Select Board Meeting Minutes

Meeting Date: February 12, 2020
Members in Attendance: Chair Michael F. Zullas, Vice Chair Melinda A. Collins, Kathleen M. Conlon, Town Administrator Michael D. Dennehy, Executive Administrative Assistant Hillary Waite
Meeting Location: Paul Kelly Community Room at the Council on Aging
Members Absent: Anthony J. Farrington, Richard G. Wells, Jr
Time Meeting called to Order: 6:38pm
Time Meeting Adjourned: 10:37pm

1. Call to order

Chair Zullas called the meeting to order at 6:38 pm.

At 6:39pm, Chair Zullas moved, Ms. Collins seconded, and the Board voted to enter Executive Session:

- to discuss the purchase, exchange, lease or value of real property, specifically the Kidder Library, believing that having such discussion in open session may have a detrimental effect on the negotiating position of the Board;
- and to discuss the reputation, character, physical condition or mental health, rather than professional competence, of an individual, or to discuss the discipline or dismissal of, or complaints or charges brought against, a public officer, employee, staff member or individual pursuant to G.L. c. 30A, § 21(a)(1).

Collins AYE
Conlon AYE
Zullas AYE

The Board returned to open session at 7:45pm. Anthony J. Farrington and Richard G. Wells, Jr., having entered the meeting during Executive Session, also joined the meeting in open session.

2. Pledge of Allegiance

3. Public Comment

The Board did not hear any comment from the public apart from those described below, which were heard as part of Item 4.
4. Airplane Noise Public Listening Session

The Board noted that its first priority in communication with Milton’s federal representatives is the impact of airplane flight over Milton, which the Board cannot directly control. The Board has had ongoing communication with Congressional and Senate representation about working to alleviate the suffering of Milton residents. On the local level, the Board has worked to advocate dispersion of flight paths over Milton.

Milton’s representative to the Massport Community Advisory Committee, Tom Dougherty, gave a presentation regarding airplane noise, including information about the Federal Aviation Administration (FAA) environmental assessment related to implementation of RNAV (Area Navigation) during landing of planes using Logan Airport Runway 4L. RNAV impacts Milton by reducing dispersion of flight paths over areas of Milton.

Following Mr. Dougherty’s presentation, the Board opened the meeting to public comment.

Philip Johenning of 23 Parkwood Drive expressed concern about the upcoming 4L Environmental Assessment, providing the context of his past disappointment with FAA’s environmental assessment related to use of RNAV over Runway 33L, especially related to environmental justice.

Mr. Johenning inquired about appointments to a 4L Working Group to address FAA’s implementation of RNAV for Runway 4L. Chair Zullas clarified that the Board had not yet appointed this group.

Mr. Johenning also requested that the Town work with Town Counsel to determine whether Milton has standing for breach of contract with regards to the 2002 FAA Record of Decision. Mr. Johenning provided a letter expressing this request signed by himself and nine other Milton residents.

Liz O’Rourke of 79 Meagher Avenue requested that the Airplane Noise Advisory Committee have representation from diverse areas of Milton. The Board agreed that geographic diversity on the committee is important, noted that vacancies currently exist on ANAC, and encouraged interested parties to volunteer to the Board.

Cindy Christiansen of 59 Collamore Street expressed appreciation that the Town is emphasizing inquiry on runway 4L. She noted that FAA has not found significant impact on noise pollution during other environmental assessments and the Town may expect a similar result.

Ms. Collins asked what level of experience would be appropriate for prospective membership on a 4L working group. Mr. Dougherty indicated that any person who has the time to serve and experience of living in the 4L flight path would be an appropriate potential member.

The Board thanked Mr. Dougherty for his presentation.
5. Conference – Ice House Update

Chair Zullas read his and Vice Chair Collins’ statement of February 12, 2020, regarding the Ice House 40B project proposal.

Mr. Wells brought to the Board’s attention a development project in Dorchester that combines commercial and residential space and would be an appropriate project for the Town to reference while seeking appropriate 40B projects.

Ms. Conlon thanked the Chair and Vice Chair, as well as the project developer, for their ongoing communication and work towards a positive result for both the Town and the developer.

6. Proclamation – Nathan Bourque

Ms. Conlon moved, Mr. Wells seconded, and the Board voted 5-0 to approve and sign a proclamation honoring Nathan Borque’s accomplishments and service to the Town, including service on the Warrant Committee and Commission on Disability.

7. Discussion – Fence Viewer Appointment Process

A Fence Viewer is a Town appointee responsible for settling boundary disputes, especially relating to position and maintenance of fences and boundaries between properties. The Board agreed to appoint two Fence Viewers to work independently on behalf of the Town.

Mr. Wells moved, Ms. Conlon seconded, and the Board voted 5-0 to appoint Michael Dennehy of 525 Canton Avenue to the office of Fence Viewer with a term expiring February 28, 2021.

8. Conference – Capital Improvement Planning Committee (Amy Dexter, Town Accountant)

Ms. Dexter presented the Board with the Capital Improvement Planning Committee (CIPC) recommendation for Fiscal Year 2021 departmental capital appropriations. The CIPC recommended $2,757,000 in bonded capital items and $1,000,000 in non-bonded capital items. This recommendation represents a reduction of the proportion of free cash the Town has appropriated for capital purchases in the last three fiscal years, reflecting the Town’s expectation of major capital needs in the near future. Ms. Dexter noted that Milton’s funding reserves are fairly healthy at 7.9%, which is slightly above the 5-7% level recommended by the Massachusetts Department of Revenue.

The Board deliberated whether to ask the CIPC to reduce recommended non-bonded capital request, given the recent emergence of potential new expenditures, including consulting expenses for newly proposed 40B projects to which the Town must respond; participation in the Runway 4L Environmental Assessment process; as well as annual funding of the Affordable Housing Trust; and funding of the Town’s stabilization funds.
Ms. Conlon moved, Mr. Farrington seconded, and the Board voted 4-1 (Wells) to request that the CIPC reconsider its recommendation for non-bonded capital items with a target of reducing the total non-bonded items by $200,000.

Ms. Conlon recused herself from the Board’s discussion of bonded capital items and left the room.

The Board agreed not to vote regarding any of the CIPC recommendations until all recommendations could be brought before the Board again. The Board expressed that it would entertain a recommendation from the CIPC that reduced expenditure on non-bonded capital items but increased expenditure on bonded capital items.

Ms. Conlon returned to the meeting.

9. Discussion – Annual Town Meeting Articles

a. PEG Access and Cable Related Fund

Mr. Wells moved, Ms. Conlon seconded, and the Board voted 5-0 to accept the PEG Access and Cable Related Fund for inclusion in the May 2020 Annual Town Meeting warrant.

b. Community Preservation Act

Assistant Town Planner Allyson Quinn and Milton resident Tom Callahan joined the Board to discuss this article. Mr. Callahan is the Executive Director of the Massachusetts Affordable Housing Alliance and is also the volunteer chair of the Community Preservation Coalition.

Because municipalities must adopt the Community Preservation Act (CPA) by ballot referendum, Town Meeting must approve the placement of a referendum on the ballot. The article submitted by the Select Board proposes that voters approve a 1% surcharge of the tax levy against real property, with some exemptions. This surcharge would create a Community Preservation Fund local to Milton. Monies in the fund are matched by the state at 30% and may be used for open space protection, outdoor recreation, historic preservation, and affordable housing. Milton previously rejected a Community Preservation Act referendum in 2012.

Chair Zullas discussed that a CPA surcharge could assist the Town in generating revenue, particularly for anticipated high-priority items, while reducing the potential need for an operational override. The Board also noted that it has the ability to create exemptions from the CPA surcharge for groups such as low-income residents and low- and moderate-income seniors.

Mr. Wells asked whether Boston’s participation in the CPA state funding pool has lowered the state’s ability to match funding to communities. Mr. Callahan answered that Boston’s entrance into the program prompted the state to increase the fee at the Registry of Deeds which funds the CPA state match, thereby increasing match funds available to all communities that have adopted the CPA.
Mr. Farrington asked why the ballot measure to approve the CPA failed in 2012. Mr. Callahan noted several factors, including the inherent difficulty of establishing additional tax levies, potential lack of voter knowledge about the CPA, and the presence of a well-funded campaign against CPA adoption.

Mr. Wells moved, Ms. Collins seconded, and the Board voted 5-0 to accept the Community Preservation Act article for inclusion in the May 2020 Annual Town Meeting warrant.

c. **Circuit Breaker**

The Board agreed to work with subject matter experts, including the Chief Appraiser, to research and agree upon a recommendation to the Warrant Committee regarding this article, which has already been accepted for inclusion in the May 2020 Annual Town Meeting warrant.

d. **Fire Station Building Committee**

Mr. Wells moved, Ms. Conlon seconded, and the Board voted 5-0 to remove the article submitted by the Fire Station Building Committee from the warrant for the May 2020 Annual Town Meeting.

e. **Electronic Delivery of Town Meeting Warrant**

The Board thanked Jennifer McCullough for her work to prepare an informational sheet regarding this article, which was submitted by the Select Board.

f. **Topics that the Chair did not reasonably anticipate would be discussed**

Chair Zullas shared communication from the School Building Committee indicating that the Committee, in anticipation of later feedback from the Massachusetts School Building Authority, would prefer to submit a request for appropriation to the May 2021 Annual Town Meeting warrant.

