Memorandum

To: Sean Scanlon, Tweed Airport **Date:** March 24, 2021

From: Ron Gautreau, FHI Studio

Subject: **Tweed Airport Master Plan Update**
Technical Advisory Committee Meeting #4
Summary of March 8, 2021 Meeting

The fourth, and final, Technical Advisory Committee (TAC) meeting for the Tweed New Haven Airport (HVN) Airport Master Plan Update (APMU) was conducted from 5:00 PM to 6:00 PM on March 8, 2021. The meeting was held virtually due to COVID-19. The TAC meeting was attended by 10 TAC members along with several members of the project team and HVN staff.

Jeff Wood, with McFarland Johnson (MJ), welcomed the TAC members, and Sean Scanlon, Executive Director of HVN, also provided a brief greeting. Mr. Wood went over the general organization of the virtual meeting and the agenda for the evening that included the master plan process, key issues and goals, recommended alternatives for the Airport Layout Plan (ALP), noise, and next steps. Questions and discussion with TAC members followed the presentation. The presentation is attached.

Mr. Wood presented the status of the master plan process. He then introduced the key issues and goals: 1) Runway 2-20 length, 2) terminal area improvements, and 3) future of Runway 14-32. The recommended runway and taxiway preferred alternative and recommended terminal alternative was presented followed by the recommended general aviation alternative and landside alternatives. An overview of the ALP sheet set was then discussed. Mr. Wood presented the existing and proposed obstruction overview.

Ms. Kate Larson (HMMH) then provided a discussion on noise including the day/night average (DNL) model, aircraft noise modeling, modeled runway use, and existing and proposed DNL noise contours. Mr. Wood presented the next steps, including the National Environmental Policy Act (NEPA) process that will commence after the AMPU has been completed. Lastly, Mr. Wood discussed how comments and questions on the AMPU can be submitted and that the presentation can be viewed on the AMPU website.

TAC members were invited to ask questions or share comments related to the presentation. Only one question was posed by a TAC member.

- A member of the TAC requested to see the slide on traffic and commented that more traffic could be anticipated going through industrial zones in East Haven if the terminal is relocated to the east side. Mr. Wood responded that the existing traffic weaves through residential areas and the proposed terminal location will result in traffic being shifted to roadways serving industrial areas (e.g., Hemmingway Avenue).

Mr. Wood finished by saying that the public meeting is on Wednesday, March 10th and the team looks forward to engaging with the TAC members on future steps.

Attendees:

- Sean Scanlon, HVN
- Jeremy Nielson, HVN/Avports
- Felipe Suriel, HVN/Avports
- Lisa Lesperance, FAA

- Bob Bruno, Connecticut Airport Authority
- Evan Warren, Robinson Aviation
- Charles Skelton, Yale Aviation/CFI
- Don Relihan, Yale University
- Douglas Hausladen, City of New Haven Traffic & Parking
- John Olson, Midwest Air Traffic Control Services
- Johnson Chang-Fong, Technical Representative Avports Engineering
- Andrew King, Avports
- Rasmus Agerskov, Avports
- Don Relihan, Director of Support Services - Yale University
- Eliot Jameson, Tweed-New Haven Airport Authority (TNHAA) Volunteer
- 1-2**-***-**20
- Jeff Wood, MJ
- Laura Canham, MJ
- Steve Bourque, MJ
- Kate Larson, HMMH
- Dominic Scarano, HMMH
- Laurel Stegina, FHI Studio
- Ron Gautreau, FHI Studio

MASTER PLAN UPDATE

Tweed-New Haven Airport Authority

Advisory Committee Meeting Mar. 8, 2021

McFarland Johnson

Logistics

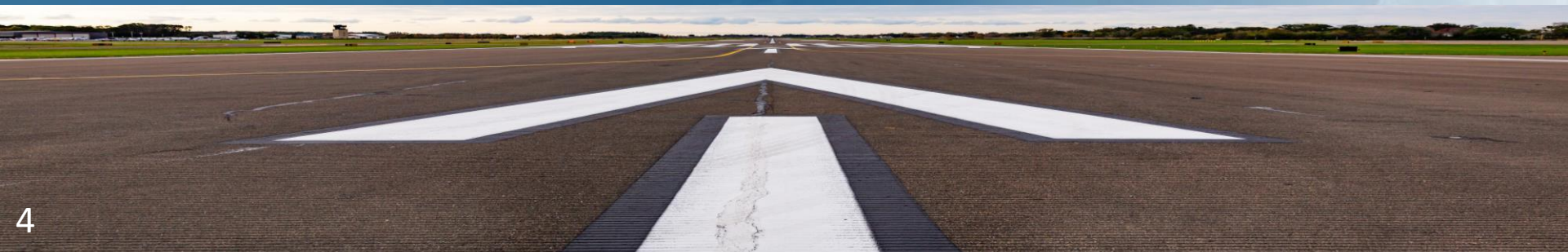
- Meeting recording
- Please mute your microphone
- Sign-in sheet - please send a chat with:
  - Name
  - Affiliation
  - Email address
- Questions will be addressed at the end
  - Send a chat any time during the presentation
  - Open mic Q&A at the Conclusion

Introductions

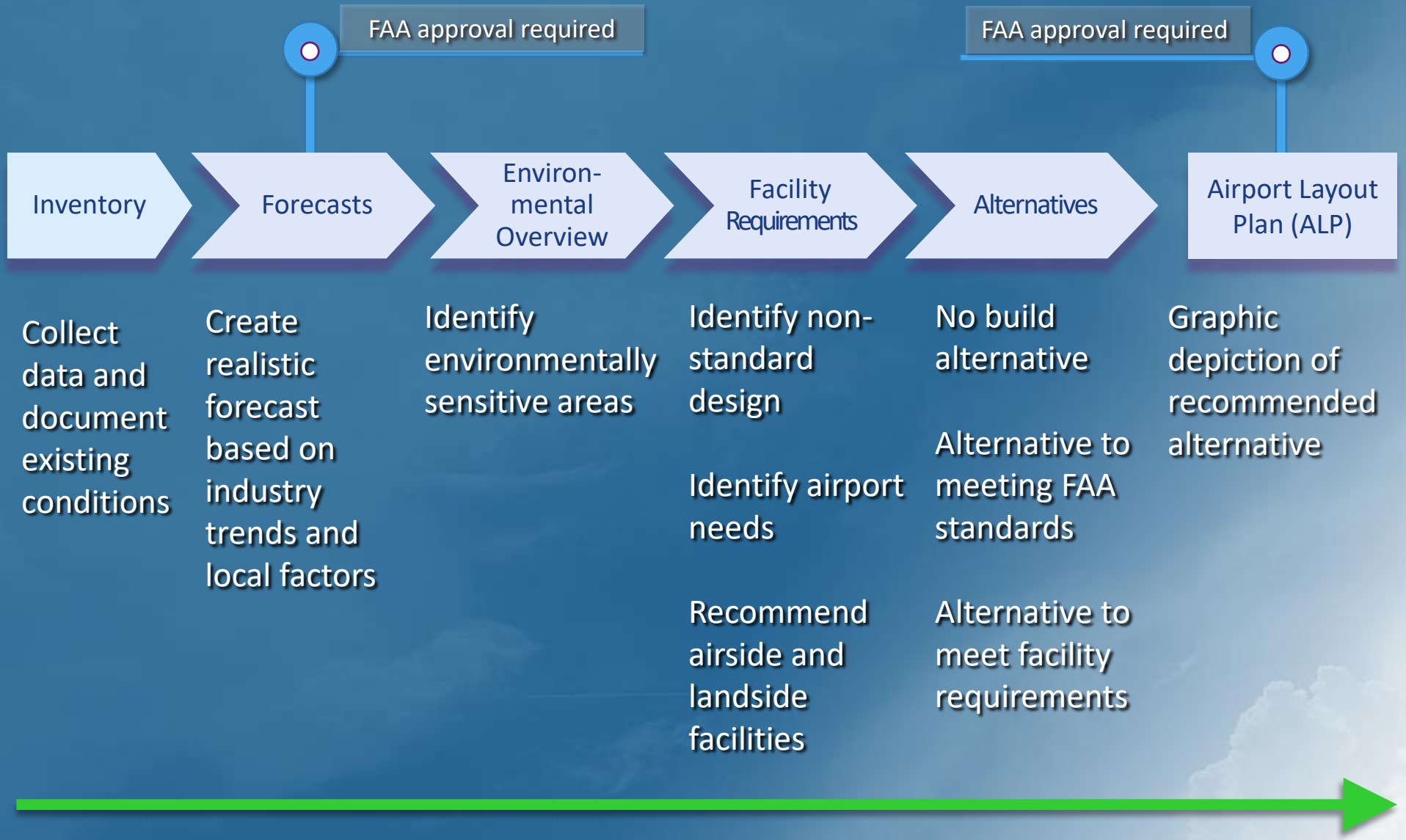
- Sean Scanlon, Executive Director
- Jeremy Nielson, Airport Manager
- Consulting Team:
  - McFarland Johnson
  - FHI Studio
  - ASM Americas
  - Harris Miller Miller & Hanson, Inc.
  - Woolpert
- Attendees

