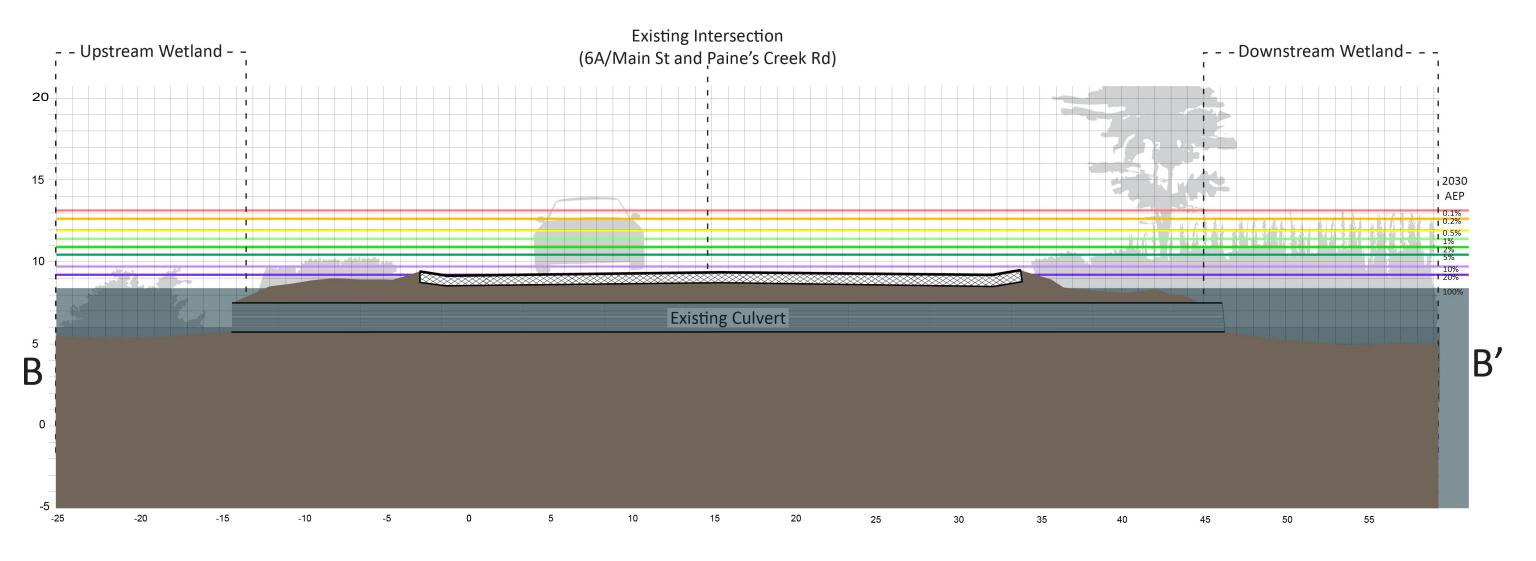


### **EXISTING CONDITIONS**

Route 6A at Betty's Curve, Brewster

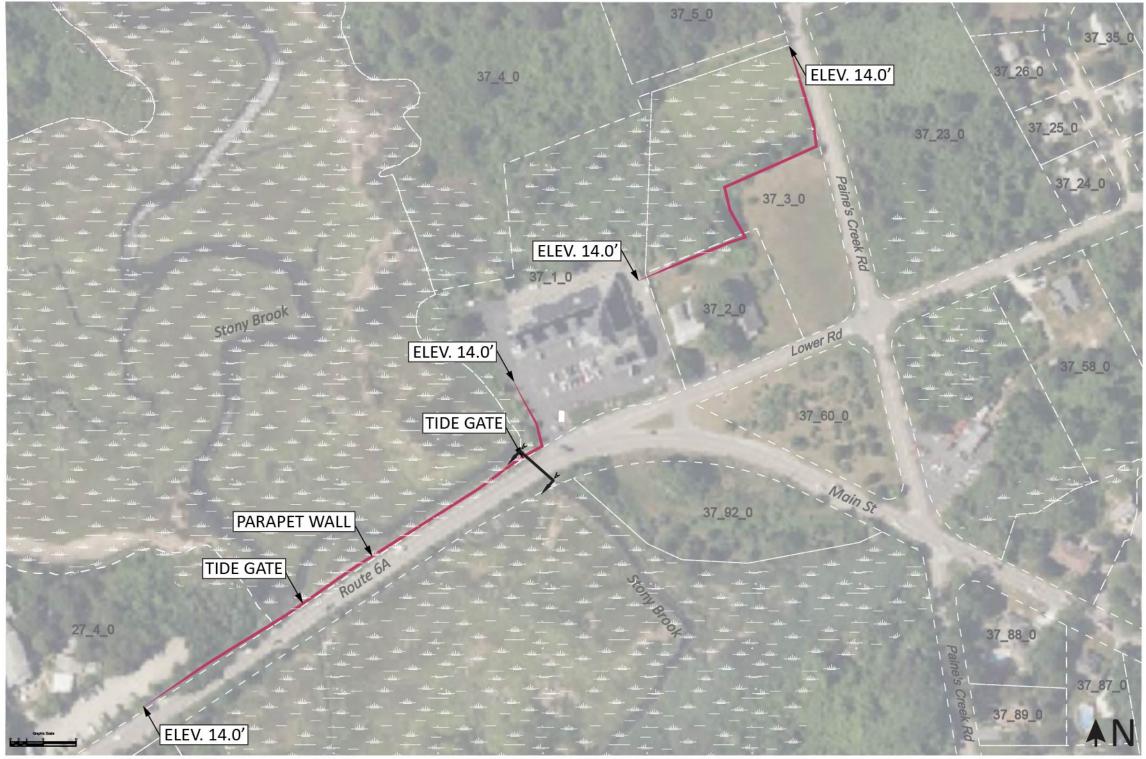


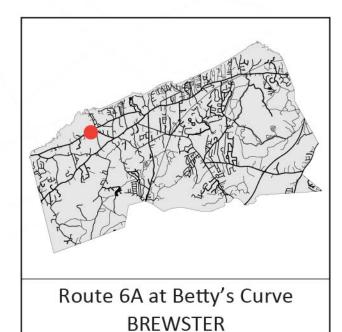


