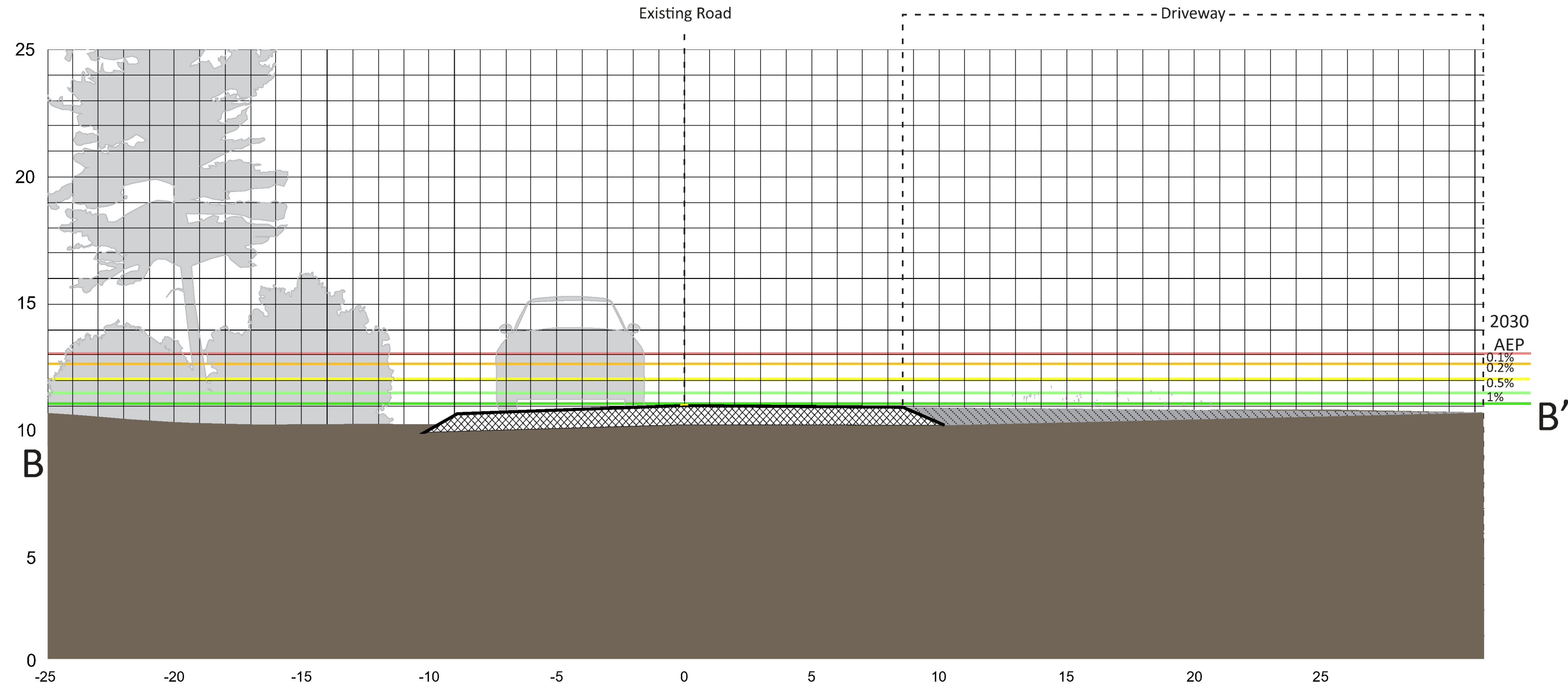
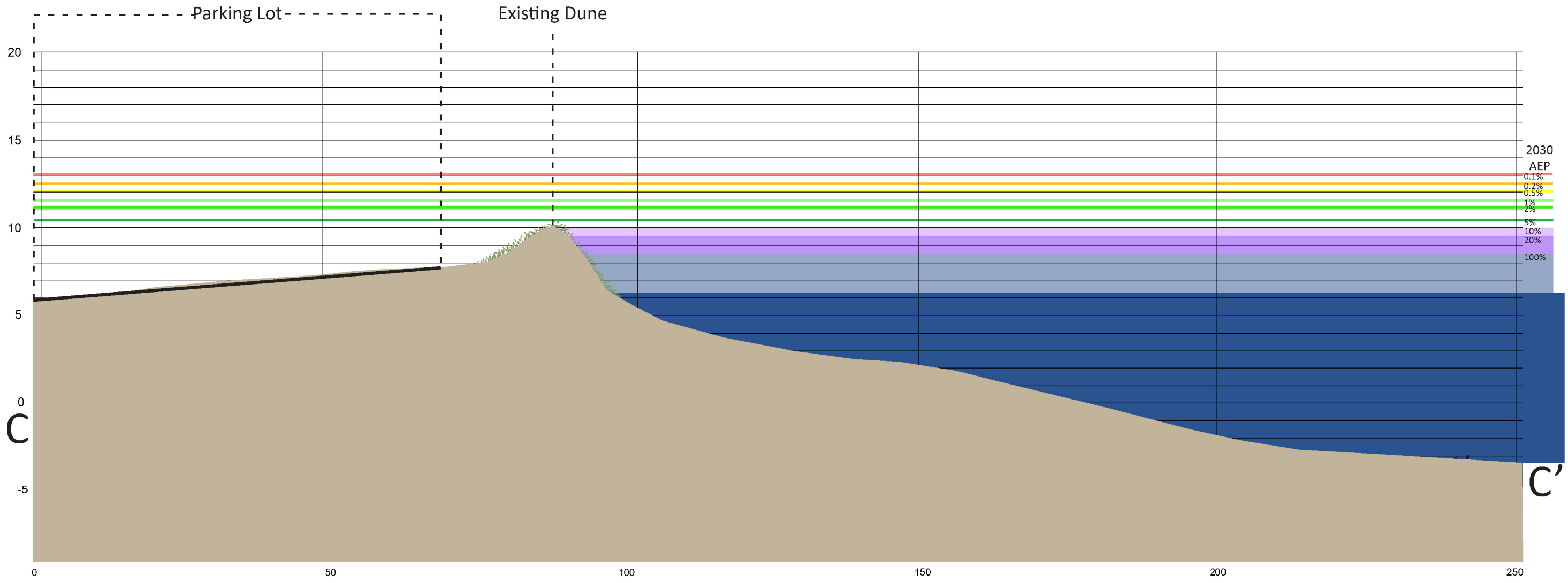


