

The Trettin Company
Community & Government Relations / Project Development

June 22, 2020

TO: Development Services Department
City of San Diego

FROM: Bob Trettin, Principal
The Trettin Company

**RE: Site Development Permit Application
Relocation of Failed Bluff Materials;
9044 La Jolla Shores Lane, La Jolla, CA 92037**

As an authorized representative for Ralph "Buzz" Woolley, the owner of the subject property, I am submitting the attached Site Development Permit (SDP) Application as a follow-up to City of San Diego Site Development and Coastal Development Emergency Permit (Project #660175). The City of San Diego has authorized consolidation of the regular Coastal Development Permit to the California Coastal Commission. That application has been submitted to the Commission will remain unfiled pending final City action on the SDP.

Project Description

The emergency project included the relocation of +/- 190 cubic yards of failed natural bluff materials that threatened a pre-Coastal Act residence and tram landing at the base of the coastal bluff. The applicant seeks approval of a Site Development Permit that is consistent with the work completed under the City and Coastal Commission-issued emergency permits. The City of San Diego has already authorized consolidation of the regular CDP with the Coastal Commission (authorization letter attached).

In addition, as continued bluff failure has been determined as imminent by the applicant's geotechnical consultant, the applicant seeks the City's authorization for similar instances of relocation of failed soils to be completed under City ministerial permits, without need for further discretionary review. The applicant also seeks the City's acknowledgement that there is an historic dirt path providing access to the site from the beach which has been in existence since the residence's initial construction. Finally, as the failed materials constitute a premium source of quality beach sand nourishment, the applicant proposes to remove the Best Management Practices (BMP) measures that were implemented during the emergency work, thus allowing the failed bluff materials to naturally dissipate over time onto the public beach.

560 N. Coast Highway 101, Suite 5; Encinitas, California 92024
Ph: (858) 603-1741 e-mail: trettincompany@gmail.com

Project History

On April 2, 2020, the City of San Diego issued an emergency SDP (revised) for the relocation of failed bluff materials which threatened a pre-Coastal Act residence and tram landing at the base of the coastal bluffs. On April 3, 2020, the Coastal Commission's Executive Director also authorized issuance of an emergency permit for the relocation of these failed bluff materials.

As a result of significant bluff failure landward of the residential structure and tram landing, natural bluff materials had impacted and overtopped the +/- 8-foot high courtyard wall on the landward side of the beachfront residence.

Minor damage to the residence and an adjacent tram landing occurred, but of greater concern was that projected continued failure of the coastal bluff could no longer be prevented from directly impacting the residence or the many visitors using the beach adjacent to the pre-Coastal Act residence. The iconic residence, known as Bell's Pavilion, was constructed in the 1960's and, as well-documented on YouTube videos, has become known as a "hidden" attraction to many visitors from throughout the world. Clearing these failed materials from landward of the safety / security wall allows that wall, not the residence or beach users, to be impacted by any future failures that might occur.

The emergency project relocated +/- 190 cubic yards of failed natural bluff sediment from behind the residence and tram landing, and placed these materials closer to the toe of the coastal bluff.

Pursuant to the City of San Diego's request, the applicant's engineering consultant completed a Water Pollution Control Plan (WPCP) and implemented Best Management Practices (BMP's) prior to and during emergency work (WPCP attached).

GeoSoils, Inc., the applicant's geotechnical firm, provided site inspections during the emergency work. The firm has provided a letter report certifying that no natural areas of bluff were disturbed during the relocation of the failed bluff materials, and all work was in conformance to the approved BMP measures.

The firm also had the loose bluff failure sediment tested to determine the percentage of beach quality sands in the failed bluff material. A laboratory sieve analysis found these materials to be composed of 80.4% of beach compatible material (study attached).

In 2005, the Scripps Institute of Oceanography partially funded a study of bluff sand contribution to La Jolla beaches by Alan Young, a then Ph.D. candidate in UCSD's Jacobs School of Engineering. The study documented the high volume of beach quality sand which had fallen from coastal bluffs onto La Jolla beaches during the study period. A separate study by Scripps Institute of Oceanography, utilizing different study criteria, provided similar documentation. The general consensus is that coastal bluffs in this area are contributing 50% of the existing beach sands through erosion and failure. The article referencing these studies is included as an attachment to this submittal letter,

560 N. Coast Highway 101, Suite 5; Encinitas, California 92024
Ph: (858) 603-1741 e-mail: trettincompany@gmail.com

Prior to submittal of this regular SDP application, GeoSoils, Inc. also obtained laboratory testing to determine if any contaminants existed that would prohibit the loose failed bluff materials from serving as a valuable source of beach sand nourishment, consistent with sands supplied to the beach from other numerous and ongoing failures directly along this stretch of shoreline. The testing determined that total Petroleum Hydrocarbons (TPH) were not detected and the failed bluff materials are free of any petroleum contamination. In layman's terms, the relocated natural bluff materials will provide a significant contribution to beach nourishment (study attached).

