CALIFORNIA COASTAL COMMISSION
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W17c

5-21-0706 (COUNTY OF LOS ANGELES)
APRIL 6, 2022

CORRESPONDENCE

Fw: CDP Application 5-21-0706* (Project 5241)

Alvarado, Marlene@Coastal <Marlene.Alvarado@coastal.ca.gov>
Wed 4/6/2022 1:32 PM
To: SouthCoast@Coastal <SouthCoast@coastal.ca.gov>

3 attachments (2 MB)
CCC Board Meeting Response.pdf; Project 5241 - Letter to CCC Final - Signed.pdf; Attachment F.pdf;

From: Ahmet Tatlilioglu <ATATLILIOGLU@dpw.lacounty.gov>
Sent: Monday, April 4, 2022 3:54 PM
To: Stevens, Eric@Coastal <eric.stevens@coastal.ca.gov>; Alvarado, Marlene@Coastal <Marlene.Alvarado@coastal.ca.gov>
Cc: Kevin Woods <kewoods@dpw.lacounty.gov>; Rainer Globus <RGLOBUS@dpw.lacounty.gov>; Choi Fung Chan <cchan@dpw.lacounty.gov>; Jolene Guerrero <JGUERRER@dpw.lacounty.gov>
Subject: RE: CDP Application 5-21-0706* (Project 5241)

Eric,

Thank you so much for taking your time and discussion this project and the special requirements with me on Friday. I believe Marlene also further discussed with my staff today.

As discussed on the phone, you mentioned Coastal Commission would like to have more justification for the extension of the approval period and sea level rise study.

For justification of the extension of the approval period from **10 years to 20 years,** we have the following reasons that this is necessary:

- We have addressed this project with the best short term solution as discussed in the memo answering the Coastal Commissions questions in September of last year. We answered Q11 by stating that, "*Repair options, such as installation of a liner, would not work due to the extremely deteriorated condition of the RCB. Reconstruction of the 380-foot segment is the only alternative to restore functionality of the damaged portion of the RCB, and the construction of piles will secure the drain in place.*" Temporary solutions (2-10 year) had been looked into, as mentioned, but were not seen as a viable option.
- Looking at long term solution, we responded in Q12 of the memo to CCC, the possibility of daylighting the drain would cause a deep trench across the entire beach that would inhibit access to the beach goers. Additionally, outfalls on the beach, often have health and safety issues due to bacteria growth and permeates unpleasant odor as noted in Q15 of the attached memo.
- Other long term solutions, would require a new pump station to pump water under the ocean to not affect any beach activity. However, this alternative would be extremely

costly and involve more beach closure for a possibility of multiple summers to be able to complete the construction. The design and property acquisition for such an endeavor could take several years since it has many components that would be necessary as well as permitting issues.

In regards to the sea level rise study, we are requesting **10 years** instead of the 5 years in the conditions since we already had a Coastal Hazard Report that was prepared as seen in attachment F, attached, and it includes addressing sea level rise. If this would be sufficient, we would like this to be removed. Since this report did not find any issues with the existing infrastructure due to sea level rise, finding alternatives may only be possible in a 10 year solution when there's more data that may show higher rates of sea level rise.

Additionally, the beach parking lot will not be used. We have made notes for all of these items in the attached document for your reference.

Lastly, if you can clarify what documents are needed for proof of legal ability to comply with conditions, that would be most helpful, so we can be sure to prepare the right documents.

Thank you,

Ahmet Tatlilioglu, PE
Civil Engineer
Los Angeles County Public Works
Office: (626)458-7810

COASTAL HAZARDS REPORT

REINFORCED CONCRETE BOX STORM DRAIN RESTORATION/RECONSTRUCTION PROJECT AT DOCKWEILER STATE BEACH

Prepared for

Los Angeles County Public Works, Stormwater Maintenance Division
900 S. Fremont Avenue
Alhambra, California 91803

Prepared by

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Project Number: PNG0904

December 2020

Geosyntec consultants

engineers | scientists | innovators

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1. INTRODUCTION

RVA solicited the services of Geosyntec to prepare a Coastal Hazards Report for Project 5241 for the Los Angeles County Public Works (Public Works). Geosyntec understands that Public Works seeks to restore/reconstruct an approximately 380-linear foot segment of damaged reinforced concrete box storm drain that discharges into Santa Monica Bay at Dockweiler State Beach. The storm drain segment to be restored/reconstructed will be a reinforced concrete box-culvert (nominally 11 feet wide by 9 feet, 2 inches high) with an approximate 175 feet segment supported on piles. Figure 1 below shows the general location of the storm drain restoration/reconstruction project.

This project is necessary to bring back the existing storm drain to its original design condition and functionality to provide stormwater conveyance for flood protection for the surrounding community.

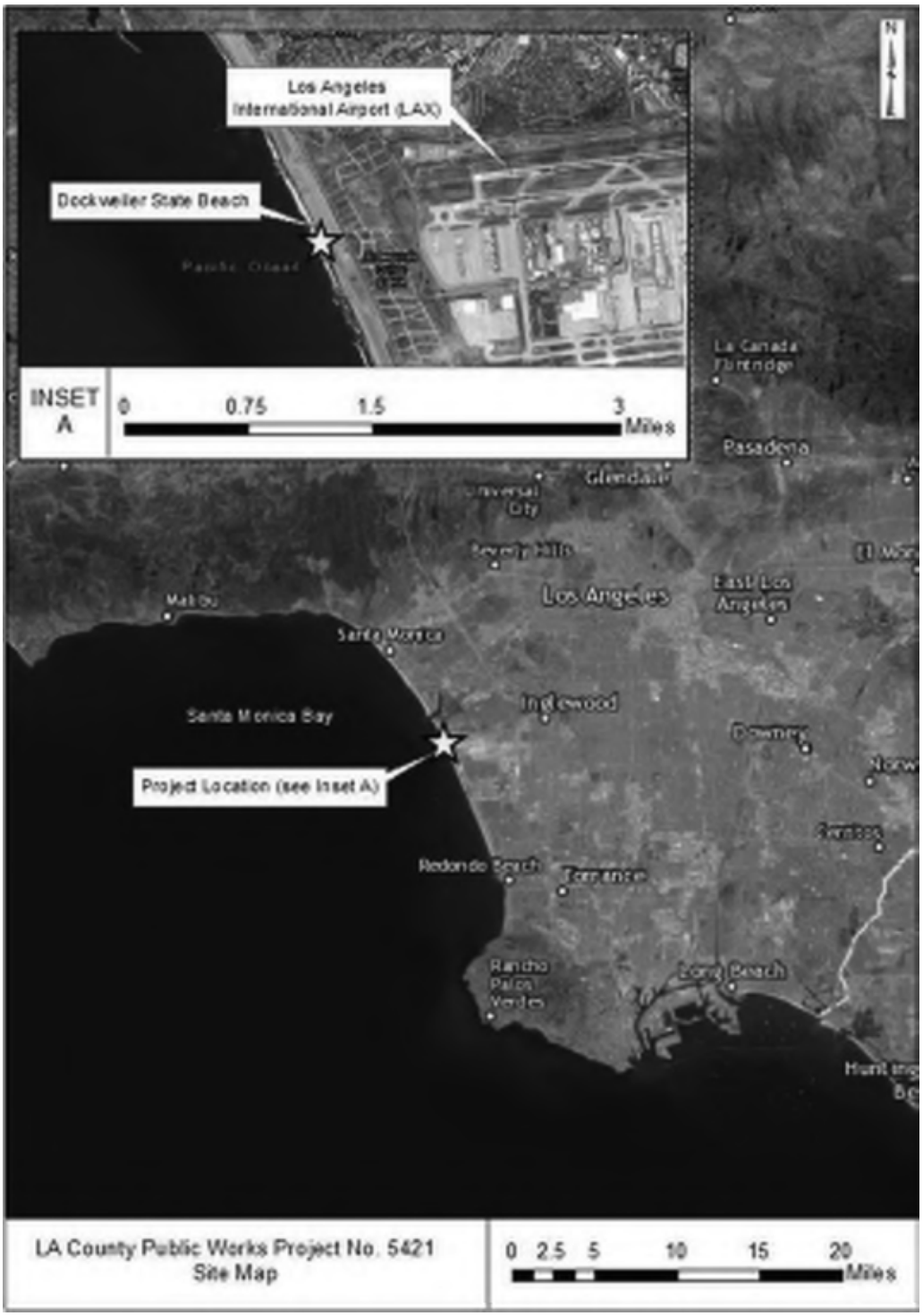

Figure 1: Project Location.

On August 13, 2019, the California Coastal Commission (Commission) notified Public Works that they required a Coastal Hazards Report as part of the project permitting process, including: analysis of future shoreline changes due to erosion, sea level rise (SLR), up and down coast

structures, changes in nourishment projects, and any other factors that currently influence shoreline conditions at the project site. The stated purpose of the Coastal Hazards Report is to determine whether future storms may erode or flood the proposed project. Based on the analytical results, this report includes the determination of potential adoptive measures over the life of the proposed project, considering the significant ongoing efforts to maintain the present beach to the extent feasible and given anticipated future coastal changes in the project area.

Because Public Works proposes to remove and replace the damaged segment of storm drain with a similar structure, the proposed project presents no physical change from the existing project. However, projected SLR results in future conditions that may be different than those evaluated previously for this project area.

This document includes the following:

- Site description and coastal setting – including tidal and wave information, sediment dynamics, and engineering activities;
- Existing coastal hazards – including extreme tidal level information, extreme waves, wave runup, and shoreline change;
- Potential future hazards – including a description of SLR and future high tides and extreme tidal and wave risks;
- Recommendations for adaptation measures – including a brief synopsis of the actions recommended to improve project resiliency; and
- Summary – including key takeaways.

The analyses presented hereinafter are based on existing information from this well-studied coastal area of southern California.

2. SITE DESCRIPTION AND COASTAL SETTING

The Project 5241 location at Dockweiler State Beach is adjacent to the Los Angeles International Airport (LAX) in the central portion of the coastal margin of Santa Monica Bay (Figure 1). Since the 1930s, beach nourishment and stabilization projects have maintained and widened the Santa Monica beaches. In the last 30 years, Dockweiler State Beach has also been protected from storm waves and wave runup by the annual construction of temporary winter sand berms. Beginning in the 1950s, groundwater has also been actively managed in the area to maintain a hydraulic barrier to seawater intrusion.

The erosion and deposition regime (onshore and offshore) influence the performance and sustainability of coastal margin infrastructure, including the proposed reinforced concrete box storm drain restoration/reconstruction. The coast of Santa Monica Bay is exposed to long period swells from Gulf of Alaska winter storms. The Redondo Submarine Canyon, which is one of the largest most active submarine canyons on the Pacific coast, is a major sink for the Santa Monica Littoral Cell. During recent times, the Calleguas, Malibu, and Ballona creeks supply sediment to this littoral cell, and historically the Los Angeles River did as well. Artificial contribution of sand

by dredging and major construction projects has provided a significant portion of the sand in the Santa Monica Littoral Cell since 1938 (Reppucci, 2012).

Littoral drift, which is the transport of sediments along a coast parallel to the shoreline, can cause instability in the width and thickness of beaches and thickness of seafloor sediment along the shoreline. The longshore currents consistently flow along the Santa Monica Bay coast toward Redondo Canyon where the currents flow down the canyon and out to sea. Marked discontinuity of the beach width is apparent on opposite sides of jetties, or groins, including several groins at Will Rogers State Beach, at Dockweiler State Beach opposite LAX, at El Segundo Beach, and at South Redondo Beach as shown in Figure 2. The discontinuity in beach width at the groins is due to persistent longshore transport (littoral drift) of the beach sand and offshore sediment that accumulates on the upstream side and is eroded on the downstream side of the groin. The groins show evidence of southward longshore transport except south of the Redondo Submarine Canyon, where the longshore transport is northward.

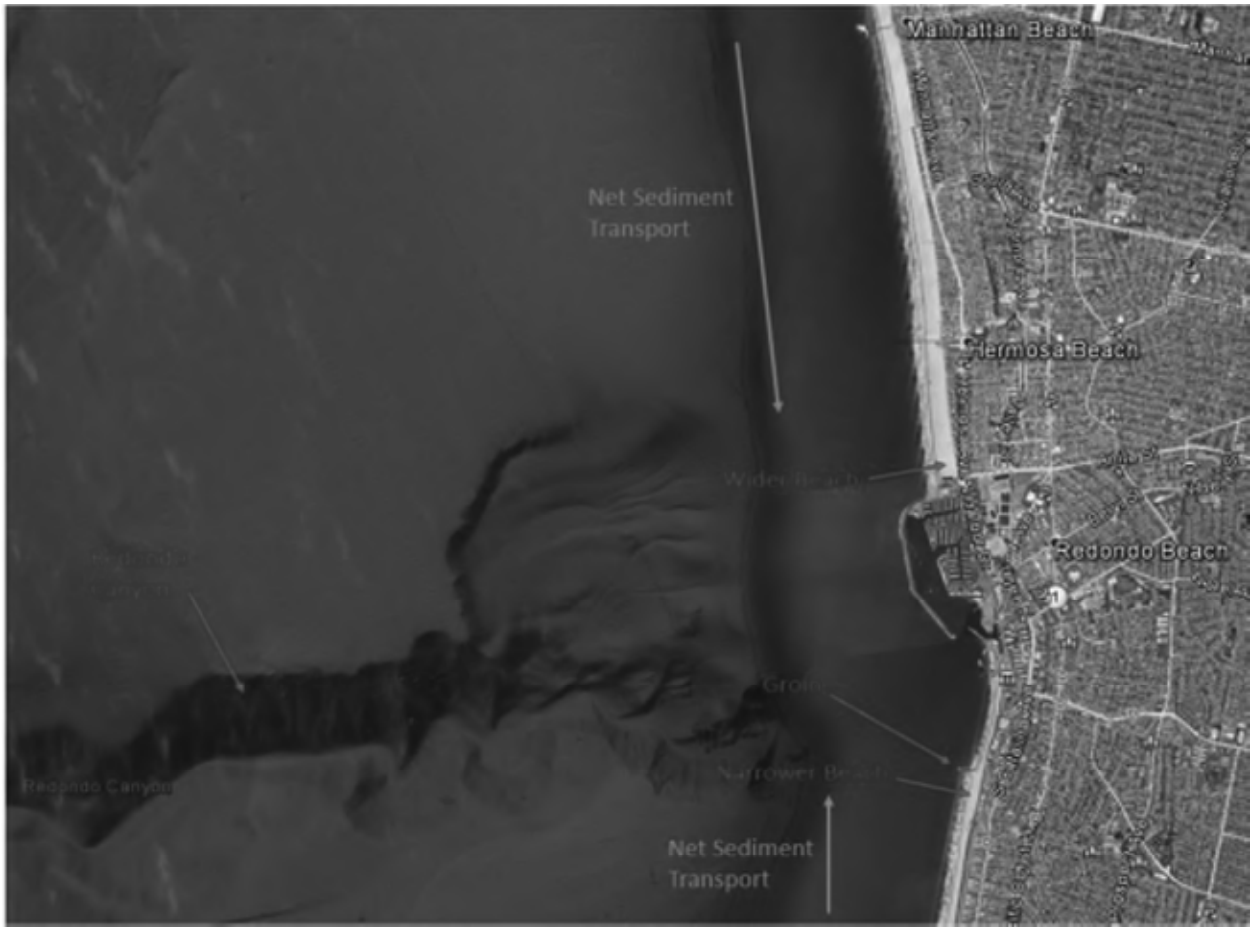

Figure 2: Effects of Heavily Engineered Shorelines on Sediment Transport.

2.1 Tidal Information (Water Levels)

Tidal datum information was gathered from the Santa Monica, California National Oceanic and Atmospheric Administration (NOAA) gauge, Station: 9410840, (NOAA, 2018). Table 1 presents

the current accepted tidal datum values based on the North American Vertical Datum of 1988 (NAVD88), and relative to Mean Lower Low Water (MLLW). Figure 3 shows the tidal datums and a profile of the project site. At current tide levels, the reinforced concrete box storm drain is partially submerged.