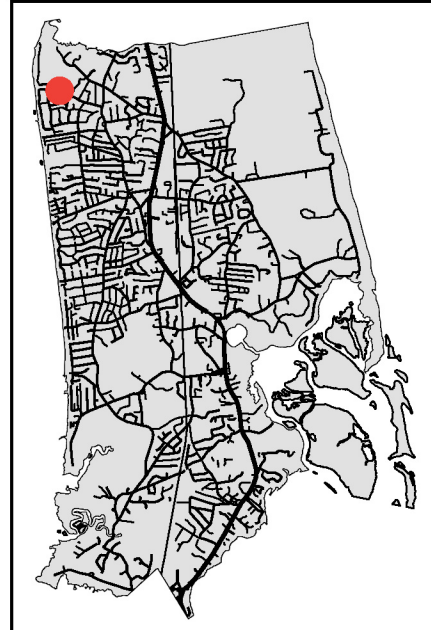
EXISTING CONDITIONS
 South Sunken Meadow Road, Eastham



EXISTING CONDITIONS
 South Sunken Meadow Road, Eastham



EXISTING CONDITIONS
 South Sunken Meadow Road, Eastham



South Sunken Meadow Road
EASTHAM

ALTERNATIVE 1: GRAY

1721 linear feet of Town-owned road are elevated from a lowest point of 6.3 feet to a lowest point of 9 feet with a 4:1 traditionally vegetated side slope. Driveway tie-ins in the eastern part of the road are necessary.