Historically and logically, the California Coastal Commission requires that any such materials remain on the beach to serve as beach nourishment / sand replenishment. Therefore, the applicant's regular SDP application being made to the City of San Diego, and the applicant's regular CDP application already submitted to the Coastal Commission proposes the removal of the existing BMP measures, thereby allowing these failed natural bluff materials to contribute to beach sand nourishment.

On behalf of the applicant, I would urge City of San Diego staff to recommend in favor of approving this Site Development Permit application as submitted. It would also be appreciated if, during the review process, City staff could remain in contact with Coastal staff.

Thank you, in advance, for your timely review and comments on this project application.

Respectfully submitted,



BOB TRETTIN, permitting agent for
R.B. Woolley, owner

cc: Matthew Peterson, esq., legal counsel
Buzz Woolley, Owner

Attachments;

ATTACHMENT "A"

Applicant's Authorized Representatives

Agent:

Bob Trettin, The Trettin Company
560 N. Coast Highway, Suite #5
Encinitas, CA 92024
trettincompany@gmail.com
(858) 603-1741

Legal Counsel:

Matthew Peterson
Peterson & Price
402 W. Broadway, Suite 960
San Diego, CA 92101
(619) 234-0361
(619) 234-4786 (fax)

Civil Engineer:

John Coffey, Coffey Engineering, Inc.
9666 Businesspark Avenue, Suite #210
San Diego, CA 92131
john@coffeyengineering.com
(858) 831-0111
(858) 8310179 (fax)

Geotechnical Engineer:

John Franklin, GeoSoils, Inc.
5741 Palmer Way
Carlsbad, CA 92010
www.geosoilsinc.com
(760) 438-3155
(760) 931-0915

***Ralph "Buzz" Woolley
9044 La Jolla Shores Lane
La Jolla, California 92037***

February 25, 2020

TO: City of San Diego
California Coastal Commission

FROM: Ralph "Buzz" Woolley

RE: Authorization of Agents

As the owner of the subject property at 9044 La Jolla Shores Lane, La Jolla, 92037, I am providing notice that Matt Peterson, Esq., and The Trettin Company (Robert Trettin, Principal), are authorized to serve as my representatives on all emergency and regular permit applications necessary to remediate a significant and dangerous mid-coastal bluff failure which threatens a pre-Coastal Act residence under my ownership at the base of the bluffs and which continues to pose an imminent and ongoing threat to public safety.

This authorization shall remain in effect unless a written notice of cancellation / amendment is provided.

Respectfully submitted,


Ralph "Buzz" Woolley

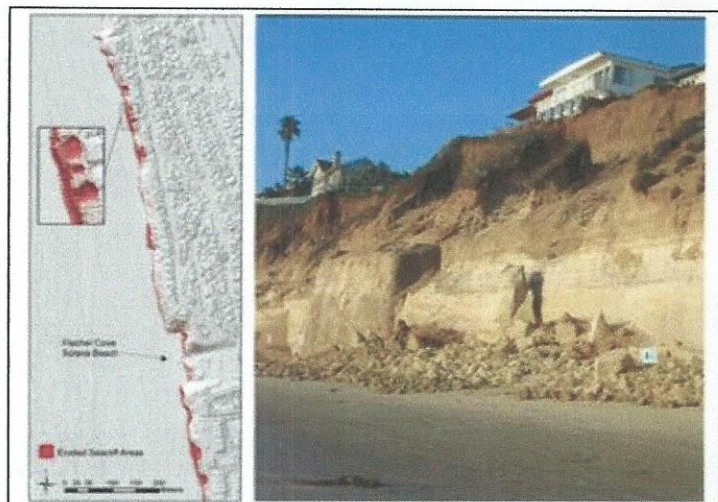
3-5-2020
(date)

Coastal bluffs provide more sand to California beaches than previously believed

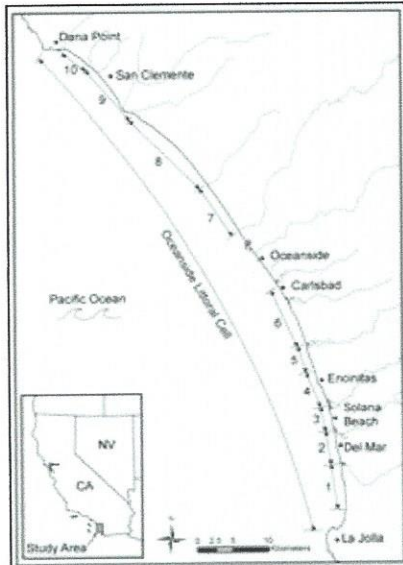
October 12, 2005 -- Coastal geologists have assumed for years that sediment-laden rivers that enter the Pacific Ocean along the Central and Southern California coast supply up to 90 percent of the sand on the region's beaches. However, new research by two independent groups of UCSD scientists indicates that what had been thought to be a minor source of sand – erosion from coastal bluffs and cliffs – could account for about half of the region's beach sand.