Chair Zullas moved, Ms. Collins seconded, and the Board voted 5-0 to remove the article submitted by the School Building Committee from the warrant for the May 2020 Annual Town Meeting.

Mr. Wells moved, Ms. Conlon seconded, and the Board voted 5-0 to close the warrant for the May 2020 Annual Town Meeting.

10. **Discussion – Appointed Treasurer Referendum**

Chair Zullas deferred this discussion until the Board’s scheduled meeting for February 26, 2020.

11. **Reappointment – Privacy Officer**
Ms. Collins moved, Ms. Conlon seconded, and the Board voted 5-0 to reappoint Paige Eppolito, Assistant Town Administrator/HR Director, of 525 Canton Avenue to serve as the Town’s Privacy Officer with a term expiring February 28, 2021.

12. Reappointment – Group Insurance Advisory Committee

Mr. Wells moved, Ms. Conlon seconded, and the Board voted 5-0 to reappoint Paige Eppolito, William Murphy, Jr., Joseph Fahey, Michael Collins, Margaret Gibbons, Kerri Devin, Jason Scherer, Robert Mallett, Dean Alexander, Jan Parr, Mary Fitzgerald, all of 525 Canton Avenue, to the Group Insurance Advisory Committee with terms expiring February 28, 2021.

13. Reappointment – Traffic Commission

Mr. Wells moved, Ms. Collins seconded, and the Board voted 5-0 to reappoint Marion Driscoll of 40 Margaret Road, Lee Toma of 58 Aberdeen Road, and Steven Geyster of 50 Canton Avenue to the Traffic Commission with terms expiring February 28, 2021.


Ms. Conlon moved, Mr. Wells seconded, and the Board voted 5-0 to approve and sign the March 3, 2020 Presidential Primary Warrant.

15. Approval – Grants to Health Department

Mr. Wells moved, Ms. Collins seconded, and the Board voted 5-0 to accept a grant from the Association of Food and Drug Officials to the Health Department for $3,000 for 2020 Milton Food Training Opportunities; and to accept a $2,400 Retail Food Safety Inspection Modernization Grant to cover the cost of food safety inspection software and an iPad.

16. Approval – One Day Liquor Licenses

Mr. Wells moved, Ms. Conlon seconded, and the Board voted 5-0 to approve one-day liquor licenses for:
- The Milton Club on February 15, 2020 for the Costello Engagement Party;
- Milton Art Center on February 15, 2020 for Comedy Night;
- Milton Art Center on February 21, 2020 for Trivia Night;
- The Eustis Estate on February 28, for a concert;
- Saint Elizabeth Parish on February 29, 2020 for Irish Night;
- The M. B. Wakefield Estate on March 7th, 2020 for the Blue Hills Winter Soupfest.
- Milton Art Center on March 14, 2020 for Saint Patrick’s Day Party;
- The Eustis Estate on March 15, 2020 for a concert;
- Milton Art Center on March 20, 2020 for Trivia Night.

17. Approval – Meeting Minutes
Ms. Collins moved, Ms. Conlon seconded, and the Board voted 5-0 to approve the meeting minutes from January 22, 2020 as written.

18. **Confirm Future Meeting Dates**

Chair Zullas confirmed the Board would meet with the Conservation Commission in attendance on February 26, 2020.

19. **Town Administrator’s Report**

Mr. Dennehy reported the following items:
- Early voting for the Presidential Primary will be held on the following schedule.
  - Monday, February 24 8:00 AM -5:00 PM
  - Tuesday, February 25 8:00 AM -5:00 PM
  - Wednesday, February 26 8:00 AM -5:00 PM
  - Thursday, February 27 8:00 AM -8:00 PM
  - Friday, February 28 8:00 AM -1:30 PM
- The Town has received 2 additional 40B proposals, to which the Select Board must respond within 30 days.
- Congratulations to members of Northeastern University’s Beanpot-winning hockey team from Milton.

20. **Chairman’s Report**

Chair Zullas reported the following items:
- The Board attended the MMA Annual Meeting in January, at which Ms. Conlon was elected president of the Massachusetts Select Board Association. The Board congratulated Ms. Conlon, who is also a member of the Massachusetts Municipal Association Board.
- The Teen Center’s grand opening was a great success and well-attended by community members and leaders.
- Chair Zullas, Mr. Dennehy, and MBTA Chair Steven Poftak met on January 28. Milton’s representatives advocated for more bus service and repairs to the stairs at Milton station.
- On January 30, the Milton Substance Abuse Prevention Coalition presented the results of a recent survey and announced awards they have recently received. The Board congratulated the MSAPC on their significant work and the recognition they have received.
- On February 10, the Town’s representatives attended a roundtable discussion about suicide prevention with the nonprofit veterans’ organization Home Base.
- The Town will hold a Municipal Vulnerability Listening Session at 6:30pm on February 13 at the Council on Aging.
- The Board wished a happy birthday to Milton resident Sean McCarthy on February 15.
21. **Members’ Report**
Ms. Conlon thanked the Master Plan Implementation Committee and Margaret Carels, who held a public meeting with Milton teens interested in providing input about the Town Center on February 11. Ms. Conlon also thanked Asst. Superintendent Glenn Pavliceck for providing her with background information on school funding for the Massachusetts Select Board Association.

Mr. Wells thanked Rep. Dan Cullinane for his service as a representative on the occasion of Mr. Cullinane’s announcement that he would not be seeking reelection. Mr. Wells also extended his condolences to the family of a Milton resident who recently passed away.

22. **Public Comment Response**
23. **Future Agenda Items**
24. **Community Happenings**
25. **Adjourn**

At 10:37pm, Mr. Wells moved, Ms. Conlon seconded, and the Board voted 5-0 to adjourn the meeting.

Respectfully submitted by Hillary Waite, Executive Administrative Assistant to the Select Board.

**ATTACHMENTS**
1. Presentation by Tom Dougherty to the Select Board
2. Chair and Vice Chair statement regarding the Ice House development
From the FAA’s Notification  
Monday, December 23, 2019

Subject: Kickoff of Boston Logan Runway 4 Left RNAV Environmental Assessment

This is a courtesy notification that the Federal Aviation Administration (FAA) awarded a contract for an Environmental Assessment (EA) for a proposed Area Navigation (RNAV) approach procedure for Runway 4 Left (L) at Boston Logan International Airport (BOS).

FAA conducted an Initial Environmental Review with technical analysis support from the Volpe Transportation Center in 2015, which included a noise analysis. We coordinated with the Massachusetts Port Authority (Massport), the Logan Community Advisory Committee (Logan CAC), and Congress on the BOS 4L proposal, and conducted a public meeting in 2015. The noise analysis for the permanent use of the procedure did not result in a reportable or significant noise impact over residential areas. However, the FAA agreed to conduct an EA. The EA project entered the budget planning and prioritization process and was recently funded.

We anticipate providing an overview of the project to the Massport Community Advisory Committee (MCAC) at their next quarterly meeting in January, 2020. This discussion will be in advance of the formal community engagement process which will include notifying the general public, community workshops and the opportunity for the public to comment on the Draft EA, when it is completed later in 2020.

The FAA will work closely with Massport and the MCAC to ensure a timely flow of information.

**sent to stakeholders (local, state and federal) in the following communities: South Boston, Roxbury, Milton, Dorchester, Mattapan, Quincy, Hyde Park, Braintree, Canton, Randolph, Blue Hills Reservation**
1. FAA JANUARY 9, 2020 RUNWAY 4L ENVIRONMENTAL ASSESSMENT SLIDES

2. FAA ANSWERS TO TD’S WRITTEN QUESTIONS PRESENTED TO FAA REGIONAL ADMINISTRATOR JANUARY 9, 2020

3. FAA INITIAL ENVIRONMENTAL REVIEW SUMMARY DATED MARCH 20, 2017

4. FAA ATTACHMENTS PROVIDED TO TD ON FEBRUARY 3, 2020
   (1) FLIGHT STANDARDS
   (2) NOISE MODELING REPORT
   (3) RNAV (GPS) 4L AND 4R FLIGHT TRACKS
   (4) PROPOSED ACTION ENVIRONMENTAL JUSTICE

5. CSDA DESIGN GROUP EXCERPT

6. MIT GEAR-DOWN FAF AND NOISE SLIDES

7. 4L RNAV EA WORKING GROUP
Environmental Assessment for the Boston Logan International Airport (BOS) Runway 4 Left (4L) Approach Procedure

Proposed BOS FAA public RNAV (GPS) RWY 4L

Presented to: MCAC
By: FAA
Date: January 9, 2020
Agenda

- Purpose and Need
- History of FAA's Environmental Review Process
- Environmental Assessment/Community Involvement Plan
- Tentative Schedule
PROPOSED BOS RNAV (GPS) RWY 4L

Purpose and Need:

- The purpose and need of the permanent BOS RNAV (GPS) & RWY 4L approach procedure is to provide a de-conflicted stabilized approach procedure that provides vertical and lateral guidance when weather or winds require BOS to land on RWY 4L. The proposed instrument procedure addresses several needs:
  - Increase safety of aircraft arriving on RWY 4L
  - Reduce arrival delays during IMC and VMC
  - Conform to national policy to implement NextGen RNAV procedures
  - Reduce Air Traffic Control workload and thereby enhance safety.
  - The permanent implementation of this approach procedure will enhance safety and efficiency at BOS. The new procedure will follow existing flight tracks as closely as possible.
History of FAA's Environmental Review of the BOS 4L RNAV Proposal

- 2015 - FAA conducted a public meeting and coordinated with the Massachusetts Port Authority (Massport), Logan Community Advisory Committee, federal, state and local officials on the BOS 4L RNAV proposal.

