CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT 725 FRONT STREET, SUITE 300 SANTA CRUZ, CA 95060 PHONE: (831) 427-4863 FAX: (831) 427-4877 WEB: WWW.COASTAL.CA.GOV



F11c

Prepared December 13, 2021 for December 17, 2021 Hearing

To: Commissioners and Interested Persons

From: Kevin Kahn, Central Coast District Manager

Katie Butler, Coastal Planner

Subject: Additional hearing materials for F11c

Appeal Number A-3-PSB-21-0074 (Hyman and Okerblom Seawall)

This package includes additional materials related to the above-referenced hearing item as follows:

Additional correspondence received in the time since the staff report was distributed



Date: December 8, 2021

To: California Coastal Commissioners, CCC Central Coast staff

From: Rachel Kovesdi

Subject: Appeal A-3-PSB-21-0074, 2141-2151 Shoreline Drive, Pismo Beach

Dear Chairman Padilla and Honorable Commissioners,

We respectfully request that your Commission find No Substantial Issue in the matter of the City of Pismo Beach Coastal Development Permit P20-000056.

The City Planning Commission unanimously approved the CDP application, understanding that the proposed shoreline protection represents the minimum necessary measures required to stabilize the eroding coastal bluff immediately seaward of the subject properties located at 2141 and 2151 Shoreline Drive. Appropriate findings and conditions were incorporated into the project approval, based on significant evidence in the record demonstrating an imminent threat to the existing principal structures, in conformance with the City's certified Local Coastal Plan.

Evaluation of Cause and Severity of Erosion

Winter storm events of the last two seasons have resulted in the abrupt loss of a significant portion of the bluff adjacent to the existing residence located at 2151 Shoreline, and undermined the existing, permitted seawall at 2141 Shoreline. Geotechnical engineers inspected the coastal bluff fronting the subject properties during multiple site visits, analyzed the site and adjacent geology, and made recommendations.

Three separate surveys were conducted by the same independent, licensed surveyor, in 2008, 2019 and 2021. (Please see attached 4/27/21 Terra Costa memo and exhibits.) The results of these surveys revealed bluff retreat is occurring at approximately 15 to 18 inches per year. Due to the undivided Miocene Monterey Formation and large cobbles in the nearshore environment, the site is subject to wave attack that continues to destabilize the base of the bluff and weaken the overlying terrace deposits, resulting in an immediate threat to the principal structures.

Approved Project is Consistent with City of Pismo Beach LCP

Site evaluations by the design engineers included a licensed land surveyor (MBS Land Surveys) locating the jurisdictional Mean High Tide Line of 4.54' (NAVD 88), as shown on the bluff stabilization plans. All work approved with the CDP will be located well above this boundary. The site is not located in an area of mapped or unmapped ESHA. The approved project will not alter public access in any way, other than to make the beach seaward of the bluff significantly safer and reduce the risk to beachgoers.

The approved design specifies carved and colorized treatment of the stabilization structure, to blend in with the surrounding geology, further minimizing visual impacts to coastal resources. The approved project represents the minimum measures necessary to protect the existing principal structures while minimizing impacts to coastal resources.

I appreciate your thoughtful consideration. Very best regards,

Rachel Kovesdi

Rachel Kovesdi



Geotechnical Engineering Coastal Engineering Maritime Engineering

Project No. 3069 April 27, 2021

Mr. Mike Gruver CITY OF PISMO BEACH 760 Mattie Road Pismo Beach, California 93449

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION APPLICATION FOR NEW SEAWALL STRUCTURE **2141 & 2151 SHORELINE DRIVE** APN 010-521-018 & 010-521-019 PISMO BEACH, CALIFORNIA

REFERENCE: City Project No. P20-000056

Dear Mr. Gruver:

As a part of our ongoing work associated with seeking approval for the 2141 and 2151 Shoreline Drive bluff stabilization project, and as requested by the City of Pismo Beach, TerraCosta Consulting Group, Inc. (TerraCosta), an ENGEO Company, has procured an additional site-specific survey prepared by MBS Land Surveys (MBS) to further demonstrate contemporary rates of erosion, as reported in our August 25, 2020, Geotechnical Basis of Design Report and our subsequent February 5, 2021 (revised date), Geotechnical Basis of Design Erosion Study for the coastal bluff erosion and instability affecting the subject properties.

Based on our review of the 2021 MBS survey, and as depicted on the attached Site Plan and Cross Section (Figures 1 and 2), the data continues to support the reported rates of erosion. In particular, the October 29, 2019, and March 8, 2021, MBS survey data (representing a 496-day period, or 1.36 years) suggest that the top-of-bluff has variably retreated further landward toward the residence, as shown shaded in red on the Site Plan (Figure 1). Notably, of the approximately 114-foot length of the top-of-bluff being monitored at the subject properties, only 37 lineal feet (approximately 33%) appear unchanged since the 2019 survey. The remaining 77 lineal feet (approximately 67%) show variable rates of retreat (with up to a foot or more occurring along the top-of-bluff at 2141 Shoreline Drive as ongoing flanking of the existing seawall continues), with a noted maximum retreat on the order of approximately 2.5 feet occurring at 2151 Shoreline Drive, as shown on the attached Site Plan. Much of this top-of-bluff retreat can be attributed to subaerial erosion that resulted from the three-day-long winter storm that occurred between

January 26 and 29, 2021; a storm that resulted in both the Governor of California and the Emergency Services Director of the County of San Luis Obispo declaring a disaster (copies of proclamations attached). Much more concerning, however, and as shown on the Cross Section depicting the 2008, 2019, and 2021 MBS survey data (Figure 2), is that the base of the bluff is also retreating and steepening due to wave attack. In this geologic setting (consisting of harder, cliff-forming formational materials exposed at the base of the bluff, coupled with overlying weaker materials), the progressive steepening of the bluff face is typically an indicator/precursor to a series of secondary upper-bluff failures that will eventually occur within the weaker overlying terrace deposits that exist at this site. As shown on the attached Cross Section, this section of terrace deposits is on the order of 21 feet in thickness. Given this thickness, we expect secondary upper-bluff failures (erosion) to propagate laterally, encroaching on the residence. Notably, these secondary upper-bluff failures within the weaker terrace deposits will be exacerbated not only by the presence of groundwater seepage¹, but also due to wave attack.

