Welcome

BWI Rail Station Improvements and Fourth Track Project

Public Information Meeting

May 12, 2015

MTA Maryland

U.S. Department of Transportation
Federal Railroad Administration

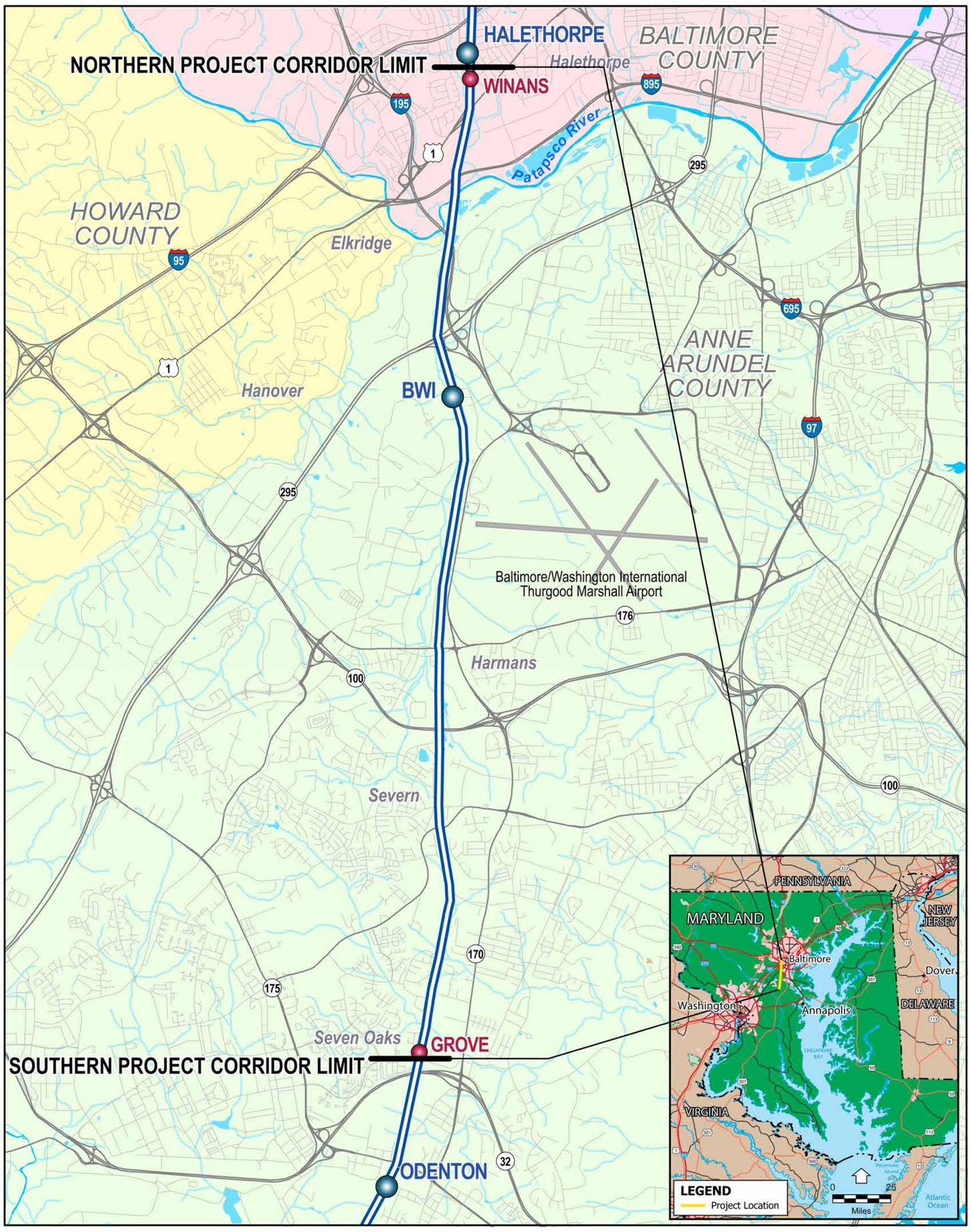
Meeting Purpose

- Review current plans for the proposed station and fourth track
- Ask questions of the study team on how the project would effect:
  - Noise Levels
  - Historic Resources (Section 106 Public Involvement Process)
  - Natural Resources
- Review the Environmental Assessment (EA) and provide comments

Project Need

- Improve reliability and on-time performance throughout the Northeast Corridor, the busiest passenger rail corridor in North America
  - 1,800 one-way trips each weekday
  - Serves Amtrak Regional, Acela Express, Commuter Trains (MARC), Freight Service
  - 84 Amtrak trains and 47 MARC trains/day between Odenton and Halethorpe
- Improve infrastructure and meet future demand
  - Part of planned improvements in the corridor including, MARC Growth and Investment Plan, and Northeast Corridor Infrastructure Master Plan
- Improve station building and facilities
  - 8th busiest station in Northeast Corridor
  - 110 stops daily between MARC and Amtrak
  - 13,600 Amtrak and 19,000 MARC daily passengers
- Legislative mandate to reduce trip times
  - 2008 Passenger Rail Investment and Improvement Act
  - Current: Washington, D.C. to New York City on Acela Express trip time is 2 hours and 52 minutes
  - 2023 Goal: 2 hours and 30 minutes
  - 2030 Goal: 2 hours and 15 minutes

Project Location



LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line

BWI Rail Station Improvements and Fourth Track Project

0 1.25 Mile

Project Study Area
(Grove Interlocking to Winans Interlocking)

- Nine miles of corridor from just south of Halethorpe MARC Station to just north of Odenton MARC Station, including BWI Station

- Communities in the project study area include:
  - Halethorpe
  - Elkridge
  - Patapsco
  - Hanover
  - Harmans
  - Severn
  - Fort Meade
  - Odenton

National Environmental Policy Act (NEPA)

The NEPA process includes:

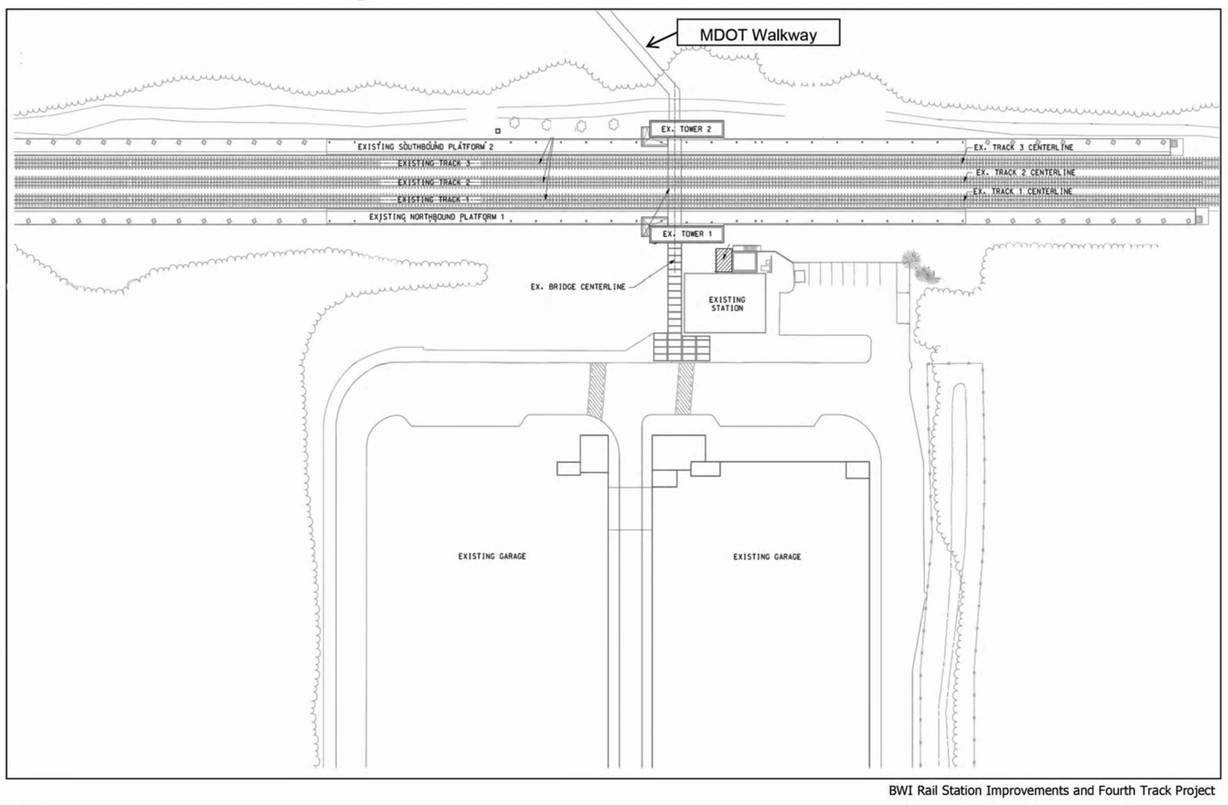
- Defining the purpose and need of the project
- Developing conceptual alternatives
- Holding a public open house to receive community comments (February 2011)
- Developing alternatives
- Conducting environmental inventory (survey of resources in the study area)
- Assessing environmental impacts (study potential impacts of each alternative)
- Presenting findings in a Draft EA (April 2015)
- Public comment period and public information meeting (May 2015)
- MTA inviting public and agency comment on EA and process
- Federal Railroad Administration (FRA) issues environmental decision, perhaps Finding of No Significant Impact (FONSI)
- Final design (if funded)
- Construction (if funded)