Agenda

- Introductions
- Master plan process
- Key issues and goals
- Recommended alternative for ALP
- Noise
- Next steps
- Conclusion/questions



Master Plan Process



McFarland Johnson

Key Issues and Goals

- (1) Runway 2-20 length
- (2) Terminal area improvements
- (3) Future of Runway 14-32
- Opportunities for economic sustainability
- Phasing and implementation plan
- Public engagement throughout
- Planning flexibility for future aviation

McFarland Johnson

Recommended Runway & Taxiway Alts

DECLARED DISTANCES		
	RUNWAY 2	RUNWAY 20
TORA	6,635'	6,635'
TODA	6,635'	6,635'
ASDA	6,235'	6,635'
LDA	6,000'	6,299'

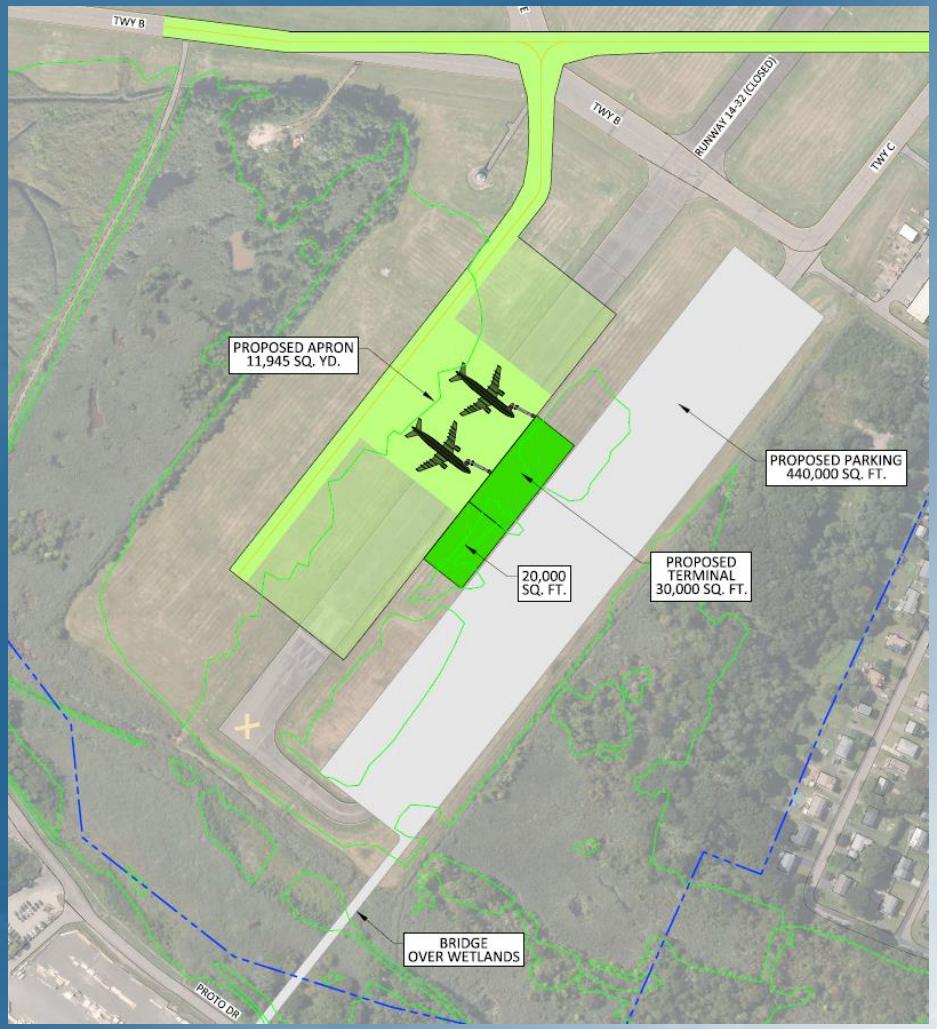
Runway Alternative With EMAS

- Meets facility requirements
- Meets FAA design and geometry standards
- Provides best flexibility for existing and future operations
- Balances safety, community, environmental, fiscal, regulatory, and operational