- During this meeting the FAA informed stakeholders of the noise analysis results for the permanent use of a RWY 4L procedure.
  - Results: no reportable or significant noise impact over residential areas.

- FAA committed to conduct an Environmental Assessment (EA)

- EA project entered FAA's budget planning and prioritization process.

BOS RWY 4L  January 9, 2020

Federal Aviation Administration
BOS RNAV (GPS) RWY 4L EA

Environmental Assessment and Record of Decision (EA/ROD) and Community Involvement Plan (CIP):

- September 2019, the FAA awarded a contract to prepare an EA for the proposed BOS RNAV (GPS) RWY 4L approach procedure.
- October 2019, a project kick-off meeting was held to begin the National Environmental Policy Act (NEPA) process.
- As part of the NEPA process, the FAA will publish a notice of the draft EA availability in local newspapers, other media, and/or on the Internet, which will initiate a 30-day public comment period.
  - FAA will revise the draft EA, as necessary, in response to internal and external comments received on the draft document, and prepare the Final EA.
  - The EA process can take approximately a year or more to complete.
- FAA is developing a Community Involvement Plan (in collaboration with the New England Region Airports Division, Regional Administrator's office, and Massport) concurrently with the NEPA process. The FAA will ensure meaningful involvement in project communication and outreach activities. This outreach will include informing elected officials, Massport, MCAC, the public, and conducting workshops.
Tentative Schedule

- Draft EA 30-day public comment period - Third Quarter CY2020
- Two (2) Public workshops - Third Quarter CY2020
- Prepare Final EA - Fourth Quarter CY2020
FAA Proposed RNAV IFR Track to Rwy 4L

Slide taken from 2015 Presentation – included for illustration purposes only. Subject to change.
1. FAA JANUARY 9, 2020 RUNWAY 4L ENVIRONMENTAL ASSESSMENT SLIDES

2. FAA ANSWERS TO TD’S WRITTEN QUESTIONS PRESENTED TO FAA REGIONAL ADMINISTRATOR JANUARY 9, 2020

3. FAA INITIAL ENVIRONMENTAL REVIEW SUMMARY DATED MARCH 20, 2017

4. FAA ATTACHMENTS PROVIDED TO TD ON FEBRUARY 3, 2020
(1) FLIGHT STANDARDS
(2) NOISE MODELING REPORT
(3) RNAV (GPS) 4L AND 4R FLIGHT TRACKS
(4) PROPOSED ACTION ENVIRONMENTAL JUSTICE

5. CSDA DESIGN GROUP EXCERPT

6. MIT GEAR-DOWN FAF AND NOISE SLIDES

7. 4L RNAV EA WORKING GROUP
**Question 1** - Why was the 4L JetBlue RNAV procedure suspended from September 15, 2019 through March 14, 2020?

**Answer** - Currently the procedure is NOTAM'ed out of service.

Boston Terminal Radar Approach Control (TRACON) had not been using the procedure for years since the FAA agreed to conduct an EA.

FAA NOTAMS PAGE LINK

IFDC 914972 (KBOS A0045/19) BOS SPECIAL EDWARD LAWRENCE LOGAN INTL. BOSTON, MA. SPECIAL RNAV VISUAL RWY 04L ORIG...PROC NOT AUTH. 100025/500-2003142399

* The 4L JetBlue RNAV procedure will be analyzed only in the cumulative impacts section of the EA. Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Question 2** - Will the baseline for noise comparison be conditions pre-4L JetBlue path?

**Answer** - The baseline covers the period between November 1, 2018 and October 31, 2019. This time-frame was chosen because it is representative of current operations and was largely free of factors that could affect normal air traffic operations, such as runway and airfield construction or runway closures.

*The EA scope only involves the proposed BOS RNAV (GPS) RWY 4L instrument approach procedure.*

**Question 3** - Will noise metrics other than DNL be used, specifically: A-weighted Lmax; LEQ and SEL?

**Answer** - FAA does not intend to use any supplemental metrics at this time. Order 1050.1F specifies that supplemental noise metrics can be considered for determining impact in noise sensitive areas, as well as in areas where a quiet setting is considered a recognized purpose and attribute. If any of these areas are identified after the determination of the area of potential impact (APE), FAA will work with those whose jurisdiction these areas fall under to determine if supplemental noise analysis should be done, and what supplemental metrics should be used for this analysis.

**Question 4** - Will the EA noise model use gear-down at 10 miles from final approach fix (FAF) in addition to at FAF?

**Answer** - The Aviation Environmental Design Tool (AEDT) models aircraft using individual flight profiles for each specific aircraft type, and the exact point of the approach where landing gear is extended differs by profile. For the proposed RNAV (GPS) RWY 4L approach, the FAF is 5 miles from the Runway 4L threshold and the intermediate fix (IF) is 10.3 miles from the Runway 4L threshold. Profiles for most aircraft types frequenting BOS would be expected to extend landing gear at a point between the IF and the FAF – between approximately 5 and 10 miles away from the Runway 4L threshold.
Question 5- Will total CSPR noise impacts be taken into account inclusive of the other RNAV 4L and 4R path realities?
Answer- Assuming CSPR means closely-spaced parallel runways, all traffic at the airport will be captured for the purposes of determining noise impacts.

Question 6- Will the noise impacts of 27 and 33L departures on the same 4L JetBlue RNAV residents be included in the EA?
Answer- Noise impacts of all BOS departures will be included in the EA cumulatively.

Question 7- Will economic justice criteria be assessed, given Blue Hill Ave, Mattapan, and Dorchester overflights?
Answer- Yes. As specified by FAA Order 1050.1F, environmental justice should be considered in order to determine potential disproportionate impacts on minority- or low-income communities. These impacts can come from potentially any impact category, and all relevant impact categories will be evaluated for potential environmental justice issues.
Massachusetts Port Authority (Massport) is proposing to reconstruct Boston Logan International Airport (BOS) Runway 4R-22L (RWY 4R-22L) during the summer of 2017. This Initial Environmental Review (IER) is intended to provide information about the proposed project to better assist in preparing for the environmental analysis phase. Although it identifies information in several categories, not all the data may be available initially; however, it does represent information, in accordance with FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, which ultimately will be needed for preparation of the environmental document.

The Federal Aviation Administration (FAA) is preparing this Categorical Exclusion (CATEX) for the above referenced temporary procedures to ensure FAA controllers have adequate procedures to safely land arriving aircraft during the reconstruction period for Runway 4R (RWY 4R). The RWY 4R reconstruction closure reduces the availability of instrument approaches to BOS. This can substantially affect the airport’s operational safety and efficiency. To address this issue, the FAA proposes to establish two temporary approach procedures: an Area Navigation (RNAV) approach to RWY 4 Left (4L) and a “side-step” maneuver to the RNAV approach for RWY 4R.

These two approaches will be used for approximately 105 days, from May 15, 2017, through September 1, 2017 while improvements occur on RWY 4R. These are temporary approaches and will be terminated when the construction work is complete. The temporary approach procedures are eligible for a CATEX under FAA Order 1050.1F, Environmental Impacts: Policies and Procedures.

The runway project necessitating these two proposed procedures involves pavement resurfacing of the existing runway sections. Such work is part of Massachusetts Port Authority’s (Massport) ongoing program to rehabilitate pavement that is reaching the end of its useful life. The reconstruction of Runway 4R-22L (RWY 4R-22L) also provided an opportunity to address another maintenance issue at the Boston Logan International Airport (BOS). The existing wooden piers that support the RWY 4R approach lighting system are deteriorating and require repair or replacement. Given this opportunity, Massport decided to complete CATEXs and conduct both projects simultaneously. While these are independent projects, they are adjacent to each other. Completing them at the same time is cost-effective, operationally efficient and in the best interests of aviation safety.

These actions do not individually or cumulatively have a significant effect on the human environment and do not involve extraordinary circumstances. Therefore, these projects individually or cumulatively are categorically excluded.
The Proposed Action for this CATEX includes:

**BOS RNAV (GPS) RWY 4L:** The Proposed Action includes the temporary publishing of BOS RNAV (GPS) RWY 4L procedure, not to exceed six months during RWY 4R-22L closure. Construction is anticipated from May 15, 2017, through September 1, 2017.

**BOS RNAV (GPS) RWY 4R Amendment:** The proposed BOS RNAV (GPS) RWY 4R Amendment will add a side-step maneuver, which will allow aircraft to land on RWY 4L during the runway construction period. This is a typical procedure used at airports throughout the National Airspace System (NAS) that provides both air traffic controllers and pilots an additional option in landing aircraft. RWYs 4R and 4L are separated by a distance of 1,500 feet between centerlines. This maneuver would begin approximately two nautical miles from the approach end of RWY 4R, then follow existing flight tracks for aircraft inbound to RWY 4L.

