### **CALIFORNIA COASTAL COMMISSION**

South Coast District Office 301 E Ocean Blvd., Suite 300 Long Beach, CA 90802-4302 (562) 590-5071



# **F14b**

## A-5-LGB-19-0011 (BLUEBIRD #24, LLC) APRIL 16, 2021

#### **EXHIBITS**

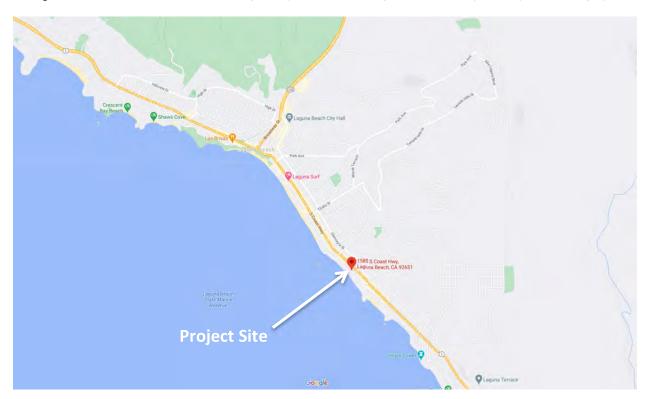
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Exhibit 2 – Project Plans

Exhibit 3 – Dr. Street's Memorandum dated March 25, 2021

Project Site: 1585 S. Coast Highway, Unit 24, Laguna Beach (County of Orange)



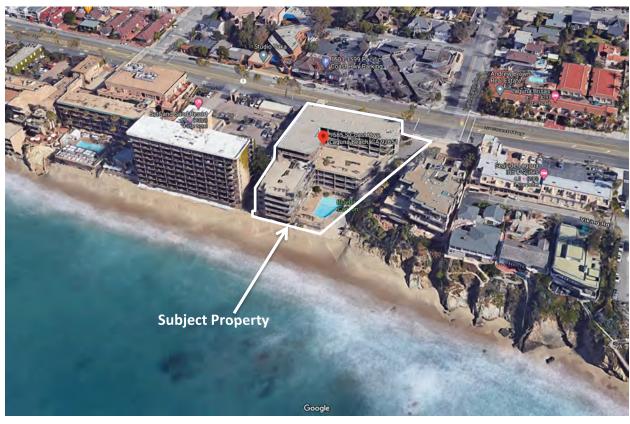


Figure 1 Aerial of the Project Site and Surrounding Development (2010)



Figure 2 Close-up of 2010 Aerial of the Project Site (Unit 24 is outlined in red)



Figure 3 Aerial of the Project Site (1987) (Unit 24 is circled)

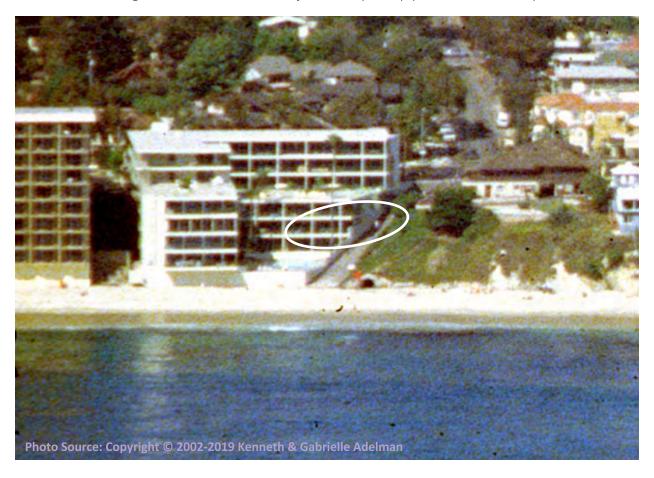


Figure 4 Aerial of the Project Site (1979) (Unit 24 is circled)



