



Boston Logan International Airport

## Logan Runway 27 Runway Safety Area (RSA) Enhancements Project

### PROJECT SUMMARY

**Project Overview.** The Massachusetts Port Authority (Massport) proposes to enhance the runway safety area (RSA) at the end of Runway 27 at Boston Logan International Airport. The proposed improvements are part of a continuing Federal Aviation Administration (FAA) safety program required to enhance the RSA, to the extent feasible, to be compliant with FAA's current airport design standards and to enhance rescue access in the event of an airfield emergency. **RSAs are safety improvements and do not extend runways or have any effect on normal runway operations, runway capacity, or types of aircraft using the runway.**

The eastern end of Runway 9/27 (Figure 1) does not meet the current FAA design standards for length as this runway was constructed before the current FAA design standards were in place. Runway Safety Areas are typically level areas 1,000 feet long by 500 feet wide that surround the runway. RSAs may be shorter in length if an Engineered Materials Arresting System (EMAS) is installed at the runway end to provide an equivalent level of safety. EMAS is a bed of crushable concrete blocks that when run over, slow down and can safely stop an airplane during an emergency.

Based on the 2019 FAA determination for this runway, the preferred RSA enhancement option for preliminary design and permitting will be construction of a 306-foot wide pile-supported deck (or pier) extending 650 feet from the existing runway threshold, with an EMAS installed on the deck. Because of the irregular shoreline at this area, it is expected that the 306-foot wide deck would extend to the northeast over Boston Harbor between 450 to 500-feet. Massport previously constructed a similar RSA deck in 2011/2012 at the eastern end of Runway 15R/33L. The proposed Runway 27 RSA deck will not include an extended approach light pier as exists at the Runway-end 33L RSA deck.

**Anticipated Construction Impacts.** As was experienced for the construction of the Runway 33L RSA deck, there will be some permanent impacts to the nearshore harbor habitat by installation of the deck support system (expected to be pilings or caissons). There will also be a range of typical temporary construction impacts including construction vehicle trips, equipment noise and emissions, etc. The safety area deck is expected to be constructed primarily from the water using barge-mounted equipment. Although no detailed construction schedule has been developed, some phases of deck construction will require periodic runway shutdowns to safely accommodate the barge(s) and other construction equipment. Runway shutdowns often result in a temporary shifting of runway utilization subject to wind and weather patterns. Because RSA

improvements are purely safety enhancements and do not impact runway operational capabilities, there will be no changes to runway utilization as the result of this project once construction is completed.

**Construction Mitigation Measures.** A range of environmental controls will be implemented during project construction, including:

- Construction equipment noise reduction mitigation measures
- Time of year (TOY) limitations for in-water construction activities to protect fish habitat
- Limited work hours – primarily daylight hours
- Construction vehicles restricted from local roads (standard practice for all projects)
- Community construction hotline

**Climate Change/Resiliency.** This safety project must be designed to connect with the existing airfield runway/taxiway network. The deck will be constructed with a 75-year design life and designed to withstand predicted sea level rise and more frequent and intense storm events.

**Greenhouse Gas (GHG) Impacts.** The completed safety project will not change how the runway or airfield operates and will not affect which aircraft can operate on Runway 9/27; therefore there will be no difference in GHG emissions with or without the project. There will be temporary increases in construction equipment emissions; those emissions will be assessed in the **Draft Environmental Assessment/Environmental Impact Report** (Draft EA/EIR) expected to be filed in 2022.

**Permit Requirements.** Based on the current concept design, RSA construction may require the following environmental reviews and permits:

#### **Federal**

- National Environmental Policy Act (NEPA): *Environmental Assessment (FAA)*
- US Army Corps of Engineers: *Section 10/404 permit*

#### **State**

- Massachusetts Environmental Policy Act (MEPA) Review: *Environmental Notification Form (ENF) and Environmental Impact Report (EIR)*
- Massachusetts Department of Environmental Protection:
  - *MA Wetlands Protection Act Compliance*

- *Chapter 91 License*
- *401 Water Quality Certification*
- MA Office of Coastal Zone Management: *Federal Consistency Statement*

**Local**

- Boston Conservation Commission: *MA Wetlands Protection Act Compliance*

**Anticipated Environmental Review and Construction Schedule**

- |                                |                      |
|--------------------------------|----------------------|
| • MEPA ENF filing              | Late Summer 2021     |
| • Draft EA/EIR                 | Late 2021/Early 2022 |
| • Final EA/EIR                 | Mid-2022             |
| • NEPA/MEPA decisions issued   | Fall 2022            |
| • File permit applications     | 2021-2022            |
| • All permits/approvals issued | Summer 2023          |
| • Final Design                 | 2023 – 2024          |
| • Construction                 | 2025 – 2026          |