After the issuance of the CATEX, FAA will begin to evaluate the permanent implementation of the BOS RNAV (GPS) RWY 4L procedure and the Jet Blue Special RNAV Visual Flight Procedure (RVFP) (hereafter referred to as Jet Blue RVFP RWY 4L). FAA will conduct an Environmental Assessment (EA) to evaluate the permanent implementation of the proposed procedures, which FAA will begin developing upon issuance of this CATEX. FAA will provide notification to the public of the EA, and the EA process will provide an additional opportunity for the public to provide comments on the procedures.

**Project Description**

A. Attach a copy of the most recent Project Status Report.

Background:

Based on 2016 flight data, RWY 4R operations account for approximately 30% of arrivals (averaging 159 aircraft per day) during the anticipated temporary closure period. Since 2013, the Air Traffic Mandatory Occurrence Reports showed several safety incidences associated with use of Instrument Landing System (ILS) RWY 15R circle to RWY 4L. When the bases of the clouds are below 1,000 feet, safety concerns with this circling approach limits arrival options and causes a potential increase in delays. In order to safely meet current aircraft arrival rates when the weather requires landing on RWY 4L, the proposed approaches are required. Thus, FAA evaluated the two proposed temporary flight procedures mentioned above to ensure the safe and continuous operation of aircraft arriving into BOS as a result of the temporary closure of RWY 4R.

As part of FAA’s alternative analysis, the FAA reviewed Air Traffic Mandatory Occurrence Reports, which showed several safety incidences associated with use of Instrument Landing System (ILS) RWY 15R circle to RWY 4L, since 2013. When the bases of the clouds are below 1,000 feet, safety concerns with this circling approach limits arrival options and causes a potential increase in delays. In order to safely meet current aircraft arrival rates when the weather requires landing on RWY 4L, the proposed approaches are required.

FAA New England Regional Administrator’s office met with Representative Michael Capuano and Representative Stephen Lynch on March 6, 2017, and provided a project update of the CATEX for both proposed actions. FAA informed the elected officials that an EA would be prepared prior to adopting the permanent procedure for BOS RNAV (GPS) RWY 4L and the Jet Blue Special RVFP RWY 4L. In addition, FAA will coordinate with Massport regarding proposed procedure changes and will work with Massport to communicate proposed procedure changes to community outreach groups. Massport community outreach may include publishing FAA’s CATEX on Massport’s website.
B. Has airspace modeling been conducted using SDAT, TAAM, TARGETS, or other airspace/air traffic design tool? X Yes Model: AEDT □ No

FAA’s Next Generation (NextGen) Terminal Area Route Generation, Evaluation, and Traffic Simulation (TARGETS) Aviation Environmental Design Tool (AEDT) 2c was used to model airspace performance in space and time; estimate noise, emissions, emissions dispersion and fuel consumption; to support analysis of interdependence between environmental consequences; and for regulatory compliance, research and development (see Attachment 1 – Prototype Plates, and Attachment 2 – AEDT Noise Modeling Report).

If yes, provide a summary of the output from the modeling.
- See Attachment 2 – AEDT Noise Modeling Report

C. Describe the present (no action alternative) procedure in full detail. Provide the necessary chart(s) depicting the current procedure. Describe the typical fleet mix, quantifying (if possible) the number of aircraft on the route and depict their altitude(s) along the route.

No-Action Alternative — For the No-Action Alternative, current procedures for the use of RWY 4L would continue, to include a circling approach from RWYs 4R to 4L. RWY 4R would remain unavailable during the construction period from May 15, 2017 through September 1, 2017. RWY 4L would continue to be generally assigned to smaller/lighter aircraft. Arrivals would continue to utilize the visual approach procedure. This would considerably limit approaches from the southwest. During marginal weather conditions and Instrument Meteorological Conditions (IMC) only circling approaches to RWY 4L would be available with higher weather requirements thereby decreasing safety and increasing flight delays.

Fleet Mix — The mix of aircraft landing on RWY 4L today is similar to that landing on RWY 4R, except that it does not include wide body aircraft. It includes aircraft from single piston-engine propeller aircraft up to and including turbojets weighing approximately 270,000 pounds (e.g., Boeing 757s (B757s)). Approximately 48% of RWY 4L arrivals during 2013 were jet aircraft. The mix of aircraft landing on RWY 4L today is similar to that landing on RWY 4R, with the exception of the Airbus 380 (A380) aircraft. A380 is a wide-body aircraft, and therefore it cannot land on RWY 4L. The A380 aircraft will land on BOS RWY 15L/33L.

Boston Northeast Flow Configuration — Because Boston RWY 4L lacks an instrument approach guidance system, when the airport is configured for a northeast flow, which occurs approximately 35% of the time, approaches to RWY 4L from the south are only conducted when the clouds are at least 3,000 feet (and preferably 4,000 feet) and the visibility is at least 5 statute miles; the operationally usable Visual Meteorological Conditions (VMC) for this configuration.

D. Describe the proposed project, providing the necessary chart(s) depicting changes. Describe changes in the fleet mix, numbers of aircraft on the new route, and their altitude(s), if any.

BOS RNAV (GPS) RWY 4L: The Proposed Action includes the temporary publishing of BOS RNAV (GPS) RWY 4L procedure, not to exceed six months during RWY 4R-22L closure. Construction is anticipated from May 15, 2017 through September 1, 2017.

BOS RNAV (GPS) RWY 4R Amendment: The proposed BOS RNAV (GPS) RWY 4R Amendment will add a side-step maneuver, which will allow aircraft to land on RWY 4L during the runway construction period. This is a typical procedure used at airports throughout the
National Airspace System (NAS) that provides both air traffic controllers and pilots an additional option in landing aircraft. RWY's 4R and 4L are separated by a distance of 1,500 feet between centerlines. This maneuver would begin approximately two nautical miles from the approach end of RWY 4R, then follow existing flight tracks for aircraft inbound to RWY 4L.

Currently, RWY 4L does not have any approach procedure that authorizes the use of an instrument guidance system during low ceiling/visibility conditions. RNAV (GPS) procedures are the most cost-effective option to address this deficiency. RNAV (GPS) approach procedures are widely used in the US. Over the past decade, the FAA has implemented RNAV (GPS) IAPs for over 6,000 runways at over 2,700 airports. This includes RNAV (GPS) IAPs for six runways ends at BOS, one of which does not have an ILS.

1. Will there be actions affecting changes in aircraft flights between the hours of 10 p.m. – 7 a.m. local? □ Yes X No

2. Is a preferential runway use program presently in effect for the affected airport(s), formal or informal? □ Yes X No

3. Will airport preferential runway configuration use change as a result of the proposed project? □ Yes X No

4. Is the proposed project primarily designed for Visual Flight Rules (VFR), Instrument Flight Rules (IFR) operations, or both? □ VFR x IFR □ Both N/A
   Proposed Action is an Instrument Approach Procedure (IAP).

   If this specifically involves a charted visual approach (CVA) procedure, provide a detailed local map indicating the route of the CVA, along with a discussion of the rationale for how the route was chosen. N/A

5. Will there be a change in takeoff power requirements? □ Yes X No
   Proposed Action is an IAP. Takeoffs are not involved.

   If so, what types of aircraft are involved, i.e., general aviation propeller-driven versus large air carrier jets? N/A

6. Will all changes occur above 3,000 feet above ground level (AGL)? □ Yes X No
   What is the lowest altitude change on newly proposed routes or on existing routes that will receive an increase in operations?
   Proposed Action is an IAP to RWY 4L, and will involve route changes for aircraft between 5,000 feet MSL and field level (however, almost all above 1,500 feet). When RWY's 4R and 4L are considered in combination, there will be no increase in the number of arrivals or types of aircraft that fly these approaches. The proposed RWY 4R Amendment will add a side-step maneuver similar to the current circling maneuver which will allow aircraft to land RWY 4L during the runway construction period. RWY's 4R and 4L are separated by a distance of 1,500 feet between centerlines. The threshold of RWY 4L is 1,155 feet beyond the primary RWY 4R. This action would occur two nautical miles from the approach end of RWY 4R, then follow existing flight tracks for aircraft inbound to RWY 4L.

   The proposed arrival procedure to RWY 4L will begin at an altitude of approximately 5,000 feet (at 15 nautical miles (NM) from the RWY 4L threshold) and end at the applicable decision altitude (from where visual guidance is employed). The majority of aircraft utilizing the proposed IAP will be aircraft (estimated to be 4,000 annually) that currently land on RWY 4R under IMC.
7. Will there be actions involving civil jet aircraft (heavier than 75,000 pounds gross weight) arrival procedures between 3,000–7,000 feet AGL or departures between 3,000–10,000 feet AGL? Attach a copy of the results of the noise screening analysis using the AEST, TARGETS Environmental Plug-in, or other FAA-approved noise-screening methodology. X Yes No

The total count of arrivals to RWYs 4R and 4L combined is not projected to change based on the Proposed Action. A noise analysis was performed using AEDT (see Attachment 2).