Project Features

- New fourth track on the Northeast Corridor between Halethorpe and Odenton
- New platform arrangement and an additional platform at BWI Station
- A replacement BWI Rail Station building

Build Alternative – New Station and Additional Platform

Existing



Not to scale

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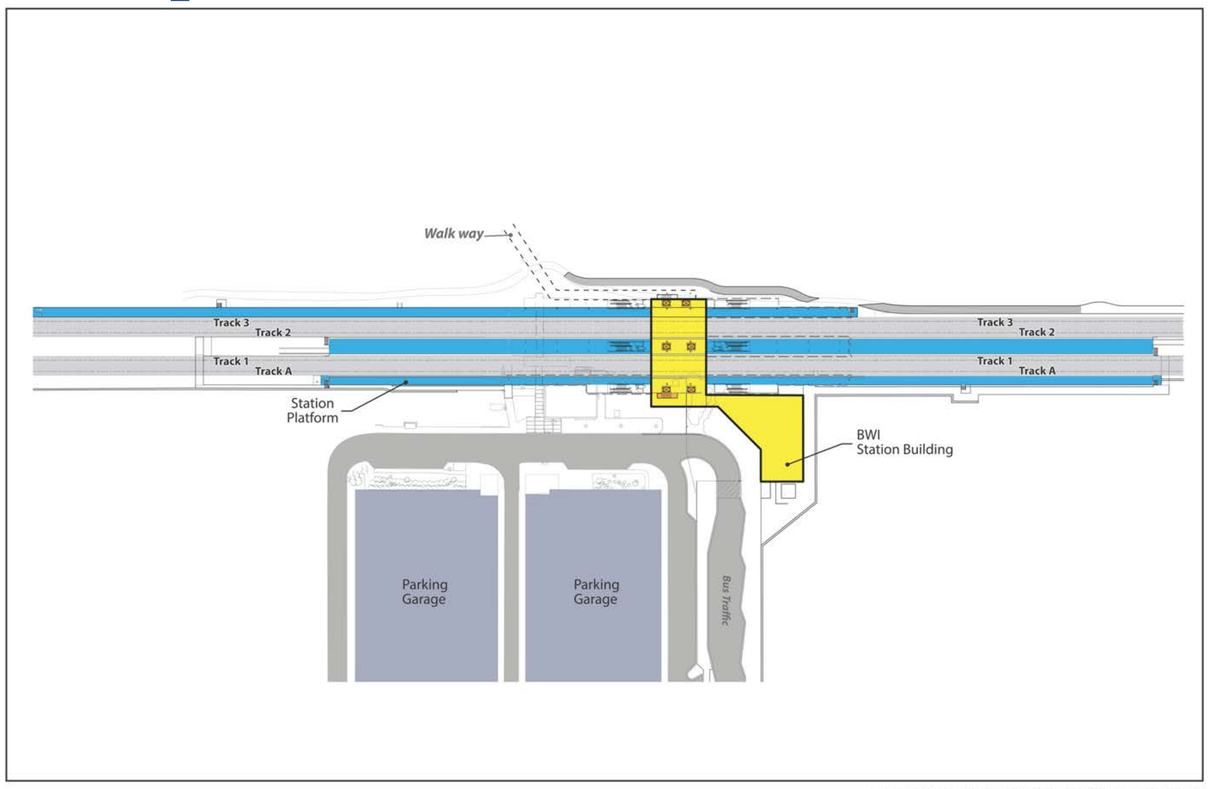
Existing Station and Platforms

Proposed



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Not to scale

Plan View of Proposed Station

- Updated passenger amenities including large waiting area, improved vending and restrooms
- Americans with Disabilities Act (ADA) compliant
- Elevated concourse-level walkway from station to tracks and passenger waiting area

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Build Alternative – Fourth Track

- Nine miles of a new fourth track
- Proposed fourth track and overall track improvements would require:
  - Major modifications to four railroad structures
    - The Herbert Run Bridge
    - The Patapsco River Bridge
    - The Furnace Road Bridge
    - A pedestrian underpass in Severn
  - Replacement of one single-span highway structure (Reece Road Bridge) with a longer structure
  - Modifications to 17 drainage structures/pipe crossings to accommodate the new track/access road

