Rehabilitate TW E from TW M to RW 11-29 & Construct TW E5

Concord and Bedford, MA

Expanded Environmental Notification Form

June 2025

PREPARED FOR:

Massachusetts Port Authority
One Harborside Drive, Suite 200S
East Boston, MA 02128

PREPARED BY:

HNTB Corporation
31 Saint James Avenue
Boston, Massachusetts 02116

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: **Massport Hanscom Field Taxiway E**		
Street Address: **200 Hanscom Drive**		
Municipality: **Bedford**	Watershed: **Shawsheen**	
Universal Transverse Mercator Coordinates: **Start: 689077.16, 4704688.65, 42T** **End: 688449.92, 4704387.74, 42T**	Latitude / Longitude **Start: 42°28'17.3"N 71°18'00.2"W** **End: 42°28'08.1"N 71°17'32.4"W**	
Estimated commencement date: **Summer 2025**	Estimated completion date: **Spring 2026**	
Project Type: **Airport**	Status of project design: **100%** complete	
Proponent: **Massachusetts Port Authority (Massport)**		
Street Address: **One Harborside Drive, Suite 200S**		
Municipality: **East Boston**	State: **MA**	Zip Code: **02128**
Name of Contact Person: **Brad Washburn**		
Firm/Agency: **Massport**	Street Address: **1 Harborside Drive**	
Municipality: **East Boston**	State: **MA**	Zip Code: **02128**
Phone: **(617) 568-3546**	Fax: **N/A**	E-mail: **Bwashburn@massport.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:

This Expanded Environmental Notification Form (EENF) is being submitted concurrently with a Proposed Environmental Impact Report (PEIR) with a request that the Secretary allow a Rollover EIR in accordance with 301 CMR 11.06(13). In the event that the request for a Rollover EIR is declined, MassDOT respectfully requests that the Secretary allow a Single Environmental Impact Report (Single EIR) in accordance with 301 CMR 11.06(8).

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

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

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

Transportation – 301 CMR 11.03(6)(b)4 - Construction of a New taxiway at an airport.

State-Listed Species – 301 CMR 11.03(2)(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.

Which State Agency Permits will the project require?

Conservation Management Permit – MassWidlife's Natural Heritage and Endangered Species Program (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:

The project is included in the Massport Fiscal Year (FY) 2025 – 2029 Capital Investment Plan (CIP). The project does not require a Land Transfer from an Agency of the Commonwealth.

Summary of Project Size & Environmental Impacts	**Existing**	**Change**	**Total**
LAND			
Total site acreage	**10.14**		
New acres of land altered		**0***	
Acres of impervious area	**3.5**	**1.92**	**5.4**
Square feet of new bordering vegetated wetlands alteration		**0**	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	**N/A**	**N/A**	**N/A**
Number of housing units	**N/A**	**N/A**	**N/A**
Maximum height (feet)	**N/A**	**N/A**	**N/A**
TRANSPORTATION			
Vehicle trips per day	**N/A**	**N/A**	**N/A**
Parking spaces	**N/A**	**N/A**	**N/A**
WASTEWATER			
Water Use (Gallons per day)	**N/A**	**N/A**	**N/A**

Water withdrawal (GPD)	**N/A**	**N/A**	**N/A**
Wastewater generation/treatment (GPD)	**N/A**	**N/A**	**N/A**
Length of water mains (miles)	**N/A**	**N/A**	**N/A**
Length of sewer mains (miles)	**N/A**	**N/A**	**N/A**

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

Has any project on this site been filed with MEPA before?
☒ Yes (EEA # 16654**) ☐No

**The L.G. Hanscom Field North Airfield Development project is a separate and distinct project that is proposed by a third-party proponent (North Airfield Ventures & Runway Realty Ventures) and is being reviewed independently from Massport's Hanscom Field Taxiway E project.

*The entire project site consists of previously disturbed managed grasslands. No tree clearing is proposed as part of the project. The project will temporarily disturb and reseed 202,900 SF of grassland and will result in a net increase of 83,450 SF of impervious area.

GENERAL PROJECT INFORMATION

PROJECT DESCRIPTION:

As described below, The Massachusetts Port Authority (Massport) is proposing the rehabilitation of Taxiway E and construction of a bypass taxiway[1] (Taxiway E5) at Hanscom Field in Bedford and Concord, Massachusetts (Attachment 2, Figure 1). Work will include milling and repaving of existing Taxiway E from Runway 5-23 to Taxiway M; construction of Taxiway E5, conversion of existing taxiway edge lights to Light-Emitting Diode (LED) fixtures, installation of new electrical infrastructure including signs and lights for new Taxiway E5, minor geometric improvements on Taxiway M at the Runway 11-29 intersection, and minor drainage upgrades.

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

Hanscom Field is a full-service general aviation airport on 1,300 acres in Bedford, Concord, Lexington, and Lincoln, Massachusetts. Most of the land surrounding the active airfield is previously disturbed grassland and has been cleared to ensure the safety of aircraft operations by reducing hazards, including obstructed visibility. Located approximately 20 miles northwest of Boston, Hanscom Field plays a critical role as a corporate reliever for Boston Logan International Airport and is a significant regional transportation and economic asset. Hanscom Field has two intersecting asphalt-paved runways: Runway 11-29, which is oriented in an east/west configuration, and Runway 5-23, which is oriented in a northeast/southwest configuration. Other existing infrastructure include taxiways, an Air Traffic Control tower, navigational aids, parking aprons, hangers, passenger terminal, Aircraft Rescue and Fire Fighting (ARFF) building, United States Customs, and other aviation services buildings. The project site is located between Taxiway M and Runway 5-23, and is comprised of paved runways, service roads, and open, maintained grassy areas.

Stormwater runoff from Hanscom Field is captured via a series of catch basins along runways, taxiways, and apron areas, and is conveyed via open channels and a closed drainage system into the Shawsheen River to the east, Elm Brook (a tributary to the Shawsheen River) to the west, and a wetland complex to the north. To date, Massport has not identified any flooding or ponding within the

[1] A bypass taxiway is an entrance taxiway used to manage aircraft queuing demand by providing multiple runway access points at or near a runway end or threshold. (FAA Advisory Circular 150/5300-13B, Airport Design)

project site following extreme precipitation events.

Refer to Attachment 2, Figures 1 and 2 for a USGS Locus Map and an Aerial Locus Map, respectively.

Adjacent Land Use and Environmental Resources

Land uses adjacent to Hanscom Field include residential, commercial, and protected open space, including Minute Man National Historic Park, Great Meadows National Wildlife Refuge, George Jordan Conservation Area, and Hartwell Town Forest. Adjacent military land uses include the U.S. Air Force's (USAF) Hanscom Air Force Base, which directly abuts Hanscom Field along its southeastern property boundary. Refer to Attachment 2, Figure 3 for a Land Use Map.

According to the 15th Edition Natural Heritage Atlas,[2] Natural Heritage and Endangered Species Program (NHESP) Priority Habitat 1512 encompasses the entire airfield and within the project site is mainly comprised of paved runways, service roads, and open, maintained, grassy areas. Refer to Attachment 2, Figure 6.

A review of MassGIS data and aerial imagery identified no wetland resource areas within the project site. All work related to the project is beyond 200-feet (ft) from any wetlands or waterways (refer to Attachment 2, Figure 4). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Middlesex County (Map No. 25017C0381F, Effective July 7, 2014), the project site is not located within or adjacent to a mapped floodplain.[3]

The project site is not located within an Area of Critical Environmental Concern (ACEC). The site does not contain any structures listed in the State Register of Historic Places or the Massachusetts Historical Commission's (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth (Attachment 2, Figure 7).

Environmental Justice

According to the Executive Office of Energy and Environmental Affairs' (EEA) EJ Maps Viewer, the following two (2) EJ populations are located entirely or partially within the one-mile DGA:

- **Bedford: Block Group 6, Census Tract 3593.03 (Minority)**
- **Lincoln: Block Group 5, Census Tract 3603 (Minority)**

There are 37 EJ populations located within a five-mile radius of the site. Refer to Attachment 2, Figure 8 for a figure which depicts their location in relation to the limit of work.

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 proposed project and its programmatic and physical elements:

This section discusses the purpose and need for the project, in addition to describing the proposed improvements.

Purpose and Need

Under existing conditions, there are no dedicated bypass taxiways at Hanscom Field. A bypass taxiway is a short connector taxiway designed to allow aircraft to pass one another, particularly near

2 15th Edition Natural Heritage Atlas (released August 1st, 2021)
3 FEMA FIRM Map

runway ends. Aircraft take-off by flying into the wind. When the wind is coming from the east, all aircraft departing from Runway 11 must use Taxiway M, located at the west end of the runway, for maintenance checks or to taxi while awaiting takeoff clearance from Air Traffic Control (ATC). This issue is particularly evident when aircraft flying under Visual Flight Rules (VFR) are positioned behind those awaiting Instrument Flight Rules (IFR) clearance. Without a bypass option, VFR aircraft that could otherwise depart immediately are forced to wait. The absence of a bypass taxiway limits operational flexibility by restricting ground maneuvering options and forcing aircraft to depart strictly in the order they are queued. During peak periods, this lack of flexibility contributes to bottlenecks, increased aircraft idling times, and a heightened risk of runway incursions.[4] In accordance with Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5300-13B, Airport Design, the proposed bypass taxiway layout should be designed to support the safe and efficient movement of aircraft between parking areas and runways.

The purpose of the project is to enhance runway access by permitting necessary ground maneuvering based on clearance sequence, reduce aircraft ground delays, and improve safety by providing a bypass taxiway meeting FAA design standards for departing aircraft to access Runway 11. The proposed taxiway will not increase the airport's take-off or landing capacity; instead, it supports the existing and forecasted operations within the current airfield capacity.

Proposed Improvements

Work associated with the project includes the rehabilitation of Taxiway E from the Taxiway M intersection to the Runway 5-23 intersection, as well as the construction of Taxiway E5 between Taxiway E and Runway 11-29. Taxiway E5 will be approximately 750-ft in length and will have varying widths of approximately 164-ft wide at the Runway 11-29 intersection, decreasing to approximately 84-ft wide at the proposed Taxiway's mid-point, then expanding again to 164-ft wide at the intersection of Taxiway E. Taxiway E5 will serve as a bypass for aircraft accessing Runway 11-29. Refer to the design plan provided in Attachment 4. All work will occur entirely within previously disturbed areas within Hanscom Field, and will include the following:

Taxiway E Rehabilitation:

- **Milling of existing pavement**
- **Crack repairs**
- **Hot mix asphalt paving within limits of existing pavement**
- **New pavement markings**
- **Conversion of existing taxiway edge lights to LED fixtures (all circuitry will be located within existing conduit)**

Taxiway E5 Construction:

- **Hot mix asphalt full depth construction**
- **Grading**
- **New electrical infrastructure including conduit, lights, and signage.**
- **Relocation of existing signage**
- **Installation of catch basins and manholes between Taxiway E and the proposed Taxiway E5**

Project Impacts

Potential environmental impacts include ground disturbance and alteration of Priority Habitat, creation of impervious area, soil disturbance at Hanscom Air Force Base (HAFB) Superfund Site, and temporary air quality, noise, and runway access impacts during construction. Additional information regarding these impacts is provided below, along with measures to avoid, minimize,

[4] Per the FAA, runway incursions refer to any occurrence involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.

and mitigate said impacts.

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.*

As noted above, the purpose of the project is to enhancerunway access by permitting necessary ground maneuvering based on clearance sequence, reduce aircraft ground delays, and improve safety by providing a bypass taxiway meeting FAA design standards for departing aircraft to access Runway 11.

The No Action Alternative was evaluated as a basis of comparison. The No Action Alternative would not reduce aircraft delays nor address operational deficiencies of Hanscom Field and was therefore dismissed from further evaluation. Alternative locations for the bypass taxiway were considered, however were deemed infeasible. By design, a bypass taxiway is located near the runway end. Placing the taxiway mid-runway would not offer the necessary operational flexibility or reduce the need for aircraft to depart strictly in queue order. Additionally, a location at the eastern end of Runway 11-29 would not resolve the congestion at Taxiway M during east wind conditions. Based on this, the bypass taxiway was located between Taxiway E and western end of Runway 11-29.

Once the location for the new bypass taxiway was determined, Massport considered alternative widths for the taxiway. The width of the taxiway is prescribed by FAA's design standards. The new bypass taxiway will connect Taxiway E (which is 75-ft wide) and Runway 11-29 (which is 150-ft wide), and serve aircraft currently using Taxiway M, which is also 75-ft-wide. Taxiway E5 will be approximately 750-ft in length and will have varying widths of 164-ft wide at the Runway 11-29 intersection, decreasing to approximately 84-ft wide at the proposed Taxiway's mid-point, then expanding again to 164-ft wide at the intersection of Taxiway E. The varying widths are to meet FAA fillet design criteria for the taxiway intersections. Taxiway fillet design refers to the geometric shaping of the pavement area where two taxiways or a taxiway and a runway intersect, allowing aircraft to make smooth turns without leaving the paved surface. The "fillet" is the tapered area that connects the straight segments of pavement, ensuring that aircraft wheels, especially the main gear, remain on the pavement during turns.

Based on the FAA fillet design, the minimum width of the Taxiway is proposed at 84-ft. The relatively short length of Taxiway E5, while complying with FAA design standards for taxiway and runway intersections, results in the taxiway having a minimum 84-feet width. Designing to meet FAA criteria will ensure that aircraft currently utilizing adjacent taxiways E and M can continue to operate on the new Taxiway E5. A reduced width scenario was not evaluated as it would not comply with FAA design standards and would not allow for all aircraft that currently utilize Taxiways M and E to utilize the new bypass Taxiway. This would not meet the project purpose of improving airfield operational efficiency, reducing aircraft ground delays, and improving safety by providing a bypass taxiway for departing aircraft to access Runway 11. An increased width was not considered to minimize environmental impacts. The preferred alternative (as described herein) was selected because it addressed operational deficiencies while meeting the purpose and need and utilizing the existing pavement areas to the maximum extent practical.

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

The project was designed to avoid impacts wherever feasible, while still meeting the project's purpose and need. Mitigation measures include implementation of a grassland management plan which contributes to the expansion and preservation of valuable grassland habitat while removing

pavement and providing stormwater and resiliency benefits. Additionally, all activities related to the rehabilitation of Taxiway E and the construction of Taxiway E5 will be conducted outside the nesting season—from May 1 to July 31—to avoid impacts on state-listed protected bird species present at the project site. All areas of temporary disturbance and pavement removal will be restored to warm-season grasslands utilizing the Division-approved seed mix. Although not anticipated, if ground disturbing activities must occur within the nesting season, pre-construction surveys will be conducted prior to earth-disturbing activities to ensure no birds or nests are present at the site.

Massport will retain a LSP for construction to oversee all excavation activities that may affect soil, fill, or bedrock deeper than three feet below the surface. A Groundwater Dewatering Plan, Soil Management Plan, and remediation work plan that includes safety procedures, contamination mitigation strategies, and waste handling methods will be submitted to MassDEP for approval.

The project will also implement best management practices (BMPs) and erosion and sedimentation controls to mitigate construction period noise and air quality impacts. Mitigation Measures for noise impacts caused by construction activities consist of using quieter equipment, adjusting operations, disconnecting backup beepers, preventing tailgate banging at night, using flaggers for nighttime equipment movement, installing perimeter fencing and shielding exterior lighting.Additional measures include enclosing or shielding noisy equipment in sensitive areas, limiting equipment idling, restricting public address systems and certain tools, prohibiting tailgate slamming, and turning off vibratory compactors during pavement transitions.

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

Construction of the project will be completed in three phases between late Summer 2025 and Spring 2026. The work associated with each construction phase are as follows:

- **Phase 1: Construction of the new Taxiway E5, including full depth pavement construction, grading, taxiway edge lighting and sign installation. Phase 1 will occur over a 20-calendar day period in late summer 2025.**

- **Phase 2: Rehabilitation of Taxiway E, including milling and resurfacing of the taxiway and electrical upgrades. Phase 2 will occur over a 10-calendar day period in late summer 2025.**

- **Phase 3: Construction of new Taxiway E5 within the Runway 11-29 Safety Area including full depth pavement construction, grading, taxiway edge light and sign installation. Phase 3 will occur over a 41-calendar day period in April 2026 and will include night and weekend closures of Runway 11-29.**

During the week, daytime construction will occur between 7:00 AM to 3:30 PM, and night construction will occur between 10:00 PM and 6:00 AM. Weekend work will begin on Friday at 10:00 PM and will conclude on Sunday at 3:30 PM. The Contractor will utilize the paved aircraft run-up pad, which is connected by a paved driveway to the T/W E, for staging and stockpiling. It is anticipated trucks shall access the project site from I-95, Route 2A, and Hanscom Drive and will not route through residential neighborhoods.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

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

☐ Yes (Specify_____)

☒ No

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

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

RARE SPECIES:

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

☒Yes (Specify: Priority Habitat 1512) ☐No

Previous NHESP coordination identified this portion of Hanscom Field as Priority Habitat for the state-listed Eastern Meadowlark *(Sturnella magna, special concern),* Grasshopper Sparrow (*Ammodramus savannarum, threatened)*, and Upland Sandpiper (*Bartramia longicauda, endangered).*

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

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

☐Yes (Specify_____) ☒No

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

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site?

☐Yes ☒ **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 ☒ **No**; if yes, identify the water body and pollutant(s) causing the impairment:

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? ☐Yes ☒ **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 Hanscom Field is captured via a series of catch basins along runways, taxiways, and apron areas, and is conveyed via open channels and a closed drainage system into the Shawsheen River to the east, Elm Brook (a tributary to the Shawsheen River) to the west, and a wetland complex to the north. To date, Massport has not identified any flooding or ponding within the project site following extreme precipitation events.

The project includes the installation of three catch basins and additional manholes between existing T/W E and proposed T/W E5. The project will increase the impervious surface by approximately 83,450 square feet (SF) (1.9 acres). As outlined in the ESPR, Massport works in cooperation with MassDEP and the U.S. Air Force (USAF) to improve the quality and flow of stormwater discharges to the Shawsheen River. Massport also works in cooperation with MassDEP and NHESP to remove excess pavement within the airfield to facilitate reclamation of pervious grassland habitat. To date, Massport has removed approximately 8.5 acres of pavement as a component of several airfield improvement projects. Massport will continue to seek opportunities to remove pavement to decrease impervious surface in Hanscom Field and reduce stormwater impacts.

Massport is a regulated entity under the EPA's National Pollution Discharge Elimination System (NPDES) for stormwater discharges, and therefore is required to develop a site-specific Stormwater

Pollution Prevention Plan (SWPPP). Hanscom Field' most recent SWPPP was revised and certified in 2023. In accordance with the SWPPP, Massport will employ erosion and sedimentation controls during construction minimize sedimentation of downgradient resource areas.

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**; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):

The project site is not currently regulated under M.G.L.c.21E. Discussion of adjacent regulated sites is provided in Section 3.6 of the concurrently filed Proposed EIR.

Is there an Activity and Use Limitation (AUL) on any portion of the project site? ☐Yes ☒ **No**; 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**; 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 project is not expected to produce new hazardous waste during construction or following implementation. Construction of the project would produce minimal solid waste. However, all construction debris created by the project would be taken from the project site and properly disposed of consistent with local regulations. To the extent that hazardous materials such as asphalt, paints, and fossil fuels are used on site during construction, they would continue to be handled, used, stored, transported, and disposed of pursuant to applicable state, federal, and local regulations.

The project would not require changes in any routine transport, use, or disposal of hazardous materials and/or solid waste associated with operations at Hanscom Field. Massport manages contaminated materials encountered during construction in accordance with the MCP (310 CMR 40.00) and M.G.L 21 E, Oil and Hazardous Materials Release Prevention and Response Act.

(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**; if yes, please consult state asbestos requirements at http://mass.gov/MassDEP/air/asbhom01.htm

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

During construction, impacts to air quality will be limited to fugitive dust associated with earth disturbing activities and construction vehicle emissions. Air quality within the project site is not expected to be substantially affected by project construction. Contractors will be required to comply with MGL c.90 § 16A and MassDEP anti-idling regulations (310 CMR 7.11(1)(b)) which prohibits unnecessary idling of motor vehicles for more than five minutes.

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**; 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 result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River. ? ☐Yes ☐ **No**; if yes, describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

ATTACHMENTS:

1. List of all attachments to this document. **Refer to Attachment 1 (copied below for reference).**
2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries. **Refer to Attachment 2, Figure 1.**
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. **Refer to Attachment 3.**
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. **Refer to Attachment 2, Figures 4, 5, 6, and 7.**
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). **Refer to Attachment 4.**
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2). **Refer to Attachment 5.**
7. List of municipal and federal permits and reviews required by the project, as applicable. **Refer to Attachment 6.**
8. Printout of output report from RMAT Climate Resilience Design Standards Tool, available here. **Refer to Attachment 7.**
9. Printout from the EEA EJ Maps Viewer showing the project location relative to Environmental Justice (EJ) Populations located in whole or in part within a 1-mile and 5-mile radius of the project site. **Refer to Attachment 8.**

List of Attachments:

Attachment 1 – List of Attachments

Attachment 2 – Figures

- **Figure 1 – USGS Locus**
- **Figure 2 – Aerial Locus**
- **Figure 3 – Land Use**
- **Figure 4 – MassDEP Wetlands**
- **Figure 5 – Open Space**
- **Figure 6 – NHESP Habitat**
- **Figure 7 – Historic Resources Map**
- **Figure 8 – Environmental Justice Map**

Attachment 3 – Existing Conditions Plans

Attachment 4 – Project Plans

Attachment 5 – EENF Distribution List

Attachment 6 – List of Required Permits and Approvals

Attachment 7 - RMAT Climate Resilience Design Standards Tool Output Report

Attachment 8 – Environmental Justice Documentation

- **EEA EJ Maps viewer – EJ Populations and Languages**
- **MEPA EJ Reference List**
- **Environmental Justice Screening Form**

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 ☒ **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	Change	Total
Footprint of buildings	0	0	0
Internal roadways	0	0	0
Parking and other paved areas	3.55	1.92	5.46
Other altered areas	6.60	-1.92	4.68
Undeveloped areas	0	0	0
Total: Project Site Acreage	**10.14**		**10.14**

B. Has any part of the project site been in active agricultural use in the last five years? ☐Yes ☒ **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 ☒ **No**; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ☐Yes ☒ **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 ☒ **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 ☒ **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**; if yes, describe:

III. Consistency

A. Identify the current municipal comprehensive land use plan

Title: **The Bedford We Want: Shaping Our Future** Date: **November 26, 2013**

Title: **Envision Concord – A Bridge to 2030** Date: **July 30,2018**

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

1) economic development

The Town of Bedford's Master Plan recognizes the economic contribution Hanscom Field has towards employment and industry development. Economic Development Goal #6 aims to Improve the regional and local transportation infrastructure to serve commercial development needs and to address the impacts of business and commercial growth. The project is consistent with this

goal as it will improve the regional transportation infrastructure by reducing aircraft and congestion, and take-off and delays.

2) adequacy of infrastructure

The Town of Bedford's Plan recognizes the need for greater efficiency in their infrastructure. Transportation goal #4 aims to improve Bedford's transportation infrastructure and leverage funding from government and private sources. The proposed project aligns with this goal as it will reduce delays and congestion on nearby taxiways and runways.

3) open space impacts

The Town of Bedford's Master Plan, and the Town of Concord's Plan both recognize the importance of preserving and enhancing open and natural spaces. The project is consistent with this goal as all work will occur within the existing Hanscom Field property and the project will not impact any recreational or open space.

4) compatibility with adjacent land uses

The project will alleviate existing delays caused by aircraft bottlenecking on Taxiway M and will improve congestion in this area of Hanscom Field. The project is consistent with the adjacent land use and all work will occur within the existing Hanscom Field property.

C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
RPA: **Metropolitan Area Planning Council (MAPC)**

Title: **MetroCommon 2050: Shaping our Region Together** Date: **Fall, 2021**

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

1) economic development

The MetroCommon 2050 Plan identifies the importance of focusing development in previously developed areas and ensuring land preservation, conservation, and access to recreational space. All work will occur within the existing Hanscom Field property and the project will not impact any recreational or open space.

2) adequacy of infrastructure

The MetroCommon 2050 Plan recognizes the benefits of meeting transportation demands and increased mobility. This project is consistent with those principles in that the project intends to improve mobility and reduce congestion to better manage transportation demands.

3) open space impacts

The MetroCommon 2050 Plan emphasizes the importance of preserving open space, farmland, and critical environmental resources. The project is consistent with this goal as it will not encroach upon open space or farmland resources and has been designed to avoid impacts to environmental resources to the extent practicable.

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))? ☒Yes ☐ **No**; if yes, specify, in quantitative terms:

The project will disturb approximately 10.1 acres of Priority Habitat and is anticipated to result in a "take" of state-listed species.

(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**? ☒Yes ☐ **No**

Consultation with NHESP is ongoing; however, the project is anticipated to require a Conservation and Management Permit.

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)? ☒**Yes** ☐ No

Refer to Attachment 2, Figure 6.

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

II. Impacts and Permits

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

1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? ☒**Yes** ☐ 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.

Consultation with NHESP is ongoing; however, the project is anticipated to require a Conservation and Management Permit.

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

The project is anticipated to result in a "take" of state-listed species and require a Conservation and Management Permit. Massport will develop a mitigation plan in coordination with NHESP that will provide grasslands habitat at a 1:3 ratio (e.g. protection of three times the amount of impacted habitat area) to achieve a "long term Net Benefit" to the conservation of the State-listed Species. Additionally, all activities related to the rehabilitation of Taxiway E and the construction of Taxiway E5 will be conducted outside the nesting season—from May 1 to July 31—to avoid impacts on state-listed protected bird species present at the project site. All areas of temporary disturbance and pavement removal will be restored to warm-season grasslands utilizing the Division-approved seed mix. Although not anticipated, if ground disturbing activities must occur within the nesting season, pre-construction surveys will be conducted prior to earth-disturbing activities to ensure no birds or nests are present at the site.

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

Previous NHESP coordination identified this portion of Hanscom Field as Priority Habitat for the state-listed Eastern Meadowlark (Sturnella magna, special concern), Grasshopper

Sparrow (Ammodramus savannarum, threatened), and Upland Sandpiper (Bartramia longicauda, endangered).

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

5. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ☐Yes ☐ **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 **N/A**

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)? ☒Yes ☐ **No**; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

The project is anticipated to result in a "take" of state-listed species. Refer to the response provided above in Section II.A.2.

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 ☒ **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 ☒ **No**; if yes, specify which permit:

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

II. Wetlands Impacts and Permits

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? __ Yes ___ No; if yes, has a Notice of Intent been filed? ___ Yes __ No; if yes, list the date and MassDEP file number: N/A 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:

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

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

D. Is any part of the project:

1. proposed as **a limited project**? ___ Yes ___ No; if yes, what is the area (in sf)?____
2. the construction or alteration of a **dam**? ___ Yes ___ No; if yes, describe:

3. fill or structure in a **velocity zone or regulatory floodway**___ Yes ___ No
4. dredging or disposal of dredged material? ___ Yes ___ 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 ___ No
6. subject to a wetlands restriction order? ___ Yes ___ No; if yes, identify the area (in sf):
7. located in buffer zones___ Yes ___ No; if yes, how much (in sf)_____

E. Will the project:
1. be subject to a local wetlands ordinance or bylaw? ___ Yes ___ No
2. alter any federally-protected wetlands not regulated under state law? ___ Yes ___ 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 ___ 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 ___ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current ___ Change ___ Total ___
If yes, how many square feet of solid fill or pile-supported structures (in sf)?

C. For non-water-dependent use projects, indicate the following:
Area of filled tidelands on the site:
Area of filled tidelands covered by buildings:
For portions of site on filled tidelands, list ground floor uses and area of each use:
Does the project include new non-water-dependent uses located over flowed tidelands? ___ Yes ___ No__
Height of building on filled tidelands:

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

D. Is the project located on landlocked tidelands? ___ Yes ___ 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 ___ 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 ___ No;

(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

G. Does the project include dredging? ___ Yes ___ No; if yes, answer the following questions:
What type of dredging? Improvement ___ Maintenance ___ Both ____
What is the proposed dredge volume, in cubic yards (cys) _____
What is the proposed dredge footprint ____length (ft) ___width (ft)____depth (ft);

Will dredging impact the following resource areas?
Intertidal Yes__ No__; if yes, ___ sq ft
Outstanding Resource Waters Yes__ No__; if yes, ___ sq ft
Other resource area (i.e. shellfish beds, eel grass beds) Yes__ No__; if yes __ sq ft

If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?

If no to any of the above, what information or documentation was used to support this determination?

Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis.

Sediment Characterization
Existing gradation analysis results? __Yes ___No: if yes, provide results.
Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? ___Yes ____No; if yes, provide results.
Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option.

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

IV. Consistency:

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

B. Is the project located within an area subject to a Municipal Harbor Plan? ___ Yes ___ 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 ☒ **No**; if yes, specify, in quantitative terms:

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

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

II. Impacts and Permits

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

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

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

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

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

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

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

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

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

G. Does the project involve:

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

water supply for purpose of forest harvesting activities? ___ Yes ___ No

III. Consistency

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

WASTEWATER SECTION

I. Thresholds / Permits

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

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

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

II. Impacts and Permits

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

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

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

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

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

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

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

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

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

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

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

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

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

III. Consistency

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

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

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

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

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

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

II. Traffic Impacts and Permits

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

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

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

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

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

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

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

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

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

III. Consistency

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

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

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

The project will exceed the threshold at 301 CMR 11.03(6)(b)4. – Construction of a New Taxiway at an airport.

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

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

II. Transportation Facility Impacts

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

Hanscom Field is a full-service general aviation airport on 1,300 acres in Bedford, Concord, Lexington, and Lincoln, Massachusetts. Hanscom Field has two intersecting asphalt-paved runways: Runway 11-29, which is oriented in an east/west configuration, and Runway 5/23, which is oriented in a northeast/southwest configuration. Other supporting infrastructure include taxiways, an Air Traffic Control tower, navigational aids, parking aprons, hangers, passenger terminals, and other aviation services buildings. The project site is located between Taxiway M and Runway 11-29, and is comprised of paved runways, service roads, and open, maintained grassy areas. The project proposes the rehabilitation of Taxiway E and construction of a bypass Taxiway E5. Work will include milling and repaving of existing Taxiway E from Runway 5-23 to Taxiway M; construction of Taxiway E5, conversion of existing taxiway edge lights to LED fixtures, installation of new electrical infrastructure including signs and lights for new Taxiway E5, minor drainage upgrades, and minor geometric improvements on Taxiway M at the Runway 11-29 intersection.

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

III. Consistency

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

The project is consistent with the Hanscom Field FAA-approved Airport Layout Plan, last updated in 2022.

Destination 2050 (July 2023) is the Boston Region's Long-range Transportation Plan (LRTP) developed by the Central Transportation Planning Staff (staff to the Boston Region Metropolitan Planning Organization). Destination 2050 included the following goals to help improve regional transportation: Support reliable, safe travel by keeping roadways, bridges, transit assets, and other infrastructure in a state of good repair, and prioritize these investments in disadvantaged communities. The project is consistent with this goal in that the project's purpose emphasizes the intention of improving the safety of the airfield and its taxiways by providing a bypass taxiway to reduce the risk of runway

incursions and improve operational efficiency.

Massport also prepares an Environmental Status and Planning Report (ESPR) for Hanscom Field every five years to assess current and planned future conditions and associated environmental impacts. The ESPR is submitted to the MEPA Office every five years to provide an update on airfield activity levels, environmental conditions, and to evaluate the potential cumulative environmental impacts of future development. While the ESPR provides a broad, long-term planning perspective, individual projects may still require their own MEPA review, independent of the ESPR. The proposed project was included in the 2022 ESPR as one of the forecasted projects that may be implemented over the next ten years.

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 ☒ **No**; if yes, specify, in quantitative terms:

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

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

II. Impacts and Permits

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

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

B. If the project involves construction or expansion of an electric generating facility, what are:
1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

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

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

III. Consistency

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

AIR QUALITY SECTION

I. Thresholds

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

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

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

II. Impacts and Permits

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

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

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

III. Consistency

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

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

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

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

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

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

II. Impacts and Permits

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

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

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

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

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

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

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

III. Consistency

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

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? ☐Yes ☒ **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 **N/A**

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

Review of the National Register and the Massachusetts Cultural Resource Information System (MACRIS) indicated that no National Register-listed or -eligible properties or districts or inventoried properties or districts are located within or directly adjacent to the project site.

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 ☒ **No**; if yes, does the project involve the destruction of all or any part of such archaeological site? ___ Yes **__ No**; if yes, please describe: **N/A**

The project site is located within a previously disturbed area that has been determined to have low archaeological sensitivity, therefore impacts to archaeological resources are not anticipated.

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

II. Impacts

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

Because the project site does not contain any structures identified in the State Register of Historic Places or the Massachusetts Historical Commission's (MHC) Inventory and Archaeological assets of the Commonwealth, the project is not anticipated to have any impacts on Historic resources. Furthermore, the project site is located within a previously disturbed area that has been determined to have low archaeological sensitivity, therefore impacts to archaeological resources are not anticipated.

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:

As noted above, the project is not anticipated to impact any National Register listed or -elibile properties or districts. Furthermore, the project site is located within a previously disturbed area that has been determined to have low archaeological sensitivity, therefore impacts to archaeological resources are not anticipated.

CLIMATE CHANGE ADAPTATION AND RESILIENCY SECTION

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

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

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

Climate Change Adaptation and Resiliency Strategies

I. Has the project taken measures to adapt to climate change for all of the climate parameters analyzed in the RMAT Climate Resilience Design Standards Tool (sea level rise/storm surge, extreme precipitation (urban or riverine flooding), extreme heat)? ☒**Yes** ☐ 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.

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).

The RMAT Tool Project Report (refer to Attachment 7) identified the project as being at "High Risk" for Extreme Precipitation: Stormwater Flooding and Extreme Heat. Despite receiving a "high risk" rating, extreme heat events are not expected to impact the function and maintenance needs of the taxiway. Additionally, the project consists of an active airfield and does not have areas where users might have to wait and be exposed to extreme heat (such as sidewalks, signalized cross walks, or bus stops). The project proposes the installation of three catch basins between existing T/W E and proposed T/W E5 which will collect and treat stormwater flow from the additional impervious area.

C. Is the project contributing to regional adaptation strategies? ☐Yes ☒ **No**; If yes, describe.

II. Has the Proponent considered alternative locations for the project in light of climate change risks? ☐Yes ☒ **No**

A. If no, explain why.

The project is proposed to allow aircraft to pass one another near a runway end in order to reduce aircraft ground delays and bottlenecking; therefore, no alternative locations were considered. The purpose of the project is to improve airfield operational efficiency, reduce aircraft ground delays, and improve safety by providing a bypass taxiway for departing aircraft to access Runway 11.

C. If yes, describe alternatives considered.

N/A

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 ☒ **No**

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

ENVIRONMENTAL JUSTICE SECTION

I. Identifying Characteristics of EJ Populations

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

There are thirty-seven (37) Environmental Justice (EJ) populations located within five miles of the project limits. A summary of the EJ populations within a one (1) and five (5) mile radius is included below and depicted on Figure 8 in Attachment 2.

Block Group	Census Tract	Municipality	EJ Characteristic	Proximity to Project
6	3593.03	Bedford	Minority	1 Mile
5	3603	Lincoln	Minority	1 Mile
2	3631.05	Acton	Minority	5 Miles
3	3612	Concord	Minority	5 Miles
3	3682	Waltham	Minority	5 Miles
1	3681.02	Waltham	Minority	5 Miles
5	3689.01	Waltham	Minority	5 Miles
6	3689.01	Waltham	Minority	5 Miles
4	3681.01	Waltham	Minority	5 Miles
3	3681.01	Waltham	Minority	5 Miles
2	3681.01	Waltham	Minority	5 Miles
1	3583	Lexington	Minority	5 Miles
4	3583	Lexington	Minority	5 Miles
3	3583	Lexington	Minority	5 Miles
2	3583	Lexington	Minority	5 Miles
4	3584	Lexington	Minority	5 Miles
3	3584	Lexington	Minority	5 Miles
3	3586	Lexington	Minority	5 Miles
1	3586	Lexington	Minority	5 Miles
6	3586	Lexington	Minority	5 Miles
2	3586	Lexington	Minority	5 Miles
4	3586	Lexington	Minority	5 Miles
5	3586	Lexington	Minority	5 Miles
1	3585	Lexington	Minority	5 Miles
2	3585	Lexington	Minority	5 Miles
3	3585	Lexington	Minority	5 Miles
4	3581	Lexington	Minority	5 Miles
2	3587	Lexington	Minority	5 Miles
1	3587	Lexington	Minority	5 Miles
2	3324.02	Burlington	Minority	5 Miles
1	3324.02	Burlington	Minority	5 Miles
2	3323	Burlington	Minority	5 Miles
1	3162.02	Billerica	Minority	5 Miles
3	3162.02	Billerica	Minority	5 Miles
2	3163	Billerica	Minority	5 Miles
1	3163	Billerica	Minority	5 Miles

Block Group	Census Tract	Municipality	EJ Characteristic	Proximity to Project
5	3164	Billerica	Minority	5 Miles

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.

Massport consulted the "Languages Spoken in Massachusetts" tab of the EJ Maps Viewer to identify languages spoken by five (5) percent or more of residents who identify as not speaking English "very well" (i.e. have Limited English Proficiency). Printouts from the EEA's EJ Mapper depicting the Census Tracts where languages are spoken by five (5) percent or more of residents who identify as not speaking English "very well" are provided in Attachment 8. EEA's EJ Mapper did not identify any populations where languages are spoken by five (5) percent or more of residents who identify as having limited English proficiency in any census tracts within the DGA.

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.

N/A

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 will not result in disproportionate adverse effects, or increase the risk of climate change, on the EJ populations by materially exacerbating such existing burdens. These improvements may provide an overall benefit to the proximate EJ populations. Additionally, the project will not exacerbate pre-existing conditions related to air, water, or soil pollution.

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 ☒ **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 ☒ **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).

N/A

III. Public Involvement Activities

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

1. If advance notification was provided under Part II.A., attach a copy of the Environmental

Justice Screening Form and provide list of CBOs/tribes contacted (with dates). Copies of email correspondence can be attached in lieu of a separate list.

The EJ Reference List was requested on April 18, 2025 and advanced notification was provided on May 6, 2025 via distribution of the EJ Screening Form. A copy of the Environmental Justice Screening Form and the EJ Reference List is provided in Attachment 8.

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.

The EJ Screening Form included project contact information and described how to request a public meeting. No community meetings have been requested by CBOs or tribes to date.

The Hanscom Field Advisory Commission (HFAC) was established as a liaison between Massport and the towns surrounding Hanscom Field. The purpose of HFAC is to provide continued communication and education among the communities surrounding Hanscom Field and Massport; and to act as an advisory commission for review and reaction to decisions relating to Hanscom Field, including land use, noise abatement, and transportation needs. The HFAC is comprised of representatives from the towns of Lincoln, Concord, Lexington, Bedford, and the South Lexington Civic Association, and the Hanscom Pilots Association. Massport presented this project to HFAC on March 16, 2025. Meeting minutes, once approved, are available on the HFAC website.

Additionally, Massport incorporated the MEPA Public Involvement Protocol and the MEPA EJ Impact Analysis Protocol in their most recent 2022 ESPR for L. G. Hanscom Field. The proposed project was included in the 2022 ESPR as one of the forecasted projects that may be implemented over the next ten years. The 2022 ESPR scope was published in the Environmental Monitor with a 30-day public comment period and Massport held two public info sessions for the ESPR in June of 2024. Furthermore, Massport circulated the ESPR to their broad distribution list which included MEPA's EJ Reference list with relevant community-based organizations and tribes/indigenous organizations.

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

   N/A

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

The EJ Reference List is provided in Attachment 8 and the MEPA Distribution List is provided in Attachment 5.

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.

Massport will continue to coordinate with MEPA on future ESPR's and incorporate MEPA's public Involvement protocol and EJ impact analysis. Following the submission of this EENF/PEIR, Massport will host a public MEPA Consultation Session to present the project to the MEPA Office, relevant state agencies, and the public. This forum will allow attendees to ask questions, engage directly with the Proponent and Project team, and gain a clearer understanding of the Project and its proposed impact mitigation measures. Additionally, Massport will continue to provide project updates to HFAC at their regulatory scheduled meetings.

