



LOSSAN

Coastal Rail Corridor

San Diego Segment

Los Angeles • San Diego • San Luis Obispo

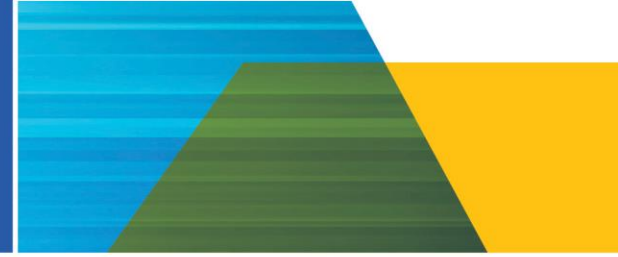


Building Today. Boarding Tomorrow.

Del Mar Bluffs Stabilization Update

July 20, 2020

KeepSanDiegoMoving.com



Engineering and Construction

- 2019 Emergency repair
- DMB Phase 4 construction
- DMB Phase 5 design
- DMB Phase 6 funding

Planning Studies

- LOSSAN tunnel alignment study started
- Beach access study funding announced

2019 Emergency Repair 15th Street Reviewing Aesthetic Options



Del Mar Bluffs Phase 4

Improvements

- Repair existing drainage structures
- Replace piles supporting sea walls
- Add piles at Sea Orbit Lane

Project Budget

- Was \$5.78 million
- \$1.3M added by NCTD BOD 7/16/20

Status

- Construction award January 2020
- Construction progress at 15%
- Completion target October 2020



Del Mar Bluffs 4 Access and Beach Work Areas



Beach Access

- Life Guard Tower (17th Street)
- State Park

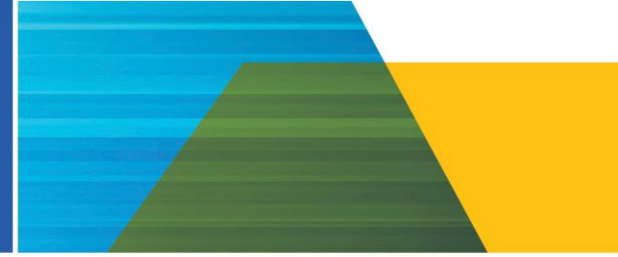
Beach Work Areas

- 13th St Sea Wall
- 13th St Drainage Outfall
- 12th St Sea Wall
- 7th St Sea Wall
- 8th St Outfall Repair