8. If noise analysis was already performed using the FAA’s AEST, Integrated Noise Model (INM), Noise Integrated Routing System (NIRS), or the TARGETS AEDT provide a summary of the results.

The FAA conducted noise modeling for the Proposed Action using the FAA’s Aviation Environmental Design Tool (AEDT). The noise analysis was conducted for an average annual day using flight data from four independent one-week periods. The result of closing RWY 4R shifts flights to RWY 4L. The scenario modeled the equal use of the two proposed procedures and resulted in the following noise increases:

- The reportable noise increase exists approximately 1.5 miles to 4 miles from touchdown on RWY 4L and represents a >5 dB noise increase in the range of 45-60 dB.

- The significant noise increase exists approximately 0.25 miles to 1.5 miles from touchdown on RWY 4L and represents a >1.5 dB noise increase for areas where noise levels exceed 65 dB. Areas impacted are primarily over the water.

When weather dictates the use of RWY 4L during RWY 4R construction, to mitigate noise increases the following procedures will be used in the order listed below to the extent practicable:

- When the ceiling is at least 700 ft. and the visibility is at least 2 ½ miles;
  - RNAV (GPS) RWY 4R side-step to RWY 4L (which more similarly overflies current arrival flight paths), or
  - Alternate periodically between RNAV (GPS) RWY 4L and RNAV (GPS) RWY 4R side-step, but no more than 50% of the time flying RNAV (GPS) RWY 4L;

- However, when the ceiling is less than 700 ft. and/or the visibility is less than 2 ½ miles, the RNAV (GPS) RWY 4L will be used.

Purpose and Need

A. Describe the purpose and need for the proposed project. If detailed background information is available, summarize here and provide a copy as an attachment to this review. The purpose of the Proposed Action is to temporarily change air traffic control procedures in order to accommodate air traffic during BOS RWY 4R construction. RNAV (GPS) Instrument Approach Procedures (IAPs) are one of several types of Performance Based Navigation (PBN) procedures, which are a key element of the FAA’s Next Generation Air Transportation System (NextGen). The RNAV (GPS) IAP will provide lateral and vertical guidance, enabling continuous decent to the runway. The Proposed Action is needed to ensure safety, improve operational efficiency, and reduce flight delays during construction.
1. What operational/economic/environmental benefits will result if this project is implemented? This project will have the following benefits: enhance safety, delay reduction during IMC, and shortened periods of peak traffic under IMC.

2. If a delay reduction is anticipated, can the reduction be quantified?
   □ Yes □ No X N/A

3. Can reduced fuel costs/natural energy consumption be quantified? □ Yes X No
   If not quantifiable, describe the approximate anticipated benefits in lay terms.
   Implementing an RNAV (GPS) RWY 4L should reduce fuel consumption for two reasons by reducing delays during IMC and by providing more efficient continuous descent path approaches, although this is a temporary procedure.

B. Is the proposed project the result of a user or community request or regulatory mandate?
   □ Community Request □ Regulatory Mandate N/A
   If not, what necessitates this action? The proposed project is resulting from the need to resurface RWY 4R and replace the pier that contains the Approach Lighting System (ALS) for RWY 4R.

Describe the Affected Environment

A. Provide a description of the existing land use near the proposed project.
   Land use near the proposed project is a mixture of residential, commercial, and open water. It is the same use as exists for arrivals regularly conducted to RWY's 4L and RWY 4R today. Flight tracks for the Proposed Action will not overfly new areas (see Attachment 3).

B. Will the proposed project introduce air traffic over noise sensitive areas not now affected?
   □ Yes X No
   The flight trajectories for the Proposed Action will be similar to those that are currently used on a regular basis. The number and types of aircraft will be similar to the No-Action Alternative. Flight paths for the Proposed Action will not overfly new areas. To the extent there are changes in noise exposure, they will be generally beneficial (see Attachment 3).

Will they be affected to a □ greater or X □ lesser extent?

Note: An area is noise sensitive if aircraft noise may interfere with the normal activities associated with the use of the land.

C. Are wildlife refuge/management areas within the affected area of the proposed project?
   □ Yes X No
   Based on Section 4(f) Sites listed in the Boston Logan Airport Noise Study (BLANS), there are no wildlife refuge/management areas in the affected area.

   If so, has there been any communication with the appropriate wildlife management regulatory (federal or state) agencies to determine if endangered or protected species inhabit the area?
   □ Yes □ No N/A
   1. At what altitude would aircraft overfly these habitats? N/A
   2. During what times of the day would operations be more/less frequent? N/A

D. Are there cultural or scenic resources, of national, state, or local significance, such as national parks, outdoor amphitheaters, or stadiums in the affected area?
   □ Yes X No
   If so, during what time(s) of the day would operations occur that may impact these areas?
The Proposed Action BOS RNAV (GPS) RWY 4L overflies the Blue Hills Reservation, a 6,000-acre Massachusetts state park. The number of flights will remain the same. Annually, under instrument conditions, the proposed RNAV instrument procedure will shift the paths of approximately 4,000 arrivals to the west by less than a mile.

E. Has there been communication with air quality regulatory agencies to determine if the affected area is a non-attainment area (an area which exceeds the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, lead, particulate matter, sulfur dioxide, or nitrogen dioxide) or maintenance area (an area which was in non-attainment but subsequently upgraded to an attainment area) concerning air quality? □ Yes □ No

This project is not expected to affect air quality and is presumed to conform as Category 14 “Air Traffic Activities and Adopting Approach; Departure and En Route Procedures for Air Operations” as identified in 72 Federal Register 41565, July 30, 2007. According to the Environmental Protection Agency (EPA), Suffolk County, MA is in attainment with NAAQS (see https://www3.epa.gov/airquality/greenbook/ancl.html).

If yes, please explain:

F. Are there reservoirs or other public water supply systems in the affected area? X Yes □ No

There are five “Community Groundwater Sources” within the study area. A study area is the geographic area potentially environmentally impacted by a proposed action. All five groundwater sources have the subcategory “Community Groundwater Well,” and all are in the Town of Stoughton. Aircraft following the BOS RNAV (GPS) RWY 4L will be at altitudes between 3,600 feet and 4,000 feet while overflying these wells. Aircraft regularly overfly this area now, as the Proposed Action does not involve significant changes to flight routes. There will be no impact to reservoirs or other public water supplies.

Community Involvement

Formal community involvement or public meetings/hearings may be required for the proposed project. Make a determination if the proposed project has the potential to become highly controversial. The effects of an action are considered highly controversial when reasonable disagreement exists over the project’s risks of causing environmental harm. Opposition on environmental grounds by a Federal, State, or local government agency or by a Tribe, or by a substantial number of the person affected by the action should be considered in determining whether reasonable disagreement regarding the effects of a proposed action exists (see FAA Order 1050.1, paragraph 5–2b (10)).

A. Have persons/officials who might have some need to know about the proposed project due to their location or by their function in the community been notified, consulted, or otherwise informed of this project? X Yes □ No

1. Are local citizens and community leaders aware of the proposed project? X Yes □ No

FAA New England Regional Administrator’s office met with Representative Michael Capuano and Representative Stephen Lynch on March 6, 2017, and provided a project update of the CATEX for both proposed actions. FAA informed the elected officials that an EA would be prepared prior to adopting the permanent procedure for BOS RNAV (GPS) RWY 4L and the Jet Blue Special RNAV Visual Flight Procedures (RVFP) RWY 4L (hereafter referred to as Jet Blue RVFP RWY 4L). In addition, FAA will coordinate with Massport regarding proposed procedure
changes and will work with Massport to communicate proposed procedure changes to community outreach groups. Massport community outreach may include publishing FAA’s CATEX on Massport’s website.

2. Are any opposed to or supporting it? If so, identify the parties and indicate the level of opposition and/or support. It is anticipated there will be minor opposition to the temporary procedure changes, since an EA will be conducted for the permanent implementation of proposed flight procedure changes. As part of the meeting with the Representatives and Massport, FAA committed to conducting an EA for any proposed permanent changes.
   a) If they are opposed, what is the basis of their opposition?
   b) Has the FAA received one or more comments objecting to the proposed project on environmental grounds from local citizens or elected officials? □ Yes □ No
      If so, state the nature of the comment and how the FAA was notified (e.g. resolution, Congressional, Public meeting/workshop, etc.).

B. Are the airport proprietor and users providing general support for the proposed project?
   X Yes □ No
   1. Is the proposed project consistent with local plans and development efforts?
      X Yes □ No
      The FAA’s Proposed Action does not impact local plans and development efforts. The proposed project would provide GPS guidance to aircraft that already land on RWY 4L. The Proposed Action flight paths involve: (a) during IMC, shifting approximately 4,000 annual arrivals from RWY 4R to nearby parallel RWY 4L at the same airport and forming part of the same traffic flow; and (b) during VMC, shifting approximately 435 annual arrivals to RWY 4L from use of the RWY 4R ILS to a direct route to RWY 4L.
   2. Has there been any previous aircraft-related environmental or noise analysis, including
      a) FAR Part 150 Studies, conducted at this location? □ Yes □ No
         If so, was the study reviewed as a part of this initial review? X Yes □ No □ N/A
         FAA reviewed the ongoing 2003-2016 BLANS report.