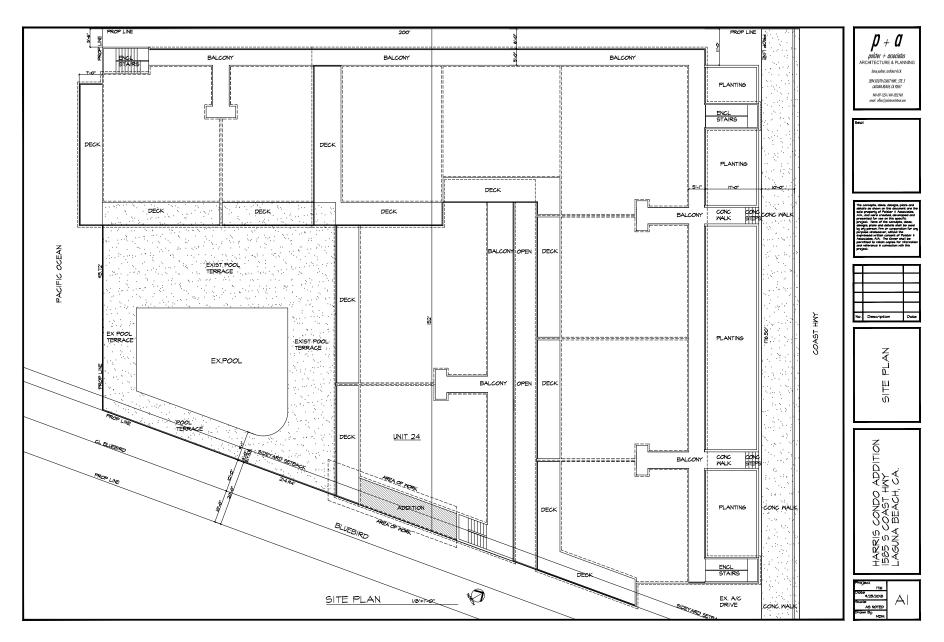
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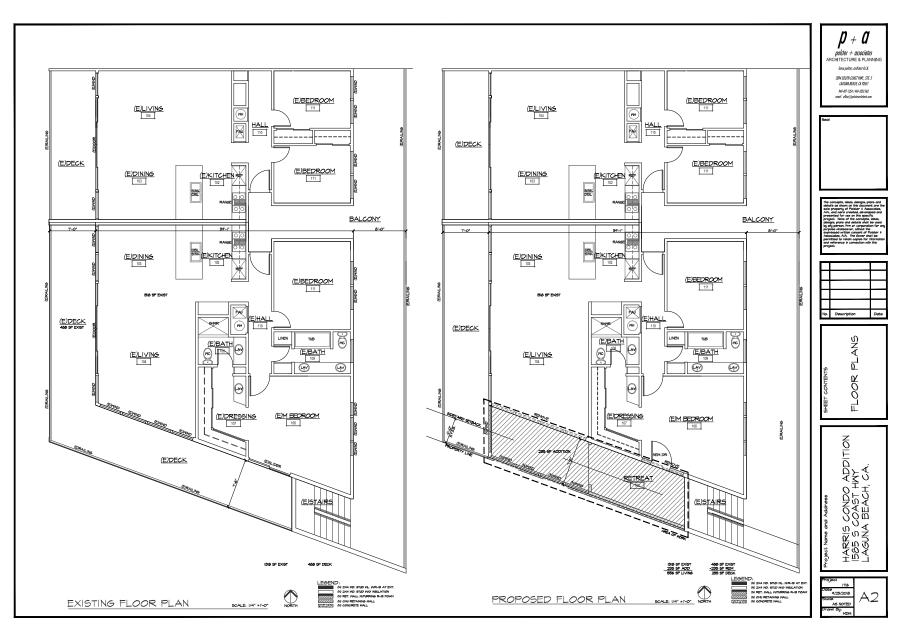
Figure 5 Aerial of the Project Site (1972) (Unit 24 is circled)



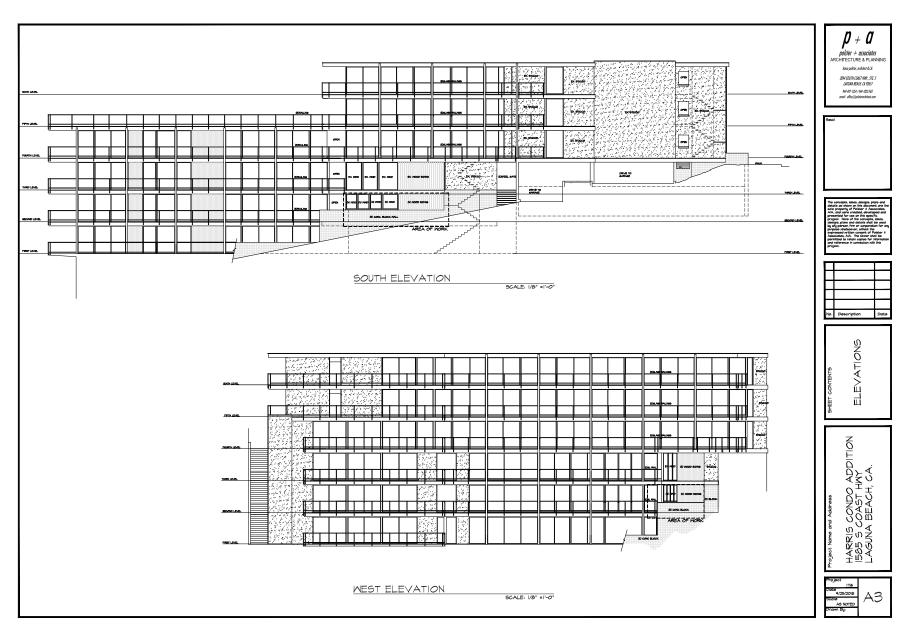
Figure 6 Aerial of the Project Site (1972) (Unit 24 is circled)