Del Mar Bluffs 4 8th Street Channel Improvements

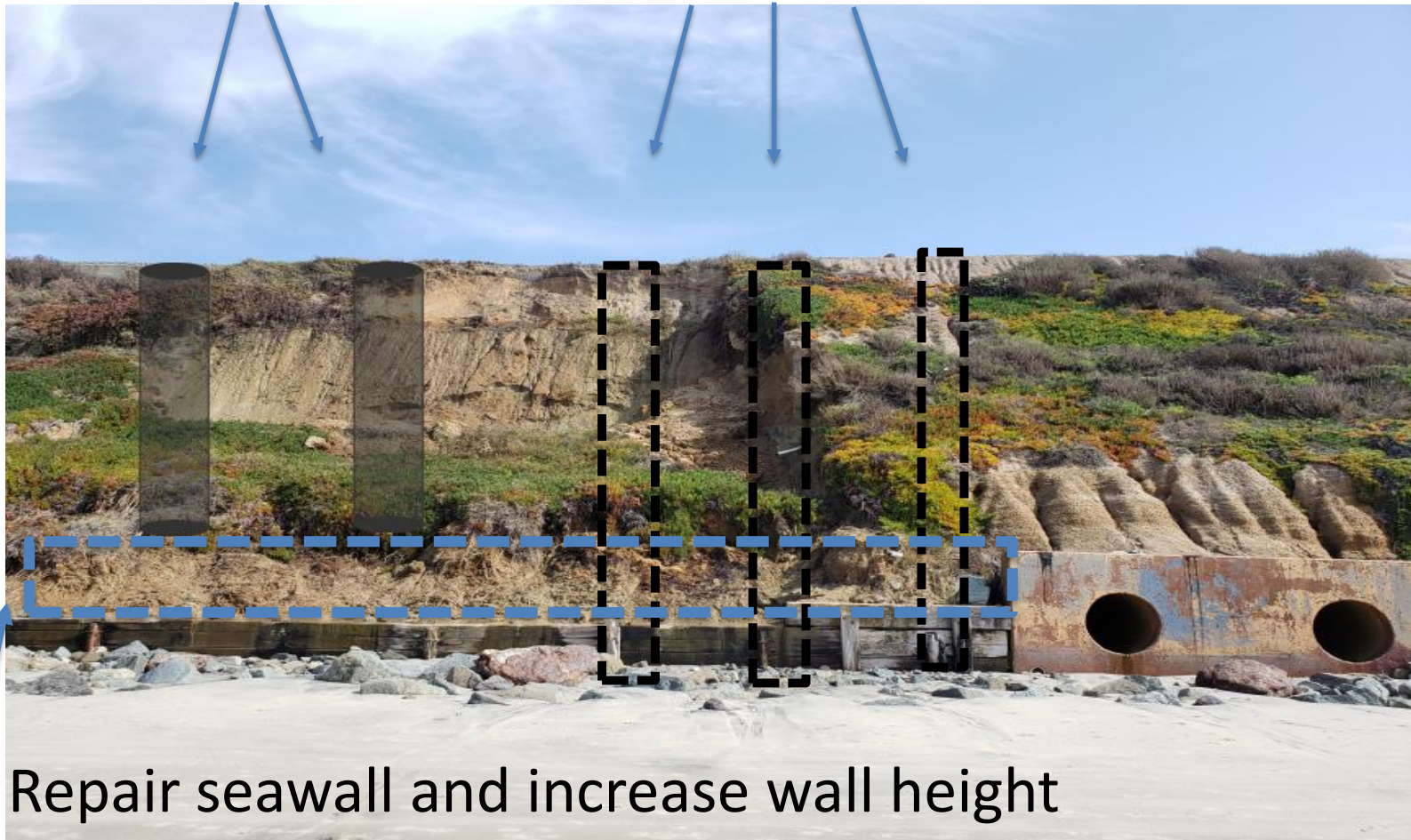


Del Mar Bluffs 4 - Recent AWW Three Piles at Sea Orbit Lane



DMB2 Piles

July 2020 Piles

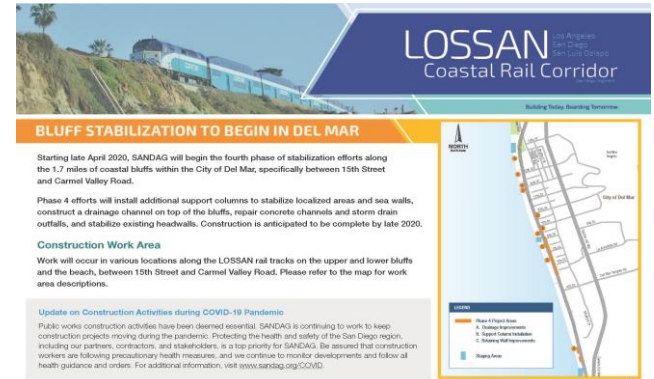


- Repair seawall and increase wall height

Del Mar Bluffs 4 Construction Outreach Ongoing

Covid-19 Construction is an Essential Activity

- 1,200 postcards
- Eblasts & social media
- News media outreach
- Less in person outreach
- Sign up for construction eblasts



Connect with Us:

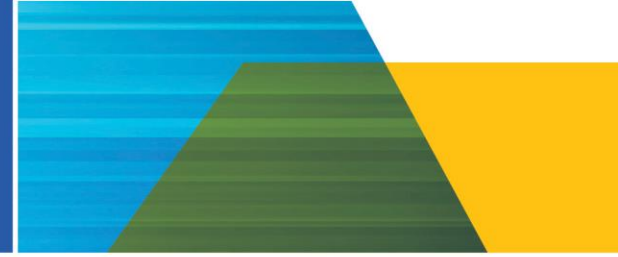
Website: [KeepSanDiegoMoving.com/DelMarBluffs](https://www.KeepSanDiegoMoving.com/DelMarBluffs)

Email: LOSSANRail@KeepSanDiegoMoving.com

Hotline: (858) 549-Rail

Del Mar Bluffs Phase 5

Maintaining stable track support



Schedule - Design started January 2020

- Reevaluating drainage capacity and needs
- Documenting bluff retreat over the last 20 years
- Reevaluate stabilization needs – static and **seismic** against deep landslides
- Add piles and tie backs and lagging
- Install new drainage structures