Extraordinary Circumstances

The determination of whether a proposed action may have a significant environmental effect is made by considering any requirements applicable to the specific resource (see FAA Order 1050.1, Appendix B).

A. Will implementation of the proposed project result in any of the following? As stated in FAA Order 1050.1, paragraph 5–2, extraordinary circumstances exist when a proposed action involves any of the following circumstances AND may have a significant effect (40 CFR 1508.4).

1. An adverse effect on cultural resources protected under the National Historic Preservation Act of 1966, as amended (see FAA Order 1050.1, paragraph 5–2b (1)).
   □ Yes □ No □ Possibly
   Comment: The proposed temporary approach procedures will not have an adverse effect on cultural resources.
2. An impact on properties protected under section 4(f) of the Department of Transportation Act. □ Yes □ No □ Possibly
Comment: Since the proposed action is affecting very similar airspace, there would be no additional impact to any possible 4(f) properties.

3. An impact on natural, ecological (e.g. invasive species) or scenic resources of Federal, Tribal, State, or local significance (for example, Federally listed or proposed endangered, threatened, or candidate species or proposed or designated critical habitat under the Endangered Species Act); resources protected by the Fish and Wildlife Coordination Act; wetlands; floodplains; prime, unique, State, or locally important farmlands; energy supply and natural resources; wild and scenic rivers, including study or eligible river segments; and solid waste management. □ Yes X No
Comment: No impacts are expected as a result of the proposed action.

4. A division or disruption of an established community; a disruption of orderly, planned development; or inconsistency with plans or goals that have been adopted by the community in which the project is located. □ Yes X No □Possibly

5. An increase in congestion from surface transportation, by causing a decrease in the Level of Service below the acceptable level determined by the appropriate transportation agency (i.e., a highway agency). □ Yes X No □Possibly
Comment: The proposed action is an air traffic navigation procedure; therefore, surface transportation will not be impacted.

6. An impact on noise levels of noise–sensitive areas. □Yes X No □Possibly
A detailed noise analysis using the TARGETS AEDT was conducted for the proposed temporary approach procedures (see Attachment 2).

7. An impact on air quality or a violation of local, State, Tribal, or Federal air quality standards under the Clean Air Act amendments of 1990. □ Yes X No □
Comment: This project is not expected to affect air quality and is presumed to conform as Category 14 “Air Traffic Activities and Adopting Approach, Departure and En Route Procedures for Air Operations” as identified in 72 Federal Register 41565, July 30, 2007.

8. An impact on water quality, sole source aquifers, a public water supply system, or State or Tribal water quality standards established under the Clean Water Act and the Safe Drinking Water Act. □ Yes X No □Possibly
Comment: The proposed action is an air traffic action with no adverse impacts expected on water quality or water supplies.

9. Effects on the quality of the human environment that are likely to be highly controversial on environmental grounds. □ Yes X No □Possibly
Comment: The proposed temporary action is similar to existing flight operations that currently exist. These are temporary approach procedures, and the analysis was based on the conservative scenario.

10. Likelihood of inconsistency with any Federal, State, Tribal, or local law relating to the environmental aspects of the proposed action. □ Yes X No

11. Likelihood of directly, indirectly, or cumulatively, creating a significant impact on the human environment. □ Yes X No □ Possibly
Comment: These are temporary approach procedures, and the analysis was based on the conservative scenario.

Alternatives
A. Are there alternatives to the proposed project? X Yes  □ No If yes, describe any alternatives to the proposed action. The No-Action Alternative was analyzed. Currently, RWY 4L has no published/unpublished approach procedure for any instrument. During RWY 4R’s construction, all flights that landed on RWY 4R would have to use to RWY 4L, and without the implementation of the Proposed Action, there are safety concerns with the current circling approach, which limits arrival options and causes a potential increase in delay during IMC.

B. Please provide a summary description of alternatives eliminated and why. N/A

Mitigation
Are there measures, which can be implemented that might mitigate any of the potential impacts, i.e., GPS/FMS plans, NAVAIDS, etc.? X Yes  □ No □ N/A

The FAA conducted noise modeling for the Proposed Action using the FAA’s Aviation Environmental Design Tool (AEDT). The noise analysis was conducted for an average annual day using flight data from four independent one-week periods. The result of closing RWY 4R shifts flights to RWY 4L. The scenario modeled the equal use of the two proposed procedures and resulted in the following noise increases:

○ The reportable noise increase exists approximately 1.5 miles to 4 miles from touchdown on RWY 4L and represents a >5 dB noise increase in the range of 45-60 dB.
○ The significant noise increase exists approximately 0.25 miles to 1.5 miles from touchdown on RWY 4L and represents a >1.5 dB noise increase for areas where noise levels exceed 65 dB. Areas impacted are primarily over the water.

When weather dictates the use of RWY 4L during RWY 4R construction, to mitigate noise increases the following procedures will be used in the order listed below to the extent practicable:

○ When the ceiling is at least 700 ft. and the visibility is at least 2 ½ miles;
  • RNAV (GPS) RWY 4R side-step to RWY 4L (which more similarly overflies current arrival flight paths), or
  • Alternate periodically between RNAV (GPS) RWY 4L and RNAV (GPS) RWY 4R side-step, but no more than 50% of the time flying RNAV (GPS) RWY 4L;
○ However, when the ceiling is less than 700 ft. and/or the visibility is less than 2 ½ miles, the RNAV (GPS) RWY 4L will be used.

Cumulative Impacts
What other projects (FAA, non-FAA, or non-aviation) are known to be planned, have been previously implemented, or are ongoing in the affected area that would contribute to the proposed project’s environmental impact? The baseline includes all currently implemented procedures.
References/Correspondence

Attach written correspondence, summarized phone contacts using Memorandums for the File, etc.

Attachment 2: Proposed Action TARGETS AEDT Noise Modeling Report
Attachment 3: RNAV (GPS) RWY 4L and RNAV (GPS) RWY 4R Flight Tracks
Attachment 4: Proposed Action Environmental Justice

Additional Preparers
The person(s) listed below, in addition to the preparer indicated on page 1, are responsible for all or part of the information and representations contained herein:

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Specific Area of Responsibility: Boston Logan Airport Noise Study

Facility/Service Center Conclusions

Compliance with FAA Order 1050.1F paragraph 5-6.5.m — Based upon FAA Order 1050.1F paragraph 5-6.5.m, the Proposed RNAV (GPS) RWY 4L procedure and the RWY 4R Amendment is qualified for the categorical exclusion of paragraph 5-6.5.m, “Short-term changes in air traffic control procedures, not to exceed six months, conducted under 3,000 feet above ground level (AGL) to accommodate airport construction.” Attachment 3 depicts representative current arrivals to RWY 4L and for FAA’s proposed BOS RNAV (GPS) RWY 4L.

This IER, including its attachments, documents the above statements.
Facility Manager Review/Concurrence

Signature: Coleman Hartigan (Coleman Hartigan) Date: March 24, 2017

Title: Air Traffic Manager, Boston Consolidated TRACON (A90)

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Service Center Environmental Specialist Review/Concurrence

Signature: Veronda Johnson Date: March 24, 2017

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Service Center Director Review/Concurrence (if necessary)

Signature: Robert K. Jones (Robert K. Jones) Date: March 27, 2017

Title: New England Terminal District Manager

Address: 25 Robert Milligan Parkway
Merrimack, New Hampshire

Phone: (603) 594-5501 Email: robert.k.jones@faa.gov
1. FAA JANUARY 9, 2020 RUNWAY 4L ENVIRONMENTAL ASSESSMENT SLIDES

2. FAA ANSWERS TO TD’S WRITTEN QUESTIONS PRESENTED TO FAA REGIONAL ADMINISTRATOR JANUARY 9, 2020

3. FAA INITIAL ENVIRONMENTAL REVIEW SUMMARY DATED MARCH 20, 2017

4. FAA ATTACHMENTS PROVIDED TO TD ON FEBRUARY 3, 2020
   (1) FLIGHT STANDARDS
   (2) NOISE MODELING REPORT
   (3) RNAV (GPS) 4L AND 4R FLIGHT TRACKS
   (4) PROPOSED ACTION ENVIRONMENTAL JUSTICE

5. CSDA DESIGN GROUP EXCERPT

6. MIT GEAR-DOWN FAF AND NOISE SLIDES

7. 4L RNAV EA WORKING GROUP
Attachment 1

FAA, Flight Standards Service (AFS),
RNAV (GPS) RWY 4L and RNAV (GPS) RWY 4R
Prototype Plates
RNAV (GPS) RWY 4L
GENERAL EDWARD LAWRENCE LOGAN INTL (BOS)

For uncompensated DME/DME systems, UNAVG/NAV NA below 160° (4°) or above 480° (11°) DME/DME RNP 0.3 NA. RWY 4L, helicopter visibility reduction below RWY 4000 NA. When control tower reports tall vessels in approach area, increase RVP DA to 300 and all Cats visibility to RVR 6000. RVR and UNAG/NAV NA when vessels taller than 137 feet present.

Missed approach requires minimum climb of 443 feet per NM to 900.