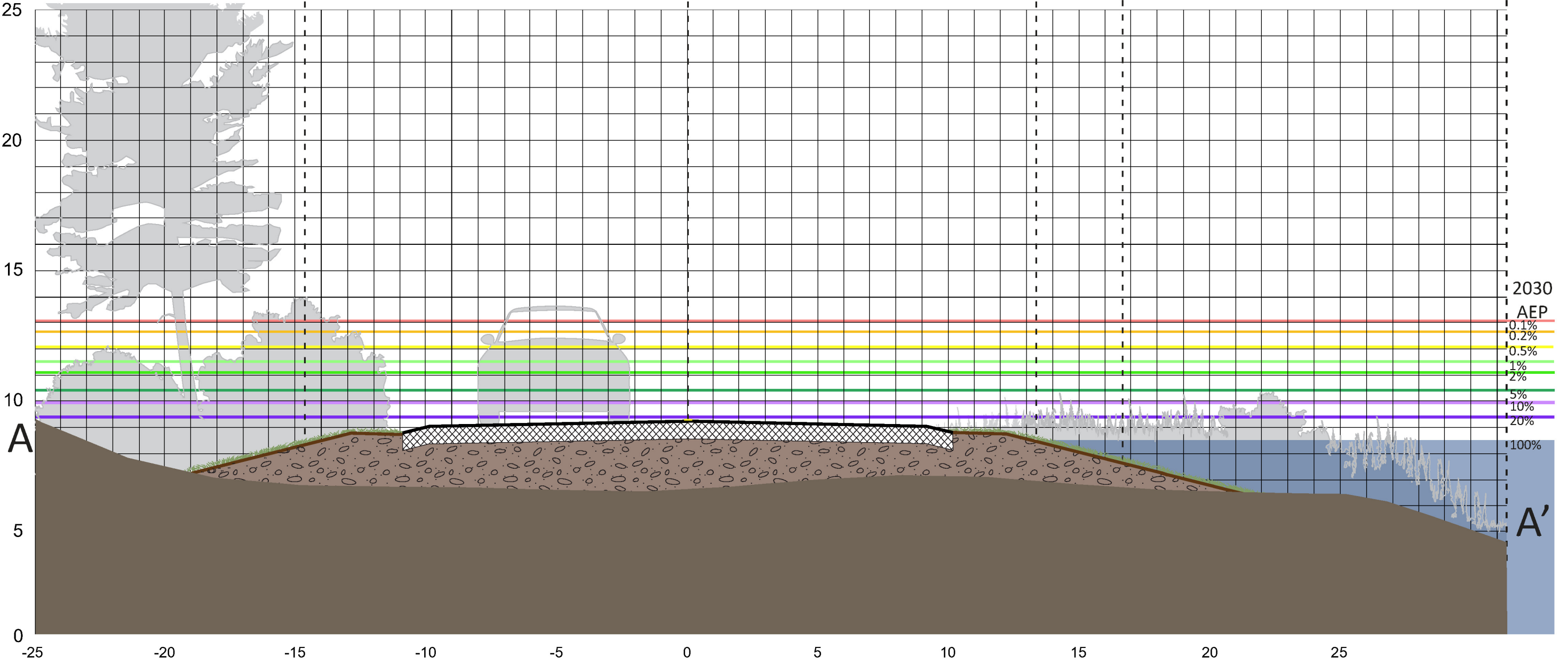
Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey