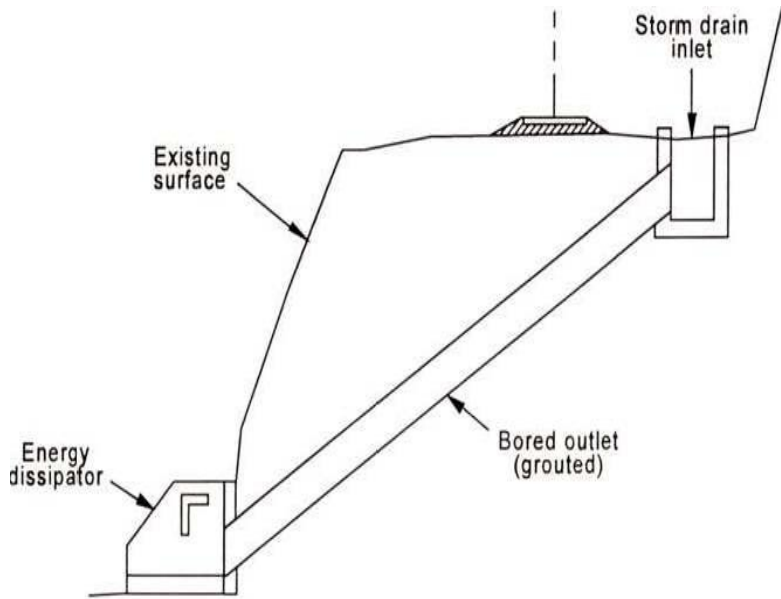
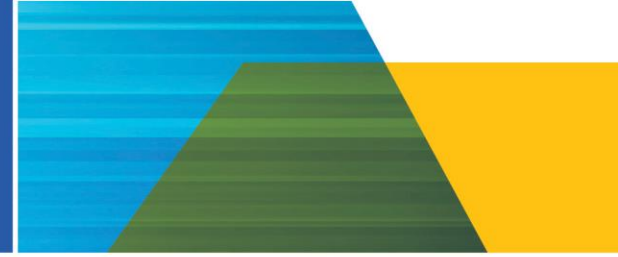
Construction Estimate

- \$50 to 65 million, partly funded
- \$11M SOGR & \$4.9M TIRCP awarded
- Applying for balance of funds
- Working Group



