investments that improve system reliability and modernize the Commonwealth's transportation infrastructure, including improving airport pavement conditions.

Also, the report notes that "high temperatures may also impact airplane operations. If the length of existing runways is not sufficient under higher temperature conditions, planes may not be able to take off when there is less lift available (MassDOT, 2017). High temperatures and dense air conditions could lead to increased runway length requirements for aircraft due to diminished performance in such conditions (resilient MA, 2018). Moreover, heat can soften the asphalt of airport runways, impairing airplane movement" (page 4-168).

The proposed Project is consistent with, and responds to, future climate scenarios by adding runway length to maintain safe operations.

- 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 Project addresses existing runway infrastructure at Plymouth Municipal Airport. It would not be feasible to relocate this Project.

- 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 <u>here</u>.

# **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.

#### The table below lists EJ populations within one mile of the Project site.

Block Group		County	Town	Criteria	Total Minority Population	Median Household Income
3	5442	Plymouth	Carver	Income	9.1%	\$44,000(52.1% of the MA median)

Block Group	Census Tract	County	Town	Criteria	Total Minority Population	Median Household Income
1	5302	Plymouth	Plymouth	Income	18.9%	\$49,223 (58.3% of the MA median)
2	5303	Plymouth	Plymouth	Income	14.7%	\$46,053 (54.6% of the MA median)
2	5305	Plymouth	Plymouth	Income	15.4%	\$54,693 (64.8% of the MA median)
5	5306	Plymouth	Plymouth	Minority	38.5%	\$138,929 (164.6% of the MA median)
1	5442	Plymouth	Carver	Income	8.7%	\$47,109(55.8% of the MA median)

#### The table below provides a breakdown of EJ Populations within 5 miles of the Project site.

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.

Block Group	Census Tract	County	Town	Language Isolation (%)
1	5302	Plymouth	Plymouth	6.5%
2	5305	Plymouth	Plymouth	11.4%
3	5442	Plymouth	Carver	7.6%

No census tracts within the 1-mile DGA contain language isolation communities. Within the 5mile buffer to the project, the other languages spoken identifies three census tracts with language isolation for Portuguese or Portuguese Creole.

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.

The Project is not required to provide advance notification under Part II.A of the MEPA EJ Public Involvement Requirements as the Project is not seeking expedited review under 301 CMR 11.06(8) or 11.06(13). However, the Project team has undertaken active public outreach and involvement prior to filing the ENF as outlined in Section III below.

### 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).

The Project is located within one mile of an EJ population in whole or in part. The Project is not anticipated to have significant impacts to EJ populations. Impacts anticipated will be minor and temporary primarily due to construction related activities. Impacts include:

- Increased vehicle emissions from construction vehicles
- Temporary impacts to air quality during construction
- Increased noise levels during construction (due to construction equipment).

All impacts will be reviewed through MEPA and applicable permitting programs and will be appropriately mitigated in accordance with applicable regulations.

The Project will have the following benefits:

- Improve safety and efficiency at Plymouth Municipal Airport
- Provide significant new construction and construction related job opportunities and economic enhancement by spending multiplier effects.
- 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:

The Proponent has planned and hosted three public meetings to inform the public of the Master Planning process and solicit comments. A fourth outreach meeting (pre-filing) was on March 29, 2023, specifically to address final outcomes of the Master Plan update and to provide EJ communities with project information. The details on each of the meetings are provided below:

- The first Public Meeting regarding the Plymouth Airport Technical Master Plan Update was held on January 13, 2022 at 7.00 PM. The meeting was held virtually. There were approximately 30 people in attendance.
- The second Public Meeting regarding the Plymouth Airport Technical Master Plan Update was held on April 27, 2022 at 7:00 PM in the Hangar Conference Room at Plymouth Municipal Airport. There were approximately 50 people in attendance.
- The third Public Meeting was held in person on July 21, 2022 at 7:00PM in the Hangar Conference Room at Plymouth Municipal Airport. There were approximately 20 people in attendance.
- A fourth Public Meeting was held in person at the Airport on March 29, 2023 at 7:00 PM. This meeting provided additional outreach specifically to inform EJ residents, organizations, and stakeholders. The meeting also served to update the public on the final master plan, and begin MEPA and NEPA environmental processes (e.g., pre-filing outreach).

The meetings were advertised through the Airport website and via the Airport's email list that included (100+) email addresses collected during the Plymouth Airport Master Plan process and prior projects. The EJ outreach list was expanded prior to the fourth meeting, and ENF submittal, to include contacts provided by the MEPA EJ Office, via the Plymouth area specific MEPA EJ Distribution List (see Attachment F).

The Proponent plans to continue efforts to engage with community members and groups to provide opportunities for the public to learn more about the project, ask questions, and share concerns. See response to III.C for additional information on the Plymouth Municipal Airport's Public Engagement Plan.

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.

Voluntary advance notification of the ENF Filing was provided to CBOs, tribes, and local EJ stakeholders. See Attachment F for a copy of the EJ notification (EJ Screening Form) that was provided for the list of organizations the notification was sent to.

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.

Prior to the fourth Public Meeting, a meeting notice with attached EJ Screening Form was shared with those on the expanded distribution list on March 16, 2023. The notice included meeting date, time, meeting link, and project email and website should anyone wish to reach out with questions or concerns before and after the meeting.

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

See Attachment F

[NOTE: Private individuals' full email addresses are not fully disclosed in this publically accessible document due to privacy/confidentiality concerns.]

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 Proponent will continue to notify CBOs, stakeholders, and interested parties from all communities as the Project progresses. Opportunities to provide for comments and receive responses will be incorporated into the project's MEPA filings and enhanced by utilizing airport email distribution lists and/or EJ outreach email lists to notify people of upcoming filings, meetings, or other opportunities for participation.

The Project team has also established a project specific email address for communication from interested parties – <u>PlymouthMAAirportRW6EA@dubois-king.com</u></u>. Additionally, the Airport maintains a dedicated webpage on its website for providing meeting notices, project information, and draft and filing reports to enhance public access <u>https://pymairport.com/</u>.

# **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 Old Colony Memorial (Date) April 20th, 2023

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

Signatures:

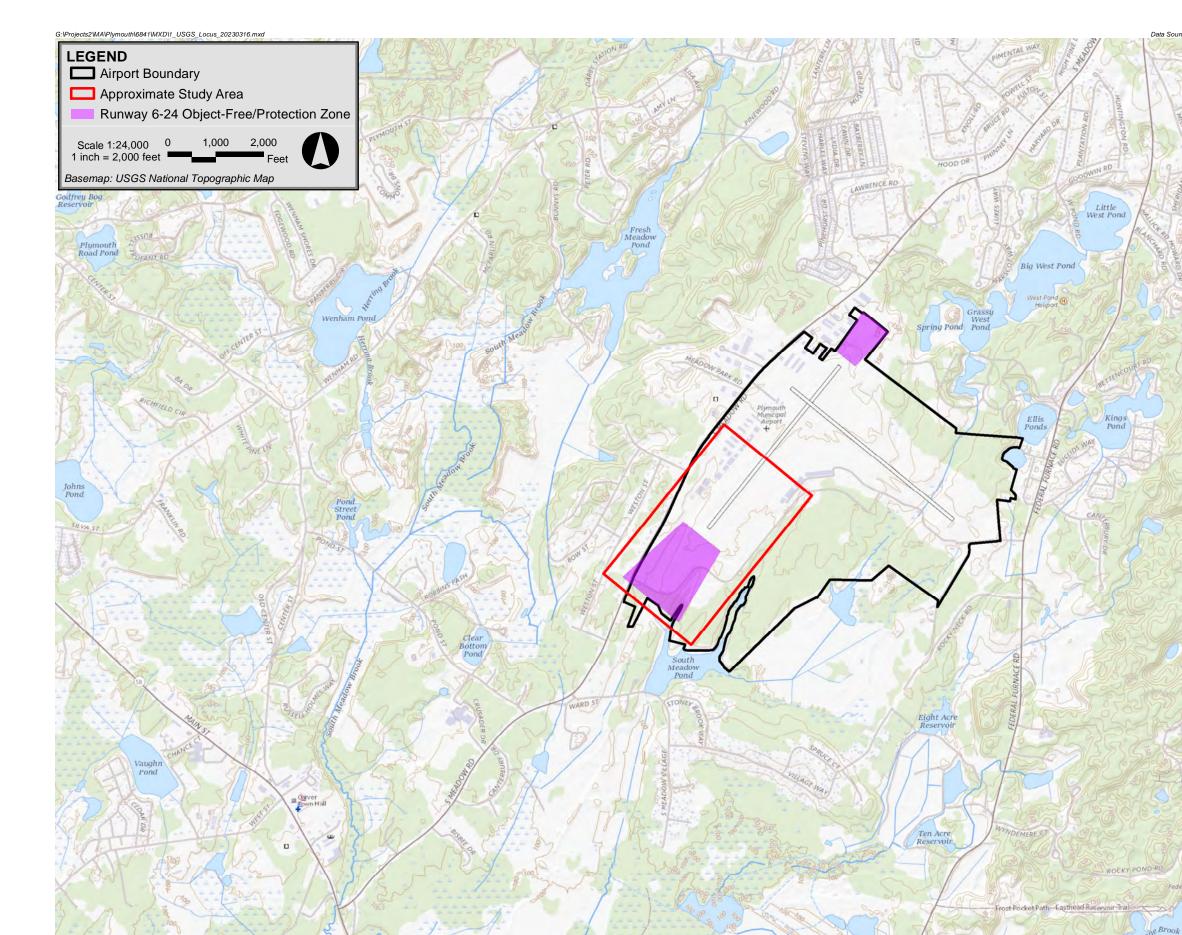
4/14/23 Matter Parelelle	4/14/23 Auto Paulin		
Date Signatule of Responsible Officer or Proponent	Date Signature of person preparing ENF (if different from above)		
or r roponone			
Matt Cardillo, Airport Manager	Nate Rawding, Senior Scientist		
Name (print or type)	Name (print or type)		
Plymouth Municipal Airport	Epsilon Associates		
Firm/Agency	Firm/Agency		
246 South Meadow Road	3 Mill & Main Place, Suite 250		
Street	Street		
Plymouth, MA 02360	Maynard, MA 01754		
Municipality/State/Zip	Municipality/State/Zip		
(508) 746-2020	(978) 897-7100		
Phone	Phone		

# **ENF** Attachments

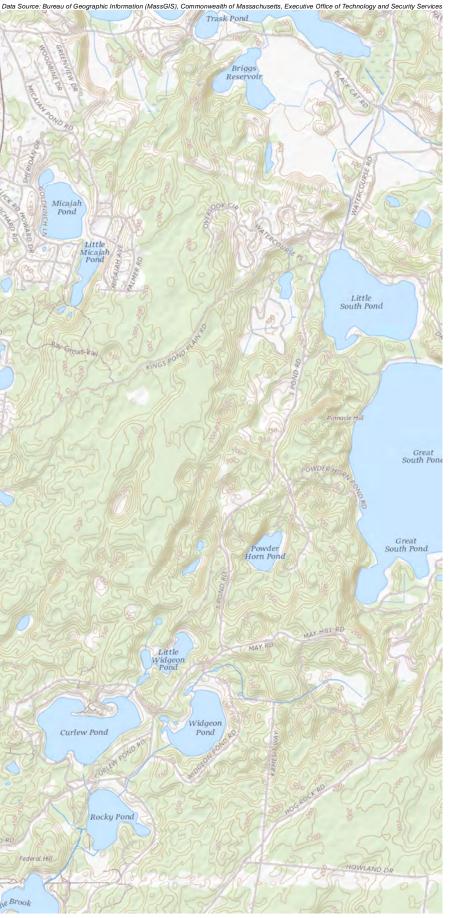
Attachment A	Figures
Attachment B	Circulation List
Attachment C	List of State, Federal, and Local Permits
Attachment D	Resilient MA Action Team (RMAT) Report
Attachment E	EEA Environmental Justice Mapping
Attachment F	Environmental Justice Distribution List and Notification