### **EXISTING CONDITIONS**

Route 6A at Betty's Curve, Brewster





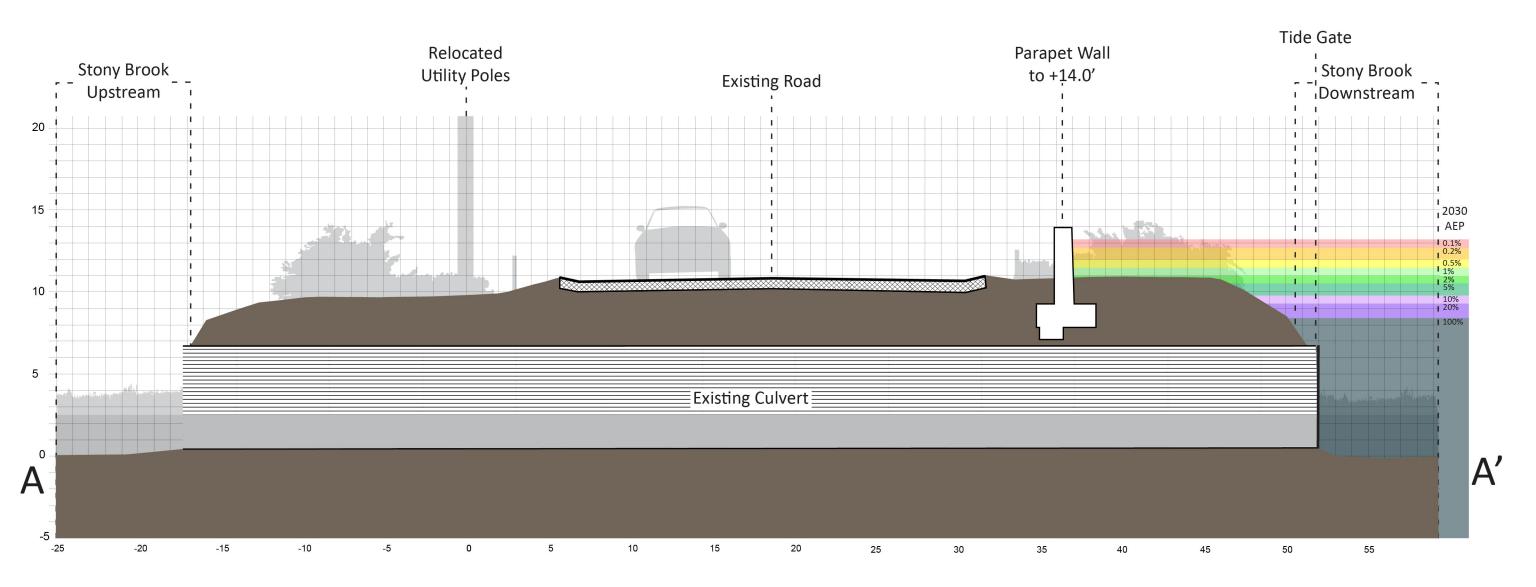


ALTERNATIVE 1: GRAY

A parapet wall to 14.0 feet is added on the north side of 6A, and continues along Paine's Creek Road to prevent flanking. Tide