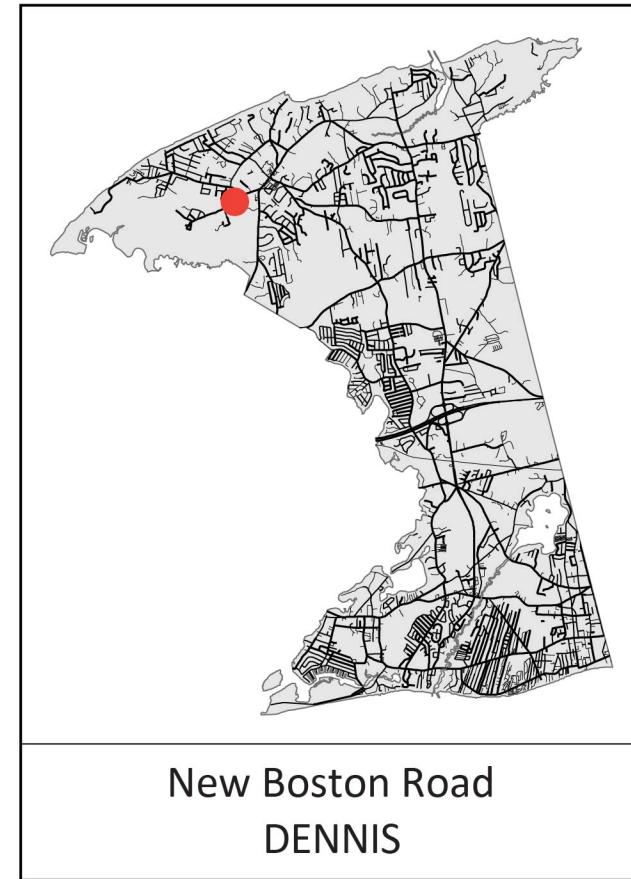


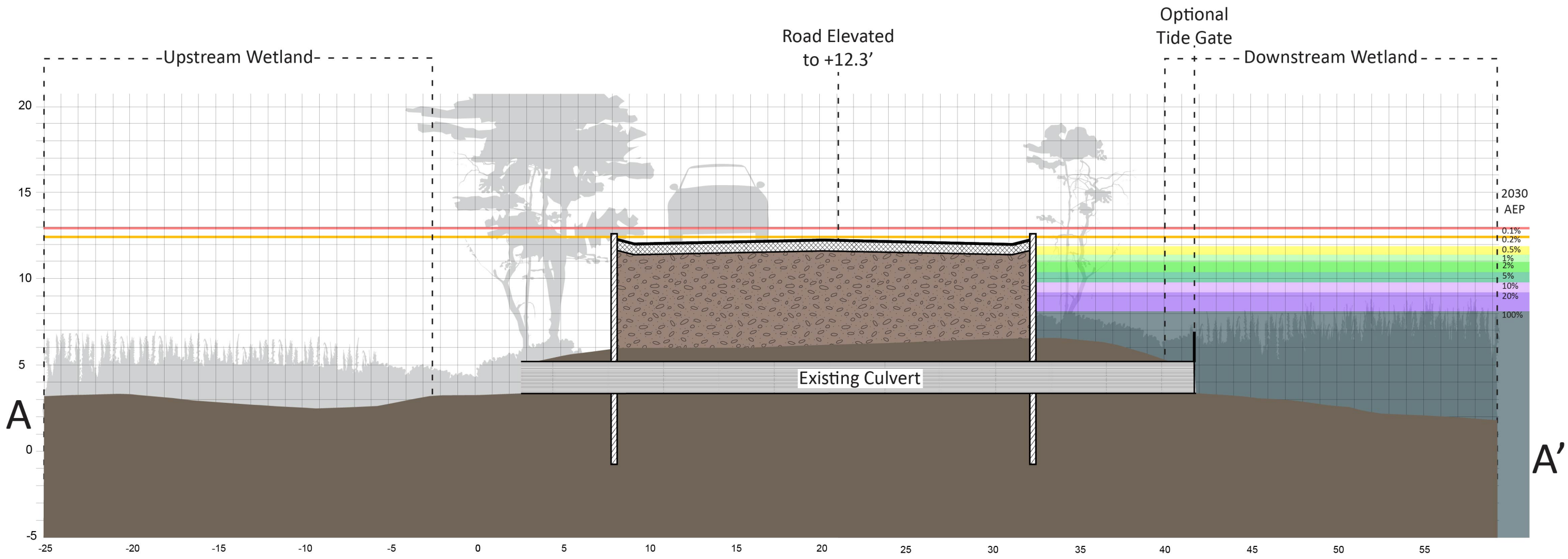
EXISTING CONDITIONS
 New Boston Road, Dennis