4:1 Side Slope with
Traditional Vegetation

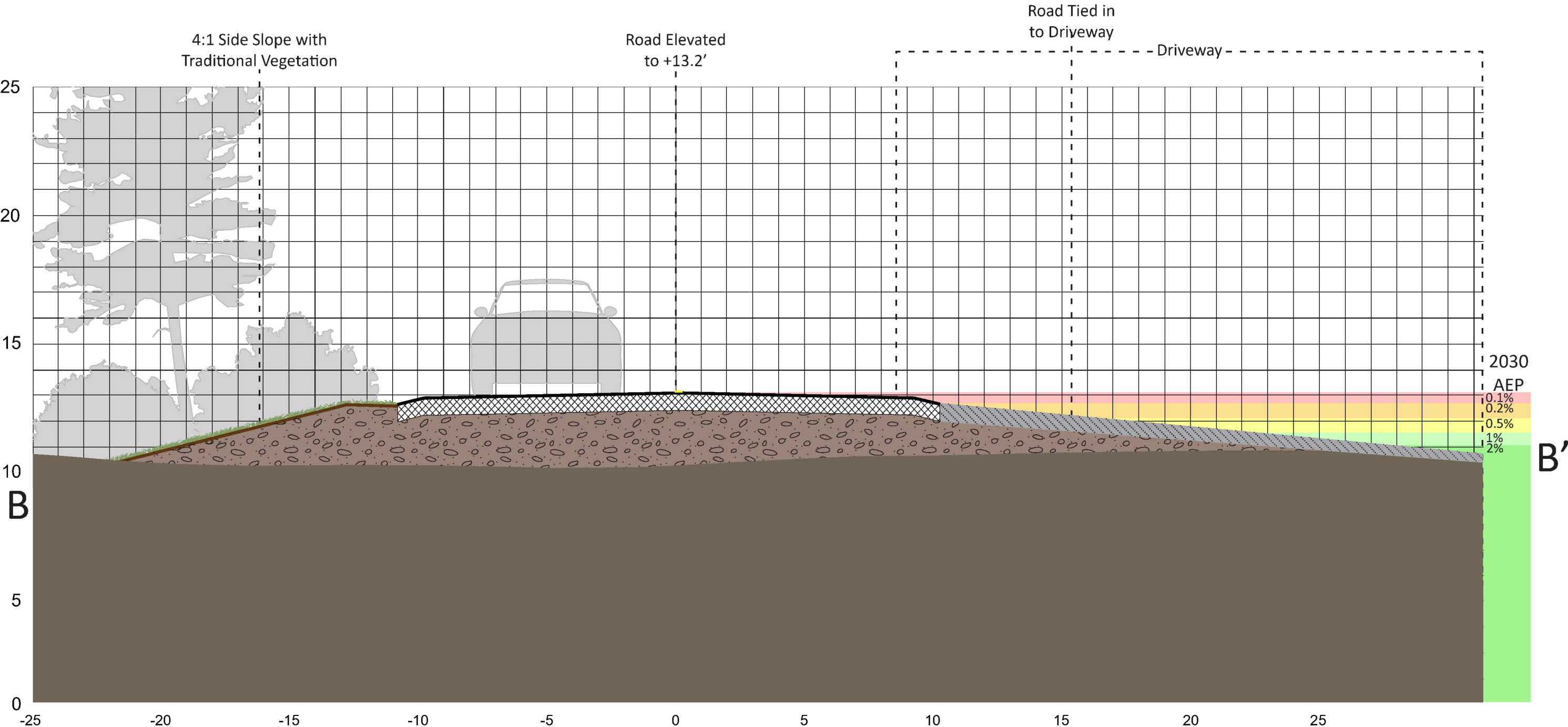
Road Elevated
to 9.0'