Site, 3.1 NM
GP 3.1° TCH 50

CATEGORY  A  B  C  D
LVP  DA  318/50  204 (300-1)
UNAVG/NAV DA  766/2.2  752 (600-2.2)
UNAVG/NAV DA  658/2.2  644 (700-2.2)
UNAVG MDA  600/55  586 (600-1.5)  600/55  586 (600-1.5)

Procedure NA for arrivals at WOONS on V0-16 southwest bound.
Attachment 2

TARGETS AEDT Noise Modeling Report
TARGETS
Noise Plug-in Report

For

General Edward Lawrence Logan International Airport
BOS
Boston, Massachusetts

Prepared by:
ATO, AJV-114, Environmental Policy Office

Date: February 24, 2017
Summary

A Noise screening analysis was completed to assess potential noise impacts resulting from proposed air traffic actions at General Edward Lawrence Logan International Airport in Boston, Massachusetts using the Terminal Area Route Generation, Evaluation, and Traffic Simulation (TARGETS) Environmental Plug-in tool and the Aviation Environmental Design Tool (AEDT).

Historical radar track data was used to create a baseline scenario. After the baseline scenario was built, aircraft operations assigned to the proposed procedure were modeled as flying the proposed procedure instead of their historical tracks, which provides the alternative scenario. The tracks were assigned to the new procedures based on usage assumptions passed on from the facility and the historical tracks were used in order to predict the lateral spread on the final approach into the airport.

Once the baseline and alternative scenarios were built, the TARGETS Environmental Plug-in Tool was used to generate noise outputs for both scenarios. In the case of BOS, there were significant and reportable increases in noise under the 4L Approach with corresponding decreases under the 4R Approach.
I. Purpose

The purpose of this report is to document the process used to analyze the noise impact of proposed air traffic actions at General Edward Lawrence Logan International Airport (BOS) in Boston, Massachusetts and to present the results of that analysis. Figure 1-1 shows the airport diagram for BOS. This analysis centers on a temporary closure of Runway 4L and the expected changes to flight management to compensate with this closure. The new procedures connected to this shutdown are the new RNAV (GPS) RWY 4L approach and an amended RNAV (GPS) RWY 4R approach, where a sidestep was added to allow for landing onto 4L from the 4R procedure. The analysis was performed using the Terminal Area Route Generation, Evaluation, and Traffic Simulation (TARGETS) Environmental Plug-in tool and the Aviation Environmental Design Tool (AEDT). Table 1-1 shows the procedure name, type and publication date.

Figures 1-2 thru 1-4 show:

1.) The proposed procedures individually
2.) The historic radar tracks being reassigned to the new procedure for the Noise Model.

<table>
<thead>
<tr>
<th>Name of Procedure</th>
<th>Names of Transition Waypoints</th>
<th>Type of Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNAV (GPS) RWY 4L</td>
<td>WOONS, NUNZO, AAALL, LVRON, MTAPN</td>
<td>New RNAV (GPS) Approach</td>
</tr>
<tr>
<td>RNAV (GPS) RWY 4R*</td>
<td>WINNI, NABBO, MILTT, IRSEW</td>
<td>Amended RNAV (GPS) Approach</td>
</tr>
</tbody>
</table>
This procedure is being proposed as part of the Runway 4R shutdown but no tracks were modeled on the procedure due to the assumptions provided by the facility. Please see the methodology section below for more details.

*Figure 1-1, Airport Diagram of BOS*
Figure 1-2, BOS Procedure RNAV (GPS) RWY 4L
Figure 1-3. BOS Radar Tracks Reassigned to RNAV (GPS) RWY 4L into Runway 4L.
Figure 1-4, BOS Procedure RNAV (GPS) RWY 4R

BOS Noise Screening Analysis Report *For Official Internal Use Only*

This Noise Screening Report was prepared by the FAA to assess noise exposure from the proposed project under consideration. Even though the data and results contained in the report are accurate, the report is a preliminary document, potentially subject to revision, until the FAA makes a final environmental decision related to the proposed project.
2. Methodology

Noise screening was completed using the TARGETS AEDT Environmental Plug-in tool to calculate Day-Night Average Sound Levels (DNL) from existing operations (baseline) and modeled operations to replicate the proposed action (alternative). Historic radar track data for BOS was obtained from the FAA’s National Offload Program (NOP)\(^1\) after concurrence of the dates to be used by the environmental specialist and air traffic facility. Twenty eight days of radar track data were selected for the BOS analysis representing a range of temperature and wind conditions\(^2\) as well as being representative of the average runway usage. After the removal of overflights, incomplete track segments, and other irrelevant and/or unusable tracks, 23,803 tracks were used for the analysis.

The dates selected for this project were the following:

- April 16-22, 2016
- July 9-15, 2016
- October 17-23, 2016
- January 15-21, 2017

These dates represent average traffic counts and traffic flows through various seasons and peak travel times for BOS. There were no significant runway outages or significant conditions that would otherwise result in abnormal traffic counts or traffic flows. In order to calculate the accurate AAD parameter, traffic counts for average daily departures and arrivals used for annualization in this analysis were obtained through the FAA’s Traffic Flow Management System Counts (TFMSC) database.

Historical radar track data (Figures 2-1 and 2-2) was used to create a baseline noise exposure, which provides lateral path definition, aircraft fleet mix, departure/arrival stream proportions for each runway, and day/night traffic ratios. A legend (Table 2-1) shows, by color, the altitudes of the track data.

After the baseline scenario was built, aircraft operations assigned to the proposed procedure were modeled as flying the proposed procedure instead of their historical tracks, which provides the alternative scenario. The historical tracks were used in order to predict the lateral spread on the final approach into the airport.

The assumptions provided by the facility for procedure usage were as follows:

1) RNAV Equipped aircraft only would be flying both approaches
2) The non-RNAV equipped aircraft that had historically been landing on 4L and 4R will instead be directed to RWY 27 or RWY 33L.
3) The RNAV (GPS) RWY 4R procedure was described to be used as overflow and no information could be provided how often flights from the 4L approach would be put onto the 4R “overflow.” Because of this lack of information, the decision was made to model all the flights on the 4L approach as the conservative situation.

---

\(^1\) All traffic data was obtained using the Boston Center (ZBW) as the radar source facility.

\(^2\) Historic weather data was obtained from weather underground (http://www.weatherunderground.com).

BOS Noise Screening Analysis Report *For Official Internal Use Only*

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The analysis does not take into account terrain. All calculations were based on "above field elevation" (AFE) using the airport's reference elevation. The altitude controls of the RNAV procedures were used to adjust the vertical profile for each modeled aircraft flying the proposed procedure. When a range of altitudes was given for a particular waypoint, the lowest point of the range was used in order to model the most conservative environmental case. The TARGETS Environmental Plug-in uses 0.5 nautical mile dispersion on either side of the centerline of an RNAV procedure and 0.3 nautical mile dispersion on either side of the centerline of an RNP procedure in the case where no historical data is available.

Once the baseline and alternative scenarios were built, the TARGETS Environmental Plug-in Tool was used to generate noise outputs for both scenarios. The Environmental Plug-in Tool uses the Aviation Environmental Design Tool version 2c (AEDT 2c) to calculate noise. The noise output files from AEDT 2c for both the baseline and alternative noise exposures consist of a series of equally spaced grid points, each showing the DNL value. The noise grid (receptor set) is a grid extending around the areas of procedure change with grid points (receptors) spaced 0.25 nautical miles (n.m.) apart. The noise results of the baseline and alternative scenarios were then compared to test for noise impacts.

The noise impact is a comparison between the baseline and the alternative noise exposure that depicts reportable and significant noise changes at all affected locations per the criteria indicated in FAA Order 1050.1F and Chapter 32 of FAA Order 7400.2K. The reportable and significant noise increases and decreases (if any) are then depicted on an aerial photograph using Google Earth as well as on a sectional chart.
Figure 2-1, Baseline Arrival Traffic

Figure 2-2, Baseline Departure Traffic

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### Track Data Legend with Field Elevation

**Airport:** BOS  
**Field Elevation In Feet:** 19.6

<table>
<thead>
<tr>
<th>AGL Altitudes</th>
<th>MSL Altitudes</th>
<th>Legend Colors</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td><strong>Above</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Baseline Scenario

The baseline noise exposure is shown in Figure 3-1, which depicts the levels and locations of the noise produced by the historical radar track data for arrivals and departures. Table 3-1 is the legend for the baseline noise exposure figures.

![Figure 3-1, Baseline Noise Exposure in TARGETS](image)

Table 3-1, Legend for Noise Exposure

<table>
<thead>
<tr>
<th>GEOMETRIC SHAPE</th>
<th>COLOR</th>
<th>DNL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQUARE</td>
<td>PURPLE</td>
<td>45 dB OR LESS</td>
</tr>
<tr>
<td>SQUARE</td>
<td>BLUE</td>
<td>45–50 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>LIGHT BLUE</td>
<td>50–55 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>GREEN</td>
<td>55–60 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>YELLOW</td>
<td>60–65 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>ORANGE</td>
<td>65–70 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>PINK</td>
<td>70–75 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>RED</td>
<td>75 dB OR MORE</td>
</tr>
</tbody>
</table>

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4. Alternative Noise Exposure

The alternative noise exposure is shown next to the baseline noise exposure for comparison in Figure 4-1, which depicts the levels and locations of the noise exposure output from the model of the proposed action. Table 4-1 is the legend for the alternative noise exposure figures.