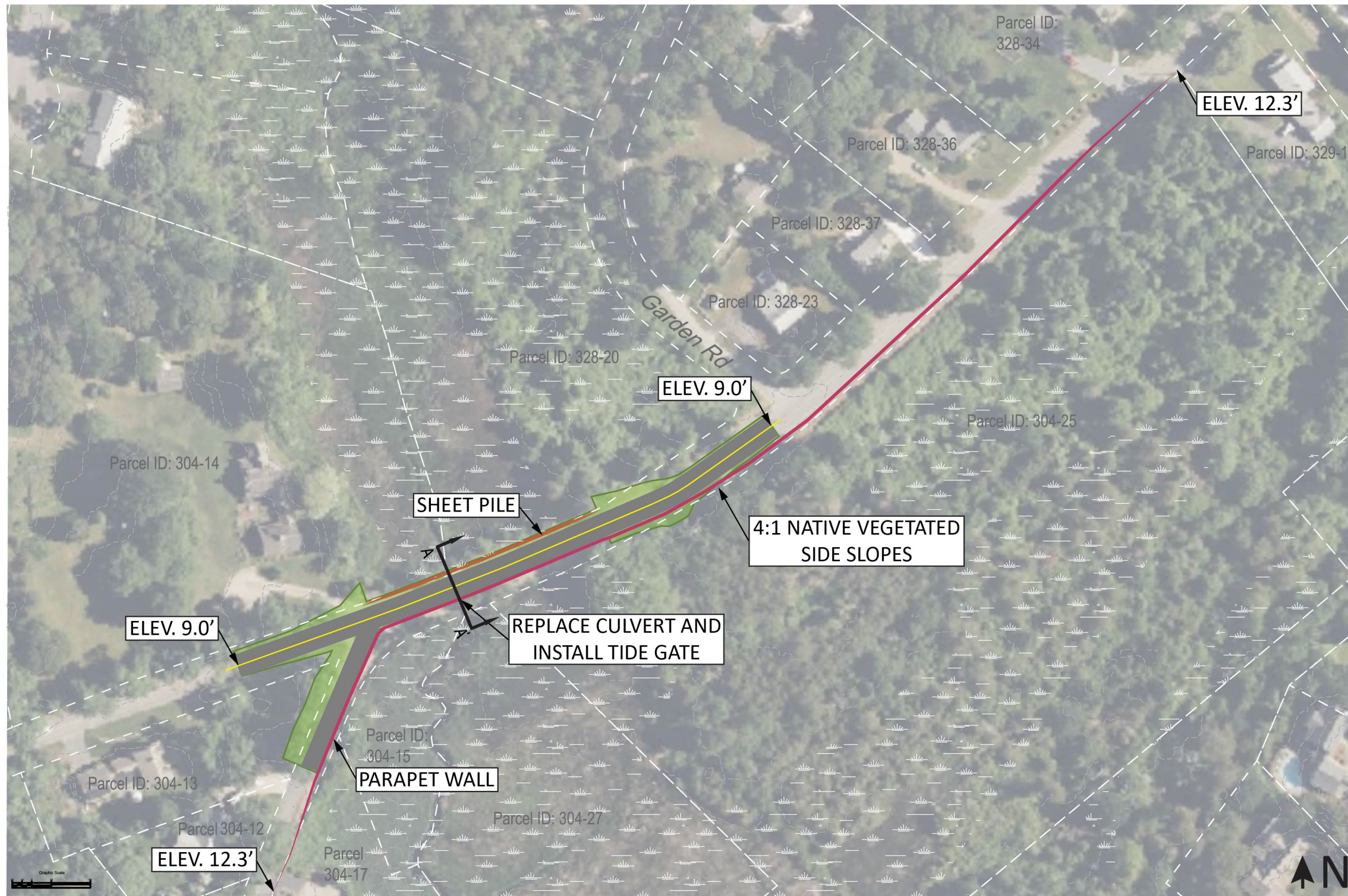
ALTERNATIVE 1: GRAY

1507 linear feet of town-owned road are elevated to 12.3 feet using sheet pile and traditionally vegetated 4:1 side slopes. A tide gate can be added to the culvert to allow this intervention to protect upstream crossings during storm events.