Based on our prior studies, it is also our opinion that the above-discussed erosion at the base of the bluff (including sea cave and notch growth) observed in the sequence of site-specific surveys is directly associated with a lack of abundant transient sand in both the nearshore and offshore environments; sand that in the past reduced wave energy and coastal erosion. In support of this observation, we have attached a series of photographs from our 2019 site reconnaissance that depict the nearshore environment (Figures 3 and 4). Also, and per 2015 USGS² mapping, the underlying offshore bedrock (seafloor) in this area has been mapped as large outcrops of undivided Miocene Monterey Formation (Tm), reproduced for the subject project area on the attached Figure 5. While the USGS mapping within the nearshore environment (shallower than about 25-foot water depth) is absent data (shown by the gray shaded area on Figure 5), it is our belief that the lack of abundant sand at the shore face would also suggest minimal to no sand within the nearshore, which would result in the increased rates of erosion observed and reported for the subject site.

The recent survey results further affirm the significant change in the erosion environment that has occurred since the project was originally investigated in 2009-10. The erosion rate presented by GeoSolutions in their revised April 1, 2009, report (3.36 inches) was

² 2015 USGS Scientific Investigations Map 3327 - Offshore Geology and Geomorphology of Point San Luis Map Area, Offshore Geology and Geomorphology from Point Piedras Blancas to Pismo Beach, Sheet 5 of 6.



¹ Groundwater seepage at this site (and regionally) is a known long-standing nuisance that has been consistently observed emanating from the face of the bluff at the geologic contact (between the Monterey Formation and the terrace deposits at approximately elevation 18 feet NAVD88).

likely appropriate at the time, given there was more sand available to reduce the wave energy below the erosion threshold. That lack of sand today has allowed the offshore wave environment to propagate more wave energy into the cliff face, resulting in an annualized erosion rate approaching 15 to 18 inches/year, now threatening not only the existing seawall at 2141 Shoreline Drive (flanking), but also the residence at 2151 Shoreline Drive.

Given the preceding, both residences are at risk of damage from severe storms (such as those described in the enclosed storm damage proclamations), and are in need of the proposed shoreline stabilization to prevent the loss of both structures.

We appreciate the opportunity to be of service and trust this information meets your needs. If you have any questions, please give us a call.

Very truly yours,

TERRACOSTA CONSULTING GROUP, INC.