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: _____ Date: _____

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

Signatures:

Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ENF (if different from above)

Name (print or type)	Name (print or type)
Massport	HNTB, Inc.
Firm/Agency	Firm/Agency
One Harborside Drive, Suite 200S	31 St. James Avenue
Street	Street
East Boston, MA 02128	Boston, MA 02116
Municipality/State/Zip	Municipality/State/Zip
Phone	Phone

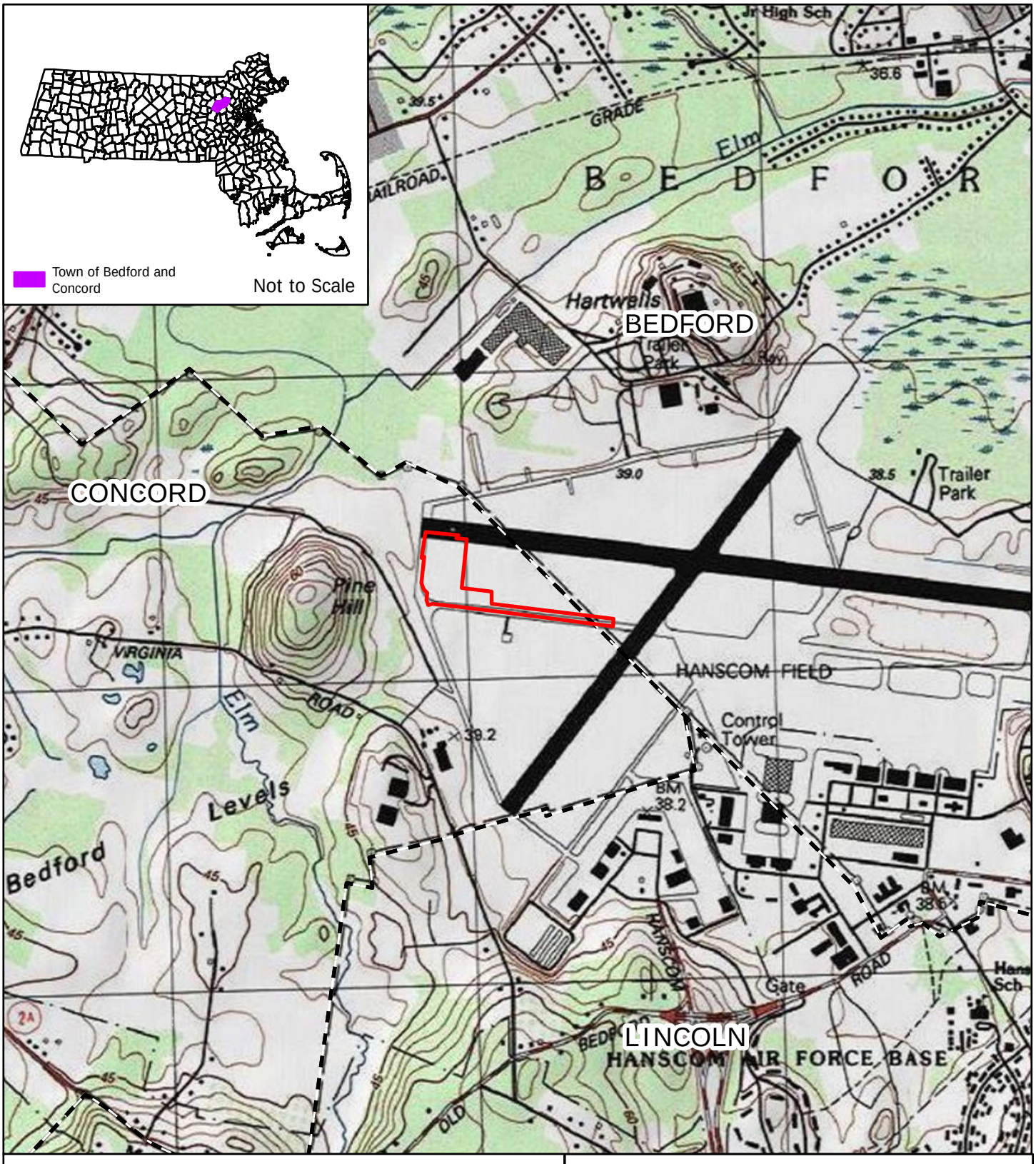
Attachment 1

List of Attachments

List of Attachments

Attachment 2

Figures



Legend

- Project Site
- Municipal Boundary

Notes:
1. U.S. Geological Survey (USGS) 7.5-minute Topographic Quadrangle Maps for Concord, Massachusetts (USGS 2024).

0 0.4 Miles

N

Figure 1: USGS Location Map
Massport Hanscom Field Taxiway E
Bedford and Concord, MA

massport	HNTB
May 2025	Boston, MA

Legend

- Project Site
- Hanscom Field Boundary
- Municipal Boundary

Notes:
1. Basemap courtesy of ESRI.

0 2,000 Feet

N

Figure 2: Aerial Locus Map
Massport Hanscom Field Taxiway E
Bedford and Concord, MA

May 2025	Boston, MA

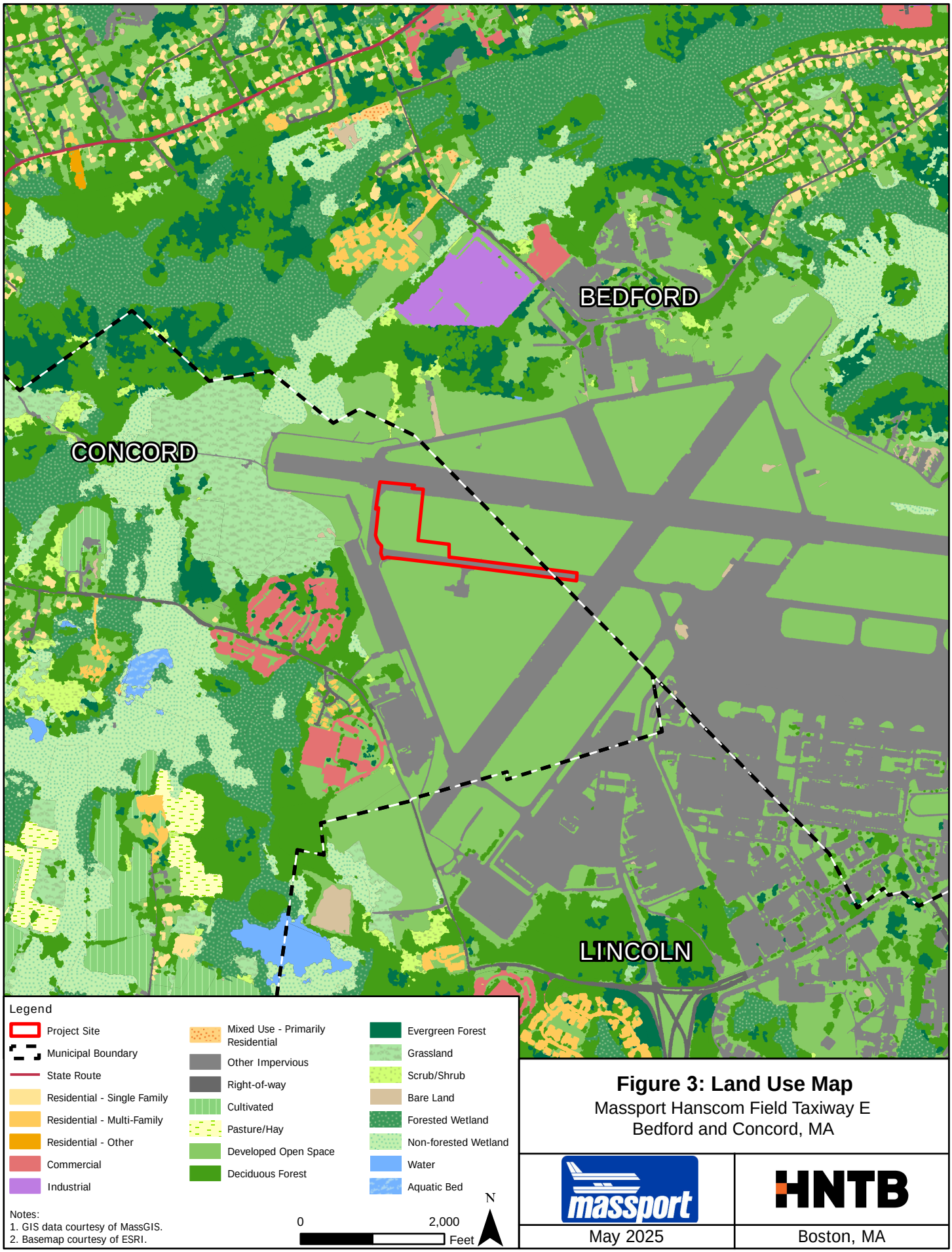


Figure 3: Land Use Map

Massport Hanscom Field Taxiway E
Bedford and Concord, MA

May 2025	Boston, MA

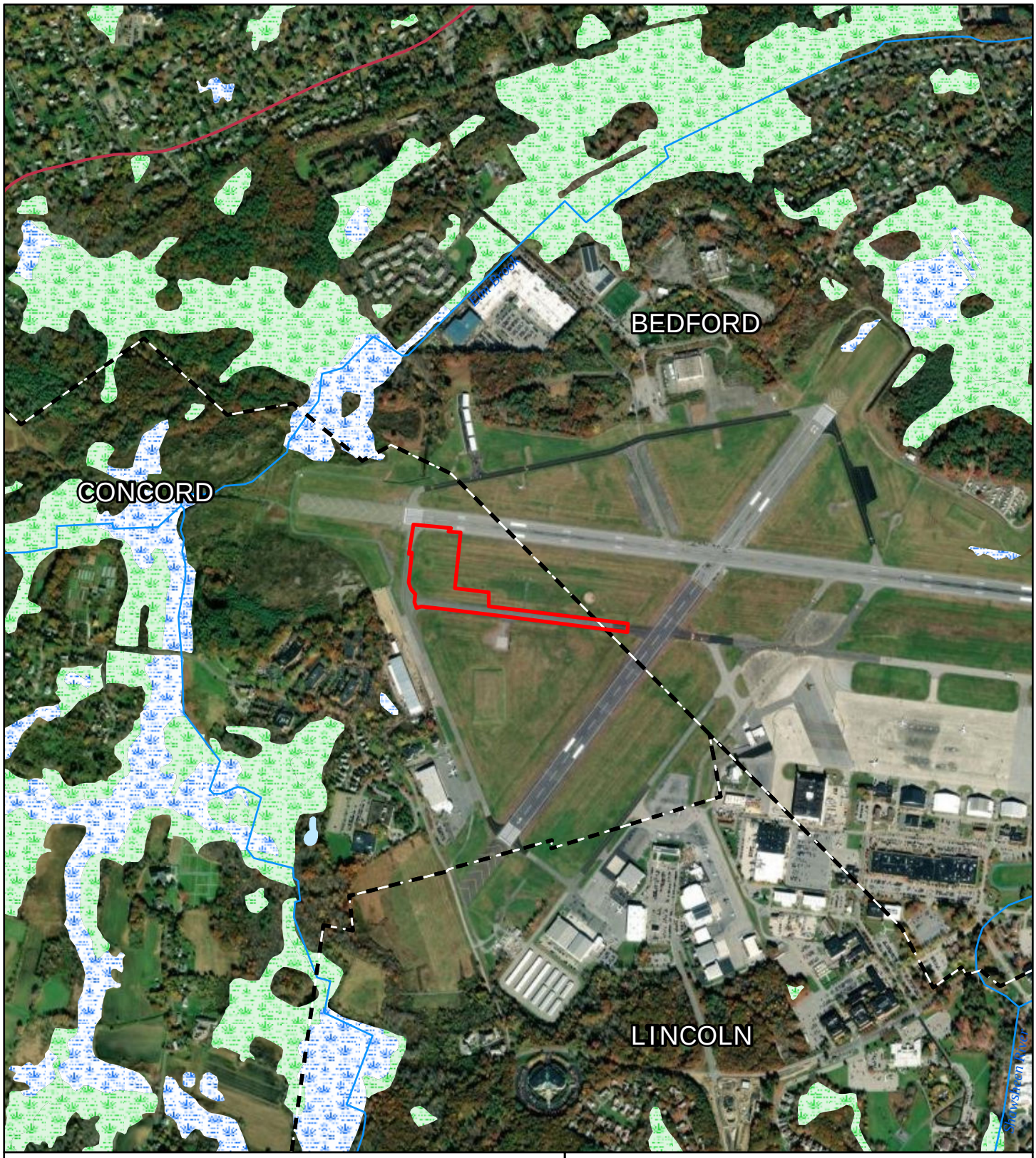


Figure 4: MassDEP Wetlands Map
Massport Hanscom Field Taxiway E
Bedford and Concord, MA

May 2025	Boston, MA

Legend

- Project Site
- Municipal Boundary
- State Route

Open Space: By Owner

- Federal
- Commonwealth of Massachusetts
- Municipal
- Land Trust
- Non-Profit
- Private
- Article 97

Notes:
1. GIS data courtesy of MassGIS.
2. Basemap courtesy of ESRI.

0 2,000 Feet

N

Figure 5: Open Space Map
Massport Hanscom Field Taxiway E
Bedford and Concord, MA

May 2025	Boston, MA

Legend

- Project Site
- Municipal Boundary
- State Route
- NHESP Priority Habitats of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- NHESP Potential Vernal Pools
- NHESP Certified Vernal Pools

Notes:
1. GIS data courtesy of NHESP and MassGIS.
2. Basemap courtesy of ESRI.

0 2,000 Feet

N

Figure 6: NHESP Map
Massport Hanscom Field Taxiway E
Bedford and Concord, MA

May 2025	Boston, MA

Legend

- Project Site
- Municipal Boundary
- State Route
- National Register of Historic Places
- Inventoried Property
- National Register of Historic Places
- Preservation Restriction
- Inventoried Property

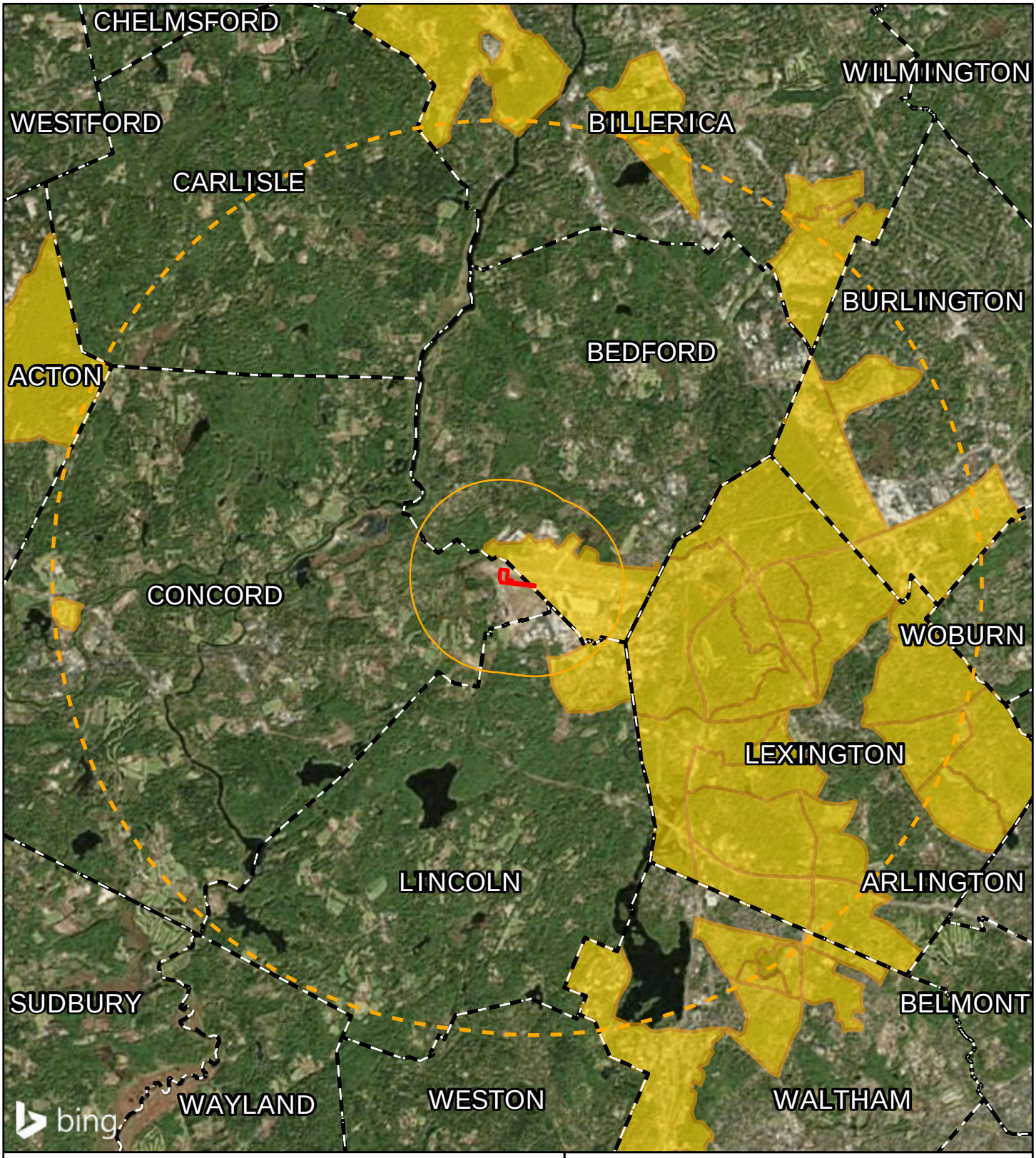
Notes:
1. GIS data courtesy of MHC and MassGIS.
2. Basemap courtesy of ESRI.

0 2,000 Feet

N

Figure 7: Historic Resources Map
Massport Hanscom Field Taxiway E
Bedford and Concord, MA

May 2025	Boston, MA



Legend

- Project Site
- Municipal Boundary
- EJ Criteria: Minority
- 1-Mile DGA
- 5-Mile DGA

Notes:
1. GIS data courtesy of MassGIS.
2. Basemap courtesy of ESRI.

0 2 Miles

N

Figure 8: Environmental Justice Populations

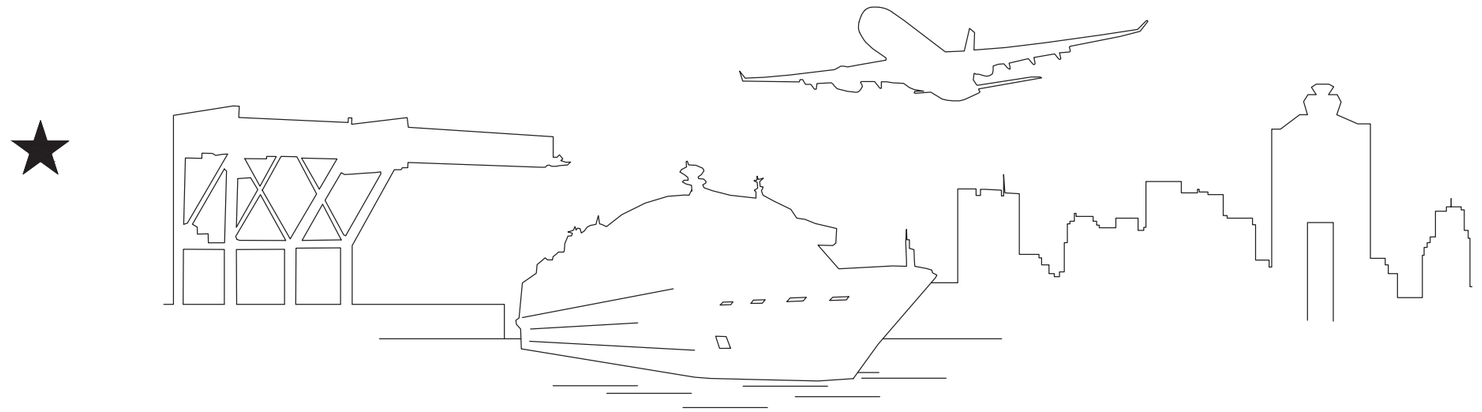
Massport Hanscom Field Taxiway E
Bedford and Concord, MA

massport	HNTB
May 2025	Boston, MA

Attachment 3

Existing Conditions Plans

MASSACHUSETTS PORT AUTHORITY



REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5 LAURENCE G. HANSCOM FIELD BEDFORD, MASSACHUSETTS MPA PROJECT NO. H296-C1 AIP #3-25-003-XXX-2025 MARCH 2025

MASSACHUSETTS PORT AUTHORITY

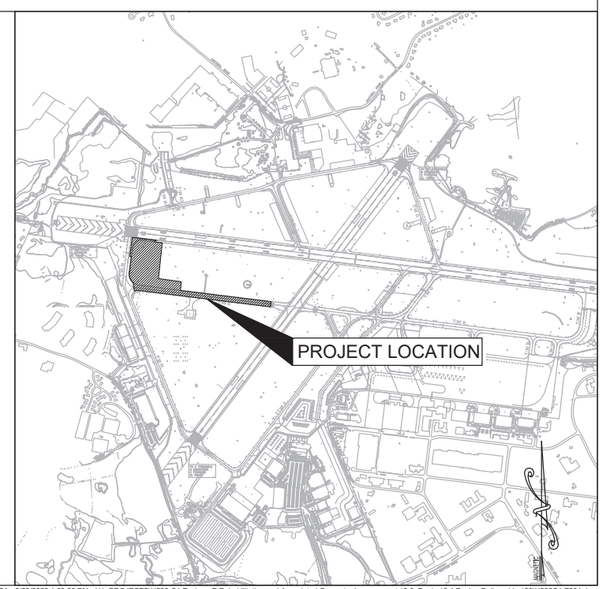
CAPITAL PROGRAMS DEPARTMENT
ONE HARBORSIDE DRIVE, SUITE 209S
EAST BOSTON, MASSACHUSETTS 02128

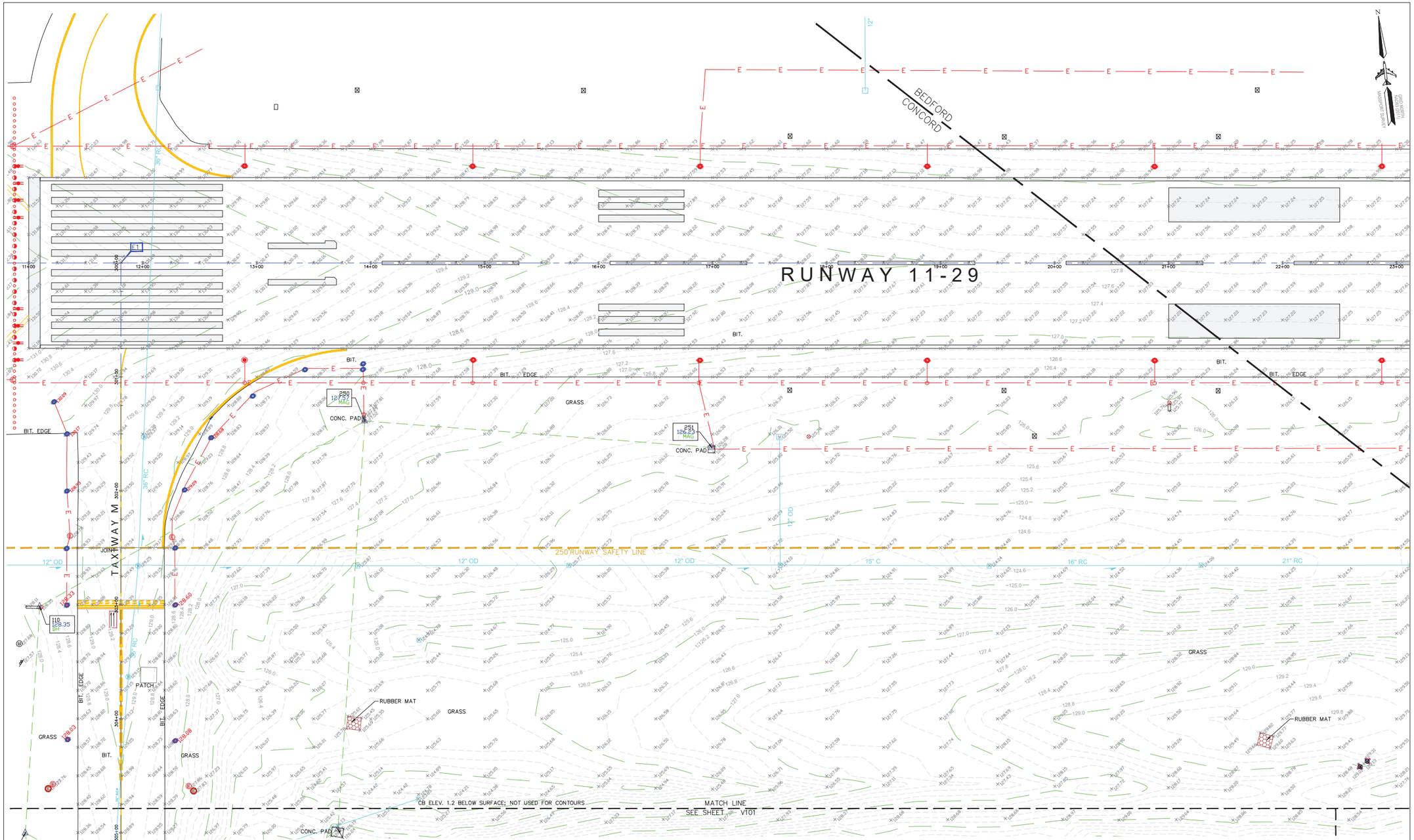
MASSACHUSETTS PORT AUTHORITY
CAPITALS PROGRAM & ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

COMMONWEALTH OF MASSACHUSETTS — DAWIT BIRRU — No. 58992 — REGISTERED PROFESSIONAL ENGINEER
CIVIL

COMMONWEALTH OF MASSACHUSETTS — MATTHEW C. DURNING — ELECTRICAL — No. 47649 — REGISTERED PROFESSIONAL ENGINEER — 03/21/25
ELECTRICAL

LIST OF DRAWINGS:





LEGEND

◐	RW SEMI–FLUSH THRESHOLD LIGHT
⊷	RW ELEVATED THRESHOLD LIGHT
○	RW ELEVATED EDGE LIGHT
◉	RW SEMI–FLUSH EDGE LIGHT
○	TW ELEVATED EDGE LIGHT
●	ABANDONED LIGHT
○	ELECTRIC PULL CAN
	DRAIN MANHOLE
□	CATCH BASIN
Ⓒ	COMMUNICATION MANHOLE
Ⓔ	ELECTRIC MANHOLE
☒	CONC/ABANDONED
•	PVC BOLLARD
UD	UNDERDRAIN CLEAN OUT
⚑	SIGN
Ⓤ	UNKNOWN MANHOLE
Ⓦ	MONITORING WELL
☒	ABANDONED CONC. LT. BASE
△	SURVEY CONTROL POINT
E4	BASELINE CONTROL POINT

NOTES:

1. COORDINATES SHOWN HEREON REFER TO THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), NAD83(2011), IN U.S. SURVEY FEET, MASSACHUSETTS MAINLAND ZONE. PROJECT CONTROL POINTS WERE ESTABLISHED USING RTK GPS.
2. ELEVATIONS SHOWN HEREON REFER TO THE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ELEVATIONS SHOWN ON RUNWAY AND TAXIWAY LIGHTS WERE TAKEN ON EDGE OF RISER NEAREST TO THE RUNWAY OR TAXIWAY CENTERLINE OR FLAT PORTION OF RING.
4. ELEVATIONS ON TAXIWAY LIGHTS, WERE NOT USED FOR SURFACE CONTOURS.
5. TAXIWAY BASELINES ARE FROM PREVIOUS CONSTRUCTION PROJECTS.
6. UPON MOBILIZATION THE CONTRACTOR SHALL CONTACT MASSPORT SURVEY (617)561–1799 FOR ASSISTANCE IN THE RECOVERY OF PROJECT SURVEY CONTROL POINTS.
7. CAUTION: UNDERGROUND UTILITIES ARE PRESENT AND MAY NOT ALL BE SHOWN ON THIS PLAN. USERS OF THIS PLAN MUST TAKE THE NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF PERSONNEL AND AVOID THE INTERRUPTION OF UTILITY SERVICES TO THE AIRPORT.
8. THE CONTOUR INTERVAL ON THIS PLAN IS 0.2'
9. FOR TAXIWAY ALIGNMENT TABLES SEE SHEET V102.
10. FOR SURVEY CONTROL TABLE SEE SHEET V102.

SCALE: 1"=40'

CAUTION: ADDITIONAL UNDERGROUND UTILITIES MAY BE PRESENT BUT NOT SHOWN.

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
Daniel Gerard MacIsaac No. 41408

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

massport SURVEY UNIT
ONE HARBORSIDE DRIVE
BOSTON, MA 02128
(617) 561-1799

IN-HOUSE DESIGN:

CAPITALS PROGRAM & ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:

H296-C1

REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

SHEET TITLE:

EXISTING CONDITIONS PLAN
SHEET 1 OF 3

MPA SURVEY PROJECT:	DRAWING:
2676	2676-01

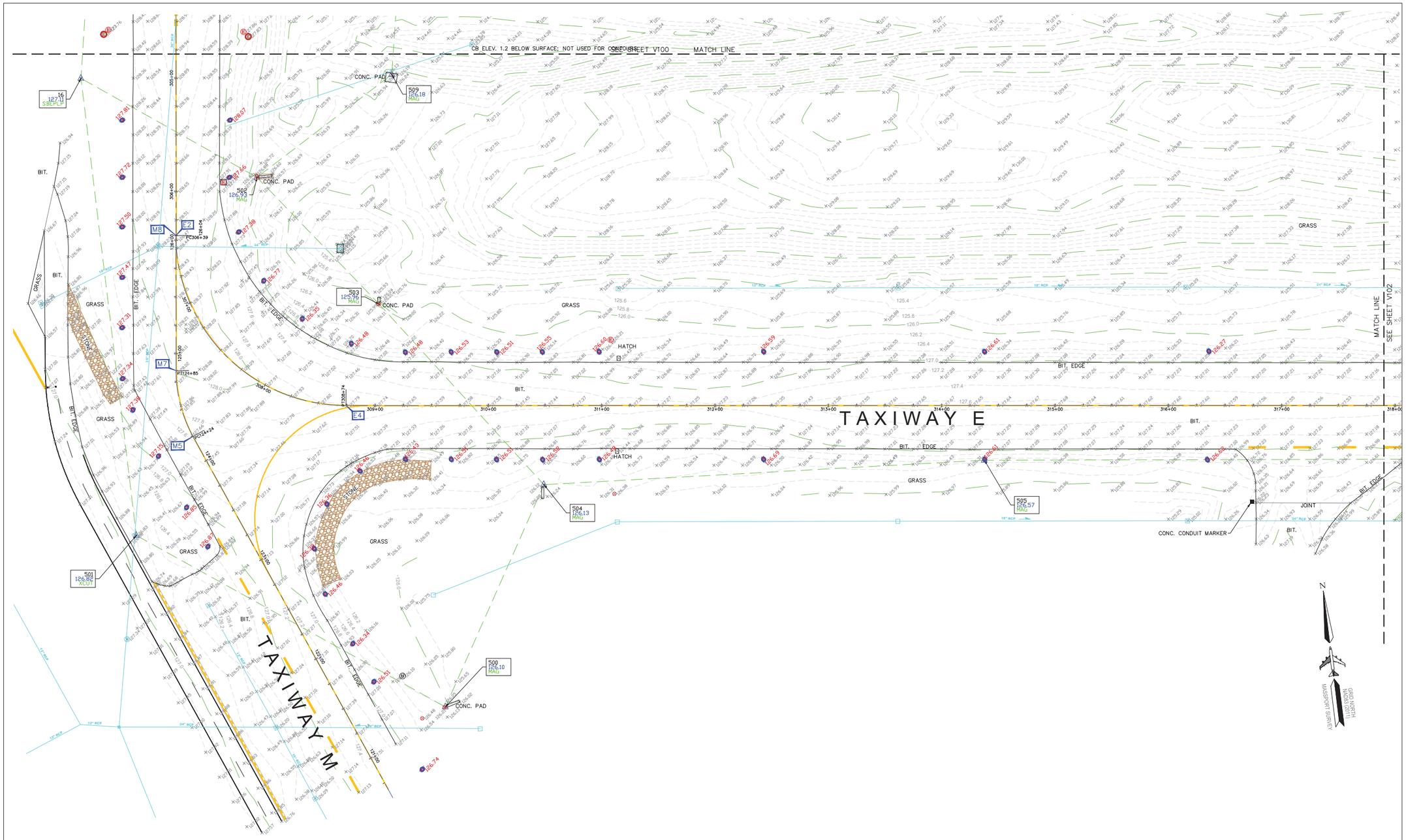
DISCIPLINE:
SURVEY

DRAWN BY:	CHECKED BY:	APPROVED BY:
ML	DGM	DGM

SCALE:	DATE:
1" = 40'	11/13/2024

SHEET NUMBER:	DWG NUMBER:
9 OF 44	V-100

MPA - 11/14/2024 10:14:47 AM - I:\Land Information System\Projects\2676\DWG\2676-01.dwg



LEGEND

- RW SEMI-FLUSH THRESHOLD LIGHT
- RW ELEVATED THRESHOLD LIGHT
- RW ELEVATED EDGE LIGHT
- RW SEMI-FLUSH EDGE LIGHT
- TW ELEVATED EDGE LIGHT
- ABANDONED LIGHT
- ELECTRIC PULL CAN
- DRAIN MANHOLE
- CATCH BASIN
- COMMUNICATION MANHOLE
- ELECTRIC MANHOLE
- CONC/ABANDONED
- PVC BOLLARD
- UNDERDRAIN CLEAN OUT
- SIGN
- UNKNOWN MANHOLE
- MONITORING WELL
- ABANDONED CONC. LT. BASE
- SURVEY CONTROL POINT
- E4 BASELINE CONTROL POINT

NOTES:

1. COORDINATES SHOWN HEREON REFER TO THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), NAD83(2011), IN U.S. SURVEY FEET, MASSACHUSETTS MAINLAND ZONE. PROJECT CONTROL POINTS WERE ESTABLISHED USING RTK GPS.
2. ELEVATIONS SHOWN HEREON REFER TO THE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ELEVATIONS SHOWN ON RUNWAY AND TAXIWAY LIGHTS WERE TAKEN ON EDGE OF RISER NEAREST TO THE RUNWAY OR TAXIWAY CENTERLINE OR FLAT PORTION OF RING.
4. ELEVATIONS ON TAXIWAY LIGHTS, WERE NOT USED FOR SURFACE CONTOURS.
5. TAXIWAY BASELINES ARE FROM PREVIOUS CONSTRUCTION PROJECTS.
6. UPON MOBILIZATION THE CONTRACTOR SHALL CONTACT MASSPORT SURVEY (617)561-1799 FOR ASSISTANCE IN THE RECOVERY OF PROJECT SURVEY CONTROL POINTS.
7. CAUTION: UNDERGROUND UTILITIES ARE PRESENT AND MAY NOT ALL BE SHOWN ON THIS PLAN. USERS OF THIS PLAN MUST TAKE THE NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF PERSONNEL AND AVOID THE INTERRUPTION OF UTILITY SERVICES TO THE AIRPORT.
8. THE CONTOUR INTERVAL ON THIS PLAN IS 0.2'
9. FOR TAXIWAY ALIGNMENT TABLES SEE SHEET V102.
10. FOR SURVEY CONTROL TABLE SEE SHEET V102.

0 40 80 120

SCALE: 1"=40'

CAUTION: ADDITIONAL UNDERGROUND UTILITIES MAY BE PRESENT BUT NOT SHOWN.

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
Daniel Gerard Macisaac No. 41408
REGISTERED PROFESSIONAL LAND SURVEYOR

KEY PLAN:

REVISIONS:

REV NO.	DATE:	DESCRIPTION:	BY:

PRIMARY:

massport SURVEY UNIT
ONE HARBORSIDE DRIVE
BOSTON, MA 02128
(617) 561-1799

IN-HOUSE DESIGN:

CAPITALS PROGRAM & ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:

H296-C1

REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

SHEET TITLE:

EXISTING CONDITIONS PLAN
SHEET 2 OF 3

MPA SURVEY PROJECT: 2676
DRAWING: 2676-01

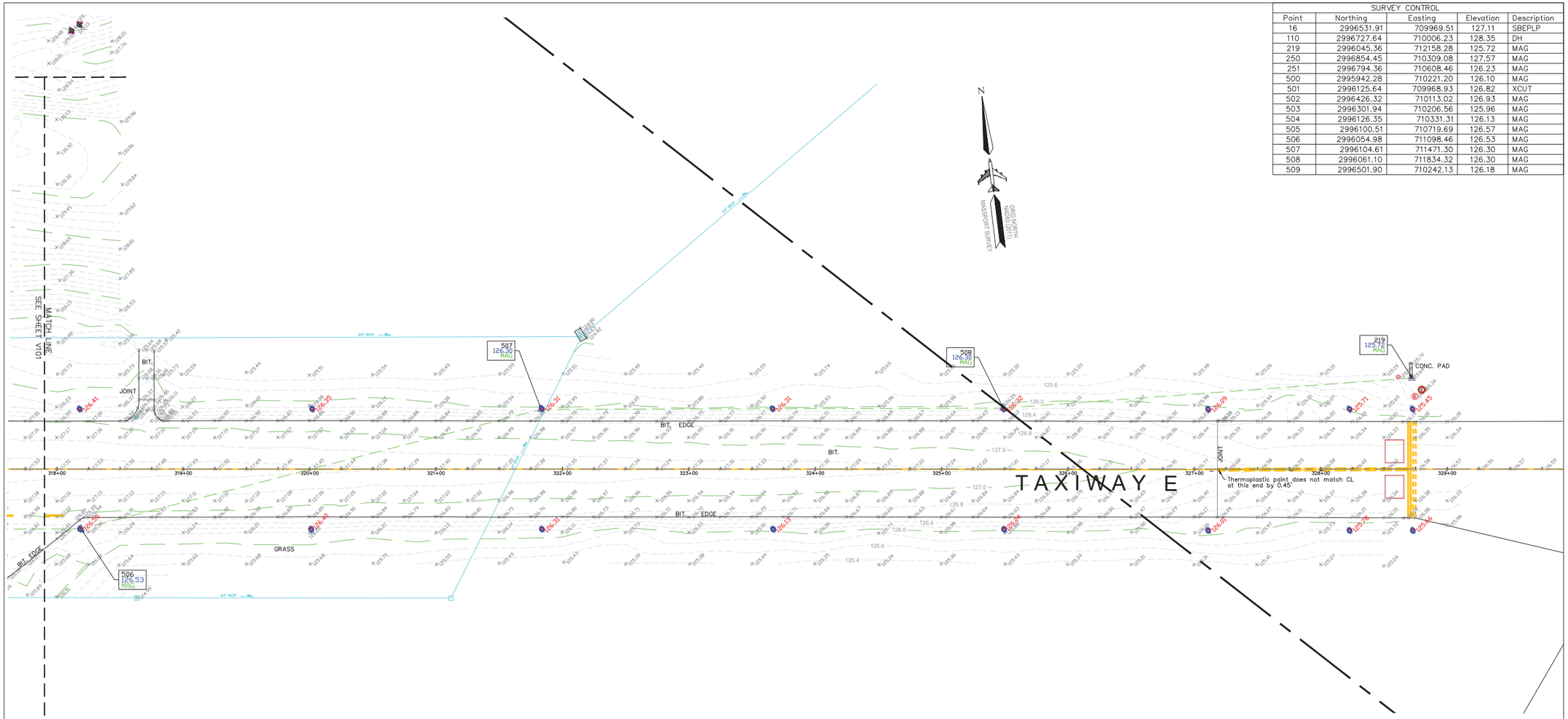
DISCIPLINE: SURVEY

DRAWN BY:	CHECKED BY:	APPROVED BY:
ML	DGM	DGM

SCALE: 1" = 40'
DATE: 11/13/2024

SHEET NUMBER: 10 OF 44
DWG NUMBER: V-101

GRID NORTH NAD83 (2011) MASSPORT SURVEY



SURVEY CONTROL

Point	Northing	Easting	Elevation	Description
16	2996531.91	709969.51	127.11	SBEPLP
110	2996727.64	710006.23	128.35	DH
219	2996045.36	712158.28	125.72	MAG
250	2996854.45	710309.08	127.57	MAG
251	2996794.36	710608.46	126.23	MAG
500	2995942.28	710221.20	126.10	MAG
501	2996125.64	709968.93	126.82	XCUT
502	2996426.32	710113.02	126.93	MAG
503	2996301.94	710206.56	125.96	MAG
504	2996126.35	710331.31	126.13	MAG
505	2996100.51	710719.69	126.57	MAG
506	2996054.98	711098.46	126.53	MAG
507	2996104.61	711471.30	126.30	MAG
508	2996061.10	711834.32	126.30	MAG
509	2996501.90	710242.13	126.18	MAG

TAXIWAY E ALIGNMENT

Point	Station	Northing	Easting	Distance	Bearing	Radius Length	Arc Length	Delta Angle
E1 POB	300+00.00	2997018.13	710113.59					
				638.82'	S 06°59'21.1" W			
E2 PC	306+38.82	2996384.05	710035.86					
E3 RP						150.00'	235.62'	90°00'06.6"
E4 PT	308+74.44	2996216.92	710166.49					
				6218.08'	S 83°00'45.5" E			
E5 PC	370+92.52	2995460.49	716338.39					
E6 RP						240.00'	376.98'	89°59'53.4"
E7 PT	374+69.51	2995669.50	716605.80					
				548.62'	N 06°59'21.1" E			
E8 END	380+18.12	2996214.04	716672.56					