McFarland Johnson

Recommended Terminal Alternative

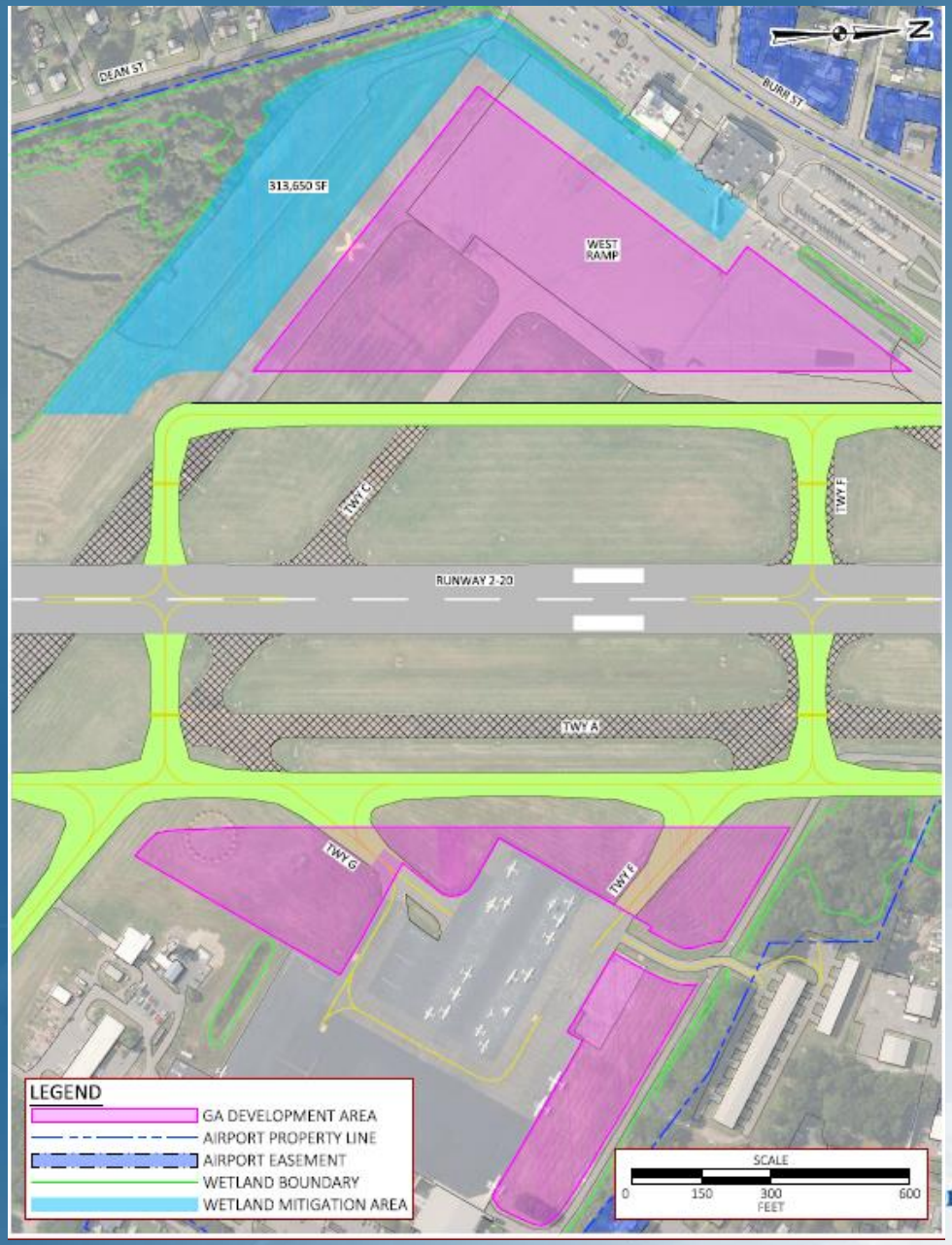
- Meets FAA design standards
- Meets Facility Requirements
- Provides high flexibility
- Improves roadway access
- Eliminates incompatible land uses
- Reduces runway/safety area crossings



McFarland Johnson

Recommended GA and Landside Alt.

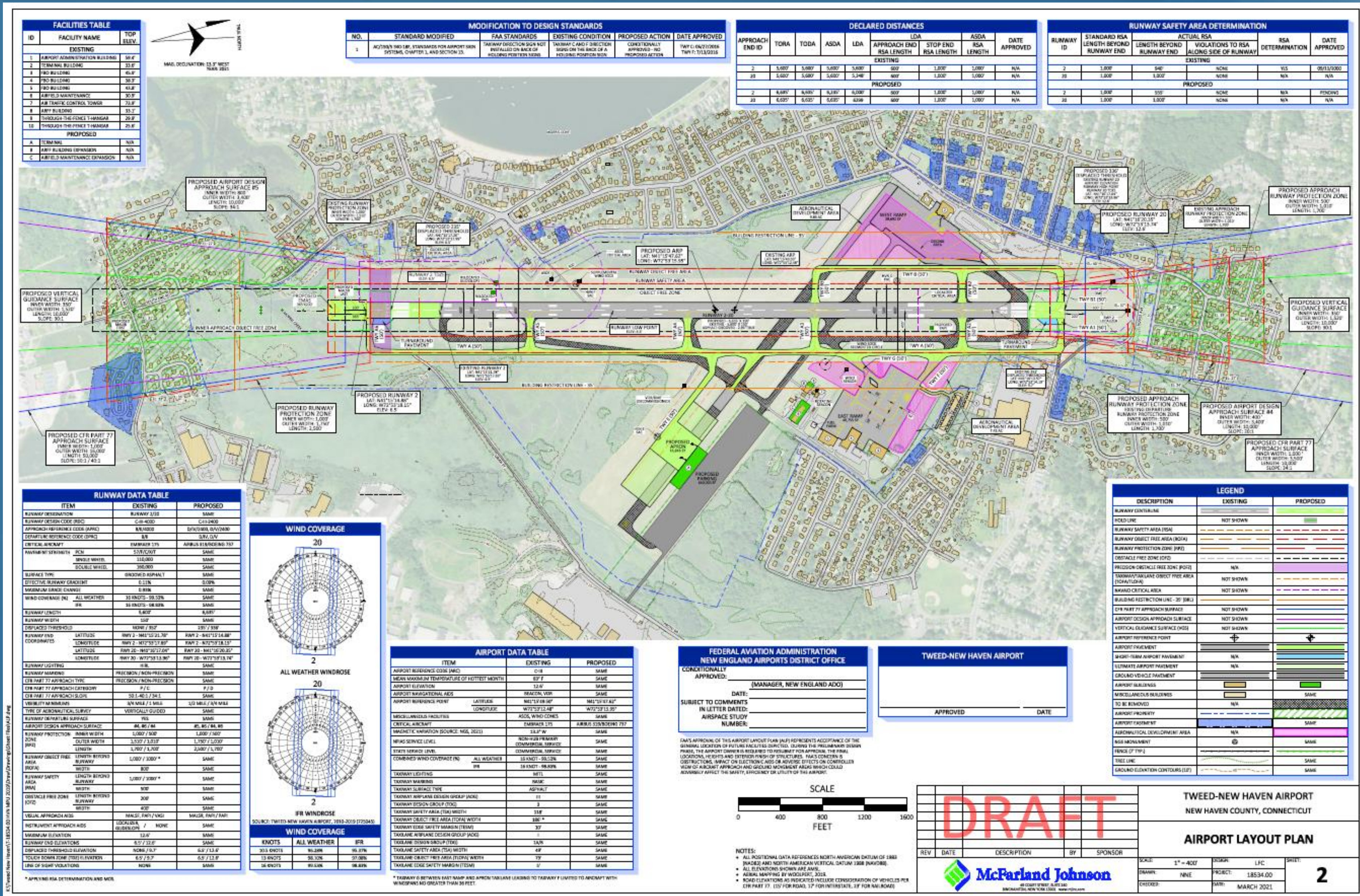
- Aeronautical/general aviation development areas
- Wetland mitigation opportunity
- Expansion of maintenance building
- Expansion of fire station building