Table 1: Santa Monica Tidal Datum, Station 9410840.

Tidal Datum	Elevation Relative to NAVD88 at Gauge Location (feet)	Elevation Relative to MLLW at Gauge Location (feet)
Highest Astronomical Tide	7.1	7.3
Mean Higher High Water	5.2	5.4
Mean High Water	4.5	4.7
Mean Tide Level	2.6	2.8
Mean Sea Level	2.6	2.8
Mean Low Water	0.7	0.9
Mean Lower Low Water	-0.2	0.0

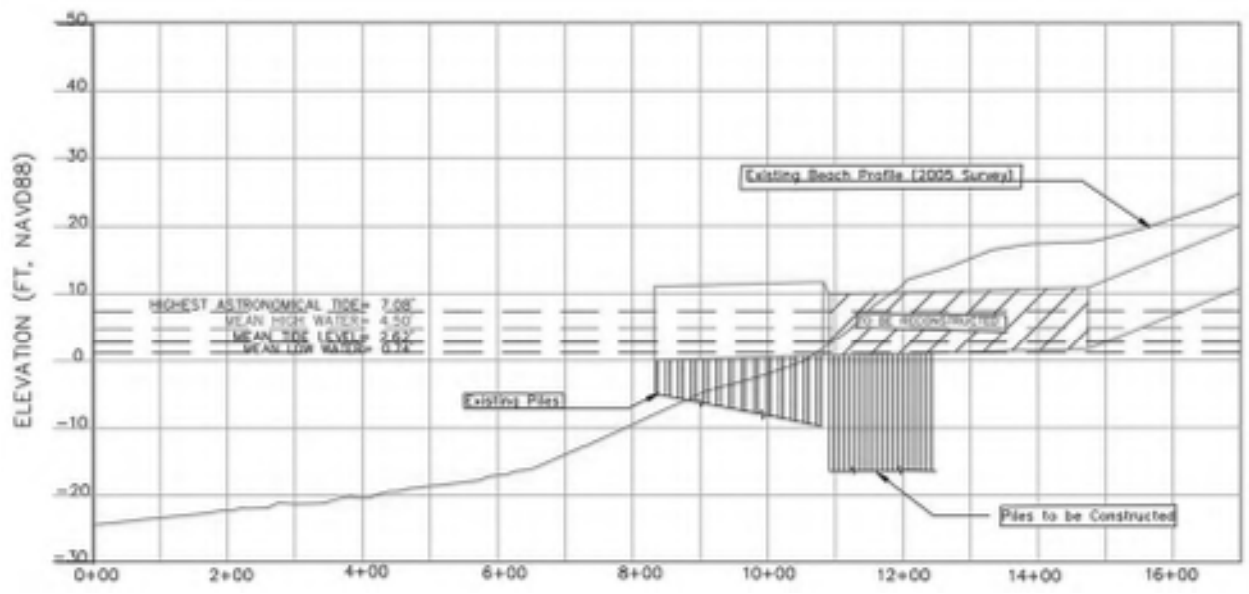

Figure 3: Beach Profile and Current Tide Levels.

2.2 Waves

The United State Army Corps of Engineers (USACE) Wave Information Studies (WIS) Station 83099 is located approximately 15 miles offshore and data are available for this station from 1980 through 2011. The Coastal Data Information Program (CDIP) Station 028 (NOAA Station 46221) is located approximately 7 miles offshore and data are available for this station from 2017 to present. Locations of the stations relative to the project area are shown in Figure 4, and wave rose diagrams for these gauges are shown in Figure 5.

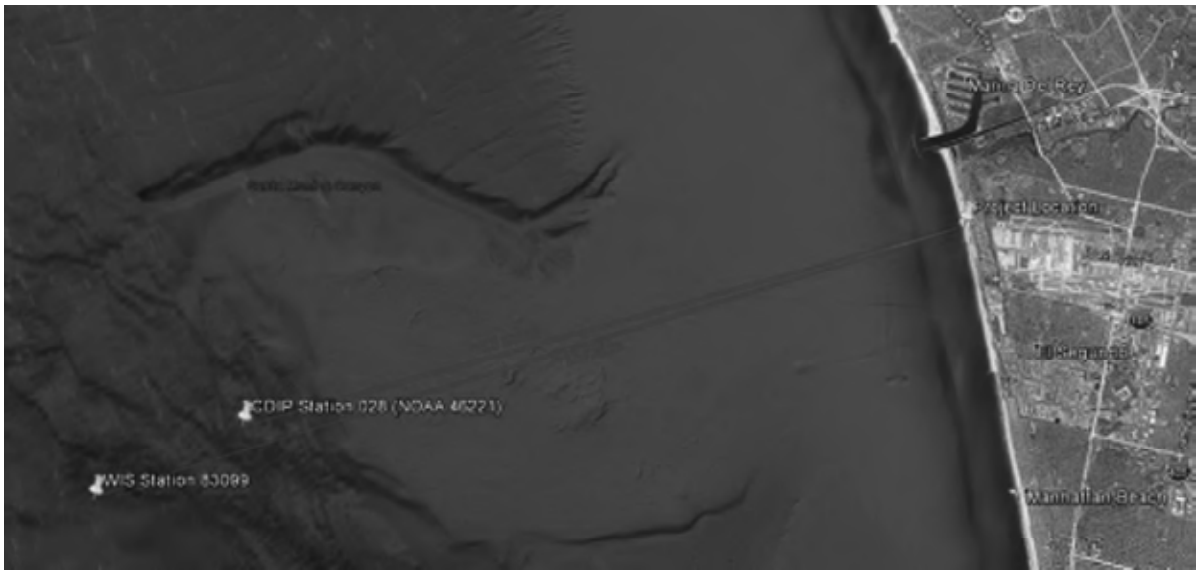

Figure 4: Wave Gauge Locations Relative to the Project Location.

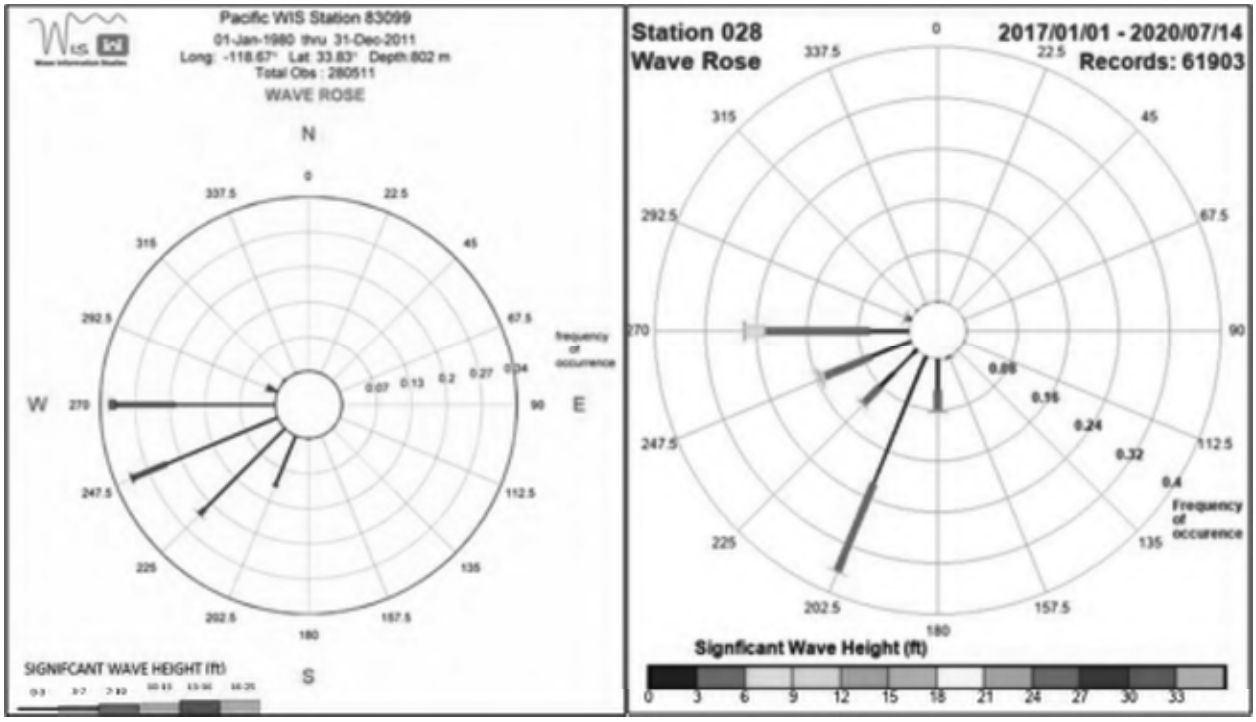

Figure 5: Wave Roses Near Project Area.

2.3 Sediment Dynamics

The Santa Monica region, like most of the southern California coastal margin, is characterized by a southeast littoral transport (Figure 6). In Santa Monica Bay, the primary discharge point of the littoral transport is the Redondo Submarine Canyon; the estimated annual rate of littoral drift for the Santa Monica region is approximately 275,000 cubic yards (Hapke, 2006).

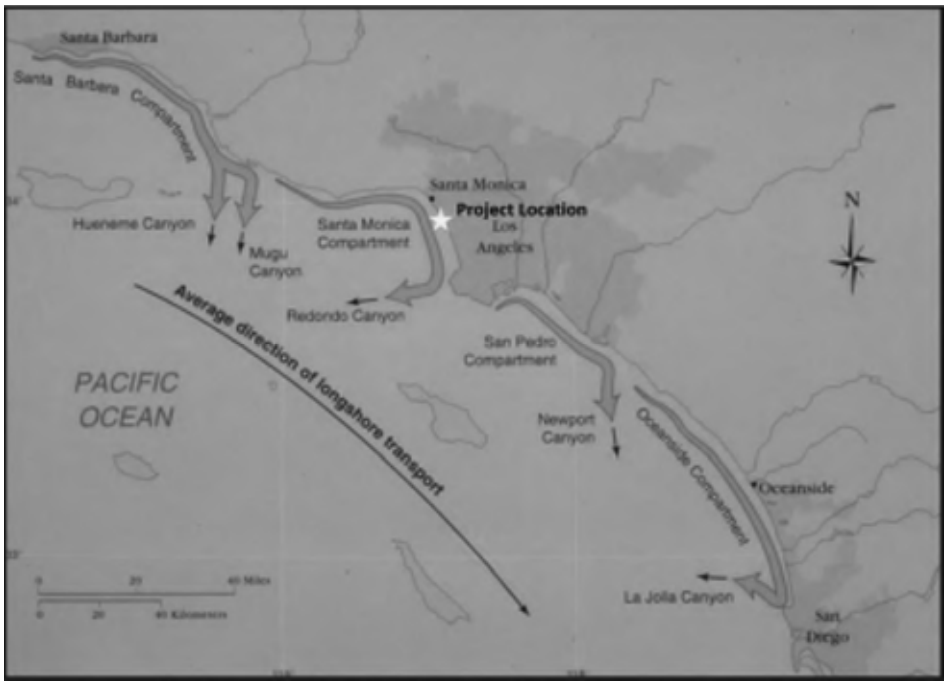

Figure 6: Littoral Transport Directions Along the Southern California Coast (Adapted from Patsch and Griggs, 2006).

Jenkins (2015) documents seven seafloor cores which were collected in the Santa Monica Bay to characterize the sediment grain size and stratigraphy. According to that information, the upper 20 feet of sediment cover consists of approximately 82 percent sand-sized sediment and 18 percent fines including very fine sand, silts, and clays as shown in Figure 7 (Jenkins, 2015).

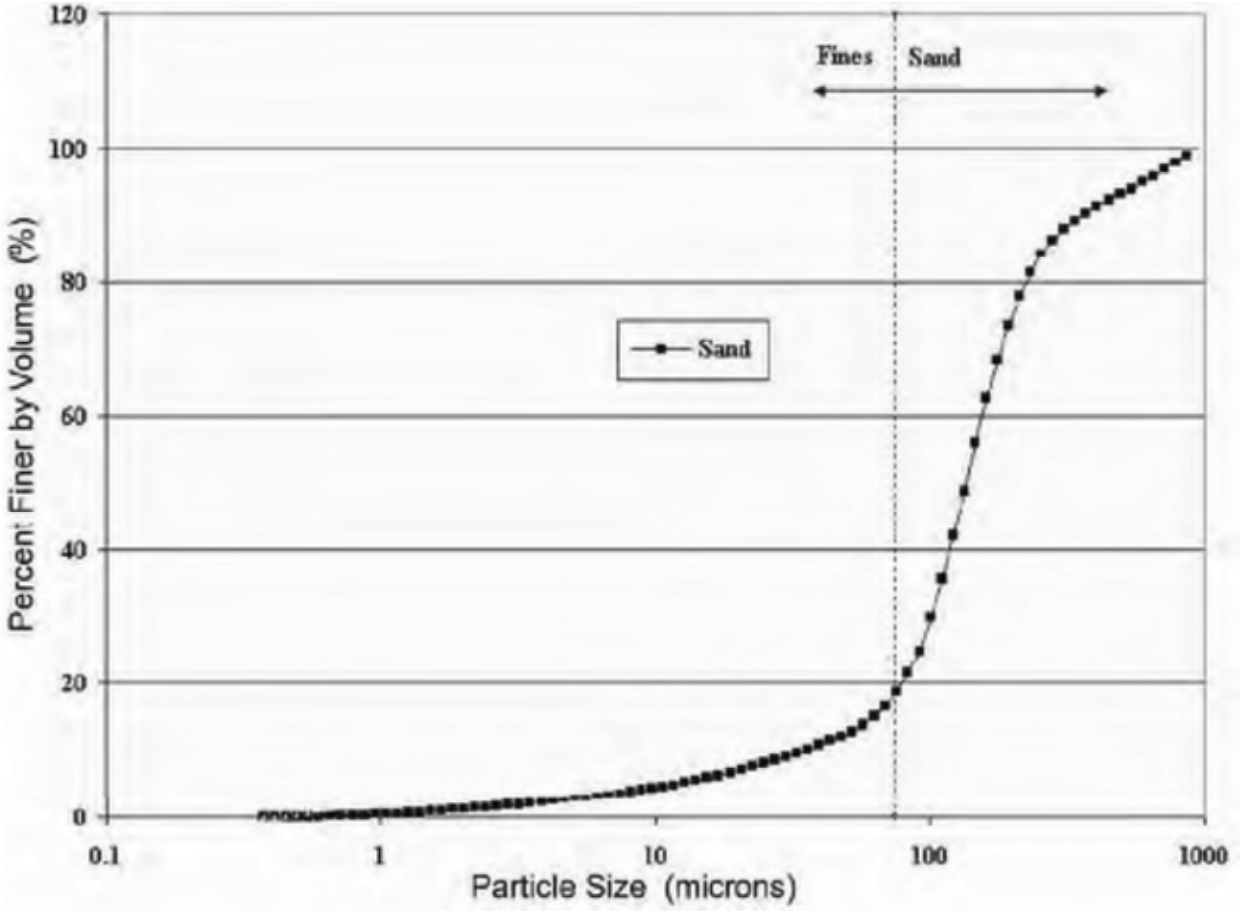

Figure 7: Shallow Sea Floor Sediment Grain-Size Distribution, Santa Monica Bay (Adapted from Jenkins, 2015).

A wider beach was constructed in the area to protect the lower-lying facilities along the coast (Noble Consultants-GEC, 2016b). The rate of change of the width of the shoreline as a result of sediment dynamics and engineering activities is shown in Figure 8. Dockweiler State Beach shows a short-term erosional trend but a long-term accretional trend due to massive nourishment projects; short-term refers to the period from 1950s/70s through the 1990s, and long-term from the 1800s through the 1990s (Hapke, 2006). From the 1970s through the 1990s, the 2.5-kilometer (1.5-mile) stretch of beach at Dockweiler State Beach eroded at a maximum rate of over 1.9 meters per year (6.2 feet per year), despite the extensive groin fields and nourishment projects (Hapke, 2006), but has more recently retained the approximate beach width in this area due to the beach nourishment program.