TAXIWAY M WEST ALIGNMENT

Point	Station	Northing	Easting	Distance	Bearing	Radius Length	Arc Length	Delta Angle
M1 POB	100+00.00	2994006.10	711002.93					
				100.14'	N 53°00'44.9" W			
M2 PC	101+00.14	2994066.35	710922.94					
M3 RP						200.00'	108.39'	31°03'07.5"
M4 PT	102+08.54	2994151.31	710857.78					
				2215.73'	N 21°57'37.4" W			
M5 PC	124+24.27	2996206.27	710029.17					
M6 RP						120.00'	60.63'	28°56'58.5"
M7 PT	124+84.90	2996265.75	710021.35					
				119.19'	N 06°59'21.1" E			
M8=E2	126+04.09	2996384.05	710035.86					

0 40 80 120

SCALE: 1"=40'

NOTES:

1. COORDINATES SHOWN HEREON REFER TO THE NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT), NAD83(2011), IN U.S. SURVEY FEET, MASSACHUSETTS MAINLAND ZONE. PROJECT CONTROL POINTS WERE ESTABLISHED USING RTK GPS.
2. ELEVATIONS SHOWN HEREON REFER TO THE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. ELEVATIONS SHOWN ON RUNWAY AND TAXIWAY LIGHTS WERE TAKEN ON EDGE OF RISER NEAREST TO THE RUNWAY OR TAXIWAY CENTERLINE OR FLAT PORTION OF RING.
4. ELEVATIONS ON TAXIWAY LIGHTS, WERE NOT USED FOR SURFACE CONTOURS.
5. TAXIWAY BASELINES ARE FROM PREVIOUS CONSTRUCTION PROJECTS.
6. UPON MOBILIZATION THE CONTRACTOR SHALL CONTACT MASSPORT SURVEY (617)561-1799 FOR ASSISTANCE IN THE RECOVERY OF PROJECT SURVEY CONTROL POINTS.
7. CAUTION: UNDERGROUND UTILITIES ARE PRESENT AND MAY NOT ALL BE SHOWN ON THIS PLAN. USERS OF THIS PLAN MUST TAKE THE NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF PERSONNEL AND AVOID THE INTERRUPTION OF UTILITY SERVICES TO THE AIRPORT.
8. THE CONTOUR INTERVAL ON THIS PLAN IS 0.2'

LEGEND

- RW SEMI-FLUSH THRESHOLD LIGHT
- RW ELEVATED THRESHOLD LIGHT
- RW ELEVATED EDGE LIGHT
- RW SEMI-FLUSH EDGE LIGHT
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- PVC BOLLARD
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- ABANDONED CONC. LT. BASE
- SURVEY CONTROL POINT
- E4 BASELINE CONTROL POINT

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS — Daniel Gerard Maciasac No. 41408 — REGISTERED PROFESSIONAL LAND SURVEYOR

KEY PLAN:

REVISIONS:

REV NO.	DATE:	DESCRIPTION:	BY:

PRIMARY:
massport SURVEY UNIT
ONE HARBORSIDE DRIVE
BOSTON, MA 02128
(617) 561-1799

IN-HOUSE DESIGN:
CAPITALS PROGRAM & ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

SHEET TITLE:
EXISTING CONDITIONS PLAN
SHEET 3 OF 3

MPA SURVEY PROJECT: 2676
DRAWING: 2676-01

DISCIPLINE: SURVEY

DRAWN BY:	CHECKED BY:	APPROVED BY:
ML	DGM	DGM

SCALE: 1" = 40'
DATE: 11/13/2024

SHEET NUMBER: 11 OF 44
DWG NUMBER: V-102

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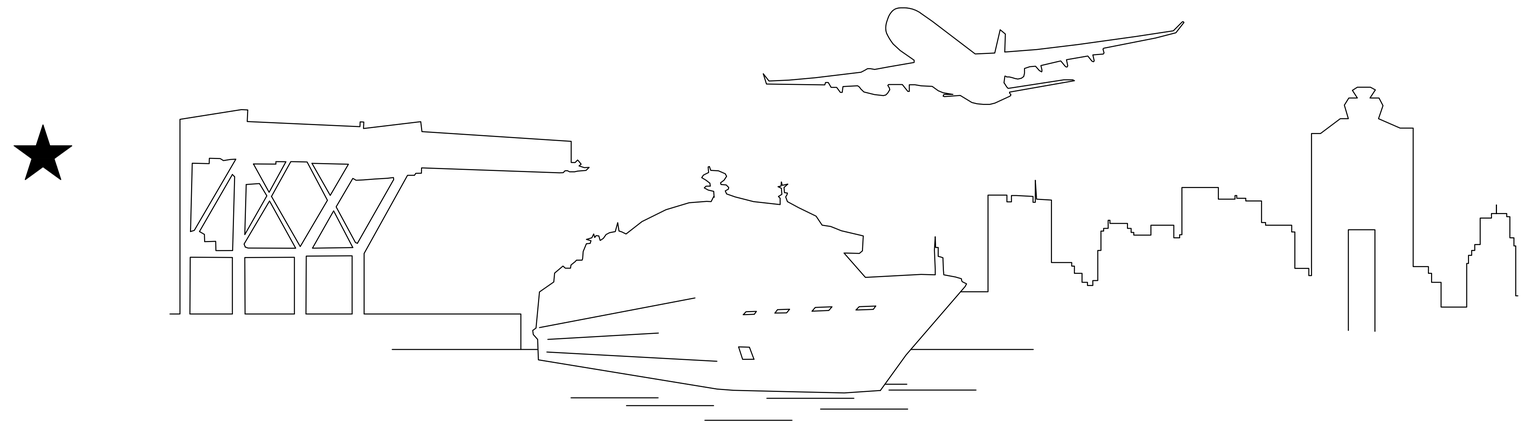
Attachment 4

Project Plans

MASSACHUSETTS PORT AUTHORITY



REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5 LAURENCE G. HANSCOM FIELD BEDFORD, MASSACHUSETTS MPA PROJECT NO. H296-C1 AIP #3-25-003-XXX-2025 MARCH 2025

MASSACHUSETTS PORT AUTHORITY

CAPITAL PROGRAMS DEPARTMENT
ONE HARBORSIDE DRIVE, SUITE 209S
EAST BOSTON, MASSACHUSETTS 02128

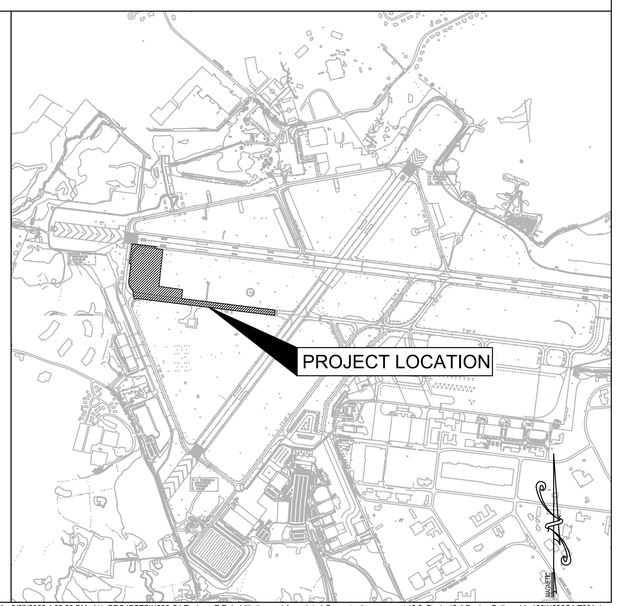
MASSACHUSETTS PORT AUTHORITY
CAPITALS PROGRAM & ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER
CIVIL

COMMONWEALTH OF MASSACHUSETTS
MATTHEW G. DURNING
ELECTRICAL
No. 47649
REGISTERED PROFESSIONAL ENGINEER
03/21/25
ELECTRICAL

LIST OF DRAWINGS:

To reduce the file size, only the highlighted plan sheets have been included. The full set of plans is available upon request.



GENERAL NOTES:

1. SUMMARY OF MAJOR WORK:
   - REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 5-23
   - MILLING
   - HOT MIX ASPHALT PAVING
   - BUILD NEW CONNECTION TAXIWAY E5 FROM TAXIWAY E TO RUNWAY 11-29 INCLUDING EARTHWORK AND BASE COURSE PLACEMENT
   - CRACK REPAIR
   - UTILITY ADJUSTMENTS
   - TOPSOIL AND SEEDING
   - PAVEMENT MARKINGS
   - TAXIWAY EDGE LIGHTS, AND CONDUITS INSTALLATION

2. STORMWATER POLLUTION PREVENTION (SWPPP) AND ASSOCIATED EROSION CONTROLS ARE TO BE INSTALLED IN ALL AREAS WITHIN THE LIMIT OF WORK AND STAGING AREA IN ACCORDANCE WITH THE PROJECT SPECIFIC SWPPP PLAN AS DIRECTED BY THE ENGINEER. REFER TO DRAWINGS C601 AND C602 FOR ADDITIONAL INFORMATION RELATING TO EROSION CONTROL.

3. ALL ACCESS TO THE PROJECT AREA SHALL BE AS FOLLOWS:

   3.1. GATE 1 SHALL BE UTILIZED FOR TRACK HAULING AND ALL WORK. ADDITIONAL GATE ACCESS SHALL BE REQUESTED AND APPROVED BY AIRPORT OPERATION. THE CONTRACTOR IS HEREBY NOTIFIED OF TRUCKING RESTRICTIONS WHILE LEAVING AIRPORT PROPERTY . TRUCKING OPERATION ROUTE AND SCHEDULE SHALL BE SUBMITTED TO AIRPORT FOR APPROVAL PRIOR TO THE START OF THE WORK.

   3.2. ACCESS ROUTES ARE SUBJECT TO CHANGE BASED ON PREVAILING WINDS AND RUNWAY CONFIGURATION IN USE AND ARE DESIGNATED BY HANSCOM OPERATIONS TO AVOID CROSSING OF ACTIVE RUNWAYS AND TO MINIMIZE CROSSING OF ACTIVE TAXIWAYS. USE OF ALTERNATE ACCESS ROUTE(S) SHALL NOT BE CONSIDERED A VALID REASON FOR ANY CLAIM FOR EXTRA TIME OR COMPENSATION.

   3.3. REFER TO THE G101 SERIES FOR INDIVIDUAL PHASE DRAWINGS SHOWING ANTICIPATED ACCESS ROUTES SPECIFIC TO EACH PHASE.

   3.4. CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT EXISTING AIRFIELD LIGHTING & SIGNAGE SYSTEMS FROM DAMAGE WHEN EMPLOYEES AND EQUIPMENT ACCESS (TO/FROM) THE WORK AREAS. DAMAGE TO ANY EXISTING LIGHTING OR SIGNAGE CAUSED BY THE CONTRACTOR'S PERSONNEL AND EQUIPMENT SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR IN CONSULTATION WITH AIRPORT OPERATIONS TO THE RPR'S SATISFACTION AT NO COST TO THE AUTHORITY.

4. NO TRENCH SHALL BE BACKFILLED UNTIL ALL EXPOSED UTILITIES ARE RECORDED BY ELECTRONIC SURVEY EQUIPMENT AND INSPECTED AND VERIFIED BY MASSPORT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RECORD LOCATIONS OF EXPOSED UTILITIES AND ENSURE TRENCH SAFETY.

5. CONSTRUCTION SIGNS SHALL BE LOCATED AT THE WORK AREA ACCESS/EGRESS POINTS. THERE SHALL BE NO SEPARATE PAYMENT FOR PROVIDING, MAINTAINING, RELOCATING AND REMOVING THESE SIGNS. REFER TO G101 SERIES FOR ANTICIPATED CONSTRUCTION SIGN PLACEMENT LOCATION.

6. THE CONTRACTOR'S ACCESS/EGRESS HAUL ROUTES, WORK AREAS, INCLUDING BUT NOT LIMITED TO THE AIRPORT VEHICLE ACCESS ROAD, DESIGNATED HAUL ROUTES BY MASSPORT , PUBLIC ROADWAYS, VEHICLE ACCESS ROADS, PARKING LOTS, AIRCRAFT APRONS, TAXIWAYS AND SHOULDERS, RUNWAYS AND OTHER AREAS DETERMINED BY HANSCOM OPERATIONS AND/OR THE RPR, SHALL BE MAINTAINED FREE OF FOREIGN OBJECTS AND DEBRIS (FOD) AT ALL TIMES AND CLEANED AS DIRECTED BY THE ENGINEER AT NO COST TO THE AUTHORITY.

7. ALL WORK WHICH IS WITHIN 250 FEET OF A RUNWAY CENTERLINE SHALL REQUIRE A RUNWAY CLOSURE. ALL WORK WITHIN 85.5' OF A TAXIWAY CENTERLINE SHALL REQUIRE A TAXIWAY CLOSURE OR "WORK IN PROGRESS". ALL RUNWAY AND TAXIWAY CLOSURES SHALL BE COORDINATED IN WRITING WITH HANSCOM OPERATIONS THROUGH THE RPR A MINIMUM OF 48 HOURS IN ADVANCE. CONTRACTOR REQUESTS FOR "WORK IN PROGRESS" WILL BE REVIEWED BY THE RPR AND MASSPORT

8. ALL REQUIRED "WORK IN PROGRESS" OR CLOSURES SHALL BE SUBJECT TO WIND/WEATHER AVAILABILITY AND A RECALL TIME AS APPROVED BY HANSCOM OPERATIONS AND THE RPR. SCHEDULING OF ALL WORK WITHIN THE AIRFIELD OPERATIONS AREA (AOA) SHALL BE COORDINATED IN WRITING WITH HANSCOM OPERATIONS THROUGH THE RPR A MINIMUM OF 48 HOURS IN ADVANCE.

9. WHEN WORKING UNDER A "WORK IN PROGRESS", ALL ADJACENT PAVEMENTS SHALL REMAIN AVAILABLE FOR AIRCRAFT OPERATIONS. THE CONTRACTOR SHALL CONDUCT ALL CONSTRUCTION ACTIVITIES IN A MANNER SUCH THAT NO INTERFERENCE WITH AIRCRAFT OPERATION OCCURS. THE CONTRACTOR SHALL BE PREPARED AND IS REQUIRED TO RELOCATE PERSONNEL AND EQUIPMENT TO THE LIMIT OF THE TAXIWAY OBJECT FREE AREA (85.5' FROM THE TAXIWAY CENTERLINE) TO ALLOW SAFE AND UNIMPEDED MOVEMENT OF ALL TAXIING AIRCRAFT.

10. CONTRACTOR IS ADVISED THAT OTHER AIRFIELD PROJECTS MAY BE CONSTRUCTED CONCURRENTLY WITH THIS PROJECT. REFER TO CONTRACT SPECIFICATION DIVISION I, ARTICLE 31 REGARDING COOPERATION BETWEEN ADJACENT AND/OR CONCURRENT CONTRACTS. COORDINATION BETWEEN CONTRACTS FOR SCHEDULING, CONSTRUCTION PHASING, AND CONSTRUCTION ACCESS SHALL BE DONE THROUGH HANSCOM OPERATIONS AND THE RPR.

11. ALL SURVEY LAYOUT REQUIRED SHALL BE PERFORMED BY THE CONTRACTOR'S PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS. ALL COSTS ASSOCIATED WITH SURVEY LAYOUT AND AS-BUILT DOCUMENTATION SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.

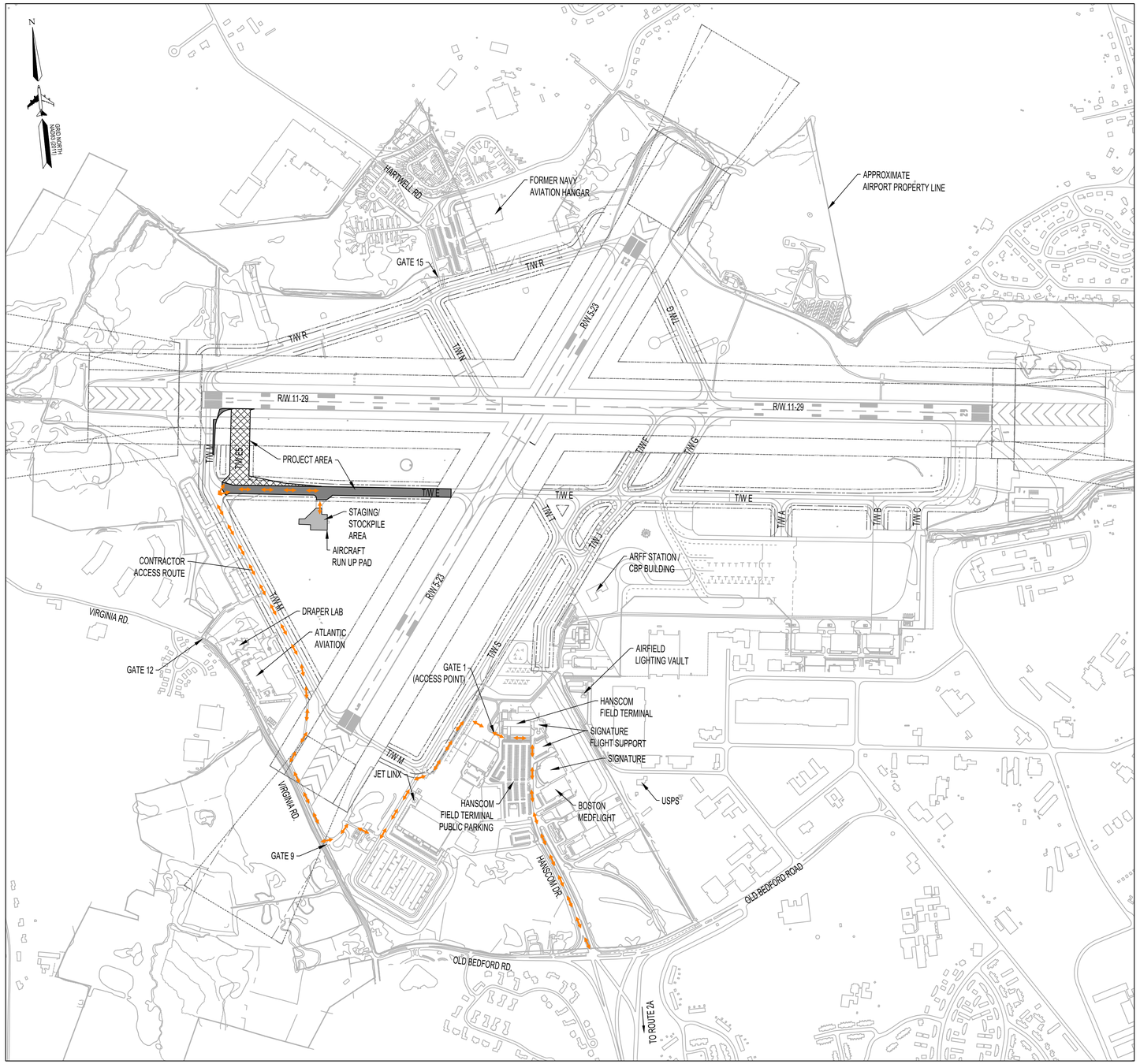
12. REFER TO DRAWING G002 AND G101 FOR ADDITIONAL NOTES PERTAINING TO CONSTRUCTION SAFETY AND PHASING.

13. REFER TO G101 SERIES DRAWINGS FOR DETAIL OF INDIVIDUAL PHASES.

14. AIRFIELD PAVEMENTS (INCLUDING HAUL ROUTES) NOT CONSIDERED FOR REHABILITATION UNDER THIS PROJECT SHALL BE PROTECTED FROM CONSTRUCTION EQUIPMENT BY THE CONTRACTOR. ANY DAMAGE TO SUCH PAVEMENT SURFACES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO MASSPORT. THE CONTRACTOR SHALL VIDEO RECORD THE EXISTING ON-AIRPORT PCC AND BITUMINOUS PAVEMENT PRIOR TO COMMENCEMENT OF WORK. A COPY OF THE VIDEO SHALL BE PROVIDED TO MASSPORT CAPITAL PROGRAMS PRIOR TO COMMENCEMENT OF WORK. ALL THERMOPLASTIC AND REGULAR MARKINGS BEING DRIVEN OVER SHALL BE PROTECTED AND REPAIRED IF DAMAGED BY THE CONTRACTOR AT NO ADDITIONAL COST. THERMOPLASTIC MARKINGS MUST BE COVERED BY A METHOD APPROVED BY THE RPR, INCLUDING BUT NOT LIMITED TO 1/2" PLYWOOD.

15. THE CONTRACTOR IS NOTIFIED TO CONSIDER ONGOING PROJECTS IN AND AROUND THE AIRPORT. TEMPORARY DELAYS RESULTING FROM TRAFFIC OPERATIONS ASSOCIATED WITH CONSTRUCTION WILL NOT BE CONSIDERED AS A CAUSE FOR ADDITIONAL COMPENSATION.

16. THE CONTRACTOR IS ADVISED THAT THIS PROJECT IS WITHIN THE BOUNDARIES OF A CERCLA / SUPERFUND SITE. THE CONTRACTOR SHALL COMPLY WITH THE REQUIRED PROTOCOLS OUTLINED IS DIVISION IIB, APPENDIX O REGARDING COMPLIANCE WITH ALL REQUIREMENTS THEREIN.



500 0 500 1000 1500

SCALE: 1"=500'

LEGEND

- TW E & TW M REHAB
- NEW TW E5

17. ANY COST ASSOCIATED WITH UPDATES TO AIRFIELD LIGHTING CONTROL MONITORING SYSTEM (ALCMS)/TOUCH SCREEN TO SHOW THE PROPOSED TAXIWAY E5 CONCURRENT WITH THE COMPLETION OF PHASE 3 SHALL PAID UNDER ITEM L-100.01 AS AN ALLOWANCE.

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

SHEET TITLE:
GENERAL PLAN & NOTES

DISCIPLINE:
GENERAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
1" = 500'	MARCH 2025

SHEET NUMBER: 2 OF 44

DWG NUMBER: G-001

A. SAFETY PLAN:

1. THE CONTRACTOR SHALL DEVELOP AND SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) A MINIMUM OF TWO WEEKS PRIOR TO THE ISSUANCE OF A NOTICE TO PROCEED. ANY DELAY IN THE ISSUANCE OF THE NOTICE TO PROCEED DUE TO FAILURE BY THE CONTRACTOR TO SUBMIT AN APPROVED SPCD WILL NOT BE GROUNDS FOR ANY CONTRACT TIME EXTENSIONS OR PROJECT PHASING MODIFICATION.

2. THE SPCD SHALL DEMONSTRATE HOW THE CONTRACTOR WILL COMPLY WITH THE FAA APPROVED "CONSTRUCTION SAFETY AND PHASING PLAN" (CSPP). THE CONTRACTOR SHALL BECOME KNOWLEDGEABLE OF THE REQUIREMENTS AND PROCEDURES OF THE CSPP FAA ADVISORY CIRCULAR 150/5370-2 (CURRENT EDITION), AND THE APPROVED CSPP AND INCORPORATE THESE ITEMS INTO THE SPCD. THE SPCD SHALL BE MODIFIED AND UPDATED AS REQUIRED TO ADDRESS EACH PHASE AND/OR SUBPHASE AS WORK PROGRESSES. THE SPCD SHALL INCLUDE, BUT IS NOT LIMITED TO:

    - STATEMENT CERTIFYING COMPLIANCE WITH APPROVED CSPP AND SPCD UNLESS WRITTEN APPROVAL RECEIVED FROM HANSCOM OPERATIONS
    - DESIGNATION OF A DEDICATED POINT OF CONTACT FOR SPCD COMPLIANCE
    - 24 HOURS / 7 DAYS PER WEEK EMERGENCY CONTACT PROCEDURES
    - WORK SCHEDULING, COORDINATION, AND NOTIFICATION PROCEDURES OF CONSTRUCTION ACTIVITY
    - PROTECTION OF UTILITIES, NAVAIDS, AND NAVAID CRITICAL AREAS
    - METHODS AND REQUIREMENTS FOR SEPARATING CONSTRUCTION AREAS FROM AIRFIELD OPERATION AREAS (AOA)
    - LOW PROFILE CONSTRUCTION BARRICADE PLACEMENT LOCATIONS, AND TEMPORARY SIGNAGE LOCATIONS
    - WORK AREA ACCESS, HAUL ROUTES, AND PARKING PROCEDURES
    - EQUIPMENT/MATERIALS STOCKPILE LOCATION REQUESTS
    - CONSTRUCTION VEHICLE REQUIREMENTS, PROCEDURES, AND DRIVER TRAINING FOR OPERATIONS WITHIN MOVEMENT AND NON-MOVEMENT AREAS
    - AIRFIELD COMMUNICATIONS AND EMERGENCY NOTIFICATION PROCEDURES
    - CONTROL OF FOREIGN OBJECT DEBRIS (FOD)
    - PROCEDURES, REQUIREMENTS, AND COORDINATION OF TAXIWAY AND RUNWAY CLOSURES
    - INSPECTION REQUIREMENTS FOR COMPLIANCE TO THE SPCD
    - CONSTRUCTION OPERATIONS ADJACENT TO OR WITHIN SAFETY AREAS, OBJECT FREE AREAS, NAVAID CRITICAL AREAS, AND APPROACH SURFACES. (I.E. GRADING, HAULING MATERIALS, ETC.)
    - CONTRACTOR ACCESS POINTS, VEHICLE CROSSING LOCATIONS, SECURITY FENCING AND GATES, AND EMPLOYEE SECURITY TRAINING.
    - PREVENTING INTERFERENCE WITH ILS CRITICAL AREAS.

3. THE CONTRACTOR SHALL PROVIDE A COMPETENT SAFETY PERSON (REFER TO DIVISION IIB.43) FAMILIAR WITH AIRPORT SAFETY TO MONITOR CONSTRUCTION ACTIVITIES. THIS INDIVIDUAL SHALL BE RESPONSIBLE FOR MONITORING CONSTRUCTION ACTIVITIES AND PERSONNEL TO ENSURE THAT THEY ADHERE TO THE SAFETY REQUIREMENTS ESTABLISHED BY THE CONTRACT DOCUMENTS, THE SPCD, THE REGULATIONS AND REQUIREMENTS OF THE AIRPORT AND THE FAA, AND OTHER APPLICABLE AGENCIES.

4. THE CONTRACTOR SHALL PROVIDE A SINGLE POINT OF CONTACT TO THE OWNER WHO CAN BE CONTACTED AT ANY TIME THROUGHOUT THE COURSE OF THE CONTRACT (24 HOURS A DAY, 7 DAYS A WEEK). THIS INDIVIDUAL SHALL BE CAPABLE OF COORDINATING AN IMMEDIATE RESPONSE TO CORRECT ANY CONSTRUCTION RELATED ACTIVITY THAT MAY ADVERSELY AFFECT THE OPERATIONAL SAFETY OR SECURITY OF THE AIRPORT.

B. CONSTRUCTION ADJACENT TO OR WITHIN THE AIRFIELD OPERATIONS AREA (AOA):

1. DELINEATION OF CLOSED WORK AREAS SHALL BE AS FOLLOWS:

    - DAILY/NIGHTLY RUNWAY/TAXIWAY CLOSURES (LESS THAN 24 HOURS) SHALL BE DELINEATED WITH LOW PROFILE FLASHER BARRICADES AS SHOWN ON THE DRAWINGS AND AS APPROVED/DIRECTED BY THE RPR AND HANSCOM OPERATIONS.
    - EXTENDED RUNWAY/TAXIWAY CLOSURES (24 HOURS OR MORE) SHALL BE DELINEATED WITH LIGHTED, FRANGIBLE, AND COLLAPSIBLE BARRICADES AND LIGHTED CHANNELIZER CONES AS SHOWN ON THE DRAWINGS AND AS APPROVED/DIRECTED BY THE RPR, MASSPORT CAPITAL PROGRAMS, AND HANSCOM OPERATIONS.

2. LIGHTED PORTABLE RUNWAY CLOSURE MARKERS (LIGHTED X'S) ARE REQUIRED FOR ALL RUNWAY CLOSURES 2 HOURS OR LONGER IN DURATION AND THAT HAVE A RECALL TIME OF MORE THAN 1 HOUR. NO SEPARATE PAYMENT WILL BE MADE FOR SUPPLYING, MAINTAINING, INSTALLING, AND REMOVING LIGHTED PORTABLE RUNWAY CLOSURE MARKERS (LIGHTED X'S) AS DEFINED IN DIVISION IIB.58.7. AT THE CONCLUSION OF THE PROJECT, THE LIGHTED PORTABLE RUNWAY CLOSURE MARKERS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

3. UPON RECEIPT OF A CLOSURE AND BEFORE EQUIPMENT ENTERS THE AIRFIELD, THE WORK AREA SHALL BE SECURED IMMEDIATELY. LIGHTING EQUIPMENT SHALL BE PLACED AS APPLICABLE, AND OPERATIONAL, CLOSURE MARKERS INSTALLED, THE WORK AREA SHALL BE CLEARLY DELINEATED AND ALL SAFETY REQUIREMENTS SHALL BE APPROVED BY THE RPR AND HANSCOM OPERATIONS.

4. ALL SAFETY/CONSTRUCTION BARRICADES/LIGHTED CHANNELIZER CONES/RUNWAY CLOSURE MARKERS SHALL BE IN PLACE AND APPROVED BY THE RPR AND HANSCOM OPERATIONS, PRIOR TO COMMENCING CONSTRUCTION OPERATIONS. PLACEMENT OF LIGHTED CHANNELIZER CONES OR BARRICADES SHALL BE COMPLETED IMMEDIATELY AFTER RECEIVING NOTIFICATION OF CLOSURE OF THE WORK AREA. THE RPR, HANSCOM OPERATIONS AND THE CONTRACTOR SHALL INSPECT THE WORK AREA AND VERIFY THAT ALL CONES, BARRICADES AND LIGHTS ARE IN PLACE AND IN WORKING ORDER DURING HOURS OF DARKNESS AND INCLEMENT WEATHER.

5. MASSPORT CAPITAL PROGRAMS MAINTAINS A SUPPLY OF CONSTRUCTION BARRICADES FOR CONTRACTOR USE. SHOULD ADDITIONAL CONSTRUCTION BARRICADES BE REQUIRED AN ALLOWANCE HAS BEEN PROVIDED FOR THEIR PURCHASE. ALL SUCH PURCHASES SHALL BE APPROVED IN ADVANCE BY MASSPORT CAPITAL PROGRAMS.

6. THERE SHALL BE NO SEPARATE PAYMENT FOR PLACING, MAINTAINING AND REMOVAL OF BARRICADES, SIGNS, ETC., REQUIRED BY HANSCOM OPERATIONS, THE RPR, AND/OR MASSPORT CAPITAL PROGRAMS. AT THE COMPLETION OF THE PROJECT ANY NEW BARRICADES AND SIGNS SHALL BECOME THE PROPERTY OF MASSPORT. THE CONTRACTOR SHALL DELIVER AND NEATLY STACK ALL UNITS IN AN AREA DESIGNATED BY THE RPR AND/OR HANSCOM OPERATIONS. ALL BARRICADES AND SIGNAGE TURNED OVER SHALL BE IN WORKING ORDER, INSPECTED AND APPROVED BY THE RPR AND MASSPORT. DAMAGED BARRICADES, SIGNS, ETC., SHALL BE DISPOSED OF OFF-SITE AND REPLACED WITH NEW BARRICADES/SIGNS BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

7. PRIOR TO PERFORMING NIGHT WORK, CONTRACTOR WILL SUBMIT A LIGHTING PLAN TO THE RPR FOR APPROVAL BY HANSCOM OPERATIONS AND THE RPR. CONTRACTOR WILL NOT DEVIATE FROM THE APPROVED PLAN AND SHALL DIRECT ALL LIGHT AWAY FROM ADJACENT NEIGHBORHOODS, ACTIVE RUNWAYS, AND THE ATCT IN A MANNER THAT DOES NOT INTERFERE WITH THE ATCT AND AIRCRAFT OPERATIONS. THE RPR AND HANSCOM OPERATIONS SHALL APPROVE THE LOCATION AND OPERATION OF ALL LIGHTING EQUIPMENT. CONTRACTOR SHALL SUBMIT A LIGHTING PLAN TO THE RPR FOR APPROVAL PRIOR TO COMMENCEMENT OF NIGHT WORK.

8. EQUIPMENT/MATERIAL STOCKPILES SHALL NOT BE PERMITTED WITHIN AOA WORK AREAS UNLESS APPROVED IN WRITING BY HANSCOM OPERATIONS. NO MILLINGS SHALL BE STOCKPILED ON MASSPORT PROPERTY AND SHALL LEAVE THE SITE AS THEY ARE GENERATED. DUST CONTROL IS REQUIRED FOR MATERIAL STOCKPILES.

9. THE CONTRACTOR SHALL NOT LEAVE ANY TRENCHES OR OTHER EXCAVATIONS OPEN AT NIGHT, ON WEEKENDS OR AT OTHER TIMES WHEN THE CONTRACTOR IS NOT ON SITE WITHOUT PRIOR APPROVAL OF THE RPR AND HANSCOM OPERATIONS. ANY TRENCHES/EXCAVATIONS LEFT UNATTENDED SHALL BE ADEQUATELY PROTECTED, MARKED, LIGHTED, AND COORDINATED WITH THE RPR, HANSCOM OPERATIONS AND FIRE/RESCUE.

10. THE CONTRACTOR SHALL ENSURE AT ALL TIMES THAT NO PAVEMENT LIPS OR EDGES EXCEED 2 INCHES WITHIN ACTIVE AIRCRAFT OPERATIONAL AREAS. THE CONTRACTOR SHALL ALSO ENSURE AT ALL TIMES THAT NO SIGN BASES, STRUCTURES OR OTHER APPURTENANCES HAVE EXPOSED LIPS OR EDGES IN EXCESS OF 2 INCHES WITHIN THE SAFETY AREA OF ANY TAXIWAY OR RUNWAY.

11. IN ADDITION TO ALL APPLICABLE OSHA SAFETY REQUIREMENTS ALL PERSONNEL SHALL WEAR APPROPRIATE REFLECTIVE SAFETY VESTS AND HARD HATS AT ALL TIMES WHEN WORKING IN ALL AREAS OF THE AOA.

12. THE CONTRACTOR SHALL COORDINATE AND PARTICIPATE IN A MINIMUM OF ONE 'SAFETY HUDDLE' AT THE BEGINNING OF EACH WORK SHIFT. SAFETY HUDDLES SHALL INCLUDE ALL CONTRACTOR AND SUB-CONTRACTOR PERSONNEL AND SHALL AT A MINIMUM REVIEW ; THE DAILY WORK PLAN, LIMITS OF PROPOSED PHASE, HAUL ROUTES, LOCATIONS OF EXISTING UTILITIES/STRUCTURES, ACCESS AND EGRESS POINTS FOR WORK AREA, CURRENT RUNWAY CONFIGURATION, ESCORT PROCEDURES AND ANY OTHER KNOWN HAZARDS. ATTENDEES AT SAFETY HUDDLE SHALL BE RECORDED BY THE CONTRACTOR AND SUBMITTED TO THE RPR DAILY. MASSPORT CAPTIAL PROGRAMS REQUIRES THAT ALL PERSONNEL SHALL ADHERE TO THE 20/20/20 PROCEDURE (TAKE 20 SECONDS EVERY 20 MINUTES TO LOOK 20 FEET AROUND).

13. AIRPORT SECURITY AND SAFETY REQUIREMENTS ARE SUBJECT TO CHANGE. THE CONTRACTOR SHALL IMMEDIATELY ABIDE BY ANY AND ALL CHANGES IN SECURITY AND SAFETY REQUIREMENTS. CHANGES IN SECURITY AND SAFETY REQUIREMENTS WILL NOT BE GROUNDS FOR ANY CONTRACT TIME EXTENSIONS OR COMPENSATION.

C. CONTRACTOR ACCESS

1. THE CONTRACTOR SHALL BE REQUIRED TO DEVELOP AND SUBMIT AN OPERATIONS PLAN A MINIMUM OF TWO WEEKS PRIOR TO THE ISSUANCE OF A NOTICE TO PROCEED. THE PLAN SHALL DETAIL THE PRECAUTIONS THEY PROPOSE FOR THE CONTROL OF VEHICLE TRAFFIC INCLUDING FLAG PEOPLE, SIGNS, ESCORTS, AND ANY OTHER MEASURES THEY PROPOSE. NO WORK SHALL START UNTIL THE OPERATIONS PLAN IS APPROVED. REFER TO DIVISION IIB OF THE CONTRACT SPECIFICATIONS.

2. CONTRACTOR'S VEHICLES WILL NOT BE ALLOWED ACCESS TO PORTIONS OF THE AIRPORT OTHER THAN THE WORK AND STAGING AREAS AND HAUL ROUTES. THE WORK AREA LIMITS SHALL BE DELINEATED ON THE GROUND BY MEANS OF BARRICADES OR OTHER DEVICES APPROVED BY THE RPR. UNESCORTED OR UNAUTHORIZED ENTRY INTO THE MOVEMENT AREAS (RUNWAYS/TAXIWAYS/APRONS) ARE SUBJECTED TO LOCAL AND FEDERAL PROSECUTION AND PENALTIES.

3. CONTRACTOR'S VEHICLES AND EQUIPMENT MUST AT ALL TIMES GIVE WAY TO AIRCRAFT OPERATIONS, SUPPORT VEHICLES, AND EMERGENCY VEHICLES. THE CONTRACTOR MUST CONDUCT OPERATIONS IN SUCH A MANNER THAT NO INTERFERENCE WITH AIRCRAFT OPERATIONS OCCURS. THE CONTRACTOR SHALL PROVIDE A FULL TIME RADIO ESCORT AT EACH WORK AREA THAT IS BEING WORKED ON WITHIN AN ACTIVE TAXIWAY OBJECT FREE AREA OR AN ACTIVE RUNWAY OBJECT FREE AREA.

4. THE CONTRACTOR SHALL OBEY ALL INSTRUCTIONS AS TO THE OPERATION AND ROUTES TO BE TAKEN BY EQUIPMENT TRAVELING ON AIRPORT PROPERTY. ANY SIGNS, LIGHTS, SIGNALS, MARKINGS, TRAFFIC CONTROL AND OTHER DEVICES WHICH MAY BE REQUIRED SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR DURING THE COURSE OF THE WORK, SUBJECT TO THE APPROVAL OF THE RPR. THERE SHALL BE NO SEPARATE PAYMENT FOR PROVIDING, MAINTAINING, RELOCATING AND REMOVING THESE ITEMS.

5. EACH CONTRACTOR'S VEHICLE OPERATING IN THE AOA SHALL BE EQUIPPED WITH AN AMBER FLASHING LIGHT AND/OR A 3-FOOT-SQUARE ORANGE & WHITE CHECKERED FLAG, AND THE COMPANY IDENTIFICATION PLAINLY VISIBLE ON BOTH SIDES OF THE VEHICLE IN ACCORDANCE WITH AC 150/5210-5 (CURRENT EDITION). IN ADDITION, THE CONTRACTOR'S ESCORT VEHICLES MUST HAVE AN AMBER FLASHING LIGHT, AN ORANGE/WHITE CHECKERED FLAG, COMPANY IDENTIFICATION, AND THE VEHICLE CALL SIGN PLAINLY VISIBLE ON BOTH SIDES (16" LETTERS) OF THE VEHICLE.

6. CONTRACTOR SHALL PROVIDE BADGED ESCORTS TO AND FROM THE WORK AREA FROM GATES APPROVED BY HANSCOM OPERATIONS FOR THE PROJECT. BADGED ESCORTS WILL ESCORT A MAXIMUM OF THREE VEHICLES TO AND FROM THE WORK AREA.

7. BADGED ESCORTS ARE REQUIRED TO CARRY A CURRENT LIST OF THE PERSONNEL BEING ESCORTED ON THE PROJECT AND SHALL ALWAYS HAVE THE ESCORTED PERSONNEL WITHIN SIGHT, EARSHOT AND IN CLOSE PROXIMITY (250' OR LESS). ESCORTS SHALL FURTHER BE POSITIONED IN SUCH A MANNER THAT THEY WILL NOT BE REQUIRED TO CROSS ACTIVE TAXIWAYS OR RUNWAYS TO REACH THE PERSONNEL BEING ESCORTED.

8. A MINIMUM OF THREE RADIO EQUIPPED CONSTRUCTION SAFETY VEHICLES (ESCORT TRUCKS) MANNED WITH QUALIFIED/BADGED ESCORT PERSONNEL SHALL BE PROVIDED FOR ALL SCHEDULED CONSTRUCTION ACTIVITIES WITHIN THE AOA. A MINIMUM OF THREE OF THE CONTRACTOR'S ESCORT PERSONNEL SHALL POSSESS A MASSPORT CLASS 3 (RED) AERODROME BADGE, MEET ALL MASSPORT SAFETY AND SECURITY REQUIREMENTS AND SHALL MAINTAIN PROPER RADIO PROTOCOL. THE CONTRACTOR SHALL PROVIDE ALL APPROVED VEHICLES, RADIOS, EQUIPMENT, PERSONNEL AND ADVANCED TRAINING FOR THIS PURPOSE.

9. IN THE EVENT THAT CONCURRENT ACTIVITIES ON THE AIRFIELD ARE APPROVED, TWO DEDICATED ESCORT DRIVERS HAVING RADIO CONTACT WITH BOTH HANSCOM OPERATIONS AND THE RPR SHALL BE STATIONED AT EACH WORK SITE DURING ALL HOURS WORK IS PROGRESSING. AT NO TIME WILL PERSONNEL BE ALLOWED AT THE WORK SITE WITHOUT THE AVAILABILITY OF FULL TIME TWO-WAY COMMUNICATIONS WITH THE TOWER, HANSCOM OPERATIONS, THE RPR, AND WITH CONTRACTOR'S RESPONSIBLE PERSONNEL ON HAND.

