

SMCHD - West Trail Repairs

Board of Harbor Commissioners Meeting

April 18, 2018



Presentation Agenda

Project Overview

Work To Date

Challenges

Soil Nail Wall







Project Overview

- West Trail Condition Assessment (2012)
- Temporary Emergency Culvert Repair Design
 Scope limited to wash-out and culvert vicinity (2014-2015)
- Emergency Coastal Development Permit issued with Conditions, including a requirement to obtain a regular CDP for work to be considered permanent
- Temporary Emergency Culvert Repairs Completed (early 2016)
- Regular CDP application submitted (late 2016)
- CDP application supplemental materials and additional requested studies submitted (2017)
- Final design (100%) and permit submittals currently underway









Work To Date

- Emergency repair design and ECDP completed
- Regular CDP application completed with studies (Sea Level Rise and Erosion; Drainage; and Conceptual Alternatives Analysis)
- Slope failure evaluation and re-evaluation completed
- ECDP submitted for the trail closure due to 2017 slides
- Commission coordination regarding how to proceed with permits at West Trail following 2017 slides
- Assistance provided with cost estimate and scope of possible slope stabilization in support of FEMA/CalOES funding applications
- Supplemental CDP application materials completed (Geotechnical Study, Sand Impact Calculations; Biology Addendum; additional Visual Simulations, etc.)
- Design, 100% completed with landscape plans
- Contractor meeting on-site



Challenges

- Scope limits (i.e. wash-out damage in the vicinity of the existing culvert at the trail)
- Winter storms in 2017 causing slides, trail closure, and additional permit submittal and coordination
- Beach nourishment considerations
- Alternatives
 - Discussed during the June 7, 2016
 Charrette
 - Sculpted Concrete Soil Nail Wall Alternative selected during Commissioner's meeting on September 7, 2016





Sculpted Shotcrete Soil Nail Wall Facing

- A pattern is carved into the shotcrete as it is being placed.
 The shotcrete is then allowed to cure and a stain is applied.
- A 'mock-up' or test section will be completed to allow the District to comment on the overall aesthetics before the entire wall is completed.





Sculpted Shotcrete Soil Nail Wall Facing (examples)

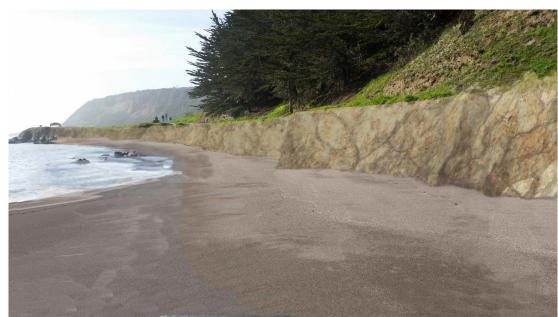








Soil Nail WallVisual Simulations







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