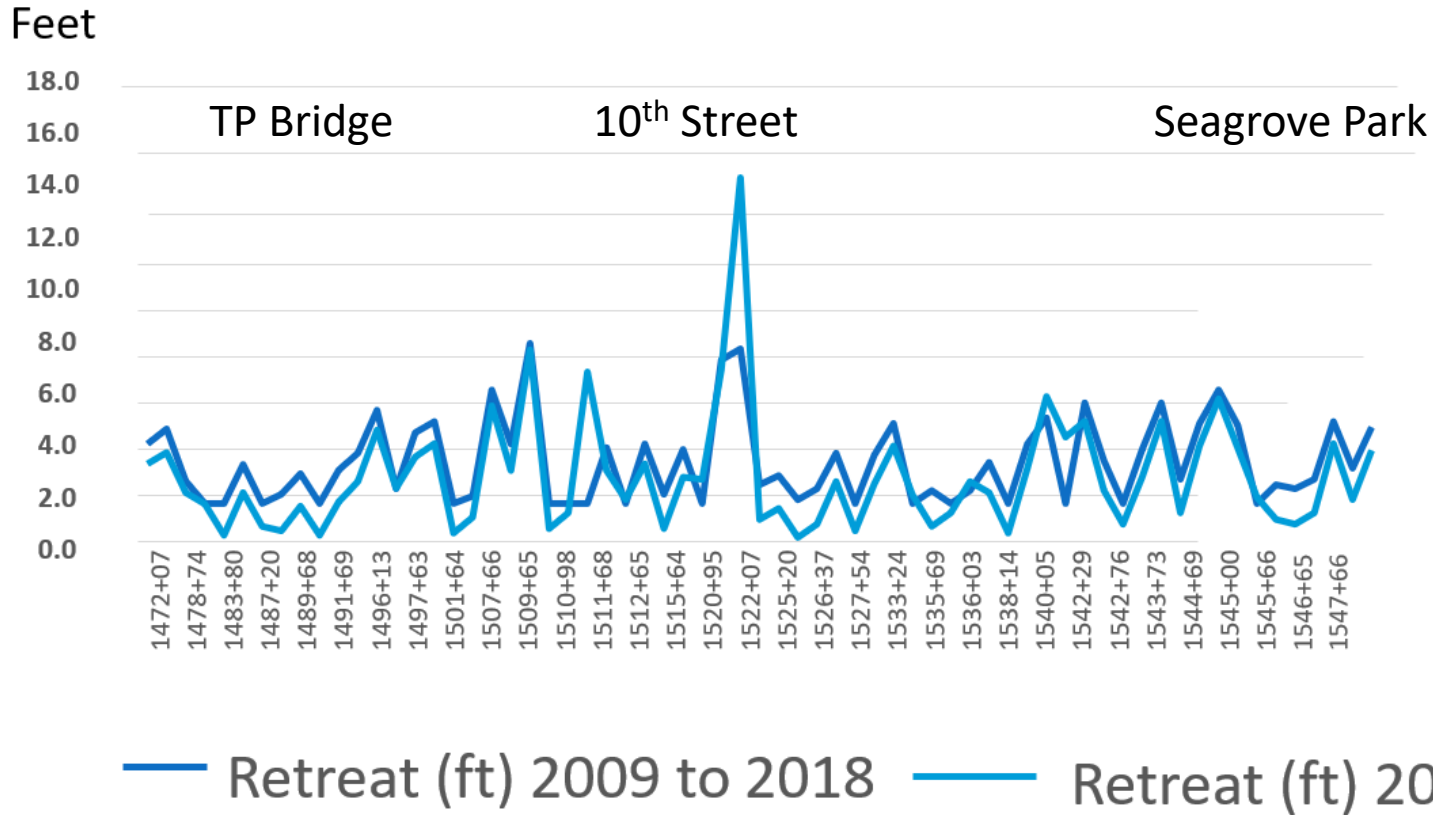
Del Mar Bluffs Phase 5

Replace 1912 storm drain at 12th St.



New piped storm drain

Del Mar Bluffs 5 Measured Bluff Retreat 2009-2020



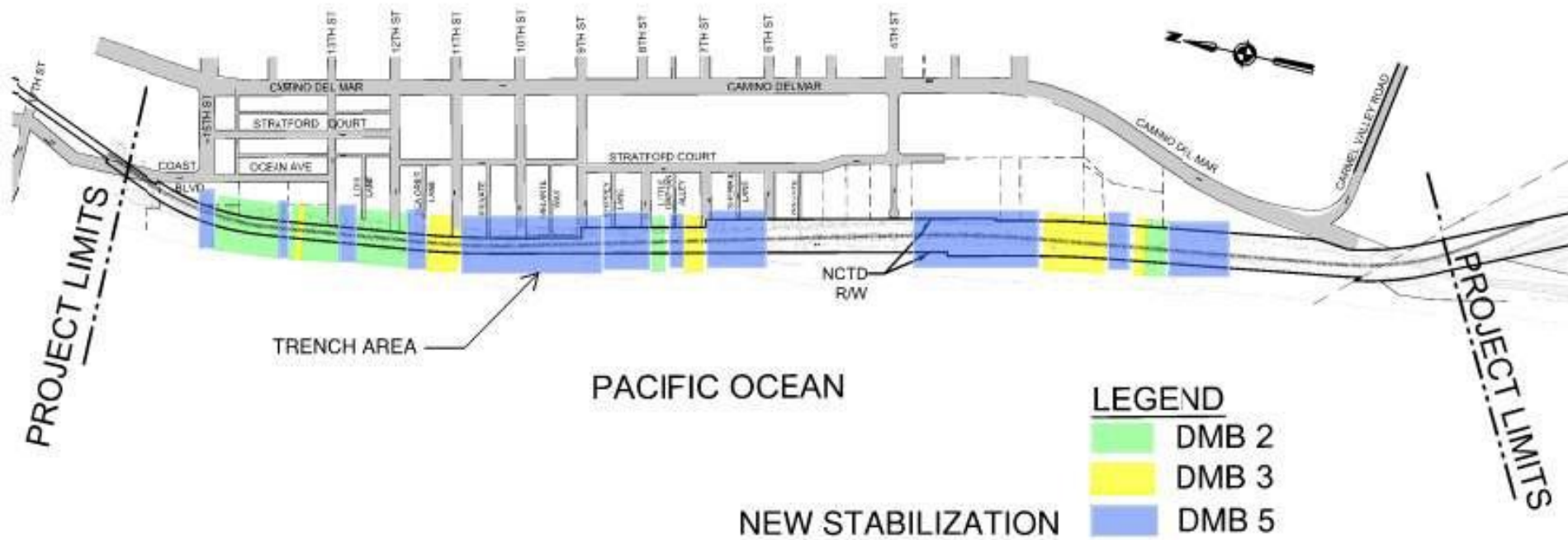
Del Mar Bluffs Retreat between 9th and 10th Street



Area of most active retreat is near 10th St.