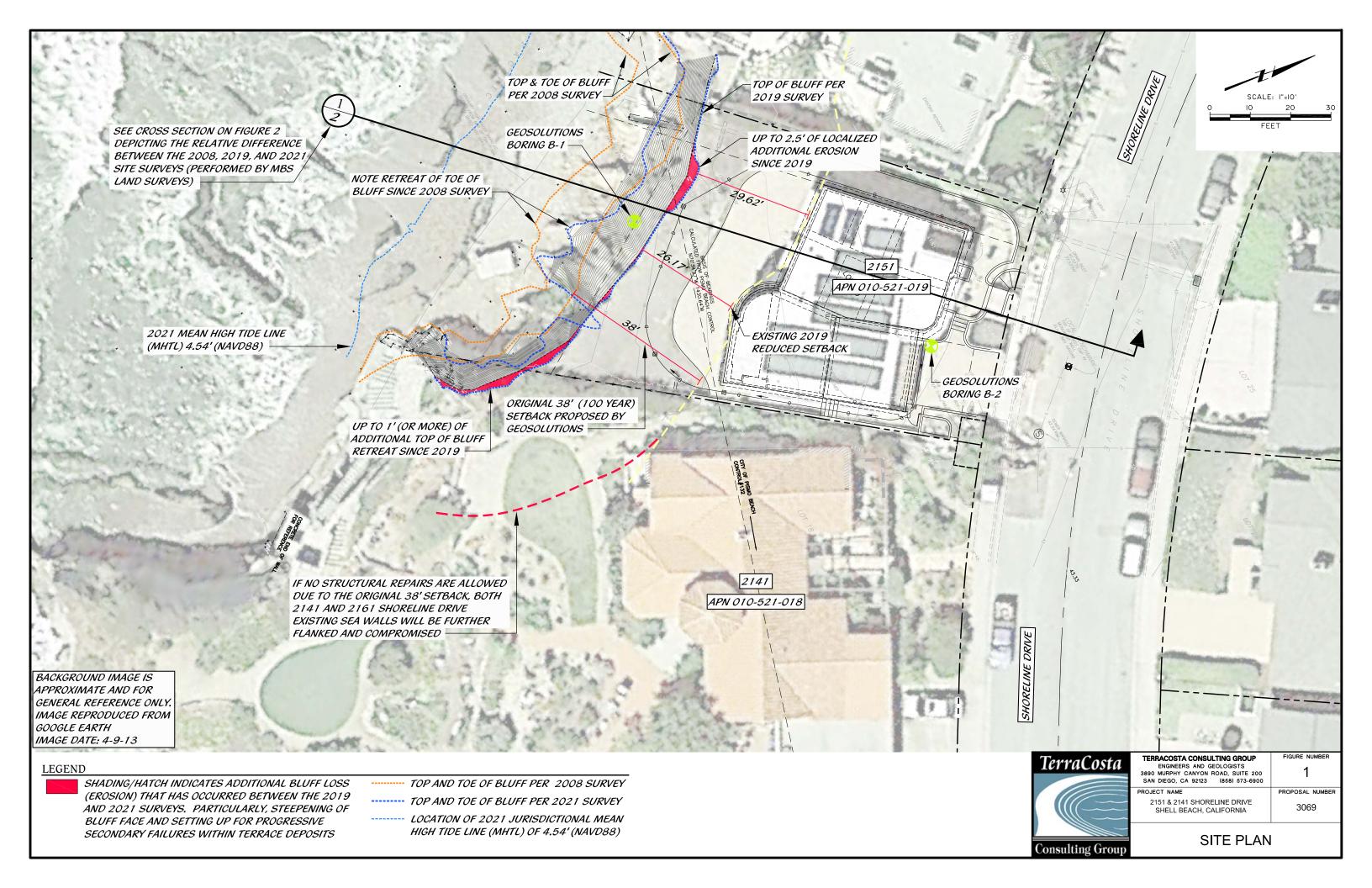
Gene D. Spineto, Senior Project Manager

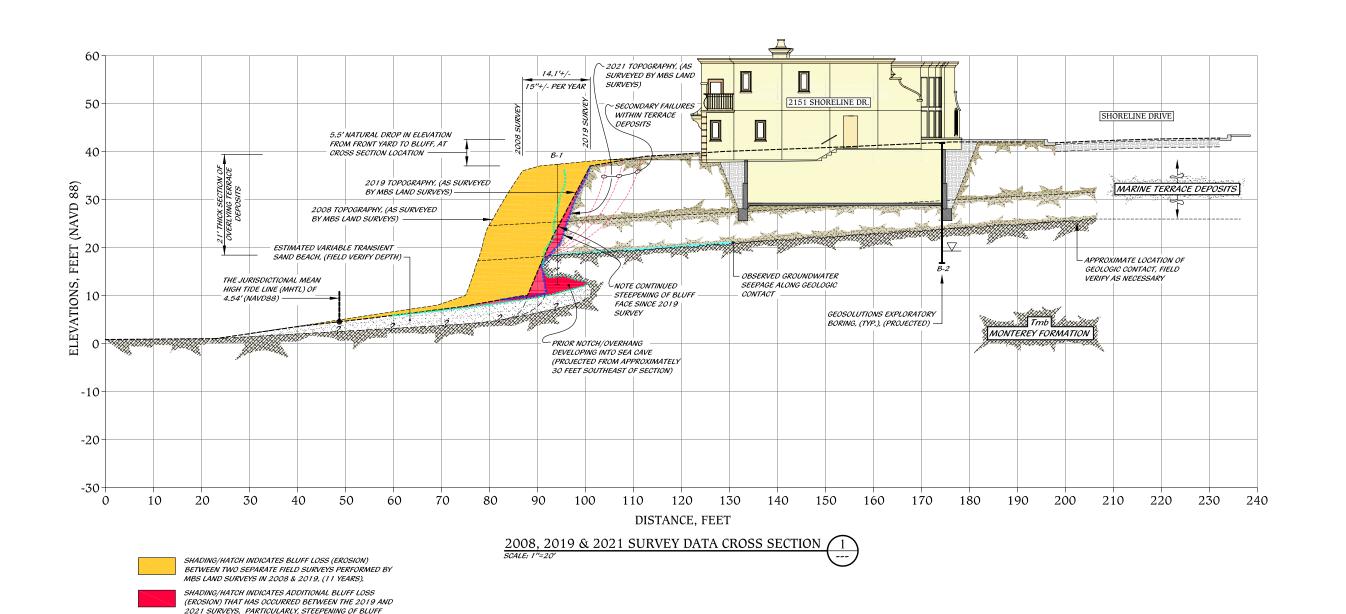
Walter F. Crampton, Principal Engineer

R.C.E. 23792, R.G.E. 245

GDS/WFC/jg Attachments







FACE AND SETTING UP FOR PROGRESSIVE SECONDARY

 INDICATES 2021 BLUFF PROFILE ALONG THE SECTION LINE AS SURVEYED BY MBS LAND SURVEYS
 INDICATES EXISTING 2021 BLUFF PROFILE PROJECTED FROM APPROXIMATELY 30 FEET SOUTHEAST OF SECTION LINE, (IN PROXIMITY TO DEVELOPING SEA CAVE)

FAILURES WITHIN TERRACE DEPOSITS



TERRACOSTA CONSULTING GROUP
ENGINEERS AND GEOLOGISTS
3890 MURPHY CANYON ROAD, SUITE 200
SAN DIEGO, CA 92123 (858) 573-6900

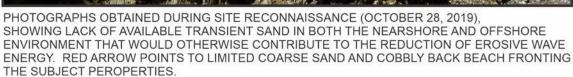
PROJECT NAME
2151 & 2141 SHORELINE DRIVE
SHELL BEACH, CALIFORNIA

FIGURE NUMBER

PROJECT NUMBER
3069

2008, 2019 & 2021 SURVEY DATA CROSS SECTION











TERRACOSTA CONSULTING GROUP **ENGINEERS AND GEOLOGISTS** 3890 MURPHY CANYON ROAD, SUITE 200 SAN DIEGO, CA 92123 (619) 573-6900