4:1 Side Slope with
Traditional Vegetation

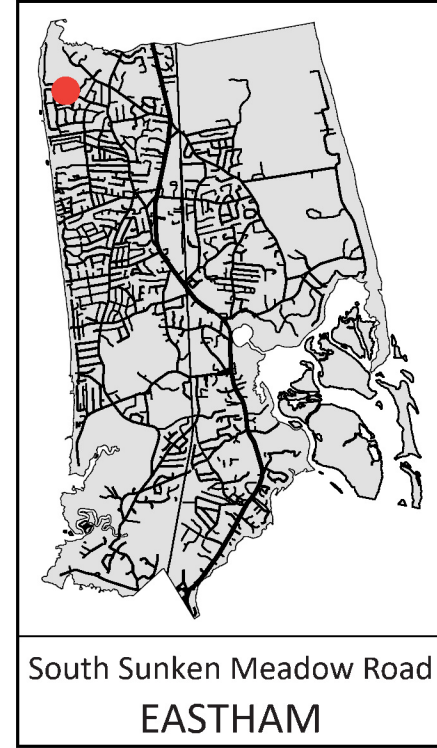
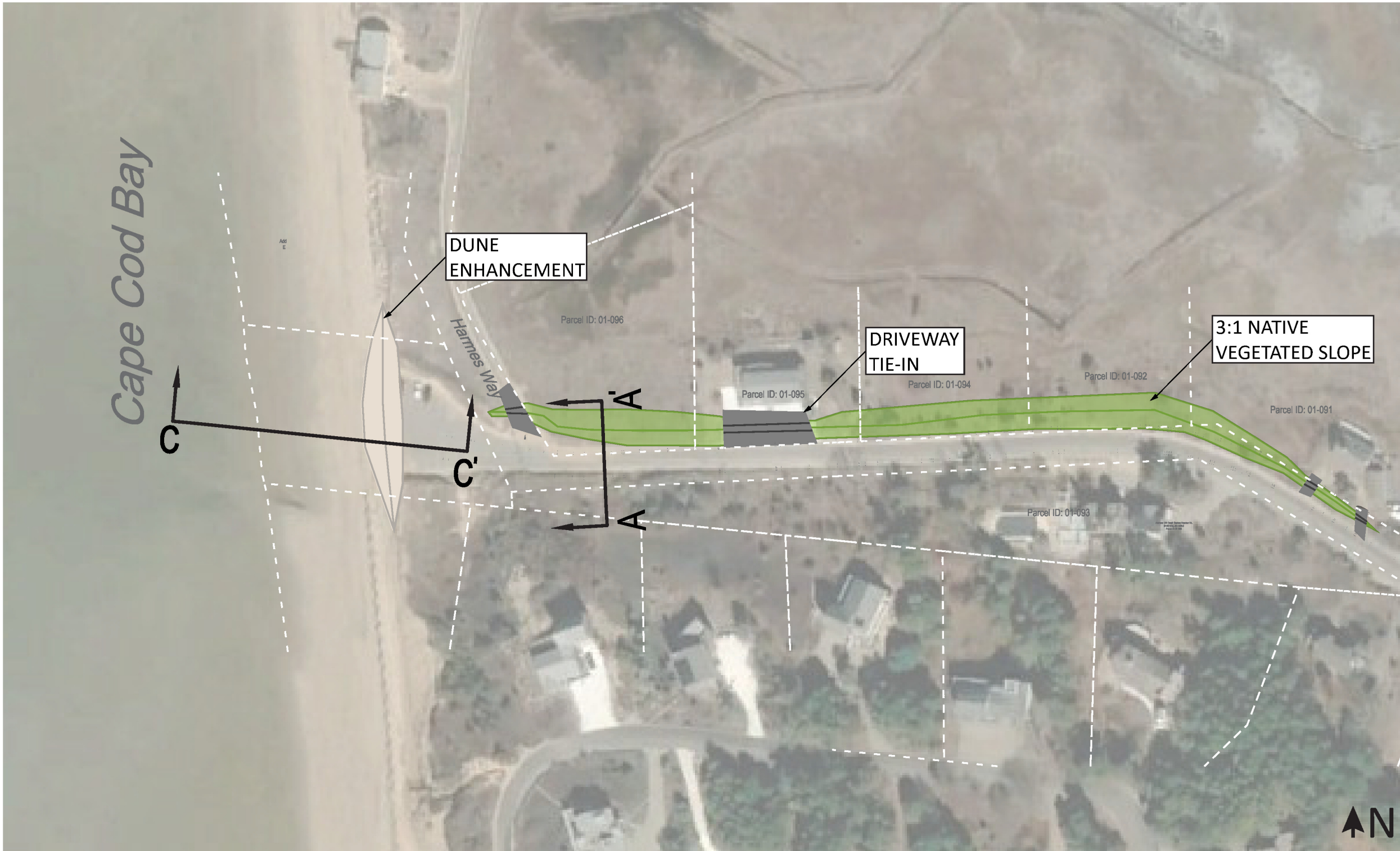
-Wetland-



