

**STAFF REPORT
C64**

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02/04/19
PRC 8812.1
D. Simpkin
B. Johnson

GENERAL LEASE – PROTECTIVE STRUCTURE USE

APPLICANT:

Megan Matchinske and David W. Brehmer

PROPOSED LEASE:

AREA, LAND TYPE, AND LOCATION:

Sovereign land located in the Pacific Ocean, below 423 Pacific Avenue, city of Solana Beach, San Diego County.

AUTHORIZED USE:

Use and maintenance of a 62-foot-long by 35-foot-high seawall and a portion of a seacave/notch fill.

LEASE TERM:

10 years, beginning December 3, 2018.

CONSIDERATION:

\$2,885 per year with an annual Consumer Price Index adjustment.

SPECIFIC LEASE PROVISIONS:

- Liability insurance in an amount no less than \$1,000,000 per occurrence.
- Lessee must apply to the Commission for a new lease when lessee submits its application for an amended coastal development permit.
- Lessee must comply with Coastal Development Permit No. 6-07-134, including any future modifications.

STAFF ANALYSIS AND RECOMMENDATION:

Authority:

Public Resources Code sections 6005, 6216, 6301, 6321, 6321.2, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

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Public Trust and State's Best Interests Analysis:

On December 3, 2008, the Commission authorized the issuance of a General Lease – Protective Structure Use to Megan Matchinske and David W. Brehmer for the retention, use, and maintenance of a 32-foot-long by 35-foot-high seawall and a portion of a seacave/notch fill, and the construction, use and maintenance of an additional 30-foot-long by 35-foot-high seawall section ([Item C18, December 3, 2008](#)). That lease expired on December 2, 2018. The Applicant is now applying for a General Lease – Protective Structure Use, for the continued use and maintenance of the existing 62-foot-long by 35-foot-high seawall and a portion of a seacave/notch fill.

The geology along this section of coastline causes the bluffs to be susceptible to periodic bluff failures. Bluff failures are typically caused by a combination of factors, including wave action eroding the sandstone formations at the base of the bluffs, and from wind and rain which erodes looser, less cohesive layers of materials above the sandstone.

The bluff face below the subject parcel developed a seacave approximately 60 feet wide, 15 feet deep, and 20 feet high. The seacave is oriented along the property line dividing 417 and 423 Pacific Avenue. A prior attempt to fill the seacave during the 1997-98 storm season was unsuccessful and further erosion occurred. Due to the size and extent of the seacave, and the unstable nature of a clean sand layer above the seacave, the collapse of the seacave could have triggered an upper bluff failure.

On August 22, 2007, the City of Solana Beach approved Resolution No. 2007-084 authorizing emergency permit No. 17-06-18 for the construction of a 170-foot-long by 35-foot-high seawall and a seacave/notch fill on City-owned property. A portion of the seawall and seacave/notch fill encroaches on State sovereign land. The City-owned property is below the Applicant's bluff-top property at 423 Pacific Avenue and the neighboring property located at 417 Pacific Avenue.

On May 23, 2008, the California Coastal Commission (CCC) authorized emergency Coastal Development Permit (CDP) No. 6-08-55-G for the construction of a 100-foot-long by 35-foot-high seawall and a seacave/notch fill below 417 and 423 Pacific Avenue. On August 7, 2008, the CCC authorized CDP No. 6-07-134 for the 100 feet of existing seawall authorized under the previous emergency CDP and an additional 70 feet of seawall below 417 and 423 Pacific Avenue. The Applicant is responsible for 62 feet of the overall 170 feet approved by the CCC.

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The proposed lease is for a 62-foot-long by 35-foot-high seawall and seacave/notch fill located at the base of the bluff to protect against bluff failure and protect the home on top of the bluff. The stabilization against bluff failure provided by the seawall and seacave/notch fill also protects the public using the beach. Tide Beach Park accessway, one of Solana Beach's primary beach parks and access ways, is located just north of the subject site.

There are also some adverse effects related to seawalls and seacave/notch fills in general. Seawalls can impact public access, increase beach erosion, and decrease natural sand supply. The City of Solana Beach and the Coastal Commission required the Applicant to pay fees to mitigate these potential impacts on Public Trust resources when approving the seawall and seacave/notch fill in 2007 and 2008.

The City of Solana Beach required a \$170,000 fee, paid over 73 years, to address adverse impacts to public access and recreational use caused by the sea wall. This fee is based on a \$1,000 per lineal foot interim charge that the City required while it prepared further studies on seawall's impacts to public access. The City uses these fees for public access and recreational projects.