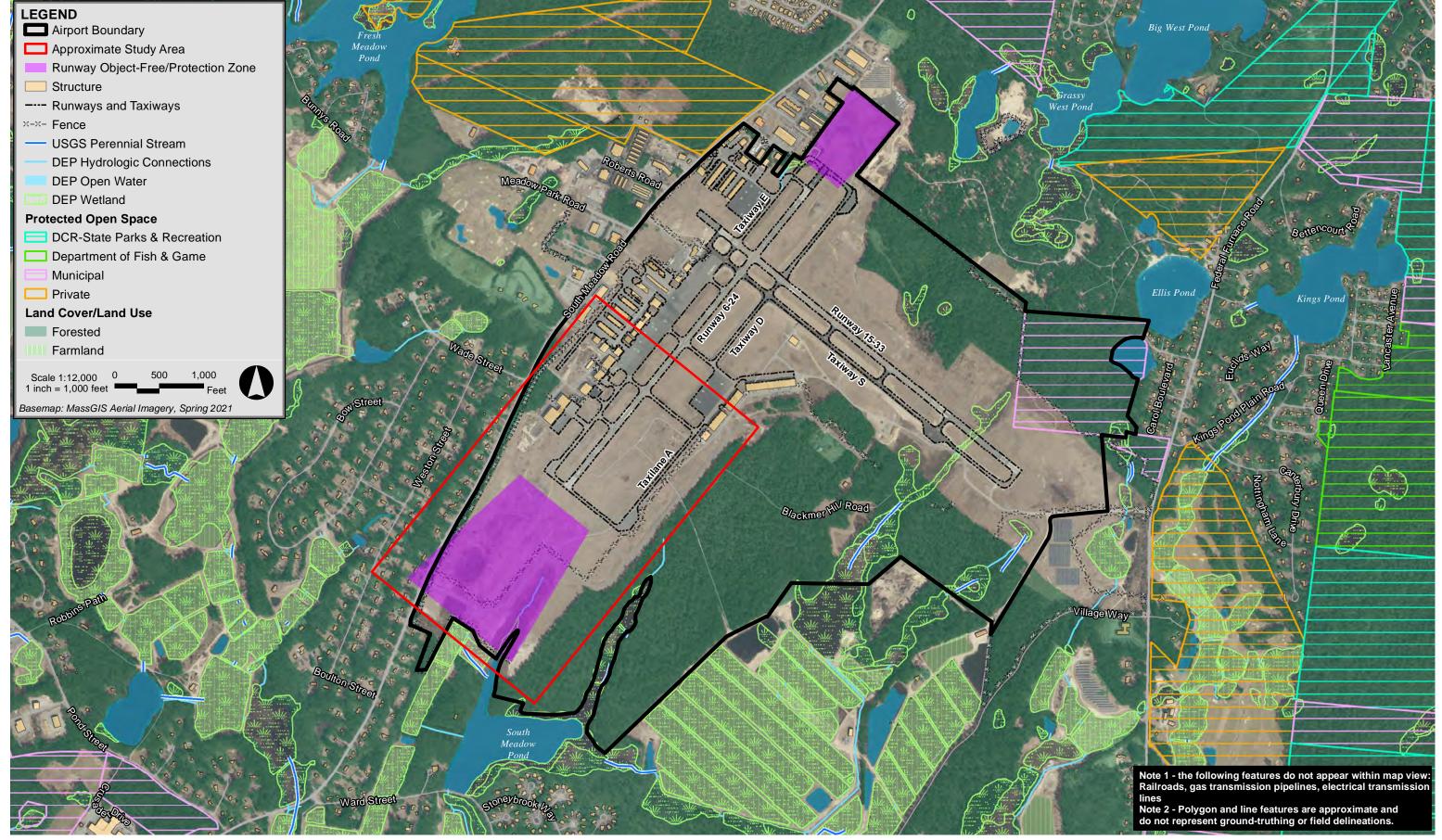
# Attachment A

Figures











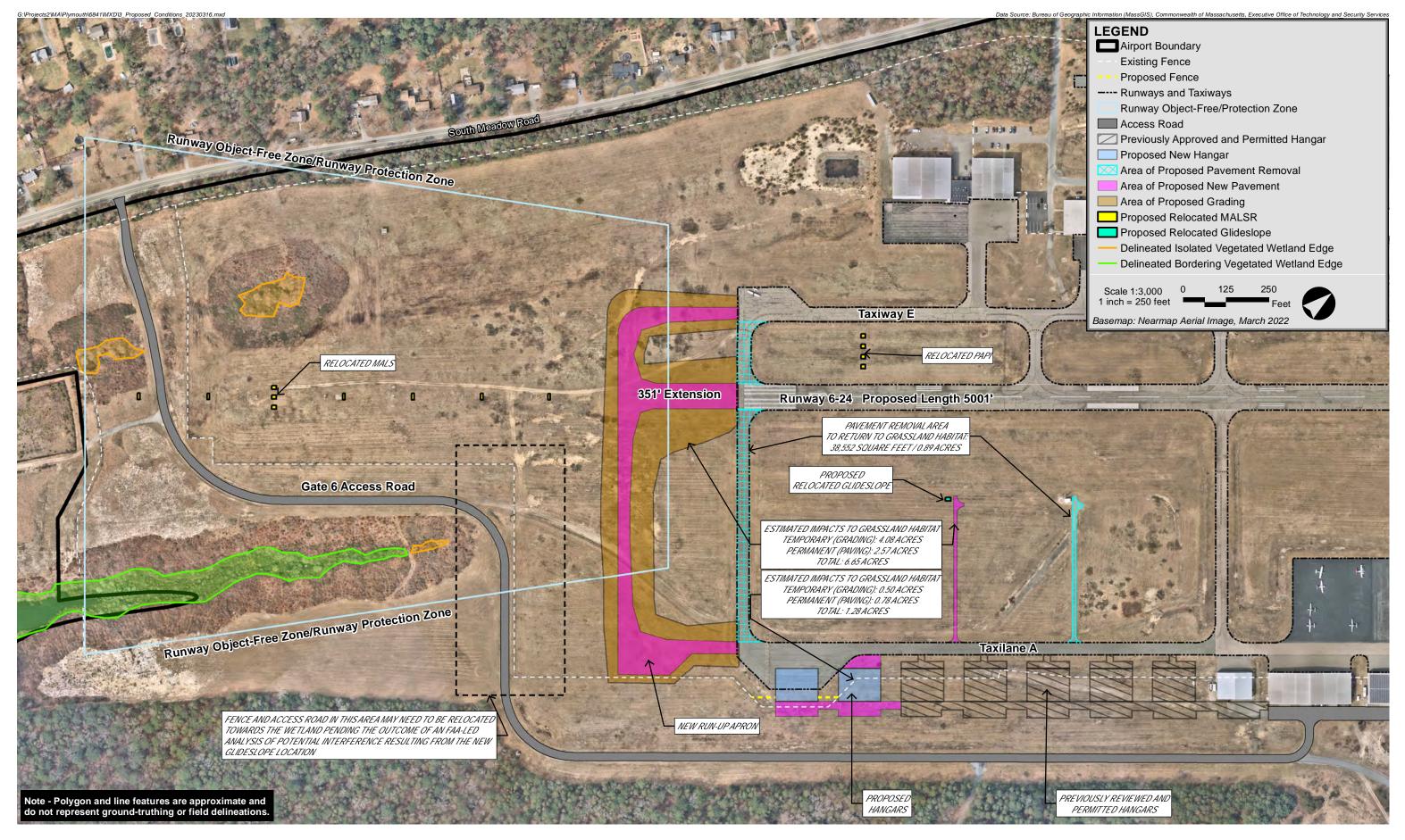
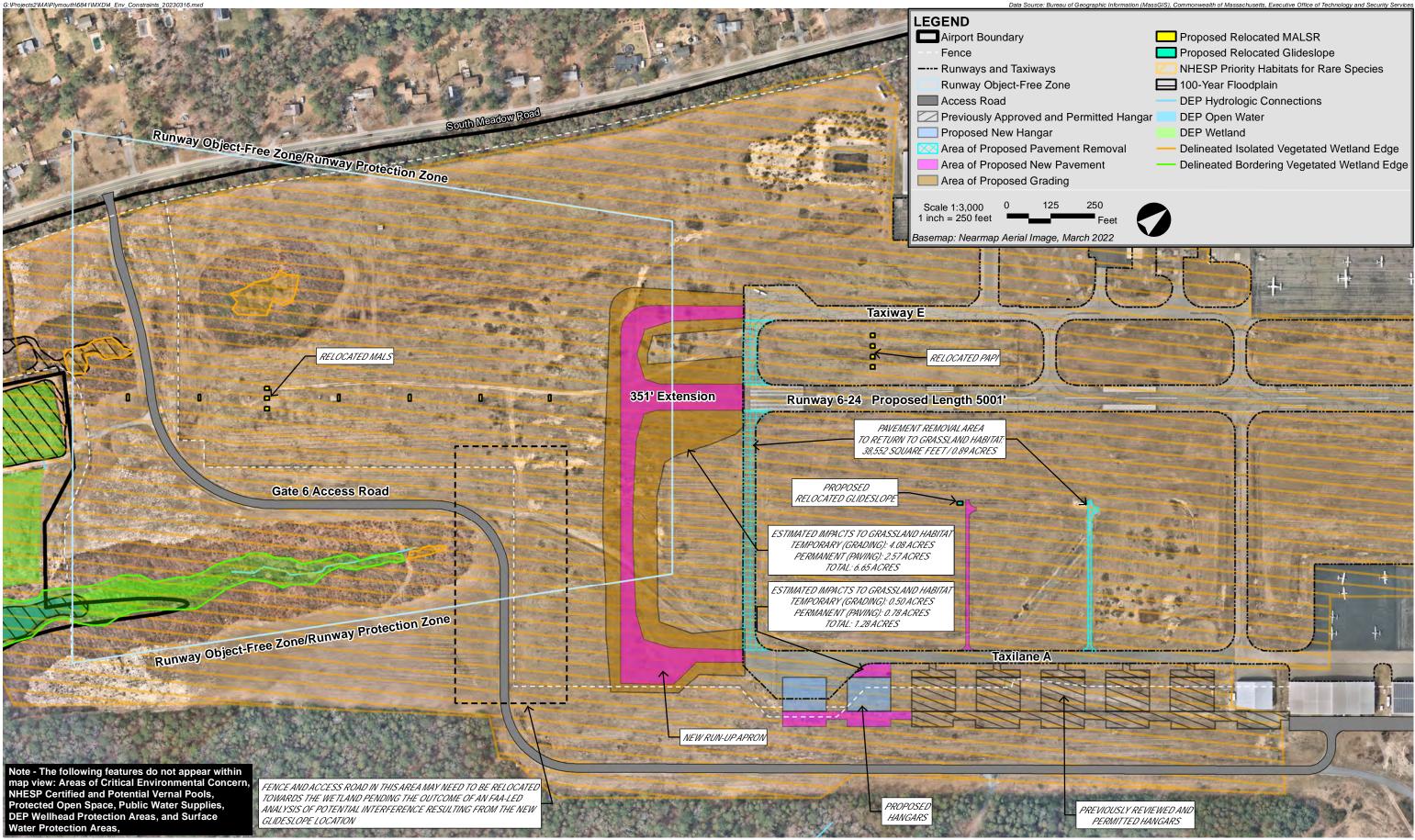