Various types of concrete surfacing and reinforcement of bluffs as well as layering large boulders as rip-rap along the base of bluffs tend to "armor" them, slowing or preventing such erosion. Determining the source of sand, according to the researchers, is the logical first step in any effort to preserve Southern Californian beaches.

In a paper to be presented October 12 during the annual meeting of the American Shore and Beach Preservation Association in San Francisco, Adam Young, a Ph.D. candidate in UCSD's Jacobs School of Engineering, will report the unexpectedly high contribution of coastal bluffs and cliffs to the supply of beach sand. Young, who has also submitted his results to the *Journal of Coastal Research*, used laserscanning technology to generate a series of 3-D topographical maps that quantified coastal bluff erosion with a high degree of accuracy during the past six years.



[Jacobs School of Engineering professor Scott Ashford and Ph.D. candidate Adam Young used a highly accurate laser scanning technology to measure the contribution of coastal bluffs to the supply of beach sand in a 50-mile stretch of Southern California beach.](#)



[A group of researchers at UCSD's Scripps Institution of Oceanography, which has worked independently of the engineering group at UCSD, also identified coastal bluffs as a much larger source of beach sand than have been previously believed. The study area for both studies was the Oceanside Littoral Cell.](#)

Based on the volume of material that has fallen from the bluffs during the study period, Young concluded that half of the beach sand in the Oceanside Littoral Cell, a 50-mile stretch of California coast from La Jolla north to Dana Point, was likely derived from the bluffs.

In recognition of his research, which was funded by California Sea Grant, the University of California's Coastal Environmental Quality Initiative, and UCSD's Center for Earth Observations and Applications, the American Shore and Beach Preservation Association on Oct. 11 will present its 2005 Education Award to Young. In addition, the California chapter of the association will present its 2005 Robert L. Wiegel Coastal Studies Scholarship to Young, also in recognition of his bluff erosion research.

"While keeping in mind that six years is only a brief snapshot in the life of the Southern California coastline, our results call into question the conventional wisdom that coastal bluffs don't contribute much to the beaches," said Scott Ashford, a professor of structural engineering at UCSD and Young's faculty advisor. "Adam's results should alert all groups interested in the preservation and development of Southern California's beaches that the assumptions they have been using to identify the supply of beach sand should now be re-examined."

Ashford said decades-old photographs of the Southern California coast taken from the ground and the air also have documented the steady pace of erosion. However, he

said the photographs lack the precision and accuracy of the laser scanning technique called LIDAR, an acronym for light detection and ranging. Ashford said the 3-D maps generated by LIDAR permitted Young to calculate the unexpectedly high volume of bluff material that has fallen onto beaches during the study period.

"



A new question we're interested in now is 'What if we stopped armoring the bluffs and cliffs and allow them to erode naturally?' " Ashford said. "Would such a moratorium be enough to replenish the beaches? We need to do more work to address a range of questions like that."

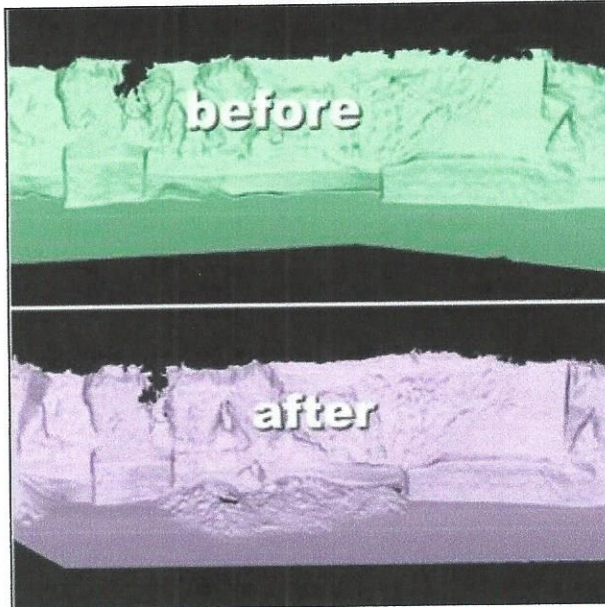
At the wave washed western edge of the campus, Neal Driscoll, a geology professor at UCSD's Scripps Institution of Oceanography, and graduate student Jennifer Haas have studied the same 50-mile stretch of beach north, but with a completely different technique. The Scripps team used a mineralogical fingerprinting technique. They compared sand grains collected from beaches in the study area to grains taken from coastal bluffs, rivers, and from dredged material that the San Diego Regional Beach Sand Project used to replenish the region's disappearing beaches.