![Figure 4-1, Alternative Noise Exposure for the Proposed Procedures in TARGETS](image)

<table>
<thead>
<tr>
<th>GEOMETRIC SHAPE</th>
<th>COLOR</th>
<th>DNL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQUARE</td>
<td>PURPLE</td>
<td>45 dB OR LESS</td>
</tr>
<tr>
<td>SQUARE</td>
<td>BLUE</td>
<td>45–50 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>LIGHT BLUE</td>
<td>50–55 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>GREEN</td>
<td>55–60 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>YELLOW</td>
<td>60–65 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>ORANGE</td>
<td>65–70 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>PINK</td>
<td>70–75 dB</td>
</tr>
<tr>
<td>SQUARE</td>
<td>RED</td>
<td>75 dB OR MORE</td>
</tr>
</tbody>
</table>

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5. Comparison of Baseline Scenario and Alternative Scenario

A comparison of the baseline and alternative scenarios by the TARGETS AEDT Environmental plug-in determines the noise impacts of the proposed alternative. Significance of noise impacts is defined by FAA Order 1050.1F\textsuperscript{3} which establishes the threshold for and significant increases in noise exposure. Where the proposed action results in a noise impact, the TARGETS AEDT Environmental Plug-in generates a graphic noise impact map that indicates the locations of reportable and significant changes. These impacts are shown below (Figure 5-1) and is also shown overlaying a google earth map view of the area surrounding the airport. (Figure 5-2) Table 5-1 shows the legend for the noise exposure map.

Table 5-1, Legend for Noise Impact

<table>
<thead>
<tr>
<th>GEOMETRIC SHAPE</th>
<th>COLOR</th>
<th>DNL DIFFERENCE</th>
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</thead>
<tbody>
<tr>
<td>SQUARE</td>
<td>PURPLE</td>
<td>60 dB OR LESS WITH A DECREASE OF 5.0 dB OR GREATER</td>
</tr>
<tr>
<td>SQUARE</td>
<td>BLUE</td>
<td>60-65 dB WITH A DECREASE OF 3.0 dB OR GREATER</td>
</tr>
<tr>
<td>SQUARE</td>
<td>GREEN</td>
<td>65 dB OR GREATER WITH A DECREASE OF 1.5 dB OR GREATER</td>
</tr>
<tr>
<td>SQUARE</td>
<td>RED</td>
<td>65 dB OR GREATER WITH AN INCREASE OF 1.5 dB OR GREATER</td>
</tr>
<tr>
<td>OVAL</td>
<td>ORANGE</td>
<td>60-65 dB WITH AN INCREASE OF 3.0 dB OR GREATER</td>
</tr>
<tr>
<td>OVAL</td>
<td>YELLOW</td>
<td>60 dB OR LESS WITH AN INCREASE OF 5.0 dB OR GREATER</td>
</tr>
</tbody>
</table>

\textsuperscript{3} According to Exhibit 4-1 of FAA Order 10501F, Environmental Impacts: Policies and Procedures, a noise impact is significant if “The action would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe”

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Figure 5-1. Noise Comparison
Figure 5-2, Noise Comparison on Google Earth
NOISE IMPACT COMPARISON FOR BOSTON INTERNATIONAL AIRPORT

The figures below provide supplemental screenings for the TARGETS Noise Screening Report provided for Boston International on Friday, February 24, 2017. Figure 1 shows the noise impacts results from the original analysis provided as a reference. Figure 2 provides an alternative where 50% of the traffic that historically approached Runway 4R were moved to the RNAV (GPS) RWY 4R Amended RNAV (GPS) Approach (with sidestep to land on 4L). Figure 3 provides an alternative where 75% of traffic that historically approached 4R were moved the Amended RNAV approach.

Figure 1 - Original results from previously provided noise screen.
Figure 2 – 50% of tracks moved to Amended 4R approach (total 2,046 tracks moved)
Figure 3 – 75% of tracks moved to Amended 4R approach (total of 3,069 tracks moved)
Attachment 3

Proposed Action Flight Tracks
Figure 1: Flight Track Overlay RWY4L
24 hour track data compiled for RWY 4L & 4R from January 2, 2017
Overlay of proposed RNAV (GPS) RWY 4L
Figure 2: Flight Track Overlay RWY4R Amendment

24 hour track data compiled for RWY 4L & 4R from January 2, 2017
Overlay of RNAV (GPS) RWY 4R and estimated path of sidestep maneuver to RWY4L
Attachment 4

Proposed Action Environmental Justice Impacts
1. FAA JANUARY 9, 2020 RUNWAY 4L ENVIRONMENTAL ASSESSMENT SLIDES

2. FAA ANSWERS TO TD’S WRITTEN QUESTIONS PRESENTED TO FAA REGIONAL ADMINISTRATOR JANUARY 9, 2020

3. FAA INITIAL ENVIRONMENTAL REVIEW SUMMARY DATED MARCH 20, 2017

4. FAA ATTACHMENTS PROVIDED TO TD ON FEBRUARY 3, 2020
   (1) FLIGHT STANDARDS
   (2) NOISE MODELING REPORT
   (3) RNAV (GPS) 4L AND 4R FLIGHT TRACKS
   (4) PROPOSED ACTION ENVIRONMENTAL JUSTICE

5. CSDA DESIGN GROUP EXCERPT

6. MIT GEAR-DOWN FAF AND NOISE SLIDES

7. 4L RNAV EA WORKING GROUP
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5. CSDA DESIGN GROUP EXCERPT

6. MIT GEAR-DOWN FAF AND NOISE SLIDES

7. 4L RNAV EA WORKING GROUP
Delayed Deceleration Approaches

Velocity Radar Data for B737-800 4000ft Level Offs into 4R

- Reduce noise by delaying extension of flaps
- Potential concerns from ATC and pilots regarding different deceleration rates and managing traffic
- Must decelerate early enough to assure stable approach criteria

Example Noise Component Breakdown Under the Flight Track
Landing Gear accounts for about 40% of the total noise emissions of long range aircraft in approach conditions

Landing gear are required to be in lowered position at the FAF (final approach fix) which for 4L and 4R is the MILTT fix located at the Granite Ave entrance to the Expressway heading north. MILTT is 5.1 nm from 4L/4R.

Yet, aircraft landing gear are often lowered well before MILTT. We see it as flights pass overhead. This is an operational issue that airlines and pilots could address. Lowered landing gear increase fuel burn, so associated operational cost savings to airlines would accrue if early gear lowering were avoided or reduced. Right-time-landing-gear-lowering should be an element of any fly quiet initiative. See the short discussion excerpt and graphics below:

Source: Airbus Engineering 2015 White Paper Published by American Institute of Aeronautics and Astronautics

Landing Gear accounts for about 40% of the total noise emissions of long range aircraft in approach conditions

EU's ACARE (Advisory Council for Aviation Research in Europe) is aiming to reduce noise emission of flying aircraft by 65% in 2050 relative to the capabilities of typical new aircraft in 2000.

In terms of noise impact for the residential areas surrounding airports, takeoff and landing are the most critical phases of the flight. While noise emissions at takeoff are mainly dominated by engines, contributions of all other noise sources are evenly balanced during landing. For a typical long-range airplane during the approach phase, around 54% of the noise stems from the
airframe. Out of these 54%, 76% originate from the landing gear alone (see Figure 2 and Figure 3).

![Figure 2 - Contribution to the overall noise emission of a typical long-range jet airplane during the landing phase](image)

![Figure 3 - Decomposition of airframe noise of a typical long-range jet airplane during the landing phase](image)

In total, the landing gear accounts for about 40% of the total noise emissions of a long-range airplane in approach conditions.
1. FAA JANUARY 9, 2020 RUNWAY 4L ENVIRONMENTAL ASSESSMENT SLIDES

2. FAA ANSWERS TO TD’S WRITTEN QUESTIONS PRESENTED TO FAA REGIONAL ADMINISTRATOR JANUARY 9, 2020

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5. CSDA DESIGN GROUP EXCERPT

6. MIT GEAR-DOWN FAF AND NOISE SLIDES

7. 4L RNAV EA WORKING GROUP
STATEMENT OF THE CHAIR AND THE VICE CHAIR OF THE SELECT BOARD
ABOUT THE ICE HOUSE DEVELOPMENT

As announced during the Select Board’s public meeting on January 22, and as authorized
by the Select Board, we, along with other Town officials, met with the developer of the Ice
House property on January 23.

It was a frank and fruitful discussion. The result was that the developer has agreed to
revise its plans for the Ice House property to accomplish three goals:

1. A design that is more appropriate given the physical form of the neighborhood
   and the character of the Blue Hills Parkway area;

2. A small-footprint store/coffee shop that would bring some basic amenities to
   the neighborhood; and

3. Reconsideration of the proposed density.

The developer anticipates that these revisions may take two to three months.

We appreciate the developer’s willingness to engage and to consider the needs of the
neighborhood and the Town, and we look forward to continuing to work together for a mutually
beneficial project.

Mike Zullas and Melinda Collins