gates are added to the large culvert and smaller secondary culvert under Route 6A.

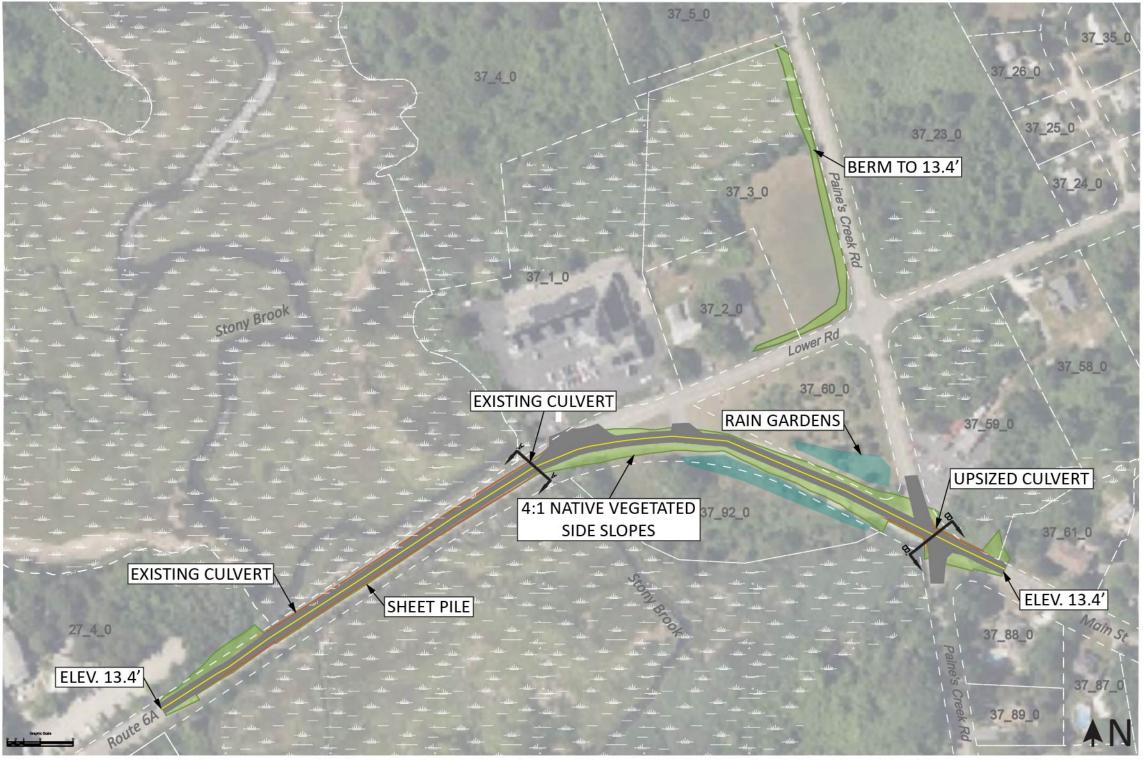


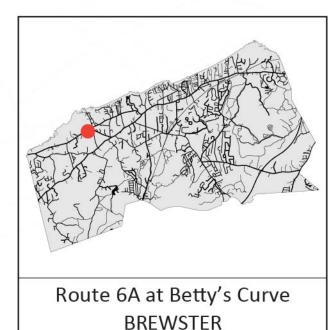
Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey