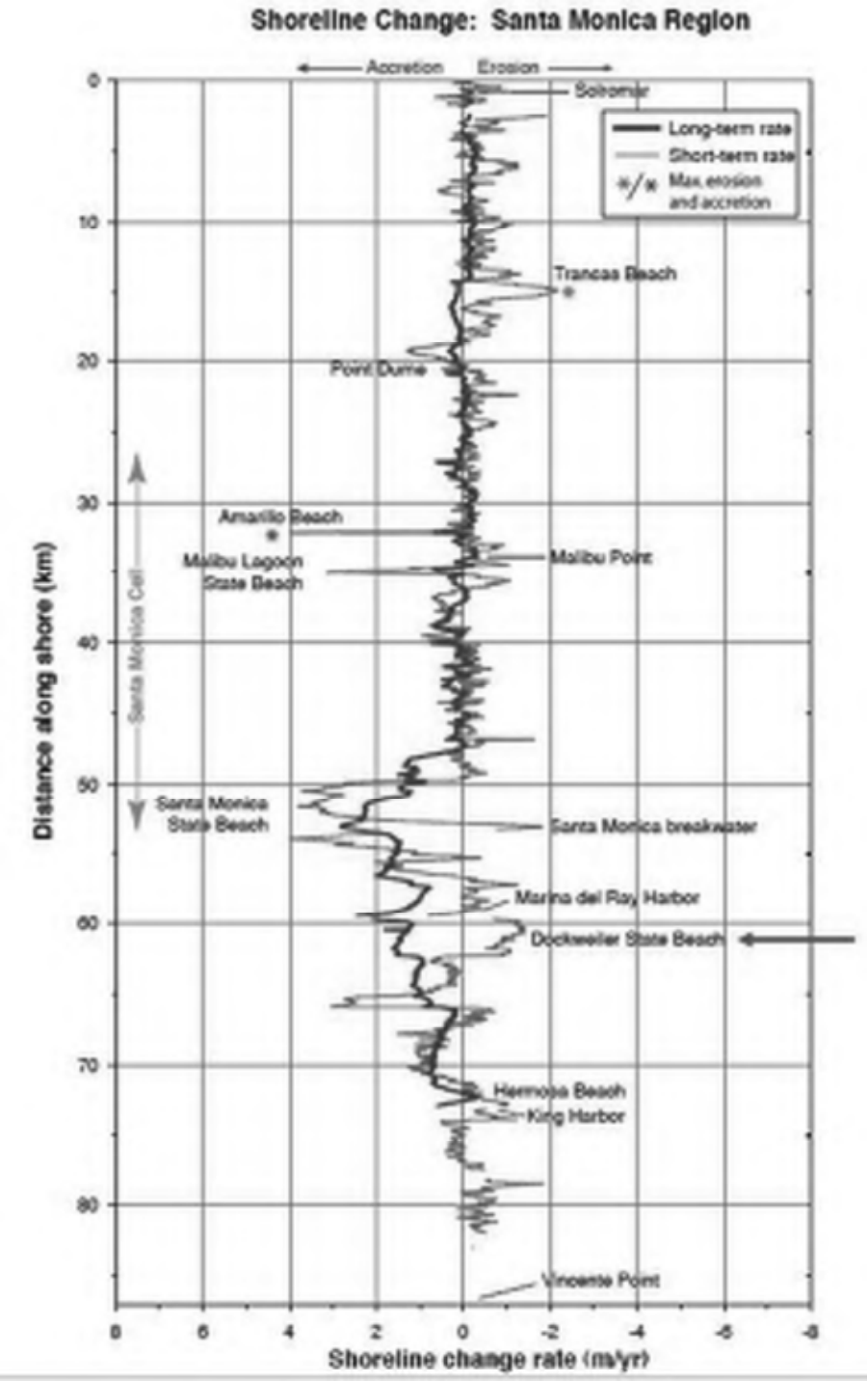

Figure 8: Shoreline Change Rates for the Santa Monica Region (Adapted from Hapke, 2006).

2.4 Engineering Activities

Engineering activities along Dockweiler State Beach to increase resiliency of the beach include nourishment projects and the construction of winter berms. Since winter storms along the Los Angeles County shoreline typically contribute to high tides and surf leading to beach erosion, the Los Angeles County Department of Beach and Harbors has built and maintained winter sand berms of more than 10 feet in height (an example profile is shown in Figure 9) for approximately 30 years at various beaches along the shoreline including Dockweiler State Beach (Noble Consultants-GEC, 2016a).

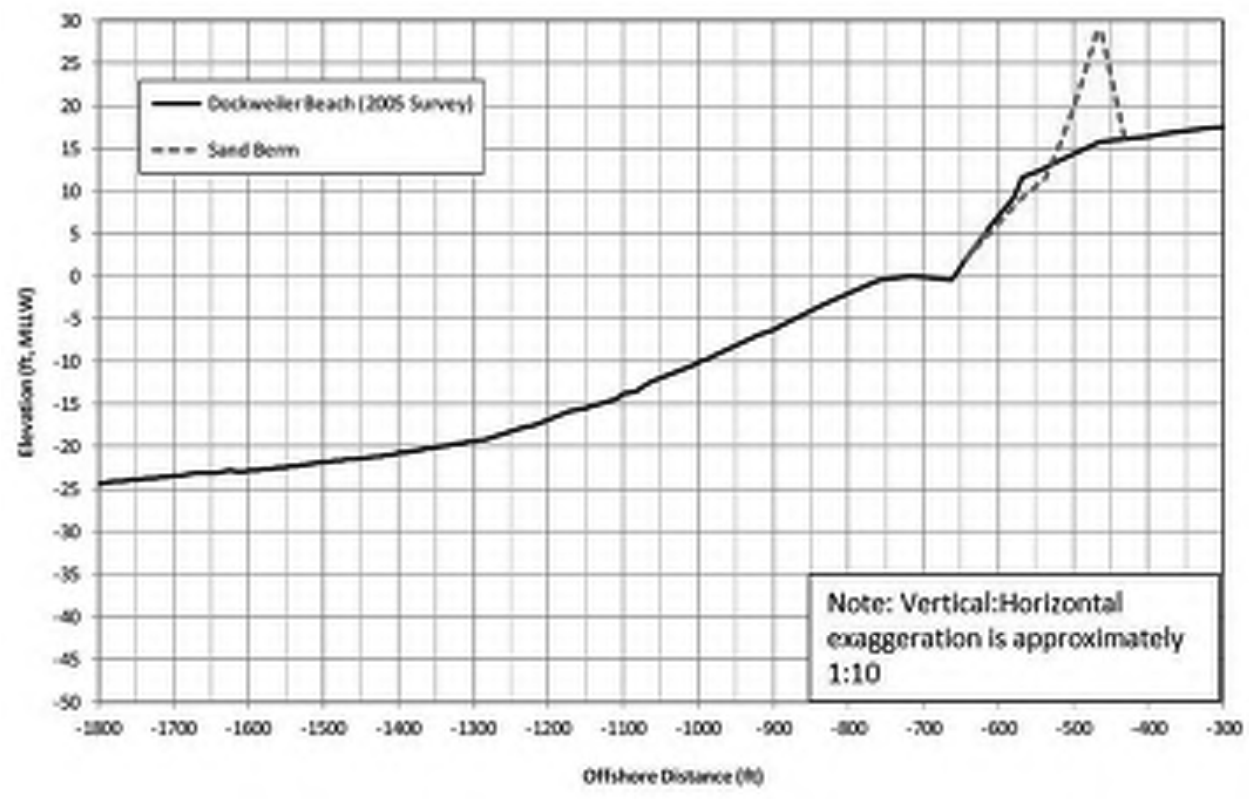

Figure 9: Winter Berm Overlain on Beach Profile (Adapted from Noble Consultants-GEC, 2016a).

A primary source of beach nourishment activity in the Santa Monica Bay area for many years has been dredging of the channel and harbor area around Marina Del Rey. The USACE dredges sediment from the main channel an average of every three to five years and places on average 150,000 cubic yards on neighboring beaches (Jenkins, 2015). The last time Marina Del Rey dredge material was placed directly onto Dockweiler State Beach was in 1996; ocean suitable dredge material removed during subsequent events has been placed either in the Nearshore Site off Dockweiler State Beach, or at Redondo Beach (Ryan, 2020).

Further engineering activities in the area include the active management of groundwater (Geosyntec, 2019). The West Coast Basin is the coastal groundwater basin that encompasses Dockweiler State Beach. Beginning in the 1950s, there are more than 150 injection wells near the

coast of the West Coast Basin as part of the West Coast Basin Barrier Project, creating a hydraulic barrier to seawater intrusion (Geosyntec, 2019). Furthermore, considering that at its location the reinforced concrete box storm drain may be partially or fully submerged, concerns about groundwater are not implicated.

3. EXISTING COASTAL HAZARDS

Based on the relevant information available, current coastal hazards for the project vicinity include extreme tidal levels, extreme waves, and wave runup. Each is presented below.

3.1 Extreme Tidal Levels

As shown in Table 1, the highest astronomical tide recorded at the Santa Monica station is 7.08 feet above the NAVD88 datum. Figure 10 shows the return period curves for the Santa Monica tide gauge.

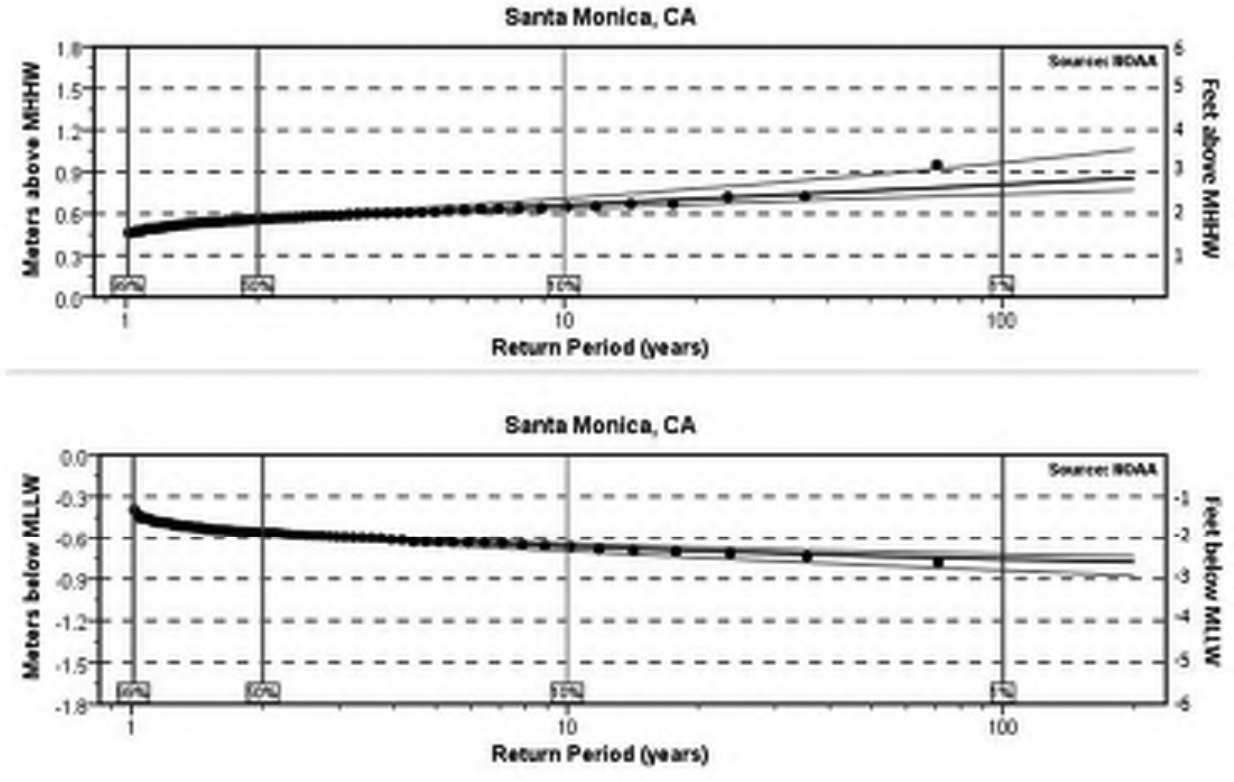

Figure 10: Extreme Water Levels at the Santa Monica Tidal Gauge (Adapted from NOAA, 2018).

3.2 Extreme Waves

Extreme wave height return periods using the hindcast wave data from the USACE WIS Station 83099 (Figure 4) is shown in Table 2.

Table 2: Extreme Wave Heights from WIS Station 83099.

Return Interval (years)	Height (meters)	Height (feet)
10	4.95	16.24
25	5.69	18.66
50	6.24	20.49
100	6.80	22.32

3.3 Wave Runup

The Federal Emergency Management Agency (FEMA) Flood Insurance Study for the area (FEMA, 2018) estimates the wave runup elevations for various annual flood chance categories near the project site. The closest coastal transect mapping location to the project site is "At Dockweiler Beach, at Beaumont Street Extended." Table 3 shows the wave runup elevation for the 10 percent, 1 percent, and 0.2 percent annual chance of flooding for the closest coastal transect as well as the coastal transects on either side.

Table 3: FEMA Wave Runup Elevations.

Flood Source and Location	Wave Runup Elevation (feet)		
	10% Annual Chance	1% Annual Chance	0.2% Annual Chance
Dockweiler State Beach, at Culver Boulevard	11.3	14	16.6
Dockweiler State Beach, at Beaumont Street	**11.9**	**14.9**	**17.6**
Dockweiler State Beach, at Fontainebleau Street	12.5	15.9	18.7

Notes: Average elevations given; elevations may vary within area (FEMA, 2018).

3.4 Shoreline Change

Sediment dynamics and beach nourishment projects have resulted in the shoreline migration in the vicinity of the project area remaining within an approximate 300-foot-wide swath, as shown in Figure 11. The most conservative shoreline to use to determine the extent of the wave runup (as shown in Table 3) is the 2017 shoreline.