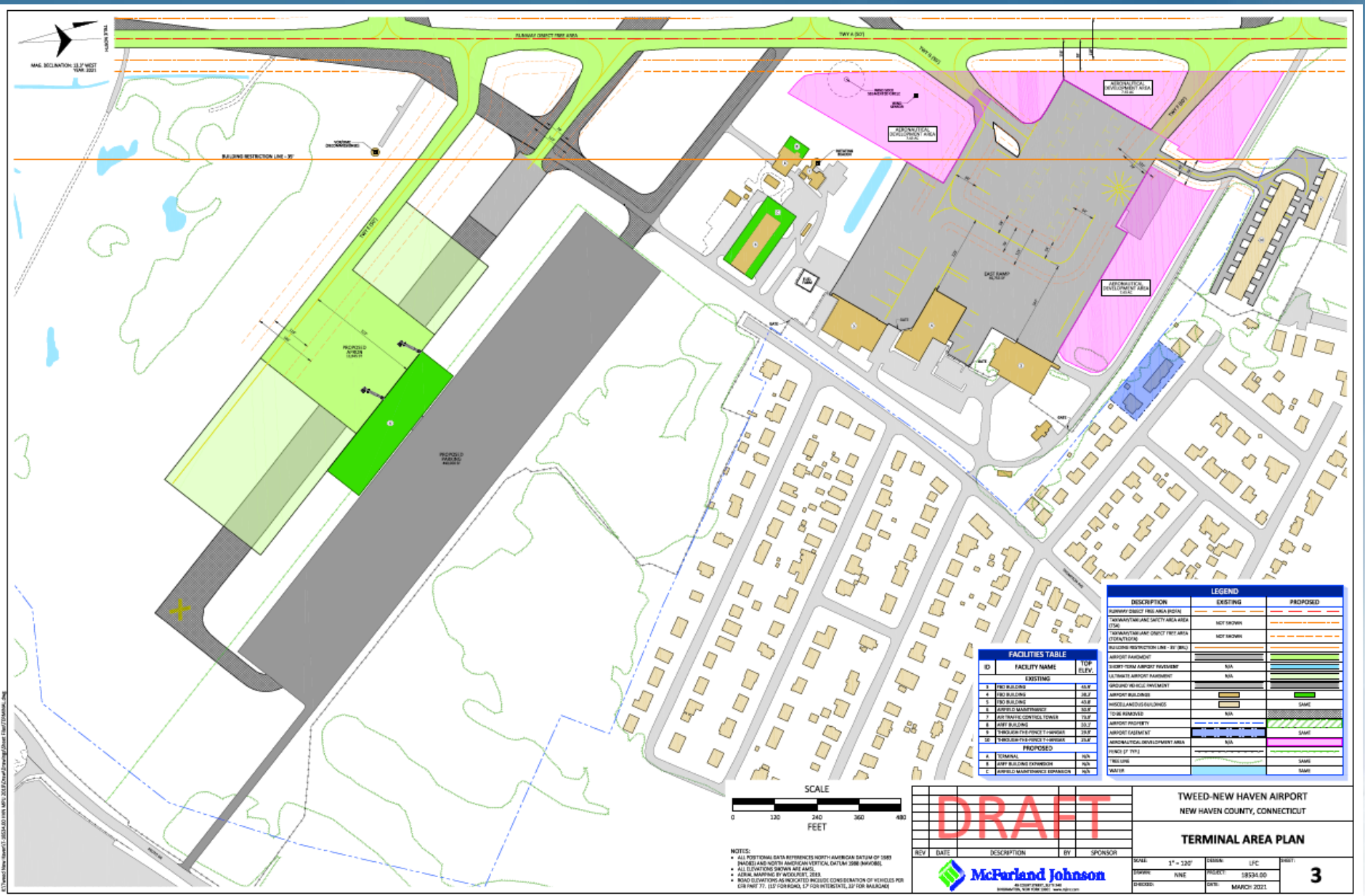
ALP Sheet Set

- Existing Airport Layout Plan
- **Proposed Airport Layout Plan**
- **Terminal Area Drawing**
- Airport Airspace Drawing
- Inner Portion of the Approach Surface Drawing
- Runway Departure Surfaces Drawings
- Land Use Plan
- Airport Property Map
- Airport Environmental Inventory Map