The Coastal Commission imposed conditions on CDP No. 6-07-134 to mitigate the impacts to beach supply caused by the 170-foot seawall. Special Condition 3 required an in-lieu fee of \$61,164.64 to compensate for the sand lost due to the protective structure. This fee covers the impacts caused over the seawall's 22-year design life and is used to implement projects that provide sand to the region's beaches.

Special Condition 3 also requires the permittees to apply for a CDP amendment by August 7, 2027. The amendment will either authorize removal of the seawall or require mitigation for effects beyond the initial 22-year design life. This requirement allows the Coastal Commission to re-review the seawall to ensure that this project does not prejudice future shoreline planning options to address climate change and sea-level rise. The proposed lease requires the lessee to comply with any modifications to the CDP as a condition of the lease. The proposed lease also requires the Applicant to apply for a new lease from the Commission when it submits its CDP amendment application to the Coastal Commission.

The City and the Coastal Commission's approvals do not restrict the Commission's ability to approve or deny a lease of State sovereign land for the seawall and seacave/notch fill. The proposed lease's limited 10-

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year term, combined with the requirement that the applicant submit a new lease application when applying for its CDP amendment, will allow the Commission to review the improvements' continuing presence concurrently with the Coastal Commission. Additionally, the proposed lease requires that the Applicant insure the lease premises and indemnify the State for any liability related to the authorized seawall and seacave/notch fill. The lease also requires payment of annual rent to compensate the people of the State for the use of public land. The lease does not alienate the State's fee simple interest or permanently impair public rights.

Climate Change:

Climate change impacts, including sea-level rise, more frequent and intense storm events, increased flooding, and erosion affect both open coastal areas and inland waterways in California. The seawall is located in a tidally influenced area vulnerable to wave action at the current sea level of the Pacific Ocean. The seawall is part of a larger seawall aligned along a steep, eroding coastal bluff to protect upland residential properties along Pacific Avenue in the city of Solana Beach. A portion of the lease area includes fill material behind the seawall to infill a sea cave cavity.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea-level rise projections and rates. Commission staff evaluated the "high emissions," "medium-high risk aversion" scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The table below shows projected sea-level rise scenarios for the lease.

Table 1. Projected Sea-Level Rise for La Jolla¹

Year	Projection (feet)
2030	0.9
2040	1.3
2050	2.0
2100	5.8

Source: Table 31, State of California Sea-Level Rise Guidance: 2018 Update

Note: ¹ Projections are with respect to a baseline of the year 2000.

The combination of these projected conditions increases the likelihood of future damage to the seawall that can jeopardize the residential properties along Pacific Avenue. As discussed in the Safeguarding California Plan: 2018 Update (California Natural Resources Agency 2018), armoring

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structures along the coast, while intended to safeguard upland properties, offers only temporary protection, eventually accelerating long-term erosion and leaving homes and property at risk. The seawall may become vulnerable to more frequent inundation during high tides, king tides, and storms, as well as from storm runoff. As a result, the seawall may require more frequent maintenance to ensure continued function during and after storm seasons and to avoid dislodgement. In the future, the seawall may also need additional fortification to withstand higher levels of flood exposure and sea-level rise.

Bluff erosion as a result of precipitation, groundwater drainage, wind force, and slumping may also exert pressure on the seawall from the landward side, and potentially destabilize the sea cave fill material. Therefore, the seawall may require more frequent maintenance to ensure continued function during and after storm seasons, and to reduce the potential risk it poses to public safety, should it become a source of marine debris or a coastal hazard as a result of dislodgement or structural failure.

The seawall also has the potential to exacerbate the impacts of sea-level rise and increased storm and wave activity on State sovereign land adjacent to the lease area. The beach area seaward of the seawall is subject to width reduction and loss from erosion, scour, and coastal squeeze (i.e., the reduction of beach width due to the inability of the beach to naturally migrate landward as a result of hard armoring infrastructure). Beach loss is anticipated to increase over the term of the lease, because of the combined factors of climate change impacts, natural dynamic coastal processes, and the presence of the seawall.

According to the 2017 monitoring report required by Special Condition 5 of the CDP, the seawall continues to appear relatively unchanged from its date of construction. The hand sculpted, color-treated shotcrete surface has maintained its texture and continues to function as designed. There is very minimal scouring near the visible base of the seawall. No abrasion, cracking, or spalling was observed, nor was there any visible or measurable tilt. Current sand levels are consistent with those depicted in the project's 2014 monitoring report.

Regular maintenance, as required by the terms of the lease, will reduce the likelihood of severe structural degradation or dislodgement. The lease includes an acknowledgment that the lease premises may be subject to the effects of sea-level rise and may require additional maintenance or protection as a result, for which the lessee agrees to be solely responsible.