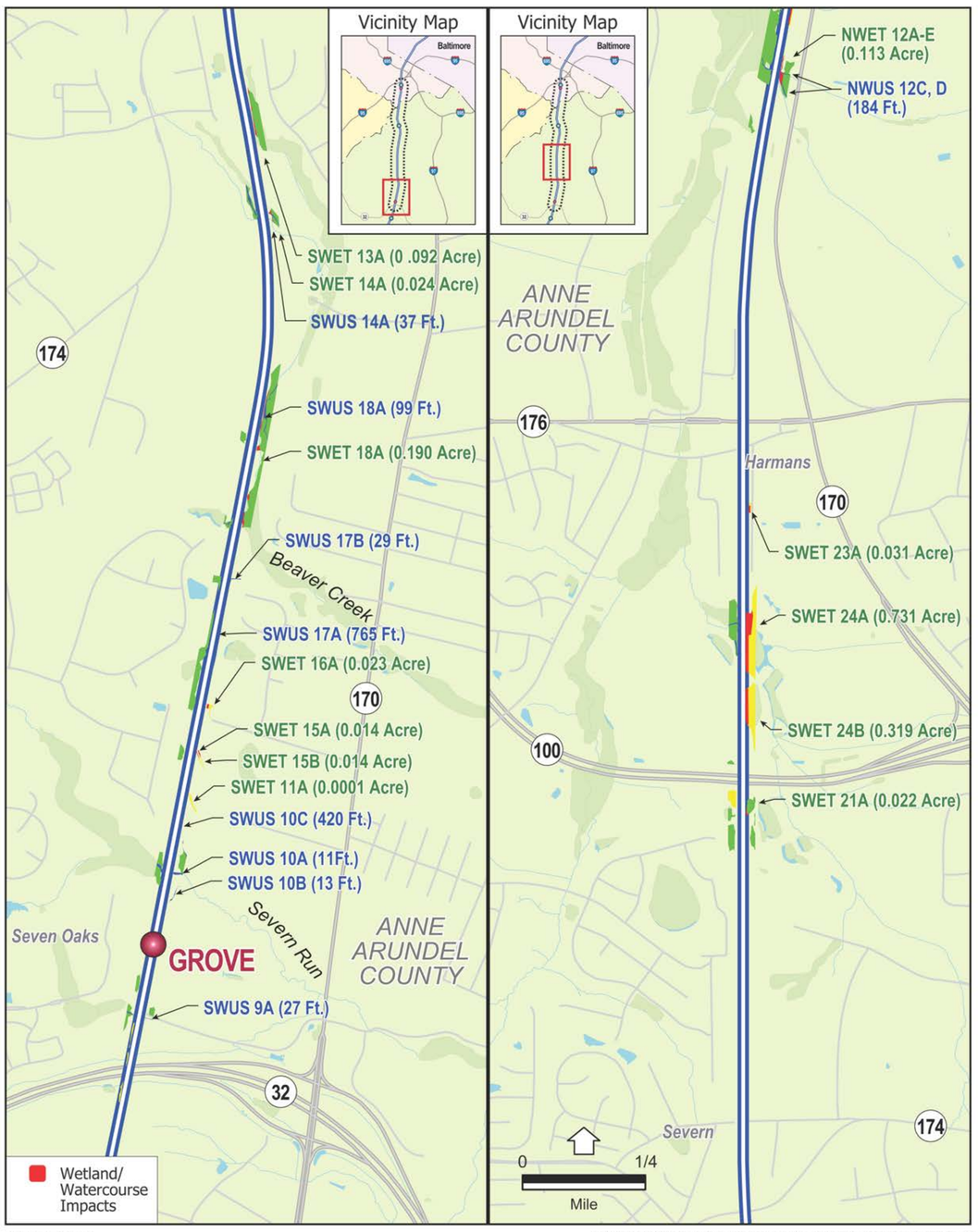
Resource Impacts

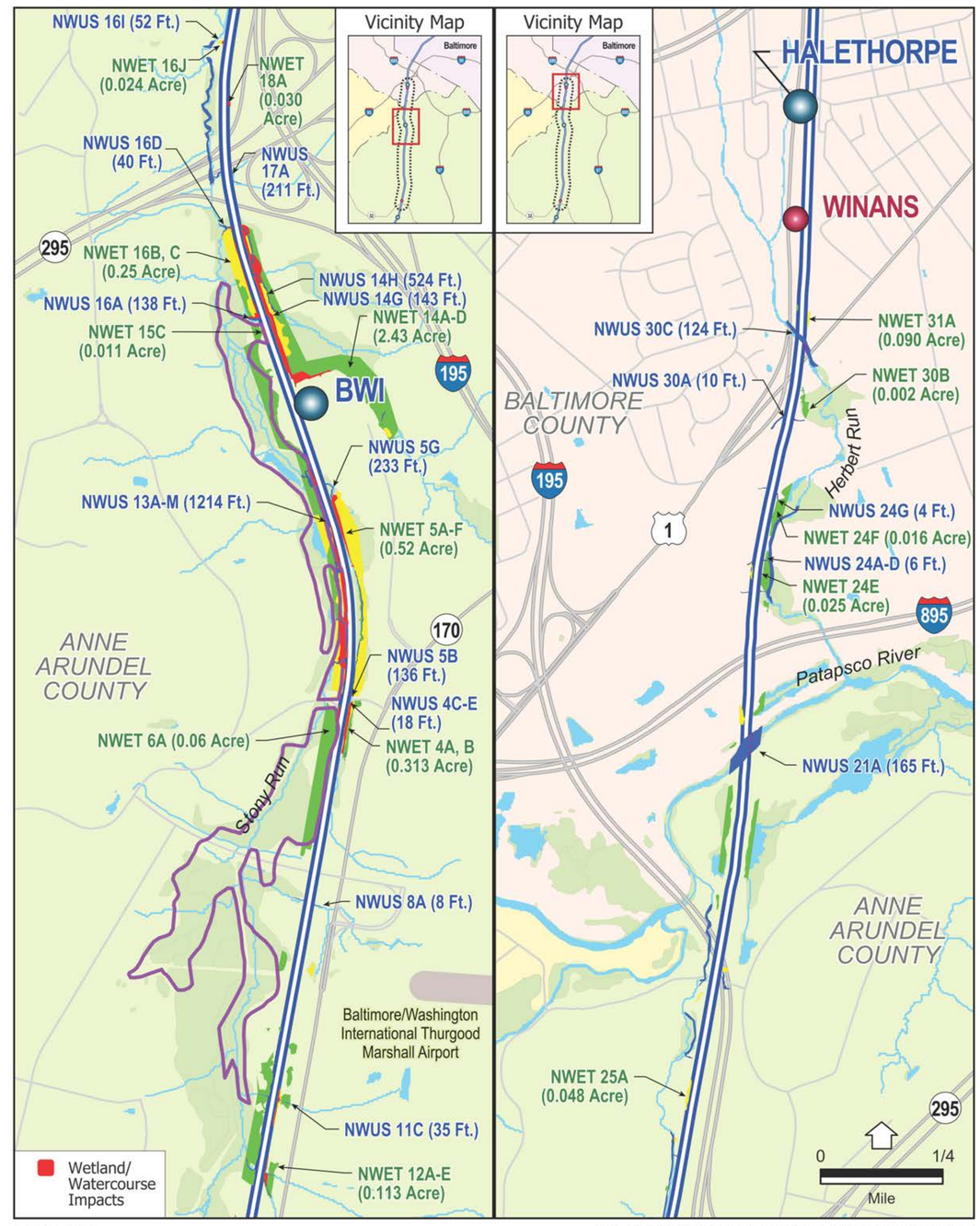
Environmental Measure	Environmental Impacts	Mitigation
Right-of-Way	11 acres No residences or businesses displaced	None required
Noise and Vibration	No significant increase	None required
Surface Water	4,647 linear feet of streams	7,740 linear feet of on-site retaining walls (nine walls)
Stormwater Runoff	7.6 acres of new impervious areas	Additional right-of-way for stormwater management features (ex. Wet swales and grass swales)
Wetlands	6.98 acres (1.52 acres Wetlands of Special State Concern)	10.27 acres of wetland mitigation (3.22 acres for Wetlands of Special State Concern) Location to be determined in Phase 2 Final
Floodplains	19.6 acres of land within the mapped 100-year floodplain	Retaining walls will minimize floodplain impacts Mitigation will be determined during later design phases
RTEs	No federal listed Rare, Threatened or Endangered Species (RTEs) 1,102 square feet of giant cane, a State-listed rare species	Mitigation will be determined during later design phases Coordination with Maryland Department of Natural Resources (DNR) on-going
Forests	17.3 acres of mapped forest stands	Coordination with DNR is ongoing A forest conservation plan will be developed during final design
Parks	0.65 acres of Patapsco Valley State Park – the property is a vegetative buffer with no planned development	None as DNR concurred that the project would not adversely affect the activities, features and attributes of the park
Cultural Resources	• Adverse Effect to NRHP-eligible Bridge No. 0207500 (Reece Road Bridge) • Adverse effect on the Harmans Site, the Telegraph Dorsey Prehistoric Site, and the O'Keefe Site East • No adverse effect on the Higgins Site (Site 18AN489)	• Mitigation in Memorandum of Agreement between FRA/SHA/MTA • Recordation of Bridge No. 0207500 • Phase 2 investigations to determine eligibility for listing on the NRHP for Archeological sites • Protective fencing for Higgins Site during construction
Hazardous Materials	Amtrak is not aware of any contamination within the Amtrak right-of-way within the project corridor Right-of-way required from three contamination sites listed in Federal and State databases: • Northrop Grumman BWI (0.373 acre) • Powercon Corporation (0.067 acre) • Patuxent Asphalt (0.050 acre)	MTA will conduct a Phase 1 Environmental Site Assessment (ESA) for areas where additional right-of-way will be needed

Wetlands

Cowardin Class	Wetland Acres Impacted		Wetland Acres Compensation Estimated (Replacement Ratio)		Total Mitigation
	Non-WSSC*	WSSC*	Non-WSSC*	WSSC*	
Palustrine Forested (PFO)	1.57	0.18	3.14 (2:1)	0.54 (3:1)	3.68
Palustrine Scrub-Shrub (PSS)	0.03	0.00	0.06 (2:1)	0.00 (3:1)	0.06
Palustrine Emergent (PEM)	3.86	1.34	3.86 (1:1)	2.68 (2:1)	6.54
Wetland Total	**5.46**	**1.52**	**7.06**	**3.22**	**10.28**

* Wetlands of Special State Concern





LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line
- Surface Water (Source: DNR)
- NWI Wetlands (Source: DNR)
- Non-tidal Wetlands of Special State Concern (Source: DNR)

Delineated Wetlands (WET)
- Palustrine Forested
- Palustrine Scrub-Shrub
- Palustrine Emergent

Delineated Watercourses (WUS)
- Waters of the U.S. (Streams)

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Wetland and Watercourse Impacts - Map 1 of 2