10. SECURITY MEASURES AT THE AIRPORT REQUIRE THAT THE CONTRACTOR PARK ONLY THOSE WORK VEHICLES AND EQUIPMENT REQUIRED FOR CONSTRUCTION WITHIN THE SECURED AREAS OF THE AIRPORT AT THE DESIGNATED CONTRACTOR PARKING AREA. CONTRACTOR EMPLOYEE PERSONAL CARS WILL NOT BE PERMITTED WITHIN THE SECURED AREAS OF THE AIRPORT. ARRANGEMENTS FOR TEMPORARY STORAGE AND PARKING OF CONTRACTOR'S TRUCKS, CRANES AND OTHER VEHICLES MUST BE MADE THROUGH THE RPR AND HANSCOM OPERATIONS. REFER TO SPECIFICATION DIVISION IIB FOR FURTHER REQUIREMENTS RELATED TO PARKING AND ACCESS TO AND FROM THE WORK SITE.

D. PHASING REQUIREMENTS

1. THE PHASING PLANS HAVE BEEN APPROVED BY HANSCOM OPERATIONS. COMBINING, MODIFYING OR ALTERNATING PHASES IS NOT ALLOWED WITHOUT THE APPROVAL OF HANSCOM OPERATIONS AND THE RPR. STATIONS OF PHASE LIMITS ARE APPROXIMATE. EXACT LIMITS SHALL BE APPROVED IN THE FIELD BY THE RPR.

2. THE CONTRACTOR SHALL NOT EXCEED PHASE LIMITS WITHOUT PRIOR APPROVAL FROM HANSCOM OPERATIONS. UNLESS OTHERWISE NOTED, ALL WORK SHOWN IN A DISTINCT PHASE SHALL BE COMPLETED IN ITS ENTIRETY AND ALL WORK ACCEPTED BY THE RPR AND MASSPORT CAPITAL PROGRAMS BEFORE THE NEXT PHASE CAN BE STARTED. PHASES DESIGNATED TO BE WORKED ON CONCURRENTLY, AS INDICATED, SHALL BE COMPLETED AND ACCEPTED WITHIN THE ALLOCATED DURATION FOR EACH PHASE PRIOR TO STARTING THE NEXT PHASE.

3. IN ADDITION TO THE 'SAFETY HUDDLE', COORDINATION MEETINGS WITH THE RPR, HANSCOM OPERATIONS, MASSPORT CAPITAL PROGRAMS AND THE CONTRACTOR WILL BE HELD AT LEAST ONCE PER WEEK TO HELP IN IDENTIFYING LIMITS OF PROPOSED WORK AND SCHEDULE FOR EACH PHASE.

4. FORMAL CONSTRUCTION OPERATIONS WITHIN INDIVIDUAL WORK AREAS SHALL BE PERFORMED IN A CONSECUTIVE, SEQUENTIAL MANNER AS REQUIRED PER THE PLANS AND SPECIFICATIONS. HOWEVER, DEPENDING ON WIND AND WEATHER CONDITIONS, THE CONTRACTOR MAY BE ALLOWED BY HANSCOM OPERATIONS TO PERFORM CONSTRUCTION OPERATIONS IN OTHER WORK AREAS OF THE PROJECT, PROVIDED THE PROPOSED ACTIVITIES WILL NOT INTERFERE WITH AIRCRAFT OPERATIONS. THE CONTRACTOR WILL BE REQUIRED TO IMMEDIATELY REMOVE ALL EQUIPMENT AND PERSONNEL FROM THE WORK AREA AND/OR CRITICAL AREAS UPON NOTIFICATION BY THE RPR AND/OR HANSCOM OPERATIONS. THE CONDITION OF THE WORK AREA SHALL MEET THE REQUIREMENTS AS SPECIFIED IN THE CONTRACT DOCUMENTS, THE APPROVED CSPP, OR AS INSTRUCTED BY THE RPR.

5. THE CONTRACTOR SHALL SCHEDULE MANPOWER AND EQUIPMENT AS REQUIRED TO COMPLETE ALL SCHEDULED WORK WITHIN THE SPECIFIED TIME FRAMES TO THE FULL COMPLIANCE OF THE CONTRACT DOCUMENTS AND ACCEPTANCE BY MASSPORT.

6. CLOSURE OF A DISTINCT PHASE SHALL BE SCHEDULED A MINIMUM OF 48 HOURS PRIOR TO THE SCHEDULED START DAY. FINAL DECISION ON THE AVAILABILITY OF THE PROPOSED WORK AREA WILL BE MADE BY HANSCOM OPERATIONS THROUGH THE RPR A MINIMUM OF 10 HOURS PRIOR TO THE SCHEDULED START. DECISION ON THE AVAILABILITY WILL BE MADE BASED ON WIND/WEATHER AVAILABILITY AND FORECAST OPERATIONS/GATE ASSIGNMENTS. ONCE THE PROPOSED WORK AREA IS MADE AVAILABLE TO THE CONTRACTOR, IT IS EXPECTED THAT THE CONSTRUCTION WILL BE READY AND PREPARED TO COMPLETE THE REQUISITE WORK WITHIN EACH DISTINCT PHASE UNLESS INCLEMENT WEATHER OR OTHER EXTENUATING CIRCUMSTANCES DICTATE OTHERWISE.

7. REMOVAL OF TEMPORARY AND EXISTING MARKINGS DURING THE VARIOUS CONSTRUCTION PHASES SHALL BE AS APPROVED/DIRECTED BY THE RPR AND HANSCOM OPERATIONS. THE CONTRACTOR SHALL SURVEY LOCATE ALL PAVEMENT MARKINGS PRIOR TO MILLING PAVEMENT IN A SPECIFIC AREA. PRIOR TO APPLYING PAVEMENT MARKINGS, THE CONTRACTOR'S MARKINGS LAYOUT SHALL BE APPROVED BY THE RPR AND HANSCOM OPERATIONS.

8. DURING CONSTRUCTION AND AS REQUIRED BY PHASING, THE CONTRACTOR SHALL PROVIDE TEMPORARY ELECTRICAL CONNECTIONS, AS APPROVED/DIRECTED BY MASSPORT ELECTRICAL, THE RPR, AND/OR HANSCOM OPERATIONS TO MAINTAIN ACTIVE THE REMAINING PORTIONS OF THE LIGHTING AND SIGNAGE CIRCUITS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS ELECTRICAL PROJECT ITEMS. THE CONTRACTOR SHALL PREPARE A TEMPORARY ELECTRICAL CONNECTIONS PLAN FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.

9. ALL LIGHTING AND SIGNAGE REMOVED FROM SERVICE DURING A DISTINCT PHASE SHALL BE OPERATIONAL AT THE END OF EACH PHASE OR WHEN THE AREA IS RETURNED TO AIRCRAFT OPERATIONS. THE CONTRACTOR SHALL SCHEDULE AND PROVIDE SUFFICIENT PERSONNEL AND EQUIPMENT TO INSURE THESE SYSTEMS ARE FULLY OPERATIONAL WITHIN THE SPECIFIED TIME FRAME.

10. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, BY HANSCOM OPERATIONS AND MASSPORT ELECTRICAL A DETAILED PLAN OF ALL LIGHTING CIRCUITS THEY PROPOSE TO ALTER AND/OR WORK ON IN A PARTICULAR PHASE OR SHIFT. THE PLAN SHALL INCLUDE ALL WORK ASSOCIATED WITH THE LIGHTS AND CIRCUITS AFFECTED AND THE LIGHTS THAT ARE REQUIRED TO REMAIN OPERATIONAL FOR THE DURATION OF THE PHASE OR SHIFT.

11. WHEN THE CONTRACTOR IS PERFORMING LIGHT ADJUSTMENTS, THE APPROPRIATE CIRCUIT SHALL BE RENDERED ENTIRELY OUT OF SERVICE, THE CIRCUIT SHALL BE LOCKED OUT, TAGGED AND SECURED AT THE ELECTRICAL VAULT IN ACCORDANCE WITH MASSPORT'S LOCK-OUT/TAG-OUT PROCEDURE. FOR EACH CIRCUIT THAT IS RENDERED OUT OF SERVICE, THE CONTRACTOR SHALL LEAVE ALL ISOLATION TRANSFORMERS IN PLACE AND PROTECT SECONDARY CABLE WITH ELECTRICAL TAPE.

12. ANY CASE IN WHICH THE HANSCOM OPERATIONS/RPR REQUIRES A PORTION OF A LIGHTING CIRCUIT TO REMAIN IN SERVICE WHILE PERFORMING LIGHT ADJUSTMENTS, ISOLATION TRANSFORMERS SHALL BE REMOVED FROM THE PRIMARY CIRCUIT AND THE PRIMARY CIRCUIT RECONNECTED TO ALLOW FOR UNINTERRUPTED SERVICE TO REMAINING LIGHTS. ALL RE-CONNECTIONS OF THE PRIMARY CIRCUIT SHALL BE WATERPROOF AND IN ACCORDANCE WITH INDUSTRY STANDARDS.

13. PAVEMENT MARKINGS SHALL BE APPLIED WITH TWO COATS OF PAINT (SEE CONTRACT SPECIFICATION SECTION P-620 FOR FURTHER INFORMATION). THE FIRST COAT (INITIAL MARKINGS) SHALL BE APPLIED PRIOR TO EACH PHASE OPENING TO AIRCRAFT TRAFFIC. THE SECOND COAT (FINAL MARKINGS) OF PAINT SHALL BE APPLIED 30 DAYS AFTER PAVEMENT PLACEMENT AND AFTER GROOVING HAS BEEN COMPLETED, AND PRIOR TO FINAL ACCEPTANCE WITH APPROVAL OF THE RPR.

14. PRIOR TO THE START OF AN EXTENDED CLOSURE, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE FAA, HANSCOM OPERATIONS, MASSPORT CAPITAL PROGRAMS, THE RPR, AN ANTICIPATED SCHEDULE FOR WORK REQUIRING AN FAA NAVAID SHUTDOWN (INCLUDING BUT NOT LIMITED TO: GLIDESLOPE, LOCALIZER, PAPI, AND REILS). ALL NAVAID SHUTDOWNS SHALL BE COORDINATED THROUGH MASSPORT CAPITAL PROGRAMS, HANSCOM OPERATIONS AND SHALL BE COMPLETED BY THE FAA PRIOR TO THE START OF WORK. AT LEAST 30 DAY NOTICE IS REQUIRED FOR COORDINATING FAA NAVAID SHUTDOWN. FAILURE TO PROVIDE 30 DAY NOTICE WILL NOT BE GROUNDS FOR ANY CONTRACT TIME EXTENSIONS OR COMPENSATION.

15. ALL WORK WITHIN 85.5 FEET OF AN ACTIVE TAXIWAY CENTERLINE REQUIRES A CLOSURE OR CAUTION. ALL TAXIWAY CLOSURES OR CAUTIONS SHALL BE COORDINATED IN WRITING WITH THE RPR AND HANSCOM OPERATIONS 48 HOURS IN ADVANCE OF COMMENCING PROPOSED WORK.

16. TEMPORARY TAXIWAY CLOSURES OR CAUTIONS ARE SUBJECT TO WIND/WEATHER AVAILABILITY AND ARE SUBJECT TO A RECALL OF 15 MINUTES FOR SURVEY AND 2 HOURS FOR SURFACE REPAIR FOR CONSTRUCTION CLOSURE.

17. ADDITIONAL PHASING REQUIREMENTS ARE NOTED THROUGHOUT THE G-SERIES DRAWINGS.

E. MAINTENANCE OF CONSTRUCTION SITE AND DUST CONTROL.

1. PRIOR TO THE COMMENCEMENT OF THE PROJECT, ALL CONTRACTOR(S) AND SUBCONTRACTOR'S PERSONNEL SHALL ATTEND A FOREIGN OBJECT DEBRIS (FOD) AND SAFETY PRESENTATION BY HANSCOM OPERATIONS. ALL ATTENDEES WILL BE REQUIRED TO UNDERSTAND AND COMPLY WITH MASSPORT SAFETY AND SECURITY REQUIREMENTS.

2. THE CONTRACTOR SHALL KEEP THE CONSTRUCTION SITE FREE OF PAPER, BOXES, LITTER, AND ALL OTHER DEBRIS SUCH AS POORLY DISPOSED FOOD WHICH COULD BE BLOWN ONTO THE AOA, AND/OR ATTRACT WILDLIFE.

3. THE CONTRACTOR SHALL REMOVE ALL DEBRIS IN OR AROUND THE PROJECT AREA AND ALL OTHER AREAS WHERE WORK MAY BE PERFORMED, HAUL ROUTES (AIRSIDE AND PUBLIC), THE CONTRACTOR'S STORAGE/STAGING AREA AND OTHER AREAS AS DESIGNATED BY HANSCOM OPERATIONS & MASSPORT CAPITAL PROGRAMS OR THE RPR ON A DAILY BASIS OR AT ANY TIME REQUESTED BY MPA.

4. THE CONTRACTOR SHALL FURNISH ON-SITE AND OPERATE A MINIMUM OF TWO (2) SELF-PROPELLED VACUUM ASSISTED SWEEPERS WITH DEDICATED OPERATORS DURING ALL HOURS OF WORK, UNLESS OTHERWISE APPROVED IN WRITING BY MASSPORT. NO SEPARATE PAYMENT SHALL BE MADE FOR FURNISHING AND OPERATING SELF PROPELLED VACUUM ASSISTED SWEEPERS. COST SHALL BE INCIDENTAL TO THE CONTRACT.

5. THE OPERATIONS OF THE RUNWAYS, TAXIWAYS, APRONS, AND ASSOCIATED NAVAIDS ARE ESPECIALLY SENSITIVE TO DUST. THE RPR AND HANSCOM OPERATIONS RESERVES THE RIGHT TO STOP CONSTRUCTION, HAULING, OR OTHER WORK IF NECESSARY TO BRING CONTRACTOR GENERATED DUST UNDER CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL WITHIN THE CONSTRUCTION LIMITS AS WELL AS ALONG ANY AIRPORT OR PUBLIC ROADWAYS USED BY HIS EQUIPMENT AND VEHICLES. FAILURE TO CONTROL THESE ITEMS SHALL RESULT IN SUSPENSION OF PROJECT WORK. SMOKING, BURNING AND/OR OPEN FLAMES SHALL NOT BE PERMITTED BY THE CONTRACTOR WITHIN THE AIRPORT PROPERTY. NO ADDITIONAL COMPENSATION OR TIME SHALL BE MADE TO THE CONTRACTOR SHOULD LOSS OF PRODUCTIVITY OR DOWN TIME OCCUR AS A RESULT OF THE RPR AND/OR HANSCOM OPERATIONS LIMITING OR SUSPENDING WORK BECAUSE OF THE CONTRACTOR'S FAILURE TO CONTROL DUST OR DEBRIS. AT A MINIMUM THE CONTRACTOR SHALL PROVIDE A WATER TRUCK AND APPLY WATER FOR DUST CONTROL AS NECESSARY. ADDITIONAL MEASURES MAY BE REQUIRED AS DIRECTED BY THE RPR. NO SEPARATE PAYMENT SHALL BE MADE FOR FURNISHING WATER AND OPERATING WATER TRUCKS. COST SHALL BE INCIDENTAL TO THE CONTRACT.

F. UNDERGROUND UTILITIES AND TRENCHING

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT LOCATIONS AND/OR ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORD DRAWINGS AND WERE FIELD SURVEYED BY MASSPORT SURVEY FOR CONFIRMATION ONLY WHERE POSSIBLE. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING COMPLETE OR EXACT AND THE CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION PRIOR TO COMMENCEMENT OF THE WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RPR AND MASSPORT CAPITAL PROGRAMS IN WRITING OF ANY DISCREPANCY DISCOVERED DURING FIELD VERIFICATION, AND SURVEYED LOCATIONS OF THESE DISCOVERIES SHALL BE REPRESENTED IN AN AUTOCAD FILE TO BE DELIVERED TO MASSPORT SURVEY.

2. THE CONTRACTOR SHALL PROVIDE A QUALIFIED UTILITY LOCATING SERVICE TO LOCATE/VERIFY UTILITY LOCATIONS PRIOR TO COMMENCING EXCAVATION. REFER TO DIVISION IIB OF THE CONTRACT SPECIFICATIONS. ALL EXISTING UTILITIES IN THE VICINITY OF ANY EXCAVATION SHALL BE CLEARLY MARKED ON THE GROUND BY THE CONTRACTOR PRIOR TO BEGINNING EXCAVATION. ALL SUCH MARKINGS SHALL BE SURVEYED, VERIFIED IF UNCOVERED DURING CONSTRUCTION, AND REPRESENTED IN AN AUTOCAD FILE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AIRFIELD ACCESS, THROUGH THE RPR, AND COMPLETING UTILITY LOCATING PRIOR TO THE START OF PHASED CONSTRUCTION ACTIVITIES.

3. THE CONTRACTOR SHALL HAND DIG OR VACUUM EXCAVATE WHEN WITHIN THREE (3) FEET OF ANY KNOWN OR SUSPECTED UNDERGROUND UTILITY. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR HAND EXCAVATION OR VACUUM EXCAVATION, IT SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS PROJECT ITEMS.

4. ANY UNDERGROUND UTILITIES DAMAGED BY CONTRACTOR OPERATIONS SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR IN CONSULTATION WITH HANSCOM OPERATIONS TO THE RPR'S SATIFICATON AT NO COST TO THE CONTRACT.

5. THE CONTRACTOR SHALL PERFORM AN AIRFIELD LIGHTING CHECK IN THE PRESENCE OF HANSCOM OPERATIONS PRIOR TO THE COMPLETION OF EACH WORK SHIFT TO VERIFY THAT THE LIGHTING SYSTEM AND NAVAIDS ARE OPERATIONAL.

6. THE CONTRACTOR SHALL SUBMIT A MASSPORT TRENCH PERMIT APPLICATION A MINIMUM OF 2 WEEKS PRIOR TO ANY EXCAVATION. LENGTH OF OPEN TRENCH LEFT BETWEEN WORK SHIFTS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AND IN NO CASE SHALL EXCEED 300 FEET WITHOUT THE APPROVAL OF MASSPORT CAPITAL PROGRAMS. ALL TRENCHES AND EXCAVATIONS WITHIN 125 FEET OF TAXIWAY CENTERLINES SHALL BE BACKFILLED AT THE END OF THE WORK SHIFT, AND/OR WHEN ADJACENT TAXIWAY IS BEING RETURNED TO SAFE AIRCRAFT OPERATIONS.

7. THE CONTRACTOR SHALL COORDINATE ALL WORK ON AND IN THE VICINITY OF THE UNDERGROUND UTILITIES AND CABLES WITH THE FOLLOWING AGENCIES AS APPROPRIATE:

    - MASSPORT FACILITIES/ELECTRICAL - CONTACT (RALPH VISCONTI)
    - LOCAL FEDERAL AVIATION ADMINISTRATION - CONTACT (MR. JIM CAULFIELD)
    - CONTRACTOR SHALL PROVIDE MASSPORT CAPITAL PROGRAMS WITH RECORDS OF COORDINATION PRIOR TO COMMENCING WITH EXCAVATION.
    - CONTACT INFORMATION IS LOCATED IN APPENDIX B: EMERGENCY CONTACTS OF THE CONSTRUCTION SAFETY AND PHASING PLAN DOCUMENT

8. PRIOR TO ANY EXCAVATION THE CONTRACTOR SHALL MEET WITH LOCAL FAA TECH OPS TO DETERMINE IF ANY CRITICAL FAA INFRASTRUCTURE RUNS THROUGH THE AREA OF EXCAVATION AND IT SHALL BE PROPERLY LOCATED IN A SAFE MANNER AS APPROVED BY THE ENGINEER.

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
DAWIT BIRRU
No. 58992
Dawit Birru
3/21/2025

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

SHEET TITLE:
PHASING & SAFETY PLAN NOTES

DISCIPLINE:
GENERAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
NOT TO SCALE	MARCH 2025

SHEET NUMBER: 3 OF 44
DWG NUMBER: G-002

2025 PROJECT SCHEDULE														
PHASE	DURATION CALENDAR DAYS	PROJECT DURATION												
		BEFORE NTP	08/04 - 08/10	08/11 - 08/17	08/18 - 08/24	08/25 - 08/31	09/01 - 09/07	09/08 - 09/14	09/15 - 09/21	09/22 - 09/28	09/29 - 10/05			
1	20D		<- 20 CALENDAR DAYS ->											
2	10D				<- 10 CALENDAR DAYS ->									
FINAL MARKING	30D													FINAL MARKING (TW E)
CALENDAR DAYS			1	5	10	15	20	25	30	35	40	45	50	55	60
H = HOURS D = DAYS N = NIGHTS			MILESTONE 1											30 DAY CURE

7/31: END OF BREEDING SEASON

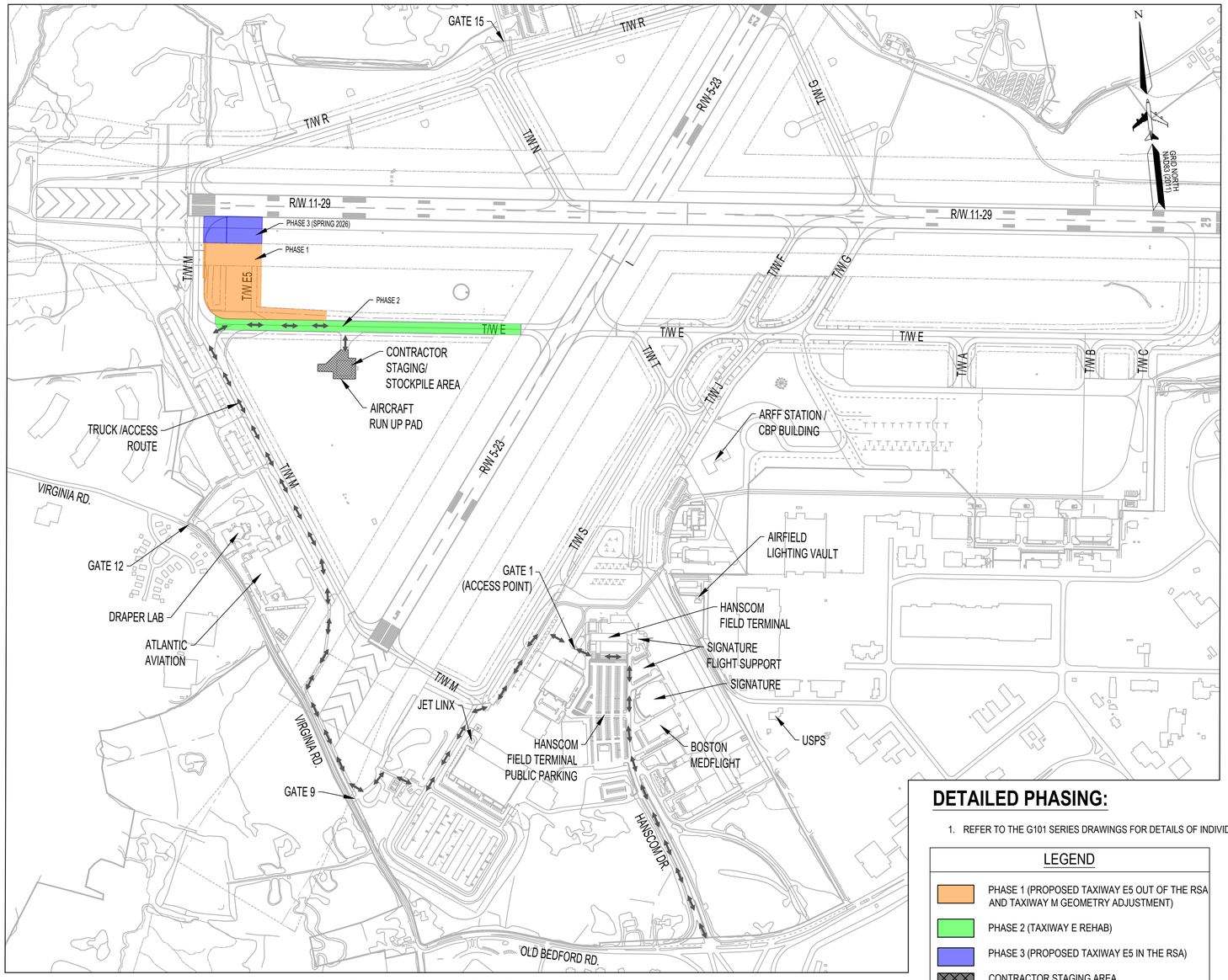
9/2:LABOR DAY

2026 PROJECT SCHEDULE																
PHASE	DURATION CALENDAR DAYS	PROJECT DURATION														
		04/06 - 04/12	04/13 - 04/19	04/20 - 04/26	04/27 - 05/03	05/04 - 05/10	05/11 - 05/17	05/18 - 05/24	05/25 - 05/31	06/01 - 06/07	06/08 - 06/14	06/15 - 06/21				
3	41N & W	N		N	<-NIGHTLY & WEEKEND CLOSURE RW 11-29->											
FINAL MARKING	5D															FINAL MARKING (TW E5)
CALENDAR DAYS		1	5	10	15	20	25	30	35	40	45	50	55	60	65	70
H = HOURS W = WEEKENDS N = NIGHTS		MILESTONE 2														30 DAY CURE

2026 SPRING

5/25:MEMORIAL DAY

10/19:JUNETEENTH



OVERALL PHASING

SCALE: 1" = 400'

400 0 400 800 1200

SCALE: 1"=400'

DETAILED PHASING:

1. REFER TO THE G101 SERIES DRAWINGS FOR DETAILS OF INDIVIDUAL PHASES.

LEGEND

- PHASE 1 (PROPOSED TAXIWAY E5 OUT OF THE RSA AND TAXIWAY M GEOMETRY ADJUSTMENT)
- PHASE 2 (TAXIWAY E REHAB)
- PHASE 3 (PROPOSED TAXIWAY E5 IN THE RSA)
- CONTRACTOR STAGING AREA

WORKING HOURS:

- DAYS (D): MONDAY TO FRIDAY 7:00 AM TO 3:30 PM
- NIGHTS (N): MONDAY TO FRIDAY 10:00 PM TO 6:00 AM
- WEEKEND (W): FRIDAY 10:00 PM TO SUNDAY 3:30 PM

WORK SCHEDULE:

ALL WORK MUST PROGRESS WITHIN THE ALLOWABLE WORK HOURS STATED WITHIN THE PHASING PLANS. FORECAST WIND AND WEATHER CONDITIONS WILL BE MONITORED CONTINUALLY, AND CONSTRUCTION SCHEDULES MODIFIED APPROPRIATELY. WORK MAY BEGIN ON ANY DAY OF THE WEEK UPON APPROVAL BY THE RPR, HANSCOM OPERATIONS AND MASSPORT CAPITAL PROGRAMS.

MILESTONE 1: 30 CALENDAR DAYS

- PHASE 1 MUST BE COMPLETED WITHIN 20 CALENDAR DAYS OF THE CONSTRUCTION NOTICE TO PROCEED.
- PHASE 2 MUST BE COMPLETED WITHIN 10 CALENDAR DAYS OF THE CONSTRUCTION NOTICE TO PROCEED.
- AFTER 30 DAYS CURING, FINISH FINAL PAVEMENT MARKING FOR TAXIWAY E AND TAXIWAY M. ANY CLOSURE TO FINISH THIS WORK WILL NEED TO BE COORDINATED WITH AIRPORT OPERATIONS.
- ALL EQUIPMENT, MATERIAL, AND SUPPLIES INTENDED FOR MILESTONE 2 MUST BE REMOVED FROM THE AIRPORT WITHIN 3 DAYS AFTER THE COMPLETION OF MILESTONE 1.

MILESTONE 2: 41 CALENDAR DAYS (SPRING 2026)

- PHASE 3 (INCLUSIVE OF ALL LIGHT ADJUSTMENTS) MUST BE COMPLETED WITHIN 36 NIGHT AND 2 WEEKEND RUNWAY CLOSURE, WHICH BEGINS ON THE DAY OF THE CONSTRUCTION NOTICE TO PROCEED. THE NIGHT RUNWAY CLOSURE IS DEFINED AS THE CLOSURE OF THE RUNWAY 11-29 THAT PROHIBITS ALL LANDING AND TAKEOFF OPERATIONS ON THE RUNWAY BETWEEN THE HOURS OF 10:00 PM TO 6:00 AM MONDAY TO FRIDAY.WEEKEND RUNWAY CLOSURES ARE FROM FRIDAY 10:00 PM TO SUNDAY 2:00 PM WHERE LANDING AND TAKEOFF OPERATIONS ON THE RUNWAY 11-29 ARE PROHIBITED.
- AFTER 30 DAYS CURING, FINISH FINAL PAVEMENT MARKING FOR TAXIWAY E5. RUNWAY CLOSURE TO FINISH THIS WORK WILL NEED TO BE COORDINATED WITH AIRPORT OPERATIONS.

SEE SHEETS G101 SERIES FOR ADDITIONAL PHASING DETAILS.

REFER TO DIVISION IIB ARTICLES 4 AND 5 FOR MILESTONES AND LIQUIDATED DAMAGES.

PHASING NOTES:

1. ANTICIPATED NOTICE TO PROCEED FOR PRE-CONSTRUCTION ACTIVITIES AND MOBILIZATION IS ON OR BEFORE JULY 1, 2025. THIS PERIOD IS INTENDED FOR PRECONSTRUCTION ACTIVITIES INCLUDING; SUBMITTALS & PROCUREMENT OF LONG LEAD ITEMS, PROJECT BADGING, PROJECT SURVEY, SUBSURFACE INVESTIGATION, CONTROL STRIP, ETC. ANTICIPATED **NOTICE TO PROCEED FOR CONSTRUCTION IS JULY 28, 2025.** THE CONTRACTOR SHALL BE PREPARED TO START 5 DAYS BEFORE THE ANTICIPATED START DATE.
2. ALL PROJECT COMPONENTS SHALL BE COMPLETED FOR MILESTONE 1 AND 2 AS DESCRIBED ABOVE. THE 30 CALENDAR DAY CURE PERIOD REQUIRED PRIOR TO FINAL PAVEMENT MARKINGS WILL NOT BE COUNTED TOWARD CONTRACT CALENDAR DAYS, PROVIDED THE ENGINEER IS SATISFIED WITH THE SUBSTANTIAL COMPLETION OF PREVIOUS MILESTONES.
3. PHASING SHALL PROGRESS IN A SEQUENTIAL MANNER UNLESS OTHERWISE APPROVED/DIRECTED BY THE RPR, MASSPORT CAPITAL PROGRAMS, AND HANSCOM OPERATIONS.
4. MASSPORT RESERVES THE RIGHT TO ADJUST PHASE ORDER AND/OR PHASE LIMITS, ON AN AS-NEEDED BASIS, AS DICTATED BY WIND AND WEATHER CONDITIONS, AND TO ACCOMMODATE SAFE AND EFFICIENT AIRPORT OPERATIONS AT NO ADDITIONAL COMPENSATION TO THE CONTRACTOR. THE CONTRACTOR SHOULD ASSUME THAT ALL MILLINGS WILL LEAVE AIRPORT PROPERTY AS THEY ARE GENERATED. THERE IS NO AVAILABILITY FOR STOCKPILE LOCATIONS LANDSIDE OR AIRSIDE ON MASSPORT PROPERTY.
5. THE CONTRACTOR SHALL BE PREPARED TO PROVIDE SUFFICIENT PERSONNEL AND EQUIPMENT TO PERFORM ALL PROPOSED WORK IN A MANNER THAT WILL ACHIEVE THE QUALITY AND PRODUCTION RATE TO COMPLETE THE PROJECT AS SCHEDULED HEREIN.
6. ALL AIRFIELD SIGNS DIRECTING TRAFFIC TO/FROM CLOSED PORTIONS OF RUNWAYS AND TAXIWAYS SHALL BE COVERED DURING EACH RESPECTIVE PHASE AS DIRECTED /APPROVED BY THE RPR, MASSPORT CAPITAL PROGRAMS AND HANSCOM OPERATIONS. SIGNS SHALL BE COVERED MINIMUM 2 MIL THICK BLACK POLY/PLASTIC WITH *POLYKEN 510 GAFFERS TAPE* (OR APPROVED EQUAL). ALL SIGNS COVERINGS SHALL BE SECURED TO RESIST JET BLAST AND TAPE SHALL BE AS SPECIFIED TO AVOID DAMAGE TO SIGN/SIGN PANELS. SIGNS WHICH HAVE BEEN COVERED WILL BE CLEANED AT THE END OF THE PROJECT TO REMOVE ANY RESIDUE AS A RESULT OF THE COVERING AT NO ADDITIONAL COST.
7. LIGHTING ASSOCIATED WITH CLOSED PORTIONS OF RUNWAYS AND TAXIWAYS SHALL BE DISCONNECTED OR COVERED DURING EACH PHASE AS DIRECTED/APPROVED BY THE RPR, MASSPORT CAPITAL PROGRAMS AND OPERATIONS IN ADVANCE. THE USE OF TEMPORARY JUMPERS SHOULD BE ANTICIPATED TO MAINTAIN PORTIONS OF EXISTING CIRCUITS AND APPROVED BY MASSPORT ELECTRICAL DEPARTMENT. NO SEPARATE PAYMENT WILL BE MADE FOR TEMPORARY JUMPERS.
8. COVERING AND UNCOVERING OF SIGNS AND TEMPORARY CIRCUIT CONNECTIONS FOR PHASING SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS PROJECT ITEMS.
9. FINAL MARKING APPLICATION SHALL BE APPLIED 30 DAYS AFTER PAVEMENT PLACEMENT IS COMPLETED, PRIOR TO FINAL ACCEPTANCE WITH APPROVAL FROM THE RPR AND MASSPORT CAPITAL PROGRAMS.
10. ALL WORK WITHIN PHASES 1, AND 2 EXCEPT FOR FINAL MARKINGS MUST BE COMPLETED WITHIN 25 CALENDAR DAYS FROM THE CONSTRUCTION NOTICE TO PROCEED DATE. ALL WORK WITHIN PHASE 3 EXCEPT FOR THE FINAL MARKING MUST BE COMPLETED WITHIN 41 CALENDAR DAYS AS SHOWN ABOVE.

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

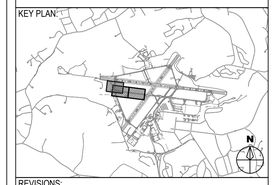
MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:



REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

SHEET TITLE:
OVERALL PHASING & SAFETY PLAN

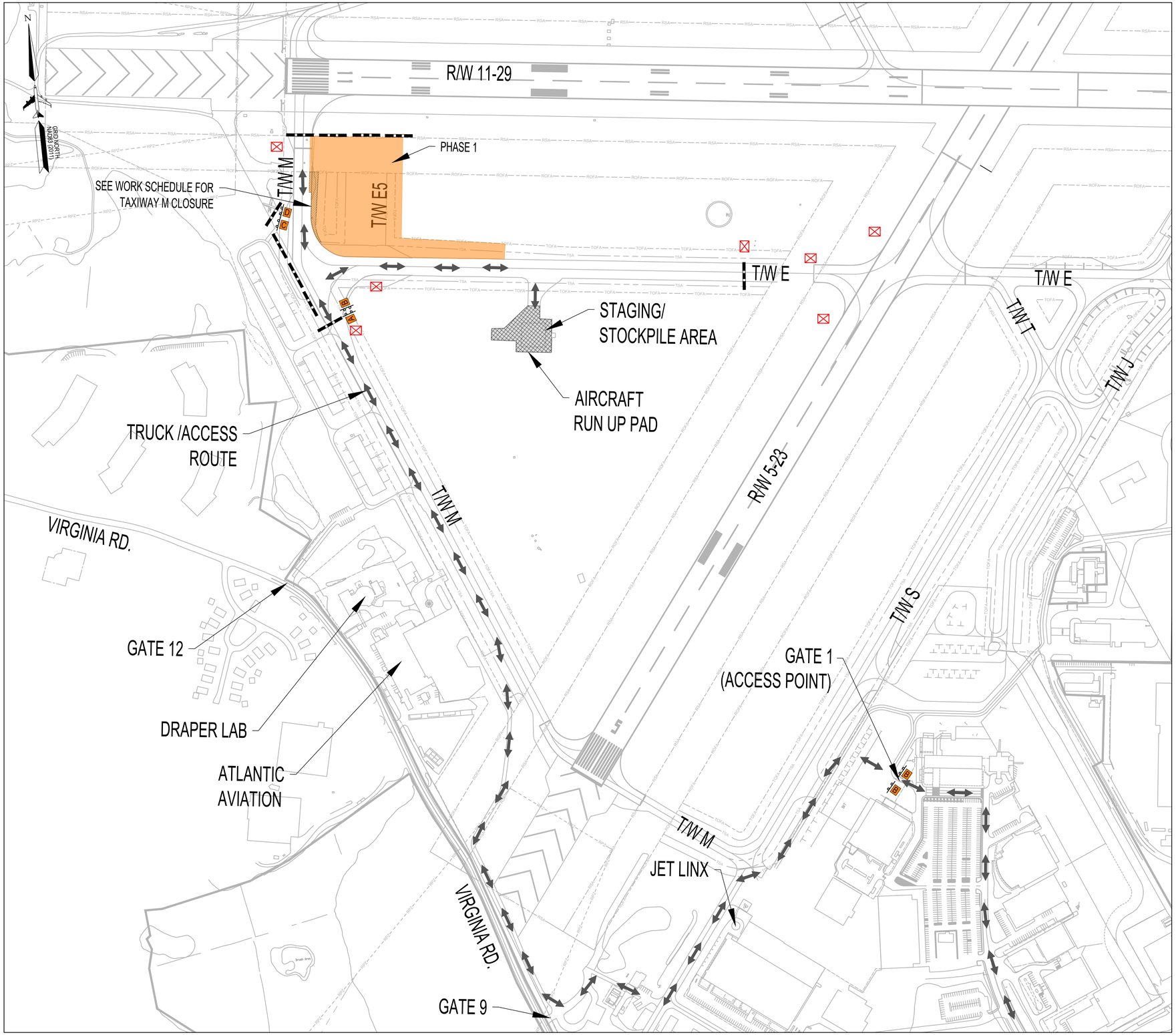
DISCIPLINE:
GENERAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
1" = 400'	MARCH 2025

SHEET NUMBER: 4 OF 44

DWG NUMBER: G-100



PHASE 1

SCALE: 1" = 200'

200 0 200 400 600

SCALE: 1"=200'

PHASE 1:

CONSTRUCT PROPOSED TAXIWAY E5 AND TAXIWAY M GEOMETRY ADJUSTMENT

DURATION -
- 20 CONSECUTIVE CALENDAR DAYS

CLOSURES -
- TAXIWAY E (RUNWAY 5-23 TO TAXIWAY M)
- TAXIWAY M (BETWEEN RUNWAY 11-29 AND TAXIWAY E)

CIRCUIT IMPACTS:
- TAXIWAY E (RUNWAY 5-23 TO TAXIWAY M)
- TAXIWAY M (SOUTH OF RUNWAY 11-29)

WORK SCHEDULE:
- MONDAY TO FRIDAY FROM 7:00 AM TO 3:30 PM
- ALL WORK WITHIN TAXIWAY M SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS AS PART OF THIS PHASE (PHASE 1).

WORK INCLUDES:
- CONSTRUCT PROPOSED TAXIWAY E5 PAVEMENT STRUCTURE. INCLUDING PREPPING SITE, EXCAVATION, AND PLACEMENT OF SUITABLE MATERIAL.
- ADJUST TW M GEOMETRY TO FIT NEW FILLET DESIGN. INCLUDING DEMO EXISTING EDGE OF TAXIWAY AND INSTALL PROPOSED PAVEMENT
- PAVEMENT PLACEMENT
- REGRADE SHOULDERS
- INSTALL AND ADJUST TAXIWAY EDGE LIGHTS
- PLACEMENT OF LOAM AND SEED
- INITIAL PAVEMENT MARKING (CENTERLINE, HOLD LINES & HOLD SIGN MARKING)
- PAVEMENT JOINT SAW AND SEAL.

ADDITIONAL NOTES:

1. CONTRACTOR MUST ADHERE TO INSTRUCTION GIVEN BY AIRPORT OPERATION REGARDING THE USAGE OF LOCAL ROADS IN THE VICINITY OF THE AIRPORT.

2. AVAILABILITY OF THE CONTRACTOR'S STAGING AREA IS SUBJECT TO AVAILABILITY AND HANSCOM OPERATIONS APPROVAL. EROSION CONTROL MEASURES SHALL BE INSTALLED AROUND THE PERIMETER OF THE STAGING AREA.

3. THE CONTRACTOR IS RESPONSIBLE FOR ANY MATERIALS REQUIRED TO PROTECT EXISTING AIRFIELD FEATURES IN PLACE, INCLUDING BUT NOT LIMITED TO PLYWOOD TO PROTECT EXISTING RUNWAY HOLD POSITION MARKINGS.