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Conclusion:

Seawalls and seacave/notch fills can have impacts on Public Trust needs and values in the Solana Beach area. However, considering the measures already required by the City of Solana Beach and the Coastal Commission, the public safety benefits, and the limited term of the lease, staff believes the issuance of this lease will not substantially interfere with the Public Trust needs and values for the foreseeable term of the proposed lease and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. This action is consistent with Strategy 1.1 of the Commission's Strategic Plan to deliver the highest levels of public health and safety in the protection, preservation, and responsible economic use of the lands and resources under the Commission's jurisdiction.
2. Staff recommends that the Commission find that this activity is exempt from the requirements of the California Environmental Quality Act (CEQA) as a categorically exempt project. The project is exempt under Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

Authority: Public Resources Code section 21084 and California Code of Regulations, title 14, section 15300 and California Code of Regulations, title 2, section 2905.

EXHIBITS:

- A. Land Description
- B. Site and Location Map

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15061 as a categorically exempt project, Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the proposed lease will not substantially interfere with the Public Trust needs and values at this location, at this time, and for the foreseeable term of the lease; and is in the best interests of the State.

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AUTHORIZATION:

Authorize issuance of a General Lease – Protective Structure Use to Megan Matchinske and David W. Brehmer beginning December 3, 2018, for a term of 10 years, for the use and maintenance of a 62-foot-long by 35-foot-high seawall and a portion of seacave/notch fill, as described on Exhibit A and shown on Exhibit B (for reference purposes only) attached and by this reference made a part hereof; annual rent in the amount of \$2,885, with an annual Consumer Price Index Adjustment; and liability insurance in an amount no less than \$1,000,000 per occurrence.

EXHIBIT A

PRC 8812.1

LAND DESCRIPTION

A parcel of tide and submerged land in the bed of the Pacific Ocean lying adjacent to "Solana Beach Vista" as shown on Map No. 2143, sheet 2, filed December 10th, 1928 in Official Records of San Diego County, situate in the City of Solana Beach, San Diego County, California more particularly described as follows:

BEGINNING at the face of a seawall and having CCS 83, Zone 6 coordinates $N(y) = 1944204.45$, $E(x) = 6246985.18$ from which a lead and brass disc stamped "RCE 7808" as shown on Record of Survey Map #8667, San Diego County, bears S 30°44'12" E 678.23 feet; thence along the face of said seawall S 39°42'53" E 40.25 feet; thence S 64°26'37" E 11.46 feet; thence S 52°41'48" E 6.49 feet; thence S 38°06'52" E 5.48 feet; thence S 18°08'51" E 2.27; thence leaving the face of said seawall N 78°40'58" E 14.07 feet along the westerly prolongation of the lot line between Lot 4 & Lot 5 per Subdivision Map "Solana Beach Vista", Map No. 2143, sheet 2, San Diego County, to a point on the O.H.W.M. of said ocean; thence along said O.H.W.M. N 30°11'24" W 7.30 feet; thence N 60°04'08" W 15.47 feet; thence N 87°37'06" W 14.56 feet; thence N 39°42'53" W 39.80 feet; thence leaving said O.H.W.M. S 50°17'07" W 2.67 feet to the POINT OF BEGINNING.