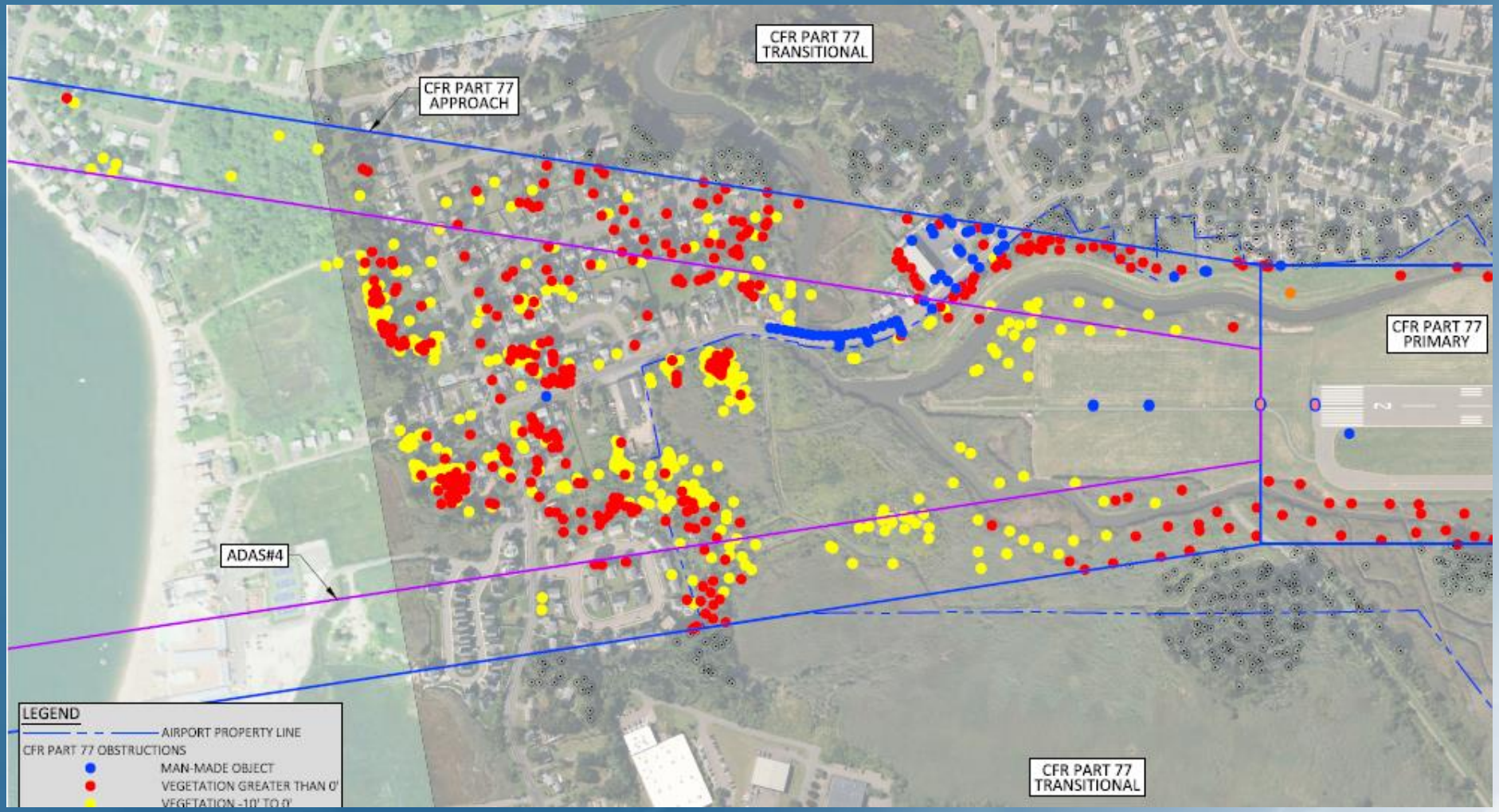
Future Airport Layout Plan



Terminal Area Plan

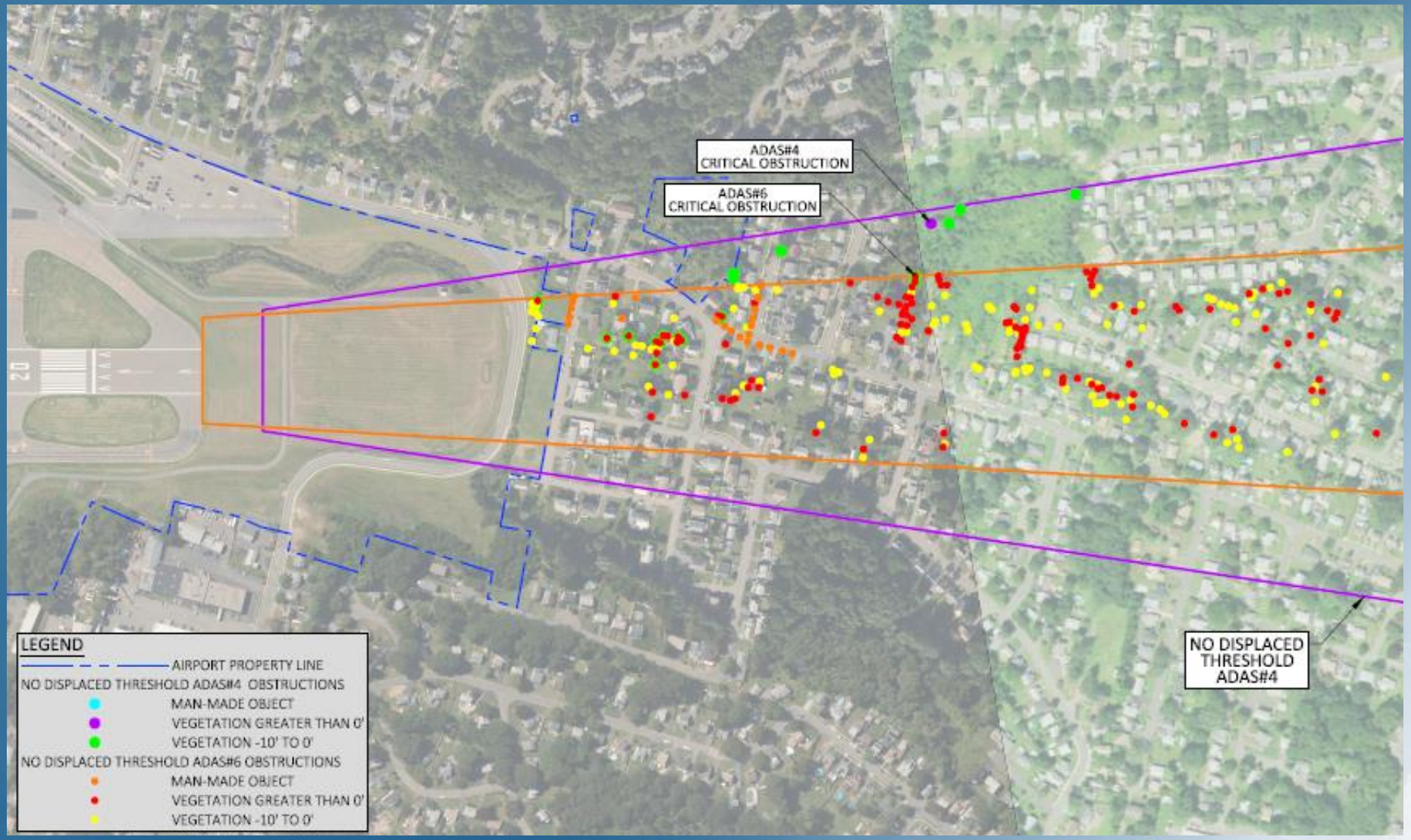


Obstruction Review – Existing RWY 2



McFarland Johnson

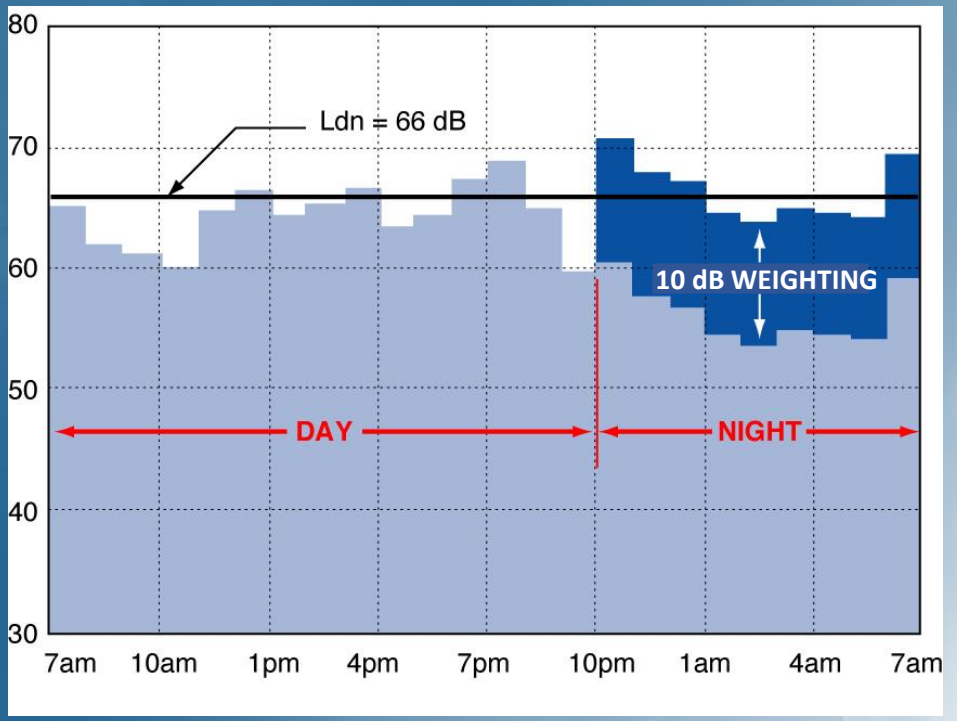
Obstruction Overview – Proposed RWY 20



McFarland Johnson

Cumulative Exposure: Day Night Average

- DNL – day night average
- Describes 24-hour exposure
- Noise from 10 pm to 7 am is factored up by 10 dB
  - Equal to 10-fold multiplier
- FAA requires annual average DNL for land use compatibility assessment