Figure 3
Proposed Conditions





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

# Attachment B

**Circulation List** 

# ATTACHMENT B: CIRCULATION LIST

# **Federal Agencies**

Federal Aviation Administration New England Region, Airports Division 1200 District Ave Burlington, MA 01803-5078 cheryl.j.quaine@faa.gov

# **State and Regional Agencies**

Rebecca Tepper, Secretary Executive Office of Energy and Environmental Affairs Attn: MEPA Office 100 Cambridge St., Suite 900 Boston, MA 02114 MEPA@mass.gov

Department of Environmental Protection Commissioner's Office One Winter Street Boston, MA 02108 helena.boccadoro@mass.gov

Department of Environmental Protection MassDEP Southeast Regional Office 20 Riverside Drive Lakeville, MA 02347 george.zoto@mass.gov jonathan.hobill@mass.gov

Massachusetts Department of Transportation Aeronautics Division Logan Office Center 1 Harborside Drive, Suite 205N East Boston MA 02128-2909 james.b.matz@state.ma.us valerie.a.johnson@state.ma.us Massachusetts Department of Transportation Public/Private Development Unit 10 Park Plaza, Suite #4150 Boston, MA 02116 MassDOTPPDU@dot.state.ma.us

Massachusetts Department of Transportation, District #5 Attn: MEPA Coordinator 1000 County Street Taunton, MA 02780 Cindy.McConarty@dot.state.ma

The Massachusetts Historical Commission The MA Archives Building 220 Morrissey Boulevard Boston, MA 02125

MEPA Office Attn: EEA EJ Director 100 Cambridge Street, Suite 900 Boston, MA 02144 MEPA-EJ@mass.gov

Department of Energy Resources Attn: MEPA Coordinator 100 Cambridge Street, 10th Floor Boston, MA 02114 paul.ormond@mass.gov Natural Heritage and Endangered Species Program Division of Fisheries & Wildlife 1 Rabbit Hill Road Westborough, MA 01581 melany.cheeseman@mass.gov emily.holt@mass.gov

Coastal Zone Management Attn: Project Review Coordinator 251 Causeway Street, Suite 800 Boston, MA 02114 robert.boeri@mass.gov patrice.bordonaro@mass.gov

DMF – South Shore Attn: Environmental Reviewer 836 South Rodney French Blvd New Bedford, MA, 02744 DMF.EnvReview-South@mass.gov

Massachusetts Water Resource Authority Attn: MEPA Coordinator 100 First Avenue Charlestown Navy Yard Boston, MA 02129 katherine.ronan@mwra.com

Old Colony Planning Council (OCPC) 70 School Street Brockton, MA 02301 mwaldron@ocpcrpa.org kmowatt@ocpcrpa.org ckilmer@ocpcrpa.org

### **Local Agencies and Representatives**

Plymouth Town manger Derek Brindisi 26 Court Street Plymouth, MA 02360 dbrindisi@plymouth-ma.gov Plymouth Dept. of Planning & Development Lee Hartmann, AICP, Director of Planning and Development 26 Court Street Plymouth, MA 02360 Ihartmann@plymouth-ma.gov

Plymouth Conservation Commission Richard Vacca, Conservation Planner 26 Court Street Plymouth, MA 02360 rvacca@plymouth-ma.gov

Plymouth Board of Health Karen Keane, Director 26 Court Street Plymouth, MA 02360 kkeane@plymouth-ma.gov

Carver Town Administrator Robert Fennessy, Town Administrator 108 Main St. Carver, MA 02330 Robert.Fennessy@carverma.gov

Carver Planning Board Thomas Bott, Town Planner 108 Main St. Carver, MA 02330 Thomas.Bott@carverma.gov

Carver Conservation Commission Gary Flaherty, Conservation Agent 108 Main St. Carver, MA 02330 Gary.Flaherty@carverma.gov

Carver Board of Health Kevin Forgue, Board of Health, Health Agent Jill Martins, BOH clerk 108 Main St. Carver, MA 02330 Kevin.Forgue@carverma.gov Jill.martins@carverma.gov

# **Local Libraries**

Main Library 132 South Street Plymouth, MA 02360 plref@ocln.org

Manomet Branch 12 Strand Avenue Plymouth, MA 02360 plmlib@ocln.org

Carver Public Library 2 Meadowbrook Way Carver, MA 02330 cjulius@carverpl.org

Attachment C

List of State, Federal, and Local Permits

# **ATTACHMENT C: LIST OF PERMITS**

Agency Name	Permit or Action*
Federal	
United States Environmental Protection Agency	National Pollutant Discharge Elimination System
	Construction General Permit (NPDES CGP)
State	
MassWildlife's Natural Heritage & Endangered	Amendment to Conservation and Management
Species Program (NHESP)	Permit
Town of Carver	
Carver Conservation Commission	Order of Conditions

Attachment D

Resilient MA Action Team (RMAT) Report

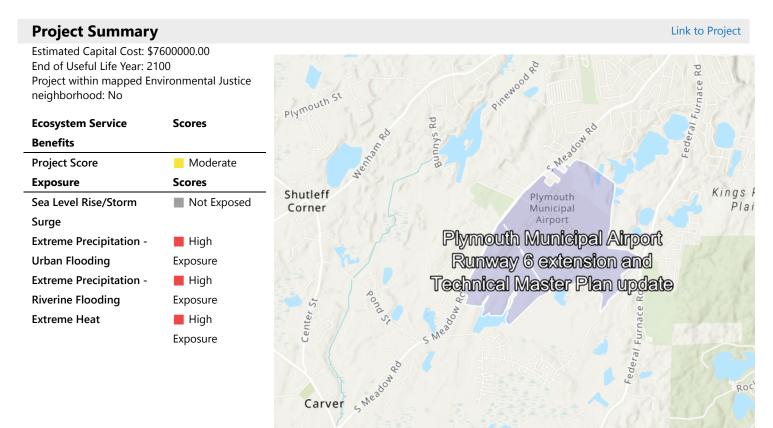
# **Climate Resilience Design Standards Tool Project Report**

#### Plymouth Municipal Airport Runway 6 extension and Technical Master Plan update Date Created: 1/26/2023 11:35:03 AM Created By: nrawding@eps

Created By: nrawding@epsilonassociates.com

Date Report Generated: 4/3/2023 10:48:39 AM Tool Version: Version 1.2

Project Contact Information: Matthew Cardillo (mcardillo@plymouth-ma.gov)



# **Asset Preliminary Climate Risk Rating**

Number of Assets: 2

Summary				
Asset Risk	Sea Level Rise/Storm Surge	Extreme Precipitation - Urban Flooding	Extreme Precipitation - Riverine Flooding	Extreme Heat
Runway 6 extension	Low Risk	High Risk	High Risk	Moderate Risk
Aircraft Hangars	Low Risk	High Risk	High Risk	High Risk

### **Climate Resilience Design Standards Summary**

	,				
	Target Planning Horizon	Intermediate Planning Horizon	Percentile	e Return Period	Tier
Sea Level Rise/Storm Surge					
Runway 6 extension					
Aircraft Hangars					
Extreme Precipitation					
Runway 6 extension	2050			10-yr (10%)	Tier 2
Aircraft Hangars	2070			25-yr (4%)	Tier 2
Extreme Heat					
Runway 6 extension	2050		50th		Tier 2
Aircraft Hangars	2070		50th		Tier 2

# **Scoring Rationale - Project Exposure Score**

The purpose of the Exposure Score output is to provide a preliminary assessment of whether the overall project site and subsequent assets are exposed to impacts of natural hazard events and/or future impacts of climate change. For each climate parameter, the Tool will calculate one of the following exposure ratings: Not Exposed, Low Exposure, Moderate Exposure, or High Exposure. The rationale behind the exposure rating is provided below.

#### 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 200ft of a waterbody and less than 30ft above the waterbody
- No historic riverine flooding at project site
- Project is not likely susceptible to riverine erosion

#### **Extreme Heat**

This project received a "High Exposure" because of the following:

- Increased impervious area
- Existing impervious area of the project site is between 10% and 50%
- 10 to 30 day increase in days over 90 deg. F within project's useful life
- Located within 100 ft of existing water body
- No tree removal

### Scoring Rationale - Asset Preliminary Climate Risk Rating

A Preliminary Climate Risk Rating is determined for each infrastructure and building asset by considering the overall project Exposure Score and responses to Step 4 questions provided by the user in the Tool. Natural Resource assets do not receive a risk rating. The following factors are what influenced the risk ratings for each asset.

#### Asset - Runway 6 extension

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 cause a loss of confidence in government agency
- Cost to replace is less than \$10 million
- There are no hazardous materials in the asset

### **Asset - Aircraft Hangars**

Primary asset criticality factors influencing risk ratings for this asset:

- Asset can be inaccessible/inoperable more than a week after natural hazard event without consequences
- · Loss/inoperability of the asset would have impacts limited to the site only
- Inoperability of the asset would not be expected to result in injuries
- Inoperability may moderately impact other facilities, assets, or buildings, but is not expected to affect their ability to operate
- Spills and/or releases of hazardous materials would be relatively easy to clean up

### Project Climate Resilience Design Standards Output

Climate Resilience Design Standards and Guidance are recommended for each asset and climate parameter. The Design Standards for each climate parameter include the following: recommended planning horizon (target and/or intermediate), recommended return period (Sea Level Rise/Storm Surge and Precipitation) or percentile (Heat), and a list of applicable design criteria that are likely to be affected by climate change. Some design criteria have numerical values associated with the recommended return period and planning horizon, while others have tiered methodologies with step-by-step instructions on how to estimate design values given the other recommended design standards.

Asset: Runway 6 extension	Infrastructure
Sea Level Rise/Storm Surge	Low Risk
Applicable Design Criteria	
Projected Tidal Datums: NOT APPLICABLE	
Projected Water Surface Elevation: NOT APPLICABLE	
Projected Wave Action Water Elevation: NOT APPLICABLE	
Projected Wave Heights: NOT APPLICABLE	
Projected Duration of Flooding: NOT APPLICABLE	
Projected Design Flood Velocity: NOT APPLICABLE	
Projected Scour & Erosion: NOT APPLICABLE	
Extreme Precipitation	High Risk

Target Planning Horizon: 2050 Return Period: 10-yr (10%)

**LIMITATIONS:** The recommended Standards for Total Precipitation Depth & Peak Intensity are determined by the user drawn polygon and relationships as defined in the Supporting Documents. The projected Total Precipitation Depth values provided through the Tool are based on the climate projections developed by Cornell University as part of EEA's Massachusetts Climate and Hydrologic Risk Project, GIS-based data as of 10/15/21. For additional information on the methodology of these precipitation outputs, see Supporting Documents.

