

Huntington Beach Bluff Top Trail Stabilization Project

Bluff Top Park, a critical segment of the 8-mile Huntington Beach Bike Trail, suffers from ongoing coastal erosion, rendering the trail impassable or park unusable after storms cause dangerous landslide conditions.

Bluff Top Park is a valued coastal resource, providing low-cost public access amenities including bike and pedestrian paths, restrooms, public parking, a dog beach area, and open beach space. Nearly 500,000 people, including residents and visitors from neighboring underserved communities, use the bike trail and visit this segment of beach annually. The blufftop project area comprises a relatively narrow strip of land between Pacific Coast Highway (PCH) and the bluffs which range in height from 20-30 feet above the sandy beach. Over the years this valuable public asset has been subject to ongoing coastal erosion that is likely caused by sea level rise and the relative alignment of the bluffs. The erosion has formed “embayments” in the bluff, where the bluff top has retreated beyond the adjacent reaches, creating safety hazards. These embayments are particularly close to existing infrastructure, including the shared bike path and a restroom. If not addressed, the erosion will continue to progress, destroying the bike trail and eventually impacting the roadway at PCH with closures for costly repairs.

The proposed repair concept to stabilize the bluffs is to install shotcrete along the bluff face that is colored and sculpted to match the natural bluff appearance and accompanied by dune habitat restoration.



Stabilizing the bluffs with natural solutions will ensure minimal impact to the sandy beach while accommodating the bike trail and recreational bluff top area. The proposed approach is resilient to future sea level rise, improves safety for beach and path users, minimizes the footprint impacting the beach, and increases public health and community wellness.

Addressing the impacts of coastal erosion and potential road closures of Pacific Coast Highway will benefit the entire Southern California region as people from across Orange, Los Angeles, and Riverside Counties visit the beach and travel along PCH and the Huntington Beach Bike Trail. The 2022 annual average daily traffic volume for this segment of PCH is 38,200 according to Caltrans. It is vital that the bluffs are stabilized to prevent further erosion impacting the adjacent roadway and preventing people from traveling between jurisdictions along the coast.

Project Cost

Total Project Cost: \$13,352,000

LTCAP Request: \$10,560,000

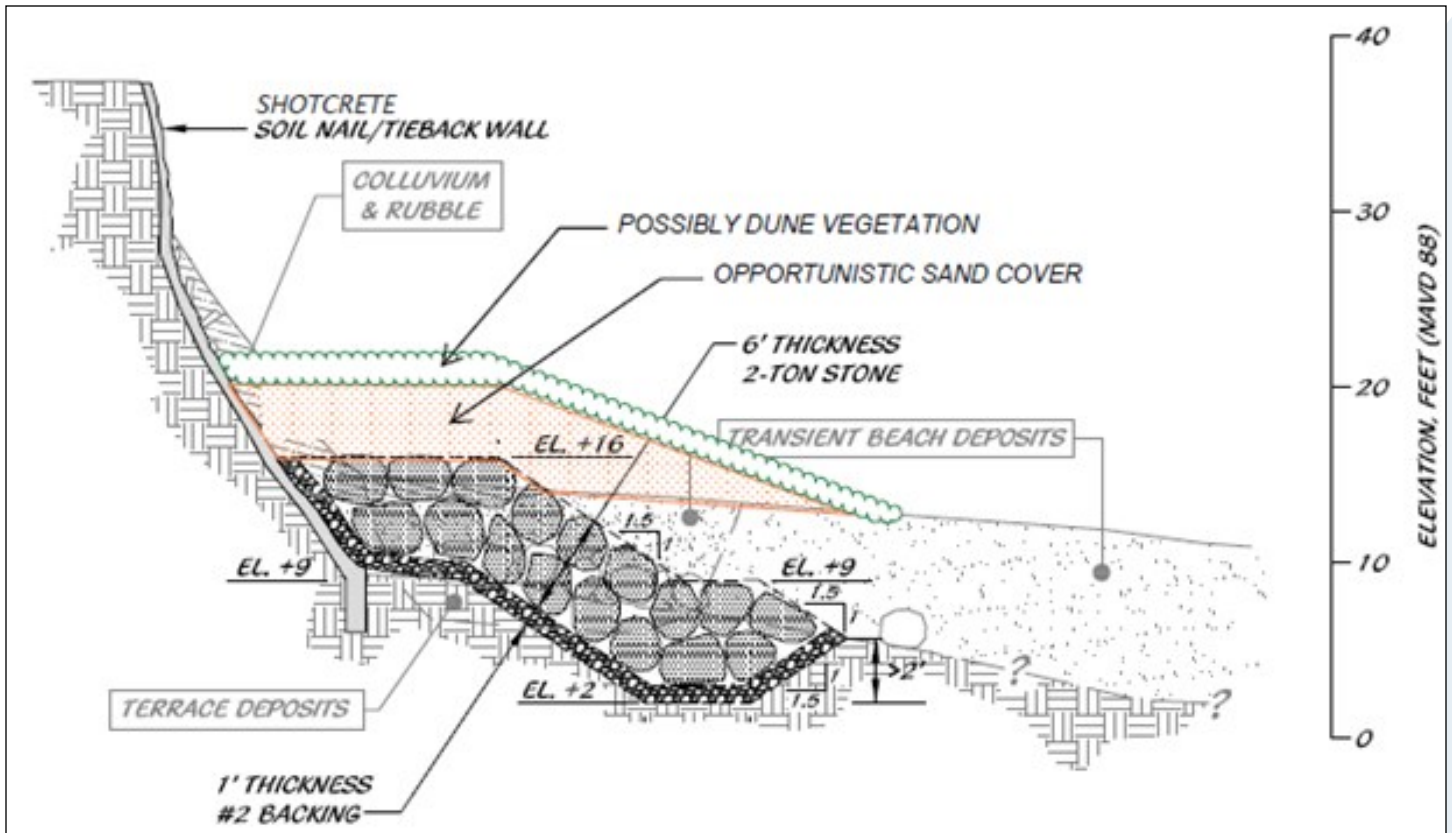
Project Milestones

PA&ED: September 2025

PS&E: September 2026

CON: February 2027





Project Scope

- Stabilize the bluffs utilizing natural solutions to minimize impact to the sandy beach and accommodate the proximity of the bike trail and recreational bluff top area
- Salvage and re-use remnant rock and rubble material to remove it from the active beach area
- Install shotcrete along the bluff face with soil nails or tie-back anchors
- Color and sculpt the shotcrete to match the natural bluff appearance
- Sand cover of the bluff toe rock
- Install dune vegetation within the sand along the bluff toe

Project Benefits

- Increase resiliency against future sea level rise
- Stabilize the resilience of the trail, bluff top, and adjacent Pacific Coast Highway
- Address existing and prevent future coastal erosion conditions
- Improve safety for beach and trail users
- Improve public health and community wellness
- Restore public access along the shoreline to the trail and beach