# ALTERNATIVE 1: GRAY Route 6A at Betty's Curve, Brewster

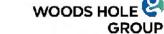


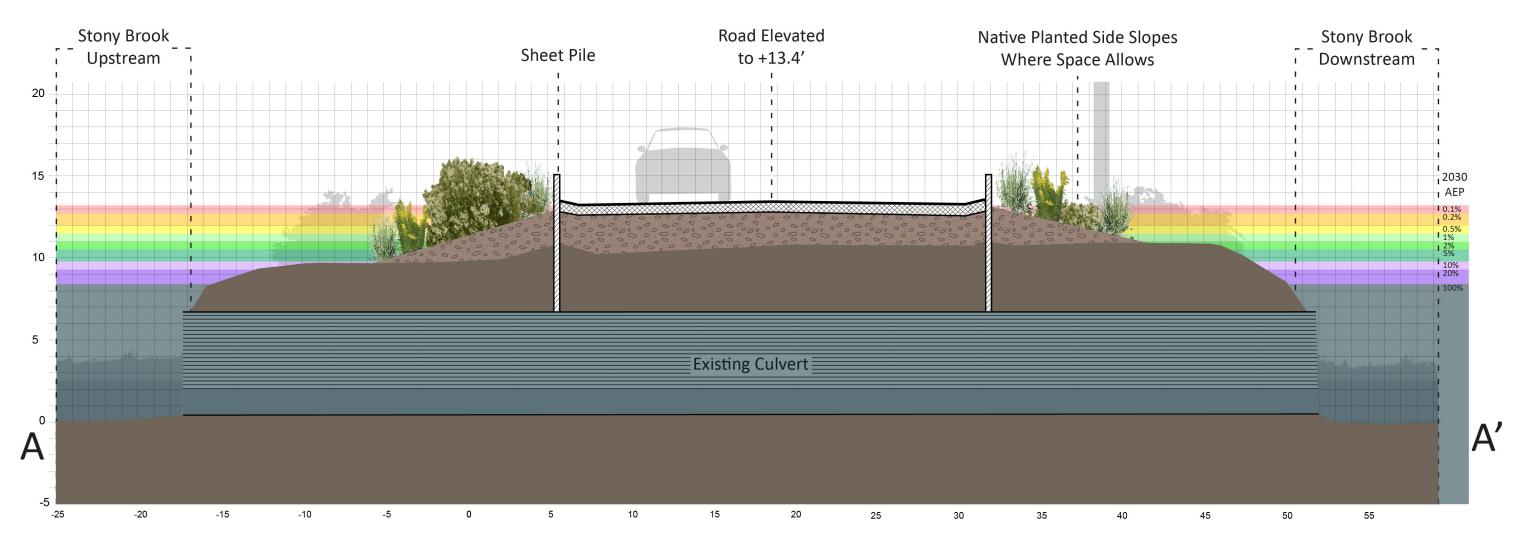




#### ALTERNATIVE 2: HYBRID

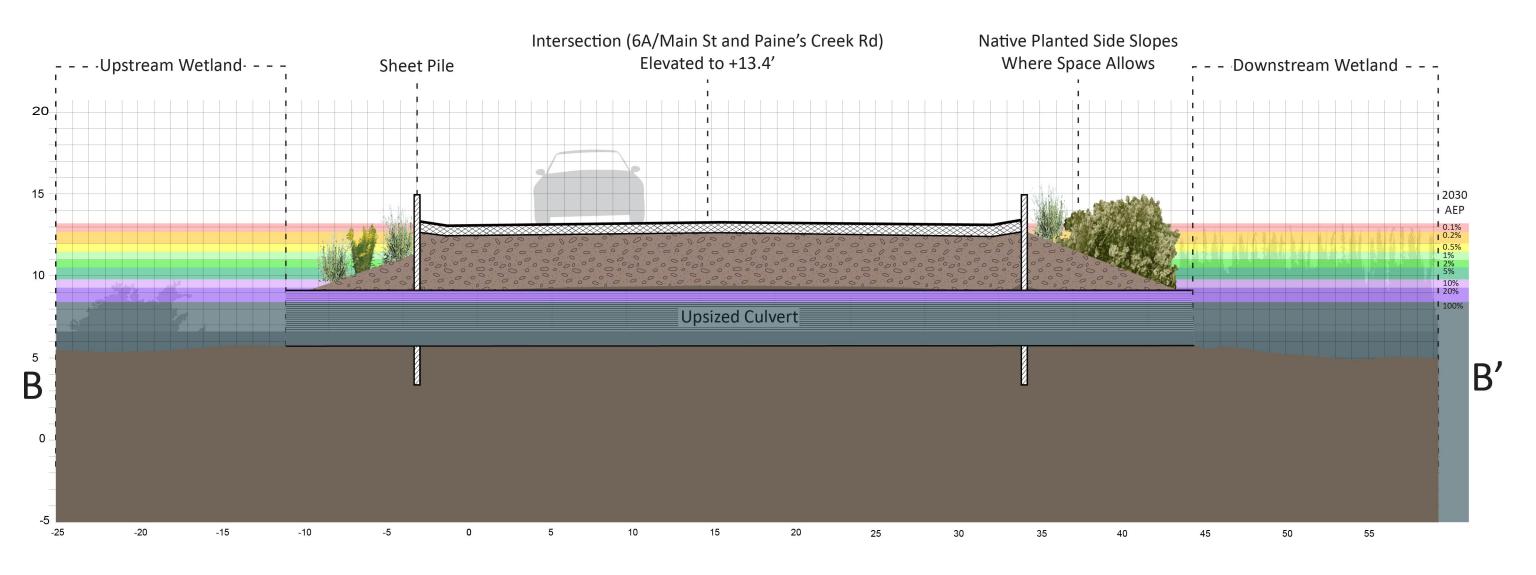
1506 linear feet of road are elevated to 13.4 feet using sheet pile and native vegetated 4:1 side slopes. The culvert at the intersection of 6A/Main Street and Paine's Creek Road is replaced with a larger culvert. A berm is added along Lower Road and Paine's Creek Road to block a flanking pathway. Rain gardens are constructed in the town-owned triangle and marsh-adjacent parcel to help manage stormwater.





# ALTERNATIVE 2: HYBRID Route 6A at Betty's Curve, Brewster





# ALTERNATIVE 2: HYBRID Route 6A at Betty's Curve, Brewster



### ROUTE 6A at BETTY'S CURVE, BREWSTER

Summary of alternatives

	Description	Critical Elevation	Annual Ex	ceedance F 2050	Probability 2070	Vulnerable to Tidal Flooding	Impacts to Resource Area(s)	Impacts to Private Property	Estimated Cost*
EXISTING	A segment of 30 foot wide road with multiple culvert crossings.	8.4 feet	20%	100%	100%	2070	N/A	N/A	N/A
ALTERNATIVE 1: GRAY	A parapet wall to 14.0 feet is added on the north side of 6A, and continues along Paine's Creek Road to prevent flanking. Tide gates are added to the large culvert and smaller secondary culvert under Route 6A.	14.0 feet	0%	0.2%	2%	2070	Minimal	Minor	\$1,880,000
ALTERNATIVE 2: HYBRID	1506 linear feet of road are elevated to 13.4 feet using sheet pile and native vegetated 4:1 side slopes. The culvert at the intersection of 6A/Main Street and Paine's Creek Road is replaced with a larger culvert. A berm is added along Lower Road and Paine's Creek Road to block a flanking pathway. Rain gardens are constructed in the town-owned triangle and marsh-adjacent parcel to help manage stormwater.	13.4 feet	0%	0.5%	5%	N/A	Possible Positive	Minor	\$3,860,000

<sup>\*2023</sup> 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.