While Total Precipitation Depth & Peak Intensity for 24-hour Design Storms are useful to inform planning and design, it is recommended to also consider additional longer- and shorter-duration precipitation events and intensities in accordance with best practices. Longer-duration, lower-intensity storms allow time for infiltration and reduce the load on infrastructure over the duration of the storm. Shorter-duration, higher-intensity storms often have higher runoff volumes because the water does not have enough time to infiltrate infrastructure systems (e.g., catch basins) and may overflow or back up during such storms, resulting in flooding. 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. While the Tool does not provide recommended design standards for these scenarios, users should still consider both short- and long-duration precipitation events and how they may impact the asset.

The projected values, standards, and guidance provided within this Tool may be used to inform plans and designs, but they do not provide guarantees for future conditions or resilience. The projected values are not to be considered final or appropriate for construction documents without supporting engineering analyses. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence

### Applicable Design Criteria

#### Tiered Methodology: Tier 2

#### Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms: APPLICABLE

Asset Name	Recommended	Recommended Return Period	Projected 24-hr Total	Step-by-Step Methodology
	Planning Horizon	(Design Storm)	Precipitation Depth (inches)	for Peak Intensity
Runway 6 extension	2050	10-Year (10%)	6.1	Downloadable Methodology PDF

**Projected Riverine Peak Discharge & Peak Flood Elevation:** APPLICABLE Methodology to Estimate Projected Values : Tier 2 Target Planning Horizon: 2050 Percentile: 50th Percentile

#### Applicable Design Criteria

Tiered Methodology: Tier 2

### Projected Annual/Summer/Winter Average Temperatures: APPLICABLE

<u>Methodology to Estimate Projected Values</u> : Tier 2

Projected Heat Index: APPLICABLE Methodology to Estimate Projected Values : Tier 2

Projected Growing Degree Days: NOT APPLICABLE

**Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F:** APPLICABLE <u>Methodology to Estimate Projected Values</u> : Tier 2

**Projected Number of Heat Waves Per Year & Average Heat Wave Duration:** APPLICABLE <u>Methodology to Estimate Projected Values</u> : Tier 2

Projected Cooling Degree Days & Heating Degree Days (base = 65°F): NOT APPLICABLE

Asset: Aircraft Hangars	craft Hangars
-------------------------	---------------

#### Sea Level Rise/Storm Surge

**Applicable Design Criteria** 

Projected Tidal Datums: NOT APPLICABLE

Projected Water Surface Elevation: NOT APPLICABLE

Projected Wave Action Water Elevation: NOT APPLICABLE

Projected Wave Heights: NOT APPLICABLE

Projected Duration of Flooding: NOT APPLICABLE

Projected Design Flood Velocity: NOT APPLICABLE

Projected Scour & Erosion: NOT APPLICABLE

#### **Extreme Precipitation**

Target Planning Horizon: 2070 Return Period: 25-yr (4%)

**LIMITATIONS:** The recommended Standards for Total Precipitation Depth & Peak Intensity are determined by the user drawn polygon and relationships as defined in the Supporting Documents. The projected Total Precipitation Depth values provided through the Tool are based on the climate projections developed by Cornell University as part of EEA's Massachusetts Climate and Hydrologic Risk Project, GIS-based data as of 10/15/21. For additional information on the methodology of these precipitation outputs, see Supporting Documents.

While Total Precipitation Depth & Peak Intensity for 24-hour Design Storms are useful to inform planning and design, it is recommended to also consider additional longer- and shorter-duration precipitation events and intensities in accordance with best practices. Longer-duration, lower-intensity storms allow time for infiltration and reduce the load on infrastructure over the duration of the storm. Shorter-duration, higher-intensity storms often have higher runoff volumes because the water does not have enough time to infiltrate infrastructure systems (e.g., catch basins) and may overflow or back up during such storms, resulting in flooding. 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. While the Tool does not provide recommended design standards for these scenarios, users should still consider both short- and long-duration precipitation events and how they may impact the asset.

The projected values, standards, and guidance provided within this Tool may be used to inform plans and designs, but they do not provide guarantees for future conditions or resilience. The projected values are not to be considered final or appropriate for construction documents without supporting engineering analyses. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence

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Building/Facility

Low Risk

High Risk

#### **Applicable Design Criteria**

#### Tiered Methodology: Tier 2

#### Projected Total Precipitation Depth & Peak Intensity for 24-hr Design Storms: APPLICABLE

	• •	-	5	
Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Aircraft Hangars	2070	25-Year (4%)	7.9	Downloadable Methodology PDF

### Projected Riverine Peak Discharge & Peak Flood Elevation: APPLICABLE

Methodology to Estimate Projected Values : Tier 2

#### Extreme Heat

Target Planning Horizon: 2070 Percentile: 50th Percentile

#### Applicable Design Criteria

Tiered Methodology: Tier 2

**Projected Annual/Summer/Winter Average Temperatures:** APPLICABLE <u>Methodology to Estimate Projected Values</u> : Tier 2

Projected Heat Index: APPLICABLE Methodology to Estimate Projected Values : Tier 2

### Projected Growing Degree Days: NOT APPLICABLE

**Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F:** APPLICABLE <u>Methodology to Estimate Projected Values</u> : Tier 2

**Projected Number of Heat Waves Per Year & Average Heat Wave Duration:** APPLICABLE <u>Methodology to Estimate Projected Values</u> : Tier 2

# Projected Cooling Degree Days & Heating Degree Days (base = 65°F): APPLICABLE

Methodology to Estimate Projected Values : Tier 2

High Risk

# **Project Inputs**

### **Core Project Information**

Name:

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)? Location of Project: Estimated Capital Cost: Who is the Submitting Entity?

Is this project identified as a priority project in the Municipal Vulnerability Preparedness (MVP) plan or the local or regional Hazard Mitigation Plan (HMP)? Is this project being submitted as part of a state grant application? Which grant program? What stage are you in your project lifecycle? Is climate resiliency a core objective of this project? Is this project being submitted as part of the state capital planning process?

Is this project being submitted as part of a regulatory review process or permitting? Brief Project Description: Project Submission Comments:

### Project Ecosystem Service Benefits

#### Factors Influencing Output

- ✓ Project reduces storm damage
- ✓ Project protects public water supply
- ✓ Project recharges groundwater
- $\checkmark$  Project filters stormwater using green infrastructure
- ✓ Project improves water quality
- $\checkmark$  Project protects fisheries, wildlife, and plant habitat
- ✓ Project prevents pollution

#### Factors to Improve Output

✓ Incorporate vegetation that provides pollinator habitat

### Is the primary purpose of this project ecological restoration?

No

### Project Benefits

Provides flood protection through nature-based solutions	No
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	No
Provides oxygen production	No
Improves air quality	No
Prevents pollution	Yes
Remediates existing sources of pollution	No
Protects fisheries, wildlife, and plant habitat	Yes
Protects land containing shellfish	No
Provides pollinator habitat	Maybe
Provides recreation	No
Provides cultural resources/education	No
Project Climate Exposure	
Is the primary purpose of this project ecological restoration?	No

is the printing purpose of this project ecological restoration.	110
Does the project site have a history of coastal flooding?	No
Does the project site have a history of flooding during extreme precipitation events	No
(unrelated to water/sewer damages)?	
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?	No

#### Project Assets

Asset: Runway 6 extension

Plymouth Municipal Airport Runway 6 extension and Technical Master Plan update 2100

Carver, Plymouth \$7,600,000 City/Town Plymouth Matthew Cardillo (mcardillo@plymouth-ma.gov) No

Permitting Yes No Yes

MEPA

Asset Type: Transportation Asset Sub-Type: Other Transportation Construction Type: New Construction Construction Year: 2025 Useful Life: 20

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 not be expected to result in injuries

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?

Minor - Inoperability will not likely affect other facilities, assets, or buildings

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 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: Aircraft Hangars Asset Type: Typically Unoccupied Asset Sub-Type: Other Construction Type: New Construction Construction Year: 2025

Useful Life: 75

Identify the length of time the asset can be inaccessible/inoperable without significant consequences.

Building may be inaccessible/inoperable more than a week after natural hazard event without consequences

**Identify the geographic area directly affected by permanent loss or significant inoperability of the building/facility.** Impacts limited to site only

Identify the population directly served that would be affected by the permanent loss of use or inoperability of the building/facility. Less than 100 people

Identify if the building/facility provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.

The building/facility does not provide services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.

If the building/facility 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 building/facility would not be expected to result in injuries

If there are hazardous materials in your building/facility, what are the extent of impacts related to spills/releases of these materials? Spills and/or releases of hazardous materials would be relatively easy to clean up

If the building/facility 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 is not expected to affect their ability to operate

If this building/facility was damaged beyond repair, how much would it approximately cost to replace?

### Less than \$10 million

Is this a recreational facility which can be vacated during a natural hazard event?  $\ensuremath{\mathsf{No}}$ 

If the building/facility became inoperable for longer than acceptable in Question 1, what are the public and/or social services impacts?

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Many alternative programs and/or services are available to support the community

If the building/facility 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 building/facility became inoperable for longer than acceptable in Question 1, what are the impacts to government services (i.e. the building is not able to serve or operate its intended users or function)?

Loss of building is not expected to reduce the ability to maintain government services.

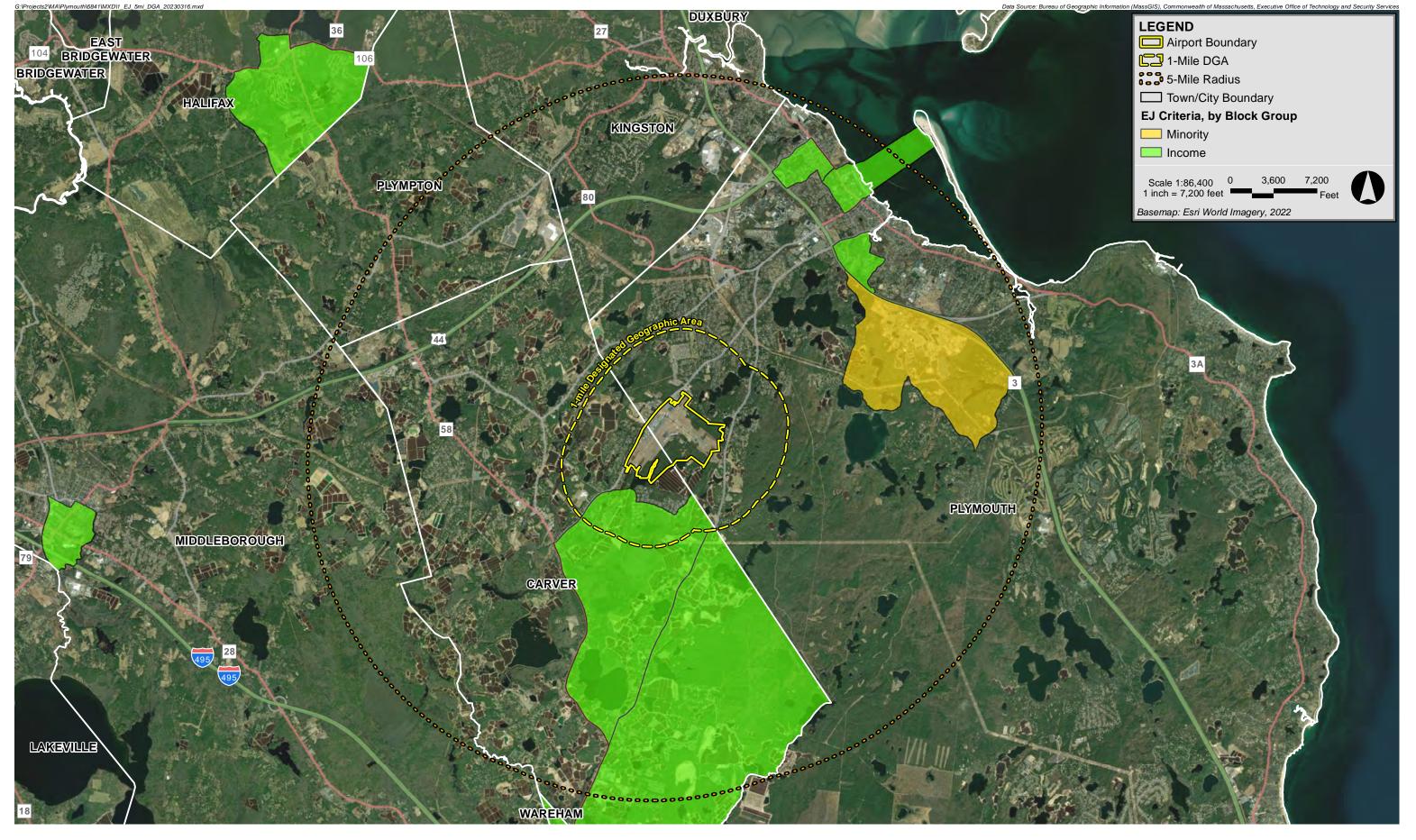
If the building/facility became inoperable for longer than acceptable in Question 1, what are the impacts to loss of confidence in government (i.e. the building is not able to serve or operate its intended users or function)? Reduced morale and public support