After examining the population of sand grains on beaches in the La Jolla area, the Scripps team determined that sea cliffs must be an important source of sand to those beaches. Based on their observations, Haas and Driscoll concluded that 50 percent of the sand came from erosion of the bluffs and cliffs. Haas successfully defended her master's thesis in spring 2005.

"What is exciting to me is that both our engineering group at the Jacobs School and the geology group at Scripps took completely different approaches, but arrived at the same conclusion, which is that bluffs and cliffs appear to be a much more important source of sand in the Oceanside Littoral Cell than had been previously believed," Ashford said.



Large amounts of sand in Southern California move offshore in winter and return to the beaches in summer, as this pair of photographs taken at the same location document. UCSD researchers have identified coastal bluffs as a large source of beach sand, but they are also seeking to understand the complex dynamics of sand redistribution along the coastline.



Engineering professor Scott Ashford said the 3-D maps generated by LIDAR (light detection and ranging) scans permitted Ph.D. candidate Adam Young to calculate the unexpectedly high volume of bluff material that has fallen onto beaches during the six-year study period.

The Scripps team found a type of clear-quartz grains in the coastal cliffs, but collected predominantly frosted quartz sand grains in the rivers and offshore borrow sites from which sand has been dredged for placement on erosion-prone beaches. "In La Jolla, the beaches have a large proportion of clear quartz, which indicates that the cliffs are a significant source of beach sand," Driscoll said. "There's just no other way around it."

Driscoll and Ashford agree that Central and Southern California rivers carry a huge amount of sandy sediment to the Pacific Ocean during seasonal downpours. "When the rains come, the majority of the sediment discharge occurs during an extremely small percent of the time," Driscoll said. "Often, the sediment-laden river water is denser than seawater, so when this slurry reaches the coast, it sinks and follows the bottom, escaping the shallow water region near the shore where it could replenish sand to the beaches."

In dry years there is very little sediment in Southern California rivers flowing into the Pacific. "In

wet years," Driscoll said, "the rivers flow like fire hoses, with most of the sediment ending up offshore in deeper water."

California Sea Grant, the largest of the 30 Sea Grant programs nationwide and administered by the University of California, recently awarded \$200,000 to Ashford and Driscoll to collaborate and expand their investigation of the relationship between bluff erosion and beach sand supply in the Oceanside Littoral Cell.

The Center for Earth Observations and Applications at UCSD, which partially funded Young's bluff-scanning project, was formed in 2005 with a grant from UCSD Chancellor Marye Anne Fox. John Orcutt, Dep. Director of Scientific Affairs at Scripps Institute of Oceanography, directs the center.



Coastal geologists and public policy makers have assumed that streams such as the San Dieguito River provide up to 90 percent of the sand on Southern California beaches, but the new findings indicate that 50 percent or more of the sand on those beaches comes from coastal bluff erosion.

**PHOTOS OF BLUFF FAILURE LANDWARD OF
PRE-COASTAL ACT RESIDENCE AND TRAM LANDING
9044 LA JOLLA SHORES LANES
FEBRUARY, 2020**







**PHOTOS OF RELOCATED FAILED BLUFF MATERIALS
AND BEST MANAGEMENT PRACTICES (BMP'S)
9044 LA JOLLA SHORES LANES
APRIL, 2020**

