2151 & 2141 SHORELINE DRIVE SHELL BEACH, CALIFORNIA

FIGURE NUMBER

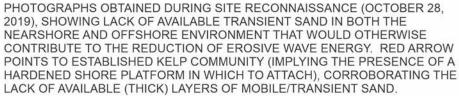
3

PROJECT NUMBER

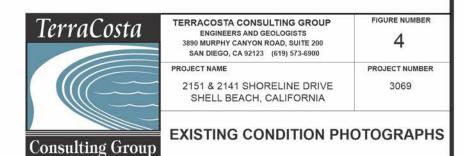
3069

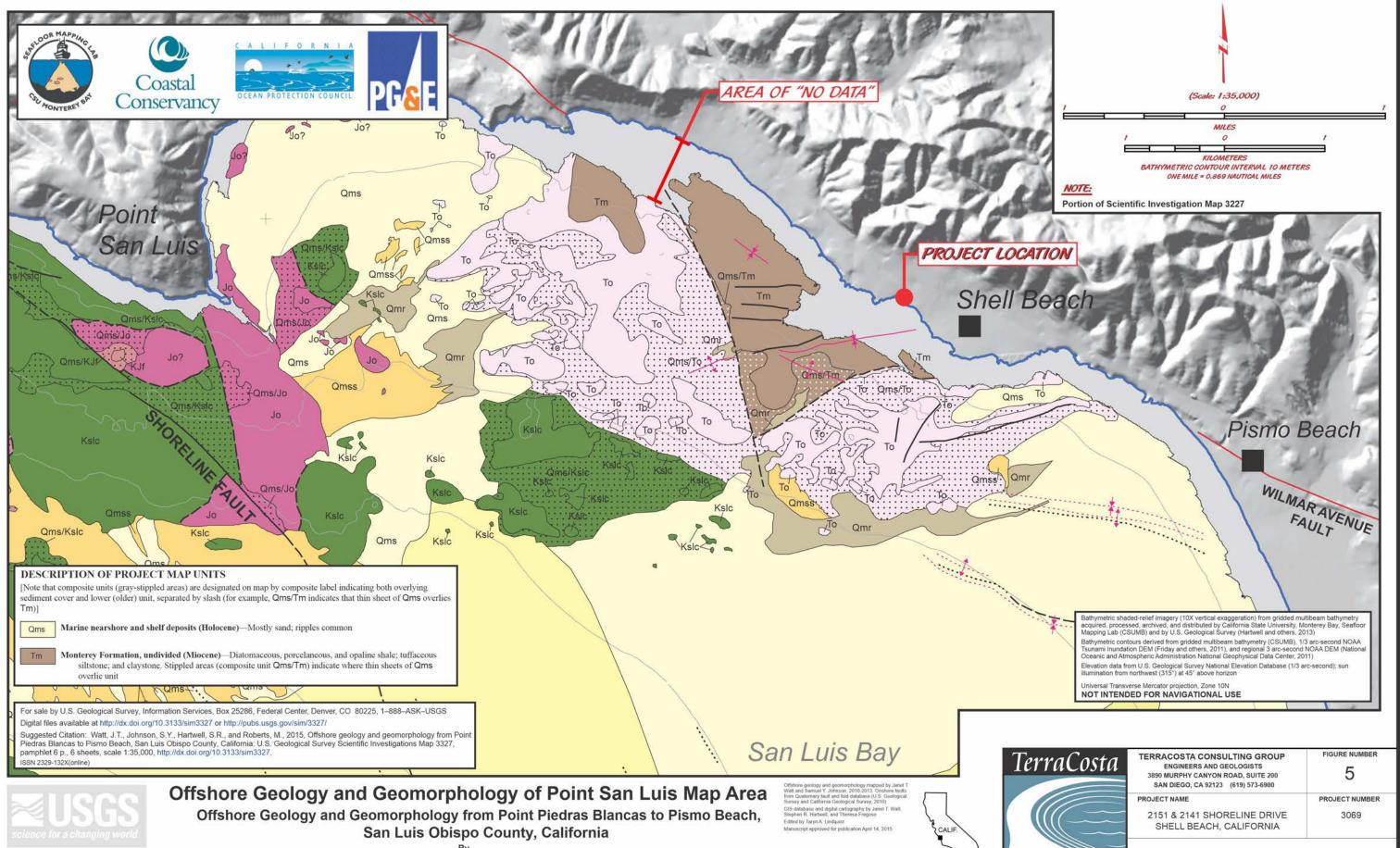
EXISTING CONDITION PHOTOGRAPHS











U.S. Department of the Interior **U.S. Geological Survey**

Janet T. Watt, Samuel Y. Johnson, Stephen R. Hartwell, and Michelle Roberts

Portion of Scientific Investigations Map 3327 Sheet 5 of 6





OFFSHORE GEOLOGIC MAP

EXECUTIVE DEPARTMENT STATE OF CALIFORNIA

PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS beginning on or about January 26, 2021, winter storms related to an atmospheric river system struck California, bringing damaging winds, substantial precipitation, flooding, and erosion, and this system continues to impact the State; and

WHEREAS the threat of mud and debris flows, particularly on burn scars from recent wildfires, has already prompted the evacuation of thousands of residents, and this threat remains ongoing; and

WHEREAS these winter storms caused significant damage to critical infrastructure, including washing out a portion of Highway 1 in Monterey and San Luis Obispo counties; and

WHEREAS under the provisions of Government Code section 8558(b), I find that conditions of extreme peril to the safety of persons and property exist due to winter storms and their effects in Monterey and San Luis Obispo counties; and

WHEREAS under the provisions of Government Code section 8558(b), I find that the conditions caused by winter storms in Monterey and San Luis Obispo counties, by reason of their magnitude, are or are likely to be beyond the control of the services, personnel, equipment, and facilities of any single local government and require the combined forces of a mutual aid region or regions to appropriately respond; and

WHEREAS under the provisions of Government Code section 8625(c), I find that local authority is inadequate to cope with the recent winter storms, and their effects, in Monterey and San Luis Obispo counties; and

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, including the California Emergency Services Act, and in particular, Government Code section 8625, **HEREBY PROCLAIM A STATE OF EMERGENCY** to exist in Monterey and San Luis Obispo counties due to the recent winter storms related to an atmospheric river system, and their effects.

IT IS HEREBY ORDERED THAT:

- 1. All agencies of the state government are to utilize and employ state personnel, equipment, and facilities for the performance of any and all activities consistent with the direction of the Governor's Office of Emergency Services and the State Emergency Plan. Also, to protect their safety, all residents are to obey the direction of emergency officials with regard to this emergency in order to protect their safety.
- 2. The Governor's Office of Emergency Services shall provide assistance to local governments, if appropriate, under the authority of the California Disaster Assistance Act, Government Code section 8680 et seq., and California Code of Regulations, Title 19, section 2900 et seq.
- 3. The California Department of Transportation shall formally request immediate assistance through the Federal Highway Administration's Emergency Relief Program, United States Code, Title 23, section 125, in order to obtain federal assistance for highway repairs or reconstruction.

I FURTHER DIRECT that as soon as hereafter possible, this proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this proclamation.

Court Swines 64

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 29th day of January 2021.

GAVIN NEWSOM

Governor of California

ATTEST:

SHIRLEY WEBER
Secretary of State

PROCLAMATION OF LOCAL EMERGENCY BY EMERGENCY SERVICES DIRECTOR

2021 WINTER STORMS

I, Wade Horton, Emergency Services Director, of the County of San Luis Obispo, State of California, hereby find and determine that there exists a condition of disaster or of extreme peril to the safety of persons and property within the County of San Luis Obispo because of the existence of winter storms caused by an atmospheric river system that struck California between January 26 through January 29, 2021, causing damaging winds, substantial precipitation, flooding and erosion resulting in damage to infrastructure and property within the county.