### **Report Comments**

N/A

Attachment E

EEA Environmental Justice Mapping





Attachment F

Public Outreach and Environmental Justice Materials

# **ATTACHMENT F CONTENTS:**

- 1. Public Outreach Plan
- Email Distribution list for Statewide Environmental Justice Community Based
   Organizations and Indigenous Organizations
- 3. EJ Meeting Information Flyer and Email Invitation
- 4. Environmental Justice Screening Form
- 5. Pre-Filing EJ Meeting Presentation



# DRAFT PUBLIC PARTICIPATION PLAN Plymouth Municipal Airport Plymouth, MA Runway 6 Extension Project

This document and engagement strategies build upon extensive public and stakeholder outreach efforts that were conducted as part of the Airport's Technical Master Plan Update (TMPU) development that included three public presentations over the course of a year (2021-2022). These efforts included pointed approaches to include neighboring Environmental Justice (EJ) community members, generally interested parties, and potentially affected parties with interests in Airport improvements and those with concerns over various aspects of the Airport operations and potential environmental, economic, and other impacts.

- I. Objectives of the Public Participation Plan:
  - 1. Ensure that a sound process is in place to familiarize the general public, local private groups and environmental justice communities, and government agencies at local and state levels with the proposed Plymouth Runway 6 extension project. It is expected that the successful implementation of the Public Participation Plan will promote and foster an atmosphere of cooperation that increases the successful completion of the project.
  - Provide a forum for the reception and consideration of public input regarding the environmental assessments being conducted under the Massachusetts Environmental Policy Act (MEPA) and the National Environmental Policy Act (NEPA). The desired input includes not only opinions but also other data that is not formally collected as part of the project initiation.
  - 3. Clarify or describe the potential effects of the alternatives and preferred project.
  - 4. Collect pre-existing resource data regarding the Airport, including the recent Technical Master Plan Update (Technical MPU) and results of public outreach, including multiple public meetings held over the course of a year during that process.
  - 5. Receive written comments and consider them in the decision-making and environmental evaluation processes.
- II. Stakeholders and Mailing List:
  - 1. The stakeholders and distribution/mailing lists are categorized into three groups as described below. The intent of categorizing the stakeholders is to promote and facilitate public participation by a range of interest groups and allow them to efficiently and effectively participate and provide input on the Runway 6 extension environmental reviews.

<u>Group 1</u> – Project Sponsor, regulatory agencies, local/regional public interest groups, federal, state, and local governments, and elected officials that include the following:



- Town of Plymouth
- Town/ Airport Officials
- Police and Fire Departments
- Planning and Zoning Commissions
- Plymouth Airport Advisory Group
- Other groups as recommended by the Town
- MEPA Statewide Environmental Justice Community-Based Organizations
- Indigenous Organizations
- Massachusetts Department of Transportation
- Federal Aviation Administration: New England Region

<u>Group 2</u> – Airport abutting residents, identified environmental justice (EJ) community(ies) residents, abutting businesses, airport businesses, airport lessees, abutting commercial properties, airport employees.

<u>Group 3</u> – Residents, businesses, commercial properties and landowners within the Runway Protection Zones and affected properties within the area defined by FAA Order 5100.38D.

Mailing lists for Groups 1 and 2 are included in Appendix 1 of this Public Participation Plan (and as an attached spreadsheet). Groups 1 and 2 will generally be notified and contacted via email. Group 3 will be notified by public notices published in the local and regional newspapers and on the Town of Plymouth website. The public notices for Group 3 will be published prior to any meetings in accordance with the Town of Plymouth's public notification policy or process, along with NEPA and MEPA requirements for notifications.

- III. Techniques to Facilitate and Promote Participation:
  - 1. Plymouth Airport officials will meet with the Group 2 and 3 Stakeholders at a minimum of two specific points in the process:
    - a) Prior to the filing of the MEPA Environmental Notification Form (ENF) to introduce the project and invite comments and input on the proposed project and environmental considerations;
    - b) Following the Draft Environmental Assessment (NEPA EA)/Environmental Impact Report (MEPA EIR) to allow the public adequate review and comment opportunities on the environmental assessment prior to finalizing the EA/EIR.
  - 2. Send out mailings to all Stakeholders containing information packets/sheets concerning the process to develop the EA/EIR and to announce meetings.
  - 3. Publish notification on the Town website informing Group 1, 2 & 3 Stakeholders of the meeting schedule.



- 4. Provide status update of the Draft EA/EIR and Final EA/EIR and publish on the Airport website.
- 5. Collect e-mail address lists during Stakeholder/public meetings to allow for electronic notifications and updates to additional interested parties.
- IV. Schedule of Public Participation Support activities and Responsible Party:
  - 1. On-going Various Planning Meetings and Teleconferences between the Town, planning team, and MASSDOT Aeronautics Bureau and FAA
    - Responsible D&K Planning Team and Airport.
  - 2. Publish Meeting Schedule Minimum 10 calendar days prior to meeting dates.
    - Responsible D&K Planning Team and Airport.
  - 3. Stakeholder Meeting #1 Wednesday, March 29 Hold meeting with all stakeholders prior to filing the MEPA Environmental Notification Form (ENF) with a focus on ensuring that EJ communities within the 1-mile Designated Geographic Area (per MEPA 11.02 and 11.05[4]) have ample opportunity to learn about and provide comments on the project. This meeting will inform the Stakeholders of the overall process in developing the EA/EIR and provide information concerning the objectives and purpose of the project and the MEPA and NEPA environmental assessment process. This meeting will also be used to seek input on alternatives, concerns, and opportunities.
    - Responsible D&K Planning Team and Airport.
  - 4. Stakeholder Meeting #2 [Date TBD] Hold a meeting with all Stakeholders (Groups 1, 2, and 3) regarding the Draft EA/EIR. The document will be reviewed and explained. The environmental impacts will be described and the analysis and consequences explained and detailed. Comments will be invited to inform the subsequent updates and production of the Final EA/EIR.
    - Responsible D&K Planning Team and Airport.

Public Participation Plan Approved:

Matt Cardillo Plymouth Municipal Airport Manager Date



Attachment A: Contact Information- Plymouth Municipal Airport Technical Master Plan Update.

Group 1				
Project Sponsor, Regulatory agencies, local public interest groups, federal, state and local				
governments and	governments and elected officials			
Representing	Name	Title	Phone/Email	



Group 2 Airport abutting Residents, abutting businesses, airport businesses, airport lessees,					
abutting commercial properties.					
Name	Contact Info	Affiliation	Location		

[PLEASE NOTE: In observation of private individual confidentiality, the Airport will not release private emails as part of this Public Participation Plan in an effort to avoid distribution beyond our control.]



Group 3					
Residents, businesses, commercial properties, and landowners within the Runway Protection Zones and affected properties with the area defined by FAA Order 5100.38D.					
Name	Contact Info	Affiliation	Location		

[PLEASE NOTE: In observation of private individual confidentiality, the Airport will not release private emails as part of this Public Participation Plan in an effort to avoid distribution beyond our control.]

Statewide Environmental Justice Co	ommunity Based Organizations	

First Name	Last Name	Title	Phone	Email	Affiliation
Julia	Blatt	Executive Director	(617) 714-4272	danielledolan@massriversalliance.org juliablatt@massriversalliance.org	Mass Rivers Alliance
Elvis	Mendez	Associate Director	508-505-6748	elvis@n2nma.org	Neighbor to Neighbor
Ben	Hellerstein	MA State Director	617-747-4368	ben@environmentmassachusetts.org	Environment Massachusetts
Claire	B.W. Muller	Movement Building Director	508 308-9261	claire@uumassaction.org	Unitarian Universalist Mass Action Network
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
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
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
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
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

Indigenous Organizations					
First Name Last Name Title		Phone	Email	Affiliation	
Alma	Gordon	President	Not Provided	tribalcouncil@chappaquiddickwampanoag.org	Chappaquiddick Tribe of the Wampanoag Nation
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
Cora	Pierce	Not Provided	Not Provided	Coradot@yahoo.com	Pocassett Wampanoag Tribe
Elizabth	Soloman	Not Provided	Not Provided	Solomon.Elizabeth@gmail.com	Massachusetts Tribe at Ponkapoag

#### NOTICE OF PROPOSED RUNWAY 6 EXTENSION PROJECT AT PLYMOUTH MUNICIPAL AIRPORT, PLYMOUTH, MA

The Plymouth Airport Commission welcomes the public to attend an information session to learn more about the Final Technical Master Plan Update (TMPU) and Airport Layout Plan (ALP), as well as seek public input regarding the environmental considerations under the Massachusetts Environmental Policy Act (MEPA; 301 CMR 11.00 et seq) and National Environmental Policy Act (NEPA) as part of environmental review of the proposed Runway 6 extension project.