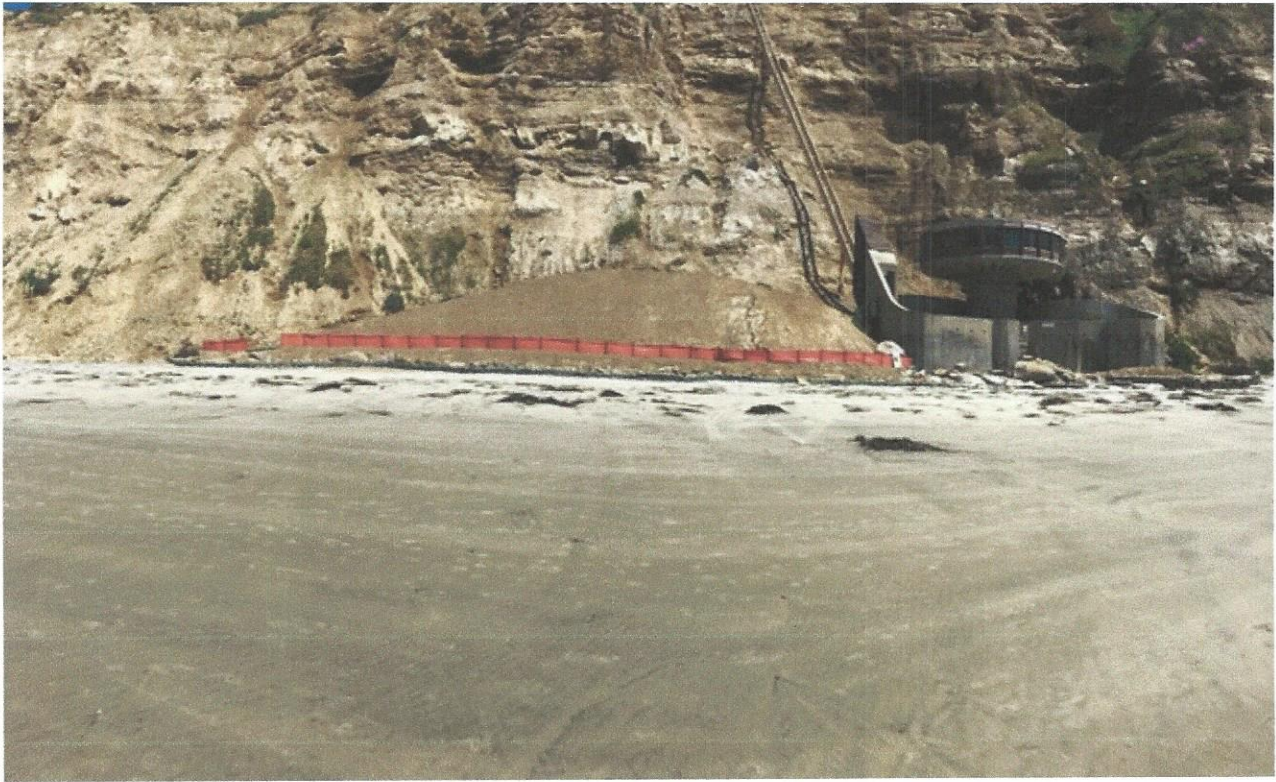
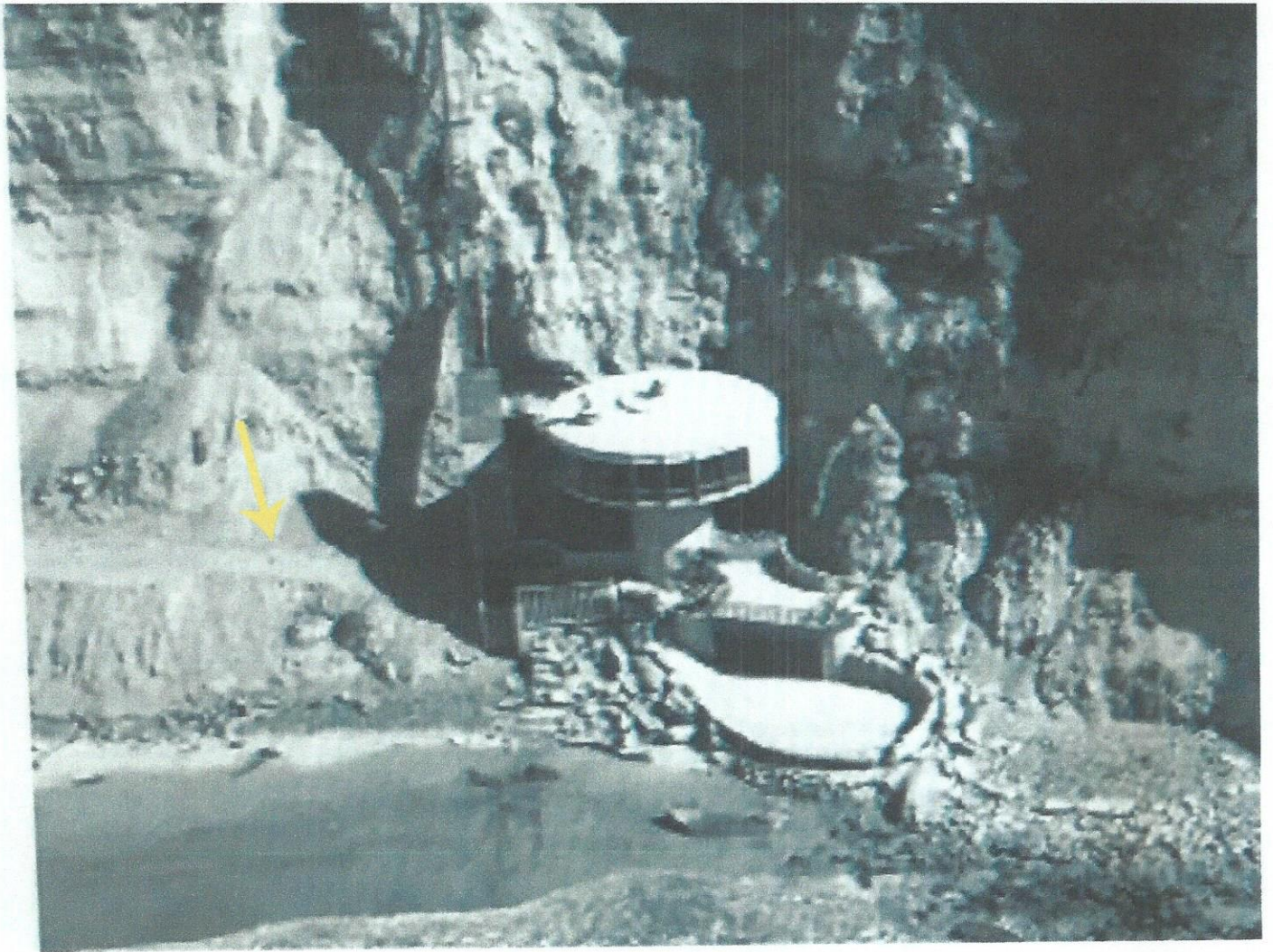