And, further, I do hereby find and determine that the conditions set forth hereinabove in this Proclamation currently exist within the entire area of the County of San Luis Obispo and are likely to be beyond the control of the services, personnel, equipment, and facilities of the county and require the combined forces of other political subdivisions to combat. These conditions are not a result of labor controversy.

NOW, THEREFORE, pursuant to the California Emergency Services Act (commencing with Gov. Code, § 8550 and Chapter 2.80 of Title 2 of the County Code, I do hereby PROCLAIM A LOCAL EMERGENCY within the entire area of the County.

IN FURTHERANCE OF THIS PROCLAMATION OF LOCAL EMERGENCY, there is hereby invoked within the County of San Luis Obispo, all of the powers and mechanisms set forth in the California Emergency Services Act and in the San Luis Obispo County Code, Chapter 2.80, and said powers and mechanisms may hereafter be used by authorized personnel of the County of San Luis Obispo.

IT IS HEREBY ORDERED that a copy of this Proclamation of Local Emergency shall be posted on all outside public access doors of the County Government Center and in one public place within any area of the County of San Luis Obispo within which this Proclamation applies, and that personnel of said county shall endeavor to make copies of this Proclamation available to news media.

This Proclamation of Local Emergency shall be effective immediately and shall be ratified by the Board of Supervisors within seven days. The Board of Supervisors shall review the need for continuing the local emergency at least every 60 days as required by Government Code section 8630, subdivision (c). This Proclamation of Local Emergency shall remain in effect until the Board of Supervisors proclaims that the local emergency has terminated.

Dated: February 4, 2021

Time: 1341

Wade Horton

Emergency Services Director





December 9, 2021

California Coastal Commission Central Coast District 725 Front Street, Suite 300 Santa Cruz, CA 95060

Re: Commission Appeal No. A-3-PSB-21-0074

Dear Coastal Commissioners,

The City of Pismo Beach (the "City") is providing this letter in response to Reasons for Appeal made in the Commission Notification of Appeal for Commission Appeal No. A-3-PSB-21-0074 (the "Appeal"), received by the City on November 22, 2021, for the project at 2141 and 2151 Shoreline Drive. The City's Local Coastal Program (LCP) was certified in 1984, and is considered to implement the Coastal Act when combined with the City's 1983 Zoning Ordinance (the "Code"). On September 28, 2021, the City's Planning Commission (the "Planning Commission") adopted Resolution No. PC-R-2021-017 approving Project P20-000056 for a Coastal Development Permit for construction of a new carved and colored shotcrete tied-back bluff wall with 27 drilled tiebacks, which is appealable to the Coastal Commission. The Appeal was reported to have been made on November 12, 2021.

The Appeal includes several assertions related to the City's processing of the application and the Planning Commission's approval of the project. The intent of this letter is to provide additional information or, where appropriate, to refute misstatements that were made. In general terms, these assertions include what defines an existing structure under the City's LCP, lack of evaluation of less environmentally damaging alternatives, exclusion of a Sand Replenishment Fee Calculation, and location of the improvements in regards to Permit Jurisdiction.

The Appeal states that the single-family residence is not an "existing principal structure" eligible for shoreline protection, while also stating that neither the Coastal Act nor the City's LCP explicitly identifies what qualifies as an existing principal structure. Instead, the Appeal references the Coastal Commission's 2018 Sea Level Rise Policy Guidance document for the Coastal Commission's interpretation that such term means a principal structure that was in existence on January 1, 1977, the effective date of the Coastal Act, and that has not subsequently been redeveloped." The City disagrees that this is not an existing principal structure eligible for a protection structure.

The residence at 2151 Shoreline was approved in 2009 and constructed by 2013 pursuant to the City's Certified LCP, including compliance with a 100-year retreat rate for the new residence plus added factor of safety identified through a geologic investigation as required by Policy S-3a., and is therefore considered a legal conforming use by the City's LCP. This use was established using the best available data at the time permits were granted by the City. Due to unforeseen episodic events, the bluff at 211 Shoreline Drive has experienced larger than could have been expected erosion rates due to several factors, as identified in the Geotechnical Basis of Design prepared by Terra



Costa (the "Report") and further discussed in the Mitigated Negative Declaration as approved by the Planning Commission.

As the structure was developed consistent with the City's Certified LCP, the City considers the residence at 2151 Shoreline Drive to be a legal conforming principal structure eligible for a protection structure under the Certified LCP, including General Plan Policy S-3 and Code Section 17.078.050. The City considers this to be consistent with the Coastal Commission approved protection devices for other residences within the City at 121 and 125 Indio Drive, under Original Permit Jurisdiction. For reference, the residence at 125 Indio Drive was approved by the City in 1997 and built in 1998 while the residence at 121 Indio Drive involved CDPs issued between 1996 and 2005 for additions to a house originally constructed in 1959.

The Appeal also states that the City did not consider less environmentally damaging alternatives in lieu of a seawall. The City did consider a "no project alternative" as part of the review of the Geotechnical Basis of Design prepared for the project. A copy of this document was provided to the Planning Commission as a part of their September 28, 2021, hearing, which was regarded by the Planning Commission as a very thorough evaluation of the situation at the project site. Other alternatives such as "managed retreat" or living shoreline alternatives were not considered as this is not a current provision of the City's certified LCP and, based on the estimated 15 to 18 inch per year retreat rate estimated by the Report, these would not be considered viable options. Such a 150' retreat rate based on an 18" annual retreat rate over 100 years would extend past property boundaries and could therefore constitute a taking of property enjoyed by its' owner for close to 8 years.

The Appeal indicates that the City failed to require a Sand Replenishment Fee calculation for the proposed project. This is simply not the case. Terra Costa provided a Sand Mitigation Fee Calculation to the City on September 24, 2021 (enclosed). Condition of Approval B-7 Sand Replenishment Supply Fee, requires the applicant to pay this supply fee prior to the issuance of a Building Permit for the bluff wall.