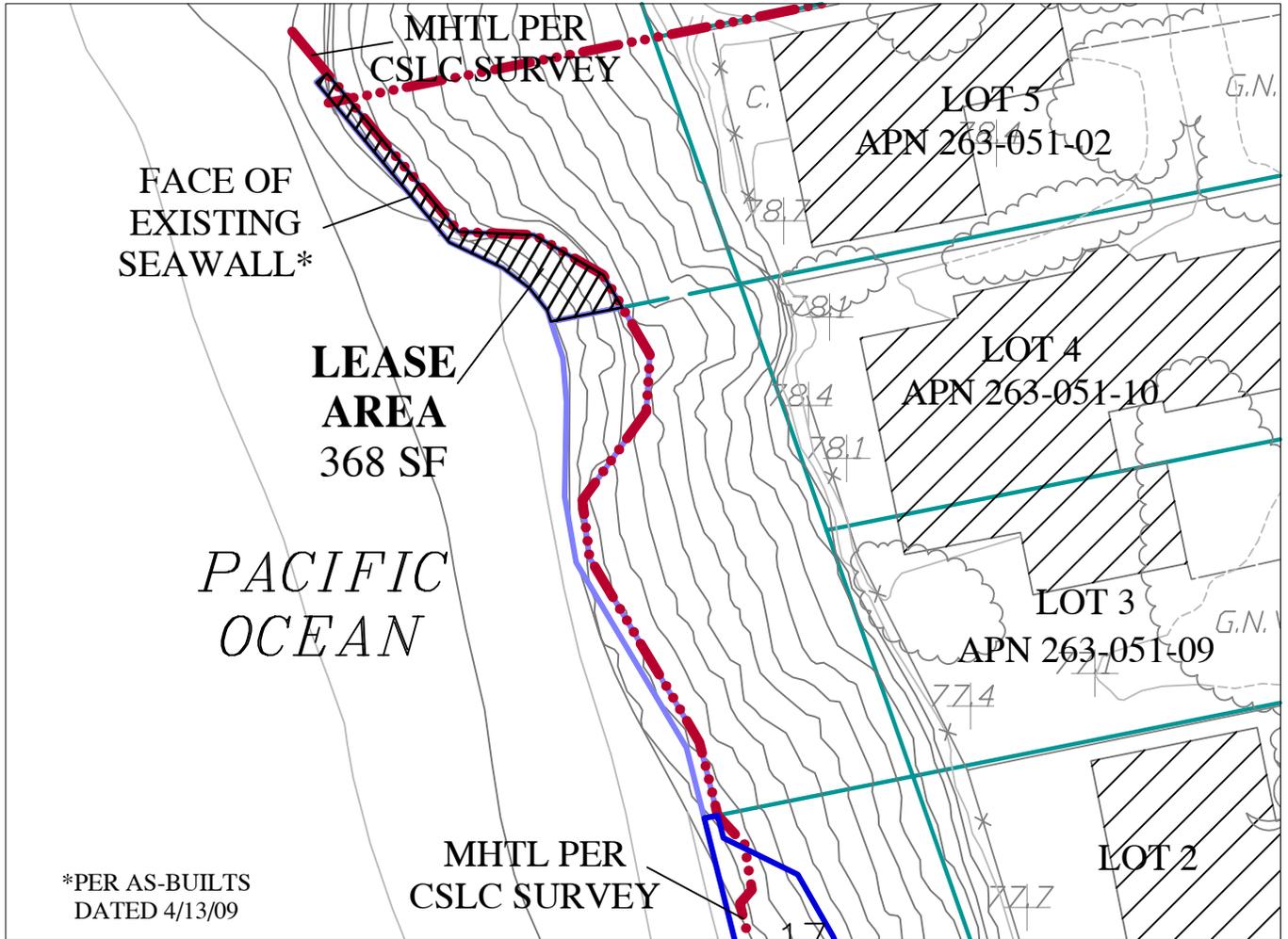
Basis of bearing is based on California Coordinate System 1983, Zone 6 (2004 epoch).
All distances are grid and in feet.

END OF DESCRIPTION



NO SCALE

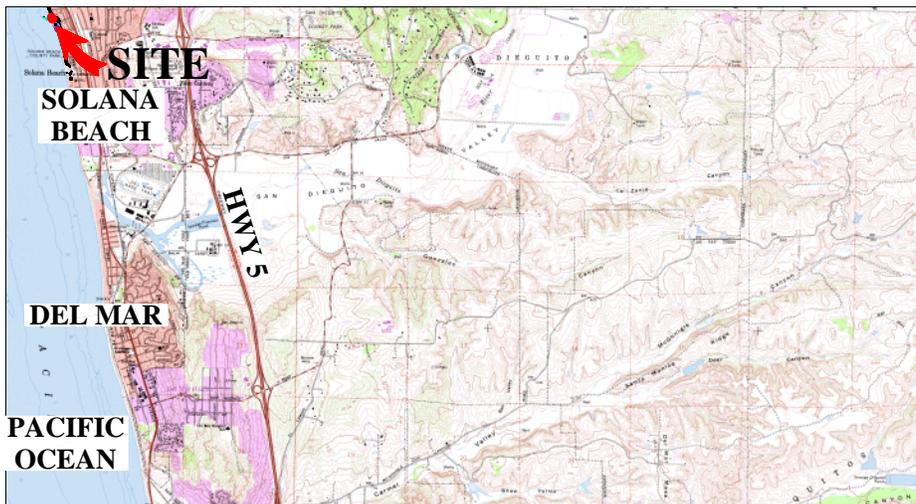
SITE



423 Pacific Avenue, Solana Beach

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

Exhibit B

PRC 8812.1
 APN 263-051-02
 BREHMER & MATCHINSKE
 GENERAL LEASE -
 PROTECTIVE STRUCTURE USE
 SAN DIEGO COUNTY



MJF 12/20/18

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.