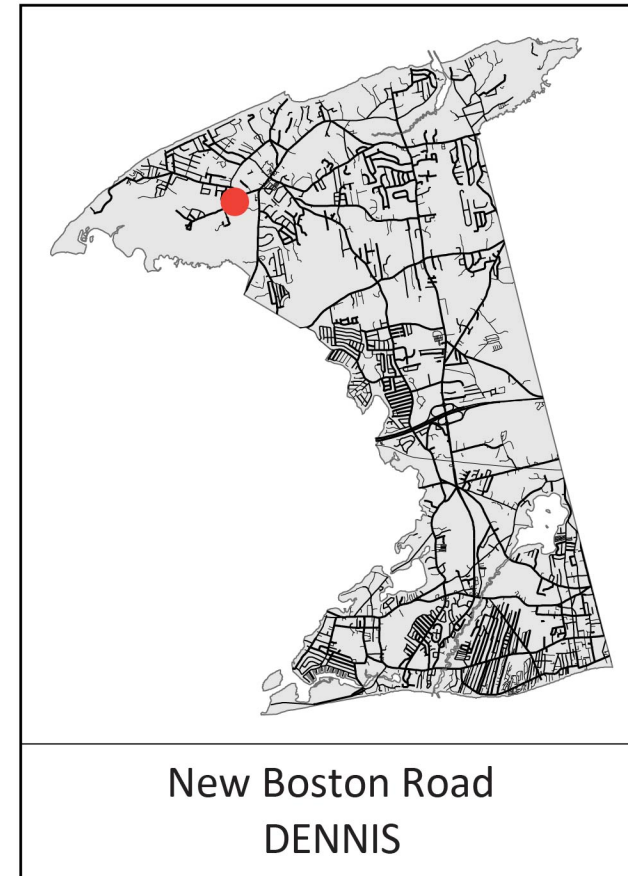
Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey