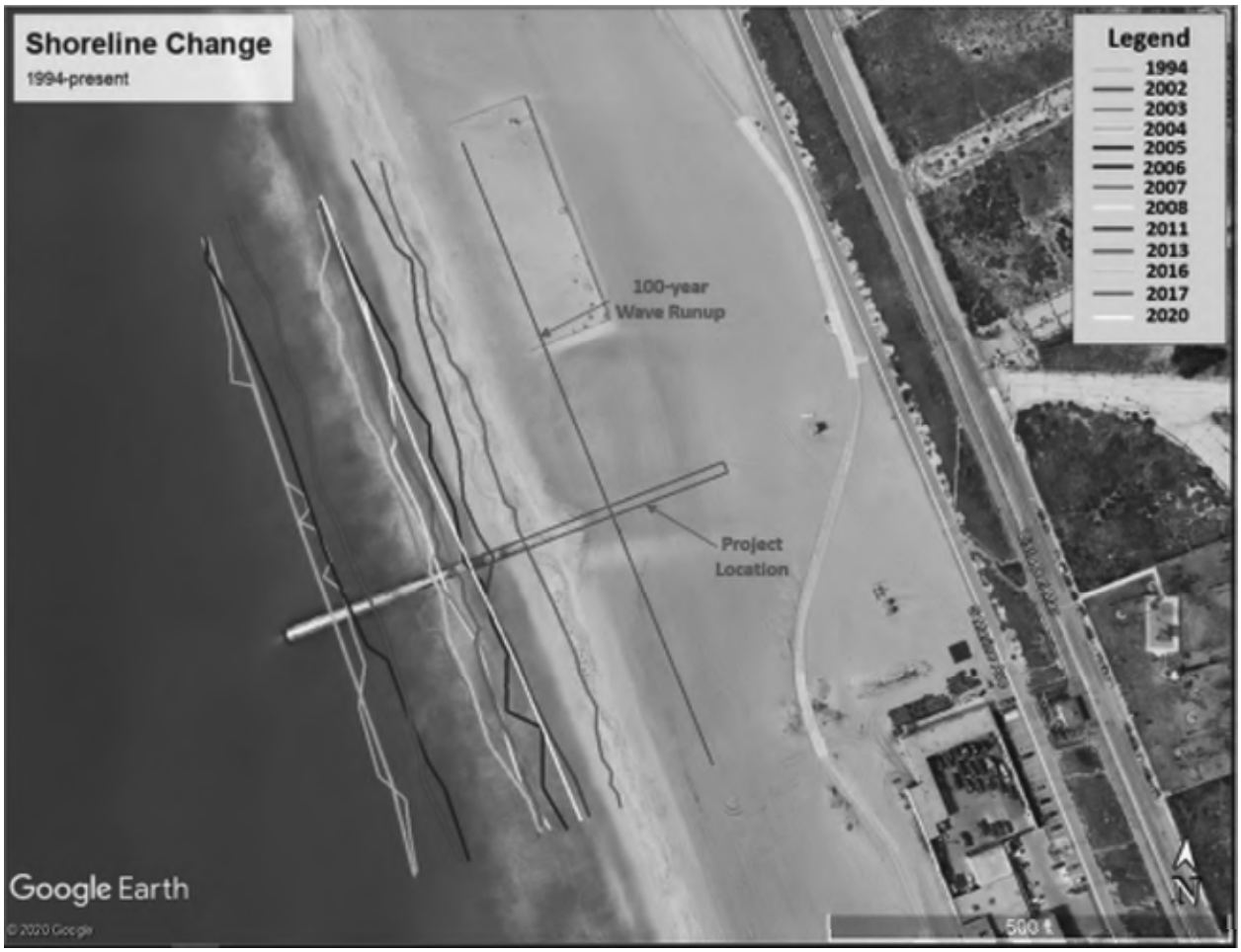

Figure 11: Shoreline Change from 1994 to Present.

In addition to the past shoreline positions, the approximate extent of the 100-year runup is shown in Figure 11. Shoreline positions were derived from aerial imagery. Aerial images may have been taken before or after beach nourishment, or during other times of seasonable variability, contributing to the overall shoreline position variability shown in Figure 11.

3.5 Discussion of Existing Coastal Hazards

The main coastal hazard for this project is erosion of the beach over and around the reinforced concrete box-culvert. Historical erosion rates have been as high as approximately 6 feet per year. However, they have been countered by engineering interventions along the beach in the area, including coastal sediment control structures and beach nourishment. As long as the reinforced concrete box remains covered with sand, it is shielded from the direct impact of waves. To maintain sand cover, this project depends on Los Angeles County Department of Beach and Harbors continuing to build and maintain winter sand berms as they have for more than 30 years. Further, this project requires continued beach nourishment activity on the part of USACE as described earlier in this report.

Due to its location, the reinforced concrete box storm drain is partially submerged at current tidal levels. At the same time, it discharges storm water into Santa Monica Bay during runoff events. The concrete structure itself may be submerged without adverse impacts.

4. POTENTIAL FUTURE HAZARDS

The storm drain restoration/reconstruction project will be subject to potential future coastal hazards due to projected SLR.

4.1 Sea Level Rise

Projections of SLR are generally presented in ranges due to several sources of significant uncertainty. The two primary sources of uncertainty in global SLR projections documented by the Commission (2018) include:

1. Uncertainty about future greenhouse gas emissions and concentrations of sulfate aerosols, which will depend on future human behavior and decision-making; and
2. Uncertainty about future rates of land ice loss.

The 2018 Update to the State of California Sea Level Guidance recommends the use of the Intergovernmental Panel on Climate Change Representative Concentration Pathway (RCP) 2.6 and RCP 8.5 scenarios as the high and low bound for estimates SLR (Commission, 2018). Each of these RCP scenarios has risk scenarios associated with it.

As part of the 2018 Update to the Sea Level Rise Guidance, three scenarios for use in planning, permitting, investing, and other decisions are recommended. These scenarios include:

Low risk aversion scenario: the upper value of the "likely range" (which has approximately a 17 percent change of being exceeded); may be used for projects that would have limited consequences or a higher ability to adapt.

Medium-high risk aversion scenario: the 1-in-200 chance (0.5 percent probability of exceedance); should be used for projects with greater consequences and/or a lower ability to adapt.

Extreme risk aversion (H++): accounts for the extreme ice loss scenario (which does not have an associated probability at this time); should be used for projects with little to no adaptive capacity that would be irreversibly destroyed or significantly costly to repair, and/or would have considerable public health, public safety, or environmental impacts should that level of SLR occur.

Table 4 shows the SLR projections for the Santa Monica Tide Gauge.

Table 4: Sea Level Rise Projections (feet).

Year	Low Risk Aversion	Medium-High Risk Aversion	Extreme Risk Aversion
2030	0.5	0.8	1.0
2050	1.1	1.9	2.6
2100	3.3	6.8	10.0

Note: Sea level rise projections correspond to the "High Emissions" scenario (RCP 8.5).

4.2 Future High Tides and Extreme Tides

Most available climate models do not extend beyond 2100; therefore, Table 5 shows the tidal datum in 2100 under all risk scenarios.

Table 5: Santa Monica Tidal Gauge Projections for 2100 (rounded to the nearest tenth of a foot).

Tidal Level	Current Conditions	Low Risk	Medium-High Risk	Extreme Risk
Highest Astronomical Tide	7.1	10.4	13.9	17.1
Mean Higher High Water	5.2	8.5	12.0	15.2
Mean High Water	4.5	7.8	11.3	14.5
Mean Tide Level	2.6	5.9	9.4	12.6
Mean Sea Level	2.6	5.9	9.4	12.6
Mean Low Water	0.7	4.0	7.5	10.7
Mean Lower Low Water	-0.2	3.1	6.6	9.8

Figure 12 shows the predicted influence of SLR for the three scenarios relative to the current mean sea level. The reinforced concrete box storm drain may be partially or fully submerged at future high tides and extreme tides.

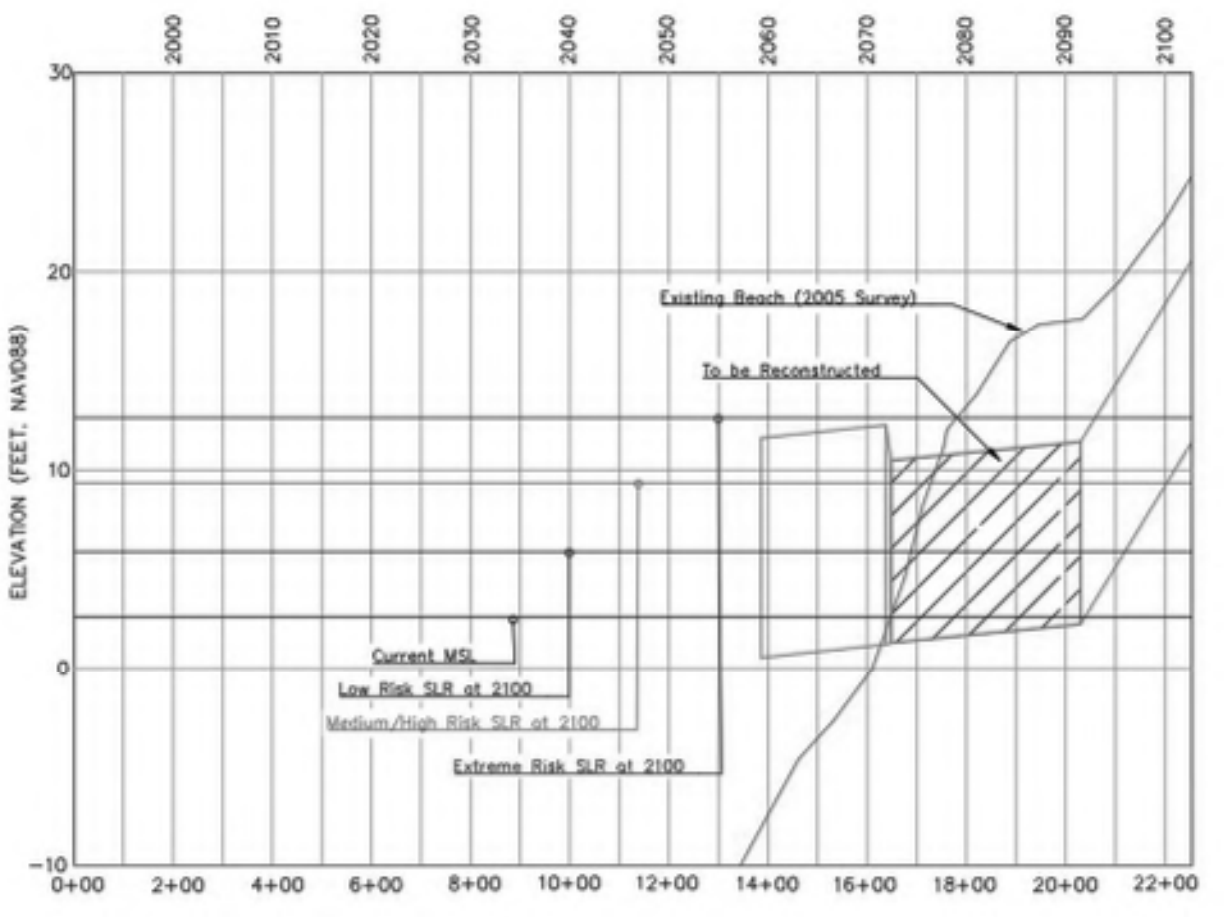

Figure 12: Mean Sea Level With Sea Level Rise Scenarios.

4.3 Coastal Risks

The United States Geological Survey (USGS) coastal hazard assessment modeling system (CoSMoS) predicts coastal risks based on assumptions made for SLR, frequency of storms, and changes in long-term coastal evolution (i.e., beach changes and cliff/bluff retreat). Rather than relying on historical storm records, CoSMoS uses wind and pressure from global climate models to project coastal storms under changing conditions (Barnard, 2014). The most significant risks for the project are beach recession, wave runup, and inundation. The 100-year wave runup from the most landward shoreline position is shown in Figure 10.

Total beach recession estimates were calculated with CoSMoS by evaluating the long-term SLR scenarios, seasonal beach erosion, and storm-induced erosion. The more extreme SLR projection was used for this study (Noble Consultants-GEC, 2016b). Table 6 shows the results of the beach recession estimates.

Table 6: CoSMoS Beach Width Estimates.

Site	2010 Pre-Storm Beach Width (feet)	Beach Erosion Due to Sea Level Rise (feet)		Seasonal Erosion (feet)	Storm-Induced Erosion (feet)	Total Beach Width (feet)		
		2040	2100			2010	2040	2100
Dockweiler State Beach	590	50	198	50	106	434	384	236

The inundation extents based on the results of the CoSMoS modeling are shown in Figure 13 for this stretch of Dockweiler State Beach.

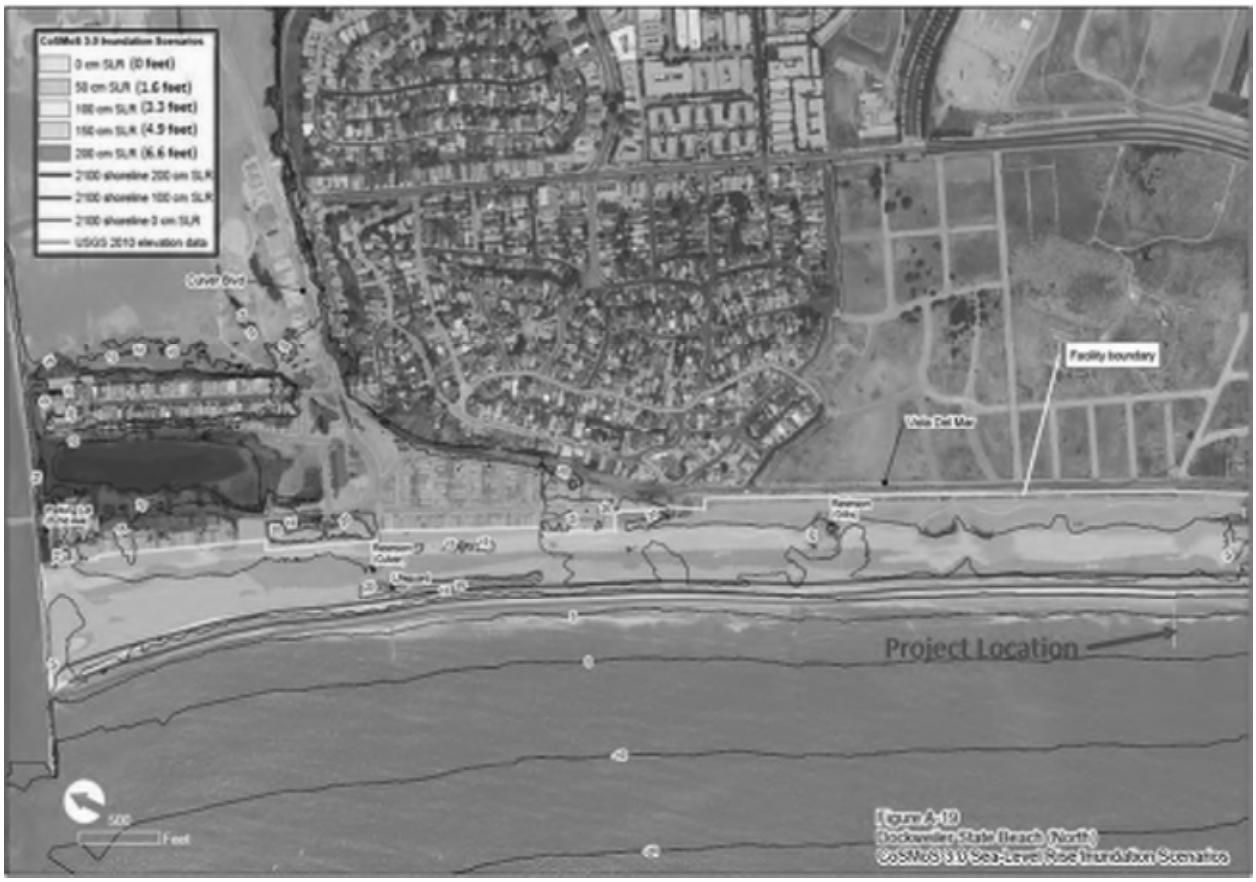

Figure 13: CoSMoS Inundation Scenario Results (North; Adapted from Noble Consultants-GEC, 2016b).

5. RECOMMENDATIONS FOR ADAPTATION MEASURES

The main coastal risk to the project is from exposure of the reinforced concrete box storm drain to erosion. Erosion in the project area is driven by waves, and particularly storm waves. The extent of wave attack on the shore will rise over time as sea levels rise. The proposed project includes the construction of 48 concrete piles to support the restored/reconstructed reinforced concrete box

storm drain segment, which improves its resilience by allowing for some future erosion around the structure without undermining the foundation. As long as the reinforced concrete box-culvert remains covered with sand, it is shielded from the direct impact of waves and will be subject to the same beach conditions as are currently present.

To maintain sand cover, this project depends on Los Angeles County Department of Beach and Harbors continuing to build and maintain winter sand berms as they have for more than 30 years. Further, this project requires continued beach nourishment activity on the part of USACE. Therefore, recommendations for future adaptation measures include the following engineering activities:

- Continued winter berm construction to shield against winter storms.
- Continued beach nourishment activities to maintain beach widths and sediment thickness.