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#### **CALIFORNIA COASTAL COMMISSION**

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March 25, 2020

#### **GEOLOGICAL REVIEW MEMORANDUM**

To: Marlene Alvarado, Coastal Program Analyst

From: Joseph Street, Ph.D., P.G., Staff Geologist

Re: 1585 S. Coast Highway, Laguna Beach (Bluebird #24, LLC),

Appeal No. A-5-LGB-19-0011

The purpose of this memorandum is to evaluate the location of the Laguna Sands condominiums building (1585 S. Coast Highway) in relation to the natural and human-modified landforms at the site, and in particular to (a) the "oceanfront bluff" as defined in the Land Use Element (LUE) of the City of Laguna Beach Local Coastal Program (LCP) and (b) the "coastal bluff" as defined in the Coastal Commission regulations (Cal. Code Reg. Title 14, §13577(h)). To this end, I have reviewed the following documents directly related to the subject property:

- 1) P + A (polster + associates) Architecture and Planning, 2018, "Harris Condo Addition, 1585 S Coast Hwy, Laguna Beach, CA. 92651", plan set dated September 25, 2018.
- 2) GeoSoils, Inc., 2019a, "Discussion of Landforms at Laguna Sands, 1585 S. Coast Highway, City of Laguna Beach, Orange County, California", report dated August 12, 2019, and signed by D. W. Skelly and J. P. Franklin.
- 3) GeoSoils, Inc., 2019b, "Discussions of Coastal Hazards and Wave Runup, Laguna Sands, City of Laguna Beach, Orange County, California", report dated September 12, 2019, and signed by D. W. Skelly.

I have also consulted oblique aerial photographs of the site provided by the California Coastal Records Project (<a href="https://www.californiacoastline.org">https://www.californiacoastline.org</a>), the two-foot contour topographic maps maintained by Orange County Public Works (OCPW) (<a href="https://www.ocgis.com/ocpw/landrecords/">https://www.ocgis.com/ocpw/landrecords/</a>), and an 1885 U.S Coast and Geodetic Survey topographic map of the project area (<a href="http://www.caltsheets.org/socal/">http://www.caltsheets.org/socal/</a>, map no. T-1646). In addition, I have visited the beach and coastal access ramp adjacent to the site on several occasions.

The landforms discussion prepared by GeoSoils (Ref. 2) draws on U.S Geological Survey (USGS) topographic maps (dating from 1896, 1901 and 1949) as well as historical aerial photographs (dating from 1931, 1938, 1947, 1970, and 1972 to conclude that the Laguna Sands site lies within the former mouth of Bluebird Canyon. Ref. 2 also provides evidence of extensive landform modifications associated with the relocation of Coast Highway to its present configuration (c. 1900) and the subsequent development of the site and area.

Coastal Commission Exhibit 3 Page 1 of 4 Relying primarily on a stereo pair of 1947 aerial photographs, Ref. 2 provides a delineation of the canyon edges (**Fig. 1**) that locates the northern edge between the Laguna Sands building and its northern neighbor (Surf and Sand), the southern edge just south of the present-day beach access ramp, and the entire Laguna Sands complex within the mouth of Bluebird Canyon.

I am in general agreement with GeoSoils' assessment that the Laguna Sands Complex is located in the mouth of Bluebird Canyon. However, I disagree with the conclusion that there "is or was no coastal bluff at the site." The presence of a coastal canyon and a coastal bluff are not mutually exclusive under either the City LUE or



**Figure 1**: GeoSoils' (Ref. 2) interpretation of Bluebird Canyon edges in 1947 aerial photographs

Section 13577(h) of the Commission's regulations.

The LUE includes the following definition of "Oceanfront Bluff/Coastal Bluff" (Glossary Definition 102):

Oceanfront Bluff/Coastal Bluff – A bluff overlooking a beach or shoreline or that is subject to marine erosion. Many oceanfront bluffs consist of a gently sloping upper bluff and a steeper lower bluff or sea cliff. The term "oceanfront bluff" or "coastal bluff" refers to the entire slope between a marine terrace or upland area and the sea. The term "sea cliff" refers to the lower, near vertical portion of an oceanfront bluff.

Under this definition, a slope is a "coastal bluff" if it meets one of two simple criteria – that it overlooks a beach or shoreline *or* is subject to marine erosion. The Section 13577(h) definition of a coastal bluff is as follows:

#### Coastal bluff shall mean:

- (1) those bluffs, the toe of which is now or was historically (generally within the last 200 years) subject to marine erosion; and
- (2) those bluffs, the toe of which is not now or was not historically subject to marine erosion, but the toe of which lies within an area otherwise identified in Public Resources Code Section 30603(a)(1) or (a)(2).