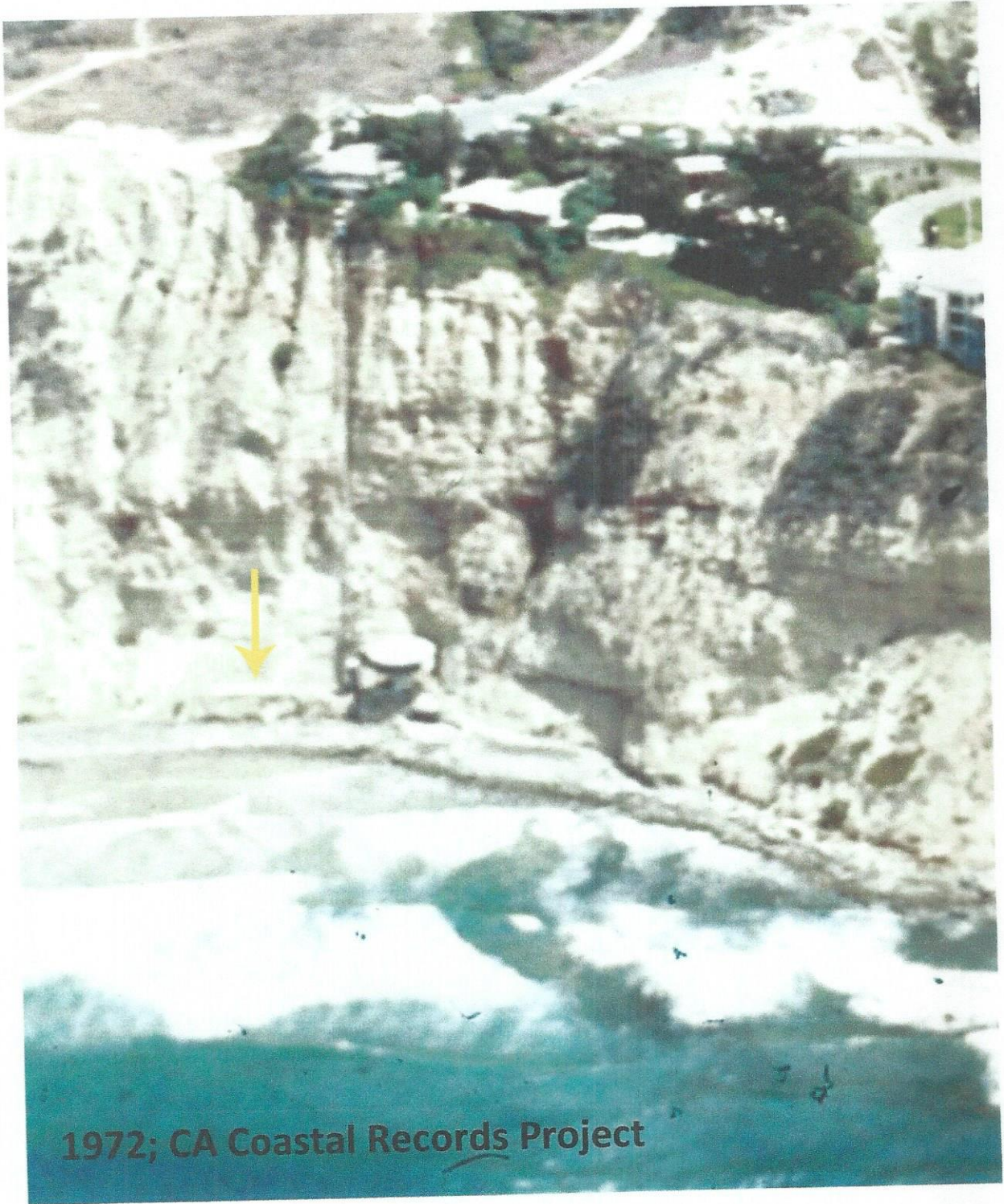
PHOTO EXHIBIT

HISTORIC BELL PAVILION and DIRT ACCESS PATH

1969 - 2020



1969; S.D. Historical Photo



1972; CA Coastal Records Project



1979; CA Coastal Records Project