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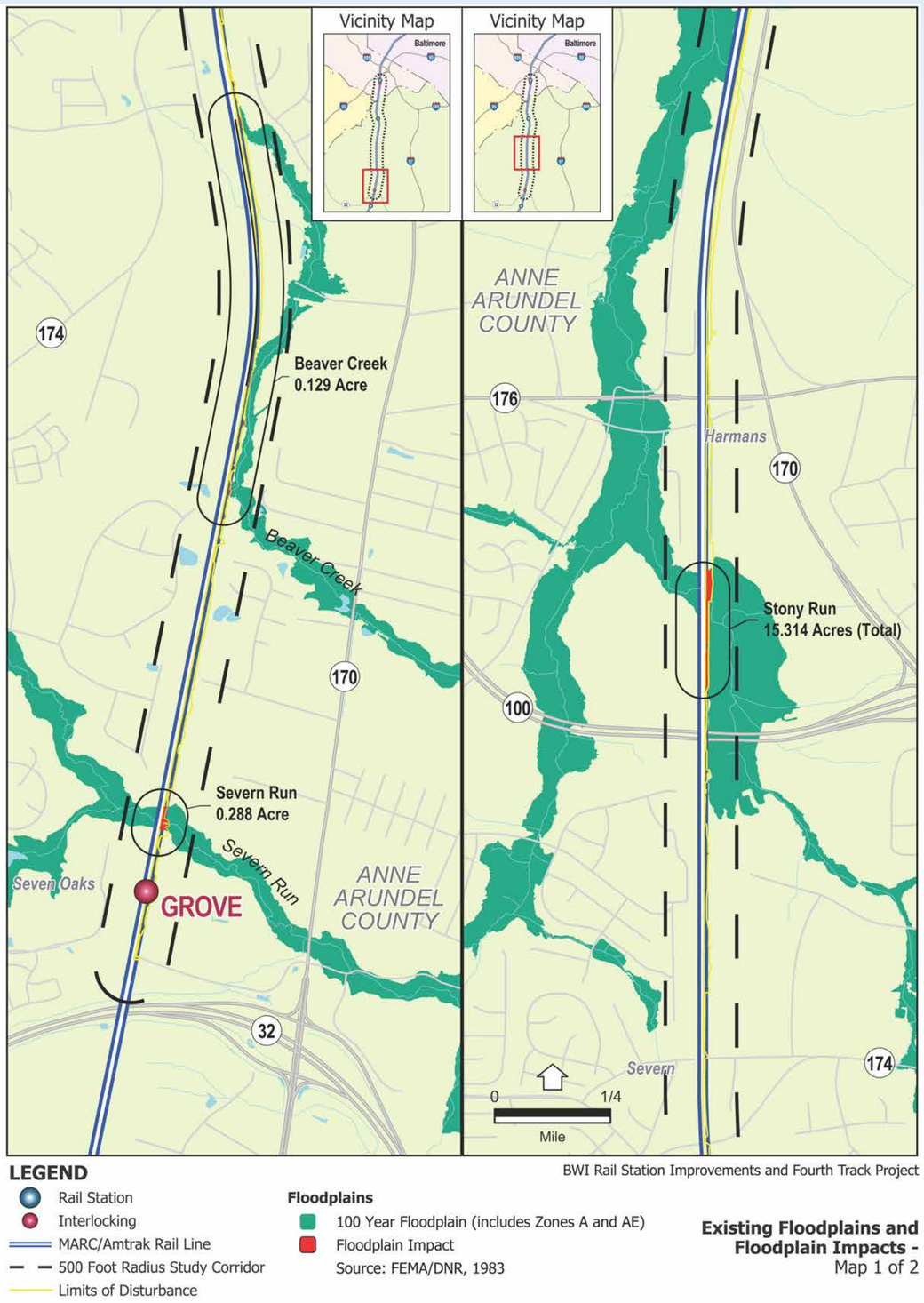
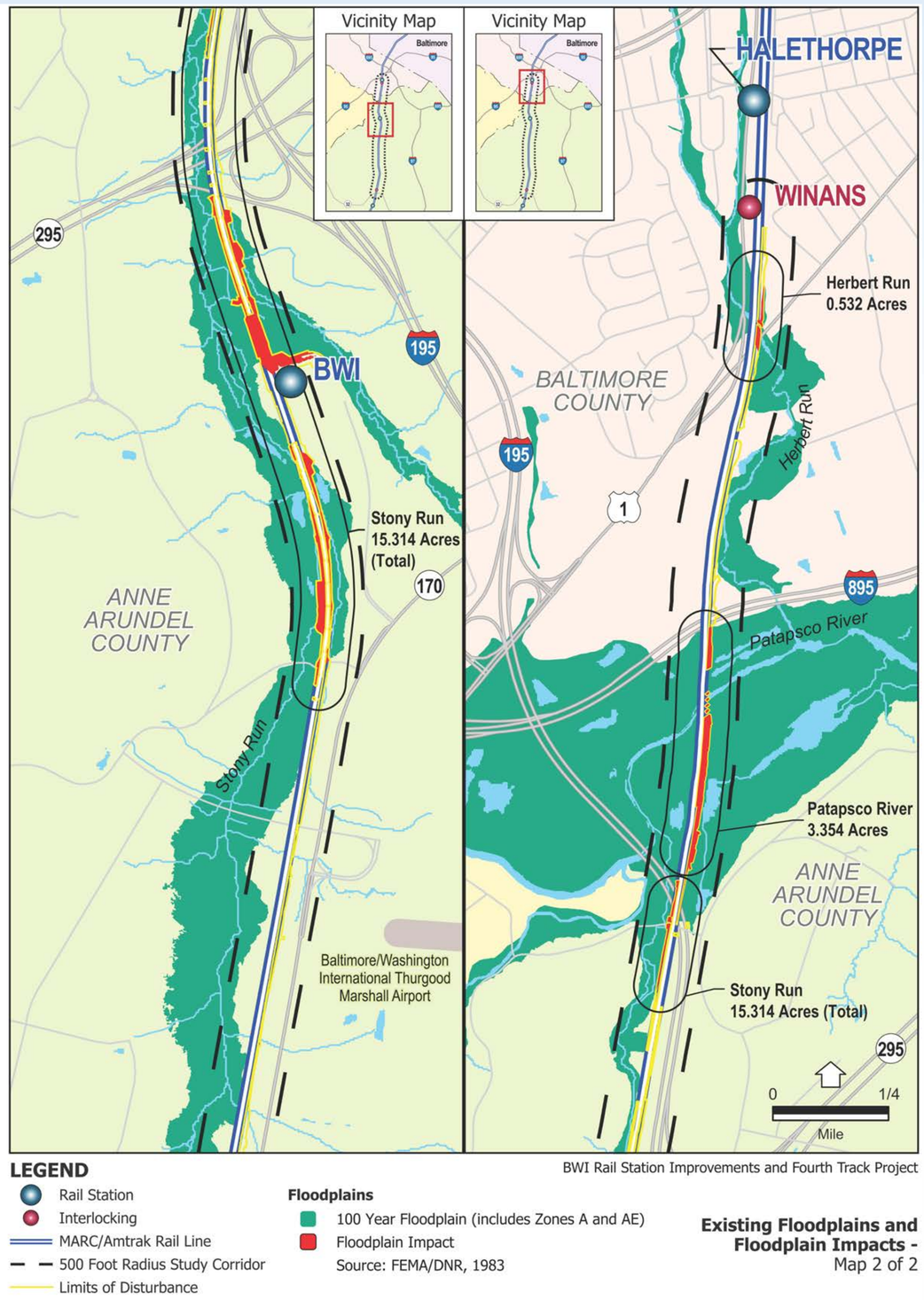
Wetland and Watercourse Impacts - Map 2 of 2