The Appeal raises questions regarding the project's location in relation to Coastal Commission Original Permit Jurisdiction Area. Consistent with previous discussions between City and Coastal Commission staff, Coastal Commission staff have stated that only those lands below the Mean High Tide Line and/or considered Public Trust Lands are subject to Original Jurisdiction. Based on Plan Sheet 5 of the plans prepared by Terra Costa and as surveyed by MBS Land Surveys, the Mean High Tide Line (MHTL) at 4.54' NAVD '88, with improvements landward of said MHTL. Under the California Public Trust Doctrine, those lands under the Ocean and under navigable waters are considered public trust lands. As the improvements are landward of MHTL and are not under navigable waters, it is the City's determination that the project is not within the Original Coastal Permit Jurisdiction.

Beyond this project and of larger concern is the continued disregard for certified LCP regulations and continued insistence at the use of January 1, 1977, as the only applicable date to determine a structure is "existing." For the last few years, the City has been working with the Commission's Local Government Sea Level Rise Working Group as part of the League of California Cities' Coastal Cities Group to explore challenges and develop solutions to better address sea level rise planning. At the December 2021 meeting, the Commission will be considering these documents, including the Framework for a Phased Approach to Updating LCPs for Sea Level Rise, a Joint Statement



on Regional Approaches to SLR Adaptation Planning, and Coordination and Elevation Process for LCP Updates. Throughout the process of developing those documents, the issue of date identification for "existing" was continually identified as a point of conflict that is too contentious to address in these documents; Coastal Commission and agency staff acknowledged that it was better to address that topic separately. As the City continues to work on an update to our LCP, to modernize the regulations and address sea level rise, we are concerned at losing great projects that have been implemented consistent with our LCP and, by extension, the Coastal Act. This concern includes, but not limited to, the subject project.

We appreciate the opportunity to provide comments on this matter. Should you have any questions, please do not hesitate to contact me by email at mdowning@pismobeach.org or by phone at (805) 773-4658.

Sincerely,

Matthew J. Downing, AICP

Community Development Director

cc: James R. Lewis, City Manager, City of Pismo Beach

Susan Craig, District Manager, Central Coast District Office Katie Butler, Coastal Planner, Central Coast District Office

Enc: Calculation of San Mitigation Fees for Impacts to Sand Supply, Proposed Shoreline Stabilization Project, 2141

& 2151 Shoreline Drive, Pismo Beach, California, Terra Costa Consulting Group, September, 2021.

CALCULATION OF SAND MITIGATION FEES FOR IMPACTS TO SAND SUPPLY PROPOSED SHORELINE STABILIZATION PROJECT 2141 & 2151 SHORELINE DRIVE PISMO BEACH, CALIFORNIA

REFERENCE: CITY PROJECT NO. P20-000056

As indicated on the construction drawings for the proposed project, the total wall length is approximately 112 feet along a curvilinear line stabilizing the bluff below 2141 & 2151 Shoreline Drive. As indicated on the construction drawings, 2151 Shoreline Drive is a partial pie-shaped lot located at the back of an eroded section of coastline having a lot width of approximately 80 feet along the eroded coastal bluff; 2141 Shoreline Drive is located to the south and adjacent to 2151 Shoreline Drive, where ongoing erosion is flanking the existing concrete bag wall protecting 2141 Shoreline Drive. The proposed project protects both the entirety of 2151 Shoreline Drive and the northern edge of 2141 Shoreline Drive extending out to the existing concrete bag wall and preventing additional marine erosion from flanking the existing shoreline protection at 2141 Shoreline Drive.

As indicated in our April 27, 2021, letter to the City of Pismo Beach titled, "Response to Request for Additional Information," for the subject project, MBS Land Surveys (MBS) prepared their initial site survey on September 26, 2008, and performed subsequent surveys on October 29, 2019, and March 8, 2021, the details of which are described in our April 27, 2021, response letter. In summary, and based on all of the survey data reviewed, we have concluded that the site is now experiencing an annualized rate approaching 15 to 18 inches per year. Accordingly, we have used an erosion rate of 1.5 feet per year in our sand mitigation fee calculations.

Since we have not performed any test borings or laboratory testing, we relied on the earlier work by GeoSolutions performed for the initial residential development. We have reproduced Plate 1 (in Attachment A) from GeoSolutions' "Geologic Coastal Bluff Evaluation, 2151 Shoreline Drive, APN: 010-521-019, Shell Beach Area, City of Pismo Beach, California," dated April 1, 2009. Plate 1 shows the locations of GeoSolutions' two test borings on the property. Copies of the test boring logs are also attached. Also provided in Attachment A is the site photograph from GeoSolutions' 2009 report to provide additional perspective and illustrating the extent of erosion that has occurred over the last 13 years.

We have calculated a composite sand fraction for the stratigraphic section presented in GeoSolutions' Boring B-1, with the upper 16.5 feet consisting of a sandy silt, with an estimated 30 percent sand fraction underlain by 7.5 feet of a clayey sand having an estimated sand fraction of 75 percent, underlain by 14 feet of the Monterey Formation Shale, which we have estimated as having a sand fraction of 5 percent. This 38-foot section of coastal bluff, when using these relative thicknesses and sand fractions results in a composite sand fraction of the entire bluff of 30 percent.

The certified City of Pismo Beach LCP provides for project mitigation of beach quality sand. According to Coastal Commission staff, the equation for calculating impacts to shoreline sand supply from retention of sand and sand-generating materials is:

$$V_b = (S \times W \times L) \times [(R \times hs) + (1/2hu \times R + (Rcu - Rcs)))] / 27$$
 (Equation 1)

where: V_b is the volume of beach material that would have been supplied to the beach if natural erosion continued (this is equivalent to the long-term reduction in the supply of bluff material to the beach resulting from the armoring). If the proposed bluff stabilization extends the full height of the bluff, this equation can be reduced to:

$$V_b = (R \times L \times W \times H \times S) / 27$$
 (Equation 2)

where,

 V_b = total volume of sand required to replace losses due to the structure

R = long-term regional bluff retreat rate (ft/yr),

L = design life of armoring without maintenance (yr),

W = width of property to be armored (ft),

H = total height of armored bluff (ft),

S = fraction of beach quality material in the bluff material.

