



CONSTRUCTION UPDATES

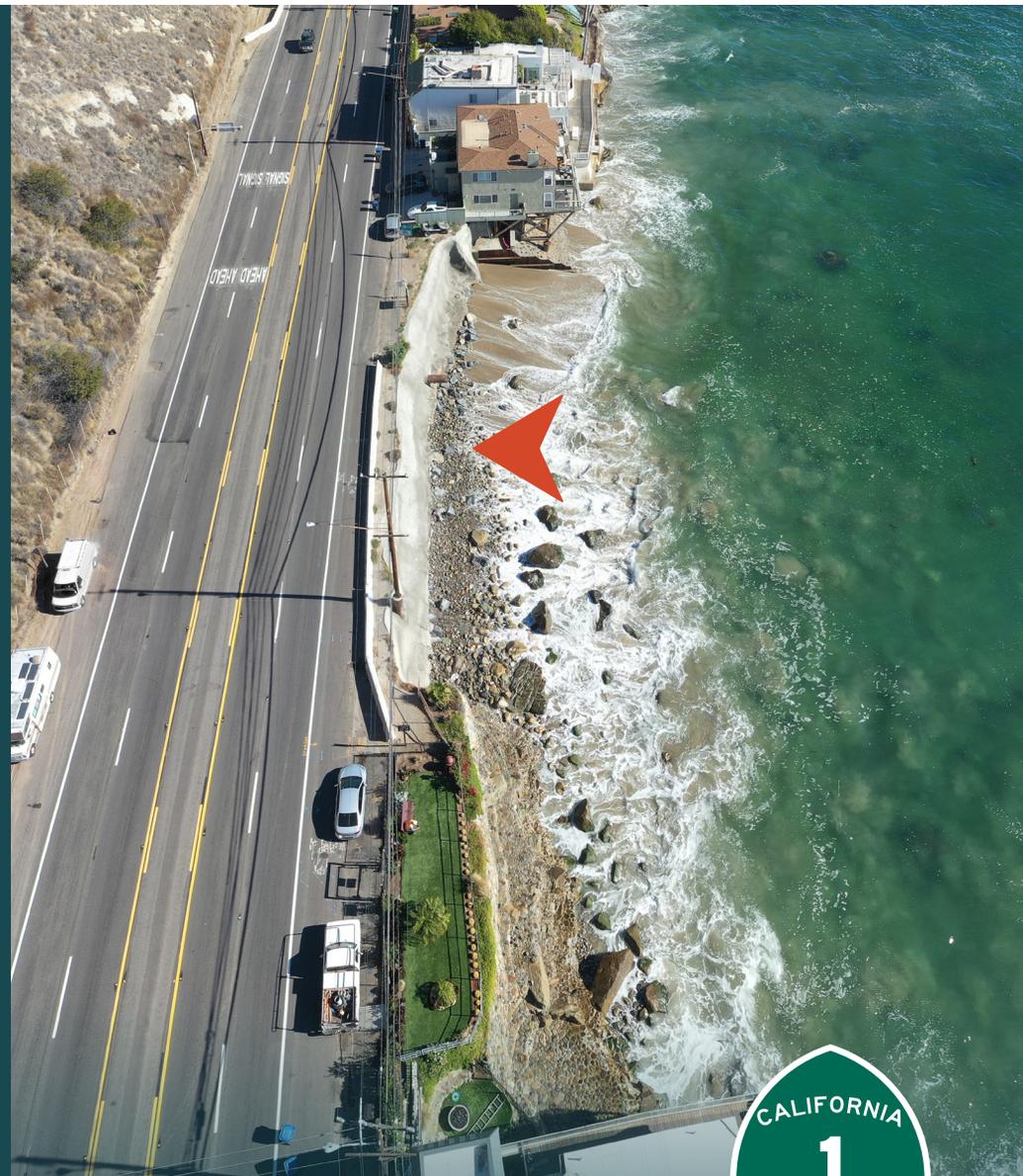
Caltrans District 7 posts updates with text, photos, graphics and videos across social media, including Twitter, Facebook, Instagram, YouTube, and Flickr. Also, check [Quickmap.dot.ca.gov](https://quickmap.dot.ca.gov).

PROJECT WEBSITE

<https://dot.ca.gov/caltrans-near-me/district-7>

CONTACT

Jim Medina, Public Information Officer, james.medina@dot.ca.gov



SR-1 SLOPE RESTORATION PROJECT

CALTRANS IS PLANNING A PERMANENT SLOPE RESTORATION ON STATE ROUTE 1 (PACIFIC COAST HIGHWAY) IN MALIBU.