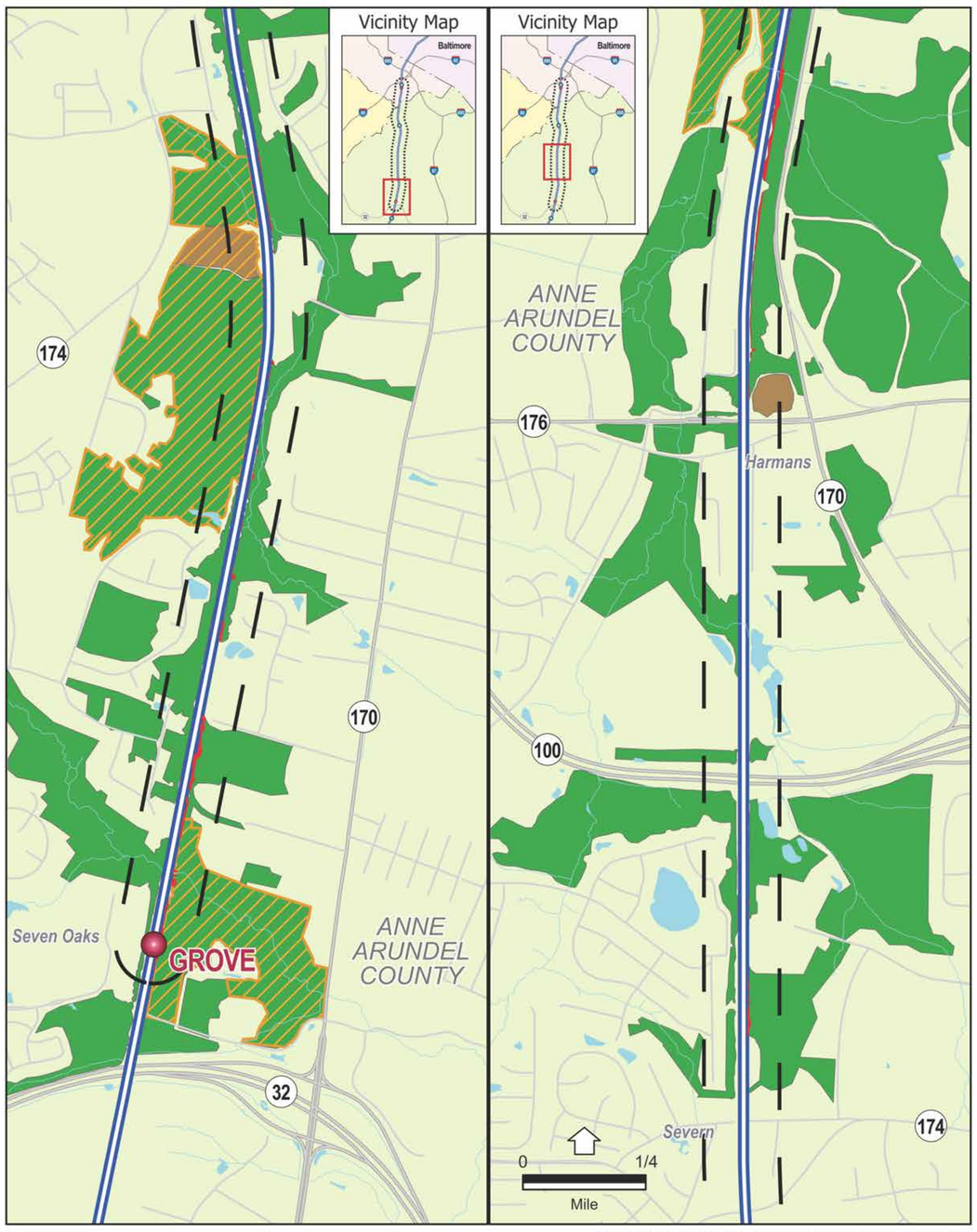
Floodplains





- Approximately 19.6 acres of total impact within the mapped 100-year floodplain
  - 15.3 acres Stony Run and its tributaries
  - 0.5 acre Herbert Run
  - 3.4 acres Patapsco River
  - 0.3 acre Severn Run
  - 0.1 acre Beaver Creek
- Mitigation: Retaining walls will be used to minimize floodplain impacts

Forests



LEGEND

- Rail Station
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- 500 Foot Radius Study Corridor

Forest Stands Delineated

- Forest Stands - Priority 1
- Forest Stands - Priority 3
- Forest Stand Takes (based on limits of disturbance)
- Potential Forest Interior Dwelling Species (FIDS) Habitat

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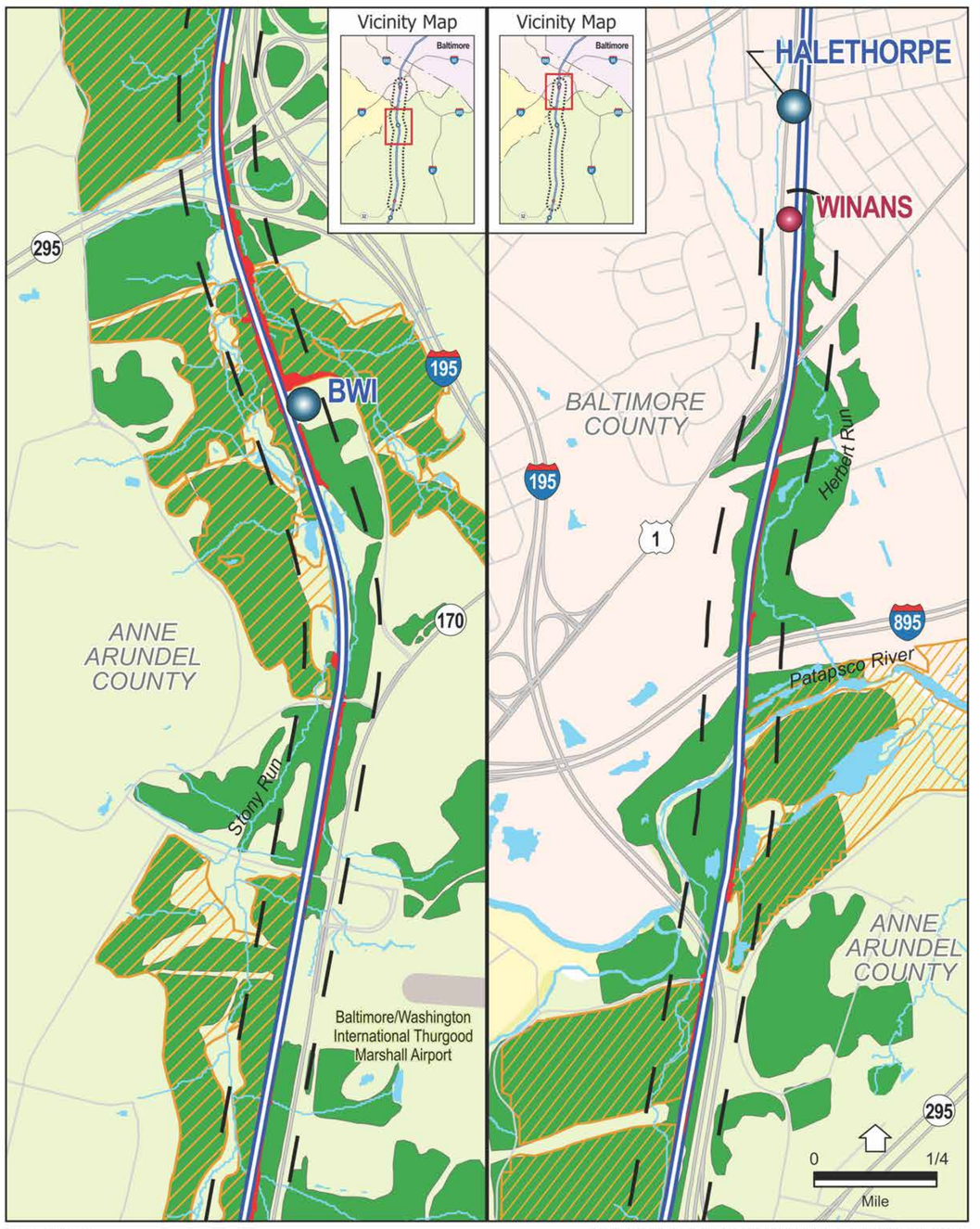
Forest Stands Impacts & Potential FIDS Habitat-



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Forest Stands Impacts & Potential FIDS Habitat-

- Impact approximately 17.3 acres of mapped forest resources
- Mitigation: MTA will coordinate with DNR to develop a Forest Conservation Plan during final design

Noise

- Noise Methodology

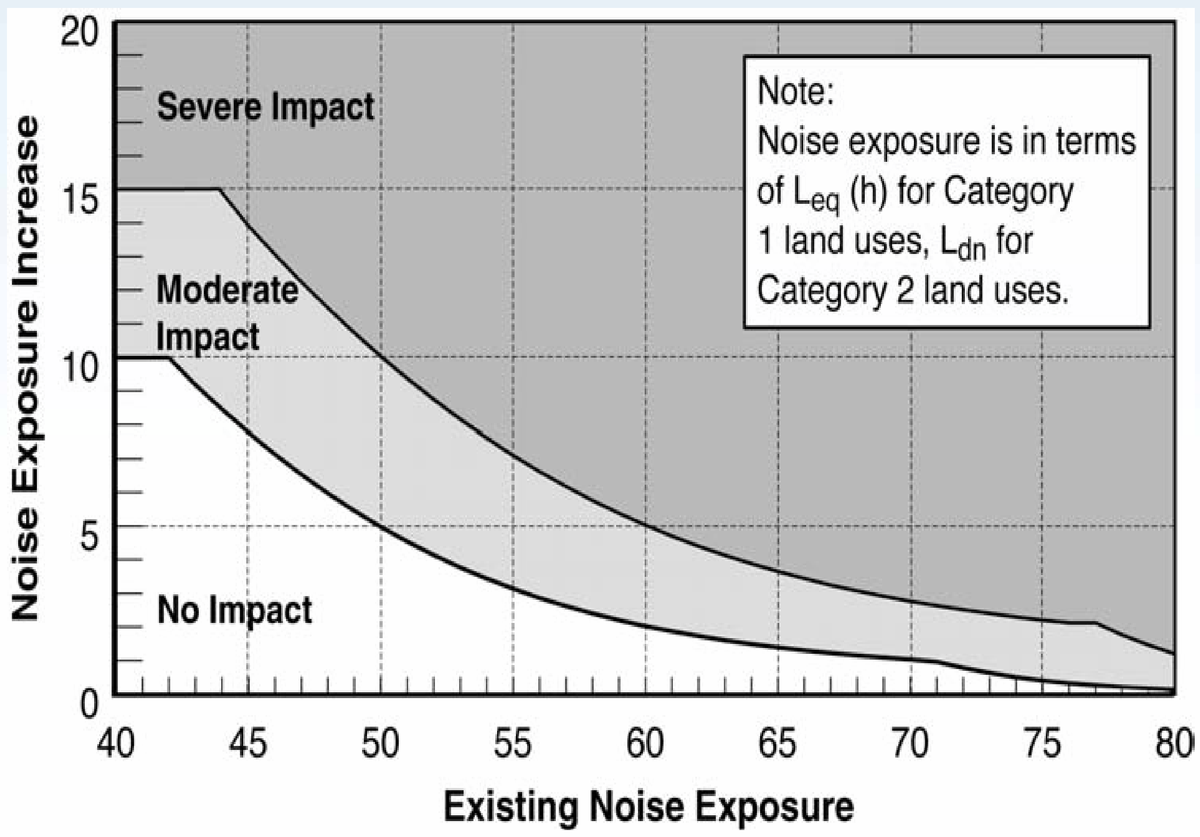
Step 1: Identified representative noise receptors