6. SUMMARY

The proposed project restore/reconstructs a damaged section of the existing reinforced concrete box storm drain at Dockweiler State Beach, and this Coastal Hazards Report considers whether future storms may erode or flood the proposed reconstruction project. The project does not represent a physical change from the existing condition. Overlying beach sand protects most of the reinforced concrete box-culvert from the impacts of storm waves. Periodic beach nourishment, primarily from Marina del Rey dredging, and the construction of winter sand berms maintain the beach condition and protect the project location.

As sea level rises, the extent of wave attack on the shore will also rise. This may result in erosion farther up the beach than what is currently experienced. For this reason, Public Works proposes to use piles to support a 175 linear foot segment of the restored/reconstructed reinforced concrete box storm drain. This action can result in greater resiliency by allowing for some future erosion around the structure farther up the beach without undermining the foundation.

Overall, the restored/reconstructed section of reinforced concrete box storm drain is subject to the same coastal hazards as the original structure, primarily erosion due to storm waves. As long as adequate beach cover is maintained, the upgraded segment of storm drain is expected to be resilient against these hazards. If beach conditions change, exposing the storm drain to wave attack, then future adaptive actions may be required, such as armoring of the reinforced concrete box storm drain.

At current and future tide levels, the reinforced concrete box storm drain is partially or fully submerged. The concrete structure itself may be submerged without adverse impacts. Concerns about flooding are not implicated considering its location and function in the stormwater system.

7. REFERENCES

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Filed:	08/04/2021
270th Day:	05/01/2022
Staff:	M. Alvarado-LB
Staff Report:	03/25/2022
Hearing Date:	04/06/2022

STAFF REPORT: REGULAR CALENDAR

Application No.:	**5-21-0706**
Applicant:	County of Los Angeles Department of Public Works
Location:	Storm drain outlet at Dockweiler State Beach seaward of Sandpiper Street and Vista Del Mar, in the Playa del Rey planning area of the City of Los Angeles.
Project Description:	Repair and maintenance of an existing storm drain, including reconstruction of approximately 380 linear feet of an existing 11-foot-wide by 9.2-foot-high, approximately one-mile-long reinforced concrete box (RCB) storm drain (including replacement of 48 driven 36-foot-deep precast concrete support piles along a 175-foot segment of the reconstructed RCB), installation of a tidal gate and wave protection barrier at the outlet, the replacement of existing security fence atop the storm drain, and temporary staging on the beach.
Staff Recommendation:	Approval with conditions

SUMMARY OF STAFF RECOMMENDATION

The proposed project is located at Dockweiler State Beach near Playa del Rey, in the City of Los Angeles. The subject storm drain (Project No. 5241) meets the ocean about a quarter of a mile south of Sandpiper Street and Vista Del Mar (see **Exhibit 1**).

The existing storm drain at this location provides drainage for Playa del Rey, Loyola Village, Westchester Districts, and north runways of LAX in the City of Los Angeles. The storm drain consists of a 11-foot-wide by 9.2-foot-high reinforced concrete box (RCB) and is entirely below grade as it crosses under Vista Del Mar and continues below grade under the beach for an

additional approximately 500 feet. At which point, the RCB storm drain is exposed on the beach and continues for approximately 100 feet before reaching the ocean and is supported at the seaward portion of the beach on piles. Out of 72 existing piles, 24 will be retained. The RCB storm drain in the ocean then continues approximately 300 feet seaward. There is an existing five-foot-high security fence on the roof perimeter of exposed portion of the storm drain that continues in the ocean.

The applicant, the County of Los Angeles Department of Public Works (County), is proposing significant repair and maintenance to the storm drain, including reconstruction of an approximately 380 linear feet segment of a one-mile-long RCB storm drain, installation a new tidal gate and wave protection barrier at the storm drain outlet, and replacement of the existing five-foot-high security fence atop the storm drain with a new five-foot-high security fence. The applicant is also proposing replacement of 48 driven 36-foot-deep precast concrete support piles along a 175-foot segment of the reconstructed RCB.

The staging areas includes ~~22 public parking spaces in a parking lot and~~ a 104-foot by 144-foot open beach in closer proximity to the storm drain but backed away from the water adjacent to the existing Marvin Braude Bike Path. An access route will need to traverse the bike path, but the bike path will be re-routed with a detour to enable bicyclists to still access it during construction.

The critical issue along the subject 380-foot reach of the drain is its poor condition. The concrete has eroded exposing the rebars and the top concrete slab of the exposed section of the RCB is covered by steel plates, which are chained into the weakened reinforced concrete. If not replaced, the 380-foot reach of the storm drain could collapse in the near future. The applicant has indicated that the proposed repairs to the storm drain is necessary to maintain conveyance for flood protection for the surrounding community in the City of Los Angeles.

The Chapter 3 policies of the Coastal Act constitute as the standard of review, and the primary coastal resource issues raised by this project are impacts to public access and recreation at Dockweiler State Beach and Vista del Mar (first public road) during and post construction, impacts to water quality, impacts to biological resources during construction (including potential impacts to grunion and shorebirds), and visual impacts resulting from the retention of the storm drain.

The storm drain currently partially restricts lateral access for the public walking along the beach and for swimmers in the surf zone. The project constitutes repair and maintenance work, but such work will help extend the life of the storm drain and will result in the RCB storm drain continuing to obstruct lateral beach access and adversely impacting public coastal views into the future. Due to the deteriorated condition of the existing RCB storm drain, the applicant indicated that replacement of 380 feet of the existing pipeline was the only feasible option at this time. However, it is likely that implementation of an adaptation plan, including removal of the RCB storm drain from the beach or modifications to the RCB storm drain, may be feasible in the future to reduce or eliminate impacts to coastal resources. Furthermore, sea level rise is likely to exacerbate the impacts of the structure on public access as the beach narrows in this location. Therefore, **Special Condition 1**

limits the length of development authorization to a time frame of 10 years but requires that the applicant submit an adaptation plan in five (5) years. Post-construction, the storm drain will continue to impact lateral coastal access and public views of the coast. However, as conditioned, the project is designed to provide the applicant a reasonable period of time to evaluate alternatives and plan and implement an adaptation plan that would minimize impacts to coastal access and minimize the perpetuation of infrastructure in hazardous areas including but not limited to an alternative that sites the facility as far landward as feasible to avoid blocking recreators from walking or swimming along the shoreline.

During construction, the project is expected to have some temporary impacts on public access and recreation. To address impacts to public access during construction, **Special Condition 2** requires the applicant to submit a final Public Access Plan to ensure lateral public access is maintained along the coast throughout construction. In addition, lateral access along the beach is available for the approximately 450-foot distance from the back beach to the exposed portion of the RCB storm drain. As proposed, the project will take approximately five months to complete.

Because construction will occur in close proximity to coastal waters, **Special Condition 3** requires the applicant to assume the risk of working in a potentially hazardous environment. In addition, **Special Condition 4** requires the applicant to submit a Construction Pollution Prevention Plan and implement Best Management Practices to ensure protection from coastal hazards, erosion and sedimentation impacts, and prevent spillage or runoff of construction materials, sediment, or contaminants associated with construction activity.

The County has proposed monitoring turbidity and monitoring for sensitive biological resources. Monitoring elements would be dictated by project-specific features such as schedule and placement method. **Special Condition 5** specifies time and operation constraints to avoid adverse impacts on sensitive bird species and bird nesting activities. **Special Condition 6** requires that monitoring and avoidance is implemented to prevent adverse impacts to grunion.

Staff recommends the Commission find that the project, as proposed by the applicants and further conditioned by the Commission, is consistent with the Chapter 3 policies of the Coastal Act. Therefore, Commission staff recommends that, after a public hearing, the Commission **approve** this coastal development permit with **eight** special conditions that require the applicant address: **1)** length of development authorization; **2)** final public access plan; **3)** assumption of risk, waiver of liability and indemnity**; 4)** water quality recommendations; **5)** bird monitoring and avoidance plan; **6)** grunion monitoring and avoidance plan; **7)** proof of legal ability to comply with conditions; and **8)** required approvals. The motion and resolution are on page 5 of this report.

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I. MOTION AND RESOLUTION

Motion: I move that the Commission **approve** Coastal Development Permit No. 5-21-0706 pursuant to the staff recommendation.

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves Coastal Development Permit Application No. 5-21-0706 and adopts the findings set forth below on grounds that the development, as conditioned, will be in conformity with the Certified Local Coastal Plan and the public access and recreation policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that will substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittees or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittees to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Length of Development Authorization.**
   A. **The approved development (including the replacement of 380 feet of RCB storm drain, 48 replacement piles, tidal gate, wave barrier, and replacement fencing) is authorized for ten (10) years from the date of approval [i.e., through April 6, 2032] or until such time that the triggers, identified below, are met, whichever is sooner.** By acceptance of this coastal development permit, the permittee acknowledges and agrees that the development authorized pursuant to this permit is thus interim, and is permitted for the time frame identified in order to provide a reasonable period of time for the Permittee to evaluate future risk of coastal hazards as influenced by sea level rise and to plan, develop, and implement any necessary responses to coastal hazards including adaptation or relocation alternatives to avoid or minimize coastal access and recreation impacts (e.g. obstruction of lateral beach and water access) and ensure minimization of risk in the long term.
   B. **Prior to the expiration of the authorization period of the development (i.e., before April 6, 2032)**, the permittee or its successors shall submit to the Coastal Commission an application for a CDP amendment to (a) relocate the facility (i.e., storm drain, tidal gate, wave barrier, fence) as far landward as feasible, (b) extend the length of time the development is authorized and modify its design as needed to ensure consistency with the Coastal Act, (c) remove the approved development in its entirety and restore the affected areas to a sandy beach condition. If a complete application is filed before the end of the authorization period, the authorization period shall be automatically extended until the time the Commission acts on the application. The required amendment application shall conform to the Commission's permit filing regulations at the time.
   C. **Within five (5) years from the date of approval of this CDP (i.e., before April 6, 2027) or prior to submittal of a CDP application for any new substantial repair to any portion of the facility within the Coastal Zone**, the Permittee or its successors shall submit for review and approval by the Executive Director a Sea Level Rise Adaptation Plan that provides a clear long-term plan to minimize flood hazard risks and to maximize coastal access through at least the year 2100. The plan shall include:
      i. An evaluation of alternatives to the development approved in the subject permit that would minimize impacts to coastal access and minimize siting of infrastructure in hazardous areas including but not limited to an alternative that sites the facility as far landward as feasible to avoid blocking recreators from walking or swimming along the shoreline. The information concerning these alternatives must be sufficiently detailed to enable the Coastal Commission to evaluate the feasibility of each alternative for addressing consistency with the Coastal Act, including whether the alternatives minimize impacts to lateral access along the wet-dry sandy beach edge or from erosion and other coastal hazards in the project area obtained through periodic monitoring and recording of conditions (e.g., beach width and sand levels) in the project area during extreme tide and storm events. The information should be sufficiently detailed regarding the extent and duration that the facility is impeding coastal access or is exposed (not buried by sand), and include an assessment of cumulative changes to the approved development's access impacts and coastal hazard risk over time. The analysis shall include a feasibility analysis of the alternatives that

evaluates and considers all potential constraints, including geotechnical and engineering constraints, potential phasing options with timelines, project costs, and potential funding options. The alternatives shall explicitly address the following:

a. Options to reduce the storm and dry-weather flows discharged through the outfall through upstream detention, infiltration, diversion, and/or reuse such that an outfall in this location is no longer needed or could be reduced in scale.
b. Options to avoid impacts to coastal access by siting the facility as far landward as feasible toward the back of the beach to avoid blocking recreators from walking or swimming along the shoreline, which may also include reconstruction of the storm drain pipeline.
c. Other options that would minimize coastal hazards and maximizes public coastal access.

2. **Final Public Access Plan**.

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, a Final Public Access Plan The plan shall include, at a minimum, the following components:

(i) The minimum number of public parking spaces that are required. The number of public parking spaces utilized shall be the minimum necessary to implement the project.
(ii) No overnight storage of equipment or materials shall occur outside the designated work area.
(iii) Continuous public pedestrian access around the construction site on Dockweiler State Beach must be maintained at all times for the duration of construction to the extent feasibly consistent with public safety.
(iv) Access corridors shall be located in a manner that has the least impact on public access to and along the shoreline of the project site.
(v) Provide a detailed construction schedule and identify through clear mapping exhibits, and provide rationale for, the minimum necessary beach work area to be closed throughout the project timeline.
(vi) Signage in English and Spanish shall be installed directing pedestrians and bicyclists at the beach to alternative lateral access corridors.
(vii) Identification of the location and size of a staging area that minimizes impacts to public access, including minimizing use of public parking spaces.
(viii) The staging site shall be removed and restored immediately following completion of the development.
(ix) The applicant shall submit evidence that the approved public access plan has been incorporated into construction bid documents.

B. The permittee shall undertake development in accordance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

3. **Assumption of Risk, Waiver of Liability and Indemnity.**
   A. By acceptance of this permit, the permittee acknowledges and agrees (i) that the site may be subject to hazards from flooding, sea level rise, erosion and wave uprush; (ii) to assume the risks to the permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.
   B. PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT, the permittee shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

4. **Water Quality Recommendations.**
   A. **Construction Pollution Prevention Plan (CPPP).** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, a Construction Pollution Prevention Plan (CPPP) to protect water quality to the maximum extent feasible. The plan shall include, at a minimum, the following components:
      i. General Best Management Practices and Procedures
      ii. Best Management Practices for Construction Activities Adjacent to Coastal Waters
      iii. Best Management Practices for Stockpile and Debris Management
      iv. Best Management Practices for Spill Prevention and Equipment Maintenance
      v. The applicant shall use plastic-free netting or no netting in a temporary erosion and sediment control BMPs.
      vi. The use of temporary erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and heavy-duty silt fences) that incorporate plastic netting shall be prohibited, to minimize wildlife entanglement and plastic debris pollution. Only 100% biodegradable (not photodegradable) natural fiber netting shall be allowed.
      vii. The temporary cofferdam shall be the minimum footprint and configuration necessary to accomplish the proposed repairs to the storm drain.
   B. **Storage of Construction Materials, Mechanized Equipment and Removal of Construction Debris.** The permittee shall comply with the following construction-related requirements for construction in, over, or adjacent to coastal waters and habitat:
      i. To the extent feasible, construction activity shall not be conducted below the mean high tide line, unless tidal waters have receded.
      ii. Construction activity shall not be conducted below the mean high tide line outside any area that is not a part of the authorized work area.
      iii. All work shall take place during daylight hours, and lighting of the beach and ocean area is prohibited.

iv. All construction equipment and materials placed on the beach during daylight construction hours shall be stored beyond the reach of tidal waters. All construction equipment and materials shall be placed in their entirety within the approved staging area on the beach by sunset each day that work occurs. The only exceptions shall be for erosion and sediment controls and/or construction area boundary fencing.

v. Tarps or other devices shall be used to capture debris, dust, oil, grease, rust, dirt, fine particles, and spills to protect the quality of coastal waters.

vi. All erosion and sediment controls shall be in place prior to the commencement of construction, as well as at the end of each workday. At a minimum, if grading is taking place, sediment control BMPs shall be installed at the perimeter of the construction site to prevent construction-related sediment and debris from entering the ocean, waterways, natural drainage swales, and the storm drain system, or being deposited on the beach.

vii. Only rubber-tired construction vehicles shall be allowed on the beach; the only exception shall be that tracked vehicles may be used if the Executive Director agrees that they are required to safely carry out construction. When transiting on the beach, all construction vehicles shall remain as high on the upper beach as possible and shall avoid contact with ocean waters and intertidal areas.

viii. All debris resulting from construction activities shall be removed from the beach immediately.

ix. All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day.

x. The applicants shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.

xi. Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required.

xii. All stockpiles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil.

xiii. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems.

xiv. The discharge of any hazardous materials into any receiving waters is prohibited.

xv. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible.