ALTERNATIVE 1:GRAY
South Sunken Meadow Road, Eastham



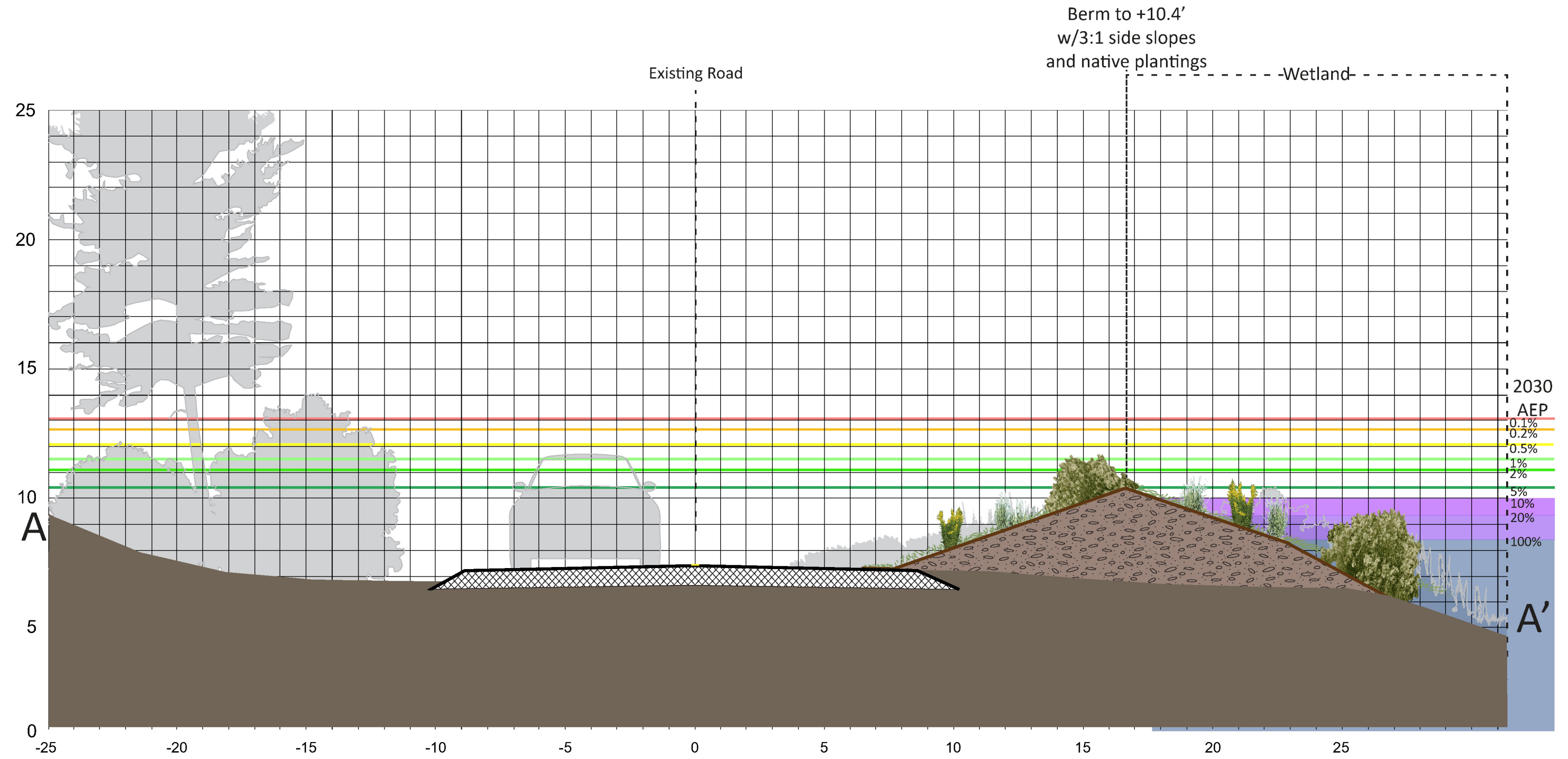
ALTERNATIVE 1:GRAY
 South Sunken Meadow Road, Eastham