Step 2: Determined existing short-term and long-term noise levels

Step 3: Predict future noise levels for conventional and high-speed trains

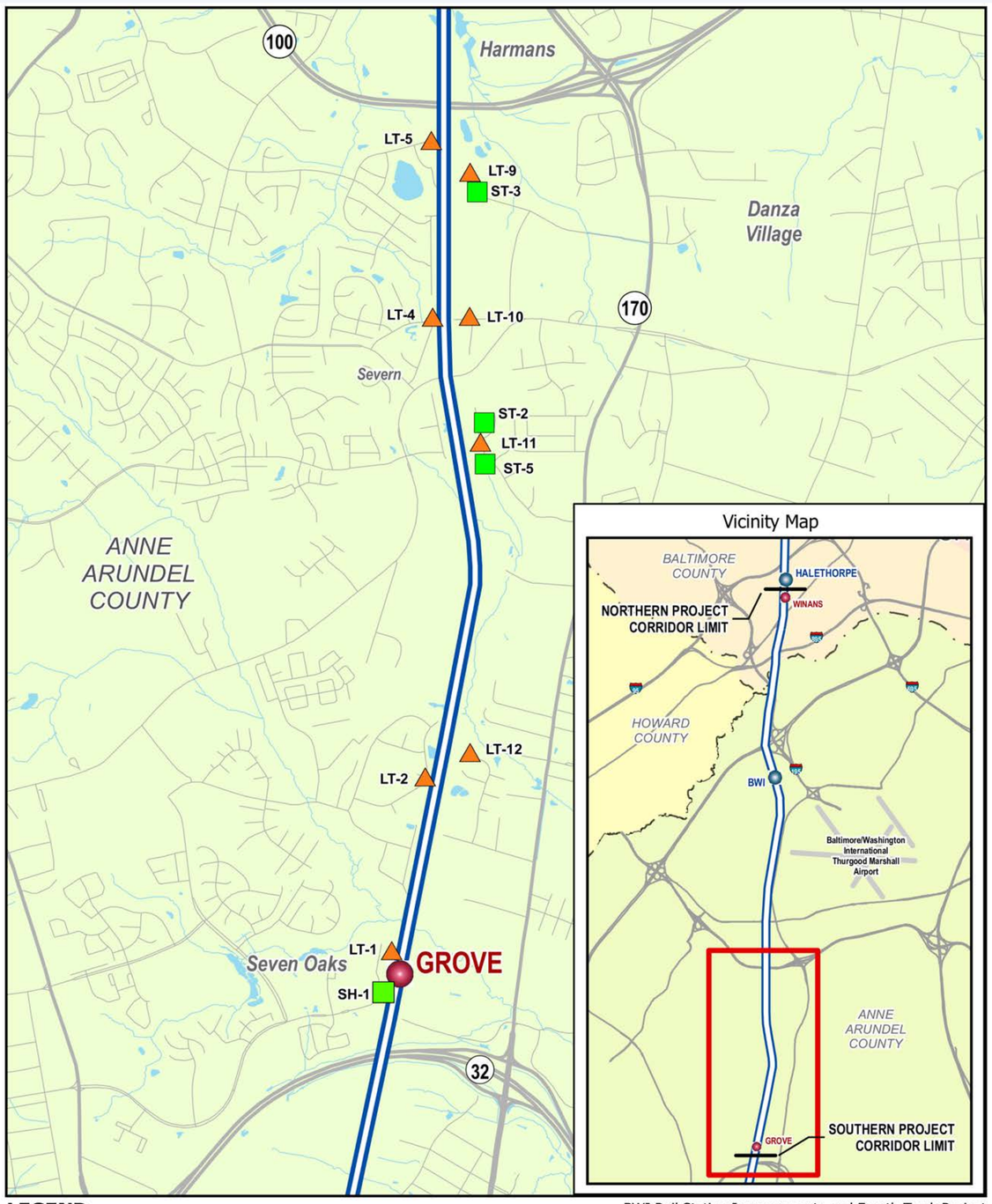
Step 4: Compare predicted noise levels with allowable noise level exposure

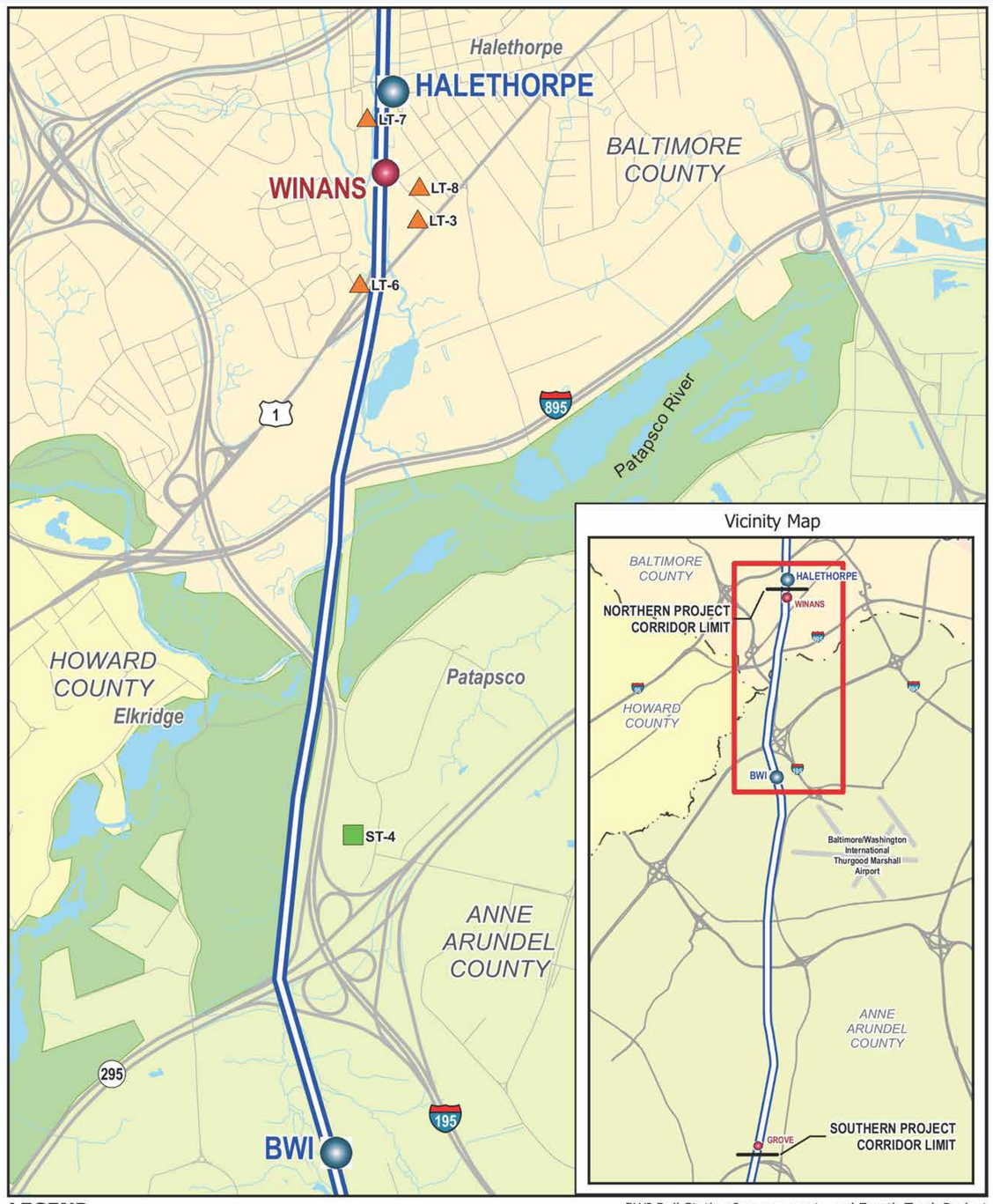
Step 5: Determine if there is a noise impact