LEGEND

- PHASE 1
- CONTRACTOR STAGING AREA
- CONTRACTOR ACCESS ROUTE
- RUNWAY CLOSURE MARKER
- LOW PROFILE BARRICADE
- COVERED SIGN — 2 / G201

SIGN LEGEND

A	ACCESS WORK AREA HERE	3A G201
B	STOP WAIT FOR ESCORT	3B G201
C	←	3C G201
D	→	3D G201
E	LEFT TURN ONLY	3E G201

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

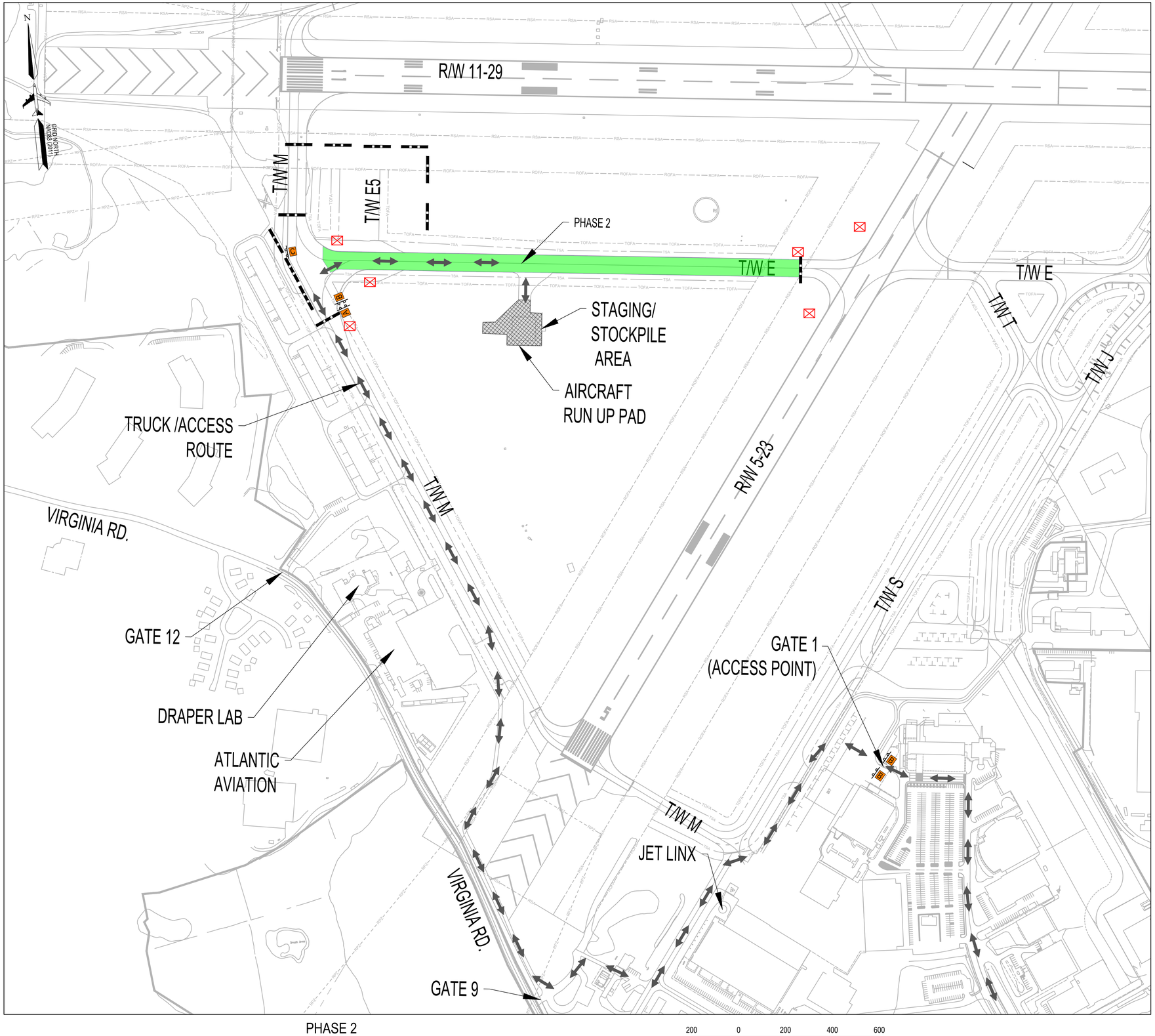
SHEET TITLE:
PHASING & SAFETY PLAN - PHASE 1

DISCIPLINE:
GENERAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 200'
DATE: MARCH 2025

SHEET NUMBER: 5 OF 44
DWG NUMBER: G-101



PHASE 2
SCALE: 1" = 200'

200 0 200 400 600
SCALE: 1"=200'

PHASE 2:

DURATION: 10 CONSECUTIVE CALENDAR DAYS

WORK SCHEDULE:
- MONDAY TO FRIDAY FROM 7:00 AM TO 3:30 PM

CLOSURES:
- TAXIWAY E (RUNWAY 5-23 TO TAXIWAY M)
- TAXIWAY M (BETWEEN RUNWAY 11-29 AND TAXIWAY E)

CIRCUIT IMPACTS:
- TAXIWAY E (RUNWAY 5-23 TO TAXIWAY M)

MAJOR WORK ITEMS:
- PAVEMENT MILLING AND REMOVAL
- BITUMINOUS CRACK REPAIRS
- PLACEMENT OF HOT MIX ASPHALT
- PLACEMENT OF LOAM AND SEED
- ADJUST TAXIWAY EDGE LIGHTS TO FINAL GRADE
- INITIAL MARKINGS

ADDITIONAL NOTES:

1. CONTRACTOR MUST ADHERE TO INSTRUCTION GIVEN BY AIRPORT OPERATION REGARDING THE USAGE OF LOCAL ROADS IN THE VICINITY OF THE AIRPORT.
2. AVAILABILITY OF THE CONTRACTOR'S STAGING AREA IS SUBJECT TO AVAILABILITY AND HANSCOM OPERATIONS APPROVAL. EROSION CONTROL MEASURES SHALL BE INSTALLED AROUND THE PERIMETER OF THE STAGING AREA.
3. THE CONTRACTOR IS RESPONSIBLE FOR ANY MATERIALS REQUIRED TO PROTECT EXISTING AIRFIELD FEATURES IN PLACE, INCLUDING BUT NOT LIMITED TO PLYWOOD TO PROTECT EXISTING RUNWAY HOLD POSITION MARKINGS.

LEGEND

- PHASE 2
- CONTRACTOR STAGING AREA
- CONTRACTOR ACCESS ROUTE
- RUNWAY CLOSURE MARKER
- LOW PROFILE BARRICADE
- COVERED SIGN — 2 / G201

SIGN LEGEND

A	ACCESS WORK AREA HERE	3A / G201
B	STOP WAIT FOR ESCORT	3B / G201
C	←	3C / G201
D	→	3D / G201
E	LEFT TURN ONLY	3E / G201

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

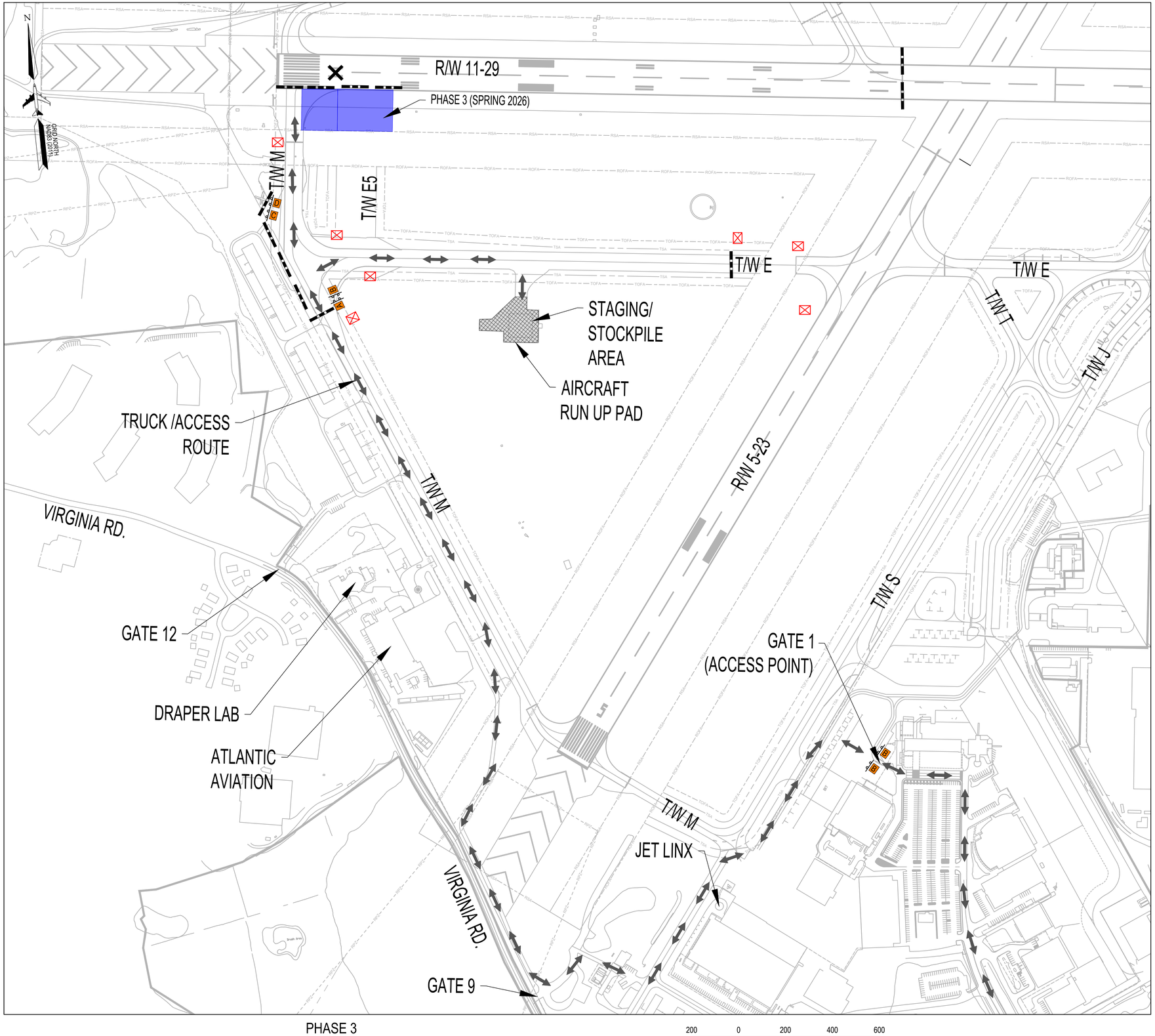
SHEET TITLE:
PHASING & SAFETY PLAN - PHASE 2

DISCIPLINE:
GENERAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 200'
DATE: MARCH 2025

SHEET NUMBER: 6 OF 44
DWG NUMBER: G-102



PHASE 3
SCALE: 1" = 200'

200 0 200 400 600
SCALE: 1"=200'

PHASE 3:

DURATION: 41 CALENDAR DAYS

WORK SCHEDULE:
- 36 NIGHTS (MONDAY TO FRIDAY 10:00PM TO 6:00AM) AND
- 2 WEEKEND (FRIDAY 10:00 PM TO SUNDAY 3:30 PM)

CLOSURES:
- RUNWAY 11-29
- TAXIWAY M (BETWEEN OF RUNWAY 11-29 AND TAXIWAY E)
- TAXIWAY E (BETWEEN RUNWAY 5-23 AND TAXIWAY M)

CIRCUIT IMPACTS: RUNWAY 11-29
TAXIWAY E (EAST OF RUNWAY 5-23)

MAJOR WORK ITEMS:
- CONSTRUCT PROPOSED TAXIWAY E5 PAVEMENT STRUCTURE. INCLUDING PREPPING SITE, EXCAVATION, AND PLACEMENT OF SUITABLE MATERIAL.
- ADJUST TAXIWAY M GEOMETRY TO FIT NEW FILLET DESIGN. INCLUDING DEMO EXISTING EDGE OF TAXIWAY AND INSTALL PROPOSED PAVEMENT
- PLACEMENT OF HOT MIX ASPHALT
- PLACEMENT OF LOAM AND SEED
- REMOVE AND REINSTALL EXISTING RUNWAY EDGE LIGHTS, AND INSTALL PROPOSED TAXIWAY EDGE LIGHTS TO FINAL GRADE
- INITIAL MARKINGS

ADDITIONAL NOTES:

1. CONTRACTOR MUST ADHERE TO INSTRUCTION GIVEN BY AIRPORT OPERATION REGARDING THE USAGE OF LOCAL ROADS IN THE VICINITY OF THE AIRPORT.
2. AVAILABILITY OF THE CONTRACTOR'S STAGING AREA IS SUBJECT TO AVAILABILITY AND HANSCOM OPERATIONS APPROVAL. EROSION CONTROL MEASURES SHALL BE INSTALLED AROUND THE PERIMETER OF THE STAGING AREA.
3. THE CONTRACTOR IS RESPONSIBLE FOR ANY MATERIALS REQUIRED TO PROTECT EXISTING AIRFIELD FEATURES IN PLACE, INCLUDING BUT NOT LIMITED TO PLYWOOD TO PROTECT EXISTING RUNWAY HOLD POSITION MARKINGS.
4. RUNWAY 5-23 TO REMAIN OPEN FOR AIRCRAFT OPERATIONS.

LEGEND

- PHASE 3
- CONTRACTOR STAGING AREA
- CONTRACTOR ACCESS ROUTE
- RUNWAY CLOSURE MARKER
- LOW PROFILE BARRICADE
- COVERED SIGN — 2 / G201

SIGN LEGEND

A	ACCESS WORK AREA HERE	3A G201
B	STOP WAIT FOR ESCORT	3B G201
C	←	3C G201
D	→	3D G201
E	LEFT TURN ONLY	3E G201

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

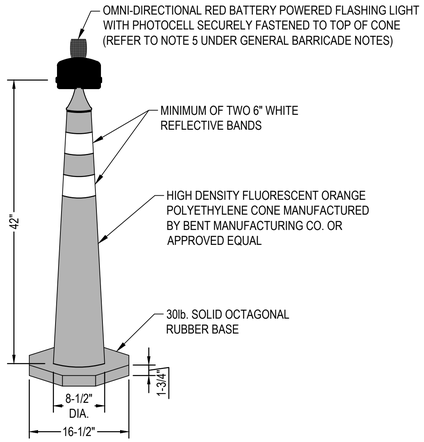
SHEET TITLE:
PHASING & SAFETY PLAN - PHASE 3

DISCIPLINE:
GENERAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

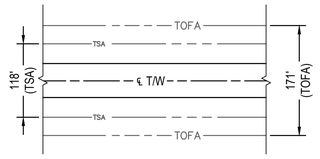
SCALE: 1" = 200'
DATE: MARCH 2025

SHEET NUMBER: 7 OF 44
DWG NUMBER: G-103

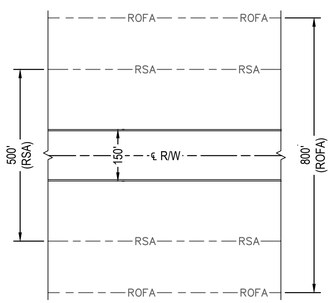


NOTE:

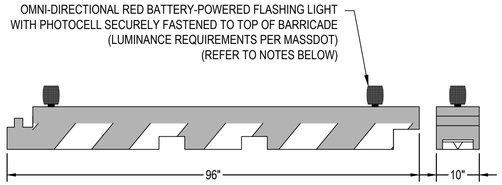
1. CONES SHALL BE PLACED EVERY 10' O.C.
2. CONTRACTOR TO ANTICIPATE DOUBLING RUBBER BASES ON EXTREME WIND DAYS.



ADG GROUP III TAXIWAY SAFETY AREA (TSA) & TAXIWAY OBJECT FREE AREA (TOFA) REQUIREMENTS
NOT TO SCALE

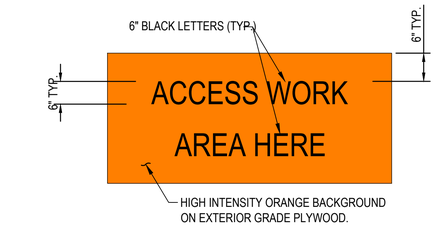


RUNWAY SAFETY AREA (RSA) &
RUNWAY OBJECT FREE AREA (ROFA) REQUIREMENTS
NOT TO SCALE

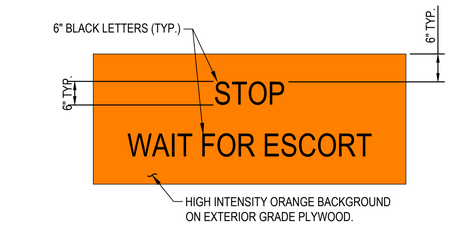


GENERAL BARRICADE NOTES:

1. THE RPR, MASSPORT CAPITAL PROGRAMS AND HANSCOM OPERATIONS SHALL HAVE FINAL DETERMINATION FOR THE PLACEMENT OF EACH TYPE OF BARRICADE
2. WATER BALLASTED BARRICADES SHALL BE PLACED AND CONNECTED END TO END TO CREATE A CONTINUOUS BARRICADE UNLESS NOTED OR SPECIFIED BY THE RPR OR HANSCOM OPERATIONS.
3. ALL BARRICADES SHALL MEET THE EXISTING FAA REQUIREMENTS OF FAA ADVISORY CIRCULAR 150/5370-2G (CURRENT EDITION).
4. BARRICADES SHALL BE ADEQUATELY WEIGHTED DOWN TO WITHSTAND HIGH WINDS AND/OR JET BLAST.
5. MPA MAINTAINS A SUPPLY OF CHANNELIZER CONES AND BARRICADES FOR CONTRACTOR USE. AN ALLOWANCE IS PROVIDED FOR RED FLASHING LIGHTS, ADDITIONAL CONES AND BARRICADES, AND REPLACEMENT RED FLASHING LIGHTS. REFER TO DIVISION IIB ARTICLES 58.6 AND 64.3 FOR USE OF BARRICADES AND CONES AND ALLOWANCE ITEMS .
6. THE BARRICADES SHALL BE CHECKED DAILY TO ENSURE THEY REMAIN FULL OF WATER AND THAT THE LIGHTS OPERATE EVERY NIGHT.



SIGN A



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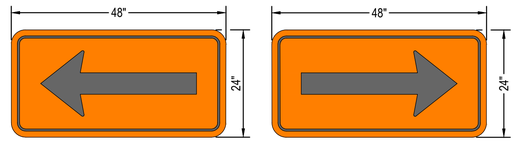
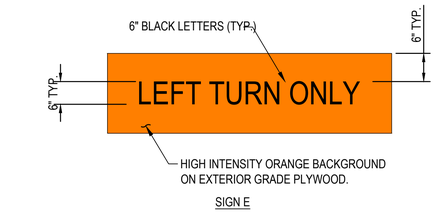


SIGN C SIGN D



SIGN E

CONSTRUCTION SIGN NOTES:

1. SIGN SHALL CONFORM TO LATEST FHWA "STANDARD HIGHWAY SIGNS"
2. THE CONTRACTOR SHALL LOCATE SIGNS A & B AT ALL ACCESS/EGRESS POINTS. SIGNS SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL CHARGE TO THE CONTRACT.
3. SIGNS SHALL NOT BE MOUNTED HIGHER THAN 4' ABOVE EXISTING GRADE.
4. IF WORKING IN MULTIPLE NON ADJACENT AREAS, THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL SIGNS REQUIRED AT THEIR OWN EXPENSE. THESE SIGNS SHALL REMAIN THE CONTRACTORS PROPERTY AT THE COMPLETION OF THE PROJECT.
5. THE CONTRACTOR SHALL ANCHOR THE SIGNS TO RESIST JET BLAST.

massport
MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

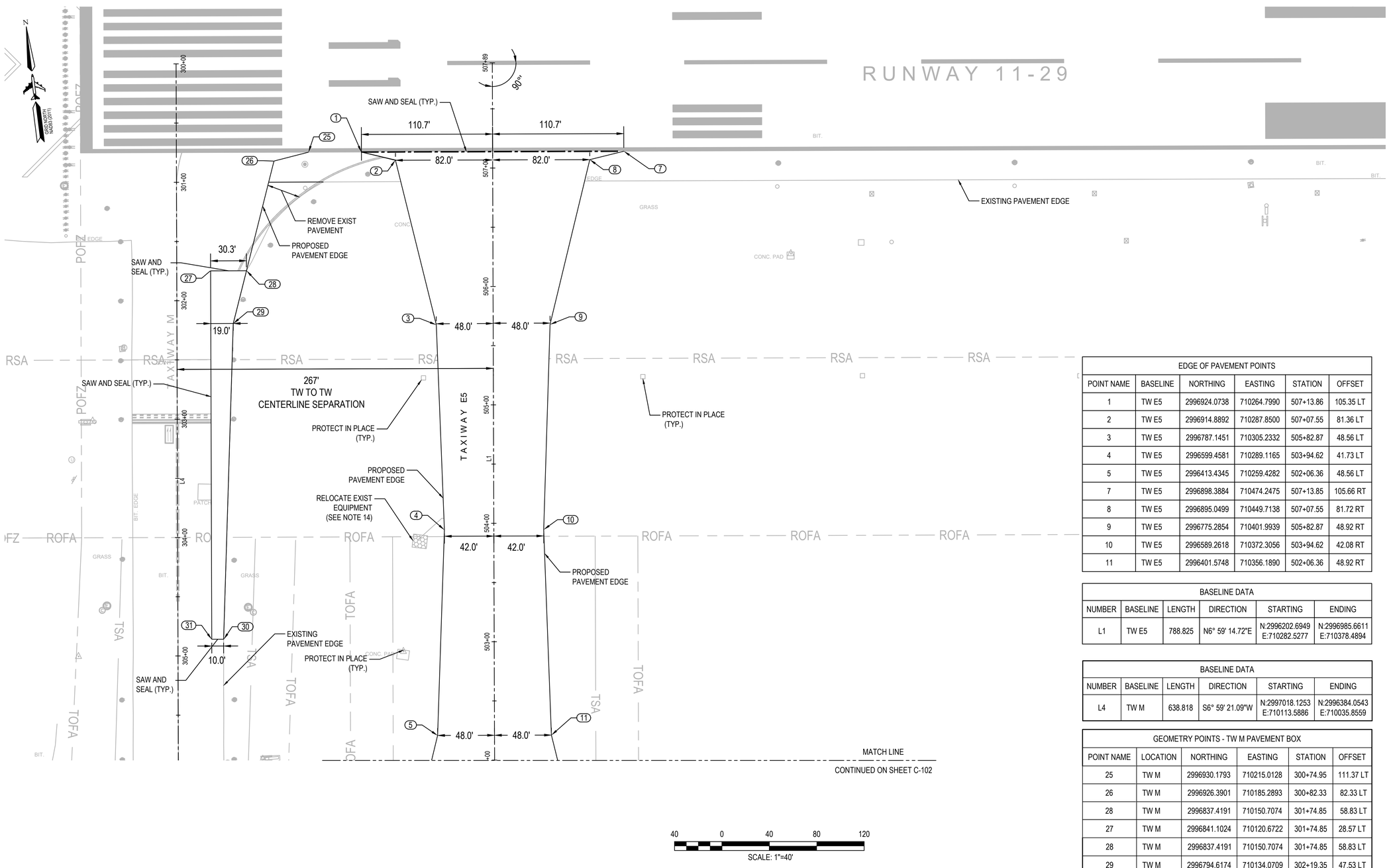
SHEET TITLE:
PHASING DETAILS

DISCIPLINE:
GENERAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: NOT TO SACLE
DATE: MARCH 2025

SHEET NUMBER: 8 OF 44
DWG NUMBER: G-003



40 0 40 80 120

SCALE: 1"=40'

GENERAL ALIGNMENT NOTES

1. COORDINATES SHOWN HEREON REFER TO THE NORTH AMERICAN DATUM OF 1983.
2. ELEVATIONS SHOWN HEREON REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88 MEAN SEA LEVEL DATUM.)
3. ALIGNMENT COORDINATES AND SURVEY CONTROL DATA ARE REFERENCED FROM MASSPORT SURVEY PERFORMED IN FALL 2024.
4. IF NECESSARY, DURING MOBILIZATION, MASSPORT SURVEY WILL ASSIST THE CONTRACTOR WITH RECOVERY OF PROJECT SURVEY CONTROL POINTS. ALL COORDINATION WILL BE DONE THROUGH MASSPORT CAPITAL PROGRAMS.
5. MASSPORT SURVEY SHALL BE NOTIFIED OF ANY SURVEY CONTROL POINTS DESTROYED/DISTURBED DURING CONSTRUCTION.
6. NORTHINGS AND EASTINGS FOR EXISTING EDGE OF SHOULDER ARE GIVEN FOR REFERENCE ONLY. CONTRACTOR SHALL SURVEY EXISTING EDGE OF PAVEMENT AND NOTIFY THE ENGINEER OF ANY INSTANCES WHERE IT IS LESS THAN MINIMUM WIDTH SPECIFIED.
7. FOR EXISTING CONDITIONS PLANS AND SURVEY NOTES, REFER TO V-100 SERIES DRAWINGS.
8. FOR GRADING AND PROFILES, REFER TO SHEETS C- 211 AND C-212 DRAWINGS.
9. FOR SPOT GRADES, REFER TO C- 300 SERIES DRAWINGS.
10. FOR TYPICAL SECTIONS, REFER DRAWING ON SHEET C-401.
11. FOR UTILITY STRUCTURE ADJUSTMENT PLAN AND STRUCTURE SCHEDULE, REFER TO C- 500 SERIES.
12. FOR MARKINGS AND MARKING DETAILS, REFER TO C-700 SERIES DRAWINGS.
13. IF STRUCTURE IS ABANDONED AND RESULTS IN UNSUITABLE RSA GRADING, THE RPR MAY DIRECT THE CONTRACTOR TO REMOVE THE STRUCTURE UNDER ITEM P-152.01.
14. RELOCATE EXISTING CAMERA EQUIPMENT AND RUBBER FOUNDATION TO A LOCATION DIRECTED BY OPERATIONS AND THE AIRPORT. NEW LOCATION SHALL BE APPROVED BY THE AIRPORT, AND THE EQUIPMENT SHALL BE PLACED ON A STABLE FOUNDATION AS DETERMINED BY THE ENGINEER. ALL WORK ASSOCIATED WITH REMOVING AND RELOCATING THE CAMERA EQUIPMENT IS INCIDENTAL TO THE PROJECT.

LEGEND

- RSA — RUNWAY SAFETY AREA (RSA)
- ROFA — RUNWAY OBJECT FREE AREA (ROFA)
- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- (4) — GEOMETRY POINTS - TAXIWAY
- ELEVATED EDGE LIGHT
- DRAIN INLET PROTECTION DEVICE
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- ELECTRIC MANHOLE
- SURVEY CONTROL POINT
- BENCH MARK
- GROUND ROD
- CORE LOCATION
- BASE CAN WITH RETRO-REFLECTIVE POST
- LIMIT OF WORK

EDGE OF PAVEMENT POINTS					
POINT NAME	BASELINE	NORTHING	EASTING	STATION	OFFSET
1	TW E5	2996924.0738	710264.7990	507+13.86	105.35 LT
2	TW E5	2996914.8892	710287.8500	507+07.55	81.36 LT
3	TW E5	2996787.1451	710305.2332	505+82.87	48.56 LT
4	TW E5	2996599.4581	710289.1165	503+94.62	41.73 LT
5	TW E5	2996413.4345	710259.4282	502+06.36	48.56 LT
7	TW E5	2996898.3884	710474.2475	507+13.85	105.66 RT
8	TW E5	2996895.0499	710449.7138	507+07.55	81.72 RT
9	TW E5	2996775.2854	710401.9939	505+82.87	48.92 RT
10	TW E5	2996589.2618	710372.3056	503+94.62	42.08 RT
11	TW E5	2996401.5748	710356.1890	502+06.36	48.92 RT

BASELINE DATA					
NUMBER	BASELINE	LENGTH	DIRECTION	STARTING	ENDING
L1	TW E5	788.825	N6° 59' 14.72"E	N:2996202.6949 E:710282.5277	N:2996985.6611 E:710378.4894

BASELINE DATA					
NUMBER	BASELINE	LENGTH	DIRECTION	STARTING	ENDING
L4	TW M	638.818	S6° 59' 21.09"W	N:2997018.1253 E:710113.5886	N:2996384.0543 E:710035.8559

GEOMETRY POINTS - TW M PAVEMENT BOX					
POINT NAME	LOCATION	NORTHING	EASTING	STATION	OFFSET
25	TW M	2996930.1793	710215.0128	300+74.95	111.37 LT
26	TW M	2996926.3901	710185.2893	300+82.33	82.33 LT
28	TW M	2996837.4191	710150.7074	301+74.85	58.83 LT
27	TW M	2996841.1024	710120.6722	301+74.85	28.57 LT
28	TW M	2996837.4191	710150.7074	301+74.85	58.83 LT
29	TW M	2996794.6174	710134.0709	302+19.35	47.53 LT
30	TW M	2996531.0562	710092.7250	304+85.99	38.56 LT
31	TW M	2996532.2870	710082.8010	304+85.97	28.56 LT

massport
MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

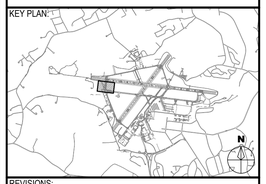
MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE: BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:



REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

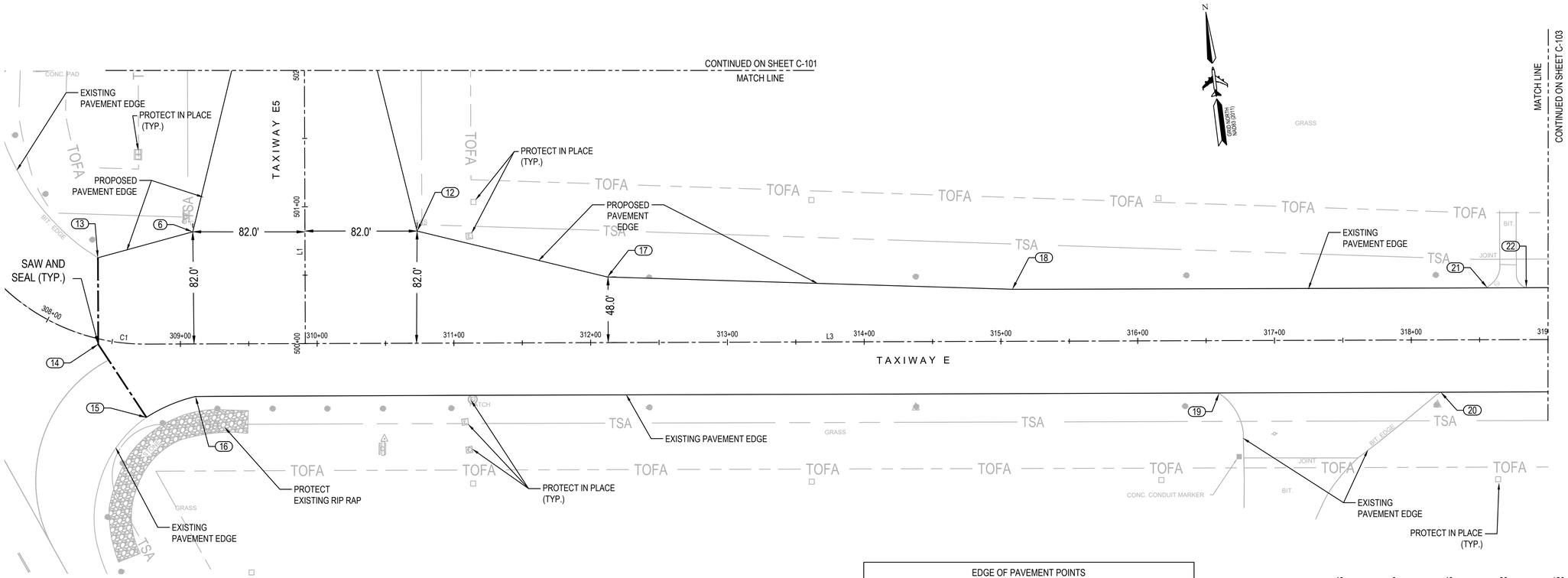
SHEET TITLE:
ALIGNMENT PLAN - 1

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 40'
DATE: MARCH 2025

SHEET NUMBER: 14 OF 44
DWG NUMBER: C-101



BASELINE DATA						
NUMBER	BASELINE	LENGTH	RADIUS	DIRECTION	STARTING	ENDING
C1	TW E	235.624	150.000	S38° 00' 42.22"E	N:2996384.0543 E:710035.8559	N:2996216.9161 E:710166.4937
L3	TW E	6218.080		S83° 00' 45.53"E	N:2996216.9161 E:710166.4937	N:2995460.4850 E:716338.3923
L1	TW E5	788.825		N6° 59' 14.72"E	N:2996202.6949 E:710282.5277	N:2996985.6611 E:710378.4894

EDGE OF PAVEMENT POINTS					
POINT NAME	BASELINE	NORTHING	EASTING	STATION	OFFSET
5	TW E5	2996413.4345	710259.4282	502+06.36	48.56 LT
6	TW E5	2996293.6700	710211.7084	500+81.68	81.36 LT
11	TW E5	2996401.5748	710356.1890	502+06.36	48.92 RT
12	TW E5	2996273.8307	710373.5721	500+81.68	81.71 RT
13	TW E	2996283.9034	710139.9365	308+17.65	56.65 LT
14	TW E	2996221.1141	710132.2410	308+40.52	3.92 RT
15	TW E	2996163.6655	710160.5079	308+74.98	53.58 RT
16	TW E	2996174.3108	710197.9583	309+10.86	38.46 RT
17	TW E	2996226.1108	710493.3367	311+97.74	48.89 LT
18	TW E	2996178.5668	710791.9786	314+99.95	38.03 LT
19	TW E	2996083.0806	710941.0177	316+59.50	38.62 RT
20	TW E	2996063.7030	711101.7622	318+21.40	38.30 RT
21	TW E	2996135.4977	711145.1268	318+55.71	38.24 LT
22	TW E	2996131.8886	711173.4932	318+84.31	38.11 LT

40 0 40 80 120
SCALE: 1"=40'

GENERAL ALIGNMENT NOTES

1. COORDINATES SHOWN HEREON REFER TO THE NORTH AMERICAN DATUM OF 1983.
2. ELEVATIONS SHOWN HEREON REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88 MEAN SEA LEVEL DATUM.)
3. ALIGNMENT COORDINATES AND SURVEY CONTROL DATA ARE REFERENCED FROM MASSPORT SURVEY PERFORMED IN FALL 2024.
4. IF NECESSARY, DURING MOBILIZATION, MASSPORT SURVEY WILL ASSIST THE CONTRACTOR WITH RECOVERY OF PROJECT SURVEY CONTROL POINTS. ALL COORDINATION WILL BE DONE THROUGH MASSPORT CAPITAL PROGRAMS.
5. MASSPORT SURVEY SHALL BE NOTIFIED OF ANY SURVEY CONTROL POINTS DESTROYED/DISTURBED DURING CONSTRUCTION.
6. NORTHINGS AND EASTINGS FOR EXISTING EDGE OF SHOULDER ARE GIVEN FOR REFERENCE ONLY. CONTRACTOR SHALL SURVEY EXISTING EDGE OF PAVEMENT AND NOTIFY THE ENGINEER OF ANY INSTANCES WHERE IT IS LESS THAN MINIMUM WIDTH SPECIFIED.
7. FOR EXISTING CONDITIONS PLANS AND SURVEY NOTES, REFER TO V-100 SERIES DRAWINGS.
8. FOR GRADING AND PROFILES, REFER TO SHEETS C- 211 AND C-212 DRAWINGS.
9. FOR SPOT GRADES, REFER TO C- 300 SERIES DRAWINGS.
10. FOR TYPICAL SECTIONS, REFER DRAWING ON SHEET C-401.
11. FOR UTILITY STRUCTURE ADJUSTMENT PLAN AND STRUCTURE SCHEDULE, REFER TO C- 500 SERIES.
12. FOR MARKINGS AND MARKING DETAILS, REFER TO C-700 SERIES DRAWINGS.
13. IF STRUCTURE IS ABANDONED AND RESULTS IN UNSUITABLE RSA GRADING, THE RPR MAY DIRECT THE CONTRACTOR TO REMOVE THE STRUCTURE UNDER ITEM P-152.01.

LEGEND

- RSA — RUNWAY SAFETY AREA (RSA)
- ROFA — RUNWAY OBJECT FREE AREA (ROFA)
- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- (4) — GEOMETRY POINTS - TAXIWAY
- ELEVATED EDGE LIGHT
- DRAIN INLET PROTECTION DEVICE
- (D) EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- (E) ELECTRIC MANHOLE
- SURVEY CONTROL POINT
- BENCH MARK
- GROUND ROD
- CORE LOCATION
- BASE CAN WITH RETRO-REFLECTIVE POST
- LIMIT OF WORK

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE: BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

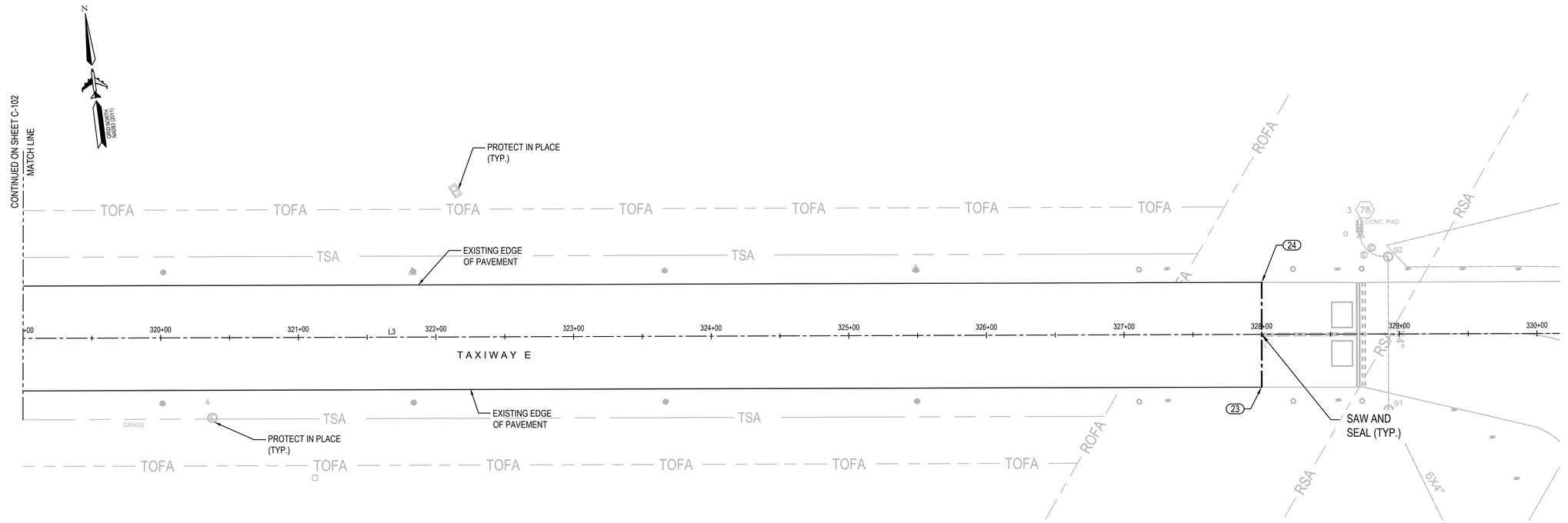
SHEET TITLE:
ALIGNMENT PLAN - 2

DISCIPLINE: CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 40'
DATE: MARCH 2025

SHEET NUMBER: 15 OF 44
DWG NUMBER: C-102



EDGE OF PAVEMENT POINTS					
POINT NAME	BASELINE	NORTHING	EASTING	STATION	OFFSET
22	TW E	2996131.8886	711173.4932	318+84.31	38.11 LT
23	TW E	2995944.6116	712072.9765	327+99.89	38.36 RT
24	TW E	2996020.1639	712082.4537	328+00.11	37.79 LT

BASELINE DATA					
NUMBER	BASELINE	LENGTH	DIRECTION	STARTING	ENDING
L3	TW E	6218.080	S83° 00' 45.53"E	N:2996216.9161 E:710166.4937	N:2995460.4850 E:716338.3923

40 0 40 80 120

SCALE: 1"=40'

GENERAL ALIGNMENT NOTES

1. COORDINATES SHOWN HEREON REFER TO THE NORTH AMERICAN DATUM OF 1983.
2. ELEVATIONS SHOWN HEREON REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88 MEAN SEA LEVEL DATUM.)
3. ALIGNMENT COORDINATES AND SURVEY CONTROL DATA ARE REFERENCED FROM MASSPORT SURVEY PERFORMED IN FALL 2024.
4. IF NECESSARY, DURING MOBILIZATION, MASSPORT SURVEY WILL ASSIST THE CONTRACTOR WITH RECOVERY OF PROJECT SURVEY CONTROL POINTS. ALL COORDINATION WILL BE DONE THROUGH MASSPORT CAPITAL PROGRAMS.
5. MASSPORT SURVEY SHALL BE NOTIFIED OF ANY SURVEY CONTROL POINTS DESTROYED/DISTURBED DURING CONSTRUCTION.
6. NORTHINGS AND EASTINGS FOR EXISTING EDGE OF SHOULDER ARE GIVEN FOR REFERENCE ONLY. CONTRACTOR SHALL SURVEY EXISTING EDGE OF PAVEMENT AND NOTIFY THE ENGINEER OF ANY INSTANCES WHERE IT IS LESS THAN MINIMUM WIDTH SPECIFIED.
7. FOR EXISTING CONDITIONS PLANS AND SURVEY NOTES, REFER TO V-100 SERIES DRAWINGS.
8. FOR GRADING AND PROFILES, REFER TO SHEETS C- 211 AND C-212 DRAWINGS.
9. FOR SPOT GRADES, REFER TO C- 300 SERIES DRAWINGS.
10. FOR TYPICAL SECTIONS, REFER DRAWING ON SHEET C-401.
11. FOR UTILITY STRUCTURE ADJUSTMENT PLAN AND STRUCTURE SCHEDULE, REFER TO C- 500 SERIES.
12. FOR MARKINGS AND MARKING DETAILS, REFER TO C-700 SERIES DRAWINGS.
13. IF STRUCTURE IS ABANDONED AND RESULTS IN UNSUITABLE RSA GRADING, THE RPR MAY DIRECT THE CONTRACTOR TO REMOVE THE STRUCTURE UNDER ITEM P-152.01.