Site-specific values for equation variables:

R = 1.5 ft/yr (refer to TerraCosta's April 27, 2021, letter)

L = 20 years

W = 112 feet

S = 0.30 (determined from GeoSolutions' 2009 report)

H = 38 feet

Utilizing equation (2):

$$V_b = \frac{1.5 \times 20 \times 112 \times 38 \times 0.30}{27}$$

 $V_b = 1,418.7 \ cubic \ yards$

Total Sand Mitigation Fee = $vb \times 18/vard = 25,536.60$

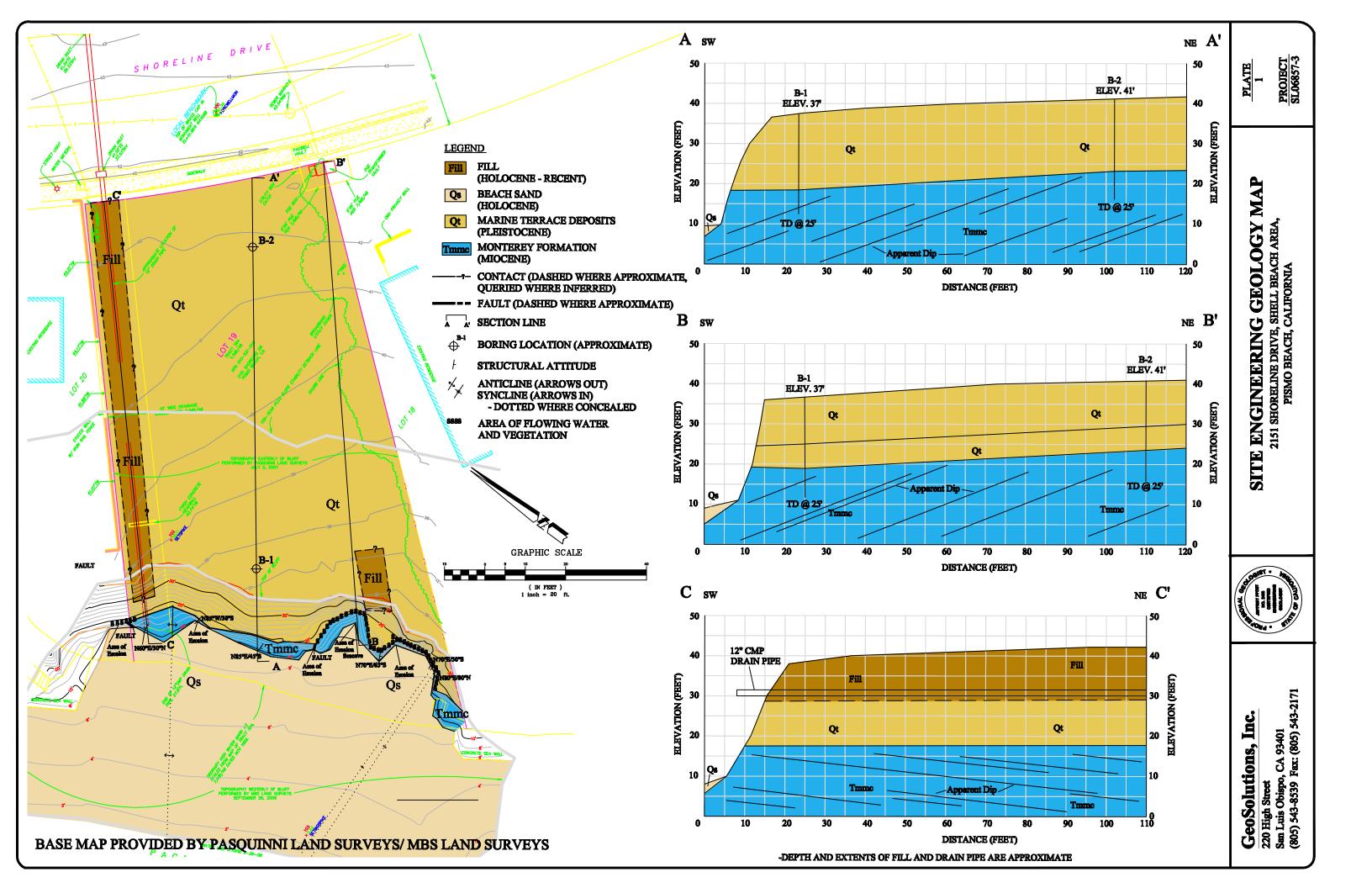
ATTACHMENT A

Excerpts from GeoSolutions 2009 Report

Site Photograph
Plate 1
Boring Logs B-1 & B-2



Figure 2: Photograph of the Site





GeoSolutions, Inc.

220 High Street San Luis Obispo, CA 93401

BORING LOG

BORING NO. B-1

JOB NO.

SL06857-1

	San Luis Obisp	o, CA	93401				021,0	•	220			
- Daysin	PROJECT INFORMATION						DRILI	ING IN	NFORM	ATION		
DR DA LC	OJECT: 2151 Shoreline Dr ULLING LOCATION: See Plate 1 ATE DRILLED: September 9, 2008 DGGED BY: JAP Depth of Groundwater: Not Encountered			P	DRILL F HOLE D SAMPLI HOLE E Boring Ten	IAME NG M LEVA	ETHOD TION:	Not R			e 1 of 2	
<u>× 1</u>	Depth of Groundwater. Not Encountered			1.	Jornig Ten	matec	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		3R		T	
DEPTH	SOIL DESCRIPTION	USCS	LITHOLOGY	SAMPLE	BLOWS/12 IN	(N _I)60	FRICTION ANGLE, (degrees)	COHESION, C (psf)	OPTIMUM WATER CONTENT (%)	MAXIMUM DRY DENSITY (pcf)	EXPANSION INDEX (EI)	PLASTICITY INDEX (PI)
7 -0	SANDY SILT: light gray, with gravel, dry,											
-1 - -2 - -3 -	Marine Terrace Deposits (Qt)	ML		A CA	13							
-4 — -5 — -6 — -7 —				CA	11							
-8 — -9 — 10 — 11 —	CLAYEY SAND: dark brown, with gravel, moist, gravel of Monterey Formation, Marine Terrace Deposits (Qt)	SC		SPT	7							
12 — 13 — 14 — 15 —			-Z-Z-	SPT	26							
117	SHALE: light brown to white, slightly to moderately weathered, thinly bedded, moderately soft, Monterey Formation(Tmmc)		-7-7	SP	Г 25							
-22 — -23 —												



GeoSolutions, Inc.