- Category groups for noise-sensitive land uses
  - Category 1. Buildings or parks where quiet is an essential element of their intended purpose
  - Category 2. Residences and buildings where people normally sleep
  - Category 3. Institutional land uses with primarily daytime and evening use

Noise Monitoring Locations





LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line
- Short-term (1-hour) Noise Monitoring Location
- Long-term (24-hour) Noise Monitoring Location

0 0.25 Miles

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Noise Monitoring Locations
Map 1 of 2

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0 0.25 Miles

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Noise Monitoring Locations
Map 2 of 2

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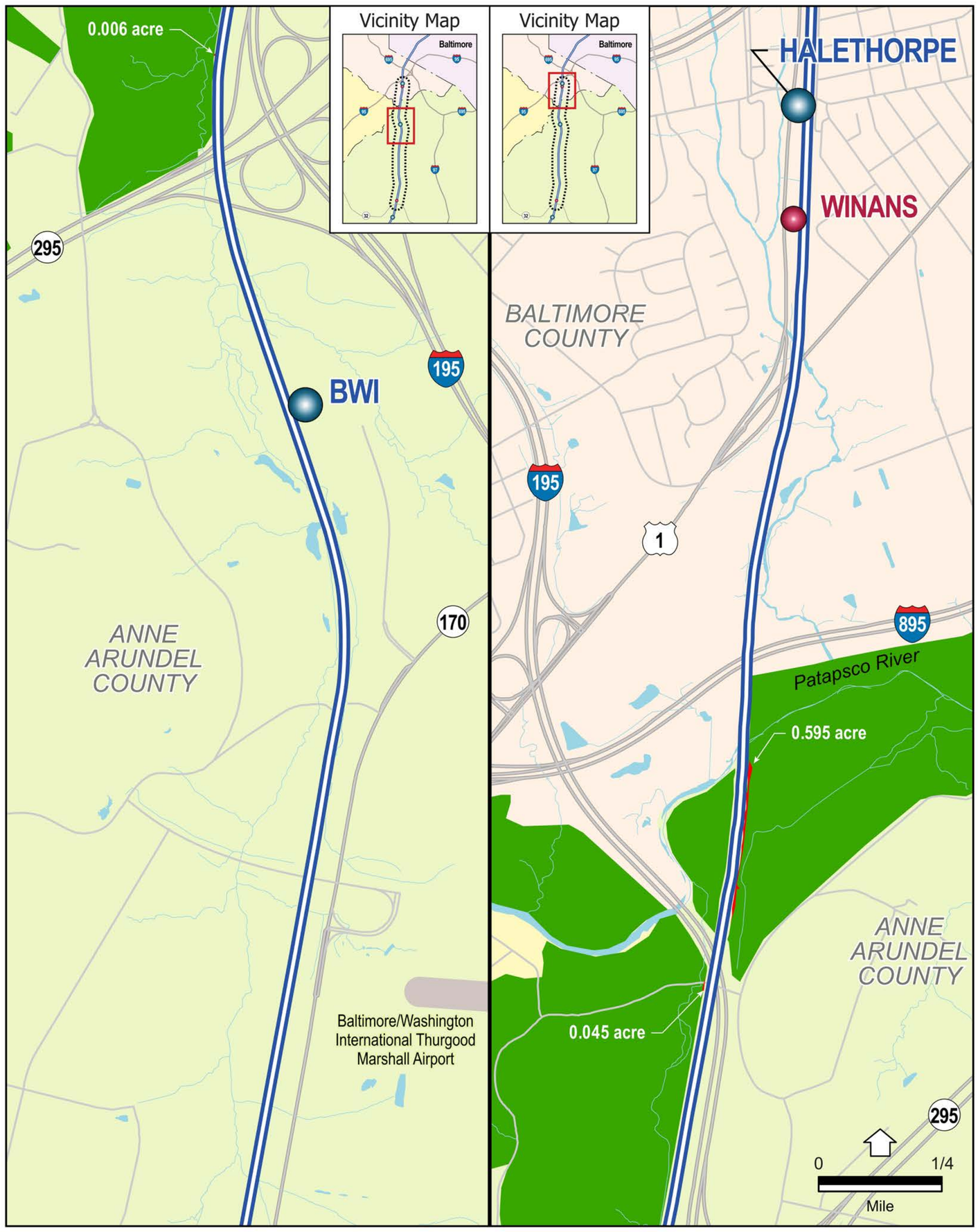
Noise Level Impacts

Site #	Category Group	Existing Noise Level (Ldn)	Distance to Near Track (feet)	Actual Project-Related Noise Exposure (Ldn)	Allowable Project-Related Noise Exposure (Ldn)	Allowable Increase in Noise Level Over Existing (dB)	Severe Impact?
LT-1	2	68	138	67	69	1	No
LT-2	2	65	215	65	66	1	No
LT-4	2	68	100	68	69	1	No
LT-5	2	67	170	66	68	1	No
LT-9	2	65	202	65	66	1	No
LT-10	2	68	89	68	69	1	No
LT-11	2	63	197	65	65	2	No
LT-12	2	64	156	66	66	2	No
LT-3	2	70	68	70	71	1	No
LT-6	2	68	314	64	69	1	No
LT-7	2	63	366	65	65	2	No
LT-8	2	69	91	69	70	1	No
ST-4	2	63	56	59	65	2	No
ST-5	3	63	232	66	66	3	No

Parks

- 0.65 acre of total acquisition from Patapsco Valley State Park
- Part of vegetative buffer
- MD Department of Natural Resources concurs no effect on park activities



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Park Property Acquisition Required

- Patapsco Valley State Park
- Required R.O.W Acquisitions

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Parkland Acquisition

Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, requires federal agencies to take into account the effect of any undertaking on historic properties

- Architectural properties

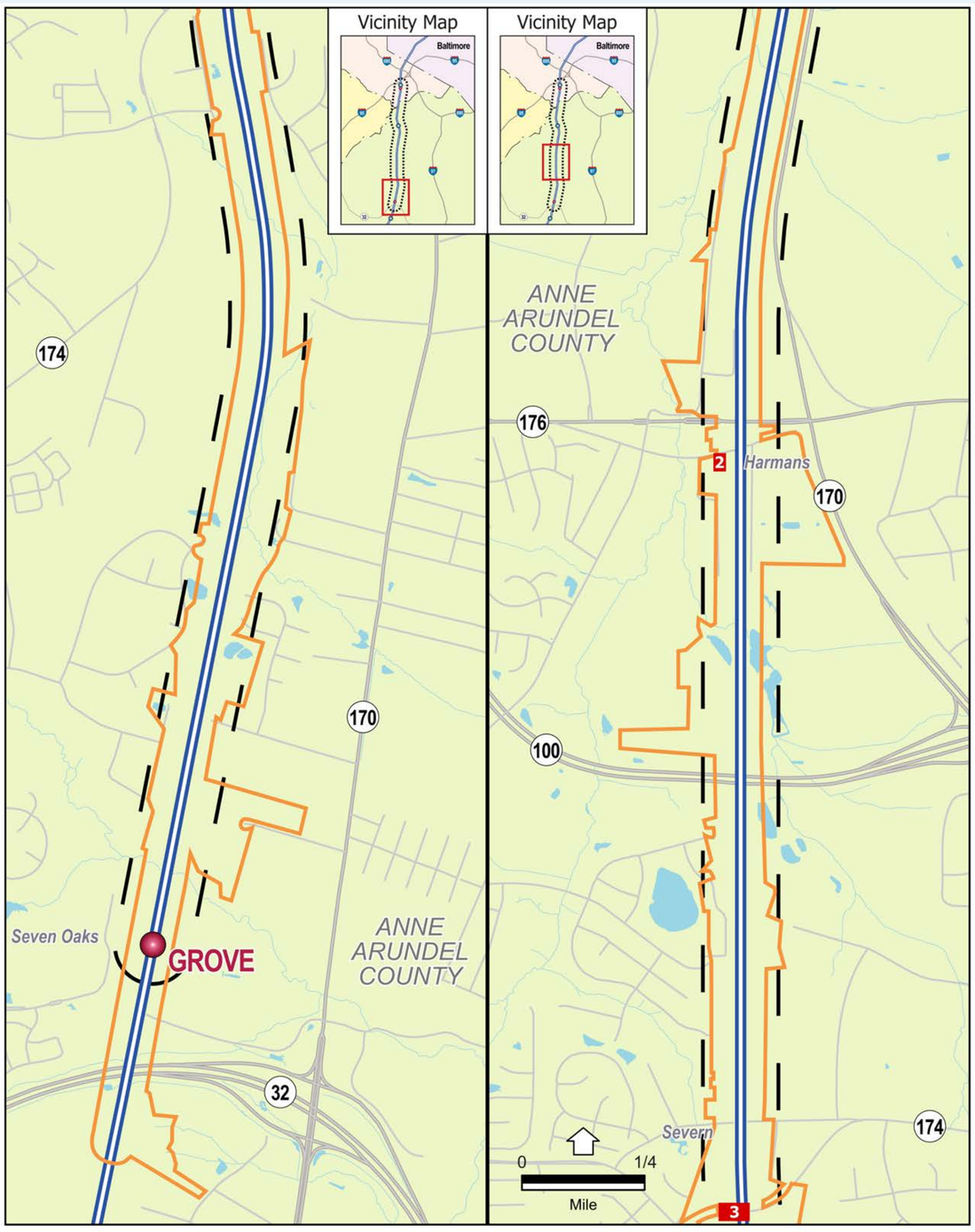
Historic Property Name	MIHP Number	Determination of Effects	Mitigation
Reece Road Bridge (Bridge No. 0207500)	AA-2125	Adverse effect due to demolition	Recordation of bridge prior to demolition
Harmans Post Office	AA-2298	No adverse effect	None
Herbert Run Bridge (Bridge No. 3011)	BA-2782	No adverse effect	None