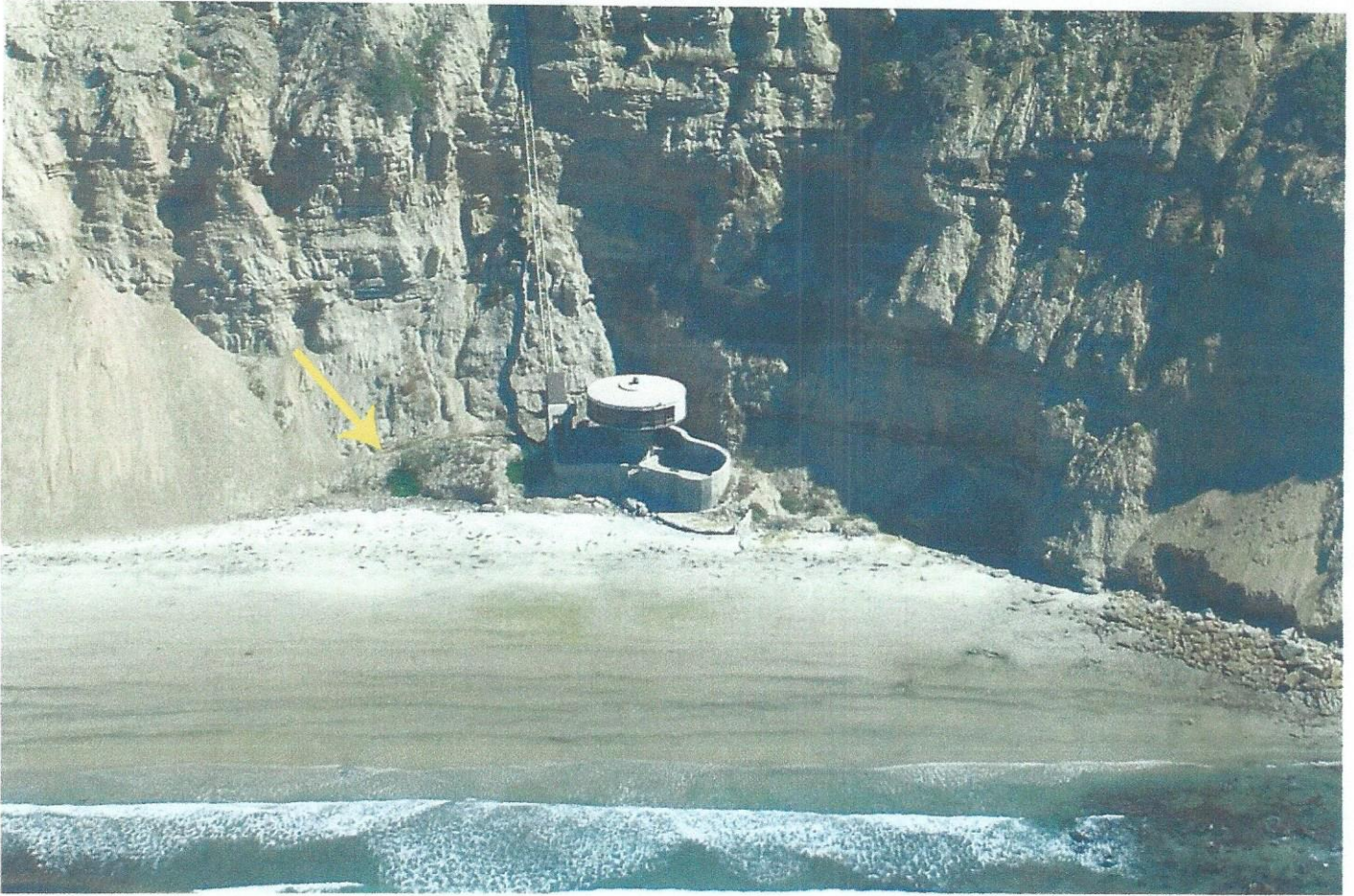
1989; CA Coastal Records Project



2002; CA Coastal Records Project



2004; CA Coastal Records Project



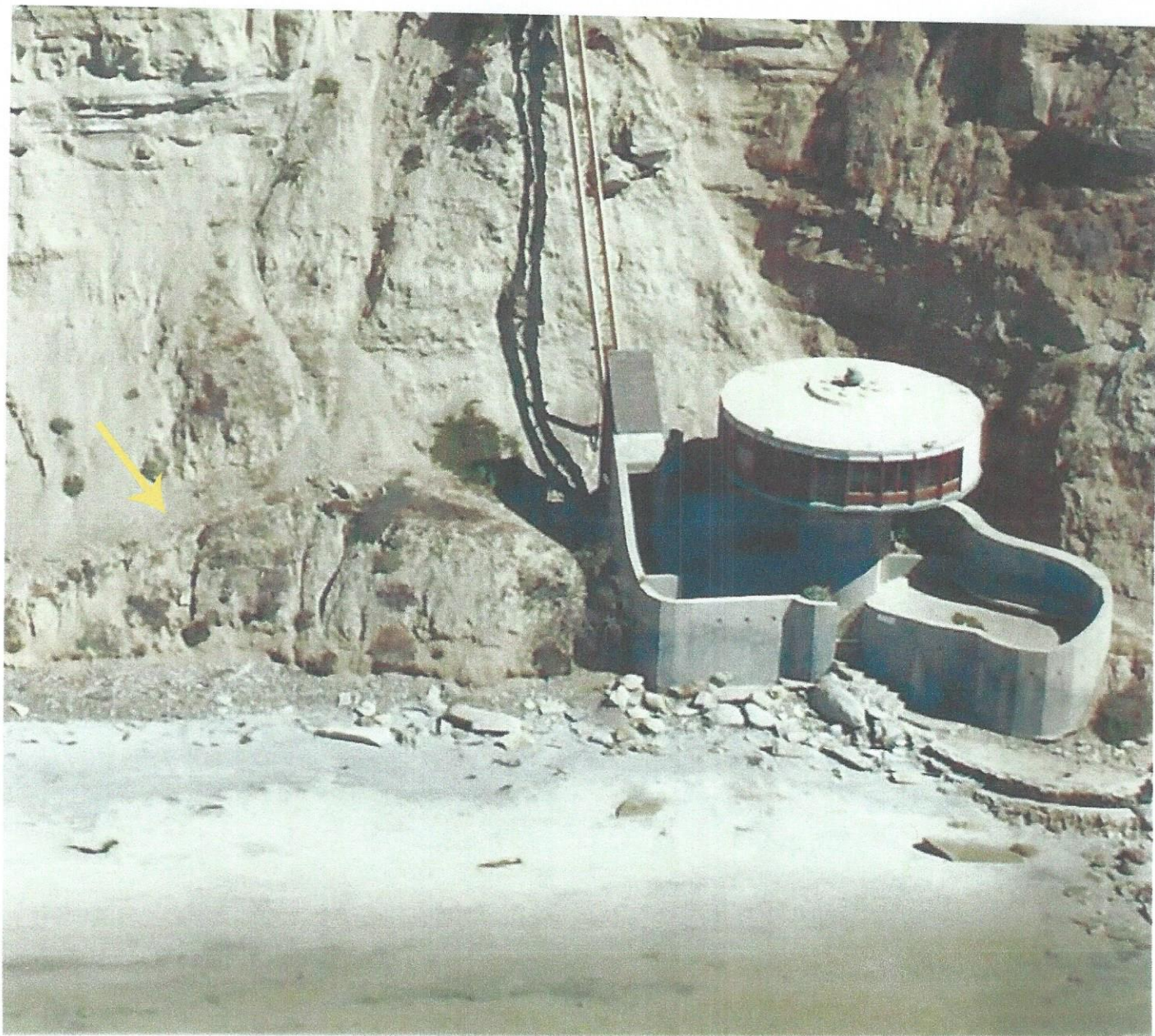
2006; CA Coastal Records Project



2008; CA Coastal Records Project



2010; CA Coastal Records Project



2013; CA Coastal Records Project



2016; Photo Taken from YouTube Video



2020: Post-Bluff Failure

Photo Taken From YouTube Video