LEGEND

- RSA — RUNWAY SAFETY AREA (RSA)
- ROFA — RUNWAY OBJECT FREE AREA (ROFA)
- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- (4) — GEOMETRY POINTS - TAXIWAY
- ELEVATED EDGE LIGHT
- DRAIN INLET PROTECTION DEVICE
- (D) EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- (E) ELECTRIC MANHOLE
- SURVEY CONTROL POINT
- BENCH MARK
- GROUND ROD
- CORE LOCATION
- BASE CAN WITH RETRO-REFLECTIVE POST
- LIMIT OF WORK

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

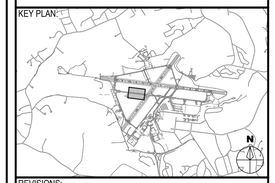
MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER
Dawit Birru 3/31/2025

KEY PLAN:



REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

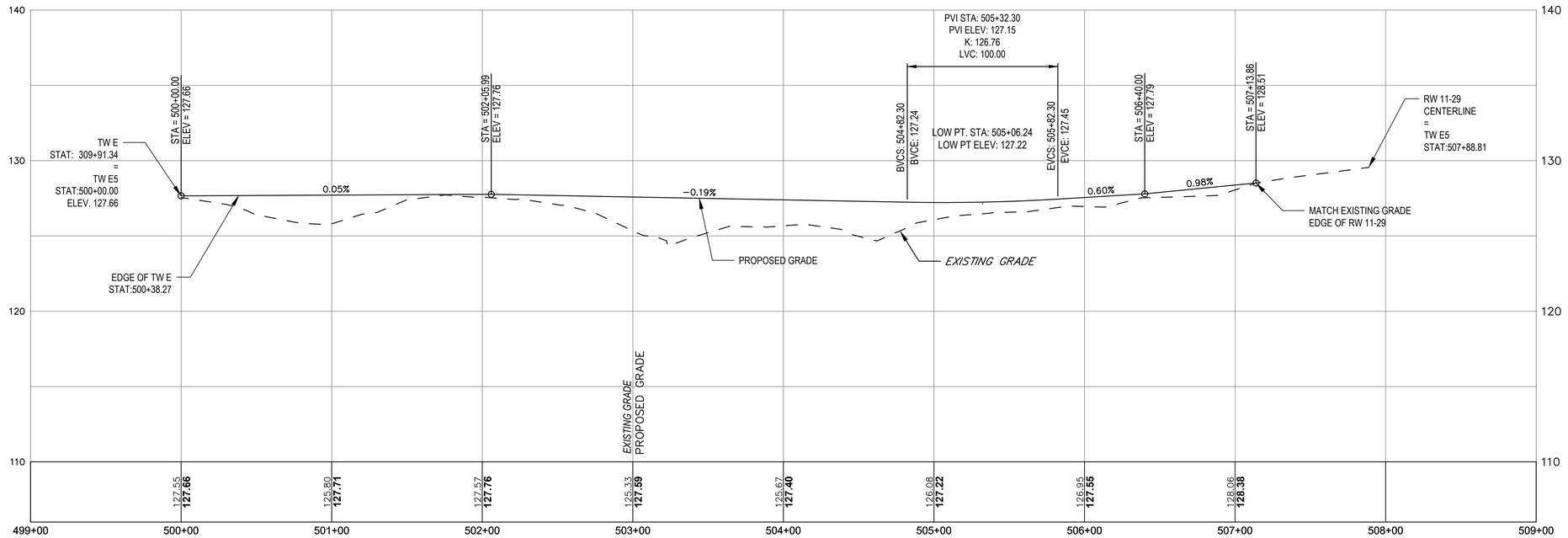
SHEET TITLE:
ALIGNMENT PLAN - 3

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 40'
DATE: MARCH 2025

SHEET NUMBER: 16 OF 44
DWG NUMBER: C-103



TAXIWAY E5
STA 500+00 TO STA 507+16.86

HOR. SCALE IN FEET
40 0 40 80
4 0 4 8
VER. SCALE IN FEET

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER
Dawit Birru 3/31/2025

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

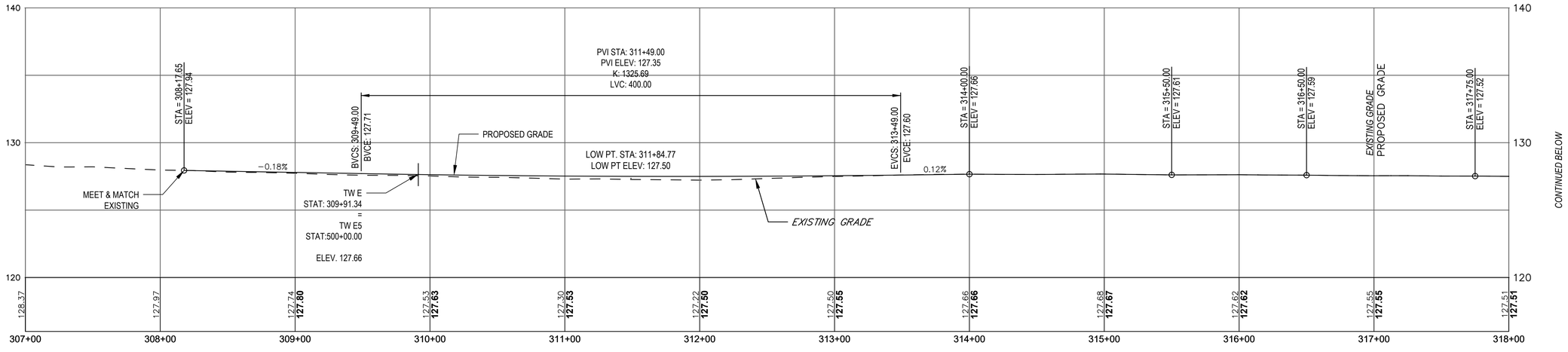
SHEET TITLE:
TAXIWAY E5 PROFILE PLAN
STA 500+00 TO 507+16.86

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

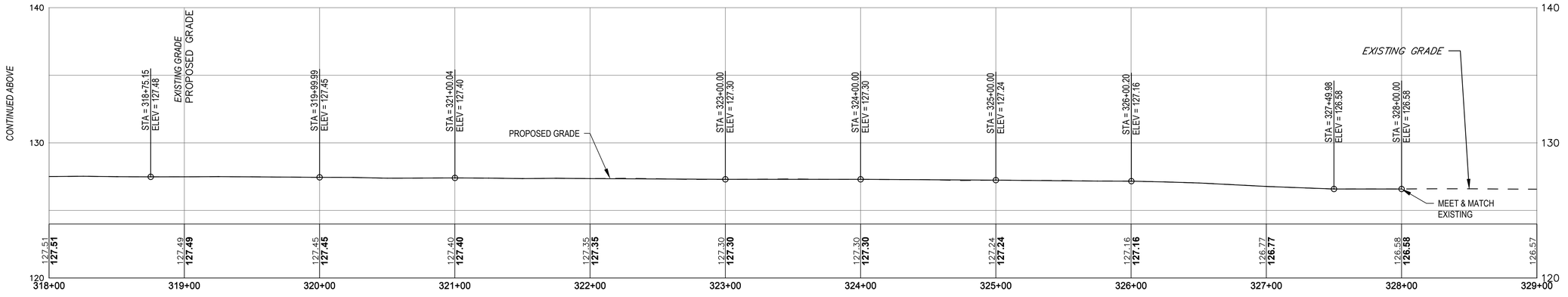
SCALE:	DATE:
1"=40' H 1"=4' V	MARCH 2025

SHEET NUMBER: 17 OF 44
DWG NUMBER: C-201



TAXIWAY E
STA 308+50 TO STA 319+50

HOR. SCALE IN FEET
40 0 40 80
4 0 4 8
VER. SCALE IN FEET



TAXIWAY E
STA 319+50 TO STA 328+00

HOR. SCALE IN FEET
40 0 40 80
4 0 4 8
VER. SCALE IN FEET

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

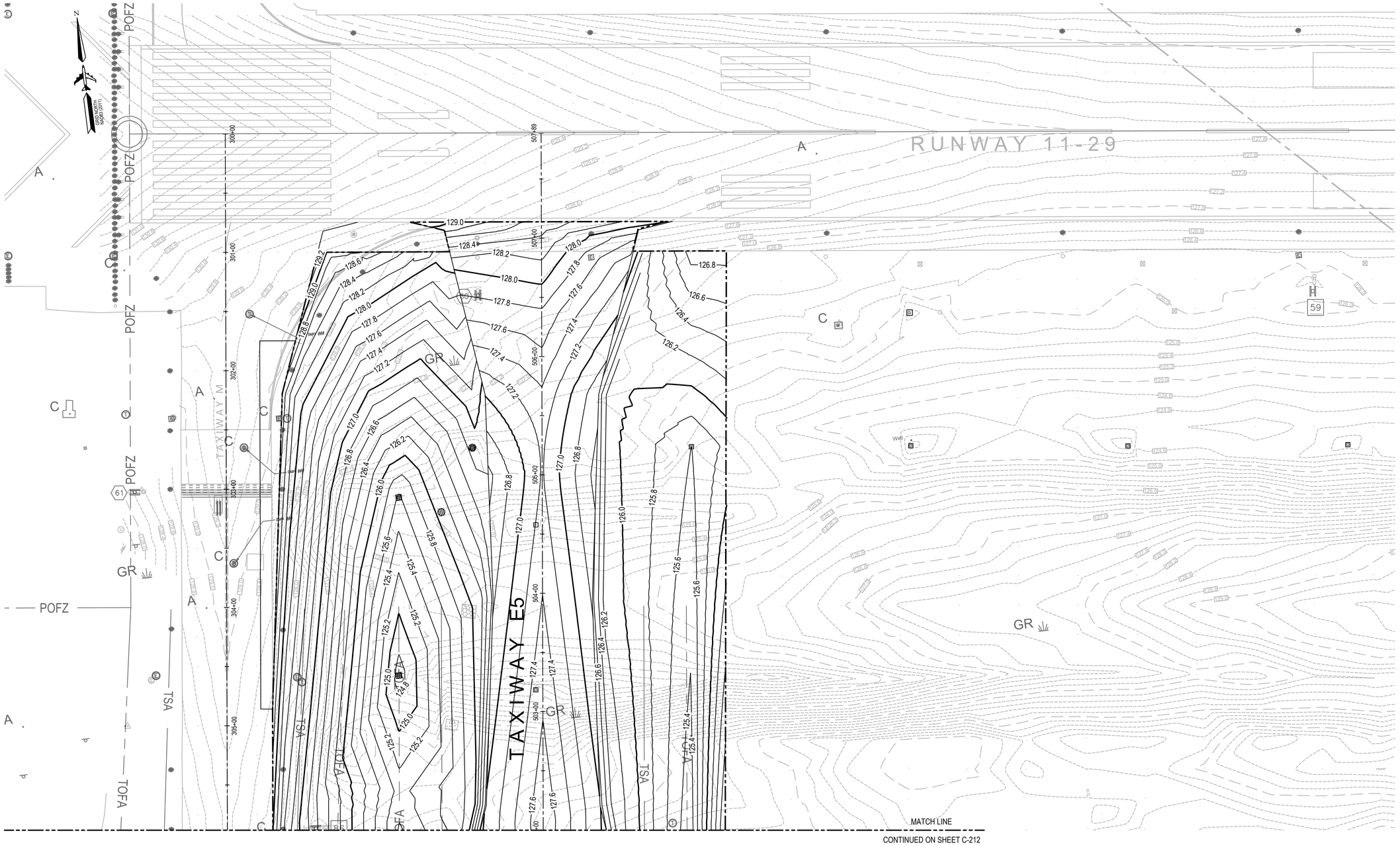
SHEET TITLE:
TAXIWAY E PROFILE PLAN
STA 308+50 TO 328+00

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
1"=40' H 1"=4' V	MARCH 2025

SHEET NUMBER: 18 OF 44
DWG NUMBER: C-202



NOTES

1. FOR GENERAL CONSTRUCTION SAFETY/PHASING NOTES, GENERAL CONSTRUCTION SAFETY/PHASING PLANS REFER TO THE G-100 DRAWINGS.
2. FOR ALIGNMENT PLANS AND LAYOUT INFORMATION REFER TO THE C-100 DRAWINGS.
3. FOR SPOT GRADE PLANS REFER TO THE C-300 SERIES DRAWINGS.
4. FOR THE TYPICAL SECTIONS AND CONSTRUCTION DETAILS REFER TO C-401 DRAWING.

LEGEND

- 128.0 — MAJOR CONTOUR
- 127.8 — MINOR CONTOUR
- RSA — RUNWAY SAFETY AREA (RSA)
- ROFA — RUNWAY OBJECT FREE AREA (ROFA)
- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- PROPOSED SURFACE BOUNDARY
- PROPOSED CATCH BASIN
- PROPOSED MANHOLE

40 0 40 80 120
SCALE: 1"=40'

massport
MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

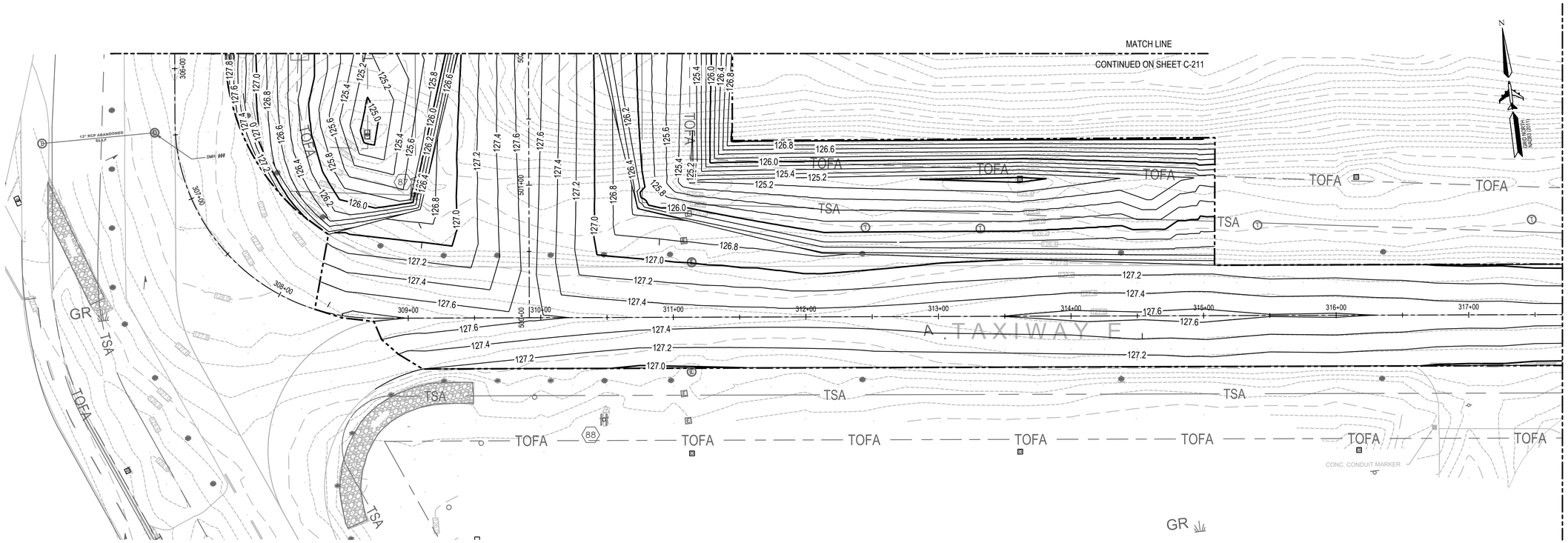
SHEET TITLE:
GRADING PLAN - 1

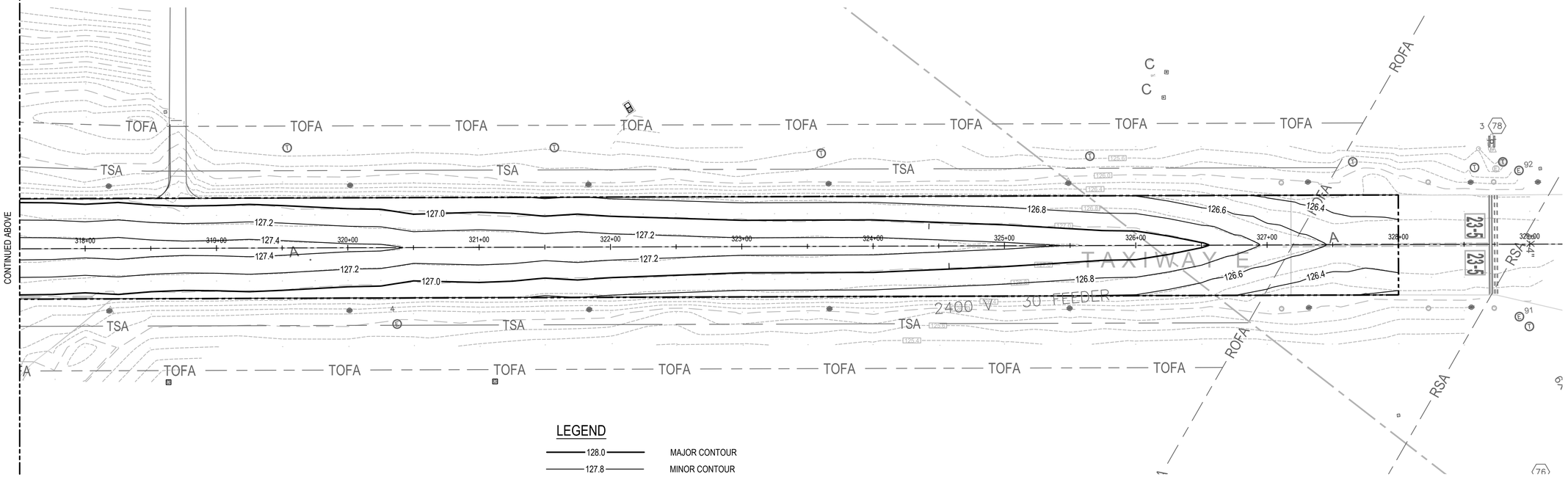
DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 40'
DATE: MARCH 2025

SHEET NUMBER: 19 OF 44
DWG NUMBER: C-211





LEGEND

128.0	MAJOR CONTOUR
127.8	MINOR CONTOUR
RSA	RUNWAY SAFETY AREA (RSA)
ROFA	RUNWAY OBJECT FREE AREA (ROFA)
TSA	TAXIWAY SAFETY AREA (TSA)
TOFA	TAXIWAY OBJECT FREE AREA (TOFA)
	PROPOSED SURFACE BOUNDARY

NOTES

1. FOR GENERAL CONSTRUCTION SAFETY/PHASING NOTES, GENERAL CONSTRUCTION SAFETY/PHASING PLANS REFER TO THE G-100 DRAWINGS.
2. FOR ALIGNMENT PLANS AND LAYOUT INFORMATION REFER TO THE C-100 DRAWINGS.
3. FOR SPOT GRADE PLANS REFER TO THE C-300 SERIES DRAWINGS.
4. FOR THE TYPICAL SECTIONS AND CONSTRUCTION DETAILS REFER TO C-401 DRAWING.

40 0 40 80 120
SCALE: 1"=40'

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

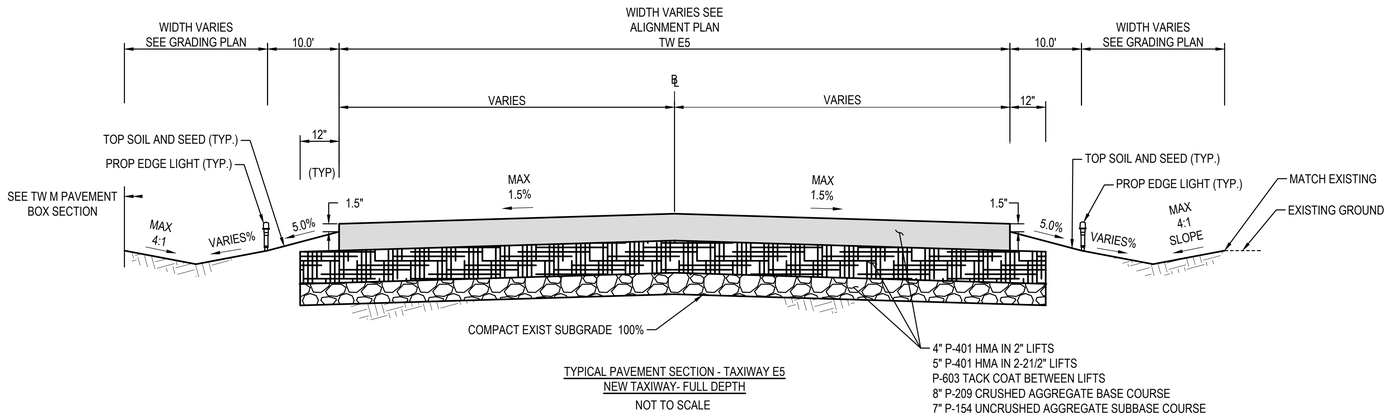
SHEET TITLE:
GRADING PLAN - 2

DISCIPLINE:
CIVIL

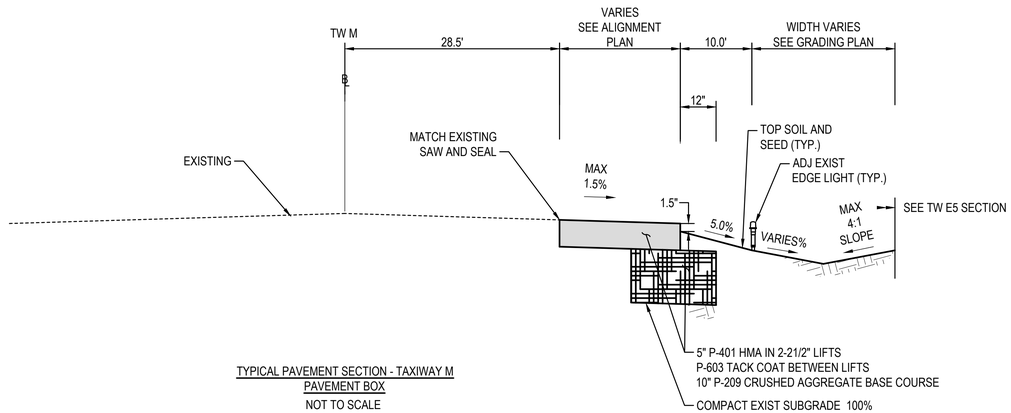
DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
1" = 40'	MARCH 2025

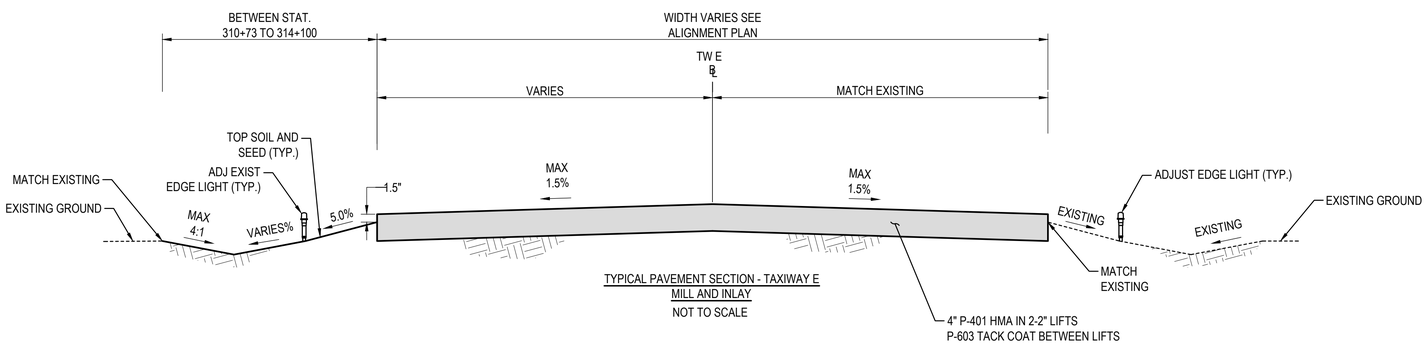
SHEET NUMBER: 20 OF 44
DWG NUMBER: C-212



TYPICAL PAVEMENT SECTION - TAXIWAY E5
NEW TAXIWAY- FULL DEPTH
NOT TO SCALE



TYPICAL PAVEMENT SECTION - TAXIWAY M
PAVEMENT BOX
NOT TO SCALE



TYPICAL PAVEMENT SECTION - TAXIWAY E
MILL AND INLAY
NOT TO SCALE

GENERAL PAVEMENT NOTES

PROPOSED PAVEMENT MILLING & INLAY

SURFACE: 2" P-401 HMA SURFACE COURSE
2" P-401 HMA INTERMEDIATE COURSE OVER MILLED SURFACE

4.00" MILLING DEPTH (VARIES, SEE NOTE 4)

PROPOSED FULL DEPTH PAVEMENT

SURFACE: 4" P-401 HMA SURFACE COURSE
5" P-401 HMA INTERMEDIATE COURSE

BASE: 8" P-209 CRUSHED AGGREGATE BASE COURSE

SUBBASE: 7" P-154 UNCRUSHED AGGREGATE SUBBASE COURSE

SUBGRADE: PREPPED AND COMPACTED TO 100%

PROPOSED PAVEMENT BOX

SURFACE: 2.5" P-401 HMA SURFACE COURSE
2.5" P-401 HMA INTERMEDIATE COURSE

BASE: 10" P-209 CRUSHED AGGREGATE BASE COURSE

SUBGRADE: PREPPED AND COMPACTED TO 100%

*EXISTING TOP SOIL SHALL BE RE-USED WHERE POSSIBLE AND AS DETERMINED SUITABLE BY THE ENGINEER.

NOTES:

1. ALL PAVING SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE FAA AC 150/5370-10H STANDARD SPECIFICATION FOR CONSTRUCTION OF AIRPORTS.
2. ALL SURFACES SHALL BE TACKED WITH P - 603 TACK COAT PRIOR TO PAVING HMA. ALL JOINTS IN THE SURFACE COURSE SHALL BE SEALED WITH P - 605 JOINT SEALANT FOR PAVEMENTS.
3. P -101-5.2 JOINT AND CRACK REPAIR SHALL BE USED TO REPAIR EXISTING PAVEMENT CRACK AS DETERMINED AND APPROVED BY THE ENGINEER.
4. EXISTING MILLING DEPTH VARIES TO ESTABLISH THE PROPOSED GRADING AND A PROPOSED MAXIMUM 1.5% CROSS SLOPE, UNLESS OTHERWISE NOTED.
5. FOR EXISTING PAVEMENT INFORMATION SEE PAVEMENT CORE LOGS ON V-200 SERIES AND BORING LOGS IN THE SPECIFICATION.

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MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

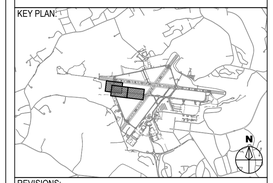
MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER
Dawit Birru 3/21/2025

KEY PLAN:



REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

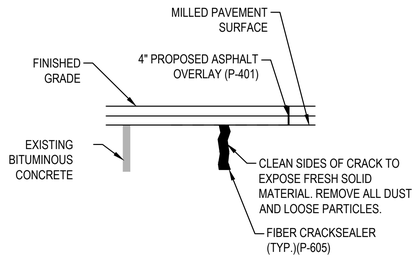
SHEET TITLE:
TYPICAL SECTIONS

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

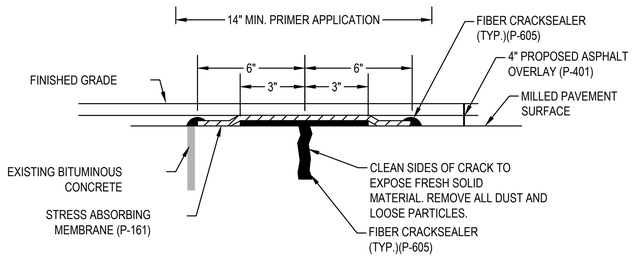
SCALE: NOT TO SCALE
DATE: MARCH 2025

SHEET NUMBER: 23 OF 44
DWG NUMBER: C-401



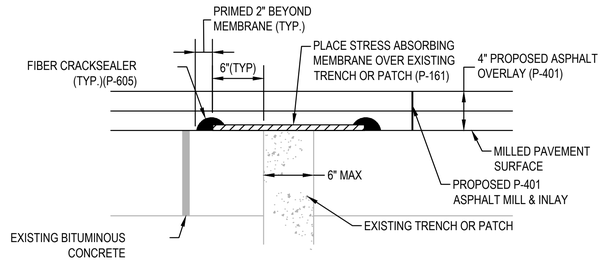
TYPE 1A CRACK REPAIR FOR CRACK WIDTH LESS THAN 1"

NOT TO SCALE



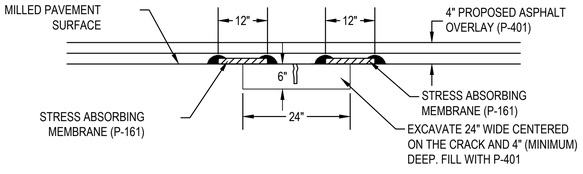
TYPE 1B CRACK REPAIR FOR CRACK WIDTH > 1" BUT LESS THAN 2-1/4"

NOT TO SCALE



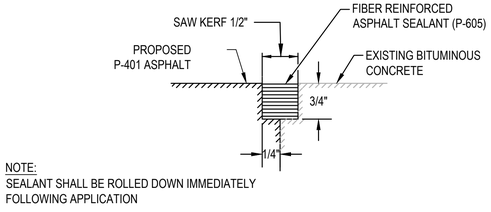
TYPE 1C CRACK REPAIR WITH P-401 ASPHALT OVERLAY (CONCRETE ELECTRICAL TRENCH OR PATCH)

NOT TO SCALE



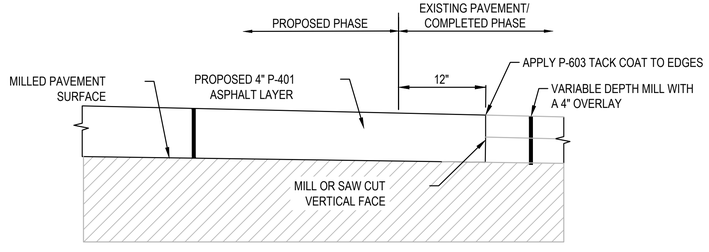
TYPE 1D CRACK REPAIR - MILL AND INLAY REPAIR GREATER THAN 2-1/4" WIDE

NOT TO SCALE



BITUMINOUS TO BITUMINOUS SAW AND SEAL DETAIL

NOT TO SCALE



TYPICAL MILL JOINT DETAIL

NOT TO SCALE

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

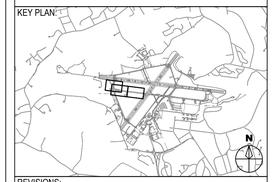
MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER
3/21/2025

KEY PLAN:



REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

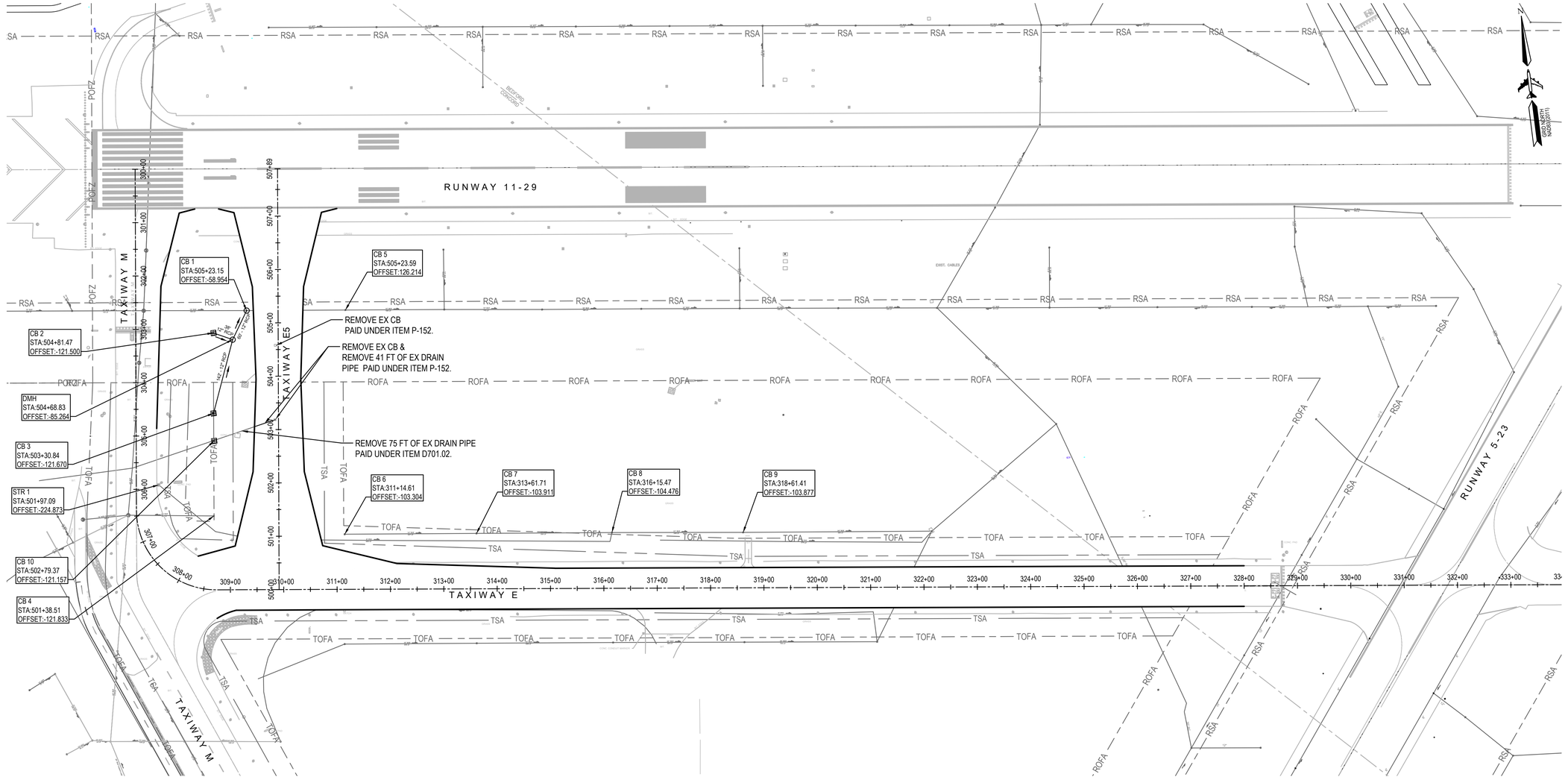
SHEET TITLE:
PAVEMENT AND CRACK REPAIR DETAILS

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: NOT TO SCALE
DATE: MARCH 2025

SHEET NUMBER: 24 OF 44
DWG NUMBER: C-402



STRUCTURE ADJUSTMENT SCHEDULE							
STR. ID	BASELINE	STATION	OFFSET	EXISTING ELEV.	FINISH ELEV.	DIFF IN ELEV.	DESCRIPTION
CB 1	TW E5	505+23.15	58.95 LT	126.88	126.42	-0.46	EXISTING CATCH BASIN TO BE CHANGED TO MANHOLE
CB 2	TW E5	504+81.47	121.50 LT	125.98	125.57	-0.41	PROPOSED CATCH BASIN
CB 3	TW E5	503+30.84	121.67 LT	125.57	124.71	-0.86	PROPOSED CATCH BASIN
CB 4	TW E5	501+38.51	121.83 LT	124.86	124.87	+0.01	EXISTING CATCH BASIN
CB 5	TW E5	505+23.59	126.21 RT	125.77	125.60	-0.17	EXISTING CATCH BASIN TO BE ADJUSTED
CB 6	TW E	311+14.61	103.30 LT	125.33	125.16	-0.17	EXISTING CATCH BASIN TO BE ADJUSTED
CB 7	TW E	313+61.71	103.91 LT	125.09	124.95	-0.14	EXISTING CATCH BASIN TO BE ADJUSTED
CB 8	TW E	316+15.47	104.48 LT	125.11	125.11	-	EXISTING CATCH BASIN TO BE ADJUSTED
CB 9	TW E	318+61.41	103.88 LT	125.92	125.92	-	EXISTING CATCH BASIN
DMH	TW E5	504+68.83	85.26 LT	125.52	125.96	+0.44	PROPOSED DRAIN MANHOLE
STR 1	TW E5	501+97.09	224.87 LT	127.84	127.69	-0.15	UNKNOWN STRUCTURE TO BE VERIFIED STRUCTURE TO BE ADJUSTED
CB 10	TW E5	502+79.37	121.16 LT	126.02	125.03	-0.99	PROPOSED CATCH BASIN

STRUCTURE SCHEDULE
NOT TO SCALE

NOTES:
1. ALL EXISTING STRUCTURES SHALL BE ADJUSTED TO PROPOSED SURFACE GRADE AND SHALL BE FLUSH WITH PAVEMENT OR LOAM (AS APPLICABLE).
2. A MINIMUM OF 1% INVERT SLOPE IS REQUIRED FOR DRAINAGE IN THE REINFORCED CONCRETE PIPES BETWEEN CONNECTIONS.
3. SEE SHEET C502 FOR STRUCTURE ADJUSTMENT DETAILS.

100 0 100 200 300
SCALE: 1"=100'

massport
MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.	DATE:	DESCRIPTION:	BY:

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CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

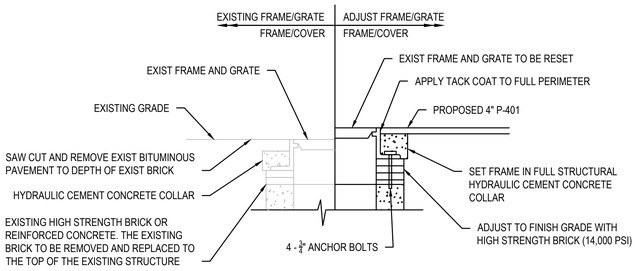
SHEET TITLE:
UTILITY STRUCTURE ADJUSTMENT AND SCHEDULE PLAN

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 100'
DATE: MARCH 2025

SHEET NUMBER: 25 OF 44
DWG NUMBER: C-501



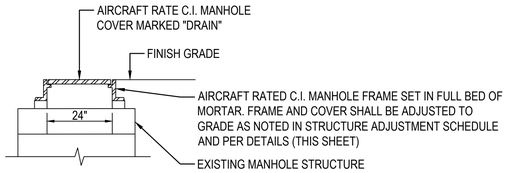
NOTES:

1. DURING THE PROCESS OF ADJUSTING THE FRAME, GRATE AND COVERS, THE CONTRACTOR SHALL REMOVE ALL BRICK, CONCRETE AND OTHER MATERIALS TO THE TOP OF THE ORIGINAL STRUCTURE AND REBUILD THE RISER USING NEW MATERIALS TO THE LINE AND GRADE AS DETERMINED ON THE CONTRACT DRAWINGS.
2. THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS MATERIALS, DIRT, RUBBISH, SILT AND OTHER MATERIALS GENERATED DURING THE REMOVAL IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS AND RESET ALL FRAME, GRATES AND COVERS.
3. INTERIOR OF UTILITY STRUCTURE SHALL BE CLEANED OF ALL DEBRIS PRIOR TO INSTALLING LASTING COVER.
4. THE QUANTITY OF P-209 FOR STRUCTURAL ADJUSTMENT SHALL BE INCIDENTAL TO ITEM D-910.01

STRUCTURE ADJUSTMENT- RAISE EXISTING CATCH BASIN/ MANHOLE/HANDHOLE

NOT TO SCALE

FRAME AND COVER



MANHOLE COVER DETAIL FOR CATCH BASIN CONVERSION TO MANHOLE

NOT TO SCALE

NOTES:

1. DURING THE PROCESS OF ADJUSTING THE FRAME, GRATE AND COVERS, THE CONTRACTOR SHALL REMOVE ALL BRICK, CONCRETE AND OTHER MATERIALS TO THE TOP OF THE ORIGINAL STRUCTURE AND REBUILD THE RISER USING NEW MATERIALS TO THE LINE AND GRADE AS DETERMINED ON THE CONTRACT DRAWINGS.
2. THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS MATERIALS, DIRT, RUBBISH, SILT AND OTHER MATERIALS GENERATED DURING THE REMOVAL IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS AND RESET ALL FRAME, GRATES AND COVERS.
3. STRUCTURES REQUIRING NO ADJUSTMENT SHALL BE REBUILT WITH NEW MATERIALS AND SET TO ORIGINAL GRADE AS DIRECTED/APPROVED BY THE ENGINEER. WORK ASSOCIATED WITH REBUILD WILL BE PAID FOR AS A TYPE II ADJUSTMENT.
4. INTERIOR OF UTILITY STRUCTURE SHALL BE CLEANED OF ALL DEBRIS PRIOR TO INSTALLING LASTING COVER.