#### MEETING INFORMATION

Date: Wednesday, March 29, 2023 Time: 7:00 PM – 8:00 PM

For meeting questions, please contact: Brenda Bhatti Sr. Environmental Planner DuBois & King, Inc. 15 Constitution Drive, Suite 1L Bedford, NH 03110 (603) 637-1043 PlymouthMAAirportRW6EA@ dubois-king.com Location: Plymouth Municipal Airport 246 South Meadow Rd., Gate 2 Plymouth, MA Conference Room (Green Hanger next to Terminal; See Map above)



Brenda Bhatti <bbhatti@dubois-king.com>

#### Re: Plymouth Municipal Airport - MEPA Screening Form & Public Meeting Notice

1 message

**Brenda Bhatti** <PlymouthMAAirportRW6EA@dubois-king.com> To: Brenda Bhatti <PlymouthMAAirportRW6EA@dubois-king.com> Tue, Apr 18, 2023 at 1:55 PM

On Fri, Mar 17, 2023 at 12:09 PM Brenda Bhatti <PlymouthMAAirportRW6EA@dubois-king.com> wrote: Good afternoon,

DuBois & King has been assisting the Plymouth Municipal Airport and Plymouth Airport Commission with the Airport's Technical Master Plan Update (TMPU) and Airport Layout Plan (ALP) over the past year, which has included significant public outreach efforts. The TMPU and ALP are now complete, and the Airport is moving forward on an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) and associated evaluations under the Massachusetts Environmental Policy Act (MEPA) on the proposed Runway 6 extension project. As part of our ongoing public engagement efforts, especially in consideration of Environmental Justice community outreach, we are providing the attached MEPA Screening Form and Notice of a Public Information Meeting specific to the environmental assessment efforts.

Please see the attached documents for the detailed information on location and times. If you have any questions, please reach me via the project's dedicated email at: PlymouthMAAirportRW6EA@dubois-king.com

Thank you for your time and consideration.

Sincere regards,

Brenda Bhatti Sr. Environmental Planner, Wildlife Biologist/Ecologist



Phone: D - (603) 637-1043 x 4414 Website: https://www.dubois-king.com Email: PlymouthMAAirportRW6EA@dubois-king.com Address: 15 Constitution Drive, Suite 1L Bedford, NH 03110

IMPORTANT: The contents of this email and any attachments are confidential. They are intended for the named recipient(s) only. If you have received this email by mistake, please notify the sender immediately and do not disclose the contents to anyone or make copies thereof.



Brenda Bhatti <bbhatti@dubois-king.com>

#### Re: Plymouth Municipal Airport - MEPA Screening Form & Public Meeting Notice

1 message

**Brenda Bhatti** <PlymouthMAAirportRW6EA@dubois-king.com> To: Brenda Bhatti <PlymouthMAAirportRW6EA@dubois-king.com> Tue, Apr 18, 2023 at 1:55 PM

On Wed, Mar 22, 2023 at 11:37 AM Brenda Bhatti <PlymouthMAAirportRW6EA@dubois-king.com> wrote: Good morning,

DuBois & King has been assisting the Plymouth Municipal Airport and Plymouth Airport Commission with the Airport's Technical Master Plan Update (TMPU) and Airport Layout Plan (ALP) over the past year, which has included extensive public outreach efforts. We appreciate the input we have received from many of you that have participated in the process to date. The TMPU and ALP are now complete, and the Airport is moving forward on an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) and associated evaluations under the Massachusetts Environmental Policy Act (MEPA) on the proposed Runway 6 extension project. As part of our ongoing public engagement efforts, we are providing the attached MEPA Screening Form and Notice of a Public Information Meeting specific to the environmental assessment efforts that will be held on Wednesday, March 29, 2023 at the Airport from 7:00-8:00 pm.

Please see the attached documents for the detailed information and directions to the location at the green hanger adjacent to the main terminal.

If you have any questions, please reach me via the project's dedicated email at: PlymouthMAAirportRW6EA@dubois-king.com

Thank you for your time and consideration.

Sincere regards,

Brenda Bhatti Sr. Environmental Planner, Wildlife Biologist/Ecologist



Phone: D - (603) 637-1043 x 4414 Fax: (866) 783-7101 Email: PlymouthMAAirportRW6EA@dubois-king.com Website: https://www.dubois-king.com Address: 15 Constitution Drive, Suite 1L Bedford, NH 03110

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#### Environmental Justice Screening Form

Project Name	Plymouth Municipal Airport Runway 6 Extension
Anticipated Date of MEPA Filing	March 31, 2023
Proponent Name	Plymouth Municipal Airport
Contact Information (e.g., consultant)	Brenda Bhatti DuBois and King Sr. Environmental Planner, Wildlife Biologist/Ecologist Phone (603) 637-1043 x 4414 <u>PlymouthMAAirportRW6@dubois-king.com</u>
Public website for project or other physical location where project materials can be obtained (if available)	https://pymairport.com/
Municipality and Zip Code for Project (if known)	Plymouth 02360
Project Type* (list all that apply)	Airport
Is the project site within a mapped 100-year FEMA flood plain? Y/N/ unknown	No
Estimated GHG emissions of conditioned spaces <u>(click here for</u> <u>GHG Estimation tool</u> )	N/A

#### Project Description

1. Provide a brief project description, including overall size of the project site and square footage of proposed buildings and structures if known.

The Airport has recently completed a Technical Master Plan Update (TMPU) identifying this project as a priority. Runway 6 will be extended 351 feet to the southwest. This project also involves the extension of associated taxiways, Taxiway A and Taxiway E.

2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known) ENF and Other MEPA Review if the Secretary So Requires

- 11.03 (6) Transportation (b)3: Expansion of an existing runway at an airport.
- 11.03 (2) State-listed Species (b)2: Greater than two acres of disturbance of designated priority habitat, as defined in 321 CMR 10.02, that results in a take of a state-listed endangered or threatened species or species of special concern.

301 CMR 11.06(7)(b), the proposed work would require the submittal of a full Environmental Impact Report (EIR) due to the presence of Environmental Justice populations within a one-mile radius of the project.

3. List all anticipated state, local and federal permits needed for the project (if known)

NHESP MESA Conservation Management Permit/update to the Airport's existing Rare Species Management Plan

4 Identify El nonulations and characteristics (Minerity Income English Isolation) within Emiles of
<ol> <li>Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map identifying 5-mile radius from <u>EJ Maps Viewer</u> in lieu of narrative)</li> </ol>
Plymouth
Block Group 1, Census Tract 5302, Income
Block Group 2, Census Tract 5303, Income
Block Group 2, Census Tract 5305, Income Block Group 5, Census Tract 5306, Minority
block Group 5, Census Tract 5500, Millionty
Carver
Block Group 3, Census Tract 5442, Income
Block Group 1, Census Tract 5442, Income
5. Identify any municipality or census tract meeting the definition of "vulnerable health EJ criteria"
in the <u>DPH EJ Tool</u> located in whole or in part within a 1 mile radius of the project site
<u>Plymouth</u>
Heart Attack
Carver
Heart Attack
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 anticipated to result in temporary air quality and noise impacts due to
construction activities. However, these impacts are not anticipated to exacerbate any existing
unfair or inequitable environmental or public health burden on the EJ populations in the DGA.
All impacts will be reviewed through MEPA and will be appropriately mitigated in accordance
with applicable regulations. No long-term environmental and public health impacts on EJ
populations are anticipated as a result of the Project.
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
Construction will contribute to the economy of the region.
<ul> <li>Provides significant new construction and long-term job opportunities.</li> <li>Improves operational safety and efficiency of the Airport.</li> </ul>
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.
Any community member can request a meeting to discuss the project or request oral language
interpretation services at the meeting using the email address provided below.
A public meeting has been scheduled for March 29, 2023, at 7:00 pm at the Airport meeting room (green hanger).
Brenda Bhatti PlymouthMAAirportRW6EA@dubois-king.com



# Technical Master Plan Update & Environmental Assessment Phase



## Technical Master Plan Team & Environmental Review Team



#### Airport / PAC

The Airport, overseen by the Plymouth Airport Commission, has undertaken a Technical Master Plan Update.

### FAA/ MASSDOT

The Plan is 90% funded by the Federal Aviation Administration. 5% funded by the MASSDOT Bureau of Aeronautics with the remainder, a local match. Input from the Public is crucial to ensuring the Master Plan reflects the needs of the local community & the environmental review provides opportunities for meaningful public input.

You

#### D&K and Epsilon Associates

The DuBois and King team has over 30 years of experience serving Plymouth Municipal Airport and its community.



## Agenda

- Community Asset
- Timeline & Transition to
   Environmental Assessment Phase
- Final Technical Master Plan Update
- Next Step MEPA and NEPA
- Environmental Evaluation Process
- Alternatives Overview & Preferred Alternative
- Proposed Conditions and Regulatory Framework
- Questions

## Plymouth Municipal Airport – Community Asset



GOOD FOR THE ENVIRONMENT

- 150 preserved acres of Natural Habitat
- DEP standards
- Compatible Wildlife
   Program
- State wildlife approval for construction
- 800 acres of rural legacy



- State Police Air Wing
- Boston Medflight
- Cape Cod Community College
- Local Pilot Humanitarian Missions
- Civil Alr Patrol



- Administration Building open to Public
- Public interaction with Airport activity- Patio and Play Area
- Public tours
- Precinct 11 voting location
- Noise Briefings



**ECONOMY** 

- Municipal Enterprise
   Account
- \$450,000+ real estate tax revenue on ~60 Buildings
- \$62 million in Total Annual Economic Output

### Timeline

### JAN 2022 – JAN 2023

Background and three TMPU public meetings, TMPU and ALP finalized MEPA Process Initiated w/MEPA office, Pre-ENF Public Meeting

FEB 2023-

MAR 2023

### April 2023-August 2023

MEPA ENF Filing MEPA Scoping Field Visit Proposed Joint Draft NEPA EA/MEPA EIR Development Final NEPA EA/MEPA EIR Completed & Submitted to FAA for FONSI & MEPA

> August 2023 Goal



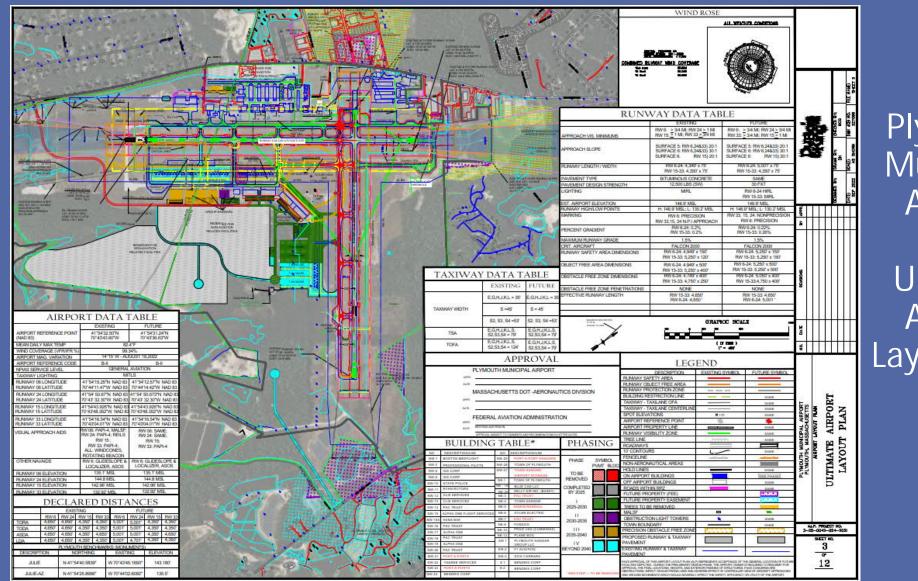
### **Plymouth Municipal Airport**

Technical Master Plan Update 2022



## **Final TMPU**

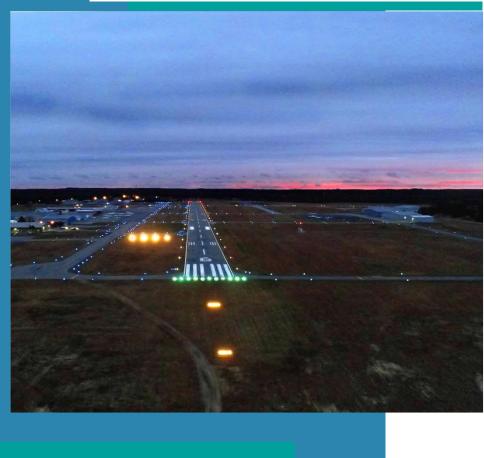
- Comprehensive Evaluation of Airport and Needs for 20 years into future – 2040+
- Extensive Public Engagement
- Evaluated four Alternatives for Runway 6
- Airport Layout Plan