**Outreach and Communications**

In preparation for this meeting, Massport has reached out to local and state elected officials, representatives in East Boston and Winthrop, The Massport Community Advisory Committee (MCAC), and a range of area community groups surrounding the project site. Notice of the meeting has been placed in the East Boston Times, Winthrop Transcript, El Mundo, and on Massport’s website at <http://www.massport.com/logan-airport/about-logan/environmental-reports/>. This pre-filing enhanced outreach is being conducted in acknowledgement of the project’s proximity to environmental justice communities surrounding Logan Airport. These communities are identified by the state Executive Office of Energy and Environmental Affairs (EEA) based on minority population, income and English isolation or a combination of these factors.

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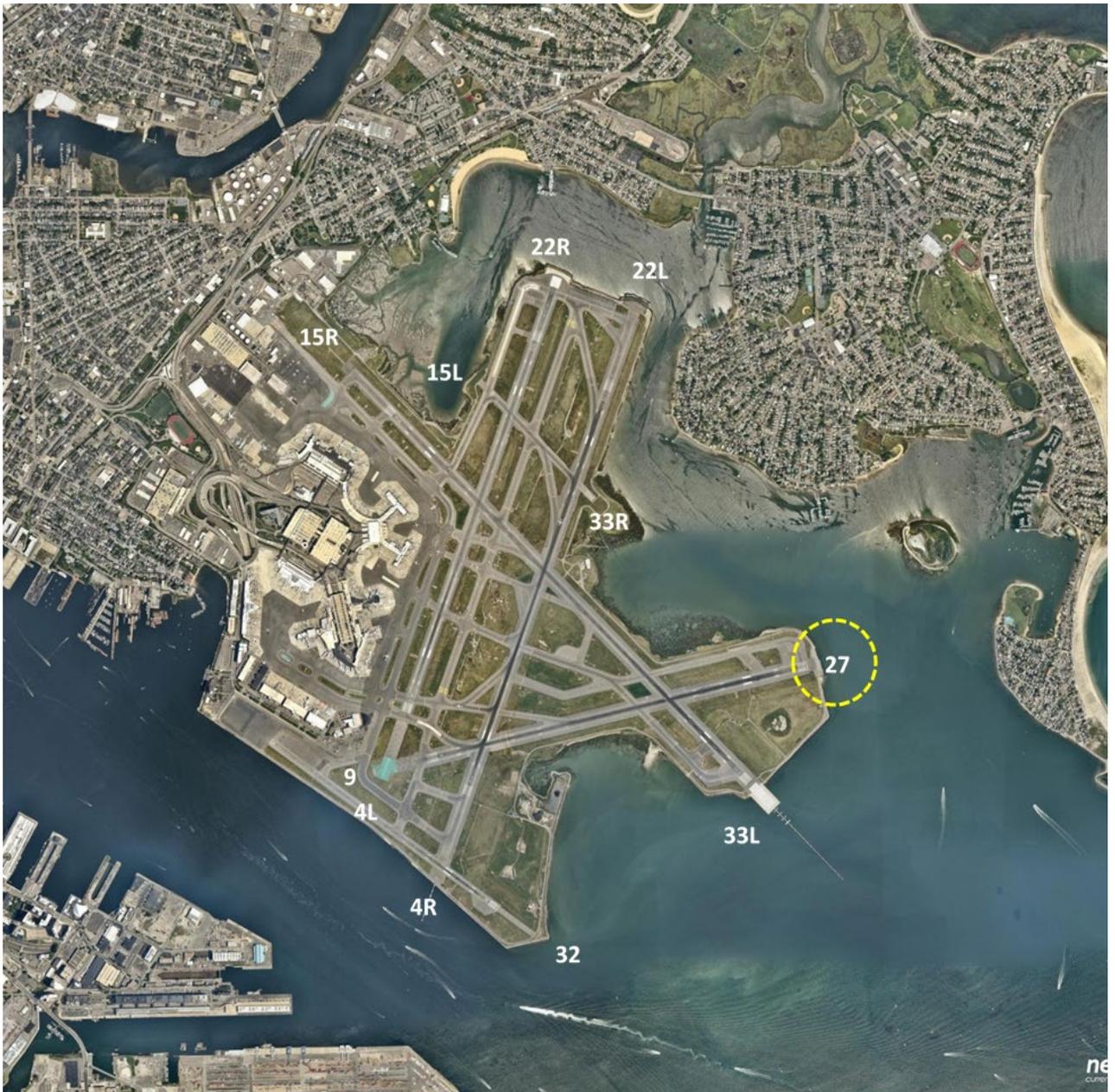


Figure 1 – Runway 27 Runway Safety Area Project Location