JOB NO.

SL06857-1

BORING LOG

220 High Street San Luis Obispo, CA 93401

PROJECT INFORMATION						DRILLING INFORMATION									
PROJECT: 2151 Shoreline Drive DRILLING LOCATION: See Plate 1 DATE DRILLED: September 9, 2008 LOGGED BY: JAP						DRILL RIG: CME 55 HOLE DIAMETER: 4 Inches SAMPLING METHOD: SPT/CA HOLE ELEVATION: Not Recorded									
_	■ Depth of Groundwater: 22.5 Feet						Boring Terminated At: 25.0 Feet Page 2 of 2								
DEPTH	SOIL DESC	RIPTION	USCS	LITHOLOGY	SAMPLE	BLOWS/12 IN	09(I _N)	FRICTION ANGLE, (degrees)	COHESION, C (psf)	OPTIMUM WATER CONTENT (%)	MAXIMUM DRY DENSITY (pcf)	EXPANSION INDEX (EI)	$^{PLASTICITY}_{INDEX(PI)}$		

7 [ML	1			 	110		
	SANDY SILT: light gray, with gravel, dry, Marine Terrace Deposits (Qt)	ML					e		
				SPT	9				
				SPT	9				
	CLAYEY SAND: dark brown, with gravel, moist to saturated, gravel of Monterey Formation, Marine Terrace Deposits (Qt)	SC	-Z-Z	SPT	42				
	SHALE: tan to white shale, slightly to moderately weathered, soft to moderately soft, thinly bedded, moderately fractured, Monterey Formation (Tmmc)			SPT	-				
-				SPT	41				



December 8, 2021

California Coastal Commission North Coast District Office 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219

To: Steve Padilla, Chair, California Coastal Commission

CC: Dan Carl, Central Coast District Director Katie Butler, Coastal Program Analyst Jack Ainsworth, Executive Director

Re: Item F11c Coastal Development Appeal No, A-3-PSB-21-0074 – Tony Hyman and John Okerblom

Dear Chair Padilla and Commissioners,

The Surfrider Foundation San Luis Obispo County Chapter (Surfrider) is dedicated to protecting all 80 miles of the County's beautiful coastline. The Surfrider Foundation is a non-profit, environmental organization dedicated to the protection and enjoyment of the world's oceans, waves and beaches for all people. Surfrider offers the following comments regarding the Genticore seawall project as we strongly believe substantial issues exist with Pismo Beach's (the City's) approved Coastal Development Permit (CDP).

Our primary concern is that, in approving the CDP, the City has incorrectly interpreted the definition of the term 'existing,' as included in the City's Local Coastal Program and the Coastal Act to define entitlements to shoreline protective structures. The home at 2151 Shoreline Drive was constructed in 2013, and the City's LCP and the Coastal Act are clear in that only 'existing' structures are entitled to shoreline protections:

Coastal Act Section 30235, Construction altering natural shoreline

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal- dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible



The City's Land Use Plan, in addition to numerous supporting policies in its Implementation Plan, states:

LUP Policy S-6 Shoreline Protective Devices. Shoreline protective devices, such as seawalls, revetments, groins, breakwaters, and riprap shall be permitted only when necessary to protect existing principal structures, coastal dependent uses, and public beaches in danger of erosion.

Staff is correct in citing the Commission's Sea Level Rise Policy Guidance to clarify that the definition of 'existing' has been well-established to refer to the date of enactment of the Coastal Act in 1976¹. The City's failure to adhere to this policy is a factual misinterpretation of the Coastal Act and the City's LUP, and is also of serious consequence to future interpretation of the LCP and to the statewide understanding of Section 30235.

In a "Protecting Public Trust Shoreline Resources in the Face of Sea Level Rise" report to the California Coastal Commission last month, Dr. Charles Lester emphasizes the need for the Commission to carefully evaluate its approach to clarifying Section 30253 to avoid the aggregate effects of authorizing shoreline armoring at great public cost². The report reasons that:

"In the last decade, the CCC has embraced what for many is the more logical and resource-protective position that "existing structures" refers only to those in existence at the time the Coastal Act came into effect (January, 1977). The alternative interpretation that "existing" means existing at the time of consideration does not make nearly as much sense when read in conjunction with the section 30253 requirement that new development be sited and designed to not require shoreline protection in the future.130 It also arguably does not comport with the Coastal Act's direction to "liberally construe[]" its provisions to accomplish its purposes and objectives." (page 58, Protecting Public Trust Shoreline Resources)

The application before the Commission today is particularly clear-cut in the context of decisions involving interpretation of the term 'existing development': The structure seeking protection was built in a Hazard Overlay Zone as identified in the City's LUP and was specifically designed not to require shoreline armoring.

In short, Surfrider agrees with staff's report in its finding that "The City's approval of the CDP for this project raises fundamental issues with the way in which the LCP and the

¹ https://documents.coastal.ca.gov/reports/2021/12/F11b/F11b-12-2021-report.pdf

² https://documents.coastal.ca.gov/assets/slr/Lester%20Prot%20Public%20Trust%20Res%20Face%20of%20SLR.pdf



Coastal Act are to be understood on such critical issues as safety hazards and shoreline armoring, including the ways in which armoring decisions affect the shoreline and the beach" (page 3, Staff Report.)

Surfrider urges commissioners to find substantial issue with this new 120-foot-long and 40-foot-high seawall project due to its detrimental impacts on local bluffs and beaches, and the negative precedent that such a decision will set for future decisions made by the City as well as future decisions made by this Commission. The ongoing privatization of public lands through armoring authorizations has confirmed the statewide importance of the Commission's work to clarify its reading of Coastal Act Section 30235.

Thank you for your consideration of Surfrider's comments.

Sincerely,

Melanie MacDowell Chair Surfrider Foundation San Luis Obispo chair@slo.surfrider.org

Brad Snook Vice Chair Surfrider Foundation San Luis Obispo vicechair@slo.surfrider.org