xvi. If preservative-treated wood is used, appropriate BMPs shall be implemented that meet industry standards for the selection, storage, and construction practices for use of preservative-treated wood in aquatic environments; at a minimum, those standards identified by the Western Wood Preservers Institute, et al. in Treated Wood in Aquatic Environments: A Specification and Environmental Guide to Selecting, Installing and Managing Wood Preservation Systems in Aquatic and Wetland Environments (2012) or current revision thereof (http://www.wwpinstitute.org/documents/TWinAquaticEnvironments-withLinks12.20.12.pdf.). The preservative-treated wood shall be certified by a third party inspection program, as indicated by the presence of a BMP Quality Mark or Certificate of Compliance, to have been produced in accordance with industry BMP standards designed to minimize adverse impacts in aquatic environments.

xvii. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity.

xviii. All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

5. **Bird Monitoring and Avoidance Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, a Bird Monitoring and Avoidance Plan and shall include but not be limited to the following provisions:
   A. Outside of bird nesting season (February 1 through August 31) the applicant shall retain the services of a qualified biologist, with qualifications acceptable to the Executive Director, to conduct surveys within 500 feet of the project site, to detect the presence and behavior of any potential sensitive birds, prior to commencement of any development and once weekly thereafter. Project activities shall not occur until any sensitive species (e.g., species listed on state or federal endangered/ threatened species lists, including but not limited to western snowy plovers and California least terns) have left the project area or its vicinity. In the event that any sensitive bird species are nesting, the qualified biologist shall require the permittee to cease work and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director. The permittee shall cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The permittee shall immediately notify the Executive Director if the qualified biologist determines that any activities outside of the scope of this coastal development permit occur. If significant impacts or damage occur to sensitive wildlife species, the permittee shall submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.
   B. If project activities must occur during bird nesting season (February 1 through August 31), a qualified biologist, with experience conducting bird surveys, who has

been approved by the Executive Director, shall conduct bird foraging, roosting, breeding behavior and nest surveys within fifteen (15) days prior to commencement of project activities, and once a week thereafter during construction, to detect any such activity within 500 feet of the project area. If active roosting, foraging, or breeding behavior of listed species and/or sensitive species is determined to be located within 500 feet of active project activities, all such activities shall cease until the qualified biologist has confirmed that the foraging or roosting bird(s) have left the project area or vicinity and/or listed or sensitive bird breeding behavior has ceased and the respective birds have left the project area or vicinity. If nesting listed or sensitive species are detected within 500 feet of the project area, avoidance measures (e.g., a suitable buffer zone or postponing construction until the young have fledged the nest) approved by the Executive director and appropriate resource agency (e.g. CDFW, USFWS), shall be implemented to avoid the nest and associated nesting behaviors. If approved, a buffer zone may be established using temporary fencing, post/rope barrier, or similar. Avoidance buffers may be reduced where appropriate, at the discretion of the qualified biologist and guidance of the Executive Director and appropriate resource agencies.

6. **Grunion Monitoring and Avoidance Plan**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director, for review and written approval, a Grunion Monitoring and Avoidance Plan. The applicant shall retain the services of a qualified biologist with appropriate qualifications acceptable to the Executive Director. The applicant shall adhere to the following provisions to avoid impacts to mature grunion and to grunion eggs during a spawning event. The annually published California Department of Fish and Wildlife (CDFW) expected grunion runs shall be used to determine possible grunion spawning periods. The plan shall, at a minimum, include the following:
   A. During the grunion spawning period of March 1 through August 31, beginning at least two (2) weeks prior to commencement of construction activities on Dockweiler Beach, the sandy beach 100 feet to the north and south of the construction footprint shall be monitored for grunion runs.
   B. Grunion monitoring shall be conducted by the qualified biologist for 30 minutes prior to, and two hours following, the predicted start of the second and third night of each spawning event. The magnitude and extent of a spawning event shall be defined in each 100-foot segment of beach using the Walker Scale.
   C. If a grunion run consisting of 0-100 individual fish per segment (Walker Scale of 0 or 1) is reported within two weeks prior to, or during, proposed work, the applicant does not need to take any avoidance action for grunion eggs.
   D. Within two weeks prior to proposed work, if a grunion run consisting of more than 100 individual fish per segment (Walker Scale of 2, 3, 4, or 5) is reported, the applicant shall avoid work on the respective beach segment(s) to ensure that no grunion eggs are buried or disturbed. The applicant shall adapt the work schedule to avoid operations on beach segments with a Walker Scale of 2, 3, 4, or 5.
   E. If work has already commenced, and a grunion run consisting of more than 100 individual fish per segment (Walker Scale of 2 or 3) is reported, the applicant shall avoid impacts to grunion eggs to the extent feasible, and then shall minimize impacts to grunion eggs through measures pursuant to subsection (g) below.

F. If construction has already commenced, and a grunion run consisting of more than 1000 individual fish per segment (Walker Scale of 4 or 5) is reported, no impacts to grunion eggs may occur. The applicant shall avoid impacts to grunion eggs in that portion of the work area through alteration of the construction site boundaries. Work at impacted locations shall cease if avoidance measures are not feasible.
G. The applicant shall develop a list of feasible measures, subject to written approval of the Executive Director in consultation with CDFW, taking into consideration the stage of construction mobilization, construction constraints, etc., that may be utilized to allow work to continue while avoiding and minimizing impacts to eggs within the two week spawning period. Under no circumstances shall any mature grunion be buried or harmed as a result of the proposed work.

7. **Proof of Legal Ability to Comply with Conditions**. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall demonstrate the permittee's legal ability or authority to comply with all the terms and conditions of this coastal development permit.

8. **Required Approvals.** By acceptance of this permit, the permittee agree that they shall obtain all other necessary local, state, and federal permits that may be necessary for all aspects of the development, including approvals from the Regional Water Quality Control Board, California Department of Fish and Wildlife, National Marine Fisheries Service, the U.S. Army Corps of Engineers, State Lands Commission, State Parks, and any other federal and state agency with jurisdiction over sensitive resources at this location unless confirmation is received from those agencies that such approvals are not required.

IV. FINDINGS AND DECLARATIONS

A. PROJECT LOCATION AND DESCRIPTION

The proposed project is located at Dockweiler State Beach near Playa del Rey, in the City of Los Angeles. The subject storm drain (Project No. 5241) ends at the ocean about a quarter of a mile south of Sandpiper Street and Vista Del Mar (see **Exhibit 1**). The site is heavily utilized for public recreational uses, including sunbathing, running, volleyball, swimming, kayaking, stand up paddle boarding and sailing. In the vicinity there are basketball and tennis courts, kayak storage, a play structure, youth lifeguard training facilities, and summer aquatic camps.

The County of Los Angeles Department of Public Works is proposing the reconstruction of approximately 380 linear feet of an existing 11-foot-wide by 9.2-foot-high, approximately one-mile-long Reinforced concrete box (RCB) storm drain (**Exhibit 2**). The applicant is proposing to replace 48 driven 36-foot-deep precast concrete support piles along a 175-foot segment of the reconstructed RCB. In addition, a heavy-duty rubber tidal gate will be installed at the terminus of the outlet to minimize sand accumulation inside the RCB, and a new stainless-steel wave protection barrier will be installed in front of the tidal gate to reduce wave impacts to the drain (**Exhibit 2**). A temporary, approximately 387-foot-long sheet metal cofferdam will be installed to enclose the work site and isolate and shore it from waves. A temporary dewatering system will be used to remove water from within the cofferdam area to help dry the work site for construction

operations; this water will be drained to the ocean approximately 200 feet upstream from the storm drain outlet into the ocean.

The storm drain is entirely below grade as it crosses under Vista Del Mar and continues below grade under the beach for an additional approximately 500 feet. At which point, the RCB storm drain is exposed on the beach and continues for approximately 100 feet before reaching the ocean and is supported at the seaward portion of the beach on piles. Out of 72 existing piles, 24 will be retained. The RCB storm drain in the ocean then continues approximately 300 feet seaward. There is an existing five-foot-high security fence on the roof perimeter of exposed portion of the storm drain that continues in the ocean.

The applicant is also proposing to replace an existing rusted 250-foot-long security fence located atop a segment of the storm drain that extends out into the water with a new fiber reinforced plastic fence. The proposed project includes approximately 8,000 cubic yards of cut and approximately 8,000 cubic yards of fill, with cut and fill volumes balanced on site.

The construction of the proposed project will involve the use of heavy machinery on the beach, including but not limited to a crane, pile driver, mini-crane, hoe ram, backhoe, concrete trucks, concrete pumping truck with extended piping, dewatering pumps, loaders, telescopic handler, hanging scaffolding. No work vessels or barges will be used. For drainage during construction, a steel pipe will bypass the flows.

The applicant has maintenance easements from the adjacent street and beach maintenance road across the beach to this storm drain but will require a temporary easement from the State for work outside of the maintenance easements and road (i.e., to accommodate the temporary cofferdam). In addition, the applicant is proposing to use the beach parking lot downcoast of the LA County Beaches and Harbor Dockweiler Beach Maintenance Yard for the temporary storage of material during construction. The staging area in the parking lot will temporarily occupy and displace approximately 22 public parking spaces. An additional staging area will be located on the open beach in closer proximity to the storm drain, adjacent to the existing Marvin Braude Bike Path.

The applicant has indicated that the proposed project is necessary to bring back the existing storm drain to adequate functionality to provide stormwater conveyance for flood protection for the surrounding community, that the project site will be restored to its original condition (with the exception of the proposed alterations to the pipeline and outlet described above), and that all construction debris will be removed. The existing storm drain at this location provides drainage for Playa del Rey, Loyola Village, Westchester Districts, and north runways of LAX in the City of Los Angeles.

The storm drain was constructed in 1970. The top slab of the outfall (the portion in the ocean) was replaced 15 years ago (CDP Ref No. 5-04-286). This extended the useful life of the outfall seaward of the surf zone. Based on the 2020 assessment, the outfall should last another 30 years. The total service life of the outfall is about 80 years. Although, in its present state, the outfall can accommodate its flow design capacity for a 50-year storm, the applicant indicates that without the proposed repairs, the subject 380-foot segment of the RCB storm drain is at risk of collapse.

The proposed project area is located within the Commission's retained jurisdiction, and Chapter 3 policies of the Coastal Act constitutes as the standard of review.

B. Relevant Site History

On May 6, 2003, the Commission approved CDP No. 5-03-094, which authorized the construction of a subterranean low flow diversion structure to divert low flow from the existing subject reinforced concrete box (RCB) storm drain (No. 5241) to an existing 72-inch coastal interceptor sanitary sewer that ultimately discharges to the Hyperion Treatment Plant.

In addition, on December 8, 2004, the Commission approved CDP No. 5-04-286, authorizing the interior and exterior repair of three reinforced concrete box drains and outlet structures located on the beach and along the shoreline and surf zone at Dockweiler State Beach (including the subject storm drain and outlet (No. 5241)). The work authorized included the following:

> Project No. 513, Line A
> Approximately 400 linear feet of corroded fence along the top the reinforced concrete box drain will be replaced; twelve missing reinforced concrete slabs will be replaced; missing manhole access plate to be replaced; install an approximately 10 feet wide by 71/2 feet high polymer coated timber protection barrier at the end of the concrete box drain; install 200 feet of high polymer coated timber protection skirt along the sides of the concrete box drain.
>
> Project No 513, Line C.
> Remove and reconstruct approximately 135 linear feet of the top of the 11 feet by 7 feet high reinforced concrete box drain; and replace approximately 300 linear feet of fence.
>
> Project No. 5241
> Remove and reconstruct approximately 135 linear feet of the top of the 11 feet by 11 feet high reinforced concrete box drain; and replace approximately 1,400 linear feet of fence.

In addition, on October 22, 2015, the Commission granted an emergency permit for emergency repairs to Storm Drain No. 5241. The emergency work authorized by the emergency permit consisted of 1) removal and replacement of the damaged soffit from station 2+60 to 3+50 (90 linear feet); 2) installation of formwork and rebar reinforcement within the new top slab and sides; and 3) pour concrete around the new reinforcement to match the existing interior and exterior of the drain. A follow-up coastal development permit application was never submitted following the emergency work, but that would be resolved through this permit as discussed in greater detail in Section IV.I (Coastal Act Violations) of this staff report.

C. Other Agency Approvals

State Department of Parks and Recreation

The applicant has maintenance easements from the adjacent street and beach maintenance road across the beach to this storm drain but will require a temporary easement from the State for work outside of the maintenance easements (i.e., to accommodate the temporary cofferdam).

Los Angeles Regional Water Quality Control Board (RWQCB)

The RWQCB regulates pollutant discharges into receiving waters in the project area. On June 24, 2019, the County of Los Angeles submitted an application for water quality certification pursuant to Clean Water Act Section 401. The RWQCB is currently reviewing the County's application.

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (ACOE) has regulatory authority over the proposed project under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 1344) and Section 404 of the Clean Water Act. The County requested federal authorization from the USACOE on June 24, 2019. The ACOE is currently reviewing this request.

Other agency approval may be required from California Department of Fish and Wildlife, National Marine Fisheries Service, State Lands Commission, and any other federal and state agency with jurisdiction over sensitive resources at this location.

Special Condition 7 requires the applicant to demonstrate its legal ability to comply with all the terms and conditions of this permit, including acquiring all necessary easements. **Special Condition 8** requires the permittees to obtain all necessary approvals.

D. PUBLIC ACCESS AND RECREATION

Projects located between the sea and the first public road paralleling the sea, such as the subject site, must be consistent with the public access and recreation policies of the Coastal Act, including:

Section 30210:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211:

> Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30213:

> Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30220:

> Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221:

> Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

The proposed project is primarily repair needed to prevent failure of the 380-foot section of the storm drain. The project also includes the installation of a tidal gate and a wave protection barrier at the terminus of the outlet. The project site is located on and under the beach and within the surf zone at Dockweiler State Beach. The Coastal Act requires that public coastal access and recreational opportunities along the coast are protected and provided. Additionally, the shoreline and beaches are valuable assets to the environment and economy of the Southern California region and the State, worthy of protection and enhancement.

Construction Timing and Staging
Construction of the proposed project will temporarily affect public access to and along the shoreline in this location. Construction activity is tentatively scheduled to occur between Summer and Fall. Typically, the Commission imposes restrictions on the timing of construction projects impacting the beach or beach parking to occur outside of peak beach season (between Memorial Day and Labor Day); however, the applicant maintains that the project can only be conducted during dry weather so that the subject facility will be available during the upcoming rainy season to perform its essential function to avoid flood damage to infrastructure. In addition, the applicant indicates that there is a risk of larger, more frequent waves during fall/winter, and that discharge from the drain as a result of winter storms would not be properly or safely diverted because of larger volume flows. The applicant has indicated that construction will last up to five months but that it will sequence activities to minimize disruptions and provide maximum access as possible during construction activities.

During construction, the project is expected to have some temporary impacts on public access and recreation, but overall access corridors and staging areas are required to be located in a manner that has the least impact on public access. Approximately 22 public parking spaces at the public parking lot located downcoast of LA County Beaches and Harbor Dockweiler Beach Maintenance Yard will be temporarily displaced for the five-month construction period to accommodate construction vehicles and for additional staging and/or storage of equipment and materials. However, there are over 2,000 public parking spaces nearby at the public parking lots to the south. Although the project will have a temporary impact on public parking, it has been designed to reduce the impact on coastal access and recreation. Work is only proposed to occur during normal work hours of Monday through Friday, with no work occurring on weekends or holidays.

A second construction staging area will be located on an empty 104-foot by 144-foot open sand area in proximity to the storm drain (adjacent to the Marvin Braude Bike Path) to store excavated materials from the cofferdam area which would be temporarily stockpiled in this location. An access route will need to traverse the bike path, but it will be rerouted with a detour to enable bicyclists to still access it during construction, and signage will be provided in English and Spanish to inform the public of the detour. The stretch of beach to the north and south of the site will remain open. Additionally, Dockweiler's beaches are very wide (varying approximately 300 to over 500 feet wide), and even if a portion of the beach near the project site were to be temporarily restricted from public use, there would still be sandy beach area available. Moreover, Dockweiler State Beach is an approximately three-mile-long beach with several different entry access points from Vista Del Mar.