Construction of the **\$12.4 million** project south of Big Rock Drive is scheduled from September 2022 through July 2023. Utility relocation will take place from September 2021 through October 2022.

The work zone spans 180 feet on southbound SR-1, which will require shifting lanes toward the hillside to make room for special construction equipment.

BACKGROUND

Storm damage during the winter of 2015-2016 caused slide damage along this slope, endangering the shoulder and the right southbound lane. Caltrans assessed the risk to the stability of the roadway and issued a Director's Order on June 10, 2016 for an emergency project to apply short-term protective measures to the collapsing slope and shoulder. The project installed a "shotcrete" wall as a temporary fix, but it is now being undermined by sea waves, endangering the southbound shoulder and southbound right lane.



URGENCY

The **180-foot** beach area is prone to erosion and needs slope protection. Permanent slope restoration must be completed as rapidly as possible to prevent erosion, flooding and enlargement of sinkholes that may trigger long-term closures of State Route 1 (Pacific Coast Highway/ PCH), an essential route for residents, commuters, emergency services and commercial traffic.

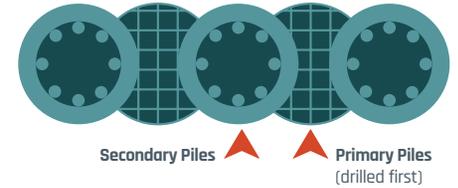
BENEFITS

A secant pile wall will permanently restore the slope, 600 linear feet of widened shoulders and 178 linear feet of concrete barrier. The new wall also will dissipate the energy generated by the waves.

PROJECT

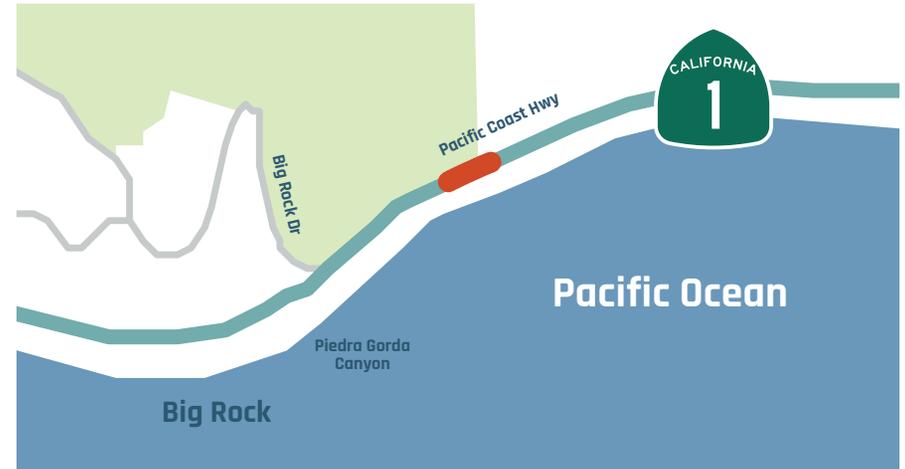
Cast in Drilled Holes (CIDH) are high-capacity cast-in-place deep foundation elements constructed using an auger to drill a hole, in which steel reinforcement and concrete are placed. Secant pile walls consist of overlapping CIDH piles, creating a water-tight surface.

Two types of piles are used in secant pile wall construction, a "primary" or reinforced pile, and a "secondary" or unreinforced pile. Primary and secondary piles alternate, to create a wall of piles.



The main advantages of Secant Pile Walls are:

- Increased construction alignment flexibility
- Increase wall stiffness compared to sheet piles
- Can be installed in difficult ground (cobbles/boulders)
- Less noisy construction



WHAT TO EXPECT

To provide space for construction along the 180-foot stretch of shoulder and roadway, traffic lanes will be shifted toward the hill, with the 10-foot-wide median reduced to 2 feet. There will be three 10-foot-wide lanes and one 11-foot-wide lane during construction, with no shoulder in both directions. The speed limit in the work zone will be reduced to 25 MPH.

There will be no pedestrian access in construction area. Bicyclists will be allowed to share right highway lanes.

GENERAL WORK HOURS

Monday-Friday 6:00 a.m. to 9:00 p.m.
Weekend work is permitted.