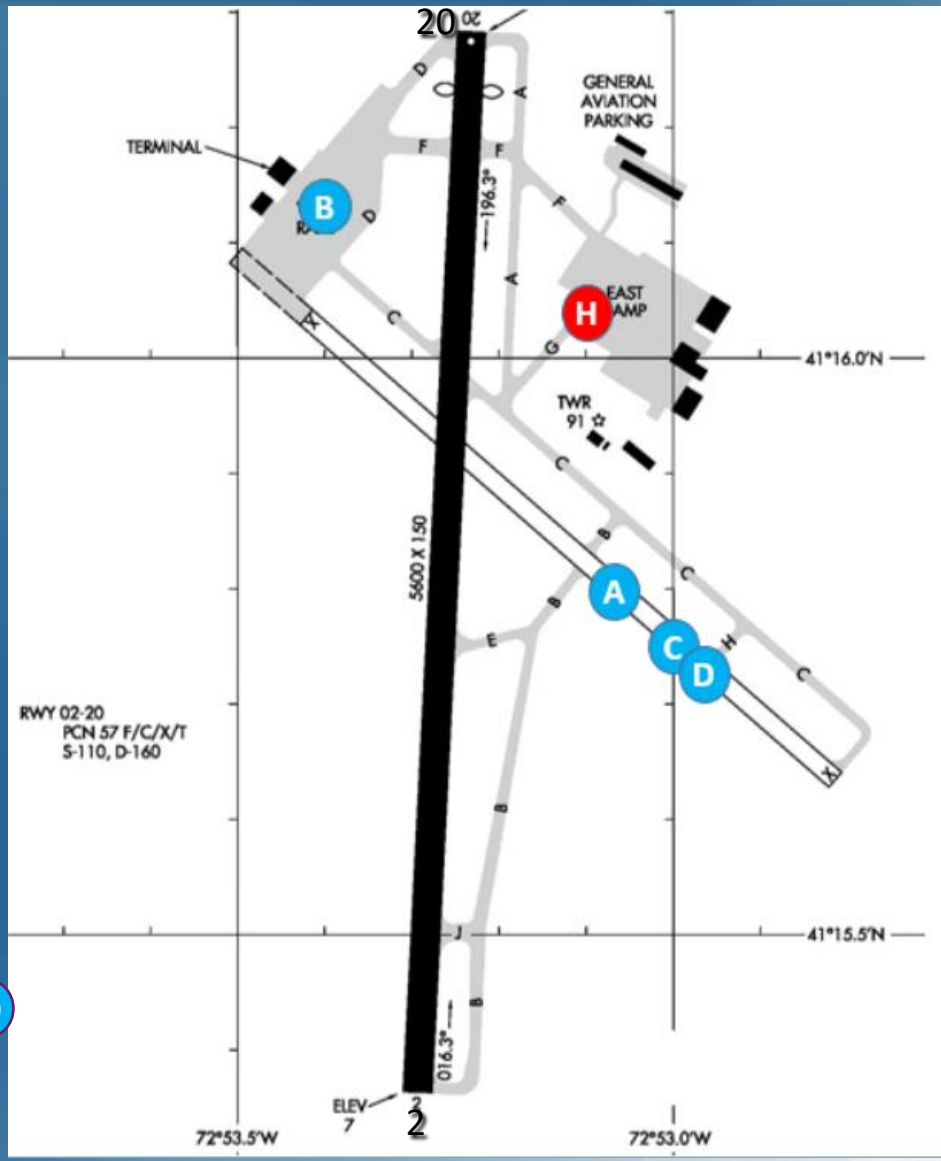


Aircraft Noise Modeling

- We must use FAA-approved model
  - FAA's Aviation Environmental Design Tool (AEDT)
- Required noise modeling inputs
  - Airport layout
  - Annual average meteorological data
  - Terrain
  - Aircraft operations by day/night for existing conditions and forecast 2040
  - Runway utilization rates by aircraft categories
  - Flight track geometry and use by aircraft categories

Airport Layout Plan Noise Model Inputs

- One runway
  - Runway 2/20
  - Extended 699‘ south and 336‘ north for Approved Forecast 2040
- Modeled helipad location H
- Modeled engine runup locations
  - Piston-engine aircraft A
  - Jets idling at terminal
    - Existing jet bridge location B
    - Future jet bridge locations C D