STRUCTURE ADJUSTMENT- LOWER EXISTING CATCH BASIN/ MANHOLE/HANDHOLE

NOT TO SCALE

MORTAR PIPE CONNECTION AT NEW DRAIN STRUCTURE

NOT TO SCALE

MORTAR PIPE CONNECTION NOTES:

1. INVERT OF UNDERDRAIN/TAXIWAY DRAIN/TRENCHDRAIN/LIGHT DRAIN SHALL BE SET A MINIMUM OF 3" ABOVE THE INVERT OF THE STRUCTURE'S OUTLET PIPE WHERE POSSIBLE.
2. CONNECTIONS AT EXISTING AND PROPOSED DRAIN STRUCTURES ARE INCIDENTAL TO THE RESPECTIVE PAY ITEM.

CORE DRILL CONNECTION AT EXISTING DRAIN STRUCTURE

NOT TO SCALE

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MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
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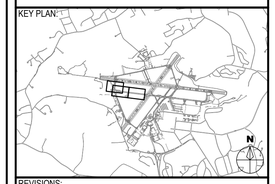
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER
3/31/2025

KEY PLAN:



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REV NO.:	DATE:	DESCRIPTION:	BY:

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PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

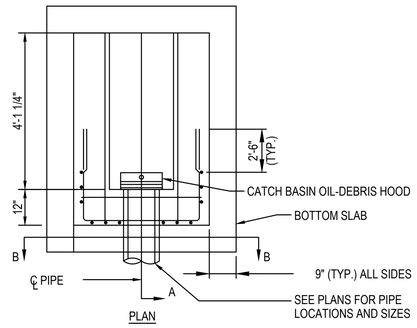
SHEET TITLE:
UTILITY STRUCTURE ADJUSTMENT DETAILS - 1

DISCIPLINE:
CIVIL

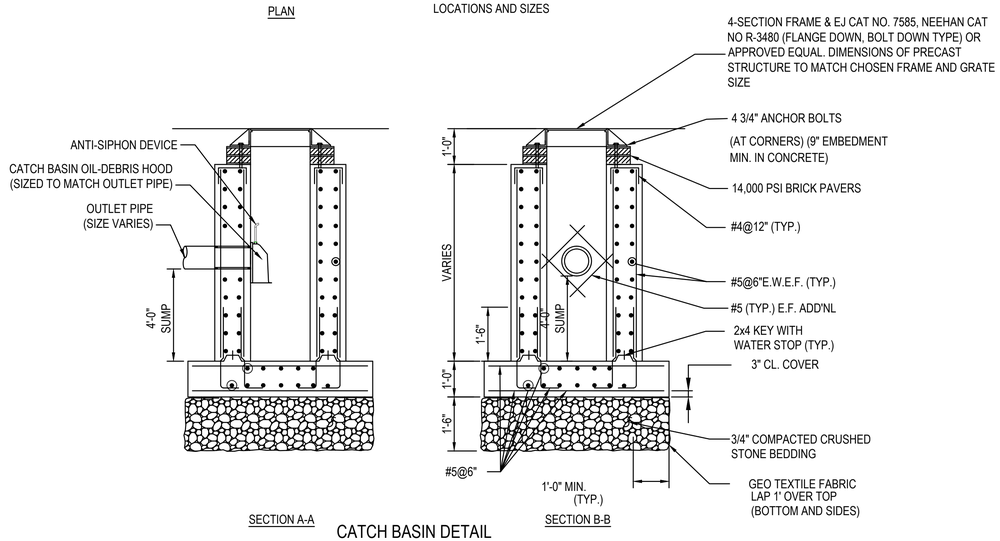
DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
NOT TO SCALE	MARCH 2025

SHEET NUMBER: 26 OF 44
DWG NUMBER: C-502



PLAN

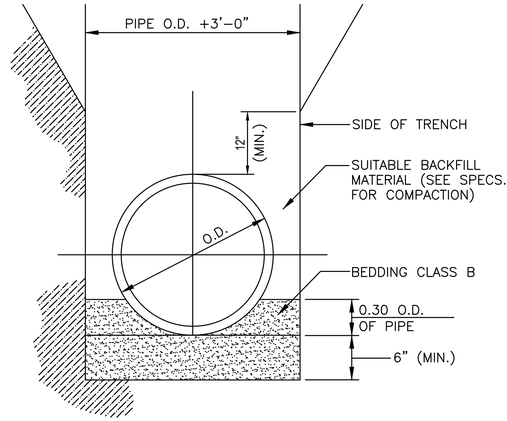


SECTION A-A SECTION B-B

CATCH BASIN DETAIL
NOT TO SCALE

CATCH BASIN/DRAIN MANHOLE NOTES:

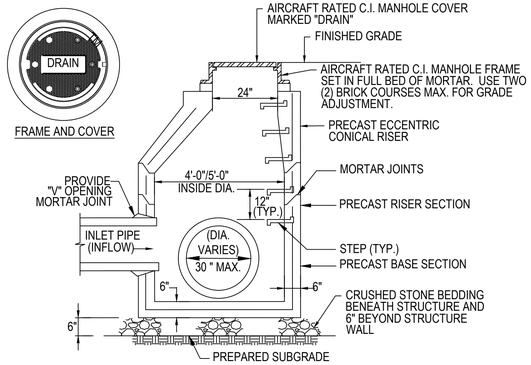
1. THE DESIGN CONFORMS TO THE FEDERAL AVIATION CIRCULARS, FAA AC 150/5300, 5320, 5360 AND AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1996, 16TH EDITION WITH THE LATEST INTERIMS.
2. ALL DRAINAGE STRUCTURES AND MANHOLES SHALL BE AIRCRAFT RATED (WITH A MINIMUM WHEEL LOADING EQUIVALENT TO A BOEING 767-300).
3. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED FOR ALLOWABLE SOIL BEARING PRESSURE OF 2 TSF MINIMUM. THE ENGINEER SHALL BE NOTIFIED IF CONDITIONS ENCOUNTERED OTHERWISE.
4. DRAINAGE AND MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND GROUNDWATER PRESSURE UNDER FLOOD CONDITION.
5. THE REINFORCING STEEL SHALL CONFORM TO AASHTO M31, GRADE 60. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
6. THE CONCRETE SHALL HAVE AN ULTIMATE STRENGTH, f'c = 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED.
7. THE MINIMUM CLEAR COVER TO REINFORCING BARS SHALL BE 2" UNLESS OTHERWISE NOTED.
8. REGARDLESS OF THE METHOD OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF EACH INDIVIDUAL STRUCTURE TO THE ENGINEER FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL BEAR THE STAMP OF A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS.
9. ALL NEW OR ADJUSTED CATCH BASINS CONSTRUCTED WITHIN GRASSED INFIELD AREAS ARE TO HAVE A CONCRETE APRON INSTALLED.



STORM DRAINAGE BELOW GRASS TRENCH DETAIL
NOT TO SCALE

STORM DRAIN NOTES:

1. THE DESIGN CONFORMS TO THE FEDERAL AVIATION CIRCULARS, FAA AC 150/5300, 5320, 5360 AND AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1996, 16TH EDITION WITH THE LATEST INTERIMS.
2. THE DRAIN LINE SHALL BE BE CONSTRUCTED FROM THE DOWNSTREAM END TO THE UPSTREAM END.
3. THE CLMS MATERIAL SHALL BE USED UNDERNEATH THE TAXIWAY ONLY.
4. A TRENCH BOX SHALL BE USED TO MAINTAIN THE SIDES OF THE TRENCH.
5. THE TRENCH SHALL BE A MINIMUM OF 6' IN WIDTH.
6. THE CONCRETE SHALL HAVE AN ULTIMATE STRENGTH, f'c = 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED.
7. THE CLSM FLOWFILL SHALL BE PLACED AT THE BOTTOM OF THE TRENCH UP TO THE BINDER CORSE.
8. A MINIMUM OF A 12' SECTION OF EXISTING PAVEMENT SHALL BE SAWCUT AND REMOVED TO CONSTRUCT THE TRENCH.
9. CONSTRUCT DURING LOW TIDE.
10. CONTRACTOR SHALL PROVIDE A TRENCH SHORING OR SHIELDING SYSTEM WITHIN TAXIWAY FOOTPRINT TO MINIMIZE LIMITS OF EXCAVATION AND MINIMIZE RESTORATION TIME. TRENCH SHORING OR SHIELDING SYSTEM SHALL BE IN COMPLIANCE WITH OSHA REQUIREMENTS, STAMPED BY A REGISTERED MASSACHUSETTS PROFESSIONAL ENGINEER AND MUST BE SUBMITTED AND APPROVED VIA THE SUBMITTAL PROCESS.



NOTES:

1. PRECAST CONCRETE SECTIONS SHALL CONFORM TO ASTM C-478
2. STEEL REINFORCING SHALL CONFORM TO ASTM A185
3. MANHOLE STEPS SHALL BE 14" WIDE AND SHALL BE CAST INTO MANHOLE SECTIONS BY THE PRECAST MANHOLE MANUFACTURER.

MANHOLE DETAIL
NOT TO SCALE

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

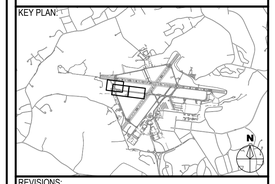
MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:



REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

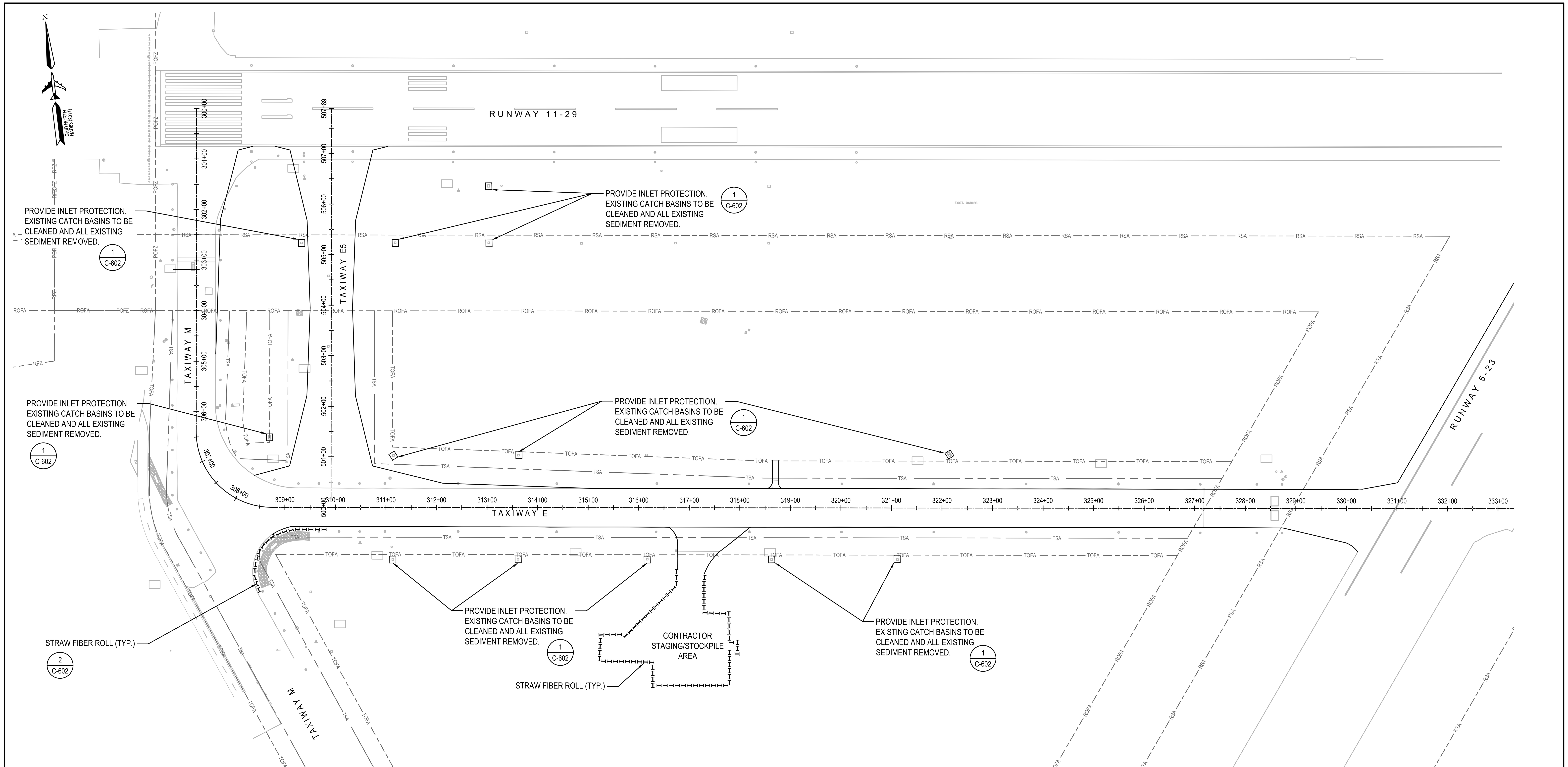
SHEET TITLE:
UTILITY STRUCTURE ADJUSTMENT DETAILS - 2

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
NOT TO SCALE	MARCH 2025

SHEET NUMBER: 27 OF 44
DWG NUMBER: C-503



NOTES

1. THE CONTRACTORS SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF ENVIRONMENT. THE CONTRACTOR SHALL IMPLEMENT ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS DOCUMENT.
2. PRIOR TO ANY WORK STARTING, THE CONTRACTOR SHALL INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES. PRIOR TO REOPENING A TAXIWAY OR RUNWAY, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS ALL SEDIMENT AND EROSION CONTROL MEASURES FROM THE RUNWAY AND THE TAXIWAY SAFETY AREA.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SEDIMENT AND EROSION CONTROL MEASURES WHEN THE PROJECT IS SUBSTANTIALLY COMPLETED WITH THE DIRECTION OF THE ENGINEER. THE REMOVAL OF ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE COMPLETED WITH NO EXTRA COST TO THE PROJECT. CONTRACTOR WILL DISPOSE OF IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS.
4. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSED, UNCOMPLETED CONSTRUCTION TO THE ELEMENTS SHALL BE AS SHORT AS PRACTICABLE. CLEARING AND GRUBBING SHALL BE SO SCHEDULED AND PERFORMED THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.
5. ALL WATER PUMPED OUT OF CONSTRUCTION AREAS SHALL BE DISCHARGED THROUGH A PORTABLE SEDIMENT REMOVAL/FILTRATION SYSTEM (DEWATERING BAG) PRIOR TO DISCHARGE BACK INTO SAME WATER SHED AREA. AT NO TIME SHALL WATER BE DISCHARGED DIRECTLY INTO ANY STORM WATER FEATURE. WATER MUST BE RE-FILTERATED INTO GROUND.
6. DURING TRENCHING OPERATION, SOIL SHALL BE PLACED ON THE UP GRADIENT SIDE OF ALL TRENCHES.
7. CONTRACTOR TO INSPECT ALL INLET PROTECTORS AFTER STORM EVENTS TO ASSURE PROPER FUNCTION AND CLEAN OUT WHEN NECESSARY AT NO EXTRA COST TO THE PROJECT.
8. CATCH BASIN CLEANING AND DISPOSAL OF SEDIMENT IS INCIDENTAL TO THE VARIOUS PROJECT ITEMS AND WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

100 0 100 200 300
SCALE: 1"=100'

LEGEND:

FIBER ROLLS

DRAIN INLET PROTECTION

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.:	LOCATION CODE:
H296-C1	3540

PROJECT SUBMISSION PHASE: BID SET

REGISTRATION STAMP: COMMONWEALTH OF MASSACHUSETTS DAWIT BIRRU No. 58992 REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

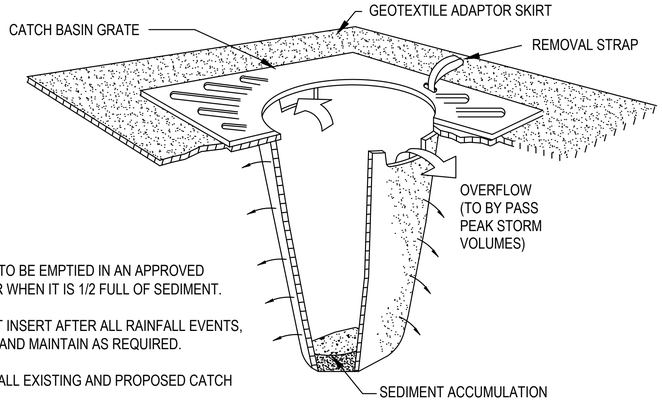
SHEET TITLE:
EROSION CONTROL PLAN

DISCIPLINE: CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
1" = 100'	MARCH 2025

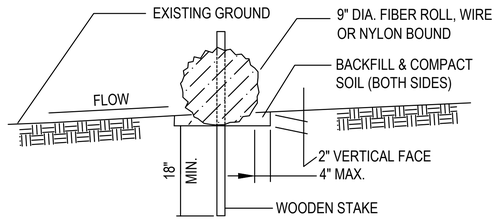
SHEET NUMBER: 28 OF 44 DWG NUMBER: C-601



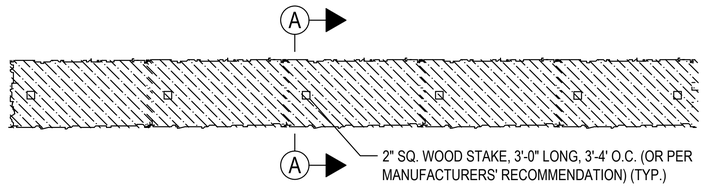
NOTES

1. INSERT TO BE EMPTIED IN AN APPROVED MANNER WHEN IT IS 1/2 FULL OF SEDIMENT.
2. INSPECT INSERT AFTER ALL RAINFALL EVENTS, REPAIR AND MAINTAIN AS REQUIRED.
3. USE AT ALL EXISTING AND PROPOSED CATCH BASINS.

1 / C-602 DRAIN INLET PROTECTION
SCALE: NTS



SECTION A-A

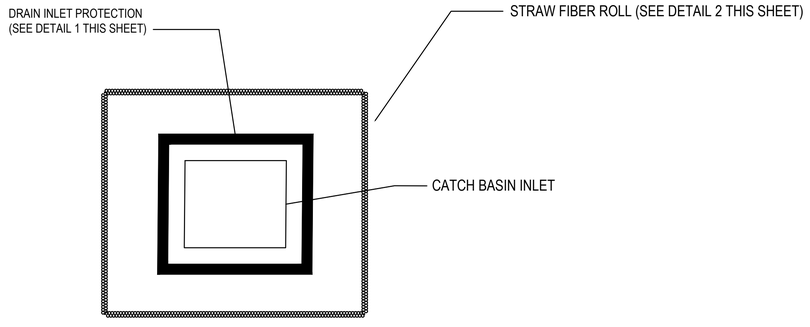


PLAN

2 / C-602 STRAW FIBER ROLL DETAIL
SCALE: NTS

NOTE:

1. AREAS DISTURBED BY EROSION BARRIERS SHALL BE RESTORED AND STABILIZED AFTER REMOVAL TO THE SATISFACTION OF THE ENGINEER AND AIRPORT.
2. STRAW FIBER ROLLS SHALL BE PLACED AROUND ALL SIDES OF DRAINAGE STRUCTURES IN GRASS AREAS.
3. OVERLAP ENDS OF STRAW FIBER ROLLS BY 2 FEET.



3 / C-602 CATCH BASIN INLET PROTECTION DETAIL
SCALE: NTS

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

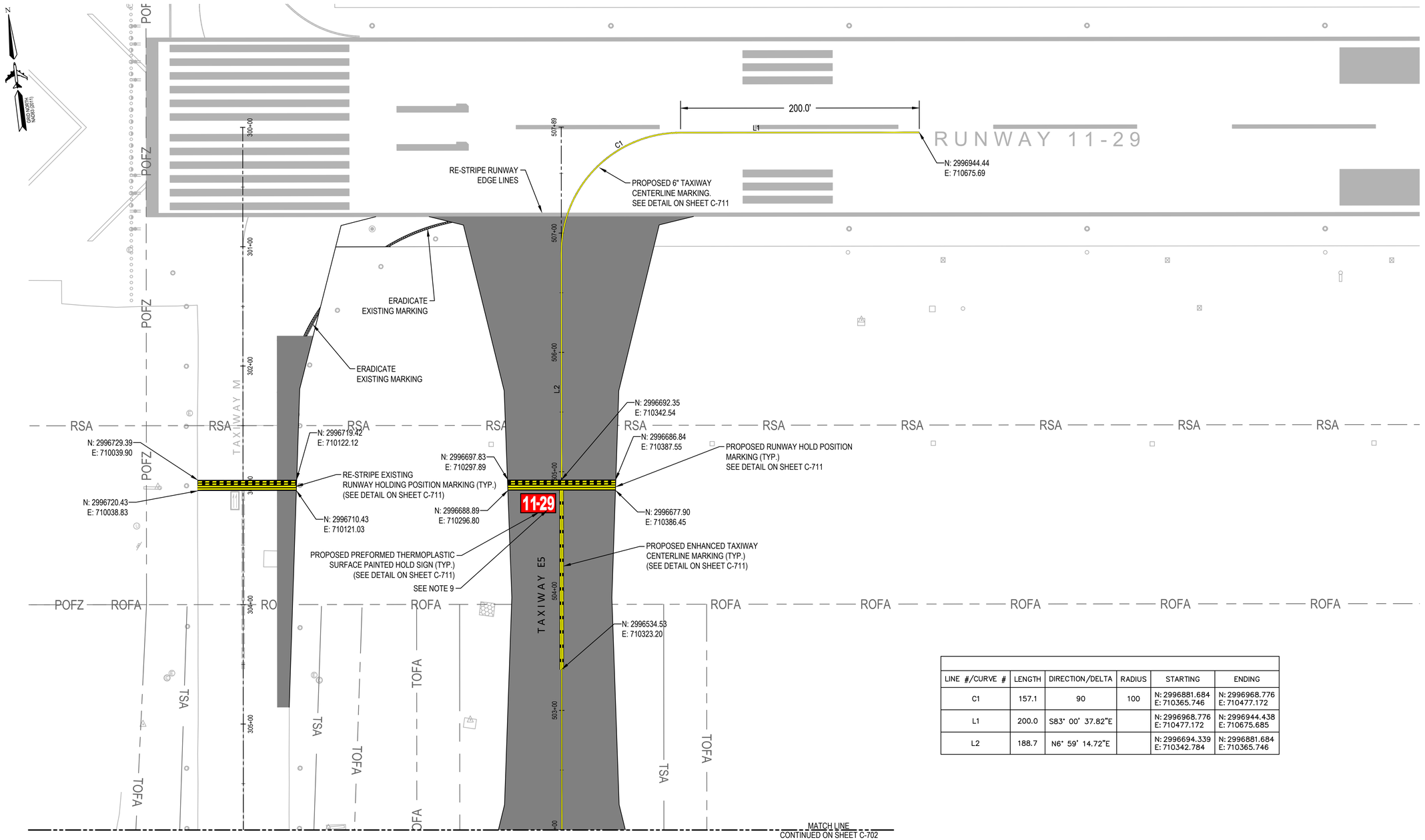
SHEET TITLE:
EROSION CONTROL DETAILS

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE:	DATE:
NOT TO SCALE	MARCH 2025

SHEET NUMBER: 29 OF 44
DWG NUMBER: C-602



LINE #/CURVE #	LENGTH	DIRECTION/DELTA	RADIUS	STARTING	ENDING
C1	157.1	90	100	N: 2996881.684 E: 710365.746	N: 2996968.776 E: 710477.172
L1	200.0	S83° 00' 37.82"E		N: 2996968.776 E: 710477.172	N: 2996944.438 E: 710675.685
L2	188.7	N6° 59' 14.72"E		N: 2996694.339 E: 710342.784	N: 2996881.684 E: 710365.746

NOTES:

1. REFER TO DRAWING C711 FOR PAVEMENT MARKING DETAILS.
2. MARKING LAYOUT SHALL BE APPROVED BY THE RESIDENT PROJECT REPRESENTATIVE (RPR) AND HANSCOM OPERATIONS PRIOR TO PAINT APPLICATION.
3. A MINIMUM OF TWO PAINT APPLICATIONS ARE REQUIRED AT EACH LOCATION ON NEW PAVEMENT.
4. INITIAL MARKINGS SHALL BE APPLIED AT THE COMPLETION OF EACH PHASE/SHIFT OR AS DIRECTED BY THE RPR.
5. FINAL MARKINGS SHALL BE APPLIED WITHIN THE ENTIRE PROJECT AREA AFTER 30 DAYS OF INSTALL, UNLESS OTHERWISE DIRECTED BY THE RPR.
6. GLASS SPHERES SHALL BE APPLIED TO ALL NEW MARKINGS, WITH THE EXCEPTION OF BLACK, FOR BOTH INITIAL AND FINAL APPLICATIONS.
7. ANY SURVEY/LAYOUT REQUIRED FOR APPLICATION OF MARKINGS SHALL BE INCIDENTAL TO PAINT MARKING PAY ITEMS.
8. TEMPORARY AND PERMANENT PAINT SHALL BE WATERBORNE, TYPE III, CONFORMING TO FEDERAL SPECIFICATION TT-P-1952F. GLASS SPHERES SHALL CONFORM TO FEDERAL SPECIFICATION TT-B-1325D.
9. ALL SURFACE PAINTED HOLD SIGNS ARE PREFORMED THERMOPLASTIC MARKING, CAN BE APPLIED TEMPORARILY WITH WATERBORNE PAINT IF THERMOPLASTIC NOT ON HAND.
10. REFER TO C711 FOR DETAILS AND PAINT COLOR. SEE NOTE 13 FOR MORE INFORMATION.
11. CONTRACTOR IS RESPONSIBLE TO REQUEST HANSCOM FACILITIES TO BORROW AND SUBSEQUENTLY RETURN SPHPS STENCILS IN A TIMELY FASHION TO HANSCOM, STENCIL SHALL BE CLEANED PRIOR TO RETURNING. WITH NO DAMAGE TO THE STENCIL. BORROW TIME SHALL NOT EXCEED 24 HOURS. DAMAGED STENCILS SHALL BE REPLACED AT NO COST TO HANSCOM OR THE PROJECT. DAMAGED STENCILS REQUIRING REPLACEMENT WILL REQUIRE SHOP DRAWING SUBMITTAL AND APPROVAL PRIOR TO ORDERING AT NO ADDITIONAL COST TO MASSPORT.
12. MASSPORT SURVEY SHALL RE-ESTABLISH RUNWAY START, END, AND THRESHOLD POINTS WITH ASSISTANCE FROM CONTRACTOR AS REQUIRED.
13. THE CONTRACTOR IS RESPONSIBLE FOR RE-MARKING ANY EXISTING PAVEMENT MARKINGS THAT HAVE BEEN OBSCURED OR DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO HANSCOM OR THE PROJECT.
14. 6" BLACK BORDERS, UNLESS OTHERWISE NOTED, ARE REQUIRED FOR ALL MARKINGS. BLACK BORDERS SHALL BE IN ACCORDANCE TO ADVISORY CIRCULAR 150/5340-1, CURRENT EDITION.
15. SEE DETAIL SHEET C711 FOR ADDITIONAL NOTES.

LEGEND

- PROPOSED PAVEMENT
- EXISTING PAVEMENT
- PROPOSED MARKING
- MARKING REMOVAL
- BORDER

40 0 40 80 120
SCALE: 1"=40'

massport
MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER
3/31/2025

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM & ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

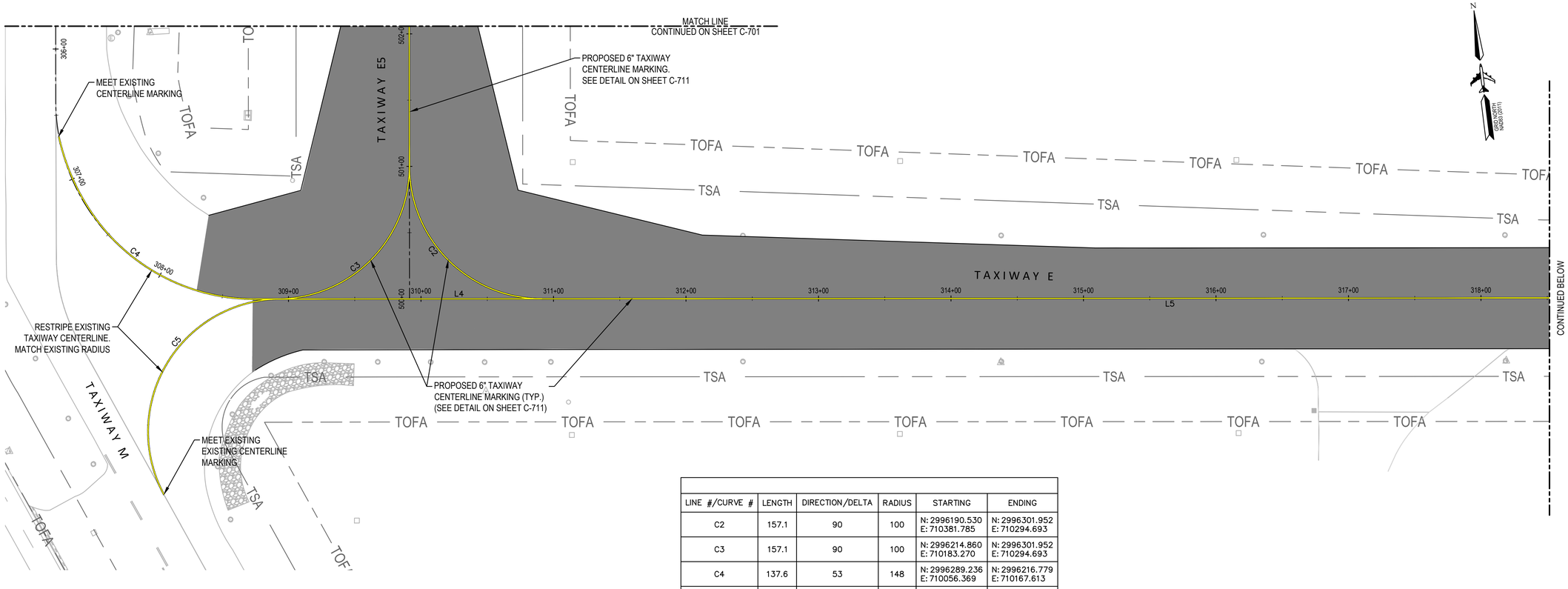
SHEET TITLE:
PAVEMENT MARKING PLAN -1

DISCIPLINE: CIVIL

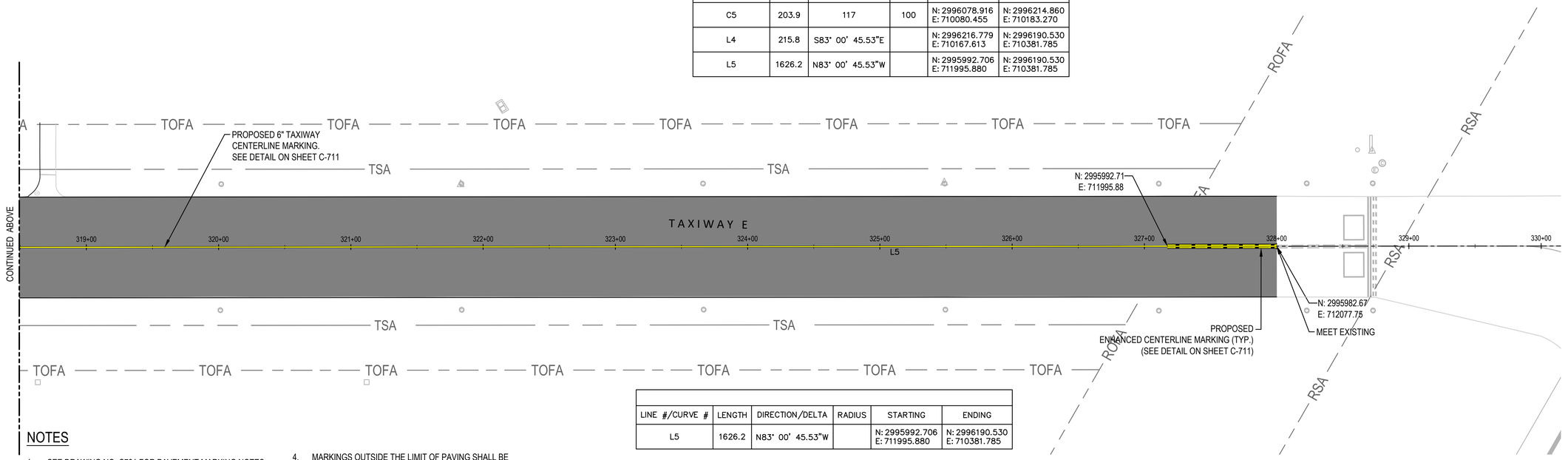
DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 40'
DATE: MARCH 2025

SHEET NUMBER: 30 OF 44
DWG NUMBER: C-701



LINE #/CURVE #	LENGTH	DIRECTION/DELTA	RADIUS	STARTING	ENDING
C2	157.1	90	100	N: 2996190.530 E: 710381.785	N: 2996301.952 E: 710294.693
C3	157.1	90	100	N: 2996214.860 E: 710183.270	N: 2996301.952 E: 710294.693
C4	137.6	53	148	N: 2996289.236 E: 710056.369	N: 2996216.779 E: 710167.613
C5	203.9	117	100	N: 2996078.916 E: 710080.455	N: 2996214.860 E: 710183.270
L4	215.8	S83° 00' 45.53"E		N: 2996216.779 E: 710167.613	N: 2996190.530 E: 710381.785
L5	1626.2	N83° 00' 45.53"W		N: 2995992.706 E: 711995.880	N: 2996190.530 E: 710381.785



LINE #/CURVE #	LENGTH	DIRECTION/DELTA	RADIUS	STARTING	ENDING
L5	1626.2	N83° 00' 45.53"W		N: 2995992.706 E: 711995.880	N: 2996190.530 E: 710381.785

NOTES

1. SEE DRAWING NO. C701 FOR PAVEMENT MARKING NOTES.
2. MATCH EXISTING RADII UNLESS OTHERWISE NOTED.
3. PROTECT EXISTING MARKINGS AT LIMITS OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES AT NO COST TO THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MATERIALS REQUIRED TO PROTECT EXISTING AIRFIELD MARKINGS IN PLACE, INCLUDING BUT NOT LIMITED TO PLYWOOD TO PROTECT EXISTING RUNWAY HOLD POSITION MARKINGS.
4. MARKINGS OUTSIDE THE LIMIT OF PAVING SHALL BE REPAINTED IN THEIR EXISTING LOCATION, EXCEPT AS SHOWN. (FINAL MARKINGS ONLY)

LEGEND

- PROPOSED PAVEMENT
- EXISTING PAVEMENT
- PROPOSED MARKING
- MARKING REMOVAL
- BORDER

40 0 40 80 120
SCALE: 1"=40'

massport
MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:
COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:

REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

SHEET TITLE:
PAVEMENT MARKING PLAN - 2

DISCIPLINE:
CIVIL

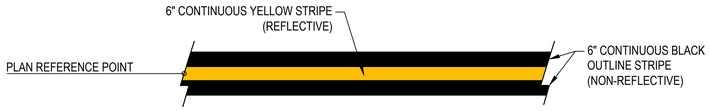
DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: 1" = 40'
DATE: MARCH 2025

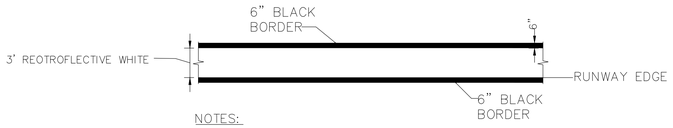
SHEET NUMBER: 31 OF 44
DWG NUMBER: C-702

NOTE:
TAXIWAY EDGE MARKINGS SHALL BE INSTALLED AS DIRECTED BY THE RPR.

TAXIWAY EDGE MARKING
NOT TO SCALE



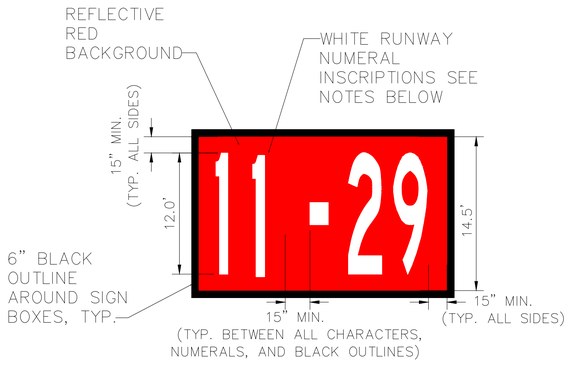
TAXIWAY CENTERLINE MARKING (YELLOW)
NOT TO SCALE



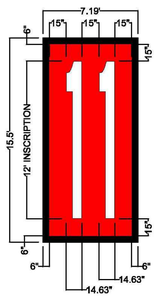
NOTES:

1. RUNWAY EDGE MARKING IS CONTINUOUS, UNLESS OTHERWISE INDICATED ON MARKING PLAN.

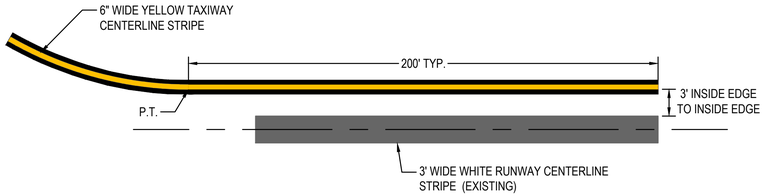
RUNWAY EDGE MARKING
NOT TO SCALE



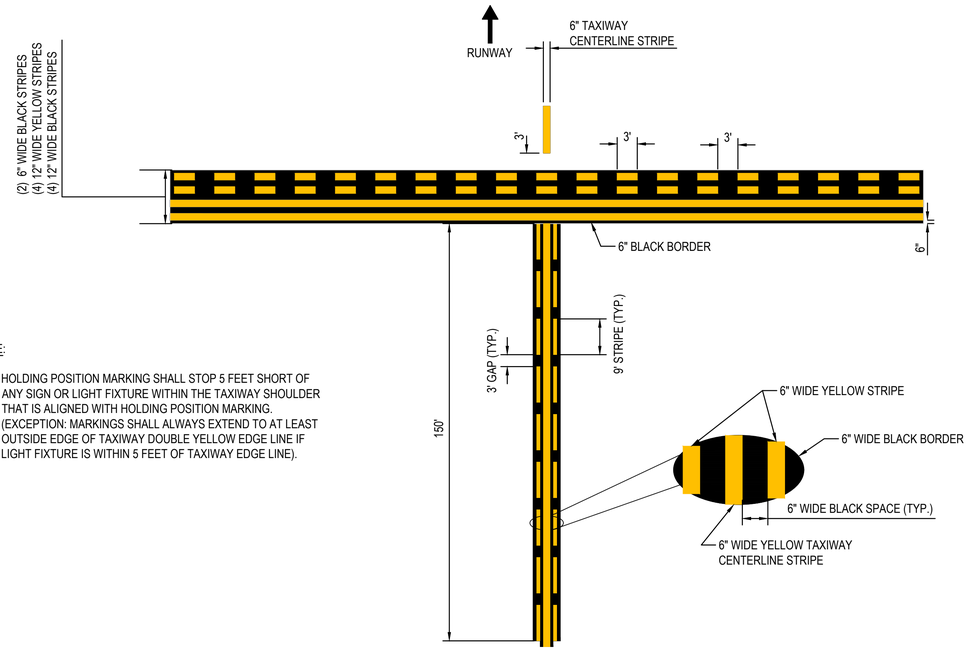
NOTES: RUNWAY NUMERAL INSCRIPTIONS SHALL HAVE A HEIGHT OF 12 FEET. EXACT DIMENSIONS SHALL BE IN ACCORDANCE WITH APPENDIX B OF FAA AC 150 5340-1M OR LATEST VERSION.