ALTERNATIVE 1: GRAY
 New Boston Road, Dennis

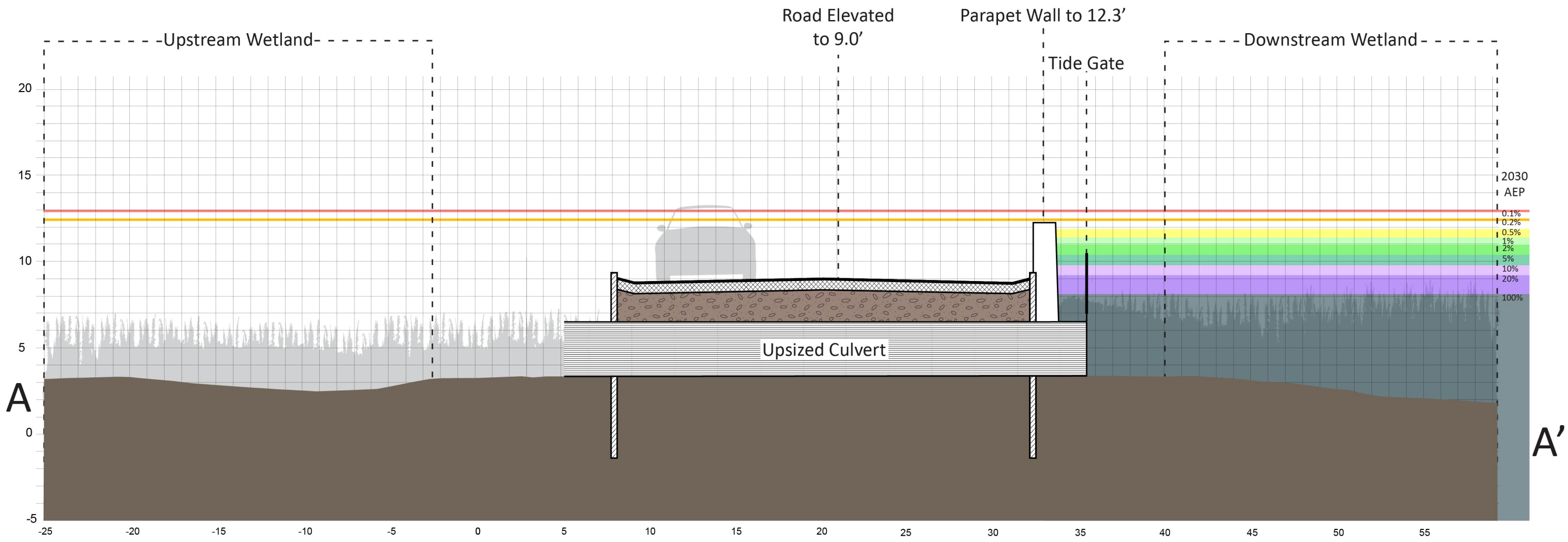


Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey



ALTERNATIVE 2: HYBRID

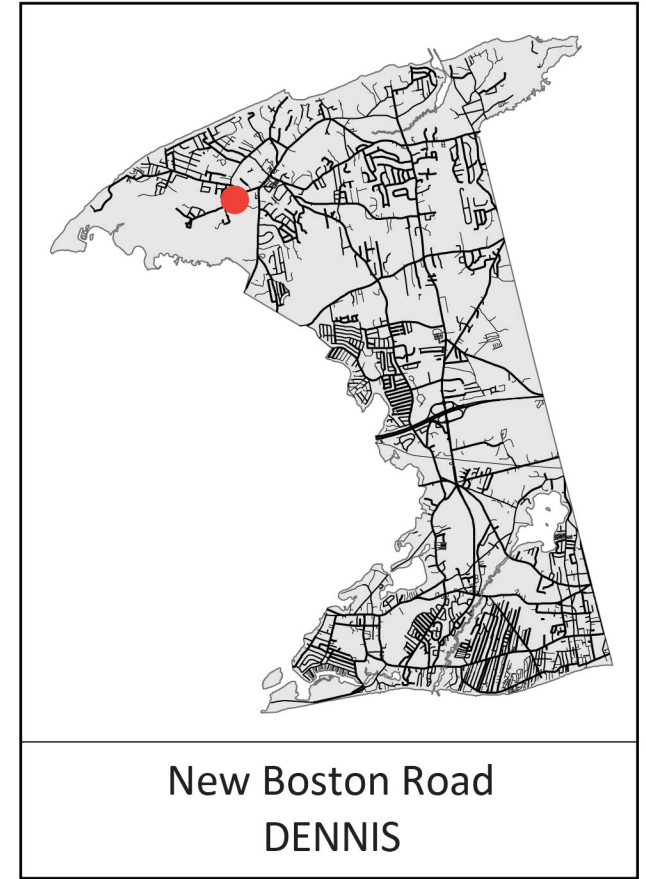
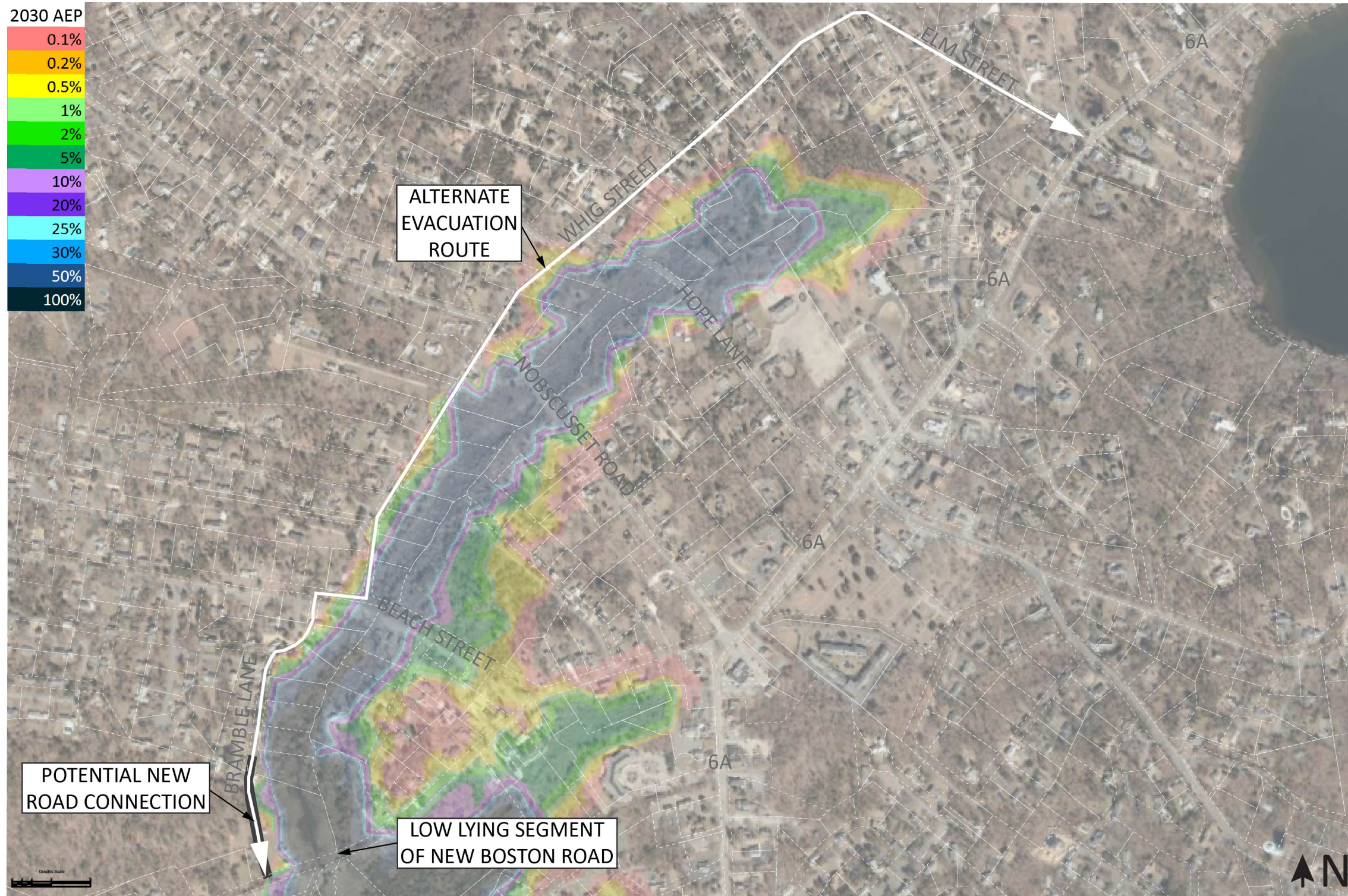
678 linear feet of town-owned road are elevated to 9.0 feet using sheet pile and native vegetated 4:1 side slopes. A parapet wall to 12.3 feet is constructed on the seaward side of the road. The culvert is replaced with a larger culvert, and a tide gate is installed to prevent flanking.