Under the Commission regulations, even bluffs not historically subject to marine erosion that lie within areas identified in Coastal Act Sections 30603(a)(1) and (a)(2) also qualify as "coastal bluffs." These include bluffs located between the sea and the first public road and within 300 feet of the inland extent of the beach.

In evaluating whether the Laguna Sands site occurs on a "coastal bluff", I have considered both the available information on the pre-development status of the site and its presentday topography. The earliest, reasonably reliable topographic map of the area is provided by the 1885 T-Sheet, which shows Bluebird Creek within a narrow, approximately 40-ft deep incised canyon that widened toward the mouth (Fig. 2). The general shape and path of the canyon on the T-Sheet is similar to GeoSoils' interpretation of the 1947 aerial photographs, but with a somewhat narrower and more horn-shaped mouth. More importantly, the T-Sheet map indicates that there were 60-foot high, partially seawardfacing bluffs along both the northern and southern slopes of the canyon mouth, as well as steeper, 20-foot sea cliffs at the bluff toe, likely reflecting the Topanga Formation bedrock noted in Ref. 3 (and still visible from the beach in places at the Surf and Sand property to the north) and the effects of wave action on the lower bluff. Fig. 2 also includes an overlay of the modern street map and the approximate position of the Laguna Sands complex on the T-Sheet map. While neither the overlay nor the T-Sheet itself are likely to be perfectly accurate, it is apparent that much of the present-day building footprint corresponds to the natural bluff face, both within the canyon and on its more seaward-facing margins.



Figure 2: Views of Bluebird Canyon and Laguna Sands site from 1885 T-Sheet Map (Source: <a href="http://www.caltsheets.org/socal/">http://www.caltsheets.org/socal/</a>)

As discussed in Ref. 2, the landforms at the Laguna Sands site have since been modified, including partial filling of the canyon and culvertization of the stream. Nonetheless, the present-day topography of the site still indicates that the existing building is mostly located on the slope or face of a bluff landform meeting the LUE and Coastal Commission definitions of a "coastal bluff." **Fig. 3** (below) shows the existing building in relation to topographic contours (and parcel boundaries) from the OCPW database. Because the property is almost completely covered by buildings, the smooth slopes indicated by the contours are not accurate – rather, they are interpolations between LiDAR measurements of the ground surface -- but the contours nonetheless show that the site still has considerable vertical relief, descending from Coast Highway, at approximately +50 ft NAVD88, to the beach at approximately +13 ft NAVD88.

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<sup>&</sup>lt;sup>1</sup> The 1896 and 1901 USGS topographic maps are smaller-scale than the 1885 T-Sheet but show a similar horn-shaped canyon mouth. This morphology is less apparent in the 1949 map, likely reflecting landform modifications.



Figure 3: Laguna Sands site with OCPW topographic contours

As shown in a cross section from the P+A plan set (**Fig 4**), the actual ground surface beneath the building descends from the top of slope in a series of steps, likely the result of grading during site development.

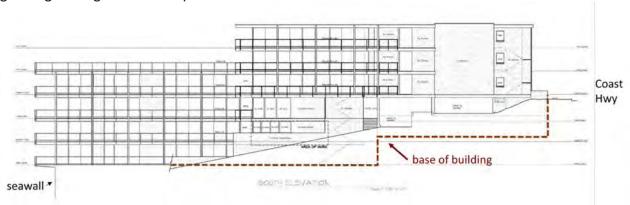


Figure 4: Laguna Sands building cross section, looking north (Modified from Ref. 1)

Although the exact nature of the historic landform modifications at the Laguna Sands site are not known, the present-day landform consists of a 35 - 40 foot high slope likely consisting remnant natural bluffs (evident in the T-Sheet and early USGS topographic maps) and imported fill. The present-day slope overlooks the beach and shoreline and were it not for the seawalls protecting the lower portions of the Laguna Sands complex, would be subject to wave attack and marine erosion (see Ref. 3). Thus, the slope on the site is an oceanfront/coastal bluff under the LUE definition, and the bulk of the Laguna Sands building is located on the bluff face.<sup>2</sup> The seaward portions of the structure may have been constructed on the beach.

A similar conclusion is reached applying the "coastal bluff" definition contained in the Commission regulations. The slope at Laguna Sands is subject to marine erosion and is located between the first public road and the sea and within 300 feet of a beach, meeting the definition of a coastal bluff.

<sup>&</sup>lt;sup>2</sup> The bluff edge appears to occur on the inland portion of the site, close to Coast Highway, at an elevation of approximately +50 ft NAVD88. Lacking a site-specific topographic survey and geologic investigation, I did not attempt to formally delineate the LUE bluff edge at the site.