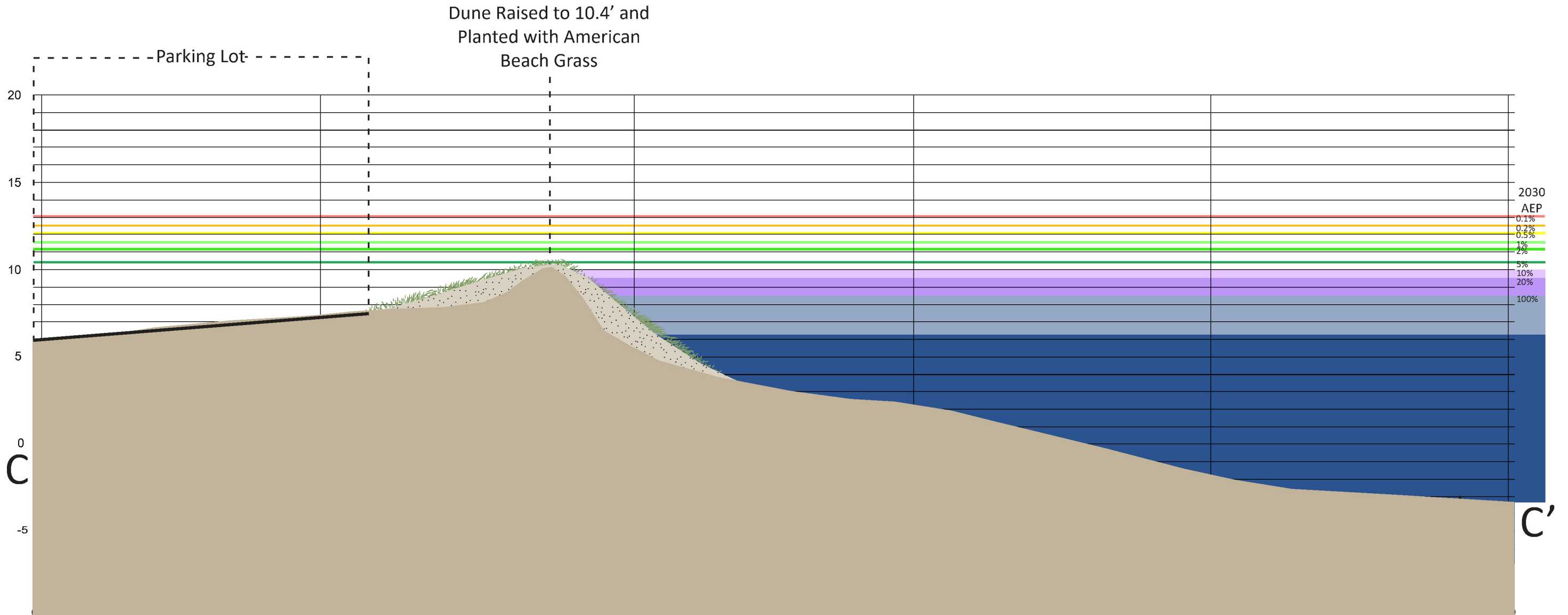
ALTERNATIVE 2: HYBRID

A berm to 10.4 feet with a 3:1 side slope planted with native vegetation is added on the northern side of the road. The dune is also enhanced to an elevation of 10.4 feet, and one row of parking spaces is eliminated. Driveway tie-ins at the eastern end of the berm are necessary.

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



ALTERNATIVE 2: HYBRID
 South Sunken Meadow Road, Eastham



Dune Raised to 10.4' and
Planted with American
Beach Grass

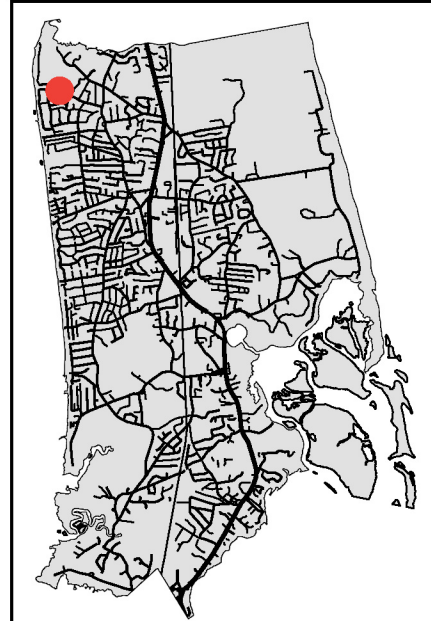
Parking Lot

2030
AEP
0.1%
0.2%
0.5%
1%
2%
5%
10%
20%
100%

C

C'