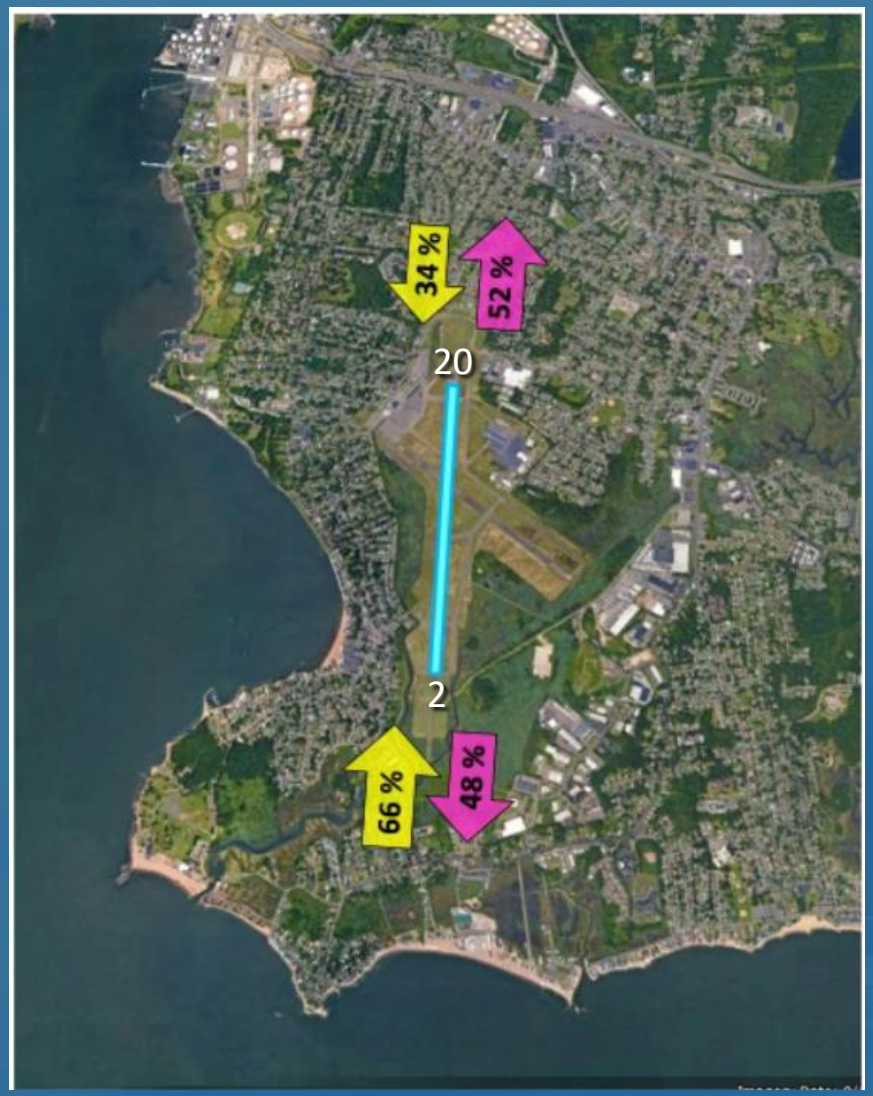


Modeled Aircraft Operations

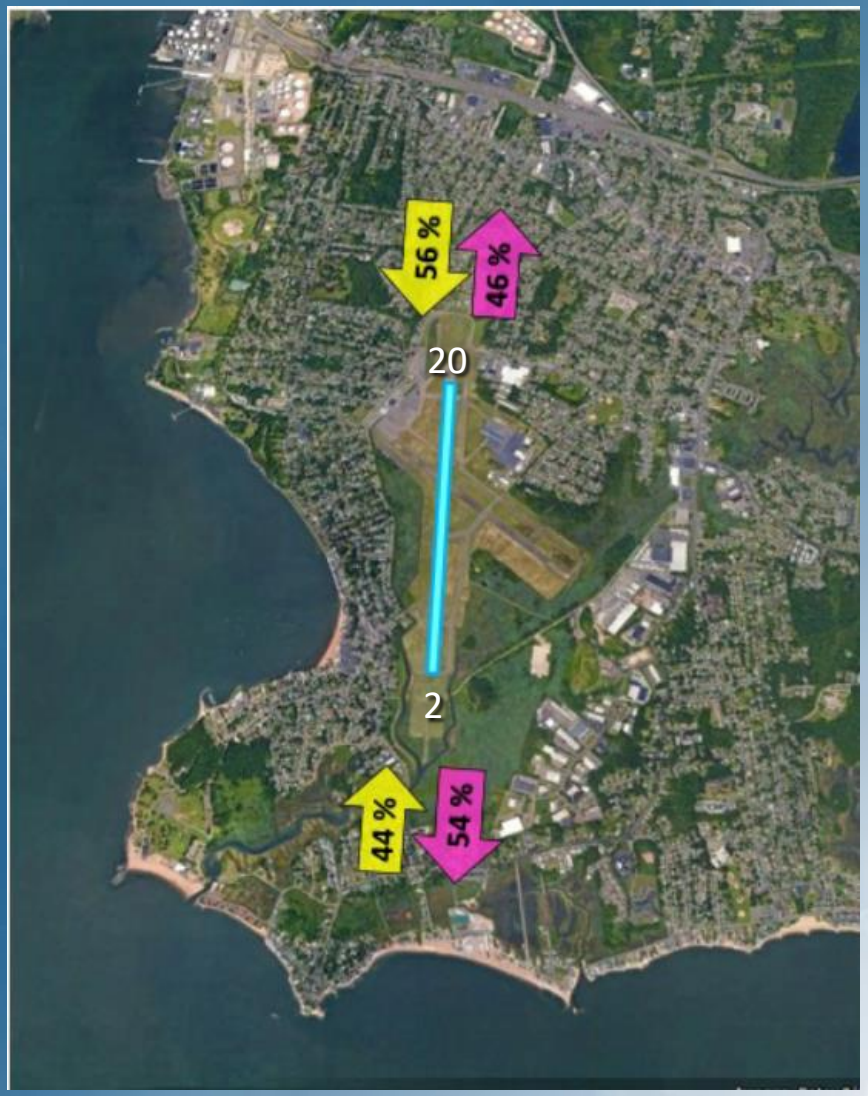
Annual Operations						
Scenario	**Air Carrier Size Jet**	**Small Jet**	**Turboprop**	**Piston**	**Helicopter**	**Total Operations**
Existing Conditions	2,908	5,064	1,863	15,227	157	**25,219**
Approved Forecast 2040	3,944	5,322	1,959	16,240	166	**27,631**
Annual Average Day Operations						
Scenario	**Air Carrier Size Jet**	**Small Jet**	**Turboprop**	**Piston**	**Helicopter**	**Total Operations**
Existing Conditions	8.0	13.9	5.1	41.7	0.4	**69.1**
Approved Forecast 2040	10.8	14.6	5.4	44.5	0.5	**75.7**

Scenario	Day	Night
Existing Conditions	94.0%	6.0%
Approved Forecast 2040	93.7%	6.3%