Further, **Special Condition 2** requires a public access plan be submitted for review and approval by the Executive Director to ensure that impacts to public coastal access and recreation are minimized to the greatest extent feasible during construction activities.

Pre- and Post-Construction Impacts to Public Access
The critical issue along the subject 380-foot reach of the drain is its poor condition. The concrete has eroded exposing the rebars and the top concrete slab of the exposed section of the RCB is covered by steel plates, which are chained into the weakened reinforced concrete. If not replaced, the 380-foot reach of the storm drain could collapse in the near future. The applicant has indicated that the proposed repairs to the storm drain is necessary to maintain conveyance for flood protection for the surrounding community in the City of Los Angeles.

However, the subject storm drain currently partially restricts lateral access along the beach. Currently, the public is already not able to walk seaward of the project even during low tides because segments of the storm drain extend out into the surf zone. Depending on tide levels, the reinforced concrete box storm drain is partially or fully submerged. In addition, because the outlet extends out into the surf zone, it also obstructs lateral access to recreational swimmers along the shoreline. Such an impact to public coastal access also raises environmental justice concerns, considering that Dockweiler State Beach is heavily used by inland populations. The project constitutes repair and maintenance work, but such work will help extend the life of the storm drain, which can continue to obstruct lateral coastal access. Thus, the development authorized pursuant to this permit should be interim. Therefore, **Special Condition 1** limits the length of development authorization to a time frame of 10 years in order to provide a reasonable period of time for the applicant to evaluate future risk of coastal hazards as influenced by sea level rise and to plan, develop, and implement a Sea Level Rise Adaptation Plan that provides a clear long-term plan to ensure that the approved development minimizes flood hazard risks to the facility and maximizes coastal access while also considering the community's need for proper handling of storm water to prevent inland flooding. The plan must be submitted to the Executive Director in five (5) years. The plan must include an evaluation of alternatives to the development approved in the subject permit that would minimize impacts to coastal access and minimize siting of infrastructure in hazardous areas including but not limited to an alternative that sites the facility as far landward as feasible to avoid blocking the public from walking or swimming along the shoreline.

The information concerning these alternatives must be sufficiently detailed to enable the Coastal Commission to evaluate the feasibility of each alternative for addressing consistency with the Coastal Act, including whether the alternatives minimize impacts to lateral access along the wet-dry sandy beach edge and erosion and other coastal hazards in the project area obtained through periodic monitoring and recording of conditions in the project area during extreme tide and storm events. The information must be sufficiently detailed regarding the extent and duration that the facility is impeding coastal access or is exposed (not buried by sand) and include an assessment of cumulative changes to the approved development's access impacts and coastal hazard risks over time. The analysis must include a feasibility analysis of the alternatives that evaluates and considers all potential constraints, including geotechnical and engineering constraints, potential phasing options with timelines, project costs, and potential funding options.

Conclusion

The proposed project will have short-term and temporary impacts on public access and recreation during construction activities; however, given the size of the beach and number of accessways available, the impacts have been minimized by restrictions and conditions on the amount and location of work that can occur during the summer months. Post-construction, the storm drain will continue to impact lateral coastal access. However, as conditioned, the project is designed to provide the applicant a reasonable period of time to evaluate alternatives and plan and implement and a Sea Level Rise Adaptation plan that would minimize impacts to coastal access and minimize the perpetuation of infrastructure in hazardous areas. Therefore, as conditioned, the proposed project can be found consistent with the public access and recreation policies of Chapter 3 of the Coastal Act.

E. HAZARDS

Section 30235 states:

> 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 fishkills should be phased out or upgraded where feasible.

Section 30253 states, in pertinent part:

> New development shall do all of the following:
> (a)Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
>
> (b)Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The proposed project is for the repair of an existing storm drain within the surf zone and on the beach. The Coastal Act requires that development minimize risks in areas of high flood hazard. The Commission has consistently found that development adjacent to the sea, like the project site, is inherently subject to hazards from erosional forces imposed against the shoreline from wave energy, erosion, and storm flooding. Some of these hazards will be exacerbated by expected sea level rise. There is a growing body of evidence that there has been an increase in global temperature and that acceleration in the rate of sea level rise can be expected to accompany this increase in temperature (some shoreline experts have indicated that sea levels could rise by as much as 6.8 feet by the year 2100). On the California coast, the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore, leading to a faster loss of the beach, as the beach is squeezed between the landward migrating ocean and the fixed backshore. This will expose the back beach/bluff or the armored shoreline to more frequent wave attack, increasing the rate of erosion of unarmored bluffs and potentially reducing available usable beach area.

The Coastal Act requires, among other things, that all new development be: adequately evaluated to ascertain potential negative impacts on natural resources and on existing adjacent development; designed and sited to avoid hazardous areas and minimize risks to life and property from coastal and other hazards; and assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms. Consistent with these requirements, the proposed project has been analyzed for impacts from wave attacks, future storms, and Sea Level Rise, and for erosion and beach change. Additionally, the proposed project has been designed for those conditions (i.e., piles, wave protection barrier, tidal gate).

During construction, parts of the project site will be subject to wave action and flooding. The applicant is proposing protection of the project site through the use of a cofferdam. Following construction, all temporary protective devices would be removed.

During construction, there would be a risk to the construction staging site on Dockweiler State Beach from wave action and high tides. In many past decisions, the Commission has required that construction staging be located off of the public beach when possible. However, in this case some staging is required for activities that must be conducted on Dockweiler State Beach due to the location of the existing storm drain. The proposed project staging areas will be located on Dockweiler State Beach and the adjacent public beach parking lot for a period of approximately five months.

As part of this project, the applicant is proposing to install a wave protection barrier to the outlet of the storm drain and is intended to increase the structural integrity of the storm drain in relation to wave-caused damage. However, there remains some inherent risk to development on such sites and no development in the water can be guaranteed to be safe from hazard. The Coastal Act recognizes that certain types of development, such as the proposed project, may involve some risk. While, overall, the proposed development will be subject to the same coastal hazards as the original structure, (primarily erosion due to storm waves), the Commission finds that due to the uncertainties associated with future storm waves, surges, and erosion, the applicant shall assume these risks as a condition of approval. Therefore, **Special Condition 3** requires the applicant to acknowledge these

risks and waive any claim of liability against the Commission for damage to life or property that may occur as a result of these hazards. The applicant's assumption of risk will demonstrate that the applicant is aware of and appreciates the nature of the hazards which exist on the site and which may adversely affect the stability or safety of the proposed development.

As conditioned, the Commission finds that the proposed project, will be consistent with Coastal Act Sections 30235 and 30253.

F. BIOLOGICAL AND MARINE RESOURCES

Section 30230 states:

> Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 states:

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232 states:

> Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30233 states, in relevant part:

> (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
>
> …

> (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines…

Coastal Act Sections 30230 and 30231 require that marine resources be maintained, enhanced, and where feasible, restored and that the biological productivity and quality of coastal waters appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained. The marine resources of concern that have the potential to be adversely impacted by the proposed project activities include, but are not limited to, western snowy plover and grunion.

Western Snowy Plover Monitoring and Avoidance
The western snowy plover (*Charadrius nivosus nivosus*) is federally listed as threatened under the Endangered Species Act of 1973 and is listed as a Bird Species of Special Concern in California. A breeding colony is known to occur about 250 feet north of the storm drain project site. The project site is located within critical habitat for the western snowy plover (USFWS, 2018). Western snowy plover breeding season extends from early March through August.

The California least tern (*Sterna antillarum browni*) was listed as federally endangered in 1970 and a state endangered species in 1971. Although critical habitat has not been designated for the California least tern (CLT), it is a fully protected species under California law. CLTs nest on flat sandy beaches that are relatively secluded from disturbance and predation, and while they do nest on Venice Beach, 1.65 miles to the north, they do not nest in the project area. Near-shore ocean waters and shallow estuaries serve as CLT foraging habitat, and while they are likely to forage in waters offshore of the project area, there is no project work that would affect their foraging behavior.

Since construction activities may extend into the bird breeding and nesting season, bird surveys must be conducted. To avoid impacts to listed and sensitive bird species, a qualified biologist shall conduct pre-construction surveys within 500 feet of the project site, whether during or outside the breeding and nesting bird season, to detect and document roosting, foraging, breeding behavior or nesting of any listed or sensitive bird species within 15 days of the anticipated start date. If active roosting, foraging, or breeding behavior of listed or sensitive species is detected, all such activities shall cease until the qualified biologist has confirmed that the foraging or roosting bird (s) have left the project area or vicinity and/or listed or sensitive bird breeding behavior has ceased and the respective birds have left the project area or vicinity. If an active nest of a listed or sensitive species is found, avoidance measures implemented to avoid the nest and associated nesting behaviors by implementation of a suitable buffer zone or postponing construction until the young have fledged the nest. A buffer zone may be established using temporary fencing, post/rope barrier, or similar. Avoidance buffers may be reduced where appropriate, at the discretion of the biologist and guidance of the permitting agencies.

To memorialize the recommended bird monitoring and avoidance requirements, **Special Condition 5** specifies time and operation constraints to avoid adverse impacts on listed and sensitive bird species activities and nesting.

Grunion Monitoring and Avoidance
The proposed storm drain repair will occur between Summer and Fall. Of particular concern with the subject project are potential impacts to the California grunion. California grunion typically spawn on sandy beaches in the Los Angeles region between March and August and have the potential to be affected by beach projects. The California grunion (*Leuresthes tenuis*) is a member of the New World silversides family, Atheriniopsidae, along with jacksmelt and topsmelt. Grunion leave the water at night to spawn on beaches during the spring and summer months. For four consecutive nights, beginning on the nights of the full and new moons, spawning occurs after high tides and continues for several hours. As waves break on the beach, grunion swim as far up the slope as possible, and the female arches her body and excavates the semi-fluid sand with her tail to create a nest. She then deposits her eggs in the nest. Males curve around the female and release milt. The milt flows down the female's body until it reaches and fertilizes the eggs. As many as eight males may fertilize the eggs in a single nest. After spawning, the males immediately retreat toward the water while the female twists free and returns with the next waves. While spawning may only take 30 seconds, some fish remain stranded on the beach for several minutes.

Spawning occurs from March through August, and occasionally in February and September. Peak spawning is late March to early June. Mature grunion may spawn during successive runs, with females spawning up to six times each season. Females lay between 1,600 and 3,600 eggs during one spawn, with larger females producing more eggs. Eggs are deposited during the highest tides of the month and incubate in the sand during lower tides, when they will not be disturbed by wave action. The eggs are kept moist by residual water in the sand. They hatch about 10 days later during the next high tide series, when they are inundated with seawater and agitated by rising surf.

Construction activities on the beach can potentially bury grunion eggs or change the beach profile such that juvenile grunion is unable to return to the ocean. Monitoring for grunion and implementation of impact minimization measures are required when beach nourishment is scheduled to overlap or follow within two weeks of a grunion spawning event.

Because the California grunion spawning occurs between early March and late August, should any work need to occur during this period, **Special Condition 6** requires the applicant to prepare a Grunion Monitoring and Avoidance Plan that is implemented prior to and during construction activities to protect California grunion and their eggs. The plan must include that the sandy beach 300 feet to the north and south of the construction footprint be monitored for grunion runs during the grunion spawning period of March 1 through August 31, beginning at least two (2) weeks prior to commencement of construction activities on Dockweiler Beach, and provides for other monitoring requirements and protection measures.

Thus, as conditioned, the Commission finds the proposed project consistent with sections 30230 and 30231 of the Coastal Act.

Construction Equipment and Water Quality
Construction-phase activities will include construction of a 387-foot-long temporary interlocking sheet metal cofferdam that will enclose the work site and isolate it from ocean wave surges. The cofferdam will also keep the project area dry and will keep the work area safe. The project will install a stainless-steel wave protection barrier at the storm drain outlet to reduce wave impacts and to minimize sand accumulation inside the storm drain. Stockpiling of excavated material will occur near the project site, however the project plans do not include the location of the excavated stockpiled materials, only the construction staging area is demarcated on the project plans.

The project also installs a temporary dewatering system to remove water from within cofferdam area. The dewatering activities on the project will discharge to the ocean approximately 200 feet upstream from the storm drain outlet into the ocean. The discharge will be continuous since underflow from the ocean will be continuously entering the cofferdam area.

Approximately 4,000 cubic feet of intertidal sandy beach habitat will be temporarily affected by the project. Full recovery of the beach and sandy intertidal organisms is expected to begin following the removal of the cofferdam and the end of construction activities. This will be a dynamic recovery over the course of one to three years. The applicant will monitor beach profiles prior to and following reconstruction to ensure that the post-construction condition is like the pre-construction beach condition. Implementation of BMPs related to potential water quality impacts would help ensure that no adverse effects will occur in the impacted sandy beach habitat or any other parts of the project area.

Due to the project's location within coastal waters, it is necessary to ensure that construction activities will be carried out in a manner that will not adversely affect water quality or marine resources. Construction equipment used for the project has the potential to contaminate the sand from minor spills and leaks from equipment. In addition, discharge to the marine environment would result in adverse effects to offshore habitat from contamination and/or increased turbidity caused by erosion and siltation of coastal waters. The presence of construction equipment, building materials, and excavated materials on the subject site could also pose hazards to beachgoers or swimmers if construction site materials were discharged into the marine environment or left inappropriately or unsafely exposed on the project site. Therefore, in order to ensure that adverse effects to the marine environment are minimized, **Special Condition 4** requires the applicant to submit a Construction Pollution Prevention Plan (CPPP) and implementation of construction best management practices.

Furthermore, the applicant applied to the Los Angeles Regional Water Quality Control Board (RWQCB) to certify that the project will comply with all applicable discharge requirements. The applicant has also applied to the U.S. Army Corps. The Corps preliminary review requires Best Management Practices to be followed during construction activities. **Special Condition 8** requires the applicant obtain all other necessary local, state, and federal permits and to comply with all requirements, requests, and mitigation measures from other resource agencies with respect to preservation and protection of water quality and the marine environment. Any change in the approved project that may be required by the above-stated agencies shall be submitted to the Executive Director to determine whether the proposed change shall require a permit

amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations. The project, as proposed and conditioned, contains sufficient BMPs to ensure that no impacts to water quality occur.

Coastal Waters and Wetlands
Section 30233 of the Coastal Act allows filling, diking, and/or dredging of coastal waters and wetlands only under very limited circumstances. Under this section, any filling, diking, and/or dredging must be for an allowable use, feasible mitigation measures must be provided to minimize adverse environmental effects. The area around the storm drain must be exposed in order to accomplish the repairs, and the cofferdam will be used to remove water from within the area to help dry the work site for construction operations. In this case, there will be temporary fill, diking, and dredging (i.e., installation of temporary cofferdam) in order to repair and maintain the storm drain. Section 30233(a)(4) of the Coastal Act allows this use for incidental public service purposes such as maintenance of existing intake and outfall lines.

Therefore, the Commission finds that the temporary cofferdam is allowable if there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. As discussed above, the temporary cofferdam is necessary to carry out the proposed repairs to the storm drain. Pursuant to **Special Condition 4**, the footprint and configuration of the proposed temporary cofferdam will be the smallest feasible to accomplish the proposed repairs. Therefore, as conditioned, the temporary cofferdam will be the least environmentally damaging feasible alternative necessary to accomplish the project. Additionally, the recommended special conditions of approval, including conditions to protect the sensitive bird species and grunion, and water quality, will mitigate the potential adverse environmental effects of the proposed project, and, thus, it can be found consistent with Section 30233 of the Coastal Act.

Conclusion
The Commission finds that only as conditioned will the proposed project ensure that marine resources, including water quality and biological productivity, are protected and maintained and ensure the protection of human health as required by Sections 30230, 30231, 30232 and 30233 of the Coastal Act.