- Archeological Sites

Site Name	MIHP Number	Determination of Effects	Mitigation
Harmans Site	18AN29B	Potential adverse effect	Phase 2 Evaluation recommended
Telegraph Dorsey Prehistoric Site	18AN1478	Potential adverse effect	Phase 2 Evaluation recommended
O'Keefe Site East	18AN1482	Potential adverse effect	Phase 2 Evaluation recommended
Higgins Site	18AN489	No adverse effect	Protective fencing during construction recommended

- Mitigation
  - Development of a Memorandum of Agreement (MOA) by FRA/MTA/SHA in consultation with Maryland Historical Trust and Section 106 consulting parties, including circulation for comments
  - Phase 2 investigations to determine eligibility for listing on the NRHP for Archeological sites
  - Protective fencing for Higgins Site during construction
  - Recordation of Reece Road Bridge prior to demolition

Cultural Resources



LEGEND

- Rail Station
- Interlocking
- 500 Foot Radius Study Corridor
- Architectural APE

Architectural Resources in the APE

- 2 Harmans Post Office (AA-2298)
- 3 MD 174 (Reece Road) Bridge over Amtrak (Bridge 2075, AA-2125)

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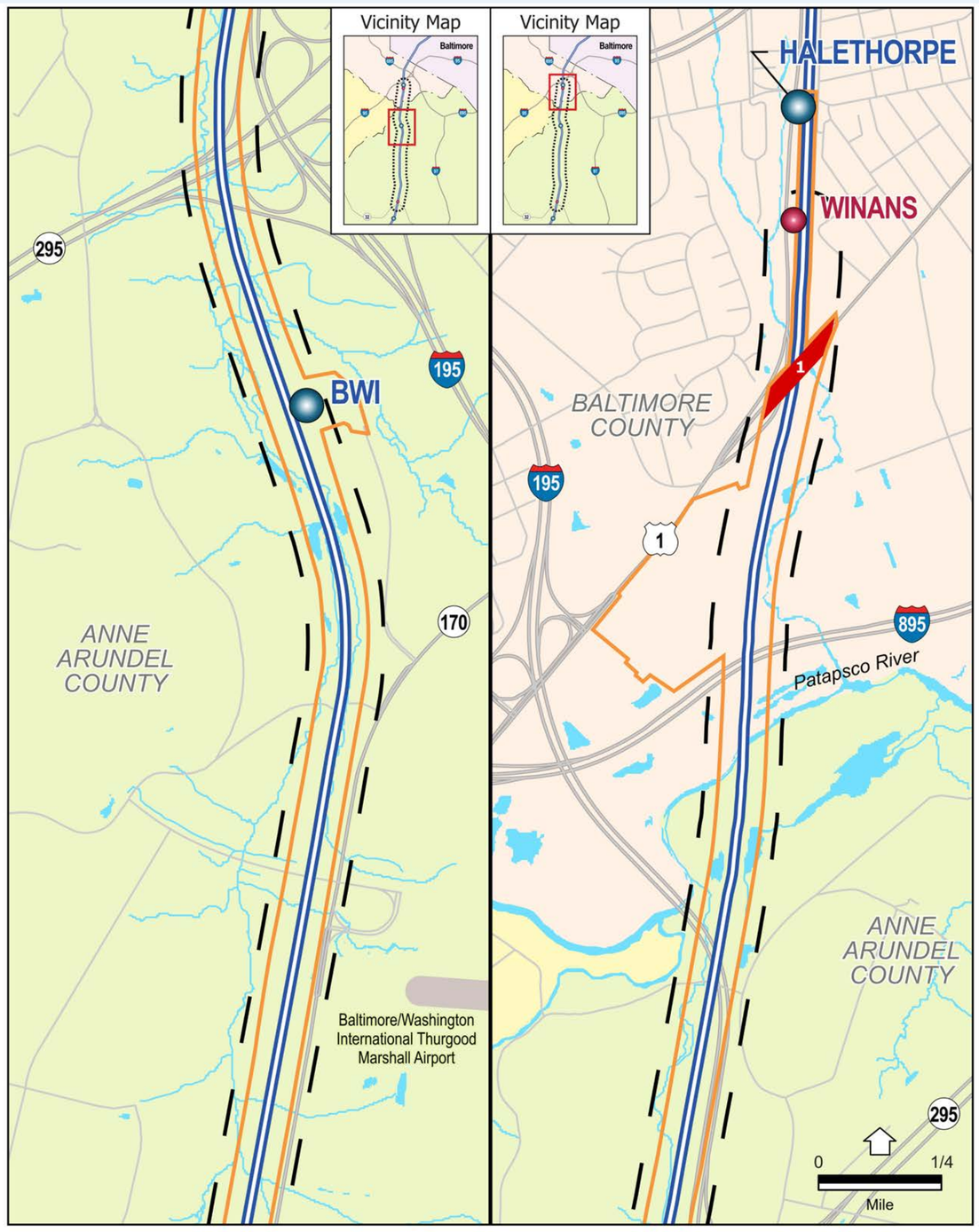
NRHP-Eligible Architectural Resources
Map 1 of 2



LEGEND

- Rail Station
- Interlocking
- 500 Foot Radius Study Corridor
- Architectural APE

Architectural Resources in the APE

- 1 Alternate US 1 (Washington Boulevard) over US 1 Northbound, Amtrak, and Herberts Run (Bridge 3011, BA-2782)

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NRHP-Eligible Architectural Resources -
Map 2 of 2

Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966 stipulates that the Department of Transportation agencies (which includes the Federal Railroad Administration) cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land
- The action includes all possible planning to minimize harm to the property resulting from use

- Section 4(f) Properties
  - Patapsco Valley State Park – *De minimis* use; DNR concurrence on February 6, 2012
  - Reece Road Bridge (Bridge No. 0207500)

Avoidance Alternatives Considered for Reece Road Bridge

	No Build	Fourth Track – New Structure under Reece Road, West of NEC	Fourth Track – New Structure under Reece Road, East of NEC	Fourth Track – Over the Existing Reece Road Bridge	Fourth Track – Under the Existing Reece Road Bridge
Meets Purpose and Need?	No	Yes	Yes	Yes	Yes
Feasible and prudent?	Not prudent	Not feasible or prudent	Not prudent	Not feasible or prudent	Not feasible or prudent
Reason eliminated	Does not meet purpose and need	Requires considerable right-of-way acquisition and embankment widening	Major constraints related to operations, safety and constructability	Expensive to construct, additional property acquisition, not enough vertical clearance at MD 100	Requires relocation of pedestrian walkway to tunnel, expensive to construct, track flooding concerns

Next Steps and Schedule

- Finalize EA and FONSI as warranted
- Initiate final design Fall 2015*
- Begin construction Fall 2017*
- Fourth track open for operation Spring 2020*
- New station open for operation Spring 2021*

* Stages not yet funded

Thank you!

- Thank you for attending
- Please check the project website for meeting materials and additional information: **http://mta.maryland.gov/bwi-amtrak-rail-improvement**
- Submit comments or questions to:

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