Modeled Runway Use

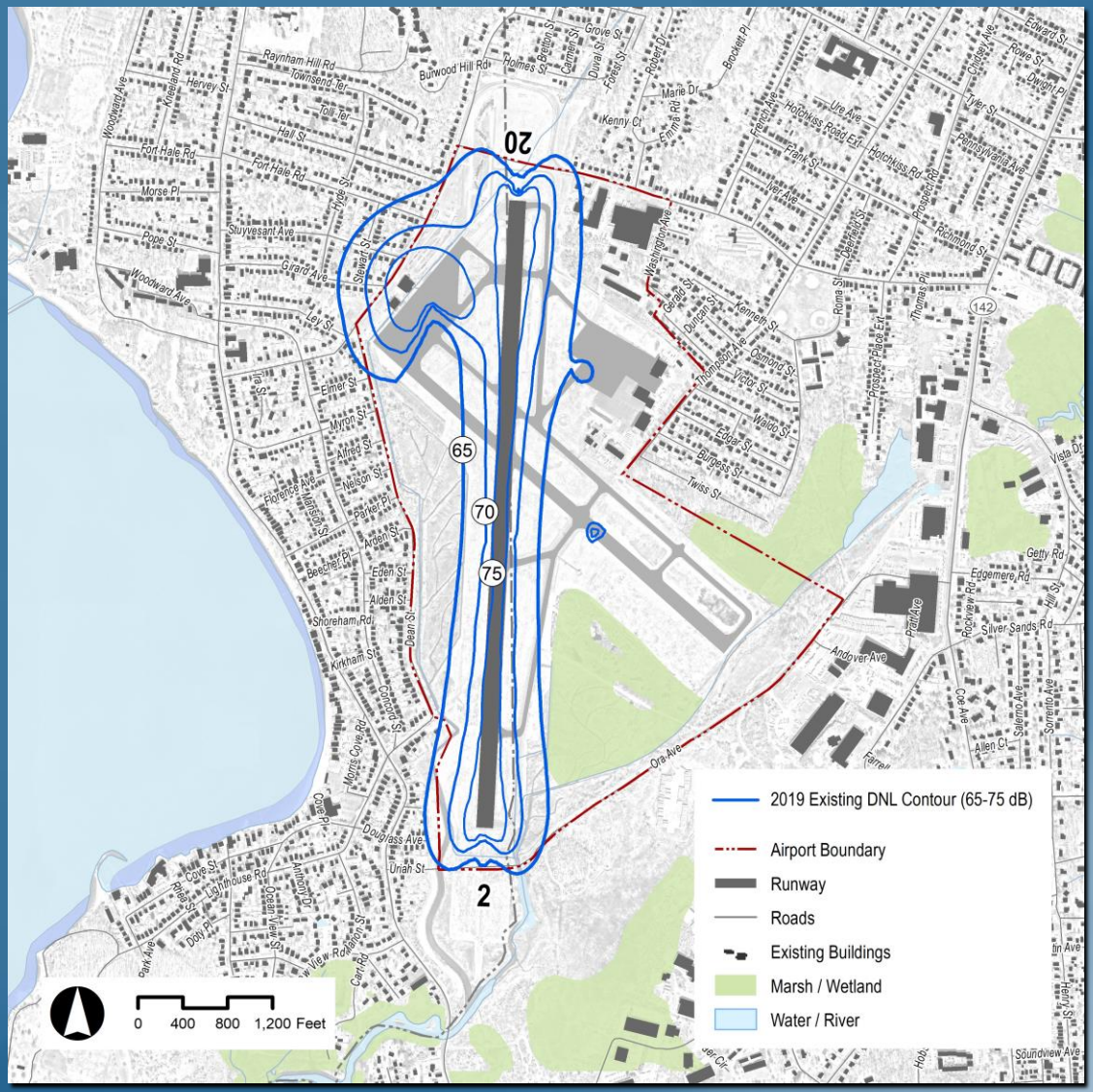


Jet Aircraft

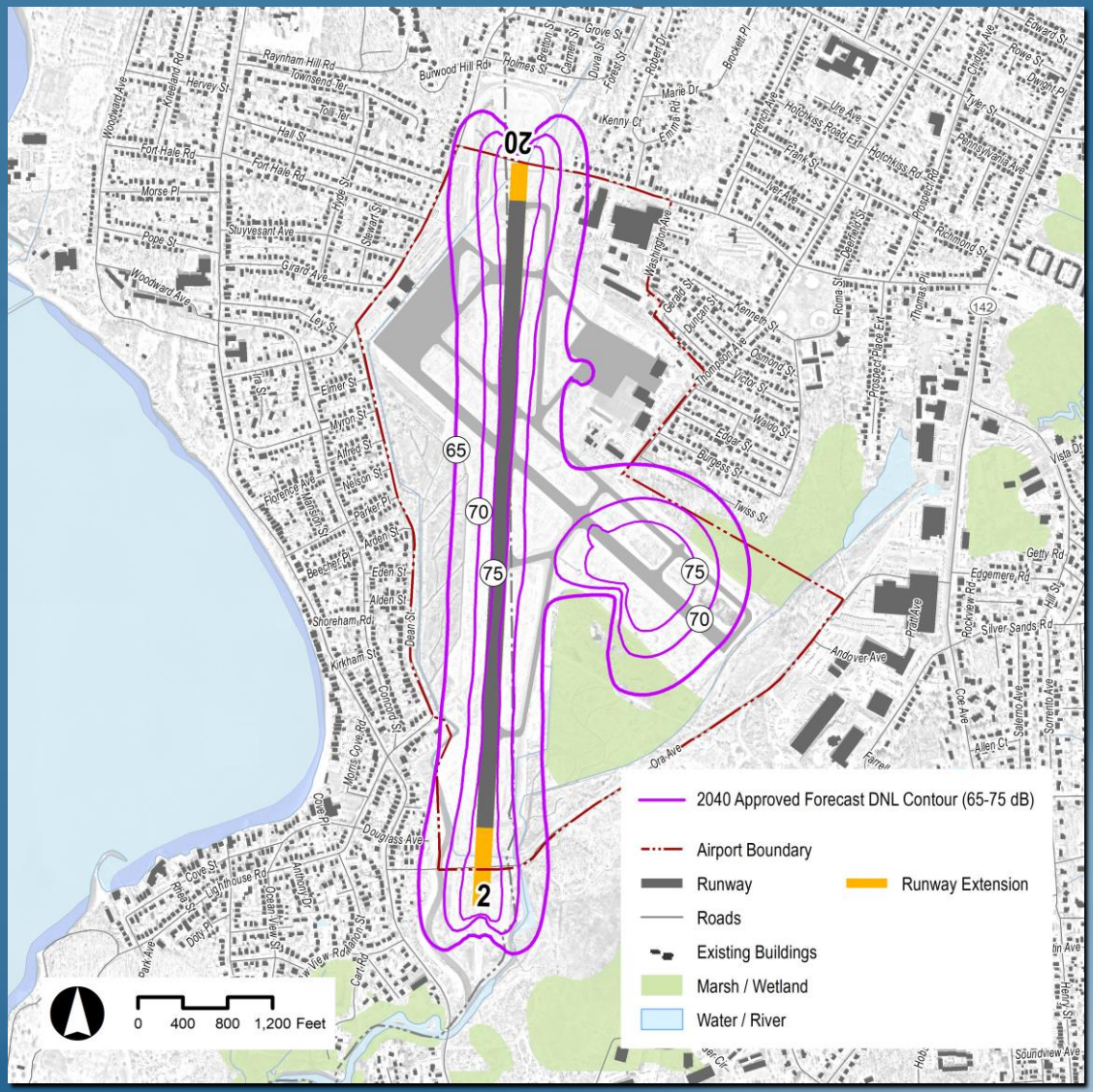


Non-Jet Aircraft

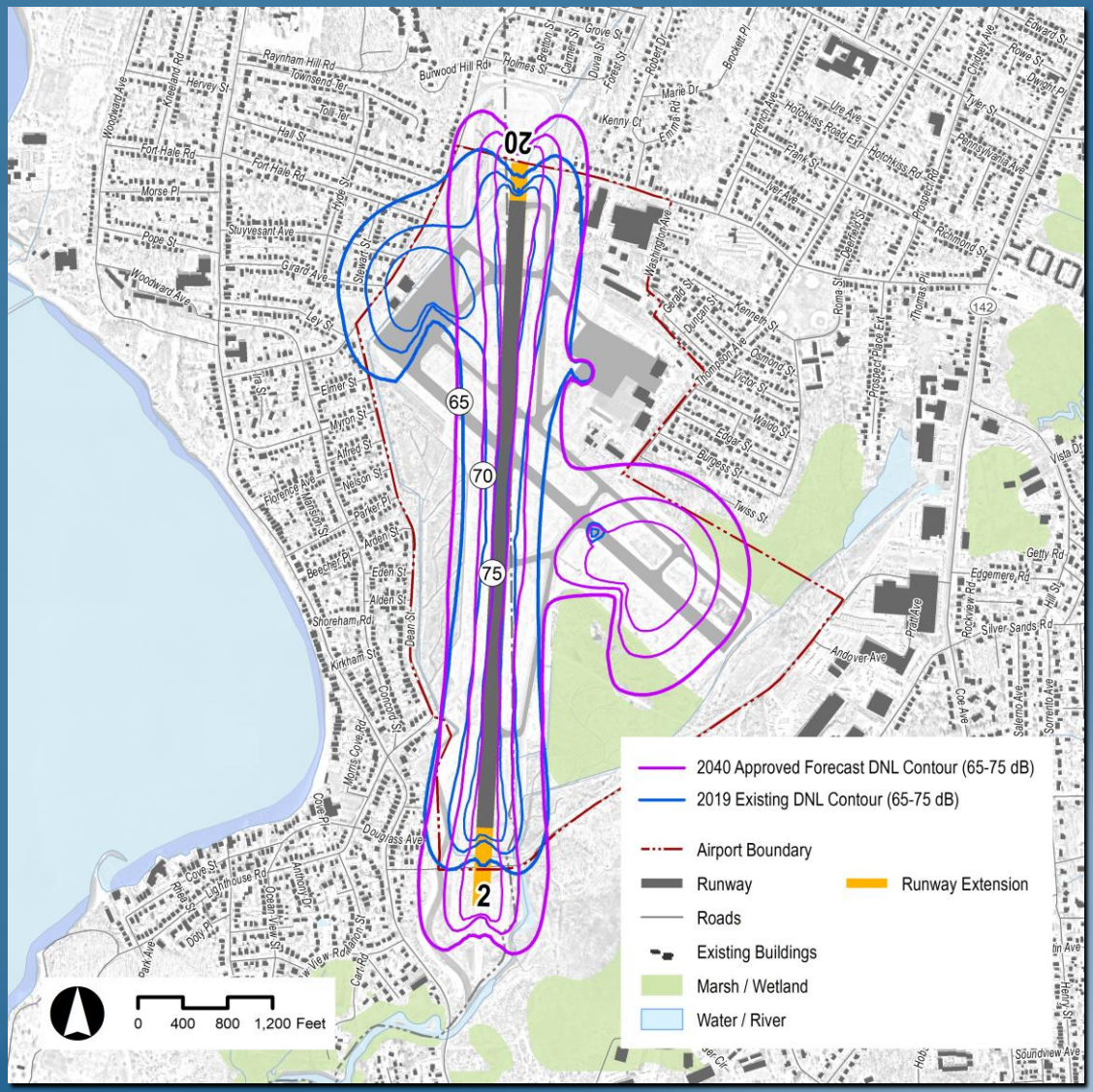
Noise Exposure – Existing Conditions



Noise Exposure – Approved Forecast 2040



Comparison of Existing & Forecast DNL



Next Steps

- Airport Layout Plan – FAA Approval
  - Projects must be shown on the ALP for funding eligibility
  - Approval of the ALP is conditioned upon National Environmental Policy Act (NEPA) completion
  - Design and construction is subject to funding availability
- Financial and implementation plan
- Master plan completion

After the Master Plan

- National Environmental Policy Act (NEPA) process
  - Project purpose and need is the foundation of NEPA documents
  - FAA will carefully review the purpose and need
- Continued public involvement
- Final design and permitting
- Begin implementation

Conclusion / Questions / Comments

- Master Plan Website: TweedMasterPlan.com

- Email: HVNMasterPlan@mjinc.com

McFarland Johnson