Plymouth Municipal Airport 2022 Ultimate Airport Layout Plan

7

## Purpose of Environmental Assessment



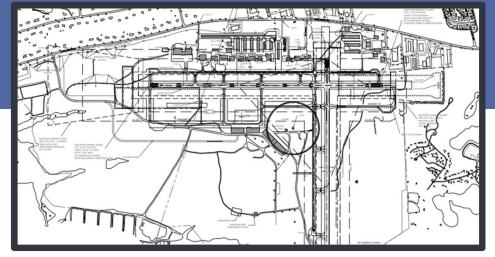
- Fulfill obligations under federal National Environmental Policy Act (NEPA) and Commonwealth's MEPA programs
- Incorporate Public Involvement
- Aligning Airport future with the Master Plan updates without "significant impacts" to natural resources
- Evaluate Environmental Impacts of Preferred and "No Action" Alternatives
- Evaluate Natural Resource Mitigation impacts to Airport Operations and Safety Needs (FAA mandates); cannot create hazards

## **Environmental Evaluation Process – Joint MEPA/NEPA**



#### Massachusetts Environmental Policy Act (MEPA)

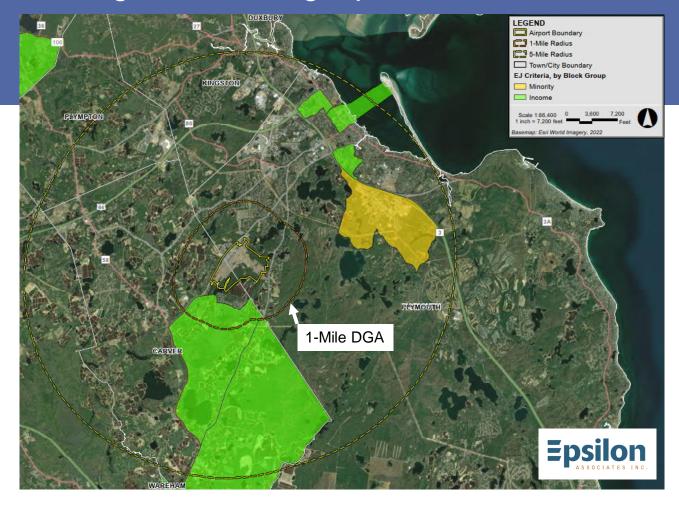
- Meet with MEPA office to Introduce the project (2/2/23)
- Public Outreach "meaningful input before the ENF is filed"
- Notice of this meeting & Screening Form disseminated to >150 organizations, parties, and individuals that were compiled during the TMPU process, including designated "Environmental Justice" communities
- 1<sup>st</sup> step Environmental Notification form (ENF)
- 2<sup>nd</sup> step Site Walk with MEPA staff (public invited to attend)
- Confirm Scope of Environmental Impact Report (EIR)

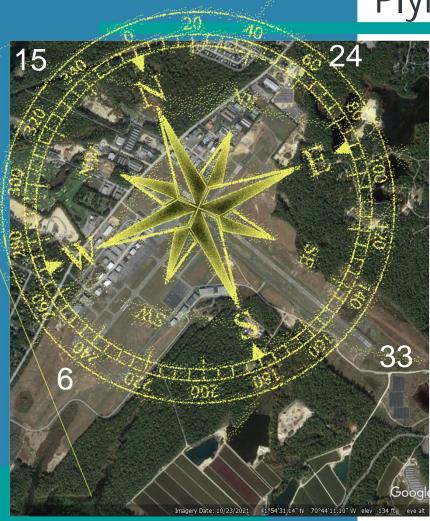


National Environmental Policy Act (NEPA)

- Under FAA 1050.1F
- Met with FAA and MassDOT to identify scope
- "Environmental Assessment" (EA) under NEPA
- 14 categories of natural resources to be evaluated
- Must stay below designated "significance thresholds" for each category using avoidance, minimization, and mitigation opportunities

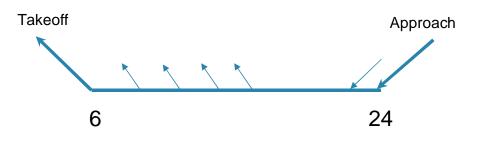
## MEPA Designated Geographic Area (DGA) – 1-Mile





## Plymouth Airport – Orientation

- Compass or "Wind Rose"
- Horizontal & Vertical "Planes" = Surfaces
   [NOTE: "Plane" vs "Airplane" or "Aircraft"]



### Overarching Guidance & Grant Mandates – Safety Paramount

FAA Grant Assurance 5 & Grant Assurance 21 [funding mandates]	GA 5 – Preserving Rights and Powers GA 21 – Compatible Land Use	Compliance Order 5190.6b, Chapter 20	<ul> <li>Under the airport compliance program, the FAA has the responsibility to assure airport sponsors comply with certain obligations that arise from FAA grant agreements</li> <li>Chapter 20 – Compatible Land Use and Airspace Protection</li> </ul>
Compliance Order 5190.6b, paragraph 7.13, Grant Assurance 20	Hazards and Mitigation GA 20 – requires airport sponsors to protect terminal airspaceinstrument and visual flight operationsincludes protecting against establishment or creation of future airport hazards, including wildlife hazards.	AC 150/5200- 33C, paragraph 2.9	<ul> <li>Hazardous Wildlife Attractants on and near Airports</li> <li>Habitat for State and Federally Listed Species on Airports</li> <li>may increase wildlife hazards and be inconsistent with safe airport operations.</li> </ul>

### Runway Ends – Safety Paramount

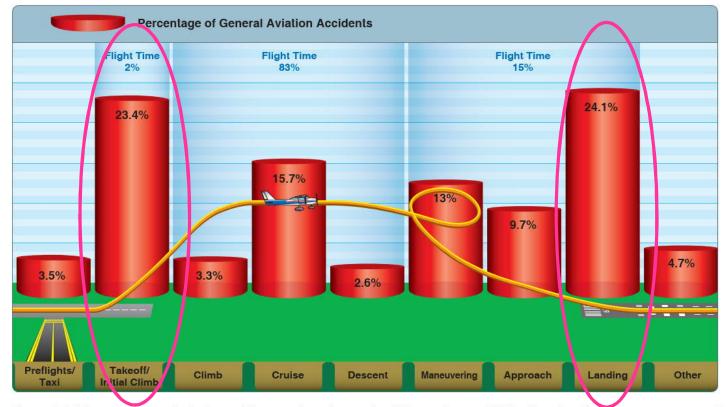


Figure 2-1. The percentage of aviation accidents as they relate to the different phases of flight. Note that the greatest percentage of accidents take place during a minor percentage of the total flight.

SOURCE: Pilot's Handbook of Aeronautical Knowledge, 2016, FAA-H-8083-25B

Based Aircraft (Table 3-3)		10	05
and Hinerant Split (Table 3.4)	Local	Itinerant	Total
Local Itinerant Split (Table 3-4)	33,103	27,918	61,021
Operations by Aircraft Type (Table 3-6)	Operations	%	Total Operations
Single-Engine	41,494		68.00%
Multi-Engine	5,492		9.00%
Turbo-Prop	7,323		12.00%
Turbo-Jet	4,271		7.00%
Rotorcraft	2,441		4.00%
Glider	-		0.00%
Light Sport	0 0.00%		
Military	y 0 0.00%		0.00%
Operations by FAA Grouping (Table 3-7)			
AAC/ADG	Opera	itions	% Total Operations
A-I	58,5	595	96.00%
A-II	69		1.10%
A-III	3	3	0.00%
B-I	38	34	0.60%
B-II	1,1	22	1.80%
B-III	3	3	0.00%
C-I	9	0	0.10%
C-II	9	6	0.20%
C-III	2	2	0.00%

#### Findings

- 8% Increase in Total Operations 8% Decrease in Based Aircraft

#### Summary

Modest changes. On track with National Average. 

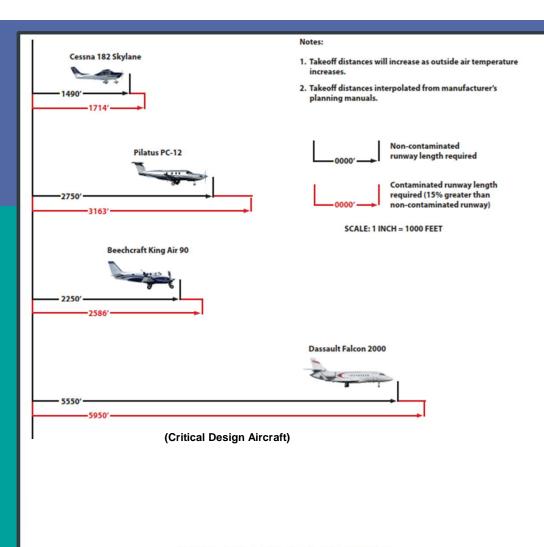
## Forecast 2022 vs 2041 Purpose & Need

Table 3-16 - Summary of Forecast Data for 2041 Based Aircraft (Table 3-11) 96					
Based Aircraft (Table 3-11)					
Least Hinerent Culit (Table 2.14)	Local	Itinerant	Total		
Local Itinerant Split (Table 3-14)	36,078	30,411	66,489		
Operations by Aircraft Type (Table 3-14)	Operations	% Total C	perations		
Single-Engine	44,932	67.	6%		
Multi-Engine	5,835	8.8	3%		
Turbo-Prop	8,041	12.	1%		
Turbo-Jet	4,847	7.3	3%		
Rotorcraft	2,834	4.3	3%		
Glider 0 0.0		0%			
Light Sport	0	0 0.0%			
Military	0 0.0%		0%		
Forecasted Operations by FAA Grouping (Table 3-15)					
AAC/ADG	Opera	ations	Operations		
A-I	63,	845	96.0%		
A-II	75	59	1.1%		
A-III	3	3	0.0%		
B-I	41	19	0.6%		
B-II	1,2	22	1.8%		
B-III	3	3	0.0%		
C-I	9	8	0.1%		
C-II	10	)5	0.2%		
C-III	3	3	0.0%		
Source: DuBois & King					

### Typical Runway Length Requirements "Critical Aircraft"

Temperature = 30°C - Average Temperature Hottest Month Flaps = 0 Max Gross Takeoff Weight Zero Wind Zero R/W Gradient Pressure Altitude = Sea Level

Aircraft Planning Manual Vs FAA Runway Length Analysis



#### **RUNWAY LENGTH REQUIRED**

## Runway Length Analysis

B-II Jet Composite				
Aircraft Type	Operations	% of Composite		
Cessna CJ3/4	4	0.8%		
Cessna Citation Bravo	4	0.8%		
Cessna Citation Encore	7	1.4%		
Cessna Citation Excel	68	13.3%		
Cessna Citation Sovereign	13	2.5%		
Cessna Citation Latitude	69	13.5%		
Cessna Citation X	2	0.4%		
Embrear Legacy 450	15	2.9%		
Embrear Phenom 300	45	8.8%		
Dassault Falcon 2000	149	29.0%		
Dassault Falcon 900	75	14.6%		
Dassault Falcon 50	7	1.4%		
Hawker 4000	55	10.7%		
Total Operations	513			



### Falcon 2000

The Falcon 2000 is the most demanding aircraft (critical design) in the composite of aircraft with more than 500 annual operations.