G. VISUAL RESOURCES

Section 30251 of the Coastal Act states:

> The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan

prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30251 of the Coastal Act requires that development is sited to protect public scenic and visual qualities of coastal areas. The project site is located between the first public road (Coast Highway) and the sea and visible from Vista Del Mar (public road) and the surrounding beach areas. Most of the proposed project is located underground, underneath the beach sand, and will not obstruct ocean views or permanently introduce new structures that would be visible from designated scenic view corridors, viewsheds, or vista points once installed. However, a portion of the existing RCB storm drain in the ocean and in the surf zone is exposed and significantly obstructs public ocean views. The project constitutes repair and maintenance work, but such work will extend the life of the storm drain and continue to obstruct public coastal views. Pursuant to **Special Condition 1** the length of development authorization is being limited to a time frame of 10 years in order to provide a reasonable period of time for the applicant to evaluate alternatives that would minimize impacts to coastal access and minimize siting of infrastructure in hazardous areas including but not limited to an alternative that sites the facility as far landward as feasible to avoid blocking recreators from walking or swimming along the shoreline and would also allow the restoration of the public's view of the shoreline.

In addition, temporary visual impacts during the five-month construction period will occur and be visible from several public vantage points around the project site, including Vista Del Mar and Dockweiler State Beach. However, the applicant proposes to return the project site to its pre-construction condition. Therefore, the Commission finds that the project as conditioned is consistent with Section 30251 of the Coastal Act.

H. COASTAL ACT VIOLATIONS

On October 22, 2015, the Commission granted an emergency permit for emergency repairs to Storm Drain No. 5241 to prevent the collapse of a segment of the storm drain. The emergency work authorized by the emergency permit consisted of 1) removal and replacement of the damaged soffit from station 2+60 to 3+50 (90 linear feet); 2) installation of formwork and rebar reinforcement within the new top slab and sides; and 3) pour concrete around the new reinforcement to match the existing interior and exterior of the drain. The emergency permit was granted with conditions, one of which clarifies that the emergency work is considered to be only temporarily authorized and that the applicant is required to obtain a regular coastal development permit for the work as part of an ongoing plan to assess and address, as necessary, hazards on the property, and to mitigate for impacts to coastal resources. However, a follow-up coastal development permit application was never submitted following the emergency work.

Consequently, the 2015 emergency work remains on the site without a valid coastal development permit. Any non-exempt development activity conducted in the coastal zone without a valid coastal development permit, or which does not substantially conform to a previously issued permit, constitutes a violation of the Coastal Act. However, the development undertaken in 2015 will be removed as part of this project to accommodate the reconstruction of approximately 380 linear feet of the storm drain. Therefore, despite this unpermitted development, Commission review and action on this permit will resolve

the violations identified in this section once the permit has been fully executed and the terms and conditions of the permit and permit amendment complied with by the applicant.

I. LOCAL COASTAL PROGRAM

Coastal Act Section 30604(a) states:

> (a) Prior to certification of the Local Coastal Program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200). A denial of a coastal development permit on grounds it would prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200) shall be accompanied by a specific finding which sets forth the basis for such conclusion.

The Playa del Rey south area of the City of Los Angeles has neither a certified LCP nor a certified Land Use Plan. As conditioned, the proposed development will be consistent with Chapter 3 of the Coastal Act. Approval of the project will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the Coastal Act.

J. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 Title 14 of the California Code of Regulations requires Commission approval of a coastal development permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. The Commission's regulatory program for reviewing and granting CDPs has been certified by the Resources Secretary to be the functional equivalent of CEQA. (14 CCR § 15251(c).)

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. The development, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. Special Conditions imposed will mitigate adverse impacts to coastal resources and public access. The **Special Conditions** address the following issues: **1)** length of development authorization; **2)** public access; **3)** coastal hazards**; 4)** water quality; **5)** potential impacts to western snowy plovers; **6)** potential impacts to grunion; **7)** ability to comply with conditions; and **8)** additional agency approvals. Therefore, the Commission finds that, as conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment, either individually or cumulatively, there are no

remaining significant environmental impacts within the meaning of CEQA, and the project is consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

1. Staff Report for CDP No. 5-03-094
2. Staff Report for CDP No. 5-04-286
3. Emergency Permit No. G-5-15-0033
4. Coastal Hazards Report, Reinforced Concrete Box Storm Drain Restoration/Reconstruction Project at Dockweiler State Beach by Geosyntec Consultants, Inc., dated December 2020.
5. Marine Biological Assessment for Los Angeles County Department of Public Works, Project 5421 Reinforced Concrete Box Storm Drain Repair at Dockweiler Beach Final Report by Coastal Resources Management Inc., dated June 5, 2020 (revised July 21, 2020).

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

MARK PESTRELLA, Director

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IN REPLY PLEASE
REFER TO FILE SWM-0

September 13, 2021

Mr. Steve Hudson
District Director
California Coastal Commission
South Coast District Office
301 Ocean Blvd., Suite 300
Long Beach, CA 90802

Attention Marlene Alvarado

Dear Mr. Hudson:

REQUEST FOR INFORMATION RESPONSE
PROJECT 5241 REINFORCED CONCRETE BOX RECONSTRUCTION

Project 5241 is a Reinforced Concrete Box (RCB) drain located within Dockweiler Beach. In 2015 Los Angeles County Public Works (LACPW) performed temporary repairs to avoid collapse and began preparing plans for a permanent repair. Since then the drain has further deteriorated and is at risk of collapse. Proposed replacement of 380 feet of the drain and upgrade to the outlet protection will allow continued flood protection of the communities in the City of Los Angeles.

In 2019 LACPW submitted a permit application to the California Coastal Commission (CCC) for permanent repair of Project 5241. In April 2021 CCC requested LACPW to examine alternatives to the existing drain's direct outlet into the ocean prior to issuing the permit. In addition, on May 10, 2021, the CCC requested additional information regarding the RCB drain. On May 17, 2021, the CCC and LACPW met to discuss alternatives to the existing drain's outlet into the ocean and the additional information requested by CCC.

LACPW has reviewed the additional information requested by CCC and would like to submit the enclosed.

If you have any questions, please contact Armond Ghazarian of my staff at (626) 458-4114 or aghazar@pw.lacounty.gov.

Very truly yours,

MARK PESTRELLA, PE
Director of Public Works

STEVEN SHERIDAN, PE
Assistant Deputy Director
Stormwater Maintenance Division

AG:sl
p:\fldpub\hq\storm water maintenance division units\project management unit\project 5241 - r.c. box reconstruction\permits\ccc\letter to ccc\project 5241 - letter to ccc draft final.docx

cc: Stormwater Maintenance (Ghazarian, Scharf)
Design (Bordas, Moran, Sim)

Enc.

California Coastal Commission's Request for Information:

Q1: What is the current status of functionality of the outfall for flood control? Are storm flows able to drain to the ocean at all right now? If so, what level of reduction in capacity (if any) is there?

A1: *Project 5241 outfall, at its present state, can accommodate its flow design capacity for a 50-year storm while creating hydraulic pressure inside the reinforced concrete box (RCB). The hydraulic pressure within the RCB will force the water through the damaged sections of the drain resulting in the drain's eventual collapse.*

Q2: Could the capacity deficit (the lost reduction in drainage capacity) be met (either temporarily or for the long-term) by other means in the drainage basin such as temporary detention ponds, pumping to another drainage system with excess capacity, etc.?

A2: *Currently, a drainage capacity deficit does not exist and the storm flows can drain to the ocean. The critical issue along the 380-foot reach of the drain, scheduled to be replaced, is the poor condition of the RCB. The concrete has eroded exposing the rebars and the top concrete slab of the exposed section of the RCB is covered by steel plates which are chained into the weakened reinforced concrete (see Attachment A - Field Photos). If not replaced, the 380-foot reach of the storm drain could collapse in the near future.*

Q3: If the loss of flood control capacity is not met, where is flooding expected to occur and how severe for something like a 20-year, 50-year or 100-year storm?

A3: *If the drain collapses, restricting flows from discharging into the ocean, Playa del Rey, Loyola Village, Westchester Districts, and north runways of LAX in the City of Los Angeles may flood. The limits of flooding will depend on the size of the storm frequency event. The storm drain was designed for a 50-year storm frequency event (Q50 = 2,780 cfs). The Q25 and Q100 frequency storms will produce flows of 2,400 cfs and 3,120 cfs, respectively (see Attachment B - Hydrology Map).*

Q4: What caused (or is causing) the current loss of functionality?

A4: *Currently, the storm drain is functioning. Please see responses under A1 and A2.*

Q5: What was the reason for the repair?

A5: *The 380-foot section of the RCB has eroded over time, resulting in holes on the side and rebars being exposed. Some top sections of the drain previously*

collapsed which are currently covered by temporary steel plates, held in place with chains (see Attachment A - Field Photos).

Q6: What is the design life of the proposed replacement/repair?

A6: *The design life of the proposed repair is approximately 50 years.*

Q7: What was the design life of the outfall as a whole and what is the anticipated useful life of the outfall (particularly the portion in and seaward of the surf zone)?

A7: *The storm drain was constructed in 1970. The top slab of the outfall (the portion in the ocean) was replaced 15 years ago. This extended the useful life of the outfall on the seaward of the surf zone. Based on the 2020 assessment, the outfall should last another 30 years. The total service life of the outfall is about 80 years.*

Q8: Are there requirements from the regional water boards or similar about how offshore stormwater flows can be discharged into the ocean? If so, are those standards being met currently?

A8: *LACPW currently meets the agency requirements regarding stormwater discharge into the ocean. LACPW submitted a permit application to the RWQCB for this project on June 24, 2019. Based on our latest communication with RWQCB, the permit is being drafted for their management's review.*

Q9: Where will the stockpile of materials and equipment be for the proposed project (as there may be conflict with the proposed LA Living Shoreline just north of the site?

A9: *The stockpile area and staging area are shown on Sheet 10 of the attached project plans (see Attachment C – 90% Project Plans). The materials and staging area will be in close vicinity to the proposed project location.*

ALTERNATIVES

Q10: In addition to the possible modifications to the drainage capacity discussed above, one option here is to permit a temporary fix to outfall to restore flood capacity, while a longer term solution is reached for the removal of the outfall and replacement with an alternative that minimizes impacts to coastal resources and access.

A10: *The steel plates were installed as a temporary fix in 2015. The current proposed project is a permanent repair needed to prevent failure of the 380-foot section of the storm drain. LACPW recommends implementing the proposed project (as shown on Attachment C – 90% Project Plans) to ensure continued safe*

operation of storm drain followed by evaluating alternatives that meet both LACPW standards and CCC's request as discussed between LACPW and CCC's Administration during the June 18, 2021, meeting.

Q11: Depending on the needed drainage/flood capacity, it could be possible to meet the current drainage needs with a liner or other temporary (2-10 year) solutions. We would like to see an analysis of temporary solutions that could involve temporary restoration of the section of concern (likely not the full 380-foot section) without piles such as a partial replacement, use of liners, etc.

A11: *Repair options, such as installation of a liner, would not work due to the extremely deteriorated condition of the RCB. Reconstruction of the 380-foot segment is the only alternative to restore functionality of the damaged portion of the RCB, and the construction of piles will secure the drain in place.*

Q12: We need the County to expand on "Alternative 3." Could a new outlet be constructed further landward on the beach without the full, contemporaneous removal of the existing outfall?

A12: *Attachment D – Alternative 3 depicts one scenario for the drain to terminate landward. For this scenario, the flat slope of the storm drain, combined with the existing beach ground surface elevation, will not allow the flows to discharge. As shown on the profile, the outlet would be below the existing ground surface elevation blocking the flows from discharging. A significantly large volume of sand would have to be excavated for the ground surface elevation to meet the elevation of the invert at the outlet. Also, an entrainment channel would continuously need to be graded so the flows could be directed from the outlet to the ocean.*

In addition, hardened sand accumulation from high tide at the outlet of the drain could prevent the low velocity storm flows (due to the flat drain slope) from pushing through creating damming effect resulting in flooding upstream of the outlet. As mentioned under A.10, LACPW will continue evaluating various scenarios/alternatives that will meet LACPW standards and be acceptable to CCC.

Q13: Could removal of the existing outfall be phased such that the portions currently blocking lateral access be removed first with the remaining portions being removed as financial and technical limitations allow?

A13: *See response A12.*

Q14: While it might be preferable to delay removal of the outfall until funds are fully secured, it is likely that the cost of removal will increase as frequency of wave impacts to the seaward portion of the outfall increases with sea level rise. Has the County considered the optimal time for removal, given the increasing difficulty with rising sea level?

A14: *The current proposed project includes the construction of the wave protection barrier. This will minimize the adverse impact of the storm surges due to rising sea level in the storm drain.*

Q15: There are examples of outfalls of similar size in Santa Monica/Venice that are further landward. We would need more detailed reasoning for why those would not be feasible in this location.

A15: *Public Works currently maintains several ocean outlets that are further landward such as, Project 248 (Montana Avenue Outlet); Project 577 – Line C (Wilshire Boulevard Outlet); Kenter Canyon Drain - Project 249 (City of Santa Monica Maintained Drain) (Pico Boulevard Outlet); and Project 46 – Line A (Rose Avenue Outlet) (See Attachment E – Outlet Photos and Location Map).*

In addition to the issues described under A12, for the outlet draining landward, there are issues associated with ponding water at low lying areas which are created due to storm scouring. After the storm ends, due to slow percolation and evaporation rate, the ponded water:

- *Becomes a health- and safety-issue for beachgoers due to bacteria growth.*
- *Permeates an unpleasant smell impacting beachgoers.*
- *Could serve as a barrier for lifeguards having to cross to the opposite side.*

REGIONAL CONTEXT

Q16: This outfall isn't mentioned in the sea level rise vulnerability studies for the area (Adapt LA's, LADB&H's) nor is it identified in LA's Regional Sediment Management Plan. What are the regional priorities for the county in terms of ocean outfalls and plans to increase resiliency to sea level rise?

A16: *A Coastal Hazard Report was prepared for this project and provides recommendations for adaptation measures to mitigate against sea level rise (see Attachment F – Final Draft Coastal Hazard Report Project No. 5241-Dec 2020).*

HAZARDS & SAFETY

Q17: Was sea level rise (and therefore the increased amount of wave energy able to reach the structure) accounted for in the design? The wave protection barrier won't protect from possible oblique and uplift forces; how were those considered in the design?

A17: *The wave protection barrier accounted for uplift forces in its design.*

Q18: How far down do the existing piles reach and is there a threat that they may be undermined (and cause collapse of the seaward portions of the outfall) if the beach profile were to retreat?

A18: *The existing concrete piles are embedded 60 feet deep into the ocean floor. The RCB storm drain is secured to piles. The outfall should not collapse if the beach profile were to retreat.*

Q19: What is the purpose of the wave deflector?

A19: *The main purpose of the wave protection barrier is to prevent storm surges from entering the storm drain and prevent the free flow of sea water from traveling upstream. It will also prevent entry of sand that can cause blockage inside the drain.*

Q20: How were wave forces considered in the design of the wave deflector? Was the potentially degraded condition of the concrete considered in the design of the supports?

A20: *The top slab of the outlet was replaced 15 years ago. The wave protection barrier will be anchored to this new concrete. This portion is in good condition and can support the barrier.*

Q21: We are concerned that the wave deflector may corrode and become a danger for recreationalists in the surf zone.

A21: *The wave protection barrier will be made from high-grade stainless steel. This outlet will be inspected on an annual basis and any maintenance issues will be addressed.*

Q22: The Hazards Report mentions historical erosion rates of up to 6ft/year. Was this referring to shoreline retreat or vertical erosion around the existing concrete box?

A22: *The historical erosion rates mentioned in the Project's Coast Hazards Report is referring to shoreline retreat (not vertical erosion measured from the box).*