ALTERNATIVE 2: HYBRID
 New Boston Road, Dennis

2030 AEP

- 0.1%
- 0.2%
- 0.5%
- 1%
- 2%
- 5%
- 10%
- 20%
- 25%
- 30%
- 50%
- 100%



ALTERNATIVE 3: NEW STORM ROUTE

Bramble Lane is extended to connect to New Boston Road along higher ground, providing emergency access to residents served by New Boston Road during flood events. The lowest point of this route using Bramble Lane, Whig Street, and Elm Street is approximately 10 feet. No changes are made to New Boston Road.

Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey

NEW BOSTON ROAD, DENNIS

Summary of alternatives

	Description	Critical Elevation	Annual Exceedance Probability			Vulnerable to Tidal Flooding	Impacts to Wetlands	Impacts to Private Property	Estimated Cost*
			2030	2050	2070				
EXISTING	A segment of 20 foot wide road with a culvert crossing.	6.0 feet	100%	100%	100%	2030	N/A	N/A	N/A
ALTERNATIVE 1: GRAY	1507 linear feet of town-owned road are elevated to 12.3 feet using sheet pile and traditionally vegetated 4:1 side slopes.	12.3 feet	0.2%	2%	20%	N/A	Minimal	Minimal	\$696,000
ALTERNATIVE 2: HYBRID	678 linear feet of town-owned road are elevated to 9.0 feet using sheet pile and native vegetated 4:1 side slopes. A parapet wall to 12.3 feet is constructed on the seaward side of the road. The culvert is replaced with a larger culvert, and a tide gate is installed to prevent flanking.	12.3 feet	0.2%	2%	20%	2070	Possible Positive	Minimal	\$1,160,000
ALTERNATIVE 3: NEW STORM ROUTE	Bramble Lane is extended to connect to New Boston Road to provide emergency access to residents served by New Boston Road during flood events. The lowest point of this route using Bramble Lane, Whig Street, and Elm Street is approximately 10 feet. No changes are made to New Boston Road.	10.0	5%	20%	100%	N/A	N/A	Yes	\$262,000 (excluding easements or acquisitions)

*Installed material cost +20% contingency. Excludes design, permitting, mobilization, stormwater and wastewater infrastructure, and site controls. Costs based on RSMMeans 2021 cost book and adjusted for inflation and region.