FAA Runway Length Analysis - Unconstrained Runway Length - 5,500-ft.

## Alternatives - Overview



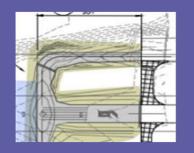
### Alternative #1: No Build

- Everything remains the same, no changes are applied
- No Penetrations



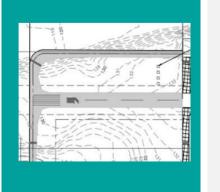
#### Alternative #3: 550-ft ext

- 5200 eet
- Taxiway 4 and E extension
- Relocation of Glideslope and MALS
- One penetration area



#### Alternative #2: 351-ft ext

- 5001 Feet
- Taxiway A and E extensions
- Relocation of Glideslope and MALS
- No penetrations

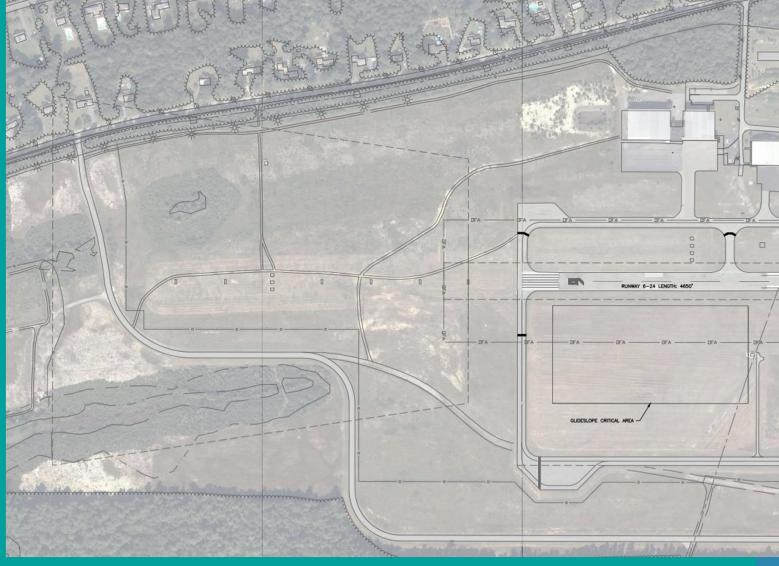


### Alternative #4: 850-ft ext

- 5500 Feet
- Taxiway A z id E extension
- Relocation of Glider ope and MALS
- Multiple penetrations

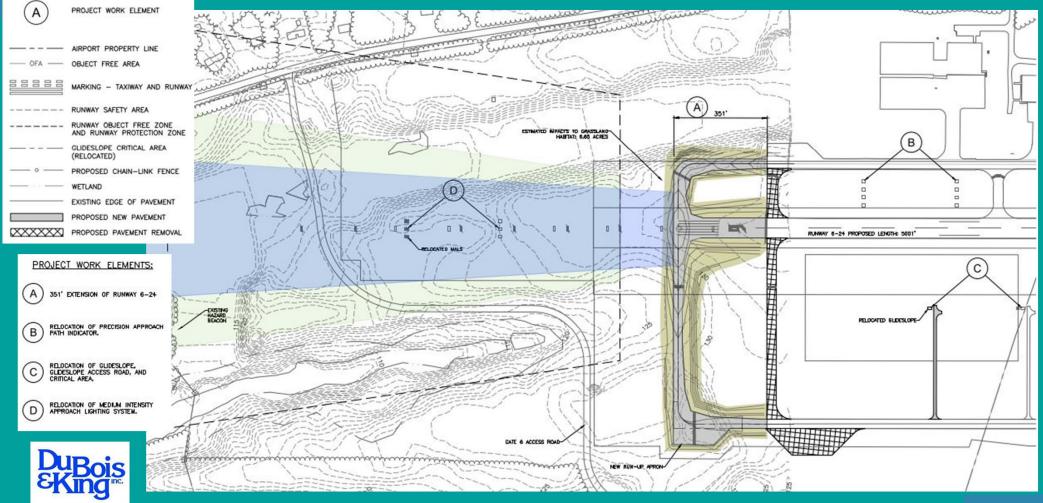
## Alternative #1 : No Build

ļ	EGEND
	AIRPORT PROPERTY LINE
— OFA —	OBJECT FREE AREA
	MARKING - TAXIWAY AND RUNWAY
	HOLDING POSITION MARKING
	RUNWAY SAFETY AREA
	RUNWAY OBJECT FREE ZONE AND RUNWAY PROTECTION ZONE
	GLIDESLOPE CRITICAL AREA
—       —	EXISTING CHAIN-LINK FENCE
	WETLAND
	EXISTING ROADWAY





### **Alternative #2: 351-ft Extension**



LEGEND

### Alternative # 2 Obstruction Map: 351-ft Extension



 SURFACE
 LEGEND

 AC
 150/5300-13A
 TABLE
 3-2
 ROW
 4

 OBSTACLE
 CLEARANCE
 SURFACE
 4

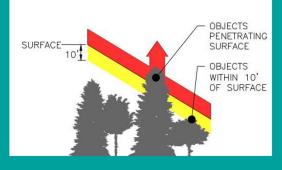
 AC
 150/5300-13A
 TABLE
 3-2
 ROW
 6

 AC
 150/5300-13A
 TABLE
 3-2
 ROW
 6

 OBSTACLE
 CLEARANCE
 SURFACE
 9
 VEGETATIVE
 OBSTRUCTION

 (REFER
 TO
 PENETRATION
 KEY)
 10

VEGETATIVE PENETRATION KEY

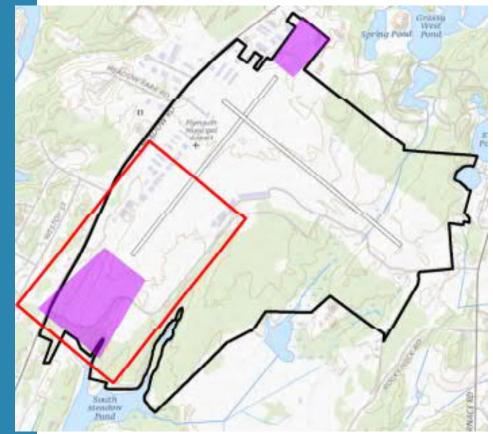




20

### Primary Project Components – Preferred Alternative

- Runway 6 351' Extension
- Taxiway A 351' Extension + 649' Connector to RW 6 end [remove former connector]
- Taxiway E 351' Extension + 349' Connector to RW 6 end [remove former connector]
- NavAids relocated

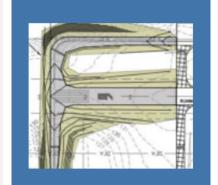


## Next Steps – Confirm Existing Conditions & Evaluate Impacts



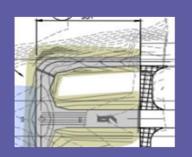
Supplemental Desktop & Field Data Collection

- TMPU identified "Existing Conditions"
- Field verification of specific natural resources potential impacted



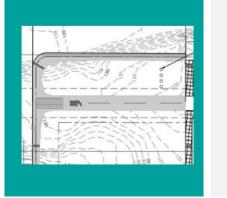
### MEPA

- Identify "thresholds"
- Submit Environmental Notification Form (ENF)
- Site Visit w/MEPA agents to Scope the documentation



### NEPA

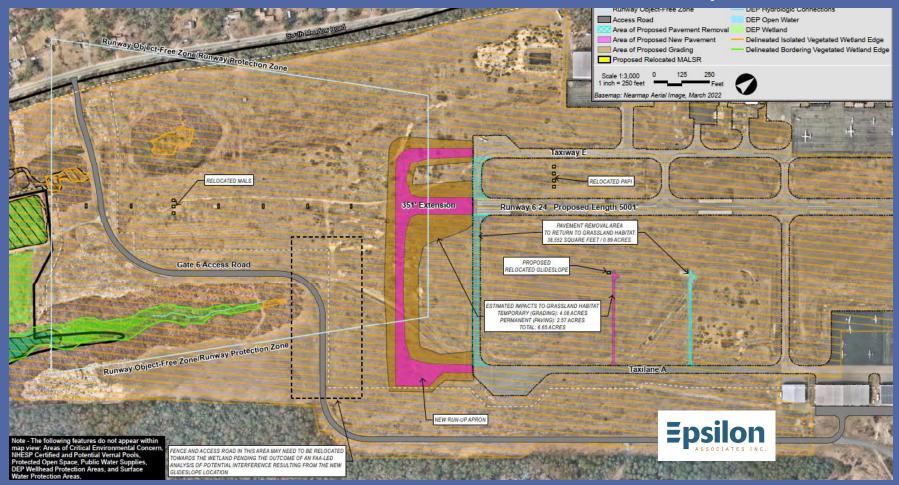
- Evaluate Potential Impacts under 14 Subject Areas based on Project
- Stay below "significance" thresholds



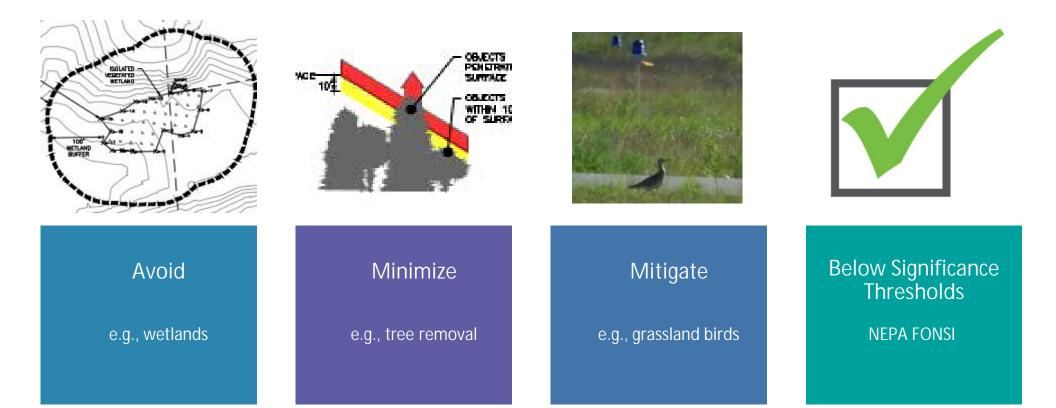
### NEPA/MEPA

- Joint EA/EIR
- Draft ~July
- Final ~August
- Goal is NEPA FONSI & MEPA Certificate

### **Environmental Constraints & Potential Impact Areas**



## Impact ("Consequences") & Mitigation



### THANK YOU!

### Questions?

PlymouthMAAirportRW6EA@dubois-king.com

### Comments

JOSTON Med Flight

The opportunity to comment on the ENF will end 20 days after ENF is noticed on the Massachusetts Environmental Monitor website (https://eeaonline.eea.state.ma.us/EEA/MEPA-eMonitor/home).

Photo permissions granted by Airport Management