TAXIWAY HOLDING MARKINGS
NOT TO SCALE



TAXIWAY CENTERLINE MARKING (YELLOW)
NOT TO SCALE



NOTE:

1. HOLDING POSITION MARKING SHALL STOP 5 FEET SHORT OF ANY SIGN OR LIGHT FIXTURE WITHIN THE TAXIWAY SHOULDER THAT IS ALIGNED WITH HOLDING POSITION MARKING. (EXCEPTION: MARKINGS SHALL ALWAYS EXTEND TO AT LEAST OUTSIDE EDGE OF TAXIWAY DOUBLE YELLOW EDGE LINE IF LIGHT FIXTURE IS WITHIN 5 FEET OF TAXIWAY EDGE LINE).

RUNWAY HOLDING POSITION MARKING (YELLOW) ON TAXIWAY WITH ENHANCED TAXIWAY CENTERLINE
NOT TO SCALE

GENERAL MARKING NOTES:

1. SURFACE PAINTED HOLD POSITION SIGNS (SPHPS) SHALL BE PREFORMED THERMOPLASTIC AIRPORT PAVEMENT MARKINGS (UNLESS OTHERWISE NOTED) MEETING CONTRACT SPECIFICATION P-620 WITH GLASS BEADS MEETING FEDERAL SPECIFICATION TT-B-1325D. THERMOPLASTIC SPHS SHOP DRAWINGS SHALL BE SUBMITTED TO RPR IMMEDIATELY AFTER THE CONTRACT HAS BEEN EXECUTED. UPON APPROVAL OF SHOP DRAWINGS THE CONTRACTOR SHALL IMMEDIATELY ORDER THERMOPLASTIC MARKINGS DUE TO LONG LEAD TIME. IF THERMOPLASTIC MARKINGS CANNOT BE INSTALLED ON TIME, THE CONTRACTOR IS TO APPLY PAINT TEMPORARILY.

SPHS NOTES:

1. CONTRACTOR SHALL CONFIRM DIMENSIONS OF SURFACE PAINTED SIGNS WITH MASSPORT MAINTENANCE. SURFACE PAINTED SIGNS SHALL MATCH EXISTING DIMENSIONS USED BY MASSPORT.
2. DIMENSIONS TYPICAL FOR RUNWAY 15R-33L SURFACE PAINTED HOLDING POSITION SIGN.
3. SURFACE PAINTED HOLDING POSITION SIGNS SHALL BE PREFORMED THERMOPLASTIC AIRPORT PAVEMENT MARKINGS (UNLESS OTHERWISE NOTED).

massport

MASSACHUSETTS PORT AUTHORITY
EAST BOSTON, MASSACHUSETTS 02128

PROJECT LOCATION:
LAURENCE G. HANSCOM FIELD
BEDFORD, MASSACHUSETTS

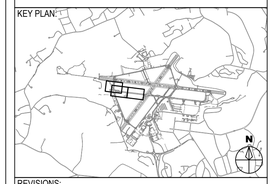
MPA CONTRACT NO.: H296-C1
LOCATION CODE: 3540

PROJECT SUBMISSION PHASE:
BID SET

REGISTRATION STAMP:

COMMONWEALTH OF MASSACHUSETTS
DAWIT BIRRU
No. 58992
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN:



REVISIONS:

REV NO.:	DATE:	DESCRIPTION:	BY:

PRIMARY:

IN-HOUSE DESIGN:
CAPITALS PROGRAM &
ENVIRONMENTAL AFFAIRS
HORIZONTAL PROJECTS
ONE HARBORSIDE DRIVE, SUITE 200S
EAST BOSTON, MA 02128-2909

PROJECT NUMBER AND TITLE:
H296-C1
REHABILITATE TAXIWAY E FROM TAXIWAY M TO RUNWAY 11-29 & CONSTRUCT TAXIWAY E5

SHEET TITLE:
MARKING DETAILS - I

DISCIPLINE:
CIVIL

DRAWN BY:	CHECKED BY:	APPROVED BY:
DB	SD/SF	RLL

SCALE: NOT TO SCALE
DATE: MARCH 2025

SHEET NUMBER: 32 OF 44
DWG NUMBER: C-711

Attachment 5

EENF Distribution List

MassPort Hanscom Field Taxiway E
Bedford and Concord, MA
EENF and Proposed EIR Distribution List

An electronic copy of the complete submittal (and all attachments) has been sent to the individuals noted below in accordance with MEPA's guidance regarding electronic filing requirements. A hard copy has been mailed to the Massachusetts Historical Commission (MHC) as indicated below.

Agency	Address
Massachusetts Environmental Policy Act Office (MEPA)	MEPA@mass.gov
Department of Environmental Protection (DEP) - Boston Office	Helena.boccadoro@mass.gov
Department of Environmental Protection (DEP)- Northeast Regional Office	John.d.viola@mass.gov
Massachusetts Department of Transportation (MassDOT) – Public/Private Development Unit	MassDOTPPDU@dot.state.ma.us
Massachusetts Department of Transportation (MassDOT) – District 4	Timothy.paris@dot.state.ma.us
Massachusetts Historical Commission (MHC)	The MA Archives Building 220 Morrissey Boulevard Boston, MA 02125 [BY MAIL]
Massachusetts Environmental Policy Act Office (MEPA) – Environmental Justice	MEPA-EJ@mass.gov
Natural Heritage and Endangered Species Program (NHESP) – Division of Fisheries and Wildlife	Melany.cheeseman@mass.gov Emily.holt@mass.gov
Department of Public Health	dphtoxicology@massmail.state.ma.us
Massachusetts Water Resources Authority (MWRA)	Hillary.monahan@mwra.org
Metropolitan Area Planning Council (MAPC)	mdraisen@mapc.org mpillsbury@mapc.org afelix@mapc.org
Bedford Select Board	shanegan@bedfordma.gov
Bedford Planning Board	tfields@bedfordma.gov
Bedford Conservation Commission	conservation@bedfordma.gov
Bedford Board of Health	BOH@bedfordma.gov
Bedford Public Library	Bedmail1@minlib.net

Agency	Address
Concord Select Board	mhartman@concordma.gov markhowell@concordma.gov
Concord Planning Department	ehighes@concordma.gov
Concord Conservation Commission	dkaye@concordma.gov
Concord Health Department	mdineen@concordma.gov
Concord Public Library	Esmith@concordma.gov
Lincoln Select Board	higginst@lincolntown.org
Lincoln Planning Board	olsonm@lincolntown.org
Lincoln Conservation Commission	grzendam@lincolntown.org
Lincoln Board of Health	benalfewv@lincoltown.org
Lincoln Public Library	mroderick@minlib.net
Lexington Select Board	DLucente@lexingtonma.gov
Lexington Planning Board	AMcCabe@lexingtonma.gov
Lexington Conservation Commission	KMullins@lexingtonma.gov
Lexington Board of Health	JBelanger@lexingtonma.gov
Lexington Public Library	webmaster@carylibrary.org

Attachment 6

Required Permits and Approvals

Permit/Approval	Jurisdictional Authority
Federal	
National Environmental Policy Act (NEPA) Compliance	Federal Aviation Administration (FAA)
Section 7 of the Endangered Species Act Consultation	United States Fish and Wildlife Service
State	
Massachusetts Endangered Species Act (MESA) – Conservation and Management Permit	Massachusetts Natural Heritage and Endangered Species Program (NHESP)
Massachusetts Environmental Policy Act (MEPA) Review	Massachusetts Executive Office of Energy and Environmental Affairs

Attachment 7

RMAT Climate Resilience Design Standards Tool Output Report

Climate Resilience Design Standards Tool Project Report

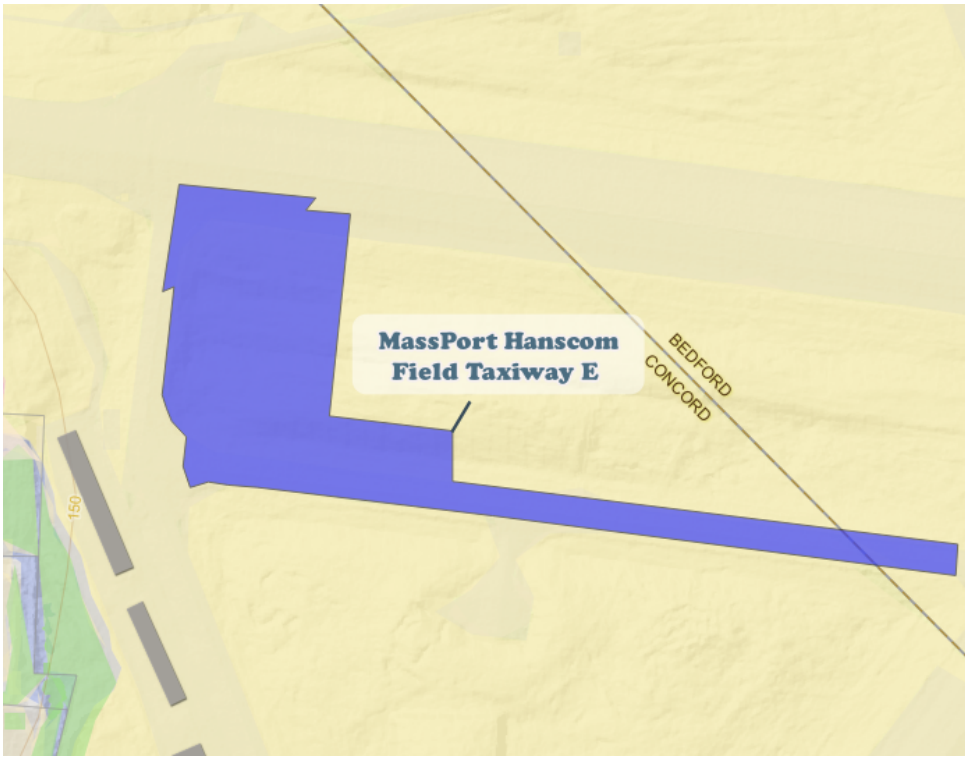
MassPort Hanscom Field Taxiway E
Date Created: 4/28/2025 11:43:45 AM
Created By: Pczepiga
Date Report Generated: 5/8/2025 2:40:57 PM
Tool Version: Version 1.4
Project Contact Information: Brad Washburn (bwashburn@massport.com)

Project Summary

Link to Project

Estimated Capital Cost: $12000000.00
End of Useful Life Year: 2075
Project within mapped Environmental Justice neighborhood: Yes

Ecosystem Service Benefits	Scores
Project Score	Low
Exposure	**Scores**
Sea Level Rise/Storm Surge	Not Exposed
Extreme Precipitation - Stormwater Flooding	High Exposure
Extreme Precipitation - Riverine Flooding	Not Exposed
Extreme Heat	High Exposure



Asset Preliminary Climate Risk Rating Summary

Number of Assets: 1

Asset Risk	Sea Level Rise/Storm Surge	Extreme Precipitation - Stormwater Flooding	Extreme Precipitation - Riverine Flooding	Extreme Heat
Hanscom Taxiways	Low Risk	High Risk	Low Risk	High Risk

Climate Resilience Design Standards Summary

	Target Planning Horizon	Intermediate Planning Horizon	Percentile	Return Period	Tier
Sea Level Rise/Storm Surge					
Hanscom Taxiways					
Extreme Precipitation					
Hanscom Taxiways	2070			25-yr (4%)	Tier 3
Extreme Heat					
Hanscom Taxiways	2070		90th		Tier 3

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 - Stormwater 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 "Not Exposed" because of the following:

- No historic riverine flooding at project site
- The project is not within a mapped FEMA floodplain [outside of the Massachusetts Coast Flood Risk Model (MC-FRM)]
- Project is more than 500ft from a waterbody
- Project is not likely susceptible to riverine erosion

Extreme Heat

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

- 30+ days increase in days over 90 deg. F within project's useful life
- Not located within 100 ft of existing water body
- Increased impervious area
- Less than 10% of the existing project site has canopy cover
- 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 - Hanscom Taxiways
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
- Loss/inoperability of the asset would have regional impacts
- The infrastructure provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.
- Inoperability of the asset would be expected to result in minor impacts to people’s health, including minor injuries or minor impacts to chronic illnesses
- Cost to replace is between $10 million and $30 million
- There are no hazardous materials in the asset

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: Hanscom Taxiways — 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: 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.

Applicable Design Criteria

Tiered Methodology: Tier 3

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

Asset Name	Recommended Planning Horizon	Recommended Return Period (Design Storm)	Projected 24-hr Total Precipitation Depth (inches)	Step-by-Step Methodology for Peak Intensity
Hanscom Taxiways	2070	25-Year (4%)	8.4	Downloadable Methodology PDF

Projected Riverine Peak Discharge & Peak Flood Elevation: NOT APPLICABLE

Extreme Heat — High Risk

Target Planning Horizon: 2070
Percentile: 90th Percentile

LIMITATIONS: The recommended standards are determined by the user-drawn polygon and relationships as defined in the supporting Section Documents. The guidance provided within this Tool may be used to inform plans and designs, but does not provide guarantees for resilience. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence. One avenue to seek more information would be to access the comprehensive temperature and precipitation projections including additional return periods, time horizons, and seasons at the Climate Projections Dashboard.

Applicable Design Criteria

Projected Annual/Summer/Winter Average Temperatures: APPLICABLE

Asset Name	Recommended Planning Horizon	Recommended Percentile	Projected Annual Average Temperature [°F]	Projected Summer Average Temperature [°F]	Projected Winter Average Temperature [°F]
Hanscom Taxiways	2070	90th	58.40	78.81	36.81

LIMITATIONS: The recommended Standards for Projected Average Annual/Summer/Winter Temperature are determined by the user-drawn polygon and relationships as defined in the supporting Section Documents. The guidance provided within this Tool may be used to inform plans and designs, but is not comprehensive and does not provide guarantees for resilience. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence. One avenue to seek more information would be to access the comprehensive temperature and precipitation projections including additional return periods, time horizons, and seasons at the Climate Projections Dashboard.

Projected Growing Degree Days: NOT APPLICABLE

Projected Days Per Year With Max Temp > 95°F, >90°F, <32°F: APPLICABLE

Asset Name	Recommended Planning Horizon	Recommended Percentile	Projected Days with Max Temp >95°F (days)	Projected Days with Max Temp >90°F (days)	Projected Days with Max Temp <32°F (days)
Hanscom Taxiways	2070	90th	33	70	75

LIMITATIONS: The recommended Standards for ProjectedÂ Days per Year with Max Temp >95Â°F, >90Â°F, <32Â°F are determined by the user-drawn polygon and relationships as defined in the supporting Section Documents. The guidance provided within this Tool may be used to inform plans and designs, but is not comprehensive and does not provide guarantees for resilience. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence. One avenue to seek more information would be to access the comprehensive temperature and precipitation projections including additional return periods, time horizons, and seasons at the Climate Projections Dashboard.

Projected Number of Heat Waves Per Year & Average Heat Wave Duration: APPLICABLE

Asset Name	Recommended Planning Horizon	Recommended Percentile	Projected Number of Heat Waves Per Year (events)	Projected Average Heat Wave Duration (days)
Hanscom Taxiways	2070	90th	0	4

LIMITATIONS: The recommended Standards for ProjectedÂ Number of Heat Waves Per Year and Average Heat Wave DurationÂ are determined by the user-drawn polygon and relationships as defined in the supporting Section Documents. The guidance provided within this Tool may be used to inform plans and designs, but is not comprehensive and does not provide guarantees for resilience. The guidance provided within this Tool is intended to be general and users are encouraged to do their own due diligence. One avenue to seek more information would be to access the comprehensive temperature and precipitation projections including additional return periods, time horizons, and seasons at the Climate Projections Dashboard.

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

Projected Heat Index: APPLICABLE
Methodology to Estimate Projected Values : Tier 3

Project Inputs

Core Project Information

Name:	MassPort Hanscom Field Taxiway E
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)?	2075
Location of Project:	Bedford, Concord
Estimated Capital Cost:	$12,000,000
Who is the Submitting Entity?	Private Other Massachusetts Port Authority (Massport) Brad Washburn (bwashburn@massport.com)
Is this project being submitted as part of a state grant application?	No
Which grant program?	
What stage are you in your project lifecycle?	Design
Is climate resiliency a core objective of this project?	Yes
Is this project being submitted as part of the state capital planning process?	No
Is this project being submitted as part of a regulatory review process or permitting?	Yes
Brief Project Description:	The project aims to enhance airfield efficiency, reduce aircraft ground delays, and improve safety by providing a direct route between Runway 11-29 and terminal areas at Hanscom Field. Massport proposes rehabilitating Taxiway E and constructing a new bypass taxiway (Taxiway E5) at Hanscom Field in Bedford and Concord, MA. The work includes milling and repaving Taxiway E from Runway 5-23 to Taxiway M, constructing Taxiway E5, converting taxiway edge lights to LED fixtures, installing new electrical infrastructure for Taxiway E5, and making minor geometric improvements on Taxiway M at the Runway 11-29 intersection. The project is submitted to the Secretary of the Executive Office of Energy and Environmental Affairs to meet state regulatory review requirements under the Massachusetts Environmental Policy Act (MEPA).

Project Ecosystem Service Benefits

No Ecosystem Service Benefits are provided by this project

Factors to Improve Output

- ✓ Increase biodiversity, protect critical habitat for species, manage invasive populations, and/or provide connectivity to other habitats
- ✓ Incorporate vegetation that provides pollinator habitat
- ✓ Identify opportunities to remediate existing sources of pollution
- ✓ Mitigate atmospheric greenhouse gas concentrations and other toxic air pollutants through nature-based solutions
- ✓ Identify opportunities to prevent pollutants from impacting ecosystems

Is the primary purpose of this project ecological restoration?

No

Project Benefits

Provides flood protection through nature-based solutions	No
Reduces storm damage	No
Recharges groundwater	No
Protects public water supply	No
Filters stormwater using green infrastructure	No
Improves water quality	No
Promotes decarbonization	No
Enables carbon sequestration	No
Provides oxygen production	No
Improves air quality	Maybe
Prevents pollution	Maybe
Remediates existing sources of pollution	Maybe
Protects fisheries, wildlife, and plant habitat	Maybe
Protects land containing shellfish	No
Provides pollinator habitat	Maybe
Provides recreation	No
Provides cultural resources/education	No

Project Climate Hazard Exposure

Is the primary purpose of this project ecological restoration?	No
Does the project site have a history of coastal flooding?	No
Does the project site have a history of flooding during extreme precipitation events	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: Hanscom Taxiways
Asset Type: Transportation
Asset Sub-Type: Other Transportation
Construction Type: New Construction
Construction Year: 2025
Useful Life: 50

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.
Less than 100,000 people

Identify if the infrastructure provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.
The infrastructure provides services to populations that reside within Environmental Justice neighborhoods or climate vulnerable populations.

Will the infrastructure reduce the risk of flooding?
No

If the infrastructure became inoperable for longer than acceptable in Question 1, how, if at all, would it be expected to impact people's health and safety?
Inoperability of the infrastructure would be expected to result in minor impacts to people's health, including minor injuries or minor impacts to chronic illnesses

If there are hazardous materials in your infrastructure, what are the extents of impacts related to spills/releases of these materials?
There are no hazardous materials in the infrastructure

If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts on other facilities, assets, and/or infrastructure?
Moderate – Inoperability may impact other facilities, assets, or buildings, but cascading impacts do not affect the ability of other facilities, assets, or buildings to operate

If the infrastructure was damaged beyond repair, how much would it approximately cost to replace?
Between $10 million and $30 million

Does the infrastructure function as an evacuation route during emergencies? This question only applies to roadway projects.
No

If the infrastructure became inoperable for longer than acceptable in Question 1, what are the environmental impacts related to natural resources?
No impact on surrounding natural resources is expected

If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts to government services (i.e. the infrastructure is not able to serve or operate its intended users or function)?
Loss of infrastructure may reduce the ability to maintain some government services, while a majority of services will still exist

What are the impacts to loss of confidence in government resulting from loss of infrastructure functionality (i.e. the infrastructure asset is not able to serve or operate its intended users or function)?
No Impact

Report Comments

N/A

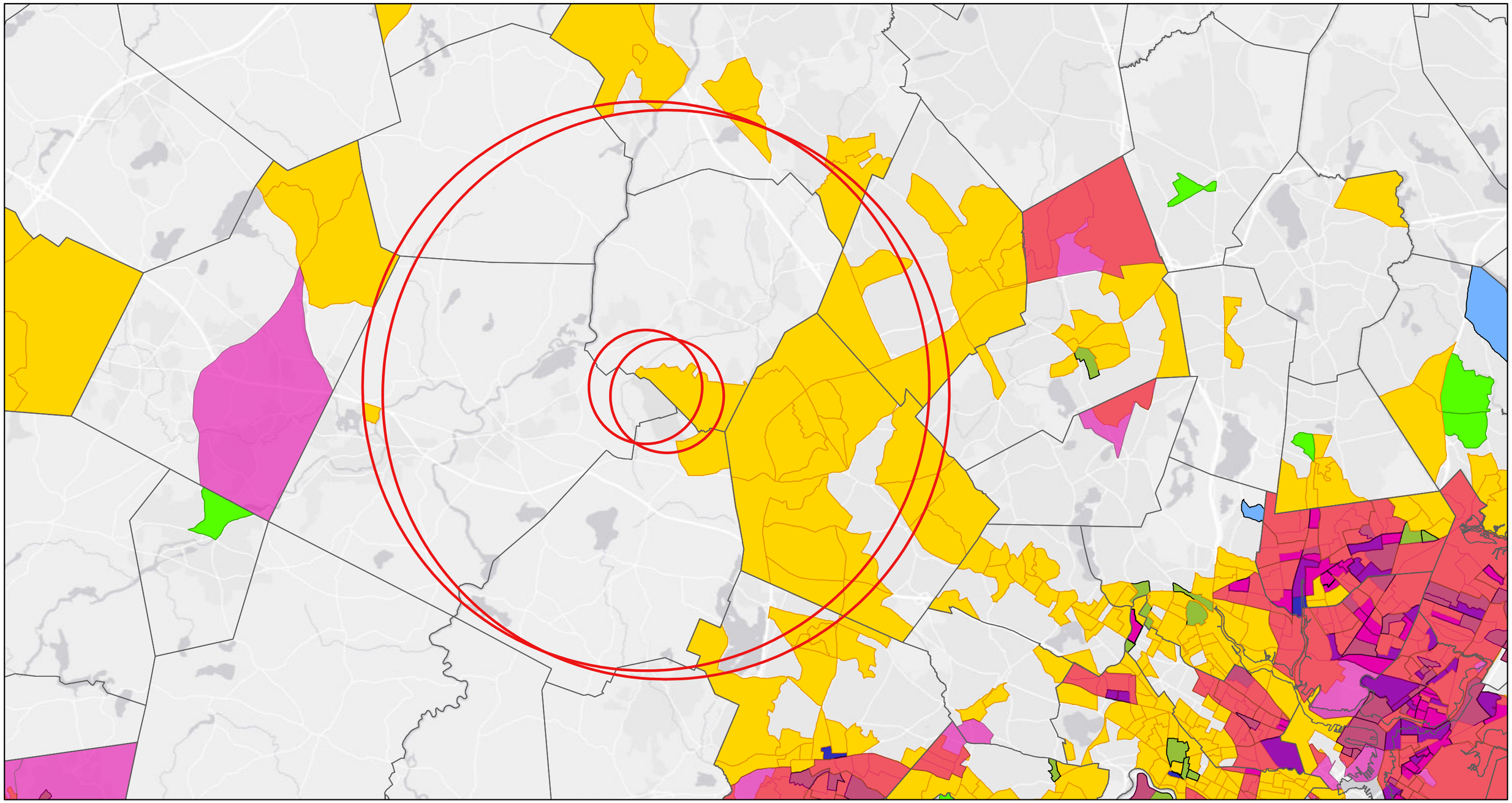
Attachment 8

Environmental Justice Documentation

8-1

Printout of EEA's EJ Mapper

EJ Populations and Languages Spoken



3/19/2025, 10:15:00 AM

1:144,448

0 1.25 2.5 5 mi

0 2 4 8 km

- Override 1
- 2015 ACS: Languages spoken by at least 5% of population in the census tract who do not speak English very well, by tract

MA 2020 Environmental Justice Block Groups Nov2022 Update

- Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and Income
- Minority and English isolation
- Minority, Income and English isolation

Town of Lexington, MassGIS, Esri, HERE, Garmin, USGS, EPA, NPS, Esri, HERE, NPS

8-2

EJ Reference List

Project-Specific EJ Refence List

Populate this Project-Specific Reference List with the appropriate contacts from all 4 tabs in the EJ Reference List workbook

Project Name: Massport Hanscom Field H296-C1 Taxiway E

Project Address: 777 Virginia Road

MA Municipalities in Project's DGA: Bedford,Concord, Lexington, & Lincoln

Date Generated: 4/25/2025

Filing Type:

☑ ENF/EENF ☑ DEIR/FEIR ☐ SEIR ☐ Other

First Name	Last Name	Title	Phone	Email	Affiliation	Contact Type *(autopopulates)*
Claire	B.W. Muller	Movement Building Director	(508) 308-9261	claire@uumassaction.org	Unitarian Universalist Mass Action Network	Statewide CBO
Julia	Blatt	Executive Director	(617) 714-4272	- juliablatt@massriversalliance.org	Mass Rivers Alliance	Statewide CBO
Jodi	Valenta	Massachusetts State Director	(617) 367-6200	Jodi.Valenta@tpl.org	The Trust for Public Land	Statewide CBO
Kerry	Bowie	Board President	Not Provided	kerry@msaadapartners.com	Browning the GreenSpace	Statewide CBO
Sylvia	Broude	Executive Director	(617) 292-4821	sylvia@communityactionworks.org	Community Action Works	Statewide CBO
Britteny	Jenkins	Vice President	Not Provided	Bjenkins@clf.org	Conservation Law Foundation	Statewide CBO
Alex	St. Pierre	Director of Communities & Toxics	Not Provided	aestpierre@clf.org	Conservation Law Foundation	Statewide CBO
Paulina	Muratore	Director of Transportation Justice and Infrastructure	Not Provided	pmuratore@clf.org	Conservation Law Foundation	Statewide CBO
Breanne	Frank	Associate Attorney	Not Provided	bfrank@clf.org	Conservation Law Foundation	Statewide CBO
Amy	Boyd Rabin	Vice President of Policy	(617) 221-8258	aboydrabin@environmentalleague.org	Environmental League of Massachusetts	Statewide CBO
Zahra	Saifee	Policy & Advocacy Coordinator	(435) 632-9482	zsaifee@environmentalleague.org	Environmental League of Massachusetts	Statewide CBO
Ben	Hellerstein	MA State Director	(617) 747-4368	ben@environmentmassachusetts.org	Environment Massachusetts	Statewide CBO
Robb	Johnson	Executive Director	(978) 443-2233	robb@massland.org	Mass Land Trust Coalition	Statewide CBO
Cindy	Luppi	New England Director	(617) 338-8131 x208	cluppi@cleanwater.org	Clean Water Action	Statewide CBO
Dálida	Rocha	Executive Director	Not Provided	dalida@n2nma.org	Neighbor to Neighbor Mass.	Statewide CBO
Lena Miles	Entin Gresham	Director of Individual Giving Campaign Director	Not Provided	Lena@N2NMa.org Miles@N2NMa.org	Neighbor to Neighbor Mass.	Statewide CBO
Rob	Moir	Executive Director	Not Provided	rob@oceanriver.org	Ocean River Institute	Statewide CBO
Vickash	Mohanka	Director, MA Chapter	Not Provided	vick.mohanka@sierraclub.org	Sierra Club MA	Statewide CBO
Heidi	Ricci	Director of Policy	Not Provided	hricci@massaudubon.org	Mass Audubon	Statewide CBO
Bettina	Washington	Tribal Historic Preservation Officer	(508) 560-9014	thpo@wampanoagtribe-nsn.gov	Wampanoag Tribe of Gay Head (Aquinnah)	Federal Tribe
Brian	Weeden	Chair	(774) 413-0520	Brian.Weeden@mwtribe-nsn.g	Mashpee Wampanoag Tribe	Federal Tribe
David	Weeden	THPO/Director	(774) 327.0068	David.Weeden@mwtribe-nsn.g	Mashpee Wampanoag Tribe	Federal Tribe
Nakia	Hendricks Jr.	Office Manager	Not Provided	106Review@mwtribe-nsn.gov	Mashpee Wampanoag Tribe	Federal Tribe
Alma	Gordon	President	Not Provided	tribalcouncil@chappaquiddick	Chappaquiddick Tribe of the Wampanoag Nation	Indigenous Org
Cheryll	Toney Holley	Chair	(774) 317-9138	crwritings@aol.com	Nipmuc Nation (Hassanamisco Nipmucs)	Indigenous Org
John	Peters, Jr.	Executive Director	(617) 573-1292	john.peters@mass.gov	Massachusetts Commission on Indian Affairs (MCIA)	Indigenous Org
Melissa	Ferretti	Chair	(508) 304-5023	melissa@herringpondtribe.org	Herring Pond Wampanoag Tribe	Indigenous Org
Patricia	D. Rocker	Council Chair	Not Provided	rockerpatriciad@verizon.net	Chappaquiddick Tribe of the Wampanoag Nation, Whale Clan	Indigenous Org
Raquel	Halsey	Executive Director	(617) 232-0343	rhalsey@naicob.org	North American Indian Center of Boston	Indigenous Org

Cora	Pierce	Not Provided	Not Provided	Coradot@yahoo.com	Pocassett Wampanoag Tribe	Indigenous Org
Elizabeth	Solomon	Not Provided	Not Provided	Solomon.Elizabeth@gmail.com	Massachusetts Tribe at Ponkapoag	Indigenous Org
Heather	Miller	Not Provided	(617) 540-5650 x1073	hmiller@crwa.org	Charles River Watershed Assoc.	Local CBO
Patrick	Herron	Executive Director	Not Provided	Patrick.Herron@mysticriver.or	Mystic River Watershed Association	Local CBO
Karl	Alexander	Greenways Program Manager	Not Provided	karl.alexander@mysticriver.org	Mystic River Watershed Association	Local CBO
Marissa	Zampino	Community Organizer	Not Provided	marissa.zampino@mysticriver.	Mystic River Watershed Association	Local CBO
Ricki	Pappo	Chair	Not Provided	Lexclimateaction@gmail.com	Lexington Climate Action Network	Local CBO
		No Local CBOs identified in Concord or Bedford				

8-3

EJ Screening Form

From:	Lauren McDonald
To:	Lauren McDonald
Cc:	MEPA-EJ (EEA)
Subject:	Massport Hanscom Field Taxiway E - Bedford, Concord, Lexington, & Lincoln, MA
Date:	Tuesday, May 6, 2025 3:58:56 PM
Attachments:	image001.png image002.png image003.png image004.png MEPA EJ Screening Form_Hanscom Field Taxiway E.pdf

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Good Afternoon,

Attached please find the EJ Screening form for the Massport Hanscom Field Taxiway E Project in Bedford and Concord, MA. The project is anticipated to be filed with the MEPA Office in late Spring 2025. A brief project description is provided below.

The Massachusetts Port Authority (Massport) is proposing the rehabilitation of Taxiway E and construction of a bypass taxiway (Taxiway E5) at Hanscom Field. Hanscom Field is located within the towns of Bedford, Concord, Lexington, and Lincoln, Massachusetts. The project area itself is located within Bedford, and Concord, Massachusetts.

Work will include:

- *Milling and repaving of existing Taxiway E from Runway 5-23 to Taxiway M*
- *Construction of Taxiway E5 between Taxiway E and Runway 11-29*
- *Conversion of taxiway edge lights to Light-Emitting-Diode (LED) fixtures.*
- *Installation of new electrical infrastructure including signs and lights for Taxiway E5.*
- *Minor geometric improvements on Taxiway M at the Runway 11-29 intersection.*

The overall project area covers approximately 441,950 Square Feet. Construction is expected to begin in late summer or early fall of 2025 and is expected to take approximately 85 construction shifts between late summer/early fall 2025 and Spring 2026 to complete. All work will occur entirely within previously disturbed upland areas within Hanscom Field.

Community-based organizations and tribal organizations are receiving this notification in accordance with the MEPA Public Involvement Protocol for Environmental Justice Populations, which took effect on January 1, 2022. More information is available on the MEPA website.

Lauren McDonald
Environmental Planner
HNTB CORPORATION
31 St. James St #300, Boston, MA 02116 | www.hntb.com

Environmental Justice Screening Form

Project Name	Hanscom Field Taxiway E
Anticipated Date of MEPA Filing	June 2025
Proponent Name	Massachusetts Port Authority
Contact Information (e.g., consultant)	Brad Washburn Deputy Director Environmental Planning & Permitting 617-568-3546 bwashburn@massport.com
Public website for project or other physical location where project materials can be obtained (if available)	A copy of the upcoming dual Expanded Environmental Notification Form (EENF) and Proposed Environmental Impact Report (PEIR) will be made available at the Bedford, Concord, Lexington, and Lincoln public libraries and at www.massport.com/environment/project-environmental-filings/hanscom-field
Municipality and Zip Code for Project (if known)	Bedford, MA 01730 Concord, MA 01742
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 (click **here** for GHG Estimation tool)	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 Massachusetts Port Authority (Massport) is proposing the rehabilitation of Taxiway E and construction of a bypass taxiway (Taxiway E5) at Hanscom Field. Hanscom Field is located within the towns of Bedford, Concord, Lexington, and Lincoln, Massachusetts. The project area itself is located within Bedford and Concord, Massachusetts.

   Work will include:
   - *Milling and repaving of existing Taxiway E from Runway 5-23 to Taxiway M (approximately 153,400 SF).*
   - *Construction of Taxiway E5 between Taxiway E and Runway 11-29 (approximately 84,550 SF).*
   - *Conversion of taxiway edge lights to Light-Emitting-Diode (LED) fixtures.*
   - *Installation of new electrical infrastructure including signs and lights for Taxiway E5.*
   - *Minor geometry improvements on Taxiway M at the Runway 11-29 intersection.*

   The overall project area covers approximately 441,950 SF. Construction is expected to begin in late

summer or early fall of 2025 and is expected to take approximately 85 construction shifts between late summer/early fall 2025 and Spring 2026 to complete. All work will occur entirely within previously disturbed upland areas within Hanscom Field. The project is intended to improve operational efficiency, reduce aircraft ground delays, and improve safety. Per FAA Advisory Circular (AC) 150/5300-13A, Airport Design, the proposed bypass taxiway layout is designed to enable safe and efficient movement by an aircraft between parking areas and runways, while utilizing the least amount of pavement possible. The proposed project will not increase the airport's take-off or landing capacity; instead, it supports the existing and forecasted operations within the current airfield capacity.

2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known)

   Transportation – 301 CMR 11.03(6)(b)4 - Construction of a New taxiway at an airport.

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

   The project requires consultation with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) due to work within Priority Habitat protected under the Massachusetts Endangered Species Act (MESA). It is anticipated that the project will not require completion of a Conservation & Management Permit (CMP).

4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map identifying 5-mile radius from EJ Maps Viewer in lieu of narrative)

   There are thirty-seven (37) EJ populations within a 5-mile radius of the project corridor, of which the following two (2) are located within the 1-mile designated geographic area (DGA)
   - *Bedford: Block Group 6, Census Tract 3593.03*
   - *Lincoln: Block Group 5, Census Tract 3603*

   Refer to the attached figure for a depiction of the EJ populations within one (1) and five (5) miles from the project area.

5. Identify any municipality or census tract meeting the definition of "vulnerable health EJ criteria" in the DPH EJ Tool located in whole or in part within a 1 mile radius of the project site.

   Census tract 3603 in Lincoln meets the vulnerable health criteria for low birth weight. The town of Lincoln also meets the vulnerable health criteria for heart attack hospitalizations which is tracked at the municipality level.

6. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation

The project is not anticipated to result in any related long-term environmental or public health impacts based on the following:

- *The project is proposed to improve airfield operational efficiency, reduce aircraft ground delays, and improve safety by providing a more direct route for aircraft movement between Runway 11-29 and terminal areas at Hanscom Field.*
- *The project's impacts to rare species habitat will be localized and mitigated through a provision of measures to ensure a net-benefit to impacted species.*
- *The project is not expected to adversely impact local ambient air quality.*
- *The project will not impact wetlands or water quality resources.*
- *The project will not construct new stationary sources of greenhouse gas emissions.*
- *Stormwater runoff generated from the addition of new impervious area will not impact nearby water resources.*

7. Identify project benefits, including "Environmental Benefits" as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population.

The following benefits are anticipated to occur as a result of this project:

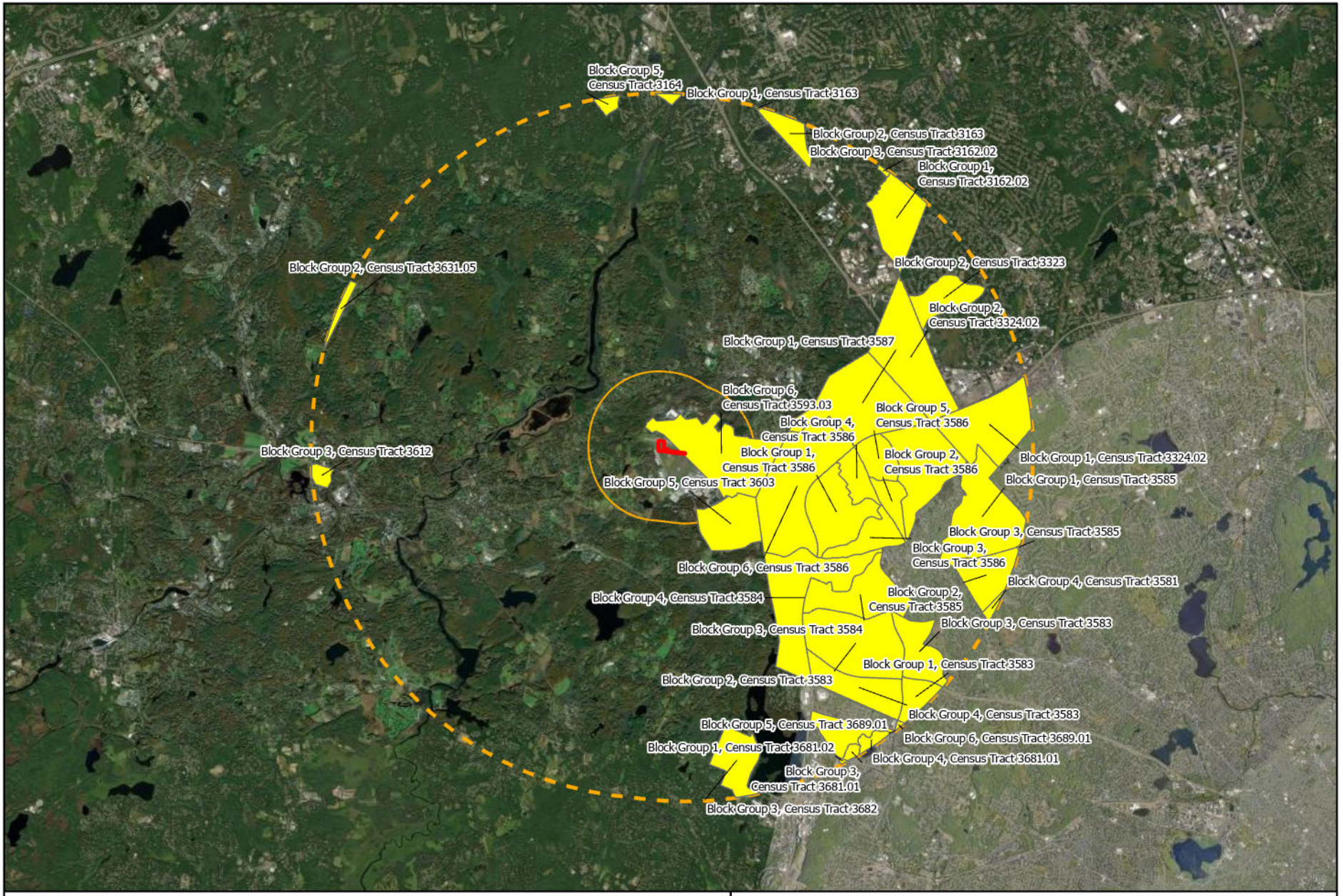
- *Anticipated local air quality benefits due to improved airfield traffic and reduced congestion.*
- *The removal of approximately 1,100 SF of excess pavement from Taxiway M which provides a partial mitigation to the added pavement from Taxiway E-5.*

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.

Project inquiries, including requests for a meeting, may be e-mailed to:
Michael Vatalaro, MVatalaro@massport.com.

Any written statements regarding the project can be submitted to:
Brad Washburn
Deputy Director
Environmental Planning & Permitting
617-568-3546
bwashburn@massport.com

Massport provides reasonable accommodations and/or language assistance upon request, as appropriate. To request accommodation or language assistance, please contact Michael Vatalaro, Massport's Senior Manager for State and Community Relations, by email MVatalaro@massport.com.



Legend

Project Area
5-Mile DGA
1-Mile DGA

EJ Criteria

Minority

0 1 2 4 Miles

N

Notes:
1. GIS data courtesy of MassDEP and MassGIS.
2. Basemap courtesy of ESRI.

Environmental Justice Populations
Massport Hanscom Field H296-C1 Taxiway
Bedford and Concord, MA

massport

HNTB

April 2025

Boston, MA