Del Mar Bluffs 5 Pile Stabilization Areas

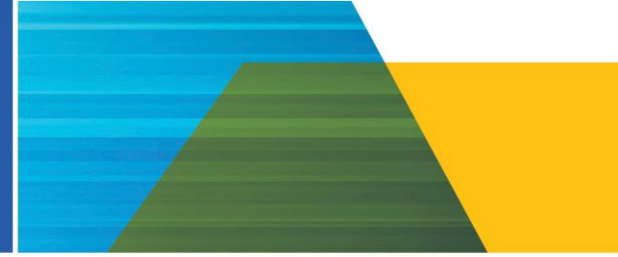
New Areas in Blue



DMB 5 Schedule

- Preliminary Engineering Summer 2020
- Environmental Clearance Winter 2020/21
- 60% Design Winter 2020/21
- Environmental Permits Spring 2021
- Final Design Spring 2021
- Bidding Summer 2021
- Construction Late 2021 – End 2022

Del Mar Bluffs Phase 6 Slowing Bluff Retreat



Scope

- Analyze alternatives for bluff protection
- Protect from Sea Level Rise
- Requested USACOE assistance

Schedule

- Design starts in Q4 2020
- When funds become available



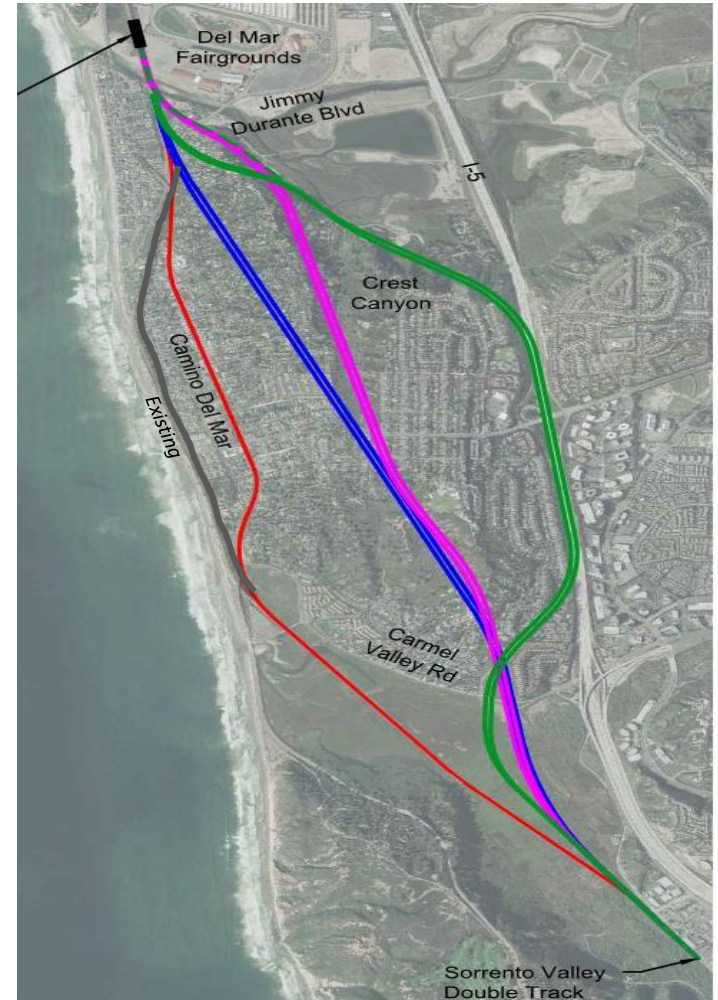
Long Term Planning - Del Mar Tunnel Alignment Alternatives

In 2017 five alignments for tunnels were studied.

We are now continuing tunnel alignment studies

Aim is to reduce trip times

- Improve speed and safety
- Move tracks inland



Del Mar Bluffs

Coastal Access study – Funding awarded



Coast Boulevard
MP 244.1

Torrey Pines Overhead Bridge
MP 245.7



Contacts and Questions?

www.KeepSanDiegoMoving.com/DelMarBluffs

Project Contacts

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