ALTERNATIVE 2: HYBRID
South Sunken Meadow Road, Eastham

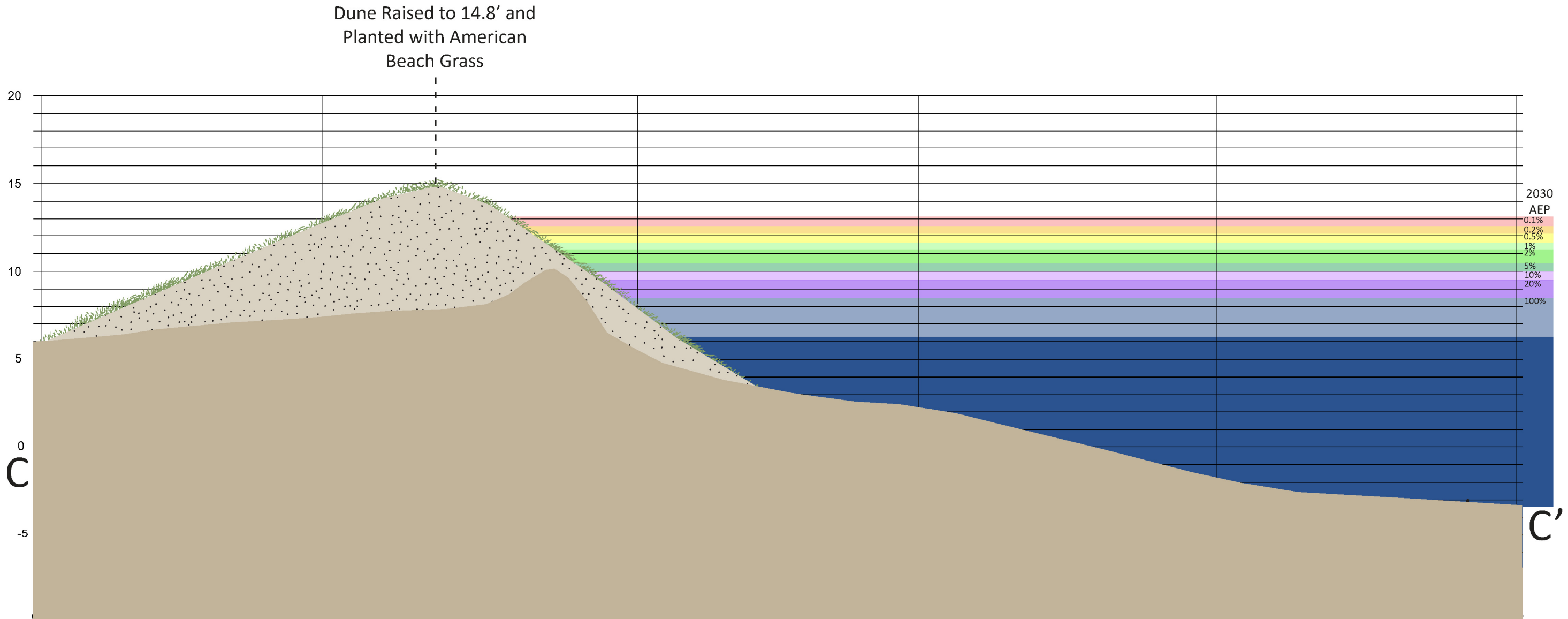


South Sunken Meadow Road
EASTHAM

ALTERNATIVE 3: GREEN

The beach parking lot is eliminated, and the dune is restored to 14.8 feet. Alternative parking locations would need to be explored.

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



ALTERNATIVE 3: GREEN
 South Sunken Meadow Road, Eastham

SOUTH SUNKEN MEADOW ROAD, EASTHAM

Summary of alternatives

	Description	Critical Elevation	Annual Exceedance Probability			Vulnerable to Tidal Flooding	Impacts to Resource Area(s)	Impacts to Private Property	Estimated Cost*
			2030	2050	2070				
EXISTING	A 20ft wide road adjacent to a marsh that ends in a beach parking lot.	6.3 feet	100%	100%	100%	2050	N/A	N/A	N/A
ALTERNATIVE 1: GRAY	1721 linear feet of Town-owned road are elevated from a lowest point of 6.3 feet to a lowest point of 9 feet with a 4:1 traditionally vegetated side slope. Driveway tie-ins in the eastern part of the road are necessary.	9.0 feet	20%	100%	100%	2070	Negative	Yes	\$724,000
ALTERNATIVE 2: HYBRID	A berm to 10.4 feet with a 3:1 side slope planted with native vegetation is added on the northern side of the road. The dune is also enhanced to an elevation of 10.4 feet, and one row of parking spaces is eliminated. Driveway tie-ins at the eastern end of the berm are necessary.	10.4 feet	5%	20%	100%	N/A	Possible Negative	Yes	\$147,000
ALTERNATIVE 3: GREEN	The beach parking lot is eliminated, and the dune is restored to 14.8 feet. Alternative parking locations would need to be explored.	14.8 feet	0%	0.2%	1%	N/A	None	No	\$108,000

*2023 installed material cost +40% escalation (through 2029) and 15% contingency. Excludes design, permitting, mobilization, stormwater and wastewater infrastructure, and site controls. Costs based on experienced contractor opinion and MassDOT costing data.